HYDROLOGIC STUDY REPORT

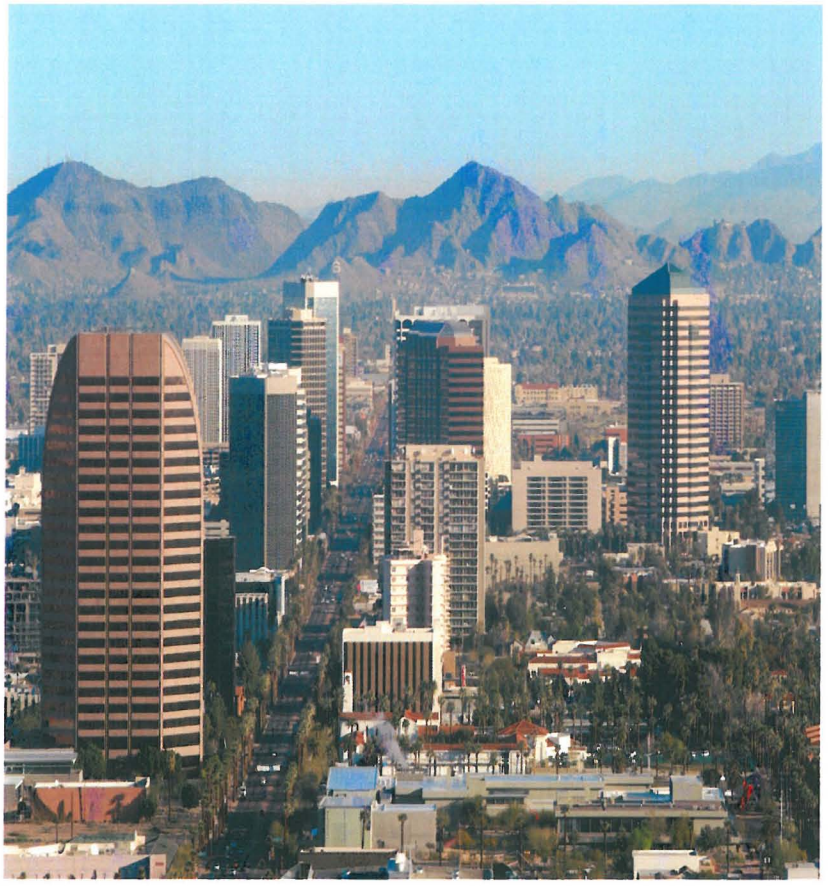
FOR

METRO PHOENIX AREA DRAINAGE MASTER STUDY/PLAN

FCD CONTRACT 2004 C040

October 2006

(Volume 1 of 3)



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Flood Control District of Maricopa County

And

City of Phoenix

Prepared by:

WOOD/PATEL

In Association With:

eec

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WP #052349

(Volume 1 of 3)

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Many people have made significant contributions to this study, especially those with the hydrologic study team: Mr. Afshin Ahouraiyan, Mr. Steven Tucker, and Mr. Richard Harris from the FCDMC; Mr. Hasan Mushtaq from the City of Phoenix; Mr. Mark Gavan, Mr. Lloyd Vick, and Mr. Charles Griffith from EEC, Inc., who provided critical technical support and decision-making guidance throughout the study phase. Their individual and group contributions represent a key role in the successful and timely completion of this study. We sincerely enjoyed these relationships and look forward to the planning phase.

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1.0 INTRODUCTION

1.1 Project Location

The study area for the Metro Phoenix Area Drainage Master Study/Plan (Metro ADMS/P) is, with two exceptions, bounded by the Arizona Canal Diversion Channel (ACDC) on the north, I-17 on the west, the Salt River on the south, and the ridgeline in the Papago Buttes on the east. One exception to this boundary is between 44th Street and 60th Street where the study area extends north of the Arizona Canal up to the ridgeline of Camelback Mountain. The other exception is Phoenix Sky Harbor Airport, which is excluded from the study area. The boundaries for the airport are 24th Street on the west, the Union Pacific Railroad on the north, SR153 on the east, and the Salt River on the south. The total study area encompasses approximately 90 square miles. Figure 1.1 illustrates the Metro ADMS/P location map and study area.

The study also includes a portion of the Durango ADMP study area west of I-17 that encompasses the Cave Creek floodplain and its corresponding watershed. This area is bounded by 59th Avenue on the west, I-10 on the north, I-17 on the east and the Salt River on the south. One reason for including this area in the Metro ADMS/P is for the Cave Creek floodplain re-study. No other work was performed west of I-17. The flood control alternatives analysis was already completed with the Durango ADMP.

This report is organized such that the referenced tables and figures follow the study text. The referenced appendices and exhibits follow the figures. Additional appendices are also provided in subsequent volumes of the report.

1.2 Purposes of the Study

The purposes of the Metro ADMS/P are to quantify the extent of drainage and flooding problems, sources, and hazards in the Metro Phoenix area, to incorporate existing drainage facilities and policies into the modeling process, and to develop preliminary alternative solutions for the identified flooding problems. The FEMA designated floodplain for Cave Creek will also be re-studied based on the newer, more accurate 2-foot contour interval mapping.

The major objectives of the project include:

- Development of a comprehensive hydrologic model in order to quantify the drainage and flooding hazards within the study area.
- A re-study of the Cave Creek floodplain from the Grand Canal to the Salt River using recent 2-foot contour interval mapping prepared for the Flood Control District of Maricopa County (FCDMC).
- Identification of cost-effective alternative flood control solutions for those flooding problems identified within the project area that may be implemented together or individually, based on scheduling, funding, and cost sharing. These flood control measures will include: 1) alternatives for eliminating and/or substantially reducing the Cave Creek floodplain, 2) upgrading the City of Phoenix's 2-year storm drain system where, and if, it is found to be deficient, and 3) measures to solve other flooding issues identified within the Phase I, ADMS portion of the study.

This report documents the hydrologic modeling methodologies and modeling results for the Phase I, ADMS portion of the project.

1.3 Project Need

From the City of Phoenix's files and database, 154 flooding complaints were documented within the Metro ADMS/P area. Of these complaints, 30 are being addressed with ongoing studies and/or design projects, 32 have been resolved with construction of drainage improvement projects (or have projects under construction), and 92 are unresolved or have been found to represent an insignificant flood hazard. There are also 15 drainage complaints, which were identified from citizens at public meetings or by the study team. Between August 1 and September 14, 2005, the City of Phoenix received 109 additional drainage complaints within the study area. More detailed information of the location and status of each flooding complaint within the study area have been documented in the Data Collection Report by EEC (February 2006).

Downstream of the Grand Canal within the study area there are approximately 3,800 properties in the Cave Creek floodplain. Within the Grand Canal floodplain there are approximately 1,400 properties within the study area. The Arizona Canal floodplain includes approximately 600 homes within the study area.

There have been several closures of I-17 at Buckeye Road including at least one occurrence since the completion of the ACDC. Stormwater runoff spills into the depressed section of the highway, overtaxing the pump stations, which causes the highway to be closed. SR51 experienced flooding problems in the depressed section at Highland Avenue where, similar to the I-17 problem, off-site runoff spills into the depressed section of highway overtaxing the storm drain pumping system.

There have been a number of hydrologic models developed for various portions of the study area. None of these studies by themselves, however, are adequate to quantify the flood hazards for the entire study area, nor are they of sufficient detail to assess the adequacy of the existing drainage systems within the project area.

1.4 Project Participation

The successful completion of this project required the active participation of multiple agencies. These included the FCDMC, the City of Phoenix, the Arizona Department of Transportation (ADOT), and others. A complete list of the stakeholders for this project has been documented in the Data Collection Report by EEC (February 2006).

The Metro ADMS/P hydrologic study team included staff members from the following agencies and consulting firms: Mr. Afshin Ahouraiyan, Mr. Steven Tucker, and Mr. Richard Harris from the FCDMC; Mr. Hasan Mushtaq from the City of Phoenix; Mr. Mark Gavan, Mr. Lloyd Vick, and Mr. Charles Griffith from EEC, Inc.; Mr. Ash Patel, Mr. Jeff Minch, and Mr. Shimin Zou from Wood/Patel.

1.5 Project Authorization

The Metro ADMS/P has been authorized by the FCDMC under Arizona Revised Statutes Title 48, Chapter 21, which requires the Board of Directors of the FCDMC to identify flood hazards and prepare plans for the construction of facilities that will eliminate or minimize flooding problems. In December 2004, the Board of Directors authorized the FCDMC to perform the Metro ADMS/P under contract number FCD 2004C040.

2.0 PERTINENT STUDIES

There have been a number of hydrologic studies performed for various portions of the study area. Some are regional area drainage master studies, and some are more project specific, such as freeway drainage, tunnel system, airport drainage, canal/channel design, railroad design, and flood insurance study. The following is a brief description of these studies. Some of the summaries of these studies are from the Data Collection Report for this project by EEC (February 2006).

2.1 Area Drainage Master Studies

24th Avenue & Camelback Road Drainage Improvements

Premier Engineering Corporation, in September 2003, prepared a final drainage report for this project. The hydrology for this project was then updated by Technical Memorandum No. 1 to the final drainage report in October 2005. The purpose of the Memorandum was to present the final construction alternative for the 24th Avenue and Camelback Drainage Improvements, City of Phoenix Project Number ST831220017. This area is located between 19th Avenue and I-17, from the Grand Canal upstream to the ACDC. The final recommended plan includes the construction of two new retention basins that provide enough volume to store the 10-year runoff.

Arcadia Area

In 1995, Huitt-Zollars, Inc. developed a new hydrologic model of the Arcadia watershed on the north side of the Arizona Canal in order to investigate alternatives to control flooding in the area and to reduce or eliminate the Zone A floodplain along the upstream side of the Canal. The hydrologic model was based on approved methodology of the FCDMC, but none of the alternatives studied to date have been implemented.

Old Cross Cut Canal (OCCC)

The OCCC is owned by the Bureau of Reclamation, managed by the FCDMC and operated by SRP. The OCCC originally was used by SRP to transfer irrigation water from the Arizona Canal to the Grand Canal. SRP now uses the OCCC during significant storm events to convey runoff out of the Arizona Canal to prevent it from being overtopped. SRP retains the right to discharge up to 1,000 cfs into the OCCC under any condition.

The U.S. Army Corps of Engineers (April 1989) conducted a feasibility study for the OCCC as part of the Phoenix Urban Study authorized by the Committee on Public Works of the United States Senate. The purpose of this study was to identify and investigate current and future problems, needs, and opportunities associated with flooding in the OCCC area. The conclusion was that while there are local flood control problems in the OCCC area, no alternative was found to justify Federal participation at that time because the cost of flood control facilities was substantially greater than the flood control benefits, and flood depths expected in the study area do not produce sufficient damages to economically justify construction.

In 1991, Greiner (URS) developed a hydrologic model for the OCCC watershed, and significant improvements were made to the OCCC. The new improvements were designed to accept 3,000 cfs from upstream of Indian School Road. This includes 1,000 cfs from a controlled release by SRP at the Arizona Canal plus 2,000 cfs coming from a planned, future storm drain upstream of the Arizona Canal. The planned upstream storm drain system was never constructed, nor is it in the City of Phoenix's Capital Improvement Program (CIP). Farther downstream at McDowell Road, the improvements to the OCCC were designed to match the 4,100 cfs capacity at the bridge structure under McDowell Road.

The upstream end of the new improvements began at Indian School Road. The original earthen channel was replaced with a double barrel 12' x 10' box culvert which continues to Earl Drive where it widens to a double barrel 18' x 10' box culvert. Conveyance is provided through the box culverts as well as in a shallow, grassed-lined channel on top of the box culverts. Just upstream of McDowell Road, the culverts transition into a rectangular channel that crosses under the McDowell Road bridge structure. Downstream of McDowell Road, stormwater is conveyed in an open channel adjacent to SR143. The channel ultimately discharges to the Salt River east of SR143, at about 50th Street.

After the improvements to the OCCC in 1993, the FCDMC revised the hydrology for the Arcadia watershed and the OCCC watershed to reflect the channel improvements and to update the model to the current FCDMC's methodology. Hydrographs for the OCCC and

Arcadia areas from this newer, updated model have been used in the HEC-1 model of the Metro ADMS/P.

Durango Area

The lower portion of the Cave Creek floodplain (west of I-17) passes through the Durango area. This area was recently studied as part of the Durango ADMP prepared by Dibble & Associates (September 2001, revised April 2003). The ADMP documents the existing conditions hydrology for the area but did not include any evaluation of the Cave Creek floodplain.

The Durango area is included in the Metro ADMS/P study boundary for the re-study of the Cave Creek floodplain delineation. The hydrologic model developed for the Durango ADMP is based on current FCDMC procedures. Hydrographs from the Metro ADMS/P model were input to the Durango ADMP hydrologic model to define the 100-year discharges for Cave Creek west of 35th Avenue to the Salt River.

2.2 Drainage Studies for Freeway Systems

I-10 Inner Loop Storm Drain Summary Report

This report is a summary of a series of reports prepared for ADOT by HNTB in 1988 to size the Inner Loop drainage structures, including the east and west tunnels. ADOT sized the highway drainage facilities to convey the design 50-year storm. This summary report updated the original hydrologic model for I-10 to include the effects of the SR202L and SR51. It established 100-year peak discharges for nearly the entire Metro watershed based on one square mile sub-basins. The methodology for calculating the peak discharges in the HNTB model, however, is not in conformance with FCDMC procedures. It utilized the TR-20 computer model, which is based on the SCS Dimensionless Hydrograph procedure and Curve Number to calculate rainfall losses. The model excluded the flood-irrigated lots from the sub-basin area.

The East Tunnel is a 21-foot diameter storm drain system and is located adjacent to the east right-of-way of the north-south section of I-10 from Moreland Street to Mohave Drive. The tunnel then traverses diagonally southwest through the I-10/I-17 TI to 20th Street near Watkins Street. The tunnel continues south along 20th Street where it transitions to a two barrel 14' x 12' RCBC and then to an open channel that discharges to

the Salt River. The 21-foot diameter tunnel was designed to convey about 5,000 cfs based on the 50-year design storm event.

One major feature within the watershed that impacts the off-site drainage discharges contributing to the East Tunnel is Phoenix Sky Harbor International Airport. Hydrology studies recently completed for the airport itself only included the airport internal storm drain systems. Runoff generated by the airport generally flows from east to west towards I-10. The southernmost portion of the airport drains directly to the Salt River.

The original TR-20 model generated design peak discharges at half mile intervals along the eastern portion of the I-10 corridor between Roosevelt Street and I-17. The design discharges into the corridor at these locations represented the sum of the overland flow to the west in the same direction as the major streets. Because of the uncertainties associated with the TR-20 analysis, a safety factor of 1.25 was applied to the peak flows. The drop structure at Moreland Street defines the upstream end of the East Tunnel. Six additional drop structures connect to the tunnel and convey on-site and off-site flows collected along the I-10 corridor.

The West Tunnel is also a 21-foot diameter storm drain system. It begins at I-10 and 2nd Street and runs south along the 2nd Street/Central Avenue alignment to the Salt River. Runoff intercepted along east-west section of I-10 between 15th Avenue and SR51 drains to the West Tunnel. Several drop shaft structures were constructed along the corridor to provide future connections to the West Tunnel. Table 2.2 summarizes the design discharges for each of the drop structures connecting to the tunnels.

Hydraulic Investigation for the Salt River at the East Tunnel Outfall

HNTB (January 1990) conducted a hydraulic study for ADOT of the East Tunnel Outfall. The purpose of that study was to investigate the potential impacts of the construction of the East Tunnel outfall on the Salt River channel. Based on the results of the hydraulic study it was concluded that the East Tunnel outfall does not increase the water-surface elevations for the 100-year flood in the study reach of the Salt River.

As would be expected of a heavily developed watershed, there are many additional drainage studies and design projects within the study boundaries. The majority of these are local in nature and deal with drainage for specific development sites. These reports were not collected and reviewed as part of this study.

I-10 Corridor Improvement Study – SR51 to Santan Freeway

DMJM+HARRIS (August 2003) prepared a pre-initial drainage report for the I-10 Corridor Improvement Study. The purpose of this study is to develop a long-term transportation master plan for this segment of I-10 based on the projected Design Year 2025 traffic volumes. The report documents the existing watershed hydrology, existing on-site and off-site drainage systems and the identification of existing drainage issues related to the overall stormwater management for the study area.

The study limits were I-10 from just south of SR51 to just north of the Santan Freeway (SR202L) and from 7th Street on I-17 to Hardy Drive on US 60. Connections with I-17, US 60, SR143, the planned SR153 and local arterial streets were evaluated as well.

SR202L from I-10 to Indian Bend Wash

SR202L (formerly East Papago Freeway) has significant impact on the stormwater drainage patterns in the study area. The off-site drainage system for SR202L from I-10 to SR143 collects and conveys the majority of overland runoff originating from the watershed north of the freeway west into the ADOT East Tunnel. Several studies were conducted for the design of the drainage systems. These studies are summarized below:

1) A-N West, Inc. (July 1989) completed a Final Drainage Design Report for East Papago (SR-217, now SR202L) Freeway Storm Drain from Junction I-10 to 40th Street;
2) Parsons Brinckerhoff Quade & Douglas, Inc. (April 1992) prepared a Final Drainage Report for the East Papago/Hohokam (SR202L and SR143) Traffic Interchange;
3) BRW, Inc. (June 1990) finished a Final Drainage Report for East Papago Freeway (SR202L) from 48th Street to Priest Drive;

4) HNTB and John Carollo Engineers (December 1990) prepared a Final Drainage Report for East Papago Freeway (SR202L) from Priest Drive to Indian Bend Wash.

These reports provided relatively detailed information on the design of the off-site freeway drainage systems including storm drains, detention/retention basins and open channels.

SR51 from I-10 to the ACDC

No drainage reports were available from either ADOT or the City of Phoenix. However, as-built drawings were collected for this segment of the freeway. SR51 intercepts the majority of overland runoff conveyed from east to west. Storm water potentially crosses SR51 at Indian School Road, 20th Street north of Thomas Road, and McDowell Road. Storm drain system and detention/retention basin information was obtained from the GIS coverage provided by the City of Phoenix.

I-17 from 20th Street to the ACDC

No drainage reports were available for this segment of I-17 from either ADOT or the City of Phoenix. However, as-built drawings were collected for this segment of the freeway. I-17 defines the west boundary of the study watershed from the ACDC to Durango Street. The Durango curve is the only location along this boundary where stormwater runoff has the potential to overtop I-17 and flow to the west.

Stormwater runoff concentrating along I-17 from the Durango curve to I-10 can flow to the south at 19th Avenue, 15th Avenue, 7th Street, 11th Street, and 16th Street in addition to storm drain systems along the major streets. Information on the storm drain system for this segment of I-17 was obtained from the GIS coverage provided by the City of Phoenix.

SR143 from SR202L to the Salt River

No drainage reports were obtained for SR143 other than the information obtained from the Final Drainage Report for the East Papago/Hohokam (SR202L and SR143) Traffic Interchange prepared by Parsons Brinckerhoff Quade & Douglas, Inc. (April 1992).

2.3 Flood Insurance Studies

Cave Creek FIS

The hydrology for the Cave Creek Flood Insurance Restudy was prepared by Cella Barr and Associates (CBA) in 1989. This study revised the floodplain for Cave Creek downstream of the Arizona Canal, based on the flood mitigation provided by the ACDC. The methodology for calculating the peak discharges in the CBA model does not conform to FCDMC procedures. The model used the SCS Dimensionless Unit Hydrograph to calculate flood hydrographs and the SCS Curve Number method to determine rainfall losses. The model was, however, very detailed. It included diversions into the City of Phoenix's 2-year storm drain system, accounted for flood-irrigated lots, and employed diversions for split flow at major street intersections. The method used in the CBA model to account for the flood-irrigated lots was to reduce the sub-basin area. Table 2.1 summarizes the peak discharges for the Cave Creek floodplain.

Grand Canal Floodplain Re-Delineation Study

EEC, Inc. (November 2002) prepared a LOMR for the City of Phoenix for the re-delineation of Grand Canal floodplain between 7th Avenue and 19th Avenue. No new hydrology was conducted for this study. This LOMR was based on detailed one-foot contour mapping and the U.S. Army Corps of Engineers' HEC-RAS computer program to redefine the floodplain. Two lateral weirs were modeled to estimate stormwater overtopping the Grand Canal using one-foot contour mapping and supplemental surveys of the canal bank. The total flow overtopping Grand Canal within the reach between 7th Avenue and 15th Avenue is about 785 cfs, and the total flow overtopping Grand Canal within the reach between 15th Avenue and 19th Avenue is about 361 cfs. This LOMR revised the floodplain boundary in the study area but maintained the special flood hazard Zone AH designation.

2.4 Drainage Studies for the Airport

Airfield Master Drainage Plan

Several drainage studies have been undertaken in recent years by the City of Phoenix at Sky Harbor International Airport. Stantec prepared an Airfield Master Drainage Plan (AMDP) in February 2001. The airport watershed was divided into on-site and off-site components. These two components have different drainage characteristics and were modeled using two techniques (HEC-1 and the Rational Method). Hydrologic and

hydraulic analyses were conducted in accordance with the FCDMC's Drainage Design Manual. The 2- and 5-year storm events were evaluated for the contributing watershed to meet the City of Phoenix and FAA design criteria, respectively.

Runoff from the off-site watershed flows to the southwest where it is intercepted into one of three storm drain trunk lines (24th Street, 32nd Street and 40th Street) that outfall to the Salt River. The capacities of these trunk lines were obtained from previous studies. The Red Mountain Freeway, Grand Canal and the railroad divert surface runoff generated by the contributing watershed away from the airport. Any excess runoff that bypassed the three storm drain trunk lines was assumed to be diverted out of the watershed. Therefore, the assumption was made to use the capacities of these trunk lines as the off-site flow component to the airport.

The key element of the proposed preferred alternative is the construction of a "super conduit". The super conduit is a large storm drain trunk line that would intercept off-site flow. The super conduit concept would significantly increase the existing storm drain trunk line capacity for use by the airport. The system was proposed to convey the flows to the west along the north boundary of the airport and then south along 24th Street to the Salt River. The preferred alternative allows for construction to occur as part of other major projects. Construction of the super conduit would take place during the construction of the fourth Runway. Until that time, interim connections of other drainage systems would be made to the existing 24th Street trunk line. It should be noted that the City of Phoenix has a consultant under contract to update the Airfield Master Drainage Plan.

I-10 and Airport Hydrology Update

HNTB Corporation (September 1997), a sub-consultant to Dibble & Associates, prepared a drainage report titled "I-10 and Airport Hydrology Update – Sky Harbor Airport Drainage Impact on ADOT East Drainage Tunnel for 24th Street Realignment." The purpose of this Hydrology Update was to identify any excess capacity in the existing ADOT East Tunnel drainage system for the interception of runoff from the proposed 24th Street realignment project area and the northwest portion of the airfield. The connection to the ADOT East Tunnel near the Buckeye Road drop shaft could alleviate the existing northwest Airfield drainage problem, mitigate runoff generated by the proposed fourth

runway, and allow the existing airport storm drain system to drain a portion of the southwest Airfield and drain the future depressed Sky Harbor Boulevard extension. The study concluded, based on the results of the updated TR-20 model, that the proposed connection to the Buckeye Road drop shaft should be allowed and would not adversely impact the ADOT East Tunnel drainage system.

2.5 Drainage Studies for Canal/Channel Systems

The ACDC

The ACDC is a flood control channel system and defines the north boundary of the study watershed. The U.S. Army Corps of Engineers (June 1982) conducted a study which presented planning and technical information on the design of the ACDC as part of the comprehensive Phoenix and Vicinity Flood Control Project supported by local Phoenix area governments and authorized by Congress. The ACDC is intended to protect the cities of Phoenix, Glendale, and Peoria from the Standard Project Flood. The ACDC is a reinforced concrete channel with vertical walls from 40th Street to 47th Avenue, a concrete trapezoidal channel from 47th Avenue to Cactus Road, and an unlined channel from Cactus Road to Skunk Creek.

2.6 Drainage Studies for the Light Rail System

Valley Metro Rail (VMR) is a joint project among several cities including Phoenix, Glendale, Tempe and Mesa that are working together to design and build the light rail system. Engineering consultants are currently working on the design of the five initial line segments of the light rail system, four of which are located within the Metro ADMS/P study boundary. Contact with VMR revealed that the drainage design for the light rail is based on a 2-year flood while maintaining one dry traffic lane in each direction. At locations where the drainage appears to be problematic, individual solutions are being designed to solve those problems. The methodology used for the design criteria was the City of Phoenix Storm Water Policies and Standards and/or the FCDMC Drainage Design Manual.

3.0 HYDROLOGIC CHARACTERISTICS OF THE STUDY AREA

3.1 General Topography

The study area for the Metro ADMS/P is generally bounded by the ACDC on the north, I-17 on the west, the Salt River on the south, and the ridgeline in the Papago Buttes on the east. The elevations range from 1,000 feet above the mean sea level near the Salt River at the southwest corner of the study area to 2,700 feet at the crest of Camelback Mountain. The majority of the drainage area is characterized by gentle topographic relief with significant urban development. The average slope of the majority of the watershed is about 0.3% except the Papago Buttes on the east and Piestewa Peak on the north. A small portion of the watershed south of Piestewa Peak (near Arizona Biltmore) has a land slope of 1.0%. The Papago Buttes area exhibits slopes as high as 15%.

In general, surface water flows from north to south within the area bounded by the ACDC on the north, I-17 on the west, I-10 on the south, and 15th Avenue on the east. Stormwater runoff generally flows from northeast to southwest within the area bounded by the ACDC on the north, 15th Avenue on the west, I-10 and SR202L on the south, and the ridgeline in the Papago Buttes on the east. Stormwater runoff generally flows from east to west within the remaining area of the study watershed.

The natural or historic flow path has been altered and/or obstructed by urban development. Canals, major streets, storm drains, detention/retention basins, freeways, buildings, irrigated areas, fences and railroads affect surface runoff and play a major role in the present characterization of the watershed and conveyance of flood flows. Significant features within, or adjacent to the watershed, are the Salt River, the Arizona Canal, the ACDC, the Grand Canal, the OCCC, State Highways SR51, SR143, SR153 and SR202L as well as Interstate Highways I-17 and I-10.

3.2 Natural Water Courses

Cave Creek has historically existed as a regional flooding source within the project area and has a significant impact on large urbanized areas in the City of Phoenix. The ACDC flood control project cut-off the Cave Creek contributing watershed upstream of the Arizona Canal. The Metro ADMS/P study watershed for Cave Creek extends south from the ACDC to the Salt River near 51st Avenue. The west boundary in part is defined by I-

17. Cave Creek is roughly parallel to the 19th Avenue alignment from the ACDC to the Durango curve. A re-study of the floodplain was prepared by CBA to account for the mitigating effects of the ACDC. The re-study included development of a new hydrologic model of the existing conditions, 100-year flood flows. The floodplain delineation is shown on the following FEMA FIRM panels: Community 04013C – panels 1665, 2120, 2130, and 2140. Since the CBA study, the City of Phoenix has processed two Letters of Map Revision (LOMR) that have resulted in a reduction of the size of the floodplain upstream of the Grand Canal. Downstream of the Grand Canal, however, the floodplain is unchanged from the 1989 study. Photo 1 shows a flooded area at 21st Avenue and Jackson Road facing east along Jackson Road after the storm of August 3, 2005. This area is located within the Cave Creek floodplain.

Photo 1 – Flooded area at 21st Avenue and Jackson Road facing east along Jackson Road.

The Salt River is the south boundary of the project area and is also the ultimate outfall for all stormwater runoff originating from this study watershed. The water-surface elevation in the Salt River does not generally have any significant impact on the design and operation of most of the drainage systems within the watershed. It may, however, have some effect on the operations of the ADOT east and west tunnels. (Photo 2 shows a cross-section of the Salt River at the 16th Street storm drain outlet).

Photo 2 – A cross-section of the Salt River at the 16th Street storm drain outlet.

3.3 Precipitation

Precipitation in the watershed is strongly influenced by changing seasons. Mean annual precipitation within the watershed is about 7.5 inches. Precipitation is typically divided into two seasons of comparative rainfall depths: summer (June through October) and winter (December through March). Precipitation varies significantly both spatially and temporally. Figure 3.1 shows the storm rainfall depth distribution within the Metro Phoenix area for the storm of August 3, 2005. Figure 3.1 shows that within a 24-hour period the highest rainfall depth within or adjacent to the project area is about 2.5 inches (I-17 and Grand Avenue), and the lowest rainfall depth was about 0.7 inches (Papago Buttes). Exhibit A shows the NOAA Atlas 2 rainfall contours covering the entire Metro Phoenix area. The representative 100-year, 24-hour point rainfall depth within the project area is estimated to be 3.9 inches.

3.4 Soils

Soil hydrologic characteristics within the study area were defined in two Maricopa County soil surveys developed by the Natural Resource Conservation Service (NRCS, formerly Soil Conservation Service): Central Part of Maricopa County and Eastern

Maricopa and Northern Pinal Counties Area. The boundary line of these two soil surveys is roughly along 16th Street. GIS coverage of the soils data was provided by the FCDMC and is shown in Exhibit B. The top ten (10) soils with highest percentage are gilman loam (651GgA), mohall clay loam (651Mr), gilman loam (655Gm), estrella loam (655Es), glenbar clay loam (651Gt), estrella loam (651Es), laveen loam (651LcA), laveen loam (655LaA), avondale clay loam (655Av), and mohall loam (651Mp). The number 651 before the map unit indicates the Central Part of Maricopa County; and the number 655 before the map unit indicates Eastern Maricopa and Northern Pinal Counties.

3.5 Land Uses

Maricopa Association of Governments (MAG) land use coverage (future conditions) provided by the FCDMC has been applied for this study and is shown in Exhibit C. Residential land uses comprise about 50% of the total project area. The second largest land use is commercial (about 20%). Open spaces, golf courses, and vacant land comprise about 13% of the total project area. Public facilities including schools, hospitals, and transportation facilities use about 12% of the total project area. Industrial uses are about 4% of the total project area.

3.6 Detention/Retention Basins

Detention/retention basins are components of an overall stormwater management system that is also comprised of natural and man-made channels, storm sewers, inlets, streets and other drainage structures. The purpose of detention/retention basins is to provide temporary storage of the stormwater runoff from developed areas and attenuate peak flows.

Detention/retention basins can be classified as on-site (local) basins and regional basins based on their size, location, and sources of flooding. On-site detention/retention basins are usually located within a parcel or sub-basin boundary. The size of on-site detention/retention basins are relatively small and provide storage for the contributing parcel only. Regional detention/retention basins are large storage facilities located at strategic sites within a watershed to control runoff from several sub-basins or the entire watershed.

Detention/retention basins can also be classified as on-line basins and off-line basins according to the flood routing operations of the basins. An off-line basin can be either a detention or a retention basin and has a storm drain or open channel system to bypass more frequent flows before water enters the basin. While on-line basins directly receive all inflows without bypassing flows downstream, an on-line basin can also be either a detention or a retention basin depending on its outlet structure.

As one of the main stormwater management policies in Maricopa County, retention facilities incorporated within new developments have been designed to retain the peak flow and volume of runoff from the 100-year, 2-hour storm event. Numerous storage facilities have been constructed with the urban development, especially with the construction of the new freeway systems within the study area.

Some of the example existing detention/retention basins are shown in the following photos: Photo 3 shows a regional on-line detention basin at SR202L and 36th Street where storm runoff flows into the basin along the north bank of the Grand Canal and then the basin bleeds-off into the SR202L storm drain system. Photo 4 shows a local on-line retention basin located at SR202L and 44th Street where stormwater from local streets flows into the basin which bleeds-off by dry wells. Photo 5 shows a regional on-line retention basin located at SR202L and 52nd Street where stormwater enters the basin from the east. An emergency spillway is located on the west side of the basin. Photo 6 shows a regional off-line detention basin located at SR51 and Colter Street for the freeway storm drain system along the east side of SR51. When the collected runoff rate is greater than the storm drain capacity, stormwater surges into the basin through the inlet structure. When the peak flow passes through the storm drain system, the stored volume in the basin begins to bleed-off through the same structure. This type of basin is also sometimes called a surge basin.

Photo 3 – A regional on-line detention basin at SR202L and 36th Street

Photo 4 – A local on-line retention basin located at SR202L and 44th Street.

Photo 5 – A regional on-line detention basin located at SR202L and 52nd Street.

Photo 6 – A regional off-line detention basin located at SR51 and Colter Street.

A basin can be designed to serve multiple purposes. For example, the basin located at I-10 and 13th Avenue shown in Photo 7 has three (3) functions: when the inflow is less than the box capacity, the basin functions as an inlet. When the inflow is greater than the box capacity and the ADOT West Tunnel is not full it functions as an on-line detention basin; and when the ADOT West Tunnel is full it functions as a surge basin for the ADOT West Tunnel. When the basin water-surface elevation exceeds the emergency spillway elevation stormwater spills into I-10.

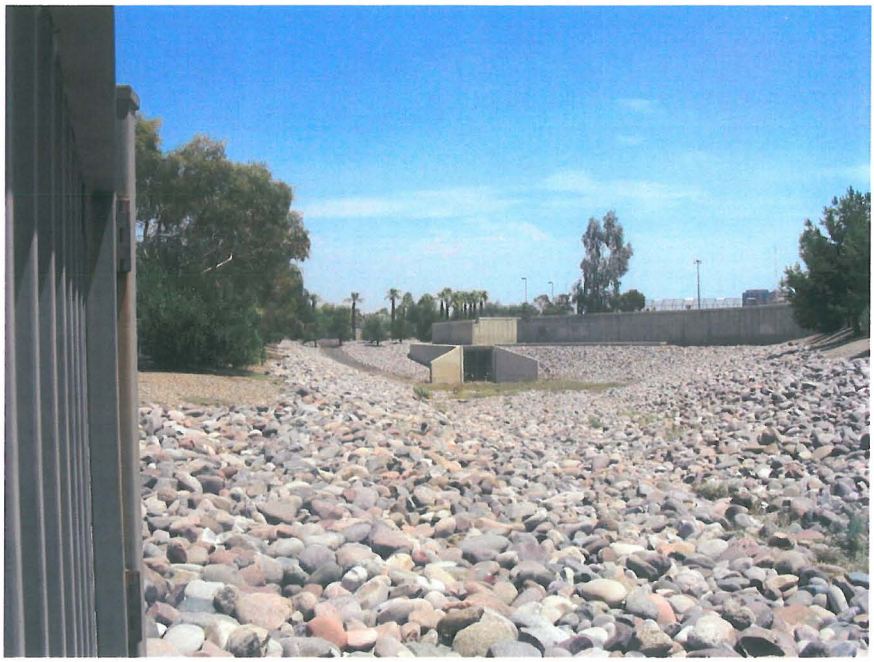

Photo 7 – A storage facility located at north I-10 and 13th Avenue with multiple functions.

The City of Phoenix has acquired 28 properties for the 24th Avenue and Camelback Road project. The project consists of two phases, Phase A includes a basin at 24th Avenue and Camelback and Phase B proposes a basin at 20th and Turney Avenues. The Phase A basin has been incorporated into the hydrologic analysis for the Metro ADMS/P.

More than 40 detention basins were evaluated with this study. They were identified and classified according to their locations, inlet and outlet structures, and contributing watershed by reviewing aerial photos, contour maps, site visits, and design reports.

3.7 Flood Irrigated Areas

The Metro ADMS/P watershed has many flood irrigated parcels including residential lots, landscaping, open spaces, and small on-site detention/retention basins. These flood irrigated lots have significant impact on the surface runoff generated by the watershed and are very difficult to explicitly account for in the hydrologic analysis. Flood irrigated parcels comprise about 8.4 square miles of the study area based on the data provided by the Salt River Project (SRP). Exhibit D shows the flood irrigated parcel coverage within the study area. Historical irrigation data provided by SRP was used to estimate the average irrigation depth in the Metro ADMS/P watershed. Photo 8 shows a typical flood irrigated lot. Flood irrigated golf courses, parks, and commercial landscaped areas are not included in the flood irrigated area since the rainfall-runoff process is different from irrigated residential lots, and the associated initial rainfall losses were accounted for by detention/retention basin storage routing for these land uses.

Photo 8 – A typical flood irrigated lot.

3.8 Freeway Systems

Interstate Highways I-17 and I-10 as well as State Highways SR51, SR143, SR153 and SR202L have significant impact on the watershed drainage patterns. Figure 1.1 shows all of the freeway systems (see also Exhibit F).

I-17 defines the west boundary of the study watershed from the ACDC to Durango Street. The Durango curve is the only location along this boundary where stormwater runoff has the potential to overtop I-17 and flow to the west.

The ADOT stormwater interceptor system paralleling the east-west segment of I-10 from 15th Avenue to SR51 intercepts the majority of overland runoff from the contributing watershed originating from the north and east. Stormwater runoff from areas west of 15th Avenue and east of I-17 flows south through storm drain systems and along 19th Avenue under I-10.

The surge basin for the ADOT West Tunnel collection system at 13th Avenue is modeled as a detention basin. The initial flow is routed to the tunnel collection system. Flows exceeding the inlet capacity of the collection system spill into the depressed I-10 corridor. Flows exceeding the capacity of the emergency spillway to the depressed segment of I-10 are assumed to sheet flow to the west. The depressed I-10 corridor has an estimated detention capacity of 1,250 ac-ft. Photo 9 shows the depressed segment of I-10 at 13th Avenue.

Photo 9 – The depressed segment of I-10 at 13th Avenue looking east.

SR51 and the north-south segment of I-10, including the ADOT East Tunnel, intercept the majority of overland runoff conveyed from east to west. Locations where flood water may cross this alignment to west are: Indian School Road, 20th Street north of Thomas Road, McDowell Road, Van Buren Street, Washington Street, Jefferson Street and Sky Harbor Boulevard. Overland flow exceeding the ADOT East Tunnel collection system capacity north of the SR202 alignment is assumed to pond at the northeast corner of the traffic interchange and then sheet flow west along the McDowell Road corridor.

SR143 and the OCCC intercept all of the flood water from the eastern portion of the watershed and Arcadia watershed with the exception that a storm drain at Camelback Road and 40th Street diverts a small amount of flow south of the ACDC and west of OCCC.

SR153 blocks all of the flood water from the eastern portion of the watershed and directs the flow south into the Salt River.

The off-site drainage system for SR202L from I-10 to SR143 collects and conveys the majority of overland runoff originating from the watershed north of the freeway west into the ADOT East Tunnel. Also, a pipe near 32nd Street equalizes flow between detention basins and a box culvert east of 36th Street provides an overflow to a basin south of the freeway. In addition, three storm drain systems along 24th, 32nd and 40th Streets convey flows south to the Salt River.

SR202L east of SR143 intercepts and conveys overland flow from the northeast to southwest. The collected flow discharges to a major storm drain along 52nd Street and the OCCC paralleling the east side of SR202L. These two drainage systems ultimately convey the runoff to the Salt River.

Stormwater runoff concentrating along I-17 from the Durango curve to I-10 can flow south at 15th Avenue, 11th Avenue, 7th Avenue, Central Avenue, 3rd Street, 7th Street, 11th Street, and 16th Street, in addition to storm drain systems along major streets.

Overland flow which is not intercepted and conveyed in storm drains or the ADOT tunnel systems to the Salt River eventually concentrates at the Durango curve. Initially, the

overland flow is routed through a ponding area at the Durango curve. Runoff volumes exceeding the Durango curve ponding capacity then spill over into the depressed portion of I-17 (estimated at 250 ac-ft of detention storage). Runoff volumes exceeding the detention storage capacity of I-17 are then routed west. Photo 10 shows the depressed segment of I-17 north of Durango Street.

Photo 10 – The depressed segment of I-17 north of Durango Street looking north.

3.9 Canal/Channel Systems

There are a number of canal/channel systems for water supply, irrigation, and flood control purposes within the study area. The Arizona Canal is one component of SRP's water transmission system. The ACDC is a flood control channel system. These two systems parallel each other and define the north boundary of the study watershed.

The Grand Canal is a SRP water transmission canal and transects the entire study watershed from east to west. The Grand Canal from 44th Street to 36th Street diverts some of the overland flow from the southeast to northwest and into the detention basin at the south side of SR202L where flow exceeding the basin capacity will overtop the Grand Canal to the southwest.

The Grand Canal from McDowell Road to SR51 diverts overland flow to the northwest where it concentrates at 20th Street and SR51. The majority of the overland flow at this location is conveyed south.

The Grand Canal from SR51 to I-17 diverts runoff from east to west. After some of the overland flow splits south over the Grand Canal and through storm drains within major streets, the ultimate outfall for runoff from these areas north of the Grand Canal is located near the northeast corner of I-17 and the Grand Canal where flow is conveyed to the south. Photo 11 shows the Grand Canal north bank near 10th Street which was overtopped during the storm of August 3, 2005.

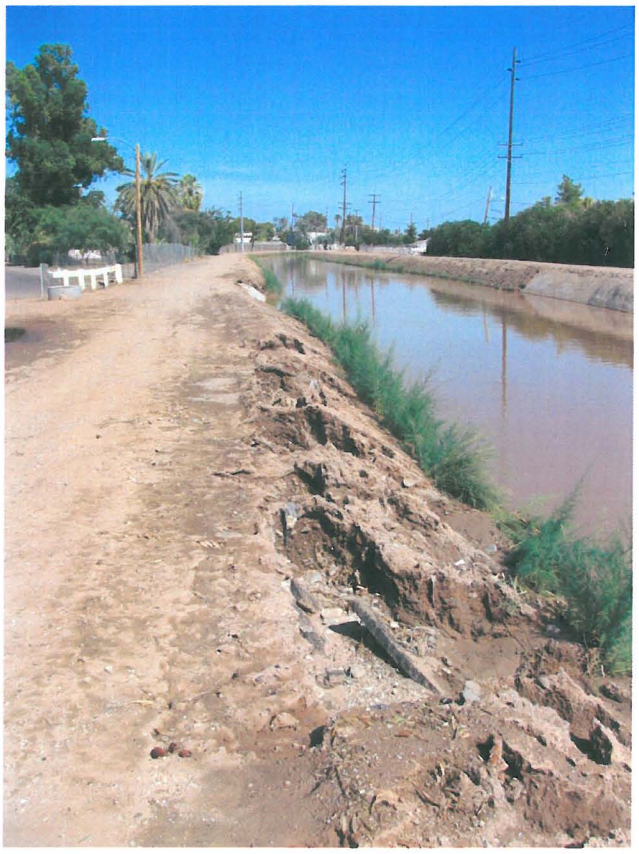

Photo 11 – Grand Canal north bank near 10th Street

The OCCC is a flood control channel with an alignment roughly along 48th Street from the ACDC to McDowell Road; it then turns west and parallels the east side of SR143 to

the Salt River. The OCCC was designed with capacity to convey flood water released from the Arizona Canal. Runoff originating from the Arcadia area and areas to the north and east can be diverted to the OCCC. In addition, a storm drain at Camelback Road and 40th Street diverts a small amount of flow south of the ACDC and west of the OCCC.

The major canal/channel systems within the study watershed are shown in Exhibit F.

3.10 Storm Drain Systems

The City of Phoenix has a well-developed storm drain network with pipes running north to south in all the mile streets as well as many of the half-mile streets. The City of Phoenix's storm drain GIS coverage was used to develop the map of the storm drain system. Exhibit F shows the storm drain systems for pipe diameters 36 inches and larger including the ADOT storm drain systems. However, some of the ADOT storm drains that only collect freeway drainage were left off of the maps for purposes of clarity. A review of the drainage reports collected for this study by EEC indicates that the City of Phoenix's storm drain network is, with some exceptions, sized to convey the runoff from the 2-year storm. For the most part, the City of Phoenix's storm drains discharge directly to the Salt River. However, there are a number of storm drains that discharge to the OCCC as well as to the freeway drainage systems paralleling the SR202L and I-10. The estimated total capacity for the storm drains that outfall into the Salt River is about 7,000 cfs. Photo 12 shows the 78-inch storm drain outlet to the Salt River at 3rd Street. Photo 13 shows the 16th Street storm drain outlet to the Salt River.

The City of Phoenix's 5-year CIP includes two new storm drain projects for 28th and 36th Streets. These programmed projects are included in the hydrologic analysis.

Photo 12 – The 78-inch storm drain outlet to the Salt River at 3rd Street.

Photo 13 – 16th Street storm drain outlet to the Salt River.

3.11 Street Systems

The City of Phoenix has a well-developed grid street network with arterial streets along all section lines and collector streets at half-mile increments. The arterial and collector streets play a very important role in collecting, directing, and conveying stormwater runoff to downstream locations. The City of Phoenix's street network GIS coverage was used to develop the map of the street network system. Exhibit F shows all the major street systems forming the sub-basin boundaries for the study area. Photo 14 shows a typical street intersection where stormwater can split in two directions, typically, south and west.

Photo 14 – A typical major street intersection.

3.12 ADOT Tunnel Systems

The ADOT tunnel drainage systems provide outfalls for many of the City of Phoenix's storm drains. The East and West Tunnels are 21 feet in diameter and are designed to convey runoff from the 50-year storm. Each tunnel has the capacity for approximately 5,000 cfs. Exhibit F shows both tunnel alignments.

Runoff intercepted along the SR202L between I-10 and SR143 drains to the East Tunnel. The East Tunnel system also intercepts and conveys runoff for the contributing watershed south of SR202L, including Sky Harbor Airport. The East Tunnel begins at the I-10/

SR51/SR202L interchange. It then follows I-10 south to the I-17 interchange continuing south to the Salt River. Photo 15 shows the East Tunnel surge chamber vent at Moreland Street.

Runoff intercepted along the east-west segment of I-10 between 15th Avenue and SR51 drains to the West Tunnel. The West Tunnel begins at I-10 and 2nd Street and runs south along the 2nd Street/Central Avenue alignment to the Salt River. The East Tunnel and the West Tunnel are connected at the I-10/SR51/SR202L traffic interchange to balance flow between the two tunnel systems. Photo 16 shows the outlet of the West Tunnel, and Photo 17 shows the tunnel outfall open channel to the Salt River. There are multiple locations along the tunnel alignment where drop shafts convey stormwater runoff from the freeway collection systems as well as City of Phoenix storm drain systems.

Photo 15 – The East Tunnel surge vent at Moreland Street.

Photo 16 – The outlet of the West Tunnel.

Photo 17 – The West Tunnel outfall open channel to the Salt River

3.13 Railroad Systems

Two railroad systems within the watershed have significant impact on the stormwater drainage systems. The first system is Burlington Northern Santa Fe railroad (BNSF) along Grand Avenue and 19th Avenue; the second system is UPSP railroad along Washington Street alignment from I-17 to the east boundary of the watershed. Since the railroads are elevated along most of the alignments, they were used to delineate sub-basin boundaries as shown in Exhibit F. Stormwater can cross the BNSF railroad north of Van Buren Street and north of UPSP railroad near Adams Street. Surface runoff can also be conveyed across the UPSP railroad near 15th Avenue (both east and west of 15th Avenue) to the south. The potential for stormwater to cross the railroads is minimal at other locations. A significant amount of stormwater enters I-17 along the north side of the UPSP railroad. Photo 18 shows ponding along the north side of the UPSP railroad east of 7th Street after the storm of August 3, 2005.

Photo 18 – The UPSP railroad east of 7th Street.

3.14 Light Rail System

Valley Metro Rail (VMR) is a joint project among several cities including Phoenix, Glendale, Tempe and Mesa who are working together to design and build the light rail system. Engineering consultants are currently working on the design of the five initial line segments of the light rail system, four of which are located within the Metro ADMS/P study boundary. See Exhibit F for the proposed light rail system alignment. The drainage design for the light rail is based on a 2-year flood, maintaining one dry traffic lane in each direction and the profile is near or at grade. Therefore, the light rail system is assumed not to have significant impact to the sub-basin boundary delineations of this study.

3.15 Airport

Phoenix Sky Harbor Airport, which is excluded from the Metro ADMS/P study area, is bounded by 24th Street on the west, the UPSP railroad on the north, SR153 on the east, and the Salt River on the south. Hydrologic studies recently completed for the airport itself only included the airport internal storm drain systems. Runoff generated by the airport generally flows from east to west towards I-10. The southernmost portion of the airport drains directly to the Salt River. It should be noted that the capacity of the ADOT East Tunnel was not evaluated because the airport area is excluded from the study watershed. Also, the exclusion of Sky Harbor Airport from the hydrologic study may slightly underestimate peak discharges for areas west of I-10 and south of the UPSP railroad because of the potential for flow to cross under I-10.

4.0 HYDROLOGIC MODELING METHODOLOGIES AND INPUT DATA

4.1 General Modeling Criteria

Development of a comprehensive hydrologic model for the entire study area is one of the major deliverables of the Metro ADMS/P. As a first step for the hydrologic modeling, a pilot study was conducted. For the pilot study, a sample representative watershed with 11 sub-basins (approximately 4 square miles) was selected. The pilot study area for the Metro ADMS/P is bounded by the ACDC on the north, 7th Street on the west, the Grand Canal on the south, and SR51 on the east. The selected sub-basins reflect typical conditions of the watershed land uses and include major drainage components such as flood irrigated lots, a storm drain system, a network of urban streets, an irrigation canal with elevated banks, and retention/detention facilities.

The purpose of the pilot study was to evaluate and recommend hydrologic modeling methodologies for the Metro ADMS/P following the procedures outlined in the FCDMC's *Hydrology Manual*, January 1995. The pilot study also performed sensitivity analyses on hydrologic input parameters and compared the estimated 100-year peak flows with other available data.

The hydrologic modeling for the Metro ADMS/P was performed using the U.S. Army Corps of Engineers' Flood Hydrograph Package (HEC-1). The model input parameters were generally prepared by using the FCDMC's Drainage Design Management System for Windows (DDMSW Version 2.1.0) program. However, the parameters for unit hydrographs were calculated by using the new MCUHPI procedures from DDMSW Version 3.2.6 based on the direction from the FCDMC during the pilot study. Multiple frequency models have been developed for the100-year, 24-hour, 50-, 25-, 10-, and 2-year storms, and 100-year, 6-hour storm.

A finite element-type approach was developed to model a typical sub-basin as shown in Figure 4.1. This HEC-1 schematic diagram illustrates the key elements, schematic legend, and structure of the HEC-1 modeling approach used in this study. Peak flows for a sub-basin may not concentrate at one single point, but it is assumed that the concentration point is located at the hydrologic low point of the sub-basin and that surface-flow diversions may occur at several locations along the downstream boundaries

of a sub-basin. In general, most sub-basins are modeled with one diverted flow in two directions.

In order to achieve consensus for the hydrologic modeling approach, the Metro ADMS/P hydrologic evaluation team held four (4) separate meetings to brainstorm ideas, evaluate approaches, review preliminary modeling results, discuss alternative procedures, define input parameters, and make recommendations for the modeling methodologies of the entire Metro ADMS/P study area. The following sub-sections summarize the recommended hydrologic modeling procedures and the input data to the hydrologic models.

4.2 Design Precipitation

The point rainfall values were from NOAA ATLAS 2 rainfall data (Exhibit A); and the design depth-duration-frequency table was computed using the FCDMC's DDMSW PREFRE software module. The design rainfall depths were applied uniformly over the entire watershed with depth-area reduction factors based on the NOAA Technical Memorandum NWS HYDRO-40 (NOAA, 1984). The design rainfall depth computations are documented in Appendix A1. As defined by FCDMC's Drainage Design Manual, the rainfall distributions are SCS Type II for 24-hour storms and the Maricopa County local storm distribution for the 6-hour storm.

4.3 Sub-basin Parameters

Sub-basin Delineation

The north-south mile and half-mile streets, and the east-west mile streets generally define the sub-basins boundaries. Therefore, the typical sub-basin size is a half square mile as shown in Figure 4.1 (generally one mile long in the north-south direction and a half mile wide in the east-west direction). One of the main considerations for the shape of the sub-basin was to quantify the input of the existing storm drain network. The total number of sub-basins is 180 for the study area. Exhibit F shows the sub-basin boundary map.

Hydrograph Naming Conventions

A grid system was developed for watershed sub-basins and a hydrograph naming convention was established. The east-west direction was represented by numbers starting from 64th Street to 35th Avenue. The north-south direction was labeled by letters from "a" to "w" starting from Dunlap Avenue to Salt River. The sub-basin name is the

combination of the number and the lower case letter of the grid. Hydrograph names are given based on the type of operation, name of the related sub-basin, structure type, and flow direction. The prefix "D" of a hydrograph name is for diversion operations; the prefix "R" of a hydrograph name is for surface flow routing operations; the prefix "S" of a hydrograph name is for storage routing operations; the prefix "C" of a hydrograph name is for combining operations; the prefix "B" of a hydrograph name is for hydrograph retrieval operations; and the prefix "P" of a hydrograph name is for pipe routing operations. The suffix "P" of a hydrograph name is for pipe diversion operations; and the suffix "PT" of a hydrograph name is for ADOT pipe tunnel diversion operations. The suffix "S" of a hydrograph name indicates a flow south direction; the suffix "W" of a hydrograph name indicates a west flow direction; and the suffix "E" of a hydrograph name indicates an east flow direction. Exhibit F shows the sub-basin boundary and HEC-1 schematic map.

Topographic Mapping Information

The FCDMC provided 2-foot contour mapping for the study limits. The contour mapping was developed by Aerial Mapping Company in March 1998 using the NGVD 1929 datum.

Sub-basin Area

Area calculations were performed for all of the sub-basins using ArcGIS based on the sub-basin delineations shown in Exhibit F.

Flow Path Length

Most of the sub-basins have general northeast to southwest slopes but some have northwest to southeast slopes. As described before, the grid street network consists of north-south and east-west roadways. The typical hydrologic low point is at either the southwest corner or southeast corner of a sub-basin. Since the street network conveys the majority of the stormwater flows, the surface flow-path length for each sub-basin was estimated to be the sum of the sub-basin length and width for a typical rectangular shape sub-basin. The flow path lengths were adjusted for irregular shape sub-basins accordingly.

Sub-basin Watercourse Slope

Sub-basin watercourse slopes were computed based on representative sub-basin high point, hydrologic low point elevations, and flow-path length using the 2-foot contour mapping.

The sub-basin names, areas, flow-path length, and slopes for all of the sub-basins are shown in Appendix A2 – *Sub-basin Data*.

4.4 Soil Data

Soil data was provided by the FCDMC in GIS format. The total sub-basin area and the portions of each soil group within each sub-basin were computed with the use of ArcGIS software. Infiltration parameters are based on soil data obtained from Appendices A, B, and C of Maricopa County's Hydrology Manual. The DDMSW soil data for each sub-basin within the watershed are provided in Appendix A3. The GIS coverage of the soils data is shown in Exhibit B.

4.5 Land Use Data

Land use data was also provided by the FCDMC in GIS format. The total sub-basin area and the portions of each land use category within each sub-basin were computed with the use of ArcGIS software. Default rainfall loss parameters provided by DDMSW were verified and updated to represent the watershed conditions. MAG land use coverage (future conditions) provided by the FCDMC was used for this study and is shown in Exhibit C. The DDMSW land use data for each sub-basin within the watershed are provided in Appendix A4.

4.6 Rainfall Loss Parameters

The Green and Ampt Rainfall Loss Method

The Green and Ampt rainfall loss methodology was used for all sub-basins. The Green and Ampt parameters for each sub-basin were computed using the DDMSW software, based on the land use and soil data. The "Normal Condition" was applied as the antecedent soil moisture condition. All sub-basin input data is summarized in Appendix A2.

Surface Retention Parameter (IA)

Typical surface retention loss values (IA) have been suggested for many land uses by the FCDMC Hydrology Manual (Table 4.2a). In order to account for the impact of flood irrigated parcels on the reduction of surface runoff, the default IA values were adjusted for the extra retention capacity.

Historical irrigation data provided by SRP was used to estimate the average flood irrigation depth in the Metro Phoenix watershed. This value (3.3 in) was applied as IA to the irrigated lots for all of the sub-basins where flood irrigated lots exist. The computed default IA values were used for pervious areas where flood irrigation is not applicable. The area-weighted IA was computed for each of the sub-basins and applied in the DDMSW as a custom IA value. Appendix A5 documents the computation process and the final results for the custom IA values. Flood irrigated golf courses, parks, and commercial landscaped areas are not included in the flood irrigated area since the rainfall-runoff process is different from irrigated residential lots, and the associated initial rainfall losses were accounted for by detention/retention basin storage routing for these land uses.

Impervious Area Percentage (RTIMP)

The Metro Phoenix ADMS/P watershed includes landscaping, open spaces, and small on-site detention/retention basins. These small on-site basins have not been modeled explicitly in the HEC-1 analysis. Stormwater runoff from some of the impervious areas is retained within these areas and does not contribute to the sub-basin total runoff. In order to account for the runoff losses from these areas, a reduction factor was recommended to adjust the default impervious percentage (RTIMP). This reduction factor is equal to one tenth of the square root of the default impervious percentage calculated by the DDMSW (Reduction Factor = 0.1*(default RTIMP)^0.5). Appendix A6 documents the computation process and the final results for the custom RTIMP values.

4.7 Rainfall Excess to Runoff Transformation (Unit Hydrograph)

Clark Unit Hydrograph methodology was used to transform rainfall excess to runoff. The synthetic dimensionless time-area relationships for urban watersheds were selected for all the sub-basins. The values of time of concentration and storage coefficient for each of

the sub-basins were calculated using the new MCUHP1 procedures from DDMSW Version 3.2.6. The estimated time of concentration and storage coefficient for each sub-basin for all of the frequencies are also provided in Appendix A2.

4.8 Flow Diversions (Flow Splits)

The HEC-1 diversion routine (typically, DT, DI, DQ cards) was utilized to model the various types of flow splits encountered within the watershed including hydrologic diversions for storm drain systems, channel/canal systems, detention/retention basins, surface flow splits, and structures.

Detention/Retention Basin Diversions

Hydrologic diversions were used to simulate existing/proposed detention/retention basins throughout the watershed. The modeling technique for a basin depends on the location and type of the basin.

Detention/retention basins were identified and classified by reviewing aerial photos, contour maps, and were then field verified. The storage volumes were estimated based on the contour maps and design reports.

The proposed Phase A retention basin by the *24th Avenue and Camelback Road Drainage Improvements* (September 2003) was included in the HEC-1 model. The Phase A basin is located on the northeast corner of I-17 and Camelback Road.

If a sub-basin has multiple basins, an equivalent detention/retention basin may have been used to model these conditions. Appendix A7 lists the major features of all the detention/retention basins evaluated within this study limits.

Storm Drain Diversions

Storm drain diversions were estimated using the Manning's equation full flow capacity of the closed conduit conveyance systems. The storm drain network GIS data provided by the City of Phoenix included pipe sizes and lengths. The existing ground slopes were used to represent the storm drain hydraulic grade line slopes. Storm drains 36-inches in diameter or larger were included in the HEC-1 models. The storm drain systems were modeled to convey the base flow up to pipe full flow assuming adequate inlet capacity.

If a sub-basin has multiple pipes in one direction, a composite storm drain pipe may have been developed to model this unique condition. If a storm drain receives flow from more than one sub-basin the total lateral capacity from each of the sub-basins was used to develop the inflow ratios. One exception should be noted regarding the hydrologic modeling of the 7th Street storm drain north of the Grand Canal. The study team decided to model the connection to the 12th Street storm drain for only the 2-year storm event due to verified surcharge problems in the Canal North neighborhood and downstream hydraulic constraints.

The proposed storm drains along 28th Street and 36th Street from Camelback Road to SR202L were also included in the hydrologic models. Storm drains along 27th Avenue and 35th Avenue at the UPSP railroad were assumed to be full in the hydrologic models, since the design criterion for storm drains is the 2-year storm for the City of Phoenix. Hydrographs were input (QI) at these locations. Appendix A16 summarizes the input hydrographs used in the models. Exhibit F shows the main storm drain systems within the study watershed. Appendix A8 summarizes the storm drain diversion data for all of the sub-basins.

Sub-basin Flow Diversions

Most sub-basins slope from northeast to southwest, and the street network conveys the majority of overland flows. Therefore, stormwater generated within a typical sub-basin is conveyed to the arterial streets along the west and south sides of the sub-basin by combination of arterial, collector and residential streets. At the same time, some of the surface runoff crosses the sub-basin boundaries and enters the adjacent sub-basins through both collector and residential streets. When the runoff from a sub-basin concentrates at a hydrologic low point (typically at or near the street intersection of the southwest corner of the sub-basin) street intersection diversions occur. Sub-basin surface runoff diversions are based on representative slopes and effective street conveyance widths including right-of-way. A composite channel cross section was developed to represent multiple-street conveyance.

Surface runoff from each sub-basin may not concentrate at one single point, for illustration purposes, it is assumed that the concentration point is located on the hydrologic low point of the sub-basin and one split flow was modeled for each sub-basin

to one direction. A fixed flow split ratio (typically southerly and westerly components) for most of the sub-basins was used except for some of the sub-basins along Grand Canal where rating curves were developed. Figure 4.1 shows a typical half square mile sub-basin with surface flow diversions in both directions. Appendix A9 presents the methodologies for the sub-basin diversions and the results of the flow diversion ratios for all of the sub-basins.

ADOT Tunnel Diversions

The ADOT tunnel systems provide outfalls for many of the City of Phoenix's storm drains. Both tunnels are 21 feet in diameter and are designed to convey runoff from the 50-year storm. The ADOT east and west system design flows and inflow locations (drop shafts) are summarized in Table 2.2. The amount of flow diverted into the tunnel systems at a specific inflow location was the lower of the drop shaft capacity or the storm drain capacity that conveys the flow to the tunnel. The storm drain diversions within the downtown area to the West Tunnel was assumed to be zero since the storm drain connections to the tunnel cannot be verified by either site visit or as-built plans. Once flood water enters the tunnel system it does not combine with surface flows. Appendix A10 shows the diversion data to the tunnel systems.

Grand Canal Diversions

The Grand Canal is a water supply transmission system and transects the entire study watershed from east to west. The banks of the Grand Canal are elevated and block the initial surface stormwater flowing to the south. Stormwater can overtop the bank and flow into the canal after the initial flow is directed to the west through the streets. It is assumed that once the stormwater overtops the north bank of the canal it enters the south sub-basin. Open channel diversion rating curves were developed using the Normal Depth method for the Grand Canal overtopping flow diversions. Since the overtopping of the canal north bank is best represented as a broad-crest weir, the broad-crest weir equation was converted into an equivalent Manning's equation so that the Normal Depth method can be used for both directions. Appendix A11 documents the methods used for the sub-basin diversions along the Grand Canal and the resulting diversion rating curves (tables).

Structure Diversions

When a specific structure, such as a culvert, a pump station, or a spillway, divides a hydrograph a diversion operation is included in the HEC-1 models. When a detention/retention basin has more than one emergency spillway or has both bleed-off pipe and an emergency spillway a diversion operation has to be used to separate the flow hydrographs.

4.9 Flow Routing

Storm Drain Routing

The Kinematic Wave method (RK card) was used for the storm drain routing. The existing ground slopes were used to represent the storm drain hydraulic grade line slopes. Manning's "n" value of 0.015 was applied for all of the storm drain pipes. Routing length was measured from the 2-foot contour map. If a sub-basin has multiple pipes in one direction, a composite storm drain pipe was used to route the flow to a downstream sub-basin. The storm drain routing data is provided in Appendix A12.

Open Channel Routing

Normal Depth channel routing methodology was utilized in the hydrologic model to route surface runoff through sub-basins. As described previously, a finite element-type approach was developed to model sub-basin surface runoff diversions based on representative slopes and total effective street flow widths. A composite channel cross section was developed to represent multiple-street conveyance based on the total effective street right-of-way. Surface flows for each sub-basin may not concentrate at one single point, for simplicity, it is assumed that the surface routing conveys the flow from the hydrologic low point of one sub-basin to the hydrologic low point of a downstream sub-basin after the flow diversion. The longitudinal slopes were estimated based on general existing ground slopes. Manning's "n" value of 0.016 was applied for the channel portion and Manning's "n" value of 0.05 was applied for the overbanks. The number of steps used for the routings (NSTPS) was based on the travel time divided by the tabulation interval (NMIN) rounded up to an integer. Channel data is provided in Appendix A13.

Storage Routing

Storage routing was modeled using the Level Pool method. Storage facilities were modeled as one of the four types of basins according to their inlet and outlet structures: on-line detention basins, on-line retention basins, off-line detention basins, and off-line retention basins. If a sub-basin contains multiple basins, an equivalent detention/retention basin may have been used to model these conditions. Storage-elevation-discharge rating curves (tables) were developed from the 2-foot contour maps and design reports. If the basin outfall structural dimensions are known they were directly modeled using HEC-1. Appendix A7 lists the major features of all the storage facilities evaluated, and Appendix A14 lists all the storage routing rating curves (tables).

4.10 Cumulative Area Computation Data

When hydrographs generated from diversions are combined, a contributing drainage area is specified on the HC card. This area is used to compute an interpolated hydrograph for the combined hydrograph based on the depth-area relationship defined previously. This relationship is used to compute the aerial reduction factor based on the contributing area experiencing rainfall at any given time. The cumulative combined areas have been computed for each combine node based on the total area of all the sub-basins located upstream of the combine node. The drainage area specified for each hydrograph combination represents the maximum drainage area that may contribute flow to the concentration point.

Since the study area has multiple outfalls, the entire watershed is divided into six (6) relatively independent sub-watersheds as defined by arterial streets, storm drains, freeways, channel/canal systems, and railroads. The six (6) sub-watersheds are: 1) north-central Phoenix; 2) north-east Phoenix; 3) OCCC-SR153; 4) Airport; 5) Cave Creek; and 6) Durango ADMP. The Phoenix downtown area is part of the Cave Creek sub-watershed for surface flow; but it is relatively independent in terms of sub-surface flow (storm drains). The six (6) sub-watersheds are shown in Exhibit E, and the cumulative area computation spreadsheet is included in Appendix A15.

4.11 Interaction with Adjacent Watershed Models

The OCCC and Arcadia Area

In 1993, the FCDMC updated the Arcadia and OCCC watershed hydrology to reflect the channel improvements and to update the model to current FCDMC methodology. Hydrographs from the updated FCDMC models have been input to the Metro ADMS/P HEC-1 model for the OCCC at McDowell Road and 48th Street, and for the Camelback Road storm drain at 40th Street. The peak flow at McDowell Road is 5,420 cfs (including 1,000 cfs from the Arizona Canal by SRP). These hydrographs were extracted from the HEC-1 model named 100W_DRN.DAT provided by FCDMC. Appendix A16 includes the information of the input hydrographs.

Durango ADMP Area

The lower portion of the Cave Creek floodplain (west of I-17) passes through the Durango ADMP study area. The Durango area is included in the study boundaries in support of the re-study of Cave Creek floodplain delineation. The hydrologic model developed for the Durango ADMP is based on current FCDMC procedures. A hydrograph from the Metro ADMS/P model was input to the Durango ADMP hydrologic model at Lower Buckeye Road and 35th Avenue in order to develop a complete model for the 100-year flood for Cave Creek from the Grand Canal to the Salt River. Appendix A16 includes the information of the input hydrographs.

4.12 Modeling Control Parameters

The computation time interval is 5 minutes; the number of hydrograph ordinates is 2,000; and the time interval for input time series is 15 minutes for rainfall and 60 minutes for runoff.

5.0 PARAMETER SENSITIVITY ANALYSIS

In order to evaluate the impact of uncertainties inherent in the hydrologic input parameters on peak flow estimations, a parameter sensitivity analysis was conducted on four hydrologic input variables for the 100-year, 24-hour model: watershed average rainfall depth, surface retention loss (IA), impervious percentage (RTIMP), and surface runoff diversion slope (south direction). For each of the four parameters, two bounding values were evaluated for a typical sub-basin: 10% lower than the base value and 10% higher than the base value.

5.1 Rainfall Depth

Exhibit A shows the NOAA Atlas 2 rainfall contours covering the entire Metro Phoenix area. The average 100-year, 24-hour rainfall depth within the project area is estimated to be 3.9 inches. The design rainfall depths were applied uniformly over the entire watershed with depth-area reduction factors based on the NOAA Technical Memorandum NWS HYDRO-40 (NOAA, 1984). The sensitivity analysis was performed by varying the rainfall depth from 3.51 inches to 4.29 inches and keeping other parameters unchanged in the HEC-1 model. The red line in Figure 5.1 shows that the change in peak flow could be as high as 20% resulting from a 10% deviation in point rainfall depth.

5.2 Surface Retention Loss

In order to account for the impact of flood irrigated parcels on the reduction of surface runoff, the default surface retention loss (IA) values were adjusted for the extra surface retention capacity. A sensitivity analysis was conducted by varying the IA value from 10% lower than the base value and 10% higher than the base value while keeping other parameters unchanged in the HEC-1 model. The dark blue line in Figure 5.1 shows peak flow changes around 6-8% resulting from a 10% deviation in surface retention losses.

5.3 Impervious Percentage

In order to account for runoff losses from impervious areas which are not directly connected to a concentration point, a reduction factor was developed to convert the default impervious percentage (RTIMP) to effective impervious percentage. The purpose of the sensitivity analysis to this variable is to show how the 100-year peak flows react to the uncertainty of this parameter estimate. The black line in Figure 5.1 shows peak flow

changes around 4-5% resulting from a 10% deviation in the effective impervious percentage.

5.4 Surface Flow Diversion Slope

A finite element-type approach was developed to model sub-basin surface runoff diversions based on representative slopes and total effective street flow widths. A composite channel cross section was developed to represent the multiple-street flow conveyance. A sensitivity analysis was conducted by varying the representative slope to the south from 10% lower than the base value to 10% higher than the base value while keeping other parameters unchanged in the HEC-1 base model. The green line in Figure 5.1 shows a change in peak flow to the south around 2-3% resulting from a 10% deviation in conveyance slope.

The results of sensitivity analyses in Figure 5.1 indicate that the most sensitive parameter of the four variables evaluated is the watershed average rainfall depth. The least sensitive parameter is the representative sub-basin slope for surface flow diversions. Peak discharge increases with the increase of all parameters except surface retention loss (IA).

6.0 HYDROLOGIC MODELING RESULTS

6.1 Modeling Results for the 24-Hour Storms

The HEC-1 hydrologic models were developed in accordance with the methodologies presented in Section 4.0. Peak flows for all of the 24-hour storms are summarized in Table 6.1. Peak flows for the 100-year storm are also shown in Exhibit G. The HEC-1 models for the 24-hour storm are presented in the following appendices:

- Appendix B – 100-year
- Appendix D – 50-year
- Appendix E – 25-year
- Appendix F – 10-year
- Appendix G – 2-year

The electronic files for the HEC-1 models and the updated MCUHP1 routine are provided on the CD in Appendix H.

6.2 Modeling Results for the 100-Year, 6-Hour Storm

The HEC-1 model output file for the 100-year, 6-hour storm is included in Appendix C. Peak flows for the 100-year, 6-hour storm are summarized in Table 6.2. The peak flows for the 100-year, 6-hour storm event are also shown in Exhibit G (below the flow arrow). The HEC-1 model electronic file for the 100-year, 6-hour storm is also provided on the CD in Appendix H.

6.3 100-Year, 24-Hour Storm Peak Flows for the Cave Creek Floodplain

The surface peak flows for both the 100-year, 24-hour and 6-hour storms in the Cave Creek floodplain are summarized in Table 6.3. Table 6.3 shows that the peak flow for the 100-year, 6-hour storm is larger than the 100-year, 24-hour storm except at 19th Avenue and Grand Canal.

6.4 Comparison of 100-Year Flows for the Cave Creek Floodplain

The 100-year, 24-hour and 6-hour surface peak flows for the Cave Creek floodplain have been compared with the effective FIS flows. These flows are shown in Table 6.4. Table 6.4 shows that the peak flows estimated by this study are lower than the effective FIS

flows at and above Thomas Road and between UPSP railroad and Durango Street at I-17 since more flow is directed south of the Grand Canal east of 15th Avenue and almost all of the flow blocked by UPSP railroad is diverted into I-17. The peak flows at other locations are either comparable or higher than the flows used for the effective FIS.

The peak flows for the Durango ADMP west of I-17 were estimated using the Durango ADMS HEC-1 models with inflow hydrographs from this study. Both the 100-year, 24-hour and 6-hour models are included on the CD.

7.0 VERIFICATION OF MODELING RESULTS FOR THE 100-YEAR STORM

7.1 Comparison with Other Studies Adjacent to the Project Area

Verification of modeling results was conducted by comparing the peak flows with studies pertinent to the Metro ADMS/P study area. These studies include: Cave Creek Flood Insurance Re-study, Durango ADMP, Glendale/Peoria ADMP Update, I-10 Corridor Improvement Study, Maryvale ADMS/P, Old Cross Cut Canal/Lafayette Interceptor hydrology, and 24th Avenue and Camelback Road Drainage Improvements. Figure 7.1 presents the results of the 100-year peak flow comparison with linear trend lines (flows for sub-basins only). Figure 7.1 shows that in general the peak flows of the Metro ADMS/P study are relatively lower than those estimated by other studies. Two major factors contributed to the lower runoff estimates: the first one is the higher surface retention loss parameter (IA) by the Metro ADMS/P model to account for the detention/retention volume of flood irrigated lots (post-retention flow). Other studies used on-site retention volume diversions to account for storage of flood irrigated lots. The second factor is the new MCUHP1 routine from DDMSW Version 3.2.6 which was used to estimate time of concentration and storage coefficient for the Clark Unit hydrograph method. Since the estimated net rainfall intensity is lower and the time of concentration is longer as calculated by the new MCUHP1 routine than those estimated by the DDMSW V2.1.0 MCUHP1 routine, the computed peak flow estimates are lower.

7.2 Comparison between 24-Hour and 6-Hour Storm

The peak flows for the 100-year storm were compared between the 24-hour and 6-hour storm durations. Figure 7.2 shows the results of the two with linear trend lines. Figure 7.2 indicates that most of the peak flows of the 6-hour storm for the smaller areas are higher than those of the 24-hour storm. The main factor causing the differences is the precipitation distribution for the 6-hour storm for small contributing areas (Patterns 1 and 2). With increasing contributing area, the peak flows for both models are similar.

For the Cave Creek floodplain, the peak flows for the 100-year, 6-hour storm is larger than the 100-year, 24-hour storm, especially west of I-17 at the Durango curve.

7.3 Comparison with USGS Regression Envelope

Peak flows were also compared with the regional USGS regression envelope using DDMSW as shown in Figure 7.3 (Figures 7.3a for the 24-hour model, and Figure 7.3b for the 6-hour model). Note that the USGS regression envelope was developed for natural watersheds and not for urbanized areas that may have significant detention/retention facilities to attenuate the peak flows. Both Figures 7.3a and 7.3b show that most of the peak flows estimated by this study are below the regional envelope curve.

8.0 EVALUATION OF EXISTING DRAINAGE SYSTEMS

8.1 Storm Drain Systems

As shown schematically in Exhibit F, the City of Phoenix has a complex system of storm drains that convey stormwater from as far north as Dunlap Avenue south to the Salt River. Primary components of this system include storm drains along I-17, 19th Avenue, 15th Avenue, 7th Avenue, Central Avenue, 7th Street, 12th Street, 16th Street, SR51 and I-10, 24th Street, 32nd Street, and 40th Street. The 28th Street and 36th Street storm drains were also modeled since they will be constructed in the near future. The design capacities for these storm drain systems are generally estimated to be the 2-year storm event. However, the contributing drainage areas to some of the storm drain systems may have been changed by the construction of the freeway systems. Specifically, the I-10 inner loop and SR202L has cut-off or significantly reduced flows to the south. Therefore, the storm drain systems to the south of these freeways may have capacity exceeding the 2-year design storm.

Table 8.1 shows the pipe-full flow capacities and estimated peak flows for major storm drain systems. Table 8.1 shows that these storm drain systems provide the following levels of protection:

1) The I-17 storm drain has the capacity for the 50-year storm north of Thomas Road. It has a 2-year capacity south of I-10.
2) The 19th Avenue storm drain has a capacity which slightly exceeds 2-year storm (lower than 10-year) except at Glendale Avenue and SPRR locations.
3) The 15th Avenue storm drain can provide protection up to 25-year storm north of Glendale Avenue; it has 2-year capacity south of Bethany Home Road except at Thomas Road where the 2-year storm can overwhelm the system.
4) The 7th Avenue storm drain system has 2-year capacity except at Indian School Road and Thomas Road.
5) The existing Central Avenue storm drain can provide up to 10-year storm protection.
6) The 7th Street storm drain has capacity for the 10-year storm north of Bethany Home Road and the 2-year to Thomas Road. South of I-10, it has a 50-year capacity to Van Buren Street, and a 2-year south to the Salt River.

7) The 12th Street storm drain has 10-year capacity north of Thomas Road and 2-year capacity at Van Buren Street and the UPSP railroad. South of UPSP railroad it has 50-year capacity.

8) The 16th Street storm drain has 10-year capacity north of Indian School Road and at Van Buren Street. It has 2-year capacity at other locations.

9) The SR51 storm drain has about a 10-year storm capacity.

10) The 24th Street storm drain has 2-year capacity north of SR202L. The freeway drainage system intercepts surface runoff creating 50-year storm capacity south of SR202L.

11) The 28th Street storm drain is a proposed drainage system with 2-year storm capacity.

12) The 32nd Street storm drain has 2-year storm capacity north of SR202L. The freeway drainage system intercepts surface runoff creating 25-year storm capacity.

13) The 36th Street storm drain is a proposed drainage system with 2-year design storm (designed by Stantec, Inc). This study shows that it may have 10-year capacity at McDowell Road and SR202L.

14) The 40th Street storm drain has about a 10-year capacity since the flows are reduced by the SR202L inceptor channel for the downstream reach.

15) The 100-year peak discharge in the OCCC at McDowell Road (5,420 cfs) exceeds the original design capacity of the crossing (4,100 cfs). However, the 100-year peak discharge includes a concurrent 1,000 cfs discharge by SRP from the Arizona Canal.

In summary, these storm drain systems have at least 2-year storm capacity. South of the I-10/SR202L alignment the storm drain systems have more than 2-year storm capacity because the flows are reduced or the storm drains are cut-off along the freeway alignments. Note that this conclusion is based on hydrologic modeling results not on detailed hydraulic modeling.

8.2 ADOT Tunnel Systems

The West Tunnel

The 21-foot diameter tunnel was designed to convey about 5,000 cfs based on the 50-year design storm event. The 100-year modeling results show that 4,036 cfs enters the West

Tunnel since the drop shafts within the downtown area are not connected with storm drain systems (total capacity 505 cfs). Therefore, the West Tunnel appears to have additional capacity.

The East Tunnel

The 21-foot diameter east tunnel was also designed to convey about 5,000 cfs based on the 50-year design storm event. The 100-year modeling results show that 3,629 cfs enters the East Tunnel excluding the airport. The design drop shaft capacity near the airport area is about 1,025 cfs. Therefore, the East Tunnel appears to have some extra capacity.

8.3 Storage Facilities

Detailed discussions regarding detention/retention basins are documented in Appendix A7 and Appendix A14. Some of the rating curves were verified or derived from the hydraulic modeling for the flood insurance study of the Cave Creek (for example, S-I17 for the depressed I-17 segment).

There are numerous detention/retention facilities within the project area. A few significant ones were reviewed from the HEC-1 modeling results. One of the biggest detention basins is the depressed segment of I-17 where it provides about 400 ac-ft storage volume (detention) for the 100-year storm flood and reduces the peak flow by half.

The depressed segment of I-10 can provide about 1250 ac-ft storage if the inlet basin near 13th Avenue is overwhelmed. The 100-year, 24-hour HEC-1 model shows that only 34 ac-ft of detention storage would be needed. The hydrologic analysis indicates there would be no overtopping to the south of I-10.

The on-line regional retention basin - Phase A Basin of 24th Ave & Camelback Road (32 ac-ft retention basin) is almost adequate for the 100-year, 24-hour storm since the discharge from the emergency spillway is about 11 cfs.

Photo 6 shows the regional off-line detention basin located at SR51 and Colter Street for the storm drain system along SR51. When the collected runoff rate is larger than the storm drain capacity, stormwater starts to surge into the basin through the inlet structure.

When the peak passes, the storm drain starts to bleed-off the basin through the same structure. This type of basin is also sometimes called a surge basin. This basin has a significant storage volume (about 30 ac-ft). However, the basin bottom elevation is only a few feet lower than the depressed section of SR51. The resulting effective detention volume is minor. The modeling results show that this basin volume is not fully utilized. Observation of the August3, 2005 storm showed that when the storm drain discharged the flood water into the basin, water also flooded the depressed freeway.

9.0 SUMMARY AND RECOMMENDATIONS

9.1 Summary

Comprehensive hydrologic models were developed for the Metro ADMS/P in accordance with the methodologies outlined in the FCDMC's *Hydrology Manual*, January 1995. The hydrologic analysis was performed using the U.S. Army Corps of Engineers' Flood Hydrograph Package (HEC-1). The model input parameters were prepared using the FCDMC's Drainage Design Management System for Windows (DDMSW) program. Multiple frequency models have been developed for the100-year, 24-hour, 50-, 25-, 10-, and 2-year storms, and 100-year, 6-hour storm.

A pilot study was conducted to evaluate and recommend hydrologic modeling methodologies and to achieve consensus for the hydrologic modeling approach. The Metro ADMS/P hydrologic evaluation team held four (4) separate meetings to brainstorm ideas, evaluate approaches, review preliminary modeling results, discuss alternative procedures, define input parameters, and make recommendations for the modeling methodologies of the entire Metro ADMS/P study area. The development of the HEC-1 models has been closely coordinated with the team members including staff from the FCDMC throughout the duration of the project and several HEC-1 models have been submitted to the FCDMC for review and approval. The team members have commented on several aspects of the HEC-1 modeling during its development, these comments have been addressed during the model's refinement.

The study performed hydrologic input parameter sensitivity analyses and compared the estimated 100-year peak flows with other available data. The hydrologic modeling results seem reasonable when compared with other pertinent studies based on more rigorous modeling approaches for detention/retention storage of flood irrigated lots, surface runoff diversions, time of concentration estimation, effective impervious percentages, and channel routing.

The recommended HEC-1 modeling techniques meet the objectives and criteria specified of the project scope of work. The HEC-1 models have the ability to model flow diversions flexibly for both surface flow and pipe flow. Therefore, they can model the existing complicated urban drainage systems and be used to evaluate additional future

drainage systems as well. It is anticipated that the HEC-1 models developed for the Metro ADMS/P will be very useful for both the FCDMC and the City of Phoenix. The HEC-1 output files are included in Appendices B through G, and the electronic files are included in Appendix H (CD).

An evaluation of existing drainage systems show that the major storm drain systems are adequate for the 2-year, 24-hour storm. South of the I-10/SR202L alignment the storm drain systems have capacity exceeding the 2-year storm because the flows are reduced or the storm drains are cut-off along the freeway alignments.

It should be noted that the ADOT East Tunnel cannot be evaluated because the airport area is excluded from the contributing watershed. Also, the exclusion of Sky Harbor Airport from the hydrologic analysis may have slightly underestimated peak discharges for areas west of I-10 and south of the SPRR because of the potential for flow to cross under I-10.

9.2 Recommendations

The HEC-1 models developed for this study are applicable to regional planning and design alternative evaluations. For local drainage issues, more detailed hydrologic models should be developed.

Data collection, field visits, meetings, and the hydrologic modeling results suggest that the following flood hazards be evaluated during the Metro ADMP phase in additional to the Cave Creek floodplain re-delineation:

- Old Cave Creek Floodplain – The area between the Arizona Canal Diversion Channel (ACDC) and the Grand Canal between 19th Avenue and 7th Avenue. The area was part of the Cave Creek floodplain until the construction of the ACDC. It was noted that even though the floodplain has been removed, there are still many drainage complaints in this area.
- 23rd Avenue Corridor – The area is adjacent to the Old Cave Creek Floodplain. It is between 19th Avenue and I-17 from the ACDC to the Grand Canal.

- Cave Creek Floodplain – The area between 15th and 19th Avenue south of the Grand Canal southwest to the I-17 Durango curve and ultimately the Salt River. It was noted that with the re-delineation, the Cave Creek floodplain may be removed between the Grand Canal and McDowell Road.
- Grand Canal Floodplain – The area is just north of the Grand Canal between I-17 and SR-51. It is a historic problem that is caused by the elevated canal bank.
- Downtown – The area is bounded by I-10 and I-17. The area has drainage infrastructure capacity available in the existing West Tunnel and storm drain systems.

10.0 REFERENCES

1. Cella Barr Associates, *Flood Insurance Re-Study for Cave Creek Wash – Hydrologic Analysis,* prepared for FEMA, January 1989.

2. City of Phoenix, (2004). Digital GIS data by unknown originator. Storm drain pipes (pipe.shp) and flooding complaints (c8-04.shp, n8-04.shp, se8-04.shp, and sw8-04.shp).

3. CK Engineering, Inc., *Final Drainage Report, Central Phoenix/East Valley Light Rail Transit Project, Line Section 1, 19th Avenue – Bethany Home Road to Camelback Road and Camelback Road – 19th Avenue to Central Avenue*, July 6, 2004.

4. David Evans and Associates, Inc., *Central Phoenix/East Valley Light Rail Transit Project, Line Section 2, Roadway Drainage Design Report, Guideway Curb/FF Elevation*s, June 2004.

5. Dibble & Associates, *Durango Area Drainage Master Plan,* prepared for the FCDMC, April 2003.

6. Dibble & Associates, *Durango Area Drainage Master Plan – Hydrology Report,* September 2001, revised April 2003.

7. Dibble & Associates, *24th Street Realignment – I-10 and Airport Hydrology Update, Sky Harbor Airport Drainage Impact on ADOT East Drainage Tunnel,* September 1997.

8. DMJM+HARRIS, *Pre-Initial Drainage Report – I-10 Corridor Improvement Study, State Route 51-Santan Freeway,* August 2003, revised November 2003.

9. Engineering and Environmental Consultants, Inc., (2004). Digital GIS data of Arizona Department of Transportation Storm Drain System. Storm drain pipes (Adot2.shp) and storm drain tunnels and channels (Adot_tun.shp).

10. Engineering and Environmental Consultants, Inc., *Metro Phoenix ADMSP – Data Collection Study,* prepared for the FCDMC, November 2004.

11. Entellus, *Glendale/Peoria ADMP Update*, prepared for the FCDMC, May 2002.

12. Flood Control District of Maricopa County, *Drainage Design for Maricopa County – Volume I – Hydrology Manual,* January 1995.

13. Flood Control District of Maricopa County, *Drainage Design Management System for Windows (DDMSW Version 2.1.0),* January 2001.

14. Flood Control District of Maricopa County, *Metro Phoenix ADMS/P, Scope of Work – Exhibit A,* May 2005.

15. Flood Control District of Maricopa County, *Old Cross Cut Canal/Lafayette Interceptor Drainage Hydrology Report,* May 1991.

16. Greiner Engineering, *Old Cross Cut Canal Drainage Improvements, Phoenix, Arizona,* May 1991.

17. HDR Engineering, Inc., *Central Phoenix/East Valley Light Rail Transit Project 100% Submittal Final Drainage Report, Volume 4 of 5, Line Section 5,* August 27, 2004.

18. HNTB, *Inner Loop Storm Drain Summary Report, Phoenix, Arizona. Interstate 10, Phoenix-Casa Grande Highway, 15th Avenue to Maricopa T.I*, July 1988.

19. Huitt-Zollars, Inc. *Arcadia Area Drainage Project – Final Alternates Hydrology & Hydraulics Report, Volumes I and II,* March 1997.

20. Jacobs Civil Inc. & Primatech, LLC, *Central Phoenix/East Valley Light Rail Transit Project Final Drainage Report, Line Section 4,* January 2005.

21. PBS&J, *Central Phoenix/East Valley Light Rail Transit Project, Line Section 2, Drainage Report Volume 3: Floodplain Analysis*, July 2004.

22. Premier Engineering Corporation, *Final DCR – 24th Avenue and Camelback Road Drainage Improvements,* prepared for the City of Phoenix, September 2003.

23. Stantec Consulting, Inc., *Central Phoenix/East Valley Light Rail Transit Project Final Drainage Report, Line Section 3,* January 2005.

24. U.S. Army Corps of Engineers, *HEC-1 Flood Hydrograph Package – Users Manual,* September 1990.

25. U.S. Army Corps of Engineers, Los Angeles District, *Old Cross C* *Arizona, Hydrology for Feasibility Studies for Flood Control and Al* 1987.

26. U.S. Army Corps of Engineers, Los Angeles District, *Old Cross Cu* *Metropolitan Area, Phoenix, Arizona, Technical Documentation Report,*

27. Wood, Patel & Associates, Inc. and CH2M Hill, *Maryvale ADMS/P*, p FCDMC, February 1996.

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TABLE 2.1

CBA Flows for the Cave Creek Floodplain

Table 2.1 100-Year Peak Flows for the Cave Creek Floodplain by CBA

	Location	FEMA FIS		Comments
		Hydrograph Name	100-Yr,24-Hr Peak Flow (cfs)	
Cave Creek	19th Ave @ Grand Canal	GRCA15	754	
	19th Ave @ Indian School Rd	INDI17	1223	
	19th Ave @ Thomas Rd	THOM17	1199	
	19th Ave @ I-10	MCDO17	1756	
	19th Ave @ Van Buren St	VANB17	1859	
	SPRR @ east I-17	JACI10	1885	
	Buckeye Rd @ east I-17	N/A	N/A	
	Durango St @ east I-17	PIMA22	2416	
	Durango St @ west I-17	I10DUE	2222	
	27th Ave @ Durango St	DURA31	2221	
	35th Ave @ Lower Buckeye	BUCK35	2229	
	43rd Ave @ S. Lower Buckeye	BUCK43	2235	
	51st Ave @ Broadway	SALTRI	2260	
	59th Ave @ South of Broadway	SALTRI	2260	

TABLE 2.2

ADOT Tunnel Design Flows

Table 2.2 ADOT Tunnel Design Flows

Summary of Flow Capacity to ADOT West Tunnel

Subbasin Name	Location	Tunnel Size	Structure to Tunnel	Design Q by Report	Inlet Structure	Est. Capacity to W. Tunnel	Comments
72o	11th Ave	10'x12' RCB	10'x12' RCB	N/A	Surge Basin/Inlet	268	Surge Basin at 15th Ave to 11th Ave.
72o	9th Ave	10'x12' RCB	10'x12' RCB	N/A	78" SD	331	Storm Water Interceptor (SWI)
68o	7th Ave	10'x12' RCB	Drop Structure	N/A	96" SD	433	SWI total Q = 1032 cfs from W
68o	3rd Ave	14' SD	Drop Shaft	510	102" SD & 96" SD	510	14' North Tunnel, Pump Station
64o	Central Ave	14' SD	Drop Shaft	535	96" SD	535	14' North Tunnel
64o	3rd St	14' SD	Drop Shaft	500	8'x7' RCB	500	14' North Tunnel, Pump Station
60o	7th St	14' SD	Drop Shaft	N/A	84" SD	435	14' North Tunnel
60o	10th St	10'x10' RCB	Drop Structure	N/A	60" SD	376	SWI total Q = 1326 cfs from E
56o	12th St	10'x10' RCB	10'x10' RCB	N/A	10'x6' RCB	433	96" SD to 10'x6' RCB SWI 10th to 12th St
52o	16th St	96" SD	96" SD	N/A	72" SD	306	96" SWI, 12th St to 16th St, Pump Station
52o	19th St	72" SD	72" SD	N/A	72" SD	211	72" SWI from 16th St to 20th St
64q	Fillmore St	21' SD	Drop Shaft	140	N/A	140	
64t	Grant St	21' SD	Drop Shaft	170	N/A	170	
64t	Tonto St	21' SD	Drop Shaft	135	N/A	135	
64u	I-17	21' SD	Drop Shaft	60	N/A	60	
					Total Flow =	4843	

Summary of Flow Capacity to ADOT East Tunnel

Subbasin Name	Location	Tunnel Size	Structure to Tunnel	Design Q by Report	Inlet Structure	Est. Capacity to E. Tunnel	Comments
48o	Moreland St	21' SD	Drop Structure	2573	Surge Basin/Inlet	2573	202L 2-9'x10' & SR51 10'x10'
48q	Pierce St	21' SD	Drop Shaft	245	78" SD	245	ADOT East Tunnel
48q	Taylor St	21' SD	Drop Shaft	368	96" SD	368	ADOT East Tunnel
48s	Admas St	21' SD	Drop Shaft	600	102" SD & 96" SD	600	ADOT East Tunnel
48s	Madison St	21' SD	Drop Shaft	468	96" SD	468	ADOT East Tunnel
Airport	Buckeye Rd	21' SD	Drop Shaft	485	8'x7' RCB	485	ADOT East Tunnel
Airport	Mohave St	21' SD	Drop Shaft	540	84" SD	540	ADOT East Tunnel
					Total Flow =	5279	

TABLE 6.1

Peak Flow Summary Table for the 24-Hour Storms

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	64c	0.26	158	12.33	10	121	12.33	8	83	12.42	6	41	12.5	4	14	12.58	2
DIVERSION	TO	D64cS	0.26	107	12.33	7	82	12.33	5	56	12.42	4	28	12.5	3	10	12.58	1
HYDROGRAPH	AT	D64cW	0.26	51	12.33	3	39	12.33	3	27	12.42	2	13	12.5	1	5	12.58	1
ROUTED TO		R64cW	0.26	48	12.67	3	36	12.75	3	25	12.83	2	12	12.92	1	4	13.25	1
HYDROGRAPH	AT	68c	0.43	181	12.33	11	110	12.33	9	62	12.42	6	45	12.42	5	24	12.5	3
2 COMBINED	AT	C68c	0.7	203	12.5	14	130	12.58	11	78	12.58	8	51	12.67	6	26	12.5	3
DIVERSION	TO	D68cP	0.7	41	12	8	41	12.08	8	41	12.17	7	41	12.33	6	26	12.5	3
HYDROGRAPH	AT	D68c	0.7	162	12.5	6	89	12.58	3	37	12.58	1	10	12.67	0	0	0	0
DIVERSION	TO	D68cS	0.7	74	12.5	3	41	12.58	1	17	12.58	1	5	12.67	0	0	0	0
HYDROGRAPH	AT	D68cW	0.7	88	12.5	3	48	12.58	2	20	12.58	1	6	12.67	0	0	0	0
ROUTED TO		R68cW	0.7	78	12.83	3	41	13	2	16	13.17	1	3	13.33	0	0	0	0
HYDROGRAPH	AT	72c	0.54	97	12.58	10	51	12.67	7	37	12.67	5	29	12.75	4	16	12.75	3
2 COMBINED	AT	C72c	1.24	164	12.83	13	86	12.92	8	48	13.08	6	30	12.83	5	16	12.75	3
DIVERSION	TO	D72cP	1.24	90	12.42	11	80	12.92	8	48	13.08	6	30	12.83	5	16	12.75	3
HYDROGRAPH	AT	D72c	1.24	74	12.83	2	6	12.92	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D72cS	1.24	66	12.83	2	5	12.92	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D72cW	1.24	7	12.83	0	1	12.92	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R72cW	1.24	4	13.92	0	0	14.17	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	76C	0.6	515	12.33	26	404	12.33	22	294	12.33	17	181	12.42	12	30	12.58	4
2 COMBINED	AT	C76c	1.84	507	12.33	26	397	12.33	21	289	12.33	17	177	12.42	12	29	12.58	4
DIVERSION	TO	D76c	1.84	468	12.33	17	358	12.33	13	250	12.33	9	138	12.42	5	0	0	0
HYDROGRAPH	AT	D76cP	1.84	39	11.75	9	39	11.83	8	39	11.92	8	39	12	7	29	12.58	4
HYDROGRAPH	AT	84c	0.47	297	12.5	28	245	12.5	24	196	12.5	21	138	12.58	16	52	12.75	8
DIVERSION	TO	D84cS	0.47	228	12.5	22	188	12.5	19	151	12.5	16	106	12.58	12	40	12.75	6
HYDROGRAPH	AT	D84cE	0.47	69	12.5	6	57	12.5	6	45	12.5	5	32	12.58	4	12	12.75	2
ROUTED TO		R84cE	0.47	65	12.83	6	53	12.92	6	43	13	5	30	13.08	4	11	13.5	2
HYDROGRAPH	AT	80c	0.66	453	12.33	32	360	12.42	27	277	12.42	23	167	12.5	16	59	12.58	8
ROUTED TO		S80c	0.66	437	12.5	30	345	12.5	25	265	12.58	21	160	12.67	14	54	12.92	6
2 COMBINED	AT	C80c	1.13	475	12.5	36	379	12.58	30	291	12.67	25	180	12.75	18	62	13	7
DIVERSION	TO	D80c	1.13	456	12.5	26	360	12.58	21	272	12.67	17	161	12.75	10	43	13	3
HYDROGRAPH	AT	D80cP	1.13	19	10.42	10	19	10.83	9	19	11.17	9	19	11.67	7	19	12.5	5
2 COMBINED	AT	C76cP	2.97	58	11.75	19	58	11.83	18	58	11.92	16	58	12	14	48	12.58	9
ROUTED TO		P76cS	2.97	58	11.92	19	58	12	18	58	12.08	16	58	12.17	14	48	12.67	9
DIVERSION	TO	D80eP1	2.97	19	11.92	6	19	12	6	19	12.08	5	19	12.17	5	15	12.67	3
HYDROGRAPH	AT	D76eP1	2.97	39	11.92	13	39	12	12	39	12.08	11	39	12.17	10	33	12.67	6
HYDROGRAPH	AT	56e	0.18	82	12.25	4	48	12.33	3	29	12.33	3	22	12.33	2	12	12.33	1
DIVERSION	TO	D56eS	0.18	44	12.25	2	26	12.33	2	15	12.33	1	11	12.33	1	6	12.33	1
HYDROGRAPH	AT	D56eW	0.18	39	12.25	2	23	12.33	2	13	12.33	1	10	12.33	1	5	12.33	1
ROUTED TO		R56eW	0.18	34	12.67	2	21	12.67	2	12	12.67	1	9	12.83	1	5	13	1
HYDROGRAPH	AT	60e	0.41	185	12.42	13	126	12.42	10	78	12.5	8	41	12.58	5	22	12.58	3
2 COMBINED	AT	C60e	0.58	208	12.5	15	140	12.5	12	87	12.58	9	48	12.75	6	26	12.75	4
DIVERSION	TO	D60eP	0.58	75	12.08	11	75	12.25	10	75	12.42	9	48	12.75	6	26	12.75	4
HYDROGRAPH	AT	D60e	0.58	133	12.5	4	65	12.5	2	12	12.58	0	0	0	0	0	0	0
DIVERSION	TO	D60eS	0.58	45	12.5	1	22	12.5	1	4	12.58	0	0	0	0	0	0	0
HYDROGRAPH	AT	D60eW	0.58	88	12.5	3	43	12.5	1	8	12.58	0	0	0	0	0	0	0
ROUTED TO		R60eW	0.58	80	12.83	3	37	13	1	4	13.17	0	0	0	0	0	0	0
HYDROGRAPH	AT	64e	0.5	167	12.42	13	103	12.5	9	55	12.58	6	34	12.58	5	18	12.67	3
HYDROGRAPH	AT	B64cS	0.26	107	12.33	7	82	12.33	5	56	12.42	4	28	12.5	3	10	12.58	1
ROUTED TO		R64cS	0.26	95	12.83	7	73	12.92	5	49	13.08	4	25	13.17	3	8	13.67	1

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
3 COMBINED	AT	C64e	1.35	302	12.75	21	187	12.92	15	95	13	11	53	13	7	22	13.08	4
DIVERSION	TO	D64eS	1.35	151	12.75	11	93	12.92	8	48	13	5	26	13	4	11	13.08	2
HYDROGRAPH	AT	D64eW	1.35	151	12.75	11	93	12.92	8	48	13	5	26	13	4	11	13.08	2
ROUTED TO		R64eW	1.35	145	13	11	87	13.17	8	46	13.25	5	25	13.42	4	11	13.5	2
HYDROGRAPH	AT	68e	0.5	159	12.42	12	97	12.5	9	51	12.58	6	30	12.67	4	16	12.67	2
HYDROGRAPH	AT	B68cP	0.7	41	12	8	41	12.08	8	41	12.17	7	41	12.33	6	26	12.5	3
ROUTED TO		P68cS	0.7	41	12.17	8	41	12.25	8	41	12.33	7	41	12.5	6	26	12.58	3
HYDROGRAPH	AT	B68cS	0.7	74	12.5	3	41	12.58	1	17	12.58	1	5	12.67	0	0	0	0
ROUTED TO		R68cS	0.7	67	12.92	3	35	13.08	1	13	13.25	1	2	13.5	0	0	0	0
2 COMBINED	AT	C68cS	0.7	108	12.92	11	76	13.08	9	54	13.25	8	42	13.08	6	26	12.58	3
3 COMBINED	AT	C68e	2.28	363	12.92	33	227	13	25	135	13.17	19	90	13.08	14	49	12.83	8
DIVERSION	TO	D68eP	2.28	63	12	17	63	12.08	16	63	12.17	15	63	12.33	13	49	12.83	8
HYDROGRAPH	AT	D68e	2.28	300	12.92	16	164	13	9	72	13.17	4	27	13.08	1	0	0	0
DIVERSION	TO	D68eS	2.28	162	12.92	8	88	13	5	39	13.17	2	15	13.08	1	0	0	0
HYDROGRAPH	AT	D68eW	2.28	138	12.92	7	75	13	4	33	13.17	2	13	13.08	1	0	0	0
ROUTED TO		R68eW	2.28	130	13.17	7	69	13.42	4	30	13.58	2	10	13.5	1	0	0	0
HYDROGRAPH	AT	72e	0.5	168	12.42	14	108	12.5	11	63	12.58	8	42	12.67	6	23	12.67	3
HYDROGRAPH	AT	B72cP	1.24	90	12.42	11	80	12.92	8	48	13.08	6	30	12.83	5	16	12.75	3
ROUTED TO		P72cS	1.24	90	12.5	11	80	13	8	48	13.08	6	30	12.92	5	16	12.83	3
HYDROGRAPH	AT	B72cS	1.24	66	12.83	2	5	12.92	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R72cS	1.24	50	13.33	2	2	13.83	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C72cS	1.24	140	13.33	12	80	13	8	48	13.08	6	30	12.92	5	16	12.83	3
3 COMBINED	AT	C72e	3.32	348	13.17	33	210	13.08	22	114	13.08	15	71	12.83	11	38	12.75	6
DIVERSION	TO	D72eP	3.32	195	12.33	26	195	12.92	22	114	13.08	15	71	12.83	11	38	12.75	6
HYDROGRAPH	AT	D72e	3.32	153	13.17	6	15	13.08	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D72eS	3.32	138	13.17	6	14	13.08	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D72eW	3.32	15	13.17	1	2	13.08	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R72eW	3.32	11	14.17	1	1	14.33	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	76e	0.5	277	12.42	19	206	12.42	15	135	12.5	12	66	12.58	8	28	12.67	4
HYDROGRAPH	AT	B76c	1.84	468	12.33	17	358	12.33	13	250	12.33	9	138	12.42	5	0	0	0
ROUTED TO		R76cS	1.84	425	12.67	17	319	12.67	13	222	12.75	9	118	12.92	5	0	0	0
4 COMBINED	AT	C76e	4.42	696	12.58	48	531	12.67	39	373	12.75	31	211	12.92	22	60	12.67	10
DIVERSION	TO	D76e	4.42	675	12.58	34	510	12.67	26	352	12.75	19	190	12.92	11	39	12.67	2
HYDROGRAPH	AT	D76eP	4.42	21	9.33	14	21	9.92	13	21	10.58	12	21	11.33	10	21	12.17	7
HYDROGRAPH	AT	BD84cS	0.47	228	12.5	22	188	12.5	19	151	12.5	16	106	12.58	12	40	12.75	6
ROUTED TO		R84cS	0.47	218	12.83	22	180	12.83	19	145	12.92	16	101	13	12	37	13.42	6
HYDROGRAPH	AT	84e	0.21	105	12.5	9	79	12.5	8	54	12.58	6	28	12.75	4	9	12.92	2
2 COMBINED	AT	C84e	0.68	312	12.75	31	250	12.83	26	193	12.83	22	126	13	16	46	13.33	8
DIVERSION	TO	D84eS	0.68	123	12.75	12	98	12.83	10	76	12.83	8	49	13	6	18	13.33	3
HYDROGRAPH	AT	D84eE	0.68	189	12.75	19	152	12.83	16	117	12.83	13	77	13	10	28	13.33	5
ROUTED TO		R84eE	0.68	178	13.25	19	144	13.33	16	110	13.42	13	72	13.58	10	26	14.17	5
HYDROGRAPH	AT	80e	0.49	353	12.33	22	274	12.42	18	206	12.42	15	127	12.5	11	29	12.67	4
HYDROGRAPH	AT	B80eP1	2.97	19	11.92	6	19	12	6	19	12.08	5	19	12.17	5	15	12.67	3
HYDROGRAPH	AT	BD80c	1.13	456	12.5	26	360	12.58	21	272	12.67	17	161	12.75	10	43	13	3
ROUTED TO		R80cS	1.13	428	12.83	26	339	12.92	21	257	13	17	151	13.17	10	37	13.75	3
4 COMBINED	AT	C80e	1.84	786	12.83	71	624	12.92	60	474	13	49	291	13.25	35	86	13.75	14
DIVERSION	TO	D80e	1.84	731	12.83	49	569	12.92	39	419	13	29	236	13.25	17	31	13.75	1
HYDROGRAPH	AT	D80eP	1.84	55	11.83	23	55	11.92	21	55	12	20	55	12.08	18	55	13.17	13
2 COMBINED	AT	C76eP	6.26	76	11.83	36	76	11.92	34	76	12	31	76	12.08	28	76	13.17	20

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		P76eS	6.26	76	11.92	36	76	12.08	34	76	12.08	31	76	12.17	28	76	13.25	20
DIVERSION	TO	D80gP1	6.26	55	11.92	27	55	12.08	25	55	12.08	23	55	12.17	20	55	13.25	14
HYDROGRAPH	AT	D76gP1	6.26	21	11.92	10	21	12.08	9	21	12.08	8	21	12.17	8	21	13.25	5
HYDROGRAPH	AT	76g	0.5	327	12.33	22	254	12.42	18	180	12.42	15	97	12.5	10	38	12.58	5
HYDROGRAPH	AT	BD76e	4.42	675	12.58	34	510	12.67	26	352	12.75	19	190	12.92	11	39	12.67	2
ROUTED TO		R76eS	4.42	643	12.92	34	481	13	26	332	13.08	19	178	13.25	11	34	13.5	2
3 COMBINED	AT	C76g	4.92	869	12.83	65	658	12.92	53	459	13	42	255	13.17	29	80	13.33	13
DIVERSION	TO	D76gP2	4.92	48	11.58	21	48	11.75	19	48	11.92	18	48	12.08	16	48	12.42	11
HYDROGRAPH	AT	D76g1	4.92	821	12.83	45	610	12.92	34	411	13	24	207	13.17	13	32	13.33	1
DIVERSION	TO	D76gP	4.92	57	12	8	57	12	8	57	12.17	7	57	12.33	6	32	13.33	1
HYDROGRAPH	AT	D76g	4.92	764	12.83	36	553	12.92	27	354	13	17	150	13.17	6	0	0	0
DIVERSION	TO	D76gS	4.92	535	12.83	26	387	12.92	19	248	13	12	105	13.17	5	0	0	0
HYDROGRAPH	AT	D76gE	4.92	229	12.83	11	166	12.92	8	106	13	5	45	13.17	2	0	0	0
ROUTED TO		R76gE	4.92	224	13	11	162	13.08	8	104	13.17	5	43	13.42	2	0	0	0
HYDROGRAPH	AT	B76gP2	4.92	48	11.58	21	48	11.75	19	48	11.92	18	48	12.08	16	48	12.42	11
2 COMBINED	AT	C76gE	4.92	272	13	32	210	13.08	27	152	13.17	23	91	13.42	18	48	12.42	11
HYDROGRAPH	AT	54g	0.25	202	12.25	10	158	12.25	9	113	12.25	7	61	12.33	5	22	12.33	2
DIVERSION	TO	D54gS	0.25	81	12.25	4	63	12.25	3	45	12.25	3	24	12.33	2	9	12.33	1
HYDROGRAPH	AT	D54gW	0.25	121	12.25	6	94	12.25	5	68	12.25	4	37	12.33	3	13	12.33	1
ROUTED TO		R54gW	0.25	104	12.58	6	81	12.58	5	59	12.67	4	31	12.83	3	12	12.92	1
HYDROGRAPH	AT	56g	0.5	189	12.33	15	122	12.42	12	79	12.42	9	60	12.5	7	32	12.5	4
HYDROGRAPH	AT	B56eS	0.18	44	12.25	2	26	12.33	2	15	12.33	1	11	12.33	1	6	12.33	1
ROUTED TO		R56eS	0.18	35	12.75	2	21	12.83	2	12	13.08	1	9	13.17	1	5	13.25	1
3 COMBINED	AT	C56g	0.92	298	12.58	23	204	12.58	18	139	12.67	14	92	12.75	11	45	12.83	6
DIVERSION	TO	D56gP	0.92	130	12.17	18	130	12.33	17	130	12.58	14	92	12.75	11	45	12.83	6
HYDROGRAPH	AT	D56g	0.92	168	12.58	5	74	12.58	2	9	12.67	0	0	0	0	0	0	0
DIVERSION	TO	D56gS	0.92	94	12.58	3	42	12.58	1	5	12.67	0	0	0	0	0	0	0
HYDROGRAPH	AT	D56gW	0.92	74	12.58	2	33	12.58	1	4	12.67	0	0	0	0	0	0	0
ROUTED TO		R56gW	0.92	66	12.92	2	26	13.08	1	1	13.25	0	0	0	0	0	0	0
HYDROGRAPH	AT	60g	0.5	225	12.42	17	155	12.42	14	97	12.5	11	62	12.5	8	33	12.58	4
HYDROGRAPH	AT	B60eP	0.58	75	12.08	11	75	12.25	10	75	12.42	9	48	12.75	6	26	12.75	4
ROUTED TO		P60eS	0.58	75	12.17	11	75	12.33	10	75	12.5	9	48	12.75	6	26	12.83	4
HYDROGRAPH	AT	B60eS	0.58	45	12.5	1	22	12.5	1	4	12.58	0	0	0	0	0	0	0
ROUTED TO		R60eS	0.58	38	13	1	16	13.17	1	2	13.33	0	0	0	0	0	0	0
2 COMBINED	AT	C60eS	0.58	113	13	13	91	13.17	11	75	12.75	9	48	12.75	6	26	12.83	4
3 COMBINED	AT	C60g	1.83	328	12.83	31	225	12.42	25	169	12.5	19	107	12.67	14	58	12.67	8
DIVERSION	TO	D60gP	1.83	124	12.08	22	124	12.17	20	124	12.33	18	107	12.67	14	58	12.67	8
HYDROGRAPH	AT	D60g	1.83	204	12.83	9	101	12.42	4	45	12.5	1	0	0	0	0	0	0
DIVERSION	TO	D60gS	1.83	96	12.83	4	47	12.42	2	21	12.5	1	0	0	0	0	0	0
HYDROGRAPH	AT	D60gW	1.83	108	12.83	5	54	12.42	2	24	12.5	1	0	0	0	0	0	0
ROUTED TO		R60gW	1.83	99	13.08	5	48	13.17	2	16	13.08	1	0	0	0	0	0	0
HYDROGRAPH	AT	64g	0.5	160	12.42	14	99	12.5	10	61	12.58	8	48	12.58	6	26	12.67	4
HYDROGRAPH	AT	B64eS	1.35	151	12.75	11	93	12.92	8	48	13	5	26	13	4	11	13.08	2
ROUTED TO		R64eS	1.35	141	13.17	11	87	13.25	8	45	13.5	5	25	13.58	4	11	13.75	2
3 COMBINED	AT	C64g	3.1	326	13.08	28	190	13.17	20	97	13.08	13	58	13.08	10	29	12.83	5
DIVERSION	TO	D64gP	3.1	153	12.33	22	153	12.83	19	97	13.08	13	58	13.08	10	29	12.83	5
HYDROGRAPH	AT	D64g	3.1	173	13.08	6	37	13.17	1	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D64gS	3.1	83	13.08	3	18	13.17	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64gW	3.1	90	13.08	3	19	13.17	0	0	0	0	0	0	0	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		R64gW	3.1	83	13.33	3	12	13.58	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	68g	0.5	101	12.58	10	60	12.58	8	47	12.67	7	37	12.67	5	20	12.75	3
HYDROGRAPH	AT	B68eP	2.28	63	12	17	63	12.08	16	63	12.17	15	63	12.33	13	49	12.83	8
ROUTED TO		P68eS	2.28	63	12.08	17	63	12.17	16	63	12.25	15	63	12.42	13	49	12.92	8
HYDROGRAPH	AT	B68eS	2.28	162	12.92	8	88	13	5	39	13.17	2	15	13.08	1	0	0	0
ROUTED TO		R68eS	2.28	149	13.25	8	79	13.5	5	33	13.67	2	11	13.58	1	0	0	0
2 COMBINED	AT	C68eS	2.28	212	13.25	26	142	13.5	21	96	13.67	17	74	13.58	13	49	12.92	8
3 COMBINED	AT	C68g	4.53	350	13.25	39	185	13.42	29	125	13.42	23	100	12.83	19	67	12.92	11
DIVERSION	TO	D68gP	4.53	82	12	24	82	12.08	22	82	12.25	20	82	12.33	17	67	12.92	11
HYDROGRAPH	AT	D68g	4.53	268	13.25	15	103	13.42	7	43	13.42	3	18	12.83	1	0	0	0
DIVERSION	TO	D68gS	4.53	150	13.25	8	58	13.42	4	24	13.42	2	10	12.83	1	0	0	0
HYDROGRAPH	AT	D68gW	4.53	118	13.25	7	45	13.42	3	19	13.42	1	8	12.83	0	0	0	0
ROUTED TO		R68gW	4.53	110	13.58	7	43	13.83	3	17	14	1	7	13.92	0	0	0	0
HYDROGRAPH	AT	72g	0.5	218	12.42	17	152	12.5	14	96	12.58	10	45	12.67	7	22	12.75	4
HYDROGRAPH	AT	B72eP	3.32	195	12.33	26	195	12.92	22	114	13.08	15	71	12.83	11	38	12.75	6
ROUTED TO		P72eS	3.32	195	12.42	26	195	13	22	114	13.17	15	71	12.92	11	38	12.83	6
HYDROGRAPH	AT	B72eS	3.32	138	13.17	6	14	13.08	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R72eS	3.32	125	13.58	6	8	13.67	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C72eS	3.32	320	13.58	32	196	13.17	22	114	13.17	15	71	12.92	11	38	12.83	6
3 COMBINED	AT	C72g	6.07	505	13.5	55	323	12.92	38	192	13.08	26	113	12.83	17	59	12.83	9
2 COMBINED	AT	CC72g	7.67	708	13.17	86	527	13	64	339	13.17	48	195	13.33	35	107	12.83	20
DIVERSION	TO	D72gP	7.67	178	12.08	49	178	12.25	45	178	12.33	41	178	13	35	107	12.83	20
HYDROGRAPH	AT	D72g	7.67	530	13.17	37	349	13	19	161	13.17	7	17	13.33	0	0	0	0
ROUTED TO		R72gS	7.67	520	13.5	37	329	13.33	19	143	13.5	7	5	14.08	0	0	0	0
HYDROGRAPH	AT	BD72gP	7.67	178	12.08	49	178	12.25	45	178	12.33	41	178	13	35	107	12.83	20
ROUTED TO		P72gS	7.67	178	12.25	49	178	12.42	45	178	12.5	41	178	13.17	35	107	12.92	20
2 COMBINED	AT	C72gS	7.67	698	13.5	86	507	13.33	64	321	13.5	48	181	13.67	35	107	12.92	20
HYDROGRAPH	AT	84g	0.21	112	12.42	10	88	12.5	8	67	12.5	7	44	12.58	5	12	12.75	2
HYDROGRAPH	AT	B84eS	0.68	123	12.75	12	98	12.83	10	76	12.83	8	49	13	6	18	13.33	3
ROUTED TO		R84eS	0.68	118	13.17	12	95	13.25	10	71	13.33	8	47	13.58	6	17	14.17	3
2 COMBINED	AT	C84g	0.9	190	13	22	152	13.08	18	113	13.25	15	73	13.42	11	24	14	5
DIVERSION	TO	D84gS	0.9	90	13	10	72	13.08	9	53	13.25	7	34	13.42	5	11	14	2
HYDROGRAPH	AT	D84gE	0.9	101	13	11	80	13.08	10	60	13.25	8	39	13.42	6	13	14	3
ROUTED TO		R84gE	0.9	96	13.5	11	75	13.58	10	57	13.75	8	37	14	6	12	14.83	3
HYDROGRAPH	AT	80g	0.5	273	12.42	20	212	12.42	16	155	12.5	13	82	12.58	9	28	12.75	4
HYDROGRAPH	AT	BD80e	1.84	731	12.83	49	569	12.92	39	419	13	29	236	13.25	17	31	13.75	1
ROUTED TO		R80eS	1.84	704	13.08	49	547	13.25	39	403	13.33	29	227	13.58	17	22	14.5	1
HYDROGRAPH	AT	B80gP1	6.26	55	11.92	27	55	12.08	25	55	12.08	23	55	12.17	20	55	13.25	14
4 COMBINED	AT	C80g	2.55	982	13.08	105	773	13.17	89	583	13.25	73	353	13.5	52	99	14.42	22
DIVERSION	TO	D80g	2.55	963	13.08	88	754	13.17	72	564	13.25	56	334	13.5	36	80	14.42	11
HYDROGRAPH	AT	D80gP	2.55	19	6.08	18	19	7	17	19	8.5	17	19	9.67	15	19	11.67	12
HYDROGRAPH	AT	B76gP	4.92	57	12	8	57	12	8	57	12.17	7	57	12.33	6	32	13.33	1
2 COMBINED	AT	C76gP	7.47	76	12	26	76	12	25	76	12.17	24	76	12.33	21	50	13.33	13
ROUTED TO		P76gS	7.47	76	12.17	26	76	12.08	25	76	12.33	24	76	12.42	21	50	13.42	13
DIVERSION	TO	D80iP1	7.47	19	12.17	6	19	12.08	6	19	12.33	6	19	12.42	5	13	13.42	3
HYDROGRAPH	AT	D76iP1	7.47	57	12.17	19	57	12.08	19	57	12.33	18	57	12.42	16	38	13.42	10
HYDROGRAPH	AT	76i	0.5	377	12.42	29	307	12.42	25	243	12.42	21	164	12.5	16	59	12.58	8
HYDROGRAPH	AT	BD76gS	4.92	535	12.83	26	387	12.92	19	248	13	12	105	13.17	5	0	0	0
ROUTED TO		R76gS	4.92	494	13.08	26	353	13.25	19	224	13.33	12	89	13.58	5	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
3 COMBINED	AT	C76i	5.42	741	13	73	558	13.08	61	393	13.25	50	215	12.5	36	80	13.25	17
DIVERSION	TO	D76i1	5.42	693	13	46	510	13.08	36	345	13.25	26	167	12.5	14	32	13.25	2
HYDROGRAPH	AT	D76iP2	5.42	48	11.58	27	48	11.75	26	48	11.83	24	48	11.92	22	48	12.25	16
HYDROGRAPH	AT	72i	0.5	253	12.42	20	195	12.5	16	142	12.5	13	75	12.67	9	25	12.75	4
3 COMBINED	AT	C72i	8.68	852	13.33	132	659	13.25	106	441	13.42	85	287	13.08	65	178	12.92	40
DIVERSION	TO	D72i	8.68	594	13.33	45	401	13.25	25	183	13.42	11	29	13.08	1	0	0	0
HYDROGRAPH	AT	D72iP	8.68	258	12.08	87	258	12.17	81	258	12.25	74	258	12.58	64	178	12.92	40
DIVERSION	TO	D72iP1	8.68	226	12.08	76	226	12.17	71	226	12.25	65	226	12.58	56	156	12.92	35
HYDROGRAPH	AT	D72iP2	8.68	32	12.08	11	32	12.17	10	32	12.25	9	32	12.58	8	22	12.92	5
ROUTED TO		P72iW	8.68	32	12.17	11	32	12.25	10	32	12.33	9	32	12.67	8	22	12.92	5
HYDROGRAPH	AT	BD76i1	5.42	693	13	46	510	13.08	36	345	13.25	26	167	12.5	14	32	13.25	2
2 COMBINED	AT	CC76i	5.92	723	13	57	541	13.08	46	376	13.25	35	197	13.5	22	53	13.25	7
DIVERSION	TO	D76i	5.92	645	13	39	463	13.08	29	298	13.25	20	119	13.5	9	0	0	0
HYDROGRAPH	AT	D76iP	5.92	78	11.92	18	78	12	17	78	12.08	15	78	12.17	14	53	13.25	7
HYDROGRAPH	AT	BD84gS	0.9	90	13	10	72	13.08	9	53	13.25	7	34	13.42	5	11	14	2
ROUTED TO		R84gS	0.9	87	13.42	10	69	13.5	9	51	13.75	7	33	14	5	11	14.75	2
HYDROGRAPH	AT	84i	0.21	92	12.5	9	71	12.58	8	52	12.58	6	29	12.75	4	11	12.83	2
2 COMBINED	AT	C84i	1.11	142	13.25	19	112	13.33	16	80	13.58	13	49	13.83	9	17	14.42	4
ROUTED TO		S84i	1.11	11	17.58	3	1	23.08	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D84iS	1.11	4	17.58	1	0	23.08	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D84iE	1.11	7	17.58	2	1	23.17	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R84iE	1.11	7	18.25	2	1	24.25	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	80i	0.49	370	12.33	23	295	12.42	19	226	12.42	16	146	12.5	12	33	12.67	4
HYDROGRAPH	AT	BD80g	2.55	963	13.08	88	754	13.17	72	564	13.25	56	334	13.5	36	80	14.42	11
ROUTED TO		S80g	2.55	963	13.08	88	754	13.17	72	564	13.33	56	334	13.5	36	80	14.42	11
ROUTED TO		R80gS	2.55	946	13.33	88	742	13.42	72	553	13.58	56	327	13.83	36	79	14.83	11
HYDROGRAPH	AT	B80iP1	7.47	19	12.17	6	19	12.08	6	19	12.33	6	19	12.42	5	13	13.42	3
4 COMBINED	AT	C80i	3.25	1087	13.25	117	855	13.33	96	640	13.5	77	386	13.75	53	95	13.5	18
DIVERSION	TO	D80i	3.25	1059	13.25	98	827	13.33	79	612	13.5	62	358	13.75	39	67	13.5	8
HYDROGRAPH	AT	D80iP	3.25	28	10.08	19	28	10.75	17	28	11.33	16	28	11.92	14	28	12.33	10
2 COMBINED	AT	C76iP	9.18	106	11.92	37	106	12	33	106	12.08	31	106	12.17	27	80	13.25	17
ROUTED TO		P76iS	9.18	106	12	37	106	12.08	33	106	12.17	31	106	12.25	27	80	13.25	17
DIVERSION	TO	D80kP1	9.18	28	12	10	28	12.08	9	28	12.17	8	28	12.25	7	21	13.25	4
HYDROGRAPH	AT	D76kP1	9.18	78	12	27	78	12.08	25	78	12.17	23	78	12.25	20	59	13.25	13
HYDROGRAPH	AT	76k	0.32	317	12.33	17	264	12.33	15	210	12.33	12	139	12.33	9	38	12.5	4
HYDROGRAPH	AT	BD76i	5.92	645	13	39	463	13.08	29	298	13.25	20	119	13.5	9	0	0	0
DIVERSION	TO	D76iE	5.92	207	13	12	148	13.08	9	95	13.25	6	38	13.5	3	0	0	0
HYDROGRAPH	AT	D76iS	5.92	439	13	27	315	13.08	20	203	13.25	13	81	13.5	6	0	0	0
ROUTED TO		R76iS	5.92	428	13.17	27	308	13.33	20	198	13.42	13	78	13.75	6	0	0	0
3 COMBINED	AT	C76k	5.74	594	13.08	70	456	12.58	59	361	12.58	48	246	12.75	35	91	12.67	16
DIVERSION	TO	D76k1	5.74	562	13.08	48	424	12.58	38	329	12.58	29	214	12.75	18	59	12.67	4
HYDROGRAPH	AT	D76kP2	5.74	32	10	23	32	10.67	21	32	11.17	19	32	11.75	17	32	12.08	12
HYDROGRAPH	AT	54i	0.19	105	12.33	9	79	12.42	7	55	12.42	6	32	12.5	4	16	12.58	2
HYDROGRAPH	AT	BD54gS	0.25	81	12.25	4	63	12.25	3	45	12.25	3	24	12.33	2	9	12.33	1
ROUTED TO		R54gS	0.25	70	12.67	4	54	12.75	3	39	12.75	3	21	12.92	2	8	13.08	1
2 COMBINED	AT	C54i	0.44	162	12.58	13	123	12.67	11	88	12.67	9	48	12.83	6	22	12.92	3
DIVERSION	TO	D54iP	0.44	68	12.17	10	68	12.25	9	68	12.5	8	48	12.83	6	22	12.92	3
HYDROGRAPH	AT	D54i	0.44	94	12.58	3	55	12.67	1	20	12.67	0	0	0	0	0	0	0
DIVERSION	TO	D54iS	0.44	35	12.58	1	20	12.67	1	7	12.67	0	0	0	0	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	D54iW	0.44	59	12.58	2	34	12.67	1	13	12.67	0	0	0	0	0	0	0
ROUTED TO		R54iW	0.44	49	13.08	2	26	13.17	1	6	13.33	0	0	0	0	0	0	0
HYDROGRAPH	AT	56i	0.5	297	12.33	21	219	12.42	17	148	12.42	13	80	12.5	9	38	12.58	5
HYDROGRAPH	AT	BD56gP	0.92	130	12.17	18	130	12.33	17	130	12.58	14	92	12.75	11	45	12.83	6
ROUTED TO		P56gS	0.92	130	12.25	18	130	12.42	17	130	12.67	14	91	12.75	11	45	12.92	6
HYDROGRAPH	AT	BD56gS	0.92	94	12.58	3	42	12.58	1	5	12.67	0	0	0	0	0	0	0
ROUTED TO		R56gS	0.92	81	13	3	31	13.17	1	2	13.5	0	0	0	0	0	0	0
2 COMBINED	AT	C56gS	0.92	211	13	21	160	13.08	17	130	12.67	14	91	12.75	11	45	12.92	6
3 COMBINED	AT	C56i	1.62	421	12.33	43	344	12.42	35	267	12.58	28	164	12.67	20	80	12.75	11
DIVERSION	TO	D56iP	1.62	204	12.08	33	204	12.17	30	204	12.33	26	164	12.67	20	80	12.75	11
HYDROGRAPH	AT	D56i	1.62	217	12.33	10	140	12.42	5	63	12.58	1	0	0	0	0	0	0
DIVERSION	TO	D56iS	1.62	106	12.33	5	68	12.42	2	31	12.58	1	0	0	0	0	0	0
HYDROGRAPH	AT	D56iW	1.62	111	12.33	5	71	12.42	3	32	12.58	1	0	0	0	0	0	0
ROUTED TO		R56iW	1.62	108	13.17	5	62	13	3	23	13.25	1	0	0	0	0	0	0
HYDROGRAPH	AT	60i	0.5	342	12.33	24	269	12.33	21	208	12.42	17	128	12.42	13	44	12.58	6
HYDROGRAPH	AT	BD60gP	1.83	124	12.08	22	124	12.17	20	124	12.33	18	107	12.67	14	58	12.67	8
ROUTED TO		P60gS	1.83	124	12.17	22	124	12.25	20	124	12.42	18	107	12.67	14	58	12.75	8
HYDROGRAPH	AT	BD60gS	1.83	96	12.83	4	47	12.42	2	21	12.5	1	0	0	0	0	0	0
ROUTED TO		R60gS	1.83	89	13.17	4	43	13.17	2	14	13.25	1	0	0	0	0	0	0
2 COMBINED	AT	C60gS	1.83	213	13.17	26	167	13.17	22	137	13.08	18	107	12.67	14	58	12.75	8
3 COMBINED	AT	C60i	3.02	522	12.75	55	392	12.83	45	327	12.42	36	227	12.58	26	100	12.67	14
DIVERSION	TO	D60iP	3.02	211	12.08	39	211	12.08	36	211	12.17	32	211	12.42	26	100	12.67	14
HYDROGRAPH	AT	D60i	3.02	311	12.75	16	181	12.83	9	116	12.42	4	16	12.58	0	0	0	0
DIVERSION	TO	D60iS	3.02	184	12.75	10	107	12.83	5	68	12.42	2	9	12.58	0	0	0	0
HYDROGRAPH	AT	D60iW	3.02	127	12.75	7	74	12.83	4	47	12.42	2	6	12.58	0	0	0	0
ROUTED TO		R60iW	3.02	119	13.08	7	69	13.17	4	35	13.08	2	2	13.25	0	0	0	0
HYDROGRAPH	AT	BD64gP	3.1	153	12.33	22	153	12.83	19	97	13.08	13	58	13.08	10	29	12.83	5
ROUTED TO		P64gS	3.1	153	12.42	22	153	12.92	19	97	13.17	13	58	13.08	10	29	12.92	5
HYDROGRAPH	AT	BD64gS	3.1	83	13.08	3	18	13.17	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R64gS	3.1	78	13.33	3	11	13.67	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C64gS	3.1	231	13.33	25	161	13.5	19	97	13.17	13	58	13.08	10	29	12.92	5
HYDROGRAPH	AT	64i	0.5	255	12.42	21	183	12.42	17	125	12.5	14	77	12.58	10	41	12.58	6
3 COMBINED	AT	C64i	4.79	457	13.08	51	353	12.83	39	220	13	28	127	12.67	20	68	12.67	11
DIVERSION	TO	D64iP	4.79	214	12.17	37	214	12.33	34	214	13	28	127	12.67	20	68	12.67	11
HYDROGRAPH	AT	D64i	4.79	243	13.08	14	139	12.83	6	6	13	0	0	0	0	0	0	0
DIVERSION	TO	D64iS	4.79	148	13.08	9	85	12.83	4	3	13	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64iW	4.79	95	13.08	6	54	12.83	2	2	13	0	0	0	0	0	0	0
ROUTED TO		R64iW	4.79	93	13.42	6	47	13.42	2	1	13.75	0	0	0	0	0	0	0
HYDROGRAPH	AT	68i	0.5	145	12.5	15	94	12.58	11	62	12.67	9	49	12.67	7	26	12.75	4
HYDROGRAPH	AT	BD68gP	4.53	82	12	24	82	12.08	22	82	12.25	20	82	12.33	17	67	12.92	11
ROUTED TO		P68gS	4.53	82	12.08	24	82	12.17	22	82	12.33	20	82	12.42	17	67	12.92	11
HYDROGRAPH	AT	BD68gS	4.53	150	13.25	8	58	13.42	4	24	13.42	2	10	12.83	1	0	0	0
ROUTED TO		R68gS	4.53	139	13.58	8	53	13.92	4	22	14.08	2	9	13.92	1	0	0	0
2 COMBINED	AT	C68gS	4.53	221	13.58	32	135	13.92	26	104	14.08	22	91	13.92	18	67	12.92	11
3 COMBINED	AT	C68i	6.72	377	13.5	51	222	13.5	39	143	13.17	30	130	12.75	25	92	12.92	15
HYDROGRAPH	AT	BD72i	8.68	594	13.33	45	401	13.25	25	183	13.42	11	29	13.08	1	0	0	0
HYDROGRAPH	AT	B76iE	5.92	207	13	12	148	13.08	9	95	13.25	6	38	13.5	3	0	0	0
ROUTED TO		R76iE	5.92	196	13.33	12	141	13.42	9	90	13.58	6	35	13.92	3	0	0	0
2 COMBINED	AT	CC72i	8.68	789	13.33	57	534	13.33	34	267	13.5	17	54	13.08	4	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
DIVERSION	TO	D72iS	8.68	552	13.33	40	374	13.33	24	187	13.5	12	37	13.08	3	0	0	0
HYDROGRAPH	AT	D72iE	8.68	237	13.33	17	160	13.33	10	80	13.5	5	16	13.08	1	0	0	0
ROUTED TO		R72iE	8.68	233	13.67	17	155	13.67	10	76	13.83	5	13	14.17	1	0	0	0
2 COMBINED	AT	CC68i	10.87	591	13.5	68	368	13.58	48	210	13.83	35	129	13.75	26	92	12.92	15
DIVERSION	TO	D68iP	10.87	99	12	32	99	12.08	30	99	12.25	27	99	12.33	24	92	12.92	15
HYDROGRAPH	AT	D68i	10.87	492	13.5	35	269	13.58	18	111	13.83	8	30	13.75	2	0	0	0
ROUTED TO		R68iS	10.87	491	13.67	35	268	13.75	18	110	13.92	8	30	13.92	2	0	0	0
HYDROGRAPH	AT	BD68iP	10.87	99	12	32	99	12.08	30	99	12.25	27	99	12.33	24	92	12.92	15
ROUTED TO		P68iS	10.87	99	12.08	32	99	12.17	30	99	12.33	27	99	12.42	24	91	12.92	15
2 COMBINED	AT	C68iS	10.87	590	13.67	68	367	13.75	48	209	13.92	35	129	13.92	26	91	12.92	15
HYDROGRAPH	AT	36i	0.34	173	12.33	12	131	12.42	10	89	12.42	7	43	12.5	5	16	12.67	2
DIVERSION	TO	D36iP	0.34	41	12	7	41	12.08	7	41	12.17	6	40	12.5	5	16	12.67	2
HYDROGRAPH	AT	D36i	0.34	132	12.33	5	90	12.42	3	48	12.42	1	3	12.5	0	0	0	0
DIVERSION	TO	D36iS	0.34	111	12.33	4	76	12.42	3	40	12.42	1	2	12.5	0	0	0	0
HYDROGRAPH	AT	D36iW	0.34	21	12.33	1	14	12.42	0	8	12.42	0	0	12.5	0	0	0	0
ROUTED TO		R36iW	0.34	20	12.67	1	13	12.75	0	6	12.92	0	0	13	0	0	0	0
HYDROGRAPH	AT	40i	0.22	57	12.33	6	49	12.33	5	42	12.33	5	33	12.42	4	18	12.42	2
ROUTED TO		S40i	0.22	2	21.08	1	0	24.83	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C40i	0.56	20	12.67	1	13	12.75	1	6	12.92	0	0	13	0	0	0	0
DIVERSION	TO	D40iS	0.56	15	12.67	1	10	12.75	0	5	12.92	0	0	13	0	0	0	0
HYDROGRAPH	AT	D40iW	0.56	5	12.67	0	3	12.75	0	2	12.92	0	0	13	0	0	0	0
ROUTED TO		R40iW	0.56	4	13.08	0	3	13.25	0	1	13.5	0	0	13.5	0	0	0	0
HYDROGRAPH	AT	44i	0.35	92	12.42	9	61	12.5	7	48	12.5	6	38	12.5	5	20	12.58	3
HYDROGRAPH	AT	42i	0.27	141	12.25	6	92	12.33	4	47	12.33	3	11	12.5	1	4	12.5	0
ROUTED TO		R42iW	0.27	132	12.42	6	87	12.5	4	43	12.67	3	10	12.83	1	3	13.17	0
3 COMBINED	AT	C44i	1.18	217	12.42	15	141	12.5	11	87	12.67	9	45	12.67	6	23	12.67	3
DIVERSION	TO	D44iP	1.18	48	12.08	9	48	12.17	8	48	12.33	8	45	12.67	6	23	12.67	3
HYDROGRAPH	AT	D44i	1.18	169	12.42	6	93	12.5	3	39	12.67	1	0	12.67	0	0	0	0
DIVERSION	TO	D44iS	1.18	84	12.42	3	47	12.5	1	19	12.67	1	0	12.67	0	0	0	0
HYDROGRAPH	AT	D44iW	1.18	85	12.42	3	47	12.5	1	19	12.67	1	0	12.67	0	0	0	0
ROUTED TO		R44iW	1.18	79	12.67	3	41	12.83	1	16	13	1	0	13.08	0	0	0	0
HYDROGRAPH	AT	48i	0.54	169	12.42	11	99	12.5	8	47	12.5	5	27	12.58	4	15	12.67	2
2 COMBINED	AT	C48i	1.72	224	12.58	14	124	12.75	9	55	12.83	6	27	12.58	4	15	12.67	2
DIVERSION	TO	D48iP	1.72	47	12.08	7	47	12.25	7	47	12.75	5	27	12.58	4	15	12.67	2
HYDROGRAPH	AT	D48i	1.72	177	12.58	6	77	12.75	3	8	12.83	0	0	0	0	0	0	0
DIVERSION	TO	D48iS	1.72	87	12.58	3	38	12.75	1	4	12.83	0	0	0	0	0	0	0
HYDROGRAPH	AT	D48iW	1.72	91	12.58	3	39	12.75	1	4	12.83	0	0	0	0	0	0	0
ROUTED TO		R48iW	1.72	86	12.75	3	37	12.92	1	3	13.08	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD48iP	1.72	47	12.08	7	47	12.25	7	47	12.75	5	27	12.58	4	15	12.67	2
ROUTED TO		P48iW	1.72	47	12.17	7	47	12.33	7	47	12.83	5	27	12.67	4	15	12.67	2
2 COMBINED	AT	C48iW	1.72	133	12.75	11	84	12.92	8	50	13	6	27	12.67	4	15	12.67	2
HYDROGRAPH	AT	52g	0.26	114	12.25	5	61	12.33	4	32	12.33	3	24	12.33	2	13	12.33	1
ROUTED TO		R52gS	0.26	94	12.67	5	50	12.83	4	28	12.92	3	21	12.92	2	10	13.25	1
HYDROGRAPH	AT	52i	0.31	155	12.33	11	109	12.42	9	69	12.42	7	34	12.5	4	17	12.58	2
3 COMBINED	AT	C52i	2.29	340	12.67	26	209	12.75	20	132	12.75	15	76	12.75	10	38	12.92	6
DIVERSION	TO	DB52i	2.29	245	12.67	9	114	12.75	5	37	12.75	1	0	0	0	0	0	0
HYDROGRAPH	AT	E52i	2.29	95	12.08	17	95	12.17	15	95	12.33	14	76	12.75	10	38	12.92	6
HYDROGRAPH	AT	BDB52i	2.29	245	12.67	9	114	12.75	5	37	12.75	1	0	0	0	0	0	0
ROUTED TO		S52i	2.29	72	13.42	9	55	13.25	5	29	13	1	0	0	0	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
2 COMBINED	AT	CC52i	2.29	167	13.42	26	150	13.25	20	124	13	15	76	12.75	10	38	12.92	6
DIVERSION	TO	D52iP	2.29	95	12.08	21	95	12.17	17	95	12.33	14	76	12.75	10	38	12.92	6
HYDROGRAPH	AT	D52i	2.29	72	13.42	5	55	13.25	3	29	13	1	0	0	0	0	0	0
ROUTED TO		R52iS	2.29	72	13.75	5	55	13.67	3	22	13.5	1	0	0	0	0	0	0
HYDROGRAPH	AT	BD52iP	2.29	95	12.08	21	95	12.17	17	95	12.33	14	76	12.75	10	38	12.92	6
ROUTED TO		P52iS	2.29	95	12.25	21	95	12.33	17	95	12.5	14	76	12.92	10	38	13	6
2 COMBINED	AT	C52iS	2.29	167	13.75	26	150	13.67	20	117	13.42	15	76	12.92	10	38	13	6
HYDROGRAPH	AT	24k	0.19	154	12.25	8	120	12.25	7	91	12.33	6	58	12.33	4	13	12.42	2
DIVERSION	TO	D24kS	0.19	77	12.25	4	60	12.25	3	45	12.33	3	29	12.33	2	7	12.42	1
HYDROGRAPH	AT	D24kW	0.19	77	12.25	4	60	12.25	3	45	12.33	3	29	12.33	2	7	12.42	1
ROUTED TO		R24kW	0.19	69	12.58	4	53	12.58	3	40	12.75	3	26	12.75	2	6	13.17	1
HYDROGRAPH	AT	ARC40	0.1	47	13	4	47	13	4	47	13	4	47	13	4	47	13	4
ROUTED TO		PARC40	0.1	46	13.08	4	46	13.08	4	46	13.08	4	46	13.08	4	46	13.08	4
HYDROGRAPH	AT	28k	0.43	235	12.33	16	169	12.42	13	109	12.42	10	53	12.5	6	25	12.58	3
3 COMBINED	AT	C28k	0.72	305	12.5	23	231	12.58	19	166	12.67	16	108	12.92	12	73	13.08	8
DIVERSION	TO	D28kP	0.72	131	12.17	18	131	12.25	16	131	12.42	15	108	12.92	12	73	13.08	8
HYDROGRAPH	AT	D28k	0.72	174	12.5	5	100	12.58	3	35	12.67	1	0	0	0	0	0	0
DIVERSION	TO	D28kS	0.72	73	12.5	2	42	12.58	1	15	12.67	0	0	0	0	0	0	0
HYDROGRAPH	AT	D28kW	0.72	100	12.5	3	58	12.58	2	20	12.67	0	0	0	0	0	0	0
ROUTED TO		R28kW	0.72	90	12.83	3	50	12.92	2	15	13.08	0	0	0	0	0	0	0
HYDROGRAPH	AT	32k	0.51	142	12.42	13	89	12.5	10	66	12.5	8	52	12.5	7	28	12.58	4
2 COMBINED	AT	C32k	1.23	210	12.75	16	122	12.83	11	67	12.92	9	52	12.5	7	28	12.58	4
DIVERSION	TO	D32kP	1.23	45	12.08	9	45	12.17	9	45	12.25	8	45	12.33	7	28	12.58	4
HYDROGRAPH	AT	D32k	1.23	165	12.75	6	77	12.83	3	22	12.92	1	7	12.5	0	0	0	0
DIVERSION	TO	D32kS	1.23	75	12.75	3	35	12.83	1	10	12.92	0	3	12.5	0	0	0	0
HYDROGRAPH	AT	D32kW	1.23	89	12.75	3	42	12.83	2	12	12.92	0	4	12.5	0	0	0	0
ROUTED TO		R32kW	1.23	82	13	3	37	13.17	2	10	13.25	0	2	13.08	0	0	0	0
HYDROGRAPH	AT	36k	0.51	250	12.33	18	172	12.42	14	109	12.5	11	61	12.5	8	33	12.58	4
HYDROGRAPH	AT	BD36iP	0.34	41	12	7	41	12.08	7	41	12.17	6	40	12.5	5	16	12.67	2
ROUTED TO		P36iS	0.34	41	12.17	7	41	12.25	7	41	12.33	6	40	12.67	5	16	12.75	2
HYDROGRAPH	AT	BD36iS	0.34	111	12.33	4	76	12.42	3	40	12.42	1	2	12.5	0	0	0	0
ROUTED TO		R36iS	0.34	96	12.83	4	63	13	3	32	13.08	1	1	13.33	0	0	0	0
2 COMBINED	AT	C36iS	0.34	137	12.83	11	104	13	9	73	13.08	7	40	12.67	5	16	12.75	2
3 COMBINED	AT	C36k	2.07	377	12.83	32	249	12.83	24	156	12.92	18	99	12.58	12	47	12.67	7
DIVERSION	TO	D36kP	2.07	59	11.92	15	59	12	14	59	12.08	13	59	12.25	11	47	12.67	7
HYDROGRAPH	AT	D36k	2.07	318	12.83	17	190	12.83	10	97	12.92	5	40	12.58	1	0	0	0
DIVERSION	TO	D36kS	2.07	140	12.83	7	83	12.83	5	43	12.92	2	18	12.58	1	0	0	0
HYDROGRAPH	AT	D36kW	2.07	179	12.83	9	106	12.83	6	54	12.92	3	22	12.58	1	0	0	0
ROUTED TO		R36kW	2.07	174	13	9	104	13.08	6	53	13.17	3	19	13	1	0	0	0
HYDROGRAPH	AT	BD40iS	0.56	15	12.67	1	10	12.75	0	5	12.92	0	0	13	0	0	0	0
ROUTED TO		R40iS	0.56	12	13.33	1	7	13.5	0	3	13.92	0	0	13.92	0	0	0	0
HYDROGRAPH	AT	40k	0.5	264	12.42	19	198	12.42	16	131	12.5	12	67	12.58	8	30	12.67	4
3 COMBINED	AT	C40k	2.8	371	12.58	29	255	12.67	22	161	12.75	15	77	12.83	9	29	12.67	4
DIVERSION	TO	D40kP	2.8	29	11.83	9	29	11.92	8	29	12	8	29	12.17	7	29	12.67	4
HYDROGRAPH	AT	D40k	2.8	342	12.58	20	226	12.67	13	132	12.75	7	48	12.83	2	0	12.67	0
DIVERSION	TO	D40kS	2.8	144	12.58	8	95	12.67	6	55	12.75	3	20	12.83	1	0	12.67	0
HYDROGRAPH	AT	D40kW	2.8	198	12.58	11	131	12.67	8	76	12.75	4	28	12.83	1	0	12.67	0
ROUTED TO		R40kW	2.8	196	12.83	11	129	12.83	8	74	13	4	26	13.17	1	0	13.08	0
HYDROGRAPH	AT	44k	0.51	312	12.33	23	246	12.42	20	179	12.42	16	102	12.5	11	43	12.58	6

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	BD44iP	1.18	48	12.08	9	48	12.17	8	48	12.33	8	45	12.67	6	23	12.67	3
ROUTED TO		P44iS	1.18	48	12.33	9	48	12.42	8	48	12.58	8	45	12.75	6	23	12.83	3
HYDROGRAPH	AT	BD44iS	1.18	84	12.42	3	47	12.5	1	19	12.67	1	0	12.67	0	0	0	0
ROUTED TO		R44iS	1.18	75	12.83	3	37	13	1	14	13.25	1	0	13.5	0	0	0	0
2 COMBINED	AT	C44iS	1.18	123	12.83	12	85	13	10	62	13.25	8	45	12.75	6	23	12.83	3
3 COMBINED	AT	C44k	3.93	550	12.75	46	391	12.75	37	265	12.75	28	152	12.75	18	63	12.67	9
DIVERSION	TO	D44kP	3.93	71	11.92	20	71	12	18	71	12.08	17	71	12.17	15	63	12.67	9
HYDROGRAPH	AT	D44k	3.93	479	12.75	26	320	12.75	18	194	12.75	11	81	12.75	4	0	0	0
DIVERSION	TO	D44kS	3.93	182	12.75	10	122	12.75	7	74	12.75	4	31	12.75	1	0	0	0
HYDROGRAPH	AT	D44kW	3.93	297	12.75	16	199	12.75	11	121	12.75	7	50	12.75	2	0	0	0
ROUTED TO		R44kW	3.93	289	12.83	16	194	12.92	11	117	12.92	7	46	13.08	2	0	0	0
HYDROGRAPH	AT	48k	0.5	329	12.42	27	266	12.42	23	207	12.42	20	132	12.5	15	52	12.67	7
ROUTED TO		S48k	0.5	329	12.42	26	264	12.5	22	207	12.5	19	132	12.58	14	52	12.67	6
HYDROGRAPH	AT	BD48iS	1.72	87	12.58	3	38	12.75	1	4	12.83	0	0	0	0	0	0	0
ROUTED TO		R48iS	1.72	78	13	3	31	13.25	1	2	13.5	0	0	0	0	0	0	0
3 COMBINED	AT	C48k	4.96	595	12.83	45	413	12.75	34	289	12.75	25	155	12.83	15	52	12.67	6
DIVERSION	TO	D48kS	4.96	267	12.83	20	185	12.75	15	130	12.75	11	70	12.83	7	23	12.67	3
HYDROGRAPH	AT	D48kW	4.96	328	12.83	25	228	12.75	19	160	12.75	14	85	12.83	8	28	12.67	3
ROUTED TO		R48kW	4.96	326	12.92	25	227	12.83	19	158	12.83	14	84	13	8	27	12.92	3
HYDROGRAPH	AT	52k	0.29	168	12.42	14	133	12.5	12	103	12.5	10	68	12.58	8	20	12.75	3
3 COMBINED	AT	C52k	5.83	589	12.92	64	448	12.92	50	342	12.75	38	217	12.92	26	84	12.92	12
DIVERSION	TO	D52kP	5.83	201	12.17	42	201	12.25	36	201	12.33	32	201	12.67	25	84	12.92	12
HYDROGRAPH	AT	D52k	5.83	388	12.92	22	247	12.92	14	141	12.75	6	16	12.92	0	0	0	0
DIVERSION	TO	D52kS	5.83	175	12.92	10	111	12.92	6	63	12.75	3	7	12.92	0	0	0	0
HYDROGRAPH	AT	D52kW	5.83	213	12.92	12	136	12.92	8	77	12.75	3	9	12.92	0	0	0	0
ROUTED TO		R52kW	5.83	210	13	12	135	13	8	76	12.92	3	6	13	0	0	0	0
HYDROGRAPH	AT	BD54iP	0.44	68	12.17	10	68	12.25	9	68	12.5	8	48	12.83	6	22	12.92	3
ROUTED TO		P54iS	0.44	68	12.33	10	68	12.42	9	68	12.75	8	48	13	6	22	13.08	3
HYDROGRAPH	AT	BD54iS	0.44	35	12.58	1	20	12.67	1	7	12.67	0	0	0	0	0	0	0
ROUTED TO		R54iS	0.44	27	13.25	1	14	13.42	1	3	13.67	0	0	0	0	0	0	0
2 COMBINED	AT	C54iS	0.44	95	13.25	11	81	13.33	10	68	13.08	8	48	13	6	22	13.08	3
HYDROGRAPH	AT	54k	0.25	146	12.42	14	119	12.5	12	94	12.5	10	65	12.58	8	22	12.75	4
3 COMBINED	AT	C54k	1.18	409	12.92	37	309	12.75	29	231	12.83	22	114	12.92	14	42	13	7
DIVERSION	TO	D54kP	1.18	124	12.17	22	124	12.25	20	124	12.33	18	111	12.92	14	42	13	7
HYDROGRAPH	AT	D54k	1.18	285	12.92	15	185	12.75	9	107	12.83	4	3	12.92	0	0	0	0
DIVERSION	TO	D54kS	1.18	146	12.92	7	82	12.75	3	35	12.83	1	0	0	0	0	0	0
HYDROGRAPH	AT	D54kW	1.18	139	12.92	8	103	12.75	6	72	12.83	3	3	12.92	0	0	0	0
ROUTED TO		R54kW	1.18	133	13.5	8	96	13.58	6	58	13.67	3	0	14.92	0	0	0	0
HYDROGRAPH	AT	BD56iP	1.62	204	12.08	33	204	12.17	30	204	12.33	26	164	12.67	20	80	12.75	11
ROUTED TO		P56iS	1.62	204	12.17	33	204	12.33	30	204	12.42	26	164	12.75	20	80	12.83	11
HYDROGRAPH	AT	BD56iS	1.62	106	12.33	5	68	12.42	2	31	12.58	1	0	0	0	0	0	0
ROUTED TO		R56iS	1.62	103	13.08	5	62	12.83	2	24	13.08	1	0	0	0	0	0	0
2 COMBINED	AT	C56iS	1.62	307	13.08	38	266	12.83	32	226	13	27	164	12.75	20	80	12.83	11
HYDROGRAPH	AT	56k	0.42	303	12.33	21	238	12.42	18	181	12.42	14	107	12.42	10	41	12.58	5
3 COMBINED	AT	C56k	2.78	540	12.67	65	437	12.75	55	380	12.42	43	259	12.58	30	118	12.75	16
HYDROGRAPH	AT	BD60iP	3.02	211	12.08	39	211	12.08	36	211	12.17	32	211	12.42	26	100	12.67	14
DIVERSION	TO	D60iP2	3.02	143	12.08	26	143	12.08	24	143	12.17	22	143	12.42	18	68	12.67	9
HYDROGRAPH	AT	D60iP1	3.02	68	12.08	13	68	12.08	12	68	12.17	10	68	12.42	8	32	12.67	4
ROUTED TO		P60iS1	3.02	68	12.17	13	68	12.17	12	68	12.25	10	68	12.5	8	32	12.75	4

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	B60iP2	3.02	143	12.08	26	143	12.08	24	143	12.17	22	143	12.42	18	68	12.67	9
ROUTED TO		P60iS2	3.02	143	12.17	26	143	12.17	24	143	12.25	22	143	12.5	18	68	12.75	9
HYDROGRAPH	AT	BD60iS	3.02	184	12.75	10	107	12.83	5	68	12.42	2	9	12.58	0	0	0	0
ROUTED TO		R60iS	3.02	176	13	10	104	13	5	57	12.83	2	4	13	0	0	0	0
3 COMBINED	AT	C60iS	3.02	387	13	49	315	13	41	268	12.83	34	213	12.75	26	100	12.75	14
HYDROGRAPH	AT	60k	0.27	203	12.33	14	164	12.33	12	127	12.42	10	88	12.42	8	26	12.58	3
2 COMBINED	AT	C60k	3.29	519	12.58	62	434	12.67	53	368	12.67	44	295	12.5	34	125	12.75	17
DIVERSION	TO	D60k	3.29	384	12.58	25	299	12.67	19	233	12.67	13	160	12.5	6	0	0	0
HYDROGRAPH	AT	D60kP	3.29	135	11.92	37	135	12	34	135	12.08	31	135	12.17	27	125	12.75	17
DIVERSION	TO	D60kP2	3.29	125	11.92	34	125	12	32	125	12.08	29	125	12.17	25	70	12.75	10
HYDROGRAPH	AT	D60kP1	3.29	10	11.92	3	10	12	3	10	12.08	2	10	12.17	2	55	12.75	8
ROUTED TO		P60kE	3.29	10	12.08	3	10	12.17	3	10	12.25	2	10	12.33	2	55	12.75	8
2 COMBINED	AT	CC56k	4.46	546	12.67	68	445	12.42	57	388	12.42	45	267	12.58	32	172	12.75	24
DIVERSION	TO	D56kP	4.46	303	12.08	54	303	12.17	49	303	12.25	43	267	12.58	32	172	12.75	24
HYDROGRAPH	AT	D56k	4.46	243	12.67	14	142	12.42	7	85	12.42	2	0	0	0	0	0	0
DIVERSION	TO	D56kS	4.46	103	12.67	5	36	12.42	1	6	12.42	0	0	0	0	0	0	0
HYDROGRAPH	AT	D56kW	4.46	140	12.67	9	106	12.42	6	80	12.42	2	0	0	0	0	0	0
ROUTED TO		R56kW	4.46	130	13.5	9	100	13.17	6	55	13.08	2	0	0	0	0	0	0
HYDROGRAPH	AT	BD60k	3.29	384	12.58	25	299	12.67	19	233	12.67	13	160	12.5	6	0	0	0
2 COMBINED	AT	CC60k	4.46	484	12.92	34	365	12.92	25	256	12.92	15	160	12.5	6	0	0	0
DIVERSION	TO	D60kS	4.46	334	12.92	21	238	12.92	14	153	12.92	8	78	12.5	2	0	0	0
HYDROGRAPH	AT	D60kW	4.46	151	12.92	13	128	12.92	10	104	12.92	7	82	12.5	4	0	0	0
ROUTED TO		R60kW	4.46	148	13.25	13	126	13.33	10	102	13.25	7	79	13.08	4	0	0	0
HYDROGRAPH	AT	64k	0.21	191	12.25	10	146	12.33	9	102	12.33	7	55	12.42	5	21	12.42	2
HYDROGRAPH	AT	BD64iS	4.79	148	13.08	9	85	12.83	4	3	13	0	0	0	0	0	0	0
ROUTED TO		R64iS	4.79	147	13.25	9	80	13.08	4	3	13.25	0	0	0	0	0	0	0
3 COMBINED	AT	C64k	6.43	350	12.75	31	247	13	22	146	12.75	13	107	13	8	21	12.42	2
ROUTED TO		S64k	6.43	222	13.92	25	128	14	16	52	14.25	7	9	14.75	2	0	0	0
HYDROGRAPH	AT	BD64iP	4.79	214	12.17	37	214	12.33	34	214	13	28	127	12.67	20	68	12.67	11
ROUTED TO		P64iS	4.79	214	12.25	37	214	12.42	34	214	13	28	127	12.67	20	68	12.75	11
2 COMBINED	AT	CC64k	6.43	436	13.92	62	335	13.75	49	214	13.08	35	126	12.67	22	68	12.75	11
DIVERSION	TO	D64kP	6.43	214	12.25	49	214	12.42	44	214	13	35	126	12.67	22	68	12.75	11
HYDROGRAPH	AT	D64k	6.43	222	13.92	13	121	13.75	5	3	13.5	0	0	0	0	0	0	0
DIVERSION	TO	D64kS	6.43	44	13.92	1	1	14	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64kW	6.43	179	13.92	11	120	13.75	5	3	13.5	0	0	0	0	0	0	0
ROUTED TO		R64kW	6.43	177	14.17	11	107	14.08	5	1	14	0	0	0	0	0	0	0
HYDROGRAPH	AT	68k	0.2	208	12.33	11	171	12.33	9	131	12.33	8	82	12.42	5	17	12.5	2
3 COMBINED	AT	C68k	12.71	742	13.75	88	455	13.83	60	229	12.58	42	181	12.75	31	104	12.83	16
DIVERSION	TO	D68kP	12.71	114	11.92	37	114	12	34	114	12.08	31	114	12.25	27	104	12.83	16
HYDROGRAPH	AT	D68k	12.71	628	13.75	50	341	13.83	26	115	12.58	11	67	12.75	4	0	0	0
DIVERSION	TO	D68kS	12.71	447	13.75	32	216	13.83	14	43	12.58	3	11	12.75	0	0	0	0
HYDROGRAPH	AT	D68kW	12.71	182	13.75	18	124	13.83	12	73	12.58	7	56	12.75	4	0	0	0
ROUTED TO		R68kW	12.71	177	14.08	18	121	14.25	12	68	14.25	7	50	13.33	4	0	0	0
HYDROGRAPH	AT	72k	0.28	271	12.33	16	224	12.33	13	174	12.33	11	114	12.42	8	27	12.58	3
ROUTED TO		S72k	0.28	260	12.42	13	211	12.5	10	159	12.58	8	90	12.83	5	1	20.25	0
HYDROGRAPH	AT	B72iP1	8.68	226	12.08	76	226	12.17	71	226	12.25	65	226	12.58	56	156	12.92	35
ROUTED TO		P72iS	8.68	226	12.25	76	226	12.25	71	226	12.42	65	226	12.75	56	156	12.92	35
HYDROGRAPH	AT	BD72iS	8.68	552	13.33	40	374	13.33	24	187	13.5	12	37	13.08	3	0	0	0
ROUTED TO		R72iS	8.68	548	13.5	40	369	13.5	24	184	13.67	12	33	13.58	3	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
2 COMBINED	AT	C72iS	8.68	774	13.5	116	595	13.5	95	410	13.67	77	259	13.58	59	156	12.92	35
3 COMBINED	AT	C72k	12.99	955	13.5	144	726	13.42	115	504	13.58	90	349	13.33	66	155	13	35
2 COMBINED	AT	CC72k	12.99	987	13.5	166	758	13.42	135	536	13.58	109	381	13.33	82	187	13	47
DIVERSION	TO	D72kP	12.99	281	12.17	105	281	12.25	97	281	12.42	90	281	12.67	78	187	13	47
HYDROGRAPH	AT	D72k	12.99	706	13.5	61	477	13.42	38	255	13.58	20	100	13.33	5	0	0	0
DIVERSION	TO	D72kS	12.99	516	13.5	42	328	13.42	24	150	13.58	10	31	13.33	1	0	0	0
HYDROGRAPH	AT	D72kW	12.99	190	13.5	19	149	13.42	14	105	13.58	9	70	13.25	4	0	0	0
ROUTED TO		R72kW	12.99	188	13.92	19	146	13.92	14	104	14	9	67	13.92	4	0	0	0
HYDROGRAPH	AT	B76k1	5.74	562	13.08	48	424	12.58	38	329	12.58	29	214	12.75	18	59	12.67	4
2 COMBINED	AT	CC76k	13.31	687	13.25	66	522	13.33	51	373	13.42	38	207	13.75	21	57	12.67	3
DIVERSION	TO	D76kP	13.31	43	11.83	9	43	11.83	8	43	11.92	8	43	12	6	43	12.5	3
HYDROGRAPH	AT	D76k	13.31	644	13.25	56	479	13.33	43	330	13.42	30	164	13.75	15	14	12.67	0
DIVERSION	TO	D76kS	13.31	498	13.25	41	361	13.33	30	238	13.42	20	102	13.75	8	0	0	0
HYDROGRAPH	AT	D76kW	13.31	146	13.25	15	117	13.33	13	92	13.42	10	62	13.75	6	14	12.67	0
ROUTED TO		R76kW	13.31	140	13.92	15	113	14	13	88	14.17	10	60	14.5	6	5	14.5	0
HYDROGRAPH	AT	80k	0.43	398	12.33	24	329	12.33	21	263	12.42	17	182	12.42	13	54	12.58	5
HYDROGRAPH	AT	BD80i	3.25	1059	13.25	98	827	13.33	79	612	13.5	62	358	13.75	39	67	13.5	8
ROUTED TO		R80iS	3.25	1052	13.33	98	818	13.5	79	607	13.58	62	354	13.92	39	64	13.83	8
HYDROGRAPH	AT	B80kP1	9.18	28	12	10	28	12.08	9	28	12.17	8	28	12.25	7	21	13.25	4
3 COMBINED	AT	C80k	3.68	1203	13.25	131	936	13.42	108	698	13.5	87	418	13.83	59	105	13.67	18
DIVERSION	TO	D80kP	3.68	63	11.75	26	63	11.83	24	63	11.92	22	63	12	20	63	12.42	15
HYDROGRAPH	AT	D80k	3.68	1140	13.25	105	873	13.42	84	635	13.5	65	355	13.83	39	42	13.67	3
2 COMBINED	AT	CC80k	4.68	1249	13.33	120	970	13.42	97	713	13.58	75	411	13.83	45	42	13.67	3
DIVERSION	TO	D80kS	4.68	559	13.33	43	396	13.42	31	256	13.58	20	104	13.83	8	0	0	0
HYDROGRAPH	AT	D80kW	4.68	690	13.33	78	574	13.42	66	458	13.58	54	307	13.83	38	42	13.67	3
ROUTED TO		R80kW	4.68	686	13.42	78	571	13.58	66	454	13.75	54	306	14	38	38	14.08	3
HYDROGRAPH	AT	84k	0.31	188	12.58	19	155	12.58	16	124	12.58	14	84	12.67	10	26	12.92	4
HYDROGRAPH	AT	BD84iS	1.11	4	17.58	1	0	23.08	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R84iS	1.11	4	19.25	1	0	25.25	0	0	0	0	0	0	0	0	0	0
3 COMBINED	AT	C84k	4.99	801	13.33	97	660	13.42	82	521	13.58	68	349	13.83	48	55	14	7
ROUTED TO		R84kS	4.99	798	13.5	97	657	13.58	82	519	13.75	68	348	14.08	48	53	14.33	7
HYDROGRAPH	AT	84m	0.21	154	12.42	13	129	12.5	11	105	12.5	9	75	12.5	7	27	12.67	3
2 COMBINED	AT	C84m	5.2	869	13.42	109	712	13.5	92	559	13.67	76	376	13.17	54	64	14.25	10
HYDROGRAPH	AT	I17	0.29	293	12.33	29	253	12.33	26	214	12.33	23	164	12.33	18	81	12.5	10
DIVERSION	TO	D84mP	0.29	249	12.17	29	247	12.33	26	214	12.33	23	164	12.33	18	81	12.5	10
HYDROGRAPH	AT	D84m	0.29	44	12.33	1	6	12.33	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	CC84m	5.49	869	13.42	109	712	13.5	92	559	13.67	76	376	13.17	54	64	14.25	10
DIVERSION	TO	D84mS	5.49	333	13.42	42	273	13.5	35	214	13.67	29	144	13.17	21	24	14.25	4
HYDROGRAPH	AT	D84mE	5.49	535	13.42	67	439	13.5	57	344	13.67	47	231	13.17	33	39	14.25	6
ROUTED TO		R84mE	5.49	532	13.58	67	436	13.75	57	342	13.92	47	229	14.08	33	37	14.75	6
HYDROGRAPH	AT	80m	0.54	509	12.33	30	423	12.33	26	336	12.42	22	234	12.42	16	71	12.58	7
HYDROGRAPH	AT	BD80kS	4.68	559	13.33	43	396	13.42	31	256	13.58	20	104	13.83	8	0	0	0
ROUTED TO		R80kS	4.68	540	13.58	43	380	13.75	31	246	13.92	20	98	14.25	8	0	0	0
3 COMBINED	AT	C80m	6.03	1173	13.5	139	887	13.67	113	640	13.83	88	359	14	57	74	12.67	13
DIVERSION	TO	D80mS	6.03	676	13.5	80	511	13.67	65	369	13.83	51	207	14	33	43	12.67	8
HYDROGRAPH	AT	D80mE	6.03	497	13.5	59	376	13.67	48	271	13.83	37	152	14	24	31	12.67	5
ROUTED TO		R80mE	6.03	494	13.67	59	374	13.83	48	269	14	37	151	14.33	24	29	13.33	5
HYDROGRAPH	AT	76l	0.18	261	12.17	10	216	12.17	8	173	12.25	7	116	12.25	5	25	12.33	2
HYDROGRAPH	AT	BD80kP	3.68	63	11.75	26	63	11.83	24	63	11.92	22	63	12	20	63	12.42	15

