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**CANDIDATE ASSESSMENT REPORT**

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**THOMAS ROAD  
X97-2774-14**

**99TH to 91ST Avenue  
&  
91ST to 83RD Avenue**



Prepared by:

Rick McFarlin, E.I.T.

**MCDOT TRANSPORTATION PLANNING DIVISION**

July 21, 1997



**CANDIDATE ASSESSMENT REPORT**

**THOMAS ROAD  
C97-2774-11-15**

**MCDOT TRANSPORTATION PLANNING DIVISION**

**July 21, 1997**

<b>Project Name:</b> <i>Thomas Road</i>		<b>Project Termini:</b> <i>99th Ave. to 83rd Ave.</i>		
<b>Requested by:</b> <i>Maricopa County and City of Phoenix</i>				
<b>Improvement Requested:</b> <i>Construct 5 lane Rural Minor Arterial Road from 350 ft west of 99th Ave. to 91st Ave. and complete the Urban Minor Arterial Road from 91st Ave. to 83rd Ave. Install Storm Drain from Loop 101 to 83rd Avenue.</i>				
<b>PM<sub>10</sub> Area?</b> <i>yes</i>		<b>Total Length:</b> <i>3.38 Km (2.1 mi.)</i>		
<b>Estimated Cost:</b>	<i>MCDOT</i>	<i>Phoenix</i>	<i>ADOT</i>	<i>Total</i>
<i>99th to 91st Ave.</i>	<b>\$1,948,000</b>	<b>\$140,000</b>	<b>\$1,279,000</b>	<b>\$3,367,000</b>
<i>91st to 83rd Ave.</i>	<b>\$0</b>	<b>\$1,110,000</b>	<b>\$0</b>	<b>\$1,110,000</b>
<b>TOTAL</b>	<b>\$1,948,000</b>	<b>\$1,250,000</b>	<b>\$1,279,000</b>	<b>\$4,477,000</b>

**Problem Identification:**

The section of the Agua Fria Freeway (Loop 101) between Interstate 10 and Glendale Avenue is scheduled to be constructed by December, 2000. This section of freeway will align east of 99th Avenue intersecting McDowell Road, Thomas Road, Indian School Road, Camelback Road and Glendale Avenue. Traffic volumes on these roads are projected to increase with the construction of this section of freeway. All crossroads within this corridor are four lane rural minor arterials except Thomas Road. Thomas Road, between 99th Avenue and 91st Avenue, currently consists of a two lane 8.5 m (28 ft) roadway in relatively poor condition, showing signs of fatigue and excessive wear. Thomas Road, from 91st to 83rd Avenue, consists of a five lane 20.2 m (66 ft) Minor Arterial Road with curb and gutter for approximately 80% of its length.

An Intergovernmental Agreement (IGA) between the County and the City of Phoenix was approved in 1991. The limit of this IGA project is Thomas Road from 99th to 83rd Avenue. Cost sharing is detailed in the IGA which is included in the Appendix. The City of Phoenix has programmed improvements for the 91st Avenue to 83rd Avenue section but has not programmed improvements identified in the IGA for 99th Avenue to 91st Avenue.

## Candidate Assessment Report Number C7-2774-14

With the projected traffic increase due to the future Agua Fria Freeway, it is anticipated that the widening of Thomas Road from 99th to 91st Avenue along with resurfacing and completion of a storm drain from 91st to 83rd Avenue is necessary. The requested improvements would upgrade the existing roadway to provide a section meeting the projected ADT for the year 2020.

### **Summary Recommendation:**

#### **99th to 91st Avenue:**

Medium Cost Alternative (Alt 3): It is recommended that a Rural Minor Arterial Road with a 10.2 m (33 ft) half width and continuous left turn lane, be constructed for Thomas Road from 106.8 m (350 ft) west of 99th Avenue to 21.0 m (69 ft) west of 91st Avenue. Salt River Project (SRP) irrigation facilities will be relocated. Right-of-Way east of 99th Avenue would be 19.8 m (65 ft) halfwidth to provide shoulder drainage and adequate clear distance. Future developers would construct curb and gutter and sidewalks at the time of their site development. The improvements to Thomas Road by ADOT at the 95th Avenue alignment will include an urban pavement section with four through lanes and left turn lanes. The county would construct a storm drain from Loop 101 to 91st Avenue. The county would be responsible for all costs for the portion of roadway from 99th to 91st Avenue except design, which would be the responsibility of the City of Phoenix.

Design, right-of-way acquisition and SRP irrigation relocation should be accomplished as soon as practical. In the event that the construction funds are available early, the construction of this project could be advanced to better coordinate with ADOT construction on Thomas Road in FY 2000.

#### **91st to 83rd Avenue:**

It is recommended that Thomas Road from 91st to 83rd Avenue be resurfaced with a minimum 37.5 mm (1 1/2") overlay at a width of 20.2 m (66 ft) during construction of a storm drain and other improvements programmed by the City of Phoenix. The City of Phoenix would be responsible for all costs for this section.

### **EXISTING CONDITIONS**

#### **Roadway:**

The existing roadway from 99th Avenue to 91st Avenue consists of an 8.6 m (28 ft) roadway with an asphalt concrete surface. Between 99th Avenue and 91st Avenue, the roadway widens to 12.2 m (40 ft) to provide separate left turn lanes at the intersections. From 91st Avenue to 83rd Avenue, the roadway increases to a five lane, 20.2 m (66 ft) Minor Arterial. The vertical alignment is relatively level through the limits of the project.

#### **Right of Way:**

**Candidate Assessment Report Number C7-2774-14**

Existing right-of-way east of 99th Avenue along Thomas Road varies from 16.764 m (55 ft) to 10.2 m (33 ft) on the north side, and is 10.058 m (33 ft) on the south side. West of 99th Avenue, the right-of-way along Thomas Road consists of 10.058 m (33 ft) on the north side and 16.764 m (55 ft) along the south side.

Between 91st and 83rd Avenue, the right-of-way varies from 14.020 m (46 ft) to 18.2 m (60 ft) on the north and from 12.192 m (40 ft) to 19.812 (65 ft) on the south.

**Drainage:**

Drainage within the project limits is from northeast to southwest. The agricultural fields between 99th and 91st Avenue north and south of Thomas Road catch and retain much of the flow. Shoulder drainage on both sides of Thomas Road direct excess flow west to catch basins at the northeast and southeast corners of 99th Avenue. The catch basins drain to the SRP irrigation system under a permit issued by SRP and eventually discharge into the nearby rivers.

The majority of the drainage conveyance between 91st and 83rd Avenue is curb and gutter on both sides of the roadway. Small sections have shoulder drainage. Two catch basins east of 91st Avenue connect to a 1050 mm (42") storm drain which in turn empties into a large City of Phoenix storm drain in 91st Avenue. It is anticipated that the City of Phoenix will complete the storm drain in the area with their programmed improvements.

**TRAFFIC VOLUMES AND ACCIDENT HISTORY:**

**Traffic Volumes:**

Thomas Road	Latest Traffic Count			Forecasted ADT (MAG)		
Year:	1996			2020		
Location:	West of 99th	East of 99th	East of 91st	West of 99th	East of 99th	East of 91st
Volume:	2668	4788	6853	19000	19000	20000

The substantial increase in traffic volume for the year 2020 is directly related to the construction of the Agua Fria Freeway from Glendale Avenue to the I-10.

**Accidents:**

*Intersections of 99th and 91st Avenue*

1994		1995		1996	
99th Ave.	91st Ave.	99th Ave.	91st Ave.	99th Ave.	91st Ave.
8	2	10	0	13	1

*Between the Intersections of 99th and 91st Avenue*

1994	1995	1996
0	0	3

The records show that the type of accidents include left hand turn collisions, running red light collisions, rear end collisions, and run off the road collisions. It is anticipated that the widening of Thomas Road will decrease the accident rate by increasing the capacity of the road and intersections. Improvements to storage lengths for 99th Avenue may also improve the accident situation and should be evaluated during the design phase. Note: A Corridor Study will be initiated by Maricopa County in the Spring of 1997 to more closely evaluate interim and long term improvements to 99th Avenue.

**Utilities:**

The SRP provides irrigation in this area with an open canal (lateral) running north to south along the west side of 83rd Avenue, 91st Avenue, and 99th Avenue. These laterals open into large control structures at Thomas Road. An open drain and pump ditch exists from 99th Avenue to about 0.80 Km (.5 mi.) east of 99th Avenue along the north side of Thomas Road. A delivery ditch lies along the south side of Thomas Road east of this location. All SRP irrigation on Thomas Road, between 91st and 83rd Avenue is underground, and is not anticipated to be effected by the proposed improvements.

An existing well site is located on the northwest corner of Thomas Road and 99th Avenue. An existing fence surrounds this site. Adjustments to the fence will be required. It appears that no well relocation will be required at this location for Thomas Road improvements.

Powerlines (69 KV poles) are located at approximately 76 m (250 ft) intervals along Thomas Road within the project limits. These poles are within the existing right of way and initial judgment is that the County or City has prior rights over the electrical facilities. SRP may have prior rights for two poles west of 99th Avenue which would have to be relocated to improve the west leg of this intersection. The cost of relocation of these two poles is shown in the utility relocation estimate.

**Land Use:**

Current land use is primarily agricultural with some residential. In the year 2000, the construction of the Agua Fria Freeway from Glendale Avenue to I-10 east of 99th Avenue is anticipated. Access to the freeway is anticipated be available on Thomas, Indian School, Glendale and Camelback Roads. Private irrigation ditches are located along Thomas Road that lie within the proposed right-of-way. These private ditches will need to be relocated prior to or during construction on Thomas Road.

**Intergovernmental Partners:**

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Included in the Appendix is the IGA between the City of Phoenix and Maricopa County that was approved for improvements to Thomas Road between 99th Avenue and 83rd Avenue. In accordance with the IGA, Maricopa County is responsible for 50% of all powerline relocation (where the County does not have prior rights) and 50% of irrigation relocation costs. Also, the County is responsible for pavement construction within 10 m (33 ft) of each side of the Thomas Road monument line and engineering costs in the amount of 10% of MCDOT construction. The City of Phoenix is responsible for storm drain construction and any construction outside the 10 m (33 ft) limits as well as 50% cost of utility and irrigation costs. Each jurisdiction is responsible for right-of-way in its jurisdiction.

At this time, the City of Phoenix proposes to improve only the Thomas Road section between 91st and 83rd Avenue. Phoenix has not programmed any improvements between 99th and 91st Avenue. An amendment to the IGA will be necessary for MCDOT to assume the all construction, utility and irrigation costs for Thomas Road from 99th to 91st Avenue. The City of Phoenix would then assume all responsibility for improvements between 91st Avenue and 83rd Avenue.

With construction of the Agua Fria Freeway at the 95th Avenue alignment, ADOT will be responsible for that section of Thomas Road (including tapers) that lies within the ADOT project limits (approximately 152.4 m (500 ft) on each side of the freeway centerline). ADOT's costs within their limits will include curb, gutter, storm drain, portland cement concrete pavement, asphalt pavement, irrigation relocation and right-of-way. An agreement between MCDOT and ADOT for the construction of the portions of Thomas Road outside these limits may be an option.

### ALTERNATIVE SOLUTIONS

#### **Alternative 1:** No Build Alternative

Maintain the existing roadway of the project limits between 99th and 83rd Avenue except for improvements by ADOT. The no build alternative will not address the future operational needs of Thomas Road because the remaining two lane sections between 99th Avenue and 91st Avenue will not provide sufficient capacity for projected traffic.

#### **Alternative 2:** Low Cost Alternative (with Storm Drain from 91st to 83rd Avenue)

From 99th Avenue to 91st Avenue, Construct a Rural Minor Arterial with a cross section of 20.2 m (66') in width, five lanes wide along Thomas Road in keeping with the existing IGA requirements for the funding of pavement construction by MCDOT. Additional widening and curb and gutter work can be accomplished in the future by developers adjacent to the road.

**Drainage would be by shoulder ditches until such time as the City can complete storm drain construction.** However, two existing catch basins on the east side of 99th Avenue along with catch basins proposed by ADOT at 95th Avenue will aid in draining the shoulder ditches at this time.

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Curb and gutter would be constructed for short segments approaching 99th Avenue and 91st Avenue. Handicap ramps would be constructed at the curb returns at 99th Avenue. ADOT construction on Thomas Road at Loop 101 would include storm drain, curb and gutter and four through lanes plus the necessary number of turn lanes. A review of the ADOT traffic analysis will determine the number of auxiliary lanes at this location.

Construction of Thomas Road would extend from 106.8 m (350 ft) west of 99th Avenue to 20.0 m (69 ft) west of 91st Avenue. This alternative will require 39.62 m (130 ft) of right-of-way along Thomas Road. All private irrigation between 99th and 91st Avenue will be relocated outside the proposed right of way.

West of 99th Avenue, extension of the SRP box culvert and relocation of the SRP fence at the well site would be necessary for the continuation of the minor arterial roadway section. At a minimum, the SRP box culvert should be extended to the north, in order that the two west bound lanes on Thomas Road may be carried through the intersection. **The possible relocation of 99th Avenue to the west in the future would counsel against ultimate improvements to 99th Avenue at this time.**

From 91st to 83rd Avenue a minimum 37.5 mm (1 1/2") overlay would be added to the existing Thomas Road and constructed with storm drain and other improvements programmed by the City of Phoenix in this area.

