SURVEY DATA

GILBERT/CHANDLER

MCFCD Traverse - Block 3

9/10/87

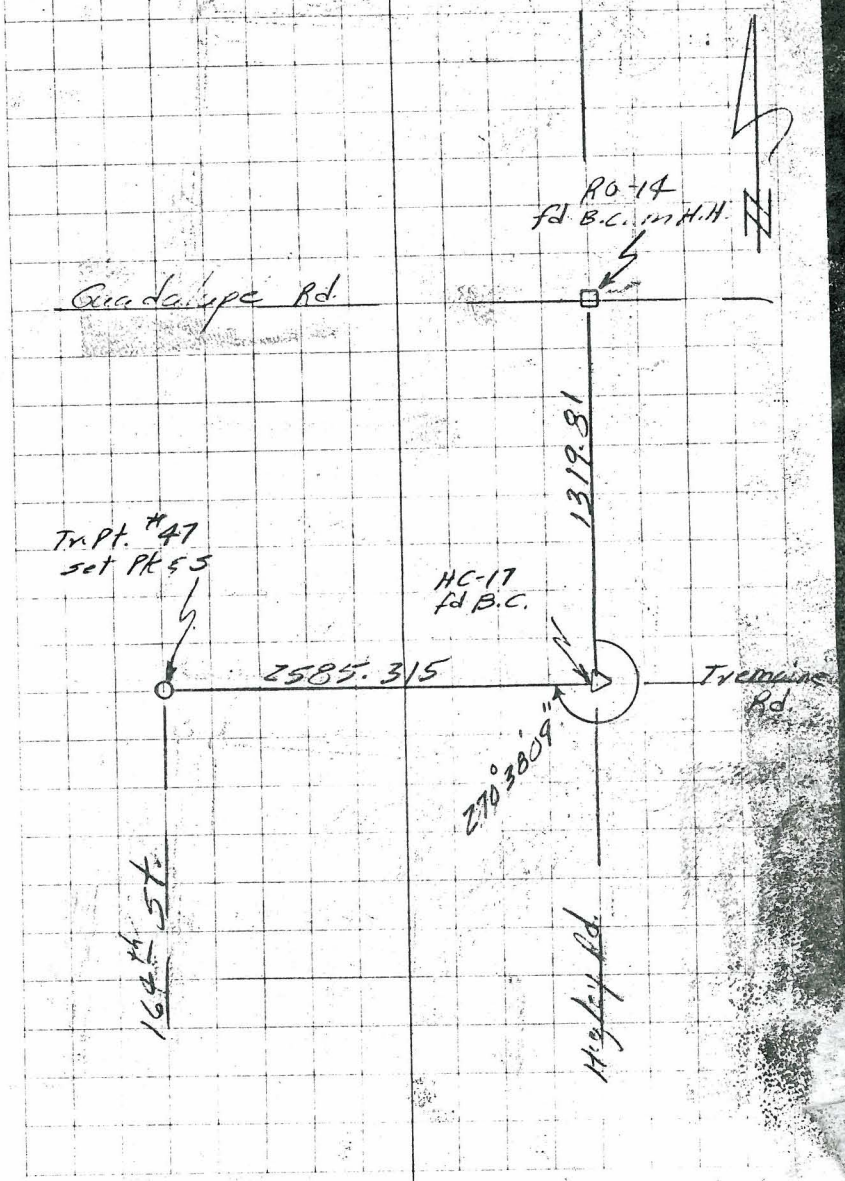
806/4

(103) TP #47 → (102) HC-17 → (101) RO-14

∠#1 = 89°21'51"
∠#6 = 176°11'08"
MNX = 89°21'51"
− 359°59'60"
270°38'09" ✓

HO to RO-14
∠X = 89°57'27"
S.D. = 1319.81
H.O. = 1319.81 ✓

HO to TP #47
∠X = 90°13'23"
S.D. = 2585.33
H.O. = 2585.31 ✓



Property of Flood Control District of MC Library
Please Return to
2801 W. Durango
Phoenix AZ 85009

MCFCD

Bk 806

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MCFCD Traverse — Block 3

L. Van Dyke
R. McMurray
J. Craven

9/16/87

806
2

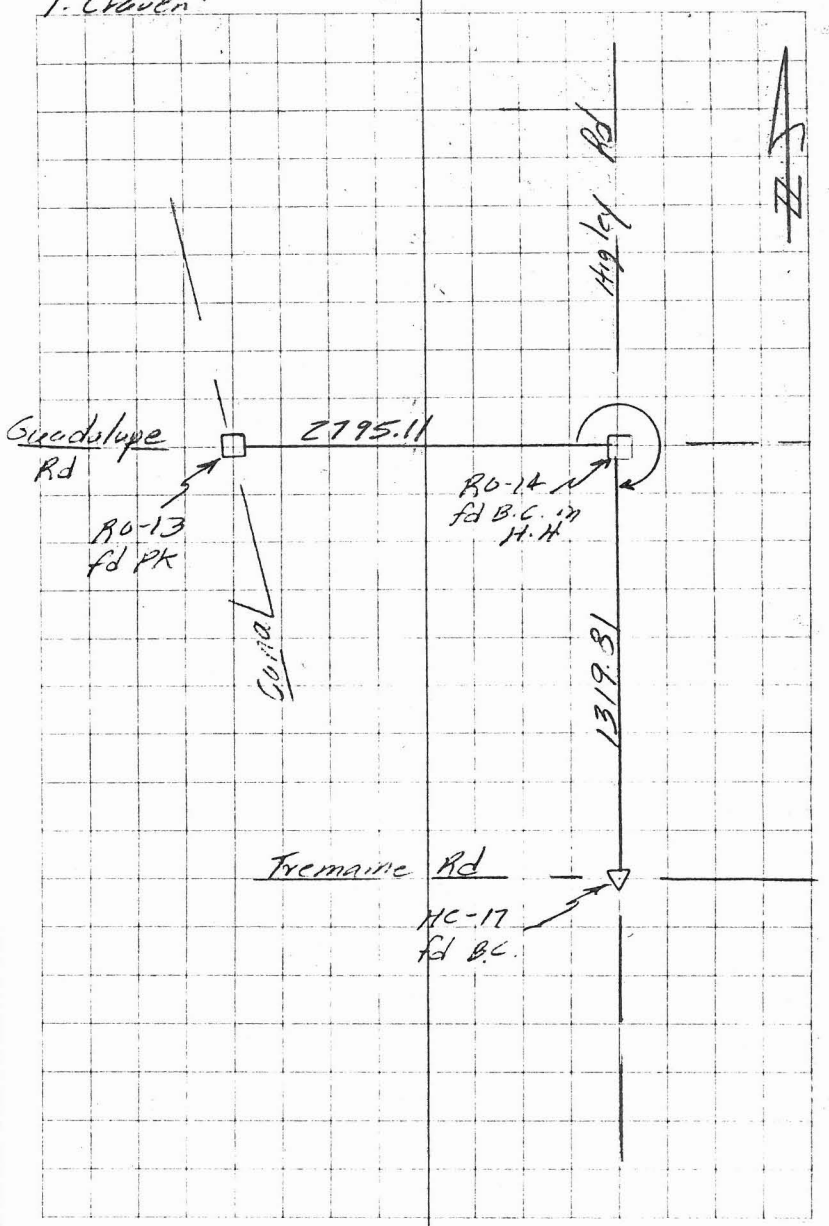
(100) RO-13 → (101) RO-14 → (102) HC-17

∠#1 = 269°08'15"
∠#6 = 179°50'04"
MNZ = 269°08'21" ✓

HD to RO-13
Σ∠ = 90°12'03"
S.D. = 2795.13
H.D. = 2795.11 ✓

HD to HC-17
Σ∠ = 90°07'24"
S.D. = 1319.81
H.D. = 1319.805 ✓

(Con't from Bk 803 — Pg 154)



MCFCD Traverse – Block 3

9/10/87

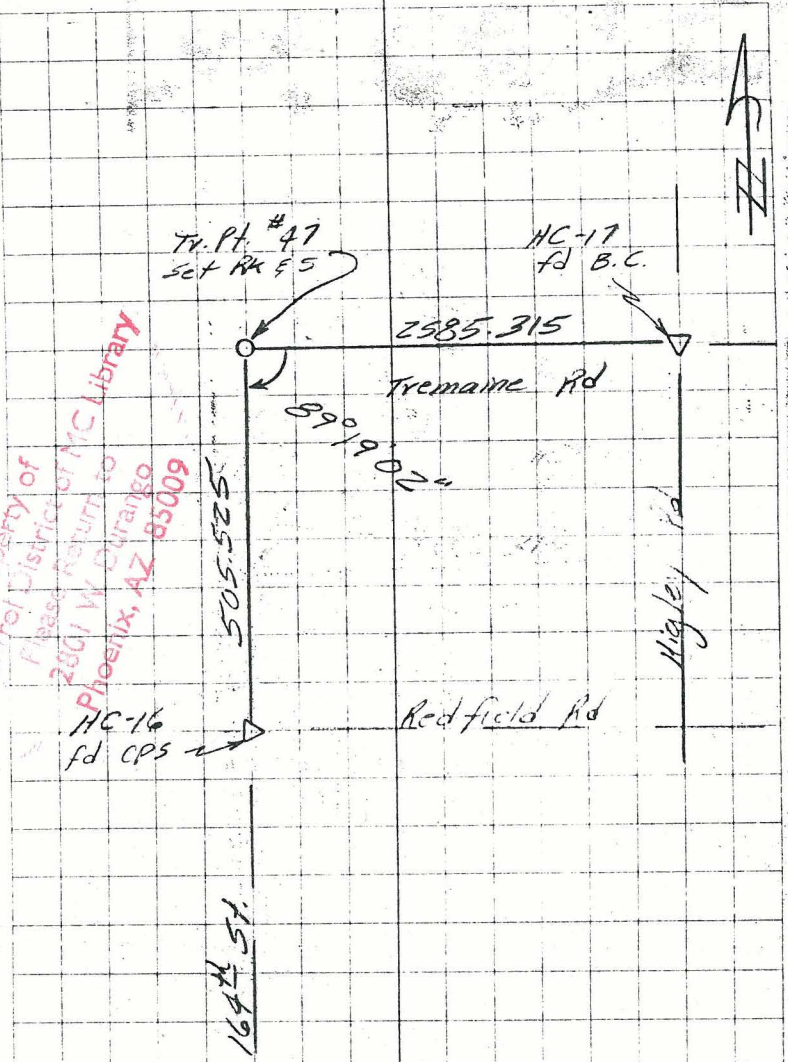
606
6

(102) HC-17 → (103) TP #47 → (104) HC-16

∠#1 = 89°19'03"
∠#6 = 175°54'09"
MN∠ = 89°19'02" ✓

HD to HC-17
ZA = 89°49'22"
S.D. = 2585.33
H.D. = 2585.32 ✓

HD to HC-16
ZA = 90°09'20"
S.D. = 505.53
H.D. = 505.53 ✓



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MCFCD Traverse - Block 3

9/10/87

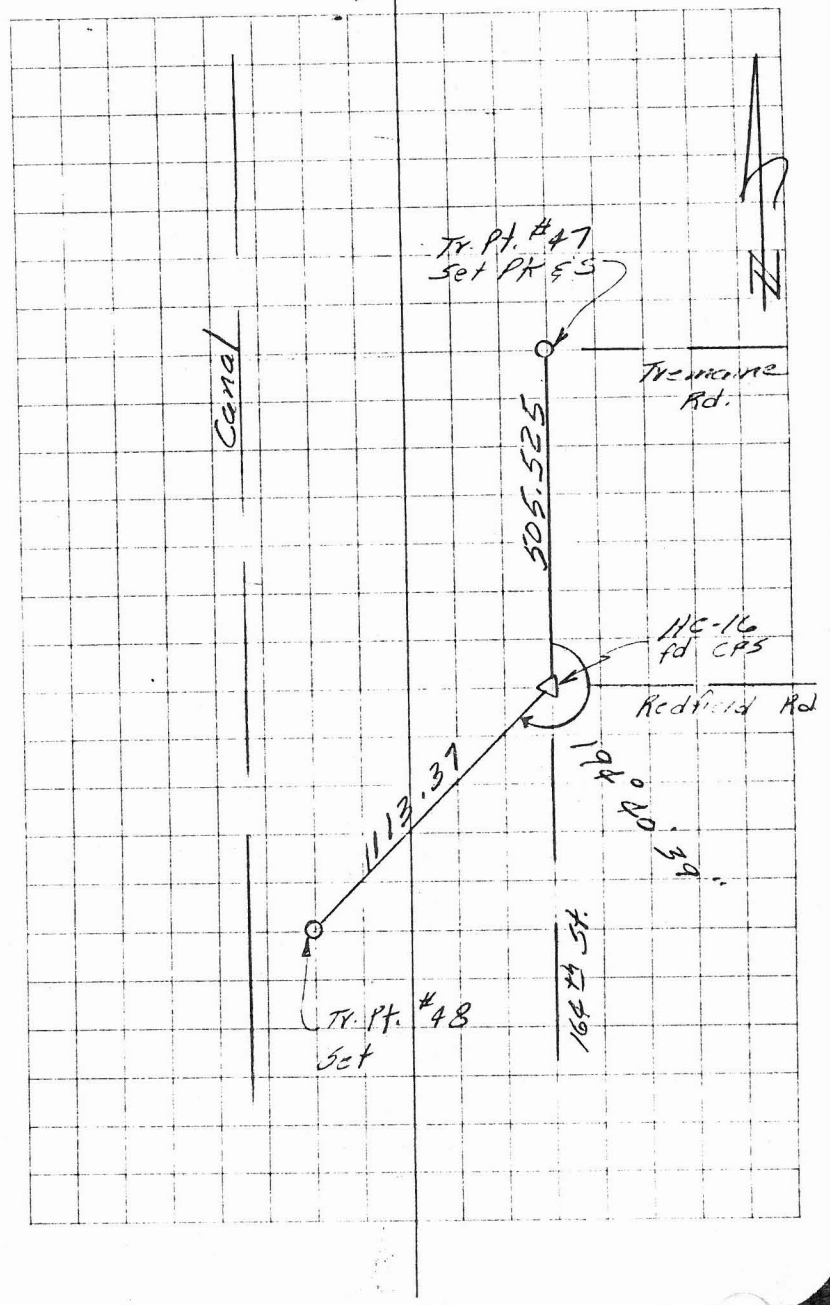
Sht 8

(105) TP #48 → (104) HC-16 → (103) TP #47

∠#1 = 165°19'19"
∠#2 = 271°56'03"
MN∠ = 165°19'21"
− 359°59'60"
194°40'39" ✓

HD to TP #47
Z∠ = 90°01'21"
S.D. = 505.52
H.D. = 505.52 ✓

HD to TP #48
Z∠ = 90°00'28"
S.D. = 1113.37
HD = 1113.37 ✓



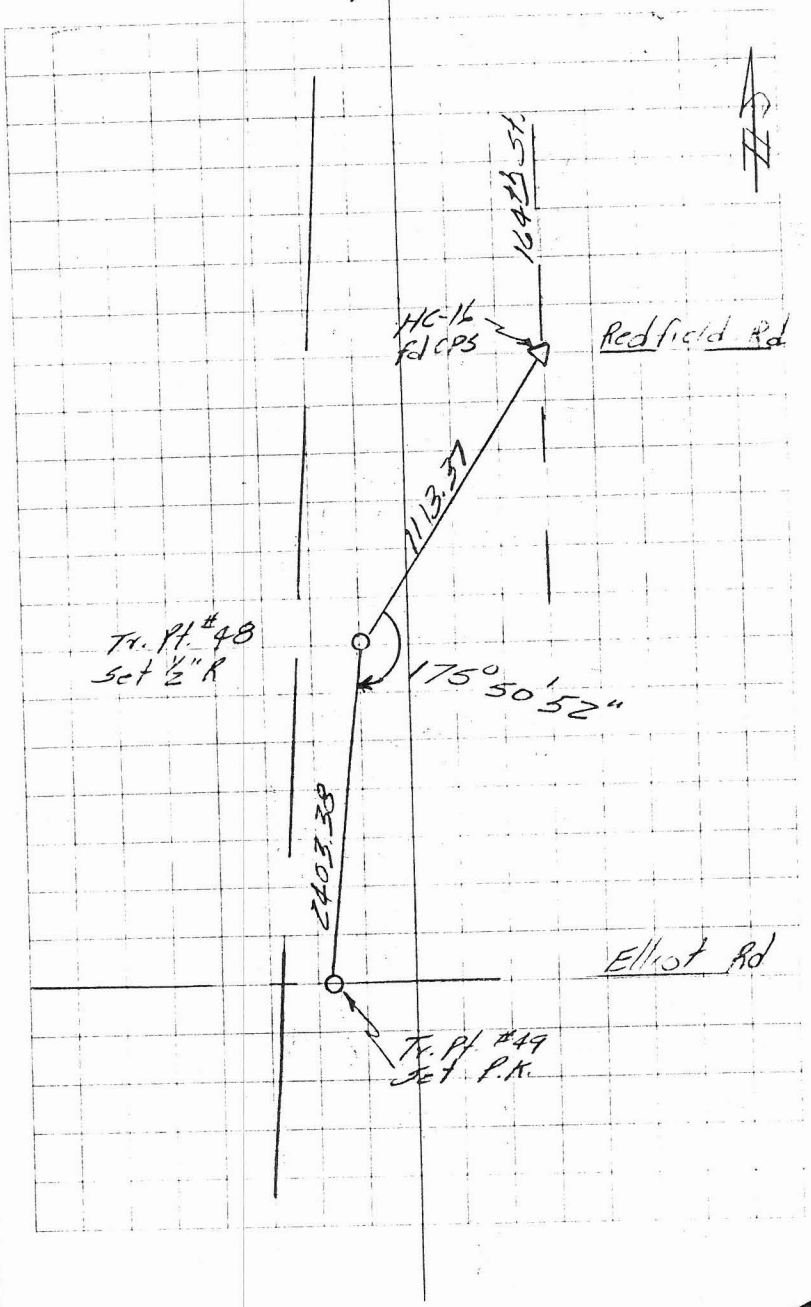
MCFCD | Traverse - Block 3 | 9/15/87

(106) TP #49 → (105) TP #48 → (104) HC-16

∠#1 = 184°09'06"
∠#2 = 24°54'45"
MNK = 184°09'08"
359°59'60"
175°50'52" ✓

HD to HC-16
ZA = 90°04'36"
S.D. = 1113.37
HD = 1113.37 ✓

HD to TP #49
ZA = 90°02'48"
S.D. = 2403.39
H.D. = 2403.39 ✓



MCFCD Traverse – Block 3

L. Van Dyke
R. McMurray
T. Craven

9/11/87

806
12

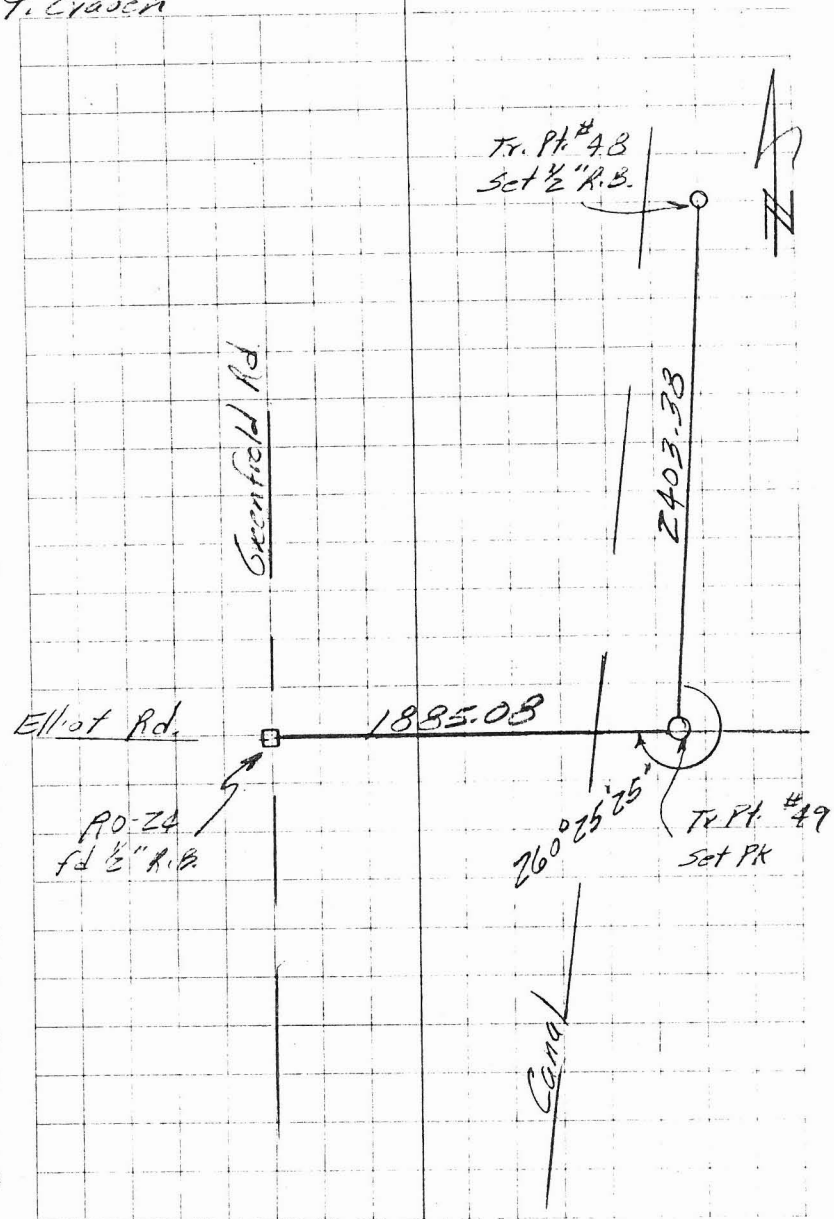
(105)	(106)	(107)
TP# 48	TP# 49	RO-Z4

T

∠#1 = 260°25'23"
∠#6 = 122°32'32"
MNX = 260°25'25" ✓

HD to TP# 48
ZX = 90°00'17"
S.D. = 2403.37
H.D. = 2403.37 ✓

HD to RO-Z4
ZX = 90°14'00"
S.D. = 1885.10
H.D. = 1885.085 ✓



N MCFCD | Traverse — Block 3

(108) TP #50 → (107) RO-24 → (106) TP #49

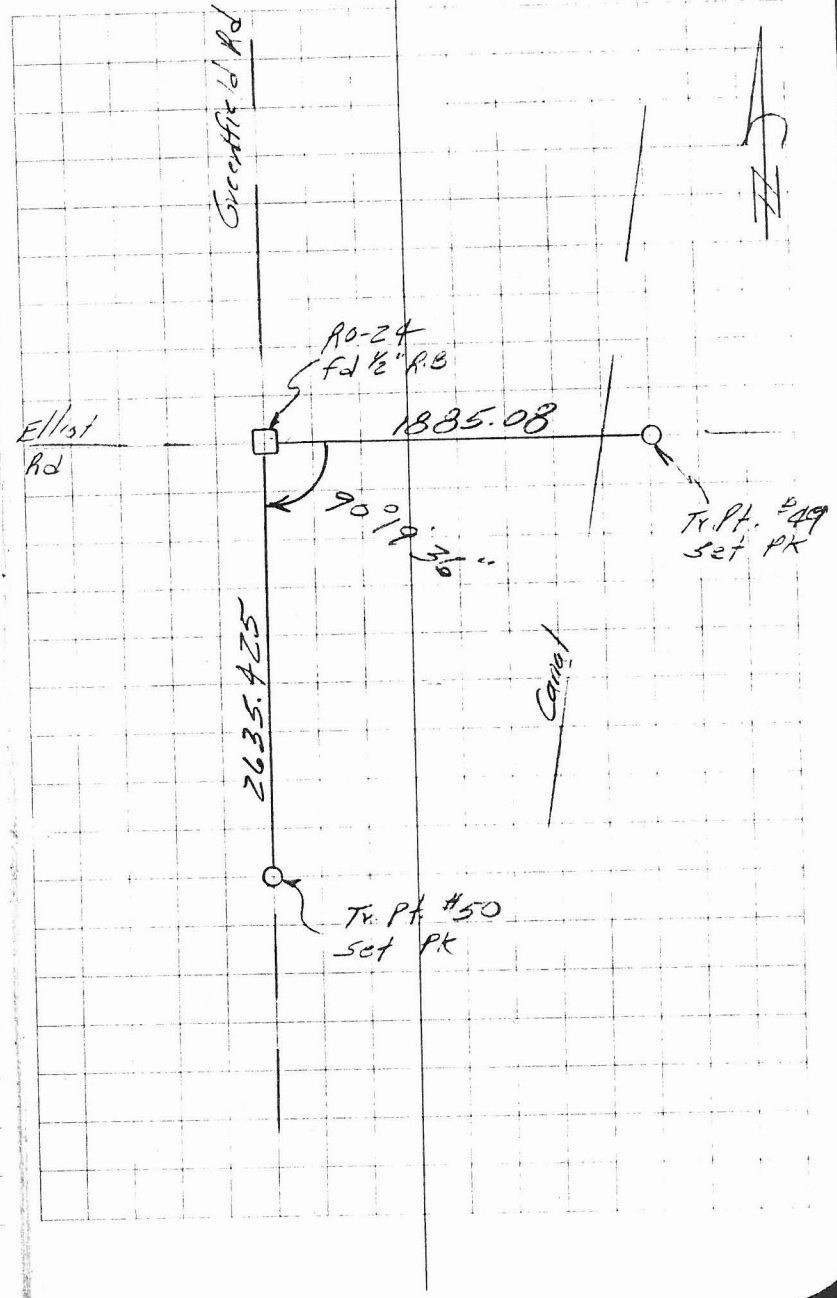
∠#1 = 269°40'23"
∠#6 = 178°02'23"
∧N ∠ = 269°40'24"
− 359°59'60"
90°19'36" ✓

HD to TP #49
∑∠ = 89°50'19"
S.D. = 1885.09
H.D. = 1885.08 ✓

HD to TP #50
∑∠ = 90°00'42"
S.D. = 2635.42
H.D = 2635.42 ✓

9/12/87

806/14



H' MCFCD Traverse - Block 3

(107) RO-24 → (108) TP #50 → (109) VC-11

T

∠#1 = 178°59'54"

∠#6 = 353°58'45"

ANT = 178°59'48" ✓

HD to RO-24

ZA = 90°03'47"

S.D. = 2635.43

H.D. = 2635.43 ✓

HD to VC-11

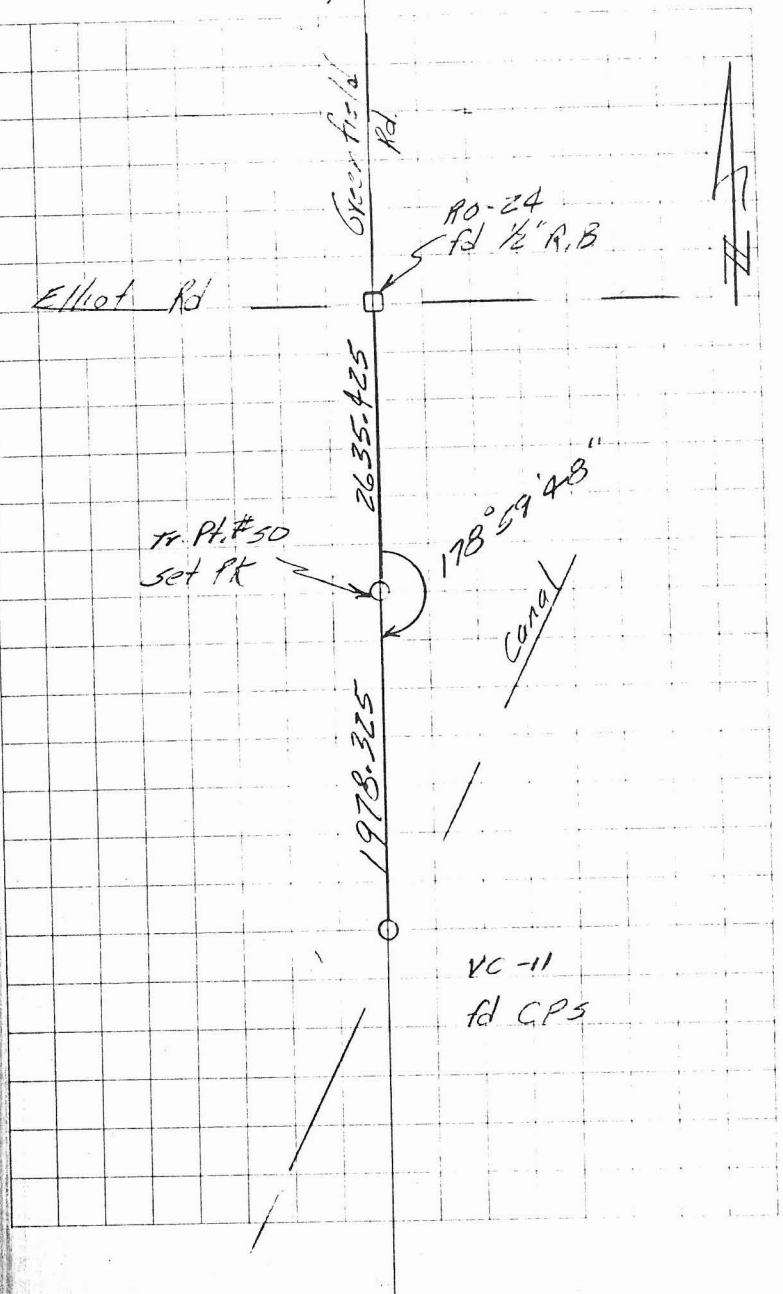
ZA = 89°51'16"

S.D. = 1978.33

H.D. = 1978.325 ✓

9/1/37

806
T6



9/1/87

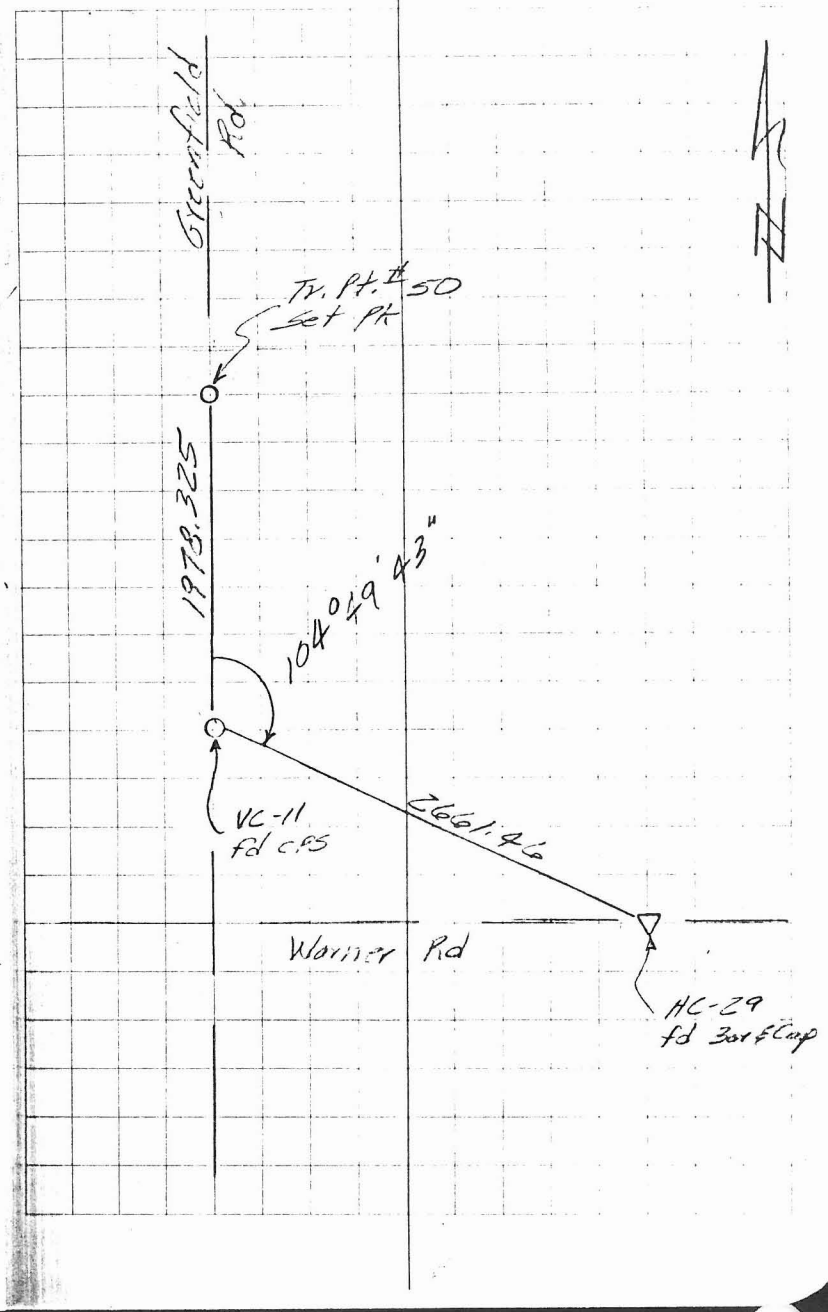
MCFCD Traverse + Block 3

(110) HC-29 → (109) VC-11 → (108) TP# 50

$\measuredangle$#1 = 255°10'11"
$\measuredangle$#6 = 91°01'43"
MM$\measuredangle$ = 255°10'17"
− 359°59'60"
104°49'43" ✓

HD to TP# 50
Z$\measuredangle$ = 90°12'26"
S.D. = 1978.34
H.D. = 1978.325 ✓

HD to HC-29
Z$\measuredangle$ = 89°59'36"
S.D. = 2661.46
H.D. = 2661.46 ✓



1 MCFCD Traverse - Block 3

L. Van Dyke
R. McMurray
T. Craven

9/14/87

336
20

(111) (110) (109)

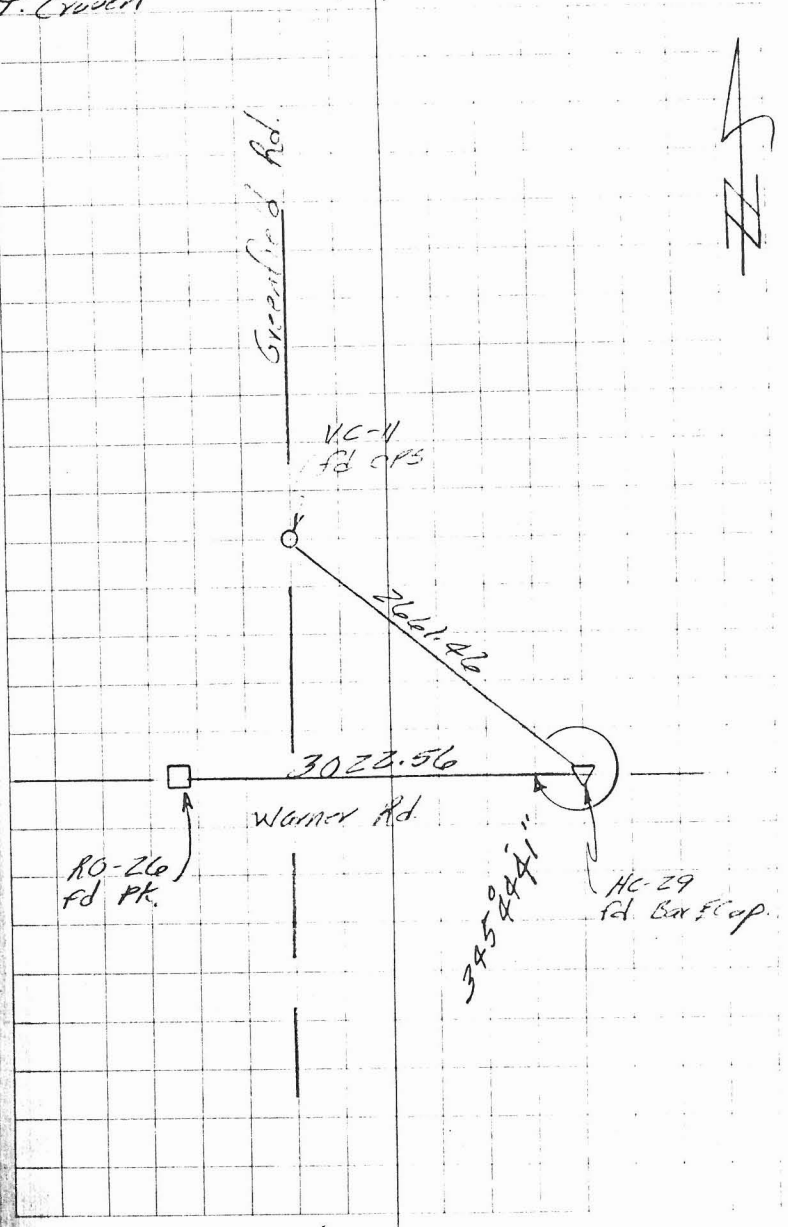
RO-26 ——— HC-29 ——— VC-11

T

∠#1 = 14°15'16"
∠#6 = 85°31'54"
MNX = 14°15'19"
359°59'60"
345°44'41" ✓

HD to VC-11
ZX = 90°03'36"
S.D. = 2661.46
H.D. = 2661.46 ✓

HD to RO-26
ZX = 90°07'21"
SD = 3022.57
HD = 3022.565 ✓



1 MCFCD

Traverse - Block 3

(110) HC-29 → (111) RO-26 → (112) Sec Cor.

∠#1 = 0°32'13"
∠#2 = 1°04'28"
MN∠ = 0°32'14" ✓

HD to Sec Cor. = 417.26 ✓

(110) HC-29 → (111) RO-26 → (113) TP#51

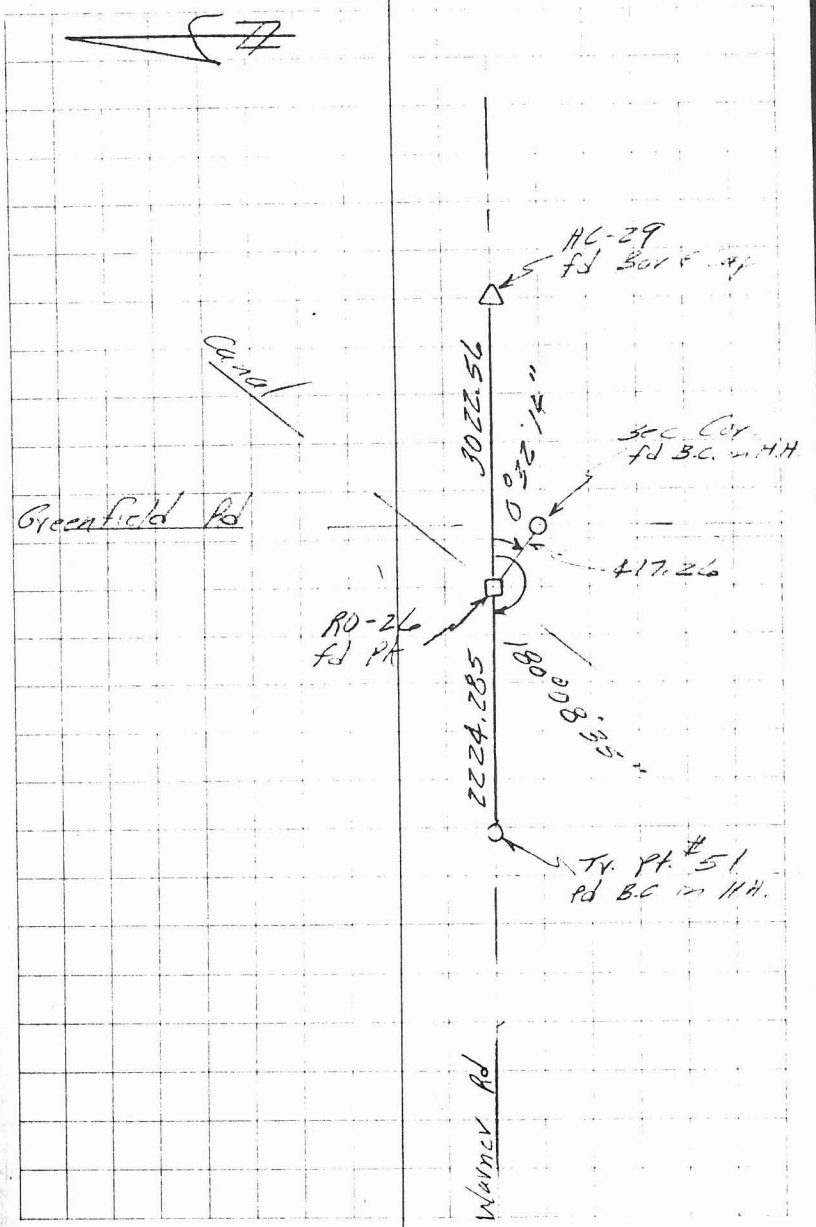
∠#1 = 180°08'34"
∠#2 = 00°51'32"
MN∠ = 180°08'35" ✓

HD to HC-29
Z∠ = 89°55'55"
S.D. = 3022.56
H.D. = 3022.56 ✓

H.D to TP#51
Z∠ = 90°15'18"
S.D. = 2224.30
H.D. = 2224.28 ✓

9/4/87

306
32



MCFCD

Traverse — Block 3

(111) RO-26 → (113) TP #51 → (114) TP #52

∠#1 = 180°03'54"

∠#2 = 00°24'09"

M/∠ = 180°04'02" ✓

AD to RO-26

∠ = 89°48'28"

S.D. = 2224.30

H.D. = 2224.29 ✓

HD to TP #52

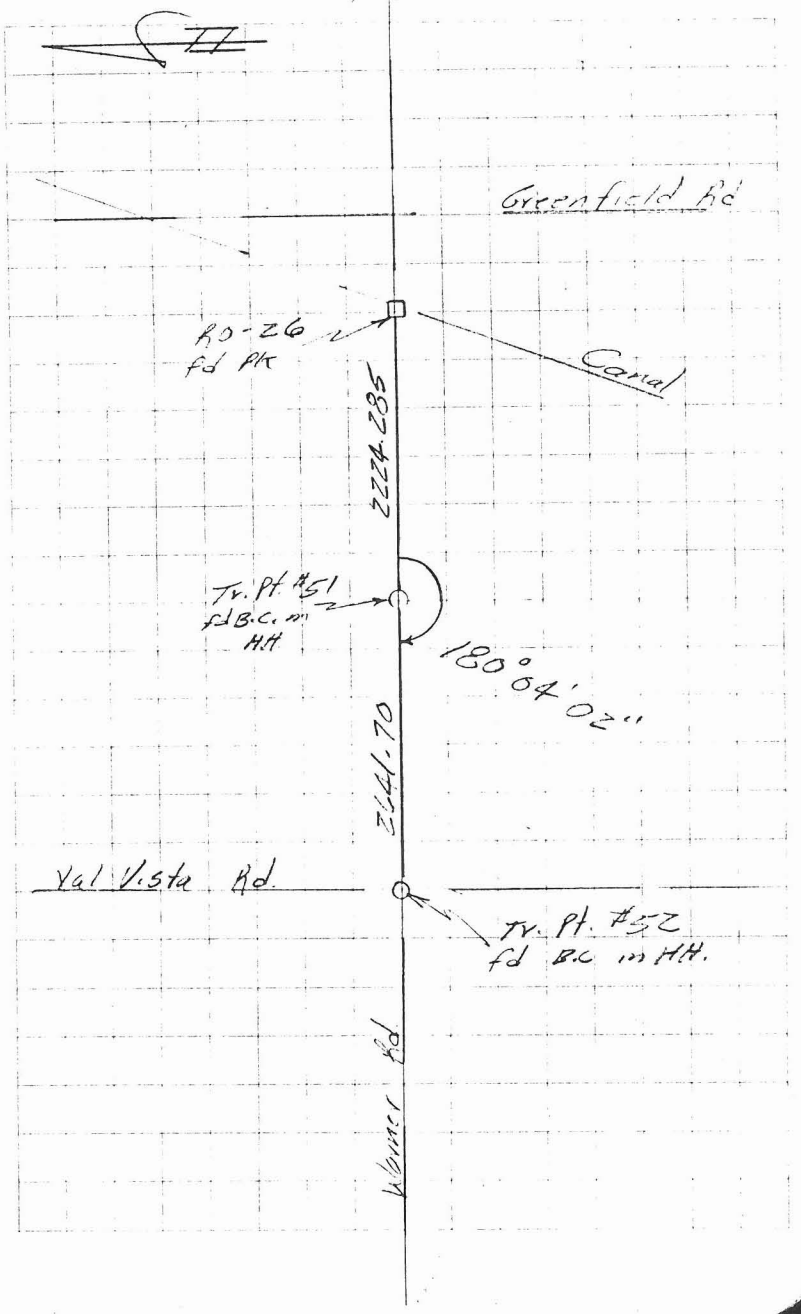
∠ = 90°06'09"

SD = 2641.71

HD = 2641.705 ✓

9/4/37

306
24



MCFCD

Traverse - Block 3

9/14/87

(113) TP #51 → (114) TP #52 → (115) HC-28

∠#1 = 179°51'36"

∠#2 = 359°09'23"

MM ∠ = 179°51'36" ✓

HD to TP #51

ΣX = 89°56'59"

S.D. = 2641.70

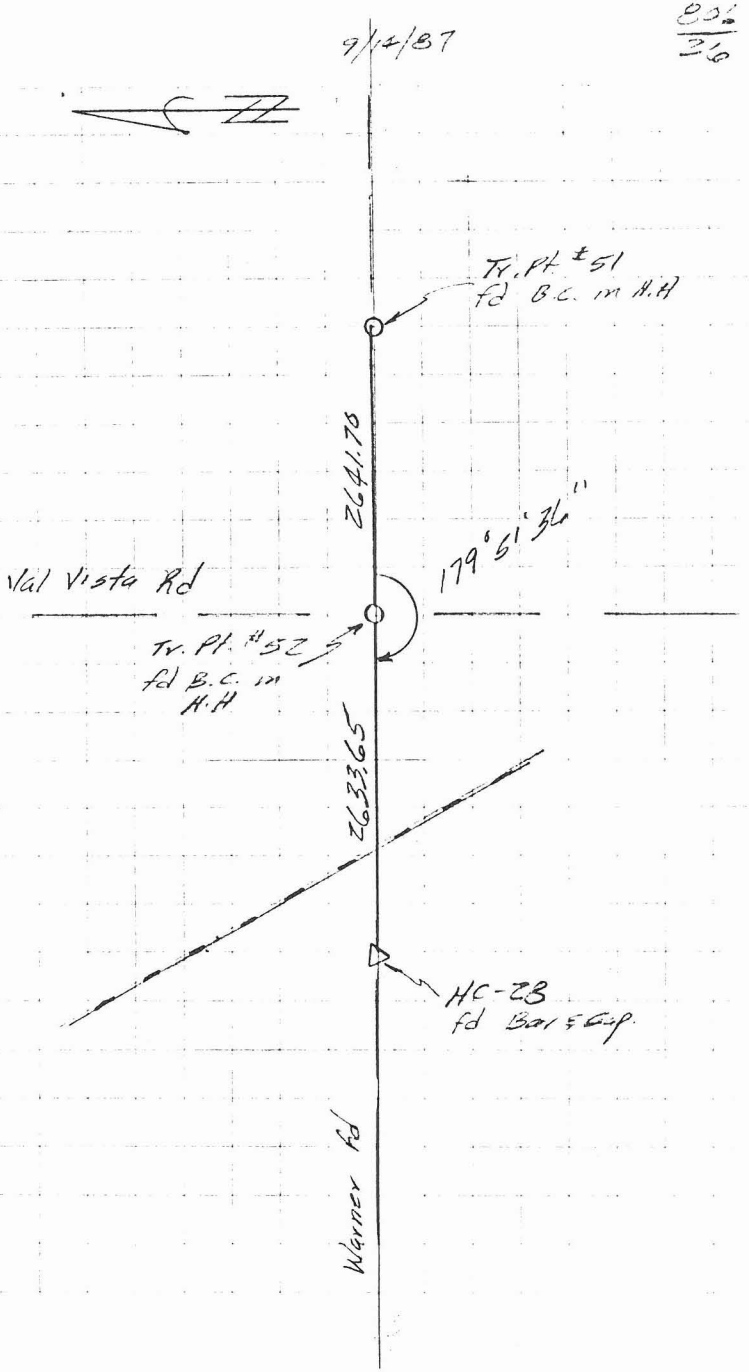
H.D. = 2641.70 ✓

HD to HC-28

ΣX = 90°10'06"

S.D. = 2633.65

H.D. = 2633.64 ✓



MCFCD Traverse + Block 3

(114) (115) (116)

TP#52 → HC-28 → TP#53

∠#1 = 179°52'48"

∠#2 = 359°16'00"

MMX = 179°52'40" ✓

HD to TP#52

ZX = 89°53'42"

S.D. = 2633.64

H.D. = 2633.655 ✓

HD to TP#53

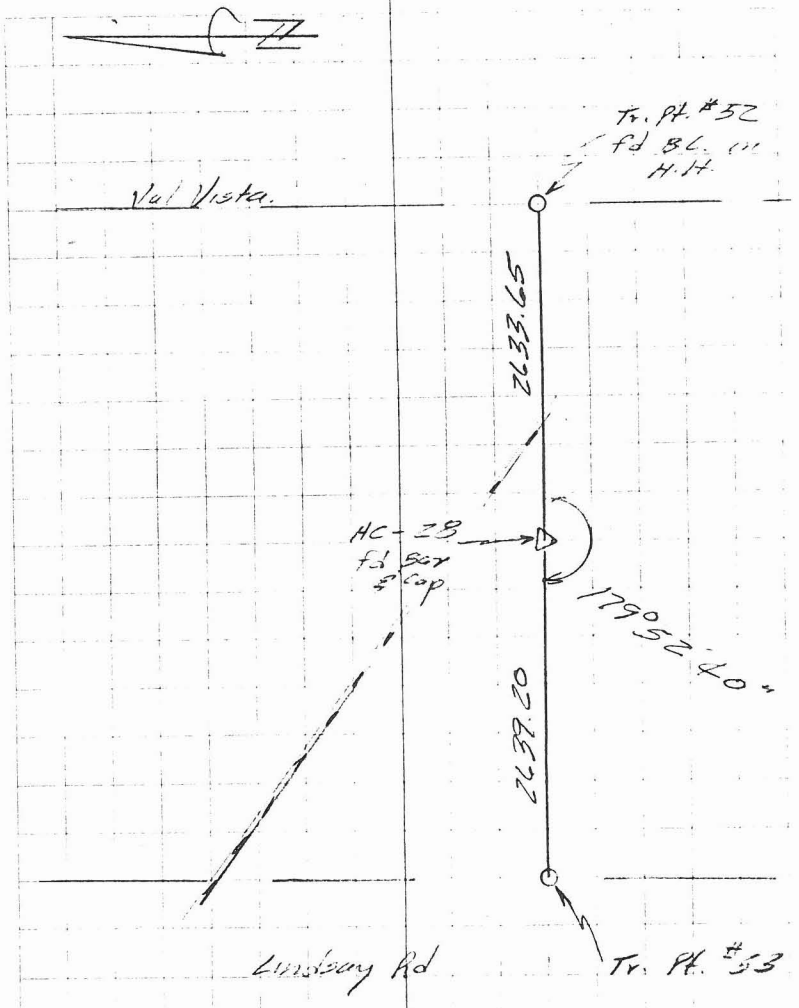
ZX = 90°10'12"

S.D. = 2639.21

H.D. = 2639.20 ✓

9/12/87

806/28



1 MCFCD Traverse – Block 3

115 → 116 → 117

HC-28 → TP #53 → RO-25

$\measuredangle$ #1 = 270°10'39"

$\measuredangle$ #6 = 181°03'26"

MN $\measuredangle$ = 270°10'34"

HD to RO-25

$\Sigma\measuredangle$ = 90°05'05"

S.D. = 2632.21

H.D. = 2632.205

HD = 2632.57

Distance 19 to Good

See 19 46

115 → 116 → 118

HC-28 → TP #53 → HC-27

$\measuredangle$ #1 = 180°02'48"

$\measuredangle$ #6 = 00°16'36"

MN $\measuredangle$ = 180°02'46" ✓

HD to HC-28

$\Sigma\measuredangle$ = 89°53'45"

S.D. = 2639.21

H.D. = 2639.205 ✓

HD to HC-27

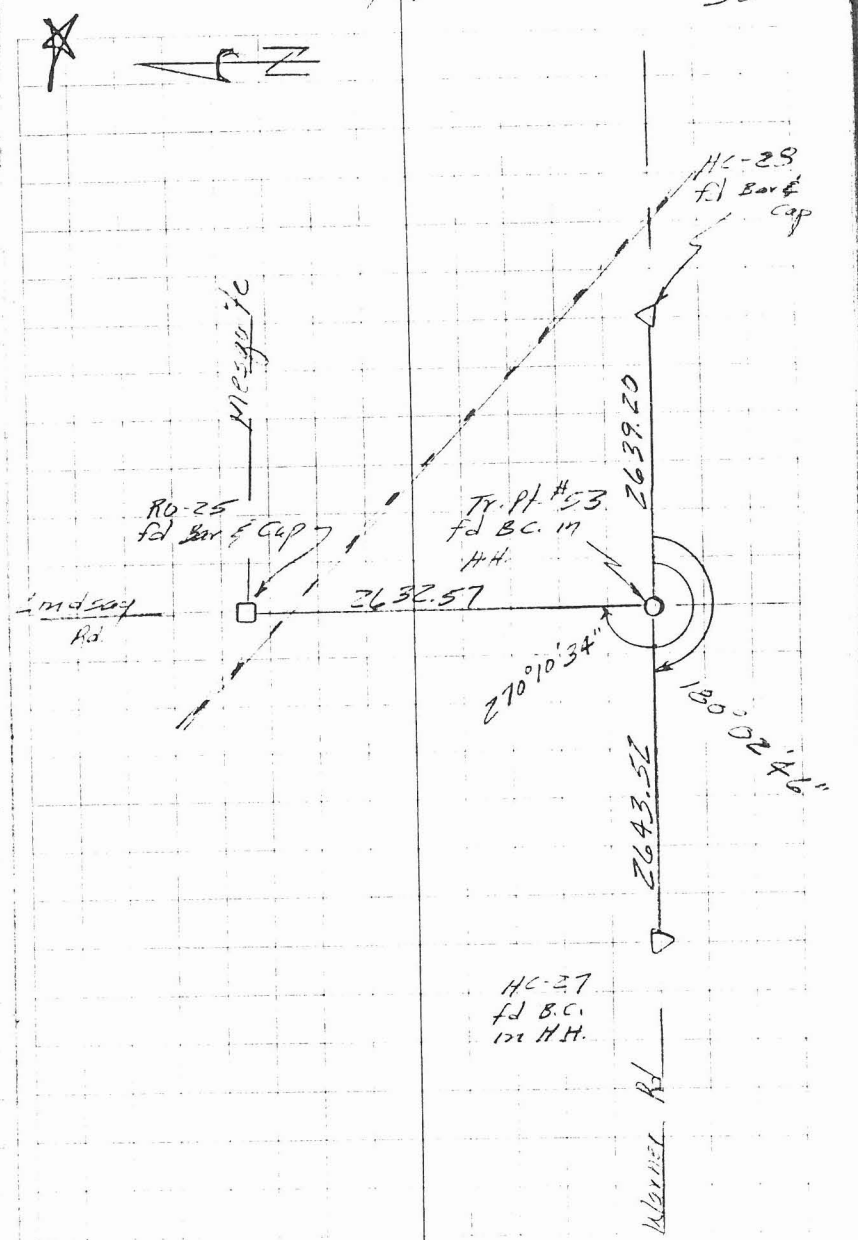
$\Sigma\measuredangle$ = 90°09'33"

S.D. = 2643.53

H.D. = 2643.52 ✓

9/14/87

806/30



MCFCD Traverse — Block 3

(116) TP #53 → (118) HC-27 → (119) HC-26

∠#1 = 179°59'36"

∠#2 = 359°57'29"

MNX = 179°59'35" ✓

HD to TP #53

ΣX = 89°54'48"

S.D. = 2643.52

H.D. = 2643.515 ✓

HD to HC-26

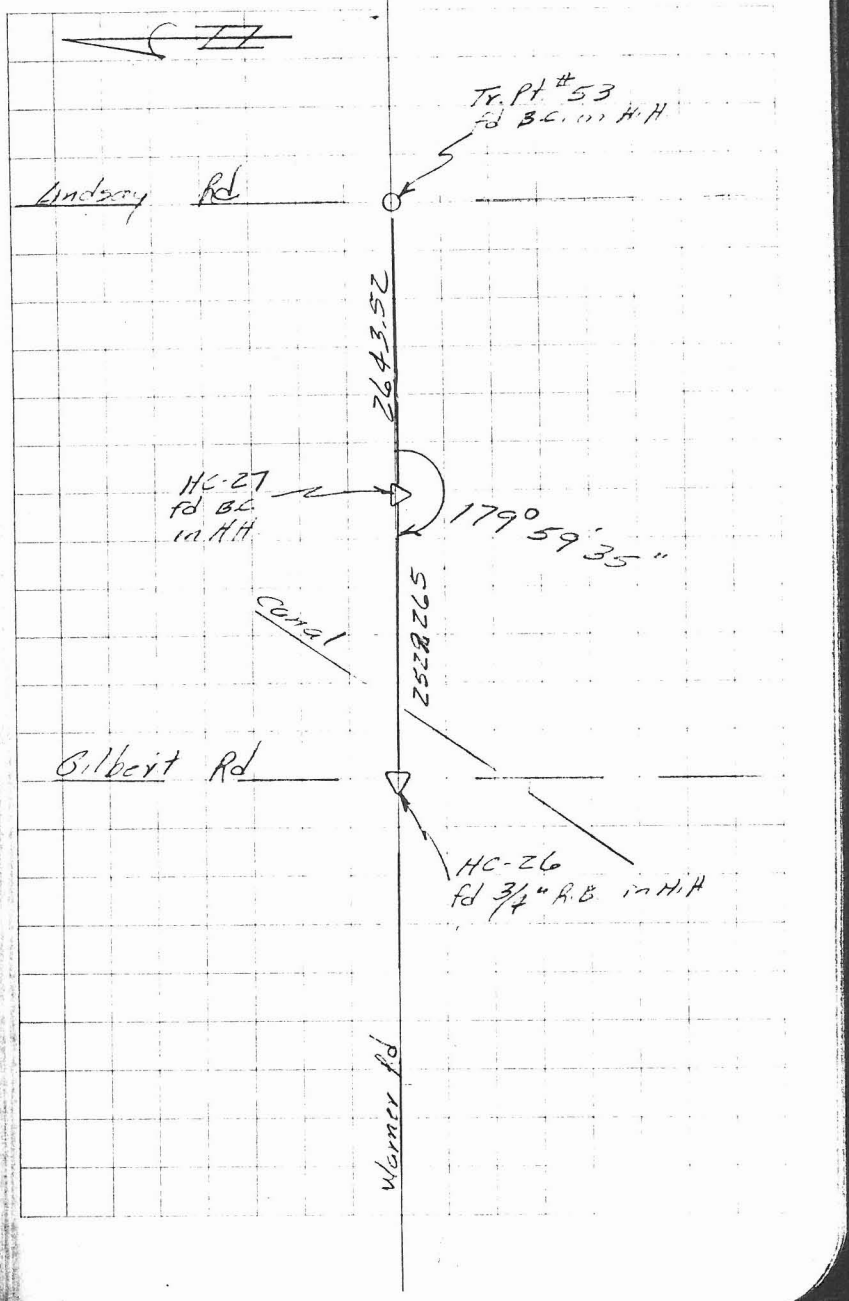
ΣX = 90°08'23"

S.D. = 2529.27

H.D. = 2529.27 ✓

9/14/87

806/32



MCFCD

Traverse — Block 3

(118) HC-27 → (119) HC-26 → (120) TP #54

$\measuredangle$ #1 = 340°12'29"

$\measuredangle$ #2 = 241°15'28"

MN $\measuredangle$ = 340°12'35" ✓

HD to TP #54

Z $\measuredangle$ = 89°46'03"

S.D. = 302.40

H.D. = 302.40 ✓

(118) HC-27 → (119) HC-26 → (121) TP 55

$\measuredangle$ #1 = 203°24'53"

$\measuredangle$ #2 = 140°29'24"

MN $\measuredangle$ = 203°24'54" ✓

HD to HC-27

Z $\measuredangle$ = 89°55'42"

S.D. = 2529.26

H.D. = 2529.26 ✓

HD to TP #55

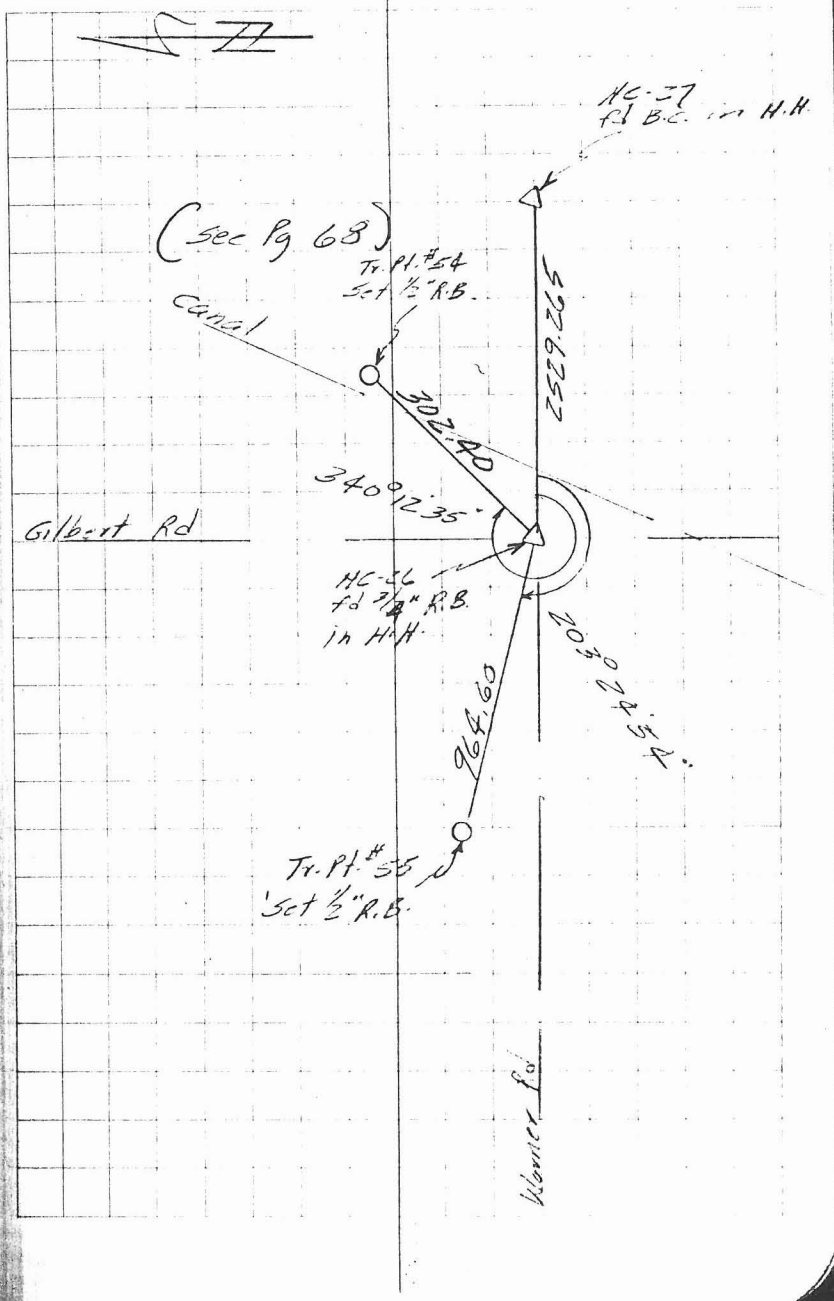
Z $\measuredangle$ = 90°13'06"

S.D = 964.81

H.D = 964.805 ✓

9/12/37

806/34



MCFCD Traverse - Block 3

9/14/37

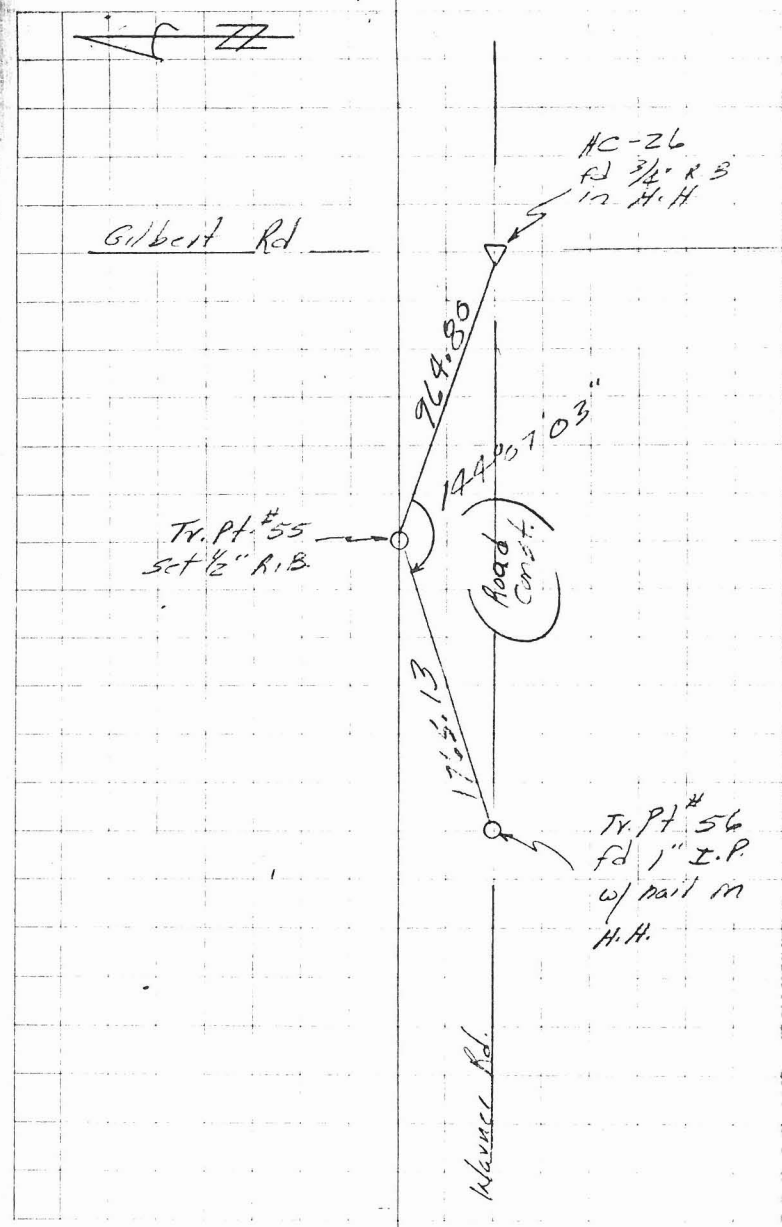
806/36

(119) HC-26 → (121) TP# 55 → (122) TP# 56

∠#1 = 215°53'03"
∠#6 = 215°17'44"
MN∠ = 215°52'57"
-359°59'60"
144°07'03" ✓

HD to HC-26
Z∠ = 89°54'24"
S.D. = 964.80
H.D. = 964.80 ✓

HD to TP# 56
Z∠ = 90°05'32"
S.D. = 1765.14
H.D. = 1765.14 ✓



MCFCD Traverse — Block 3

(123) TP #57 → (122) TP #56 → (121) TP #55

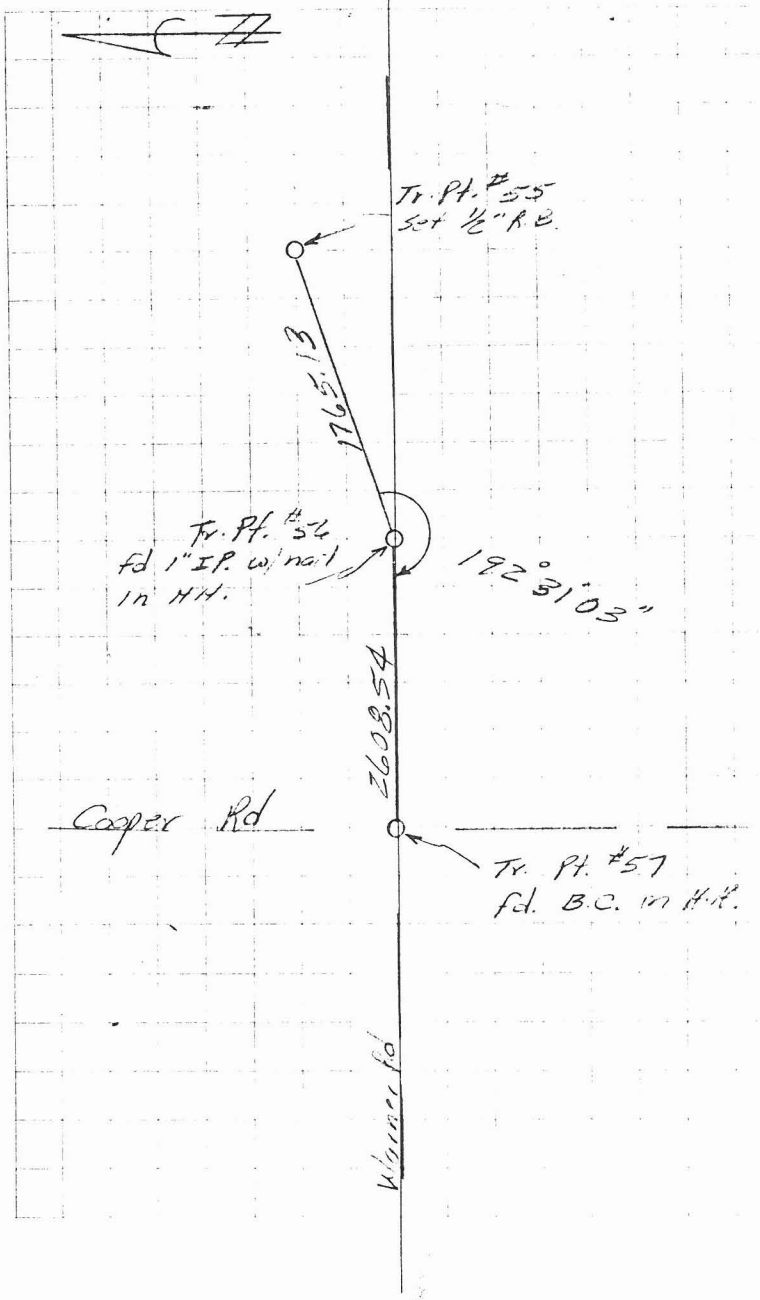
∠#1 = 167°29'04"
∠#6 = 284°53'42"
MN ∠ = 167°28'57"
359°59'60"
192°31'03" ✓

HD to TP #55
Σ ∠ = 89°59'06"
S.D. = 1765.12
H.D. = 1765.12 ✓

HD to TP #57
Σ ∠ = 90°08'54"
S.D. = 2608.54
H.D. = 2608.53 ✓

7/4/37

806/38



MCFCD Traverse Block 3

9/14/87

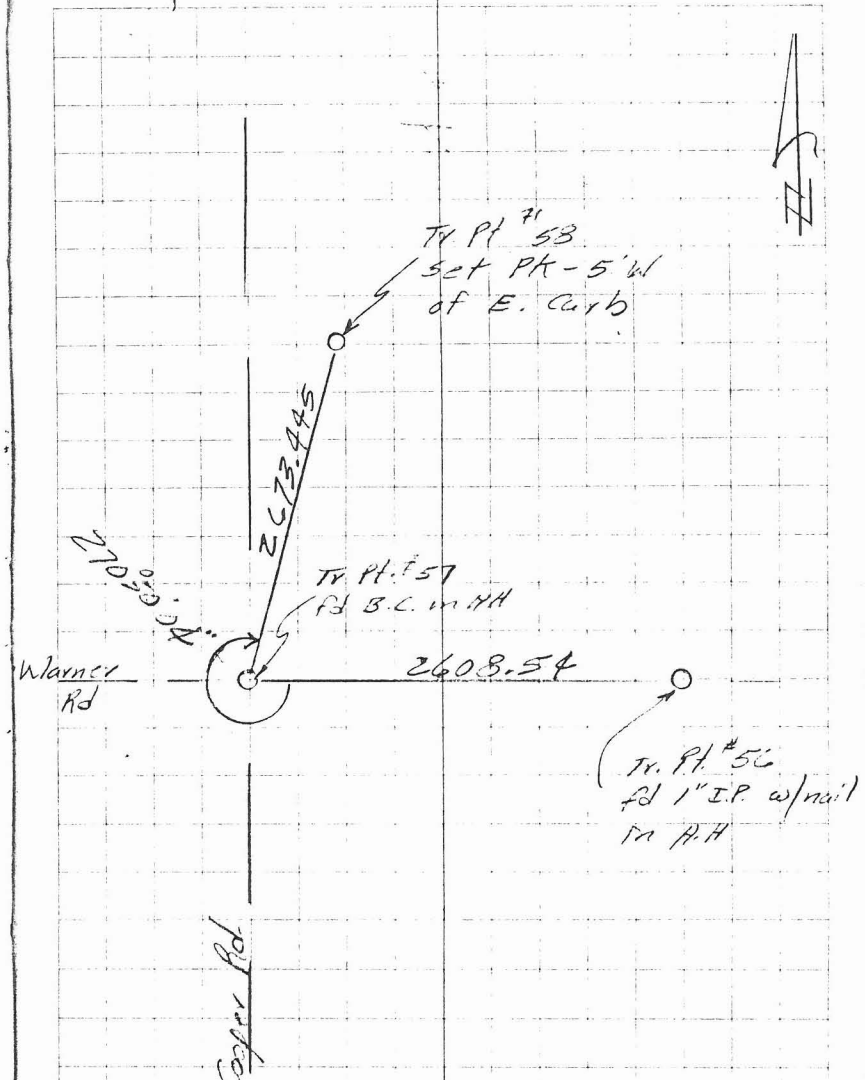
806/40

(122) TP #56 → (123) TP #57 → (124) TP #58

∠#1 = 270°49'58"
∠#6 = 185°00'24"
INT = 270°50'04" ✓

HD to TP #56
Z∠ = 89°55'35"
S.D. = 2608.55
H.D. = 2608.55 ✓

HD to TP #58
Z∠ = 90°08'33
S.D. = 2673.45
H.D. = 2673.44 ✓



MCFCD — Traverse — Block 3

123 — 124 — 125

TP #57 → TP #58 → ¼ Cor

$\measuredangle$ #1 = 36°41'12"

$\measuredangle$ #2 = 73°22'32"

MN $\measuredangle$ = 36°41'16" ✓

HD to ¼ Cor = 46.19 (chained)

126 — 124 — 123

HC 20/21 → TP #58 → TP #57

$\measuredangle$ #1 = 181°11'44"

$\measuredangle$ #2 = 7°10'47"

MN $\measuredangle$ = 181°11'48"

−360° = 178°48'12" ✓

HD to TP #57

$\Sigma\measuredangle$ = 89°55'51"

S.D. = 2673.45

H.D. = 2673.45 ✓

HD to HC-21

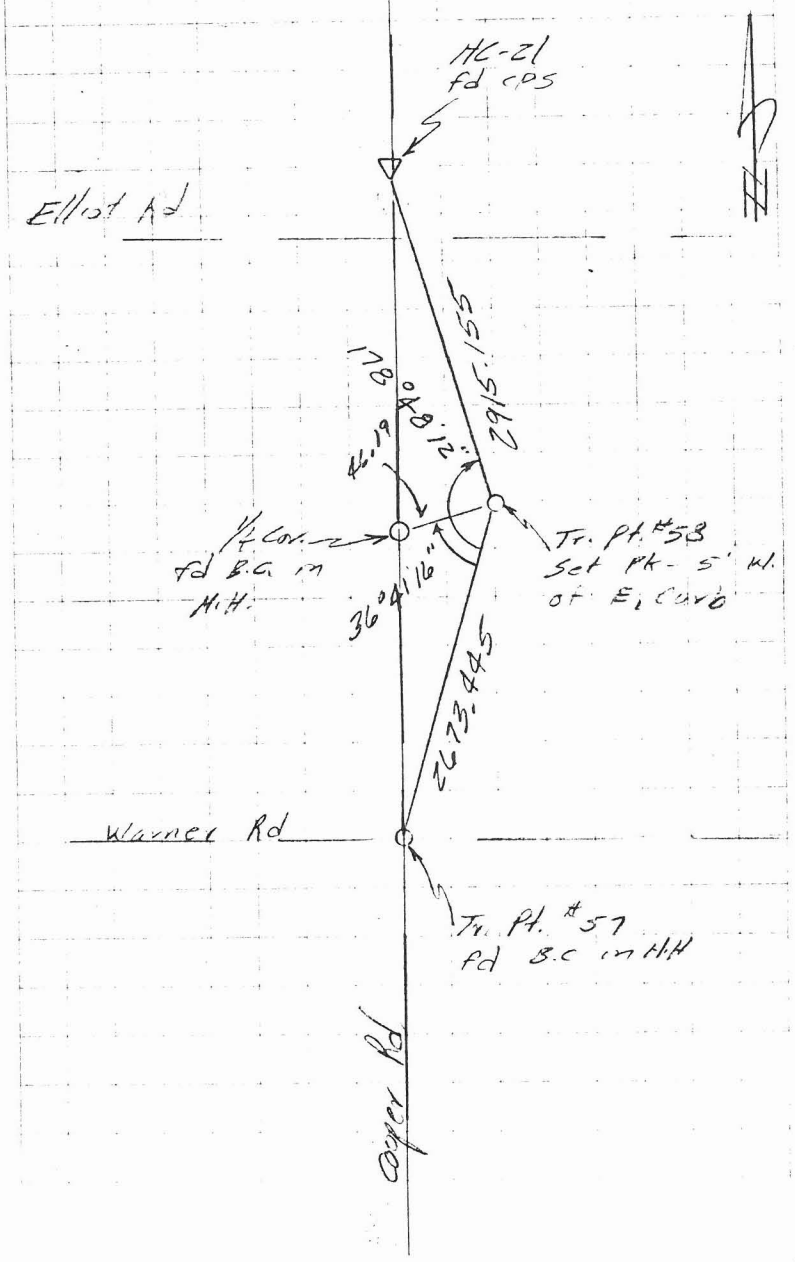
$\Sigma\measuredangle$ = 90°03'00"

S.D. = 2915.16

H.D. = 2915.16 ✓

9/4-187

806/42



MCFCD — Traverse — Block 3

TP #58 → HC-21 → Sec Cor.

∠#1 =

∠#2 =

MNA = ____

HD to Sec Cor. = ____

Buried

(124) TP #58 → (126) HC-21 → (127) RO-18

∠#1 = 180° 28' 29"

∠#2 = 00° 00' 54"

MNA = 180° 28' 29" ✓

HD to TP #58

ΣA = 90° 01' 32"

S.D. = 2915.15

H.D. = 2915.15 ✓

9/4/37

806/44

RO-18 fd B.C.

Canal

180° 28' 29"

HC-21 fd CPS

Elliot Rd

2915.155

Ty. Pt. #58 Set PK - 5' W. of E. Curb

Scottsdale Rd

L. Van Dyke
R. McMurray
T. Crosby

9/15/37

806/46

Traverse – Block 3

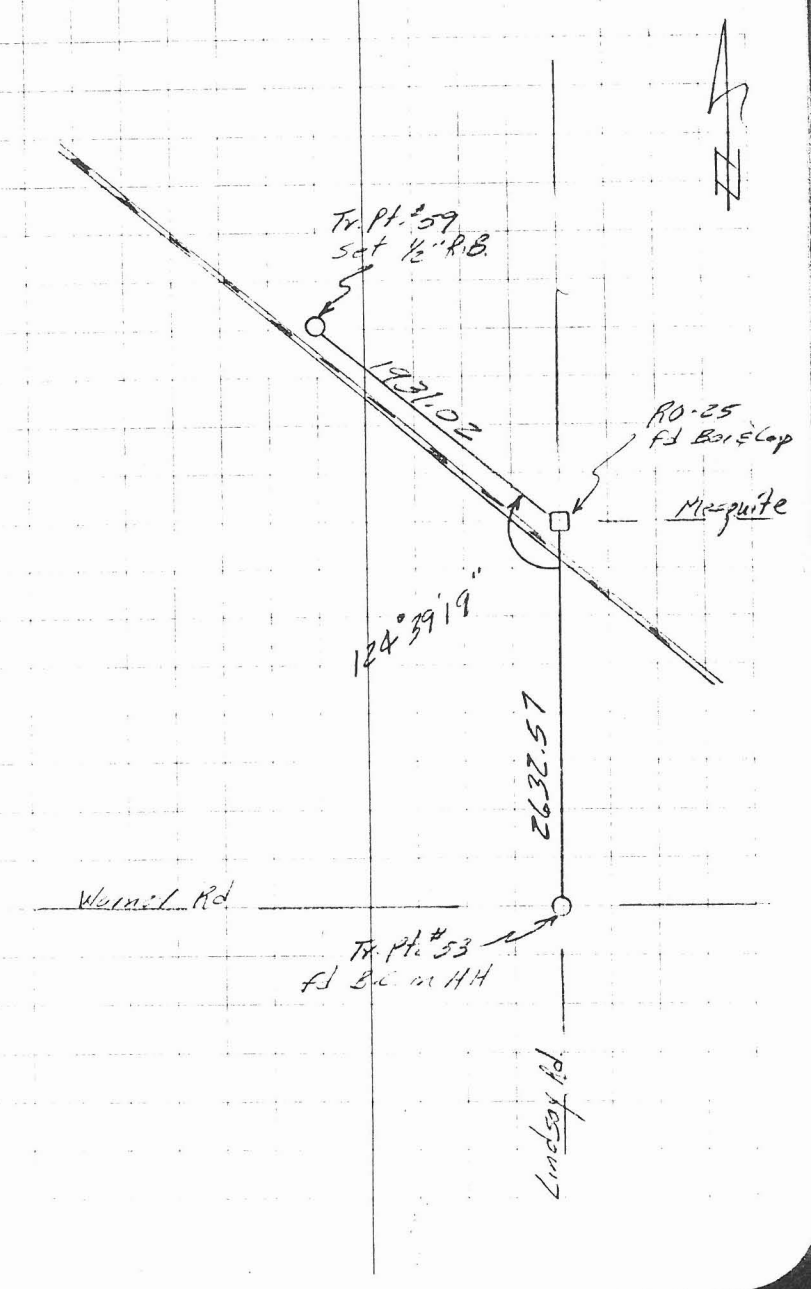
(see Pg. 30)

116 — TP #53 → 117 — RO·25 → 118 — TP #59

∠#1 = 124°39'28"
∠#6 = 27°55'55"
HD ∠ = 124°39'19" ✓

HD to TP #53
ZX = 89°58'42"
SD = 2632.57
HD = 2632.57
(checked Distance = 2632.57) ✓

HP to TP #59
ZX = 90°11'22"
SD = 1931.03
HP = 1931.02 ✓



MCFCD — Traverse — Block 3

9/15/37

806/43

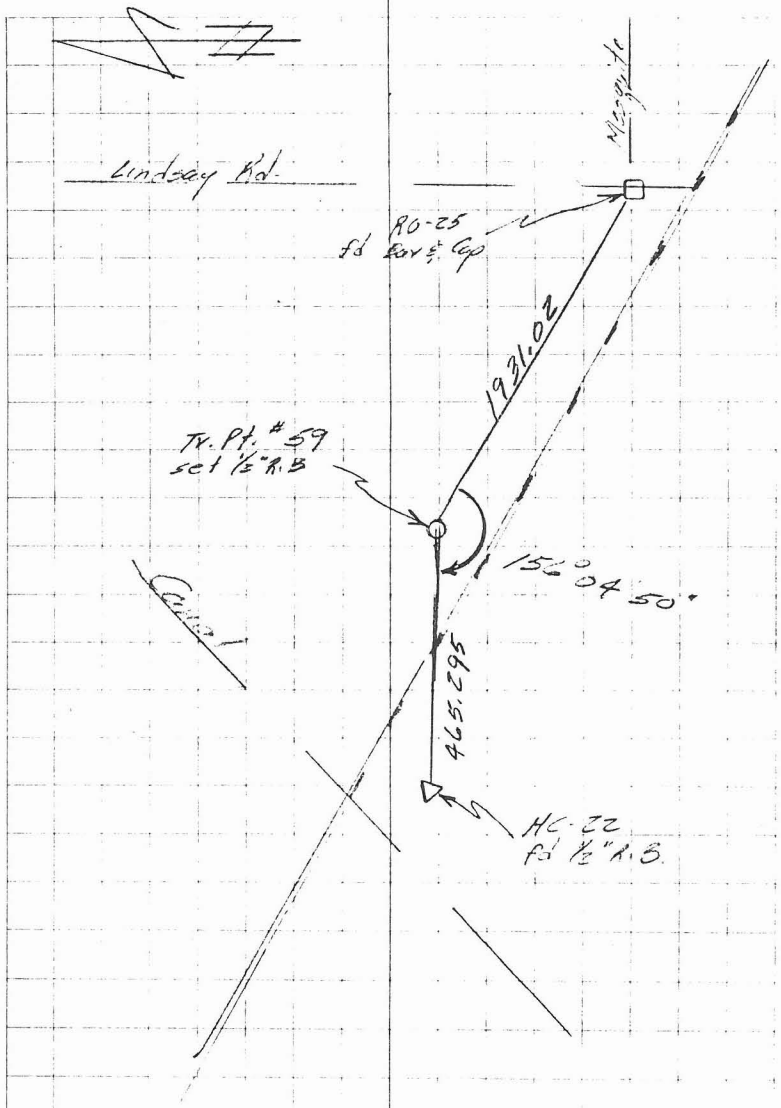
(126) RO-25 → (127) TP #59 → (128) HC-22

∠#1 = 156°04'40"
∠#6 = 216°28'59"
MI∠ = 156°04'50" ✓

HD to RO-25
E∠ = 89°52'45"
S.D. = 1931.03
H.D. = 1931.025 ✓

HD to HC-22
E∠ = 90°08'09"
S.D. = 465.29
H.D. = 465.29 ✓

(See Pg 52)



MCFCD — Traverse — Block 5

9/15/37

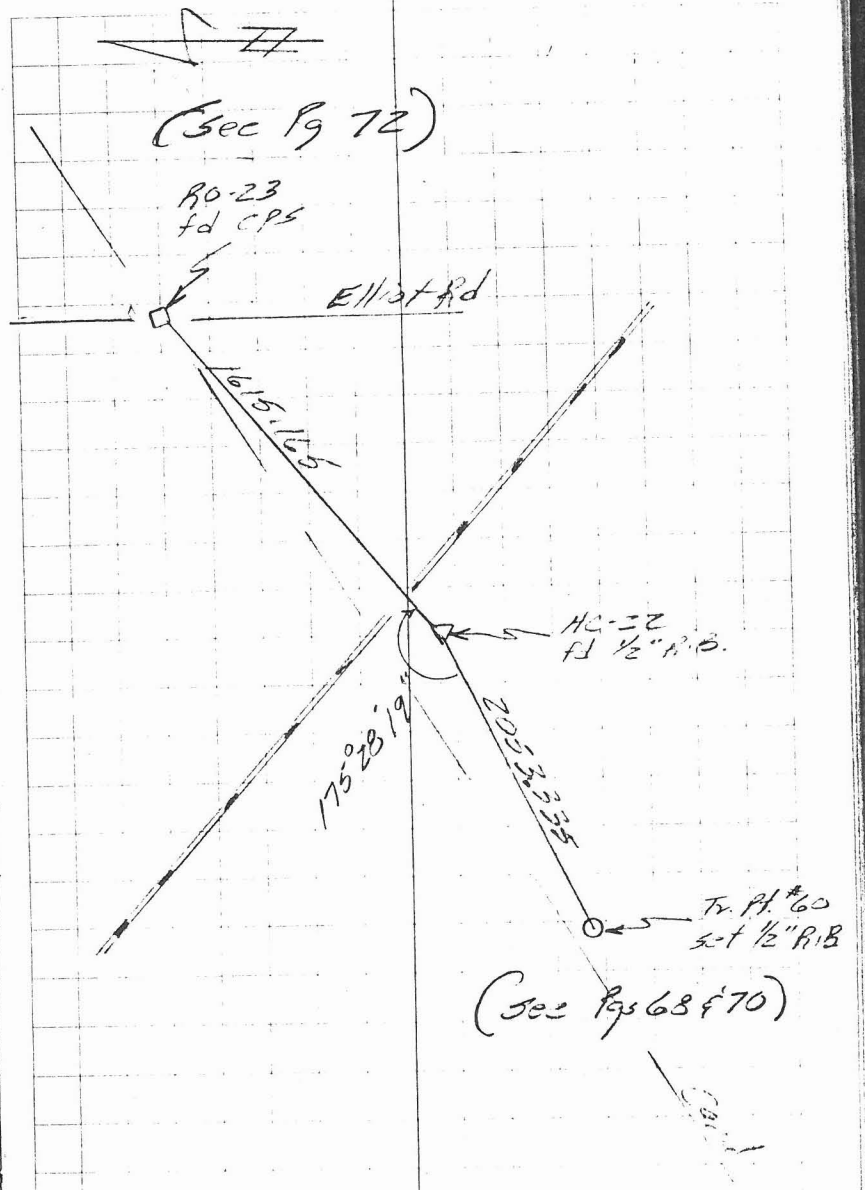
806/50

(141) TP #60 → (142) ~~128~~ HC-22 → (143) RO-23

$\angle$ #1 = 175°28'14"
$\angle$ #6 = 332°49'55"
MN $\angle$ = 175°28'19" ✓

HD to TP #60
ZA = 90°02'51"
S.D. = 2053.34
H.D. = 2053.34 ✓

HD to RO-23
ZA = 89°58'01"
S.D. = 1615.17
H.D. = 1615.17 ✓



MCFCD Traverse – Block 3

9/15/37

806/52

(See Pg 48)

(129) TP #61 → (128) HC-22 → (127) TP #59

↑

∠#1 = 144° 35' 12" (144° 35' 30")

∠#6 = 147° 32' 42" (147 33' 36")

∧MX = 144° 35' 27" (144° 35' ?")

Use → 144° 35' 36"

— 359° 59' 60"

215° 24' 24" ✓

HD to TP #59

∠ = 90° 05' 15"

SD = 465.30

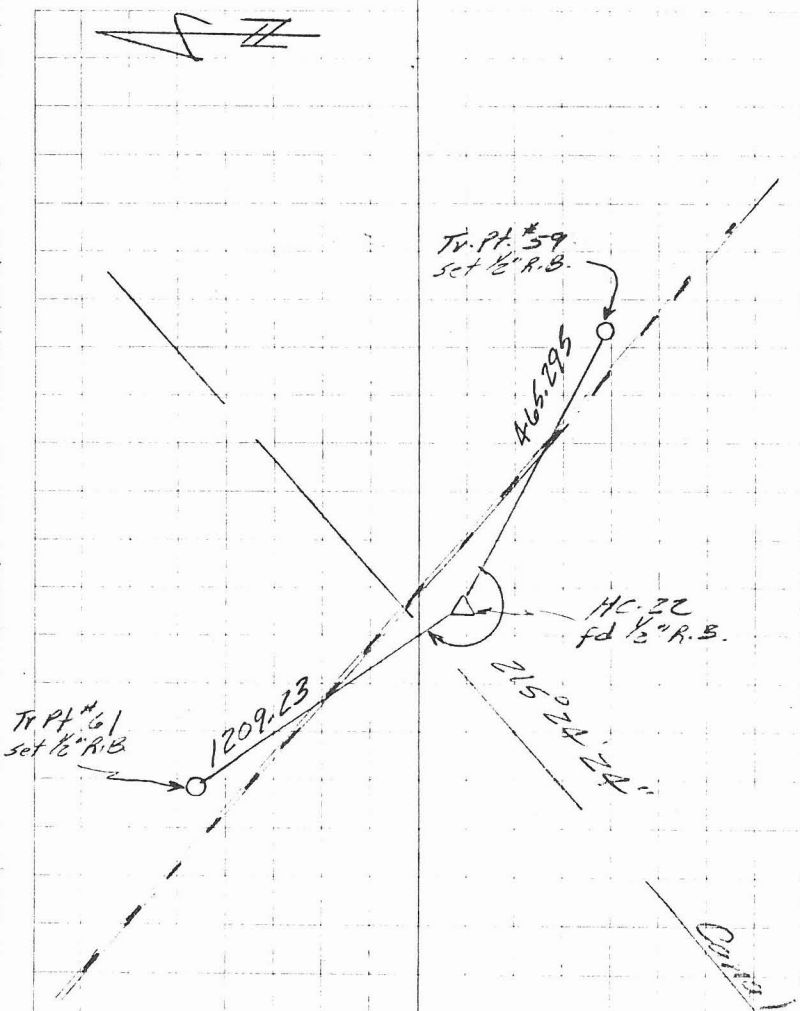
HD = 465.30 ✓

HD to TP #61

∠ = 90° 06' 33"

SD = 1209.24

HD = 1209.24 ✓



MCFCD Traverse - Block 3

(130) TP #62 → (129) TP #61 → (128) HC-22

$\angle$ #1 = 191°16'02"

$\angle$ #62 = 67°36'03"

MNA = 191°16'01"

− 359°59'60"

168°43'59" ✓

HD to HC-22

EA = 89°57'00"

S.D. = 1209.22

H.D. = 1209.22 ✓

HD to TP #62

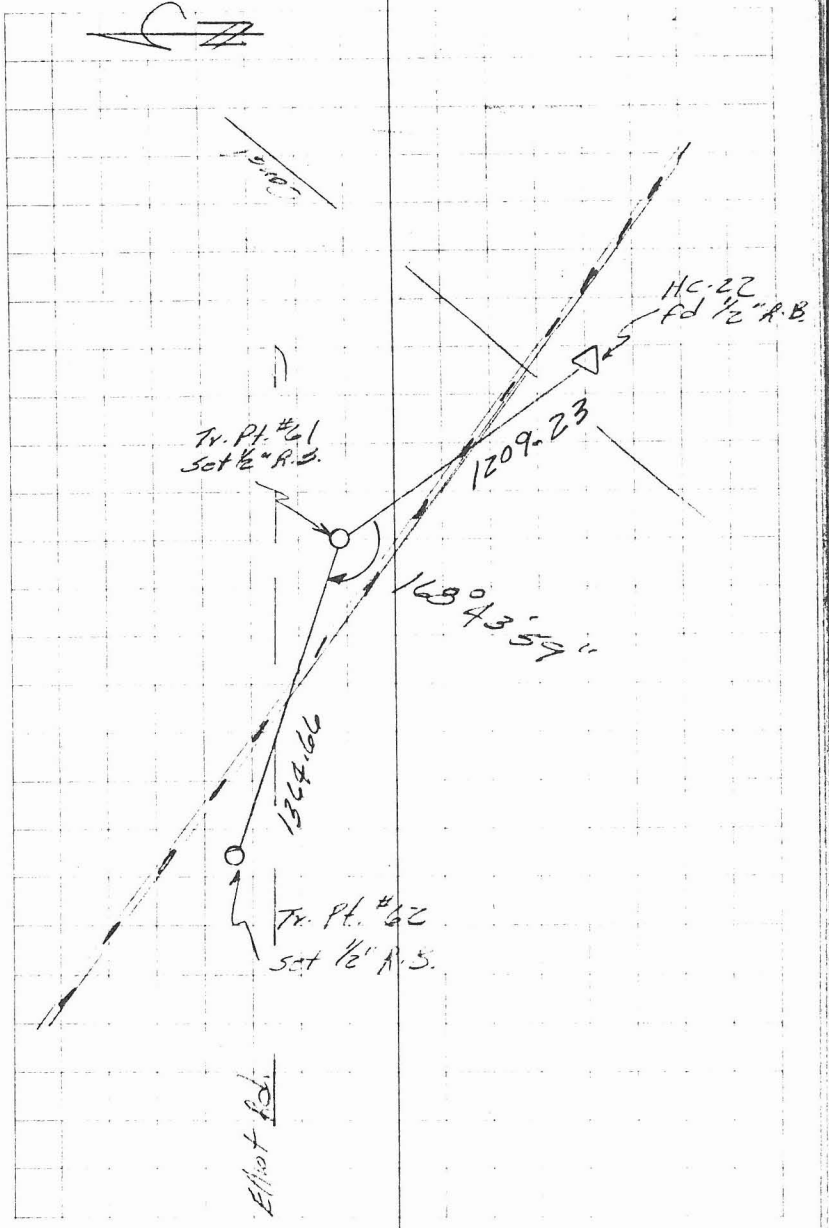
EA = 90°07'45"

S.D. = 1364.66

H.D. = 1364.655 ✓

9/15/87

806/54



MCFCD Traverse Block 3

(129) TP #61 → (130) TP #62 → (131) RO-22

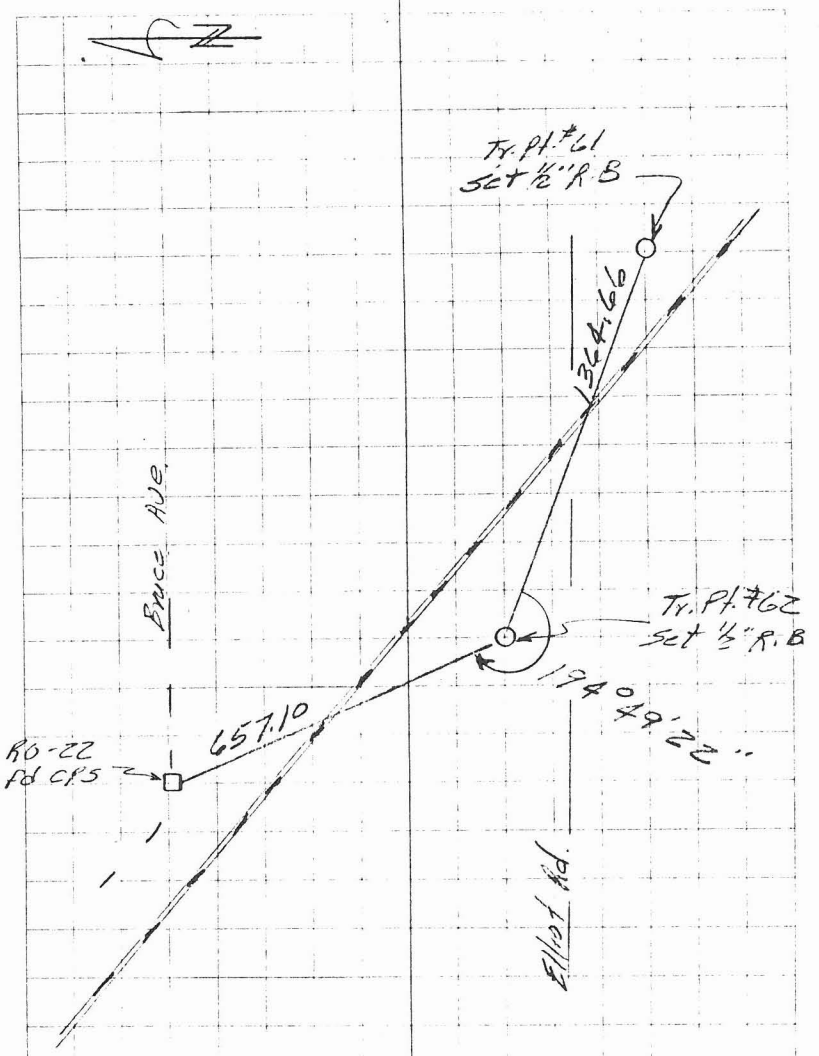
∠ #1 = 194°49'27"
∠ #6 = 88°56'12"
MN ∠ = 194°49'22" ✓

HD to TP #61
Z ∠ = 89°57'58"
S.D. = 1364.66
H.D. = 1364.66 ✓

HD to RO-22
Z ∠ = 90°16'04"
S.D. = 657.10
H.D. = 657.095 ✓

9/15/37

806/56



MCFCD Traverse - Block 3

132 — 131 — 130

TP #63 → RO-22 → TP #62

∠#1 = 202°20'07" (202°20'13")

∠#6 = 134°02'18" (134°01'45")

MN ∠ = 202°20'23" (202°20'13")

use → 202°20'20"

− 359°59'60"

157°39'40" ✓

HD to TP #62

∠ = 89°53'30"

S.D. = 657.10

H.D. = 657.10 ✓

HD to TP #63

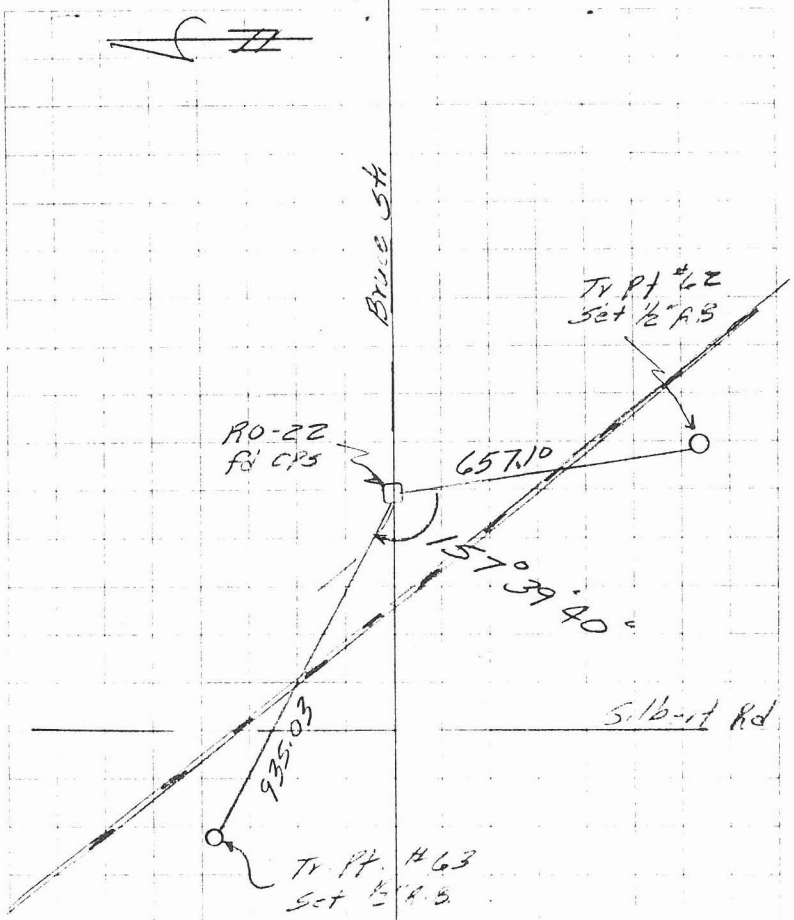
∠ = 90°07'10"

S.D. = 935.03

H.D. = 935.03 ✓

9/15/87

8.06
53



MCFCD Traverse – Block 3

133 → TP# 64 → 132 → TP# 63 → 131 RO-22

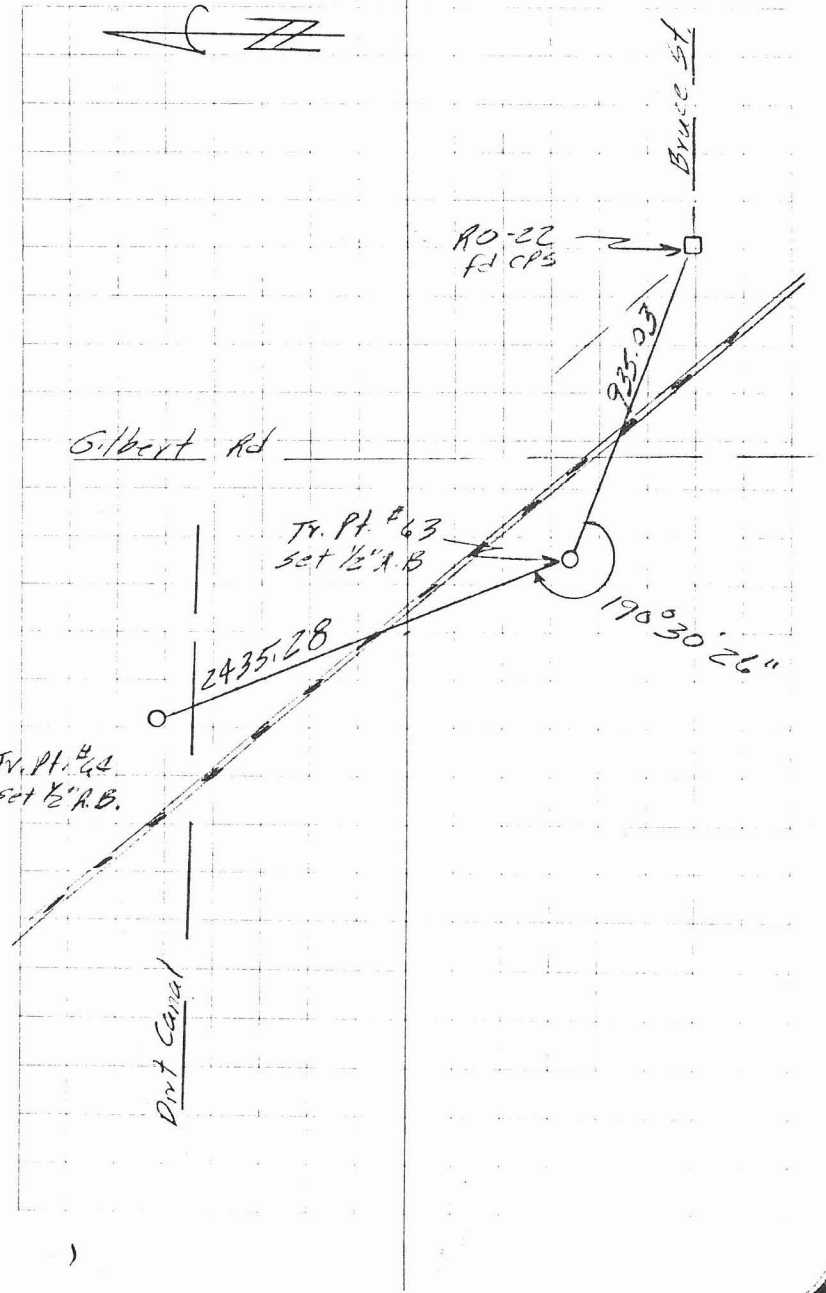
∠#1 = 169°29'27"
∠#2 = 296°51'25"
M/A = 169°29'34"
− 359°59'60"
190°30'26" ✓

HD to RO-22
ZA = 90°00'20"
S.D. = 935.03
H.D. = 935.03 ✓

HD to TP# 64
ZA = 90°06'04"
S.D. = 2435.28
H.D. = 2435.275 ✓

9/15/87

80
10



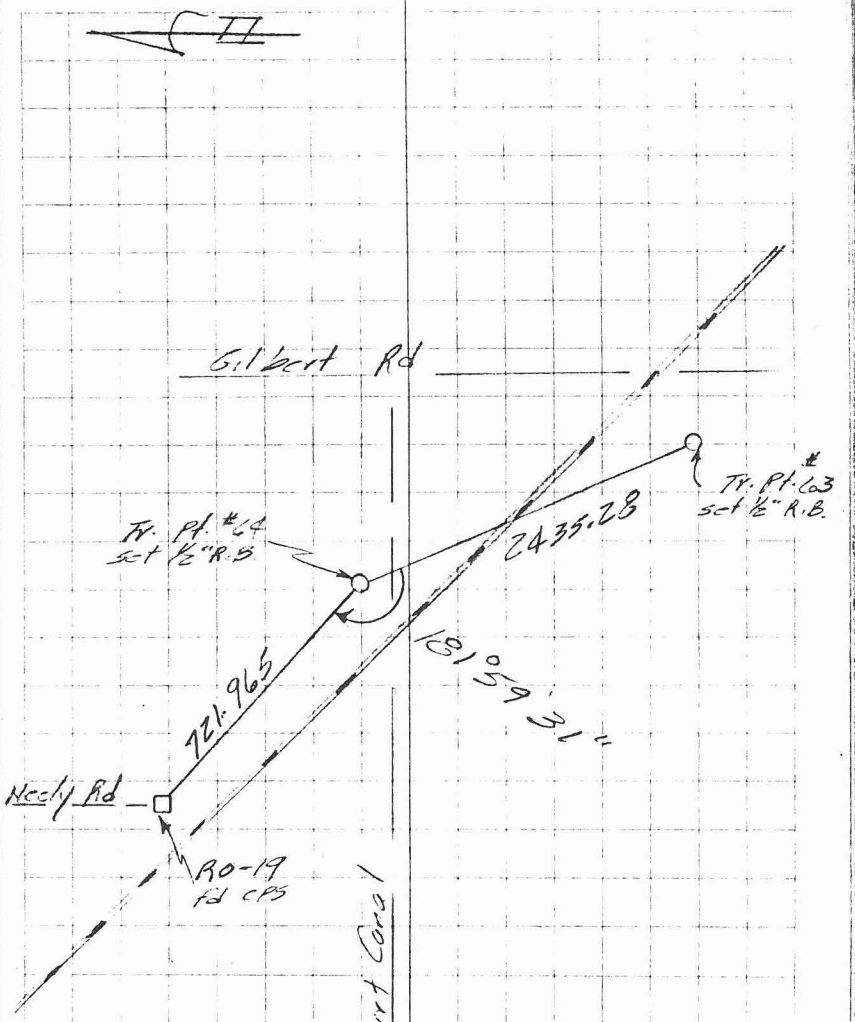
1 MCFCD | Traverse – Block 3 | 9/5/87 | 606/62

(132) TP #63 → (133) TP #64 → (134) RO-19

$\measuredangle$ #1 = 181°59'30"
$\measuredangle$ #6 = 11°57'04"
INT = 181°59'31" ✓

HD to TP #63
ΣX = 89°58'24"
S.D. = 2435.29
H.D. = 2435.29 ✓

HD to RO-19
ΣX = 90°20'31"
S.D. = 721.98
H.D. = 721.965 ✓



MCFCD Traverse – Block 3

(See Bk 803 Pg 96)

135 TP #33 → 134 RO-19 → 133 TP #64

↑

∠#1 = 130°09'20"

∠#6 = 60°51'00"

ΣN∠ = 130°09'30"

− 359°59'60"

229°50'30" ✓

HD to TP #64

Z∠ = 89 47 51"

S.D. = 721.97

H.D. = 721.965 ✓

HD to TP #

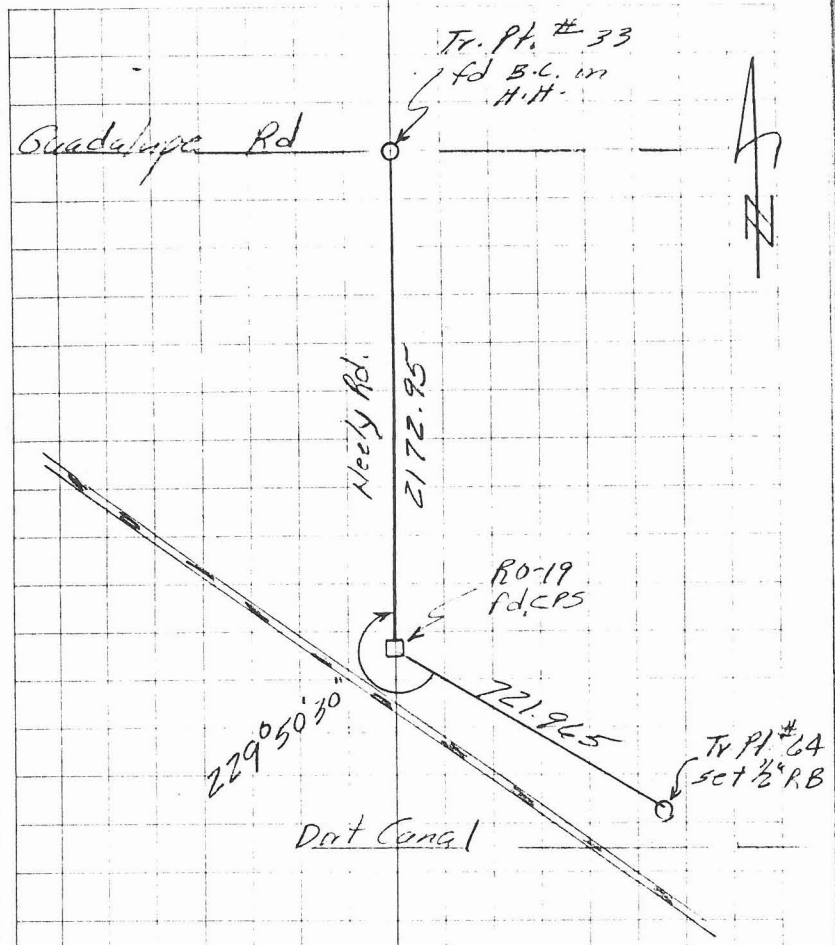
Z∠ = 90°04'03"

S.D. = 2172.95

H.D. = 2172.95 ✓

9/15/87

806/64



MCFCD Traverse — Block 3

9/15/87

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(See Bk 803 Pg 98)

134 — RO-19 → 135 — TP #33 → 136 — TP #32

∠ #1 = 91°06'11"

∠ #6 = 186°36'38"

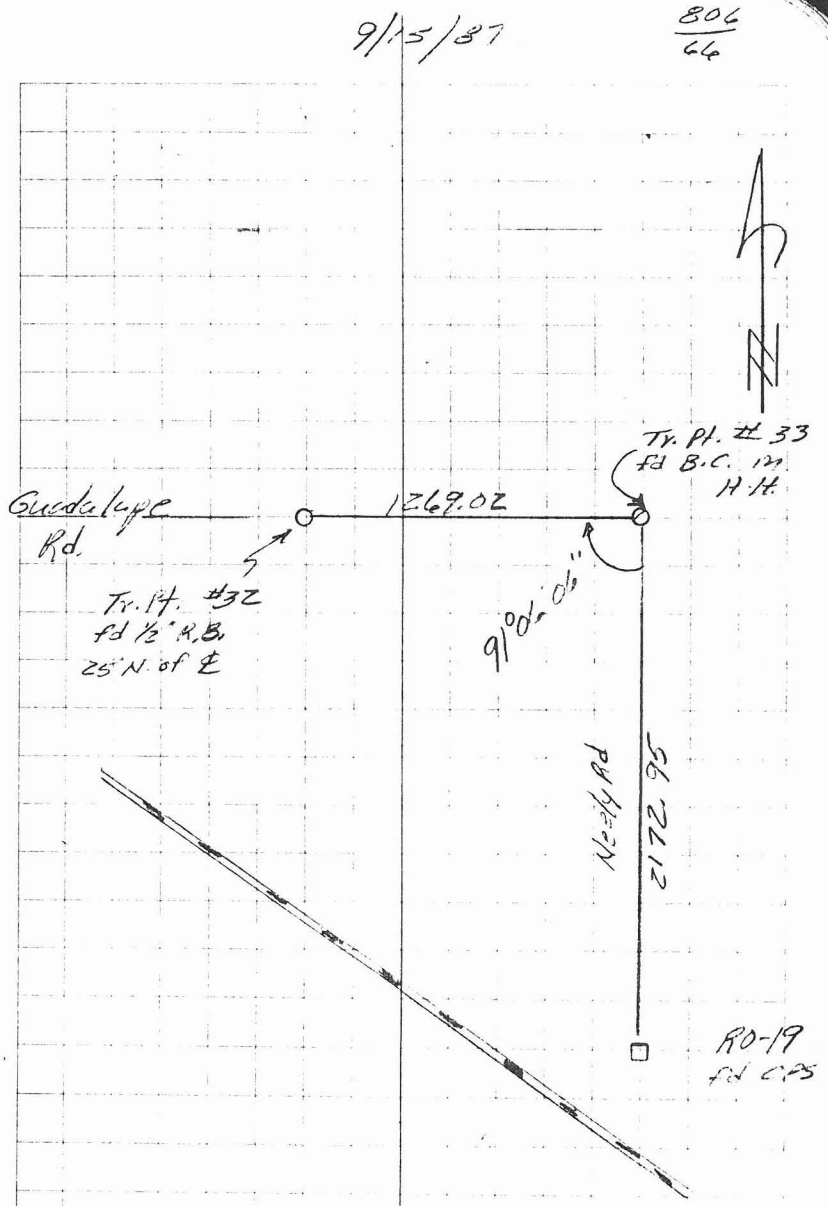
MN ∠ = 91°06'06" ✓

HD to RO-19

Z ∠ = 89°59'53"

S.D. = 2172.95

H.D. = 2172.95 ✓



MCFCD Traverse - Block 3

(see Pgs 34 & 50)

(141) TP #60 → (140) TP #54 → (313) HC-26

↑

$\measuredangle$ #1 = 208°14'12"

$\measuredangle$ #2 = 169°25'57"

N17 = 208°14'20"

− 359°59'60" ✓

151°45'40" ✓

HD to HC-26.