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	BD76kP	13.31	43	11.83	9	43	11.83	8	43	11.92	8	43	12	6	43	12.5	3
2 COMBINED	AT	C76kP	17.25	106	11.83	34	106	11.83	32	106	11.92	29	106	12	26	106	12.58	18
ROUTED TO		P76kS	17.25	106	11.92	34	106	11.92	32	106	12	29	106	12.08	26	106	12.67	18
HYDROGRAPH	AT	BD76kS	13.31	498	13.25	41	361	13.33	30	238	13.42	20	102	13.75	8	0	0	0
ROUTED TO		R76kS	13.31	494	13.25	41	358	13.42	30	236	13.5	20	100	13.83	8	0	0	0
2 COMBINED	AT	C76kS	4.68	621	13.25	78	481	13.33	64	355	13.5	51	216	13.83	36	106	12.5	18
2 COMBINED	AT	C76l	4.86	643	13.25	88	496	13.33	72	381	12.5	57	262	12.42	40	127	12.5	20
DIVERSION	TO	D76lP	4.86	156	11.83	45	156	11.92	42	156	11.92	38	156	12.08	34	127	12.5	20
HYDROGRAPH	AT	D76l	4.86	487	13.25	42	340	13.33	30	225	12.5	19	106	12.42	7	0	0	0
ROUTED TO		R76lS	4.86	473	13.5	42	330	13.58	30	206	12.92	19	88	13	7	0	0	0
HYDROGRAPH	AT	BD76lP	4.86	156	11.83	45	156	11.92	42	156	11.92	38	156	12.08	34	127	12.5	20
ROUTED TO		P76lS	4.86	156	12	45	156	12.08	42	156	12.08	38	156	12.25	34	126	12.58	20
2 COMBINED	AT	C76lS	4.86	629	13.5	88	486	13.58	72	362	12.92	57	244	13	40	126	12.58	20
HYDROGRAPH	AT	76m	0.49	466	12.33	27	385	12.33	23	303	12.42	19	202	12.42	14	50	12.58	5
ROUTED TO		S76m	0.49	462	12.33	27	383	12.42	23	304	12.42	19	201	12.5	14	49	12.67	5
3 COMBINED	AT	C76m	6.71	1224	13.42	172	937	12.83	141	730	12.83	113	483	12.92	77	186	12.83	30
DIVERSION	TO	D76m	6.71	1033	13.42	108	746	12.83	81	539	12.83	56	292	12.92	27	1	12.92	0
HYDROGRAPH	AT	D76mP	6.71	191	11.83	65	191	11.92	60	191	12	56	191	12.08	50	186	12.83	30
DIVERSION	TO	D76mP2	6.71	32	11.83	11	32	11.92	10	32	12	9	32	12.08	8	31	12.83	5
HYDROGRAPH	AT	D76mP1	6.71	159	11.83	54	159	11.92	50	159	12	47	159	12.08	42	155	12.83	25
HYDROGRAPH	AT	72l	0.22	131	12.42	10	99	12.5	9	67	12.58	7	35	12.67	4	12	12.75	2
HYDROGRAPH	AT	BD72kP	12.99	281	12.17	105	281	12.25	97	281	12.42	90	281	12.67	78	187	13	47
ROUTED TO		P72kS	12.99	281	12.25	105	281	12.33	97	281	12.5	90	281	12.75	78	187	13	47
HYDROGRAPH	AT	BD72kS	12.99	516	13.5	42	328	13.42	24	150	13.58	10	31	13.33	1	0	0	0
ROUTED TO		R72kS	12.99	514	13.58	42	325	13.58	24	148	13.75	10	27	13.58	1	0	0	0
2 COMBINED	AT	C72kS	12.99	795	13.58	147	606	13.58	121	429	13.75	100	308	13.58	79	187	13	47
2 COMBINED	AT	C72l	13.21	843	13.5	156	646	13.5	129	456	13.58	106	327	13.5	83	199	13	49
DIVERSION	TO	D72lP	13.21	305	12.17	111	305	12.25	103	305	12.42	95	305	12.75	82	199	13	49
HYDROGRAPH	AT	D72l	13.21	538	13.5	45	341	13.5	25	151	13.58	11	22	13.5	1	0	0	0
ROUTED TO		R72lS	13.21	531	13.75	45	330	13.83	25	148	13.92	11	14	14.17	1	0	0	0
HYDROGRAPH	AT	BD72lP	13.21	305	12.17	111	305	12.25	103	305	12.42	95	305	12.75	82	199	13	49
ROUTED TO		P72lS	13.21	305	12.33	111	305	12.42	103	305	12.5	95	305	12.83	82	198	13.08	49
2 COMBINED	AT	C72lS	13.21	836	13.75	156	635	13.83	129	453	13.92	106	317	14.08	83	198	13.08	49
HYDROGRAPH	AT	72m	0.47	386	12.42	28	322	12.42	24	260	12.42	20	185	12.5	15	65	12.67	7
3 COMBINED	AT	C72m	13.67	1099	13.58	235	878	13.58	200	711	12.5	171	622	12.75	138	405	12.92	80
HYDROGRAPH	AT	60l	0.23	174	12.33	12	140	12.33	10	108	12.42	8	73	12.42	6	20	12.58	3
HYDROGRAPH	AT	B60kP2	3.29	125	11.92	34	125	12	32	125	12.08	29	125	12.17	25	70	12.75	10
ROUTED TO		P60kS	3.29	125	12	34	125	12.08	32	125	12.17	29	125	12.25	25	70	12.75	10
HYDROGRAPH	AT	BD60kS	4.46	334	12.92	21	238	12.92	14	153	12.92	8	78	12.5	2	0	0	0
ROUTED TO		R60kS	4.46	332	13	21	237	13	14	151	13	8	75	12.67	2	0	0	0
2 COMBINED	AT	C60kS	4.46	457	13	55	362	13	46	276	13	37	200	12.67	27	70	12.75	10
2 COMBINED	AT	C60l	4.69	553	12.83	67	444	12.83	56	346	12.75	44	265	12.67	33	88	12.75	12
DIVERSION	TO	D60lP	4.69	93	11.75	34	93	11.92	31	93	11.92	29	93	12.08	25	88	12.75	12
HYDROGRAPH	AT	D60l	4.69	460	12.83	33	351	12.83	24	253	12.75	16	172	12.67	8	0	12.75	0
DIVERSION	TO	D60lS	4.69	335	12.83	24	255	12.83	18	184	12.75	12	125	12.67	6	0	12.75	0
HYDROGRAPH	AT	D60lW	4.69	125	12.83	9	96	12.83	7	69	12.75	4	47	12.67	2	0	12.75	0
ROUTED TO		R60lW	4.69	123	13.17	9	94	13.17	7	68	13.17	4	42	13.17	2	0	13.67	0
HYDROGRAPH	AT	64l	0.29	148	12.5	12	104	12.58	9	67	12.58	7	30	12.75	4	13	12.83	2
HYDROGRAPH	AT	BD64kS	6.43	44	13.92	1	1	14	0	0	0	0	0	0	0	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		R64kS	6.43	42	14.08	1	1	14.17	0	0	0	0	0	0	0	0	0	0
3 COMBINED	AT	C64l	6.96	233	12.83	22	173	12.92	15	122	13	11	67	13.08	6	13	12.83	2
ROUTED TO		S64l	6.96	53	14.75	4	0	23.75	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD64kP	6.43	214	12.25	49	214	12.42	44	214	13	35	126	12.67	22	68	12.75	11
ROUTED TO		P64kS	6.43	214	12.33	49	214	12.5	44	214	13.08	35	126	12.75	22	68	12.83	11
2 COMBINED	AT	CC64l	6.96	267	14.75	53	214	12.5	44	214	13.08	35	126	12.75	22	68	12.83	11
DIVERSION	TO	D64lP	6.96	265	14.75	53	214	12.5	44	214	13.08	35	126	12.75	22	68	12.83	11
HYDROGRAPH	AT	D64l	6.96	3	14.42	0	0	0	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D64lS	6.96	3	14.42	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64lW	6.96	0	14.42	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R64lW	6.96	0	15.5	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	68l	0.32	234	12.42	18	193	12.5	15	153	12.5	13	102	12.58	9	27	12.75	4
HYDROGRAPH	AT	BD68kP	12.71	114	11.92	37	114	12	34	114	12.08	31	114	12.25	27	104	12.83	16
ROUTED TO		P68kS	12.71	114	12	37	114	12.08	34	114	12.17	31	114	12.33	27	104	12.92	16
HYDROGRAPH	AT	BD68kS	12.71	447	13.75	32	216	13.83	14	43	12.58	3	11	12.75	0	0	0	0
ROUTED TO		R68kS	12.71	442	13.83	32	210	14	14	35	12.83	3	7	13.08	0	0	0	0
2 COMBINED	AT	C68kS	12.71	556	13.83	69	324	14	48	149	12.83	34	121	13.08	27	104	12.92	16
3 COMBINED	AT	C68l	13.56	615	13.83	86	368	14	62	281	12.67	46	210	12.58	36	127	12.92	20
DIVERSION	TO	D68lP	13.56	114	11.83	40	114	11.92	38	114	12	34	114	12.17	30	114	12.67	19
HYDROGRAPH	AT	D68l	13.56	501	13.83	46	254	14	25	167	12.67	12	96	12.58	6	13	12.92	0
ROUTED TO		R68lS	13.56	488	14.08	46	244	14.33	25	154	13.17	12	85	13.25	6	5	13.83	0
HYDROGRAPH	AT	BD68lP	13.56	114	11.83	40	114	11.92	38	114	12	34	114	12.17	30	114	12.67	19
ROUTED TO		P68lS	13.56	114	12	40	114	12.08	38	114	12.17	34	114	12.33	30	114	12.83	19
2 COMBINED	AT	C68lS	13.56	602	14.08	86	358	14.33	62	268	13.17	46	199	13.25	36	116	13.42	20
HYDROGRAPH	AT	24m	0.5	195	12.42	16	129	12.42	13	81	12.5	10	59	12.5	8	32	12.58	4
ROUTED TO		S24m	0.5	195	12.42	16	129	12.5	12	81	12.5	9	59	12.58	7	32	12.58	4
HYDROGRAPH	AT	BD24kS	0.19	77	12.25	4	60	12.25	3	45	12.33	3	29	12.33	2	7	12.42	1
ROUTED TO		R24kS	0.19	67	12.67	4	52	12.75	3	38	12.92	3	25	12.92	2	6	13.42	1
2 COMBINED	AT	C24m	0.69	245	12.58	20	169	12.67	16	112	12.75	12	79	12.83	9	34	12.75	5
DIVERSION	TO	D24mS	0.69	105	12.58	8	73	12.67	7	48	12.75	5	34	12.83	4	15	12.75	2
HYDROGRAPH	AT	D24mW	0.69	140	12.58	11	97	12.67	9	64	12.75	7	45	12.83	5	20	12.75	3
ROUTED TO		R24mW	0.69	133	12.83	11	91	12.92	9	61	13	7	42	13.17	5	19	13.17	3
HYDROGRAPH	AT	28m	0.51	158	12.42	14	101	12.5	11	69	12.5	9	55	12.5	7	29	12.58	4
HYDROGRAPH	AT	BD28kP	0.72	131	12.17	18	131	12.25	16	131	12.42	15	108	12.92	12	73	13.08	8
ROUTED TO		P28kS	0.72	131	12.33	18	131	12.42	16	131	12.58	15	108	13	12	72	13.17	8
HYDROGRAPH	AT	BD28kS	0.72	73	12.5	2	42	12.58	1	15	12.67	0	0	0	0	0	0	0
ROUTED TO		R28kS	0.72	64	12.92	2	34	13.08	1	9	13.33	0	0	0	0	0	0	0
2 COMBINED	AT	C28kS	0.72	195	12.92	20	165	13.08	18	139	13.17	15	108	13	12	72	13.17	8
3 COMBINED	AT	C28m	1.73	442	12.83	44	326	12.92	37	251	12.92	31	192	13	24	114	13.17	14
DIVERSION	TO	D28mP	1.73	211	12.17	35	211	12.33	32	211	12.42	29	192	13	24	114	13.17	14
HYDROGRAPH	AT	D28m	1.73	231	12.83	9	115	12.92	4	40	12.92	1	0	0	0	0	0	0
DIVERSION	TO	D28mS	1.73	102	12.83	4	51	12.92	2	17	12.92	1	0	0	0	0	0	0
HYDROGRAPH	AT	D28mW	1.73	129	12.83	5	64	12.92	2	22	12.92	1	0	0	0	0	0	0
ROUTED TO		R28mW	1.73	123	13	5	59	13.17	2	19	13.33	1	0	0	0	0	0	0
HYDROGRAPH	AT	32m	0.51	277	12.33	20	197	12.42	16	130	12.5	13	71	12.5	9	37	12.58	5
ROUTED TO		S32m	0.51	277	12.42	20	197	12.42	16	131	12.5	12	71	12.5	9	37	12.58	5
HYDROGRAPH	AT	BD32kP	1.23	45	12.08	9	45	12.17	9	45	12.25	8	45	12.33	7	28	12.58	4
ROUTED TO		P32kS	1.23	45	12.25	9	45	12.33	9	45	12.42	8	45	12.5	7	28	12.75	4
HYDROGRAPH	AT	BD32kS	1.23	75	12.75	3	35	12.83	1	10	12.92	0	3	12.5	0	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		R32kS	1.23	69	13.17	3	30	13.33	1	9	13.42	0	1	13.42	0	0	0	0
2 COMBINED	AT	C32kS	1.23	114	13.17	12	75	13.33	10	54	13.42	8	46	13	7	28	12.75	4
3 COMBINED	AT	C32m	2.75	390	12.92	37	241	12.92	28	171	12.5	21	114	12.5	15	64	12.67	8
DIVERSION	TO	D32mP	2.75	66	11.92	18	66	12	17	66	12.08	15	66	12.25	13	64	12.67	8
HYDROGRAPH	AT	D32m	2.75	324	12.92	18	175	12.92	11	105	12.5	6	48	12.5	2	0	12.67	0
DIVERSION	TO	D32mS	2.75	139	12.92	8	75	12.92	5	45	12.5	2	21	12.5	1	0	12.67	0
HYDROGRAPH	AT	D32mW	2.75	185	12.92	11	100	12.92	6	60	12.5	3	27	12.5	1	0	12.67	0
ROUTED TO		R32mW	2.75	178	13.08	11	98	13.17	6	51	13.08	3	21	13.17	1	0	13	0
HYDROGRAPH	AT	36m	0.51	206	12.42	17	140	12.5	14	89	12.5	11	61	12.58	8	32	12.67	5
HYDROGRAPH	AT	BD36kP	2.07	59	11.92	15	59	12	14	59	12.08	13	59	12.25	11	47	12.67	7
ROUTED TO		P36kS	2.07	59	12.08	15	59	12.17	14	59	12.25	13	59	12.42	11	47	12.75	7
HYDROGRAPH	AT	BD36kS	2.07	140	12.83	7	83	12.83	5	43	12.92	2	18	12.58	1	0	0	0
ROUTED TO		R36kS	2.07	132	13.08	7	79	13.17	5	39	13.33	2	13	13.25	1	0	0	0
2 COMBINED	AT	C36kS	2.07	191	13.08	22	138	13.17	19	98	13.33	15	72	13.25	11	47	12.75	7
3 COMBINED	AT	C36m	4.11	493	12.92	49	324	13	38	213	13	28	140	13	20	79	12.75	11
DIVERSION	TO	D36mP	4.11	114	12.08	28	114	12.17	26	114	12.25	23	114	12.42	19	79	12.75	11
HYDROGRAPH	AT	D36m	4.11	379	12.92	22	210	13	12	99	13	5	26	13	1	0	0	0
DIVERSION	TO	D36mS	4.11	182	12.92	10	101	13	6	47	13	2	13	13	0	0	0	0
HYDROGRAPH	AT	D36mW	4.11	197	12.92	11	109	13	6	51	13	3	14	13	0	0	0	0
ROUTED TO		R36mW	4.11	193	13.08	11	105	13.25	6	47	13.33	3	10	13.42	0	0	0	0
HYDROGRAPH	AT	40m	0.51	331	12.33	23	259	12.42	19	196	12.42	16	114	12.5	11	39	12.58	5
HYDROGRAPH	AT	BD40kP	2.8	29	11.83	9	29	11.92	8	29	12	8	29	12.17	7	29	12.67	4
ROUTED TO		P40kS	2.8	29	12.08	9	29	12.17	8	29	12.25	8	29	12.42	7	29	12.83	4
HYDROGRAPH	AT	BD40kS	2.8	144	12.58	8	95	12.67	6	55	12.75	3	20	12.83	1	0	12.67	0
ROUTED TO		R40kS	2.8	141	12.92	8	93	13	6	52	13.17	3	18	13.42	1	0	13.42	0
2 COMBINED	AT	C40kS	2.8	170	12.92	17	122	13	14	81	13.17	11	47	13.42	7	29	12.83	4
3 COMBINED	AT	C40m	5.35	549	12.83	51	376	12.83	39	240	12.92	29	137	12.5	19	66	12.67	9
DIVERSION	TO	D40mP	5.35	66	11.92	20	66	11.92	19	66	12	17	66	12.17	15	66	12.67	9
HYDROGRAPH	AT	D40m	5.35	483	12.83	30	310	12.83	20	174	12.92	11	71	12.5	4	0	12.67	0
DIVERSION	TO	D40mS	5.35	208	12.83	13	133	12.83	9	75	12.92	5	31	12.5	2	0	12.67	0
HYDROGRAPH	AT	D40mW	5.35	276	12.83	17	177	12.83	11	99	12.92	7	41	12.5	2	0	12.67	0
ROUTED TO		R40mW	5.35	271	13	17	173	13.08	11	97	13.17	7	37	13	2	0	13.08	0
HYDROGRAPH	AT	44m	0.5	262	12.42	20	189	12.42	16	126	12.5	13	68	12.58	9	35	12.67	5
HYDROGRAPH	AT	BD44kP	3.93	71	11.92	20	71	12	18	71	12.08	17	71	12.17	15	63	12.67	9
ROUTED TO		P44kS	3.93	71	14.67	20	71	12.25	18	71	12.25	17	71	12.33	15	63	12.83	9
HYDROGRAPH	AT	BD44kS	3.93	182	12.75	10	122	12.75	7	74	12.75	4	31	12.75	1	0	0	0
ROUTED TO		R44kS	3.93	173	13	10	115	13.08	7	69	13.17	4	26	13.33	1	0	0	0
2 COMBINED	AT	C44kS	3.93	244	13	30	186	13.08	25	140	13.17	21	97	13.33	16	63	12.83	9
3 COMBINED	AT	C44m	6.98	675	12.92	66	482	12.92	52	321	13	39	182	13	26	96	12.75	14
DIVERSION	TO	D44mP	6.98	124	12	33	124	12.08	31	124	12.17	28	124	12.33	24	96	12.75	14
HYDROGRAPH	AT	D44m	6.98	551	12.92	33	358	12.92	21	197	13	11	58	13	3	0	0	0
DIVERSION	TO	D44mS	6.98	233	12.92	14	151	12.92	9	83	13	5	24	13	1	0	0	0
HYDROGRAPH	AT	D44mW	6.98	318	12.92	19	206	12.92	12	114	13	7	34	13	2	0	0	0
ROUTED TO		R44mW	6.98	305	13.08	19	195	13.17	12	104	13.33	7	27	13.5	2	0	0	0
HYDROGRAPH	AT	24o	0.5	278	12.42	22	213	12.42	18	147	12.5	15	82	12.58	10	37	12.67	5
HYDROGRAPH	AT	BD24mS	0.69	105	12.58	8	73	12.67	7	48	12.75	5	34	12.83	4	15	12.75	2
ROUTED TO		R24mS	0.69	99	12.92	8	67	13.08	7	45	13.17	5	31	13.33	4	14	13.42	2
2 COMBINED	AT	C24o	1.2	312	12.67	30	231	12.67	25	160	12.67	19	96	12.83	14	46	13	7
DIVERSION	TO	D24oP	1.2	48	11.92	15	48	11.92	14	48	12	13	48	12.17	11	46	13	7

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	D24o	1.2	264	12.67	15	183	12.67	11	112	12.67	6	48	12.83	3	0	13	0
DIVERSION	TO	D24oS	1.2	100	12.67	6	70	12.67	4	43	12.67	2	18	12.83	1	0	13	0
HYDROGRAPH	AT	D24oW	1.2	164	12.67	9	114	12.67	7	70	12.67	4	30	12.83	2	0	13	0
ROUTED TO		R24oW	1.2	162	12.83	9	111	12.92	7	68	13	4	28	13.25	2	0	13.17	0
HYDROGRAPH	AT	28o	0.5	178	12.5	16	118	12.5	12	73	12.58	9	52	12.58	7	28	12.67	4
HYDROGRAPH	AT	BD28mP	1.73	211	12.17	35	211	12.33	32	211	12.42	29	192	13	24	114	13.17	14
ROUTED TO		P28mS	1.73	211	12.33	35	211	12.5	33	211	12.58	29	192	13.08	24	114	13.25	14
HYDROGRAPH	AT	BD28mS	1.73	102	12.83	4	51	12.92	2	17	12.92	1	0	0	0	0	0	0
ROUTED TO		R28mS	1.73	95	13.17	4	45	13.33	2	14	13.5	1	0	0	0	0	0	0
2 COMBINED	AT	C28mS	1.73	306	13.17	39	256	13.33	34	224	13.42	30	192	13.08	24	114	13.25	14
3 COMBINED	AT	C28o	2.73	573	13	63	432	13	52	341	12.83	43	262	13	32	137	13.25	18
DIVERSION	TO	D28oP	2.73	367	12.33	55	367	12.5	50	341	12.83	43	262	13	32	137	13.25	18
HYDROGRAPH	AT	D28o	2.73	206	13	8	65	13	2	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D28oS	2.73	87	13	4	27	13	1	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D28oW	2.73	120	13	5	38	13	1	0	0	0	0	0	0	0	0	0
ROUTED TO		R28oW	2.73	113	13.17	5	34	13.33	1	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	32o	0.5	262	12.42	20	194	12.42	16	130	12.5	13	68	12.58	9	32	12.67	5
HYDROGRAPH	AT	BD32mS	2.75	139	12.92	8	75	12.92	5	45	12.5	2	21	12.5	1	0	12.67	0
ROUTED TO		R32mS	2.75	133	13.17	8	72	13.33	5	38	13.25	2	15	13.33	1	0	13.17	0
HYDROGRAPH	AT	BD32mP	2.75	66	11.92	18	66	12	17	66	12.08	15	66	12.25	13	64	12.67	8
ROUTED TO		P32mS	2.75	66	12.08	18	66	12.17	17	66	12.25	15	66	12.42	13	63	12.75	8
2 COMBINED	AT	C32mS	2.75	199	13.17	26	138	13.33	21	104	13.25	18	81	13.33	14	63	12.75	8
3 COMBINED	AT	C32o	4.25	450	13	50	283	12.92	38	201	12.83	30	134	12.92	22	95	12.75	13
DIVERSION	TO	D32oP	4.25	160	12.08	34	160	12.17	32	160	12.33	28	134	12.92	22	95	12.75	13
HYDROGRAPH	AT	D32o	4.25	290	13	16	123	12.92	7	41	12.83	1	0	0	0	0	0	0
DIVERSION	TO	D32oS	4.25	128	13	7	54	12.92	3	18	12.83	1	0	0	0	0	0	0
HYDROGRAPH	AT	D32oW	4.25	162	13	9	69	12.92	4	23	12.83	1	0	0	0	0	0	0
ROUTED TO		R32oW	4.25	160	13.17	9	68	13.08	4	20	13.17	1	0	0	0	0	0	0
HYDROGRAPH	AT	36o	0.5	312	12.42	21	244	12.42	18	185	12.42	15	115	12.5	11	29	12.67	4
HYDROGRAPH	AT	BD36mP	4.11	114	12.08	28	114	12.17	26	114	12.25	23	114	12.42	19	79	12.75	11
ROUTED TO		P36mS	4.11	114	12.25	28	114	12.33	26	114	12.42	23	114	12.58	19	78	12.83	11
HYDROGRAPH	AT	BD36mS	4.11	182	12.92	10	101	13	6	47	13	2	13	13	0	0	0	0
ROUTED TO		R36mS	4.11	177	13.25	10	95	13.42	6	42	13.58	2	8	13.75	0	0	0	0
2 COMBINED	AT	C36mS	4.11	291	13.25	38	209	13.42	31	156	13.58	26	121	13.67	20	78	12.83	11
3 COMBINED	AT	C36o	6.12	596	13	67	393	12.92	52	292	12.42	41	223	12.5	30	106	12.83	15
DIVERSION	TO	D36oP	6.12	139	12	37	139	12.08	34	139	12.17	31	139	12.25	27	106	12.83	15
HYDROGRAPH	AT	D36o	6.12	457	13	30	254	12.92	18	153	12.42	9	84	12.5	4	0	0	0
DIVERSION	TO	D36oS	6.12	196	13	13	109	12.92	8	66	12.42	4	36	12.5	2	0	0	0
HYDROGRAPH	AT	D36oW	6.12	260	13	17	145	12.92	10	87	12.42	5	48	12.5	2	0	0	0
ROUTED TO		R36oW	6.12	257	13.17	17	144	13.17	10	82	12.83	5	42	13	2	0	0	0
HYDROGRAPH	AT	B40mP	5.35	66	11.92	20	66	11.92	19	66	12	17	66	12.17	15	66	12.67	9
ROUTED TO		P40mS	5.35	66	12.08	20	66	12.08	19	66	12.17	17	66	12.33	15	66	12.75	9
HYDROGRAPH	AT	BD40mS	5.35	208	12.83	13	133	12.83	9	75	12.92	5	31	12.5	2	0	12.67	0
ROUTED TO		R40mS	5.35	202	13.17	13	128	13.25	9	72	13.33	5	27	13.33	2	0	13.5	0
2 COMBINED	AT	C40mS	5.35	268	13.17	33	194	13.25	27	138	13.33	22	93	13.33	17	66	12.75	9
HYDROGRAPH	AT	40o	0.47	263	12.42	18	199	12.42	15	132	12.42	11	66	12.5	7	28	12.58	4
3 COMBINED	AT	C40o	7.82	643	13	67	434	12.92	51	302	12.92	38	179	13	26	93	12.75	13
DIVERSION	TO	D40oP	7.82	70	11.83	26	70	11.92	24	70	12	22	70	12.08	19	70	12.42	13
HYDROGRAPH	AT	D40o	7.82	573	13	42	364	12.92	28	232	12.92	16	109	13	7	23	12.75	1

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
DIVERSION	TO	D40oS	7.82	302	13	19	170	12.92	11	90	12.92	5	29	13	1	0	0	0
HYDROGRAPH	AT	D40oW	7.82	271	13	23	194	12.92	17	142	12.92	11	81	13	6	23	12.75	1
ROUTED TO		R40oW	7.82	267	13.33	23	192	13.33	17	138	13.33	11	77	13.5	6	14	13.67	1
HYDROGRAPH	AT	44o	0.23	121	12.33	8	81	12.42	6	50	12.42	5	25	12.5	3	14	12.5	2
HYDROGRAPH	AT	BD44mP	6.98	124	12	33	124	12.08	31	124	12.17	28	124	12.33	24	96	12.75	14
ROUTED TO		P44mS	6.98	124	12.08	33	124	12.17	31	124	12.25	28	124	12.42	24	96	12.75	14
HYDROGRAPH	AT	BD44mS	6.98	233	12.92	14	151	12.92	9	83	13	5	24	13	1	0	0	0
ROUTED TO		R44mS	6.98	230	13	14	149	13.08	9	81	13.17	5	23	13.33	1	0	0	0
2 COMBINED	AT	C44mS	6.98	354	13	47	273	13.08	40	205	13.17	33	147	13.33	25	96	12.75	14
3 COMBINED	AT	C44o	9.68	649	13.08	76	493	13.08	62	364	13.25	48	236	13.42	33	108	12.75	16
DIVERSION	TO	D44oP	9.68	124	12	37	124	12	34	124	12.08	32	124	12.25	27	108	12.75	16
HYDROGRAPH	AT	D44o	9.68	525	13.08	40	369	13.08	27	240	13.25	17	112	13.42	6	0	0	0
DIVERSION	TO	D44oS	9.68	371	13.08	26	250	13.08	17	151	13.25	9	59	13.42	3	0	0	0
HYDROGRAPH	AT	D44oW	9.68	154	13.08	13	119	13.08	10	89	13.25	7	53	13.42	4	0	0	0
ROUTED TO		R44oW	9.68	150	13.67	13	115	13.75	10	86	13.92	7	50	14.17	4	0	0	0
2 COMBINED	AT	C44mW	9.68	414	13.33	32	281	13.42	22	175	13.67	14	69	13.92	5	0	0	0
HYDROGRAPH	AT	48m	0.48	295	12.33	20	229	12.42	17	161	12.42	13	85	12.5	9	33	12.58	4
HYDROGRAPH	AT	BD48kS	4.96	267	12.83	20	185	12.75	15	130	12.75	11	70	12.83	7	23	12.67	3
ROUTED TO		R48kS	4.96	257	13.08	20	180	13	15	124	13.08	11	65	13.25	7	20	13.33	3
3 COMBINED	AT	C48m	11.19	766	13.08	70	526	13.25	53	326	13.33	37	149	13.67	20	47	13	7
HYDROGRAPH	AT	BD52kP	5.83	201	12.17	42	201	12.25	36	201	12.33	32	201	12.67	25	84	12.92	12
ROUTED TO		P52kS	5.83	201	12.33	42	201	12.42	36	201	12.42	32	201	12.83	25	84	13	12
HYDROGRAPH	AT	BD52kS	5.83	175	12.92	10	111	12.92	6	63	12.75	3	7	12.92	0	0	0	0
ROUTED TO		R52kS	5.83	172	13	10	110	13.08	6	60	13	3	3	13.17	0	0	0	0
2 COMBINED	AT	C52kS	5.83	373	13	52	311	13.08	42	261	13	34	204	13.17	26	84	13	12
HYDROGRAPH	AT	52m	0.18	161	12.25	7	126	12.25	6	93	12.33	5	60	12.33	3	9	12.42	1
2 COMBINED	AT	C52m	6.01	419	12.75	59	356	12.75	48	296	12.83	39	239	12.75	29	90	13	13
2 COMBINED	AT	CC52m	12.24	1156	13.08	127	848	13.17	99	592	13	74	359	13	48	136	13	20
DIVERSION	TO	D52mP	12.24	364	12.17	77	364	12.17	69	364	12.33	62	359	13	48	136	13	20
HYDROGRAPH	AT	D52m	12.24	792	13.08	51	484	13.17	30	228	13	13	0	0	0	0	0	0
DIVERSION	TO	D52mS	12.24	713	13.08	46	435	13.17	27	205	13	11	0	0	0	0	0	0
HYDROGRAPH	AT	D52mW	12.24	79	13.08	5	48	13.17	3	23	13	1	0	0	0	0	0	0
ROUTED TO		R52mW	12.24	78	13.17	5	48	13.25	3	22	13.33	1	0	0	0	0	0	0
HYDROGRAPH	AT	54m	0.27	256	12.25	13	203	12.25	11	157	12.33	9	106	12.33	7	29	12.42	3
HYDROGRAPH	AT	BD54kP	1.18	124	12.17	22	124	12.25	20	124	12.33	18	111	12.92	14	42	13	7
ROUTED TO		P54kS	1.18	124	12.33	22	124	12.42	20	124	12.5	18	111	13	14	42	13.17	7
HYDROGRAPH	AT	BD54kS	1.18	146	12.92	7	82	12.75	3	35	12.83	1	0	0	0	0	0	0
ROUTED TO		R54kS	1.18	142	13.17	7	78	13.08	3	27	13.25	1	0	0	0	0	0	0
2 COMBINED	AT	C54kS	1.18	266	13.17	29	202	13.08	24	151	13.25	19	111	13	14	42	13.17	7
3 COMBINED	AT	C54m	1.66	416	12.92	47	321	12.33	38	266	12.42	29	182	12.58	21	63	12.75	10
DIVERSION	TO	D54mP	1.66	124	12	27	124	12.08	25	124	12.08	23	124	12.25	19	63	12.75	10
HYDROGRAPH	AT	D54m	1.66	292	12.92	20	197	12.33	13	142	12.42	7	58	12.58	2	0	0	0
DIVERSION	TO	D54mS	1.66	117	12.92	8	79	12.33	5	57	12.42	3	23	12.58	1	0	0	0
HYDROGRAPH	AT	D54mW	1.66	175	12.92	12	118	12.33	8	85	12.42	4	35	12.58	1	0	0	0
ROUTED TO		R54mW	1.66	172	13.08	12	111	13.08	8	70	12.75	4	26	13	1	0	0	0
HYDROGRAPH	AT	56m	0.58	274	12.5	24	214	12.58	21	160	12.58	17	91	12.67	12	31	12.83	5
HYDROGRAPH	AT	BD56kP	4.46	303	12.08	54	303	12.17	49	303	12.25	43	267	12.58	32	172	12.75	24
ROUTED TO		P56kS	4.46	303	12.25	54	303	12.33	49	303	13.25	43	266	12.75	32	171	12.92	24
HYDROGRAPH	AT	BD56kS	4.46	103	12.67	5	36	12.42	1	6	12.42	0	0	0	0	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		R56kS	4.46	84	13.08	5	25	13.25	1	1	13.42	0	0	0	0	0	0	0
2 COMBINED	AT	C56kS	4.46	387	13.08	59	328	13.25	51	304	13.25	43	266	12.75	32	171	12.92	24
3 COMBINED	AT	C56m	5.5	764	12.92	94	609	12.67	78	521	12.75	63	371	12.75	44	202	12.92	29
DIVERSION	TO	D56mP	5.5	433	12.25	76	433	12.33	70	433	12.42	61	371	12.75	44	202	12.92	29
HYDROGRAPH	AT	D56m	5.5	331	12.92	18	176	12.67	9	88	12.75	3	0	0	0	0	0	0
DIVERSION	TO	D56mS	5.5	129	12.92	7	69	12.67	3	34	12.75	1	0	0	0	0	0	0
HYDROGRAPH	AT	D56mW	5.5	202	12.92	11	108	12.67	5	54	12.75	2	0	0	0	0	0	0
ROUTED TO		R56mW	5.5	196	13.17	11	102	13.17	5	42	13.17	2	0	0	0	0	0	0
HYDROGRAPH	AT	60m	0.5	248	12.5	18	188	12.5	15	137	12.58	12	74	12.67	8	16	12.83	3
HYDROGRAPH	AT	BD60lP	4.69	93	11.75	34	93	11.92	31	93	11.92	29	93	12.08	25	88	12.75	12
ROUTED TO		P60lS	4.69	93	11.92	34	93	12.08	31	93	12.08	29	93	12.25	25	88	12.83	12
HYDROGRAPH	AT	BD60lS	4.69	335	12.83	24	255	12.83	18	184	12.75	12	125	12.67	6	0	12.75	0
ROUTED TO		R60lS	4.69	329	13.17	24	251	13.17	18	181	13.17	12	113	13.08	6	0	13.75	0
2 COMBINED	AT	C60lS	4.69	422	13.17	58	344	13.17	49	274	13.17	40	206	13.08	31	88	12.83	12
3 COMBINED	AT	C60m	6.24	775	13	86	579	13	68	418	13.08	53	267	13.08	39	103	12.83	15
DIVERSION	TO	D60mP	6.24	124	11.92	42	124	12	39	124	12.08	36	124	12.25	32	103	12.83	15
HYDROGRAPH	AT	D60m	6.24	651	13	44	455	13	29	294	13.08	17	143	13.08	7	0	0	0
DIVERSION	TO	D60mS	6.24	338	13	23	236	13	15	153	13.08	9	74	13.08	4	0	0	0
HYDROGRAPH	AT	D60mW	6.24	312	13	21	218	13	14	141	13.08	8	69	13.08	3	0	0	0
ROUTED TO		R60mW	6.24	304	13.33	21	209	13.42	14	133	13.5	8	58	13.58	3	0	0	0
HYDROGRAPH	AT	64m	0.5	391	12.42	35	329	12.5	31	271	12.5	26	198	12.58	21	81	12.67	11
HYDROGRAPH	AT	BD64lP	6.96	265	14.75	53	214	12.5	44	214	13.08	35	126	12.75	22	68	12.83	11
ROUTED TO		P64lS	6.96	265	14.83	53	214	12.67	44	214	13.17	35	126	12.83	22	67	12.92	11
HYDROGRAPH	AT	BD64lS	6.96	3	14.42	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R64lS	6.96	2	15.08	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C64lS	6.96	266	14.92	53	214	12.67	44	214	13.17	35	126	12.83	22	67	12.92	11
HYDROGRAPH	AT	68m	0.55	444	12.42	42	377	12.5	37	313	12.5	32	233	12.58	25	103	12.67	13
DIVERSION	TO	D68m	0.55	410	12.42	25	343	12.5	21	279	12.5	17	199	12.58	12	69	12.67	4
HYDROGRAPH	AT	D68mP2	0.55	34	11.17	17	34	11.42	16	34	11.58	15	34	11.75	13	34	12.08	9
4 COMBINED	AT	C64m	9.55	771	13.08	125	644	13.17	103	533	13.17	83	344	12.67	58	178	12.83	30
DIVERSION	TO	D64mP	9.55	399	12.17	101	399	12.25	89	399	12.42	77	344	12.67	58	178	12.83	30
HYDROGRAPH	AT	D64m	9.55	372	13.08	24	245	13.17	14	134	13.17	5	0	0	0	0	0	0
DIVERSION	TO	D64mS	9.55	230	13.08	15	152	13.17	9	83	13.17	3	0	0	0	0	0	0
HYDROGRAPH	AT	D64mW	9.55	142	13.08	9	93	13.17	5	51	13.17	2	0	0	0	0	0	0
ROUTED TO		R64mW	9.55	138	13.42	9	90	13.5	5	45	13.58	2	0	0	0	0	0	0
HYDROGRAPH	AT	BD68m	0.55	410	12.42	25	343	12.5	21	279	12.5	17	199	12.58	12	69	12.67	4
3 COMBINED	AT	C68m	16.15	804	12.92	116	628	13	85	468	12.92	63	329	13	47	176	12.75	23
DIVERSION	TO	D68mP	16.15	144	11.92	47	144	11.92	44	144	12	40	144	12.17	35	144	12.58	22
HYDROGRAPH	AT	D68m2	16.15	660	12.92	69	484	13	42	324	12.92	23	185	13	12	32	12.75	1
DIVERSION	TO	D68mS	16.15	548	12.92	57	402	13	35	269	12.92	19	154	13	10	27	12.75	1
HYDROGRAPH	AT	D68mW	16.15	112	12.92	12	82	13	7	55	12.92	4	31	13	2	5	12.75	0
ROUTED TO		R68mW	16.15	109	13.33	12	79	13.33	7	53	13.33	4	29	13.5	2	3	13.83	0
2 COMBINED	AT	CC72m	17.12	1190	13.5	244	939	13.5	205	733	13.5	173	623	12.83	139	405	12.92	80
DIVERSION	TO	D72mP	17.12	308	11.75	142	308	11.83	132	308	11.92	123	308	12.08	110	308	12.5	75
HYDROGRAPH	AT	D72m	17.12	882	13.5	102	631	13.5	73	425	13.5	50	315	12.83	30	94	12.92	4
ROUTED TO		R72mS	17.12	874	13.92	102	625	14	73	418	13.92	50	297	13.5	30	71	13.83	4
HYDROGRAPH	AT	BD72mP	17.12	308	11.75	142	308	11.83	132	308	11.92	123	308	12.08	110	308	12.5	75
ROUTED TO		P72mS	17.12	308	11.92	143	308	12	132	308	12.08	123	308	12.25	110	308	12.67	75
2 COMBINED	AT	C72mS	17.12	1182	13.92	244	933	14	205	726	13.92	173	605	13.5	139	379	13.83	79

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	BD24oS	1.2	100	12.67	6	70	12.67	4	43	12.67	2	18	12.83	1	0	13	0
ROUTED TO		R24oS	1.2	98	12.83	6	68	12.92	4	42	13	2	17	13.25	1	0	13.33	0
HYDROGRAPH	AT	BD28oP	2.73	367	12.33	55	367	12.5	50	341	12.83	43	262	13	32	137	13.25	18
ROUTED TO		P28oS	2.73	367	12.42	55	367	12.58	50	341	12.92	43	262	13.08	32	137	13.25	18
HYDROGRAPH	AT	BD28oS	2.73	87	13	4	27	13	1	0	0	0	0	0	0	0	0	0
ROUTED TO		R28oS	2.73	84	13.08	4	25	13.25	1	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C28oS	2.73	451	13.08	58	392	13.25	51	341	12.92	43	262	13.08	32	137	13.25	18
2 COMBINED	AT	C28p	2.73	543	13	64	456	13.08	55	381	12.92	45	278	13.08	33	137	13.25	18
HYDROGRAPH	AT	28p	0.37	238	12.33	15	185	12.33	13	130	12.42	10	69	12.5	7	27	12.58	3
ROUTED TO		S28p	0.37	237	12.33	15	184	12.42	13	130	12.42	10	69	12.5	7	27	12.58	3
2 COMBINED	AT	CC28p	3.11	686	12.75	78	583	12.58	67	476	12.75	55	326	13	40	156	13.17	21
DIVERSION	TO	D28pP	3.11	279	12.17	54	279	12.25	51	279	12.33	46	279	12.67	39	156	13.17	21
HYDROGRAPH	AT	D28p	3.11	407	12.75	24	304	12.58	17	197	12.75	9	47	13	1	0	0	0
ROUTED TO		R28pW	3.11	404	12.83	24	301	12.83	17	192	13	9	38	13.33	1	0	0	0
HYDROGRAPH	AT	32p	0.23	125	12.42	7	97	12.42	6	71	12.5	5	41	12.58	3	5	12.83	1
HYDROGRAPH	AT	BD32oS	4.25	128	13	7	54	12.92	3	18	12.83	1	0	0	0	0	0	0
ROUTED TO		R32oS	4.25	127	13.08	7	54	13	3	17	13	1	0	0	0	0	0	0
2 COMBINED	AT	C32p	4.49	208	12.92	14	131	12.75	9	75	12.75	5	41	12.58	3	5	12.83	1
ROUTED TO		S32p	4.49	93	13.75	12	58	13.75	7	27	13.75	3	9	14.5	1	0	0	0
HYDROGRAPH	AT	BD32oP	4.25	160	12.08	34	160	12.17	32	160	12.33	28	134	12.92	22	95	12.75	13
ROUTED TO		P32oS	4.25	160	12.17	34	160	12.25	32	160	12.42	28	134	13	22	94	12.75	13
3 COMBINED	AT	CC32p	4.86	625	13	70	487	12.92	55	362	13	40	164	13.25	24	94	12.75	13
DIVERSION	TO	D32pS	4.86	92	13	9	70	12.92	7	51	13	5	20	13.25	3	9	12.75	1
HYDROGRAPH	AT	D32pW	4.86	534	13	61	417	12.92	48	311	13	35	144	13.25	22	85	12.75	12
DIVERSION	TO	D32pP	4.86	379	12.5	55	379	12.67	47	311	13	35	144	13.25	22	85	12.75	12
HYDROGRAPH	AT	D32p	4.86	155	13	6	38	12.92	1	0	0	0	0	0	0	0	0	0
ROUTED TO		R32pW	4.86	150	13.25	6	31	13.33	1	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD32pP	4.86	379	12.5	55	379	12.67	47	311	13	35	144	13.25	22	85	12.75	12
ROUTED TO		P32pW	4.86	379	12.58	55	379	12.75	47	311	13.08	35	143	13.33	22	85	12.83	12
2 COMBINED	AT	C32pW	4.86	529	13.25	61	410	13.33	48	311	13.08	35	143	13.33	22	85	12.83	12
HYDROGRAPH	AT	28q	0.32	316	12.25	18	258	12.25	16	204	12.33	13	145	12.33	10	48	12.42	5
ROUTED TO		S28q	0.32	315	12.25	18	257	12.25	16	205	12.33	13	145	12.33	10	48	12.42	5
HYDROGRAPH	AT	BD28pP	3.11	279	12.17	54	279	12.25	51	279	12.33	46	279	12.67	39	156	13.17	21
DIVERSION	TO	D28pP2	3.11	68	12.17	13	68	12.25	12	68	12.33	11	68	12.67	9	38	13.17	5
HYDROGRAPH	AT	D28pP1	3.11	211	12.17	41	211	12.25	38	211	12.33	35	211	12.67	29	118	13.17	16
ROUTED TO		P28pS	3.11	211	12.25	41	211	12.33	38	211	12.42	35	211	12.75	29	118	13.25	16
2 COMBINED	AT	C28q	0.82	523	12.25	60	464	12.33	54	404	12.42	48	316	12.67	40	147	12.92	21
DIVERSION	TO	D28qP	0.82	340	12.08	56	340	12.17	52	340	12.25	47	316	12.67	40	147	12.92	21
HYDROGRAPH	AT	D28q	0.82	183	12.25	4	124	12.33	2	64	12.42	1	0	0	0	0	0	0
DIVERSION	TO	D28qS	0.82	128	12.25	2	82	12.33	1	35	12.42	0	0	0	0	0	0	0
HYDROGRAPH	AT	D28qW	0.82	55	12.25	1	42	12.33	1	28	12.42	0	0	0	0	0	0	0
ROUTED TO		R28qW	0.82	30	13.25	1	19	13.42	1	8	13.75	0	0	0	0	0	0	0
HYDROGRAPH	AT	32q	0.17	114	12.33	6	90	12.42	5	68	12.42	4	41	12.5	3	8	12.75	1
HYDROGRAPH	AT	BD32pS	4.86	92	13	9	70	12.92	7	51	13	5	20	13.25	3	9	12.75	1
3 COMBINED	AT	C32q	0.99	181	12.58	17	143	12.67	13	103	12.83	9	55	12.5	5	17	12.75	2
ROUTED TO		S32q	0.99	75	14.08	15	65	14.08	11	53	13.83	8	26	13.83	4	1	21.75	0
DIVERSION	TO	D32q	0.99	43	14.08	6	33	14.08	4	21	13.83	2	0	0	0	0	0	0
HYDROGRAPH	AT	D32qP	0.99	32	12.5	9	32	12.67	7	32	12.92	6	26	13.83	4	1	21.75	0
ROUTED TO		P32qW	0.99	32	12.58	9	32	12.75	7	32	13	6	26	13.83	4			

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
2 COMBINED	AT	C32pqW	4.86	561	13.25	70	442	13.33	55	343	13.08	41	163	13.33	25	85	12.83	12
HYDROGRAPH	AT	36p	0.19	143	12.33	8	113	12.33	7	85	12.33	5	52	12.42	4	12	12.5	2
HYDROGRAPH	AT	BD36oS	6.12	196	13	13	109	12.92	8	66	12.42	4	36	12.5	2	0	0	0
ROUTED TO		R36oS	6.12	195	13.17	13	109	13.08	8	64	12.75	4	34	12.83	2	0	0	0
3 COMBINED	AT	C36p	6.91	793	13.08	90	582	12.75	69	440	13	50	204	13.25	30	96	12.83	13
DIVERSION	TO	DB36p	6.91	180	13.08	6	3	13.17	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	E36p	6.91	613	12.5	84	582	12.75	69	440	13	50	204	13.25	30	96	12.83	13
HYDROGRAPH	AT	BDB36p	6.91	180	13.08	6	3	13.17	0	0	0	0	0	0	0	0	0	0
ROUTED TO		S36p	6.91	72	13.58	4	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD36oP	6.12	139	12	37	139	12.08	34	139	12.17	31	139	12.25	27	106	12.83	15
ROUTED TO		P36oS	6.12	139	12.08	37	139	12.17	34	139	12.25	31	139	12.33	27	106	12.83	15
3 COMBINED	AT	CC36p	6.91	824	13.58	124	721	12.75	103	579	13	81	343	13.25	57	202	12.83	28
DIVERSION	TO	D36pP	6.91	613	12.42	112	613	12.58	99	577	13	81	343	13.25	57	202	12.83	28
HYDROGRAPH	AT	D36p	6.91	211	13.58	11	108	12.75	4	2	12.92	0	0	0	0	0	0	0
ROUTED TO		R36pW	6.91	207	13.83	11	100	13.25	4	1	13.25	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD36pP	6.91	613	12.42	112	613	12.58	99	577	13	81	343	13.25	57	202	12.83	28
DIVERSION	TO	D36pP2	6.91	139	12.42	25	139	12.58	22	131	13	18	78	13.25	13	46	12.83	6
HYDROGRAPH	AT	D36pP1	6.91	474	12.42	87	474	12.58	76	446	13	63	265	13.25	44	156	12.83	22
ROUTED TO		P36pW	6.91	474	12.5	87	474	12.67	76	446	13	63	264	13.25	44	156	12.83	22
2 COMBINED	AT	C36pW	6.91	681	13.83	98	574	13.25	80	446	13	63	264	13.25	44	156	12.83	22
HYDROGRAPH	AT	40p	0.22	190	12.33	10	146	12.33	8	105	12.33	7	56	12.42	4	14	12.58	2
HYDROGRAPH	AT	BD40oP	7.82	70	11.83	26	70	11.92	24	70	12	22	70	12.08	19	70	12.42	13
ROUTED TO		P40oS	7.82	70	11.92	26	70	12	24	70	12.08	22	70	12.17	19	70	12.5	13
HYDROGRAPH	AT	BD40oS	7.82	302	13	19	170	12.92	11	90	12.92	5	29	13	1	0	0	0
ROUTED TO		R40oS	7.82	301	13.17	19	170	13.08	11	87	13.08	5	26	13.25	1	0	0	0
2 COMBINED	AT	C40oS	7.82	371	13.17	45	240	13.08	35	157	13.08	27	96	13.25	20	70	12.5	13
3 COMBINED	AT	C40p	8.83	1047	13	152	860	13.08	123	652	13	96	384	13.25	68	238	12.83	36
DIVERSION	TO	D40pP	8.83	785	12.42	139	785	12.75	121	652	13	96	384	13.25	68	238	12.83	36
HYDROGRAPH	AT	D40p	8.83	262	13	14	75	13.08	2	0	0	0	0	0	0	0	0	0
ROUTED TO		R40pW	8.83	257	13.25	14	67	13.42	2	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD40pP	8.83	785	12.42	139	785	12.75	121	652	13	96	384	13.25	68	238	12.83	36
ROUTED TO		P40pW	8.83	785	12.5	139	785	12.83	121	650	13	96	384	13.25	68	237	12.92	36
2 COMBINED	AT	C40pW	8.83	1042	13.25	152	852	13.42	123	650	13	96	384	13.25	68	237	12.92	36
HYDROGRAPH	AT	44p	0.41	292	12.42	21	238	12.42	18	186	12.5	15	121	12.5	11	31	12.75	4
HYDROGRAPH	AT	BD44oP	9.68	124	12	37	124	12	34	124	12.08	32	124	12.25	27	108	12.75	16
ROUTED TO		P44oS	9.68	124	12.17	37	124	12.17	34	124	15.08	32	124	12.42	27	108	12.92	16
HYDROGRAPH	AT	BD44oS	9.68	371	13.08	26	250	13.08	17	151	13.25	9	59	13.42	3	0	0	0
ROUTED TO		R44oS	9.68	362	13.33	26	242	13.42	17	144	13.58	9	52	13.92	3	0	0	0
2 COMBINED	AT	C44oS	9.68	486	13.33	63	366	13.42	51	268	13.58	41	176	13.92	30	108	12.92	16
3 COMBINED	AT	C44p	11.1	1655	13.17	234	1314	13.33	190	965	13.17	150	599	12.75	107	372	12.92	56
DIVERSION	TO	D44pP	11.1	1344	12.92	223	1314	13.33	190	965	13.17	150	599	12.75	107	372	12.92	56
HYDROGRAPH	AT	D44p	11.1	311	13.17	11	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R44pW	11.1	296	13.42	11	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD44pP	11.1	1344	12.92	223	1314	13.33	190	965	13.17	150	599	12.75	107	372	12.92	56
DIVERSION	TO	D44pP2	11.1	124	12.92	21	121	13.33	18	89	13.17	14	55	12.75	10	34	12.92	5
HYDROGRAPH	AT	D44pP1	11.1	1220	12.92	202	1193	13.33	172	876	13.17	136	544	12.75	97	338	12.92	51
ROUTED TO		P44pW	11.1	1220	13	202	1191	13.33	172	874	13.17	136	544	12.75	97	338	12.92	51
2 COMBINED	AT	C44pW	11.1	1516	13.42	213	1191	13.33	172	874	13.17	136	544	12.75	97	338	12.92	51
HYDROGRAPH	AT	48o	0.68	511	12.42	32	406	12.42	27	300	12.5	22	192	12.5	16	38	12.75	6

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	BD52mS	12.24	713	13.08	46	435	13.17	27	205	13	11	0	0	0	0	0	0
ROUTED TO		R52mS	12.24	689	13.33	46	419	13.5	27	193	13.67	11	0	0	0	0	0	0
HYDROGRAPH	AT	BD52mP	12.24	364	12.17	77	364	12.17	69	364	12.33	62	359	13	48	136	13	20
ROUTED TO		P52mS	12.24	364	14.83	77	364	12.42	69	364	12.58	62	358	13.17	48	135	13.17	20
2 COMBINED	AT	C52mS	12.24	1053	13.33	122	783	13.5	96	557	13.67	73	358	13.17	48	135	13.17	20
3 COMBINED	AT	C48o	14.34	2681	13.33	361	2082	13.33	290	1516	13.25	227	1041	12.83	158	500	13	76
DIVERSION	TO	DB48o	14.34	125	13.33	2	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	E48o	14.34	2557	13.42	359	2082	13.33	290	1516	13.25	227	1041	12.83	158	500	13	76
HYDROGRAPH	AT	BDB48o	14.34	125	13.33	2	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		S48o	14.34	23	13.67	1	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	CC48o	14.34	2571	13.42	360	2082	13.33	290	1516	13.25	227	1041	12.83	158	500	13	76
DIVERSION	TO	D48oPT	14.34	2557	13.42	360	2082	13.33	290	1516	13.25	227	1041	12.83	158	500	13	76
HYDROGRAPH	AT	D48o	14.34	23	13.67	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R48oW	14.34	11	13.92	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	52o	0.64	422	12.42	32	338	12.5	27	264	12.5	23	174	12.58	17	48	12.75	7
HYDROGRAPH	AT	BD54mP	1.66	124	12	27	124	12.08	25	124	12.08	23	124	12.25	19	63	12.75	10
ROUTED TO		P54mS	1.66	124	12.25	27	124	12.25	25	124	12.33	23	124	12.42	19	62	12.83	10
HYDROGRAPH	AT	BD54mS	1.66	117	12.92	8	79	12.33	5	57	12.42	3	23	12.58	1	0	0	0
ROUTED TO		R54mS	1.66	113	13.42	8	73	13.33	5	43	13.25	3	14	13.5	1	0	0	0
2 COMBINED	AT	C54mS	1.66	237	13.42	35	197	13.33	30	167	13.25	25	136	13.33	19	62	12.83	10
3 COMBINED	AT	C52o	2.3	548	12.75	67	457	12.5	57	383	12.5	48	295	12.58	36	108	12.83	16
DIVERSION	TO	D52oP	2.3	517	12.42	67	457	12.5	57	383	12.5	48	295	12.58	36	108	12.83	16
HYDROGRAPH	AT	D52o	2.3	31	12.75	1	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R52oW	2.3	20	13.17	1	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD52oP	2.3	517	12.42	67	457	12.5	57	383	12.5	48	295	12.58	36	108	12.83	16
ROUTED TO		P52oW	2.3	517	12.5	67	457	12.5	57	382	12.58	48	294	12.58	36	108	12.92	16
2 COMBINED	AT	C52oW	2.3	528	12.92	67	457	12.5	57	382	12.58	48	294	12.58	36	108	12.92	16
HYDROGRAPH	AT	56o	0.64	358	12.5	29	289	12.5	25	221	12.58	20	146	12.67	15	39	12.83	6
HYDROGRAPH	AT	BD56mP	5.5	433	12.25	76	433	12.33	70	433	12.42	61	371	12.75	44	202	12.92	29
ROUTED TO		P56mS	5.5	433	12.42	76	433	12.5	70	433	12.58	61	370	12.92	44	201	13	29
HYDROGRAPH	AT	BD56mS	5.5	129	12.92	7	69	12.67	3	34	12.75	1	0	0	0	0	0	0
ROUTED TO		R56mS	5.5	118	13.58	7	57	13.75	3	19	13.92	1	0	0	0	0	0	0
2 COMBINED	AT	C56mS	5.5	551	13.58	83	490	13.75	73	443	13.5	62	370	12.92	44	201	13	29
3 COMBINED	AT	C56o	6.79	1298	12.5	177	1165	12.5	153	1025	12.58	128	789	12.75	94	343	12.92	51
DIVERSION	TO	D56oP	6.79	950	12.25	159	950	12.33	143	950	12.5	124	751	12.75	91	329	12.92	50
HYDROGRAPH	AT	D56o	6.79	348	12.5	19	215	12.5	10	75	12.58	4	38	12.75	3	13	12.92	1
ROUTED TO		R56oW	6.79	332	12.75	19	196	12.83	10	57	12.92	4	36	13.25	3	12	13.58	1
HYDROGRAPH	AT	BD56oP	6.79	950	12.25	159	950	12.33	143	950	12.5	124	751	12.75	91	329	12.92	50
ROUTED TO		P56oW	6.79	950	12.33	159	950	12.42	144	950	12.58	124	750	12.83	91	329	13	50
2 COMBINED	AT	C56oW	6.79	1282	12.75	177	1146	12.83	153	1001	12.83	128	775	12.83	94	335	13.08	51
HYDROGRAPH	AT	60o	0.64	301	12.5	29	227	12.58	24	158	12.67	19	91	12.75	13	44	12.75	7
HYDROGRAPH	AT	BD60mP	6.24	124	11.92	42	124	12	39	124	12.08	36	124	12.25	32	103	12.83	15
ROUTED TO		P60mS	6.24	124	12.08	42	124	12.25	39	124	12.33	36	124	12.42	32	103	13	15
HYDROGRAPH	AT	BD60mS	6.24	338	13	23	236	13	15	153	13.08	9	74	13.08	4	0	0	0
ROUTED TO		R60mS	6.24	323	13.5	23	221	13.58	15	138	13.75	9	55	14.08	4	0	0	0
2 COMBINED	AT	C60mS	6.24	447	13.5	65	345	13.58	54	262	13.75	45	179	14.08	35	103	13	15
3 COMBINED	AT	C60o	8.16	1807	13.25	269	1517	13.25	230	1270	12.83	191	982	12.83	142	480	13	73
DIVERSION	TO	D60oPT	8.16	1761	13.08	268	1517	13.25	230	1270	12.83	191	982	12.83	142	480	13	73
HYDROGRAPH	AT	D60o	8.16	46	13.25	1	0	0	0	0	0	0	0	0	0	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		R60oW	8.16	26	13.67	1	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	64o	0.65	339	12.58	36	267	12.58	30	198	12.67	25	125	12.75	19	62	12.83	10
ROUTED TO		S64o	0.65	339	12.58	36	267	12.67	30	198	12.67	25	125	12.75	19	62	12.83	10
HYDROGRAPH	AT	BD64mP	9.55	399	12.17	101	399	12.25	89	399	12.42	77	344	12.67	58	178	12.83	30
ROUTED TO		P64mS	9.55	399	12.33	101	399	12.42	89	399	12.58	77	343	12.83	58	178	12.92	30
HYDROGRAPH	AT	BD64mS	9.55	230	13.08	15	152	13.17	9	83	13.17	3	0	0	0	0	0	0
ROUTED TO		R64mS	9.55	220	13.67	15	142	13.75	9	69	13.92	3	0	0	0	0	0	0
2 COMBINED	AT	C64mS	9.55	619	13.67	115	541	13.75	98	468	13.92	81	343	12.83	58	178	12.92	30
3 COMBINED	AT	C64o	12.13	799	13.5	149	684	13.5	126	586	12.67	103	458	12.83	75	236	12.92	40
DIVERSION	TO	D64oPT	12.13	799	13.5	149	684	13.5	126	586	12.67	103	458	12.83	75	236	12.92	40
HYDROGRAPH	AT	D64o	12.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R64oW	12.13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	68o	0.69	457	12.5	36	377	12.5	31	301	12.58	26	209	12.58	20	74	12.75	9
ROUTED TO		S68o	0.69	413	12.83	30	331	12.92	25	253	13	20	157	13.25	13	16	15.33	3
HYDROGRAPH	AT	BD68mP	16.15	144	11.92	47	144	11.92	44	144	12	40	144	12.17	35	144	12.58	22
ROUTED TO		P68mS	16.15	144	12.17	47	144	12.25	44	144	12.25	40	144	12.42	35	144	12.83	22
HYDROGRAPH	AT	BD68mS	16.15	548	12.92	57	402	13	35	269	12.92	19	154	13	10	27	12.75	1
ROUTED TO		R68mS	16.15	529	13.5	57	383	13.5	35	256	13.5	19	145	13.58	10	12	14.17	1
2 COMBINED	AT	C68mS	16.15	673	13.5	104	527	13.5	78	400	13.5	59	289	13.58	45	146	13.67	23
3 COMBINED	AT	C68o	16.84	941	13.25	132	755	13.33	101	595	13.33	77	422	13.42	57	146	13.67	25
DIVERSION	TO	D68oPT	16.84	926	13.25	131	755	13.33	101	595	13.33	77	422	13.42	57	146	13.67	25
HYDROGRAPH	AT	D68o	16.84	16	13.25	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R68oW	16.84	7	13.83	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	72o	0.66	494	12.5	33	408	12.5	27	323	12.5	23	217	12.58	16	60	12.75	6
3 COMBINED	AT	C72o	17.78	1306	13.75	274	1035	13.67	230	894	13.08	194	727	13.25	154	409	13.83	84
DIVERSION	TO	D72oP	17.78	433	12	173	433	12.08	161	433	12.17	150	433	12.33	133	409	13.83	84
HYDROGRAPH	AT	D72o	17.78	873	13.75	101	602	13.67	69	461	13.08	44	294	13.25	21	0	0	0
ROUTED TO		S72o	17.78	873	13.75	101	601	13.67	69	450	13.17	44	288	13.42	21	0	0	0
DIVERSION	TO	D72o1	17.78	254	13.75	17	53	13.67	3	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D72oPT	17.78	619	13.75	84	548	13.67	66	450	13.17	44	288	13.42	21	0	0	0
ROUTED TO		PT72oE	17.78	618	13.75	84	548	13.75	66	450	13.25	44	287	13.42	21			
HYDROGRAPH	AT	B68oPT	16.84	926	13.25	131	755	13.33	101	595	13.33	77	422	13.42	57	146	13.67	25
2 COMBINED	AT	CPT68o	18.47	1520	13.33	214	1294	13.33	166	1039	13.25	120	705	13.42	77	146	13.58	25
ROUTED TO		PT68oE	18.47	1520	13.33	214	1294	13.33	166	1038	13.25	120	704	13.5	77	146	13.58	25
HYDROGRAPH	AT	BD72o1	17.78	254	13.75	17	53	13.67	3	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D72oW	17.78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D72oE	17.78	254	13.75	17	53	13.67	3	0	0	0	0	0	0	0	0	0
ROUTED TO		S-I10	17.78	82	14.75	17	18	14.33	3	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	B64oPT	12.13	799	13.5	149	684	13.5	126	586	12.67	103	458	12.83	75	236	12.92	40
HYDROGRAPH	AT	B60oPT	8.16	1761	13.08	268	1517	13.25	230	1270	12.83	191	982	12.83	142	480	13	73
ROUTED TO		PT60oW	8.16	1761	13.17	268	1514	13.25	230	1270	12.83	191	981	12.92	142	479	13.08	73
4 COMBINED	AT	C-WT	21.04	4036	13.33	629	3391	13.33	509	2768	13.25	401	1929	13.25	285	834	13	134
ROUTED TO		PT64o	21.04	4032	13.33	629	3389	13.33	509	2767	13.25	401	1928	13.33	285	834	13.08	134
DIVERSION	TO	DPT64o	21.04	4032	13.33	629	3389	13.33	509	2767	13.25	401	1928	13.33	285	834	13.08	134
HYDROGRAPH	AT	DN_64o	21.04	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	36q	0.27	269	12.33	16	228	12.33	14	187	12.33	12	135	12.33	9	49	12.5	4
HYDROGRAPH	AT	BD32q	0.99	43	14.08	6	33	14.08	4	21	13.83	2	0	0	0	0	0	0
ROUTED TO		R32qS	0.99	43	14.33	6	33	14.33	4	20	14.25	2	0	0	0	0	0	0
HYDROGRAPH	AT	B36pP2	6.91	139	12.42	25	139	12.58	22	131	13	18	78	13.25	13	46	12.83	6

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		P36pS	6.91	139	12.58	25	139	12.75	22	131	13.08	18	78	13.33	13	46	12.92	6
3 COMBINED	AT	C36q	1.56	381	12.42	48	321	12.58	40	263	12.42	32	195	12.42	22	87	12.75	10
DIVERSION	TO	D36qP	1.56	295	12.17	46	295	12.33	39	263	12.42	32	195	12.42	22	87	12.75	10
HYDROGRAPH	AT	D36q	1.56	86	12.42	2	26	12.58	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D36qS	1.56	37	12.42	1	11	12.58	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D36qW	1.56	49	12.42	1	15	12.58	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R36qW	1.56	35	12.83	1	7	13	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	40q	0.35	336	12.33	22	283	12.33	19	230	12.33	16	166	12.42	12	60	12.5	6
2 COMBINED	AT	C40q	1.91	331	12.33	22	278	12.33	18	226	12.33	15	163	12.42	12	59	12.5	5
DIVERSION	TO	D40qP	1.91	32	11.67	8	32	11.75	8	32	11.83	7	32	11.92	6	32	12.25	5
HYDROGRAPH	AT	D40q	1.91	299	12.33	14	246	12.33	11	194	12.33	8	131	12.42	5	27	12.5	1
DIVERSION	TO	D40qS	1.91	182	12.33	8	150	12.33	7	118	12.33	5	80	12.42	3	16	12.5	1
HYDROGRAPH	AT	D40qW	1.91	117	12.33	5	96	12.33	4	76	12.33	3	51	12.42	2	10	12.5	0
ROUTED TO		R40qW	1.91	111	12.67	5	89	12.67	4	71	12.75	3	45	12.83	2	8	13.25	0
HYDROGRAPH	AT	BD40qP	1.91	32	11.67	8	32	11.75	8	32	11.83	7	32	11.92	6	32	12.25	5
ROUTED TO		P40qW	1.91	32	11.83	8	32	11.92	8	32	12	7	32	12.08	6	32	12.33	5
2 COMBINED	AT	C40qW	1.91	143	12.67	14	121	12.67	12	103	12.75	10	77	12.83	8	40	13.25	5
HYDROGRAPH	AT	44q	0.36	336	12.33	26	284	12.33	23	234	12.42	19	173	12.42	15	70	12.5	8
HYDROGRAPH	AT	B44pP2	11.1	124	12.92	21	121	13.33	18	89	13.17	14	55	12.75	10	34	12.92	5
ROUTED TO		P44pS	11.1	124	13	21	121	13.42	18	89	13.25	14	55	12.83	10	34	13	5
3 COMBINED	AT	C44q	2.57	549	12.58	60	466	12.58	52	381	12.58	43	278	12.67	33	131	12.83	18
DIVERSION	TO	D44qP	2.57	201	12	44	201	12.08	40	201	12.17	37	201	12.25	31	131	12.83	18
HYDROGRAPH	AT	D44q	2.57	348	12.58	16	265	12.58	12	180	12.58	7	77	12.67	2	0	0	0
DIVERSION	TO	D44qS	2.57	216	12.58	10	165	12.58	7	111	12.58	4	48	12.67	1	0	0	0
HYDROGRAPH	AT	D44qW	2.57	132	12.58	6	101	12.58	4	68	12.58	3	29	12.67	1	0	0	0
ROUTED TO		R44qW	2.57	125	12.75	6	95	12.83	4	63	12.92	3	23	13.08	1	0	0	0
HYDROGRAPH	AT	48q	0.3	246	12.42	18	206	12.42	15	167	12.5	13	120	12.5	10	43	12.58	4
2 COMBINED	AT	C48q	2.87	336	12.67	24	267	12.75	19	202	12.75	15	120	12.75	10	42	12.67	4
DIVERSION	TO	D48qPT	2.87	336	12.67	24	267	12.75	19	202	12.75	15	120	12.75	10	42	12.67	4
HYDROGRAPH	AT	DB48q	2.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		S48q	2.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D48qS	2.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D48qW	2.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R48qW	2.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	52q	0.39	301	12.42	25	251	12.5	21	203	12.5	18	144	12.58	14	50	12.67	6
2 COMBINED	AT	C52q	0.39	301	12.42	25	251	12.5	21	203	12.5	18	144	12.58	14	50	12.67	6
DIVERSION	TO	D52qP	0.39	191	12.17	22	191	12.25	20	191	12.42	18	144	12.58	14	50	12.67	6
HYDROGRAPH	AT	D52q	0.39	110	12.42	3	60	12.5	1	12	12.5	0	0	0	0	0	0	0
DIVERSION	TO	D52qS	0.39	56	12.42	1	31	12.5	1	6	12.5	0	0	0	0	0	0	0
HYDROGRAPH	AT	D52qW	0.39	54	12.42	1	29	12.5	1	6	12.5	0	0	0	0	0	0	0
ROUTED TO		R52qW	0.39	45	13	1	20	13.08	1	2	13.42	0	0	0	0	0	0	0
HYDROGRAPH	AT	56q	0.35	251	12.42	17	204	12.42	14	158	12.42	12	106	12.5	9	32	12.67	4
2 COMBINED	AT	C56q	0.75	249	12.42	18	202	12.42	15	157	12.42	12	105	12.5	9	31	12.67	4
DIVERSION	TO	D56qP	0.75	68	12	10	68	12.08	10	68	12.17	9	68	12.25	8	31	12.67	4
HYDROGRAPH	AT	D56q	0.75	181	12.42	8	134	12.42	5	89	12.42	3	37	12.5	1	0	0	0
DIVERSION	TO	D56qS	0.75	60	12.42	3	44	12.42	2	29	12.42	1	12	12.5	0	0	0	0
HYDROGRAPH	AT	D56qW	0.75	121	12.42	5	90	12.42	3	59	12.42	2	25	12.5	1	0	0	0
ROUTED TO		R56qW	0.75	111	12.83	5	76	13	3	48	13	2	16	13.25	1	0	0	0
HYDROGRAPH	AT	60q	0.35	265	12.33	16	215	12.42	14	168	12.42	11	109	12.5	8	29	12.58	3

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
2 COMBINED	AT	C60q	1.1	297	12.75	21	225	12.75	17	166	12.42	13	108	12.5	9	28	12.58	3
DIVERSION	TO	D60qP	1.1	281	12.67	21	225	12.75	17	166	12.42	13	108	12.5	9	28	12.58	3
HYDROGRAPH	AT	D60q	1.1	16	12.75	0	0	0	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D60qS	1.1	5	12.75	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D60qW	1.1	12	12.75	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R60qW	1.1	5	13.25	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	64q	0.41	375	12.42	26	316	12.42	22	259	12.42	19	186	12.42	15	74	12.58	8
3 COMBINED	AT	C64q	1.51	370	12.42	25	312	12.42	22	255	12.42	19	183	12.42	15	73	12.58	7
DIVERSION	TO	D64qPT	1.51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64q	1.51	370	12.42	25	312	12.42	22	255	12.42	19	183	12.42	15	73	12.58	7
DIVERSION	TO	D64qP	1.51	68	11.92	14	68	11.92	13	68	12	12	68	12.08	11	68	12.5	7
HYDROGRAPH	AT	D64q1	1.51	302	12.42	11	244	12.42	9	187	12.42	7	115	12.42	4	5	12.58	0
DIVERSION	TO	D64qS	1.51	100	12.42	4	81	12.42	3	62	12.42	2	38	12.42	1	2	12.58	0
HYDROGRAPH	AT	D64qW	1.51	202	12.42	7	163	12.42	6	126	12.42	4	77	12.42	3	3	12.58	0
ROUTED TO		R64qW	1.51	184	12.67	7	147	12.75	6	110	12.75	4	65	12.92	3	1	13.5	0
HYDROGRAPH	AT	BD64qP	1.51	68	11.92	14	68	11.92	13	68	12	12	68	12.08	11	68	12.5	7
ROUTED TO		P64qW	1.51	68	12	14	68	12	13	68	12.17	12	68	12.25	11	68	12.58	7
2 COMBINED	AT	C64qW	1.51	252	12.67	22	215	12.75	19	178	12.75	17	133	12.92	13	68	12.75	7
HYDROGRAPH	AT	68q	0.29	268	12.33	17	220	12.33	15	177	12.42	12	125	12.42	10	45	12.5	5
2 COMBINED	AT	C68q	1.8	463	12.58	38	387	12.67	33	315	12.67	29	225	12.83	23	112	12.58	12
DIVERSION	TO	D68qP	1.8	68	11.83	20	68	11.83	18	68	11.92	17	68	12	15	68	12.33	10
HYDROGRAPH	AT	D68q	1.8	395	12.58	19	319	12.67	15	247	12.67	12	157	12.83	8	44	12.58	1
DIVERSION	TO	D68qS	1.8	130	12.58	6	105	12.67	5	81	12.67	4	52	12.83	3	14	12.58	0
HYDROGRAPH	AT	D68qW	1.8	265	12.58	12	214	12.67	10	165	12.67	8	105	12.83	5	29	12.58	1
ROUTED TO		R68qW	1.8	250	12.83	12	201	12.92	10	155	12.92	8	99	13.08	5	22	13.17	1
HYDROGRAPH	AT	BD68qP	1.8	68	11.83	20	68	11.83	18	68	11.92	17	68	12	15	68	12.33	10
ROUTED TO		P68qW	1.8	68	12	20	68	12	18	68	12.08	17	68	12.17	15	68	12.5	10
2 COMBINED	AT	C68qW	1.8	318	12.83	32	269	12.92	28	223	12.92	25	167	13.08	20	90	13.17	11
HYDROGRAPH	AT	72q	0.33	300	12.42	20	252	12.42	17	205	12.42	14	148	12.5	11	56	12.58	5
HYDROGRAPH	AT	B72oP	17.78	433	12	173	433	12.08	161	433	12.17	150	433	12.33	133	409	13.83	84
ROUTED TO		P72oS	17.78	433	12.08	173	433	12.17	161	433	12.25	150	433	12.42	133	409	13.83	84
3 COMBINED	AT	C72q	3.13	981	12.67	228	894	12.75	209	811	12.75	192	709	12.83	167	515	13.58	104
DIVERSION	TO	D72qP	3.13	662	12.08	216	662	12.17	201	662	12.25	187	662	12.5	166	515	13.58	104
HYDROGRAPH	AT	D72q	3.13	319	12.67	12	232	12.75	8	149	12.75	5	47	12.83	1	0	0	0
DIVERSION	TO	D72qS	3.13	105	12.67	4	77	12.75	3	49	12.75	2	15	12.83	0	0	0	0
HYDROGRAPH	AT	D72qW	3.13	214	12.67	8	156	12.75	6	100	12.75	3	31	12.83	1	0	0	0
ROUTED TO		R72qW	3.13	200	13	8	142	13.08	6	85	13.17	3	19	13.42	1	0	0	0
HYDROGRAPH	AT	80o	0.54	626	12.25	34	527	12.33	29	434	12.33	25	312	12.33	19	105	12.42	8
HYDROGRAPH	AT	BD84mP	0.29	249	12.17	29	247	12.33	26	214	12.33	23	164	12.33	18	81	12.5	10
ROUTED TO		P84mS	0.29	249	12.25	29	247	12.33	26	212	12.42	23	164	12.42	18	81	12.5	10
HYDROGRAPH	AT	BD84mS	5.49	333	13.42	42	273	13.5	35	214	13.67	29	144	13.17	21	24	14.25	4
ROUTED TO		R84mS	5.49	330	13.67	42	270	13.83	35	212	14	29	143	14.17	21	23	14.83	4
2 COMBINED	AT	C84mS	5.49	435	13.17	70	362	13.25	61	293	13.25	51	208	13.42	39	81	12.5	14
HYDROGRAPH	AT	BD80mS	6.03	676	13.5	80	511	13.67	65	369	13.83	51	207	14	33	43	12.67	8
ROUTED TO		R80mS	6.03	674	13.58	80	510	13.75	65	368	13.92	51	207	14.17	33	41	13.08	8
3 COMBINED	AT	C80o	6.58	1214	13.08	183	970	12.42	154	792	12.42	126	568	12.42	89	207	12.58	30
DIVERSION	TO	DB80o	6.58	965	13.08	102	721	12.42	78	543	12.42	54	319	12.42	25	0	0	0
HYDROGRAPH	AT	E80o	6.58	249	11.83	80	249	11.92	76	249	12	71	249	12.08	64	207	12.58	30
HYDROGRAPH	AT	BDB80o	6.58	965	13.08	102	721	12.42	78	543	12.42	54	319	12.42	25	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		S80o	6.58	964	13.17	102	716	13.17	78	487	13.25	54	216	13.42	25	0	0	0
2 COMBINED	AT	CC80o	6.58	1213	13.17	183	965	13.17	153	736	13.25	125	465	13.42	89	207	12.58	30
DIVERSION	TO	D80oP	6.58	249	11.83	87	249	11.92	83	249	12	78	249	12.08	71	207	12.58	30
HYDROGRAPH	AT	D80o	6.58	964	13.17	95	716	13.17	71	487	13.25	47	216	13.42	18	0	0	0
ROUTED TO		R80oS	6.58	960	13.33	95	710	13.42	71	481	13.42	47	204	13.83	18	0	0	0
HYDROGRAPH	AT	76o	0.67	529	12.42	40	442	12.5	34	360	12.5	29	258	12.58	22	96	12.67	10
HYDROGRAPH	AT	BD76m	6.71	1033	13.42	108	746	12.83	81	539	12.83	56	292	12.92	27	1	12.92	0
ROUTED TO		R76mS	6.71	1025	13.67	108	743	13.67	81	509	13.33	56	264	13.42	27	0	14	0
HYDROGRAPH	AT	B76mP2	6.71	32	11.83	11	32	11.92	10	32	12	9	32	12.08	8	31	12.83	5
ROUTED TO		P76mS	6.71	32	12.08	11	32	12.17	10	32	12.25	9	32	12.33	8	31	13	5
2 COMBINED	AT	C76mS	6.71	1057	13.67	118	775	13.67	91	541	13.33	66	296	13.42	35	31	13	5
HYDROGRAPH	AT	BD72oW	17.78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R72oW	17.78	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4 COMBINED	AT	C76o	7.92	2259	13.17	251	1713	13.17	194	1220	13.17	140	587	13.58	74	122	12.75	15
DIVERSION	TO	D76o	7.92	2030	13.17	192	1484	13.17	139	991	13.17	88	358	13.58	27	0	0	0
HYDROGRAPH	AT	D76oP	7.92	229	12.08	59	229	12.08	56	229	12.17	52	229	12.33	46	122	12.75	15
ROUTED TO		P76oS	7.92	229	12.25	59	229	12.25	56	229	12.33	52	229	12.5	46	122	12.83	15
HYDROGRAPH	AT	BD76o	7.92	2030	13.17	192	1484	13.17	139	991	13.17	88	358	13.58	27	0	0	0
DIVERSION	TO	D76oW	7.92	203	13.17	19	148	13.17	14	99	13.17	9	36	13.58	3	0	0	0
HYDROGRAPH	AT	D76oS	7.92	1827	13.17	173	1336	13.17	125	892	13.17	79	323	13.58	25	0	0	0
ROUTED TO		R76oS	7.92	1818	13.33	173	1322	13.42	125	869	13.5	79	304	13.92	25	0	0	0
2 COMBINED	AT	C76oS	7.92	2047	13.33	232	1551	13.42	181	1098	13.5	131	533	13.92	71	122	12.83	15
HYDROGRAPH	AT	76q	0.4	443	12.33	28	380	12.33	24	314	12.33	20	232	12.42	16	99	12.5	8
3 COMBINED	AT	C76q	11.45	2314	13.17	263	1751	13.25	206	1222	13.42	152	560	13.83	85	200	12.75	22
DIVERSION	TO	D76qP	11.45	229	11.92	67	229	12	63	229	12.08	59	229	12.17	52	200	12.75	22
HYDROGRAPH	AT	D76q	11.45	2085	13.17	196	1522	13.25	143	993	13.42	92	331	13.83	33	0	0	0
DIVERSION	TO	D76qS	11.45	1084	13.17	102	791	13.25	74	516	13.42	48	172	13.83	17	0	0	0
HYDROGRAPH	AT	D76qW	11.45	1001	13.17	94	731	13.25	69	477	13.42	44	159	13.83	16	0	0	0
ROUTED TO		R76qW	11.45	991	13.33	94	720	13.42	69	466	13.58	44	155	14.08	16	0	0	0
HYDROGRAPH	AT	80p	0.4	449	12.25	29	381	12.33	26	318	12.33	22	239	12.33	17	104	12.42	9
HYDROGRAPH	AT	BD76oW	7.92	203	13.17	19	148	13.17	14	99	13.17	9	36	13.58	3	0	0	0
ROUTED TO		R76oW	7.92	202	13.33	19	147	13.33	14	96	13.5	9	34	13.92	3	0	0	0
2 COMBINED	AT	C80p	8.32	449	12.25	50	381	12.33	40	318	12.33	32	239	12.33	21	104	12.42	9
ROUTED TO		S80p	8.32	438	12.33	45	363	12.42	37	302	12.42	28	227	12.42	18	91	12.67	7
HYDROGRAPH	AT	BD80oP	6.58	249	11.83	87	249	11.92	83	249	12	78	249	12.08	71	207	12.58	30
ROUTED TO		P80oS	6.58	249	12.08	87	249	12.08	83	249	12.17	78	249	12.25	71	207	12.67	30
2 COMBINED	AT	CC80p	8.32	687	12.33	132	612	12.42	119	551	12.42	106	476	12.42	88	297	12.67	36
DIVERSION	TO	D80pP	8.32	249	11.83	93	249	11.92	87	249	12	82	249	12.08	75	249	12.5	35
HYDROGRAPH	AT	D80p	8.32	438	12.33	39	363	12.42	31	302	12.42	23	227	12.42	14	48	12.67	1
ROUTED TO		R80pS	8.32	391	12.92	39	326	13	31	267	13	23	193	13.08	14	14	13.83	1
HYDROGRAPH	AT	BD80pP	8.32	249	11.83	93	249	11.92	87	249	12	82	249	12.08	75	249	12.5	35
ROUTED TO		P80pS	8.32	249	12	93	249	12.17	87	249	12.17	82	249	12.25	75	249	12.67	35
2 COMBINED	AT	C80pS	8.32	640	12.92	132	575	13	119	516	13	106	442	13.08	88	249	13.08	36
HYDROGRAPH	AT	80q	0.5	373	12.5	32	314	12.5	27	256	12.58	23	185	12.58	18	72	12.75	9
3 COMBINED	AT	C80q	12.34	1801	13.25	255	1410	13.33	212	1034	13.42	171	681	13.08	120	317	12.75	44
HYDROGRAPH	AT	28s	0.16	200	12.25	10	168	12.25	9	137	12.25	7	98	12.25	6	38	12.33	3
HYDROGRAPH	AT	BD28qP	0.82	340	12.08	56	340	12.17	52	340	12.25	47	316	12.67	40	147	12.92	21
DIVERSION	TO	D28qP2	0.82	32	12.08	5	32	12.17	5	32	12.25	4	30	12.67	4	14	12.92	2
HYDROGRAPH	AT	D28qP1	0.82	308	12.08	51	308	12.17	47	308	12.25	43	287	12.67	36	134	12.92	19

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		P28qS	0.82	308	12.17	51	308	12.25	47	308	12.33	43	286	12.67	36	134	13	19
HYDROGRAPH	AT	BD28qS	0.82	128	12.25	2	82	12.33	1	35	12.42	0	0	0	0	0	0	0
ROUTED TO		R28qS	0.82	117	12.33	2	71	12.42	1	26	12.5	0	0	0	0	0	0	0
2 COMBINED	AT	C28qS	0.82	425	12.33	53	379	12.42	48	334	12.5	43	286	12.67	36	134	13	19
2 COMBINED	AT	C28s	0.98	603	12.33	63	522	12.33	57	443	12.42	51	347	12.58	42	153	12.83	22
DIVERSION	TO	D28sP	0.98	492	12.17	61	492	12.25	57	443	12.42	51	347	12.58	42	153	12.83	22
HYDROGRAPH	AT	D28s	0.98	111	12.33	1	30	12.33	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D28sS	0.98	48	12.33	1	13	12.33	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D28sW	0.98	63	12.33	1	17	12.33	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R28sW	0.98	39	12.67	1	5	12.83	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	32s	0.34	285	12.33	23	239	12.42	20	194	12.42	17	137	12.42	13	50	12.58	6
2 COMBINED	AT	C32s	1.32	297	12.58	23	236	12.42	20	191	12.42	17	135	12.42	13	49	12.58	6
ROUTED TO		S32s	1.32	279	12.67	15	191	12.83	12	127	13	9	54	13.67	5	0	0	0
DIVERSION	TO	D32sP	1.32	48	12.5	8	48	12.67	7	48	12.83	7	48	13.58	5	0	0	0
HYDROGRAPH	AT	D32s	1.32	231	12.67	7	143	12.83	4	79	13	2	6	13.67	0	0	0	0
ROUTED TO		R32sW	1.32	200	13	7	117	13.17	4	57	13.5	2	3	14.08	0	0	0	0
HYDROGRAPH	AT	BD32sP	1.32	48	12.5	8	48	12.67	7	48	12.83	7	48	13.58	5	0	0	0
ROUTED TO		P32sW	1.32	48	12.67	8	48	12.75	7	48	12.92	7	48	13.67	5			
2 COMBINED	AT	C32sW	1.32	248	13	15	165	13.17	12	105	13.5	9	50	13.92	5	0	0	0
HYDROGRAPH	AT	36s	0.24	255	12.33	16	217	12.33	14	180	12.33	12	132	12.42	9	55	12.5	5
HYDROGRAPH	AT	BD36qP	1.56	295	12.17	46	295	12.33	39	263	12.42	32	195	12.42	22	87	12.75	10
ROUTED TO		P36qS	1.56	295	12.25	46	295	12.42	39	261	12.42	32	195	12.5	22	87	12.75	10
HYDROGRAPH	AT	BD36qS	1.56	37	12.42	1	11	12.58	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R36qS	1.56	29	12.75	1	6	12.92	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C36qS	1.56	324	12.75	47	298	12.67	40	261	12.42	32	195	12.5	22	87	12.75	10
3 COMBINED	AT	C36s	2.3	670	12.92	78	508	12.67	65	434	12.42	52	321	12.42	35	135	12.67	15
DIVERSION	TO	D36sP	2.3	303	12.08	60	303	12.08	54	303	12.17	47	303	12.33	35	135	12.67	15
HYDROGRAPH	AT	D36s	2.3	367	12.92	17	205	12.67	11	131	12.42	4	18	12.42	0	0	0	0
ROUTED TO		R36sW	2.3	338	13.08	17	188	12.83	11	98	12.75	4	4	12.83	0	0	0	0
HYDROGRAPH	AT	40s	0.24	258	12.33	18	221	12.33	16	183	12.33	14	137	12.42	11	61	12.5	6
HYDROGRAPH	AT	BD40qS	1.91	182	12.33	8	150	12.33	7	118	12.33	5	80	12.42	3	16	12.5	1
ROUTED TO		R40qS	1.91	173	12.58	8	141	12.58	7	110	12.67	5	73	12.75	3	12	13.08	1
3 COMBINED	AT	C40s	2.89	603	12.58	44	487	12.58	33	353	12.67	23	192	12.67	14	61	12.75	6
DIVERSION	TO	D40sP	2.89	68	11.92	14	68	11.92	12	68	12	11	68	12.08	9	61	12.75	6
HYDROGRAPH	AT	D40s	2.89	535	12.58	30	419	12.58	21	285	12.67	11	124	12.67	4	0	0	0
ROUTED TO		R40sW	2.89	519	12.92	30	390	12.92	21	255	12.92	11	106	12.92	4	0	0	0
HYDROGRAPH	AT	BD40sP	2.89	68	11.92	14	68	11.92	12	68	12	11	68	12.08	9	61	12.75	6
ROUTED TO		P40sW	2.89	68	12.08	14	68	12.08	12	68	12.17	11	68	12.25	9	60	12.75	6
2 COMBINED	AT	C40sW	2.89	587	12.92	44	458	12.92	33	323	12.92	23	174	12.92	14	60	12.75	6
HYDROGRAPH	AT	44s	0.24	232	12.33	18	197	12.42	15	164	12.42	13	122	12.42	10	53	12.5	5
HYDROGRAPH	AT	BD44qP	2.57	201	12	44	201	12.08	40	201	12.17	37	201	12.25	31	131	12.83	18
ROUTED TO		P44qS	2.57	201	12.08	44	201	12.17	40	201	12.25	37	201	12.33	31	131	12.83	18
HYDROGRAPH	AT	BD44qS	2.57	216	12.58	10	165	12.58	7	111	12.58	4	48	12.67	1	0	0	0
ROUTED TO		R44qS	2.57	205	12.75	10	156	12.83	7	104	12.92	4	40	13	1	0	0	0
2 COMBINED	AT	C44qS	2.57	406	12.75	54	357	12.83	48	305	12.92	41	241	13	33	131	12.83	18
3 COMBINED	AT	C44s	3.79	1150	12.75	114	954	12.83	95	746	12.83	76	501	12.92	56	239	12.75	28
DIVERSION	TO	D44sP	3.79	201	11.83	56	201	11.92	51	201	12	47	201	12.08	41	201	12.42	27
HYDROGRAPH	AT	D44s	3.79	949	12.75	59	753	12.83	44	545	12.83	29	300	12.92	15	38	12.75	1
ROUTED TO		R44sW	3.79	943	12.92	59	741	13	44	533	13	29	292	13.08	15	30	13.17	1

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	48s	0.21	227	12.33	16	194	12.33	14	161	12.33	12	119	12.42	9	52	12.42	5
HYDROGRAPH	AT	BD48qS	2.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R48qS	2.87	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 COMBINED	AT	C48s	4.31	1058	12.92	74	841	12.92	57	614	13	40	353	13	24	63	13	6
DIVERSION	TO	D48sPT	4.31	1048	12.92	74	841	12.92	57	614	13	40	353	13	24	63	13	6
HYDROGRAPH	AT	DB48s	4.31	11	12.92	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		S48s	4.31	9	13	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R48sW	4.31	5	13.42	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	52s	0.26	271	12.33	19	230	12.33	17	190	12.42	14	142	12.42	11	62	12.5	6
HYDROGRAPH	AT	BD52qP	0.39	191	12.17	22	191	12.25	20	191	12.42	18	144	12.58	14	50	12.67	6
ROUTED TO		P52qS	0.39	191	12.25	22	191	12.33	20	191	12.5	18	144	12.58	14	50	12.75	6
HYDROGRAPH	AT	BD52qS	0.39	56	12.42	1	31	12.5	1	6	12.5	0	0	0	0	0	0	0
ROUTED TO		R52qS	0.39	47	12.92	1	22	13	1	2	13.17	0	0	0	0	0	0	0
2 COMBINED	AT	C52qS	0.39	238	12.92	23	212	12.92	21	191	12.58	18	144	12.58	14	50	12.75	6
3 COMBINED	AT	C52s	0.66	459	12.33	43	419	12.33	37	377	12.42	32	280	12.5	25	108	12.58	12
DIVERSION	TO	D52sP	0.66	191	12	31	191	12.08	29	191	12.17	26	191	12.25	23	108	12.58	12
HYDROGRAPH	AT	D52s	0.66	268	12.33	12	228	12.33	9	186	12.42	6	89	12.5	2	0	0	0
ROUTED TO		R52sW	0.66	259	12.58	12	218	12.67	9	176	12.75	6	77	12.83	2	0	0	0
HYDROGRAPH	AT	56s	0.25	272	12.33	19	233	12.33	17	193	12.33	14	146	12.42	11	66	12.5	6
HYDROGRAPH	AT	BD56qP	0.75	68	12	10	68	12.08	10	68	12.17	9	68	12.25	8	31	12.67	4
ROUTED TO		P56qS	0.75	68	12.08	10	68	12.17	10	68	12.33	9	68	12.33	8	31	12.75	4
HYDROGRAPH	AT	BD56qS	0.75	60	12.42	3	44	12.42	2	29	12.42	1	12	12.5	0	0	0	0
ROUTED TO		R56qS	0.75	55	12.83	3	40	12.83	2	25	12.92	1	9	13.08	0	0	0	0
2 COMBINED	AT	C56qS	0.75	123	12.83	13	108	12.83	11	93	12.92	10	77	13.08	8	31	12.75	4
3 COMBINED	AT	C56s	1.27	596	12.58	44	504	12.67	36	415	12.67	30	258	12.83	21	93	12.58	9
DIVERSION	TO	D56sP	1.27	201	12.08	28	201	12.08	26	201	12.17	24	201	12.33	20	93	12.58	9
HYDROGRAPH	AT	D56s	1.27	395	12.58	15	303	12.67	10	214	12.67	6	57	12.83	1	0	0	0
DIVERSION	TO	D56sS	1.27	59	12.58	2	45	12.67	2	32	12.67	1	9	12.83	0	0	0	0
HYDROGRAPH	AT	D56sW	1.27	336	12.58	13	258	12.67	9	182	12.67	5	48	12.83	1	0	0	0
ROUTED TO		R56sW	1.27	315	12.83	13	237	12.92	9	160	13	5	29	13.17	1	0	0	0
HYDROGRAPH	AT	60s	0.25	301	12.25	20	257	12.25	17	215	12.33	15	164	12.33	12	75	12.42	6
HYDROGRAPH	AT	BD60qP	1.1	281	12.67	21	225	12.75	17	166	12.42	13	108	12.5	9	28	12.58	3
ROUTED TO		P60qS	1.1	281	12.75	21	225	12.75	17	165	12.5	13	107	12.5	9	28	12.67	3
HYDROGRAPH	AT	BD60qS	1.1	5	12.75	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R60qS	1.1	2	13.17	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C60qS	1.1	281	12.75	21	225	12.75	17	165	12.5	13	107	12.5	9	28	12.67	3
3 COMBINED	AT	C60s	1.87	754	12.75	53	588	12.83	42	422	12.92	33	255	12.42	21	96	12.5	9
DIVERSION	TO	D60sP	1.87	217	12	30	217	12.08	28	217	12.17	25	217	12.33	21	96	12.5	9
HYDROGRAPH	AT	D60s	1.87	537	12.75	22	371	12.83	14	205	12.92	7	38	12.42	1	0	0	0
DIVERSION	TO	D60sS	1.87	150	12.75	6	104	12.83	4	57	12.92	2	11	12.42	0	0	0	0
HYDROGRAPH	AT	D60sW	1.87	387	12.75	16	267	12.83	10	148	12.92	5	28	12.42	0	0	0	0
ROUTED TO		R60sW	1.87	365	13	16	246	13.08	10	131	13.17	5	9	13	0	0	0	0
HYDROGRAPH	AT	BD60sP	1.87	217	12	30	217	12.08	28	217	12.17	25	217	12.33	21	96	12.5	9
ROUTED TO		P60sW	1.87	217	12.08	30	217	12.17	28	217	12.25	25	217	12.42	21	95	12.5	9
2 COMBINED	AT	C60sW	1.87	582	13	47	463	13.08	38	348	13.17	31	220	12.67	21	95	12.5	9
HYDROGRAPH	AT	64s	0.26	301	12.25	21	257	12.33	19	217	12.33	16	165	12.33	13	76	12.42	7
HYDROGRAPH	AT	BD64qS	1.51	100	12.42	4	81	12.42	3	62	12.42	2	38	12.42	1	2	12.58	0
ROUTED TO		R64qS	1.51	89	12.67	4	71	12.75	3	53	12.75	2	31	12.92	1	1	13.08	0
3 COMBINED	AT	C64s	2.54	795	12.83	71	634	12.92	59	493	12.75	48	380	12.33	35	168	12.5	16

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
DIVERSION	TO	D64sPT	2.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64s	2.54	795	12.83	71	634	12.92	59	493	12.75	48	380	12.33	35	168	12.5	16
DIVERSION	TO	D64sP	2.54	327	12	49	327	12.08	45	327	12.08	41	327	12.25	33	168	12.5	16
HYDROGRAPH	AT	D64s1	2.54	468	12.83	21	307	12.92	14	166	12.75	7	53	12.33	1	0	0	0
DIVERSION	TO	D64sS	2.54	197	12.83	9	129	12.92	6	70	12.75	3	22	12.33	0	0	0	0
HYDROGRAPH	AT	D64sW	2.54	271	12.83	12	178	12.92	8	96	12.75	4	31	12.33	1	0	0	0
ROUTED TO		R64sW	2.54	266	13	12	175	13	8	93	13	4	23	12.83	1	0	0	0
HYDROGRAPH	AT	68s	0.24	239	12.33	17	203	12.33	15	167	12.33	13	122	12.33	10	52	12.42	5
HYDROGRAPH	AT	BD68qS	1.8	130	12.58	6	105	12.67	5	81	12.67	4	52	12.83	3	14	12.58	0
ROUTED TO		R68qS	1.8	122	12.83	6	99	12.92	5	75	13	4	47	13.17	3	11	13.25	0
3 COMBINED	AT	C68s	3.07	494	12.83	35	369	12.83	28	256	12.83	21	144	12.75	13	52	12.42	6
DIVERSION	TO	D68sP	3.07	124	12.08	18	124	12.08	17	124	12.17	16	124	12.42	13	50	12.42	6
HYDROGRAPH	AT	D68s	3.07	370	12.83	17	245	12.83	10	132	12.83	5	20	12.75	0	0	0	0
DIVERSION	TO	D68sS	3.07	103	12.83	5	69	12.83	3	37	12.83	1	5	12.75	0	0	0	0
HYDROGRAPH	AT	D68sW	3.07	266	12.83	12	176	12.83	7	95	12.83	4	14	12.75	0	0	0	0
ROUTED TO		R68sW	3.07	256	13.08	12	167	13.08	7	85	13.17	4	5	13.33	0	0	0	0
HYDROGRAPH	AT	72s	0.28	306	12.33	19	261	12.33	16	216	12.33	14	157	12.42	11	65	12.42	5
HYDROGRAPH	AT	BD72qP	3.13	662	12.08	216	662	12.17	201	662	12.25	187	662	12.5	166	515	13.58	104
DIVERSION	TO	D72qP2	3.13	229	12.08	75	229	12.17	70	229	12.25	65	229	12.5	57	178	13.58	36
HYDROGRAPH	AT	D72qP1	3.13	433	12.08	141	433	12.17	131	433	12.25	122	433	12.5	108	337	13.58	68
ROUTED TO		P72qS1	3.13	433	12.17	141	433	12.25	131	433	12.33	122	433	12.58	108	337	13.67	68
HYDROGRAPH	AT	B72qP2	3.13	229	12.08	75	229	12.17	70	229	12.25	65	229	12.5	57	178	13.58	36
ROUTED TO		P72qS2	3.13	229	12.17	75	229	12.25	70	229	12.33	65	229	12.58	57	178	13.67	36
HYDROGRAPH	AT	BD72qS	3.13	105	12.67	4	77	12.75	3	49	12.75	2	15	12.83	0	0	0	0
ROUTED TO		R72qS	3.13	100	13	4	70	13.08	3	43	13.17	2	10	13.33	0	0	0	0
3 COMBINED	AT	C72qS	3.13	762	13	220	732	13.08	204	705	13.17	188	672	13.25	166	515	13.67	104
3 COMBINED	AT	C72s	4.68	1148	12.92	250	1009	13	226	876	13	205	809	12.5	176	546	12.75	109
DIVERSION	TO	D72sP	4.68	662	12	223	662	12.08	207	662	12.17	193	662	12.25	171	546	12.75	109
HYDROGRAPH	AT	D72s	4.68	486	12.92	27	347	13	19	214	13	12	147	12.5	5	0	0	0
DIVERSION	TO	D72sS	4.68	194	12.92	11	139	13	8	86	13	5	59	12.5	2	0	0	0
HYDROGRAPH	AT	D72sW	4.68	291	12.92	16	208	13	11	128	13	7	88	12.5	3	0	0	0
ROUTED TO		R72sW	4.68	280	13.25	16	198	13.25	11	124	13.33	7	67	13.08	3	0	0	0
HYDROGRAPH	AT	76s	0.28	306	12.33	21	262	12.33	19	218	12.33	16	162	12.42	13	72	12.42	7
ROUTED TO		S76s	0.28	306	12.33	21	261	12.33	18	216	12.33	16	162	12.42	12	72	12.5	6
HYDROGRAPH	AT	BD76qP	11.45	229	11.92	67	229	12	63	229	12.08	59	229	12.17	52	200	12.75	22
ROUTED TO		P76qS	11.45	229	12	67	229	12.08	63	229	12.17	59	229	12.25	52	200	12.75	22
HYDROGRAPH	AT	BD76qS	11.45	1084	13.17	102	791	13.25	74	516	13.42	48	172	13.83	17	0	0	0
ROUTED TO		R76qS	11.45	1075	13.33	102	781	13.42	74	508	13.58	48	170	14	17	0	0	0
2 COMBINED	AT	C76qS	11.45	1304	13.33	169	1010	13.42	137	737	13.58	107	399	14	69	200	12.75	22
3 COMBINED	AT	C76s	13.28	1647	13.25	202	1255	13.33	164	888	13.5	128	484	12.92	83	260	12.75	28
DIVERSION	TO	D76sP	13.28	204	11.83	67	204	11.92	63	204	12	59	204	12.08	52	204	12.42	27
HYDROGRAPH	AT	D76s	13.28	1443	13.25	135	1051	13.33	101	684	13.5	69	280	12.92	31	56	12.75	1
DIVERSION	TO	D76sS	13.28	317	13.25	30	231	13.33	22	150	13.5	15	62	12.92	7	12	12.75	0
HYDROGRAPH	AT	D76sW	13.28	1125	13.25	105	820	13.33	79	533	13.5	53	218	12.92	24	43	12.75	1
ROUTED TO		R76sW	13.28	1116	13.42	105	809	13.5	79	523	13.67	53	213	13.25	24	26	13.17	1
2 COMBINED	AT	CC80q	14.17	2864	13.33	358	2169	13.42	288	1520	13.58	222	886	13.08	142	333	13.08	44
DIVERSION	TO	D80qP	14.17	364	12	124	364	12.08	118	364	12.17	111	364	12.33	99	333	13.08	44
HYDROGRAPH	AT	D80q	14.17	2500	13.33	233	1805	13.42	171	1156	13.58	111	522	13.08	43	0	0	0
DIVERSION	TO	D80qW	14.17	2500	13.33	233	1805	13.42	171	1156	13.58	111	522	13.08	43	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	D80qS	14.17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R80qS	14.17	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD80qP	14.17	364	12	124	364	12.08	118	364	12.17	111	364	12.33	99	333	13.08	44
ROUTED TO		P80qS	14.17	364	12.08	124	364	12.17	118	364	12.25	111	364	12.42	99	333	13.08	44
2 COMBINED	AT	C80qS	14.17	364	12.08	124	364	12.17	118	364	12.25	111	364	12.42	99	333	13.08	44
HYDROGRAPH	AT	52t	0.3	275	12.33	20	233	12.42	17	191	12.42	15	140	12.42	11	57	12.58	6
ROUTED TO		S52t	0.3	274	12.42	18	230	12.42	15	189	12.5	13	139	12.5	9	51	12.92	4
HYDROGRAPH	AT	BD52sP	0.66	191	12	31	191	12.08	29	191	12.17	26	191	12.25	23	108	12.58	12
ROUTED TO		P52sS	0.66	191	12.08	31	191	12.17	29	191	12.25	26	191	12.33	23	108	12.67	12
2 COMBINED	AT	C52t	0.96	462	12.42	48	418	12.42	43	378	12.5	38	328	12.5	32	153	12.83	16
DIVERSION	TO	D52tP	0.96	281	12.08	43	281	12.08	39	281	12.17	36	281	12.33	31	153	12.83	16
HYDROGRAPH	AT	D52t	0.96	181	12.42	6	137	12.42	4	97	12.5	3	47	12.5	1	0	0	0
DIVERSION	TO	D52tS	0.96	74	12.42	2	56	12.42	2	40	12.5	1	19	12.5	0	0	0	0
HYDROGRAPH	AT	D52tW	0.96	107	12.42	3	81	12.42	2	57	12.5	2	28	12.5	1	0	0	0
ROUTED TO		R52tW	0.96	99	12.67	3	74	12.75	2	50	12.75	2	20	12.92	1	0	0	0
HYDROGRAPH	AT	56t	0.18	170	12.33	14	145	12.33	12	120	12.42	10	90	12.42	8	40	12.5	4
HYDROGRAPH	AT	BD56sP	1.27	201	12.08	28	201	12.08	26	201	12.17	24	201	12.33	20	93	12.58	9
ROUTED TO		P56sS	1.27	201	12.17	28	201	12.17	26	201	12.25	24	201	12.42	20	92	12.67	9
HYDROGRAPH	AT	BD56sS	1.27	59	12.58	2	45	12.67	2	32	12.67	1	9	12.83	0	0	0	0
ROUTED TO		R56sS	1.27	55	13	2	41	13	2	27	13.17	1	4	13.33	0	0	0	0
2 COMBINED	AT	C56sS	1.27	256	13	31	242	13	28	228	13.17	24	203	13.08	20	92	12.67	9
3 COMBINED	AT	C56t	1.74	462	12.75	47	405	12.75	42	352	12.75	36	292	12.75	29	130	12.67	13
DIVERSION	TO	D56tP	1.74	462	12.75	47	405	12.75	42	352	12.75	36	292	12.75	29	130	12.67	13
HYDROGRAPH	AT	D56t	1.74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D56tS	1.74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D56tW	1.74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R56tW	1.74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	60t	0.33	285	12.42	22	240	12.42	19	196	12.42	16	143	12.5	13	58	12.58	6
ROUTED TO		S60t	0.33	285	12.42	21	240	12.42	19	196	12.42	16	144	12.5	12	58	12.58	6
HYDROGRAPH	AT	BD60sS	1.87	150	12.75	6	104	12.83	4	57	12.92	2	11	12.42	0	0	0	0
ROUTED TO		R60sS	1.87	142	12.92	6	98	13	4	51	13.17	2	4	12.92	0	0	0	0
3 COMBINED	AT	C60t	2.68	356	12.75	27	272	12.67	22	204	12.58	17	144	12.5	12	58	12.58	6
DIVERSION	TO	D60tS	2.68	96	12.75	7	73	12.67	6	55	12.58	5	38	12.5	3	15	12.58	2
HYDROGRAPH	AT	D60tW	2.68	260	12.75	20	198	12.67	16	149	12.58	13	103	12.5	9	41	12.58	4
ROUTED TO		R60tW	2.68	256	12.92	20	196	12.92	16	147	12.83	13	99	12.75	9	39	13	4
HYDROGRAPH	AT	64t	0.27	248	12.33	18	207	12.33	16	169	12.42	13	123	12.42	11	50	12.5	5
HYDROGRAPH	AT	BD64sP	2.54	327	12	49	327	12.08	45	327	12.08	41	327	12.25	33	168	12.5	16
ROUTED TO		P64sS	2.54	327	12.08	49	327	12.17	45	327	12.17	41	327	12.33	33	167	12.5	16
HYDROGRAPH	AT	BD64sS	2.54	197	12.83	9	129	12.92	6	70	12.75	3	22	12.33	0	0	0	0
ROUTED TO		R64sS	2.54	191	13	9	126	13.08	6	65	13.08	3	15	12.92	0	0	0	0
2 COMBINED	AT	C64sS	2.54	518	13	58	453	13.08	51	392	13.08	44	342	12.83	34	167	12.5	16
3 COMBINED	AT	C64t	3.61	911	12.83	95	773	12.83	82	652	12.75	70	541	12.67	53	238	12.58	26
DIVERSION	TO	D64tPT	3.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64t	3.61	911	12.83	95	773	12.83	82	652	12.75	70	541	12.67	53	238	12.58	26
DIVERSION	TO	D64tP	3.61	375	12	67	375	12.08	62	375	12.08	56	375	12.25	47	238	12.58	26
HYDROGRAPH	AT	D64tI	3.61	536	12.83	29	398	12.83	21	277	12.75	13	166	12.67	5	0	0	0
DIVERSION	TO	D64tS	3.61	236	12.83	13	175	12.83	9	122	12.75	6	73	12.67	2	0	0	0
HYDROGRAPH	AT	D64tW	3.61	300	12.83	16	223	12.83	12	155	12.75	8	93	12.67	3	0	0	0
ROUTED TO		R64tW	3.61	295	13	16	218	13	12	151	13	8	86	13	3	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	68t	0.25	262	12.33	16	222	12.33	14	182	12.33	12	132	12.42	9	51	12.42	4
HYDROGRAPH	AT	BD68sP	3.07	124	12.08	18	124	12.08	17	124	12.17	16	124	12.42	13	50	12.42	6
ROUTED TO		P68sS	3.07	124	12.17	18	124	12.17	17	124	12.25	16	124	12.5	13	50	12.5	6
HYDROGRAPH	AT	BD68sS	3.07	103	12.83	5	69	12.83	3	37	12.83	1	5	12.75	0	0	0	0
ROUTED TO		R68sS	3.07	101	13	5	64	13.17	3	33	13.17	1	3	13.17	0	0	0	0
2 COMBINED	AT	C68sS	3.07	225	13	23	188	13.17	20	157	13.17	17	126	13	13	50	12.5	6
3 COMBINED	AT	C68t	4.39	639	12.92	54	511	12.83	45	402	12.83	36	293	12.83	24	99	12.5	10
DIVERSION	TO	D68tP	4.39	124	11.92	24	124	12	22	124	12	20	124	12.08	17	99	12.5	10
HYDROGRAPH	AT	D68t	4.39	515	12.92	31	387	12.83	23	278	12.83	15	169	12.83	7	0	0	0
DIVERSION	TO	D68tS	4.39	237	12.92	14	178	12.83	10	128	12.83	7	78	12.83	3	0	0	0
HYDROGRAPH	AT	D68tW	4.39	278	12.92	16	209	12.83	12	150	12.83	8	91	12.83	4	0	0	0
ROUTED TO		R68tW	4.39	272	13.08	16	204	13.08	12	145	13.08	8	85	13.08	4	0	0	0
HYDROGRAPH	AT	72t	0.22	194	12.33	14	163	12.42	12	133	12.42	10	97	12.5	8	38	12.58	4
HYDROGRAPH	AT	BD72sS	4.68	194	12.92	11	139	13	8	86	13	5	59	12.5	2	0	0	0
ROUTED TO		R72sS	4.68	191	13.08	11	136	13.08	8	84	13.17	5	49	12.83	2	0	0	0
HYDROGRAPH	AT	BD72sP	4.68	662	12	223	662	12.08	207	662	12.17	193	662	12.25	171	546	12.75	109
DIVERSION	TO	D72sP2	4.68	229	12	77	229	12.08	72	229	12.17	67	229	12.25	59	189	12.75	38
HYDROGRAPH	AT	D72sP1	4.68	433	12	146	433	12.08	136	433	12.17	126	433	12.25	112	357	12.75	71
ROUTED TO		P72sS1	4.68	433	12.08	146	433	12.17	136	433	12.25	126	433	12.33	112	357	12.83	71
HYDROGRAPH	AT	B72sP2	4.68	229	12	77	229	12.08	72	229	12.17	67	229	12.25	59	189	12.75	38
ROUTED TO		P72sS2	4.68	229	12.08	77	229	12.17	72	229	12.25	67	229	12.33	59	189	12.83	38
3 COMBINED	AT	C72sS	4.68	853	13.08	234	798	13.08	215	746	13.17	197	711	12.83	173	546	12.83	109
3 COMBINED	AT	C72t	6.23	1234	13	263	1096	13	238	975	12.92	215	863	12.83	184	578	12.83	112
DIVERSION	TO	D72tP	6.23	714	12.08	233	714	12.08	216	714	12.17	201	714	12.33	178	578	12.83	112
HYDROGRAPH	AT	D72t	6.23	520	13	31	382	13	22	261	12.92	14	149	12.83	6	0	0	0
DIVERSION	TO	D72tS	6.23	275	13	16	202	13	12	139	12.92	8	79	12.83	3	0	0	0
HYDROGRAPH	AT	D72tW	6.23	244	13	14	179	13	10	123	12.92	7	70	12.83	3	0	0	0
ROUTED TO		R72tW	6.23	238	13.25	14	175	13.25	10	119	13.25	7	63	13.25	3	0	0	0
HYDROGRAPH	AT	76t	0.27	264	12.33	18	222	12.33	16	183	12.42	13	134	12.42	10	55	12.5	5
HYDROGRAPH	AT	BD76sP	13.28	204	11.83	67	204	11.92	63	204	12	59	204	12.08	52	204	12.42	27
ROUTED TO		P76sS	13.28	204	11.92	67	204	12	63	204	12.08	59	204	12.17	52	204	12.5	27
HYDROGRAPH	AT	BD76sS	13.28	317	13.25	30	231	13.33	22	150	13.5	15	62	12.92	7	12	12.75	0
ROUTED TO		R76sS	13.28	313	13.42	30	228	13.58	22	148	13.67	15	61	13.17	7	8	13.17	0
2 COMBINED	AT	C76sS	13.28	517	13.42	97	432	13.58	85	352	13.67	74	265	13.17	59	212	13.17	27
3 COMBINED	AT	C76t	15.1	821	13.33	127	656	13.33	110	510	13	93	389	13.08	71	255	12.5	32
DIVERSION	TO	D76tP	15.1	297	12	89	297	12.08	83	297	12.08	78	297	12.25	67	255	12.5	32
HYDROGRAPH	AT	D76t	15.1	524	13.33	39	359	13.33	26	213	13	15	92	13.08	4	0	0	0
DIVERSION	TO	D76tS	15.1	278	13.33	21	190	13.33	14	113	13	8	49	13.08	2	0	0	0
HYDROGRAPH	AT	D76tW	15.1	246	13.33	18	169	13.33	12	100	13	7	43	13.08	2	0	0	0
ROUTED TO		R76tW	15.1	239	13.58	18	165	13.58	12	98	13.5	7	38	13.5	2	0	0	0
HYDROGRAPH	AT	80t	0.25	215	12.33	14	178	12.33	12	141	12.33	10	98	12.42	8	35	12.5	4
3 COMBINED	AT	C80t	16.24	650	13.42	155	575	13.17	141	514	13.17	127	455	12.42	108	355	13.08	47
DIVERSION	TO	D80tP	16.24	364	12	128	364	12.08	120	364	12.08	113	364	12.25	101	355	13	47
HYDROGRAPH	AT	D80t	16.24	286	13.42	28	211	13.17	20	150	13.17	14	91	12.42	7	0	13.08	0
ROUTED TO		R80tS	16.24	285	13.5	28	210	13.25	20	149	13.25	14	86	12.75	7	0	13.33	0
HYDROGRAPH	AT	52u	0.39	257	12.42	15	203	12.42	12	153	12.5	10	95	12.5	7	19	12.75	2
HYDROGRAPH	AT	BD52tS	0.96	74	12.42	2	56	12.42	2	40	12.5	1	19	12.5	0	0	0	0
ROUTED TO		R52tS	0.96	65	12.83	2	47	12.92	2	31	13.08	1	12	13.17	0	0	0	0
2 COMBINED	AT	C52u	1.35	265	12.67	17	203	12.75	14	153	12.5	11	95	12.5	8	19	12.75	2

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		S52u	1.35	101	13.5	15	89	13.5	12	75	13.5	9	54	13.5	5	1	16.08	0
HYDROGRAPH	AT	BD52tP	0.96	281	12.08	43	281	12.08	39	281	12.17	36	281	12.33	31	153	12.83	16
ROUTED TO		P52tS	0.96	281	12.17	43	281	12.17	39	281	12.25	36	281	12.42	31	152	12.92	16
2 COMBINED	AT	CC52u	1.35	382	13.42	57	369	13.33	51	355	13.25	45	327	13.08	36	151	12.92	16
DIVERSION	TO	D52uP	1.35	281	12.17	52	281	12.17	47	281	12.25	42	281	12.42	35	151	12.92	16
HYDROGRAPH	AT	D52u	1.35	101	13.42	6	88	13.33	4	74	13.25	3	46	13.08	1	0	0	0
DIVERSION	TO	D52uS	1.35	32	13.42	2	28	13.33	1	24	13.25	1	15	13.08	0	0	0	0
HYDROGRAPH	AT	D52uW	1.35	69	13.42	4	60	13.33	3	50	13.25	2	31	13.08	1	0	0	0
ROUTED TO		R52uW	1.35	67	13.58	4	57	13.5	3	46	13.42	2	18	13.42	1	0	0	0
HYDROGRAPH	AT	56u	0.33	203	12.42	14	164	12.5	12	126	12.5	10	83	12.58	8	22	12.75	3
HYDROGRAPH	AT	BD56tS	1.74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R56tS	1.74	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 COMBINED	AT	C56u	2.46	204	12.5	18	164	12.58	15	126	12.5	12	83	12.58	8	22	12.75	3
ROUTED TO		S56u	2.46	204	12.67	17	162	12.67	14	121	12.75	11	75	12.92	8	5	15.33	3
HYDROGRAPH	AT	BD56tP	1.74	462	12.75	47	405	12.75	42	352	12.75	36	292	12.75	29	130	12.67	13
ROUTED TO		P56tS	1.74	462	12.75	47	405	12.75	42	352	12.75	36	292	12.75	29	130	12.67	13
2 COMBINED	AT	CC56u	2.46	662	12.75	64	566	12.75	55	472	12.75	47	364	12.83	36	132	12.67	15
DIVERSION	TO	D56uP	2.46	612	12.5	63	566	12.75	55	472	12.75	47	364	12.83	36	132	12.67	15
HYDROGRAPH	AT	D56u	2.46	50	12.75	1	0	0	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D56uS	2.46	11	12.75	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D56uW	2.46	40	12.75	1	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R56uW	2.46	22	13.17	1	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	60u	0.28	206	12.42	13	165	12.42	11	126	12.42	9	82	12.5	7	19	12.75	3
HYDROGRAPH	AT	BD60tS	2.68	96	12.75	7	73	12.67	6	55	12.58	5	38	12.5	3	15	12.58	2
ROUTED TO		R60tS	2.68	93	13.08	7	72	13.08	6	53	13.08	5	35	13	3	14	13.33	2
3 COMBINED	AT	C60u	3.68	243	12.67	21	194	12.67	17	151	12.75	14	100	12.83	10	29	13.17	4
ROUTED TO		S60u	3.68	241	12.75	21	192	12.75	17	149	12.83	14	99	12.92	10	28	13.25	4
DIVERSION	TO	D60uP	3.68	124	12.25	16	124	12.33	15	124	12.5	13	99	12.92	10	28	13.25	4
HYDROGRAPH	AT	D60u	3.68	117	12.75	5	68	12.75	2	25	12.83	1	0	0	0	0	0	0
DIVERSION	TO	D60uS	3.68	39	12.75	2	22	12.75	1	8	12.83	0	0	0	0	0	0	0
HYDROGRAPH	AT	D60uW	3.68	78	12.75	3	46	12.75	1	17	12.83	0	0	0	0	0	0	0
ROUTED TO		R60uW	3.68	74	13	3	40	13.08	1	10	13.33	0	0	0	0	0	0	0
HYDROGRAPH	AT	64u	0.3	245	12.42	17	203	12.42	15	163	12.42	12	114	12.5	10	42	12.58	5
HYDROGRAPH	AT	BD64tP	3.61	375	12	67	375	12.08	62	375	12.08	56	375	12.25	47	238	12.58	26
ROUTED TO		P64tS	3.61	375	12.08	67	375	12.17	62	375	12.17	56	375	12.33	47	237	12.67	26
HYDROGRAPH	AT	BD64tS	3.61	236	12.83	13	175	12.83	9	122	12.75	6	73	12.67	2	0	0	0
ROUTED TO		R64tS	3.61	232	13	13	171	13.08	9	118	13	6	65	13	2	0	0	0
2 COMBINED	AT	C64tS	3.61	607	13	79	546	13.08	71	493	13	62	440	13	50	237	12.67	26
3 COMBINED	AT	C64u	4.91	822	12.92	99	700	12.92	86	609	12.83	74	523	12.92	59	276	12.67	30
DIVERSION	TO	D64uPT	4.91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D64u	4.91	822	12.92	99	700	12.92	86	609	12.83	74	523	12.92	59	276	12.67	30
DIVERSION	TO	D64uP	4.91	375	12	73	375	12.08	68	375	12.08	62	375	12.25	53	276	12.67	30
HYDROGRAPH	AT	D64u1	4.91	447	12.92	26	325	12.92	19	234	12.83	13	148	12.92	6	0	0	0
DIVERSION	TO	D64uS	4.91	112	12.92	6	81	12.92	5	59	12.83	3	37	12.92	2	0	0	0
HYDROGRAPH	AT	D64uW	4.91	335	12.92	19	244	12.92	14	176	12.83	9	111	12.92	5	0	0	0
ROUTED TO		R64uW	4.91	325	13.17	19	239	13.17	14	169	13.08	9	106	13.17	5	0	0	0
HYDROGRAPH	AT	68u	0.28	251	12.42	18	212	12.42	15	173	12.42	13	125	12.5	10	48	12.58	5
HYDROGRAPH	AT	BD68tP	4.39	124	11.92	24	124	12	22	124	12	20	124	12.08	17	99	12.5	10
ROUTED TO		P68tS	4.39	124	12	24	124	12.08	22	124	12.08	20	124	12.17	17	98	12.58	10

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	BD68tS	4.39	237	12.92	14	178	12.83	10	128	12.83	7	78	12.83	3	0	0	0
ROUTED TO		R68tS	4.39	232	13.08	14	174	13.08	10	124	13.08	7	71	13.08	3	0	0	0
2 COMBINED	AT	C68tS	4.39	356	13.08	38	298	13.08	33	248	13.08	27	195	13.08	21	98	12.58	10
3 COMBINED	AT	C68u	5.97	817	13	74	657	13	61	526	12.92	49	380	13	35	144	12.58	14
DIVERSION	TO	D68uP	5.97	146	11.92	32	146	12	30	146	12	27	146	12.08	24	143	12.58	14
HYDROGRAPH	AT	D68u	5.97	671	13	42	511	13	32	380	12.92	22	234	13	11	1	12.58	0
DIVERSION	TO	D68uS	5.97	141	13	9	107	13	7	80	12.92	5	49	13	2	0	12.58	0
HYDROGRAPH	AT	D68uW	5.97	530	13	33	404	13	25	300	12.92	17	185	13	9	1	12.58	0
ROUTED TO		R68uW	5.97	525	13.17	33	400	13.17	25	294	13.17	17	179	13.25	9	0	13.17	0
HYDROGRAPH	AT	72u	0.26	235	12.42	15	198	12.42	13	162	12.42	11	115	12.42	8	41	12.58	4
2 COMBINED	AT	C72u	6.23	644	13	48	505	13	38	382	13.08	28	241	13.08	17	39	12.58	4
HYDROGRAPH	AT	BD72tP	6.23	714	12.08	233	714	12.08	216	714	12.17	201	714	12.33	178	578	12.83	112
DIVERSION	TO	D72tP2	6.23	281	12.08	92	281	12.08	85	281	12.17	79	281	12.33	70	228	12.83	44
HYDROGRAPH	AT	D72tP1	6.23	433	12.08	141	433	12.08	131	433	12.17	122	433	12.33	108	351	12.83	68
ROUTED TO		P72tS1	6.23	433	12.17	141	433	12.17	131	433	12.25	122	433	12.42	108	350	12.83	68
HYDROGRAPH	AT	B72tP2	6.23	281	12.08	92	281	12.08	85	281	12.17	79	281	12.33	70	228	12.83	44
ROUTED TO		P72tS2	6.23	281	12.17	92	281	12.17	85	281	12.25	79	281	12.42	70	227	12.83	44
HYDROGRAPH	AT	B72tS	6.23	275	13	16	202	13	12	139	12.92	8	79	12.83	3	0	0	0
ROUTED TO		R72tS	6.23	269	13.25	16	197	13.25	12	134	13.25	8	69	13.33	3	0	0	0
3 COMBINED	AT	C72tS	6.23	983	13.25	249	911	13.25	228	848	13.25	208	783	13.33	181	577	12.83	112
2 COMBINED	AT	CC72u	8.06	1614	13.08	296	1405	13.08	265	1222	13.08	236	1018	13.17	198	613	12.83	115
DIVERSION	TO	D72uP	8.06	714	12	238	714	12.08	221	714	12.17	206	714	12.25	183	613	12.83	115
HYDROGRAPH	AT	D72u	8.06	900	13.08	59	691	13.08	44	508	13.08	30	304	13.17	15	0	0	0
DIVERSION	TO	D72uS	8.06	279	13.08	18	214	13.08	14	157	13.08	9	94	13.17	5	0	0	0
HYDROGRAPH	AT	D72uW	8.06	621	13.08	40	477	13.08	30	350	13.08	21	210	13.17	11	0	0	0
ROUTED TO		R72uW	8.06	615	13.25	40	470	13.33	30	342	13.33	21	204	13.42	11	0	0	0
HYDROGRAPH	AT	BD76tP	15.1	297	12	89	297	12.08	83	297	12.08	78	297	12.25	67	255	12.5	32
DIVERSION	TO	D76tP2	15.1	48	12	14	48	12.08	13	48	12.08	13	48	12.25	11	41	12.5	5
HYDROGRAPH	AT	D76tP1	15.1	249	12	74	249	12.08	70	249	12.08	65	249	12.25	56	214	12.5	27
ROUTED TO		P76tS1	15.1	249	12.08	74	249	12.17	70	249	12.17	65	249	12.33	56	214	12.58	27
HYDROGRAPH	AT	B76tP2	15.1	48	12	14	48	12.08	13	48	12.08	13	48	12.25	11	41	12.5	5
ROUTED TO		P76tS2	15.1	48	12.17	14	48	12.17	13	48	12.25	13	48	12.42	11	41	12.67	5
HYDROGRAPH	AT	BD76tS	15.1	278	13.33	21	190	13.33	14	113	13	8	49	13.08	2	0	0	0
ROUTED TO		R76tS	15.1	270	13.5	21	186	13.58	14	111	13.5	8	43	13.5	2	0	0	0
3 COMBINED	AT	C76tS	15.1	567	13.5	109	483	13.58	97	408	13.5	85	340	13.5	69	255	12.58	32
HYDROGRAPH	AT	76u	0.28	261	12.42	17	219	12.42	14	178	12.42	12	126	12.5	9	43	12.58	4
3 COMBINED	AT	C76u	17.22	1229	13.25	162	1004	13.25	139	801	13.25	116	580	13.33	86	294	12.58	35
DIVERSION	TO	D76uP	17.22	297	11.92	92	297	12	86	297	12.08	80	297	12.17	69	294	12.58	35
HYDROGRAPH	AT	D76u	17.22	932	13.25	71	707	13.25	52	504	13.25	36	283	13.33	17	0	0	0
DIVERSION	TO	D76uS	17.22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D76uW	17.22	932	13.25	71	707	13.25	52	504	13.25	36	283	13.33	17	0	0	0
ROUTED TO		R76uW	17.22	929	13.33	71	704	13.33	52	500	13.42	36	280	13.5	17	0	0	0
HYDROGRAPH	AT	80u	0.25	252	12.33	17	213	12.33	15	176	12.33	13	129	12.42	10	54	12.5	5
3 COMBINED	AT	C80u	18.61	1270	13.25	114	969	13.25	86	695	13.33	61	390	13.42	33	49	12.5	5
HYDROGRAPH	AT	BD80tP	16.24	364	12	128	364	12.08	120	364	12.08	113	364	12.25	101	355	13	47
ROUTED TO		P80tS	16.24	364	12.08	128	364	12.17	120	364	12.17	113	364	12.33	101	355	13.08	47
HYDROGRAPH	AT	BD80qW	14.17	2500	13.33	233	1805	13.42	171	1156	13.58	111	522	13.08	43	0	0	0
3 COMBINED	AT	CC80u	18.61	4071	13.33	468	3075	13.42	372	2141	13.5	281	1240	13.17	174	389	12.92	51
ROUTED TO		S-I17	18.61	2788	14.33	466	1428	14.92	370	519	16.17	280	461	15.5	174	249	13.83	51

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
DIVERSION	TO	D80uP	18.61	509	13.58	322	509	14	313	509	16.17	280	461	15.5	174	249	13.83	51
HYDROGRAPH	AT	D80u	18.61	2279	14.33	144	919	14.92	57	10	16.17	1	0	0	0	0	0	0
ROUTED TO		R80uW	18.61	2250	14.42	144	880	15.17	57	8	16.67	1	0	0	0	0	0	0
HYDROGRAPH	AT	84t	0.27	237	12.33	20	200	12.42	18	166	12.42	15	123	12.42	12	53	12.58	6
HYDROGRAPH	AT	P84tN	0.5	252	13	19	252	13	19	252	13	19	252	13	19	252	13	19
2 COMBINED	AT	C84t	0.77	398	13	39	381	13	36	364	13	34	341	13	31	297	13	25
DIVERSION	TO	D84tP	0.77	252	12.25	34	252	12.33	32	252	12.42	31	252	12.5	29	252	12.83	25
HYDROGRAPH	AT	D84t	0.77	146	13	5	129	13	4	112	13	3	89	13	2	45	13	0
DIVERSION	TO	D84tW	0.77	19	13	1	17	13	1	14	13	0	12	13	0	6	13	0
HYDROGRAPH	AT	D84tS	0.77	127	13	4	112	13	3	97	13	2	77	13	1	40	13	0
ROUTED TO		R84tS	0.77	113	13.08	4	93	13.17	3	73	13.17	2	44	13.25	1	10	13.33	0
HYDROGRAPH	AT	84u	0.26	229	12.42	17	191	12.42	14	153	12.42	12	104	12.5	9	33	12.58	4
3 COMBINED	AT	C84u	9.04	2618	14.33	184	1196	14.92	90	150	13.08	16	100	13.17	10	33	13.25	4
ROUTED TO		S84u	9.04	2611	14.33	184	1190	14.92	90	149	13.17	16	99	13.17	10	22	13.75	4
HYDROGRAPH	AT	BD84tP	0.77	252	12.25	34	252	12.33	32	252	12.42	31	252	12.5	29	252	12.83	25
ROUTED TO		P84tS	0.77	252	12.33	34	252	12.42	32	252	12.5	31	252	12.58	29	252	12.92	25
2 COMBINED	AT	CC84u	9.04	2706	14.33	217	1239	14.92	123	401	13.17	46	351	13.17	39	271	13.17	29
DIVERSION	TO	D84uP	9.04	252	12.17	72	252	12.25	67	252	12.33	39	252	12.5	35	252	12.83	29
HYDROGRAPH	AT	D84u	9.04	2454	14.33	145	987	14.92	56	149	13.17	7	99	13.17	4	19	13.17	0
DIVERSION	TO	D84uS	9.04	491	14.33	29	197	14.92	11	30	13.17	1	20	13.17	1	4	13.17	0
HYDROGRAPH	AT	D84uW	9.04	1963	14.33	116	790	14.92	45	119	13.17	6	79	13.17	3	15	13.17	0
ROUTED TO		R84uW	9.04	1943	14.42	116	774	15.08	45	116	13.33	6	76	13.42	3	8	13.5	0
HYDROGRAPH	AT	88t	0.26	176	12.42	16	146	12.5	14	117	12.5	12	83	12.58	9	32	12.75	5
HYDROGRAPH	AT	BD84tW	0.77	19	13	1	17	13	1	14	13	0	12	13	0	6	13	0
ROUTED TO		R84tW	0.77	15	13.33	1	12	13.42	1	9	13.42	0	5	13.58	0	1	13.83	0
2 COMBINED	AT	C88t	1.03	176	12.42	17	146	12.5	15	117	12.5	12	83	12.58	10	32	12.75	5
DIVERSION	TO	D88tW	1.03	52	12.42	5	43	12.5	4	35	12.5	4	25	12.58	3	10	12.75	1
HYDROGRAPH	AT	D88tS	1.03	121	12.42	12	100	12.5	10	81	12.5	8	57	12.58	7	22	12.75	3
ROUTED TO		R88tS	1.03	117	12.67	12	97	12.75	10	78	12.75	8	55	12.92	7	21	13.25	3
HYDROGRAPH	AT	88u	0.25	202	12.42	16	169	12.42	14	138	12.5	12	100	12.5	9	38	12.58	5
3 COMBINED	AT	C88u	9.55	2000	14.42	143	803	15.08	68	289	12.83	26	188	13.08	19	53	13	8
DIVERSION	TO	D88uP	9.55	36	11.75	14	36	11.83	13	36	11.92	11	36	12	10	36	12.42	7
HYDROGRAPH	AT	D88u	9.55	1964	14.42	129	767	15.08	55	253	12.83	15	152	13.08	9	17	13	1
DIVERSION	TO	D88uS	9.55	1492	14.42	98	583	15.08	41	193	12.83	11	115	13.08	7	13	13	1
HYDROGRAPH	AT	D88uW	9.55	471	14.42	31	184	15.08	13	61	12.83	4	36	13.08	2	4	13	0
ROUTED TO		R88uW	9.55	437	14.75	31	164	15.42	13	55	13.25	4	33	13.5	2	3	13.75	0
HYDROGRAPH	AT	BD88uP	9.55	36	11.75	14	36	11.83	13	36	11.92	11	36	12	10	36	12.42	7
ROUTED TO		P88uW	9.55	36	11.92	14	36	11.92	13	36	12.08	11	36	12.17	10	36	12.58	7
2 COMBINED	AT	C88uW	9.55	473	14.75	45	200	15.42	26	91	13.25	14	69	13.5	12	39	13.75	7
HYDROGRAPH	AT	92t	0.17	104	12.42	9	85	12.5	8	67	12.5	7	45	12.58	5	15	12.75	2
HYDROGRAPH	AT	BD88tW	1.03	52	12.42	5	43	12.5	4	35	12.5	4	25	12.58	3	10	12.75	1
ROUTED TO		R88tW	1.03	50	12.67	5	42	12.75	4	33	12.83	4	23	12.92	3	9	13.17	1
2 COMBINED	AT	C92t	1.21	148	12.58	14	120	12.67	12	94	12.67	10	65	12.75	8	23	13	4
ROUTED TO		R92tS	1.21	145	12.75	14	118	12.83	12	93	12.83	10	64	13	8	22	13.33	4
HYDROGRAPH	AT	92u	0.25	187	12.42	16	155	12.42	14	125	12.42	12	89	12.5	9	35	12.58	4
HYDROGRAPH	AT	P92uN	2.5	141	13	15	141	13	15	141	13	15	141	13	15	141	13	15
4 COMBINED	AT	C92u	10.17	562	14.67	88	455	13	65	399	13	50	326	13	42	227	13	29
DIVERSION	TO	D92uP	10.17	201	12.17	57	201	12.17	52	201	12.25	41	201	12.42	38	201	12.83	29
HYDROGRAPH	AT	D92u	10.17	361	14.67	31	254	13	13	198	13	9	125	13	5	26	13	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		R92uS	10.17	353	14.75	31	251	13	13	191	13.08	9	119	13.08	5	16	13.17	0
HYDROGRAPH	AT	B92uP	10.17	201	12.17	57	201	12.17	52	201	12.25	41	201	12.42	38	201	12.83	29
ROUTED TO		P92uS	10.17	201	12.25	57	201	12.25	52	201	12.33	41	201	12.5	38	201	12.92	29
2 COMBINED	AT	C92uS	10.17	554	14.75	88	452	13	65	392	13.08	50	320	13.08	42	217	13.17	29
HYDROGRAPH	AT	76v	0.24	156	12.42	14	128	12.42	12	101	12.5	10	71	12.58	8	25	12.67	4
HYDROGRAPH	AT	B76uP	17.22	297	11.92	92	297	12	86	297	12.08	80	297	12.17	69	294	12.58	35
DIVERSION	TO	D76uP1	17.22	249	11.92	77	249	12	72	249	12.08	67	249	12.17	58	246	12.58	30
HYDROGRAPH	AT	D76uP2	17.22	48	11.92	15	48	12	14	48	12.08	13	48	12.17	11	47	12.58	6
ROUTED TO		P76uS2	17.22	48	12	15	48	12.17	14	48	12.17	13	48	12.25	11	47	12.67	6
HYDROGRAPH	AT	BD76uS	17.22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R76uS	17.22	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C76uS	17.22	48	12	15	48	12.17	14	48	12.17	13	48	12.25	11	47	12.67	6
2 COMBINED	AT	C76v	8.24	198	12.42	28	171	12.42	26	145	12.5	23	116	12.58	19	71	12.67	9
DIVERSION	TO	D76vP	8.24	109	12.08	25	109	12.17	24	109	12.25	22	109	12.42	19	71	12.67	9
HYDROGRAPH	AT	D76v	8.24	89	12.42	3	62	12.42	2	36	12.5	1	7	12.58	0	0	0	0
DIVERSION	TO	D76vS	8.24	47	12.42	2	33	12.42	1	19	12.5	1	4	12.58	0	0	0	0
HYDROGRAPH	AT	D76vW	8.24	42	12.42	1	29	12.42	1	17	12.5	0	3	12.58	0	0	0	0
ROUTED TO		R76vW	8.24	37	12.92	1	25	13	1	12	13.17	0	1	13.5	0	0	0	0
HYDROGRAPH	AT	80v	0.23	216	12.33	18	183	12.33	15	151	12.42	13	113	12.42	11	49	12.5	6
HYDROGRAPH	AT	B76uP1	17.22	249	11.92	77	249	12	72	249	12.08	67	249	12.17	58	246	12.58	30
ROUTED TO		P76uS1	17.22	249	12.08	77	249	12.17	72	249	12.25	67	249	12.33	58	246	12.67	30
3 COMBINED	AT	C80v	8.23	457	12.33	96	426	12.33	89	395	12.42	81	358	12.42	70	295	12.67	36
DIVERSION	TO	D80vP	8.23	249	11.92	83	249	12	78	249	12.08	73	249	12.17	64	249	12.5	35
HYDROGRAPH	AT	D80v	8.23	208	12.33	13	177	12.33	11	146	12.42	9	109	12.42	6	46	12.67	1
DIVERSION	TO	D80vS	8.23	117	12.33	7	99	12.33	6	82	12.42	5	61	12.42	3	26	12.67	1
HYDROGRAPH	AT	D80vW	8.23	92	12.33	6	78	12.33	5	64	12.42	4	48	12.42	3	20	12.67	1
ROUTED TO		R80vW	8.23	86	13	6	71	13.08	5	56	13.17	4	40	13.25	3	12	13.75	1
HYDROGRAPH	AT	84v	0.25	138	12.42	12	97	12.5	9	63	12.5	7	43	12.58	6	23	12.67	3
HYDROGRAPH	AT	BD80uP	18.61	509	13.58	322	509	14	313	509	16.17	280	461	15.5	174	249	13.83	51
ROUTED TO		P80uS	18.61	509	13.67	322	509	14.17	313	509	16.17	280	461	15.58	174	249	13.83	51
3 COMBINED	AT	C84v	8.73	643	13.17	341	592	13.33	328	548	13.75	304	491	14.25	193	281	13.83	58
HYDROGRAPH	AT	BD84uP	9.04	252	12.17	72	252	12.25	67	252	12.33	39	252	12.5	35	252	12.83	29
ROUTED TO		P84uS	9.04	252	12.25	72	252	12.33	67	252	12.42	39	252	12.58	35	252	12.92	29
HYDROGRAPH	AT	BD84uS	9.04	491	14.33	29	197	14.92	11	30	13.17	1	20	13.17	1	4	13.17	0
ROUTED TO		R84uS	9.04	482	14.5	29	190	15.17	11	28	13.33	1	18	13.42	1	2	13.67	0
2 COMBINED	AT	C84uS	9.04	734	14.5	101	442	15.17	78	280	13.33	41	270	13.42	36	253	13.33	29
2 COMBINED	AT	CC84v	9.76	1283	14.5	440	972	15.17	405	823	13.58	344	741	13.58	228	512	13.42	86
DIVERSION	TO	D84vP	9.76	1269	14.5	440	972	15.17	405	823	13.58	344	741	13.58	228	512	13.42	86
HYDROGRAPH	AT	D84v	9.76	14	14.5	0	0	0	0	0	0	0	0	0	0	0	0	0
DIVERSION	TO	D84vS	9.76	5	14.5	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	D84vW	9.76	9	14.5	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R84vW	9.76	1	14.83	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	88v	0.25	188	12.5	17	159	12.5	15	130	12.5	12	96	12.58	9	39	12.67	5
HYDROGRAPH	AT	BD88uS	9.55	1492	14.42	98	583	15.08	41	193	12.83	11	115	13.08	7	13	13	1
ROUTED TO		R88uS	9.55	1474	14.58	98	566	15.25	41	185	13.08	11	111	13.33	7	12	13.58	1
3 COMBINED	AT	C88v	10.52	1482	14.58	113	557	15.25	54	287	13	23	179	13.17	16	43	13.08	5
DIVERSION	TO	D88vP	10.52	51	12	15	51	12	14	51	12.08	10	51	12.25	9	43	13.08	5
HYDROGRAPH	AT	D88v	10.52	1431	14.58	98	506	15.25	41	236	13	13	128	13.17	7	0	0	0
ROUTED TO		R88vW	10.52	1392	14.75	98	473	15.5	41	224	13.25	13	122	13.42	7	0	0	0

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	92v	0.16	161	12.33	14	139	12.33	12	116	12.33	11	88	12.33	8	42	12.42	5
3 COMBINED	AT	C92v	11.3	1903	14.75	197	816	13.08	116	660	13.08	73	468	13.17	57	243	13.08	34
DIVERSION	TO	D92v	11.3	1702	14.75	132	615	13.08	55	459	13.08	26	267	13.17	15	42	13.08	1
HYDROGRAPH	AT	D92vP	11.3	201	12	65	201	12.08	61	201	12.08	47	201	12.17	43	201	12.58	33
ROUTED TO		P92vS	11.3	201	12.17	65	201	12.25	61	201	12.25	47	201	12.33	43	201	12.75	33
HYDROGRAPH	AT	88w	0.6	422	12.42	34	349	12.5	30	279	12.5	25	192	12.58	19	69	12.67	9
HYDROGRAPH	AT	BD88vP	10.52	51	12	15	51	12	14	51	12.08	10	51	12.25	9	43	13.08	5
ROUTED TO		P88vS	10.52	51	12.08	15	51	12.08	14	51	12.25	10	51	12.33	9	43	13.17	5
3 COMBINED	AT	C88w	11.9	657	12.42	113	586	12.5	103	518	12.5	80	436	12.58	70	304	12.92	46
HYDROGRAPH	AT	44v	0.24	91	12.42	8	68	12.5	6	47	12.5	5	27	12.58	4	14	12.67	2
HYDROGRAPH	AT	BD44sP	3.79	201	11.83	56	201	11.92	51	201	12	47	201	12.08	41	201	12.42	27
ROUTED TO		P44sS	3.79	201	12.08	56	201	12.17	51	201	12.25	47	201	12.33	41	201	12.67	27
2 COMBINED	AT	C44v	4.03	287	12.42	63	266	12.5	58	245	12.5	52	227	12.58	44	215	12.67	29
HYDROGRAPH	AT	B48oPT	14.34	2557	13.42	360	2082	13.33	290	1516	13.25	227	1041	12.83	158	500	13	76
ROUTED TO		PT48o	14.34	2556	13.42	360	2080	13.33	290	1515	13.25	227	1040	12.83	158	500	13	76
HYDROGRAPH	AT	B48qPT	2.87	336	12.67	24	267	12.75	19	202	12.75	15	120	12.75	10	42	12.67	4
2 COMBINED	AT	CPT48q	16.11	2727	13.33	380	2222	13.25	306	1639	13.08	239	1144	12.83	167	533	13	79
ROUTED TO		PT48q	16.11	2727	13.33	380	2220	13.25	306	1639	13.17	239	1142	12.92	167	532	13	79
HYDROGRAPH	AT	B48sPT	4.31	1048	12.92	74	841	12.92	57	614	13	40	353	13	24	63	13	6
2 COMBINED	AT	CPT48s	17.54	3629	13.08	447	2943	13.08	357	2191	13	275	1463	12.92	189	583	13	84
ROUTED TO		PT48s	17.54	3627	13.08	447	2940	13.17	358	2189	13.08	275	1461	13	189	582	13.17	84
HYDROGRAPH	AT	48v	0.3	212	12.42	22	177	12.42	19	143	12.42	16	105	12.5	13	54	12.58	7
2 COMBINED	AT	C48v	17.84	3744	13.08	467	3038	13.08	375	2277	13.08	290	1539	13	200	623	13.08	91
2 COMBINED	AT	NUL48v	18.08	3995	13.08	528	3280	13.08	430	2508	13.08	340	1761	13	243	835	13.08	120
HYDROGRAPH	AT	52v	0.3	121	12.5	10	93	12.5	8	66	12.5	7	35	12.58	4	16	12.75	2
HYDROGRAPH	AT	BD52uP	1.35	281	12.17	52	281	12.17	47	281	12.25	42	281	12.42	35	151	12.92	16
ROUTED TO		P52uS	1.35	281	12.25	52	281	12.25	47	281	12.33	42	281	12.5	35	150	12.92	16
HYDROGRAPH	AT	BD52uS	1.35	32	13.42	2	28	13.33	1	24	13.25	1	15	13.08	0	0	0	0
ROUTED TO		R52uS	1.35	31	13.58	2	26	13.5	1	21	13.5	1	8	13.42	0	0	0	0
2 COMBINED	AT	C52uS	1.35	312	13.58	53	307	13.5	48	302	13.5	43	289	13.33	35	150	12.92	16
2 COMBINED	AT	C52v	1.64	403	12.58	63	373	12.58	56	346	12.83	49	315	13.25	40	165	12.92	18
2 COMBINED	AT	NUL52v	19.72	4353	13.08	585	3622	13.08	481	2831	13.08	385	2062	13	280	981	13.08	136
HYDROGRAPH	AT	56v	0.23	122	12.5	11	98	12.5	9	75	12.58	8	51	12.67	6	15	12.83	2
HYDROGRAPH	AT	BD56uP	2.46	612	12.5	63	566	12.75	55	472	12.75	47	364	12.83	36	132	12.67	15
ROUTED TO		P56uS	2.46	612	12.58	63	565	12.75	55	471	12.83	47	363	12.92	36	131	12.75	15
HYDROGRAPH	AT	BD56uS	2.46	11	12.75	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R56uS	2.46	7	13.08	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	C56uS	2.46	618	13	63	565	12.75	55	471	12.83	47	363	12.92	36	131	12.75	15
2 COMBINED	AT	C56v	2.69	728	12.58	74	654	12.75	64	541	12.75	54	410	12.83	41	145	12.75	18
2 COMBINED	AT	NUL56v	21.07	5024	13	653	4188	13	540	3308	13.08	434	2445	12.92	318	1099	13	152
HYDROGRAPH	AT	60v	0.23	153	12.42	14	127	12.42	12	101	12.5	10	71	12.5	8	26	12.67	4
HYDROGRAPH	AT	BD60uP	3.68	124	12.25	16	124	12.33	15	124	12.5	13	99	12.92	10	28	13.25	4
ROUTED TO		P60uS	3.68	124	12.33	16	124	12.42	15	124	12.58	13	99	13	10	28	13.33	4
HYDROGRAPH	AT	BD60uS	3.68	39	12.75	2	22	12.75	1	8	12.83	0	0	0	0	0	0	0
ROUTED TO		R60uS	3.68	37	12.92	2	20	13.08	1	6	13.17	0	0	0	0	0	0	0
2 COMBINED	AT	C60uS	3.68	161	12.92	17	144	13.08	15	130	13.17	13	99	13	10	28	13.33	4
2 COMBINED	AT	C60v	3.91	282	12.67	31	247	12.5	27	220	12.58	23	159	12.83	17	50	13.17	8
2 COMBINED	AT	NUL60v	22.51	5260	13	680	4398	13	564	3489	13	454	2586	12.92	333	1140	13	159
HYDROGRAPH	AT	BPT64o	21.04	4032	13.33	629	3389	13.33	509	2767	13.25	401	1928	13.33	285	834	13.08	134

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	B64qPT	1.51	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	CPT64q	22.55	4032	13.33	629	3389	13.33	509	2767	13.25	401	1928	13.33	285	834	13.08	134
ROUTED TO		PT64q	22.55	4020	13.42	626	3373	13.33	507	2754	13.25	399	1916	13.33	284	830	13.08	133
HYDROGRAPH	AT	B64sPT	2.54	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	CPT64s	23.58	4020	13.42	626	3373	13.33	507	2754	13.25	399	1916	13.33	284	830	13.08	133
ROUTED TO		PT64s	23.58	4011	13.42	624	3363	13.42	505	2747	13.33	398	1906	13.42	283	828	13.17	133
HYDROGRAPH	AT	B64tPT	3.61	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	CPT64t	24.65	4011	13.42	624	3363	13.42	505	2747	13.33	398	1906	13.42	283	828	13.17	133
ROUTED TO		PT64t	24.65	4002	13.42	622	3354	13.42	504	2740	13.33	397	1899	13.42	282	826	13.17	133
HYDROGRAPH	AT	B64uPT	4.91	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2 COMBINED	AT	CPT64u	25.95	4002	13.42	622	3354	13.42	504	2740	13.33	397	1899	13.42	282	826	13.17	133
ROUTED TO		PT64u	25.95	3990	13.42	620	3343	13.42	502	2731	13.33	396	1890	13.42	281	823	13.17	132
HYDROGRAPH	AT	64v	0.19	165	12.33	14	137	12.33	12	112	12.42	11	82	12.42	8	34	12.58	4
HYDROGRAPH	AT	BD64uP	4.91	375	12	73	375	12.08	68	375	12.08	62	375	12.25	53	276	12.67	30
ROUTED TO		P64uS	4.91	375	12.08	73	375	12.17	68	375	12.17	62	375	12.33	53	276	12.67	30
HYDROGRAPH	AT	BD64uS	4.91	112	12.92	6	81	12.92	5	59	12.83	3	37	12.92	2	0	0	0
ROUTED TO		R64uS	4.91	111	13	6	81	13.08	5	58	13	3	37	13	2	0	0	0
2 COMBINED	AT	C64uS	4.91	486	13	79	456	13.08	72	433	13	65	412	13	54	276	12.67	30
3 COMBINED	AT	C64v	26.15	4498	13.42	709	3826	13.42	582	3196	13.33	467	2314	13.42	341	1059	13.08	164
2 COMBINED	AT	NUL64v	44.28	9171	13.08	316	7764	13.17	86	6311	13.17	874	4525	13.17	642	2116	13.08	310
HYDROGRAPH	AT	68v	0.22	128	12.42	11	104	12.5	10	81	12.5	8	56	12.58	6	18	12.75	3
HYDROGRAPH	AT	BD68uP	5.97	146	11.92	32	146	12	30	146	12	27	146	12.08	24	143	12.58	14
ROUTED TO		P68uS	5.97	146	12	32	146	12.08	30	146	12.08	27	146	12.17	24	143	12.58	14
HYDROGRAPH	AT	BD68uS	5.97	141	13	9	107	13	7	80	12.92	5	49	13	2	0	12.58	0
ROUTED TO		R68uS	5.97	140	13.17	9	106	13.08	7	79	13.17	5	48	13.17	2	0	13	0
2 COMBINED	AT	C68uS	5.97	286	13.17	41	252	13.08	36	225	13.17	32	194	13.17	26	143	12.58	14
2 COMBINED	AT	C68v	6.19	376	12.92	51	329	12.92	45	287	13	39	237	13.08	32	159	12.58	17
2 COMBINED	AT	NUL68v	45.56	9492	13.08	360	8042	13.17	124	6559	13.17	908	4735	13.17	670	2231	13.08	325
HYDROGRAPH	AT	72v	0.41	328	12.33	28	273	12.42	25	222	12.42	21	163	12.42	17	67	12.58	9
HYDROGRAPH	AT	BD72uP	8.06	714	12	238	714	12.08	221	714	12.17	206	714	12.25	183	613	12.83	115
DIVERSION	TO	D72uP2	8.06	281	12	94	281	12.08	87	281	12.17	81	281	12.25	72	241	12.83	45
HYDROGRAPH	AT	D72uP1	8.06	433	12	144	433	12.08	134	433	12.17	125	433	12.25	111	372	12.83	70
ROUTED TO		P72uS1	8.06	433	12.17	144	433	12.25	134	433	12.33	125	433	12.42	111	371	12.92	70
HYDROGRAPH	AT	B72uP2	8.06	281	12	94	281	12.08	87	281	12.17	81	281	12.25	72	241	12.83	45
ROUTED TO		P72uS2	8.06	281	12.17	94	281	12.17	87	281	12.33	81	281	12.42	72	241	12.92	45
HYDROGRAPH	AT	BD72uS	8.06	279	13.08	18	214	13.08	14	157	13.08	9	94	13.17	5	0	0	0
ROUTED TO		R72uS	8.06	275	13.33	18	210	13.42	14	152	13.5	9	91	13.58	5	0	0	0
3 COMBINED	AT	C72uS	8.06	989	13.33	256	924	13.42	235	866	13.5	215	805	13.58	187	612	12.92	115
2 COMBINED	AT	C72v	8.47	1130	13.08	283	1045	13.17	259	968	13.17	235	883	13.17	203	671	12.92	124
2 COMBINED	AT	NUL72v	47.06	10547	13.08	622	9024	13.17	365	7478	13.17	128	5580	13.17	860	2849	13	437
HYDROGRAPH	AT	76w	0.33	121	12.42	6	89	12.42	5	60	12.5	4	26	12.58	2	1	12.75	0
HYDROGRAPH	AT	BD76vS	8.24	47	12.42	2	33	12.42	1	19	12.5	1	4	12.58	0	0	0	0
ROUTED TO		R76vS	8.24	44	12.75	2	30	12.75	1	16	12.92	1	2	13.08	0	0	0	0
HYDROGRAPH	AT	BD76vP	8.24	109	12.08	25	109	12.17	24	109	12.25	22	109	12.42	19	71	12.67	9
ROUTED TO		P76vS	8.24	109	12.25	25	109	12.33	24	109	12.33	22	109	12.5	19	71	12.75	9
2 COMBINED	AT	C76vS	8.24	153	12.75	27	139	12.75	25	125	12.92	22	111	12.92	19	71	12.75	9
2 COMBINED	AT	C76w	8.57	256	12.58	33	215	12.67	29	175	12.75	26	132	12.67	21	73	12.75	10
2 COMBINED	AT	NUL76w	56.1	10597	13.08	625	9057	13.08	369	7517	13.17	134	5604	13.17	866	2878	13	440
HYDROGRAPH	AT	80w	0.36	290	12.33	24	244	12.33	21	199	12.33	18	143	12.42	14	64	12.5	8