Alternative 2 is intended to increase the capacity of vehicles on Thomas Road to meet the demand of the projected traffic brought by the development of Loop 101. The modified section meets the requirements for the projected ADT in 2020.

### **Alternative 3:** Medium Cost Alternative (with Storm Drain from Loop 101 to 83rd Avenue)

Same construction as the Low Cost Alternative, and in addition a storm drain would be installed between Loop 101 and 91st Avenue. East of the freeway, the Storm Drain could outfall to the ADOT drainage system. Catch basins could be constructed with developer improvements when curb and gutter is installed. No funds have been programmed for a Storm Drain west of Loop 101, and no storm drain outfall exists in 99th Avenue.

### **Alternative 4:** High Cost Alternative

Construction of an Urban Minor Arterial Road with cross section of either 19.6 m (64') or 22.6 m (74') including curb and gutter, sidewalk, and storm drain for the full length of Thomas Road between 99th and 91st Avenue is not justified at this time. The City of Phoenix has not programmed capital funds for construction, design, construction management and other items for this section of road. Improvements at a later time with developer participation is the most practical way to complete the full development of this road. For this reason the full cost alternative has not been considered in this assessment.

**MAJOR DESIGN FEATURES - Thomas Road - 99th to 91st Avenue**

<i>Standard Typical Section:</i>	MCDOT Rural Minor Arterial
<i>Design Year:</i>	2020
<i>Design Vehicle:</i>	WB-50
<i>Design Speed:</i>	90 Kmph (55 mph) *
<i>Pavement Design Life:</i>	20 yrs
<i>Number of Lanes:</i>	5
<i>Roadway Width:</i>	20.2 m (66 ft)
<i>Intersection Geometrics:</i>	10.7 m (35 ft) or larger return radius **
<i>Drainage Structures:</i>	Shoulder Ditches (to existing MCDOT or proposed ADOT catch basins)
<i>Standard Right-of-Way Requirements:</i>	19.8 m (65 ft) half width
<i>Clear Zone:</i>	7.6 m (25 ft)
<i>Stopping Sight Distance:</i>	standard
<i>Superelevation:</i>	N/A

**Design Exceptions:**

\* 90 Kmph (55mph) is acceptable because of signalization at 0.8 Km (0.5 mile) intervals and proximity to urban development.

\*\* Special intersection curb radius design should be considered to accommodate WB 50 design vehicles because of the close proximity to Loop 101.

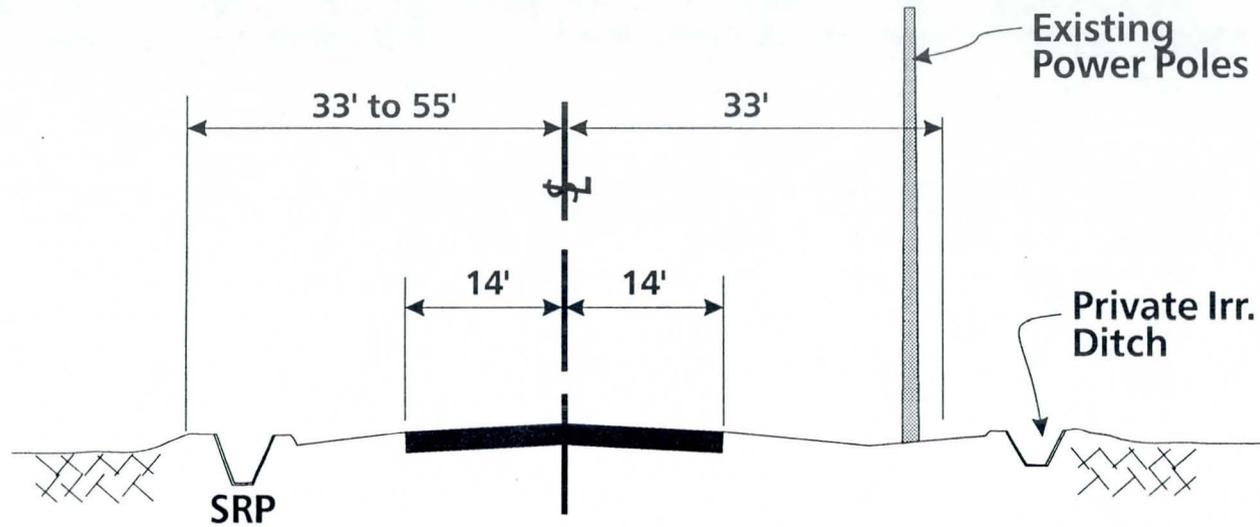
**Survey:**

This project will require a field survey and design, including design by SRP.

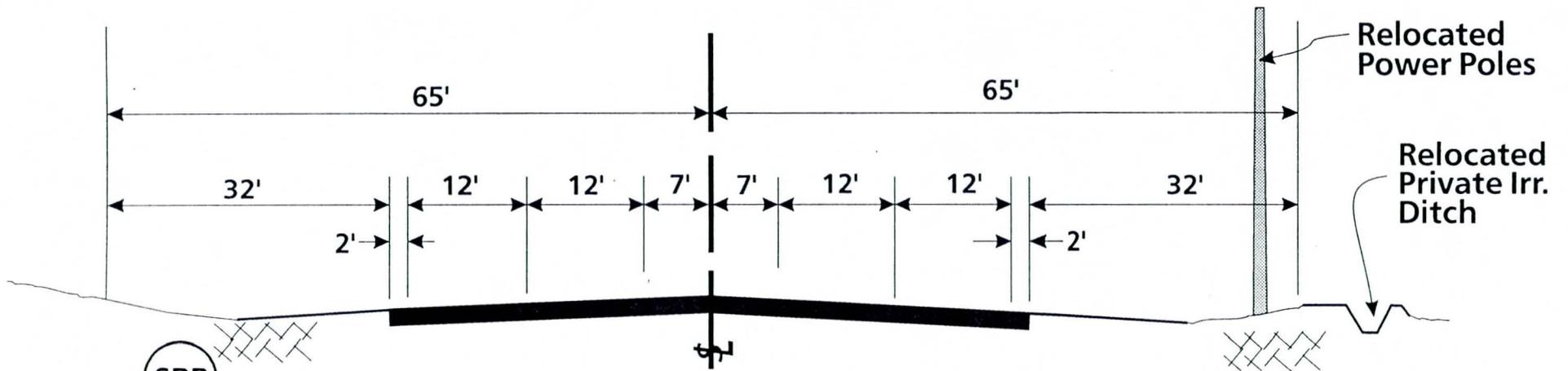
**Construction Cost Estimate: See attached spread sheets.**

**Attachments:**

- Typical Sections
- Summary Cost Estimate
- Construction Cost Estimates
- Utility Relocation Estimates
- Right-of-Way Estimates
- Recommended Improvement Concept Drawing
- Recent Traffic Counts and MAG 2020 projections
- Traffic Accident Summary
- City Limits Map
- SRP Irrigation Map
- IGA - City of Phoenix & Maricopa County
- Agua Fria Freeway (Loop 101) Conceptual Plans



Existing cross section



Proposed Rural Minor Arterial Road Cross Section

# Thomas Road 99th Avenue to 91st Avenue

<b>Thomas Road - 99th Avenue to 83rd Avenue</b>					
<b>SUMMARY - MEDIUM COST ALTERNATIVE (STORM DRAIN FROM LOOP 101 TO 83RD AVE)</b>					
<b>COST SHARING PER EXISTING IGA</b>					
<b>COST CATEGORIES</b>	<b>Factors</b>	<b>No Build</b>	<b>County Cost</b>	<b>Phoenix Cost</b>	<b>ADOT Cost</b>
<b>99th Ave to 91st Ave Segment:</b>					
Construction		\$0	\$1,013,000	\$187,000	\$741,000
Design	10%	\$0	\$103,100	\$16,900	\$120,000
Construction Management	13%	\$0	\$0	\$156,000	\$115,000
Right-of-Way		\$0	\$ 9,000.00	\$100,000	\$27,000
Utility Relocation (SRP Irrigation)		\$0	\$165,000	\$165,000	\$176,000
Utiltiy Relocation (SRP Power)		\$0	\$9,000	\$0	\$0
Administration		\$0	\$20,000	\$100,000	\$100,000
	<i>Total</i>		\$1,319,100	\$724,900	\$1,279,000
<b>91st Ave to 83rd Ave Segment:</b>					
Construction		\$0	\$183,000	\$617,000	
Design	10%	\$0	\$18,300	\$61,700	
Construction Management	13%	\$0	\$0	\$104,000	
Right-of-Way		\$0	\$0	\$0	
Utility Relocation (SRP Irrigation )		\$0	\$0	\$0	
Utility Relocation (SRP Power, Other )		\$0	\$0	\$50,000	
Administration		\$0	\$5,000	\$76,000	
	<i>Total</i>		\$206,300	\$908,700	
	<b>Grand Total</b>		<b>\$1,525,400</b>	<b>\$1,633,600</b>	<b>\$1,279,000</b>
<b>PROPOSED AGREEMENT</b>					
<b>COST CATEGORIES</b>	<b>Factors</b>	<b>No Build</b>	<b>County Cost</b>	<b>Phoenix Cost</b>	<b>ADOT Cost</b>
<b>99th Ave to 91st Ave Segment:</b>					
Construction		\$0	\$1,200,000	\$0	\$741,000
Design	10%	\$0	\$0	\$120,000	\$120,000
Construction Management	13%	\$0	\$156,000	\$0	\$115,000
Right-of-Way		\$0	\$ 109,000	\$0	\$27,000
Utility Relocation (SRP Irrigation)		\$0	\$330,000	\$0	\$176,000
Utiltiy Relocation (SRP Power)		\$0	\$9,000	\$0	\$0
Administration		\$0	\$144,000	\$20,000	\$100,000
	<i>Total</i>		\$1,948,000	\$140,000	\$1,279,000
<b>91st Ave to 83rd Ave Segment:</b>					
Construction		\$0	\$0	\$800,000	
Design	10%	\$0	\$0	\$80,000	
Construction Management	13%	\$0	\$0	\$104,000	
Right-of-Way		\$0	\$0	\$0	
Utility Relocation (SRP, Other )		\$0	\$0	\$50,000	
Administration		\$0	\$0	\$76,000	
	<i>Total</i>		\$0	\$1,110,000	
	<b>Grand Total</b>		<b>\$1,948,000</b>	<b>\$1,250,000</b>	<b>\$1,279,000</b>

THOMAS ROAD - 99TH AVENUE TO 91ST AVENUE						
Alternative No. 2: CITY OF PHOENIX Const Cost per Existing IGA - One Half of Private Irrigation Construction Costs						
Project Length (km) =			1.71			
Typical Number of Lanes =			5		CAR SPREAD SHEETS PREPARED 7/15/97lp/RM	
Typical Roadway Width (M) =			25.6			
Approximate Pavement Length =			0.00			
Asphalt Concrete (mm) =			100			
Aggregate Base Thickness (mm) =			250			
Alternative: — Grade, Drain & Pave (or Penetrate & Chip)						
Item #	Description	Unit	Quantity	Unit Cost	Total	
107.01100	N.P.D.E.S.	L.S.	1	\$0.00	\$0	Range 1,500 - 5,000
107.09200	Community Relations	Allowance	1	\$0.00	\$0	Range: 10,000 - 30,000
110.01000	Mobilization @ 5%	L.S.	1	5.00%	\$3,750	Auto Calculated @ 5% of Construction Cost
205.03000	Roadway Excavation	CM	0	\$4.00	\$0	Gross Roadway Prism Excavation without shrink or swell
210.04200	Borrow Excavation (If anticipated)	CM	0	\$4.00	\$0	Gross imported dirt quantity needed for finished roadway
215.00000	Channel & Retention Basin Excavation	CM	0	\$4.00	\$0	Includes Channels & Retention Basins outside roadway shoulder
	New Asphalt Pavement (See Pavement Sheet)	SQ M	0	\$15.25	\$0	
	Asphalt Concrete 50 mm Overlay (See Pavement Sheet)	SQ M	0	\$3.60	\$0	
	Penetration and Chip Seal on Base Material (See Pav)	SQ M	0	\$4.60	\$0	
	Chip Seal Surface on Pavement (See Pavement Sheet)	SQ M	0	\$1.15	\$0	
336.08100	Pavement Sawcut	M	0	\$4.50	\$0	
340.01020	Single Curb	M	0	\$22.00	\$0	Increase price for small quantities
340.01120	Conc. C & G	M	0	\$20.00	\$0	Increase price for small quantities
	Conc S/W Ramp Std Det 231 Type "A"	EA	0	\$600.00	\$0	
340.06950	Concrete Sidewalk Std Det 230	SQ M	0	\$16.00	\$0	
340.09750	Concrete Driveway w/5' Wings, Std. Det. 250	SQ M	0	\$40.00	\$0	
350.01110	Removal of Existing Improvements	L.S.	1	\$3,500.00	\$3,500	Range 5,000 - 75,000
401.00000	Traffic Control @ 3.5%	L.S.	1	3.50%	\$2,600	
402.00000	Traffic Signing & Striping - 2 lanes	M	0	\$3.20	\$0	
402.00000	Traffic Signing & Striping - 5 lanes	M	0	\$5.80	\$0	
402.00000	Traffic Signing & Striping - 7 lanes	M	0	\$8.20	\$0	
402.00000	Traffic Signal	EA	0	\$125,000.00	\$0	
402.00000	Traffic Signal, Future "Box-in"	EA	0	\$3,500.00	\$0	
505.06125	Catch Basin	EA	0	\$2,200.00	\$0	
510.03010	Scupper with 1 M to 2 M down drain	EA	0	\$550.00	\$0	
	Drywell	EA	0	\$5,000.00	\$0	Includes Inlet, grate and typical 20 M to 25 M depth
618.00000	380 mm (15") Connector Pipe	M	0	\$90.00	\$0	
618.02324	610 mm (24") & Smaller RGRCP, Class III	M	0	\$125.00	\$0	For Drainage
618.02336	760 mm & 910 mm (30" & 36") RGRCP, Class III	M	0	\$195.00	\$0	
618.02348	1060 mm & 1220 mm (42" & 48") RGRCP, Class III	M	0	\$250.00	\$0	Same
618.02348	1370 mm & 1520 mm (54" & 60") RGRCP, Class III	M	0	\$300.00	\$0	Same
625.00000	1370 mm & 1520 mm Storm Drain/Irrigation Man Hole	EA	0	\$3,200.00	\$0	Same
	Concrete Lined Ditch	SM	0	\$35.00	\$0	SRP Channel Lining
	Headwall, 460 mm to 910 mm Pipe (MAG Details)	EA	0	\$1,500.00	\$0	Same,
	Headwall, 1060 mm to 1520 mm Pipe (MAG Details)	EA	0	\$2,800.00	\$0	Same
	Irrigation Headwall w/ Trashrack (Inlet)	EA	0	\$2,200.00	\$0	Same
	Irrigation Junction Box (MAG Details)	EA	1	\$2,500.00	\$2,500	Same
	Misc. Irrigation Pipe	M	30	\$125.00	\$3,750	
	Concrete Slip Form Irrigation Ditch	M	640	\$75.00	\$48,000	50% of Private Ditch Length
	Earth Irrigation Ditch W/ 50 mm lining -	M	0	\$50.00	\$0	Same
	Irrigation Structure w/ Gates	EA	0	\$7,500.00	\$0	Same
	Extend SRP Box Culvert	SM	0	\$325.00	\$0	Same
	Bridge < 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
	Bridge > 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
220.01400	Plain Riprap	CM	0	\$50.00	\$0	Includes excavation for and placement of riprap
415.00000	Guardrail without approach end section	M	0	\$75.00	\$0	
	Guardrail Approach End Section	EA	0	\$3,500.00	\$0	
Subtotal Construction					\$64,100	
Contingency				20%	\$12,820	
Total					\$76,920	