$\measuredangle$ = 90°34'46"

S.D. = 302.41

H.D. = 302.395 ✓

HD to TP #60

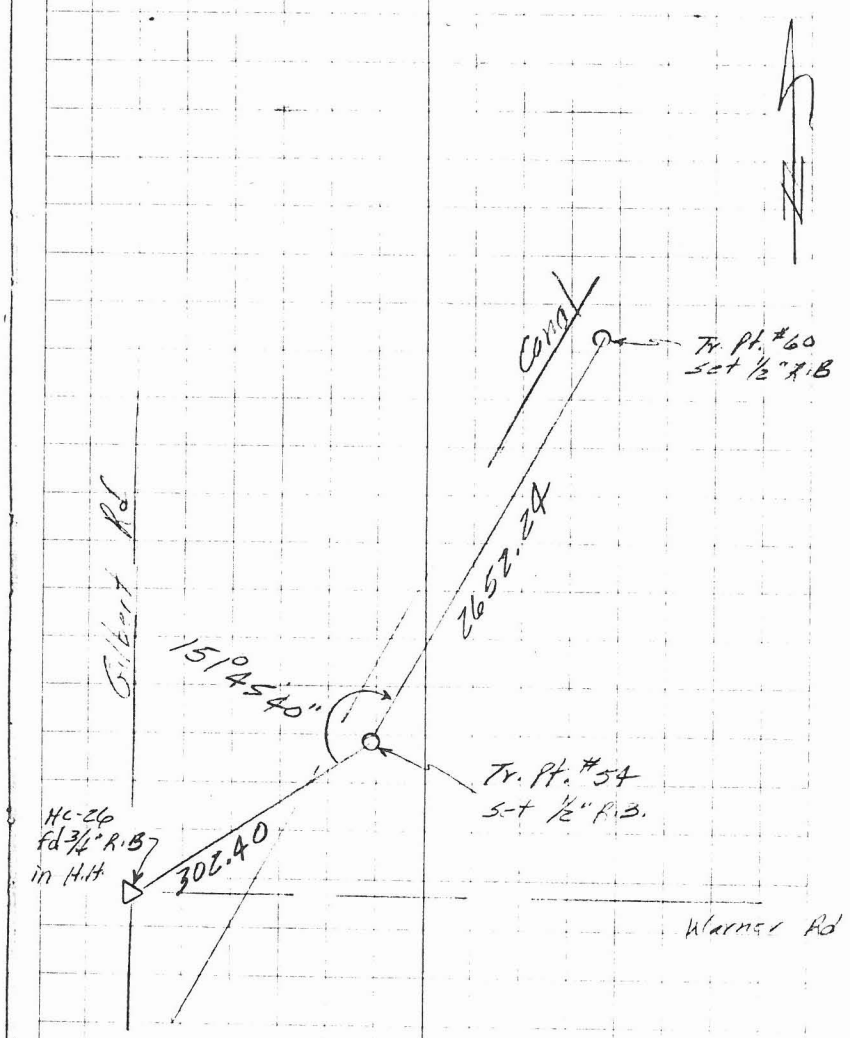
$\measuredangle$ = 90°01'54"

S.D. = 2652.25

H.D. = 2652.25 ✓

9/15/87

30/68



MCFCD — Traverse — Block 3

(See fg 50)

(140) TP #54 → (141) TP #60 → (142) HC-22

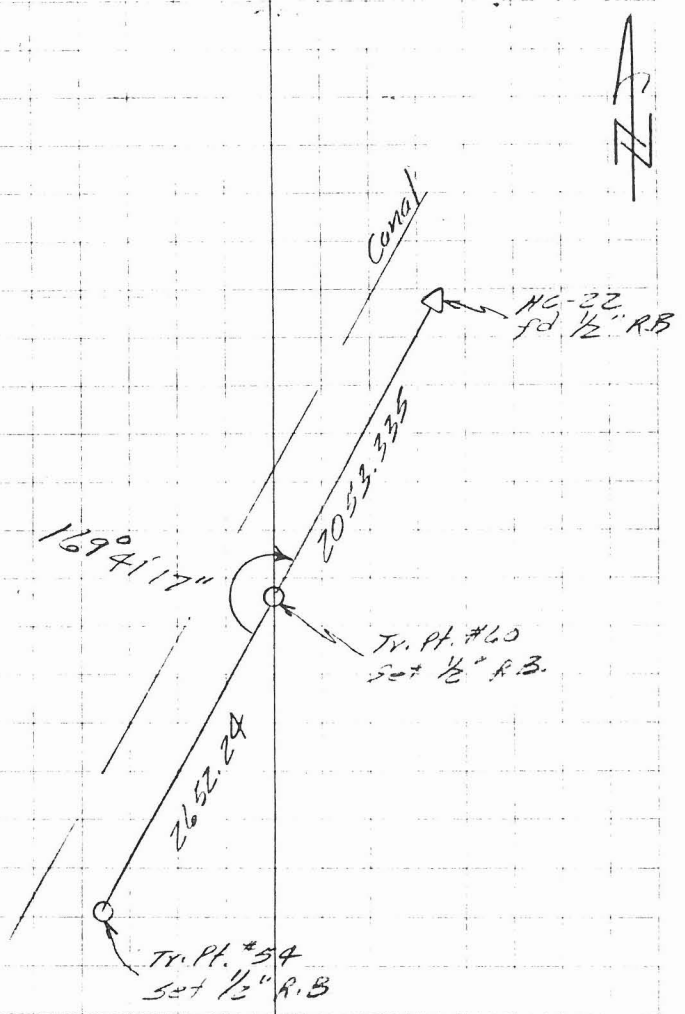
∠#1 = 169°41'09"
∠#C = 298°07'44"
MN∠ = 169°41'17" ✓

HD to TP #54
ΣA = 90°01'33"
SD = 2652.23 ✓
HD = 2652.23

HD to HC-22
ΣA = 90°01'18"
S.D. = 2053.33 ✓
H.D. = 2053.33

9/15/87

34/70



MCFCD Traverse — Block 3

(see pg 50)

142 → 143 → 144

HC-22 → RO-23 → TP # 65

$\measuredangle$ #1 = 242°15'53"

$\measuredangle$ #6 = 13°35'28" √

MN $\measuredangle$ = 242°15'55"

HD to HC-22

$\Sigma\measuredangle$ = 90°06'03"

S.D. = 1615.16 √

H.D. = 1615.16

HD to TP # 65

$\Sigma\measuredangle$ = 89°59'43"

S.D. = 1312.16 √

H.D. = 1312.16

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T. Crouch

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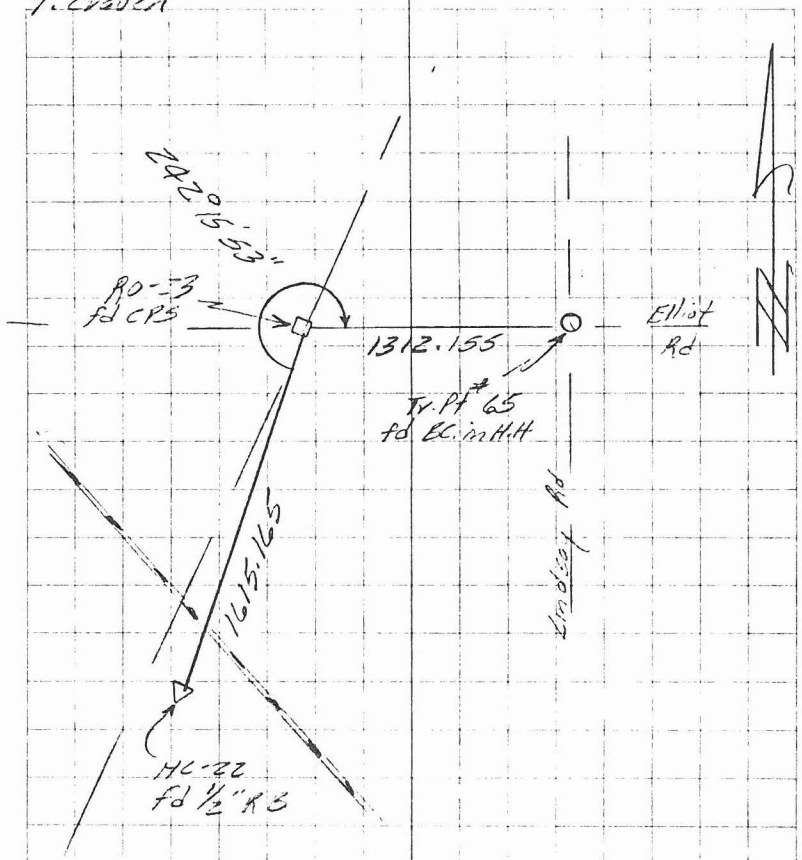

MCFCD Traverse - Block 3

9/16/87

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(143) → (144) → (145)

RO-23 → TP #65 → HC-23

∠#1 = 89°48'48"

∠#6 = 178°52'52"

MN = 89°48'49" ✓

HD to RO-23

ZA = 90°05'36"

S.D. = 1312.15

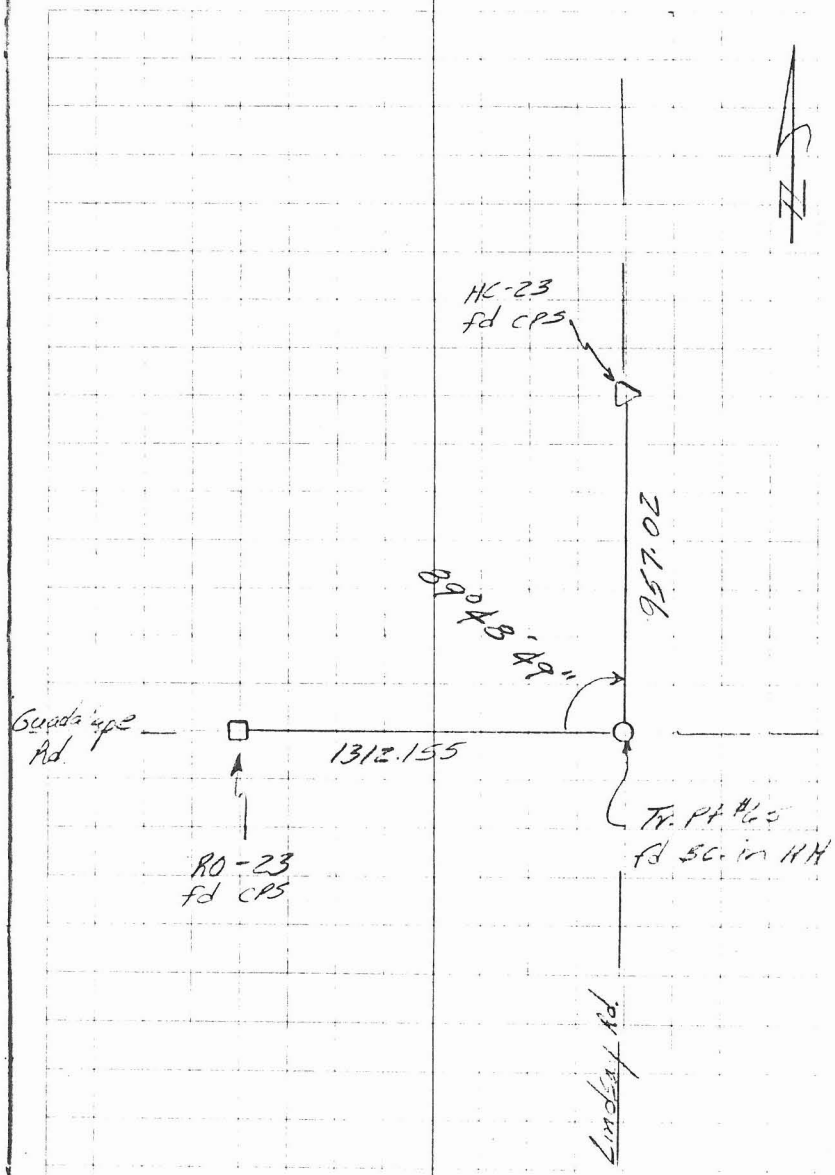
H.D. = 1312.15 ✓

HD to HC-23

ZA = 90°09'12"

S.D. = 957.03

H.D. = 957.025 ✓



MCFCD Traverse - Block 3

(146) TP #66 → (145) HC-23 → (144) TP #65

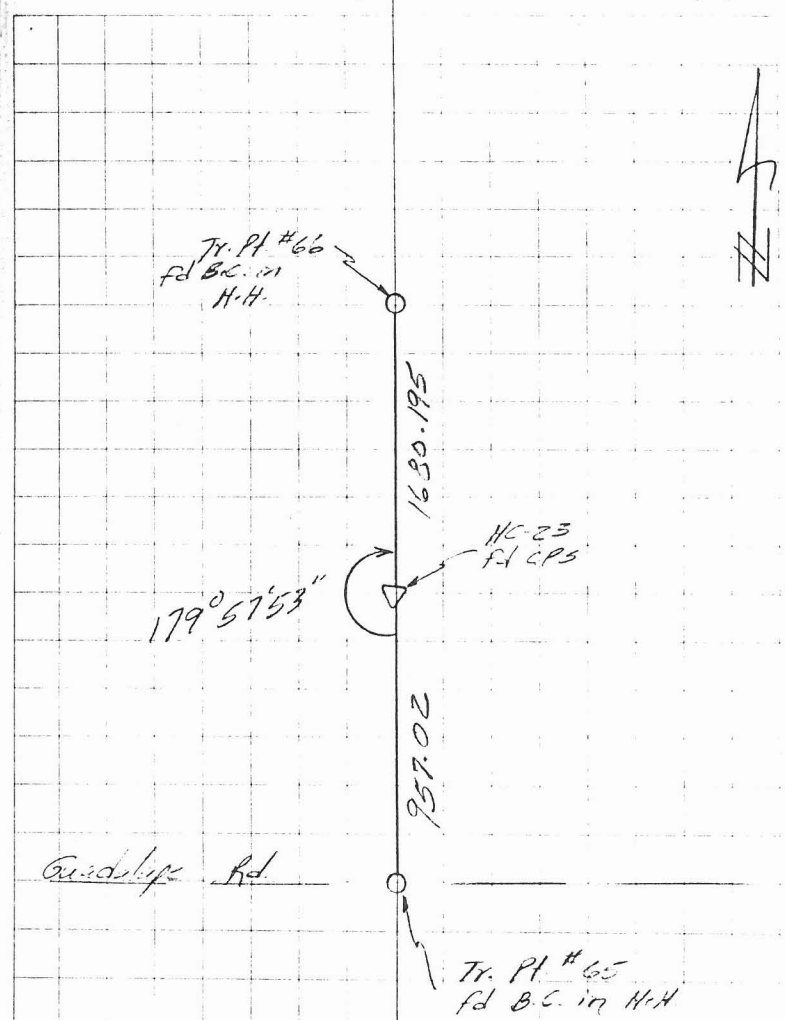
∠#1 = 180°02'09"
∠#6 = 00°12'43"
MM∠ 180°02'07"
− 359°59'60"
179°57'53" ✓

HD to TP #65
ΣA = 89°57'15"
S.D. = 957.02
H.D. = 957.02 ✓

HD to TP #66
ΣA = 90°00'17"
S.D. = 1680.19
H.D. = 1680.19 ✓

9/16/37

806/76



MCFCD

Traverse - Block 3

(See BK 803 - Pg 108)

145 — 146 — 147

HC-23 → TP #66 → HC-14

∠#1 = 180°52'42"

∠#6 = 5°16'00"

MNZ = 180°52'40" ✓

HD to HC-23

ZA = 98°04'21"

S.D. = 1680.28

H.D. = 1680.20 ✓

HD to HC-14

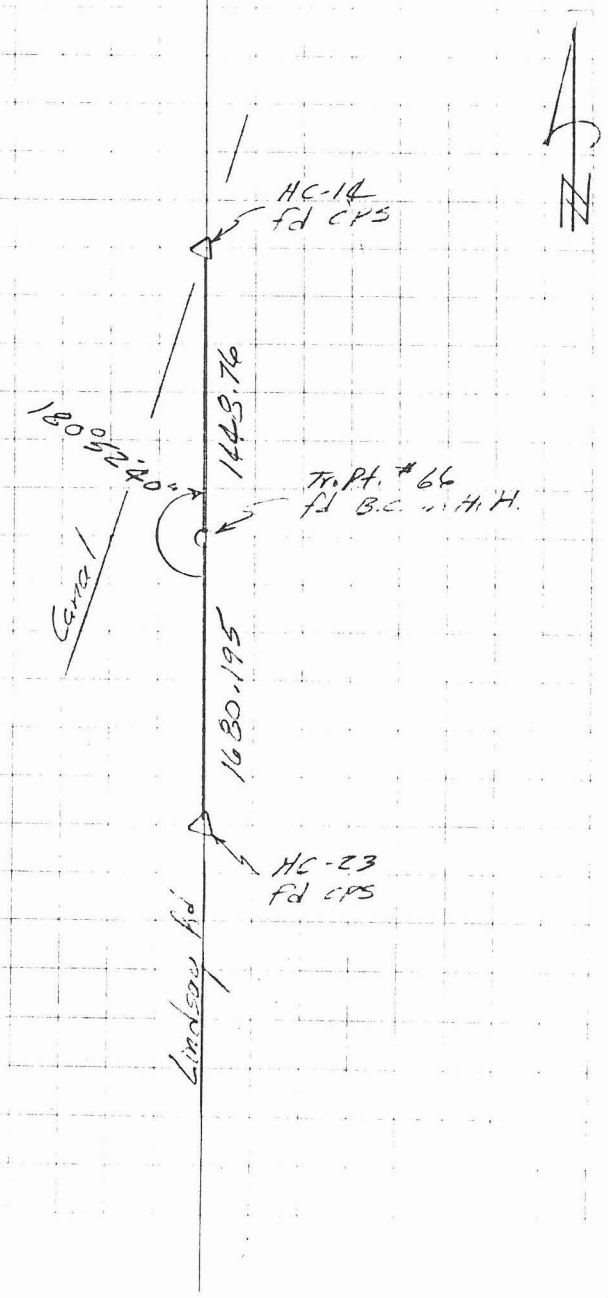
ZA = 89°53'27"

S.D. = 1448.77

H.D. = 1448.765 ✓

9/16/87

306
73



MCFCD

Traverse - Block 3

(See Bk 803 - Pg 103)

146 → 147 → 148

TP #66 → HC-14 → TP #37

∠#1 = 179°31'14"

∠#6 = 357°01'10"

∠1&4 = 179°31'12" ✓

HD to TP #66

ΣA = 90°11'26"

S.D. = 1448.71

H.D. = 1448.76 ✓

HD to TP #37

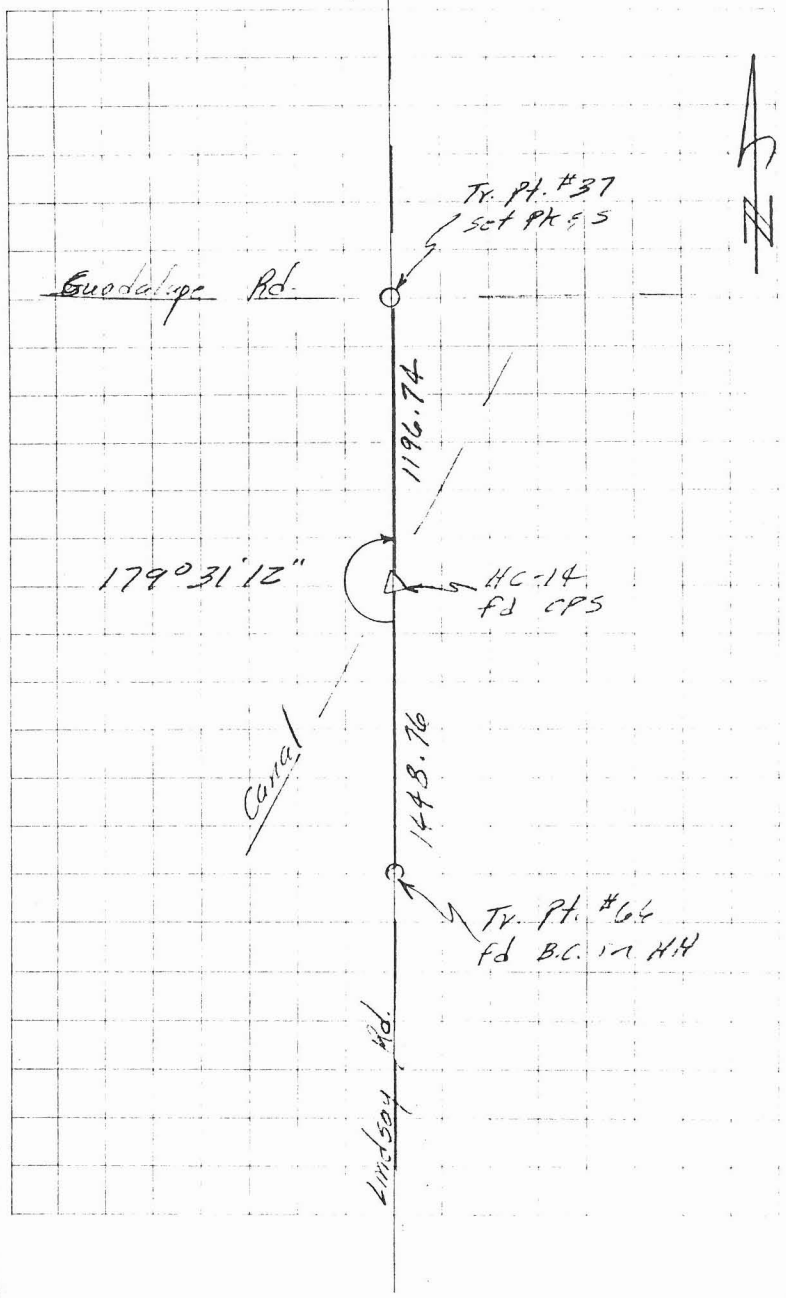
ΣA = 90°16'54"

S.D. = 1196.71

H.D. = 1196.755 ✓

9/14/87

806/80



MCFCD Traverse - Block 6

(See Pg 18)

245 246

VC-11 → HC-29 → TP #98

$\measuredangle$ #1 = 165°39'27"

$\measuredangle$ #2 = 273°57'14"

MN $\measuredangle$ = 165°39'32" ✓

HD to TP #98

$\measuredangle$ = 89°51'29"

SD = 2605.09

HD = 2605.08 ✓

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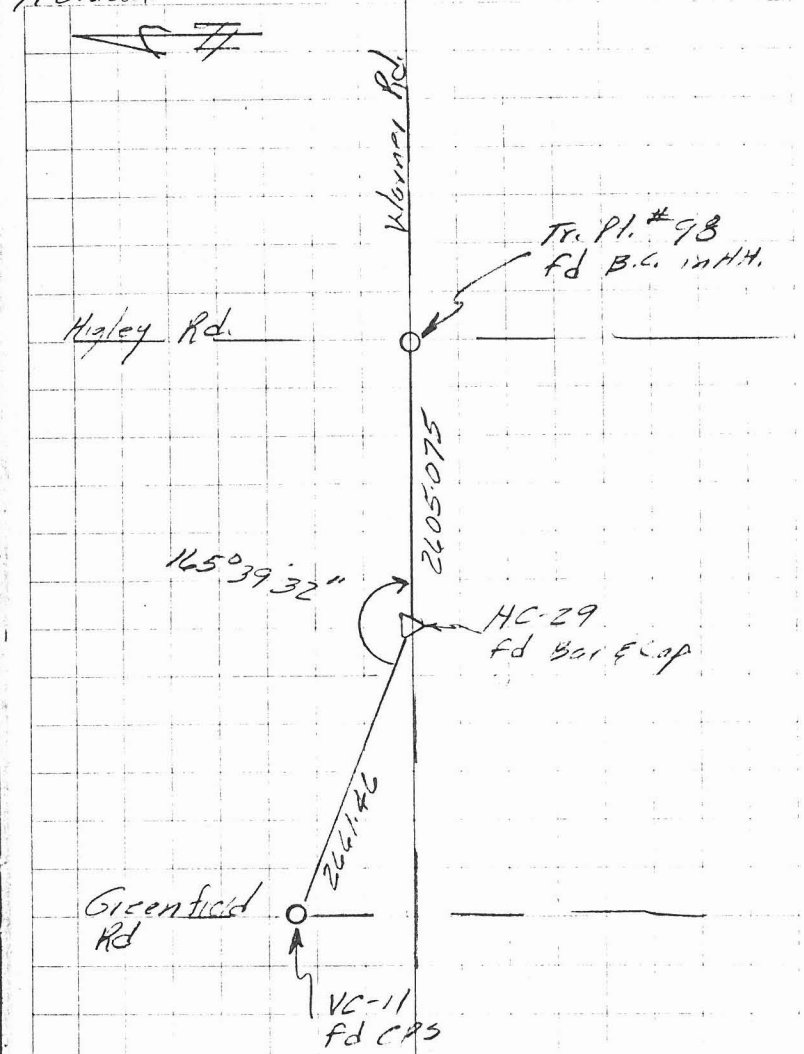
R McMurray
T. Craven

9/29/87

806
32



MCFCD — Traverse — Block 6

9/29/87

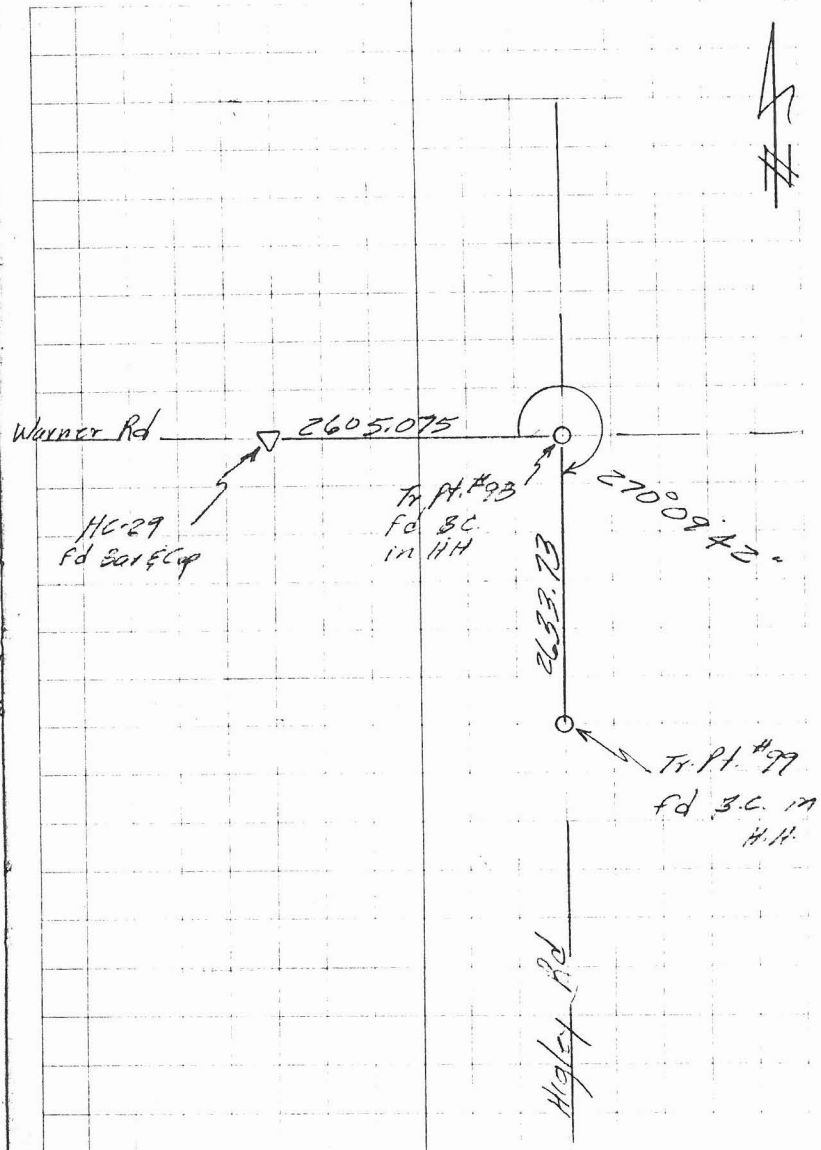
BOL 34

245	246	247
HC-29	→ TP #98	→ TP #99

∠#1 = 270°09'36"
∠#6 = 180°58'13"
MN∠ = 270°09'42" ✓

HD to HC-29
E∠ = 90°12'06"
SD = 2605.09
HD = 2605.075 ✓

HD to TP #99
E∠ = 89°58'42"
SD = 2633.73
HD = 2633.73 ✓



MCFCD Traverse - Block 6

246	247	248
TP #98	TP #99	HC-34

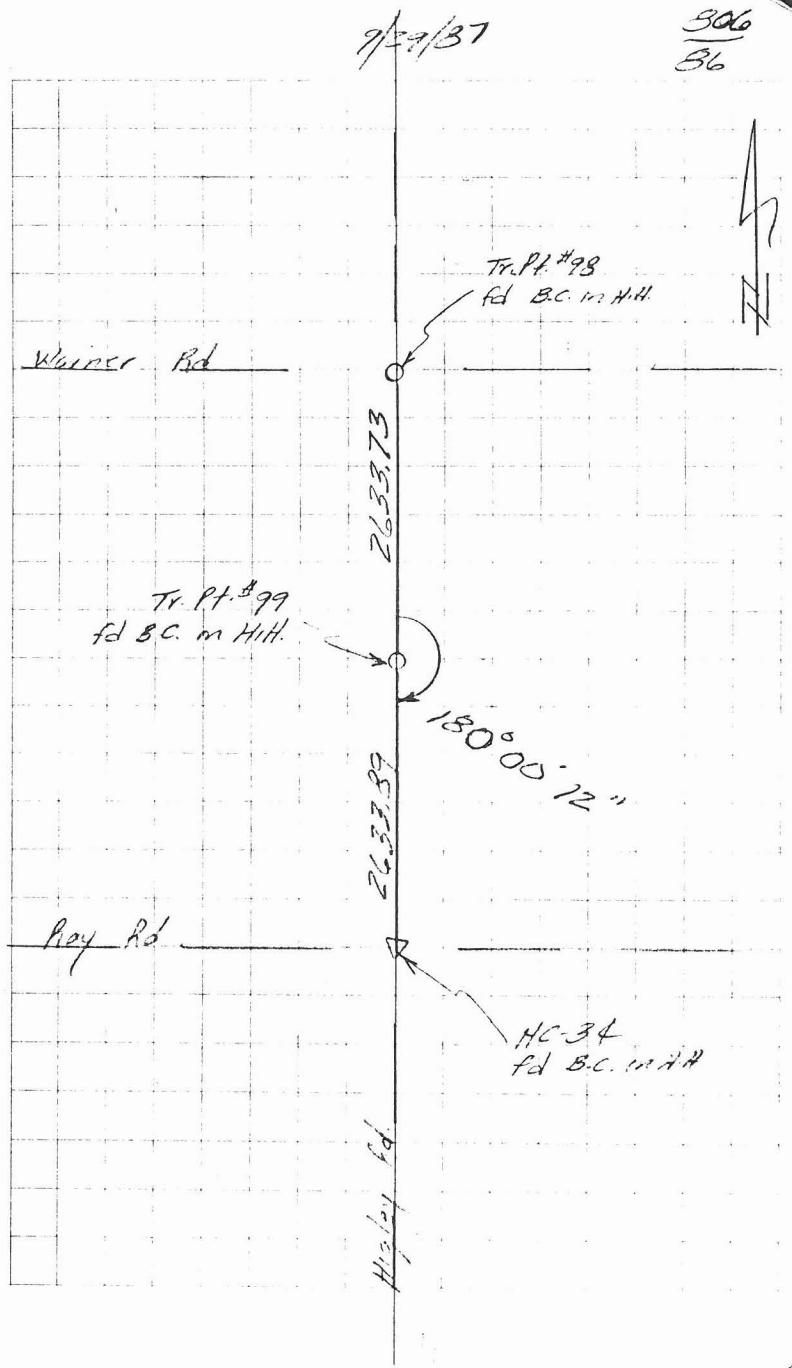
∠#1 = 180°00'11"
∠#6 = 00°01'13"
Σ∠ = 180°00'12" ✓

HD to TP #98
ZA = 90°05'16"
SD = 2633.74
HD = 2633.735 ✓

HD to HC-34
ZA = 89°59'48"
SD = 2633.89
HD = 2633.89 ✓

9/29/87

306/36



MCFCO Traverse — Block 6

247	248	249
TP #99	→ HC-34 →	TP #100

$\measuredangle$ #5 = 89°50'10"

$\measuredangle$ #6 = 179°01'15"

$\angle N\measuredangle$ = 89°50'13" ✓

HD to TP #99

$\measuredangle$ = 90°03'06"

SD = 2633.89

HD = 2633.89 ✓

HD to TP #100

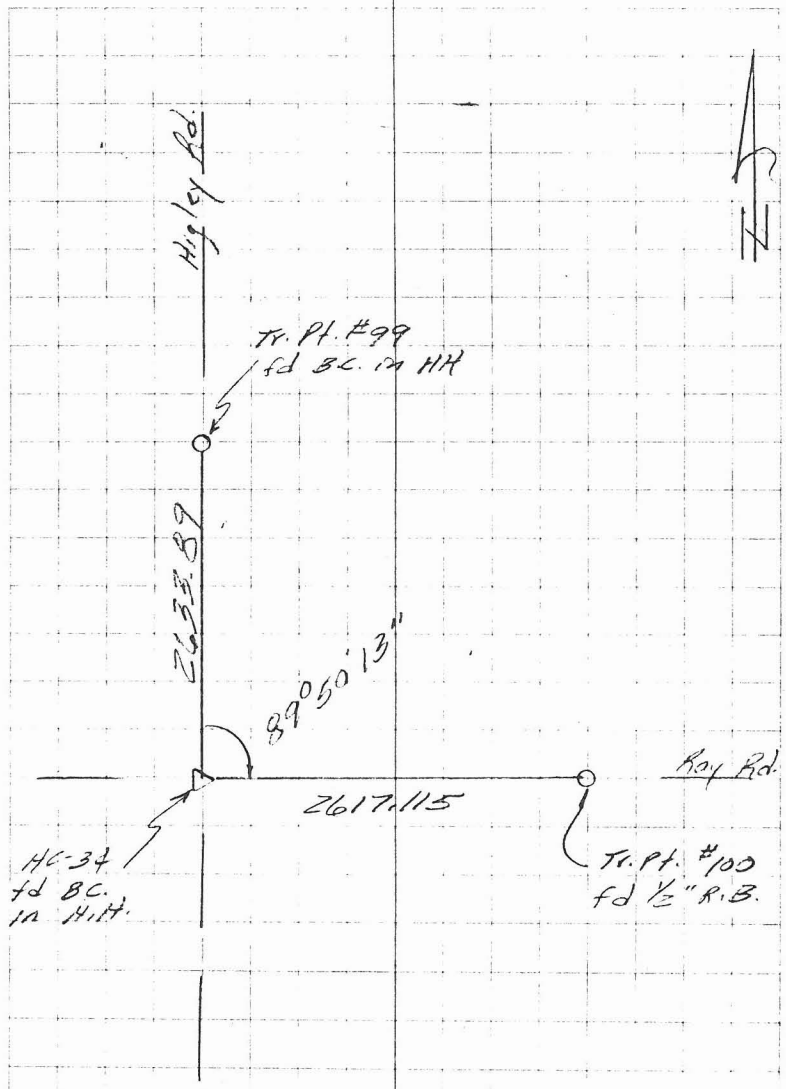
$\measuredangle$ = 89°54'28"

SD = 2617.12

HD = 2617.115 ✓

9/29/37

80L/33



MCFCD — Traverse — Block 6

248	249	250
HC-34	TP #100	TP #101

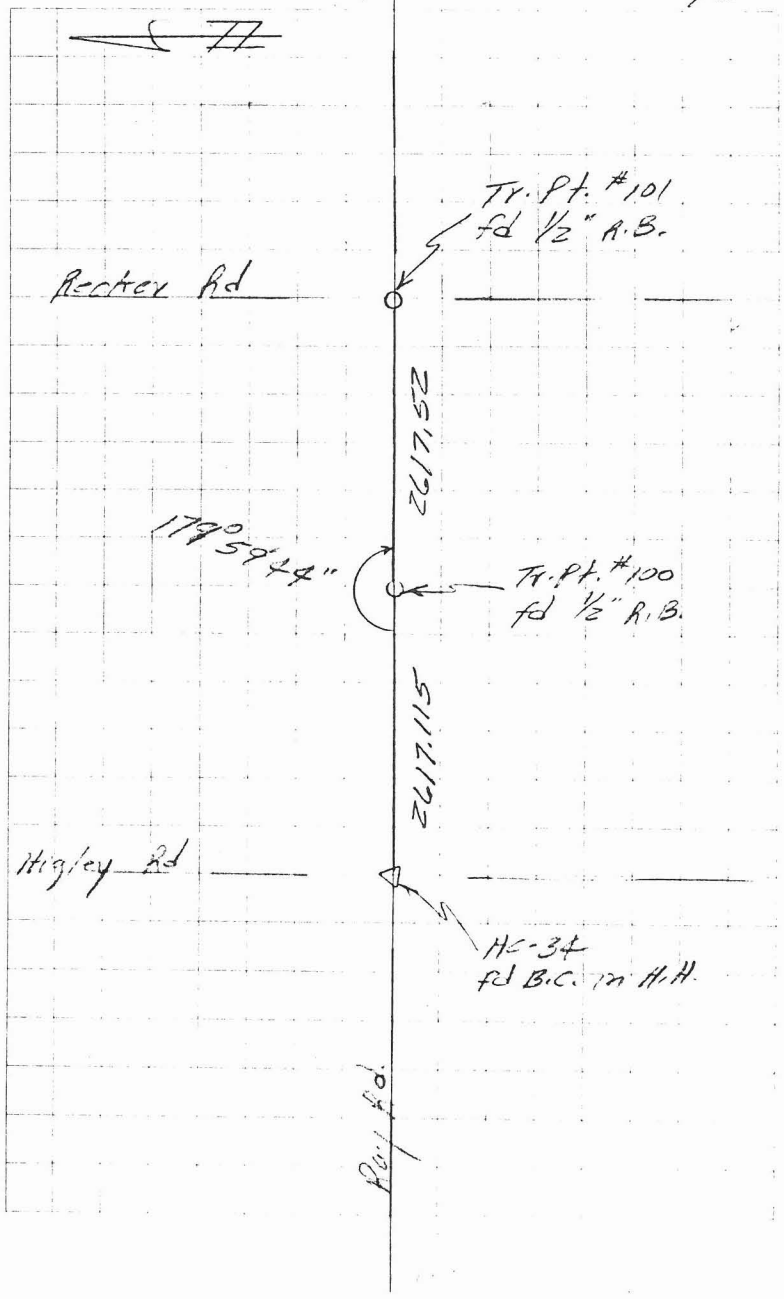
∠#1 = 179°59'51"
∠#6 = 359°58'26"
MN ∠ = 179°59'44" ✓

HD to HC-34
ZX = 90°08'12"
SD = 2617.12
HD = 2617.115 ✓

HD to TP #101
ZX = 89°50'42"
SD = 2617.53
HD = 2617.52 ✓

9/29/37

906/90



MCFCD Traverse - Block 6

9/29/87

306/92

249 → 250 → 251

TP #100 → TP #101 → TP #102

∠#1 = 269°47'36"

∠#2 = 178°45'45"

MM∠ = 269°47'38" ✓

HD to TP #100

Z∠ = 90°12'32"

SD = 2617.53

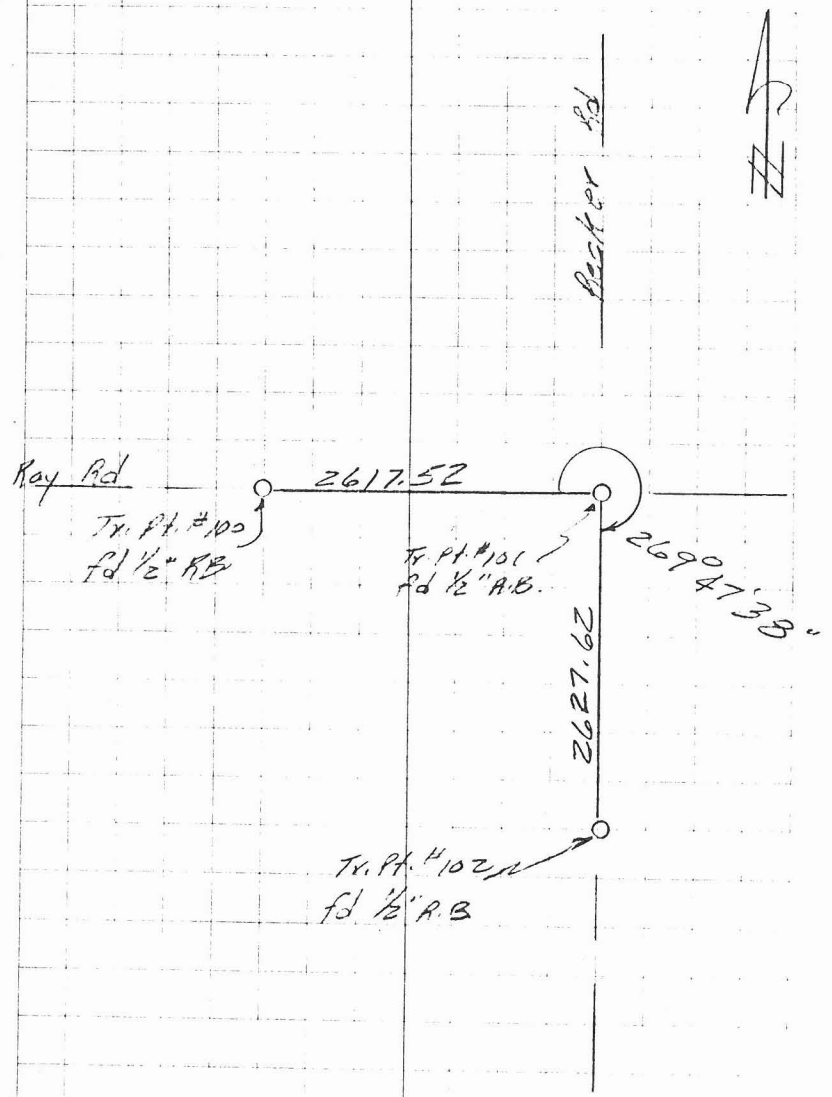
HD = 2617.515 ✓

HD to TP #102

Z∠ = 89°59'20"

SD = 2627.62

HD = 2627.62 ✓



MCFCD Traverse - Block 6

9/29/31 pg 7

250 → 251 → 252

TP #101 → TP #102 → RO-34

$\measuredangle$ #1 = 180°01'06"

$\measuredangle$ #6 = 00°05'33"

$\sum\measuredangle$ = 180°00'56" ✓

HD to TP #101

Z$\measuredangle$ = 90°03'23"

SD = 2627.62 ✓

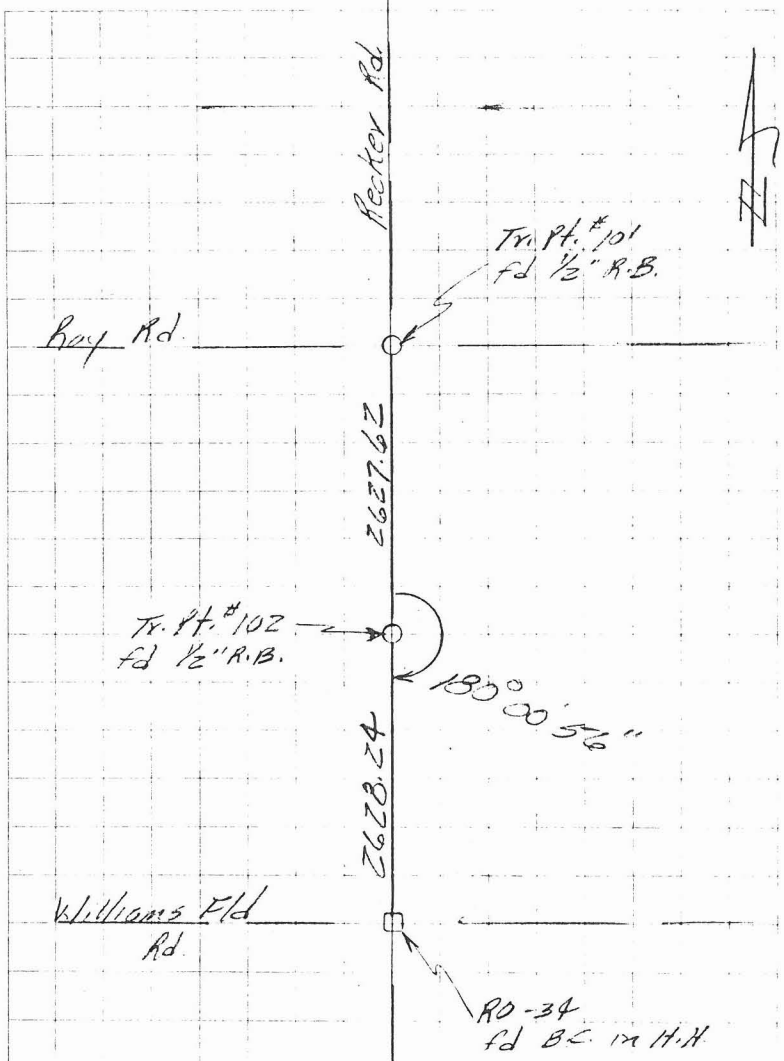
HD = 2627.62

HD to RO-34

Z$\measuredangle$ = 89°56'57"

SD = 2628.24 ✓

HD = 2628.24



MCFCD Traverse - Block 6

9/29/87

806/96

251 TP #102 → 252 RO-34 → 253 TP #103

∠#1 = 90°14'58"

∠#2 = 181°30'07"

MN∠ = 90°15'01" ✓

HD to TP #102

ZA = 90°05'51"

SD = 2628.24

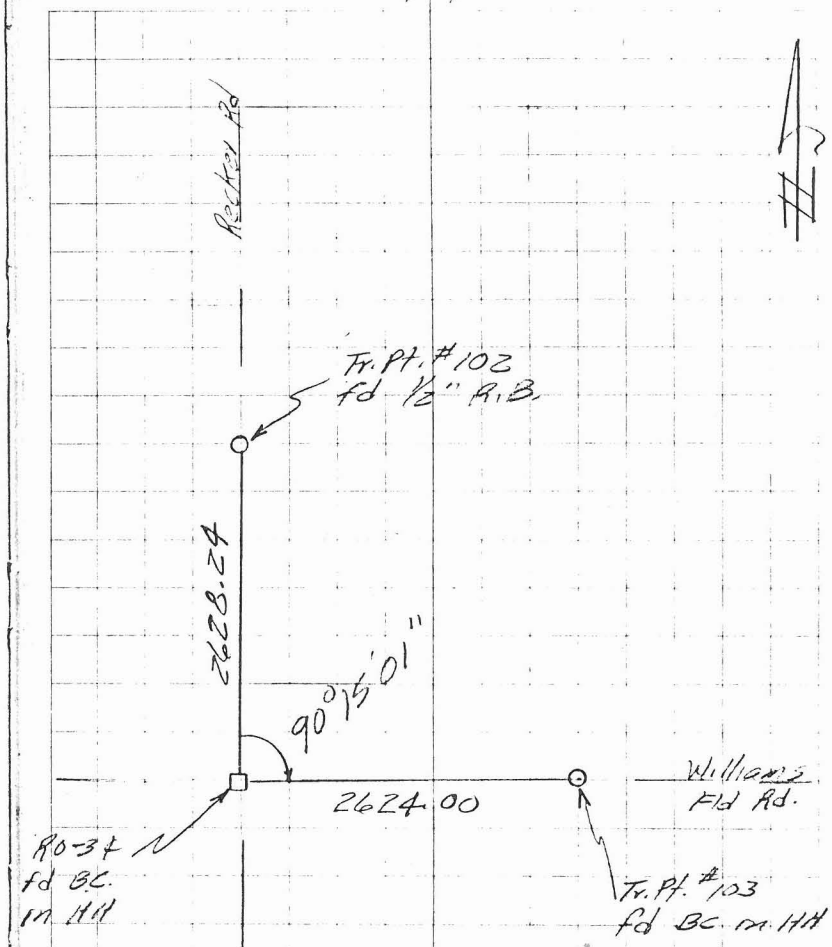
HD = 2628.235 ✓

HD to TP #103

ZA = 89°54'22"

SD = 2624.01

HD = 2624.005 ✓



MCFCD Traverse – Block 6

9/29/87

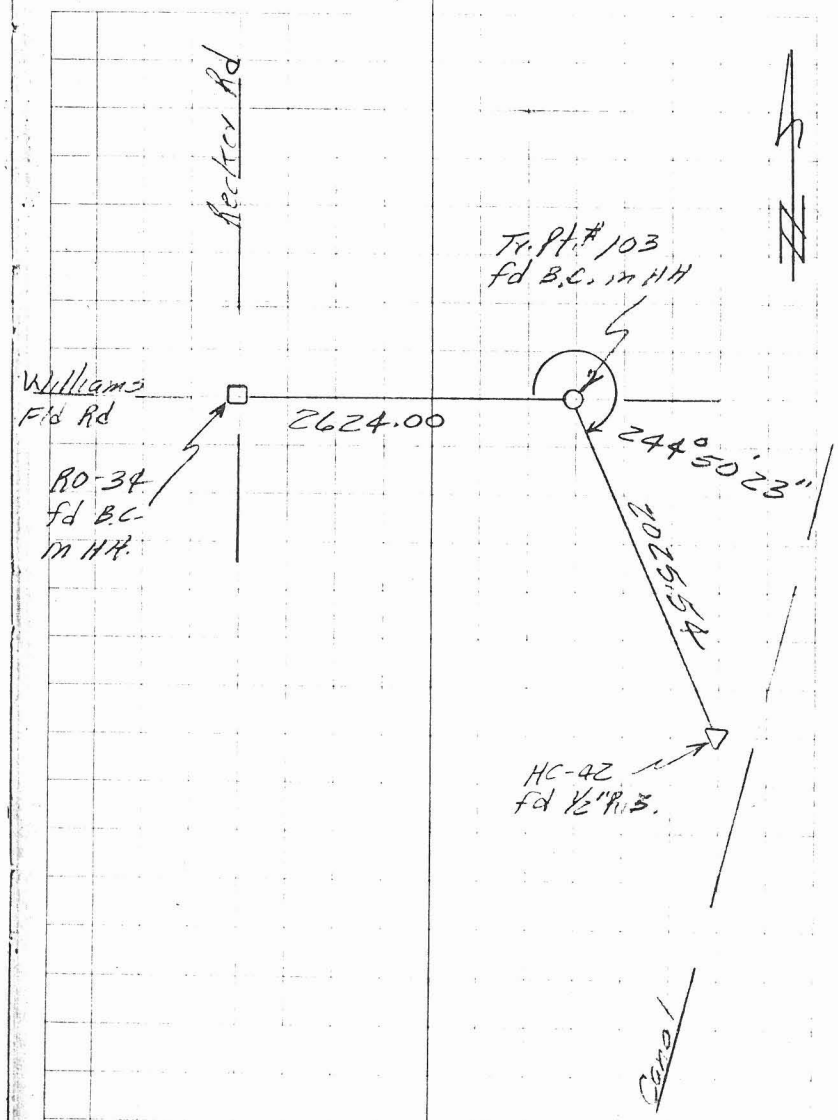
804/93

252 — RO-34 → 253 — TP #103 → 254 — HC-42

∠#1 = 244°50'30"
∠#6 = 29°02'19"
MK = 244°50'23" ✓

HD to RO-34
ZA = 90°08'36"
SD = 2624.01
HD = 2624.00 ✓

HD to HC-42
ZA = 89°52'33"
SD = 2025.54
HD = 2025.535 ✓



MCFCD Traverse – Block 6

9/29/37

R06/100

253 254 255

TP#103 → HC-42 → RO-35

$\measuredangle$#1 = 230°07'06"

$\measuredangle$#6 = 300°42'27"

MN = 230°07'05" ✓

HD to TP#103

ZA = 90°11'35"

SD = 2025.55

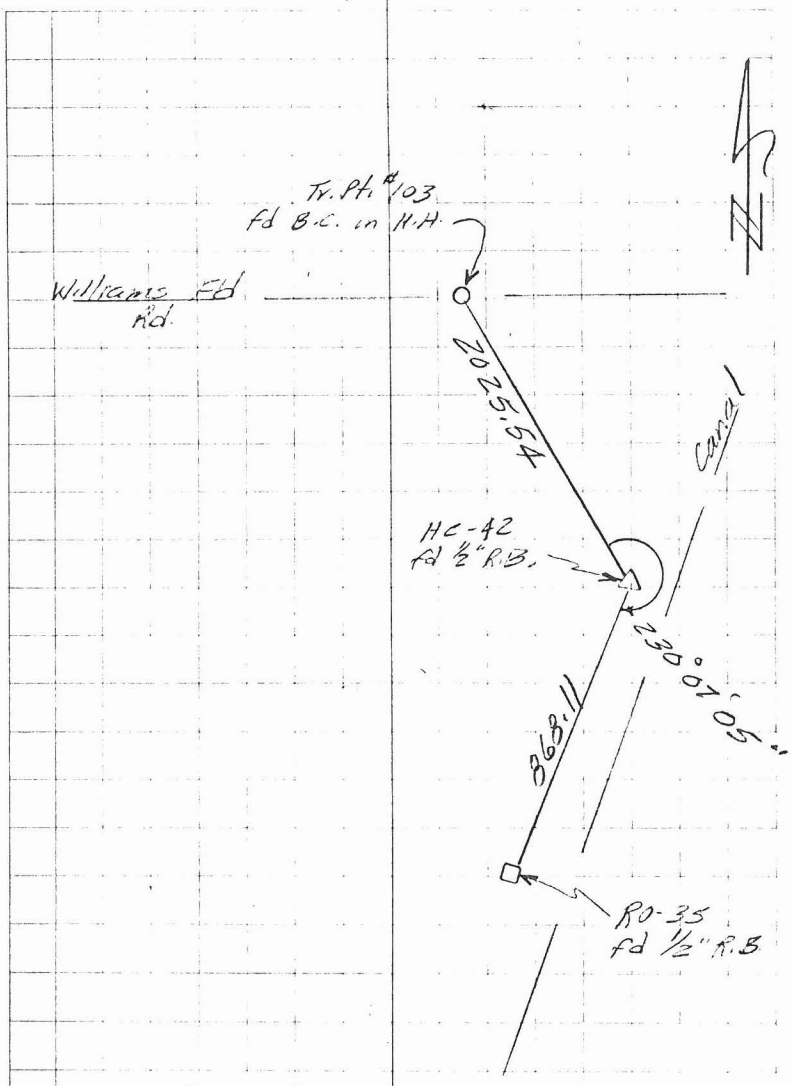
HD = 2025.54 ✓

HD to RO-35

ZA = 90°09'40"

SD = 868.11

HD = 868.105 ✓



MCFCD Traverse — Block 6

9/29/37

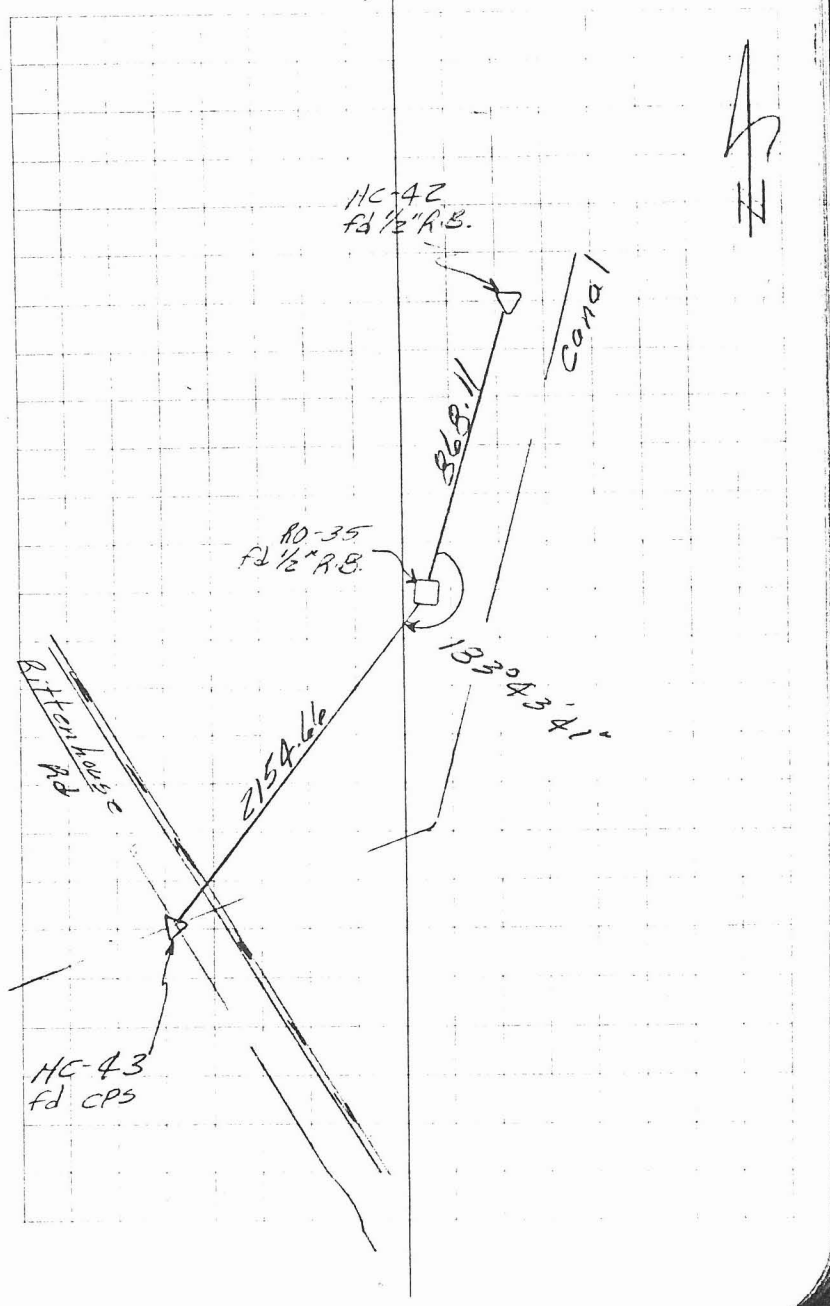
306
102

256	255	254
HC-43 →	RO-35	HC-42

∠#1 = 176°16'18"
∠#2 = 337°37'54"
#N4 = 176°16'19"
−359°59'60"
183°43'41" ✓

HD to HC-42
ZA = 89°57'06"
SD = 868.11
HD = 868.11 ✓

HD to HC-43
ZA = 89°55'02"
SD = 2154.66
HD = 2154.66 ✓



MCFCD Traverse – Block 6

9/29/37

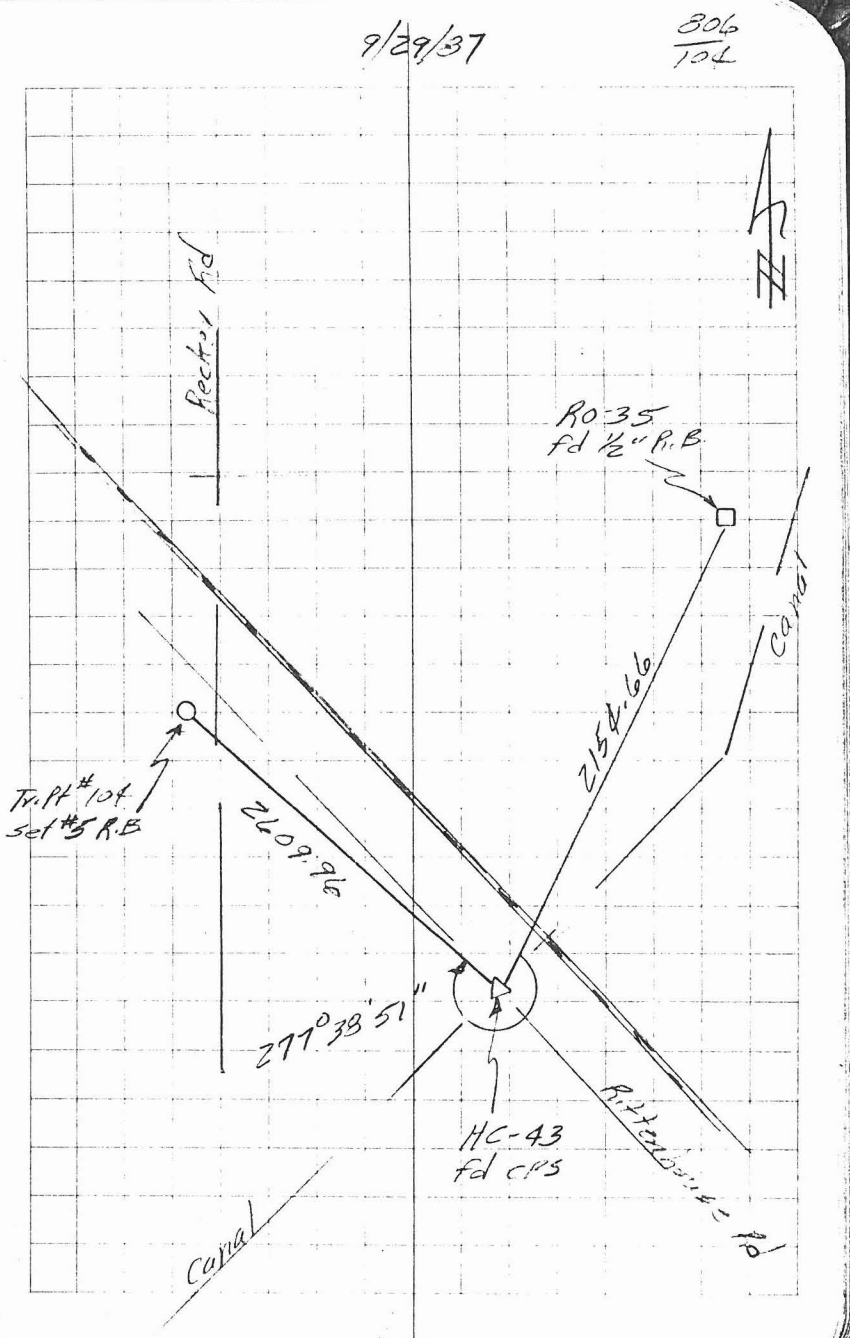
806
104

257 — TP #104 → 256 — HC-43 → 255 — RO-35

∠#1 = 82°21'12"
∠#6 = 134°06'54"
∠NX = 82°21'09"
−359°59'60"
277°38'51" ✓

HD to RO-35
ZX = 90°08'27"
SD = 2154.66
HD = 2154.655 ✓

HD to TP #104
ZX = 90°17'09"
SD = 2609.99
HD = 2609.96 ✓



MCFCD Traverse – Block 6

256 257 258
HC-43 → TP #104 → ¼ Cor.

∠#1 = 237°44'38"
∠#2 = 115°29'05"
MN ∠ = 237°44'33" ✓
HD to ½ Cor = 329.81

256 257 259
HC-43 → TP #104 → TP #105

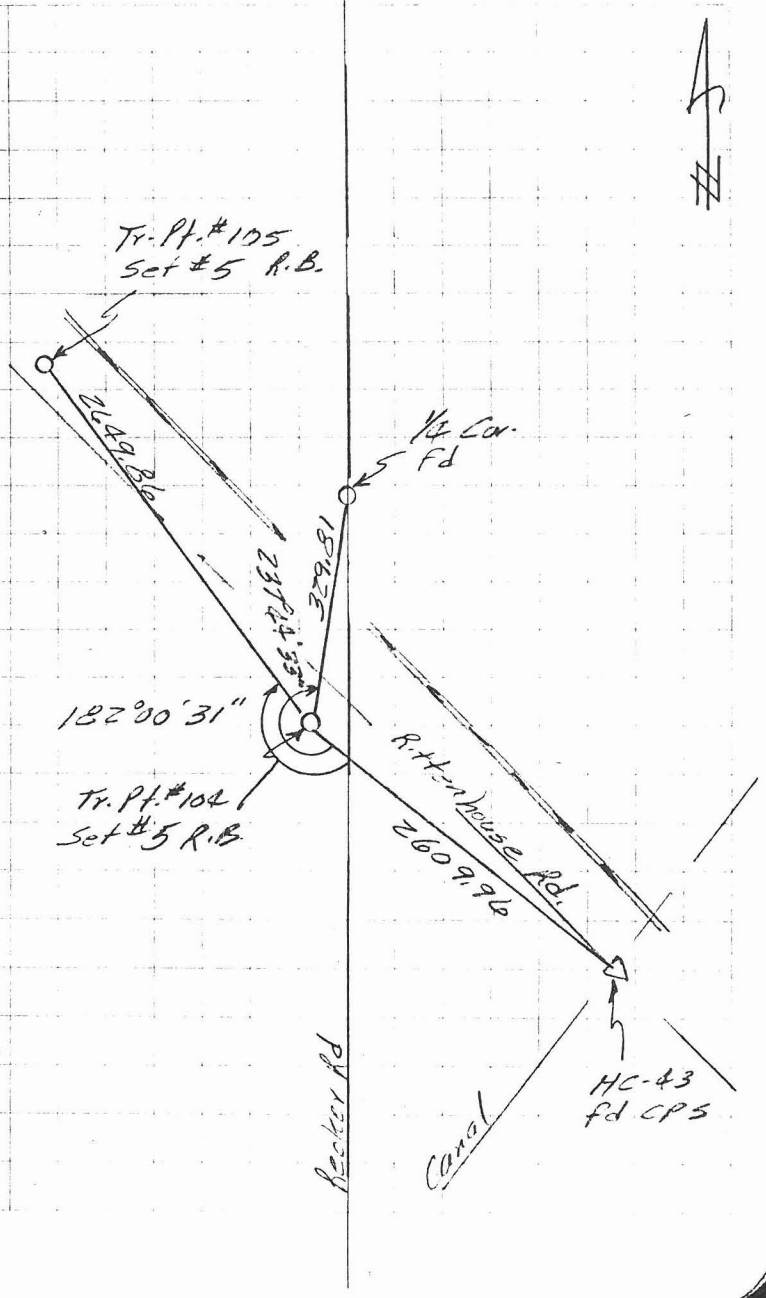
∠#1 = 182°00'28"
∠#6 = 12°03'05"
MN ∠ = 182°00'31" ✓

HD to HC-43
ΣX = 89°45'36"
SD = 2609.98
HD = 2609.955 ✓

HD to TP #105
ΣX = 90°13'26"
SD = 2649.87
HD = 2649.85 ✓

9/29/37

80L/10L



MCFCD Traverse - Blk K

L. Von Pyke
R. McMurray
T. Craven

9/29/37

306
103

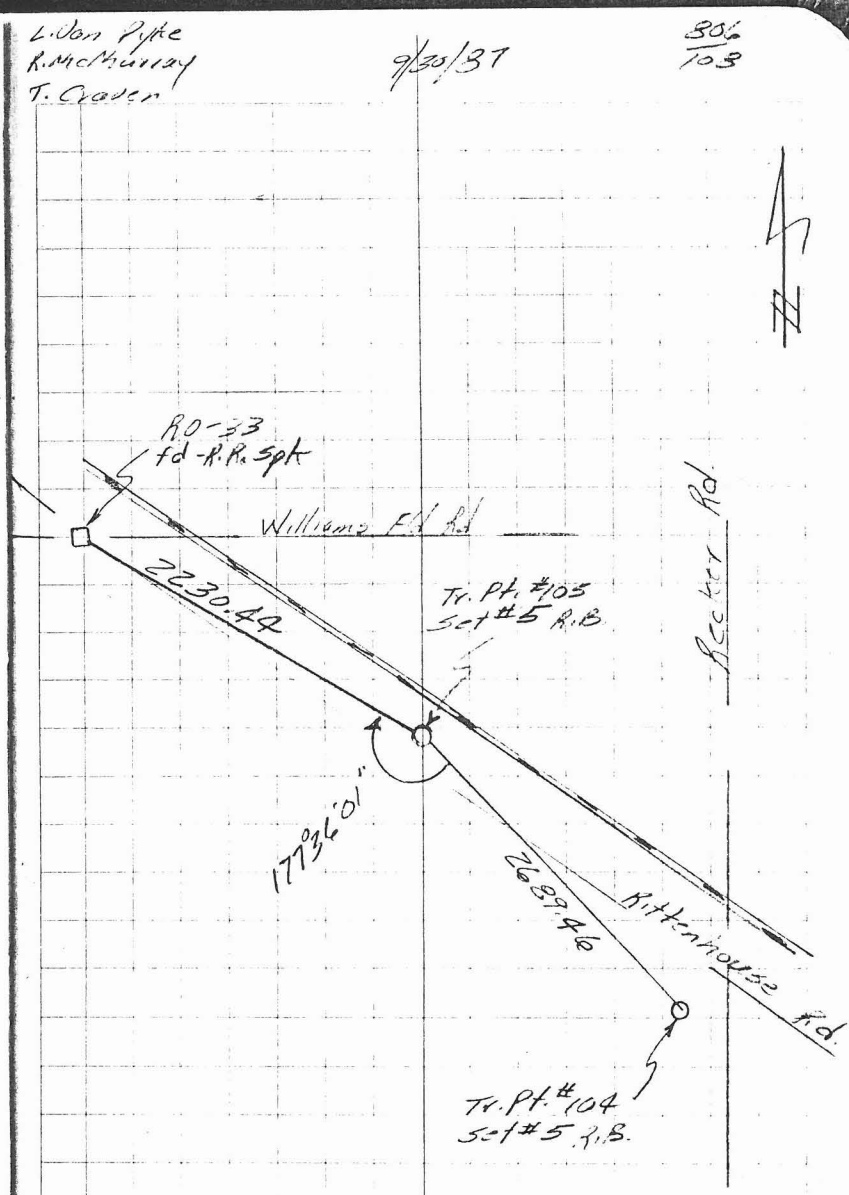
257 259 260

TP #104 → TP #105 → RO-33

$\angle$ #1 = 177°36'00"
$\angle$ #6 = 345°36'08"
$\angle$ INT = 177°36'01" ✓

HD to TP #104
Z$\angle$ = 89°49'21"
SD = 2649.88
HD = 2649.865 ✓

HD to RO-33
Z$\angle$ = 90°02'51"
SD = 2230.44
HD = 2230.44 ✓



1 MCFCD Traverse - Block 6

9/30/87

806/110

259 — 260 — 261

TP #105 → RO-33 → TP #106

∠#1 = 143°55'07"

∠#6 = 143°31'08"

1/N∠ = 143°55'11" ✓

HD to TP #105

ZA = 89°59'52"

SD = 2230.44

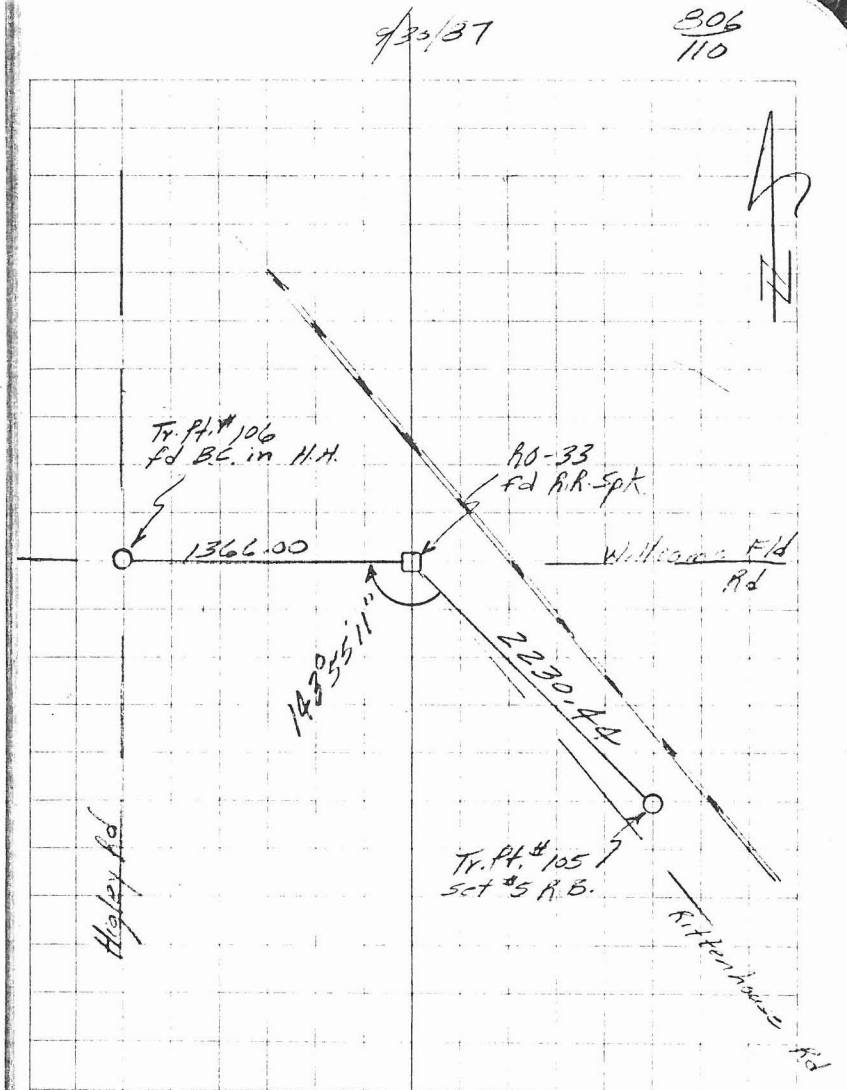
HD = 2230.44 ✓

HD to TP #106

ZA = 90°13'43"

SD = 1366.02

HD = 1366.01 ✓



MCFCD Traverse – Block 6

9/30/37

806
11E

260 261 262

RO-33 → TP #106 → HC-41

∠#1 = 270°46'26" (270 46 23)

∠#6 = 134°38'26" (184°38'10")

∧NY = 262°26'24" (270°46'22")

Use 270°46'22" ✓

HD to RO-33

ZA = 89°50'25"

SD = 1366.00

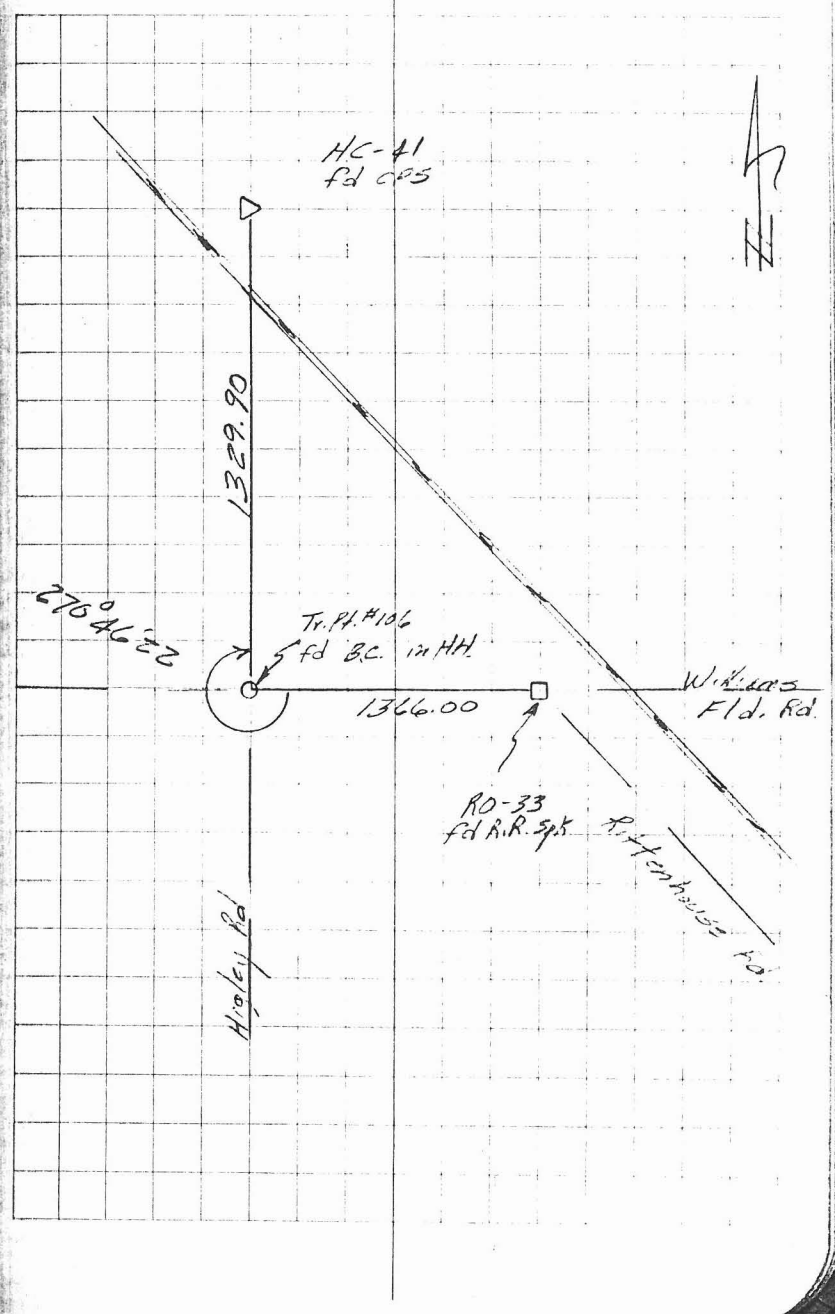
HD = 1365.995 ✓

HD to HC-41

ZA = 90°02'44"

SD = 1329.90

HD = 1329.90 ✓



MCFCD Traverse - Block 6

9/30/87

806
114

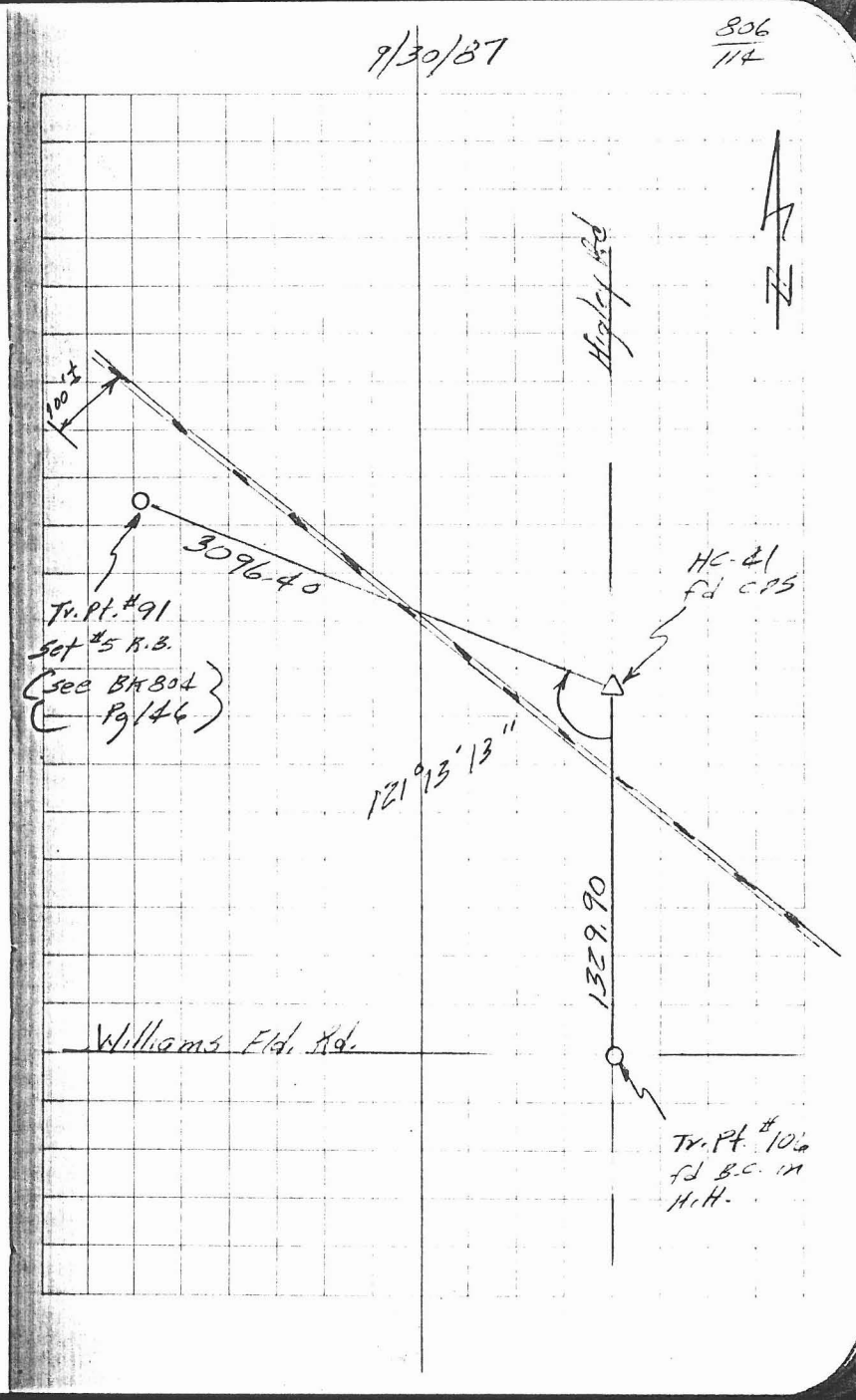
263 262 261

TP #91 → HC-41 → TP #106

∠#1 = 238°46'49"
∠#2 = 352°40'39"
ΔN∠ = 238°46'47"
- 359°59'60"
121°13'13" ✓

HD to TP #106
EZ = 90°02'06"
SD = 1329.90
HD = 1329.90 ✓

HD to TP #91
EZ = 90°12'54"
SD = 3096.42
HD = 3096.40 ✓



MCFCD Traverse - Block 6

9/30/87

30 / 116

(See Bk 80+ Pg 146)

262 — 263 — 264

HC-41 → TP #91 → RO-31

∠#5 = 189°29'43"

∠#6 = 56°58'29"

∠N1 = 189°29'45" ✓

HD to HC-41

∠ = 89°50'09"

SD = 3096.42

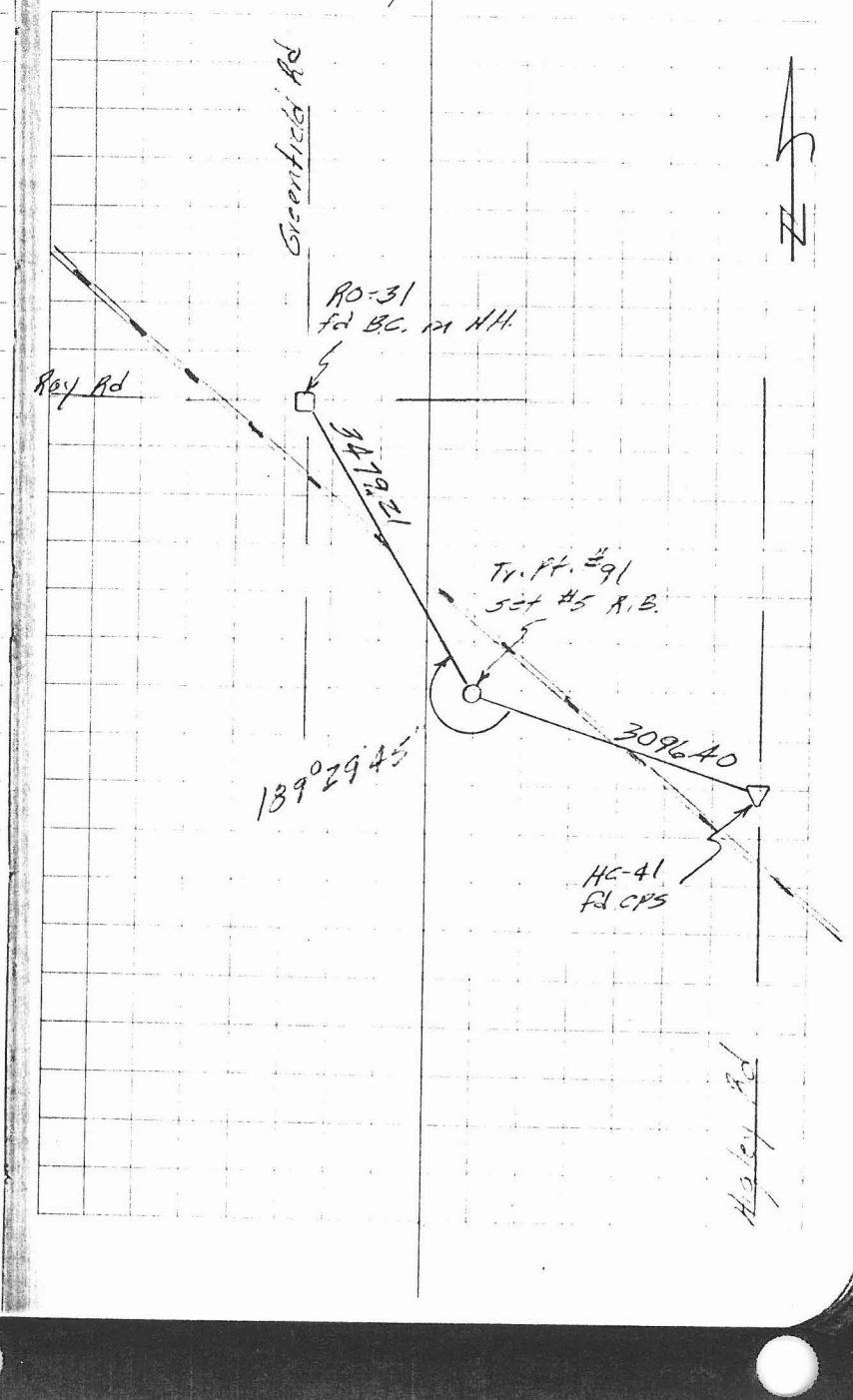
HD = 3096.40 ✓

HD to RO-31

∠ = 90°07'06"

SD = 3479.22

HD = 3479.215 ✓

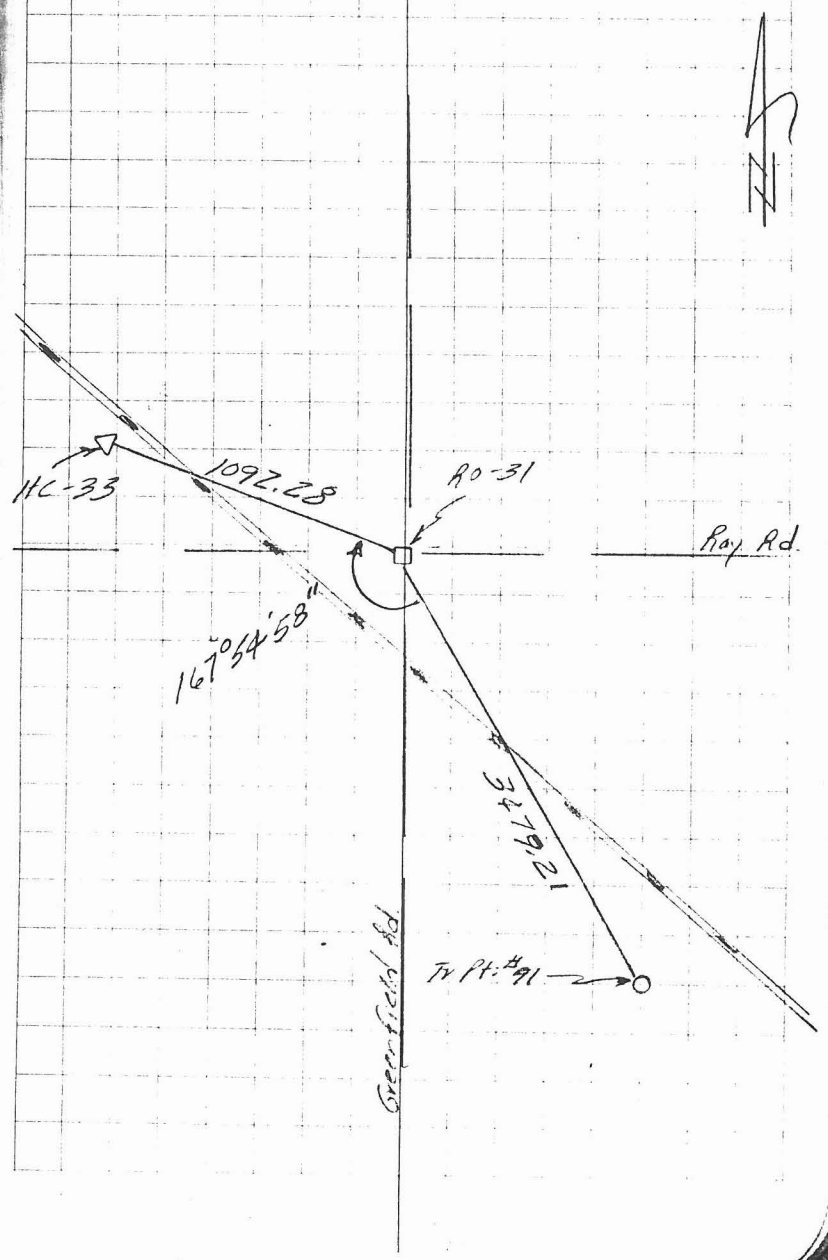


MCKP | Traverse - Block 6

(See BK 804 - Pg 146)

9/30/87

80
118



MCECD Traverse - Block 6

9/30/37

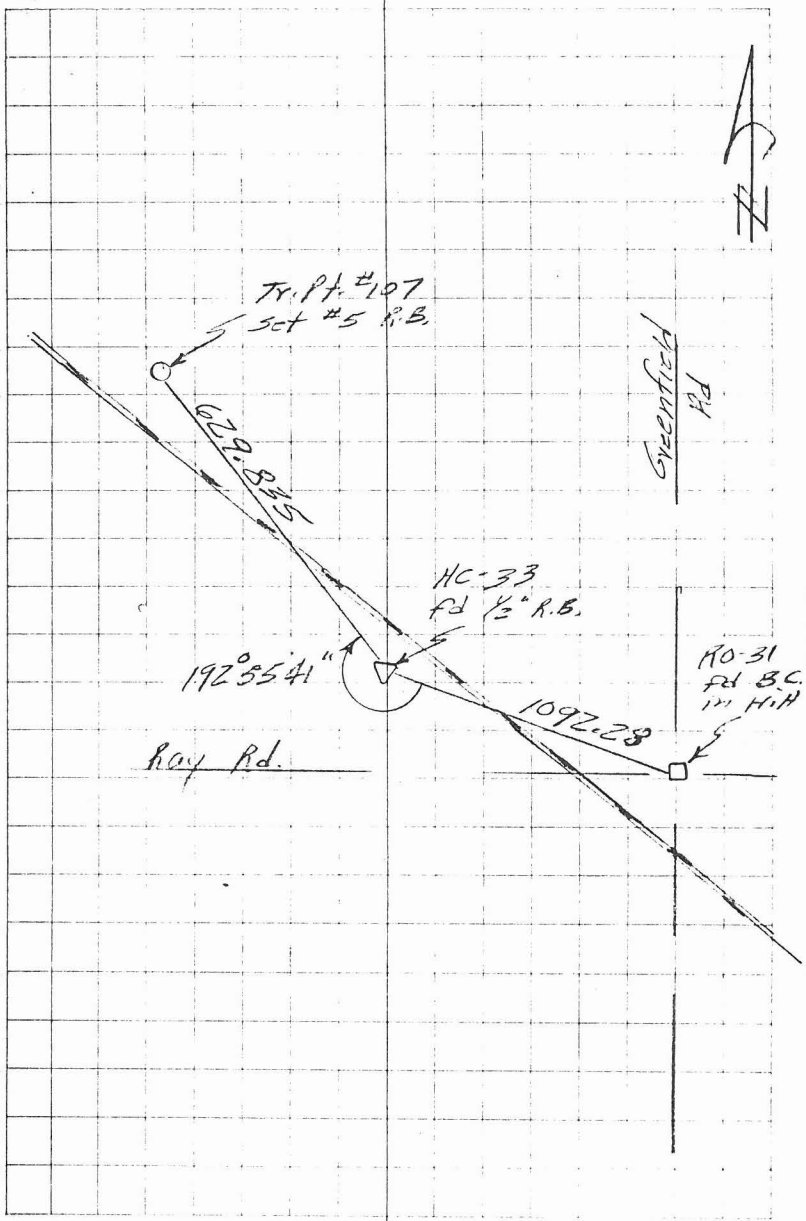
806/120

RO-31 —(264)→ HC-33 —(265)→ TP #107 —(266)→

∠#1 = 192°55'43"
∠#6 = 77°34'08"
MNX = 192°55'41" ✓

HD to RO-31
ZX = 89°39'39"
SD = 1092.31
HD = 1092.29 ✓

HD to TP #107
ZX = 89°51'28"
SD = 629.84
HD = 629.84 ✓



MCFCD Transverse - Block 6

HC-33 (265) → TP #107 (266) → TP #108 (267)

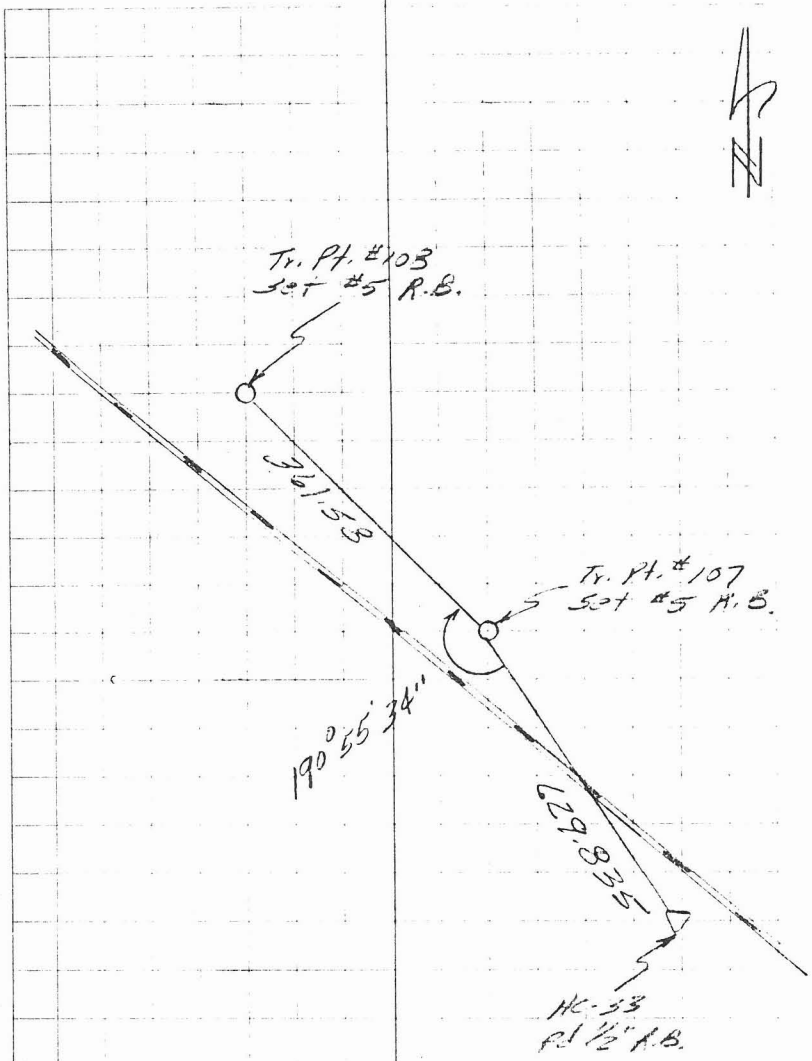
∠ #1 = 190°55'41"
∠ #6 = 65°33'21"
MN ∠ = 190°55'34" ✓

HD to HC-33
Z∠ = 90°17'38"
SD = 629.84
HD = 629.83 ✓

HD to TP #108
Z∠ = 90°32'00"
SD = 361.60
HD = 361.585 ✓

9/30/87

506/122



MCFCD Traverse - Block 6

268 → 267 → 266

HC-30 → TP #108 → TP #107

Π

∠#1 = 192° 52' 33"

∠#6 = 77° 15' 50"

MN = 192° 52' 38"

-359° 59' 60"

167° 07' 22" ✓

HD to TP #107

ZA = 89° 43' 20"

SD = 361.59

HD = 361.57 ✓

HD to HC-30

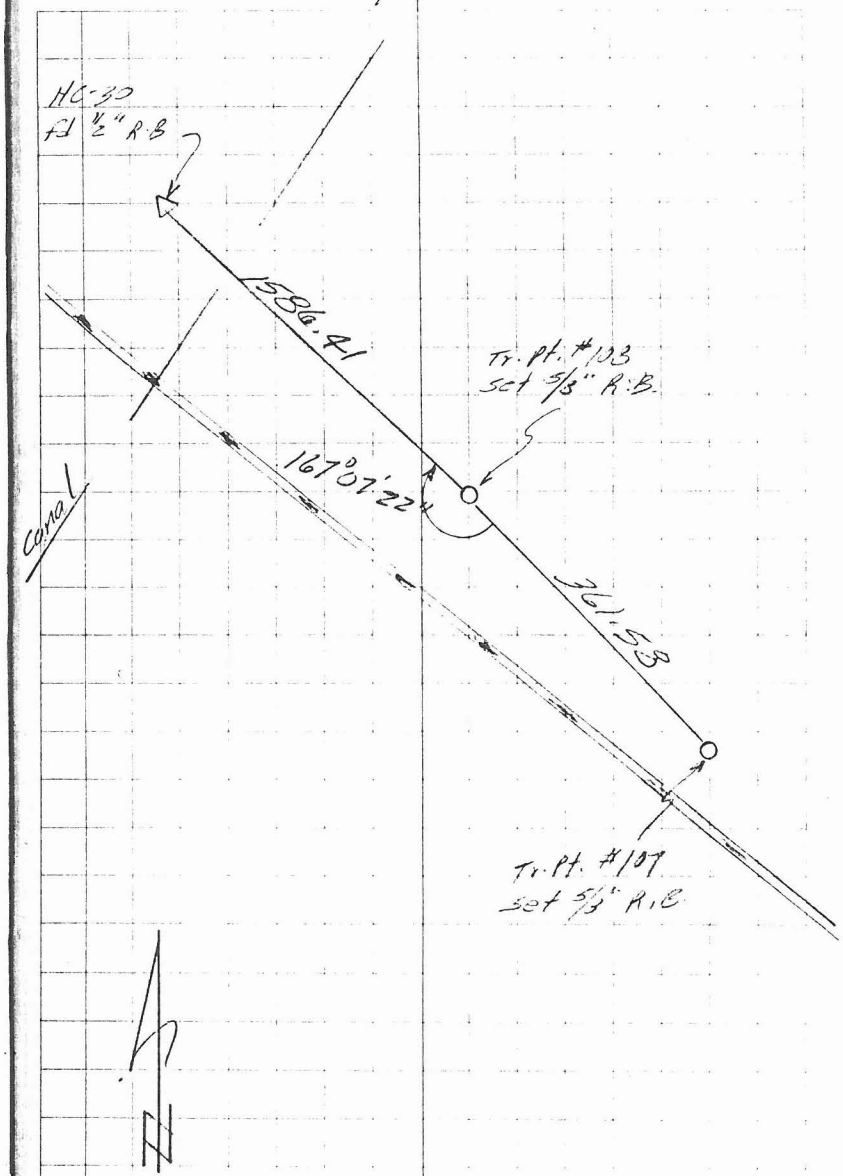
ZA = 90° 12' 03"

SD = 1586.42

HD = 1586.41 ✓

9/30/37

306/124



MCFCD Traverse – Block 6

267 268 269

TP #108 → HC-30 → TP #109

∠#1 = 166° 22' 27" (166° 22' 36")

∠#6 = 278° 16' 15" (278° 15' 45")

MI∠ = 166° 22' 43" (166° 22' 38")

Use 166° 22' 38" ✓

HD to TP #108

Z∠ = 89° 53' 31"

SD = 1586.42

HD = 1586.415 ✓

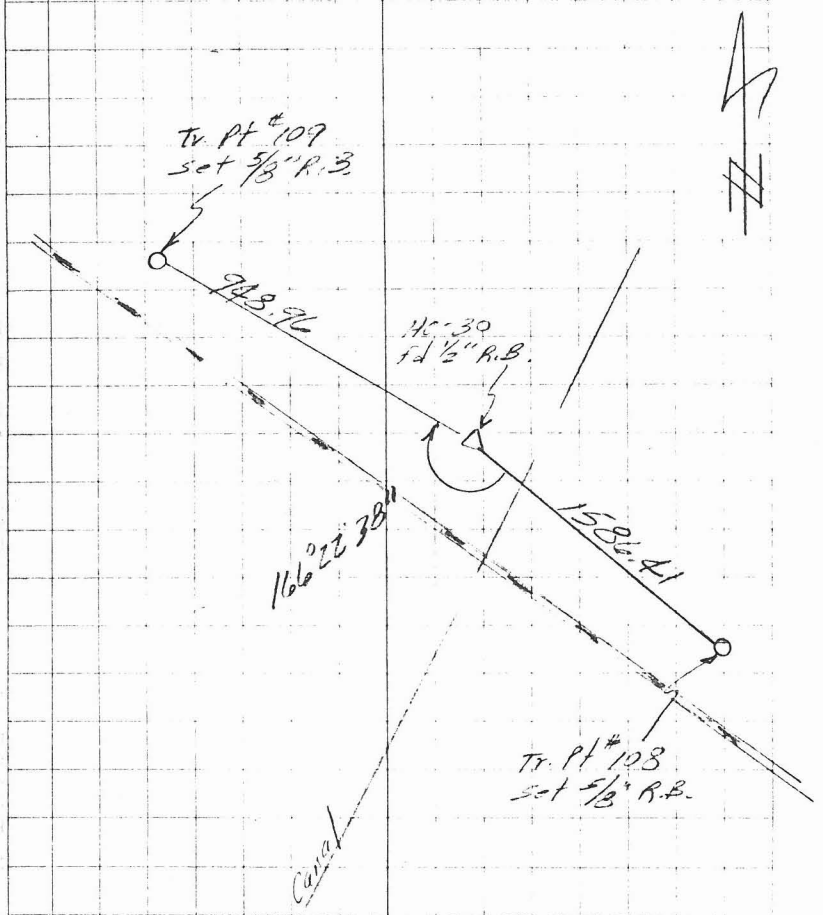
HD to TP #109

Z∠ = 90° 11' 13"

SD = 948.96

HD = 948.955 ✓

9/30/67 30/126



MCFCD Traverse - Block 6

9/25/37

806
T23

268 269 270

HC-30 → TP #109 → TP #110

∠#1 = 190°28'40

∠#2 = 62°51'24"

INT = 190°28'34" ✓

HD to HC-30

ZA = 89°55'29

SD = 948.96

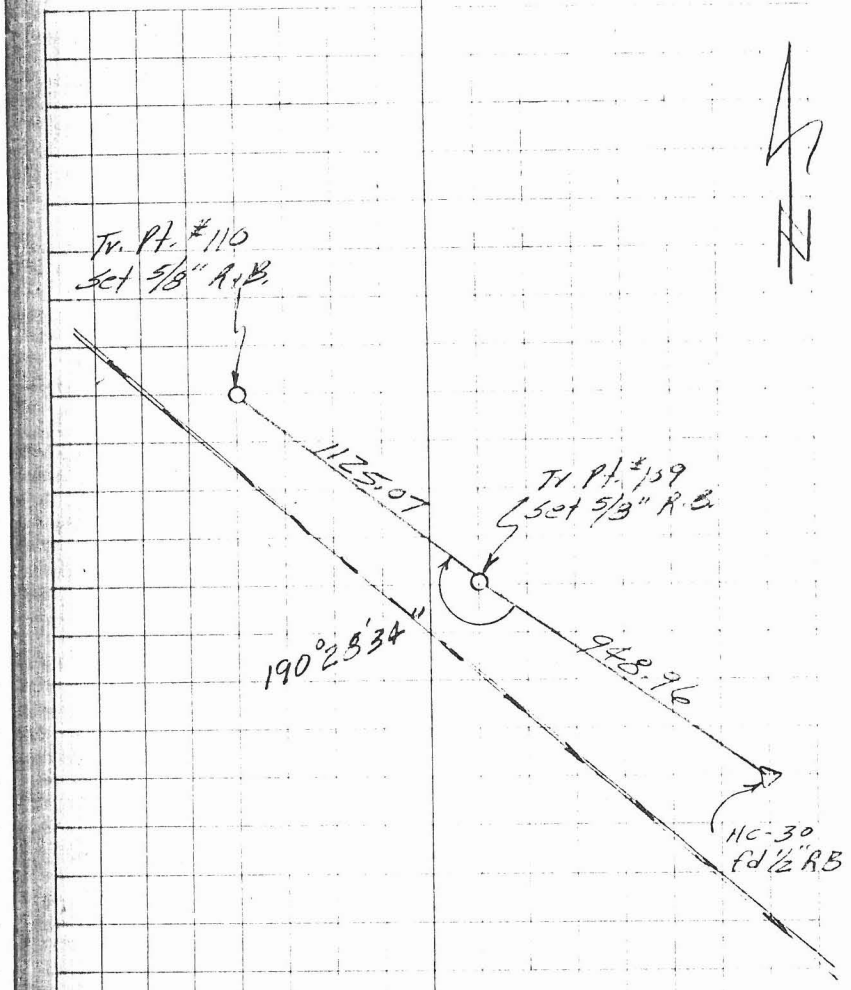
HD = 948.96 ✓

HD to TP #110

ZA = 90°08'51"

SD = 1125.08

HD = 1125.075 ✓



MCFCO Traverse – Block 6

9/30/87

326/736

TP #109 (269) → TP #110 (270) → RO-27 (271)

↑

∠#1 = 167°26'13"

∠#6 = 284°38'21"

ΣNΔ = 167°26'24" ✓

HD to TP #109

ΣΔ = 89°57'24"

SD = 1125.07

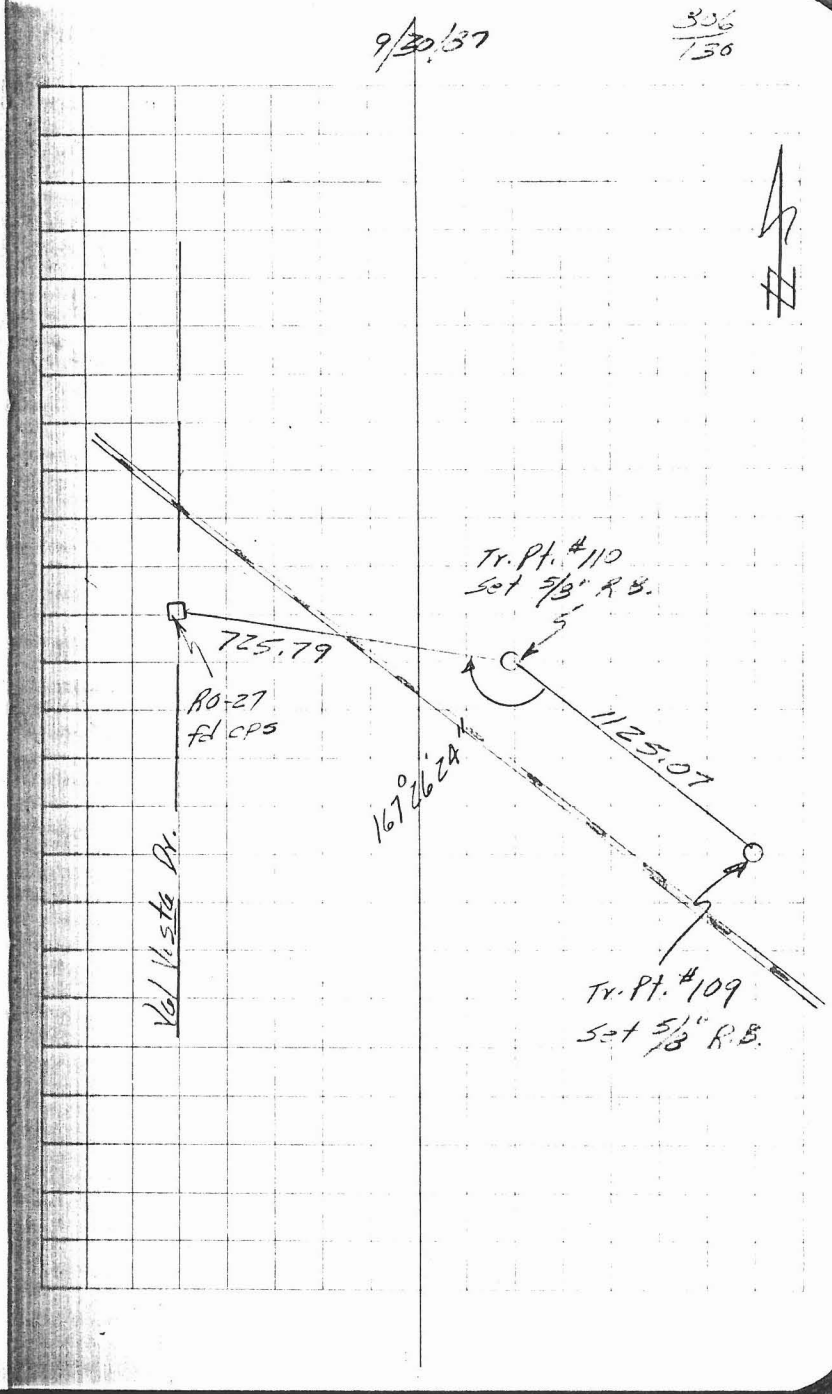
HD = 1125.07 ✓

HD to RO-27

ΣΔ = 90°00'32"

SD = 725.79

HD = 725.79 ✓



MCFCD Traverse + Block 6

272 271 270

TP #52 → RO-27 → TP #110

$\measuredangle$ #1 = 114°19'21" (114°19'04")

$\measuredangle$ #2 = 325°54'53" (325°54'21")

MN $\measuredangle$ = 114°19'09" (114°19'04")

Use 114°19'04"

−359°59'60"

245°40'56" ✓

HD to TP #110

Z $\measuredangle$ = 90°07'21"

SD = 725.79

HD = 725.79 ✓

HD to TP #52

Z $\measuredangle$ = 90°07'35"

SD = 1609.34

HD = 1609.335 ✓

TP #52 Pg 26

9/30/37

826 152

Val Vista Dr.

Tr. Pt. #52 fd BC in HH (See Pg 26)

Warner Rd

1609.33

245°40'56"

RO-27 fd CPS

725.79

Tr. Pt. #110 set 5/8" R.B.

MCFCD Traverse - Block 6

(See Page 26)

273 HC-28 → 272 TP #52 → 271 RO-27

↑

∠#1 = 270°07'19"

∠#2 = 180°44'18"

N/A = 270°07'23"

−359°59'60"

89°52'37" ✓

HD to RO-27

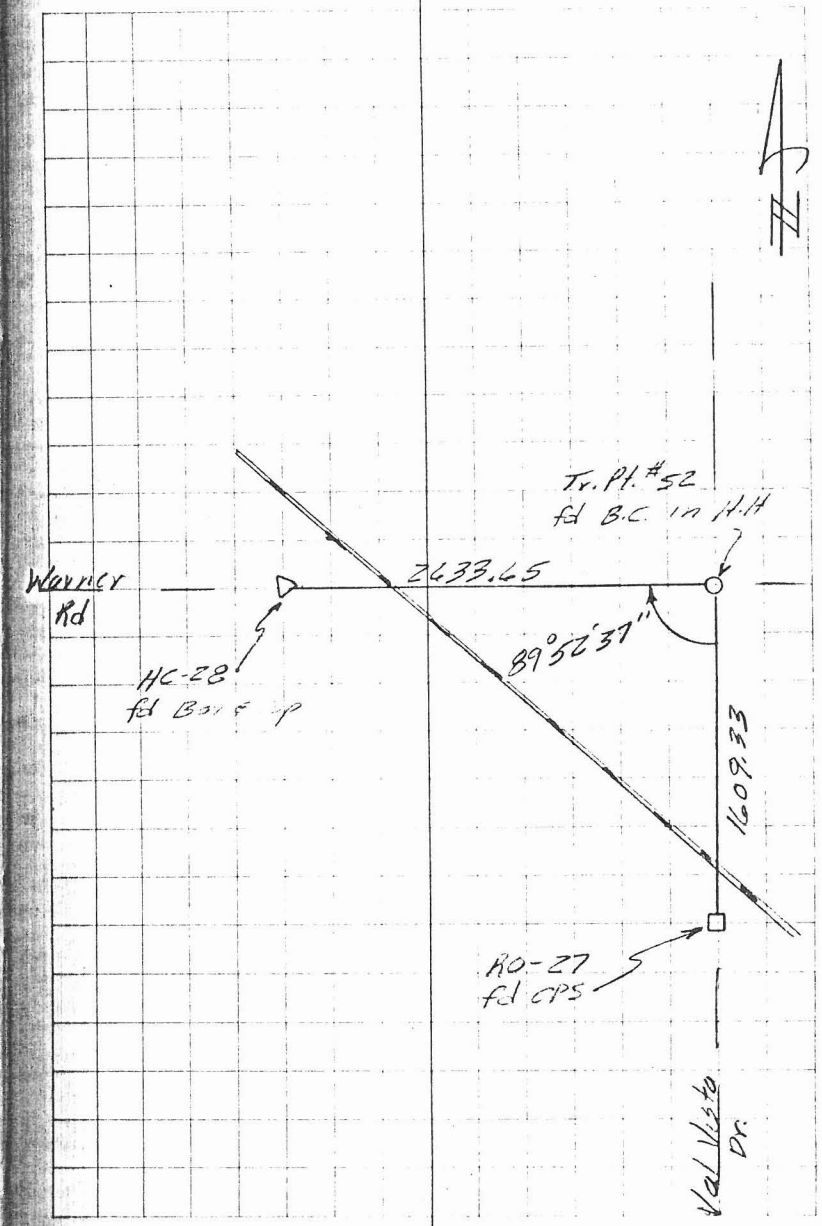
ZA = 89°56'30"

SD = 1609.33

HD = 1609.33 ✓

9/30/87

806
T34



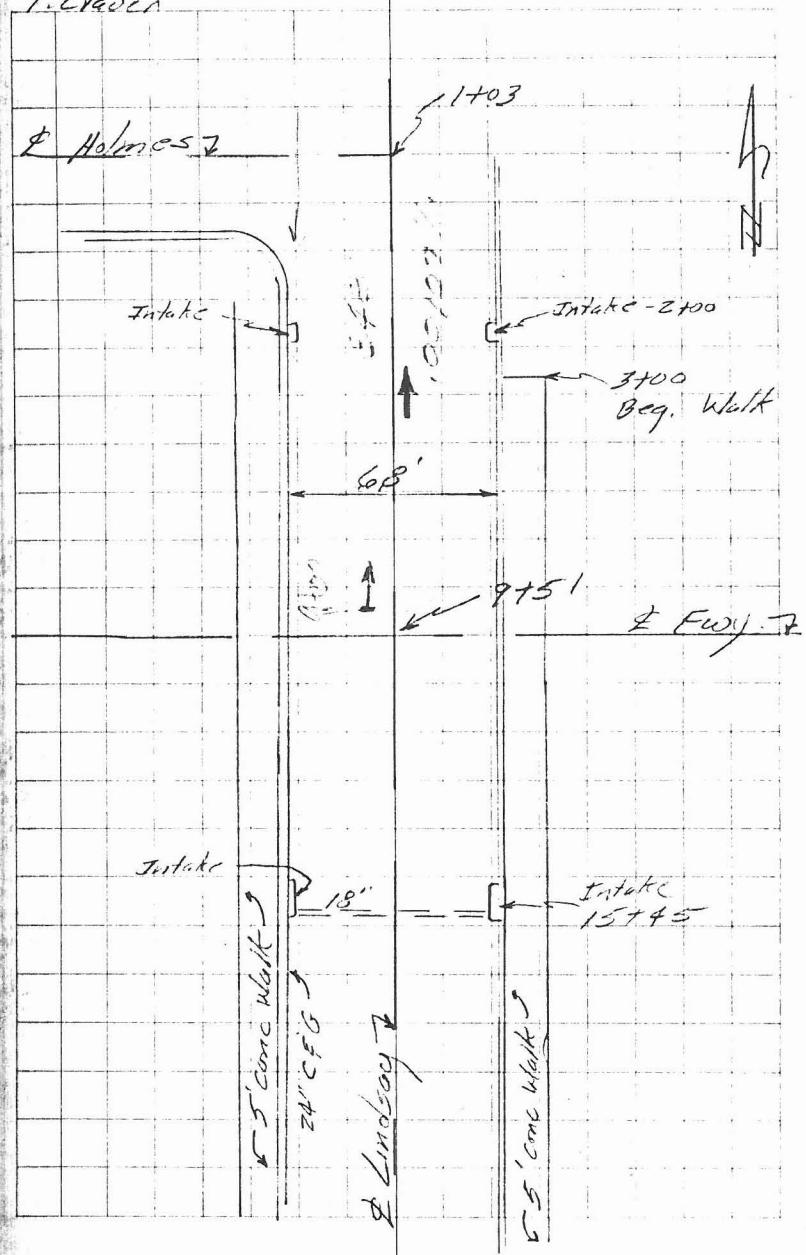
MCFCD

Flood Control Study
Lindsay Rd @ Freeway

L. Van Pyke
R. McMurray
T. Craven

11/1/87

506
134



MCFCD	Flood Control Study — Lindsay Rd @ Superstition Fwy			
TBM #C-3	4.21	47.95 ↑		1243.74
16+00				
15+45				
15+00				
14+00				
13+00				

NOTES		DATE
CHECKED	SM	11-10-87
COPIED		
	TO	DATE
DELIVERED	45	11-10-87

11/4/87

83/138

½" RB - SE Cor Intersection Lindsay & Superstition Fwy.

42.3 ✓	41.77 ✓	41.74 ✓	41.5 ✓	42.0 ✓	41.34 ✓	41.83 ✓	41.87 ✓	41.8 ✓
5.65	6.18	6.21	6.65	5.95	6.61	6.12	6.08	6.15
55	39.5	34.5	34	B.L.	34	34.5	39.5	55
	S/W	T.C.	Cut		Cut	T.C.	S/W	

41.3 ✓		41.4 ✓
6.65		6.55
34	B.L.	34
Intake		Intake

42.45 ✓	42.36 ✓	42.09 ✓	41.6 ✓	42.24 ✓	41.59 ✓	42.07 ✓	42.23 ✓	41.55 ✓
5.3	5.79	5.86	6.35	5.71	6.36	5.88	5.72	6.4
62	39.5	34.5	34	B.L.	34	34.5	39.5	62
	S/W	T.C.	Cut		Cut	T.C.	S/W	

43.15 ✓	42.35 ✓	42.23 ✓	41.83 ✓	42.44 ✓	41.78 ✓	42.27 ✓	42.33 ✓	41.7 ✓
4.8	5.60	5.67	6.12	5.51	6.17	5.68	5.57	6.25
77	39.5	34.5	34	B.L.	34	34.5	39.5	77
	S/W	T.C.	Cut		Cut	T.C.	S/W	

43.5 ✓	42.47 /	42.45 ✓	41.99 ✓	42.63 ✓	41.99 ✓	42.49 ✓	42.51 ✓	41.6 ✓
4.45	5.48	5.50	5.96	5.27	5.96	5.46	5.44	6.35
91	39.5	34.5	34	B.L.	34	34.5	39.5	91
	S/W	T.C.	Cut		Cut	T.C.	S/W	

MCFCD	Flood Control Study Lindsay Rd @ Freeway			
		1247.95 ↑		
12+00				
11+00				
10+00				
9+51	℄ Fwy			
TP#1	6.01	49.10 ✓ ↑	4.86	43.09 ✓
9+00				

NOTE'S	BY	DATE
CHECKED	JM	11-10-87
COPIED		
	TO	DATE
DELIVERED	LS	11-10-87

11/4/87

336
740

43.25 ✓
42.8 ✓ 42.74 ✓ 42.36 ✓ 42.83 ✓ 42.16 ✓ 42.67 ✓ 42.79 ✓ 42.0 ✓
4.7 5.15 5.21 5.47 5.07 5.79 5.28 5.2 5.75
82 39.5 34.5 34 B.L. 34 34.5 39.5 34
S/W T.C. Gut Gut T.C. S/W

43.4 ✓
42.85 ✓ 42.39 ✓ 43.0 ✓ 42.4 ✓ 42.9 ✓ 42.93 ✓ 42.5 ✓
1+35 5.10 5.36 4.95 5.55 5.05 5.02 5.45
29 34.5 34 B.L. 34 34.5 37.5 56
T.C. S/W Gut T.C S/W

43.05 ✓
43.06 ✓ 42.96 ✓ 43.23 ✓ 42.59 ✓ 43.08 ✓ 43.05 ✓
4.9 4.89 5.37 4.72 5.36 4.37 4.9
41 34.5 34 B.L. 34 34.5 47
T.S. TC Gut Gut T.C. T.S.

43.25 ✓
43.2 ✓ 42.7 ✓ 43.34 ✓ 42.66 ✓ 43.11 ✓ 42.8 ✓
4.7 4.75 5.25 4.61 5.29 4.79 5.15
41 34.5 34 B.L. 34 34.5 47
T.S. T.C. Gut Gut T.C. T.S

10+00 - T.C 34

43.35 ✓
43.31 ✓ 42.83 ✓ 43.48 ✓ 42.78 ✓ 43.21 ✓ 43.3 ✓
5.75 5.79 6.27 5.62 6.32 5.84 5.8
41 34.5 34 B.L. 34 34.5 47
T.S. T.C. Gut Gut T.C. T.S.

MCFCD

Flood Control Study
Lindsay Rd @ Freeway

1749.10

11/4/87

306
142

8+00	43.55 ✓	43.47 ✓	42.98 ✓	43.68 ✓	43.03 ✓	43.53 ✓	43.54 ✓	43.05 ✓
	5.55	5.63	6.12	5.32	6.07	5.57	5.56	6.35
	41	34.5	34	B.L.	34	34.5	39.5	45
	Fc	T.C.	Cut		C.I	T.C.	S/W	Fc
7+00	43.38 ✓	43.65 ✓	43.15 ✓	43.38 ✓	43.17 ✓	43.67 ✓	43.68 ✓	43.0 ✓
	5.3	5.45	5.95	5.3	5.93	5.43	5.42	6.1
	41	34.5	34	B.L.	34	34.5	39.5	44
	Fc	T.C.	Cut		Cut	T.C.	S/W	Fc
6+00	43.5 ✓	43.44 ✓	42.94 ✓	43.16 ✓	43.01 ✓	43.51 ✓	43.52 ✓	42.7 ✓
	5.6	5.66	6.16	5.50	6.09	5.59	5.58	6.4
	41	34.5	34	B.L.	34	34.5	39.5	43
	Fc	T.C.	Cut		Cut	T.C.	S/W	Fc
5+00	43.31 ✓	43.25 ✓	42.77 ✓	43.39 ✓	42.74 ✓	43.32 ✓		43.3 ✓
	5.79	5.85	6.33	5.71	6.36	5.83		5.80
	39.5	34.5	34	B.L.	34	34.5		39.5
	S/W	T.C.	Cut		Cut	T.C.		S/W
5+00	43.5 ✓							42.0 ✓
	5.6							7.1
	74							75
	Fc							Fc

NOTE'S	BY	DATE
CHECKED	Su	11-10-87
COPIES		
	TO	DATE
DELIVERED	LS	11-10-87

MCFCD — Flood Control Study
Lindsay Rd @ Freeway

1249.10

4+00				
4+00				
TP#2	5.29	48.35	6.04	43.06
3+00				
3+00				

1/12/87

306/144

43.14	43.09	42.59	43.15	42.54	43.03	43.08
5.94	6.01	6.51	5.95	6.56	6.03	6.02
39.5	34.5	34	B.L.	34	34.5	39.5
S/W	T.C.	Cut		Cut	T.C.	S/W

43.45	42.1
5.65	7.0
C4	C4
Fc	Fc

T.C. — Rt. — 4+00

42.95	42.91	42.33	42.9	42.38	42.82	42.9
5.40	5.44	6.02	5.45	5.97	5.53	5.45
39.5	34.5	34	B.L.	34	34.5	39.5
S/W	T.C.	Cut		Cut	T.C.	S/W

43.9	43.1
4.45	5.05
C5	C6
	W.H.

Flood Control Study — Lindsay Rd. @ Freeway

MCFCD		1248.35 ↑			
Z700					
Z700					
1403		& Holmes to West			
TP#3	5.77	49.03 ↑ ✓	5.09	43.26 ✓	
TP#2	5.41	48.28 ↑ ✓	6.16	42.87 ✓	
TBM HC-3			4.54	43.74 ✓	(1243.74)

11/4/87

306/146

44.2 ✓	42.23 ✓	41.73 ✓	42.63 ✓	42.18 ✓	42.67 ✓	42.67 ✓
4.15	6.12	6.62	5.67	6.17	5.63	5.63
6.5	34.5 T.C.	34 Intake	B.L.	34 Intake	34.5 T.C.	39.5 S/W1

42.75 ✓
5.6
56
Wall

44.55 ✓	42.36 ✓	41.91 ✓	42.57 ✓	42.13 ✓	42.01 ✓
3.8	5.99	6.44	5.78	6.22	6.34
6.5	34.5	34	B.L.	34 Asph	64 Asph

5100 - T.C. Left

11400 - T.C. Lt.

½" R.B. - Loop Return

	BY	DATE
DESIGNED	JM	11-10-87
DRAWN		
		DATE
CHECKED	LS	11-10-87

MCFCD

35901^{00}	3-WIRE LEVEL RUN, INTEIOR	BLK. #2	9/3-8/87 1-20
35901^{00}	3-WIRE LEVEL RUN, PERIMETER	BLK. 3 (TBM 3-1 TO 3-158)	9/8-15/87 21-128
35901^{00}	3-WIRE LEVEL RUN, INTERIOR BLK. 3	TBM 3-159 TO 180	9/15-16/87 129-148
35901^{00}	3-WIRE LEVEL RUN TO VC-1 BLK #2		9-11-87 149-156

MCFCD
BLK. Z 3-WIRE LEVEL RUN, CLOSE
BLK. # Z

9-3-87
90-105° CLR.

RUGLAND
B. McMURRAY
THOMPSON

805/2

TBM Z-58			1215.648 UNADJUSTED EL.			BC IN HH @ INT. OF McQUEEN & ELLIOT SEE BK. 802/136
	7.17					
	5.98	+5.98	21.628			
	4.79					
				6.285		
TBM Z-85				4.99	-4.99	1216.638 CUT, S. TCD, N. SIDE ELLIOT RD, 550' W. OF McQUEEN
				3.69		
	5.34					
	3.995	+3.995	20.633			
	2.65					
				5.69		
TBM Z-86				4.365	-4.365	1216.268 CUT, S. TCD, N. SIDE ELLIOT RD, 1100' W. OF McQUEEN
				3.04		
	5.53					
	4.205	+4.205	20.473			
	2.885					
				6.345		
TBM Z-87				5.03	-5.03	1215.443 CUT, S. TCD, N. SIDE ELLIOT RD, 1650' W. OF McQUEEN 150' W. OF BRIDGE
				3.71		
	6.12					
	4.855	+4.855	20.298			
	3.595					

9-3-87

McFCD						
BLK. Z			1220.298			
				6.435		
TBM 2-88				5.135	−5.135	1215.163
				3.84		
	6.54					
	5.03	+5.03	20.193			
	3.525					
				5.425		
RO-21				3.985	−3.985	1216.208
				2.55		

□ CUT, S. TCD, N. SIDE ELLIOT RD. 2200' W. OF McQUEEN, 60' E. OF W. END OF CONC. DITCH

BC IN HH, @ INT. OF ELLIOT & RR TRACK <1216.178> SEE BK 802/66

MCFCD

805/6

3-WIRE LEVEL RUN, INTERIOR

9-3-87

BLK. Z

HC-8				〈1210.508〉 UNADJUSTED EL.			✓ CPS IN ℄ McQUEEN RD, 440' S. OF RR. ± 1900' N. OF BASELINE RD. SEE BK. 802/152
	5.215						
	4.15	+4.15	14.658				
	3.08						
				3.49			
TBM 2-89				2.36	-2.36	1212.298	□ CUT, W. END OF HEADWALL E. SIDE OF McQUEEN RD, 200' N. OF HOUSTON AVE.
				1.23			
	4.38						
	2,975	+2.975	15.273				
	1.57						
				7.825			
TBM 2-90				6.40	-6.40	1208.873	□ CUT, TOP OF CURB, SE COR. OF INT. OF McQUEEN & SAN PEDRO ST.
				4.975			
	7.13						
	5.73	+5.73	14.603				
	4.33						
				6.78			
TBM 2-91				5.42	-5.42	1209.183	□ CUT, TOP OF CURB, E. SIDE McQUEEN RD, 600' S. OF SAN PEDRO
				4.055			
	7.225						
	6.025	+6.025	15.208				
	4.82						

MCFCD

BLK. 2 — 1215.208 ↑ — 9-3-87

				6.39			
TBM 2-92				5.00	-5.00	1210.208	□ CUT, TOP OF CURB, E. SIDE McQUEEN RD, 1150' S. OF SAN PEDRO ST.
				3.61			
	6.49						
	5.26	+ 5.26	15.468 ↑				
	4.03						
				6.88			
TBM 2-93				5.49	- 5.49	1209.978	□ CUT, TOP OF CURB, E SIDE McQUEEN RD, 800' N. OF GUADELUPE RD.
				4.10			
	7.13						
	5.865	+5.865	15.843 ↑				
	4.595						
				6.245			
TBM 2-94				4.84	-4.84	1211.003	□ CUT, TOP OF CURB, E. SIDE McQUEEN RD, 250' N. OF GUADELUPE RD.
				3.43			
	6.55						
	5.905	+ 5.905	16.908 ↑				
	5.255						
SIDESHOT		- 4.95				1211.958	TOP OF PAVEMENT, TARGET ELEV. @ RO-10
				6.31			
RO-10				5.76	-5.76	1211.148	BC IN HH @ INT. OF McQUEEN & GUADELUPE
				5.21			

MCFCD
BLK. 2

9-3-87

	6.53					
	5.585	+5.585	16.733			
	4.645					
				5.43		
TBM 2-95				4.43	- 4.43	1212.303
				3.43		
	4.26					
	3.72	+3.72	16.023			
	3.18					
SIDESHOT		- 4.51			1211.513	
				5.26		
HC-12				4.51	- 4.51	1211.513
				3.76		
	6.185					
	4.90	+4.90	16.413			
	3.62					
				4.75		
TBM 2-96				3.13	- 3.13	1213.283
				1.51		
	5.26					
	3.885	+3.885	17.168			
	2.51					

TOP OF PAVEMENT, TARGET ELEV. @ HC-12

CPS, E. OF McQUEEN RD, 600' S. OF GUADELUPE RD.

CPS IN W. FACE OF PP #147 E. SIDE OF McQUEEN, 1150' S. OF GUADELUPE

CPS IN W. FACE PP # 148 E. SIDE McQUEEN RD 390' S. OF GUADELUPE

9-8-87

RUGLAND
B. McMURRAY
VYNE

805/12

MCFCD							
BLK. 2			1217.168				
				4.54			
TBM 2-97				3.16	-3.16	1214.008	CPS IN W. FACE OF PP # 145, E. SIDE OF McQUEEN, 1700' S. OF GUADELUPE
				1.78			
	5.35						
	3.985	+3.985	17.993				
	2.62						
				3.965			
TBM 2-98				2.575	-2.575	1215.418	CPS IN W. FACE OF PP # 143, E. SIDE McQUEEN, N. OF WESTERN CANAL
				1.19			
	5.915						
	5.15	+5.15	20.568				
	4.38						
SIDESHOT		-3.32		1217.248			TOP OF PAVEMENT, TARGET ELEV @ RO-17
				4.41			
RO-17				3.51	-3.51	1217.058	BC IN HH @ INT. OF ℄ McQUEEN & WESTERN CANAL
				2.61			
	4.125						
	2.905	+2.905	19.963				
	1.685						

9-8-87

MCFCD BLK. 2			1219.963			
				4.36		
				3.13	−3.13	1216.833
TBM 2-99				1.90		
	5.395					
	4.045	+4.045	20.878			
	2.695					
				5.03		
				3.735	−3.735	1217.143
TBM 2-100				2.435		
	4.92					
	3.59	+3.59	20.733			
	2.255					
				4.755		
				3.435	−3.435	1217.298
TBM 2-101				2.11		
	5.17					
	3.825	+3.825	21.123			
	2.48					
				4.74		
				3.395	−3.395	1217.728
TBM 2-102				2.05		
	3.56					
	3.245	+3.245	20.973			
	2.93					

CPS IN W. FACE OF PP # 74 E. SIDE McQUEEN RD, 500' S. OF WESTERN CANAL.

CPS IN W. FACE OF PP # 72, E. SIDE McQUEEN RD, 1050 S. OF WESTERN CANAL

CPS IN W. FACE OF PP # 70 E. SIDE OF McQUEEN RD, 1600' S. OF WESTERN CANAL

CPS IN E. FACE OF PP # 88 W. SIDE McQUEEN RD, 600' N. OF ELLIOT RD.

9-8-87

MCFCD BLK 2			1220.973 ^		
SIDESHOT		- 4.22		1216.753	TOP OF PAVEMENT, TARGET ELEV. @ HC-20
				4.645	
HC-20				4.215	- 4.215 1216.758 CPS IN ℄ OF McQUEEN RD, 450' N. OF ELLIOT
				3.79	
	5.625				
	4 ~~8~~.695	+4.695	21.453 ^		
	3.765				
				7.02	
TBM 2-58				5.825	- 5.825 1215.628 BC IN HH @ INT. OF ELLIOT & McQUEEN BK. 802/136 <1215.648> UNADJUSTED
				4.63	

MCFCD

BLK. 2 RUN TO VC-9, SEC. 15

9-8-87

TBM 2-79			17.778	1213.918 UNADJUSTED EL.			☐ CUT ON HEADWALL, 15' E. OF RR, 1/2 MILE S. OF ELLIOT RD. BK. 802/148
	5.14						
	3.86	+3.86					
	2.585						
				5.66			
TP-1				4.43	-4.43	1213.348	HUB, S. SIDE FIELD RD, 600' E. OF RR TRACK
				3.205			
	6.59						
	5.34	+5.34	18.688				
	4.09						
				5.74			
TP-2				4.52	-4.52	1214.168	HUB, S. SIDE FIELD RD, 1200' E. OF RR
				3.30			
	6.185						
	5.365	+5.365	19.533				
	4.55						
				4.13			
VC-9				3.32	-3.32	1216.213	R-BAR, FLUSH WITH TOP OF GROUND, S. OF MID-SEC. LINE, 1/4 MILE E. OF RR E. SIDE OF CONC. DITCH
				2.505			
	4.085						
	3.275	+3.275	19.488				
	2.47						

9-8-87

MCFCD BLK. 2			1219.488 ↑				
				6.15			
TP-2				5.325	− 5.325	1214.163	HUB
				4.5°			
	5.61						
	4.385	+4.385	18.548 ↑				
	3.165						
				6.455			
TP-1				5.205	−5.205	1213.343	HUB
				3.955			
	5.60						
	4.39	+4.39	17.733 ↑				
	3.185						
				5.12			
TBM 2-79				3.825	−3.825	1213.908	□ CUT ON HDWALL
				2.53			< 1213.918 >

MCFCD

3-WIRE LEVEL RUN, PERIMETER

BLK. 3

9-8-87

80-102° CLR.

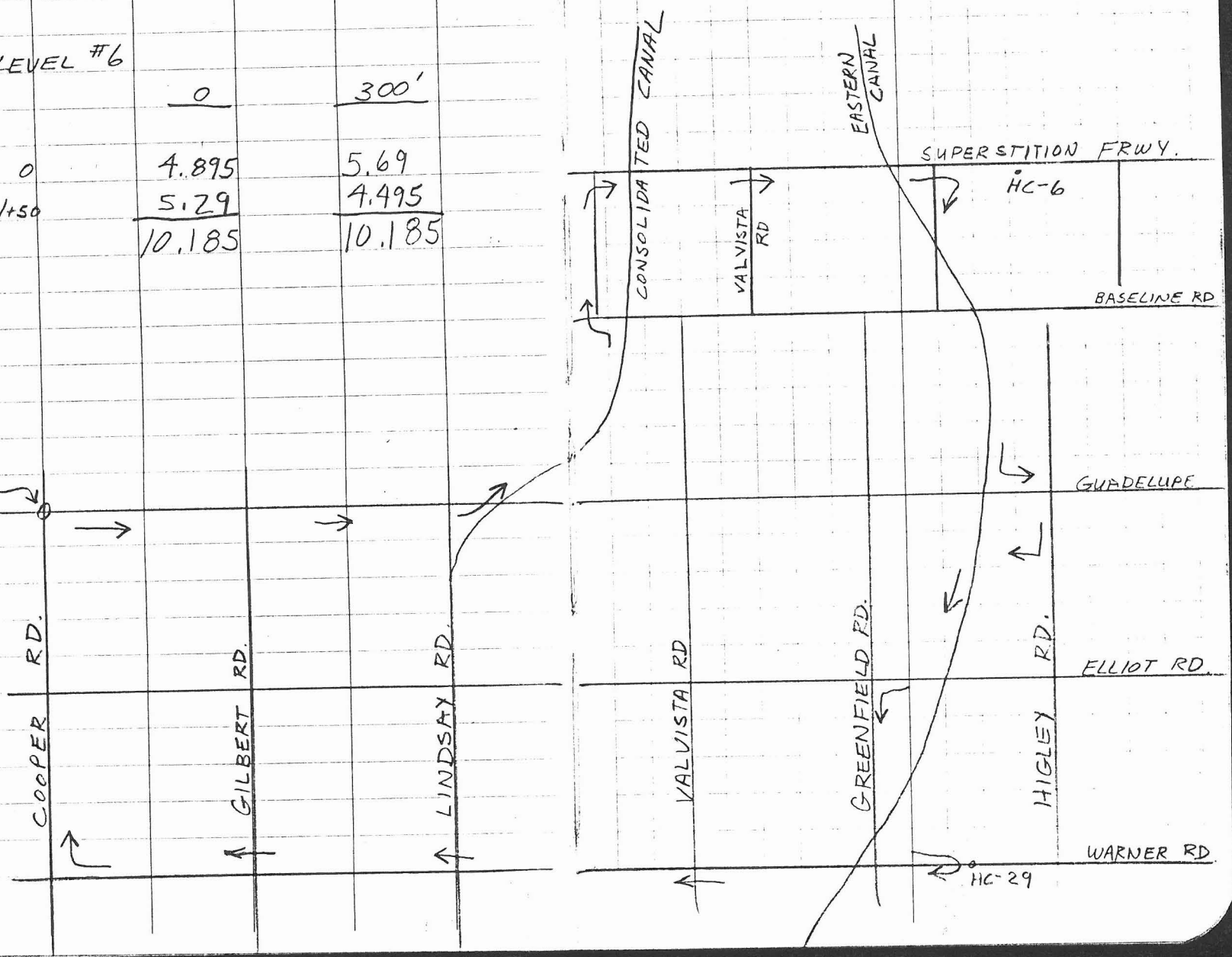
RUGLAND
MCNARRAY
VYNE

805/22

PEG LEVEL #6

	0	300'
⊼ @ 0	4.895	5.69
⊼ @ 1+50	5.29	4.495
	10.185	10.185

TBM
2-39



MCFCD
BLK. 3

9-8-87

805/24

TBM 2-39				(UNADJUSTED 1220.363)	BC IN HH @ INT. OF COOPER & GUADELUPE RD SEE BK. 802/124	
	6.16					
	4.765	+ 4.765	25.128			
	3.37					
				4.105		
TBM 3-1				2.66	- 2.66	1222.468	□ CUT ON S. TCD, N. SIDE GUADELUPE RD, 550' E. OF COOPER RD.
	5.99			1.22		
	4.57	+4.57	27.038			
	3.15					
				5.515		
TBM 3-2				4.14	- 4.14	1222.898	□ CUT ON S. TCD, N. SIDE GUADELUPE, 1100' E. OF COOPER RD.
	6.54			2.765		
	5.12	+5.12	28.018			
	3.705					
				4.915		
TBM 3-3				3.475	- 3.475	1224.543	□ CUT ON S. TCD, N. SIDE GUADELUPE, 15' E. OF GOLDEN KEY ST.
				2.04		
	5.785					
	4.495	+ 4.495	29.038			
	3.21					

MCFCD

9-8-87

ELK. 3			1229.038 ↑				
				5.23			
TBM 3-4				4.04	-4.04	1224.998	□ CUT ON S. TCD, N. SIDE OF GUADELUPE, 10' E. OF MONTEREY ST.
				2.85			
	6.63						
	5.335	+5.335	30.333 ↑				
	4.04						
				5.205			
TBM 3-5				4.13	-4.13	1226.203	BC IN HH @ INT. OF GUADELUPE & NEELY ST.
				3.055			
	6.955						
	5.545	+5.545	31.748 ↑				
	4.13						
				5.285			
TBM 3-6				3.81	-3.81	1227.938	□ CUT, TOP OF CURB, N. SIDE OF GUADELUPE, 550' E. OF NEELY ST.
				2.34			
	6.27						
	4.865	+4.865	32.803 ↑				
	3.455						
				4.895			
TBM 3-7				3.56	-3.56	1229.243	□ CUT, TOP OF CURB, N. SIDE OF GUADELUPE, 225' E. OF BIRCH ST.
				2.22			
	6.64						
	5.25	+5.25	34.493 ↑				
	3.865						

9-8-87

MCFCD
BLK. 3

34.493

				5.345		
TBM 3-8				3.86	-3.86	1230.633	□ CUT, TOP OF CURB, NE COR. OF INT. OF OAK & GUADELUPE
				2.37		
	6.83					
	5.37	+5.37	36.003			
	3.905					
				6.34		
TBM-3-9				5.055	-5.025	1230.948	□ CUT, TOP OF CURB, N. SIDE GUADELUPE, 600' E. OF OAK ST.
				3.775		
	6.335					
	5.37	+5.37	36.318			
	4.405					
				6.105		
TBM 3-10				4.96	-4.96	1231.358	BC IN HH @ INT. OF GUADELUPE & GILBERT RD.
				3.82		
	6.11					
	4.535	+4.535	35.893			
	2.965					
				6.20		
TBM 3-10A				4.745	-4.745	1231.148	□ CUT, TOP OF CURB, W. SIDE GILBERT RD, 600' S. OF GUADELUPE
				3.29		
	6.105					
	5.40	+5.40	36.548			
	4.69					

MCFCD

BLK. 3

9-8-87

			1236.548		
SIDESHOT		−4.58		1231.968	TOP OF PAVEMENT, TARGET ELEV @ RO-11
				5.655	
				4.575	−4.575 1231.973 CPS, IN LEFT, S. BOUND LANE OF GILBERT RD, 100' N. OF OLIVE AVE.
RO-11				3.495	
	5.57				
	4.485	+4.485	36.458		
	3.405				
				6.015	
				5.31	−5.31 1231.148 □ CUT ON TOP OF CURB
TBM 3-10A				4.60	
	6.29				
	4.775	+4.775	35.923		
	3.265				
				6.07	
				4.57	−4.57 1231.353 BC IN HH @ GILBERT & GUADELUPE (ADJ. TO ELEV. PG 28)
TBM 3-10				3.07	
	6.145				
	4.725	+4.725	36.083		
	3.31				
				5.37	
				3.94	−3.94 1232.143 □ CUT, TOP OF CURB, N. SIDE GUADELUPE RD, 550' E OF GILBERT RD.
TBM 3-11				2.505	
	7.18				
	5.795	+5.795	37.938		
	4.405				

MCFCD

9-8-87

BLK. 3			1237.938			
				5.87		
				4.48	- 4.48	1233.458
TBM 3-12				3.09		
	6.55					
	5.045	+5.045	38.503			
	3.54					
				5.65		
				4.34	- 4.34	1234.163
TBM 3-13				3.025		
	6.445					
	5.07	+5.07	39.233			
	3.70					
				5.345		
				4.125	- 4.125	1235.108
TBM 3-14				2.905		
	5.49					
	4.98	+4.98	40.088			
	4.47					
				5.05		
				4.52	- 4.52	1235.568
TBM 3-15				3.995		
	7.13					
	5.70	+5.70	41.268			
	4.27					

□ CUT, TOP OF CURB, N. SIDE OF GUADELUPE, 10' W. OF PALM ST.