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH	AT	BD80vS	8.23	117	12.33	7	99	12.33	6	82	12.42	5	61	12.42	3	26	12.67	1
ROUTED TO		R80vS	8.23	112	12.67	7	93	12.67	6	76	12.75	5	54	12.92	3	18	13.25	1
2 COMBINED	AT	C80w	8.59	362	12.5	31	301	12.5	27	241	12.58	23	169	12.67	17	64	13	8
2 COMBINED	AT	NUL80w	58.09	10773	13.08	647	9207	13.08	389	7636	13.17	150	5707	13.08	879	2922	13	446
HYDROGRAPH	AT	BD84vS	9.76	5	14.5	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R84vS	9.76	1	14.83	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD84vP	9.76	1269	14.5	440	972	15.17	405	823	13.58	344	741	13.58	228	512	13.42	86
DIVERSION	TO	D84vP2	9.76	1017	14.5	353	779	15.17	325	660	13.58	275	594	13.58	183	411	13.42	69
HYDROGRAPH	AT	D84vP1	9.76	252	14.5	87	193	15.17	80	163	13.58	68	147	13.58	45	102	13.42	17
ROUTED TO		P84vS1	9.76	252	14.58	87	193	15.17	80	163	13.67	68	147	13.67	45	102	13.42	17
HYDROGRAPH	AT	B84vP2	9.76	1017	14.5	353	779	15.17	325	660	13.58	275	594	13.58	183	411	13.42	69
ROUTED TO		P84vS2	9.76	1017	14.58	353	779	15.17	325	660	13.67	275	594	13.67	183	410	13.42	69
3 COMBINED	AT	C84vS	9.76	1269	14.58	440	971	15.17	405	823	13.67	344	741	13.67	228	512	13.42	86
HYDROGRAPH	AT	84w	0.34	231	12.42	19	188	12.42	17	149	12.42	14	106	12.5	11	38	12.67	5
HYDROGRAPH	AT	BD80vP	8.23	249	11.92	83	249	12	78	249	12.08	73	249	12.17	64	249	12.5	35
ROUTED TO		P80vS	8.23	249	12.08	83	249	12.17	78	249	12.25	73	249	12.33	64	249	12.67	35
3 COMBINED	AT	C84w	10.1	1543	14.58	539	1234	15.17	497	1137	13.33	428	1037	13.42	302	787	13.42	125
2 COMBINED	AT	NUL84w	59.72	12001	13.08	134	10349	13.08	835	8708	13.17	520	6677	13.17	136	3667	13.08	557
2 COMBINED	AT	NUL88w	61.86	12459	13.08	235	10784	13.08	913	9103	13.17	592	7041	13.08	200	3948	13.08	599
HYDROGRAPH	AT	24s	0.19	183	12.25	10	150	12.25	9	118	12.25	8	82	12.33	6	27	12.42	3
ROUTED TO		S24s	0.19	144	12.5	8	112	12.58	7	80	12.67	5	42	13	3	0	20.75	0
HYDROGRAPH	AT	B28qP2	0.82	32	12.08	5	32	12.17	5	32	12.25	4	30	12.67	4	14	12.92	2
ROUTED TO		P28qE	0.82	32	12.17	5	32	12.25	5	32	12.33	4	30	12.67	4	14	13	2
2 COMBINED	AT	C24s	0.2	176	12.5	13	144	12.58	11	112	12.67	10	70	12.92	7	14	13	2
DIVERSION	TO	D24sP	0.2	176	12.5	13	144	12.58	11	112	12.67	10	70	12.92	7	14	13	2
HYDROGRAPH	AT	D24s	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R24sS	0.2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD24sP	0.2	176	12.5	13	144	12.58	11	112	12.67	10	70	12.92	7	14	13	2
DIVERSION	TO	D24sPE	0.2	23	12.5	2	18	12.58	1	14	12.67	1	9	12.92	1	2	13	0
HYDROGRAPH	AT	D24sPS	0.2	154	12.5	12	125	12.58	10	97	12.67	8	61	12.92	6	12	13	2
ROUTED TO		P24sS	0.2	153	12.58	12	124	12.67	10	97	12.83	8	60	13	6	12	13.17	2
2 COMBINED	AT	C24sS	0.2	153	12.58	12	124	12.67	10	97	12.83	8	60	13	6	12	13.17	2
HYDROGRAPH	AT	24t	0.26	199	12.25	6	152	12.25	5	110	12.25	4	62	12.33	3	6	12.42	1
2 COMBINED	AT	C24t	0.46	280	12.42	18	214	12.5	15	151	12.58	12	81	12.92	9	16	12.92	2
ROUTED TO		S24t	0.46	53	13.75	17	42	14	14	30	14.33	12	19	14.58	8	5	15	2
HYDROGRAPH	AT	04s	0.28	407	12.08	12	328	12.08	10	253	12.08	8	169	12.17	6	40	12.17	3
ROUTED TO		S04s	0.28	389	12.17	12	318	12.17	10	247	12.17	8	154	12.25	6	10	12.92	3
ROUTED TO		R04sS	0.28	349	12.25	12	281	12.25	10	211	12.25	8	131	12.33	6	10	13.17	3
HYDROGRAPH	AT	08q	0.44	469	12.17	24	388	12.25	21	311	12.25	18	220	12.25	14	73	12.33	7
ROUTED TO		R08qS	0.44	456	12.33	24	377	12.33	21	301	12.33	18	210	12.33	14	70	12.5	6
HYDROGRAPH	AT	08s	0.65	736	12.25	37	608	12.25	32	491	12.25	27	348	12.25	21	124	12.33	10
3 COMBINED	AT	C08s	1.37	1514	12.25	72	1233	12.25	62	966	12.25	52	663	12.33	40	192	12.42	19
ROUTED TO		S08s	1.37	1357	12.33	70	1016	12.42	60	692	12.5	51	324	12.75	40	44	13.83	19
DIVERSION	TO	D08sP	1.37	862	12.33	65	862	12.42	59	692	12.5	51	324	12.75	40	44	13.83	19
HYDROGRAPH	AT	D08s	1.37	495	12.33	5	154	12.42	1	0	0	0	0	0	0	0	0	0
ROUTED TO		R08sW	1.37	337	12.5	5	59	12.67	1	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	12q	0.4	387	12.17	12	298	12.17	10	223	12.25	8	141	12.25	6	16	12.33	1
ROUTED TO		R12qS	0.4	366	12.25	12	285	12.33	10	213	12.33	8	132	12.42	6	15	12.58	1
HYDROGRAPH	AT	12s	0.21	292	12.17	17	247	12.17	15	205	12.17	13	154	12.17	10	70	12.25	5

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation		Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
ROUTED TO		S12s	0.21	234	12.33	15	168	12.42	13	106	12.58	11	36	13.08	9	9	13.83	5
2 COMBINED	AT	C12s	0.61	585	12.33	26	421	12.42	23	268	12.5	19	140	12.42	14	23	12.67	7
ROUTED TO		R12sW	0.61	543	12.42	26	389	12.5	23	248	12.67	19	129	12.58	14	21	13	7
2 COMBINED	AT	C12sW	1.97	835	12.5	31	419	12.58	23	240	12.67	19	126	12.58	14	21	13	7
DIVERSION	TO	D16sP2	1.97	818	12.5	31	419	12.58	23	240	12.67	19	126	12.58	14	21	13	7
HYDROGRAPH	AT	D16s2	1.97	17	12.5	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	16o	0.21	487	12	18	420	12	16	354	12	14	269	12	11	129	12.08	6
ROUTED TO		R16oS	0.21	421	12.08	18	359	12.08	16	299	12.17	14	234	12.17	11	109	12.17	6
HYDROGRAPH	AT	16q	0.65	505	12.25	25	391	12.25	21	303	12.33	17	199	12.33	13	44	12.42	5
2 COMBINED	AT	C16q	0.86	856	12.17	43	690	12.17	36	547	12.17	31	385	12.17	24	142	12.25	11
ROUTED TO		S16q	0.86	484	12.5	25	313	12.67	19	176	12.92	13	39	13.92	6	0	0	0
DIVERSION	TO	D16qP	0.86	484	12.5	25	313	12.67	19	176	12.92	13	39	13.92	6	0	0	0
HYDROGRAPH	AT	D16q	0.86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R16qS	0.86	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	16s	0.42	608	12.17	29	514	12.17	26	421	12.17	22	308	12.17	17	126	12.25	9
3 COMBINED	AT	C16s	3.26	594	12.17	29	503	12.17	25	411	12.17	22	301	12.17	17	123	12.25	9
ROUTED TO		S16s	3.26	565	12.25	19	472	12.25	16	336	12.33	12	161	12.58	7	0	0	0
HYDROGRAPH	AT	BD16qP	0.86	484	12.5	25	313	12.67	19	176	12.92	13	39	13.92	6	0	0	0
DIVERSION	TO	D16qPW	0.86	129	12.5	7	83	12.67	5	47	12.92	3	10	13.92	2	0	0	0
HYDROGRAPH	AT	D16qPS	0.86	355	12.5	18	230	12.67	14	129	12.92	10	29	13.92	4	0	0	0
ROUTED TO		P16qS	0.86	349	12.58	18	225	12.75	14	128	12.92	10	29	13.92	4			
2 COMBINED	AT	CC16s	3.26	670	12.42	37	472	12.25	29	336	12.33	21	161	12.58	12	0	0	0
DIVERSION	TO	D16sP	3.26	658	12.42	37	472	12.25	29	336	12.33	21	161	12.58	12	0	0	0
HYDROGRAPH	AT	D16s	3.26	12	12.42	0	0	0	0	0	0	0	0	0	0	0	0	0
ROUTED TO		R16sS	3.26	7	12.58	0	0	0	0	0	0	0	0	0	0	0	0	0
HYDROGRAPH	AT	BD16sP	3.26	658	12.42	37	472	12.25	29	336	12.33	21	161	12.58	12	0	0	0
ROUTED TO		P16sS	3.26	653	12.42	37	448	12.25	29	314	12.42	21	157	12.58	12			
2 COMBINED	AT	C16sS	3.26	655	12.42	37	448	12.25	29	314	12.42	21	157	12.58	12	0	0	0
HYDROGRAPH	AT	20p	0.53	453	12.25	23	356	12.33	20	276	12.33	16	179	12.33	12	46	12.42	5
ROUTED TO		S20p1	0.53	450	12.33	22	357	12.33	19	274	12.33	15	177	12.42	11	45	12.5	4
HYDROGRAPH	AT	B16qPW	0.86	129	12.5	7	83	12.67	5	47	12.92	3	10	13.92	2	0	0	0
ROUTED TO		P16qW	0.86	127	12.58	7	82	12.75	5	46	13	3	10	14	2			
2 COMBINED	AT	C20p	1.39	505	12.42	29	352	12.33	23	274	12.33	19	177	12.42	13	45	12.5	4
ROUTED TO		S20p2	1.39	95	13.5	28	90	13.5	23	82	13.5	18	69	13.17	12	32	13.08	3
HYDROGRAPH	AT	OCCC48	3	5420	13	833	4607	13	708	3523	13	542	2493	13	383	976	13	150
HYDROGRAPH	AT	BD24oP	1.2	48	11.92	15	48	11.92	14	48	12	13	48	12.17	11	46	13	7
ROUTED TO		P24oS	1.2	48	12.08	15	48	12.08	14	48	12.17	13	48	12.33	11	46	13.08	7
2 COMBINED	AT	C24oS	3	5468	13	848	4655	13	722	3571	13	554	2541	13	394	1021	13	157
ROUTED TO		ROCCC	3	5392	13	848	4582	13	722	3510	13	554	2492	13	394	1005	13.08	157
2 COMBINED	AT	CC20p	4.39	5485	13	875	4670	13	744	3589	13	572	2560	13.08	406	1037	13.08	161
ROUTED TO		R20pS	4.39	5480	13.08	875	4685	13.08	744	3606	13.08	572	2576	13.08	406	1033	13.08	161
HYDROGRAPH	AT	20q	0.28	252	12.25	10	200	12.25	8	151	12.33	7	96	12.33	5	17	12.5	1
HYDROGRAPH	AT	B28pP2	3.11	68	12.17	13	68	12.25	12	68	12.33	11	68	12.67	9	38	13.17	5
ROUTED TO		P28pE	3.11	68	12.42	13	68	12.5	12	68	12.58	11	68	12.92	9	38	13.33	5
3 COMBINED	AT	C20q	4.67	5595	13.08	898	4798	13.08	765	3715	13.08	590	2677	13.08	420	1080	13.08	167
ROUTED TO		R20qS	4.67	5598	13.08	898	4793	13.08	765	3698	13.08	589	2657	13.08	420	1075	13.17	167
HYDROGRAPH	AT	20s	0.48	717	12.17	32	607	12.17	28	495	12.17	24	358	12.17	18	139	12.25	9
ROUTED TO		S20s	0.48	683	12.17	30	578	12.25	26	475	12.25	22	343	12.25	17	130	12.33	8
2 COMBINED	AT	C20s	5.15	5675	13.08	927	4865	13.08	790	3767	13.08	611	2718	13.08	436	1110	13.17	175

Table 6.1 Peak Flow Summary Table for the 24-Hour Storms

Operation	Hydrograph Name	Drainage Area (sq.mi.)	Q100 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q50 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q25 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q10 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)	Q2 (cfs)	Tp (hour)	24-Hour Avg. Flow (cfs)
HYDROGRAPH AT	B24sPE	0.2	23	12.5	2	18	12.58	1	14	12.67	1	9	12.92	1	2	13	0
ROUTED TO	P24sE	0.2	23	12.58	2	18	12.67	1	14	12.75	1	9	13	1	2	13.08	0
2 COMBINED AT	CC20s	5.35	5690	13.08	929	4879	13.08	791	3779	13.08	612	2727	13.08	437	1111	13.17	175
ROUTED TO	R20sS	5.35	5664	13.08	929	4848	13.08	791	3748	13.08	612	2716	13.17	437	1110	13.17	175
HYDROGRAPH AT	20t	0.26	85	12.42	4	60	12.5	3	36	12.5	2	11	12.67	1	2	12.75	0
ROUTED TO	S20t	0.26	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
3 COMBINED AT	C20t	8.01	5919	13.08	965	5075	13.08	819	3931	13.08	632	2769	13.17	448	1110	13.17	175
2 COMBINED AT	NUL20t	8.27	5962	13.08	979	5105	13.08	831	3952	13.08	642	2781	13.17	455	1112	13.17	177

TABLE 6.2

Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	64c	220	4.33	42	11	4	0.26
DIVERSION	TO	D64cS	149	4.33	28	7	2	0.26
HYDROGRAPH	AT	D64cW	71	4.33	13	3	1	0.26
ROUTED TO		R64cW	66	4.67	13	3	1	0.26
HYDROGRAPH	AT	68c	254	4.33	47	12	4	0.43
2 COMBINED	AT	C68c	273	4.5	57	15	5	0.7
DIVERSION	TO	D68cP	41	3.92	22	6	2	0.7
HYDROGRAPH	AT	D68c	232	4.5	35	9	3	0.7
DIVERSION	TO	D68cS	107	4.5	16	4	1	0.7
HYDROGRAPH	AT	D68cW	126	4.5	19	5	2	0.7
ROUTED TO		R68cW	116	4.75	19	5	2	0.7
HYDROGRAPH	AT	72c	133	4.58	39	10	3	0.54
2 COMBINED	AT	C72c	197	4.75	50	13	4	1.24
DIVERSION	TO	D72cP	90	4.58	36	9	3	1.24
HYDROGRAPH	AT	D72c	107	4.75	14	3	1	1.24
DIVERSION	TO	D72cS	96	4.75	12	3	1	1.24
HYDROGRAPH	AT	D72cW	11	4.75	1	0	0	1.24
ROUTED TO		R72cW	7	5.75	1	0	0	1.24
HYDROGRAPH	AT	76C	668	4.33	115	29	10	0.6
2 COMBINED	AT	C76c	542	4.42	107	27	9	1.84
DIVERSION	TO	D76c	503	4.42	84	21	7	1.84
HYDROGRAPH	AT	D76cP	39	3.75	23	6	2	1.84
HYDROGRAPH	AT	84c	422	4.5	112	29	10	0.47
DIVERSION	TO	D84cS	324	4.5	86	22	7	0.47
HYDROGRAPH	AT	D84cE	98	4.5	26	7	2	0.47
ROUTED TO		R84cE	92	4.83	26	7	2	0.47
HYDROGRAPH	AT	80c	598	4.42	126	32	11	0.66
ROUTED TO		S80c	583	4.5	119	30	10	0.66
2 COMBINED	AT	C80c	595	4.58	139	35	12	1.13
DIVERSION	TO	D80c	576	4.58	124	31	10	1.13
HYDROGRAPH	AT	D80cP	19	3.83	14	4	1	1.13
2 COMBINED	AT	C76cP	58	3.75	36	10	3	2.97
ROUTED TO		P76cS	58	3.92	36	10	3	2.97
DIVERSION	TO	D80eP1	19	3.92	12	3	1	2.97
HYDROGRAPH	AT	D76eP1	39	3.92	25	7	2	2.97
HYDROGRAPH	AT	56e	114	4.25	18	5	2	0.18
DIVERSION	TO	D56eS	60	4.25	10	2	1	0.18
HYDROGRAPH	AT	D56eW	53	4.25	9	2	1	0.18
ROUTED TO		R56eW	48	4.58	9	2	1	0.18
HYDROGRAPH	AT	60e	244	4.42	54	14	5	0.41
2 COMBINED	AT	C60e	273	4.5	61	15	5	0.58
DIVERSION	TO	D60eP	75	4.08	34	9	3	0.58
HYDROGRAPH	AT	D60e	198	4.5	28	7	2	0.58
DIVERSION	TO	D60eS	68	4.5	9	2	1	0.58
HYDROGRAPH	AT	D60eW	131	4.5	18	5	2	0.58
ROUTED TO		R60eW	124	4.83	18	5	2	0.58
HYDROGRAPH	AT	64e	231	4.42	54	14	5	0.5
HYDROGRAPH	AT	B64cS	149	4.33	28	7	2	0.26
ROUTED TO		R64cS	133	4.83	28	7	2	0.26
3 COMBINED	AT	C64e	355	4.83	83	21	7	1.35
DIVERSION	TO	D64eS	177	4.83	42	11	4	1.35
HYDROGRAPH	AT	D64eW	177	4.83	42	11	4	1.35
ROUTED TO		R64eW	172	5	42	11	4	1.35
HYDROGRAPH	AT	68e	219	4.5	52	13	4	0.5
HYDROGRAPH	AT	B68cP	41	3.92	22	6	2	0.7
ROUTED TO		P68cS	41	4.08	22	6	2	0.7
HYDROGRAPH	AT	B68cS	107	4.5	16	4	1	0.7
ROUTED TO		R68cS	98	4.83	16	4	1	0.7

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
2 COMBINED	AT	C68cS	139	4.83	38	10	3	0.7
3 COMBINED	AT	C68e	372	4.92	109	28	9	2.28
DIVERSION	TO	D68eP	63	3.92	42	11	4	2.28
HYDROGRAPH	AT	D68e	309	4.92	67	17	6	2.28
DIVERSION	TO	D68eS	167	4.92	36	9	3	2.28
HYDROGRAPH	AT	D68eW	142	4.92	31	8	3	2.28
ROUTED TO		R68eW	135	5.25	31	8	3	2.28
HYDROGRAPH	AT	72e	234	4.5	57	15	5	0.5
HYDROGRAPH	AT	B72cP	90	4.58	36	9	3	1.24
ROUTED TO		P72cS	90	4.67	36	9	3	1.24
HYDROGRAPH	AT	B72cS	96	4.75	12	3	1	1.24
ROUTED TO		R72cS	72	5.25	12	3	1	1.24
2 COMBINED	AT	C72cS	162	5.25	48	12	4	1.24
3 COMBINED	AT	C72e	325	5.25	108	28	9	3.32
DIVERSION	TO	D72eP	195	4.83	86	22	7	3.32
HYDROGRAPH	AT	D72e	130	5.25	22	6	2	3.32
DIVERSION	TO	D72eS	117	5.25	20	5	2	3.32
HYDROGRAPH	AT	D72eW	13	5.25	2	1	0	3.32
ROUTED TO		R72eW	10	6.25	2	1	0	3.32
HYDROGRAPH	AT	76e	375	4.42	78	20	7	0.5
HYDROGRAPH	AT	B76c	503	4.42	84	21	7	1.84
ROUTED TO		R76cS	477	4.67	84	21	7	1.84
4 COMBINED	AT	C76e	683	4.67	163	42	14	4.42
DIVERSION	TO	D76e	662	4.67	143	36	12	4.42
HYDROGRAPH	AT	D76eP	21	3.25	20	6	2	4.42
HYDROGRAPH	AT	BD84cS	324	4.5	86	22	7	0.47
ROUTED TO		R84cS	310	4.83	86	22	7	0.47
HYDROGRAPH	AT	84e	137	4.5	38	10	3	0.21
2 COMBINED	AT	C84e	423	4.75	122	32	11	0.68
DIVERSION	TO	D84eS	167	4.75	48	12	4	0.68
HYDROGRAPH	AT	D84eE	256	4.75	74	19	6	0.68
ROUTED TO		R84eE	243	5.17	74	19	6	0.68
HYDROGRAPH	AT	80e	482	4.33	94	24	8	0.49
HYDROGRAPH	AT	B80eP1	19	3.92	12	3	1	2.97
HYDROGRAPH	AT	BD80c	576	4.58	124	31	10	1.13
ROUTED TO		R80cS	548	4.83	124	31	10	1.13
4 COMBINED	AT	C80e	965	4.92	283	73	24	1.84
DIVERSION	TO	D80e	910	4.92	236	59	20	1.84
HYDROGRAPH	AT	D80eP	55	3.83	47	14	5	1.84
2 COMBINED	AT	C76eP	76	3.75	67	20	7	6.26
ROUTED TO		P76eS	76	3.83	67	20	7	6.26
DIVERSION	TO	D80gP1	55	3.83	49	14	5	6.26
HYDROGRAPH	AT	D76gP1	21	3.83	18	5	2	6.26
HYDROGRAPH	AT	76g	448	4.33	90	23	8	0.5
HYDROGRAPH	AT	BD76e	662	4.67	143	36	12	4.42
ROUTED TO		R76eS	640	4.92	143	36	12	4.42
3 COMBINED	AT	C76g	871	4.92	229	59	20	4.92
DIVERSION	TO	D76gP2	48	3.58	41	12	4	4.92
HYDROGRAPH	AT	D76g1	823	4.92	188	47	16	4.92
DIVERSION	TO	D76gP	57	3.92	32	8	3	4.92
HYDROGRAPH	AT	D76g	766	4.92	156	39	13	4.92
DIVERSION	TO	D76gS	536	4.92	109	27	9	4.92
HYDROGRAPH	AT	D76gE	230	4.92	47	12	4	4.92
ROUTED TO		R76gE	226	5	47	12	4	4.92
HYDROGRAPH	AT	B76gP2	48	3.58	41	12	4	4.92
2 COMBINED	AT	C76gE	274	5	88	24	8	4.92
HYDROGRAPH	AT	54g	281	4.25	43	11	4	0.25
DIVERSION	TO	D54gS	114	4.25	17	4	1	0.25

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	D54gW	168	4.25	26	6	2	0.25
ROUTED TO		R54gW	153	4.5	26	6	2	0.25
HYDROGRAPH	AT	56g	267	4.42	59	15	5	0.5
HYDROGRAPH	AT	B56eS	60	4.25	10	2	1	0.18
ROUTED TO		R56eS	50	4.83	10	2	1	0.18
3 COMBINED	AT	C56g	380	4.5	86	22	7	0.92
DIVERSION	TO	D56gP	130	4.17	54	14	5	0.92
HYDROGRAPH	AT	D56g	250	4.5	32	8	3	0.92
DIVERSION	TO	D56gS	140	4.5	18	4	1	0.92
HYDROGRAPH	AT	D56gW	110	4.5	14	3	1	0.92
ROUTED TO		R56gW	100	4.83	14	3	1	0.92
HYDROGRAPH	AT	60g	307	4.42	68	17	6	0.5
HYDROGRAPH	AT	B60eP	75	4.08	34	9	3	0.58
ROUTED TO		P60eS	75	4.17	34	9	3	0.58
HYDROGRAPH	AT	B60eS	68	4.5	9	2	1	0.58
ROUTED TO		R60eS	59	4.92	9	2	1	0.58
2 COMBINED	AT	C60eS	134	4.92	43	11	4	0.58
3 COMBINED	AT	C60g	366	4.83	108	27	9	1.83
DIVERSION	TO	D60gP	124	4	63	16	5	1.83
HYDROGRAPH	AT	D60g	242	4.83	44	11	4	1.83
DIVERSION	TO	D60gS	114	4.83	21	5	2	1.83
HYDROGRAPH	AT	D60gW	128	4.83	24	6	2	1.83
ROUTED TO		R60gW	117	5.08	24	6	2	1.83
HYDROGRAPH	AT	64g	220	4.5	54	14	5	0.5
HYDROGRAPH	AT	B64eS	177	4.83	42	11	4	1.35
ROUTED TO		R64eS	165	5.17	42	11	4	1.35
3 COMBINED	AT	C64g	321	5.17	94	24	8	3.1
DIVERSION	TO	D64gP	153	4.83	68	18	6	3.1
HYDROGRAPH	AT	D64g	168	5.17	26	6	2	3.1
DIVERSION	TO	D64gS	81	5.17	12	3	1	3.1
HYDROGRAPH	AT	D64gW	87	5.17	13	3	1	3.1
ROUTED TO		R64gW	81	5.42	13	3	1	3.1
HYDROGRAPH	AT	68g	146	4.58	42	11	4	0.5
HYDROGRAPH	AT	B68eP	63	3.92	42	11	4	2.28
ROUTED TO		P68eS	63	4	42	11	4	2.28
HYDROGRAPH	AT	B68eS	167	4.92	36	9	3	2.28
ROUTED TO		R68eS	155	5.25	36	9	3	2.28
2 COMBINED	AT	C68eS	218	5.25	78	20	7	2.28
3 COMBINED	AT	C68g	310	5.33	112	29	10	4.53
DIVERSION	TO	D68gP	82	3.92	58	16	5	4.53
HYDROGRAPH	AT	D68g	228	5.33	53	13	4	4.53
DIVERSION	TO	D68gS	128	5.33	30	7	2	4.53
HYDROGRAPH	AT	D68gW	100	5.33	23	6	2	4.53
ROUTED TO		R68gW	94	5.67	23	6	2	4.53
HYDROGRAPH	AT	72g	285	4.5	71	18	6	0.5
HYDROGRAPH	AT	B72eP	195	4.83	86	22	7	3.32
ROUTED TO		P72eS	195	4.92	86	22	7	3.32
HYDROGRAPH	AT	B72eS	117	5.25	20	5	2	3.32
ROUTED TO		R72eS	107	5.67	20	5	2	3.32
2 COMBINED	AT	C72eS	299	5.67	106	27	9	3.32
3 COMBINED	AT	C72g	426	5.42	167	43	14	6.07
2 COMBINED	AT	CC72g	637	5.08	243	64	21	7.67
DIVERSION	TO	D72gP	178	4.17	123	34	11	7.67
HYDROGRAPH	AT	D72g	459	5.08	120	30	10	7.67
ROUTED TO		R72gS	449	5.42	120	30	10	7.67
HYDROGRAPH	AT	BD72gP	178	4.17	123	34	11	7.67
ROUTED TO		P72gS	178	4.25	123	34	11	7.67
2 COMBINED	AT	C72gS	627	5.42	243	64	21	7.67

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	84g	155	4.42	41	10	3	0.21
HYDROGRAPH	AT	B84eS	167	4.75	48	12	4	0.68
ROUTED TO		R84eS	161	5.08	48	12	4	0.68
2 COMBINED	AT	C84g	255	5	85	22	7	0.9
DIVERSION	TO	D84gS	121	5	40	10	3	0.9
HYDROGRAPH	AT	D84gE	134	5	45	12	4	0.9
ROUTED TO		R84gE	128	5.42	45	12	4	0.9
HYDROGRAPH	AT	80g	384	4.42	83	21	7	0.5
HYDROGRAPH	AT	BD80e	910	4.92	236	59	20	1.84
ROUTED TO		R80eS	882	5.08	236	59	20	1.84
HYDROGRAPH	AT	B80gP1	55	3.83	49	14	5	6.26
4 COMBINED	AT	C80g	1168	5.08	384	100	33	2.55
DIVERSION	TO	D80g	1149	5.08	365	92	31	2.55
HYDROGRAPH	AT	D80gP	19	1.42	19	8	3	2.55
HYDROGRAPH	AT	B76gP	57	3.92	32	8	3	4.92
2 COMBINED	AT	C76gP	76	3.92	51	16	5	7.47
ROUTED TO		P76gS	76	4	51	16	5	7.47
DIVERSION	TO	D80iP1	19	4	13	4	1	7.47
HYDROGRAPH	AT	D76iP1	57	4	38	12	4	7.47
HYDROGRAPH	AT	76i	527	4.42	112	28	9	0.5
HYDROGRAPH	AT	BD76gS	536	4.92	109	27	9	4.92
ROUTED TO		R76gS	503	5.17	109	27	9	4.92
3 COMBINED	AT	C76i	770	5.08	241	63	21	5.42
DIVERSION	TO	D76i1	722	5.08	198	50	17	5.42
HYDROGRAPH	AT	D76iP2	48	3.42	43	14	5	5.42
HYDROGRAPH	AT	72i	352	4.42	84	21	7	0.5
3 COMBINED	AT	C72i	782	5.25	340	92	31	8.68
DIVERSION	TO	D72i	524	5.25	146	37	12	8.68
HYDROGRAPH	AT	D72iP	258	4.08	194	55	18	8.68
DIVERSION	TO	D72iP1	226	4.08	170	49	16	8.68
HYDROGRAPH	AT	D72iP2	32	4.08	24	7	2	8.68
ROUTED TO		P72iW	32	4.17	24	7	2	8.68
HYDROGRAPH	AT	BD76i1	722	5.08	198	50	17	5.42
2 COMBINED	AT	CC76i	743	5.08	220	56	19	5.92
DIVERSION	TO	D76i	665	5.08	168	42	14	5.92
HYDROGRAPH	AT	D76iP	78	3.83	52	14	5	5.92
HYDROGRAPH	AT	BD84gS	121	5	40	10	3	0.9
ROUTED TO		R84gS	116	5.33	40	10	3	0.9
HYDROGRAPH	AT	84i	126	4.5	37	9	3	0.21
2 COMBINED	AT	C84i	187	5.17	73	19	6	1.11
ROUTED TO		S84i	21	7.42	11	3	1	1.11
DIVERSION	TO	D84iS	8	7.42	4	1	0	1.11
HYDROGRAPH	AT	D84iE	13	7.42	7	2	1	1.11
ROUTED TO		R84iE	13	7.92	7	2	1	1.11
HYDROGRAPH	AT	80i	524	4.33	101	25	8	0.49
HYDROGRAPH	AT	BD80g	1149	5.08	365	92	31	2.55
ROUTED TO		S80g	1147	5.08	364	92	31	2.55
ROUTED TO		R80gS	1131	5.33	364	92	31	2.55
HYDROGRAPH	AT	B80iP1	19	4	13	4	1	7.47
4 COMBINED	AT	C80i	1268	5.25	452	117	39	3.25
DIVERSION	TO	D80i	1240	5.25	424	106	35	3.25
HYDROGRAPH	AT	D80iP	28	3.5	28	10	3	3.25
2 COMBINED	AT	C76iP	106	3.83	79	24	8	9.18
ROUTED TO		P76iS	106	3.92	79	24	8	9.18
DIVERSION	TO	D80kP1	28	3.92	21	6	2	9.18
HYDROGRAPH	AT	D76kP1	78	3.92	58	18	6	9.18
HYDROGRAPH	AT	76k	435	4.33	73	18	6	0.32
HYDROGRAPH	AT	BD76i	665	5.08	168	42	14	5.92

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
DIVERSION	TO	D76iE	213	5.08	54	13	4	5.92
HYDROGRAPH	AT	D76iS	452	5.08	114	29	10	5.92
ROUTED TO		R76iS	443	5.25	114	29	10	5.92
3 COMBINED	AT	C76k	641	5.08	236	63	21	5.74
DIVERSION	TO	D76k1	609	5.08	205	51	17	5.74
HYDROGRAPH	AT	D76kP2	32	3.25	31	12	4	5.74
HYDROGRAPH	AT	54i	140	4.33	33	8	3	0.19
HYDROGRAPH	AT	BD54gS	114	4.25	17	4	1	0.25
ROUTED TO		R54gS	103	4.58	17	4	1	0.25
2 COMBINED	AT	C54i	234	4.5	50	13	4	0.44
DIVERSION	TO	D54iP	68	4.08	30	8	3	0.44
HYDROGRAPH	AT	D54i	166	4.5	20	5	2	0.44
DIVERSION	TO	D54iS	62	4.5	8	2	1	0.44
HYDROGRAPH	AT	D54iW	104	4.5	13	3	1	0.44
ROUTED TO		R54iW	92	4.83	13	3	1	0.44
HYDROGRAPH	AT	56i	401	4.33	82	21	7	0.5
HYDROGRAPH	AT	BD56gP	130	4.17	54	14	5	0.92
ROUTED TO		P56gS	130	4.25	54	14	5	0.92
HYDROGRAPH	AT	BD56gS	140	4.5	18	4	1	0.92
ROUTED TO		R56gS	123	4.92	18	4	1	0.92
2 COMBINED	AT	C56gS	253	4.92	72	18	6	0.92
3 COMBINED	AT	C56i	499	4.83	150	38	13	1.62
DIVERSION	TO	D56iP	204	4.08	96	25	8	1.62
HYDROGRAPH	AT	D56i	295	4.83	54	14	5	1.62
DIVERSION	TO	D56iS	144	4.83	26	7	2	1.62
HYDROGRAPH	AT	D56iW	151	4.83	28	7	2	1.62
ROUTED TO		R56iW	145	5.17	28	7	2	1.62
HYDROGRAPH	AT	60i	477	4.33	98	25	8	0.5
HYDROGRAPH	AT	BD60gP	124	4	63	16	5	1.83
ROUTED TO		P60gS	124	4.08	63	16	5	1.83
HYDROGRAPH	AT	BD60gS	114	4.83	21	5	2	1.83
ROUTED TO		R60gS	106	5.17	21	5	2	1.83
2 COMBINED	AT	C60gS	230	5.17	84	22	7	1.83
3 COMBINED	AT	C60i	544	4.83	186	47	16	3.02
DIVERSION	TO	D60iP	211	4	112	29	10	3.02
HYDROGRAPH	AT	D60i	333	4.83	74	18	6	3.02
DIVERSION	TO	D60iS	197	4.83	44	11	4	3.02
HYDROGRAPH	AT	D60iW	136	4.83	30	8	3	3.02
ROUTED TO		R60iW	130	5.17	30	8	3	3.02
HYDROGRAPH	AT	BD64gP	153	4.83	68	18	6	3.1
ROUTED TO		P64gS	153	4.92	68	18	6	3.1
HYDROGRAPH	AT	BD64gS	81	5.17	12	3	1	3.1
ROUTED TO		R64gS	76	5.42	12	3	1	3.1
2 COMBINED	AT	C64gS	229	5.42	81	21	7	3.1
HYDROGRAPH	AT	64i	338	4.42	80	20	7	0.5
3 COMBINED	AT	C64i	450	4.83	165	43	14	4.79
DIVERSION	TO	D64iP	214	4.33	111	29	10	4.79
HYDROGRAPH	AT	D64i	236	4.83	54	14	5	4.79
DIVERSION	TO	D64iS	144	4.83	33	8	3	4.79
HYDROGRAPH	AT	D64iW	92	4.83	21	5	2	4.79
ROUTED TO		R64iW	91	5.42	21	5	2	4.79
HYDROGRAPH	AT	68i	199	4.58	57	15	5	0.5
HYDROGRAPH	AT	BD68gP	82	3.92	58	16	5	4.53
ROUTED TO		P68gS	82	4	58	16	5	4.53
HYDROGRAPH	AT	BD68gS	128	5.33	30	7	2	4.53
ROUTED TO		R68gS	119	5.67	30	7	2	4.53
2 COMBINED	AT	C68gS	201	5.67	88	23	8	4.53
3 COMBINED	AT	C68i	325	5.5	142	37	12	6.72

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	BD72i	524	5.25	146	37	12	8.68
HYDROGRAPH	AT	B76iE	213	5.08	54	13	4	5.92
ROUTED TO		R76iE	202	5.42	54	13	4	5.92
2 COMBINED	AT	CC72i	709	5.33	197	49	16	8.68
DIVERSION	TO	D72iS	496	5.33	138	34	11	8.68
HYDROGRAPH	AT	D72iE	213	5.33	59	15	5	8.68
ROUTED TO		R72iE	208	5.67	59	15	5	8.68
2 COMBINED	AT	CC68i	475	5.58	184	48	16	10.87
DIVERSION	TO	D68iP	99	3.83	78	22	7	10.87
HYDROGRAPH	AT	D68i	376	5.58	106	26	9	10.87
ROUTED TO		R68iS	374	5.67	106	26	9	10.87
HYDROGRAPH	AT	BD68iP	99	3.83	78	22	7	10.87
ROUTED TO		P68iS	99	3.92	78	22	7	10.87
2 COMBINED	AT	C68iS	473	5.67	184	48	16	10.87
HYDROGRAPH	AT	36i	248	4.33	51	13	4	0.34
DIVERSION	TO	D36iP	41	3.92	21	5	2	0.34
HYDROGRAPH	AT	D36i	207	4.33	31	8	3	0.34
DIVERSION	TO	D36iS	173	4.33	26	6	2	0.34
HYDROGRAPH	AT	D36iW	34	4.33	5	1	0	0.34
ROUTED TO		R36iW	32	4.67	5	1	0	0.34
HYDROGRAPH	AT	40i	72	4.42	19	5	2	0.22
ROUTED TO		S40i	0	0	0	0	0	0.22
2 COMBINED	AT	C40i	32	4.67	5	1	0	0.56
DIVERSION	TO	D40iS	23	4.67	4	1	0	0.56
HYDROGRAPH	AT	D40iW	7	4.67	1	0	0	0.56
ROUTED TO		R40iW	7	5.08	1	0	0	0.56
HYDROGRAPH	AT	44i	130	4.5	35	9	3	0.35
HYDROGRAPH	AT	42i	204	4.25	29	7	2	0.27
ROUTED TO		R42iW	195	4.42	29	7	2	0.27
3 COMBINED	AT	C44i	245	4.5	54	14	5	1.18
DIVERSION	TO	D44iP	48	4	25	7	2	1.18
HYDROGRAPH	AT	D44i	197	4.5	29	7	2	1.18
DIVERSION	TO	D44iS	98	4.5	14	4	1	1.18
HYDROGRAPH	AT	D44iW	99	4.5	15	4	1	1.18
ROUTED TO		R44iW	91	4.67	15	4	1	1.18
HYDROGRAPH	AT	48i	231	4.42	50	13	4	0.54
2 COMBINED	AT	C48i	227	4.67	51	13	4	1.72
DIVERSION	TO	D48iP	47	4.08	23	6	2	1.72
HYDROGRAPH	AT	D48i	180	4.67	28	7	2	1.72
DIVERSION	TO	D48iS	88	4.67	14	3	1	1.72
HYDROGRAPH	AT	D48iW	92	4.67	14	4	1	1.72
ROUTED TO		R48iW	88	4.83	14	4	1	1.72
HYDROGRAPH	AT	BD48iP	47	4.08	23	6	2	1.72
ROUTED TO		P48iW	47	4.17	23	6	2	1.72
2 COMBINED	AT	C48iW	135	4.83	37	9	3	1.72
HYDROGRAPH	AT	52g	162	4.25	23	6	2	0.26
ROUTED TO		R52gS	138	4.67	23	6	2	0.26
HYDROGRAPH	AT	52i	202	4.33	44	11	4	0.31
3 COMBINED	AT	C52i	316	4.75	87	22	7	2.29
DIVERSION	TO	DB52i	221	4.75	38	10	3	2.29
HYDROGRAPH	AT	E52i	95	4.08	49	13	4	2.29
HYDROGRAPH	AT	BDB52i	221	4.75	38	10	3	2.29
ROUTED TO		S52i	71	5.5	38	10	3	2.29
2 COMBINED	AT	CC52i	166	5.5	85	22	7	2.29
DIVERSION	TO	D52iP	95	4.08	63	17	6	2.29
HYDROGRAPH	AT	D52i	71	5.5	22	5	2	2.29
ROUTED TO		R52iS	71	5.92	22	5	2	2.29
HYDROGRAPH	AT	BD52iP	95	4.08	63	17	6	2.29

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		P52iS	95	4.25	63	17	6	2.29
2 COMBINED	AT	C52iS	166	5.92	85	22	7	2.29
HYDROGRAPH	AT	24k	216	4.25	35	9	3	0.19
DIVERSION	TO	D24kS	108	4.25	18	4	1	0.19
HYDROGRAPH	AT	D24kW	108	4.25	18	4	1	0.19
ROUTED TO		R24kW	97	4.58	17	4	1	0.19
HYDROGRAPH	AT	ARC40	47	4	12	3	1	0.1
ROUTED TO		PARC40	46	4.08	12	3	1	0.1
HYDROGRAPH	AT	28k	317	4.33	64	16	5	0.43
3 COMBINED	AT	C28k	408	4.42	90	23	8	0.72
DIVERSION	TO	D28kP	131	4.08	55	14	5	0.72
HYDROGRAPH	AT	D28k	277	4.42	35	9	3	0.72
DIVERSION	TO	D28kS	117	4.42	15	4	1	0.72
HYDROGRAPH	AT	D28kW	160	4.42	20	5	2	0.72
ROUTED TO		R28kW	151	4.67	20	5	2	0.72
HYDROGRAPH	AT	32k	199	4.5	50	13	4	0.51
2 COMBINED	AT	C32k	279	4.67	61	16	5	1.23
DIVERSION	TO	D32kP	45	4	25	7	2	1.23
HYDROGRAPH	AT	D32k	234	4.67	36	9	3	1.23
DIVERSION	TO	D32kS	107	4.67	17	4	1	1.23
HYDROGRAPH	AT	D32kW	127	4.67	20	5	2	1.23
ROUTED TO		R32kW	116	4.92	20	5	2	1.23
HYDROGRAPH	AT	36k	328	4.42	71	18	6	0.51
HYDROGRAPH	AT	BD36iP	41	3.92	21	5	2	0.34
ROUTED TO		P36iS	41	5.92	21	5	2	0.34
HYDROGRAPH	AT	BD36iS	173	4.33	26	6	2	0.34
ROUTED TO		R36iS	155	4.83	26	6	2	0.34
2 COMBINED	AT	C36iS	196	4.83	46	12	4	0.34
3 COMBINED	AT	C36k	423	4.83	113	29	10	2.07
DIVERSION	TO	D36kP	59	3.83	38	10	3	2.07
HYDROGRAPH	AT	D36k	364	4.83	75	19	6	2.07
DIVERSION	TO	D36kS	160	4.83	33	8	3	2.07
HYDROGRAPH	AT	D36kW	204	4.83	42	11	4	2.07
ROUTED TO		R36kW	198	5	42	11	4	2.07
HYDROGRAPH	AT	BD40iS	23	4.67	4	1	0	0.56
ROUTED TO		R40iS	20	5.33	4	1	0	0.56
HYDROGRAPH	AT	40k	360	4.42	80	20	7	0.5
3 COMBINED	AT	C40k	379	4.75	105	27	9	2.8
DIVERSION	TO	D40kP	29	3.67	21	6	2	2.8
HYDROGRAPH	AT	D40k	350	4.75	84	21	7	2.8
DIVERSION	TO	D40kS	147	4.75	36	9	3	2.8
HYDROGRAPH	AT	D40kW	202	4.75	49	12	4	2.8
ROUTED TO		R40kW	201	4.92	49	12	4	2.8
HYDROGRAPH	AT	44k	434	4.33	93	24	8	0.51
HYDROGRAPH	AT	BD44iP	48	4	25	7	2	1.18
ROUTED TO		P44iS	48	4.25	25	7	2	1.18
HYDROGRAPH	AT	BD44iS	98	4.5	14	4	1	1.18
ROUTED TO		R44iS	88	4.83	14	4	1	1.18
2 COMBINED	AT	C44iS	136	4.83	40	10	3	1.18
3 COMBINED	AT	C44k	522	4.75	154	39	13	3.93
DIVERSION	TO	D44kP	71	3.75	48	13	4	3.93
HYDROGRAPH	AT	D44k	451	4.75	106	27	9	3.93
DIVERSION	TO	D44kS	171	4.75	40	10	3	3.93
HYDROGRAPH	AT	D44kW	279	4.75	66	16	5	3.93
ROUTED TO		R44kW	275	4.92	66	16	5	3.93
HYDROGRAPH	AT	48k	460	4.42	105	27	9	0.5
ROUTED TO		S48k	461	4.42	102	26	9	0.5
HYDROGRAPH	AT	BD48iS	88	4.67	14	3	1	1.72

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		R48iS	76	5.08	14	3	1	1.72
3 COMBINED	AT	C48k	553	4.83	156	39	13	4.96
DIVERSION	TO	D48kS	248	4.83	70	18	6	4.96
HYDROGRAPH	AT	D48kW	305	4.83	86	22	7	4.96
ROUTED TO		R48kW	304	4.92	86	22	7	4.96
HYDROGRAPH	AT	52k	234	4.42	58	15	5	0.29
3 COMBINED	AT	C52k	559	4.92	204	52	17	5.83
DIVERSION	TO	D52kP	201	4.08	120	31	10	5.83
HYDROGRAPH	AT	D52k	358	4.92	85	21	7	5.83
DIVERSION	TO	D52kS	161	4.92	38	10	3	5.83
HYDROGRAPH	AT	D52kW	197	4.92	46	12	4	5.83
ROUTED TO		R52kW	195	5	46	12	4	5.83
HYDROGRAPH	AT	BD54iP	68	4.08	30	8	3	0.44
ROUTED TO		P54iS	68	4.25	30	8	3	0.44
HYDROGRAPH	AT	BD54iS	62	4.5	8	2	1	0.44
ROUTED TO		R54iS	53	5	8	2	1	0.44
2 COMBINED	AT	C54iS	121	5	37	10	3	0.44
HYDROGRAPH	AT	54k	208	4.42	54	14	5	0.25
3 COMBINED	AT	C54k	534	4.92	156	40	13	1.18
DIVERSION	TO	D54kP	124	4.08	67	17	6	1.18
HYDROGRAPH	AT	D54k	410	4.92	89	22	7	1.18
DIVERSION	TO	D54kS	227	4.92	44	11	4	1.18
HYDROGRAPH	AT	D54kW	183	4.92	44	11	4	1.18
ROUTED TO		R54kW	173	5.42	44	11	4	1.18
HYDROGRAPH	AT	BD56iP	204	4.08	96	25	8	1.62
ROUTED TO		P56iS	204	4.17	96	25	8	1.62
HYDROGRAPH	AT	BD56iS	144	4.83	26	7	2	1.62
ROUTED TO		R56iS	140	5.08	26	7	2	1.62
2 COMBINED	AT	C56iS	344	5.08	122	31	10	1.62
HYDROGRAPH	AT	56k	423	4.33	82	21	7	0.42
3 COMBINED	AT	C56k	580	5.17	224	57	19	2.78
HYDROGRAPH	AT	BD60iP	211	4	112	29	10	3.02
DIVERSION	TO	D60iP2	143	4	76	20	7	3.02
HYDROGRAPH	AT	D60iP1	68	4	36	9	3	3.02
ROUTED TO		P60iS1	68	4.08	36	9	3	3.02
HYDROGRAPH	AT	B60iP2	143	4	76	20	7	3.02
ROUTED TO		P60iS2	143	4.08	76	20	7	3.02
HYDROGRAPH	AT	BD60iS	197	4.83	44	11	4	3.02
ROUTED TO		R60iS	192	5	44	11	4	3.02
3 COMBINED	AT	C60iS	403	5	156	40	13	3.02
HYDROGRAPH	AT	60k	286	4.33	58	15	5	0.27
2 COMBINED	AT	C60k	549	4.67	205	52	17	3.29
DIVERSION	TO	D60k	414	4.67	116	29	10	3.29
HYDROGRAPH	AT	D60kP	135	3.75	89	24	8	3.29
DIVERSION	TO	D60kP2	125	3.75	83	22	7	3.29
HYDROGRAPH	AT	D60kP1	10	3.75	7	2	1	3.29
ROUTED TO		P60kE	10	3.92	7	2	1	3.29
2 COMBINED	AT	CC56k	580	5.17	228	58	19	4.46
DIVERSION	TO	D56kP	303	4.08	160	42	14	4.46
HYDROGRAPH	AT	D56k	250	5.17	60	15	5	4.46
DIVERSION	TO	D56kS	108	5.17	22	5	2	4.46
HYDROGRAPH	AT	D56kW	143	5.17	38	10	3	4.46
ROUTED TO		R56kW	140	5.5	38	10	3	4.46
HYDROGRAPH	AT	BD60k	414	4.67	116	29	10	3.29
2 COMBINED	AT	CC60k	502	4.92	148	37	12	4.46
DIVERSION	TO	D60kS	348	4.92	93	23	8	4.46
HYDROGRAPH	AT	D60kW	154	4.92	55	14	5	4.46
ROUTED TO		R60kW	152	5.25	55	14	5	4.46

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	64k	246	4.25	41	10	3	0.21
HYDROGRAPH	AT	BD64iS	144	4.83	33	8	3	4.79
ROUTED TO		R64iS	143	5.08	33	8	3	4.79
3 COMBINED	AT	C64k	357	4.92	115	29	10	6.43
ROUTED TO		S64k	215	5.92	87	23	8	6.43
HYDROGRAPH	AT	BD64iP	214	4.33	111	29	10	4.79
ROUTED TO		P64iS	214	4.42	111	29	10	4.79
2 COMBINED	AT	CC64k	429	5.83	190	52	17	6.43
DIVERSION	TO	D64kP	214	4.42	142	40	13	6.43
HYDROGRAPH	AT	D64k	215	5.83	48	12	4	6.43
DIVERSION	TO	D64kS	43	5.83	6	2	1	6.43
HYDROGRAPH	AT	D64kW	172	5.83	42	10	3	6.43
ROUTED TO		R64kW	167	6.08	42	10	3	6.43
HYDROGRAPH	AT	68k	273	4.33	45	11	4	0.2
3 COMBINED	AT	C68k	601	5.83	247	64	21	12.71
DIVERSION	TO	D68kP	114	3.83	92	25	8	12.71
HYDROGRAPH	AT	D68k	487	5.83	155	39	13	12.71
DIVERSION	TO	D68kS	333	5.83	93	23	8	12.71
HYDROGRAPH	AT	D68kW	154	5.83	62	15	5	12.71
ROUTED TO		R68kW	150	6.17	62	15	5	12.71
HYDROGRAPH	AT	72k	361	4.33	65	16	5	0.28
ROUTED TO		S72k	345	4.42	53	13	4	0.28
HYDROGRAPH	AT	B72iP1	226	4.08	170	49	16	8.68
ROUTED TO		P72iS	226	4.17	170	49	16	8.68
HYDROGRAPH	AT	BD72iS	496	5.33	138	34	11	8.68
ROUTED TO		R72iS	491	5.5	138	34	11	8.68
2 COMBINED	AT	C72iS	717	5.5	307	83	28	8.68
3 COMBINED	AT	C72k	871	5.42	395	105	35	12.99
2 COMBINED	AT	CC72k	903	5.42	426	117	39	12.99
DIVERSION	TO	D72kP	281	4.25	224	67	22	12.99
HYDROGRAPH	AT	D72k	622	5.42	203	51	17	12.99
DIVERSION	TO	D72kS	447	5.42	135	34	11	12.99
HYDROGRAPH	AT	D72kW	175	5.42	67	17	6	12.99
ROUTED TO		R72kW	173	5.83	67	17	6	12.99
HYDROGRAPH	AT	B76k1	609	5.08	205	51	17	5.74
2 COMBINED	AT	CC76k	660	5.25	252	63	21	13.31
DIVERSION	TO	D76kP	43	3.67	35	9	3	13.31
HYDROGRAPH	AT	D76k	617	5.25	217	54	18	13.31
DIVERSION	TO	D76kS	476	5.25	158	39	13	13.31
HYDROGRAPH	AT	D76kW	141	5.25	60	15	5	13.31
ROUTED TO		R76kW	136	5.92	59	15	5	13.31
HYDROGRAPH	AT	80k	547	4.33	102	26	9	0.43
HYDROGRAPH	AT	BD80i	1240	5.25	424	106	35	3.25
ROUTED TO		R80iS	1230	5.33	424	106	35	3.25
HYDROGRAPH	AT	B80kP1	28	3.92	21	6	2	9.18
3 COMBINED	AT	C80k	1392	5.25	530	135	45	3.68
DIVERSION	TO	D80kP	63	3.67	59	17	6	3.68
HYDROGRAPH	AT	D80k	1329	5.25	471	118	39	3.68
2 COMBINED	AT	CC80k	1409	5.33	525	131	44	4.68
DIVERSION	TO	D80kS	652	5.33	197	49	16	4.68
HYDROGRAPH	AT	D80kW	756	5.33	327	82	27	4.68
ROUTED TO		R80kW	752	5.42	327	82	27	4.68
HYDROGRAPH	AT	84k	252	4.5	75	19	6	0.31
HYDROGRAPH	AT	BD84iS	8	7.42	4	1	0	1.11
ROUTED TO		R84iS	7	8.67	4	1	0	1.11
3 COMBINED	AT	C84k	887	5.33	392	100	33	4.99
ROUTED TO		R84kS	883	5.5	391	100	33	4.99
HYDROGRAPH	AT	84m	216	4.42	53	13	4	0.21

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
2 COMBINED	AT	C84m	965	5.42	437	112	37	5.2
HYDROGRAPH	AT	I17	435	4.25	98	25	8	0.29
DIVERSION	TO	D84mP	249	4	82	21	7	0.29
HYDROGRAPH	AT	D84m	186	4.25	15	4	1	0.29
2 COMBINED	AT	CC84m	965	5.42	443	113	38	5.49
DIVERSION	TO	D84mS	369	5.42	169	43	14	5.49
HYDROGRAPH	AT	D84mE	591	5.42	272	70	23	5.49
ROUTED TO		R84mE	588	5.58	271	70	23	5.49
HYDROGRAPH	AT	80m	692	4.33	129	32	11	0.54
HYDROGRAPH	AT	BD80kS	652	5.33	197	49	16	4.68
ROUTED TO		R80kS	632	5.58	197	49	16	4.68
3 COMBINED	AT	C80m	1319	5.5	568	146	49	6.03
DIVERSION	TO	D80mS	760	5.5	328	84	28	6.03
HYDROGRAPH	AT	D80mE	559	5.5	241	62	21	6.03
ROUTED TO		R80mE	556	5.67	240	62	21	6.03
HYDROGRAPH	AT	76l	346	4.17	42	10	3	0.18
HYDROGRAPH	AT	BD80kP	63	3.67	59	17	6	3.68
HYDROGRAPH	AT	BD76kP	43	3.67	35	9	3	13.31
2 COMBINED	AT	C76kP	106	3.67	94	26	9	17.25
ROUTED TO		P76kS	106	3.75	94	26	9	17.25
HYDROGRAPH	AT	BD76kS	476	5.25	158	39	13	13.31
ROUTED TO		R76kS	473	5.33	158	39	13	13.31
2 COMBINED	AT	C76kS	671	5.25	281	73	24	4.68
2 COMBINED	AT	C76l	698	5.25	317	82	27	4.86
DIVERSION	TO	D76lP	156	3.75	130	35	12	4.86
HYDROGRAPH	AT	D76l	542	5.25	187	47	16	4.86
ROUTED TO		R76lS	529	5.42	187	47	16	4.86
HYDROGRAPH	AT	BD76lP	156	3.75	130	35	12	4.86
ROUTED TO		P76lS	156	3.92	130	36	12	4.86
2 COMBINED	AT	C76lS	685	5.42	317	82	27	4.86
HYDROGRAPH	AT	76m	625	4.33	115	29	10	0.49
ROUTED TO		S76m	620	4.33	114	29	10	0.49
3 COMBINED	AT	C76m	1353	5.33	643	167	56	6.71
DIVERSION	TO	D76m	1162	5.33	468	117	39	6.71
HYDROGRAPH	AT	D76mP	191	3.75	174	50	17	6.71
DIVERSION	TO	D76mP2	32	3.75	29	8	3	6.71
HYDROGRAPH	AT	D76mP1	159	3.75	145	41	14	6.71
HYDROGRAPH	AT	72l	166	4.5	41	10	3	0.22
HYDROGRAPH	AT	BD72kP	281	4.25	224	67	22	12.99
ROUTED TO		P72kS	281	4.33	224	67	22	12.99
HYDROGRAPH	AT	BD72kS	447	5.42	135	34	11	12.99
ROUTED TO		R72kS	444	5.58	135	34	11	12.99
2 COMBINED	AT	C72kS	725	5.58	359	100	33	12.99
2 COMBINED	AT	C72l	788	5.42	392	109	36	13.21
DIVERSION	TO	D72lP	305	4.17	243	72	24	13.21
HYDROGRAPH	AT	D72l	483	5.42	149	37	12	13.21
ROUTED TO		R72lS	471	5.75	149	37	12	13.21
HYDROGRAPH	AT	BD72lP	305	4.17	243	72	24	13.21
ROUTED TO		P72lS	305	4.33	243	72	24	13.21
2 COMBINED	AT	C72lS	776	5.75	391	109	36	13.21
HYDROGRAPH	AT	72m	541	4.42	117	30	10	0.47
3 COMBINED	AT	C72m	1059	5.5	628	176	59	13.67
HYDROGRAPH	AT	60l	248	4.33	49	12	4	0.23
HYDROGRAPH	AT	B60kP2	125	3.75	83	22	7	3.29
ROUTED TO		P60kS	125	3.83	83	22	7	3.29
HYDROGRAPH	AT	BD60kS	348	4.92	93	23	8	4.46
ROUTED TO		R60kS	347	5	93	23	8	4.46
2 COMBINED	AT	C60kS	472	5	177	45	15	4.46

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
2 COMBINED	AT	C60I	585	4.83	216	55	18	4.69
DIVERSION	TO	D60IP	93	3.67	71	19	6	4.69
HYDROGRAPH	AT	D60I	492	4.83	145	36	12	4.69
DIVERSION	TO	D60IS	358	4.83	105	26	9	4.69
HYDROGRAPH	AT	D60IW	134	4.83	39	10	3	4.69
ROUTED TO		R60IW	131	5.17	39	10	3	4.69
HYDROGRAPH	AT	64I	189	4.58	49	12	4	0.29
HYDROGRAPH	AT	BD64kS	43	5.83	6	2	1	6.43
ROUTED TO		R64kS	39	6.08	6	2	1	6.43
3 COMBINED	AT	C64I	244	4.92	83	21	7	6.96
ROUTED TO		S64I	71	6.42	14	3	1	6.96
HYDROGRAPH	AT	BD64kP	214	4.42	142	40	13	6.43
ROUTED TO		P64kS	214	4.5	142	40	13	6.43
2 COMBINED	AT	CC64I	285	6.42	155	43	14	6.96
DIVERSION	TO	D64IP	257	6.17	152	43	14	6.96
HYDROGRAPH	AT	D64I	28	6.42	2	1	0	6.96
DIVERSION	TO	D64IS	24	6.42	2	1	0	6.96
HYDROGRAPH	AT	D64IW	4	6.42	0	0	0	6.96
ROUTED TO		R64IW	1	7.58	0	0	0	6.96
HYDROGRAPH	AT	68I	312	4.42	74	19	6	0.32
HYDROGRAPH	AT	BD68kP	114	3.83	92	25	8	12.71
ROUTED TO		P68kS	114	3.92	92	25	8	12.71
HYDROGRAPH	AT	BD68kS	333	5.83	93	23	8	12.71
ROUTED TO		R68kS	329	5.92	93	23	8	12.71
2 COMBINED	AT	C68kS	443	5.92	185	49	16	12.71
3 COMBINED	AT	C68I	505	5.83	246	64	21	13.56
DIVERSION	TO	D68IP	114	3.75	96	27	9	13.56
HYDROGRAPH	AT	D68I	391	5.83	150	37	12	13.56
ROUTED TO		R68IS	380	6.17	150	37	12	13.56
HYDROGRAPH	AT	BD68IP	114	3.75	96	27	9	13.56
ROUTED TO		P68IS	114	3.92	96	27	9	13.56
2 COMBINED	AT	C68IS	494	6.17	244	64	21	13.56
HYDROGRAPH	AT	24m	272	4.42	63	16	5	0.5
ROUTED TO		S24m	272	4.42	63	16	5	0.5
HYDROGRAPH	AT	BD24kS	108	4.25	18	4	1	0.19
ROUTED TO		R24kS	95	4.67	17	4	1	0.19
2 COMBINED	AT	C24m	331	4.58	77	19	6	0.69
DIVERSION	TO	D24mS	142	4.58	33	8	3	0.69
HYDROGRAPH	AT	D24mW	189	4.58	44	11	4	0.69
ROUTED TO		R24mW	181	4.83	44	11	4	0.69
HYDROGRAPH	AT	28m	217	4.5	54	14	5	0.51
HYDROGRAPH	AT	BD28kP	131	4.08	55	14	5	0.72
ROUTED TO		P28kS	131	4.25	55	14	5	0.72
HYDROGRAPH	AT	BD28kS	117	4.42	15	4	1	0.72
ROUTED TO		R28kS	108	4.75	15	4	1	0.72
2 COMBINED	AT	C28kS	239	4.75	70	18	6	0.72
3 COMBINED	AT	C28m	504	4.83	150	39	13	1.73
DIVERSION	TO	D28mP	211	4.08	103	27	9	1.73
HYDROGRAPH	AT	D28m	293	4.83	47	12	4	1.73
DIVERSION	TO	D28mS	130	4.83	21	5	2	1.73
HYDROGRAPH	AT	D28mW	163	4.83	26	7	2	1.73
ROUTED TO		R28mW	156	5	26	7	2	1.73
HYDROGRAPH	AT	32m	362	4.42	79	20	7	0.51
ROUTED TO		S32m	363	4.42	79	20	7	0.51
HYDROGRAPH	AT	BD32kP	45	4	25	7	2	1.23
ROUTED TO		P32kS	45	4.17	25	7	2	1.23
HYDROGRAPH	AT	BD32kS	107	4.67	17	4	1	1.23
ROUTED TO		R32kS	96	5	17	4	1	1.23

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
2 COMBINED	AT	C32kS	141	5	42	11	4	1.23
3 COMBINED	AT	C32m	426	5	125	32	11	2.75
DIVERSION	TO	D32mP	66	3.83	44	11	4	2.75
HYDROGRAPH	AT	D32m	360	5	81	20	7	2.75
DIVERSION	TO	D32mS	155	5	35	9	3	2.75
HYDROGRAPH	AT	D32mW	205	5	46	12	4	2.75
ROUTED TO		R32mW	198	5.17	46	12	4	2.75
HYDROGRAPH	AT	36m	282	4.42	68	17	6	0.51
HYDROGRAPH	AT	BD36kP	59	3.83	38	10	3	2.07
ROUTED TO		P36kS	59	4	38	10	3	2.07
HYDROGRAPH	AT	BD36kS	160	4.83	33	8	3	2.07
ROUTED TO		R36kS	150	5.08	33	8	3	2.07
2 COMBINED	AT	C36kS	209	5.08	71	18	6	2.07
3 COMBINED	AT	C36m	489	5.08	159	41	14	4.11
DIVERSION	TO	D36mP	114	4	73	19	6	4.11
HYDROGRAPH	AT	D36m	375	5.08	86	22	7	4.11
DIVERSION	TO	D36mS	180	5.08	42	10	3	4.11
HYDROGRAPH	AT	D36mW	195	5.08	45	11	4	4.11
ROUTED TO		R36mW	190	5.25	45	11	4	4.11
HYDROGRAPH	AT	40m	458	4.33	94	24	8	0.51
HYDROGRAPH	AT	BD40kP	29	3.67	21	6	2	2.8
ROUTED TO		P40kS	29	3.92	21	6	2	2.8
HYDROGRAPH	AT	BD40kS	147	4.75	36	9	3	2.8
ROUTED TO		R40kS	145	5.08	36	9	3	2.8
2 COMBINED	AT	C40kS	174	5.08	56	14	5	2.8
3 COMBINED	AT	C40m	519	4.92	168	43	14	5.35
DIVERSION	TO	D40mP	66	3.75	49	13	4	5.35
HYDROGRAPH	AT	D40m	453	4.92	120	30	10	5.35
DIVERSION	TO	D40mS	195	4.92	51	13	4	5.35
HYDROGRAPH	AT	D40mW	258	4.92	68	17	6	5.35
ROUTED TO		R40mW	255	5.08	68	17	6	5.35
HYDROGRAPH	AT	44m	347	4.42	78	20	7	0.5
HYDROGRAPH	AT	BD44kP	71	3.75	48	13	4	3.93
ROUTED TO		P44kS	71	3.92	48	13	4	3.93
HYDROGRAPH	AT	BD44kS	171	4.75	40	10	3	3.93
ROUTED TO		R44kS	165	5	40	10	3	3.93
2 COMBINED	AT	C44kS	236	5	88	23	8	3.93
3 COMBINED	AT	C44m	609	4.92	206	53	18	6.98
DIVERSION	TO	D44mP	124	3.92	85	23	8	6.98
HYDROGRAPH	AT	D44m	485	4.92	121	30	10	6.98
DIVERSION	TO	D44mS	206	4.92	51	13	4	6.98
HYDROGRAPH	AT	D44mW	280	4.92	70	17	6	6.98
ROUTED TO		R44mW	269	5.17	70	17	6	6.98
HYDROGRAPH	AT	24o	380	4.42	87	22	7	0.5
HYDROGRAPH	AT	BD24mS	142	4.58	33	8	3	0.69
ROUTED TO		R24mS	134	4.92	33	8	3	0.69
2 COMBINED	AT	C24o	390	4.67	110	28	9	1.2
DIVERSION	TO	D24oP	48	3.83	34	9	3	1.2
HYDROGRAPH	AT	D24o	342	4.67	76	19	6	1.2
DIVERSION	TO	D24oS	129	4.67	29	7	2	1.2
HYDROGRAPH	AT	D24oW	212	4.67	47	12	4	1.2
ROUTED TO		R24oW	208	4.83	47	12	4	1.2
HYDROGRAPH	AT	28o	247	4.5	62	16	5	0.5
HYDROGRAPH	AT	BD28mP	211	4.08	103	27	9	1.73
ROUTED TO		P28mS	211	4.25	103	27	9	1.73
HYDROGRAPH	AT	BD28mS	130	4.83	21	5	2	1.73
ROUTED TO		R28mS	121	5.08	21	5	2	1.73
2 COMBINED	AT	C28mS	332	5.08	124	32	11	1.73

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
3 COMBINED	AT	C28o	612	5	210	54	18	2.73
DIVERSION	TO	D28oP	367	4.33	171	44	15	2.73
HYDROGRAPH	AT	D28o	245	5	39	10	3	2.73
DIVERSION	TO	D28oS	103	5	17	4	1	2.73
HYDROGRAPH	AT	D28oW	142	5	23	6	2	2.73
ROUTED TO		R28oW	135	5.17	23	6	2	2.73
HYDROGRAPH	AT	32o	355	4.42	80	20	7	0.5
HYDROGRAPH	AT	BD32mS	155	5	35	9	3	2.75
ROUTED TO		R32mS	147	5.25	35	9	3	2.75
HYDROGRAPH	AT	BD32mP	66	3.83	44	11	4	2.75
ROUTED TO		P32mS	66	4	44	11	4	2.75
2 COMBINED	AT	C32mS	213	5.25	78	20	7	2.75
3 COMBINED	AT	C32o	451	5.08	156	40	13	4.25
DIVERSION	TO	D32oP	160	4.17	95	24	8	4.25
HYDROGRAPH	AT	D32o	291	5.08	61	15	5	4.25
DIVERSION	TO	D32oS	128	5.08	27	7	2	4.25
HYDROGRAPH	AT	D32oW	162	5.08	34	9	3	4.25
ROUTED TO		R32oW	160	5.25	34	9	3	4.25
HYDROGRAPH	AT	36o	437	4.42	92	23	8	0.5
HYDROGRAPH	AT	BD36mP	114	4	73	19	6	4.11
ROUTED TO		P36mS	114	4.17	73	19	6	4.11
HYDROGRAPH	AT	BD36mS	180	5.08	42	10	3	4.11
ROUTED TO		R36mS	174	5.33	42	10	3	4.11
2 COMBINED	AT	C36mS	288	5.33	114	30	10	4.11
3 COMBINED	AT	C36o	551	5.08	211	54	18	6.12
DIVERSION	TO	D36oP	139	3.92	95	25	8	6.12
HYDROGRAPH	AT	D36o	412	5.08	116	29	10	6.12
DIVERSION	TO	D36oS	177	5.08	50	12	4	6.12
HYDROGRAPH	AT	D36oW	235	5.08	66	16	5	6.12
ROUTED TO		R36oW	233	5.25	66	16	5	6.12
HYDROGRAPH	AT	B40mP	66	3.75	49	13	4	5.35
ROUTED TO		P40mS	66	3.92	49	13	4	5.35
HYDROGRAPH	AT	BD40mS	195	4.92	51	13	4	5.35
ROUTED TO		R40mS	190	5.25	51	13	4	5.35
2 COMBINED	AT	C40mS	256	5.25	100	26	9	5.35
HYDROGRAPH	AT	40o	360	4.42	74	19	6	0.47
3 COMBINED	AT	C40o	575	5.08	209	54	18	7.82
DIVERSION	TO	D40oP	70	3.67	57	16	5	7.82
HYDROGRAPH	AT	D40o	505	5.08	152	38	13	7.82
DIVERSION	TO	D40oS	259	5.08	67	17	6	7.82
HYDROGRAPH	AT	D40oW	246	5.08	84	21	7	7.82
ROUTED TO		R40oW	242	5.42	84	21	7	7.82
HYDROGRAPH	AT	44o	156	4.33	31	8	3	0.23
HYDROGRAPH	AT	BD44mP	124	3.92	85	23	8	6.98
ROUTED TO		P44mS	124	4	85	23	8	6.98
HYDROGRAPH	AT	BD44mS	206	4.92	51	13	4	6.98
ROUTED TO		R44mS	203	5.08	51	13	4	6.98
2 COMBINED	AT	C44mS	327	5.08	136	35	12	6.98
3 COMBINED	AT	C44o	574	5.17	232	60	20	9.68
DIVERSION	TO	D44oP	124	3.83	95	26	9	9.68
HYDROGRAPH	AT	D44o	450	5.17	137	34	11	9.68
DIVERSION	TO	D44oS	312	5.17	89	22	7	9.68
HYDROGRAPH	AT	D44oW	137	5.17	48	12	4	9.68
ROUTED TO		R44oW	134	5.75	48	12	4	9.68
2 COMBINED	AT	C44mW	352	5.42	112	28	9	9.68
HYDROGRAPH	AT	48m	407	4.33	82	21	7	0.48
HYDROGRAPH	AT	BD48kS	248	4.83	70	18	6	4.96
ROUTED TO		R48kS	242	5.08	70	18	6	4.96

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
3 COMBINED	AT	C48m	644	5.17	224	57	19	11.19
HYDROGRAPH	AT	BD52kP	201	4.08	120	31	10	5.83
ROUTED TO		P52kS	201	4.25	120	31	10	5.83
HYDROGRAPH	AT	BD52kS	161	4.92	38	10	3	5.83
ROUTED TO		R52kS	159	5	38	10	3	5.83
2 COMBINED	AT	C52kS	360	5	158	41	14	5.83
HYDROGRAPH	AT	52m	227	4.25	32	8	3	0.18
2 COMBINED	AT	C52m	422	4.75	181	47	16	6.01
2 COMBINED	AT	CC52m	992	5.08	386	99	33	12.24
DIVERSION	TO	D52mP	364	4.08	225	59	20	12.24
HYDROGRAPH	AT	D52m	628	5.08	161	40	13	12.24
DIVERSION	TO	D52mS	566	5.08	145	36	12	12.24
HYDROGRAPH	AT	D52mW	63	5.08	16	4	1	12.24
ROUTED TO		R52mW	62	5.25	16	4	1	12.24
HYDROGRAPH	AT	54m	360	4.25	55	14	5	0.27
HYDROGRAPH	AT	BD54kP	124	4.08	67	17	6	1.18
ROUTED TO		P54kS	124	4.25	67	17	6	1.18
HYDROGRAPH	AT	BD54kS	227	4.92	44	11	4	1.18
ROUTED TO		R54kS	221	5.08	44	11	4	1.18
2 COMBINED	AT	C54kS	345	5.08	111	28	9	1.18
3 COMBINED	AT	C54m	526	4.83	184	47	16	1.66
DIVERSION	TO	D54mP	124	3.92	76	20	7	1.66
HYDROGRAPH	AT	D54m	402	4.83	108	27	9	1.66
DIVERSION	TO	D54mS	161	4.83	43	11	4	1.66
HYDROGRAPH	AT	D54mW	241	4.83	65	16	5	1.66
ROUTED TO		R54mW	237	5	65	16	5	1.66
HYDROGRAPH	AT	56m	371	4.5	100	26	9	0.58
HYDROGRAPH	AT	BD56kP	303	4.08	160	42	14	4.46
ROUTED TO		P56kS	303	4.25	160	42	14	4.46
HYDROGRAPH	AT	BD56kS	108	5.17	22	5	2	4.46
ROUTED TO		R56kS	101	5.5	22	5	2	4.46
2 COMBINED	AT	C56kS	404	5.5	182	47	16	4.46
3 COMBINED	AT	C56m	774	5	307	79	26	5.5
DIVERSION	TO	D56mP	433	4.25	230	60	20	5.5
HYDROGRAPH	AT	D56m	341	5	77	19	6	5.5
DIVERSION	TO	D56mS	133	5	30	7	2	5.5
HYDROGRAPH	AT	D56mW	209	5	47	12	4	5.5
ROUTED TO		R56mW	204	5.17	47	12	4	5.5
HYDROGRAPH	AT	60m	343	4.5	83	21	7	0.5
HYDROGRAPH	AT	BD60lP	93	3.67	71	19	6	4.69
ROUTED TO		P60lS	93	3.83	71	19	6	4.69
HYDROGRAPH	AT	BD60lS	358	4.83	105	26	9	4.69
ROUTED TO		R60lS	351	5.17	105	26	9	4.69
2 COMBINED	AT	C60lS	444	5.17	176	45	15	4.69
3 COMBINED	AT	C60m	793	5.08	279	72	24	6.24
DIVERSION	TO	D60mP	124	3.92	96	26	9	6.24
HYDROGRAPH	AT	D60m	669	5.08	183	46	15	6.24
DIVERSION	TO	D60mS	348	5.08	95	24	8	6.24
HYDROGRAPH	AT	D60mW	321	5.08	88	22	7	6.24
ROUTED TO		R60mW	312	5.42	88	22	7	6.24
HYDROGRAPH	AT	64m	552	4.42	136	35	12	0.5
HYDROGRAPH	AT	BD64lP	257	6.17	152	43	14	6.96
ROUTED TO		P64lS	257	6.33	152	43	14	6.96
HYDROGRAPH	AT	BD64lS	24	6.42	2	1	0	6.96
ROUTED TO		R64lS	15	7.17	2	1	0	6.96
2 COMBINED	AT	C64lS	257	6.75	154	43	14	6.96
HYDROGRAPH	AT	68m	628	4.42	158	40	13	0.55
DIVERSION	TO	D68m	594	4.42	128	32	11	0.55

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	D68mP2	34	3.42	29	8	3	0.55
4 COMBINED	AT	C64m	797	5.08	373	102	34	9.55
DIVERSION	TO	D64mP	399	4.17	269	76	25	9.55
HYDROGRAPH	AT	D64m	398	5.08	104	26	9	9.55
DIVERSION	TO	D64mS	246	5.08	64	16	5	9.55
HYDROGRAPH	AT	D64mW	152	5.08	40	10	3	9.55
ROUTED TO		R64mW	148	5.42	40	10	3	9.55
HYDROGRAPH	AT	BD68m	594	4.42	128	32	11	0.55
3 COMBINED	AT	C68m	821	5	375	97	32	16.15
DIVERSION	TO	D68mP	144	3.67	123	34	11	16.15
HYDROGRAPH	AT	D68m2	677	5	252	63	21	16.15
DIVERSION	TO	D68mS	562	5	209	52	17	16.15
HYDROGRAPH	AT	D68mW	115	5	43	11	4	16.15
ROUTED TO		R68mW	112	5.42	43	11	4	16.15
2 COMBINED	AT	CC72m	1138	5.5	657	183	61	17.12
DIVERSION	TO	D72mP	308	3.67	289	91	30	17.12
HYDROGRAPH	AT	D72m	830	5.5	368	92	31	17.12
ROUTED TO		R72mS	820	5.92	367	92	31	17.12
HYDROGRAPH	AT	BD72mP	308	3.67	289	91	30	17.12
ROUTED TO		P72mS	308	3.83	289	91	30	17.12
2 COMBINED	AT	C72mS	1128	5.92	653	183	61	17.12
HYDROGRAPH	AT	BD24oS	129	4.67	29	7	2	1.2
ROUTED TO		R24oS	127	4.83	29	7	2	1.2
HYDROGRAPH	AT	BD28oP	367	4.33	171	44	15	2.73
ROUTED TO		P28oS	367	4.42	171	44	15	2.73
HYDROGRAPH	AT	BD28oS	103	5	17	4	1	2.73
ROUTED TO		R28oS	98	5.17	17	4	1	2.73
2 COMBINED	AT	C28oS	465	5.17	188	48	16	2.73
2 COMBINED	AT	C28p	564	5.08	212	54	18	2.73
HYDROGRAPH	AT	28p	330	4.33	64	16	5	0.37
ROUTED TO		S28p	329	4.33	63	16	5	0.37
2 COMBINED	AT	CC28p	709	4.83	261	67	22	3.11
DIVERSION	TO	D28pP	279	4.08	156	40	14	3.11
HYDROGRAPH	AT	D28p	430	4.83	106	26	9	3.11
ROUTED TO		R28pW	426	4.92	106	26	9	3.11
HYDROGRAPH	AT	32p	188	4.42	40	10	3	0.23
HYDROGRAPH	AT	BD32oS	128	5.08	27	7	2	4.25
ROUTED TO		R32oS	127	5.17	27	7	2	4.25
2 COMBINED	AT	C32p	209	4.92	57	14	5	4.49
ROUTED TO		S32p	91	5.83	48	12	4	4.49
HYDROGRAPH	AT	BD32oP	160	4.17	95	24	8	4.25
ROUTED TO		P32oS	160	4.25	95	24	8	4.25
3 COMBINED	AT	CC32p	622	5.08	232	61	20	4.86
DIVERSION	TO	D32pS	91	5.08	32	8	3	4.86
HYDROGRAPH	AT	D32pW	531	5.08	200	53	18	4.86
DIVERSION	TO	D32pP	379	4.67	175	46	15	4.86
HYDROGRAPH	AT	D32p	152	5.08	25	6	2	4.86
ROUTED TO		R32pW	146	5.25	25	6	2	4.86
HYDROGRAPH	AT	BD32pP	379	4.67	175	46	15	4.86
ROUTED TO		P32pW	379	4.75	175	46	15	4.86
2 COMBINED	AT	C32pW	526	5.25	200	53	18	4.86
HYDROGRAPH	AT	28q	451	4.25	73	18	6	0.32
ROUTED TO		S28q	450	4.25	73	18	6	0.32
HYDROGRAPH	AT	BD28pP	279	4.08	156	40	14	3.11
DIVERSION	TO	D28pP2	68	4.08	38	10	3	3.11
HYDROGRAPH	AT	D28pP1	211	4.08	118	30	10	3.11
ROUTED TO		P28pS	211	4.17	118	30	10	3.11
2 COMBINED	AT	C28q	621	4.25	187	48	16	0.82

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
DIVERSION	TO	D28qP	340	4	161	41	14	0.82
HYDROGRAPH	AT	D28q	281	4.25	27	7	2	0.82
DIVERSION	TO	D28qS	208	4.25	19	5	2	0.82
HYDROGRAPH	AT	D28qW	72	4.25	8	2	1	0.82
ROUTED TO		R28qW	50	5.17	8	2	1	0.82
HYDROGRAPH	AT	32q	170	4.33	32	8	3	0.17
HYDROGRAPH	AT	BD32pS	91	5.08	32	8	3	4.86
3 COMBINED	AT	C32q	239	5	78	20	7	0.99
ROUTED TO		S32q	87	6.17	67	18	6	0.99
DIVERSION	TO	D32q	55	6.17	35	9	3	0.99
HYDROGRAPH	AT	D32qP	32	4.5	31	9	3	0.99
ROUTED TO		P32qW	32	4.58	31	9	3	0.99
2 COMBINED	AT	C32pqW	558	5.25	225	61	20	4.86
HYDROGRAPH	AT	36p	198	4.33	34	9	3	0.19
HYDROGRAPH	AT	BD36oS	177	5.08	50	12	4	6.12
ROUTED TO		R36oS	177	5.17	50	12	4	6.12
3 COMBINED	AT	C36p	742	5.17	287	76	25	6.91
DIVERSION	TO	DB36p	129	5.17	19	5	2	6.91
HYDROGRAPH	AT	E36p	613	5.08	268	72	24	6.91
HYDROGRAPH	AT	BDB36p	129	5.17	19	5	2	6.91
ROUTED TO		S36p	53	5.75	14	4	1	6.91
HYDROGRAPH	AT	BD36oP	139	3.92	95	25	8	6.12
ROUTED TO		P36oS	139	4	95	25	8	6.12
3 COMBINED	AT	CC36p	798	5.33	373	100	33	6.91
DIVERSION	TO	D36pP	613	4.5	330	90	30	6.91
HYDROGRAPH	AT	D36p	185	5.33	43	11	4	6.91
ROUTED TO		R36pW	181	5.58	43	11	4	6.91
HYDROGRAPH	AT	BD36pP	613	4.5	330	90	30	6.91
DIVERSION	TO	D36pP2	139	4.5	75	20	7	6.91
HYDROGRAPH	AT	D36pP1	474	4.5	256	69	23	6.91
ROUTED TO		P36pW	474	4.58	256	69	23	6.91
2 COMBINED	AT	C36pW	655	5.58	298	80	27	6.91
HYDROGRAPH	AT	40p	246	4.33	43	11	4	0.22
HYDROGRAPH	AT	BD40oP	70	3.67	57	16	5	7.82
ROUTED TO		P40oS	70	3.75	57	16	5	7.82
HYDROGRAPH	AT	BD40oS	259	5.08	67	17	6	7.82
ROUTED TO		R40oS	257	5.17	67	17	6	7.82
2 COMBINED	AT	C40oS	327	5.17	125	32	11	7.82
3 COMBINED	AT	C40p	1005	5.17	446	119	40	8.83
DIVERSION	TO	D40pP	785	4.58	403	108	36	8.83
HYDROGRAPH	AT	D40p	220	5.17	43	11	4	8.83
ROUTED TO		R40pW	218	5.42	43	11	4	8.83
HYDROGRAPH	AT	BD40pP	785	4.58	403	108	36	8.83
ROUTED TO		P40pW	785	4.67	403	108	36	8.83
2 COMBINED	AT	C40pW	1003	5.42	446	119	40	8.83
HYDROGRAPH	AT	44p	399	4.42	91	23	8	0.41
HYDROGRAPH	AT	BD44oP	124	3.83	95	26	9	9.68
ROUTED TO		P44oS	124	7.25	95	26	9	9.68
HYDROGRAPH	AT	BD44oS	312	5.17	89	22	7	9.68
ROUTED TO		R44oS	306	5.42	89	22	7	9.68
2 COMBINED	AT	C44oS	430	5.42	183	48	16	9.68
3 COMBINED	AT	C44p	1554	5.25	688	182	61	11.1
DIVERSION	TO	D44pP	1344	5	660	175	58	11.1
HYDROGRAPH	AT	D44p	210	5.25	28	7	2	11.1
ROUTED TO		R44pW	186	5.58	28	7	2	11.1
HYDROGRAPH	AT	BD44pP	1344	5	660	175	58	11.1
DIVERSION	TO	D44pP2	124	5	61	16	5	11.1
HYDROGRAPH	AT	D44pP1	1220	5	599	158	53	11.1

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		P44pW	1220	5.08	599	158	53	11.1
2 COMBINED	AT	C44pW	1406	5.58	627	165	55	11.1
HYDROGRAPH	AT	48o	651	4.42	137	35	12	0.68
HYDROGRAPH	AT	BD52mS	566	5.08	145	36	12	12.24
ROUTED TO		R52mS	545	5.42	145	36	12	12.24
HYDROGRAPH	AT	BD52mP	364	4.08	225	59	20	12.24
ROUTED TO		P52mS	364	6.67	225	59	20	12.24
2 COMBINED	AT	C52mS	909	5.42	369	95	32	12.24
3 COMBINED	AT	C48o	2401	5.42	1074	281	94	14.34
DIVERSION	TO	DB48o	35	5.25	4	1	0	14.34
HYDROGRAPH	AT	E48o	2369	5.42	1070	280	93	14.34
HYDROGRAPH	AT	BDB48o	35	5.25	4	1	0	14.34
ROUTED TO		S48o	4	5.92	3	1	0	14.34
2 COMBINED	AT	CC48o	2372	5.42	1072	281	94	14.34
DIVERSION	TO	D48oPT	2369	5.42	1071	281	94	14.34
HYDROGRAPH	AT	D48o	4	5.92	1	0	0	14.34
ROUTED TO		R48oW	4	6	1	0	0	14.34
HYDROGRAPH	AT	52o	571	4.42	136	35	12	0.64
HYDROGRAPH	AT	BD54mP	124	3.92	76	20	7	1.66
ROUTED TO		P54mS	124	4.08	76	20	7	1.66
HYDROGRAPH	AT	BD54mS	161	4.83	43	11	4	1.66
ROUTED TO		R54mS	155	5.33	43	11	4	1.66
2 COMBINED	AT	C54mS	279	5.33	119	31	10	1.66
3 COMBINED	AT	C52o	660	4.75	262	67	22	2.3
DIVERSION	TO	D52oP	517	4.33	237	61	20	2.3
HYDROGRAPH	AT	D52o	143	4.75	25	6	2	2.3
ROUTED TO		R52oW	130	5.08	25	6	2	2.3
HYDROGRAPH	AT	BD52oP	517	4.33	237	61	20	2.3
ROUTED TO		P52oW	517	4.42	237	61	20	2.3
2 COMBINED	AT	C52oW	647	5.08	262	67	22	2.3
HYDROGRAPH	AT	56o	500	4.5	127	32	11	0.64
HYDROGRAPH	AT	BD56mP	433	4.25	230	60	20	5.5
ROUTED TO		P56mS	433	4.42	230	60	20	5.5
HYDROGRAPH	AT	BD56mS	133	5	30	7	2	5.5
ROUTED TO		R56mS	124	5.58	30	7	2	5.5
2 COMBINED	AT	C56mS	557	5.58	260	67	22	5.5
3 COMBINED	AT	C56o	1316	4.92	583	151	50	6.79
DIVERSION	TO	D56oP	950	4.25	494	128	43	6.79
HYDROGRAPH	AT	D56o	366	4.92	89	22	7	6.79
ROUTED TO		R56oW	363	5.08	89	22	7	6.79
HYDROGRAPH	AT	BD56oP	950	4.25	494	128	43	6.79
ROUTED TO		P56oW	950	4.33	494	128	43	6.79
2 COMBINED	AT	C56oW	1313	5.08	583	151	50	6.79
HYDROGRAPH	AT	60o	386	4.58	108	28	9	0.64
HYDROGRAPH	AT	BD60mP	124	3.92	96	26	9	6.24
ROUTED TO		P60mS	124	4.17	96	26	9	6.24
HYDROGRAPH	AT	BD60mS	348	5.08	95	24	8	6.24
ROUTED TO		R60mS	332	5.58	95	24	8	6.24
2 COMBINED	AT	C60mS	456	5.58	189	50	17	6.24
3 COMBINED	AT	C60o	1861	5.25	841	219	73	8.16
DIVERSION	TO	D60oPT	1720	5.17	823	214	71	8.16
HYDROGRAPH	AT	D60o	144	5.33	18	4	1	8.16
ROUTED TO		R60oW	139	5.58	18	4	1	8.16
HYDROGRAPH	AT	64o	444	4.58	130	34	11	0.65
ROUTED TO		S64o	442	4.67	130	34	11	0.65
HYDROGRAPH	AT	BD64mP	399	4.17	269	76	25	9.55
ROUTED TO		P64mS	399	4.33	269	76	25	9.55
HYDROGRAPH	AT	BD64mS	246	5.08	64	16	5	9.55

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		R64mS	234	5.67	64	16	5	9.55
2 COMBINED	AT	C64mS	633	5.67	333	92	31	9.55
3 COMBINED	AT	C64o	878	5.42	437	119	40	12.13
DIVERSION	TO	D64oPT	839	5.42	434	118	39	12.13
HYDROGRAPH	AT	D64o	41	5.5	3	1	0	12.13
ROUTED TO		R64oW	32	5.75	3	1	0	12.13
HYDROGRAPH	AT	68o	632	4.5	160	41	14	0.69
ROUTED TO		S68o	574	4.75	136	34	11	0.69
HYDROGRAPH	AT	BD68mP	144	3.67	123	34	11	16.15
ROUTED TO		P68mS	144	3.92	123	34	11	16.15
HYDROGRAPH	AT	BD68mS	562	5	209	52	17	16.15
ROUTED TO		R68mS	544	5.5	209	52	17	16.15
2 COMBINED	AT	C68mS	688	5.5	330	86	29	16.15
3 COMBINED	AT	C68o	990	5.33	433	112	37	16.84
DIVERSION	TO	D68oPT	936	5.33	430	112	37	16.84
HYDROGRAPH	AT	D68o	54	5.33	3	1	0	16.84
ROUTED TO		R68oW	35	5.75	3	1	0	16.84
HYDROGRAPH	AT	72o	661	4.5	148	37	12	0.66
3 COMBINED	AT	C72o	1309	5.67	775	214	71	17.78
DIVERSION	TO	D72oP	433	4	395	119	40	17.78
HYDROGRAPH	AT	D72o	876	5.67	380	95	32	17.78
ROUTED TO		S72o	874	5.75	380	95	32	17.78
DIVERSION	TO	D72o1	256	5.75	63	16	5	17.78
HYDROGRAPH	AT	D72oPT	619	5.75	317	79	26	17.78
ROUTED TO		PT72oE	619	5.75	317	79	26	17.78
HYDROGRAPH	AT	B68oPT	936	5.33	430	112	37	16.84
2 COMBINED	AT	CPT68o	1534	5.58	737	189	63	18.47
ROUTED TO		PT68oE	1533	5.58	737	189	63	18.47
HYDROGRAPH	AT	BD72o1	256	5.75	63	16	5	17.78
DIVERSION	TO	D72oW	0	0	0	0	0	17.78
HYDROGRAPH	AT	D72oE	256	5.75	63	16	5	17.78
ROUTED TO		S-I10	78	6.58	53	16	5	17.78
HYDROGRAPH	AT	B64oPT	839	5.42	434	118	39	12.13
HYDROGRAPH	AT	B60oPT	1720	5.17	823	214	71	8.16
ROUTED TO		PT60oW	1720	5.25	823	214	71	8.16
4 COMBINED	AT	C-WT	3914	5.33	1905	507	169	21.04
ROUTED TO		PT64o	3912	5.33	1905	507	169	21.04
DIVERSION	TO	DPT64o	3912	5.33	1905	507	169	21.04
HYDROGRAPH	AT	DN_64o	0	0	0	0	0	21.04
HYDROGRAPH	AT	36q	377	4.33	69	17	6	0.27
HYDROGRAPH	AT	BD32q	55	6.17	35	9	3	0.99
ROUTED TO		R32qS	54	6.42	35	9	3	0.99
HYDROGRAPH	AT	B36pP2	139	4.5	75	20	7	6.91
ROUTED TO		P36pS	139	4.67	75	20	7	6.91
3 COMBINED	AT	C36q	450	4.42	177	47	16	1.56
DIVERSION	TO	D36qP	295	4.08	163	44	15	1.56
HYDROGRAPH	AT	D36q	155	4.42	15	4	1	1.56
DIVERSION	TO	D36qS	66	4.42	6	2	1	1.56
HYDROGRAPH	AT	D36qW	88	4.42	8	2	1	1.56
ROUTED TO		R36qW	70	4.75	8	2	1	1.56
HYDROGRAPH	AT	40q	469	4.33	90	23	8	0.35
2 COMBINED	AT	C40q	404	4.58	95	24	8	1.91
DIVERSION	TO	D40qP	32	3.67	20	5	2	1.91
HYDROGRAPH	AT	D40q	372	4.58	75	19	6	1.91
DIVERSION	TO	D40qS	227	4.58	45	11	4	1.91
HYDROGRAPH	AT	D40qW	146	4.58	29	7	2	1.91
ROUTED TO		R40qW	143	4.75	29	7	2	1.91
HYDROGRAPH	AT	BD40qP	32	3.67	20	5	2	1.91

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		P40qW	32	3.75	20	5	2	1.91
2 COMBINED	AT	C40qW	175	4.75	49	13	4	1.91
HYDROGRAPH	AT	44q	470	4.33	100	25	8	0.36
HYDROGRAPH	AT	B44pP2	124	5	61	16	5	11.1
ROUTED TO		P44pS	124	5.17	61	16	5	11.1
3 COMBINED	AT	C44q	637	4.58	210	54	18	2.57
DIVERSION	TO	D44qP	201	3.92	124	33	11	2.57
HYDROGRAPH	AT	D44q	436	4.58	86	22	7	2.57
DIVERSION	TO	D44qS	271	4.58	54	13	4	2.57
HYDROGRAPH	AT	D44qW	165	4.58	33	8	3	2.57
ROUTED TO		R44qW	159	4.83	33	8	3	2.57
HYDROGRAPH	AT	48q	346	4.42	76	19	6	0.3
2 COMBINED	AT	C48q	416	4.67	105	27	9	2.87
DIVERSION	TO	D48qPT	416	4.67	105	27	9	2.87
HYDROGRAPH	AT	DB48q	0	0	0	0	0	2.87
ROUTED TO		S48q	0	0	0	0	0	2.87
DIVERSION	TO	D48qS	0	0	0	0	0	2.87
HYDROGRAPH	AT	D48qW	0	0	0	0	0	2.87
ROUTED TO		R48qW	0	0	0	0	0	2.87
HYDROGRAPH	AT	52q	415	4.42	99	25	8	0.39
2 COMBINED	AT	C52q	415	4.42	99	25	8	0.39
DIVERSION	TO	D52qP	191	4.08	73	19	6	0.39
HYDROGRAPH	AT	D52q	224	4.42	27	7	2	0.39
DIVERSION	TO	D52qS	114	4.42	14	3	1	0.39
HYDROGRAPH	AT	D52qW	110	4.42	13	3	1	0.39
ROUTED TO		R52qW	102	4.83	13	3	1	0.39
HYDROGRAPH	AT	56q	359	4.42	76	19	6	0.35
2 COMBINED	AT	C56q	369	4.75	87	22	7	0.75
DIVERSION	TO	D56qP	68	3.92	33	8	3	0.75
HYDROGRAPH	AT	D56q	301	4.75	54	13	4	0.75
DIVERSION	TO	D56qS	99	4.75	18	4	1	0.75
HYDROGRAPH	AT	D56qW	202	4.75	36	9	3	0.75
ROUTED TO		R56qW	193	4.92	36	9	3	0.75
HYDROGRAPH	AT	60q	387	4.33	72	18	6	0.35
2 COMBINED	AT	C60q	437	4.67	102	26	9	1.1
DIVERSION	TO	D60qP	281	4.33	86	22	7	1.1
HYDROGRAPH	AT	D60q	156	4.67	16	4	1	1.1
DIVERSION	TO	D60qS	44	4.67	4	1	0	1.1
HYDROGRAPH	AT	D60qW	112	4.67	11	3	1	1.1
ROUTED TO		R60qW	91	5	11	3	1	1.1
HYDROGRAPH	AT	64q	539	4.33	105	27	9	0.41
3 COMBINED	AT	C64q	459	4.42	111	28	9	1.51
DIVERSION	TO	D64qPT	0	0	0	0	0	1.51
HYDROGRAPH	AT	D64q	459	4.42	111	28	9	1.51
DIVERSION	TO	D64qP	68	3.75	37	10	3	1.51
HYDROGRAPH	AT	D64q1	391	4.42	73	18	6	1.51
DIVERSION	TO	D64qS	129	4.42	24	6	2	1.51
HYDROGRAPH	AT	D64qW	262	4.42	49	12	4	1.51
ROUTED TO		R64qW	249	4.75	49	12	4	1.51
HYDROGRAPH	AT	BD64qP	68	3.75	37	10	3	1.51
ROUTED TO		P64qW	68	3.83	37	10	3	1.51
2 COMBINED	AT	C64qW	317	4.75	86	22	7	1.51
HYDROGRAPH	AT	68q	385	4.33	71	18	6	0.29
2 COMBINED	AT	C68q	584	4.58	151	38	13	1.8
DIVERSION	TO	D68qP	68	3.67	45	12	4	1.8
HYDROGRAPH	AT	D68q	516	4.58	107	27	9	1.8
DIVERSION	TO	D68qS	170	4.58	35	9	3	1.8
HYDROGRAPH	AT	D68qW	346	4.58	71	18	6	1.8

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		R68qW	330	4.83	71	18	6	1.8
HYDROGRAPH	AT	BD68qP	68	3.67	45	12	4	1.8
ROUTED TO		P68qW	68	3.83	45	12	4	1.8
2 COMBINED	AT	C68qW	398	4.83	116	29	10	1.8
HYDROGRAPH	AT	72q	425	4.42	84	21	7	0.33
HYDROGRAPH	AT	B72oP	433	4	395	119	40	17.78
ROUTED TO		P72oS	433	4.08	395	119	40	17.78
3 COMBINED	AT	C72q	1097	4.67	582	167	56	3.13
DIVERSION	TO	D72qP	662	4	508	148	49	3.13
HYDROGRAPH	AT	D72q	435	4.67	75	19	6	3.13
DIVERSION	TO	D72qS	144	4.67	25	6	2	3.13
HYDROGRAPH	AT	D72qW	292	4.67	50	12	4	3.13
ROUTED TO		R72qW	276	5	50	12	4	3.13
HYDROGRAPH	AT	80o	850	4.25	138	35	12	0.54
HYDROGRAPH	AT	BD84mP	249	4	82	21	7	0.29
ROUTED TO		P84mS	249	4.08	82	21	7	0.29
HYDROGRAPH	AT	BD84mS	369	5.42	169	43	14	5.49
ROUTED TO		R84mS	364	5.67	168	43	14	5.49
2 COMBINED	AT	C84mS	500	5	245	66	22	5.49
HYDROGRAPH	AT	BD80mS	760	5.5	328	84	28	6.03
ROUTED TO		R80mS	758	5.58	327	84	28	6.03
3 COMBINED	AT	C80o	1431	4.92	686	180	60	6.58
DIVERSION	TO	DB80o	1182	4.92	465	116	39	6.58
HYDROGRAPH	AT	E80o	249	3.75	221	64	21	6.58
HYDROGRAPH	AT	BDB80o	1182	4.92	465	116	39	6.58
ROUTED TO		S80o	1179	5	447	116	39	6.58
2 COMBINED	AT	CC80o	1428	5	665	180	60	6.58
DIVERSION	TO	D80oP	249	3.75	230	71	24	6.58
HYDROGRAPH	AT	D80o	1179	5	435	109	36	6.58
ROUTED TO		R80oS	1168	5.17	435	109	36	6.58
HYDROGRAPH	AT	76o	729	4.42	170	43	14	0.67
HYDROGRAPH	AT	BD76m	1162	5.33	468	117	39	6.71
ROUTED TO		R76mS	1156	5.5	467	117	39	6.71
HYDROGRAPH	AT	B76mP2	32	3.75	29	8	3	6.71
ROUTED TO		P76mS	32	4.08	29	8	3	6.71
2 COMBINED	AT	C76mS	1188	5.5	496	125	42	6.71
HYDROGRAPH	AT	BD72oW	0	0	0	0	0	17.78
ROUTED TO		R72oW	0	0	0	0	0	17.78
4 COMBINED	AT	C76o	2628	5.17	1058	268	89	7.92
DIVERSION	TO	D76o	2399	5.17	863	216	72	7.92
HYDROGRAPH	AT	D76oP	229	3.92	195	52	17	7.92
ROUTED TO		P76oS	229	4.08	195	52	17	7.92
HYDROGRAPH	AT	BD76o	2399	5.17	863	216	72	7.92
DIVERSION	TO	D76oW	240	5.17	86	22	7	7.92
HYDROGRAPH	AT	D76oS	2159	5.17	777	194	65	7.92
ROUTED TO		R76oS	2140	5.33	776	194	65	7.92
2 COMBINED	AT	C76oS	2369	5.33	971	246	82	7.92
HYDROGRAPH	AT	76q	626	4.33	111	28	9	0.4
3 COMBINED	AT	C76q	2595	5.17	1059	270	90	11.45
DIVERSION	TO	D76qP	229	3.75	207	57	19	11.45
HYDROGRAPH	AT	D76q	2366	5.17	853	213	71	11.45
DIVERSION	TO	D76qS	1230	5.17	443	111	37	11.45
HYDROGRAPH	AT	D76qW	1136	5.17	409	102	34	11.45
ROUTED TO		R76qW	1128	5.33	409	102	34	11.45
HYDROGRAPH	AT	80p	644	4.25	113	29	10	0.4
HYDROGRAPH	AT	BD76oW	240	5.17	86	22	7	7.92
ROUTED TO		R76oW	238	5.33	86	22	7	7.92
2 COMBINED	AT	C80p	661	4.75	250	63	21	8.32

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		S80p	433	4.92	178	46	16	8.32
HYDROGRAPH	AT	BD80oP	249	3.75	230	71	24	6.58
ROUTED TO		P80oS	249	3.92	230	71	24	6.58
2 COMBINED	AT	CC80p	682	4.92	407	118	40	8.32
DIVERSION	TO	D80pP	249	3.75	232	74	25	8.32
HYDROGRAPH	AT	D80p	433	4.92	175	44	15	8.32
ROUTED TO		R80pS	427	5.25	175	44	15	8.32
HYDROGRAPH	AT	BD80pP	249	3.75	232	74	25	8.32
ROUTED TO		P80pS	249	3.92	232	74	25	8.32
2 COMBINED	AT	C80pS	676	5.25	406	118	40	8.32
HYDROGRAPH	AT	80q	526	4.5	131	33	11	0.5
3 COMBINED	AT	C80q	2019	5.25	913	247	83	12.34
HYDROGRAPH	AT	28s	285	4.25	41	10	3	0.16
HYDROGRAPH	AT	BD28qP	340	4	161	41	14	0.82
DIVERSION	TO	D28qP2	32	4	15	4	1	0.82
HYDROGRAPH	AT	D28qP1	308	4	145	38	13	0.82
ROUTED TO		P28qS	308	4.08	145	38	13	0.82
HYDROGRAPH	AT	BD28qS	208	4.25	19	5	2	0.82
ROUTED TO		R28qS	201	4.33	19	5	2	0.82
2 COMBINED	AT	C28qS	509	4.33	164	42	14	0.82
2 COMBINED	AT	C28s	730	4.33	202	52	17	0.98
DIVERSION	TO	D28sP	492	4.08	185	48	16	0.98
HYDROGRAPH	AT	D28s	238	4.33	17	4	1	0.98
DIVERSION	TO	D28sS	103	4.33	7	2	1	0.98
HYDROGRAPH	AT	D28sW	135	4.33	10	2	1	0.98
ROUTED TO		R28sW	116	4.58	10	2	1	0.98
HYDROGRAPH	AT	32s	394	4.33	88	22	7	0.34
2 COMBINED	AT	C32s	436	4.5	94	24	8	1.32
ROUTED TO		S32s	399	4.67	63	16	5	1.32
DIVERSION	TO	D32sP	48	4.5	21	5	2	1.32
HYDROGRAPH	AT	D32s	351	4.67	42	11	4	1.32
ROUTED TO		R32sW	298	5	42	11	4	1.32
HYDROGRAPH	AT	BD32sP	48	4.5	21	5	2	1.32
ROUTED TO		P32sW	48	4.67	21	5	2	1.32
2 COMBINED	AT	C32sW	346	5	63	16	5	1.32
HYDROGRAPH	AT	36s	359	4.33	66	17	6	0.24
HYDROGRAPH	AT	BD36qP	295	4.08	163	44	15	1.56
ROUTED TO		P36qS	295	4.17	163	44	15	1.56
HYDROGRAPH	AT	BD36qS	66	4.42	6	2	1	1.56
ROUTED TO		R36qS	57	4.67	6	2	1	1.56
2 COMBINED	AT	C36qS	352	4.67	169	45	15	1.56
3 COMBINED	AT	C36s	793	5	286	75	25	2.3
DIVERSION	TO	D36sP	303	4	192	51	17	2.3
HYDROGRAPH	AT	D36s	490	5	95	24	8	2.3
ROUTED TO		R36sW	456	5.17	95	24	8	2.3
HYDROGRAPH	AT	40s	365	4.33	70	18	6	0.24
HYDROGRAPH	AT	BD40qS	227	4.58	45	11	4	1.91
ROUTED TO		R40qS	222	4.75	45	11	4	1.91
3 COMBINED	AT	C40s	745	5.08	204	51	17	2.89
DIVERSION	TO	D40sP	68	3.75	40	10	3	2.89
HYDROGRAPH	AT	D40s	677	5.08	164	41	14	2.89
ROUTED TO		R40sW	670	5.17	164	41	14	2.89
HYDROGRAPH	AT	BD40sP	68	3.75	40	10	3	2.89
ROUTED TO		P40sW	68	3.92	40	10	3	2.89
2 COMBINED	AT	C40sW	738	5.17	203	51	17	2.89
HYDROGRAPH	AT	44s	330	4.33	68	17	6	0.24
HYDROGRAPH	AT	BD44qP	201	3.92	124	33	11	2.57
ROUTED TO		P44qS	201	4	124	33	11	2.57

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	BD44qS	271	4.58	54	13	4	2.57
ROUTED TO		R44qS	261	4.75	54	13	4	2.57
2 COMBINED	AT	C44qS	462	4.75	177	46	15	2.57
3 COMBINED	AT	C44s	1345	4.83	436	112	37	3.79
DIVERSION	TO	D44sP	201	3.67	141	38	13	3.79
HYDROGRAPH	AT	D44s	1144	4.83	296	74	25	3.79
ROUTED TO		R44sW	1140	4.92	296	74	25	3.79
HYDROGRAPH	AT	48s	320	4.33	61	15	5	0.21
HYDROGRAPH	AT	BD48qS	0	0	0	0	0	2.87
ROUTED TO		R48qS	0	0	0	0	0	2.87
3 COMBINED	AT	C48s	1274	4.83	348	87	29	4.31
DIVERSION	TO	D48sPT	1063	4.92	328	82	27	4.31
HYDROGRAPH	AT	DB48s	214	4.83	20	5	2	4.31
ROUTED TO		S48s	214	4.92	20	5	2	4.31
ROUTED TO		R48sW	194	5.17	20	5	2	4.31
HYDROGRAPH	AT	52s	382	4.33	75	19	6	0.26
HYDROGRAPH	AT	BD52qP	191	4.08	73	19	6	0.39
ROUTED TO		P52qS	191	4.17	73	19	6	0.39
HYDROGRAPH	AT	BD52qS	114	4.42	14	3	1	0.39
ROUTED TO		R52qS	107	4.75	14	3	1	0.39
2 COMBINED	AT	C52qS	298	4.75	86	22	7	0.39
3 COMBINED	AT	C52s	966	5	218	55	18	0.66
DIVERSION	TO	D52sP	191	3.92	94	24	8	0.66
HYDROGRAPH	AT	D52s	775	5	124	31	10	0.66
ROUTED TO		R52sW	749	5.17	124	31	10	0.66
HYDROGRAPH	AT	56s	384	4.33	74	19	6	0.25
HYDROGRAPH	AT	BD56qP	68	3.92	33	8	3	0.75
ROUTED TO		P56qS	68	4	33	8	3	0.75
HYDROGRAPH	AT	BD56qS	99	4.75	18	4	1	0.75
ROUTED TO		R56qS	96	4.92	18	4	1	0.75
2 COMBINED	AT	C56qS	164	4.92	51	13	4	0.75
3 COMBINED	AT	C56s	848	5.17	230	58	19	1.27
DIVERSION	TO	D56sP	201	4	94	24	8	1.27
HYDROGRAPH	AT	D56s	647	5.17	136	34	11	1.27
DIVERSION	TO	D56sS	97	5.17	20	5	2	1.27
HYDROGRAPH	AT	D56sW	550	5.17	115	29	10	1.27
ROUTED TO		R56sW	529	5.33	115	29	10	1.27
HYDROGRAPH	AT	60s	428	4.25	75	19	6	0.25
HYDROGRAPH	AT	BD60qP	281	4.33	86	22	7	1.1
ROUTED TO		P60qS	281	4.42	86	22	7	1.1
HYDROGRAPH	AT	BD60qS	44	4.67	4	1	0	1.1
ROUTED TO		R60qS	37	5	4	1	0	1.1
2 COMBINED	AT	C60qS	318	5	90	23	8	1.1
3 COMBINED	AT	C60s	957	4.67	266	67	22	1.87
DIVERSION	TO	D60sP	217	3.92	104	26	9	1.87
HYDROGRAPH	AT	D60s	740	4.67	162	41	14	1.87
DIVERSION	TO	D60sS	207	4.67	45	11	4	1.87
HYDROGRAPH	AT	D60sW	532	4.67	117	29	10	1.87
ROUTED TO		R60sW	519	4.92	117	29	10	1.87
HYDROGRAPH	AT	BD60sP	217	3.92	104	26	9	1.87
ROUTED TO		P60sW	217	4	104	26	9	1.87
2 COMBINED	AT	C60sW	736	4.92	220	56	19	1.87
HYDROGRAPH	AT	64s	432	4.25	78	20	7	0.26
HYDROGRAPH	AT	BD64qS	129	4.42	24	6	2	1.51
ROUTED TO		R64qS	124	4.67	24	6	2	1.51
3 COMBINED	AT	C64s	1013	4.83	311	79	26	2.54
DIVERSION	TO	D64sPT	0	0	0	0	0	2.54
HYDROGRAPH	AT	D64s	1013	4.83	311	79	26	2.54

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
DIVERSION	TO	D64sP	327	3.92	165	42	14	2.54
HYDROGRAPH	AT	D64s1	686	4.83	146	36	12	2.54
DIVERSION	TO	D64sS	288	4.83	61	15	5	2.54
HYDROGRAPH	AT	D64sW	398	4.83	85	21	7	2.54
ROUTED TO		R64sW	392	4.92	85	21	7	2.54
HYDROGRAPH	AT	68s	345	4.25	63	16	5	0.24
HYDROGRAPH	AT	BD68qS	170	4.58	35	9	3	1.8
ROUTED TO		R68qS	162	4.83	35	9	3	1.8
3 COMBINED	AT	C68s	680	4.83	173	44	15	3.07
DIVERSION	TO	D68sP	124	4	62	16	5	3.07
HYDROGRAPH	AT	D68s	556	4.83	111	28	9	3.07
DIVERSION	TO	D68sS	156	4.83	31	8	3	3.07
HYDROGRAPH	AT	D68sW	400	4.83	80	20	7	3.07
ROUTED TO		R68sW	385	5.08	80	20	7	3.07
HYDROGRAPH	AT	72s	432	4.33	77	19	6	0.28
HYDROGRAPH	AT	BD72qP	662	4	508	148	49	3.13
DIVERSION	TO	D72qP2	229	4	176	51	17	3.13
HYDROGRAPH	AT	D72qP1	433	4	332	97	32	3.13
ROUTED TO		P72qS1	433	4.08	332	97	32	3.13
HYDROGRAPH	AT	B72qP2	229	4	176	51	17	3.13
ROUTED TO		P72qS2	229	4.08	176	51	17	3.13
HYDROGRAPH	AT	BD72qS	144	4.67	25	6	2	3.13
ROUTED TO		R72qS	137	5	25	6	2	3.13
3 COMBINED	AT	C72qS	799	5	532	154	51	3.13
3 COMBINED	AT	C72s	1314	4.92	671	191	64	4.68
DIVERSION	TO	D72sP	662	3.92	522	153	51	4.68
HYDROGRAPH	AT	D72s	652	4.92	149	37	12	4.68
DIVERSION	TO	D72sS	261	4.92	59	15	5	4.68
HYDROGRAPH	AT	D72sW	391	4.92	89	22	7	4.68
ROUTED TO		R72sW	379	5.17	89	22	7	4.68
HYDROGRAPH	AT	76s	434	4.33	81	20	7	0.28
ROUTED TO		S76s	435	4.33	80	20	7	0.28
HYDROGRAPH	AT	BD76qP	229	3.75	207	57	19	11.45
ROUTED TO		P76qS	229	3.83	206	57	19	11.45
HYDROGRAPH	AT	BD76qS	1230	5.17	443	111	37	11.45
ROUTED TO		R76qS	1224	5.33	443	111	37	11.45
2 COMBINED	AT	C76qS	1453	5.33	650	168	56	11.45
3 COMBINED	AT	C76s	1842	5.25	779	202	67	13.28
DIVERSION	TO	D76sP	204	3.67	191	55	18	13.28
HYDROGRAPH	AT	D76s	1638	5.25	588	147	49	13.28
DIVERSION	TO	D76sS	360	5.25	129	32	11	13.28
HYDROGRAPH	AT	D76sW	1278	5.25	459	115	38	13.28
ROUTED TO		R76sW	1268	5.42	458	115	38	13.28
2 COMBINED	AT	CC80q	3215	5.33	1354	357	119	14.17
DIVERSION	TO	D80qP	364	3.92	338	103	35	14.17
HYDROGRAPH	AT	D80q	2851	5.33	1016	254	85	14.17
DIVERSION	TO	D80qW	2851	5.33	1016	254	85	14.17
HYDROGRAPH	AT	D80qS	0	0	0	0	0	14.17
ROUTED TO		R80qS	0	0	0	0	0	14.17
HYDROGRAPH	AT	BD80qP	364	3.92	338	103	35	14.17
ROUTED TO		P80qS	364	4	338	103	35	14.17
2 COMBINED	AT	C80qS	364	4	338	103	35	14.17
HYDROGRAPH	AT	52t	395	4.33	80	20	7	0.3
ROUTED TO		S52t	393	4.42	73	18	6	0.3
HYDROGRAPH	AT	BD52sP	191	3.92	94	24	8	0.66
ROUTED TO		P52sS	191	4	94	24	8	0.66
2 COMBINED	AT	C52t	550	4.42	166	42	14	0.96
DIVERSION	TO	D52tP	281	4	128	33	11	0.96

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	D52t	269	4.42	38	9	3	0.96
DIVERSION	TO	D52tS	110	4.42	15	4	1	0.96
HYDROGRAPH	AT	D52tW	159	4.42	22	6	2	0.96
ROUTED TO		R52tW	150	4.67	22	6	2	0.96
HYDROGRAPH	AT	56t	242	4.33	52	13	4	0.18
HYDROGRAPH	AT	BD56sP	201	4	94	24	8	1.27
ROUTED TO		P56sS	201	4.08	94	24	8	1.27
HYDROGRAPH	AT	BD56sS	97	5.17	20	5	2	1.27
ROUTED TO		R56sS	93	5.33	20	5	2	1.27
2 COMBINED	AT	C56sS	294	5.33	115	29	10	1.27
3 COMBINED	AT	C56t	570	4.67	185	47	16	1.74
DIVERSION	TO	D56tP	565	4.67	185	47	16	1.74
HYDROGRAPH	AT	D56t	5	4.67	0	0	0	1.74
DIVERSION	TO	D56tS	2	4.67	0	0	0	1.74
HYDROGRAPH	AT	D56tW	3	4.67	0	0	0	1.74
ROUTED TO		R56tW	1	5	0	0	0	1.74
HYDROGRAPH	AT	60t	405	4.42	88	22	7	0.33
ROUTED TO		S60t	406	4.42	87	22	7	0.33
HYDROGRAPH	AT	BD60sS	207	4.67	45	11	4	1.87
ROUTED TO		R60sS	202	4.92	45	11	4	1.87
3 COMBINED	AT	C60t	468	4.75	126	31	10	2.68
DIVERSION	TO	D60tS	126	4.75	34	8	3	2.68
HYDROGRAPH	AT	D60tW	342	4.75	92	23	8	2.68
ROUTED TO		R60tW	338	4.92	92	23	8	2.68
HYDROGRAPH	AT	64t	356	4.33	71	18	6	0.27
HYDROGRAPH	AT	BD64sP	327	3.92	165	42	14	2.54
ROUTED TO		P64sS	327	4	165	42	14	2.54
HYDROGRAPH	AT	BD64sS	288	4.83	61	15	5	2.54
ROUTED TO		R64sS	282	5	61	15	5	2.54
2 COMBINED	AT	C64sS	609	5	226	57	19	2.54
3 COMBINED	AT	C64t	1100	4.83	374	95	32	3.61
DIVERSION	TO	D64tPT	0	0	0	0	0	3.61
HYDROGRAPH	AT	D64t	1100	4.83	374	95	32	3.61
DIVERSION	TO	D64tP	375	3.83	205	53	18	3.61
HYDROGRAPH	AT	D64t1	725	4.83	169	42	14	3.61
DIVERSION	TO	D64tS	319	4.83	74	19	6	3.61
HYDROGRAPH	AT	D64tW	406	4.83	95	24	8	3.61
ROUTED TO		R64tW	398	5	95	24	8	3.61
HYDROGRAPH	AT	68t	369	4.33	66	17	6	0.25
HYDROGRAPH	AT	BD68sP	124	4	62	16	5	3.07
ROUTED TO		P68sS	124	4.08	62	16	5	3.07
HYDROGRAPH	AT	BD68sS	156	4.83	31	8	3	3.07
ROUTED TO		R68sS	152	5	31	8	3	3.07
2 COMBINED	AT	C68sS	276	5	93	24	8	3.07
3 COMBINED	AT	C68t	802	4.92	243	61	20	4.39
DIVERSION	TO	D68tP	124	3.75	73	19	6	4.39
HYDROGRAPH	AT	D68t	678	4.92	170	42	14	4.39
DIVERSION	TO	D68tS	312	4.92	78	20	7	4.39
HYDROGRAPH	AT	D68tW	366	4.92	92	23	8	4.39
ROUTED TO		R68tW	358	5.08	92	23	8	4.39
HYDROGRAPH	AT	72t	273	4.33	59	15	5	0.22
HYDROGRAPH	AT	BD72sS	261	4.92	59	15	5	4.68
ROUTED TO		R72sS	257	5.08	59	15	5	4.68
HYDROGRAPH	AT	BD72sP	662	3.92	522	153	51	4.68
DIVERSION	TO	D72sP2	229	3.92	181	53	18	4.68
HYDROGRAPH	AT	D72sP1	433	3.92	342	100	33	4.68
ROUTED TO		P72sS1	433	4	341	100	33	4.68
HYDROGRAPH	AT	B72sP2	229	3.92	181	53	18	4.68

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		P72sS2	229	4	181	53	18	4.68
3 COMBINED	AT	C72sS	919	5.08	582	168	56	4.68
3 COMBINED	AT	C72t	1378	5	717	203	68	6.23
DIVERSION	TO	D72tP	714	3.92	554	162	54	6.23
HYDROGRAPH	AT	D72t	664	5	163	41	14	6.23
DIVERSION	TO	D72tS	352	5	86	22	7	6.23
HYDROGRAPH	AT	D72tW	312	5	77	19	6	6.23
ROUTED TO		R72tW	305	5.25	77	19	6	6.23
HYDROGRAPH	AT	76t	373	4.33	74	19	6	0.27
HYDROGRAPH	AT	BD76sP	204	3.67	191	55	18	13.28
ROUTED TO		P76sS	204	3.75	191	55	18	13.28
HYDROGRAPH	AT	BD76sS	360	5.25	129	32	11	13.28
ROUTED TO		R76sS	356	5.42	129	32	11	13.28
2 COMBINED	AT	C76sS	560	5.42	320	87	29	13.28
3 COMBINED	AT	C76t	911	5.33	443	119	40	15.1
DIVERSION	TO	D76tP	297	3.83	264	74	25	15.1
HYDROGRAPH	AT	D76t	614	5.33	180	45	15	15.1
DIVERSION	TO	D76tS	325	5.33	95	24	8	15.1
HYDROGRAPH	AT	D76tW	289	5.33	84	21	7	15.1
ROUTED TO		R76tW	281	5.5	84	21	7	15.1
HYDROGRAPH	AT	80t	307	4.33	59	15	5	0.25
3 COMBINED	AT	C80t	698	5.42	463	136	46	16.24
DIVERSION	TO	D80tP	364	3.83	340	105	35	16.24
HYDROGRAPH	AT	D80t	334	5.42	124	31	10	16.24
ROUTED TO		R80tS	332	5.5	124	31	10	16.24
HYDROGRAPH	AT	52u	379	4.42	73	18	6	0.39
HYDROGRAPH	AT	BD52tS	110	4.42	15	4	1	0.96
ROUTED TO		R52tS	102	4.75	15	4	1	0.96
2 COMBINED	AT	C52u	377	4.67	81	20	7	1.35
ROUTED TO		S52u	118	5.5	72	18	6	1.35
HYDROGRAPH	AT	BD52tP	281	4	128	33	11	0.96
ROUTED TO		P52tS	281	4.08	128	33	11	0.96
2 COMBINED	AT	CC52u	399	5.5	197	51	17	1.35
DIVERSION	TO	D52uP	281	4.08	168	44	15	1.35
HYDROGRAPH	AT	D52u	118	5.5	29	7	2	1.35
DIVERSION	TO	D52uS	38	5.5	9	2	1	1.35
HYDROGRAPH	AT	D52uW	80	5.5	20	5	2	1.35
ROUTED TO		R52uW	78	5.67	20	5	2	1.35
HYDROGRAPH	AT	56u	297	4.42	65	17	6	0.33
HYDROGRAPH	AT	BD56tS	2	4.67	0	0	0	1.74
ROUTED TO		R56tS	0	5.25	0	0	0	1.74
3 COMBINED	AT	C56u	296	4.5	85	22	7	2.46
ROUTED TO		S56u	243	4.75	70	19	6	2.46
HYDROGRAPH	AT	BD56tP	565	4.67	185	47	16	1.74
ROUTED TO		P56tS	565	4.75	185	47	16	1.74
2 COMBINED	AT	CC56u	794	4.75	251	65	22	2.46
DIVERSION	TO	D56uP	612	4.42	232	60	20	2.46
HYDROGRAPH	AT	D56u	182	4.75	19	5	2	2.46
DIVERSION	TO	D56uS	38	4.75	4	1	0	2.46
HYDROGRAPH	AT	D56uW	144	4.75	15	4	1	2.46
ROUTED TO		R56uW	131	5.08	15	4	1	2.46
HYDROGRAPH	AT	60u	289	4.42	59	15	5	0.28
HYDROGRAPH	AT	BD60tS	126	4.75	34	8	3	2.68
ROUTED TO		R60tS	123	5	34	8	3	2.68
3 COMBINED	AT	C60u	365	5	94	24	8	3.68
ROUTED TO		S60u	366	5	94	24	8	3.68
DIVERSION	TO	D60uP	124	4.25	56	14	5	3.68
HYDROGRAPH	AT	D60u	242	5	38	10	3	3.68

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
DIVERSION	TO	D60uS	80	5	13	3	1	3.68
HYDROGRAPH	AT	D60uW	162	5	25	6	2	3.68
ROUTED TO		R60uW	152	5.25	25	6	2	3.68
HYDROGRAPH	AT	64u	349	4.42	71	18	6	0.3
HYDROGRAPH	AT	BD64tP	375	3.83	205	53	18	3.61
ROUTED TO		P64tS	375	3.92	205	53	18	3.61
HYDROGRAPH	AT	BD64tS	319	4.83	74	19	6	3.61
ROUTED TO		R64tS	312	5.08	74	19	6	3.61
2 COMBINED	AT	C64tS	687	5.08	279	71	24	3.61
3 COMBINED	AT	C64u	954	5	361	92	31	4.91
DIVERSION	TO	D64uPT	0	0	0	0	0	4.91
HYDROGRAPH	AT	D64u	954	5	361	92	31	4.91
DIVERSION	TO	D64uP	375	3.83	217	56	19	4.91
HYDROGRAPH	AT	D64u1	579	5	144	36	12	4.91
DIVERSION	TO	D64uS	145	5	36	9	3	4.91
HYDROGRAPH	AT	D64uW	434	5	108	27	9	4.91
ROUTED TO		R64uW	428	5.17	108	27	9	4.91
HYDROGRAPH	AT	68u	355	4.42	73	18	6	0.28
HYDROGRAPH	AT	BD68tP	124	3.75	73	19	6	4.39
ROUTED TO		P68tS	124	3.83	73	19	6	4.39
HYDROGRAPH	AT	BD68tS	312	4.92	78	20	7	4.39
ROUTED TO		R68tS	306	5.08	78	20	7	4.39
2 COMBINED	AT	C68tS	430	5.08	151	38	13	4.39
3 COMBINED	AT	C68u	986	5	318	80	27	5.97
DIVERSION	TO	D68uP	146	3.75	94	24	8	5.97
HYDROGRAPH	AT	D68u	840	5	224	56	19	5.97
DIVERSION	TO	D68uS	176	5	47	12	4	5.97
HYDROGRAPH	AT	D68uW	664	5	177	44	15	5.97
ROUTED TO		R68uW	660	5.17	177	44	15	5.97
HYDROGRAPH	AT	72u	332	4.33	66	16	5	0.26
2 COMBINED	AT	C72u	795	5.08	235	59	20	6.23
HYDROGRAPH	AT	BD72tP	714	3.92	554	162	54	6.23
DIVERSION	TO	D72tP2	281	3.92	218	64	21	6.23
HYDROGRAPH	AT	D72tP1	433	3.92	336	99	33	6.23
ROUTED TO		P72tS1	433	4	336	99	33	6.23
HYDROGRAPH	AT	B72tP2	281	3.92	218	64	21	6.23
ROUTED TO		P72tS2	281	4	218	64	21	6.23
HYDROGRAPH	AT	B72tS	352	5	86	22	7	6.23
ROUTED TO		R72tS	344	5.25	86	22	7	6.23
3 COMBINED	AT	C72tS	1058	5.25	640	184	61	6.23
2 COMBINED	AT	CC72u	1795	5.17	861	240	80	8.06
DIVERSION	TO	D72uP	714	3.92	567	167	56	8.06
HYDROGRAPH	AT	D72u	1081	5.17	294	73	24	8.06
DIVERSION	TO	D72uS	335	5.17	91	23	8	8.06
HYDROGRAPH	AT	D72uW	746	5.17	203	51	17	8.06
ROUTED TO		R72uW	740	5.25	203	51	17	8.06
HYDROGRAPH	AT	BD76tP	297	3.83	264	74	25	15.1
DIVERSION	TO	D76tP2	48	3.83	43	12	4	15.1
HYDROGRAPH	AT	D76tP1	249	3.83	221	62	21	15.1
ROUTED TO		P76tS1	249	3.92	221	62	21	15.1
HYDROGRAPH	AT	B76tP2	48	3.83	43	12	4	15.1
ROUTED TO		P76tS2	48	4	43	12	4	15.1
HYDROGRAPH	AT	BD76tS	325	5.33	95	24	8	15.1
ROUTED TO		R76tS	317	5.5	95	24	8	15.1
3 COMBINED	AT	C76tS	614	5.5	359	98	33	15.1
HYDROGRAPH	AT	76u	362	4.33	71	18	6	0.28
3 COMBINED	AT	C76u	1341	5.33	590	156	52	17.22
DIVERSION	TO	D76uP	297	3.75	267	76	25	17.22

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	D76u	1044	5.33	323	81	27	17.22
DIVERSION	TO	D76uS	0	0	0	0	0	17.22
HYDROGRAPH	AT	D76uW	1044	5.33	323	81	27	17.22
ROUTED TO		R76uW	1041	5.42	323	81	27	17.22
HYDROGRAPH	AT	80u	357	4.33	68	17	6	0.25
3 COMBINED	AT	C80u	1422	5.33	491	124	41	18.61
HYDROGRAPH	AT	BD80tP	364	3.83	340	105	35	16.24
ROUTED TO		P80tS	364	3.92	340	105	35	16.24
HYDROGRAPH	AT	BD80qW	2851	5.33	1016	254	85	14.17
3 COMBINED	AT	CC80u	4472	5.33	1790	469	157	18.61
ROUTED TO		S-I17	3290	6.08	1188	469	157	18.61
DIVERSION	TO	D80uP	509	6	509	299	100	18.61
HYDROGRAPH	AT	D80u	2781	6.08	679	170	57	18.61
ROUTED TO		R80uW	2755	6.17	679	170	57	18.61
HYDROGRAPH	AT	84t	339	4.33	77	19	6	0.27
HYDROGRAPH	AT	P84tN	252	4	63	16	5	0.5
2 COMBINED	AT	C84t	512	4.33	139	36	12	0.77
DIVERSION	TO	D84tP	252	3.83	107	28	9	0.77
HYDROGRAPH	AT	D84t	260	4.33	32	8	3	0.77
DIVERSION	TO	D84tW	34	4.33	4	1	0	0.77
HYDROGRAPH	AT	D84tS	227	4.33	28	7	2	0.77
ROUTED TO		R84tS	198	4.58	28	7	2	0.77
HYDROGRAPH	AT	84u	311	4.42	66	17	6	0.26
3 COMBINED	AT	C84u	3393	6.08	932	236	79	9.04
ROUTED TO		S84u	3393	6.17	930	236	79	9.04
HYDROGRAPH	AT	BD84tP	252	3.83	107	28	9	0.77
ROUTED TO		P84tS	252	3.92	107	28	9	0.77
2 COMBINED	AT	CC84u	3459	6.17	1024	264	88	9.04
DIVERSION	TO	D84uP	252	3.75	235	67	22	9.04
HYDROGRAPH	AT	D84u	3207	6.17	788	197	66	9.04
DIVERSION	TO	D84uS	641	6.17	158	39	13	9.04
HYDROGRAPH	AT	D84uW	2566	6.17	630	158	53	9.04
ROUTED TO		R84uW	2553	6.25	630	158	53	9.04
HYDROGRAPH	AT	88t	250	4.42	64	16	5	0.26
HYDROGRAPH	AT	BD84tW	34	4.33	4	1	0	0.77
ROUTED TO		R84tW	28	4.75	4	1	0	0.77
2 COMBINED	AT	C88t	250	4.58	66	17	6	1.03
DIVERSION	TO	D88tW	75	4.58	20	5	2	1.03
HYDROGRAPH	AT	D88tS	175	4.58	46	12	4	1.03
ROUTED TO		R88tS	171	4.75	46	12	4	1.03
HYDROGRAPH	AT	88u	282	4.42	66	17	6	0.25
3 COMBINED	AT	C88u	2604	6.25	715	180	60	9.55
DIVERSION	TO	D88uP	36	3.67	35	10	3	9.55
HYDROGRAPH	AT	D88u	2568	6.25	680	170	57	9.55
DIVERSION	TO	D88uS	1952	6.25	517	129	43	9.55
HYDROGRAPH	AT	D88uW	616	6.25	163	41	14	9.55
ROUTED TO		R88uW	572	6.5	163	41	14	9.55
HYDROGRAPH	AT	BD88uP	36	3.67	35	10	3	9.55
ROUTED TO		P88uW	36	3.75	35	10	3	9.55
2 COMBINED	AT	C88uW	608	6.5	197	51	17	9.55
HYDROGRAPH	AT	92t	150	4.42	38	10	3	0.17
HYDROGRAPH	AT	BD88tW	75	4.58	20	5	2	1.03
ROUTED TO		R88tW	73	4.75	20	5	2	1.03
2 COMBINED	AT	C92t	198	4.58	55	14	5	1.21
ROUTED TO		R92tS	196	4.75	55	14	5	1.21
HYDROGRAPH	AT	92u	266	4.42	62	16	5	0.25
HYDROGRAPH	AT	P92uN	141	4	47	12	4	2.5
4 COMBINED	AT	C92u	680	6.5	333	88	29	10.17

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
DIVERSION	TO	D92uP	201	3.75	177	49	16	10.17
HYDROGRAPH	AT	D92u	479	6.5	156	39	13	10.17
ROUTED TO		R92uS	467	6.58	156	39	13	10.17
HYDROGRAPH	AT	B92uP	201	3.75	177	49	16	10.17
ROUTED TO		P92uS	201	3.83	177	49	16	10.17
2 COMBINED	AT	C92uS	668	6.58	333	88	29	10.17
HYDROGRAPH	AT	76v	224	4.42	55	14	5	0.24
HYDROGRAPH	AT	B76uP	297	3.75	267	76	25	17.22
DIVERSION	TO	D76uP1	249	3.75	224	63	21	17.22
HYDROGRAPH	AT	D76uP2	48	3.75	43	12	4	17.22
ROUTED TO		P76uS2	48	3.83	43	12	4	17.22
HYDROGRAPH	AT	BD76uS	0	0	0	0	0	17.22
ROUTED TO		R76uS	0	0	0	0	0	17.22
2 COMBINED	AT	C76uS	48	3.83	43	12	4	17.22
2 COMBINED	AT	C76v	224	4.5	91	25	8	8.24
DIVERSION	TO	D76vP	109	4	72	20	7	8.24
HYDROGRAPH	AT	D76v	88	4.58	14	4	1	8.24
DIVERSION	TO	D76vS	47	4.58	7	2	1	8.24
HYDROGRAPH	AT	D76vW	41	4.58	7	2	1	8.24
ROUTED TO		R76vW	39	4.92	7	2	1	8.24
HYDROGRAPH	AT	80v	308	4.33	66	17	6	0.23
HYDROGRAPH	AT	B76uP1	249	3.75	224	63	21	17.22
ROUTED TO		P76uS1	249	3.83	224	63	21	17.22
3 COMBINED	AT	C80v	472	4.67	288	80	27	8.23
DIVERSION	TO	D80vP	249	3.75	228	65	22	8.23
HYDROGRAPH	AT	D80v	223	4.67	60	15	5	8.23
DIVERSION	TO	D80vS	125	4.67	34	8	3	8.23
HYDROGRAPH	AT	D80vW	98	4.67	26	7	2	8.23
ROUTED TO		R80vW	95	5.08	26	7	2	8.23
HYDROGRAPH	AT	84v	187	4.5	44	11	4	0.25
HYDROGRAPH	AT	BD80uP	509	6	509	299	100	18.61
ROUTED TO		P80uS	509	6.08	509	299	100	18.61
3 COMBINED	AT	C84v	685	5.17	553	316	106	8.73
HYDROGRAPH	AT	BD84uP	252	3.75	235	67	22	9.04
ROUTED TO		P84uS	252	3.83	235	67	22	9.04
HYDROGRAPH	AT	BD84uS	641	6.17	158	39	13	9.04
ROUTED TO		R84uS	626	6.33	158	39	13	9.04
2 COMBINED	AT	C84uS	878	6.33	393	106	36	9.04
2 COMBINED	AT	CC84v	1434	6.33	917	421	141	9.76
DIVERSION	TO	D84vP	1269	6.25	899	417	139	9.76
HYDROGRAPH	AT	D84v	165	6.33	18	5	2	9.76
DIVERSION	TO	D84vS	61	6.33	7	2	1	9.76
HYDROGRAPH	AT	D84vW	104	6.33	11	3	1	9.76
ROUTED TO		R84vW	76	6.5	11	3	1	9.76
HYDROGRAPH	AT	88v	264	4.42	67	17	6	0.25
HYDROGRAPH	AT	BD88uS	1952	6.25	517	129	43	9.55
ROUTED TO		R88uS	1928	6.33	517	129	43	9.55
3 COMBINED	AT	C88v	1995	6.33	571	144	48	10.52
DIVERSION	TO	D88vP	51	3.83	47	13	4	10.52
HYDROGRAPH	AT	D88v	1944	6.33	524	131	44	10.52
ROUTED TO		R88vW	1886	6.5	523	131	44	10.52
HYDROGRAPH	AT	92v	229	4.25	49	13	4	0.16
3 COMBINED	AT	C92v	2517	6.5	878	226	75	11.3
DIVERSION	TO	D92v	2316	6.5	686	171	57	11.3
HYDROGRAPH	AT	D92vP	201	3.67	192	54	18	11.3
ROUTED TO		P92vS	201	3.83	192	54	18	11.3
HYDROGRAPH	AT	88w	594	4.42	138	35	12	0.6
HYDROGRAPH	AT	BD88vP	51	3.83	47	13	4	10.52

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		P88vS	51	3.92	47	13	4	10.52
3 COMBINED	AT	C88w	638	4.58	344	95	32	11.9
HYDROGRAPH	AT	44v	148	4.42	34	9	3	0.24
HYDROGRAPH	AT	BD44sP	201	3.67	141	38	13	3.79
ROUTED TO		P44sS	201	3.92	141	38	13	3.79
2 COMBINED	AT	C44v	267	4.5	161	43	14	4.03
HYDROGRAPH	AT	B48oPT	2369	5.42	1071	281	94	14.34
ROUTED TO		PT48o	2368	5.5	1072	281	94	14.34
HYDROGRAPH	AT	B48qPT	416	4.67	105	27	9	2.87
2 COMBINED	AT	CPT48q	2551	5.17	1147	299	100	16.11
ROUTED TO		PT48q	2550	5.17	1147	299	100	16.11
HYDROGRAPH	AT	B48sPT	1063	4.92	328	82	27	4.31
2 COMBINED	AT	CPT48s	3487	5.08	1421	368	123	17.54
ROUTED TO		PT48s	3485	5.17	1422	368	123	17.54
HYDROGRAPH	AT	48v	315	4.33	76	19	6	0.3
2 COMBINED	AT	C48v	3595	5.17	1477	383	128	17.84
2 COMBINED	AT	NUL48v	3823	5.08	1634	426	142	18.08
HYDROGRAPH	AT	52v	192	4.42	44	11	4	0.3
HYDROGRAPH	AT	BD52uP	281	4.08	168	44	15	1.35
ROUTED TO		P52uS	281	4.17	168	44	15	1.35
HYDROGRAPH	AT	BD52uS	38	5.5	9	2	1	1.35
ROUTED TO		R52uS	37	5.67	9	2	1	1.35
2 COMBINED	AT	C52uS	318	5.67	177	46	15	1.35
2 COMBINED	AT	C52v	412	4.58	208	54	18	1.64
2 COMBINED	AT	NUL52v	4112	5.08	1794	468	156	19.72
HYDROGRAPH	AT	56v	176	4.5	46	12	4	0.23
HYDROGRAPH	AT	BD56uP	612	4.42	232	60	20	2.46
ROUTED TO		P56uS	612	4.5	232	61	20	2.46
HYDROGRAPH	AT	BD56uS	38	4.75	4	1	0	2.46
ROUTED TO		R56uS	35	5	4	1	0	2.46
2 COMBINED	AT	C56uS	647	5	236	61	21	2.46
2 COMBINED	AT	C56v	762	4.83	276	72	24	2.69
2 COMBINED	AT	NUL56v	4727	5.08	2016	527	176	21.07
HYDROGRAPH	AT	60v	221	4.42	54	14	5	0.23
HYDROGRAPH	AT	BD60uP	124	4.25	56	14	5	3.68
ROUTED TO		P60uS	124	4.33	56	14	5	3.68
HYDROGRAPH	AT	BD60uS	80	5	13	3	1	3.68
ROUTED TO		R60uS	77	5.17	13	3	1	3.68
2 COMBINED	AT	C60uS	201	5.17	69	17	6	3.68
2 COMBINED	AT	C60v	326	4.67	115	29	10	3.91
2 COMBINED	AT	NUL60v	4919	5.08	2092	547	182	22.51
HYDROGRAPH	AT	BPT64o	3912	5.33	1905	507	169	21.04
HYDROGRAPH	AT	B64qPT	0	0	0	0	0	1.51
2 COMBINED	AT	CPT64q	3912	5.33	1905	507	169	22.55
ROUTED TO		PT64q	3868	5.42	1884	502	167	22.55
HYDROGRAPH	AT	B64sPT	0	0	0	0	0	2.54
2 COMBINED	AT	CPT64s	3868	5.42	1884	502	167	23.58
ROUTED TO		PT64s	3840	5.42	1870	498	166	23.58
HYDROGRAPH	AT	B64tPT	0	0	0	0	0	3.61
2 COMBINED	AT	CPT64t	3840	5.42	1870	498	166	24.65
ROUTED TO		PT64t	3812	5.42	1856	494	165	24.65
HYDROGRAPH	AT	B64uPT	0	0	0	0	0	4.91
2 COMBINED	AT	CPT64u	3812	5.42	1856	494	165	25.95
ROUTED TO		PT64u	3779	5.42	1840	490	163	25.95
HYDROGRAPH	AT	64v	237	4.33	51	13	4	0.19
HYDROGRAPH	AT	BD64uP	375	3.83	217	56	19	4.91
ROUTED TO		P64uS	375	3.92	217	56	19	4.91
HYDROGRAPH	AT	BD64uS	145	5	36	9	3	4.91

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
ROUTED TO		R64uS	144	5.08	36	9	3	4.91
2 COMBINED	AT	C64uS	519	5.08	253	65	22	4.91
3 COMBINED	AT	C64v	4292	5.42	2106	562	187	26.15
2 COMBINED	AT	NUL64v	8234	5.17	3808	9	337	44.28
HYDROGRAPH	AT	68v	185	4.42	46	12	4	0.22
HYDROGRAPH	AT	BD68uP	146	3.75	94	24	8	5.97
ROUTED TO		P68uS	146	3.83	94	24	8	5.97
HYDROGRAPH	AT	BD68uS	176	5	47	12	4	5.97
ROUTED TO		R68uS	175	5.17	47	12	4	5.97
2 COMBINED	AT	C68uS	321	5.17	141	36	12	5.97
2 COMBINED	AT	C68v	417	4.92	178	46	15	6.19
2 COMBINED	AT	NUL68v	8513	5.17	3938	44	348	45.56
HYDROGRAPH	AT	72v	477	4.33	105	27	9	0.41
HYDROGRAPH	AT	BD72uP	714	3.92	567	167	56	8.06
DIVERSION	TO	D72uP2	281	3.92	223	66	22	8.06
HYDROGRAPH	AT	D72uP1	433	3.92	344	101	34	8.06
ROUTED TO		P72uS1	433	4.08	344	101	34	8.06
HYDROGRAPH	AT	B72uP2	281	3.92	223	66	22	8.06
ROUTED TO		P72uS2	281	4.08	223	66	22	8.06
HYDROGRAPH	AT	BD72uS	335	5.17	91	23	8	8.06
ROUTED TO		R72uS	331	5.33	91	23	8	8.06
3 COMBINED	AT	C72uS	1045	5.33	658	190	63	8.06
2 COMBINED	AT	C72v	1208	5.08	741	212	71	8.47
2 COMBINED	AT	NUL72v	9528	5.17	4595	240	413	47.06
HYDROGRAPH	AT	76w	207	4.42	38	9	3	0.33
HYDROGRAPH	AT	BD76vS	47	4.58	7	2	1	8.24
ROUTED TO		R76vS	45	4.75	7	2	1	8.24
HYDROGRAPH	AT	BD76vP	109	4	72	20	7	8.24
ROUTED TO		P76vS	109	4.17	72	20	7	8.24
2 COMBINED	AT	C76vS	154	4.75	79	22	7	8.24
2 COMBINED	AT	C76w	207	4.67	92	25	8	8.57
2 COMBINED	AT	NUL76w	9528	5.17	4612	246	415	56.1
HYDROGRAPH	AT	80w	426	4.33	89	22	7	0.36
HYDROGRAPH	AT	BD80vS	125	4.67	34	8	3	8.23
ROUTED TO		R80vS	123	4.83	34	8	3	8.23
2 COMBINED	AT	C80w	426	4.5	116	30	10	8.59
2 COMBINED	AT	NUL80w	9522	5.08	4610	246	415	58.09
HYDROGRAPH	AT	BD84vS	61	6.33	7	2	1	9.76
ROUTED TO		R84vS	42	6.5	7	2	1	9.76
HYDROGRAPH	AT	BD84vP	1269	6.25	899	417	139	9.76
DIVERSION	TO	D84vP2	1017	6.25	720	334	112	9.76
HYDROGRAPH	AT	D84vP1	252	6.25	179	83	28	9.76
ROUTED TO		P84vS1	252	6.33	179	83	28	9.76
HYDROGRAPH	AT	B84vP2	1017	6.25	720	334	112	9.76
ROUTED TO		P84vS2	1017	6.33	720	334	112	9.76
3 COMBINED	AT	C84vS	1311	6.5	906	419	140	9.76
HYDROGRAPH	AT	84w	334	4.42	75	19	6	0.34
HYDROGRAPH	AT	BD80vP	249	3.75	228	65	22	8.23
ROUTED TO		P80vS	249	3.92	228	65	22	8.23
3 COMBINED	AT	C84w	1588	6.25	1175	499	167	10.1
2 COMBINED	AT	NUL84w	10697	5.08	5503	695	566	59.72
2 COMBINED	AT	NUL88w	11099	5.08	5771	771	591	61.86
HYDROGRAPH	AT	24s	264	4.25	44	11	4	0.19
ROUTED TO		S24s	207	4.5	34	8	3	0.19
HYDROGRAPH	AT	B28qP2	32	4	15	4	1	0.82
ROUTED TO		P28qE	32	4.08	15	4	1	0.82
2 COMBINED	AT	C24s	239	4.5	49	12	4	0.2
DIVERSION	TO	D24sP	239	4.5	49	12	4	0.2

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm

Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	D24s	0	0	0	0	0	0.2
ROUTED TO		R24sS	0	0	0	0	0	0.2
HYDROGRAPH	AT	BD24sP	239	4.5	49	12	4	0.2
DIVERSION	TO	D24sPE	31	4.5	6	2	1	0.2
HYDROGRAPH	AT	D24sPS	208	4.5	42	11	4	0.2
ROUTED TO		P24sS	207	4.58	42	11	4	0.2
2 COMBINED	AT	C24sS	207	4.58	42	11	4	0.2
HYDROGRAPH	AT	24t	322	4.25	35	9	3	0.26
2 COMBINED	AT	C24t	402	4.42	77	20	7	0.46
ROUTED TO		S24t	76	5.5	51	19	7	0.46
HYDROGRAPH	AT	04s	601	4.08	52	13	4	0.28
ROUTED TO		S04s	571	4.17	51	13	4	0.28
ROUTED TO		R04sS	537	4.17	51	13	4	0.28
HYDROGRAPH	AT	08q	690	4.17	96	24	8	0.44
ROUTED TO		R08qS	667	4.25	96	24	8	0.44
HYDROGRAPH	AT	08s	1015	4.25	143	36	12	0.65
3 COMBINED	AT	C08s	1766	4.25	269	68	23	1.37
ROUTED TO		S08s	1781	4.25	227	68	23	1.37
DIVERSION	TO	D08sP	862	4.17	176	55	18	1.37
HYDROGRAPH	AT	D08s	919	4.25	52	13	4	1.37
ROUTED TO		R08sW	829	4.42	52	13	4	1.37
HYDROGRAPH	AT	12q	589	4.17	64	16	5	0.4
ROUTED TO		R12qS	564	4.25	64	16	5	0.4
HYDROGRAPH	AT	12s	420	4.17	59	15	5	0.21
ROUTED TO		S12s	382	4.25	42	15	5	0.21
2 COMBINED	AT	C12s	901	4.25	102	30	10	0.61
ROUTED TO		R12sW	840	4.33	102	30	10	0.61
2 COMBINED	AT	C12sW	1281	4.42	132	38	13	1.97
DIVERSION	TO	D16sP2	979	4.42	121	35	12	1.97
HYDROGRAPH	AT	D16s2	302	4.42	11	3	1	1.97
HYDROGRAPH	AT	16o	694	4	62	16	5	0.21
ROUTED TO		R16oS	608	4.08	62	16	5	0.21
HYDROGRAPH	AT	16q	712	4.25	112	28	9	0.65
2 COMBINED	AT	C16q	1102	4.17	169	43	14	0.86
ROUTED TO		S16q	679	4.5	100	25	8	0.86
DIVERSION	TO	D16qP	617	4.58	97	24	8	0.86
HYDROGRAPH	AT	D16q	74	4.42	2	1	0	0.86
ROUTED TO		R16qS	41	4.58	2	1	0	0.86
HYDROGRAPH	AT	16s	872	4.17	110	28	9	0.42
3 COMBINED	AT	C16s	547	4.17	102	26	9	3.26
ROUTED TO		S16s	535	4.25	64	16	5	3.26
HYDROGRAPH	AT	BD16qP	617	4.58	97	24	8	0.86
DIVERSION	TO	D16qPW	164	4.58	26	6	2	0.86
HYDROGRAPH	AT	D16qPS	453	4.58	71	18	6	0.86
ROUTED TO		P16qS	451	4.58	71	18	6	0.86
2 COMBINED	AT	CC16s	768	4.5	123	31	10	3.26
DIVERSION	TO	D16sP	687	4.58	121	30	10	3.26
HYDROGRAPH	AT	D16s	84	4.5	2	0	0	3.26
ROUTED TO		R16sS	33	4.67	2	0	0	3.26
HYDROGRAPH	AT	BD16sP	687	4.58	121	30	10	3.26
ROUTED TO		P16sS	686	4.58	121	30	10	3.26
2 COMBINED	AT	C16sS	711	4.58	123	31	10	3.26
HYDROGRAPH	AT	20p	636	4.25	99	25	8	0.53
ROUTED TO		S20p1	632	4.33	96	24	8	0.53
HYDROGRAPH	AT	B16qPW	164	4.58	26	6	2	0.86
ROUTED TO		P16qW	162	4.58	26	6	2	0.86
2 COMBINED	AT	C20p	612	4.42	112	28	9	1.39
ROUTED TO		S20p2	104	5.5	91	27	9	1.39

Table 6.2 Peak Flow Summary Table for the 100-Year, 6-Hour Storm								
Operation		Hydrograph Name	Peak Flow (cfs)	Time of Peak (hour)	6-Hour Avg. Flow (cfs)	12-Hour Avg. Flow (cfs)	72-Hour Avg. Flow (cfs)	Drainage Area (sq.mi.)
HYDROGRAPH	AT	OCCC48	5420	4	1901	481	160	3
HYDROGRAPH	AT	BD24oP	48	3.83	34	9	3	1.2
ROUTED TO		P24oS	48	3.92	34	9	3	1.2
2 COMBINED	AT	C24oS	5468	4	1935	490	163	3
ROUTED TO		ROCCC	5397	4	1935	490	163	3
2 COMBINED	AT	CC20p	5447	4	1996	514	171	4.39
ROUTED TO		R20pS	5455	4.08	1996	514	171	4.39
HYDROGRAPH	AT	20q	374	4.25	50	13	4	0.28
HYDROGRAPH	AT	B28pP2	68	4.08	38	10	3	3.11
ROUTED TO		P28pE	68	4.33	38	10	3	3.11
3 COMBINED	AT	C20q	5693	4.08	2072	533	178	4.67
ROUTED TO		R20qS	5673	4.08	2072	533	178	4.67
HYDROGRAPH	AT	20s	1028	4.17	122	31	10	0.48
ROUTED TO		S20s	1024	4.17	116	29	10	0.48
2 COMBINED	AT	C20s	6225	4.08	2173	558	186	5.15
HYDROGRAPH	AT	B24sPE	31	4.5	6	2	1	0.2
ROUTED TO		P24sE	31	4.58	6	2	1	0.2
2 COMBINED	AT	CC20s	6225	4.08	2178	559	187	5.35
ROUTED TO		R20sS	6201	4.17	2177	559	187	5.35
HYDROGRAPH	AT	20t	155	4.42	28	7	2	0.26
ROUTED TO		S20t	0	0	0	0	0	0.26
3 COMBINED	AT	C20t	6502	4.17	2278	584	195	8.01
2 COMBINED	AT	NUL20t	6503	4.17	2301	596	199	8.27

TABLE 6.3

100-Year Peak Flows for the Cave Creek Floodplain

Table 6.3 100-Year Peak Flows for the Cave Creek Floodplain

	Location	Hydrograph Name	100-Yr,24-Hr Peak Flow (cfs)	100-Yr,6-Hr Peak Flow (cfs)	Comments
Cave Creek	19th Ave @ Grand Canal	D76kS	498	476	
	19th Ave @ Indian School Rd	D76l	487	542	
	19th Ave @ Thomas Rd	D76m	1033	1162	
	19th Ave @ I-10	D76o	2030	2399	
	19th Ave @ Van Buren St	D76q	2085	2366	
	SPRR @ east I-17	D80q	2500	2851	
	Buckeye Rd @ east I-17	D80t	286	334	
	Durango St @ east I-17	C80u	1270	1422	
	Durango St @ west I-17	D80u	2279	2781	
	27th Ave @ Durango St	D84u	2454	3207	
	35th Ave @ Lower Buckeye	D92v	1702	2316	
	43rd Ave @ S. Lower Buckeye	C43LB	1679	2227	Durango ADMP model
	51st Ave @ Broadway	C51BW	2016	2299	Durango ADMP model
	59th Ave @ South of Broadway	C59BW	2363	2543	Durango ADMP model

TABLE 6.4

Comparison of 100-Year Peak Flows for the Cave Creek Floodplain

Table 6.4 Comparison of 100-Year Peak Flows for the Cave Creek Floodplain

	Location	Metro ADMS			FEMA FIS		Comments
		Hydrograph Name	100-Yr,24-Hr Peak Flow (cfs)	100-Yr,6-Hr Peak Flow (cfs)	Hydrograph Name	100-Yr,24-Hr Peak Flow (cfs)	
Cave Creek	19th Ave @ Grand Canal	D76kS	498	476	GRCA15**	754	
	19th Ave @ Indian School Rd	D76l	487	542	INDI17	1237	
	19th Ave @ Thomas Rd	D76m	1033	1162	THOM17	1210	
	19th Ave @ I-10	D76o	2030	2399	MCDO17	1691	
	19th Ave @ Van Buren St	D76q	2085	2366	VANB17	1865	
	SPRR @ east I-17	D80q	2500	2851	JACI10	1890	
	Buckeye Rd @ east I-17	D80t	286	334	N/A	N/A	
	Durango St @ east I-17	C80u	1270	1422	PIMA22	2523	
	Durango St @ west I-17	D80u	2279	2781	I10DUE	2217	
	27th Ave @ Durango St	D84u	2454	3207	DURA31**	2221	
	35th Ave @ Lower Buckeye	D92v	1702	2316	BUCK35	2226	
	43rd Ave @ S. Lower Buckeye	C43LB*	1679	2227	BUCK43**	2235	
	51st Ave @ Broadway	C51BW*	2016	2299	SALTRI	2257	
	59th Ave @ South of Broadway	C59BW*	2363	2543	SALTRI	2257	

* - Durango ADMP model
** - CBA model

TABLE 8.1

Pipe-Full Flow Capacities and Estimated Peak Flows for Major Storm Drain Systems

Table 8.1 Pipe-Full Flow Capacities and Estimated Peak Flows for Major Storm Drain Systems

SD Name		Location	Northern Avenue	Glendale Avenue	Bethany Home Road	Camelback Road	Indian School Road	Thomas Road	McDowell Road	I-10/202	Van Buren Street	SPRR	Buckeye Road	I-17
I-17 SD	**Full Pipe**	**Capacity**	-	-	-	-	-	**249**		**249**	**249**	**364**	**364**	**509**
	Hydrograph	**Name**	-	-	-	-	-	**D84mP**		**D80pP**	**D80pP**	**D80qP**	**D80tP**	**D80uP**
	2-Year	Flow	-	-	-	-	-	81		249	249	333	355	249
	10-Year	Flow	-	-	-	-	-	164		249	249	364	364	461
	25-Year	Flow	-	-	-	-	-	214		249	249	364	364	509
	50-Year	Flow	-	-	-	-	-	247		249	249	364	364	509
	100-Year	Flow	-	-	-	-	-	249		249	249	364	364	509
19th Ave SD	**Full Pipe**	**Capacity**	**58**	**76**	**76**	**106**	**156**	**159**		**229**	**229**	**204**	**297**	**297**
	Hydrograph	**Name**	**C76cP**	**C76eP**	**C76gP**	**C76iP**	**D76lP**	**D76mP1**		**D76oP**	**D76qP**	**D76sP**	**D76tP**	**D76uP**
	2-Year	Flow	48	76	50	80	127	155		122	200	204	255	294
	10-Year	Flow	58	76	76	106	156	159		229	229	204	297	297
	25-Year	Flow	58	76	76	106	156	159		229	229	204	297	297
	50-Year	Flow	58	76	76	106	156	159		229	229	204	297	297
	100-Year	Flow	58	76	76	106	156	159		229	229	204	297	297
15th Ave SD	**Full Pipe**	**Capacity**	**90**	**195**	**178**	**226**	**305**	**308**		**433**	**433**	**433**	**433**	**433**
	Hydrograph	**Name**	**D72cP**	**D72eP**	**D72gP**	**D72iP1**	**D72lP**	**D72mP**		**D72oP**	**D72qP1**	**D72sP1**	**D72tP1**	**D72uP1**
	2-Year	Flow	16	38	107	156	199	308		409	337	357	351	372
	10-Year	Flow	30	71	178	226	305	308		433	433	433	433	433
	25-Year	Flow	48	114	178	226	305	308		433	433	433	433	433
	50-Year	Flow	80	195	178	226	305	308		433	433	433	433	433
	100-Year	Flow	90	195	178	226	305	308		433	433	433	433	433
7th Ave SD	**Full Pipe**	**Capacity**	**41**	**63**	**82**	**99**	**114**	**144**			**229**	**229**	**281**	**281**
	Hydrograph	**Name**	**D68cP**	**D68eP**	**D68gP**	**D68iP**	**D68lP**	**D68mP**			**D72qP2**	**D72sP2**	**D72tP2**	**D72uP2**
	2-Year	Flow	26	49	67	92	114	144			178	189	228	241
	10-Year	Flow	41	63	82	99	114	144			229	229	281	281
	25-Year	Flow	41	63	82	99	114	144			229	229	281	281
	50-Year	Flow	41	63	82	99	114	144			229	229	281	281
	100-Year	Flow	41	63	82	99	114	144			229	229	281	281
Central Ave SD	**Full Pipe**	**Capacity**	-	-	**153**	**214**	**303**	**399**			-	-	-	-
	Hydrograph	**Name**	-	-	**D64gP**	**D64iP**	**D64lP**	**D64mP**			-	-	-	-
	2-Year	Flow	-	-	29	68	68	178			-	-	-	-
	10-Year	Flow	-	-	58	127	126	344			-	-	-	-
	25-Year	Flow	-	-	97	214	214	399			-	-	-	-
	50-Year	Flow	-	-	153	214	214	399			-	-	-	-
	100-Year	Flow	-	-	153	214	265	399			-	-	-	-
7th St SD	**Full Pipe**	**Capacity**	-	**75**	**124**	**143**	**93**	**124**			**281**	**327**	**375**	**375**
	Hydrograph	**Name**	-	**D60eP**	**D60gP**	**D60iP2**	**D60lP**	**D60mP**			**D64qP**	**D64sP**	**D64tP**	**D64uP**
	2-Year	Flow	-	26	58	68	88	103			28	168	238	276
	10-Year	Flow	-	48	107	143	93	124			108	327	375	375
	25-Year	Flow	-	75	124	143	93	124			166	327	375	375
	50-Year	Flow	-	75	124	143	93	124			225	327	375	375
	100-Year	Flow	-	75	124	143	93	124			281	327	375	375

Table 8.1 Pipe-Full Flow Capacities and Estimated Peak Flows for Major Storm Drain Systems

SD Name		Location	Northern Avenue	Glendale Avenue	Bethany Home Road	Camelback Road	Indian School Road	Thomas Road	McDowell Road	I-10/202	Van Buren Street	SPRR	Buckeye Road	I-17
12th St SD	**Full Pipe**	**Capacity**	-	-	**130**	**204**	**303**	**433**			**68**	**201**	**612**	**612**
	Hydrograph	**Name**	-	-	**D56gP**	**D56iP**	**D56kP**	**D56mP**			**D56qP**	**D56sP**	**D56tP**	**D56uP**
	2-Year	Flow	-	-	45	80	172	202			31	93	130	132
	10-Year	Flow	-	-	92	164	267	371			68	201	292	364
	25-Year	Flow	-	-	130	204	303	433			68	201	352	472
	50-Year	Flow	-	-	130	204	303	433			68	201	405	566
	100-Year	Flow	-	-	130	204	303	433			68	201	462	612
16th St SD	**Full Pipe**	**Capacity**	-	-	-	**68**	**124**	**124**			**191**	**191**	**281**	**281**
	Hydrograph	**Name**	-	-	-	**D54iP**	**D54kP**	**D54mP**			**D52qP**	**D52sP**	**D52tP**	**D52uP**
	2-Year	Flow	-	-	-	22	42	63			50	108	153	151
	10-Year	Flow	-	-	-	48	111	124			144	191	281	281
	25-Year	Flow	-	-	-	68	124	124			191	191	281	281
	50-Year	Flow	-	-	-	68	124	124			191	191	281	281
	100-Year	Flow	-	-	-	68	124	124			191	191	281	281
SR51/I-10 SD	**Full Pipe**	**Capacity**	-	-	-	**95**	**201**	**364**	-	-	-	-	-	-
	Hydrograph	**Name**	-	-	-	**D52iP**	**D52kP**	**D52mP**	-	-	-	-	-	-
	2-Year	Flow	-	-	-	38	84	136	-	-	-	-	-	-
	10-Year	Flow	-	-	-	76	201	359	-	-	-	-	-	-
	25-Year	Flow	-	-	-	95	201	364	-	-	-	-	-	-
	50-Year	Flow	-	-	-	95	201	364	-	-	-	-	-	-
	100-Year	Flow	-	-	-	95	201	364	-	-	-	-	-	-
24th St SD	**Full Pipe**	**Capacity**	-	-	-	**48**	**71**	**124**	-	**1220**	**201**	**201**		
	Hydrograph	**Name**	-	-	-	**D44iP**	**D44kP**	**D44mP**	-	**D44pP1**	**D44qP**	**D44sP**		
	2-Year	Flow	-	-	-	23	63	96	-	338	131	201		
	10-Year	Flow	-	-	-	45	71	124	-	544	201	201		
	25-Year	Flow	-	-	-	48	71	124	-	876	201	201		
	50-Year	Flow	-	-	-	48	71	124	-	1193	201	201		
	100-Year	Flow	-	-	-	48	71	124	-	1220	201	201		
28th St SD	**Full Pipe**	**Capacity**	-	-	-	-	**29**	**66**	**70**	**70**	-	-	-	-
	Hydrograph	**Name**	-	-	-	-	**D40kP**	**D40mP**	**D40oP**	**D40oP**	-	-	-	-
	2-Year	Flow	-	-	-	-	29	66	70	70	-	-	-	-
	10-Year	Flow	-	-	-	-	29	66	70	70	-	-	-	-
	25-Year	Flow	-	-	-	-	29	66	70	70	-	-	-	-
	50-Year	Flow	-	-	-	-	29	66	70	70	-	-	-	-
	100-Year	Flow	-	-	-	-	29	66	70	70	-	-	-	-
32nd St SD	**Full Pipe**	**Capacity**	-	-	-	**41**	**59**	**114**	**139**	**139**	**295**	**303**	-	-
	Hydrograph	**Name**	-	-	-	**D36iP**	**D36kP**	**D36mP**	**D36oP**	**D36pP2**	**D36qP**	**D36sP**	-	-
	2-Year	Flow	-	-	-	16	47	79	106	46	87	135	-	-
	10-Year	Flow	-	-	-	40	59	114	139	78	195	303	-	-
	25-Year	Flow	-	-	-	41	59	114	139	131	263	303	-	-
	50-Year	Flow	-	-	-	41	59	114	139	139	295	303	-	-
	100-Year	Flow	-	-	-	41	59	114	139	139	295	303	-	-

Table 8.1 Pipe-Full Flow Capacities and Estimated Peak Flows for Major Storm Drain Systems

SD Name		Location	Northern Avenue	Glendale Avenue	Bethany Home Road	Camelback Road	Indian School Road	Thomas Road	McDowell Road	I-10/202	Van Buren Street	SPRR	Buckeye Road	I-17
36th St SD	**Full Pipe**	**Capacity**	-	-	-	-	**45**	**66**	**160**	**160**	-	-	-	-
	Hydrograph	**Name**	-	-	-	-	**D32kP**	**D32mP**	**D32oP**	**D32oP**	-	-	-	-
	2-Year	Flow	-	-	-	-	28	64	95	95	-	-	-	-
	10-Year	Flow	-	-	-	-	45	66	134	134	-	-	-	-
	25-Year	Flow	-	-	-	-	45	66	160	160	-	-	-	-
	50-Year	Flow	-	-	-	-	45	66	160	160	-	-	-	-
	100-Year	Flow	-	-	-	-	45	66	160	160	-	-	-	-
40th St SD	**Full Pipe**	**Capacity**	-	-	-	**47**	**131**	**211**	**367**	**211**	**308**	**492**	-	-
	Hydrograph	**Name**	-	-	-	**ARC40**	**D28kP**	**D28mP**	**D28oP**	**D28pP1**	**D28qP1**	**D28sP**	-	-
	2-Year	Flow	-	-	-	47	73	114	137	118	134	153	-	-
	10-Year	Flow	-	-	-	47	108	192	262	211	287	347	-	-
	25-Year	Flow	-	-	-	47	131	211	341	211	308	443	-	-
	50-Year	Flow	-	-	-	47	131	211	367	211	308	492	-	-
	100-Year	Flow	-	-	-	47	131	211	367	211	308	492	-	-

Notes:

It is assumed that under normal circumstances, a storm drain system will progressively increase in size as it progresses " downstream". Some exceptions to this pattern occur in this table and are explained as follows:

1) 19th Ave SD at the SPRR (**D76sP**): This section of the SD occurs in an unusually flat area, accounting for the reduced capacity despite continuity of SD size.