THOMAS ROAD - 99TH AVENUE TO 91ST AVENUE						
Alternative No. 3: CITY OF PHOENIX Const Costs per Existing IGA - One Half of Private Irrigation and Storm Drain Costs from 95th to 91st Ave.						
<b>ALT: 1</b>	Project Length (km) =		1.71		CAR SPREAD SHEETS PREPARED 7/15/97jip/RM	
	Typical Number of Lanes =		5			
	Typical Roadway Width (M) =		25.6			
	Approximate Pavement Length =		0.00			
	Asphalt Concrete (mm) =		100			
	Aggregate Base Thickness (mm) =		250			
<b>Alternative: Grade, Drain &amp; Pave (or Penetrate &amp; Chip)</b>						
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110.01000	Mobilization @ 5%	L.S.	1	5.00%	\$7,582	Auto Calculated @ 5% of Construction Cost
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210.04200	Borrow Excavation (If anticipated)	CM	0	\$4.00	\$0	Gross imported dirt quantity needed for finished roadway
215.00000	Channel & Retention Basin Excavation	CM	0	\$4.00	\$0	Includes Channels & Retention Basins outside roadway shoulder
	New Asphalt Pavement (See Pavement Sheet)	SQ M	0	\$15.25	\$0	
	Asphalt Concrete .50 mm Overlay (See Pavement Sheet)	SQ M	0	\$3.60	\$0	
	Penetration and Chip Seal on Base Material (See Pav)	SQ M	0	\$4.60	\$0	
	Chip Seal Surface on Pavement (See Pavement Sheet)	SQ M	0	\$1.15	\$0	
336.08100	Pavement Sawcut	M	0	\$4.50	\$0	
340.01020	Single Curb	M	0	\$22.00	\$0	Increase price for small quantities
340.01120	Conc. C & G	M	0	\$20.00	\$0	Increase price for small quantities
	Conc S/W Ramp Std Det 231 Type "A"	EA	0	\$600.00	\$0	
340.06950	Concrete Sidewalk Std Det 230	SQ M	0	\$16.00	\$0	
340.09750	Concrete Driveway w/5' Wings, Std. Det. 250	SQ M	0	\$40.00	\$0	
350.01110	Removal of Existing Improvements	L.S.	1	\$3,500.00	\$3,500	Range 5,000 - 75,000
401.00000	Traffic Control @ 3.5%	L.S.	1	3.50%	\$5,307	
402.00000	Traffic Signing & Striping - 2 lanes	M	0	\$3.20	\$0	
402.00000	Traffic Signing & Striping - 5 lanes	M	0	\$5.80	\$0	
402.00000	Traffic Signing & Striping - 7 lanes	M	0	\$8.20	\$0	
402.00000	Traffic Signal	EA	0	\$125,000.00	\$0	
402.00000	Traffic Signal, Future "Box-in"	EA	0	\$3,500.00	\$0	
505.06125	Catch Basin	EA	2	\$2,200.00	\$4,400	
510.03010	Scupper with 1 M to 2 M down drain	EA	0	\$550.00	\$0	
	Drywell	EA	0	\$5,000.00	\$0	Includes Inlet, grate and typical 20 M to 25 M depth
618.00000	380 mm (15") Connector Pipe	M	82	\$90.00	\$7,380	
618.02324	610 mm (24") & Smaller RGRCP, Class III	M	500	\$155.00	\$77,500	For Drainage
618.02336	760 mm & 910 mm (30" & 36") RGRCP, Class III	M	0	\$195.00	\$0	
618.02348	1060 mm & 1220 mm (42" & 48") RGRCP, Class III	M	0	\$250.00	\$0	Same
618.02348	1370 mm & 1520 mm (54" & 60") RGRCP, Class III	M	0	\$300.00	\$0	Same
625.00000	1370 mm & 1520 mm Storm Drain/Irrigation Man Hole	EA	3	\$3,200.00	\$9,600	Same
	Concrete Lined Ditch	SM	0	\$35.00	\$0	SRP Channel Lining
	Headwall, 460 mm to 910 mm Pipe (MAG Details)	EA	0	\$1,500.00	\$0	Same,
	Headwall, 1060 mm to 1520 mm Pipe (MAG Details)	EA	0	\$2,800.00	\$0	Same
	Irrigation Headwall w/ Trashrack (Inlet)	EA	0	\$2,200.00	\$0	Same
	Irrigation Junction Box (MAG Details)	EA	0	\$2,500.00	\$0	Same
	Irrigation Pipe	M	10	\$125.00	\$1,250	
	Concrete Slip Form Irrigation Ditch	M	640	\$75.00	\$48,000	50% of Private Ditch Length
	Earth Irrigation Ditch w/ 50 mm lining -	M	0	\$50.00	\$0	Same
	Irrigation Structure w/ Gates	EA	0	\$7,500.00	\$0	Same
	Extend SRP Box Culvert	SM	0	\$325.00	\$0	Same
	Bridge < 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
	Bridge > 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
220.01400	Plain Riprap	CM	0	\$50.00	\$0	Includes excavation for and placement of riprap
415.00000	Guardrail without approach end section	M	0	\$75.00	\$0	
	Guardrail Approach End Section	EA	0	\$3,500.00	\$0	
Subtotal Construction				\$151,630	\$164,519	
Contingency				15%	\$22,745	
<b>Total</b>					<b>\$187,263</b>	

THOMAS ROAD - 99TH AVENUE TO 91ST AVENUE						
Alternative No. 2 or 3: MCDOT Const Cost per Existing IGA - for Roadway and One Half of Private Irrigation Construction Costs						
Project Length (km) =		1.71			CAR SPREAD SHEETS PREPARED 7/15/97jip/RM	
Typical Number of Lanes =		5 +				
Typical Roadway Width (M) =		20.2				
Approximate ADOT Pavement Length =		1.41				
Asphalt Concrete (mm) =		100				
Aggregate Base Thickness (mm) =		250				
<b>Alternative: Grade, Drain &amp; Pave (or Penetrate &amp; Chip)</b>						
Item #	Description	Unit	Quantity	Unit Cost	Total	
107.01100	N.P.D.E.S.	L.S.	1	\$2,500.00	\$2,500	Range 1,500 - 5,000
107.09200	Community Relations	Allowance	1	\$15,000.00	\$15,000	Range: 10,000 - 30,000
110.01000	Mobilization @ 5%	L.S.	1	5.00%	\$39,421	Auto Calculated @ 5% of Construction Cost
205.03000	Roadway Excavation	CM	12,029	\$4.00	\$48,116	Gross Roadway Prism Excavation without shrink or swell
210.04200	Borrow Excavation (If anticipated)	CM	3,000	\$4.00	\$12,000	Gross imported dirt quantity needed for finished roadway
215.00000	Channel & Retention Basin Excavation	CM	0	\$4.00	\$0	Includes Channels & Retention Basins outside roadway shoulder
	New Asphalt Pavement (See Pavement Sheet)	SQ M	33,730	\$15.25	\$514,383	
	Asphalt Concrete .50 mm Overlay (See Pavement Sheet)	SQ M	0	\$3.60	\$0	
	Penetration and Chip Seal on Base Material (See Pav)	SQ M	0	\$4.60	\$0	
	Chip Seal Surface on Pavement (See Pavement Sheet)	SQ M	0	\$1.15	\$0	
336.08100	Pavement Sawcut	M	64	\$4.50	\$288	
340.01020	Single Curb	M	0	\$22.00	\$0	Increase price for small quantities
340.01120	Conc. C & G	M	305	\$20.00	\$6,100	Increase price for small quantities
	Conc S/W Ramp Std Det 231 Type "A"	EA	4	\$600.00	\$2,400	
340.06950	Concrete Sidewalk Std Det 230	SQ M	0	\$16.00	\$0	
340.09750	Concrete Driveway w/5' Wings, Std. Det. 250	SQ M	45	\$40.00	\$1,800	
350.01110	Removal of Existing Improvements	L.S.	1	\$20,000.00	\$20,000	Range 5,000 - 75,000
401.00000	Traffic Control @ 3.5%	L.S.	1	3.50%	\$27,594	
402.00000	Traffic Signing & Striping - 2 lanes	M	0	\$3.20	\$0	
402.00000	Traffic Signing & Striping - 5 lanes	M	1,677	\$5.80	\$9,727	
402.00000	Traffic Signing & Striping - 7 lanes	M	0	\$8.20	\$0	
402.00000	Traffic Signal, Upgrade Existing at 99th Avenue	EA	1	\$75,000.00	\$75,000	
402.00000	Traffic Signal, Future "Box-in"	EA	0	\$3,500.00	\$0	
505.06125	Catch Basin	EA	2	\$2,200.00	\$4,400	
510.03010	Scupper with 1 M to 2 M down drain	EA	0	\$550.00	\$0	
	Drywell	EA	0	\$5,000.00	\$0	Includes Inlet, grate and typical 20 M to 25 M depth
618.02324	610 mm (24") & Smaller RGRCP, Class III	M	30	\$125.00	\$3,750	For Drainage and Irrigation facilities NOT belonging to SRP
618.02336	760 mm & 910 mm (30" & 36") RGRCP, Class III	M	0	\$195.00	\$0	Temporary SRP Canal Diversion
618.02348	1060 mm & 1220 mm (42" & 48") RGRCP, Class III	M	0	\$250.00	\$0	Same
618.02348	1370 mm & 1520 mm (54" & 60") RGRCP, Class III	M	0	\$300.00	\$0	Same
625.00000	1370 mm & 1520 mm Storm Drain/Irrigation Man Hole	EA	0	\$3,200.00	\$0	Same
	Concrete Lined Ditch (SRP Irrigation on 99th Ave.)	SQM	140	\$35.00	\$2,450	SRP Channel Lining
	Concrete Slip Form Irrigation Ditch (Private)	M	640	\$75.00	\$48,000	50% of Private Ditch Length
	Misc. Irrigation Pipe	M	30	\$125.00	\$3,750	
	Headwall, 460 mm to 910 mm Pipe (MAG Details)	EA	0	\$1,500.00	\$0	Same,
	Headwall, 1060 mm to 1520 mm Pipe (MAG Details)	EA	0	\$2,800.00	\$0	Same
	Irrigation Headwall w/ Trashrack (Inlet)	EA	0	\$2,200.00	\$0	Same
	Irrigation Junction Box (MAG Details)	EA	1	\$2,500.00	\$2,500	Same
	Irrigation Structure w/ Gates	EA	0	\$7,500.00	\$0	Same
	Extend SRP Box Culvert	SQM	50	\$325.00	\$16,250	Same
	Bridge < 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
	Bridge > 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
220.01400	Plain Riprap	CM	0	\$50.00	\$0	Includes excavation for and placement of riprap
415.00000	Guardrail without approach end section	M	0	\$75.00	\$0	
	Guardrail Approach End Section	EA	0	\$3,500.00	\$0	
	Subtotal Construction			\$788,413	\$855,428	
	Contingency			20%	\$157,683	
	<b>Total</b>				<b>\$1,013,111</b>	