□ CUT, TOP OF CURB, S. SIDE GUADELUPE RD 250' W. OF BRECKENRIDGE MANOR ENTRANCE

□ CUT, TOP OF CURB, S. SIDE GUADELUPE, 250' E. OF BRECKENRIDGE MANOR ENTRANCE

BC IN HH @ INT. OF GUADELUPE & BURK ST.

9-8-87

MCFCD BLK. 3			1241.268 ↑			
				5.635		
TBM 3-16				4.19	-4.19	1237.078
				2.75		
	6.99					
	5.495	+5.495	42.573 ↑			
	4.00					
				5.61		
TBM 3-17				4.22	-4.22	1238.353
				2.93		
	6.55					
	5.135	+5.135	43.488 ↑			
	3.715					
				5.49		
TBM 3-18				4.09	-4.09	1239.398
				2.745		
	7.21					
	5.825	+5.825	45.223 ↑			
	4.435					
				6.09		
TBM 3-19				4.675	-4.675	1240.548
				3.265		
	7.11					
	6.07	+6.07	46.618 ↑			
	5.025					

□ CUT, S. TCD, N. SIDE OF GUADELUPE, 550' E. OF BURK ST.

□ CUT, TOP OF CURB, S. SIDE OF GUADELUPE, 100' E. OF CORINNE ST.

□ CUT, TOP OF CURB, S. SIDE GUADELUPE, 700' E. OF CORINNE ST, 50' W. OF E. END OF CURB

□ CUT, S. TCD, N. SIDE OF GUADELUPE RD, 400' W. OF LINDSAY RD.

9-8-87

MCFCD BLK. 3

1246.618

				5.075		
TBM 3-20				4.21	- 4.21	1242.408
				3.34		
	7.76					
	6.10	+6.10	48.508			
	4.44					
				4.045		
RO-12-				2.38	- 2.38	1246.128
				1.715		
	7.125					
	5.495	+5.495	51.623			
	3.865					
				6.41		
TBM 3-21				4.735	- 4.735	1246.888
				3.06		
	4.55					
	3.17	+3.17	50.058			
	1.79					
				6.49		
TBM 3-22				5.085	- 5.085	1244.973
				3.685		
	7.30					
	5.93	+ 5.93	50.903			
	4.56					

LS CAP #16588 @ INT. OF GUADELUPE & LINDSAY, FLUSH WITH TOP OF PAVEMENT

P-K NAIL ON BRIDGE, ℄ GUADELUPE RD, 660' E. OF LINDSAY, FLUSH WITH TOP OF CONC. BRIDGE

CPS IN S. FACE OF PP# 77 N. SIDE GUADELUPE, 650' E. OF CONSOLIDATED CANAL

□ CUT, TOP OF CURB, NE COR. INT. OF GUADELUPE & VAL VISTA PARK BLVD.

MCFCD

9-8-87

BLK. 3			1250.903 ↑				
				4.865			
TBM 3-23				3.405	− 3.405	1247.498	CPS IN S. FACE OF PP #73 N. SIDE OF GUADELUPE 600' E. OF VAL VISTA PARK BLVD.
				1.945			
	5.995						
	5.105	+ 5.105	52.603 ↑				
	4.22						
				4.38			
TBM 3-24				3.30	− 3.30	1249.303	□ CUT, TOP OF CURB, S. SIDE GUADELUPE RD, 40' E. OF W. ENTRANCE OF PATTERSON SCHOOL
				2.215			
	5.785						
	5.21	+ 5.21	1254.513 ↑				
	4.64						
SIDESHOT		− 5.21	1249.303	TOP OF PAVEMENT, TARGET ELEV. @ HC-15			
				5.915			
HC-15				5.19	− 5.19	1249.323	CPS IN S. EDGE OF E. BOUND LANE OF GUADELUPE RD, 75' E. OF MAIN ENTRANCE TO PATTERSON SCHOOL
				4.47			
	5.90						
	5.18	+ 5.18	54.503 ↑	★	BEGIN RUN BACK TO RO-12		
	4.465						

9-8-87

MCFCD
BLK. 3

1254.503 ↑

				5.775		
TBM 3-24				5.20	−5.20	1249.303	□ CUT, TOP OF CURB
				4.625		
	4.75					
	3.84	+3.84	53.143 ↑			
	2.93					
				6.71		
TBM 3-23				5.65	−5.65	1247.493	CPS IN PP #73
				4.59		
	4.41					
	2.985	+2.985	50.478 ↑			
	1.565					
				6.88		
TBM 3-22				5.52	−5.52	1244.958	□ CUT, TOP OF CURB
				4.16		
	6.43					
	5.095	+5.095	50.053 ↑			
	3.755					
				4.575		
TBM 3-21				3.175	−3.175	1246.878	CPS IN PP # 77
				1.78		
	6.11					
	4.665	+4.665	51.543 ↑			
	3.225					

9-8-87

MCFCD BLK. 3			1251.543			
				7.285		
RO-12				5.43	-5.43	1246.113
				3.58		
	5.855					
	4.24	+4.24	50.368			
	2.625					
				6.71		
TBM 3-25				5.29	-5.29	1245.078
				3.865		
	6.02					
	4.63	+4.63	49.708			
	3.245					
				6.55		
TBM 3-26				5.155	-5.155	1244.553
				3.755		
	6.31					
	4.925	+4.925	49.478			
	3 54					
				5.53		
TBM 3-27				4.13	-4.13	1245.348
				2.73		
	6.405					
	5.02	+5.02	50.368			
	3.635					

P-K NAIL IN BRIDGE @ GUADELUPE & CONSOLIDATED CANAL, ADJ. TO ELEV. ON pg. 36 <1246.128>

CPS IN E. FACE, PP #18 W. SIDE CONS. CANAL, 600' N. OF GUADELUPE RD.

CPS IN E. FACE OF PP #16 W. SIDE CONSOL. CANAL, 1200' N. OF GUADELUPE RD.

CPS N E. FACE OF PP #14 W. SIDE CONSOL. CANAL, 1800' N. OF GUADELUPE RD.

MCFCD

9-8-87

			1250.368				
				6.015			
TBM 3-28				4.615	-4.615	1245.753	CPS IN E. FACE OF PP # 12 W. SIDE CONSOL. CANAL, 2350' N. OF GUADELUPE
				3.215			
	5.28						
	3.895	+3.895	49.648				
	2.51						
				4.215			
TBM 3-29				2.78	-2.78	1246.868	CPS IN E. FACE OF PP # 10 W. SIDE CONSOL. CANAL, 2900' N. OF GUADELUPE @ NE COR. OF SRP WELL ENCLOSURE #31.3E - 0.5S
				1.35			
	5.02						
	3.665	+3.665	50.533				
	2.31						
				5.59			
TBM 3-30				4.215	-4.215	1246.318	CPS IN PP # 8, W. SIDE OF CONSOL. CANAL, 3450' N. OF GUADELUPE
				2.835			
	4.83						
	4.285	+4.285	50.603				
	3.74						
				6.18			
VC-3				5.65	-5.65	1244.953	R-BAR, BETWEEN CONSOL. CANAL & PRIVATE DITCH 3600' N. OF GUADELUPE
				5.12			
	6.32						
	5.615	+5.615	50.568				
	4.91						

9-8-87

MCFCD BLK. 3			1250.568 ↑			
				5.63		
TBM 3-31				4.655	- 4.655	1245.913
				3.68		
	6.48					
	5.11	+ 5.11	51.023 ↑			
	3.74					
				5.41		
TBM 3-32				4.07	- 4.07	1246.953
				2.73		
	6.13					
	4.975	+ 4.975	51.928 ↑			
	3.82					
				5.735		
TBM 3-33				4.53	- 4.53	1247.398
				3.32		
	6.825					
	5.475	+ 5.425	52.873 ↑			
	4.13					
				2.77		
TBM 3-34				1.595	- 1.595	1251.278
				0.415		
	2.715					
	1.50	+ 1.50	52.778 ↑			
	0.28					

CPS IN E. FACE OF PP #6 W. SIDE CONSOL. CANAL 4000' N. OF GUADELUPE
CPS IN E. FACE OF PP #4 W. SIDE CONSOL. CANAL, 900' S. OF BASELINE RD.
CPS IN E. FACE OF PP #2 W. SIDE OF CONSOL. CANAL 400' S. OF BASELINE RD.
□ CUT ON SW. COR OF SRP BOX SW. COR. OF INT. OF CONSOLIDATED CANAL & BASELINE RD.

9-8-87

MCFCD BLK. 3			1252.778 ↑				
				9.425			
TBM 3-35				8.06	−8.06	1244.718	□ CUT, TOP OF CURB, N. SIDE BASELINE RD, 550' W. OF CONSOLIDATED CANAL
				6.70			
	5.245						
	4.34	+4.34	49.058 ↑				
	3.44						
				6.97			
TBM 3-36				5.765	−5.765	1243.293	□ CUT, TOP OF CURB, N. SIDE BASELINE RD, 300' E. OF LINDSAY RD.
				4.56			
	5.115						
	4.195	+4.195	47.488 ↑				
	3.27						
SIDESHOT		−4.54		1242.948	TOP OF PAVEMENT, TARGET ELEV. @ RO-6		
				5.755			
RO-6				5.12	−5.12	1242.368	BCIN HH @ INT. OF BASELINE & LINDSAY
				4.485			
	5.77						
	4.435	+4.435	46.803 ↑				
	3.10						
				6.45			
TBM 3-37				5.165	−5.165	1241.638	□ CUT, TOP OF CURB, E. SIDE LINDSAY RD, 100' N. OF JAVELINA ST.
				3.88			

MCFCD
BLK. 3

9-9-87
80-105° CLR.

RUGLAND
S. McMURRAY
THOMPSON

805/50

	5.67						
	4.21	+4.21	45.848				
	2.755						
				5.52			
TBM 3-38				4.275	-4.275	1241.573	□ CUT, TOP OF CURB, E. SIDE LINDSAY RD, 275' S. OF INVERNESS ST.
				3.03			
	5.47						
	4.15	+4.15	45.723				
2.83							
				5.62			
TBM 3-39				4.265	-4.265	1241.458	□ CUT, TOP OF CURB, E. SIDE LINDSAY RD, 275' N. OF INVERNESS ST.
				2 8.915			
	6.30						
	5.05	+5.05	46.508				
	3.795						
				5.705			
TBM 3-40				4.385	-4.385	1242.123	□ CUT, TOP OF CURB, E. SIDE LINDSAY RD, 175' N. OF IRWIN ST.
				3.065			
	7.295						
	6.12	+6.12	48.243				
	4.94						
				5.195			
HC-3				4.50	-4.50	1243.743	R-BAR, FLUSH WITH GROUND, 120' E. OF LINDSAY, 35' S. OF S. TOE OF SUPER. FRWY.
				3.805			

MCFCD
BLK. 3

805/52

9-9-87

	7.31					
	6.01	+6.01	49.753			
	4.705			4.625		
TBM 3-41				3.375	-3.375	1246.378
				2.125		
	6.21					
	4.99	+4.99	51.368			
	3.775					
				3.815		
TBM 3-42				2.905	-2.905	1248.463
				1.995		
	3.88					
	2.88	+2.88	51.343			
	1.875					
				5.39		
TBM 3-43				4.375	-4.375	1246.968
				3.36		
	6.92					
	5.52	+5.52	52.488			
	4.125					
				4.94		
TBM 3-44				3.64	-3.64	1248.848
				2.335		
	8.32					
	7.01	+7.61	55.858			
	5.705					

R-BAR, 1' N. OF S. FRWY, R/W FENCE, 700' E. OF LINDSAY RD.

R-BAR, 35' N. OF S. FRWY. R/W FENCE, 1' EAST OF FENCE W. SIDE CONSOLIDATED CANAL

R-BAR, 1' N. OF S. FRWY R/W FENCE, 400' E. OF CONSOL. CANAL

R-BAR, 1' N OF S. FRWY R/W FENCE, 1000' E. OF CONSOL. CANAL

9-9-87

mcF CD BLK. 3			1255.858 ↑				
				3.22			
TBM 3-45				1.975	-1.975	1253.883	R-BAR, 20' N. OF S. FRWY. R/W FENCE, 2' W. OF FENCE, W. SIDE OF 32ND ST.
				0.73			
	13.005						
	12.69	+12.69	66.573 ↑				
	12.38						
				2.32			
TBM 3-46				1.80	-1.80	1264.773	□ CUT, TOP OF CURB, E. SIDE 32ND ST, 10' S. OF FRWY, OVERPASS BRIDGE RAIL
				1.275			
	5.46						
	5.095	+5.095	69.868 ↑				
	4.735						
SIDESHOT		-3.33		1266.538	TOP OF CONC. TARGET ELEV. @ RO-3		
				3.995			
RO-3				3.31	-3.31	1266.558	ADOT BC, & 32ND ST. & SUPERSTION FRWY, TOP OF OVERPASS
				2.62			
	3.93						
	3.245	+3.245	69.803 ↑				
	2.555						
				5.39			
TBM 3-46				5.03	-5.03	1264.773	□ CUT ON CURB
				4.67			

9-9-87

MCFCD BLK. 3							
	2.74						
	1.46	+ 1.46		1266.233			
	0.18						
					5.705		
TBM 3-47					4.375	-4.375	1261.858
					3.05		
	6.64						
	5.46	+ 5.46		67.318			
	4.275						
					5.50		
HC-4					4.42	-4.42	1262.898
					3.34		
	7.15						
	5.895	+ 5.895		68.793			
	4.635						
					5.825		
TBM 3-48					4.545	-4.545	1264.248
					3.265		
	6.88						
	5.645	+ 5.645		69.893			
	4.405						
					6.05		
TBM 3-49					4.77	-4.77	1265.123
					3.49		
	6.575						
	5.19	+ 5.19		70.313			
	3.805						

R-BAR, TOP OF BERM, S. SIDE OF FRWY, 550' E. OF 32ND ST.		
R-BAR @ GRND. LEVEL, TOP OF BERM S. SIDE OF FRWY. 1106' E. OF 32ND ST.		
R-BAR, TOP OF BERM, S. SIDE OF FRWY, 1650' E. OF 32ND ST.		
R-BAR, TOP OF BERM, S. SIDE OF FRWY, 600' W. OF VAL VISTA DR.		

MCFCD
BLK. 3

9-9-87

			1270.313				
				5.25			
TBM 3-50				3.705	- 3.705	1266.608	□ CUT, TOP OF CURB, W. SIDE VAL VISTA RD, 6' S. OF SIGNAL LIGHT POLE
				2.165			
	3.605						
	2.96	+ 2.96	69.568				
	2.32						
				8.58			
TBM 3-51				7.795	- 7.795	1261.773	R-BAR, 1' N. OF S. FRWY R/W FENCE, 200' E. OF VAL VISTA RD.
				7.005			
	5.96						
	5.16	+ 5.16	66.933				
	4.365						
				4.63			
TBM 3-52				3.79	- 3.79	1263.143	R-BAR, 1' N. OF S. FRWY. R/W FENCE, 500' E. OF VAL VISTA RD, @ ⊀ PT. OF FENCE
				2.95			
	6.595						
	5.255	+ 5.255	68.398				
	3.92						
				5.675			
TBM 3-53				4.41	- 4.41	1263.988	R-BAR, 1' N. OF S. FRWY R/W FENCE, 1050' E. OF VAL VISTA RD.
				3.145			
	7.245						
	5.93	+ 5.93	69.918				
	4.61						

MCFCD
BLK. 3

1269.918

				5.65		
TBM 3-54				4.32	-4.32	1265.598
				2.985		
	10.35					
	9.285	+9.285	74.883			
	8.225					
				2.425		
TBM 3-55				1.435	-1.435	1273.448
				0.45		
	2.58					
	2.035	+2.035	75.483			
	1.49					
				8.475		
TBM 3-56				7.925	-7.925	1267.558
				7.37		
	6.31					
	5.05	+5.05	72.608			
	3.79					
				3.205		
TBM 3-57				2.145	-2.145	1270.463
				1.09		
	6.215					
	5.105	+5.105	75.568			
	3.99					

9-9-87

R-BAR, 1' N. OF S. FRWY R/W FENCE, 400' W. OF 39TH ST.
□ CUT, TOP OF CURB, W. SIDE 39TH ST., 10' S. OF S. FRWY. R/W FENCE
R-BAR, @ TOE OF SLOPE, 10' N. OF S. FRWY R/W FENCE 100' E. OF 39TH ST.
R-BAR 1' N. OF SRP BOX STRUC. @ S. FRWY R/W FENCE, 700' E. OF 39TH ST.

MCFCD
BLK. 3

1275.568

4.57

TBM 3-58

3.38

2.185

6.925

5.69 +5.69

77.878

4.455

4.89

TBM 3-59

3.715

2.545

7.06

5.82 +5.82

79.983

4.575

4.60

TBM 3-60

3.41

2.225

11.815

11.11 +11.11

87.683

10.41

10.73

HC-5

10.11

9.99

10.305

9.025 +9.025

86.598

~~8~~7.74

9-9-87

-3.38	1272.188	R-BAR, 1'N. OF S. FRWY R/W FENCE, 1250' E. OF 39TH ST.
-3.715	1274.163	R-BAR, 1'N. OF S. FRWY. R/W FENCE, 1775' E. OF 39TH ST
-3.41	1276.573	R-BAR, 1'N. OF S. FRWY. R/W FENCE, @ X PT. OF FENCE, W. SIDE GREENFIELD OFF RAMP
-10.11	1277.573	R-BAR @ GRND. LEVEL BETWEEN FRWY & GREENFIELD OFF RAMP

805/62

MCFCD
BLK. 3

9-9-87

			1286.598 ↑			
				5.11		
TBM 3-61				3.855	-3.855	1282.743
				2.605		
	6.55					
	5.285	+5.285	88.028 ↑			
	4.02					
SIDESHOT		-3.43	1284.598			
				4.49		
RO-4				3.41	-3.41	1284.618
				2.33		
	7.015					
	5.71	+5.71	90.328 ↑			
	4.405					
				8.71		
TBM 3-62				7.645	-7.645	1282.683
				6.575		
	6.185					
	4.975	+4.975	87.658 ↑			
	3.76					
				4.905		
TBM 3-63				3.68	-3.68	1283.978
				2.45		

(TOP OF PAVEMENT) TARGET ELEV. @ RO-4

TBM 3-61: R-BAR, 1' N. OF N. EDGE OF OFFRAMP, 300' W. OF GREENFIELD RD.

RO-4: CPS IN ℄ OF GREENFIELD RD, 10' N. OF EASTERN CANAL

TBM 3-62: R-BAR, 1' N. OF S. FRWY. R/W FENCE, 120' E. OF GREENFIELD RD.

TBM 3-63: R-BAR, 1' N. OF S. FRWY. R/W FENCE, 700' E. OF GREENFIELD RD.

MCFCD
BLK. 3

9-9-87

	6.96					
	5.72	+ 5.72	89.698			
	4.475					
				5.115		
TBM 3-64				3.88	−3.88	1285.818
				2.65		
	7.23					
	5.99	+ 5.99	91.808			
	4.75					
				4.67		
TBM 3-65				3.48	−3.49	1288.328
				2.295		
	6.77					
	5.515	+ 5.515	93.843			
	4.26					
				4.905		
TBM 3-66				3.645	−3.645	1290.198
				2.385		
	6.025					
	5.175	+ 5.175	95.373			
	4.33					
				4.765		
HC-6A				3.93	−3.93	1291.443
				3.095		
	12.96					
	12.46	+ 12.46	1303.903			
	11.96					

R-BAR, 1' N. OF S. FRWY R/W FENCE, 1250' E. OF GREENFIELD RD.

R-BAR, 1' N OF S. FRWY. R/W FENCE, 1775' E. OF GREENFIELD RD.

R-BAR, 1' N. OF S. FRWY. R/W FENCE, 2300' E. OF GREENFIELD RD

R-BAR @ GRND. LEVEL, 25' N. OF S. FRWY R/W FENCE, 75' W. OF 48TH ST. 40' NW. OF SRP BOX STRUC.

9-9-87

MCFCD BLK. 3			1303.903			
SIDESHOT		-1.18		1302.725	TOP OF PAVEMENT, TARGET ELEV @ HC-6	
				1.63		
HC-6				1.16	-1.16 1302.743	CPS IN ℄ 48TH ST. ON S. EDGE OF CONC. OVERPASS
				0.695		
	1.34					
	0.87	+0.87	1303.613		★ BEGIN RUN BACK TO RD-4	
	0.40					
				12.66		
HC-6A				12.16	-12.16 1291.453	R-BAR
				11.665		
	4.72					
	3.91	+3.91	95.363			
	3.10					
				6.03		
TBM 3-66				5.155	-5.155 1290.208	R-BAR
				4.28		
	5.065					
	3.805	+3.805	94.413			
	2.545					
				6.925		
TBM 3-65				5.675	-5.675 1288.338	R-BAR
	4.72			4.43		
	3.52	+3.52	91.858			
	2.32					

MCFCD

9-9-87

805/70

BLK. 3			1291.858				
				7.25			
TBM 3-64				6.025	-6.025	1285.833	R-BAR
				4.805			
	5.01						
	3.78	+3.78	89.613				
	2.55						
				6.865			
TBM 3-63				5.61	-5.61	1284.003	R-BAR
				4.36			
	4.96						
	3.73	+3.73	87.733				
	2.50						
				6.23			
TBM 3-62				5.02	-5.02	1282.713	R-BAR
				3.81			
	7.46						
	6.41	+6.41	89.123				
	5.36						
				5.79			
RO-4				4.48	-4.48	1284.643	CPS, E OF GREENFIELD RD. & EASTERN CANAL
				3.17			⟨1284.618⟩ ADJ. TO ELEV.
	3.485						PG. 64
	2.22	+2.22	86.838				
	0.96						

MCFCD
BLK. 3

9-9-87

			1286.838 ↑			
				5.62		
TBM 3-67				4.345	−4.345	1282.493 CPS IN S. FACE OF PP N. SIDE EASTERN CANAL, 500' SE. OF GREENFIELD RD.
				3.07		
	3.97					
	2.735	+2.735	85.228 ↑			
	1.50					
				4.01		
TBM 3-68				2.71	−2.71	1282.518 CPS IN SW FACE OF PP. E. SIDE EASTERN CANAL, 1000' SE. OF GREENFIELD
				1.41		
	4.555					
	3.51	+3.51	86.028 ↑			
	2.47					
				4.68		
TBM 3-69				3.66	−3.66	1282.368 CPS IN W. FACE OF PP, E. SIDE EASTERN CANAL, 1500' SE. OF GREENFIELD
				2.635		
	4.315					
	3.225	+3.225	85.593 ↑			
	2.14					
				5.28		
TBM 3-70				4.18	−4.18	1281.413 CPS IN W. FACE. OF PP, E. SIDE EASTERN CANAL, 500' N. OF BASELINE RD.
				3.075		
	5.315					
	4.115	+4.115	85.528 ↑			
	2.915					

MCFCD
BLK. 3

9-9-87

805/74

			1285.528				
				4.80			
TBM 3-71				3.49	-3.49	1282.038	CPS IN E. EDGE OF PAVED STREET, E. SIDE EASTERN CANAL, N. SIDE ℄ RD.
				2.185			
	6.96						
	6.275	+6.275	88.313				
	5.59						
				4.795			
VC-2				4.305	-4.305	1284.008	P-K NAIL ℄ BASELINE RD. W. EDGE OF EASTERN CANAL BRIDGE, FLUSH WITH TOP OF CONC.
				3.81			
	5.47						
	4.105	+4.105	88.113				
	2.74						
				7.185			
TBM 3-72				5.84	-5.84	1282.273	R-BAR, 2' E. OF E.TCD. EASTERN CANAL, 550' S. OF BASELINE RD.
				4.495			
	6.01						
	4.62	+4.62	86.893				
	3.23						
				6.03			
TBM 3-73				4.655	-4.655	1282.238	R-BAR, 2' E. OF E.TCD. EASTERN CANAL, 1100' S. OF BASELINE RD.
				3.28			
	5.755						
	4.33	+4.33	86.568				
	2.91						

MCFCD
BLK. 3

1286.568

9-9-87

805/76

				6.01		
TBM 3-74				4.655	-4.655	1281.913
				3.30		
	6.68					
	5.245	+5.245	87.158			
	3.81					
				6.62		
TBM 3-75				5.27	-5.27	1281.888
				3.92		
	5.255					
	3.99	+3.99	85.878			
	2.725					
SIDESHOT		-5.54				1280.338
				6.715		
VC-4				5.52	-5.52	1280.358
				4.32		
	7.125					
	5.73	+5.73	86.088			
	4.33					
				8.55		
TBM 3-76				7.17	-7.17	1278.918
				5.79		

R-BAR, 2'E. of E.TCD, EASTERN CANAL, 1650'S. OF BASELINE RD.

R-BAR, 2'E. of E.TCD, EASTERN CANAL, 2200'S. OF BASELINE RD.

TOP OF PAVEMENT, TARGET ELEV. @ VC-4

CPS IN PAVEMENT, E. SIDE EASTERN CANAL, W. END OF HOUSTON ST.

CPS IN E. FACE OF PP W. SIDE EASTERN CANAL, 575 S. OF HOUSTON ST.

MCFCD
BLK. 3

9-10-87
80-105° CLR

RUGLAND
B. McMURRAY
THOMPSON

805/78

		6.69					
		5.37	+ 5.37	84.288			
		4.055					
					7.145		
TBM 3-77					5.965	- 5.965	1278.323
					4.785		
	6.90						
	5.515	+ 5.515		83.838			
	4.13						
					7.70		
TBM 3-78					6.285	- 6.285	1277.553
					4.865		
	7.175						
	5.77	+ 5.77		83.323			
	4.36						
					7.51		
TBM 3-79					6.07	- 6.07	1277.253
					4.625		
	7.525						
	6.065	+ 6.065		83.318			
	4.60						
					4.81		
RO-13					3.41	- 3.41	1279.908
					2.01		

CPS IN E. FACE OF PP, W. SIDE OF CANAL, 1100' S. OF HOUSTON ST.

R-BAR, 1' W. OF CONC. DITCH, W. SIDE EASTERN CANAL, 1650' S. OF HOUSTON ST.

R-BAR, 1' W. OF CONC. DITCH, W. SIDE EASTERN CANAL, 550' N. OF GUADELUPE

P-K NAIL, ℄ GUADELUPE, ℄ OF BRIDGE OVER EASTERN CANAL

MCFCD

BLK. 3

9-10-87

805/80

	6.065					
	4.70	+ 4.70	84.608			
	3.335					
				5.38		
TBM 3-80				3.885	-3.885	1280.723
				2.385		
	6.665					
	5.115	+ 5.115	85.838			
	3.57					
				5.01		
TBM 3-81				3.40	-3.40	1282.438
				1.795		
	7.01					
	5.39	+ 5.39	87.828			
	3.775					
				4.12		
TBM 3-82				2.55	-2.55	~~1285.438~~ 1285.[illegible]
				0.985		
	6.505					
	4.89	+ 4.89	90.168			
	3.27					
				3.995		
TBM 3-83				2.43	-2.43	1287.738
				0.87		
	5.97					
	5.10	+ 5.10	92.838			
	4.23					

CPS IN S. FACE OF PP, N. SIDE GUADELUPE RD. 150' E. OF 48TH ST.

CPS IN S. FACE OF PP, N. SIDE GUADELUPE, 750' E. OF 48TH ST.

CPS IN S. FACE OF PP, N. SIDE GUADELUPE, 1350' E. OF 48TH ST.

CPS IN PP, S. FACE, N. SIDE OF GUADELUPE, [illegible]' W. OF HIGLEY RD.

805/82

9-10-87

MCFCD BLK. 3			1292.838 ↑			
SIDESHOT		− 4.51		1288.328		TOP OF PVMNT, TARGET ELEV. @ RO-14
				5.635		
RO-14				4.795	− 4.795	1288.043 BC IN HH @ INT. OF HIGLEY & GUADELUPE
	5.37			3.96		
	3.96	+ 3.96	92.003 ↑			
	2.55					
				6.825		
TBM 3-84				5.36	− 5.36	1286.643 R-BAR, W. SIDE HIGLEY RD, 575' S. OF GUADELUPE
				3.895		
	6.235					
	4.77	+ 4.77	91.413 ↑			
	3.31					
				6.595		
TBM 3-85				5.20	− 5.20	1286.213 R-BAR, W. SIDE HIGLEY RD, 125' N. OF TREMAINE ST.
				3.81		
	4.77					
	4.295	+ 4.295	90.508 ↑			
	3.815					
SIDESHOT		− 4.08		1286.428		TOP OF PAVEMENT, TARGET ELEV. @ HC-17

805/84

9-10-87

MCFCD
BLK. 3

1290.508

				4.485			
HC-17				4.06	-4.06	1286.448	MARICOPA CO, BC @ INT. OF TREMAINE ST. & HIGLEY RD.
				3.64			
	4.65						
	3.34	+3.34	89.788				
	2.025						
				5.49			
TBM 3-86				4.215	-4.215	1285.573	MARI. CO. BC. @ INT. OF REDFIELD & HIGLEY RD.
				2.94			
	4.81						
	3.38	+3.38	88.953				
	1.955						
				7.395			
TBM3-87				5.995	-5.995	1282.958	CPS IN N. EDGE REDFIELD ST. 575' E. OF HIGLEY
				4.59			
	4.76						
	3.395	+3.395	86.353				
	2.03						
				6.62			
TBM 3-88				5.21	-5.21	1281.143	CPS IN N. EDGE OF REDFIELD 150' E. OF 166TH ST.
				3.80			
	5.435						
	4.06	+4.06	85.203				
	2.685						

805/86

9-10-87

MCFCD BLK. 3			1285.203 ^				
				7.09			
TBM 3-89				5.70	- 5.70	1279.503	CPS IN N. EDGE REDFIELD ST. 400' W. OF 166TH ST.
				4.305			
	5.165						
	3.79	+ 3.79	83.293 ^				
	2.41						
				6.775			
TBM 3-90				5.40	- 5.40	1277.893	CPS IN N. EDGE OF REDFIELD 'E. OF 164TH ST.
				4.025			
	5.33						
	4.42	+ 4.42	82.313 ^				
	3.51						
SIDESHOT		- 5.45		1276.863			TOP OF PAVEMENT, TARGET ELEV. @ HC-16
				6.34			
HC-16				5.445	-5.445	1276.868	CPS MARICOPA ~~CO. BC.~~ @ INT. OF 164TH ST & REDFIELD
	4.505			4.545			
	3.985	+ 3.985	80.853 ^				
	3.465						
				5.05			
				4.525			
TBM 3-91				4.00	- 4.525	1276.328	R-BAR, W. SIDE DIRT DITCH, E SIDE EASTERN CANAL, 100' S. OF REDFIELD ST.
	6.01						
	4.63	+ 4.63	80.958 ^				
	3.25						

805/88

MCFCD
BLK. 3

1280.958

9-10-87

				6.625		
TBM 3-92				5.245	−5.245	1275.713
				3.865		
	6.90					
	5.47	+5.47	81.183			
	4.04					
				6.84		
TBM 3-93				5.395	−5.395	1275.788
				3.955		
	6.58					
	5.15	+5.15	80.938			
	3.725					
				6.825		
TBM 3-94				5.41	−5.41	1275.528
				4.00		
	6.36					
	4.94	+4.94	80.468			
	3.52					
				6.72		
TBM 3-95				5.30	−5.30	1275.168
				3.875		
	6.025					
	4.625	+4.625	79.793			
	3.225					

R-BAR, W. SIDE DIRT DITCH E. SIDE EASTERN CANAL, 100' N. OF MID-SEC. LINE SEC. 10

R-BAR, W. SIDE DIRT DITCH, E. SIDE EASTERN CANAL, 250' S. OF HIGHVOLTAGE POWERLINE

R-BAR, W. SIDE DIRT DITCH, E. SIDE EASTERN CANAL, 1650' N. OF ELLIOT RD.

R-BAR, W. SIDE DIRT DITCH, E SIDE EASTERN CANAL, 1100' N. OF ELLIOT RD.

9-10-87

MCFCD BLK. 3			1279.793			
				6.115		
TBM 3-96				4.705	-4.705	1275.088
	6.39			3.30		R-BAR, W. SIDE DIRT DITCH, E SIDE EASTERN CANAL, 600' N. OF ELLIOT RD.
	4.895	+4.895	79.983			
	3.40					
				4.37		
VC-8				2.87	-2.87	1277.113
	4.58			1.375		P-K NAIL ON E. EDGE BRIDGE @ ELLIOT & EASTERN CANAL
	3.51	+3.51	80.623			
	2.44					
SIDESHOT		-3.86		1276.763		MARICOPA CO. ENG. DEPT, BC ON NE. COR. OF BRIDGE ABUTMENT @ ELLIOT & EASTERN CANAL
				6.54		
TBM 3-97				5.035	-5.035	1275.588
				3.53		□ CUT, ON SW COR. OF HEADWALL, NW COR. OF ELLIOT & POINCIANA RD
	3.51					
	2.13	+2.13	77.718			
	0.745					
				6.785		
TBM 3-98				5.415	-5.415	1272.303
				4.045		□ CUT, S.TCD, N. SIDE ELLIOT RD, 575' W. OF POINCIANA RD.
	5.585					
	4.22	+4.22	76.523			
	2.85					

9-10-87

MCFCD BLK 3			1276.523			
				6.17		
TBM 3-99				4.80	-4.80	1271.723
				3.425		
	3.975					
	3.555	+3.555	1275.278			
	3.135					
SIDESHOT		-4.865		1270.413		
				5.505		
RO-24				4.955	-4.955	1270.323
				4.405		
	6.38					
	5.005	+5.005	75.328			
	3.63					
				5.68		
TBM 3-100				4.31	-4.31	1271.018
				2.94		
	5.975					
	4.60	+4.60	75.618			
	3.225					
				5.55		
TBM 3-101				4.17	-4.17	1271.448
				2.795		
	6.03					
	4.65	+4.65	76.098			
	3.27					

□ CUT ON S. TCD, N. SIDE ELLIOT RD, 1' E. OF GREENFIELD RD.

TOP OF PVMNT, TARGET ELEV @ RO-24

R-BAR IN INT. OF ELLIOT & GREENFIELD (SEC. COR)

□ CUT ON E. TCD, W. SIDE OF GREENFIELD RD. 550' S. OF ELLIOT RD.

□ CUT ON E. TCD, W. SIDE OF GREENFIELD, 1100' S. OF ELLIOT RD.

MCFCD

9-10-87

BLK 3			1276.098			
				5.575		
				4.215	-4.215	1271.883
TBM 3-102				2.86		
	6.39					
	5.03	+5.03	76.913			
	3.67					
				6.165		
				4.79	-4.79	1272.123
TBM 3-103				3.42		
	5.65					
	4.31	+4.31	76.433			
	2.965					
				6.015		
				4.64	-4.64	1271.793
TBM 3-104				3.265		
	5.61					
	4.255	+4.255	76.048			
	2.895					
				5.83		
				4.41	-4.41	1271.638
TBM 3-105				2.99		
	5.805					
	4.43	+4.43	76.068			
	3.055					

□ CUT, E.TCD, W. SIDE GREENFIELD RD, 1650' S. OF ELLIOT

□ CUT ON E.TCD, W. SIDE GREENFIELD RD, 2200' S. OF ELLIOT

□ CUT ON E.TCD. W. SIDE OF GREENFIELD RD, 100' S OF WELL @ W. 1/4 COR. SEC. 15

□ CUT ON E.TCD, W. SIDE OF GREENFIELD RD, 650' S. OF W. 1/4 COR. SEC. 15

9-10-87

MCFCD BLK. 3 — 1276.068

				5.905		
TBM 3-106				4.545	−4.545	1271.523
				3.18		
	5.76					
	4.39	+4.39	75.913			
	3.02					
				5.915		
TBM 3-107				4.51	−4.51	1271.403
				3.105		
	9.625					
	9.035	+ 9.035	80.438			
	8.445					
SIDESHOT		− 3.085	1277.353			
				3.635		
VC-11				3.07	−3.07	1277.368
				2.50		
	3.06					
	1.86	+1.86	79.228			
	0.665					
				6.66		
TBM 3-108				5.52	−5.52	1273.708
				4.38		
	4.105					
	3.54	+3.54	77.248			
	2.975					

□ CUT, E. TCD, W. SIDE OF GREENFIELD, 700' N. OF EASTERN CANAL

□ CUT, E. TCD, W. SIDE OF GREENFIELD, 200' N. OF EASTERN CANAL

TOP OF CONC. TARGET ELEV. @ VC-11

CPS IN SEAM OF CONC. BRIDGE W. SIDE OF GREENFIELD, N. EDGE OF EASTERN CANAL

CPS IN W. EDGE OF GREENFIELD RD, 175' N. OF WARNER RD.

MCFCD
BLK. 3

1277.248

9-10-87

805/98

				4.95		
TBM 3-109				4.495	-4.495	1272.753
				4.045		
	5.72					
	4.385	+ 4.385	77.138			
	3.05					
				5.72		
TBM 3-110				4.32	-4.32	1272.818
				2.925		
	6.265					
	4.89	+ 4.89	77.708			
	3.52					
				4.90		
TBM 3-111				3.50	-3.50	1274.208
				2.10		
	6.105					
	4.745	+ 4.745	78.953			
	3.38					
				4.69		
TBM 3-112				3.285	-3.285	1275.668
				1.88		
	5.975					
	4.60	+ 4.60	80.268			
	3.22					

BC IN HH, ℄ WARNER RD. 40' W. OF GREENFIELD RD. (SEC. COR.)

□ CUT, ON S.TCD, N. SIDE WARNER RD. 500' E. OF GREENFIELD RD.

□ CUT ON S.TCD, N. SIDE OF WARNER, 1050' E. OF GREENFIELD RD.

□ CUT ON S.TCD, N. SIDE OF WARNER RD, 1600' E. OF GREENFIELD RD.

MCFCD
BLK 3

1280.268

9-10-87

				5.375		
TBM 3-113				3.955	−3.955	1276.313	□ CUT ON S. TCD, N. SIDE OF WARNER, 1' W. OF S. 1/4 COR. SEC. 15
	6.51			2.535		
	5.415	+5.415	81.728			
	4.32					
SIDESHOT		− 2.57		1279.158	TOP OF PAVEMENT, TARGET ELEV. @ HC-29	
				3.74		
HC-29				2.69	−2.69	1279.038	1" BAR, 2' N. OF ℄ WARNER RD @ S. 1/4 COR. SEC. 15 0.1' BELOW PAVEMENT
	4.09			1.645		
	3.045	+3.045	82.083			
	1.995					
				6.865		
TBM 3-113				5.765	−5.765	1276.318	□ CUT ON S. TCD,
				4.67		
	6.46					
	5.06	+5.06	81.378			
	3.665					
				7.065		
TBM 3-112				5.70	−5.70	1275.678	□ CUT ON S. TCD.
				4.335		
	5.65					
	4.285	+4.285	79.963			
	2.925					

★ BEGIN RUN BACK TO TBM 3-109

9-10-87

MCFCD BLK. 3			1279.963			
				7.11		
TBM 3-111				5.745	-5.745	1274.218	□ CUT ON TCD.
				4.38		
	6.295					
	4.925	+4.925	79.143			
	3.555					
				7.68		
TBM 3-110				6.315	-6.315	1272.828	□ CUT ON TCD
				4.95		
	6.28					
	4.945	+4.945	77.773			
	3.61					
				6.39		
TBM 3-109				5.01	-5.01	1272.763	BC IN HH, E OF WARNER 60' W. OF GREENFIELD ⟨1272.753⟩ ADJ. TO ELEV. ON PG. 98
				3.63		
	4.28					
	3.215	+3.215	75.968			
	2.15					
				2.94		
RO-26				1.92	-1.92	1274.048	P-K NAIL, E OF WARNER & BRIDGE OVER EASTERN CANAL, FLUSH WITH TOP OF CONC.
				0.895		
	2.82					
	1.49	+1.49	1275.538			
	0.16					

MCFCD
BLK.3

1275.538

				7.78	
TBM 3-114				6.32	-6.32 1269.218 □ CUT ON S.TCD, N. SIDE OF WARNER, 550' W. OF EASTERN CANAL
				4.86	
	4.805				
	3.38	+3.38	72.598		
	1.96				
				5.375	
TBM 3-115				4.035	-4.035 1268.563 □ CUT ON S.TCD, N. SIDE OF WARNER RD, 1100' W. OF EASTERN CANAL
				2.695	
	4.41				
	3.03	+3.03	71.593		
	1.65				
				5.17	
TBM 3-116				3.795	-3.795 1267.798 □ CUT ON S.TCD, N. SIDE OF WARNER, 1650' W. OF EASTERN CANAL
				2.42	
	4.50				
	3.155	+3.155	1270.953		
	1.81				
				7.615	
TBM 3-117				6.15	-6.15 1264.803 BC IN HH, 2' S. OF ℄ WARNER RD, 1/2 mi. E. OF VAL VISTA DR. S. 1/4 COR. SEC. 16
				4.68	
	6.31				
	4.905	+4.905	69.708		
	3.505				

9-11-87
85-105° CLR.

RUGLAND
B. McMURRAY
THOMPSON

805/104

MCFCD
BLK. 3

1269.708

9-11-87

805/106

				6.485		
TBM 3-118				4.95	-4.95	1264.758
				3.41		
	4.895					
	3.425	+3.425	68.183			
	1.95					
				5.32		
TBM 3-119				3.92	-3.92	1264.263
				2.52		
	4.11					
	2.71	+2.71	66.973			
	1.315					
				5.72		
TBM 3-120				4.34	-4.34	1262.633
				2.955		
	5.075					
	3.67	+3.67	66.303			
	2.26					
				5.54		
TBM 3-121				4.215	-4.215	1262.088
				2.895		
	4.945					
	4.00	+4.00	66.088			
	3.06					

□ CUT ON S.TCD, N. SIDE OF WARNER, 550' W. OF S. 1/4 COR. SEC. 16

□ CUT ON S.TCD, N. SIDE OF WARNER, 1100' W. OF S. 1/4 COR. SEC. 16

□ CUT ON S. TCD, N. SIDE OF WARNER, 1000' E. OF VAL VISTA DR.

□ CUT ON S. TCD, N. SIDE OF WARNER, 400' E OF VAL VISTA DR.

MCFCD
BLK. 3

9-11-87

			1266.088				
				5.94			
TBM 3-122				4.99	- 4.99	1261.098	MARICOPA CO. BC IN HH @ INT. OF WARNER & VAL VISTA DR.
				4.04			
	4.755						
	3.365	+3.365	64.463				
	1.98						
				7.025			
TBM 3-123				5.66	- 5.66	1258.803	□ CUT ON S. TCD, N. SIDE OF WARNER, 550' W. OF VAL VISTA DR.
				4.29			
	5.40						
	4.04	+4.04	62.843				
	2.675						
				5.675			
TBM 3-124				4.385	- 4.385	1258.458	□ CUT, ON S. TCD, N. SIDE OF WARNER RD, 1100' W. OF VAL VISTA, 200' E. OF BRIDGE OVER CONC. DITCH
				3.08			
5.[illegible]	5.45						
4.245	4.705	+4.705	62.533				
2.415	2.70						
			[illegible]	5.52			
TBM 3-125			+4.21	4.21	- 4.21	1258.323	□ CUT, ON S. WINGWALL, N. SIDE OF WARNER RD, 50' W. OF 31 ST.
			[illegible]	2.90			
	7.22						
	5.86	+5.86	64.183				
	4.495						

MCFCD
BLK. 3

9-11-87

			1264.183			
				8.22		
TBM 3-126				6.77	-6.77	1257.413
				5.32		
	4.655					
	3.55	+3.55	60.963			
	2.44					
SIDESHOT		- 5.53		1255.433		
				6.70		
HC-28				5.55	-5.55	1255.413
				4.40		
	4.815					
	3.44	+3.44	58.853			
	2.065					
				6.88		
TBM 3-127				5.505	-5.505	1253.348
				4.135		
	4.695					
	3.385	+3.385	56.733			
	2.07					
				6.095		
TBM 3-128				4.725	-4.725	1252.008
				3.355		
	5.17					
	3.84	+3.84	55.848			
	2.51					

	□ CUT ON SE COR BRIDGE ABUTTMENT N. SIDE OF WARNER, 200' W. OF RR TRACK
	TOP OF PAVEMENT, TARGET ELEV. @ HC-28
	L.S. CAP, 2' N. OF ℄ WARNER RD, 700' W. OF RR, S. 1/4 COR. SEC. 17
	□ CUT ON S. TCD, N. SIDE OF WARNER RD, 550' W. OF S. 1/4 COR. SEC. 17
	□ CUT ON S. TCD, N. SIDE OF WARNER RD, 1100' W. OF S. 1/4 COR. SEC. 17

9-11-87

MCFCD BLK. 3

1255.848

				5.67		
TBM 3-129				4.24	-4.24	1251.608 CONC. DITCH, N. SIDE
				2.815		
	4.56					
	3.20	+3.20	54.808			
	1.84					
				6.095		
TBM 3-130				4.75	-4.75	1250.058
				3.41		
	5.76					
	4.645	+4.645	54.703			
	3.53					
				7.21		
TBM 3-131				6.01	-6.01	1248.693
				4.805		
	5.40					
	4.055	+4.055	52.748			
	2.71					
				6.43		
TBM 3-132				5.09	-5.09	1247.658
				3.755		
	5.295					
	3.965	+3.965	51.623			
	2.64					

□ CUT IN SE. SIDE OF CHECK OVER WARNER RD, 1000' E. OF LINDSAY RD.

□ CUT ON S.TCD, N. SIDE OF WARNER RD, 475' E. OF LINDSAY RD.

CITY OF GILBERT
BC IN HH @ INT. OF WARNER & LINDSAY

□ CUT, TOP OF CURB, N. SIDE OF WARNER, 550' W. OF LINDSAY RD.

MCFCD

9-11-87

BLK 3			1251.623				
				6.64			
3-133				5.315	−5.315	1246.308	□ CUT ON TOP OF CURB, N. SIDE WARNER, 1100' W. OF LINDSAY RD.
				3.995			
	5.205						
	3.995	+3.995	50.303				
	2.785						
				6.375			CITY OF GILBERT
TBM 3-134				5.185	−5.185	1245.118	BC IN HH @ INT. OF WARNER & RIATA ST.
				3.99			
	6.295						
	5.13	+5.13	50.248				
	3.96						
				6.595			
TBM 3-135				5.235	−5.235	1245.013	□ CUT, S.TCD, N. SIDE WARNER RD, 550' W. OF RIATA ST.
				3.87			
	6.075						
	4.665	+4.665	49.678				
	3.25						
SIDESHOT		−5.88		1243.798	TOP OF PAVEMENT, TARGET ELEV @ HC-27		
				8.07			
HC-27				6.495	−6.495	1243.183	MARICOPA CO. BC IN HH, 2' N. OF & WARNER RD, ½ MILE W. OF LINDSAY, S. ¼ COR. SEC. 18
				4.915			

9-11-87

MCFCD
BLK. 3

	4.495						
	3.175	+3.175	1246.358				
	1.85						
				4.485			
TBM 3-136				3.155	-3.155	1243.203	□ CUT ON S.TCD, N. SIDE OF WARNER RD, 550' W. OF S. 1/4 COR. SEC. 18
				1.83			
	3.795						
	2.475	+2.475	45.678				
	1.16			4.965			
TBM 3-137				3.62	-3.62	1242.058	□ CUT, S.TCD, N. SIDE OF WARNER RD, 1100' W. OF S. 1/4 COR. SEC. 18
				2.28			
	3.92						
	2.535	+2.535	44.593				
	1.15						
				5.06			
TBM 3-138				3.715	-3.715	1240.878	□ CUT, S.TCD, N. SIDE WARNER RD, 700' E. OF CONSOLIDATED CANAL, 75' E. OF W. END OF CONC. DITCH
				2.37			
	4.55						
	3.20	+3.20	44.078				
	1.845						
				5.085			
TBM 3-139				3.70	-3.70	1240.378	CPS ON N. EDGE WARNER RD, 190' E. OF CONSOL. CANAL
				2.31			
	7.605						
	6.685	+6.685	1247.063				
	5.765						

805/118

9-11-87

MCFCD
BLK. 3

1247.063

SIDESHOT — 8.32 — 1238.743

TOP OF PVMNT, TARGET ELEV. @ HC-26

9.35
8.40 — 8.40 — 1238.663 — 3/4" BAR IN HH. @ INT. OF GILBERT & WARNER RD.
7.45

HC-26

5.74
4.37 + 4.37 — 43.033
3.00

7.86
6.535 — 6.535 — 1236.498 — □ CUT, S.TCD, N. SIDE OF WARNER, 550' W. OF GILBERT RD.
5.205

TBM 3-140

6.595
5.30 + 5.30 — 41.798
4.01

7.035
5.70 — 5.70 — 1236.098 — □ CUT ON S.TCD, N. SIDE OF WARNER RD, 200' W. OF 134TH PLACE
4.33

TBM 3+141

4.365

5.835
4.555 + 4.555 — 40.653
3.27

6.25
4.905 — 4.905 — 1235.748 — □ CUT ON S.TCD, N. SIDE OF WARNER RD, 750' W. OF 134TH PLACE
3.56

TBM 3-142

6.04
4.78 + 4.78 — 40.528
3.52

RUGLAND GRANT

805/120

9-15-87
80-95°CLR

MCFCD BLK. 3			1240.528			
				6.585		
TBM 3-143				5.27	-5.27	1235.258
				3.95		
	6.06					
	4.755	+4.755	40.013			
	3.455					
				6.955		
TBM 3-144				5.725	-5.725	1234.288
				4.495		
	6.005					
	4.68	+4.68	38.968			
	3.36					
				8.47		
TBM 3-145				7.14	-7.14	1231.828
				5.81		
	6.83					
	5.53	+5.53	37.358			
	4.23					
				7.42		
TBM 3-146				6.115	-6.115	1231.243
				4.81		
	6.39					
	5.095	+5.095	36.338			
	3.805					

□ CUT ON S.TCD, N. SIDE OF WARNER RD,

1" PIPE IN HH @ INT. OF WARNER & 132ND ST. S. 1/4 COR. SEC. 13

□ CUT IN S.TCD, N. SIDE WARNER RD. 75' E. OF 131ST ST.

□ CUT ON S.TCD, N. SIDE OF WARNER, 275' E. OF 130TH ST.

MCFCD

9-15-87

BLK. 3			1236.338 ↑				
				7.29			
TBM 3-147				5.98	-5.98	1230.358	□ CUT ON S.TCD, N.SIDE OF WARNER RD, 250' W. OF 130TH ST.
				4.67			
	6.44						
	5.125	+5.125	35.483 ↑				
	3.81						
				6.98			
TBM 3-148				5.685	-5.685	1229.798	□ CUT ON S.TCD, N. SIDE OF WARNER RD, 500'E. OF COOPER RD.
				4.39			
	6.49						
	5.24	+5.24	35.038 ↑				
	3.99						
				7.25			
TBM 3-149				5.905	-5.905	1229.133	BC IN HH @ INT. OF WARNER & COOPER
				4.56			
	6.005						
	4.67	+4.67	33.803 ↑				
	3.335						
				6.82			
TBM 3-150				5.47	-5.47	1228.333	□ CUT, TOP OF CURB, W. SIDE OF COOPER, 565' N. OF WARNER
				4.12			
	5.655						
	4.06	+4.06	32.393 ↑				
	2.46						

9-15-87

MCFCD BLK. 3			1232.393			
				6.15		
TBM 3-151				4.94	-4.94	1227.453
				3.73		
	5.495					
	4.255	+4.255	31.708			
	3.02					
				6.445		
TBM 3-152				5.10	-5.10	1226.608
				3.76		
	5.82					
	4.495	+4.495	31.103			
	3.17					
				6.56		
TBM 3-153				5.27	-5.27	1225.833
				3.98		
	5.85					
	4.55	+4.55	30.383			
	3.25					
				6.81		
TBM 3-154				5.47	-5.47	1224.913
				4.135		
	5.795					
	4.50	+4.50	29.413			
	3.205					

□ CUT, TOP OF CURB, W. SIDE, OF COOPER RD. 300' N. OF BAYSHORE

□ CUT, TOP OF CURB, W. SIDE OF COOPER RD, 850' N. OF BAYSHORE

□ CUT, TOP OF CURB, W. SIDE OF COOPER, 530' S. OF W. 1/4 COR SEC. 13

BC IN HH, E OF COOPER RD 1/2 MILE N. OF WARNER W. 1/4 COR. SEC. 13

MCFCD
BLK. 3

9-15-87

		1229.413			
			6.255		
TBM 3-155			4.93	- 4.93	1224.483	□ CUT, TOP OF CURB, E. SIDE OF COOPER RD, 550' N. OF W. 1/4 COR. SEC. 13
	6.11		3.61			
	4.79	+ 4.79	29.273			
	3.475					
			6.205		
TBM 3-156			4.965	- 4.965	1224.308	□ CUT, TOP OF CURB, E. SIDE OF COOPER RD, 625' N. OF MADERA PARC DR.
	5.895		3.725			
	4.54	+ 4.54	28.848			
	3.185					
			5.97		
TBM 3-157			4.63	- 4.63	1224.218	□ CUT, TOP OF CURB, E. SIDE OF COOPER RD, 300' S. OF SILVER CREEK DR.
	5.73		3.295			
	4.15	+ 4.15	28.368			
	2.57					
			5.63		
TBM 3-158			4.32	- 4.32	1224.018	□ CUT, TOP OF CURB, E. SIDE COOPER RD, 550' S. OF ELLIOT RD.
	5.735		3.01			
	4.38	+ 4.38	28.428			
	3.03					

805/128

MCFCD
BLK. 3

1228.428

TBM 2-48

4.01
2.85
1.69

9-15-87

-2.85 1225.578 D CUT ON SE COR. OF STRUC, NW. COR. INT. OF ELLIOT & COOPER RD. <1225.548>
BK. 802/130

MCFCD

BLK. 3 3-WIRE LEVEL RUN TO RO-19

CTR. SEC. 12

9-15-87

805/130

CITY OF GILBERT

BC IN HH @ INT. OF GUADELUPE & NEELY

BK. 805/26

TBM 3-5			<1226.203> NAD83 ELEV.		
	4.675				
	3.43	+3.43	29.633		
	2.185				
				5.075	
TBM 3-159				3.58	-3.58 1226.053 □ CUT, TOP OF CURB, E. SIDE OF NEELY ST, 550' S. OF GUADELUPE
				2.08	
	5.60				
	4.33	+4.33	30.383		
	3.055				
				5.04	
TBM 3-160				3.81	-3.81 1226.573 □ CUT, TOP OF CURB, E. SIDE OF NEELY ST, 200' S. OF PINON AVE
				2.58	
	6.05				
	4.70	+4.70	31.273		
	3.355				
				5.45	
TBM 3-161				4.26	-4.26 1227.013 □ CUT, TOP OF CURB, E. SIDE OF NEELY ST, 200' S. OF JUNIPER AVE.
				3.065	
	6.905				
	5.27	+5.27	32.283		
	3.63				

MCFCD
BLK. 3

1232.283

SIDESHOT		-3.99	1228.293	
			5.55	
RO-19			3.975	
	5.51		2.405	
	3.935	+3.935	32.243	
	2.36			
			6.865	
TBM 3-161			5.225	
			3.585	
	5.81			
	4.65	+4.65	31.668	
	3.49			
			6.42	
TBM 3-160			5.09	
			3.765	
	5.455			
	4.28	+4.28	30.858	
	3.10			
			6.07	
TBM 3-159			4.795	
			3.515	
	5.55			
	4.22	+4.22	30.283	
	2.885			

9-15-87

805/132

TOP OF PVMNT, TARGET ELEV @ RO-19			
-3.975	1228.308	BEGIN RUN BACK	CPS IN ℄ OF NEELY ST, 40' N. OF S. END OF PAVEMENT, 60' N. OF RR TRACK
-5.225	1227.018		□ CUT ON TOP OF CURB
-5.09	1226.578		□ CUT ON TOP OF CURB
-4.795	1226.063		□ CUT ON TOP OF CURB

MCFCD

9-15-87

BLK. 3			1230.283			
				5.46		
TBM 3-5				4.07	-4.07	1226.213 BC IN HH @ INT. OF NEELY & GUADELUPE <1226.203>
				2.675		
3-WIRE LEVEL RUN TO VC-10						
W. 1/4 COR. SEC. 16						
TBM 3-122			<1261.098>			BC IN HH @ INT. OF WARNER & VAL VISTA DR. SEE PG. 108
	5.31					
	4.18	+4.18	65.278			
	3.05					
				4.965		
TBM 3-162				3.62	-3.62	1261.658 CPS IN W. FACE OF PP #24 E. SIDE OF VAL VISTA, 500' N. OF WARNER RD.
				2.28		
	3.98					
	2.66	+2.66	64.318			
	1.34					
				4.445		
TBM 3-163				3.13	-3.13	1261.188 CPS IN W. FACE OF PP #26 E. SIDE OF VAL VISTA, 1050' N. OF WARNER RD.
				1.81		
	3.75					
	2.43	+2.43	63.618			
	1.11					

MCFCD
BLK. 3

1263.618

TBM 3-164	4.025 2.70 1.38	+2.70	63.453	4.19 2.865 1.545	
TBM 3-165	4.48 3.165 1.845	+3.165	63.233	4.71 3.385 2.065	
SIDESHOT	— 4.97		1258.263		TOP OF PAVEMENT, TARGET ELEV. @ VC-10
VC-10	6.455 4.985 3.51	+4.985	63.168	6.52 5.05 3.575	
TBM 3-165	4.74 3.40 2.06	+3.40	63.468	4.415 3.10 1.785	

9-15-87

-2.865	1260.753	CPS IN W. FACE OF PP #28 E. SIDE OF VAL VISTA, 1600' N. OF WARNER
-3.385	1260.068	CPS IN W. FACE OF PP #30 E. SIDE OF VAL VISTA, 2100' N. OF WARNER RD.
-5.05	1258.183	R-BAR, @ INT. OF VAL VISTA DR. & MESQUITE ST, W. 1/4 COR. SEC. 16
	BEGIN RUN BACK	
-3.10	1260.068	CPS IN PP #30

9-15-87

MCFCD BLK. 3			1263.468 ↑			
				4.02		
				2.71	-2.71	1260.758 CPS IN PP. # 28
TBM 3-164				1.405		
	4.28					
	2.95	+2.95	63.708 ↑			
	1.625					
				3.83		
				2.515	-2.515	1261.193 CPS IN PP, # 26
TBM 3-163				1.20		
	4.41					
	3.075	+3.075	64.268 ↑			
	1.74					
				3.91		
				2.605	-2.605	1261.663 CPS IN PP, #24
TBM 3-162				1.30		
	4.915					
	3.63	+3.63	65.293 ↑			
	2.34					
				5.37		
				4.185	-4.185	1261.108 BC IN HH @ INT. OF WARNER & VAL VISTA
TBM 3-122				3.00		⟨1261.098⟩

MCFCD
BLK. 3 3-WIRE LEVEL RUN THRU. E BLK. 3

9-15-87

TBM 3-20						L.S. CAP #16588 IN INT. OF GUADELUPE & LINDSAY RD. SEE pg. 36
			<1242.408> UNADJ. ELEV.			
	5.94					
	5.05	+5.05	47.458			
	4.165					
				4.62		
TBM 3-166				3.81	-3.81	1243.648 CPS IN W. FACE OF PP, E SIDE OF LINDSAY RD, 300' S. OF GUADELUPE RD.
				2.995		
	4.86					
	3.80	+3.80	47.448			
	2.735					
				2.77		
TBM 3-167				1.705	-1.705	1245.743 CPS IN W. FACE OF PP, E. SIDE LINDSAY RD, 60' N. OF CONSOLIDATED CANAL
				0.64		
	8.935					
	7.88	+7.88	53.623			
	6.825					
SIDESHOT		— 6.23	1247.393			TOP OF PAVEMENT, TARGET ELEV. @ HC-14
				7.45		
HC-14				6.20	-6.20	1247.423 CPS IN ASPHALT APRON, W. SIDE OF LINDSAY RD, S. SIDE OF CONSOLIDATED CANAL
				4.95		

MCFCD

BLK. 3

805/142

9-15-87

	2.725 1.86 + 1.86 0.99	49.283	6.18 5.15 4.12	- 5.15	1244.133	CPS IN W. FACE OF PP, E. SIDE OF LINDSAY RD, 500' S. OF CONSOL. CANAL CROSSING
TBM 3-168	5.345 4.135 + 4.135 2.93	48.268				
TBM 3-169	6.445 4.855 + 4.855 3.27	48.868	5.46 4.255 3.055	- 4.255	1244.013	CPS IN W. FACE OF PP, E. SIDE OF LINDSAY RD, 1000' S. OF CONSOL. CANAL CROSSING
TBM 3-170	7.07 5.885 + 5.885 4.695	49.053	7.12 5.70 4.28	- 5.70	1243.168	MARICOPA CO. BC IN HH, W. EDGE LINDSAY RD, ½ MILE S. OF GUADALUPE, W. ¼ COR. SEC. 8
TBM 3-171	6.135 4.84 + 4.84 3.54	47.603	7.59 6.29 4.985	- 6.29	1242.763	□ CUT, TOP OF CURB, W. SIDE OF LINDAY RD, @ VAUGHN ST.

MCFCD
BLK. 3

1247.603

				5.90		
TBM 3-172				4.575	- 4.575	1243.028
				3.255		
	5.80					
	4.47	+ 4.47	47.498			
	3.14					
				6.05		
TBM 3-173				5.035	- 5.035	1243.463
				4.02		
	5.38					
	4.855	+ 4.855	47.318			
	4.385					
SIDESHOT		- 4.725				1242.593
				5.17		
HC-23				4.70	- 4.70	1242.618
				4.23		
	5.87					
	5.235	+ 5.235	47.853			
	4.595					
				6.435		
TBM 3-174				5.09	- 5.09	1242.763
				3.75		

9-16-87
80-95° CLR

RUGLAND
B. McMURRAY
CROLLARD

805/144

□ CUT, TOP OF CURB, W. SIDE OF LINDSAY RD, 200' S. OF N. ENTRANCE TO STONEBRIDGE LAKES SUBDIVISION

□ CUT, TOP OF CURB, W. SIDE OF LINDSAY RD, 250' S. OF CULLUMBER ST.

TOP OF PAVEMENT, TARGET ELEV. @ HC-23

CPS IN & OF LINDSAY RD. 800' N. OF ELLIOT RD.

□ CUT, TOP OF CURB, W. SIDE OF LINDSAY, 400' N. OF ELLIOT RD.

9-16-87

MCFCD
BLK. 3

	6.965				
	5.395 + 5.395	1248.158			
	3.825				
			5.565		
TBM 3-175			4.295	- 4.295	1243.863
	6.325		3.02		
	4.87 + 4.87	48.733			
	3.415				
			6.68		
TBM 3-176			5.255	- 5.255	1243.478
			3.83		
	5.995				
	4.735 + 4.735	48.213			
	3.475				
			6.02		
TBM 3-177			4.78	- 4.78	1243.433
			3.54		
	5.835				
	5.255 + 5.255	48.688			
	4.675				
SIDESHOT	- 5.37	1243.318			
			5.985		
RO-23			5.35	- 5.35	1243.338
			4.72		

□ CUT, TOP OF CURB, N. SIDE OF ELLIOT, 550' W. OF LINDSAY RD.

□ CUT, TOP OF CURB, N. SIDE OF ELLIOT, 150' E. OF CONSOLIDATED CANAL

TOP OF PAVEMENT, TARGET ELEV @ RO-23

BC IN HH @ INT. OF ELLIOT & LINDSAY

CPS IN ℄ OF ELLIOT, W. SIDE OF CONSOL. CANAL BRIDGE

805/148

MCFCD

9-16-87

BLK. 3

	5.33					
	4.245	+ 4.245	1247.583			
	3.155					
				6.995		
				5.75	- 5.75	1241.833
TBM 3-178				4.505		
	6.495					
	5.195	+ 5.195	47.028			
	3.895					
				6.545		
				5.29	- 5.29	1241.738
TBM 3-179				4.035		
	6.34					
	5.25	+ 5.25	46.988			
	4.16					
				4.57		
				3.455	- 3.455	1243.533
TBM 3-180				2.34		
	4.555					
	4.01	+ 4.01	47.543			
	3.465					
				6.645		
				6.15	- 6.15	1241.393
HC-22				5.655		
	6.44					
	5.945	+ 5.945	47.338			
	5.445					

R-BAR, 1' W. OF BLOCK WALL, E SIDE CONSOL. CANAL, 500' S. OF ELLIOT RD.

R-BAR, 1' W. OF BLOCK WALL, E. SIDE OF CONSOL. CANAL 1000' S. OF ELLIOT RD.

R-BAR, E. SIDE RD, E. SIDE OF CONSOL. CANAL, 20' N. OF RR TRACK.

R-BAR @ GRND LEVEL, 40' E. OF CONSOL. CANAL, 100' S. OF RR TRACK

CONT. IN BK. 807/2

MCFCD
BLK. 2 3-WIRE LEVEL RUN TO VC-1

9-11-87

	S. 1/4 COR. SEC. 35							
RO-5				⟨1211.348⟩	BC IN HH @ INT OF MESA DR. & BASELINE RD. BK. 802/114			
	6.675							
	5.25	+5.25		16.598				
	3.825							
					6.67			
TBM 2-105					5.105	− 5.105	1211.493	BC IN HH, ℄ 巷 RD, 600' E. OF MESA DR. SW. COR. SEC. 35
					3.54			
	5.98							
	4.67	+9.67		16.163				
	3.36							
					6.355			
TBM 2-106					5.13	− 5.13	1211.033	□ CUT, TOP OF CURB, N. SIDE OF 巷 RD, 150' W. OF LEE CIRCLE
					3.905			
	6.32							
	5.00	+5.00		16.033				
	3.68							
					5.975			
TBM 2-107					4.74	− 4.74	1211.293	□ CUT, TOP OF CURB, N. SIDE OF 巷 RD, 300' W. OF HOBSON RD.
	5.81				3.505			
	4.96	+4.96		16.253				
	4.105							

9-11-87

MCFCD BLK. 2			1216.253			
				5.97		
TBM 2-108				5.08	-5.08	1211.173
				4.195		BC IN HH @ INT. OF BASELINE & HOBSON RD.
	7.25					
	5.94	+5.94	17.113			
	4.625					
				5.295		
TBM 2-109				3.925	-3.925	1213.188
				2.55		□ CUT, TOP OF CURB, S. SIDE RD, 550' E. OF HOBSON RD
	7.10					
	5.435	+5.435	18.623			
	3.775					
SIDESHOT		-3.41		1215.213		TOP OF PAVEMENT, TARGET ELEV. @ VC-1
				5.745		
VC-1				3.39	-3.39	1215.233
				1.03		CPS, ℄ BASELINE & HORNE
	BEGIN RUN BACK					
	5.685					
	3.47	+3.47	18.703			
	1.25					
				7.31		
TBM 2-109				5.515	-5.515	1213.188
				3.72		□ CUT, TOP OF CURB

MCFCD
BLK. 2

9-11-87

805/154

	5.42						
	4.02	+4.02	1217.208				
	2.62						
				7.335			
TBM 2-108				6.035	- 6.035	1211.173	BC IN HH @ BASELINE & HOBSON
				4.73			
	6.11						
	5.28	+5.28	16.453				
	4.45						
				6.02			
TBM 2-107				5.155	- 5.155	1211.298	□ CUT, TOP OF CURB
				4.29			
	6.185						
	4.975	+4.975	16.273				
	3.76						
				6.475			
TBM 2-106				5.23	- 5.23	1211.043	□ CUT, TOP OF CURB
				3.98			
	6.74						
	5.515	+5.515	16.558				
	4.29						
				6.34			
TBM 2-105				5.065	- 5.065	1211.493	BC IN HH, & BASELINE RD, 600' E. OF MESA DR.
				3.785			

MCFCD
BLK. 2

9-11-87

805/156

	6.39					
	4.915	+4.915	16.408			
	3.445					
				6.595		
RO-5				5.065	-5.065	1211.343
				3.53		

BC IN HH @ INT. OF MESA DR. & BASELINE RD
<1211.348> RK. 802/114

MCFCD

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MCFCD 3-Wire Levels - Val Vista — Freeway to Warner

11/5/87

TBM 3-50				1266.608 — cut 5' - Top W. curb - Val Vista Rd. - 6' S. of signal Light - (See SK 395 - Pg 58)
	2.21			
	1.20	67.808		
	0.19	↑		
			6.42	
TBM #3-200			5.20	1262.609 — CPS - Pb Pole - E. Side Val Vista - 500± S. of Freeway -
			3.975	
	3.215			
	2.11	64.718		
	1.01	↑		
			4.515	
TBM #3-201			3.285	1261.433 — CPS - Pb. Pole - E. Side Val Vista — 750± S. of Freeway
			2.06	
	3.54			
	2.365	63.798		
	1.19	↑		
			4.305	
TBM #3-202			3.125	1260.673 — CPS - Pb. Pole - E. Side Val Vista - 1150± S. of Freeway
			1.95	
	4.80			
	3.66	64.793		
	2.435	↑		

MCFCD 3-Wire-Levels - Vol Vista - Freeway to Warner Rd

11/5/63

		1264.293			
			4.465		
TBM 3-203			3.29	1261.003	CPS - R. Pole - E. Side Vol Vista - 1705± S. of Freeway
			2.115		
	4.205				
	3.035	64.038			
	1.865				
			7.155		
TBM 3-204			5.565	1258.473	B.C. in H.H. - Intersection Baseline and Vol Vista
			3.975		
	7.06				
	5.55	64.023			
	4.035				
			6.625		
TBM 3-205			5.23	1253.793	CPS - W. Gutter Line Vol Vista - 600± S. of Base Line
			3.84		
	10.065				
	8.69	67.483			
	7.32				
			3.56		
TBM# 3-206			2.23	1265.253	CPS - E. Gutter Line - W. Lane - Vol Vista - 1200± S. of Base Line
			0.895		
	4.25				
	2.64	67.913			
	1.07				

MCFCD

3-Wire Levels – Val Vista – Freeway to Warner Rd

1/5/87

		1267.913 ↑		
			10.73	
TBM # 3-207			9.29	1253.623
			7.845	
	4.235			
	2.83	61.453 ↑		
	1.43			
			7.68	
TBM # 3-208			6.23	1255.223
			4.78	
	5.645			
	4.33	59.553 ↑		
	3.015			
			6.02	
TBM # 3-209			4.75	1254.303
			3.47	
	6.49			
	5.11	59.913 ↑		
	3.725			
			7.03	
TBM # 3-210			5.67	1254.243
			4.32	
	6.365			
	5.52	59.763 ↑		
	4.175			

CBS – W. Sutton Line Val Vista – 1300± S. of Baseline

CBS – W. Sutton Line – Val Vista – 2300± S. of Baseline

BC in MH – E. Val Vista ½ mile S. of Baseline (North Manhole)

S/B AZE – W. Side Val Vista – 3300± S. of Baseline

MCFCD 3-Wire Levels Val Vista – Freeway to Waterline

1259.763 ↑

6.73
TBM #3-211 5.385
4.04

6.52
5.165 59.543 ↑
3.81

6.20
TBM #3-212 4.865
3.525

6.66
5.345 60.023 ↑
4.03

5.595
TBM #3-213 4.24
2.88

7.705
6.555 62.338 ↑
5.40

5.89
TBM #3-214 4.78
3.66

5.76
4.62 62.178 ↑
3.475

11/5/57

12

1254.378 ½" R.B. – W. Side Val Vista – 37.5± S. of Baseline

1254.678 ½" R.B. – W. Side Val Vista – 43.5± S. of Baseline

1255.783 ½" R.B. – W. Side Val Vista – 43.5± S. of Baseline

1257.559 B.C. in H.H. – Intersection Val Vista and Guadalupe

N MCFCD — 3-Wire Levels — Freeway to Warner — Val Vista

11/5/37

324/14

		1262.178			
		↑			
			5.60		
T. TBM # 3+215			4.24	1257.938	CBS. B. Pole E. Side Val Vista - 500± S. of Guadalupe
			2.875		
	5.37				
	4.01	61.948			
	2.655	↑			
			5.63		
T. TBM # 3-216			4.23	1257.718	CBS B. Pole - E. Side Val Vista - 1050± S. of Guadalupe
			2.85		
	5.40				
	4.045	61.763			
	2.695	↑			
			5.51		
T. TBM # 3-217			4.16	1257.603	CBS - B. Pole - E. Side Val Vista - 1600± S. of Guadalupe
			2.73		
	4.97				
	3.61	61.213			
	2.25	↑			
			4.79		
T. TBM # 3-218			3.42	1257.793	CBS. B. Pole - E. Side Val Vista - 2150± S.
			2.05		
	4.16				
	2.775	60.563			
	1.39	↑			

MCFCD — 3-Wire Levels — Val Vista — Freeway to Warner Rd

11/6/63 — 8 of 16

		1260.568 ↑	6.65	
1	TBM #3-219		5.45	1255.118 — B.C. in H.H. ½ mile S. of Guadalupe & Val Vista
			4.25	
	7.30			
	5.815	60.933 ↑		
	4.33			
			5.48	
1	TBM #3-220		4.11	1256.823 — CPS - P. Pole - E. side Val Vista - 3200± S. of Guadalupe
			2.74	
	6.30			
	4.99	61.813 ↑		
	3.67			
			5.81	
1	TBM #3-221		4.43	1257.383 — CPS - P. Pole - E. side Val Vista - 3750± S. of Guadalupe
			3.05	
	5.91			
	4.59	61.973 ↑		
	3.26			
			5.50	
1	TBM #3-222		4.12	1257.853 — CPS - P. Pole - E. side Val Vista - 4300± S. of Guadalupe
			2.74	
	4.96			
	3.61	61.463		
	2.27			

MCFCD

3-Wire Levels - Val Vista — Freeway to Warner Rd

		126.463			
		⊼		6.07	
TBM #3-223				4.72	1256.743
				3.37	
	5.21				
	3.91	60.653			
	2.605	⊼			
				6.16	
TBM #3-224				4.965	1255.688
				3.765	
	7.00				
	5.55	61.238			
	4.105	⊼			
				5.435	
TBM #3-225				4.065	1257.173
				2.70	
	5.96				
	4.615	61.788			
	3.27	⊼			
				5.72	
TBM #3-226				4.38	1257.408
				3.03	
	5.99				
	4.675	62.083			
	3.36	⊼			

11-5-87

824/13

1256.743 — CPS - Po. Pole - E. Side Val Vista - 4330± S. of Guadalupe.

1255.688 — B.C. - in S.W. - Intersection of Elliot and Val Vista.

1257.173 — CPS - Po. Pole - E. Side Val Vista - 550± S. of Elliot

1257.408 — CPS - Po. Pole - E. Side Val Vista - 1100± S. of Elliot

MCFCD

3-Wire Levels – Val Vista – Freeway to Warner Rd.

11/5/87

824/30

1262.033

5.87

TBM #3-227 — 4.50

3.15

6.11

4.81 — 62.393

3.50

5.85

TBM #3-228 — 4.47

3.09

6.05

4.70 — 62.623

3.35

5.64

TBM VC-10 — 4.505

3.33

7.26

5.765 — 63.833

4.27

5.21

TBM #3-165 — 3.87

2.54

1257.583

CPS Pole E. side Val Vista – 1650± S. of Elliot

1257.923

CPS – 2 Pole E. side Val Vista – 2200± S. of Elliot

1253.118

0.065

1253.183

½" R.B. – ± Val Vista – ½ mile S. of Elliot – (see BK 304 pg 136)

1260.013

0.055

1260.068

CPS Pole E side Val Vista – 2100 N. of Warner

MCFCD Traverse - Block 3

T.P.# 206 → T.P.# 207 → T.P.# 52
327 ↑ 328 329

∠1 = 180° 00' 02"
∠6 = 00° 00' 12"
M∠ = 180° 00' 02"

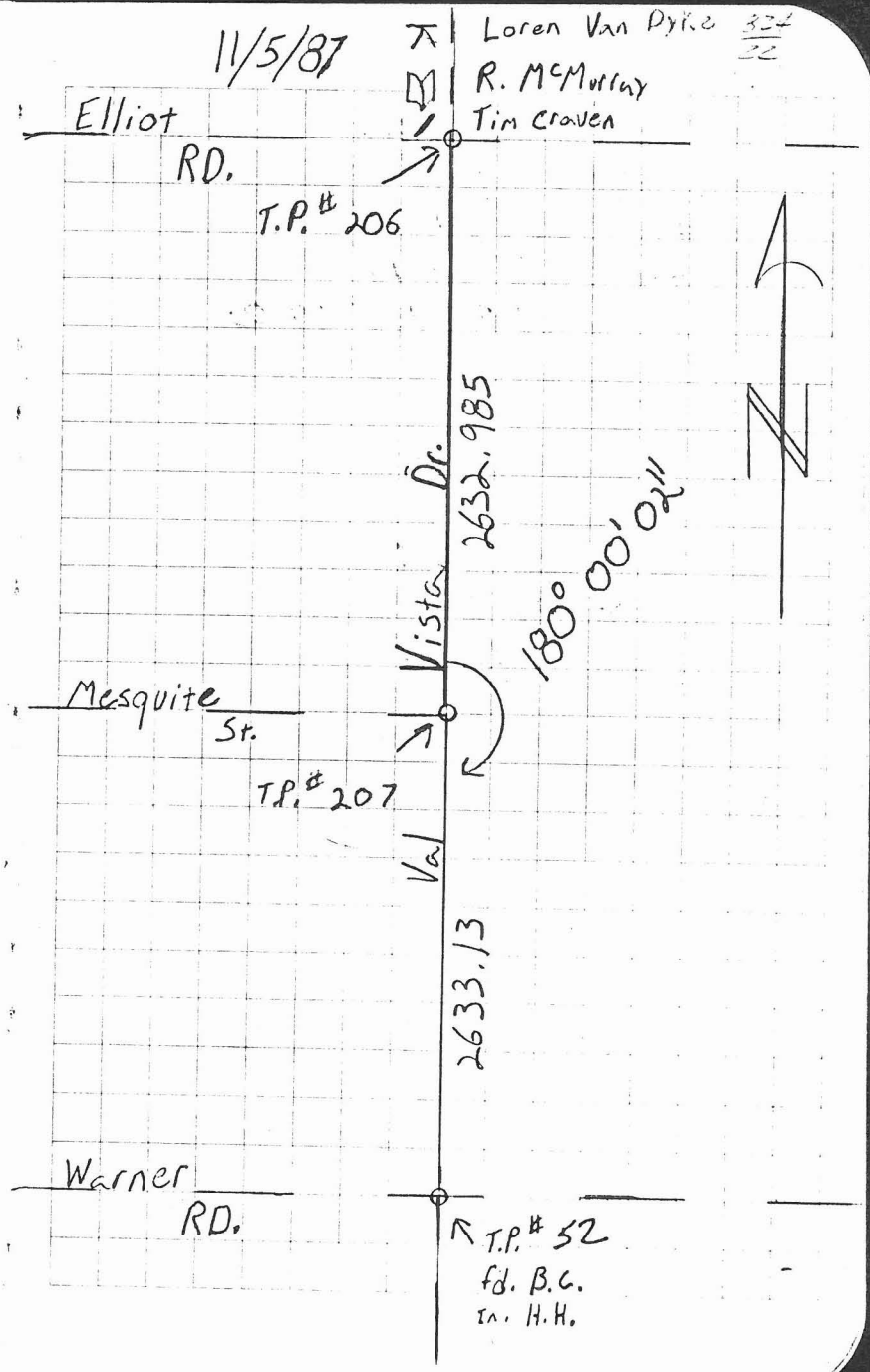
H.D. to T.P.# 206
∠ = 89° 58" 42"
S.D. = 2632.99
H.D. = 2632.99

H.D. to T.P.#
∠ = 90° 00' 50"
S.D. = 2633.13
H.D. = 2633.13

(See Book 808 Pg. 156)

11/5/87

Loren Van Dyke
R. McMurray
Tim Craven



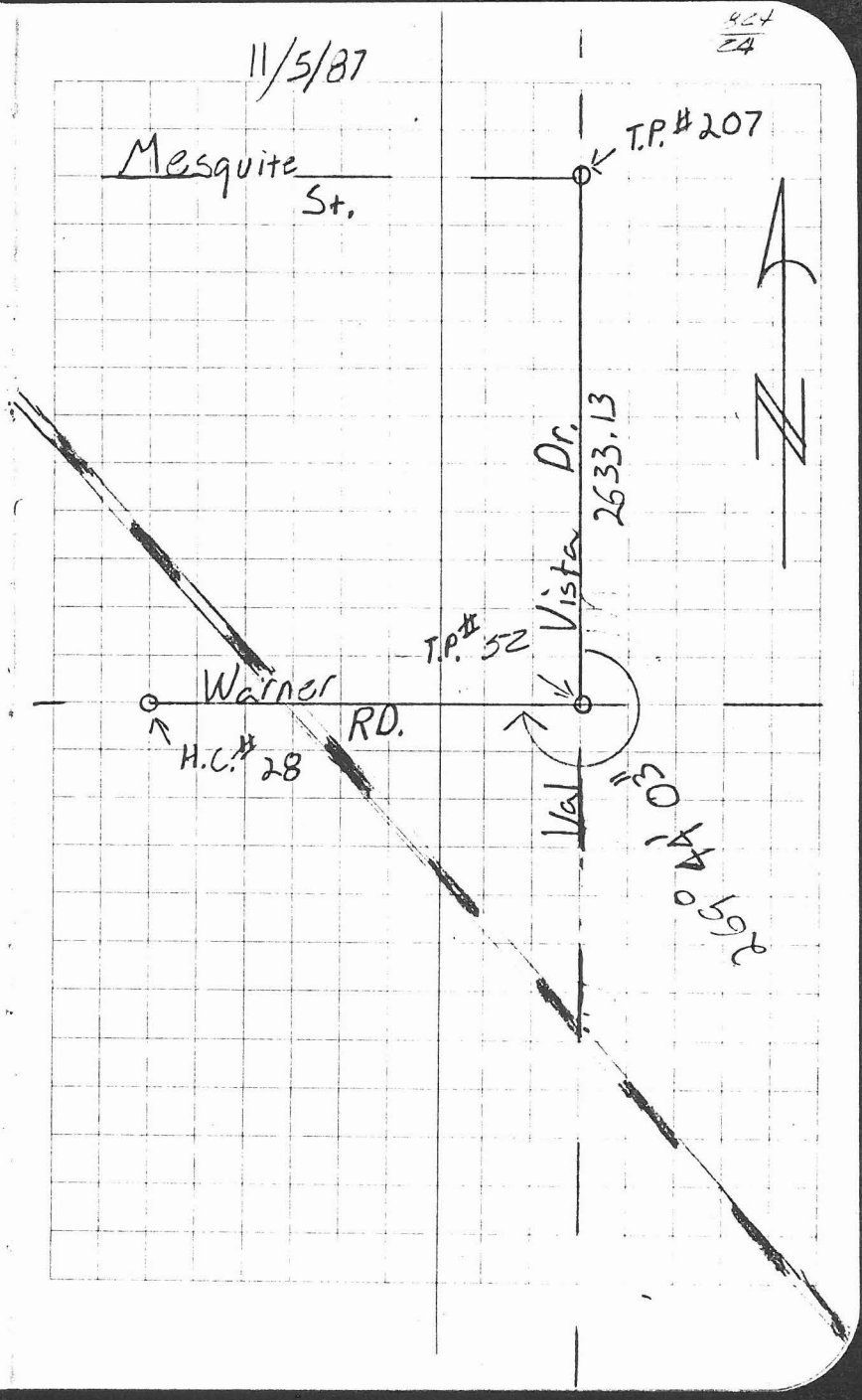
MCFCD Traverse - Block 3

T.P.# 207 → T.P.# 52 → H.C.# 28
328 329 330

∠1 = 269° 44' 11"
∠6 = 178° 24' 15"
M∠ = 269° 44 03

H.D. to T.P.# 207
∠ 90° 00' 50"
S.D. 2633.13
H.D. = 2633.13

11/5/87



MCFCD — 3-Wire Levels - Lindsay Rd - Warner To Williams Fld Rd

11/5/87

934/26

TBM 3-131				1243.693	BC in H.H. @ Int. of Warner & Lindsay Rd (see BK 835 Pg 12)
	5.88				
	5.165	53.858			
	4.46	↑			
			3.425		
TBM 5-200			2.62	1251.238	CBS - Po. Pole - E. Side Lindsay - 300± S. of Warner Rd
			1.81		
	4.135				
	3.12	54.358			
	2.105	↑			
			3.27		
TBM 5-201			2.295	1252.063	CBS - PP Pole E. Side Lindsay - 700± S. of Warner Rd
			1.325		
	3.475				
	2.485	54.548			
	1.495	↑			
			3.32		
TBM 5-202			2.36	1252.138	CBS - Po Pole - E Side Lindsay - 1100± S. of Warner Rd.
			1.40		
	3.68				
	2.71	54.898			
	1.74	↑			

MCFCD — 3-Wire Levels - Lindsay Rd: Warner to Willis Fld Rd

		1254.898		
		↑		2.665
TBM 5-203				1.69
				0.715
	3.22			
	2.26	55.468		
	1.30	↑		
				3.37
TBM # 5-204				2.385
				1.40
	3.685			
	2.715	55.798		
	1.75	↑		
				4.205
TBM # 5-205				3.23
				2.25
	4.865			
	3.91	56.478		
	2.96	↑		
				4.93
TBM # 5-206				3.945
				2.955
	5.945			
	4.96	57.493		
	3.97	↑		

11/5/87

324/28

1253.208	CPS - Pe. Pole - E. Side Lindsay - 1500± S. of Warner Rd
1253.083	CPS - P. Pole - E. Side Lindsay - 1900± S. of Warner Rd
1252.568	CPS - Pe Pole E. Side Lindsay - 2300± S. of Warner Rd
1252.533	N. River Manhole & Lindsay - ½ M.L. S. of Warner Rd. (dn. 0.19 to 1" I.P. Elev. = 1252.343)

M MCFCD 3-Wire Levels - Lindsay Rd

L. Van Pyke
R. McMurray
T. Craven

11/5/37
11/6/37

354
30

		1257.493			
		↑	4.435		
TL	TBM 5-207		3.52	1253.973	CPS - Po. Pole - E. Side
			2.61		Lindsay - 3950± S.
	4.585				of Warner Rd
	3.70	57.673			
	2.81	↑			
			4.45		
TL	TBM# 5-208		3.51	1254.163	CPS - Po Pole - E. Side
			2.56		Lindsay - 3750± S
	4.75				of Warner Rd
	3.845	58.008			
	2.94	↑			
			4.47		
TL	TBM# 5-209		3.525	1254.483	CPS - Po Pole E. Side
			2.61		Lindsay - 3350± S.
	4.975				of Warner Rd
	4.07	58.553			
	3.165	↑			
			4.63		
TL	TBM# 5-210		3.71	1254.843	CPS - Po Pole - E. Side
			2.78		Lindsay - 4250± S
	4.53				of Warner Rd
	3.63	58.473			
	2.73	↑			

MCFCD

3-Wire Levels – Lindsay Rd
Warner to Williams Fld Rd

11/6/87

		1258.473 ↑	4.23	
TBM #5-211			3.30	
			2.37	1255.173 CPS Po Pole – E. Side Lindsay Rd 1650± S. of Warner Rd
	4.37			
	3.45	58.623 ↑		
	2.53			
			3.495	
TBM #5-212			2.575	1256.048 CPS-Po. Pole E. Side Lindsay Rd 5000± S. of Warner Rd
			1.655	
	4.50			
	3.51	59.558 ↑		
	2.525			
			4.975	
TBM #5-213			3.79	1255.768 B.C. in H/H @ Intersection Lindsay and Ray Rd
			2.61	
	7.51			
	5.955	61.723 ↑		
	4.40			
			5.56	
TBM #5-214			3.74	1257.983 CPS-Po Pole – W. Side Lindsay – 700± S. of Ray Rd.
			1.92	
	4.905			
	3.63	61.613 ↑		
	2.355			

MCFCD 3-Wire Levels - Lindsay Rd - Warner to Williams Fld Rd

		1261.613 ↑			
			5.203		
TBM #5-215			4.03	1257.583	CPS - P. Pole - W. Side Lindsay - 1200± S. of Ray Rd.
			2.84		
	5.61				
	4.47	62.053 ↑			
	3.325				
			4.255		
TBM #5-216			2.96	1259.093	CPS - P. Pole - W. Side Lindsay - 1700± S. of Ray Rd.
			1.66		
	3.965				
	2.73	61.823 ↑			
	1.495				
			4.71		
TBM #5-217			3.54	1258.283	CPS - P. Pole - W. Side Lindsay - 2300± S. of Ray Rd.
			2.36		
	5.85				
	4.49	62.773 ↑			
	3.13				
			4.235		
TBM #5-218			3.01	1259.763	CPS - P. Pole - W. Side Lindsay - ½ mile S. of Ray Rd.
			1.73		
	4.99				
	3.63	63.393 ↑			
	2.27				

4/2/87

11/6/87

MCFCD — 3-Wire Levels – Lindsay Rd – Warner to Williams Fld Rd.

		1263.393 ↑			
			6.38		
TBM* 5-219			4.94	1258.453	CRS- Po. Pole - W. Side Lindsay – 3100± S. of Ray Rd
			3.495		
	6.33				
	4.96	63.413 ↑			
	3.59				
			6.18		
TBM* 5-220			4.645	1258.768	CRS- Po. Pole - W. Side Lindsay - 3600± S. of Ray Rd.
			3.11		
	6.395				
	4.955	63.723 ↑			
	3.515				
			6.07		
TBM* 5-221			4.64	1259.083	CRS- Po. Pole – W Side Lindsay – 4100± S. of Ray Rd.
			3.21		
	6.175				
	4.84	63.973 ↑			
	3.50				
			5.71		
TBM* 5-222			4.35	1259.573	CRS- Po. Pole – W Side Lindsay – 4600± S. of Ray Rd.
			2.995		
	5.61				
	4.68	64.253 ↑			
	3.76				

11/6/87

3-Wire Levels – Lindsay Rd – Warner Rd to Williams Fld.

MCFCD

		1264.253		
		⊼		
			5.965	
TBM # 5-223			5.02	1259.233
			4.08	B.C. in H.H. @ Int. Lindsay & Williams Fld. Rd
	7.00			
	5.39	64.623		
	3.77	⊼		
			4.56	
TBM # 5-224			3.21	1261.413
			1.86	CPS. Po. Pole – N. Side Williams Fld Rd – 600± E. of Lindsay
	5.66			
	4.34	65.753		
	3.01	⊼		
			5.22	
TBM # 5-225			3.90	1261.853
			2.57	CPS. Po Pole – N. Side Williams Fld Rd – 1150± E. of Lindsay
	5.97			
	4.69	66.543		
	3.41	⊼		
			4.30	
TBM # 5-226			2.92	1263.623
			1.54	CPS – Po. Pole : S. Side Williams Fld. Rd – 1600± E. of Lindsay
	5.79			
	4.51	68.133		
	3.24	⊼		

MCFCD

3-Wire Leads - Lindsay Rd - Warner to Williams Fld Rd.

1268-133

T

4.95

1264+5.227

3.54

2.12

6.40

5.05 69.643

3.71 T

5.17

HC-39

3.835

2.50

11/6/87

924/40

1264.593

CBS - Po. Pb - N. Side Williams Fld Rd - 2100± E. of Lindsay

1265.803

B.C in H.H - ± Williams Fld Rd - ½ mile E. of Lindsay

0.062

(1265.87)

MCFCD

Traverse Lindsay Rd — Warner to Williams Fld Rd
(Sec Bk 806 Pg)

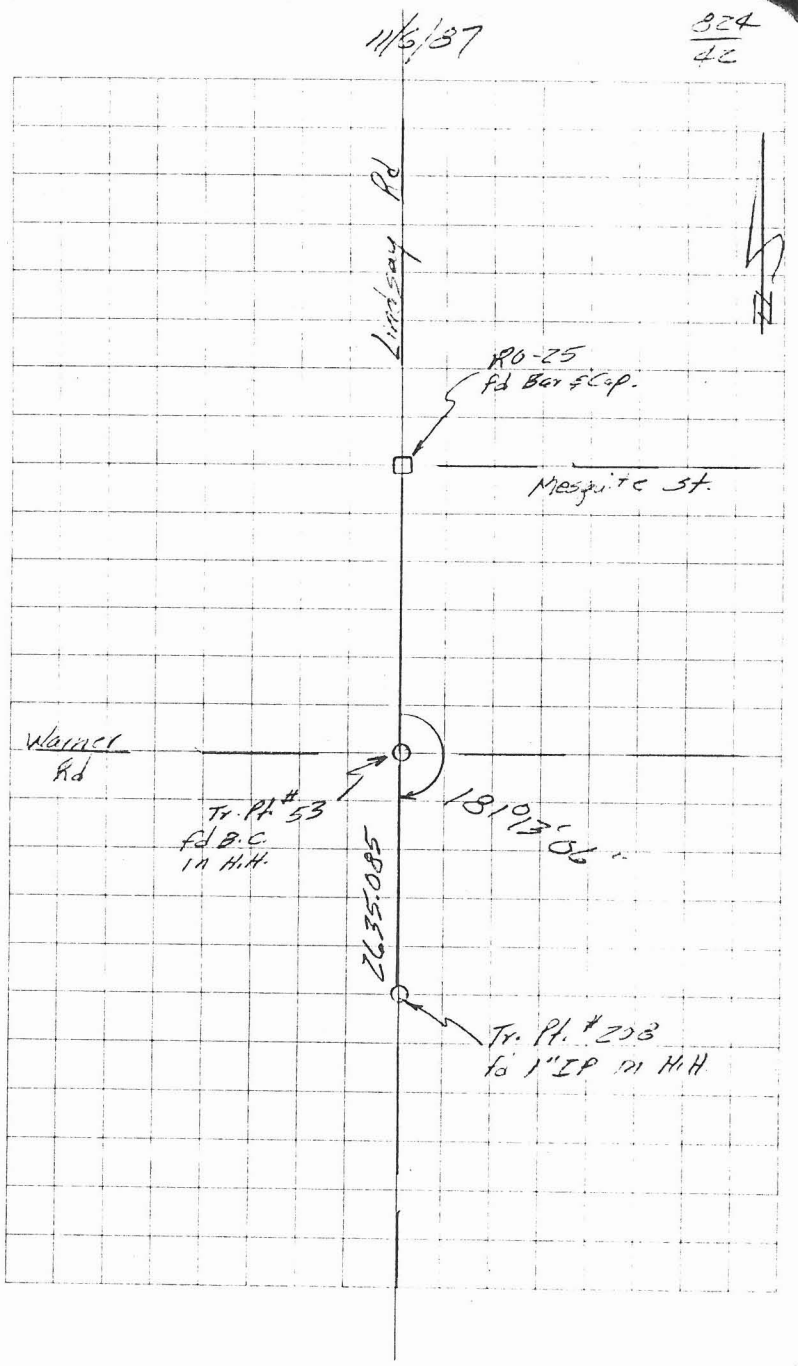
RO-25 → TP# → TP# 208

∠#1 = 181°13'12"
∠#6 = 7°18'34"
MNZ - 181°13'06"

HD to TP# 208
ΣA = 89°51'35"
SD = 2635.09
HD = 2635.08

11/5/87

824
4E



MCFCD

Traverse – Lindsay Rd – Warner to Williams Fld Rd

TP# → TP# 208 → TP# 209

↑

$\measuredangle$#1 = 178°56'54"

$\measuredangle$#6 = 353°41'21"

MN $\measuredangle$ = 178°56'54"

HD to TP# 53

Z$\measuredangle$ = 89°54'36"

SD = 2635.09

HD = 2635.09

HD to TP# 209

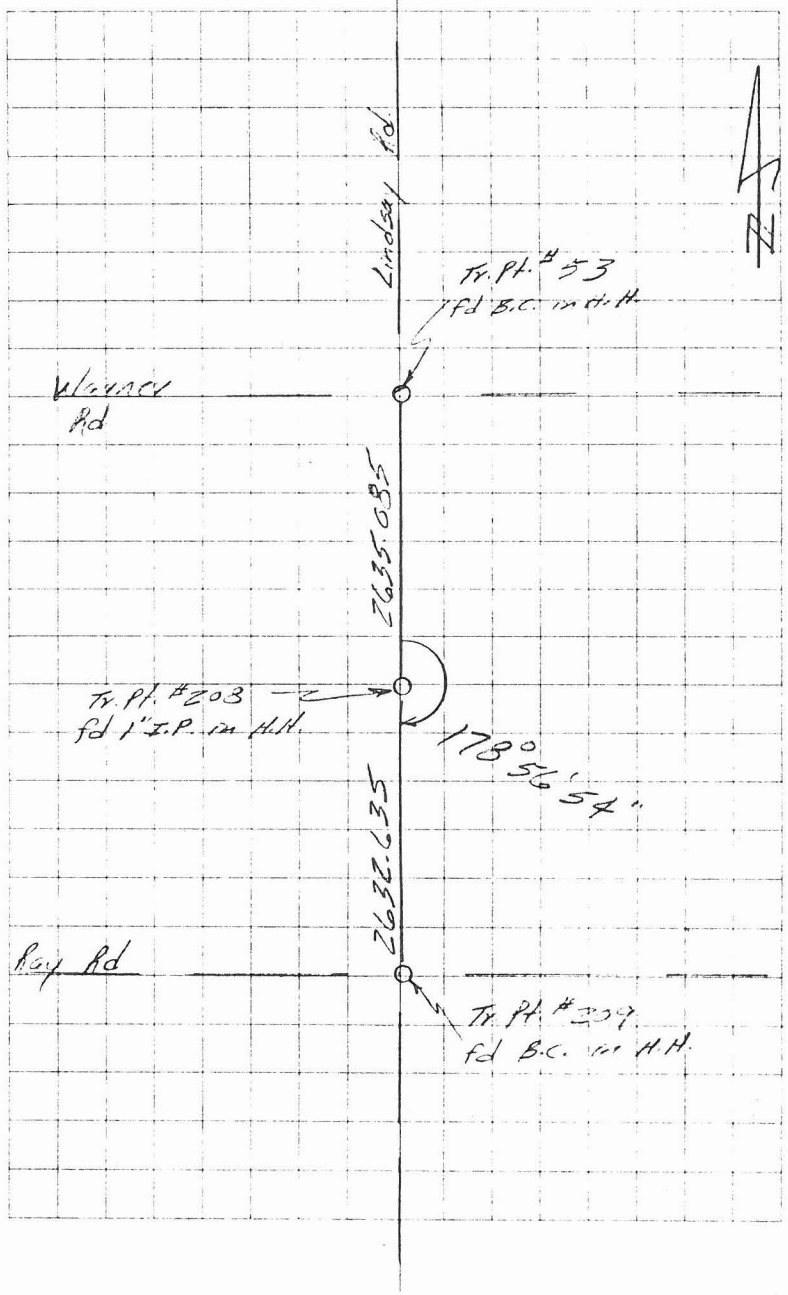
Z$\measuredangle$ = 89°50'36"

SD = 2632.64

HD = 2632.63

11/6/87

824/44



MCFCD

Traverse - Lindsay Rd - Warner to Williams Fld Rd

TP #208 → TP #209 → TP #210

π

$\angle$ #1 = 179°34'55"

$\angle$ #2 = 357°28'49"

MNT = 179°34'43"

HD to TP #208

ZA = 90°00'21"

SD = 2632.64

HD = 2632.64

HD to TP #210

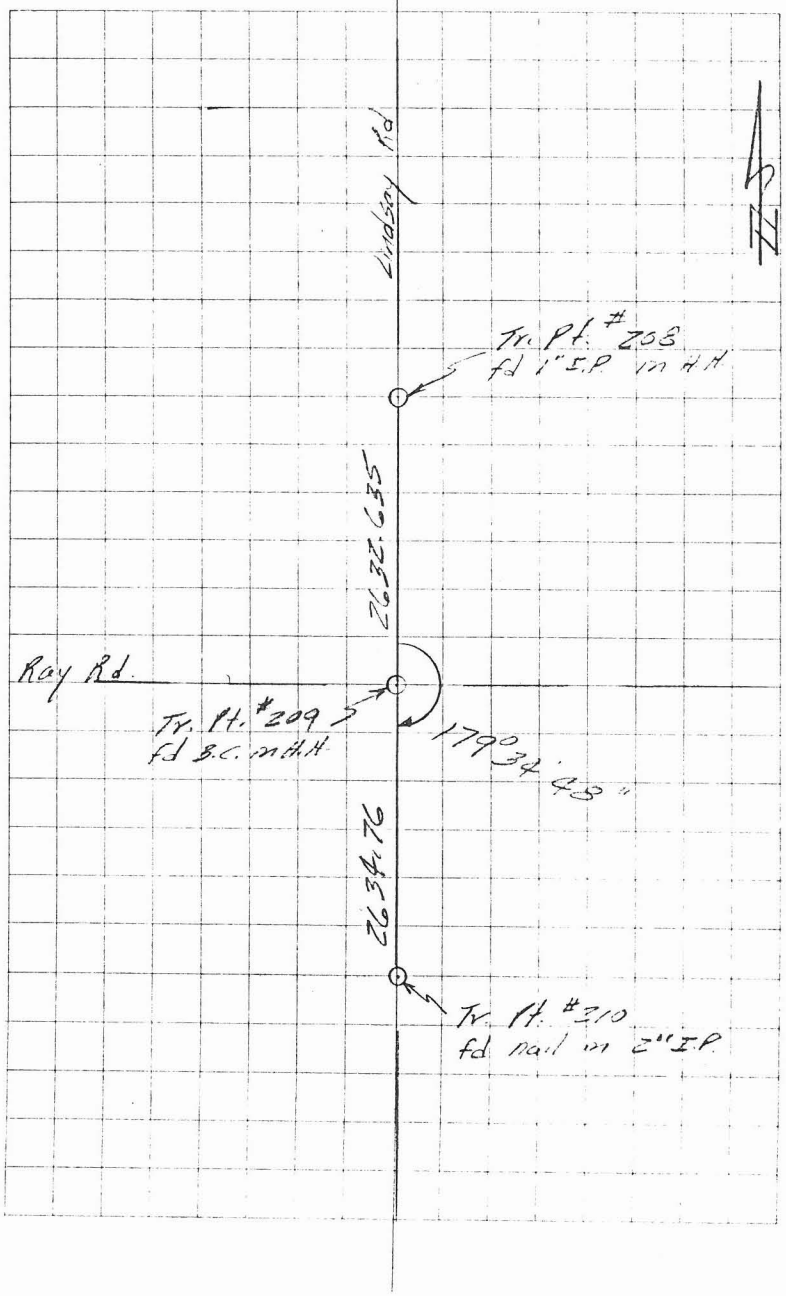
ZA = 89°52'58"

SD = 2634.77

HD = 2634.76

11/6/87

824
46



MCFCD

Traverse - Lindsay Rd.
Waltrel to Williams Fld Rd.

TP# 209 → TP# 210 → TP# 211

π

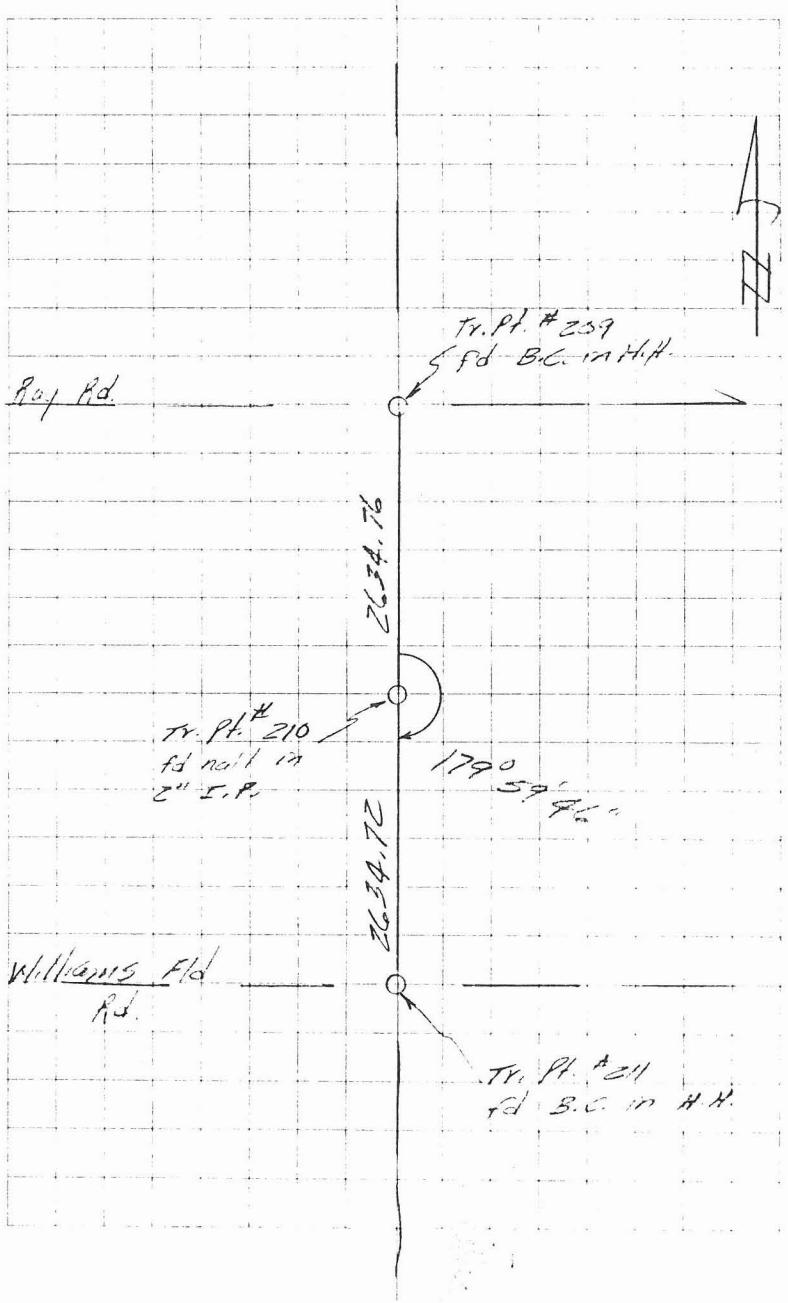
∠#1 = 179°59'42"
∠#6 = 359°58'35"
M/T - 179°59'46"

HD to TP# 209
ZA = 89°58'09"
SD = 2634.76
HD = 2634.76

HD to TP# 211
ZA = 89°54'27"
SD = 2634.72
HD = 2634.72

11/6/87

3-4
43



MCFCD

Traverse — Lindsay Rd - Warner to Williams Fld Rd

11/6/37

GZR
50

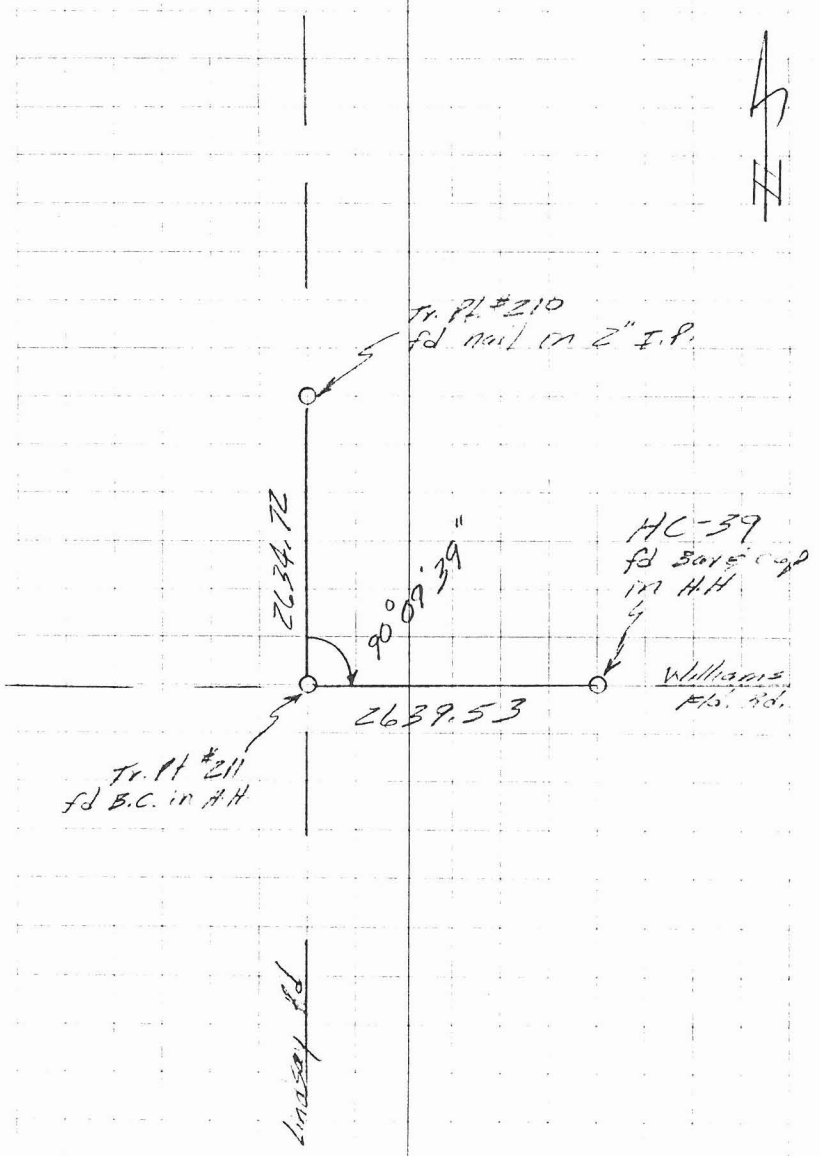
TP #210 → TP #211 → HC-39

π

∠#1 = 90°09'45"
∠#6 = 180°57'53"
INA = 90°09'39"

HD to TP #210
ZA = 89°56'17"
SD = 2634.72
HD = 2634.72

HD to HC-39
ZA = 89°45'55"
SD = 2639.54
HD = 2639.52



MCFCD

Traverse - Lindsay Rd - Klamer to Williams Fld Rd.

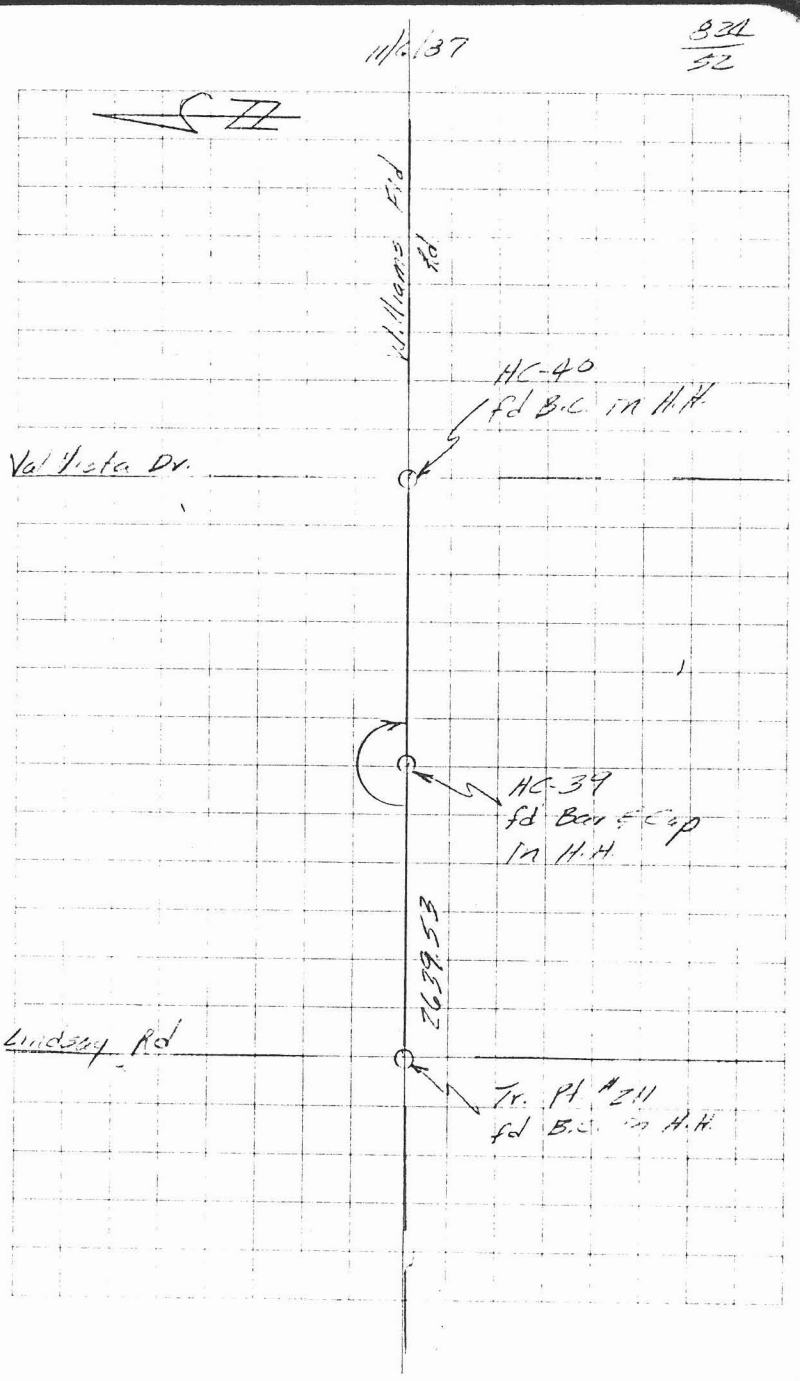
TP #211 → HC-39 →
↑

$\angle$ #1 = 179°58'14"
$\angle$ #2 = 359°49'23"
$\angle$ NA = 179°58'14"

HD to TP #211
ZA = 90°04'00"
SD = 2639.54
HD = 2639.54

HD
to
ZA =
SD =
HD =

11/2/37



MCFCD

Traverse — Cooper Rd
Queen Creek to Riggs Rd

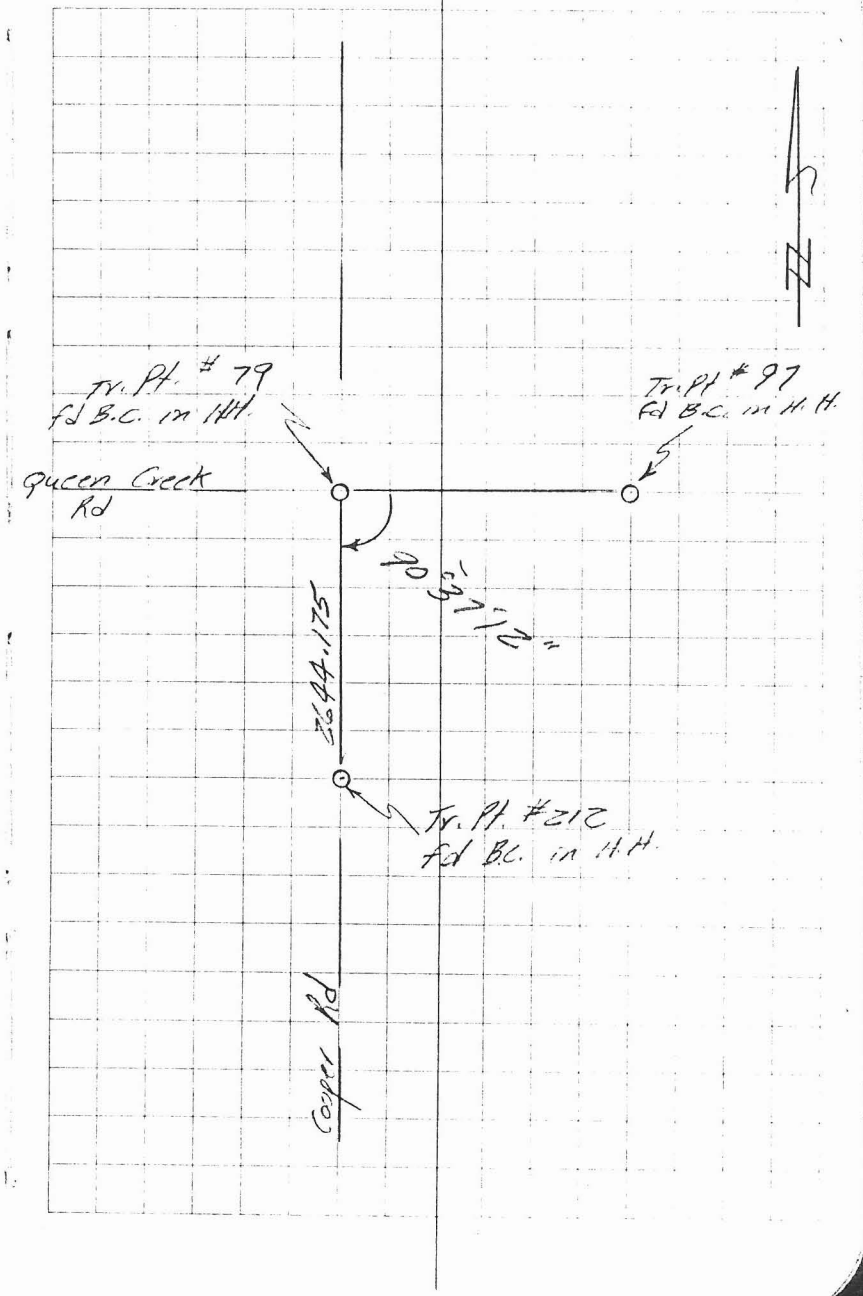
11/6/37

324/54

TP #97 → TP #79 → TP #212

∠#1 = 90°37'14"
∠#2 = 183°43'12"
MN∠ = 90°37'12"

HD to TP #212
E∠ = 89°52'06"
SD = 2644.18
HD = 2644.17



MCFCD

Traverse – Cooper Rd – Queen Creek to Riggs Rd.

TP #79 → TP #212 → TP #213

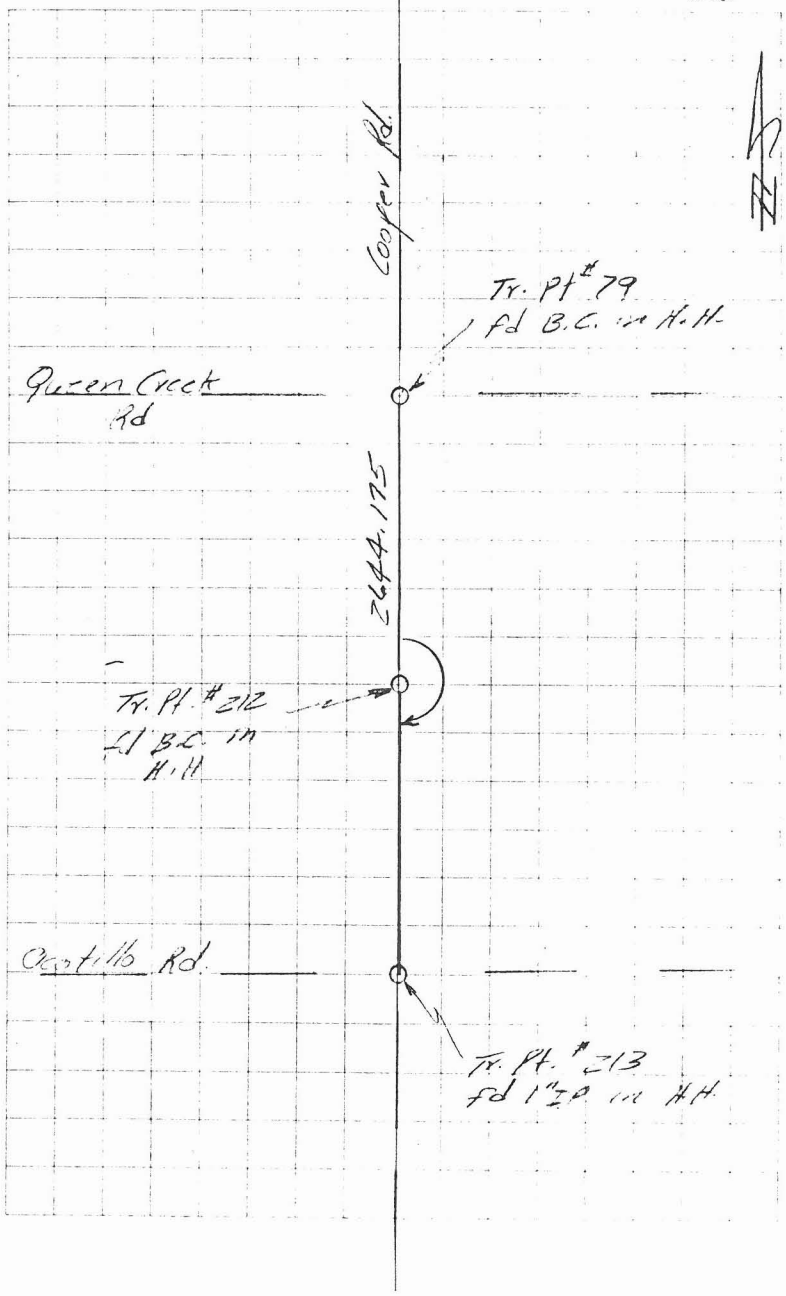
$\measuredangle$ #1 = 180°02'52"
$\measuredangle$ #2 = 00°17'16"
MM = 180°02'53"

HD to TP #79
ZA = 89°57'45"
SD = 2644.18
HD = 2644.18

HD to TP #213
ZA = 89°52'39"
SD = 2645.93
HD = 2645.92

11/6/87

124
50



MCFCD

Traverse – Cooper Rd – Queen Creek to Riggs Rd

C24
5B

TP #212 → TP #213 → TP #214

∠ #1 =

∠ #2 =

MM ∠ =

HD to TP #212

ZA =

SD =

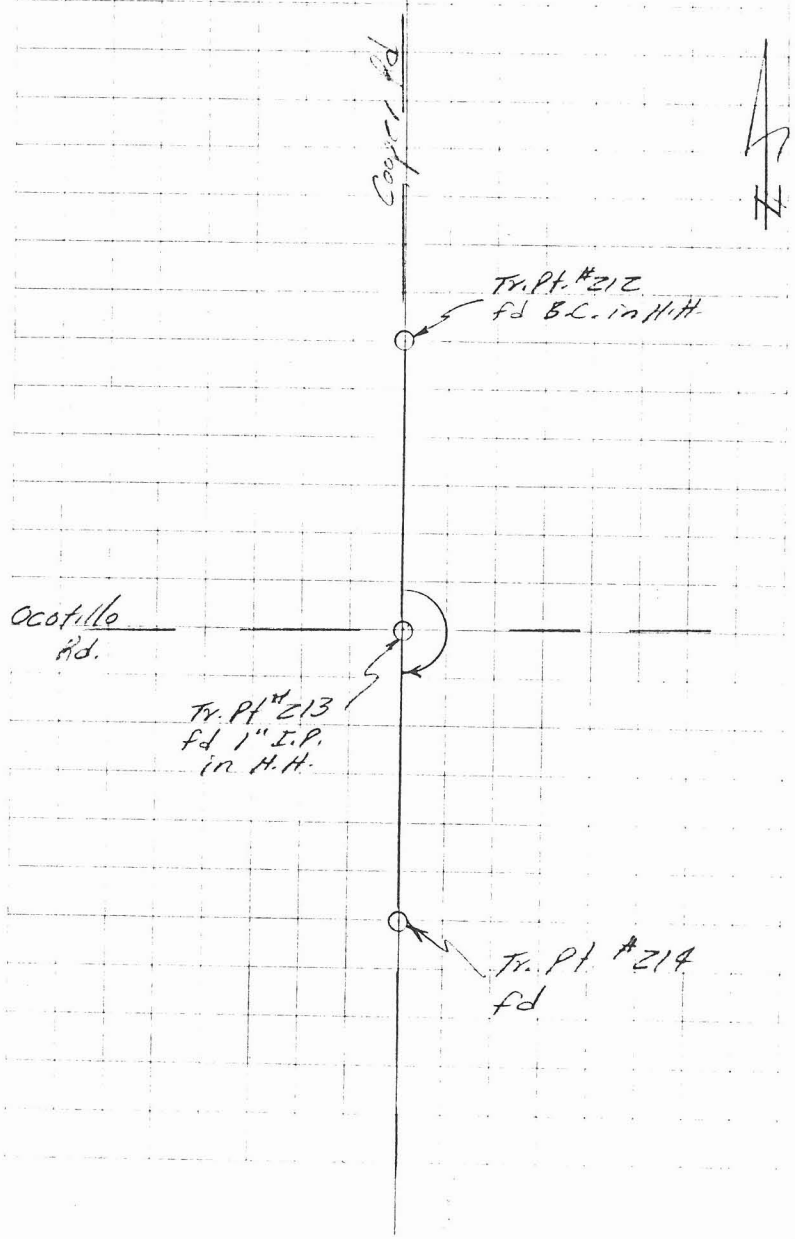
HD =

HD to TP #214

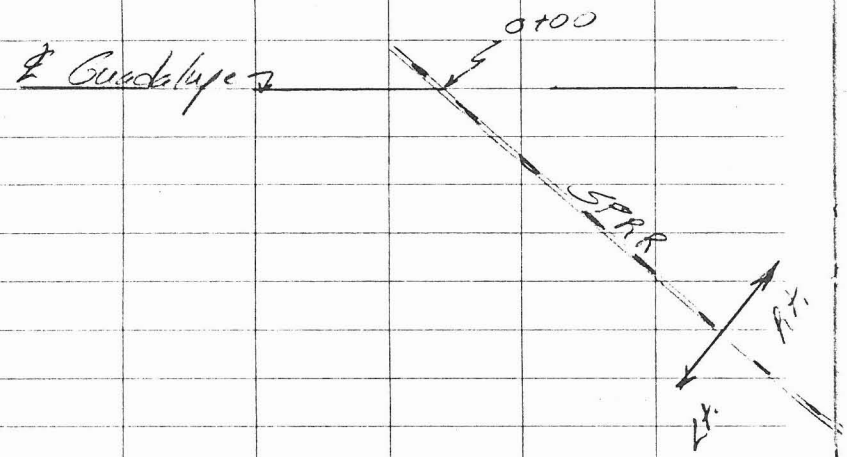
ZA =

SD =

HD =



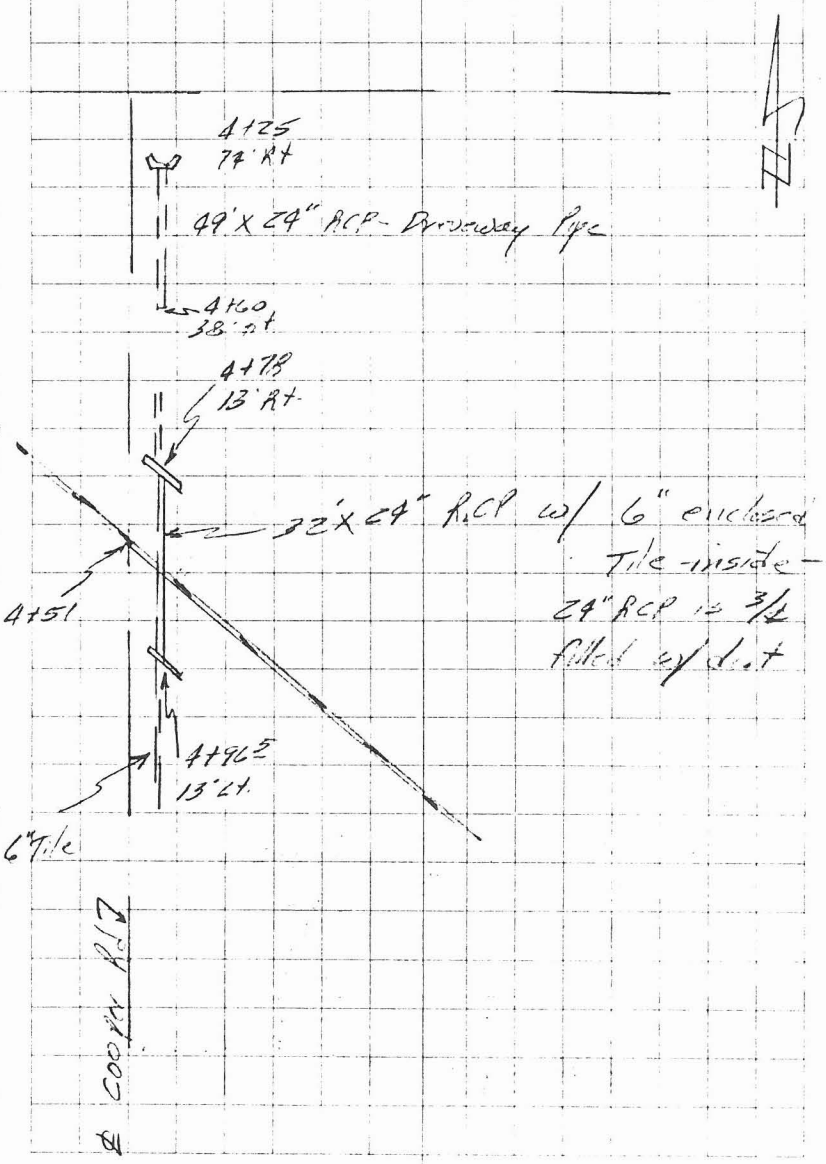
MCFCD Flood Control Study — SPRR & Guadalupe



L. Van Dyke
R. McMurray
T. Cooper

11/20/87

924
60



NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

IMCFCD — Flood Control Study - SRPPE Backslope

11/16/87

5-4 / 62

TBM #2-40	5.07	27.20 ↑		22.13
0400				
0400				
0400				
2400				
2400				

NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

Cal Trans - Sta. 44+00 to 46+00 Easterly Levee

20+00 S. of SPRR EL. = 22.13

✓ 10.5	✓ 13.3	✓ 23.1	✓ 13.5	✓ 9.05	✓ 15.9
6.7	4.50	4.1	3.7	8.15	11.3
39	14	B.L.	20	35	45
T.S.	Sh.	E R.R	Sh	S.TCD	Inc. C.D.