2) 15th Ave SD at Bethany Home Road (**D72gP**): This section of the SD appears to have reduced capacity because of additional inflow from the west. 178 cfs was used as the capacity so as not to overestimate the actual capacity of the pipe.

3) 7th St SD at Indian School (**D60lP**): This SD intercepts flow along 7th St, north of the Grand Canal. At the canal, the SD turns east and goes to 12th St. The east turning segment was ignored in keeping with the estimate of 7th St SD capacity. The smaller SD in 7th St that continues from Camelback south to the Inner Loop (I-10) was used to estimate the 7th St SD capacity.

4) 40th St SD at I-10/202 (**D28pP1**): This SD size reduction occurs as an emergency surcharge pipe for the freeway channel.

FIGURES

Figure 1.1 Metro ADMS/P Location and Area Delineation

Figure 3.1 Rainfall Data for the Storm of August 3, 2005

Figure 4.1 HEC-1 Schematic for a Typical Half Square Mile Sub-basin

Figure 5.1 Parameters Sensitivity Analysis

Figure 7.1 100-Year Peak Flow Comparison with Other Studies

Figure 7.2 100-Year Peak Flow Comparison between 24-Hour and 6-Hour Storms

Figure 7.3 100-Year Peak Flow Comparison with USGS Regression Envelope

FIGURE 1.1

Metro ADMS/P Location and Area Delineation

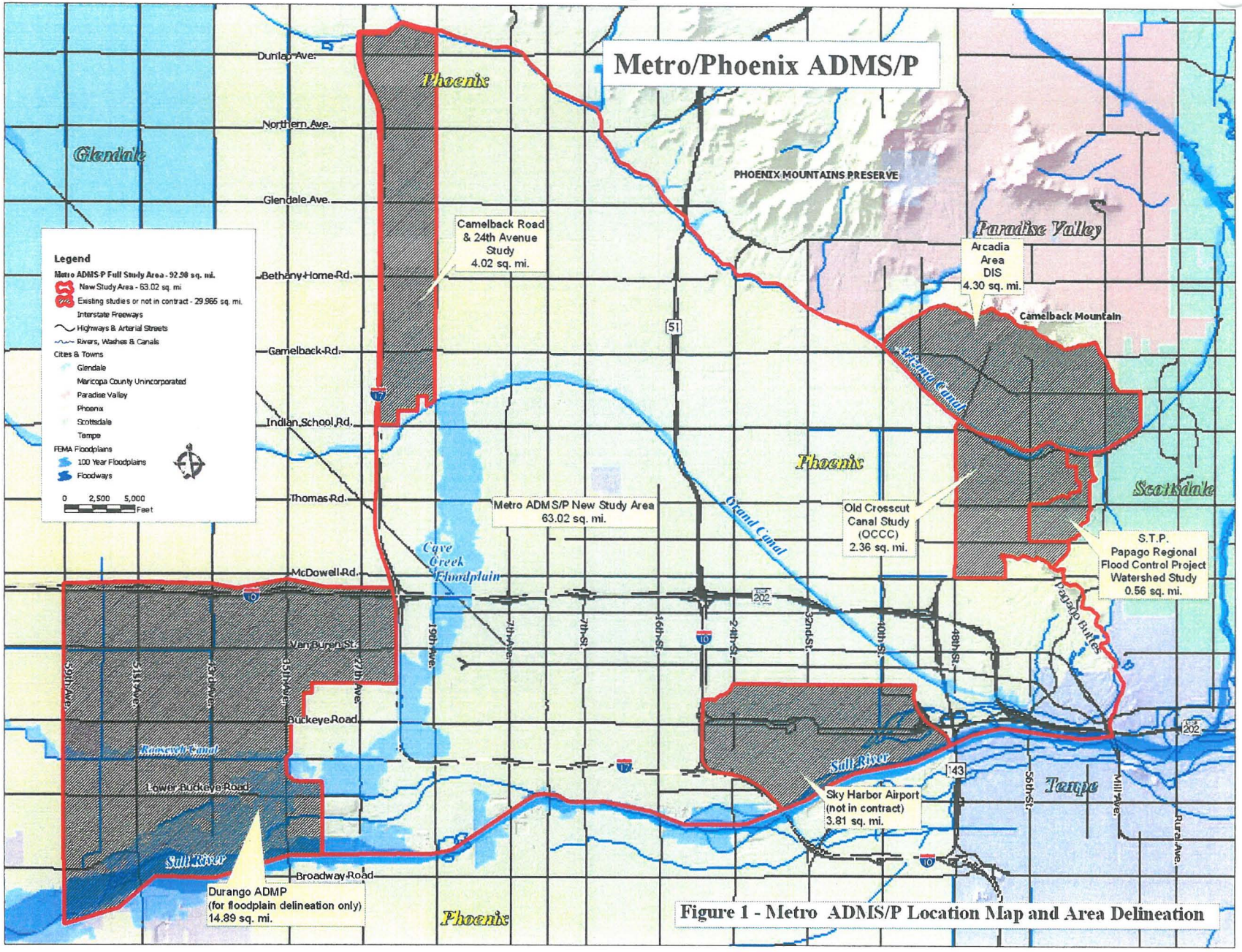

Figure 1 - Metro ADMS/P Location Map and Area Delineation

FIGURE 3.1

Rainfall Data for the Storm of August 3, 2005

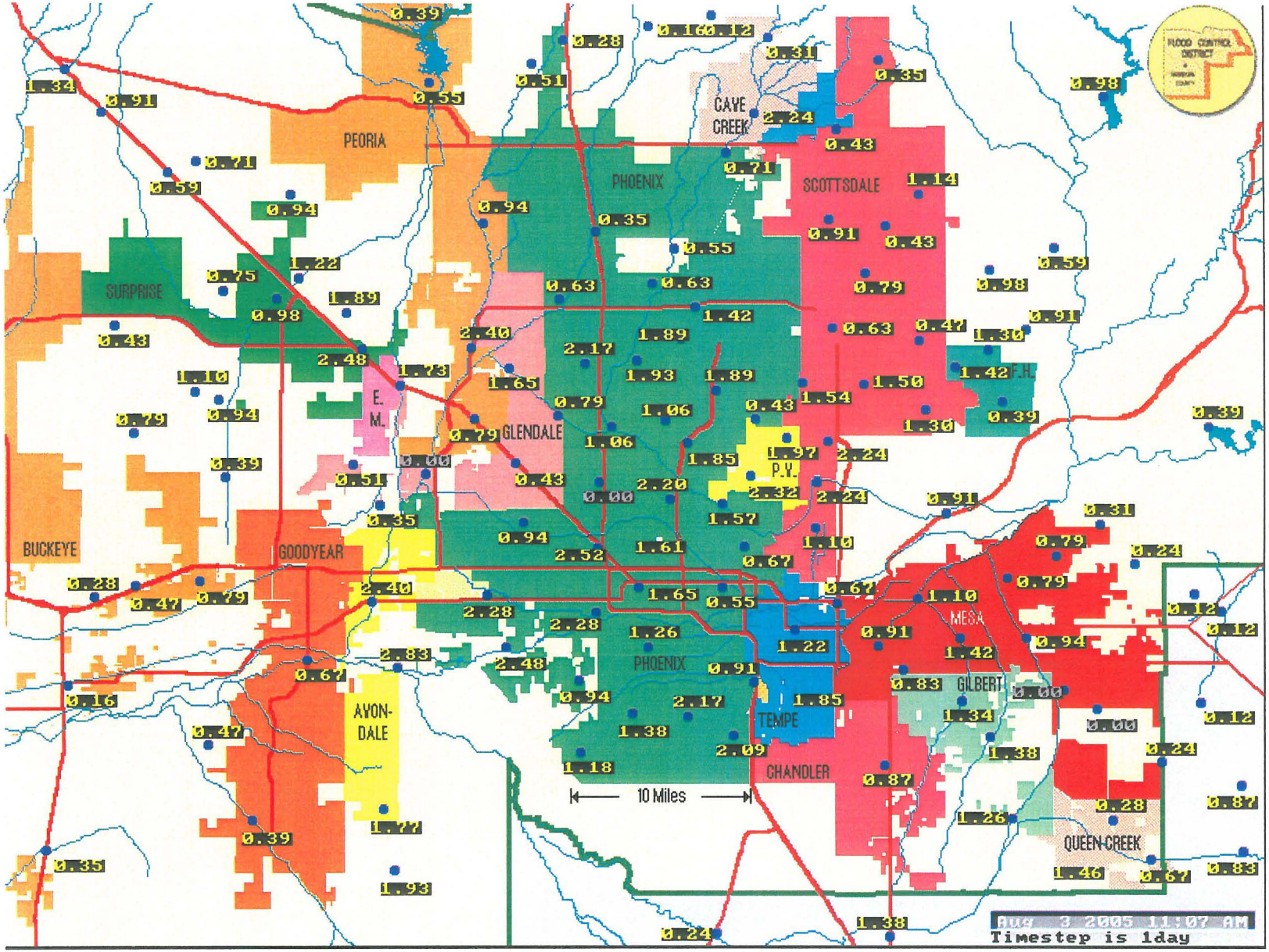
PEORIA
CAVE CREEK
PHOENIX
SCOTTSDALE
SURPRISE
E. M.
GLENDALE
P.V.
BUCKEYE
GOODYEAR
AVON-DALE
MESA
GILBERT
TEMPE
CHANDLER
QUEEN CREEK
10 Miles
Aug 3 2005 11:07 AM
Timestep is 1day

FIGURE 4.1

HEC-1 Schematic for a Typical Half Square Mile Sub-basin

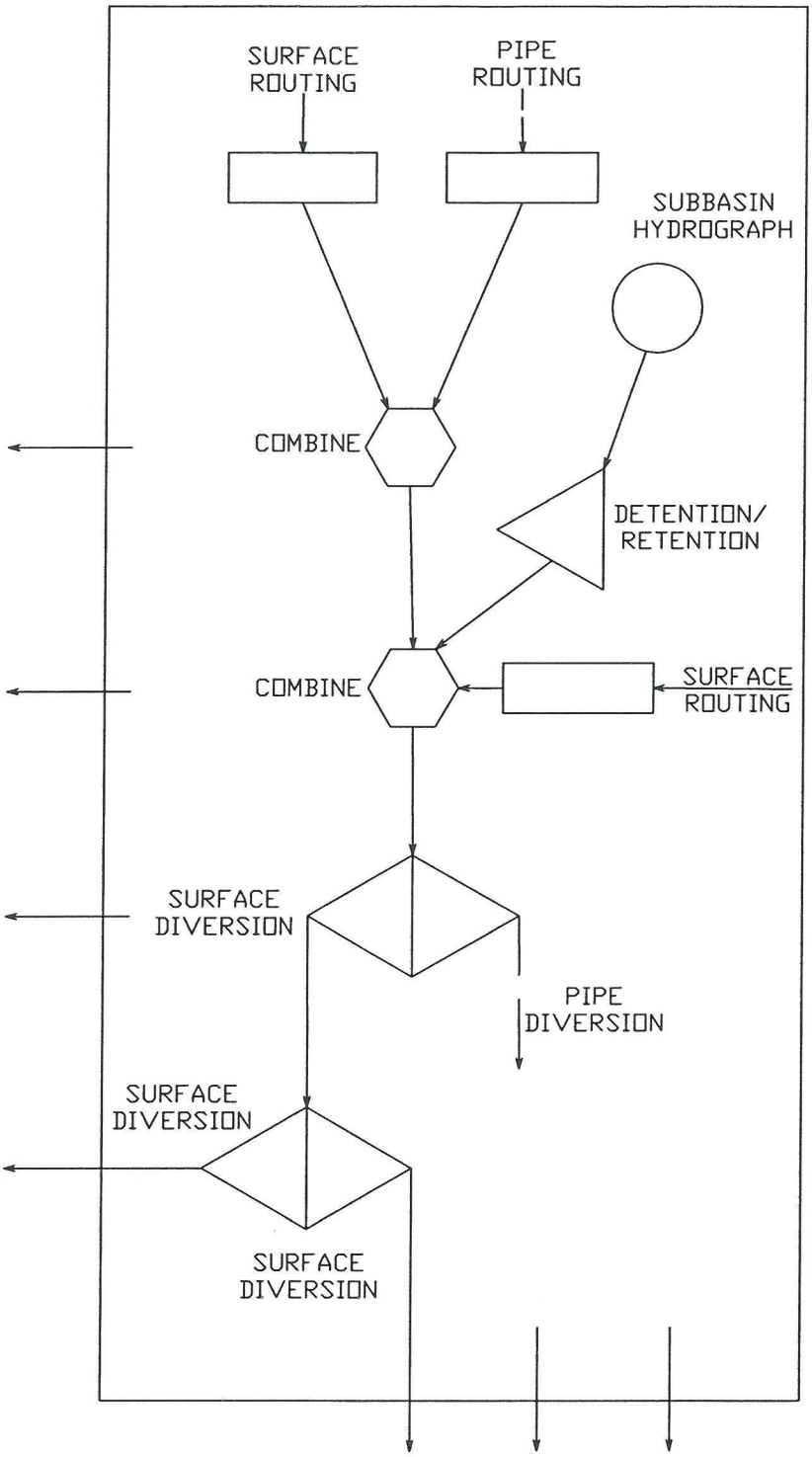

Figure 4.1 HEC–1 Schematic for a typical half square mile sub–basin

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FIGURE 5.1

Parameters Sensitivity Analysis

Figure 5.1 Parameters Sensitivity Analysis

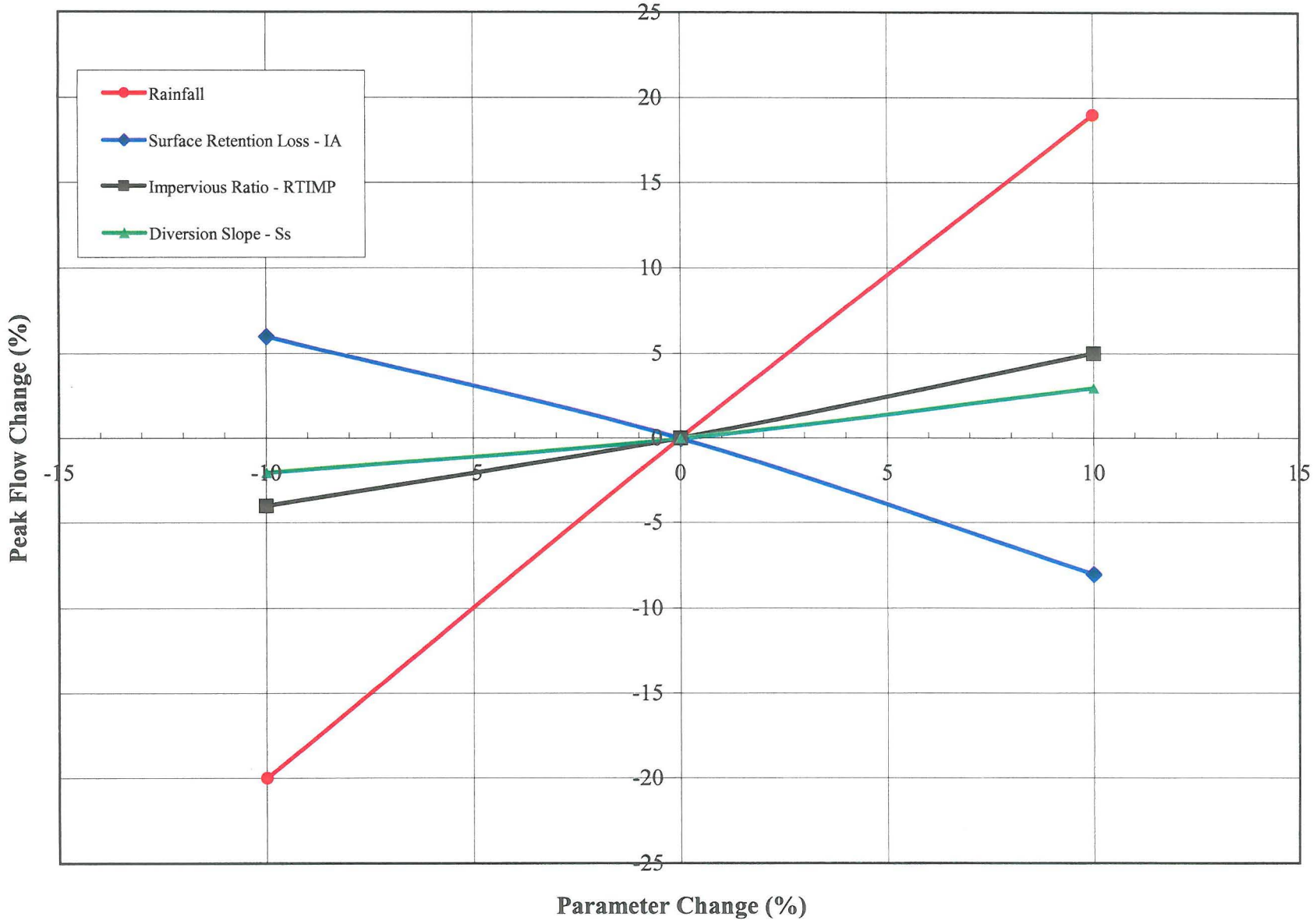

FIGURE 7.1

100-Year Peak Flow Comparison with Other Studies

Fig. 7.1 100-Year Peak Flow Comparison with Other Studies

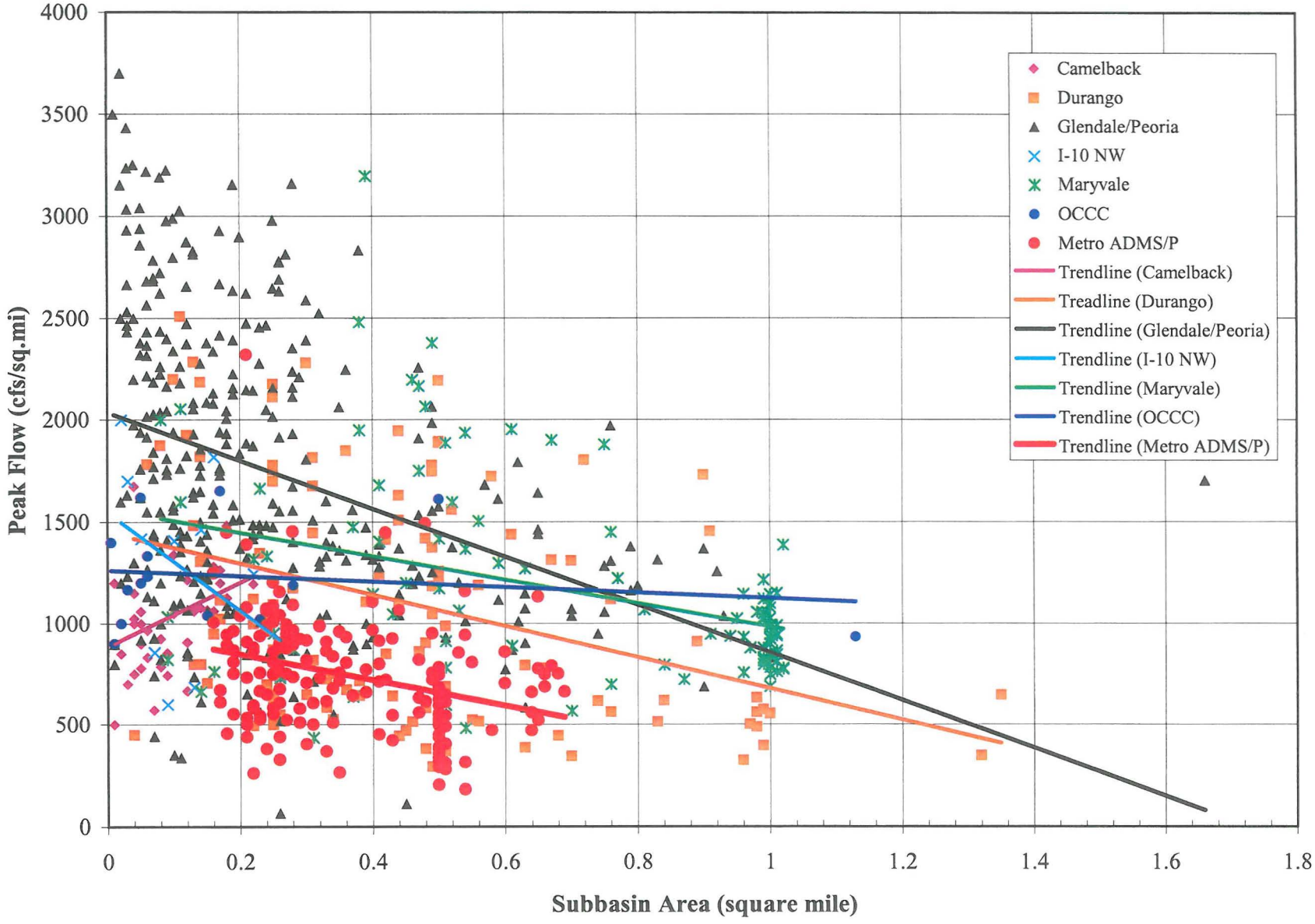

FIGURE 7.2

100-Year Peak Flow Comparison between 24-Hour and 6-Hour Storms

Fig. 7.2 100-Year Peak Flow Comparison: 24-hour vs. 6-hour

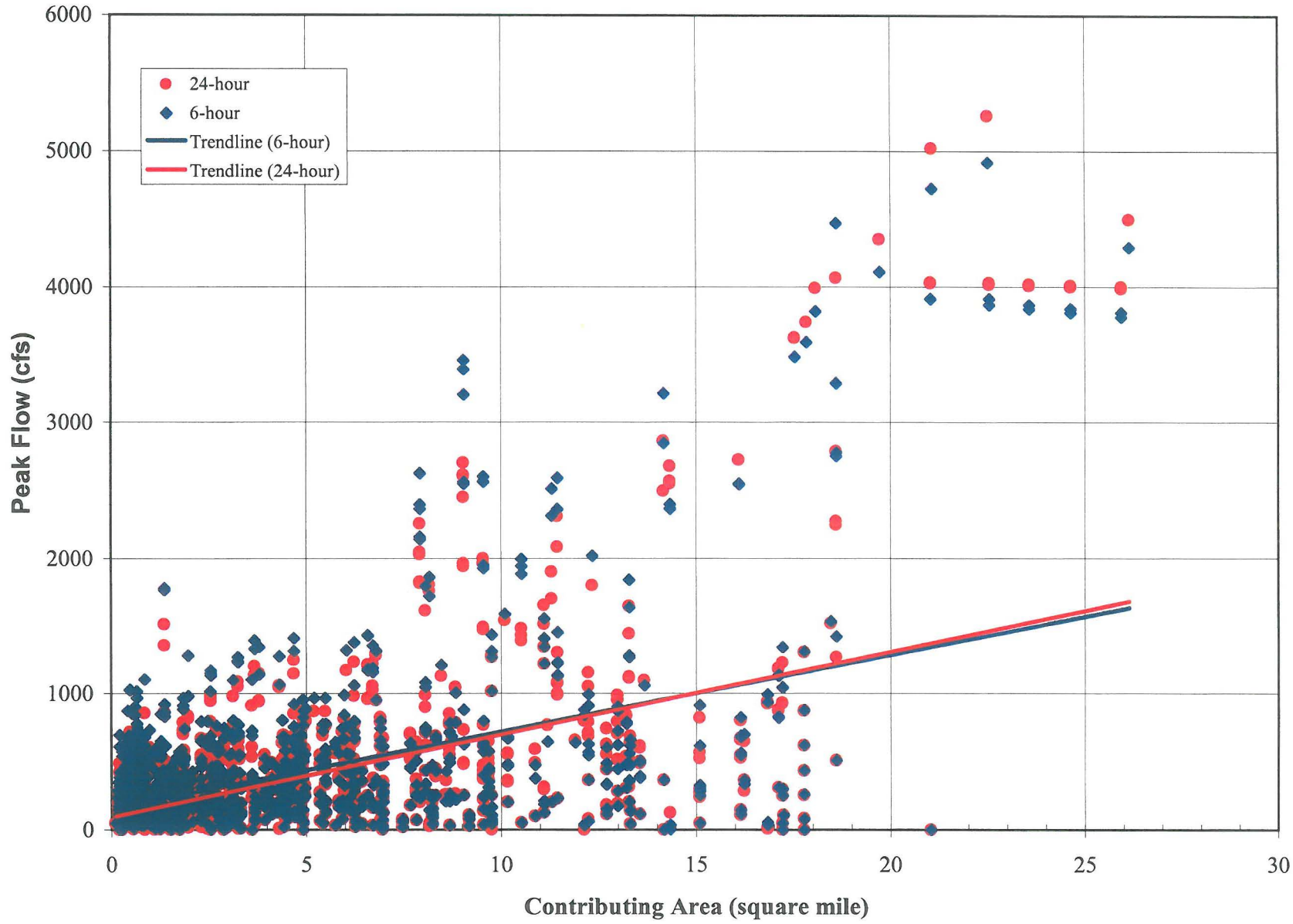

FIGURE 7.3

100-Year Peak Flow Comparison with USGS Regression Envelope

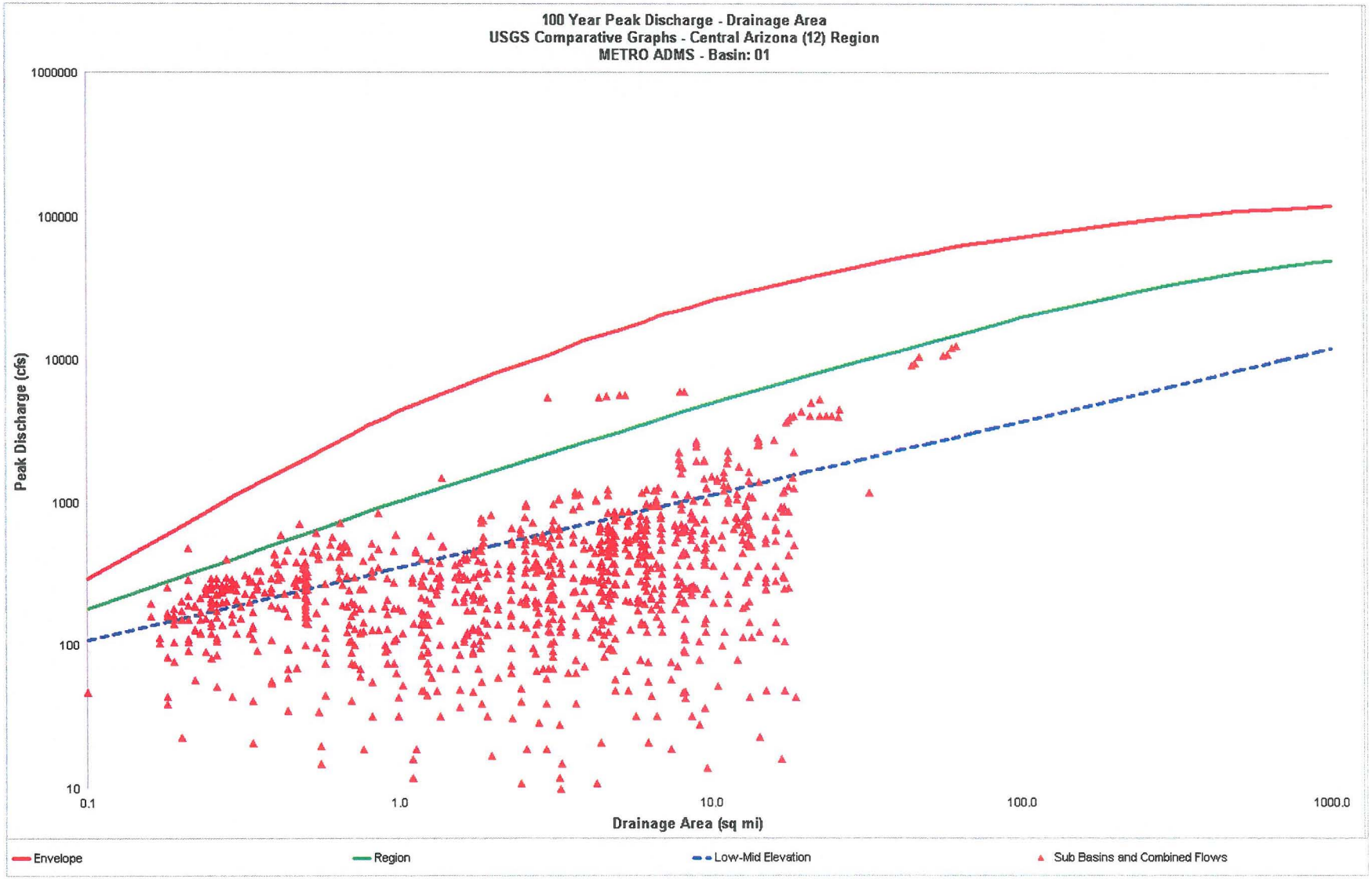

Figure 7.3a 100-Year 24-Hour Flow Comparison with USGS Regression Envelope

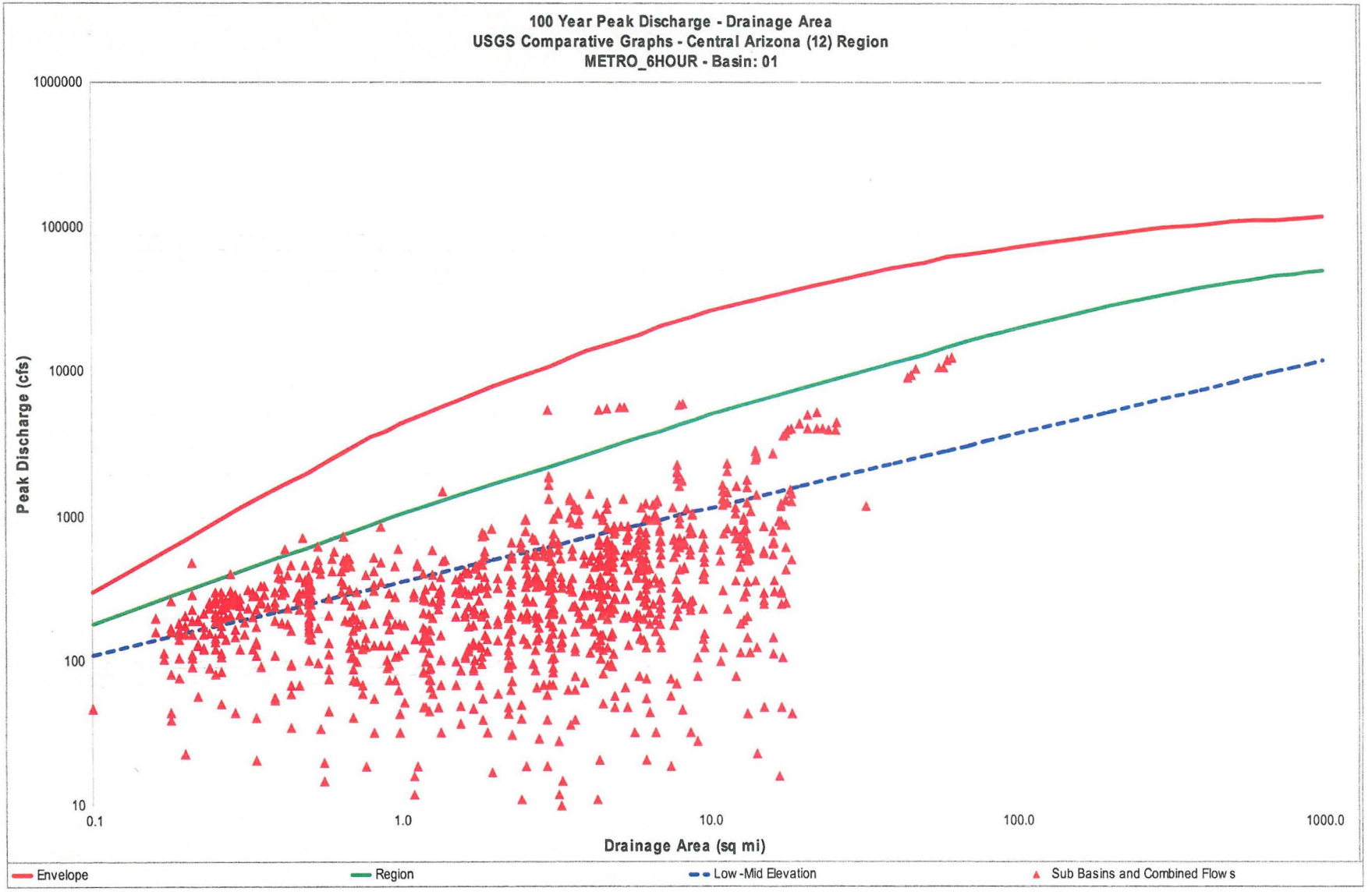

Figure 7.3b 100-Year 6-Hour Peak Flow Comparison with USGS Regression Envelope

APPENDICES

APPENDIX A – HEC-1 Input Parameters

Appendix A1 – Rainfall Data

Appendix A2 – Sub-basin Data

Appendix A3 – Soil Data

Appendix A4 – Land Use Data

Appendix A5 – Surface Retention Parameter (AI)

Appendix A6 – Impervious Area Percentage (RTIMP)

Appendix A7 – Detention/Retention Basin Diversions

Appendix A8 – Storm Drain Diversion Data

Appendix A9 – Sub-basin Flow Diversions

Appendix A10 – Diversions to ADOT Tunnel Systems

Appendix A11 – Grand Canal Diversions

Appendix A12 – Storm Drain Routing Data

Appendix A13 – Channel Routing Data

Appendix A14 – Storage Routing Data

Appendix A15 – Cumulative Area Computation Data

Appendix A16 – Input and Output Hydrograph Data (QI)

APPENDIX A1

Rainfall Data

Appendix A1 Rainfall Data

Exhibit A shows the NOAA Atlas 2 rainfall contours covering the entire Metro Phoenix area. The average 100-year, 24-hour rainfall depth within the project area is estimated to be 3.9 inches. The design rainfall depths were applied uniformly over the entire watershed with depth-area reduction factors based on the NOAA Technical Memorandum NWS HYDRO-40 (NOAA, 1984) by using the JD cards. The design depth-duration-frequency table was computed using the FCDMC's DDMSW PREFRE software module. As defined by FCDMC's Drainage Design Manual, the rainfall distributions are SCS Type II for 24-hour storms and Maricopa County local storm distribution for the 6-hour storm by using PC cards.

Rainfall Data

Primary Zone Number:	7	Latitude:	0.0	Elevation:	0
Short Duration Zone Number:	8	Longitude:	0.0		

	Point Values (in)					
Duration	2-Yr	5-Yr	10-Yr	25-Yr	50-Yr	100-Yr
5 MIN	0.33	0.43	0.50	0.59	0.67	0.74
10 MIN	0.49	0.65	0.75	0.91	1.02	1.14
15 MIN	0.59	0.81	0.95	1.15	1.31	1.46
30 MIN	0.79	1.08	1.28	1.56	1.77	1.98
1 HOUR	0.96	1.34	1.59	1.94	2.21	2.48
2 HOUR	1.04	1.46	1.74	2.13	2.43	2.72
3 HOUR	1.10	1.54	1.84	2.25	2.57	2.89
6 HOUR	1.20	1.70	2.03	2.49	2.85	3.20
12 HOUR	1.30	1.86	2.24	2.76	3.15	3.55
24 HOUR	1.40	2.03	2.45	3.02	3.46	3.90

Table 2.1a
Depth-Area Reduction Factors for 24-Hour Duration Rainfall

Area Square Miles	Ratio to Point Rainfall
0	1
10	0.94
20	0.91
30	0.90
40	0.88
50	0.87
60	0.86
70	0.856
80	0.855
90	0.846
100	0.842
110	0.838
120	0.834
130	0.833
140	0.829
150	0.825
200	0.817
300	0.80
400	0.79
500	0.78

24-Hour Rainfall Distribution

Time (Hour)	Fraction of Total Rainfall
0.00	0.000
0.25	0.002
0.50	0.005
0.75	0.008
1.00	0.011
1.25	0.014
1.50	0.017
1.75	0.020
2.00	0.023
2.25	0.026
2.50	0.029
2.75	0.032
3.00	0.035
3.25	0.038
3.50	0.041
3.75	0.044
4.00	0.048
4.25	0.052
4.50	0.056
4.75	0.060
5.00	0.064
5.25	0.068
5.50	0.072
5.75	0.076
6.00	0.080
6.25	0.085
6.50	0.090
6.75	0.095
7.00	0.100
7.25	0.105
7.50	0.110
7.75	0.115
8.00	0.120
8.25	0.126
8.50	0.133
8.75	0.140
9.00	0.147
9.25	0.155
9.50	0.163

24-Hour Rainfall Distribution		
	Time (Hour)	Fraction of Total Rainfall
	9.75	0.172
	10.00	0.181
	10.25	0.191
	10.50	0.203
	10.75	0.218
	11.00	0.236
	11.25	0.257
	11.50	0.283
	11.75	0.387
	12.00	0.663
	12.25	0.707
	12.50	0.735
	12.75	0.758
	13.00	0.776
	13.25	0.791
	13.50	0.804
	13.75	0.815
	14.00	0.825
	14.25	0.834
	14.50	0.842
	14.75	0.849
	15.00	0.856
	15.25	0.863
	15.50	0.869
	15.75	0.875
	16.00	0.881
	16.25	0.887
	16.50	0.893
	16.75	0.898
	17.00	0.903
	17.25	0.908
	17.50	0.913
	17.75	0.918
	18.00	0.922
	18.25	0.926
	18.50	0.930
	18.75	0.934
	19.00	0.938
	19.25	0.942
	19.50	0.946

24-Hour Rainfall Distribution			
	Time	Fraction of	
	(Hour)	Total Rainfall	
	19.75	0.950	
	20.00	0.953	
	20.25	0.956	
	20.50	0.959	
	20.75	0.962	
	21.00	0.965	
	21.25	0.968	
	21.50	0.971	
	21.75	0.974	
	22.00	0.977	
	22.25	0.980	
	22.50	0.983	
	22.75	0.986	
	23.00	0.989	
	23.25	0.992	
	23.50	0.995	
	23.75	0.998	
	24.00	1.000	

Table 2.2
Depth-Area Reduction Factors
for 6-Hour Duration Rainfall

Area, Square Miles	Ratio to Point of Rainfall
0	1.0
1	0.987
5	0.96
10	0.94
20	0.91
30	0.89
40	0.87
50	0.86
100	0.80
200	0.72
300	0.66
400	0.61
500	0.57

Use the depth-area reduction values from Figure 2.14 or Table 2.2 to correct the 6-hour point rainfall depth from the isopluvial maps (Figures 2.2 through 2.7) for all flood studies in which the 6-hour local storm is the design rainfall criteria (see Table 2.1).

If the flood study is for the design of a retention/detention facility for a small drainage area and the design rainfall criteria is the 100-year, 2-hour storm, then the point rainfall depths from Figure 2.1 are not to be reduced for area. This is because local retention/detention basins will be provided only for very small drainage areas and the point rainfall from Figure 2.1 is representative of the equivalent uniform depth of rainfall over the entire contributing area.

If a general storm is the accepted design rainfall criteria (as opposed to the 6-hour local storm as defined in this manual), then the appropriate depth-area reduction curve will need to be defined to correspond with the rainfall duration and the temporal distribution of the general storm. Usually the general storm for use in Maricopa County is the SCS Type II 24-hour design rainfall. Areal reductions for point rainfall for this 24-hour storm should be performed using Table 2.1a. The data for Table 2.1a have been taken from Figure 15 of the NWS HYDRO-40 (Zehr and Myers, 1984). For other general storms, the depth-area reduction and temporal distribution will need to be performed on a case-by-case basis depending on the purpose of the study, location of the watershed, and other meteorological and hydrological factors.

2.3.1 Procedure for Depth-Area Adjustment

The following procedure is to be used with the 6-hour local storm rainfall depths (Figures 2.2 through 2.7):

1. Determine the size of the drainage area.

Table 2.4
6-Hour Distributions*

Time (hrs)	Pattern 1	Pattern 2	Pattern 3	Pattern 4	Pattern 5
0:00	0.0	0.0	0.0	0.0	0.0
0:15	0.8	0.9	1.5	2.1	2.4
0:30	1.6	1.6	2.0	3.5	4.3
0:45	2.5	2.5	3.0	5.1	5.9
1:00	3.3	3.4	4.8	7.1	7.8
1:15	4.1	4.2	6.3	8.7	9.8
1:30	5.0	5.1	7.6	10.5	11.9
1:45	5.8	5.9	9.0	12.5	14.1
2:00	6.6	6.7	10.5	14.3	16.2
2:15	7.4	7.6	11.9	16.0	18.6
2:30	8.7	8.7	13.5	17.9	21.2
2:45	9.9	10.0	15.2	20.1	23.9
3:00	11.8	12.0	17.5	23.2	27.1
3:15	13.8	16.3	22.2	28.1	32.1
3:30	21.6	25.2	30.4	36.4	40.8
3:45	37.7	45.1	47.2	50.0	51.5
4:00	83.4	69.4	67.0	65.8	62.7
4:15	91.1	83.7	79.6	77.3	73.5
4:30	93.1	90.0	86.8	84.1	81.4
4:45	95.0	93.8	91.2	88.8	86.4
5:00	96.2	95.0	94.6	92.7	90.7
5:15	97.2	96.3	96.0	94.5	93.0
5:30	98.3	97.5	97.3	96.4	95.4
5:45	99.1	98.8	98.7	98.2	97.7
6:00	100.0	100.0	100.0	100.0	100.0

*Pattern represents percent Rainfall Depth.

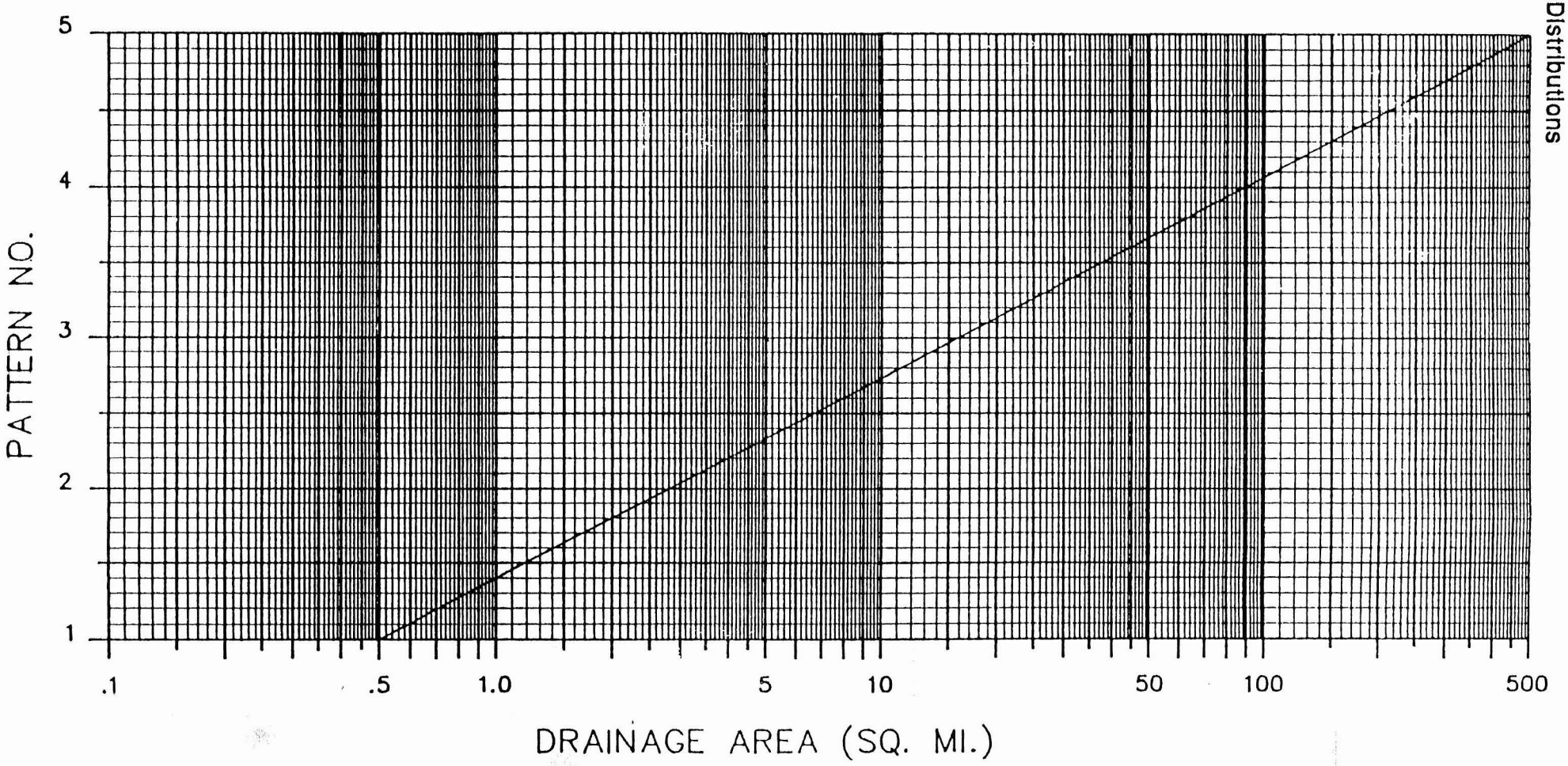

Figure 2.17
Area Versus Pattern Number for Maricopa County

APPENDIX A2

Sub-basin Data

Appendix A2 Sub-basin Data

The FCDMC provided 2-foot contour maps for the use of this project. The typical sub-basin size is a half square mile. The north-south mile and half-mile streets, and east-west mile streets are used as the sub-basins boundaries. The total number of sub-basins is 179 for this project. Exhibit F shows the sub-basin boundary map. Areas for all of the sub-basins were estimated by using ArcGIS based on the sub-basin delineations shown in Exhibit F. Other sub-basin parameters including sub-basin names, flow path length, slopes, rainfall loss parameters, unit hydrograph parameters for the Clark method for all of the sub-basins are shown in the flowing table. This table was produced by the DDMSW program.

Sub Basin Data

6/23/2006

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method: Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
04s	0.28	0.74	245.3	238.0	Urban	0.037	0.12	0.25	4.15	0.63	25 *	Tc (hrs)	0.48	0.42	0.39	0.36	0.34	0.32
												Vel (f/s)	2.28	2.60	2.80	3.02	3.20	3.37
												R (hrs)	0.27	0.23	0.21	0.19	0.18	0.17
08q	0.44	1.14	93.3	93.3	Urban	0.040	0.10	0.25	3.95	0.64	41 *	Tc (hrs)	0.74	0.66	0.62	0.58	0.55	0.53
												Vel (f/s)	2.25	2.52	2.68	2.87	3.02	3.17
												R (hrs)	0.47	0.42	0.39	0.36	0.34	0.32
08s	0.65	1.10	59.2	59.2	Urban	0.037	0.15	0.25	3.85	0.68	44 *	Tc (hrs)	0.80	0.72	0.67	0.63	0.60	0.57
												Vel (f/s)	2.02	2.25	2.39	2.56	2.69	2.82
												R (hrs)	0.40	0.35	0.33	0.31	0.29	0.27
12q	0.40	1.18	344.6	276.0	Urban	0.047	0.14	0.25	4.10	0.60	10 *	Tc (hrs)	0.77	0.64	0.59	0.53	0.50	0.47
												Vel (f/s)	2.24	2.70	2.96	3.24	3.48	3.70
												R (hrs)	0.54	0.44	0.39	0.36	0.33	0.31
12s	0.21	0.80	70.4	70.4	Urban	0.033	0.12	0.25	4.00	0.65	72 *	Tc (hrs)	0.57	0.51	0.48	0.45	0.43	0.41
												Vel (f/s)	2.07	2.30	2.43	2.60	2.72	2.83
												R (hrs)	0.40	0.36	0.34	0.31	0.30	0.28
16o	0.21	0.53	860.4	315.0	Urban	0.027	0.10	0.25	4.15	0.63	78 *	Tc (hrs)	0.26	0.23	0.22	0.21	0.20	0.19
												Vel (f/s)	2.99	3.32	3.52	3.76	3.95	4.11
												R (hrs)	0.12	0.11	0.10	0.09	0.09	0.09
16q	0.65	1.65	78.9	78.9	Urban	0.032	0.13	0.25	3.95	0.67	21 *	Tc (hrs)	0.97	0.84	0.78	0.72	0.68	0.64
												Vel (f/s)	2.51	2.88	3.11	3.37	3.57	3.78
												R (hrs)	0.68	0.58	0.53	0.49	0.46	0.43
16s	0.42	0.85	73.1	73.1	Urban	0.039	0.16	0.23	4.25	0.52	59 *	Tc (hrs)	0.64	0.58	0.54	0.51	0.48	0.46
												Vel (f/s)	1.95	2.17	2.30	2.45	2.58	2.69
												R (hrs)	0.33	0.29	0.27	0.25	0.24	0.23
20p	0.53	1.19	42.1	42.1	Urban	0.037	0.54 *	0.24	4.40	0.46	26 *	Tc (hrs)	1.03	0.91	0.84	0.77	0.73	0.69
												Vel (f/s)	1.70	1.91	2.08	2.26	2.39	2.53

* Non default value

Sub Basin Data

6/23/2006

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.63	0.55	0.50	0.46	0.43	0.40
20q	0.28	0.76	36.9	36.9	Urban	0.045	0.25	0.22	4.45	0.40	11 *	**Tc (hrs)**	1.06	0.88	0.82	0.74	0.69	0.65
												Vel (f/s)	1.05	1.26	1.37	1.51	1.61	1.70
												R (hrs)	0.66	0.54	0.49	0.44	0.41	0.39
20s	0.48	0.80	73.0	73.0	Urban	0.042	0.16	0.24	4.55	0.44	52 *	**Tc (hrs)**	0.65	0.59	0.55	0.52	0.49	0.47
												Vel (f/s)	1.79	2.00	2.12	2.27	2.38	2.49
												R (hrs)	0.29	0.26	0.24	0.23	0.21	0.20
20t	0.27	0.63	16.0	16.0	Urban	0.055	0.13	0.23	2.54	1.53	3 *	**Tc (hrs)**	1.50	1.50	1.50	1.27	1.16	1.07
												Vel (f/s)	0.53	0.54	0.61	0.73	0.80	0.86
												R (hrs)	1.00	0.98	0.86	0.71	0.64	0.59
24k	0.19	0.85	28.3	28.3	Urban	0.032	0.60 *	0.25	4.60	0.40	23 *	**Tc (hrs)**	0.93	0.83	0.76	0.69	0.65	0.62
												Vel (f/s)	1.33	1.51	1.65	1.80	1.91	2.02
												R (hrs)	0.77	0.68	0.61	0.55	0.52	0.49
24m	0.50	1.50	30.7	30.7	Urban	0.031	1.65 *	0.25	4.80	0.38	24 *	**Tc (hrs)**	1.18	1.12	1.09	1.03	0.95	0.88
												Vel (f/s)	1.86	1.96	2.02	2.14	2.32	2.51
												R (hrs)	0.91	0.86	0.83	0.78	0.71	0.66
24o	0.50	1.50	21.3	21.3	Urban	0.032	1.13 *	0.25	4.80	0.37	30 *	**Tc (hrs)**	1.28	1.21	1.14	1.03	0.95	0.90
												Vel (f/s)	1.72	1.81	1.93	2.15	2.31	2.44
												R (hrs)	1.00	0.94	0.87	0.78	0.72	0.68
24s	0.20	0.81	34.6	34.6	Urban	0.042	0.19	0.25	4.80	0.37	35 *	**Tc (hrs)**	0.88	0.78	0.73	0.68	0.64	0.62
												Vel (f/s)	1.35	1.53	1.62	1.75	1.85	1.93
												R (hrs)	0.69	0.60	0.56	0.52	0.49	0.46
24t	0.26	0.55	40.1	40.1	Urban	0.049	0.10	0.25	3.48	0.87	6 *	**Tc (hrs)**	1.07	0.91	0.81	0.73	0.68	0.64
												Vel (f/s)	0.76	0.88	0.99	1.11	1.19	1.26
												R (hrs)	0.53	0.45	0.39	0.35	0.32	0.30

* Non default value

Sub Basin Data

6/23/2006

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Sub Basin ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
28k	0.43	1.35	28.1	28.1	Urban	0.031	1.19 *	0.25	4.60	0.40	22 *	**Tc (hrs)**	1.17	1.12	1.06	0.94	0.86	0.81
												Vel (f/s)	1.69	1.77	1.88	2.11	2.30	2.46
												R (hrs)	0.91	0.86	0.81	0.71	0.65	0.60
28m	0.51	1.50	26.7	26.7	Urban	0.028	1.85 *	0.25	4.80	0.36	22 *	**Tc (hrs)**	1.19	1.13	1.10	1.06	0.99	0.91
												Vel (f/s)	1.85	1.94	2.00	2.07	2.22	2.42
												R (hrs)	0.91	0.87	0.84	0.81	0.74	0.68
28o	0.50	1.50	21.3	21.3	Urban	0.030	1.64 *	0.25	4.80	0.36	23 *	**Tc (hrs)**	1.31	1.25	1.21	1.14	1.05	0.97
												Vel (f/s)	1.68	1.76	1.82	1.93	2.11	2.27
												R (hrs)	1.03	0.97	0.94	0.88	0.80	0.73
28p	0.37	1.16	29.4	29.4	Urban	0.038	1.02 *	0.25	4.80	0.36	26 *	**Tc (hrs)**	1.15	1.09	1.00	0.89	0.83	0.79
												Vel (f/s)	1.48	1.57	1.70	1.91	2.04	2.15
												R (hrs)	0.86	0.80	0.73	0.65	0.60	0.56
28q	0.32	0.87	23.0	23.0	Urban	0.036	0.35 *	0.25	4.80	0.39	42 *	**Tc (hrs)**	0.94	0.84	0.79	0.73	0.69	0.66
												Vel (f/s)	1.35	1.53	1.63	1.75	1.84	1.93
												R (hrs)	0.60	0.52	0.49	0.45	0.42	0.40
28s	0.16	0.50	16.0	16.0	Urban	0.040	0.15	0.23	5.80	0.25	42 *	**Tc (hrs)**	0.81	0.73	0.68	0.64	0.61	0.58
												Vel (f/s)	0.90	1.01	1.07	1.15	1.21	1.27
												R (hrs)	0.47	0.42	0.39	0.36	0.34	0.33
32k	0.51	1.50	29.3	29.3	Urban	0.029	1.88 *	0.25	4.50	0.43	21 *	**Tc (hrs)**	1.19	1.13	1.10	1.06	1.00	0.92
												Vel (f/s)	1.85	1.94	2.00	2.07	2.20	2.39
												R (hrs)	0.91	0.87	0.84	0.81	0.76	0.69
32m	0.51	1.50	26.7	26.7	Urban	0.030	1.32 *	0.25	4.80	0.36	27 *	**Tc (hrs)**	1.18	1.12	1.08	0.97	0.90	0.84
												Vel (f/s)	1.86	1.96	2.04	2.27	2.46	2.63
												R (hrs)	0.90	0.85	0.81	0.72	0.66	0.61
32o	0.50	1.50	21.3	21.3	Urban	0.030	1.19 *	0.25	4.80	0.37	26 *	**Tc (hrs)**	1.28	1.21	1.15	1.03	0.95	0.89
												Vel (f/s)	1.72	1.81	1.92	2.14	2.32	2.47

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	1.00	0.94	0.89	0.78	0.72	0.67
32p	0.23	0.94	19.2	19.2	Urban	0.050	0.28	0.25	4.80	0.33	3 *	Tc (hrs)	1.50	1.37	1.25	1.11	1.03	0.97
												Vel (f/s)	0.80	1.01	1.11	1.25	1.34	1.43
												R (hrs)	1.48	1.14	1.03	0.90	0.83	0.78
32q	0.18	0.74	18.9	18.9	Urban	0.052	0.25	0.21	4.80	0.32	6 *	Tc (hrs)	1.42	1.18	1.08	0.97	0.91	0.86
												Vel (f/s)	0.76	0.92	1.01	1.12	1.20	1.27
												R (hrs)	1.16	0.94	0.85	0.76	0.71	0.66
32s	0.34	1.18	13.5	13.5	Urban	0.034	0.52 *	0.15	8.00	0.11	48 *	Tc (hrs)	1.19	1.06	0.99	0.92	0.87	0.83
												Vel (f/s)	1.45	1.64	1.75	1.89	1.98	2.08
												R (hrs)	0.96	0.84	0.78	0.71	0.68	0.64
36i	0.34	1.28	26.6	26.6	Urban	0.031	0.95 *	0.24	3.95	0.57	19 *	Tc (hrs)	1.20	1.14	1.05	0.92	0.86	0.81
												Vel (f/s)	1.57	1.65	1.79	2.03	2.19	2.32
												R (hrs)	1.02	0.97	0.88	0.76	0.70	0.66
36k	0.51	1.50	28.0	28.0	Urban	0.029	1.39 *	0.25	4.65	0.39	24 *	Tc (hrs)	1.17	1.12	1.08	0.98	0.90	0.83
												Vel (f/s)	1.88	1.97	2.03	2.25	2.45	2.64
												R (hrs)	0.90	0.85	0.82	0.73	0.67	0.62
36m	0.51	1.50	24.0	24.0	Urban	0.031	1.59 *	0.25	4.80	0.36	25 *	Tc (hrs)	1.26	1.20	1.16	1.09	1.00	0.93
												Vel (f/s)	1.74	1.83	1.89	2.03	2.20	2.37
												R (hrs)	0.97	0.92	0.89	0.82	0.75	0.69
36o	0.50	1.50	20.0	20.0	Urban	0.029	0.66 *	0.25	4.80	0.36	24 *	Tc (hrs)	1.30	1.16	1.06	0.97	0.91	0.86
												Vel (f/s)	1.69	1.89	2.08	2.27	2.41	2.56
												R (hrs)	1.02	0.90	0.81	0.73	0.69	0.64
36p	0.19	0.70	17.2	17.2	Urban	0.038	0.72 *	0.22	4.80	0.36	23 *	Tc (hrs)	1.08	0.97	0.88	0.80	0.75	0.71
												Vel (f/s)	0.95	1.06	1.17	1.28	1.37	1.45
												R (hrs)	0.79	0.70	0.63	0.57	0.53	0.50

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
36q	0.27	0.98	16.4	16.4	Urban	0.032	0.26 *	0.15	9.70	0.06	25 *	**Tc (hrs)**	1.02	0.89	0.83	0.76	0.73	0.70
												Vel (f/s)	1.42	1.62	1.74	1.88	1.98	2.07
												R (hrs)	0.79	0.68	0.63	0.57	0.54	0.52
36s	0.24	0.75	10.7	10.7	Urban	0.039	0.19	0.13	10.10	0.05	34 *	**Tc (hrs)**	1.07	0.95	0.89	0.83	0.79	0.76
												Vel (f/s)	1.03	1.16	1.24	1.33	1.39	1.45
												R (hrs)	0.71	0.62	0.58	0.54	0.51	0.49
40i	0.22	1.07	54.2	54.2	Urban	0.035	2.53 *	0.25	4.10	0.58	26 *	**Tc (hrs)**	0.88	0.83	0.81	0.78	0.75	0.74
												Vel (f/s)	1.79	1.89	1.95	2.02	2.08	2.14
												R (hrs)	0.79	0.75	0.72	0.69	0.67	0.65
40k	0.50	1.50	24.0	24.0	Urban	0.032	1.14 *	0.25	4.80	0.37	24 *	**Tc (hrs)**	1.30	1.23	1.15	1.03	0.95	0.89
												Vel (f/s)	1.70	1.79	1.91	2.15	2.32	2.46
												R (hrs)	1.01	0.95	0.89	0.78	0.71	0.67
40m	0.51	1.50	24.0	24.0	Urban	0.030	0.85 *	0.25	4.80	0.36	29 *	**Tc (hrs)**	1.20	1.11	1.02	0.92	0.87	0.83
												Vel (f/s)	1.83	1.98	2.16	2.38	2.52	2.66
												R (hrs)	0.92	0.84	0.77	0.69	0.64	0.61
40o	0.47	1.28	20.4	20.4	Urban	0.032	1.13 *	0.24	4.80	0.36	23 *	**Tc (hrs)**	1.27	1.21	1.12	1.00	0.92	0.87
												Vel (f/s)	1.48	1.55	1.67	1.88	2.04	2.16
												R (hrs)	0.91	0.86	0.79	0.69	0.64	0.60
40p	0.22	0.73	13.8	13.8	Urban	0.037	1.05 *	0.13	7.00	0.14	22 *	**Tc (hrs)**	1.18	1.07	0.96	0.85	0.79	0.74
												Vel (f/s)	0.91	1.00	1.12	1.26	1.36	1.45
												R (hrs)	0.81	0.73	0.65	0.57	0.52	0.49
40q	0.35	1.13	16.0	16.0	Urban	0.033	0.31 *	0.15	9.70	0.06	29 *	**Tc (hrs)**	1.11	0.97	0.91	0.84	0.80	0.76
												Vel (f/s)	1.50	1.71	1.83	1.98	2.08	2.17
												R (hrs)	0.83	0.72	0.67	0.61	0.58	0.55
40s	0.24	0.75	8.0	8.0	Urban	0.035	0.15	0.13	10.10	0.05	48 *	**Tc (hrs)**	1.07	0.96	0.90	0.84	0.81	0.78
												Vel (f/s)	1.03	1.15	1.22	1.30	1.36	1.42

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Sub Basin ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
												R (hrs)	0.71	0.63	0.59	0.54	0.52	0.50
42i	0.27	1.00	54.3	54.3	Urban	0.029	1.07 *	0.25	4.00	0.64	5 *	**Tc (hrs)**	1.02	1.00	0.93	0.77	0.68	0.62
												Vel (f/s)	1.44	1.47	1.57	1.90	2.16	2.35
												R (hrs)	0.80	0.78	0.73	0.59	0.51	0.46
44i	0.35	1.50	50.6	50.6	Urban	0.035	1.92 *	0.25	4.35	0.50	23 *	**Tc (hrs)**	1.09	1.03	1.00	0.97	0.92	0.86
												Vel (f/s)	2.03	2.13	2.19	2.28	2.38	2.57
												R (hrs)	1.02	0.97	0.94	0.90	0.85	0.79
44k	0.51	1.50	22.7	22.7	Urban	0.030	1.00 *	0.25	4.80	0.38	32 *	**Tc (hrs)**	1.20	1.13	1.05	0.95	0.89	0.84
												Vel (f/s)	1.83	1.95	2.10	2.33	2.48	2.61
												R (hrs)	0.92	0.86	0.79	0.71	0.66	0.62
44m	0.50	1.50	22.7	22.7	Urban	0.030	1.28 *	0.25	4.80	0.37	27 *	**Tc (hrs)**	1.24	1.18	1.13	1.01	0.94	0.88
												Vel (f/s)	1.77	1.87	1.95	2.17	2.35	2.51
												R (hrs)	0.96	0.91	0.87	0.77	0.70	0.65
44o	0.23	0.81	17.2	17.2	Urban	0.034	1.41 *	0.24	4.80	0.36	21 *	**Tc (hrs)**	1.12	1.07	1.04	0.93	0.85	0.78
												Vel (f/s)	1.06	1.11	1.15	1.28	1.40	1.52
												R (hrs)	0.82	0.78	0.75	0.67	0.60	0.55
44p	0.41	1.30	10.8	10.8	Urban	0.032	0.56 *	0.15	7.00	0.14	25 *	**Tc (hrs)**	1.46	1.25	1.16	1.06	1.00	0.95
												Vel (f/s)	1.31	1.52	1.65	1.81	1.91	2.02
												R (hrs)	1.16	0.98	0.90	0.81	0.76	0.72
44q	0.36	1.24	14.6	14.6	Urban	0.031	0.33 *	0.15	9.70	0.06	49 *	**Tc (hrs)**	1.10	0.98	0.92	0.85	0.82	0.78
												Vel (f/s)	1.66	1.86	1.98	2.13	2.23	2.33
												R (hrs)	0.87	0.77	0.72	0.66	0.63	0.60
44s	0.24	0.75	6.7	6.7	Urban	0.038	0.16	0.13	10.10	0.05	44 *	**Tc (hrs)**	1.19	1.06	1.00	0.93	0.89	0.86
												Vel (f/s)	0.93	1.04	1.10	1.18	1.23	1.28
												R (hrs)	0.80	0.71	0.66	0.61	0.58	0.56

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
44v	0.24	0.76	10.6	10.6	Urban	0.043	0.21	0.29	2.49	1.68	24 *	**Tc (hrs)**	1.38	1.32	1.27	1.16	1.08	1.02
												Vel (f/s)	0.81	0.85	0.87	0.97	1.03	1.09
												R (hrs)	0.97	0.92	0.89	0.79	0.74	0.69
48i	0.54	1.67	50.4	50.4	Urban	0.030	1.55 *	0.25	4.35	0.45	11 *	**Tc (hrs)**	1.22	1.18	1.16	1.06	0.94	0.85
												Vel (f/s)	2.00	2.08	2.12	2.31	2.60	2.87
												R (hrs)	1.00	0.96	0.93	0.85	0.75	0.67
48k	0.50	1.50	18.7	18.7	Urban	0.031	0.82 *	0.25	4.80	0.38	41 *	**Tc (hrs)**	1.23	1.14	1.06	0.97	0.92	0.88
												Vel (f/s)	1.78	1.93	2.08	2.27	2.39	2.51
												R (hrs)	0.96	0.88	0.81	0.73	0.69	0.66
48m	0.48	1.28	18.8	18.8	Urban	0.031	1.04 *	0.24	4.80	0.36	26 *	**Tc (hrs)**	1.25	1.18	1.09	0.97	0.91	0.86
												Vel (f/s)	1.50	1.59	1.73	1.93	2.07	2.19
												R (hrs)	0.88	0.82	0.75	0.66	0.61	0.58
48o	0.68	1.42	14.1	14.1	Urban	0.033	0.74 *	0.17	6.80	0.16	23 *	**Tc (hrs)**	1.50	1.29	1.18	1.08	1.01	0.95
												Vel (f/s)	1.37	1.61	1.76	1.94	2.07	2.19
												R (hrs)	0.97	0.82	0.74	0.66	0.62	0.58
48q	0.30	1.13	14.1	14.1	Urban	0.039	0.25 *	0.15	9.70	0.06	24 *	**Tc (hrs)**	1.27	1.11	1.03	0.95	0.91	0.87
												Vel (f/s)	1.30	1.49	1.60	1.74	1.83	1.91
												R (hrs)	1.06	0.91	0.84	0.77	0.73	0.69
48s	0.21	0.69	8.8	8.8	Urban	0.037	0.15	0.15	9.70	0.06	49 *	**Tc (hrs)**	1.03	0.93	0.87	0.81	0.78	0.75
												Vel (f/s)	0.98	1.09	1.16	1.24	1.30	1.35
												R (hrs)	0.69	0.61	0.57	0.53	0.50	0.48
48v	0.30	1.10	10.9	10.9	Urban	0.030	0.10	0.28	2.59	1.77	68 *	**Tc (hrs)**	1.13	1.04	1.00	0.93	0.89	0.85
												Vel (f/s)	1.42	1.55	1.62	1.73	1.82	1.90
												R (hrs)	0.91	0.83	0.79	0.73	0.70	0.66
52g	0.27	0.78	64.5	64.5	Urban	0.035	1.71 *	0.25	4.15	0.51	13 *	**Tc (hrs)**	0.81	0.78	0.77	0.74	0.67	0.60
												Vel (f/s)	1.41	1.46	1.50	1.56	1.72	1.91

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.51	0.49	0.48	0.46	0.41	0.37
52i	0.31	1.31	35.0	35.0	Urban	0.033	1.29 *	0.25	4.70	0.37	22 *	Tc (hrs)	1.11	1.06	1.02	0.90	0.83	0.77
												Vel (f/s)	1.72	1.81	1.89	2.13	2.32	2.49
												R (hrs)	1.01	0.96	0.91	0.80	0.73	0.67
52k	0.30	1.31	15.3	15.3	Urban	0.032	0.59 *	0.25	4.80	0.37	31 *	Tc (hrs)	1.32	1.17	1.08	1.00	0.95	0.90
												Vel (f/s)	1.46	1.64	1.77	1.92	2.03	2.14
												R (hrs)	1.25	1.10	1.01	0.92	0.87	0.82
52m	0.18	0.58	20.8	20.8	Urban	0.041	0.54 *	0.23	4.80	0.35	16 *	Tc (hrs)	1.04	0.88	0.80	0.73	0.68	0.64
												Vel (f/s)	0.82	0.97	1.06	1.17	1.25	1.32
												R (hrs)	0.67	0.55	0.50	0.45	0.42	0.39
52o	0.65	1.64	13.4	13.4	Urban	0.031	0.42 *	0.25	5.80	0.23	28 *	Tc (hrs)	1.50	1.31	1.22	1.12	1.06	1.01
												Vel (f/s)	1.60	1.84	1.97	2.15	2.27	2.39
												R (hrs)	1.11	0.95	0.88	0.80	0.75	0.71
52q	0.39	1.27	11.1	11.1	Urban	0.037	0.43 *	0.15	8.80	0.08	35 *	Tc (hrs)	1.40	1.23	1.15	1.06	1.01	0.96
												Vel (f/s)	1.33	1.51	1.62	1.76	1.85	1.94
												R (hrs)	1.10	0.96	0.89	0.81	0.77	0.73
52s	0.27	0.80	7.5	7.5	Urban	0.034	0.17	0.13	10.10	0.05	44 *	Tc (hrs)	1.12	1.00	0.94	0.88	0.84	0.81
												Vel (f/s)	1.05	1.17	1.25	1.33	1.40	1.45
												R (hrs)	0.75	0.66	0.62	0.57	0.54	0.52
52t	0.30	0.82	7.3	7.3	Urban	0.037	0.15	0.15	8.00	0.11	42 *	Tc (hrs)	1.23	1.10	1.03	0.96	0.91	0.88
												Vel (f/s)	0.98	1.10	1.17	1.25	1.32	1.37
												R (hrs)	0.79	0.70	0.65	0.60	0.57	0.55
52u	0.39	0.90	11.1	11.1	Urban	0.044	0.27	0.25	4.80	0.34	13 *	Tc (hrs)	1.50	1.35	1.25	1.13	1.06	1.01
												Vel (f/s)	0.82	0.97	1.05	1.16	1.24	1.31
												R (hrs)	0.99	0.81	0.75	0.67	0.62	0.59

* Non default value

Sub Basin Data

6/23/2006

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
52v	0.30	0.81	9.8	9.8	Urban	0.043	0.22	0.28	2.65	1.41	22 *	**Tc (hrs)**	1.49	1.42	1.34	1.20	1.13	1.07
												Vel (f/s)	0.80	0.84	0.89	0.99	1.05	1.11
												R (hrs)	0.97	0.92	0.86	0.77	0.72	0.67
54g	0.25	0.97	51.4	51.4	Urban	0.034	0.95 *	0.25	4.65	0.39	26 *	**Tc (hrs)**	0.83	0.78	0.72	0.64	0.60	0.57
												Vel (f/s)	1.71	1.81	1.98	2.21	2.36	2.48
												R (hrs)	0.66	0.61	0.56	0.49	0.46	0.43
54i	0.19	1.17	35.0	35.0	Urban	0.036	1.22 *	0.25	4.80	0.39	33 *	**Tc (hrs)**	1.01	0.96	0.91	0.83	0.77	0.72
												Vel (f/s)	1.70	1.80	1.88	2.08	2.23	2.37
												R (hrs)	1.09	1.02	0.97	0.87	0.80	0.75
54k	0.25	1.24	14.5	14.5	Urban	0.035	0.33 *	0.24	4.80	0.38	39 *	**Tc (hrs)**	1.29	1.14	1.07	0.99	0.94	0.90
												Vel (f/s)	1.41	1.59	1.70	1.83	1.93	2.02
												R (hrs)	1.30	1.13	1.06	0.97	0.92	0.87
54m	0.27	0.75	18.6	18.6	Urban	0.034	0.56 *	0.25	4.80	0.37	31 *	**Tc (hrs)**	0.97	0.86	0.79	0.73	0.69	0.66
												Vel (f/s)	1.14	1.28	1.39	1.50	1.59	1.67
												R (hrs)	0.60	0.52	0.48	0.44	0.41	0.39
56e	0.18	0.66	33.2	33.2	Urban	0.031	1.72 *	0.24	4.35	0.47	18 *	**Tc (hrs)**	0.81	0.78	0.76	0.72	0.66	0.60
												Vel (f/s)	1.20	1.25	1.28	1.34	1.46	1.60
												R (hrs)	0.57	0.54	0.52	0.50	0.45	0.41
56g	0.50	1.50	37.4	37.4	Urban	0.029	1.70 *	0.25	4.35	0.47	23 *	**Tc (hrs)**	1.08	1.03	1.00	0.96	0.89	0.82
												Vel (f/s)	2.03	2.14	2.20	2.30	2.49	2.70
												R (hrs)	0.83	0.79	0.76	0.72	0.66	0.61
56i	0.50	1.50	30.0	30.0	Urban	0.030	1.20 *	0.25	4.80	0.37	28 *	**Tc (hrs)**	1.13	1.07	1.02	0.91	0.85	0.80
												Vel (f/s)	1.95	2.05	2.17	2.41	2.60	2.77
												R (hrs)	0.87	0.82	0.77	0.69	0.63	0.59
56k	0.42	1.09	17.4	17.4	Urban	0.035	0.90 *	0.24	4.80	0.38	34 *	**Tc (hrs)**	1.19	1.11	1.02	0.93	0.88	0.83
												Vel (f/s)	1.35	1.45	1.56	1.72	1.82	1.92

* Non default value

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.78	0.72	0.66	0.60	0.56	0.53
56m	0.58	1.65	12.1	12.1	Urban	0.031	0.86 *	0.25	4.90	0.36	26 *	**Tc (hrs)**	1.50	1.50	1.38	1.24	1.17	1.10
												Vel (f/s)	1.49	1.61	1.76	1.96	2.08	2.19
												R (hrs)	1.30	1.19	1.08	0.96	0.90	0.84
56o	0.64	1.67	11.4	11.4	Urban	0.031	0.29 *	0.25	5.00	0.33	24 *	**Tc (hrs)**	1.50	1.42	1.33	1.22	1.15	1.09
												Vel (f/s)	1.49	1.72	1.84	2.01	2.13	2.24
												R (hrs)	1.25	1.07	0.99	0.90	0.84	0.80
56q	0.35	1.07	9.4	9.4	Urban	0.033	0.24	0.25	6.00	0.21	22 *	**Tc (hrs)**	1.40	1.23	1.14	1.05	0.99	0.94
												Vel (f/s)	1.12	1.28	1.38	1.50	1.59	1.67
												R (hrs)	1.03	0.89	0.82	0.74	0.70	0.66
56s	0.26	0.74	8.1	8.1	Urban	0.038	0.18	0.10	11.20	0.03	39 *	**Tc (hrs)**	1.10	0.98	0.93	0.87	0.83	0.80
												Vel (f/s)	0.99	1.10	1.17	1.25	1.30	1.36
												R (hrs)	0.70	0.62	0.58	0.54	0.52	0.50
56t	0.18	0.78	7.7	7.7	Urban	0.032	0.12	0.15	8.80	0.08	57 *	**Tc (hrs)**	1.06	0.95	0.90	0.84	0.80	0.77
												Vel (f/s)	1.08	1.21	1.28	1.37	1.43	1.49
												R (hrs)	0.86	0.76	0.72	0.66	0.63	0.60
56u	0.33	0.85	7.1	7.1	Urban	0.042	0.22 *	0.25	4.70	0.38	23 *	**Tc (hrs)**	1.50	1.39	1.30	1.19	1.12	1.07
												Vel (f/s)	0.78	0.90	0.96	1.05	1.11	1.17
												R (hrs)	1.04	0.88	0.82	0.74	0.70	0.66
56v	0.23	1.03	11.7	11.7	Urban	0.043	0.20 *	0.24	4.40	0.47	28 *	**Tc (hrs)**	1.49	1.30	1.22	1.13	1.06	1.01
												Vel (f/s)	1.01	1.16	1.24	1.34	1.42	1.49
												R (hrs)	1.36	1.17	1.09	1.00	0.93	0.89
60e	0.41	1.31	25.9	25.9	Urban	0.032	1.35 *	0.25	4.45	0.45	21 *	**Tc (hrs)**	1.22	1.16	1.12	1.01	0.92	0.85
												Vel (f/s)	1.58	1.66	1.71	1.91	2.08	2.25
												R (hrs)	0.95	0.90	0.87	0.78	0.70	0.65

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Sub Basin ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
60g	0.50	1.50	31.4	31.4	Urban	0.031	1.51 *	0.25	4.65	0.39	25 *	**Tc (hrs)**	1.16	1.10	1.07	0.99	0.91	0.84
												Vel (f/s)	1.89	1.99	2.05	2.22	2.42	2.61
												R (hrs)	0.90	0.85	0.82	0.75	0.68	0.63
60i	0.50	1.50	24.7	24.7	Urban	0.030	0.78 *	0.25	4.80	0.37	33 *	**Tc (hrs)**	1.16	1.07	0.98	0.90	0.85	0.81
												Vel (f/s)	1.89	2.07	2.24	2.46	2.59	2.73
												R (hrs)	0.90	0.82	0.74	0.67	0.63	0.60
60k	0.27	0.96	14.5	14.5	Urban	0.034	0.46 *	0.24	4.80	0.37	36 *	**Tc (hrs)**	1.15	1.01	0.94	0.88	0.83	0.79
												Vel (f/s)	1.23	1.40	1.49	1.61	1.70	1.78
												R (hrs)	0.89	0.77	0.71	0.66	0.62	0.59
60l	0.23	0.85	11.8	11.8	Urban	0.034	0.37 *	0.25	4.80	0.37	30 *	**Tc (hrs)**	1.18	1.03	0.97	0.89	0.84	0.80
												Vel (f/s)	1.05	1.21	1.29	1.40	1.48	1.55
												R (hrs)	0.90	0.77	0.72	0.66	0.62	0.58
60m	0.50	1.50	13.3	13.3	Urban	0.031	0.84 *	0.25	5.80	0.25	16 *	**Tc (hrs)**	1.50	1.50	1.33	1.19	1.11	1.04
												Vel (f/s)	1.32	1.47	1.65	1.85	1.98	2.11
												R (hrs)	1.33	1.19	1.05	0.92	0.85	0.80
60o	0.64	1.68	10.7	10.7	Urban	0.029	1.22 *	0.25	5.30	0.31	32 *	**Tc (hrs)**	1.50	1.49	1.41	1.28	1.18	1.12
												Vel (f/s)	1.56	1.66	1.75	1.93	2.08	2.21
												R (hrs)	1.20	1.12	1.06	0.95	0.87	0.82
60q	0.35	0.86	9.3	9.3	Urban	0.036	0.24	0.25	5.00	0.33	23 *	**Tc (hrs)**	1.36	1.18	1.10	1.01	0.95	0.90
												Vel (f/s)	0.93	1.07	1.15	1.26	1.33	1.40
												R (hrs)	0.83	0.71	0.66	0.60	0.56	0.53
60s	0.25	0.77	13.1	13.1	Urban	0.034	0.14	0.13	10.10	0.05	55 *	**Tc (hrs)**	0.91	0.82	0.77	0.72	0.69	0.66
												Vel (f/s)	1.24	1.38	1.47	1.57	1.64	1.70
												R (hrs)	0.59	0.53	0.49	0.46	0.44	0.42
60t	0.33	0.97	8.3	8.3	Urban	0.036	0.17	0.15	8.00	0.11	42 *	**Tc (hrs)**	1.27	1.13	1.06	0.99	0.94	0.90
												Vel (f/s)	1.12	1.26	1.34	1.44	1.51	1.58

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.89	0.78	0.73	0.67	0.64	0.61
60u	0.29	0.81	7.4	7.4	Urban	0.037	0.44 *	0.25	6.00	0.22	22 *	Tc (hrs)	1.46	1.25	1.16	1.06	1.00	0.95
												Vel (f/s)	0.81	0.95	1.02	1.12	1.19	1.26
												R (hrs)	0.97	0.82	0.75	0.68	0.64	0.60
60v	0.23	0.95	8.5	8.5	Urban	0.035	0.15	0.24	4.90	0.38	43 *	Tc (hrs)	1.29	1.15	1.09	1.01	0.96	0.92
												Vel (f/s)	1.08	1.21	1.28	1.38	1.45	1.51
												R (hrs)	1.10	0.97	0.91	0.83	0.79	0.75
64c	0.26	0.97	20.6	20.6	Urban	0.033	1.00 *	0.24	4.55	0.41	20 *	Tc (hrs)	1.15	1.09	1.00	0.88	0.82	0.77
												Vel (f/s)	1.23	1.30	1.43	1.62	1.74	1.84
												R (hrs)	0.90	0.85	0.77	0.67	0.62	0.58
64e	0.50	1.50	25.3	25.3	Urban	0.028	1.59 *	0.25	4.70	0.36	15 *	Tc (hrs)	1.31	1.26	1.22	1.13	1.02	0.93
												Vel (f/s)	1.68	1.75	1.80	1.95	2.17	2.37
												R (hrs)	1.02	0.98	0.95	0.87	0.77	0.70
64g	0.50	1.50	26.7	26.7	Urban	0.029	1.76 *	0.25	4.80	0.36	20 *	Tc (hrs)	1.24	1.18	1.15	1.11	1.01	0.92
												Vel (f/s)	1.78	1.86	1.92	1.99	2.17	2.38
												R (hrs)	0.96	0.91	0.88	0.85	0.77	0.69
64i	0.50	1.50	21.3	21.3	Urban	0.030	1.40 *	0.25	4.80	0.37	32 *	Tc (hrs)	1.22	1.16	1.12	1.02	0.95	0.89
												Vel (f/s)	1.80	1.90	1.97	2.15	2.32	2.48
												R (hrs)	0.95	0.89	0.86	0.78	0.72	0.67
64k	0.21	0.66	15.3	15.3	Urban	0.035	1.25 *	0.14	7.60	0.12	31 *	Tc (hrs)	0.98	0.93	0.85	0.76	0.70	0.66
												Vel (f/s)	0.99	1.04	1.14	1.28	1.38	1.47
												R (hrs)	0.64	0.60	0.55	0.48	0.44	0.41
64l	0.30	1.03	11.7	11.7	Urban	0.043	1.36 *	0.15	8.00	0.11	21 *	Tc (hrs)	1.50	1.50	1.42	1.24	1.13	1.05
												Vel (f/s)	0.94	0.99	1.06	1.22	1.34	1.44
												R (hrs)	1.29	1.22	1.12	0.96	0.87	0.80

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Sub Basin ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
64m	0.50	1.50	10.7	10.7	Urban	0.032	0.29 *	0.15	8.40	0.09	49 *	**Tc (hrs)**	1.36	1.21	1.14	1.06	1.01	0.97
												Vel (f/s)	1.62	1.82	1.93	2.08	2.18	2.27
												R (hrs)	1.06	0.94	0.88	0.81	0.77	0.73
64o	0.65	1.61	9.3	9.3	Urban	0.034	1.21 *	0.25	5.80	0.25	44 *	**Tc (hrs)**	1.50	1.50	1.46	1.33	1.25	1.19
												Vel (f/s)	1.44	1.53	1.62	1.78	1.89	1.99
												R (hrs)	1.20	1.12	1.05	0.95	0.89	0.84
64q	0.41	0.84	7.1	7.1	Urban	0.038	0.17	0.17	6.80	0.17	42 *	**Tc (hrs)**	1.29	1.16	1.09	1.01	0.96	0.92
												Vel (f/s)	0.95	1.07	1.13	1.22	1.28	1.34
												R (hrs)	0.72	0.63	0.59	0.55	0.52	0.49
64s	0.26	0.75	10.7	10.7	Urban	0.033	0.11	0.15	9.70	0.07	65 *	**Tc (hrs)**	0.94	0.85	0.80	0.75	0.72	0.69
												Vel (f/s)	1.17	1.29	1.37	1.47	1.53	1.59
												R (hrs)	0.60	0.53	0.50	0.46	0.44	0.42
64t	0.27	0.78	7.7	7.7	Urban	0.036	0.15	0.21	6.40	0.21	49 *	**Tc (hrs)**	1.17	1.06	0.99	0.92	0.88	0.85
												Vel (f/s)	0.98	1.08	1.15	1.24	1.30	1.35
												R (hrs)	0.76	0.68	0.63	0.59	0.56	0.53
64u	0.30	0.78	6.4	6.4	Urban	0.037	0.19	0.23	6.20	0.21	36 *	**Tc (hrs)**	1.32	1.18	1.10	1.02	0.97	0.93
												Vel (f/s)	0.87	0.97	1.04	1.12	1.18	1.23
												R (hrs)	0.82	0.73	0.68	0.62	0.59	0.56
64v	0.20	0.74	6.7	6.7	Urban	0.032	0.10	0.25	4.55	0.49	61 *	**Tc (hrs)**	1.13	1.01	0.96	0.89	0.85	0.82
												Vel (f/s)	0.96	1.07	1.14	1.22	1.28	1.33
												R (hrs)	0.84	0.75	0.70	0.65	0.62	0.59
68c	0.43	1.14	29.8	29.8	Urban	0.028	1.68 *	0.25	4.60	0.39	18 *	**Tc (hrs)**	1.05	1.00	0.97	0.92	0.84	0.77
												Vel (f/s)	1.60	1.67	1.72	1.81	1.99	2.18
												R (hrs)	0.69	0.66	0.64	0.60	0.55	0.49
68e	0.50	1.50	23.3	23.3	Urban	0.028	1.58 *	0.25	4.80	0.35	14 *	**Tc (hrs)**	1.36	1.31	1.28	1.17	1.05	0.96
												Vel (f/s)	1.62	1.68	1.73	1.88	2.10	2.30

* Non default value

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	1.07	1.03	1.00	0.91	0.80	0.73
68g	0.50	1.50	22.0	22.0	Urban	0.030	1.98 *	0.25	4.80	0.36	17 *	**Tc (hrs)**	1.38	1.32	1.29	1.25	1.19	1.09
												Vel (f/s)	1.59	1.66	1.71	1.77	1.85	2.03
												R (hrs)	1.08	1.03	1.00	0.97	0.92	0.83
68i	0.50	1.50	16.0	16.0	Urban	0.030	1.78 *	0.25	4.80	0.36	23 *	**Tc (hrs)**	1.43	1.36	1.32	1.28	1.18	1.08
												Vel (f/s)	1.54	1.61	1.66	1.72	1.87	2.04
												R (hrs)	1.13	1.07	1.04	1.00	0.91	0.83
68k	0.20	0.63	9.5	9.5	Urban	0.035	0.79 *	0.14	8.40	0.09	26 *	**Tc (hrs)**	1.14	0.97	0.89	0.80	0.75	0.71
												Vel (f/s)	0.81	0.95	1.04	1.15	1.23	1.30
												R (hrs)	0.73	0.61	0.56	0.50	0.46	0.43
68l	0.32	1.19	10.1	10.1	Urban	0.034	0.59 *	0.15	8.80	0.07	26 *	**Tc (hrs)**	1.44	1.23	1.13	1.03	0.98	0.93
												Vel (f/s)	1.21	1.41	1.54	1.69	1.79	1.88
												R (hrs)	1.22	1.03	0.94	0.85	0.80	0.76
68m	0.55	1.53	9.2	9.2	Urban	0.030	0.14	0.15	8.80	0.08	57 *	**Tc (hrs)**	1.35	1.22	1.15	1.07	1.03	0.99
												Vel (f/s)	1.66	1.84	1.95	2.09	2.19	2.28
												R (hrs)	1.02	0.91	0.85	0.79	0.75	0.72
68o	0.69	1.61	8.7	8.7	Urban	0.032	0.21	0.17	6.80	0.16	25 *	**Tc (hrs)**	1.50	1.45	1.35	1.24	1.18	1.12
												Vel (f/s)	1.44	1.63	1.75	1.90	2.00	2.10
												R (hrs)	1.16	1.01	0.93	0.85	0.81	0.76
68q	0.30	0.73	8.2	8.2	Urban	0.039	0.18	0.23	6.20	0.22	36 *	**Tc (hrs)**	1.21	1.09	1.02	0.94	0.90	0.86
												Vel (f/s)	0.88	0.99	1.05	1.14	1.20	1.25
												R (hrs)	0.72	0.63	0.59	0.54	0.51	0.49
68s	0.24	0.72	11.2	11.2	Urban	0.035	0.12	0.25	5.20	0.35	60 *	**Tc (hrs)**	0.98	0.89	0.84	0.78	0.75	0.72
												Vel (f/s)	1.07	1.19	1.26	1.35	1.42	1.48
												R (hrs)	0.64	0.57	0.53	0.49	0.47	0.45

Sub Basin Data

6/23/2006

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
68t	0.25	0.78	12.9	12.9	Urban	0.039	0.20	0.15	8.80	0.08	33 *	**Tc (hrs)**	1.05	0.93	0.87	0.81	0.77	0.74
												Vel (f/s)	1.09	1.23	1.31	1.41	1.49	1.55
												R (hrs)	0.71	0.62	0.57	0.53	0.50	0.48
68u	0.28	0.80	6.3	6.3	Urban	0.037	0.20	0.15	8.80	0.08	32 *	**Tc (hrs)**	1.30	1.15	1.08	1.00	0.95	0.91
												Vel (f/s)	0.90	1.02	1.09	1.18	1.24	1.29
												R (hrs)	0.85	0.75	0.69	0.64	0.60	0.58
68v	0.22	0.90	8.9	8.9	Urban	0.042	0.19	0.25	4.60	0.42	33 *	**Tc (hrs)**	1.44	1.27	1.19	1.10	1.05	1.00
												Vel (f/s)	0.92	1.04	1.11	1.20	1.26	1.32
												R (hrs)	1.22	1.06	0.99	0.90	0.85	0.81
72c	0.54	1.56	24.3	24.3	Urban	0.031	1.94 *	0.25	4.80	0.35	13 *	**Tc (hrs)**	1.46	1.41	1.38	1.34	1.25	1.13
												Vel (f/s)	1.56	1.63	1.66	1.71	1.83	2.03
												R (hrs)	1.14	1.09	1.07	1.03	0.96	0.86
72e	0.50	1.50	19.3	19.3	Urban	0.027	1.62 *	0.25	4.80	0.35	19 *	**Tc (hrs)**	1.33	1.27	1.24	1.15	1.05	0.97
												Vel (f/s)	1.65	1.73	1.78	1.91	2.10	2.28
												R (hrs)	1.05	0.99	0.96	0.89	0.80	0.73
72g	0.50	1.50	16.7	16.7	Urban	0.031	1.30 *	0.25	5.60	0.27	20 *	**Tc (hrs)**	1.48	1.41	1.35	1.18	1.08	1.01
												Vel (f/s)	1.49	1.56	1.63	1.86	2.03	2.19
												R (hrs)	1.17	1.12	1.06	0.92	0.83	0.77
72i	0.50	1.50	14.0	14.0	Urban	0.029	0.92 *	0.25	4.80	0.36	22 *	**Tc (hrs)**	1.48	1.38	1.26	1.12	1.05	0.99
												Vel (f/s)	1.49	1.59	1.75	1.97	2.10	2.22
												R (hrs)	1.17	1.08	0.98	0.86	0.80	0.75
72k	0.28	0.81	9.8	9.8	Urban	0.034	0.66 *	0.14	8.40	0.09	27 *	**Tc (hrs)**	1.22	1.04	0.96	0.87	0.82	0.78
												Vel (f/s)	0.97	1.14	1.24	1.36	1.45	1.52
												R (hrs)	0.80	0.67	0.62	0.55	0.52	0.49
72l	0.22	1.01	9.9	9.9	Urban	0.032	1.24 *	0.15	8.80	0.07	26 *	**Tc (hrs)**	1.38	1.30	1.17	1.03	0.95	0.89
												Vel (f/s)	1.08	1.14	1.26	1.44	1.56	1.67

* Non default value

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	1.28	1.20	1.07	0.93	0.84	0.78
72m	0.47	1.38	11.6	11.6	Urban	0.030	0.31 *	0.15	8.80	0.08	27 *	**Tc (hrs)**	1.31	1.15	1.07	0.99	0.94	0.89
												Vel (f/s)	1.55	1.77	1.90	2.05	2.16	2.26
												R (hrs)	1.00	0.86	0.79	0.73	0.69	0.65
72o	0.66	1.48	10.2	10.2	Urban	0.033	0.41 *	0.15	8.80	0.08	12 *	**Tc (hrs)**	1.50	1.40	1.28	1.16	1.10	1.04
												Vel (f/s)	1.32	1.55	1.69	1.86	1.98	2.08
												R (hrs)	1.12	0.93	0.84	0.76	0.71	0.67
72q	0.33	0.81	6.2	6.2	Urban	0.037	0.19	0.15	8.40	0.09	29 *	**Tc (hrs)**	1.33	1.17	1.10	1.02	0.97	0.93
												Vel (f/s)	0.89	1.01	1.08	1.17	1.23	1.28
												R (hrs)	0.81	0.70	0.65	0.60	0.57	0.54
72s	0.28	0.78	12.8	12.8	Urban	0.041	0.16	0.15	9.70	0.06	35 *	**Tc (hrs)**	1.06	0.94	0.88	0.82	0.78	0.75
												Vel (f/s)	1.08	1.21	1.29	1.39	1.46	1.52
												R (hrs)	0.67	0.58	0.54	0.50	0.48	0.45
72t	0.22	0.95	12.7	12.7	Urban	0.038	0.21	0.15	9.70	0.06	31 *	**Tc (hrs)**	1.15	1.01	0.95	0.88	0.84	0.80
												Vel (f/s)	1.21	1.37	1.47	1.58	1.66	1.73
												R (hrs)	0.98	0.85	0.79	0.73	0.69	0.66
72u	0.26	0.78	7.7	7.7	Urban	0.039	0.27 *	0.15	9.70	0.06	24 *	**Tc (hrs)**	1.28	1.11	1.04	0.96	0.91	0.87
												Vel (f/s)	0.90	1.03	1.10	1.20	1.26	1.31
												R (hrs)	0.86	0.74	0.69	0.63	0.59	0.56
72v	0.41	1.21	13.2	13.2	Urban	0.032	0.13	0.25	4.40	0.52	59 *	**Tc (hrs)**	1.17	1.05	1.00	0.93	0.89	0.85
												Vel (f/s)	1.51	1.68	1.78	1.91	2.00	2.09
												R (hrs)	0.86	0.76	0.72	0.67	0.63	0.60
76c	0.60	1.41	25.6	25.6	Urban	0.029	0.77 *	0.19	6.60	0.17	18 *	**Tc (hrs)**	1.24	1.05	0.95	0.86	0.80	0.75
												Vel (f/s)	1.67	1.96	2.17	2.40	2.58	2.74
												R (hrs)	0.83	0.69	0.62	0.55	0.51	0.48

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
76e	0.50	1.26	15.1	15.1	Urban	0.030	1.17 *	0.25	5.20	0.30	22 *	**Tc (hrs)**	1.35	1.29	1.20	1.06	0.97	0.92
												Vel (f/s)	1.37	1.44	1.54	1.75	1.90	2.02
												R (hrs)	0.92	0.87	0.81	0.70	0.64	0.60
76g	0.50	1.26	16.7	16.7	Urban	0.030	1.08 *	0.25	5.60	0.26	28 *	**Tc (hrs)**	1.24	1.17	1.08	0.97	0.90	0.86
												Vel (f/s)	1.49	1.57	1.71	1.91	2.05	2.16
												R (hrs)	0.84	0.79	0.72	0.64	0.59	0.56
76i	0.50	1.26	14.3	14.3	Urban	0.033	0.72 *	0.25	5.40	0.29	44 *	**Tc (hrs)**	1.25	1.13	1.05	0.98	0.93	0.88
												Vel (f/s)	1.48	1.63	1.75	1.90	2.00	2.10
												R (hrs)	0.85	0.76	0.70	0.64	0.61	0.58
76k	0.32	0.88	13.6	13.6	Urban	0.032	0.55 *	0.15	7.00	0.14	28 *	**Tc (hrs)**	1.09	0.95	0.88	0.80	0.76	0.72
												Vel (f/s)	1.18	1.37	1.47	1.61	1.70	1.79
												R (hrs)	0.71	0.60	0.56	0.50	0.47	0.45
76l	0.18	0.48	12.5	12.5	Urban	0.030	0.66 *	0.15	8.80	0.07	22 *	**Tc (hrs)**	0.84	0.71	0.65	0.58	0.55	0.52
												Vel (f/s)	0.84	0.99	1.09	1.21	1.28	1.35
												R (hrs)	0.45	0.37	0.33	0.30	0.28	0.26
76m	0.49	1.26	14.3	14.3	Urban	0.029	0.60 *	0.15	8.80	0.07	24 *	**Tc (hrs)**	1.24	1.06	0.97	0.88	0.83	0.79
												Vel (f/s)	1.49	1.74	1.90	2.09	2.22	2.33
												R (hrs)	0.85	0.71	0.65	0.58	0.55	0.52
76o	0.67	1.60	10.0	10.0	Urban	0.030	0.17	0.15	8.80	0.08	26 *	**Tc (hrs)**	1.45	1.28	1.20	1.11	1.05	1.01
												Vel (f/s)	1.61	1.83	1.96	2.12	2.23	2.33
												R (hrs)	1.02	0.89	0.82	0.76	0.71	0.68
76q	0.40	0.86	9.3	9.3	Urban	0.034	0.19	0.13	10.10	0.05	39 *	**Tc (hrs)**	1.10	0.98	0.92	0.86	0.82	0.79
												Vel (f/s)	1.15	1.29	1.37	1.47	1.54	1.60
												R (hrs)	0.62	0.54	0.51	0.47	0.45	0.43
76s	0.28	0.74	8.1	8.1	Urban	0.035	0.11	0.15	9.70	0.07	54 *	**Tc (hrs)**	1.06	0.95	0.90	0.84	0.80	0.77
												Vel (f/s)	1.02	1.14	1.21	1.29	1.35	1.41

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.64	0.57	0.54	0.50	0.47	0.45
76t	0.27	0.84	9.5	9.5	Urban	0.038	0.19	0.15	9.70	0.06	36 *	Tc (hrs)	1.16	1.03	0.97	0.90	0.86	0.82
												Vel (f/s)	1.06	1.19	1.27	1.37	1.44	1.50
												R (hrs)	0.80	0.70	0.65	0.60	0.57	0.55
76u	0.28	0.76	6.6	6.6	Urban	0.039	0.32 *	0.15	9.70	0.06	23 *	Tc (hrs)	1.34	1.16	1.08	1.00	0.95	0.90
												Vel (f/s)	0.83	0.96	1.03	1.12	1.18	1.23
												R (hrs)	0.84	0.72	0.67	0.61	0.57	0.55
76v	0.24	0.99	10.1	10.1	Urban	0.037	0.21	0.25	4.90	0.40	41 *	Tc (hrs)	1.31	1.16	1.10	1.02	0.97	0.92
												Vel (f/s)	1.11	1.25	1.32	1.43	1.50	1.57
												R (hrs)	1.12	0.98	0.92	0.84	0.80	0.76
76w	0.33	0.95	29.6	29.6	Urban	0.048	0.10	0.26	3.17	1.09	2 *	Tc (hrs)	1.50	1.50	1.31	1.13	1.04	0.98
												Vel (f/s)	0.83	0.90	1.06	1.23	1.33	1.42
												R (hrs)	1.18	1.08	0.90	0.76	0.70	0.65
80c	0.66	1.55	20.6	20.6	Urban	0.030	0.83 *	0.25	5.20	0.33	33 *	Tc (hrs)	1.25	1.15	1.06	0.96	0.91	0.87
												Vel (f/s)	1.82	1.98	2.15	2.36	2.49	2.63
												R (hrs)	0.85	0.78	0.71	0.64	0.60	0.57
80e	0.49	1.26	15.9	15.9	Urban	0.031	0.74 *	0.25	6.00	0.22	23 *	Tc (hrs)	1.34	1.18	1.07	0.98	0.92	0.86
												Vel (f/s)	1.38	1.57	1.73	1.89	2.02	2.14
												R (hrs)	0.92	0.80	0.72	0.65	0.60	0.57
80g	0.50	1.26	15.9	15.9	Urban	0.036	0.89 *	0.25	4.80	0.39	23 *	Tc (hrs)	1.45	1.35	1.23	1.10	1.03	0.98
												Vel (f/s)	1.28	1.37	1.50	1.68	1.79	1.89
												R (hrs)	1.00	0.93	0.84	0.74	0.69	0.65
80i	0.49	1.26	14.3	14.3	Urban	0.030	0.47 *	0.25	5.70	0.24	23 *	Tc (hrs)	1.33	1.14	1.06	0.97	0.91	0.86
												Vel (f/s)	1.39	1.62	1.74	1.91	2.03	2.14
												R (hrs)	0.92	0.77	0.71	0.64	0.60	0.57

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
80k	0.43	1.14	14.1	14.1	Urban	0.033	0.47 *	0.15	8.40	0.09	26 *	**Tc (hrs)**	1.22	1.06	0.98	0.90	0.85	0.81
												Vel (f/s)	1.37	1.57	1.70	1.86	1.96	2.06
												R (hrs)	0.83	0.71	0.65	0.59	0.56	0.53
80m	0.54	1.36	16.1	16.1	Urban	0.029	0.46 *	0.15	8.40	0.09	26 *	**Tc (hrs)**	1.19	1.04	0.96	0.88	0.83	0.80
												Vel (f/s)	1.67	1.92	2.08	2.26	2.39	2.51
												R (hrs)	0.82	0.70	0.64	0.58	0.55	0.52
80o	0.54	1.08	18.6	18.6	Urban	0.033	0.46 *	0.15	9.70	0.06	33 *	**Tc (hrs)**	1.04	0.91	0.85	0.78	0.74	0.71
												Vel (f/s)	1.52	1.73	1.87	2.03	2.13	2.23
												R (hrs)	0.58	0.50	0.46	0.42	0.40	0.38
80p	0.40	1.04	19.2	19.2	Urban	0.033	0.14	0.15	8.00	0.11	55 *	**Tc (hrs)**	0.94	0.85	0.80	0.75	0.71	0.68
												Vel (f/s)	1.62	1.80	1.91	2.04	2.14	2.23
												R (hrs)	0.61	0.54	0.50	0.47	0.44	0.42
80q	0.50	1.38	8.7	8.7	Urban	0.036	0.20	0.15	9.70	0.06	31 *	**Tc (hrs)**	1.50	1.34	1.25	1.16	1.11	1.06
												Vel (f/s)	1.34	1.51	1.62	1.74	1.83	1.91
												R (hrs)	1.13	0.98	0.91	0.84	0.80	0.76
80t	0.25	0.88	13.7	13.7	Urban	0.036	0.19	0.25	5.80	0.24	35 *	**Tc (hrs)**	1.10	0.98	0.92	0.85	0.81	0.77
												Vel (f/s)	1.17	1.31	1.40	1.51	1.59	1.67
												R (hrs)	0.82	0.72	0.67	0.61	0.58	0.55
80u	0.25	0.84	11.9	11.9	Urban	0.035	0.16	0.15	8.00	0.11	46 *	**Tc (hrs)**	1.03	0.92	0.87	0.81	0.77	0.74
												Vel (f/s)	1.20	1.34	1.42	1.52	1.60	1.67
												R (hrs)	0.73	0.65	0.61	0.56	0.53	0.51
80v	0.23	0.87	9.2	9.2	Urban	0.034	0.16 *	0.15	8.00	0.12	59 *	**Tc (hrs)**	1.10	0.99	0.93	0.87	0.83	0.80
												Vel (f/s)	1.16	1.29	1.37	1.46	1.54	1.60
												R (hrs)	0.85	0.75	0.71	0.65	0.62	0.59
80w	0.36	1.23	19.5	19.5	Urban	0.029	0.12	0.27	3.43	0.95	60 *	**Tc (hrs)**	1.00	0.92	0.86	0.80	0.77	0.74
												Vel (f/s)	1.81	1.97	2.10	2.25	2.35	2.45

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.78	0.71	0.66	0.61	0.58	0.56
84c	0.47	1.77	19.2	19.2	Urban	0.035	0.24 *	0.25	6.00	0.23	42 *	**Tc (hrs)**	1.36	1.21	1.14	1.06	1.01	0.96
												Vel (f/s)	1.91	2.14	2.28	2.45	2.58	2.70
												R (hrs)	1.27	1.12	1.04	0.96	0.91	0.86
84e	0.21	1.27	17.4	17.4	Urban	0.037	1.19 *	0.15	7.30	0.13	23 *	**Tc (hrs)**	1.43	1.35	1.22	1.07	0.99	0.93
												Vel (f/s)	1.30	1.38	1.53	1.74	1.88	2.01
												R (hrs)	1.61	1.51	1.34	1.17	1.07	0.99
84g	0.21	1.26	17.5	17.5	Urban	0.033	0.61 *	0.25	4.80	0.36	27 *	**Tc (hrs)**	1.30	1.15	1.06	0.97	0.92	0.87
												Vel (f/s)	1.42	1.61	1.75	1.90	2.02	2.13
												R (hrs)	1.43	1.25	1.14	1.04	0.97	0.92
84i	0.21	1.28	15.6	15.6	Urban	0.035	0.99 *	0.25	5.20	0.31	27 *	**Tc (hrs)**	1.40	1.31	1.20	1.08	1.01	0.96
												Vel (f/s)	1.34	1.43	1.56	1.74	1.86	1.96
												R (hrs)	1.59	1.48	1.34	1.19	1.11	1.04
84k	0.31	1.55	12.9	12.9	Urban	0.036	0.57 *	0.15	8.40	0.09	35 *	**Tc (hrs)**	1.50	1.31	1.22	1.12	1.06	1.01
												Vel (f/s)	1.52	1.74	1.87	2.04	2.15	2.26
												R (hrs)	1.60	1.38	1.27	1.15	1.09	1.03
84m	0.21	1.18	13.5	13.5	Urban	0.034	0.24 *	0.15	9.70	0.06	24 *	**Tc (hrs)**	1.22	1.07	1.00	0.92	0.88	0.84
												Vel (f/s)	1.42	1.62	1.74	1.88	1.98	2.07
												R (hrs)	1.29	1.11	1.03	0.94	0.89	0.85
84t	0.27	1.05	9.6	9.6	Urban	0.031	0.14	0.15	7.60	0.13	55 *	**Tc (hrs)**	1.14	1.03	0.97	0.90	0.86	0.83
												Vel (f/s)	1.35	1.50	1.59	1.71	1.79	1.86
												R (hrs)	0.93	0.83	0.78	0.72	0.68	0.65
84u	0.26	0.79	6.3	6.3	Urban	0.035	0.61 *	0.15	8.00	0.11	41 *	**Tc (hrs)**	1.30	1.14	1.07	0.98	0.93	0.89
												Vel (f/s)	0.89	1.02	1.09	1.18	1.25	1.31
												R (hrs)	0.88	0.76	0.70	0.64	0.60	0.57

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

	Sub Basin Parameters						Rainfall Losses						Return Period (Years)					
Sub Basin ID	Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		2	5	10	25	50	100
84v	0.25	0.76	7.9	7.9	Urban	0.040	1.75 *	0.15	9.70	0.07	35 *	**Tc (hrs)**	1.35	1.27	1.23	1.14	1.05	0.97
												Vel (f/s)	0.83	0.88	0.91	0.98	1.06	1.15
												R (hrs)	0.91	0.85	0.82	0.75	0.69	0.63
84w	0.34	1.03	10.7	10.7	Urban	0.036	0.17	0.25	3.95	0.61	43 *	**Tc (hrs)**	1.30	1.16	1.09	1.02	0.97	0.92
												Vel (f/s)	1.16	1.30	1.39	1.48	1.56	1.63
												R (hrs)	0.94	0.83	0.77	0.72	0.68	0.64
88t	0.26	1.05	7.7	7.7	Urban	0.034	0.18 *	0.25	6.00	0.23	44 *	**Tc (hrs)**	1.35	1.21	1.14	1.06	1.01	0.96
												Vel (f/s)	1.14	1.27	1.35	1.46	1.53	1.60
												R (hrs)	1.16	1.03	0.96	0.89	0.84	0.80
88u	0.25	1.05	9.6	9.6	Urban	0.033	0.31 *	0.15	8.40	0.09	40 *	**Tc (hrs)**	1.22	1.08	1.01	0.94	0.90	0.86
												Vel (f/s)	1.27	1.42	1.52	1.64	1.72	1.79
												R (hrs)	1.06	0.93	0.86	0.79	0.75	0.72
88v	0.25	1.05	8.6	8.6	Urban	0.039	0.20	0.13	10.10	0.05	34 *	**Tc (hrs)**	1.35	1.20	1.12	1.05	1.00	0.96
												Vel (f/s)	1.14	1.29	1.37	1.47	1.54	1.61
												R (hrs)	1.19	1.04	0.97	0.90	0.85	0.81
88w	0.60	1.25	8.8	8.8	Urban	0.036	0.17	0.25	5.10	0.34	40 *	**Tc (hrs)**	1.50	1.34	1.26	1.17	1.11	1.06
												Vel (f/s)	1.22	1.37	1.45	1.57	1.65	1.72
												R (hrs)	0.93	0.82	0.77	0.70	0.67	0.63
92t	0.18	0.90	8.9	8.9	Urban	0.038	0.21	0.25	5.20	0.32	32 *	**Tc (hrs)**	1.36	1.20	1.13	1.04	0.98	0.94
												Vel (f/s)	0.97	1.10	1.17	1.27	1.34	1.41
												R (hrs)	1.29	1.12	1.05	0.96	0.90	0.86
92u	0.25	1.05	10.5	10.5	Urban	0.032	0.16	0.25	6.00	0.23	44 *	**Tc (hrs)**	1.19	1.07	1.00	0.93	0.89	0.85
												Vel (f/s)	1.30	1.44	1.54	1.65	1.74	1.82
												R (hrs)	1.03	0.91	0.85	0.79	0.74	0.71
92v	0.16	0.83	9.6	9.6	Urban	0.027	0.10	0.13	10.10	0.05	72 *	**Tc (hrs)**	0.92	0.83	0.78	0.73	0.70	0.68
												Vel (f/s)	1.32	1.47	1.56	1.66	1.74	1.80

Sub Basin Data

Basin: 01 | Storms: Multiple | Duration: 24 Hour | Loss Method:Green-Ampt | Unit Hydrograph: Clark

Sub Basin ID	Sub Basin Parameters: Area (sq mi)	Length (mi)	Slope (ft/mi)	Adj Slope	Time-Area	Kb	Rainfall Losses: IA (in)	DTHETA	PSIF (in)	XKSAT (in/hr)	RTIMP (%)		Return Period (Years): 2	5	10	25	50	100
												R (hrs)	0.83	0.74	0.69	0.64	0.61	0.59
I17	0.29	1.50	30.0	30.0	Urban	0.026	0.10	0.25	4.80	0.25	99	**Tc (hrs)**	0.90	0.80	0.75	0.70	0.67	0.64
												Vel (f/s)	2.46	2.76	2.94	3.15	3.30	3.44
												R (hrs)	0.91	0.80	0.75	0.69	0.66	0.63

APPENDIX A3

Soil Data

Soil Data

	Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
Major Basin	**01**							
	04s	Eastern County	CEC	0.046	16.3	0.40		
		Eastern County	RO	0.041	14.7	0.25	65.0	100
		Eastern County	RU	0.192	69.0	0.40	20.0	100
	08q	Eastern County	CEC	0.068	15.6	0.40		
		Eastern County	RO	0.013	3.0	0.25	65.0	100
		Eastern County	RU	0.324	73.9	0.40	20.0	100
		Eastern County	CEC	0.033	7.6	0.40		
	08s	Eastern County	AM	0.108	16.5	1.20 *		
		Eastern County	CEC	0.022	3.3	0.40		
		Eastern County	GF	0.094	14.4	0.25 *		
		Eastern County	GM	0.065	9.9	0.25 *		
		Eastern County	RIB	0.013	2.0	0.40		
		Eastern County	RO	0.003	0.4	0.25	65.0	100
		Eastern County	RU	0.349	53.5	0.40	20.0	100
	12q	Eastern County	CEC	0.176	44.2	0.40		
		Eastern County	RO	0.044	11.0	0.25	65.0	100
		Eastern County	RU	0.179	44.8	0.40	20.0	100
	12s	Eastern County	CEC	0.018	8.4	0.40		
		Eastern County	GM	0.000		0.25 *		
		Eastern County	RIB	0.058	27.9	0.40		
		Eastern County	RO	0.013	6.1	0.25	65.0	100
		Eastern County	RU	0.120	57.6	0.40	20.0	100
	16o	Eastern County	CEC	0.076	35.8	0.40		
		Eastern County	RO	0.041	19.4	0.25	65.0	100
		Eastern County	RU	0.095	44.8	0.40	20.0	100
	16q	Eastern County	CEC	0.642	98.5	0.40		
		Eastern County	RO	0.002	0.4	0.25	65.0	100
		Eastern County	RU	0.007	1.1	0.40	20.0	100
	16s	Eastern County	AM	0.068	16.2	1.20 *		
		Eastern County	CEC	0.080	19.0	0.40		
		Eastern County	GM	0.048	11.5	0.25 *		
		Eastern County	RO	0.224	53.4	0.25	65.0	100
	20p	Eastern County	CEC	0.155	29.1	0.40		
		Eastern County	LAA	0.264	49.5	0.25		
		Eastern County	RIA	0.071	13.4	0.40		
		Eastern County	RIB	0.042	8.0	0.40		
	20q	Eastern County	CEC	0.059	21.4	0.40		
		Eastern County	LAA	0.147	53.3	0.25		
		Eastern County	RIA	0.058	20.9	0.40		
		Eastern County	RO	0.012	4.4	0.25	65.0	100
	20s	Eastern County	CEC	0.119	24.7	0.40		
		Eastern County	GM	0.011	2.2	0.25 *		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
20s	Eastern County	LAA	0.023	4.8	0.25		
	Eastern County	RO	0.321	66.4	0.25	65.0	100
	Eastern County	VF	0.009	1.9	1.20 *		
20t	Eastern County	AM	0.225	84.9	1.20 *		
	Eastern County	GM	0.001	0.2	0.25 *		
	Eastern County	RO	0.014	5.1	0.25	65.0	100
	Eastern County	VF	0.026	9.8	1.20 *		
24k	Eastern County	MV	0.151	78.4	0.25 *		
	Eastern County	VA	0.041	21.6	0.40 *		
24m	Eastern County	ES	0.313	62.3	0.25		
	Eastern County	MV	0.184	36.6	0.25 *		
	Eastern County	VA	0.006	1.1	0.40 *		
24o	Eastern County	ES	0.183	36.4	0.25		
	Eastern County	LAA	0.321	63.6	0.25		
24s	Eastern County	LAA	0.195	100.0	0.25		
24t	Eastern County	AM	0.128	49.1	1.20 *		
	Eastern County	CB	0.013	5.1	0.25 *		
	Eastern County	GM	0.075	28.8	0.25 *		
	Eastern County	GN	0.010	3.7	0.04 *		
	Eastern County	LAA	0.021	8.0	0.25		
	Eastern County	VF	0.013	5.2	1.20 *		
28k	Eastern County	AOB	0.093	21.7	0.40		
	Eastern County	MV	0.331	77.3	0.25 *		
	Eastern County	VA	0.005	1.1	0.40 *		
28m	Eastern County	ES	0.407	80.0	0.25		
	Eastern County	MV	0.102	20.0	0.25 *		
28o	Eastern County	ES	0.289	57.7	0.25		
	Eastern County	LAA	0.212	42.3	0.25		
28p	Eastern County	ES	0.010	2.6	0.25		
	Eastern County	LAA	0.362	97.4	0.25		
28q	Eastern County	GM	0.025	7.8	0.25 *		
	Eastern County	LAA	0.293	92.2	0.25		
28s	Eastern County	GM	0.117	71.3	0.25 *		
	Eastern County	GN	0.043	26.3	0.04 *		
	Eastern County	LAA	0.004	2.4	0.25		
32k	Eastern County	AOB	0.186	36.7	0.40		
	Eastern County	ES	0.055	10.8	0.25		
	Eastern County	GM	0.170	33.6	0.25 *		
	Eastern County	MV	0.095	18.9	0.25 *		
32m	Eastern County	ES	0.451	87.9	0.25		
	Eastern County	GM	0.037	7.2	0.25 *		
	Eastern County	MV	0.025	4.9	0.25 *		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
32o	Eastern County	ES	0.351	70.2	0.25		
	Eastern County	LAA	0.149	29.8	0.25		
32p	Eastern County	ES	0.047	19.9	0.25		
	Eastern County	LAA	0.188	80.1	0.25		
32q	Eastern County	GM	0.046	26.2	0.25 *		
	Eastern County	LAA	0.129	73.8	0.25		
32s	Eastern County	AV	0.113	33.5	0.04		
	Eastern County	CC	0.018	5.2	0.01		
	Eastern County	GM	0.122	36.4	0.25 *		
	Eastern County	GN	0.082	24.4	0.04 *		
	Eastern County	LAA	0.002	0.4	0.25		
36i	Eastern County	AOB	0.337	99.3	0.40		
	Eastern County	RU	0.002	0.7	0.40	20.0	100
36k	Eastern County	AOB	0.069	13.7	0.40		
	Eastern County	ES	0.113	22.1	0.25		
	Eastern County	GM	0.326	64.2	0.25 *		
36m	Eastern County	ES	0.339	66.0	0.25		
	Eastern County	GM	0.175	34.0	0.25 *		
36o	Eastern County	ES	0.447	89.4	0.25		
	Eastern County	GM	0.022	4.3	0.25 *		
	Eastern County	LAA	0.031	6.3	0.25		
36p	Eastern County	AV	0.002	1.0	0.04		
	Eastern County	ES	0.053	28.3	0.25		
	Eastern County	LAA	0.132	70.7	0.25		
36q	Eastern County	AV	0.258	96.7	0.04		
	Eastern County	LAA	0.009	3.3	0.25		
36s	Eastern County	AV	0.169	70.0	0.04		
	Eastern County	CC	0.034	14.1	0.01		
	Eastern County	PM	0.038	15.9	0.04		
40i	Eastern County	AOB	0.144	64.4	0.40		
	Eastern County	GM	0.030	13.4	0.25 *		
	Eastern County	PVC	0.001	0.2	0.40		
	Eastern County	RU	0.049	21.9	0.40	20.0	100
40k	Eastern County	AOB	0.002	0.3	0.40		
	Eastern County	ES	0.006	1.3	0.25		
	Eastern County	GM	0.496	98.4	0.25 *		
40m	Eastern County	ES	0.413	80.8	0.25		
	Eastern County	GM	0.098	19.2	0.25 *		
40o	Eastern County	ES	0.308	66.1	0.25		
	Eastern County	GM	0.158	33.9	0.25 *		
40p	Eastern County	AV	0.118	53.0	0.04		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
40p	Eastern County	ES	0.092	41.4	0.25		
	Eastern County	LAA	0.012	5.6	0.25		
40q	Eastern County	AV	0.313	89.9	0.04		
	Eastern County	CC	0.035	10.1	0.01		
40s	Eastern County	AV	0.211	86.6	0.04		
	Eastern County	CC	0.033	13.4	0.01		
42i	Eastern County	AOB	0.112	41.8	0.40		
	Eastern County	CEC	0.002	0.9	0.40		
	Eastern County	GM	0.020	7.6	0.25 *		
	Eastern County	PVC	0.060	22.4	0.40		
	Eastern County	RU	0.073	27.3	0.40	20.0	100
44i	Eastern County	AOB	0.114	32.7	0.40		
	Eastern County	CEC	0.052	14.7	0.40		
	Eastern County	ES	0.038	10.9	0.25		
	Eastern County	GM	0.116	33.1	0.25 *		
	Eastern County	RU	0.030	8.5	0.40	20.0	100
44k	Eastern County	ES	0.000		0.25		
	Eastern County	GM	0.508	100.0	0.25 *		
44m	Eastern County	ES	0.252	49.9	0.25		
	Eastern County	GM	0.253	50.1	0.25 *		
44o	Eastern County	ES	0.051	22.2	0.25		
	Eastern County	GM	0.178	77.8	0.25 *		
44p	Eastern County	AV	0.207	50.8	0.04		
	Eastern County	ES	0.163	40.0	0.25		
	Eastern County	GM	0.037	9.2	0.25 *		
44q	Eastern County	AV	0.322	89.7	0.04		
	Eastern County	CC	0.037	10.3	0.01		
44s	Eastern County	AV	0.206	85.7	0.04		
	Eastern County	CC	0.034	14.3	0.01		
44v	Eastern County	AM	0.231	98.0	1.20 *		
	Eastern County	GM	0.005	2.0	0.25 *		
48i	Eastern County	AOB	0.154	28.8	0.40		
	Eastern County	CEC	0.135	25.2	0.40		
	Eastern County	ES	0.187	35.0	0.25		
	Eastern County	GM	0.037	7.0	0.25 *		
	Eastern County	RU	0.022	4.0	0.40	20.0	100
48k	Eastern County	ES	0.031	6.1	0.25		
	Eastern County	GM	0.469	93.9	0.25 *		
48m	Eastern County	ES	0.112	23.4	0.25		
	Eastern County	GM	0.369	76.6	0.25 *		
48o	Eastern County	AV	0.304	44.9	0.04		
	Eastern County	ES	0.053	7.9	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
48o	Eastern County	GM	0.112	16.6	0.25 *		
	Eastern County	LAA	0.206	30.5	0.25		
48q	Eastern County	AV	0.186	62.0	0.04		
	Eastern County	CC	0.031	10.4	0.01		
	Eastern County	GN	0.083	27.7	0.04 *		
48s	Eastern County	AV	0.152	71.4	0.04		
	Eastern County	CC	0.012	5.8	0.01		
	Eastern County	GN	0.048	22.7	0.04 *		
48v	Eastern County	AM	0.227	76.0	1.20 *		
	Eastern County	CA	0.047	15.8	1.20		
	Eastern County	GM	0.024	8.1	0.25 *		
	Eastern County	VF	0.001	0.2	1.20 *		
52g	Eastern County	AOB	0.163	61.4	0.40		
	Eastern County	CEC	0.038	14.5	0.40		
	Eastern County	GM	0.041	15.5	0.25 *		
	Eastern County	LAA	0.000	0.2	0.25		
	Eastern County	PVC	0.009	3.5	0.40		
	Eastern County	RU	0.013	4.9	0.40	20.0	100
52i	Eastern County	AOB	0.019	6.3	0.40		
	Eastern County	ES	0.061	19.8	0.25		
	Eastern County	GM	0.219	71.0	0.25 *		
	Eastern County	MV	0.009	3.0	0.25 *		
52k	Eastern County	ES	0.054	18.4	0.25		
	Eastern County	GM	0.230	78.2	0.25 *		
	Eastern County	MV	0.010	3.4	0.25 *		
52m	Eastern County	ES	0.057	32.2	0.25		
	Eastern County	GM	0.102	57.4	0.25 *		
	Eastern County	MV	0.019	10.4	0.25 *		
52o	Central County	ES	0.002	0.3	0.25		
	Central County	GGA	0.003	0.5	0.25		
	Central County	LCA	0.007	1.0	0.25		
	Eastern County	AV	0.138	21.5	0.04		
	Eastern County	ES	0.035	5.5	0.25		
	Eastern County	GM	0.063	9.8	0.25 *		
	Eastern County	LAA	0.382	59.3	0.25		
	Eastern County	LEA	0.014	2.2	0.04		
52q	Central County	AO	0.000		0.04		
	Central County	LCA	0.000	0.1	0.25		
	Central County	LE	0.001	0.1	0.04		
	Eastern County	AV	0.140	35.5	0.04		
	Eastern County	GN	0.043	10.8	0.04 *		
	Eastern County	LAA	0.038	9.5	0.25		
	Eastern County	LEA	0.173	43.8	0.04		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
52s	Eastern County	AV	0.094	35.5	0.04		
	Eastern County	CC	0.050	18.9	0.01		
	Eastern County	GN	0.121	45.6	0.04 *		
52t	Central County	GGA	0.000		0.25		
	Central County	GT	0.000		0.04		
	Eastern County	AG	0.008	2.8	0.25		
	Eastern County	AV	0.049	16.5	0.04		
	Eastern County	GM	0.068	23.0	0.25 *		
	Eastern County	GN	0.171	57.7	0.04 *		
52u	Eastern County	AG	0.015	3.8	0.25		
	Eastern County	GM	0.376	96.2	0.25 *		
52v	Central County	TD	0.000	0.1	1.20		
	Eastern County	AM	0.164	55.1	1.20 *		
	Eastern County	CA	0.095	32.0	1.20		
	Eastern County	CB	0.008	2.6	0.25 *		
	Eastern County	GM	0.027	9.1	0.25 *		
	Eastern County	VF	0.003	1.1	1.20 *		
54g	Central County	ADA	0.002	0.7	0.40		
	Central County	ADB	0.015	6.0	0.40		
	Central County	GGA	0.003	1.0	0.25		
	Central County	LCA	0.004	1.7	0.25		
	Eastern County	AOB	0.088	35.4	0.40		
	Eastern County	GM	0.031	12.7	0.25 *		
	Eastern County	LAA	0.029	11.9	0.25		
	Eastern County	PVC	0.028	11.5	0.40		
	Eastern County	TRB	0.047	19.0	0.10 *		
54i	Central County	ES	0.007	3.4	0.25		
	Central County	GGA	0.012	6.5	0.25		
	Central County	MP	0.003	1.7	0.25		
	Eastern County	ES	0.034	17.6	0.25		
	Eastern County	GM	0.110	57.5	0.25 *		
	Eastern County	MV	0.026	13.4	0.25 *		
54k	Central County	ES	0.007	2.7	0.25		
	Central County	GGA	0.017	6.8	0.25		
	Central County	MP	0.000		0.25		
	Eastern County	ES	0.034	14.0	0.25		
	Eastern County	GM	0.168	68.7	0.25 *		
	Eastern County	MV	0.019	7.8	0.25 *		
54m	Central County	ES	0.010	3.7	0.25		
	Central County	GGA	0.003	1.0	0.25		
	Central County	MP	0.004	1.5	0.25		
	Eastern County	ES	0.179	66.1	0.25		
	Eastern County	GM	0.065	23.8	0.25 *		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
54m	Eastern County	MV	0.010	3.8	0.25 *		
56e	Central County	ABA	0.006	3.6	0.38		
	Central County	ADA	0.062	35.3	0.40		
	Central County	ADB	0.002	0.9	0.40		
	Central County	CP	0.023	13.3	0.40		
	Central County	CRB	0.008	4.5	0.40		
	Central County	GGA	0.027	15.3	0.25		
	Central County	LCA	0.048	27.1	0.25		
56g	Central County	ABA	0.074	14.7	0.38		
	Central County	ADA	0.117	23.5	0.40		
	Central County	ADB	0.073	14.6	0.40		
	Central County	CP	0.042	8.5	0.40		
	Central County	ES	0.014	2.9	0.25		
	Central County	GGA	0.065	12.9	0.25		
	Central County	LCA	0.115	23.0	0.25		
56i	Central County	ABA	0.010	1.9	0.38		
	Central County	ES	0.171	34.2	0.25		
	Central County	GGA	0.199	39.8	0.25		
	Central County	LCA	0.034	6.8	0.25		
	Central County	MP	0.087	17.3	0.25		
56k	Central County	ES	0.270	63.8	0.25		
	Central County	GGA	0.050	11.8	0.25		
	Central County	MP	0.103	24.3	0.25		
56m	Central County	ES	0.337	58.5	0.25		
	Central County	GGA	0.106	18.3	0.25		
	Central County	MP	0.118	20.4	0.25		
	Central County	MR	0.016	2.7	0.05		
56o	Central County	AO	0.020	3.1	0.04		
	Central County	ES	0.025	3.8	0.25		
	Central County	GGA	0.047	7.4	0.25		
	Central County	LCA	0.541	84.8	0.25		
	Central County	LE	0.006	0.9	0.04		
56q	Central County	AO	0.027	7.5	0.04		
	Central County	LCA	0.253	71.3	0.25		
	Central County	LE	0.075	21.2	0.04		
	Eastern County	AV	0.000		0.04		
56s	Central County	AO	0.097	37.8	0.04		
	Central County	CN	0.112	44.0	0.01		
	Central County	GT	0.044	17.3	0.04		
	Central County	LCA	0.002	0.7	0.25		
	Eastern County	AV	0.000		0.04		
	Eastern County	GN	0.000	0.2	0.04 *		
56t	Central County	AO	0.044	24.5	0.04		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
56t	Central County	CN	0.003	1.6	0.01		
	Central County	GGA	0.014	8.0	0.25		
	Central County	GT	0.115	64.3	0.04		
	Central County	MA	0.003	1.4	0.40		
	Eastern County	AV	0.000	0.1	0.04		
	Eastern County	GM	0.000	0.1	0.25 *		
	Eastern County	GN	0.000	0.1	0.04 *		
56u	Central County	AA	0.001	0.4	0.26		
	Central County	GGA	0.280	86.0	0.25		
	Central County	GT	0.002	0.6	0.04		
	Central County	MA	0.023	6.9	0.40		
	Central County	TC	0.018	5.4	0.40		
	Eastern County	AG	0.000	0.1	0.25		
	Eastern County	GM	0.002	0.7	0.25 *		
56v	Central County	CB	0.020	8.5	0.39 *		
	Central County	GGA	0.061	26.5	0.40 *		
	Central County	GP	0.110	47.5	0.24		
	Central County	TD	0.015	6.6	1.20		
	Central County	VH	0.024	10.5	0.27		
	Eastern County	AM	0.000		1.20 *		
	Eastern County	CA	0.001	0.3	1.20		
	Eastern County	GM	0.000	0.1	0.25 *		
60e	Central County	ADA	0.187	46.1	0.40		
	Central County	GGA	0.131	32.2	0.25		
	Central County	LCA	0.088	21.7	0.25		
60g	Central County	ADA	0.041	8.1	0.40		
	Central County	CP	0.019	3.9	0.40		
	Central County	ES	0.098	19.5	0.25		
	Central County	GGA	0.295	59.1	0.25		
	Central County	LCA	0.047	9.5	0.25		
60i	Central County	ES	0.285	57.1	0.25		
	Central County	GGA	0.204	40.8	0.25		
	Central County	LCA	0.011	2.2	0.25		
60k	Central County	ES	0.190	71.2	0.25		
	Central County	GGA	0.048	17.9	0.25		
	Central County	MP	0.029	10.9	0.25		
60l	Central County	ES	0.113	48.3	0.25		
	Central County	MP	0.121	51.7	0.25		
60m	Central County	ES	0.252	50.4	0.25		
	Central County	GGA	0.025	5.0	0.25		
	Central County	MP	0.080	16.0	0.25		
	Central County	MR	0.143	28.7	0.05		
60o	Central County	AO	0.002	0.3	0.04		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
60o	Central County	ES	0.150	23.4	0.25		
	Central County	GGA	0.244	38.1	0.25		
	Central County	LCA	0.168	26.2	0.25		
	Central County	LE	0.074	11.6	0.04		
	Central County	MR	0.003	0.4	0.05		
60q	Central County	ES	0.079	22.5	0.25		
	Central County	GGA	0.018	5.2	0.25		
	Central County	LCA	0.236	66.9	0.25		
	Central County	MR	0.019	5.5	0.05		
60s	Central County	AO	0.152	60.2	0.04		
	Central County	CN	0.075	29.8	0.01		
	Central County	LCA	0.012	4.7	0.25		
	Central County	MR	0.013	5.3	0.05		
60t	Central County	AO	0.189	57.7	0.04		
	Central County	CN	0.022	6.7	0.01		
	Central County	GGA	0.108	33.1	0.25		
	Central County	GT	0.008	2.5	0.04		
60u	Central County	AO	0.069	24.1	0.04		
	Central County	GGA	0.175	61.3	0.25		
	Central County	GT	0.017	5.8	0.04		
	Central County	MA	0.025	8.8	0.40		
60v	Central County	GGA	0.058	25.2	0.25		
	Central County	GP	0.167	73.1	0.24		
	Central County	VH	0.004	1.7	0.27		
64c	Central County	ADA	0.075	28.3	0.40		
	Central County	ES	0.026	9.7	0.25		
	Central County	GGA	0.163	61.9	0.25		
64e	Central County	ADA	0.036	7.2	0.40		
	Central County	ES	0.012	2.5	0.25		
	Central County	GGA	0.448	89.3	0.25		
	Central County	LCA	0.006	1.1	0.25		
64g	Central County	ES	0.089	17.8	0.25		
	Central County	GGA	0.248	49.4	0.25		
	Central County	LCA	0.164	32.8	0.25		
64i	Central County	ES	0.416	83.3	0.25		
	Central County	GGA	0.016	3.1	0.25		
	Central County	LCA	0.068	13.6	0.25		
64k	Central County	ES	0.024	11.6	0.25		
	Central County	GGA	0.015	7.3	0.25		
	Central County	LCA	0.016	7.8	0.25		
	Central County	MR	0.151	73.3	0.05		
64l	Central County	ES	0.028	9.6	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
64l	Central County	MP	0.023	7.9	0.25		
	Central County	MR	0.244	82.6	0.05		
64m	Central County	MP	0.067	13.3	0.25		
	Central County	MR	0.434	86.7	0.05		
64o	Central County	ES	0.103	15.8	0.25		
	Central County	GGA	0.371	57.1	0.25		
	Central County	MR	0.176	27.1	0.05		
64q	Central County	ES	0.092	22.7	0.25		
	Central County	GGA	0.023	5.6	0.25		
	Central County	GT	0.101	24.9	0.04		
	Central County	LCA	0.089	21.9	0.25		
	Central County	MR	0.101	24.8	0.05		
64s	Central County	AO	0.021	8.2	0.04		
	Central County	GGA	0.000		0.25		
	Central County	GT	0.220	85.5	0.04		
	Central County	LCA	0.009	3.4	0.25		
	Central County	MR	0.007	2.9	0.05		
64t	Central County	AO	0.008	2.8	0.04		
	Central County	CN	0.006	2.2	0.01		
	Central County	GGA	0.176	64.8	0.25		
	Central County	GR	0.000		0.23		
	Central County	GT	0.082	30.1	0.04		
64u	Central County	AO	0.005	1.7	0.04		
	Central County	GGA	0.102	34.5	0.25		
	Central County	GR	0.107	36.0	0.23		
	Central County	GT	0.082	27.7	0.04		
64v	Central County	CB	0.044	22.4	0.39 *		
	Central County	GGA	0.032	16.2	0.40 *		
	Central County	GP	0.107	54.6	0.24		
	Central County	GR	0.013	6.8	0.23		
	Central County	GT	0.000	0.1	0.04		
68c	Central County	ADA	0.023	5.3	0.40		
	Central County	ES	0.067	15.5	0.25		
	Central County	GGA	0.256	59.0	0.25		
	Central County	RAA	0.087	20.1	0.39		
68e	Central County	ES	0.073	14.8	0.25		
	Central County	GGA	0.423	85.2	0.25		
68g	Central County	ES	0.257	51.3	0.25		
	Central County	GGA	0.214	42.6	0.25		
	Central County	LCA	0.031	6.2	0.25		
68i	Central County	ES	0.321	64.2	0.25		
	Central County	GGA	0.072	14.4	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
68i	Central County	LCA	0.106	21.1	0.25		
	Central County	MP	0.001	0.2	0.25		
68k	Central County	ES	0.017	8.3	0.25		
	Central County	MR	0.187	91.7	0.05		
68l	Central County	MR	0.317	100.0	0.05		
68m	Central County	GGA	0.021	3.8	0.25		
	Central County	MR	0.529	96.2	0.05		
68o	Central County	GGA	0.342	49.7	0.25		
	Central County	MR	0.346	50.3	0.05		
68q	Central County	GGA	0.117	39.5	0.25		
	Central County	LCA	0.065	22.1	0.25		
	Central County	MR	0.113	38.4	0.05		
68s	Central County	GGA	0.036	15.4	0.25		
	Central County	GT	0.025	10.7	0.04		
	Central County	LCA	0.175	73.9	0.25		
68t	Central County	GGA	0.040	16.1	0.25		
	Central County	GT	0.211	83.9	0.04		
	Central County	LCA	0.000		0.25		
68u	Central County	GR	0.024	8.7	0.23		
	Central County	GT	0.255	91.3	0.04		
68v	Central County	CF	0.003	1.4	0.50		
	Central County	GGA	0.130	59.8	0.25		
	Central County	GP	0.024	11.2	0.24		
	Central County	GR	0.041	18.7	0.23		
	Central County	GT	0.001	0.4	0.04		
	Central County	TD	0.019	8.6	1.20		
72c	Central County	ES	0.404	74.5	0.25		
	Central County	GGA	0.130	23.9	0.25		
	Central County	LCA	0.001	0.2	0.25		
	Central County	RAA	0.007	1.4	0.39		
72e	Central County	ES	0.155	31.0	0.25		
	Central County	GGA	0.335	67.1	0.25		
	Central County	LCA	0.010	1.9	0.25		
72g	Central County	ES	0.181	36.2	0.25		
	Central County	GGA	0.022	4.3	0.25		
	Central County	LCA	0.168	33.7	0.25		
	Central County	LE	0.049	9.8	0.04		
	Central County	MP	0.026	5.1	0.25		
	Central County	MR	0.054	10.8	0.05		
72i	Central County	ES	0.055	11.0	0.25		
	Central County	LCA	0.246	48.8	0.25		
	Central County	MP	0.166	33.0	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
72i	Central County	MR	0.001	0.1	0.05		
	Central County	TU	0.036	7.1	0.25		
72k	Central County	ES	0.010	3.5	0.25		
	Central County	LCA	0.005	1.8	0.25		
	Central County	MR	0.266	94.7	0.05		
72l	Central County	MR	0.215	100.0	0.05		
72m	Central County	MR	0.468	100.0	0.05		
72o	Central County	CN	0.001	0.2	0.01		
	Central County	GGA	0.009	1.3	0.25		
	Central County	MR	0.652	98.5	0.05		
72q	Central County	CN	0.005	1.6	0.01		
	Central County	GGA	0.071	21.5	0.25		
	Central County	GT	0.126	38.3	0.04		
	Central County	MR	0.127	38.6	0.05		
72s	Central County	AO	0.054	19.1	0.04		
	Central County	GGA	0.010	3.6	0.25		
	Central County	GT	0.219	77.2	0.04		
72t	Central County	GT	0.222	100.0	0.04		
72u	Central County	GGA	0.001	0.5	0.25		
	Central County	GT	0.255	99.5	0.04		
72v	Central County	CF	0.077	18.8	0.50		
	Central County	GGA	0.253	62.2	0.25		
	Central County	GT	0.002	0.4	0.04		
	Central County	TD	0.027	6.7	1.20		
	Central County	VH	0.048	11.9	0.27		
76c	Central County	ES	0.167	27.7	0.25		
	Central County	GGA	0.026	4.3	0.25		
	Central County	LCA	0.153	25.4	0.25		
	Central County	LE	0.122	20.2	0.04		
	Central County	MR	0.134	22.3	0.05		
76e	Central County	ES	0.082	16.4	0.25		
	Central County	GGA	0.014	2.8	0.25		
	Central County	LCA	0.309	61.9	0.25		
	Central County	LE	0.027	5.5	0.04		
	Central County	MP	0.038	7.6	0.25		
	Central County	MR	0.029	5.8	0.05		
76g	Central County	LCA	0.393	78.5	0.25		
	Central County	LE	0.032	6.3	0.04		
	Central County	MP	0.015	3.1	0.25		
	Central County	MR	0.061	12.1	0.05		
76i	Central County	GGA	0.007	1.5	0.25		
	Central County	LCA	0.223	44.7	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
76i	Central County	LE	0.010	1.9	0.04		
	Central County	MP	0.144	28.9	0.25		
	Central County	MR	0.069	13.8	0.05		
	Central County	TU	0.046	9.2	0.25		
76k	Central County	LCA	0.109	34.3	0.25		
	Central County	MP	0.019	6.0	0.25		
	Central County	MR	0.189	59.6	0.05		
76l	Central County	MR	0.183	100.0	0.05		
76m	Central County	MR	0.492	100.0	0.05		
76o	Central County	GT	0.238	35.3	0.04		
	Central County	MR	0.436	64.7	0.05		
76q	Central County	AO	0.011	2.8	0.04		
	Central County	CN	0.049	12.4	0.01		
	Central County	GT	0.335	84.5	0.04		
	Central County	MR	0.001	0.3	0.05		
76s	Central County	AO	0.029	10.2	0.04		
	Central County	GT	0.251	89.8	0.04		
76t	Central County	AO	0.001	0.2	0.04		
	Central County	GGA	0.010	3.5	0.25		
	Central County	GT	0.262	96.3	0.04		
76u	Central County	AO	0.001	0.2	0.04		
	Central County	GGA	0.001	0.2	0.25		
	Central County	GT	0.282	99.6	0.04		
76v	Central County	AO	0.023	9.6	0.04		
	Central County	CB	0.037	15.6	0.39 *		
	Central County	GGA	0.133	55.3	0.25		
	Central County	GT	0.015	6.4	0.04		
	Central County	VG	0.031	13.1	0.91		
76w	Central County	CB	0.001	0.4	0.39 *		
	Central County	CF	0.040	12.0	0.50		
	Central County	GGA	0.000	0.1	0.25		
	Central County	GP	0.057	17.1	0.24		
	Central County	TD	0.038	11.4	1.20		
	Central County	VG	0.197	59.0	0.91		
80c	Central County	BR	0.010	1.5	1.05		
	Central County	ES	0.010	1.5	0.25		
	Central County	GE	0.003	0.4	0.26		
	Central County	LB	0.004	0.6	0.40		
	Central County	LCA	0.134	20.3	0.25		
	Central County	LE	0.044	6.7	0.04		
	Central County	MO	0.065	9.9	0.39		
	Central County	MP	0.166	25.2	0.25		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
80c	Central County	MR	0.100	15.1	0.05		
	Central County	PEA	0.004	0.6	0.37		
	Central County	VA	0.104	15.8	0.40 *		
	Central County	VG	0.014	2.2	0.91		
	Central County	VH	0.002	0.3	0.27		
80e	Central County	ES	0.059	11.8	0.25		
	Central County	LCA	0.000		0.25		
	Central County	LE	0.006	1.3	0.04		
	Central County	MP	0.268	54.3	0.25		
	Central County	MR	0.161	32.6	0.05		
80g	Central County	LCA	0.057	11.4	0.25		
	Central County	MP	0.440	88.6	0.25		
80i	Central County	GGA	0.247	49.9	0.25		
	Central County	LCA	0.093	18.7	0.25		
	Central County	LE	0.100	20.1	0.04		
	Central County	MP	0.039	7.9	0.25		
	Central County	MR	0.004	0.8	0.05		
	Central County	TC	0.012	2.5	0.40		
80k	Central County	LCA	0.037	8.7	0.25		
	Central County	LE	0.043	10.1	0.04		
	Central County	MR	0.347	81.2	0.05		
80m	Central County	LCA	0.033	6.1	0.25		
	Central County	LE	0.024	4.4	0.04		
	Central County	MR	0.485	89.5	0.05		
80o	Central County	GGA	0.000	0.1	0.25		
	Central County	GT	0.209	38.6	0.04		
	Central County	LCA	0.006	1.1	0.25		
	Central County	LE	0.189	34.8	0.04		
	Central County	MR	0.138	25.4	0.05		
80p	Central County	AO	0.011	2.7	0.04		
	Central County	GGA	0.116	29.1	0.25		
	Central County	GT	0.203	51.1	0.04		
	Central County	LE	0.068	17.2	0.04		
80q	Central County	AO	0.339	68.2	0.04		
	Central County	GGA	0.000	0.1	0.25		
	Central County	GT	0.158	31.7	0.04		
80t	Central County	AO	0.060	23.9	0.04		
	Central County	GGA	0.192	76.1	0.25		
80u	Central County	CN	0.012	4.8	0.01		
	Central County	GGA	0.073	29.2	0.25		
	Central County	GT	0.164	65.9	0.04		
80v	Central County	CN	0.001	0.5	0.01		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
80v	Central County	GGA	0.012	5.1	0.25		
	Central County	GT	0.189	82.1	0.04		
	Central County	VG	0.028	12.3	0.91		
80w	Central County	CB	0.010	2.9	0.39 *		
	Central County	GGA	0.002	0.6	0.25		
	Central County	GP	0.115	32.0	0.24		
	Central County	GT	0.001	0.1	0.04		
	Central County	TD	0.001	0.2	1.20		
	Central County	VG	0.231	64.2	0.91		
84c	Central County	AO	0.005	1.0	0.04		
	Central County	GE	0.013	2.7	0.26		
	Central County	GGA	0.078	16.7	0.25		
	Central County	LCA	0.072	15.3	0.25		
	Central County	MP	0.099	21.0	0.25		
	Central County	MR	0.076	16.2	0.05		
	Central County	PEA	0.011	2.4	0.37		
	Central County	TT	0.067	14.2	0.04		
	Central County	TW	0.013	2.8	0.05		
	Central County	VA	0.029	6.1	0.40 *		
	Central County	VH	0.008	1.7	0.27		
84e	Central County	LE	0.018	8.5	0.04		
	Central County	MP	0.078	36.3	0.25		
	Central County	MR	0.099	46.2	0.05		
	Central County	TT	0.011	4.9	0.04		
	Central County	TW	0.009	4.1	0.05		
84g	Central County	ES	0.000	0.1	0.25		
	Central County	GGA	0.011	5.3	0.25		
	Central County	MP	0.203	94.6	0.25		
84i	Central County	GGA	0.170	80.6	0.25		
	Central County	LE	0.023	10.7	0.04		
	Central County	MP	0.001	0.5	0.25		
	Central County	TC	0.018	8.3	0.40		
84k	Central County	AO	0.005	1.6	0.04		
	Central County	GGA	0.008	2.6	0.25		
	Central County	LCA	0.044	14.1	0.25		
	Central County	LE	0.080	25.5	0.04		
	Central County	MR	0.175	56.2	0.05		
84m	Central County	AO	0.016	7.8	0.04		
	Central County	LE	0.169	80.8	0.04		
	Central County	MR	0.024	11.4	0.05		
84t	Central County	AO	0.119	43.5	0.04		
	Central County	GGA	0.108	39.4	0.25		
	Central County	GT	0.022	8.0	0.04		

* Custom Value (not default value)

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
84t	Central County	MS	0.002	0.7	0.01		
	Central County	TT	0.023	8.5	0.04		
84u	Central County	CN	0.088	33.4	0.01		
	Central County	GGA	0.146	55.5	0.25		
	Central County	GT	0.029	11.1	0.04		
84v	Central County	CN	0.053	20.7	0.01		
	Central County	GGA	0.024	9.3	0.25		
	Central County	GT	0.155	60.9	0.04		
	Central County	MV	0.023	9.0	0.14 *		
84w	Central County	CB	0.013	4.0	0.39 *		
	Central County	CF	0.106	31.1	0.50		
	Central County	GGA	0.018	5.3	0.25		
	Central County	GP	0.091	26.8	0.24		
	Central County	MV	0.030	8.7	0.14 *		
	Central County	TC	0.005	1.6	0.40		
	Central County	VG	0.076	22.3	0.91		
	Central County	VH	0.001	0.3	0.27		
88t	Central County	GGA	0.203	78.2	0.25		
	Central County	GT	0.040	15.3	0.04		
	Central County	MS	0.017	6.5	0.01		
88u	Central County	CN	0.105	41.8	0.01		
	Central County	GGA	0.139	55.7	0.25		
	Central County	GT	0.006	2.5	0.04		
88v	Central County	AO	0.102	40.9	0.04		
	Central County	CN	0.037	15.0	0.01		
	Central County	GGA	0.004	1.7	0.25		
	Central County	GT	0.105	42.4	0.04		
88w	Central County	AO	0.016	2.6	0.04		
	Central County	CB	0.047	7.9	0.39 *		
	Central County	CF	0.018	3.0	0.50		
	Central County	GE	0.020	3.3	0.26		
	Central County	GGA	0.062	10.4	0.25		
	Central County	GT	0.029	4.8	0.04		
	Central County	MV	0.235	39.3	0.14 *		
	Central County	MA	0.006	1.0	0.40		
	Central County	TC	0.007	1.1	0.40		
	Central County	VG	0.075	12.5	0.91		
	Central County	VH	0.085	14.1	0.27		
92t	Central County	GGA	0.157	89.5	0.25		
	Central County	GT	0.018	10.5	0.04		
92u	Central County	AO	0.019	7.7	0.04		
	Central County	CN	0.023	9.3	0.01		
	Central County	GC	0.005	2.0	0.01		

* Custom Value (not default value)

Soil Data

Sub Basin ID	Soil Survey	Map Unit	Area	Area Pct (%)	XKSAT	Rock Outcrop (%)	Effective (%)
92u	Central County	GGA	0.192	77.1	0.25		
	Central County	GT	0.002	0.9	0.04		
	Central County	MP	0.008	3.0	0.25		
92v	Central County	AO	0.007	4.6	0.04		
	Central County	CN	0.045	28.4	0.01		
	Central County	GC	0.028	17.8	0.01		
	Central County	GGA	0.022	13.6	0.25		
	Central County	GT	0.057	35.6	0.04		
I17	Central County	MP	0.293	100.0	0.25		

* Custom Value (not default value)

APPENDIX A4

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
04s	200	0.014	5.2	Normal	60.0	80	0.10	0.040	Min	0.034
	520	0.010	3.4	Normal	80.0	45	0.29	0.035	Min	0.035
	550	0.026	9.3	Normal	75.0	80	0.10	0.035	Min	0.032
	710	0.051	18.2	Normal	60.0	5	0.10	0.030	Low	0.059
	720	0.158	56.7	Normal	80.0	5	0.10	0.035	Min	0.027
	900	0.020	7.1	Normal	25.0		0.35	0.030	Low	0.065
08q	200	0.193	44.0	Normal	60.0	80	0.10	0.040	Min	0.027
	320	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	550	0.001	0.1	Normal	75.0	80	0.10	0.035	Min	0.043
	560	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.042
	710	0.235	53.5	Normal	60.0	5	0.10	0.030	Low	0.050
	720	0.007	1.5	Normal	80.0	5	0.10	0.035	Min	0.036
	900	0.003	0.7	Normal	25.0		0.35	0.030	Low	0.076
08s	200	0.024	3.6	Normal	60.0	80	0.10	0.040	Min	0.033
	230	0.002	0.3	Normal	75.0	80	0.10	0.030	Min	0.040
	320	0.180	27.7	Normal	60.0	55	0.15	0.035	Min	0.027
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	550	0.184	28.2	Normal	75.0	80	0.10	0.035	Min	0.027
	560	0.043	6.6	Normal	75.0	80	0.10	0.035	Min	0.031
	610	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.042
	710	0.109	16.7	Normal	60.0	5	0.10	0.030	Low	0.055
	720	0.014	2.1	Normal	80.0	5	0.10	0.035	Min	0.034
	740	0.003	0.4	Wet				0.020	Low	0.076
	900	0.093	14.3	Normal	25.0		0.35	0.030	Low	0.056
12q	550	0.006	1.6	Normal	75.0	80	0.10	0.035	Min	0.036
	710	0.257	64.3	Normal	60.0	5	0.10	0.030	Low	0.050
	720	0.076	19.1	Normal	80.0	5	0.10	0.035	Min	0.029
	900	0.060	15.0	Normal	25.0		0.35	0.030	Low	0.058

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
12s	230	0.046	21.9	Normal	75.0	80	0.10	0.030	Min	0.031
	310	0.001	0.4	Normal	75.0	80	0.10	0.035	Min	0.041
	320	0.041	19.9	Normal	60.0	55	0.15	0.035	Min	0.031
	410	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	550	0.067	32.1	Normal	75.0	80	0.10	0.035	Min	0.030
	610	0.040	19.1	Normal	75.0	80	0.10	0.030	Min	0.031
	710	0.007	3.4	Normal	60.0	5	0.10	0.030	Low	0.071
	900	0.006	3.0	Normal	25.0		0.35	0.030	Low	0.072
16o	550	0.211	100.0	Normal	75.0	80	0.10	0.035	Min	0.027
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
16q	150	0.020	3.0	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.004	0.6	Normal	50.0	40	0.25	0.050	Min	0.037
	170	0.002	0.4	Normal	50.0	45	0.25	0.055	Min	0.039
	190	0.083	12.7	Normal	50.0	45	0.25	0.060	Min	0.029
	210	0.001	0.1	Normal	65.0	80	0.10	0.035	Min	0.042
	320	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	410	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	550	0.202	31.1	Normal	75.0	80	0.10	0.035	Min	0.027
	710	0.071	10.9	Normal	60.0	5	0.10	0.030	Low	0.057
	720	0.250	38.4	Normal	80.0	5	0.10	0.035	Min	0.026
	900	0.018	2.8	Normal	25.0		0.35	0.030	Low	0.065
16s	140	0.005	1.1	Normal	50.0	30	0.25	0.045	Min	0.037
	150	0.000	0.1	Normal	50.0	30	0.25	0.045	Min	0.044
	190	0.055	13.0	Normal	50.0	45	0.25	0.060	Min	0.030
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.044
	210	0.045	10.6	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.002	0.5	Normal	65.0	80	0.10	0.030	Min	0.039
	310	0.123	29.3	Normal	75.0	80	0.10	0.035	Min	0.028
	320	0.006	1.4	Normal	60.0	55	0.15	0.035	Min	0.036

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
16s	410	0.010	2.3	Normal	75.0	80	0.10	0.035	Min	0.035
	510	0.003	0.7	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.042	10.0	Normal	75.0	80	0.10	0.035	Min	0.031
	610	0.007	1.6	Normal	75.0	80	0.10	0.030	Min	0.036
	710	0.012	2.9	Normal	60.0	5	0.10	0.030	Low	0.068
	740	0.036	8.6	Wet				0.020	Low	0.061
	900	0.075	17.9	Normal	25.0		0.35	0.030	Low	0.057
20p	120	0.002	0.3	Normal	30.0	5	0.30	0.035	Min	0.040
	140	0.021	4.0	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.004	0.7	Normal	50.0	30	0.25	0.045	Min	0.038
	160	0.022	4.2	Normal	50.0	40	0.25	0.050	Min	0.033
	170	0.012	2.3	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.039	7.3	Normal	50.0	45	0.25	0.060	Min	0.031
	190	0.080	15.0	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.012	2.3	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.005	1.0	Normal	65.0	80	0.10	0.030	Min	0.037
	310	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.040
	320	0.129	24.3	Normal	60.0	55	0.15	0.035	Min	0.028
	410	0.022	4.1	Normal	75.0	80	0.10	0.035	Min	0.033
	510	0.010	1.8	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.031	5.8	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.015	2.8	Normal	75.0	80	0.10	0.035	Min	0.034
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.088
	720	0.000		Normal	80.0	5	0.10	0.035	Min	0.047
	740	0.032	6.1	Wet				0.020	Low	0.062
	900	0.090	16.9	Normal	25.0		0.35	0.030	Low	0.056
20q	120	0.004	1.3	Normal	30.0	5	0.30	0.035	Min	0.038

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
20q	140	0.002	0.7	Normal	50.0	30	0.25	0.045	Min	0.039
	150	0.056	20.2	Normal	50.0	30	0.25	0.045	Min	0.030
	170	0.000	0.1	Normal	50.0	45	0.25	0.055	Min	0.044
	190	0.042	15.0	Normal	50.0	45	0.25	0.060	Min	0.031
	210	0.004	1.4	Normal	65.0	80	0.10	0.035	Min	0.038
	220	0.003	0.9	Normal	65.0	80	0.10	0.030	Min	0.039
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.009	3.3	Normal	75.0	80	0.10	0.035	Min	0.035
	420	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.046
	510	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	530	0.007	2.4	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.003	1.0	Normal	75.0	80	0.10	0.035	Min	0.038
	710	0.003	0.9	Normal	60.0	5	0.10	0.030	Low	0.077
	740	0.031	11.2	Wet				0.020	Low	0.062
	900	0.115	41.5	Normal	25.0		0.35	0.030	Low	0.054
20s	190	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	200	0.010	2.0	Normal	60.0	80	0.10	0.040	Min	0.035
	210	0.027	5.7	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.022	4.4	Normal	65.0	80	0.10	0.030	Min	0.033
	310	0.020	4.1	Normal	75.0	80	0.10	0.035	Min	0.033
	320	0.092	18.9	Normal	60.0	55	0.15	0.035	Min	0.029
	410	0.036	7.4	Normal	75.0	80	0.10	0.035	Min	0.031
	420	0.002	0.5	Normal	75.0	80	0.10	0.030	Min	0.039
	520	0.001	0.2	Normal	80.0	45	0.29	0.035	Min	0.042
	550	0.067	13.9	Normal	75.0	80	0.10	0.035	Min	0.030
	710	0.068	14.1	Normal	60.0	5	0.10	0.030	Low	0.057
	740	0.025	5.1	Wet				0.020	Low	0.063
	900	0.114	23.6	Normal	25.0		0.35	0.030	Low	0.054
20t	610	0.009	3.4	Normal	75.0	80	0.10	0.030	Min	0.035

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
20t	710	0.139	52.5	Normal	60.0	5	0.10	0.030	Low	0.053
	740	0.060	22.5	Wet				0.020	Low	0.058
	900	0.057	21.5	Normal	25.0		0.35	0.030	Low	0.059
24k	130	0.002	0.8	Normal	50.0	15	0.30	0.040	Min	0.040
	140	0.035	18.1	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.106	55.2	Normal	50.0	30	0.25	0.045	Min	0.029
	170	0.000	0.2	Normal	50.0	45	0.25	0.055	Min	0.044
	180	0.015	7.6	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.001	0.4	Normal	50.0	45	0.25	0.060	Min	0.042
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.003	1.4	Normal	65.0	80	0.10	0.035	Min	0.039
	220	0.017	8.9	Normal	65.0	80	0.10	0.030	Min	0.034
	310	0.001	0.7	Normal	75.0	80	0.10	0.035	Min	0.040
	410	0.007	3.7	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.001	0.7	Normal	75.0	80	0.10	0.035	Min	0.040
	610	0.000	0.2	Normal	75.0	80	0.10	0.030	Min	0.044
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.092
	740	0.003	1.8	Wet				0.020	Low	0.075
	900	0.000	0.1	Normal	25.0		0.35	0.030	Low	0.096
24m	130	0.036	7.2	Normal	50.0	15	0.30	0.040	Min	0.031
	140	0.224	44.7	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.026	5.1	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	180	0.000		Normal	50.0	45	0.25	0.060	Min	0.046
	190	0.018	3.6	Normal	50.0	45	0.25	0.060	Min	0.033
	200	0.015	3.0	Normal	60.0	80	0.10	0.040	Min	0.034
	210	0.023	4.6	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.000		Normal	65.0	80	0.10	0.030	Min	0.047

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
24m	240	0.000		Normal	65.0	80	0.10	0.030	Min	0.047
	400	0.009	1.7	Normal	75.0	80	0.10	0.035	Min	0.035
	410	0.040	8.0	Normal	75.0	80	0.10	0.035	Min	0.031
	520	0.077	15.3	Normal	80.0	45	0.29	0.035	Min	0.029
	530	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	710	0.008	1.7	Normal	60.0	5	0.10	0.030	Low	0.070
	750	0.015	2.9	Normal	85.0		0.50	0.100	Low	0.067
	900	0.006	1.2	Normal	25.0		0.35	0.030	Low	0.072
24o	120	0.000		Normal	30.0	5	0.30	0.035	Min	0.047
	130	0.008	1.5	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.132	26.2	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.102	20.2	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.001	0.3	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.004	0.8	Normal	50.0	45	0.25	0.060	Min	0.038
	190	0.035	7.0	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.008	1.5	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.015	3.0	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.043
	240	0.115	22.9	Normal	65.0	80	0.10	0.030	Min	0.028
	310	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	410	0.014	2.8	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.000		Normal	75.0	80	0.10	0.030	Min	0.046
	510	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.015	2.9	Normal	80.0	45	0.29	0.035	Min	0.034
	550	0.001	0.1	Normal	75.0	80	0.10	0.035	Min	0.043
	710	0.047	9.4	Normal	60.0	5	0.10	0.030	Low	0.060
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
24s	200	0.037	19.2	Normal	60.0	80	0.10	0.040	Min	0.031
	210	0.003	1.4	Normal	65.0	80	0.10	0.035	Min	0.038
	410	0.029	14.7	Normal	75.0	80	0.10	0.035	Min	0.032
	420	0.027	13.8	Normal	75.0	80	0.10	0.030	Min	0.032
	510	0.017	8.7	Normal	75.0	80	0.10	0.035	Min	0.034
	530	0.008	3.9	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.003	1.4	Normal	75.0	80	0.10	0.030	Min	0.038
	740	0.003	1.4	Wet				0.020	Low	0.077
	900	0.069	35.4	Normal	25.0		0.35	0.030	Low	0.057
24t	200	0.002	0.7	Normal	60.0	80	0.10	0.040	Min	0.040
	310	0.000	0.2	Normal	75.0	80	0.10	0.035	Min	0.044
	610	0.035	13.5	Normal	75.0	80	0.10	0.030	Min	0.032
	620	0.001	0.5	Normal	60.0	55	0.15	0.030	Min	0.040
	710	0.210	80.8	Normal	60.0	5	0.10	0.030	Low	0.051
	740	0.008	3.0	Wet				0.020	Low	0.070
	900	0.004	1.3	Normal	25.0		0.35	0.030	Low	0.075
28k	110	0.000		Normal	30.0	5	0.30	0.035	Min	0.047
	130	0.026	6.0	Normal	50.0	15	0.30	0.040	Min	0.032
	140	0.148	34.6	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.129	30.2	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.008	2.0	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.018	4.1	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.026	6.0	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.001	0.1	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.015	3.5	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.012	2.7	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	310	0.004	1.0	Normal	75.0	80	0.10	0.035	Min	0.037