THOMAS ROAD - 99TH AVENUE TO 91ST AVENUE						
All Alternatives: ESTIMATED ADOT CONSTRUCTION COSTS						
ALT: 1	Project Length (km) =		1.71			CAR SPREAD SHEETS PREPARED 7/15/97jip/RM
	Typical Number of Lanes =		5 +			
	Typical Roadway Width (M) =		25.6			
	Approximate ADOT Pavement Length =		0.30			
	Asphalt Concrete (mm) =		100			
	Aggregate Base Thickness (mm) =		250			
Alternative: <u>Grade, Drain &amp; Pave (or Penetrate &amp; Chip)</u>						
Item #	Description	Unit	Quantity	Unit Cost	Total	
107.01100	N.P.D.E.S.	L.S.	1	\$1,500.00	\$1,500	Range 1,500 - 5,000
107.09200	Community Relations	Allowance	1	\$10,000.00	\$10,000	Range: 10,000 - 30,000
110.01000	Mobilization @ 5%	L.S.	1	5.00%	\$30,000	Auto Calculated @ 5% of Construction Cost
205.03000	Roadway Excavation	CM	1,800	\$4.00	\$7,200	Gross Roadway Prism Excavation without shrink or swell
210.04200	Borrow Excavation (If anticipated)	CM	0	\$4.00	\$0	Gross imported dirt quantity needed for finished roadway
215.00000	Channel & Retention Basin Excavation	CM	0	\$4.00	\$0	Includes Channels & Retention Basins outside roadway shoulder
	New Asphalt Pavement (See Pavement Sheet)	SQ M	7,000	\$15.25	\$106,750	
	Asphalt Concrete .50 mm Overlay (See Pavement Sheet)	SQ M	0	\$3.60	\$0	
	Penetration and Chip Seal on Base Material (See Pav)	SQ M	0	\$4.60	\$0	
	Chip Seal Surface on Pavement (See Pavement Sheet)	SQ M	0	\$1.15	\$0	
336.08100	Pavement Sawcut	M	20	\$4.50	\$90	
340.01020	Single Curb	M	0	\$22.00	\$0	Increase price for small quantities
340.01120	Conc. C & G	M	440	\$22.00	\$9,680	Increase price for small quantities
	Conc S/W Ramp Std Det 231 Type "A"	EA	8	\$600.00	\$4,800	
340.06950	Concrete Sidewalk Std Det 230	SQ M	200	\$16.00	\$3,200	
340.09750	Concrete Driveway w/5' Wings, Std. Det. 250	SQ M	45	\$40.00	\$1,800	
350.01110	Removal of Existing Improvements	L.S.	1	\$20,000.00	\$20,000	Range 5,000 - 75,000
401.00000	Traffic Control @ 3.5%	L.S.	1	3.50%	\$20,000	
402.00000	Traffic Signing & Striping - 2 lanes	M	0	\$3.20	\$0	
402.00000	Traffic Signing & Striping - 5 lanes	M	300	\$5.80	\$1,740	
402.00000	Traffic Signing & Striping -7 lanes	M	0	\$8.20	\$0	
402.00000	Traffic Signal,	EA	2	\$125,000.00	\$250,000	
402.00000	Traffic Signal, Future "Box-in"	EA	0	\$3,500.00	\$0	
505.06125	Catch Basin	EA	4	\$2,200.00	\$8,800	
510.03010	Scupper with 1 M to 2 M down drain	EA	0	\$550.00	\$0	
	Drywell	EA	0	\$5,000.00	\$0	Includes Inlet, grate and typical 20 M to 25 M depth
618.02324	610 mm (24") & Smaller RGRCP, Class III	M	300	\$125.00	\$37,500	For Drainage and Irrigation facilities NOT belonging to SRP
618.02336	760 mm & 910 mm (30" & 36") RGRCP, Class III	M	0	\$195.00	\$0	
618.02348	1060 mm & 1220 mm (42" & 48") RGRCP, Class III	M	300	\$250.00	\$75,000	Same
618.02348	1370 mm & 1520 mm (54" & 60") RGRCP, Class III	M	0	\$300.00	\$0	Same
625.00000	1370 mm & 1520 mm Storm Drain/Irrigation Man Hole	EA	0	\$3,200.00	\$0	Same
	Concrete Lined Ditch	SQM	100	\$35.00	\$1,750	SRP Channel Lining
	Headwall, 460 mm to 910 mm Pipe (MAG Details)	EA	0	\$1,500.00	\$0	Same,
	Headwall, 1060 mm to 1520 mm Pipe (MAG Details)	EA	0	\$2,800.00	\$0	Same
	Irrigation Headwall w/ Trashrack (Inlet)	EA	0	\$2,200.00	\$0	Same
	Irrigation Junction Box (MAG Details)	EA	2	\$2,500.00	\$5,000	Same
	Concrete Slip Form Irrigation Ditch	M	300	\$75.00	\$22,500	Private Ditch Length
	Earth Irrigation Ditch W/ 50 mm lining -	M	0	\$50.00	\$0	Same
	Irrigation Structure w/ Gates	EA	0	\$7,500.00	\$0	Same
	Extend SRP Box Culvert	SQM	0	\$325.00	\$0	Same
	Bridge < 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
	Bridge > 100' See Structure Calc Sheet	EA	0	\$0.00	\$0	
220.01400	Plain Riprap	CM	0	\$50.00	\$0	Includes excavation for and placement of riprap
415.00000	Guardrail without approach end section	M	0	\$75.00	\$0	
	Guardrail Approach End Section	EA	0	\$3,500.00	\$0	
	Subtotal Construction				\$617,310	
	Contingency			20%	\$123,462	
	Total				\$740,772	

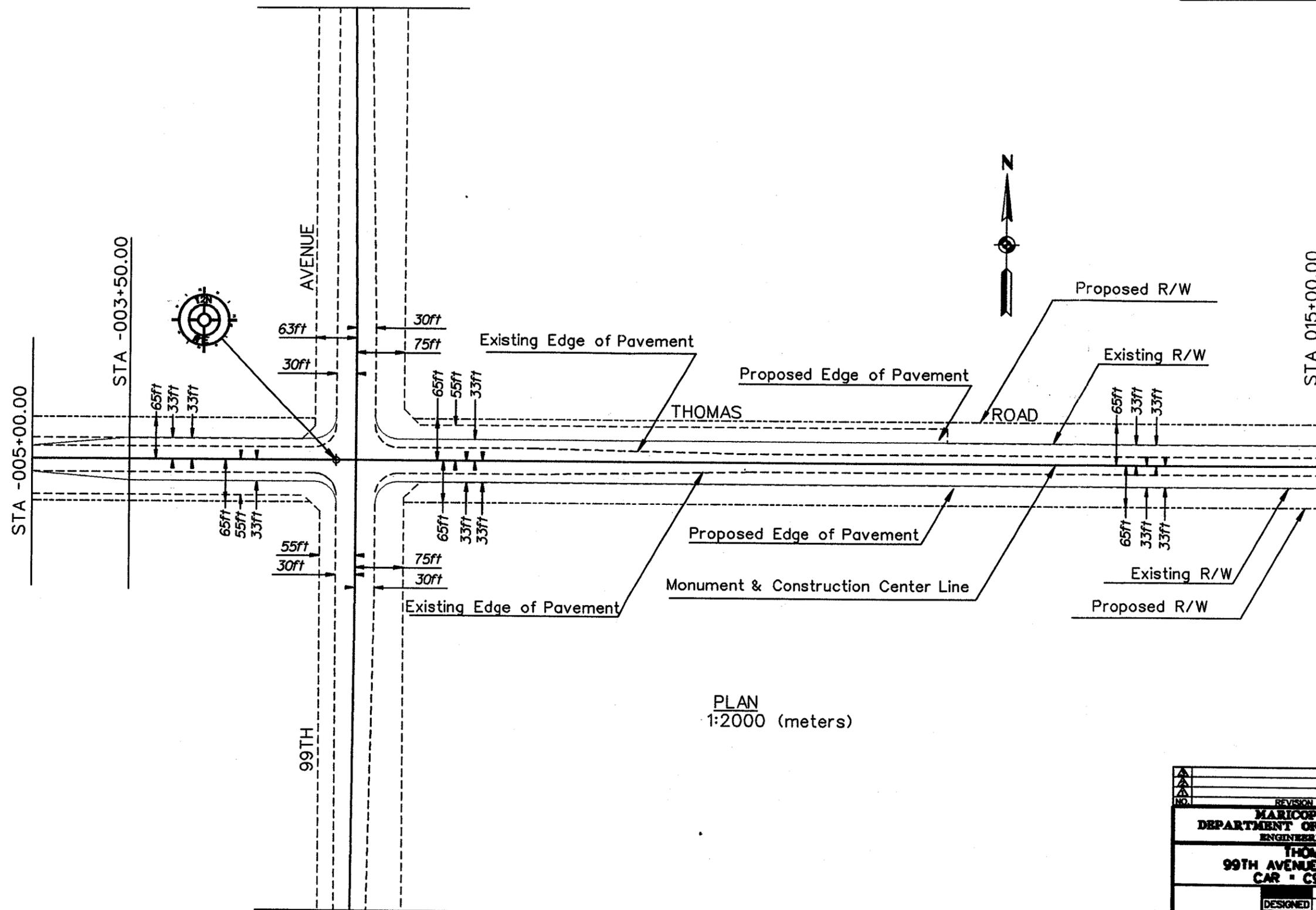
Utility Relocation

<b>Thomas Road from 99th to 91st Avenue (Phoenix &amp; County)</b>					
<i>Alternative:</i>					
<i>Item #</i>	<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Unit Cost</i>	<i>Total</i>
1	Relocate 69 kv Power Pole	EA	2	\$10,000.00	\$20,000.00
2	Other Poles associated w/ 69kv Power Line	EA	0	\$4,000.00	\$0.00
3	SRP Facilities by SRP Forces (See Calc Sheet)	EA	1	\$262,500.00	\$262,500.00
4	Railroad Crossing	EA	1	\$0.00	\$0.00
Subtotal Construction					\$282,500.00
Contingency				0.20	\$56,500.00
<b>Total</b>					<b>\$339,000.00</b>
<b>Thomas Road @ Agua Fria Freeway (ADOT)</b>					
<i>Alternative:</i>					
<i>Item #</i>	<i>Description</i>	<i>Unit</i>	<i>Quantity</i>	<i>Unit Cost</i>	<i>Total</i>
1	Relocate 69 kv Power Pole	EA	0	\$10,000.00	\$0.00
2	Other Poles associated w/ 69kv Power Line	EA	0	\$4,000.00	\$0.00
3	SRP Facilities by SRP Forces (See Calc Sheet)	EA	1	\$146,400.00	\$146,400.00
4	Railroad Crossing	EA	1	\$0.00	\$0.00
Subtotal Construction					\$146,400.00
Contingency				0.20	\$29,280.00
<b>Total</b>					<b>\$175,680.00</b>

Right of Way

Right of Way Cost: (99th Avenue to 91st Avenue)				
Thomas (65' R/W):		Area (ft)	m <sup>2</sup>	\$ (@ \$9.00/m <sup>2</sup> )
	Phoenix (NE):	(840x 10) + (3500 x 32)	11185	\$ 100,665
	ADOT (NE)	(1000 x 32)	2972	\$ 26,748
	County (SE):	(5340 x 2)	992	\$ 8,928
	*Avondale (NW):	(310 x 32)	922	\$ 8,298
	*Avondale (SW):	(310 x 10)	288	\$ 2,592
			<b>Sub Total:</b>	\$ 147,231
*Cost of Avondale R/W will be accrued by County				