✓ 11.5	✓ 10.0	✓ 19.0
9.7	7.2	8.2
70	66	52
Inc. C.D.	S.TCD	N.TCD

✓ 19.9	✓ 21.9	✓ 19.6
7.3	5.3	7.6
73	115	145
N.TCD	Berm	Ws.11

✓ 18.96	✓ 21.15	✓ 21.15	✓ 21.8	✓ 17.9	✓ 19.06
8.25	4.45	4.45	4.4	9.3	8.15
19	5	B.L	5	17	28
T.S.	Berm	E R.R	Berm	T.S	

✓ 21.1	✓ 10.56	✓ 18.16
5.5	6.65	8.6
174	131	102
Sh. Good	Sh. Good	T.S.

MCFCD

Flood Control Study
SPRR - S Guadalupe
227.20

2400

2400

2400

2400

2400

2400

NOTE'S	BY	DATE
CHECKED	LT	11-23-87
COPIED		
	TO	DATE
DELIVERED		

11/23/87

8 of 64

✓ 19.1	✓ 16.25	✓ 19.15	
8.1	10.85	8.05	
185	192	198	
S.	Inv	N.	
TCD	CD	TCD	
✓ 19.55	✓ 20.1	✓ 19.45	✓ 20.1
665	7.1	3.75	7.1
263	222	218	213
	N.	Inv	S.
	TCD	CD	TCD
✓ 18.45	✓ 20.75	✓ 21.2	✓ 20.8
8.30	6.45	6.0	6.4
273	277	282	300
Inv.	E.	SH.	
CD	TCD	Coop.	
✓ 19.85	✓ 17.1	✓ 20.45	✓ 19.75
7.35	10.1	6.75	7.45
407	391	380	375
Berm	Inv. Ditch	Berm	SH. Coop.
✓ 18.1	✓ 19.35	✓ 19.6	✓ 19.6
8.5	7.85	7.6	7.6
423	500	600	700
	✓ 19.9	✓ 19.75	✓ 19.65
	7.3	7.45	7.35
	1000	900	800

MCFCD

Flood Control Study
SPRR & Guadalupe

227.20
11

4+00

4+00

4+00

4+00

4+00

4+00

NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

11/10/87

824
66

✓ 20.4	✓ 20.1	✓ 20.0	✓ 19.8
4.8	7.1	7.2	7.4
1000	900	800	700
✓ 19.65	✓ 19.5	✓ 19.1	✓ 19.8
7.55	7.7	7.5	7.4
36.9	400	500	600
✓ 20.05	✓ 19.05	✓ 20.0	✓ 21.5
5.15	8.15	5.2	5.7
347	340	333	321
N.	INV	S.	Sh.
TCD	CD	TCD	Guad.
20.75 ✓ 21.45	✓ 19.1	✓ 19.15	✓ 19.55
6.45	8.1	7.45	7.65
284	273	265	165
Sh	Ditch	fe.	
Guad.			
✓ 22.55	✓ 21.65	✓ 19.0	✓ 19.6
4.65	5.55	8.2	7.6
37	89	113	117
Sh.	Sh.	Ditch	fd
Coop	Coop.		

✓ 19.1	✓ 22.7	✓ 22.95	✓ 22.85	✓ 21.6
7.5	4.5	4.25	4.35	5.7
17	5	B.L.	5	11
7.5.	Berm	&	Berm	
		R.R.		

MCFCD Flood Control Study SPRR & Guadalupe

227.20

TP #1	3.93	27.40	3.73	23.47
6+00				
6+00				
TP #2	4.96	28.60	3.76	23.64
4+78	Inv. 24" RCP			
4+96.5	Inv. 24" RCP			

NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

11/13/87

5-24
63

Top Rail 6+00

18.1	13.0	13.3	23.15	17.K	19.8
9.3	4.4	4.1	4.25	10.0	7.6
22	5	B.L.	5	25	33
T.S.	Berm	& R.R.	Berm	T.S.	fc

40.5
6.9
193
fc

19.85
7.55
102
fc

Top Rail - 5+00

17.16
11.44
13

17.16
11.44
13

MCFCD

Flood Control Study -
UPRR & Guadalupe
228.60
π

8100

10100

ITEM #2.40

6.46 22.14 222

6.46 22.14 (222.13)

11/15/87

824
70

✓ 18.95	✓ 23.7	✓ 23.8	✓ 24.15	✓ 19.15	✓ 20.4
9.65	4.9	4.65	5.1	9.45	8.2
25	5	B.L.	5	24	33
T.S.	Berm	& R.R.	Berm	T.S.	TC

✓ 19.2	✓ 24.05	✓ 24.25	✓ 24.15	✓ 19.35	✓ 20.5
9.4	4.55	4.35	4.45	9.55	8.1
25	5	B.L.	5	23	33
T.S.	Berm	& R.R.	Berm	T.S.	TC

Cut 'A' - Loop Return

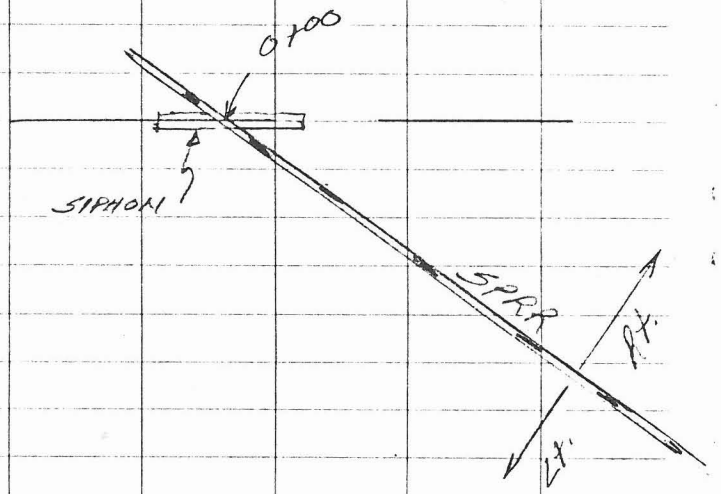
NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

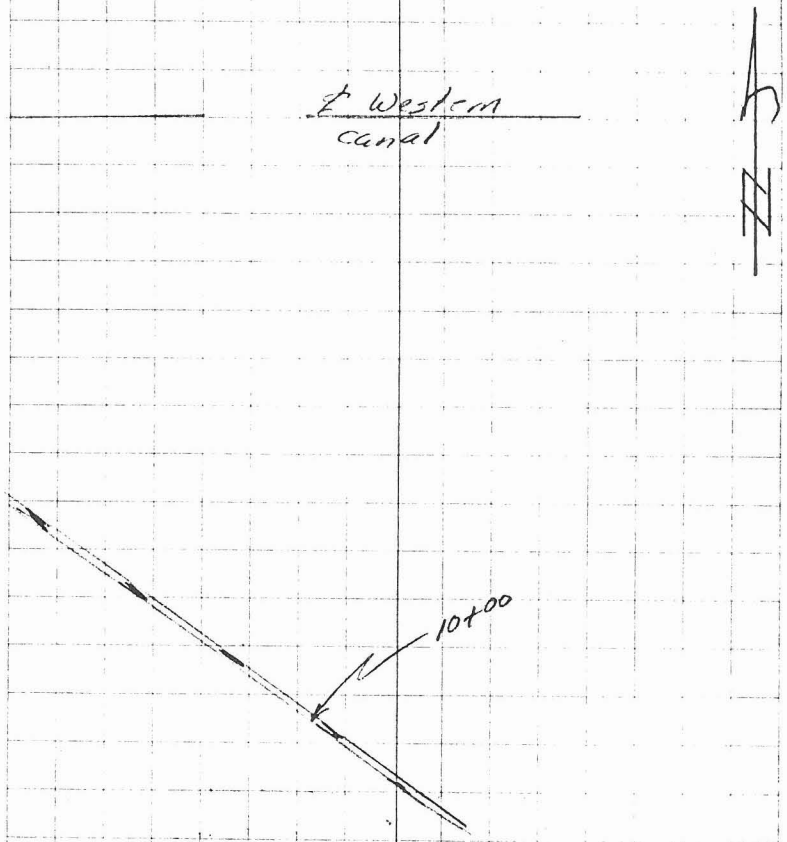
MCFCD

Flood Control Study –
SPRR & Western Canal

11/10/37

824
72





NOTE'S	BY	DATE
CHECKED	LT	11·23·37
COPIED		
	TO	DATE
DELIVERED		

MCFCD

Flood Control Study – Western Canal & SPRR

RB-19	5.67	33.98 ↑			1223.31
TP#1	5.49	37.20 ↑	2.27	31.71	

11/10/87

334
74

CPS – & Neely – 50' N. of SPRR

B.C. E. Wall @ Int. Western Canal & SPRR –

6+00	31.0	31.9	32.6	31.7	29.75 / 19.75	28.6 / 18.6
	4.2	5.3	5.15	5.5	7.45	8.6
	13	5	5.2	6	24	52
		Berm	R.R.	Berm	T.S.	Wall
2+00	27.05	31.85	32.5	31.8	29.70 / 19.7	29.75
	10.15	5.35	4.7	5.4	7.5	7.45
	20	9	S.L.	19	32	100
	T.S.	Berm	R.R.	Berm	fc	fc
2+00				24.75	24.95	30.65
				12.45	12.35	6.55
				150	138	130
				Ind. Canal	Ind. Canal	S. Bank Canal
2+00				30.1	29.55	
				7.1	7.65	
				160	188	
				N. Bank Canal	Wall	

NOTE'S	BY	DATE
CHECKED	L-T	11-23-87
COPIED		
	TO	DATE
DELIVERED		

MCFCD Flood Control Study - SPRR & Western Canal

237.20

4+00

TP#2 4.51 37.80 3.91 33.29

6+00

8+00

NOTE'S	BY	DATE
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COPIED		
	TO	DATE
DELIVERED		

8+05

8+00

11/23/87

534/76

✓ 33.65	✓ 32.8	✓ 33.65	✓ 32.95	✓ 30.7	✓ 29.8
8.65	4.7	4.15	4.25	6.5	7.4
74	5	B.L.	5	17	34
T.S.	Berm	S.P.R.R.	Berm	T.S.	Fe

Top S.P.R.R. pk - 5+00

✓ 28.25	✓ 32.15	✓ 33.3	✓ 33.2	✓ 31.4	✓ 29.6
9.55	5.05	4.5	4.1	6.4	8.2
18	6	B.L.	5	12	32
T.S.	Berm	S.P.R.R.	Berm	T.S.	Fe

✓ 30.2	✓ 33.4	✓ 33.35	✓ 33.55	✓ 32.3	✓ 32.1
7.6	4.4	4.45	4.25	5.5	5.7
22	9	B.L.	6	13	35
T.S.	Berm	S.P.R.R.	Berm	T.S.	

✓ 30.16	✓ 29.9	✓ 30.46	✓ 30.1
7.64	8.11	7.34	7.7
81	80	42	174
N.	N.	Asph	Fe
T.C.	Gut	Street	

MCFCD — Flood Control Study — SPRR & Western Canal

11/13/37

237.80

10+00					
TP#3	4.42	37.72	4.50	33.30	
TP#1	2.75	34.44	6.03	31.69	
TBM RO-19			6.16	28.28	(1223)

40.5	33.95	37.8	33.1	31.2	31.55
7.3	3.85	4.0	4.1	6.5	6.25
26	18	6.2	8	26	32
T.S.	Berm	E R R	Berm	T.S.	Fc

R.R. Spk - 5100

B.C. - Loop Return

CRS - Loop Return

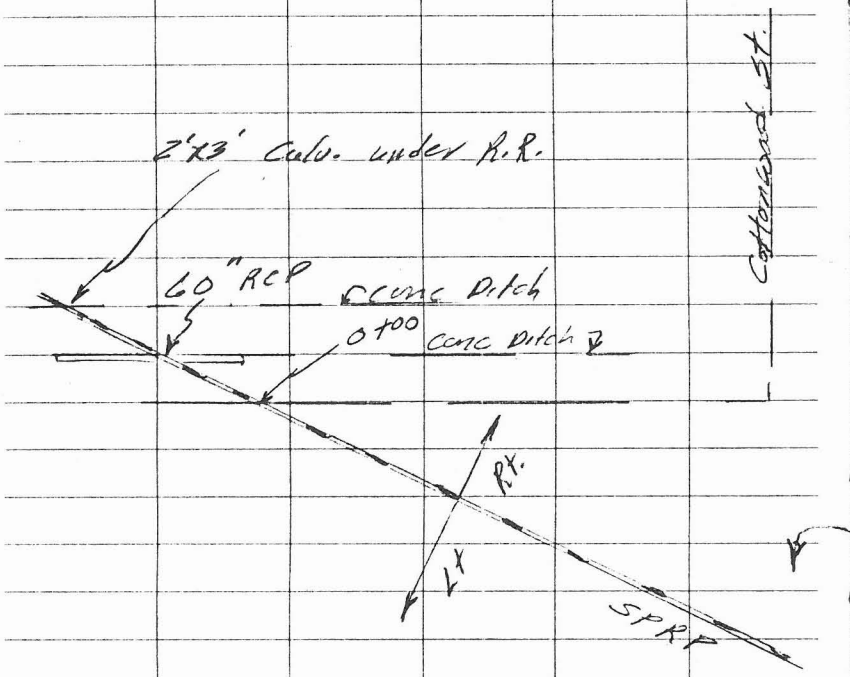
NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

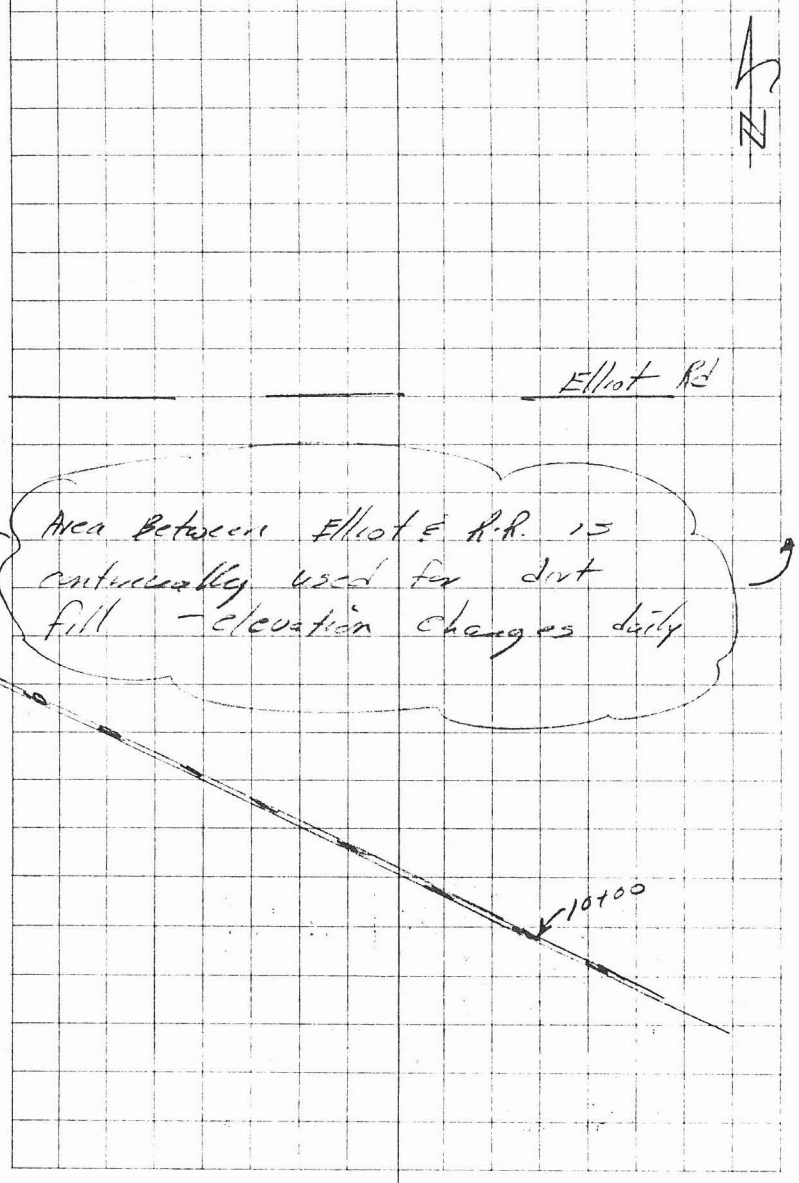
MCFCD

Flood Control Study — SPRR & Elliot

L. Van Dyke
R. McMurray
T. Craven

11/10/87
11/11/87





NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

MCFCD — Flood Control Study — SPRR & Elliot Rd

IBM #3-194 3.30 43.30 (T) 1240.00

0400 E R.R. & Elliot Rd.

0100

0100

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

2400

2700

11/4/87

9.24
82

cut A - N. side - Elliot Rd - 100± E. of SPRR.

37.2 — 6.1 — 40 — T.S.

40.1 — 3.1 — 27 — 54. Elliot

40.48 — 2.82 — B.L. — R.R.

40.3 — 3.0 — 17 — 54. Elliot

37.58 — 5.72 — 28.5 — S. TCD

33.47 — 9.33 — 36 — Inv. C.D.

36.08 — 7.22 — 53.5 — Inv. CD.

38.25 — 5.05 — 50 — S. TCD

36.95 — 6.35 — 42. — N. TCD

38.18 — 5.12 — 56.5 — N. TCD

38.1 — 5.2 — 107 — Wall

35.0 — 8.3 — 24 — T.S.

40.15 — 3.15 — 5 — Berm

40.3 — 3.0 — B.L. — R.R.

40.35 — 2.95 — 5 — Berm

34.15 — 9.15 — 41 — T.S.

36.7 — 6.6 — 58

28.89 — 4.41 — 150 — E. Elliot

38.5 — 4.8 — 123 — 54. Elliot

36.75 — 6.55 — 100

MCFCD

Hood Control Study
Elliot & SPRR

1243.30
T

2+00

2+00

4+00

4+00

4+00

4+00

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

11/16/87

9-4
B4

38.44
4.36
E 11
N. Gut.
Elliot

38.96
4.34
264
E
Ctwd

38.59
4.71
296
E. Gut
Ctwd

38.9
4.4
330

38.79
4.51
297
T.C.

35.4
7.9
23
T.S.

40.65
2.65
5
Berm

40.75
2.55
BC.
SR

40.85
2.45
5
Berm

36.9
6.4
33
T.S.

38.1
5.2
74

38.79
4.51
300
E
Elliot

38.45
4.85
200

37.2
6.1
100

39.0
4.3
336
Berm

33.95
9.35
347
Inv
60

38.1
4.6
358

38.8
4.5
362
S.
TCD

37.8
5.5
400

38.58
4.72
370
N.
TCD

36.67
6.63
366
Inv.
CD

MCFCD

Flood Control Study
SPRR & Elliot

		124+30 ⊤		
typ #1	5.14	44.00 ⊤	4.44	33.86
4+00				
5+00				
6+00				
6+50				
6+00				
6+00				

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

11/16/87

824
84

N.T.C.D. 4+30

37.95 38.6
6.05 5.4
500 600

36.4 41.1 41.15 41.15 34.75 37.9
7.6 2.9 2.85 2.85 9.25 6.1
23 5 84 5 40 58
T.S. Berm E.R. Berm T.S.

38.0 38.8 39.7 38.3
6.0 4.2 4.3 5.7
200 154 116 100

37.75 38.1 39.12
6.25 5.9 4.33
500 400 454
E
Elliot

39.35 34.19 39.45
4.65 9.31 4.55
513 500 488
Berm Inv. Berm
E.S. TCP CD

MCFCD

Flood Control Dist.
SPRR & Elliot
1244.00

6+00

8+00

8+00

8+00

10+00

10+00

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

11/11/87

824
58

37.17
6.33
51C
TW
CO

39.24
4.76
321
N.
TCO

37.8
6.2
600

38.0
6.0
700

36.6
7.95
23
T.S.

41.35
2.75
5
Berm

41.3
2.7
BC
&
R.R.

41.45
2.55
5
Berm

36.35
7.65
23
T.S.

38.3
5.7
100

38.0
6.0
500

37.85
6.15
400

37.15
6.35
300

38.4
5.6
200

39.54
4.46
603
&
Elliot

39.4
4.6
700

40.6
3.4
736

36.65
7.85
C1
T.S.

41.8
2.6
5
Berm

41.75
2.65
BC
&
R.R.

41.9
2.1
5
Berm

37.9
6.1
18
T.S.

40.0
4.0
30

38.6
5.4
300

40.2
3.8
100

39.6
4.4
100

MCFCD

Flood Control Study - SPRR & Elliot Rd.

1244.00

T

10+00

TBM# 3-193 6.44 37.56 (1237.55)

11/4/87

8-24
90

39.1
4.9
393

41.8
2.15
403
Wall

cut 0' S. Rail Conc Ditch - 400'± E of TBM# 3-194 (N. side Elliot)

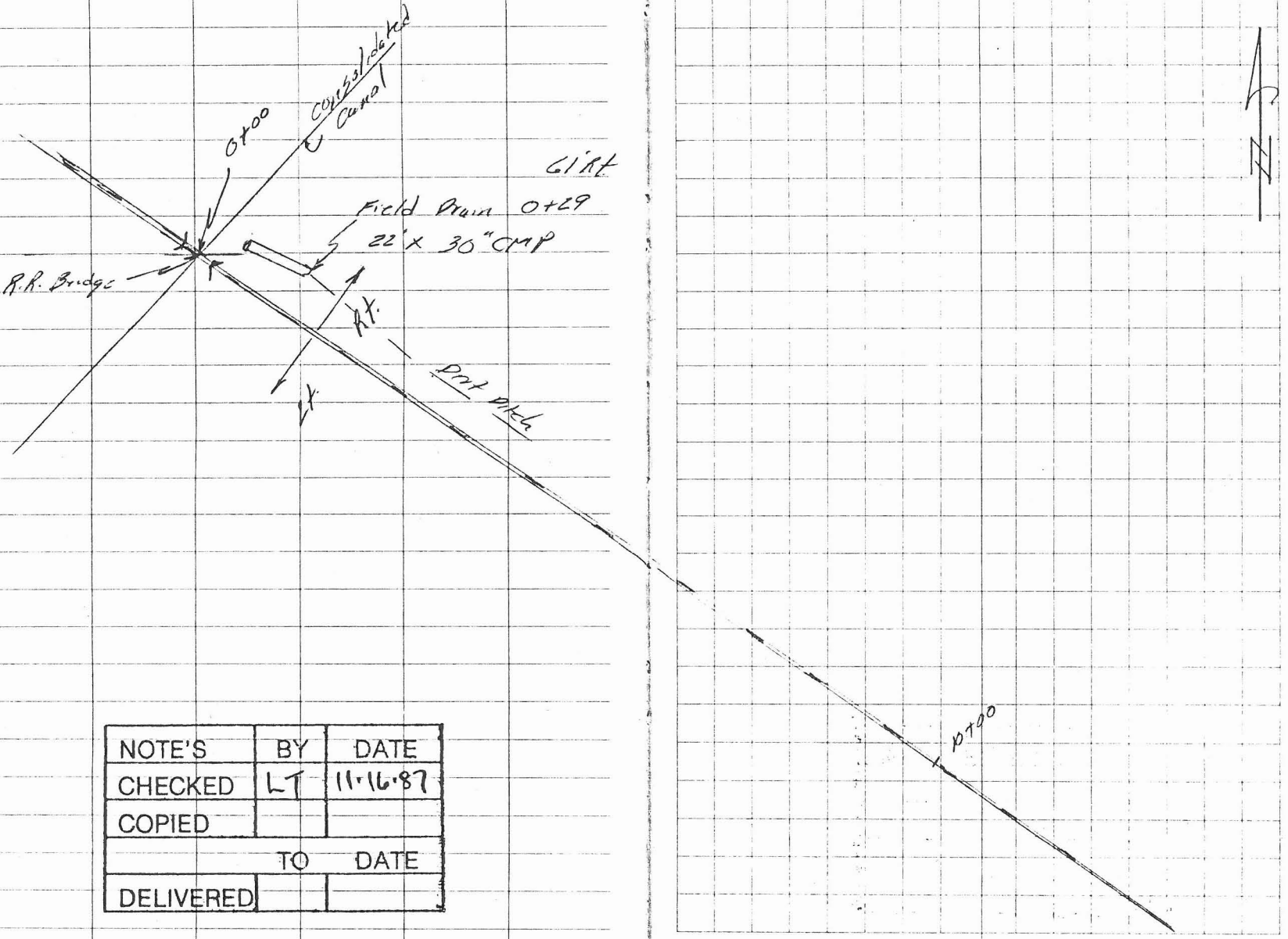
NOTE'S	BY	DATE
CHECKED	LT	11-16-87
COPIED		
	TO	DATE
DELIVERED		

MCFCD

Flood Control Study
SPRR & Consolidated Canal

11/4/87

824
92



NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

1 MCFCD	Flood Control Study – SPRR & Consolidated Canal			
HC-22	5.61	47.00 T		1241.39
0+00				
0+08	W. End Field Drain			
0+29	E. End Field Drain			
2+00				
2+00				

NOTE'S	BY	DATE
CHECKED	LT	(1-16-97)
COPIED		
	TO	DATE
DELIVERED		

11/4/97

324
97

½" R.B. – SE Corner – Intersection of SPRR & Consolidated Canal

44.1
2.30
B.L.
Top Bridge

36.18
10.32
B.L.
Inv
Canal

38.89
8.11
55
Inv
30" CMP

39.30
7.70
61
Inv
30" CMP

39.54
7.45
24
T.S.

44.8
2.2
5
Berm

44.9
2.1
B.L.
8
R.R.

44.8
2.2
4
Berm

39.5
7.5
21
T.S.

41.5
5.5
30
Berm

40.95
6.05
61
EOF

41.65
5.35
45
Berm

40.2
6.8
38
Inv.
Dirt Ditch

MCFCD

Flood Control Study
SPRR & Consolidated Canal

1247.00
↑

2+00

4+00

7+00

9+00

TP#1 4.84 47.00 4.84 42.16
↑

NOTE'S	BY	DATE
CHECKED	L-T	11-16-87
COPIED		
	TO	DATE
DELIVERED		

6+00

11/11/87

824/96

41.0
6.0
100

41.9
5.1
193
Bldg.

39.75
7.25
24
T.S.

45.05
1.95
5
Berm

45.05
1.95
B.L.
&
R.R.

45.0
2.0
4
Berm

40.15
6.85
21
T.S.

41.25
5.25
31
Berm

41.5
5.5
100

41.4
5.6
52
EOF

42.3
4.7
94
Berm

40.4
6.6
38
End
Dirt Ditch

42.01
4.93
200
Asph
Street

41.4
5.6
276
Fc

40.1
6.9
21
T.S.

45.25
1.75
5
Berm

45.3
1.65
B.L.
&
R.R.

45.3
1.7
4
Berm

40.1
6.3
22
T.S.

41.85
5.15
30
Berm

MCFCD

Flood Control 5th day
SPRR & Consolidated Canal

1247.00

6+00

8+00

8+00

10+00

10+00

10+00

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

11/16/87

324
98

41.7
5.3
1.77
Yard

41.65
5.35
100

41.1
5.9
37
EOF

40.7
6.3
19
T.S.

45.5
1.5
5
Berm

45.6
1.5
B.C.
&
R.R.

45.5
1.5
5
Berm

42.1
4.9
18
T.S.
EOF

41.9
5.1
100

42.15
4.85
300
Yard

42.25
4.75
200

40.75
6.25
22
T.S.

45.95
1.05
5
Berm

42.0
1.0
B.C.
&
R.R.

42.0
1.0
5
Berm

42.25
4.75
19
T.S.
EOF

42.3
4.7
100

42.7
4.3
500

42.6
4.4
400

42.6
4.4
300

42.25
4.75
200

42.8
4.2
600

MCFCD — Flood Control Study — SP R & Consolidated Canal

11/11/87

824/100

		1247.00 ⊼			
TP #2	4.52	50.01 ⊼	1.51	45.49	R.R. Spk - 1247.00
TBM #HC-22			8.62	41.39	(1241.39) ½" R.B. - Loop Between

NOTE'S	BY	DATE
CHECKED	LT	11-16-87
COPIED		
	TO	DATE
DELIVERED		

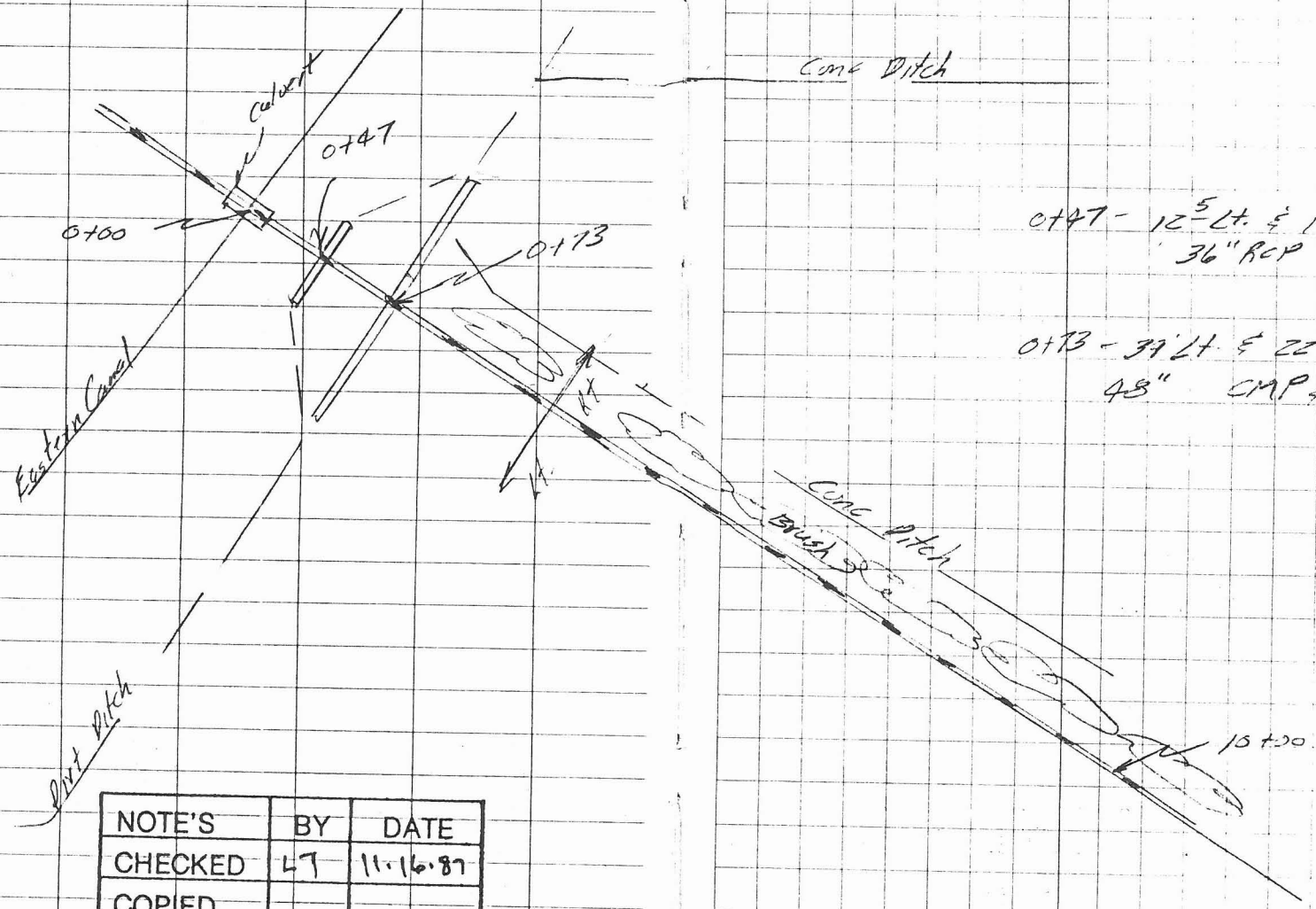
MCFCD

Flood Control Study
SPRR Eastern Canal

L. Van Dyke
R. McMurray
T. Crouch

11/12/87

824
152



0+47 - 12.5' Lt. & 12' Rt
36" RCP

0+73 - 37' Lt. & 22' Rt
48" CMP & RCP

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
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	TO	DATE
DELIVERED		

MCFCD

Flood Control Study – SPRR & Eastern Canal

MC-30	9.27	77.10 ↑		1267.33

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

0+00				
0+47	36" RCP			
0+73	48" RCP & CMP			
TP#1	5.67	77.30 ↑	5.47	71.63
2+30	(Con't - bottom of Pg 104)			

11/12/87

8.34
104

½" A.2 – N/S Cor. Intersection SPRR & Eastern Canal

64.4	70.6	71.3	70.8	64.15
12.70	6.5	5.80	6.3	12.95
9	8.5	B.L. & R.R.	8.5	9
Inv. Canal				Inv. Canal

64.45
12.65
12.5
Inv.
RCP

64.6
12.45
12
Inv.
RCP

62.65
14.45
39
Inv.
CMP

62.80
14.30
22
Inv.
RCP

RR Sta – 2+00

71.6	71.4	71.65	70.95	68.2	68.7
9.7	5.9	5.75	6.35	9.1	8.6
20	5	B.L. & R.R.	11	20	30
T.S.	Berm		Berm	T.S.	

MCFCD

Flood Control Stn. 69 – SPRR & Eastern Canal

1277.30 ↑

4+00	(con't on Pg 108)			
6+00	(con't on Pg 110)			
8+00	(con't on Pg 112)			
10+00	(con't on Pg 112)			
TP #2	4.71	76.00 ↑	6.01	71.29
2+00	(con't from Pg. 104)			

11/12/87

834/106

67.4	71.5	71.1	71.3	67.7	68.8
9.9	5.8	5.6	6.0	9.6	8.5
22	5	B.L.	11	22	33
T.S.	Berm	8 R.R.	Berm	T.S.	
68.05	71.95	72.0	71.9	68.6	70.3
9.25	5.35	5.3	5.4	8.7	7.0
20	5	B.L.	12	22	60
T.S.	Berm	8 R.R.	Berm	T.S.	
68.7	72.25	72.4	72.0	69.3	69.2
8.6	5.05	4.9	5.3	9.0	8.1
18	5	B.L.	11	17	50
T.S.	Berm	8 R.R.	Berm	T.S.	
69.15	72.65	72.1	72.4	69.75	69.8
8.15	4.65	4.6	4.9	7.55	7.5
17	5	B.L.	12	17	54
T.S.	Berm	8 R.R.	Berm	T.S.	

N. TCD - 7+00 - 108± Rt.

NOTE'S	BY	DATE
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	TO	DATE
DELIVERED		

69.3	71.3	67.9		71.3
6.7	4.7	9.1	4.7	
119	127	130	137	
T.S.	Berm	Ext. Dirt Ditch		Berm

MCFCO

Flood Control Study -
SPRR & Eastern Canal

1276.00
JT

2+00

2+00

2+00

2+00

4+00

4+00

NOTE'S	BY	DATE
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(Con't from Pg 106)

11/12/37

304
105

69.35 69.5 70.0 69.9
6.65 6.5 6.0 6.1
400 300 200 142
EOR

69.3 69.6 69.55 69.5
6.7 6.4 6.45 6.5
500 600 700 800

69.25 70.35 68.3 70.3
6.75 5.65 7.7 5.7
900 861 862 858
N. JCD JAD S. JCD
EO

69.6
6.4
1060

70.4 70.05 69.95 70.1
5.6 5.95 6.05 5.9
1000 900 800 700

69.55 69.35 69.85 69.95
6.45 6.15 6.15 6.05
300 400 500 600

MCFCD

Flood Control Study — SPRR & Eastern Canal

1276.30

4+00

4+00

6+00 (con't from Pg 106)

6+00

6+00

6+00

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	TO	DATE
DELIVERED		

11/12/87

324
110

69.55 6.45 200

69.8 6.2 136 50F

10.85 3.12 12.6 N. TCD

68.75 7.25 123 IND. CD

68.8 7.2 90

10.85 5.15 120 S. TCD

69.1 6.9 97

10.95 5.05 120 S. TCD

68.8 7.20 123 IND CD.

10.95 5.05 120 N. TCD

10.05 5.95 400

69.85 6.15 300

69.95 6.05 200

10.35 5.65 130 50F

10.1 5.9 500

10.15 5.85 600

10.2 5.8 700.

10.2 5.8 300

10.85 5.75 1000

10.2 5.8 300

MCFCD

Flood Control Study —
S.P.R.R. Eastern Canal

1276.00

8+00 (con't from Pg 106)

8+00

8+00

NOTE'S	BY	DATE
CHECKED	LT	11.16.87
COPIED		
	TO	DATE
DELIVERED		

9+55

10+00 (con't from Pg. 106)

10+00

11/14/87

824
112

10.65 10.75 10.65 10.85
5.35 5.35 5.35 5.15
1000 900 800 700

10.3 10.3 10.45 10.55
5.7 5.7 5.55 5.75
300 400 500 600

10.45 10.5 11.45
5.55 5.5 4.55
200 131 126
E.O.F N. TCD

69.5 71.45 69.3
6.5 4.55 6.70
75 120 123
S. E.O.
TCD CD

69.55 71.7 69.55 71.65
6.45 4.30 6.45 4.35
72 120 123 124
S. Ino N.
TCD CD TCD

10.6 10.45 10.65 10.85
5.4 5.55 5.35 5.15
400 300 200 136
E.O.F

MCFCD

Flood Control Study -
SPRR & Eastern Canal

1276.00
↑

10+00

10+00

TBM ± HC-30 | 8.13 | 67.87 | (1262.83)

11/12/87

824
TH

10.4 | 10.85 | 10.15 | 10.8
5.4 | 5.15 | 5.25 | 5.2
500 | 600 | 750 | 900

11.8 | 10.9
5.0 | 5.1
1000 | 800

½" R.B. - Loop Return

NOTE'S	BY	DATE
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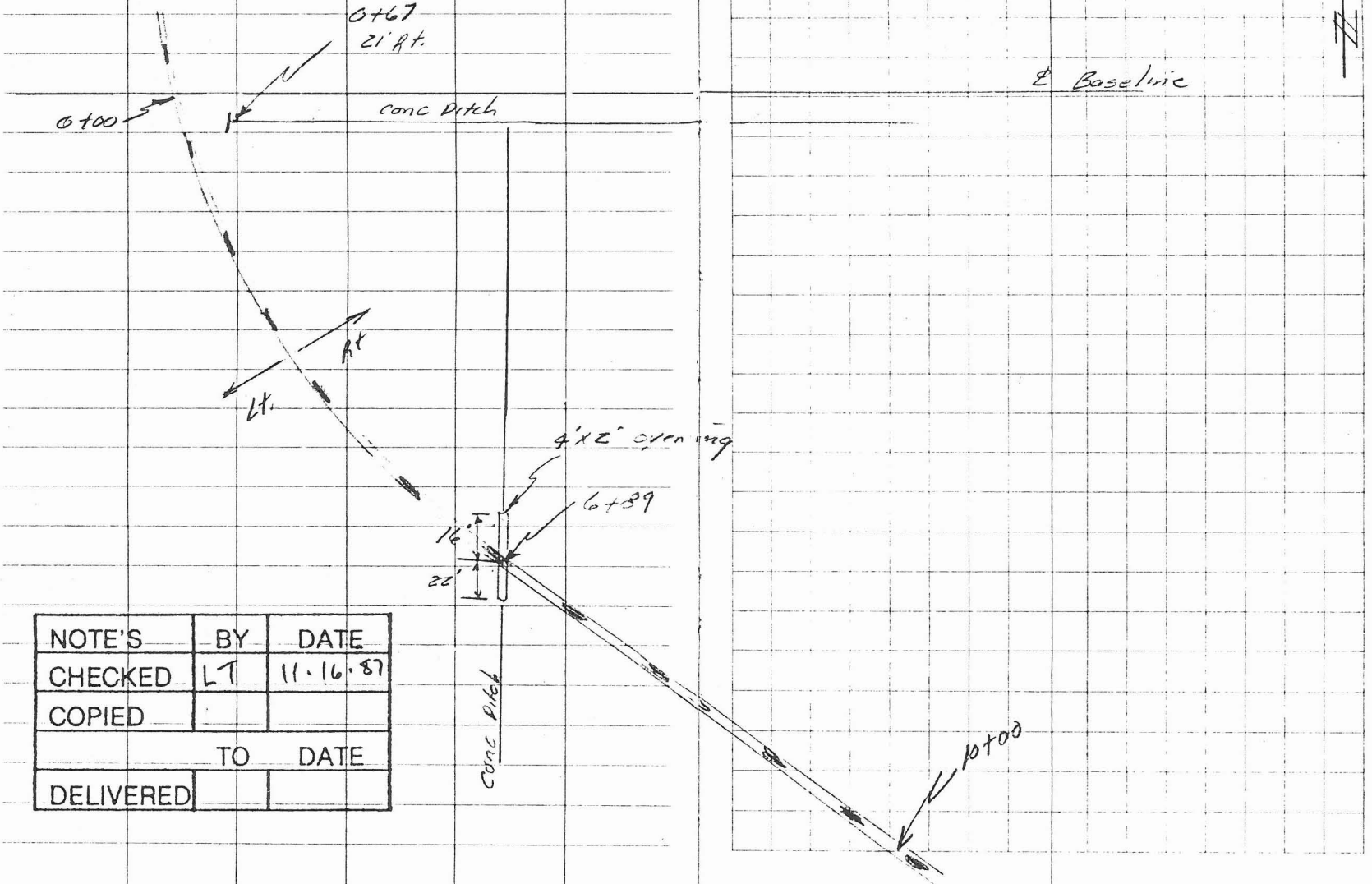
	TO	DATE
DELIVERED		

MCFCD Flood Control Study — Baseline & SPRR

11/12/87

824
TC



NOTE'S	BY	DATE
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	TO	DATE
DELIVERED		

MCFCD | Flood Control Survey — SPRR & Baseline Rd

TBM C-10	3.41	17.00		1213.59
		T		
0+00	℄ Baseline Rd —			
2+00				
2+00				
2+00				
4+00				

NOTE'S	BY	DATE
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	TO	DATE
DELIVERED		

11/3/87

824/113

Cut D' - SW cor. Rh Signal Base - E. Side
Rh & N. Side Baseline
(Bk 332 Pg 104)

11.15	12.95	12.80	11.85	13.7
5.85	4.05	4.20	5.15	3.3
73	51	B.L.	91	111
T.S.	Berm	℄ R.R.	N. Cut	Planter
			BS/m.	Area

01.25	12.65	12.4	12.1	10.65	11.8
9.75	4.35	4.6	4.9	6.5	5.2
29	5	B.L.	5	11	26
T.S.	Berm	℄ R.R.	Berm	T.S.	

11.5	08.15	11.75	11.6
5.50	8.25	5.25	5.4
208	202	196	100
N	TNO	S.	
TCP	CO	TCP	

12.35	11.45	11.65
4.65	5.55	5.35
283	348	400
℄ Bs/m.		

09.8	12.9	12.9	12.3	11.05	11.45
7.2	4.1	4.1	4.3	5.95	5.35
40	5	B.L.	5	11	26
T.S.	Berm	℄ R.R.	Berm	T.S.	

MCFCD

Flood Control Study — SPRR & Baseline Rd

1217.00

4400

4400

4400

4400

6400

6400

NOTE'S	BY	DATE
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	TO	DATE
DELIVERED		

11/13/87

329
720

08.70 / 8.30 / 272 / IN / CD

10.90 / 6.10 / 263 / W. / TCD

11.75 / 5.25 / 200

11.4 / 5.6 / 100

11.00 / 6.00 / 275 / E. / TCD

09.85 / 7.15 / 300

10.1 / 6.9 / 285

11.7 / 5.30 / 396 / S. / TCD

11.3 / 5.70 / 536

12.1 / 4.90 / 476 / E / Bdry.

11.7 / 5.30 / 408 / N. / TCD

08.85 / 8.15 / 400 / Inv. / CD

11.1 / 5.9 / 600

11.8 / 5.6 / 700 / Fc

08.9 / 8.1 / 39 / T.S.

13.45 / 3.55 / 5 / Berm

13.3 / 3.7 / B.L. & R.R.

13.1 / 3.9 / 5 / Berm

09.85 / 7.15 / EC / T.S.

11.4 / 5.6 / 36

09.05 / 7.95 / 200

10.95 / 6.05 / 100 / E. / TCD

08.7 / 8.30 / 95 / Inv. / CD

10.8 / 6.20 / 91 / W. / TCD

MCFCD

Flood Control Study
SPRR & Baseline Rd

		1217.00 ↑		
6+00				
6+00				
6+00				
TP#1	2.61	15.90 ↑	3.71	13.29
6+89				
8+00				

NOTE'S	BY	DATE
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	TO	DATE
DELIVERED		

11/12/87

824
TCC

09.35 | 09.3 | 10.3
7.65 | 7.7 | 6.7
305 | 400 | 500

11.85 | 11.70 | 08.95 | 11.65
5.15 | 5.30 | 8.05 | 5.35
628 | 556 | 549 | 541
E | N. | Inv | S.
Bsln. | TCD | CD | TCD

11.20 | 11.15 | 11.5
5.80 | 5.95 | 5.5
683 | 700 | 800
| | Fe

R.R. Spk - 8+00

07.25
6.65
22
Inv.
C.D.

08.45
7.45
16
Inv.
C.D.

08.45 | 13.15 | 13.2 | 13.05 | 10.45 | 09.8
7.45 | 2.75 | 2.7 | 2.85 | 5.45 | 6.1
23 | 5 | B.L | 5 | 30 | 100
T.S. | Berm | & | Berm | T.S. |
| | | R.R. | | |

MCFCD

Flood Control Study
SPRR & Baseline
12:15:95

8+00

8+00

8+00

10+00

10+00

NOTE'S	BY	DATE
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COPIED		
	TO	DATE
DELIVERED		

11/12/87

824
124

09.7 10.6 09.2 10.1
6.15 6.3 6.7 5.3
500 400 300 200

10.6 11.70 11.0 11.55
5.7 4.20 4.90 4.35
600 724 776 800
℄
Basin

11.9
4.0
900

8.95 12.15 12.85 12.65 09.8 10.05
6.95 3.15 3.05 3.25 6.1 5.35
C3 5 B.L. 5 16 100
T.S. B-1m ℄ B-1m T.S.
RR.

14.3 11.0 10.1 09.5
1.6 4.9 5.8 6.4
410 400 300 200

Aggr. Plt @ Ready Mix Plant

11/12/87

024
126

1 MCFCD	Flood Control Study — SPRR & Baseline Rd				
		1215.90 ↑			
c					
TP#2	5.76	16.52 ↑	5.14	10.76	
c					
JBM#2-10			2.88	13.64	(1213.99)
c					
1					
/					

cut 'D' — Loop Return

NOTE'S	BY	DATE
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	TO	DATE
DELIVERED		

MCFCD

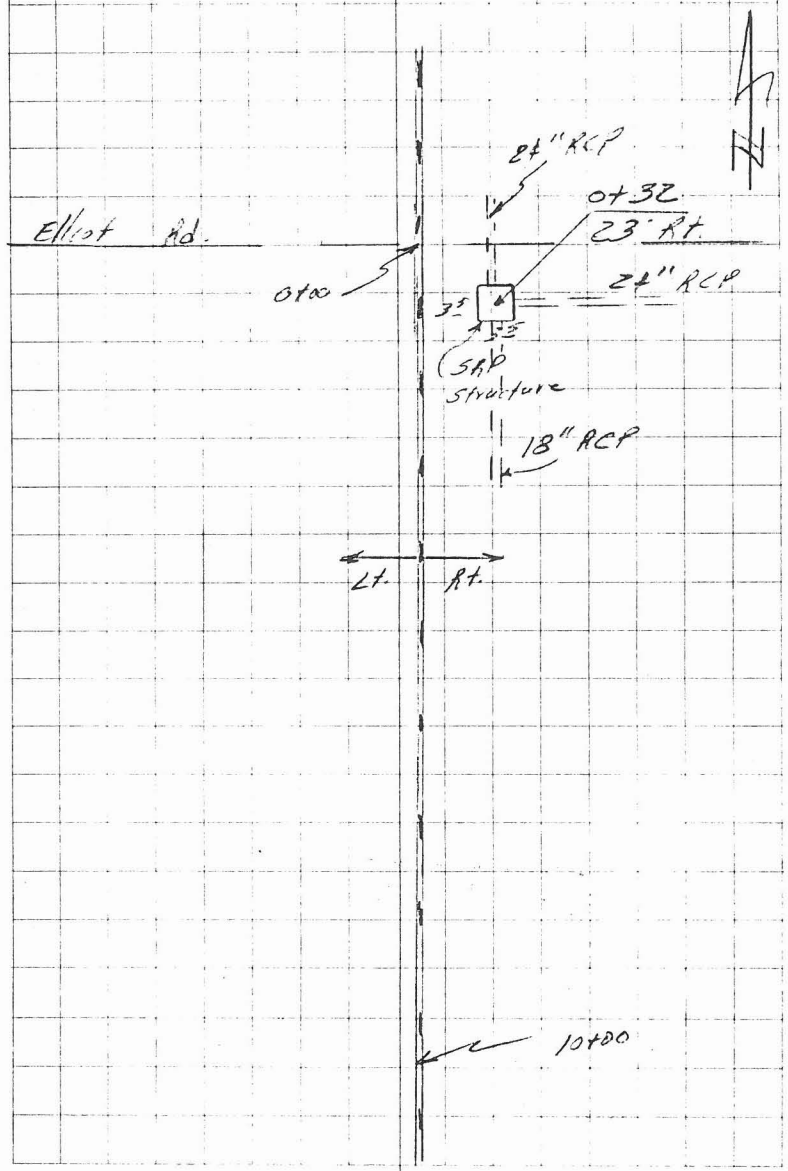
Flood Control Study –
Elliot & R.R.

NOTE'S	BY	DATE
CHECKED	LT	11-23-87
COPIED		
	TO	DATE
DELIVERED		

L. Van Dyke
R. McMurray
J. Craven

11/3/87

SC4
128



MCFCD — Flood Control Survey — Elliot Rd E R.R.

RO-21	3.32	20.00 ✓ ↑	1216.12
0+00	℄ Elliot Rd (con't on pg 134)		
0+32	SRP Structure		
2+00			
2+00	(con't on pg 134)		
4+00			

NOTE'S	BY	DATE
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COPIED		
	TO	DATE
DELIVERED		

11/13/87

324
125

B.C. on 114 - N. Edge Elliot - 30' E W. of R.R.

✓ 16.65	✓ 16.55	✓ 16.70	✓ 16.30	
3.95	3.45	3.30	3.7	
100	B.L. E R.R.	100	200	
		✓ 14.10	✓ 09.70	
		5.50	10.30	
	B.L.	24 top Struct	24 End.	24" RCP

✓ 13.3	✓ 15.1	✓ 15.8	✓ 15.9	✓ 12.3	✓ 12.2
6.7	4.3	4.2	4.1	7.7	7.8
13	4	B.L.	5	41	100
T.S.	Beam		Beam	T.S.	

					✓ 12.25
					7.75
					200

✓ 13.45	✓ 15.45	✓ 15.65	✓ 15.6	✓ 13.4	✓ 11.7
6.55	4.55	4.45	4.4	6.6	5.3
12	+	B.L. & R.R.	4	23	65
T.S.	Beam		Beam	T.S.	

MCFCD — Flood Control Study — Elliot Rd = K.R.

1220.00
T

4+00 (con't on Pg 136)

TP #1 — 4.22 — 19.30 — 4.42 — 15.58

6+00

6+00 (con't on Pg 136)

NOTE'S	BY	DATE
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COPIED		
	TO	DATE
DELIVERED		

8+00

8+00 (con't on Pg 136)

11/13/87

824
TSC

			J 12.5	J 12.75	J 11.05
			7.5	7.25	9.95
			200	147	103

RR Spk - 5+00

✓ 10.75	J 15.25	✓ 15.35	J 15.4	✓ 13.15	J 12.95
9.05	4.55	4.45	4.4	6.65	6.85
21	4	B.L.	4	21	51
T.S.	Berm	4	Berm	T.S.	
		R.R.			

			J 12.5	✓ 13.1	J 11.0 / J 11.45
			7.3	6.7	8.8 / 3.35
			200	143	100 / 64

✓ 10.1	✓ 15.15	✓ 15.2	J 15.35	✓ 13.0	✓ 11.1
9.1	4.65	4.6	4.45	6.3	8.7
20	4	B.L.	4	19	72
T.S.	Berm	4	Berm	T.S.	
		R.R.			

			J 12.4	✓ 13.0	✓ 11.0
			7.4	6.8	8.8
			200	143	100

MCFCD

Flood Control Study – Elliot Rd & R.R.

11/13/87

934
13E

12+19.80

16+00

10+00 (con't on pg 13B)

TP#2	5.43	18.00	7.23	12.57

0+00 & Elliot Rd
(con't from pg 13D)

NOTE'S	BY	DATE
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DELIVERED		

0+00

2+00 (con't from pg 13D)

J 9	J 1	J 2	J 3	J 6	J 8
10.9	15.1	15.2	15.3	12.6	11.65
8.9	4.7	4.6	4.5	7.2	8.15
20	4	B.L.	4	20	65
T.S.	Berm	& R.R.	Berm	T.S.	

J 12.35	J 12.6		J 11.15
7.45	7.2		5.55
200	147		100

H&S - 8+00 200 Rt

J 15.20	J 15.10	J 14.55	J 14.35
2.20	2.90	3.45	3.65
300	400	500	600

J 14.50	J 14.40	J 14.40	J 14.35
3.50	3.60	3.60	3.65
1000	900	800	700

J 12.65	J 12.45	J 12.75	J 12.95
5.35	5.55	5.25	5.05
300	400	500	600

MCFCD

Flood Control Study —
Elliot Rd & R.R.

1218.00

2+00

4+00 (con't from Pg 132)

4+00

6+00 (con't from Pg 132)

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	TO	DATE
DELIVERED		

6+00

8+00 (con't from Pg 132)

11.23.87

324
136

13.8	13.55	13.25	13.1
4.2	4.45	4.75	4.9
1000	900	800	700
12.45	12.6	12.75	12.8
5.55	5.5	5.25	5.2
300	400	500	600
13.7	13.35	13.45	13.15
4.3	4.65	4.55	4.85
1000	900	800	700
12.45	12.55	12.75	12.95
5.55	5.45	5.25	5.05
300	400	500	600
13.55	13.5	13.2	13.1
4.45	4.5	4.8	4.9
1000	900	800	700
12.6	12.6	12.75	12.9
5.5	5.4	5.25	5.1
300	400	500	600

MCFCD

Flood Control Study – Elliot Rd & R.R.

1218.00
T

8+00

10+00 (Con't from Pg 134)

10+00

TBM # Z-83 3.71 14.29 (1214.29)

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11/13/87

324
158

J 13.65	J 13.45	J 13.4	J 13.1
4.35	4.55	4.6	4.9
1000	900	300	700
J 12.55	J 12.6	J 12.65	J 12.85
5.45	5.4	5.35	5.15
300	900	500	600
J 13.55	J 13.35	J 13.2	J 12.95
4.45	4.65	4.8	5.05
1000	900	300	700

cos- Pg Rd E. side R.R. - 300± S. of Elliot Rd.

(See Bk 302 Pg 150)

MCFCD Flood Control Study - Eastern Canal & Warner Rd

11/13/87

8-4
140

NOTE'S	BY	DATE
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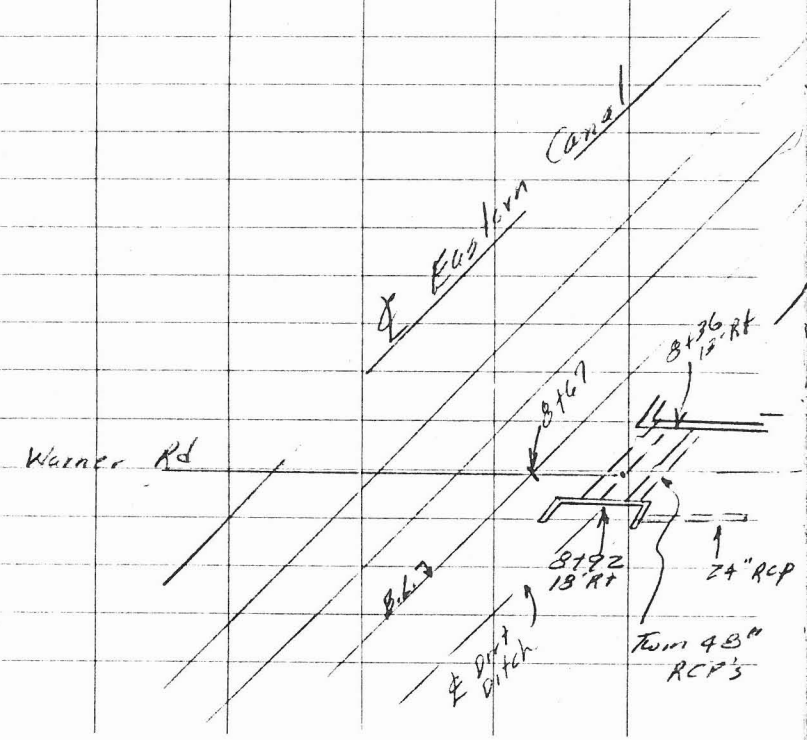

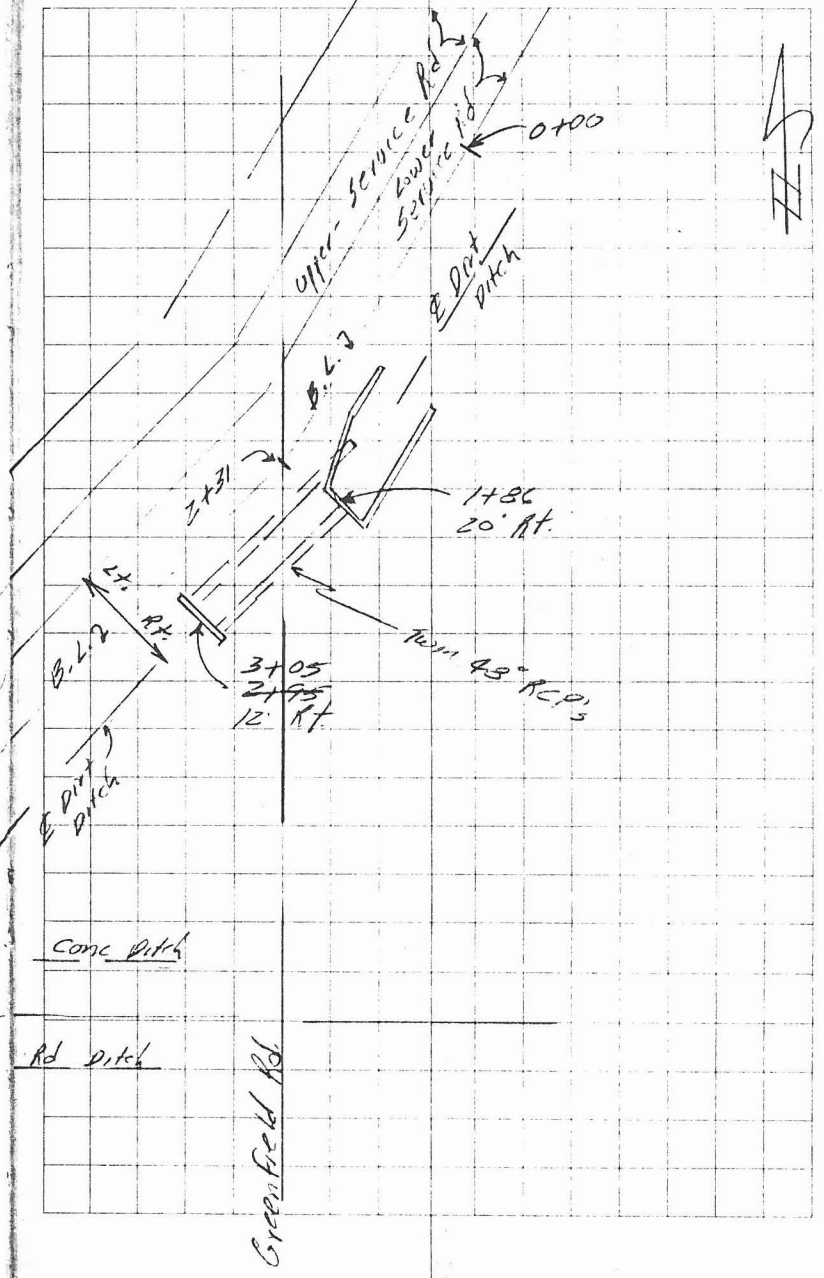

MCFCD | Flood Control Study - Eastern Canal & Warner Rd

VC-11 | 1.63 | 79.00 | 12.7.37

EOR = Edge of Road
EOF = Edge of Field

0700

0700

1400

NOTE'S	BY	DATE
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1400

1430

11/12/87

324/142

CBS - Greenfield Rd @ Eastern Canal

✓ 15.4	✓ 15.5	✓ 12.0	✓ 11.9.5	✓ 6.9	✓ 6.9.5
3.1	3.5	7.0	7.05	13.1	13.05
34	22	11	B.L.	10	15
EOR	EOR	EOR	EOR E Berm	Inv. Dirt Ditch	Inv. Dirt Ditch

✓ 12.2	✓ 12.1
6.3	6.3
37	20
EOF	Berm

✓ 17.7	✓ 11.24	✓ 16.05	✓ 15.6	✓ 6.9	✓ 6.9
1.30	1.76	2.95	3.5	13.1	13.1
57	20	11	B.L.	12	17
E Greenfield	EOR	EOR	EOR E Berm	Inv. Dirt Ditch	Inv. Dirt Ditch

✓ 12.3	✓ 12.9
6.7	6.1
40	24
EOF	Berm

✓ 15.95	✓ 15.16
3.05	13.32
20	20
Adwl	Inv. 48" RCP

MCFCD

Flood Control Study – Eastern Canal & Warner Rd

1279.00
↑

2+00

2+00

TP #1	0.97	78.90 ↓	1.07	77.93 ↓

↑

3+05

3+00

NOTE'S	BY	DATE
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11/23/87

324
14+

J 14
11.
1.32
15
E
Greenfield

J 16
11.
1.5
B.L.

J 12
11.
1.8
18
St.
Greenfield

J 16.6
12.
645
50
EOF

J
14.6
42
25
F.S.

SW Cor Bridge

✓ 14.95
3.95
12
Holdr.

✓ 15.52
13.38
12
2nd
45° RCP

✓ 0
14'
2.9
34
EOR

✓ 12.5
14.
2.65
23
EOR

J 16.0
2.9
15
EOR

J 15.0
3.9
B.L.
& EOR

✓
16.45
2.45
32
St.
Greenfield

MCFCD

Flood Control Study –
Eastern Canal & Dawn Rd
1273-80

11/23/87

824
14

4+00	4+00	5+00	5+00	6+00	6+00
✓ 15.15	✓ 15.15	✓ 15.15	✓ 15.15	✓ 15.15	✓ 15.15
3.75	3.75	6.75	6.75	13.35	13.35
40	28	18	B.L.	9	14
EOR	EOR	EOR	EOR	Inv. Ditch	Inv. Ditch
✓ 15.15	✓ 15.15	✓ 12.15	✓ 12.15	✓ 6.35	✓ 6.35
3.75	3.75	6.75	6.75	13.35	13.35
42	30	18	B.L.	9	14
EOR	EOR	EOR	EOR	Inv. Ditch	Inv. Ditch
✓ 15.05	✓ 15.1	✓ 12.1	✓ 12.0	✓ 6.75	✓ 6.5.1
3.85	3.8	6.2	6.3	13.15	13.2
37	27	18	B.L.	9	14
EOR	EOR	EOR	EOR	Inv. Ditch	Inv. Ditch

✓ 15.15	✓ 15.15	✓ 12.1	✓ 12.5	✓ 6.5.1	✓ 6.5.1
3.75	3.75	6.2	6.4	13.8	13.8
40	28	17	B.L.	11	16
EOR	EOR	EOR	EOR	Inv. Dirt Ditch	Inv. Dirt Ditch
					✓ 7.1.5
					7.4
					23
					Top Bank
					✓ 7.1.3
					7.6
					19
					Top Bank
					✓ 7.1.1
					7.8
					Top Bank

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MCFCD — Flood Control Study — Eastern Canal & Warner Rd

11/13/87

824/148

1278.90

7+00				
7+00				
TP#2	4.94	79.00	4.84	74.06
8+50				
8+00				
8+36				

NOTE'S	BY	DATE
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	TO	DATE
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✓ 14.1 / 4.15 / 36 / EOR

✓ 14.4 / 4.5 / 26 / EOR

✓ 13.0 / 5.9 / 13 / EOR

✓ 12.5 / C.L. / EOR

✓ 10 / 6.6 / 12.9 / 9 / Inv. Ditch

✓ 6.0 / 6.6 / 12.9 / 14 / Inv. Ditch

✓ 11.3 / 7.6 / 18 / Top Bank

SPK - P Pole - 7+00 - 12' Lt.

✓ 14.0 / 5.0 / 33 / EOR

✓ 12.0 / 5.0 / 20 / EOR

✓ 12.9 / 6.1 / 13 / EOR

✓ 12.5 / 6.4 / B.L. / EOR

✓ 6.5 / 13.15 / 9 / Inv. Ditch

✓ 6.9 / 13.1 / 14 / Inv. Ditch

✓ 11.4 / 7.6 / 13 / Top Bank

✓ 11.8 / 7.17 / 13 / Hdwl

✓ 6.52 / 13.48 / 13 / Inv. 48" RCP

MCFCD

Flood Control Study — Eastern Canal & Warner Rd

1279.00

8+67 ℄ Warner

8+92

9+00

10+00

11+00

NOTE'S	BY	DATE
CHECKED	LT	11-23-87
COPIED		
	TO	DATE
DELIVERED		

TBM #RO-26 4.94 74.06 ✓ (1274.05)

11/13/87

324
150

	✓ 13.62			
	13			
	5.33			
	B.L.			
		J 71.89	J 65.67	
		7.11	13.33	
		19	13	
		Alum.	Inv.	
			45° RCP	
J 14.14	J 13.97	✓ 65.55	✓ 65.55	✓ 71.3
4.86	5.3	13.5	13.5	7.7
48	B.L.	14	20	51
℄ Warner	℄	Inv.	Inv.	Top
	EOR	Ditch	Ditch	Bank
✓ 72.0	✓ 71.35	✓ 65.3	✓ 65.3	✓ 71.4
7.0	7.65	13.7	13.7	7.6
55	B.L.	9	14	19
Top	℄	Inv.	Inv.	Top
Bank-Canal	EOR	Ditch	Ditch	Bank
✓ 71.05	✓ 70.05	✓ 65.3	✓ 65.3	✓ 70.6
7.95	8.95	13.7	13.7	8.4
56	B.L.	9	14	17
Top	℄	Inv.	Inv.	Top
Bank-Canal	EOR	Ditch	Ditch	Bank

Pk Nut - ℄ Warner @ Eastern Canal

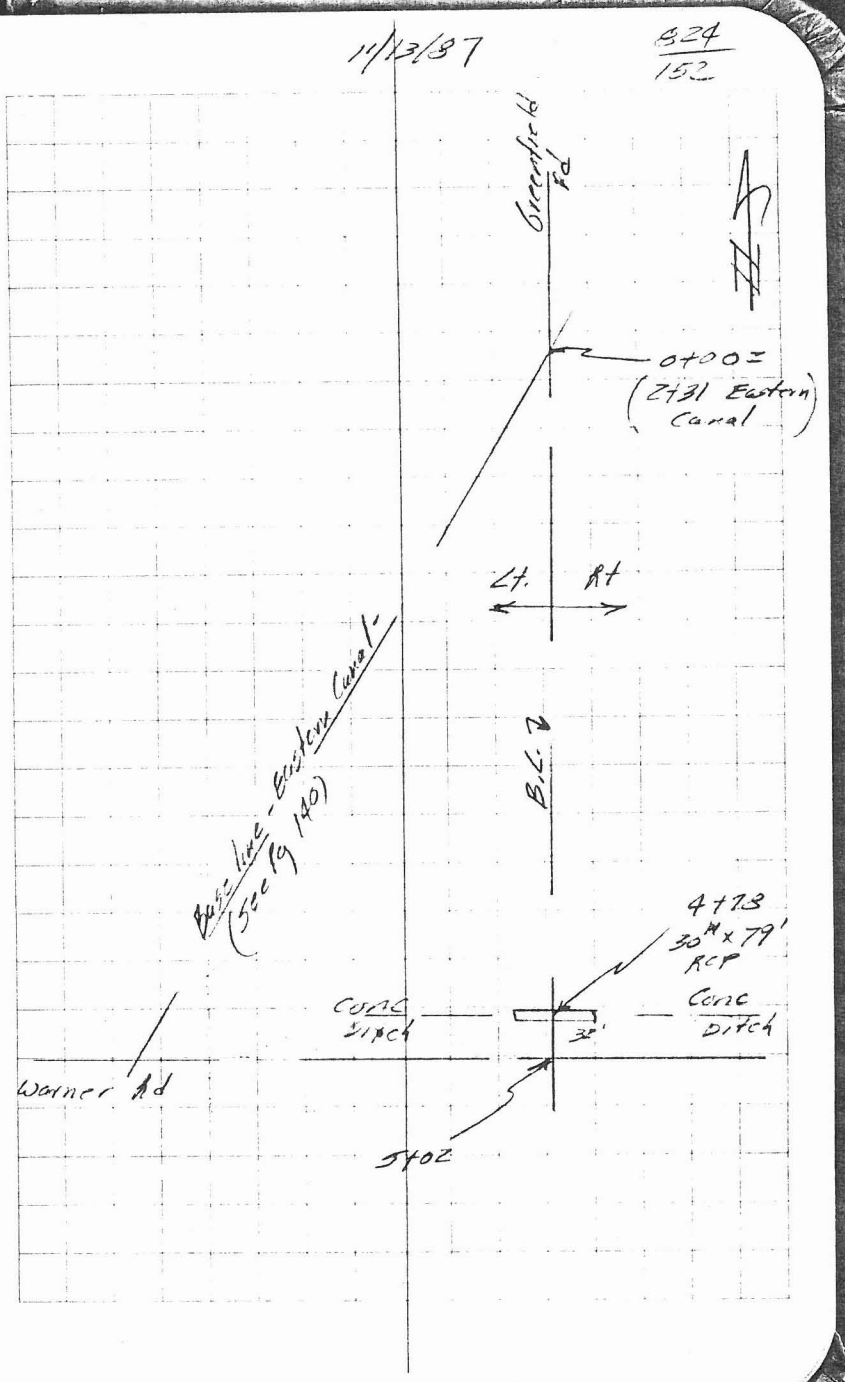
MCFCD

Flood Control Study —
Eastern Canal @ Warner Rd

NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

11/23/87

824
152



MCFCD — Flood Control Study — Eastern Canal & Warner Rd

TBM #VC-11 Z.63 80.00 J — 12/2/87

0700

1400

2100

2400

3400

NOTE'S	BY	DATE
CHECKED	LT	12/23/87
COPIED		
	TO	DATE
DELIVERED		

11/13/87 — 824/154

CBS - Greenfield Rd @ Eastern Canal —

✓ 17.58	✓ 17.4	✓ 16.55	✓ 12.45	
242	2.6	5.45	7.55	
BL	29	39	56	
E	Sh.	T.S.	EOF	
Grnfld				

✓ 14.9	✓ 16.0	✓ 16.31	✓ 16.85	✓ 13.95	✓ 12.7
5.1	40	3.65	3.15	6.05	7.3
44	21	BL	27	36	50
Swale	Sh.	E	Sh.	T.S.	EOF
		Grnfld			

✓ 13.7	✓ 13.4	✓ 14.65	✓ 14.98	✓ 15.55	✓ 13.5	✓ 12.5
6.3	6.6	5.35	5.02	4.45	6.5	7.5
62	44	23	BL	31	36	60
Berm	Swale	Sh	E	Sh.	T.S.	EOF
			Grnfld			

✓ 12.8
7.2
6.3
Yard

✓ 12.4	✓ 13.15	✓ 12.7	✓ 14.17	✓ 14.95	✓ 13.1	✓ 12.7
7.6	6.45	7.3	5.83	5.05	6.9	7.3
73	63	47	BL	35	42	54
Yard	Berm	Swale	E	Sh.	T.S.	EOF
			Grnfld			

MCFCD — Flood Control Study — Eastern Canal @ Warner Rd

1285.00 ↑

4+00

4+78 — Insert 30" RCP

5+02 ℄ Warner

TP#1 — 2.07 — 77.93 ✓ — (1277.93)

11/3/87

5+04 ℄

✓	✓	✓	✓	✓	✓	✓
12.1	12.5	12.3	13.8	14.3	13.45	12.55
7.3	7.5	7.5	5.22	5.7	6.55	7.45
73	69	48	B.L.	34	41	53
Yard	Drain	Swale	℄ Grnfld	54	T.S.	EOE

✓	✓
68.55	18.42
11.75	11.58
47	32
Inv.	Inv

B.L.

✓	✓	✓
13.05	13.16	13.27
6.95	6.84	6.73
100	B.L.	100
	℄ Grnfld	

50 cor. Bridge (see Pg. 144)

NOTE'S	BY	DATE
CHECKED	LT	11.23.87
COPIED		
	TO	DATE
DELIVERED		

Level Check

Lewis Pyke
R MacMurray
T. Crouch

11/5/87

T @ Mid point

#1 = 5.17
#2 = 5.00
Diff = 0.17

T @ #1

#1 = 4.72
#2 = 4.55
Diff = 0.17

okay

322
158

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CURVE AND REDUCTION TABLES

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Table IV—NATURAL TRIGONOMETRICAL FUNCTIONS

CURVE FORMULAE

Table V—TANGENTS AND EXTERNALS TO A 1° CURVE

USEFUL RELATIONS

Table VI—INCHES TO DECIMALS OF A FOOT

Table VII—MINUTES IN DECIMALS OF A DEGREE

Table VIII—MIDDLE ORDINATES OF RAILS

Table IX—SHORT RADIUS CURVES

Table X—RODS IN FEET, 10THS AND 100THS OF FEET

Table XI—LINKS IN FEET, 10TIIS AND 100THS OF FEET

MCFCD

35901 00	Complete 3-WIRE LEVELS BLK.	3	TBM 3-181 TO 3-194	9-16-87	1-16
35901 00	3-WIRE LEVEL RUN · PERIMETER BLK. 4		TBM 4-1 TO 4-136	9/17-23/87	17-100
35901 00	3-WIRE LEVEL RUN - INTERIOR BLK. 4		TBM 4-137 TO 4-155	9/24/87	101-136
35901 00	BEGIN 3-WIRE LEVEL RUN, PERIMETER BLK.	5	TBM 5-1 TO 5-24	9-28-87	137-154

MCFCD BLK. 3 — CONT. — FROM BK. 805/148

1247.338

9-16-87

807/2

				4.345			
TBM 3-180				3.80	-3.80	1243.538	R-BAR, E. SIDE CONSOL. CANAL, 20' N. OF RR.
				3.255			
	4.165						
	2.93	+2.93	46.468				
	1.69						
				7.34			
TBM 3-181				6.09	-6.09	1240.378	R-BAR @ N. TOE OF RR, 550' E. OF CONSOL. CANAL
				4.835			
	7.44						
	6.115	+6.115	46.493				
	4.79						
				4.77			
TBM 3-182				3.46	-3.46	1243.033	R-BAR, @ N. TOE OF RR, 1050' E. OF CONSOL. CANAL
				2.15			
	6.54						
	5.155	+5.155	48.188				
	3.775						
				6.02			
TBM 3-183				4.755	-4.755	1243.433	R-BAR @ N. TOE OF RR 1550' E. OF CONSOL. CANAL
				3.485			
	6.835						
	5.555	+5.555	48.988				
	4.275						

MCFCD BLK. 3			1248.988 ↑		9-16-87		
				5.83			
TBM 3-184				4.575	-4.575	1244.413	R-BAR @ N. TOE OF RR, 400' W. OF LINDSAY RD,
				3.32			
	6.66						
	5.765	+5.765	50.178 ↑				
	4.865						
SIDESHOT		-3.32		1246.858	TOP OF PAVEMENT, TARGET ELEV. @ RO-25		
				4.17			
RO-25				3.36	-3.36	1246.818	L.S. CAP @ INT OF LINDSAY & MESQUITE ST.
	8.23			2.55			
	7.20	+7.20	54.018 ↑				
	6.17						
				8.05			
TBM 3-185				7.04	-7.04	1246.978	CPS IN E. FACE OF PP, W. SIDE OF LINDSAY RD, 200' S. OF RR TRACK
				6.03			
	7.47						
	6.68	+6.68	53.658 ↑				
	5.895						
				6.42			
TBM 3-186				5.66	-5.66	1247.998	MARI. CO. BC IN HH, E OF LINDSAY @ ENTRANCE TO GILBERT HEIGHTS
				4.895			
	6.175						
	4.675	+4.675	52.673 ↑				
	3.18						

MCFCD

1252.673

9-16-87

807/6

			5.635		
TBM 3-187			4.13	-4.13	1248.543
			2.625		
	6.145				
	4.905 + 4.905	53.448			
	3.66				
			5.69		
TBM 3-188			4.465	-4.465	1248.983
			3.24		
	6.23				
	4.945 + 4.945	53.928			
	3.655				
			5.675		
TBM 3-189			4.41	-4.41	1249.518
			3.15		
	5.48				
	4.68 + 4.68	54.198			
	3.885				
			6.28		
TBM 3-31			5.475	-5.475	1248.723
			4.665		

MAR. CO. BC IN HH @ INT. OF LINDAY & CAT CLAW ST.

□ CUT, TOP OF CURB, W. SIDE OF LINDSAY, 550' S. OF CAT CLAW ST.

□ CUT, TOP OF CURB, W. SIDE OF LINDSAY, 300' N. OF WARNER

CITY OF GILBERT BC IN HH @ INT. OF LINDSAY & WARNER <1248.693> UNADJUSTED

Bk. 805/112

MCFCD
BLK. 3

9-16-87

3-WIRE LEVEL RUN TO RO-22
IN SW 1/4 SEC. 7

RO-23				1243.338 UNADJUSTED			CPS IN ℄ OF ELLIOT RD, W. SIDE OF CONSOLIDATED CANAL BRIDGE BK. 805/196
	4.565						
	3.285	+3.285	46.623				
	2.01						
				7.18			
TBM 3-190				5.895	-5.895	1240.728	□ CUT, TOP OF CURB, S. SIDE OF ELLIOT RD, 550' W. OF CONSOL. CANAL
				4.605			
	5.505						
	4.25	+4.25	44.978				
	2.995						
				6.46			
TBM 3-191				5.20	-5.20	1239.778	CITY OF GILBERT BC IN HH @ INT. OF ELLIOT & MORNING RIDGE ST.
				3.94			
	5.465						
	4.58	+4.58	44.358				
	3.70						
				5.83			
TBM 3-192				5.045	-5.045	1239.313	MARICOPA CO. BC IN HH @ INT. OF ELLIOT & BURK ST.
				4.265			
	5.995						
	4.72	+4.72	44.033				
	3.44						

MCFCD BLK. 3

9-16-87

			1244.033				
				7.75			
TBM 3-193				6.48	-6.48	1237.553	□ CUT, ON S.TCD, N. SIDE OF ELLIOT RD, 200' E. OF COTTONWOOD ST.
				5.205			
	6.94						
	6.035	+6.035	43.588				
	5.13						
				4.89			
TBM 3-194				3.585	-3.585	1240.003	□ CUT, TOP OF CURB, N. SIDE OF ELLIOT, E. OF RR TRACK @ W. END OF CURB
				2.285			
	3.33						
	2.03	+2.03	42.033				
	0.73						
				7.685			
TP-1				6.435	-6.435	1235.598	HUB, 60' N. OF RR, 500' N. OF ELLIOT
				5.19			
	5.705						
	4.445	+4.445	40.043				
	3.19						
				6.245			
TP-2				4.99	-4.99	1235.053	HUB, 60' N. OF RR, 1000' N. OF ELLIOT
				3.735			
	5.375						
	5.055	+5.055	40.108				
	4.735						

807/12

9-16-87

MCFCD BLK. 3			1240.108				
SIDESHOT		− 4.95		1235.158	TOP OF PAVEMENT, TARGET ELEV. @ RO-22		
				5.30			
RO-22				4.935	−4.935	1235.173	CPS IN PAVEMENT
				4.57			
					BEGIN RUN BACK		
	5.325						
	4.955	+ 4.955	40.128				
	4.585						
				5.40			
TP-2				5.075	− 5.075	1235.053	HUB
				4.75			
	6.185						
	4.915	+4.195	39.968				
	3.645						
				5.62			
TP-1				4.37	− 4.37	1235.598	HUB
				3.125			
	7.725						
	6.50	+ 6.50	42.098				
	5.27						
				3.405			
TBM 3-194				2.09	-2.09	1240.008	□ CUT ON TOP OF CURB
				0.78			

MCFCD
BLK. 3

9-16-87

	5.355						
	3.97	+3.97	1243.978				
	2.585						
				7.23			
TBM 3-193				6.415	-6.915	1237.563	□ CUT ON S. TCD
				5.595			
	7.11						
	5.83	+5.83	43.393				
	4.545						
				5.34			
TBM 3-192				4.07	-4.07	1239.323	BC IN HH @ ELLIOT & BURK
				2.80			
	6.265						
	5.415	+5.415	44.738				
	4.57						
				5.77			
TBM 3-191				4.95	-4.95	1239.788	BC IN HH @ ELLIOT & MORNING RIDGE
				4.135			
	6.735						
	5.47	+5.47	45.258				
	4.205						
				5.77			
TBM 3-190				4.52	-4.52	1240.738	□ CUT ON S. TOP CURB
				3.275			

807/16

MCFCD
BLK. 3

	7.335			
	6.05	+6.05	46.788	
	4.765			
				4.725
				3.445
RD-23				2.16

9-16-87

-3.445	1243.343	CPS IN ℄ OF ELLIOT, W. SIDE CONSOL. CANAL BRIDGE ⟨1243.338⟩

807/18

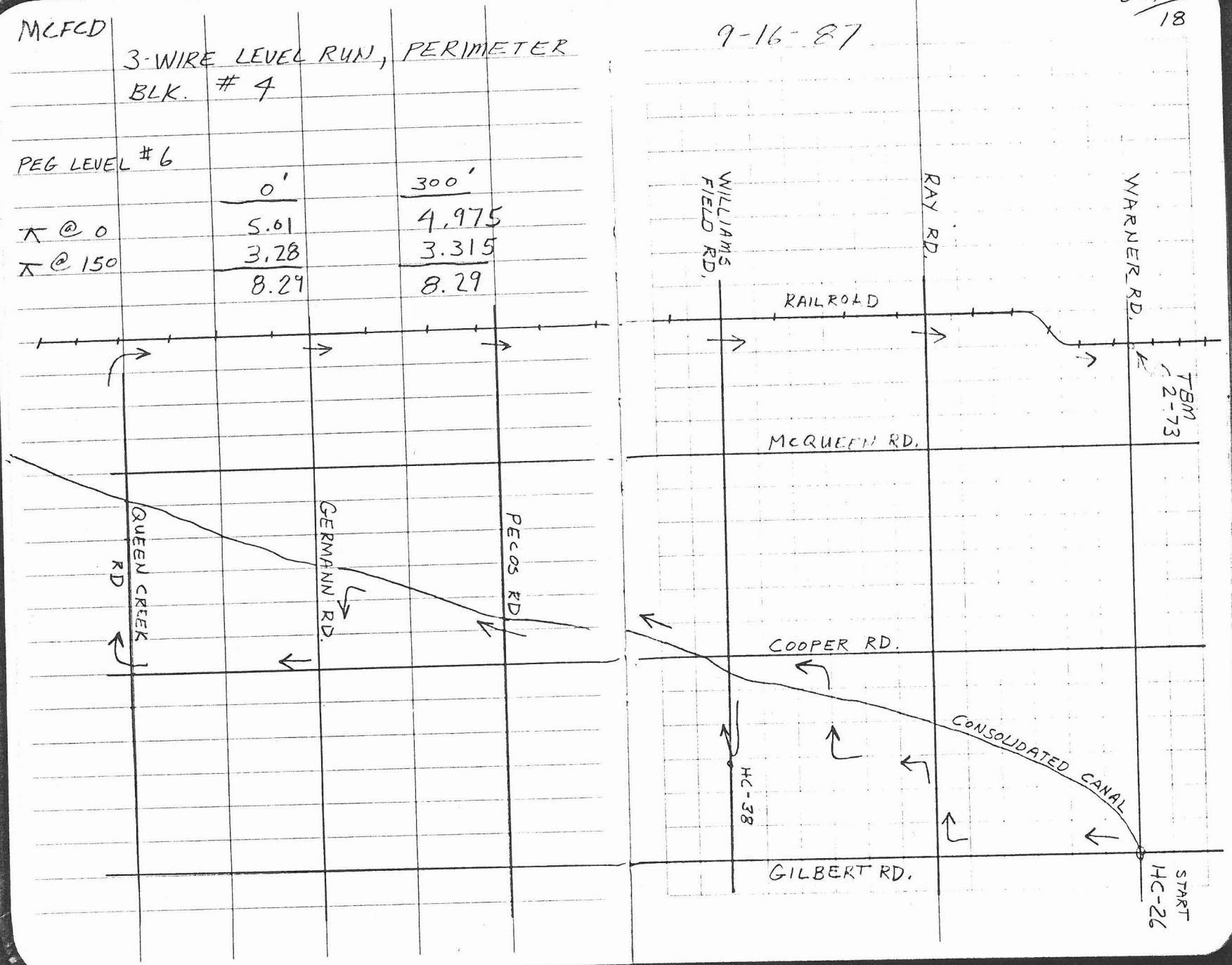
MCFCD

9-16-87

3-WIRE LEVEL RUN, PERIMETER
BLK. # 4

PEG LEVEL #6

	0'	300'
⊼ @ 0	5.01	4.975
⊼ @ 150	3.28	3.315
	8.29	8.29



MCFCD
BLK. 4 3-WIRE LEVEL RUN, PERIMETER BLK. 4

9-16-87

			UNADJUSTED			
HC-26			1238.663		3/4" BAR IN HH. @ INT. OF WARNER & GILBERT RD.	BK. 805/118
	6.70					
	5.405 + 5.405		44.068			
	4.11					
				4.625		
TBM 4-1				3.72	- 3.72	1240.348
				2.81		
	4.895					
	3.735 + 3.735		44.083			
	2.57					
				4.33		
TBM 4-2				3.055	- 3.055	1241.028
				1.785		
	5.27					
	4.065 + 4.065		45.093			
	2.855					
				4.565		
TBM 4-3				3.31	- 3.31	1241.783
				2.05		
	4.95					
	3.735 + 3.735		45.518			
	2.52					

CPS IN E. FACE OF PP, W. SIDE OF GILBERT RD, 450' S. OF WARNER

CPS IN E. FACE OF PP, W. SIDE OF GILBERT RD, 950' S. OF WARNER

CPS IN E. FACE OF PP, W. SIDE OF GILBERT RD, 1450' S. OF WARNER

MCFCD
BLK. 4

9-16-87

		1245.518			
			3.89		
TBM 4-4			2.635	- 2.635	1242.883
			1.38		CPS IN E. FACE OF FF, W. SIDE OF GILBERT RD, 1950' S. OF WARNER
	4.63				
	3.42	+ 3.42			
	2.205	46.303			
			4.96		
TBM 4-5			3.73	- 3.73	1242.573
			2.495		CPS IN E. FACE OF FF, W. SIDE OF GILBERT RD, 2450' S. OF WARNER RD.
	5.725				
	5.07	+ 5.07			
	4.42	47.643			
SIDESHOT		- 4.63			1" R-BAR IN HH, & GILBERT RD, ½ MILE S. OF WARNER, W. 1/4 COR. SEC. 19
SIDESHOT		- 4.13		1243.513	TOP OF PAVEMENT, TARGET ELEV. @ VC-13
			4.845		
VC 13			4.12	- 4.12	1243.523
			3.40		CPS IN ℄ OF GILBERT RD. 20' S. OF W. 1/4 COR SEC. 19
	6.60				
	5.53	+ 5.53			
	4.46	49.053			

MCFCD BLK. 4			1249.053		9-16-87	
				4.93		
TBM 4-6				3.72	−3.72	1245.333
				2.515		CPS IN E. FACE OF PP, W. SIDE GILBERT RD, 475' S. OF W. 1/4 COR. SEC. 19
	5.325					
	4.155	+4.155	49.488			
	2.99					
				5.395		
TBM 4-7				4.20	−4.20	1245.288
				3.01		CPS IN E. FACE OF PP, W. SIDE OF GILBERT RD, 950' S. OF W. 1/4 COR. SEC. 19
	5.90					
	4.73	+4.73	50.018			
	3.56					
				5.275		
TBM 4-8				4.09	−4.09	1245.928
				2.905		CPS IN E. FACE OF PP, W. SIDE OF GILBERT RD, 1400' S. OF W. 1/4 COR. SEC. 19
	5.99					
	4.825	+4.825	50.753			
	3.66					
				5.605		
TBM 4-9				4.405	−4.405	1246.348
				3.205		CPS IN E. FACE OF PP, W. SIDE OF GILBERT RD, 1850' S. OF W. 1/4 COR. SEC. 19
	6.135					
	4.945	+4.945	51.293			
	3.755					

BENCH
ELEV. 1251.293

9-16-87

				5.58		
TBM 4-10				4.415	- 4.415	1246.878
				3.25		
	6.015					
	5.31	+5.31	52.188			
	4.60					
SIDESHOT		- 4.21			1247.978	
				5.16		
RO-29				4.44	- 4.44	1247.748
				3.715		
	4.92					
	3.575	+3.575	51.323			
	2.225					
				7.325		
TBM 4-11				6.03	- 6.03	1245.293
				4.735		
	5.70					
	4.47	+4.47	49.763			
	3.24					
				5.895		
TBM 4-12				4.645	- 4.645	1245.118
				3.39		
	4.98					
	3.685	3.685	48.803			
	2.395					

TOP OF PAVEMENT, TARGET, ELEV. @ RO-29.

1" BAR IN HH @ EXIT. OF RAY & GILBERT RD.

□ CUT ON S. TCD, N. SIDE RAY RD, 550' W. OF GILBERT RD.

□ CUT ON S. TCD, N. SIDE RAY RD, 1100 'W. OF GILBERT RD.

9-16-87

MCFCD ELK 4			1248.803		
				7.41	
TBM 4-13				6.13	
				4.845	
	6.205				
	4.93	+4.93	47.603	−6.13	1242.673
	3.66				
				6.225	
TBM 4-14				5.025	
				3.82	
	6.37				
	5.145	+5.145	47.723	−5.025	1242.578
	3.915				
				6.655	
TBM 4-15				5.42	
				4.185	
	5.205				
	5.005	+5.005	47.308	−5.42	1242.303
	4.805				
				6.365	
TBM 4-16				6.13	
				5.895	
	5.67				
	4.45	+4.45	45.628	−6.13	1241.178
	3.23				

□ CUT ON S. TCD, N. SIDE OF RAY RD, 1660' W. OF GILBERT RD.

□ CUT ON S. TCD, N. SIDE OF RAY RD, 2100' W. OF GILBERT RD.

□ CUT ON S. TCD, N. SIDE OF RAY RD, 110' E. OF S. 1/4 COR. SEC. 24

MARI. CO. BC IN HH, N. EDGE OF RAY RD, @ S. 1/4 COR SEC 24

9-17-87
80-95° CLDY

RUCKMAN MEMORIAL HIGH SCH. LEVEE EXT.

90L
50

HC FCD EL K. 4		1245.628		
			6.015	
TBM 4-17			4.81	- 4.81	1240.818	□ CUT ON S. TOD, N. SIDE OF RAY RD, 150' E. OF 131ST ST.
			3.605	
	5.20			
	3.99	+ 3.99	44.808	
	2.785			
			5.735	
TBM 4-18			4.535	- 4.535	1240.273	□ CUT ON S. TOD, N. SIDE OF RAY RD, 300' E. OF CONSOL CANAL, 20' E. OF HEADWALL
			3.34	
	5.87			
	5.085	+ 5.085	45.358	
	4.30			
~~SIDEGATE~~				
TOP OF , TARGET ELEV @ HC-32				
			6.97	
HC-32			6.07	- 6.07	1239.288	TACK IN LEAD, ℄ OF CANAL ENTRANCE ℄ RAY RD. FLUSH WITH TOP OF CONC.
			5.17	
	7.07			
	6.17	+ 6.17	45.458	
	5.27			
			5.97	
TBM 4-18			5.185	- 5.185	1240.273	□ CUT ON S. TOD, N. SIDE RAY RD. 300' E. OF CANAL
			4.40	
	5.675			
	4.425	+ 4.425	44.678	
	3.118			

MCFCD
ELEV. 4

1244.698

9-17-87

				6.51		
				5.425	-5.425	1239.273
TBM 4-19				4.255		
	5.51					
	4.92	+4.92	44.173			
	4.33					
				4.625		
TBM 4-20				3.76	-3.76	1240.933
				2.89		
	4.64					
	3.17	+3.17	43.603			
	1.70					
				7.13		
TBM 4-21				5.635	-5.635	1237.968
				4.14		
	5.88					
	4.915	+4.915	42.883			
	3.95					
				5.205		
TBM 4-22				4.165	-4.165	1239.718
				3.13		
	4.125					
	3.245	+3.245	41.963			
	2.37					

⊓ CUT ON SW. COR. OF ELEC. BOX SLAB, E. SIDE 131ST ST, 250' S. OF RAY RD.
FLANGE BOLT, E. SIDE OF FIRE HYDRANT, E. SIDE OF 131ST ST, 500' S. OF RAY RD.
FLANGE BOLT, E. SIDE OF FIRE HYDRANT, E. SIDE OF 131ST ST, 1100' S. OF RAY RD.
⊓ CUT ON ℄ OF CONC. HEADWALL E. SIDE OF 131ST ST, 1450' S. OF RAY RD.

9-17-87

MCFCD BLK. 4			1241.963		
TBM 4-23				5.41 4.54 3.67		
	5.49 4.445 3.405	+ 4.445	41.868			
TBM 4-24				5.99 4.725 3.46	−4.725	1237.143	FLANGE BOLT, E. SIDE OF FIRE HYDRANT, E. SIDE OF 131ST ST, 350' N. OF GALVESTON ST
	5.865 5.30 4.735	+ 5.30	42.443			
SIDESHOT		− 4.63		1237.813			TOP OF PAVEMENT, TARGET ELEV @ VC-15
VC-15				5.335 4.63 3.925	−4.63	1237.813	CPS IN PAVEMENT @ INT. OF 131ST ST. & GALVESTON ST.
	5.36 4.79 4.22	+ 4.79	42.603			
TBM 4-25				5.58 4.71 3.845	−4.71	1237.893	FLANGE BOLT ON N. SIDE OF FIRE HYDRANT, N. SIDE OF GALVESTON, 250' W. OF 131ST ST.
	5.705 4.23 2.755	+ 4.23	42.123			
					−4.54	1237.423	□ CUT ON SW COR. OF ELEC. BOX SLAB, E. SIDE OF 131ST ST, 1750' S. OF RAY RD

9-17-87

MCFCD BLK 4			1242.123		
				7.495	
TBM 4-26				5.935	-5.935 1236.188 FLANGE BOLT ON N. SIDE OF FIRE HYDRANT, N. SIDE OF GALVESTON ST, 850' W. OF 131 ST ST.
				4.425	
	5.60				
	4.54	+ 4.54	40.728		
	3.485				
				5.155	
TBM 4-27				4.12	-4.12 1236.608 □ CUT ON SW. COR. OF ELEC. BOX SLAB, N. SIDE OF GALVESTON 250' E. OF CONSOL. CANAL
				3.085	
	6.13				
	4.88	+ 4.88	41.488		
	3.635				
				6.295	
TBM 4-28				5.07	-5.07 1236.418 R-BAR, E. EDGE E. CANAL RD. 200' S. OF GALVESTON ST.
				3.845	
	7.11				
	5.90	+ 5.90	42.318		
	4.685				
				5.83	
TBM 4-29				4.60	-4.60 1237.718 R-BAR, E. EDGE E. CANAL RD, 700' S. OF GALVESTON
				3.37	
	6.08				
	4.85	+ 4.85	42.568		
	3.615				

MCFCD
BLK. 4

1242.568

9-17-87

				5.975		
TBM 4-30				4.76	- 4.76	1237.808
				3.545		
	5.595					
	4.38	+4.38	42.188			
	3.165					
				6.28		
TBM 4-31				5.09	- 5.09	1237.098
				3.90		
	6.145					
	4.94	+4.94	42.038			
	3.73					
				5.915		
TBM 4-32				4.68	- 4.68	1237.358
				3.445		
	6.13					
	4.875	+4.875	42.233			
	3.625					
				6.78		
TBM 4-33				5.39	- 5.39	1236.843
				4.00		
	4.155					
	2.92	+2.92	39.763			
	1.685					

R-BAR, E. SIDE OF E. CANAL RD, 1200' S. OF GALVESTON ST.

R-BAR, E. SIDE OF E. CANAL RD, 1700' S. OF GALVESTON ST.

R-BAR, E. SIDE OF E. CANAL RD, 600' N. OF CHANDLER BLVD.

□ CUT ON E. END OF WING WALL ON E. SIDE GATE STRUC. 40' N. OF CHANDLER BLVD.

9-17-87

MCFCD BLK. 4			1239.763			
				5.825		
TBM 4-34				4.615	-4.615	1235.148
				3.41		
	6.095					
	4.875	+4.875	40.023			
	3.655					
				5.06		
TBM 4-35				3.825	-3.825	1236.198
				2.59		
	6.595					
	5.36	+5.36	41.558			
	4.12					
				5.86		
TBM 4-36				4.54	-4.54	1237.018
				3.22		
	6.72					
	5.43	+5.42	42.448			
	4.14					
				5.70		
TBM 4-37				4.525	-4.525	1237.923
				3.35		
	5.695					
	5.07	+5.07	42.993			
	4.44					

□ CUT ON S. TCD, N. SIDE CHANDLER BLVD, 500' E. OF CONSOL. CANAL

□ CUT ON S. TCD, N. SIDE OF CHANDLER BLVD. 300' E. OF COTTONWOOD ST.

□ CUT, TOP OF CURB, S. SIDE OF CHANDLER BLVD. 800' E. OF COTTONWOOD

□ CUT, TOP OF CURB, S. SIDE OF CHANDLER BLVD, 250' W. OF 132ND ST.

9-17-87

MCFCD BLK. 4			1242.993 ↑			
SIDESHOT		− 4.225	1238.768			
				5.155		
				4.615	−4.615	1238.378
HC-38				4.075		
	5.24					
	4.705	+ 4.705	1243.083 ↑			
	4.165					
				5.785		
TBM 4-37				5.155	−5.155	1237.928
				4.525		
	5.81					
	4.61	+ 4.61	42.538 ↑			
	3.41					
				6.82		
TBM 4-36				5.515	−5.515	1237.023
				4.21		
	5.92					
	4.625	+ 4.625	41.648 ↑			
	3.335					
				6.725		
TBM 4-35				5.445	−5.445	1236.203
				4.165		
	5.325					
	4.09	+ 4.09	40.293 ↑			
	2.86					

TOP OF PAVEMENT, TARGET ELEV. @ HC-38

BEGIN RUN BACK TO TBM 4-33

MARI. CO. BC IN HH @ INT. OF CHANDLER BLVD. & 132ND ST.

□ CUT ON S. CURB

□ CUT. ON S. CURB

□ CUT ON S. TCD.

9-17-87

MCFCD BLK. 4			1240.293 ↑			
				6.36		
TBM 4-34				5.145	- 5.145	1235.148	□ CUT ON S. TCD
				3.93			
	5.94						
	4.73	+ 4.73	39.878 ↑				
	3.52						
				4.255			
TBM 4-33				3.035	-3.035	1236.843	□ CUT ON WINGWALL, E. SIDE OF GATE STRUC., N. SIDE OF CHANDLER BLVD. 〈1236.843〉
				1.815			
	5.365						
	4.115	+ 4.115	40.958 ↑				
	2.87						
SIDESHOT		- 4.99		1235.968			TOP OF PAVEMENT, TARGET ELEV. @ HC-37
				6.63			
HC-37				5.50	- 5.50	1235.458	MARI. CO. BC IN HH @ INT. OF CHANDLER BLVD. & COOPER RD.
	6.47			4.37			
	4.75	+ 4.75	40.208 ↑				
	3.03						
				5.27			
TBM 4-38				4.01	- 4.01	1236.198	□ CUT ON N. END OF CURB, E. SIDE COOPER RD, S. OF CHANDLER BLVD.
				2.75			
	3.765						
	2.37	+ 2.37	38.568 ↑				
	0.98						

MCFCD
BLK. 4

1238.568

6.93
5.61
4.29

TBM 4-39

5.85
4.515 +4.515 37.473
3.185

6.69
5.39
4.09

TBM 4-40

7.325
5.50 +5.50 37.583
3.675

5.95
5.05
4.15

TBM 4-41

5.885
4.305 +4.305 36.838
2.72

5.855
4.295
2.735

TBM 4-42

5.205
3.84 +3.84 36.383
2.475

9-21-87
80-100° CLR.

RUGLAND
DAVIS
UYNE

807/16

-5.61	1232.958	R-BAR, 2' E. OF BLOCKWALL W. SIDE CONSOL. CANAL, 500' SW. OF COOPER RD.
-5.39	1232.083	R-BAR, 2' E. OF BLOCKWALL W. SIDE CONSOL. CANAL 1000' SW. OF COOPER RD.
-5.05	1232.533	R-BAR, 2' E. OF BLOCKWALL W. SIDE CONSOL. CANAL, 1500' SW. OF COOPER RD.
-4.295	1232.543	USBR BC, ℄ OF T.O. HDWALL W. SIDE OF CONS. CANAL @ MID-SEC. LINE OF SEC. 35

MCFCD

9-21-87

BLK. 4			1236.383 ↑			
				7.595		
				6.235	-6.235	1230.148 R-BAR, W. SIDE W. CANAL RD, 550'S. OF MID-SEC. LINE SEC. 35
TBM 4-43				4.88		
	6.945					
	5.585	+5.585	35.733 ↑			
	4.225					
				6.285		
				4.975	-4.975	1230.758 R-BAR, W. EDGE W. CANAL RD, 1100'S. OF MID-SEC. LINE SEC. 35
TBM 4-44				3.665		
	4.34					
	3.055	+3.055	33.813 ↑			
	1.775					
				5.355		
				4.025	-4.025	1229.788 R-BAR, 2'E. OF BLOCK WALL W. SIDE OF CANAL, 1150' N. OF PECOS RD.
TBM 4-45				2.695		
	7.805					
	6.215	+6.215	36.003 ↑			
	4.625					
				5.125		
				3.455	-3.455	1232.548 R-BAR @ INDENTATION IN BLOCK WALL, W. SIDE OF CANAL, 600' N. OF PECOS RD.
VC-22				1.785		
	5.89					
	4.145	+4.145	36.693 ↑			
	2.405					

MCFCD
BLK. 4

9-21-87

			1236.693 ^		
				3.52	
TBM 4-46				2.88	-2.88 1233.813 MARICOPA CO. HWY. DEPT. BC ON SW. COR. OF BRIDGE N. SIDE OF PECOS RD, W. SIDE OF CANAL
				2.245	
	3.04				
	1.69	+1.69	35.503 ^		
	0.34				
				6.12	
TBM 4-47				4.77	-4.77 1230.733 R-BAR, BETWEEN CONC. DITCHES, W. SIDE OF CANAL 550' S. OF PECOS RD.
				3.42	
	6.115				
	4.81	+4.81	35.543 ^		
	3.51				
				6.26	
TBM 4-48				4.91	-4.91 1230.633 R-BAR, BETWEEN CONC. DITCHES W. SIDE OF CANAL, 1100' S. OF PECOS RD,
				3.56	
	5.82				
	4.525	+4.525	35.158 ^		
	3.225				
				5.855	
TBM 4-49				4.465	-4.465 1230.693 R-BAR, 1/2' E. OF E. TCD, W. SIDE OF CANAL, 1650' S. OF PECOS RD.
				3.075	
	6.87				
	5.575	+5.575	36.268 ^		
	4.285				

MCFCD
BLK. 4

9-21-87

			1236.268 ↑				
				6.125			
TBM 4-50				4.765	- 4.765	1231.503	R-BAR, ½' E. OF E. TCD, W. SIDE OF CANAL, 2200' S. OF PECOS RD.
				3.405			
	6.525						
	5.19	+ 5.19	36.693 ↑				
	3.855						
				6.375			
TBM 4-51				5.025	- 5.025	1231.668	R-BAR, ½' E. OF E. TCD. W. SIDE OF CANAL, 2700' S. OF PECOS RD.
				3.675			
	6.28						
	4.975	+ 4.975	36.643 ↑				
	3.675						
				8.77			
HC-48				7.455	- 7.445	1229.188	R-BAR@GRND. LEVEL, NW. COR. OF STRUC. W. SIDE OF CANAL @ MID-SEC. LINE SEC. 2
				6.14			
	7.59						
	6.25	+ 6.25	35.438 ↑				
	4.91						
				6.88			
TBM 3-52				5.53	- 5.53	1229.908	R-BAR, W. EDGE W. CANAL RD, 550' S. OF MID-SEC. LINE SEC. 2
				4.18			
	6.865						
	5.595	+ 5.595	35.503 ↑				
	4.33						

MCFCD
BLK. 4

9-21-87

			1235.503			
				6.06		
TBM 4-53				4.69	-4.69	1230.813
				3.325		
	5.515					
	4.225	+4.225	35.038			
	2.935					
				6.02		
TBM 4-54				4.69	-4.69	1230.348
				3.36		
	5.895					
	4.57	+4.57	34.918			
	3.25					
				6.515		
TBM 4-55				5.105	-5.105	1229.813
				3.70		
	6.53					
	5.095		34.908			
	3.655					
				3.47		
TBM 4-56				1.83	-1.83	1233.078
				0.19		
	4.89					
	3.645	+3.645	36.723			
	2.395					

R-BAR, 1'E. OF E.TCD, W. SIDE OF CANAL, 1100' S. OF MID-SEC LINE SEC. 2

R-BAR, 1'E. OF E.TCD, W. SIDE OF CANAL, 1600' S. OF MID-SEC. LINE SEC. 2

R-BAR, 1'E. OF E.TCD, W. SIDE OF CANAL, 600' N. OF GERMANN RD.

L.S. CAP @ INT. OF GERMANN RD & AIRPORT BLVD.

9-21-87

807/56

MCFCD BLK. 4			1236.723 ↑			
				5.86		
TBM 4-57				4.535	−4.535	1232.188 □ CUT ON S.TCD, S. SIDE OF GERMANN RD, 550' E. OF AIRPORT BLVD.
				3.205		
	6.025					
	4.705	+4.705	36.893 ↑			
	3.38					
				5.465		
TBM 4-58				4.09	−4.09	1232.803 □ CUT ON S.TCD, S. SIDE OF GERMANN RD, 1100' E. OF AIRPORT BLVD.
				2.715		
	6.485					
	5.135	+5.135	37.938 ↑			
	3.785					
				5.77		
TBM 4-59				4.405	−4.405	1233.533 □ CUT ON S.TCD, S. SIDE OF GERMANN RD, 1650' E. OF AIRPORT BLVD.
				3.04		
	6.205					
	5.42	+5.42	38.953 ↑			
	4.63					
SIDESHOT		−3.815		1235.138		TOP OF PAVEMENT, TARGET ELEV. @ HC-49
				4.64		
HC-49				3.80	−3.80	1235.153 CPS, IN ℄ OF GERMANN RD, 675' W. OF COOPER RD.
				2.96		

MCFCD
BLK. 4

9-21-87

807/58

	6.455				
	1.77 + 4.77	39.923			
	3.085	↑			
			4.94		
TBM 4-60			3.01	-3.01	1236.913	STONE IN HH @ INT. OF GERMANN & COOPER RD.
			1.075		
	4.925				
	3.655 + 3.655	40.568			
	2.385	↑			
			6.15		
TBM 4-61			4.785	-4.785	1235.783	□ CUT ON E. TCD, W. SIDE COOPER RD, 550' S. OF GERMAN RD.
			3.42		
	5.48				
	4.175 + 4.175	39.958			
	2.87	↑			
			5.805		
TBM 4-62			4.49	-4.49	1235.468	□ CUT ON E. TCD, W. SIDE OF COOPER RD, 1100' S. OF GERMANN RD.
			3.175		
	6.50				
	5.155 + 5.155	40.623			
	3.81	↑			
			7.205		
TBM 4-63			5.85	-5.85	1234.773	R-BAR, 1' E. OF C.L. FENCE, W. SIDE COOPER RD, 1600' S. OF GERMANN RD.
			4.50		
	6.055				
	4.745 + 4.745	39.518			
	3.435	↑			

MLFCD
BLK. 4

1239.518

TBM 4-64			5.66		
			4.39	- 4.39	1235.128
			3.115		
	5.96				
	4.64	+ 4.64	39.768		
	3.325				
			4.24		
TBM 4-65			2.72	- 2.72	1237.048
			1.205		
	3.615				
	2.55	+ 2.55	39.598		
	1.485				
			3.985		
TBM 4-66			2.85	- 2.85	1236.748
			1.71		
	4.60				
	3.33	+ 3.33	40.078		
	2.06				
			4.72		
TBM 4-67			3.505	- 3.505	1236.573
			2.29		
	6.695				
	5.245	+ 5.245	41.818		
	3.80				

9-21-87

807/60

R-BAR, 1'E. OF C.L. FENCE W. SIDE OF COOPER RD, 2150' S. OF GERMANN RD.

CPS IN W. FACE OF PP #16 W. SIDE OF COOPER RD, 2650' S. OF GERMANN RD.

CPS IN W. FACE OF PP. #17 W. SIDE OF COOPER RD, 3050' S. OF GERMANN RD.

R-BAR, 1'E. OF C.L. FNCE, W. SIDE OF COOPER RD, 3500' S. OF GERMANN RD.

MCFCD

9-21-87

ELK. 4			1241.818 ^		
				5.355	
				4.085	
TBM 4-68				2.82	
	6.105				
	4.775	+4.775	42.508 ^		
	3.44				
				6.275	
TBM 4-69				4.865	
				3.45	
	6.285				
	1.82	+4.82	42.463 ^		
	3.355				
				5.99	
TBM 4-70				4.505	
				3.025	
	4.90				
	3.76	+3.76	41.718 ^		
	2.62				
				5.61	
TBM 4-71				4.225	
				2.845	
	4.33				
	2.905	+2.905	40.398 ^		
	1.48				

-4.085	1237.733	□	CUT ON E. TCD, W. SIDE OF COPPER RD, 4100' S. OF GERMANN RD
-4.865	1237.643	□	CUT ON E. TCD, W. SIDE COOPER RD, 4650' S. OF GERMANN RD.
-4.505	1237.958		MARI. CO. BC IN HH @ INT. OF QUEEN CREEK & COOPER RD.
-4.225	1237.493		CPS IN N. FACE OF PP # 41/2 S. SIDE OF Q. CREEK RD. 475' W. OF COOPER RD.

9-21-87

MCFCD BLK. 4			1240.398 ↑			
				5.50		
TBM 4-72				4.105	-4.105	1236.293 CPS IN N. FACE OF PP, S. SIDE OF Q. CREEK RD 950' W. OF COOPER RD
				2.705		
	4.30					
	2.88	+2.88	39.173 ↑			
	1.465					
				6.55		
TBM 4-73				5.13	-5.13	1234.043 CPS IN N. FACE OF PP S. SIDE OF Q. CREEK RD 30' E. OF 125TH PL.
				3.71		
	4.635					
	3.23	+3.23	37.273 ↑			
	1.825					
				5.465		
TBM 4-74				4.025	-4.025	1233.248 CPS IN N. FACE OF PP. S. SIDE OF Q. CREEK RD. 100' E. 124TH PL.
				2.59		
	4.705					
	3.62	+3.62	36.868 ↑			
	2.53					
SIDESHOT		-5.13		1231.738		TOP OF PAVEMENT, TARGET ELEV. @ HC-54
				6.575		
HC-54				5.325	-5.325	1231.543 1" PIPE IN HH @ INT. OF QUEEN CREEK & 123RD PL.
				4.07		

MCFCD
BLK. 4

	5.51				
	3.715 + 3.715	35.258			
	1.925				
			6.905		
TBM 4-75			5.415	-5.415	1229.843
			3.925		
	5.79				
	4.385 + 4.385	34.228			
	2.98				
			6.255		
TBM 4-76			4.83	-4.83	1229.398
			3.40		
	5.545				
	4.47 + 4.47	33.868			
	3.40				
			6.16		
TBM 4-77			5.24	-5.24	1228.628
			4.32		
	5.44				
	4.74 + 4.74	33.368			
	4.04				
			5.43		
TBM 4-78			4.63	-4.63	1228.738
			3.835		

9-21-87

807/66

CPS IN N. FACE OF PP, S. SIDE Q. CREEK RD, 2000' E. OF McQUEEN RD.

CPS IN N. FACE OF PP, S. SIDE OF QUEEN CREEK RD, 1450' E. OF McQUEEN RD.

CPS IN S. EDGE OF QUEEN CREEK RD, 300' E. OF AIRPORT BLVD.

CITY OF CHANDLER BC @ INT. OF AIRPORT BLVD. & QUEEN CREEK RD.

MCFCD
BLK. 4

9-22-87
80-95° CLR.

RUGLAND
B. McMURRAY
MIDDLETON

807/68

	6.29 5.105 +5.105 3.92	33.843			
			8.24		
TBM 4-79			7.195	-7.195	1226.648
			6.155		
	4.295 3.595 +3.595 2.89	30.243			
SIDESHOT	-5.38		1224.863		
			6.345		
HC-53			5.44	-5.44	1224.803
			4.53		
	4.92 3.57 +3.57 2.215	28.373			
			6.565		
TBm 4-80			5.26	-5.26	1223.113
			3.95		
	5.015 3.695 +3.695 2.37	26.808			

TOP OF PAVEMENT, TARGET ELEV @ HC-53

1" PIPE IN HH @ INT. OF McQUEEN & QUEEN CREEK ROAD.

□ CUT ON S.TCD, N. SIDE OF Q. CREEK RD, 550' W. OF McQUEEN RD.

CPS IN N. FACE OF PP, S. SIDE OF Q. CREEK RD, 300' E. OF McQUEEN RD.

MCFCD
BLK. 4

1226.808

9-22-87

807/70

				6.325		
TBM 4-81				4.925	-4.925	1221.883
				3.52		
	5.02					
	3.64	+3.64	25.523			
	2.255					
				5.705		
TBM 4-82				4.35	-4.35	1221.173
				3.00		
	4.90					
	3.545	+3.545	24.718			
	2.19					
				5.35		
TBM 4-83				4.00	-4.00	1220.718
				2.65		
	3.875					
	2.57	+2.57	23.288			
	1.265					
				6.205		
TBM 4-84				4.80	-4.80	1218.488
				3.40		
	5.85					
	4.53	+4.53	23.018			
	3.205					

□ CUT ON S.TCD, N. SIDE OF Q. CREEK RD, 1100' W. OF McQUEEN RD

□ CUT ON S.TCD, N. SIDE Q. CREEK RD, 1650' W. OF McQUEEN RD.

□ CUT ON S.TCD, N. SIDE OF Q. CREEK RD, 2200' W. OF McQUEEN RD.

□ CUT ON S.TCD, N. SIDE OF QUEEN CREEK RD, 2750' W. OF McQUEEN RD.

9-22-87

MCFCD
BLK 4

1223.018

				6.57		
TBM 4-85				5.21	-5.21	1217.808
	5.995			3.85		
	4.65	+4.65	22.458			
	3.305					
				6.27		
TBM 4-86				4.905	-4.905	1217.553
				3.54		
	6.67					
	5.925	+5.925	23.478			
	5.18					
SIDESHOT		-4.71				1218.768
				5.18		
HC-52				4.72	-4.72	1218.758
				4.26		
	4.815					
	4.35	+4.35	23.108			
	3.885					
				7.795		
TBM 4-87				6.765	-6.765	1216.343
				5.735		
	4.49					
	3.11	+3.11	19.453			
	1.725					

□ CUT ON S. TOD, N. SIDE OF Q. CREEK RD, 3300' W. OF McQUEEN RD.

□ CUT ON S. TOD, N. SIDE OF Q. CREEK RD, 60' E. OF RR TRACK.

TOP OF PAVEMENT, TARGET ELEV. @ HC-52

CPS IN ℄ OF QUEEN CREEK RD, 50' W. OF RR, ± 1300' E. OF AZ AVE.

CPS IN E. FACE OF PP # 45 W. SIDE OF RR, 200' N. OF QUEEN CREEK RD

9-22-87

MCFCD BCK. 4			1219.453			
				4.68		
TBm 4-88				3.29	-3.29	1216.163 CPS IN E. FACE OF PP # 47 W SIDE OF RR, 750' N. OF QUEEN CREEK RD.
				1,895		
	4.83					
	3.47	+3.47	19.633			
	2.105					
				5,18		
TBm 4-89				3.765	-3.765	1215.868 CPS IN E. FACE OF PP # 49 W. SIDE OF RR, 1300' N. OF Q. CREEK RD.
				2.35		
	5.005					
	3.62	+3.62	19.488			
	2.24					
				5,33		
TBm 4-90				3,935	-3.935	1215.553 CPS IN E. FACE OF PI # 51 W. SIDE OF RR, 1850' N. OF Q. CREEK RD.
				2.535		
	4,485					
	3.095	+3.095	18.648			
	1.71					
				5,41		
TBm 4-91				4.025	-4.025	1214.623 CPS IN E. FACE OF PP. # 53, W. SIDE OF RR, 2400' N. OF Q. CREEK RD.
				2.645		
	9.33					
	8.40	+8.40	23.023			
	7.47					

MCFCD
ELK. 4

1223.623

				8.89		
TBM 4-92				7.61	-7.61	1215.413
				6.38		
	6.07					
	4.76	+4.76	20.173			
	3.45					
				6.38		
TBM 4-93				5.045	-5.045	1215.128
				3.715		
	6.22					
	4.885	+4.885	20.013			
	3.55					
				5.835		
TBM 4-94				4.47	-4.47	1215.543
				3.11		
	5.46					
	4.09	+4.09	19.633			
	2.725					
				5.92		
TBM 4-95				4.575	-4.575	1215.058
				3.23		
	6.205					
	4.825	+4.825	19.883			
	3.45					

9-22-87

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R-BAR ON W. EDGE OF ROAD E. SIDE OF RR, 200' N. OF RYAN RD.

R-BAR ON W. EDGE OF RD. E. SIDE OF RR, 750' N. OF RYAN RD.

R-BAR ON W. EDGE OF RD, E. SIDE OF RR, 1300' N. OF RYAN RD

R-BAR ON W. EDGE OF RD, E. SIDE OF RR, 700' S. OF GERMANN RD.

807/78

9-22-87

MCFCD BLK. 4			1219.883 ↑			
				5.605		
				4.235	-4.235	1215.648 R-BAR, W. EDGE OF RD, E. SIDE OF RR, 200' S. OF GERMANN RD.
TBM 4-96				2.87		
	6.05					
	5.43	+5.43	21.078 ↑			
	4.815					
SIDESHOT		-2.63		1218.448		TOP OF PAVEMENT, TARGET ELEV. @ RO-39
				3.38		
RO-39				2.635	-2.635	1218.443 CPS IN E OF GERMANN RD, 50' W. OF RR. TRACKS
				1.885		
	5.275					
	3.925	+3.925	22.368 ↑			
	2.575					
				7.22		
				5.875	-5.875	1216.493 R-BAR @ W. TOE OF RR, 550' N. OF GERMANN RD.
TBM 4-97				4.53		
	5.66					
	4.30	+4.30	20.793 ↑			
	2.945					
				4.505		
				3.075	-3.075	1217.718 R-BAR @ W. TOE OF RR, 1100' N. OF GERMAIN RD.
TBM 4-98				1.65		
	7.32					
	5.91	+5.91	23.628 ↑			
	4.50					

9-22-87

MCFCD BLK. 4			1223.628			
				5.935		
TBM 4-99				4.60	-4.60	1219.028 R-BAR @ W. TOE OF RR, 1600' N. OF GERMANN RD.
				3.26		
	5.285					
	3.895	+3.895	22.923			
	2.505					
				5.98		
TBM 4-100				4.675	-4.675	1218.248 R-BAR @ W. TOE OF RR, 500' S. OF WILLIS RD.
	7.35			3.37		
	6.015	+6.015	24.263			
	4.685					
SIDESHOT		-4.36		1219.903		TOP OF PAVEMENT, TARGET ELEV. @ HC-46
				5.34		
HC-46				4.345	-4.345	1219.918 CPS IN E OF WILLIS RD, 50' W. OF RR TRACK
				3.35		
	4.35					
	2.95	+2.95	22.868			
	1.55					
				6.44		
TBM 4-101				5.055	-5.055	1217.813 R-BAR ON W. EDGE OF ROAD, E SIDE OF RR, 550' N. OF WILLIS RD.
				3.67		
	5.685					
	4.35	+4.35	22.163			
	3.02					

9-22-87

MCFCD BLK. 4		1222.163			
			6.07		
TBM 4-102			4.685	-4.685	1217.478
			3.30		R-BAR, W. EDGE OF RD, E. SIDE OF RR, 1100' N. OF WILLIS RD.
	5.875				
	4.485 + 4.485	21.963			
	3.09				
			6.035		
TBM 4-103			4.69	-4.69	1217.273
			3.35		R-BAR, W. EDGE OF RD, E. SIDE OF RR, 1600' N. OF WILLIS RD.
	6.025				
	4.625 + 4.625	21.898			
	3.23				
			5.81		
TBM 4-104			4.50	-4.50	1217.398
			3.185		R-BAR, W. EDGE OF RD, E. SIDE OF RR, 600' S. OF PECOS RD.
	5.96				
	4.58 + 4.58	21.978			
	3.20				
			5.81		
TBM 4-105			4.635	-4.635	1217.343
			3.46		R-BAR, W. EDGE OF RD, E. SIDE OF RR, 50' S. OF PECOS RD.
	7.205				
	5.95 + 5.95	23.293			
	4.70				

9-22-87

MCFCD
BLK. 4

1223.293

				6.71	
TBM 4-106				5.47	−5.47 1217.823 CPS IN E. FACE OF PP, W. SIDE OF RR, 500' N. OF PECOS RD.
				4.23	
	6.77				
	5.72	+5.72	23.543		
	4.67				
				5.615	
TBM 4-107				4.615	−4.615 1218.928 CPS IN E. FACE OF PP, W. SIDE OF RR, @ SE COR OF INT. OF MORELES & DELEWARE ST.
				3.615	
	4.545				
	3.39	+3.39	22.318		
	2.23				
				7.925	
TBM 4-108				6.41	−6.41 1215.908 □ CUT, TOP OF CURB, E. SIDE OF DELEWARE ST. N. SIDE OF FAIRVIEW ST.
				4.895	
	5.925				
	4.81	+4.81	20.718		
	3.695				
				6.155	
TBM 4-109				4.92	−4.92 1215.798 R-BAR @ W. TOE OF RR, 500' N. OF FAIRVIEW ST.
				3.68	
	4.935				
	3.45	+3.45	19.248		
	1.965				

MCFCD
BLK. 4

1219.248 ↑

9-22-87

				6.02		
TBM 4-110				4.67	-4.67	1214.578	□ CUT, TOP OF CURB, E. SIDE OF DELEWARE ST, 125' N. OF FOLLEY ST.
				3.325		
	5.755					
	4.92	+4.92	19.498			
	4.09		↑			
SIDESHOT		-2.73	1216.768				TOP OF PAVEMENT, TARGET ELEV @ RO-36
SIDESHOT		-2.715	1216.783				CPS, ℄ OF FRYE RD, 50' W. OF RR, RO-36
				6.42		
BM #31				5.83	-5.83	1213.668	ADOT, ALUM. CAP @ INT. OF DELEWARE & FRYE RD. ⟨1213.624⟩ ADJ. TO GREINER ENG. ELEV.
				5.235		
	6.45					
	5.08	+5.08	18.704			
	3.715		↑			
				5.945		
TBM 4-111				4.44	-4.44	1214.264	□ CUT, TOP OF CURB, W. SIDE OF DELEWARE ST, 35' S. OF CHICAGO ST.
				2.935		
	6.68					
	5.13	+5.13	19.394			
	3.585		↑			

9-22-87

MCFCD BLK. 4			1219.394 ↑			
				5.48		
TBM 4-112				4.015	−4.015	1215.379
				2.545		
	6.685					
	5.16	+ 5.16	20.539 ↑			
	3.635					
				6.355		
TBM 4-113				4.825	−4.825	1215.714
				3.30		
	5.27					
	3.855	+ 3.855	19.569 ↑			
	2.44					
				6.76		
TBM 4-114				5.43	−5.43	1214.139
				4.10		
	5.47					
	4.575	+ 4.575	18.714 ↑			
	3.68					
SIDESHOT		− 3.205		1215.509		
SIDESHOT		− 3.205		1215.509		
				6.075		
TBM 4-115				5.345	−5.345	1213.369
				4.61		

□ CUT, TOP OF CURB, W. SIDE OF DELEWARE ST, 45 'S. OF BOSTON ST.

□ CUT, TOP OF CURB, W. SIDE OF DELEWARE ST, 75 'N. OF COMMONWEALTH AVE.

□ CUT, TOP OF CURB, W. SIDE OF DELEWARE ST, 250 'N. OF BUFFALOE ST

TOP OF PAVEMENT, TARGET ELEV. @ HC-35

HC-35, CPS IN ℄ OF CHANDLER BLVD, 50' W. OF RR.

CITY OF CHANDLER BC, IN HH @ INT. OF CHANDLER BLVD & DELEWARE ST.

MCFCD
BLK. 4

9-23-87
75-95° CLDY.

RUGLAND
B. McMURRAY
MIDDLETON

807/90

	7.045					
	5.70 + 5.70		19.069			
	4.35					
				6.33		
TBM 4-116				5.38	- 5.38	1213.689
				4.43		
	5.68					
	5.13	+ 5.13	18.819			
	4.575					
				6.13		
TBM 4-117				5.60	- 5.60	1213.219
				5.07		
	7.25					
	5.855	+ 5.855	19.074			
	4.455					
				6.145		
TBM 4-118				5.015	- 5.015	1214.059
				3.89		
	5.70					
	5.285	+ 5.285	19.344			
	4.865					
				6.24		
TBM 4-119				5.80	- 5.80	1213.544
				5.36		
	6.48					
	5.95	+ 5.95	19.494			
	5.42					

□ CUT, TOP OF CURB, W. SIDE OF DELEWARE ST. 550' N. OF CHANDLER BLVD.
1" PIPE IN HH @ INT. OF DELEWARE & DETROIT ST.
□ CUT, TOP OF CURB, W. SIDE OF DELEWARE ST. 550' N. OF DETROIT ST.
PK NAIL IN 2" PIPE IN HH @ INT. OF DELEWARE & ERIE ST.