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
28k	410	0.014	3.3	Normal	75.0	80	0.10	0.035	Min	0.034
	530	0.010	2.3	Normal	75.0	80	0.10	0.035	Min	0.035
	540	0.000	0.1	Normal	90.0	5	0.10	0.035	Low	0.090
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	610	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	710	0.005	1.2	Normal	60.0	5	0.10	0.030	Low	0.073
	740	0.008	1.9	Wet				0.020	Low	0.070
	900	0.002	0.5	Normal	25.0		0.35	0.030	Low	0.078
28m	120	0.007	1.4	Normal	30.0	5	0.30	0.035	Min	0.036
	130	0.004	0.7	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.342	67.2	Normal	50.0	30	0.25	0.045	Min	0.025
	150	0.052	10.3	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	170	0.009	1.7	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.011	2.1	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.026	5.2	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.002	0.3	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.021	4.2	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.005	1.0	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.006	1.2	Normal	75.0	80	0.10	0.030	Min	0.036
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.012	2.4	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.005	1.0	Normal	75.0	80	0.10	0.030	Min	0.037
	530	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	710	0.003	0.5	Normal	60.0	5	0.10	0.030	Low	0.077
	900	0.001	0.1	Normal	25.0		0.35	0.030	Low	0.087
28o	120	0.002	0.4	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.039	7.8	Normal	50.0	15	0.30	0.040	Min	0.031

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
28o	140	0.229	45.8	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.051	10.1	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.013	2.7	Normal	50.0	40	0.25	0.050	Min	0.034
	170	0.007	1.4	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.002	0.3	Normal	50.0	45	0.25	0.060	Min	0.040
	190	0.060	12.0	Normal	50.0	45	0.25	0.060	Min	0.030
	200	0.001	0.1	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.046	9.2	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.000	0.1	Normal	65.0	80	0.10	0.030	Min	0.044
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	240	0.000		Normal	65.0	80	0.10	0.030	Min	0.047
	310	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	410	0.012	2.4	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.008	1.5	Normal	75.0	80	0.10	0.030	Min	0.036
	510	0.007	1.3	Normal	75.0	80	0.10	0.035	Min	0.036
	530	0.001	0.1	Normal	75.0	80	0.10	0.035	Min	0.042
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	610	0.002	0.3	Normal	75.0	80	0.10	0.030	Min	0.040
	900	0.015	3.1	Normal	25.0		0.35	0.030	Low	0.066
28p	140	0.001	0.4	Normal	50.0	30	0.25	0.045	Min	0.040
	150	0.023	6.1	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.041	11.0	Normal	50.0	40	0.25	0.050	Min	0.031
	170	0.018	4.8	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.040	10.9	Normal	50.0	45	0.25	0.060	Min	0.031
	190	0.044	12.0	Normal	50.0	45	0.25	0.060	Min	0.031
	210	0.004	1.1	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.009	2.4	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.046
	310	0.013	3.5	Normal	75.0	80	0.10	0.035	Min	0.034
	410	0.012	3.3	Normal	75.0	80	0.10	0.035	Min	0.034

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
28p	510	0.047	12.7	Normal	75.0	80	0.10	0.035	Min	0.031
	520	0.025	6.7	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	570	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	710	0.003	0.9	Normal	60.0	5	0.10	0.030	Low	0.076
	740	0.001	0.4	Wet				0.020	Low	0.081
	900	0.088	23.6	Normal	25.0		0.35	0.030	Low	0.056
28q	140	0.004	1.2	Normal	50.0	30	0.25	0.045	Min	0.038
	150	0.061	19.0	Normal	50.0	30	0.25	0.045	Min	0.030
	180	0.025	8.0	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.012	3.7	Normal	50.0	45	0.25	0.060	Min	0.034
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.044
	210	0.011	3.6	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.014	4.4	Normal	65.0	80	0.10	0.030	Min	0.034
	310	0.009	2.8	Normal	75.0	80	0.10	0.035	Min	0.035
	410	0.049	15.3	Normal	75.0	80	0.10	0.035	Min	0.031
	420	0.037	11.6	Normal	75.0	80	0.10	0.030	Min	0.031
	510	0.022	6.9	Normal	75.0	80	0.10	0.035	Min	0.033
	530	0.009	2.8	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.025	7.8	Normal	75.0	80	0.10	0.030	Min	0.032
	710	0.007	2.1	Normal	60.0	5	0.10	0.030	Low	0.071
	740	0.001	0.4	Wet				0.020	Low	0.082
	900	0.031	9.7	Normal	25.0		0.35	0.030	Low	0.062
28s	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.005	2.9	Normal	65.0	80	0.10	0.035	Min	0.037
	310	0.101	61.4	Normal	75.0	80	0.10	0.035	Min	0.029
	410	0.001	0.6	Normal	75.0	80	0.10	0.035	Min	0.041
	520	0.004	2.6	Normal	80.0	45	0.29	0.035	Min	0.037

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
28s	550	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.042
	560	0.003	2.0	Normal	75.0	80	0.10	0.035	Min	0.038
	610	0.002	1.1	Normal	75.0	80	0.10	0.030	Min	0.040
	710	0.001	0.4	Normal	60.0	5	0.10	0.030	Low	0.085
	740	0.014	8.7	Wet				0.020	Low	0.067
	900	0.032	19.7	Normal	25.0		0.35	0.030	Low	0.062
32k	130	0.065	12.9	Normal	50.0	15	0.30	0.040	Min	0.030
	140	0.260	51.5	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.022	4.3	Normal	50.0	30	0.25	0.045	Min	0.033
	170	0.019	3.7	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.034	6.7	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.062	12.2	Normal	50.0	45	0.25	0.060	Min	0.030
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.044
	210	0.007	1.4	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.012	2.5	Normal	65.0	80	0.10	0.030	Min	0.034
	410	0.011	2.2	Normal	75.0	80	0.10	0.035	Min	0.035
	530	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	540	0.002	0.4	Normal	90.0	5	0.10	0.035	Low	0.079
	550	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.038
	570	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.040
	610	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	710	0.001	0.2	Normal	60.0	5	0.10	0.030	Low	0.082
32m	120	0.007	1.3	Normal	30.0	5	0.30	0.035	Min	0.036
	130	0.050	9.7	Normal	50.0	15	0.30	0.040	Min	0.031
	140	0.181	35.2	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.027	5.3	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.002	0.3	Normal	50.0	40	0.25	0.050	Min	0.040
	170	0.012	2.3	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.096	18.7	Normal	50.0	45	0.25	0.060	Min	0.029

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
32m	190	0.041	8.0	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.016	3.2	Normal	60.0	80	0.10	0.040	Min	0.034
	210	0.023	4.5	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.026	5.0	Normal	65.0	80	0.10	0.030	Min	0.032
	230	0.007	1.3	Normal	75.0	80	0.10	0.030	Min	0.036
	410	0.004	0.7	Normal	75.0	80	0.10	0.035	Min	0.038
	520	0.001	0.2	Normal	80.0	45	0.29	0.035	Min	0.041
	530	0.015	2.8	Normal	75.0	80	0.10	0.035	Min	0.034
	540	0.000		Normal	90.0	5	0.10	0.035	Low	0.096
	550	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.040
	610	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	710	0.001	0.2	Normal	60.0	5	0.10	0.030	Low	0.083
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
32o	120	0.002	0.4	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.008	1.6	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.164	32.7	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.148	29.6	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.002	0.4	Normal	50.0	40	0.25	0.050	Min	0.039
	180	0.024	4.9	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.026	5.1	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.006	1.1	Normal	60.0	80	0.10	0.040	Min	0.037
	210	0.015	2.9	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.001	0.1	Normal	65.0	80	0.10	0.030	Min	0.042
	230	0.067	13.4	Normal	75.0	80	0.10	0.030	Min	0.030
	310	0.001	0.1	Normal	75.0	80	0.10	0.035	Min	0.042
	410	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.018	3.6	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.011	2.1	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
32o	570	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	710	0.003	0.5	Normal	60.0	5	0.10	0.030	Low	0.077
	900	0.004	0.8	Normal	25.0		0.35	0.030	Low	0.075
32p	140	0.025	10.5	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.000	0.2	Normal	50.0	30	0.25	0.045	Min	0.044
	170	0.000	0.1	Normal	50.0	45	0.25	0.055	Min	0.046
	180	0.000	0.2	Normal	50.0	45	0.25	0.060	Min	0.044
	190	0.027	11.7	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.000	0.2	Normal	65.0	80	0.10	0.035	Min	0.044
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.043
	710	0.045	19.2	Normal	60.0	5	0.10	0.030	Low	0.060
	900	0.135	57.7	Normal	25.0		0.35	0.030	Low	0.053
32q	140	0.000	0.1	Normal	50.0	30	0.25	0.045	Min	0.047
	150	0.000	0.1	Normal	50.0	30	0.25	0.045	Min	0.047
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.047
	310	0.016	9.2	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.047
	550	0.017	9.9	Normal	75.0	80	0.10	0.035	Min	0.033
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.096
	740	0.026	14.9	Wet				0.020	Low	0.063
	900	0.115	65.7	Normal	25.0		0.35	0.030	Low	0.054
32s	140	0.005	1.5	Normal	50.0	30	0.25	0.045	Min	0.037
	150	0.019	5.6	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.003	0.7	Normal	50.0	40	0.25	0.050	Min	0.039
	170	0.003	0.9	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.002	0.6	Normal	50.0	45	0.25	0.060	Min	0.039
	210	0.040	11.8	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.001	0.1	Normal	65.0	80	0.10	0.030	Min	0.043

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
32s	310	0.021	6.3	Normal	75.0	80	0.10	0.035	Min	0.033
	320	0.003	0.9	Normal	60.0	55	0.15	0.035	Min	0.038
	420	0.015	4.3	Normal	75.0	80	0.10	0.030	Min	0.034
	510	0.009	2.5	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.058	17.1	Normal	80.0	45	0.29	0.035	Min	0.030
	530	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	560	0.103	30.5	Normal	75.0	80	0.10	0.035	Min	0.029
	610	0.023	6.7	Normal	75.0	80	0.10	0.030	Min	0.033
	740	0.002	0.6	Wet				0.020	Low	0.078
	900	0.032	9.6	Normal	25.0		0.35	0.030	Low	0.062
36i	120	0.014	4.0	Normal	30.0	5	0.30	0.035	Min	0.034
	130	0.035	10.3	Normal	50.0	15	0.30	0.040	Min	0.032
	140	0.211	62.2	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.010	2.8	Normal	50.0	30	0.25	0.045	Min	0.035
	160	0.001	0.3	Normal	50.0	40	0.25	0.050	Min	0.041
	180	0.002	0.5	Normal	50.0	45	0.25	0.060	Min	0.040
	190	0.008	2.4	Normal	50.0	45	0.25	0.060	Min	0.035
	210	0.001	0.2	Normal	65.0	80	0.10	0.035	Min	0.042
	220	0.002	0.6	Normal	65.0	80	0.10	0.030	Min	0.039
	230	0.005	1.4	Normal	75.0	80	0.10	0.030	Min	0.037
	410	0.026	7.8	Normal	75.0	80	0.10	0.035	Min	0.032
	420	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	530	0.006	1.8	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.039
	710	0.007	1.9	Normal	60.0	5	0.10	0.030	Low	0.071
	740	0.007	2.2	Wet				0.020	Low	0.071
	900	0.003	0.8	Normal	25.0		0.35	0.030	Low	0.077
36k	130	0.002	0.5	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.239	47.0	Normal	50.0	30	0.25	0.045	Min	0.026

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
36k	150	0.122	24.0	Normal	50.0	30	0.25	0.045	Min	0.028
	170	0.005	1.0	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.031	6.0	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.013	2.6	Normal	50.0	45	0.25	0.060	Min	0.034
	200	0.001	0.1	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.017	3.4	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.006	1.2	Normal	65.0	80	0.10	0.030	Min	0.036
	230	0.009	1.8	Normal	75.0	80	0.10	0.030	Min	0.035
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.021	4.1	Normal	75.0	80	0.10	0.035	Min	0.033
	420	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.042
	520	0.018	3.6	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.020	3.9	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.046
	610	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.043
	710	0.002	0.4	Normal	60.0	5	0.10	0.030	Low	0.079
	900	0.001	0.2	Normal	25.0		0.35	0.030	Low	0.084
36m	120	0.006	1.2	Normal	30.0	5	0.30	0.035	Min	0.036
	130	0.033	6.4	Normal	50.0	15	0.30	0.040	Min	0.032
	140	0.207	40.2	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.085	16.6	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.046
	170	0.006	1.2	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.027	5.2	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.005	1.0	Normal	50.0	45	0.25	0.060	Min	0.037
	200	0.003	0.6	Normal	60.0	80	0.10	0.040	Min	0.038
	210	0.026	5.0	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.010	1.9	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
36m	310	0.016	3.0	Normal	75.0	80	0.10	0.035	Min	0.034
	410	0.010	2.0	Normal	75.0	80	0.10	0.035	Min	0.035
	510	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.020	3.9	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.031	6.0	Normal	75.0	80	0.10	0.035	Min	0.032
	550	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	610	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	900	0.019	3.6	Normal	25.0		0.35	0.030	Low	0.065
36o	120	0.002	0.5	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.003	0.5	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.130	25.9	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.235	47.1	Normal	50.0	30	0.25	0.045	Min	0.026
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.042
	180	0.007	1.4	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.017	3.4	Normal	50.0	45	0.25	0.060	Min	0.034
	210	0.043	8.5	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.009	1.8	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	310	0.015	3.1	Normal	75.0	80	0.10	0.035	Min	0.034
	410	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.008	1.6	Normal	80.0	45	0.29	0.035	Min	0.036
	530	0.011	2.2	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.040
	570	0.003	0.6	Normal	75.0	80	0.10	0.035	Min	0.038
	710	0.001	0.2	Normal	60.0	5	0.10	0.030	Low	0.084
	900	0.010	2.1	Normal	25.0		0.35	0.030	Low	0.069
36p	120	0.000	0.1	Normal	30.0	5	0.30	0.035	Min	0.047
	130	0.004	2.1	Normal	50.0	15	0.30	0.040	Min	0.038

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	01									
36p	140	0.020	10.6	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.047	25.2	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.006	3.4	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.002	1.3	Normal	50.0	45	0.25	0.055	Min	0.039
	180	0.001	0.8	Normal	50.0	45	0.25	0.060	Min	0.040
	190	0.027	14.2	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.004	2.0	Normal	65.0	80	0.10	0.035	Min	0.038
	220	0.010	5.5	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.046
	310	0.009	4.6	Normal	75.0	80	0.10	0.035	Min	0.035
	410	0.002	1.1	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.026	14.1	Normal	80.0	45	0.29	0.035	Min	0.032
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.096
	740	0.020	10.6	Wet				0.020	Low	0.065
	900	0.008	4.4	Normal	25.0		0.35	0.030	Low	0.070
36q	140	0.033	12.4	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.147	54.9	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.016	5.9	Normal	50.0	40	0.25	0.050	Min	0.034
	170	0.002	0.7	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.002	0.9	Normal	50.0	45	0.25	0.060	Min	0.039
	210	0.011	4.1	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.005	2.0	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.046
	310	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	320	0.001	0.2	Normal	60.0	55	0.15	0.035	Min	0.043
	410	0.003	1.2	Normal	75.0	80	0.10	0.035	Min	0.038
	510	0.026	9.8	Normal	75.0	80	0.10	0.035	Min	0.032
	530	0.005	1.7	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	560	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
36q	610	0.004	1.3	Normal	75.0	80	0.10	0.030	Min	0.038
	740	0.003	1.1	Wet				0.020	Low	0.076
	900	0.009	3.5	Normal	25.0		0.35	0.030	Low	0.069
36s	130	0.003	1.4	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.003	1.4	Normal	50.0	30	0.25	0.045	Min	0.038
	150	0.011	4.6	Normal	50.0	30	0.25	0.045	Min	0.035
	160	0.006	2.6	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.002	0.7	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.001	0.2	Normal	50.0	45	0.25	0.060	Min	0.043
	200	0.002	0.7	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.030	12.4	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.004	1.8	Normal	65.0	80	0.10	0.030	Min	0.037
	300	0.002	0.6	Normal	60.0	55	0.15	0.035	Min	0.040
	310	0.025	10.5	Normal	75.0	80	0.10	0.035	Min	0.032
	320	0.058	23.9	Normal	60.0	55	0.15	0.035	Min	0.030
	510	0.019	8.0	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.002	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.015	6.1	Normal	75.0	80	0.10	0.030	Min	0.034
	900	0.058	24.1	Normal	25.0		0.35	0.030	Low	0.058
40i	120	0.020	9.0	Normal	30.0	5	0.30	0.035	Min	0.033
	130	0.024	10.7	Normal	50.0	15	0.30	0.040	Min	0.033
	140	0.006	2.5	Normal	50.0	30	0.25	0.045	Min	0.036
	150	0.009	3.8	Normal	50.0	30	0.25	0.045	Min	0.035
	170	0.019	8.6	Normal	50.0	45	0.25	0.055	Min	0.033
	190	0.030	13.2	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.006	2.5	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.015	6.6	Normal	65.0	80	0.10	0.030	Min	0.034
	410	0.029	13.1	Normal	75.0	80	0.10	0.035	Min	0.032
	420	0.000	0.2	Normal	75.0	80	0.10	0.030	Min	0.044

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
40l	550	0.009	4.2	Normal	75.0	80	0.10	0.035	Min	0.035
	710	0.010	4.5	Normal	60.0	5	0.10	0.030	Low	0.069
	720	0.045	20.0	Normal	80.0	5	0.10	0.035	Min	0.031
	740	0.003	1.1	Wet				0.020	Low	0.077
40k	120	0.020	4.0	Normal	30.0	5	0.30	0.035	Min	0.033
	130	0.002	0.3	Normal	50.0	15	0.30	0.040	Min	0.040
	140	0.238	47.3	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.014	2.7	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.002	0.3	Normal	50.0	40	0.25	0.050	Min	0.040
	170	0.026	5.2	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.001	0.2	Normal	50.0	45	0.25	0.060	Min	0.041
	190	0.043	8.6	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.016	3.2	Normal	60.0	80	0.10	0.040	Min	0.034
	210	0.005	1.0	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.021	4.1	Normal	65.0	80	0.10	0.030	Min	0.033
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.042
	410	0.034	6.7	Normal	75.0	80	0.10	0.035	Min	0.032
	420	0.017	3.4	Normal	75.0	80	0.10	0.030	Min	0.034
	520	0.001	0.1	Normal	80.0	45	0.29	0.035	Min	0.042
	530	0.015	3.0	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	710	0.049	9.7	Normal	60.0	5	0.10	0.030	Low	0.059
	720	0.000	0.1	Normal	80.0	5	0.10	0.035	Min	0.044
40m	120	0.003	0.5	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.001	0.1	Normal	50.0	15	0.30	0.040	Min	0.042
	140	0.176	34.3	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.075	14.6	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.033	6.4	Normal	50.0	45	0.25	0.055	Min	0.032

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
40m	180	0.003	0.6	Normal	50.0	45	0.25	0.060	Min	0.038
	190	0.102	19.9	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.007	1.4	Normal	60.0	80	0.10	0.040	Min	0.036
	210	0.022	4.3	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.020	3.9	Normal	65.0	80	0.10	0.030	Min	0.033
	230	0.038	7.4	Normal	75.0	80	0.10	0.030	Min	0.031
	310	0.006	1.2	Normal	75.0	80	0.10	0.035	Min	0.036
	320	0.001	0.2	Normal	60.0	55	0.15	0.035	Min	0.041
	410	0.005	0.9	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.001	0.2	Normal	80.0	45	0.29	0.035	Min	0.041
	530	0.011	2.1	Normal	75.0	80	0.10	0.035	Min	0.035
	610	0.002	0.3	Normal	75.0	80	0.10	0.030	Min	0.040
	900	0.008	1.5	Normal	25.0		0.35	0.030	Low	0.070
40o	110	0.000		Normal	30.0	5	0.30	0.035	Min	0.046
	130	0.003	0.7	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.174	37.3	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.126	27.1	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.025	5.4	Normal	50.0	40	0.25	0.050	Min	0.032
	170	0.012	2.5	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.030	6.5	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.008	1.7	Normal	50.0	45	0.25	0.060	Min	0.036
	200	0.001	0.3	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.021	4.6	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.007	1.4	Normal	65.0	80	0.10	0.030	Min	0.036
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	310	0.007	1.6	Normal	75.0	80	0.10	0.035	Min	0.036
	410	0.005	1.2	Normal	75.0	80	0.10	0.035	Min	0.037
	530	0.012	2.5	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.042
	570	0.003	0.7	Normal	75.0	80	0.10	0.035	Min	0.038

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	01									
40o	610	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	710	0.016	3.3	Normal	60.0	5	0.10	0.030	Low	0.066
	740	0.010	2.2	Wet				0.020	Low	0.069
	900	0.002	0.3	Normal	25.0		0.35	0.030	Low	0.080
40p	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	140	0.045	20.4	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.068	30.8	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.001	0.6	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.002	1.1	Normal	50.0	45	0.25	0.060	Min	0.039
	210	0.009	4.0	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.004	1.8	Normal	65.0	80	0.10	0.030	Min	0.038
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.043
	310	0.013	5.9	Normal	75.0	80	0.10	0.035	Min	0.034
	410	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.041
	510	0.008	3.7	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.028	12.6	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.003	1.1	Normal	75.0	80	0.10	0.035	Min	0.039
	740	0.035	15.8	Wet				0.020	Low	0.061
	900	0.003	1.4	Normal	25.0		0.35	0.030	Low	0.076
40q	110	0.001	0.2	Normal	30.0	5	0.30	0.035	Min	0.043
	130	0.005	1.4	Normal	50.0	15	0.30	0.040	Min	0.037
	140	0.028	8.1	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.128	36.8	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.003	0.8	Normal	50.0	40	0.25	0.050	Min	0.038
	170	0.005	1.5	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.036	10.3	Normal	50.0	45	0.25	0.060	Min	0.031
	190	0.012	3.4	Normal	50.0	45	0.25	0.060	Min	0.035
	210	0.011	3.2	Normal	65.0	80	0.10	0.035	Min	0.035

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
40q	230	0.001	0.4	Normal	75.0	80	0.10	0.030	Min	0.040
	310	0.003	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	510	0.008	2.3	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.029	8.4	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.017	4.9	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.027	7.7	Normal	75.0	80	0.10	0.035	Min	0.032
	560	0.013	3.7	Normal	75.0	80	0.10	0.035	Min	0.034
	610	0.004	1.1	Normal	75.0	80	0.10	0.030	Min	0.037
	900	0.018	5.1	Normal	25.0		0.35	0.030	Low	0.066
40s	140	0.002	0.8	Normal	50.0	30	0.25	0.045	Min	0.039
	150	0.022	9.0	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.004	1.6	Normal	50.0	40	0.25	0.050	Min	0.038
	170	0.002	0.6	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.002	0.9	Normal	50.0	45	0.25	0.060	Min	0.039
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.024	9.8	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.005	2.1	Normal	65.0	80	0.10	0.030	Min	0.037
	310	0.098	40.0	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.040	16.5	Normal	60.0	55	0.15	0.035	Min	0.031
	410	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	510	0.010	4.0	Normal	75.0	80	0.10	0.035	Min	0.035
	530	0.001	0.4	Normal	75.0	80	0.10	0.035	Min	0.041
	550	0.005	2.2	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.003	1.2	Normal	75.0	80	0.10	0.030	Min	0.038
	900	0.026	10.6	Normal	25.0		0.35	0.030	Low	0.063
42i	120	0.034	12.8	Normal	30.0	5	0.30	0.035	Min	0.032
	130	0.030	11.1	Normal	50.0	15	0.30	0.040	Min	0.032
	140	0.024	8.9	Normal	50.0	30	0.25	0.045	Min	0.033

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
42l	550	0.001	0.4	Normal	75.0	80	0.10	0.035	Min	0.041
	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	720	0.176	65.5	Normal	80.0	5	0.10	0.035	Min	0.027
	740	0.003	1.2	Wet				0.020	Low	0.076
44l	120	0.013	3.6	Normal	30.0	5	0.30	0.035	Min	0.034
	130	0.037	10.5	Normal	50.0	15	0.30	0.040	Min	0.031
	140	0.079	22.6	Normal	50.0	30	0.25	0.045	Min	0.029
	170	0.028	8.1	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.004	1.1	Normal	50.0	45	0.25	0.060	Min	0.038
	190	0.019	5.4	Normal	50.0	45	0.25	0.060	Min	0.033
	210	0.006	1.6	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.000		Normal	65.0	80	0.10	0.030	Min	0.047
	240	0.052	14.8	Normal	65.0	80	0.10	0.030	Min	0.031
	410	0.012	3.5	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.042
	510	0.008	2.4	Normal	75.0	80	0.10	0.035	Min	0.035
	530	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	570	0.009	2.7	Normal	75.0	80	0.10	0.035	Min	0.035
	710	0.038	11.0	Normal	60.0	5	0.10	0.030	Low	0.061
	720	0.040	11.4	Normal	80.0	5	0.10	0.035	Min	0.031
	740	0.003	0.7	Wet				0.020	Low	0.077
	900	0.000	0.1	Normal	25.0		0.35	0.030	Low	0.088
44k	140	0.074	14.6	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.115	22.6	Normal	50.0	30	0.25	0.045	Min	0.028
	170	0.005	0.9	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.003	0.6	Normal	50.0	45	0.25	0.060	Min	0.038
	190	0.130	25.6	Normal	50.0	45	0.25	0.060	Min	0.028
	200	0.004	0.7	Normal	60.0	80	0.10	0.040	Min	0.038
	210	0.008	1.6	Normal	65.0	80	0.10	0.035	Min	0.036

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
44k	220	0.023	4.5	Normal	65.0	80	0.10	0.030	Min	0.033
	240	0.000	0.1	Normal	65.0	80	0.10	0.030	Min	0.044
	310	0.014	2.8	Normal	75.0	80	0.10	0.035	Min	0.034
	320	0.004	0.7	Normal	60.0	55	0.15	0.035	Min	0.038
	410	0.027	5.3	Normal	75.0	80	0.10	0.035	Min	0.032
	420	0.018	3.6	Normal	75.0	80	0.10	0.030	Min	0.033
	510	0.006	1.1	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.063	12.4	Normal	80.0	45	0.29	0.035	Min	0.030
	530	0.007	1.4	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.039
	710	0.003	0.6	Normal	60.0	5	0.10	0.030	Low	0.076
	900	0.002	0.4	Normal	25.0		0.35	0.030	Low	0.078
44m	120	0.006	1.2	Normal	30.0	5	0.30	0.035	Min	0.036
	130	0.013	2.6	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.215	42.6	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.076	15.1	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.003	0.6	Normal	50.0	40	0.25	0.050	Min	0.038
	170	0.025	4.9	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	190	0.041	8.2	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.037	7.3	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.010	2.0	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.002	0.3	Normal	75.0	80	0.10	0.030	Min	0.040
	310	0.005	0.9	Normal	75.0	80	0.10	0.035	Min	0.037
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	410	0.028	5.5	Normal	75.0	80	0.10	0.035	Min	0.032
	520	0.021	4.2	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.016	3.3	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.046

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
44m	570	0.005	0.9	Normal	75.0	80	0.10	0.035	Min	0.037
	710	0.001	0.3	Normal	60.0	5	0.10	0.030	Low	0.081
44o	130	0.012	5.3	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.119	51.9	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.021	9.1	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.005	2.0	Normal	50.0	40	0.25	0.050	Min	0.037
	170	0.002	0.8	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.009	3.8	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.007	3.1	Normal	50.0	45	0.25	0.060	Min	0.036
	200	0.002	1.0	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.006	2.5	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.005	2.2	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.001	0.4	Normal	75.0	80	0.10	0.030	Min	0.041
	410	0.009	4.1	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.009	4.0	Normal	80.0	45	0.29	0.035	Min	0.035
	530	0.005	2.2	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	570	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.042
	710	0.001	0.3	Normal	60.0	5	0.10	0.030	Low	0.085
	740	0.012	5.4	Wet				0.020	Low	0.068
	900	0.004	1.6	Normal	25.0		0.35	0.030	Low	0.075
44p	120	0.002	0.5	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.008	2.1	Normal	50.0	15	0.30	0.040	Min	0.035
	140	0.110	27.1	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.117	28.6	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.007	1.8	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.023	5.6	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.022	5.3	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.022	5.3	Normal	50.0	45	0.25	0.060	Min	0.033

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
44p	200	0.004	0.9	Normal	60.0	80	0.10	0.040	Min	0.038
	210	0.031	7.5	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.015	3.7	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.003	0.7	Normal	75.0	80	0.10	0.030	Min	0.039
	310	0.008	1.9	Normal	75.0	80	0.10	0.035	Min	0.036
	410	0.006	1.4	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.044
	530	0.006	1.6	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.040
	570	0.002	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.002	0.4	Normal	75.0	80	0.10	0.030	Min	0.040
	710	0.001	0.1	Normal	60.0	5	0.10	0.030	Low	0.086
	740	0.011	2.7	Wet				0.020	Low	0.068
	900	0.008	1.9	Normal	25.0		0.35	0.030	Low	0.071
44q	110	0.000	0.1	Normal	30.0	5	0.30	0.035	Min	0.046
	130	0.002	0.6	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.025	6.8	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.039	10.9	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.004	1.1	Normal	50.0	40	0.25	0.050	Min	0.037
	170	0.013	3.7	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.008	2.3	Normal	50.0	45	0.25	0.060	Min	0.035
	210	0.008	2.1	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.001	0.3	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	410	0.002	0.5	Normal	75.0	80	0.10	0.035	Min	0.040
	510	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.227	63.0	Normal	75.0	80	0.10	0.035	Min	0.026
	550	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.039
	900	0.027	7.6	Normal	25.0		0.35	0.030	Low	0.063

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
44s	140	0.001	0.3	Normal	50.0	30	0.25	0.045	Min	0.042
	150	0.013	5.5	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.001	0.5	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.002	0.7	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.003	1.0	Normal	50.0	45	0.25	0.060	Min	0.039
	190	0.001	0.2	Normal	50.0	45	0.25	0.060	Min	0.043
	210	0.036	14.8	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.001	0.5	Normal	65.0	80	0.10	0.030	Min	0.041
	300	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	310	0.048	19.9	Normal	75.0	80	0.10	0.035	Min	0.031
	320	0.023	9.4	Normal	60.0	55	0.15	0.035	Min	0.033
	410	0.002	0.8	Normal	75.0	80	0.10	0.035	Min	0.039
	510	0.009	3.9	Normal	75.0	80	0.10	0.035	Min	0.035
	530	0.016	6.7	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.032	13.2	Normal	75.0	80	0.10	0.035	Min	0.032
	570	0.004	1.7	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.004	1.5	Normal	75.0	80	0.10	0.030	Min	0.038
	710	0.002	0.7	Normal	60.0	5	0.10	0.030	Low	0.080
	900	0.045	18.6	Normal	25.0		0.35	0.030	Low	0.060
44v	310	0.059	25.0	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.027	11.3	Normal	60.0	55	0.15	0.035	Min	0.032
	410	0.026	11.2	Normal	75.0	80	0.10	0.035	Min	0.032
	510	0.006	2.5	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	570	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.042
	610	0.005	2.1	Normal	75.0	80	0.10	0.030	Min	0.037
	740	0.007	3.0	Wet				0.020	Low	0.071
	900	0.105	44.5	Normal	25.0		0.35	0.030	Low	0.055
48i	120	0.172	32.1	Normal	30.0	5	0.30	0.035	Min	0.027

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
48i	130	0.164	30.7	Normal	50.0	15	0.30	0.040	Min	0.027
	140	0.100	18.8	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.008	1.5	Normal	50.0	30	0.25	0.045	Min	0.036
	170	0.000		Normal	50.0	45	0.25	0.055	Min	0.046
	180	0.003	0.6	Normal	50.0	45	0.25	0.060	Min	0.038
	190	0.001	0.3	Normal	50.0	45	0.25	0.060	Min	0.040
	200	0.001	0.1	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.006	1.2	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.005	1.0	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.002	0.4	Normal	75.0	80	0.10	0.030	Min	0.039
	410	0.014	2.6	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.013	2.4	Normal	75.0	80	0.10	0.030	Min	0.034
	530	0.018	3.3	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.005	0.9	Normal	75.0	80	0.10	0.035	Min	0.037
	710	0.006	1.1	Normal	60.0	5	0.10	0.030	Low	0.072
	740	0.002	0.3	Wet				0.020	Low	0.079
	900	0.014	2.7	Normal	25.0		0.35	0.030	Low	0.067
48k	130	0.007	1.4	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.066	13.2	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.067	13.4	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.004	0.9	Normal	50.0	40	0.25	0.050	Min	0.037
	170	0.007	1.4	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.025	5.0	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.085	16.9	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.008	1.6	Normal	60.0	80	0.10	0.040	Min	0.036
	210	0.025	5.0	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.012	2.4	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.044	8.8	Normal	75.0	80	0.10	0.030	Min	0.031
	410	0.016	3.1	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.054	10.7	Normal	75.0	80	0.10	0.030	Min	0.030

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
48k	510	0.009	1.8	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.020	3.9	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.046	9.2	Normal	75.0	80	0.10	0.035	Min	0.031
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	710	0.004	0.9	Normal	60.0	5	0.10	0.030	Low	0.074
	900	0.001	0.3	Normal	25.0		0.35	0.030	Low	0.081
48m	120	0.002	0.4	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.005	1.0	Normal	50.0	15	0.30	0.040	Min	0.037
	140	0.160	33.3	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.140	29.2	Normal	50.0	30	0.25	0.045	Min	0.028
	170	0.006	1.2	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.020	4.2	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.009	1.8	Normal	50.0	45	0.25	0.060	Min	0.035
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.026	5.4	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.042	8.8	Normal	65.0	80	0.10	0.030	Min	0.031
	230	0.002	0.4	Normal	75.0	80	0.10	0.030	Min	0.039
	310	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	410	0.015	3.2	Normal	75.0	80	0.10	0.035	Min	0.034
	510	0.003	0.7	Normal	75.0	80	0.10	0.035	Min	0.038
	520	0.024	4.9	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	570	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	610	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	740	0.015	3.1	Wet				0.020	Low	0.067
	900	0.000	0.1	Normal	25.0		0.35	0.030	Low	0.088
48o	130	0.002	0.2	Normal	50.0	15	0.30	0.040	Min	0.040

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
48o	140	0.093	13.8	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.257	38.0	Normal	50.0	30	0.25	0.045	Min	0.026
	160	0.007	1.1	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.012	1.7	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.009	1.4	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.009	1.3	Normal	50.0	45	0.25	0.060	Min	0.035
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.046
	210	0.037	5.5	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.037	5.5	Normal	65.0	80	0.10	0.030	Min	0.031
	310	0.003	0.4	Normal	75.0	80	0.10	0.035	Min	0.038
	410	0.017	2.6	Normal	75.0	80	0.10	0.035	Min	0.033
	520	0.080	11.8	Normal	80.0	45	0.29	0.035	Min	0.029
	530	0.024	3.5	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	570	0.004	0.5	Normal	75.0	80	0.10	0.035	Min	0.038
	710	0.048	7.0	Normal	60.0	5	0.10	0.030	Low	0.060
	740	0.005	0.8	Wet				0.020	Low	0.073
	900	0.032	4.8	Normal	25.0		0.35	0.030	Low	0.062
48q	130	0.004	1.3	Normal	50.0	15	0.30	0.040	Min	0.037
	140	0.017	5.6	Normal	50.0	30	0.25	0.045	Min	0.034
	150	0.053	17.7	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.002	0.7	Normal	50.0	40	0.25	0.050	Min	0.039
	170	0.001	0.3	Normal	50.0	45	0.25	0.055	Min	0.042
	180	0.003	0.9	Normal	50.0	45	0.25	0.060	Min	0.039
	190	0.058	19.3	Normal	50.0	45	0.25	0.060	Min	0.030
	210	0.020	6.7	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.003	1.1	Normal	65.0	80	0.10	0.030	Min	0.038
	310	0.029	9.6	Normal	75.0	80	0.10	0.035	Min	0.032
	320	0.002	0.6	Normal	60.0	55	0.15	0.035	Min	0.040
	410	0.009	2.9	Normal	75.0	80	0.10	0.035	Min	0.035

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
48q	520	0.007	2.4	Normal	80.0	45	0.29	0.035	Min	0.036
	530	0.007	2.4	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.009	2.9	Normal	75.0	80	0.10	0.035	Min	0.035
	610	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	710	0.002	0.5	Normal	60.0	5	0.10	0.030	Low	0.080
	900	0.075	24.8	Normal	25.0		0.35	0.030	Low	0.057
48s	150	0.004	1.7	Normal	50.0	30	0.25	0.045	Min	0.038
	180	0.002	0.8	Normal	50.0	45	0.25	0.060	Min	0.040
	210	0.041	19.0	Normal	65.0	80	0.10	0.035	Min	0.031
	310	0.077	36.0	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.016	7.3	Normal	60.0	55	0.15	0.035	Min	0.034
	410	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	510	0.012	5.7	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.022	10.2	Normal	75.0	80	0.10	0.035	Min	0.033
	610	0.002	1.0	Normal	75.0	80	0.10	0.030	Min	0.039
	900	0.039	18.3	Normal	25.0		0.35	0.030	Low	0.061
48v	210	0.013	4.2	Normal	65.0	80	0.10	0.035	Min	0.034
	310	0.131	44.0	Normal	75.0	80	0.10	0.035	Min	0.028
	320	0.019	6.4	Normal	60.0	55	0.15	0.035	Min	0.033
	410	0.018	5.9	Normal	75.0	80	0.10	0.035	Min	0.033
	510	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	570	0.105	35.1	Normal	75.0	80	0.10	0.035	Min	0.029
	610	0.006	2.1	Normal	75.0	80	0.10	0.030	Min	0.036
	740	0.006	2.0	Wet				0.020	Low	0.072
	900	0.001	0.2	Normal	25.0		0.35	0.030	Low	0.087
52g	120	0.063	23.8	Normal	30.0	5	0.30	0.035	Min	0.030
	130	0.032	12.2	Normal	50.0	15	0.30	0.040	Min	0.032
	140	0.101	38.2	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.001	0.5	Normal	50.0	30	0.25	0.045	Min	0.040

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
52g	160	0.001	0.4	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.002	0.8	Normal	50.0	45	0.25	0.055	Min	0.039
	180	0.017	6.2	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.003	1.1	Normal	50.0	45	0.25	0.060	Min	0.038
	210	0.001	0.2	Normal	65.0	80	0.10	0.035	Min	0.043
	410	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	530	0.016	6.1	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	710	0.015	5.5	Normal	60.0	5	0.10	0.030	Low	0.067
	740	0.004	1.6	Wet				0.020	Low	0.074
	900	0.007	2.6	Normal	25.0		0.35	0.030	Low	0.071
52i	130	0.004	1.2	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.100	32.5	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.086	27.9	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	170	0.010	3.4	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.017	5.4	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.041	13.4	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.001	0.5	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.008	2.6	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.006	2.0	Normal	65.0	80	0.10	0.030	Min	0.036
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	410	0.001	0.4	Normal	75.0	80	0.10	0.035	Min	0.041
	420	0.001	0.3	Normal	75.0	80	0.10	0.030	Min	0.041
	520	0.001	0.4	Normal	80.0	45	0.29	0.035	Min	0.040
	530	0.008	2.4	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.004	1.4	Normal	75.0	80	0.10	0.030	Min	0.037
	710	0.018	5.7	Normal	60.0	5	0.10	0.030	Low	0.066
	900	0.001	0.4	Normal	25.0		0.35	0.030	Low	0.082

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
52k	130	0.001	0.2	Normal	50.0	15	0.30	0.040	Min	0.042
	140	0.021	7.2	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.146	49.6	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.004	1.2	Normal	50.0	40	0.25	0.050	Min	0.038
	170	0.001	0.4	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.005	1.5	Normal	50.0	45	0.25	0.060	Min	0.037
	190	0.005	1.7	Normal	50.0	45	0.25	0.060	Min	0.037
	200	0.003	0.9	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.013	4.4	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.004	1.3	Normal	65.0	80	0.10	0.030	Min	0.038
	230	0.065	21.9	Normal	75.0	80	0.10	0.030	Min	0.030
	310	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	410	0.006	2.0	Normal	75.0	80	0.10	0.035	Min	0.036
	420	0.001	0.4	Normal	75.0	80	0.10	0.030	Min	0.040
	530	0.003	1.0	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.004	1.4	Normal	75.0	80	0.10	0.035	Min	0.037
	710	0.007	2.5	Normal	60.0	5	0.10	0.030	Low	0.071
	900	0.006	1.9	Normal	25.0		0.35	0.030	Low	0.072
52m	140	0.012	6.7	Normal	50.0	30	0.25	0.045	Min	0.034
	150	0.086	48.6	Normal	50.0	30	0.25	0.045	Min	0.029
	170	0.003	1.6	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.005	2.5	Normal	50.0	45	0.25	0.060	Min	0.037
	190	0.006	3.2	Normal	50.0	45	0.25	0.060	Min	0.036
	210	0.006	3.1	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.006	3.6	Normal	65.0	80	0.10	0.030	Min	0.036
	410	0.003	1.8	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.043
	570	0.002	0.9	Normal	75.0	80	0.10	0.035	Min	0.040
	610	0.001	0.5	Normal	75.0	80	0.10	0.030	Min	0.041
	710	0.029	16.1	Normal	60.0	5	0.10	0.030	Low	0.063

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
52m	740	0.014	7.9	Wet				0.020	Low	0.067
	900	0.006	3.1	Normal	25.0		0.35	0.030	Low	0.072
52o	120	0.007	1.1	Normal	30.0	5	0.30	0.035	Min	0.036
	130	0.002	0.3	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.052	8.1	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.265	41.0	Normal	50.0	30	0.25	0.045	Min	0.026
	160	0.009	1.3	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.012	1.9	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.024	3.8	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.078	12.1	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.001	0.1	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.031	4.7	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.026	4.1	Normal	65.0	80	0.10	0.030	Min	0.032
	230	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.041
	310	0.022	3.4	Normal	75.0	80	0.10	0.035	Min	0.033
	320	0.001	0.1	Normal	60.0	55	0.15	0.035	Min	0.042
	410	0.014	2.2	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.001	0.1	Normal	80.0	45	0.29	0.035	Min	0.041
	530	0.052	8.0	Normal	75.0	80	0.10	0.035	Min	0.030
	550	0.004	0.5	Normal	75.0	80	0.10	0.035	Min	0.038
	570	0.002	0.2	Normal	75.0	80	0.10	0.035	Min	0.040
	610	0.005	0.7	Normal	75.0	80	0.10	0.030	Min	0.037
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.088
	900	0.038	5.8	Normal	25.0		0.35	0.030	Low	0.061
52q	140	0.011	2.7	Normal	50.0	30	0.25	0.045	Min	0.035
	150	0.029	7.4	Normal	50.0	30	0.25	0.045	Min	0.032
	170	0.007	1.9	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.079	20.1	Normal	50.0	45	0.25	0.060	Min	0.029
	190	0.000		Normal	50.0	45	0.25	0.060	Min	0.047

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
52q	200	0.001	0.4	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.041	10.5	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.018	4.5	Normal	65.0	80	0.10	0.030	Min	0.033
	310	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	410	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	510	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	520	0.022	5.6	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.066	16.6	Normal	75.0	80	0.10	0.035	Min	0.030
	550	0.017	4.4	Normal	75.0	80	0.10	0.035	Min	0.033
	570	0.004	1.0	Normal	75.0	80	0.10	0.035	Min	0.038
	610	0.021	5.2	Normal	75.0	80	0.10	0.030	Min	0.033
	710	0.009	2.3	Normal	60.0	5	0.10	0.030	Low	0.069
	900	0.068	17.1	Normal	25.0		0.35	0.030	Low	0.058
52s	140	0.001	0.3	Normal	50.0	30	0.25	0.045	Min	0.042
	150	0.040	15.0	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.043
	170	0.004	1.6	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.002	0.8	Normal	50.0	45	0.25	0.060	Min	0.039
	190	0.030	11.2	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.016	5.9	Normal	65.0	80	0.10	0.035	Min	0.034
	310	0.132	50.0	Normal	75.0	80	0.10	0.035	Min	0.028
	320	0.003	1.2	Normal	60.0	55	0.15	0.035	Min	0.038
	410	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.040
	510	0.002	0.8	Normal	75.0	80	0.10	0.035	Min	0.039
	530	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	540	0.001	0.5	Normal	90.0	5	0.10	0.035	Low	0.081
	550	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.042
	610	0.001	0.5	Normal	75.0	80	0.10	0.030	Min	0.041
	900	0.029	11.1	Normal	25.0		0.35	0.030	Low	0.062

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
52t	310	0.007	2.4	Normal	75.0	80	0.10	0.035	Min	0.036
	410	0.181	60.8	Normal	75.0	80	0.10	0.035	Min	0.027
	550	0.019	6.3	Normal	75.0	80	0.10	0.035	Min	0.033
	710	0.025	8.6	Normal	60.0	5	0.10	0.030	Low	0.063
	900	0.065	21.9	Normal	25.0		0.35	0.030	Low	0.058
52u	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	210	0.001	0.4	Normal	65.0	80	0.10	0.035	Min	0.040
	310	0.024	6.1	Normal	75.0	80	0.10	0.035	Min	0.033
	410	0.085	21.7	Normal	75.0	80	0.10	0.035	Min	0.029
	550	0.008	2.0	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.005	1.3	Normal	75.0	80	0.10	0.030	Min	0.037
	710	0.005	1.3	Normal	60.0	5	0.10	0.030	Low	0.073
	900	0.263	67.3	Normal	25.0		0.35	0.030	Low	0.049
52v	140	0.003	0.9	Normal	50.0	30	0.25	0.045	Min	0.038
	150	0.020	6.8	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.046
	210	0.036	11.9	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.001	0.3	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.065	21.7	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.032	10.6	Normal	60.0	55	0.15	0.035	Min	0.032
	410	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	550	0.003	0.9	Normal	75.0	80	0.10	0.035	Min	0.039
	570	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	710	0.001	0.4	Normal	60.0	5	0.10	0.030	Low	0.082
	740	0.013	4.2	Wet				0.020	Low	0.068
	900	0.125	41.9	Normal	25.0		0.35	0.030	Low	0.054
54g	120	0.002	0.8	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.008	3.4	Normal	50.0	15	0.30	0.040	Min	0.035

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
54g	140	0.082	33.1	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.028	11.4	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.002	0.6	Normal	50.0	40	0.25	0.050	Min	0.040
	170	0.002	0.8	Normal	50.0	45	0.25	0.055	Min	0.039
	180	0.034	13.6	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.026	10.6	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.001	0.5	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.015	5.9	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.014	5.7	Normal	65.0	80	0.10	0.030	Min	0.034
	310	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.040
	410	0.002	0.9	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.014	5.7	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	570	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	710	0.010	4.1	Normal	60.0	5	0.10	0.030	Low	0.069
	740	0.004	1.7	Wet				0.020	Low	0.074
	750	0.001	0.3	Normal	85.0		0.50	0.100	Low	0.084
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
54i	130	0.000	0.2	Normal	50.0	15	0.30	0.040	Min	0.044
	140	0.044	23.1	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.014	7.0	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.046
	170	0.007	3.7	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.013	6.7	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.003	1.6	Normal	50.0	45	0.25	0.060	Min	0.038
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.011	5.9	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.020	10.2	Normal	65.0	80	0.10	0.030	Min	0.033
	310	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.041

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
54i	410	0.020	10.2	Normal	75.0	80	0.10	0.035	Min	0.033
	420	0.006	3.0	Normal	75.0	80	0.10	0.030	Min	0.036
	510	0.004	1.9	Normal	75.0	80	0.10	0.035	Min	0.038
	520	0.029	15.3	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.001	0.7	Normal	75.0	80	0.10	0.035	Min	0.040
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	710	0.016	8.5	Normal	60.0	5	0.10	0.030	Low	0.066
	750	0.001	0.4	Normal	85.0		0.50	0.100	Low	0.084
	900	0.001	0.7	Normal	25.0		0.35	0.030	Low	0.081
54k	130	0.005	2.2	Normal	50.0	15	0.30	0.040	Min	0.037
	140	0.016	6.5	Normal	50.0	30	0.25	0.045	Min	0.034
	150	0.043	17.6	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	170	0.007	2.9	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.004	1.7	Normal	50.0	45	0.25	0.060	Min	0.037
	190	0.041	16.6	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.003	1.2	Normal	60.0	80	0.10	0.040	Min	0.038
	210	0.021	8.7	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.034	13.7	Normal	65.0	80	0.10	0.030	Min	0.032
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.043
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.019	7.8	Normal	75.0	80	0.10	0.035	Min	0.033
	420	0.024	9.8	Normal	75.0	80	0.10	0.030	Min	0.033
	520	0.004	1.6	Normal	80.0	45	0.29	0.035	Min	0.038
	530	0.004	1.7	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.002	1.0	Normal	75.0	80	0.10	0.030	Min	0.039
	710	0.004	1.8	Normal	60.0	5	0.10	0.030	Low	0.074
	740	0.011	4.4	Wet				0.020	Low	0.069
	900	0.001	0.5	Normal	25.0		0.35	0.030	Low	0.082

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
54m	130	0.005	1.7	Normal	50.0	15	0.30	0.040	Min	0.037
	140	0.040	14.8	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.070	25.8	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.009	3.4	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.010	3.5	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.015	5.6	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.031	11.4	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.011	3.9	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.015	5.5	Normal	65.0	80	0.10	0.030	Min	0.034
	310	0.003	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.017	6.1	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.004	1.6	Normal	75.0	80	0.10	0.030	Min	0.037
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.026	9.7	Normal	75.0	80	0.10	0.035	Min	0.032
	610	0.002	0.8	Normal	75.0	80	0.10	0.030	Min	0.039
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.090
	740	0.005	1.7	Wet				0.020	Low	0.074
	900	0.009	3.2	Normal	25.0		0.35	0.030	Low	0.070
56e	130	0.004	2.1	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.127	72.0	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.015	8.4	Normal	50.0	30	0.25	0.045	Min	0.034
	170	0.011	6.2	Normal	50.0	45	0.25	0.055	Min	0.035
	210	0.000	0.1	Normal	65.0	80	0.10	0.035	Min	0.046
	220	0.006	3.4	Normal	65.0	80	0.10	0.030	Min	0.036
	520	0.008	4.6	Normal	80.0	45	0.29	0.035	Min	0.036
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.047
	710	0.001	0.7	Normal	60.0	5	0.10	0.030	Low	0.082
	740	0.004	2.5	Wet				0.020	Low	0.074
	900	0.000	0.1	Normal	25.0		0.35	0.030	Low	0.096

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
56g	120	0.001	0.3	Normal	30.0	5	0.30	0.035	Min	0.040
	130	0.014	2.8	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.268	53.5	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.012	2.4	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.003	0.6	Normal	50.0	40	0.25	0.050	Min	0.038
	170	0.029	5.8	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.050	10.0	Normal	50.0	45	0.25	0.060	Min	0.031
	190	0.080	16.0	Normal	50.0	45	0.25	0.060	Min	0.029
	210	0.011	2.3	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.009	1.8	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	410	0.008	1.6	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.001	0.3	Normal	80.0	45	0.29	0.035	Min	0.040
	530	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	710	0.004	0.8	Normal	60.0	5	0.10	0.030	Low	0.075
	750	0.004	0.8	Normal	85.0		0.50	0.100	Low	0.074
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
56i	130	0.002	0.4	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.228	45.6	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.057	11.3	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.007	1.4	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.023	4.6	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.026	5.3	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.034	6.7	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.064	12.8	Normal	65.0	80	0.10	0.035	Min	0.030
	220	0.014	2.8	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	310	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
56i	410	0.022	4.3	Normal	75.0	80	0.10	0.035	Min	0.033
	530	0.007	1.5	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	610	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	710	0.002	0.4	Normal	60.0	5	0.10	0.030	Low	0.079
	750	0.008	1.7	Normal	85.0		0.50	0.100	Low	0.070
56k	120	0.003	0.6	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.003	0.8	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.030	7.2	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.066	15.6	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.003	0.7	Normal	50.0	40	0.25	0.050	Min	0.038
	180	0.015	3.4	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.063	14.8	Normal	50.0	45	0.25	0.060	Min	0.030
	210	0.087	20.6	Normal	65.0	80	0.10	0.035	Min	0.029
	220	0.010	2.4	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	310	0.007	1.6	Normal	75.0	80	0.10	0.035	Min	0.036
	320	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	410	0.015	3.4	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.030	7.0	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.041	9.7	Normal	75.0	80	0.10	0.035	Min	0.031
	610	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	710	0.030	7.1	Normal	60.0	5	0.10	0.030	Low	0.062
	740	0.013	3.1	Wet				0.020	Low	0.067
	900	0.008	1.8	Normal	25.0		0.35	0.030	Low	0.070
56m	120	0.006	1.1	Normal	30.0	5	0.30	0.035	Min	0.036
	130	0.056	9.6	Normal	50.0	15	0.30	0.040	Min	0.030
	140	0.085	14.8	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.166	28.7	Normal	50.0	30	0.25	0.045	Min	0.027

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
56m	160	0.003	0.6	Normal	50.0	40	0.25	0.050	Min	0.038
	170	0.004	0.8	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.009	1.6	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.055	9.6	Normal	50.0	45	0.25	0.060	Min	0.030
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.044
	210	0.029	5.0	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.015	2.7	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	310	0.026	4.5	Normal	75.0	80	0.10	0.035	Min	0.032
	410	0.041	7.0	Normal	75.0	80	0.10	0.035	Min	0.031
	520	0.043	7.5	Normal	80.0	45	0.29	0.035	Min	0.031
	530	0.011	2.0	Normal	75.0	80	0.10	0.035	Min	0.035
	540	0.000		Normal	90.0	5	0.10	0.035	Low	0.096
	550	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.039
	570	0.005	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	720	0.000		Normal	80.0	5	0.10	0.035	Min	0.047
	740	0.003	0.6	Wet				0.020	Low	0.075
	900	0.015	2.7	Normal	25.0		0.35	0.030	Low	0.066
56o	120	0.005	0.8	Normal	30.0	5	0.30	0.035	Min	0.037
	130	0.002	0.3	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.107	16.8	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.316	49.5	Normal	50.0	30	0.25	0.045	Min	0.026
	160	0.007	1.2	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.016	2.5	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.018	2.8	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.001	0.2	Normal	50.0	45	0.25	0.060	Min	0.040
	200	0.033	5.1	Normal	60.0	80	0.10	0.040	Min	0.032
	210	0.031	4.8	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.011	1.8	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.004	0.6	Normal	75.0	80	0.10	0.030	Min	0.038

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
56o	310	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.040
	320	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	410	0.012	1.8	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.011	1.7	Normal	80.0	45	0.29	0.035	Min	0.035
	530	0.022	3.4	Normal	75.0	80	0.10	0.035	Min	0.033
	540	0.001	0.1	Normal	90.0	5	0.10	0.035	Low	0.083
	550	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.038
	570	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.038
	610	0.002	0.3	Normal	75.0	80	0.10	0.030	Min	0.040
	710	0.018	2.9	Normal	60.0	5	0.10	0.030	Low	0.065
	730	0.001	0.2	Normal	80.0		0.10	0.030	Low	0.082
	900	0.012	1.9	Normal	25.0		0.35	0.030	Low	0.068
56q	130	0.002	0.5	Normal	50.0	15	0.30	0.040	Min	0.040
	140	0.024	6.8	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.177	49.8	Normal	50.0	30	0.25	0.045	Min	0.027
	160	0.014	3.9	Normal	50.0	40	0.25	0.050	Min	0.034
	170	0.028	7.8	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.020	5.7	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.003	0.9	Normal	50.0	45	0.25	0.060	Min	0.038
	200	0.002	0.6	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.021	6.0	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.002	0.7	Normal	65.0	80	0.10	0.030	Min	0.039
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	310	0.004	1.0	Normal	75.0	80	0.10	0.035	Min	0.038
	320	0.001	0.3	Normal	60.0	55	0.15	0.035	Min	0.041
	520	0.017	4.9	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.006	1.6	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	610	0.002	0.6	Normal	75.0	80	0.10	0.030	Min	0.039
	900	0.031	8.8	Normal	25.0		0.35	0.030	Low	0.062

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
56s	140	0.004	1.6	Normal	50.0	30	0.25	0.045	Min	0.037
	150	0.026	10.2	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.043
	170	0.006	2.4	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.011	4.1	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.004	1.7	Normal	50.0	45	0.25	0.060	Min	0.037
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.024	9.2	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.005	1.9	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.043
	310	0.060	23.4	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.012	4.8	Normal	60.0	55	0.15	0.035	Min	0.034
	410	0.010	3.8	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.020	7.7	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.020	8.0	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.041
	610	0.005	1.8	Normal	75.0	80	0.10	0.030	Min	0.037
	710	0.018	6.9	Normal	60.0	5	0.10	0.030	Low	0.066
	900	0.029	11.5	Normal	25.0		0.35	0.030	Low	0.062
56t	140	0.000	0.1	Normal	50.0	30	0.25	0.045	Min	0.047
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.047
	210	0.005	2.7	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.001	0.6	Normal	65.0	80	0.10	0.030	Min	0.041
	300	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.046
	310	0.095	52.9	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.063	35.1	Normal	60.0	55	0.15	0.035	Min	0.030
	530	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	550	0.005	2.8	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.004	2.4	Normal	75.0	80	0.10	0.030	Min	0.037

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
56t	710	0.003	1.4	Normal	60.0	5	0.10	0.030	Low	0.077
	900	0.003	1.7	Normal	25.0		0.35	0.030	Low	0.076
56u	140	0.037	11.4	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.029	8.8	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.019	5.9	Normal	50.0	40	0.25	0.050	Min	0.033
	170	0.001	0.2	Normal	50.0	45	0.25	0.055	Min	0.042
	180	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	210	0.004	1.3	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.043	13.2	Normal	65.0	80	0.10	0.030	Min	0.031
	300	0.001	0.4	Normal	60.0	55	0.15	0.035	Min	0.041
	310	0.004	1.3	Normal	75.0	80	0.10	0.035	Min	0.037
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	520	0.015	4.6	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.007	2.1	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.036	11.2	Normal	75.0	80	0.10	0.035	Min	0.031
	610	0.009	2.8	Normal	75.0	80	0.10	0.030	Min	0.035
	710	0.037	11.4	Normal	60.0	5	0.10	0.030	Low	0.061
	900	0.083	25.3	Normal	25.0		0.35	0.030	Low	0.056
56v	140	0.006	2.4	Normal	50.0	30	0.25	0.045	Min	0.037
	150	0.020	8.6	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.001	0.4	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.001	0.3	Normal	50.0	45	0.25	0.055	Min	0.042
	200	0.001	0.3	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.028	12.1	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.001	0.2	Normal	65.0	80	0.10	0.030	Min	0.043
	300	0.001	0.2	Normal	60.0	55	0.15	0.035	Min	0.043
	310	0.066	28.6	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.008	3.4	Normal	60.0	55	0.15	0.035	Min	0.036
	410	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.041

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
56v	530	0.002	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	550	0.009	3.8	Normal	75.0	80	0.10	0.035	Min	0.035
	710	0.011	4.6	Normal	60.0	5	0.10	0.030	Low	0.069
	740	0.007	3.2	Wet				0.020	Low	0.071
	900	0.070	30.4	Normal	25.0		0.35	0.030	Low	0.057
60e	120	0.010	2.4	Normal	30.0	5	0.30	0.035	Min	0.035
	130	0.014	3.5	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.218	53.6	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.049	12.1	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.015	3.6	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.002	0.5	Normal	50.0	45	0.25	0.060	Min	0.039
	190	0.008	1.9	Normal	50.0	45	0.25	0.060	Min	0.036
	200	0.008	2.0	Normal	60.0	80	0.10	0.040	Min	0.036
	210	0.005	1.3	Normal	65.0	80	0.10	0.035	Min	0.037
	220	0.015	3.8	Normal	65.0	80	0.10	0.030	Min	0.034
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.002	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.020	4.8	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.016	3.9	Normal	75.0	80	0.10	0.035	Min	0.034
	710	0.015	3.7	Normal	60.0	5	0.10	0.030	Low	0.066
	740	0.005	1.2	Wet				0.020	Low	0.073
	900	0.004	1.0	Normal	25.0		0.35	0.030	Low	0.074
60g	120	0.003	0.7	Normal	30.0	5	0.30	0.035	Min	0.038
	130	0.009	1.8	Normal	50.0	15	0.30	0.040	Min	0.035
	140	0.171	34.3	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.097	19.3	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.006	1.2	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.037	7.4	Normal	50.0	45	0.25	0.055	Min	0.031

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
60g	180	0.045	8.9	Normal	50.0	45	0.25	0.060	Min	0.031
	190	0.036	7.1	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.025	5.0	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.012	2.4	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.042
	410	0.010	1.9	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.018	3.6	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.012	2.3	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.011	2.3	Normal	75.0	80	0.10	0.035	Min	0.035
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	610	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.043
	710	0.003	0.6	Normal	60.0	5	0.10	0.030	Low	0.076
	900	0.004	0.8	Normal	25.0		0.35	0.030	Low	0.074
60i	120	0.002	0.4	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.003	0.6	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.094	18.8	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.121	24.2	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.004	0.7	Normal	50.0	40	0.25	0.050	Min	0.038
	170	0.025	5.0	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.014	2.8	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.089	17.8	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.036	7.2	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.050	10.0	Normal	65.0	80	0.10	0.030	Min	0.031
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	310	0.003	0.7	Normal	75.0	80	0.10	0.035	Min	0.038
	410	0.046	9.2	Normal	75.0	80	0.10	0.035	Min	0.031
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.010	1.9	Normal	75.0	80	0.10	0.035	Min	0.035

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
60i	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	610	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.042
	710	0.001	0.2	Normal	60.0	5	0.10	0.030	Low	0.082
	900	0.000	0.1	Normal	25.0		0.35	0.030	Low	0.088
60k	130	0.001	0.3	Normal	50.0	15	0.30	0.040	Min	0.041
	140	0.029	10.9	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.064	24.0	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.002	0.6	Normal	50.0	40	0.25	0.050	Min	0.040
	170	0.008	3.0	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.010	3.8	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.044	16.6	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.002	0.9	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.033	12.2	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.014	5.4	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.001	0.5	Normal	75.0	80	0.10	0.030	Min	0.040
	310	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	410	0.021	7.8	Normal	75.0	80	0.10	0.035	Min	0.033
	420	0.014	5.4	Normal	75.0	80	0.10	0.030	Min	0.034
	520	0.001	0.3	Normal	80.0	45	0.29	0.035	Min	0.042
	530	0.004	1.6	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.005	2.0	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.002	0.6	Normal	75.0	80	0.10	0.030	Min	0.040
	740	0.010	3.6	Wet				0.020	Low	0.069
	900	0.001	0.5	Normal	25.0		0.35	0.030	Low	0.081
60l	130	0.005	2.0	Normal	50.0	15	0.30	0.040	Min	0.037
	140	0.047	20.1	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.035	14.8	Normal	50.0	30	0.25	0.045	Min	0.032

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
60l	160	0.010	4.2	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.008	3.2	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.039	16.6	Normal	50.0	45	0.25	0.060	Min	0.031
	190	0.009	3.8	Normal	50.0	45	0.25	0.060	Min	0.035
	210	0.033	13.9	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.010	4.4	Normal	65.0	80	0.10	0.030	Min	0.035
	410	0.003	1.3	Normal	75.0	80	0.10	0.035	Min	0.038
	520	0.019	8.0	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.008	3.3	Normal	75.0	80	0.10	0.035	Min	0.036
	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	740	0.003	1.1	Wet				0.020	Low	0.077
	900	0.007	3.2	Normal	25.0		0.35	0.030	Low	0.071
60m	120	0.003	0.6	Normal	30.0	5	0.30	0.035	Min	0.038
	130	0.058	11.5	Normal	50.0	15	0.30	0.040	Min	0.030
	140	0.037	7.5	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.106	21.2	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.042
	170	0.015	3.0	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.003	0.5	Normal	50.0	45	0.25	0.060	Min	0.039
	190	0.030	5.9	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.001	0.1	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.021	4.1	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.005	0.9	Normal	65.0	80	0.10	0.030	Min	0.037
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.029	5.8	Normal	75.0	80	0.10	0.035	Min	0.032
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.044
	530	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	570	0.024	4.9	Normal	75.0	80	0.10	0.035	Min	0.033
	610	0.006	1.1	Normal	75.0	80	0.10	0.030	Min	0.037
	710	0.004	0.8	Normal	60.0	5	0.10	0.030	Low	0.075

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
60m	720	0.153	30.6	Normal	80.0	5	0.10	0.035	Min	0.028
	900	0.003	0.6	Normal	25.0		0.35	0.030	Low	0.077
60o	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	140	0.079	12.3	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.246	38.4	Normal	50.0	30	0.25	0.045	Min	0.026
	160	0.012	1.8	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.017	2.6	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.012	1.9	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.001	0.1	Normal	50.0	45	0.25	0.060	Min	0.042
	200	0.002	0.4	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.023	3.5	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.009	1.4	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	310	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.038
	320	0.004	0.7	Normal	60.0	55	0.15	0.035	Min	0.037
	410	0.008	1.2	Normal	75.0	80	0.10	0.035	Min	0.036
	420	0.002	0.4	Normal	75.0	80	0.10	0.030	Min	0.039
	520	0.069	10.8	Normal	80.0	45	0.29	0.035	Min	0.030
	530	0.133	20.8	Normal	75.0	80	0.10	0.035	Min	0.028
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.044
	610	0.012	1.9	Normal	75.0	80	0.10	0.030	Min	0.034
	710	0.004	0.6	Normal	60.0	5	0.10	0.030	Low	0.075
	900	0.004	0.6	Normal	25.0		0.35	0.030	Low	0.075
60q	140	0.036	10.1	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.104	29.4	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.025	7.2	Normal	50.0	40	0.25	0.050	Min	0.032
	170	0.023	6.4	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.031	8.8	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.004	1.2	Normal	50.0	45	0.25	0.060	Min	0.037

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
60q	200	0.001	0.3	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.013	3.8	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.003	0.7	Normal	65.0	80	0.10	0.030	Min	0.039
	310	0.008	2.2	Normal	75.0	80	0.10	0.035	Min	0.036
	320	0.002	0.4	Normal	60.0	55	0.15	0.035	Min	0.040
	410	0.003	0.9	Normal	75.0	80	0.10	0.035	Min	0.038
	510	0.006	1.7	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.026	7.4	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.008	2.3	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.005	1.5	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.002	0.6	Normal	75.0	80	0.10	0.030	Min	0.039
	710	0.008	2.2	Normal	60.0	5	0.10	0.030	Low	0.070
	900	0.046	13.1	Normal	25.0		0.35	0.030	Low	0.060
60s	140	0.005	2.1	Normal	50.0	30	0.25	0.045	Min	0.037
	150	0.014	5.4	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	180	0.001	0.4	Normal	50.0	45	0.25	0.060	Min	0.041
	190	0.033	13.0	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.008	3.2	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.011	4.2	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.003	1.1	Normal	75.0	80	0.10	0.030	Min	0.038
	310	0.041	16.1	Normal	75.0	80	0.10	0.035	Min	0.031
	320	0.020	7.7	Normal	60.0	55	0.15	0.035	Min	0.033
	410	0.022	8.8	Normal	75.0	80	0.10	0.035	Min	0.033
	510	0.002	0.9	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.007	2.9	Normal	80.0	45	0.29	0.035	Min	0.036
	530	0.027	10.8	Normal	75.0	80	0.10	0.035	Min	0.032
	540	0.001	0.6	Normal	90.0	5	0.10	0.035	Low	0.081
	550	0.034	13.4	Normal	75.0	80	0.10	0.035	Min	0.032
	610	0.019	7.7	Normal	75.0	80	0.10	0.030	Min	0.033

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
60s	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	900	0.004	1.6	Normal	25.0		0.35	0.030	Low	0.074
60t	140	0.003	0.9	Normal	50.0	30	0.25	0.045	Min	0.038
	150	0.008	2.4	Normal	50.0	30	0.25	0.045	Min	0.036
	160	0.017	5.3	Normal	50.0	40	0.25	0.050	Min	0.033
	170	0.002	0.6	Normal	50.0	45	0.25	0.055	Min	0.039
	180	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	210	0.025	7.6	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.001	0.3	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.055	16.7	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.027	8.2	Normal	60.0	55	0.15	0.035	Min	0.032
	410	0.004	1.1	Normal	75.0	80	0.10	0.035	Min	0.038
	520	0.001	0.2	Normal	80.0	45	0.29	0.035	Min	0.042
	570	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	610	0.111	34.0	Normal	75.0	80	0.10	0.030	Min	0.028
	900	0.074	22.5	Normal	25.0		0.35	0.030	Low	0.057
60u	130	0.002	0.7	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.020	7.0	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.104	36.5	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.011	3.9	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.003	1.1	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.002	0.8	Normal	50.0	45	0.25	0.060	Min	0.039
	210	0.017	6.1	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.001	0.4	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.012	4.0	Normal	75.0	80	0.10	0.035	Min	0.035
	320	0.030	10.5	Normal	60.0	55	0.15	0.035	Min	0.032
	410	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	520	0.016	5.5	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.008	2.8	Normal	75.0	80	0.10	0.035	Min	0.036

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
60u	550	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	570	0.005	1.6	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.043
	710	0.011	3.9	Normal	60.0	5	0.10	0.030	Low	0.068
	900	0.042	14.6	Normal	25.0		0.35	0.030	Low	0.060
60v	140	0.000	0.2	Normal	50.0	30	0.25	0.045	Min	0.044
	150	0.010	4.2	Normal	50.0	30	0.25	0.045	Min	0.035
	160	0.001	0.5	Normal	50.0	40	0.25	0.050	Min	0.041
	210	0.001	0.6	Normal	65.0	80	0.10	0.035	Min	0.040
	310	0.096	41.8	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.083	36.5	Normal	60.0	55	0.15	0.035	Min	0.029
	410	0.002	0.9	Normal	75.0	80	0.10	0.035	Min	0.039
	530	0.002	0.8	Normal	75.0	80	0.10	0.035	Min	0.040
	740	0.005	2.1	Wet				0.020	Low	0.073
	900	0.028	12.4	Normal	25.0		0.35	0.030	Low	0.063
64c	130	0.004	1.5	Normal	50.0	15	0.30	0.040	Min	0.037
	140	0.120	45.3	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.033	12.6	Normal	50.0	30	0.25	0.045	Min	0.032
	170	0.031	11.7	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.012	4.5	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.045	17.2	Normal	50.0	45	0.25	0.060	Min	0.031
	210	0.002	0.7	Normal	65.0	80	0.10	0.035	Min	0.040
	410	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.040
	530	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	710	0.010	3.8	Normal	60.0	5	0.10	0.030	Low	0.069
	740	0.006	2.2	Wet				0.020	Low	0.072
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
64e	120	0.025	4.9	Normal	30.0	5	0.30	0.035	Min	0.033
	130	0.092	18.3	Normal	50.0	15	0.30	0.040	Min	0.029

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64e	140	0.338	67.3	Normal	50.0	30	0.25	0.045	Min	0.025
	150	0.000		Normal	50.0	30	0.25	0.045	Min	0.047
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.008	1.5	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.011	2.1	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.000		Normal	50.0	45	0.25	0.060	Min	0.047
	210	0.004	0.7	Normal	65.0	80	0.10	0.035	Min	0.038
	220	0.002	0.3	Normal	65.0	80	0.10	0.030	Min	0.040
	310	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.042
	530	0.012	2.4	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	710	0.008	1.5	Normal	60.0	5	0.10	0.030	Low	0.070
	900	0.003	0.7	Normal	25.0		0.35	0.030	Low	0.075
64g	120	0.022	4.4	Normal	30.0	5	0.30	0.035	Min	0.033
	130	0.068	13.6	Normal	50.0	15	0.30	0.040	Min	0.030
	140	0.301	60.0	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.008	1.5	Normal	50.0	30	0.25	0.045	Min	0.036
	160	0.002	0.5	Normal	50.0	40	0.25	0.050	Min	0.039
	170	0.003	0.7	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.011	2.2	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.009	1.9	Normal	50.0	45	0.25	0.060	Min	0.035
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.010	2.0	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.008	1.5	Normal	65.0	80	0.10	0.030	Min	0.036
	230	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.043
	410	0.012	2.4	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.002	0.3	Normal	80.0	45	0.29	0.035	Min	0.040
	530	0.034	6.7	Normal	75.0	80	0.10	0.035	Min	0.032
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	570	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64g	710	0.006	1.1	Normal	60.0	5	0.10	0.030	Low	0.072
	900	0.002	0.5	Normal	25.0		0.35	0.030	Low	0.078
64i	120	0.028	5.7	Normal	30.0	5	0.30	0.035	Min	0.032
	130	0.033	6.5	Normal	50.0	15	0.30	0.040	Min	0.032
	140	0.174	34.7	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.007	1.4	Normal	50.0	30	0.25	0.045	Min	0.036
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.067	13.3	Normal	50.0	45	0.25	0.055	Min	0.030
	180	0.006	1.2	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.006	1.1	Normal	50.0	45	0.25	0.060	Min	0.036
	200	0.002	0.4	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.038	7.7	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.029	5.8	Normal	65.0	80	0.10	0.030	Min	0.032
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.046
	310	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.016	3.1	Normal	75.0	80	0.10	0.035	Min	0.034
	420	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	520	0.006	1.1	Normal	80.0	45	0.29	0.035	Min	0.037
	530	0.070	14.1	Normal	75.0	80	0.10	0.035	Min	0.030
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.046
	570	0.006	1.2	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.003	0.6	Normal	75.0	80	0.10	0.030	Min	0.038
	710	0.005	1.1	Normal	60.0	5	0.10	0.030	Low	0.073
64k	130	0.003	1.3	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.046	22.1	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.018	8.7	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.001	0.4	Normal	50.0	40	0.25	0.050	Min	0.042
	170	0.001	0.5	Normal	50.0	45	0.25	0.055	Min	0.041
	180	0.009	4.5	Normal	50.0	45	0.25	0.060	Min	0.035

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64k	190	0.016	7.6	Normal	50.0	45	0.25	0.060	Min	0.034
	210	0.016	8.0	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.014	6.9	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	410	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.041
	420	0.001	0.6	Normal	75.0	80	0.10	0.030	Min	0.041
	520	0.049	23.5	Normal	80.0	45	0.29	0.035	Min	0.031
	530	0.017	8.3	Normal	75.0	80	0.10	0.035	Min	0.033
	610	0.000	0.2	Normal	75.0	80	0.10	0.030	Min	0.044
	740	0.009	4.4	Wet				0.020	Low	0.070
	900	0.005	2.3	Normal	25.0		0.35	0.030	Low	0.073
64l	190	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.001	0.4	Normal	65.0	80	0.10	0.035	Min	0.041
	220	0.000	0.1	Normal	65.0	80	0.10	0.030	Min	0.044
	410	0.004	1.3	Normal	75.0	80	0.10	0.035	Min	0.038
	420	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.042
	510	0.005	1.6	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.069	23.4	Normal	80.0	45	0.29	0.035	Min	0.030
	530	0.072	24.3	Normal	75.0	80	0.10	0.035	Min	0.030
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	710	0.115	39.0	Normal	60.0	5	0.10	0.030	Low	0.054
	740	0.002	0.5	Wet				0.020	Low	0.080
	900	0.026	8.8	Normal	25.0		0.35	0.030	Low	0.063
64m	120	0.002	0.3	Normal	30.0	5	0.30	0.035	Min	0.040
	130	0.001	0.2	Normal	50.0	15	0.30	0.040	Min	0.041
	140	0.052	10.4	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.065	13.0	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.002	0.3	Normal	50.0	40	0.25	0.050	Min	0.040

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64m	170	0.002	0.4	Normal	50.0	45	0.25	0.055	Min	0.039
	180	0.009	1.9	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.036	7.2	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.004	0.8	Normal	60.0	80	0.10	0.040	Min	0.037
	210	0.050	9.9	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.014	2.8	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.043
	310	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	320	0.002	0.5	Normal	60.0	55	0.15	0.035	Min	0.039
	410	0.067	13.4	Normal	75.0	80	0.10	0.035	Min	0.030
	420	0.114	22.7	Normal	75.0	80	0.10	0.030	Min	0.028
	510	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.044
	530	0.029	5.7	Normal	75.0	80	0.10	0.035	Min	0.032
	550	0.010	1.9	Normal	75.0	80	0.10	0.035	Min	0.035
	570	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	610	0.019	3.8	Normal	75.0	80	0.10	0.030	Min	0.033
	900	0.014	2.9	Normal	25.0		0.35	0.030	Low	0.067
64o	120	0.003	0.5	Normal	30.0	5	0.30	0.035	Min	0.038
	130	0.026	3.9	Normal	50.0	15	0.30	0.040	Min	0.032
	140	0.040	6.1	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.041	6.3	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.002	0.2	Normal	50.0	40	0.25	0.050	Min	0.040
	170	0.006	1.0	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.035	5.4	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.037	5.7	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.002	0.2	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.047	7.2	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.028	4.3	Normal	65.0	80	0.10	0.030	Min	0.032
	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64o	310	0.003	0.4	Normal	75.0	80	0.10	0.035	Min	0.038
	320	0.001	0.1	Normal	60.0	55	0.15	0.035	Min	0.041
	410	0.115	17.7	Normal	75.0	80	0.10	0.035	Min	0.028
	420	0.020	3.1	Normal	75.0	80	0.10	0.030	Min	0.033
	510	0.004	0.6	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.014	2.2	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.056	8.6	Normal	75.0	80	0.10	0.035	Min	0.030
	550	0.060	9.2	Normal	75.0	80	0.10	0.035	Min	0.030
	570	0.004	0.6	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.042	6.4	Normal	75.0	80	0.10	0.030	Min	0.031
	710	0.030	4.6	Normal	60.0	5	0.10	0.030	Low	0.062
	900	0.037	5.7	Normal	25.0		0.35	0.030	Low	0.061
64q	140	0.004	1.0	Normal	50.0	30	0.25	0.045	Min	0.037
	150	0.015	3.8	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.002	0.5	Normal	50.0	40	0.25	0.050	Min	0.039
	170	0.005	1.2	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.012	3.0	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.022	5.3	Normal	50.0	45	0.25	0.060	Min	0.033
	200	0.006	1.5	Normal	60.0	80	0.10	0.040	Min	0.036
	210	0.018	4.5	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.027	6.7	Normal	65.0	80	0.10	0.030	Min	0.032
	230	0.013	3.2	Normal	75.0	80	0.10	0.030	Min	0.034
	310	0.004	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	410	0.043	10.6	Normal	75.0	80	0.10	0.035	Min	0.031
	420	0.019	4.6	Normal	75.0	80	0.10	0.030	Min	0.033
	430	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	510	0.012	2.9	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.008	1.9	Normal	80.0	45	0.29	0.035	Min	0.036
	530	0.015	3.7	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.039	9.6	Normal	75.0	80	0.10	0.035	Min	0.031

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64q	560	0.001	0.1	Normal	75.0	80	0.10	0.035	Min	0.043
	570	0.003	0.6	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.050	12.4	Normal	75.0	80	0.10	0.030	Min	0.031
	710	0.012	3.0	Normal	60.0	5	0.10	0.030	Low	0.068
	900	0.076	18.8	Normal	25.0		0.35	0.030	Low	0.057
64s	190	0.001	0.5	Normal	50.0	45	0.25	0.060	Min	0.041
	200	0.004	1.6	Normal	60.0	80	0.10	0.040	Min	0.037
	210	0.007	2.8	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.006	2.3	Normal	65.0	80	0.10	0.030	Min	0.036
	310	0.007	2.5	Normal	75.0	80	0.10	0.035	Min	0.036
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	410	0.007	2.5	Normal	75.0	80	0.10	0.035	Min	0.036
	420	0.010	4.0	Normal	75.0	80	0.10	0.030	Min	0.035
	430	0.013	5.0	Normal	75.0	80	0.10	0.030	Min	0.034
	510	0.009	3.6	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.009	3.6	Normal	80.0	45	0.29	0.035	Min	0.035
	530	0.004	1.4	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.023	8.9	Normal	75.0	80	0.10	0.035	Min	0.033
	560	0.100	39.0	Normal	75.0	80	0.10	0.035	Min	0.029
	610	0.047	18.1	Normal	75.0	80	0.10	0.030	Min	0.031
	710	0.010	4.0	Normal	60.0	5	0.10	0.030	Low	0.069
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
64t	140	0.003	1.0	Normal	50.0	30	0.25	0.045	Min	0.039
	150	0.025	9.2	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.006	2.1	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.005	1.9	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.003	1.2	Normal	50.0	45	0.25	0.060	Min	0.038
	200	0.001	0.3	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.022	8.0	Normal	65.0	80	0.10	0.035	Min	0.033

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64t	220	0.010	3.8	Normal	65.0	80	0.10	0.030	Min	0.035
	310	0.063	23.2	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.016	6.1	Normal	60.0	55	0.15	0.035	Min	0.034
	410	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	520	0.002	0.6	Normal	80.0	45	0.29	0.035	Min	0.040
	530	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.040
	550	0.034	12.6	Normal	75.0	80	0.10	0.035	Min	0.032
	560	0.005	1.9	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	610	0.042	15.7	Normal	75.0	80	0.10	0.030	Min	0.031
	710	0.005	1.8	Normal	60.0	5	0.10	0.030	Low	0.073
	900	0.026	9.7	Normal	25.0		0.35	0.030	Low	0.063
64u	140	0.000	0.1	Normal	50.0	30	0.25	0.045	Min	0.044
	150	0.041	13.8	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.002	0.5	Normal	50.0	40	0.25	0.050	Min	0.040
	170	0.002	0.8	Normal	50.0	45	0.25	0.055	Min	0.039
	180	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	190	0.001	0.2	Normal	50.0	45	0.25	0.060	Min	0.043
	210	0.026	8.7	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.001	0.3	Normal	65.0	80	0.10	0.030	Min	0.041
	300	0.001	0.4	Normal	60.0	55	0.15	0.035	Min	0.040
	310	0.092	31.1	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.028	9.4	Normal	60.0	55	0.15	0.035	Min	0.032
	410	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	510	0.016	5.5	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.011	3.7	Normal	80.0	45	0.29	0.035	Min	0.035
	530	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.040
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	570	0.006	2.0	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.002	0.5	Normal	75.0	80	0.10	0.030	Min	0.040

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
64u	900	0.063	21.4	Normal	25.0		0.35	0.030	Low	0.058
64v	210	0.008	4.0	Normal	65.0	80	0.10	0.035	Min	0.036
	300	0.001	0.7	Normal	60.0	55	0.15	0.035	Min	0.040
	310	0.160	81.8	Normal	75.0	80	0.10	0.035	Min	0.027
	320	0.006	2.8	Normal	60.0	55	0.15	0.035	Min	0.037
	410	0.003	1.3	Normal	75.0	80	0.10	0.035	Min	0.039
	710	0.018	9.0	Normal	60.0	5	0.10	0.030	Low	0.066
	740	0.000	0.1	Wet				0.020	Low	0.096
	900	0.001	0.4	Normal	25.0		0.35	0.030	Low	0.084
68c	120	0.009	2.0	Normal	30.0	5	0.30	0.035	Min	0.035
	130	0.009	2.1	Normal	50.0	15	0.30	0.040	Min	0.035
	140	0.328	75.7	Normal	50.0	30	0.25	0.045	Min	0.025
	150	0.025	5.8	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.006	1.5	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.007	1.5	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.032	7.3	Normal	50.0	45	0.25	0.060	Min	0.032
	210	0.002	0.4	Normal	65.0	80	0.10	0.035	Min	0.040
	220	0.004	0.9	Normal	65.0	80	0.10	0.030	Min	0.037
	530	0.007	1.5	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.090
	740	0.004	0.9	Wet				0.020	Low	0.075
	900	0.001	0.3	Normal	25.0		0.35	0.030	Low	0.082
68e	120	0.032	6.3	Normal	30.0	5	0.30	0.035	Min	0.032
	130	0.045	9.0	Normal	50.0	15	0.30	0.040	Min	0.031
	140	0.374	75.4	Normal	50.0	30	0.25	0.045	Min	0.025
	150	0.001	0.2	Normal	50.0	30	0.25	0.045	Min	0.041
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.046

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68e	170	0.005	1.0	Normal	50.0	45	0.25	0.055	Min	0.037
	190	0.000		Normal	50.0	45	0.25	0.060	Min	0.046
	530	0.015	3.0	Normal	75.0	80	0.10	0.035	Min	0.034
	710	0.003	0.6	Normal	60.0	5	0.10	0.030	Low	0.076
	900	0.022	4.5	Normal	25.0		0.35	0.030	Low	0.064
68g	110	0.001	0.2	Normal	30.0	5	0.30	0.035	Min	0.041
	120	0.017	3.5	Normal	30.0	5	0.30	0.035	Min	0.033
	130	0.145	29.0	Normal	50.0	15	0.30	0.040	Min	0.028
	140	0.207	41.3	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.002	0.3	Normal	50.0	30	0.25	0.045	Min	0.040
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.046
	170	0.016	3.1	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.014	2.8	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.030	5.9	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.002	0.4	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.003	0.6	Normal	65.0	80	0.10	0.035	Min	0.038
	520	0.018	3.6	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.036	7.1	Normal	75.0	80	0.10	0.035	Min	0.032
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	570	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	710	0.002	0.5	Normal	60.0	5	0.10	0.030	Low	0.078
	750	0.000		Normal	85.0		0.50	0.100	Low	0.096
	900	0.005	1.0	Normal	25.0		0.35	0.030	Low	0.073
68i	120	0.049	9.9	Normal	30.0	5	0.30	0.035	Min	0.031
	130	0.053	10.6	Normal	50.0	15	0.30	0.040	Min	0.030
	140	0.215	43.1	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.008	1.5	Normal	50.0	30	0.25	0.045	Min	0.036
	160	0.002	0.4	Normal	50.0	40	0.25	0.050	Min	0.039
	170	0.013	2.5	Normal	50.0	45	0.25	0.055	Min	0.034

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68i	180	0.023	4.6	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.028	5.7	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.033	6.5	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.011	2.3	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	410	0.015	2.9	Normal	75.0	80	0.10	0.035	Min	0.034
	510	0.007	1.4	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.002	0.4	Normal	80.0	45	0.29	0.035	Min	0.039
	530	0.032	6.3	Normal	75.0	80	0.10	0.035	Min	0.032
	540	0.000		Normal	90.0	5	0.10	0.035	Low	0.096
	550	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	610	0.002	0.4	Normal	75.0	80	0.10	0.030	Min	0.039
	710	0.004	0.8	Normal	60.0	5	0.10	0.030	Low	0.075
	900	0.002	0.3	Normal	25.0		0.35	0.030	Low	0.080
68k	130	0.003	1.3	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.083	40.5	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.019	9.4	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.001	0.3	Normal	50.0	40	0.25	0.050	Min	0.043
	170	0.004	1.8	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.019	9.2	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.014	6.9	Normal	50.0	45	0.25	0.060	Min	0.034
	200	0.001	0.4	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.013	6.5	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.014	6.7	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.000	0.2	Normal	75.0	80	0.10	0.030	Min	0.044
	310	0.002	1.1	Normal	75.0	80	0.10	0.035	Min	0.039
	320	0.000	0.2	Normal	60.0	55	0.15	0.035	Min	0.044
	410	0.005	2.4	Normal	75.0	80	0.10	0.035	Min	0.037
	420	0.000		Normal	75.0	80	0.10	0.030	Min	0.047

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68k	520	0.000	0.2	Normal	80.0	45	0.29	0.035	Min	0.044
	530	0.002	1.1	Normal	75.0	80	0.10	0.035	Min	0.039
	540	0.001	0.5	Normal	90.0	5	0.10	0.035	Low	0.083
	550	0.005	2.4	Normal	75.0	80	0.10	0.035	Min	0.037
	610	0.003	1.4	Normal	75.0	80	0.10	0.030	Min	0.038
	740	0.010	4.8	Wet				0.020	Low	0.069
	900	0.006	2.7	Normal	25.0		0.35	0.030	Low	0.072
68l	140	0.021	6.8	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.131	41.3	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.001	0.3	Normal	50.0	40	0.25	0.050	Min	0.042
	170	0.011	3.4	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.008	2.6	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.044	13.8	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.044
	210	0.025	8.0	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.020	6.4	Normal	65.0	80	0.10	0.030	Min	0.033
	310	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.006	2.0	Normal	75.0	80	0.10	0.035	Min	0.036
	420	0.003	0.9	Normal	75.0	80	0.10	0.030	Min	0.038
	510	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	520	0.003	1.0	Normal	80.0	45	0.29	0.035	Min	0.038
	530	0.007	2.1	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.002	0.8	Normal	75.0	80	0.10	0.030	Min	0.039
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.092
	740	0.001	0.3	Wet				0.020	Low	0.083
	900	0.030	9.4	Normal	25.0		0.35	0.030	Low	0.062
68m	140	0.001	0.2	Normal	50.0	30	0.25	0.045	Min	0.040
	150	0.037	6.7	Normal	50.0	30	0.25	0.045	Min	0.031
	180	0.025	4.6	Normal	50.0	45	0.25	0.060	Min	0.032

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68m	190	0.078	14.2	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.060	11.0	Normal	65.0	80	0.10	0.035	Min	0.030
	220	0.079	14.4	Normal	65.0	80	0.10	0.030	Min	0.029
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	310	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.039	7.1	Normal	75.0	80	0.10	0.035	Min	0.031
	420	0.033	6.0	Normal	75.0	80	0.10	0.030	Min	0.032
	510	0.031	5.6	Normal	75.0	80	0.10	0.035	Min	0.032
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.090	16.4	Normal	75.0	80	0.10	0.035	Min	0.029
	550	0.007	1.2	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.063	11.4	Normal	75.0	80	0.10	0.030	Min	0.030
	900	0.003	0.6	Normal	25.0		0.35	0.030	Low	0.076
68o	140	0.201	29.1	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.226	32.8	Normal	50.0	30	0.25	0.045	Min	0.026
	160	0.001	0.1	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.017	2.5	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.015	2.1	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.004	0.6	Normal	50.0	45	0.25	0.060	Min	0.037
	200	0.002	0.3	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.021	3.0	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.017	2.5	Normal	65.0	80	0.10	0.030	Min	0.033
	230	0.002	0.3	Normal	75.0	80	0.10	0.030	Min	0.039
	310	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	320	0.007	1.0	Normal	60.0	55	0.15	0.035	Min	0.036
	410	0.025	3.7	Normal	75.0	80	0.10	0.035	Min	0.032
	420	0.041	6.0	Normal	75.0	80	0.10	0.030	Min	0.031
	510	0.004	0.6	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.017	2.5	Normal	80.0	45	0.29	0.035	Min	0.034

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68o	530	0.007	1.1	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.005	0.7	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.001	0.1	Normal	75.0	80	0.10	0.035	Min	0.042
	610	0.016	2.3	Normal	75.0	80	0.10	0.030	Min	0.034
	710	0.038	5.4	Normal	60.0	5	0.10	0.030	Low	0.061
	900	0.021	3.1	Normal	25.0		0.35	0.030	Low	0.064
68q	130	0.001	0.3	Normal	50.0	15	0.30	0.040	Min	0.041
	140	0.020	6.8	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.006	1.9	Normal	50.0	30	0.25	0.045	Min	0.037
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	170	0.010	3.5	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.029	9.8	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.017	5.7	Normal	50.0	45	0.25	0.060	Min	0.034
	210	0.015	5.0	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.010	3.3	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.004	1.3	Normal	75.0	80	0.10	0.030	Min	0.038
	310	0.007	2.3	Normal	75.0	80	0.10	0.035	Min	0.036
	320	0.003	1.1	Normal	60.0	55	0.15	0.035	Min	0.038
	400	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.040
	410	0.033	11.1	Normal	75.0	80	0.10	0.035	Min	0.032
	420	0.002	0.6	Normal	75.0	80	0.10	0.030	Min	0.040
	510	0.007	2.4	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.016	5.2	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.008	2.7	Normal	75.0	80	0.10	0.035	Min	0.036
	540	0.000	0.1	Normal	90.0	5	0.10	0.035	Low	0.088
	550	0.018	6.1	Normal	75.0	80	0.10	0.035	Min	0.033
	570	0.002	0.8	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.030	10.0	Normal	75.0	80	0.10	0.030	Min	0.032
	710	0.021	7.2	Normal	60.0	5	0.10	0.030	Low	0.064
	900	0.036	12.1	Normal	25.0		0.35	0.030	Low	0.061

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68s	180	0.001	0.5	Normal	50.0	45	0.25	0.060	Min	0.041
	190	0.004	1.8	Normal	50.0	45	0.25	0.060	Min	0.037
	210	0.014	5.9	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.002	0.8	Normal	65.0	80	0.10	0.030	Min	0.039
	230	0.004	1.7	Normal	75.0	80	0.10	0.030	Min	0.037
	310	0.012	5.1	Normal	75.0	80	0.10	0.035	Min	0.034
	320	0.001	0.6	Normal	60.0	55	0.15	0.035	Min	0.040
	410	0.011	4.6	Normal	75.0	80	0.10	0.035	Min	0.035
	420	0.016	6.8	Normal	75.0	80	0.10	0.030	Min	0.034
	430	0.001	0.3	Normal	75.0	80	0.10	0.030	Min	0.043
	510	0.002	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.001	0.6	Normal	80.0	45	0.29	0.035	Min	0.040
	530	0.002	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	550	0.079	33.6	Normal	75.0	80	0.10	0.035	Min	0.029
	560	0.005	2.2	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.002	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.053	22.2	Normal	75.0	80	0.10	0.030	Min	0.030
	710	0.006	2.5	Normal	60.0	5	0.10	0.030	Low	0.072
	900	0.019	7.9	Normal	25.0		0.35	0.030	Low	0.065
68t	140	0.002	0.8	Normal	50.0	30	0.25	0.045	Min	0.039
	150	0.050	19.9	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.008	3.3	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.007	2.7	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.004	1.6	Normal	50.0	45	0.25	0.060	Min	0.037
	190	0.005	1.8	Normal	50.0	45	0.25	0.060	Min	0.037
	210	0.018	7.3	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.006	2.5	Normal	65.0	80	0.10	0.030	Min	0.036
	310	0.014	5.6	Normal	75.0	80	0.10	0.035	Min	0.034
	320	0.007	2.9	Normal	60.0	55	0.15	0.035	Min	0.036

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68t	410	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	520	0.011	4.2	Normal	80.0	45	0.29	0.035	Min	0.035
	530	0.010	3.8	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.045	17.7	Normal	75.0	80	0.10	0.035	Min	0.031
	570	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	610	0.013	5.0	Normal	75.0	80	0.10	0.030	Min	0.034
	710	0.006	2.3	Normal	60.0	5	0.10	0.030	Low	0.072
	900	0.046	18.1	Normal	25.0		0.35	0.030	Low	0.060
68u	140	0.007	2.5	Normal	50.0	30	0.25	0.045	Min	0.036
	150	0.049	17.4	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.002	0.5	Normal	50.0	40	0.25	0.050	Min	0.040
	170	0.004	1.5	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.052	18.7	Normal	50.0	45	0.25	0.060	Min	0.030
	190	0.011	3.9	Normal	50.0	45	0.25	0.060	Min	0.035
	210	0.010	3.6	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.005	1.8	Normal	65.0	80	0.10	0.030	Min	0.037
	300	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.046
	310	0.035	12.5	Normal	75.0	80	0.10	0.035	Min	0.032
	320	0.011	3.9	Normal	60.0	55	0.15	0.035	Min	0.035
	410	0.001	0.4	Normal	75.0	80	0.10	0.035	Min	0.041
	520	0.014	5.0	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.024	8.6	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.008	2.9	Normal	75.0	80	0.10	0.035	Min	0.036
	570	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.040
	610	0.005	1.6	Normal	75.0	80	0.10	0.030	Min	0.037
	710	0.018	6.4	Normal	60.0	5	0.10	0.030	Low	0.065
	900	0.024	8.4	Normal	25.0		0.35	0.030	Low	0.064
68v	140	0.004	1.7	Normal	50.0	30	0.25	0.045	Min	0.038
	150	0.016	7.3	Normal	50.0	30	0.25	0.045	Min	0.034

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
68v	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.043
	180	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.046
	210	0.032	14.6	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.003	1.3	Normal	65.0	80	0.10	0.030	Min	0.038
	300	0.000	0.2	Normal	60.0	55	0.15	0.035	Min	0.044
	310	0.051	23.2	Normal	75.0	80	0.10	0.035	Min	0.031
	320	0.004	1.9	Normal	60.0	55	0.15	0.035	Min	0.037
	530	0.000	0.2	Normal	75.0	80	0.10	0.035	Min	0.044
	550	0.014	6.2	Normal	75.0	80	0.10	0.035	Min	0.034
	570	0.016	7.1	Normal	75.0	80	0.10	0.035	Min	0.034
	610	0.006	2.7	Normal	75.0	80	0.10	0.030	Min	0.036
	710	0.011	4.9	Normal	60.0	5	0.10	0.030	Low	0.069
	900	0.062	28.3	Normal	25.0		0.35	0.030	Low	0.058
72c	120	0.028	5.1	Normal	30.0	5	0.30	0.035	Min	0.032
	130	0.110	20.4	Normal	50.0	15	0.30	0.040	Min	0.028
	140	0.316	58.3	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.003	0.6	Normal	50.0	30	0.25	0.045	Min	0.038
	160	0.004	0.8	Normal	50.0	40	0.25	0.050	Min	0.037
	170	0.004	0.7	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.014	2.5	Normal	50.0	45	0.25	0.060	Min	0.034
	210	0.001	0.3	Normal	65.0	80	0.10	0.035	Min	0.040
	220	0.003	0.5	Normal	65.0	80	0.10	0.030	Min	0.038
	410	0.003	0.6	Normal	75.0	80	0.10	0.035	Min	0.038
	530	0.004	0.7	Normal	75.0	80	0.10	0.035	Min	0.038
	710	0.049	9.1	Normal	60.0	5	0.10	0.030	Low	0.059
	740	0.002	0.4	Wet				0.020	Low	0.077
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
72e	120	0.004	0.9	Normal	30.0	5	0.30	0.035	Min	0.037
	130	0.012	2.4	Normal	50.0	15	0.30	0.040	Min	0.035

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
72e	140	0.421	84.2	Normal	50.0	30	0.25	0.045	Min	0.025
	150	0.002	0.4	Normal	50.0	30	0.25	0.045	Min	0.039
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.022	4.4	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.004	0.8	Normal	50.0	45	0.25	0.060	Min	0.038
	190	0.008	1.6	Normal	50.0	45	0.25	0.060	Min	0.036
	210	0.000		Normal	65.0	80	0.10	0.035	Min	0.047
	530	0.022	4.4	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.040
	710	0.003	0.6	Normal	60.0	5	0.10	0.030	Low	0.076
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
72g	120	0.000		Normal	30.0	5	0.30	0.035	Min	0.046
	130	0.012	2.3	Normal	50.0	15	0.30	0.040	Min	0.035
	140	0.262	52.3	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.016	3.1	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.010	1.9	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.026	5.2	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.020	4.1	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.014	2.8	Normal	50.0	45	0.25	0.060	Min	0.034
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.002	0.4	Normal	65.0	80	0.10	0.035	Min	0.039
	410	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	530	0.054	10.8	Normal	75.0	80	0.10	0.035	Min	0.030
	540	0.003	0.6	Normal	90.0	5	0.10	0.035	Low	0.077
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.046
	710	0.014	2.7	Normal	60.0	5	0.10	0.030	Low	0.067
	720	0.053	10.6	Normal	80.0	5	0.10	0.035	Min	0.030
	750	0.009	1.9	Normal	85.0		0.50	0.100	Low	0.069
	900	0.001	0.2	Normal	25.0		0.35	0.030	Low	0.082

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
72l	120	0.005	0.9	Normal	30.0	5	0.30	0.035	Min	0.037
	130	0.001	0.1	Normal	50.0	15	0.30	0.040	Min	0.043
	140	0.304	60.2	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.092	18.2	Normal	50.0	30	0.25	0.045	Min	0.029
	170	0.004	0.8	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.007	1.4	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.018	3.5	Normal	50.0	45	0.25	0.060	Min	0.033
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.013	2.6	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.004	0.8	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.033	6.5	Normal	75.0	80	0.10	0.030	Min	0.032
	410	0.007	1.4	Normal	75.0	80	0.10	0.035	Min	0.036
	510	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.046
	530	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.040
	540	0.000		Normal	90.0	5	0.10	0.035	Low	0.096
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	610	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	710	0.014	2.8	Normal	60.0	5	0.10	0.030	Low	0.067
	900	0.001	0.1	Normal	25.0		0.35	0.030	Low	0.086
72k	120	0.002	0.8	Normal	30.0	5	0.30	0.035	Min	0.039
	140	0.034	12.2	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.105	37.4	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	170	0.005	1.8	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.022	7.8	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.010	3.7	Normal	50.0	45	0.25	0.060	Min	0.035
	210	0.017	6.0	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.015	5.3	Normal	65.0	80	0.10	0.030	Min	0.034
	310	0.005	1.7	Normal	75.0	80	0.10	0.035	Min	0.037

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
72k	410	0.011	3.9	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.025	8.9	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.005	1.8	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.040
	570	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.004	1.6	Normal	75.0	80	0.10	0.030	Min	0.037
	740	0.012	4.3	Wet				0.020	Low	0.068
	900	0.005	1.6	Normal	25.0		0.35	0.030	Low	0.074
72l	140	0.083	38.4	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.052	24.4	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.001	0.3	Normal	50.0	40	0.25	0.050	Min	0.043
	170	0.006	2.6	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.019	8.8	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.014	6.5	Normal	50.0	45	0.25	0.060	Min	0.034
	200	0.003	1.2	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.012	5.3	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.010	4.6	Normal	65.0	80	0.10	0.030	Min	0.035
	310	0.003	1.3	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.009	4.1	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.001	0.5	Normal	80.0	45	0.29	0.035	Min	0.041
	530	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	610	0.001	0.4	Normal	75.0	80	0.10	0.030	Min	0.041
	740	0.001	0.3	Wet				0.020	Low	0.086
	900	0.003	1.3	Normal	25.0		0.35	0.030	Low	0.077
72m	140	0.077	16.5	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.141	30.1	Normal	50.0	30	0.25	0.045	Min	0.028
	170	0.008	1.6	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.027	5.7	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.010	2.1	Normal	50.0	45	0.25	0.060	Min	0.035

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
72m	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.006	1.3	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.025	5.3	Normal	65.0	80	0.10	0.030	Min	0.033
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.011	2.3	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.142	30.4	Normal	80.0	45	0.29	0.035	Min	0.028
	530	0.013	2.7	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.007	1.5	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	900	0.002	0.3	Normal	25.0		0.35	0.030	Low	0.080
72o	130	0.003	0.4	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.282	42.6	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.083	12.6	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.004	0.6	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.009	1.4	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.005	0.7	Normal	50.0	45	0.25	0.060	Min	0.037
	200	0.001	0.1	Normal	60.0	80	0.10	0.040	Min	0.042
	210	0.008	1.1	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.002	0.4	Normal	65.0	80	0.10	0.030	Min	0.039
	410	0.014	2.1	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.003	0.4	Normal	80.0	45	0.29	0.035	Min	0.039
	530	0.008	1.2	Normal	75.0	80	0.10	0.035	Min	0.036
	610	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	710	0.134	20.2	Normal	60.0	5	0.10	0.030	Low	0.053
	720	0.105	15.9	Normal	80.0	5	0.10	0.035	Min	0.029
	900	0.001	0.2	Normal	25.0		0.35	0.030	Low	0.083
72q	140	0.028	8.4	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.076	23.2	Normal	50.0	30	0.25	0.045	Min	0.029

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
72q	160	0.010	2.9	Normal	50.0	40	0.25	0.050	Min	0.035
	170	0.021	6.2	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.020	6.0	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.015	4.5	Normal	50.0	45	0.25	0.060	Min	0.034
	200	0.003	1.0	Normal	60.0	80	0.10	0.040	Min	0.038
	210	0.033	10.0	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.013	3.8	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.004	1.1	Normal	75.0	80	0.10	0.030	Min	0.038
	310	0.013	3.9	Normal	75.0	80	0.10	0.035	Min	0.034
	320	0.010	2.9	Normal	60.0	55	0.15	0.035	Min	0.035
	410	0.006	1.9	Normal	75.0	80	0.10	0.035	Min	0.036
	510	0.012	3.5	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.044
	530	0.008	2.5	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.003	0.8	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.004	1.3	Normal	75.0	80	0.10	0.030	Min	0.037
	710	0.035	10.6	Normal	60.0	5	0.10	0.030	Low	0.061
	900	0.018	5.5	Normal	25.0		0.35	0.030	Low	0.065
72s	150	0.025	9.0	Normal	50.0	30	0.25	0.045	Min	0.032
	170	0.001	0.5	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	190	0.001	0.4	Normal	50.0	45	0.25	0.060	Min	0.041
	210	0.012	4.4	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.001	0.4	Normal	65.0	80	0.10	0.030	Min	0.041
	300	0.002	0.6	Normal	60.0	55	0.15	0.035	Min	0.040
	310	0.054	18.9	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.006	2.3	Normal	60.0	55	0.15	0.035	Min	0.036
	410	0.007	2.5	Normal	75.0	80	0.10	0.035	Min	0.036
	510	0.003	1.1	Normal	75.0	80	0.10	0.035	Min	0.038
	530	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.039

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
72s	550	0.058	20.5	Normal	75.0	80	0.10	0.035	Min	0.030
	610	0.022	7.8	Normal	75.0	80	0.10	0.030	Min	0.033
	710	0.036	12.8	Normal	60.0	5	0.10	0.030	Low	0.061
	900	0.052	18.2	Normal	25.0		0.35	0.030	Low	0.059
72t	130	0.001	0.6	Normal	50.0	15	0.30	0.040	Min	0.040
	140	0.002	1.0	Normal	50.0	30	0.25	0.045	Min	0.039
	150	0.020	9.1	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.001	0.3	Normal	50.0	40	0.25	0.050	Min	0.042
	170	0.004	1.9	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.058	26.0	Normal	50.0	45	0.25	0.060	Min	0.030
	210	0.019	8.5	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.005	2.4	Normal	65.0	80	0.10	0.030	Min	0.037
	300	0.001	0.3	Normal	60.0	55	0.15	0.035	Min	0.043
	310	0.032	14.6	Normal	75.0	80	0.10	0.035	Min	0.032
	320	0.013	5.7	Normal	60.0	55	0.15	0.035	Min	0.034
	520	0.007	3.2	Normal	80.0	45	0.29	0.035	Min	0.036
	530	0.009	3.9	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.005	2.0	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.001	0.4	Normal	75.0	80	0.10	0.035	Min	0.042
	610	0.001	0.6	Normal	75.0	80	0.10	0.030	Min	0.040
	710	0.002	0.7	Normal	60.0	5	0.10	0.030	Low	0.080
	900	0.041	18.6	Normal	25.0		0.35	0.030	Low	0.060
72u	120	0.003	1.2	Normal	30.0	5	0.30	0.035	Min	0.038
	140	0.002	0.7	Normal	50.0	30	0.25	0.045	Min	0.040
	150	0.075	29.0	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.017	6.5	Normal	50.0	40	0.25	0.050	Min	0.034
	170	0.007	2.8	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.007	2.9	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.001	0.5	Normal	50.0	45	0.25	0.060	Min	0.041

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
72u	210	0.010	3.9	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.026	10.0	Normal	65.0	80	0.10	0.030	Min	0.032
	310	0.015	5.8	Normal	75.0	80	0.10	0.035	Min	0.034
	320	0.001	0.5	Normal	60.0	55	0.15	0.035	Min	0.040
	530	0.013	5.2	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.014	5.5	Normal	75.0	80	0.10	0.035	Min	0.034
	900	0.065	25.3	Normal	25.0		0.35	0.030	Low	0.058
72v	140	0.000	0.1	Normal	50.0	30	0.25	0.045	Min	0.044
	150	0.001	0.3	Normal	50.0	30	0.25	0.045	Min	0.040
	180	0.000		Normal	50.0	45	0.25	0.060	Min	0.047
	210	0.058	14.3	Normal	65.0	80	0.10	0.035	Min	0.030
	220	0.006	1.4	Normal	65.0	80	0.10	0.030	Min	0.037
	300	0.001	0.2	Normal	60.0	55	0.15	0.035	Min	0.041
	310	0.079	19.4	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.030	7.4	Normal	60.0	55	0.15	0.035	Min	0.032
	410	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.040
	550	0.003	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	570	0.181	44.5	Normal	75.0	80	0.10	0.035	Min	0.027
	610	0.006	1.5	Normal	75.0	80	0.10	0.030	Min	0.036
	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	740	0.003	0.8	Wet				0.020	Low	0.075
	900	0.036	8.9	Normal	25.0		0.35	0.030	Low	0.061
76c	110	0.006	1.0	Normal	30.0	5	0.30	0.035	Min	0.036
	120	0.040	6.6	Normal	30.0	5	0.30	0.035	Min	0.031
	130	0.003	0.5	Normal	50.0	15	0.30	0.040	Min	0.038
	140	0.359	59.6	Normal	50.0	30	0.25	0.045	Min	0.025
	150	0.098	16.2	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.001	0.1	Normal	50.0	45	0.25	0.055	Min	0.043

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
76c	180	0.002	0.3	Normal	50.0	45	0.25	0.060	Min	0.039
	190	0.016	2.7	Normal	50.0	45	0.25	0.060	Min	0.034
	210	0.008	1.4	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.035	5.8	Normal	65.0	80	0.10	0.030	Min	0.032
	410	0.000		Normal	75.0	80	0.10	0.035	Min	0.046
	520	0.009	1.5	Normal	80.0	45	0.29	0.035	Min	0.035
	530	0.005	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	710	0.003	0.5	Normal	60.0	5	0.10	0.030	Low	0.077
	740	0.002	0.3	Wet				0.020	Low	0.079
	900	0.015	2.5	Normal	25.0		0.35	0.030	Low	0.067
76e	120	0.074	14.9	Normal	30.0	5	0.30	0.035	Min	0.030
	130	0.014	2.8	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.229	45.8	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.021	4.2	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	170	0.009	1.7	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.020	3.9	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.020	4.0	Normal	50.0	45	0.25	0.060	Min	0.033
	210	0.016	3.3	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.004	0.7	Normal	65.0	80	0.10	0.030	Min	0.038
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	410	0.013	2.5	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.026	5.2	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.051	10.1	Normal	75.0	80	0.10	0.035	Min	0.031
	710	0.001	0.2	Normal	60.0	5	0.10	0.030	Low	0.082
	900	0.003	0.5	Normal	25.0		0.35	0.030	Low	0.077
76g	130	0.007	1.5	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.222	44.3	Normal	50.0	30	0.25	0.045	Min	0.027

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
76g	150	0.016	3.2	Normal	50.0	30	0.25	0.045	Min	0.034
	170	0.027	5.3	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.065	12.9	Normal	50.0	45	0.25	0.060	Min	0.030
	190	0.071	14.2	Normal	50.0	45	0.25	0.060	Min	0.030
	210	0.033	6.6	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.001	0.2	Normal	65.0	80	0.10	0.030	Min	0.042
	230	0.018	3.5	Normal	75.0	80	0.10	0.030	Min	0.033
	240	0.000		Normal	65.0	80	0.10	0.030	Min	0.047
	410	0.001	0.1	Normal	75.0	80	0.10	0.035	Min	0.042
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.032	6.3	Normal	75.0	80	0.10	0.035	Min	0.032
	550	0.006	1.2	Normal	75.0	80	0.10	0.035	Min	0.036
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	720	0.002	0.5	Normal	80.0	5	0.10	0.035	Min	0.039
	900	0.001	0.1	Normal	25.0		0.35	0.030	Low	0.086
76i	120	0.004	0.8	Normal	30.0	5	0.30	0.035	Min	0.037
	130	0.015	2.9	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.049	9.8	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.002	0.4	Normal	50.0	30	0.25	0.045	Min	0.039
	160	0.004	0.8	Normal	50.0	40	0.25	0.050	Min	0.037
	170	0.004	0.8	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.067	13.5	Normal	50.0	45	0.25	0.060	Min	0.030
	190	0.052	10.4	Normal	50.0	45	0.25	0.060	Min	0.030
	200	0.002	0.3	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.024	4.8	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.037	7.4	Normal	65.0	80	0.10	0.030	Min	0.031
	230	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.041
	240	0.134	26.9	Normal	65.0	80	0.10	0.030	Min	0.028
	310	0.005	0.9	Normal	75.0	80	0.10	0.035	Min	0.037
	410	0.016	3.2	Normal	75.0	80	0.10	0.035	Min	0.034

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	01									
76i	520	0.024	4.8	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.024	4.9	Normal	75.0	80	0.10	0.035	Min	0.033
	550	0.010	2.0	Normal	75.0	80	0.10	0.035	Min	0.035
	570	0.003	0.6	Normal	75.0	80	0.10	0.035	Min	0.038
	610	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	710	0.018	3.5	Normal	60.0	5	0.10	0.030	Low	0.066
	900	0.005	1.1	Normal	25.0		0.35	0.030	Low	0.073
76k	130	0.003	0.9	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.059	18.5	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.075	23.7	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.000		Normal	50.0	40	0.25	0.050	Min	0.047
	170	0.002	0.7	Normal	50.0	45	0.25	0.055	Min	0.039
	180	0.008	2.5	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.105	33.1	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.001	0.4	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.013	4.0	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.019	6.1	Normal	65.0	80	0.10	0.030	Min	0.033
	310	0.004	1.3	Normal	75.0	80	0.10	0.035	Min	0.037
	410	0.009	2.8	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.001	0.3	Normal	80.0	45	0.29	0.035	Min	0.041
	530	0.006	2.0	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.046
	570	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	740	0.009	2.8	Wet				0.020	Low	0.070
	900	0.002	0.6	Normal	25.0		0.35	0.030	Low	0.079
76l	140	0.138	75.7	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.018	9.8	Normal	50.0	30	0.25	0.045	Min	0.033
	160	0.001	0.4	Normal	50.0	40	0.25	0.050	Min	0.042
	170	0.002	1.1	Normal	50.0	45	0.25	0.055	Min	0.039

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
76l	180	0.001	0.8	Normal	50.0	45	0.25	0.060	Min	0.040
	190	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.046
	210	0.007	3.8	Normal	65.0	80	0.10	0.035	Min	0.036
	220	0.004	2.2	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.001	0.3	Normal	75.0	80	0.10	0.030	Min	0.043
	410	0.003	1.8	Normal	75.0	80	0.10	0.035	Min	0.038
	520	0.001	0.3	Normal	80.0	45	0.29	0.035	Min	0.043
	530	0.006	3.2	Normal	75.0	80	0.10	0.035	Min	0.036
	540	0.000	0.2	Normal	90.0	5	0.10	0.035	Low	0.088
	610	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.047
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.092
	740	0.000	0.1	Wet				0.020	Low	0.096
76m	130	0.001	0.2	Normal	50.0	15	0.30	0.040	Min	0.041
	140	0.229	46.5	Normal	50.0	30	0.25	0.045	Min	0.026
	150	0.109	22.1	Normal	50.0	30	0.25	0.045	Min	0.028
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.042
	170	0.004	0.8	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.027	5.4	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.017	3.5	Normal	50.0	45	0.25	0.060	Min	0.033
	210	0.014	2.9	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.012	2.5	Normal	65.0	80	0.10	0.030	Min	0.034
	410	0.013	2.6	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.047	9.5	Normal	80.0	45	0.29	0.035	Min	0.031
	530	0.015	3.0	Normal	75.0	80	0.10	0.035	Min	0.034
	570	0.003	0.6	Normal	75.0	80	0.10	0.035	Min	0.038
	720	0.000		Normal	80.0	5	0.10	0.035	Min	0.047
	900	0.001	0.2	Normal	25.0		0.35	0.030	Low	0.084
76o	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	140	0.041	6.1	Normal	50.0	30	0.25	0.045	Min	0.031

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
76o	150	0.207	30.8	Normal	50.0	30	0.25	0.045	Min	0.027
	160	0.005	0.8	Normal	50.0	40	0.25	0.050	Min	0.037
	180	0.003	0.4	Normal	50.0	45	0.25	0.060	Min	0.039
	210	0.024	3.5	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.006	0.8	Normal	65.0	80	0.10	0.030	Min	0.037
	230	0.003	0.5	Normal	75.0	80	0.10	0.030	Min	0.038
	310	0.034	5.1	Normal	75.0	80	0.10	0.035	Min	0.032
	320	0.001	0.2	Normal	60.0	55	0.15	0.035	Min	0.041
	410	0.002	0.3	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.008	1.2	Normal	80.0	45	0.29	0.035	Min	0.036
	530	0.012	1.7	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.009	1.4	Normal	75.0	80	0.10	0.035	Min	0.035
	560	0.130	19.3	Normal	75.0	80	0.10	0.035	Min	0.028
	610	0.012	1.7	Normal	75.0	80	0.10	0.030	Min	0.035
	710	0.002	0.3	Normal	60.0	5	0.10	0.030	Low	0.078
	720	0.154	22.9	Normal	80.0	5	0.10	0.035	Min	0.028
	900	0.019	2.9	Normal	25.0		0.35	0.030	Low	0.065
76q	140	0.041	10.2	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.060	15.0	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.046
	170	0.029	7.3	Normal	50.0	45	0.25	0.055	Min	0.032
	180	0.009	2.2	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.002	0.6	Normal	50.0	45	0.25	0.060	Min	0.039
	210	0.039	9.7	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.010	2.4	Normal	65.0	80	0.10	0.030	Min	0.035
	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	310	0.096	24.3	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.021	5.4	Normal	60.0	55	0.15	0.035	Min	0.033
	410	0.003	0.8	Normal	75.0	80	0.10	0.035	Min	0.038
	420	0.000		Normal	75.0	80	0.10	0.030	Min	0.047

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
76q	510	0.003	0.8	Normal	75.0	80	0.10	0.035	Min	0.038
	520	0.012	3.1	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.010	2.5	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.014	3.5	Normal	75.0	80	0.10	0.035	Min	0.034
	610	0.007	1.8	Normal	75.0	80	0.10	0.030	Min	0.036
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.092
	900	0.040	10.2	Normal	25.0		0.35	0.030	Low	0.061
76s	150	0.007	2.6	Normal	50.0	30	0.25	0.045	Min	0.036
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.043
	210	0.017	6.1	Normal	65.0	80	0.10	0.035	Min	0.034
	310	0.004	1.5	Normal	75.0	80	0.10	0.035	Min	0.037
	320	0.001	0.4	Normal	60.0	55	0.15	0.035	Min	0.041
	410	0.006	2.0	Normal	75.0	80	0.10	0.035	Min	0.037
	420	0.009	3.2	Normal	75.0	80	0.10	0.030	Min	0.035
	510	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.042
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	550	0.176	63.0	Normal	75.0	80	0.10	0.035	Min	0.027
	610	0.013	4.5	Normal	75.0	80	0.10	0.030	Min	0.034
	710	0.036	12.8	Normal	60.0	5	0.10	0.030	Low	0.061
	900	0.010	3.5	Normal	25.0		0.35	0.030	Low	0.069
76t	140	0.006	2.2	Normal	50.0	30	0.25	0.045	Min	0.036
	150	0.040	14.8	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.001	0.3	Normal	50.0	40	0.25	0.050	Min	0.041
	170	0.005	1.8	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.012	4.4	Normal	50.0	45	0.25	0.060	Min	0.034
	210	0.022	8.0	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.005	2.0	Normal	65.0	80	0.10	0.030	Min	0.037
	310	0.081	29.8	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.015	5.4	Normal	60.0	55	0.15	0.035	Min	0.034

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
76t	410	0.003	1.1	Normal	75.0	80	0.10	0.035	Min	0.038
	510	0.001	0.4	Normal	75.0	80	0.10	0.035	Min	0.041
	530	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	550	0.011	4.2	Normal	75.0	80	0.10	0.035	Min	0.035
	570	0.011	3.9	Normal	75.0	80	0.10	0.035	Min	0.035
	610	0.002	0.6	Normal	75.0	80	0.10	0.030	Min	0.040
	900	0.056	20.8	Normal	25.0		0.35	0.030	Low	0.059
76u	140	0.005	1.7	Normal	50.0	30	0.25	0.045	Min	0.037
	150	0.095	33.5	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.012	4.4	Normal	50.0	40	0.25	0.050	Min	0.034
	180	0.002	0.6	Normal	50.0	45	0.25	0.060	Min	0.040
	210	0.024	8.4	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.001	0.2	Normal	65.0	80	0.10	0.030	Min	0.043
	310	0.045	15.9	Normal	75.0	80	0.10	0.035	Min	0.031
	320	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	520	0.016	5.6	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.006	2.1	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	710	0.009	3.0	Normal	60.0	5	0.10	0.030	Low	0.070
	750	0.011	3.8	Normal	85.0		0.50	0.100	Low	0.068
	900	0.059	20.8	Normal	25.0		0.35	0.030	Low	0.058
76v	210	0.053	22.1	Normal	65.0	80	0.10	0.035	Min	0.030
	220	0.001	0.4	Normal	65.0	80	0.10	0.030	Min	0.041
	300	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	310	0.079	33.0	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.042	17.6	Normal	60.0	55	0.15	0.035	Min	0.031
	570	0.002	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.000	0.2	Normal	75.0	80	0.10	0.030	Min	0.044

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
76v	710	0.001	0.4	Normal	60.0	5	0.10	0.030	Low	0.083
	750	0.061	25.4	Normal	85.0		0.50	0.100	Low	0.058
	900	0.000		Normal	25.0		0.35	0.030	Low	0.096
76w	210	0.000		Normal	65.0	80	0.10	0.035	Min	0.047
	320	0.010	3.0	Normal	60.0	55	0.15	0.035	Min	0.035
	570	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.039
	710	0.311	93.0	Normal	60.0	5	0.10	0.030	Low	0.048
	740	0.007	2.2	Wet				0.020	Low	0.071
	900	0.004	1.1	Normal	25.0		0.35	0.030	Low	0.075
80c	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	140	0.000		Normal	50.0	30	0.25	0.045	Min	0.044
	150	0.016	2.4	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.070	10.6	Normal	50.0	40	0.25	0.050	Min	0.030
	180	0.006	0.9	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.221	33.4	Normal	50.0	45	0.25	0.060	Min	0.027
	200	0.006	0.8	Normal	60.0	80	0.10	0.040	Min	0.037
	210	0.003	0.4	Normal	65.0	80	0.10	0.035	Min	0.039
	220	0.052	7.9	Normal	65.0	80	0.10	0.030	Min	0.030
	310	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.040
	320	0.003	0.4	Normal	60.0	55	0.15	0.035	Min	0.039
	400	0.006	0.9	Normal	75.0	80	0.10	0.035	Min	0.036
	410	0.095	14.4	Normal	75.0	80	0.10	0.035	Min	0.029
	510	0.006	0.9	Normal	75.0	80	0.10	0.035	Min	0.036
	520	0.046	6.9	Normal	80.0	45	0.29	0.035	Min	0.031
	530	0.016	2.4	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.012	1.8	Normal	75.0	80	0.10	0.035	Min	0.034
	710	0.011	1.7	Normal	60.0	5	0.10	0.030	Low	0.068
	720	0.090	13.6	Normal	80.0	5	0.10	0.035	Min	0.029
	740	0.001	0.1	Wet				0.020	Low	0.083

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
80c	900	0.002	0.4	Normal	25.0		0.35	0.030	Low	0.077
80e	120	0.006	1.2	Normal	30.0	5	0.30	0.035	Min	0.036
	130	0.007	1.3	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.115	23.3	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.161	32.7	Normal	50.0	30	0.25	0.045	Min	0.027
	160	0.002	0.4	Normal	50.0	40	0.25	0.050	Min	0.039
	170	0.012	2.4	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.060	12.2	Normal	50.0	45	0.25	0.060	Min	0.030
	190	0.049	9.8	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.002	0.5	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.011	2.2	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.001	0.2	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.012	2.4	Normal	75.0	80	0.10	0.035	Min	0.034
	520	0.020	4.1	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.017	3.4	Normal	75.0	80	0.10	0.035	Min	0.034
	550	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	720	0.000		Normal	80.0	5	0.10	0.035	Min	0.047
	900	0.015	2.9	Normal	25.0		0.35	0.030	Low	0.067
80g	120	0.003	0.5	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.002	0.3	Normal	50.0	15	0.30	0.040	Min	0.040
	140	0.064	12.9	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.096	19.3	Normal	50.0	30	0.25	0.045	Min	0.029
	170	0.018	3.5	Normal	50.0	45	0.25	0.055	Min	0.033
	180	0.036	7.2	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.000		Normal	50.0	45	0.25	0.060	Min	0.047
	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.024	4.9	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.002	0.4	Normal	65.0	80	0.10	0.030	Min	0.039

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
80g	230	0.000	0.1	Normal	75.0	80	0.10	0.030	Min	0.044
	310	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.040
	520	0.087	17.4	Normal	80.0	45	0.29	0.035	Min	0.029
	530	0.062	12.4	Normal	75.0	80	0.10	0.035	Min	0.030
	570	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	710	0.094	19.0	Normal	60.0	5	0.10	0.030	Low	0.056
	900	0.005	0.9	Normal	25.0		0.35	0.030	Low	0.073
80l	130	0.013	2.5	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.192	38.7	Normal	50.0	30	0.25	0.045	Min	0.027
	150	0.177	35.7	Normal	50.0	30	0.25	0.045	Min	0.027
	160	0.007	1.4	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.003	0.7	Normal	50.0	45	0.25	0.055	Min	0.038
	180	0.014	2.9	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.007	1.4	Normal	50.0	45	0.25	0.060	Min	0.036
	200	0.008	1.6	Normal	60.0	80	0.10	0.040	Min	0.036
	210	0.018	3.5	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.013	2.6	Normal	65.0	80	0.10	0.030	Min	0.034
	230	0.001	0.1	Normal	75.0	80	0.10	0.030	Min	0.042
	240	0.000		Normal	65.0	80	0.10	0.030	Min	0.047
	410	0.004	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	420	0.012	2.4	Normal	75.0	80	0.10	0.030	Min	0.034
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.008	1.6	Normal	75.0	80	0.10	0.035	Min	0.036
	550	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.040
	570	0.003	0.5	Normal	75.0	80	0.10	0.035	Min	0.039
	610	0.001	0.3	Normal	75.0	80	0.10	0.030	Min	0.040
	710	0.005	1.1	Normal	60.0	5	0.10	0.030	Low	0.073
	900	0.009	1.8	Normal	25.0		0.35	0.030	Low	0.070

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
80k	130	0.001	0.2	Normal	50.0	15	0.30	0.040	Min	0.041
	140	0.097	22.6	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.053	12.3	Normal	50.0	30	0.25	0.045	Min	0.030
	160	0.001	0.2	Normal	50.0	40	0.25	0.050	Min	0.042
	170	0.014	3.3	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.061	14.1	Normal	50.0	45	0.25	0.060	Min	0.030
	190	0.098	22.9	Normal	50.0	45	0.25	0.060	Min	0.029
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.030	7.0	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.006	1.3	Normal	65.0	80	0.10	0.030	Min	0.036
	310	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.040
	410	0.018	4.3	Normal	75.0	80	0.10	0.035	Min	0.033
	520	0.015	3.6	Normal	80.0	45	0.29	0.035	Min	0.034
	530	0.002	0.4	Normal	75.0	80	0.10	0.035	Min	0.040
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	710	0.006	1.5	Normal	60.0	5	0.10	0.030	Low	0.072
	740	0.014	3.3	Wet				0.020	Low	0.067
	900	0.011	2.5	Normal	25.0		0.35	0.030	Low	0.069
80m	120	0.000		Normal	30.0	5	0.30	0.035	Min	0.047
	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	140	0.123	22.7	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.222	41.0	Normal	50.0	30	0.25	0.045	Min	0.027
	170	0.005	1.0	Normal	50.0	45	0.25	0.055	Min	0.037
	180	0.011	2.1	Normal	50.0	45	0.25	0.060	Min	0.035
	190	0.030	5.5	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.046
	210	0.020	3.7	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.030	5.6	Normal	65.0	80	0.10	0.030	Min	0.032
	410	0.012	2.3	Normal	75.0	80	0.10	0.035	Min	0.034

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
80m	520	0.060	11.2	Normal	80.0	45	0.29	0.035	Min	0.030
	530	0.023	4.2	Normal	75.0	80	0.10	0.035	Min	0.033
	540	0.000		Normal	90.0	5	0.10	0.035	Low	0.096
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	720	0.000		Normal	80.0	5	0.10	0.035	Min	0.047
	740	0.000		Wet				0.020	Low	0.096
	900	0.004	0.7	Normal	25.0		0.35	0.030	Low	0.075
80o	130	0.006	1.1	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.140	25.8	Normal	50.0	30	0.25	0.045	Min	0.028
	150	0.080	14.7	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.008	1.4	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.006	1.1	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.003	0.5	Normal	50.0	45	0.25	0.060	Min	0.038
	190	0.018	3.3	Normal	50.0	45	0.25	0.060	Min	0.033
	200	0.003	0.6	Normal	60.0	80	0.10	0.040	Min	0.038
	210	0.031	5.7	Normal	65.0	80	0.10	0.035	Min	0.032
	220	0.008	1.5	Normal	65.0	80	0.10	0.030	Min	0.036
	310	0.061	11.2	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.023	4.3	Normal	60.0	55	0.15	0.035	Min	0.033
	510	0.011	2.0	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.030	5.4	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.005	0.8	Normal	75.0	80	0.10	0.035	Min	0.037
	550	0.046	8.4	Normal	75.0	80	0.10	0.035	Min	0.031
	560	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.041
	610	0.023	4.2	Normal	75.0	80	0.10	0.030	Min	0.033
	720	0.000		Normal	80.0	5	0.10	0.035	Min	0.047
	900	0.042	7.8	Normal	25.0		0.35	0.030	Low	0.060
80p	210	0.056	14.1	Normal	65.0	80	0.10	0.035	Min	0.030
	220	0.015	3.8	Normal	65.0	80	0.10	0.030	Min	0.034

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
80p	300	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	310	0.223	56.1	Normal	75.0	80	0.10	0.035	Min	0.027
	320	0.042	10.5	Normal	60.0	55	0.15	0.035	Min	0.031
	410	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.042
	510	0.003	0.7	Normal	75.0	80	0.10	0.035	Min	0.038
	540	0.002	0.5	Normal	90.0	5	0.10	0.035	Low	0.079
	610	0.004	1.0	Normal	75.0	80	0.10	0.030	Min	0.038
	900	0.052	13.0	Normal	25.0		0.35	0.030	Low	0.059
80q	140	0.018	3.6	Normal	50.0	30	0.25	0.045	Min	0.033
	150	0.097	19.6	Normal	50.0	30	0.25	0.045	Min	0.029
	160	0.020	4.0	Normal	50.0	40	0.25	0.050	Min	0.033
	170	0.016	3.1	Normal	50.0	45	0.25	0.055	Min	0.034
	180	0.007	1.3	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.000	0.1	Normal	50.0	45	0.25	0.060	Min	0.044
	200	0.000	0.1	Normal	60.0	80	0.10	0.040	Min	0.044
	210	0.044	8.9	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.001	0.2	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.135	27.1	Normal	75.0	80	0.10	0.035	Min	0.028
	320	0.005	0.9	Normal	60.0	55	0.15	0.035	Min	0.037
	510	0.005	1.0	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.002	0.5	Normal	80.0	45	0.29	0.035	Min	0.039
	530	0.019	3.7	Normal	75.0	80	0.10	0.035	Min	0.033
	540	0.017	3.4	Normal	90.0	5	0.10	0.035	Low	0.066
	550	0.012	2.5	Normal	75.0	80	0.10	0.035	Min	0.034
	900	0.100	20.0	Normal	25.0		0.35	0.030	Low	0.055
80t	140	0.001	0.2	Normal	50.0	30	0.25	0.045	Min	0.043
	150	0.049	19.3	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.014	5.6	Normal	50.0	40	0.25	0.050	Min	0.034
	170	0.002	0.6	Normal	50.0	45	0.25	0.055	Min	0.040

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
80t	180	0.002	0.6	Normal	50.0	45	0.25	0.060	Min	0.040
	210	0.038	15.0	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.009	3.6	Normal	65.0	80	0.10	0.030	Min	0.035
	310	0.040	15.7	Normal	75.0	80	0.10	0.035	Min	0.031
	320	0.058	22.8	Normal	60.0	55	0.15	0.035	Min	0.030
	410	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	530	0.004	1.4	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.044
	610	0.000	0.2	Normal	75.0	80	0.10	0.030	Min	0.044
	900	0.038	14.9	Normal	25.0		0.35	0.030	Low	0.061
80u	140	0.001	0.2	Normal	50.0	30	0.25	0.045	Min	0.043
	150	0.001	0.2	Normal	50.0	30	0.25	0.045	Min	0.043
	180	0.057	23.0	Normal	50.0	45	0.25	0.060	Min	0.030
	210	0.055	21.9	Normal	65.0	80	0.10	0.035	Min	0.030
	220	0.015	5.9	Normal	65.0	80	0.10	0.030	Min	0.034
	310	0.062	25.0	Normal	75.0	80	0.10	0.035	Min	0.030
	320	0.015	5.8	Normal	60.0	55	0.15	0.035	Min	0.034
	520	0.017	6.7	Normal	80.0	45	0.29	0.035	Min	0.034
	550	0.002	0.9	Normal	75.0	80	0.10	0.035	Min	0.039
	710	0.013	5.1	Normal	60.0	5	0.10	0.030	Low	0.067
	900	0.013	5.1	Normal	25.0		0.35	0.030	Low	0.067
80v	210	0.029	12.7	Normal	65.0	80	0.10	0.035	Min	0.032
	300	0.002	0.8	Normal	60.0	55	0.15	0.035	Min	0.039
	310	0.043	18.7	Normal	75.0	80	0.10	0.035	Min	0.031
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	550	0.128	55.6	Normal	75.0	80	0.10	0.035	Min	0.028
	710	0.005	2.1	Normal	60.0	5	0.10	0.030	Low	0.073
	750	0.022	9.5	Normal	85.0		0.50	0.100	Low	0.064
	900	0.001	0.5	Normal	25.0		0.35	0.030	Low	0.082

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
80w	210	0.015	4.1	Normal	65.0	80	0.10	0.035	Min	0.034
	300	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	310	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.041
	320	0.118	32.9	Normal	60.0	55	0.15	0.035	Min	0.028
	550	0.078	21.6	Normal	75.0	80	0.10	0.035	Min	0.029
	570	0.146	40.7	Normal	75.0	80	0.10	0.035	Min	0.028
	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	740	0.000		Wet				0.020	Low	0.096
	900	0.002	0.4	Normal	25.0		0.35	0.030	Low	0.080
84c	120	0.004	0.9	Normal	30.0	5	0.30	0.035	Min	0.037
	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	140	0.000	0.1	Normal	50.0	30	0.25	0.045	Min	0.044
	150	0.104	22.2	Normal	50.0	30	0.25	0.045	Min	0.029
	190	0.024	5.2	Normal	50.0	45	0.25	0.060	Min	0.033
	200	0.002	0.5	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.015	3.3	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.039	8.4	Normal	65.0	80	0.10	0.030	Min	0.031
	230	0.006	1.3	Normal	75.0	80	0.10	0.030	Min	0.036
	310	0.043	9.3	Normal	75.0	80	0.10	0.035	Min	0.031
	410	0.051	10.8	Normal	75.0	80	0.10	0.035	Min	0.031
	420	0.021	4.4	Normal	75.0	80	0.10	0.030	Min	0.033
	510	0.051	10.9	Normal	75.0	80	0.10	0.035	Min	0.031
	520	0.025	5.4	Normal	80.0	45	0.29	0.035	Min	0.032
	530	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	550	0.026	5.6	Normal	75.0	80	0.10	0.035	Min	0.032
	720	0.000		Normal	80.0	5	0.10	0.035	Min	0.046
	740	0.004	0.8	Wet				0.020	Low	0.075
	900	0.051	10.9	Normal	25.0		0.35	0.030	Low	0.059
84e	110	0.001	0.4	Normal	30.0	5	0.30	0.035	Min	0.042

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
84e	130	0.007	3.2	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.068	31.8	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.009	4.3	Normal	50.0	30	0.25	0.045	Min	0.035
	160	0.008	3.5	Normal	50.0	40	0.25	0.050	Min	0.036
	170	0.007	3.3	Normal	50.0	45	0.25	0.055	Min	0.036
	180	0.020	9.2	Normal	50.0	45	0.25	0.060	Min	0.033
	190	0.019	8.6	Normal	50.0	45	0.25	0.060	Min	0.033
	200	0.002	0.8	Normal	60.0	80	0.10	0.040	Min	0.040
	210	0.020	9.2	Normal	65.0	80	0.10	0.035	Min	0.033
	230	0.000		Normal	75.0	80	0.10	0.030	Min	0.047
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	410	0.010	4.4	Normal	75.0	80	0.10	0.035	Min	0.035
	530	0.009	4.0	Normal	75.0	80	0.10	0.035	Min	0.035
	550	0.002	0.9	Normal	75.0	80	0.10	0.035	Min	0.039
	570	0.003	1.6	Normal	75.0	80	0.10	0.035	Min	0.038
	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	900	0.031	14.5	Normal	25.0		0.35	0.030	Low	0.062
84g	120	0.000		Normal	30.0	5	0.30	0.035	Min	0.047
	130	0.019	8.9	Normal	50.0	15	0.30	0.040	Min	0.033
	140	0.057	26.3	Normal	50.0	30	0.25	0.045	Min	0.030
	150	0.042	19.4	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.004	1.9	Normal	50.0	40	0.25	0.050	Min	0.037
	180	0.016	7.3	Normal	50.0	45	0.25	0.060	Min	0.034
	190	0.019	8.8	Normal	50.0	45	0.25	0.060	Min	0.033
	210	0.010	4.6	Normal	65.0	80	0.10	0.035	Min	0.035
	220	0.031	14.6	Normal	65.0	80	0.10	0.030	Min	0.032
	310	0.002	1.1	Normal	75.0	80	0.10	0.035	Min	0.039
	410	0.011	4.9	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.046
	530	0.001	0.6	Normal	75.0	80	0.10	0.035	Min	0.041

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
84g	710	0.000		Normal	60.0	5	0.10	0.030	Low	0.096
	900	0.003	1.4	Normal	25.0		0.35	0.030	Low	0.076
84i	130	0.000	0.2	Normal	50.0	15	0.30	0.040	Min	0.044
	140	0.079	37.7	Normal	50.0	30	0.25	0.045	Min	0.029
	150	0.008	3.9	Normal	50.0	30	0.25	0.045	Min	0.035
	160	0.022	10.6	Normal	50.0	40	0.25	0.050	Min	0.033
	170	0.002	0.7	Normal	50.0	45	0.25	0.055	Min	0.040
	180	0.008	3.8	Normal	50.0	45	0.25	0.060	Min	0.036
	190	0.017	8.0	Normal	50.0	45	0.25	0.060	Min	0.034
	210	0.023	10.7	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.003	1.6	Normal	65.0	80	0.10	0.030	Min	0.038
	410	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.041
	510	0.002	0.9	Normal	75.0	80	0.10	0.035	Min	0.039
	520	0.019	9.2	Normal	80.0	45	0.29	0.035	Min	0.033
	530	0.003	1.3	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.008	3.7	Normal	75.0	80	0.10	0.035	Min	0.036
	900	0.015	7.2	Normal	25.0		0.35	0.030	Low	0.066
84k	130	0.014	4.6	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.035	11.2	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.017	5.5	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.018	5.8	Normal	50.0	40	0.25	0.050	Min	0.033
	170	0.010	3.3	Normal	50.0	45	0.25	0.055	Min	0.035
	180	0.030	9.5	Normal	50.0	45	0.25	0.060	Min	0.032
	190	0.038	12.2	Normal	50.0	45	0.25	0.060	Min	0.031
	200	0.011	3.5	Normal	60.0	80	0.10	0.040	Min	0.035
	210	0.049	15.6	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.002	0.5	Normal	65.0	80	0.10	0.030	Min	0.040
	310	0.027	8.7	Normal	75.0	80	0.10	0.035	Min	0.032
	410	0.009	2.8	Normal	75.0	80	0.10	0.035	Min	0.035

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
84k	510	0.002	0.5	Normal	75.0	80	0.10	0.035	Min	0.040
	520	0.001	0.3	Normal	80.0	45	0.29	0.035	Min	0.041
	530	0.003	0.9	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.011	3.5	Normal	75.0	80	0.10	0.035	Min	0.035
	570	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.040
	710	0.000	0.1	Normal	60.0	5	0.10	0.030	Low	0.090
	740	0.007	2.4	Wet				0.020	Low	0.071
	900	0.027	8.6	Normal	25.0		0.35	0.030	Low	0.063
84m	120	0.002	0.9	Normal	30.0	5	0.30	0.035	Min	0.039
	130	0.002	1.0	Normal	50.0	15	0.30	0.040	Min	0.039
	140	0.010	4.8	Normal	50.0	30	0.25	0.045	Min	0.035
	150	0.104	49.5	Normal	50.0	30	0.25	0.045	Min	0.029
	170	0.001	0.2	Normal	50.0	45	0.25	0.055	Min	0.043
	180	0.002	1.1	Normal	50.0	45	0.25	0.060	Min	0.039
	190	0.033	15.7	Normal	50.0	45	0.25	0.060	Min	0.032
	200	0.000	0.2	Normal	60.0	80	0.10	0.040	Min	0.044
	210	0.014	6.7	Normal	65.0	80	0.10	0.035	Min	0.034
	220	0.001	0.4	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.001	0.3	Normal	75.0	80	0.10	0.035	Min	0.043
	320	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	410	0.006	2.8	Normal	75.0	80	0.10	0.035	Min	0.036
	510	0.010	4.8	Normal	75.0	80	0.10	0.035	Min	0.035
	520	0.004	2.0	Normal	80.0	45	0.29	0.035	Min	0.037
	550	0.005	2.2	Normal	75.0	80	0.10	0.035	Min	0.037
	740	0.002	1.1	Wet				0.020	Low	0.078
	900	0.013	6.3	Normal	25.0		0.35	0.030	Low	0.067
84t	140	0.007	2.4	Normal	50.0	30	0.25	0.045	Min	0.036
	150	0.029	10.7	Normal	50.0	30	0.25	0.045	Min	0.032
	180	0.001	0.4	Normal	50.0	45	0.25	0.060	Min	0.041

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
84t	200	0.001	0.2	Normal	60.0	80	0.10	0.040	Min	0.043
	210	0.036	13.3	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.001	0.4	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.145	53.1	Normal	75.0	80	0.10	0.035	Min	0.028
	320	0.042	15.5	Normal	60.0	55	0.15	0.035	Min	0.031
	520	0.000		Normal	80.0	45	0.29	0.035	Min	0.047
	530	0.002	0.7	Normal	75.0	80	0.10	0.035	Min	0.040
	550	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	610	0.001	0.2	Normal	75.0	80	0.10	0.030	Min	0.043
	900	0.008	3.0	Normal	25.0		0.35	0.030	Low	0.070
84u	130	0.000	0.1	Normal	50.0	15	0.30	0.040	Min	0.046
	140	0.013	5.1	Normal	50.0	30	0.25	0.045	Min	0.034
	150	0.047	17.9	Normal	50.0	30	0.25	0.045	Min	0.031
	160	0.000	0.1	Normal	50.0	40	0.25	0.050	Min	0.044
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.025	9.4	Normal	65.0	80	0.10	0.035	Min	0.033
	220	0.001	0.4	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.092	35.0	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.015	5.7	Normal	60.0	55	0.15	0.035	Min	0.034
	520	0.026	9.9	Normal	80.0	45	0.29	0.035	Min	0.032
	550	0.013	4.8	Normal	75.0	80	0.10	0.035	Min	0.034
	610	0.001	0.5	Normal	75.0	80	0.10	0.030	Min	0.040
	750	0.000	0.1	Normal	85.0		0.50	0.100	Low	0.092
	900	0.029	11.1	Normal	25.0		0.35	0.030	Low	0.063
84v	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	310	0.061	23.8	Normal	75.0	80	0.10	0.035	Min	0.030
	550	0.099	38.7	Normal	75.0	80	0.10	0.035	Min	0.029
	750	0.089	35.0	Normal	85.0		0.50	0.100	Low	0.056

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
84v	900	0.006	2.4	Normal	25.0		0.35	0.030	Low	0.072
84w	200	0.063	18.5	Normal	60.0	80	0.10	0.040	Min	0.030
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	550	0.005	1.3	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.174	51.2	Normal	75.0	80	0.10	0.035	Min	0.027
	750	0.000		Normal	85.0		0.50	0.100	Low	0.096
	900	0.098	28.8	Normal	25.0		0.35	0.030	Low	0.055
88t	130	0.014	5.3	Normal	50.0	15	0.30	0.040	Min	0.034
	140	0.027	10.4	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.016	6.2	Normal	50.0	30	0.25	0.045	Min	0.034
	160	0.004	1.7	Normal	50.0	40	0.25	0.050	Min	0.037
	170	0.004	1.6	Normal	50.0	45	0.25	0.055	Min	0.037
	200	0.002	0.9	Normal	60.0	80	0.10	0.040	Min	0.039
	210	0.110	42.2	Normal	65.0	80	0.10	0.035	Min	0.028
	220	0.003	1.0	Normal	65.0	80	0.10	0.030	Min	0.039
	310	0.029	11.2	Normal	75.0	80	0.10	0.035	Min	0.032
	320	0.020	7.6	Normal	60.0	55	0.15	0.035	Min	0.033
	530	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.040
	550	0.004	1.6	Normal	75.0	80	0.10	0.035	Min	0.037
	570	0.002	0.6	Normal	75.0	80	0.10	0.035	Min	0.040
	900	0.024	9.1	Normal	25.0		0.35	0.030	Low	0.064
88u	120	0.005	2.1	Normal	30.0	5	0.30	0.035	Min	0.037
	130	0.018	7.1	Normal	50.0	15	0.30	0.040	Min	0.033
	140	0.051	20.3	Normal	50.0	30	0.25	0.045	Min	0.031
	150	0.030	12.1	Normal	50.0	30	0.25	0.045	Min	0.032
	160	0.005	2.0	Normal	50.0	40	0.25	0.050	Min	0.037
	180	0.001	0.3	Normal	50.0	45	0.25	0.060	Min	0.042
	200	0.004	1.7	Normal	60.0	80	0.10	0.040	Min	0.037
	210	0.061	24.5	Normal	65.0	80	0.10	0.035	Min	0.030

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
88u	220	0.001	0.5	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.049	19.5	Normal	75.0	80	0.10	0.035	Min	0.031
	320	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.044
	410	0.005	2.1	Normal	75.0	80	0.10	0.035	Min	0.037
	520	0.000	0.1	Normal	80.0	45	0.29	0.035	Min	0.046
	530	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	550	0.003	1.0	Normal	75.0	80	0.10	0.035	Min	0.039
	570	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	610	0.008	3.1	Normal	75.0	80	0.10	0.030	Min	0.036
	900	0.008	3.2	Normal	25.0		0.35	0.030	Low	0.070
88v	130	0.000		Normal	50.0	15	0.30	0.040	Min	0.047
	140	0.000		Normal	50.0	30	0.25	0.045	Min	0.047
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.000		Normal	65.0	80	0.10	0.035	Min	0.047
	310	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	550	0.151	60.8	Normal	75.0	80	0.10	0.035	Min	0.028
	570	0.001	0.5	Normal	75.0	80	0.10	0.035	Min	0.040
	750	0.004	1.8	Normal	85.0		0.50	0.100	Low	0.074
	900	0.091	36.7	Normal	25.0		0.35	0.030	Low	0.056
88w	200	0.005	0.8	Normal	60.0	80	0.10	0.040	Min	0.037
	210	0.013	2.2	Normal	65.0	80	0.10	0.035	Min	0.034
	300	0.000		Normal	60.0	55	0.15	0.035	Min	0.047
	310	0.003	0.4	Normal	75.0	80	0.10	0.035	Min	0.039
	320	0.016	2.7	Normal	60.0	55	0.15	0.035	Min	0.034
	550	0.128	21.4	Normal	75.0	80	0.10	0.035	Min	0.028
	570	0.243	40.6	Normal	75.0	80	0.10	0.035	Min	0.026
	710	0.032	5.4	Normal	60.0	5	0.10	0.030	Low	0.062
	900	0.159	26.6	Normal	25.0		0.35	0.030	Low	0.052
92t	120	0.003	1.5	Normal	30.0	5	0.30	0.035	Min	0.039

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
92t	130	0.006	3.4	Normal	50.0	15	0.30	0.040	Min	0.036
	140	0.026	14.7	Normal	50.0	30	0.25	0.045	Min	0.032
	150	0.009	5.2	Normal	50.0	30	0.25	0.045	Min	0.035
	160	0.013	7.2	Normal	50.0	40	0.25	0.050	Min	0.034
	170	0.000	0.2	Normal	50.0	45	0.25	0.055	Min	0.044
	180	0.001	0.7	Normal	50.0	45	0.25	0.060	Min	0.040
	200	0.001	0.6	Normal	60.0	80	0.10	0.040	Min	0.041
	210	0.041	23.5	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.001	0.7	Normal	65.0	80	0.10	0.030	Min	0.041
	310	0.021	12.2	Normal	75.0	80	0.10	0.035	Min	0.033
	320	0.010	5.7	Normal	60.0	55	0.15	0.035	Min	0.035
	510	0.002	1.0	Normal	75.0	80	0.10	0.035	Min	0.040
	520	0.015	8.6	Normal	80.0	45	0.29	0.035	Min	0.034
	900	0.026	15.0	Normal	25.0		0.35	0.030	Low	0.063
92u	120	0.024	9.8	Normal	30.0	5	0.30	0.035	Min	0.033
	130	0.020	7.9	Normal	50.0	15	0.30	0.040	Min	0.033
	140	0.012	4.9	Normal	50.0	30	0.25	0.045	Min	0.034
	150	0.005	1.9	Normal	50.0	30	0.25	0.045	Min	0.037
	160	0.014	5.8	Normal	50.0	40	0.25	0.050	Min	0.034
	170	0.003	1.0	Normal	50.0	45	0.25	0.055	Min	0.039
	200	0.000		Normal	60.0	80	0.10	0.040	Min	0.047
	210	0.041	16.4	Normal	65.0	80	0.10	0.035	Min	0.031
	220	0.002	0.7	Normal	65.0	80	0.10	0.030	Min	0.040
	300	0.015	5.9	Normal	60.0	55	0.15	0.035	Min	0.034
	310	0.099	39.7	Normal	75.0	80	0.10	0.035	Min	0.029
	320	0.006	2.4	Normal	60.0	55	0.15	0.035	Min	0.036
	510	0.000		Normal	75.0	80	0.10	0.035	Min	0.047
	530	0.004	1.5	Normal	75.0	80	0.10	0.035	Min	0.038
	550	0.001	0.2	Normal	75.0	80	0.10	0.035	Min	0.043
	740	0.000		Wet				0.020	Low	0.096

Land Use Data

Sub Basin ID	Land Use Code	Area	Area Pct (%)	DTHETA Condition	Vegetation Cover (%)	RTIMP (%)	IA (in)	Kn	Kb Type	Kb
Major Basin:	**01**									
92u	750	0.000		Normal	85.0		0.50	0.100	Low	0.096
	900	0.004	1.7	Normal	25.0		0.35	0.030	Low	0.074
92v	210	0.000	0.3	Normal	65.0	80	0.10	0.035	Min	0.044
	300	0.000	0.1	Normal	60.0	55	0.15	0.035	Min	0.047
	310	0.000	0.1	Normal	75.0	80	0.10	0.035	Min	0.047
	320	0.001	0.4	Normal	60.0	55	0.15	0.035	Min	0.042
	550	0.157	99.1	Normal	75.0	80	0.10	0.035	Min	0.027
	740	0.000	0.1	Wet				0.020	Low	0.096
I17	610	0.293	100.0	Normal	*	99 *	0.10	0.030	Min	0.026

APPENDIX A5

Surface Retention Parameter (IA)

Appendix A5 Evaluation Procedures for Surface Retention Loss - IA

The surface retention loss, IA, is one of the important rainfall loss parameters used in the Green-Ampt method for the HEC-1 rainfall-runoff model. Typical IA values have been suggested for many land uses by the FCDMC Hydrology Manual (Table 4.2a). However, the engineer/hydrologist should always evaluate the specific circumstances in any particular watershed for hydrologic variations from these typical values.

The Metro Phoenix ADMS/P watershed includes many flood irrigated parcels. Storm water runoff from these irrigated parcels is retained within these areas and does not contribute to the subbasin total runoff. In order to account for the impact of flood irrigated parcels on the reduction of surface runoff, the default IA values need to be adjusted for the extra surface retention capacity.

Historical irrigation data provided by SRP has been used to help to estimate the average irrigation depth in the Metro Phoenix watershed. The flood irrigated land within the Metro ADMS/P watershed is presented on Exhibit D. The attached Table A5-1 shows the estimation procedure of averaged irrigated-area IA for the entire watershed from the SRP data (per occurrence). First, the irrigated area (columns 2 and 3) and irrigated depth (column 9) for each of the subbasins were computed from the SRP GIS database. The highest and the lowest irrigation depths (outliers) for the subbasins were eliminated and the remaining irrigation depths were used to calculate the watershed average irrigation depth per occurrence (last row, 3.3 in). The attached Table A5-2 shows the estimation procedure of averaged irrigated-area IA (custom IA) for each of the sub-basins. The watershed averaged irrigated depth of 3.3 has been applied as IA to the irrigated lots for all of the subbasins where flood irrigated lots exist (column 11). This depth compares favorably with SRP's average of 3 to 4 inches per delivery per irrigated parcel. The pervious area for each subbasin is the difference between the total subbasin area and the impervious area (column 10). The non-irrigated area is the difference between the pervious area and the irrigated area (column 12). The default IA values were used for pervious areas where flood irrigation is not available (column 13). Finally, the area-

weighted IA is computed for each of the subbasins as shown in the last column of the table (column 14). These values were applied in the DDMSW as custom IA values.