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ.	C97-2774-11-15	1	3	



NO.	REVISION	BY	DATE

**MARICOPA COUNTY**  
DEPARTMENT OF TRANSPORTATION  
ENGINEERING DIVISION

**THOMAS ROAD**  
99TH AVENUE to 91ST AVENUE  
CAR - C97-2774-11-15

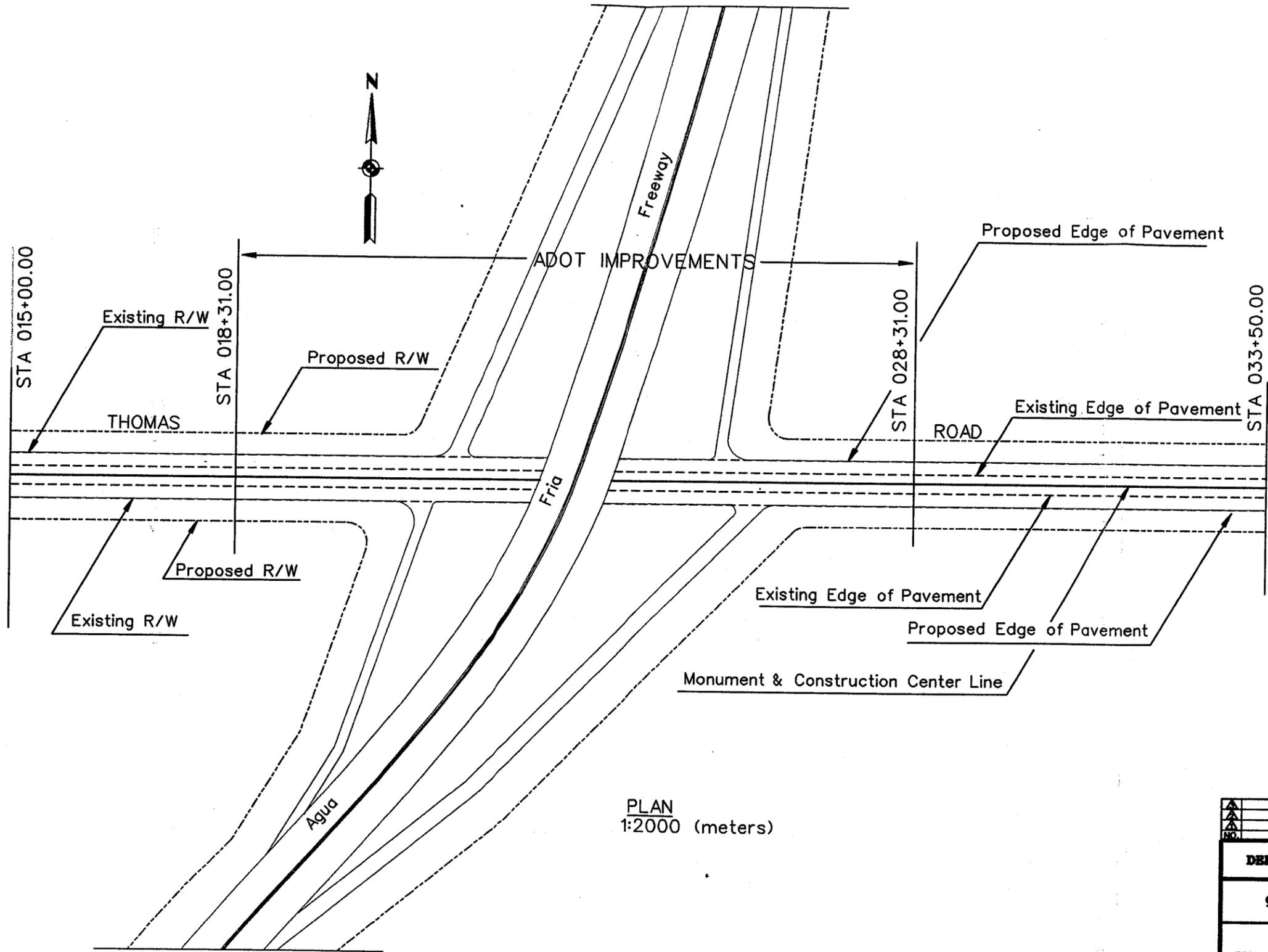
	BY	DATE
DESIGNED	Rick McFarlin	2/3/97
DRAWN	Rick McFarlin	2/3/97
CHECKED	Tom Phelan	2/3/97

PRELIMINARY  
NOT FOR  
CONSTRUCTION

TYPE OF SHEET  
STA. -005+50.00 TO 015+00.00

SHEET OF  
1 3

TRACS NO.



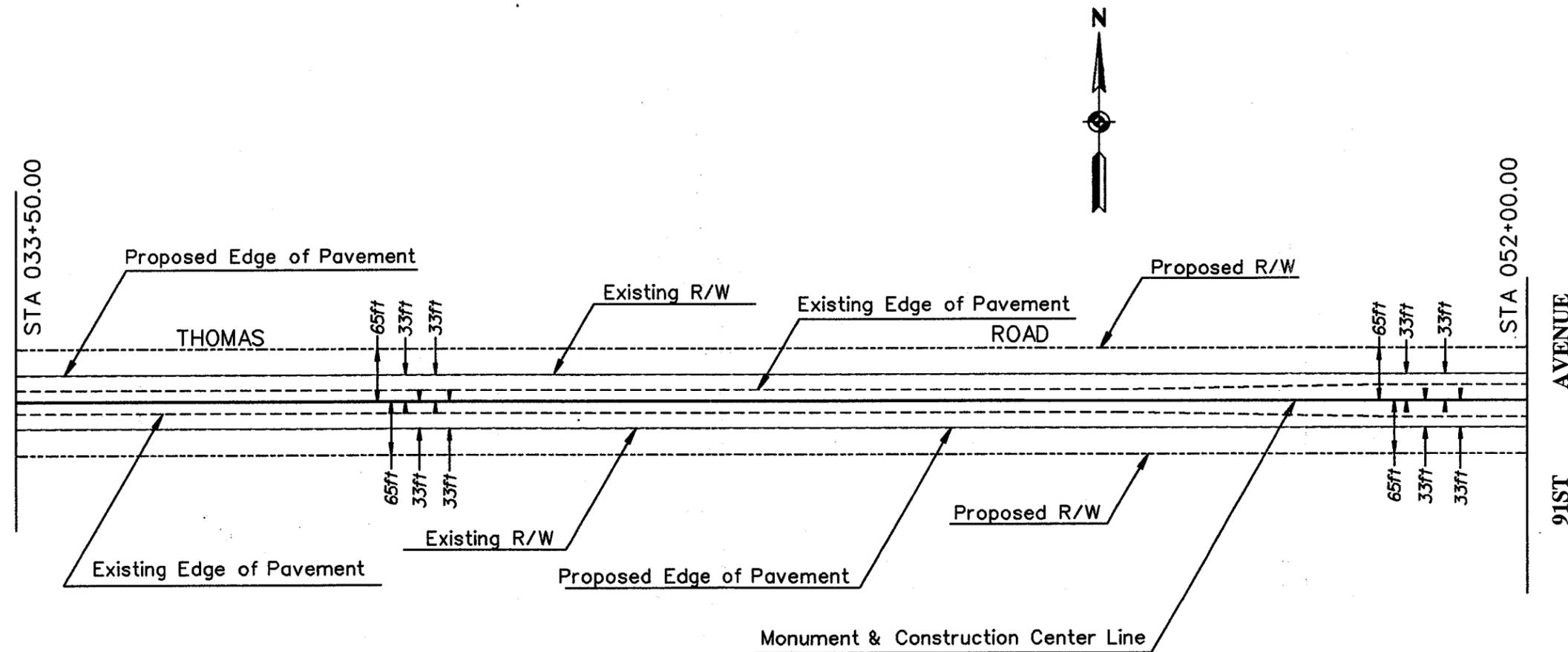
PLAN  
1:2000 (meters)

NO.	REVISION	BY	DATE
<b>MARICOPA COUNTY</b> <b>DEPARTMENT OF TRANSPORTATION</b> <b>ENGINEERING DIVISION</b>			
<b>THOMAS ROAD</b> <b>99TH AVENUE to 91ST AVENUE</b> <b>CAR - C97-2774-11-15</b>			
PRELIMINARY NOT FOR CONSTRUCTION	DESIGNED	Rick McFarlin	2/3/97
	DRAWN	Rick McFarlin	2/3/97
	CHECKED	Tom Phelan	2/3/97
TYPE OF SHEET STA 015+00.00 TO 033+50.00			SHEET OF 2 3

TRACS NO.

b.don 12/6/93

F.H.W.A. REGION	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	RECORD DRAWING
9	AZ.	C97-2774-11-15	3	3	



PLAN  
1:2000 (meters)

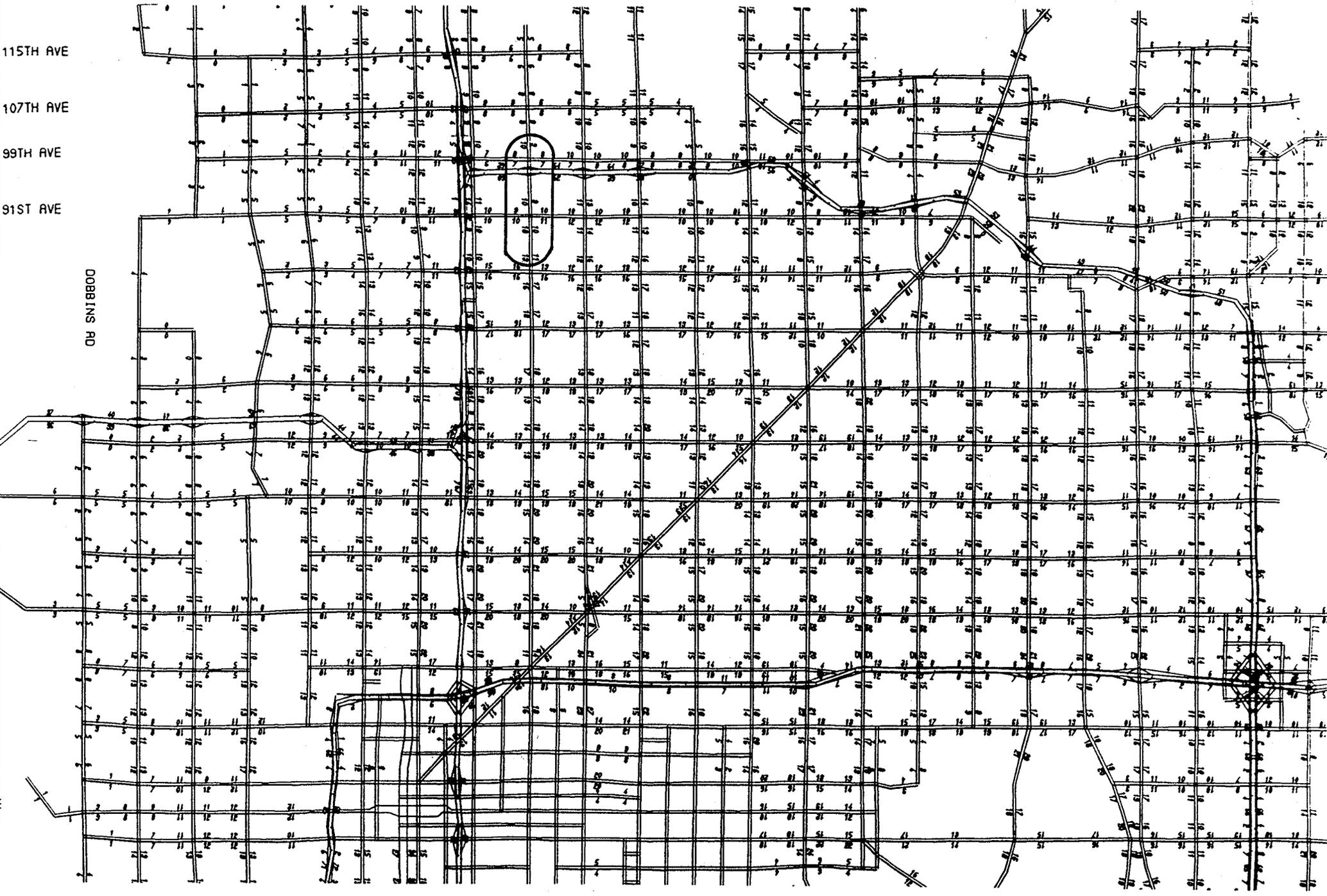
NO.	REVISION	BY	DATE
<b>MARICOPA COUNTY</b> <b>DEPARTMENT OF TRANSPORTATION</b> <b>ENGINEERING DIVISION</b>			
<b>THOMAS ROAD</b> <b>99TH AVENUE to 91ST AVENUE</b> <b>CAR = C97-2774-11-15</b>			
PRELIMINARY NOT FOR CONSTRUCTION	DESIGNED	Rick McFarlin	2/3/97
	DRAWN	Rick McFarlin	2/3/97
	CHECKED	Tom Phelan	2/3/97
TYPE OF SHEET STA. 033+50.00 TO 052+00.00			SHEET OF <b>3 3</b>

TRACS NO.