MCFCD

BLK. 4

1219.494

				6.675
TBM 4-126				5.50
				4.32
	6.13			
	5.205	+ 5.205	19.199	
	4.28			
				7.195
TBM 4-121				6.39
				5.585
	6.97			
	5.57	+ 5.57	18.379	
	4.17			
				6.71
TBM 4-122				5.415
				4.10
	6.705			
	5.345	+ 5.345	18.319	
	3.985			
				6.205
TBM 4-123				4.925
				3.645
	6.35			
	4.99	+ 4.99	18.384	
	3.625			

9-23-87

807/92

- 5.50	1213.994	□	CUT, TOP OF CURB, W. SIDE OF DELEWARE ST, 400' N. OF ERIE ST.
- 6.39	1212.809		1" PIPE IN HH @ INT. OF DELEWARE & OAKLAND ST.
- 5.405	1212.974	□	CUT, TOP OF CURB, W. SIDE OF DELEWARE ST, 550' N. OF OAKLAND ST.
- 4.925	1213.394	□	CUT, TOP OF CURB, W. SIDE OF DELEWARE ST, 400' N. OF GALVESTON ST

807/94

MCFCD

9-23-87

BLK. 4			1218.384 ↑				
				6.47			
TBM 4-124				5.095	- 5.095	1213.289	□ CUT, TOP OF CURB, W. SIDE OF DELEWARE ST. 300' N. OF HARRISON ST.
				3.72			
	6.235						
	5.31	+5.31	18.599 ↑				
	4.39						
				6.845			
TBM 4-125				5.925	- 5.925	1212.674	CITY OF CHANDLER BC IN H.H @ INT. OF DELEWARE & IVANHOE ST.
				5.005			
	8.61						
	1.53	+7.53	20.204 ↑				
	6.45						
				8.315			
TBM 4-126				6.11	-6.11	1214.094	CPS IN W. FACE OF PP # 12/6 E. SIDE OF RR, 400' N. OF IVANHOE ST.
				3.905			
	5.75						
	4.61	+4.61	18.704 ↑				
	3.47						
				6.285			
TBM 4-127				5.22	-5.22	1213.484	CPS IN W. FACE OF PP # 12/5 E. SIDE OF RR, 500' S. OF RAY RD.
				4.15			
	7.31						
	6.265	+6.265	19.749 ↑				
	5.22						

807/96

MCFCD							
ELK. 4			1219.749				
			↑				
SIDESHOT		- 1.885		1217.864			
				7.89			
RO-28				1.86	-1.86	1217.889	CPS IN ℄ OF RAY RD, 50' W. OF RR TRACK
	2.90			0.825			
	1.93	+1.93	19.819				
	0.96		↑				
				7.345			
TBM 4-128				6.26	-6.26	1213.559	CPS IN W. FACE OF PP # 12/3 E. SIDE OF RR, 400' N. OF RAY RD.
				5.17			
	7.33						
	5.97	+5.97	19.529				
	4.605		↑				
				6.51			
TBM 4-129				5.21	-5.21	1214.319	R-BAR, 1' E. OF CONC. DITCH W. SIDE OF RR, 950' N. OF RAY RD.
				3.915			
	6.755						
	5.36	+5.36	19.679				
	3.965		↑				
				7.19			
TBM 4-130				5.84	-5.84	1213.839	R-BAR, 20' W. OF RR. TRACK, 1500' N. OF RAY RD.
				4.485			
	5.93						
	4.585	+4.585	18.424				
	3.24		↑				

9-23-87

TOP OF PAVEMENT, TARGET ELEV. @ RO-28

MCFCD

BLK. 4 — 1218.424

				6.505
TBM 4-131				5.145
				3.785
	5.57			
	4.165	+ 4.165	17.444	
	2.76			
				5.60
TBM 4-132				4.355
				3.11
	6.995			
	5.555	+5.555	18.644	
	4.11			
				7.86
TBM 4-133				6.465
				5.07
	6.395			
	4.985	+4.985	17.164	
	3.58			
				5.92
TBM 4-134				4.57
				3.225
	6.32			
	4.925	+ 4.925	17.519	
	3.53			

9-23-87

-5.145	1213.279	R-BAR, 20' W. OF RR TRACK, 2050' N. OF RAY RD.
-4.355	1213.089	R-BAR, 20' W. OF RR TRACK, 50' S. OF KNOX RD.
-6.965	1212.179	R-BAR, 20' W. OF RR TRACK, 500' N. OF KNOX RD.
-4.57	1212.594	R-BAR, 20' E. OF RR TRACK, 1050' N. OF KNOX RD.

9-23-87

MCFCD ELK. 4		1217.519 ↑			
			5.79		
TBM 4-135			4.43	− 4.43	1213.089
			3.065		
	6.785				
	5.41 + 5.41	18.499 ↑			
	4.03				
			5.455		
TBM 4-136			4.08	− 4.08	1214.419
			2.70		
	9.895				
	8.20 + 8.20	22.619 ↑			
	✱6.50				
			5.05		
TBM 2-73			2.59	− 2.59	1220.029
			0.13		

R-BAR, 20'E. OF RR TRACK, 1400'N. OF KNOX RD.

R-BAR @ E. TOE OF RP, 1'S. OF WARNER RD.

BC IN ℄ OF WARNER RD & RR TRACK
⟨1220.068⟩

MCFCD
BLK. 4

3-WIRE LEVEL RUN - INTERIOR

BLK. 4 VC-12, CTR. SEC. 22

9-24-87
80-95° PT. CLDY

RUCKMAN
B. McMURRAY
MIDDLETON

807/102

TBM 4-132				UNADJ. ELEV. <1213.089>	R-BAR, 20' W. OF RR TRACK, 50' S. OF KNOX RD.		SEE PG. 98
	6.02						
	4.685	+ 4.685	17.774				
	3.345						
				4.63			
TBM 4-137				3.45	- 3.45	1214.324	CPS IN N. FACE OF PP S. SIDE OF KNOX RD, 450' E. OF RR TRACK
				2.27			
	5.09						
	3.895	+ 3.895	18.219				
	2.705						
				3.90			
TBM 1-138				2.71	- 2.71	1215.509	CPS IN N. FACE OF PP S. SIDE OF KNOX RD, 950' E. OF RR TRACK
				1.515			
	6.51						
	5.295	+ 5.295	20.804				
	4.08						
				6.07			
VC-12				4.83	- 4.83	1215.974	R-BAR @ GRND LEVEL, N. SIDE OF KNOX RD, 100' E. OF CTR. 22
				3.595			
	6.29				BEGIN RUN BACK		
	5.05	+ 5.05	21.024				
	3.81						

9-24-87

MCFCD BLK. 4			1221.024 ^				
				6.73			
TBM 4-138				5.515	-5.515	1215.509	CPS IN PP
				4.30			
	3.87						
	2.74	+2.74	18.249 ^				
	1.615						
				5.185			
TBM 4-137				3.93	-3.93	1214.319	CPS IN PP
				2.675			
	5.185						
	4.005	+4.005	18.324 ^				
	2.82						
				6.62			
TBM 4-132				5.235	-5.235	1213.089	R-BAR, 20' W. OF RR, 50' S. OF KNOX RD
				3.85			<1213.089>

MCFCD
BLK. 4

3-WIRE LEVEL RUN TO VC-14
SEC. 27

9-24-87

			UNADJ. ELEV.		
TBM 1-125			1212.67		CITY OF CHANDLER BC IN HH @ INT. OF DELEWARE & IVANHOE ST. SEE pg. 94
	9.585				
	8.065	+8.065	20.735		
	6.545				
				5.305	
TBM 4-139				3.325	-3.325 1217.41 TOP OF UPPER FLANGE BOLT, NW SIDE OF FIRE HYDRANT, N. SIDE OF HARRISON ST, 550' E. OF RR TRACK
				1.34	
	5.63				
	4.395	+4.395	21.805		
	3.16				
				5.195	
TBM 4-140				4.16	-4.16 1217.645 TOP OF UPPER FLANGE BOLT, NW COR. OF FIRE HYDRANT, N. SIDE OF HARRISON ST. 425' W. OF HAMILTON ST.
				3.13	
	5.525				
	4.525	+4.525	22.17		
	3.53				
SIDESHOT		-6.24		1215.93	TOP OF PAVEMENT, TARGET ELEV. @ VC-14
				7.19	
VC-14				6.215	-6.215 1215.955 CITY OF CHANDLER BC @ INT.
				5.245	

BEGIN RUN BACK

MCFCD
BLK. 4

9-24-87

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	7.255				
	6.285	+6.285	22.24		
	5.31				
				5.59	
TBM 4-140				4.59	
				3.59	
	5.12				
	4.11	+4.11	21.76		
	3.095				
				5.59	
TBM 4-139				4.34	
				3.09	
	5.83				
	4.15	+4.15	21.57		
	2.465				
				10.715	
TBM 4-125				8.885	
				7.06	

-4.59	1217.65	TOP OF UPPER FLANGE BOLT OF FIRE HYDRANT
-4.34	1217.42	TOP OF UPPER FLANGE BOLT OF FIRE HYDRANT
-8.885	1212.685	BC IN HH @ INT. OF DELEWARE & IVANHOE ST. <1212.67>

807/110

NCFCD
BLK. 3-WIRE LEVEL RUN TO HC-36

9-24-87

			UNADJ. ELEV. 1213.369		CITY OF CHANDLER BC IN HH @ INT. OF CHANDLER BLVD & DELEWARE ST. SEE pg. 88
TBM 4-115					
	7.145				
	6.185	+6.185	19.554		
	5.23				
				6.205	
TBM 4-141				5.25	
				4.30	
	6.55				
	5.11	+5.11	19.414		
	3.675				
				5.78	
TBM 4-142				4.275	
				2.77	
	6.385				
	5.13	+5.13	20.269		
	3.87				
				5.61	
TBM 4-143				4.55	
				3.495	
	7.305				
	5.855	+5.855	21.574		
	4.405				

-5.25	1214.304	□	CUT, TOP OF CURB, S. SIDE OF CHANDLER BLVD, 250' E. OF RR TRACK
-4.275	1215.139	□	CUT, TOP OF CURB, S. SIDE OF CHANDLER BLVD, 150' E. OF EXETER ST.
-4.55	1215.719		CITY OF CHANDLER BC IN HH @ INT. OF HAMILTON & CHANDLER BLVD.

9-24-87

MCFCD BLK 4			1221.574 ^		
				5.09	
TBM 4-144				3.595	−3.595 1217.979 BC, FLUSH WITH TOP OF ROAD @ INT. OF CHANDLER BLVD & S. ITHICA ST.
				2.10	
	7.055				
	5.63	+5.63	23.609 ^		
	4.205				
SIDESHOT		−3.64		1219.969	TOP OF PAVEMENT, TARGET ELEV. @ HC-36
				5.125	
HC-36				3.62	−3.62 1219.989 CITY OF CHANDLER BC @ INT. OF CHANDLER BLVD. & N. JACKSON ST.
				2.11	
	5.325				BEGIN RUN BACK
	3.82	+3.82	23.809 ^		
	2.31				
				7.25	
TBM 4-144				5.83	−5.83 1217.979 BC @ CHANDLER BLVD & ITHICA
				4.405	
	5.01				
	3.515	+3.515	21.494 ^		
	2.02				
				7.22	
TBM 4-143				5.77	−5.77 1215.724 BC @ HAMILTON & CHANDLER BLVD
				4.32	
	5.865				
	4.815	+4.815	20.539 ^		
	3.765				

9-24-87

MCFCD BLK. 4			1220.539			
				6.65		
TBM 4-142				5.39	-5.39	1215.149
				4.13		
	5.905					
	4.40	+4.40	19.549			
	2.895					
				6.675		
TBM 4-141				5.24	-5.24	1214.309
				3.80		
	6.49					
	5.52	+5.52	19.829			
	4.55					
				7.385		
TBM 4-115				6.45	-6.45	1213.379
				5.515		

□ CUT ON CURB

□ CUT ON CURB

BC @ INT. OF CHANDLER BLVD. & DELEWARE ST.
<1213.369>

MCFCD
BLK. 4

3-WIRE LEVEL RUN TO VC-19 CTR. SEC. 34

9-24-87

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BM #31				<1213.624>	ADOT. ALUM. CAP @ INT. OF FRYE RD. & DELEWARE ST. GREINER ENG. ELEV.
	7.78				
	6.295	+6.295	19.919		
	4.805				
				6.07	
TBM 4-145				4.76	-4.76 1215.159 □ CUT, TOP OF CURB, S. SIDE OF FRYE RD, 75' W. OF HIDALGO ST.
				3.45	
	7.205				
	5.82	+5.82	20.979		
	4.435				
				4.28	
TBM 4-146				3.05	-3.05 1217.929 □ CUT, TOP OF CURB, S. SIDE FRYE RD, 350' W. OF HAMILTON ST.
				1.82	
	5.71				
	4.81	+4.81	22.739		
	3.915				
SIDESHOT		-4.41		1218.329	TOP OF PAVEMENT, TARGET ELEV. @ VC-19
				6.065	
VC-19				5.205	-5.205 1217.534 CITY OF CHANDLER BC IN HH @ INT OF FRYE RD & HAMILTON ST.
				4.35	

BEGIN RUN BACK

MCFCD BLK. 4

9-24-87

	6.29						
	5.435	+5.435	22.969				
	4.525						
				5.94			
TBM 4-146				5.04	-5.04	1217.929	□ CUT ON CURB
				4.14			
	4.93						
	3.70	+3.70	21.629				
	2.465						
				7.845			
TBM 4-145				6.47	-6.47	1215.159	□ CUT ON CURB
				5.09			
	7.525						
	6.065	+6.065	21.224				
	4.60						
				8.965			
BM #31				7.595	-7.595	1213.629	ADOT. ALUM. CAP @ INT. OF FRYE RD. & DELEWARE ST. <1213.624>
				6.23			

MCFCD
BLK. 4

3-WIRE LEVEL RUN TO VC-24

9-24-87

			UNADJ. ELEV.		
RO-39			(1218.44)		CPS IN ℄ OF GERMANN RD, 50' W. OF RR TRACKS. SEE Pg. 78
	4.85				
	3.12	+3.12	21.56		
	1.385				
				6.925	
TBM 4-147				5.45	-5.45 1216.11 TOP OF FLANGE BOLT NW. SIDE OF FIRE HYDRANT N. SIDE OF GERMANN RD, 600' E. OF RR
				3.98	
	7.305				
	5.805	+5.805	21.915		
	4.30				
SIDESHOT		-4.23	1217.685		TOP OF PAVEMENT, TARGET ELEV. @ VC-24
				5.885	
VC-24				4.21	-4.21 1217.705 CPS IN ℄ OF GERMANN RD, 1/2 MILE E. OF AZ. AVE.
				2.53	
					BEGIN RUN BACK
	6.00				
	4.325	+4.325	22.03		
	2.645				

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MCFCD

9-24-87

BLK. 4			1222.03 ↑				
				7.425			
TBM 4-147				5.925	- 5.925	1216.105	FLANGE BOLT OF FIRE HYDRANT
				4.42			
	6.29						
	4.69	+4.69	20.795 ↑				
	3.09						
				3.96			
RO-39				2.36	- 2.36	1218.435	CPS IN ℄ OF GERMANN RD, 50' W. OF RR. <1218.44>
				0.76			

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MCFCD
BLK. 4

3-WIRE LEVEL RUN TO HC-47 & RO-38 SEC. 3

9-24-87

HC-48			<1229.185 UNADJ. ELEV.	R-BAR @ NW. COR. OF STRUC., W. SIDE OF CANAL, N. SIDE WILLIS RD, SEE pg. 52	
	3.705				
	2.37	+2.37	31.555		
	1.04				
			6.785		
TBM 4-148			5.225	-5.225	1226.33 CPS IN N. FACE OF PP S. SIDE OF WILLIS RD, 550' W. OF CONSOLIDATED CANAL
			3.665		
	3.81				
	2.14	+2.14	28.47		
	0.47				
			6.175		
TBM 4-149			4.80	-4.80	1223.67 CPS IN N. FACE OF PP #4 S. SIDE OF WILLIS RD. 1100' E. OF McQUEEN RD.
			3.425		
	4.985				
	3.295	+3.295	26.965		
	1.605				
			5.72		
TBM 4-150			4.055	-4.055	1222.91 CPS IN N. FACE OF PP S. SIDE OF WILLIS RD, 450' E. OF McQUEEN RD.
			2.39		
	3.87				
	2.855	+2.855	25.765		
	1.84				

MCFCD
BLK. 1

1225.765

SIDESHOT		−4.26		1221.505		
				5.555		
RO-38				4.325	−4.325	1221.44
				3.095		
	6.065					
	5.415	+5.415	26.855			
	4.76					
				6.165		
TBM 4-151				5.17	−5.17	1221.685
				4.175		
	5.17					
	4.07	+4.07	25.755			
	2.97					
SIDESHOT		−5.50		1220.255		
				6.47		
HC-47				5.495	−5.495	1220.26
				4.515		
	6.32					
	5.345	+5.345	25.605			
	4.365					

9-21-87

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TOP OF PAVEMENT, TARGET ELEV. @ RO-38

MARICOPA CO. BC @ INT. McQUEEN & WILLIS RD. 0.10' BELOW PAVEMENT

CPS IN N. FACE OF PP S. SIDE OF WILLIS RD, 330' W. OF McQUEEN RD.

TOP OF PAVEMENT, TARGET ELEV. @ HC-47

CPS IN ℄ OF WILLIS RD. 750' W. OF McQUEEN RD.

9-24-87

MCFCD BLK. 4			1225.605 ↑				
				5.015			
TBM 4-151				3.92	-3.92	1221.685	CPS IN PP
				2.825			
	5.155						
	4.295	+4.295	25.98 ↑				
	3.44						
				5.31			
RD-38				4.545	-4.545	1221.435	BC @ WILLIS & McQUEEN
				3.775			
	5.215						
	4.075	+4.075	25.51 ↑				
	2.93						
				3.695			
TBM 4-150				2.605	-2.605	1222.905	CPS IN PP
				1.52			
	4.925						
	3.275	+3.275	26.18 ↑				
	1.62						
				4.19			
TBM 4-149				2.51	-2.51	1223.67	CPS IN PP
				0.83			
	5.725						
	4.19	+4.19	27.86 ↑				
	2.655						

MCFCD
BLK. 1

1227.86

3.025
1.535
0.04

TBM 4-148

6.78
5.285 + 5.285 = 31.61
3.785

3.825
2.425
1.03

HC-48

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9-24-87

-1.535	1226.325	CPS, IN PP
-2.425	1229.185	R-BAR @ NW. COR. OF STRUC. W. SIDE OF CANAL N. SIDE OF WILLIS RD, <1229.185>

MCFCD
BLK. 4

3-WIRE LEVEL RUN TO VC-25
SEC. 11

9-24-87

TBM 4-56				<1233.075> UNADJ. ELEV.	L.S. CAP @ INT. OF AIRPORT BLVD.	GERMANN RD. & SEE pg. 54
	3.95					
	2.425	+2.425	35.50			
	0.90					
				5.55		
TBM 4-152				4.17	-4.17 1231.33	R-BAR ON E. EDGE OF CONSOLIDATED CANAL, 575' S. OF GERMANN RD.
				2.79		
	6.345					
	5.04	+5.04	36.37			
	3.74					
				5.945		
TBM 4-153				4.94	-4.94 1231.43	R-BAR, ON E. EDGE OF CONSOL. CANAL, 1150' S. OF GERMANN RD.
				3.935		
	7.31					
	5.92	+5.92	37.35			
	4.53					
				7.325		
TBM 4-154				5.875	-5.875 1231.475	R-BAR, ON E. EDGE OF CONSOL. CANAL, 1700' S. OF GERMANN RD.
				4.42		
	5.69					
	4.43	+4.43	35.905			
	3.165					

9-24-87

MCFCD BLK. 4			1235.905 ↑				
				5.52			
TBM 4-155				4.38	-4.38	1231.525	R-BAR ON E. EDGE OF CONSOL CANAL, 2250' S. OF GERMANN RD.
				3.245			
	5.23						
	4.495	+4.495	36.02 ↑				
	3.765						
				8.955			
VC-25				8.46	-8.46	1227.56	R-BAR @ GRND, LEVEL, E. SIDE OF E. CANAL RD.
				7.965			
	8.82				BEGIN RUN BACK		N. SIDE OF JOG IN CHANDLER AIRPORT FENCE
	8.325	+8.325	35.885 ↑				
	7.83						
				5.095			
TBM 4-155				4.36	-4.36	1231.525	R-BAR
				3.625			
	5.76						
	4.625	+4.625	36.15 ↑				
	3.495						
				5.935			
TBM 4-154				4.665	-4.665	1231.485	R-BAR
				3.40			
	7.205						
	5.755	+5.755	37.24 ↑				
	4.305						

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9-24-87

MCFCD BLK. 4 — 1237.24

				7.19			
TBM 4-153				5.80	- 5.80	1231.44	R-BAR
				4.41			
	6.125						
	5.065	+ 5.065	36.505				
	4.00						
				6.41			
TBM 4-152				5.165	- 5.165	1231.34	R-BAR
				3.925			
	5.93						
	4.58	+ 4.58	35.92				
	3.23						
				4.39			
TBM 4-56				2.83	- 2.83	1233.09	LS CAP @ INT OF GERMANN RD & AIRPORT BLVD. <1233.075>
				1.27			

MCFLD

3-WIRE LEVEL RUN, PERIMETER

BLK. 5

PEGLEVEL #6

	0'	300'
⊼ @ 0	5.33	5.45
⊼ @ 150	4.59	4.465
	9.92	9,915

9-28-87

80-100° CLR.

RUGLAND
B. MCMURRAY
MIDDLETON

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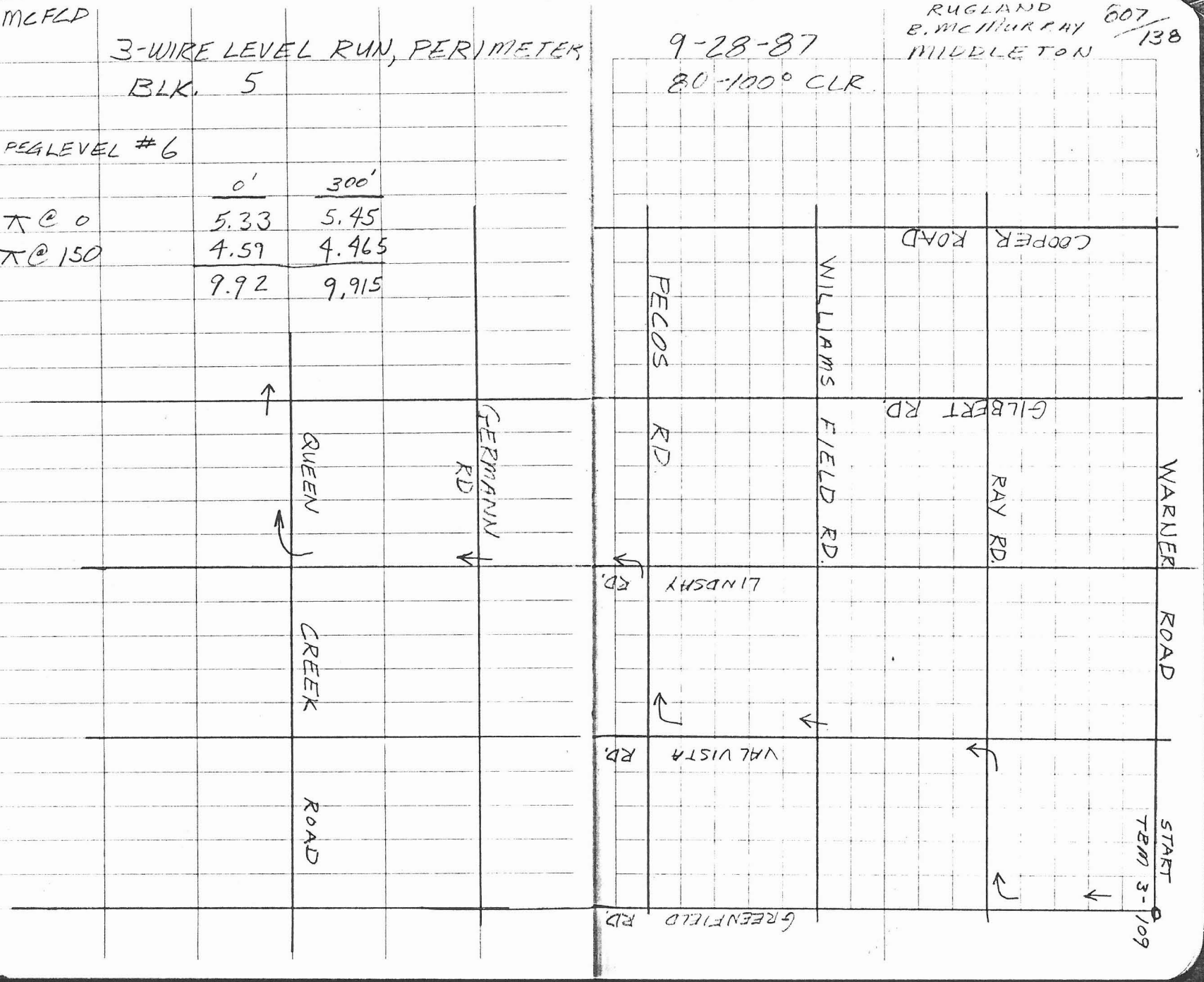

MCFCD

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3-WIRE LEVEL RUN, PERIMETER BLK. 5

			UNADJ. ELEV.		
TBM 3-109			1272.755		BC IN HH, ℄ OF WARNER RD., 60' W. OF GREENFIELD RD. SEE BK. 805
	7.13				
	5.405	+5.405	78.160		
	3.68				
				6.04	
TBM 5-1				4.315	
				2.59	
	5.135				
	3.49	+3.49	77.335		
	1.85				
				5.17	
TBM 5-2				3.53	
				1.895	
	5.145				
	3.51	+3.51	77.315		
	1.87				
				5.08	
TBM 5-3				3.425	
				1.77	
	5.50				
	4.285	+4.285	78.175		
	2.99				
SIDESHOT		-4.25		1273.925	TOP OF PAVEMENT, TARGET ELEV. @ HC-31

-4.315	1273.845	CPS IN E. FACE OF PP, W. SIDE OF GREENFIELD RD, 700' S. OF WARNER RD.
-3.53	1273.805	CPS IN E. FACE OF PP, W. SIDE OF GREENFIELD RD, 1350' S. OF WARNER RD.
-3.425	1273.890	CPS IN E. FACE OF PP, W. SIDE OF GREENFIELD RD, 2000' S. OF WARNER RD.

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MCFCD BLK. 5			1278.175 ^			
				5.765		
HC-31				4.235	-4.235	1273.94 CPS IN ℄ OF GREENFIELD RD, ½ MILE S. OF WARNER RD.
				2.705		
	6.69					
	4.695	+4.695	78.635 ^			
	2.70					
				5.51		
TBM 5-4				3.74	-3.74	1274.895 CPS IN E. FACE OF PP, W. SIDE OF GREENFIELD RD, 2000' N. OF RAY RD.
				1.97		
	5.75					
	4.11	+4.11	79.005 ^			
	2.47					
				5.19		
TBM 5-5				3.53	-3.53	1275.475 CPS IN E. FACE OF PP, W. SIDE OF GREENFIELD RD, 1350' N. OF RAY RD.
				1.87		
	4.98					
	4.165	+4.165	79.64 ^			
	3.35					
				4.405		
TBM 5-6				3.565	-3.565	1276.075 CPS IN E. FACE OF PP, W. SIDE OF GREENFIELD RD, 1000' N. OF RAY RD.
				2.73		
	5.43					
	3.85	+3.85	79.925 ^			
	2.275					

9-28-87

MCFCD BLK. 5			1279.925		
				4.265	
TBM 5-7				2.555	−2.555	1277.37	CPS IN E. FACE OF PP, W. SIDE OF GREENFIELD RD, 300' N. OF RAY RD.
				0.85	
	5.525				
	4.825	+ 4.825	82.195		
	4.13				
SIDESHOT		−2.45		1279.745			TOP OF PAVEMENT, TARGET ELEV, @ RO-31
				3.795	
RO-31				3.02	−3.02	1279.175	MARICOPA CO BC IN HH @ INT. OF GREENFIELD & RAY RD
	4.875			2.245	
	3.415	+ 3.415	82.59		
	1.95				
				10.55	
TBM 5-8				9.055	−9.055	1273.535	□ CUT ON S. TCD, N. SIDE OF RAY RD, 575' W. OF GREENFIELD RD.
				7.56	
	5.48				
	4.05	+ 4.05	77.585		
	2.615				
				7.095	
TBM 5-9				5.64	−5.64	1271.945	□ CUT ON S. TCD, N. SIDE OF RAY RD, 1150' W. OF GREENFLD. RD.
				4.18	
	5.655				
	4.23	+ 4.23	76.175		
	2.80				

MCFCD
BLK. 5

1276.175

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			6.155		
TBM 5-10			4.73	−4.73	1271.445	□ CUT ON S.TCD, N. SIDE OF RAY RD, 1700' W. OF GREENFIELD RD.
			3.305		
	5.215				
	3.79	+3.79	75.235		
	2.365				
			5.54		
TBM 5-11			4.325	−4.325	1270.91	□ CUT ON S.TCD, N. SIDE OF RAY RD, 2250' W. OF GREENFIELD RD.
			3.11		
	5.82				
	4.39	+4.39	75.30		
	2.96				
			8.325		
TBM 5-12			6.925	−6.925	1268.375	□ CUT ON S.TCD, N. SIDE OF RAY RD, 2800' W. OF GREENFIELD RD.
			5.525		
	6.125				
	4.69	+4.69	73.065		
	3.255				
			7.625		
TBM 5-13			6.185	−6.185	1266.88	□ CUT ON S.TCD, N. SIDE OF RAY RD, 700' E. OF ~~CONSOL.~~ EASTERN CANAL
			4.75		
	7.73				
	5.885	+5.885	72.765		
	4.045				

MCFCD

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BLK. 5 — 1272.765

SIDESHOT		-3.03		1269.735	TOP OF PAVEMENT, TARGET ELEV. @ RO-30
				4.96	
				3.01	-3.01 1269.755 CPS IN & OF RAY RD, EASTERN E. SIDE OF ~~CONSOLIDATED~~ CANAL BRIDGE
RO-30				1.065	
	4.16				
	2.72	+2.72	72.475		
	1.28				
				8.445	
				6.93	-6.93 1265.545 □ CUT ON S.TCD, N. SIDE OF RAY RD, 500' E. OF VAL VISTA DR.
TBM 5-14				5.41	
	6.035				
	4.985	+4.985	70.53		
	3.94				
				7.33	
				5.79	-5.79 1264.74 MARICOPA CO. BC IN HH @ INT. OF RAY RD & VAL VISTA DR.
TBM 5-15				4.25	
					RUN BACK TO RO-30
	7.10				
	5.55	+5.55	70.29		
	4.005				
				5.795	
				4.75	-4.75 1265.54 □ CUT ON S. TCD.
TBM 5-14				3.705	
	7.245				
	5.855	+5.855	71.395		
	4.47				

9-28-87

MCFCD BLK. 5			1271.395			
				3.25		
RO-30				1.66	-1.66	1269.735
				0.07		
	3.555					
	2.525	+2.525	72.28			
	1.50					
				5.205		
TBM 5-16				4.025	-4.025	1268.255
				2.845		
	6.21					
	4.88	+4.88	73.135			
	3.555					
				6.22		
TBM 5-17				4.885	-4.885	1268.25
				3.555		
	6.215					
	4.89	+4.89	73.14			
	3.56					
				5.90		
TBM 5-18				4.57	-4.57	1268.57
				3.24		
	4.58					
	3.695	+3.695	72.265			
	2.805					

CPS IN ℄ OF RAY RD, E. SIDE OF CANAL BRIDGE ⟨1269.755⟩ ADJ. TO ELEV. ON PG. 148

CPS IN W. FACE OF PP, #166 E. SIDE OF ~~CONSOL.~~ EASTERN CANAL, 400' S. OF RAY RD.

CPS IN W. FACE OF PP. #164 E. SIDE OF ~~CONSOL.~~ EASTERN CANAL, 950' S. OF RAY RD.

CPS IN W. FACE OF PP #162 E. SIDE OF ~~CONSOL.~~ EASTERN CANAL 1500' S. OF RAY RD.

9-28-87

MCFCD BLK. 5			1272.265 ↑			
				7.65		
VC-16				5.99	−5.99	1266.275 R-BAR @ GRND. LEVEL, 100' E. OF ~~CONSOL.~~ EASTERN CANAL 1700' S. OF RAY RD.
				4.93		
	7.20					
	6.215	+6.215	72.49 ↑			
	5.225					
				5.805		
TBM 5-19				4.51	−4.51	1267.98 CPS IN W. FACE OF PP #159 E. SIDE OF ~~CONSOL.~~ EASTERN CANAL, 2100' S. OF RAY RD.
				3.215		
	6.115					
	4.78	+4.78	72.76 ↑			
	3.445					
				5.46		
TBM 5-20				4.145	−4.145	1268.615 CPS IN W. FACE OF PP #157 E. SIDE OF ~~CONSOL.~~ EASTERN CANAL 2650' S. OF RAY RD.
				2.83		
	5.025					
	3.685	+3.685	72.30 ↑			
	2.34					
				5.175		
TBM 5-21				3.865	−3.865	1268.435 CPS IN W. FACE OF PP #155 E. SIDE OF ~~CONSOL.~~ EASTERN CANAL 3200' S. OF RAY RD.
				2.55		
	2.915					
	1.635	+1.635	70.07 ↑			
	0.35					

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9-28-87

MCFCD BLK. 5			1270.07			
				4.475		
TBM 5-22				3.185	-3.185	1266.885 CPS IN W. FACE OF PP. 100' E. OF VAL VISTA DR. 1700' N. OF WILLIAMS FIELD RD.
				1.89		
	5.045					
	3.66	+3.66	70.545			
	2.27					
				4.14		
TBM 5-23				2.755	-2.755	1267.79 CPS IN W. FACE OF PP E. SIDE OF VAL VISTA DR, 1100' N. OF WILLIAMS FIELD RD.
				1.375		
	5.26					
	4.005	+4.005	71.795			
	2.75					
				4.015		
TBM 5-24				2.74	-2.74	1269.055 CPS IN W. FACE OF PP E. SIDE OF VAL VISTA RD, 550' N. OF WILLIAMS FIELD RD.
				1.465		
	4.705					
	3.405	+3.405	72.46			
	2.10					
SIDESHOT		-2.15		1270.31		TOP OF PAVEMENT, TARGET ELEV @ HC-40
				4.16		
HC-40				2.61	-2.61	1269.85 MARICOPA CO. BC IN HH @ INT. OF VAL VISTA & WILLIAMS FIELD RD.
				1.06		

CONT. IN BK. 812/pg. 2

MCFCD
BLK. 3 CHECK TBM 3-124 TO 3-126

9-21-87

TBm 3-124			<1258.458>		□ CUT, S. TCD, N. SIDE WARNER, 1100' W. OF VAL VISTA.
	5.755				
	4.285	+4.285	62.743		
	2.815				
				5.635	
				4.42	
TBM 3-125				3.205	
	7.32				
	5.935	+5.935	64.258		
	4.55				
				8.275	
TBM 3-126				6.845	
				5.42	

- 4.42	1358.323	□ CUT ON HOWALL, N. SIDE OF WARNER, 60' W. OF 31ST ST. <1258.323>
- 6.845	1257.413	□ CUT ON S. TCD, N. SIDE OF WARNER, 200' W. OF RR <1257.413>

MCFCD

INDEX

Bk 808

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MCFCD | Traverse – Block 5

(con't from Bk 804)

Z16	Z17	Z18
TP #94	HC-39	HC-39#40

$\measuredangle$ #1 = 41°18'02" (41°18'05"

$\measuredangle$ #6 = 247°49'15" (247°48'47")

MN = 41°18'13" (41°18'08"

Use 41°18'08"

HD to TP #94

Z = 90°00'12"

S.D. = 1978.76

H.D. = 1978.76

HD to HC-40

Z = 89°56'45"

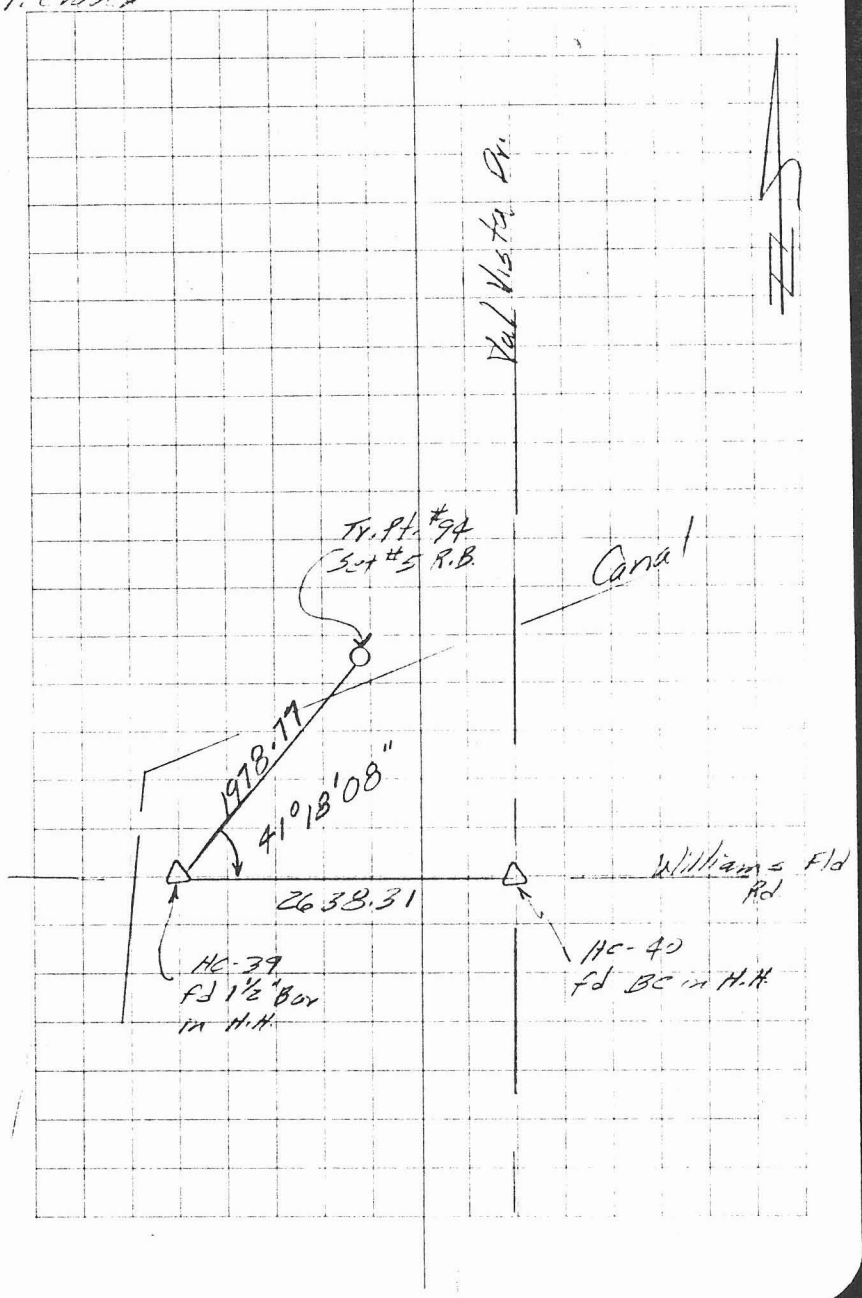
S.D. = 2638.32

H.D. = 2638.32

L. Van Dyke
K. McMurray
T. Crook

9/24/87

803
2



MCFCD

Traverse — Block 5

9/24/87

217	218	219
HC-39 →	HC-40 →	RO-32

$\measuredangle$ #1 = 270° 22' 41"

$\measuredangle$ #6 = 182° 16' 11"

MN $\measuredangle$ = 270° 22' 42"

HD to HC-39

ZA = 90° 06' 36"

SD = 2638.31

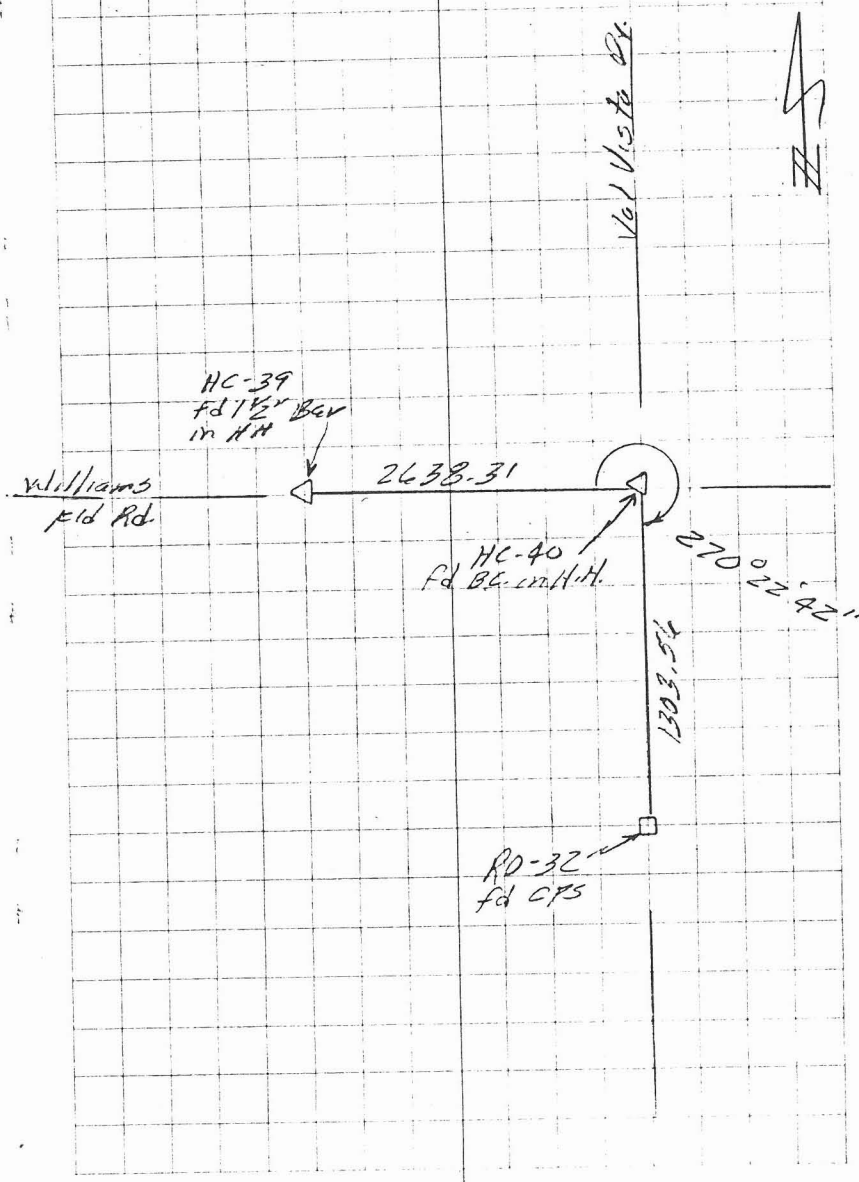
HD = 2638.305

HD to RO-32

ZA = 89° 59' 26"

SD = 1303.57

HD = 1303.57



MCFCO Traverse – Block 5

L. Van Dyke
R. McMurray
T. Crosen

9/28/37

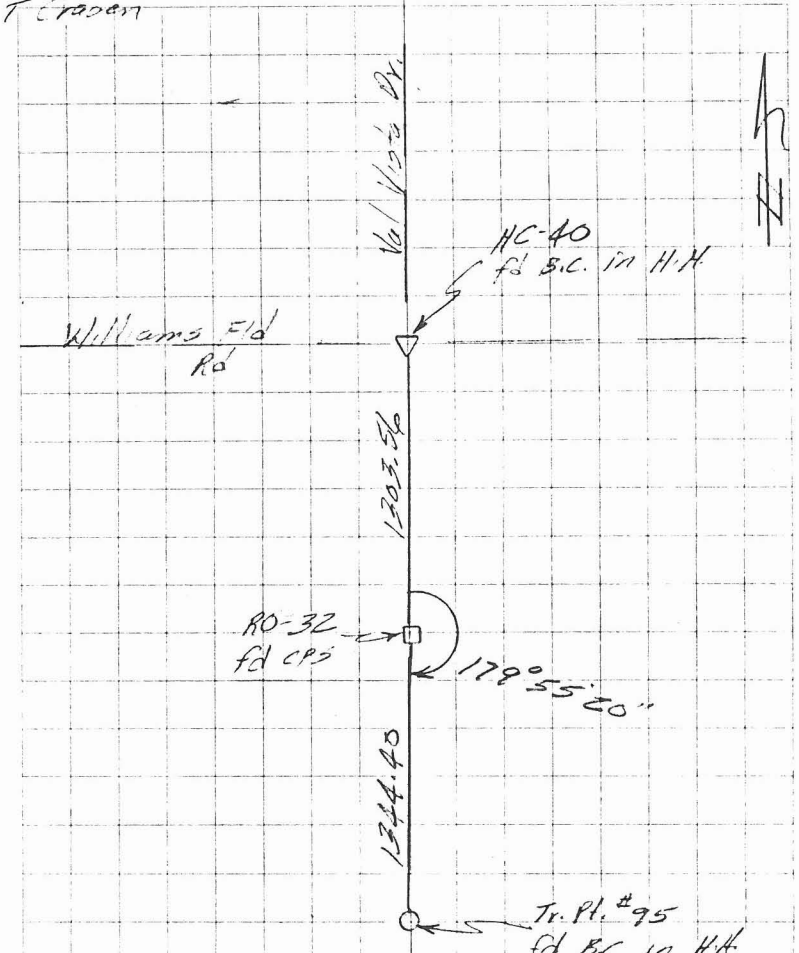
808/6

218	219	220
HC-40	RO-32	TP #95

$\angle$#1 = 179°55'31" (179°55'27")
$\angle$#2 = 359°31'59" (359°32'00")
MN $\angle$ = 179°55'20" (179°55'20")

HD to HC-40
ZA = 90°04'28"
SD = 1303.55
HD = 1303.55

HD to TP #95
ZA = 89°54'27"
SD = 1344.40
HD = 1344.40



MCFCO Traverse - Block 5

9/23/37

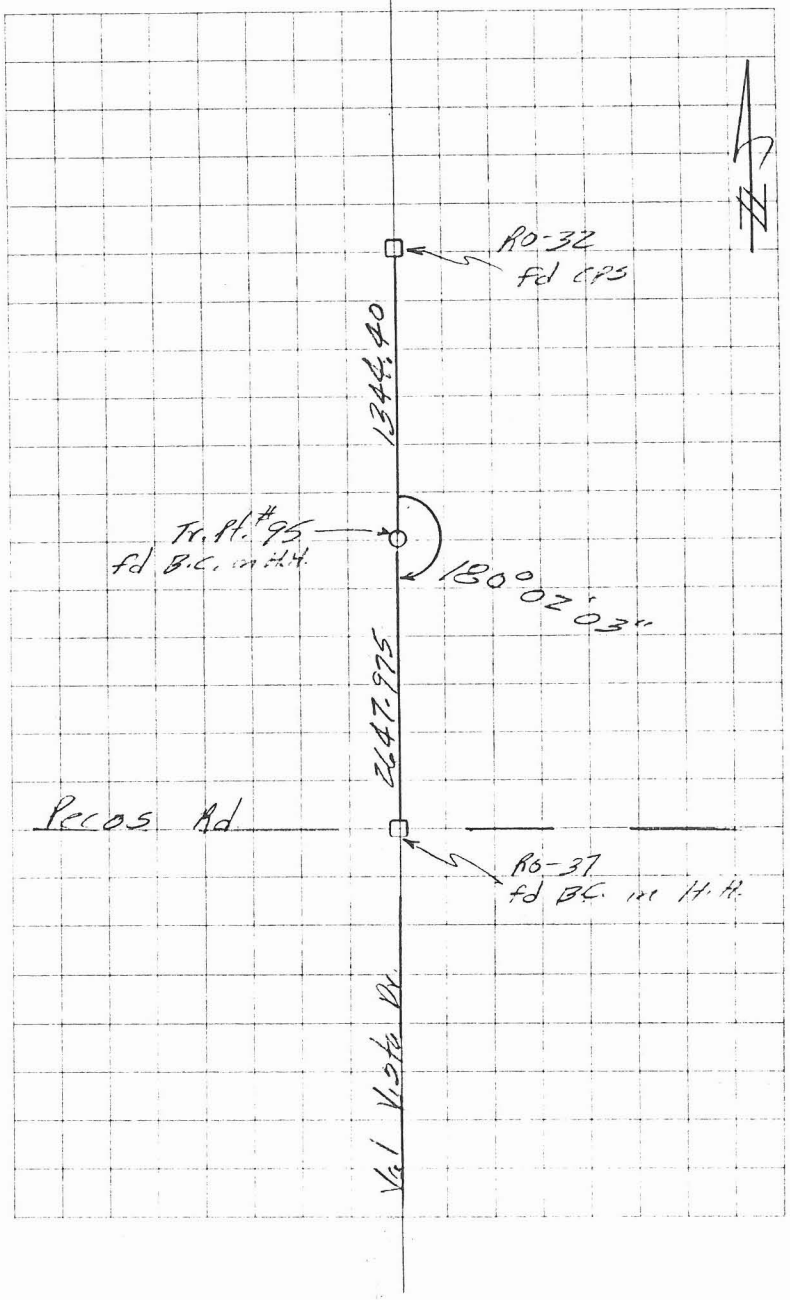
808
8

221	220	219
RO-32	→ TP #95 →	RO-32

$\measuredangle$ #1 = 179°58'02"
$\measuredangle$ #6 = 359°47'42"
MP = 179°57'57"
359°59'60"
180°02'03"

HD to RO-32
ΣX = 90°09'53
SD = 1344.40
HD = 1344.395

HD to RO-37
ΣX = 89°58'00
SD = 2647.97
HD = 2647.97



MCFCD Traverse - Block 5

220	221	222
TP #95 →	RO-37 →	HC-45

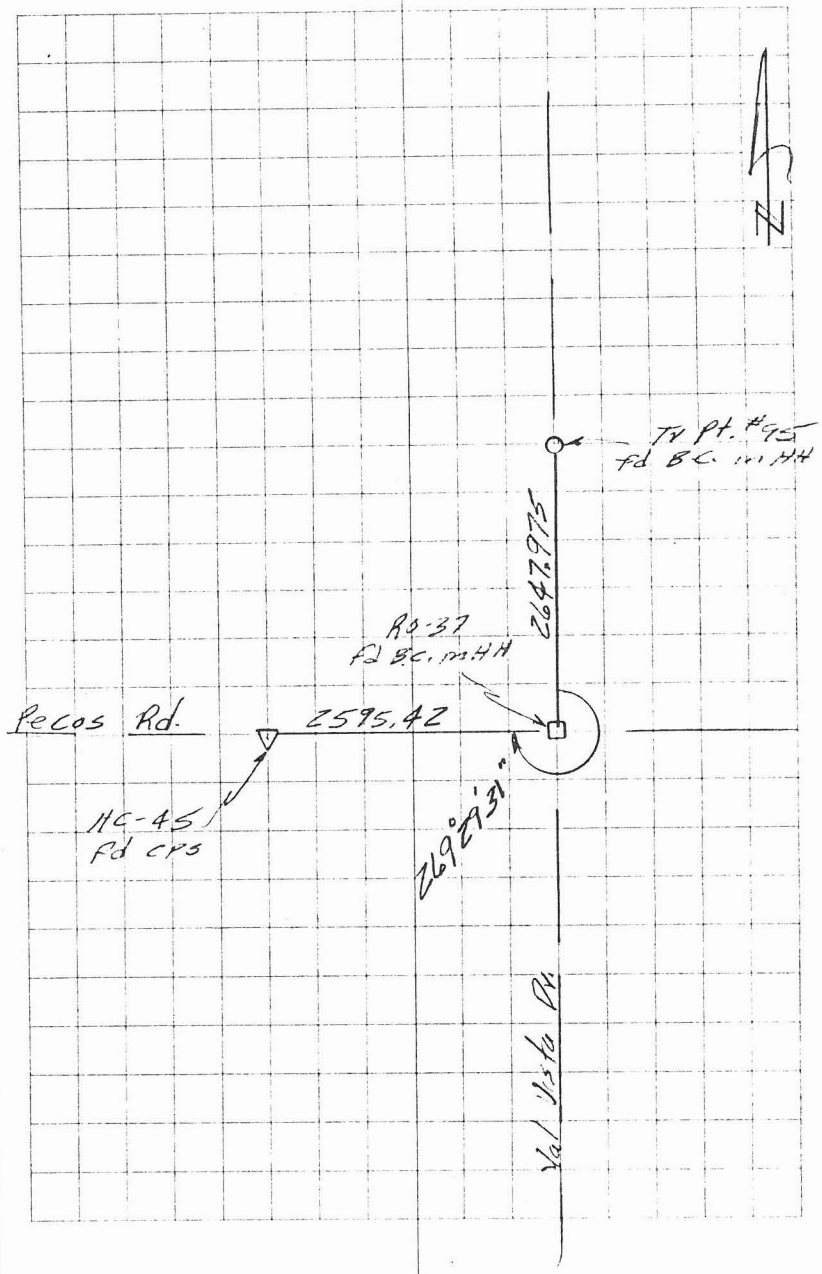
∠#1 = 269°29'30"
∠#6 = 176°57'06"
MN∠ = 269°29'31"

HD to TP #95
E∠ = 90°04'40"
SD = 2647.98
HD = 2647.98

HD to HC-45
E∠ = 90°12'36"
SD = 2595.44
HD = 2595.425

9/28/87

808
10



MCFCD

Traverse — Block 5

221 — 222 — 223

RO-37 → HC-45 → ¼ Cor.

∠#1 = 182°04'55"

∠#2 = 4°09'18"

MN∠ = 182°04'39"

HD to ¼ Cor. = 31.59 (chained)

221 — 222 — 224

RO-37 → HC-45 → HC-44

∠#1 = 180°03'24"

∠#2 = 00°20'14"

MN∠ = 180°03'22"

"

HD to RO-37

Z∠ = 89°50'20"

SD = 2595.43

HD = 2595.42

HD to HC-44

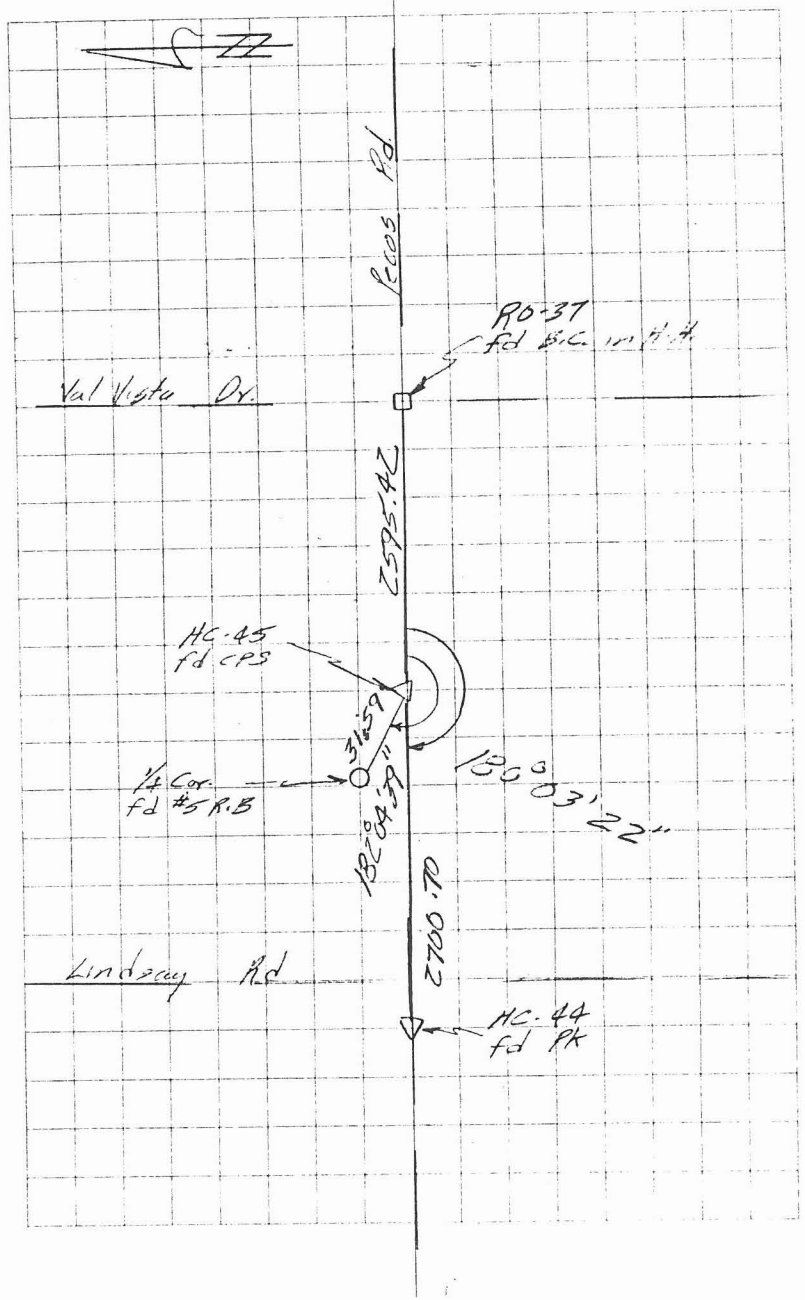
Z∠ = 90°03'15"

SD = 2700.70

H.D. = 2700.70

9/23/87

808/12



MCFCD Traverse - Block 5

9/23/87

808/14

222 HC-45 → 224 HC-44 → 225 Sec. Cor.

∠#1 = 00°00'58"

∠#2 = 00°01'54"

MN∠ = 00°00'57"

HD to sec cor. = 42.41 (chained)

222 HC-45 → 224 HC-44 → 226 VC-23

∠#1 = 89°39'04"

∠#2 = 177°54'54"

MN∠ = 89°39'09"

HD to HC-45

Z∠ = 89°59'21"

SD = 2700.70

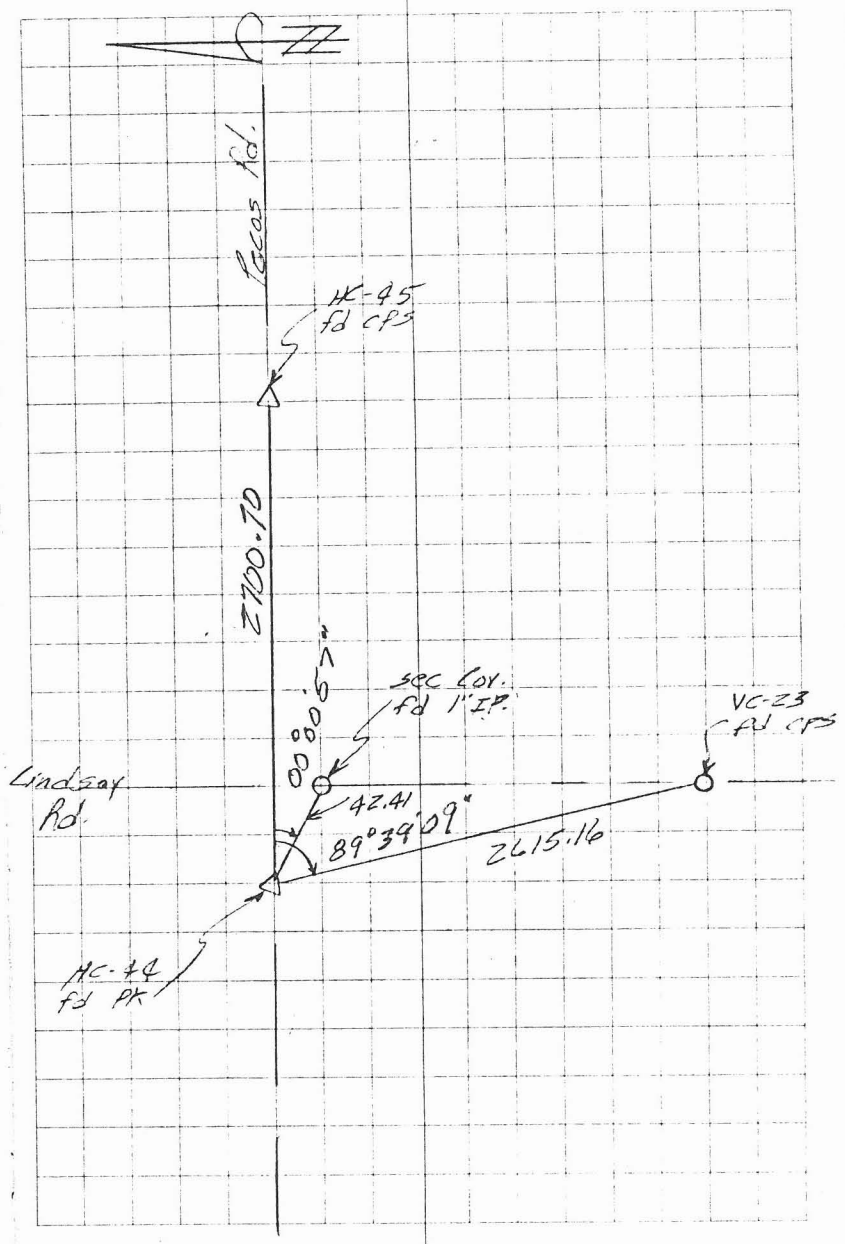
HD = 2700.70

HD to VC-23

Z∠ = 90°04'44"

SD = 2615.16

HD = 2615.16



NCFCD Traverse - Block 5

224	226	227
HC-44 →	VC-23 →	RO-40

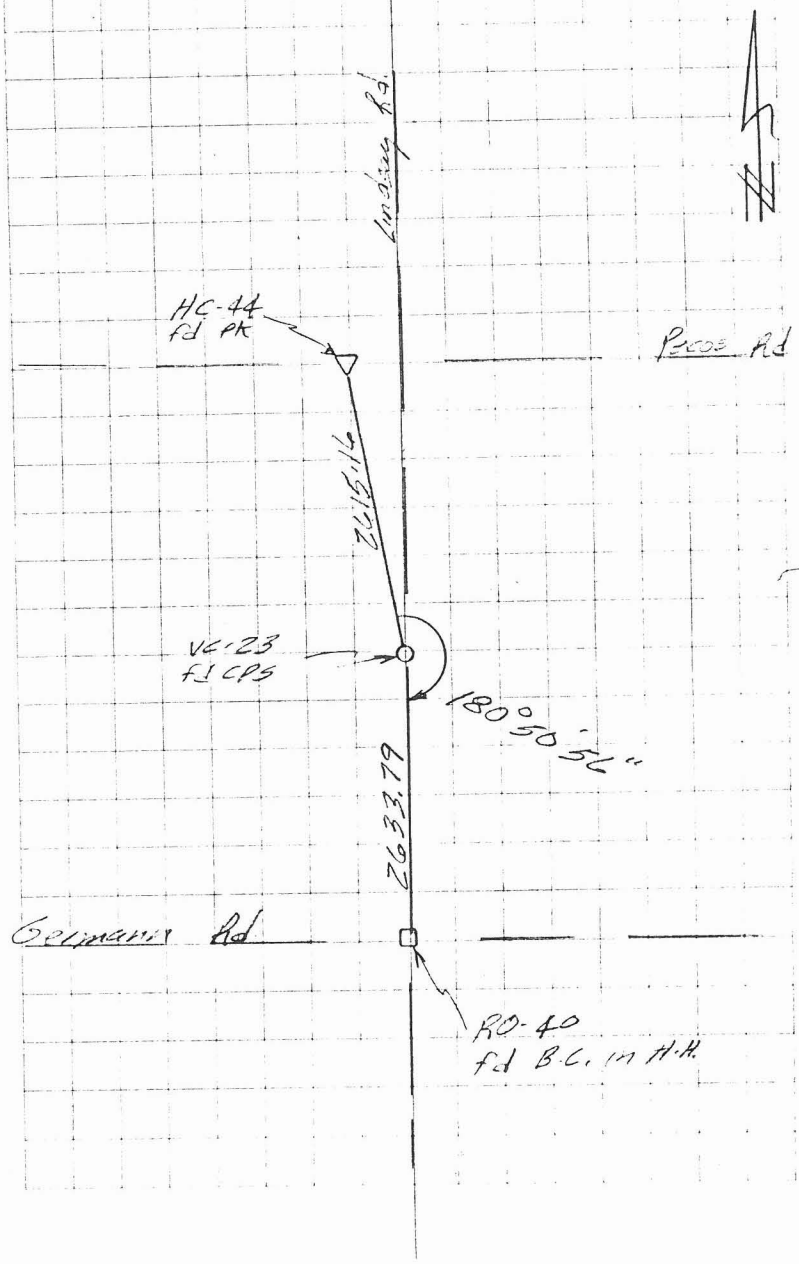
∠*1 = 180°50'50"
∠*2 = 5°05'35"
MN∠ = 180°50'56"

HD to HC-44
E∠ = 89°58'16"
SD = 2615.16
HD = 2615.16

HD to RO-40
E∠ = 90°02'54"
SD = 2633.79
HD = 2633.79

9/28/37

805'
To



MCFCD Traverse — Block 5

226	227	228
VC-23	RO-40	HC-50

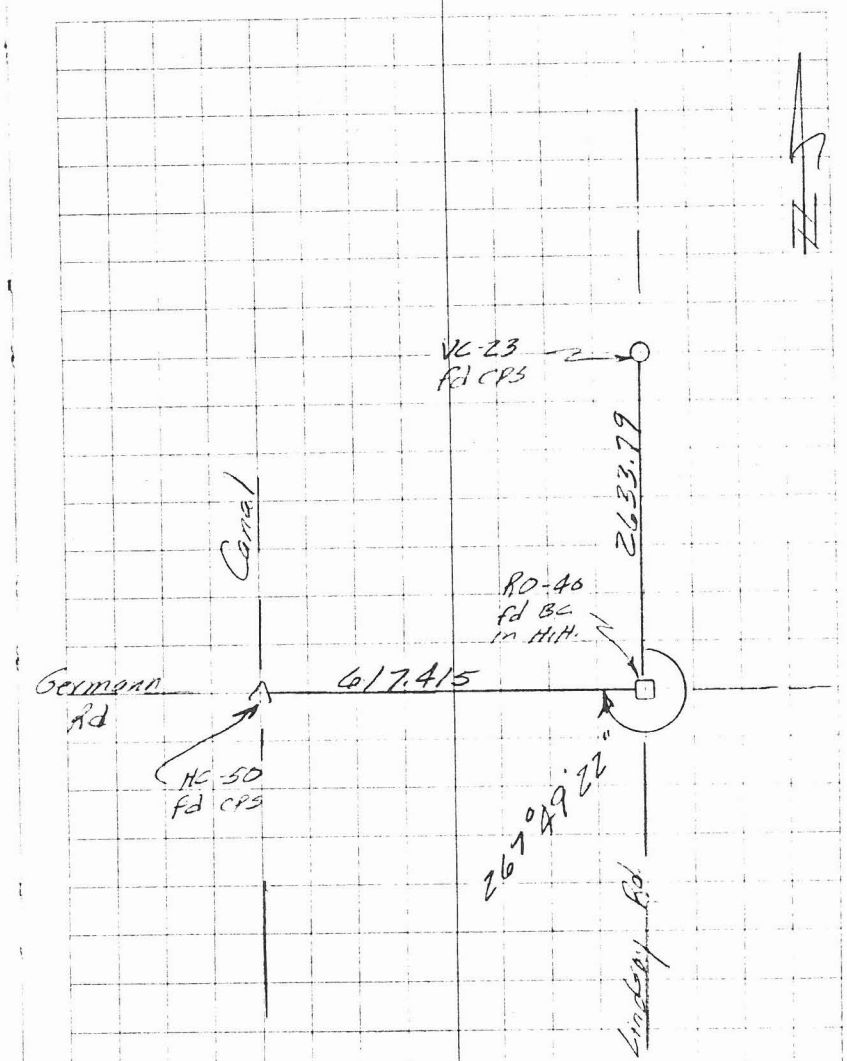
∠#1 = 267° 49' 18"
∠#6 = 166° 56' 12"
MN ∠ = 267° 49' 22"

HD to VC-23
ZE = 90° 00' 04"
SD = 2633.79
HD = 2633.79

HD to HC-50
ZE = 90° 07' 09"
SD = 617.39
HD = 617.39

9/23/37

8-28
78



MCFCD

Traverse - Block 5

229	228	227
HC-51	HC-50	RO-40

$\angle$#1 = 358°11'04"

$\angle$#6 = 349°06'55"

MNA = 358°11'09"

− 359°59'60"

1°48'51"

HD to RO-40

ΣA = 90°01'57"

SD = 617.44

HD = 617.44

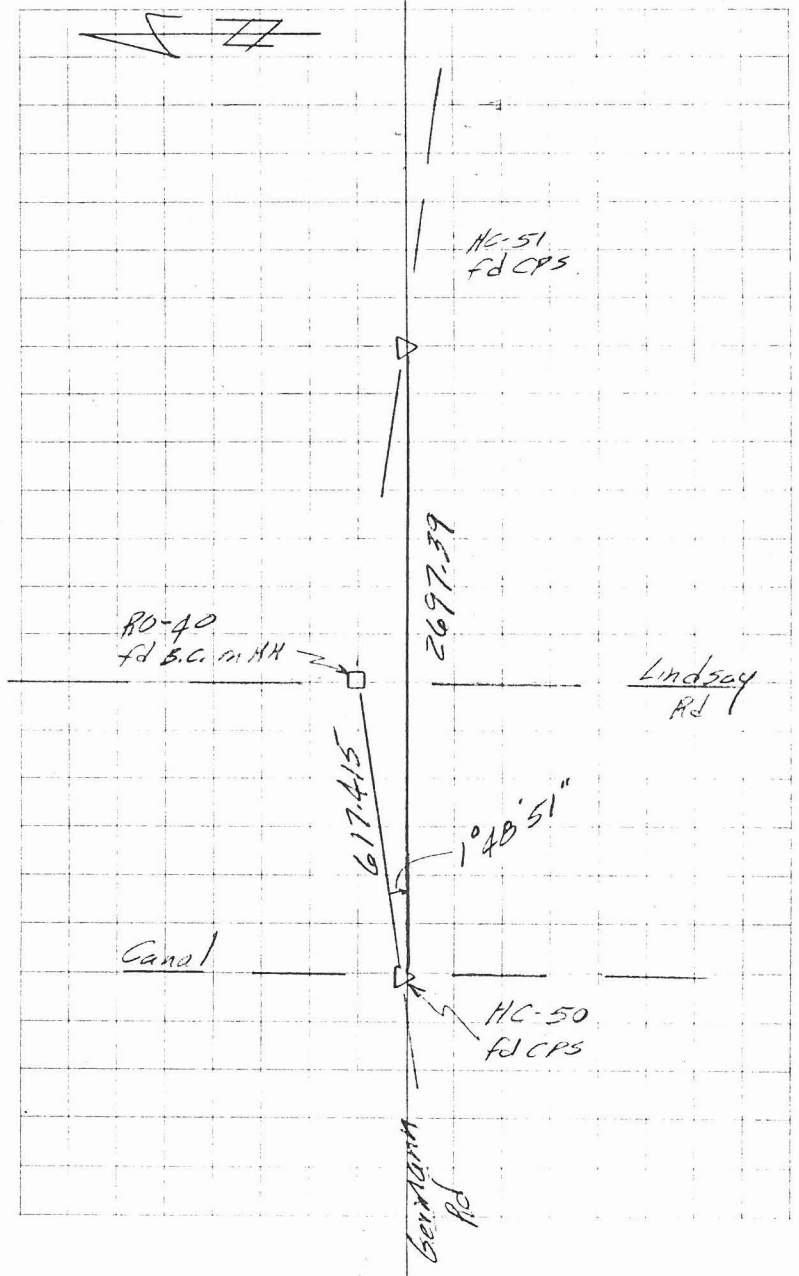
HD to HC-51

ΣA = 89°53'36"

SD = 2697.40

HD = 2697.395

9/24/87



MCFCD

Traverse – Block 5

7/23/57

308
22

230	229	228
VC-26	→ HC-51	→ HC-50

$\measuredangle$ #1 = 51°30'10"

$\measuredangle$ #6 = 309°01'39"

M/$\measuredangle$ = 51°30'17"

− 359°59'60"

308°29'43"

HD to HC-50

Z$\measuredangle$ = 90°09'24"

SD = 2697.40

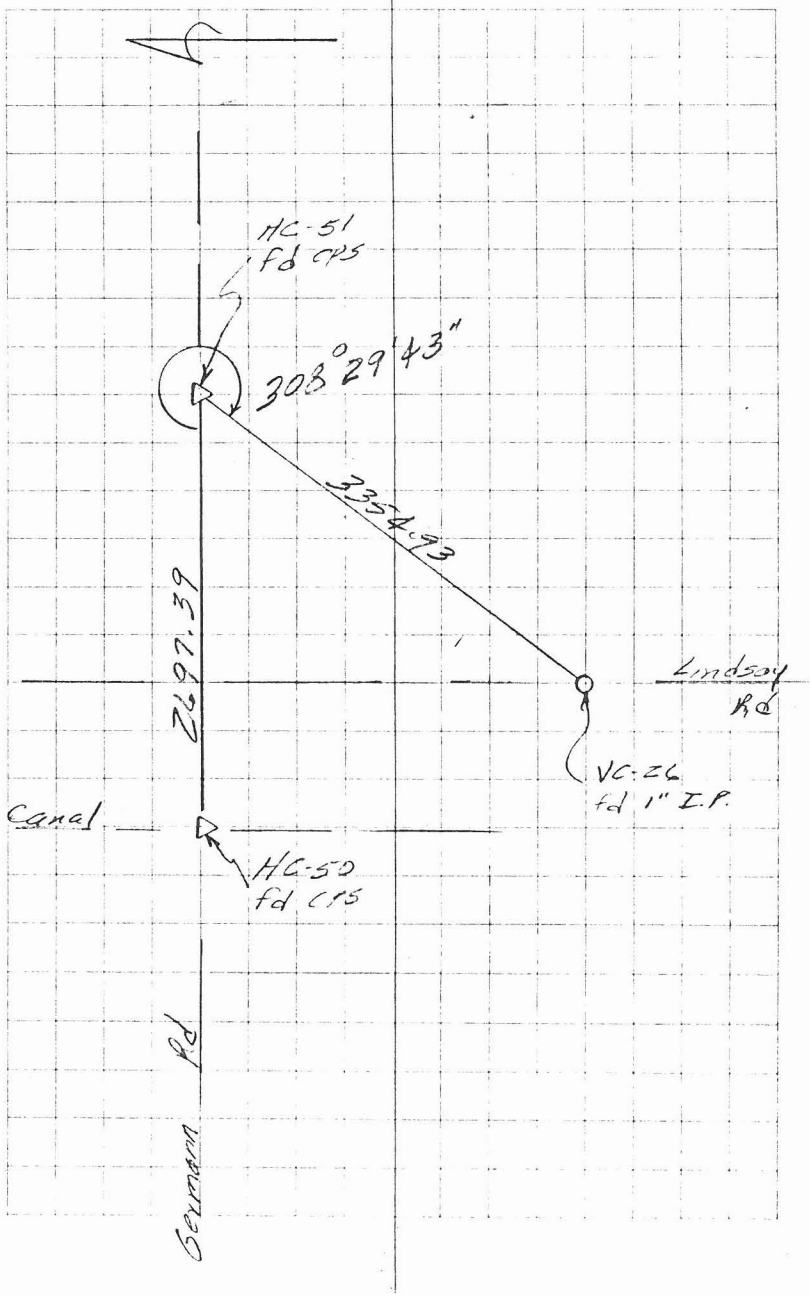
HD = 2697.39

HD to VC-26

Z$\measuredangle$ = 90°06'24"

SD = 3354.94

HD = 3354.935



MCFCD Traverse – Block 5

9/28/87

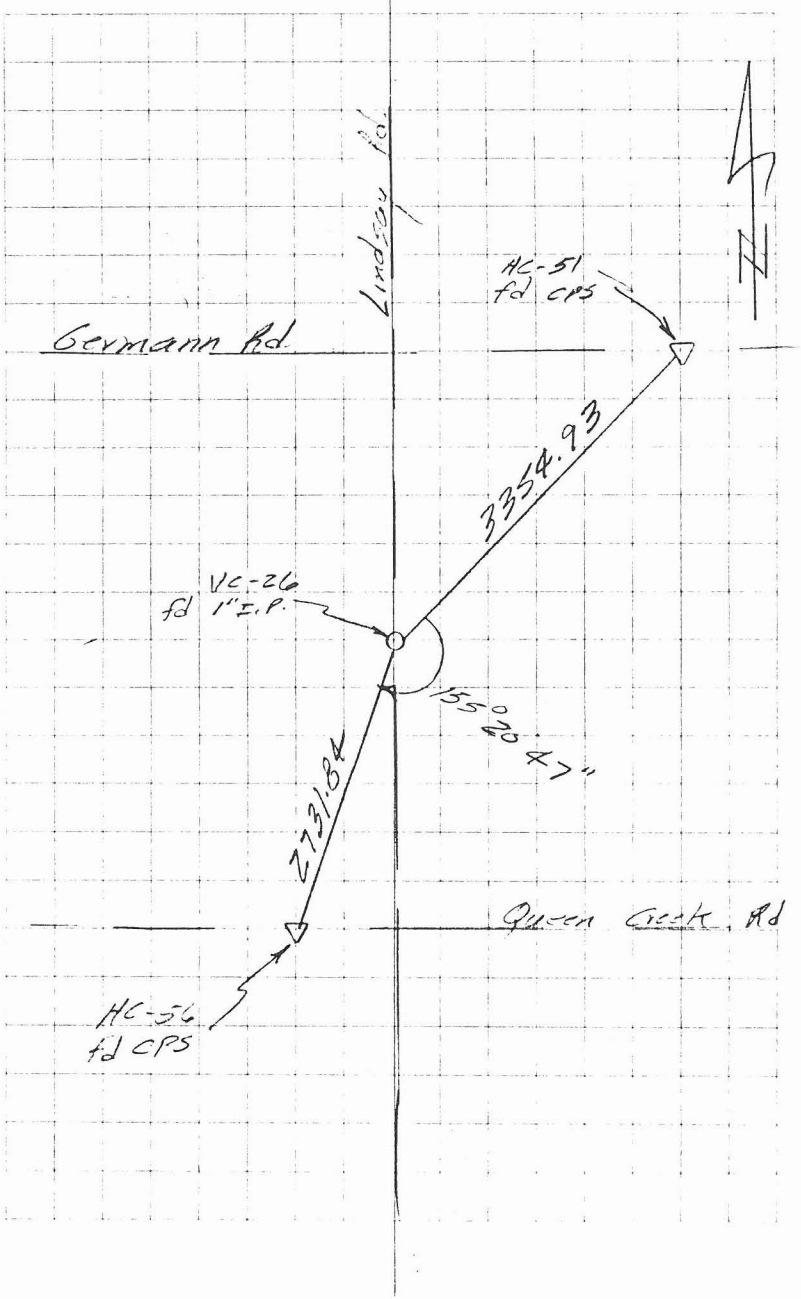
808/24

229	230	231
HC-51	→ VC-26	→ HC-56

∠#1 = 155°20'26" (155°20'54")
∠#2 = 212°04'28" (212°04'56")
∠INT = 155°20'45" (155°20'49")
USE = 155°20'47"

HD to HC-51
ΣX = 89°55'50"
SD = 3354.93
HD = 3354.925

HD to HC-56
ΣX = 90°01'18"
SD = 2731.84
HD = 2731.84



MCFCD

Irvine - Block 5

230	231	232
VC-26	HC-56	Sec Cor

$\measuredangle \#1 = 75°33'22"$

$\measuredangle \#2 = 151°06'34"$

$MN\measuredangle = 75°33'17"$

HD to Sec Cor. = 645.72

230	231	232
VC-26	HC-56	RO-41

$\measuredangle \#1 = 255°49'12"$

$\measuredangle \#6 = 94°55'02"$

$MN\measuredangle = 255°49'10"$

HD to VC-26

$ZA = 90°02'27"$

SD = 2731.84

HD = 2731.84

HD to RO-41

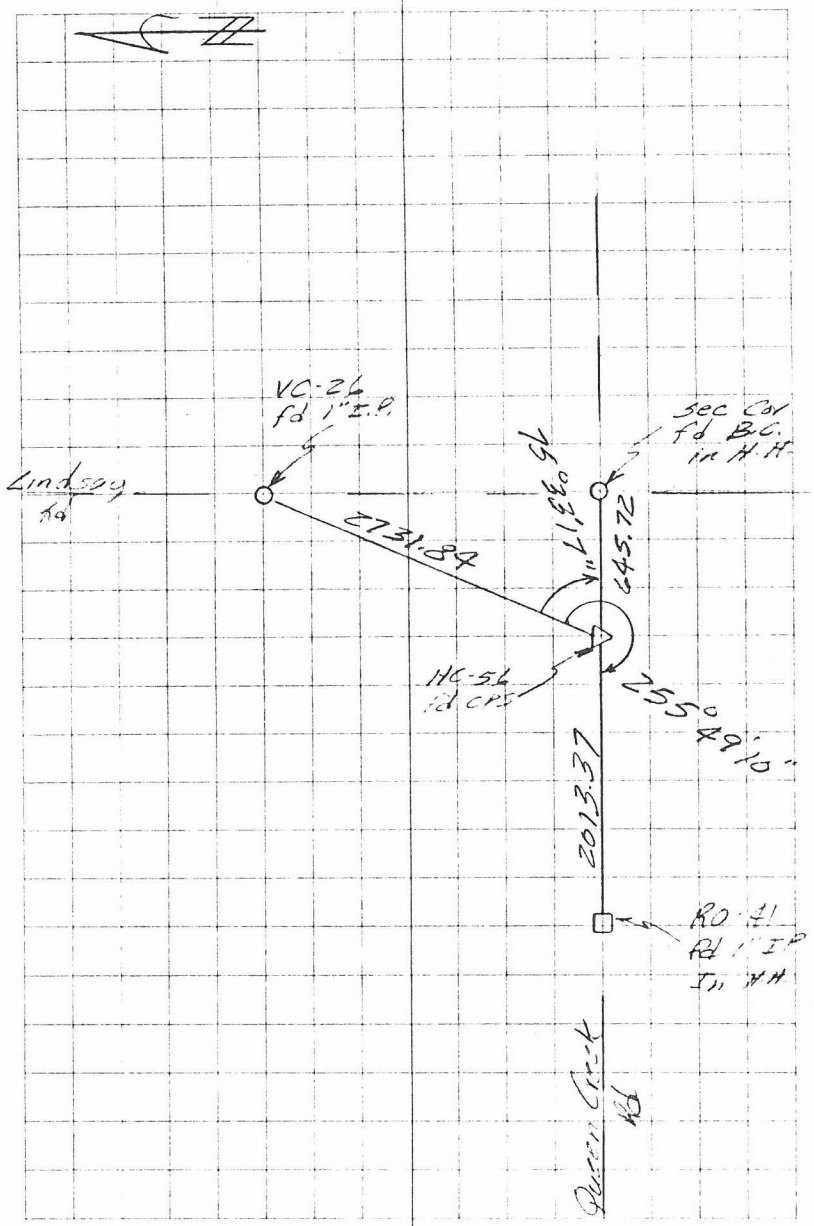
$ZA = 90°10'32"$

SD = 2013.38

HD = 2013.37

9/28/37

8 of 8 Co



MCFCD Traverse – Block 5

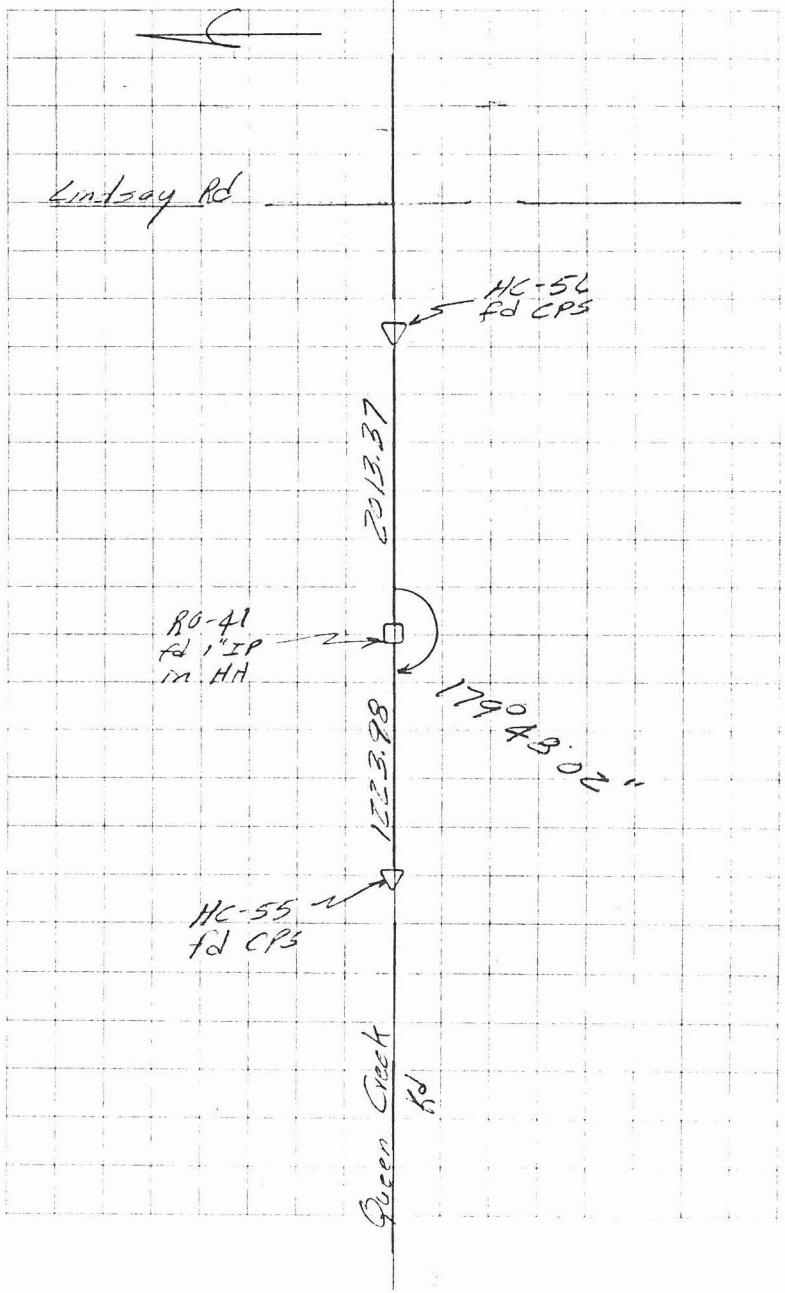
231	232	233
HC-56	RO-41	HC-55

$\angle$ #1 = 179°48'00"
$\angle$ #6 = 358°48'12"
MN = 179°48'02"

HD to HC-56
ZA = 89°52'53"
SD = 2013.37
HD = 2013.365

HD to HC-55
ZA = 90°17'03"
SD = 1224.00
HD = 1223.935

9/29/37



MCFCD

Traverse — Block 5

232	233	234
RO-41	HC-55	TP #96

$\angle$#1 = 180°16'14" (180°16'27")

$\angle$#6 = 01°38'37" (01°37'58")

MN $\angle$ = 180°16'26" (180°16'20")

Use 180°16'23"

HD to RO-41

ΣX = 89°48'12"

SD = 1223.99

HD = 1223.98

HD to TP #96

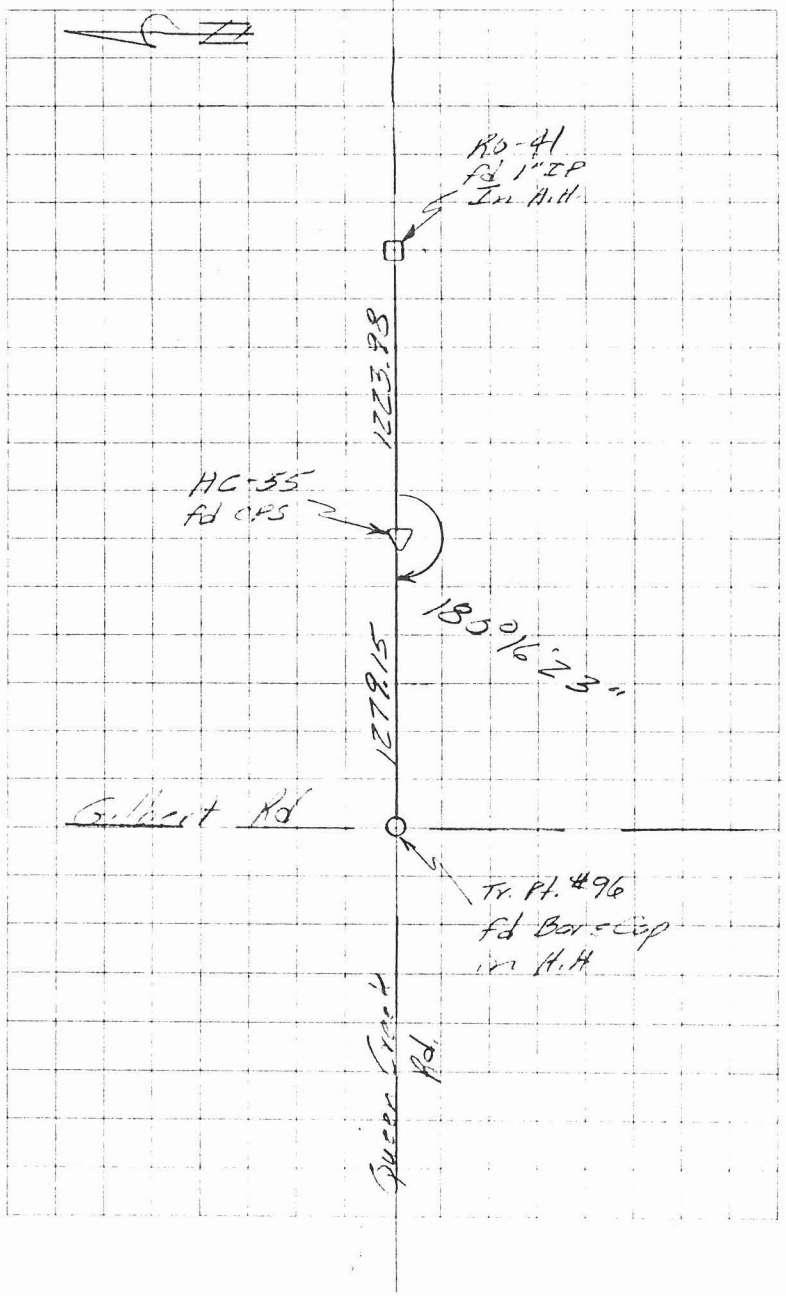
ΣX = 98°07'43

SD = 1279.16

HD = 1279.155

9/28/87

#78
30



MCFCD Traverse - Block 5

235	234	233
TP #97	TP #96	HC-55

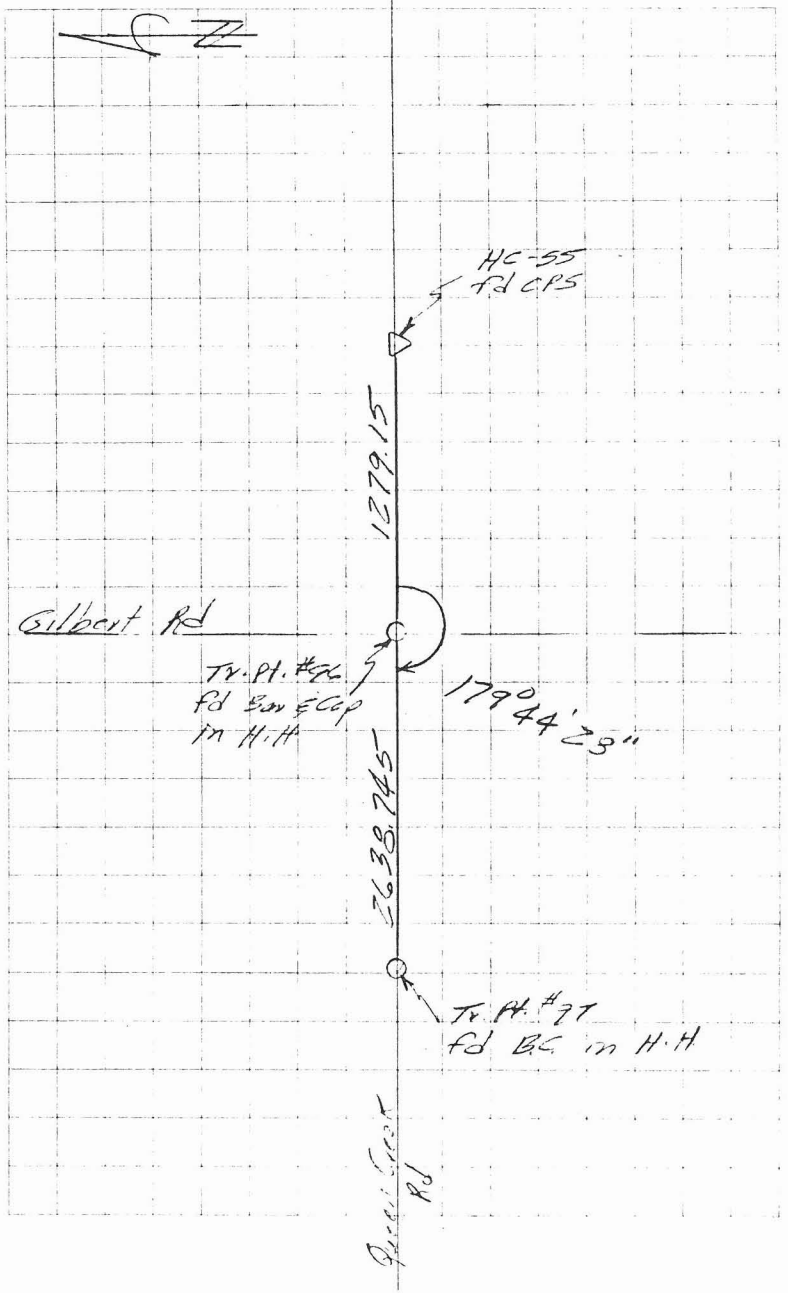
$\measuredangle$ #1 = 180° 15' 20" (180° 15' 37")
$\measuredangle$ #2 = 1° 33' 18" (1° 33' 06")
MA $\measuredangle$ = 180° 15' 33" (180° 15' 31")
Use - 180° 15' 32"
−359° 59' 60"
179° 44' 28"

HD to HC-55
Z $\measuredangle$ = 89° 57' 33"
SD = 1279.15
HD = 1279.15

HD to TP #97
Z $\measuredangle$ = 90° 11' 30"
SD = 2638.76
HD = 2638.745

9/28/87

808/32



MCFCD

Traverse - Block 5

234	235	236
TP #96 →	TP #97 →	TP #79

$\measuredangle$ #1 = 180° 00' 11"

$\measuredangle$ #2 = 00° 00' 54"

MN $\measuredangle$ = 180° 00' 09"

HD to TP #96

ZA = 89° 52' 10"

SD = 2638.75

HD = 2638.745

HD to TP #79

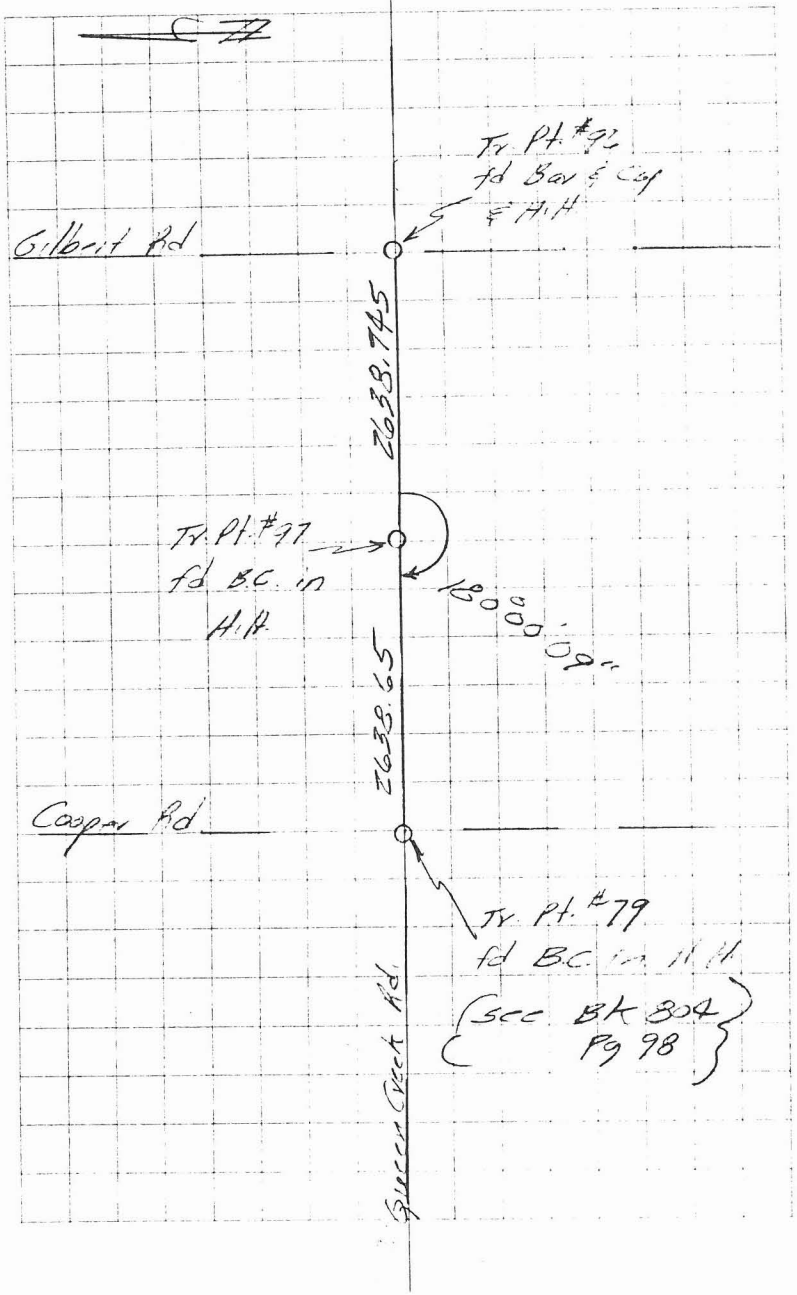
ZA = 90° 10' 12"

S.D. = 2638.65

HD = 2638.64

9/23/37

S-15
34



MCFCD

Traverse - Block 5

(See Bk 804 - Pg 98)

235	236	237
TP #97	→ TP #79	→ HC-54

$\Sigma\angle$ #1 = 180°02'30"

$\Sigma\angle$ #6 = 00°15'26"

MN $\Sigma\angle$ = 180°02'34"

HD to TP #97

ZX = 89°52'59"

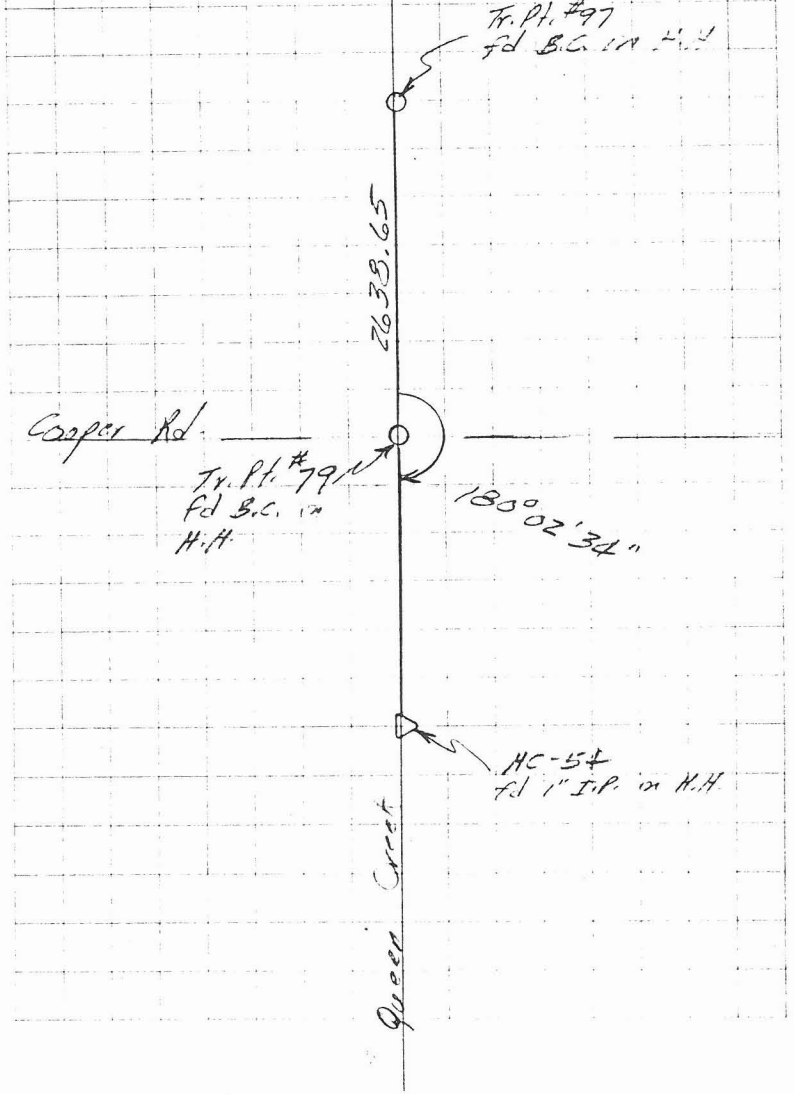
SD = 2633.66

HD = 2633.655

L. Van Hyfte
K. McMurray
T. Crouch

9/29/87

303
36



MCFCD Traverse — Block 7

(See Bk 804 - Pg 102)

HC-54 → HC-53 → TP#115

318 275

↑

∠#1 = 90°41'32"

∠#6 = 134°09'24"

∠N/A = 90°41'34" ✓

HD to TP#115

∠A = 89°58'36"

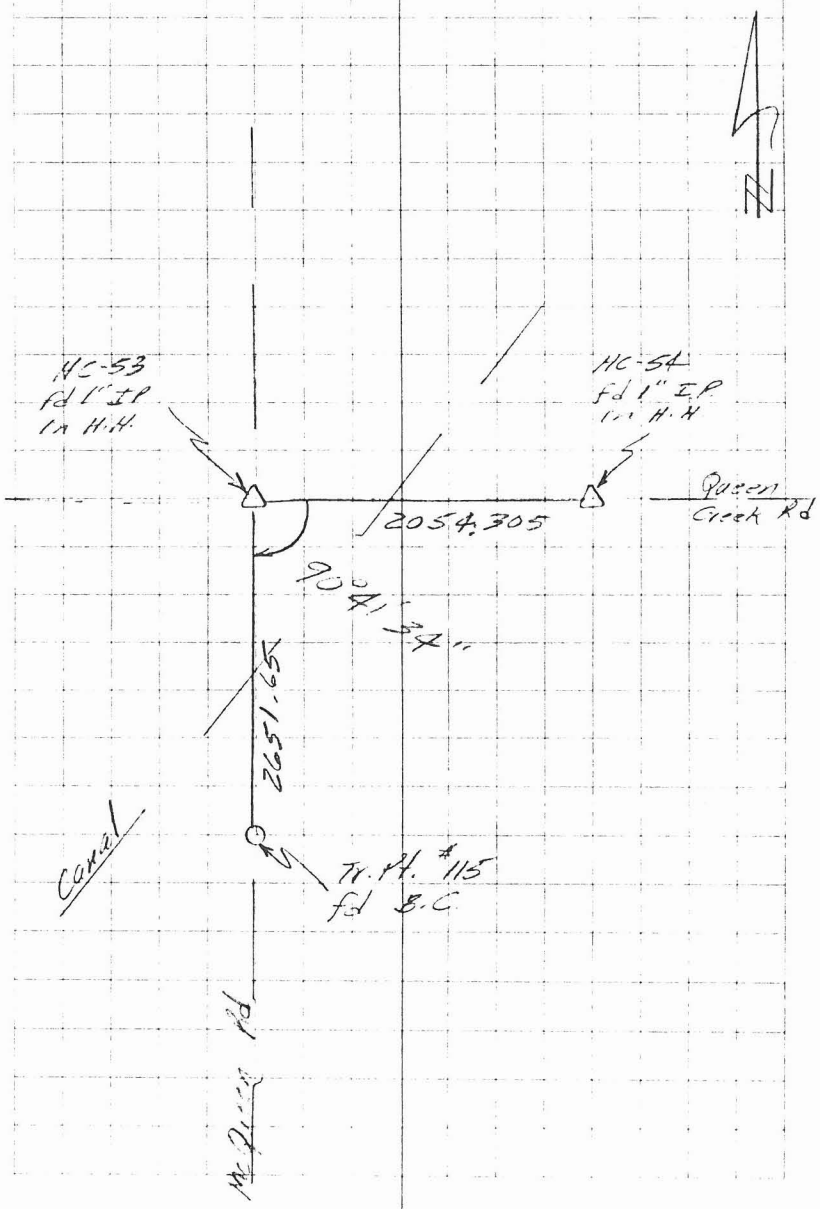
SD = 2651.66

HD = 2651.66 ✓

C. Van Dyke
R. McMurray
T. Craven

10/1/87

8B
3B



MCFCD

Traverse – Block 7

318	275	276
HC-53	→ TP #115 →	HC-59

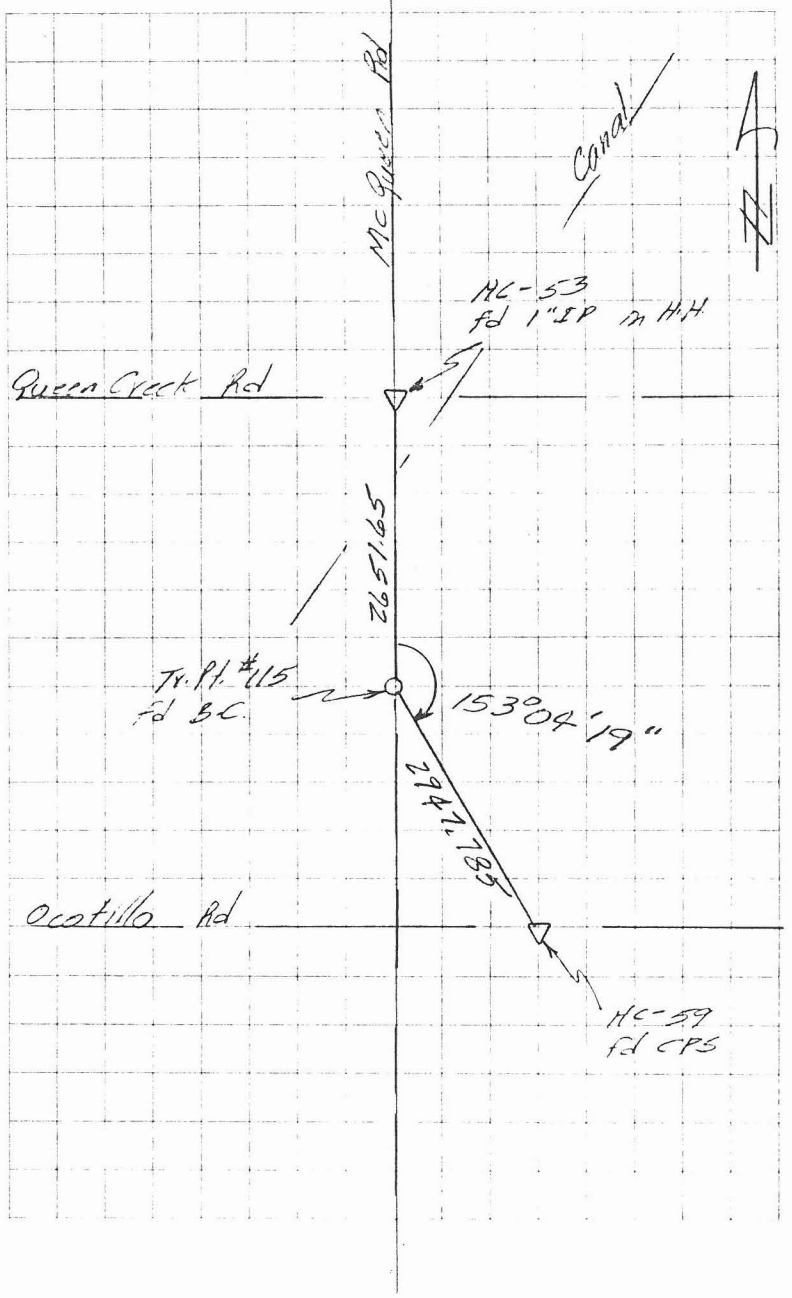
∠#1 = 153°04'12"
∠#6 = 198°25'53"
MNZ = 153°04'19" ✓

HD to HC-53
ZA = 90°04'44"
SD = 2651.64 ✓
HD = 2651.64 ✓

HD to HC-59
ZA = 89°55'50"
SD = 2947.79 ✓
HD = 2947.79 ✓

10/1/37

503
40



MCFCO — Traverse – Block 7

10/1/37

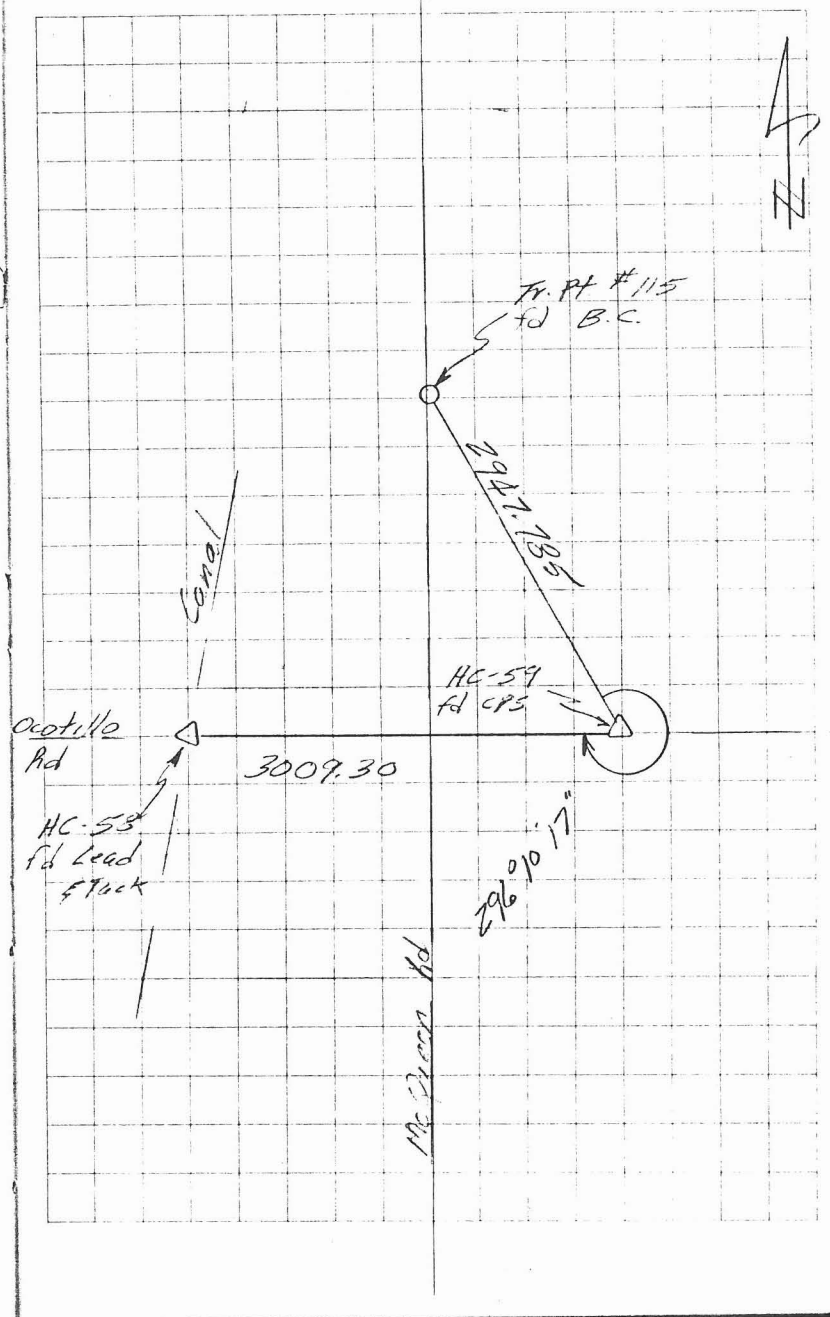
808/42

275	276	277
TP #115	→ HC-59	→ HC-58

∠1 = 296°10'13" (296°10'18")
∠2 = 338°17'08" (337°01'42")
MN = 296°22'51" (296°10'17")
Use 296°10'17" ✓

HD to TP #115
ZA = 90°07'42"
SD = 2947.79
HD = 2947.78 ✓

HD to HC-58
ZA = 90°36'48"
SD = 3009.31
HD = 3009.30 ✓



MCFCD

Traverse - Block 7

276	277	278
HC-59 →	HC-58 →	RO-42

$\measuredangle$ #1 = 00°00'52"

$\measuredangle$ #6 = 00°05'30"

$\sum\measuredangle$ = 06°00'55" ✓

HD HC-59

$\Sigma\measuredangle$ = 89°56'36"

SD = 3009.30 ✓

HD = 3009.30

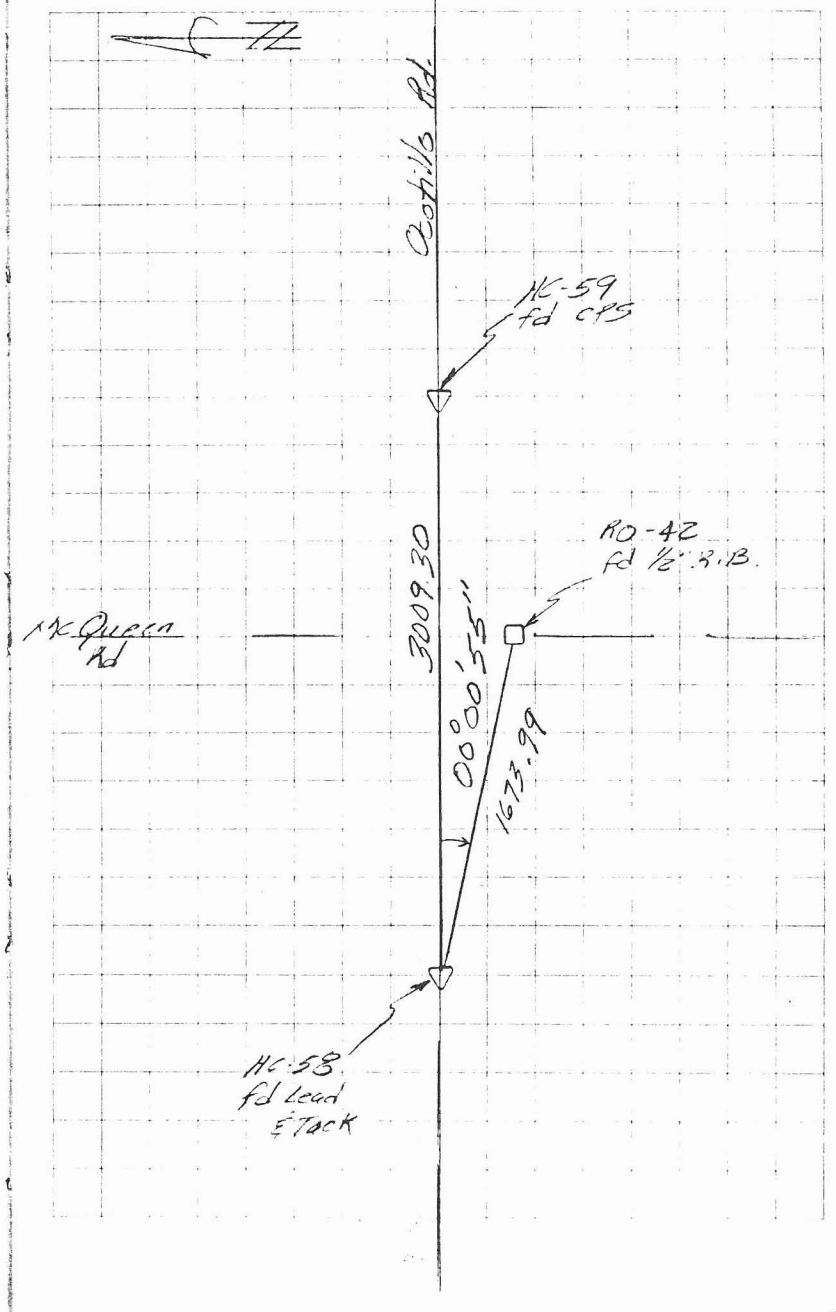
HD to RO-42

$\Sigma\measuredangle$ = 90°00'24"

SD = 1673.99

HD = 1673.99 ✓

10/1/87



MCFCD Traverse - Block 7

10/1/87

508/46

279 278 277

TP #116 → RO-42 → HC-58

$\measuredangle$ #1 = 89°16'18"

$\measuredangle$ #6 = 175°37'32"

NN = 89°16'15"

− 359°59'60"

270°43'45" ✓

HD to HC-58

ZA = 90°04'06"

SD = 1673.99

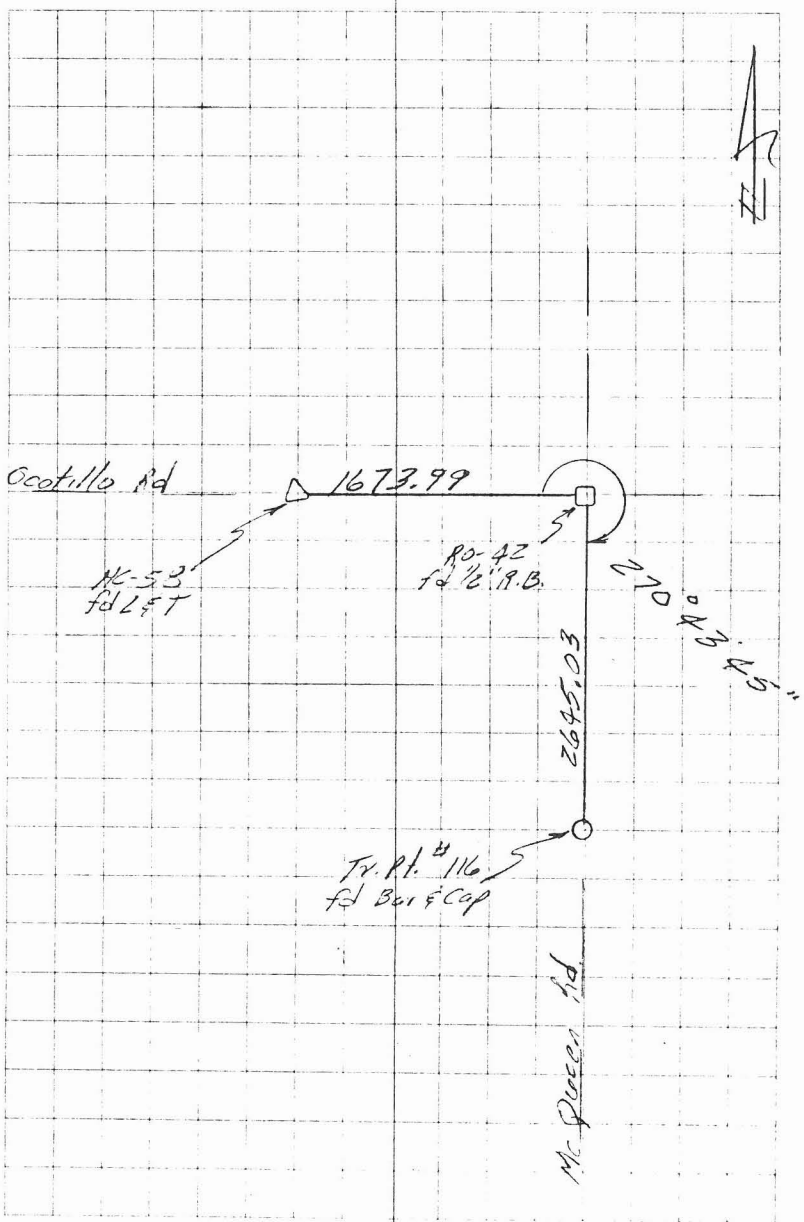
HD = 1673.99 ✓

HD to TP #116

ZA = 90°01'46"

SD = 2645.03

HD = 2645.03 ✓



MCFCD — Traverse — Block 7

10/1/87

303
48

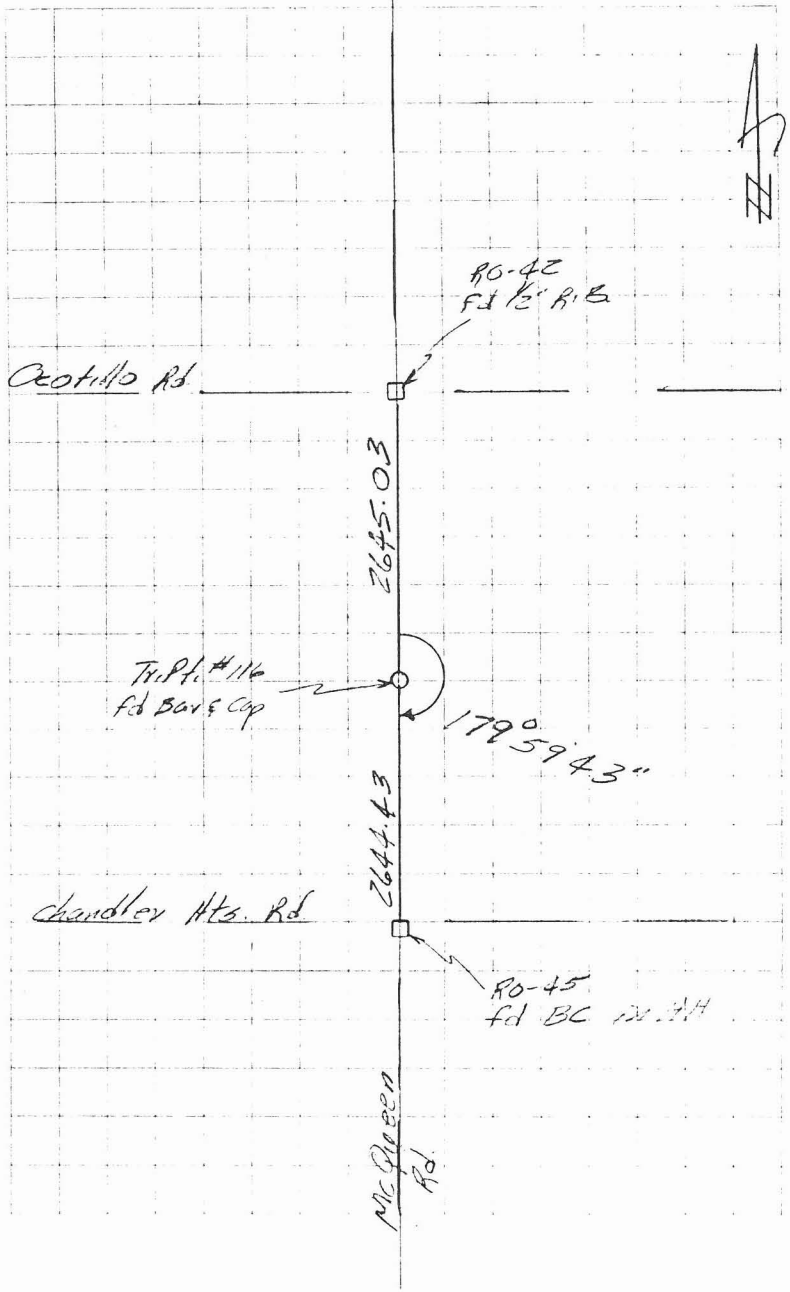
278 → 279 → 280

RO-42 → TP #116 → RO-45

∠#1 = 179°59'34"
∠#6 = 359°58'20"
∠N∠ = 179°59'43" ✓

HD to RO-42
∠ = 90°01'48
SD = 2645.03
HD = 2645.03 ✓

HD to RO-45
∠ = 90°06'25"
SD = 2644.43
HD = 2644.425 ✓



MCFCD Traverse — Block 7

12/4/87

938/55

279 280 281

TP #116 → RO-45 → TP #117

$\measuredangle$ #1 = 179°59'54"

$\measuredangle$ #6 = 00°00'03"

MM $\measuredangle$ - 180°00'01" ✓

HD to TP #116

ZA = 89°57'21"

SD = 2644.43

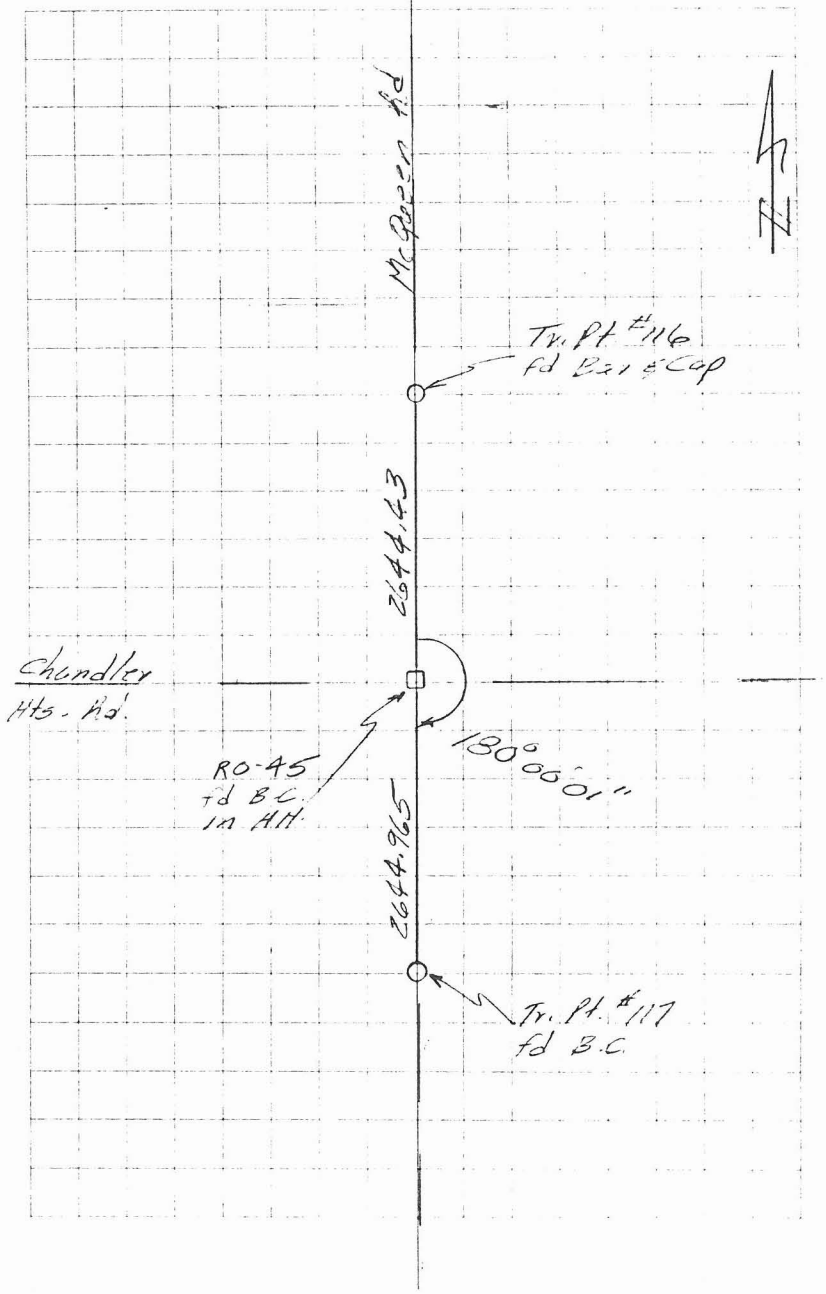
HD = 2644.43 ✓

HD to TP #117

ZA = 90°03'55

SD = 2644.97

HD = 2644.97 ✓



MCFCD — Traverse — Block 7

RO-45 (280) → TP #117 (281) → HC-64 (282)

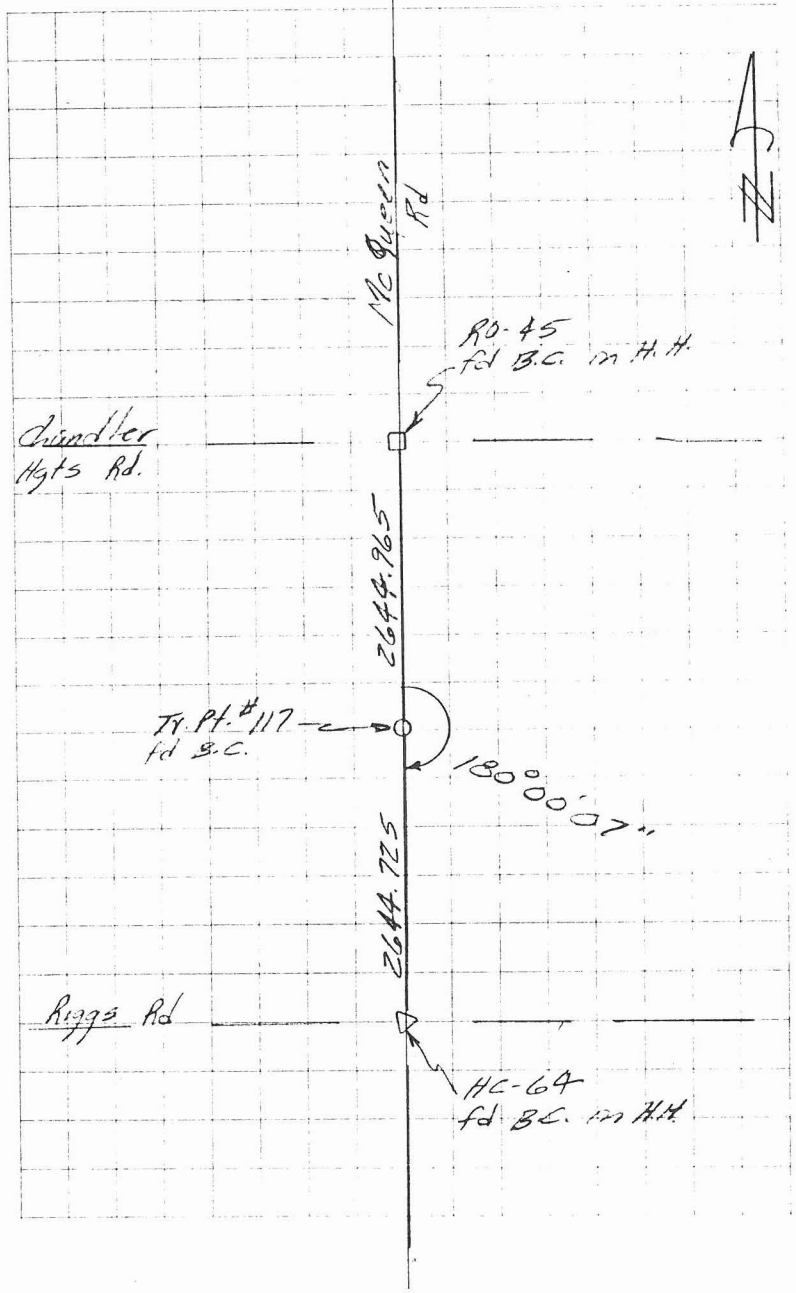
∠#1 = 180°00'06"
∠#2 = 00°00'43"
MN∠ = 180°00'07" ✓