Metro Phoenix ADMS/P
Table A5-1 SRP Irrigated Area Summary - IA Data

Subbasin Name	Irrigated area in subbasin (SF)	Irrigated area in subbasin (AC)	Irrigated Vol per day (ft^3)	Irrigated Day Per year (2001)	Occurrence Per year(2001)	Irrigated days per occurrence (day)	Irrigated Vol per occurrence (ft^3)	Ave depth per occurrence (in)
	SUM_F_AREA		SUM_AREA_D	SUM_irriga	SUM_occurr			
1	2	3	4	5	6	7	8	9
60o	3957864	91	22303	54	36	1.5	33454	0.10
36p	646666	15	21553	37	30	1.2	26583	0.49
64l	2485776	57	50111	101	42	2.4	120506	0.58
28p	1951918	45	93118	16	14	1.1	106421	0.65
24o	2968317	68	173547	23	19	1.2	210084	0.85
52q	525424	12	34565	22	18	1.2	42246	0.96
52g	3097995	71	247212	9	8	1.1	278113	1.08
36m	4749168	109	265781	31	19	1.6	433643	1.10
80m	848295	19	84485	2	2	1.0	84485	1.20
80c	2524609	58	146479	64	35	1.8	267848	1.27
44i	4155502	95	287313	85	55	1.5	444029	1.28
64k	1335570	31	91885	48	30	1.6	147017	1.32
72k	834666	19	67701	25	18	1.4	94029	1.35
28o	4888417	112	399576	28	20	1.4	559406	1.37
20p	1161473	27	95941	39	28	1.4	133632	1.38
48k	1675710	38	182233	11	10	1.1	200457	1.44
80o	830463	19	76914	22	17	1.3	99536	1.44
84k	813737	19	71534	26	18	1.4	103327	1.52
76m	1225316	28	120483	39	30	1.3	156627	1.53
48i	5608524	129	673150	32	30	1.1	718027	1.54
84m	21069	0.5	2178	5	4	1.3	2723	1.55
40p	1335618	31	167009	19	18	1.1	176287	1.58
76e	3328961	76	303221	66	45	1.5	444724	1.60
68g	6574300	151	562599	51	31	1.6	925566	1.69
32s	544528	13	66520	21	18	1.2	77607	1.71
64c	1471146	34	117730	86	48	1.8	210932	1.72
32m	3436222	79	419840	24	20	1.2	503808	1.76
64i	3653630	84	279350	59	29	2.0	568333	1.87
40k	3184701	73	270752	42	22	1.9	516889	1.95
24m	4880767	112	452527	41	22	1.9	843347	2.07
28m	5853922	134	419766	46	19	2.4	1016275	2.08
54m	583857	13	79780	23	18	1.3	101941	2.10
80i	818473	19	87364	48	28	1.7	149767	2.20
36k	4039792	93	435613	31	18	1.7	750223	2.23

84u	598857	14	104666	8	7	1.1	119618	2.40
44m	3522890	81	317230	45	20	2.3	713768	2.43
60e	3285576	75	325027	44	21	2.1	681010	2.49
40m	2066830	47	294936	24	16	1.5	442404	2.57
72c	7351261	169	880531	33	17	1.9	1709265	2.79
80k	716976	16	152922	19	17	1.1	170913	2.86
60u	428970	10	92299	19	17	1.1	103158	2.89
60i	1713315	39	236675	61	35	1.7	412490	2.89
48o	2429873	56	293586	22	11	2.0	587171	2.90
72g	3921659	90	477814	56	28	2.0	955628	2.92
76c	2378098	55	553020	15	14	1.1	592522	2.99
56o	284608	7	53331	20	15	1.3	71107	3.00
44o	1953764	45	203199	41	17	2.4	490067	3.01
56e	1943551	45	308318	31	19	1.6	503045	3.11
56m	2428617	56	289186	44	20	2.2	636209	3.14
28q	300617	7	49380	31	19	1.6	80567	3.22
72l	1453716	33	141056	47	17	2.8	389978	3.22
76u	163425	4	37919	7	6	1.2	44239	3.25
60m	2469913	57	467983	28	19	1.5	689658	3.35
48m	2666773	61	322048	42	18	2.3	751445	3.38
56k	1786250	41	157439	64	20	3.2	503805	3.38
32o	3227396	74	469054	35	18	1.9	912050	3.39
64m	293976	7	68690	22	18	1.2	83954	3.43
88t	16392	0.4	3533	12	9	1.3	4710	3.45
44k	2445103	56	385846	37	20	1.9	713815	3.50
44p	937900	22	176958	28	18	1.6	275268	3.52
76i	1355341	31	194787	35	17	2.1	401033	3.55
52o	843434	19	142794	32	18	1.8	253856	3.61
72e	5084485	117	738015	71	34	2.1	1541150	3.64
80g	2348090	54	550246	22	17	1.3	712082	3.64
52k	702539	16	68607	63	20	3.2	216112	3.69
84i	1306164	30	212656	36	19	1.9	402926	3.70
64g	5557419	128	730074	43	18	2.4	1744066	3.77
72m	217490	5	38098	35	19	1.8	70180	3.87
60k	406397	9	57125	44	19	2.3	132289	3.91
36q	70675	2	20756	20	18	1.1	23063	3.92
80e	1716411	39	400382	26	18	1.4	578329	4.04
84g	682682	16	186149	44	35	1.3	234016	4.11
64e	5232303	120	576560	60	19	3.2	1820716	4.18
68k	787525	18	144911	38	20	1.9	275331	4.20
84e	1772636	41	254874	45	18	2.5	637185	4.31
52m	466238	11	84337	34	17	2.0	168673	4.34

60g	4333644	99	417636	75	19	3.9	1648563	4.56
60l	214803	5	50726	31	19	1.6	82763	4.62
40o	2983864	69	433230	48	18	2.7	1155281	4.65
68c	4656301	107	583817	54	17	3.2	1854478	4.78
76g	2798650	64	280818	72	18	4.0	1123273	4.82
68i	5383073	124	548830	71	18	3.9	2164829	4.83
32k	5986857	137	797819	55	18	3.1	2437780	4.89
72o	1173121	27	234645	37	18	2.1	482325	4.93
56g	5140650	118	649345	63	19	3.3	2153090	5.03
56i	3184227	73	606874	46	20	2.3	1395809	5.26
68l	773825	18	136034	53	21	2.5	343323	5.32
68e	5170928	119	866387	48	18	2.7	2310364	5.36
28k	2914107	67	392680	79	23	3.4	1348772	5.55
64o	3373769	77	553791	55	19	2.9	1603080	5.70
36o	1473964	34	180874	68	17	4.0	723497	5.89
56v	12521	0.3	6281	18	17	1.1	6651	6.37
24k	502044	12	134065	37	18	2.1	275577	6.59
76k	683695	16	246624	26	17	1.5	377189	6.62
72i	2464964	57	243165	101	17	5.9	1444686	7.03
36i	1775369	41	497690	36	17	2.1	1053933	7.12
40i	3468174	80	188532	249	21	11.9	2235451	7.73
54g	1224003	28	505854	32	19	1.7	851964	8.35
72u	71035	2	38163	4	3	1.3	50884	8.60
52i	2333871	54	381437	85	19	4.5	1706431	8.77
56u	21214	0.5	14005	6	5	1.2	16805	9.51
76l	558692	13	138477	61	19	3.2	444585	9.55
84c	160751	4	134134	23	22	1.0	140231	10.47
88u	169444	4	120535	21	17	1.2	148896	10.54
44q	283431	7	221071	23	18	1.3	282480	11.96
42i	2052286	47	188532	249	21	11.9	2235451	13.07
48q	13335	0.3	11966	23	18	1.3	15290	13.76
54k	219577	5	179175	26	18	1.4	258809	14.14
84v	2257943	52	596628	43	8	5.4	3206877	17.04
54i	1176573	27	423952	85	20	4.3	1801796	18.38
40q	193584	4	238752	50	36	1.4	331600	20.56
80v	19703	0.5	127226	8	7	1.1	145401	88.55
72v	7102	0.2	28305	14	4	3.5	99069	167.40
					Area Weighted Irrigated Depth (in) =			**3.30**

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Table A5-2 Custom IA and RTIMP Estimation

E-W Grid	N-S Grid	Hydr. Low Point St. Intersection		Sub-Basin Name	Area (sq-mi)	Irri. Area (mile²)	Default RTIMP(%)	Custom RTIMP(%)	Pervious Area (mile²)	Irri-Area IA (in)	Non-Irri. Area (mile²)	Non-Irri. IA (in)	Weighted IA (in)
		E-W Street	N-S Street										
1	2	3	4	5	6	7	8	9	10	11	12	13	14
4	s	Washington	Center Pkwy	**04s**	0.278		40	25.3	0.208	3.30	0.208	0.12	0.12
8	q	Center Pkwy	Phoenix Zoo	**08q**	0.438		55	40.8	0.260	3.30	0.260	0.10	0.10
8	s	Loop 202	Priest Dr	**08s**	0.651		58	44.2	0.364	3.30	0.364	0.15	0.15
12	q	Van Buren	56th St	**12q**	0.399		22	10.3	0.358	3.30	0.358	0.14	0.14
12	s	UPRR	Galvin Pkwy	**12s**	0.208		80	71.6	0.059	3.30	0.059	0.12	0.12
16	o	Mcdowell	54th St	**16o**	0.211		85	78.4	0.046	3.30	0.046	0.10	0.10
16	q	Van Buren	52nd St	**16q**	0.651		35	20.7	0.516	3.30	0.516	0.13	0.13
16	s	Loop 202	Sky Harbor Blvd	**16s**	0.420		70	58.6	0.174	3.30	0.174	0.16	0.16
20	p	Loop 202	SR143	**20p**	0.532	0.04	41	26.3	0.392	3.30	0.351	0.21	0.54
20	q	Van Buren	SR143	**20q**	0.276		23	11.0	0.246	3.30	0.246	0.25	0.25
20	s	Grand Canal	SR143	**20s**	0.484		65	52.4	0.230	3.30	0.230	0.16	0.16
20	t	Salt River	SR143	**20t**	0.265		9	2.7	0.258	3.30	0.258	0.13	0.13
24	k	Indian School	44th St	**24k**	0.192	0.02	38	23.4	0.147	3.30	0.129	0.22	0.60
24	m	Thomas	44th St	**24m**	0.502	0.18	39	24.4	0.380	3.30	0.205	0.24	1.65
24	o	Mcdowell	44th St	**24o**	0.504	0.11	45	30.2	0.352	3.30	0.245	0.19	1.13
24	s	Grand Canal	44th St	**24s**	0.195		50	35.4	0.126	3.30	0.126	0.19	0.19
24	t	Salt River	SR143	**24t**	0.260		16	6.4	0.243	3.30	0.243	0.10	0.10
28	k	Indian School	40th St	**28k**	0.428	0.10	36	21.6	0.335	3.30	0.231	0.23	1.19
28	m	Thomas	40th St	**28m**	0.508	0.21	36	21.6	0.399	3.30	0.188	0.23	1.85
28	o	Mcdowell	40th St	**28o**	0.500	0.18	38	23.4	0.383	3.30	0.208	0.23	1.64
28	p	Loop 202	40th St	**28p**	0.372	0.07	41	26.3	0.274	3.30	0.204	0.24	1.02
28	q	Grand Canal	40th St	**28q**	0.318	0.01	56	41.9	0.185	3.30	0.174	0.17	0.35
28	s	UPRR	40th St	**28s**	0.164		56	41.9	0.095	3.30	0.095	0.15	0.15
32	k	Indian School	36th St	**32k**	0.506	0.21	35	20.7	0.401	3.30	0.186	0.24	1.88
32	m	Thomas	36th St	**32m**	0.514	0.13	42	27.2	0.374	3.30	0.241	0.23	1.32
32	o	Mcdowell	36th St	**32o**	0.500	0.12	41	26.3	0.369	3.30	0.253	0.22	1.19
32	p	Loop 202	36th St	**32p**	0.234		10	3.2	0.227	3.30	0.227	0.28	0.28
32	q	Grand Canal	36th St	**32q**	0.175		15	5.8	0.165	3.30	0.165	0.25	0.25
32	s	UPRR	36th St	**32s**	0.336	0.02	61	47.6	0.176	3.30	0.157	0.17	0.52
36	i	Camelback	32nd St	**36i**	0.339	0.06	33	19.0	0.275	3.30	0.210	0.23	0.95
36	k	Indian School	32nd St	**36k**	0.508	0.14	39	24.4	0.385	3.30	0.240	0.23	1.39
36	m	Thomas	32nd St	**36m**	0.514	0.17	40	25.3	0.384	3.30	0.214	0.23	1.59
36	o	Mcdowell	32nd St	**36o**	0.500	0.05	39	24.4	0.378	3.30	0.325	0.23	0.66
36	p	Grand Canal	Loop 202	**36p**	0.186	0.02	37	22.5	0.144	3.30	0.121	0.22	0.72
36	q	Van Buren	32nd St	**36q**	0.267	0.003	40	25.3	0.200	3.30	0.197	0.22	0.26
36	s	UPRR	32nd St	**36s**	0.241		49	34.3	0.158	3.30	0.158	0.19	0.19

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Table A5-2 Custom IA and RTIMP Estimation

E-W	N-S	Hydr. Low Point St. Intersection		Sub-Basin	Area	Irri. Area	Default	Custom	Pervious Area	Irri-Area IA	Non-Irri. Area	Non-Irri. IA	Weighted IA
Grid	Grid	E-W Street	N-S Street	Name	(sq-mi)	(mile²)	RTIMP(%)	RTIMP(%)	(mile²)	(in)	(mile²)	(in)	(in)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
40	i	Camelback	28th St	**40i**	0.224	0.12	41	26.3	0.165	3.30	0.041	0.18	2.53
40	k	Indian School	28th St	**40k**	0.504	0.11	39	24.4	0.381	3.30	0.267	0.21	1.14
40	m	Thomas	28th St	**40m**	0.511	0.07	44	29.2	0.362	3.30	0.288	0.22	0.85
40	o	Grand Canal	28th St	**40o**	0.465	0.11	37	22.5	0.360	3.30	0.253	0.22	1.13
40	p	Loop 202	28th St	**40p**	0.222	0.05	36	21.6	0.174	3.30	0.126	0.19	1.05
40	q	Van Buren	28th St	**40q**	0.349	0.01	44	29.2	0.247	3.30	0.240	0.22	0.31
40	s	UPRR	28th St	**40s**	0.244		61	47.6	0.128	3.30	0.128	0.15	0.15
42	i	Biltmore Loop	28th St	**42i**	0.269	0.07	14	5.2	0.255	3.30	0.181	0.16	1.07
44	i	Camelback	24th St	**44i**	0.349	0.15	38	23.4	0.267	3.30	0.118	0.18	1.92
44	k	Indian School	24th St	**44k**	0.508	0.09	47	32.2	0.344	3.30	0.257	0.22	1.00
44	m	Thomas	24th St	**44m**	0.504	0.13	42	27.2	0.367	3.30	0.241	0.22	1.28
44	o	Grand Canal	24th St	**44o**	0.229	0.07	35	20.7	0.181	3.30	0.111	0.22	1.41
44	p	Loop 202	24th St	**44p**	0.407	0.03	40	25.3	0.304	3.30	0.271	0.22	0.56
44	q	Van Buren	24th St	**44q**	0.359	0.01	62	48.8	0.184	3.30	0.174	0.16	0.33
44	s	UPRR	24th St	**44s**	0.240		58	44.2	0.134	3.30	0.134	0.16	0.16
44	v	Salt River	20th St	**44v**	0.236		39	24.4	0.178	3.30	0.178	0.21	0.21
48	i	Camelback	20th St	**48i**	0.535	0.20	23	11.0	0.476	3.30	0.275	0.26	1.55
48	k	Indian School	20th St	**48k**	0.500	0.06	55	40.8	0.296	3.30	0.236	0.19	0.82
48	m	Grand Canal	20th St	**48m**	0.481	0.10	41	26.3	0.355	3.30	0.259	0.21	1.04
48	o	Loop 202	SR51	**48o**	0.676	0.09	38	23.4	0.517	3.30	0.430	0.22	0.74
48	q	Van Buren	I-10	**48q**	0.300	0.0005	39	24.4	0.227	3.30	0.227	0.24	0.25
48	s	UPRR	I-10	**48s**	0.212		62	48.8	0.109	3.30	0.109	0.15	0.15
48	v	Salt River	20th St	**48v**	0.299		77	67.6	0.097	3.30	0.097	0.10	0.10
52	g	Bethany	SR51	**52g**	0.265	0.11	25	12.5	0.232	3.30	0.121	0.25	1.71
52	i	Camelback	SR51	**52i**	0.309	0.08	36	21.6	0.242	3.30	0.158	0.23	1.29
52	k	Indian School	SR51	**52k**	0.295	0.03	46	31.2	0.203	3.30	0.178	0.20	0.59
52	m	Grand Canal	SR51	**52m**	0.177	0.02	29	15.6	0.150	3.30	0.133	0.19	0.54
52	o	I-10	16th St	**52o**	0.645	0.03	43	28.2	0.463	3.30	0.433	0.22	0.42
52	q	Van Buren	16th St	**52q**	0.394	0.02	50	35.4	0.255	3.30	0.236	0.20	0.43
52	s	UPRR	16th St	**52s**	0.265		58	44.2	0.148	3.30	0.148	0.17	0.17
52	t	Buckeye	16th St	**52t**	0.297		56	41.9	0.172	3.30	0.172	0.15	0.15
52	u	I-17	16th St	**52u**	0.391		25	12.5	0.342	3.30	0.342	0.27	0.27
52	v	Salt River	16th St	**52v**	0.297		36	21.6	0.233	3.30	0.233	0.22	0.22
54	g	Bethany	16th St	**54g**	0.247	0.04	41	26.3	0.182	3.30	0.138	0.21	0.95
54	i	Camelback	16th St	**54i**	0.192	0.04	48	33.3	0.128	3.30	0.086	0.20	1.22
54	k	Grand Canal	SR51	**54k**	0.245	0.01	53	38.6	0.151	3.30	0.143	0.17	0.33

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Table A5-2 Custom IA and RTIMP Estimation

E-W Grid	N-S Grid	Hydr. Low Point St. Intersection		Sub-Basin Name	Area (sq-mi)	Irri. Area (mile²)	Default RTIMP(%)	Custom RTIMP(%)	Pervious Area (mile²)	Irri-Area IA (in)	Non-Irri. Area (mile²)	Non-Irri. IA (in)	Weighted IA (in)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
54	m	Thomas	16th St	**54m**	0.271	0.02	46	31.2	0.187	3.30	0.166	0.21	0.56
56	e	Glendale	12th St	**56e**	0.176	0.07	32	18.1	0.144	3.30	0.074	0.24	1.72
56	g	Bethany	12th St	**56g**	0.500	0.18	37	22.5	0.387	3.30	0.203	0.24	1.70
56	i	Camelback	12th St	**56i**	0.500	0.11	43	28.2	0.359	3.30	0.245	0.22	1.20
56	k	Grand Canal	12th St	**56k**	0.423	0.06	49	34.3	0.278	3.30	0.214	0.18	0.90
56	m	Thomas	12th St	**56m**	0.576	0.09	41	26.3	0.425	3.30	0.338	0.23	0.86
56	o	I-10	12th St	**56o**	0.638	0.01	39	24.4	0.483	3.30	0.472	0.22	0.29
56	q	Van Buren	12th St	**56q**	0.354		36	21.6	0.278	3.30	0.278	0.24	0.24
56	s	UPRR	12th St	**56s**	0.255		53	38.6	0.157	3.30	0.157	0.18	0.18
56	t	Buckeye	12th St	**56t**	0.179		69	57.3	0.077	3.30	0.077	0.12	0.12
56	u	I-17	12th St	**56u**	0.326	0.0008	37	22.5	0.252	3.30	0.251	0.21	0.22
56	v	Salt River	12th St	**56v**	0.231	0.0004	43	28.2	0.166	3.30	0.165	0.19	0.20
60	e	Glendale	7th St	**60e**	0.406	0.12	35	20.7	0.322	3.30	0.204	0.23	1.35
60	g	Bethany	7th St	**60g**	0.500	0.16	40	25.3	0.374	3.30	0.218	0.23	1.51
60	i	Camelback	7th St	**60i**	0.500	0.06	48	33.3	0.334	3.30	0.272	0.21	0.78
60	k	Grand Canal	7th St	**60k**	0.266	0.01	51	36.4	0.169	3.30	0.155	0.19	0.46
60	l	Indian School	7th St	**60l**	0.234	0.01	45	30.2	0.163	3.30	0.156	0.22	0.37
60	m	Thomas	7th St	**60m**	0.500	0.09	30	16.4	0.418	3.30	0.329	0.18	0.84
60	o	I-10	7th St	**60o**	0.640	0.14	47	32.2	0.434	3.30	0.292	0.21	1.22
60	q	Van Buren	7th St	**60q**	0.353		37	22.5	0.274	3.30	0.274	0.24	0.24
60	s	UPRR	7th St	**60s**	0.253		67	54.8	0.114	3.30	0.114	0.14	0.14
60	t	Buckeye	7th St	**60t**	0.328		56	41.9	0.190	3.30	0.190	0.17	0.17
60	u	I-17	7th St	**60u**	0.285	0.02	36	21.6	0.224	3.30	0.208	0.23	0.44
60	v	Salt River	7th St	**60v**	0.228		57	43.0	0.130	3.30	0.130	0.15	0.15
64	c	Northern	Central	**64c**	0.264	0.05	34	19.8	0.211	3.30	0.159	0.24	1.00
64	e	Glendale	Central	**64e**	0.502	0.19	28	14.8	0.428	3.30	0.240	0.25	1.59
64	g	Bethany	Central	**64g**	0.502	0.20	34	19.8	0.402	3.30	0.203	0.24	1.76
64	i	Camelback	Central	**64i**	0.499	0.13	47	32.2	0.338	3.30	0.207	0.20	1.40
64	k	Grand Canal	Central	**64k**	0.206	0.05	46	31.2	0.142	3.30	0.094	0.21	1.25
64	l	Indian School	Central	**64l**	0.295	0.09	35	20.7	0.234	3.30	0.145	0.17	1.36
64	m	Thomas	Central	**64m**	0.500	0.01	62	48.8	0.256	3.30	0.246	0.16	0.29
64	o	I-10	Central	**64o**	0.651	0.12	58	44.2	0.363	3.30	0.242	0.16	1.21
64	q	Van Buren	Central	**64q**	0.405		56	41.9	0.235	3.30	0.235	0.17	0.17
64	s	UPRR	Central	**64s**	0.258		75	65.0	0.090	3.30	0.090	0.11	0.11
64	t	Buckeye	Central	**64t**	0.271		62	48.8	0.139	3.30	0.139	0.15	0.15
64	u	I-17	Central	**64u**	0.296		51	36.4	0.188	3.30	0.188	0.19	0.19

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Table A5-2 Custom IA and RTIMP Estimation

E-W	N-S	Hydr. Low Point St. Intersection		Sub-Basin	Area	Irri. Area	Default	Custom	Pervious Area	Irri-Area IA	Non-Irri. Area	Non-Irri. IA	Weighted IA
Grid	Grid	E-W Street	N-S Street	Name	(sq-mi)	(mile²)	RTIMP(%)	RTIMP(%)	(mile²)	(in)	(mile²)	(in)	(in)
1	2	3	4	5	6	7	8	9	10	11	12	13	14
64	v	Salt River	Central	**64v**	0.195		72	61.1	0.076	3.30	0.076	0.10	0.10
68	c	Northern	7th Ave	**68c**	0.434	0.17	32	18.1	0.355	3.30	0.188	0.25	1.68
68	e	Glendale	7th Ave	**68e**	0.496	0.19	27	14.0	0.427	3.30	0.241	0.26	1.58
68	g	Bethany	7th Ave	**68g**	0.502	0.24	31	17.3	0.415	3.30	0.179	0.25	1.98
68	i	Camelback	7th Ave	**68i**	0.500	0.19	38	23.4	0.383	3.30	0.190	0.23	1.78
68	k	Grand Canal	7th Ave	**68k**	0.204	0.03	41	26.3	0.150	3.30	0.122	0.21	0.79
68	l	Indian School	7th Ave	**68l**	0.317	0.03	41	26.3	0.234	3.30	0.206	0.23	0.59
68	m	Thomas	7th Ave	**68m**	0.550		69	57.3	0.235	3.30	0.235	0.14	0.14
68	o	I-10	7th Ave	**68o**	0.688		40	25.3	0.514	3.30	0.514	0.21	0.21
68	q	Van Buren	7th Ave	**68q**	0.295		51	36.4	0.188	3.30	0.188	0.18	0.18
68	s	UPRR	7th Ave	**68s**	0.236		71	59.8	0.095	3.30	0.095	0.12	0.12
68	t	Buckeye	7th Ave	**68t**	0.251		48	33.3	0.168	3.30	0.168	0.20	0.20
68	u	I-17	7th Ave	**68u**	0.280		47	32.2	0.190	3.30	0.190	0.20	0.20
68	v	Salt River	7th Ave	**68v**	0.218		48	33.3	0.146	3.30	0.146	0.19	0.19
72	c	Northern	15th Ave	**72c**	0.542	0.26	25	12.5	0.474	3.30	0.210	0.24	1.94
72	e	Glendale	15th Ave	**72e**	0.499	0.18	33	19.0	0.405	3.30	0.222	0.24	1.62
72	g	Bethany	15th Ave	**72g**	0.500	0.14	34	19.8	0.401	3.30	0.260	0.22	1.30
72	i	Camelback	15th Ave	**72i**	0.504	0.09	36	21.6	0.395	3.30	0.307	0.23	0.92
72	k	Grand Canal	15th Ave	**72k**	0.281	0.03	42	27.2	0.205	3.30	0.175	0.21	0.66
72	l	Indian School	7th Ave	**72l**	0.215	0.05	41	26.3	0.159	3.30	0.106	0.23	1.24
72	m	Thomas	15th Ave	**72m**	0.468	0.01	42	27.2	0.340	3.30	0.332	0.24	0.31
72	o	I-10	15th Ave	**72o**	0.662	0.04	24	11.8	0.584	3.30	0.542	0.19	0.41
72	q	Van Buren	15th Ave	**72q**	0.329		44	29.2	0.233	3.30	0.233	0.19	0.19
72	s	UPRR	15th Ave	**72s**	0.283		50	35.4	0.183	3.30	0.183	0.16	0.16
72	t	Buckeye	15th Ave	**72t**	0.222		46	31.2	0.152	3.30	0.152	0.21	0.21
72	u	I-17	15th Ave	**72u**	0.257	0.0025	39	24.4	0.194	3.30	0.192	0.23	0.27
72	v	Salt River	15th Ave	**72v**	0.407	0.0003	70	58.6	0.169	3.30	0.168	0.13	0.13
76	c	Northern	19th Ave	**76c**	0.602	0.09	32	18.1	0.493	3.30	0.407	0.24	0.77
76	e	Glendale	15th Ave	**76e**	0.499	0.12	36	21.6	0.391	3.30	0.272	0.24	1.17
76	g	Bethany	15th Ave	**76g**	0.501	0.10	43	28.2	0.360	3.30	0.259	0.22	1.08
76	i	Camelback	15th Ave	**76i**	0.499	0.05	58	44.2	0.278	3.30	0.230	0.17	0.72
76	k	Grand Canal	19th Ave	**76k**	0.317	0.02	43	28.2	0.227	3.30	0.203	0.22	0.55
76	l	Indian School	19th Ave	**76l**	0.183	0.02	36	21.6	0.143	3.30	0.123	0.23	0.66
76	m	Thomas	15th Ave	**76m**	0.492	0.04	39	24.4	0.372	3.30	0.328	0.24	0.60
76	o	I-10	19th Ave	**76o**	0.673		41	26.3	0.496	3.30	0.496	0.17	0.17
76	q	Van Buren	UPRR	**76q**	0.396		53	38.6	0.243	3.30	0.243	0.19	0.19

Metro Phoenix ADMS/P
Table A5-2 Custom IA and RTIMP Estimation

E-W Grid	N-S Grid	Hydr. Low Point St. Intersection		Sub-Basin Name	Area (sq-mi)	Irri. Area (mile²)	Default RTIMP(%)	Custom RTIMP(%)	Pervious Area (mile²)	Irri-Area IA (in)	Non-Irri. Area (mile²)	Non-Irri. IA (in)	Weighted IA (in)
		E-W Street	N-S Street										
1	2	3	4	5	6	7	8	9	10	11	12	13	14
76	s	UPRR	19th Ave	**76s**	0.279		66	53.6	0.130	3.30	0.130	0.11	0.11
76	t	Buckeye	19th Ave	**76t**	0.272		51	36.4	0.173	3.30	0.173	0.19	0.19
76	u	I-17	19th Ave	**76u**	0.283	0.01	37	22.5	0.219	3.30	0.213	0.24	0.32
76	v	Lower Buckeye	19th Ave	**76v**	0.240		55	40.8	0.142	3.30	0.142	0.21	0.21
76	w	Salt River	19th Ave	**76w**	0.334		7	1.9	0.328	3.30	0.328	0.10	0.10
80	c	Northern	19th Ave	**80c**	0.661	0.09	48	33.3	0.441	3.30	0.350	0.19	0.83
80	e	Glendale	19th Ave	**80e**	0.494	0.06	38	23.4	0.378	3.30	0.316	0.24	0.74
80	g	Bethany	19th Ave	**80g**	0.496	0.08	38	23.4	0.380	3.30	0.296	0.20	0.89
80	i	Camelback	19th Ave	**80i**	0.494	0.03	37	22.5	0.383	3.30	0.354	0.23	0.47
80	k	Grand Canal	23rd Ave	**80k**	0.428	0.03	41	26.3	0.315	3.30	0.290	0.22	0.47
80	m	Thomas	19th Ave	**80m**	0.541	0.03	41	26.3	0.399	3.30	0.369	0.23	0.46
80	o	Mcdowell	19th Ave	**80o**	0.542	0.03	48	33.3	0.362	3.30	0.332	0.20	0.46
80	p	I-10	I-17	**80p**	0.397		67	54.8	0.179	3.30	0.179	0.14	0.14
80	q	UPRR	I-17	**80q**	0.497		46	31.2	0.342	3.30	0.342	0.20	0.20
80	t	Buckeye	I-17	**80t**	0.252		50	35.4	0.163	3.30	0.163	0.19	0.19
80	u	Durango	I-17	**80u**	0.249		60	46.5	0.133	3.30	0.133	0.16	0.16
80	v	Lower Buckeye	23rd Ave	**80v**	0.231	0.001	70	58.6	0.096	3.30	0.095	0.14	0.16
80	w	Salt River	23rd Ave	**80w**	0.360		71	59.8	0.144	3.30	0.144	0.12	0.12
84	c	Northern	23rd Ave	**84c**	0.542	0.01	56	41.9	0.315	3.30	0.309	0.18	0.24
84	e	Glendale	23rd Ave	**84e**	0.263	0.06	37	22.5	0.204	3.30	0.140	0.24	1.19
84	g	Bethany	23rd Ave	**84g**	0.265	0.02	42	27.2	0.193	3.30	0.169	0.22	0.61
84	i	Camelback	23rd Ave	**84i**	0.260	0.05	42	27.2	0.189	3.30	0.142	0.23	0.99
84	k	Grand Canal	23rd Ave	**84k**	0.381	0.03	50	35.4	0.246	3.30	0.217	0.20	0.57
84	m	Thomas	I-17	**84m**	0.209	0.001	39	24.4	0.158	3.30	0.158	0.23	0.24
84	t	Buckeye	27th Ave	**84t**	0.273		67	54.8	0.123	3.30	0.123	0.14	0.14
84	u	Durango	27th Ave	**84u**	0.263	0.02	55	40.8	0.156	3.30	0.134	0.18	0.61
84	v	Lower Buckeye	27th Ave	**84v**	0.254	0.08	50	35.4	0.164	3.30	0.083	0.25	1.75
84	w	Salt River	27th Ave	**84w**	0.339		57	43.0	0.193	3.30	0.193	0.17	0.17
88	t	Buckeye	35th Ave	**88t**	0.259	0.001	58	44.2	0.145	3.30	0.144	0.17	0.18
88	u	Durango	35th Ave	**88u**	0.250	0.01	54	39.7	0.151	3.30	0.145	0.18	0.31
88	v	Lower Buckeye	35th Ave	**88v**	0.248		49	34.3	0.163	3.30	0.163	0.20	0.20
88	w	Salt River	43rd Ave	**88w**	0.599		54	39.7	0.361	3.30	0.361	0.17	0.17
92	t	Buckeye	43rd Ave	**92t**	0.175		47	32.2	0.119	3.30	0.119	0.21	0.21
92	u	Durango	43rd Ave	**92u**	0.249		58	44.2	0.139	3.30	0.139	0.16	0.16
92	v	Lower Buckeye	43rd Ave	**92v**	0.159		80	71.6	0.045	3.30	0.045	0.10	0.10

APPENDIX A6

Impervious Area Percentage (RTIMP)

Appendix A6 Evaluation Procedures for Impervious Percentage - RTIMP

The impervious percentage, RTIMP, is one of the important rainfall loss parameters used in the Green-Ampt method for the HEC-1 rainfall-runoff model. Typical RTIMP values have been suggested for many land uses by the FCDMC Hydrology Manual (Table 4.2a). However, the engineer/hydrologist should always evaluate the specific circumstances in any particular watershed for hydrologic variations from these typical values.

The Metro Phoenix ADMS/P watershed includes many flood irrigated parcels, landscaping, open spaces, and small on-site detention/retention basins. These small on-site basins have not been modeled explicitly in the HEC-1 models. Storm water runoff from some of the impervious areas is retained within these areas and does not contribute to the subbasin total runoff. In order to account for the runoff losses from these areas, a reduction factor was recommended to adjust the default impervious percentage, RTIMP. This reduction factor is equal to one tenth of the square root of the default impervious percentage calculated by the DDMSW (Reduction Factor = 0.1*(default RTIMP)^0.5).

To evaluate the application of the reduction factor, two typical land uses, residential flood irrigated and commercial, were used to demonstrate the effects of the reduction factor. See attached sheets 1, 2, 3 and 4.

Sheet 1 shows the detailed evaluation of RTIMP for a typical residential flood irrigated lot. The calculations show that RTIMPo (total value without adjustment) is equal to 43%, RTIMP1 (with reduction factor adjustment) is equal to 28%, and RTIMP2 (calculated directly contributing impervious area only) is equal to 24%. The reduction factor curve is shown in the attached figure (sheet 3).

Sheet 2 shows the detailed evaluation of RTIMP for a typical commercial parcel (see Sheet 4). The calculations show that RTIMPo (without adjustment) is equal to 94%,

RTIMP1 (with reduction factor adjustment) is equal to 91%, and RTIMP2 (calculated directly contributing impervious area only) is equal to 70%.

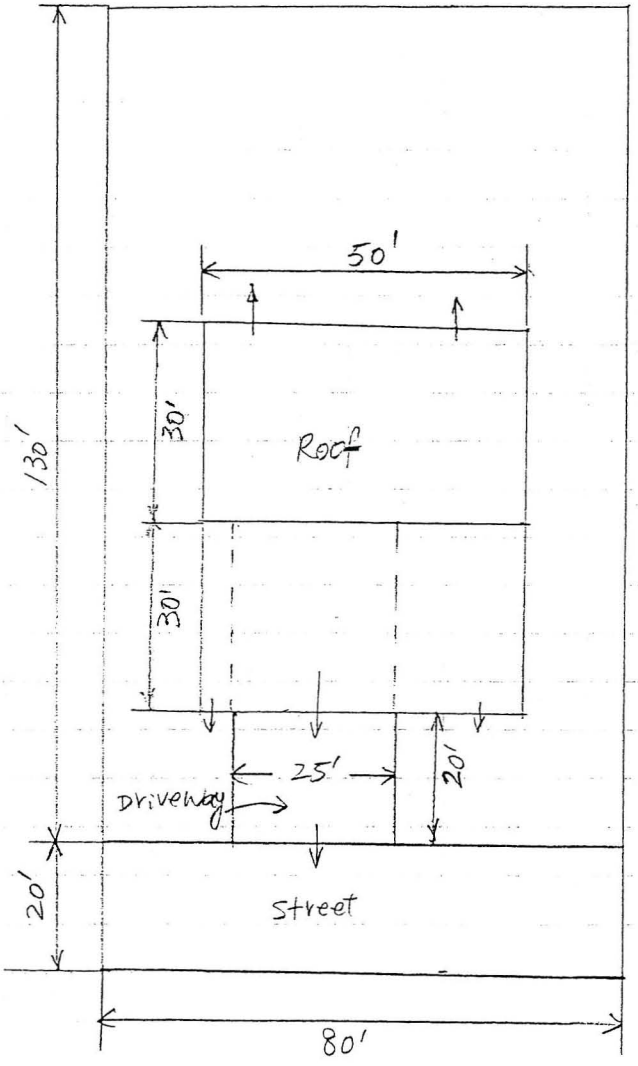
The default impervious percentage for each of the sub-basins calculated by the DDMSW was exported as shown in column 8 of Table A5-2 (see Appendix A5). The Reduction Factor = 0.1*(default RTIMP)^0.5) was applied to each of the default RTIMP value to calculate the custom RTIMP as shown in column 9 of Table A5-2. These custom values were then applied to the HEC-1 models.

PROJECT Metro ADMS/P No. 052349

CALC'D BY SZ CHK'D BY _____

SHEET 1 OF ___ DATE _____

Typical Residential Home Site:



Total Area:

$150 \times 80 = 12{,}000\ ft^2$

Total Impervious Area:

Street + Driveway + Roof

$= 80 \times 20 + 25 \times 20 + 50 \times 60 = 5{,}100\ ft^2$

RTIMP without Adjustment:

$$RTIMP_0 = \frac{5100}{12{,}000} \times 100 = 43\%$$

RTIMP with Adjustment:

$$RTIMP_1 = \sqrt{43} \times 43/10 = 28\%$$

Directly Contributing RTIMP:

$$RTIMP_2 = \frac{\text{partial Roof + driveway + street}}{\text{Total Area}} \times 100$$

$$RTIMP_2 = \frac{30 \times 25 + 25 \times 20 + 80 \times 20}{12000} \times 100 = 24\%$$

PROJECT Metro ADMS/P NO. 052349

CALC'D BY SZ CHK'D BY

SHEET 2 OF DATE

Typical commercial site (see site plan)

Total Area = 1,724,500 ft²

parking Area = 174,730 ft²

Landscaping Area = 10% of parking Area = 17,470 ft²

D/R Basins Total Area = 90,970 ft²

Average D/R Basin Depth ≈ 1.5 ft = 18 in

Total Area contributing to D/R Basins = $90970 \times \frac{18}{4} = 409,365$ ft²

Directly contributing Impervious Area = Total Area − Landscaping − D/R Basins − Basin contributing Area

= 1,724,500 − 17,470 − 90,970 − 409,365 = 1,206,695 ft²

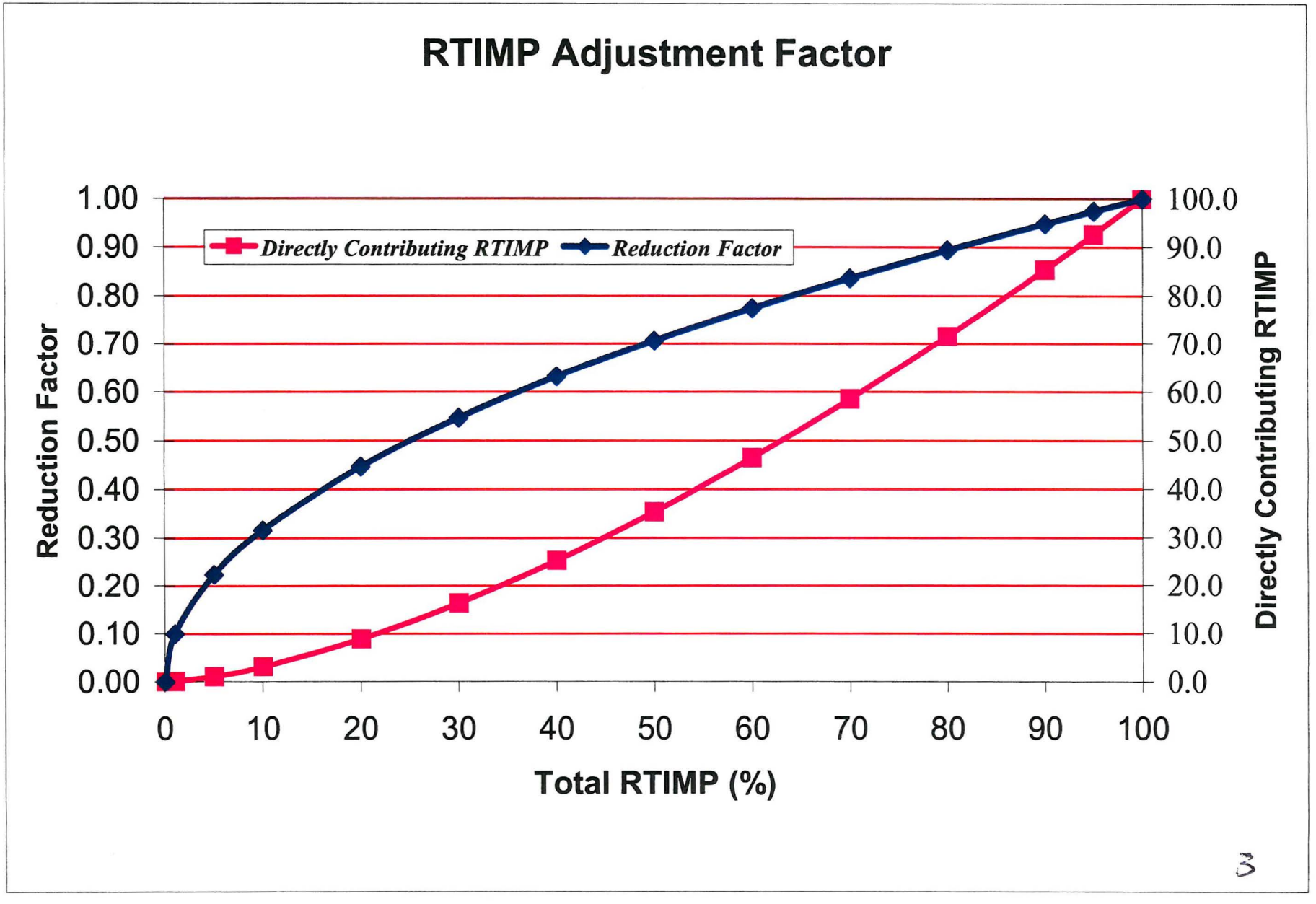
Total Impervious Area = Total Area − D/R Basins − Landscaping

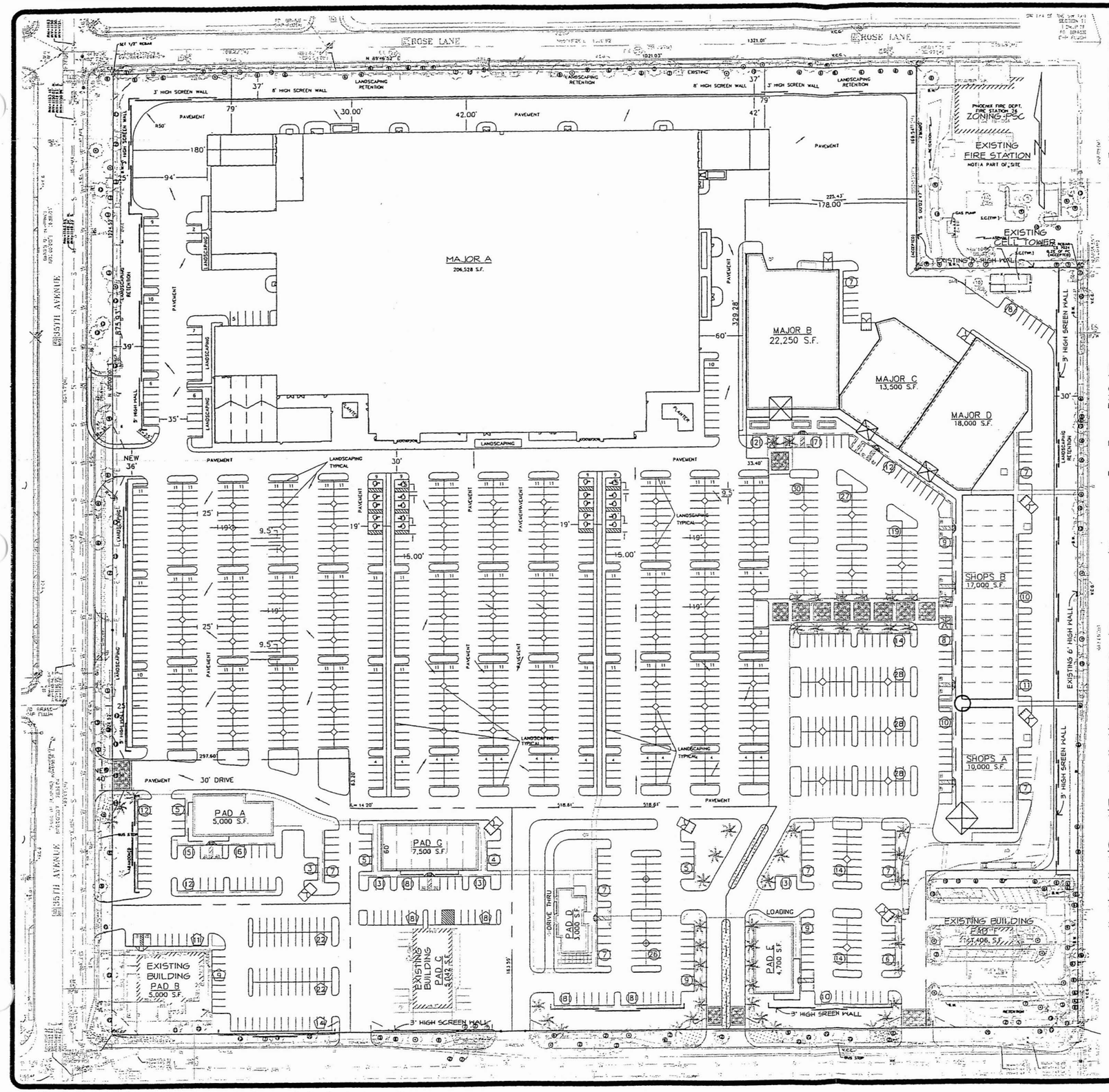
= 1,724,500 − 90,970 − 17,470 = 1,616,060 ft²

RTIMP without Adjustment $RTIMP_0 = \frac{1,616,060}{1,724,500} \times 100 = 94\%$

RTIMP with Adjustment $RTIMP_1 = \sqrt{94} \times 94/10 = 91\%$

Directly contributing RTIMP: $RTIMP_2 = \frac{1,206,695}{1,724,500} \times 100 = 70\%$


RTIMP Adjustment Factor
Directly Contributing RTIMP
Reduction Factor
Reduction Factor
Directly Contributing RTIMP
Total RTIMP (%)
1.00
0.90
0.80
0.70
0.60
0.50
0.40
0.30
0.20
0.10
0.00
100.0
90.0
80.0
70.0
60.0
50.0
40.0
30.0
20.0
10.0
0.0
0
10
20
30
40
50
60
70
80
90
100



PARKING DATA

WAL-MART	206,528 S.F.
STANDARD SPACES	
GROUND LEVEL	901 SPACES
ACCESSIBLE SPACES	20 SPACES
CART CORRALS	10 SPACES
TOTAL PARKING	921
RATIO	4.47

PARKING RATIO IS APPROXIMATE, BASED ON A PROTOTYPICAL BUILDING SQUARE FOOTAGE OF 206,528 S.F. INCLUDING T.L.E. AND SEASONAL GARDEN CENTER.

STREET SETBACKS REQ.: - 30' AVERAGE
- MINIMUM 25' FOR UP TO 50% OF FRONTAGE

LANDSCAPING REQUIREMENTS: - 10% PARKING LOT COVERAGE (AS SHOWN 10.20%)
- ISLAND SIZE 300 SQ. FT. MIN.

NOTES

1. ALL CALCULATIONS BASED ON TOTAL GROSS SQUARE FOOTAGE OF BUILDING
2. WAL-MART PREFERRED PARKING (4.5 SP/1,000 S.F.) CODE REQUIRED PARKING SPACES (4/1,000 S.F.) 4.5/1000 MAX. PER BIG BOX ORDINANCE. LANDSCAPING INCENTIVES CAN INCREASE THIS NUMBER.
3. PARKING LAYOUT MEETS WAL-MART STANDARDS WHICH IS WITHIN CURRENT LOCAL REQUIREMENTS. PENDING "BIG BOX" CODE ITEMS ARE REFLECTED IN PLAN SAVE THE FOLLOWING EXCEPTIONS:
   1. TWO WAY AISLES: 25' (PENDING ZONING 28')
4. PARKING SHOWN CONTAINS 968 PARKING SPACES.
   TYPICAL DIMENSIONS: WIDTH: 9.5' (EXISTING CODE 9')
   DEPTH: 19' (EXISTING CODE 18')
   ACCESSIBLE: WIDTH - 11' (5' UNLOADING ZONE)
   DEPTH: 19' (EXISTING CODE 18')

SITE DATA

WAL-MART	18.02 ± AC (NET)
PDG	15.26 ± AC (NET)

BUILDING DATA (WAL-MART ONLY)

GROSS BUILDING AREA:	206,528± S.F.
ZONE:	C2
BUILDING SETBACKS REQD:	20' FRONT YARD 20' SIDE YARD 20' REAR YARD 60' FROM RESIDENTIAL ZONE BOUNDARY
BUILDING HEIGHT:	
MAXIMUM BY CODE	30' (35' PER C.O.P. "BIG BOX" ORDINANCE)
WAL-MART SUPERCENTER	30' ±
BUILDING COVERAGE:	
WAL-MART SUPERCENTER	26.22%

PROTOTYPE MODIFICATIONS

- ADDED TIRE AND BATTERY STORAGE.

ENVIRONMENTAL

- CEC ASSUMES THAT THEIR ARE NO WATERS OF THE U.S. ON THE SITE. A LETTER FROM THE CORPS OF ENGINEERS VERIFIES THIS DATED 10/09/03.
- CEC ASSUMES THAT NO THREATENED OR ENDANGERED SPECIES OR HABITATS EXIST ON-SITE THAT WOULD IMPEDE DEVELOPMENT OF THE SITE. INVESTIGATION IS IN PROCESS.
- A PHASE 1 ENVIRONMENTAL SITE ASSESSMENT (ESA) IS IN PROCESS WITH PRELIMINARY CONDITIONS AND RECOMMENDATIONS IDENTIFIED. SEE DOCUMENTATION.

ON-SITE RETENTION NOTE

THIS SITE PLAN REFLECTS MINIMAL STORM WATER RETENTION AS WAS PROVIDED FOR THE EXISTING, RECENTLY DEVELOPED FRED MEYER SITE (BROOKS HERSEY 3/99). SHOULD FUTURE DISCUSSIONS WITH THE CITY OF PHOENIX YIELD FULL REQUIREMENTS FOR SITE RETENTION, CONVENTIONAL METHODS (ABOVE GROUND) WILL REQUIRE MORE LAND AREA TO ACCOMPLISH THIS REQUIREMENT. OTHER METHODS OF STORAGE SUCH AS UNDERGROUND MAY RELAX THE NEED FOR ADDITIONAL LAND FOR STORM WATER STORAGE, BUT AT AN INCREASED COST. SHOULD FULL RETENTION REQUIREMENTS BE REQUESTED FOR THE WAL-MART SITE, APPROXIMATELY 180,000 CUBIC FEET WILL HAVE TO BE STORED UNDERGROUND AT AN APPROXIMATE COST OF $650,000.

ZONING LAND USE/ DEVELOPMENT REGULATIONS

1. THE SITE IS ZONED C-2 MEDIUM LEVEL COMMERCIAL. CEC ASSUMES NO REZONING WILL BE REQUIRED FOR THIS SITE.
2. CEC ASSUMES THAT SEASONAL OUTDOOR SALES WILL BE ALLOWED THROUGH INTERPRETATION BY THE CITY OF PHOENIX. A USE PERMIT WILL NEED TO BE APPLIED FOR AND GRANTED.
3. ACCESS OFF OF 33RD AVENUE AND/OR ROSE LANE WILL REQUIRE A USE PERMIT. THE CEC ASSUMES THE CITY OF PHOENIX WILL ALLOW THIS USE. A USE PERMIT WILL NEED TO BE APPLIED FOR AND GRANTED. SOLE ACCESS OFF 35TH AVENUE IS POSSIBLE.

UTILITIES

1. CEC ASSUMES WATER, SEWER, ELECTRICAL COMMUNICATION UTILITIES ARE AVAILABLE WITH ADEQUATE CAPACITY/PRESSURE IN THE AREA OF THE SITE.

OFF-SITE/ SURVEY

1. THE SITE IS CURRENTLY BEING USED FOR COMMERCIAL PURPOSES WITH SOME VACANT BUILDINGS AND ADJACENT PARKING/AMMENITIES.
2. AT THIS TIME A SITE TOPOGRAPHY SURVEY IS NEARLY COMPLETE ALONG WITH AN A.L.T.A. SURVEY.

TRAFFIC/ ACCESS

1. THE CEC ASSUMES THE SITE CAN BE ACCESSED AS SHOWN. A USE PERMIT WILL BE APPLIED FOR ACCESS OFF ROSE LANE AND/OR 33RD AVENUE.
2. A PRELIMINARY TRAFFIC ANALYSIS HAS BEEN COMPLETED FOR THE SITE. THE DETERMINATION IS NO ADDITIONAL OFFSITE IMPROVEMENTS WILL BE REQUIRED. A FINAL ANALYSIS WILL NEED TO BE COMPLETED IN ORDER TO FINALIZE THE PRELIMINARY CONCLUSIONS.

50 0 30 60

1 inch = 50 ft.

CONCEPTUAL SITE PLAN

REVISIONS	BY

WOOD/PATEL
2051 W. NORTHERN AVENUE, STE 100
PHOENIX, ARIZONA 85021
TELEPHONE: (602) 335-8500 • FAX: (602) 335-8580

PRELIMINARY
NOT FOR CONSTRUCTION
FOR CONCEPT ONLY

WAL-MART STORE #94511
BETHANY HOME RD & 35TH AVE
PHOENIX, ARIZONA
SITE PLAN M

DRAWN	C. BACH
CHECKED	J. DRIVER
DATE	05/05/03
SCALE	1"=60'
JOB No.	021626
SHEET	SP-1
4	SHEETS

APPENDIX A7

Detention/Retention Basin Diversions

Appendix A7 Hydrologic Modeling of Detention/Retention Basins

Man-made detention/retention facilities are storage structures intended to mitigate the negative impacts of urbanization on storm drainage. A **detention basin** is a basin or reservoir where water is stored for regulating storm water runoff. It uses gravity-flow outlets for discharging the stored runoff. Detention facilities do not reduce the volume of runoff, they do, however, lengthen the time flow will be present in the watercourse downstream of the facility. A **retention basin** is a basin or reservoir where water is stored for regulating a flood, however, it does not have gravity-flow outlets for discharging stored runoff as detention basins do. The stored water is disposed by other means such as infiltration into the soil, evaporation, injection (or dry) wells, or pumping systems. Therefore, a retention facility will reduce the volume of runoff into the water course downstream of the facility. Both detention and retention basins should have emergency overflow structures.

Detention/retention basins can be classified as **onsite basins** and **regional basins** based on their sizes and locations. Onsite detention/retention basins are usually located within a parcel or subdivision boundary. The sizes of onsite detention/retention basins are relatively small and provide storage for the limited parcel only. Regional detention/retention basins are large storage facilities located at strategic sites within a drainage watershed to provide control of runoff from the entire watershed.

Detention/retention basins can also be classified as **online basins** and **offline basins** according to the flood routing operations of the basins. An offline basin has a storm drain or open channel system to bypass certain flow before the flood water enters the basin. An offline basin can be either a detention or a retention basin. While online basins directly receive all inflows without bypassing any flows to downstream. An online basin can also be either a detention or a retention basin depending on its outlet structure as defined previously.

The greater the number of detention/retention basins in a system, the more complex is the analysis of the interaction of the various drainage components. Planning efforts should be oriented toward minimizing the number of storage facilities in a drainage watershed.

In general, storage facilities are to be located so they can intercept the flow from the entire development area. If portions of the area cannot drain to a single storage facility, then additional

storage facilities may be added to provide control of those areas as approved by the appropriate jurisdictional agency. The objective is to provide storage of runoff within a minimum number of detention/retention facilities located at appropriate points within a development area. Whenever possible, the facilities shall be designed for multiple uses, such as parks or other recreational facilities, to offset the cost of open space and to encourage improved maintenance.

Detention/retention basins were identified and classified by reviewing the aerial maps and contour maps, and were verified by performing field reconnaissance. Their storage volumes were estimated based on the contour maps and design reports. If a sub-basin has multiple basins, an equivalent detention/retention basin may have been used to model these conditions. The major features of all the detention/retention basins are listed in the following table and are modeled accordingly.

					Summary Table for Detention/Retention Basins Modeled in HEC-1								
E-W Grid	N-S Grid	Basin HEC-1 ID	Subbasin Name	Combined Volume (Ac-Ft)	No. Det./Ret. Basins Combined	Online	Offline	Detention	Retention	Spillway Length (ft)	Bleed-off Pipe D (ft)	Regional	Comment
4	s	**S04s**	04s	2	1	Y		Y		60	1	N	
8	s	**S08s**	08s	28	4	Y		Y		200	2	Y	
12	s	**S12s**	12s	10	3	Y		Y		150	1	N	
16	q	**S16q**	16q	35	3	Y			Y	100		Y	
16	s	**S16s**	16s	19	3	Y			Y	300		Y	
20	p	**S20p2**	20p	43	4	Y		Y		200	3	Y	
20	p	**S20p1**	20p	2	1	Y			Y	100		N	NOT ACCESSIBLE. ASSUMED ONSITE RETENTION FOR HIGHWAY.
20	s	**S20s**	20s	3	5	Y			Y	60		N	
20	t	**S20t**	20t	156	3	Y			Y	600		N	
24	m	**S24m**	24m	0.5	1	Y			Y	100		N	OFFICE COMPLEX
24	s	**S24s**	24s	5	3	Y			Y	100		N	
24	t	**S24t**	24t	31	1	Y		Y		300	3	Y	NOT ACCESSIBLE. ASSUMED ONSITE DETENTION FOR HIGHWAY.
28	p	**S28p**	28p	0.8	1	Y			Y	100		N	
28	q	**S28q**	28q	0.3	1	Y			Y	100		N	COMMERCIAL SITE
32	m	**S32m**	32m	0.6	1	Y			Y	50		N	
32	p	**S32p**	32p	57	1	Y		Y		20	4	Y	BASIN AT 36TH ST/202
32	q	**S32q**	32q	92	1	Y		Y		750	3	Y	SURGE BASIN AT 36TH ST/202
32	s	**S32s**	32s	16	1	Y			Y	100		Y	GREYHOUND PARK
36	p	**S36p**	36q	68	2		Y	Y		200	4	Y	
40	i	**S40i**	40i	11	1	Y			Y	50		N	GOLF COURSE OR RELATED LAKES WITHIN EASTERN BILTMORE AREA
48	k	**S48k**	48k	2	2	Y			Y	100		N	
48	o	**S48o**	48o	35	2	Y		Y		50	3	Y	
48	q	**S48q**	48q	5	9	Y		Y		50	1EA. 4X4 GRATE	Y	
48	s	**S48s**	48s	0.6	7	Y		Y		50	1EA. 4X4 GRATE	Y	
52	t	**S52t**	52t	4	1	Y			Y	100		N	ONSITE RETENTION
52	u	**S52u**	52u	68	3	Y		Y		200	4	Y	
52	i	**S52i**	52i	27	1		Y	Y		100	5	Y	SR-51 SD SURGE BASIN, FUNCTIONS AS 52i BUT LOCATED IN 54i.
56	u	**S56u**	56u	4	1	Y		Y		400	1	Y	BARRIOS PARK
60	t	**S60t**	60t	0.7	1	Y			Y	100		N	ONSITE RETENTION
60	u	**S60u**	60u	1	1	Y		Y		50	4X10 BOX	Y	ONLINE DETENTION
64	k	**S64k**	64k	12	1	Y			Y	500		Y	RETENTION FOR BROPHY/XAVIER HS
64	l	**S64l**	64l	35	1	Y			Y	900		Y	STEELE PARK, ONSITE RETENTION
64	o	**S64o**	64o	1	2	Y		Y		200	3EA.-2' GRATE	N	ONSITE DETEN FOR HEARD MUSEUM
64	o	**S-I10**	64o	997	1		Y	Y		500	PUMPS	Y	DEPRESSED AREA OF I-10 BETWEEN 15TH AVE AND 12TH ST
68	o	**S68o**	68o	13	2	Y			Y	100		N	ONSITE RETENTION
72	k	**S72k**	72k	6	1	Y			Y	400		N	ONSITE RETENTION FOR OSBORN MIDDLE SCHOOL
72	o	**S72o**	72o	9	1	Y		Y		60	8	Y	ADOT BASIN WEIRS INTO I-10 AT DEPTH 10'
76	m	**S76m**	76m	0.5	1	Y			Y	100		N	ONSITE RETENTION
76	s	**S76s**	76s	0.7	2	Y			Y	100		N	ONSITE RETENTION
80	c	**S80c**	80c	4	1	Y			Y	100		N	ONSITE RETEN AROUND PERIMETER OF COMPLEX
80	g	**S80g**	80g	0.9	2	Y		Y		300	1	Y	ONSITE DETENTION
80	o	**S80o**	80o	18	1		Y	Y		30	SEE TAB	Y	ADOT BASIN, PUMP OUTLET. SEE 80o-NW TAB.
80	p	**S80p**	80p	6	1	Y		Y		50	SEE TAB	Y	ADOT BASIN
80	u	**S-I17**	80u	320	1	Y		Y		300	8.5	Y	I-17 DEPRESSED AREAS
84	i	**S84i**	84i	32	1	Y			Y	100		Y	PROPOSED BASIN
84	u	**S84u**	84u	3	1	Y		Y		1000	1EA. 4X4 GRATE	Y	SHALLOW BASIN OUTSIDE OF DURANGO CURVE

APPENDIX A8

Storm Drain Diversion Data

Appendix A8 Storm Drain Diversion Data

The storm drain diversions were estimated based upon the full flow Manning's equation capacity in the closed conduit conveyance systems using available information. The storm drain network GIS data provided by the City of Phoenix included pipe sizes and lengths. The existing ground slopes were used to represent the storm drain hydraulic grade line slopes. Storm drains with 36-inch diameters or larger were included in the HEC-1 models. Storm drain system is assumed to carry the base flow up to pipe flow-full capacity with adequate inlet capacities. If a sub-basin has multiple pipes in one direction, a composite storm drain pipe may have been used to model these conditions. If a storm drain receives flow from more than one sub-basin the total lateral capacity from each of the sub-basins was used to develop the inflow ratios. The proposed storm drains along 28th Street and 36th Street from Camelback Road to SR-202L were also included in the hydrologic models. Storm drains along 27th Avenue and 35th Avenue at SPRR were assumed to be full in the hydrologic models. Hydrographs were input (QI) at these locations. Exhibit F shows the entire storm drain systems within the watershed. The following table summarizes the storm drain diversion data for all of the sub-basins.

Metro Phoenix ADMS
Storm Drain Capacity Estimation

Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
10ST-1	54	4.50	502	UNIVERSITY DR/10TH ST	SALT RIVER/10TH ST	1076	1052	0.0478	0.015	372	10TH ST OUTFALL AT THE SALT RIVER
10ST-2	66	5.50	258	UP/10TH ST	UNIVERSITY DR/10TH ST	1076	1076	0.0030	0.015	159	S-10TH ST OUTFALL TO SALT RIVER
10ST-3	72	6.00	1106	I17 FRONTAGE/10TH ST	UP/10TH ST	1080	1076	0.0036	0.015	220	S-10TH ST OUTFALL TO SALT RIVER. CROSSES UP.
10ST-4	60	5.00	111	I17 FRONTAGE/10TH ST	I17 FRONTAGE/10TH ST	1080	1080	0.0030	0.015	124	S-10TH ST OUTFALL TO SALT RIVER. ACCEPTS FLOW FROM DOUBLE 48".
10ST-4A	66	5.50	127	I17 FRONTAGE/10TH ST	I17 FRONTAGE/10TH ST	1080	1080	0.0030	0.015	159	S-10TH ST OUTFALL TO SALT RIVER. ACCEPTS FLOW FROM DOUBLE 48".
10ST-5A	48	4.00	356	I17/10TH ST	I17 FRONTAGE/10TH ST	1084	1080	0.0112	0.015	132	10TH ST OUTFALL FROM I17 CULVERT. ONE OUT OF TWO PIPES.
10ST-5B	48	4.00	355	I17/10TH ST	I17 FRONTAGE/10TH ST	1084	1080	0.0113	0.015	132	S-10TH ST OUTFALL FROM I17 CULVERT. ONE OUT OF TWO PIPES.
11AV-2	81	6.80	5465	BUCKEYE RD/11TH AVE	LOWER BUCKEYE RD/11TH AV	1066	1064	0.0030	0.015	281	S-11TH AV OUTFALL TO OPEN CHANNEL WHICH FLOWS TO SALT RIVER.
11AV-3	78	6.50	1519	GRANT ST/11TH AV	BUCKEYE RD/11TH AV	1070	1066	0.0030	0.015	249	S-11TH AV ALONG UP SPUR.
11AV-4	75	6.30	7651	I10/9TH AV	GRANT ST/11TH AV	1082	1070	0.0030	0.015	229	S-OUTFALL FOR I10 CULVERT AT 9TH AV.
11AV-5	48	4.00	3349	PORTLAND ST/CENTRAL AV	PORTLAND ST/11TH AV	1084	1080	0.0030	0.015	68	W-FLOWS WEST ALONG I10 INNER LOOP JUST SOUTH OF FREEWAY
11AV-6	48	4.00	400	PORTLAND ST/1ST ST	PORTLAND ST/CENTRAL AV	1084	1080	0.0100	0.015	124	W-FLOWS WEST ALONG I10 INNER LOOP JUST SOUTH OF FREEWAY
11AV-7	36	3.00	1039	PORTLAND ST/3RD ST	PORTLAND ST/1ST ST	1086	1084	0.0030	0.015	32	W-FLOWS WEST ALONG I10 INNER LOOP JUST SOUTH OF FREEWAY
11AV-8	36	3.00	498	ROOSEVELT ST/CENTRAL AV	PORTLAND ST/CENTRAL AV	1084	1080	0.0080	0.015	52	N-FLOWS TO PORTLAND FROM ROOSEVELT ALONG CENTRAL
12ST-1	96	8.00	5970	BUCKEYE RD/12TH ST	SALT RIVER/12TH ST	1088	1052	0.0060	0.015	612	S-ALONG 12TH ST ACROSS I17 AND UP. PUMP
12ST-2	78	6.50	829	HADLEY ST/12TH ST	BUCKEYE RD/12TH ST	1090	1088	0.0030	0.015	249	S-ALONG 12TH ST
12ST-3	72	6.00	2515	JACKSON ST/13TH ST	HADLEY ST/12TH ST	1088	1090	0.0030	0.015	201	S-ALONG 12TH ST WEST ALONG JACKSON. ACROSS UP YARD.
12ST-3	60	5.00	1222	WASHINGTON ST/13TH ST	JACKSON ST/13TH ST	1090	1088	0.0030	0.015	124	S-ALONG 13TH ST
12ST-4	48	4.00	1324	VAN BUREN ST/13TH ST	WASHINGTON ST/13TH ST	1092	1090	0.0030	0.015	68	S-ALONG 13TH ST
12ST-5	42	3.50	1308	TAYLOR ST/12TH ST	VAN BUREN ST/13TH ST	1096	1092	0.0031	0.015	49	S-ALONG 13TH ST EAST ALONG TAYLOR
12ST-6	36	3.00	1325	GARFIELD ST/12TH ST	TAYLOR ST/12TH ST	1094	1096	0.0030	0.015	32	S-ALONG 12TH ST
12ST-MOH-1	42	3.50	1609	PIMA ST/14TH ST	MOHAVE ST/12TH ST	1086	1084	0.0030	0.015	48	W-TO 12ST-1
12STN-1	96	8.00	9314	OSBORN RD/12TH PL	I10/12TH ST	1112	1096	0.0030	0.015	433	S-ALONG 12TH ST TO I10 TO 14' ADOT TUNNEL
12STN-2	90	7.50	2936	INDIAN SCHOOL RD/12TH ST	OSBORN RD/12TH PL	1120	1112	0.0030	0.015	364	S-ALONG 12ST
12STN-3	84	7.00	2699	CAMPBELL AV/12TH ST	INDIAN SCHOOL RD/12TH ST	1128	1120	0.0030	0.015	303	S-ALONG 12TH ST ACROSS GRAND CANAL
12STN-4	72	6.00	1286	HIGHLAND AV/12TH ST	CAMPBELL AV/12TH ST	1132	1128	0.0031	0.015	204	S-ALONG 12TH ST
12STN-5	66	5.50	1479	CAMELBACK RD/12TH ST	HIGHLAND AV/12TH ST	1140	1132	0.0054	0.015	214	S-ALONG 12TH ST
12STN-6	54	4.50	5203	BETHANY HOME RD/12TH ST	CAMELBACK RD/12TH ST	1170	1140	0.0058	0.015	130	S-ALONG 12TH ST
12STN-7	42	3.50	646	BERRIDGE LN/7TH ST	BETHANY HOME RD/12TH ST	1174	1170	0.0062	0.015	69	S-ALONG 12TH ST
12STN-CAM-1	36	3.00	1330	CAMELBACK RD/14TH PL	CAMELBACK RD/12TH ST	1142	1140	0.0030	0.015	32	W-ALONG CAMELBACK TO 12STN-5
12STN-THM-1	36	3.00	373	THOMAS RD/EVERGREEN ST	THOMAS RD/MANOR DR W	1108	1106	0.0054	0.015	42	W-ALONG THOMAS TO 12STN-1
12STNW-1	66	5.50	2999	MINNEZONA AV/7TH ST	CAMPBELL AV/12TH ST	1126	1128	0.0030	0.015	159	E-ALONG GRAND CANAL TO 12STN-3. DIVERSION STRUCTURE
12STNW-2	60	5.00	5016	MISSOURI AV/7TH ST	CAMPBELL AV/12TH ST	1148	1128	0.0040	0.015	143	S-ALONG 7TH ST TO DIVERSION STRUCTURE
12STNW-3	54	4.50	2635	BETHANY HOME RD/7TH ST	MISSOURI AV/7TH ST	1162	1148	0.0053	0.015	124	S-ALONG 7TH ST
12STNW-4	48	4.00	2609	MARYLAND AV/7TH AV	BETHANY HOME RD/7TH ST	1178	1162	0.0061	0.015	97	S-ALONG 7TH ST
12STNW-5	42	3.50	2686	GLENDALE AV/7TH ST	MARYLAND AV/7TH AV	1198	1178	0.0074	0.015	75	S-ALONG 7TH ST
12STNW-6	36	3.00	1125	MYRTLE AV/7TH ST	GLENDALE AV/7TH ST	1204	1198	0.0053	0.015	42	S-ALONG 7TH ST
12ST-WAS-1	42	3.50	653	WASHINGTON ST/14TH ST	WASHINGTON ST/13TH ST	1090	1088	0.0031	0.015	49	W-ALONG WASHINGTON ST TO 12ST-3
15AV-10	48	4.00	2697	NORTHERN AV/19TH AV	ORANGEWOOD AV/15TH AV	1196	1182	0.0052	0.015	90	S-ALONG 15TH AV
15AV-11	42	3.50	3375	ORCHID LN/15TH AV	NORTHERN AV/19TH AV	1214	1196	0.0053	0.015	63	S-ALONG 15TH AV
15AV-12	36	3.00	1861	DUNLAP AV/15TH AV	ORCHID LN/15TH AV	1226	1214	0.0064	0.015	46	S-ALONG 15TH AV
15AV-2	96	8.00	16674	MCDOWELL RD/15TH AVE	LOWER BUCKEYE RD/15TH AVE	1082	1056	0.0030	0.015	433	S-15TH AV ACROSS I10-I17 OUTFALL TO SALT RIVER
15AV-3	90	7.50	2748	ENCANTO BLVD/15TH AV	MCDOWELL RD/15TH AVE	1086	1082	0.0030	0.015	364	S-ALONG 15TH AV
15AV-4	84	7.00	5190	OSBORN RD/15TH AV	ENCANTO BLVD/15TH AV	1102	1086	0.0031	0.015	308	S-ALONG 15TH AV
15AV-5	78	6.50	2695	INDIAN SCHOOL RD/15TH AV	OSBORN RD/15TH AV	1114	1102	0.0045	0.015	305	S-ALONG 15TH AV
15AV-6	81	6.80	4066	COOLIDGE ST/15TH AV	INDIAN SCHOOL RD/15TH AV	1125	1114	0.0030	0.015	281	S-ALONG 15TH AV
15AV-7	72	6.00	9177	MARYLAND AV/15TH AV	COOLIDGE ST/15TH AV	1160	1125	0.0038	0.015	226	S-ALONG 15TH AV
15AV-8	63	5.30	2730	GLENDALE AV/15TH AV	MARYLAND AV/15TH AV	1175	1160	0.0055	0.015	195	S-ALONG 15TH AV
15AV-9	57	4.80	2563	ORANGEWOOD AV/15TH AV	GLENDALE AV/15TH AV	1182	1175	0.0030	0.015	111	S-ALONG 15TH AV
15AV-BU-1	36	3.00	1389	BUTLER DR/11TH AV	BUTLER DR/15TH AV	1210	1208	0.0030	0.015	32	W-ALONG BUTLER TO 15AV-11
15AV-CMP-1	39	3.30	253	CAMPBELL AV/14TH AV	CAMPBELL AV/15TH AV	1122	1122	0.0030	0.015	41	W-ALONG CAMPBELL TO 15AV-6

Metro Phoenix ADMS
Storm Drain Capacity Estimation

Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
15AV-CMP-2	36	3.00	1153	CAMPBELL AV/11TH AV	CAMPBELL AV/14TH AV	1122	1122	0.0030	0.015	32	W-ALONG GRAND CANAL
15AV-FLW-1	36	3.00	2267	FLOWER ST/18TH AV	FLOWER ST/15TH AV	1102	1100	0.0030	0.015	32	E-ALONG FLOWER ST TO 15AV-4
15AV-GL-1	36	3.00	1083	GLENDALE AV/11TH AV	GLENDALE AV/15TH AV	1172	1171	0.0030	0.015	32	W-ALONG GLENDALE TO 15AV-8
15AV-MAR-1	36	3.00	81	MARYLAND AV/15TH AV	MARYLAND AV/15TH AV	1160	1160	0.0030	0.015	32	E-ALONG MARYLAND TO 15AV-7
15AV-MAR-2	42	3.50	1293	MARYLAND AV/17TH AV	MARYLAND AV/15TH AV	1163	1161	0.0030	0.015	48	E-ALONG MARYLAND TO 15AV-7
15AV-MAR-3	36	3.00	1598	MARYLAND AV/11TH AV	MARYLAND AV/15TH AV	1162	1161	0.0030	0.015	32	W-ALONG MISSOURI TO 15AV-7
15AV-MIS-1	42	3.50	1562	MISSOURI AV/17TH AV	MISSOURI AV/15TH AV	1143	1141	0.0030	0.015	48	E-ALONG MISSOURI TO 15AV-7
15AV-MIS-2	36	3.00	477	MISSOURI AV/18TH AV	MISSOURI AV/17TH AV	144	1143	0.0030	0.015	32	E-ALONG MISSOURI TO 15AV-7
15AV-ROM-1	36	3.00	1414	ROMA AV/17TH AV	ROMA AV/15TH AV	1120	1121	0.0030	0.015	32	E-ALONG ROMA AV TO 15AV-6
16ST-1	66	5.50	1746	UNIVERSITY DR/16TH ST	SALT RIVER/16TH ST	1084	1060	0.0137	0.015	341	S-ALONG 16TH ST OUTFALL TO SALT RIVER
16ST-10	39	3.30	2623	MISSOURI AV/16TH ST	CAMELBACK RD/16TH ST	1162	1146	0.0061	0.015	58	S-ALONG 16TH ST
16ST-1A	36	3.00	10623	VAN BUREN ST/16TH ST	UNIVERSITY DR/16TH ST	1094	1080	0.0030	0.015	32	S-ALONG 16TH ST TO SALT RIVER OUTFALL
16ST-2	78	6.50	4755	BUCKEYE RD/16TH ST	UNIVERSITY DR/16TH ST	1094	1084	0.0030	0.015	249	S-ALONG 16TH ST ACROSS I17, UP.
16ST-3	66	5.50	4278	WASHINGTON ST/16TH ST	BUCKEYE RD/16TH ST	1094	1094	0.0030	0.015	159	S-ALONG 16TH ST ACROSS LR
16ST-4	60	5.00	4716	I17/16TH ST	WASHINGTON ST/16TH ST	1102	1094	0.0030	0.015	124	S-ALONG 16TH ST. MAKE ACCEPT FLOW FROM I10 OR ACROSS I10. CHECK.
16ST-6	60	5.00	11283	GRAND CANAL/16TH ST	I10/16TH ST	1130	1102	0.0030	0.015	124	S-ALONG 16TH ST TO I10. CHECK.
16ST-7	57	4.80	551	INDIAN SCHOOL RD/16TH ST	GRAND CANAL/16TH ST	1130	1130	0.0030	0.015	111	S-ALONG 16TH ST TO GRAND CANAL.
16ST-8	51	4.30	2619	CAMPBELL AV/16TH ST	INDIAN SCHOOL RD/16TH ST	1138	1130	0.0031	0.015	84	S-ALONG 16TH ST
16ST-9	48	4.00	2659	CAMELBACK RD/16TH ST	CAMPBELL AV/16TH ST	1146	1138	0.0030	0.015	68	S-ALONG 16TH ST
16ST-GRT-1	36	3.00	263	GRANT ST/14TH ST	GRANT ST/16TH ST	1094	1094	0.0030	0.015	32	E-ALONG GRANT TO 16ST-3
19AV-1	54	4.50	5347	I17/19TH AV	SALT RIVER-19TH AV	1054	1032	0.0041	0.015	109	S-ALONG 19TH AV OUTFALL TO SALT RIVER.
19AV-10	63	5.30	3945	INDIAN SCHOOL RD/19TH AV	EARLL DR/19TH AV	1112	1098	0.0035	0.015	156	S-ALONG 19TH AV
19AV-11	54	4.50	5358	CAMELBACK RD/19TH AV	INDIAN SCHOOL RD/19TH AV	1133	1112	0.0039	0.015	106	S-ALONG 19TH AV ACROSS GRAND CANAL
19AV-12	48	4.00	13724	VISTA DR/19TH AV	CAMELBACK RD/19TH AV	1184	1133	0.0037	0.015	76	S-ALONG 19TH AV
19AV-13	42	3.50	2293	NORTHERN AV/19TH AV	VISTA DR/19TH AV	1194	1184	0.0044	0.015	58	S-ALONG 19TH AV
19AV-14	36	3.00	4222	TOWNLEY AV/19TH AV	NORTHERN AV/19TH AV	1216	1194	0.0052	0.015	42	S-ALONG 19TH AV, BEGIN TRUNKLINE
19AV-2	42	3.50	4661	BUCKEYE RD/18TH AV	I17/19TH AV	1062	1054	0.0030	0.015	48	S-EAST ALONG BUCKEYE THEN SOUTH ALONG 19TH AV ACROSS I17.
19AV-3	36	3.00	1833	SHERMAN ST/17TH AV	BUCKEYE RD/18TH AV	1064	1062	0.0030	0.015	32	S-TO 19AV -2
19AV-5	78	6.50	8539	BUCKEYE RD/19TH AV	LOWER BUCKEYE RD/22ND AVE	1062	1048	0.0030	0.015	249	S-ALONG 19TH TO DURANGO CURVE TO SALT RIVER OUTFALL
19AV-6	72	6.00	2563	UP/19TH AV	BUCKEYE RD/19TH AV	1070	1062	0.0031	0.015	204	S-ALONG 19TH ACROSS UP
19AV-7	75	6.30	7331	GRAND AV/19TH AV	UP/19TH AV	1078	1070	0.0030	0.015	229	S-ALONG 19TH ACROSS I10
19AV-8	66	5.50	5968	THOMAS RD/19TH AV	GRAND AV/19TH AV	1094	1078	0.0030	0.015	159	S-ALONG 19TH ACROSS GRAND AV
19AV-9	72	6.00	1329	EARLL DR/19TH AV	THOMAS RD/19TH AV	1098	1094	0.0030	0.015	201	S-ALONG 19TH AV
19AV-BTH-1	36	3.00	2630	ROSE LN/17TH AV	BETHANY HOME RD/19TH AV	1158	1153	0.0030	0.015	32	E-ALONG BETHANY HOME TO 19AV-12
19AV-CAM-1	48	4.00	2681	CAMELBACK RD/19TH AV	CAMELBACK RD/15TH AV	1133	1132	0.0030	0.015	68	W-ALONG CAMELBACK TO 19AV-11
19AV-CAM-2	36	3.00	4090	MONTEBELLO AV/15TH AV	CAMELBACK RD/15TH AV	1144	1133	0.0030	0.015	32	S-ALONG 15TH AVE
19AV-LB-1	36	3.00	579	LOWER BUCKEYE RD/21ST AVE	LOWER BUCKEYE RD/21ST AVE	1050	1048	0.0035	0.015	34	E-ALONG LOWER BUCKEYE
19AV-LB-2	42	3.50	719	LOWER BUCKEYE RD/22ND AVE	LOWER BUCKEYE RD/22ND AVE	1054	1052	0.0030	0.015	48	E-NORTH OF LOWER BUCKEY TO 19AV-5
19AV-MCD-1	36	3.00	1056	MCDOWELL RD/17TH DR	MCDOWELL RD/19TH AV	1084	1080	0.0038	0.015	36	E-ALONG MCDOWELL TO 19AV-8
23AV-4	60	5.00	2703	BUTLER DR/23RD AV	NORTHERN AV/23RD AV	1210	1200	0.0037	0.015	137	S-ALONG 23RD AV, EMPTIES INTO ?
23AV-5	54	4.50	2557	DUNLAP AV/23RD AV	BUTLER DR/23RD AV	1224	1210	0.0055	0.015	126	S-ALONG 23RD AV
23AV-6	39	3.30	777	DUNLAP AV/22ND AV	DUNLAP AV/23RD AV	1224	1224	0.0030	0.015	41	W-ALONG DUNLAP TO 23AV-5
23AV-7	36	3.00	393	DUNLAP AV/20TH AV	DUNLAP AV/22ND AV	1222	1224	0.0030	0.015	32	W-ALONG DUNLAP TO 23AV-6
24ST-10	42	3.50	2697	CAMELBACK RD/24TH ST	CAMPBELL AV/24TH ST	1170	1164	0.0030	0.015	48	S-ALONG 24TH ST
24ST-11	36	3.00	401	PASADENA AV/24TH ST	CAMELBACK RD/24TH ST	1172	1170	0.0050	0.015	41	S-ALONG 24TH ST
24ST-2	78	6.50	5076	BUCKEYE RD/24TH ST	MAGNOLIA ST/24TH ST	1102	1080	0.0043	0.015	298	S-ALONG 24TH ST ALGN ACROSS I10 AND UP.
24ST-3	72	6.00	7408	FILLMORE ST/24TH ST	BUCKEYE RD/24TH ST	1106	1102	0.0030	0.015	201	S-ALONG 24TH ST ALGN ACROSS UP AND LR.
24ST-4	63	5.30	1651	PORTLAND ST/24TH ST	FILLMORE ST/24TH ST	1116	1106	0.0061	0.015	206	S-ALONG 24TH ST
24ST-5	60	5.00	7422	THOMAS RD/24TH ST	PORTLAND ST/24TH ST	1136	1116	0.0030	0.015	124	S-ALONG 24TH ST ACROSS L202
24ST-6	54	4.50	2959	MITCHELL DR/24TH ST	THOMAS RD/24TH ST	1146	1136	0.0034	0.015	99	S-ALONG 24TH ST
24ST-7	48	4.00	2450	INDIAN SCHOOL RD/24TH ST	MITCHELL DR/24TH ST	1154	1146	0.0033	0.015	71	S-ALONG 24TH ST

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Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
24ST-8	42	3.50	354	MONTEROSA ST/24TH ST	INDIAN SCHOOL RD/24TH ST	1158	1154	0.0113	0.015	93	S-ALONG 24TH ST
24ST-9	48	4.00	2236	CAMPBELL AV/24TH ST	MONTEROSA ST/24TH ST	1164	1158	0.0030	0.015	68	S-ALONG 24TH ST
24ST-IND-1	36	3.00	1644	INDIAN SCHOOL RD/27TH AV	INDIAN SCHOOL RD/24TH ST	1164	1154	0.0061	0.015	45	W-ALONG INDIAN SCHOOL TO 24ST-7
24ST-JEF-1	48	4.00	3568	WASHINGTON ST/29TH ST	JEFFERSON ST/24TH ST	1112	1104	0.0030	0.015	68	W-ALONG WASHINGTON AND JEFFERSON NEXT TO LR ALGN INTO 24ST-3
24ST-JEF-2	39	3.30	558	WASHINGTON ST/30TH ST	WASHINGTON ST/29TH ST	1112	1112	0.0030	0.015	41	W-ALONG WASHINGTON AND JEFFERSON NEXT TO LR ALGN
24ST-MCD-1	42	3.50	1136	MCDOWELL RD/26TH PL	MCDOWELL RD/24TH ST	1126	1122	0.0035	0.015	52	W-ALONG MCDOWELL TO 24ST-5
24ST-MCD-2	36	3.00	538	MCDOWELL RD/26TH ST	MCDOWELL RD/26TH PL	1126	1126	0.0030	0.015	32	W-ALONG MCDOWELL TO 24ST-5
24ST-OAK-1	42	3.50	2042	OAK ST/27TH ST	OAK ST/24TH ST	1134	1128	0.0030	0.015	48	W-ALONG OAK ACROSS GRAND CANAL INTO 24ST-5
24ST-OAK-2	36	3.00	435	OAK ST/27TH PL	OAK ST/27TH ST	1136	1134	0.0046	0.015	39	W-ALONG OAK ACROSS GRAND CANAL INTO 24ST-5. ACCEPTS FLOW FROM 40O
24ST-OT-1	51	4.30	1246	OLD TOWER RD/24TH ST	OLD TOWER RD/24TH ST	1100	1104	0.0030	0.015	83	W-ALONG OLD TOWER RD ON WEST SIDE OF AIRPORT.
24ST-THM-1	39	3.30	3256	THOMAS RD/28TH PL	THOMAS RD/24TH ST	1150	1136	0.0043	0.015	49	W-ALONG THOMAS RD TO 24ST-5
24ST-THM-2	36	3.00	1014	THOMAS RD/30TH ST	THOMAS RD/28TH PL	1154	1150	0.0039	0.015	36	W-ALONG THOMAS RD TO 24ST-5
24ST-VAN-1	36	3.00	2611	VAN BUREN ST/28TH ST	VAN BUREN ST/24TH ST	1110	1106	0.0030	0.015	32	W-ALONG VAN BUREN ST INTO 24ST-3
25AV-DUR-1	102	8.50	5776	I10/23RD AV	SALT RIVER/25TH AV	1054	1060	0.0030	0.015	509	S-FROM DURANGO CURVE TO OUTFALL AT SALT RIVER
25AV-DUR-1A	60	5.00	2078	LOWER BUCKEYE RD/25TH AV	SALT RIVER/25TH AV	1050	1060	0.0030	0.015	124	S-THROUGH 84w TO OUTFALL AT SALT RIVER
27AV-DUR-1	78	6.50	13038	POLK ST/27TH AV	SALT RIVER/27TH AV	1070	1030	0.0031	0.015	252	S-ALONG 27TH TO OUTFALL AT SALT RIVER
28ST-1	72	6.00	11767	INDIAN SCHOOL/28TH ST	L202/28TH ST	1170	1122	0.0041	0.015	235	S-PROPOSED-FUNDED BUT NO DIAMETER
2ST-FILL-1	72	6.00	1993	FILLMORE ST/7TH ST	FILLMORE ST/2ND ST	1090	1084	0.0030	0.015	201	W-ALONG FILLMORE TO WESTERN TUNNEL
32ST-10	42	3.50	2616	INDIAN SCHOOL RD/32ND ST	OSBORN RD/32ND ST	1184	1172	0.0046	0.015	59	S-FLOWS ALONG 32ND
32ST-11	39	3.30	586	MONTEROSA ST/32ND ST	INDIAN SCHOOL RD/32ND ST	1186	1184	0.0034	0.015	43	S-FLOWS ALONG 32ND
32ST-12	36	3.00	5534	MEDLOCK DR/32ND ST	MONTEROSA ST/32ND ST	1214	1186	0.0051	0.015	41	S-FLOW ALONG 32ND ST. BEGIN TRUNKLINE
32ST-2	90	7.50	3241	SKY HARBOR/32TH ST	SALT RIVER/32TH ST	1120	1116	0.0030	0.015	364	S-FLOWS THROUGH AIRPORT INTO SALT RIVER OUTFALL TUNNEL AT 32ND ST
32ST-202-1	54	4.50	756	ROOSEVELT ST/32ND ST	L202/32ND ST	1114	1116	0.0030	0.015	93	N-ACROSS L202 FROM DETEN/RETEN BASIN INTO PIPE2-I17-14
32ST-202-2	36	3.00	374	BELLEVIEW ST/32ND ST	L202/32ND ST	1110	1134	0.0030	0.015	32	S-FROM DETEN/RETEN BASIN TO PIPE3-32ST-WAS-2
32ST-3	84	7.00	2314	AIR LN/32ND ST	SKY HARBOR/32TH ST	1120	1120	0.0030	0.015	303	S-FLOWS THROUGH AIRPORT INTO SALT RIVER OUTFALL TUNNEL AT 32ND ST
32ST-4	72	6.00	3447	VAN BUREN ST/32ND ST	AIR LN/32ND ST	1118	1120	0.0030	0.015	201	S-FLOWS SOUTH TO AIRPORT ALONG 32ND ST
32ST-5	66	5.50	2632	ROOSEVELT ST/32ND ST	VAN BUREN ST/32ND ST	1130	118	0.3845	0.015	1804	S-FLOWS ALONG 32ND ST TO AIRPORT
32ST-6	60	5.00	2653	MCDOWELL RD/32ND ST	ROOSEVELT ST/32ND ST	1140	1130	0.0038	0.015	139	S-FLOWS ALONG 32ND ST ACROSS L202
32ST-7	57	4.80	2650	CYPRESS ST/32ND ST	MCDOWELL RD/32ND ST	1146	1140	0.0030	0.015	111	S-FLOWS ALONG 32ND
32ST-8	54	4.50	4021	EARLL DR/32ND ST	CYPRESS ST/32ND ST	1164	1146	0.0045	0.015	114	S-FLOWS ALONG 32ND
32ST-9	51	4.30	1292	OSBORN RD/32ND ST	EARLL DR/32ND ST	1172	1164	0.0062	0.015	119	S-FLOWS ALONG 32ND
32ST-IND-1	36	3.00	821	INDIAN SCHOOL RD/33RD ST	INDIAN SCHOOL RD/32ND ST	1190	1184	0.0073	0.015	49	E-FLOW ALONG INDIAN SCHOOL TO 33ST-10
32ST-MCD-1	36	3.00	717	MCDOWELL RD/31ST PL	MCDOWELL RD/32ND ST	1138	1138	0.0030	0.015	32	E-ALONG MCDOWELL TO 32ST-6
32ST-OSB-1	36	3.00	2042	OSBORN RD/35TH ST	OSBORN RD/32ND ST	1180	1172	0.0039	0.015	36	E-FLOW ALONG OSBORN TO 32ST-9
32ST-THO-1	48	4.00	527	THOMAS RD/32ND PL	THOMAS RD/32ND ST	1162	1160	0.0038	0.015	77	E-ALONG THOMAS TO 32ST-8
32ST-THO-2	42	3.50	3513	THOMAS RD/38TH ST	THOMAS RD/32ND PL	1176	1162	0.0040	0.015	55	E-ALONG THOMAS TO 32ST-8
32ST-VAN-1	39	3.30	568	VAN BUREN ST/32ND PL	VAN BUREN ST/32ND ST	1118	1120	0.0030	0.015	41	W-ALONG VAN BUREN ST INTO 32ST-4
32ST-WAS-1	36	3.00	334	WASHINGTON ST/32ND ST	WASHINGTON ST/32ND ST	1116	1116	0.0030	0.015	32	W-ALONG WASHINGTON INTO 32ST-4.
32ST-WAS-2	48	4.00	1680	WASHINGTON ST/34TH ST	WASHINGTON ST/32ND ST	1122	1116	0.0036	0.015	75	W-ALONG WASHINGTON INTO 32ST-4.
32ST-WAS-3	42	3.50	685	WASHINGTON ST/36TH ST	WASHINGTON ST/34TH ST	1124	1122	0.0030	0.015	48	W-ALONG WASHINGTON INTO 32ST-4.
32ST-WAS-4	36	3.00	640	WASHINGTON ST/37TH ST	WASHINGTON ST/36TH ST	1126	1124	0.0031	0.015	32	W-ALONG WASHINGTON ST
32ST-YAL-1	36	3.00	2483	YALE ST/35TH PL	YALE ST/32ND ST	1160	1150	0.0040	0.015	37	W-FLOWS ALONG YALE TO 32ST-8
35AV-BUCK-1	60	5.00	2099	BUCKEYE RD/40TH AV	BUCKEYE RD/35TH AV	1040	1040	0.0030	0.015	124	E-ALONG BUCKEYE RD TO 35AV-DUR-4
35AV-DUR-1	75	6.25	3902	LOWER BUCKEYE RD/35TH AV	SALT RIVER/35TH AV	1040	1040	0.0030	0.015	224	S-ALONG 35TH AV TO OUTFALL AT SALT RIVER
35AV-DUR-2	72	6.00	2660	DURANGO ST/35TH AV	LOWER BUCKEYE RD/35TH AV	1040	1040	0.0030	0.015	201	S-ALONG 35TH AV ACROSS ROOSEVELT CANAL
35AV-DUR-3	63	5.25	2702	BUCKEYE RD/35TH AV	DURANGO ST/35TH AV	1040	1040	0.0030	0.015	141	S-ALONG 35TH AV
35AV-DUR-4	60	5.00	2882	WASHINGTON ST/35TH AV	BUCKEYE RD/35TH AV	1060	1040	0.0069	0.015	188	S-ALONG 35TH AV ACROSS UP
35AV-DURANGO-1	42	3.50	1404	DURANGO ST/32ND DR	DURANGO ST/35TH AV	1040	1040	0.0030	0.015	48	W-ALONG DURANGO TO 35AV-DUR-2
35AV-DURANGO-2	36	3.00	2629	DURANGO ST/29TH AV	DURANGO ST/32ND DR	1050	1040	0.0038	0.015	36	W-ALONG DURANGO TO 35AV-DUR-2
35AV-LOWER-1	42	3.50	2978	LOWER BUCKEYE RD/29TH AV	LOWER BUCKEYE RD/35TH AV	1050	1040	0.0034	0.015	51	W-ALONG LOWER BUCKEYE RD TO 35AV-DUR-1
36ST-1	72	6.00	12793	INDIAN SCHOOL/36TH ST	L202/36TH ST	1196	1140	0.0044	0.015	243	S-PROPOSED-FUNDED BUT NO DIAMETER

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Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
3ST-1	84	7.00	8517	SALT RIVER/3RD ST	LINCOLN ST/7TH ST	1082	1052	0.0035	0.015	327	S- FLOWS WEST THEN SOUTH ALONG 3RD ST ALONG UP
40ST-10	36	3.00	5412	CAMELBACK RD/44TH ST	CAMPBELL AV/40TH ST	1264	1228	0.0067	0.015	47	S-EAST ON CAMELBACK SOUTH ON 40TH ST ACROSS ACDC
40ST-1A	72	6.00	5338	AIR LN/40TH ST	SALT RIVER/40TH ST	1128	1104	0.0045	0.015	246	S-ALONG 40TH ST ALGN THROUGH AIRPORT
40ST-1B	72	6.00	5344	AIR LN/40TH ST	SALT RIVER/40TH ST	1128	1104	0.0045	0.015	246	S-ALONG 40TH ST ALGN THROUGH AIRPORT
40ST-2	84	7.00	1922	WASHINGTON ST/40TH ST	AIR LN/40TH ST	1134	1128	0.0031	0.015	308	S-ALONG 40TH ST ACROSS UP TO AIRPORT
40ST-3	78	6.50	1282	GRAND CANAL/40TH ST	WASHINGTON ST/40TH ST	1142	1134	0.0062	0.015	358	S-ALONG 40TH ST ACROSS GRAND CANAL
40ST-4	72	6.00	2114	L202/40TH ST	GRAND CANAL/40TH ST	1148	1142	0.0030	0.015	201	S-ALONG 40TH ST
40ST-5	84	7.00	3211	MCDOWELL RD/40TH ST	L202/40TH ST	1162	1148	0.0044	0.015	367	S-ALONG 40TH ST ACROSS L202
40ST-6	72	6.00	5491	THOMAS RD/40TH ST	MCDOWELL RD/40TH ST	1180	1162	0.0033	0.015	211	S-ALONG 40TH ST
40ST-7	66	5.50	2656	OSBORN RD/40TH ST	THOMAS RD/40TH ST	1194	1180	0.0053	0.015	212	S-ALONG 40TH ST
40ST-8	54	4.50	2719	INDIAN SCHOOL RD/40TH ST	OSBORN RD/40TH ST	1210	1194	0.0059	0.015	131	S-ALONG 40TH ST
40ST-9	39	3.30	2558	CAMPBELL AV/40TH ST	INDIAN SCHOOL RD/40TH ST	1228	1210	0.0070	0.015	62	S-ALONG 40TH ST
40ST-APE-1	36	3.00	731	SKY HARBOR/40TH ST	SKY HARBOR/40TH ST	1132	1132	0.0030	0.015	32	E-OFFSITE SD. COLLECTS WATER FROM SKY HARBOR EMPTIES INTO 40TH ST SD.
40ST-APW-1	48	4.00	428	SKY HARBOR/40TH ST	SKY HARBOR/40TH ST	1132	1132	0.0030	0.015	68	E-OFFSITE SD. COLLECTS WATER FROM SKY HARBOR EMPTIES INTO 40TH ST SD.
40ST-APW-2	45	3.80	328	SKY HARBOR/40TH ST	SKY HARBOR/40TH ST	1132	1132	0.0030	0.015	59	E-OFFSITE SD. COLLECTS WATER FROM SKY HARBOR EMPTIES INTO 40TH ST SD.
40ST-APW-3	42	3.50	237	SKY HARBOR/40TH ST	SKY HARBOR/40TH ST	1132	1132	0.0030	0.015	48	E-OFFSITE SD. COLLECTS WATER FROM SKY HARBOR EMPTIES INTO 40TH ST SD.
40ST-APW-4	36	3.00	268	SKY HARBOR/40TH ST	SKY HARBOR/40TH ST	1132	1132	0.0030	0.015	32	E-OFFSITE SD. COLLECTS WATER FROM SKY HARBOR EMPTIES INTO 40TH ST SD.
40ST-BELLE-0	54	4.50	482	BELLEVIEW ST/40TH ST	I10/40TH ST	1156	1154	0.0042	0.015	110	S-ALONG 40TH ST TO OPEN CHANNEL
40ST-BELLE-1	42	3.50	565	BELLEVIEW ST/41ST ST	BELLEVIEW ST/40TH ST	1160	1156	0.0071	0.015	73	S-TO PIPE3-40ST-4
40ST-BELLE-2	42	3.50	559	BELLEVIEW ST/40TH ST	BELLEVIEW ST/40TH ST	1156	1156	0.0030	0.015	48	S- TO PIPE3-40ST-4
40ST-IND-1	36	3.00	300	INDIAN SCHOOL/40TH PL	INDIAN SCHOOL/40TH ST	1212	1210	0.0067	0.015	47	W-ALONG INDIAN SCHOOL TO 40ST-8
40ST-MCD-1	36	3.00	994	MCDOWELL RD/41ST PL	MCDOWELL RD/40TH ST	1166	1162	0.0040	0.015	37	W-ALONG MCDOWELL TO 40ST-5
40ST-THM-1	36	3.00	1367	THOMAS RD/42ND ST	THOMAS RD/40TH ST	1188	1182	0.0044	0.015	38	W-ALONG THOMAS TO 40ST-6
4ST-1	84	7.00	1122	JACKSON ST/4TH ST	LINCOLN ST/4TH ST	1082	1080	0.0030	0.015	303	S-ALONG 4TH ST ACROSS UP
4ST-2	84	7.00	636	MADISON ST/5TH ST	JACKSON ST/4TH ST	1084	1082	0.0031	0.015	308	S-ALONG 4TH ST
50ST-1	120	10.00	635	GRAND CANAL/50TH ST	SALT RIVER/50TH ST	1148	1128	0.0315	0.015	2543	S-ACROSS GRAND CANAL TO OPEN CHANNEL TO SALT RIVER OUTFALL
50ST-2	84	7.00	1706	L202/LR	GRAND CANAL/50TH ST	1176	1148	0.0164	0.015	709	S-ACROSS L202 TO GRAND CANAL TO CBC THEN OUTFALL TO SALT RIVER
50ST-202-1	30	2.50	596	ROOSEVELT ST/50TH ST	ROOSEVELT ST/L202	1190	1186	0.0067	0.015	29	E-FROM DETEN/RETEN BASIN N SIDE OF L202 TO OPEN CHANNEL
50ST-3	78	6.50	1759	VAN BUREN ST/L202	L202/LR	1196	1176	0.0114	0.015	484	S-ALONG EAST SIDE OF L202
50ST-4	72	6.00	1587	L202/52ND ST	VAN BUREN ST/L202	1206	1196	0.0063	0.015	291	S-ALONG EAST SIDE OF L202
50ST-5	60	5.00	392	L202/52ND ST	L202/52ND ST	1212	1206	0.0153	0.015	279	S-ALONG EAST SIDE OF L202
50ST-6	48	4.00	386	UP/L202	GRAND CANAL/50TH ST	1156	1148	0.0207	0.015	179	S-ACROSS UP TO 50ST-1
50ST-7	42	3.50	408	TAYLOR ST/L202	TAYLOR ST/L202	1200	1206	0.0030	0.015	48	E-FROM L202 TO 50ST-4
50ST-8	36	3.00	84	TAYLOR ST/L202	TAYLOR ST/L202	1200	1200	0.0030	0.015	32	E-FROM L202 TO 50ST-4
50ST-ROOS-1	36	3.00	783	ROOSEVELT ST/51ST ST	ROOSEVELT ST/ 50TH ST	1202	1192	0.0128	0.015	65	W-ALONG ROOSEVELT TO RETEN/DETEN BASIN AT L202/50TH ST
50ST-ROOS-2	42	3.50	870	ROOSEVELT ST/52ND ST	ROOSEVELT ST/51ST ST	1212	1202	0.0115	0.015	93	S-ALONG 52ND ST TO L202 BASIN
50ST-ROOS-3	36	3.00	1224	PORTLAND ST/51ST ST	ROOSEVELT ST/ 50TH ST	1206	1192	0.0114	0.015	62	S-ALONG 51ST ST TO DETEN/RETEN BASIN AT L202/52ND ST
50ST-ROOS-4	42	3.50	283	PORTLAND ST/52ND ST	PORTLAND ST/51ST ST	1210	1206	0.0141	0.015	104	S-ALONG 51ST ST TO DETEN/RETEN BASIN AT L202/52ND ST
52ST-1	72	6.00	242	ROOSEVELT ST/52ND ST	ROOSEVELT ST/52ND ST	1208	1206	0.0083	0.015	334	S-ALONG 52ND ST TO L202 BASIN
52ST-2	66	5.50	914	PORTLAND ST/52ND ST	ROOSEVELT ST/52ND ST	1214	1208	0.0066	0.015	236	S-ALONG 52ND ST TO L202 BASIN
52ST-3	42	3.50	718	MOTOROLA NO 1 ENTR/52ND ST	PORTLAND ST/52ND ST	1220	1214	0.0084	0.015	80	S-ALONG 52ND ST TO L202 BASIN
52ST-L202-1	60	5.00	545	FILLMORE ST/52ND ST	L202/52ND ST	1210	1192	0.0330	0.015	410	S-ALONG AND ACROSS 52ND ST TO DETEN/RETEN BASIN AT NWC OF L202/52ND ST
5ST-1	84	7.00	1816	JEFFERSON ST/5TH ST	LINCOLN ST/5TH ST	1082	1080	0.0030	0.015	303	S-ALONG 5HT ST INTO 4ST-1
5ST-1A	39	3.30	469	JACKSON ST/6TH ST	JACKSON ST/5TH ST	1084	1082	0.0043	0.015	49	W-ALONG JACKSON INTO 5ST-1
5ST-1B	54	4.50	969	JACKSON ST/7TH ST	UP/5TH ST	1082	1080	0.0030	0.015	93	W-SOUTH OF UP INTO 5ST-1
5ST-1C	48	4.00	767	JEFFERSON ST/3RD ST	JEFFERSON ST/5TH ST	1084	1082	0.0030	0.015	68	E-NORTH OF JEFFERSON ST INTO 5ST-1
5ST-2	81	6.80	4105	MCKINLEY ST/7TH ST	JEFFERSON ST/5TH ST	1088	1082	0.0030	0.015	281	S-ALONG 5TH ST
5ST-2C	48	4.00	190	JEFFERSON ST/3RD ST	JEFFERSON ST/3RD ST	1084	1084	0.0030	0.015	68	S-ALONG 3RD ST
5ST-2D	36	3.00	181	WASHINGTON ST/3RD ST	JEFFERSON ST/3RD ST	1086	1084	0.0110	0.015	61	S-ALONG 3RD ST
5ST-3	81	6.80	61	MCKINLEY ST/7TH ST	MCKINLEY ST/7TH ST	1088	1088	0.0030	0.015	281	S-MCKINLEY AND 7TH ST
5ST-4	78	6.50	719	ROOSEVELT ST/7TH ST	MCKINLEY ST/7TH ST	1088	1088	0.0030	0.015	249	S-ALONG 7TH ST

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Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
5ST-5	75	6.30	921	I10/7TH ST	ROOSEVELT ST/7TH ST	1088	1088	0.0030	0.015	229	S-ALONG 7TH ST. BEGINS AT I10 UNDERPASS.
5ST-7	42	3.50	672	FILLMORE ST/7TH ST	MCKINLEY ST/7TH ST	1088	1088	0.0030	0.015	48	N-ALONG 7TH ST INTO 5ST-2
5ST-WAS-1	60	5.00	815	WASHINGTON ST/7TH ST	WASHINGTON ST/5TH ST	1082	1084	0.0030	0.015	124	W-ALONG WASHINGTON INTO 5ST-2
5ST-WAS-2	48	4.00	1784	WASHINGTON ST/11TH ST	WASHINGTON ST/7TH ST	1086	1082	0.0030	0.015	68	W-ALONG WASHINGTON
5ST-WAS-3	36	3.00	852	WASHINGTON ST/12TH ST	WASHINGTON ST/11TH ST	1088	1086	0.0030	0.015	32	W-ALONG WASHINGTON
7AV-1	78	6.50	376	CULVER ST/9TH AV	I10/9TH AV	1082	1080	0.0053	0.015	331	S-ALONG 9TH AV INTO ADOT 10'X12' CBC
7AV-1	54	4.50	3579	I17/7TH AV	SALT RIVER/7TH AV	1070	1044	0.0073	0.015	146	S-7TH AV OUTFALL TO SALT RIVER
7AV-10	48	4.00	5319	MARYLAND AV/7TH AV	MISSOURI AV/7TH AV	1162	1139	0.0043	0.015	82	S-ALONG 7TH AV
7AV-11	42	3.50	6495	FRIER DR/7TH AV	MISSOURI AV/7TH AV	1196	1162	0.0052	0.015	63	S-ALONG 7TH AV
7AV-12	39	3.30	854	AUGUSTA AV/7TH AV	FRIER DR/7TH AV	1198	1196	0.0030	0.015	41	S-ALONG 7TH AV
7AV-13	36	3.00	1627	NORTHERN AV/5TH AV	AUGUSTA AV/7TH AV	1206	1198	0.0049	0.015	40	S-ALONG 7TH AV
7AV-2	75	6.30	1165	MCDOWELL RD/9TH AV	CULVER ST/9TH AV	1084	1082	0.0030	0.015	229	S-ALONG 9TH AV
7AV-2	60	5.00	3705	SHERMAN ST/7TH AV	I17/7TH AV	1072	1070	0.0030	0.015	124	S-7TH AV OUTFALL TO SALT RIVER
7AV-3	54	4.50	2048	JACKSON ST/7TH AV	SHERMAN ST/7TH AV	1080	1072	0.0039	0.015	106	S-7TH AV ACROSS UP
7AV-3	72	6.00	594	MCDOWELL RD/7TH AV	MCDOWELL RD/9TH AV	1084	1084	0.0030	0.015	201	E-ALONG MCDOWELL
7AV-4	51	4.30	1966	JACKSON ST/2ND AV	JACKSON ST/7TH AV	1082	1080	0.0030	0.015	83	W-FLOWS ALONG JACKSON TO 7TH AV TRUNKLINE. JUST NORTH OF UP
7AV-4	69	5.80	2663	ENCANTO BLVD/7TH AV	MCDOWELL RD/7TH AV	1088	1084	0.0030	0.015	184	S-ALONG 7TH AV
7AV-5	66	5.50	1284	VIRGINIA AV/7TH AV	ENCANTO BLVD/7TH AV	1092	1088	0.0031	0.015	162	S-ALONG 7TH AV
7AV-5	48	4.00	346	JACKSON ST/1ST AV	JACKSON ST/2ND AV	1084	1082	0.0058	0.015	95	W-JACKSON ST JUST NORTH OF UP
7AV-6	39	3.30	1032	WASHINGTON ST/1ST AV	JACKSON ST/1ST AV	1086	1084	0.0030	0.015	41	S-FLOWS SOUTH ALONG 1ST AV
7AV-6	63	5.30	1359	THOMAS RD/7TH AV	VIRGINIA AV/7TH AV	1096	1092	0.0030	0.015	144	S-ALONG 7TH AV
7AV-7	60	5.00	2593	OSBORN RD/7TH AV	THOMAS RD/7TH AV	1104	1096	0.0031	0.015	126	S-ALONG 7TH AV
7AV-7	36	3.00	529	MONROE ST/1ST AV	WASHINGTON ST/1ST AV	1086	1086	0.0030	0.015	32	S-FLOWS SOUTH ALONG 1ST AV
7AV-8	36	3.00	418	JACKSON ST/CENTRAL AV	JACKSON ST/1ST AV	1086	1084	0.0048	0.015	40	W-JACKSON ST JUST NORTH OF UP
7AV-8	57	4.80	5659	GRAND CANAL/7TH AV	OSBORN RD/7TH AV	1122	1104	0.0032	0.015	114	S-ALONG 7TH AV
7AV-9	54	4.50	5050	MISSOURI AV/7TH AV	GRAND CANAL/7TH AV	1139	1122	0.0034	0.015	99	S-ALONG 7TH AV TO GRAND CANAL
7AV-CAM-1	42	3.50	1259	CAMELBACK RD/3RD AV	CAMELBACK RD/7TH AV	1130	1130	0.0030	0.015	48	W-ALONG CAMELBACK TO 7AV-9
7AV-CAM-2	36	3.00	1197	CAMELBACK RD/1ST AV	CAMELBACK RD/3RD AV	1130	1130	0.0030	0.015	32	W-ALONG CAMELBACK TO 7AV-9
7AV-GCANAL-1	36	3.00	130	GRAND CANAL/7TH AV	GRAND CANAL/7TH AV	1122	1122	0.0030	0.015	32	W-ALONG GRAND CANAL TO 7AV-8
7AV-OSB-1	36	3.00	777	OSBORN RD/5TH AV	OSBORN RD/7TH AV	1104	1104	0.0030	0.015	32	W-ALONG OSBORN TO 7AV-7
7AV-THM-1	42	3.50	1578	THOMAS RD/3RD AV	THOMAS RD/7TH AV	1096	1094	0.0030	0.015	48	W-FLOWS ALONG THOMAS INTO 7AV-6
7AV-THM-2	36	3.00	950	THOMAS RD/1ST AV	THOMAS RD/3RD AV	1096	1096	0.0030	0.015	32	W-FLOWS ALONG THOMAS INTO 7AV-6
7STN-1	75	6.30	257	WILLETTA ST/7TH ST	I10/7TH ST	1090	1088	0.0078	0.015	369	S-ALONG 7TH ST INTO 14' ADOT TUNNEL AT I10
7STN-10	48	4.00	2096	PIERSON ST/7TH ST	GRAND CANAL/7TH ST	1132	1126	0.0030	0.015	68	S-ALONG 7TH ST DIVERSION STURCTURE
7STN-11	48	4.00	3295	MISSOURI AV/7TH ST	PIERSON ST/7TH ST	1148	1132	0.0049	0.015	87	S-ALONG 7TH ST
7STN-2	72	6.00	645	MCDOWELL RD/7TH ST	WILLETTA ST/7TH ST	1090	1090	0.0030	0.015	201	S-ALONG 7TH ST
7STN-3	69	5.80	2084	MONTE VISTA RD/7TH ST	MCDOWELL RD/7TH ST	1092	1090	0.0030	0.015	184	S-ALONG 7TH ST
7STN-4	66	5.50	712	OAK ST/7TH ST	MONTE VISTA RD/7TH ST	1094	1092	0.0030	0.015	159	S-ALONG 7TH ST
7STN-5	63	5.30	1329	VIRGINIA AV/7TH ST	OAK ST/7TH ST	1096	1094	0.0030	0.015	144	S-ALONG 7TH ST
7STN-6	60	5.00	1388	THOMAS RD/7TH ST	VIRGINIA AV/7TH ST	1100	1096	0.0030	0.015	124	S-ALONG 7TH ST
7STN-7	57	4.80	2452	OSBORN RD/7TH ST	THOMAS RD/7TH ST	1106	1100	0.0030	0.015	111	S-ALONG 7TH ST
7STN-8	54	4.50	4338	VETERANS ADM HOSP/7TH ST	OSBORN RD/7TH ST	1118	1106	0.0030	0.015	93	S-ALONG 7TH ST
7STN-9	51	4.30	1158	GRAND CANAL/7TH ST	VETERANS ADM HOSP/7TH ST	1126	1118	0.0069	0.015	125	S-ALONG 7TH ST DIVERSION STURCTURE
7STN-CAM-1	42	3.50	2560	CAMELBACK RD/12TH ST	CAMELBACK RD/7TH ST	1140	1134	0.0030	0.015	48	W-ALONG CAMELBACK TO 7STN-11
7STN-MB-1	36	3.00	715	MEADOWBROOK AV/6TH ST	MEADOWBROOK AV/7TH ST	1124	1126	0.0030	0.015	32	E-ALONG GRAND CANAL TO 7STN-10
84w-1	48	4.00	1282	84w-1	84w-1	1050	1050	0.0030	0.015	68	S-FROM INTERIOR OF 84w TO OUTFALL AT SALT RIVER
ADAMS-I10-1	78	6.50	356	ADAMS ST/I10	ADAMS ST/I10	1100	1100	0.0030	0.015	249	S-ALONG I10 FROM DETEN/RETEN BASIN
ADAMS-I10-2	66	5.50	317	ADAMS ST/I10	ADAMS ST/I10	1100	1100	0.0030	0.015	159	S-ALONG I10 FROM DETEN/RETEN BASIN
ADOT-14-E	168	14.00	0	I10/14TH ST	I10/10TH ST	1066	1084	0.0030	0.015	1924	E-TO 21' WEST ADOT TUNNEL
ADOT-14-E-2	10X10	10X10	0	I10/7TH ST	I10/10TH ST	1072	1066	0.0042	0.015	1280	W-ALONG I10
ADOT-14-W	168	14.00	0	I10/7TH AV	I10/3RD ST	1082	1082	0.0030	0.015	1924	W-FLOW TO 21' WEST ADOT TUNNEL

Metro Phoenix ADMS
Storm Drain Capacity Estimation

Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
BUCK-I10-1	72	6.00	97	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	201	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-10	54	4.50	196	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	93	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-11	36	3.00	263	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	32	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-12	42	3.50	242	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	48	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-2	42	3.50	332	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	48	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-3	60	5.00	339	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	124	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-4	72	6.00	1046	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	201	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-5	96	8.00	402	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	433	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-6	96	8.00	265	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	433	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-7	36	3.00	344	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	32	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-8	72	6.00	151	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	201	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
BUCK-I10-9	60	5.00	163	BUCKEYE RD/I10	BUCKEYE RD/I10	1104	1104	0.0030	0.015	124	W-TO DETEN/RETEN BASIN - SURGE POOL TO EASTERN TUNNEL
CEN-1	96	8.00	6571	THOMAS RD/CENTRALAV	I10/CENTRAL AV	1096	1086	0.0030	0.015	433	S-ALONG CENTRAL TO 14' ADOT TUNNEL
CEN-2	90	7.50	2619	OSBORN RD/ CENTRAL AV	THOMAS RD/CENTRALAV	1104	1096	0.0031	0.015	370	S-ALONG CENTRAL TO 14' ADOT TUNNEL
CEN-3	84	7.00	2629	INDIAN SCHOOL RD/CENTRAL AV	OSBORN RD/ CENTRAL AV	1112	1104	0.0030	0.015	303	S-ALONG CENTRAL
CEN-4	72	6.00	5304	CAMELBACK RD/CENTAL AV	INDIAN SCHOOL RD/CENTRAL AV	1130	1112	0.0034	0.015	214	S-ALONG CENTRAL CROSSES GRAND CANAL
CEN-5	66	5.50	2633	MISSOURI AV/CENTRAL AV	CAMELBACK RD/CENTAL AV	1142	1130	0.0046	0.015	197	S-ALONG CENTRAL
CEN-6	60	5.00	2631	BETHANY HOME RD/CENTRAL AV	MISSOURI AV/CENTRAL AV	1154	1142	0.0046	0.015	153	S-ALONG CENTRAL
CEN-MCD-1	42	3.50	674	MCDOWELL RD/2ND ST	MCDOWELL RD/CENTRAL AV	1088	1088	0.0030	0.015	48	W-ALONG MCDOWELL RD TO CEN-1
CEN-MCD-2	36	3.00	679	MCDOWELL RD/3RD ST	MCDOWELL RD/2ND ST	1088	1088	0.0030	0.015	32	W-ALONG MCDOWELL RD TO CEN-1
CEN-MCD-2	36	3.00	448	MCDOWELL RD/6TH ST	MCDOWELL RD/2ND ST	1098	1088	0.0223	0.015	86	W-ALONG MCDOWELL RD TO CEN-1
CEN-MCD-3	36	3.00	2361	OSBORN RD/CENTRAL	MCDOWELL RD/CENTRAL AV	1104	1096	0.0034	0.015	34	S-ALONG CENTRAL AV TO CEN-2
CEN-OAK-1	36	3.00	168	OAK ST/CENTRAL AV	OAK ST/CENTRAL AV	1092	1092	0.0030	0.015	32	W-ALONG OAK TO CEN-1
CEN-S-1	42	3.50	4534	BUCKEYE RD/CENTRAL AV	SALT RIVER/CENTRAL AV	1076	1072	0.0030	0.015	48	S-ALONG CENTRAL TO OPEN CHANNEL TO SALT RIVER OUTFALL
CEN-S-2	36	3.00	566	HADLEY ST/CENTRAL AV	CENTRAL AV/BUCKEYE RD	1076	1076	0.0030	0.015	32	S-ALONG CENTRAL
CEN-THM-1	42	3.50	1998	THOMAS RD/5TH ST	THOMAS RD/CENTRALAV	1098	1096	0.0030	0.015	48	W-ALONG THOMAS RD TO CEN-1
CULV-1	54	4.50	845	CULVER ST/50TH ST	CULVER ST/49TH PL	1216	1206	0.0118	0.015	185	S-ALONG CULVER TO DETEN/RETEN BASIN AT CULVER/49TH PL
CULV-2	42	3.50	1139	AZ NATIONAL ENTR 2/52ND ST	CULVER ST/50TH ST	1226	1216	0.0088	0.015	82	S-ALONG CULVER TO DETEN/RETEN BASIN AT CULVER/49TH PL
EAST TUNNEL	252	21.00	11863	SR51/I10	SALT RIVER/20TH ST				0.015		EAST TUNNEL
FILL-I10-1	60	5.00	216	FILLMORE ST/21ST PL	FILLMORE ST/I10	1106	1110	0.0030	0.015	124	E-ALONG FILLMORE TO EASTERN TUNNEL. DETEN/RETEN BASIN
FILL-I10-2	42	3.50	415	TAYLOR ST/21ST AV	FILLMORE ST/21ST PL	1104	1106	0.0030	0.015	48	N-ALONG 21ST PL TO FILL-I10-1. DETEN/RETEN BASIN
FILL-I10-3	60	5.00	302	PIERCE ST/21ST PL	TAYLOR ST/21ST AV	1106	1104	0.0066	0.015	184	S-ALONG 21ST PL TO FILL-I10-1
FILL-I10-4	48	4.00	144	PIERCE ST/21ST PL	PIERCE ST/21ST PL	1106	1106	0.0030	0.015	68	S-ALONG 21ST PL TO FILL-I10-1
FILL-I10-5	42	3.50	195	MCKINLEY ST/21ST PL	PIERCE ST/21ST PL	1106	1106	0.0030	0.015	48	S-ALONG 21ST PL TO FILL-I10-1
FILL-I10-6	36	3.00	158	MCKINLEY ST/21ST PL	PIERCE ST/21ST PL	1106	1106	0.0030	0.015	32	S-ALONG 21ST PL TO FILL-I10-1
GRANT-1	78	6.50	1527	GRANT ST/5TH ST	GRANT ST/2ND ST	1082	1080	0.0030	0.015	249	W-ALONG GRANT TO WESTERN TUNNEL
I10OFF-1	72	6.00	160	I10/SALT RIVER	I10/SALT RIVER	1108	1100	0.0500	0.015	820	S-OUTFALL FOR OPEN CHANNEL ON NORTH SIDE OF I10 AT SALT RIVER
I10-SALT-1	36	3.00	1612	UNIVERSITY DR/I10	I10/SALT RIVER	1096	1076	0.0124	0.015	64	S-ALONG WEST SIDE OF I10 AT SALT RIVER
I10W-1	0	8.00	152	I10/7TH AV	I10/7TH AV	1082	1082	0.0030	0.015	433	S-COLLECT WATER FROM NORTH OF I10 AND CONVEYS TO 14' ADOT TUNNEL
I10W-2	96	8.00	423	I10/7TH AV	I10/7TH AV	1082	1082	0.0030	0.015	433	S-COLLECT WATER FROM NORTH OF I10 AND CONVEYS TO 14' ADOT TUNNEL
I10W-3	96	8.00	1947	CULVER ST/15TH ST	I10/12TH ST	1100	1096	0.0030	0.015	433	W-ALONG I10 (NORTH SIDE). EMPTIES TO 14' ADOT TUNNEL
I10W-4	90	7.50	641	CULVERT ST/16TH ST	CULVER ST/15TH ST	1102	1100	0.0031	0.015	370	W-ALONG I10 (NORTH SIDE). EMPTIES TO 14' ADOT TUNNEL, PUMP
I10W-5	72	6.00	3028	I10/SR51	CULVERT ST/16TH ST	1112	1102	0.0033	0.015	211	W-ALONG I10 (NORTH SIDE). PUMP, POSSIBLY ACCEPTS FLOW FROM SURGE POOL.
I10-WEST 14'-1	147	12.30	1507	CULVER ST/11TH AV	I10/7TH AV	1070	1086	0.0030	0.015	1363	W-ALONG I10 TO 14' ADOT TUNNEL
I17-10	72	6.00	7020	BETHANY HOME RD/I17	ELM ST/I17	1158	1134	0.0034	0.015	214	S-ALONG I17 EAST SIDE OF FREEWAY
I17-11	66	5.50	7202	ORANGEWOOD AV/I17	BETHANY HOME RD/I17	1191	1158	0.0046	0.015	197	S-ALONG I17 EAST SIDE OF FREEWAY
I17-12	60	5.00	2584	NORTHERN AV/I17	ORANGEWOOD AV/I17	1202	1191	0.0043	0.015	148	S-ALONG I17 EAST SIDE OF FREEWAY. PUMP
I17-13	54	4.50	2018	LAS PALMARITAS DR/I17	NORTHERN AV/I17	1211	1202	0.0045	0.015	114	S-ALONG I17 EAST SIDE OF FREEWAY. PUMP
I17-14	48	4.00	307	BUTLER DR/I17	LAS PALMARITAS DR/I17	1212	1211	0.0033	0.015	71	S-ALONG I17 EAST SIDE OF FREEWAY, BEGIN TRUNKLINE
I17-15	48	4.00	2084	I17/27TH AV	BUTLER DR/I17	1221	1212	0.0043	0.015	82	S-ALONG I17 TO PIPE3-I17-14
I17-16	42	3.50	1122	DUNLAP AV/I17	27TH AV/I17	1226	1221	0.0045	0.015	58	S-ALONG I17 TO PIPE3-I17-14

Metro Phoenix ADMS
Storm Drain Capacity Estimation

Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
I17-4	102	8.50	7419	I17/23RD AV	SALT RIVER/23RD AV	1052	1036	0.0030	0.015	509	S-ALONG 23RD AV THROUGH DURANGO CURVE TO SALT RIVER OUTFALL
I17-5	102	8.50	1648	I17/23RD AV	DURANGO ST/24TH AV	1054	1052	0.0030	0.015	509	S-ALONG I17 FROM DURANGO CURVE SW TO SALT RIVER TO ADJACENT DURANGO SD
I17-6	90	7.50	6921	VAN BUREN ST/I17	I17/23RD AV	1070	1054	0.0030	0.015	364	S-ALONG I17 ON EAST SIDE OF FREEWAY
I17-7	78	6.50	13105	FLOWER ST/I17	VAN BUREN ST/I17	1106	1070	0.0030	0.015	249	S-ALONG I17 ON EAST SIDE OF FREEWAY, SWITCHES TO WEST SIDE
I17-8	66	5.50	3081	INDIAN SCHOOL RD/I17	FLOWER ST/I17	1128	1106	0.0071	0.015	245	S-ALONG I17 EAST SIDE OF FREEWAY
I17-9	78	6.50	4390	ELM ST/I17	INDIAN SCHOOL RD/I17	1134	1128	0.0030	0.015	249	S-ALONG I17 EAST SIDE OF FREEWAY
I17-GRD-1	36	3.00	1611	GRAND AV/I17	ENCANTO BLVD/I17	1096	1094	0.0030	0.015	32	S-ALONG WEST SIDE OF I17, PUMP
I17-I10-1	48	4.00	360	I17/I10	I17/I10	1092	1092	0.0030	0.015	68	N-TO SE I17/I10 BASIN
I17-I10-2	60	5.00	2835	I17/17TH ST	I17/I10	1096	1092	0.0030	0.015	124	E-ALONG SOUTH SIDE I17 TO DETEN/RETEN BASIN?
I17-I10-3	36	3.00	566	I17/I10	I17/I10	1092	1094	0.0030	0.015	32	N-PIPE TO CONNECT SE DETEN/RETEN BASIN TO NW BASIN?
I17-I10-4	30	2.50	258	I17/I10	I17/I10	1120	1092	0.1085	0.015	117	N-PIPE FROM I17 TO DETEN/RETEN BASIN ON NW CORNER OF I17/I10?
I17-I10-5	48	4.00	770	HESS AV/I10	I17/19TH ST	1098	1094	0.0052	0.015	90	N-ACROSS I17 TO NW DETEN/RETEN BASIN
I17-VAN-1	60	5.00	1515	FILLMORE ST/I17	VAN BUREN ST/I17	1070	1068	0.0030	0.015	124	S-ALONG EAST SIDE OF I17 TO PIPE2-I17-6
I17-VAN-2	60	5.00	589	FILLMORE ST/24TH AV	FILLMORE ST/I17	1070	1070	0.0030	0.015	124	E-ALONG FILLMORE ACROSS I17 TO I17-VAN-1
I17-VAN-3	48	4.00	1084	ROOSEVELT ST/I17	FILLMORE ST/24TH ST	1072	1070	0.0030	0.015	68	S-ALONG WEST SIDE OF I17
I17-VAN-4	42	3.50	3048	MCDOWELL RD/I17	ROOSEVELT ST/I17	1088	1072	0.0053	0.015	63	S-ALONG WEST SIDE OF I17
I17-VAN-5	48	4.00	1080	FILLMORE ST/24TH AV	ROOSEVELT ST/24TH AV	1072	1070	0.0030	0.015	68	S-ALONG 24TH AV TO I17-VAN-2
I17-VAN-6	42	3.50	739	I10/I17	FILLMORE ST/24TH AV	1076	1072	0.0054	0.015	64	S-ALONG 24TH AV
JACK-I10-1	72	6.00	670	JACKSON ST/22ND ST	JACKSON ST/I10	1100	1124	0.0030	0.015	201	W-TO JACKSON ST DROP SHAFT TO EASTERN TUNNEL, DETEN/RETEN BASIN
JEFF-I10-1	36	3.00	410	JEFFERSON ST/20TH ST	JEFFERSON ST/I10	1098	1098	0.0030	0.015	32	E-ALONG JEFFERSON ACROSS I10 TO EASTERN TUNNEL
JEFF-I10-2	42	3.50	866	JEFFERSON ST/22ND ST	JEFFERSON ST/I10	1100	1098	0.0030	0.015	48	W-ALONG JEFFERSON TO E. TUNNEL DROP SHAFT FROM DETEN/RETEN BASIN
JEFF-I10-3	90	7.50	555	JEFFERSON ST/22ND ST	JEFFERSON ST/I10	1100	1098	0.0036	0.015	399	W-ALONG JEFFERSON TO E. TUNNEL DROP SHAFT FROM DETEN/RETEN BASIN
JEFF-I10-4	84	7.00	378	JEFFERSON ST/22ND ST	JEFFERSON ST/I10	1100	1098	0.0053	0.015	403	W-ALONG JEFFERSON TO E. TUNNEL DROP SHAFT FROM DETEN/RETEN BASIN
JEFF-I10-5	102	8.50	334	JEFFERSON ST/22ND ST	JEFFERSON ST/I10	1100	1098	0.0060	0.015	719	W-ALONG JEFFERSON TO E. TUNNEL DROP SHAFT FROM DETEN/RETEN BASIN
L202 CBC-1	141	11.80	2108	L202/24TH ST	L202/I10	1118	1118	0.0030	0.015	1220	W-ALONG L202 TO EASTERN TUNNEL
L202 CBC-2	135	11.30	910	L202/25TH PL	L202/24TH ST	1118	1118	0.0030	0.015	1087	W-ALONG L202 TO EASTERN TUNNEL
L202 CBC-3	120	10.00	1412	L202/28TH ST	L202/25TH PL	1118	1118	0.0030	0.015	785	W-ALONG L202 TO EASTERN TUNNEL
L202-1	72	6.00	506	LR/L202	LR/L202	1180	1180	0.0030	0.015	201	S-ACROSS LR TRACKS EAST OF L202
L202-16S-1	48	4.00	477	L202/LR	L202/LR	1168	1156	0.0252	0.015	197	S- TO 50ST-2
L202-24ST-1	36	3.00	163	L202/24TH ST	L202/24TH ST	1118	1118	0.0030	0.015	32	S-ALONG 24TH ST TO ADOT TUNNEL
L202-27ST-1	36	3.00	184	L202/27TH ST	L202/27TH ST	1124	1124	0.0030	0.015	32	S-ALONG 27TH ST TO ADOT TUNNEL ON NORTH SIDE OF L202
L202-28ST-1	96	8.00	2753	L202/32ND ST	L202/28TH ST	1132	1122	0.0036	0.015	474	W-ALONG NORTH SIDE OF L202 TO ADOT SD TUNNEL TO EAST TUNNEL
L202-28ST-1A	36	3.00	198	L202/29TH ST	L202/29TH ST	1126	1126	0.0030	0.015	32	S-FROM OPEN CHANNEL TO PIPE3-L202-28ST-1
L202-28ST-2	84	7.00	2580	L202/36TH ST	L202/32ND ST	1144	1132	0.0047	0.015	379	W-ALONG NORTH SIDE OF L202 TO ADOT SD TUNNEL TO EAST TUNNEL
L202-28ST-3	36	3.00	519	GRAND ACCC/L202	L202/36TH ST	1116	1144	0.0030	0.015	32	W-BLEED PIPE? FROM BASIN ON SE SIDE OF L202/36TH ST
L202-28ST-4	54	4.50	938	GRAND ACCC/L202	L202/36TH ST	1134	1144	0.0030	0.015	93	W-BLEED PIPE? FROM BASIN ON NE SIDE OF L202/36TH ST
L202-36ST-1	2ea-8X6	2ea-8X6	434	NL202/s36TH ST	L202/36TH ST	1142	1118	0.0553	0.015	1026	S-EAST OF 36TH ST ACROSS L202 FROM OPEN CHANNEL TO DETEN/RETEN BASIN
L202-44ST-1	48	4.00	437	L202/SR143	L202/SR143	1170	1174	0.0030	0.015	68	S-FROM NW CORNER OF L202/SR143 TO SWC ACROSS L202 TO OPEN CHANNEL
L202-44ST-2	66	5.50	1008	TAYLOR ST/SR143	MELVIN ST/SR143	1162	1166	0.0030	0.015	159	E-ACROSS SR143 FROM OPEN CHANNEL TO OCCC
L202-48ST-1	42	3.50	401	L202/48TH ST	L202/48TH ST	1180	1186	0.0030	0.015	48	N-FROM S. SIDE OF L202 OPEN CHANNEL ACROSS L202 TO OPEN CHANNEL ON N. SIDE
L202-48ST-1	42	3.50	466	L202/48TH ST	L202/48TH ST	1180	1186	0.0030	0.015	48	N-FROM S. SIDE OF L202 OPEN CHANNEL ACROSS L202 TO OPEN CHANNEL ON N. SIDE
LR-SR143-1	36	3.00	2324	VAN BUREN ST/SR143	LR/SR143	1146	1156	0.0030	0.015	32	E- ACROSS SR143 TO OPEN CHANNEL
LR-SR143-1A	36	3.00	2037	LR/SR143	AIRPORT/SR143	1156	1144	0.0058	0.015	44	S-ALONG SR143
OCCC-ERL-1	54	4.50	2709	EARLL DR/52ND ST	EARLL DR/OCCC	1228	1210	0.0066	0.015	138	W-ALONG EARLL DR TO OUTFALL AT OCCC
OCCC-ERL-2	48	4.00	1250	EARLL DR/ 54TH ST	EARLL DR/52ND ST	1234	1228	0.0048	0.015	86	W-ALONG EARLL DR TO OUTFALL AT OCCC
OCCC-ERL-3	42	3.50	1256	EARLL DR/56TH ST	EARLL DR/ 54TH ST	1240	1234	0.0048	0.015	60	W-ALONG EARLL DR TO OUTFALL AT OCCC
OCCC-ERL-4	36	3.00	612	CHEERY LYNN RD/56TH ST	EARLL DR/56TH ST	1244	1240	0.0065	0.015	47	W-ALONG EARLL DR TO OUTFALL AT OCCC
OCCC-MCD-1	42	3.50	1347	PALM LN/46TH ST	MCDOWELL RD/OCCC	1186	1192	0.0030	0.015	48	E-ALONG MCDOWELL TO OCCC
OCCC-MCD-1	48	4.00	3268	OAK ST/44TH ST	PALM LN/46TH ST	1186	1186	0.0030	0.015	68	E-ALONG MCDOWELL TO OCCC
OCCC-MCD-3	54	4.50	637	MCDOWELL RD/48TH ST	MCDOWELL RD/OCCC	1200	1192	0.0126	0.015	191	W-ALONG MCDOWELL RD TO OCCC
OCCC-MCD-4	48	4.00	2598	MCDOWELL RD/52ND ST	MCDOWELL RD/48TH ST	1230	1200	0.0115	0.015	133	W-ALONG MCDOWELL RD

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Storm Drain Capacity Estimation

Pipe ID	Diameter (in)	Diameter (ft)	Length (ft)	U/S Location (street)	D/S Location (street)	U/S Elevation[1] (ft)	D/S Elevation[1] (ft)	Ground Slope (ft/ft)	Manning's "n"	Estimated Capacity (cfs)	Comments
OCCC-MCD-5	48	4.00	737	MCDOWELL RD/52ND ST	MCDOWELL RD/52ND ST	1234	1230	0.0054	0.015	91	S-ALONG 52ND ST FROM OFF SITE
OCCC-MCD-6	36	3.00	405	MCDOWELL RD/58TH ST	MCDOWELL RD/52ND ST	1236	1230	0.0148	0.015	70	W-ALONG MCDOWELL TO OCCC-MCD-4
OCCC-THM-1	36	3.00	1030	THOMAS RD/50TH ST	THOMAS RD/OCCC	1216	1208	0.0078	0.015	51	W-ALONG THOMAS TO OCCC OUTFALL
PIMA-I10-1	66	5.50	2018	NE I17/I10	PIMA ST/I10	1098	1094	0.0030	0.015	159	N-ALONG EAST SIDE OF I10 FROM AIRPORT TO DROP SHAFT AT PIMA ST
PIMA-I10-2	48	4.00	1793	I10/24TH ST	NE I17/I10	1102	1098	0.0030	0.015	68	W-ALONG I10 TO PIMA-I10-1
PIMA-I10-3	60	5.00	1378	MOHAVE ST/24TH ST	MOHAVE ST/I10	1102	1098	0.0030	0.015	124	W-ALONG MOHAVE FROM AIRPORT
PIMA-I10-4	42	3.50	692	I17/I10	I17/I10	1100	1098	0.0030	0.015	48	S-TO PIMA-I10-1
PRIEST-202-1	96	8.00	1303	PRIEST DR/L202	PRIEST DR/SALT RIVER	1152	1132	0.0154	0.015	979	S-ACROSS L202 AND OUTFALL INTO SALT RIVER
ROOS-1	66	5.50	411	L202/SR143	OCCC/SR143	1178	1172	0.0146	0.015	352	S-FROM PIPE3-ROOS2 ACROSS L202 TO OCCC
ROOS-2	66	5.50	814	ROOSEVELT ST/48TH ST	L202/SR143	1184	1178	0.0074	0.015	250	W-ALONG ROOSEVELT TO ADOT SD AND OPEN CHANNEL
SR143-DETEN-1	36	3.00	657	SR143/L202 ON RAMP	SR143/L202 ON RAMP	1108	1128	0.0030	0.015	32	?-FLOW IN OR OUT OF DETEN/RETEN BASIN AT SR143/L202 ON RAMP
SR143-DETEN-2	42	3.50	2008	AIR/SR143	SR143/L202 ON RAMP	1124	1108	0.0080	0.015	78	E-FROM AIRPORT TO DETEN/RETEN BASIN
SR143-LR-1	36	3.00	841	LR/SR143	LR/SR143	1150	1158	0.0030	0.015	32	?-DIRECTION AND OUTFALL NOT APPARENT
SR143-MELV-1	60	5.00	813	MELVIN ST/48TH ST	MELVIN ST/SR143	1170	1164	0.0074	0.015	194	W-ALONG MELVIN TO OPEN CHANNEL ON EAST SIDE OF SR143
SR143-MELV-2	60	5.00	324	MELVIN ST/SR143	MELVIN ST/OCCC	1174	1164	0.0309	0.015	397	E-FROM SR143 TO ADOT OPEN CHANNEL OCCC
SR143-VAN-1	42	3.50	1005	VAN BUREN ST/48TH ST	VAN BUREN ST/48TH ST	1168	1162	0.0060	0.015	68	W-ALONG VAN BUREN TO OPEN CHANNEL ON EAST SIDE OF SR143
SR143-VAN-2	36	3.00	716	POLK ST/48TH ST	VAN BUREN ST/48TH ST	1170	1168	0.0030	0.015	32	S-ALONG 48TH ST TO SR143-VAN-1
SR153-3	78	6.50	2029	GRAND CANAL/SR153	AIR LN/SR153	1138	1132	0.0030	0.015	249	S-ALONG EAST SIDE OF SR153 TO OPEN CHANNEL AND SALT RIVER OUTFALL. PUMP
SR153-4	42	3.50	2146	VAN BUREN ST/44TH ST	GRAND CANAL/SR153	1152	1138	0.0065	0.015	70	S-ALONG EAST SIDE OF SR153 TO OPEN CHANNEL AND SALT RIVER OUTFALL. PUMP
SR153-ACCC-1	42	3.50	423	GRAND ACCC/SR153	GRAND ACCC/SR153	1144	1138	0.0142	0.015	104	S-ALONG SR153 TO SR153-3
SR51-10	84	7.00	639	CLARENDON AV/SR51	WHITTON AV/SR51	1130	1130	0.0030	0.015	303	S-ALONG EAST SIDE OFSR51
SR51-11	78	6.50	599	FAIRMOUNT AV/SR51	CLARENDON AV/SR51	1136	1130	0.0100	0.015	454	S-ALONG EAST SIDE OFSR51
SR51-12	72	6.00	1325	DEVONSHIRE AV/SR51	FAIRMOUNT AV/SR51	1136	1136	0.0030	0.015	201	S-ALONG EAST SIDE OFSR51
SR51-14	60	5.00	3524	HIGHLAND AV/SR51	DEVONSHIRE AV/SR51	1146	1136	0.0030	0.015	124	S-ALONG EAST SIDE OFSR51. PUMP
SR51-15	54	4.50	1295	CAMELBACK RD/SR51	HIGHLAND AV/SR51	1150	1146	0.0031	0.015	95	S-ALONG EAST SIDE OFSR51. PUMP
SR51-16	48	4.00	1391	COLTER ST/SR51	CAMELBACK RD/SR51	1156	1150	0.0043	0.015	82	S-ALONG SR51 FROM DETEN/RETEN BASIN
SR51-17	54	4.50	1319	MISSOURI AV/SR51	COLTER ST/SR51	1164	1156	0.0061	0.015	133	S-ALONG SR51 FROM DETEN/RETEN BASIN
SR51-18	42	3.50	1322	MONTEBELLO AV/SR51	MISSOURI AV/SR51	1172	1164	0.0061	0.015	68	S-ALONG EAST SIDE OF SR51
SR51-6	108	9.00	2308	CORONADO RD/SR51	I10/SR51	1114	1110	0.0030	0.015	593	S-ALONG SR51 INTO DETENTION BASIN/SURGE POOL ON SE SIDE OF I10/SR51 IT.
SR51-7	102	8.50	591	PALM LN/SR51	CORONADO RD/SR51	1116	1114	0.0034	0.015	542	S-ALONG EAST SIDE OFSR51
SR51-8	96	8.00	1356	OAK ST/SR51	PALM LN/SR51	1118	1116	0.0030	0.015	433	S-ALONG EAST SIDE OFSR51
SR51-9	90	7.50	6267	WHITTON AV/SR51	OAK ST/SR51	1130	1118	0.0030	0.015	364	S-ALONG EAST SIDE OFSR51
SR51-CAM-1	39	3.30	1546	CAMELBACK RD/20TH ST	CAMELBACK RD/SR51	1156	1150	0.0039	0.015	47	W-ALONG CAMELBACK TO SR51-15
SR51-CLT-1	72	6.00	621	COLTER ST/17TH ST	COLTER ST/SR51	1136	1154	0.0030	0.015	201	?-BASIN-FLOW DIRECTION NOT APPARENT
SR51-HGH-1	36	3.00	1307	HIGHLAND AV/20TH ST	HIGHLAND ST/ SR51	1152	1146	0.0046	0.015	39	W-ALONG HIGHLAND INTO SR51-14. PUMP.
SR51-HGH-2	48	4.00	1761	CAMELBACK RD/SR51	HIGHLAND RD/SR51	1128	1146	0.0030	0.015	68	S-ALONG WEST SIDE OF SR51 TRUNKLINE SD. PUMP.
SR51-HGH-3	42	3.50	763	MEDLOCK DR/SR51	CAMELBACK RD/SR51	1136	1128	0.0105	0.015	89	S-ALONG WEST SIDE OF SR51 TRUNKLINE SD. PUMP.
SR51-HGH-4	39	3.30	317	COLTER ST/SR51	MEDLOCK DR/SR51	1136	1136	0.0030	0.015	41	S-ALONG WEST SIDE OF SR51 TRUNKLINE SD. PUMP.
SR51-HGH-5	36	3.00	403	OREGON AV/SR51	COLTER ST/SR51	1134	1136	0.0030	0.015	32	S-ALONG WEST SIDE OF SR51 TRUNKLINE SD. PUMP.
SR51-MIS-1	48	4.00	267	MISSOURI AV/18TH ST	MISSOURI AV/SR51	1166	1166	0.0030	0.015	68	W-ALONG MISSOURI TO SR51-17
SR51-MIS-2	39	3.30	1210	MISSOURI AV/20TH ST	MISSOURI AV/18TH ST	1168	1166	0.0030	0.015	41	W-ALONG MISSOURI TO SR51-17
TONTO-1	72	6.00	2351	TONTO ST/6TH ST	TONTO ST/CENTRAL AV	1082	1076	0.0030	0.015	201	W-ALONG TONTO ST TO WESTERN TUNNEL
UP-SR153-1	78	6.50	112	UP/SR153	UP/SR153	1134	1134	0.0030	0.015	249	E-FROM SR153 ADOT SD TO PUMP TO SR153-3
VAN-I10-1	66	5.50	954	POLK ST/21ST PL	VAN BUREN ST/I10	1122	1100	0.0231	0.015	442	S-ALONG I10 FROM DETEN/RETEN BASIN TO VAN BUREN DROP SHAFT
VAN-I10-10	102	8.50	327	VAN BUREN ST/I10	VAN BUREN ST/I10	1100	1100	0.0030	0.015	509	W-ALONG VAN BUREN INTO EASTERN TUNNEL DROP SHAFT
VAN-I10-2	54	4.50	292	POLK ST/21ST PL	POLK ST/21ST PL	1122	1122	0.0030	0.015	93	S-ALONG I10 FROM DETEN/RETEN BASIN TO VAN BUREN DROP SHAFT

APPENDIX A9

Sub-basin Flow Diversions

Appendix A9 Sub-basin Flow Diversions

Urban sub-basin surface flow diversions are a complex two-dimensional flow condition. For hydrologic modeling purposes a fixed flow split ratio was applied to the HEC-1 model diversion operations. This appendix shows the derivations of the ratios for each of the sub-basins.

Most of the sub-basins have general northeast to southwest slopes (a few of them have northwest to southeast slopes), and the street network controls the majority of the stormwater flows. Therefore, stormwater flowing within a typical sub-basin is directed and conveyed to the arterial streets along the west and south sides of the sub-basin by an arterial street, collector and residential streets. At the same time some of the surface flow crosses the sub-basin boundaries and enters the adjacent sub-basins via both collector and residential streets. When the flow of a sub-basin concentrates at a hydrologic low point (typically at or near the street intersection of the southwest corner of the sub-basin) street intersection diversions occur. Sub-basin surface runoff diversions were based on representative slopes and total effective street flow widths including right-of-way width. A composite channel cross section was developed to represent the multiple-street flow conveyance. Surface flows for each sub-basin may not concentrate at one single point, for illustration purposes, it is assumed that the concentration point is located on the hydrologic low point of the sub-basin and one split flow was modeled for each sub-basin to one direction. A fixed flow split ratio (typically southerly and westerly components) for most of the sub-basins was used except for some of the sub-basins along Grand Canal where rating curves were developed. Appendix A8 presents the methodologies for the sub-basin diversions and the results of the flow diversion ratios for all of the sub-basins. The flow split ratio is developed based on the Manning's equation as follows:

The Manning's equation is:

$$Q = \frac{1.486}{n} A R^{2/3} S^{1/2}$$

Where Q – Discharge (cfs);

n – Manning's roughness coefficient;

A – Flow area (ft^2);

R – Hydraulic radius (ft);

S – Slope (ft/ft).

For sheet (shallow) flow condition

A = Bh, and R = h

Where B – flow width (ft);

h – flow depth (ft); Then

$$Q = \frac{1.486}{n} B h^{5/3} S^{1/2}$$

For sheet (shallow) flow conditions,

$h_1 \approx h_2 \approx h$

Where h_1 and h_2 are flow depths to directions 1 and 2.

$$Q = Q_1 + Q_2$$

Where Q_1 and Q_2 are flows to directions 1 and 2.

$$\frac{1.486}{n} B h^{5/3} S^{1/2} = \frac{1.486}{n} B_1 h_1^{5/3} S_1^{1/2} + \frac{1.486}{n} B_2 h_1^{5/3} S_2^{1/2}$$

$$B S^{1/2} = B_1 S_1^{1/2} + B_2 S_2^{1/2}$$

$$Ratio\ 1 = \frac{B_1 S_1^{1/2}}{B_1 S_1^{1/2} + B_2 S_2^{1/2}} = \frac{S_1^{1/2}}{S_1^{1/2} + \frac{B_2}{B_1} S_2^{1/2}}$$

$$Ratio\ 2 = \frac{B_2 S_2^{1/2}}{B_1 S_1^{1/2} + B_2 S_2^{1/2}} = \frac{\frac{B_2}{B_1} S_2^{1/2}}{S_1^{1/2} + \frac{B_2}{B_1} S_2^{1/2}}$$

For Metro Phoenix ADMS/P

$$B_2 = B_w \qquad B_1 = B_s \qquad S_1 = S_s \qquad S_2 = S_w \qquad r = \frac{B_w}{B_s}$$

$$Ratio\ s = \frac{S_s^{1/2}}{S_s^{1/2} + r S_w^{1/2}}$$

$$Ratio\ w = \frac{r S_w^{1/2}}{S_s^{1/2} + r S_w^{1/2}}$$

Where r is flow width ratio of the west direction to the south direction.

Table A9-1 shows the flow width estimations for each of the sub-basins including right-of-way for both directions according to the types of streets and number of streets in each of the directions. Table A9-2

shows the surface flow diversion ratios for the sub-basins based on the equations developed above. Table A9-3 shows the rating tables for the major streets west of I-17 within the Durango ADMP area where flow diverted to south into the Salt River.