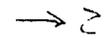
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115TH AVE  
107TH AVE  
99TH AVE  
91ST AVE

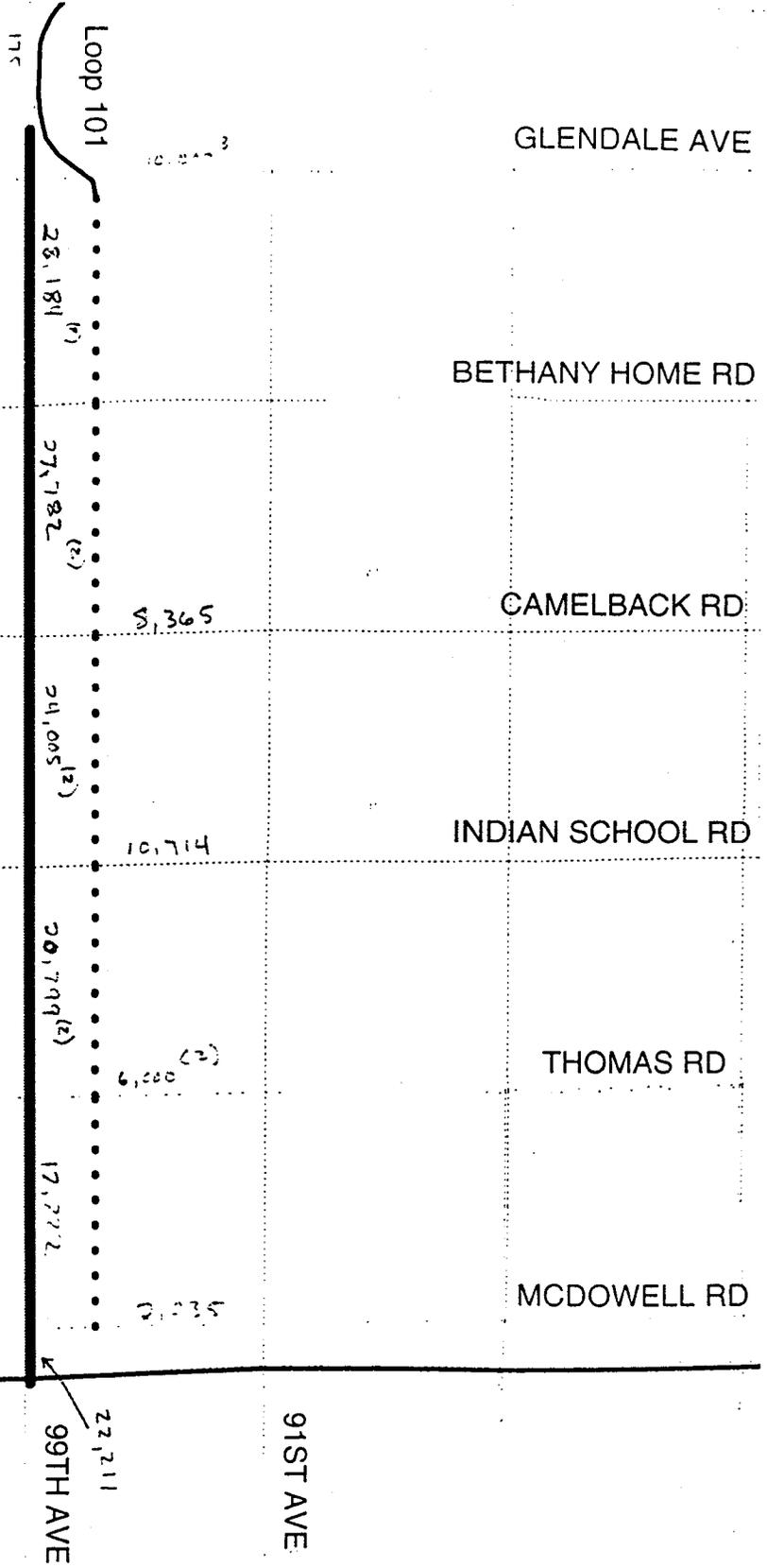
DOBBINS RD



2020 MAG Model Traffic Projections - Sept. 1996



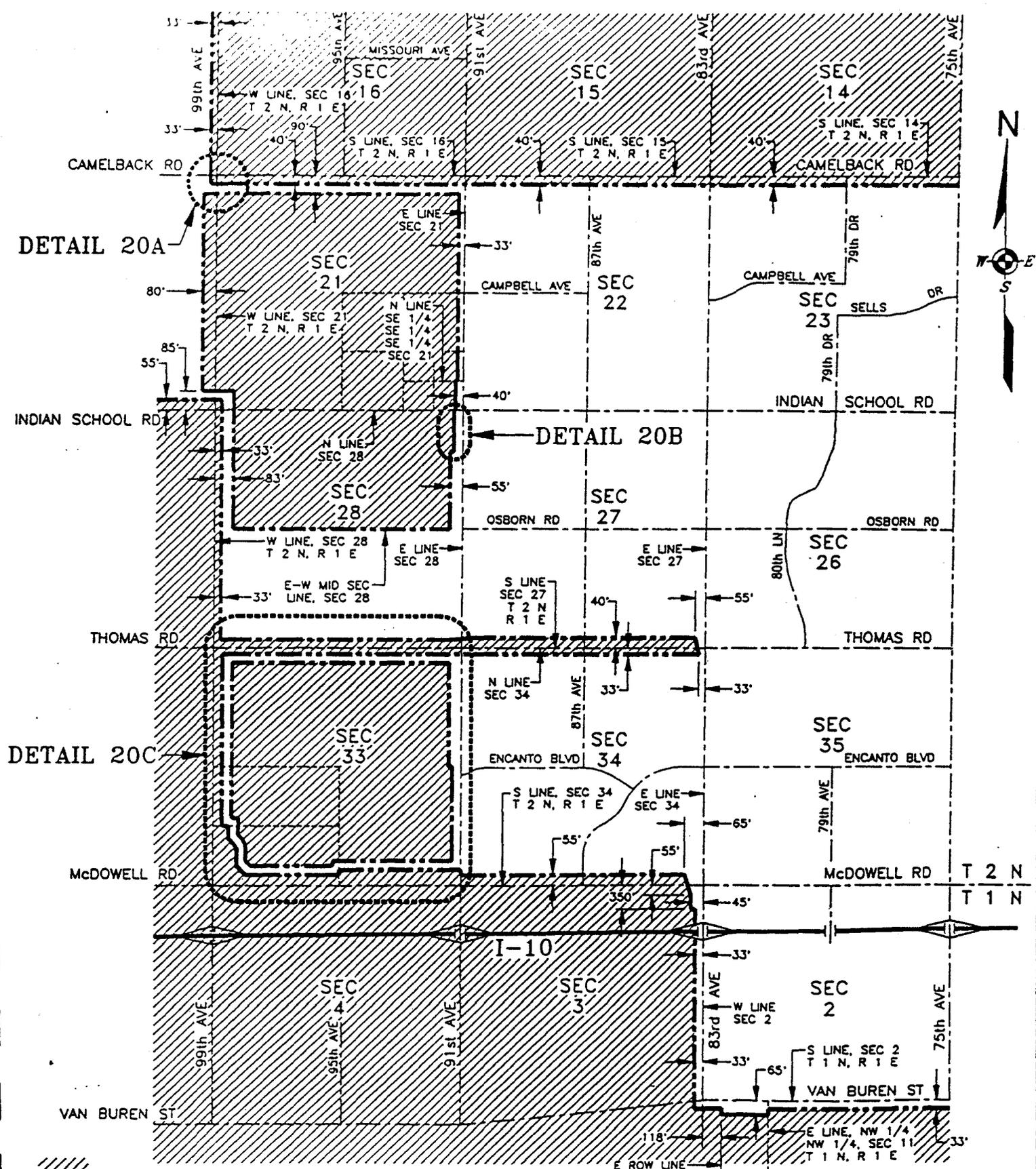
C97-2774-11-15











= not in Phoenix

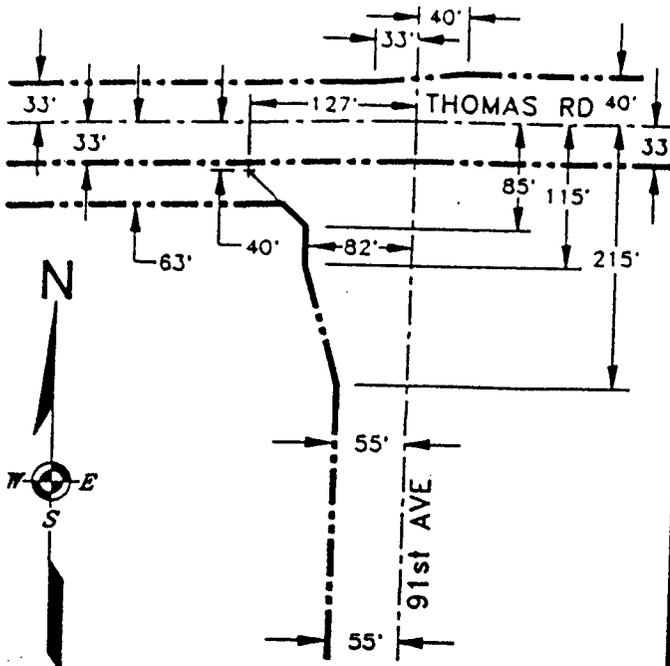
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CAD/GIS Mapping-EAS Dept.



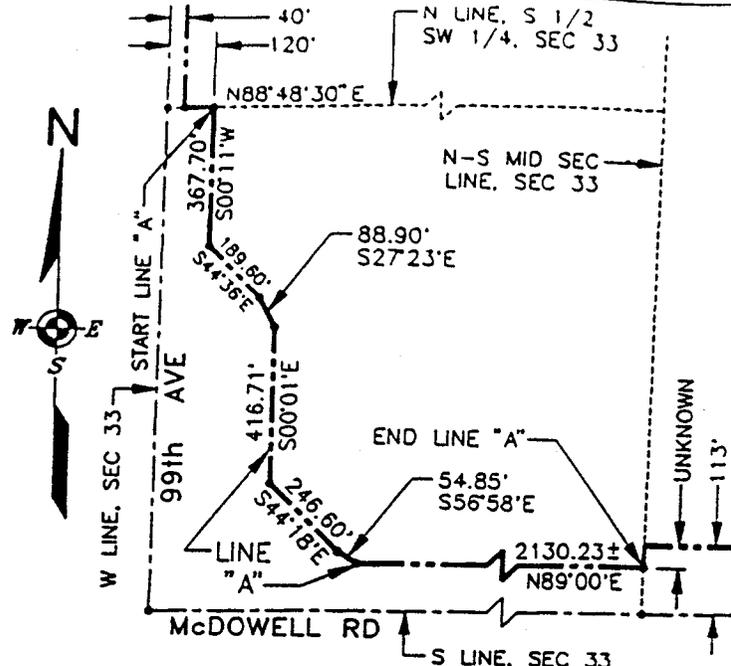
City of Phoenix  
City Limits

ORD NO	LAST EFF ANNEX DATE	REV BY	ORD NO	LAST EFF ANNEX DATE	REV BY
G-3306	3-10-90	JWM			

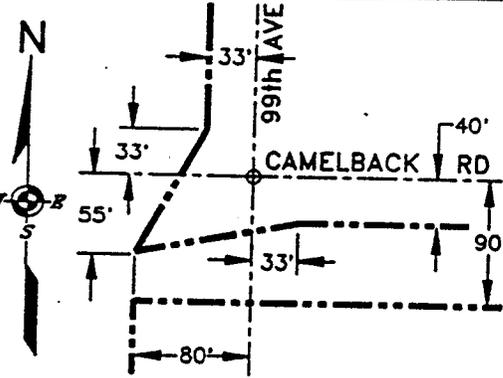
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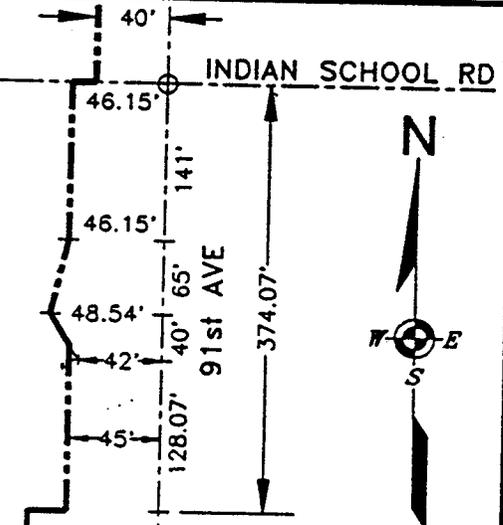
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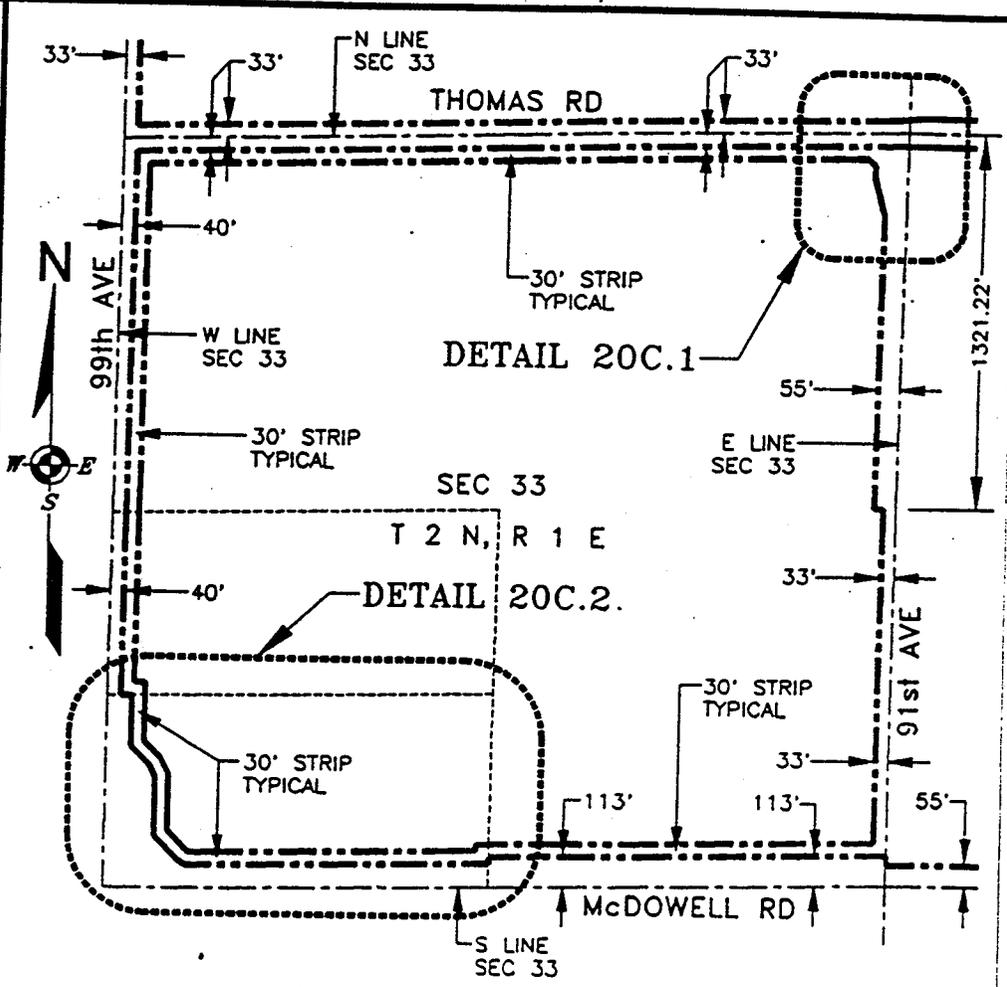
DETAIL 20C.2



DETAIL 20A



DETAIL 20B



DETAIL 20C

Prepared By:  
CAD/GIS Mapping-EAS Dept.