HD to RO-45
ZA = 90°00'21
SD: 2644.96 ✓
HD: 2644.96

HD to HC-64
ZA = 89°55'44"
SD: 2644.72 ✓
HD: 2644.72

10/1/37

608
52



MCFCD Traverse — Block 7

10/6/87

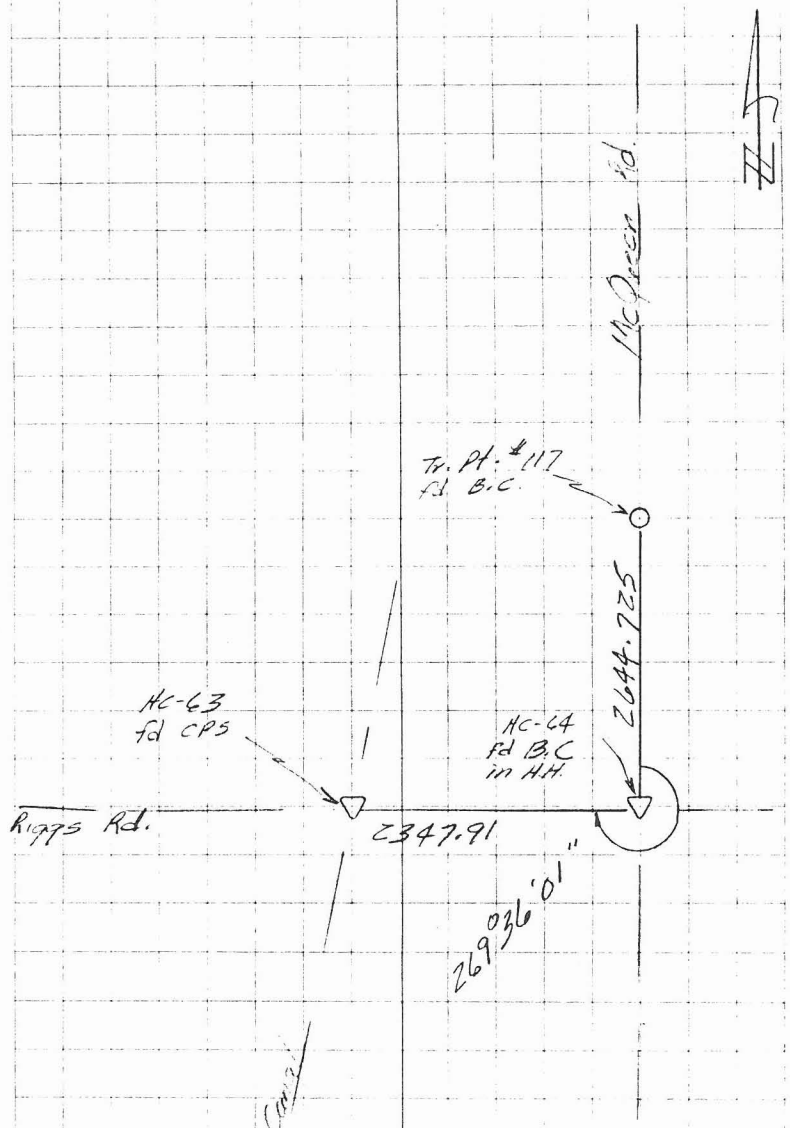
5.23
5+

TP# 117 (281) → HC-64 (282) → HC-63 (283)

∠#1 = 269°35'57"
∠#C = 177°36'06"
MN4 = 269°36'01" ✓

HD to TP# 117
ZA = 90°07'45"
SD = 2644.74
HD = 2644.735 ✓

HD to HC-63
ZA = 90°14'33"
SD = 2347.93
HD = 2347.91 ✓



MCFCD Traverse — Block 7

10/1/57

503
56

282 — HC-64 → 283 — HC-63 → 284 — TP# 118

∠#1 = 102°04'19"

∠#6 = 252°26'32"

MM = 102°04'25" ✓

HD to HC-64

ZX = 89°49'04"

SD = 2347.92 ✓

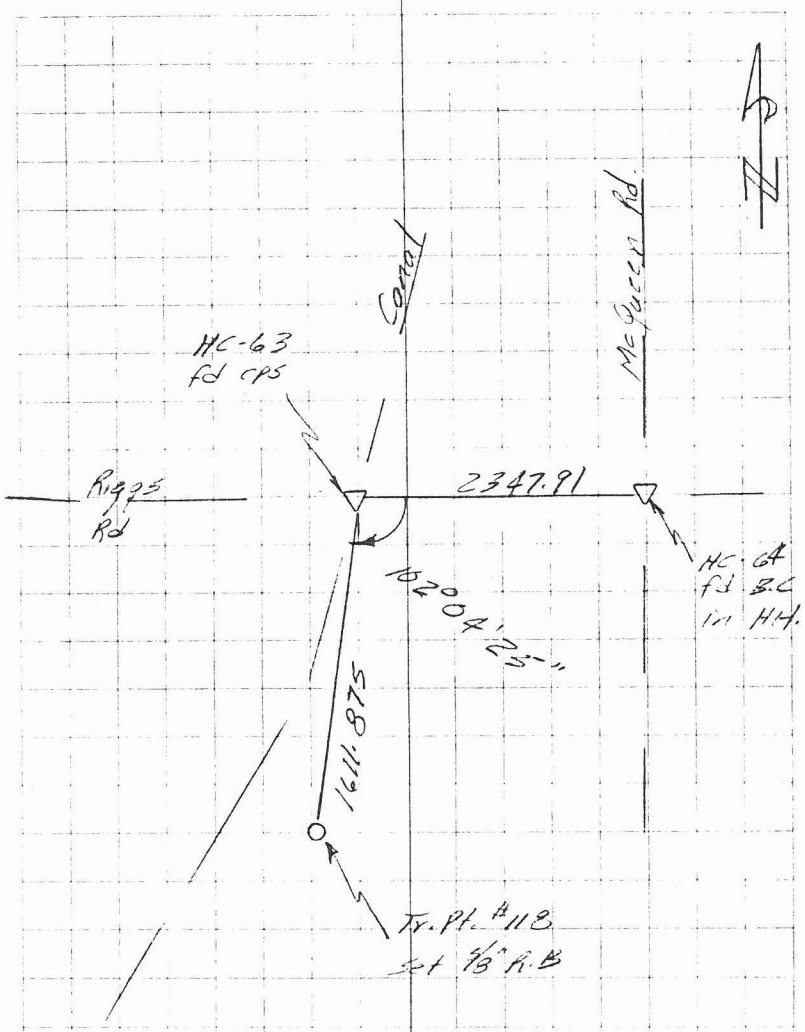
HD = 2347.91 ✓

HD to TP# 118

ZX = 89°52'12"

SD = 1611.89

HD = 1611.885 ✓



MCFCD Traverse - Block 7

285 284 283

HC-68 → TP #118 → HG-63

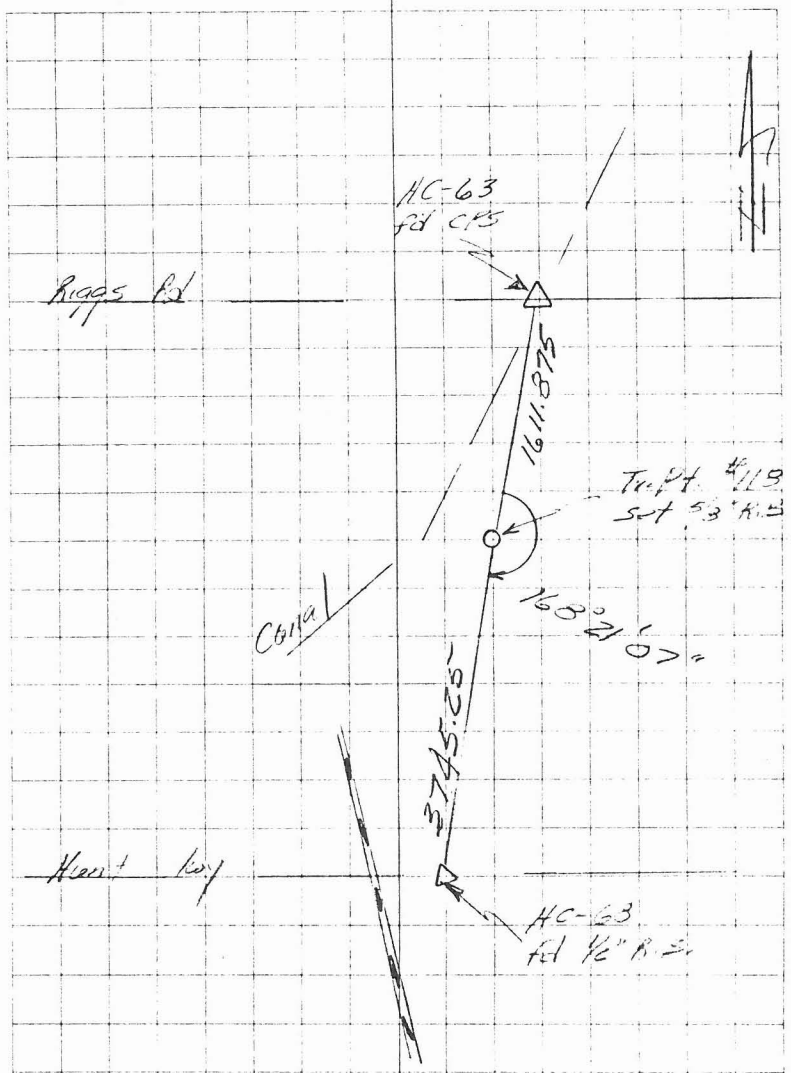
∠#1 = 191°38'57"
∠#6 = 69°53'19"
MN∠ = 191°38'53"
−359°59'60"
168°21'07" ✓

HD to HC-63
ZA = 90°06'51"
SD = 1611.87
HD = 1611.865 ✓

HD to HC-68
ZA = 90°04'18"
SD = 3745.25
HD = 3745.245 ✓

10/1/87

308/53



MCFCD Traverse - Block 7

284 285 286

TP #118 → HC-68 → HC-67

∠#1 = 90°06'39" (269°47'33")

∠#6 = 178°36'43" (178°46'06")

MN ∠ = 89°46'07" (269°47'41")

Use - 269°47'41" ✓

HD to TP #118

ΣA = 89°58'46"

SD = 3745.25

HD = 3745.25 ✓

HD to HC-67

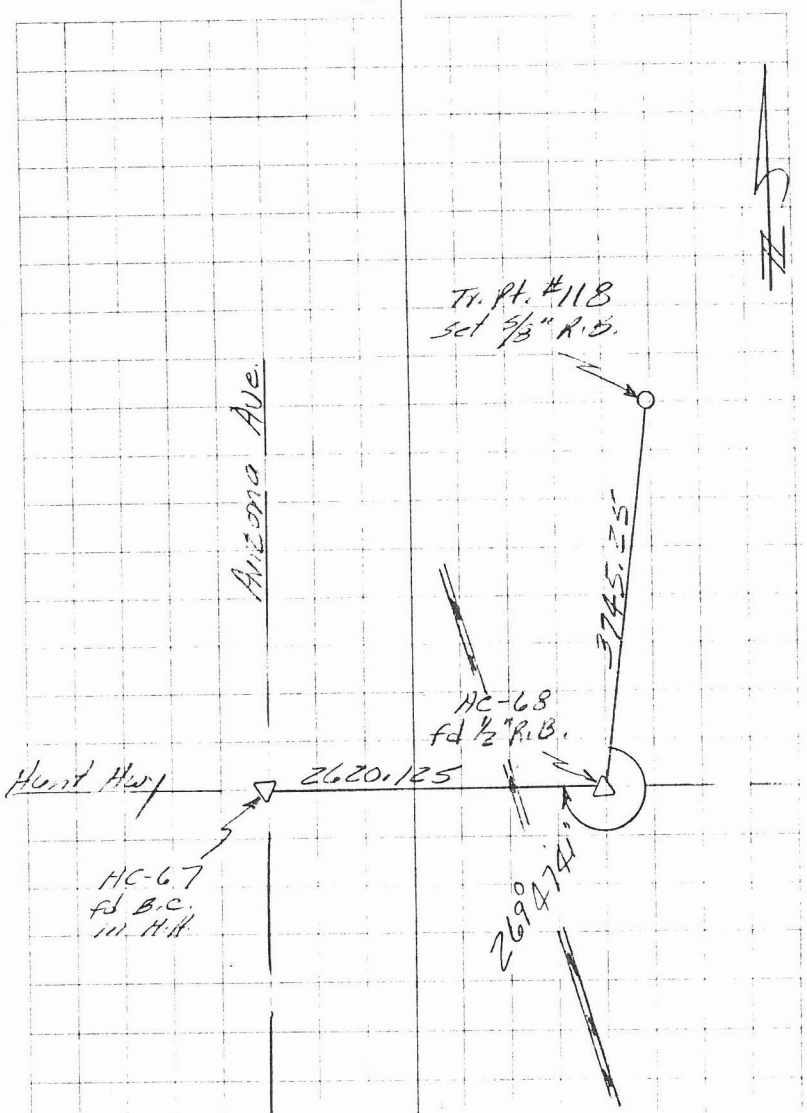
ΣA = 90°06'43

SD = 2620.13

HD = 2620.125 ✓

10/1/87

9.15/60



MCFCO — Traverse — Block 7

285 → 286 → 287

HC-68 → HC-67 → TP #119

$\angle$ #1 = 270°14'18"

$\angle$ #6 = 181°25'25"

MN $\angle$ = 270°14'14" ✓

HD to HC-68

Z $\angle$ = 89°56'32"

SD = 2620.13 /

HD = 2620.13 ✓

HD to TP #119

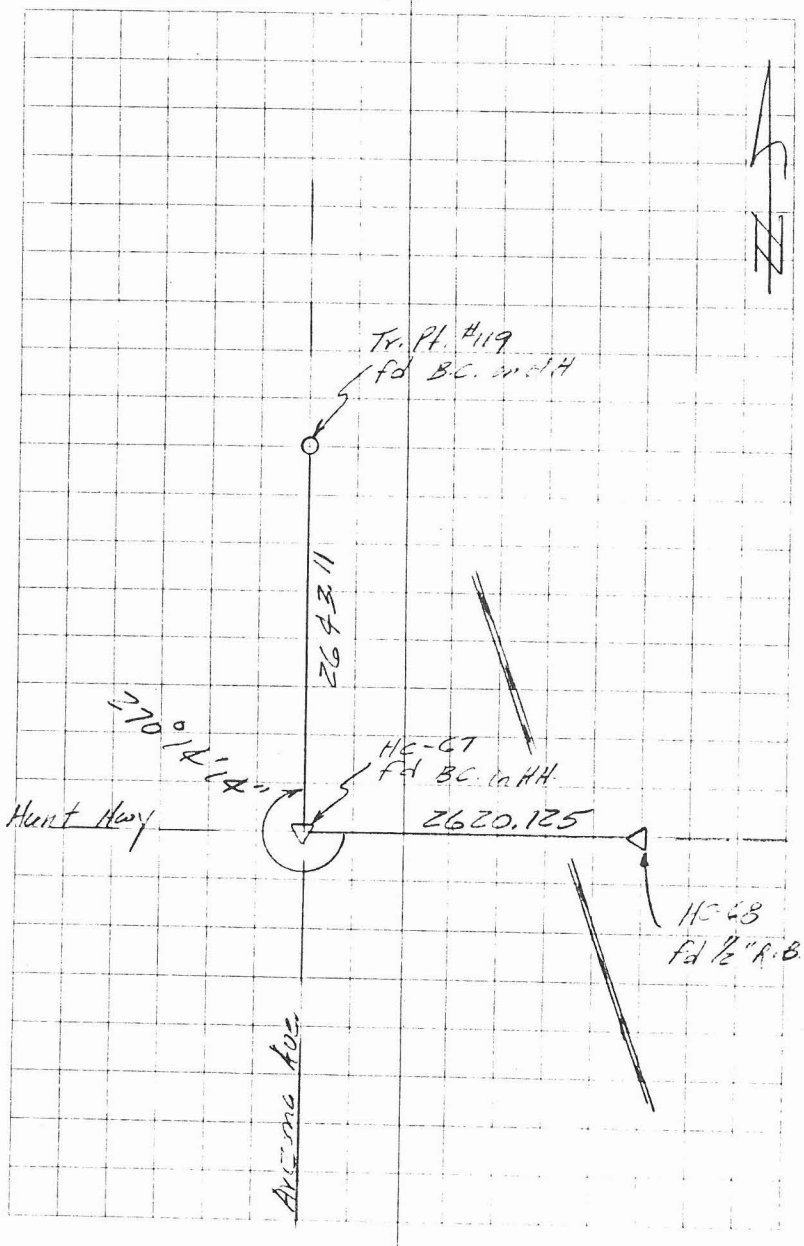
Z $\angle$ = 90°02'00"

SD = 2643.11 ✓

HD = 2643.11 ✓

11/4/37

825/62



MCFCD Traverse – Block 7

286 287 288

HC-67 → TP #119 → TP #120

∠#1 = 179°54'20"

∠#2 = 359°26'09"

MN∠ = 179°54'22" ✓

HD to HC-67

Z∠ = 90°01'49"

SD = 2643.11

HD = 2643.11 ✓

HD to TP #120

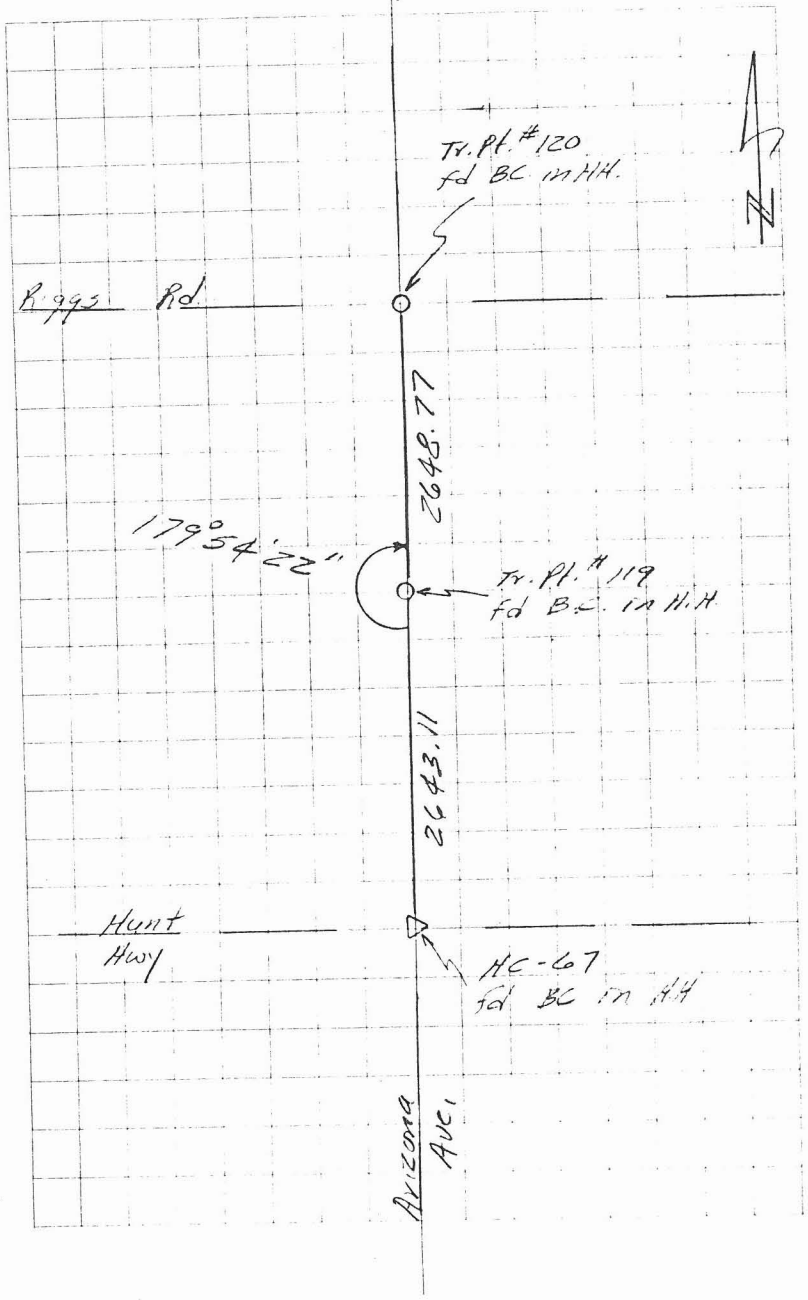
Z∠ = 90°05'54"

SD = 2648.78

HD = 2643.775 ✓

10/4/37

808/64



MCFCD — Traverse — Block 7

287 — TP # 119 → 288 — TP # 120 → 289 — HC-62

TA

$\measuredangle$ #1 = 269°12'08"

$\measuredangle$ #6 = 175°12'12"

MA = 269°12'02" ✓

HD to TP # 119

ZA = 89°57'36"

SD = 2648.77 ✓

HD = 2648.77 ✓

HD to HC-62

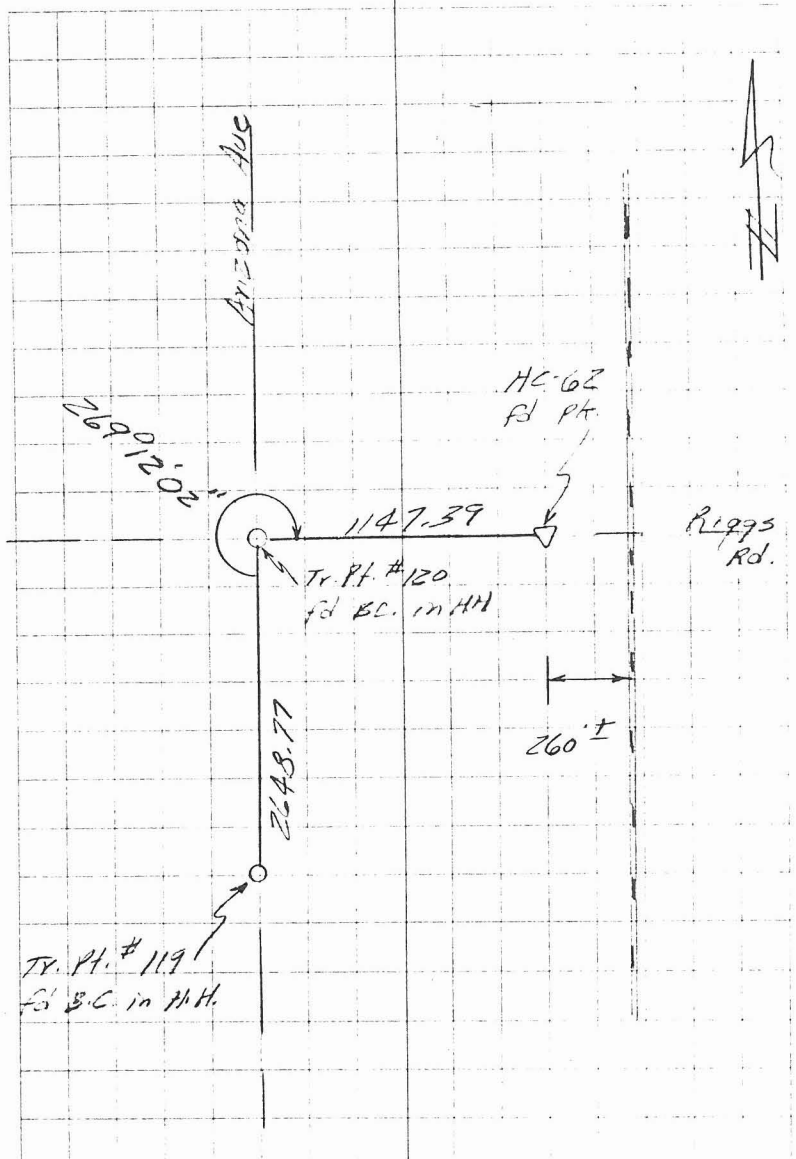
ZA = 89°50'59"

SD = 1147.40 ✓

HD = 1147.395 ✓

10/1/87

808/64



MCFCD Traverse – Block 7

290 289 288

TP #121 → AC-6Z → TP #120

∠#1 = 262°53'18"
∠#6 = 137°20'36"
MN ∠ = 262°53'26"
− 359°59'60"
97°06'34" ✓

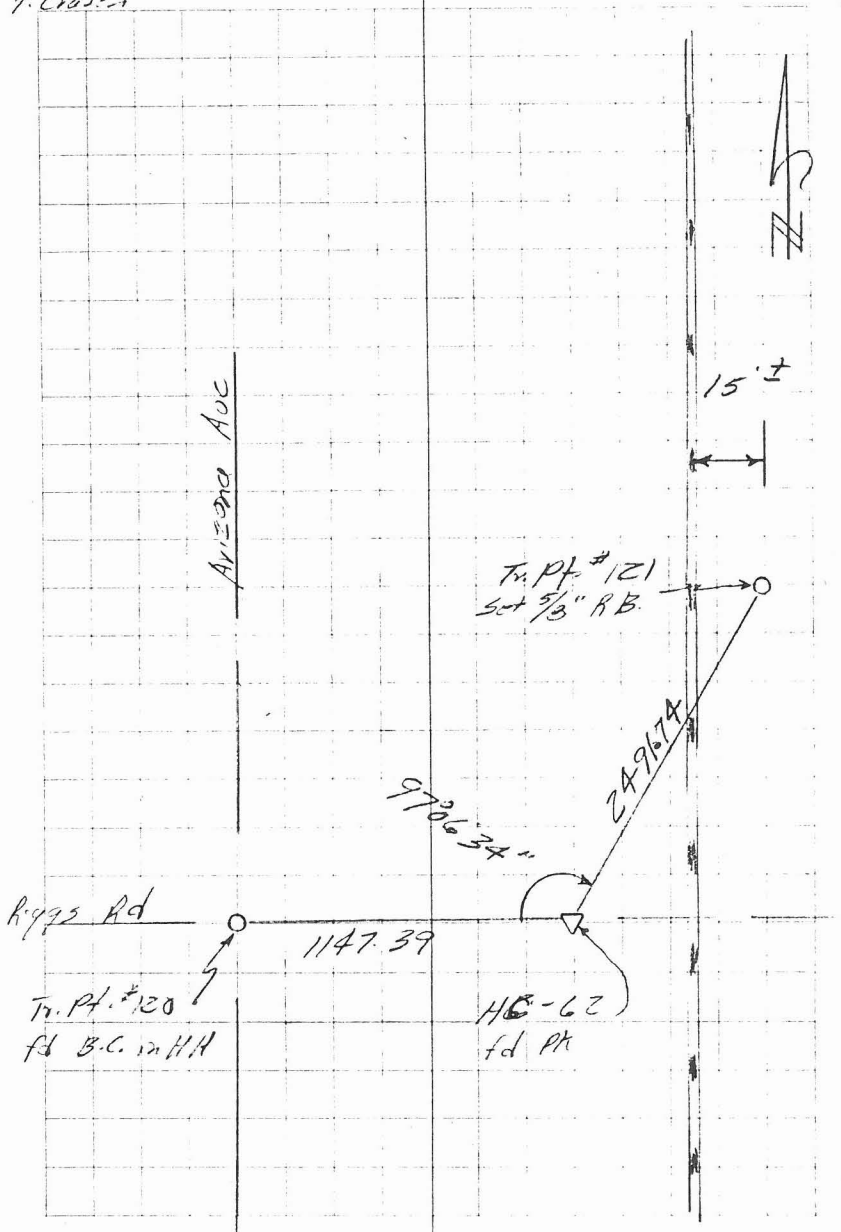
HD to TP #120
ZA = 90°13'40"
SD = 1147.39 ✓
HD = 1147.39 ✓

HD to TP #121
ZA = 90°01'33"
SD = 2491.74
HD = 2491.74 ✓

L. Osmundson
R. McMurray
T. Crosson

10/7/39

509
68



MCFCD | Traverse – | Block 7

10/7/87

300/70

289 — HC-62 → 290 — TP #121 → 291 — RO-44

$\measuredangle$ #1 = 173°26'21"

$\measuredangle$ #2 = 320°37'35"

MN $\measuredangle$ = 173°26'16" ✓

HD to HC-62

ZA = 90°01'46"

SD = 2491.74

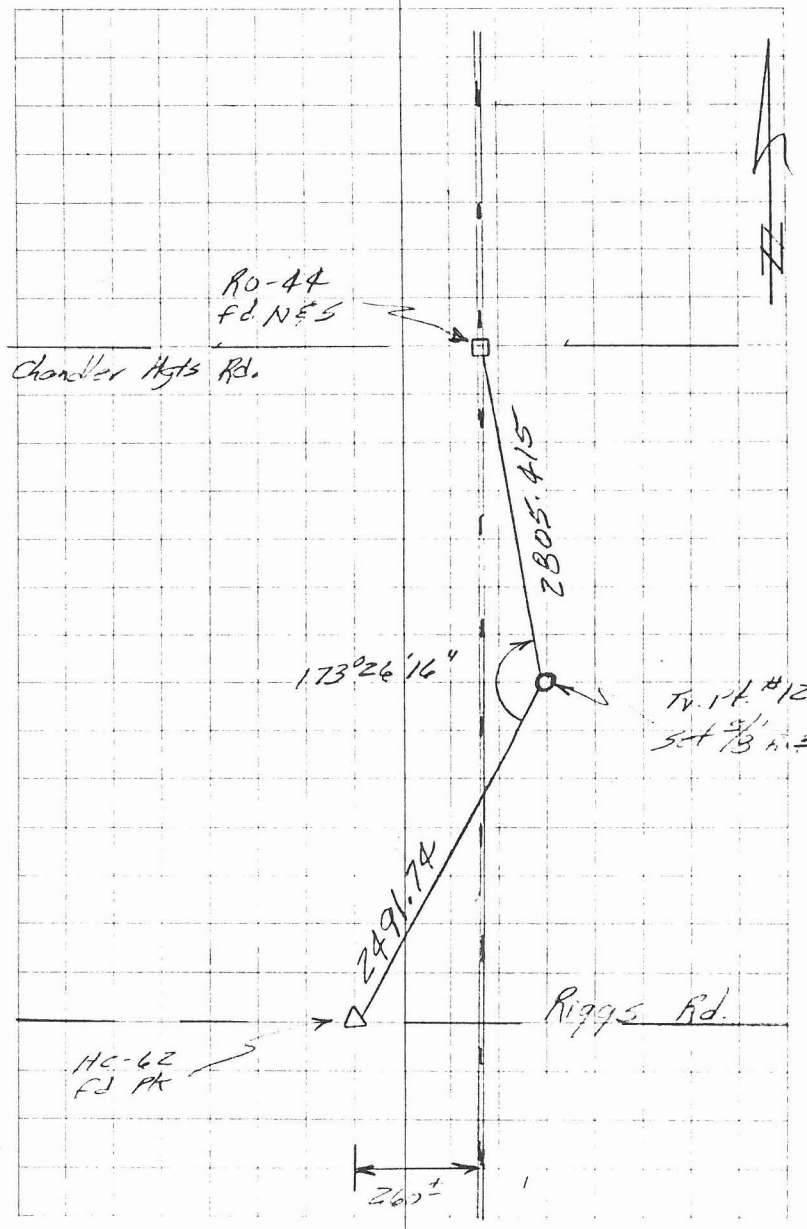
HD = 2491.74 ✓

HD to RO-44

ZA = 89°58'42"

SD = 2805.44 ✓

HD = 2805.44 ✓



MCFCD Traverse - Block 7

10/7/57

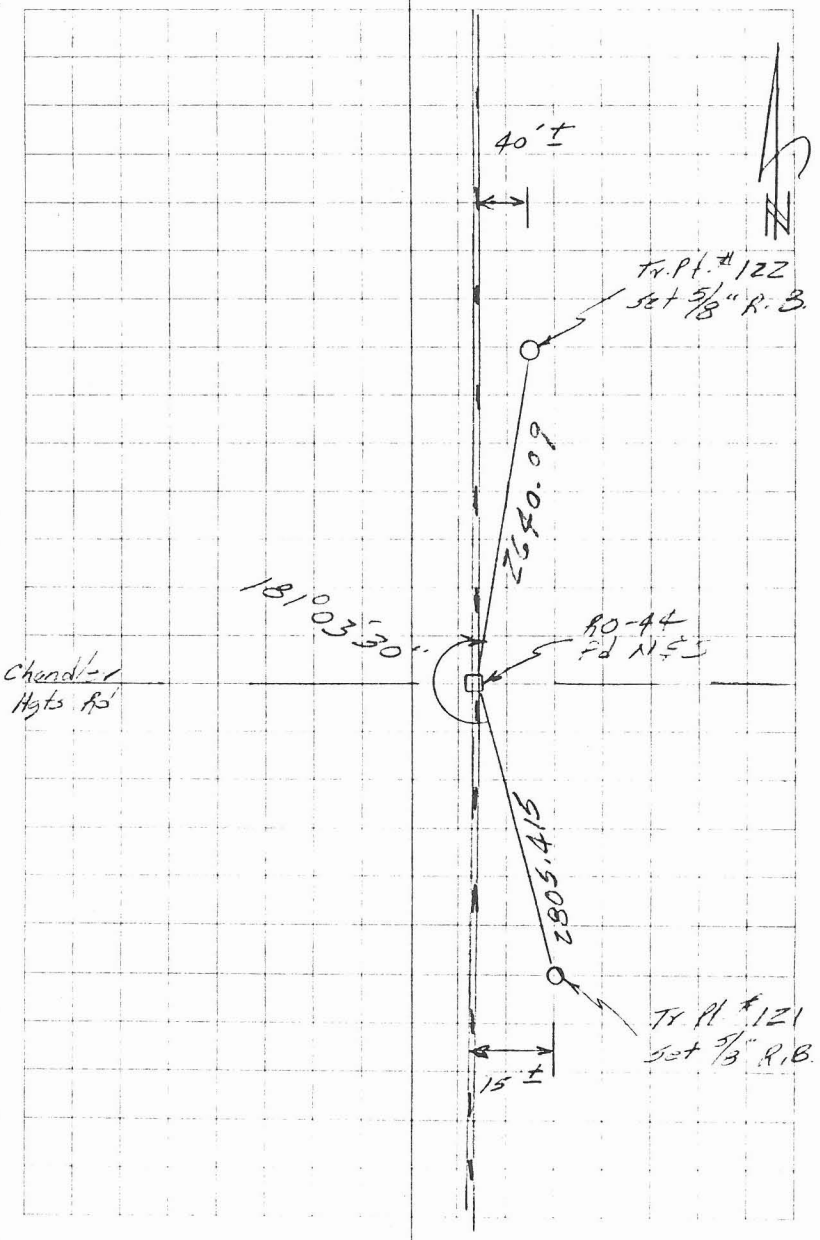
308/72

290 TP #121 → 291 RO-44 → 292 TP #122

$\measuredangle$#1 = 181°03'36"
$\measuredangle$#6 = 6°21'00"
Rev $\measuredangle$ = 181°03'30" ✓

HD to TP #121
ZA = 90°38'37"
SD = 2805.40
HD = 2805.39 ✓

HD to TP #122
ZA = 90°02'26"
SD = 2640.09
HD = 2640.09 ✓



MCFCO Traverse - Block 7

10/7/87

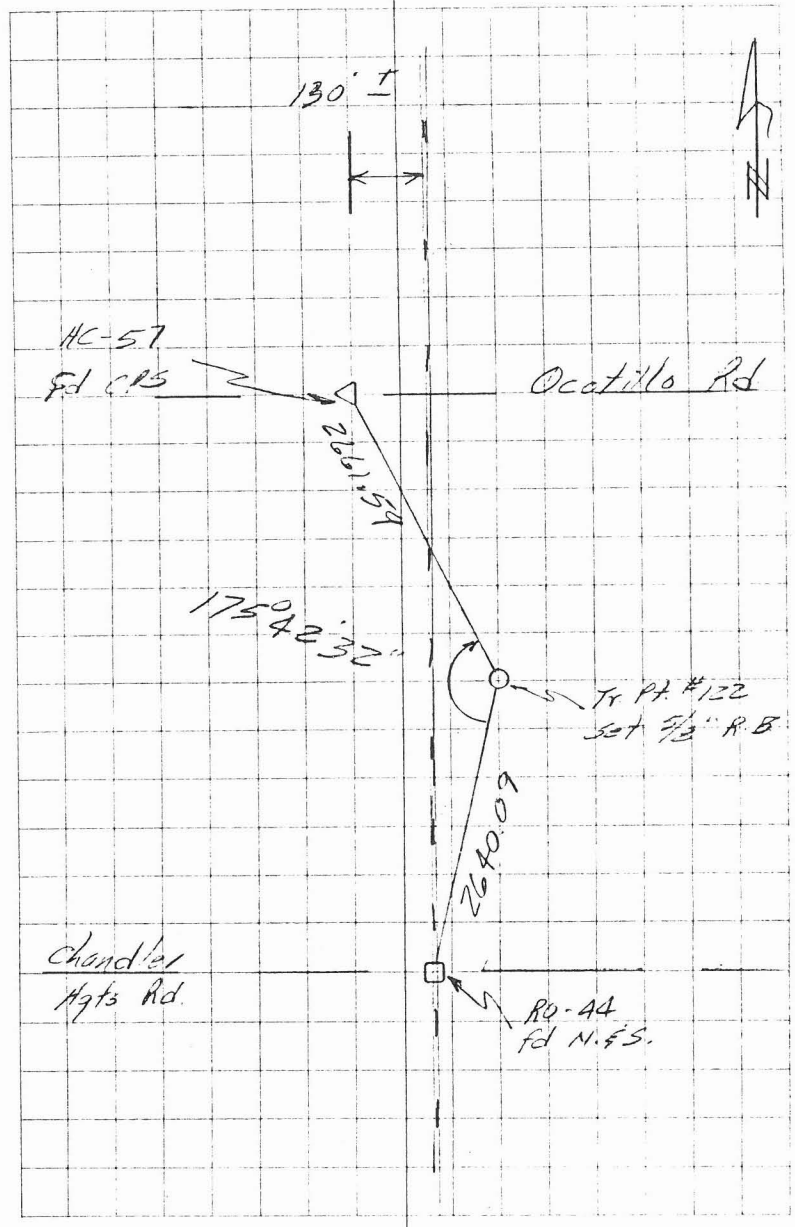
508/74

Z1 RO-44 → Z2 TP #122 → Z3 HC-57

∠#1 = 175°42'28"
∠#6 = 334°15'14"
MN∠ = 175°42'32" ✓

HD to RO-44
Z∠ = 90°01'15
SD = 2640.09
HD = 2640.09 ✓

HD to HC-57
Z∠ = 89°56'43"
SD = 2661.59
HD = 2661.59 ✓



MCFCD Traverse - Block 7

292 293 294

TP#122 → MC-57 → TP#123

∠#1 = 184°04'20"

∠#6 = 24°26'25"

∠MC = 184°04'24" ✓

HD to TP#122

ZA = 90°06'41"

SD = 2661.59

HD = 2661.585 ✓

HD to TP#123

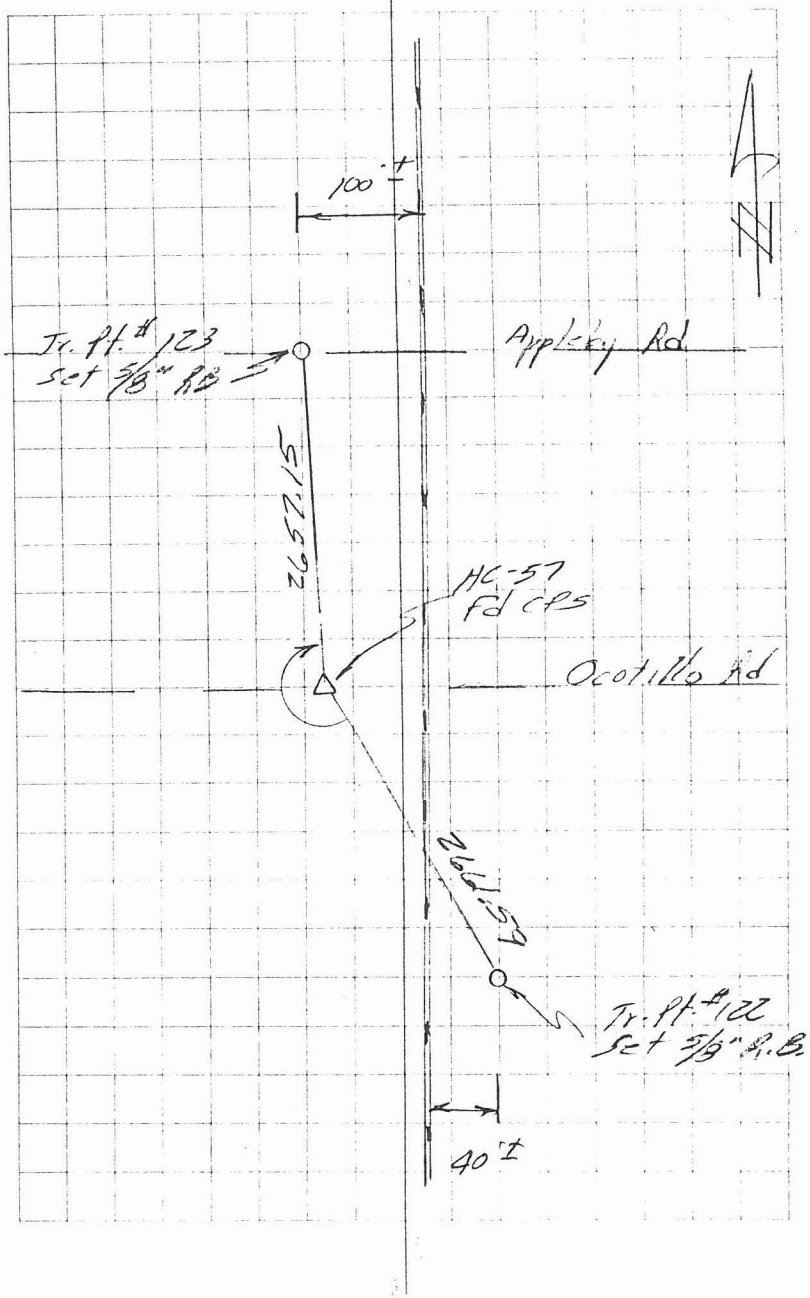
ZA = 90°05'03"

SD = 2657.15

HD = 2657.145 ✓

10/7/87

808/76



MCFCD Traverse — Block 7

293 → 294 → 295

HC-57 → TP #123 → HC-52

Π

$\measuredangle$#1 = 172°32'10"

$\measuredangle$#6 = 357°12'46"

MA = 179°32'08" ✓

HD to HC-57

EA = 89°58'12"

SD = 2657.15

HD = 2657.15 ✓

HD to HC-52

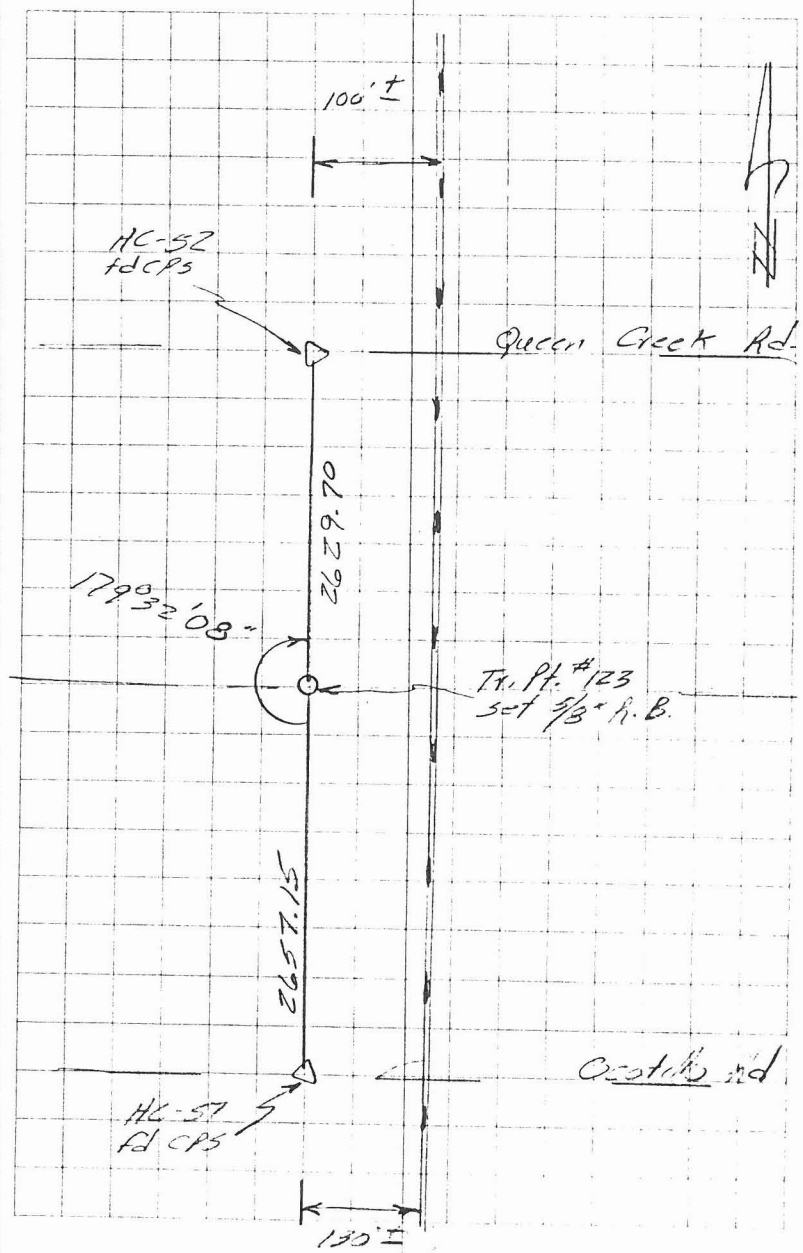
EA = 90°01'25"

SD = 2629.70

HD = 2629.70 ✓

10/7/87

3.03/73



MCFCO Traverse - Block 7

(See Bk 804 - Pg 106)

294 295 296

TP #123 → HC-52 → TP #81

∠#1 = 191°47'35"

∠#6 = 70°45'23"

INT = 191°47'34" ✓

HD to TP #123

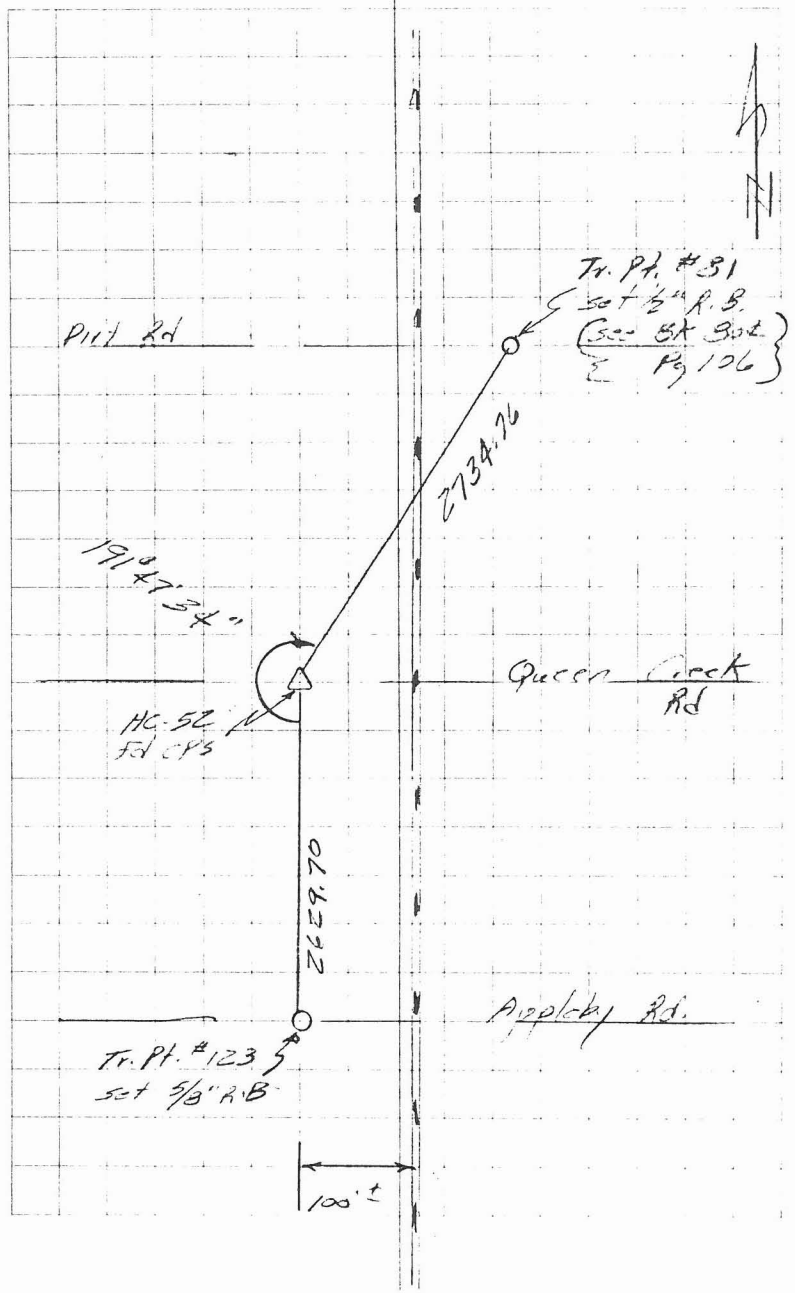
ΣA = 90°01'54

SD = 2629.70

HD = 2629.70 ✓

10/7/37

608
80



MCFCD Traverse — Block 8

(See Pg 32)

350 380

HC-55 → TP #9 → TP #124

∠#1 = 90°27'45"

∠#6 = 182°46'36"

∠N4 = 90°27'46" ✓

HD to TP #124

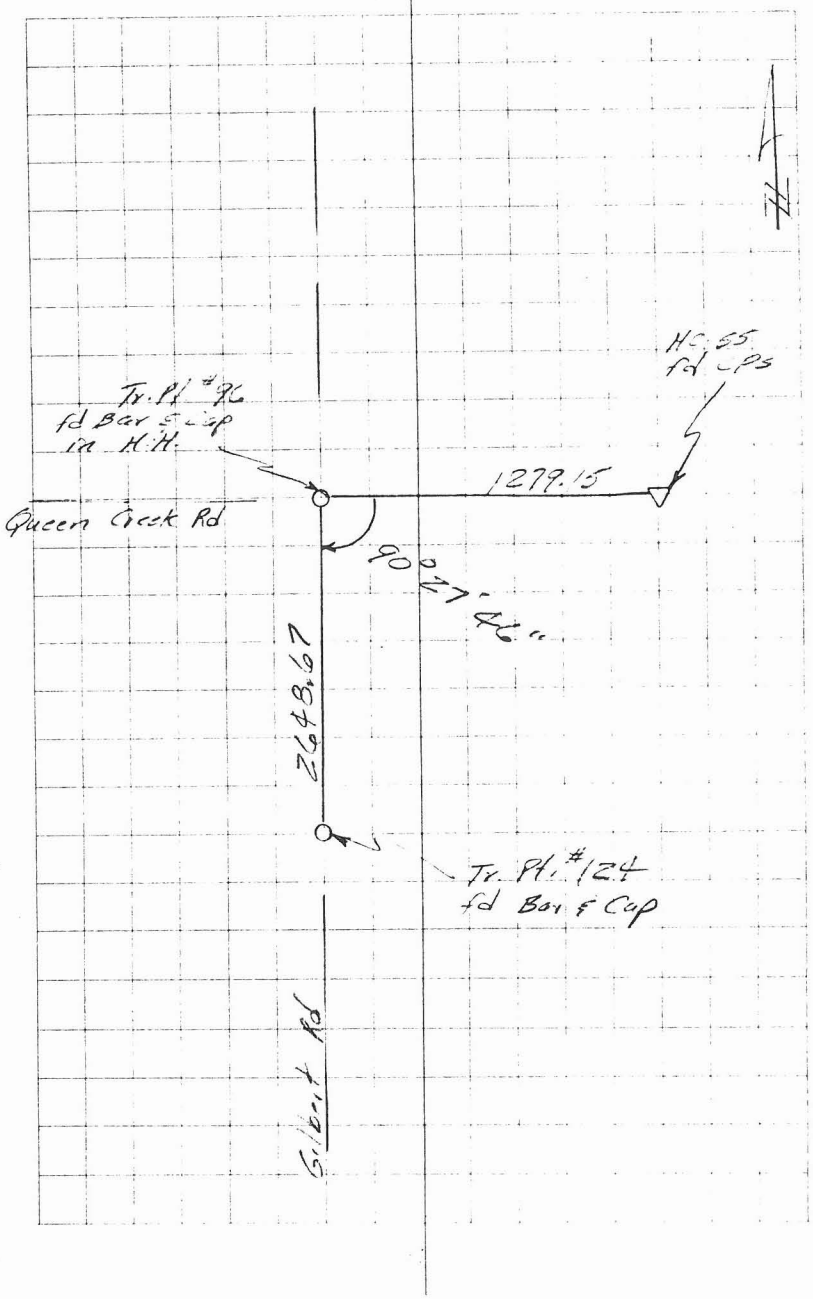
ΣX = 89°57'33"

SD = 2648.67

HD = 2648.67 ✓

10/7/37

803
92



MCFCD Traverse – Block 8

10/7/37

508/84

350 → 300 → 301

TP #96 → TP #124 → RO-43

∠#1 = 167°01'12"

∠#6 = 282°07'24"

MA = 167°01'14" ✓

HD to TP #96

ΣA = 90°06'09"

SD = 2648.67

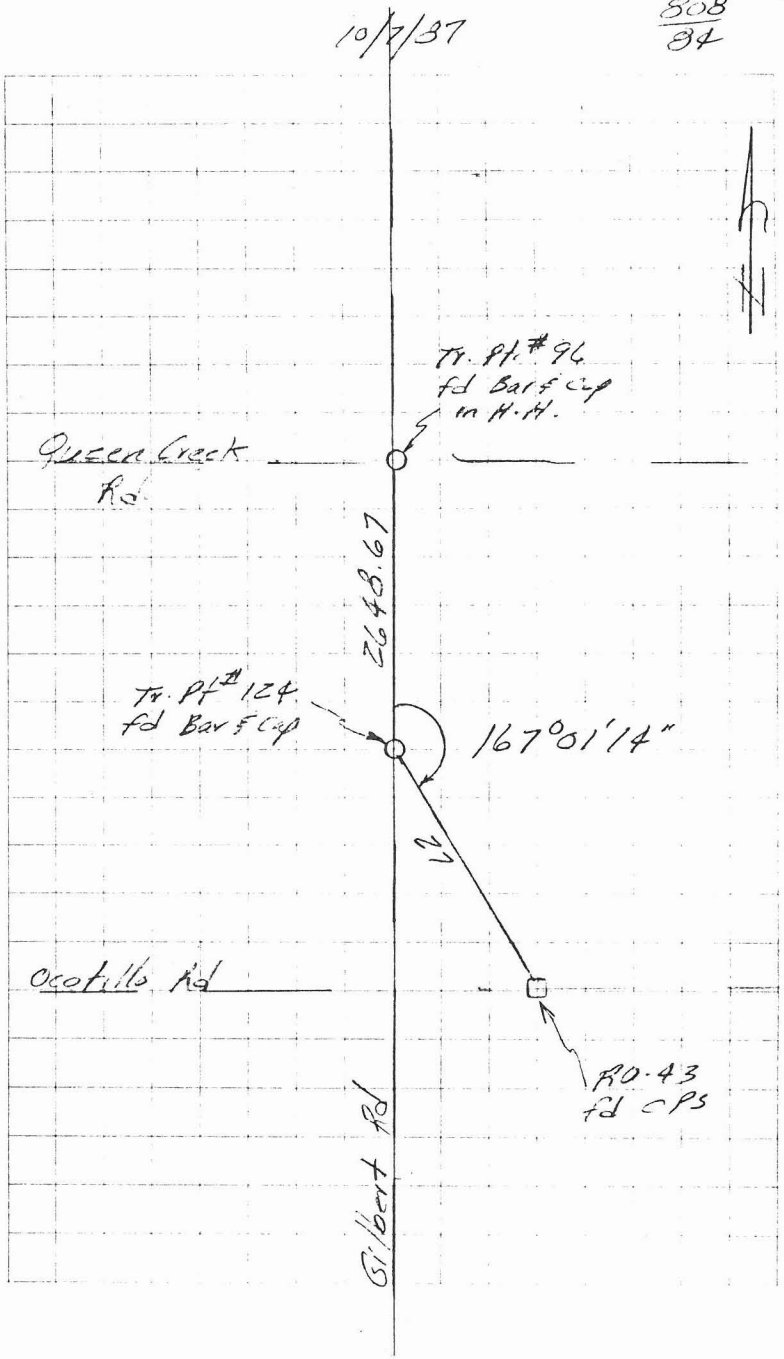
HD = 2648.66 ✓

HD to RO-43

ΣA = 89°58'21"

SD = 2709.64

HD = 2709.64 ✓



MCFCD Traverse — Block 8

10/7/37

208/86

300 TP #124 → 301 RO-43 → 302 TP #125

$\angle$#1 = 282°00'34"

$\angle$#6 = 252°03'50"

$\angle$ INT = 282°00'38" ✓

HD to TP #124

ZA = 90°04'51"

SD = 2709.64

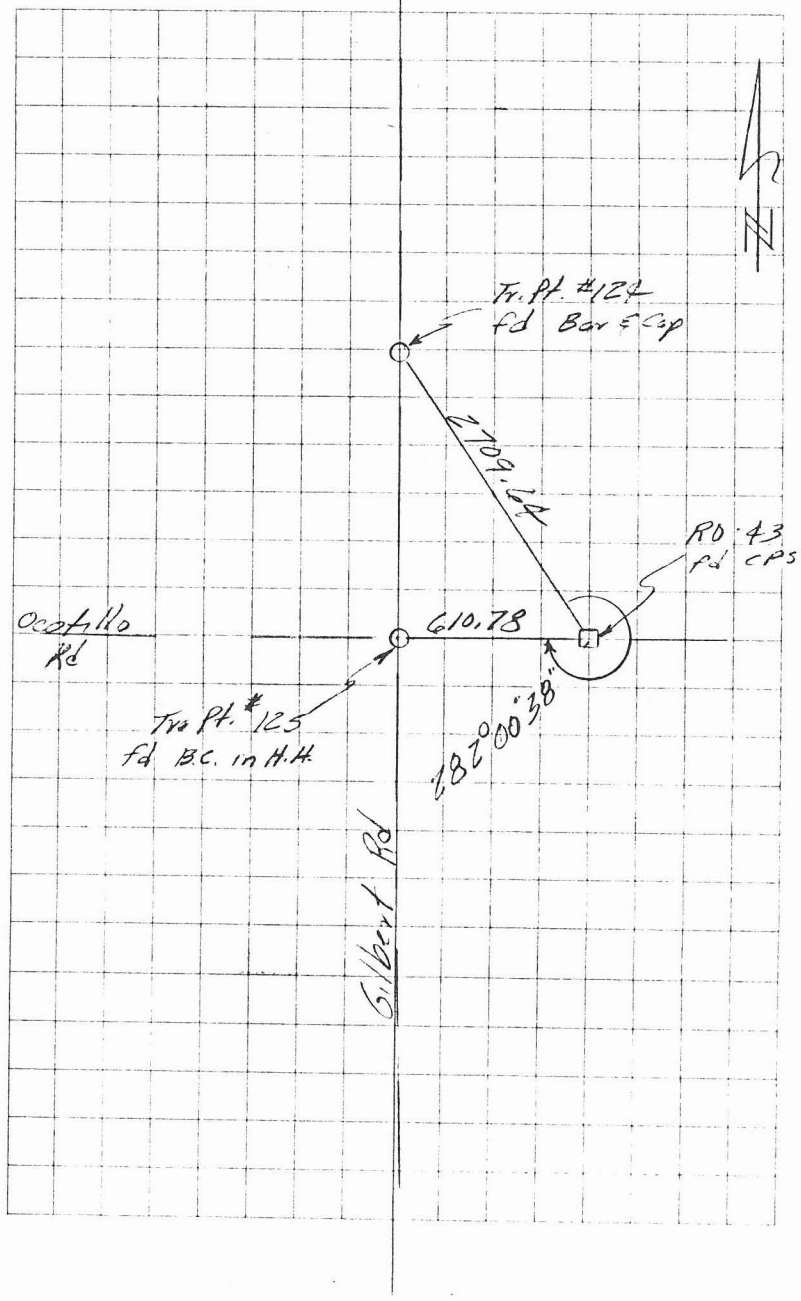
HD = 2709.635 ✓

HD to TP #125

ZA = 90°22'24"

SD = 610.80

HD = 610.785 ✓



MCFCD Traverse — Block 8

303 — TP #126 → 302 — TP #125 → 301 — RO-43

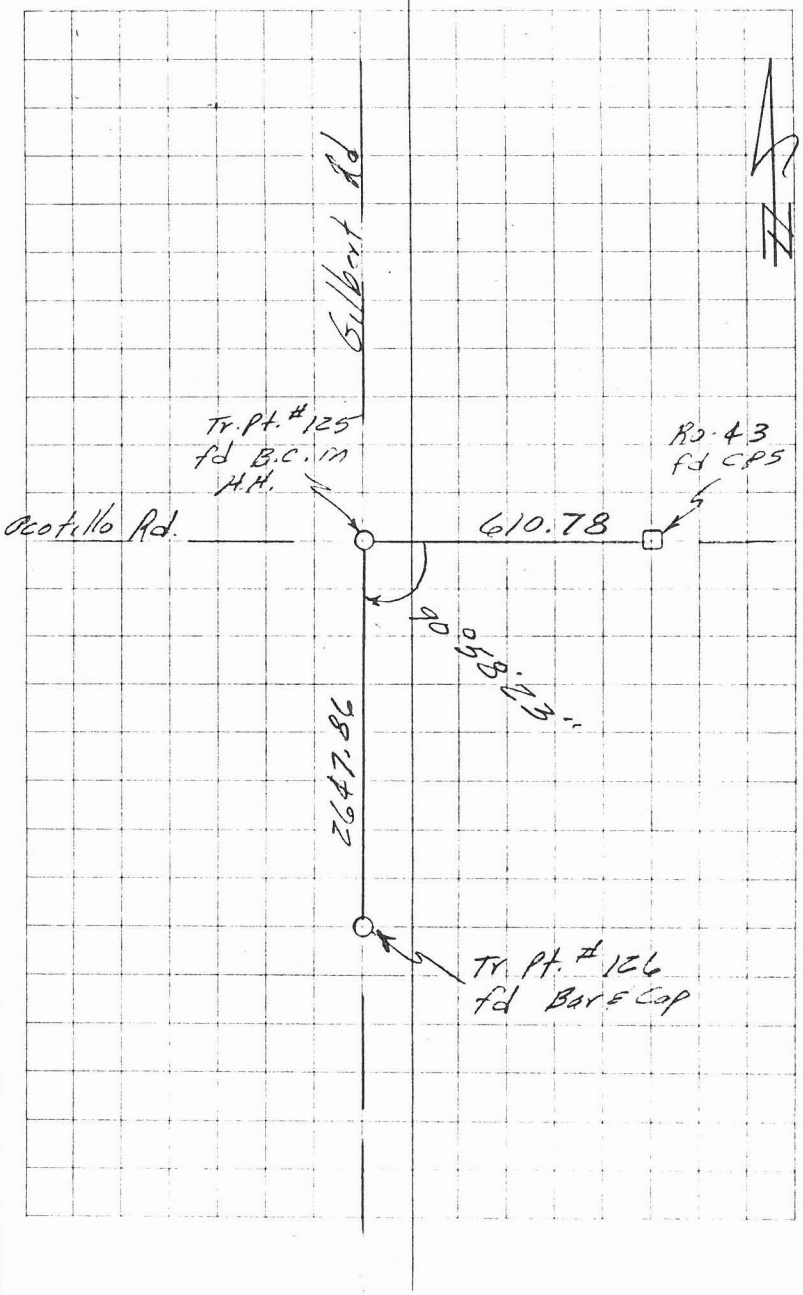
$\measuredangle$ #1 = 269°01'40"
$\measuredangle$ #6 = 174°09'42"
MN $\measuredangle$ = 269°01'37"
− 359°59'60" ✓
90°58'23" ✓

HD to RO-43
Z $\measuredangle$ = 89°47'00"
SD = 610.78
HD = 610.775 ✓

HD to TP #126
Z $\measuredangle$ = 89°58'55"
SD = 2647.86
HD = 2647.86 ✓

10/7/81

508
88



MCFCD Traverse - Block 8

304 303 302

HC-61 → TP #126 → TP #125

π

$\measuredangle$ #1 = 203°17'31"

$\measuredangle$ #6 = 139°45'32"

MN $\measuredangle$ = 203°17'35"

− 359°59'60"

156°42'25" ✓

HD to TP #125

ZA = 90°04'47"

SD = 2647.86

HD = 2647.855 ✓

HD to TP #~~136~~ HC 61

ZA = 89°58'00"

SD = 2894.33

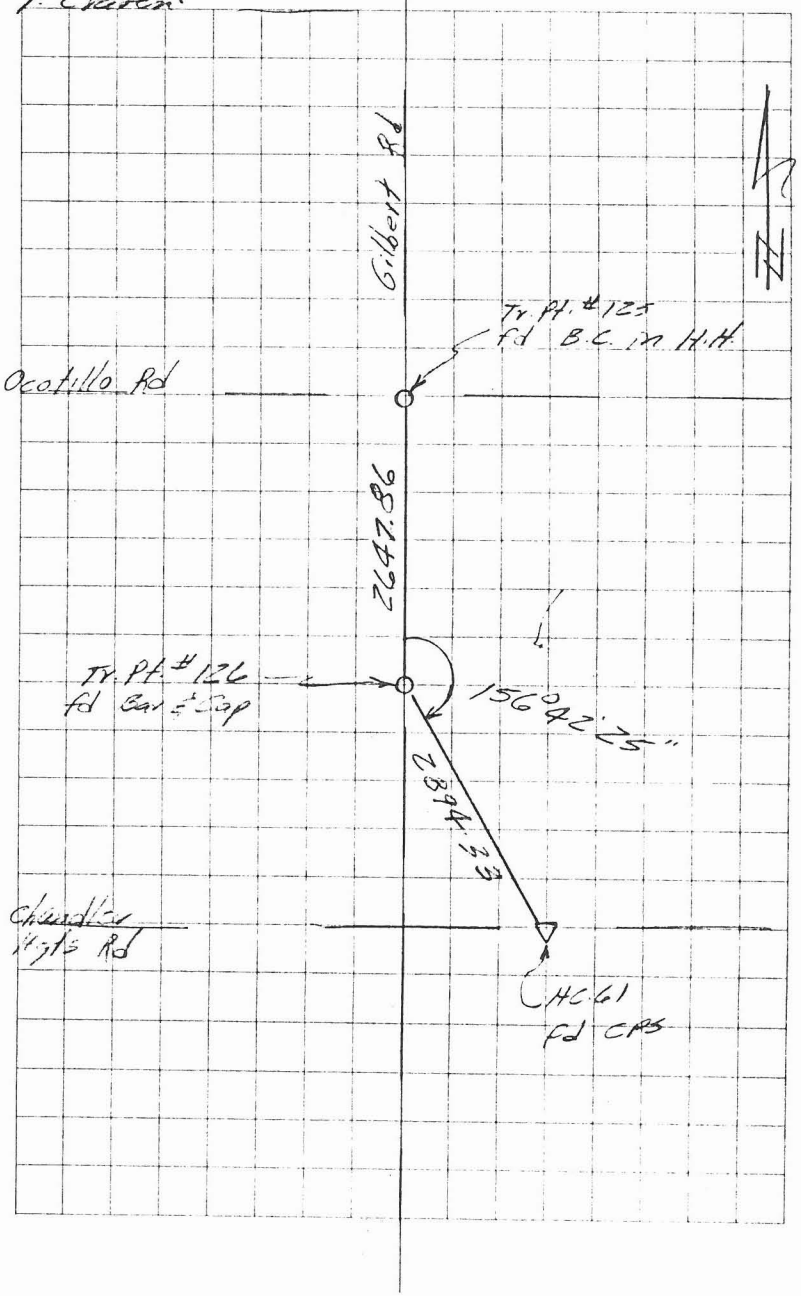
HD = 2894.33 ✓

(con't on Page 118)

L. Von Dyke
R. McMurray
T. Chacon

10/14/87

308/90



MCFCD Traverse – Williams Fld, Power & Recos Roads

L. Von Dyke
R. McMurray
T. Craven

10/3/87

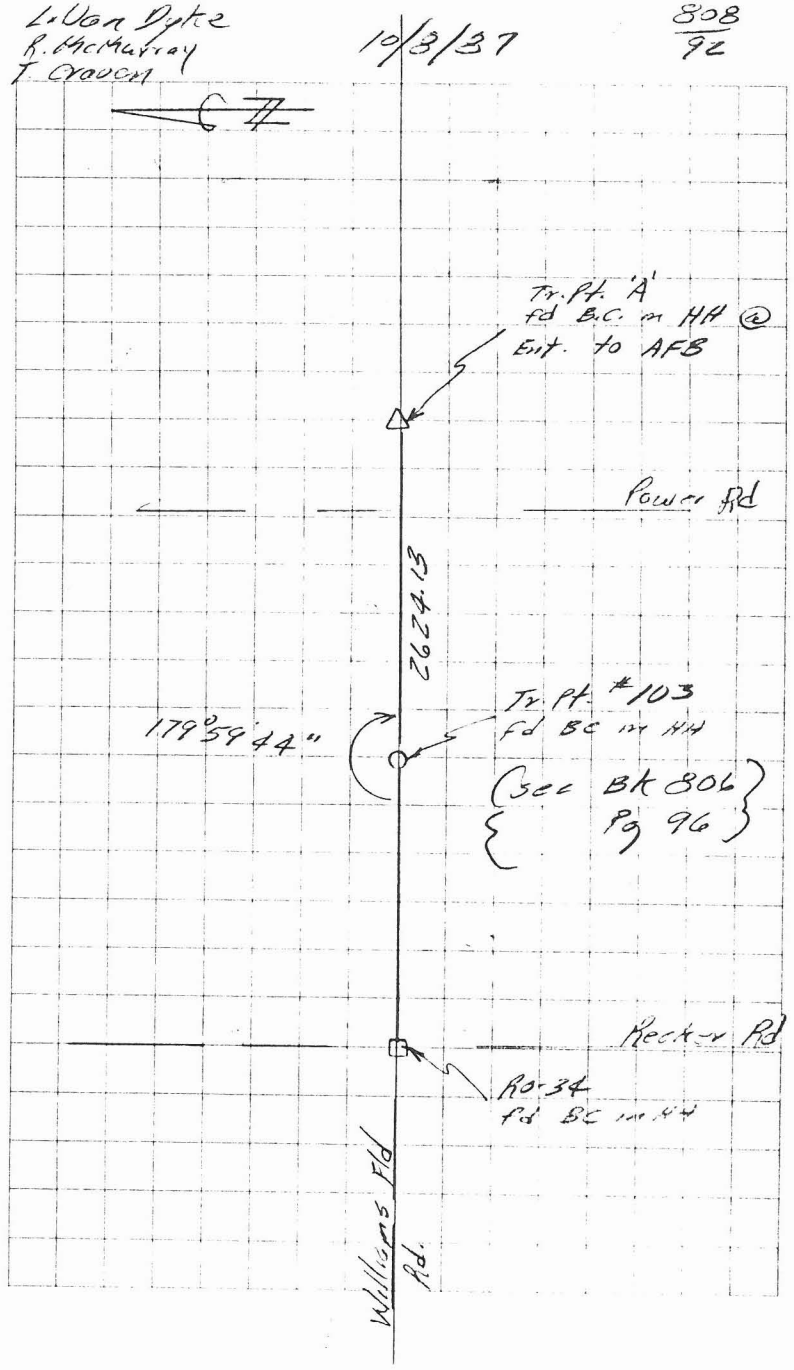
808
9L

RO-34 → TP #103 → TP 'A'

$\measuredangle$ #1 = 179°59'47"
$\measuredangle$ #2 = 359°58'56"
MN $\measuredangle$ = 179°59'44" ✓

HD to RO-34
ΣA =
SD =
HD =

HD to TP 'A'
ΣA = 89°46'12"
SD = 2624.15
HD = 2624.13 ✓



MCFCD | Traverse – Williams Fld, Reese

10/8/87

309/94

TP #103 → TP 'A' → TP 'B'

$\angle$ #1 = 272° 35' 56"

$\angle$ #4 = 10° 24' 23"

MN 4 = 272° 36' 06" ✓

HD to TP #103

ZA = 90° 17' 08"

SD = 2624.16

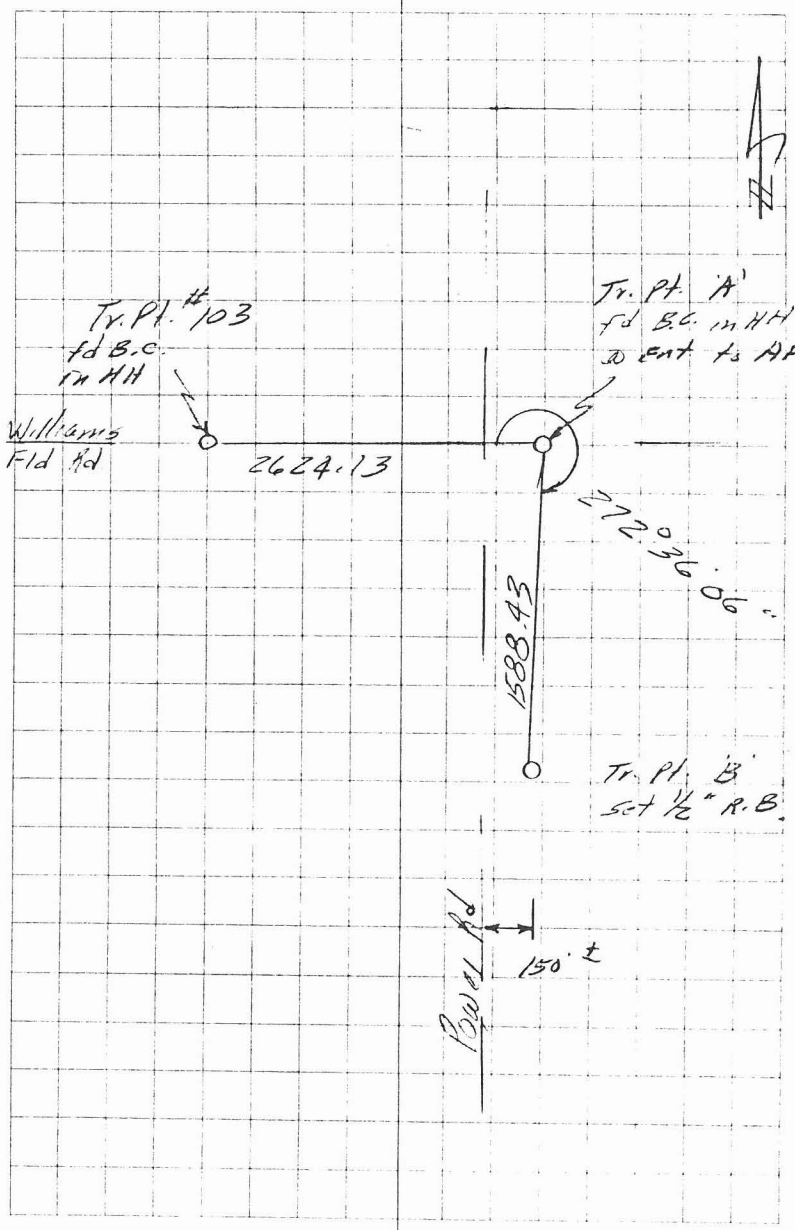
HD = 2624.125 ✓

HD to TP 'B'

ZA = 90° 06' 38"

SD = 1588.43

HD = 1588.485 ✓



MCFCD | Traverse – Williams Fld, Power & Pecos Rd.

10/8/87

808/86

TP 'C' → TP 'B' → TP 'A'

π

∠#1 = 183°38'26"

∠#4 = 176°21'06"

MN∠ = 183°38'32"

− 359°59'60" ✓

176°21'28" ✓

HD to TP 'A'

ZA = 89°57'08"

SD = 1588.43 ✓

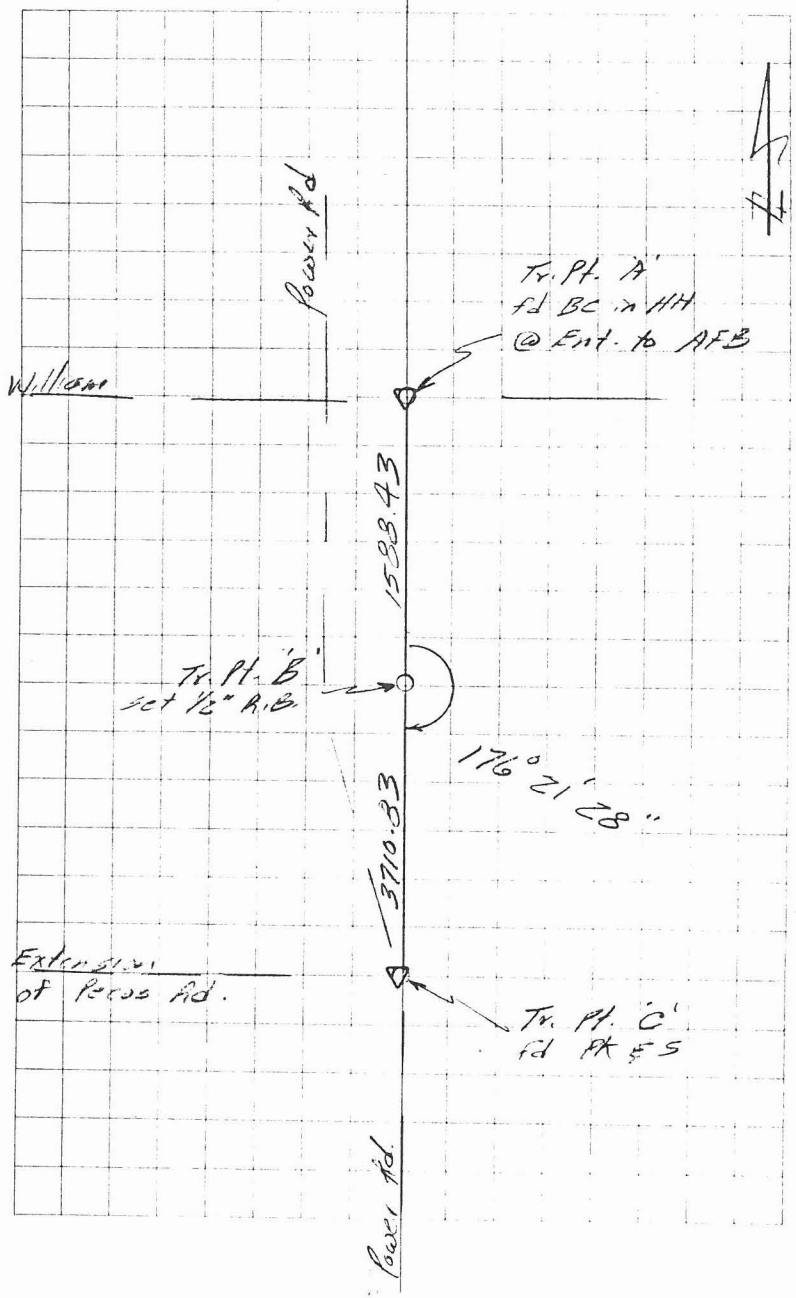
HD = 1588.43 ✓

HD to TP 'C'

ZA = 89°53'43"

SD = 3710.84 ✓

HD = 3710.835 ✓



MCFCD

Traverse of Williams Fld, Power & Pecos Roads

10/3/87

308
73

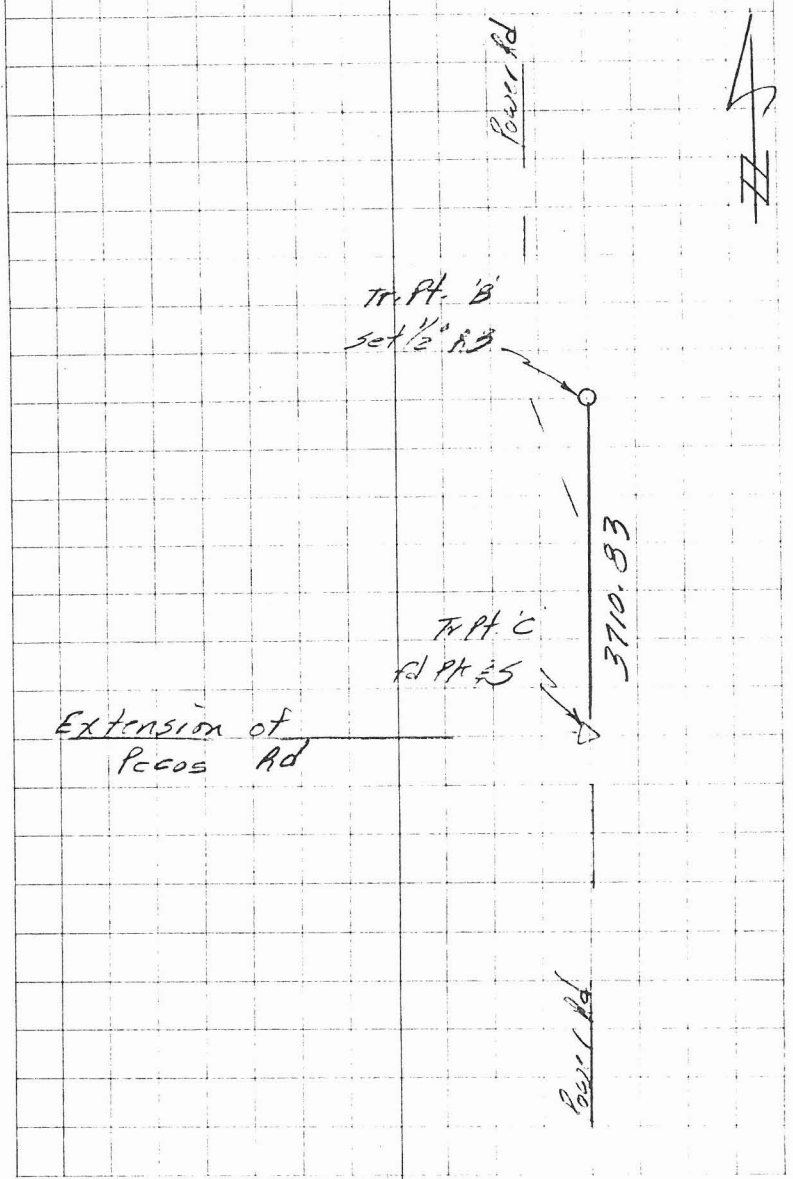
TP 'C'

HD to TP 'B'

ZX = 90°09'10"

SD = 3710.84

HD = 3710.825 ✓



MCFCD

Trouse - Williams Fld, Power & Pecos Roads

10/8/87

908
700

HC-43 → TP #104 → TP 'D'

∠#1 = 307°01'11"

∠#4 = 148°05'40"

MNT = 307°01'25"

−359°59'60"

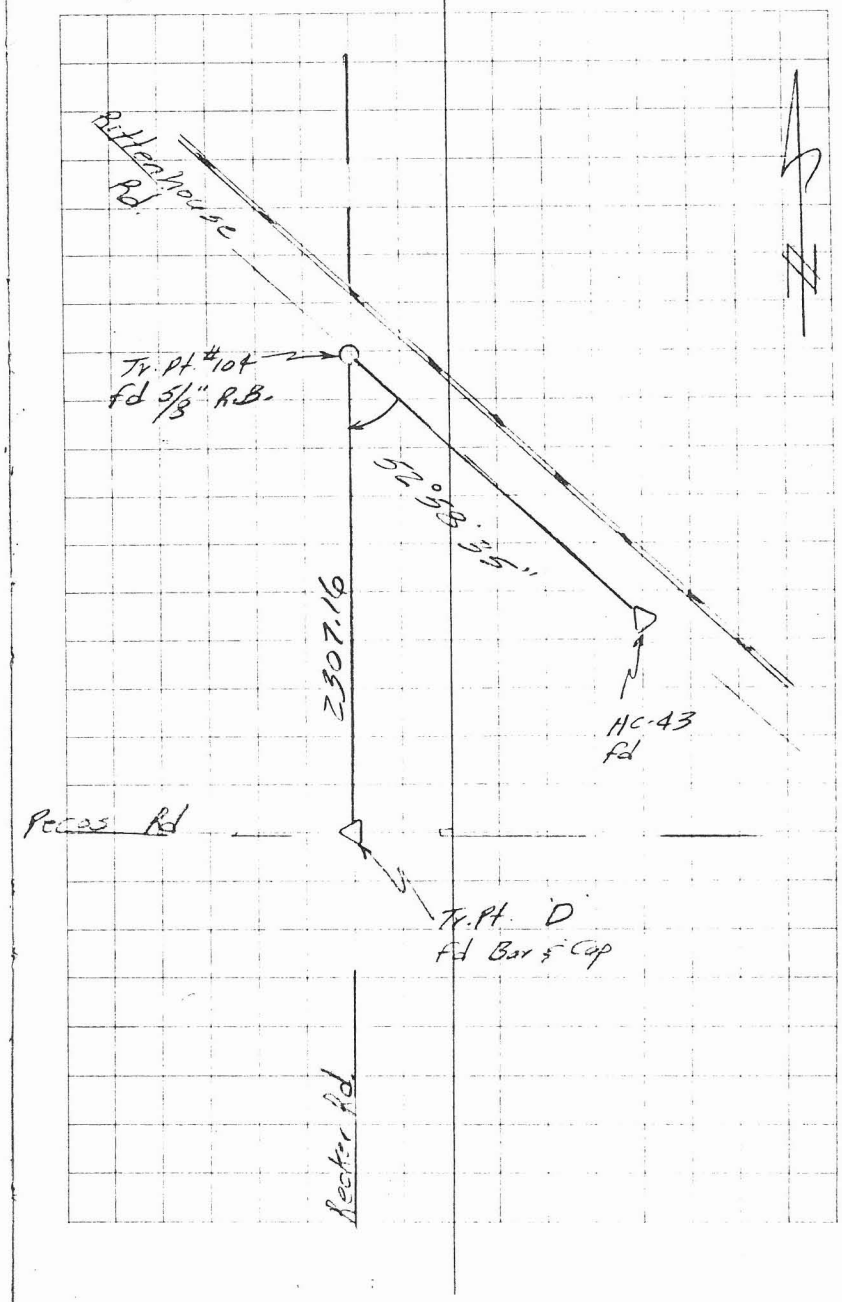
52°58'35" ✓

HD to TP 'D'

ZT = 89°55'03"

SD = 2307.16

HD = 2307.16 ✓



MCFCD — 3-Wire Levels - Williams Rd, Power & Pecos Roads

10/3/37

808/102

TBM 6.41				1320.185	Cut □ - Hub - Conc Lid 1000'± - 1000± W. of Williams AFB
	6.23				
	5.22	25.405			
	4.21				
			3.59		
TP#1			2.385	1323.02	Cut □ Top Curb - SW Cor. Intersection Power & Williams Fld Rd.
			1.18		
	9.52				
	8.08	31.10			
	6.64				
			7.46		
TP BH 'A'			5.40	1325.70	B.C. on H.H @ Ent. to Williams AFB
			3.35		
	7.63				<1325.64>
	3.565	31.265			
	3.50				
			9.665		
TP#1			8.23	1323.035	Cut □ - Loop Return
			6.80		
	3.37				
	2.14	25.175			
	0.915				
			5.96		
TBM 6.41			4.97	1320.205	cut □ - Loop Return
			3.98		<1320.185>

MCFCD | 3-Wire Levels Power & Recos — Williams Rd

TBM HC-43			
	8.10		
	6.135	28.975	
	4.175	↑	
			4.58
TP # 2			2.93
			1.28
	4.985		
	3.95	29.995	
	2.925	↑	
			4.605
TP # 3			3.42
			2.23
	4.57		
	3.33	29.905	
	2.10	↑	
			5.73
TP # 4			4.48
			3.235
	5.77		
	4.59	30.015	
	3.41	↑	

1/3/37

303
104

1322.84	CPS @ Rittenhouse Rd & Canal —
1326.045	R.R. Spk - N. Rail — 350'± SE of R.R. Bridg.
1326.575	R.R. Spk - N Rail 800'± SE of RR Bridg.
1325.425	CPS - Fc Cor. - @ Recos Rd E. of R.R.

MCFCD | 3-Wire Levels - Williams Fld, Power & Pecos Roads

		1330.015 ↑	
			5.48
TP#5			4.33
			3.18
	6.61		
	5.32	31.005 ↑	
	4.035		
			5.87
TP#6			4.72
			3.57
	7.29		
	6.10	32.385 ↑	
	4.91		
			5.73
TP#7			4.60
			3.46
	6.15		
	5.48	33.265 ↑	
	4.80		
			1.69
Mt. Pt. 'C'			0.94
			0.20
	1.55		
	0.80	33.125 ↑	
	0.05		

10/3/37

808/106

1325.685	Hub @ Fc - N. side Pecos - 1200'± W. of Power Rd.
1326.235	Hub @ Fc - N. side Pecos - 700'± W. of Power Rd.
1327.785	Hub @ Fc - N side Pecos 200'± W. of Power Rd.
1332.325	Pk's @ Pecos & Power Roads <1330.67>

MCFCD | 3-Wire Levels – Williams Fld, Power & Pecos Roads

1333.125 ↑

6.01

TP #7

5.34

4.67

5.835

4.71 32.495

3.59 ↑

7.42

TP #6

6.21

5.01

5.98

4.845 31.13

3.71 ↑

6.745

TP #5

5.45

4.16

5.76

4.62 30.30

3.48 ↑

6.07

TP #4

4.88

3.685

5.80

4.55 29.97

3.305 ↑

10/3/37

808/108

1327.735 Hub - Loop Return

1326.285 Hub - Loop Return

1325.68 Hub - Loop Return

1325.42 CPS - Fe Co - Loop Return

10/3/37

MCFCD	3-Wire Levels – Williams Power & Feeds			Fld, Roads
		1329.97 ↑		
				4.645
TP #3				3.415
				2.18
	4.51			
	3.33	29.885		
	2.15	↑		
				4.905
TP #2				3.87
				2.83
	4.70			
	3.05	29.065		
	1.40	↑		
				8.22
TBMHC-43				6.25
				4.29

1326.555 R.R. Spk – Loop Return

1326.015 R.R. Spk – Loop Return

1322.815 CPS – Loop Return
<1322.84>

MCFCP	3-Wire Leveling - Power & Recise		Williams Rd, Roads
TBM-VC-21			
	7.24		
	5.955	17.59	
	4.67	↑	
			7.47
TP #8			6.06
			4.65
	6.655		
	5.62	17.15	
	4.58	↑	
			4.09
TP #9			2.78
			1.47
	4.55		
	3.165	17.535	
	1.77	↑	
			3.83
TP #10			2.425
			1.02
	3.845		
	2.45	17.56	
	1.065	↑	

10/3/37

808
112

1311.635	Bar Cap – Rector Rd 300'± N. of Rittenhouse Rd.
1311.53	CPS-Po.Pole-E.Side Rector Rd – 200'S. of Rittenhouse Rd
1314.37	CPS- Po.Pole -E. Side Rector Rd – 670'±S. of Rittenhouse Rd
1315.11	CPS- Po Pole – E. Side Rector Rd – 1230'± S. of Rittenhouse Rd.

MCFCD — 3-Wire Levels — Williams Fld, Powell & Pecos Roads

10/8/87

808/114

			1317.56		
				3.29	
TP #11				1.89	1315.67 — CPS - Po.Pole - E. side Rector Rd - 1800'± S. of Rittenhouse Rd.
				0.49	
	4.39				
	3.00		18.67		
	1.61				
				4.80	
Tr.Pt. D'				3.565	1315.105 — Bar & Cap - Intersection of Rector Rd & Pecos Rd. <1315.16>
				2.33	
	4.67				
	3.435		18.54		
	2.20				
				4.26	
TP #11				2.88	1315.66 — CPS - Po Pole - Loop Return
				1.50	
	3.37				
	1.98		17.64		
	0.59				
				3.93	
TP #10				2.54	1315.10 — CPS - Po Pole - Loop Return
				1.14	
	4.01				
	2.61		17.71		
	1.21				

MCKCO — 3-Wire Leads - Williams Fld, Power & Pecos Roads

1317.71

4.75
3.36
1.965

TP #9

4.14
2.84
1.54

17.19

6.70
5.67
4.65

TP #8

7.38
5.94
4.53

17.48

7.13
5.84
4.56

TBM VC-21

1314.35 — CPS-Po Pole - Loop Return

1311.52 — CPS-Po Pole - Loop Return

1311.64 — Bar & Cap - Loop Return

<1311.635>

MCFCD Traverse – Block 8

(Con't from Pg 90)

303 → 304 → 305

TP#126 → HC-61 → RO-47

$\angle$#1 = 293°43'07" (293°42'54")

$\angle$#61 = 322°17'32" (322°17'30")

MN = 293°42'55" (293°42'55") ✓

Use 293°42'55"

HD to TP#126

ZX = 90°05'48"

SD = 2894.33

HD = 2894.325 ✓

HD to RO-47

ZX = 90°12'30"

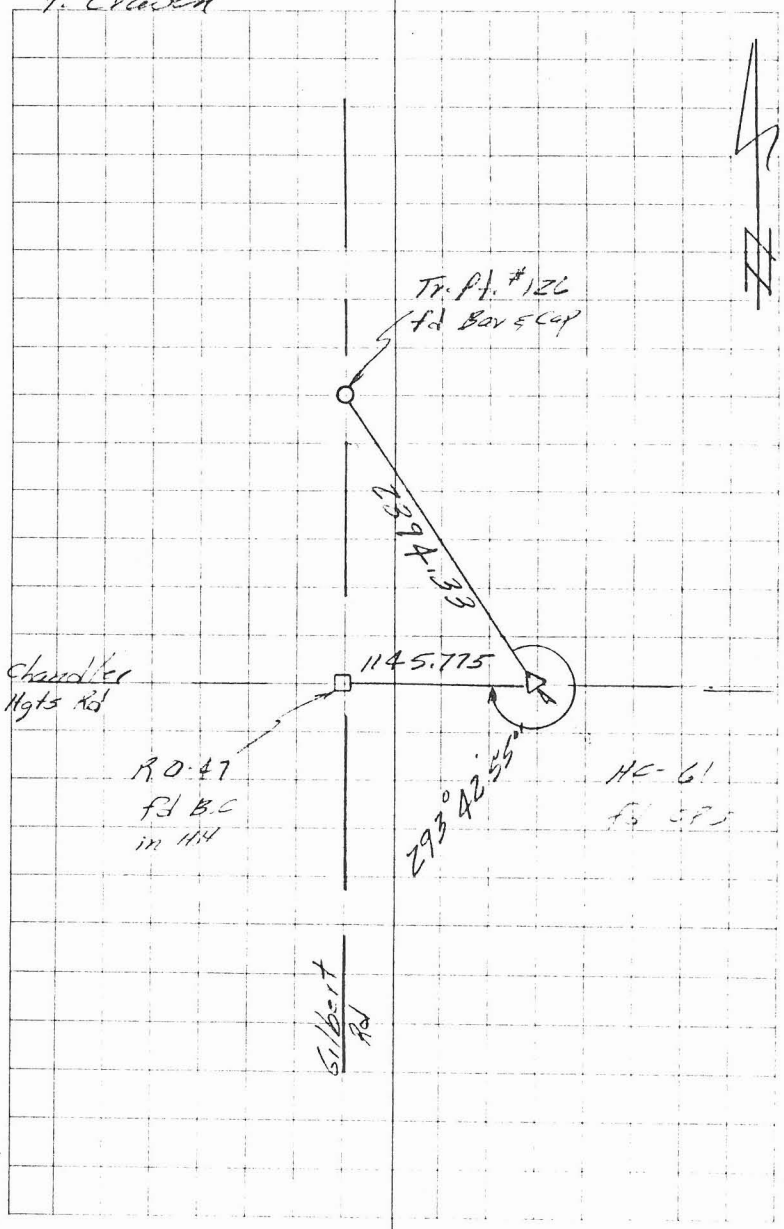
SD = 1145.78

HD = 1145.77 ✓

L. Van Dyke
R. McMahon
T. Crowson

10/14/87

308
118



MCFCD | Traverse – | Block 8

10/14/87

303/120

304 → 305 → 306

HC-61 → RO-47 → RO-46

$\angle$#1 = 179°09'33"

$\angle$#6 = 354°57'36"

MN = 179°09'36" ✓

HD to HC-61

ZA = 89°53'27"

SD = 1145.78

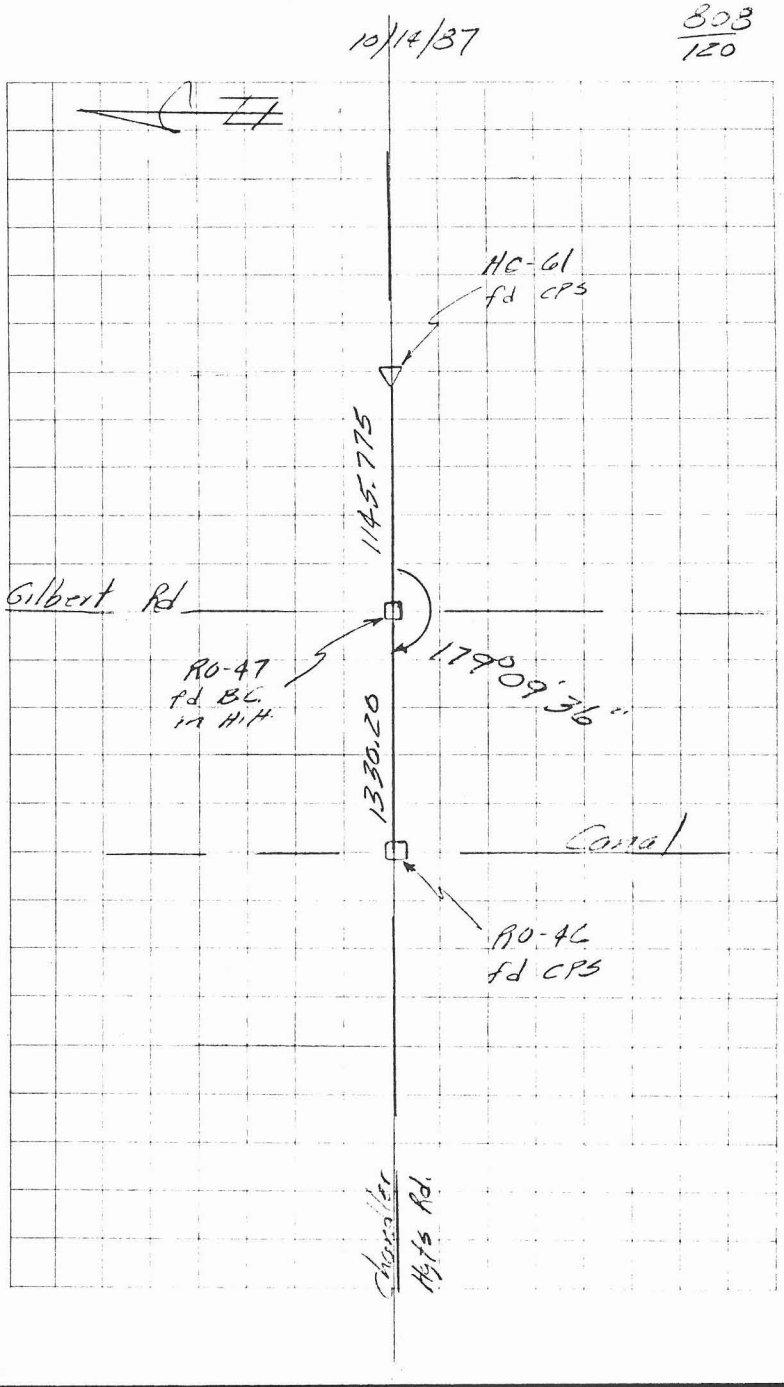
HD = 1145.78 ✓

HD to RO-46

ZA = 90°10'50"

SD = 1330.20

HD = 1330.195 ✓



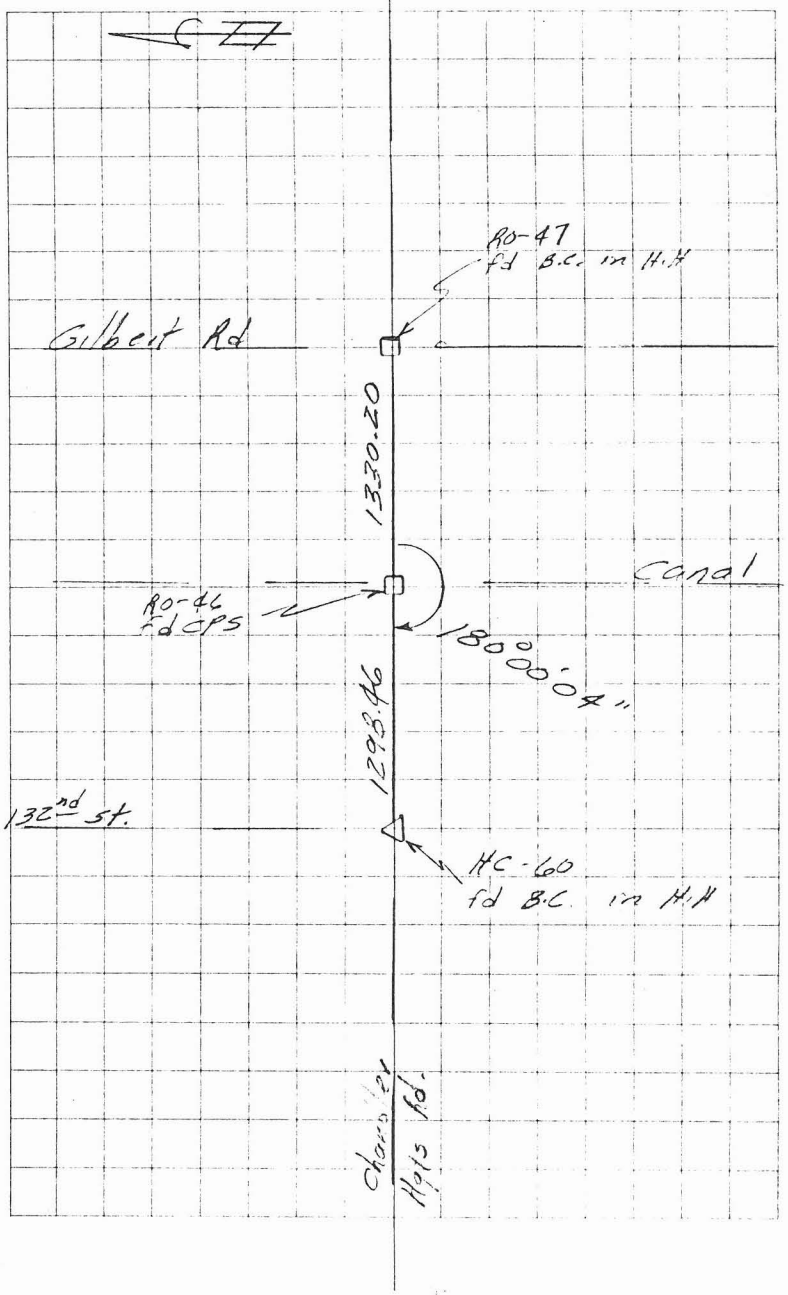
MCFLD | Traverse – | Block 8 | | 10/14/37 | 808/122

RO-47 (305) → RO-46 (306) → HC-60 (307)

∡#1 = 180°00'00"
∡#4 = 00°00'23"
MN = 180°00'04" ✓

HD to RO-47
ZA = 89°54'03"
SD = 1330.20
HD = 1330.20 ✓

HD to HC-60
ZA = 90°15'54"
SD = 1298.48
HD = 1298.46 ✓



MCFCD | Traverse - | Block 8

L. Van Dyke
J. Thompson
T. Craven

10/15/37

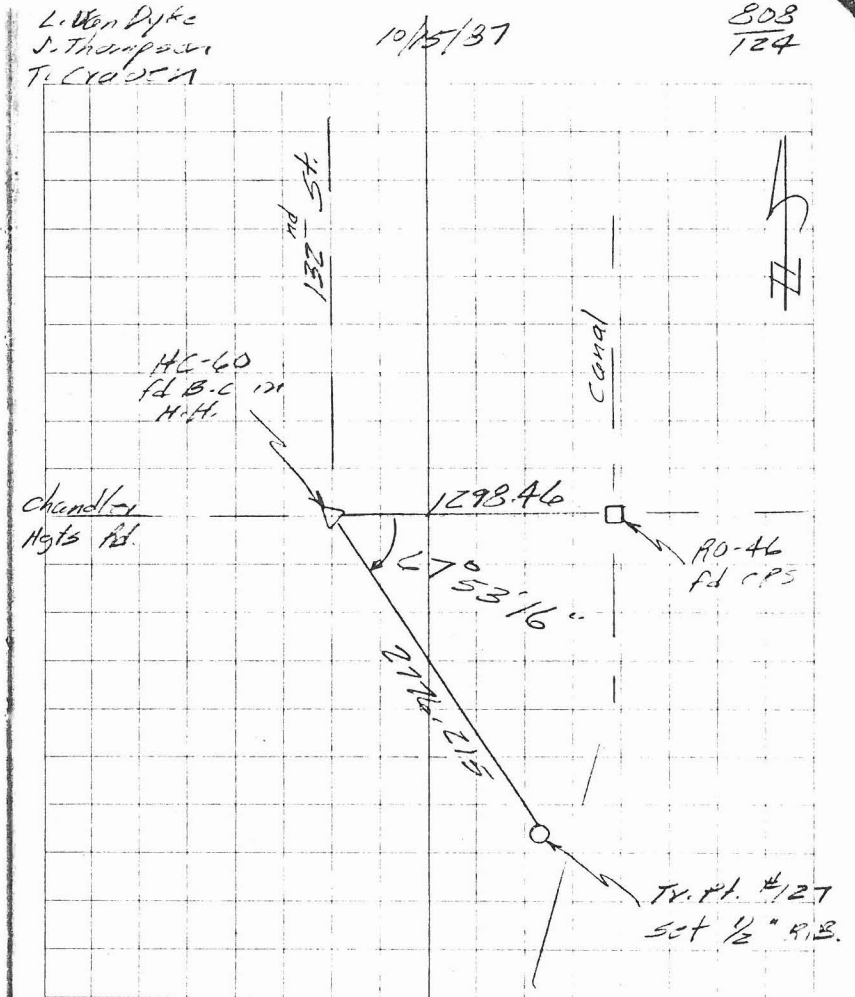
808/124

TP #127 (308) → HC-60 (307) → RS-46 (306)

∠#1 = 292°06'34"
∠#6 = 312°40'23"
MN = 292°06'44"
− 359 59 60" ✓
67°53'16" ✓

HD to R.O.-46
ZA = 89°49'24"
SD = 1298.455
HD = 1298.45 ✓

HD to TP #127
ZA = 89°58'46"
SD = 2776.22
HD = 2776.22 ✓



MCFCD Traverse – Block B

10/15/37

203/126

HC-60 (307) → TP #127 (308) → HC-65 (309)

∠#1 = 210°57'54"

∠#6 = 185°46'58"

MIA = 210°57'50" ✓

HD to HC-60

ZA = 90°05'03"

SD = 2776.215 ✓

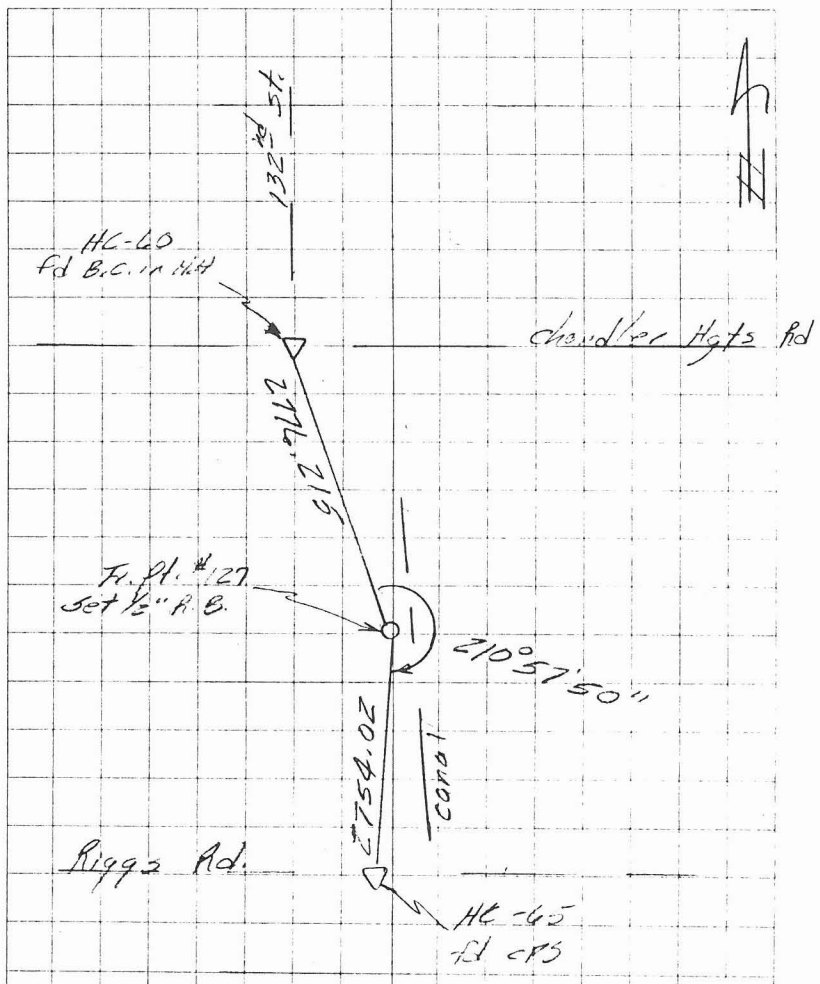
HD = 2776.21 ✓

HD to HC-65

ZA = 90°06'24"

SD = 2754.02

HD = 2754.015 ✓



MCFCD Traverse – Block 8

10/13/87

808/128

TP #127 → 308 → HC-65 → 309 → HC-66 → 310

∠#1 = 81°12'13"

∠#6 = 127°15'06"

MN ∠ = 81°12'13" ✓

81°12'31"

HD to TP #127

ZA = 89°57'12"

SD = 2754.025

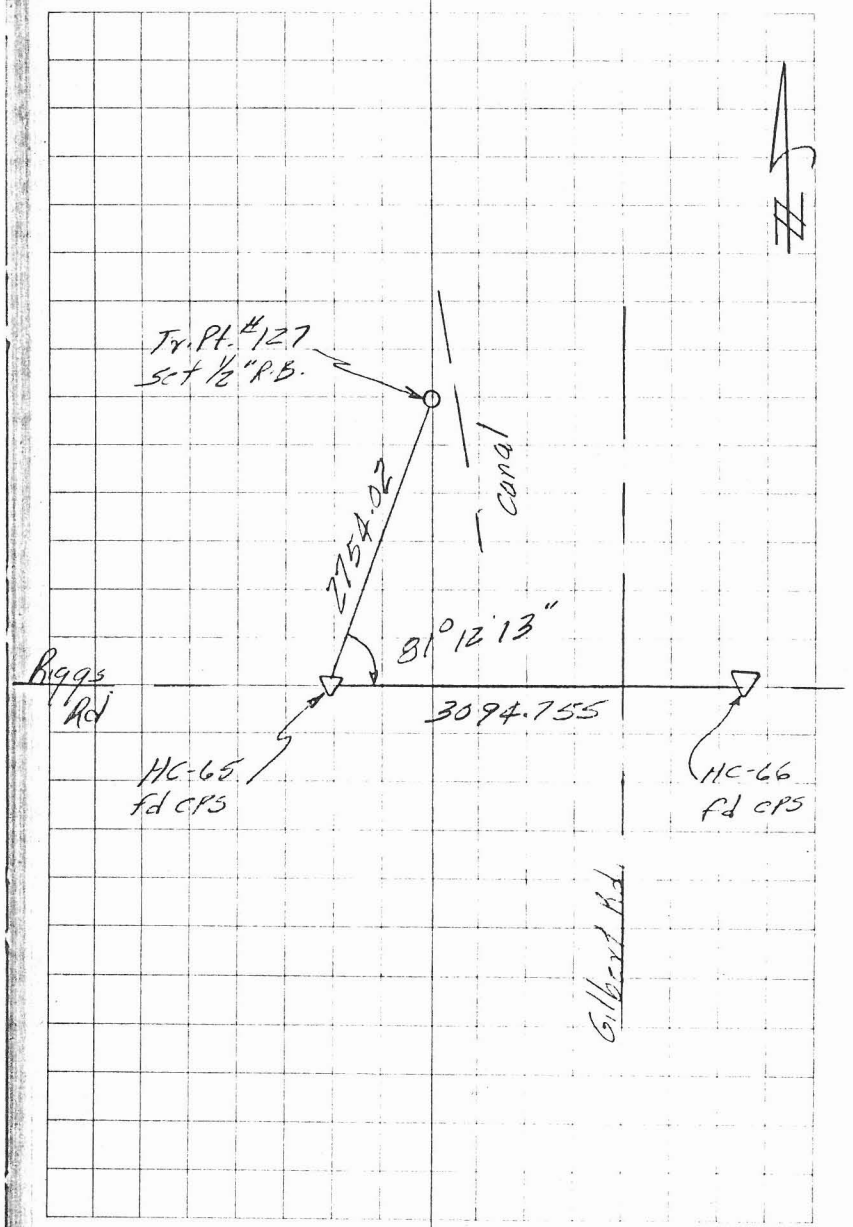
HD = 2754.025 ✓

HD to HC-66

ZA = 89°55'18"

SD = 3094.76

HD = 3094.755 ✓



MCFCD Traverse - Block 8

309 → 310 → 311

HC-65 → HC-66 → RO-48

∠#1 = 0°36'36"

∠#6 = 3°39'37"

MN ∠ = 0°36'36" ✓

HD to HC-65

ZA = 90°08'09"

SD = 3094.765 ✓

HD = 3094.755 ✓

HD to RO-48

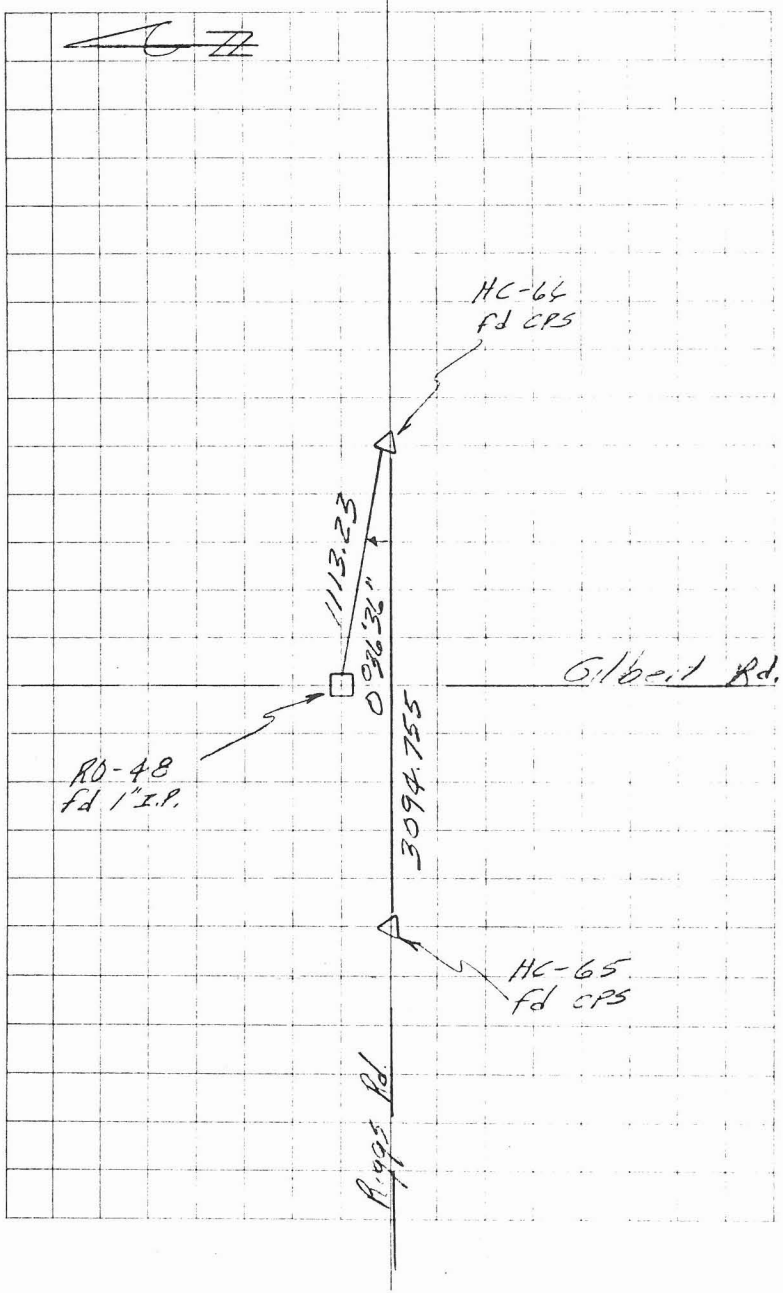
ZA = 90°07'36"

SD = 1113.24

HD = 1113.235 ✓

10/15/87

303
130



MCFCD — Traverse — Block A 8

312 — 311 — 310

TP #128 → RO-48 → HC-66

∠#1 = 180°46'20"

∠#6 = 04'38'21"

M/∠ = 180°46'24"

359°59'60"

179°13'36" ✓

HD to HC-66

ZA = 89°58'02"

SD = 1113.23

HD = 1113.23 ✓

HD to TP # 128

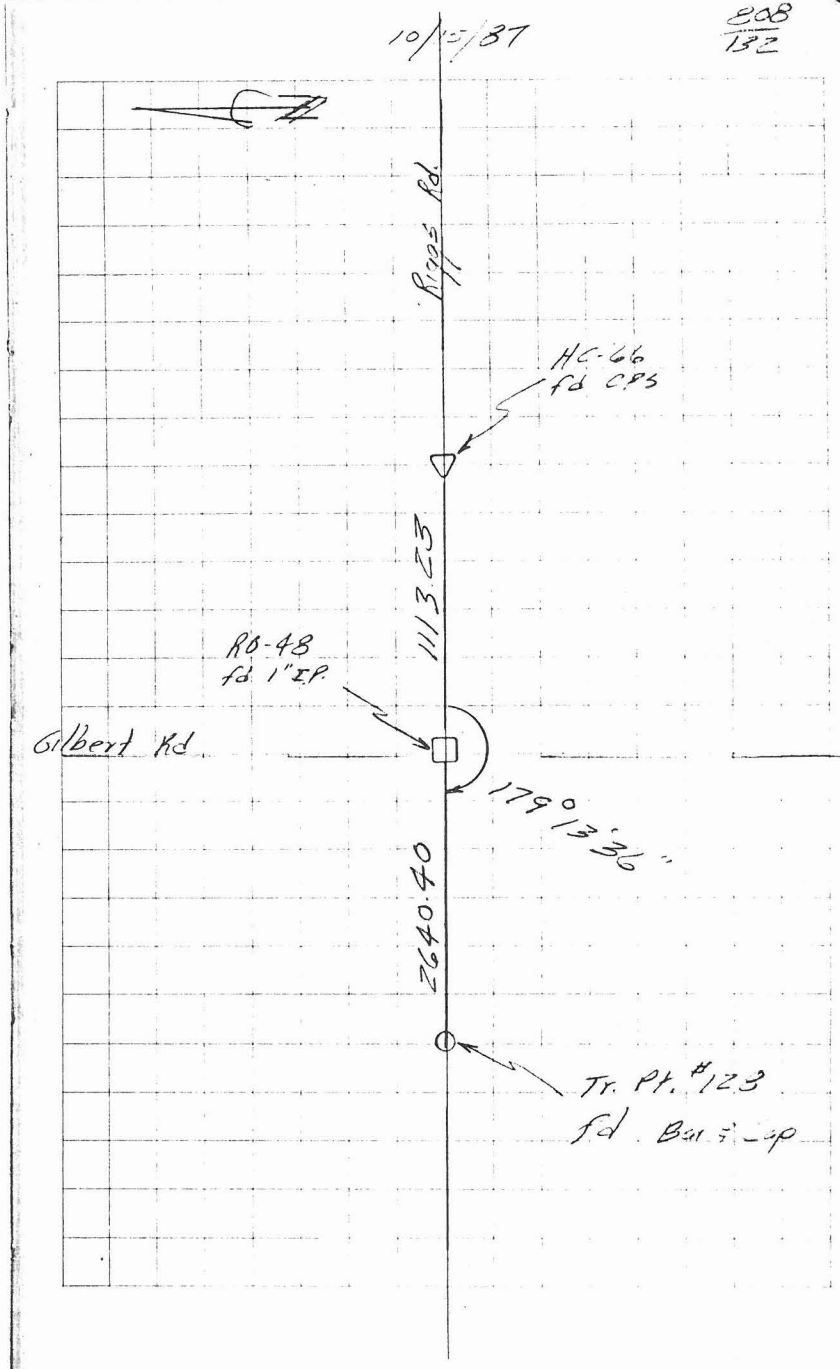
ZA = 90°08'54"

SD = 2640.41

HD = 2640.40 ✓

10/15/87

808
132



MCFCD Traverse - Block 8

10/15/87

303
134

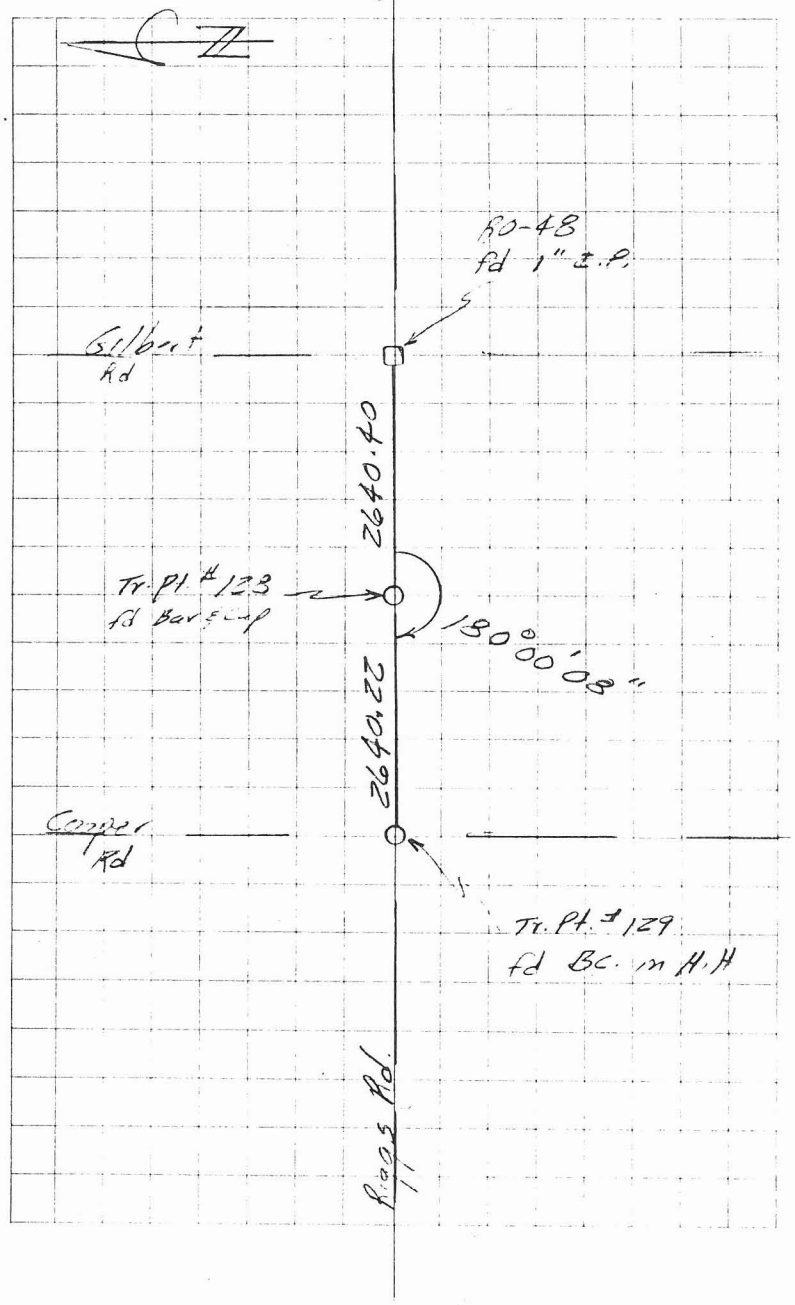
311 312 313

RO-48 → TP #128 → TP #129

∠#1 = 180°00'09"
∠#6 = 0°00'45"
MN∠ = 180°00'08" ✓

HD to RO-48
ZA = 89°54'12"
SD = 2640.40
HD = 2640.395 ✓

HD to TP #129
ZA = 90°12'36"
SD = 2640.23
HD = 2640.21 ✓



MCFCD Traverse - Block 8

312 313 314

TP# 128 → TP# 129 → TP# 130

$\measuredangle$#1 = 179°40'31"

$\measuredangle$#6 = 358°03'17"

MN $\measuredangle$ = 179°40'33" ✓

HD to TP# 128

Z$\measuredangle$ = 89°50'26

SD = 2640.235

HD = 2640.225 ✓

HD to TP# 130

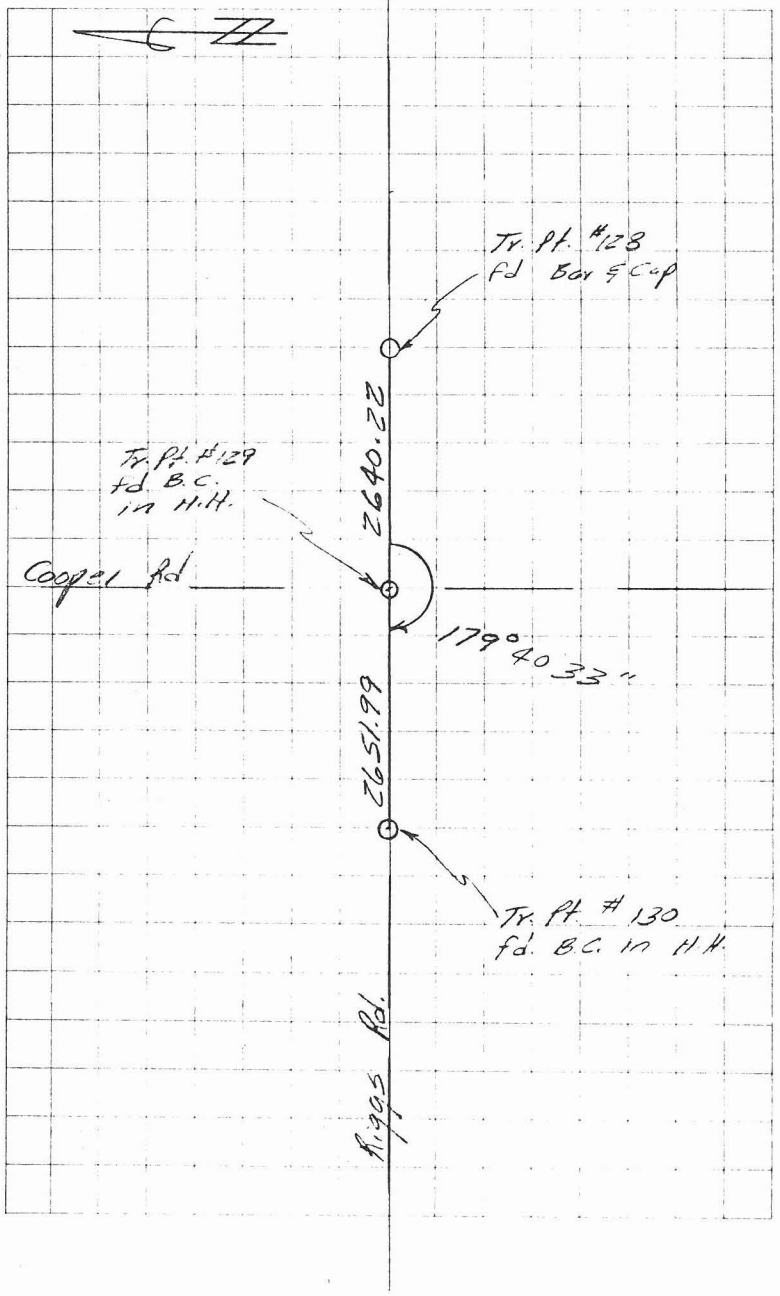
Z$\measuredangle$ = 90°09'39"