Metro ADMS

Table A9-1 Effective Split Flow Width Estimation

(ROW Width)

E-W Grid	N-S Grid	Sub-Basin Name	Hydrologic Low Pt. St. Intersection		South Direction						Total Width	West Direction						Total Width
			E-W Street	N-S Street	No. of Streets			Width of Street (ROW) (ft)				No. of Streets			Width of Street (ROW) (ft)			
					Arterial[1]	Collector[2]	Residential[3]	Arterial	Collector	Residential	(ft)	Arterial	Collector	Residential	Arterial	Collector	Residential	(ft)
64	c	64c	Northern	Central	2	1	2	100	60	50	360	1	1	2	100	60	50	260
68	c	68c	Northern	7th Ave	1	1	1	100	60	50	210	1	2	3	100	60	50	370
72	c	72c	Northern	15th Ave	1	1	3	100	60	50	310	2	0	0	100	60	50	200
76	c	76c	Northern	19th Ave	1	0	2	100	60	50	200	2	3	0	100	60	50	380
80	c	80c	Northern	19th Ave	1	0	1	100	60	50	150	2	2	0	100	60	50	320
84	c	84c	Northern	23rd Ave	1	0	1	100	60	50	150	0	0	0	100	60	50	0
56	e	56e	Glendale	12th St	0	1	6	100	60	50	360	1	0	5	100	60	50	350
60	e	60e	Glendale	7th St	1	1	3	100	60	50	310	1	2	11	100	60	50	770
64	e	64e	Glendale	Central	1	0	3	100	60	50	250	1	1	3	100	60	50	310
68	e	68e	Glendale	7th Ave	1	1	2	100	60	50	260	1	1	3	100	60	50	310
72	e	72e	Glendale	15th Ave	1	0	5	100	60	50	350	1	0	0	100	60	50	100
76	e	76e	Glendale	15th Ave	1	1	1	100	60	50	210	1	3	1	100	60	50	330
80	e	80e	Glendale	19th Ave	1	1	1	100	60	50	210	1	2	3	100	60	50	370
84	e	84e	Glendale	23rd Ave	1	0	2	100	60	50	200	0	0	0	100	60	50	0
52	g	52g	Bethany	SR51	2	1	2	100	60	50	360	0	0	0	100	60	50	0
54	g	54g	Bethany	16th St	1	0	1	100	60	50	150	1	4	1	100	60	50	390
56	g	56g	Bethany	12th St	0	1	4	100	60	50	260	1	3	2	100	60	50	380
60	g	60g	Bethany	7th St	1	1	1	100	60	50	210	1	1	5	100	60	50	410
64	g	64g	Bethany	Central	1	0	1	100	60	50	150	1	1	3	100	60	50	310
68	g	68g	Bethany	7th Ave	1	1	2	100	60	50	260	1	2	3	100	60	50	370
72	g	72g	Bethany	15th Ave	1	1	2	100	60	50	260	1	2	2	100	60	50	320
76	g	76g	Bethany	15th Ave	1	0	1	100	60	50	150	1	3	0	100	60	50	280
80	g	80g	Bethany	19th Ave	1	1	2	100	60	50	260	1	2	2	100	60	50	320
84	g	84g	Bethany	23rd Ave	1	0	1	100	60	50	150	0	0	0	100	60	50	0
36	i	36i	Camelback	32nd St	2	1	3	100	60	50	410	1	1	1	100	60	50	210
40	i	40i	Camelback	28th St	1	0	2	100	60	50	200	1	0	0	100	60	50	100
42	i	42i	Biltmore Loop	28th St	1	0	1	100	60	50	150	1	1	0	100	60	50	160
44	i	44i	Camelback	24th St	1	0	0	100	60	50	100	1	1	0	100	60	50	160
48	i	48i	Camelback	20th St	1	1	0	100	60	50	160	1	2	1	100	60	50	270
52	i	52i	Camelback	SR51	1	0	0	100	60	50	100	0	0	0	100	60	50	0
54	i	54i	Camelback	16th St	1	0	0	100	60	50	100	1	2	2	100	60	50	320
56	i	56i	Camelback	12th St	0	1	3	100	60	50	210	1	3	4	100	60	50	480
60	i	60i	Camelback	7th St	1	1	2	100	60	50	260	1	2	3	100	60	50	370
64	i	64i	Camelback	Central	1	0	3	100	60	50	250	1	2	2	100	60	50	320
68	i	68i	Camelback	7th Ave	1	1	0	100	60	50	160	1	2	1	100	60	50	270
72	i	72i	Camelback	7th Ave	1	1	1	100	60	50	210	1	2	3	100	60	50	370
76	i	76i	Camelback	15th Ave	1	0	1	100	60	50	150	1	2	1	100	60	50	270
80	i	80i	Camelback	19th Ave	1	1	1	100	60	50	210	1	2	1	100	60	50	270
84	i	84i	Camelback	23rd Ave	1	0	1	100	60	50	150	0	0	0	100	60	50	0
24	k	24k	Indian School	44th St	1	0	3	100	60	50	250	1	2	3	100	60	50	370
28	k	28k	Indian School	40th St	1	0	2	100	60	50	200	1	2	3	100	60	50	370
32	k	32k	Indian School	36th St	1	1	1	100	60	50	210	1	2	3	100	60	50	370
36	k	36k	Indian School	32nd St	1	1	0	100	60	50	160	1	2	1	100	60	50	270
40	k	40k	Indian School	28th St	1	1	0	100	60	50	160	1	2	1	100	60	50	270
44	k	44k	Indian School	24th St	1	0	1	100	60	50	150	1	2	1	100	60	50	270

Metro ADMS

Table A9-1 Effective Split Flow Width Estimation

(ROW Width)

E-W Grid	N-S Grid	Sub-Basin Name	Hydrologic Low Pt. St. Intersection		South Direction						Total Width	West Direction						Total Width
			E-W Street	N-S Street	No. of Streets			Width of Street (ROW) (ft)				No. of Streets			Width of Street (ROW) (ft)			
					Arterial[1]	Collector[2]	Residential[3]	Arterial	Collector	Residential	(ft)	Arterial	Collector	Residential	Arterial	Collector	Residential	(ft)
48	k	48k	Indian School	20th St	1	1	1	100	60	50	210	1	3	0	100	60	50	280
52	k	52k	Indian School	SR51	1	0	1	100	60	50	150	1	1	0	100	60	50	160
54	k	54k	Grand Canal	16th St	1	0	0	100	60	50	100	1	2	2	100	60	50	320
56	k	56k	Grand Canal	12th St	1	0	0	100	60	50	100	0	2	1	100	60	50	170
60	k	60k	Grand Canal	7th St	1	0	0	100	60	50	100	0	1	2	100	60	50	160
64	k	64k	Grand Canal	Central	1	0	0	100	60	50	100	1	0	1	100	60	50	150
68	k	68k	Grand Canal	7th Ave	1	0	0	100	60	50	100	1	2	0	100	60	50	220
72	k	72k	Grand Canal	15th Ave	1	0	0	100	60	50	100	1	2	0	100	60	50	220
76	k	76k	Grand Canal	19th Ave	1	0	2	100	60	50	200	1	2	1	100	60	50	270
80	k	80k	Grand Canal	23rd Ave	1	0	2	100	60	50	200	1	2	3	100	60	50	370
84	k	84k	Grand Canal	23rd Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0
60	l	60l	Indian School	7th St	1	1	2	100	60	50	260	1	0	1	100	60	50	150
64	l	64l	Indian School	Central	1	0	3	100	60	50	250	1	0	0	100	60	50	100
68	l	68l	Indian School	7th Ave	1	1	2	100	60	50	260	1	1	2	100	60	50	260
72	l	72l	Indian School	7th Ave	1	1	1	100	60	50	210	1	0	1	100	60	50	150
76	l	76l	Indian School	19th Ave	1	0	2	100	60	50	200	0	0	0	100	60	50	0
24	m	24m	Thomas	44th St	1	1	1	100	60	50	210	1	1	4	100	60	50	360
28	m	28m	Thomas	40th St	1	1	0	100	60	50	160	1	1	2	100	60	50	260
32	m	32m	Thomas	36th St	1	0	2	100	60	50	200	1	2	3	100	60	50	370
36	m	36m	Thomas	32nd St	1	0	3	100	60	50	250	1	3	3	100	60	50	430
40	m	40m	Thomas	28th St	1	1	2	100	60	50	260	1	3	3	100	60	50	430
44	m	44m	Thomas	24th St	1	1	2	100	60	50	260	1	2	4	100	60	50	420
48	m	48m	Grand Canal	20th St	1	0	0	100	60	50	100	1	1	0	100	60	50	160
52	m	52m	Grand Canal	SR51	1	0	0	100	60	50	100	0	1	0	100	60	50	60
54	m	54m	Thomas	16th St	1	0	1	100	60	50	150	1	1	1	100	60	50	210
56	m	56m	Thomas	12th St	1	2	0	100	60	50	220	2	1	2	100	60	50	360
60	m	60m	Thomas	7th St	1	1	2	100	60	50	260	1	1	3	100	60	50	310
64	m	64m	Thomas	Central	1	1	1	100	60	50	210	1	1	2	100	60	50	260
68	m	68m	Thomas	7th Ave	1	1	2	100	60	50	260	1	1	1	100	60	50	210
72	m	72m	Thomas	15th Ave	1	0	3	100	60	50	250	1	1	3	100	60	50	310
76	m	76m	Thomas	15th Ave	1	0	1	100	60	50	150	1	1	1	100	60	50	210
80	m	80m	Thomas	19th Ave	1	0	0	100	60	50	100	1	1	0	100	60	50	160
84	m	84m	Thomas	23rd Ave	1	0	1	100	60	50	150	0	0	0	100	60	50	0
16	o	16o	Mcdowell	54th St	1	0	0	100	60	50	100	0	0	0	100	60	50	0
24	o	24o	Mcdowell	44th St	2	0	0	100	60	50	200	1	1	3	100	60	50	310
28	o	28o	Mcdowell	40th St	1	0	3	100	60	50	250	1	2	3	100	60	50	370
32	o	32o	Mcdowell	36th St	1	0	0	100	60	50	100	1	1	0	100	60	50	160
36	o	36o	Mcdowell	32nd St	1	0	1	100	60	50	150	1	2	1	100	60	50	270
40	o	40o	Grand Canal	28th St	1	1	2	100	60	50	260	1	2	1	100	60	50	270
44	o	44o	Grand Canal	24th St	1	0	2	100	60	50	200	1	1	1	100	60	50	210
48	o	48o	Loop 202	SR51	1	0	0	100	60	50	100	2	0	0	100	60	50	200
52	o	52o	I-10	16th St	1	0	0	100	60	50	100	1	2	2	100	60	50	320
56	o	56o	I-10	12th St	1	0	0	100	60	50	100	1	1	2	100	60	50	260
60	o	60o	I-10	7th St	1	0	0	100	60	50	100	1	1	1	100	60	50	210
64	o	64o	I-10	Central	1	0	0	100	60	50	100	1	2	2	100	60	50	320

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Table A9-1 Effective Split Flow Width Estimation

(ROW Width)

E-W Grid	N-S Grid	Sub-Basin Name	Hydrologic Low Pt. St. Intersection		South Direction						Total Width	West Direction						Total Width
			E-W Street	N-S Street	No. of Streets			Width of Street (ROW) (ft)				No. of Streets			Width of Street (ROW) (ft)			
					Arterial[1]	Collector[2]	Residential[3]	Arterial	Collector	Residential	(ft)	Arterial	Collector	Residential	Arterial	Collector	Residential	(ft)
68	o	68o	I-10	7th Ave	1	2	0	100	60	50	220	1	3	3	100	60	50	430
72	o	72o	I-10	15th Ave	1	0	0	100	60	50	100	0	0	1	100	60	50	50
76	o	76o	I-10	19th Ave	1	1	1	100	60	50	210	2	1	2	100	60	50	360
80	o	80o	Mcdowell	19th Ave	0	0	0	100	60	50	0	0	0	0	100	60	50	0
20	p	20p	Loop 202	SR143	1	1	0	100	60	50	160	0	0	0	100	60	50	0
28	p	28p	Loop 202	40th St	1	0	0	100	60	50	100	1	1	0	100	60	50	160
32	p	32p	Loop 202	36th St	1	0	0	100	60	50	100	1	0	0	100	60	50	100
36	p	36p	Grand Canal	Loop 202	1	0	0	100	60	50	100	1	0	1	100	60	50	150
40	p	40p	Loop 202	28th St	2	0	0	100	60	50	200	2	0	0	100	60	50	200
44	p	44p	Loop 202	24th St	1	0	0	100	60	50	100	1	1	0	100	60	50	160
80	p	80p	I-10	I-17	1	1	2	100	60	50	260	0	0	0	100	60	50	0
8	q	08q	Center Pkwy	Phoenix Zoo	1	0	1	100	60	50	150	0	0	0	100	60	50	0
12	q	12q	Van Buren	56th St	1	0	0	100	60	50	100	0	0	0	100	60	50	0
16	q	16q	Van Buren	52nd St	1	0	2	100	60	50	200	0	0	0	100	60	50	0
20	q	20q	Van Buren	SR143	2	0	0	100	60	50	200	0	0	0	100	60	50	0
28	q	28q	Grand Canal	40th St	1	1	0	100	60	50	160	1	0	1	100	60	50	150
32	q	32q	Grand Canal	36th St	1	0	0	100	60	50	100	1	0	0	100	60	50	100
36	q	36q	Van Buren	32nd St	1	0	1	100	60	50	150	1	1	2	100	60	50	260
40	q	40q	Van Buren	28th St	1	1	1	100	60	50	210	1	1	1	100	60	50	210
44	q	44q	Van Buren	24th St	1	0	1	100	60	50	150	1	1	0	100	60	50	160
48	q	48q	Van Buren	I-10	1	0	1	100	60	50	150	1	1	0	100	60	50	160
52	q	52q	Van Buren	16th St	1	2	2	100	60	50	320	1	2	2	100	60	50	320
56	q	56q	Van Buren	12th St	1	0	3	100	60	50	250	1	2	4	100	60	50	420
60	q	60q	Van Buren	7th St	1	0	3	100	60	50	250	1	1	3	100	60	50	310
64	q	64q	Van Buren	Central	1	1	3	100	60	50	310	1	2	1	100	60	50	270
68	q	68q	Van Buren	7th Ave	1	0	2	100	60	50	200	1	1	2	100	60	50	260
72	q	72q	Van Buren	15th Ave	1	0	2	100	60	50	200	1	2	2	100	60	50	320
76	q	76q	Van Buren	UPRR	1	1	1	100	60	50	210	1	1	0	100	60	50	160
80	q	80q	UPRR	I-17	0	0	0	100	60	50	0	1	0	2	100	60	50	200
4	s	04s	Washington	Center Pkwy	1	0	0	100	60	50	100	0	0	0	100	60	50	0
8	s	08s	Loop 202	Priest Dr	2	0	0	100	60	50	200	1	0	0	100	60	50	100
12	s	12s	UPRR	Galvin Pkwy	1	0	0	100	60	50	100	1	0	0	100	60	50	100
16	s	16s	Loop 202	Sky Harbor Blvd	3	0	0	100	60	50	300	0	0	0	100	60	50	0
20	s	20s	Grand Canal	SR143	1	0	0	100	60	50	100	2	0	0	100	60	50	200
24	s	24s	Grand Canal	44th St	1	0	0	100	60	50	100	1	2	0	100	60	50	220
28	s	28s	UPRR	40th St	1	0	0	100	60	50	100	1	1	0	100	60	50	160
32	s	32s	UPRR	36th St	1	0	1	100	60	50	150	2	1	0	100	60	50	260
36	s	36s	UPRR	32nd St	1	0	0	100	60	50	100	1	1	0	100	60	50	160
40	s	40s	UPRR	28th St	1	0	0	100	60	50	100	1	2	0	100	60	50	220
44	s	44s	UPRR	24th St	1	0	0	100	60	50	100	1	2	0	100	60	50	220
48	s	48s	UPRR	I-10	1	0	0	100	60	50	100	0	3	0	100	60	50	180
52	s	52s	UPRR	16th St	0	0	0	100	60	50	0	3	1	0	100	60	50	360
56	s	56s	UPRR	12th St	1	0	0	100	60	50	100	3	1	0	100	60	50	360
60	s	60s	UPRR	7th St	0	1	1	100	60	50	110	3	1	0	100	60	50	360
64	s	64s	UPRR	Central	1	1	2	100	60	50	260	3	1	1	100	60	50	410

Metro ADMS

Table A9-1 Effective Split Flow Width Estimation

(ROW Width)

E-W Grid	N-S Grid	Sub-Basin Name	Hydrologic Low Pt. St. Intersection		South Direction						Total Width	West Direction						Total Width
			E-W Street	N-S Street	No. of Streets			Width of Street (ROW) (ft)				No. of Streets			Width of Street (ROW) (ft)			
					Arterial[1]	Collector[2]	Residential[3]	Arterial	Collector	Residential	(ft)	Arterial	Collector	Residential	Arterial	Collector	Residential	(ft)
68	s	68s	UPRR	7th Ave	0	1	2	100	60	50	160	1	1	3	100	60	50	310
72	s	72s	UPRR	15th Ave	1	1	1	100	60	50	210	1	1	2	100	60	50	260
76	s	76s	UPRR	19th Ave	0	1	2	100	60	50	160	1	1	2	100	60	50	260
20	t	20t	Salt River	SR143	1	0	0	100	60	50	100	0	0	0	100	60	50	0
24	t	24t	Salt River	SR143	1	2	0	100	60	50	220	0	0	0	100	60	50	0
52	t	52t	Buckeye	16th St	1	1	0	100	60	50	160	1	1	0	100	60	50	160
56	t	56t	Buckeye	12th St	1	1	1	100	60	50	210	2	1	0	100	60	50	260
60	t	60t	Buckeye	7th St	1	0	1	100	60	50	150	1	0	1	100	60	50	150
64	t	64t	Buckeye	Central	1	1	2	100	60	50	260	1	1	2	100	60	50	260
68	t	68t	Buckeye	7th Ave	1	0	2	100	60	50	200	1	1	1	100	60	50	210
72	t	72t	Buckeye	15th Ave	1	1	2	100	60	50	260	1	1	2	100	60	50	260
76	t	76t	Buckeye	19th Ave	1	1	2	100	60	50	260	1	1	3	100	60	50	310
80	t	80t	Buckeye	I-17	1	0	2	100	60	50	200	0	0	0	100	60	50	0
84	t	84t	Buckeye	27th Ave	1	1	1	100	60	50	210	1	0	0	100	60	50	100
88	t	88t	Buckeye	35th Ave	1	1	1	100	60	50	210	1	0	1	100	60	50	150
92	t	92t	Buckeye	43rd Ave	0	0	2	100	60	50	100	1	1	0	100	60	50	160
52	u	52u	I-17	16th St	1	0	0	100	60	50	100	0	3	0	100	60	50	180
56	u	56u	I-17	12th St	0	1	0	100	60	50	60	0	2	1	100	60	50	170
60	u	60u	I-17	7th St	1	1	0	100	60	50	160	0	2	1	100	60	50	170
64	u	64u	I-17	Central	1	1	0	100	60	50	160	0	2	2	100	60	50	220
68	u	68u	I-17	7th Ave	1	0	0	100	60	50	100	0	2	1	100	60	50	170
72	u	72u	I-17	15th Ave	1	1	0	100	60	50	160	0	2	1	100	60	50	170
76	u	76u	I-17	19th Ave	0	0	0	100	60	50	0	0	2	1	100	60	50	170
80	u	80u	Durango	I-17	0	0	0	100	60	50	0	0	0	0	100	60	50	0
84	u	84u	Durango	27th Ave	1	0	1	100	60	50	150	1	1	0	100	60	50	160
88	u	88u	Durango	35th Ave	1	1	1	100	60	50	210	1	0	1	100	60	50	150
92	u	92u	Durango	43rd Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0
44	v	44v	Salt River	20th St	1	0	0	100	60	50	100	0	0	0	100	60	50	0
48	v	48v	Salt River	20th St	1	0	0	100	60	50	100	0	0	0	100	60	50	0
52	v	52v	Salt River	16th St	1	0	0	100	60	50	100	0	0	0	100	60	50	0
56	v	56v	Salt River	12th St	1	0	0	100	60	50	100	0	0	0	100	60	50	0
60	v	60v	Salt River	7th St	1	0	0	100	60	50	100	0	0	0	100	60	50	0
64	v	64v	Salt River	Central	1	0	0	100	60	50	100	0	0	0	100	60	50	0
68	v	68v	Salt River	7th Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0
72	v	72v	Salt River	15th Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0
76	v	76v	Lower Buckeye	19th Ave	1	0	0	100	60	50	100	1	0	0	100	60	50	100
80	v	80v	Lower Buckeye	23rd Ave	1	0	1	100	60	50	150	2	0	1	100	60	50	250
84	v	84v	Lower Buckeye	27th Ave	1	0	0	100	60	50	100	1	0	0	100	60	50	100
88	v	88v	Lower Buckeye	35th Ave	0	0	0	100	60	50	0	1	0	0	100	60	50	100
92	v	92v	Lower Buckeye	43rd Ave	0	0	0	100	60	50	0	1	0	0	100	60	50	100
76	w	76w	Salt River	19th Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0
80	w	80w	Salt River	23rd Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0
84	w	84w	Salt River	27th Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0
88	w	88w	Salt River	43rd Ave	1	0	0	100	60	50	100	0	0	0	100	60	50	0

Metro Phoenix ADMS
Table A9-2 Surface Flow Split Estimation

E-W Grid	N-S Grid	Hydrologic Low Pt. St. Intersection		Sub-Basin Name	USGE (N-S)	USGE (E-W)	DSGE Hydrologic Low Pt.	N-S Length (ft)	E-W Length (ft)	South Slope Ss (ft/ft)	West Slope Sw (ft/ft)	Ss^0.5	Sw^0.5	Eff. ROW Ratio Ww/Ws	Flow to South Ratio	Flow to West Ratio	Comments
		E-W Street	N-S Street														
64	c	Northern	Central	64c	1234	1234	1214	1550	3570	0.0129	0.0056	0.114	0.075	0.72	0.68	0.32	
68	c	Northern	7th Ave	68c	1236	1214	1202	3385	2640	0.0100	0.0045	0.100	0.067	1.76	0.46	0.54	
72	c	Northern	15th Ave	72c	1232	1196	1195	5620	2640	0.0066	0.0004	0.081	0.019	0.65	0.90	0.10	
76	c	Northern	19th Ave	76c	1230	1194	1194	6085	2640	0.0059	0.0000	0.077	0.000	1.90	1.00	0.00	
80	c	Northern	19th Ave	80c	1230	1200	1198	6848	2640	0.0047	0.0008	0.068	0.028	2.13	1.00	0.00	flows to south along 19th Ave.
84	c	Northern	23rd Ave	84c	1234	1202	1200	7275	2090	0.0047	0.0010	0.068	0.031	0.67	0.77	0.23	flows to east
56	e	Glendale	12th St	56e	1234	1228	1212	1900	1600	0.0116	0.0100	0.108	0.100	0.97	0.53	0.47	
60	e	Glendale	7th St	60e	1236	1212	1198	4300	2640	0.0088	0.0053	0.094	0.073	2.48	0.34	0.66	
64	e	Glendale	Central	64e	1224	1198	1186	5280	2640	0.0072	0.0045	0.085	0.067	1.24	0.50	0.50	
68	e	Glendale	7th Ave	68e	1212	1186	1177	5280	2640	0.0066	0.0034	0.081	0.058	1.19	0.54	0.46	
72	e	Glendale	15th Ave	72e	1200	1174	1171	5280	2640	0.0055	0.0011	0.074	0.034	0.29	0.90	0.10	
76	e	Glendale	15th Ave	76e	1194	1174	1174	5280	2640	0.0038	0.0000	0.062	0.000	1.57	1.00	0.00	
80	e	Glendale	19th Ave	80e	1196	1176	1176	5280	2640	0.0038	0.0000	0.062	0.000	1.76	1.00	0.00	flows to south along 19th Ave.
84	e	Glendale	23rd Ave	84e	1198	1180	1176	5280	1400	0.0042	0.0029	0.065	0.053	1.85	0.39	0.61	flows to east
52	g	Bethany	SR51	52g	1238	1210	1188	2050	2040	0.0244	0.0108	0.156	0.104	0.00	1.00	0.00	
54	g	Bethany	16th St	54g	1238	1184	1180	4630	1000	0.0125	0.0040	0.112	0.063	2.60	0.40	0.60	
56	g	Bethany	12th St	56g	1228	1180	1172	5280	2640	0.0106	0.0030	0.103	0.055	1.46	0.56	0.44	
60	g	Bethany	7th St	60g	1210	1170	1162	5280	2640	0.0091	0.0030	0.095	0.055	1.95	0.47	0.53	
64	g	Bethany	Central	64g	1196	1162	1156	5280	2640	0.0076	0.0023	0.087	0.048	2.01	0.48	0.52	
68	g	Bethany	7th Ave	68g	1184	1156	1151	5280	2640	0.0063	0.0019	0.079	0.044	1.42	0.56	0.44	
72	g	Bethany	15th Ave	72g	1175	1150	1150	5280	2640	0.0047	0.0000	0.069	0.000	1.23	1.00	0.00	
76	g	Bethany	15th Ave	76g	1171	1152	1150	5280	2640	0.0040	0.0008	0.063	0.028	1.00	0.70	0.30	flows to east
80	g	Bethany	19th Ave	80g	1174	1154	1154	5280	2640	0.0038	0.0000	0.062	0.000	1.23	1.00	0.00	flows to south along 19th Ave.
84	g	Bethany	23rd Ave	84g	1176	1156	1154	5280	1360	0.0042	0.0015	0.065	0.038	1.87	0.47	0.53	flows to east
36	i	Camelback	32nd St	36i	1246	1230	1212	1470	5280	0.0231	0.0034	0.152	0.058	0.51	0.84	0.16	
40	i	Camelback	28th St	40i	1248	1210	1190	3045	2610	0.0190	0.0077	0.138	0.088	0.50	0.76	0.24	
42	i	Biltmore Loop	28th St	42i	1244	1210	1190	2980	2275	0.0181	0.0088	0.135	0.094	1.07	0.00	1.00	
44	i	Camelback	24th St	44i	1248	1188	1172	5215	2715	0.0146	0.0059	0.121	0.077	1.60	0.50	0.50	
48	i	Camelback	20th St	48i	1240	1170	1156	6160	2640	0.0136	0.0053	0.117	0.073	1.69	0.49	0.51	
52	i	Camelback	SR51	52i	1196	1156	1150	5280	1660	0.0087	0.0036	0.093	0.060	0.00	1.00	0.00	
54	i	Camelback	16th St	54i	1184	1148	1146	5280	1000	0.0072	0.0020	0.085	0.045	3.20	0.37	0.63	
56	i	Camelback	12th St	56i	1180	1146	1142	5280	2640	0.0072	0.0015	0.085	0.039	2.29	0.49	0.51	
60	i	Camelback	7th St	60i	1170	1140	1136	5280	2640	0.0064	0.0015	0.080	0.039	1.42	0.59	0.41	
64	i	Camelback	Central	64i	1162	1134	1130	5280	2640	0.0061	0.0015	0.078	0.039	1.28	0.61	0.39	
68	i	Camelback	7th Ave	68i	1154	1130	1130	5280	2640	0.0045	0.0000	0.067	0.000	1.69	1.00	0.00	flows to south along 7th Ave.
72	i	Camelback	7th Ave	72i	1151	1132	1130	5280	2640	0.0040	0.0008	0.063	0.028	1.00	0.70	0.30	flows to east
76	i	Camelback	15th Ave	76i	1150	1134	1132	5280	2640	0.0034	0.0008	0.058	0.028	1.00	0.68	0.32	flows to east
80	i	Camelback	19th Ave	80i	1152	1138	1134	5280	2640	0.0034	0.0015	0.058	0.039	1.29	1.00	0.00	flows to south along 19th Ave.
84	i	Camelback	23rd Ave	84i	1154	1138	1134	5280	1470	0.0038	0.0027	0.062	0.052	1.87	0.39	0.61	flows to east
24	k	Indian School	44th St	24k	1248	1242	1224	1680	2800	0.0143	0.0064	0.120	0.080	1.48	0.50	0.50	
28	k	Indian School	40th St	28k	1248	1222	1210	4500	2640	0.0084	0.0045	0.092	0.067	1.85	0.42	0.58	
32	k	Indian School	36th St	32k	1244	1210	1200	5280	2640	0.0083	0.0038	0.091	0.062	1.76	0.46	0.54	
36	k	Indian School	32nd St	36k	1228	1198	1186	5280	2640	0.0080	0.0045	0.089	0.067	1.69	0.44	0.56	
40	k	Indian School	28th St	40k	1208	1184	1172	5280	2640	0.0068	0.0045	0.083	0.067	1.69	0.42	0.58	
44	k	Indian School	24th St	44k	1190	1170	1156	5280	2640	0.0064	0.0053	0.080	0.073	1.80	0.38	0.62	

Metro Phoenix ADMS
Table A9-2 Surface Flow Split Estimation

E-W Grid	N-S Grid	Hydrologic Low Pt. St. Intersection		Sub-Basin Name	USGE (N-S)	USGE (E-W)	DSGE Hydrologic Low Pt.	N-S Length (ft)	E-W Length (ft)	South Slope Ss (ft/ft)	West Slope Sw (ft/ft)	Ss^0.5	Sw^0.5	Eff. ROW Ratio Ww/Ws	Flow to South Ratio	Flow to West Ratio	Comments
		E-W Street	N-S Street														
48	k	Indian School	20th St	48k	1170	1154	1142	5280	2640	0.0053	0.0045	0.073	0.067	1.33	0.45	0.55	
52	k	Indian School	SR51	52k	1154	1142	1134	5280	1625	0.0038	0.0049	0.062	0.070	1.07	0.45	0.55	
54	k	Grand Canal	16th St	54k	1148	1130	1128	5800	1500	0.0034	0.0013	0.059	0.037	N/A	N/A	N/A	Rating curve by GC Diversion
56	k	Grand Canal	12th St	56k	1146	1130	1124	4200	3500	0.0052	0.0017	0.072	0.041	N/A	N/A	N/A	Rating curve by GC Diversion
60	k	Grand Canal	7th St	60k	1140	1126	1126	3000	2800	0.0047	0.0000	0.068	0.000	N/A	N/A	N/A	Rating curve by GC Diversion
64	k	Grand Canal	Central	64k	1134	1126	1124	2130	2680	0.0047	0.0007	0.069	0.027	N/A	N/A	N/A	Rating curve by GC Diversion
68	k	Grand Canal	7th Ave	68k	1130	1124	1124	2000	2690	0.0030	0.0000	0.055	0.000	N/A	N/A	N/A	Rating curve by GC Diversion
72	k	Grand Canal	15th Ave	72k	1130	1124	1122	2900	2860	0.0028	0.0007	0.053	0.026	N/A	N/A	N/A	Rating curve by GC Diversion
76	k	Grand Canal	19th Ave	76k	1132	1122	1120	3200	2680	0.0038	0.0007	0.061	0.027	N/A	N/A	N/A	Rating curve by GC Diversion
80	k	Grand Canal	23rd Ave	80k	1132	1122	1116	4450	3280	0.0036	0.0018	0.060	0.043	N/A	N/A	N/A	Rating curve by GC Diversion
84	k	Grand Canal	23rd Ave	84k	1136	1116	1116	6900	2200	0.0029	0.0000	0.054	0.000	N/A	1.00	0.00	Determined by field visit
60	l	Indian School	7th St	60l	1124	1120	1114	1855	2640	0.0054	0.0023	0.073	0.048	0.58	0.73	0.27	
64	l	Indian School	Central	64l	1124	1114	1112	2780	2640	0.0043	0.0008	0.066	0.028	0.40	0.86	0.14	
68	l	Indian School	7th Ave	68l	1124	1112	1112	3290	2980	0.0036	0.0000	0.060	0.000	1.00	1.00	0.00	flows to south
72	l	Indian School	7th Ave	72l	1122	1112	1112	2940	2405	0.0034	0.0000	0.058	0.000	0.71	1.00	0.00	flows to south
76	l	Indian School	19th Ave	76l	1118	1114	1112	1190	2640	0.0050	0.0008	0.071	0.028	0.00	1.00	0.00	
24	m	Thomas	44th St	24m	1240	1208	1194	5280	2640	0.0087	0.0053	0.093	0.073	1.71	0.43	0.57	
28	m	Thomas	40th St	28m	1222	1194	1182	5280	2640	0.0076	0.0045	0.087	0.067	1.63	0.44	0.56	
32	m	Thomas	36th St	32m	1210	1180	1170	5280	2640	0.0076	0.0038	0.087	0.062	1.85	0.43	0.57	
36	m	Thomas	32nd St	36m	1196	1169	1162	5280	2640	0.0064	0.0027	0.080	0.051	1.72	0.48	0.52	
40	m	Thomas	28th St	40m	1184	1160	1148	5280	2640	0.0068	0.0045	0.083	0.067	1.65	0.43	0.57	
44	m	Thomas	24th St	44m	1170	1148	1136	5280	2640	0.0064	0.0045	0.080	0.067	1.62	0.42	0.58	
48	m	Grand Canal	20th St	48m	1154	1134	1130	5000	3600	0.0048	0.0011	0.069	0.033	1.60	0.90	0.10	Determined by field visit that 90%
52	m	Grand Canal	SR51	52m	1142	1130	1130	2600	1000	0.0046	0.0000	0.068	0.000	0.60	0.90	0.10	flow from 48m and 52m to south
54	m	Thomas	16th St	54m	1128	1124	1114	2460	1505	0.0057	0.0066	0.075	0.082	1.40	0.40	0.60	
56	m	Thomas	12th St	56m	1126	1114	1106	6070	2640	0.0033	0.0030	0.057	0.055	1.64	0.39	0.61	
60	m	Thomas	7th St	60m	1120	1106	1100	5280	2640	0.0038	0.0023	0.062	0.048	1.19	0.52	0.48	
64	m	Thomas	Central	64m	1112	1098	1096	5280	2640	0.0030	0.0008	0.055	0.028	1.24	0.62	0.38	
68	m	Thomas	7th Ave	68m	1110	1096.5	1096	5235	2840	0.0027	0.0002	0.052	0.013	0.81	0.83	0.17	
72	m	Thomas	15th Ave	72m	1110	1094	1094	5280	2640	0.0030	0.0000	0.055	0.000	1.24	1.00	0.00	
76	m	Thomas	15th Ave	76m	1112	1094	1094	5280	2640	0.0034	0.0000	0.058	0.000	1.40	1.00	0.00	
80	m	Thomas	19th Ave	80m	1118	1098	1096	5900	2540	0.0037	0.0008	0.061	0.028	1.60	0.58	0.42	flows to east
84	m	Thomas	23rd Ave	84m	1114	1103	1098	4573	1670	0.0035	0.0030	0.059	0.055	1.73	0.38	0.62	flows to east
16	o	Mcdowell	54th St	16o	1720	1344	1244	800	2000	0.5950	0.0500	0.771	0.224	0.00	1.00	0.00	
24	o	Mcdowell	44th St	24o	1210	1196	1178	5280	2640	0.0061	0.0068	0.078	0.083	1.55	0.38	0.62	
28	o	Mcdowell	40th St	28o	1194	1176	1162	5280	2640	0.0061	0.0053	0.078	0.073	1.48	0.42	0.58	
32	o	Mcdowell	36th St	32o	1182	1160	1150	5280	2640	0.0061	0.0038	0.078	0.062	1.60	0.44	0.56	
36	o	Mcdowell	32nd St	36o	1170	1148	1140	5280	2640	0.0057	0.0030	0.075	0.055	1.80	0.43	0.57	
40	o	Grand Canal	28th St	40o	1160	1138	1134	4900	3600	0.0053	0.0011	0.073	0.033	N/A	N/A	N/A	Rating curve by GC Diversion
44	o	Grand Canal	24th St	44o	1146	1134	1132	2400	3600	0.0058	0.0006	0.076	0.024	N/A	N/A	N/A	Rating curve by GC Diversion
48	o	Loop 202	SR51	48o	1132	1118	1114	7000	2640	0.0026	0.0015	0.051	0.039	N/A	N/A	N/A	Rating Curve for McDowell Rd
52	o	I-10	16th St	52o	1124	1110	1104	6845	2640	0.0029	0.0023	0.054	0.048	3.20	0.00	1.00	I-10
56	o	I-10	12th St	56o	1114	1102	1098	6770	2640	0.0024	0.0015	0.049	0.039	2.60	0.00	1.00	I-10
60	o	I-10	7th St	60o	1106	1096	1090	6720	2640	0.0024	0.0023	0.049	0.048	2.10	0.00	1.00	I-10
64	o	I-10	Central	64o	1100	1090	1086	6860	2640	0.0020	0.0015	0.045	0.039	3.20	0.00	1.00	I-10

Metro Phoenix ADMS
Table A9-2 Surface Flow Split Estimation

E-W Grid	N-S Grid	Hydrologic Low Pt. St. Intersection		Sub-Basin Name	USGE (N-S)	USGE (E-W)	DSGE Hydrologic Low Pt.	N-S Length (ft)	E-W Length (ft)	South Slope Ss (ft/ft)	West Slope Sw (ft/ft)	Ss^0.5	Sw^0.5	Eff. ROW Ratio Ww/Ws	Flow to South Ratio	Flow to West Ratio	Comments
		E-W Street	N-S Street														
68	o	I-10	7th Ave	68o	1096	1086	1082	6780	2640	0.0021	0.0015	0.045	0.039	1.95	0.00	1.00	I-10
72	o	I-10	15th Ave	72o	1094	1082	1080	6900	2640	0.0020	0.0008	0.045	0.028	N/A	N/A	N/A	Basin Rating Curve to W.
76	o	I-10	19th Ave	76o	1094	1080	1078	6930	2915	0.0023	0.0007	0.048	0.026	0.20	0.90	0.10	Determined by field visit
80	o	Mcdowell	19th Ave	80o	1100	1094	1080	3055	2620	0.0065	0.0053	0.081	0.073	0.70	0.00	1.00	flows to east
20	p	Loop 202	SR143	20p	1228	1200	1178	2050	4225	0.0244	0.0052	0.156	0.072	0.00	1.00	0.00	
28	p	Loop 202	40th St	28p	1188	1172	1154	3030	3070	0.0112	0.0059	0.106	0.077	1.60	0.00	1.00	
32	p	Loop 202	36th St	32p	1160	1150	1142	2540	2640	0.0071	0.0030	0.084	0.055	1.00	0.00	1.00	
36	p	Grand Canal	Loop 202	36p	1148	1140	1136	1900	3000	0.0063	0.0013	0.079	0.037	N/A	1.00	0.00	Determined by field visit
40	p	Loop 202	28th St	40p	1136	1132	1126	1380	2460	0.0072	0.0024	0.085	0.049	1.00	0.00	1.00	
44	p	Loop 202	24th St	44p	1132	1124	1118	4230	2640	0.0033	0.0023	0.058	0.048	1.60	0.00	1.00	
80	p	I-10	I-17	80p	1096	1078	1070	7000	2200	0.0037	0.0036	0.061	0.060	0.00	1.00	0.00	
8	q	Center Pkwy	Phoenix Zoo	08q	1300	1204	1194	4450	1550	0.0238	0.0065	0.154	0.080	0.00	1.00	0.00	
12	q	Van Buren	56th St	12q	1610	1216	1202	5250	1000	0.0777	0.0140	0.279	0.118	0.00	1.00	0.00	
16	q	Van Buren	52nd St	16q	1330	1210	1200	5150	3550	0.0252	0.0028	0.159	0.053	0.00	1.00	0.00	
20	q	Van Buren	SR143	20q	1194	1200	1166	1740	2270	0.0161	0.0150	0.127	0.122	0.00	1.00	0.00	
28	q	Grand Canal	40th St	28q	1162	1144	1142	3270	3100	0.0061	0.0006	0.078	0.025	N/A	N/A	N/A	Rating curve by GC Diversion
32	q	Grand Canal	36th St	32q	1150	1142	1136	1700	4100	0.0082	0.0015	0.091	0.038	N/A	1.00	0.00	Determined by field visit
36	q	Van Buren	32nd St	36q	1134	1128	1118	2520	2640	0.0063	0.0038	0.080	0.062	1.73	0.43	0.57	
40	q	Van Buren	28th St	40q	1130	1118	1112	3300	2640	0.0055	0.0023	0.074	0.048	1.00	0.61	0.39	
44	q	Van Buren	24th St	44q	1124	1110	1106	3885	2640	0.0046	0.0015	0.068	0.039	1.07	0.62	0.38	
48	q	Van Buren	I-10	48q	1116	1104	1100	3720	2250	0.0043	0.0018	0.066	0.042	1.07	0.59	0.41	
52	q	Van Buren	16th St	52q	1102	1100	1094	3640	3045	0.0022	0.0020	0.047	0.044	1.00	0.51	0.49	
56	q	Van Buren	12th St	56q	1096	1096	1092	3700	2640	0.0011	0.0015	0.033	0.039	1.68	0.33	0.67	
60	q	Van Buren	7th St	60q	1091	1093	1090	3775	2640	0.0003	0.0011	0.016	0.034	1.24	0.28	0.72	
64	q	Van Buren	Central	64q	1087	1090	1086	3590	2640	0.0003	0.0015	0.017	0.039	0.87	0.33	0.67	
68	q	Van Buren	7th Ave	68q	1084	1085	1082	3720	2210	0.0005	0.0014	0.023	0.037	1.30	0.33	0.67	
72	q	Van Buren	15th Ave	72q	1080	1081	1076	3280	2640	0.0012	0.0019	0.035	0.044	1.60	0.33	0.67	
76	q	Van Buren	UPRR	76q	1077	1077	1072	3800	2640	0.0013	0.0019	0.036	0.044	0.76	0.52	0.48	
80	q	UPRR	I-17	80q	1078	1068	1066	6175	2290	0.0019	0.0009	0.044	0.030	N/A	0.00	1.00	
4	s	Washington	Center Pkwy	04s	1370	1200	1188	2050	1870	0.0888	0.0064	0.298	0.080	0.00	1.00	0.00	
8	s	Loop 202	Priest Dr	08s	1215	1170	1150	2900	2900	0.0224	0.0069	0.150	0.083	N/A	0.00	1.00	Determined by field visit
12	s	UPRR	Galvin Pkwy	12s	1212	1184	1156	3200	1000	0.0175	0.0280	0.132	0.167	N/A	0.00	1.00	Determined by field visit
16	s	Loop 202	Sky Harbor Blvd	16s	1210	1152	1148	3200	1280	0.0194	0.0031	0.139	0.056	0.00	1.00	0.00	
20	s	Grand Canal	SR143	20s	1202	1152	1144	2700	1500	0.0215	0.0053	0.147	0.073	N/A	1.00	0.00	Determined by field visit
24	s	Grand Canal	44th St	24s	1168	1148	1140	3600	2000	0.0078	0.0040	0.088	0.063	N/A	1.00	0.00	Determined by field visit
28	s	UPRR	40th St	28s	1138	1136	1130	1240	1400	0.0065	0.0043	0.080	0.065	1.60	0.43	0.57	
32	s	UPRR	36th St	32s	1138	1128	1122	3600	2640	0.0044	0.0023	0.067	0.048	1.73	0.00	1.00	Railroad
36	s	UPRR	32nd St	36s	1126	1122	1118	2530	2640	0.0032	0.0015	0.056	0.039	1.60	0.00	1.00	Railroad
40	s	UPRR	28th St	40s	1118	1116	1112	2540	2640	0.0024	0.0015	0.049	0.039	2.20	0.00	1.00	Railroad
44	s	UPRR	24th St	44s	1110	1110	1106	2550	2640	0.0016	0.0015	0.040	0.039	2.20	0.00	1.00	Railroad
48	s	UPRR	I-10	48s	1106	1104	1100	2545	2365	0.0024	0.0017	0.049	0.041	1.80	0.00	1.00	Railroad
52	s	UPRR	16th St	52s	1096	1099	1094	2515	2905	0.0008	0.0017	0.028	0.041	N/A	0.00	1.00	Railroad
56	s	UPRR	12th St	56s	1090	1093	1088	2500	2640	0.0008	0.0019	0.028	0.044	3.60	0.15	0.85	
60	s	UPRR	7th St	60s	1089	1086	1082	2725	2640	0.0026	0.0015	0.051	0.039	3.27	0.28	0.72	
64	s	UPRR	Central	64s	1085	1084	1080	2480	2640	0.0020	0.0015	0.045	0.039	1.58	0.42	0.58	

Metro Phoenix ADMS
Table A9-2 Surface Flow Split Estimation

E-W Grid	N-S Grid	Hydrologic Low Pt. St. Intersection		Sub-Basin Name	USGE (N-S)	USGE (E-W)	DSGE Hydrologic Low Pt.	N-S Length (ft)	E-W Length (ft)	South Slope Ss (ft/ft)	West Slope Sw (ft/ft)	Ss^0.5	Sw^0.5	Eff. ROW Ratio Ww/Ws	Flow to South Ratio	Flow to West Ratio	Comments
		E-W Street	N-S Street														
68	s	UPRR	7th Ave	68s	1080	1081	1078	2550	2280	0.0008	0.0013	0.028	0.036	1.94	0.28	0.72	
72	s	UPRR	15th Ave	72s	1076	1077	1072	2990	2640	0.0013	0.0019	0.037	0.044	1.24	0.40	0.60	
76	s	UPRR	19th Ave	76s	1071	1075	1070	2450	2640	0.0004	0.0019	0.020	0.044	1.63	0.22	0.78	
20	t	Salt River	SR143	20t	1148	1132	1124	1500	1800	0.0160	0.0044	0.126	0.067	0.00	1.00	0.00	
24	t	Salt River	SR143	24t	1142	1124	1120	2000	900	0.0110	0.0044	0.105	0.067	0.00	1.00	0.00	
52	t	Buckeye	16th St	52t	1095	1096	1094	2840	2830	0.0004	0.0007	0.019	0.027	1.00	0.41	0.59	
56	t	Buckeye	12th St	56t	1091	1094	1088	2855	2640	0.0011	0.0023	0.032	0.048	1.24	0.35	0.65	
60	t	Buckeye	7th St	60t	1083	1088	1082	3275	2630	0.0003	0.0023	0.017	0.048	1.00	0.27	0.73	
64	t	Buckeye	Central	64t	1080	1082	1076	2880	2640	0.0014	0.0023	0.037	0.048	1.00	0.44	0.56	
68	t	Buckeye	7th Ave	68t	1077	1078	1070	2830	2640	0.0025	0.0030	0.050	0.055	1.05	0.46	0.54	
72	t	Buckeye	15th Ave	72t	1071	1070	1064	2355	2640	0.0030	0.0023	0.055	0.048	1.00	0.53	0.47	
76	t	Buckeye	19th Ave	76t	1070	1067	1062	2405	2640	0.0033	0.0019	0.058	0.044	1.19	0.53	0.47	
80	t	Buckeye	I-17	80t	1070	1062	1058	2855	2640	0.0042	0.0015	0.065	0.039	0.00	1.00	0.00	
84	t	Buckeye	27th Ave	84t	1068	1059	1058	2760	2760	0.0036	0.0004	0.060	0.019	0.48	0.87	0.13	
88	t	Buckeye	35th Ave	88t	1063	1058	1055	2760	2760	0.0029	0.0011	0.054	0.033	0.71	0.70	0.30	
92	t	Buckeye	43rd Ave	92t	1063	1055	1055	2760	1990	0.0029	0.0000	0.054	0.000	1.60	1.00	0.00	
52	u	I-17	16th St	52u	1095	1096	1088	3530	2960	0.0020	0.0027	0.045	0.052	1.80	0.32	0.68	
56	u	I-17	12th St	56u	1089	1090	1086	3555	2660	0.0008	0.0015	0.029	0.039	2.83	0.21	0.79	
60	u	I-17	7th St	60u	1085	1087	1084	3175	2660	0.0003	0.0011	0.018	0.034	1.06	0.33	0.67	
64	u	I-17	Central	64u	1079	1082	1078	2970	2640	0.0003	0.0015	0.018	0.039	1.38	0.25	0.75	
68	u	I-17	7th Ave	68u	1073	1076	1072	3090	2650	0.0003	0.0015	0.018	0.039	1.70	0.21	0.79	
72	u	I-17	15th Ave	72u	1065	1068	1064	2820	2640	0.0004	0.0015	0.019	0.039	1.06	0.31	0.69	
76	u	I-17	19th Ave	76u	1061	1064	1060	2665	2640	0.0004	0.0015	0.019	0.039	1.70	0.00	1.00	
80	u	Durango	I-17	80u	1062	1058	1052	2070	2370	0.0048	0.0025	0.070	0.050	0.00	0.00	0.00	
84	u	Durango	27th Ave	84u	1051.5	1058	1051	2760	2760	0.0002	0.0025	0.013	0.050	1.07	0.20	0.80	
88	u	Durango	35th Ave	88u	1058	1050	1048	2760	2760	0.0036	0.0007	0.060	0.027	0.71	0.76	0.24	
92	u	Durango	43rd Ave	92u	1055	1048	1044	2760	2760	0.0040	0.0014	0.063	0.038	0.00	1.00	0.00	
44	v	Salt River	20th St	44v	1104	1100	1096	2250	1750	0.0036	0.0023	0.060	0.048	0.00	1.00	0.00	
48	v	Salt River	20th St	48v	1096	1084	1084	3150	2660	0.0038	0.0000	0.062	0.000	0.00	1.00	0.00	
52	v	Salt River	16th St	52v	1092	1084	1084	3080	2700	0.0026	0.0000	0.051	0.000	0.00	1.00	0.00	
56	v	Salt River	12th St	56v	1088	1080	1076	2705	2730	0.0044	0.0015	0.067	0.038	0.00	1.00	0.00	
60	v	Salt River	7th St	60v	1084	1076	1076	2351	2640	0.0034	0.0000	0.058	0.000	0.50	1.00	0.00	
64	v	Salt River	Central	64v	1076	1076	1072	2430	2700	0.0016	0.0015	0.041	0.038	0.00	1.00	0.00	
68	v	Salt River	7th Ave	68v	1076	1072	1068	1760	2990	0.0045	0.0013	0.067	0.037	0.00	1.00	0.00	
72	v	Salt River	15th Ave	72v	1068	1072	1052	3260	3150	0.0049	0.0063	0.070	0.080	0.00	1.00	0.00	
76	v	Lower Buckeye	19th Ave	76v	1062	1060	1052	2610	2640	0.0038	0.0030	0.062	0.055	1.00	0.53	0.47	
80	v	Lower Buckeye	23rd Ave	80v	1058	1052	1050	2290	2570	0.0035	0.0008	0.059	0.028	1.67	0.56	0.44	
84	v	Lower Buckeye	27th Ave	84v	1050	1052	1049	2615	2640	0.0004	0.0011	0.020	0.034	1.00	0.37	0.63	
88	v	Lower Buckeye	35th Ave	88v	1051	1049	1042	2760	2760	0.0033	0.0025	0.057	0.050	1.00	0.00	1.00	
92	v	Lower Buckeye	43rd Ave	92v	1048	1043	1040	1650	2750	0.0048	0.0011	0.070	0.033	0.00	0.00	1.00	
76	w	Salt River	19th Ave	76w	1060	1052	1032	2610	3080	0.0107	0.0065	0.104	0.081	0.00	1.00	0.00	
80	w	Salt River	23rd Ave	80w	1052	1056	1028	3920	2570	0.0061	0.0109	0.078	0.104	0.00	1.00	0.00	
84	w	Salt River	27th Ave	84w	1050	1040	1039	3290	2125	0.0033	0.0005	0.058	0.022	0.00	1.00	0.00	
88	w	Salt River	43rd Ave	88w	1049	1039	1038	3320	5400	0.0033	0.0002	0.058	0.014	0.00	1.00	0.00	

Table A9-3 Cave Creek Diversions at West of I-17

35th Avenue

West Flow		South Flow		Total
WSE	Q	WSE	Q	Q
1,036.75	0.0	1,036.75	0.0	0.0
1,037.00	0.1	1,037.00	0.0	0.1
1,037.25	12.8	1,037.25	0.0	12.8
1,037.50	83.2	1,037.50	0.0	83.2
1,037.75	307.4	1,037.75	0.1	307.5
1,038.00	703.2	1,038.00	5.3	708.4
1,038.25	1588.5	1,038.25	18.0	1606.5
1,038.50	2767.3	1,038.50	77.0	2844.2
1,038.75	4583.5	1,038.75	202.9	4786.4
1,039.00	6953.4	1,039.00	430.1	7383.5

43rd Avenue

West Flow		South Flow		Total
WSE	Q	WSE	Q	Q
1,022.77	0.0	1,022.77	0.0	0.0
1,023.00	0.3	1,023.00	0.0	0.3
1,023.25	2.4	1,023.25	0.0	2.4
1,023.50	7.3	1,023.50	0.0	7.3
1,023.75	16.1	1,023.75	0.0	16.1
1,024.00	29.4	1,024.01	0.0	29.4
1,024.25	48.2	1,024.25	0.4	48.7
1,024.50	73.1	1,024.50	2.9	76.0
1,024.75	104.8	1,024.75	9.6	114.4
1,025.00	79.1	1,025.00	20.4	99.5
1,025.25	166.4	1,025.25	34.2	200.6
1,025.50	303.2	1,025.50	50.0	353.2
1,025.75	514.3	1,025.75	41.3	555.5
1,026.00	801.9	1,026.00	84.9	886.8
1,026.25	1120.0	1,026.25	192.0	1312.0
1,026.50	1477.7	1,026.50	333.6	1811.3
1,026.75	2200.8	1,026.75	455.2	2655.9
1,027.00	3044.6	1,027.00	708.7	3753.3
1,027.25	4299.7	1,027.25	1004.8	5304.5

51st Avenue

West Flow		South Flow		Total
WSE	Q	WSE	Q	Q
1,012.50	0.0	1,012.50	0.0	0.0
1,012.75	0.4	1,012.75	0.0	0.4
1,013.00	6.2	1,013.00	0.0	6.2
1,013.25	63.7	1,013.25	0.0	63.7
1,013.50	265.7	1,013.50	7.8	273.5
1,013.75	764.2	1,013.75	36.5	800.7
1,014.00	1518.6	1,014.00	88.1	1606.7
1,014.25	2483.3	1,014.25	188.0	2671.3
1,014.50	3596.9	1,014.50	323.8	3920.7
1,014.75	5566.9	1,014.75	491.2	6058.1
1,015.00	8084.6	1,015.00	689.1	8773.7

APPENDIX A10

Diversions to ADOT Tunnel Systems

Appendix A10 Diversions to ADOT Tunnel Systems

The ADOT tunnel systems provide outfalls for many of the City's storm drains. The tunnels are each 21 feet in diameter and are designed to convey runoff from the 50-year storm. The ADOT east and west systems were described in detail in Section 3.12 and their design flows and inflow locations (drop shafts) were summarized in Table 2.2 of Section 2.7. The amount of flow diverted into the tunnel systems at a specific inflow location was the lower of the drop shaft capacity or the storm drain capacity that conveys the flow to the tunnel. The storm drain diversions within the downtown area to the West Tunnel was assumed to be zero since the storm drain connections to the tunnel cannot be verified by either site visit or as-built plans. Once the flood water enters the tunnel system it does not combine with surface flows anymore. The following table shows the diversion data to the tunnel systems.

Appendix A10 Diversions to ADOT Tunnel Systems

ADOT West Tunnel

Subbasin Name	Tunnel Size	Structure to Tunnel	Design Flow to W. Tunnel	Max. Diversion to Tunnel	Comments
72o	10'x12' RCB	10'x12' RCB	599	599	SWI total Q = 1032 cfs
68o	10'x12' RCB	Drop Structure	943	943	14' North Tunnel, Pump Station
64o	14' SD	Drop Shaft	1035	1035	14' North Tunnel, Pump Station
60o	14' SD	Drop Shaft	811	811	SWI total Q = 1326 cfs from E
56o	10'x10' RCB	10'x10' RCB	433	433	96" SD to 10'x6' RCB SWI 10th to 12th St
52o	96" SD	96" SD	517	517	96" SWI, 12th St to 16th St, Pump Station
64q	21' SD	Drop Shaft	140	0	SD not connected
64s	21' SD	N/A	0	0	No Drop Shaft available
64t	21' SD	Drop Shaft	305	0	SD not connected
64u	21' SD	Drop Shaft	60	0	SD not connected
			4843		

ADOT East Tunnel

Subbasin Name	Tunnel Size	Structure to Tunnel	Design Flow to E. Tunnel	Max. Diversion to Tunnel	Comments
48o	21' SD	Drop Structure	2573	2573	202L 2-9'x10' & SR51 10'x10'
48q	21' SD	Drop Shaft	613	613	ADOT East Tunnel
48s	21' SD	Drop Shaft	1068	1068	ADOT East Tunnel
Airport	21' SD	Drop Shaft	485	N/A	Not Modeled
Airport	21' SD	Drop Shaft	540	N/A	Not Modeled
			5279		

APPENDIX A11

Grand Canal Diversions

Appendix A11 Grand Canal Diversions

The Grand Canal is a water supply transmission canal and transects the entire study watershed from east to west. The north bank of the Grand Canal is elevated and blocks initial surface storm water flowing to the south. Topographic data and site visits identified that the north bank is typically one (1.0) foot higher than the adjacent ground.

Urban sub-basin surface flow diversions are a complex two-dimensional flow condition. For hydrologic modeling purposes, it was assumed that the Grand Canal is full when the 100-year storm occurs and that peak flow attenuation, due to the ponding along the north bank, is minimal. Storm water is assumed to overtop the north bank of the canal and be directly conveyed into the sub-basins south of the canal after the initial flow is directed to the west along the north bank and streets in the east-west direction.

In order to evaluate the flow diversions for this sheet flow condition, composite cross-sections for each sub-basin were developed based on available 2-foot contour mapping, site visits, street network data, and engineering judgment. Where detailed survey data was available, it was also utilized to develop the diversion rating relationships.

Lateral surface flow for sub-basins along the north side of the Grand Canal consists of two distinctive types of diversion processes: flow diversion to the west along the north bank of the canal and flow diversion to the west crossing the west boundary of the sub-basin before it reaches the Grand Canal. To approximate these two processes, a representative cross-section was developed near the north bank of the Grand Canal to estimate the total westerly diversion.

Since the overtopping of the canal north bank is a weir flow condition of irregular weir shape, the broad-crested weir equation cannot be applied directly and was converted into an equivalent Manning's equation so that the Normal Depth method can be used in both the south and west directions. The derivation of the relationship between weir flow and Manning's equation is presented below:

The Manning's equation is:

$$Qm = \frac{1.486}{n} A R^{2/3} S^{1/2} \qquad (A11-1)$$

Where Qm – Discharge (cfs);

n – Manning's roughness coefficient;

A – Flow area (ft^2);

R – Hydraulic radius (ft);

S – Slope (ft/ft).

The broad-crested weir equation is:

$$Qw = C L H^{3/2} \qquad (A11-2)$$

Where C – Broad-crested weir flow coefficient, 2.8 is used;

L – Weir length (ft);

H – Weir flow hydraulic head (ft).

Note that the challenge of using the Manning's equation to the weir flow condition is the slope (S) is unknown. The purpose of following is to find the relationship between the broad-crested weir equation coefficient (C) and the slope for the Manning's equation.

Since $L H = A$ and $R \approx H$ for sheet flow condition Equations (A11-1) and (A11-2) can be written as:

$$Qm = \frac{1.486}{n} A H^{2/3} S^{1/2} \qquad (A11-1a)$$

$$Qw = C A H^{1/2} \qquad (A11-2a)$$

Let (A11-1a) equal to (A11-2a) and eliminate common variables

$$C = \frac{1.486}{n} H^{1/6} S^{1/2} \qquad (A11-3)$$

Since $H^{1/6}$ is approximately equal to 1.0 when H varies from 0.5 to 1.5 for sheet flow condition Equation (A11-3) becomes

$$C = \frac{1.486}{n} S^{1/2} \qquad (A11-4)$$

When C = 2.8 for broad-crested weir then Equation (A11-4) becomes

$$S = 3.55\ n^2 \qquad \text{(A11-5)}$$

If n = 0.035 then S is equal to 0.004 which was applied for the Manning's equation to the broad-crested weir flow condition for the sub-basins along the north bank of the Grand Canal.

As a check, the average slope of the north bank of the canal is 0.0006 from 16th Street to 19th Avenue. The typical natural ground slope along the north-south direction is 0.004. A few typical cross sections are included (HNTB, July 1988) as part of the attachments to this appendix. The minimal flow to the west along the north bank of the canal before overtopping to the south was estimated to be 74 cfs by applying Manning's equation (see FlowMaster printout for detailed information).

Open channel diversion rating curves were developed using the Normal Depth method for the Grand Canal overtopping flow diversions. The HEC-1 diversion routine (typically DT, DI, DQ cards) was utilized to model the split flow diversions. Summary rating curves are tabulated and attached to this Appendix along with supporting FlowMaster calculations for each of the sub-basins.

Grand Canal Split Flow Rating Curves

Subbasin	80k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		3	3	0.00	1.00
0.2		10	10	0.00	1.00
0.3		22	22	0.00	1.00
0.4		38	38	0.00	1.00
0.5		58	58	0.00	1.00
0.6		84	84	0.00	1.00
0.7		115	115	0.00	1.00
0.8		152	152	0.00	1.00
0.9	12	196	208	0.06	0.94
1.0	41	245	286	0.14	0.86
1.1	85	302	387	0.22	0.78
1.2	144	366	510	0.28	0.72

Subbasin	76k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		1	1	0.00	1.00
0.2		5	5	0.00	1.00
0.3		10	10	0.00	1.00
0.4		18	18	0.00	1.00
0.5		28	28	0.00	1.00
0.6	24	40	64	0.37	0.63
0.7	76	56	132	0.58	0.42
0.8	153	74	227	0.67	0.33
0.9	253	96	348	0.72	0.28
1.0	374	121	495	0.76	0.24
1.1	519	150	669	0.78	0.22
1.2	686	182	869	0.79	0.21

Grand Canal Split Flow Rating Curves

Subbasin	72k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		1	1	0.00	1.00
0.2		4	4	0.00	1.00
0.3		8	8	0.00	1.00
0.4		15	15	0.00	1.00
0.5		24	24	0.00	1.00
0.6		36	36	0.00	1.00
0.7		51	51	0.00	1.00
0.8	29	70	99	0.30	0.70
0.9	95	91	186	0.51	0.49
1.0	190	117	307	0.62	0.38
1.1	314	146	460	0.68	0.32
1.2	464	180	644	0.72	0.28

Subbasin	68k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		3	3	0.00	1.00
0.2		9	9	0.00	1.00
0.3		18	18	0.00	1.00
0.4		32	32	0.00	1.00
0.5		49	49	0.00	1.00
0.6	35	70	105	0.33	0.67
0.7	113	96	209	0.54	0.46
0.8	225	127	352	0.64	0.36
0.9	368	164	532	0.69	0.31
1.0	542	205	747	0.73	0.27
1.1	745	253	997	0.75	0.25
1.2	977	306	1283	0.76	0.24

Grand Canal Split Flow Rating Curves

Subbasin	64k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		2	2	0.00	1.00
0.2		6	6	0.00	1.00
0.3		13	13	0.00	1.00
0.4		24	24	0.00	1.00
0.5		38	38	0.00	1.00
0.6		56	56	0.00	1.00
0.7		79	79	0.00	1.00
0.8		106	106	0.00	1.00
0.9		138	138	0.00	1.00
1.0	38	176	214	0.18	0.82
1.1	125	219	344	0.36	0.64
1.2	251	269	519	0.48	0.52

Subbasin	60k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		3	3	0.00	1.00
0.2		9	9	0.00	1.00
0.3		18	18	0.00	1.00
0.4		32	32	0.00	1.00
0.5		49	49	0.00	1.00
0.6	36	70	106	0.34	0.66
0.7	116	96	212	0.55	0.45
0.8	235	127	362	0.65	0.35
0.9	390	164	554	0.70	0.30
1.0	583	205	788	0.74	0.26
1.1	814	253	1067	0.76	0.24
1.2	1085	306	1391	0.78	0.22

Grand Canal Split Flow Rating Curves

Subbasin	56k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		3	3	0.00	1.00
0.2		9	9	0.00	1.00
0.3		20	20	0.00	1.00
0.4		34	34	0.00	1.00
0.5		51	51	0.00	1.00
0.6		73	73	0.00	1.00
0.7	24	100	124	0.19	0.81
0.8	78	131	209	0.37	0.63
0.9	157	168	325	0.48	0.52
1.0	262	209	471	0.56	0.44
1.1	393	256	649	0.61	0.39
1.2	550	309	859	0.64	0.36

Subbasin	54k				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		3	3	0.00	1.00
0.2		11	11	0.00	1.00
0.3		22	22	0.00	1.00
0.4		37	37	0.00	1.00
0.5	12	56	68	0.18	0.82
0.6	40	79	118	0.33	0.67
0.7	81	106	187	0.43	0.57
0.8	137	138	275	0.50	0.50
0.9	207	175	382	0.54	0.46
1.0	292	217	509	0.57	0.43
1.1	393	265	658	0.60	0.40
1.2	511	318	828	0.62	0.38

Grand Canal Split Flow Rating Curves

Subbasin	44o				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		1	1	0.00	1.00
0.2		4	4	0.00	1.00
0.3		9	9	0.00	1.00
0.4		17	17	0.00	1.00
0.5		27	27	0.00	1.00
0.6	18	41	58	0.31	0.69
0.7	59	58	116	0.50	0.50
0.8	119	79	198	0.60	0.40
0.9	199	104	303	0.66	0.34
1.0	299	134	433	0.69	0.31
1.1	419	169	588	0.71	0.29
1.2	561	208	769	0.73	0.27

Subbasin	40o				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		2	2	0.00	1.00
0.2		8	8	0.00	1.00
0.3		18	18	0.00	1.00
0.4		32	32	0.00	1.00
0.5		51	51	0.00	1.00
0.6	12	75	87	0.14	0.86
0.7	41	104	145	0.28	0.72
0.8	85	139	224	0.38	0.62
0.9	147	181	327	0.45	0.55
1.0	225	229	454	0.50	0.50
1.1	323	284	607	0.53	0.47
1.2	441	347	788	0.56	0.44

Grand Canal Split Flow Rating Curves

Subbasin	28q				
Depth	Q_s	Q_w	Q_t	R_s	R_w
0.0					
0.1		1	1	0.00	1.00
0.2		4	4	0.00	1.00
0.3		8	8	0.00	1.00
0.4		14	14	0.00	1.00
0.5	12	22	34	0.36	0.64
0.6	41	32	72	0.56	0.44
0.7	85	44	128	0.66	0.34
0.8	144	59	203	0.71	0.29
0.9	221	76	297	0.74	0.26
1.0	316	96	413	0.77	0.23
1.1	430	120	550	0.78	0.22
1.2	565	146	711	0.79	0.21

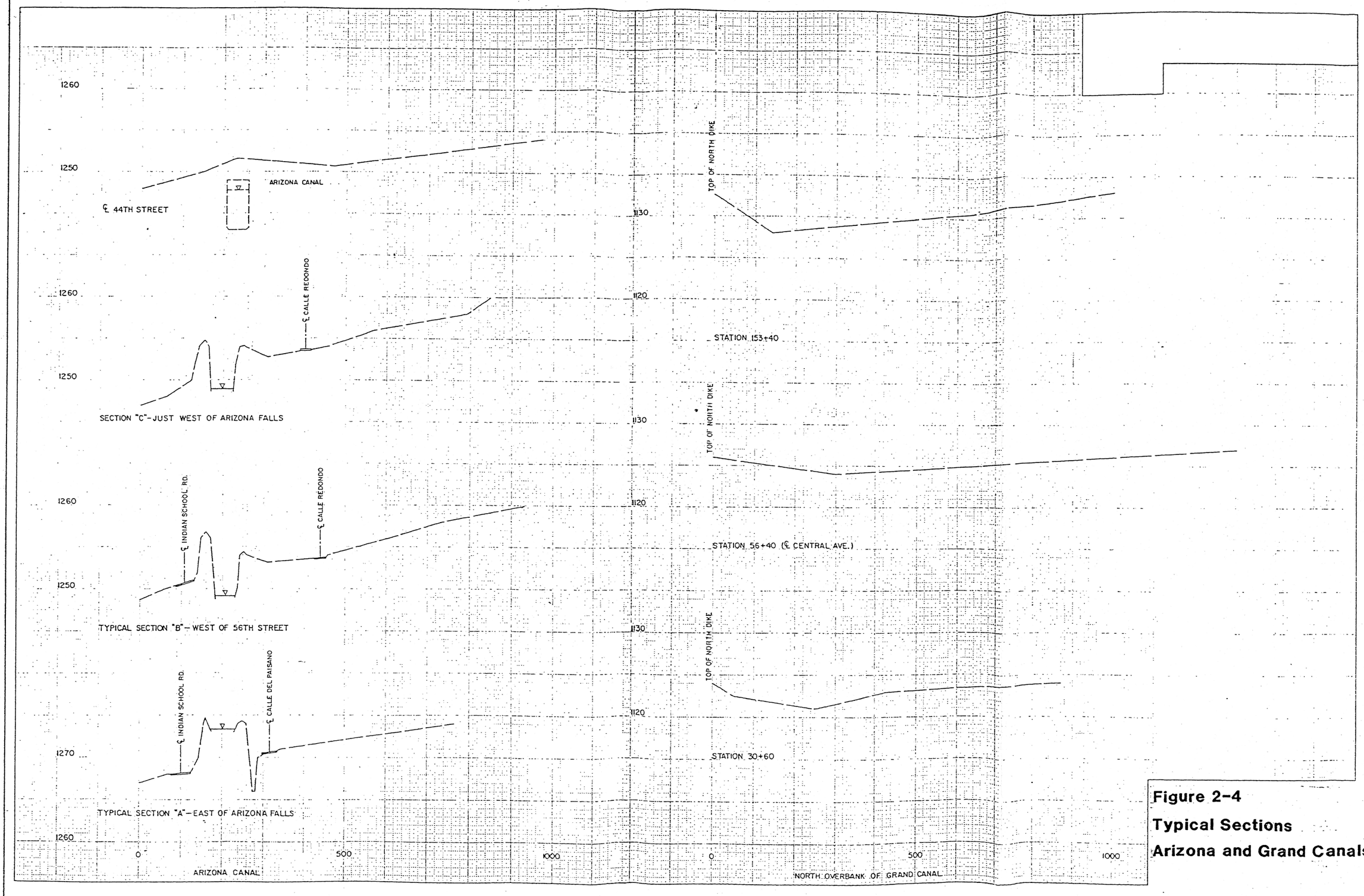
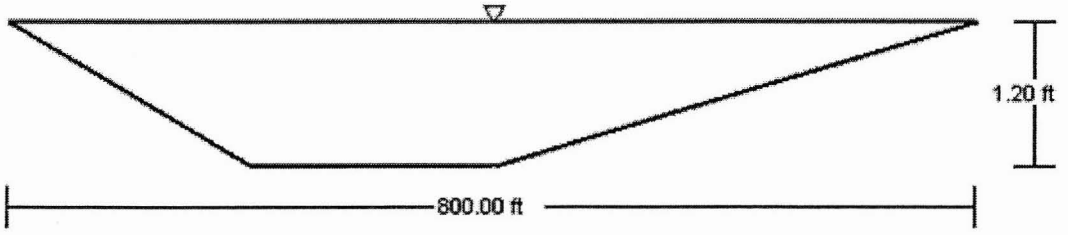


Figure 2-4
Typical Sections
Arizona and Grand Canals

Grand Canal Diversion
Cross Section for 80k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.20	ft
Elevation Range:	0.80 to 2.00 ft	
Discharge:	1329.88	ft^3/s



V: 100
H: 1

Worksheet for 80k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	1.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	40.66	ft^3/s
Elevation Range:	0.80 to 2.00 ft	
Flow Area:	50.00	ft^2
Wetted Perimeter:	300.00	ft
Top Width:	300.00	ft
Normal Depth:	0.20	ft
Critical Depth:	0.10	ft
Critical Slope:	0.03936	ft/ft
Velocity:	0.81	ft/s
Velocity Head:	0.01	ft
Specific Energy:	0.21	ft
Froude Number:	0.35	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(8+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
2+00	0.80

Worksheet for 80k-south

Station	Elevation
4+00	0.80
8+00	2.00

Rating Table for 80k-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

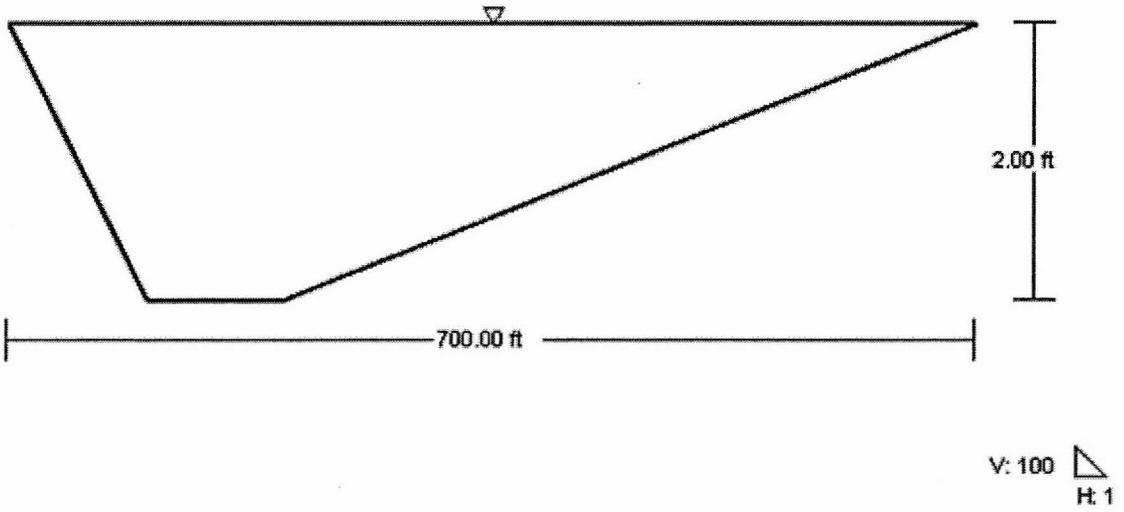
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.80	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.80					
0.90	12.13	0.54	22.50	250.00	250.00
1.00	40.66	0.81	50.00	300.00	300.00
1.10	84.53	1.02	82.50	350.00	350.00
1.20	144.39	1.20	120.00	400.00	400.00
1.30	221.26	1.36	162.50	450.00	450.00
1.40	316.23	1.51	210.00	500.00	500.00
1.50	430.46	1.64	262.50	550.00	550.00
1.60	565.07	1.77	320.00	600.00	600.00
1.70	721.22	1.89	382.50	650.00	650.00
1.80	900.00	2.00	450.00	700.00	700.00
1.90	1102.53	2.11	522.50	750.00	750.00
2.00	1329.88	2.22	600.00	800.01	800.00

Grand Canal Diversion
Cross Section for 80k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00100	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	1174.00	ft^3/s



Worksheet for 80k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00100	ft/ft
Water Surface Elevation:	0.30	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	21.86	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	43.50	ft^2
Wetted Perimeter:	190.00	ft
Top Width:	190.00	ft
Normal Depth:	0.30	ft
Critical Depth:	0.11	ft
Critical Slope:	0.03917	ft/ft
Velocity:	0.50	ft/s
Velocity Head:	0.00	ft
Specific Energy:	0.30	ft
Froude Number:	0.19	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(7+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 80k-west

Station	Elevation
2+00	0.00
7+00	2.00

Rating Table for 80k-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00100	ft/ft
Water Surface Elevation:	2.00	ft

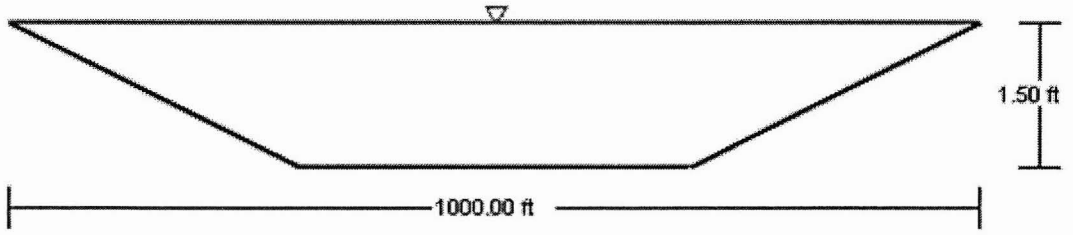
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	3.07	0.27	11.50	130.00	130.00
0.20	10.39	0.40	26.00	160.00	160.00
0.30	21.86	0.50	43.50	190.00	190.00
0.40	37.72	0.59	64.00	220.00	220.00
0.50	58.34	0.67	87.50	250.01	250.00
0.60	84.07	0.74	114.00	280.01	280.00
0.70	115.28	0.80	143.50	310.01	310.00
0.80	152.33	0.87	176.00	340.01	340.00
0.90	195.57	0.92	211.50	370.01	370.00
1.00	245.35	0.98	250.00	400.01	400.00
1.10	302.00	1.04	291.50	430.01	430.00
1.20	365.86	1.09	336.00	460.01	460.00
1.30	437.25	1.14	383.50	490.02	490.00
1.40	516.49	1.19	434.00	520.02	520.00
1.50	603.90	1.24	487.50	550.02	550.00
1.60	699.78	1.29	544.00	580.02	580.00
1.70	804.44	1.33	603.50	610.02	610.00
1.80	918.17	1.38	666.00	640.02	640.00
1.90	1041.26	1.42	731.50	670.02	670.00
2.00	1174.00	1.47	800.00	700.02	700.00

Grand Canal Diversion
Cross Section for 76k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.50	ft
Elevation Range:	0.50 to 2.00 ft	
Discharge:	2912.53	ft^3/s



V: 100
H: 1

Worksheet for 76k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	2912.53	ft^3/s
Elevation Range:	0.50 to 2.00 ft	
Flow Area:	1050.00	ft^2
Wetted Perimeter:	1000.01	ft
Top Width:	1000.00	ft
Normal Depth:	1.50	ft
Critical Depth:	0.99	ft
Critical Slope:	0.01968	ft/ft
Velocity:	2.77	ft/s
Velocity Head:	0.12	ft
Specific Energy:	1.62	ft
Froude Number:	0.48	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(10+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
3+00	0.50

Worksheet for 76k-south

Station	Elevation
7+00	0.50
10+00	2.00

Rating Table for 76k-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

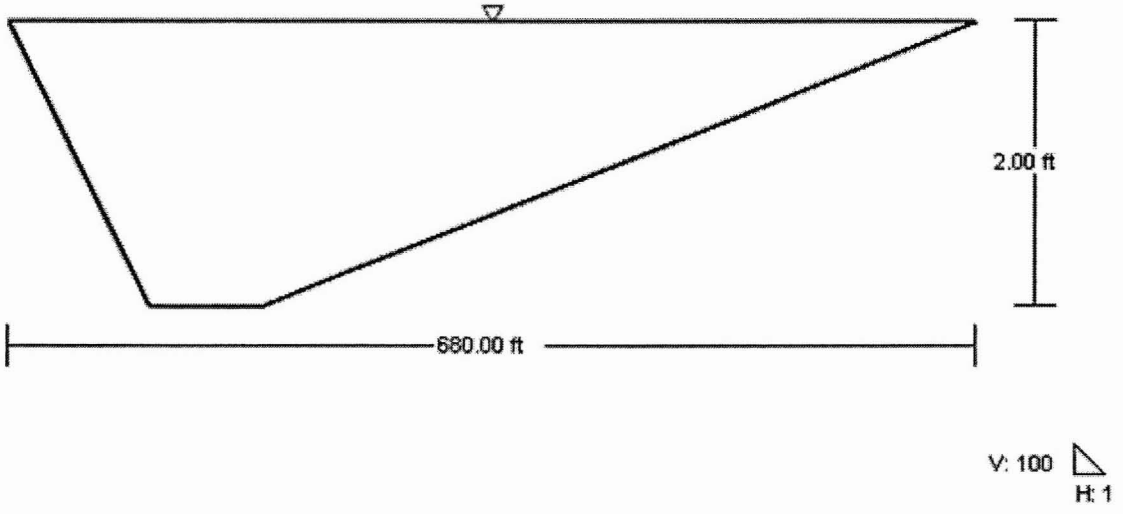
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.50	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.50					
0.60	23.55	0.56	42.00	440.00	440.00
0.70	76.25	0.87	88.00	480.00	480.00
0.80	153.02	1.11	138.00	520.00	520.00
0.90	252.54	1.32	192.00	560.00	560.00
1.00	374.47	1.50	250.00	600.00	600.00
1.10	518.91	1.66	312.00	640.00	640.00
1.20	686.18	1.82	378.00	680.00	680.00
1.30	876.73	1.96	448.00	720.00	720.00
1.40	1091.10	2.09	522.00	760.00	760.00
1.50	1329.88	2.22	600.00	800.00	800.00
1.60	1593.71	2.34	682.00	840.01	840.00
1.70	1883.22	2.45	768.00	880.01	880.00
1.80	2199.08	2.56	858.00	920.01	920.00
1.90	2541.96	2.67	952.00	960.01	960.00
2.00	2912.53	2.77	1050.00	1000.01	1000.00

Grand Canal Diversion
Cross Section for 76k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00030	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	601.86	ft^3/s



Worksheet for 76k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00030	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	601.86	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	760.00	ft^2
Wetted Perimeter:	680.02	ft
Top Width:	680.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.78	ft
Critical Slope:	0.02269	ft/ft
Velocity:	0.79	ft/s
Velocity Head:	0.01	ft
Specific Energy:	2.01	ft
Froude Number:	0.13	
Flow Type:	Subcritical	

Segment Roughness		
Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(6+80, 2.00)	0.035

Section Geometry	
Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 76k-west

Station	Elevation
1+80	0.00
6+80	2.00

Rating Table for 76k-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00030	ft/ft
Water Surface Elevation:	2.00	ft

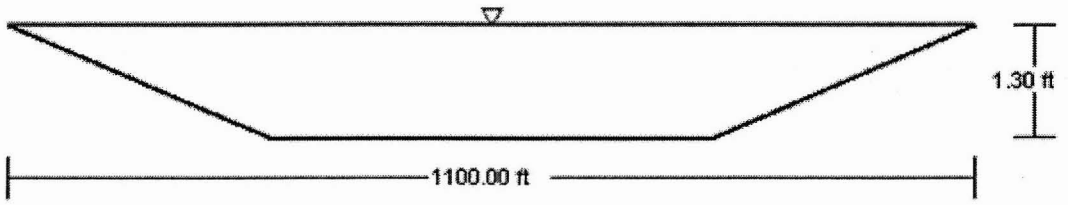
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	1.36	0.14	9.50	110.00	110.00
0.20	4.71	0.21	22.00	140.00	140.00
0.30	10.07	0.27	37.50	170.00	170.00
0.40	17.62	0.31	56.00	200.00	200.00
0.50	27.60	0.36	77.50	230.01	230.00
0.60	40.19	0.39	102.00	260.01	260.00
0.70	55.63	0.43	129.50	290.01	290.00
0.80	74.12	0.46	160.00	320.01	320.00
0.90	95.84	0.50	193.50	350.01	350.00
1.00	121.01	0.53	230.00	380.01	380.00
1.10	149.81	0.56	269.50	410.01	410.00
1.20	182.43	0.58	312.00	440.01	440.00
1.30	219.05	0.61	357.50	470.02	470.00
1.40	259.84	0.64	406.00	500.02	500.00
1.50	304.99	0.67	457.50	530.02	530.00
1.60	354.65	0.69	512.00	560.02	560.00
1.70	409.01	0.72	569.50	590.02	590.00
1.80	468.22	0.74	630.00	620.02	620.00
1.90	532.45	0.77	693.50	650.02	650.00
2.00	601.86	0.79	760.00	680.02	680.00

Grand Canal Diversion
Cross Section for 72k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.30	ft
Elevation Range:	0.70 to 2.00 ft	
Discharge:	2689.98	ft^3/s



V: 100
H: 1

Worksheet for 72k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	2689.98	ft^3/s
Elevation Range:	0.70 to 2.00 ft	
Flow Area:	1040.00	ft^2
Wetted Perimeter:	1100.01	ft
Top Width:	1100.00	ft
Normal Depth:	1.30	ft
Critical Depth:	0.84	ft
Critical Slope:	0.02052	ft/ft
Velocity:	2.59	ft/s
Velocity Head:	0.10	ft
Specific Energy:	1.40	ft
Froude Number:	0.47	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(11+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
3+00	0.70

Worksheet for 72k-south

Station	Elevation
8+00	0.70
11+00	2.00

Rating Table for 72k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

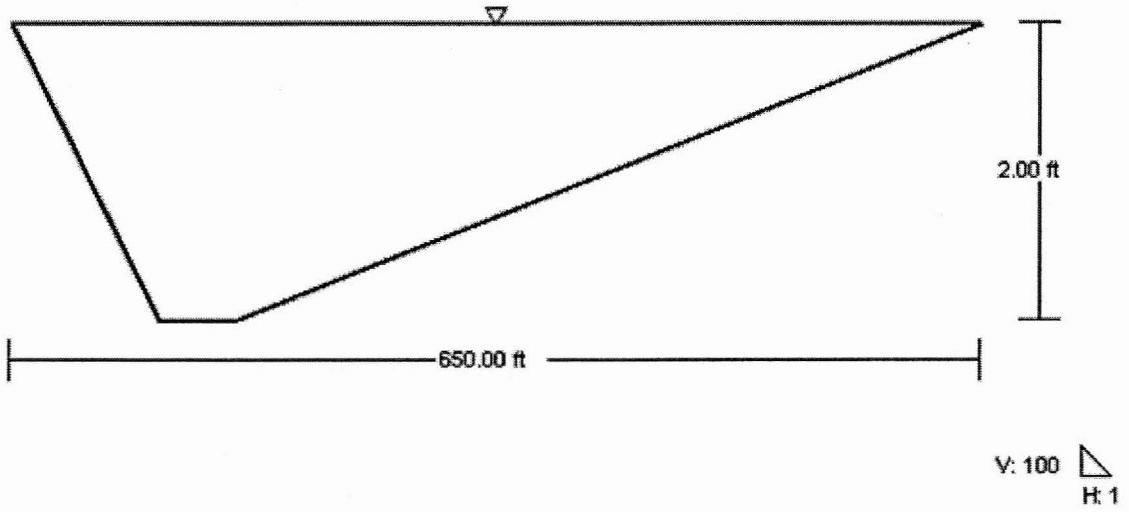
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.70	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.70					
0.80	29.40	0.56	52.31	546.15	546.15
0.90	95.02	0.87	109.23	592.31	592.31
1.00	190.35	1.11	170.77	638.46	638.46
1.10	313.57	1.32	236.92	684.62	684.62
1.20	464.12	1.51	307.69	730.77	730.77
1.30	641.97	1.68	383.08	776.93	776.92
1.40	847.39	1.83	463.08	823.08	823.08
1.50	1080.84	1.97	547.69	869.23	869.23
1.60	1342.86	2.11	636.92	915.39	915.38
1.70	1634.10	2.24	730.77	961.54	961.54
1.80	1955.22	2.36	829.23	1007.70	1007.69
1.90	2306.94	2.47	932.31	1053.85	1053.85
2.00	2689.98	2.59	1040.00	1100.01	1100.00

Grand Canal Diversion
Cross Section for 72k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00040	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	624.45	ft^3/s



Worksheet for 72k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00040	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	624.45	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	700.00	ft^2
Wetted Perimeter:	650.02	ft
Top Width:	650.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.86	ft
Critical Slope:	0.02246	ft/ft
Velocity:	0.89	ft/s
Velocity Head:	0.01	ft
Specific Energy:	2.01	ft
Froude Number:	0.15	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(6+50, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 72k-west

Station	Elevation
1+50	0.00
6+50	2.00

Rating Table for 72k-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00040	ft/ft
Water Surface Elevation:	2.00	ft

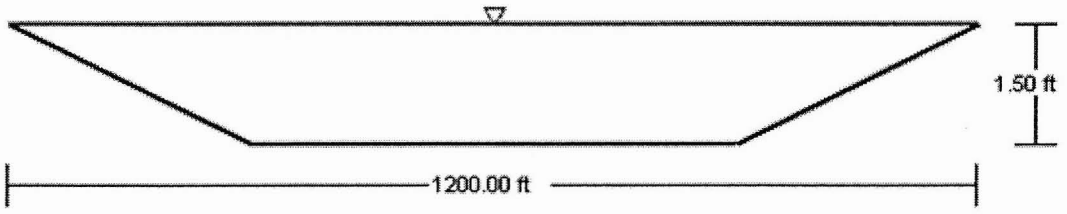
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	1.04	0.16	6.50	80.00	80.00
0.20	3.76	0.23	16.00	110.00	110.00
0.30	8.37	0.29	28.50	140.00	140.00
0.40	15.17	0.34	44.00	170.00	170.00
0.50	24.44	0.39	62.50	200.01	200.00
0.60	36.44	0.43	84.00	230.01	230.00
0.70	51.45	0.47	108.50	260.01	260.00
0.80	69.70	0.51	136.00	290.01	290.00
0.90	91.45	0.55	166.50	320.01	320.00
1.00	116.94	0.58	200.00	350.01	350.00
1.10	146.38	0.62	236.50	380.01	380.00
1.20	180.00	0.65	276.00	410.01	410.00
1.30	218.02	0.68	318.50	440.02	440.00
1.40	260.65	0.72	364.00	470.02	470.00
1.50	308.09	0.75	412.50	500.02	500.00
1.60	360.54	0.78	464.00	530.02	530.00
1.70	418.22	0.81	518.50	560.02	560.00
1.80	481.30	0.84	576.00	590.02	590.00
1.90	549.98	0.86	636.50	620.02	620.00
2.00	624.45	0.89	700.00	650.02	650.00

Grand Canal Diversion
Cross Section for 68k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.50	ft
Elevation Range:	0.50 to 2.00 ft	
Discharge:	3920.94	ft^3/s



V: 100
H: 1

Worksheet for 68k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	3920.94	ft^3/s
Elevation Range:	0.50 to 2.00 ft	
Flow Area:	1350.00	ft^2
Wetted Perimeter:	1200.01	ft
Top Width:	1200.00	ft
Normal Depth:	1.50	ft
Critical Depth:	0.98	ft
Critical Slope:	0.01934	ft/ft
Velocity:	2.90	ft/s
Velocity Head:	0.13	ft
Specific Energy:	1.63	ft
Froude Number:	0.48	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(12+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
3+00	0.50

Worksheet for 68k-south

Station	Elevation
9+00	0.50
12+00	2.00

Rating Table for 68k-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

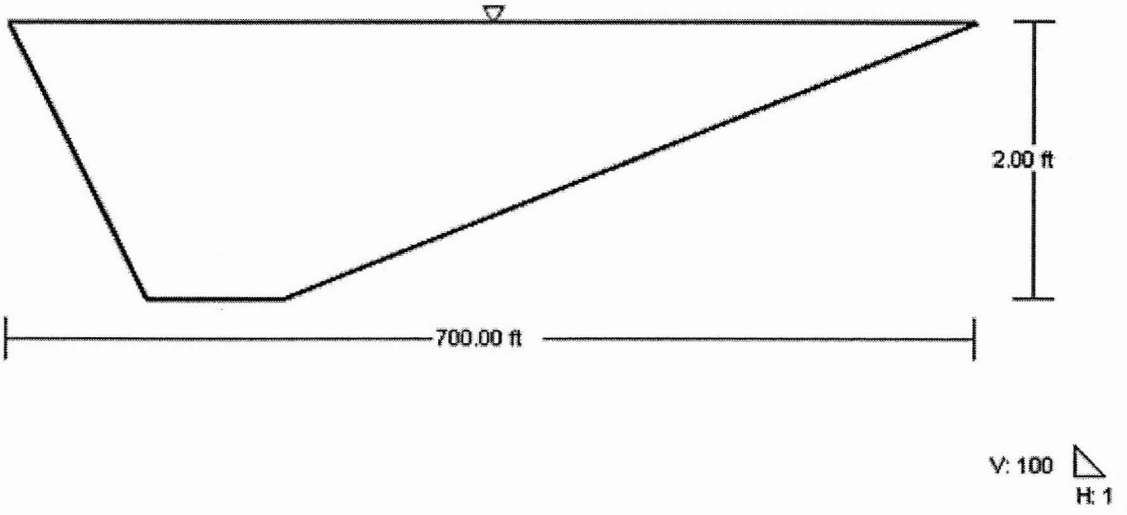
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.50	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.50					
0.60	35.11	0.57	62.00	640.00	640.00
0.70	112.88	0.88	128.00	680.00	680.00
0.80	224.82	1.14	198.00	720.00	720.00
0.90	368.15	1.35	272.00	760.00	760.00
1.00	541.60	1.55	350.00	800.00	800.00
1.10	744.58	1.72	432.00	840.00	840.00
1.20	976.90	1.89	518.00	880.00	880.00
1.30	1238.62	2.04	608.00	920.00	920.00
1.40	1529.92	2.18	702.00	960.00	960.00
1.50	1851.14	2.31	800.00	1000.00	1000.00
1.60	2202.64	2.44	902.00	1040.01	1040.00
1.70	2584.88	2.56	1008.00	1080.01	1080.00
1.80	2998.33	2.68	1118.00	1120.01	1120.00
1.90	3443.51	2.80	1232.00	1160.01	1160.00
2.00	3920.94	2.90	1350.00	1200.01	1200.00

Grand Canal Diversion
Cross Section for 68k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00070	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	982.24	ft^3/s



Worksheet for 68k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00070	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	982.24	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	800.00	ft^2
Wetted Perimeter:	700.02	ft
Top Width:	700.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.94	ft
Critical Slope:	0.02127	ft/ft
Velocity:	1.23	ft/s
Velocity Head:	0.02	ft
Specific Energy:	2.02	ft
Froude Number:	0.20	
Flow Type:	Subcritical	

Segment Roughness		
Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(7+00, 2.00)	0.035

Section Geometry	
Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 68k-west

Station	Elevation
2+00	0.00
7+00	2.00

Rating Table for 68k-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00070	ft/ft
Water Surface Elevation:	2.00	ft

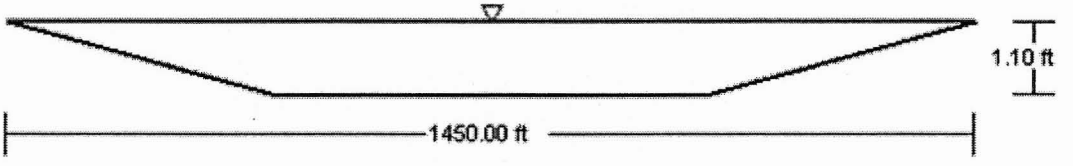
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	2.56	0.22	11.50	130.00	130.00
0.20	8.70	0.33	26.00	160.00	160.00
0.30	18.29	0.42	43.50	190.00	190.00
0.40	31.56	0.49	64.00	220.00	220.00
0.50	48.81	0.56	87.50	250.01	250.00
0.60	70.34	0.62	114.00	280.01	280.00
0.70	96.45	0.67	143.50	310.01	310.00
0.80	127.45	0.72	176.00	340.01	340.00
0.90	163.63	0.77	211.50	370.01	370.00
1.00	205.27	0.82	250.00	400.01	400.00
1.10	252.67	0.87	291.50	430.01	430.00
1.20	306.10	0.91	336.00	460.01	460.00
1.30	365.83	0.95	383.50	490.02	490.00
1.40	432.13	1.00	434.00	520.02	520.00
1.50	505.26	1.04	487.50	550.02	550.00
1.60	585.48	1.08	544.00	580.02	580.00
1.70	673.04	1.12	603.50	610.02	610.00
1.80	768.19	1.15	666.00	640.02	640.00
1.90	871.18	1.19	731.50	670.02	670.00
2.00	982.24	1.23	800.00	700.02	700.00

Grand Canal Diversion
Cross Section for 64k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.10	ft
Elevation Range:	0.90 to 2.00 ft	
Discharge:	2664.90	ft^3/s



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Worksheet for 64k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	2664.90	ft^3/s
Elevation Range:	0.90 to 2.00 ft	
Flow Area:	1155.00	ft^2
Wetted Perimeter:	1450.00	ft
Top Width:	1450.00	ft
Normal Depth:	1.10	ft
Critical Depth:	0.70	ft
Critical Slope:	0.02182	ft/ft
Velocity:	2.31	ft/s
Velocity Head:	0.08	ft
Specific Energy:	1.18	ft
Froude Number:	0.46	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(14+50, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
4+00	0.90

Worksheet for 64k-south

Station	Elevation
10+50	0.90
14+50	2.00

Rating Table for 64k-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

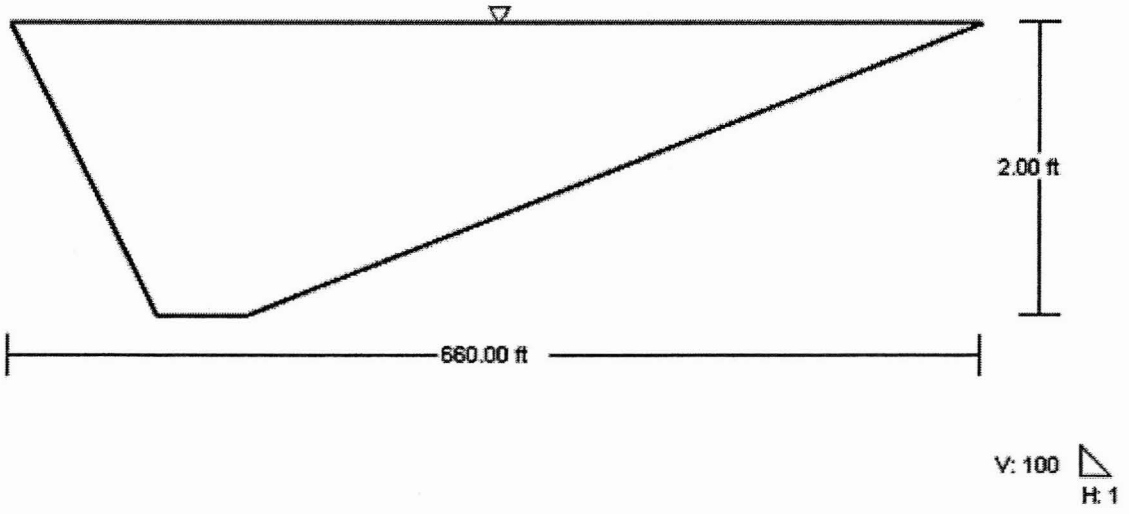
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.90	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.90					
1.00	38.36	0.56	68.64	722.73	722.73
1.10	124.51	0.86	144.55	795.46	795.45
1.20	250.56	1.10	227.73	868.18	868.18
1.30	414.68	1.30	318.18	940.91	940.91
1.40	616.64	1.48	415.91	1013.64	1013.64
1.50	856.86	1.64	520.91	1086.37	1086.36
1.60	1136.12	1.79	633.18	1159.09	1159.09
1.70	1455.42	1.93	752.73	1231.82	1231.82
1.80	1815.85	2.06	879.55	1304.55	1304.55
1.90	2218.61	2.19	1013.64	1377.28	1377.27
2.00	2664.90	2.31	1155.00	1450.00	1450.00

Grand Canal Diversion
Cross Section for 64k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00080	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	916.19	ft^3/s



Worksheet for 64k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00080	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	916.19	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	720.00	ft^2
Wetted Perimeter:	660.02	ft
Top Width:	660.00	ft
Normal Depth:	2.00	ft
Critical Depth:	1.00	ft
Critical Slope:	0.02134	ft/ft
Velocity:	1.27	ft/s
Velocity Head:	0.03	ft
Specific Energy:	2.03	ft
Froude Number:	0.21	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(6+60, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 64k-west

Station	Elevation
1+60	0.00
6+60	2.00

Rating Table for 64k-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00080	ft/ft
Water Surface Elevation:	2.00	ft

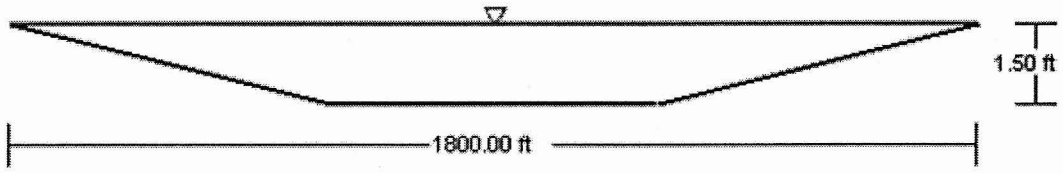
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	1.72	0.23	7.50	90.00	90.00
0.20	6.10	0.34	18.00	120.00	120.00
0.30	13.36	0.42	31.50	150.00	150.00
0.40	23.88	0.50	48.00	180.00	180.00
0.50	38.03	0.56	67.50	210.01	210.00
0.60	56.20	0.62	90.00	240.01	240.00
0.70	78.74	0.68	115.50	270.01	270.00
0.80	106.00	0.74	144.00	300.01	300.00
0.90	138.33	0.79	175.50	330.01	330.00
1.00	176.05	0.84	210.00	360.01	360.00
1.10	219.47	0.89	247.50	390.01	390.00
1.20	268.92	0.93	288.00	420.01	420.00
1.30	324.68	0.98	331.50	450.02	450.00
1.40	387.07	1.02	378.00	480.02	480.00
1.50	456.36	1.07	427.50	510.02	510.00
1.60	532.85	1.11	480.00	540.02	540.00
1.70	616.80	1.15	535.50	570.02	570.00
1.80	708.50	1.19	594.00	600.02	600.00
1.90	808.21	1.23	655.50	630.02	630.00
2.00	916.19	1.27	720.00	660.02	660.00

Grand Canal Diversion
Cross Section for 60k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.50	ft
Elevation Range:	0.50 to 2.00 ft	
Discharge:	4833.14	ft^3/s



V: 100
H: 1

Worksheet for 60k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	4833.14	ft^3/s
Elevation Range:	0.50 to 2.00 ft	
Flow Area:	1800.00	ft^2
Wetted Perimeter:	1800.00	ft
Top Width:	1800.00	ft
Normal Depth:	1.50	ft
Critical Depth:	1.00	ft
Critical Slope:	0.01994	ft/ft
Velocity:	2.69	ft/s
Velocity Head:	0.11	ft
Specific Energy:	1.61	ft
Froude Number:	0.47	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(18+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
6+00	0.50

Worksheet for 60k-south

Station	Elevation
12+00	0.50
18+00	2.00

Rating Table for 60k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

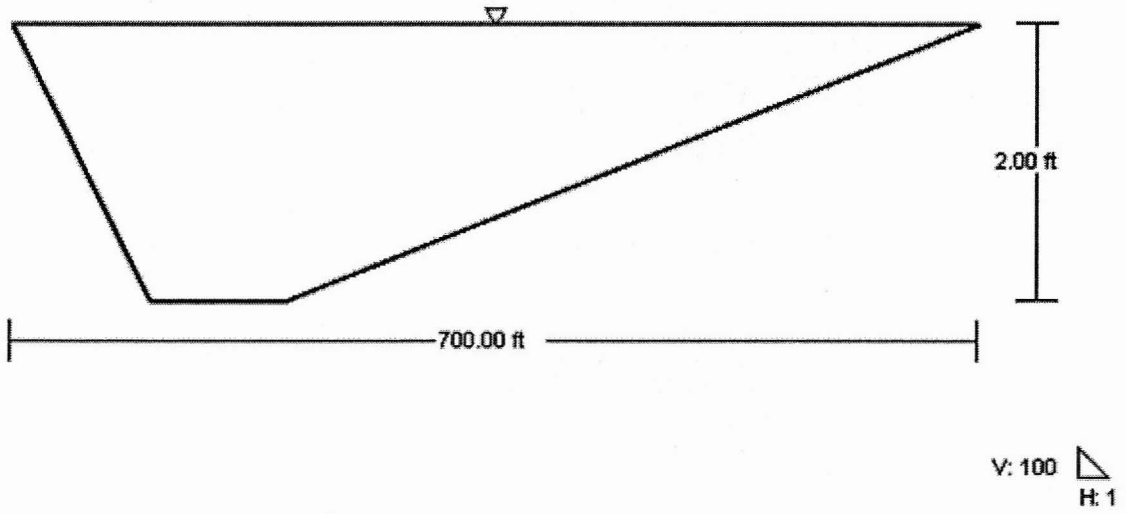
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.50	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.50					
0.60	35.56	0.56	64.00	680.00	680.00
0.70	115.96	0.85	136.00	760.00	760.00
0.80	234.53	1.09	216.00	840.00	840.00
0.90	390.14	1.28	304.00	920.00	920.00
1.00	583.07	1.46	400.00	1000.00	1000.00
1.10	814.19	1.62	504.00	1080.00	1080.00
1.20	1084.64	1.76	616.00	1160.00	1160.00
1.30	1395.74	1.90	736.00	1240.00	1240.00
1.40	1748.89	2.02	864.00	1320.00	1320.00
1.50	2145.55	2.15	1000.00	1400.00	1400.00
1.60	2587.17	2.26	1144.00	1480.00	1480.00
1.70	3075.26	2.37	1296.00	1560.00	1560.00
1.80	3611.29	2.48	1456.00	1640.00	1640.00
1.90	4196.76	2.58	1624.00	1720.00	1720.00
2.00	4833.14	2.69	1800.00	1800.00	1800.00

Grand Canal Diversion
Cross Section for 60k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00070	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	982.24	ft^3/s



Worksheet for 60k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00070	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	982.24	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	800.00	ft^2
Wetted Perimeter:	700.02	ft
Top Width:	700.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.94	ft
Critical Slope:	0.02127	ft/ft
Velocity:	1.23	ft/s
Velocity Head:	0.02	ft
Specific Energy:	2.02	ft
Froude Number:	0.20	
Flow Type:	Subcritical	

Segment Roughness		
Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(7+00, 2.00)	0.035

Section Geometry	
Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 60k-west

Station	Elevation
2+00	0.00
7+00	2.00

Rating Table for 60k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00070	ft/ft
Water Surface Elevation:	2.00	ft

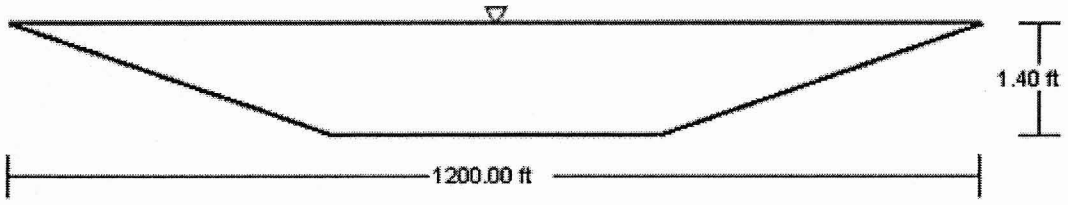
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	2.56	0.22	11.50	130.00	130.00
0.20	8.70	0.33	26.00	160.00	160.00
0.30	18.29	0.42	43.50	190.00	190.00
0.40	31.56	0.49	64.00	220.00	220.00
0.50	48.81	0.56	87.50	250.01	250.00
0.60	70.34	0.62	114.00	280.01	280.00
0.70	96.45	0.67	143.50	310.01	310.00
0.80	127.45	0.72	176.00	340.01	340.00
0.90	163.63	0.77	211.50	370.01	370.00
1.00	205.27	0.82	250.00	400.01	400.00
1.10	252.67	0.87	291.50	430.01	430.00
1.20	306.10	0.91	336.00	460.01	460.00
1.30	365.83	0.95	383.50	490.02	490.00
1.40	432.13	1.00	434.00	520.02	520.00
1.50	505.26	1.04	487.50	550.02	550.00
1.60	585.48	1.08	544.00	580.02	580.00
1.70	673.04	1.12	603.50	610.02	610.00
1.80	768.19	1.15	666.00	640.02	640.00
1.90	871.18	1.19	731.50	670.02	670.00
2.00	982.24	1.23	800.00	700.02	700.00

Grand Canal Diversion
Cross Section for 56k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.40	ft
Elevation Range:	0.60 to 2.00 ft	
Discharge:	2872.09	ft^3/s



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Worksheet for 56k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	2872.09	ft^3/s
Elevation Range:	0.60 to 2.00 ft	
Flow Area:	1120.00	ft^2
Wetted Perimeter:	1200.00	ft
Top Width:	1200.00	ft
Normal Depth:	1.40	ft
Critical Depth:	0.93	ft
Critical Slope:	0.02044	ft/ft
Velocity:	2.56	ft/s
Velocity Head:	0.10	ft
Specific Energy:	1.50	ft
Froude Number:	0.47	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(12+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
4+00	0.60

Worksheet for 56k-south

Station	Elevation
8+00	0.60
12+00	2.00

Rating Table for 56k-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

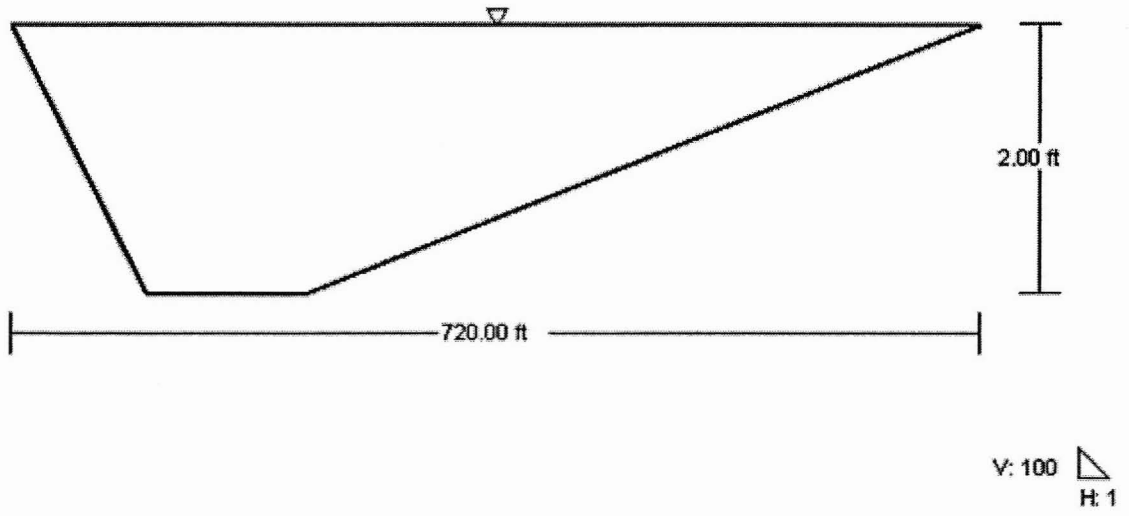
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.60	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.60					
0.70	23.75	0.55	42.86	457.14	457.14
0.80	77.62	0.85	91.43	514.29	514.29
0.90	157.33	1.08	145.71	571.43	571.43
1.00	262.32	1.28	205.71	628.57	628.57
1.10	392.90	1.45	271.43	685.72	685.71
1.20	549.80	1.60	342.86	742.86	742.86
1.30	733.91	1.75	420.00	800.00	800.00
1.40	946.23	1.88	502.86	857.15	857.14
1.50	1187.79	2.01	591.43	914.29	914.29
1.60	1459.67	2.13	685.71	971.43	971.43
1.70	1762.95	2.24	785.71	1028.58	1028.57
1.80	2098.73	2.35	891.43	1085.72	1085.71
1.90	2468.08	2.46	1002.86	1142.86	1142.86
2.00	2872.09	2.56	1120.00	1200.00	1200.00

Grand Canal Diversion
Cross Section for 56k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00060	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	968.06	ft^3/s



Worksheet for 56k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00060	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	968.06	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	840.00	ft^2
Wetted Perimeter:	720.02	ft
Top Width:	720.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.89	ft
Critical Slope:	0.02140	ft/ft
Velocity:	1.15	ft/s
Velocity Head:	0.02	ft
Specific Energy:	2.02	ft
Froude Number:	0.19	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(7+20, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 56k-west

Station	Elevation
2+20	0.00
7+20	2.00

Rating Table for 56k-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00060	ft/ft
Water Surface Elevation:	2.00	ft

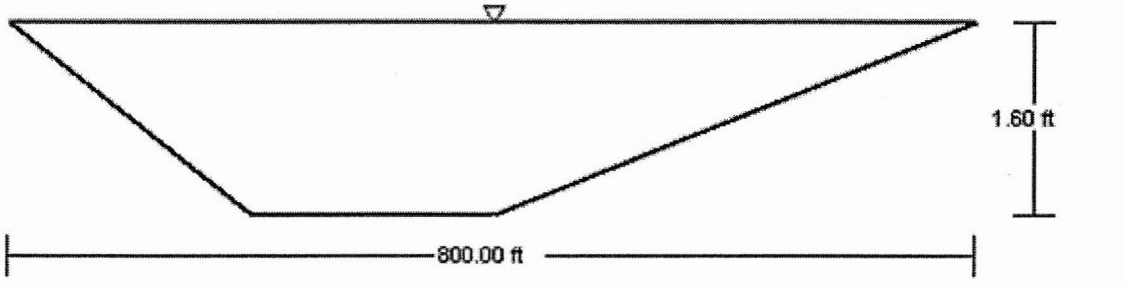
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

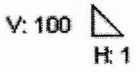
Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	2.82	0.21	13.50	150.00	150.00
0.20	9.45	0.31	30.00	180.00	180.00
0.30	19.64	0.40	49.50	210.00	210.00
0.40	33.55	0.47	72.00	240.00	240.00
0.50	51.42	0.53	97.50	270.01	270.00
0.60	73.49	0.58	126.00	300.01	300.00
0.70	100.03	0.64	157.50	330.01	330.00
0.80	131.31	0.68	192.00	360.01	360.00
0.90	167.59	0.73	229.50	390.01	390.00
1.00	209.14	0.77	270.00	420.01	420.00
1.10	256.20	0.82	313.50	450.01	450.00
1.20	309.03	0.86	360.00	480.01	480.00
1.30	367.88	0.90	409.50	510.02	510.00
1.40	432.98	0.94	462.00	540.02	540.00
1.50	504.58	0.98	517.50	570.02	570.00
1.60	582.90	1.01	576.00	600.02	600.00
1.70	668.19	1.05	637.50	630.02	630.00
1.80	760.66	1.08	702.00	660.02	660.00
1.90	860.55	1.12	769.50	690.02	690.00
2.00	968.06	1.15	840.00	720.02	720.00

Grand Canal Diversion
Cross Section for 54k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.60	ft
Elevation Range:	0.40 to 2.00 ft	
Discharge:	2148.05	ft^3/s





Worksheet for 54k-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth(	ImprovedLotters	
Open Channel Weighted Roughnes:	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	2148.05	ft^3/s
Elevation Range:	0.40 to 2.00 ft	
Flow Area:	800.00	ft^2
Wetted Perimeter:	800.01	ft
Top Width:	800.00	ft
Normal Depth:	1.60	ft
Critical Depth:	1.10	ft
Critical Slope:	0.01985	ft/ft
Velocity:	2.69	ft/s
Velocity Head:	0.11	ft
Specific Energy:	1.71	ft
Froude Number:	0.47	
Flow Type:	Subcritical	

Segment Roughness		
Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(8+00, 2.00)	0.035

Section Geometry	
Station	Elevation
0+00	2.00
2+00	0.40

Worksheet for 54k-south

Station	Elevation
4+00	0.40
8+00	2.00

Rating Table for 54k-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

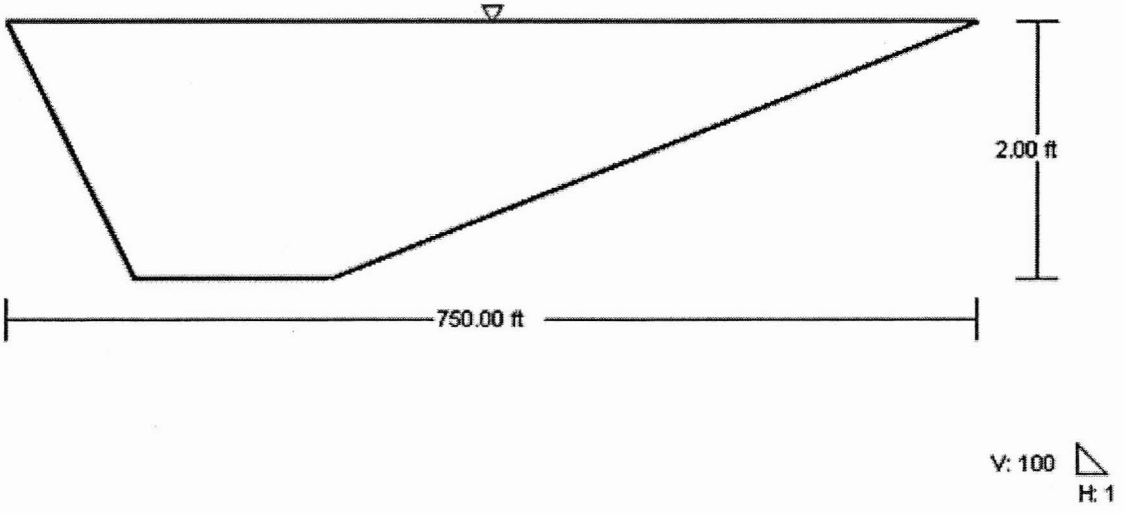
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.40	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.40					
0.50	11.98	0.55	21.88	237.50	237.50
0.60	39.56	0.83	47.50	275.00	275.00
0.70	81.04	1.05	76.88	312.50	312.50
0.80	136.53	1.24	110.00	350.00	350.00
0.90	206.55	1.41	146.88	387.50	387.50
1.00	291.76	1.56	187.50	425.00	425.00
1.10	392.92	1.69	231.88	462.50	462.50
1.20	510.78	1.82	280.00	500.00	500.00
1.30	646.14	1.95	331.88	537.51	537.50
1.40	799.76	2.06	387.50	575.01	575.00
1.50	972.43	2.18	446.88	612.51	612.50
1.60	1164.92	2.28	510.00	650.01	650.00
1.70	1377.98	2.39	576.88	687.51	687.50
1.80	1612.36	2.49	647.50	725.01	725.00
1.90	1868.80	2.59	721.88	762.51	762.50
2.00	2148.05	2.69	800.00	800.01	800.00

Grand Canal Diversion
Cross Section for 54k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00050	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	964.79	ft^3/s



Worksheet for 54k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00050	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	964.79	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	900.00	ft^2
Wetted Perimeter:	750.02	ft
Top Width:	750.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.82	ft
Critical Slope:	0.02156	ft/ft
Velocity:	1.07	ft/s
Velocity Head:	0.02	ft
Specific Energy:	2.02	ft
Froude Number:	0.17	
Flow Type:	Subcritical	

Segment Roughness		
Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(7+50, 2.00)	0.035

Section Geometry	
Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 54k-west

Station	Elevation
2+50	0.00
7+50	2.00

Rating Table for 54k-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00050	ft/ft
Water Surface Elevation:	2.00	ft

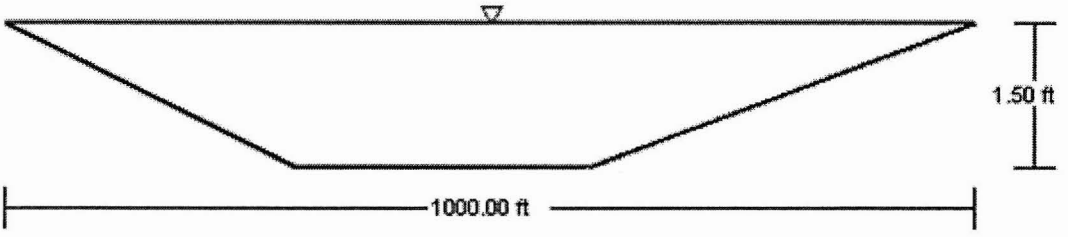
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	3.18	0.19	16.50	180.00	180.00
0.20	10.55	0.29	36.00	210.00	210.00
0.30	21.67	0.37	58.50	240.00	240.00
0.40	36.61	0.44	84.00	270.00	270.00
0.50	55.54	0.49	112.50	300.01	300.00
0.60	78.64	0.55	144.00	330.01	330.00
0.70	106.15	0.59	178.50	360.01	360.00
0.80	138.29	0.64	216.00	390.01	390.00
0.90	175.27	0.68	256.50	420.01	420.00
1.00	217.34	0.72	300.00	450.01	450.00
1.10	264.70	0.76	346.50	480.01	480.00
1.20	317.58	0.80	396.00	510.01	510.00
1.30	376.19	0.84	448.50	540.02	540.00
1.40	440.76	0.87	504.00	570.02	570.00
1.50	511.49	0.91	562.50	600.02	600.00
1.60	588.60	0.94	624.00	630.02	630.00
1.70	672.28	0.98	688.50	660.02	660.00
1.80	762.73	1.01	756.00	690.02	690.00
1.90	860.17	1.04	826.50	720.02	720.00
2.00	964.79	1.07	900.00	750.02	750.00

Grand Canal Diversion
Cross Section for 44o-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.50	ft
Elevation Range:	0.50 to 2.00 ft	
Discharge:	2574.12	ft^3/s



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Worksheet for 44o-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	2574.12	ft^3/s
Elevation Range:	0.50 to 2.00 ft	
Flow Area:	975.00	ft^2
Wetted Perimeter:	1000.01	ft
Top Width:	1000.00	ft
Normal Depth:	1.50	ft
Critical Depth:	1.01	ft
Critical Slope:	0.02009	ft/ft
Velocity:	2.64	ft/s
Velocity Head:	0.11	ft
Specific Energy:	1.61	ft
Froude Number:	0.47	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(10+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
3+00	0.50

Worksheet for 44o-south

Station	Elevation
6+00	0.50
10+00	2.00

Rating Table for 44o-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

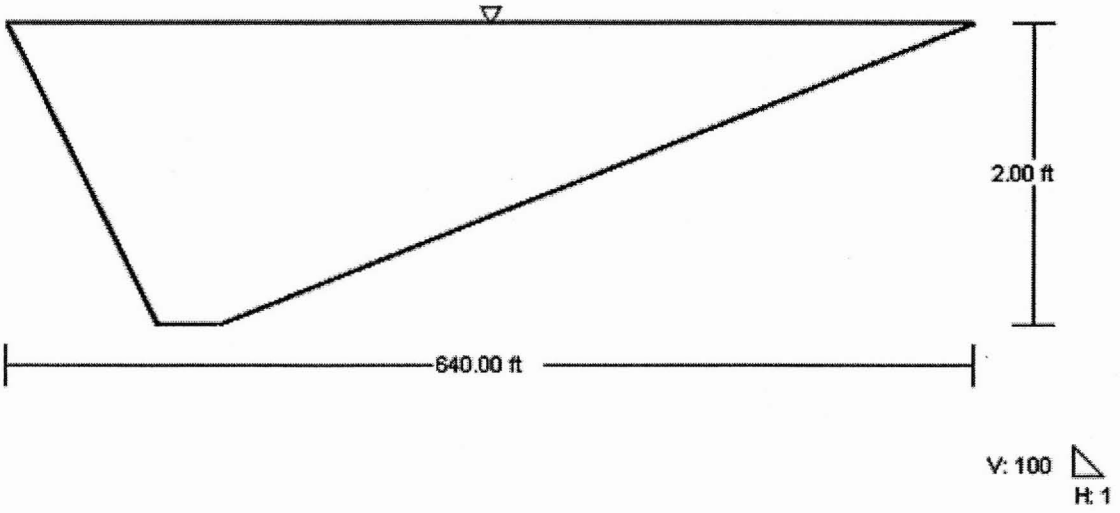
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.50	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.50					
0.60	17.86	0.55	32.33	346.67	346.67
0.70	58.53	0.84	69.33	393.33	393.33
0.80	118.99	1.07	111.00	440.00	440.00
0.90	198.99	1.26	157.33	486.67	486.67
1.00	298.92	1.43	208.33	533.34	533.33
1.10	419.45	1.59	264.00	580.00	580.00
1.20	561.37	1.73	324.33	626.67	626.67
1.30	725.56	1.86	389.33	673.34	673.33
1.40	912.90	1.99	459.00	720.00	720.00
1.50	1124.30	2.11	533.33	766.67	766.67
1.60	1360.68	2.22	612.33	813.34	813.33
1.70	1622.95	2.33	696.00	860.01	860.00
1.80	1912.01	2.44	784.33	906.67	906.67
1.90	2228.78	2.54	877.33	953.34	953.33
2.00	2574.12	2.64	975.00	1000.01	1000.00

Grand Canal Diversion
Cross Section for 44o-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00060	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	736.30	ft^3/s



Worksheet for 44o-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00060	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	736.30	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	680.00	ft^2
Wetted Perimeter:	640.02	ft
Top Width:	640.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.96	ft
Critical Slope:	0.02194	ft/ft
Velocity:	1.08	ft/s
Velocity Head:	0.02	ft
Specific Energy:	2.02	ft
Froude Number:	0.19	
Flow Type:	Subcritical	

Segment Roughness		
Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(6+40, 2.00)	0.035

Section Geometry	
Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 44o-west

Station	Elevation
1+40	0.00
6+40	2.00

Rating Table for 44o-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00060	ft/ft
Water Surface Elevation:	2.00	ft

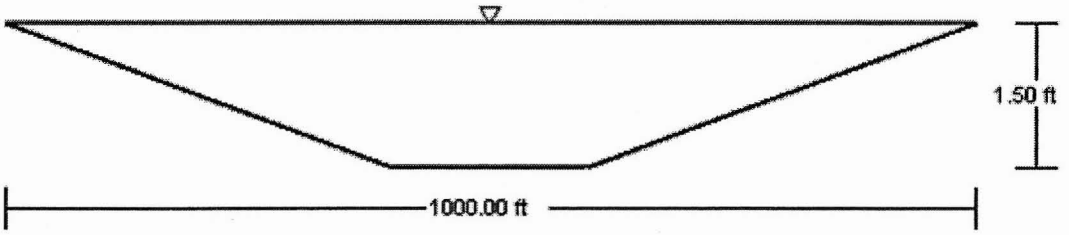
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

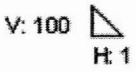
Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	1.05	0.19	5.50	70.00	70.00
0.20	3.93	0.28	14.00	100.00	100.00
0.30	8.95	0.35	25.50	130.00	130.00
0.40	16.51	0.41	40.00	160.00	160.00
0.50	26.95	0.47	57.50	190.01	190.00
0.60	40.63	0.52	78.00	220.01	220.00
0.70	57.87	0.57	101.50	250.01	250.00
0.80	78.99	0.62	128.00	280.01	280.00
0.90	104.28	0.66	157.50	310.01	310.00
1.00	134.05	0.71	190.00	340.01	340.00
1.10	168.57	0.75	225.50	370.01	370.00
1.20	208.11	0.79	264.00	400.01	400.00
1.30	252.95	0.83	305.50	430.02	430.00
1.40	303.34	0.87	350.00	460.02	460.00
1.50	359.55	0.90	397.50	490.02	490.00
1.60	421.81	0.94	448.00	520.02	520.00
1.70	490.38	0.98	501.50	550.02	550.00
1.80	565.50	1.01	558.00	580.02	580.00
1.90	647.39	1.05	617.50	610.02	610.00
2.00	736.30	1.08	680.00	640.02	640.00

Grand Canal Diversion
Cross Section for 40o-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.50	ft
Elevation Range:	0.50 to 2.00 ft	
Discharge:	2252.65	ft^3/s





Worksheet for 40o-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	2252.65	ft^3/s
Elevation Range:	0.50 to 2.00 ft	
Flow Area:	900.00	ft^2
Wetted Perimeter:	1000.01	ft
Top Width:	1000.00	ft
Normal Depth:	1.50	ft
Critical Depth:	1.03	ft
Critical Slope:	0.02057	ft/ft
Velocity:	2.50	ft/s
Velocity Head:	0.10	ft
Specific Energy:	1.60	ft
Froude Number:	0.47	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(10+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
4+00	0.50

Worksheet for 40o-south

Station	Elevation
6+00	0.50
10+00	2.00

Rating Table for 40o-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

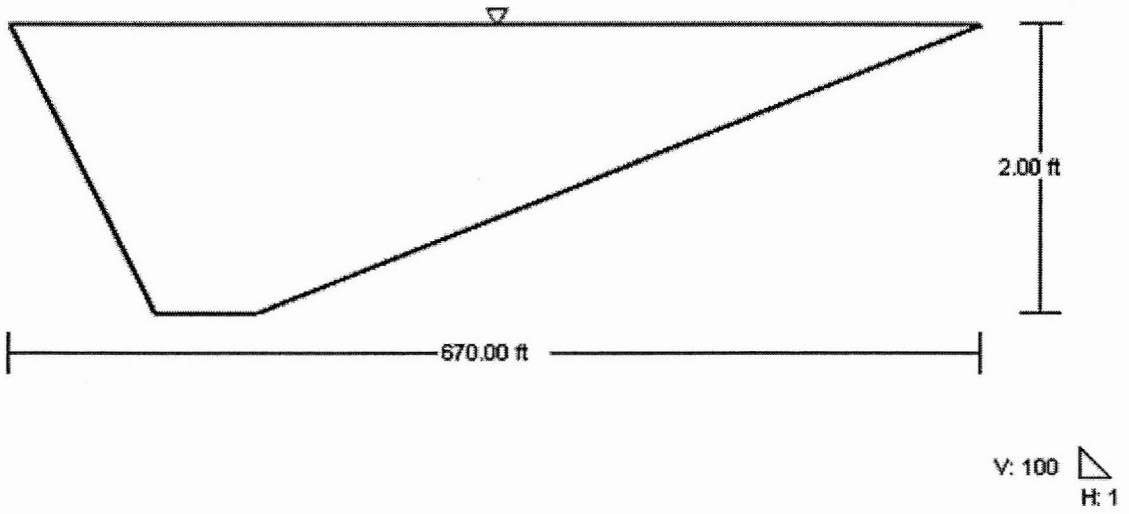
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.50	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.50					
0.60	12.18	0.54	22.67	253.33	253.33
0.70	40.96	0.81	50.67	306.67	306.67
0.80	85.48	1.02	84.00	360.00	360.00
0.90	146.54	1.19	122.67	413.33	413.33
1.00	225.27	1.35	166.67	466.67	466.67
1.10	322.88	1.49	216.00	520.00	520.00
1.20	440.63	1.63	270.67	573.34	573.33
1.30	579.76	1.75	330.67	626.67	626.67
1.40	741.50	1.87	396.00	680.00	680.00
1.50	927.04	1.99	466.67	733.34	733.33
1.60	1137.58	2.10	542.67	786.67	786.67
1.70	1374.29	2.20	624.00	840.00	840.00
1.80	1638.29	2.31	710.67	893.34	893.33
1.90	1930.71	2.41	802.67	946.67	946.67
2.00	2252.65	2.50	900.00	1000.01	1000.00

Grand Canal Diversion
Cross Section for 40o-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00120	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	1162.81	ft^3/s



Worksheet for 40o-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00120	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	1162.81	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	740.00	ft^2
Wetted Perimeter:	670.02	ft
Top Width:	670.00	ft
Normal Depth:	2.00	ft
Critical Depth:	1.09	ft
Critical Slope:	0.02069	ft/ft
Velocity:	1.57	ft/s
Velocity Head:	0.04	ft
Specific Energy:	2.04	ft
Froude Number:	0.26	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(6+70, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 40o-west

Station	Elevation
1+70	0.00
6+70	2.00

Rating Table for 40o-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00120	ft/ft
Water Surface Elevation:	2.00	ft

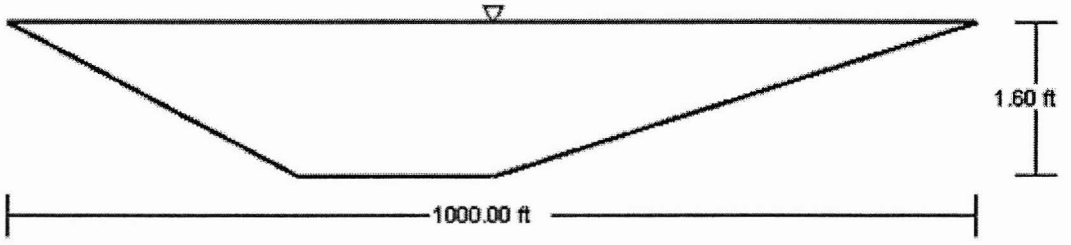
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	2.42	0.28	8.50	100.00	100.00
0.20	8.45	0.42	20.00	130.00	130.00
0.30	18.24	0.53	34.50	160.00	160.00
0.40	32.24	0.62	52.00	190.00	190.00
0.50	50.87	0.70	72.50	220.01	220.00
0.60	74.59	0.78	96.00	250.01	250.00
0.70	103.82	0.85	122.50	280.01	280.00
0.80	139.00	0.91	152.00	310.01	310.00
0.90	180.52	0.98	184.50	340.01	340.00
1.00	228.78	1.04	220.00	370.01	370.00
1.10	284.16	1.10	258.50	400.01	400.00
1.20	347.05	1.16	300.00	430.01	430.00
1.30	417.82	1.21	344.50	460.02	460.00
1.40	496.81	1.27	392.00	490.02	490.00
1.50	584.38	1.32	442.50	520.02	520.00
1.60	680.88	1.37	496.00	550.02	550.00
1.70	786.64	1.42	552.50	580.02	580.00
1.80	902.00	1.47	612.00	610.02	610.00
1.90	1027.28	1.52	674.50	640.02	640.00
2.00	1162.81	1.57	740.00	670.02	670.00

Grand Canal Diversion
Cross Section for 28q-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Normal Depth:	1.60	ft
Elevation Range:	0.40 to 2.00 ft	
Discharge:	2508.46	ft^3/s



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Worksheet for 28q-south

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

Options	
Current Roughness Weighted Meth	ImprovedLotters
Open Channel Weighted Roughnes	ImprovedLotters
Closed Channel Weighted Roughne	Hortons

Results		
Roughness Coefficient:	0.035	
Discharge:	2508.46	ft^3/s
Elevation Range:	0.40 to 2.00 ft	
Flow Area:	960.00	ft^2
Wetted Perimeter:	1000.01	ft
Top Width:	1000.00	ft
Normal Depth:	1.60	ft
Critical Depth:	1.11	ft
Critical Slope:	0.02010	ft/ft
Velocity:	2.61	ft/s
Velocity Head:	0.11	ft
Specific Energy:	1.71	ft
Froude Number:	0.47	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(10+00, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
3+00	0.40

Worksheet for 28q-south

Station	Elevation
5+00	0.40
10+00	2.00

Rating Table for 28q-south

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00400	ft/ft
Water Surface Elevation:	2.00	ft

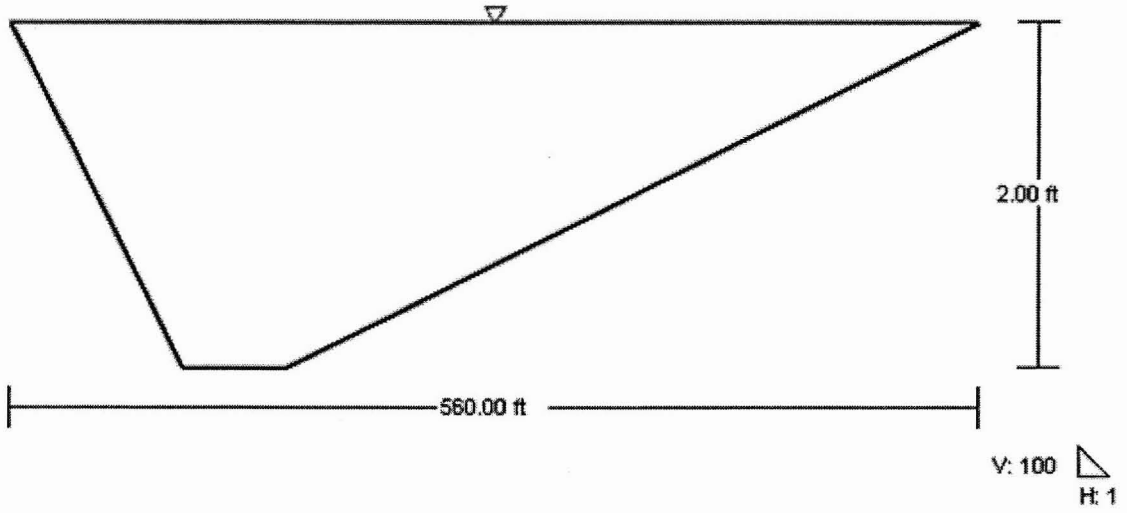
Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.40	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.40					
0.50	12.13	0.54	22.50	250.00	250.00
0.60	40.66	0.81	50.00	300.00	300.00
0.70	84.53	1.02	82.50	350.00	350.00
0.80	144.39	1.20	120.00	400.00	400.00
0.90	221.26	1.36	162.50	450.00	450.00
1.00	316.23	1.51	210.00	500.00	500.00
1.10	430.46	1.64	262.50	550.00	550.00
1.20	565.07	1.77	320.00	600.00	600.00
1.30	721.22	1.89	382.50	650.00	650.00
1.40	900.00	2.00	450.00	700.00	700.00
1.50	1102.53	2.11	522.50	750.00	750.00
1.60	1329.88	2.22	600.00	800.01	800.00
1.70	1583.12	2.32	682.50	850.01	850.00
1.80	1863.28	2.42	770.00	900.01	900.00
1.90	2171.39	2.52	862.50	950.01	950.00
2.00	2508.46	2.61	960.00	1000.01	1000.00

Grand Canal Diversion
Cross Section for 28q-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Section Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00030	ft/ft
Normal Depth:	2.00	ft
Elevation Range:	0.00 to 2.00 ft	
Discharge:	487.91	ft^3/s



Worksheet for 28q-west

Project Description		
Flow Element:	Irregular Section	
Friction Method:	Manning Formula	
Solve For:	Discharge	

Input Data		
Channel Slope:	0.00030	ft/ft
Water Surface Elevation:	2.00	ft

Options		
Current Roughness Weighted Meth	ImprovedLotters	
Open Channel Weighted Roughnes	ImprovedLotters	
Closed Channel Weighted Roughne	Hortons	

Results		
Roughness Coefficient:	0.035	
Discharge:	487.91	ft^3/s
Elevation Range:	0.00 to 2.00 ft	
Flow Area:	620.00	ft^2
Wetted Perimeter:	560.02	ft
Top Width:	560.00	ft
Normal Depth:	2.00	ft
Critical Depth:	0.78	ft
Critical Slope:	0.02274	ft/ft
Velocity:	0.79	ft/s
Velocity Head:	0.01	ft
Specific Energy:	2.01	ft
Froude Number:	0.13	
Flow Type:	Subcritical	

Segment Roughness

Start Station	End Station	Roughness Coefficient
(0+00, 2.00)	(5+60, 2.00)	0.035

Section Geometry

Station	Elevation
0+00	2.00
1+00	0.00

Worksheet for 28q-west

Station	Elevation
1+60	0.00
5+60	2.00

Rating Table for 28q-west

Project Description	
Flow Element:	Irregular Section
Friction Method:	Manning Formula
Solve For:	Discharge

Input Data		
Roughness Coefficient:	0.035	
Channel Slope:	0.00030	ft/ft
Water Surface Elevation:	2.00	ft

Attribute	Minimum	Maximum	Increment
Water Surface Elevation (ft)	0.00	2.00	0.10

Water Surface Elevation	Discharge	Velocity	Flow Area	Wetted Perimeter	Top Width
0.00					
0.10	1.03	0.14	7.25	85.00	85.00
0.20	3.60	0.21	17.00	110.00	110.00
0.30	7.76	0.27	29.25	135.00	135.00
0.40	13.68	0.31	44.00	160.00	160.00
0.50	21.55	0.35	61.25	185.01	185.00
0.60	31.56	0.39	81.00	210.01	210.00
0.70	43.88	0.42	103.25	235.01	235.00
0.80	58.68	0.46	128.00	260.01	260.00
0.90	76.14	0.49	155.25	285.01	285.00
1.00	96.42	0.52	185.00	310.01	310.00
1.10	119.69	0.55	217.25	335.01	335.00
1.20	146.09	0.58	252.00	360.01	360.00
1.30	175.78	0.61	289.25	385.02	385.00
1.40	208.90	0.63	329.00	410.02	410.00
1.50	245.62	0.66	371.25	435.02	435.00
1.60	286.06	0.69	416.00	460.02	460.00
1.70	330.37	0.71	463.25	485.02	485.00
1.80	378.70	0.74	513.00	510.02	510.00
1.90	431.16	0.76	565.25	535.02	535.00
2.00	487.91	0.79	620.00	560.02	560.00

Grand Canal - General Cross Section
Worksheet for Irregular Channel

Project Description	
Worksheet	Grand Canal
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Input Data		
Slope	0.000600	ft/ft
Water Surface Elevation	1.00	ft

Options	
Current Roughness Method	Improved Lotter's Method
Open Channel Weighting Method	Improved Lotter's Method
Closed Channel Weighting Method	Horton's Method

Results		
Mannings Coefficient	0.038	
Elevation Range	0.00 to 1.00	
Discharge	74.36	cfs
Flow Area	124.7	ft²
Wetted Perimeter	250.42	ft
Top Width	250.00	ft
Actual Depth	1.00	ft
Critical Elevation	0.47	ft
Critical Slope	0.034879	ft/ft
Velocity	0.60	ft/s
Velocity Head	0.01	ft
Specific Energy	1.01	ft
Froude Number	0.15	
Flow Type	Subcritical	

Roughness Segments		
Start Station	End Station	Mannings Coefficient
0+00	1+00	0.016
1+00	2+50	0.050

Natural Channel Points	
Station (ft)	Elevation (ft)
0+00	1.00
0+01	0.00
1+00	0.40
2+50	1.00

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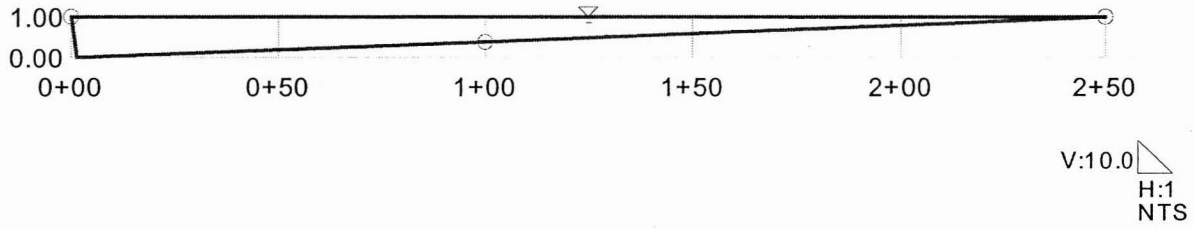
Grand Canal - General Cross Section
Cross Section for Irregular Channel

Project Description	
Worksheet	Grand Canal
Flow Element	Irregular Channel
Method	Manning's Formula
Solve For	Discharge

Section Data		
Mannings Coefficient	0.038	
Slope	0.000600	ft/ft
Water Surface Elevation	1.00	ft
Elevation Range	0.00 to 1.00	
Discharge	74.36	cfs



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APPENDIX A12

Storm Drain Routing Data

Appendix A12 Storm Drain Routing Data

The Kinematic Wave method (RK card) was used for the storm drain routing. The existing ground slopes were used to represent the storm drain hydraulic grade line slopes. Manning's "n" value of 0.015 was applied for all of the storm drain pipes. Routing length was measured from the 2-foot contour map. If a sub-basin has multiple pipes in one direction, a composite storm drain pipe may have been used to route the flow to a downstream sub-basin. The storm drain routing data is provided in the following table.

Table A12 Storm Drain Routing Data					
Hydrograph Name	Pipe Length (ft)	Slope	"n" value	Shape	Diameter (ft)
P76cS	5300	0.0044	0.015	CIRC	3.5
P68cS	5300	0.0033	0.015	CIRC	3.25
P72cS	5300	0.0052	0.015	CIRC	4
P76eS	5300	0.0037	0.015	CIRC	4
P60eS	5300	0.0074	0.015	CIRC	3.5
P68eS	5300	0.0052	0.015	CIRC	3.5
P72eS	5300	0.0058	0.015	CIRC	5.25
P72gS	5300	0.0024	0.015	CIRC	6
P76gS	5300	0.0037	0.015	CIRC	4
P72iW	2600	0.003	0.015	CIRC	4
P76iS	3500	0.0039	0.015	CIRC	4.5
P56gS	5300	0.0058	0.015	CIRC	4.5
P60gS	5300	0.0053	0.015	CIRC	4.5
P64gS	5300	0.0046	0.015	CIRC	5
P68gS	5300	0.0043	0.015	CIRC	4
P68iS	2400	0.0034	0.015	CIRC	4.5
P48iW	1550	0.0043	0.015	CIRC	3.3
P52iS	5250	0.0031	0.015	CIRC	4.5
PARC40	5400	0.005	0.015	CIRC	4
P36iS	5350	0.005	0.015	CIRC	3
P44iS	5300	0.003	0.015	CIRC	3.5
P54iS	5800	0.003	0.015	CIRC	4
P56iS	3400	0.0031	0.015	CIRC	6
P60iS1	2600	0.0031	0.015	CIRC	6
P60iS2	2600	0.0031	0.015	CIRC	7
P60kE	3000	0.003	0.015	CIRC	7
P64iS	2000	0.0034	0.015	CIRC	6
P72iS	3300	0.0024	0.015	CIRC	6
P76kS	1600	0.0039	0.015	CIRC	4.5
P76lS	5300	0.0037	0.015	CIRC	5.25
P72kS	2850	0.0031	0.015	CIRC	6.75
P72lS	5280	0.0045	0.015	CIRC	6.5
P60kS	2750	0.003	0.015	CIRC	4.5
P64kS	3300	0.0034	0.015	CIRC	6
P68kS	2900	0.0034	0.015	CIRC	4.75
P68lS	5300	0.0034	0.015	CIRC	4.75
P28kS	5300	0.0059	0.015	CIRC	4.5
P32kS	5400	0.0044	0.015	CIRC	4

Table A12 Storm Drain Routing Data

Hydrograph Name	Pipe Length (ft)	Slope	"n" value	Shape	Diameter (ft)
P36kS	5300	0.0046	0.015	CIRC	3.5
P40kS	5400	0.0041	0.015	CIRC	3
P44kS	5300	0.0033	0.015	CIRC	4
P28mS	5280	0.0033	0.015	CIRC	6
P32mS	5280	0.006	0.015	CIRC	4.5
P36mS	5300	0.0045	0.015	CIRC	4.5
P40mS	3800	0.0041	0.015	CIRC	4.5
P44mS	1150	0.003	0.015	CIRC	5
P52kS	4500	0.003	0.015	CIRC	6
P54kS	5000	0.003	0.015	CIRC	5
P56kS	7350	0.003	0.015	CIRC	7
P60lS	5300	0.003	0.015	CIRC	4.5
P64lS	5280	0.003	0.015	CIRC	7
P72mS	6900	0.003	0.015	CIRC	7
P28oS	2500	0.0044	0.015	CIRC	7
P32oS	2500	0.006	0.015	CIRC	6
P32pW	2750	0.0047	0.015	CIRC	7
P28pS	2700	0.003	0.015	CIRC	6
P32qW	800	0.0031	0.015	CIRC	3
P36oS	900	0.0038	0.015	CIRC	5
P36pW	2700	0.0036	0.015	CIRC	8
P40oS	2800	0.0041	0.015	CIRC	5
P40pW	2640	0.003	0.015	CIRC	10
P44oS	5650	0.003	0.015	CIRC	5
P44pW	2100	0.003	0.015	CIRC	12
P52mS	8600	0.003	0.015	CIRC	7.5
P54mS	6350	0.003	0.015	CIRC	5
P52oW	2700	0.0031	0.015	CIRC	7.5
P56mS	6450	0.003	0.015	CIRC	8
P56oW	2700	0.003	0.015	CIRC	11.5
P60mS	6200	0.003	0.015	CIRC	5
P64mS	6450	0.0025	0.015	CIRC	8
P68mS	6800	0.002	0.015	CIRC	4
PT72oE	2600	0.003	0.015	CIRC	14
PT68oE	850	0.003	0.015	CIRC	14
PT60oW	2800	0.003	0.015	CIRC	14
PT64o	3800	0.002	0.015	CIRC	21
P36pS	4500	0.0036	0.015	CIRC	5

Table A12 Storm Drain Routing Data

Hydrograph Name	Pipe Length (ft)	Slope	"n" value	Shape	Diameter (ft)
P40qW	2700	0.0031	0.015	CIRC	3
P44pS	3700	0.003	0.015	CIRC	5
P64qW	2650	0.003	0.015	CIRC	4
P68qW	3500	0.003	0.015	CIRC	4
P72oS	3700	0.003	0.015	CIRC	8
P84mS	1800	0.003	0.015	CIRC	6.5
P76mS	7000	0.003	0.015	CIRC	5.5
P76oS	4000	0.0031	0.015	CIRC	6.25
P80oS	5900	0.003	0.015	CIRC	6.5
P80pS	6200	0.003	0.015	CIRC	6.5
P28qS	2500	0.0031	0.015	CIRC	7
P32sW	2650	0.003	0.015	CIRC	3.5
P36qS	2500	0.0065	0.015	CIRC	6
P40sW	2800	0.003	0.015	CIRC	4
P44qS	2500	0.003	0.015	CIRC	6
P52qS	2500	0.0139	0.015	CIRC	4.42
P56qS	2600	0.003	0.015	CIRC	4
P60qS	2600	0.0031	0.015	CIRC	6.75
P60sW	1150	0.003	0.015	CIRC	6.2
P72qS1	3000	0.003	0.015	CIRC	8
P72qS2	3000	0.0031	0.015	CIRC	6.3
P76qS	2200	0.0031	0.015	CIRC	6.25
P80qS	2700	0.003	0.015	CIRC	7.5
P52sS	2850	0.0139	0.015	CIRC	4.42
P56sS	2900	0.003	0.015	CIRC	6
P64sS	2800	0.0035	0.015	CIRC	10
P68sS	2500	0.003	0.015	CIRC	5
P72sS1	2350	0.003	0.015	CIRC	8
P72sS2	2350	0.0031	0.015	CIRC	6.3
P76sS	3000	0.0031	0.015	CIRC	6
P52tS	3550	0.0038	0.015	CIRC	6.5
P56tS	3300	0.006	0.015	CIRC	8
P64tS	3100	0.0035	0.015	CIRC	8.5
P68tS	2750	0.003	0.015	CIRC	5
P72tS1	2700	0.003	0.015	CIRC	8
P72tS2	2700	0.0031	0.015	CIRC	6.8
P76tS1	3000	0.003	0.015	CIRC	6.5
P76tS2	3000	0.003	0.015	CIRC	3.5

Table A12 Storm Drain Routing Data

Hydrograph Name	Pipe Length (ft)	Slope	"n" value	Shape	Diameter (ft)
P80tS	2100	0.003	0.015	CIRC	7.5
P84tS	2650	0.0031	0.015	CIRC	6.5
P88uW	2600	0.0039	0.015	CIRC	3
P92uS	1500	0.003	0.015	CIRC	6
P76uS2	2300	0.003	0.015	CIRC	3.5
P76uS1	4000	0.003	0.015	CIRC	6.5
P80uS	4000	0.003	0.015	CIRC	8.5
P84uS	2600	0.003	0.015	CIRC	10.33
P92vS	4900	0.003	0.015	CIRC	6
P88vS	2600	0.0034	0.015	CIRC	3.5
P44sS	9500	0.003	0.015	CIRC	6
PT48o	3800	0.003	0.015	CIRC	21
PT48q	2500	0.003	0.015	CIRC	21
PT48s	9500	0.003	0.015	CIRC	21
P52uS	2700	0.0038	0.015	CIRC	6.5
P56uS	2500	0.006	0.015	CIRC	8
P60uS	2400	0.003	0.015	CIRC	5
PT64q	2500	0.003	0.015	CIRC	21
PT64s	2800	0.003	0.015	CIRC	21
PT64t	3100	0.003	0.015	CIRC	21
PT64u	2000	0.003	0.015	CIRC	21
P64uS	2000	0.0035	0.015	CIRC	8
P68uS	3300	0.0073	0.015	CIRC	4.5
P72uS1	5000	0.003	0.015	CIRC	8
P72uS2	4500	0.0031	0.015	CIRC	6.8
P76vS	4000	0.0041	0.015	CIRC	4.5
P84vS1	3100	0.0031	0.015	CIRC	6.5
P84vS2	3100	0.003	0.015	CIRC	11
P80vS	4600	0.003	0.015	CIRC	6.5
P28qE	1300	0.0031	0.015	CIRC	3
P24sS	5000	0.003	0.015	CIRC	6.5
P16qS	3400	0.0114	0.015	CIRC	6.5
P16sS	1500	0.0153	0.015	CIRC	8
P16qW	5200	0.0127	0.015	CIRC	5
P24oS	3000	0.003	0.015	CIRC	3.5
P28pE	6000	0.003	0.015	CIRC	4
P24sE	2700	0.0031	0.015	CIRC	3

APPENDIX A13

Channel Routing Data

Appendix A13 Channel Routing Data

Normal Depth channel routing methodology was utilized in the hydrologic model to route surface runoff through sub-basins. As described in the report, a finite element type approach was developed to model sub-basin surface runoff diversions based on representative slope and total effective street flow width including right-of-way width. A composite channel cross section was developed to represent the multiple-street flow conveyance based on the total effective street flow width and right-of-way width (see the following table). Surface flows for each sub-basin may not concentrate at one single point, for simplicity, it is assumed that the surface routing conveys the flow from the hydrologic low point of one sub-basin to the hydrologic low point of a downstream sub-basin after the flow diversion. The longitudinal slopes were estimated based on general existing ground slopes. Manning's "n" value of 0.016 was applied for the channel portion and Manning's "n" value of 0.05 was applied for both the overbanks. The overbank area is about 20% of the total composite flow width. The number of steps used for the routings (NSTPS) was based on the travel time estimated by the HEC-1 output time difference divided by the tabulation interval (NMIN) rounded up to an integer. If the value of NSTPS is very high for some flat hydrographs adjustment was applied. Channel data is attached in this appendix.

Typical Composite Channel Routing Cross Section								
No. of Points	1	2	3	4	5	6	7	8
RX (% of total width)	0%	0.5%	20%	49%	51%	80%	99.5%	100%
RY (ft)	3	1	0.5	0	0	0.5	1	3

Table A13 Channel Routing Data

Hydrograph Name	NSTP	Left Bank "n" value	Channel "n" value	Right Bank "n" value	Length	Slope	RX	1	2	3	4	5	6	7	8	RY	1	2	3	4	5	6	7	8
R64cW	5	0.05	0.016	0.05	2640	0.0045	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68cW	4	0.05	0.016	0.05	2640	0.0023	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R72cW	9	0.05	0.016	0.05	2640	0.0008	RX	0	2.05	82	200.9	209.1	328	407.95	410	RY	3	1	0.5	0	0	0.5	1	3
R84cE	4	0.05	0.016	0.05	2640	0.0008	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R56eW	6	0.05	0.016	0.05	2640	0.0053	RX	0	1.75	70	171.5	178.5	280	348.25	350	RY	3	1	0.5	0	0	0.5	1	3
R60eW	6	0.05	0.016	0.05	2640	0.0038	RX	0	3.85	154	377.3	392.7	616	766.15	770	RY	3	1	0.5	0	0	0.5	1	3
R64cS	6	0.05	0.016	0.05	5280	0.0072	RX	0	1.8	72	176.4	183.6	288	358.2	360	RY	3	1	0.5	0	0	0.5	1	3
R64eW	3	0.05	0.016	0.05	2640	0.0034	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R68cS	6	0.05	0.016	0.05	5280	0.0066	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R68eW	3	0.05	0.016	0.05	2640	0.0019	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R72cS	6	0.05	0.016	0.05	5280	0.0055	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R72eW	9	0.05	0.016	0.05	2640	0.0004	RX	0	1.65	66	161.7	168.3	264	328.35	330	RY	3	1	0.5	0	0	0.5	1	3
R76cS	5	0.05	0.016	0.05	5280	0.0036	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R84cS	4	0.05	0.016	0.05	5280	0.0042	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R84eE	6	0.05	0.016	0.05	2640	0.0005	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R80cS	4	0.05	0.016	0.05	5280	0.0036	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R76eS	5	0.05	0.016	0.05	5280	0.004	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R76gE	3	0.05	0.016	0.05	1000	0.0008	RX	0	1.4	56	137.2	142.8	224	278.6	280	RY	3	1	0.5	0	0	0.5	1	3
R54gW	4	0.05	0.016	0.05	2636	0.003	RX	0	1.95	78	191.1	198.9	312	388.05	390	RY	3	1	0.5	0	0	0.5	1	3
R56eS	6	0.05	0.016	0.05	5280	0.0106	RX	0	1.8	72	176.4	183.6	288	358.2	360	RY	3	1	0.5	0	0	0.5	1	3
R56gW	5	0.05	0.016	0.05	2636	0.003	RX	0	1.9	76	186.2	193.8	304	378.1	380	RY	3	1	0.5	0	0	0.5	1	3
R60eS	6	0.05	0.016	0.05	5280	0.0091	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R60gW	3	0.05	0.016	0.05	2640	0.0023	RX	0	2.05	82	200.9	209.1	328	407.95	410	RY	3	1	0.5	0	0	0.5	1	3
R64eS	6	0.05	0.016	0.05	5280	0.0076	RX	0	1.75	70	171.5	178.5	280	348.25	350	RY	3	1	0.5	0	0	0.5	1	3
R64gW	3	0.05	0.016	0.05	2640	0.0019	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68eS	3	0.05	0.016	0.05	5280	0.0063	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68gW	4	0.05	0.016	0.05	2640	0.0008	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R72eS	5	0.05	0.016	0.05	5280	0.0047	RX	0	1.75	70	171.5	178.5	280	348.25	350	RY	3	1	0.5	0	0	0.5	1	3
R72gS	3	0.05	0.016	0.05	5280	0.004	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R84eS	6	0.05	0.016	0.05	5280	0.0042	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R84gE	6	0.05	0.016	0.05	2640	0.0005	RX	0	1.4	56	137.2	142.8	224	278.6	280	RY	3	1	0.5	0	0	0.5	1	3
R80eS	3	0.05	0.016	0.05	5280	0.004	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R76gS	3	0.05	0.016	0.05	5280	0.0034	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R84gS	6	0.05	0.016	0.05	5280	0.0038	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R84iE	9	0.05	0.016	0.05	2640	0.0015	RX	0	1.4	56	137.2	142.8	224	278.6	280	RY	3	1	0.5	0	0	0.5	1	3
R80gS	3	0.05	0.016	0.05	5280	0.0034	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R76iS	3	0.05	0.016	0.05	3500	0.0038	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R54gS	6	0.05	0.016	0.05	5280	0.0072	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R54iW	6	0.05	0.016	0.05	2636	0.0015	RX	0	1.6	64	156.8	163.2	256	318.4	320	RY	3	1	0.5	0	0	0.5	1	3
R56gS	6	0.05	0.016	0.05	5280	0.0072	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R56iW	9	0.05	0.016	0.05	2636	0.0015	RX	0	2.4	96	235.2	244.8	384	477.6	480	RY	3	1	0.5	0	0	0.5	1	3
R60gS	5	0.05	0.016	0.05	5280	0.0064	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R60iW	4	0.05	0.016	0.05	2640	0.0015	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R64gS	5	0.05	0.016	0.05	5280	0.0061	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R64iW	6	0.05	0.016	0.05	2640	0.001	RX	0	1.6	64	156.8	163.2	256	318.4	320	RY	3	1	0.5	0	0	0.5	1	3
R68gS	4	0.05	0.016	0.05	5280	0.0045	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R76iE	4	0.05	0.016	0.05	2640	0.0008	RX	0	1.4	56	137.2	142.8	224	278.6	280	RY	3	1	0.5	0	0	0.5	1	3

Table A13 Channel Routing Data

Hydrograph Name	NSTP	Left Bank "n" value	Channel "n" value	Right Bank "n" value	Length	Slope	RX	1	2	3	4	5	6	7	8	RY	1	2	3	4	5	6	7	8
R72iE	5	0.05	0.016	0.05	2640	0.0008	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R68iS	3	0.05	0.016	0.05	2000	0.003	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R36iW	5	0.05	0.016	0.05	2610	0.0077	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R40iW	5	0.05	0.016	0.05	2715	0.0059	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R42iW	3	0.05	0.016	0.05	2715	0.0059	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R44iW	3	0.05	0.016	0.05	2640	0.0053	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R48iW	3	0.05	0.016	0.05	1660	0.0036	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R52gS	6	0.05	0.016	0.05	5280	0.0087	RX	0	1.8	72	176.4	183.6	288	358.2	360	RY	3	1	0.5	0	0	0.5	1	3
R52iS	4	0.05	0.016	0.05	5280	0.0038	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R24kW	4	0.05	0.016	0.05	2640	0.0045	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R28kW	4	0.05	0.016	0.05	2640	0.0038	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R32kW	3	0.05	0.016	0.05	2640	0.0045	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R36iS	6	0.05	0.016	0.05	5280	0.008	RX	0	2.05	82	200.9	209.1	328	407.95	410	RY	3	1	0.5	0	0	0.5	1	3
R36kW	3	0.05	0.016	0.05	2640	0.0045	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R40iS	8	0.05	0.016	0.05	5280	0.0068	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R40kW	3	0.05	0.016	0.05	2640	0.0053	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R44iS	5	0.05	0.016	0.05	5280	0.0064	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R44kW	2	0.05	0.016	0.05	2640	0.0045	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R48iS	6	0.05	0.016	0.05	5280	0.0053	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R48kW	2	0.05	0.016	0.05	1625	0.0049	RX	0	1.4	56	137.2	142.8	224	278.6	280	RY	3	1	0.5	0	0	0.5	1	3
R52kW	1	0.05	0.016	0.05	1100	0.0026	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R54iS	9	0.05	0.016	0.05	5800	0.0034	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R54kW	7	0.05	0.016	0.05	3500	0.0005	RX	0	1.6	64	156.8	163.2	256	318.4	320	RY	3	1	0.5	0	0	0.5	1	3
R56iS	9	0.05	0.016	0.05	4200	0.0052	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R60iS	3	0.05	0.016	0.05	3000	0.0047	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R56kW	5	0.05	0.016	0.05	3000	0.0006	RX	0	0.85	34	83.3	86.7	136	169.15	170	RY	3	1	0.5	0	0	0.5	1	3
R60kW	6	0.05	0.016	0.05	2800	0.0007	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R64iS	3	0.05	0.016	0.05	2130	0.0047	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R64kW	3	0.05	0.016	0.05	2800	0.0008	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R68kW	4	0.05	0.016	0.05	3000	0.0007	RX	0	1.1	44	107.8	112.2	176	218.9	220	RY	3	1	0.5	0	0	0.5	1	3
R72iS	3	0.05	0.016	0.05	2900	0.0028	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R72kW	6	0.05	0.016	0.05	2800	0.0004	RX	0	1.1	44	107.8	112.2	176	218.9	220	RY	3	1	0.5	0	0	0.5	1	3
R76kW	9	0.05	0.016	0.05	3500	0.0003	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R80iS	2	0.05	0.016	0.05	3500	0.0038	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R80kW	2	0.05	0.016	0.05	1500	0.001	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R84iS	9	0.05	0.016	0.05	6900	0.0029	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R84kS	3	0.05	0.016	0.05	4570	0.0035	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R84mE	3	0.05	0.016	0.05	2540	0.0008	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R80kS	3	0.05	0.016	0.05	5900	0.0037	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R80mE	3	0.05	0.016	0.05	2640	0.0008	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R76kS	1	0.05	0.016	0.05	1700	0.005	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R76lS	3	0.05	0.016	0.05	5280	0.0034	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R72kS	2	0.05	0.016	0.05	2900	0.0034	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R72lS	3	0.05	0.016	0.05	5280	0.003	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R60kS	2	0.05	0.016	0.05	1855	0.0054	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R60lW	5	0.05	0.016	0.05	2640	0.0008	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R64kS	2	0.05	0.016	0.05	2780	0.0043	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R64lW	5	0.05	0.016	0.05	2980	0.0004	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3

Table A13 Channel Routing Data

Hydrograph Name	NSTP	Left Bank "n" value	Channel "n" value	Right Bank "n" value	Length	Slope	RX	1	2	3	4	5	6	7	8	RY	1	2	3	4	5	6	7	8
R68kS	2	0.05	0.016	0.05	3290	0.0036	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R68lS	4	0.05	0.016	0.05	5235	0.0027	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R24kS	6	0.05	0.016	0.05	5280	0.0087	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R24mW	3	0.05	0.016	0.05	2840	0.0045	RX	0	1.8	72	176.4	183.6	288	358.2	360	RY	3	1	0.5	0	0	0.5	1	3
R28kS	6	0.05	0.016	0.05	5280	0.0076	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R28mW	3	0.05	0.016	0.05	2640	0.0038	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R32kS	6	0.05	0.016	0.05	5280	0.0076	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R32mW	2	0.05	0.016	0.05	2640	0.0023	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R36kS	3	0.05	0.016	0.05	5280	0.0068	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R36mW	2	0.05	0.016	0.05	2640	0.0045	RX	0	1.9	76	186.2	193.8	304	378.1	380	RY	3	1	0.5	0	0	0.5	1	3
R40kS	5	0.05	0.016	0.05	5280	0.0068	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R40mW	3	0.05	0.016	0.05	2640	0.0045	RX	0	1.9	76	186.2	193.8	304	378.1	380	RY	3	1	0.5	0	0	0.5	1	3
R44kS	3	0.05	0.016	0.05	5280	0.0064	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R44mW	2	0.05	0.016	0.05	2700	0.0023	RX	0	2.1	84	205.8	214.2	336	417.9	420	RY	3	1	0.5	0	0	0.5	1	3
R24mS	5	0.05	0.016	0.05	5280	0.0061	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R24oW	2	0.05	0.016	0.05	2640	0.0053	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R28mS	5	0.05	0.016	0.05	5280	0.0061	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R28oW	3	0.05	0.016	0.05	2640	0.0038	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R32mS	3	0.05	0.016	0.05	5280	0.0061	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R32oW	3	0.05	0.016	0.05	2640	0.003	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R36mS	4	0.05	0.016	0.05	5280	0.0057	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R36oW	3	0.05	0.016	0.05	2000	0.0022	RX	0	1.65	66	161.7	168.3	264	328.35	330	RY	3	1	0.5	0	0	0.5	1	3
R40mS	5	0.05	0.016	0.05	4900	0.0053	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R40oW	6	0.05	0.016	0.05	3500	0.0012	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R44mS	2	0.05	0.016	0.05	2400	0.0058	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R44oW	8	0.05	0.016	0.05	4000	0.0006	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R48kS	3	0.05	0.016	0.05	4500	0.0048	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R52kS	2	0.05	0.016	0.05	2600	0.0046	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R52mW	2	0.05	0.016	0.05	2650	0.0066	RX	0	0.3	12	29.4	30.6	48	59.7	60	RY	3	1	0.5	0	0	0.5	1	3
R54kS	3	0.05	0.016	0.05	4500	0.0057	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R54mW	2	0.05	0.016	0.05	2640	0.003	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R56kS	5	0.05	0.016	0.05	6070	0.0033	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R56mW	3	0.05	0.016	0.05	2640	0.0023	RX	0	1.8	72	176.4	183.6	288	358.2	360	RY	3	1	0.5	0	0	0.5	1	3
R60lS	5	0.05	0.016	0.05	5280	0.0038	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R60mW	4	0.05	0.016	0.05	2640	0.0008	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R64lS	8	0.05	0.016	0.05	5280	0.003	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R64mW	5	0.05	0.016	0.05	2640	0.001	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68mW	5	0.05	0.016	0.05	2640	0.0008	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R72mS	6	0.05	0.016	0.05	6900	0.002	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R24oS	3	0.05	0.016	0.05	3500	0.0081	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R28oS	2	0.05	0.016	0.05	2800	0.0112	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R28pW	3	0.05	0.016	0.05	2640	0.003	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R32oS	2	0.05	0.016	0.05	2540	0.0071	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R32pW	3	0.05	0.016	0.05	2700	0.0022	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R28qW	9	0.05	0.016	0.05	3500	0.0003	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R36oS	3	0.05	0.016	0.05	2500	0.0063	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R36pW	2	0.05	0.016	0.05	2640	0.0024	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R40oS	3	0.05	0.016	0.05	2500	0.0072	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3

Table A13 Channel Routing Data

Hydrograph Name	NSTP	Left Bank "n" value	Channel "n" value	Right Bank "n" value	Length	Slope	RX	1	2	3	4	5	6	7	8	RY	1	2	3	4	5	6	7	8
R40pW	4	0.05	0.016	0.05	2640	0.0023	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R44oS	3	0.05	0.016	0.05	4230	0.0033	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R44pW	3	0.05	0.016	0.05	2640	0.0015	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R52mS	3	0.05	0.016	0.05	7000	0.0026	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R48oW	3	0.05	0.016	0.05	2640	0.0015	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R54mS	6	0.05	0.016	0.05	6845	0.0029	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R52oW	6	0.05	0.016	0.05	2640	0.0015	RX	0	1.6	64	156.8	163.2	256	318.4	320	RY	3	1	0.5	0	0	0.5	1	3
R56mS	7	0.05	0.016	0.05	6770	0.0024	RX	0	1.1	44	107.8	112.2	176	218.9	220	RY	3	1	0.5	0	0	0.5	1	3
R56oW	3	0.05	0.016	0.05	2640	0.0023	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R60mS	6	0.05	0.016	0.05	6720	0.0024	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R60oW	6	0.05	0.016	0.05	2640	0.0015	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R64mS	8	0.05	0.016	0.05	6860	0.002	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R64oW	2	0.05	0.016	0.05	2640	0.0015	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R68mS	7	0.05	0.016	0.05	6780	0.0021	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68oW	6	0.05	0.016	0.05	2640	0.0015	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R32qS	3	0.05	0.016	0.05	3600	0.0044	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R36qW	5	0.05	0.016	0.05	2640	0.0023	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R40qW	5	0.05	0.016	0.05	2640	0.0015	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R44qW	3	0.05	0.016	0.05	2500	0.0018	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R48qW	2	0.05	0.016	0.05	3050	0.002	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R52qW	7	0.05	0.016	0.05	2640	0.0015	RX	0	1.6	64	156.8	163.2	256	318.4	320	RY	3	1	0.5	0	0	0.5	1	3
R56qW	5	0.05	0.016	0.05	2640	0.0015	RX	0	2.1	84	205.8	214.2	336	417.9	420	RY	3	1	0.5	0	0	0.5	1	3
R60qW	6	0.05	0.016	0.05	2640	0.0015	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R64qW	4	0.05	0.016	0.05	2300	0.0009	RX	0	1.35	54	132.3	137.7	216	268.65	270	RY	3	1	0.5	0	0	0.5	1	3
R68qW	3	0.05	0.016	0.05	2640	0.0015	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R72qW	4	0.05	0.016	0.05	3000	0.0015	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R84mS	3	0.05	0.016	0.05	6000	0.004	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R80mS	2	0.05	0.016	0.05	3500	0.0065	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R80oS	3	0.05	0.016	0.05	4000	0.0037	RX	0	1.5	60	147	153	240	298.5	300	RY	3	1	0.5	0	0	0.5	1	3
R76mS	3	0.05	0.016	0.05	6900	0.0023	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R72oW	2	0.05	0.016	0.05	2800	0.0007	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R76oS	2	0.05	0.016	0.05	4000	0.0022	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R76qW	2	0.05	0.016	0.05	2300	0.0009	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R76oW	2	0.05	0.016	0.05	2200	0.0036	RX	0	1.8	72	176.4	183.6	288	358.2	360	RY	3	1	0.5	0	0	0.5	1	3
R80pS	8	0.05	0.016	0.05	6200	0.0019	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R28qS	1	0.05	0.016	0.05	1240	0.0065	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R28sW	5	0.05	0.016	0.05	2640	0.0023	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R32sW	4	0.05	0.016	0.05	2640	0.0015	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R36qS	4	0.05	0.016	0.05	2530	0.0032	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R36sW	2	0.05	0.016	0.05	2640	0.0015	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R40qS	3	0.05	0.016	0.05	2540	0.0024	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R40sW	2	0.05	0.016	0.05	2640	0.0015	RX	0	1.1	44	107.8	112.2	176	218.9	220	RY	3	1	0.5	0	0	0.5	1	3
R44qS	3	0.05	0.016	0.05	2550	0.0016	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R44sW	3	0.05	0.016	0.05	2400	0.0017	RX	0	1.1	44	107.8	112.2	176	218.9	220	RY	3	1	0.5	0	0	0.5	1	3
R48qS	2	0.05	0.016	0.05	2550	0.0016	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R48sW	6	0.05	0.016	0.05	3000	0.0014	RX	0	0.9	36	88.2	91.8	144	179.1	180	RY	3	1	0.5	0	0	0.5	1	3
R52qS	5	0.05	0.016	0.05	2500	0.0024	RX	0	1.85	74	181.3	188.7	296	368.15	370	RY	3	1	0.5	0	0	0.5	1	3
R52sW	5	0.05	0.016	0.05	2640	0.0015	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3

Table A13 Channel Routing Data

Hydrograph Name	NSTP	Left Bank "n" value	Channel "n" value	Right Bank "n" value	Length	Slope	RX	1	2	3	4	5	6	7	8	RY	1	2	3	4	5	6	7	8
R56qS	5	0.05	0.016	0.05	2500	0.0024	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R56sW	3	0.05	0.016	0.05	2640	0.0015	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R60qS	6	0.05	0.016	0.05	2600	0.0037	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R60sW	3	0.05	0.016	0.05	2640	0.0008	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R64qS	3	0.05	0.016	0.05	2480	0.0032	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R64sW	3	0.05	0.016	0.05	2280	0.0026	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68qS	3	0.05	0.016	0.05	2800	0.0024	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R68sW	3	0.05	0.016	0.05	2640	0.0015	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R72qS	4	0.05	0.016	0.05	3000	0.0024	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R72sW	4	0.05	0.016	0.05	2640	0.0008	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R76qS	2	0.05	0.016	0.05	2480	0.0032	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R76sW	3	0.05	0.016	0.05	2290	0.0009	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R80qS	2	0.05	0.016	0.05	2900	0.0042	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R52tW	3	0.05	0.016	0.05	2640	0.0023	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R56sS	6	0.05	0.016	0.05	2900	0.003	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R56tW	2	0.05	0.016	0.05	2640	0.0023	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R60sS	3	0.05	0.016	0.05	2900	0.0035	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R60tW	3	0.05	0.016	0.05	2640	0.0023	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R64sS	3	0.05	0.016	0.05	2900	0.0035	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R64tW	3	0.05	0.016	0.05	2640	0.0023	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68sS	3	0.05	0.016	0.05	2600	0.0035	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68tW	2	0.05	0.016	0.05	2640	0.0023	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R72sS	2	0.05	0.016	0.05	2400	0.0051	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R72tW	3	0.05	0.016	0.05	2640	0.0015	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R76sS	3	0.05	0.016	0.05	2800	0.0033	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R76tW	3	0.05	0.016	0.05	2640	0.0015	RX	0	1.55	62	151.9	158.1	248	308.45	310	RY	3	1	0.5	0	0	0.5	1	3
R80tS	2	0.05	0.016	0.05	2100	0.0048	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R52tS	5	0.05	0.016	0.05	3530	0.0023	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R52uW	2	0.05	0.016	0.05	2660	0.0015	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R56tS	2	0.05	0.016	0.05	3400	0.0017	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R56uW	6	0.05	0.016	0.05	2660	0.001	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R60tS	5	0.05	0.016	0.05	3175	0.0013	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R60uW	4	0.05	0.016	0.05	2640	0.0015	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R64tS	3	0.05	0.016	0.05	3100	0.0035	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R64uW	3	0.05	0.016	0.05	2650	0.0015	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68tS	2	0.05	0.016	0.05	2800	0.0035	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R68uW	3	0.05	0.016	0.05	2640	0.0015	RX	0	0.8	32	78.4	81.6	128	159.2	160	RY	3	1	0.5	0	0	0.5	1	3
R72tS	3	0.05	0.016	0.05	2820	0.0021	RX	0	2.3	92	225.4	234.6	368	457.7	460	RY	3	1	0.5	0	0	0.5	1	3
R72uW	3	0.05	0.016	0.05	2640	0.0015	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R76tS	3	0.05	0.016	0.05	2665	0.0015	RX	0	1.3	52	127.4	132.6	208	258.7	260	RY	3	1	0.5	0	0	0.5	1	3
R76uW	2	0.05	0.016	0.05	2370	0.0025	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R80uW	2	0.05	0.016	0.05	2760	0.0014	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R84tS	2	0.05	0.016	0.05	2760	0.0018	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R84uW	3	0.05	0.016	0.05	2760	0.0022	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R84tW	4	0.05	0.016	0.05	2760	0.0011	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R88tS	3	0.05	0.016	0.05	2760	0.0036	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R88uW	2	0.05	0.016	0.05	2760	0.0014	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R88tW	3	0.05	0.016	0.05	1990	0.002	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3

Table A13 Channel Routing Data

Hydrograph Name	NSTP	Left Bank "n" value	Channel "n" value	Right Bank "n" value	Length	Slope	RX	1	2	3	4	5	6	7	8	RY	1	2	3	4	5	6	7	8
R92tS	3	0.05	0.016	0.05	2760	0.004	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R92uS	1	0.05	0.016	0.05	1650	0.0048	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R76uS	2	0.05	0.016	0.05	2640	0.0023	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R76vW	6	0.05	0.016	0.05	2570	0.0008	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R80vW	8	0.05	0.016	0.05	2640	0.0004	RX	0	1.25	50	122.5	127.5	200	248.75	250	RY	3	1	0.5	0	0	0.5	1	3
R84uS	3	0.05	0.016	0.05	2600	0.0023	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R84vW	2	0.05	0.016	0.05	2760	0.0025	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R88uS	2	0.05	0.016	0.05	2760	0.0033	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R88vW	3	0.05	0.016	0.05	2750	0.0011	RX	0	1.05	42	102.9	107.1	168	208.95	210	RY	3	1	0.5	0	0	0.5	1	3
R52uS	2	0.05	0.016	0.05	3080	0.0026	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R56uS	4	0.05	0.016	0.05	2500	0.0034	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R60uS	3	0.05	0.016	0.05	2400	0.0034	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R64uS	3	0.05	0.016	0.05	2100	0.0034	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R68uS	3	0.05	0.016	0.05	3300	0.007	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R72uS	5	0.05	0.016	0.05	4500	0.0023	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R76vS	4	0.05	0.016	0.05	3800	0.0107	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R80vS	3	0.05	0.016	0.05	3920	0.0061	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R84vS	2	0.05	0.016	0.05	3290	0.0033	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R24sS	2	0.05	0.016	0.05	5000	0.003	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R04sS	1	0.05	0.016	0.05	1870	0.0064	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R08qS	2	0.05	0.016	0.05	3500	0.0224	RX	0	0.75	30	73.5	76.5	120	149.25	150	RY	3	1	0.5	0	0	0.5	1	3
R08sW	3	0.05	0.016	0.05	2800	0.0031	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R12qS	2	0.05	0.016	0.05	3500	0.0175	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R12sW	2	0.05	0.016	0.05	2500	0.0031	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R16oS	2	0.05	0.016	0.05	5150	0.0252	RX	0	0.5	20	49	51	80	99.5	100	RY	3	1	0.5	0	0	0.5	1	3
R16qS	2	0.05	0.016	0.05	3200	0.0194	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
R16sS	2	0.05	0.016	0.05	1800	0.0044	RX	0	1	40	98	102	160	199	200	RY	3	1	0.5	0	0	0.5	1	3
ROCCC	2	0.013	0.013	0.013	3000	0.0038	RX	0	1	2	10	19	28	29	30	RY	20	20	0	0	0	0	20	20
R20pS	1	0.013	0.013	0.013	3000	0.002	RX	0	1	2	10	19	28	29	30	RY	20	20	0	0	0	0	20	20
R20qS	2	0.013	0.013	0.013	3200	0.002	RX	0	1	2	10	19	28	29	30	RY	20	20	0	0	0	0	20	20
R20sS	2	0.013	0.013	0.013	3200	0.0038	RX	0	1	2	10	19	28	29	30	RY	20	20	0	0	0	0	20	20

APPENDIX A14

Storage Routing Data

Appendix A14 Hydrologic Modeling of Storage Routing

Detailed discussions about detention/retention basins were documented in Appendix A7. This appendix documents the storage-elevation-discharge relationships for all of the storage facilities modeled in this study.