City of Phoenix  
City Limits

ORD NO	LAST EFF ANNEX DATE	REV BY	ORD NO	LAST EFF ANNEX DATE	REV BY
G-3306	3-10-90	JWM			

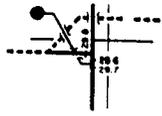
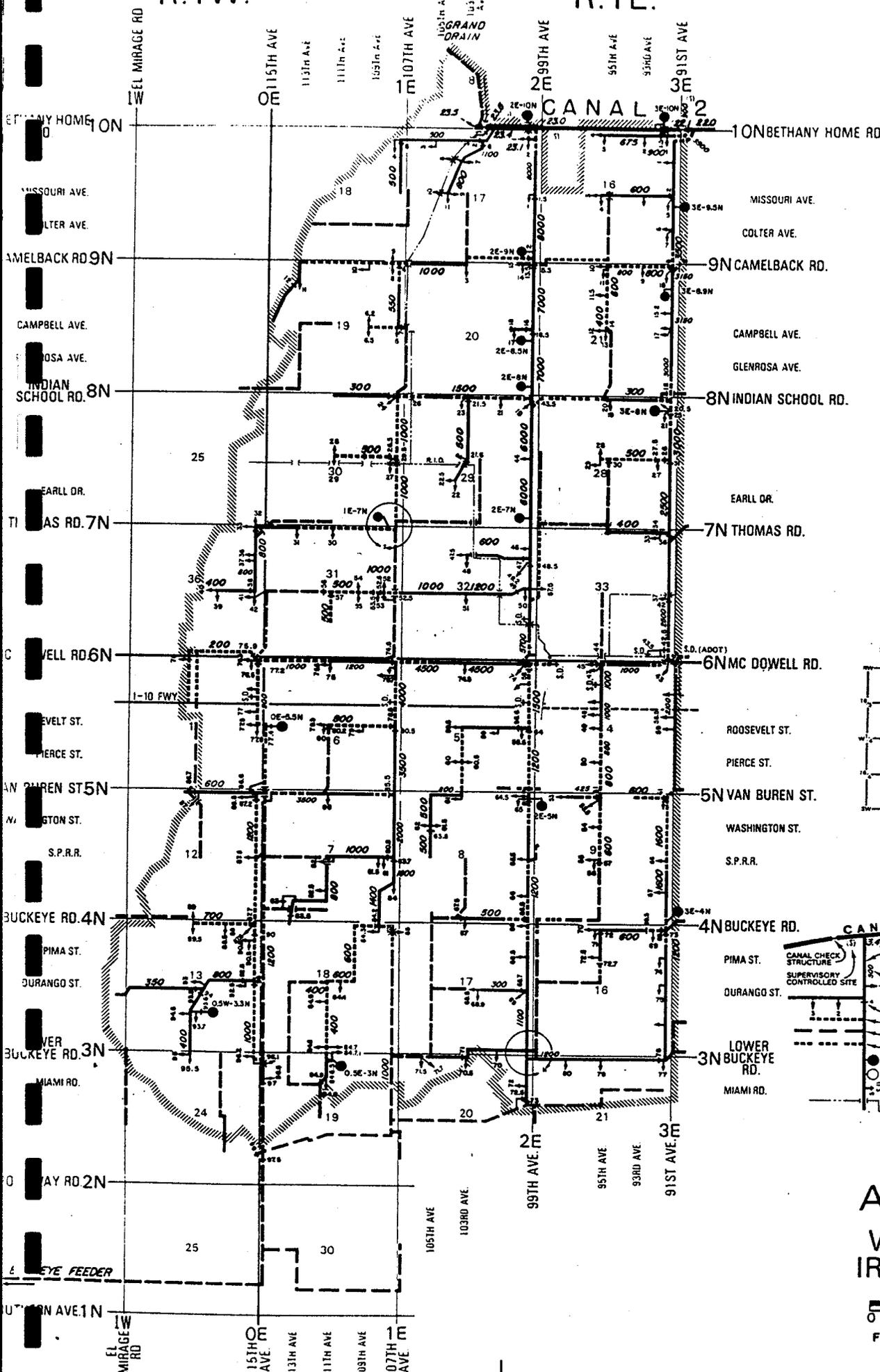
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R.1W.

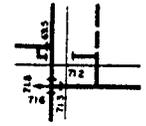
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SEE AREA 23

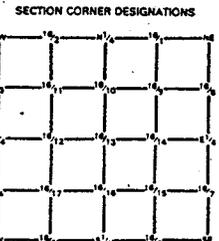
26



DETAIL 1  
1 E 7 N



DETAIL 2  
2 E 3 N



LEGEND

- CANAL
- (S) LATERAL NO.
- (L) LATERAL
- (I) CAPACITY OF DITCH IN MINER'S INCHES
- (F) FARM TURN OUT AND NO.
- (C) INDICATES CONTINUATION OF LATERAL
- (P) PIPED LATERAL
- (O) OPEN DRAIN AND PUMP DITCH
- (D) PIPED DRAIN AND PUMP DITCH
- (W) S.R.V.W.U.A. WELL AND WHERE IT DISCHARGES
- (B) S.R.V.W.U.A. BOOSTER PUMP
- (T) TIE TO CITY STORM DRAIN (ADOT)
- (R) ROOSEVELT IRRIGATION DIST. CANAL

T.2N.

SEE AREA 25

T.1N.

AREA 26  
WESTERN  
IRRIGATION



FEBRUARY 2, 1988

x-file

MARICOPA COUNTY BOARD OF SUPERVISORS  
**AGENDA FORM**

**RETURN  
TO HIGHWAY**

Contract/Lease for  NEW  RENEWAL  AMENDMENT  CANCELLATION  
(for existing record Encumbrance No. below)

LOW ORG. NO. 6420 DEPARTMENT: Engineering CONTROL NUMBER HD 325-90

ENCUMBRANCE NO. CS911225 AGENCY: Public Works/Highway CONTROL NUMBER PW 325-90

**1. BRIEF DESCRIPTION OF PROPOSAL AND REQUESTED BOARD ACTION:**

It is recommended by the County Engineer that the Board of Supervisors approve an intergovernmental agreement, which has been executed by the City of Phoenix for the improvement of Thomas Road from 99th Avenue to 83rd Avenue as a City of Phoenix project and providing for annexation by the City of Phoenix before construction. Funds are budgeted in the Highway Department's Five-Year Capital Improvements Program for \$1,250,000 under Work Order No. 68815 in fiscal year 1994-95 for this agreement. This roadway is located in Supervisor District No. 4 and exists as a "County Island."

City of Phoenix will be responsible for 100% of the storm drain, median islands and landscaping portions of the project.

**2. COMPLIANCE WITH MARICOPA COUNTY PROCUREMENT CODE** N/A article \_\_\_\_\_ paragraph \_\_\_\_\_  
Procurement Officer 

SOLE SOURCE JUSTIFICATION \_\_\_\_\_

**3. CONTINUED FROM MEETING OF** \_\_\_\_\_ **4.  THIS DEPARTMENT WILL CAUSE PUBLICATION**  
**DISCUSSED IN MEETING OF** \_\_\_\_\_  **CLERK OF THE BOARD TO CAUSE PUBLICATION**

**5. MOTION:** It is moved that the Maricopa County Board of Supervisors ... approve and authorize the execution of the intergovernmental agreement with the City of Phoenix for the improvement and annexation of Thomas Road between 99th Avenue and 83rd Avenue by the City of Phoenix.

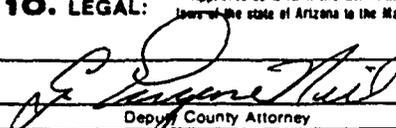
**6. FINANCIAL:**  Expenditure  Revenue  Budgeted  Contingency  Budget Amendment  Transfer  Grant or other

\$ \_\_\_\_\_ Total \_\_\_\_\_ Fund \_\_\_\_\_ Financial Officer \_\_\_\_\_ Date \_\_\_\_\_

**7. PERSONNEL:**  
\_\_\_\_\_  
Personnel Director \_\_\_\_\_ Date \_\_\_\_\_

**8. DEPARTMENT:** Highway-6400 (BHW) MH:km  
 5.14.91  
Action Recommended by \_\_\_\_\_ Date \_\_\_\_\_

**9. MATERIALS MANAGEMENT:**  
A. \_\_\_\_\_ Date \_\_\_\_\_  
Materials Management Director  
B. \_\_\_\_\_ Date \_\_\_\_\_  
W/MBE Representative

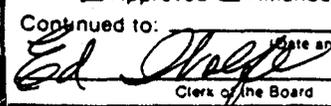
**10. LEGAL:** Approved as to form and within the powers and authority granted under the laws of the state of Arizona to the Maricopa County Board of Supervisors  
 5-15-91  
Deputy County Attorney \_\_\_\_\_ Date \_\_\_\_\_

**11. OTHER:** MAF Office  
 5-15-91  
Signature \_\_\_\_\_ Date \_\_\_\_\_

**12. APPROVED FOR AGENDA:**  
 5.15.91  
Approving Official \_\_\_\_\_ Date \_\_\_\_\_

**13. OTHER:**  
\_\_\_\_\_  
Signature \_\_\_\_\_ Date \_\_\_\_\_

**15. RECOMMENDATION OF COUNTY MANAGER:**  
 Approve  Disapprove

**14. BOARD OF SUPERVISORS: Action taken:**  
 Approved  Amended  Disapproved  Deleted  
Continued to: \_\_\_\_\_  
 Date and type of meeting) JUN 3 1991  
Clerk of the Board \_\_\_\_\_ Date \_\_\_\_\_

Comments:  
\_\_\_\_\_  
County Manager \_\_\_\_\_ Date \_\_\_\_\_

200175

INTERGOVERNMENTAL AGREEMENT  
BETWEEN MARICOPA COUNTY AND THE CITY OF PHOENIX  
FOR IMPROVEMENTS TO THOMAS ROAD-  
99TH AVENUE TO 83RD AVENUE

58948

This Agreement entered into this 3 day of June, 1991, pursuant to Arizona Revised Statutes Section 11-951 et seq., as amended, by and between the County of Maricopa, a political subdivision of the State of Arizona, hereinafter called the "COUNTY," and the City of Phoenix, a municipal corporation, hereinafter called "PHOENIX."

WHEREAS, the COUNTY, pursuant to Arizona Revised Statutes Sections 11-251, et seq. and 18-201, et seq. has the authority to improve streets within or without the corporate limits of a city or town; and

WHEREAS, PHOENIX has the authority to enter into this Agreement pursuant to Chapter II, Section 2 of the PHOENIX City Charter; and

WHEREAS, PHOENIX proposes to improve Thomas Road between 99th Avenue and 83rd Avenue ("PROJECT"), including the construction of curb, gutter, sidewalk, paving, irrigation, waterline, storm drain facilities and landscaping; and

WHEREAS, the existing roadway within the PROJECT limits is partially located within COUNTY jurisdiction, and is abutted by and also partially within PHOENIX; and

WHEREAS, the COUNTY is willing to participate in the improvement project and jointly exercise common powers pursuant to Arizona Revised Statutes, Title 11, Chapter 7, Article 3;

NOW, THEREFORE, in consideration of the mutual covenants hereinafter set forth, the parties mutually agree to the following:

ARTICLE I

PHOENIX RESPONSIBILITIES

PHOENIX agrees:

1. To provide all surveys, all necessary engineering work and all plans and specifications for the roadway, storm drain, and waterline and irrigation improvements to Thomas Road between 99th Avenue and 83rd Avenue, and to submit such documents to the COUNTY for its review.
2. To act as the contracting agency for the PROJECT, and to call for, receive, open and tabulate bids for the proposed improvement. PHOENIX shall furnish copies of the tabulation of all bids received from prospective contractors to the COUNTY for review and approval before award of the contract.
3. To award a contract to the lowest responsible bidder for the PROJECT, which shall include satisfactory warranty, indemnity and insurance provisions and shall otherwise be in a form acceptable to all parties. Terms of said construction contract shall require that the contractor obtain all necessary permits from PHOENIX and the COUNTY to work within their respective jurisdictions.
4. To provide all the necessary construction engineering, interim and final inspections and testing required for quality control and adherence to the plans and specifications. PHOENIX shall include representatives of the COUNTY in the final inspection to determine whether the parties to this Agreement will jointly accept the PROJECT construction.