SD = 2651.995

HD = 2651.985 ✓

10/15/87

803/136



MCFCD Traverse — Block 8

(See Pg. 54)

313 → 314 → 315

TP #129 → TP #130 → HC-64

π

$\angle$#1 = 179°59'45"

$\angle$#2 = 359°57'54"

M/A = 179°59'39" ✓

HD to TP #129

ZA = 39°54'09"

SD = 2651.995

HD = 2651.99

HD to HC-64

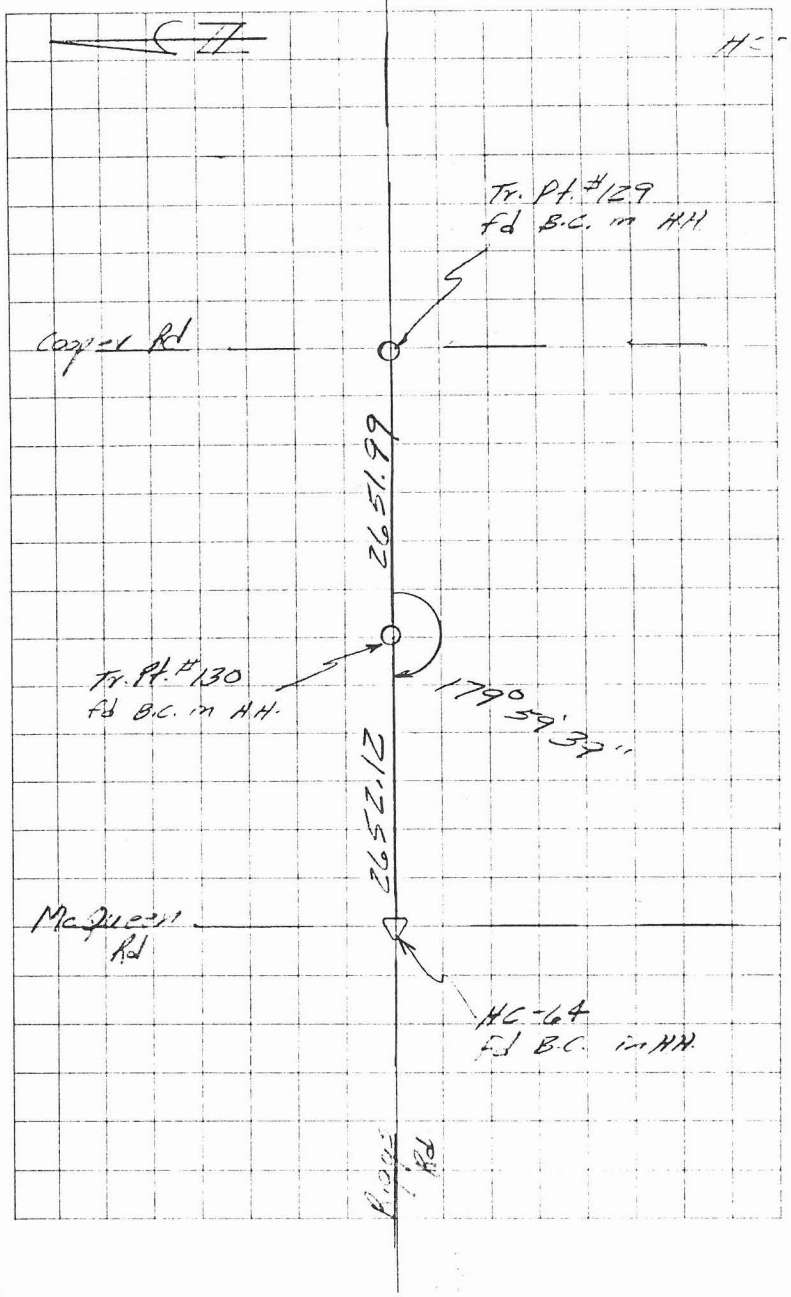
ZA = 90°06'18"

SD = 2652.125

HD = 2652.12 ✓

10/15/87

303
138



MCFCD Traverse — Block 8

(See Page 54)

314 315 316

TP #130 → HC-64 → HC-63

∠#1 = 180°27'17"

∠#62 = 2°43'54"

M/∠ = 180°27'19" ✓

HD to TP #130

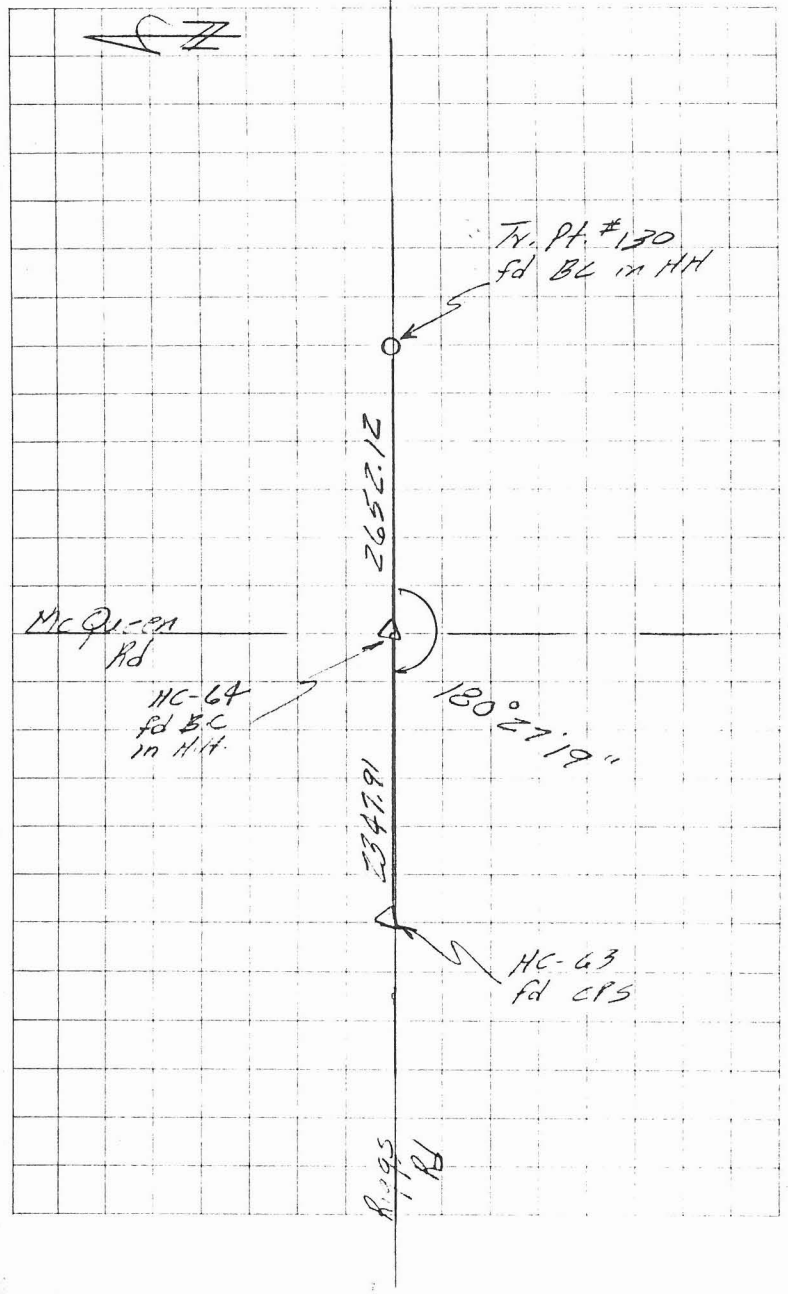
ZK = 89°57'33"

SD = 2652.125

HD = 2652.125 ✓

10/15/37

808/170



MCFCD Traverse - Block 3

HC# 4 → TP# 320 40 A → TP# 321 200

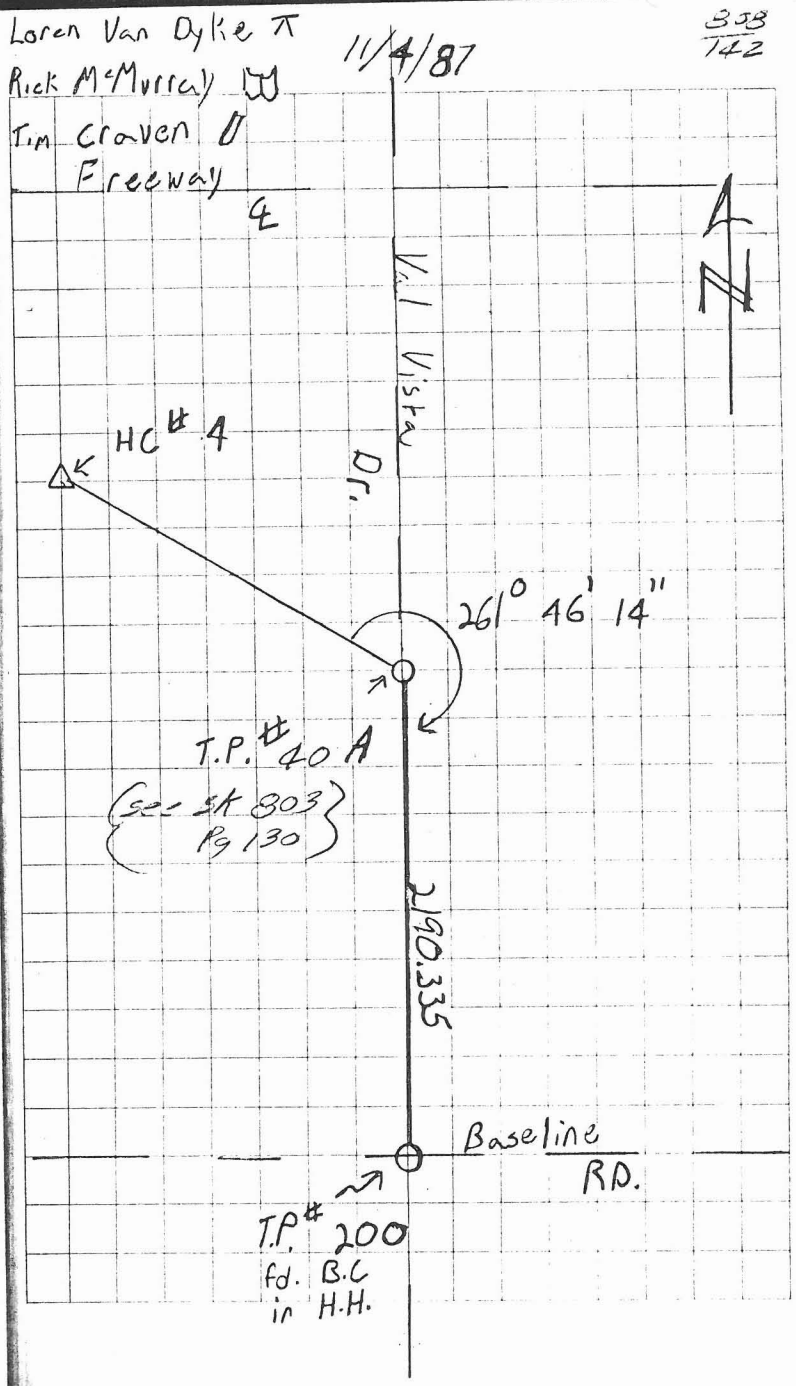
⊼1 261° 46' 27"
⊼6 130° 37' 26"
M⊼ = 261° 46' 14"

HD to TP# 200
z⊼ = 90° 03' 03"
SD = 2190.34
HD = 2190.34

Loren Van Dyke ⊼
Rick McMurray
Tim Craven
Freeway

11/4/87

338
742



MCFCD Traverse Block-3

320 321 322

TP # 40 A → T.P. # 200 → TP # 201

∠1 = 184° 46' 03"

∠6 = 28° 35' 14"

M ∠ = 184° 45' 52"

H.D. to T.P. # 200

∠ = 89° 50' 22"

S.D. = 2190.34

H.D. = 2190.33

H.D. to T.P. # 201

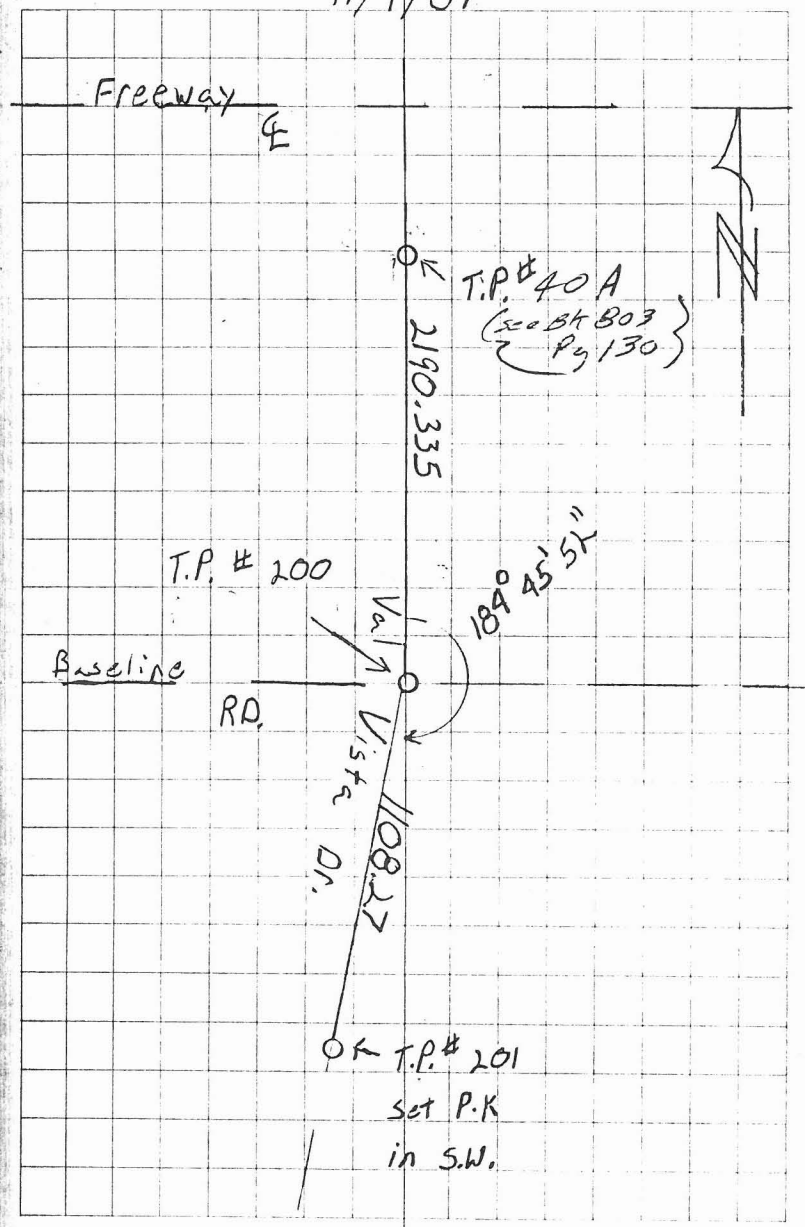
∠ = 89° 43' 42"

S.D. = 1108.26

H.D. = 1108.25

938/144

11/4/87



MCFCD Traverse - Block 3

321	322	323
T.P.# 200 →	T.P.# 201 →	T.P.# 202

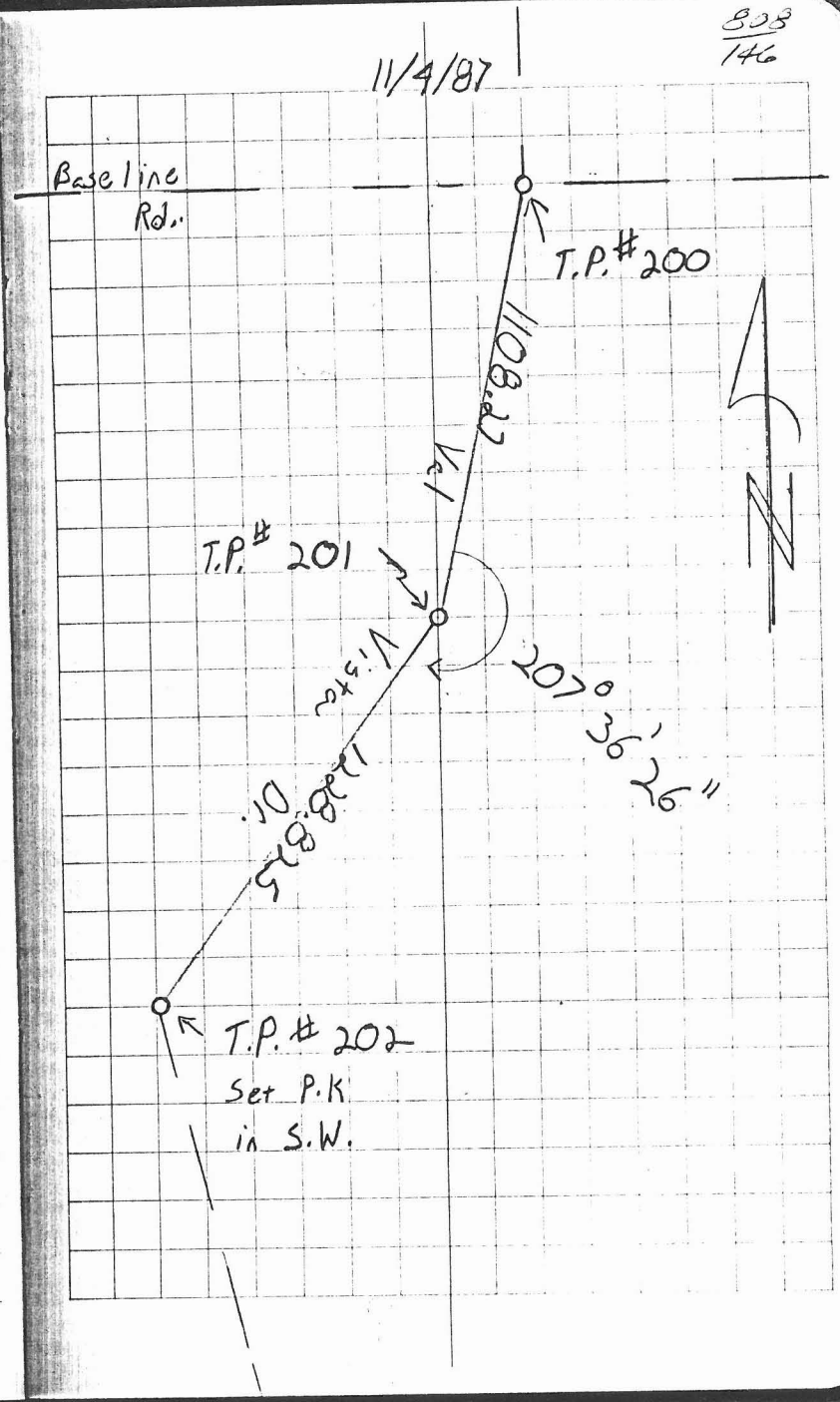
∡1 = 207° 36' 36"
∡6 = 165° 38' 33"
M∡ = 207° 36' 26"

H.P. to T.P.# 200
z∡ = 90° 11' 02"
S.D. = 1108.30
H.P. = 1108.29

H.P. to T.P.# 202
z∡ = 90° 19' 14"
S.D. = 1228.85
H.P. = 1228.83

11/4/87

833/146



MCFCD Traverse - Block 3

322 323 324

T.P.# 201 → T.P.# 202 → T.P.# 203

∠1 = 147° 26' 40"

∠6 = 169° 38' 52"

M∠ 147° 26' 29"

HD to T.P.# 201

2∠ = 89° 34' 52"

S.D. = 1228.83

H.D. = 1228.82

H.D. to T.P.# 203

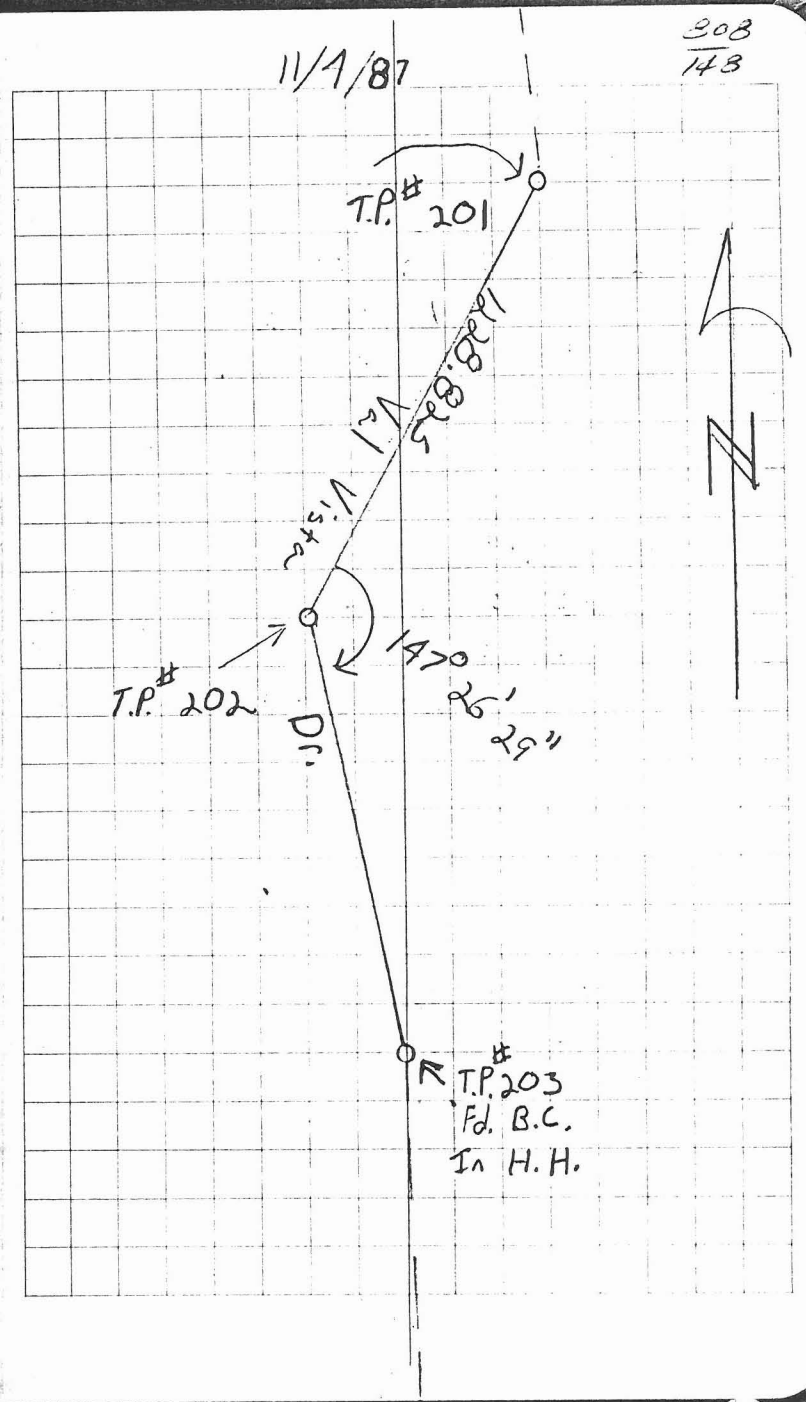
2∠ = 90° 02' 08"

S.D. = 508.02

H.D. = 508.02

11/1/87

908/148



MCFCD Traverse Block-3

T.P.# 323 202 → T.P.# 324 203 → T.P.# 325 204

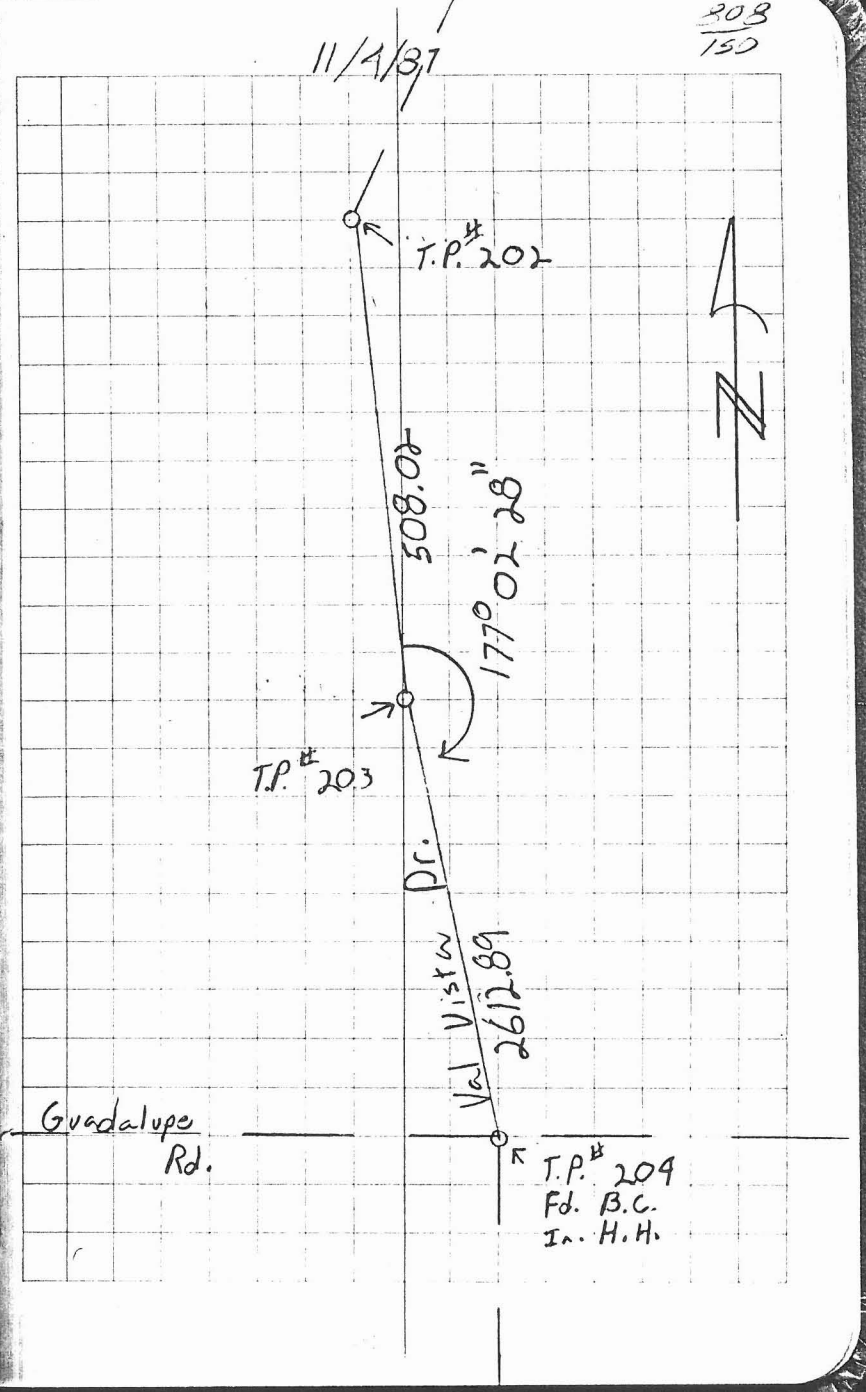
∠1 = 182° 57' 38"
∠6 = 17° 45' 10"
M∠ = 182° 57' 32"
− 359° 59' 60" ✓
177° 02' 28"

H.D. to T.P.# 202
Z∠ = 89° 57' 42"
S.D. = 508.02
H.D. = 508.02

H.D. to T.P.# 204
Z∠ = 89° 52' 15"
S.D. = 2612.90
H.D. = 2612.89

11/4/87

208/150



MCFCD Traverse - Block B

T.P. # 203 — T.P. # 204 — T.P. # 205

(324) (325) (326)

∠1 181° 07' 41"

∠6 6° 45' 34"

M∠ 181° 07' 36"

H.D. to T.P. # 203

z∠ = 89° 59' 46"

S.D. = 2612.89

H.D. = 2612.89

H.D. to T.P. # 205

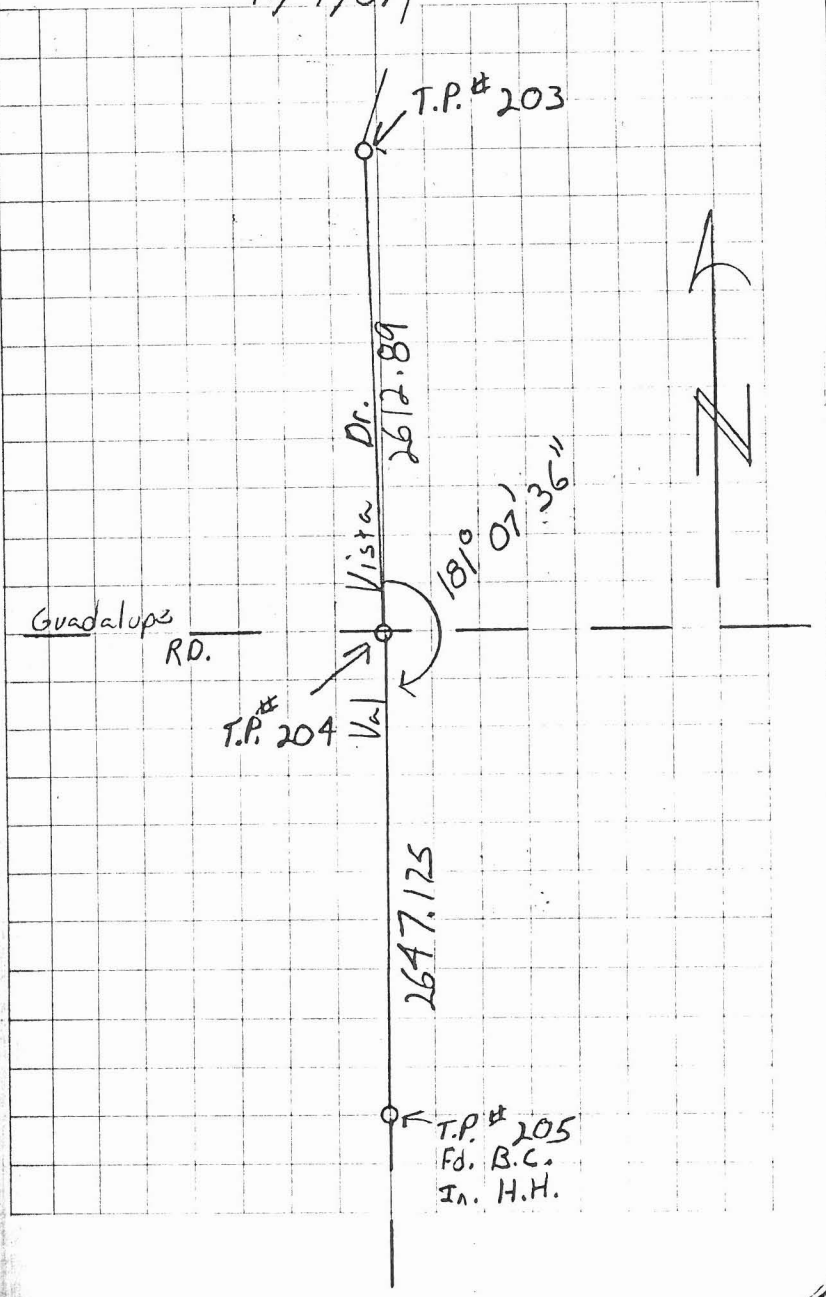
z∠ = 89° 58' 56"

S.D. = 2647.17

H.D. = 2647.17

11/4/87

808/152



MCFCD Traverse Block - 3

T.P.# 204 (325) → T.P.# 205 (326) → T.P.# 206 (327)

∠1 = 180° 23' 58"

∠6 = 02° 23' 21"

M∠ = 180. 23' 54"

H.D. to T.P.# 204

Z∠ = 89° 52' 52"

S.D. = 2647.19

H.D. = 2647.18

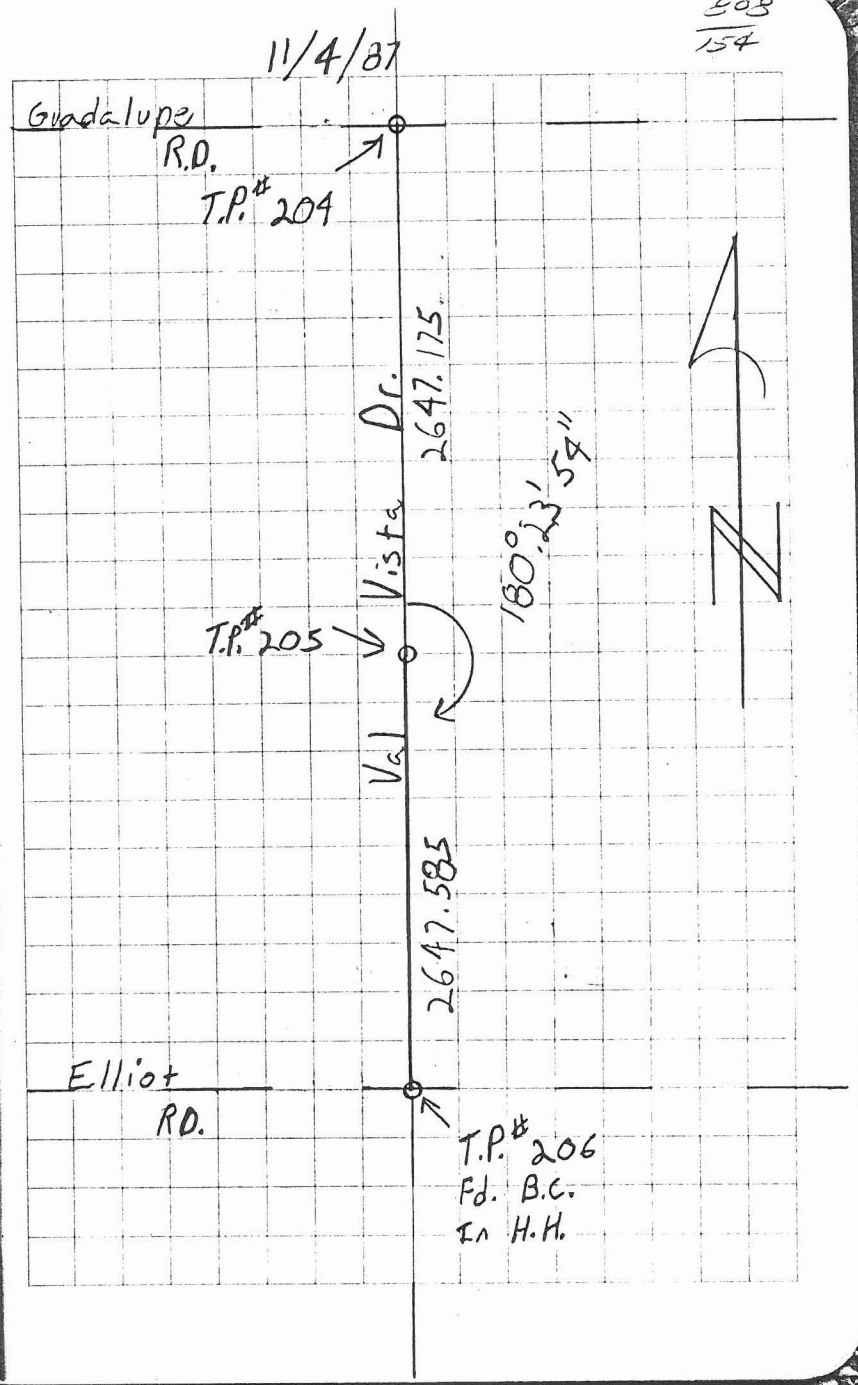
H.D. to T.P.# 206

Z∠ = 89° 55' 20"

S.D. = 2647.58

H.D. = 2647.58

11/4/87



608/154

MCFCD

Traverse - Block 3

T.P.# 205 (326) → T.P.# 206 (327) → T.P.# 207 (328)

↑

∠1 = 181° 02' 33"

∠6 = 6° 14' 12"

M∠ = 181° 02' 22"

H.D. to T.P.# 205

z∠ = 89° 56' 14"

S.D. = 2647.59

H.D. = 2647.59

H.D. to T.P.# 207

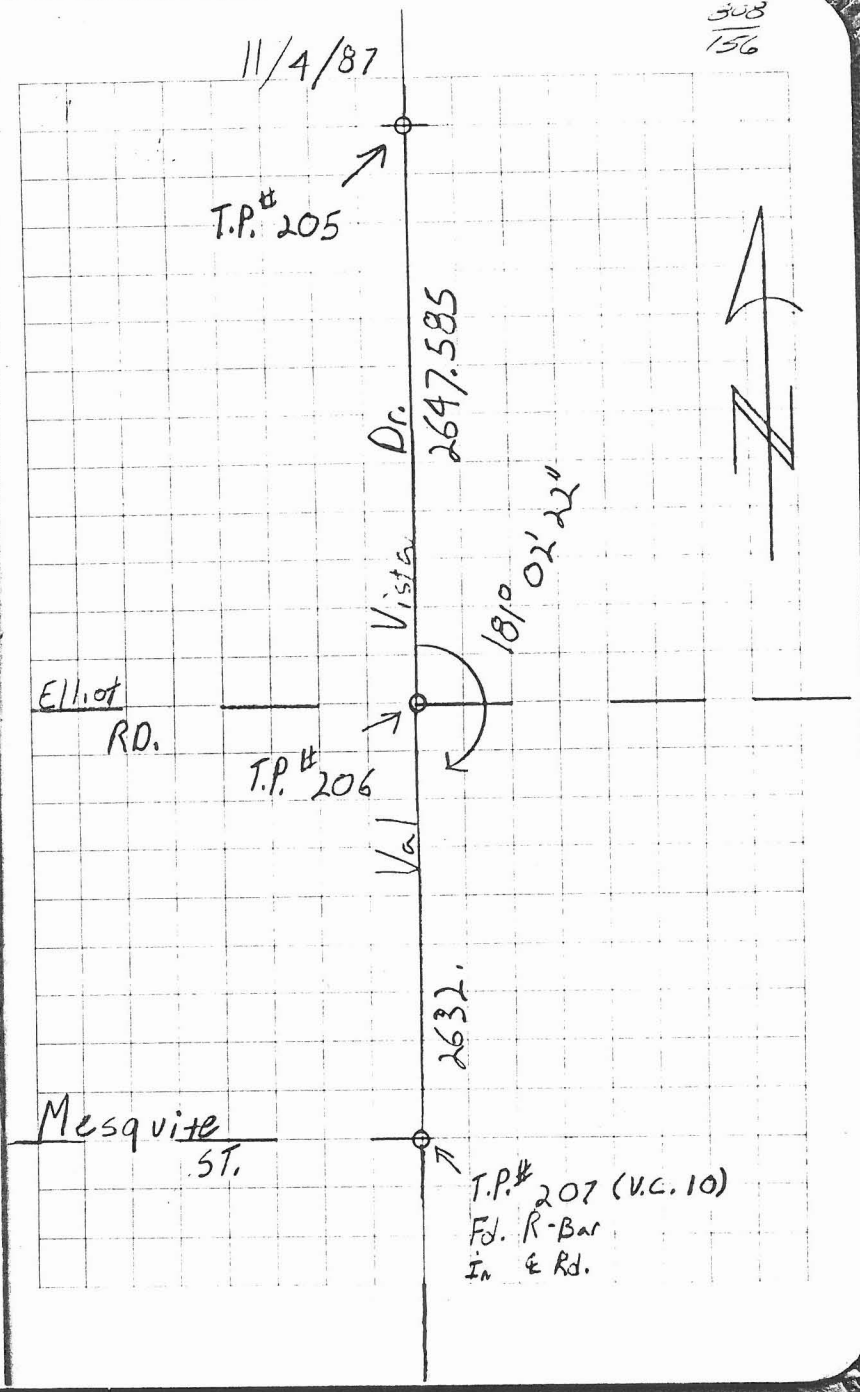
z∠ = 89° 52' 42"

S.D. = 2632.99

H.D. = 2632.98

11/4/87

308
156



Level Peg

M

10/7/87

T @ Mid-point

#1 = 5.33

#2 = 4.825

Diff. = 0.505

okay

T @ #2

#1 = 5.29

#2 = 4.78

Diff = 0.51

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NCFCD
(1002)

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35901.00	Traverse Block 2	
35901.00	Traverse Block 2	
35901.00	Traverse - Block 2	
35901.00	Traverse - Block 4	
35901.00	Traverse - Block 4	
35901.00	Traverse - Block 4	
35901.00	Traverse - Block 4	
35901.00	Traverse - Block 4	
35901.00	Traverse - Block 5	
35901.00	Traverse - Block 6	
14013.00	DV Airport - Markings	

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MCFCD	Traverse	Block C
26	27	33
RO-9 →	HC-1 →	TP #20

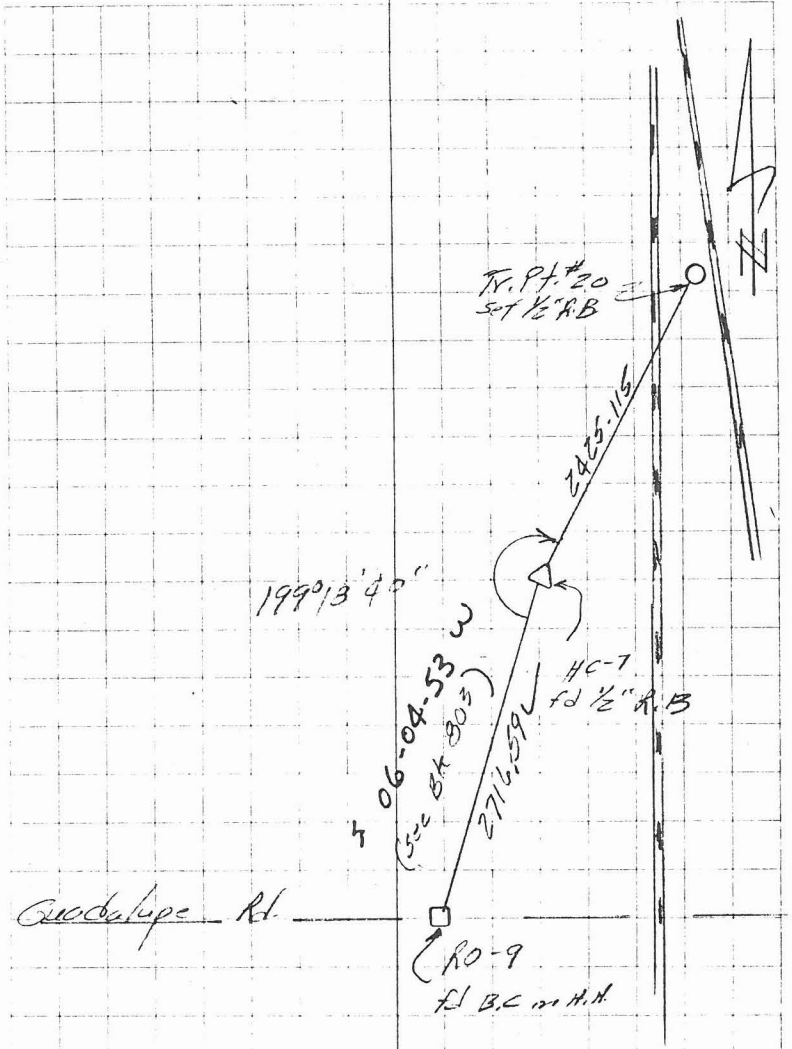
$\measuredangle$ #1 = 199°18'42"
$\measuredangle$ #6 = 115°52'02"
MN $\measuredangle$ = 199°18'40" ✓

HD to RO-9
$\Sigma\measuredangle$ = 89°59'18"
S.D. = 2716.59
H.D. = 2716.59 ✓

HD to TP #20
$\Sigma\measuredangle$ = 90°00'33"
S.D. = 2425.12
H.D. = 2425.12 ✓

9/1/37

804
2



MCFCD | Traverse | Block | Z

27 — 33 — 34

HC-7 → TP # 20 → RO-1

∠#1 = 130°24'45"

∠#6 = 62°29'23"

MM = 130°24'54" ✓

HO to HC-7

ΣX = 90°03'42"

S.D. = 2425.11

H.D. = 2425.11 ✓

HO to RO-1

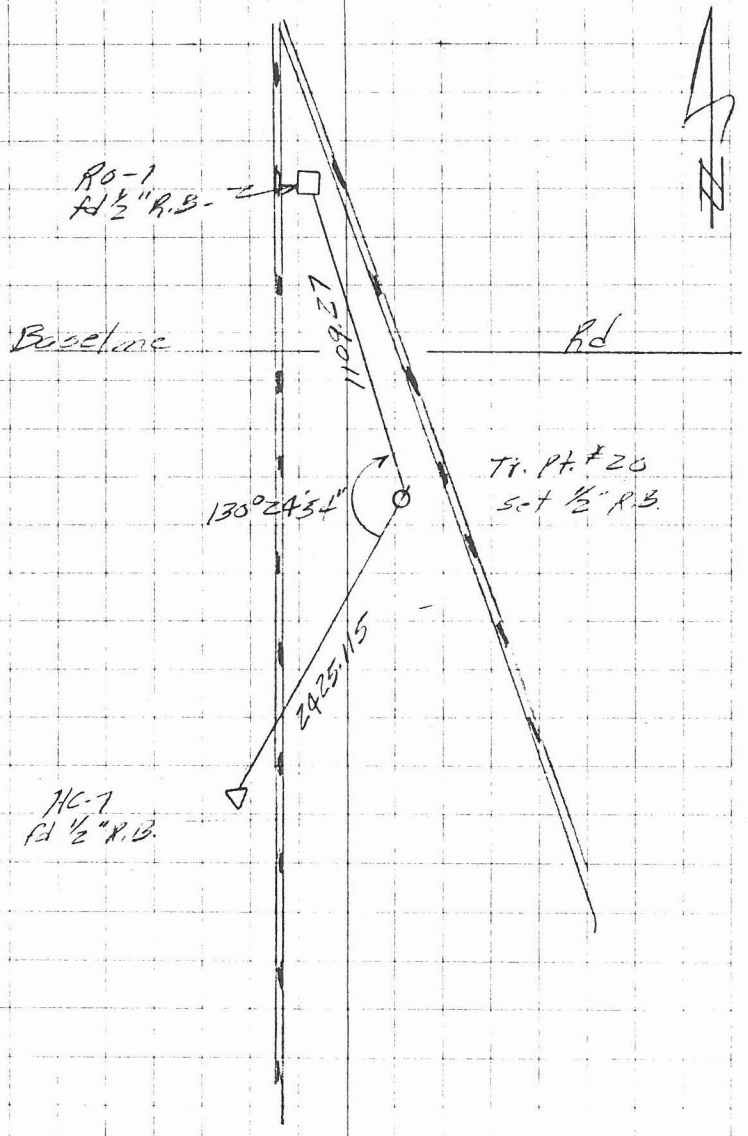
ΣX = 89°54'44"

S.D. = 1109.27

H.D. = 1109.27 ✓

9/1/87

304/4



MCFCD | Traverse | Block C

9/1/37

804
C

35	34	33
TP #21	→ RO-1 →	TP #20

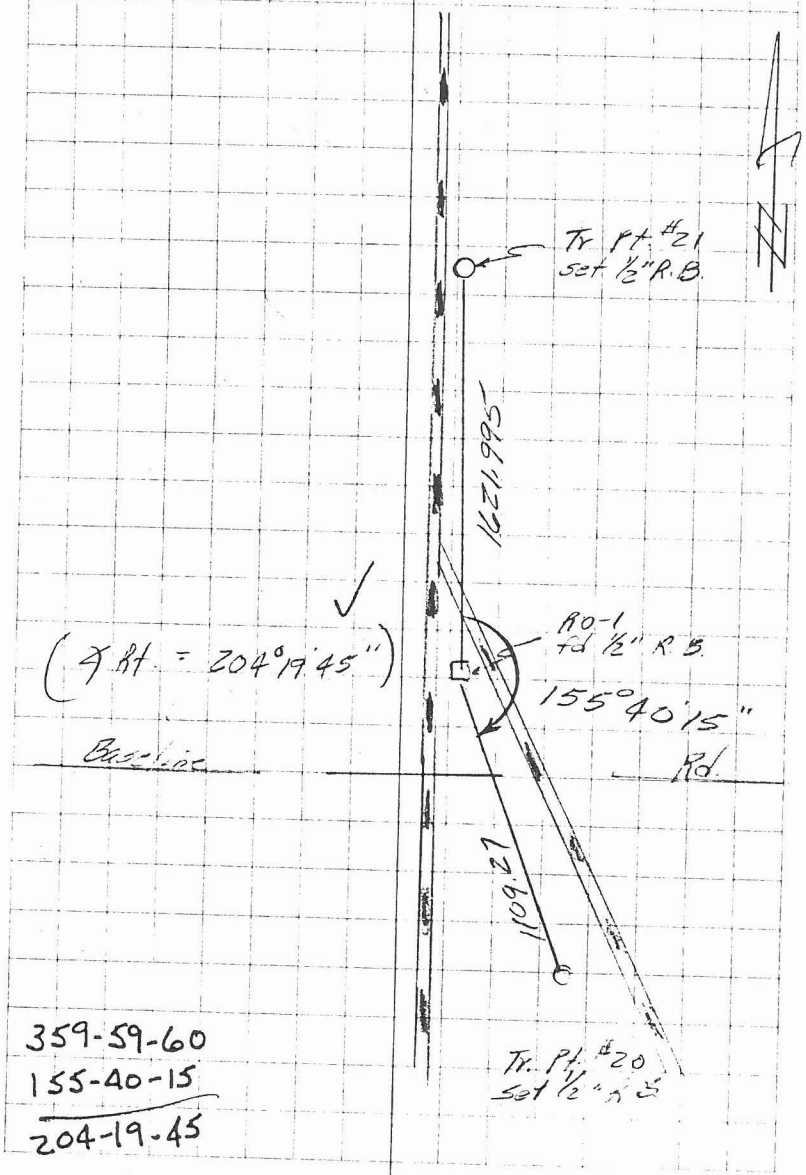
∠#1 = 155°40'09"
∠#6 = 214°01'30"
MNL = 155°40'15" ✓

H.D. to TP #20
ΣL = 90°09'02"
S.D. = 1109.27
H.D. = 1109.27 ✓

H.D. to TP #21
ΣL = 90°03'15"
S.D. = 1621.99
H.D. = 1621.99 ✓

(∠ Rt. = 204°19'45") ✓

359-59-60
155-40-15
204-19-45



MCFCD | Traverse - Block Z

9/1/87

S-4
8

34	35	36
RO-1	→ TP #21 →	HC-1

$\measuredangle$ #1 = 101°02'17"

$\measuredangle$ #2 = 246°14'18"

MN $\measuredangle$ = 101°02'23" ✓

HD to TP #21

ZX = 90°00'38"

S.D. = 1622.00

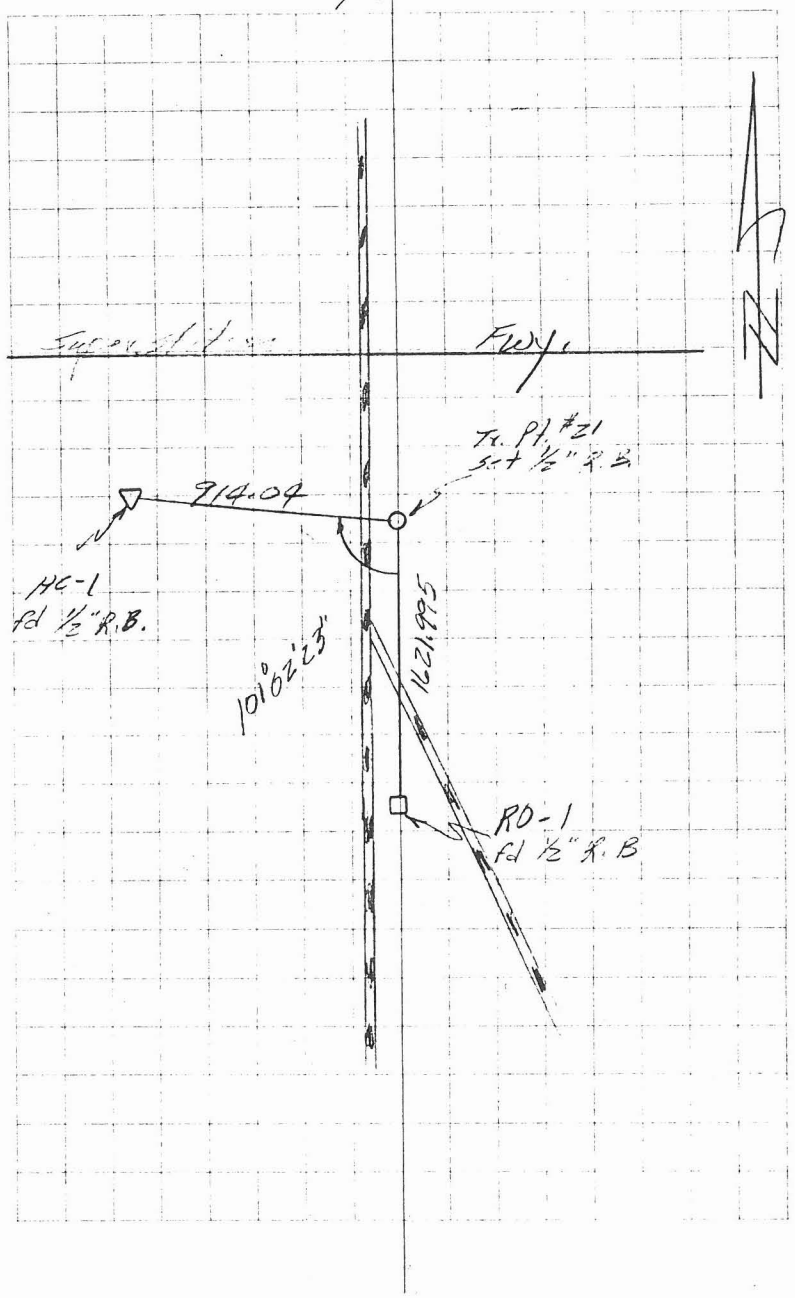
H.D. = 1622.00 ✓

HD to HC-1

ZX = 90°07'37"

S.D. = 914.04

H.D. = 914.04 ✓



MCFCD | Traverse Block Z

9/1/37

804/10

37 — TP #22 → 36 — HC-1 → 35 — TP #21

$\measuredangle$ #1 = 7°03'46"

$\measuredangle$ #2 = 42°22'23"

HNK = 7°03'44" ✓

HD to TP #21

$\measuredangle$ = 89°58'18"

S.D. = 914.04

H.D. = 914.04 ✓

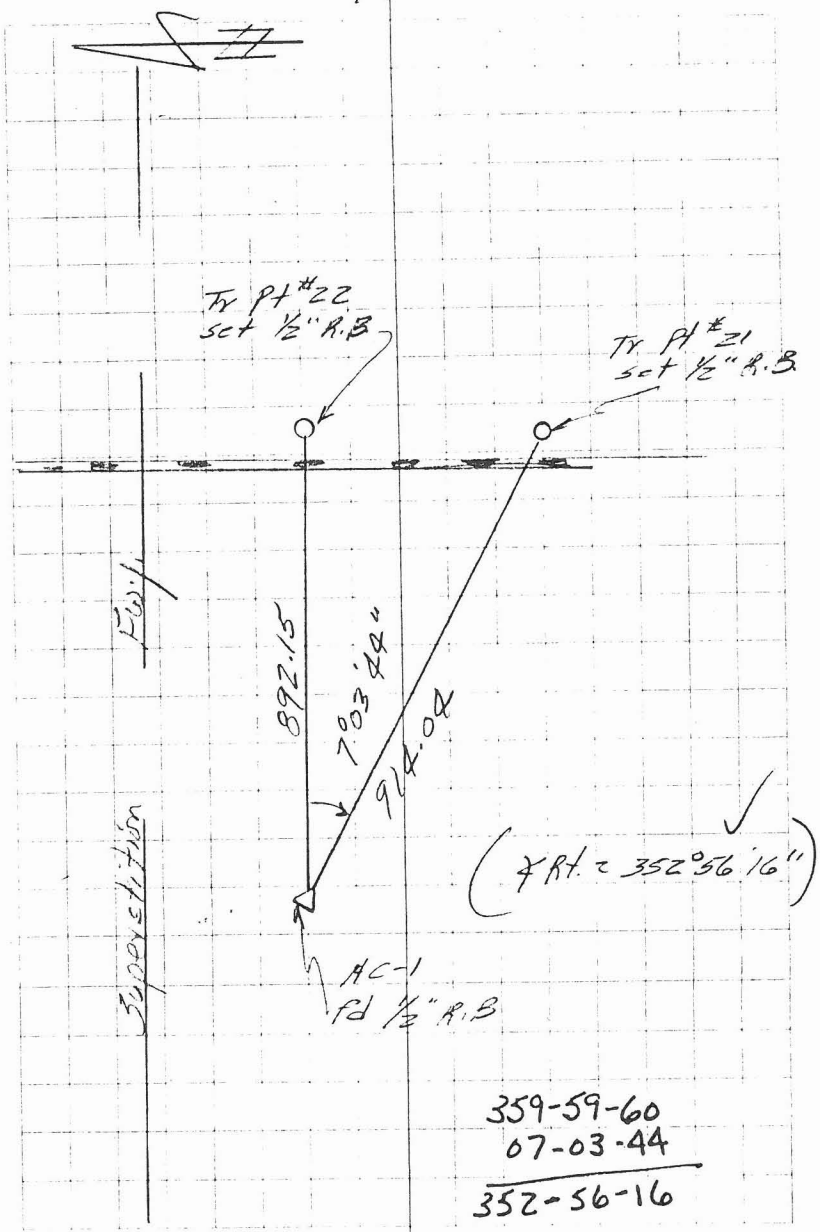
HD to TP #22

$\measuredangle$ = 89°52'06"

S.D. = 892.15

H.D. = 892.15 ✓

.145



359-59-60
07-03-44
352-56-16

MCFCD Traverse Block 2

9/1/87

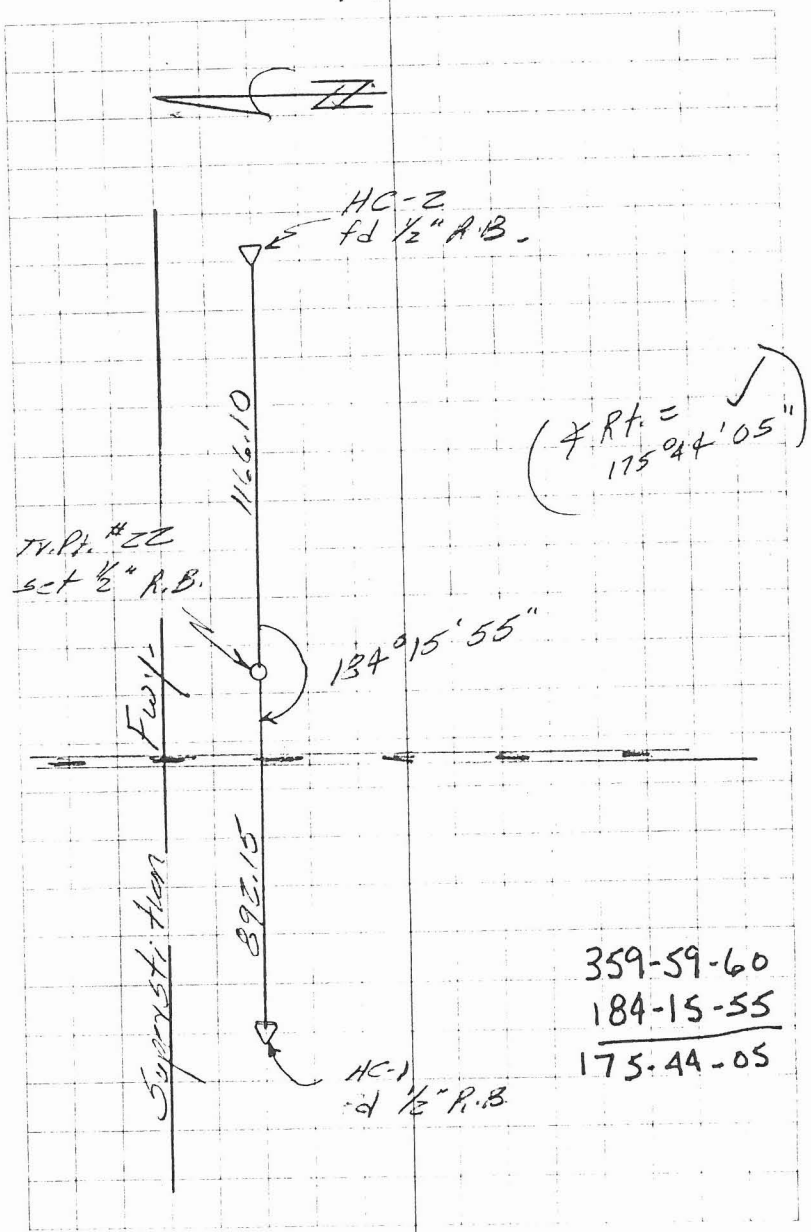
804/12

38	37	36
HC-2	→ TP #22 →	HC-1

∠#1 = 184°15'59"
∠#6 = 25°35'32" ✓
INT = 184°15'55"

HD to HC-1
ZX = 90°13'00"
S.D. = 892.16 ✓
H.D. = 892.15

HD to HC-2
ZX = 90°07'49"
S.D. = 1166.10 ✓
H.D. = 1166.10 ✓
.095



359-59-60
184-15-55
175-44-05

MCFCD | Traverse | Block Z

39	38	37
RO-Z	HC-Z	TP #22

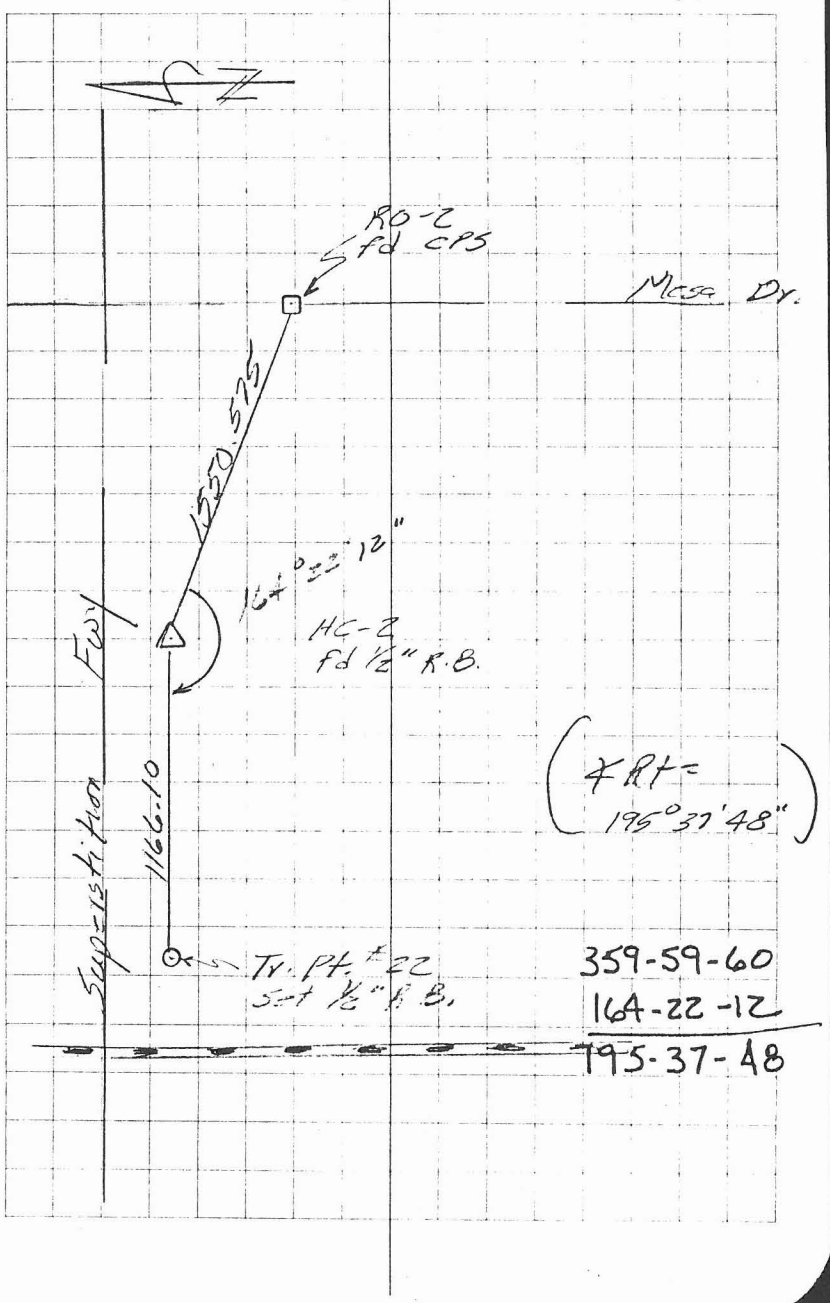
∠#1 = 164°22'10"
∠#6 = 266°13'09
MN ∠ = 164°22'12" ✓

HC to TP #22
Z∠ = 89°57'11"
S.D. = 166.10
H.D. = 166.10 ✓

H.D. to RO-Z
Z∠ = 89°58'32"
S.D. = 1550.58
H.D. = 1550.58 ✓

9/1/87

804/14



MCFCD — Traverse — Block 2

L. Dan Dyke
R. McMurray
J. Craven

9/2/87

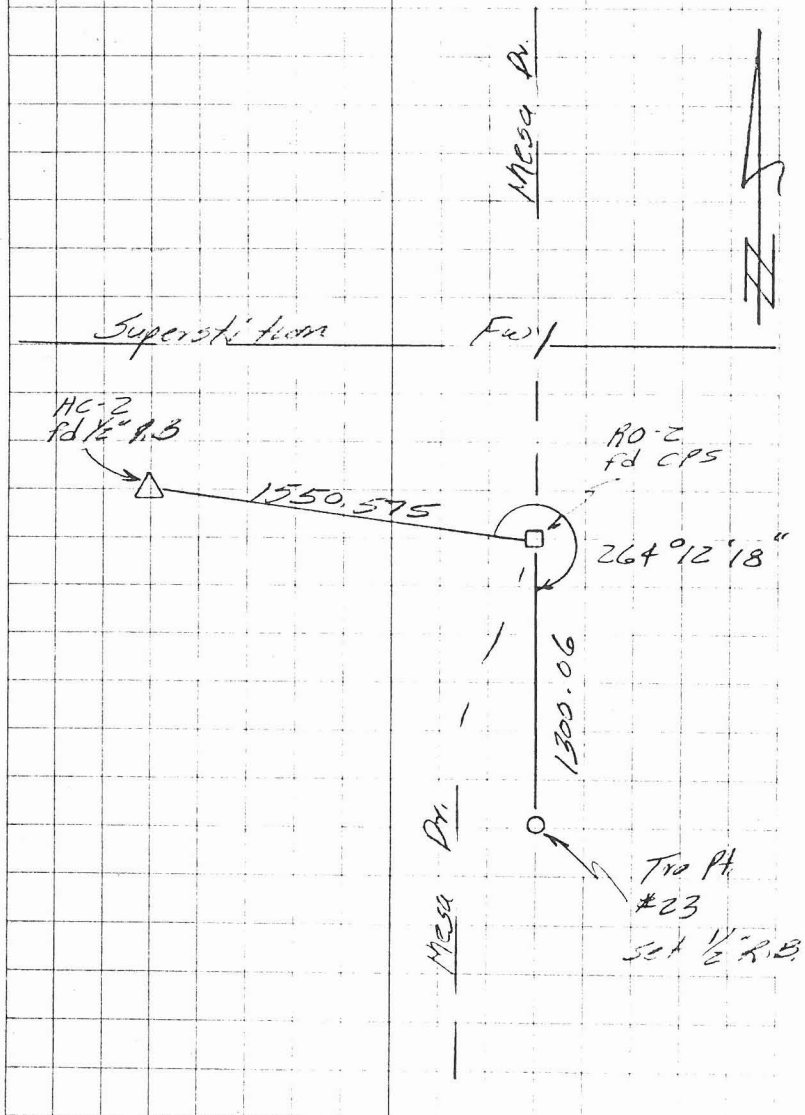
334
TC

38	39	40
HC-2	RO-2	TP #23

∠#1 = 264°12'18"
∠#6 = 145°13'47"
MNA = 264°12'18" ✓

HD to HC-2
ZA = 90°05'28"
S.D. = 1550.57 ✓
H.D. = 1550.57 ✓

H.D. to TP #23
ZA = 89°47'18"
SD = 1300.07 ✓
HD = 1300.06 ✓



MCFCD Traverse — Block 2

9/2/37

Sht 13

39	40	41
RO-2	→ TP #23	→ RO-5

∠#) = ~~201°04'17"~~ (201°04'19")

∠#6 = ~~84°16'55"~~ (126°25'59")

∠NX = 174°02'49"

(201°04'20")

HD to RO-2

Z∠ = 90°17'12"

S.D. = 1300.07

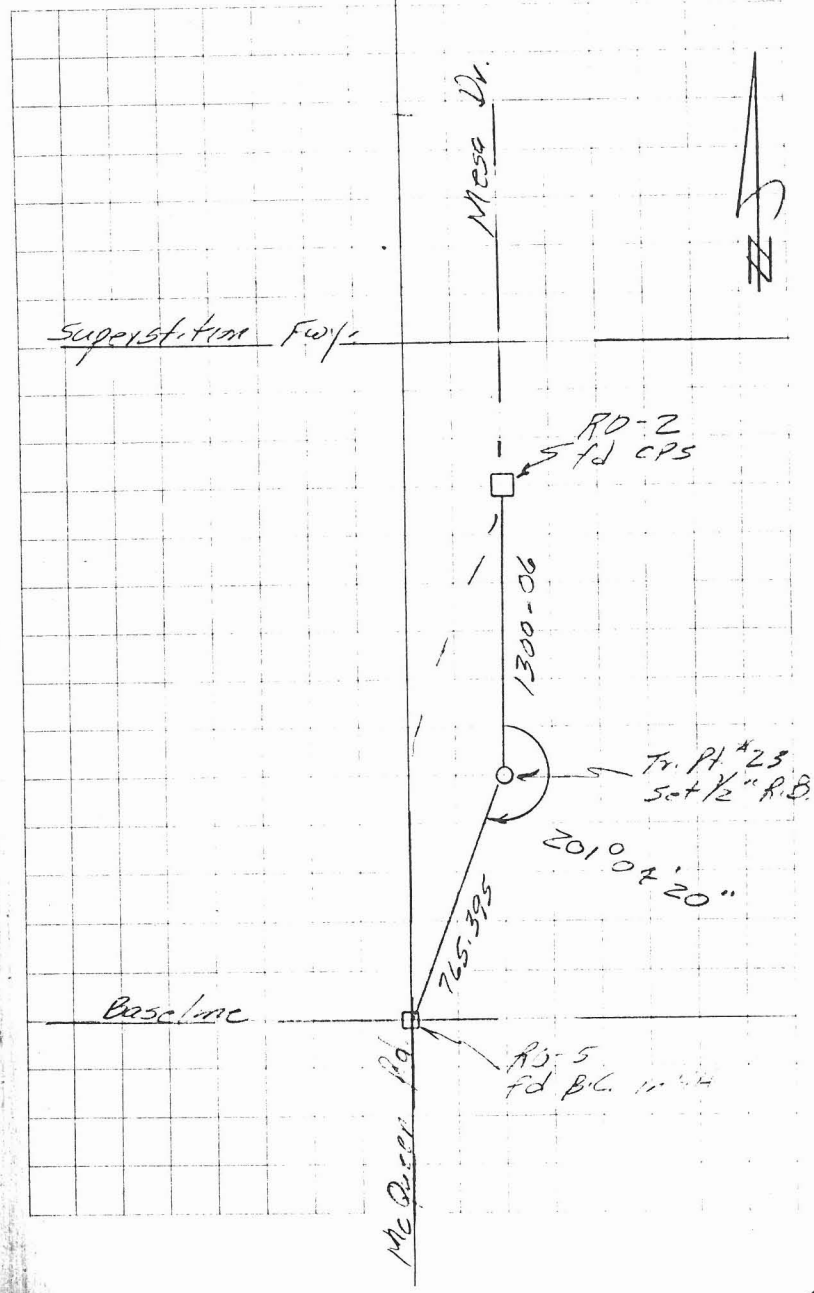
H.D. = 1300.06
.055

HD to RO-5

Z∠ = 90°32'12"

S.D. = 765.43

H.D. = 765.43
.395



MCFCD | Traverse – Block Z

42	41	40
TP #24	RD-5	TP #23

∠#1 = 211°00'10"
∠#6 = 186°01'16"
MN ∠ = 211°00'13" ✓

HD to TP #23
Z ∠ = 89°35'21"
S.D. = 765.41
H.D. = 765.39 ✓

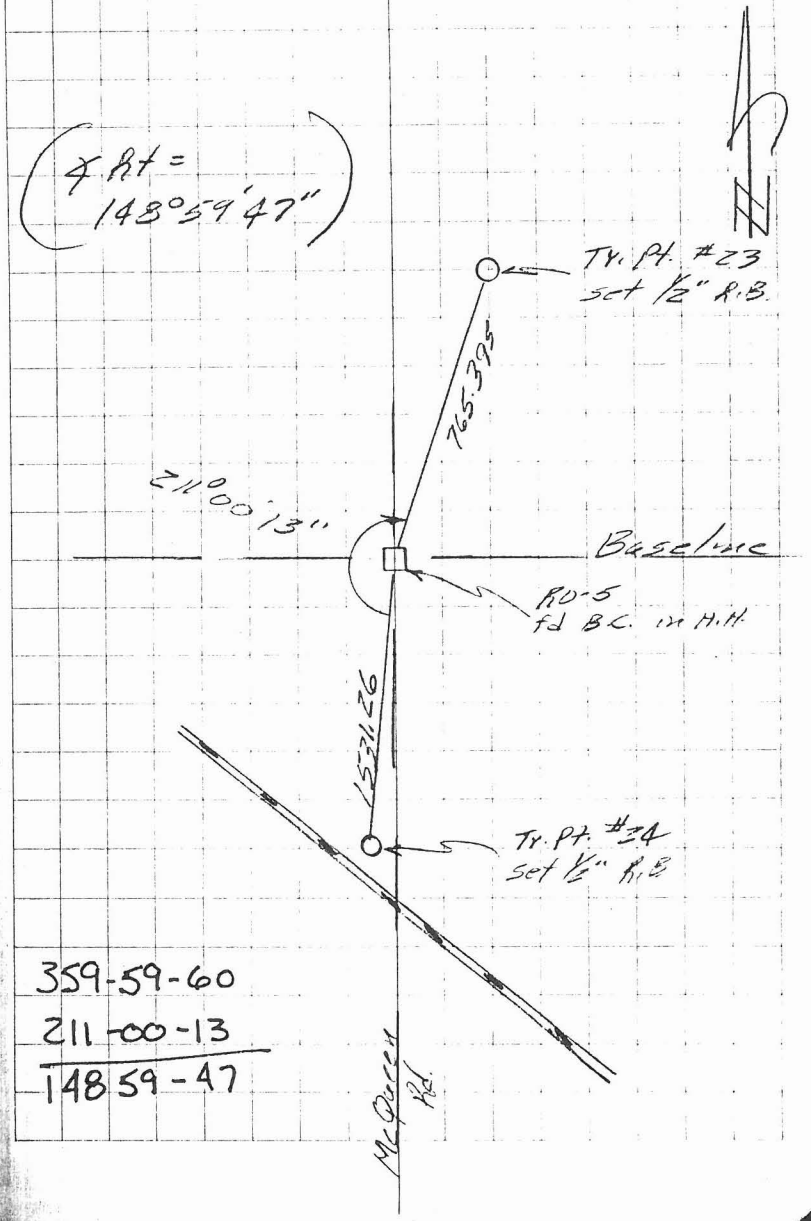
HD to TP #24
Z ∠ = 89°57'32"
S.D. = 1531.26 ✓
H.D. = 1531.26 ✓

9/2/37

804/30

180 5/1

(∠ Rt = 148°59'47")



MCFCD Traverse Book-2

41	42	43
RO-5	TP #24	HC-8

∠#1 = 177°01'57"
∠#6 = 342°11'54"
MNA = 177°01'59" ✓

HD to HC-8
ZA = 90°31'57
S.D. = 493.67
H.D. = 493.65

44	42	41
TP #25	TP #24	RO-5

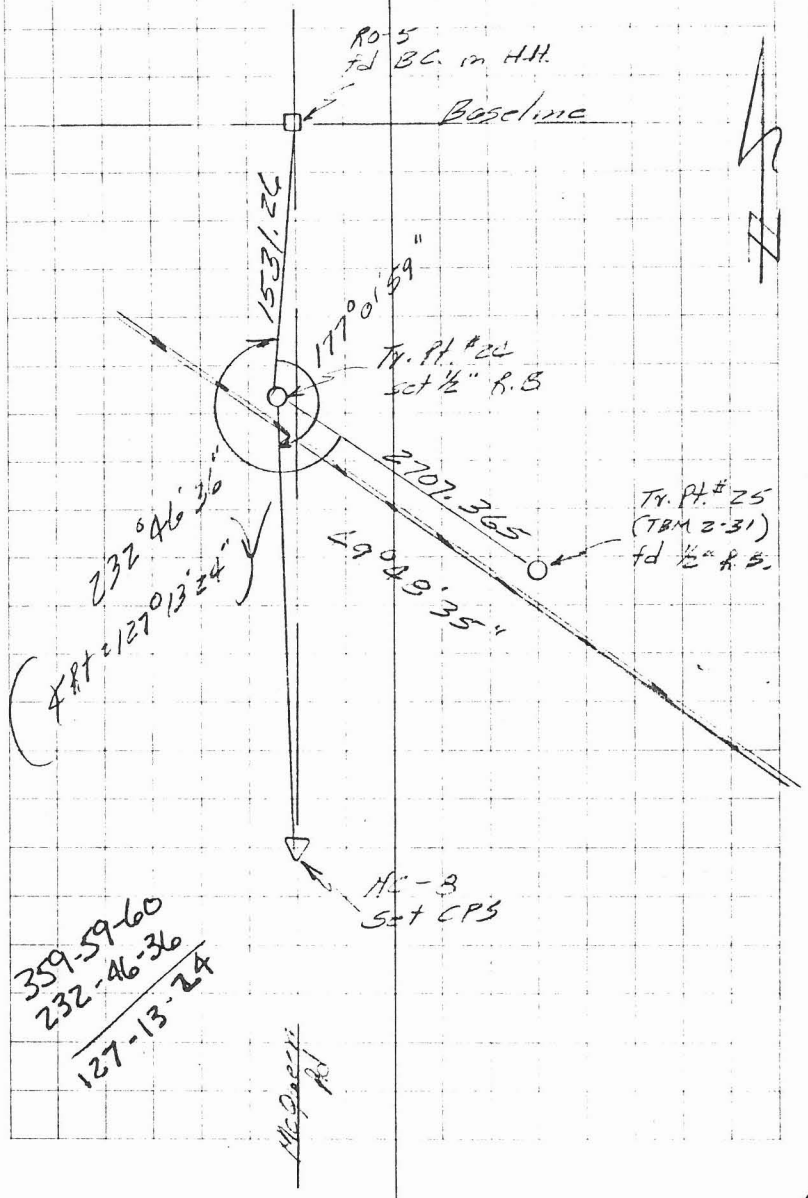
∠#1 = 232°46'24" (232°46'33")
∠#6 = 316°39'27" (316°39'36")
MNA = 232°46'35" ✓
Use → (232°46'36")

HD to RO-5
ZA = 90°06'54"
S.D. = 1531.26 ✓
H.D. = 1531.26

HD to TP #25
ZA = 90°01'35"
S.D. = 2707.36 ✓
H.D. = 2707.36

9/2/87

334/22



359-59-60
232-46-36
127-13-24

MCFCD | Traverse | Back - Z

42	44	45
TP #24	→ TP #25	→ RO-7

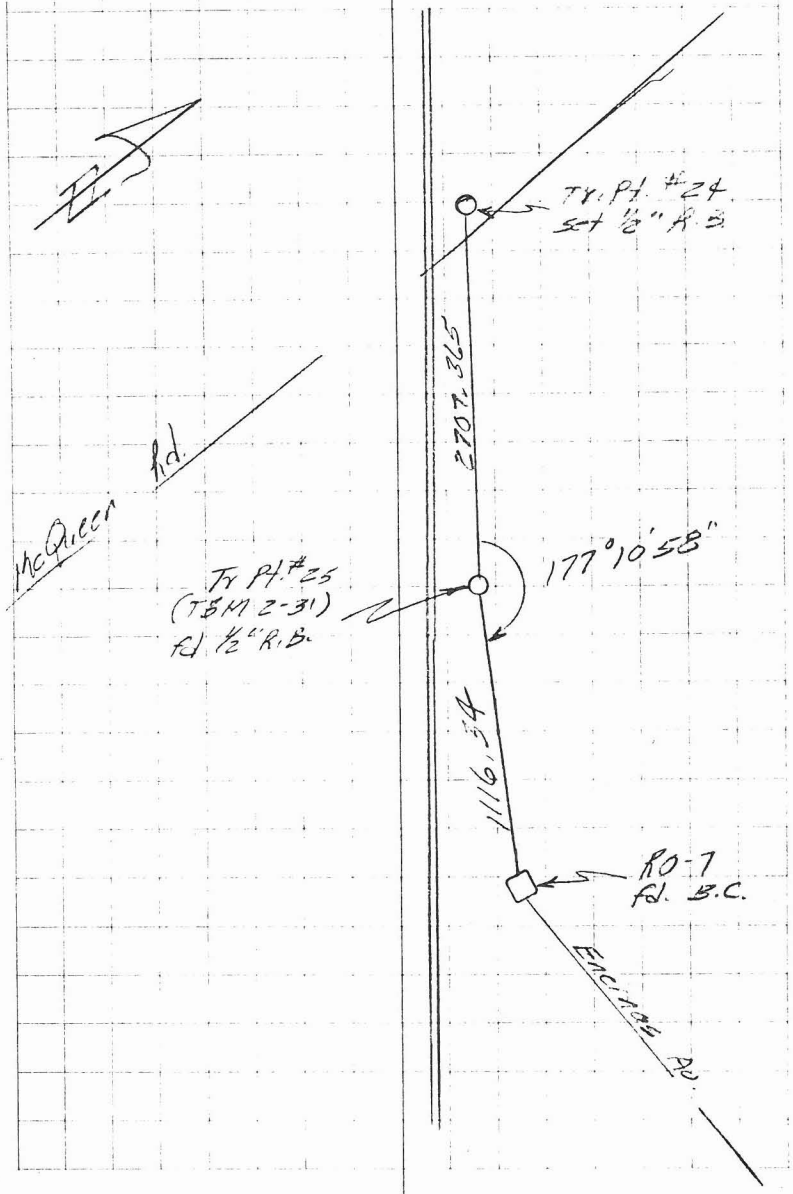
∠#1 = 177°10'53"
∠#6 = 343°05'48" ✓
MN∠ = 177°10'58"

HD to TP #24
Z∠ = 90°01'54"
S.D. = 2707.37
H.D. = 2707.37 ✓

HD to RO-7
Z∠ = 90°00'39"
S.D. = 1116.33
H.D. = 1116.33 ✓

9/3/87

804
C4



MCFCD

Traverse Block 2

46 45 44

RO-8 → RS-7 → TP #25

$\measuredangle$ #1 = 214°05'38"

$\measuredangle$ #2 = 204°34'15"

MN $\measuredangle$ = 214°05'43" ✓

HD to TP #25

$\Sigma\measuredangle$ = 90 04 55'

S.D. = 1116.35 ✓

H.D. = 1116.35

HD to RO-8

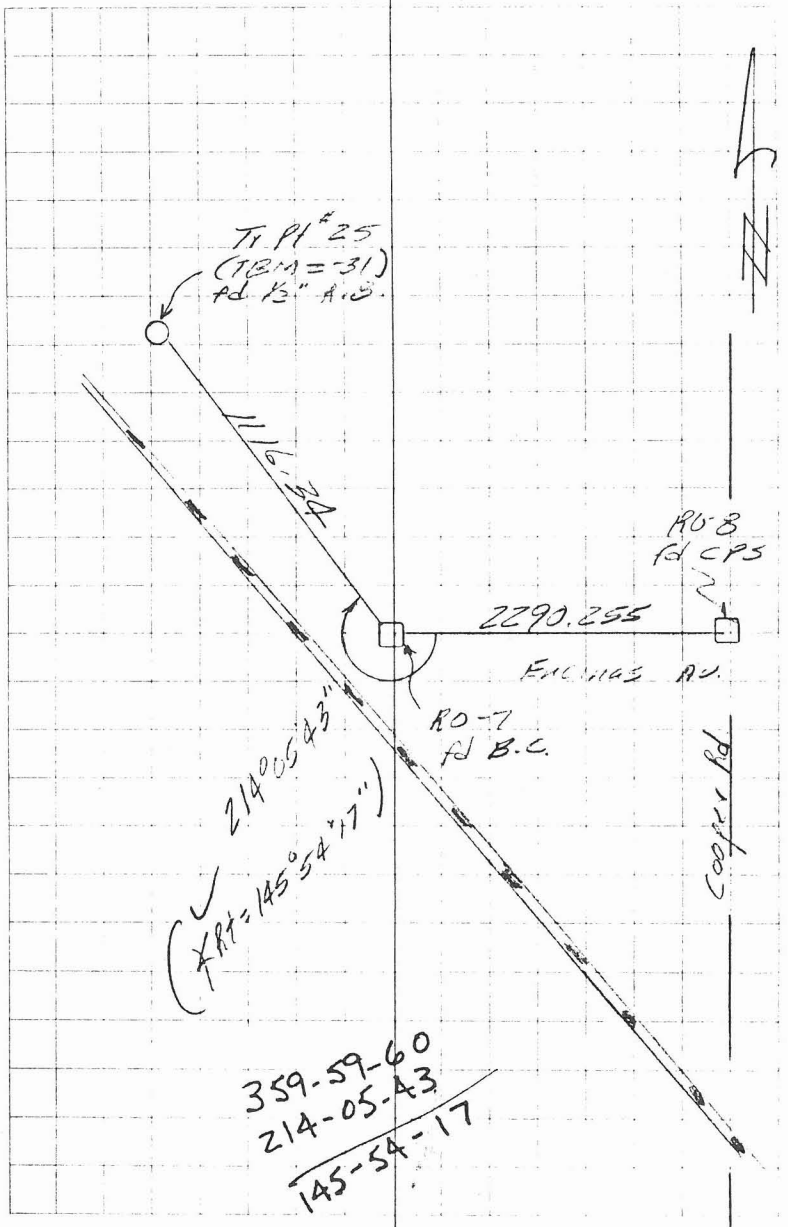
$\Sigma\measuredangle$ = 89°55'30"

S.D. = 2290.26

H.D. = 2290.26 ✓

9/5/37

804/26



MCFCD Traverse – Block C

47	46	45
HC-13	RO-8	RO-7

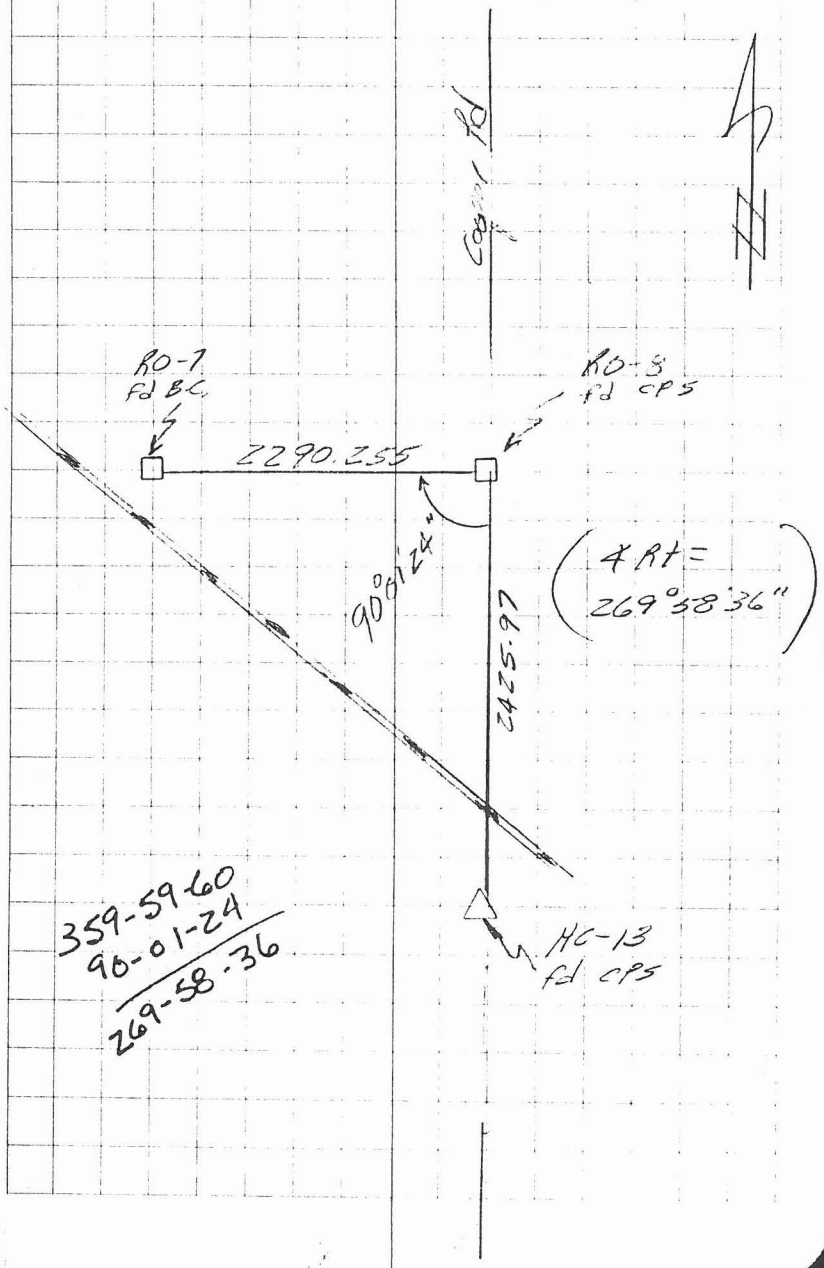
∠#1 = 90°01'37" (90°01'21")
∠#6 = 180°08'06" (180°08'39") ✓
MN ∠ = 90°01'21" (90°01'27") ✓
Use – 90°01'24"

HD to RO-7
EX = 90°01'28
S.D. = 2290.26
H.D. = 2290.25 ✓

HD to HC-13
EX = 89°58'42"
S.D. = 2425.97
H.D. = 2425.97 ✓

9/3/97

804
28



359-59-60
90-01-24
269-58-36

MCFCD Traverse – Block Z

46 → 47 → 48

RO-8 → HC-13 → Sec Cor.

∠#1 = 00°07'29"

∠#2 = 60°15'12"

MM = 60°07'36" ✓

HD to Sec Cor.

ZA = 90°02'44"

S.D. = 900.96 ✓

H.D. = 900.96

46 → 47 → 49

RO-8 → HC-13 → RO-18

∠#1 = 180°08'06"

∠#6 = 00°48'40"

MM = 180°08'07" ✓

HD to RO-8

ZA = 90°04'03"

S.D. = 2425.97 ✓

H.D. = 2425.97

HD to RO-18

ZA = 89°51'45"

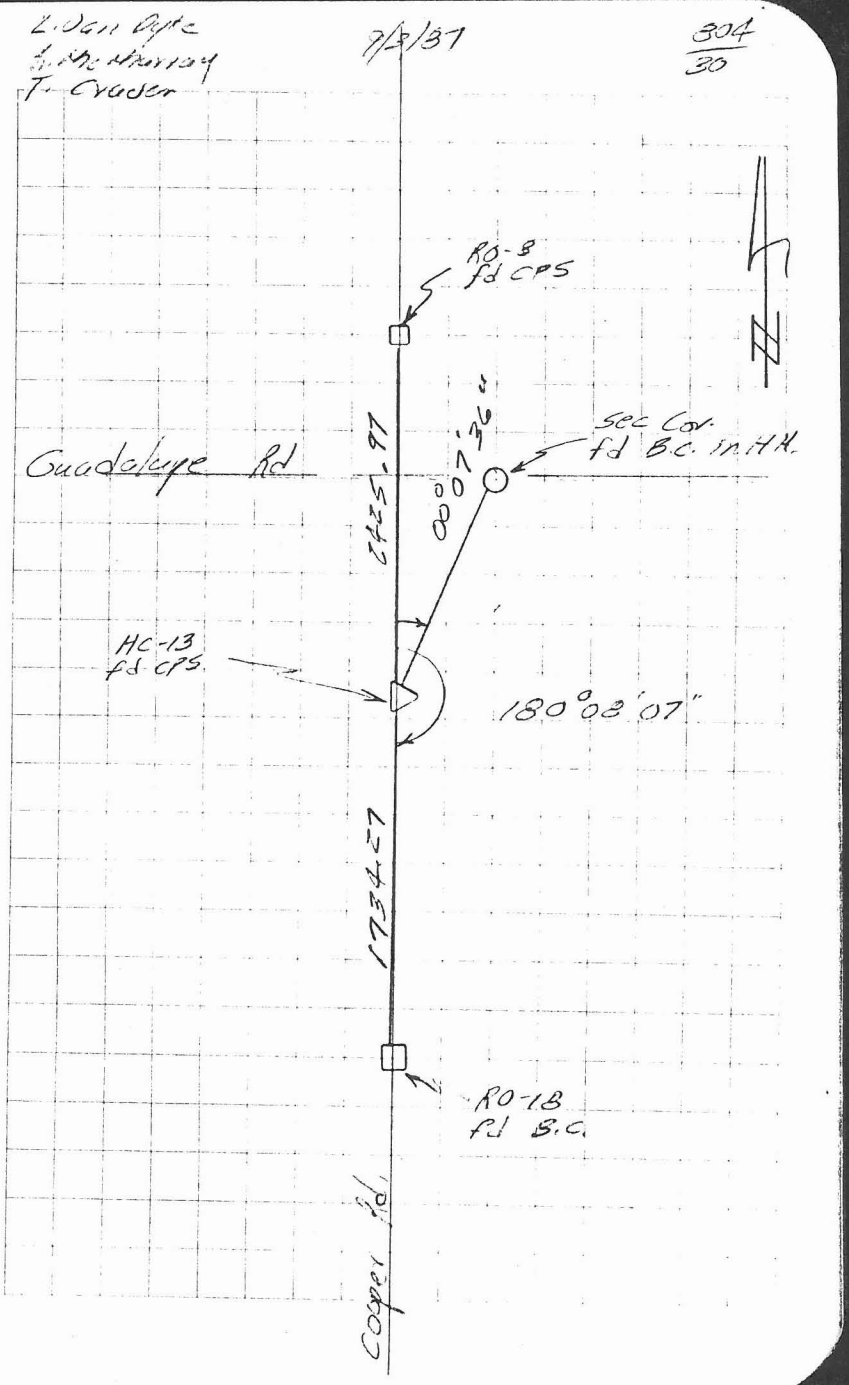
S.D. = 1734.27 ✓

HD = 1734.27

Z. Vogel Optic
L. McHarney
T. Crosser

7/13/87

304
30



MCFCD Traverse - Black 2

47	49	50
HC-13 →	RO-18	→ HC-21

$\angle \#1 = 180°00'27"$

$\angle \#6 = 00°03'04"$

$MM = 180°00'31"$ ✓

HD to HC-13

$\angle = 90\ 05\ 36$

S.D. = 1734.27 ✓

H.D. = 1734.27 ✓

HD to HC-21

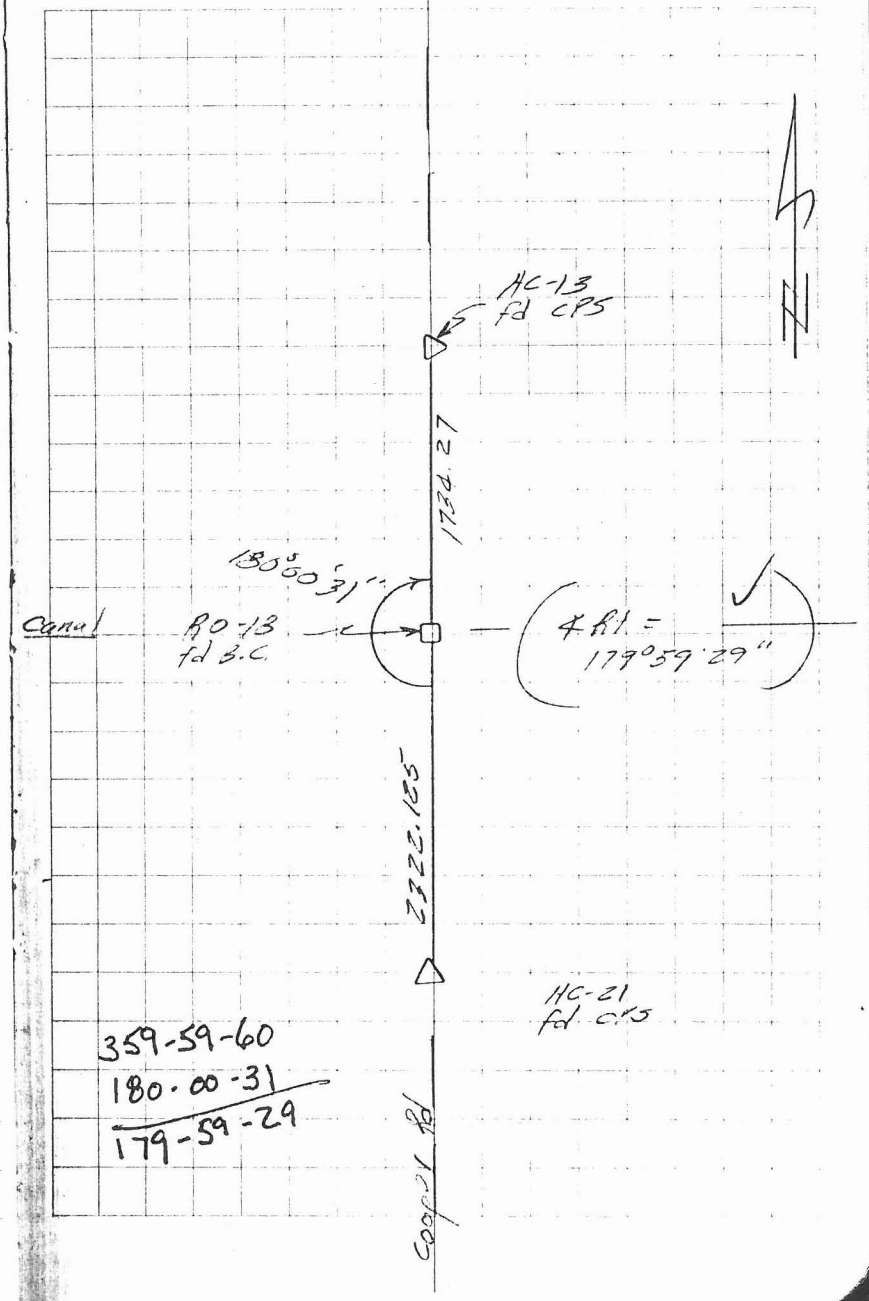
$\angle = 89°59'34"$

S.D. = 2322.12 ✓

H.D. = 2322.12 ✓

9/3/37

804/32



359-59-60
180-00-31
179-59-29

MCFCD | Traverse | Block =

49 — 50 — -51

RO-18 → HC-21 → Sec Cor.

∠#1 = 179°42'53"

∠#2 = 359°25'46"

∠INT = 179°42'53" ✓

HD to Sec Cor. =

ΣL = 90°02'48"

S.D. = 314.70

H.D. = 314.70 ✓

49 — 50 — 52

RO-18 — HC-21 — TP #26

∠#1 = 263°09'52"

∠#6 = 138°59'54" ✓

∠INT = 263°09'59"

HD to RO-18

ΣL = 90°03'26"

S.D. = 2322.13

H.D. = 2322.13 ✓

HD to TP #26

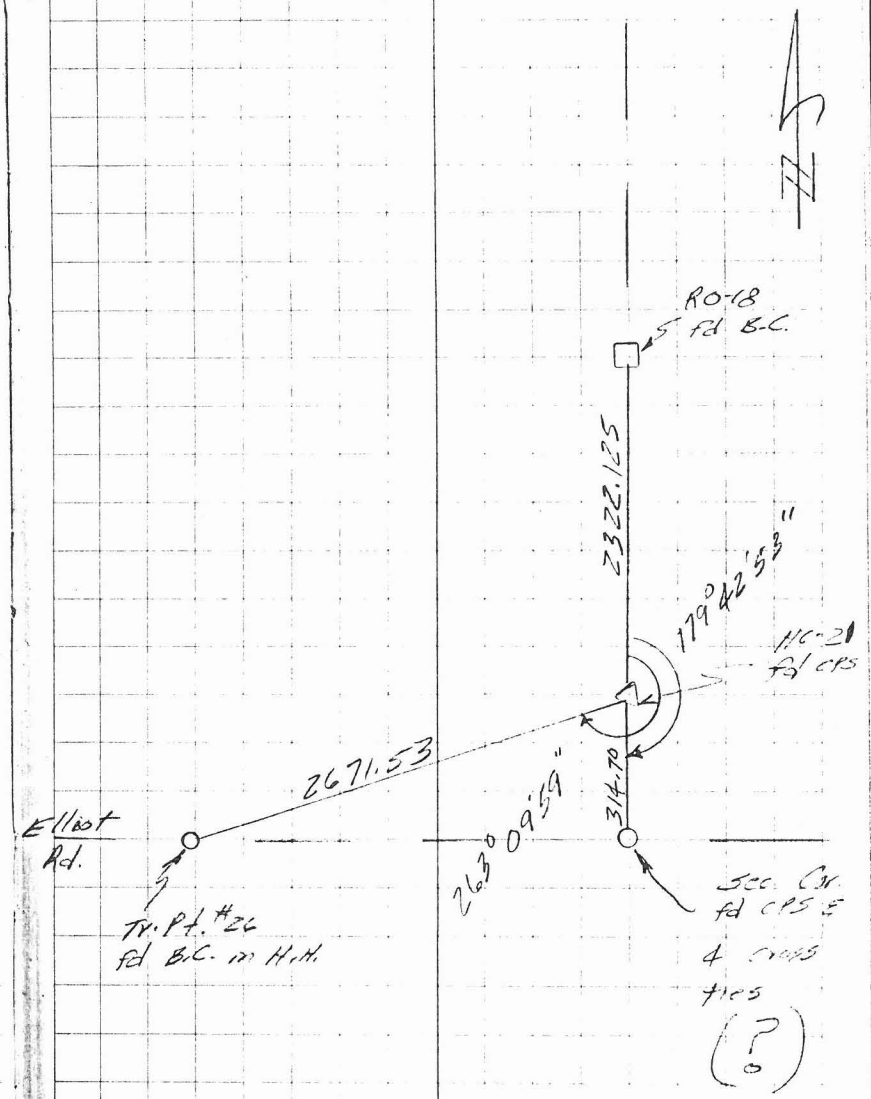
ΣL = 90°06'28"

S.D. = 2671.53

H.D. = 2671.525 ✓

9/3/37

804/34



MCFCD Traverse Block C

50	52	53
HC-21 →	TP #26 →	TP #27

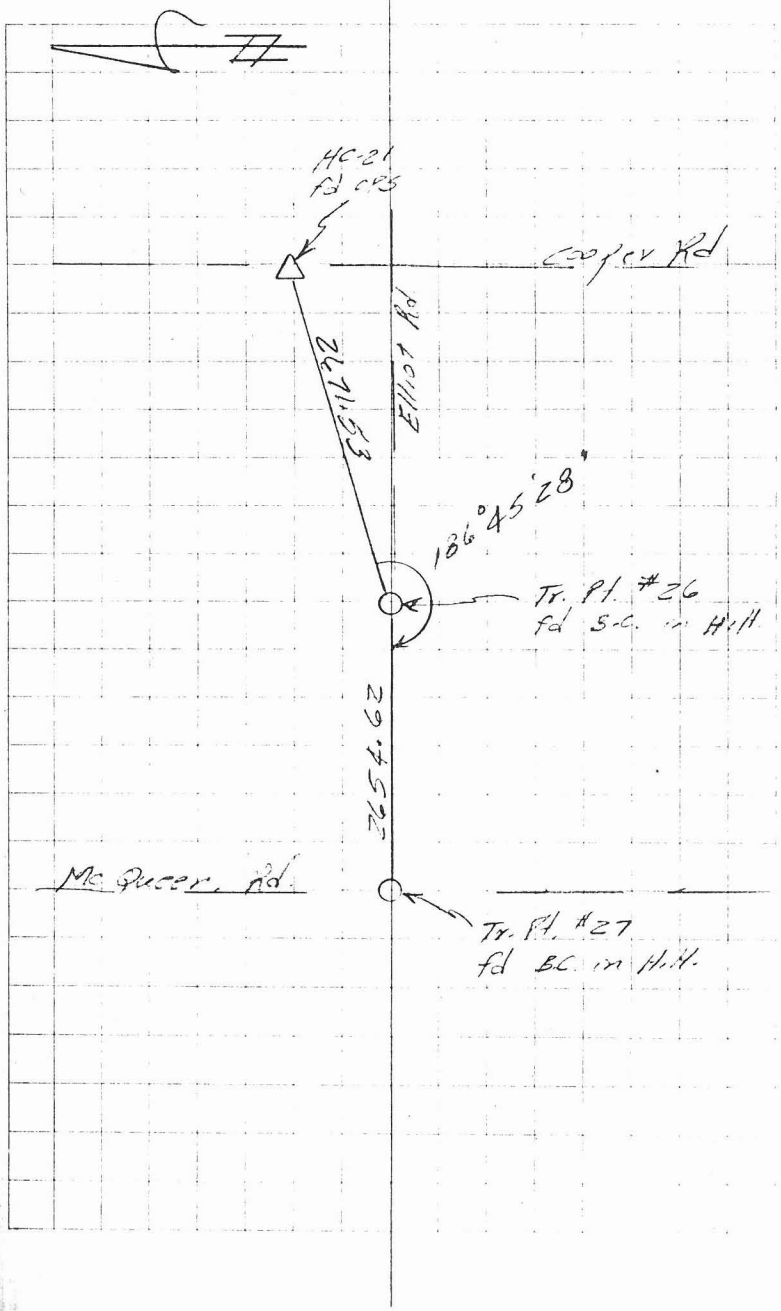
∠#1 = 186° 45' 30"
∠#6 = 40° 32' 48" ✓
∠N ∠ = 186° 45' 28"

HD to HC-21
Z∠ = 89° 55' 42"
S.D. = 2671.53
H.D. = 2671.53 ✓

HD to TP #27
Z∠ = 90° 06' 14"
S.D. = 2654.62
H.D. = 2654.615 ✓

9/3/87

804/36



MCFCD Traverse Block-2

9/3/87

52 — TP #26 → 53 — TP #27 → 54 — HC-20

∠#1 = 270°22'15"

∠#2 = 182°14'28" ✓

MN ∠ = 270°22'25"

HD to HC 20

Z ∠ = 90°02'13"

S.D. = 416.02 ✓

H.D. = 416.02

52 — TP #26 → 53 — TP #27 → 55 — TP #28

∠#1 = 89°05'23"

∠#2 = 184°33'18" ✓

MN ∠ = 89°05'33"

HD to TP #26

Z ∠ = 89°56'41"

S.D. = 2654.62 ✓

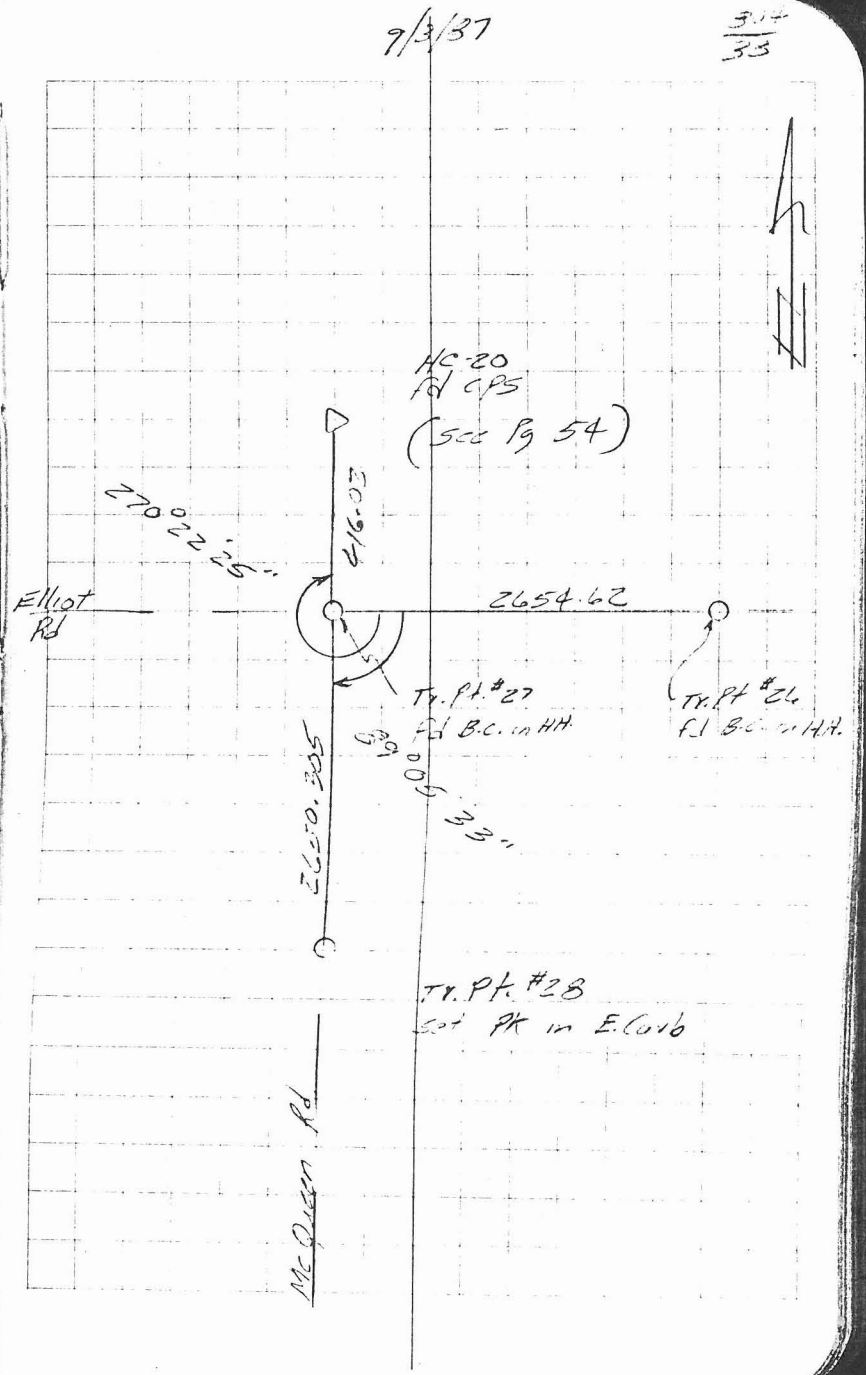
H.D. = 2654.62

HD to TP #28

Z ∠ = 89°58'20"

S.D. = 2650.29 ✓

H.D. = 2650.29



MCFCD Traverse Block Z

53 TP #27 → 55 TP #28 → -56 ¼ Cor.

∠#1 = 277°51'27"
∠#2 = 195°55'01"
MM∠ = 277°51'34" ✓

H.D. to ¼ Cor. = 44.69 Chained

53 TP #27 → 55 TP #28 → 57 TP #29

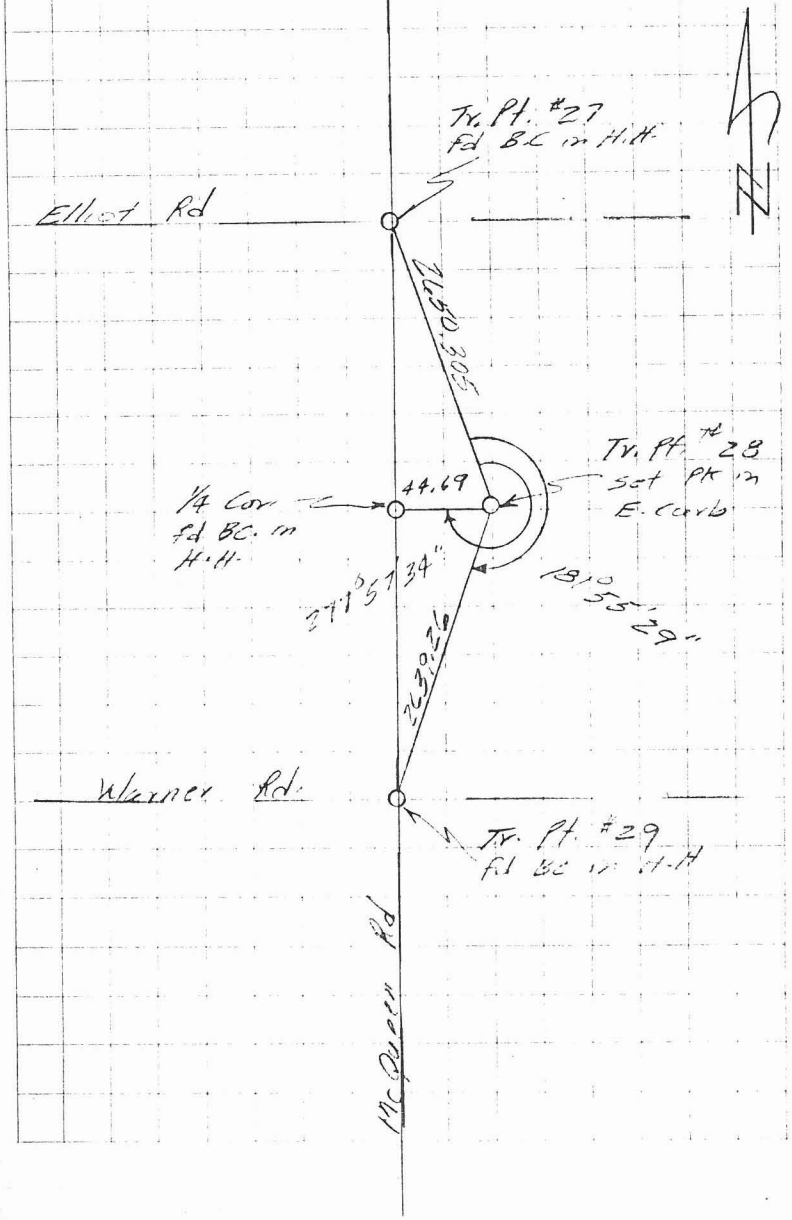
∠#1 = 181°55'38"
∠#6 = 11°32'54"
MM∠ = 181°55'29" ✓

HD to TP #27
Z∠ = 90°04'36"
S.D. = 2650.32 ✓
H.D. = 2650.32

HD to TP #29
Z∠ = 89 54'23"
S.D. = 2639.26 ✓
H.D. = 2639.26 ✓

9/3/37

804/40



9/3/87

MCFCD | Traverse | Block Z

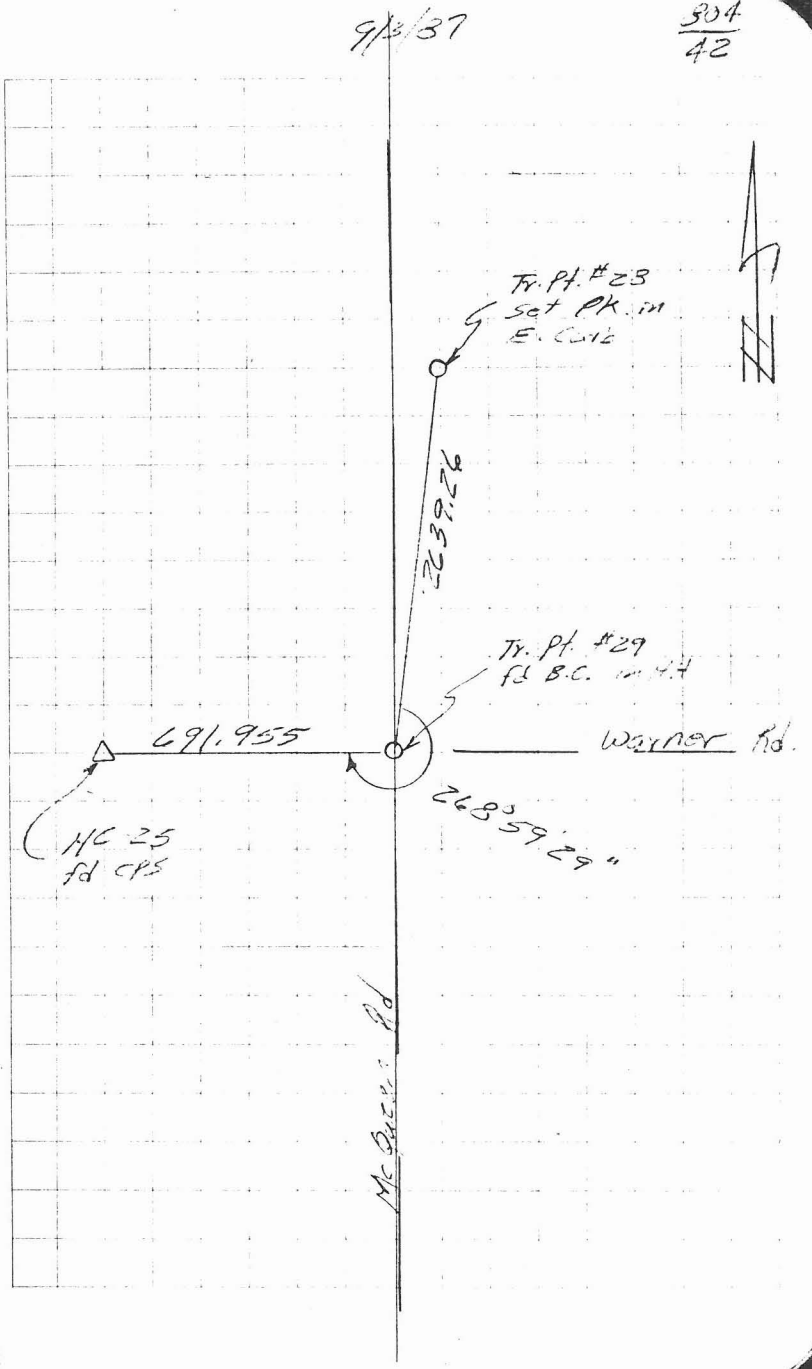
55 — 57 — 58

TP #28 → TP #29 → HC-25

∠#1 = 268° 59' 30"
∠#6 = 173° 56' 51"
INT ∠ = 268° 59' 29" ✓

H.D. to TP #28
Z∠ = 90° 08' 28"
S.D. = 2639.27 ✓
H.D. = 2639.26

H.D. to HC-25
Z∠ = 90° 16' 24"
S.D. = 691.95 ✓
H.D. = 691.~~95~~
94



MCFCD | Traverse | Block 2

59	58	57
HC-24	HC-25	TP #29

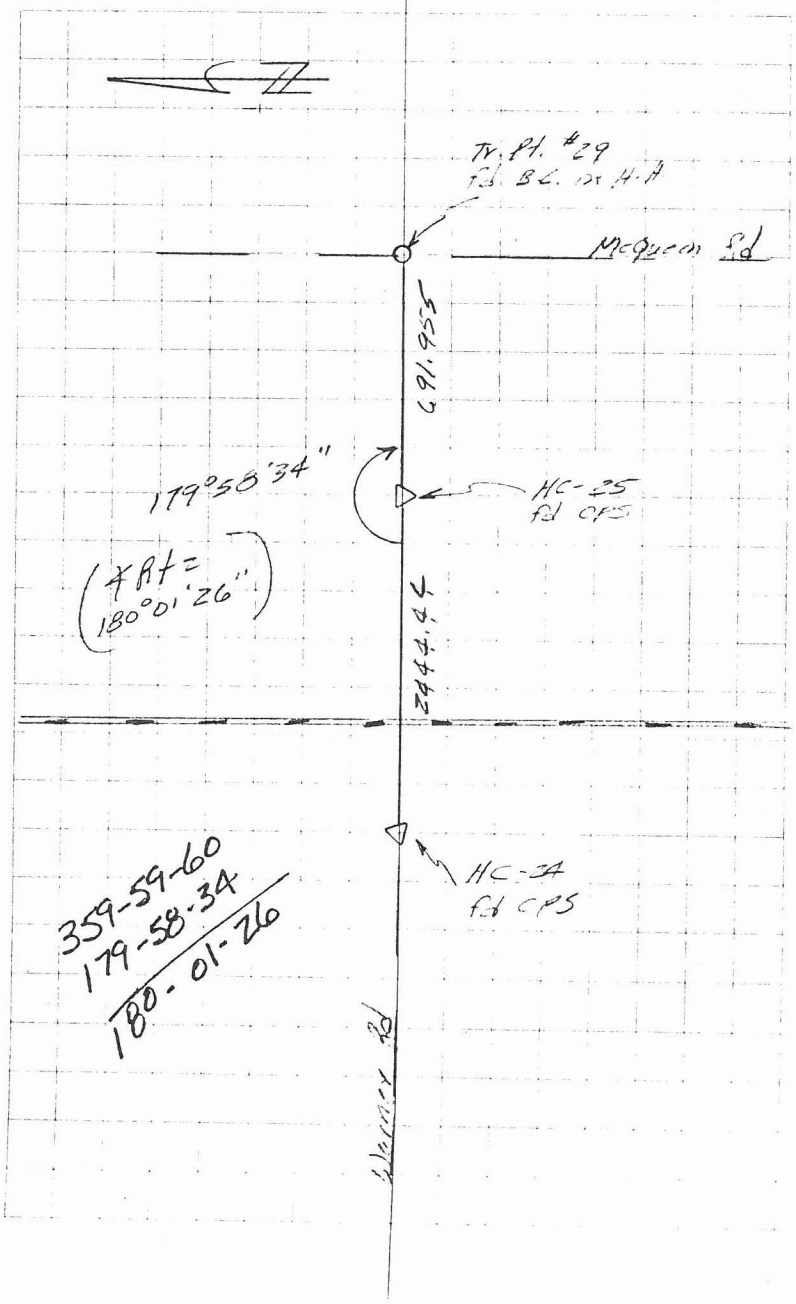
∠#1 = 179°58'24"
∠#6 = 359°51'22"
MM∠ = 179°58'34" ✓

HD to TP #29
Z∠ = 89°51'39"
S.D. = 691.96
H.D. = 691.96 ✓

HD to HC-24
Z∠ = 90°11'10"
S.D. = 2444.46
H.D. = 2444.45 ✓

9/3/87

304
54



MCFCD Traverse Block C

58	59	60
HC-25	HC-24	TP #30

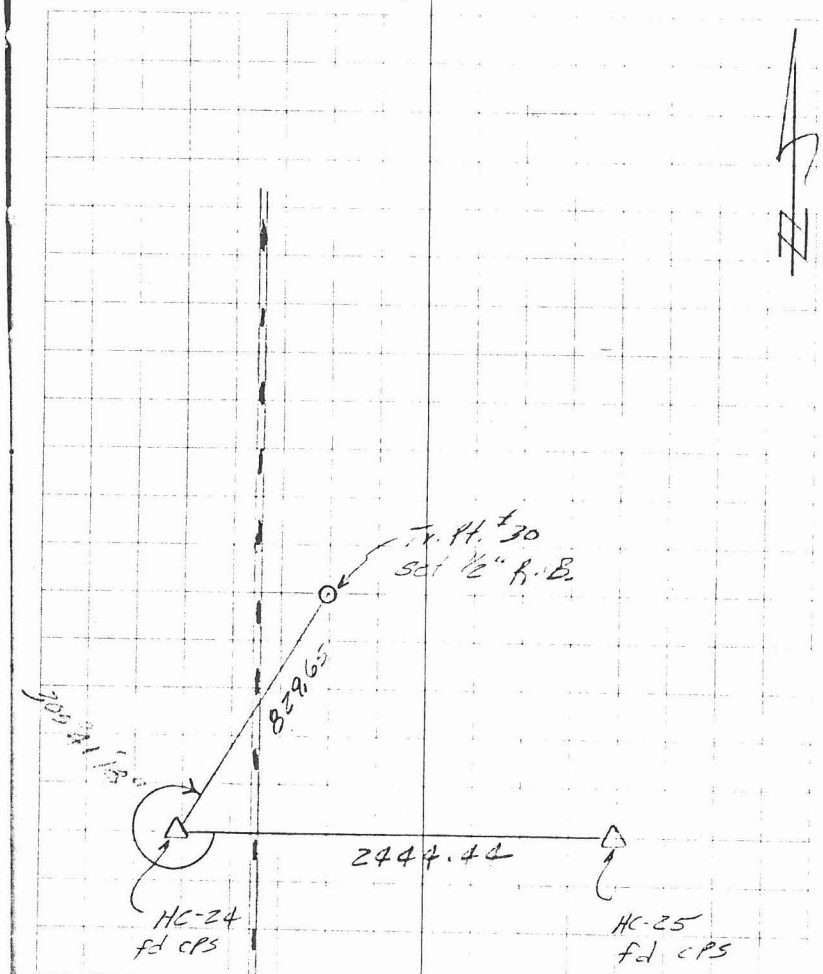
∠#1 = 305°41'30"
∠#6 = 32°07'45"
NN = 305°41'18" ✓

HD to HC-25
Σ∠ = 89°52'42"
S.D. = 2444.44
H.D. = 2444.435 ✓

HD to TP #30
Σ∠ = 90°02'15"
S.D. = 829.65
H.D. = 829.65 ✓

9/3/87

3.07
IC



MCFCD — Traverse — Block Z

59	60	61
HC-24	→ TP #30 →	TP #31

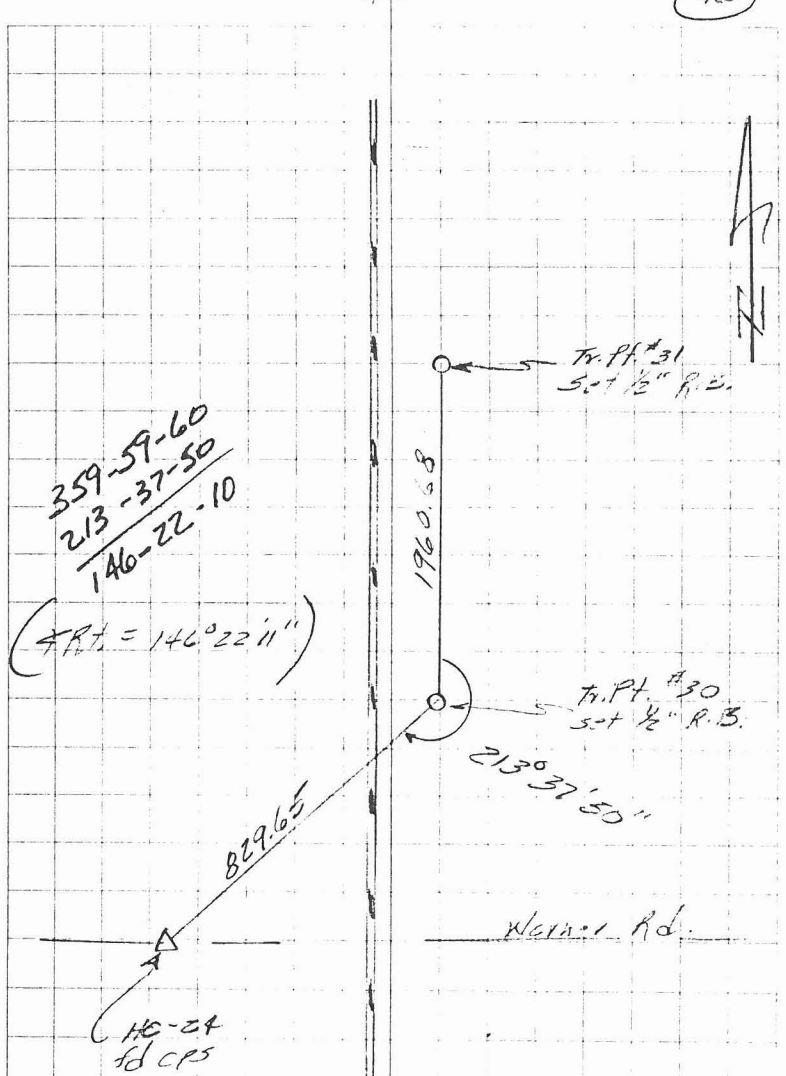
∠#1 = 213° 37' 53"
∠#6 = 201° 46' 57"
MK ∠ = 213° 37' 50" ✓

HD to HC-24
Z∠ = 90° 04' 58"
S.D. = 829.65
H.D. = 829.65 ✓

HD to TP #31
Z∠ = 90° 08' 45"
S.D. = 1960.68
H.D. = 1960.67 ✓

9/2/37

434
(423)



MCFCD Traverse – Blk of Z

9/3/87

(304/50)

62 — RO-21

61 — TP #31

60 — TP #30

∠#1 = 183°41'57"

∠#6 = 22°11'42"

∠NN = 183°41'57" ✓

HD to TP #30

ΣA 89°55'38"

S.D. = 1960.69 ✓

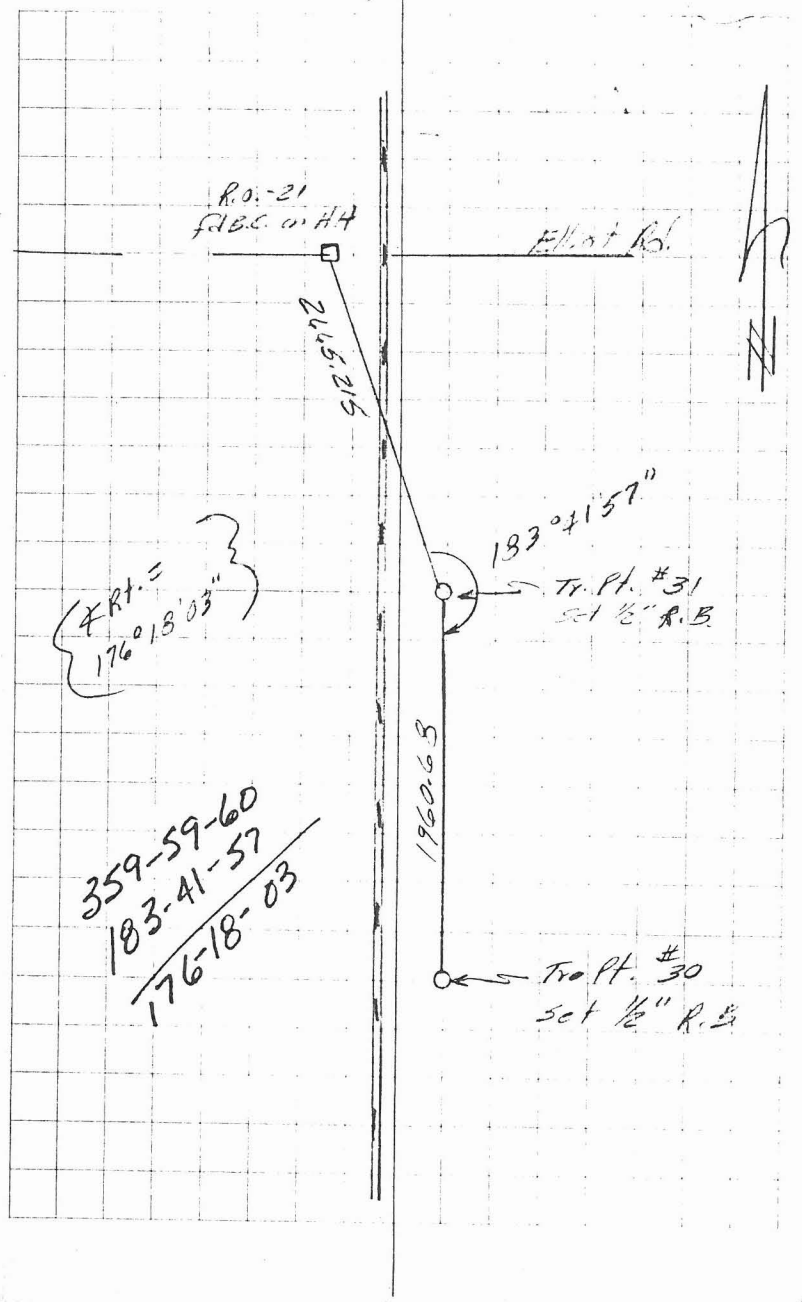
H.D. = 1960.69

HD to RO-21

ΣA = 89°55'55"

S.D. = 2665.22 ✓

H.D. = 2665.22



359-59-60
183-41-57
176-18-03

MCFCP | Traverse | Block Z

60	62	63
TP #31	→ RD-21	→ HC-11

T

∠ #1 = ~~184° 53' 44"~~ (184° 53' 34")

∠ #6 = ~~39° 21' 25"~~ (39° 22' 50")

M.I.∠ = ~~184° 54' 01"~~ (184° 53' 40") ✓

HD TP #30

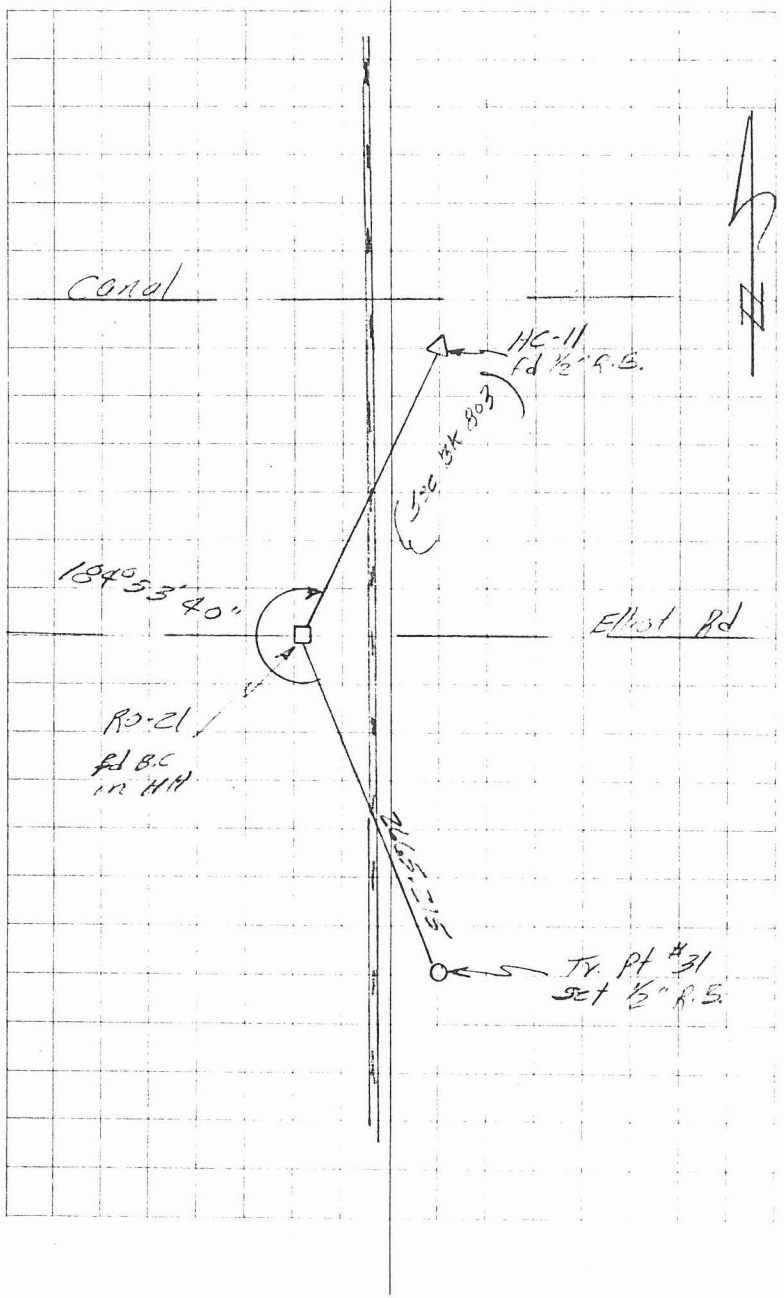
ZZ = 90° 07' 39"

S.D. = 2665.22 ✓

H.D. = 2665.21

9/87

304/52



MCFCD | Traverse | Block Z

9/3/87

9.34
5-4

66 — 67 — 68

RO-17 → HC-20 → TP#Z7

∠#1 = 180°13'15"

∠#2 = 1°19'00"

MM∠ = 180°13'10" ✓

HD to TP#Z7

Z∠ = 90°09'43

S.D. = 416.02 ✓

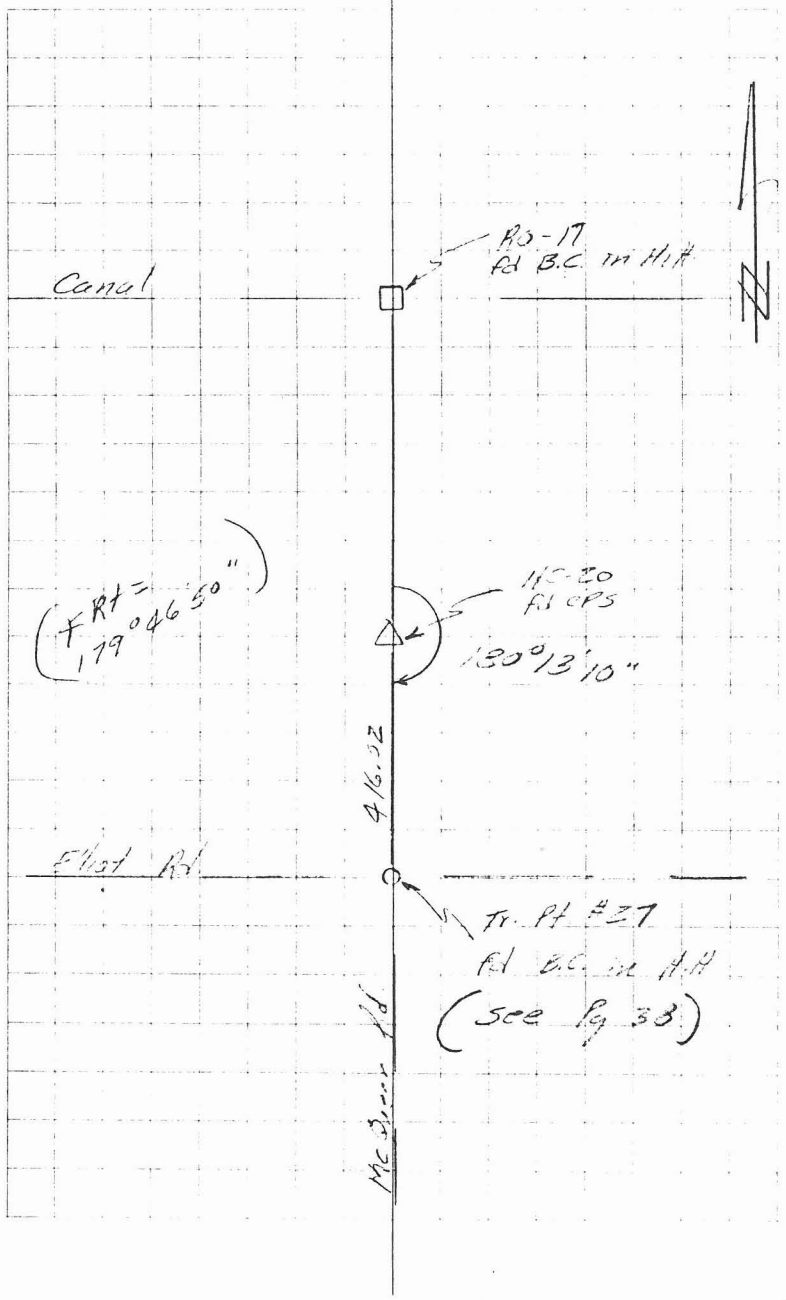
H.D. = 416.02 ✓

HD to RO-18

Z∠ = 90°00'48"

S.D. = 2216.66 ✓

H.D. = 2216.66 ✓



MCFCD Traverse - Block 4

(see Bk 836 - Pg 34)

HC-27 → HC-26 → TP#67

∠#1 = 90°16'01" (90°16'05")

∠#6 = 181°37'27" (182°41'54")

MNΔ = 90°16'14" (96°26'59")

use →

HD to TP#67

ΣΔ = 89°56'03"

S.D. = 2642.78

H.D. = 2642.78

← S 89-59-38 E

2529.27

(118) HC-27 → (119) HC-26 → (160) TP#67

∠#1 = 90°16'14"

∠#6 = 181°37'09"

MNΔ = 90°16'12"

Linda Lyke
R. McMurray
T. Craven

9/16/87

836
56

HC-26
fd ¾" R.B.
in H.H.