Detention/retention basins were identified and classified by reviewing the aerial maps and contour maps, and were verified by performing field reconnaissance. Their storage volumes were estimated based on the contour maps and design reports. If a sub-basin has multiple basins, an equivalent detention/retention basin may have been used to model these conditions. If the dimensions of the structures for the low flow spillways and emergency spillways were know SL and SS cards were applied. Otherwise, rating curves were developed according to detailed topographic data. Some of the rating curves were verified or derived from the hydraulic modeling for the flood insurance study of the Cave Creek (for example, S-I17 for the depressed I-17 segment). The following table lists the storage-elevation-discharge data for all of the storage facilities in the HEC-1 models.

Table A14 Storage Routing Data

Hydrograph Name	Type	SV	1	2	3	4	5	6	7	8	9	10	SE	1	2	3	4	5	6	7	8	9	10	SL/SQ	1	2	3	4	5	6	7	8	9	10	SS	1	2	3	4
S80c	STOR	SV	0	1	2.6	4.3	11						SE	0	1	2	3	5																		SS	3	100	2.7	1.5
S84i	STOR	SV	0	8	17	22	27	32	50				SE	0	2	4	5	6	7	9																SS	7	100	2.7	1.5
S80g	STOR	SV	0	0.2	0.5	0.9	1.4	3					SE	0	1	2	3	4	5					SL	0	0.785	0.62	0.5							SS	3	300	2.7	1.5
S40i	STOR	SV	0	2.4	6.1	10.5	15.3						SE	0	1	2	3	4																		SS	3	50	2.7	1.5
S52i	STOR	SV	0	1	5	12	21	27	33				SE	0	4	8	12	16	18	20				SQ	0	43	60	74	86	91	860								
S48k	STOR	SV	0	0.8	2	4							SE	0	2	4	6																		SS	4	100	2.7	1.5
S64k	STOR	SV	0	12	149								SE	0	0.5	2.5																			SS	0.5	500	2.7	1.5
S72k	STOR	SV	0	6	12								SE	0	1	2																			SS	1	400	2.7	1.5
S76m	STOR	SV	0	0.47	2.27								SE	0	2	4																			SS	2	100	2.7	1.5
S64l	STOR	SV	0	35	92								SE	0	2	4																			SS	2	900	2.7	1.5
S24m	STOR	SV	0	0.5	1.2								SE	0	2	4																			SS	2	100	2.7	1.5
S32m	STOR	SV	0	0.2	0.6	1.2							SE	0	2	4	6																			SS	4	50	2.7	1.5
S28p	STOR	SV	0	0.2	0.8	1.5							SE	0	2	4	6																			SS	4	100	2.7	1.5
S32p	STOR	SV	0	3.5	13.8	32.9	57.4	83.7					SE	0	2	4	6	8	10					SL	2	12.56	0.62	0.5							SS	8	20	2.7	1.5
S28q	STOR	SV	0	0.3	0.8								SE	0	2	4																			SS	2	100	2.7	1.5
S32q	STOR	SV	0	10	24	41	59	80	92	110			SE	0	4	8	12	16	20	22	24			SL	1.5	7.068	0.62	0.5							SS	22	750	2.7	1.5
S36p	STOR	SV	0	10	22	37	55	68	84				SE	0	4	8	12	16	18	20				SL	2	12.56	0.62	0.5							SS	18	200	2.7	1.5
S48o	STOR	SV	0	6	35	81							SE	0	2	4	6							SL	0.5	7.07	0.62	0.5							SS	4	50	2.7	1.5
S64o	STOR	SV	0	0.25	1	3							SE	0	2	4	6							SQ	0	8	11	600											
S68o	STOR	SV	0	4	13	25							SE	0	2	4	6																			SS	4	100	2.7	1.5
S72o	STOR	SV	0	0.2	2	3	4.3	6.2	8.9	50			SE	0	2	6	8	10	12	14	16			SQ	0	50	250	380	530	1148	2156	3703							
S-I10	STOR	SV	0	10	62	160	287	602	997	1252	1539		SE	0	1	4	8	12	20	28	32	36		SQ	0	50	175	350	350	350	350	350	4820						
S48q	STOR	SV	0	2	4	5.2	8						SE	0	2	4	5	7						SQ	0	30	43	48	438										
S80o	STOR	SV	0	2.7	6.2	10.1	14.3	17.7	24.3				SE	0	2	4	6	8	9.5	12				SQ	0	15	26	34	55	120	1400								
S80p	STOR	SV	0	1.9	3.8	5.7	7.8	10					SE	0	2	4	6	8	10					SQ	0	2	3	4	400	1100									
S32s	STOR	SV	0	0.9	2.2	3.9	6.1	8.8	16	21.2			SE	0	2	4	6	8	10	14	16															SS	14	100	2.7	1.5
S48s	STOR	SV	0	0.6	2								SE	0	1	3								SQ	0	24	290												
S76s	STOR	SV	0	0.7	2								SE	0	2	4																			SS	2	100	2.7	1.5
S52t	STOR	SV	0	1.6	4	7							SE	0	2	4	6																			SS	4	100	2.7	1.5
S60t	STOR	SV	0	0.3	0.7	1.3							SE	0	2	4	6																			SS	4	100	2.7	1.5
S52u	STOR	SV	0	8	21	35	50	68	90				SE	0	2	4	6	8	10	12				SL	1	12.56	0.62	0.5							SS	10	200	2.7	1.5
S56u	STOR	SV	0	4	12								SE	0	2	4								SL	0.33	0.785	0.62	0.5							SS	2	400	2.7	1.5
S60u	STOR	SV	0	0.3	0.6	1	2						SE	0	2	4	6	8						SQ	0	45	90	145	290										
S-I17	STOR	SV	0	6	29	45	112	169	320	360	396	425	SE	0	2	6	8	12	14	16	17	17.6	18	SQ	0	183	316	365	448	483	517	674	2224	4564					
S84u	STOR	SV	0	3	13								SE	0	2	4								SQ	0	30	3000												
S24s	STOR	SV	0	5.1	14								SE	0	2	4																			SS	2	100	2.7	1.5
S24t	STOR	SV	0	13	30.6	53.6							SE	0	4	8	12							SQ	0	25	90	6594											
S04s	STOR	SV	0	0.5	2	6							SE	0	4	8	12							SL	0.5	0.785	0.62	0.5							SS	8	60	2.7	1.5
S08s	STOR	SV	0	1	3	6	12	20	28	38			SE	0	2	4	6	8	10	12	14			SL	0.5	3.14	0.62	0.5							SS	12	200	2.7	1.5
S12s	STOR	SV	0	1.2	3	6	10	15					SE	0	2	4	6	8	10					SL	0.5	0.785	0.62	0.5							SS	8	150	2.7	1.5
S16q	STOR	SV	0	0.5	2	3	9	20	35	58			SE	0	2	4	6	10	14	18	22															SS	18	100	2.7	1.5
S16s	STOR	SV	0	2.4	7	12.7	19.2	26.5					SE	0	2	4	6	8	10																	SS	8	300	2.7	1.5
S20p1	STOR	SV	0	0.1	0.6	2	4						SE	0	2	4	6	8																		SS	6	100	2.7	1.5
S20p2	STOR	SV	0	1.4	4.1	9.6	20.7	42.7	79.4				SE	0	2	4	6	8	10	12				SL	1.5	7.065	0.62	0.5							SS	10	200	2.7	1.5
S20s	STOR	SV	0	0.9	3	8							SE	0	2	4	7																		SS	4	60	2.7	1.5
S20t	STOR	SV	0	20.7	50.1	88.4	156.1	249.1					SE	0	2	4	6	8	10																	SS	8	600	2.7	1.5

APPENDIX A15

Cumulative Area Computation Data

Appendix A15 Cumulative Area Computation Data

When hydrographs generated from diversions are combined, HEC-1 requires a drainage area specified on the HC card. This area is used to compute an interpolated hydrograph for the "combined hydrograph" with the data given in the JD card which is used to compute the aerial reduction factor based on the area experiencing rainfall at any given time. The cumulative combined areas have been computed for each combine node based on the total area of all the sub-basins located upstream of the combine node. The drainage area specified for each of the combine nodes represents the maximum drainage area that may contribute flow to the combine node. It is recognized that a combine node may only receive a fraction or none of the runoff hydrograph from some of the upstream sub-basins.

Since the project area has multiple outfalls, the entire watershed is divided into six (6) relatively independent sub-watersheds by arterial streets, storm drains, freeways, channel/canal systems, and railroads. The area carried to the downstream sub-watershed is proportional to the 100-year peak flow to the downstream sub-watershed. These six (6) sub-watersheds are: 1) north-central Phoenix; 2) north-east Phoenix; 3) OCCC-SR153; 4) Airport; 5) Cave Creek; and 6) Durango ADMP. The Phoenix downtown area is part of the Cave Creek sub-watershed for surface flow; but it is relatively independent in terms of sub-surface flow (storm drains).

The north-central Phoenix sub-watershed is bounded by the ACDC on the north, 19th Avenue from ACDC to Grand Canal and 15th Avenue from Grand Canal to I-10 on the west, I-10 on the south, and SR-51 on the east. The north-east Phoenix sub-watershed is bounded by the ACDC on the north, SR-51 on the west, SR-202L on the south, and the OCCC alignment on the east.

The OCCC-SR-153 sub-watershed is bounded by the OCCC and SR-153 on the west, McDowell Road on the north, the Salt River on the south, and the ridgeline in the Papago Buttes on the east. The airport sub-watershed is bounded by the SR-202L on the north, I-10 on the west, SPRR on the south, and SR-153 on the east.

The Cave Creek sub-watershed is bounded by the ACDC from I-17 to 19th Avenue and I-10 from 15th Avenue to I-10/SR-51 traffic interchange on the north, I-17 from ACDC to 15th Avenue and 15th Avenue from I-17 to the Salt River on the west, the Salt River on the south, and 19th Avenue from ACDC to Grand Canal and 15th Avenue from Grand Canal to I-10, and I-10 north-south

segment and 20th Street on the east. The Durango ADMP sub-watershed is the area west and south of I-17 at the Durango curve within the study watershed.

The areas taken to the downstream sub-watersheds are as follows:

North-east Phoenix sub-watershed to north-central Phoenix sub-watershed: D52kW = 0.5 square miles, and D52mW = 0.2 square miles;

North-east Phoenix sub-watershed to Phoenix Airport sub-watershed: P28pS = 0.5 square miles, P36pS = 0.3 square miles, and P44pS = 0.3 square miles;

North-central Phoenix sub-watershed to Cave Creek sub-watershed: CC76k = 1.0 square mile, and P72oS = 1.0 square mile;

Cave Creek sub-watershed to Durango Curve sub-watershed through I-17: R80uW = 8.0 square miles.

The areas for the input hydrographs are: ARC40 = 0.1 square miles, P84tN = 0.5 square miles, P92uN = 0.2 square miles, and OCCC48 = 3.0 square miles.

The six (6) sub-watersheds are shown in Exhibit E, and the cumulative area computation spreadsheet is included here.

Combined Area for HC Cards

Order	HG Name	Area (sq. mi.)
1	C68c	0.70
2	C72c	1.24
3	C76c	1.84
4	C80c	1.13
5	C76cp	2.97
6	C60e	0.58
7	C64e	1.35
8	C68cS	0.70
9	C68e	2.28
10	C72cS	1.24
11	C72e	3.32
12	C76e	4.42
13	C84e	0.68
14	C80e	1.84
15	C76eP	6.26
16	C76g	4.92
17	C76gE	4.92
18	C56g	0.92
19	C60eS	0.58
20	C60g	1.83
21	C64g	3.10
22	C68eS	2.28
23	C68g	4.53
24	C72eS	3.32
25	C72g	6.07
26	CC72g	7.67
27	C72gS	7.67
28	C84g	0.90
29	C80g	2.55
30	C76gP	7.47
31	C76i	5.42
32	C72i	8.68
33	CC76i	5.92
34	C84i	1.11
35	C80i	3.25
36	C76iP	9.18
37	C76k	5.74
38	C54i	0.44
39	C56gS	0.92
40	C56i	1.62
41	C60gS	1.83
42	C60i	3.02
43	C64gS	3.10
44	C64i	4.79
45	C68gS	4.53
46	C68i	6.72
47	CC72i	8.68
48	CC68i	10.87
49	C68iS	10.87
50	C40i	0.56
51	C44i	1.18
52	C48i	1.72

	53	C48iW	1.72	
	54	C52i	2.29	
	55	CC52i	2.29	
	56	C52iS	2.29	
	57	C28k	0.72	
	58	C32k	1.23	
	59	C36iS	0.34	
	60	C36k	2.07	
	61	C40k	2.80	
	62	C44iS	1.18	
	63	C44k	3.93	
	64	C48k	4.96	
	65	C52k	5.83	
	66	C54iS	0.44	
	67	C54k	1.18	
	68	C56iS	1.62	
	69	C56k	2.78	
	70	C60iS	3.02	
	71	C60k	3.29	
	72	CC56k	4.46	
	73	CC60k	4.46	
	74	C64k	6.43	
	75	CC64k	6.43	
	76	C68k	12.71	
	77	C72iS	8.68	
	78	C72k	12.99	
	79	CC72k	12.99	
	80	CC76k	13.31	
	81	C80k	3.68	
	82	CC80k	4.68	
	83	CCC80k	4.68	
	84	C84k	4.99	
	85	C84m	5.20	
	86	CC84m	5.49	
	87	C80m	6.03	
	88	C76kP	17.25	
	89	C76kS	4.68	
	90	C76l	4.86	
	91	C76lS	4.86	
	92	C76m	6.71	
	93	C72kS	12.99	
	94	C72l	13.21	
	95	C72lS	13.21	
	96	C72m	13.67	
	97	C60kS	4.46	
	98	C60l	4.69	
	99	C64l	6.96	
	100	CC64l	6.96	
	101	C68kS	12.71	
	102	C68l	13.56	
	103	C68lS	13.56	
	104	C24m	0.69	
	105	C28kS	0.72	
	106	C28m	1.73	
	107	C32kS	1.23	
	108	C32m	2.75	
	109	C36kS	2.07	

	110	C36m	4.11	
	111	C40kS	2.80	
	112	C40m	5.35	
	113	C44kS	3.93	
	114	C44m	6.98	
	115	C24o	1.20	
	116	C28mS	1.73	
	117	C28o	2.73	
	118	C32mS	2.75	
	119	C32o	4.25	
	120	C36mS	4.11	
	121	C36o	6.12	
	122	C40mS	5.35	
	123	C40o	7.82	
	124	C44mS	6.98	
	125	C44o	9.68	
	126	C44mW	9.68	
	127	C48m	11.19	
	128	C52kS	5.83	
	129	C52m	6.01	
	130	CC52m	12.24	
	131	C54kS	1.18	
	132	C54m	1.66	
	133	C56kS	4.46	
	134	C56m	5.50	
	135	C60lS	4.69	
	136	C60m	6.24	
	137	C64lS	6.96	
	138	C64m	9.55	
	139	C68m	16.15	
	140	CC72m	17.12	
	141	C72mS	17.12	
	142	C28oS	2.73	
	143	C28p	2.73	
	144	CC28p	3.11	
	145	C32p	4.49	
	146	CC32p	4.86	
	147	C32pW	4.86	
	148	C28q	0.82	
	149	C32q	0.99	
	150	C32pqW	4.86	
	151	C36p	6.91	
	152	CC36p	6.91	
	153	C36pW	6.91	
	154	C40oS	7.82	
	155	C40p	8.83	
	156	C40pW	8.83	
	157	C44oS	9.68	
	158	C44p	11.10	
	159	C44pW	11.10	
	160	C52mS	12.24	
	161	C48o	14.34	
	162	CC48o	14.34	
	163	C54mS	1.66	
	164	C52oW	2.30	
	165	C52o	2.30	
	166	C56mS	5.50	

	167	C56o	6.79	
	168	C56oW	6.79	
	169	C60mS	6.24	
	170	C60o	8.16	
	171	C64mS	9.55	
	172	C64o	12.13	
	173	C68mS	16.15	
	174	C68o	16.84	
	175	C72o	17.78	
	176	CPT68o	18.47	
	177	C-WT	21.04	
	178	C36q	1.56	
	179	C40q	1.91	
	180	C40qW	1.91	
	181	C44q	2.57	
	182	C48q	2.87	
	183	C52q	0.39	
	184	C56q	0.75	
	185	C60q	1.10	
	186	C64q	1.51	
	187	C64qW	1.51	
	188	C68q	1.80	
	189	C68qW	1.80	
	190	C72q	3.13	
	191	C84mS	5.49	
	192	C80o	6.58	
	193	CC80o	6.58	
	194	C76mS	6.71	
	195	C76o	7.92	
	196	C76oS	7.92	
	197	C76q	11.45	
	198	C80p	8.32	
	199	CC80p	8.32	
	200	C80pS	8.32	
	201	C80q	12.34	
	202	C28qS	0.82	
	203	C28s	0.98	
	204	C32s	1.32	
	205	C32sW	1.32	
	206	C36qS	1.56	
	207	C36s	2.30	
	208	C40s	2.89	
	209	C40sW	2.89	
	210	C44qS	2.57	
	211	C44s	3.79	
	212	C48s	4.31	
	213	C52qS	0.39	
	214	C52s	0.66	
	215	C56qS	0.75	
	216	C56s	1.27	
	217	C60qS	1.10	
	218	C60s	1.87	
	219	C60sW	1.87	
	220	C64s	2.54	
	221	C68s	3.07	
	222	C72qS	3.13	
	223	C72s	4.68	

	224	C76qs	11.45	
	225	C76s	13.28	
	226	CC80q	14.17	
	227	C80qS	14.17	
	228	C52t	0.96	
	229	C56sS	1.27	
	230	C56t	1.74	
	231	C60t	2.68	
	232	C64sS	2.54	
	233	C64t	3.61	
	234	C68sS	3.07	
	235	C68t	4.39	
	236	C72sS	4.68	
	237	C72t	6.23	
	238	C76sS	13.28	
	239	C76t	15.10	
	240	C80t	16.24	
	241	C52u	1.35	
	242	CC52u	1.35	
	243	C56u	2.46	
	244	CC56u	2.46	
	245	C60u	3.68	
	246	C64tS	3.61	
	247	C64u	4.91	
	248	C68tS	4.39	
	249	C68u	5.97	
	250	C72u	6.23	
	251	C72tS	6.23	
	252	CC72u	8.06	
	253	C76tS	15.10	
	254	C76u	17.22	
	255	C80u	18.61	
	256	CC80u	18.61	
	257	C84t	0.77	
	258	C84u	9.04	
	259	CC84u	9.04	
	260	C88t	1.03	
	261	C88u	9.55	
	262	C88uW	9.55	
	263	C92t	1.21	
	264	C92u	10.17	
	265	C92uS	10.17	
	266	C76uS	17.22	
	267	C76v	8.24	
	268	C80v	8.23	
	269	C84v	8.73	
	270	C84uS	9.04	
	271	CC84v	9.76	
	272	C88v	10.52	
	273	C92v	11.30	
	274	C88w	11.90	
	275	C44v	4.03	
	276	CPT48q	16.11	
	277	CPT48s	17.54	
	278	C48v	17.84	
	279	NUL48v	18.08	
	280	C52uS	1.35	

	281	C52v	1.64	
	282	NUL52v	19.72	
	283	C56uS	2.46	
	284	C56v	2.69	
	285	NUL56v	21.07	
	286	C60uS	3.68	
	287	C60v	3.91	
	288	NUL60v	22.51	
	289	CPT64q	22.55	
	290	CPT64s	23.58	
	291	CPT64t	24.65	
	292	CPT64u	25.95	
	293	C64uS	4.91	
	294	C64v	26.15	
	295	NUL64v	44.28	
	296	C68uS	5.97	
	297	C68v	6.19	
	298	NUL68v	45.56	
	299	C72uS	8.06	
	300	C72v	8.47	
	301	NUL72v	47.06	
	302	C76vS	8.24	
	303	C76w	8.57	
	304	NUL76w	56.10	
	305	C80w	8.59	
	306	NUL80w	58.09	
	307	C84vS	9.76	
	308	C84w	10.10	
	309	NUL84w	59.72	
	310	NUL88w	61.86	
	311	C24s	0.20	
	312	C24sS	0.20	
	313	C24t	0.46	
	314	C08s	1.37	
	315	C12s	0.61	
	316	C12sW	1.97	
	317	C16q	0.86	
	318	C16s	3.26	
	319	CC16s	3.26	
	320	C16sS	3.26	
	321	C20p	1.39	
	322	C24oS	3.00	
	323	CC20p	4.39	
	324	C20q	4.67	
	325	C20s	5.15	
	326	CC20s	5.35	
	327	C20t	8.01	
	328	NUL20t	8.27	

APPENDIX A16

Input and Output Hydrograph Data (QI)

Appendix A16 Input and Output Hydrograph Data

The OCCC and Arcadia Area

In 1993, the FCDMC revised the previous hydrology for the Arcadia watershed and the OCCC watershed to reflect the channel improvements and to update the model to the current FCDMC's methodology. Hydrographs for the OCCC and Arcadia areas from this updated model have been input to the HEC-1 models of the Metro ADMS/P at McDowell Road and 48th Street (OCCC48), and Camelback Road and 40th Street (ARC40) as follows:

```
KK ARC40  INFLOW
KM Inflow from Arcadia area from 40th Street through storm drain system.
KM Maximum flow 47 cfs.
IN    60
BA   0.1
QI   0.0     0.1     0.2     0.5       1       1       1       1       1       1
QI     1       1       2      47      16       5       2       1       1       1
QI     1       1     0.5     0.1     0.0
```

```
KKOCCC48  INFLOW
KM Inflow from OCCC area at 48th Street and McDowell Rd.
KM Maximum flow 5420 cfs
IN    60
BA   3.0
QI     0      10      50     100     200     350     500     650     800     900
QI  1114    1149    1258    5420    2461    1288    1038     900     700     500
QI   300     200     100       5     0.1
```

The hydrograph of OCCC48 for other frequencies were estimated by using ratios to the 100-year flow.

Durango ADMP Area

The lower portion of the Cave Creek floodplain (west of I-17) passes through the Durango area. This area has been recently studied with the Durango ADMP prepared by Dibble & Associates (September 2001, revised April 2003). The Durango area is included in the study boundaries because the re-study of Cave Creek floodplain delineations is part of the scope of the Metro ADMS/P and the existing Cave Creek floodplain passes through it. The hydrologic model developed for the Durango ADMP is based on current FCDMC's procedures. A hydrograph from the Metro ADMS/P model has been input to the Durango ADMP hydrologic model at Lower Buckeye Road and 35th Avenue (D92v) in order to develop a complete model of the

existing conditions, 100-year flood on Cave Creek from the Grand Canal, downstream to the Salt River.

```
KK  D92v  INFLOW
KM Inflow from area east of 35th Avenue
KM Maximum flow 1702.
IN    60
BA   5.3
QI   0.0     0.1     0.2     0.5       1       1       1       1       1       1
QI     1       1      10     676     438    1702     741      83      10       1
QI     1       1     0.5     0.1     0.0
```

Two storm drains were modeled along 27th and 35th Avenues and they were assumed to be full into the study area. Their input hydrographs are shown below:

```
KK P84tN  INFLOW
KM Inflow from storm drain north of SPRR along 27th Avenue.
KM Maximum flow 252 cfs.
IN    60
BA   0.5
QI     0       1       2       3       4       4       5       5       6       6
QI     8      10      17     252      74      21       9       7       6       5
QI     5       4       1     0.5     0.1
```

```
KK P92uN  INFLOW
KM Inflow from storm drain north of Durango Street along 35th Avenue.
KM Maximum flow 141 cfs.
IN    60
BA   2.5
QI   0.0       1       2       3       3       4       4       5       5       5
QI     7       9      30     141      69      27       8       6       5       5
QI     4       3       2     0.5     0.0
```

	QI Cards of OCCC48 Hydrograph for All Frequencies					
Hydrograph	Q100	Q50	Q25	Q10	Q5	Q2
Name						
(Ratio to Q100)	1.00	0.85	0.65	0.46	0.30	0.18
	0	0	0	0	0	0
	10	9	7	5	3	2
	50	43	33	23	15	9
	100	85	65	46	30	18
	200	170	130	92	60	36
	350	298	228	161	105	63
	500	425	325	230	150	90
	650	553	423	299	195	117
	800	680	520	368	240	144
	900	765	585	414	270	162
	1114	947	724	512	334	201
	1149	977	747	529	345	207
	1258	1069	818	579	377	226
	5420	4607	3523	2493	1626	976
	2461	2092	1600	1132	738	443
	1288	1095	837	592	386	232
	1038	882	675	477	311	187
	900	765	585	414	270	162
	700	595	455	322	210	126
	500	425	325	230	150	90
	300	255	195	138	90	54
	200	170	130	92	60	36
	100	85	65	46	30	18
	5	4	3	2	2	1
	0.1	0	0	0	0	0

Name	area (sq-mi)	C84t	C88t	C92t	C68c	C72c	C76c	C80c	C76cp	C60e	C64e	C68cS	C68e	C72cS	C72e	C76e	C84e	C80e	C76eP	C84g	C80g	C76g	C76gP	C76gE	C56g	C60eS	C60g	C64g	C68eS	C68g
64c	0.264	0.000	0.000	0.000	1 0.264	1 0.264	1 0.264	0.000	1 0.264	0.000	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	0.000	0.000	1 0.264	0.000	0.000	1 0.264	1 0.264	1 0.264	0.000	0.000	0.000	1 0.264	1 0.264	1 0.264
68c	0.434	0.000	0.000	0.000	1 0.434	1 0.434	1 0.434	0.000	1 0.434	0.000	0.000	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	0.000	0.000	1 0.434	0.000	0.000	1 0.434	1 0.434	1 0.434	0.000	0.000	0.000	0.000	1 0.434	1 0.434
72c	0.542	0.000	0.000	0.000	0.000	1 0.542	1 0.542	0.000	1 0.542	0.000	0.000	0.000	0.000	1 0.542	1 0.542	1 0.542	0.000	0.000	1 0.542	0.000	0.000	1 0.542	1 0.542	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000
76c	0.602	0.000	0.000	0.000	0.000	0.000	1 0.602	0.000	1 0.602	0.000	0.000	0.000	0.000	0.000	0.000	1 0.602	0.000	0.000	1 0.602	0.000	0.000	1 0.602	1 0.602	1 0.602	0.000	0.000	0.000	0.000	0.000	0.000
80c	0.661	0.000	0.000	0.000	0.000	0.000	0.000	1 0.661	1 0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.661	1 0.661	0.000	1 0.661	0.000	1 0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84c	0.467	0.000	0.000	0.000	0.000	0.000	0.000	1 0.467	1 0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.467	1 0.467	1 0.467	1 0.467	1 0.467	0.000	1 0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56e	0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.176	1 0.176	0.000	1 0.176	0.000	1 0.176	1 0.176	0.000	0.000	1 0.176	0.000	0.000	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176
60e	0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.406	1 0.406	0.000	1 0.406	0.000	1 0.406	1 0.406	0.000	0.000	1 0.406	0.000	0.000	1 0.406	1 0.406	1 0.406	0.000	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406
64e	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000	1 0.502	0.000	1 0.502	1 0.502	0.000	0.000	1 0.502	0.000	0.000	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502
68e	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	0.000	1 0.496	1 0.496	0.000	0.000	1 0.496	0.000	0.000	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000	0.000	1 0.496	1 0.496
72e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	0.000	0.000	1 0.499	0.000	0.000	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000
76e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	0.000	0.000	1 0.499	0.000	0.000	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000
80e	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	1 0.494	0.000	1 0.494	0.000	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84e	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	0.000	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52g	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54g	0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.247	0.000	1 0.247	1 0.247	0.000	1 0.247
56g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	1 0.500	1 0.500	0.000	1 0.500
60g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	1 0.500
64g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000	1 0.502
68g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502
72g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76g	0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.501	1 0.501	1 0.501	0.000	0.000	0.000	0.000	0.000	0.000
80g	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	0.000	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84g	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	0.000	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36i	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40i	0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42i	0.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44i	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48i	0.535	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52i	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54i	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72i	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80i	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84i	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24k	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ARC40	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28k	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32k	0.506	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36k	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40k	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44k	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48k	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52k	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52kW	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54k	0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56k	0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60k	0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64k	0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68k	0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72k	0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76k	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CC76k	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80k	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84k	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60l	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64l	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68l	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72l	0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76l	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24m	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28m	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C84t	C88t	C92t	C68c	C72c	C76c	C80c	C76cp	C60e	C64e	C68cS	C68e	C72cS	C72e	C76e	C84e	C80e	C76eP	C84g	C80g	C76g	C76gP	C76gE	C56g	C60eS	C60g	C64g	C68eS	C68g
36m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40m	0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44m	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48m	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52m	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52mW	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54m	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56m	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68m	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72m	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76m	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80m	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84m	0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
I17	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16o	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24o	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40o	0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44o	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48o	0.676	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52o	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56o	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60o	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64o	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68o	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72o	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76o	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80o	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20p	0.532	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28p	0.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32p	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36p	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40p	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44p	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80p	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08q	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12q	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16q	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20q	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28q	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32q	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36q	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40q	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44q	0.359	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48q	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52q	0.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56q	0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60q	0.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64q	0.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68q	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72q	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76q	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80q	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04s	0.278	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08s	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12s	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16s	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20s	0.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24s	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28s	0.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32s	0.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36s	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40s	0.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44s	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C84t	C88t	C92t	C68c	C72c	C76c	C80c	C76cp	C60e	C64e	C68cS	C68e	C72cS	C72e	C76e	C84e	C80e	C76eP	C84g	C80g	C76g	C76gP	C76gE	C56g	C60eS	C60g	C64g	C68eS	C68g
48s	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52s	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56s	0.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60s	0.253	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64s	0.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68s	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72s	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76s	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20t	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24t	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52t	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56t	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60t	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64t	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68t	0.251	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72t	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76t	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80t	0.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P84tN	0.500 1	0.500 1	0.500 1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84t	0.273 1	0.273 1	0.273 1	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88t	0.259	0.000 1	0.259 1	0.259	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92t	0.175	0.000	0.000 1	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52u	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56u	0.326	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60u	0.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64u	0.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68u	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72u	0.257	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76u	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84u	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88u	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44v	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48v	0.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52v	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60v	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64v	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68v	0.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72v	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76v	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84v	0.254	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88v	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92v	0.159	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76w	0.334	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80w	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84w	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88w	0.599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Area =		0.773	1.032	1.207	0.698	1.240	1.842	1.128	2.970	0.582	1.348	0.698	2.278	1.240	3.319	4.420	0.681	1.836	6.256	0.895	2.546	4.921	7.467	4.921	0.923	0.582	1.829	3.097	2.278	4.529
Total No. =		2	3	4	2	3	4	2	6	2	4	2	6	3	8	10	2	4	14	3	6	11	17	11	3	2	5	8	6	11

Name	area (sq-mi)	C72eS	C72g	CC72g	C72gS	C54i	C56gS	C56i	C60gS	C60i	C64gS	C64i	C68gS	C68i	CC68i	C72i	CC72i	C84i	C80i	C76i	CC76i	C76iP	C40i	C44i	C48i	C48iW	C52i	CC52i	C52iS	C28k
64c	0.264	1 0.264	1 0.264	1 0.264	1 0.264	0.000	0.000	0.000	0.000	0.000	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	0.000	0.000	1 0.264	1 0.264	1 0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68c	0.434	1 0.434	1 0.434	1 0.434	1 0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	0.000	0.000	1 0.434	1 0.434	1 0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72c	0.542	1 0.542	1 0.542	1 0.542	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.542	1 0.542	1 0.542	0.000	0.000	1 0.542	1 0.542	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76c	0.602	0.000	0.000	1 0.602	1 0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.602	1 0.602	1 0.602	0.000	0.000	1 0.602	1 0.602	1 0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80c	0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.661	0.000	0.000	1 0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84c	0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.467	1 0.467	0.000	0.000	1 0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56e	0.176	1 0.176	1 0.176	1 0.176	1 0.176	0.000	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	0.000	0.000	1 0.176	1 0.176	1 0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60e	0.406	1 0.406	1 0.406	1 0.406	1 0.406	0.000	0.000	0.000	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	0.000	0.000	1 0.406	1 0.406	1 0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64e	0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68e	0.496	1 0.496	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	0.000	0.000	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72e	0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	1 0.499	0.000	0.000	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76e	0.499	0.000	0.000	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	1 0.499	0.000	0.000	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80e	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	0.000	0.000	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84e	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	0.000	0.000	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52g	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.265	1 0.265	1 0.265	0.000
54g	0.247	0.000	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56g	0.500	0.000	1 0.500	1 0.500	1 0.500	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60g	0.500	0.000	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64g	0.502	0.000	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68g	0.502	0.000	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72g	0.500	0.000	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76g	0.501	0.000	0.000	1 0.501	1 0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.501	1 0.501	1 0.501	1 0.501	0.000	0.000	1 0.501	1 0.501	1 0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80g	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	0.000	0.000	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84g	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	0.000	0.000	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36i	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	0.000
40i	0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	0.000
42i	0.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	0.000
44i	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	0.000
48i	0.535	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.535	1 0.535	1 0.535	1 0.535	1 0.535	1 0.535	0.000
52i	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.309	1 0.309	1 0.309	1 0.309	0.000
54i	0.192	0.000	0.000	0.000	0.000 1	0.192	0.000 1	0.192	0.000 1	0.192	0.000 1	0.192	0.000 1	0.192	0.000 1	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56i	0.500	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500	0.000 1	0.500	0.000 1	0.500	0.000 1	0.500	0.000 1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500	0.000 1	0.500	0.000 1	0.500	0.000 1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.499	0.000 1	0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72i	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.504 1	0.504	1 0.504	0.000	0.000	0.000 1	0.504 1	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.499 1	0.499	1 0.499	0.000	0.000	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80i	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.494	0.000	0.000 1	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84i	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.211 1	0.211	0.000	0.000 1	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24k	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.192 1
ARC40	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.100 1
28k	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.428 1
32k	0.506	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1
36k	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40k	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44k	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48k	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52k	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52kW	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54k	0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56k	0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60k	0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64k	0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68k	0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72k	0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76k	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CC76k	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80k	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84k	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60l	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64l	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68l	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72l	0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76l	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24m	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28m	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C72eS	C72g	CC72g	C72gS	C54i	C56gS	C56i	C60gS	C60i	C64gS	C64i	C68gS	C68i	CC68i	C72i	CC72i	C84i	C80i	C76i	CC76i	C76iP	C40i	C44i	C48i	C48iW	C52i	CC52i	C52iS	C28k
36m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40m	0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44m	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48m	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52m	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52mW	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54m	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56m	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68m	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72m	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76m	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80m	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84m	0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
I17	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16o	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24o	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40o	0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44o	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48o	0.676	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52o	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56o	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60o	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64o	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68o	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72o	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76o	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80o	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20p	0.532	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28p	0.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32p	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36p	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40p	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44p	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80p	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08q	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12q	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16q	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20q	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28q	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32q	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36q	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40q	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44q	0.359	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48q	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52q	0.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56q	0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60q	0.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64q	0.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68q	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72q	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76q	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80q	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04s	0.278	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08s	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12s	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16s	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20s	0.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24s	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28s	0.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32s	0.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36s	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40s	0.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44s	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C72eS	C72g	CC72g	C72gS	C54i	C56gS	C56i	C60gS	C60i	C64gS	C64i	C68gS	C68i	CC68i	C72i	CC72i	C84i	C80i	C76i	CC76i	C76iP	C40i	C44i	C48i	C48iW	C52i	CC52i	C52iS	C28k
48s	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52s	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
6s	0.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60s	0.253	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64s	0.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68s	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72s	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76s	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20t	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24t	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52t	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56t	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60t	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64t	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68t	0.251	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72t	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76t	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80t	0.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P84tN	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84t	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88t	0.259	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92t	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52u	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56u	0.326	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60u	0.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64u	0.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68u	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72u	0.257	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76u	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84u	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88u	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44v	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48v	0.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52v	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60v	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64v	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68v	0.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72v	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76v	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84v	0.254	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88v	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92v	0.159	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76w	0.334	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80w	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84w	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88w	0.599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Area =		3.319	6.070	7.672	7.672	0.439	0.923	1.615	1.829	3.021	3.097	4.788	4.529	6.720	10.866	8.675	8.675	1.106	3.251	5.420	5.924	9.175	0.563	1.181	1.716	1.716	2.290	2.290	2.290	0.720
Total No. =		8	14	17	17	2	3	5	5	8	8	12	11	16	24	19	19	4	8	12	13	21	2	4	5	5	7	7	7	3	4

Name	area (sq-mi)	C32k	C36iS	C36k	C40k	C44iS	C44k	C48k	C52k	C54iS	C54k	C56iS	C56k	C60iS	C60k	CC56k	CC60k	C64k	CC64k	C68iS	C68k	C72k	C72iS	CC72k	C76k	CC76k	C76kP	C80k	CC80k	CCC80k
64c	0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	0.000	0.000	0.000
68c	0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	0.000	0.000	0.000
72c	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.542	1 0.542	1 0.542	1 0.542	1 0.542	1 0.542	1 0.542	1 0.542	0.000	0.000	0.000
76c	0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.602	1 0.602	1 0.602	1 0.602	1 0.602	1 0.602	1 0.602	1 0.602	0.000	0.000	0.000
80c	0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.661	1 0.661	1 0.661	1 0.661
84c	0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.467	1 0.467	1 0.467	1 0.467
56e	0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.176 1	0.000	0.000	0.000
60e	0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.406 1	0.000	0.000	0.000
64e	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000
68e	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000
72e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000
76e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000
80e	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	1 0.494
84e	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	1 0.214
52g	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.265	0.000	0.000	0.000
54g	0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.247 1	0.000	0.000	0.000
56g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.000	0.000	0.000
60g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.000	0.000	0.000
64g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000
68g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000
72g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000
76g	0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.501	1 0.501	1 0.501	1 0.501	1 0.501	1 0.501	1 0.501	1 0.501	0.000	0.000	0.000
80g	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	1 0.496	1 0.496	1 0.496
84g	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	1 0.214
36i	0.339	0.000 1	0.339 1	0.339 1	0.339 1	0.339 1	0.339 1	0.339 1	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40i	0.224	0.000	0.000	0.000 1	0.224 1	0.224 1	0.224 1	0.224 1	0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42i	0.269	0.000	0.000	0.000	0.000 1	0.269 1	0.269 1	0.269 1	0.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44i	0.349	0.000	0.000	0.000	0.000 1	0.349 1	0.349 1	0.349 1	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48i	0.535	0.000	0.000	0.000	0.000	0.000	0.000 1	0.535 1	0.535	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52i	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54i	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192 1	0.192	0.000 1	0.192	0.000 1	0.192 1	0.192	0.000	0.000	0.000
56i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500	0.000 1	0.500	0.000 1	0.500 1	0.500	0.000	0.000	0.000
60i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500 1	0.500	0.000 1	0.500	0.000 1	0.500 1	0.500	0.000	0.000	0.000
64i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.499 1	0.499 1	0.499 1	0.499	0.000 1	0.499	0.000 1	0.499 1	0.499	0.000	0.000	0.000
68i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	0.000 1	0.500	0.000 1	0.500 1	0.500	0.000	0.000	0.000
72i	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000	0.000
76i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000
80i	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	1 0.494
84i	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.211	1 0.211	1 0.211	1 0.211
24k	0.192	0.192	0.000 1	0.192 1	0.192	0.000 1	0.192 1	0.192 1	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ARC40	0.100	0.100	0.000 1	0.100 1	0.100	0.000 1	0.100 1	0.100 1	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28k	0.428	0.428	0.000 1	0.428 1	0.428	0.000 1	0.428 1	0.428 1	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32k	0.506	0.506	0.000 1	0.506 1	0.506	0.000 1	0.506 1	0.506 1	0.506	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36k	0.508	0.000	0.000 1	0.508 1	0.508	0.000 1	0.508 1	0.508 1	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40k	0.504	0.000	0.000	0.000 1	0.504	0.000 1	0.504 1	0.504 1	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44k	0.508	0.000	0.000	0.000	0.000	0.000 1	0.508 1	0.508 1	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48k	0.500	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500 1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52k	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52kW	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500	0.000 1	0.500	0.000	0.000 1	0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000 1	0.500	1 0.500	0.000 1	0.500 1	0.500	0.000	0.000	0.000
54k	0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.245	0.000 1	0.245	0.000	0.000 1	0.245	1 0.245	1 0.245	1 0.245	1 0.245	0.000 1	0.245	1 0.245	0.000 1	0.245 1	0.245	0.000	0.000	0.000
56k	0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.423	0.000	0.000 1	0.423	1 0.423	1 0.423	1 0.423	1 0.423	0.000 1	0.423	1 0.423	0.000 1	0.423 1	0.423	0.000	0.000	0.000
60k	0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.266 1	0.266 1	0.266 1	0.266 1	0.266 1	0.266	0.000 1	0.266	1 0.266	0.000 1	0.266 1	0.266	0.000	0.000	0.000
64k	0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.206 1	0.206 1	0.206	0.206 1	0.206	0.000 1	0.206	0.000 1	0.206 1	0.206	0.000	0.000	0.000
68k	0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.204 1	0.204	0.000 1	0.204	0.000 1	0.204 1	0.204	0.000	0.000
72k	0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.281	0.000 1	0.281	0.000 1	0.281 1	0.281	0.000	0.000
76k	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.317 1	0.317 1	0.317	0.000	0.000
CC76k	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	1.000 1	1.000 1
80k	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.428 1	0.428 1	0.428 1
84k	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1
60l	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64l	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68l	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72l	0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76l	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24m	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28m	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C32k	C36iS	C36k	C40k	C44iS	C44k	C48k	C52k	C54iS	C54k	C56iS	C56k	C60iS	C60k	CC56k	CC60k	C64k	CC64k	C68iS	C68k	C72k	C72iS	CC72k	C76k	CC76k	C76kP	C80k	CC80k	CCC80k
36m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40m	0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44m	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48m	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52m	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52mW	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54m	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56m	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68m	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72m	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76m	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80m	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84m	0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
I17	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16o	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24o	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40o	0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44o	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48o	0.676	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52o	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56o	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60o	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64o	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68o	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72o	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76o	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80o	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20p	0.532	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28p	0.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32p	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36p	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40p	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44p	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80p	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08q	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12q	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16q	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20q	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28q	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32q	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36q	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40q	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44q	0.359	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48q	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52q	0.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56q	0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60q	0.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64q	0.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68q	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72q	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76q	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80q	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04s	0.278	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08s	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12s	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16s	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20s	0.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24s	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28s	0.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32s	0.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36s	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40s	0.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44s	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C32k	C36iS	C36k	C40k	C44iS	C44k	C48k	C52k	C54iS	C54k	C56iS	C56k	C60iS	C60k	CC56k	CC60k	C64k	CC64k	C68iS	C68k	C72k	C72iS	CC72k	C76k	CC76k	C76kP	C80k	CC80k	CCC80k
48s	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52s	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56s	0.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60s	0.253	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64s	0.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68s	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72s	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76s	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20t	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24t	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52t	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56t	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60t	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64t	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68t	0.251	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72t	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76t	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80t	0.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P84tN	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84t	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88t	0.259	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92t	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52u	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56u	0.326	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60u	0.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64u	0.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68u	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72u	0.257	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76u	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84u	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88u	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44v	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48v	0.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52v	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60v	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64v	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68v	0.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72v	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76v	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84v	0.254	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88v	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92v	0.159	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76w	0.334	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80w	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84w	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88w	0.599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Area =		1.226	0.339	2.073	2.801	1.181	3.927	4.962	5.831	0.439	1.184	1.615	2.783	3.021	3.287	4.455	4.455	6.428	6.428	10.866	12.710	12.991	8.675	12.991	5.737	13.308	17.252	3.679	4.679	4.679
Total No. =		1	6	8	4	11	13	16	2	4	5	8	8	9	12	12	17	17	24	30	31	19	31	13	32	42	9	10	10	11

Name	area (sq-mi)	C84k		C84m		CC84m		C80m		C76kS		C76l		C76lS		C76m		C72kS		C72l		C72lS		C72m		C60kS		C60l		C64l		CC64l		C68kS		C68l		C68lS		C24m		C28kS		C28m		C32m		C32kS		C36kS
64c	0.264	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.264	1	0.264	1	0.264	1	0.264		0.000		0.000	1	0.264	1	0.264	1	0.264	1	0.264	1	0.264		0.000		0.000		0.000		0.000		0.000		0.000
68c	0.434	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.434	1	0.434	1	0.434	1	0.434		0.000		0.000		0.000		0.000	1	0.434	1	0.434	1	0.434		0.000		0.000		0.000		0.000		0.000		0.000
72c	0.542	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.542	1	0.542	1	0.542	1	0.542		0.000		0.000		0.000		0.000	1	0.542	1	0.542	1	0.542		0.000		0.000		0.000		0.000		0.000		0.000
76c	0.602	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.602	1	0.602	1	0.602	1	0.602		0.000		0.000		0.000		0.000	1	0.602	1	0.602	1	0.602		0.000		0.000		0.000		0.000		0.000		0.000
80c	0.661	0.661	1	0.661	1	0.661	1	0.661	1	0.661	1	0.661	1	0.661	1	0.661		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
84c	0.467	0.467	1	0.467	1	0.467	1	0.467	1	0.467	1	0.467	1	0.467	1	0.467		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
56e	0.176	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.176	1	0.176	1	0.176	1	0.176	1	0.176	1	0.176	1	0.176	1	0.176	1	0.176	1	0.176	1	0.176		0.000		0.000		0.000		0.000		0.000		0.000
60e	0.406	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.406	1	0.406	1	0.406	1	0.406	1	0.406	1	0.406	1	0.406	1	0.406	1	0.406	1	0.406	1	0.406		0.000		0.000		0.000		0.000		0.000		0.000
64e	0.502	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.502	1	0.502	1	0.502	1	0.502		0.000		0.000	1	0.502	1	0.502	1	0.502	1	0.502	1	0.502		0.000		0.000		0.000		0.000		0.000		0.000
68e	0.496	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.496	1	0.496	1	0.496	1	0.496		0.000		0.000		0.000		0.000	1	0.496	1	0.496	1	0.496		0.000		0.000		0.000		0.000		0.000		0.000
72e	0.499	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.499	1	0.499	1	0.499	1	0.499		0.000		0.000		0.000		0.000	1	0.499	1	0.499	1	0.499		0.000		0.000		0.000		0.000		0.000		0.000
76e	0.499	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.499	1	0.499	1	0.499	1	0.499		0.000		0.000		0.000		0.000	1	0.499	1	0.499	1	0.499		0.000		0.000		0.000		0.000		0.000		0.000
80e	0.494	0.494	1	0.494	1	0.494	1	0.494	1	0.494	1	0.494	1	0.494	1	0.494		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
84e	0.214	0.214	1	0.214	1	0.214	1	0.214	1	0.214	1	0.214	1	0.214	1	0.214		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
52g	0.265	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
54g	0.247	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.247	1	0.247	1	0.247	1	0.247	1	0.247	1	0.247	1	0.247	1	0.247	1	0.247	1	0.247	1	0.247		0.000		0.000		0.000		0.000		0.000		0.000
56g	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000
60g	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000
64g	0.502	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.502	1	0.502	1	0.502	1	0.502		0.000		0.000	1	0.502	1	0.502	1	0.502	1	0.502	1	0.502		0.000		0.000		0.000		0.000		0.000		0.000
68g	0.502	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.502	1	0.502	1	0.502	1	0.502		0.000		0.000		0.000		0.000	1	0.502	1	0.502	1	0.502		0.000		0.000		0.000		0.000		0.000		0.000
72g	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000
76g	0.501	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.501	1	0.501	1	0.501	1	0.501		0.000		0.000		0.000		0.000	1	0.501	1	0.501	1	0.501		0.000		0.000		0.000		0.000		0.000		0.000
80g	0.496	0.496	1	0.496	1	0.496	1	0.496	1	0.496	1	0.496	1	0.496	1	0.496		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
84g	0.214	0.214	1	0.214	1	0.214	1	0.214	1	0.214	1	0.214	1	0.214	1	0.214		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
36i	0.339	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.339
40i	0.224	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
42i	0.269	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
44i	0.349	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
48i	0.535	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
52i	0.309	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
54i	0.192	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192		0.000		0.000		0.000		0.000		0.000		0.000
56i	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000
60i	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000
64i	0.499	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.499	1	0.499	1	0.499	1	0.499		0.000		0.000	1	0.499	1	0.499	1	0.499	1	0.499	1	0.499		0.000		0.000		0.000		0.000		0.000		0.000
68i	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000
72i	0.504	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.504	1	0.504	1	0.504	1	0.504		0.000		0.000		0.000		0.000	1	0.504	1	0.504	1	0.504		0.000		0.000		0.000		0.000		0.000		0.000
76i	0.499	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.499	1	0.499	1	0.499	1	0.499		0.000		0.000		0.000		0.000	1	0.499	1	0.499	1	0.499		0.000		0.000		0.000		0.000		0.000		0.000
80i	0.494	0.494	1	0.494	1	0.494	1	0.494	1	0.494	1	0.494	1	0.494	1	0.494		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
84i	0.211	0.211	1	0.211	1	0.211	1	0.211	1	0.211	1	0.211	1	0.211	1	0.211		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
24k	0.192	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.192	1	0.192	1	0.192	1	0.192	1	0.192
ARC40	0.100	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.100	1	0.100	1	0.100	1	0.100
28k	0.428	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.428	1	0.428	1	0.428	1	0.428
32k	0.506	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.506	1	0.506
36k	0.508	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.508
40k	0.504	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
44k	0.508	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
48k	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
52k	0.295	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
D52kW	0.500	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000
54k	0.245	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.245	1	0.245	1	0.245	1	0.245	1	0.245	1	0.245	1	0.245	1	0.245	1	0.245	1	0.245	1	0.245		0.000		0.000		0.000		0.000		0.000		0.000
56k	0.423	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.423	1	0.423	1	0.423	1	0.423	1	0.423	1	0.423	1	0.423	1	0.423	1	0.423	1	0.423	1	0.423		0.000		0.000		0.000		0.000		0.000		0.000
60k	0.266	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.266	1	0.266	1	0.266	1	0.266	1	0.266	1	0.266	1	0.266	1	0.266	1	0.266	1	0.266	1	0.266		0.000		0.000		0.000		0.000		0.000		0.000
64k	0.206	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.206	1	0.206	1	0.206	1	0.206		0.000		0.000	1	0.206	1	0.206	1	0.206	1	0.206	1	0.206		0.000		0.000		0.000		0.000		0.000		0.000
68k	0.204	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.204	1	0.204	1	0.204	1	0.204		0.000		0.000		0.000		0.000	1	0.204	1	0.204	1	0.204		0.000		0.000		0.000		0.000		0.000		0.000
72k	0.281	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.281	1	0.281	1	0.281	1	0.281		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
76k	0.317	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
CC76k	1.000	1.000	1	1.000	1	1.000	1	1.000	1	1.000	1	1.000	1	1.000	1	1.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
80k	0.428	0.428	1	0.428	1	0.428	1	0.428	1	0.428	1	0.428	1	0.428	1	0.428		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
84k	0.311	0.311	1	0.311	1	0.311	1	0.311		0.000		0.000		0.000	1	0.311		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
60l	0.234	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
64l	0.295	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
68l	0.317	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
72l	0.215	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.215	1	0.215	1	0.215		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
76l	0.183	0.000		0.000		0.000		0.000	1	0.183	1	0.183	1	0.183		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
24m	0.502	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.502		0.000	1	0.502	1	0.502		0.000		0.000
28m	0.508	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.508	1	0.508		0.000		0.000
32m	0.514	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.514		0.000		0.000

Name	area	C84k	C84m	CC84m	C80m	C76kS	C76l	C76lS	C76m	C72kS	C72l	C72lS	C72m	C60kS	C60l	C64l	CC64l	C68kS	C68l	C68lS	C24m	C28kS	C28m	C32m	C32kS	C36kS
36m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40m	0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44m	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48m	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52m	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52mW	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54m	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56m	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68m	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72m	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76m	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80m	0.541	0.000	0.000	0.000	1 0.541	0.000	0.000	0.000	1 0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84m	0.209	0.000	1 0.209	1 0.209	1 0.209	0.000	0.000	0.000	1 0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
I17	0.293	0.000	0.000	1 0.293	1 0.293	0.000	0.000	0.000	1 0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16o	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24o	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40o	0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44o	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48o	0.676	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52o	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56o	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60o	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64o	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68o	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72o	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76o	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80o	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20p	0.532	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28p	0.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32p	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36p	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40p	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44p	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80p	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08q	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12q	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16q	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20q	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28q	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32q	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36q	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40q	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44q	0.359	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48q	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52q	0.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56q	0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60q	0.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64q	0.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68q	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72q	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76q	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80q	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04s	0.278	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08s	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12s	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16s	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20s	0.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24s	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28s	0.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32s	0.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36s	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40s	0.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44s	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C84k	C84m	CC84m	C80m	C76kS	C76l	C76lS	C76m	C72kS	C72l	C72lS	C72m	C60kS	C60l	C64l	CC64l	C68kS	C68l	C68lS	C24m	C28kS	C28m	C32m	C32kS	C36kS
48s	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52s	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56s	0.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60s	0.253	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64s	0.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68s	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72s	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76s	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20t	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24t	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52t	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56t	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60t	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64t	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68t	0.251	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72t	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76t	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80t	0.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P84tN	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84t	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88t	0.259	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92t	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52u	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56u	0.326	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60u	0.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64u	0.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68u	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72u	0.257	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76u	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84u	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88u	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44v	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48v	0.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52v	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60v	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64v	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68v	0.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72v	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76v	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84v	0.254	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88v	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92v	0.159	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76w	0.334	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80w	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84w	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88w	0.599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
Total Area =		4.990	5.199	5.492	6.033	4.679	4.862	4.862	6.708	12.991	13.206	13.206	13.674	4.455	4.689	6.957	6.957	12.710	13.556	13.556	0.694	0.720	1.730	2.750	1.226	2.073
Total No. =		12	13	14	10	11	11	16	31	32	32	33	12	13	19	19	30	33	33	2	3	5	7	4	6	

Name	area (sq-mi)	C36m	C40kS	C40m	C44kS	C44m	C24o	C28mS	C28o	C32mS	C32o	C36mS	C36o	C40mS	C40o	C44mS	C44o	C44mW	C48m	C52kS	C52m	CC52m	C54kS	C54m	C56kS	C56m	C60lS	C60m	C64lS
64c	0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.264
68c	0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72c	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76c	0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80c	0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84c	0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56e	0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	0.000
60e	0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	0.000
64e	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502
68e	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80e	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84e	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52g	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.265	1 0.265	1 0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54g	0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247
56g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500
60g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500
64g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502
68g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76g	0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80g	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84g	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36i	0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	0.000	0.000	0.000	0.000	0.000	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40i	0.224	0.000	1 0.224	1 0.224	1 0.224	1 0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000
42i	0.269	0.000	0.000	0.000	1 0.269	1 0.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44i	0.349	0.000	0.000	0.000	1 0.349	1 0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48i	0.535	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.535	1 0.535	1 0.535	1 0.535	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52i	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.309	1 0.309	1 0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54i	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	0.000
56i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500
60i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500
64i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499
68i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72i	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80i	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84i	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24k	0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000
ARC40	0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	0.000	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28k	0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	0.000	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32k	0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	0.000	0.000	0.000	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36k	0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000	0.000	0.000	0.000	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40k	0.504	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44k	0.508	0.000	0.000	0.000	1 0.508	1 0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48k	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52k	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.295	1 0.295	1 0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52kW	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500
54k	0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245
56k	0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423
60k	0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266
64k	0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.206
68k	0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72k	0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76k	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
CC76k	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80k	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84k	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60l	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.234	1 0.234	1 0.234
64l	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.295
68l	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72l	0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76l	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24m	0.502	1 0.502	0.000	1 0.502	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28m	0.508	1 0.508	0.000	1 0.508	0.000	1 0.508	0.000	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000	1 0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32m	0.514	1 0.514	0.000	1 0.514	0.000	1 0.514	0.000	0.000	0.000	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	0.000	0.000	1 0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C36m	C40kS	C40m	C44kS	C44m	C24o	C28mS	C28o	C32mS	C32o	C36mS	C36o	C40mS	C40o	C44mS	C44o	C44mW	C48m	C52kS	C52m	CC52m	C54kS	C54m	C56kS	C56m	C60lS	C60m	C64lS
36m	0.514	1 0.514	0.000	1 0.514	0.000	1 0.514	0.000	0.000	0.000	0.000	0.000	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	0.000	0.000	1 0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40m	0.511	0.000	0.000	1 0.511	0.000	1 0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.511	1 0.511	1 0.511	1 0.511	1 0.511	1 0.511	0.000	0.000	1 0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44m	0.504	0.000	0.000	0.000	0.000	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48m	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.481	0.000	0.000	1 0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52m	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.177	1 0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52mW	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.200	0.000	1 0.200	0.000	1 0.200	0.000
54m	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.271	0.000	1 0.271	0.000	1 0.271	0.000
56m	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.576	0.000	1 0.576	0.000
60m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
64m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68m	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72m	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76m	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80m	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84m	0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
I17	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16o	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24o	0.504	0.000	0.000	0.000	0.000	0.000	1 0.504	0.000	1 0.504	0.000	1 0.504	0.000	1 0.504	0.000	1 0.504	0.000	1 0.504	0.000	1 0.504	1 0.504	1 0.504	0.000	0.000	1 0.504	0.000	0.000	0.000	0.000	0.000
28o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	1 0.500	1 0.500	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000
32o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	1 0.500	1 0.500	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000
36o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500	1 0.500	1 0.500	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000
40o	0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.465	0.000	1 0.465	1 0.465	1 0.465	0.000	0.000	1 0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44o	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.229	1 0.229	1 0.229	0.000	0.000	1 0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48o	0.676	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52o	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56o	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60o	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64o	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68o	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72o	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76o	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80o	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20p	0.532	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28p	0.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32p	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36p	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40p	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44p	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80p	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08q	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12q	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16q	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20q	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P28pS	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28q	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32q	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P36pS	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36q	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40q	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P44pS	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44q	0.359	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48q	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52q	0.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56q	0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60q	0.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64q	0.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68q	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P72oS	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72q	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76q	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80q	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04s	0.278	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08s	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12s	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16s	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20s	0.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24s	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28s	0.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C36m	C40kS	C40m	C44kS	C44m	C24o	C28mS	C28o	C32mS	C32o	C36mS	C36o	C40mS	C40o	C44mS	C44o	C44mW	C48m	C52kS	C52m	CC52m	C54kS	C54m	C56kS	C56m	C60lS	C60m	C64lS
32s	0.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36s	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40s	0.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44s	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48s	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52s	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56s	0.255	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60s	0.253	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64s	0.258	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68s	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72s	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76s	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20t	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24t	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52t	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56t	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60t	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64t	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68t	0.251	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72t	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76t	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80t	0.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84t	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88t	0.259	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92t	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52u	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56u	0.326	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60u	0.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64u	0.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68u	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72u	0.257	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76u	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84u	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88u	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44v	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48v	0.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52v	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60v	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64v	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68v	0.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72v	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76v	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84v	0.254	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88v	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92v	0.159	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76w	0.334	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80w	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84w	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88w	0.599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		4.111	2.801	5.350	3.927	6.980	1.198	1.730	2.734	2.750	4.254	4.111	6.115	5.350	7.819	6.980	9.678	9.678	11.194	5.831	6.008	12.240	1.184	1.655	4.455	5.502	4.689	6.236	6.957
		10	8	13	11	17	3	5	7	7	10	10	14	13	18	17	23	23	26	16	17	30	4	6	12	15	13	17	19

C64m	C68m	CC72m	C72mS	C72o	C68o	C68mS	C28p	C28oS	CC28p	C32p	CC32p	C32pW	C28q	C32q	C32pqW	C36p	CC36p	C36pW	C40oS	C40p	C40pW	C44oS	C44p	C44pW	C52mS	C48o	CC48o	C52o	C54mS
1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	1 0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	1 0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.542	1 0.542	1 0.542	1 0.542	1 0.542	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.602	1 0.602	1 0.602	1 0.602	1 0.602	1 0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.265	1 0.265	1 0.265	0.000	0.000
1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.247	1 0.247
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.501	1 0.501	1 0.501	1 0.501	1 0.501	1 0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	1 0.339	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	1 0.224	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	1 0.269	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.535	1 0.535	1 0.535	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.309	1 0.309	1 0.309	0.000	0.000
1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.192	1 0.192
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	0.000	0.000	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	0.000	0.000	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	1 0.100	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	0.000	0.000	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.506	1 0.506	1 0.506	0.000	0.000	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	1 0.506	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.295	1 0.295	1 0.295	0.000	0.000
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500
1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.245	1 0.245
1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.206	1 0.206	1 0.206	1 0.206	1 0.206	1 0.206	1 0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.204	1 0.204	1 0.204	1 0.204	1 0.204	1 0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1 0.281	1 0.281	1 0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.234	1 0.234	1 0.234	1 0.234	1 0.234	1 0.234	1 0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.317	1 0.317	1 0.317	1 0.317	1 0.317	1 0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1 0.215	1 0.215	1 0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	1 0.508	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.514	1 0.514	1 0.514	0.000	0.000	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	0.000	0.000

C64m	C68m	CC72m	C72mS	C72o	C68o	C68mS	C28p	C28oS	CC28p	C32p	CC32p	C32pW	C28q	C32q	C32pqW	C36p	CC36p	C36pW	C40oS	C40p	C40pW	C44oS	C44p	C44pW	C52mS	C48o	CC48o	C52o	C54mS
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	1 0.514	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.511	1 0.511	1 0.511	1 0.511	1 0.511	1 0.511	1 0.511	1 0.511	1 0.511	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.481	1 0.481	1 0.481	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.177	1 0.177	1 0.177	0.000	0.000
1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.200	1 0.200
1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.271	1 0.271
1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1 0.550	1 0.550	1 0.550	1 0.550	1 0.550	1 0.550	1 0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1 0.468	1 0.468	1 0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	1 0.504	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.465	1 0.465	1 0.465	1 0.465	1 0.465	1 0.465	1 0.465	1 0.465	1 0.465	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.229	1 0.229	1 0.229	1 0.229	1 0.229	1 0.229	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.676	1 0.676	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.645	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	1 0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	1 0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	1 0.372	0.000	1 0.372	1 0.372	0.000	0.000	1 0.372	1 0.372	1 0.372	1 0.372	0.000	1 0.372	1 0.372	0.000	1 0.372	1 0.372	0.000	1 0.372	1 0.372	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	1 0.234	1 0.234	1 0.234	0.000	0.000	1 0.234	1 0.234	1 0.234	1 0.234	0.000	1 0.234	1 0.234	0.000	1 0.234	1 0.234	0.000	1 0.234	1 0.234	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.186	1 0.186	1 0.186	0.000	1 0.186	1 0.186	0.000	1 0.186	1 0.186	0.000	1 0.186	1 0.186	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.222	1 0.222	0.000	1 0.222	1 0.222	0.000	1 0.222	1 0.222	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.407	1 0.407	0.000	1 0.407	1 0.407	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.318	1 0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

C64m	C68m	CC72m	C72mS	C72o	C68o	C68mS	C28p	C28oS	CC28p	C32p	CC32p	C32pW	C28q	C32q	C32pqW	C36p	CC36p	C36pW	C40oS	C40p	C40pW	C44oS	C44p	C44pW	C52mS	C48o	CC48o	C52o	C54mS
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
9.554	16.153	17.117	17.117	17.779	16.841	16.153	2.734	2.734	3.106	4.488	4.860	4.860	0.818	0.993	4.860	6.907	6.907	6.907	7.819	8.833	8.833	9.678	11.099	11.099	12.240	14.337	14.337	2.300	1.655
25	39	42	42	43	40	39	7	7	8	11	12	12	2	3	12	17	17	17	18	22	22	23	28	28	30	36	36	7	6

C52oW	C56mS	C56o	C56oW	C60mS	C60o	C64o	C64mS	CPT68o	C-WT	C76mS	C76o	C80o	C84mS	CC80o	C80p	CC80p	C80pS	C36q	C40q	C40qW	C44q	C48q	CPT48q	C52q	C56q	C60q	C64q	CPT64q	C64qW
0.000	0.000	0.000	0.000	0.000	0.000	1 0.264	1 0.264	1 0.264	1 0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.264	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.434	1 0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.434	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.542	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.542	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.602	1 0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.602	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.661	1 0.661	1 0.661	1 0.661	1 0.661	1 0.661	1 0.661	1 0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.467	1 0.467	1 0.467	1 0.467	1 0.467	1 0.467	1 0.467	1 0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	1 0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.176	0.000
0.000	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	1 0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.406	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.265	0.000	0.000	0.000	0.000	0.000	0.000
1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	1 0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.247	0.000
0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.501	1 0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.501	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.339	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.224	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.269	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.349	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.535	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.309	0.000	0.000	0.000	0.000	0.000	0.000
1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	1 0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.192	0.000
0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.211	1 0.211	1 0.211	1 0.211	1 0.211	1 0.211	1 0.211	1 0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.192	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.100	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.428	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.506	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.508	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.508	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.295	0.000	0.000	0.000	0.000	0.000	0.000
1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	1 0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.245	0.000
0.000	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	1 0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.423	0.000
0.000	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	1 0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.266	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.206	1 0.206	1 0.206	1 0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.206	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.204	1 0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.204	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.281	1 0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.281	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 1.000	1 1.000	1 1.000	1 1.000	1 1.000	1 1.000	1 1.000	1 1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	1 0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.311	1 0.311	1 0.311	1 0.311	1 0.311	1 0.311	1 0.311	1 0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	1 0.234	1 0.234	1 0.234	1 0.234	1 0.234	1 0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.234	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.295	1 0.295	1 0.295	1 0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.295	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.317	1 0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.317	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.215	1 0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.215	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.183	1 0.183	0.000	0.000	0.000	1 0.183	1 0.183	1 0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.508	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.514	0.000	0.000	0.000	0.000	0.000	0.000

C52oW	C56mS	C56o	C56oW	C60mS	C60o	C64o	C64mS	CPT68o	C-WT	C76mS	C76o	C80o	C84mS	CC80o	C80p	CC80p	C80pS	C36q	C40q	C40qW	C44q	C48q	CPT48q	C52q	C56q	C60q	C64q	CPT64q	C64qW
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.514	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.511	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.481	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.177	0.000	0.000	0.000	0.000	0.000	0.000
1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	1 0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.200	0.000
1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	1 0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.271	0.000
0.000	1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	1 0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.576	0.000
0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.550	1 0.550	1 0.550	1 0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.550	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.468	1 0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.468	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.492	1 0.492	0.000	0.000	0.000	1 0.492	1 0.492	1 0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.541	1 0.541	1 0.541	0.000	1 0.541	1 0.541	1 0.541	1 0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.209	1 0.209	1 0.209	1 0.209	1 0.209	1 0.209	1 0.209	1 0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.293	1 0.293	1 0.293	1 0.293	1 0.293	1 0.293	1 0.293	1 0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.465	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.229	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.676	0.000	0.000	0.000	0.000	0.000	0.000
1 0.645	0.000	1 0.645	1 0.645	0.000	1 0.645	1 0.645	0.000	0 0.000	1 0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.645	0.000
0.000	0.000	1 0.638	1 0.638	0.000	1 0.638	1 0.638	0.000	0 0.000	1 0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.638	0.000
0.000	0.000	0.000	0.000	0.000	1 0.640	1 0.640	0.000	0 0.000	1 0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.640	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.651	0.000	0 0.000	1 0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.651	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.688	1 0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.688	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.662	1 0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.662	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.673	0.000	0.000	0.000	1 0.673	1 0.673	1 0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.542	1 0.542	0.000	1 0.542	1 0.542	1 0.542	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.372	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.234	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.186	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.222	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.407	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.397	1 0.397	1 0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	1 0.500	1 0.500	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.318	1 0.318	1 0.318	1 0.318	1 0.318	1 0.318	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.175	1 0.175	1 0.175	1 0.175	1 0.175	1 0.175	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.300	1 0.300	1 0.300	1 0.300	1 0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.267	1 0.267	1 0.267	1 0.267	1 0.267	1 0.267	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.349	1 0.349	1 0.349	1 0.349	1 0.349	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.300	1 0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.359	1 0.359	1 0.359	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.300	1 0.300	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.353	1 0.353	1 0.353	1 0.353
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.405	1 0.405	1 0.405
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

C52oW	C56mS	C56o	C56oW	C60mS	C60o	C64o	C64mS	CPT68o	C-WT	C76mS	C76o	C80o	C84mS	CC80o	C80p	CC80p	C80pS	C36q	C40q	C40qW	C44q	C48q	CPT48q	C52q	C56q	C60q	C64q	CPT64q	C64qW
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
2.300	5.502	6.785	6.785	6.236	8.159	12.128	9.554	18.467	21.041	6.708	7.923	6.575	5.492	6.575	8.320	8.320	8.320	1.560	1.909	1.909	2.568	2.868	16.105	0.394	0.748	1.101	1.506	22.547	1.506
7	15	17	17	17	20	29	25	44	48	16	18	15	13	15	19	19	19	5	6	6	8	9	42	1	2	3	4	52	4

	C68q	C68qW	C72q		C76q		C76oS		C80q	C28qS	C28s	C32s	C32sW	C36qS	C36s	C40s	C40sW	C44qS	C44s	C48s		CPT48s		C52qS		C52s	C56qS	C56s	C56sS	C60qS	C60s	C60sW	C64s	C64sS		CPT64s
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.264
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.434
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.542
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.602
0	0.000	0.000	0.000	1	0.661	1	0.661	1	0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000	1	0.467	1	0.467	1	0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.176
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.406
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.502
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.496
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.499
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.499
0	0.000	0.000	0.000	1	0.494	1	0.494	1	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000	1	0.214	1	0.214	1	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.265		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.247
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.502
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.502
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.501
0	0.000	0.000	0.000	1	0.496	1	0.496	1	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000	1	0.214	1	0.214	1	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.339	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.224	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.269	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.349	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.535		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.309		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.192
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.499
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.504
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.499
0	0.000	0.000	0.000	1	0.494	1	0.494	1	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000	1	0.211	1	0.211	1	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.192	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.100	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.428	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.506	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.508	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.504	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.508	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.295		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.500
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.245
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.423
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.266
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.206
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.204
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.281
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000	1	1.000	1	1.000	1	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000	1	0.428	1	0.428	1	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000	1	0.311	1	0.311	1	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.234
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.295
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.317
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.215
0	0.000	0.000	0.000	1	0.183	1	0.183	1	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.502	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.508	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000
0	0.000	0.000	0.000		0.000		0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.514	0	0.000	0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000

	C68q		C68qW		C72q		C76q		C76oS		C80q		C28qS		C28s		C32s		C32sW		C36qS		C36s		C40s		C40sW		C44qS		C44s		C48s		CPT48s		C52qS		C52s		C56qS		C56s		C56sS		C60qS		C60s		C60sW		C64s		C64sS		CPT64s
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.514	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.511	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.504	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.481		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.177		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.200
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.271
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.576
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.550
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.468
0	0.000		0.000		0.000	1	0.492	1	0.492	1	0.492		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000	1	0.541	1	0.541	1	0.541		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000	1	0.209	1	0.209	1	0.209		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000	1	0.293	1	0.293	1	0.293		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.504	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.465	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.229	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.676		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.645
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.638
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.640
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.651
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.688
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.662
	0.000		0.000		0.000	1	0.673	1	0.673	1	0.673		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000	1	0.542	1	0.542	1	0.542		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.372	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.234	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.186	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.222	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.407	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000	1	0.397		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	1	0.318	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.175	1	0.175	1	0.175	1	0.175	1	0.175	1	0.175	1	0.175	1	0.175	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.300	1	0.300	1	0.300	1	0.300	1	0.300	1	0.300	1	0.300		0.000	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.267	1	0.267	1	0.267	1	0.267	1	0.267	1	0.267	1	0.267	1	0.267	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.349	1	0.349	1	0.349	1	0.349	1	0.349	1	0.349	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.300	1	0.300	1	0.300		0.000	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.359	1	0.359	1	0.359	1	0.359	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.300	1	0.300	0	0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.394	1	0.394	1	0.394	1	0.394		0.000	1	0.394		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.394	1	0.394	1	0.394	1	0.394	1	0.394	1	0.394	1	0.394	1	0.394	1	0.394	1	0.394	1	0.394
1	0.354	1	0.354	1	0.354	1	0.354		0.000	1	0.354		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.354	1	0.354	1	0.354	1	0.354	1	0.354	1	0.354	1	0.354	1	0.354	1	0.354
1	0.353	1	0.353	1	0.353	1	0.353		0.000	1	0.353		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.353	1	0.353	1	0.353	1	0.353	1	0.353	1	0.353
1	0.405	1	0.405	1	0.405	1	0.405		0.000	1	0.405		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.405	1	0.405	1	0.405
1	0.295	1	0.295	1	0.295	1	0.295		0.000	1	0.295		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	1.000	1	1.000		0.000	1	1.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.329	1	0.329		0.000	1	0.329		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000	1	0.396		0.000	1	0.396		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000	1	0.497		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.164	1	0.164	1	0.164		0.000	1	0.164	1	0.164	1	0.164		0.000	1	0.164	1	0.164	1	0.164		0.000	0	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000

C68q	C68qW	C72q	C76q	C76oS	C80q	C28qS	C28s	C32s	C32sW	C36qS	C36s	C40s	C40sW	C44qS	C44s	C48s	CPT48s	C52qS	C52s	C56qS	C56s	C56sS	C60qS	C60s	C60sW	C64s	C64sS	CPT64s
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.336	1 0.336	0.000	1 0.336	1 0.336	1 0.336	0.000	1 0.336	1 0.336	1 0.336	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.241	1 0.241	1 0.241	0.000	1 0.241	1 0.241	1 0.241	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.244	1 0.244	0.000	1 0.244	1 0.244	1 0.244	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.240	1 0.240	1 0.240	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.212	1 0.212	0.000	0 0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.265	0.000	1 0.265	1 0.265	0.000	1 0.265	1 0.265	1 0.265	1 0.265	1 0.265
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.255	1 0.255	0.000	1 0.255	1 0.255	1 0.255	1 0.255	1 0.255
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.253	1 0.253	1 0.253	1 0.253	1 0.253
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.258	1 0.258	1 0.258
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
1.801	1.801	3.130	11.449	7.923	12.343	0.818	0.982	1.318	1.318	1.560	2.301	2.894	2.894	2.568	3.793	4.305	17.542	0.394	0.659	0.748	1.268	1.268	1.101	1.874	1.874	2.537	2.537	23.578
5	5	7	26	18	28	2	3	4	4	5	8	10	10	8	13	15	48	1	2	2	4	4	3	6	6	8	8	56

Name	area (sq-mi)	C68s	C72qS	C72s	C76qs	C76s	CC80q	C80qS	C52t	C56t	C60t	C64t	C64tS	CPT64t	C68sS	C68t	C68tS	C72sS	C72t	C76sS	C76t	C80t	C52u	CC52u	C56u	CC56u	C56uS	C60u	C64u	C64uS	
4c	0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
c	0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
2c	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
76c	0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
80c	0.661	0.000	0.000	0.000	1 0.661	1 0.661	1 0.661	1 0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.661	1 0.661	1 0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
84c	0.467	0.000	0.000	0.000	1 0.467	1 0.467	1 0.467	1 0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.467	1 0.467	1 0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
56e	0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
60e	0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
64e	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
68e	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
72e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
76e	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
80e	0.494	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
84e	0.214	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
52g	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
54g	0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
56g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
60g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
64g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
68g	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
72g	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
76g	0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
80g	0.496	0.000	0.000	0.000	1 0.496	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.496	1 0.496	1 0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
84g	0.214	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.214	1 0.214	1 0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
36i	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
40i	0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
42i	0.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
44i	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
48i	0.535	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
52i	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
54i	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
56i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
60i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
64i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
68i	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
72i	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
76i	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
80i	0.494	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.494	1 0.494	1 0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
84i	0.211	0.000	0.000	0.000	1 0.211	1 0.211	1 0.211	1 0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.211	1 0.211	1 0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
24k	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
ARC40	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
28k	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
32k	0.506	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
36k	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
40k	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
44k	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
48k	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
52k	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
D52kW	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
54k	0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
56k	0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
60k	0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
64k	0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
68k	0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
72k	0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
76k	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
CC76k	1.000	0.000	0.000	0.000	1 1.000	1 1.000	1 1.000	1 1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 1.000	1 1.000	1 1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
80k	0.428	0.000	0.000	0.000	1 0.428	1 0.428	1 0.428	1 0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.428	1 0.428	1 0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
84k	0.311	0.000	0.000	0.000	1 0.311	1 0.311	1 0.311	1 0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.311	1 0.311	1 0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
60l	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
64l	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
68l	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
72l	0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1
76l	0.183	0.000	0.000	0.000	1 0.183	1 0.183	1 0.183	1 0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.183	1 0.183	1 0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
4m	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
m	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	
32m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	

Name	area	C68s	C72qS	C72s	C76qs	C76s	CC80q	C80qS	C52t	C56t	C60t	C64t	C64tS	CPT64t	C68sS	C68t	C68tS	C72sS	C72t	C76sS	C76t	C80t	C52u	CC52u	C56u	CC56u	C56uS	C60u	C64u	C64uS
36m	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]m	0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]n	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]m	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52m	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
D52mW	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
54m	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56m	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64m	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68m	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72m	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76m	0.492	0.000	0.000	0.000 1	0.492 1	0.492 1	0.492 1	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.492 1	0.492 1	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80m	0.541	0.000	0.000	0.000 1	0.541 1	0.541 1	0.541 1	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.541 1	0.541 1	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84m	0.209	0.000	0.000	0.000 1	0.209 1	0.209 1	0.209 1	0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.209 1	0.209 1	0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
I17	0.293	0.000	0.000	0.000 1	0.293 1	0.293 1	0.293 1	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.293 1	0.293 1	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16o	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24o	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36o	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40o	0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44o	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48o	0.676	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52o	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56o	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60o	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64o	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68o	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72o	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76o	0.673	0.000	0.000	0.000 1	0.673 1	0.673 1	0.673 1	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.673 1	0.673 1	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80o	0.542	0.000	0.000	0.000 1	0.542 1	0.542 1	0.542 1	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.542 1	0.542 1	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20p	0.532	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]CC48	3.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]p	0.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32p	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36p	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40p	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44p	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80p	0.397	0.000	0.000	0.000	0.000	0.000	0.000 1	0.397 1	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08q	0.438	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12q	0.399	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
16q	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20q	0.276	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P28pS	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
28q	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32q	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P36pS	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36q	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40q	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P44pS	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44q	0.359	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48q	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52q	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1	0.394 1
56q	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1	0.354 1
60q	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1	0.353 1
64q	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1	0.405 1
68q	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295	0.000	0.000	0.000	0.000	0.000	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1	0.295 1
P72oS	1.000	0.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1	1.000 1
72q	0.329	0.000 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1	0.329 1
76q	0.396	0.000	0.000	0.000 1	0.396 1	0.396 1	0.396 1	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.396 1	0.396 1	0.396 1	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80q	0.497	0.000	0.000	0.000	0.000	0.000 1	0.497 1	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.497 1	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000
04s	0.278	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
08s	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
12s	0.208	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]6s	0.420	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
[illegible]s	0.484	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24s	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

Name	area	C68s	C72qS	C72s	C76qs	C76s	CC80q	C80qS	C52t	C56t	C60t	C64t	C64tS	CPT64t	C68sS	C68t	C68tS	C72sS	C72t	C76sS	C76t	C80t	C52u	CC52u	C56u	CC56u	C56uS	C60u	C64u	C64uS
28s	0.164	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
32s	0.336	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
36s	0.241	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
40s	0.244	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44s	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48s	0.212	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52s	0.265 1	0.265	0.000 1	0.265	0.000 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1	0.265 1
56s	0.255 1	0.255	0.000 1	0.255	0.000 1	0.255 1	0.255 1	0.255 1	0.255	0.000 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255	0.000	0.000 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1	0.255 1
60s	0.253 1	0.253	0.000 1	0.253	0.000 1	0.253 1	0.253 1	0.253 1	0.000	0.000 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253 1	0.253	0.000	0.000	0.000	0.000 1	0.253 1	0.253 1	0.253 1	0.253 1
64s	0.258 1	0.258	0.000 1	0.258	0.000 1	0.258 1	0.258 1	0.258	0.000	0.000	0.000 1	0.258 1	0.258 1	0.258 1	0.258 1	0.258 1	0.258 1	0.258 1	0.258 1	0.258 1	0.258 1	0.258	0.000	0.000	0.000	0.000	0.000 1	0.258 1	0.258 1	0.258 1
68s	0.236 1	0.236	0.000 1	0.236	0.000 1	0.236 1	0.236 1	0.236	0.000	0.000	0.000	0.000	0.000	0.000 1	0.236 1	0.236 1	0.236 1	0.236 1	0.236 1	0.236 1	0.236 1	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72s	0.283	0.000	0.000 1	0.283	0.000 1	0.283 1	0.283 1	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.283 1	0.283 1	0.283 1	0.283 1	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76s	0.279	0.000	0.000	0.000	0.000 1	0.279 1	0.279 1	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.279 1	0.279 1	0.279	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
20t	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
24t	0.260	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52t	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.297 1	0.297 1	0.297 1	0.297 1	0.297 1	0.297	0.000 1	0.297 1	0.297	0.000 1	0.297	0.000 1	0.297 1	0.297 1	0.297	0.297 1	0.297 1	0.297 1	0.297 1	0.297 1	0.297 1	0.297 1
56t	0.179	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.179 1	0.179 1	0.179 1	0.179 1	0.179	0.000 1	0.179 1	0.179	0.000 1	0.179	0.000 1	0.179 1	0.179	0.000	0.000 1	0.179 1	0.179 1	0.179 1	0.179 1	0.179 1	0.179 1
60t	0.328	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.328 1	0.328 1	0.328 1	0.328	0.000 1	0.328 1	0.328	0.000 1	0.328	0.000 1	0.328 1	0.328	0.000	0.000	0.000	0.000	0.000 1	0.328 1	0.328 1	0.328 1
64t	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.271 1	0.271 1	0.271	0.000 1	0.271 1	0.271	0.000 1	0.271	0.000 1	0.271 1	0.271	0.000	0.000	0.000	0.000	0.000	0.000 1	0.271 1	0.271 1
68t	0.251	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.251 1	0.251	0.000 1	0.251	0.000 1	0.251 1	0.251	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72t	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.222	0.000 1	0.222 1	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76t	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.272 1	0.272	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80t	0.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.252	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P84tN	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84t	0.273	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88t	0.259	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92t	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52u	0.391	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.391	0.391 1	0.391 1	0.391 1	0.391 1	0.391 1	0.391 1	0.391 1
56u	0.326	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.326 1	0.326 1	0.326 1	0.326 1	0.326 1	0.326 1
60u	0.285	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.285 1	0.285 1	0.285 1
64u	0.296	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.296 1	0.296 1
68u	0.280	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72u	0.257	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76u	0.283	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P80uW	8.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84u	0.263	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88u	0.250	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
P92uN	0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92u	0.249	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
44v	0.236	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
48v	0.299	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
52v	0.297	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
56v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
60v	0.228	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
64v	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
68v	0.218	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
72v	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76v	0.240	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80v	0.231	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84v	0.254	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88v	0.248	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
92v	0.159	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
76w	0.334	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
80w	0.360	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
84w	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
88w	0.599	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
		3.068	3.130	4.680	11.449	13.278	14.172	14.172	0.956	1.744	2.678	3.612	3.612	24.653	3.068	4.394	4.394	4.680	6.228	13.278	15.098	16.244	1.347	1.347	2.461	2.461	2.461	3.680	4.910	4.910
		10	7	13	26	33	35	35	3	6	9	12	12	60	10	15	15	13	19	33	40	43	4	4	8	8	8	12	16	16	64

CPT64u	C68u	C68uS	C72u	C72tS	CC72u	C76tS	C76u	C80u	CC80u	C84u	CC84u	C88u	C88uW	C92u	C92uS	C44v	C48v	NUL48v	C52uS	C52v	NUL52v	C56v	NUL56v	C60uS	C60v	NUL60v	C64v	NUL64v	C68v	NUL68v
.264	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.264	0.264	0.000	0.264
.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.434	0.434	0.000	0.434
.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.542	0.542	0.000	0.542
0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.602	0.602	0.000	0.602
0.000	0.000	0.000	0.000	0.000	0.000 1	0.661 1	0.661 1	0.661 1	0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000 1	0.467 1	0.467 1	0.467 1	0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.176	0.176	0.000	0.176
0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.406	0.406	0.000	0.406
0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.502	0.502	0.000	0.502
0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.496	0.496	0.000	0.496
0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.499	0.499	0.000	0.499
0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.499	0.499	0.000	0.499
0.000	0.000	0.000	0.000	0.000	0.000 1	0.494 1	0.494 1	0.494 1	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000 1	0.214 1	0.214 1	0.214 1	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.265 1	0.265	0.000	0.000 1	0.265	0.000 1	0.265	0.000	0.000 1	0.265	0.000	0.000 1	0.265	0.000
0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.247	0.247	0.000	0.247
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.500
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.500
0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.502	0.502	0.000	0.502
0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.502	0.502	0.000	0.502
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.500
0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.501	0.501	0.000	0.501
0.000	0.000	0.000	0.000	0.000	0.000 1	0.496 1	0.496 1	0.496 1	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000 1	0.214 1	0.214 1	0.214 1	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.339 1	0.339	0.000	0.000 1	0.339	0.000 1	0.339	0.000	0.000 1	0.339	0.000	0.000 1	0.339	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.224 1	0.224	0.000	0.000 1	0.224	0.000 1	0.224	0.000	0.000 1	0.224	0.000	0.000 1	0.224	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.269 1	0.269	0.000	0.000 1	0.269	0.000 1	0.269	0.000	0.000 1	0.269	0.000	0.000 1	0.269	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.349 1	0.349	0.000	0.000 1	0.349	0.000 1	0.349	0.000	0.000 1	0.349	0.000	0.000 1	0.349	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.535 1	0.535	0.000	0.000 1	0.535	0.000 1	0.535	0.000	0.000 1	0.535	0.000	0.000 1	0.535	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.309 1	0.309	0.000	0.000 1	0.309	0.000 1	0.309	0.000	0.000 1	0.309	0.000	0.000 1	0.309	0.000
0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.192	0.192	0.000	0.192
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.500
.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.500
.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.499	0.499	0.000	0.499
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.500	0.000	0.500
0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.504	0.504	0.000	0.504
0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.499	0.499	0.000	0.499
0.000	0.000	0.000	0.000	0.000	0.000 1	0.494 1	0.494 1	0.494 1	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000 1	0.211 1	0.211 1	0.211 1	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.192 1	0.192	0.000	0.000 1	0.192	0.000 1	0.192	0.000	0.000 1	0.192	0.000	0.000 1	0.192	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.100 1	0.100	0.000	0.000 1	0.100	0.000 1	0.100	0.000	0.000 1	0.100	0.000	0.000 1	0.100	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.428 1	0.428	0.000	0.000 1	0.428	0.000 1	0.428	0.000	0.000 1	0.428	0.000	0.000 1	0.428	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.506 1	0.506	0.000	0.000 1	0.506	0.000 1	0.506	0.000	0.000 1	0.506	0.000	0.000 1	0.506	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.508 1	0.508	0.000	0.000 1	0.508	0.000 1	0.508	0.000	0.000 1	0.508	0.000	0.000 1	0.508	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.504 1	0.504	0.000	0.000 1	0.504	0.000 1	0.504	0.000	0.000 1	0.504	0.000	0.000 1	0.504	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.508 1	0.508	0.000	0.000 1	0.508	0.000 1	0.508	0.000	0.000 1	0.508	0.000	0.000 1	0.508	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.500 1	0.500	0.000	0.000 1	0.500	0.000 1	0.500	0.000	0.000 1	0.500	0.000	0.000 1	0.500	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.295 1	0.295	0.000	0.000 1	0.295	0.000 1	0.295	0.000	0.000 1	0.295	0.000	0.000 1	0.295	0.000
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.500	0.000	0.000	0.000
0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.245	0.245	0.000	0.245
0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.423	0.423	0.000	0.423
0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.266	0.266	0.000	0.266
0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.206	0.206	0.000	0.206
0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.204	0.204	0.000	0.204
0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.281	0.281	0.000	0.281
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000 1	1.000 1	1.000 1	1.000 1	1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000 1	0.428 1	0.428 1	0.428 1	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000 1	0.311 1	0.311 1	0.311 1	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.234	0.234	0.000	0.234
0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.295	0.295	0.000	0.295
0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.317	0.317	0.000	0.317
0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.215	0.215	0.000	0.215
0.000	0.000	0.000	0.000	0.000	0.000 1	0.183 1	0.183 1	0.183 1	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.502 1	0.502	0.000	0.000 1	0.502	0.000 1	0.502	0.000	0.000 1	0.502	0.000	0.000 1	0.502	0.000
.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.508 1	0.508	0.000	0.000 1	0.508	0.000 1	0.508	0.000	0.000 1	0.508	0.000	0.000 1	0.508	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000 1	0.514 1	0.514	0.000	0.000 1	0.514	0.000 1	0.514	0.000	0.000 1	0.514	0.000	0.000 1	0.514	0.000

CPT64u	C68u	C68uS	C72u	C72tS	CC72u	C76tS	C76u	C80u	CC80u	C84u	CC84u	C88u	C88uW	C92u	C92uS	C44v	C48v	NUL48v	C52uS	C52v	NUL52v	C56v	NUL56v	C60uS	C60v	NUL60v	C64v	NUL64v	C68v	NUL68v
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.514	1 0.514	0.000	0.000	1 0.514	0.000	1 0.514	0.000	0.000	1 0.514	0.000	1 0.514	0.000	1 0.514
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.511	1 0.511	0.000	0.000	1 0.511	0.000	1 0.511	0.000	0.000	1 0.511	0.000	1 0.511	0.000	1 0.511
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	0.000	0.000	1 0.504	0.000	1 0.504	0.000	0.000	1 0.504	0.000	1 0.504	0.000	1 0.504
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.481	1 0.481	0.000	0.000	1 0.481	0.000	1 0.481	0.000	0.000	1 0.481	0.000	1 0.481	0.000	1 0.481
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.177	1 0.177	0.000	0.000	1 0.177	0.000	1 0.177	0.000	0.000	1 0.177	0.000	1 0.177	0.000	1 0.177
0.200	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.200	0.000	0.000	0.000
0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.271	1 0.271	0.000	1 0.271
0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.576	1 0.576	0.000	1 0.576
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	1 0.500
0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	1 0.500
0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.550	1 0.550	0.000	1 0.550
0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.468	1 0.468	0.000	1 0.468
0.000	0.000	0.000	0.000	0.000	0.000	1 0.492	1 0.492	1 0.492	1 0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.541	1 0.541	1 0.541	1 0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.209	1 0.209	1 0.209	1 0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.293	1 0.293	1 0.293	1 0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.504	1 0.504	0.000	0.000	1 0.504	0.000	1 0.504	0.000	0.000	1 0.504	0.000	1 0.504	0.000	1 0.504
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	0.000	1 0.500	0.000	1 0.500	0.000	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	0.000	1 0.500	0.000	1 0.500	0.000	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	1 0.500	0.000	0.000	1 0.500	0.000	1 0.500	0.000	0.000	1 0.500	0.000	1 0.500	0.000	1 0.500
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.465	1 0.465	0.000	0.000	1 0.465	0.000	1 0.465	0.000	0.000	1 0.465	0.000	1 0.465	0.000	1 0.465
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.229	1 0.229	0.000	0.000	1 0.229	0.000	1 0.229	0.000	0.000	1 0.229	0.000	1 0.229	0.000	1 0.229
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.676	1 0.676	0.000	0.000	1 0.676	0.000	1 0.676	0.000	0.000	1 0.676	0.000	1 0.676	0.000	1 0.676
0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.645	1 0.645	0.000	1 0.645
0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.638	1 0.638	0.000	1 0.638
0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.640	1 0.640	0.000	1 0.640
0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.651	1 0.651	0.000	1 0.651
0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.688	1 0.688	0.000	1 0.688
0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.662	1 0.662	0.000	1 0.662
0.000	0.000	0.000	0.000	0.000	0.000	1 0.673	1 0.673	1 0.673	1 0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.542	1 0.542	1 0.542	1 0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.372	1 0.372	0.000	0.000	1 0.372	0.000	1 0.372	0.000	0.000	1 0.372	0.000	1 0.372	0.000	1 0.372
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.234	1 0.234	0.000	0.000	1 0.234	0.000	1 0.234	0.000	0.000	1 0.234	0.000	1 0.234	0.000	1 0.234
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.186	1 0.186	0.000	0.000	1 0.186	0.000	1 0.186	0.000	0.000	1 0.186	0.000	1 0.186	0.000	1 0.186
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.222	1 0.222	0.000	0.000	1 0.222	0.000	1 0.222	0.000	0.000	1 0.222	0.000	1 0.222	0.000	1 0.222
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.407	1 0.407	0.000	0.000	1 0.407	0.000	1 0.407	0.000	0.000	1 0.407	0.000	1 0.407	0.000	1 0.407

CPT64u	C68u	C68uS	C72u	C72tS	CC72u	C76tS	C76u	C80u	CC80u	C84u	CC84u	C88u	C88uW	C92u	C92uS	C44v	C48v	NUL48v	C52uS	C52v	NUL52v	C56v	NUL56v	C60uS	C60v	NUL60v	C64v	NUL64v	C68v	NUL68v
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.186	1 0.186	0.000	0.000	1 0.186	0.000	1 0.186	0.000	0.000	1 0.186	0.000	1 0.186	0.000	1 0.186
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.222	1 0.222	0.000	0.000	1 0.222	0.000	1 0.222	0.000	0.000	1 0.222	0.000	1 0.222	0.000	1 0.222
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.407	1 0.407	0.000	0.000	1 0.407	0.000	1 0.407	0.000	0.000	1 0.407	0.000	1 0.407	0.000	1 0.407
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.397	1 0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.318	1 0.318	1 0.318	0.000	0.000	1 0.318	0.000	1 0.318	0.000	0.000	1 0.318	0.000	1 0.318	0.000	1 0.318
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.175	1 0.175	1 0.175	0.000	0.000	1 0.175	0.000	1 0.175	0.000	0.000	1 0.175	0.000	1 0.175	0.000	1 0.175
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.267	1 0.267	1 0.267	0.000	0.000	1 0.267	0.000	1 0.267	0.000	0.000	1 0.267	0.000	1 0.267	0.000	1 0.267
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.349	1 0.349	1 0.349	0.000	0.000	1 0.349	0.000	1 0.349	0.000	0.000	1 0.349	0.000	1 0.349	0.000	1 0.349
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.359	1 0.359	1 0.359	0.000	0.000	1 0.359	0.000	1 0.359	0.000	0.000	1 0.359	0.000	1 0.359	0.000	1 0.359
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.300	1 0.300	0.000	0.000	1 0.300	0.000	1 0.300	0.000	0.000	1 0.300	0.000	1 0.300	0.000	1 0.300
1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394	1 0.394
1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354	1 0.354
1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353	1 0.353
1 0.405	1 0.405	1 0.405	1 0.405	1 0.405	1 0.405	1 0.405	1 0.405	1 0.405	1 0.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.405	1 0.405	1 0.405	1 0.405	1 0.405
1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	1 0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.295	1 0.295	1 0.295
0.000	0.000	0.000	0.000	1 1.000	1 1.000	1 1.000	1 1.000	1 1.000	1 1.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	1 0.329	1 0.329	1 0.329	1 0.329	1 0.329	1 0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	1 0.396	1 0.396	1 0.396	1 0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1 0.497	1 0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CPT64u		C68u		C68uS		C72u		C72tS		CC72u		C76tS		C76u		C80u		CC80u		C84u		CC84u		C88u		C88uW		C92u		C92uS		C44v		C48v		NUL48v		C52uS		C52v		NUL52v		C56v		NUL56v		C60uS		C60v		NUL60v		C64v		NUL64v		C68v		NUL68v
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.164	1	0.164	1	0.164		0.000		0.000	1	0.164		0.000	1	0.164		0.000		0.000	1	0.164		0.000	1	0.164		0.000	1	0.164
.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.336	1	0.336	1	0.336		0.000		0.000	1	0.336		0.000	1	0.336		0.000		0.000	1	0.336		0.000	1	0.336		0.000	1	0.336
00		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.241	1	0.241	1	0.241		0.000		0.000	1	0.241		0.000	1	0.241		0.000		0.000	1	0.241		0.000	1	0.241		0.000	1	0.241
.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.244	1	0.244	1	0.244		0.000		0.000	1	0.244		0.000	1	0.244		0.000		0.000	1	0.244		0.000	1	0.244		0.000	1	0.244
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.240	1	0.240	1	0.240		0.000		0.000	1	0.240		0.000	1	0.240		0.000		0.000	1	0.240		0.000	1	0.240		0.000	1	0.240
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.212	1	0.212		0.000		0.000	1	0.212		0.000	1	0.212		0.000		0.000	1	0.212		0.000	1	0.212		0.000	1	0.212
0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265	1	0.265
0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255	1	0.255
0.253	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253	1	0.253
0.258	1	0.258	1	0.258	1	0.258	1	0.258	1	0.258	1	0.258	1	0.258	1	0.258	1	0.258		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.258	1	0.258	1	0.258	1	0.258
0.000	1	0.236	1	0.236	1	0.236	1	0.236	1	0.236	1	0.236	1	0.236	1	0.236	1	0.236		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.236	1	0.236
0.000		0.000		0.000		0.000	1	0.283	1	0.283	1	0.283	1	0.283	1	0.283	1	0.283		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000	1	0.279	1	0.279	1	0.279	1	0.279		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297	1	0.297
0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179	1	0.179
0.328	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328	1	0.328
0.271	1	0.271	1	0.271	1	0.271	1	0.271	1	0.271	1	0.271	1	0.271	1	0.271	1	0.271		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.271	1	0.271	1	0.271	1	0.271
0.000	1	0.251	1	0.251	1	0.251	1	0.251	1	0.251	1	0.251	1	0.251	1	0.251	1	0.251		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.251	1	0.251
0.000		0.000		0.000		0.000	1	0.222	1	0.222	1	0.222	1	0.222	1	0.222	1	0.222		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000	1	0.272	1	0.272	1	0.272	1	0.272		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.252	1	0.252		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.273	1	0.273	1	0.273	1	0.273	1	0.273	1	0.273		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.259	1	0.259	1	0.259	1	0.259		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.175	1	0.175		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.391	1	0.391	1	0.391	1	0.391		0.000	1	0.391		0.000	1	0.391	1	0.391	1	0.391		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391	1	0.391
0.326	1	0.326	1	0.326	1	0.326		0.000	1	0.326		0.000	1	0.326	1	0.326	1	0.326		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.326	1	0.326	1	0.326	1	0.326	1	0.326	1	0.326	1	0.326	1	0.326	1	0.326
0.285	1	0.285	1	0.285	1	0.285		0.000	1	0.285		0.000	1	0.285	1	0.285	1	0.285		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.285	1	0.285	1	0.285	1	0.285	1	0.285	1	0.285	1	0.285
0.296	1	0.296	1	0.296	1	0.296		0.000	1	0.296		0.000	1	0.296	1	0.296	1	0.296		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.296	1	0.296	1	0.296	1	0.296
0.000	1	0.280	1	0.280	1	0.280		0.000	1	0.280		0.000	1	0.280	1	0.280	1	0.280		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.280	1	0.280
0.000		0.000		0.000	1	0.257		0.000	1	0.257		0.000	1	0.257	1	0.257	1	0.257		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.283	1	0.283	1	0.283		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.249	1	0.249		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	8.000	1	8.000	1	8.000	1	8.000	1	8.000	1	8.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.263	1	0.263	1	0.263	1	0.263	1	0.263	1	0.263		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.250	1	0.250	1	0.250	1	0.250		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.200	1	0.200		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.249	1	0.249		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.236		0.000	1	0.236		0.000		0.000	1	0.236		0.000	1	0.236		0.000		0.000	1	0.236		0.000	1	0.236		0.000	1	0.236
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.299	1	0.299		0.000		0.000	1	0.299		0.000	1	0.299		0.000		0.000	1	0.299		0.000	1	0.299		0.000	1	0.299
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.297	1	0.297		0.000	1	0.297		0.000		0.000	1	0.297		0.000	1	0.297		0.000	1	0.297
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.231	1	0.231		0.000		0.000	1	0.231		0.000	1	0.231		0.000	1	0.231
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.228	1	0.228		0.000	1	0.228		0.000	1	0.228
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.195	1	0.195		0.000	1	0.195
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.218	1	0.218
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
25.951		5.972		5.972		6.229		6.228		8.063		15.098		17.216		18.611		18.611		9.036		9.036		9.545		9.545		10.169		10.169		4.029		17.841		18.077		1.347		1.644		19.721		2.692		21.066		3.680		3.908		22.513		26.146		44.279		6.190		45.559
20		20		21		19		25		40		47		51		51		4		4		6		6		9		9		14		49		50		4		5		55		9		60		12		13		65		65		116		21		121		

C72v	C72uS		NUL72v		C76uS	C76v	C76vS	C76w		NUL76w	C80v	C80w		NUL80w	C84v	C84uS	CC84v	C84vS	C84w		NUL84w	C88v	C92v	C88w		NUL88w	C24s	C24sS	C24t	C08s	C12s	C12sW	C16q	C16s
0.000	0.000	1	0.499		0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.434		0.000	0.000	0.000	0.000	1	0.434	0.000	0.000	1	0.434	0.000	0.000	0.000	0.000	0.000	1	0.434	0.000	0.000	0.000	1	0.434	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.542		0.000	0.000	0.000	0.000	1	0.542	0.000	0.000	1	0.542	0.000	0.000	0.000	0.000	0.000	1	0.542	0.000	0.000	0.000	1	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.602		0.000	0.000	0.000	0.000	1	0.602	0.000	0.000	1	0.602	0.000	0.000	0.000	0.000	0.000	1	0.602	0.000	0.000	0.000	1	0.602	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.661	0.000	0.000	0.000	1	0.661	0.000	0.000	1	0.661	0.000	0.000	0.000	0.000	0.000	1	0.661	0.000	0.000	0.000	1	0.661	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.467	0.000	0.000	0.000	1	0.467	0.000	0.000	1	0.467	0.000	0.000	0.000	0.000	0.000	1	0.467	0.000	0.000	0.000	1	0.467	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.176		0.000	0.000	0.000	0.000	1	0.176	0.000	0.000	1	0.176	0.000	0.000	0.000	0.000	0.000	1	0.176	0.000	0.000	0.000	1	0.176	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.406		0.000	0.000	0.000	0.000	1	0.406	0.000	0.000	1	0.406	0.000	0.000	0.000	0.000	0.000	1	0.406	0.000	0.000	0.000	1	0.406	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.502		0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.496		0.000	0.000	0.000	0.000	1	0.496	0.000	0.000	1	0.496	0.000	0.000	0.000	0.000	0.000	1	0.496	0.000	0.000	0.000	1	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.499		0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.499		0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.494	0.000	0.000	0.000	1	0.494	0.000	0.000	1	0.494	0.000	0.000	0.000	0.000	0.000	1	0.494	0.000	0.000	0.000	1	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.214	0.000	0.000	0.000	1	0.214	0.000	0.000	1	0.214	0.000	0.000	0.000	0.000	0.000	1	0.214	0.000	0.000	0.000	1	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.265		0.000	0.000	0.000	0.000	1	0.265	0.000	0.000	1	0.265	0.000	0.000	0.000	0.000	0.000	1	0.265	0.000	0.000	0.000	1	0.265	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.247		0.000	0.000	0.000	0.000	1	0.247	0.000	0.000	1	0.247	0.000	0.000	0.000	0.000	0.000	1	0.247	0.000	0.000	0.000	1	0.247	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.502		0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.502		0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.501		0.000	0.000	0.000	0.000	1	0.501	0.000	0.000	1	0.501	0.000	0.000	0.000	0.000	0.000	1	0.501	0.000	0.000	0.000	1	0.501	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.496	0.000	0.000	0.000	1	0.496	0.000	0.000	1	0.496	0.000	0.000	0.000	0.000	0.000	1	0.496	0.000	0.000	0.000	1	0.496	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.214	0.000	0.000	0.000	1	0.214	0.000	0.000	1	0.214	0.000	0.000	0.000	0.000	0.000	1	0.214	0.000	0.000	0.000	1	0.214	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.339		0.000	0.000	0.000	0.000	1	0.339	0.000	0.000	1	0.339	0.000	0.000	0.000	0.000	0.000	1	0.339	0.000	0.000	0.000	1	0.339	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.224		0.000	0.000	0.000	0.000	1	0.224	0.000	0.000	1	0.224	0.000	0.000	0.000	0.000	0.000	1	0.224	0.000	0.000	0.000	1	0.224	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.269		0.000	0.000	0.000	0.000	1	0.269	0.000	0.000	1	0.269	0.000	0.000	0.000	0.000	0.000	1	0.269	0.000	0.000	0.000	1	0.269	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.349		0.000	0.000	0.000	0.000	1	0.349	0.000	0.000	1	0.349	0.000	0.000	0.000	0.000	0.000	1	0.349	0.000	0.000	0.000	1	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.535		0.000	0.000	0.000	0.000	1	0.535	0.000	0.000	1	0.535	0.000	0.000	0.000	0.000	0.000	1	0.535	0.000	0.000	0.000	1	0.535	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.309		0.000	0.000	0.000	0.000	1	0.309	0.000	0.000	1	0.309	0.000	0.000	0.000	0.000	0.000	1	0.309	0.000	0.000	0.000	1	0.309	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.192		0.000	0.000	0.000	0.000	1	0.192	0.000	0.000	1	0.192	0.000	0.000	0.000	0.000	0.000	1	0.192	0.000	0.000	0.000	1	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.499		0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.504		0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.499		0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	1	0.499	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.494	0.000	0.000	0.000	1	0.494	0.000	0.000	1	0.494	0.000	0.000	0.000	0.000	0.000	1	0.494	0.000	0.000	0.000	1	0.494	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.211	0.000	0.000	0.000	1	0.211	0.000	0.000	1	0.211	0.000	0.000	0.000	0.000	0.000	1	0.211	0.000	0.000	0.000	1	0.211	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.192		0.000	0.000	0.000	0.000	1	0.192	0.000	0.000	1	0.192	0.000	0.000	0.000	0.000	0.000	1	0.192	0.000	0.000	0.000	1	0.192	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.100		0.000	0.000	0.000	0.000	1	0.100	0.000	0.000	1	0.100	0.000	0.000	0.000	0.000	0.000	1	0.100	0.000	0.000	0.000	1	0.100	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.428		0.000	0.000	0.000	0.000	1	0.428	0.000	0.000	1	0.428	0.000	0.000	0.000	0.000	0.000	1	0.428	0.000	0.000	0.000	1	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.506		0.000	0.000	0.000	0.000	1	0.506	0.000	0.000	1	0.506	0.000	0.000	0.000	0.000	0.000	1	0.506	0.000	0.000	0.000	1	0.506	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.508		0.000	0.000	0.000	0.000	1	0.508	0.000	0.000	1	0.508	0.000	0.000	0.000	0.000	0.000	1	0.508	0.000	0.000	0.000	1	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.504		0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.508		0.000	0.000	0.000	0.000	1	0.508	0.000	0.000	1	0.508	0.000	0.000	0.000	0.000	0.000	1	0.508	0.000	0.000	0.000	1	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.295		0.000	0.000	0.000	0.000	1	0.295	0.000	0.000	1	0.295	0.000	0.000	0.000	0.000	0.000	1	0.295	0.000	0.000	0.000	1	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.245		0.000	0.000	0.000	0.000	1	0.245	0.000	0.000	1	0.245	0.000	0.000	0.000	0.000	0.000	1	0.245	0.000	0.000	0.000	1	0.245	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.423		0.000	0.000	0.000	0.000	1	0.423	0.000	0.000	1	0.423	0.000	0.000	0.000	0.000	0.000	1	0.423	0.000	0.000	0.000	1	0.423	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.266		0.000	0.000	0.000	0.000	1	0.266	0.000	0.000	1	0.266	0.000	0.000	0.000	0.000	0.000	1	0.266	0.000	0.000	0.000	1	0.266	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.206		0.000	0.000	0.000	0.000	1	0.206	0.000	0.000	1	0.206	0.000	0.000	0.000	0.000	0.000	1	0.206	0.000	0.000	0.000	1	0.206	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.204		0.000	0.000	0.000	0.000	1	0.204	0.000	0.000	1	0.204	0.000	0.000	0.000	0.000	0.000	1	0.204	0.000	0.000	0.000	1	0.204	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.281		0.000	0.000	0.000	0.000	1	0.281	0.000	0.000	1	0.281	0.000	0.000	0.000	0.000	0.000	1	0.281	0.000	0.000	0.000	1	0.281	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000		0.000	0.000	0.000	0.000	1	0.317	0.000	0.000	1	0.317	0.000	0.000	0.000	0.000	0.000	1	0.317	0.000	0.000	0.000	1	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	1.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.428	0.000	0.000	0.000	1	0.428	0.000	0.000	1	0.428	0.000	0.000	0.000	0.000	0.000	1	0.428	0.000	0.000	0.000	1	0.428	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.311	0.000	0.000	0.000	1	0.311	0.000	0.000	1	0.311	0.000	0.000	0.000	0.000	0.000	1	0.311	0.000	0.000	0.000	1	0.311	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.234		0.000	0.000	0.000	0.000	1	0.234	0.000	0.000	1	0.234	0.000	0.000	0.000	0.000	0.000	1	0.234	0.000	0.000	0.000	1	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.295		0.000	0.000	0.000	0.000	1	0.295	0.000	0.000	1	0.295	0.000	0.000	0.000	0.000	0.000	1	0.295	0.000	0.000	0.000	1	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.317		0.000	0.000	0.000	0.000	1	0.317	0.000	0.000	1	0.317	0.000	0.000	0.000	0.000	0.000	1	0.317	0.000	0.000	0.000	1	0.317	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.215		0.000	0.000	0.000	0.000	1	0.215	0.000	0.000	1	0.215	0.000	0.000	0.000	0.000	0.000	1	0.215	0.000	0.000	0.000	1	0.215	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000		0.000	1	0.183	0.000	0.000	0.000	1	0.183	0.000	0.000	1	0.183	0.000	0.000	0.000	0.000	0.000	1	0.183	0.000	0.000	0.000	1	0.183	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.502		0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	1	0.502	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.508		0.000	0.000	0.000	0.000	1	0.508	0.000	0.000	1	0.508	0.000	0.000	0.000	0.000	0.000	1	0.508	0.000	0.000	0.000	1	0.508	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	1	0.514		0.000	0.000	0.000	0.000	1	0.514	0.000	0.000	1	0.514	0.000	0.000	0.000	0.000	0.000	1	0.514	0.000	0.000	0.000	1	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

C72v	C72uS		NUL72v		C76uS	C76v	C76vS	C76w		NUL76w	C80v	C80w		NUL80w	C84v	C84uS	CC84v	C84vS	C84w		NUL84w	C88v	C92v	C88w		NUL88w	C24s	C24sS	C24t	C08s	C12s	C12sW	C16q		C16s	
0.000	0.000	1	0.514		0.000	0.000	0.000	0.000	1	0.514	0.000	0.000	1	0.514	0.000	0.000	0.000	0.000	0.000	1	0.514	0.000	0.000	0.000	1	0.514	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.511		0.000	0.000	0.000	0.000	1	0.511	0.000	0.000	1	0.511	0.000	0.000	0.000	0.000	0.000	1	0.511	0.000	0.000	0.000	1	0.511	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.504		0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.481		0.000	0.000	0.000	0.000	1	0.481	0.000	0.000	1	0.481	0.000	0.000	0.000	0.000	0.000	1	0.481	0.000	0.000	0.000	1	0.481	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.177		0.000	0.000	0.000	0.000	1	0.177	0.000	0.000	1	0.177	0.000	0.000	0.000	0.000	0.000	1	0.177	0.000	0.000	0.000	1	0.177	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.271		0.000	0.000	0.000	0.000	1	0.271	0.000	0.000	1	0.271	0.000	0.000	0.000	0.000	0.000	1	0.271	0.000	0.000	0.000	1	0.271	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.576		0.000	0.000	0.000	0.000	1	0.576	0.000	0.000	1	0.576	0.000	0.000	0.000	0.000	0.000	1	0.576	0.000	0.000	0.000	1	0.576	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.550		0.000	0.000	0.000	0.000	1	0.550	0.000	0.000	1	0.550	0.000	0.000	0.000	0.000	0.000	1	0.550	0.000	0.000	0.000	1	0.550	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.468		0.000	0.000	0.000	0.000	1	0.468	0.000	0.000	1	0.468	0.000	0.000	0.000	0.000	0.000	1	0.468	0.000	0.000	0.000	1	0.468	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000	1	0.492	0.000	0.000	0.000	1	0.492	0.000	0.000	1	0.492	0.000	0.000	0.000	0.000	0.000	1	0.492	0.000	0.000	0.000	1	0.492	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000	1	0.541	0.000	0.000	0.000	1	0.541	0.000	0.000	1	0.541	0.000	0.000	0.000	0.000	0.000	1	0.541	0.000	0.000	0.000	1	0.541	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000	1	0.209	0.000	0.000	0.000	1	0.209	0.000	0.000	1	0.209	0.000	0.000	0.000	0.000	0.000	1	0.209	0.000	0.000	0.000	1	0.209	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000	1	0.293	0.000	0.000	0.000	1	0.293	0.000	0.000	1	0.293	0.000	0.000	0.000	0.000	0.000	1	0.293	0.000	0.000	0.000	1	0.293	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.211	1	0.211	1
0.000	0.000	1	0.504		0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	1	0.504	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.500		0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	1	0.500	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.465		0.000	0.000	0.000	0.000	1	0.465	0.000	0.000	1	0.465	0.000	0.000	0.000	0.000	0.000	1	0.465	0.000	0.000	0.000	1	0.465	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.229		0.000	0.000	0.000	0.000	1	0.229	0.000	0.000	1	0.229	0.000	0.000	0.000	0.000	0.000	1	0.229	0.000	0.000	0.000	1	0.229	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.676		0.000	0.000	0.000	0.000	1	0.676	0.000	0.000	1	0.676	0.000	0.000	0.000	0.000	0.000	1	0.676	0.000	0.000	0.000	1	0.676	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.645		0.000	0.000	0.000	0.000	1	0.645	0.000	0.000	1	0.645	0.000	0.000	0.000	0.000	0.000	1	0.645	0.000	0.000	0.000	1	0.645	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.638		0.000	0.000	0.000	0.000	1	0.638	0.000	0.000	1	0.638	0.000	0.000	0.000	0.000	0.000	1	0.638	0.000	0.000	0.000	1	0.638	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.640		0.000	0.000	0.000	0.000	1	0.640	0.000	0.000	1	0.640	0.000	0.000	0.000	0.000	0.000	1	0.640	0.000	0.000	0.000	1	0.640	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.651		0.000	0.000	0.000	0.000	1	0.651	0.000	0.000	1	0.651	0.000	0.000	0.000	0.000	0.000	1	0.651	0.000	0.000	0.000	1	0.651	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.688		0.000	0.000	0.000	0.000	1	0.688	0.000	0.000	1	0.688	0.000	0.000	0.000	0.000	0.000	1	0.688	0.000	0.000	0.000	1	0.688	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.662		0.000	0.000	0.000	0.000	1	0.662	0.000	0.000	1	0.662	0.000	0.000	0.000	0.000	0.000	1	0.662	0.000	0.000	0.000	1	0.662	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000	1	0.673	0.000	0.000	0.000	1	0.673	0.000	0.000	1	0.673	0.000	0.000	0.000	0.000	0.000	1	0.673	0.000	0.000	0.000	1	0.673	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000	1	0.542	0.000	0.000	0.000	1	0.542	0.000	0.000	1	0.542	0.000	0.000	0.000	0.000	0.000	1	0.542	0.000	0.000	0.000	1	0.542	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.372		0.000	0.000	0.000	0.000	1	0.372	0.000	0.000	1	0.372	0.000	0.000	0.000	0.000	0.000	1	0.372	0.000	0.000	0.000	1	0.372	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.234		0.000	0.000	0.000	0.000	1	0.234	0.000	0.000	1	0.234	0.000	0.000	0.000	0.000	0.000	1	0.234	0.000	0.000	0.000	1	0.234	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.186		0.000	0.000	0.000	0.000	1	0.186	0.000	0.000	1	0.186	0.000	0.000	0.000	0.000	0.000	1	0.186	0.000	0.000	0.000	1	0.186	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.222		0.000	0.000	0.000	0.000	1	0.222	0.000	0.000	1	0.222	0.000	0.000	0.000	0.000	0.000	1	0.222	0.000	0.000	0.000	1	0.222	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.407		0.000	0.000	0.000	0.000	1	0.407	0.000	0.000	1	0.407	0.000	0.000	0.000	0.000	0.000	1	0.407	0.000	0.000	0.000	1	0.407	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	1	0.397	0.000	0.000	0.000	0.000	0.000	1	0.397	0.000	0.000	0.000	1	0.397	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	1	0.438	0.000	1	0.438	0.000	1	0.438	1
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	1	0.399	1	0.399	0.000	1	0.399	1
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	1	0.651	1	0.651	1
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.318		0.000	0.000	0.000	0.000	1	0.318	0.000	0.000	1	0.318	0.000	0.000	0.000	0.000	0.000	1	0.318	0.000	0.000	0.000	1	0.318	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.175		0.000	0.000	0.000	0.000	1	0.175	0.000	0.000	1	0.175	0.000	0.000	0.000	0.000	0.000	1	0.175	0.000	0.000	0.000	1	0.175	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.267		0.000	0.000	0.000	0.000	1	0.267	0.000	0.000	1	0.267	0.000	0.000	0.000	0.000	0.000	1	0.267	0.000	0.000	0.000	1	0.267	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.349		0.000	0.000	0.000	0.000	1	0.349	0.000	0.000	1	0.349	0.000	0.000	0.000	0.000	0.000	1	0.349	0.000	0.000	0.000	1	0.349	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.359		0.000	0.000	0.000	0.000	1	0.359	0.000	0.000	1	0.359	0.000	0.000	0.000	0.000	0.000	1	0.359	0.000	0.000	0.000	1	0.359	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000	1	0.300		0.000	0.000	0.000	0.000	1	0.300	0.000	0.000	1	0.300	0.000	0.000	0.000	0.000	0.000	1	0.300	0.000	0.000	0.000	1	0.300	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
1 0.394	1 0.394	1	0.394	1	0.394	0.000	0.000	0.000	1	0.394	0.000	0.000	1	0.394	0.000	0.000	0.000	0.000	0.000	1	0.394	0.000	0.000	0.000	1	0.394	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
1 0.354	1 0.354	1	0.354	1	0.354	0.000	0.000	0.000	1	0.354	0.000	0.000	1	0.354	0.000	0.000	0.000	0.000	0.000	1	0.354	0.000	0.000	0.000	1	0.354	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
1 0.353	1 0.353	1	0.353	1	0.353	0.000	0.000	0.000	1	0.353	0.000	0.000	1	0.353	0.000	0.000	0.000	0.000	0.000	1	0.353	0.000	0.000	0.000	1	0.353	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
1 0.405	1 0.405	1	0.405	1	0.405	0.000	0.000	0.000	1	0.405	0.000	0.000	1	0.405	0.000	0.000	0.000	0.000	0.000	1	0.405	0.000	0.000	0.000	1	0.405	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
1 0.295	1 0.295	1	0.295	1	0.295	0.000	0.000	0.000	1	0.295	0.000	0.000	1	0.295	0.000	0.000	0.000	0.000	0.000	1	0.295	0.000	0.000	0.000	1	0.295	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
1 1.000	1 1.000		0.000	1	1.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
1 0.329	1 0.329	1	0.329	1	0.329	0.000	0.000	0.000	1	0.329	0.000	0.000	1	0.329	0.000	0.000	0.000	0.000	0.000	1	0.329	0.000	0.000	0.000	1	0.329	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000	1	0.396	0.000	0.000	0.000	1	0.396	0.000	0.000	1	0.396	0.000	0.000	0.000	0.000	0.000	1	0.396	0.000	0.000	0.000	1	0.396	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	1	0.497	0.000	0.000	0.000	0.000	0.000	1	0.497	0.000	0.000	0.000	1	0.497	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	1	0.278	0.000	1	0.278	0.000	1	0.278	1
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	1	0.651	0.000	1	0.651	0.000	1	0.651	1
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	1	0.208	1	0.208	0.000	1	0.208	1
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	1	0.420	1
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000		0.000	
0.000	0.000		0.000		0.000	0.000	0.000	0.000		0.000	0.000	0.000		0.000	0.000	0.000	0.000	0.000	0.000		0.000	0.000	0.000	0.000	1	0.195	1	0.195	1	0.195	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

	C72v		C72uS		NUL72v		C76uS		C76v		C76vS		C76w		NUL76w		C80v		C80w		NUL80w		C84v		C84uS		CC84v		C84vS		C84w		NUL84w		C88v		C92v		C88w		NUL88w		C24s		C24sS		C24t		C08s		C12s		C12sW		C16q		C16s
	0.000		0.000	1	0.164		0.000		0.000		0.000		0.000	1	0.164		0.000		0.000	1	0.164		0.000		0.000		0.000		0.000		0.000	1	0.164		0.000		0.000		0.000	1	0.164		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.336		0.000		0.000		0.000		0.000	1	0.336		0.000		0.000	1	0.336		0.000		0.000		0.000		0.000		0.000	1	0.336		0.000		0.000		0.000	1	0.336		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.241		0.000		0.000		0.000		0.000	1	0.241		0.000		0.000	1	0.241		0.000		0.000		0.000		0.000		0.000	1	0.241		0.000		0.000		0.000	1	0.241		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.244		0.000		0.000		0.000		0.000	1	0.244		0.000		0.000	1	0.244		0.000		0.000		0.000		0.000		0.000	1	0.244		0.000		0.000		0.000	1	0.244		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.240		0.000		0.000		0.000		0.000	1	0.240		0.000		0.000	1	0.240		0.000		0.000		0.000		0.000		0.000	1	0.240		0.000		0.000		0.000	1	0.240		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.212		0.000		0.000		0.000		0.000	1	0.212		0.000		0.000	1	0.212		0.000		0.000		0.000		0.000		0.000	1	0.212		0.000		0.000		0.000	1	0.212		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.265	1	0.265	1	0.265	1	0.265		0.000		0.000		0.000	1	0.265		0.000		0.000	1	0.265		0.000		0.000		0.000		0.000		0.000	1	0.265		0.000		0.000		0.000	1	0.265		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.255	1	0.255	1	0.255	1	0.255		0.000		0.000		0.000	1	0.255		0.000		0.000	1	0.255		0.000		0.000		0.000		0.000		0.000	1	0.255		0.000		0.000		0.000	1	0.255		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.253	1	0.253	1	0.253	1	0.253		0.000		0.000		0.000	1	0.253		0.000		0.000	1	0.253		0.000		0.000		0.000		0.000		0.000	1	0.253		0.000		0.000		0.000	1	0.253		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.258	1	0.258	1	0.258	1	0.258		0.000		0.000		0.000	1	0.258		0.000		0.000	1	0.258		0.000		0.000		0.000		0.000		0.000	1	0.258		0.000		0.000		0.000	1	0.258		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.236	1	0.236	1	0.236	1	0.236		0.000		0.000		0.000	1	0.236		0.000		0.000	1	0.236		0.000		0.000		0.000		0.000		0.000	1	0.236		0.000		0.000		0.000	1	0.236		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.283	1	0.283	1	0.283	1	0.283		0.000		0.000		0.000	1	0.283		0.000		0.000	1	0.283		0.000		0.000		0.000		0.000		0.000	1	0.283		0.000		0.000		0.000	1	0.283		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000	1	0.279		0.000		0.000		0.000	1	0.279		0.000		0.000	1	0.279		0.000		0.000		0.000		0.000		0.000	1	0.279		0.000		0.000		0.000	1	0.279		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.260		0.000		0.000		0.000		0.000		0.000
1	0.297	1	0.297	1	0.297	1	0.297		0.000		0.000		0.000	1	0.297		0.000		0.000	1	0.297		0.000		0.000		0.000		0.000		0.000	1	0.297		0.000		0.000		0.000	1	0.297		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.179	1	0.179	1	0.179	1	0.179		0.000		0.000		0.000	1	0.179		0.000		0.000	1	0.179		0.000		0.000		0.000		0.000		0.000	1	0.179		0.000		0.000		0.000	1	0.179		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.328	1	0.328	1	0.328	1	0.328		0.000		0.000		0.000	1	0.328		0.000		0.000	1	0.328		0.000		0.000		0.000		0.000		0.000	1	0.328		0.000		0.000		0.000	1	0.328		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.271	1	0.271	1	0.271	1	0.271		0.000		0.000		0.000	1	0.271		0.000		0.000	1	0.271		0.000		0.000		0.000		0.000		0.000	1	0.271		0.000		0.000		0.000	1	0.271		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.251	1	0.251	1	0.251	1	0.251		0.000		0.000		0.000	1	0.251		0.000		0.000	1	0.251		0.000		0.000		0.000		0.000		0.000	1	0.251		0.000		0.000		0.000	1	0.251		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.222	1	0.222	1	0.222	1	0.222		0.000		0.000		0.000	1	0.222		0.000		0.000	1	0.222		0.000		0.000		0.000		0.000		0.000	1	0.222		0.000		0.000		0.000	1	0.222		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000	1	0.272		0.000		0.000		0.000	1	0.272		0.000		0.000	1	0.272		0.000		0.000		0.000		0.000		0.000	1	0.272		0.000		0.000		0.000	1	0.272		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.252		0.000		0.000		0.000		0.000		0.000	1	0.252		0.000		0.000		0.000	1	0.252		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500	1	0.500		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.273	1	0.273	1	0.273	1	0.273	1	0.273	1	0.273	1	0.273	1	0.273	1	0.273		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.259	1	0.259	1	0.259	1	0.259		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.175	1	0.175	1	0.175		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.391	1	0.391	1	0.391	1	0.391		0.000		0.000		0.000	1	0.391		0.000		0.000	1	0.391		0.000		0.000		0.000		0.000		0.000	1	0.391		0.000		0.000		0.000	1	0.391		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.326	1	0.326	1	0.326	1	0.326		0.000		0.000		0.000	1	0.326		0.000		0.000	1	0.326		0.000		0.000		0.000		0.000		0.000	1	0.326		0.000		0.000		0.000	1	0.326		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.285	1	0.285	1	0.285	1	0.285		0.000		0.000		0.000	1	0.285		0.000		0.000	1	0.285		0.000		0.000		0.000		0.000		0.000	1	0.285		0.000		0.000		0.000	1	0.285		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.296	1	0.296	1	0.296	1	0.296		0.000		0.000		0.000	1	0.296		0.000		0.000	1	0.296		0.000		0.000		0.000		0.000		0.000	1	0.296		0.000		0.000		0.000	1	0.296		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.280	1	0.280	1	0.280	1	0.280		0.000		0.000		0.000	1	0.280		0.000		0.000	1	0.280		0.000		0.000		0.000		0.000		0.000	1	0.280		0.000		0.000		0.000	1	0.280		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.257	1	0.257	1	0.257	1	0.257		0.000		0.000		0.000	1	0.257		0.000		0.000	1	0.257		0.000		0.000		0.000		0.000		0.000	1	0.257		0.000		0.000		0.000	1	0.257		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000	1	0.283		0.000		0.000		0.000	1	0.283		0.000		0.000	1	0.283		0.000		0.000		0.000		0.000		0.000	1	0.283		0.000		0.000		0.000	1	0.283		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.249		0.000		0.000		0.000		0.000		0.000	1	0.249		0.000		0.000		0.000	1	0.249		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000	1	8.000	1	8.000	1	8.000		0.000	1	8.000	1	8.000		0.000	1	8.000	1	8.000	1	8.000	1	8.000	1	8.000		0.000	1	8.000	1	8.000	1	8.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.263	1	0.263	1	0.263	1	0.263	1	0.263	1	0.263	1	0.263	1	0.263	1	0.263		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.250	1	0.250	1	0.250	1	0.250		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.200	1	0.200	1	0.200		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.249	1	0.249	1	0.249		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.236		0.000		0.000		0.000		0.000	1	0.236		0.000		0.000	1	0.236		0.000		0.000		0.000		0.000		0.000	1	0.236		0.000		0.000		0.000	1	0.236		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.299		0.000		0.000		0.000		0.000	1	0.299		0.000		0.000	1	0.299		0.000		0.000		0.000		0.000		0.000	1	0.299		0.000		0.000		0.000	1	0.299		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.297		0.000		0.000		0.000		0.000	1	0.297		0.000		0.000	1	0.297		0.000		0.000		0.000		0.000		0.000	1	0.297		0.000		0.000		0.000	1	0.297		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.231		0.000		0.000		0.000		0.000	1	0.231		0.000		0.000	1	0.231		0.000		0.000		0.000		0.000		0.000	1	0.231		0.000		0.000		0.000	1	0.231		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.228		0.000		0.000		0.000		0.000	1	0.228		0.000		0.000	1	0.228		0.000		0.000		0.000		0.000		0.000	1	0.228		0.000		0.000		0.000	1	0.228		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.195		0.000		0.000		0.000		0.000	1	0.195		0.000		0.000	1	0.195		0.000		0.000		0.000		0.000		0.000	1	0.195		0.000		0.000		0.000	1	0.195		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000	1	0.218		0.000		0.000		0.000		0.000	1	0.218		0.000		0.000	1	0.218		0.000		0.000		0.000		0.000		0.000	1	0.218		0.000		0.000		0.000	1	0.218		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
1	0.407		0.000	1	0.407		0.000		0.000		0.000		0.000	1	0.407		0.000		0.000	1	0.407		0.000		0.000		0.000		0.000		0.000	1	0.407		0.000		0.000		0.000	1	0.407		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000	1	0.240	1	0.240	1	0.240	1	0.240		0.000		0.000	1	0.240	1	0.240		0.000	1	0.240	1	0.240	1	0.240	1	0.240	1	0.240	1	0.240	1	0.240	1	0.240		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.231	1	0.231	1	0.231	1	0.231		0.000	1	0.231	1	0.231	1	0.231	1	0.231	1	0.231	1	0.231	1	0.231	1	0.231		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.254		0.000	1	0.254	1	0.254	1	0.254	1	0.254	1	0.254	1	0.254	1	0.254	1	0.254		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.248	1	0.248	1	0.248	1	0.248		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.159	1	0.159	1	0.159		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000	1	0.334	1	0.334		0.000		0.000	1	0.334		0.000		0.000		0.000		0.000		0.000	1	0.334		0.000		0.000		0.000	1	0.334		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.360	1	0.360		0.000		0.000		0.000		0.000		0.000	1	0.360		0.000		0.000		0.000	1	0.360		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.339	1	0.339		0.000		0.000		0.000	1	0.339		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.599	1	0.599		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
	8.470		8.063		47.057		17.216		8.240		8.240		8.574		56.101		8.231		8.591		58.087		8.725		9.036		9.761		9.761		10.100		59.716		10.518		11.301		11.900		61.855		0.195		0.195		0.455		1.367		0.607		1.974		0.862		3.256
26		25		126		47		2		2		3		150		2		3		156		4		4		7		7		8		161		10		14		15		169		1		1		2		3		2		5		2		8	

8

CC16s	C16sS	C20p	CC20p	C24oS	C20q	C20s	CC20s	C20t	NUL20t
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000

CC16s		C16sS		C20p		CC20p		C24oS		C20q		C20s		CC20s		C20t		NUL20t
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.211	1	0.211	1	0.211	1	0.211		0.000	1	0.211	1	0.211	1	0.211	1	0.211	1	0.211
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000	1	0.532	1	0.532		0.000	1	0.532	1	0.532	1	0.532	1	0.532	1	0.532
0.000		0.000		0.000	1	3.000	1	3.000	1	3.000	1	3.000	1	3.000	1	3.000	1	3.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.438	1	0.438		0.000		0.000		0.000		0.000		0.000		0.000	1	0.438	1	0.438
0.399	1	0.399		0.000		0.000		0.000		0.000		0.000		0.000	1	0.399	1	0.399
0.651	1	0.651	1	0.651	1	0.651		0.000	1	0.651	1	0.651	1	0.651	1	0.651	1	0.651
0.000		0.000		0.000		0.000		0.000	1	0.276	1	0.276	1	0.276	1	0.276	1	0.276
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
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0.208	1	0.208		0.000		0.000		0.000		0.000		0.000		0.000	1	0.208	1	0.208
0.420	1	0.420		0.000		0.000		0.000		0.000		0.000		0.000	1	0.420	1	0.420
0.000		0.000		0.000		0.000		0.000		0.000	1	0.484	1	0.484	1	0.484	1	0.484
0.000		0.000		0.000		0.000		0.000		0.000		0.000	1	0.195	1	0.195	1	0.195

CC16s		C16sS		C20p		CC20p		C24oS		C20q		C20s		CC20s		C20t		NUL20t
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0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000		0.000
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3.256		3.256		1.394		4.394		3.000		4.670		5.154		5.349		8.008		8.268
	8		3		4		1		5		6		7		14		15	

APPENDIX B

HEC-1 Model Output File for the 100-Year, 24-Hour Storm

(Volume 2 of 3)

APPENDIX C

HEC-1 Model Output File for the 100-Year, 6-Hour Storm

(Volume 2 of 3)

APPENDIX D

HEC-1 Model Output File for the 50-Year, 24-Hour Storm

(Volume 2 of 3)

APPENDIX E

HEC-1 Model Output File for the 25-Year, 24-Hour Storm

(Volume 3 of 3)

APPENDIX F

HEC-1 Model Output File for the 10-Year, 24-Hour Storm

(Volume 3 of 3)

APPENDIX G

HEC-1 Model Output File for the 2-Year, 24-Hour Storm

(Volume 3 of 3)

APPENDIX H

Electronic Files (CD)

EXHIBITS

EXHIBIT A

NOAA Rainfall Contours for the Project Site

NOAA
100 Year-24 Hour
Rainfall Contours

YAVAPAI CO.

LA PAZ CO.

GILA CO.

PINAL CO.

YUMA CO.

PIMA CO.

Wickenburg

Cave Creek

Carefree

Peoria

Surprise

Phoenix

Scottsdale

Buckeye

Youngtown

Glendale

Fountain Hills

El Mirage

Litchfield Park

Tolleson

Paradise Valley

Mesa

Tempe

Avondale

Gilbert

STUDY AREA

Chandler

Queen Creek

Goodyear

Gila Bend

4.0 4.1 4.2 4.4 4.6 4.7 4.8 5.0 3.8 3.4 5.5 6.0 6.5

Publication Date: June 23, 2003

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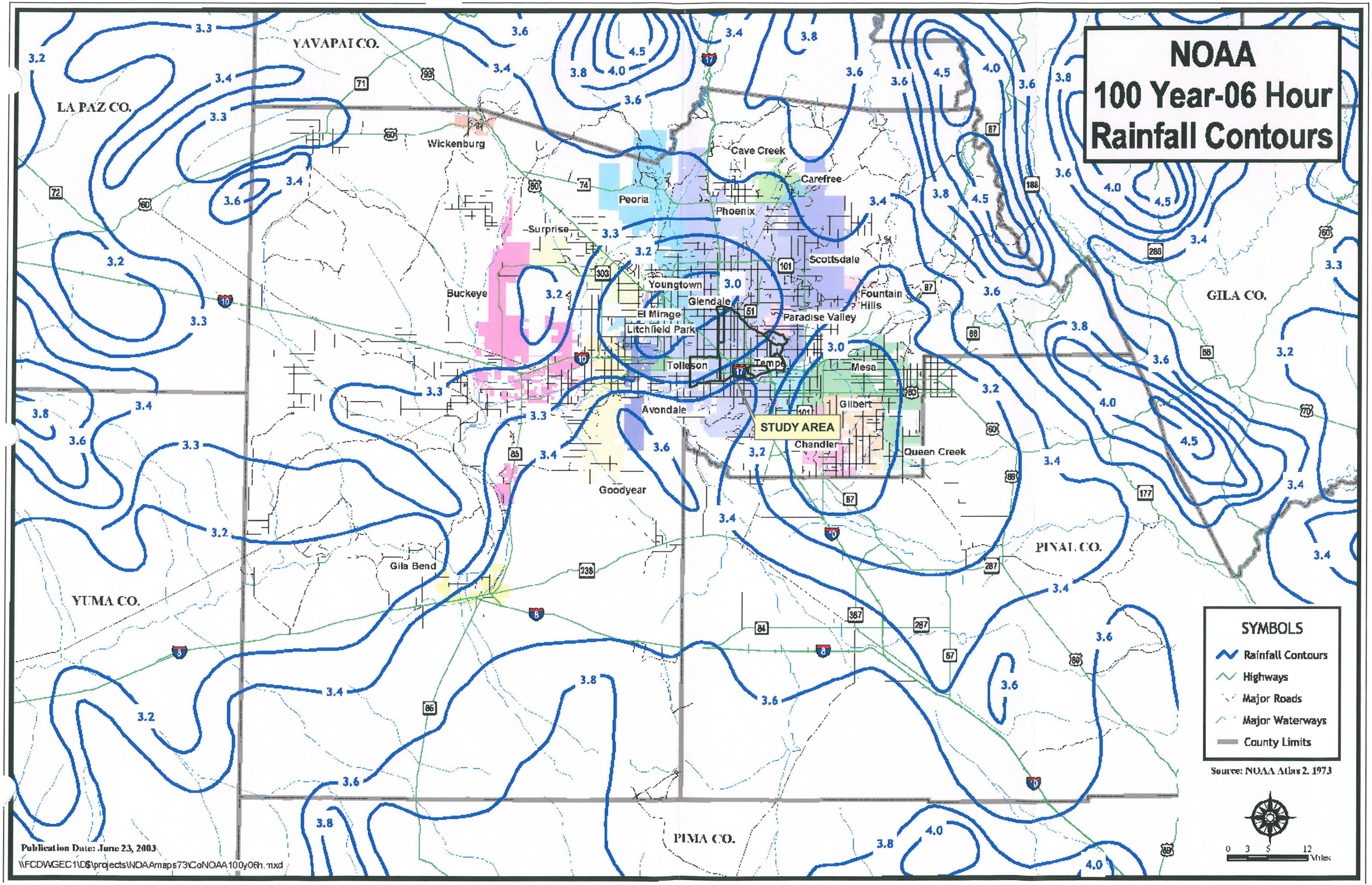
SYMBOLS

- Rainfall Contours
- Highways
- Major Roads
- Major Waterways
- County Limits

Source: NOAA Atlas 2. 1973

0 3 6 12 Miles

NOAA
100 Year-06 Hour
Rainfall Contours



NOAA
2 Year-24 Hour
Rainfall Contours

YAVAPAI CO.

LA PAZ CO.

Wickenburg

Cave Creek

Carefree

Peoria

Surprise

Phoenix

Scottsdale

Buckeye

Youngtown

Glendale

El Mirage

Litchfield Park

Paradise Valley

Tolleson

Tempe

Mesa

Avondale

Gilbert

STUDY AREA

Chandler

Queen Creek

Goodyear

GILA CO.

Gila Bend

YUMA CO.

PINAL CO.

PIMA CO.

SYMBOLS

- Rainfall Contours
- Highways
- Major Roads
- Major Waterways
- County Limits

Source: NOAA Atlas 2. 1973

0 3 6 12 Miles

Publication Date: June 23, 2003

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NOAA 2 Year-06 Hour Rainfall Contours

YAVAPAI CO.
LA PAZ CO.
YUMA CO.
PINAL CO.
GILA CO.
PIMA CO.

Wickenburg
Cave Creek
Carefree
Scottsdale
Peoria
Surprise
Buckeye
Phoenix
Youngtown
Glendale
El Mirage
Litchfield Park
Tolleson
Paradise Valley
Temple
Mesa
Gilbert
Avondale
Chandler
Queen Creek
Goodyear
Gila Bend

STUDY AREA

SYMBOLS
- Rainfall Contours
- Highways
- Major Roads
- Major Waterways
- County Limits

Source: NOAA Atlas 2, 1973

0 3 6 12 Miles

Publication Date: June 23, 2003
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EXHIBIT B

Soil Map

METRO PHOENIX ADMS/P
SUB-BASIN BOUNDARY
&
SOIL COVERAGE

Legend

SCS Soil Survey
Soil, Area

- 651Aa, 1 acres
- 651AbA, 57 acres
- 651AdA, 348 acres
- 651AdB, 57 acres
- 651Ao, 928 acres
- 651Br, 6 acres
- 651CF, 155 acres
- 651Cb, 111 acres
- 651Cn, 408 acres
- 651Cp, 54 acres
- 651CrB, 5 acres
- 651Es, 2982 acres
- 651GPI, 431 acres
- 651Gc, 21 acres
- 651Ge, 22 acres
- 651GgA, 5446 acres
- 651Gr, 119 acres
- 651Gt, 3043 acres
- 651Lb, 3 acres
- 651LcA, 2814 acres
- 651Le, 755 acres
- 651M-W, 184 acres
- 651Ma, 36 acres
- 651Mo, 42 acres
- 651Mp, 1571 acres
- 651Mr, 5037 acres
- 651Ms, 12 acres
- 651PeA, 10 acres
- 651RaA, 60 acres
- 651TD, 65 acres
- 651Tc, 38 acres
- 651Tt, 64 acres
- 651Tu, 52 acres
- 651Tw, 14 acres
- 651Va, 85 acres
- 651Vg, 418 acres
- 651Vh, 110 acres
- 655Ag, 15 acres
- 655Am, 736 acres
- 655AoB, 947 acres
- 655Av, 1909 acres
- 655Ca, 91 acres
- 655Cb, 13 acres
- 655Cc, 182 acres
- 655CeC, 1080 acres
- 655Es, 3339 acres
- 655GPI, 38 acres
- 655Gf, 60 acres
- 655Gm, 3581 acres
- 655Gn, 384 acres
- 655LaA, 2015 acres
- 655LeA, 120 acres
- 655Mv, 627 acres
- 655Pm, 25 acres
- 655PvC, 63 acres
- 655RiA, 83 acres
- 655RiB, 72 acres
- 655Ro, 466 acres
- 655Ru, 932 acres
- 655TrB, 30 acres
- 655Va, 33 acres
- 655Vf, 34 acres
- 655W, 21 acres

Soil Survey as shown by soil prefix:
651xxx - Maricopa County, AZ, Central Part
655xxx - Eastern Maricopa and Northern Pinal Counties Area, AZ

- Lightrail
- Local Roads
- Highway
- Railroad
- Subbasin Boundary

3,000 0 3,000
Feet

SCALE: 1" = 3000'

WOOD/PATEL
CIVIL ENGINEERS HYDROLOGISTS LAND SURVEYORS CONSTRUCTION MANAGERS
2051 West Northern, Suite 100, Phoenix, Arizona 85021 Phone: (602) 335-8500

In association with EEC, Inc.

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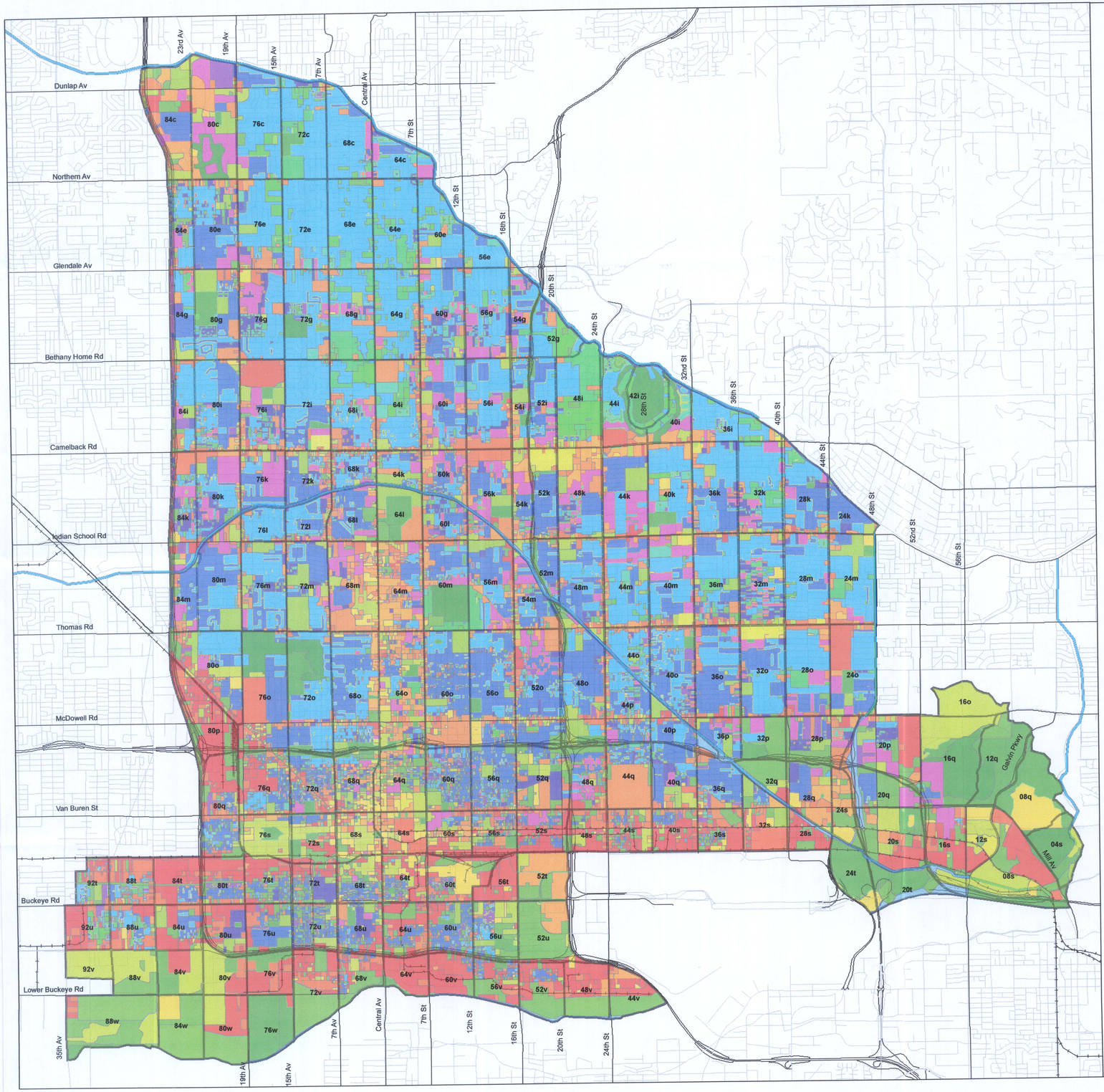
EXHIBIT C

Land Use Map

METRO PHOENIX ADMS/P SUB-BASIN BOUNDARY & LAND USE



Legend

MAG Land Use Coverage

Land Use, Area

- Golf courses, 847 acres
- Passive Open Space (Includes mountain preserves, 1 acres
- Active Open Space (Includes parks), 1887 acres
- Agriculture, 144 acres
- Vacant (Existing land use database only), 2970 acres
- Other Employment - low (Proving grounds and lan, 651 acres
- Airports (Includes public use airports), 1 acres
- Cemeteries, 19 acres
- Educational (Schools and universities), 1248 acres
- Neighborhood Commercial (50,000 to 100,000 sq., 1022 acres
- Public Facilities (comm centers, libraries, sub, 1739 acres
- Community Commercial (100,000 to 500,000 sq. ft, 262 acres
- General Commercial (Commercial where no detail, 373 acres
- Office General (Office where no detail availabl, 10 acres
- Office Mid Rise (5-12 stories), 353 acres
- Office Low Rise (1-4 stories), 1316 acres
- Office High Rise (13 stories or more), 9 acres
- Tourist and Visitor Accommodations (Hotels, mot, 303 acres
- Specialty Commercial (<=50,000 sq. ft.), 2200 acres
- Special Events (stadiums, sports complexes and, 258 acres
- Regional Commercial (500,000 to 1,000,000 sq. f, 193 acres
- General Industrial (Industrial where no detail, 17 acres
- Warehouse/Distribution Centers, 2421 acres
- Industrial, 985 acres
- Institutional (Includes hospitals and churches), 1381 acres
- Transportation (railways, transit centers, free, 587 acres
- Rural Residential (<= 1/5 du per acre), 6 acres
- Estate Residential (1/5 du per acre to 1 du per, 523 acres
- Large Lot Residential - Single Family (1-2 du p, 1061 acres
- Medium Density Residential - Muli Family (5-10, 757 acres
- Medium Lot Residential - Single Family (2-4 du, 8633 acres
- Small Lot Residential - Single Family (4-6 du p, 5869 acres
- High Density Residential - Multi Family (10-15, 1385 acres
- Very Small Lot Residential - Single Family (>6, 429 acres
- Very High Density Residential - Multi Family (>, 2212 acres
- Water, 383 acres

- Lightrail
- Local Roads
- Highway
- Railroad
- Subbasin Boundary

3,000 0 3,000

Feet

SCALE: 1" = 3000'

WOOD/PATEL

CIVIL ENGINEERS HYDROLOGISTS LAND SURVEYORS CONSTRUCTION MANAGERS
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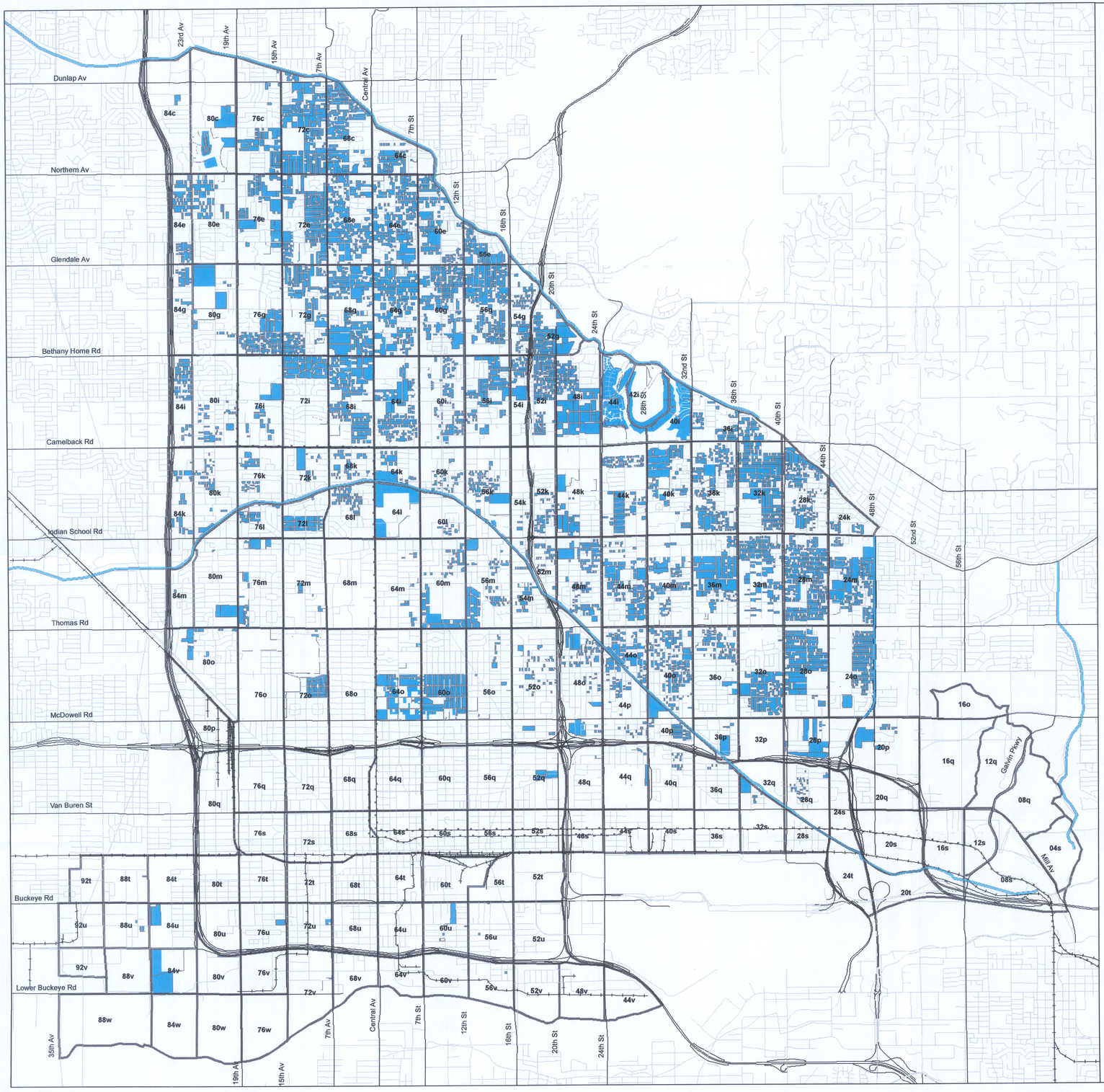
EXHIBIT D

Flood Irrigated Area

METRO PHOENIX ADMS/P SUB-BASIN BOUNDARY & IRRIGATED AREA



Legend

- Lightrail
- Local Roads
- Highway
- Railroad
- Subbasin Boundary
- Irrigated Area

3,000 0 3,000

Feet

SCALE: 1" = 3000'

WOOD/PATEL

CIVIL ENGINEERS HYDROLOGISTS LAND SURVEYORS CONSTRUCTION MANAGERS
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EXHIBIT E

Sub-Watershed Map

METRO PHOENIX ADMS/P SUB-WATERSHED BOUNDARY

Legend

- Lightrail
- Local Roads
- Highway
- Railroad
- Canal
- 24m — Subbasin Boundary and Subbasin Name

Sub-Watershed Boundaries

- Surface and Sub-surface Boundary
- Sub-surface Boundary

3,000 0 3,000

Feet

SCALE: 1" = 3000'

WOOD/PATEL

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EXHIBIT F

Sub-basin Boundary and HEC-1 Schematic Map

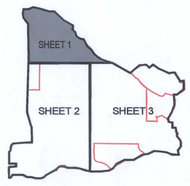
METRO PHOENIX ADMS/P
SUB-BASIN BOUNDARY
&
HEC-1 SCHEMATIC DIAGRAM

SHEET 1 OF 3

Legend

- Local Roads
- Highway
- Railroad
- Lightrail
- Major Streets
- East & West ADOT Tunnel 21'
- ADOT Tunnel 14'
- Other SD Tunnels
- 36"-45"
- 48"-57"
- 60"-108"
- Canal
- 5 pump
- Subbasin Boundary
- 10' Index Contours
- Salt River Floodway

- Subbasin Hydrograph
- Diversion
- Surface/Pipe Routing
- Storage Routing
- Combine
- Input Hydrograph



1,000 0 1,000 Feet

SCALE: 1" = 1000'

WOOD/PATEL
CIVIL ENGINEERS HYDROLOGISTS LAND SURVEYORS CONSTRUCTION MANAGERS
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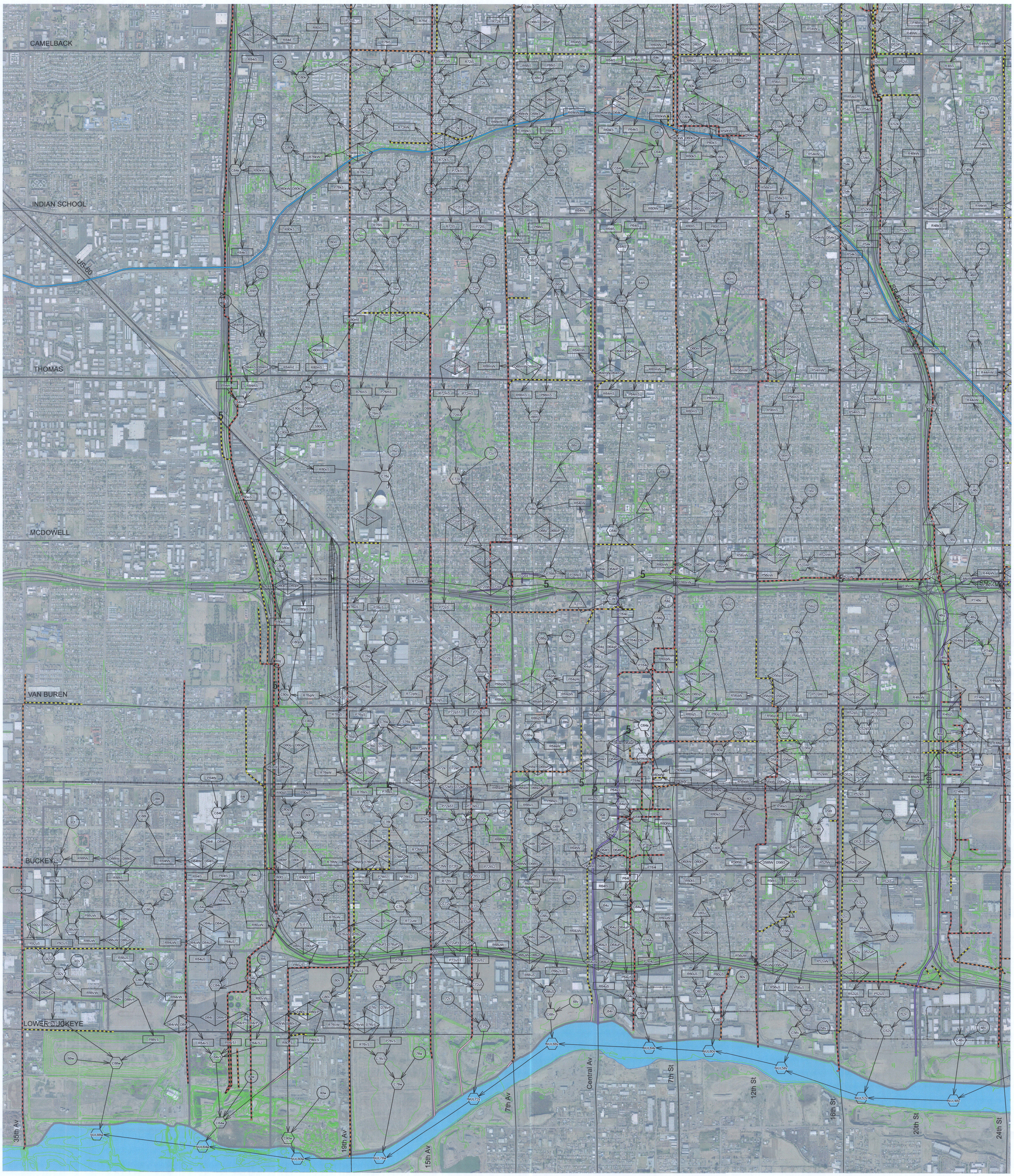
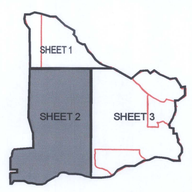


METRO PHOENIX ADMS/P
SUB-BASIN BOUNDARY
&
HEC-1 SCHEMATIC DIAGRAM

SHEET 2 OF 3

Legend

- Local Roads
- Highway
- Railroad
- Lightrail
- Major Streets
- East & West ADOT Tunnel 21'
- ADOT Tunnel 14'
- Other SD Tunnels
- 36"-45"
- 48"-57"
- 60"-108"
- Canal
- 5 pump
- Subbasin Boundary
- 10' Index Contours
- Salt River Floodway
- 16s Subbasin Hydrograph
- D16sP D16s Diversion
- P16sS Surface/Pipe Routing
- S16s Storage Routing
- C16s Combine
- ARC40 Input Hydrograph



1,000 0 1,000 Feet

SCALE: 1" = 1000'

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METRO PHOENIX ADMS/P
SUB-BASIN BOUNDARY
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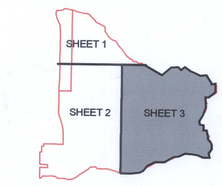

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EXHIBIT G

100-Year Peak Flows

METRO PHOENIX ADMS/P
EXHIBIT G 100-YEAR
PEAK FLOWS

SHEET 1 OF 3

Legend

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- Salt River Floodway
- 100-YR 24-HR / (100-YR 6-HR) SURFACE FLOW (CFS)
- 100-YR 24-HR / (100-YR 6-HR) PIPE FLOW (CFS)
- *100-YR 24-HR* / *(100-YR 6-HR)* TUNNEL FLOW (CFS)

1,000 0 1,000 Feet

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METRO PHOENIX ADMS/P
EXHIBIT G - 100-YEAR PEAK FLOWS

SHEET 2 OF 3

CAMELBACK
INDIAN SCHOOL
US-60
THOMAS
MCDOWELL
VAN BUREN
BUCKEYE
LOWER BUCKEYE
SR-202
I-17
I-10
35th Av
19th Av
15th Av
7th Av
Central Av
7th St
12th St
16th St
20th St
24th St

Legend

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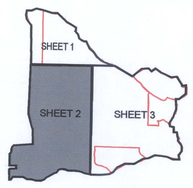

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METRO PHOENIX ADMS/P
EXHIBIT G 100-YEAR
PEAK FLOWS

SHEET 3 OF 3

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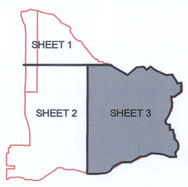

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