5. To process and make payments to the contractor in accordance with the bid schedule and PHOENIX standard payment policies.

6. To maintain accurate and complete accounting records and vouchers in support of all costs related to the PROJECT in accordance with generally accepted accounting principles and practices which shall be subject to audit and examination by the COUNTY at any reasonable time up to three (3) years after completion of the PROJECT.

7. To acquire rights-of-way needed to construct the PROJECT within the present PHOENIX city limits.

8. To install, operate, and maintain the storm drain system and all traffic signals, signing, striping and other traffic control devices during and after construction of the PROJECT.

9. To annex the COUNTY roadway right-of-way prior to initiation of construction, and to assume all maintenance responsibilities within the annexed area. If the annexation is successfully challenged in a court of competent jurisdiction and is voided in whole or in part, this Agreement shall remain in full force and effect.

10. To pay construction costs for all work located beyond lines parallel to and 33 feet north and south of the Thomas Road monument line, except that the City's cost responsibility for power line relocations and irrigation ditch tiling/relocations shall be limited to 50% of the cost of those items.

11. To pay all storm drain construction costs.

12. To pay for relocation of any fire hydrants, water meters or any City utilities in conflict with construction of any PROJECT components.

13. To pay for any adjustments of manholes and valve boxes necessary to accomplish the PROJECT.

14. To pay for all PHOENIX internal administrative expenses plus all PROJECT construction engineering and design costs exclusive of costs relating to work within the County's area of responsibility as defined in Article II, Section 2.

15. To pay 100% of all storm drain construction engineering and design costs.

16. To bill the COUNTY monthly for its share of PROJECT costs as set forth in this Agreement, based upon contract unit prices and monthly payments to the contractor for work completed that month.

## ARTICLE II

### COUNTY RESPONSIBILITIES

COUNTY agrees:

1. To be responsible for all costs that may arise from the acquisition of all necessary rights-of-way, easements, and right-of-way claims within the area presently under County jurisdiction within the PROJECT limits.

2. To reimburse PHOENIX for the actual costs based on contract unit prices of all roadway construction (exclusive of storm drain main and median islands) within 33 feet of each side of the Thomas Road monument line. The County shall also be responsible for 50% of power line relocation and irrigation ditch tiling/relocation costs on the project.

3. To reimburse PHOENIX an additional ten percent (10%) of the County's share of construction costs identified in Article II, Section 2 above, to cover the County's share of PROJECT construction engineering and design costs.

4. To reimburse PHOENIX for the COUNTY'S share of PROJECT costs, as defined herein, within thirty (30) days of the receipt of each monthly billing by PHOENIX.

ARTICLE III

GENERAL PROVISIONS

1. PHOENIX agrees to indemnify and save harmless the COUNTY, or any of its departments, agencies, officers or employees, from and against all loss, expense, damage or claim of any nature whatsoever which is caused by any activity, condition or event arising out of the performance or nonperformance of any of the provisions of this Agreement by PHOENIX. The COUNTY shall in all instances be indemnified against all liability, losses and damages of any nature for or on account of any injuries to, or death of persons, or damages to or destruction of property arising out of, or in any way connected with the performance or nonperformance of this Agreement by PHOENIX, except such injury or damage as shall have been occasioned by the negligence of the COUNTY. The above cost or damages incurred by the COUNTY, or any of its departments, agencies, officers or employees, shall include in the event of an action, court costs, expenses for litigation and reasonable attorney's fees.

2. The COUNTY agrees to indemnify and save harmless PHOENIX, or any of its departments, agencies, officers or employees, from and against all loss, expense, damage or claim of any nature whatsoever which is caused by any activity, condition or event arising out of the performance or nonperformance of any of the provisions of this Agreement by the COUNTY. PHOENIX shall in all instances be indemnified against all liability, losses and damages of any nature for or on account of any injuries to, or death of persons, or damages to or destruction of property arising out of, or in any way connected with the performance or nonperformance of this Agreement by the COUNTY, except such injury or damage as shall have been occasioned by the negligence of PHOENIX. The above cost or damages incurred by PHOENIX or any of its departments, agencies, officers or employees, shall include in the event of an action, court costs, expenses for litigation and reasonable attorney's fees.

3. This Agreement shall become effective on the date it is filed with the Maricopa County Recorder and remain in force and effect until all work on this PROJECT has been completed in accordance with the terms of the Agreement and the PROJECT has been accepted by the COUNTY and PHOENIX as having been constructed in accordance with the plans and specifications under which the contract for construction was awarded and all payments have been made in accordance with the above provisions and the roadway right-of-way has been annexed by Phoenix

except that Article III Paragraph 1 and 2 relating to liability, and Article I, Paragraphs 8 and 9, relating to maintenance shall continue in perpetuity. This Agreement may be amended or terminated upon the written consent of all parties.

5. Attached to this Agreement are copies of appropriate action by ordinance, resolution or otherwise authorizing the respective parties to enter into this Agreement.

IN WITNESS WHEREOF the parties hereto have executed this Agreement this \_\_\_\_\_ day of \_\_\_\_\_, 1991.

MARICOPA COUNTY BOARD OF SUPERVISORS

CITY OF PHOENIX

By Thomas A. Greenstone  
Chairman of the Board

By Sheryl L. Sculley  
City Manager  
Sheryl L. Sculley  
Assistant City Manager

ATTEST:

ATTEST:

By Ed Wolf  
Clerk of the Board

By Vicky Miel  
City Clerk

JUN 3 1991

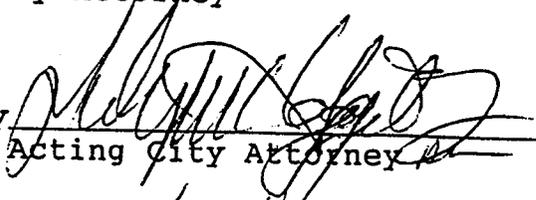
8574R

1991 APR 24 2:11:19 PM  
CITY CLERK DEPT.

APPROVAL OF PHOENIX CITY ATTORNEY AND DEPUTY COUNTY ATTORNEY

I hereby certify that I have reviewed the proposed Intergovernmental Agreement between the City of Phoenix and Maricopa County for improvements to Thomas Road between 99th Avenue and 83rd Avenue and declare the Agreement to be in proper form and within the powers and authority granted to the City of Phoenix and Maricopa County under the laws of the State of Arizona.

RODERICK G. McDOUGALL  
City Attorney

By   
Acting City Attorney

Date 2/22/91

By   
Deputy County Attorney

Date 3-11-91

8574R

WHEN RECORDED MAIL TO:

CHARLOTTE C. NANCE  
CLERK OF THE BOARD'S OFFICE  
10th FLOOR - NEW ADMINISTRATION BUILDING  
261-7064

RECORDED IN OFFICIAL RECORDS  
OF M: COPA COUNTY, ARIZONA  
JUN 07 '91 - 3 00  
HELEN PURCELL, County Recorder  
FEE N/C PGS 13 W

91 260170

THIS SPACE IS RESERVED FOR RECORDING  
INFORMATION

FILE NO.	STATE	PROJECT NO.	SHEET NO.	TOTAL SHEETS	AS BUILT
9	ARIZ.	RAM-600-0-313			

101 L MA 3

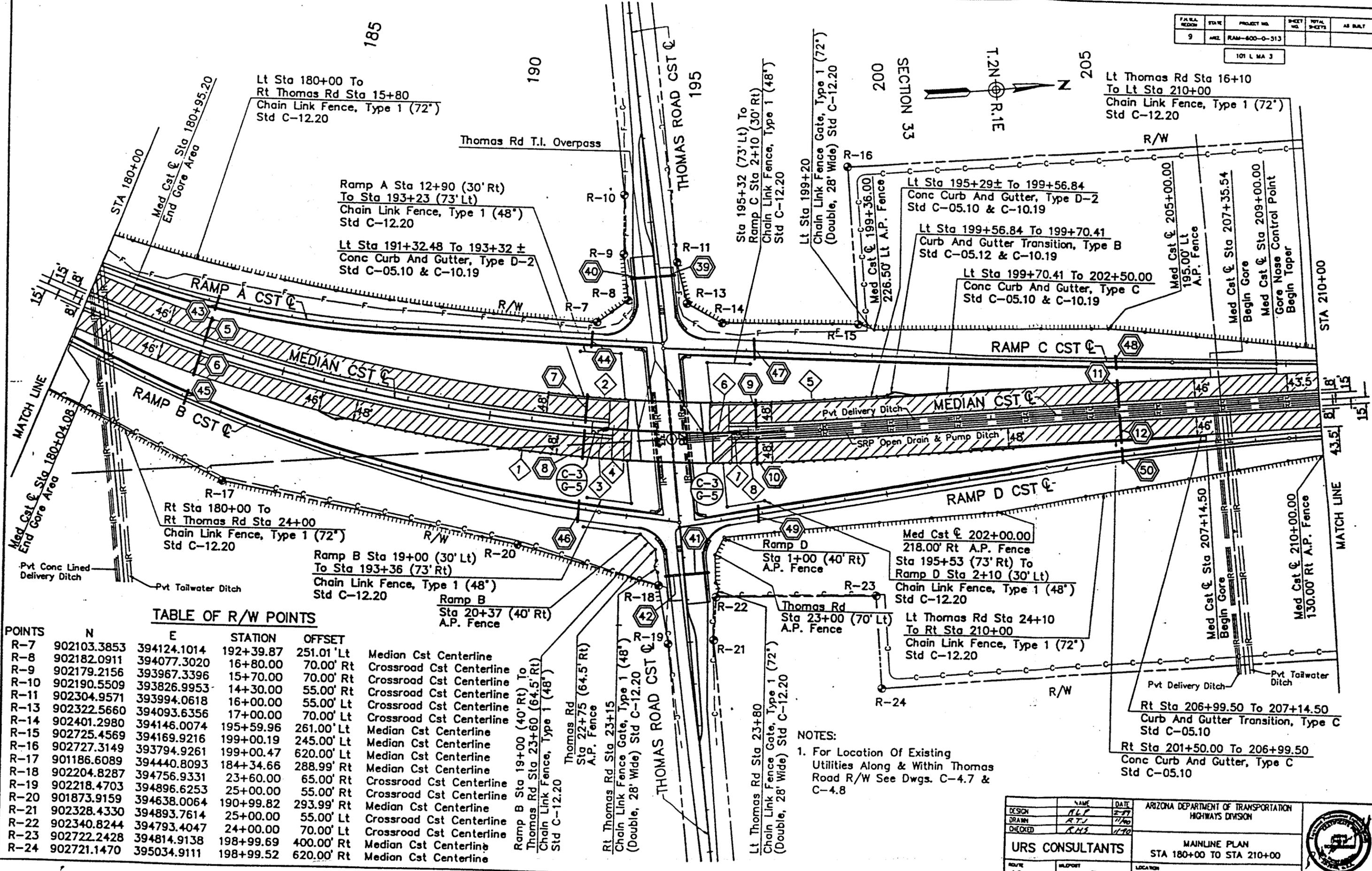


TABLE OF R/W POINTS

POINTS	N	E	STATION	OFFSET	
R-7	902103.3853	394124.1014	192+39.87	251.01' Lt	Median Cst Centerline
R-8	902182.0911	394077.3020	16+80.00	70.00' Rt	Crossroad Cst Centerline
R-9	902179.2156	393967.3396	15+70.00	70.00' Rt	Crossroad Cst Centerline
R-10	902190.5509	393826.9953	14+30.00	55.00' Rt	Crossroad Cst Centerline
R-11	902304.9571	393994.0618	16+00.00	55.00' Lt	Crossroad Cst Centerline
R-13	902322.5660	394093.6356	17+00.00	70.00' Lt	Crossroad Cst Centerline
R-14	902401.2980	394146.0074	195+59.96	261.00' Lt	Median Cst Centerline
R-15	902725.4569	394169.9216	199+00.19	245.00' Lt	Median Cst Centerline
R-16	902727.3149	393794.9261	199+00.47	620.00' Lt	Median Cst Centerline
R-17	901186.6089	394440.8093	184+34.66	288.99' Rt	Median Cst Centerline
R-18	902204.8287	394756.9331	23+60.00	65.00' Rt	Crossroad Cst Centerline
R-19	902218.4703	394896.6253	25+00.00	55.00' Rt	Crossroad Cst Centerline
R-20	901873.9159	394638.0064	190+99.82	293.99' Rt	Median Cst Centerline
R-21	902328.4330	394893.7614	25+00.00	55.00' Lt	Crossroad Cst Centerline
R-22	902340.8244	394793.4047	24+00.00	70.00' Lt	Crossroad Cst Centerline
R-23	902722.2428	394814.9138	198+99.69	400.00' Rt	Median Cst Centerline
R-24	902721.1470	395034.9111	198+99.52	620.00' Rt	Median Cst Centerline

NOTES:  
 1. For Location Of Existing Utilities Along & Within Thomas Road R/W See Dwg. C-4.7 & C-4.8

DESIGN	NAME	DATE	ARIZONA DEPARTMENT OF TRANSPORTATION HIGHWAYS DIVISION
DRAWN	RLP	2/77	
CHECKED	RHS	11/80	
URS CONSULTANTS			MAINLINE PLAN STA 180+00 TO STA 210+00
NO. 101 L	SHEET 3	LOCATION	
			AGUA FRIA (ENCANTO-CAMELBACK)