2529.265

Warner Rd

90°16'12"

HC-27
fd S.C. in H.H.

2642.77

TP #67
fd ½" x 3 in H.H.

Gilbert Rd

MCFCD Traverse – Block 4

119	160	161
HC-26	→ TP #67 →	RO-29

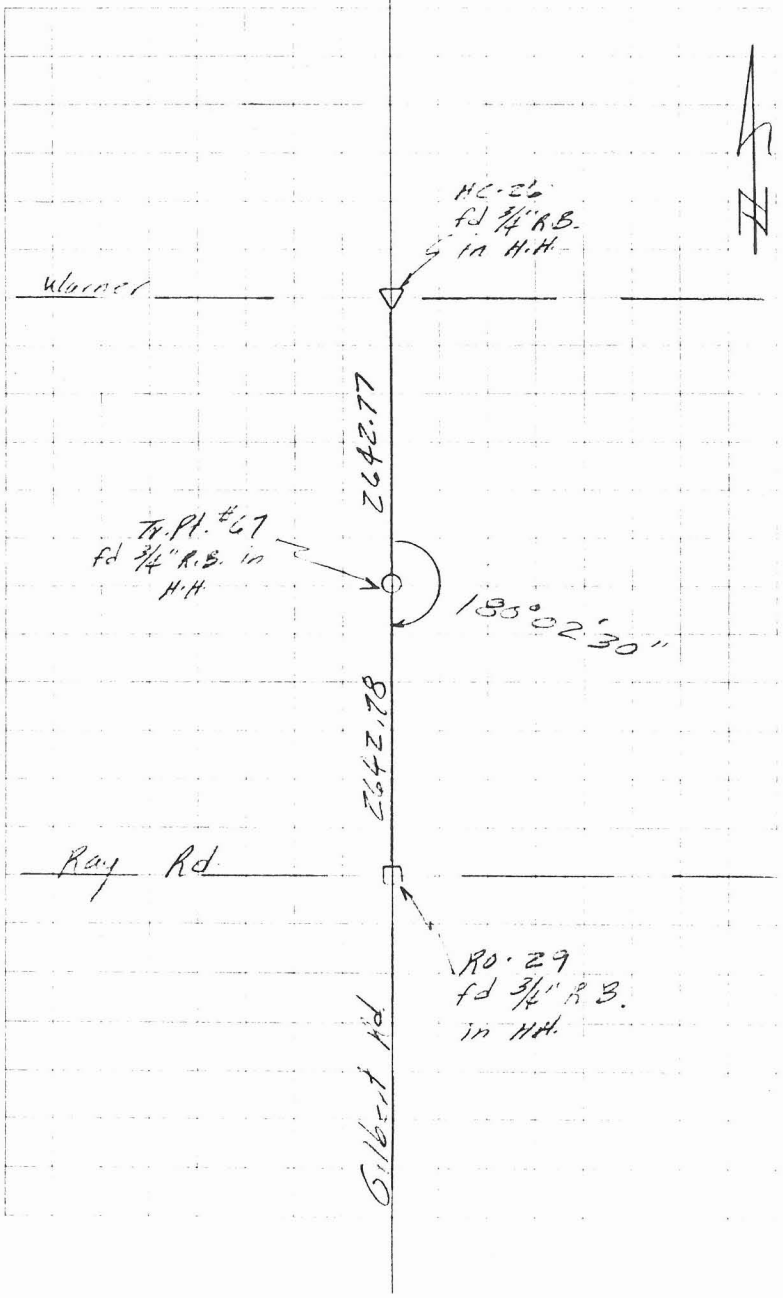
∠#1 = 180°02'26"
∠#6 = 00°15'00"
MNX = 180°02'30" ✓

HD to HC-26
ZX = 90°08'14"
SD = 2642.77
HD = 2642.76

HD to RO-29
ZX = 89°56'27"
S.D. = 2642.78
H.D. = 2642.78

9/14/37

804/53



MCFCD

Traverse - Block 4

160	161	162
TP #67	RO-29	TP #68

$\measuredangle$ #1 = 269°49'06"

$\measuredangle$ #2 = 178°54'55"

MM = 269°49'09" ✓

HD to TP #67

Z $\measuredangle$ = 90°08'13"

S.D. = 2642.79

H.D. = 2642.78

HD to TP #68

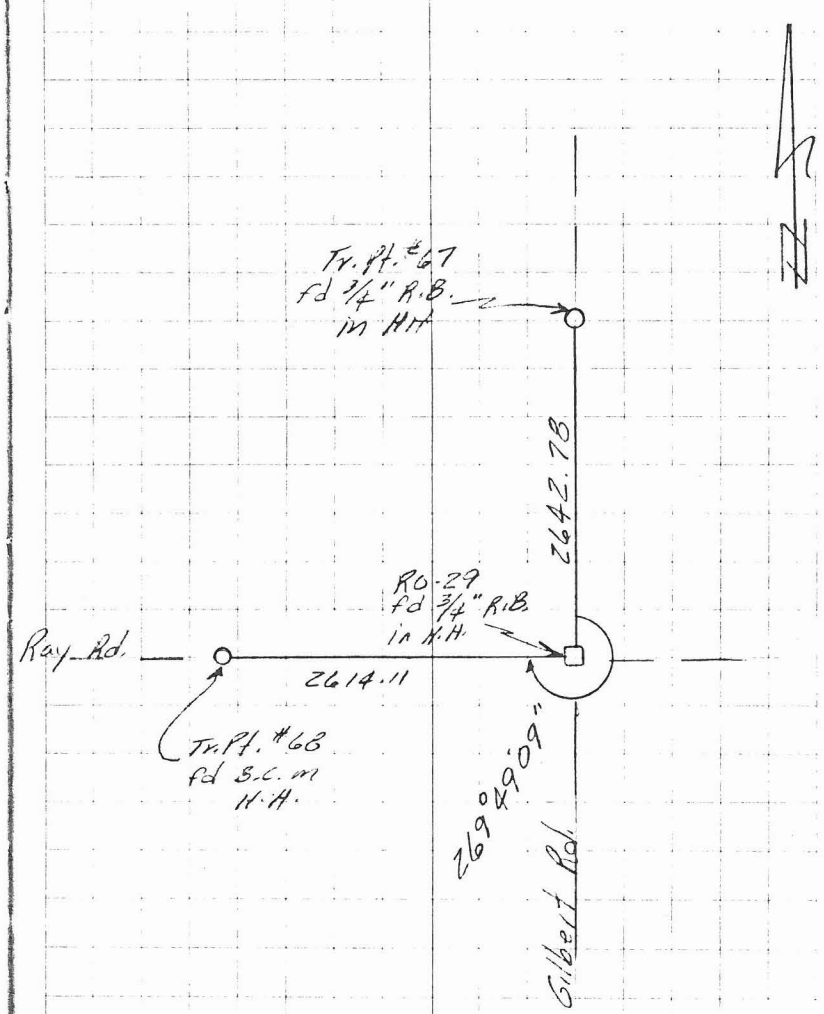
Z $\measuredangle$ = 90°09'59"

S.D. = 2614.12

H.D. = 2614.11

9/16/37

802/60



MCFCD

Traverse - Block 4

161	162	163
RO-29	→ TP #68 →	HC-32

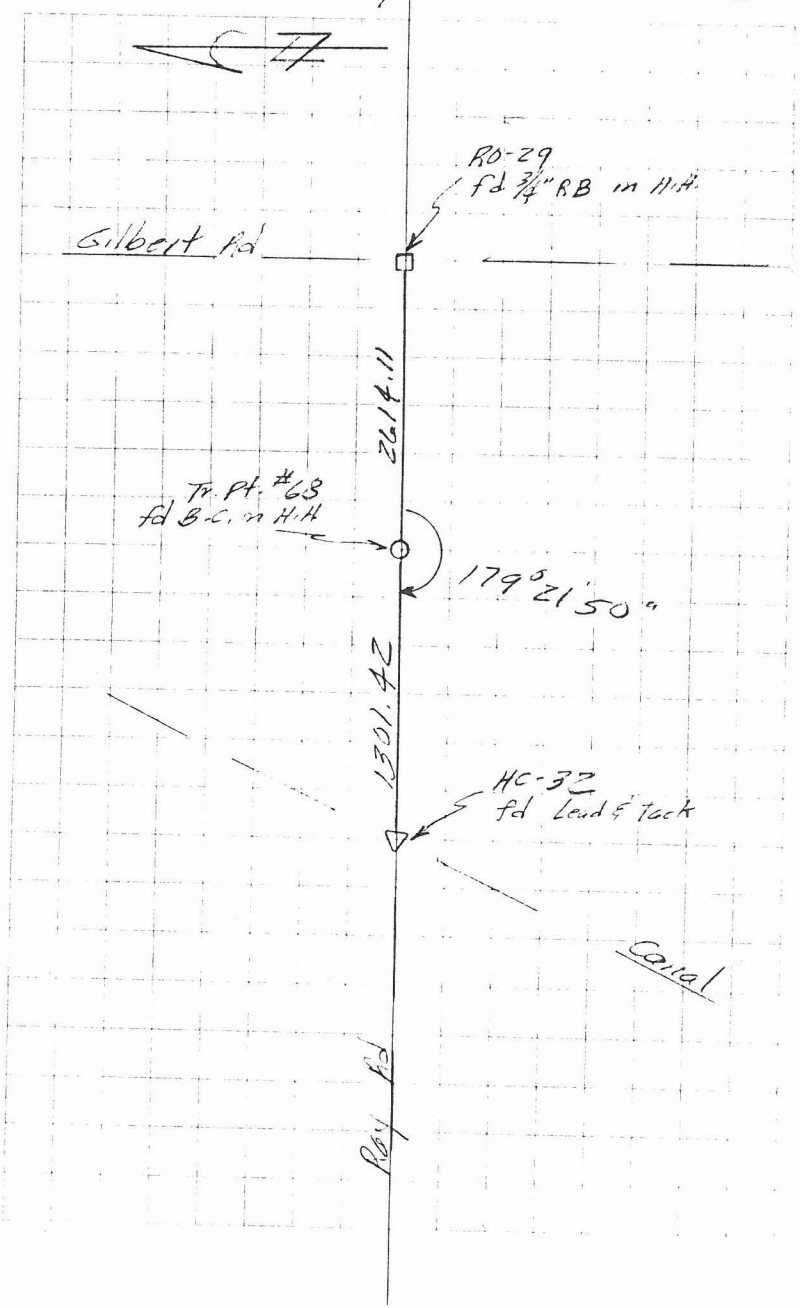
$\measuredangle$#1 = 179°21'45"
$\measuredangle$#2 = 356°11'00"
MM = 179°21'50" ✓

HD to RO-29
EX = 89°53'24"
S.D. = 2614.12
H.D. = 2614.115

HD to HC-32
EX = 90°08'49"
S.D. = 1301.40
H.D. = 1301.395

9/6/37

5-4
22



MCFCD — Traverse — Block C

164	163	162
TP #69	HC-32	TP #68

$\measuredangle$#1 = 263°26'11"

$\measuredangle$#2 = 140°37'16" ✓

MN$\measuredangle$ = 263°26'13"

−359°59'60"

96°33'47" ✓

HD to TP #68

Z$\measuredangle$ = 89°56'00'

S.D. = 1301.44

H.D. = 1301.44

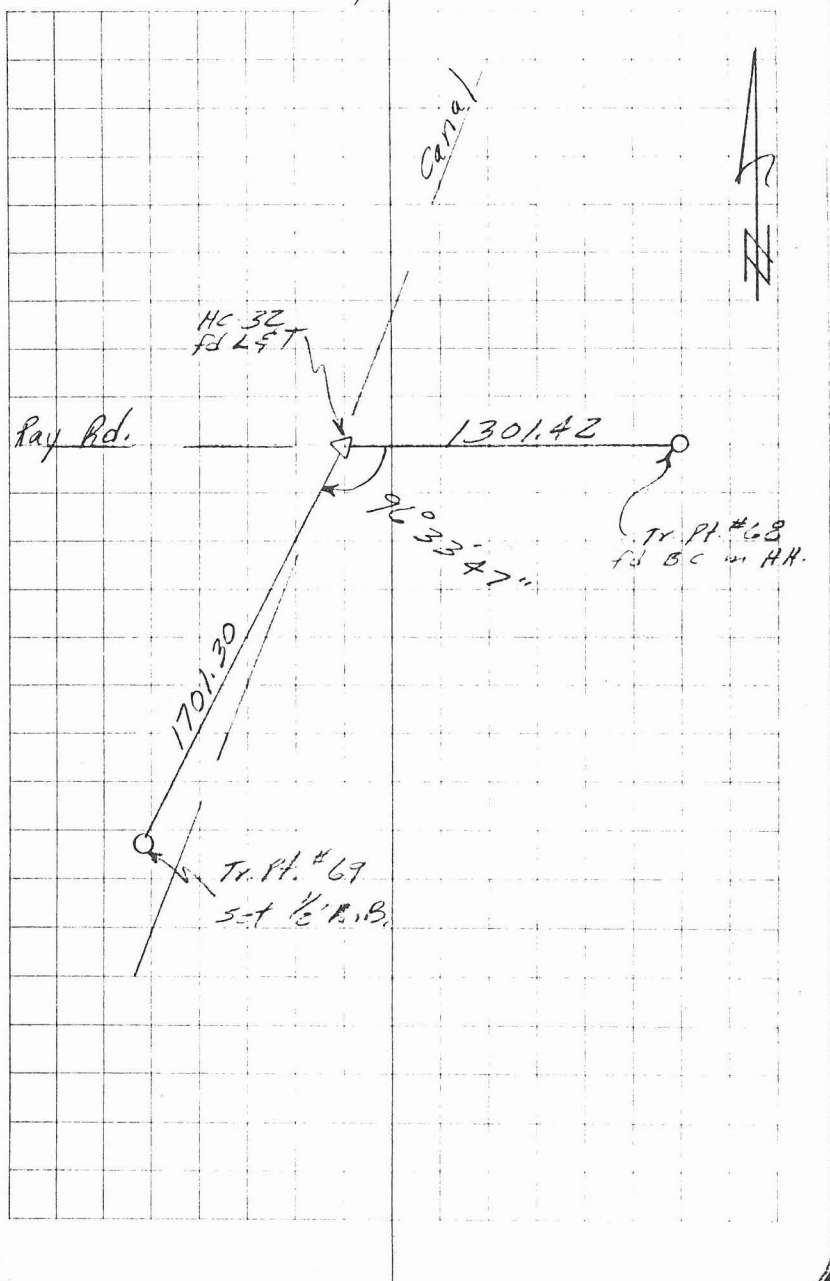
HD to TP #69

Z$\measuredangle$ = 90°07'21"

S.D. = 1701.31

H.D. = 1701.305

9/4/57



MCFCD Traverse – Block 4

9/6/87

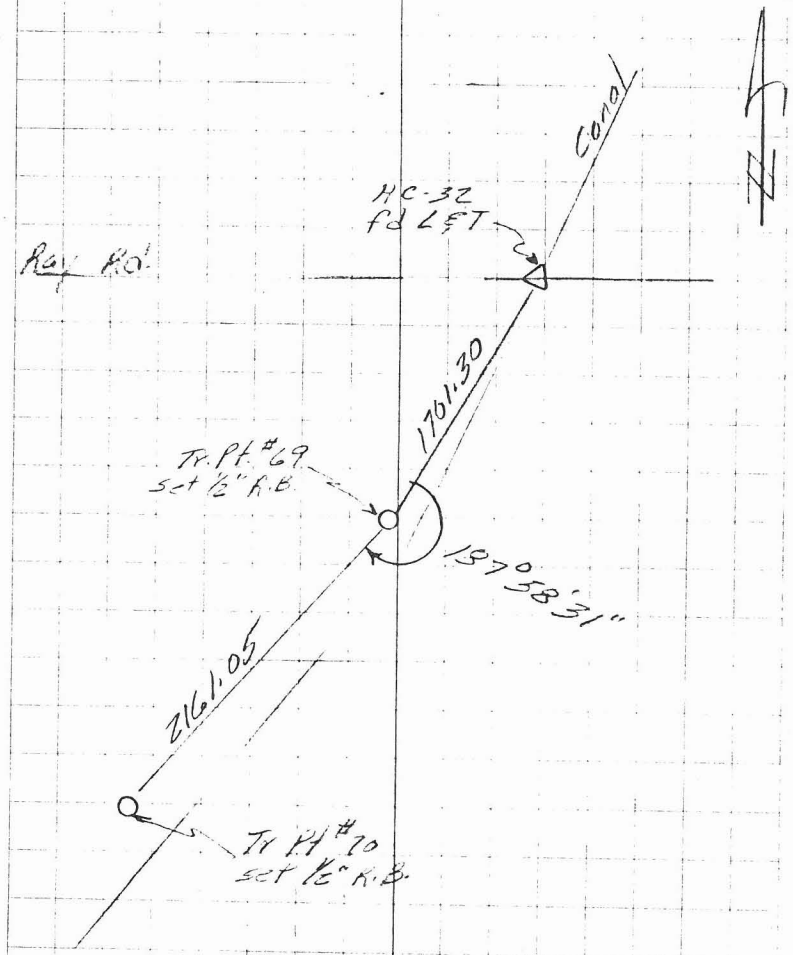
804
6.

165	164	163
TP#70	→ TP#69	→ HC-32

∠#1 = 172°01'21"
∠#6 = 312°08'52" ✓
MN∠ = 172°01'29" ✓
359°59'60" ✓
187°58'31"

HD to HC-32
Z∠ = 89°56'35"
S.D. = 1701.30
H.D. = 1701.30

HD to TP#70
Z∠ = 90°00'29"
S.D. = 2161.05
H.D. = 2161.05



MCFCD Traverse — Block 4

9/16/87

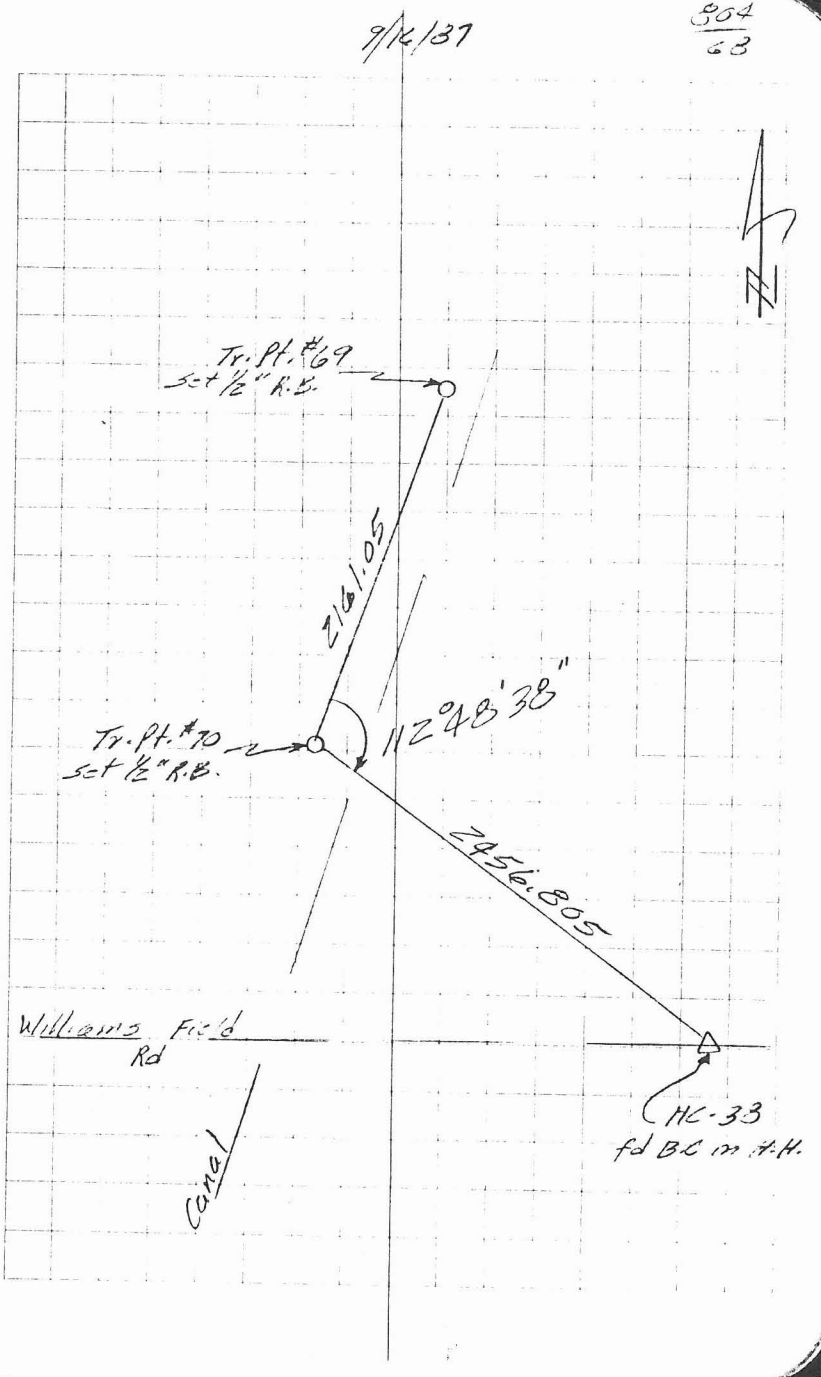
504/63

166	165	164
HC-38	→ TP #70	→ TP #69

∠#1 = 247°11'23"
∠#6 = 43°08'13"
MN∠ = 247°11'22"
− 359°59'60"
112°48'38"

HD to TP #69
Z∠ = 90°03'33"
S.D. = 2161.05
H.D. = 2161.05

HD to HC-38
Z∠ = 90°00'21"
S.D. = 2456.80
H.D. = 2456.80



MCFCD Traverse - Block 4

9/X/37

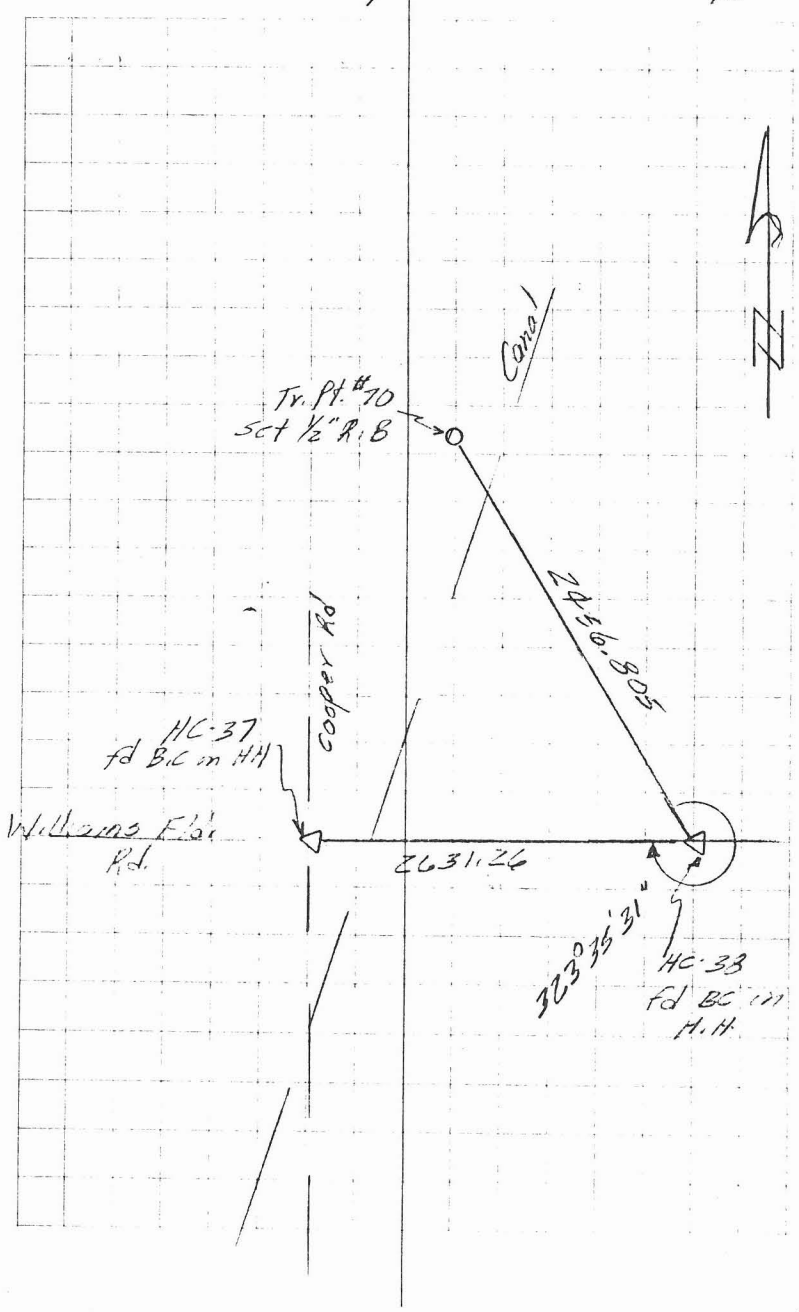
92-2
70

167	166	165
HC-37 →	HC-33 →	TP #70

$\measuredangle$ #1 = 36°24'31"
$\measuredangle$ #6 = 218°26'51"
MM = 36°24'29" ✓
− 359°59'60"
323°35'31"

HD to TP #70
$\Sigma\measuredangle$ = 90°02'48"
SD = 2456.81
HD = 2456.81

HD to HC-37
$\Sigma\measuredangle$ = 90°05'47"
SD = 2631.26"
HD = 2631.255



MCFCD Traverse – Block 4

168	167	166
TP #71	HC-37	HC-33

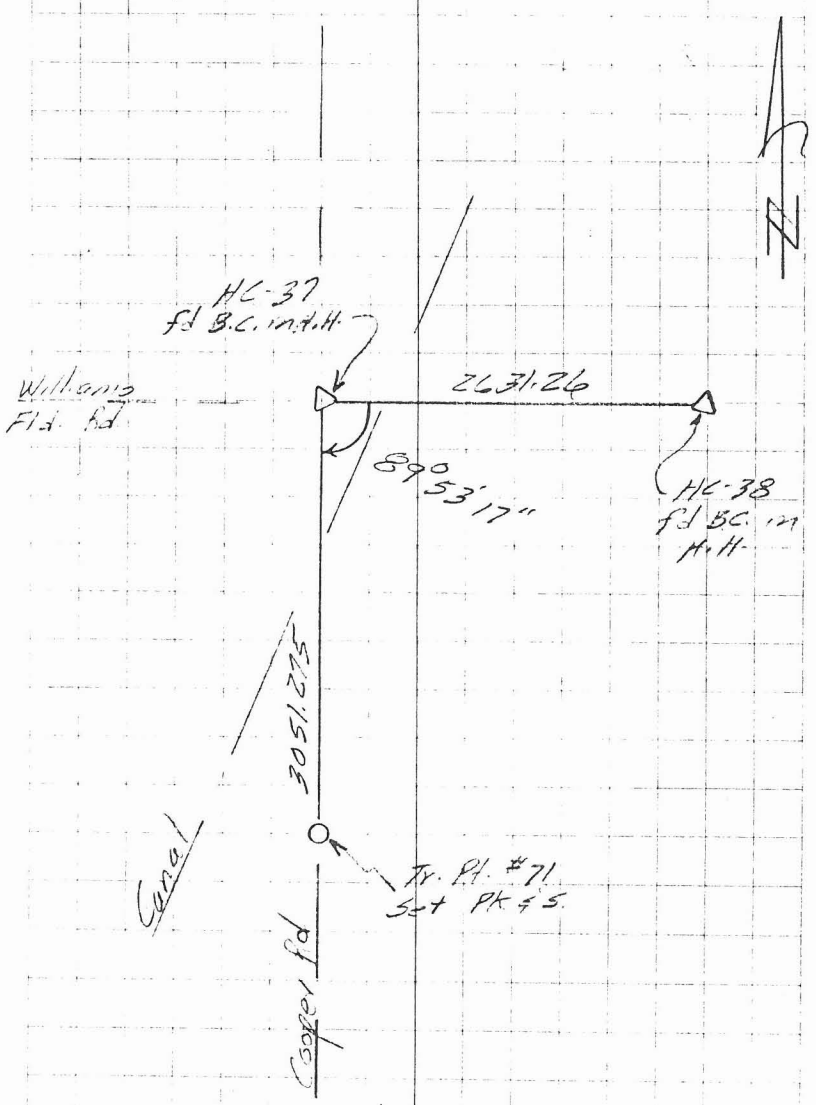
∠#1 = 270°06'33"
∠#6 = 180°40'16"
MIX = 270°06'43" ✓
−359°59'60"
89°53'17" ✓

HD to HC-38
∠ = 90°04'06"
S.D. = 2631.27
H.D. = 2631.27

HD to TP #71
∠ = 90°03'48"
S.D. = 3051.28
H.D. = 3051.28

9/16/37

8 of 7



MECO Traverse – Block 4

167	168	169
HC-37	TP #71	TP #72

$\angle$ #1 = 213°48'26"

$\angle$ #6 = 202°50'38"

$\angle$ 1 & 2 = 213°48'26" ✓

HD to HC-37

ΣA = 89°59'20"

S.D. = 3051.27

H.D. = 3051.27

HD to TP #72

ΣA = 90°04'44"

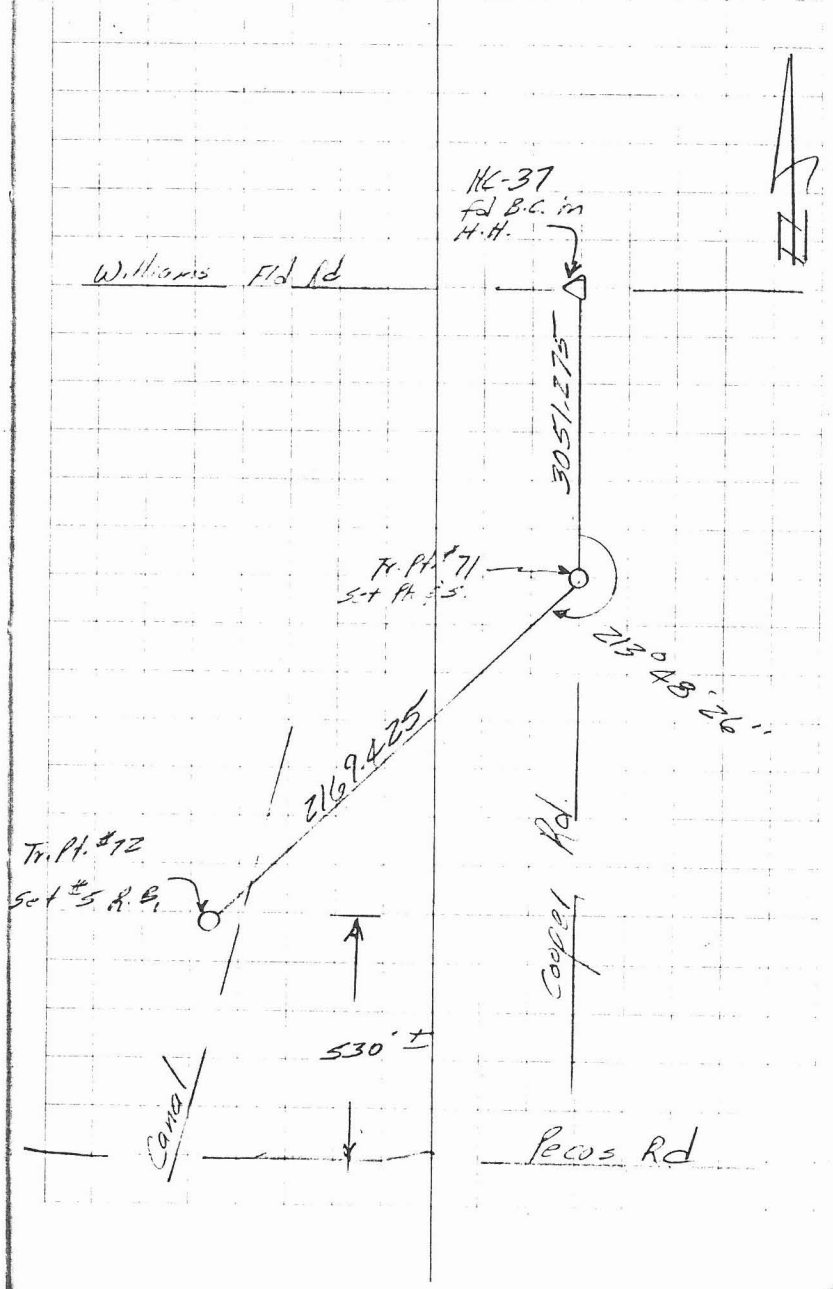
S.D. = 2169.42

H.D. = 2169.42

L. Von Dyke
R. McMurray
T. Clack

9/21/87

334/74



MCFCD Traverse – Block 4

9/21/87

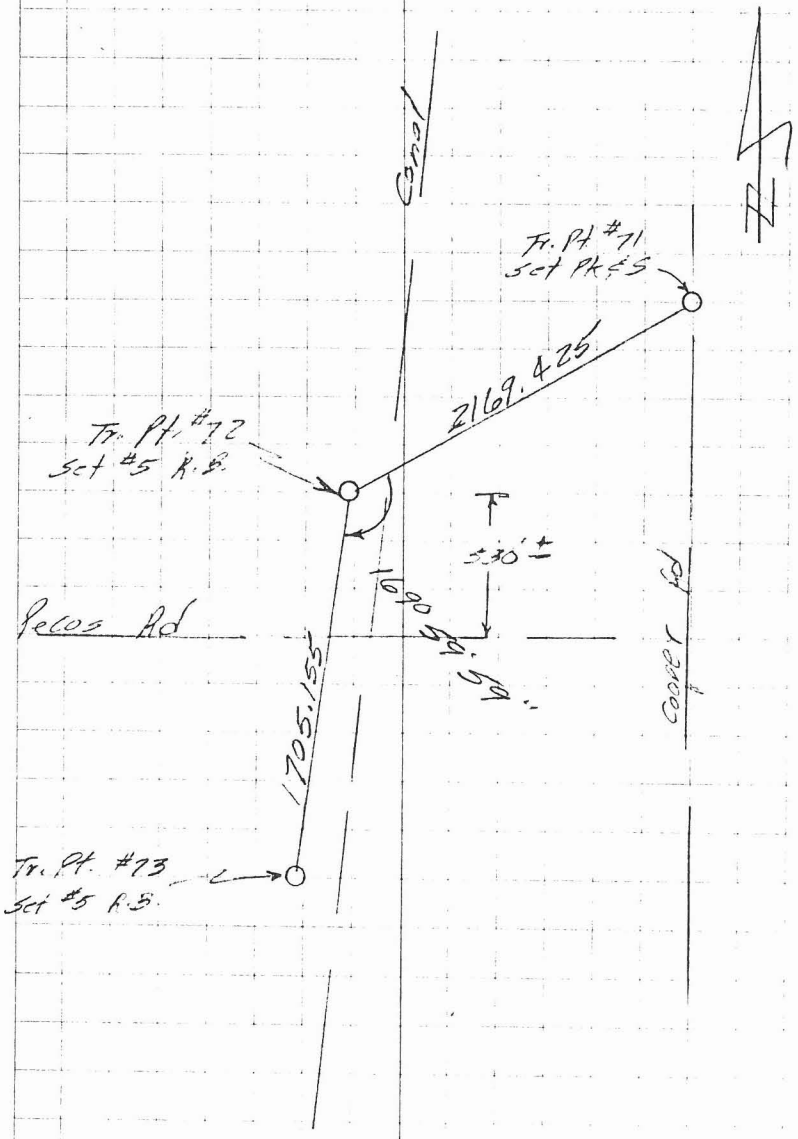
504/76

168 — TP #71 → 169 — TP #72 → 170 — TP #73

∠#1 = 170°00'03"
∠#2 = 299°59'53"
MNX = 169°59'59" ✓

HD to TP #71
ΣX = 89°57'50"
S.D. = 2169.43
H.D. = 2169.43

HD to TP #73
ΣX = 90°02'21"
S.D. = 1705.16
H.D. = 1705.16



MCFCD

Traverse - Block 4

169	170	171
TP #72 →	TP #73 →	TP #74

π

$\angle$ #1 = 193°59'49"

$\angle$ #6 = 83°58'39" ✓

INT $\angle$ = 193°59'47

HD to TP #72

$\Sigma\angle$ = 90°01'41"

S.D. = 1705.15

H.D. = 1705.15

HD to TP #74

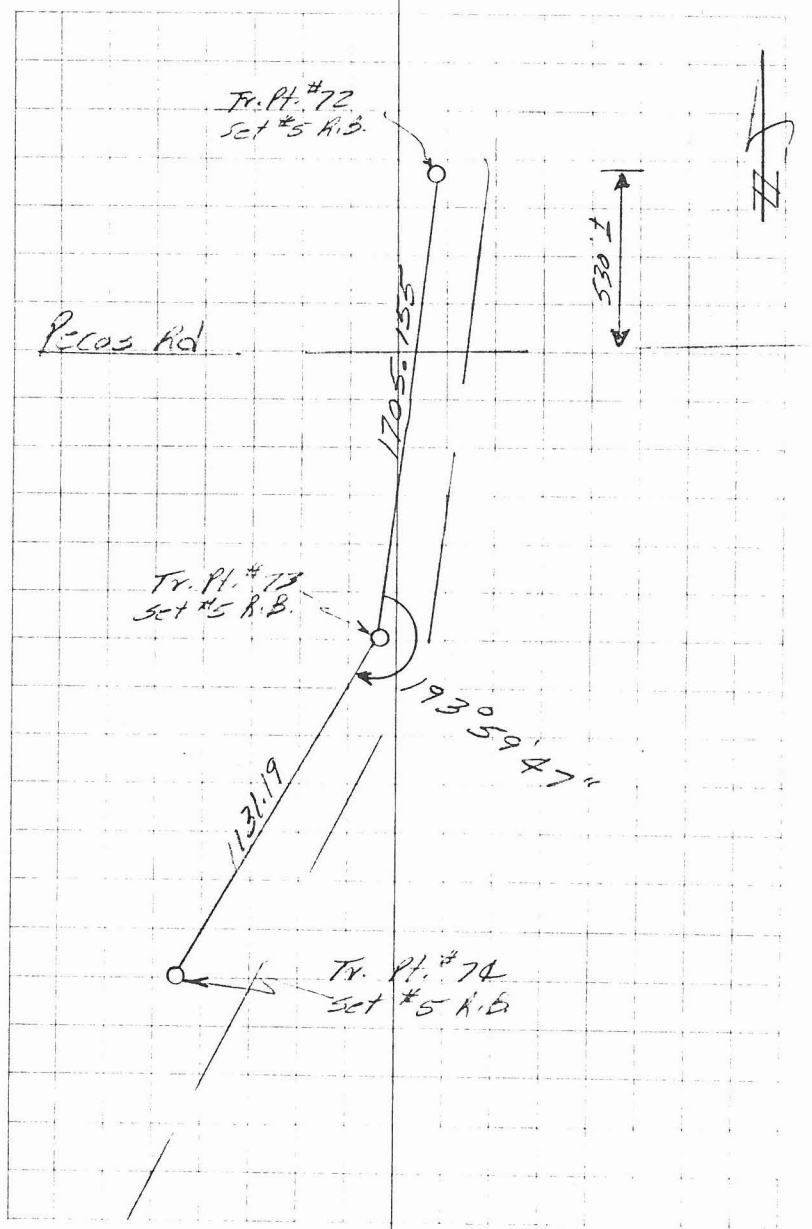
$\Sigma\angle$ = 90°02'12"

S.D. = 1131.19

H.D. = 1131.19

9/21/37

914/13



MCFCD Traverse - Block 4

9/21/87

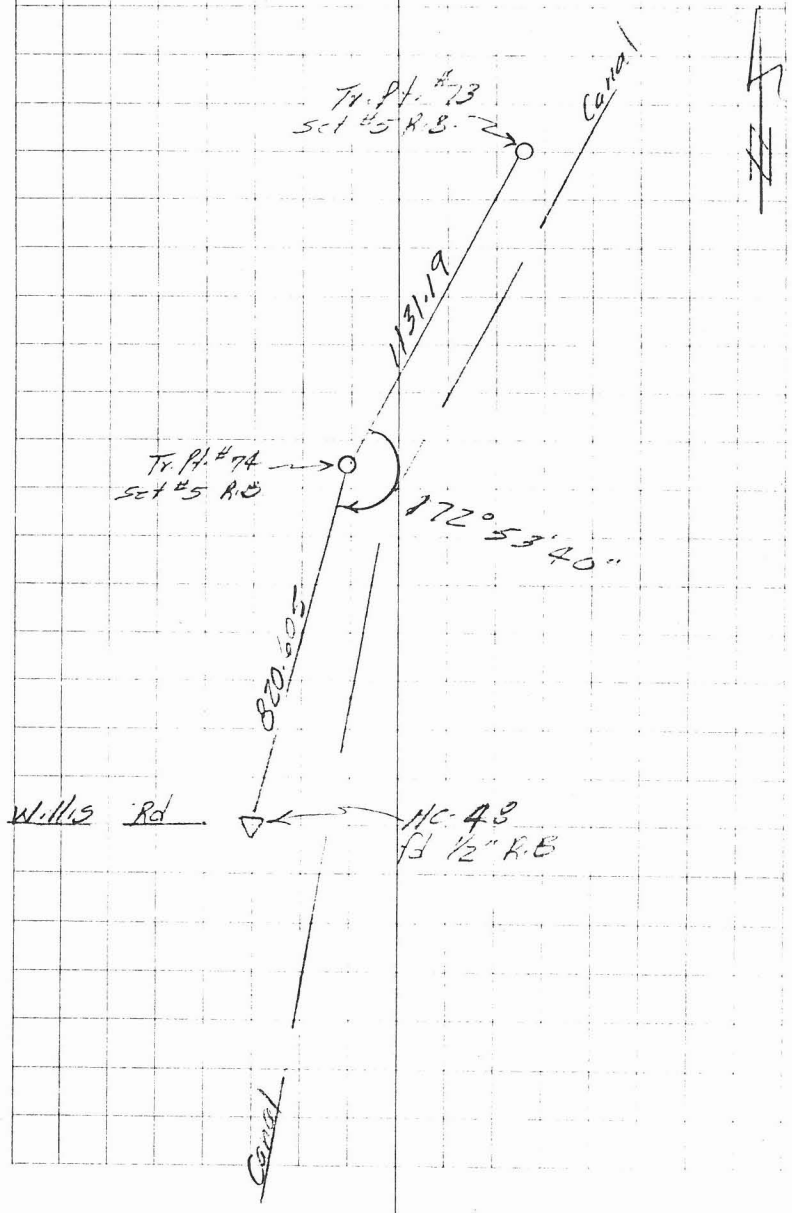
804/83

170	171	172
TP #73	TP #74	HC-48

∠#1 = 172°53'41"
∠#6 = 317°21'59"
MM∠ = 172°53'40" ✓

HD to TP #73
Z∠ = 90°03'09"
S.D. = 1131.19
H.D. = 1131.19

HD to HC-48
Z∠ = 90°13'46"
S.D. = 820.61
H.D. = 820.605



MCFCD — Traverse — Block 4

9/21/87

504
82

173	172	171
RO-38	→ HC-48	→ TP #74

$\measuredangle$ #1 = 121°49'49"

$\measuredangle$ #2 = 10°59'52" ✓

INT = 121°49'59" ✓

− 359°59'60" ✓

238°10'01"

HD to TP #74

$\measuredangle$ = 89°53'50"

S.D. = 820.61

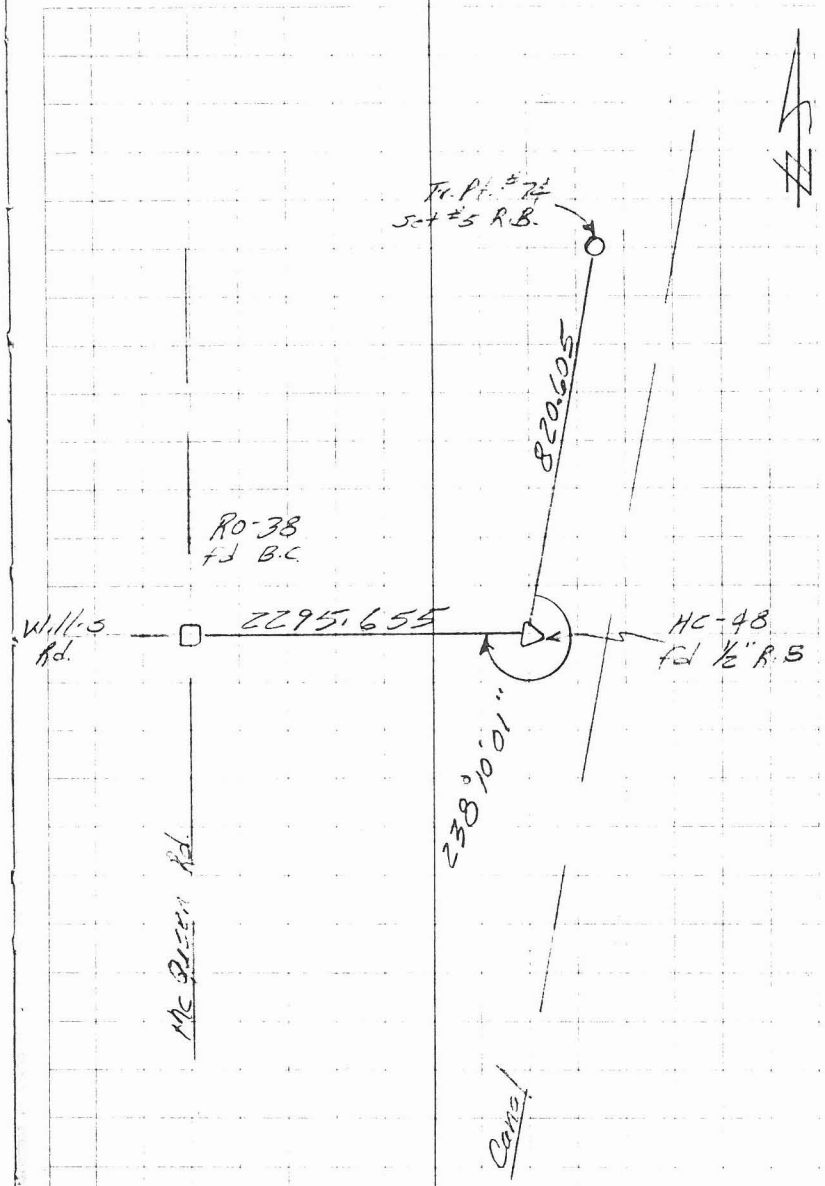
H.D. = 820.61

HD to RO-38

$\measuredangle$ = 90°13'12"

S.D. = 2295.67

H.D. = 2295.655



MCFCD Traverse Block ℄

172	173	174
HC-48 →	RO-38	→ HC-47

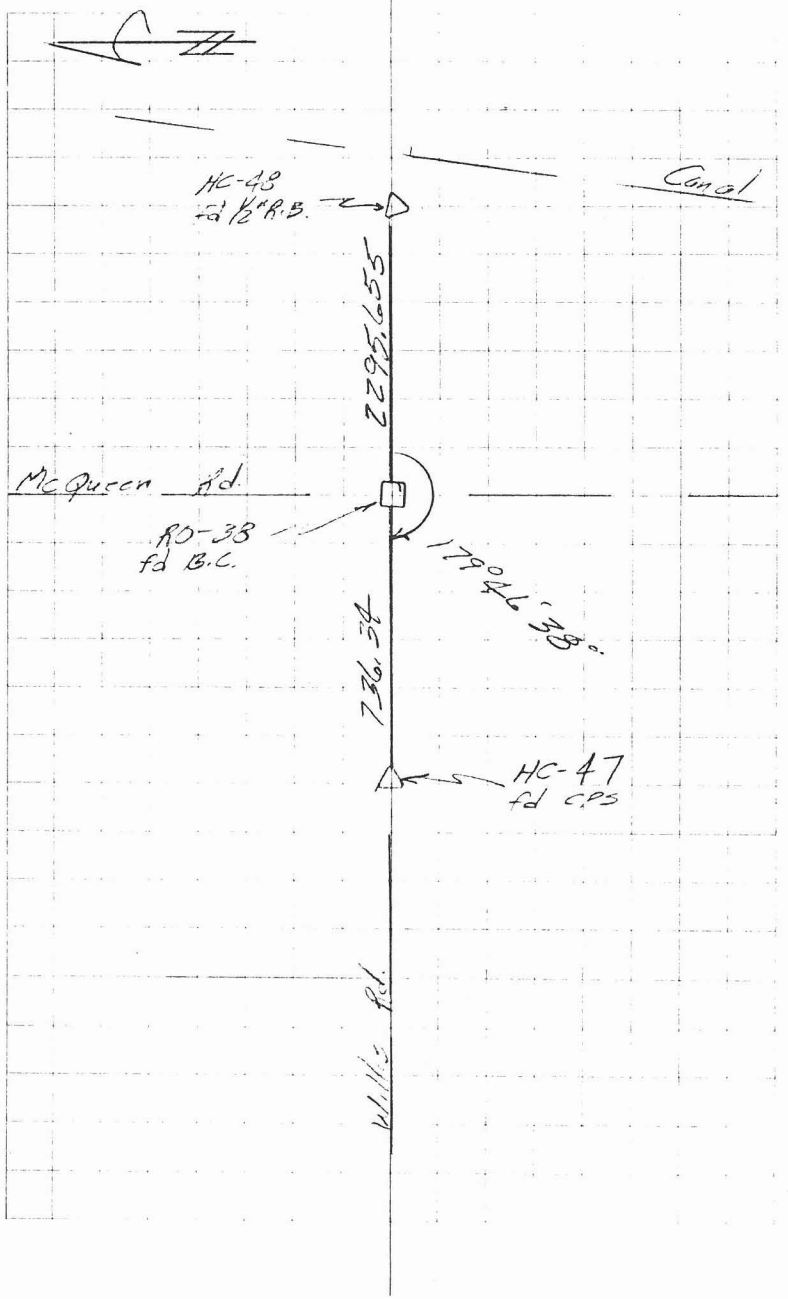
∠#1 = 179°46'48"
∠#2 = 358°39'45"
Δ∠ = 179°46'38"

HD to HC-48
ZA = 89°50'17"
S.D. = 2295.66
H.D. = 2295.65

HD to HC-47
ZA = 90°09'41"
S.D. = 736.35
H.D. = 736.345

9/21/37

3-7
3-2



MCFCD Traverse – Block 4

9/21/87

3.4
5.0

173	174	175
RO-38	HC-47	TP #75

π

$\measuredangle$#1 = 24°49'21"

$\measuredangle$#6 = 148°56'15"

MN $\measuredangle$ = 24°49'23" ✓

HD to RO-38

$\measuredangle$ = 89°58'38"

S.D. = 736.34

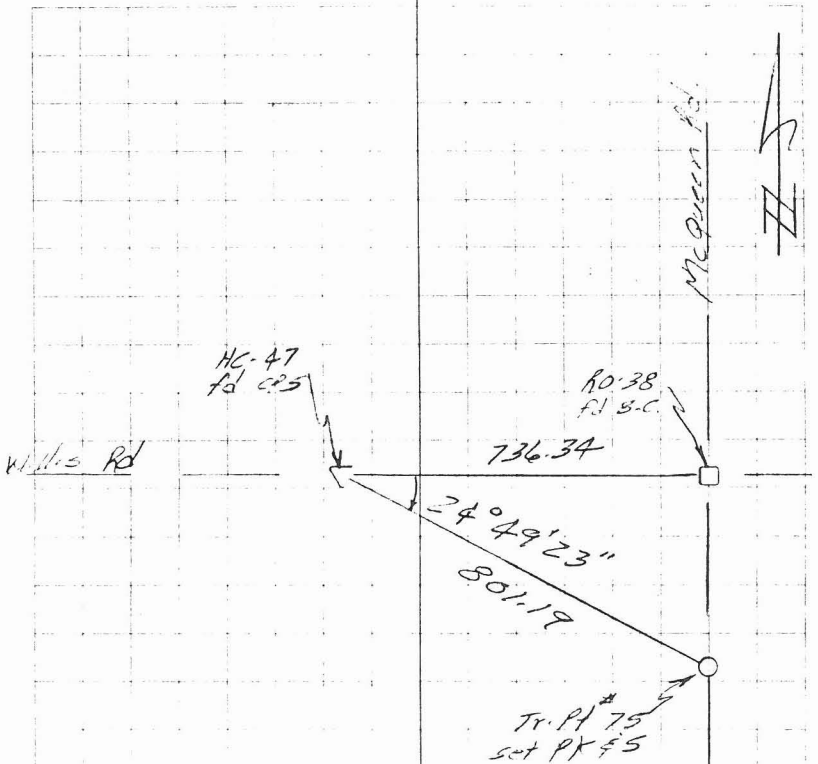
H.D. = 736.34

HD to TP #75

$\measuredangle$ = 89°58'45"

S.D. = 801.19

H.D. = 801.19



MCFCD — Tract 4 — Block 4

176 — 175 — 174

TP #76 → TP #75 → HC-47

$\measuredangle$ #1 = 113°35'33"

$\measuredangle$ #6 = 321°33'33"

INT = 113°35'36"

− 359°59'60"

246°24'24"

HD to HC-47

ΣX = 90°09'14"

S.D. = 801.19

H.D. = 801.185

HD to TP #76

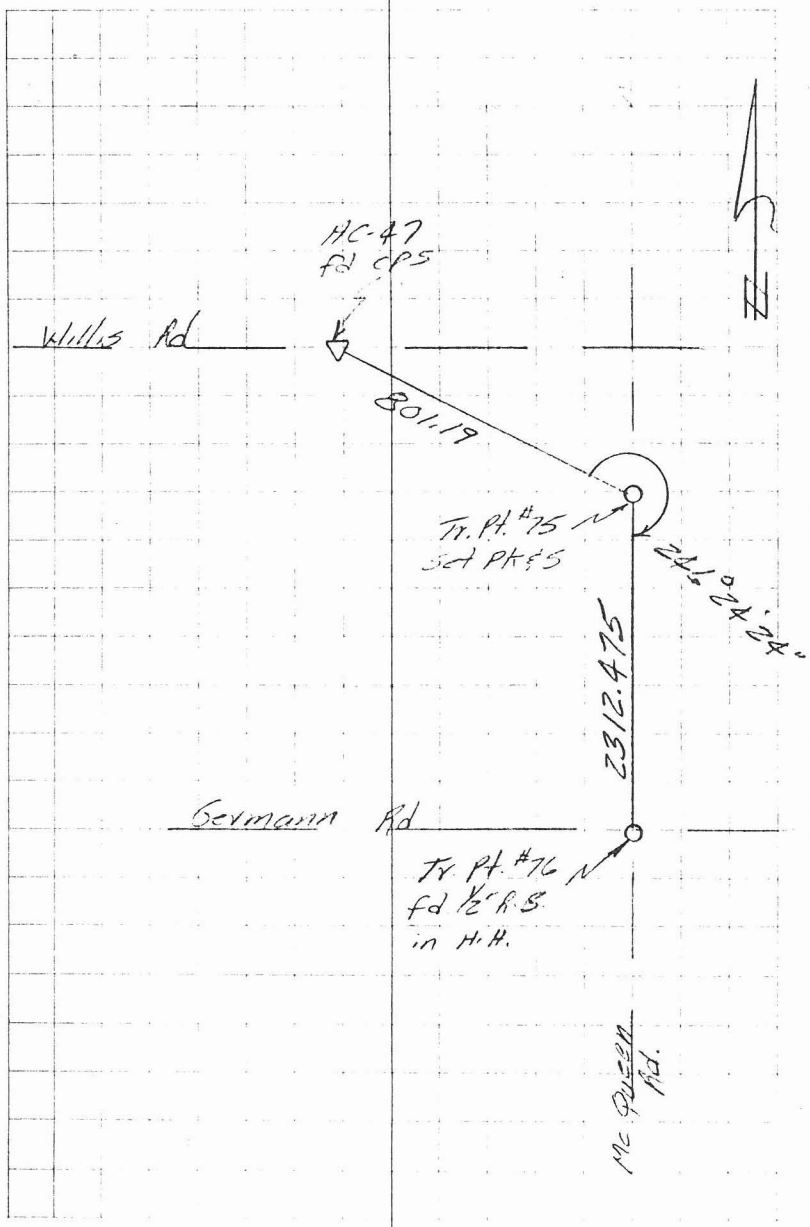
ΣX = 90°01'40"

S.D. = 2312.48

H.D. = 2312.48

9/21/87

3/4
83



MCFCD — Traverse — Block C

178	176	175
TP #77 →	TP #76 →	TP #75

$\measuredangle$ #1 = 270°26'56"

$\measuredangle$ #6 = 182°42'35" ✓

MN $\measuredangle$ = 270°27'06"

− 359°59'60"

89°32'54" ✓

HD to TP #75

Z $\measuredangle$ = 90°02'12"

S.D. = 2312.47

H.D. = 2312.47

HD to TP #77

Z $\measuredangle$ = 89°47'12"

S.D. = 2644.38

H.D. = 2644.36

9/21/37

304/70

MCFCD

Traverse – Block 4

176 — 178 — 178

TP #76 → TP #77 → HC-49

$\measuredangle$ #1 = 179° 58' 44"

$\measuredangle$ #6 = 359° 52' 08"

MN $\measuredangle$ = 179° 58' 41" ✓

HD to TP #76

Z $\measuredangle$ = 90° 16' 02"

S.D. = 2644.36

H.D. = 2644.33

HD to HC-49

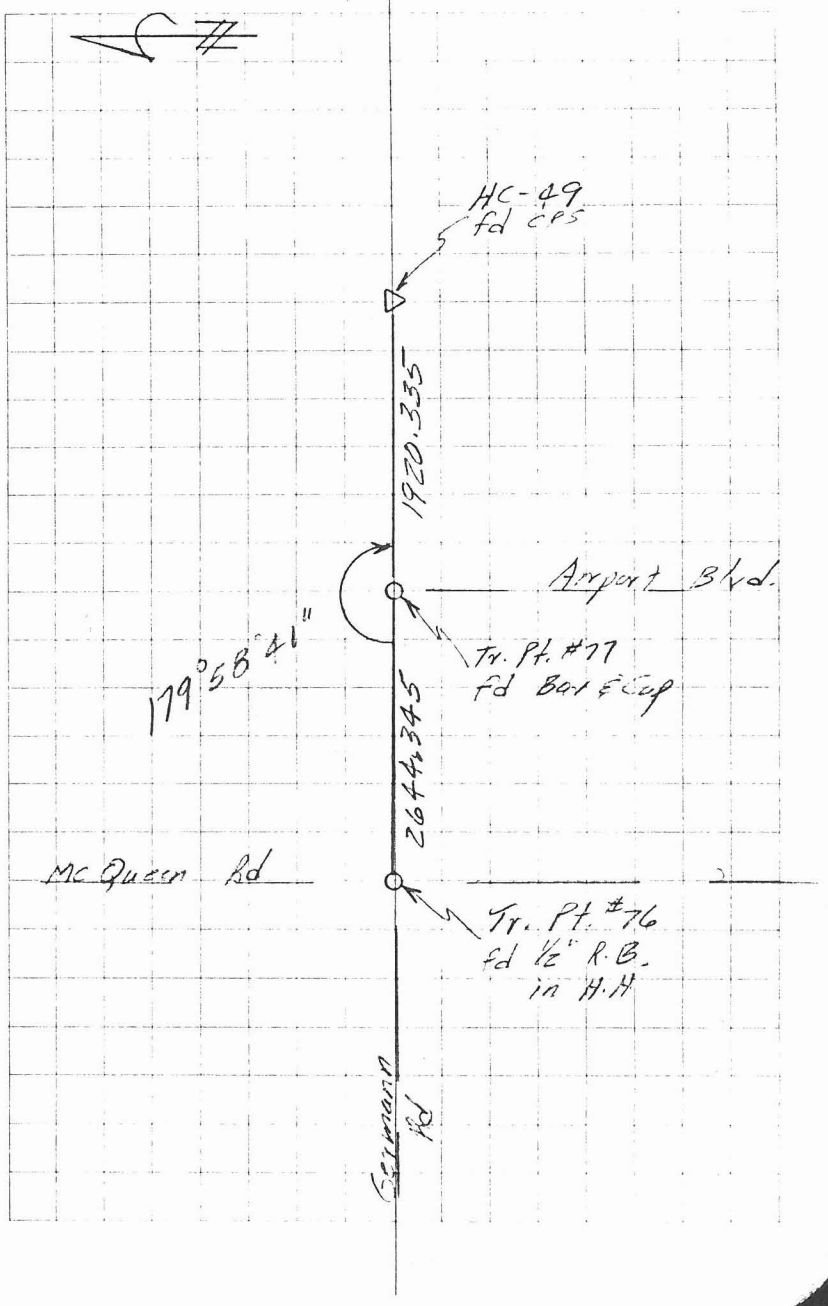
Z $\measuredangle$ = 89° 58' 00"

S.D. = 1920.33

H.D. = 1920.33

9/21/87

501
93



MCFCD Traverse - Block 4

177 178 179

TP#77 → HC-49 → Sec. Cor.

∠#1 = 180°04'42"

∠#2 = 0°09'24"

MN∠ = 180°04'42" ✓

HD to Sec Cor. = 723.76

180 178 177

TP#78 → HC-49 → TP#77

∠#1 = 104°49'14"

∠#6 = 268°55'57" ✓

MN∠ = 104°49'20"

359°59'60" ✓

255°10'40"

HD to TP#77

Z∠ = 90°06'04"

S.D. = 1920.34

H.D. = 1920.335

HD to TP#78

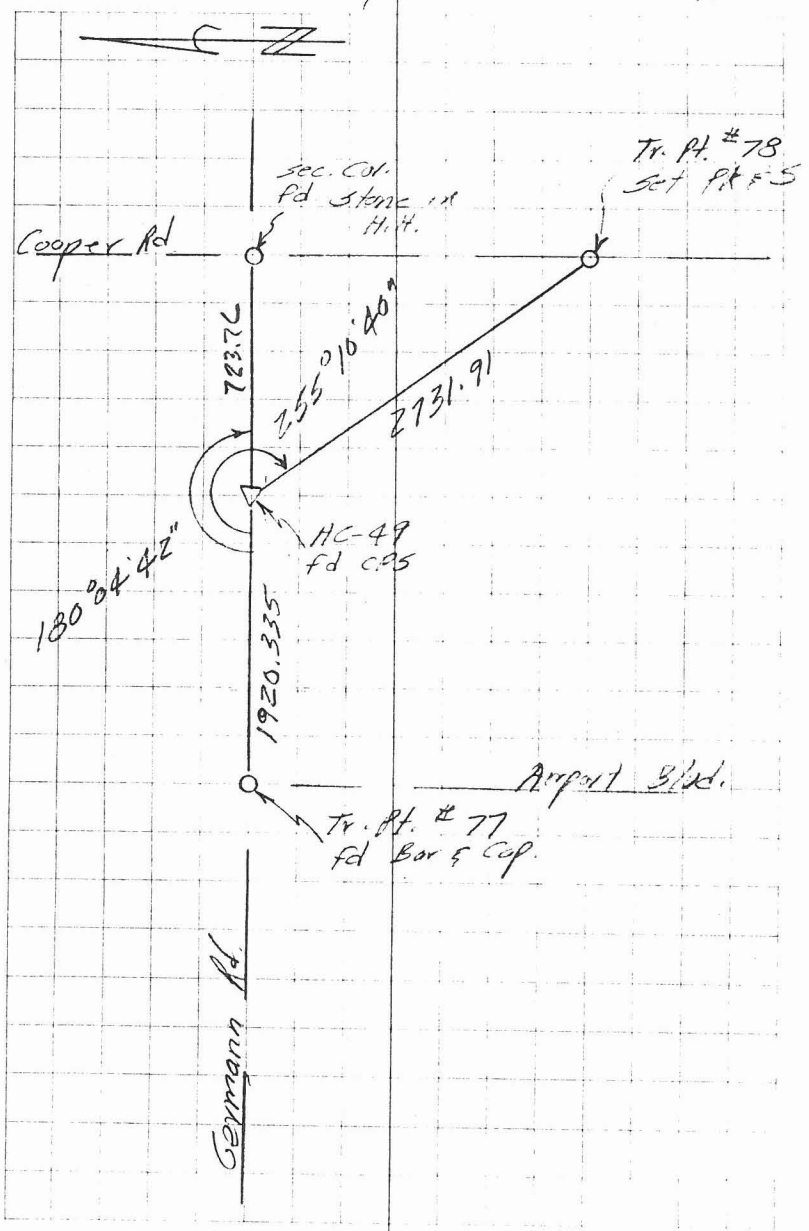
Z∠ = 90°00'02"

S.D. = 2731.91

H.D. = 2731.91

9/21/87

BJ



MCECO Traverse - Block #

178 180 181

HC-49 → TP # 78 → TP # 79

∠ #1 = 195°08'55"

∠ #6 = 90°53'30"

∠ N/A = 195°08'55"

HD to HC-49

Z∠ = 90°03'19"

S.D. = 2731.91

H.D = 2731.91

HD to TP # 79

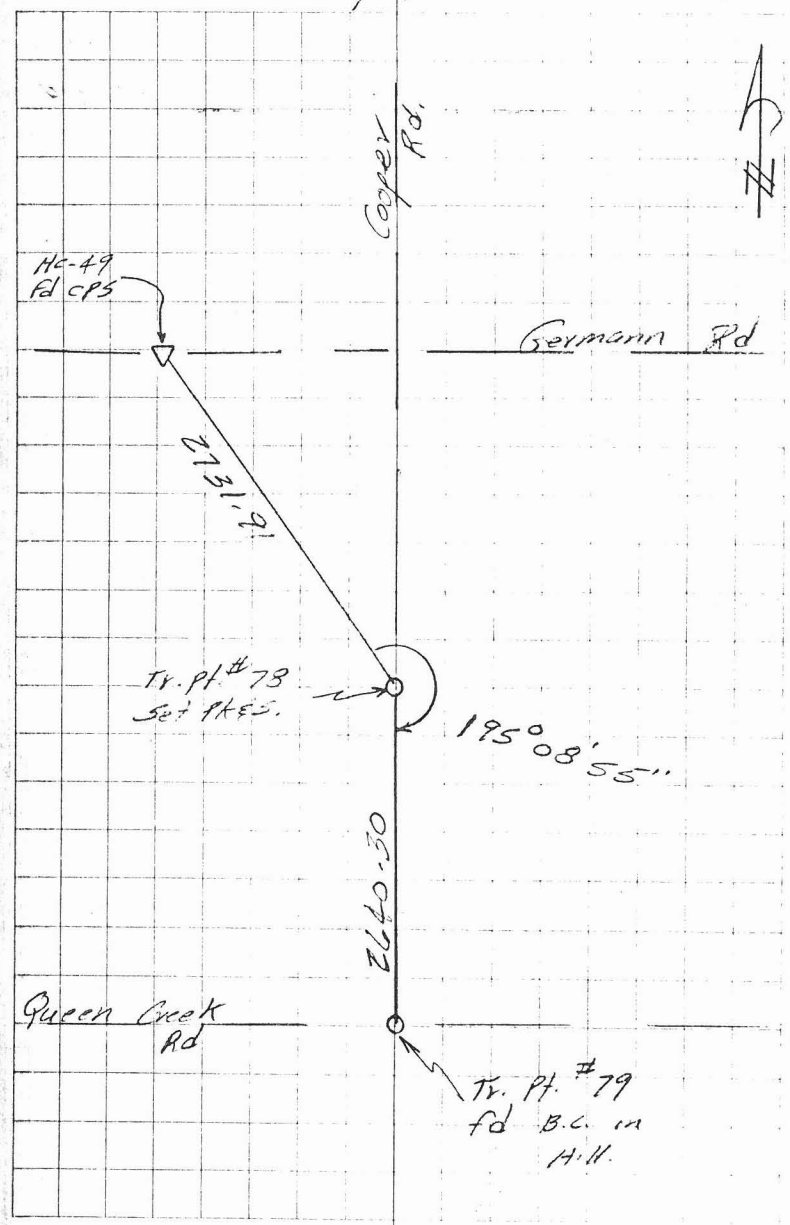
Z∠ = 89°59'03"

S.A. = 2640.30

H.D. = 2640.30

9/21/87

304
9.



MCFCD Traverse – Block 4

9/21/87

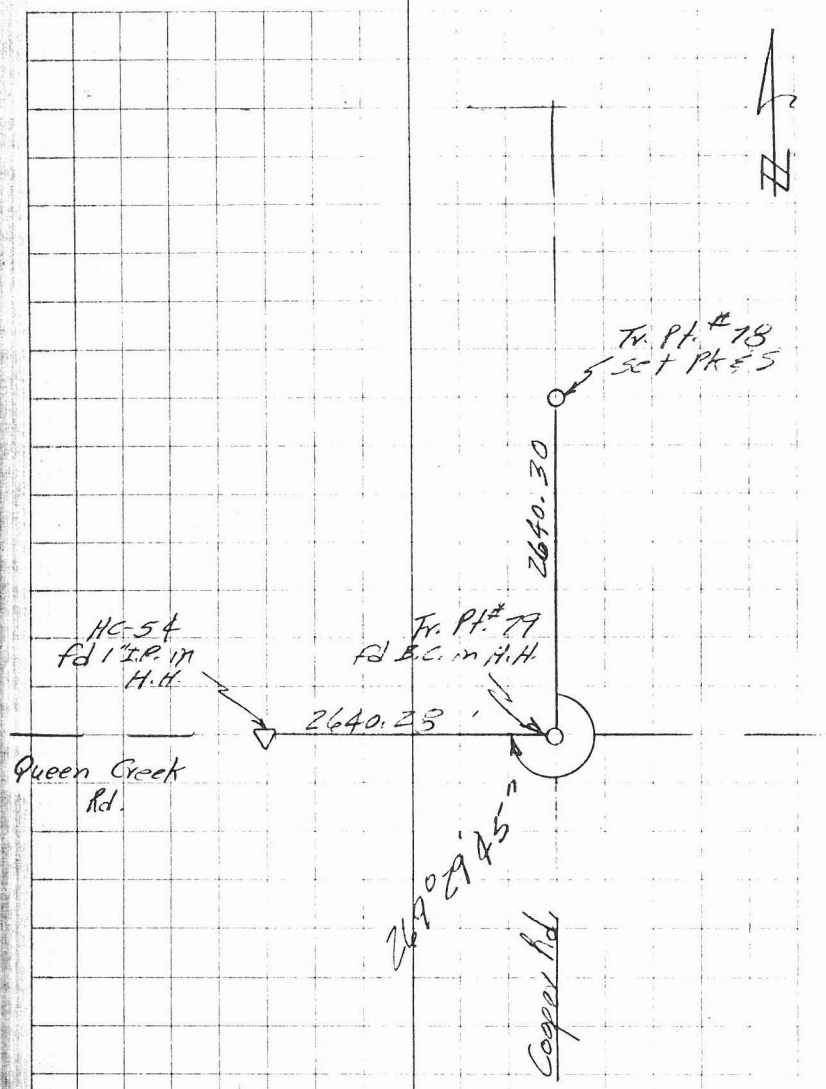
304/98

180	181	182
TP#78	→ TP#79	→ HC-54

∠#1 = 269°29'43"
∠#6 = 176°58'29"
NN∠ = 269°29'45" ✓

HD to TP#78
ZA = 90°05'09"
S.D. = 2640.31
H.D. = 2640.305

HD to HC-54
ZA = 90°10'30"
S.D. = 2640.29
H.D. = 2640.28



MCFCD

Traverse – Black 4

181	182	183
TP #79	→ HC-54 →	HC-53

$\angle 1 = 180°00'06"$

$\angle 2 = 00°01'18$

$MN\angle = 180°00'13"$

HD to TP #79

$Z\angle = 89°53'18"$

SD = 2640.29

HD = 2640.285

HD to HC-53

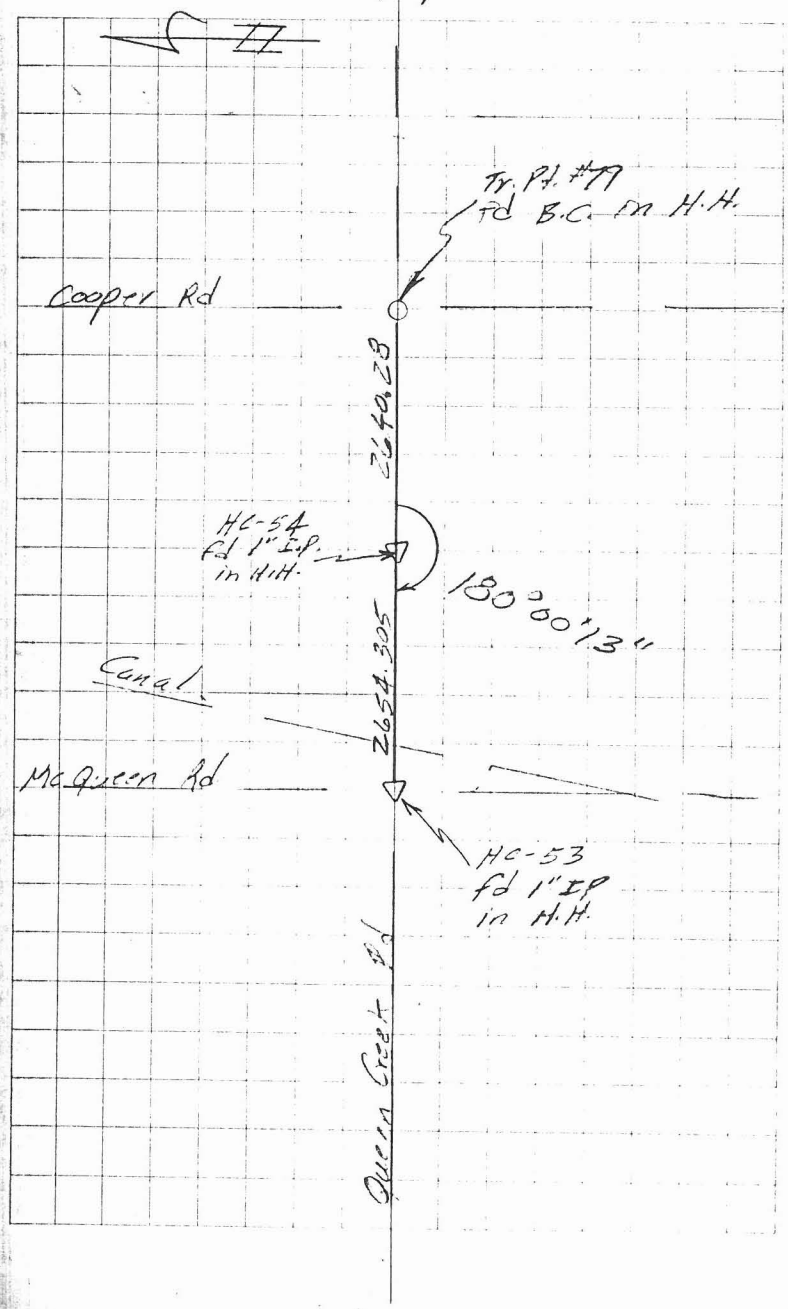
$Z\angle = 90°10'51"$

SD = 2654.32

HD = 2654.305

9/21/87

934/105



MCFCD Traverse — Block 4

9/21/87

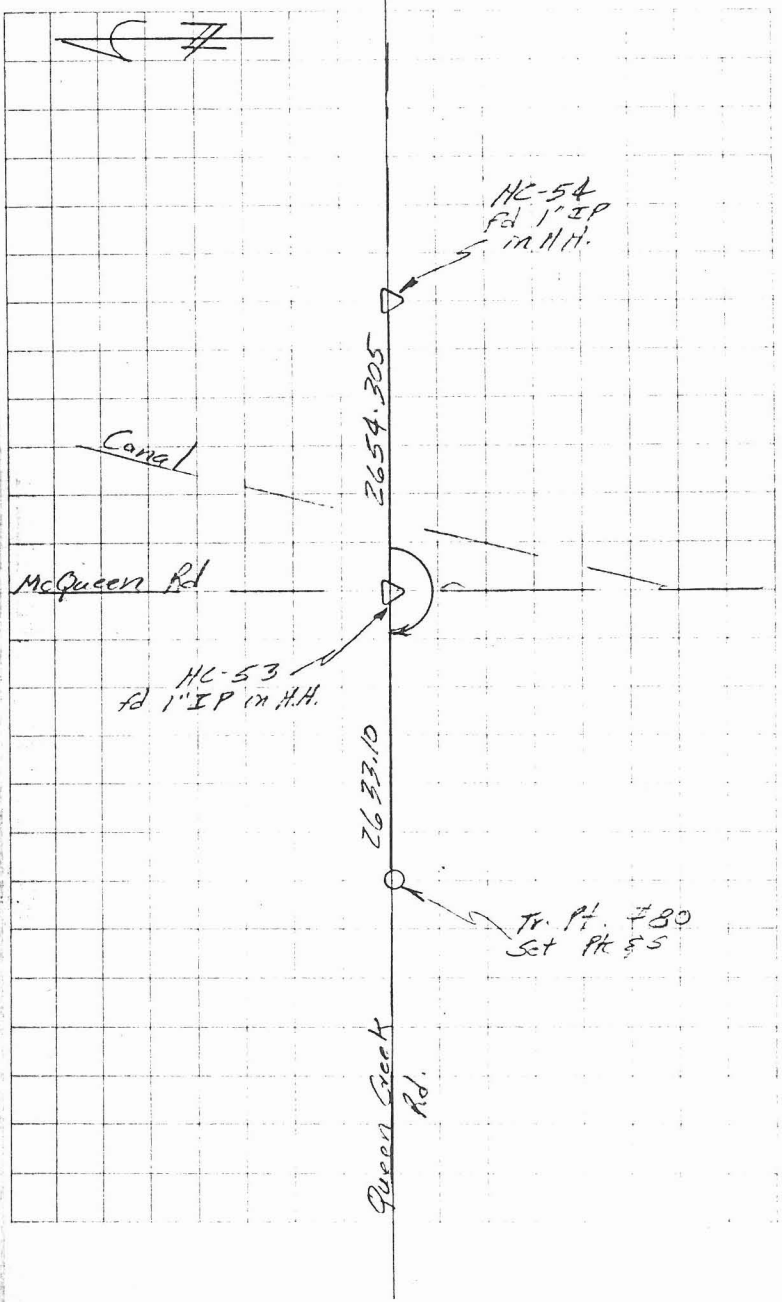
BS4
TO2

182	183	184
HC-54	→ HC-53	→ TP #80

∠#1 = 179°55'56"
∠#6 = 359°35'24"
∠NA = 179°55'54"

HD to HC-54
ZA = 89°53'09"
SD = 2654.31
HD = 2654.305

HD to TP #80
ZA = 90°08'39"
SD = 2633.12
HD = 2633.11



MCFCD Traverse - Block 4

183	184	185
HC-53	→ TP #80 →	HC-52

$\measuredangle$ #1 = 180°02'32"
$\measuredangle$ #2 = 00°15'50"
MN $\measuredangle$ = 180°02'38"

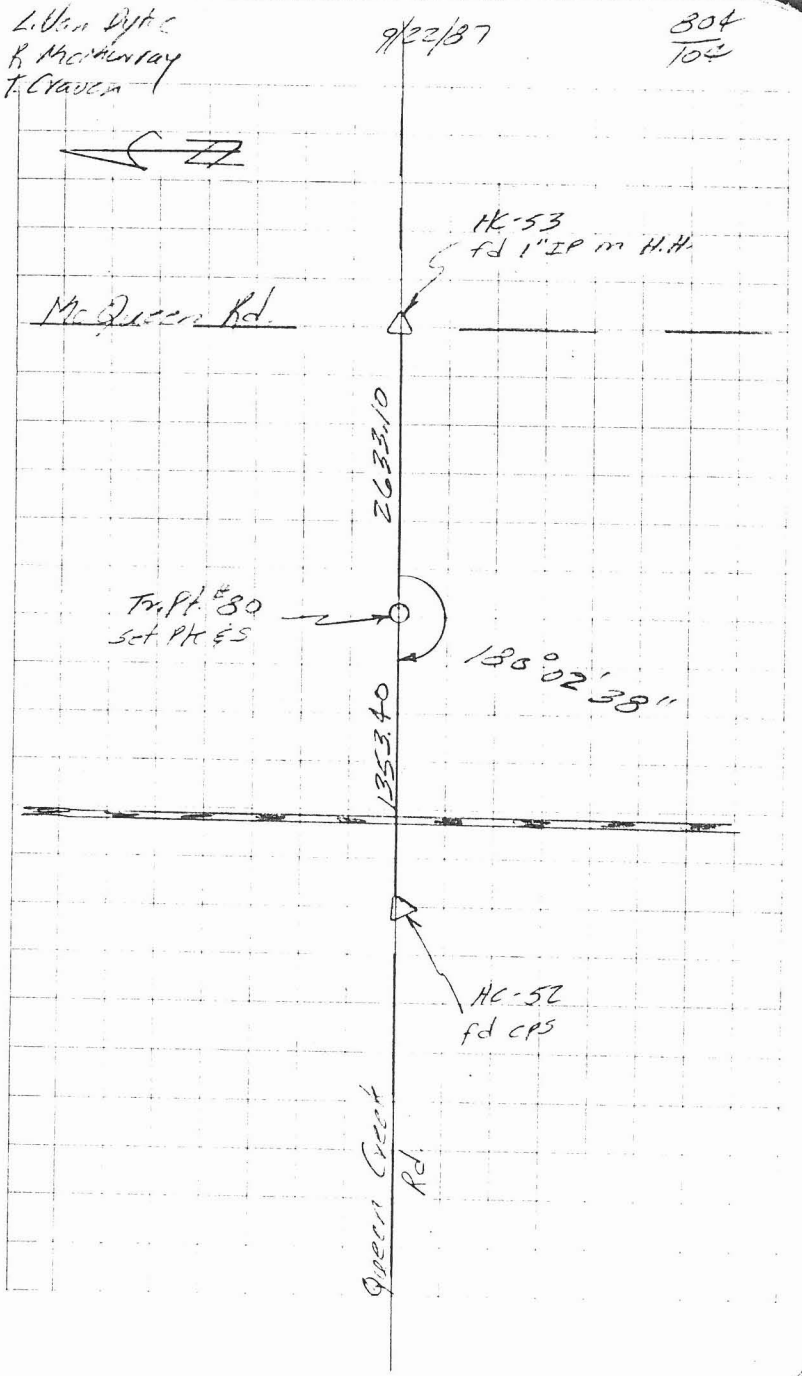
HD to HC-53
ZA = 89°54'47
SD = 2633.09
HD = 2633.085

HD to HC-52
ZA = 90°04'46"
SD = 1353.40
HD = 1353.40

L. Van Dyke
R. MacMurray
T. Craven

9/22/87

304
105



MCFCD Traverse - Block 4

9/22/87

5.24
104

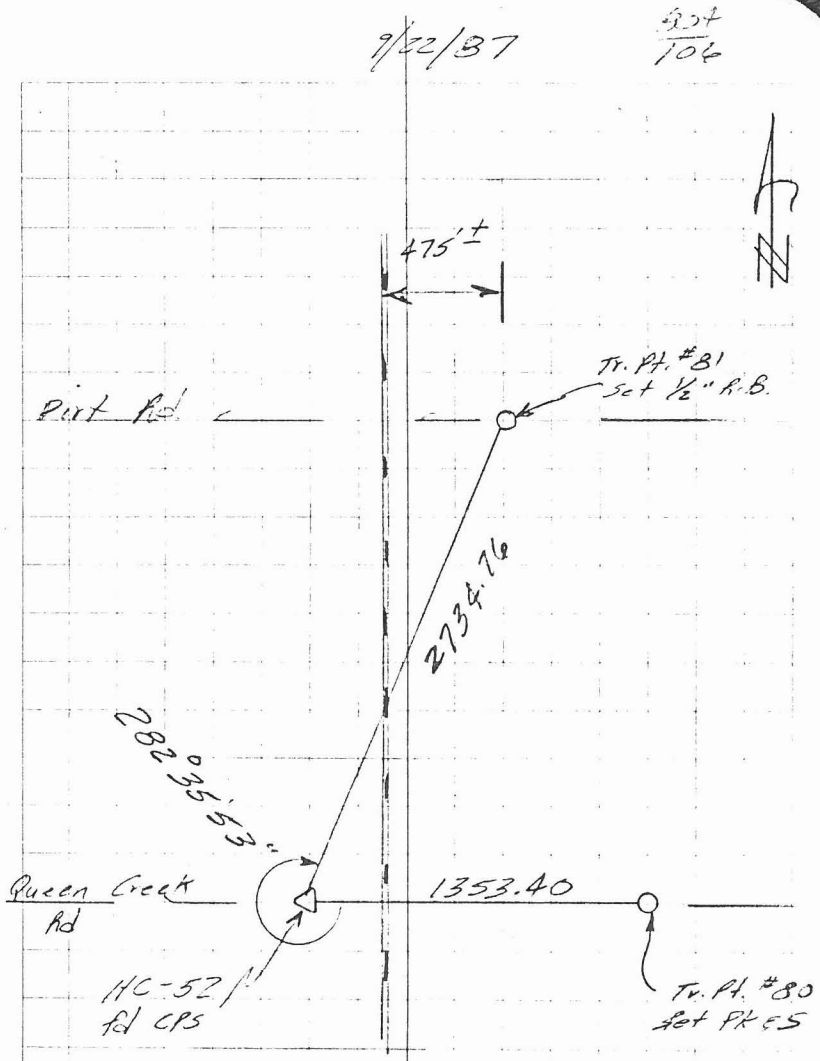
186 185 184

TP #81 → HC-52 → TP #80

∠#1 = 77°23'59"
∠#6 = 104°24'39"
MN = 77°24'07
−359°59'60"
282°35'53" ✓

HD to TP #80
ZA = 90°00'45"
S.D. = 1353.40
H.D. = 1353.40

HD to TP #81
ZA = 90°05'54"
S.D. = 2734.76
H.D. = 2734.755



MCFCD Traverse — Block 4

9/22/87

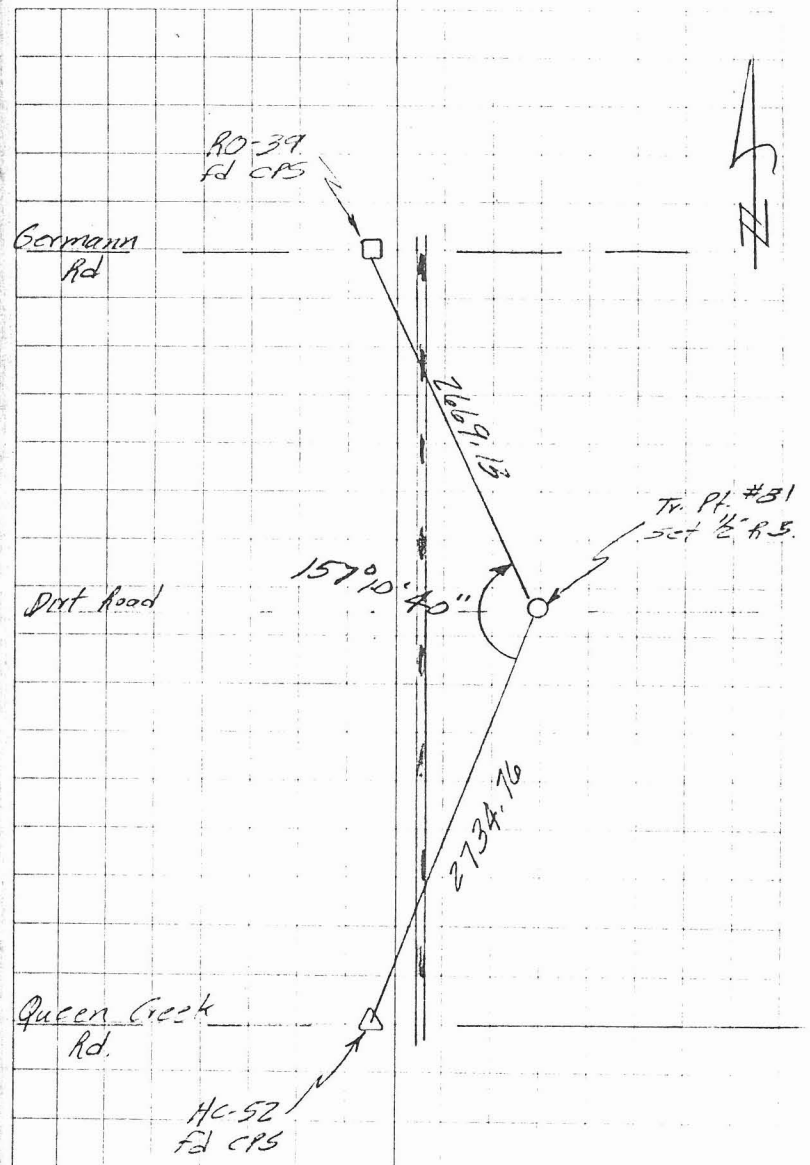
934
109

185	186	187
HC-52	→ TP #31 →	RO-39

∠#1 = 157°10'35"
∠#6 = 223°03'59" ✓
MX = 157°10'40"

HD to HC-52
ZX = 89°57'51"
S.D. = 2734.76
HD = 2734.76

HD to RO-39
ZX = 89°58'21"
SD = 2669.13
HD = 2669.13



1 MCFCD — Traverse — Block 4

9/22/97

304/110

186	187	188
TP #81	RO-39	TP #82

$\measuredangle$ #1 = 153°29'08"

$\measuredangle$ #2 = 200°54'55"

MN $\measuredangle$ = 153°29'09" ✓

HD to TP #81

$\measuredangle$ = 90°05'50"

S.D. = 2669.14

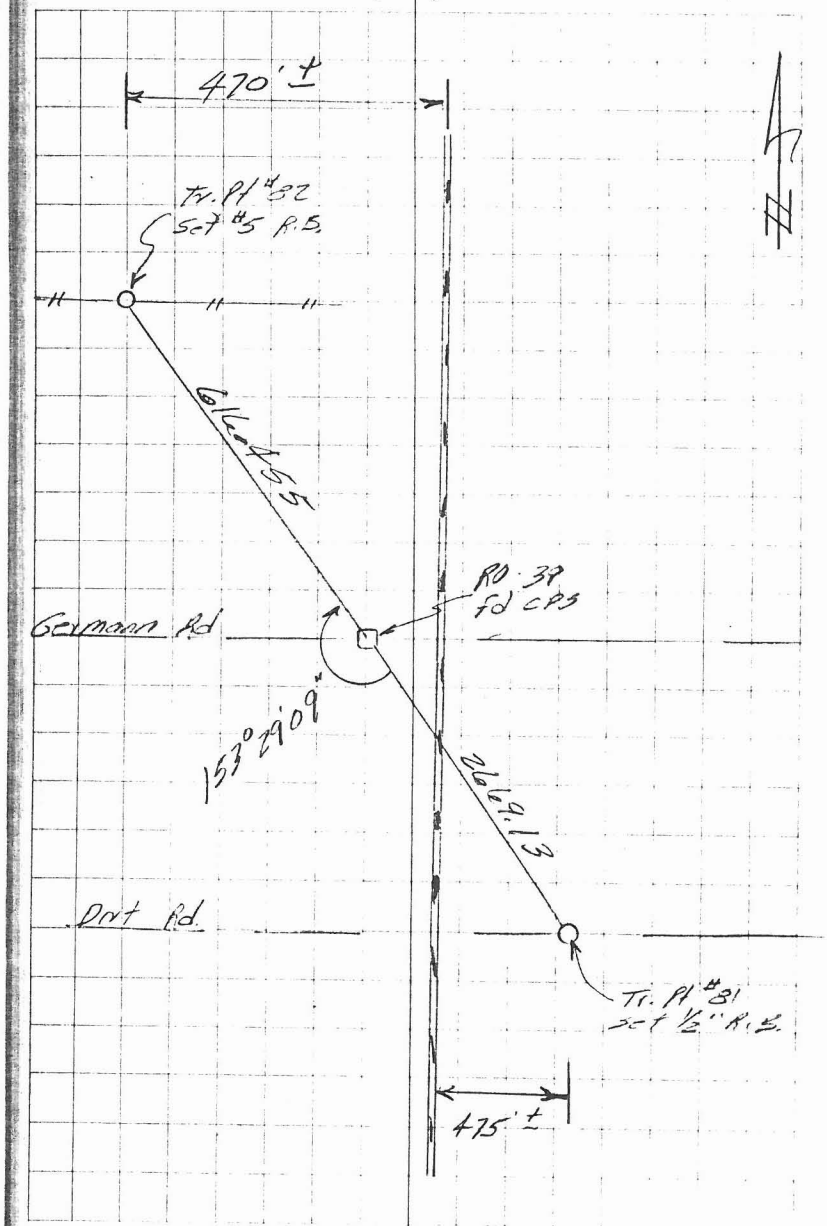
HD = 2669.135

HD to TP #82

$\measuredangle$ = 90°24'48"

SD = 616.47

HD = 616.455



MCFCD | Traverse - Block 4

9/22/97

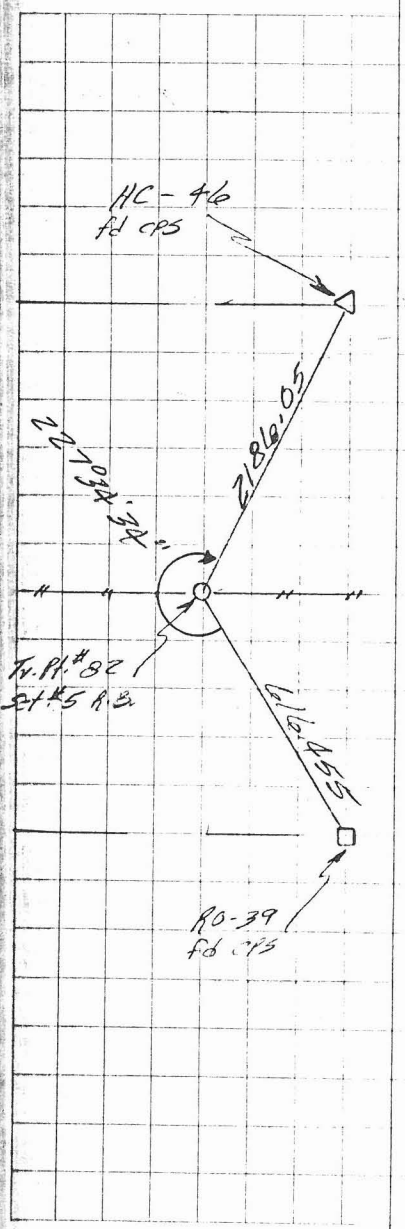
304
112

189	188	187
HC-46	→ TP #82	→ RO-39

∠#1 = 132°25'19"
∠#6 = 74°32'34"
MN ∠ = 132°25'26"
− 359°59'60"
227°34'34"

HD to RO-39
ΣA = 89°45'15"
SD = 616.44
HD = 616.455

HD to HC-46
ΣA = 89°53'57"
SD = 2186.06
HD = 2186.055



Willis Rd

Germann Rd.

MCFCD Traverse — Block 4

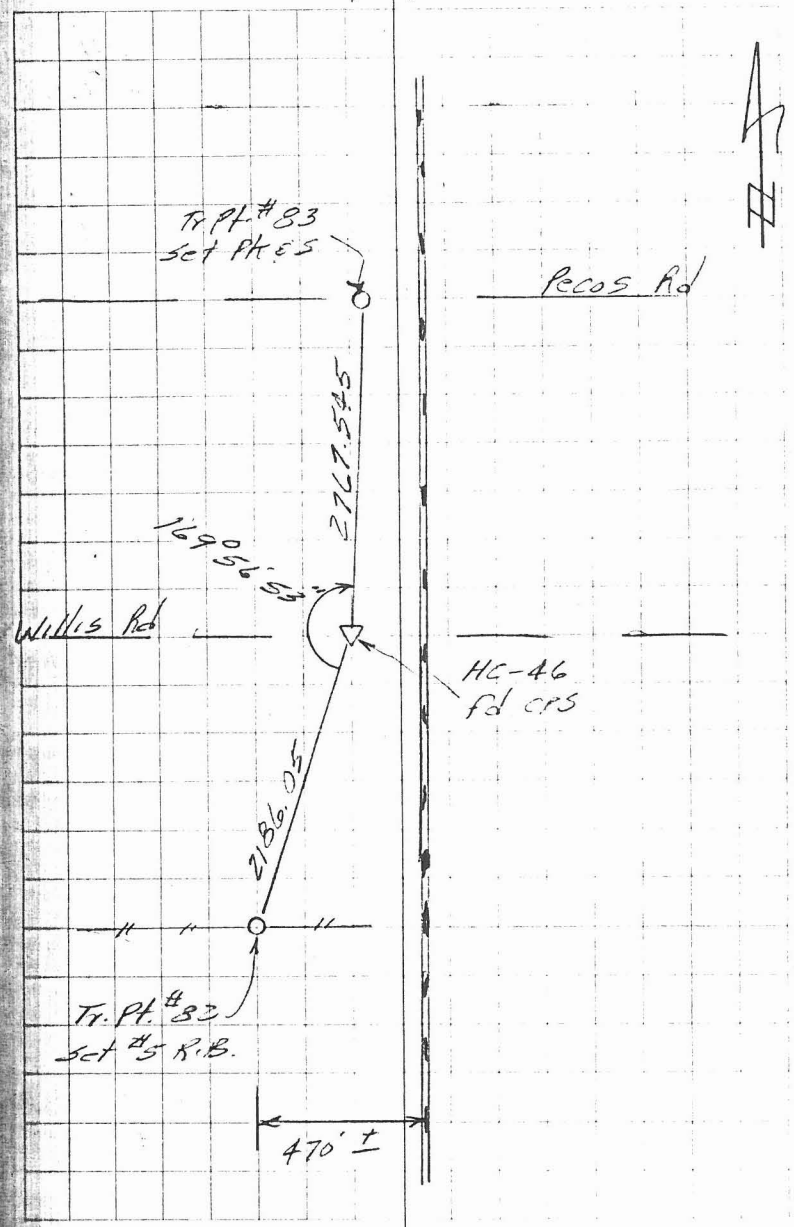
190	189	188
TP #83	HC-46	TP #82

$\measuredangle$ #1 = 190°03'02"
$\measuredangle$ #2 = 60°18'42" ✓
MN $\measuredangle$ = 190°03'07"
— 359°59'60" ✓
169°56'53"

HD to TP #82
ΣA = 90°01'20"
SD = 2186.06
HD = 2186.05

HD to TP #83
ΣA = 90°01'38"
SD = 2767.55
HD = 2767.55

9/22/87



MCFCD — Traverse — Block 4

9/22/87

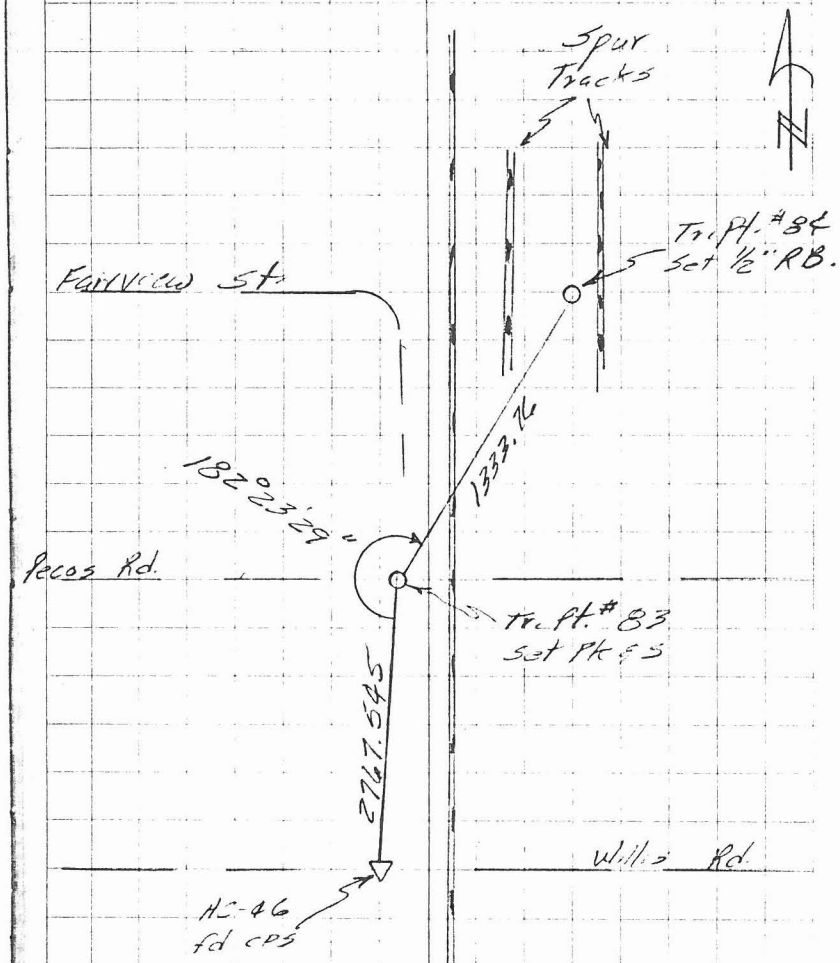
804
116

189	190	191
HC-46	→ TP #83	→ TP #84

∠#1 = 182°23'23"
∠#4 = 14°20'51"
ANG = 182°23'29"

HD to HC-46
∠ = 90°02'21"
SD = 2767.54
HD = 2767.54

HD to TP #84
∠ = 90°10'25"
SD = 1333.76
HD = 1333.755



MCFCD — Traverse — Block 4

9/22/87

804/118

190	191	192
TP #83	TP #84	RO-36

$\angle$ #1 = 174°18'48"

$\angle$ #6 = 325°53'44"

MN = 174°18'57" ✓

HD to TP #83

ZA = 89°55'12"

SD = 1333.76

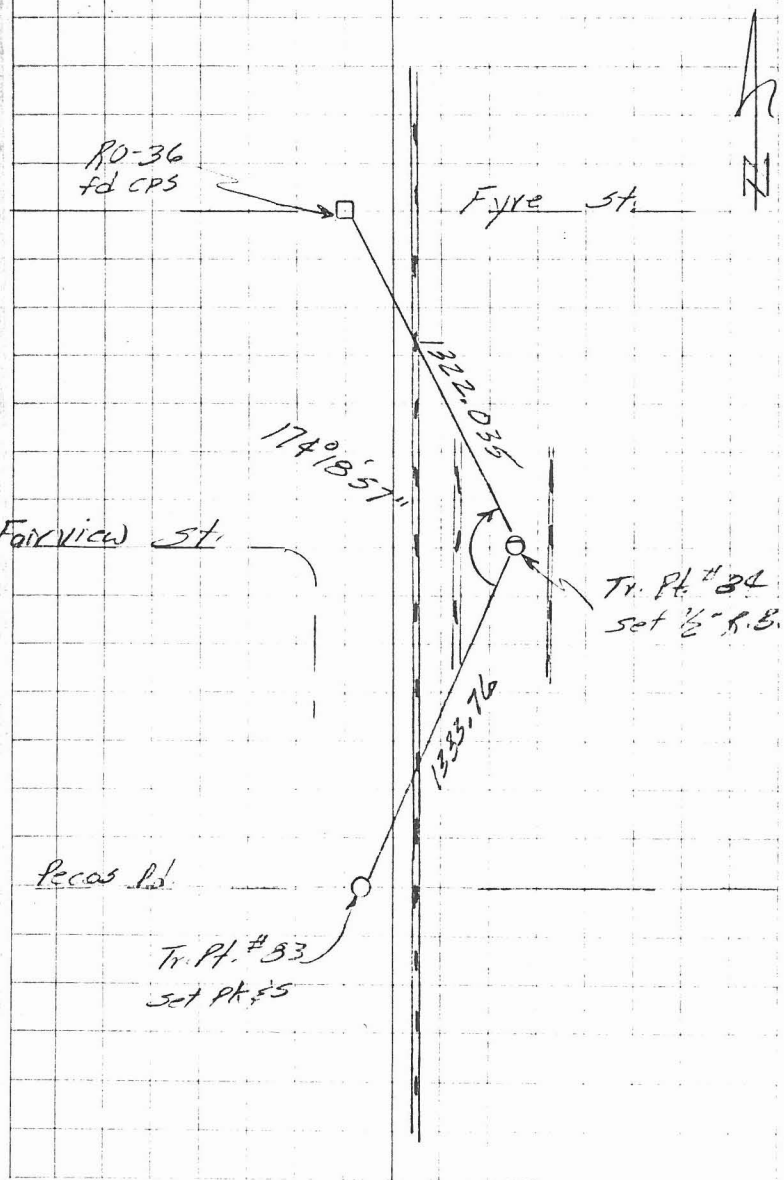
HD = 1333.76

HD to RO-36

ZA = 90°04'26"

SD = 1322.04

HD = 1322.04



MCFCD

Traverse - Block 4

9/22/87

804
130

193	192	191
TP #85	RO-36	TP #84

$\measuredangle$ #1 = 174° 21' 18"

$\measuredangle$ #6 = 326° 01' 56" ✓

MNA = 174° 21' 19" ✓

− 359° 59' 60"

185° 38' 41" ✓

HD to TP #84

ZA = 90° 00' 24"

SD = 1322.03

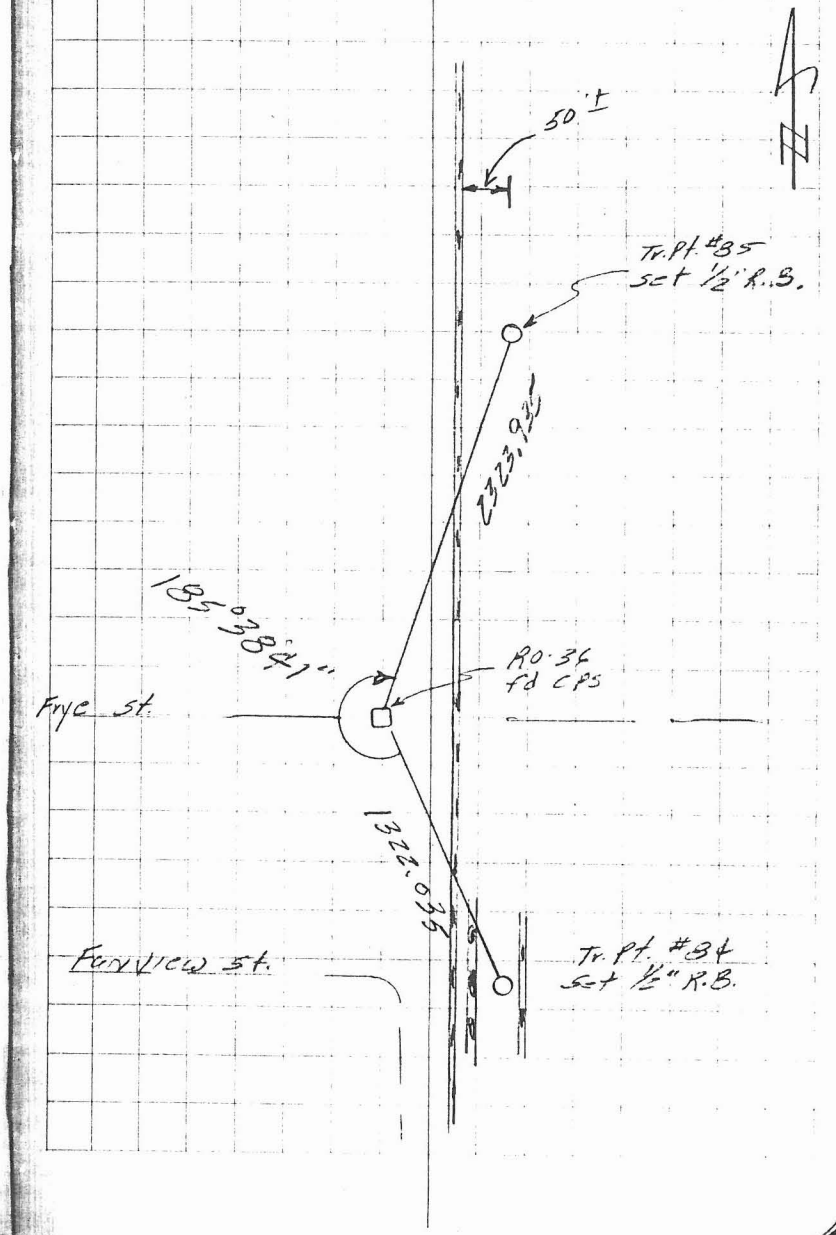
HD = 1322.03

HD to TP #85

ZA = 90° 01' 00"

SD = 2323.93

HD = 2323.925



MCFCD Traverse - Block 4

192	193	194
RO-36	TP #85	HC-35

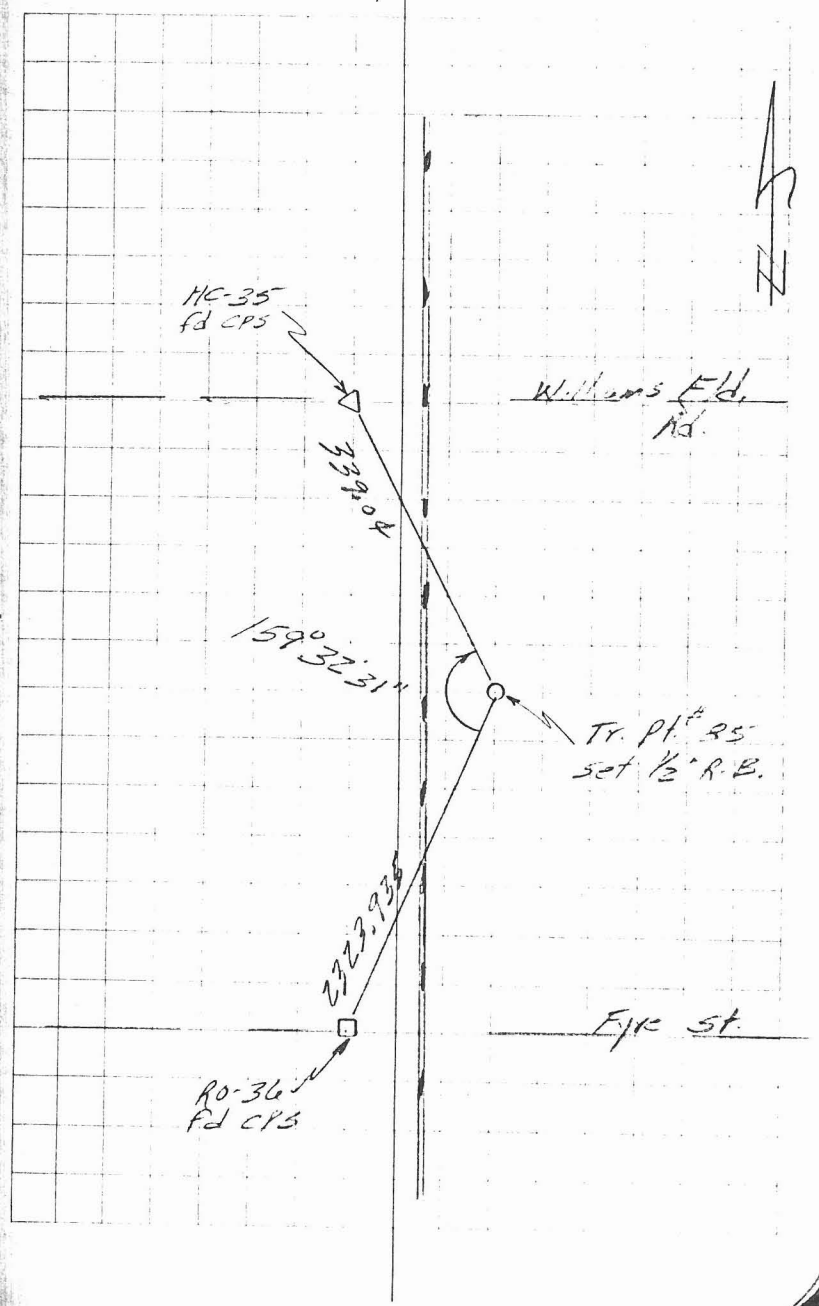
∠#1 = 159°32'28"
∠#6 = 237°15'07"
MNX = 159°32'31" ✓

HD to RO-36
ZX = 89°57'51"
SD = 2323.94
HD = 2323.94

HD to HC-35
ZX = 89°46'34"
SD = 339.04
HD = 339.035

9/22/37

804/122



MCFCD

Traverse – Block 4

195	194	193
HC-36	→ HC-35	→ TP #85

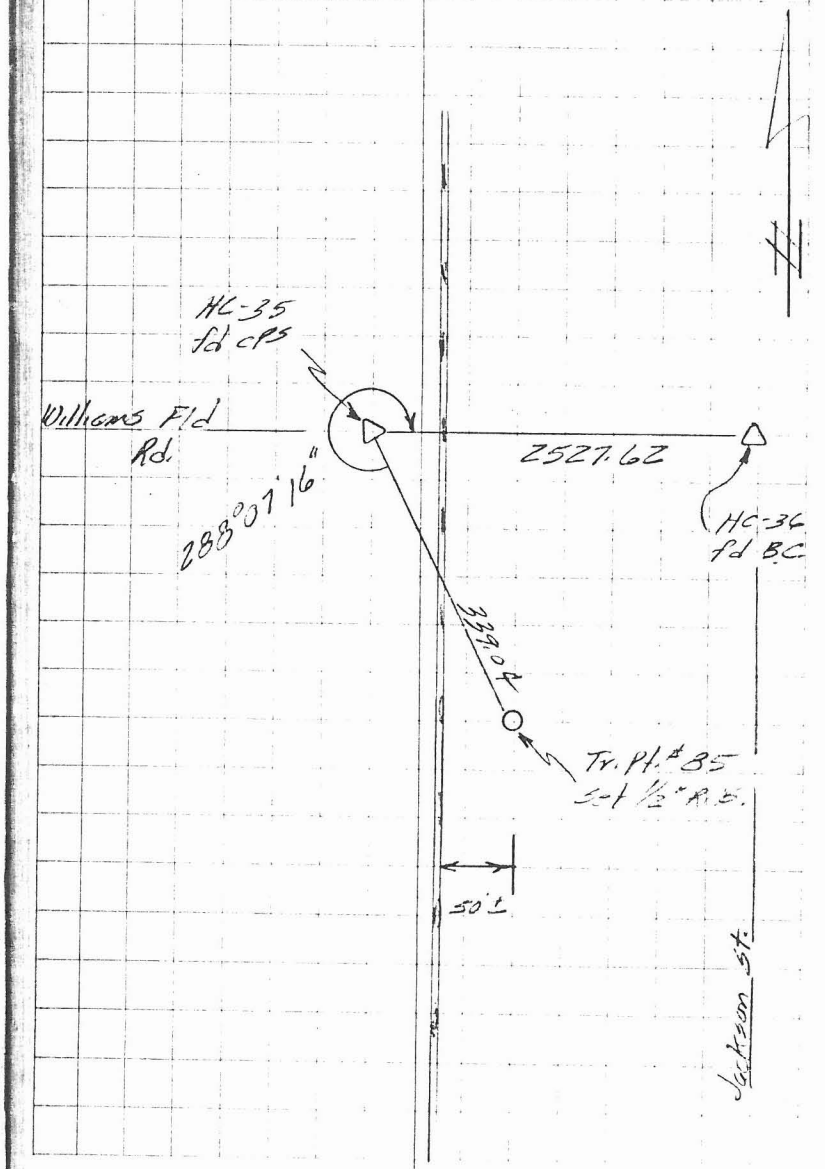
$\angle$#1 = 71°52'41"
$\angle$#6 = 71°16'21"
MM4 = 71°52'44"
− 359°59'60"
288°07'16"

HD to TP #85
ZA = 90°20'00"
SD = 339.06
HD = 339.045

HD to HC-36
ZA = 89°56'02"
SD = 2527.62
HD = 2527.62

9/22/87

504
124



A.MCFCD Traverse - Block #

194	195	196
HC-35	HC-36	TP #36

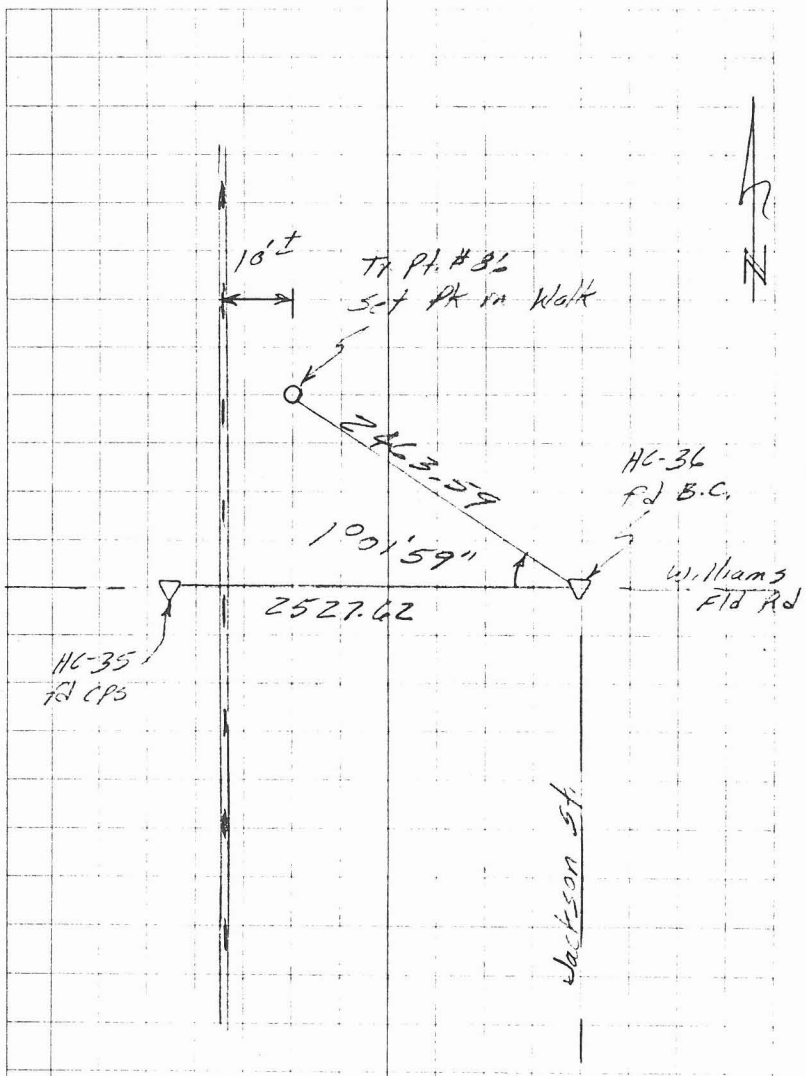
∠#1 = 1°01'58"
∠#6 = 6°11'52"
MW = 1°01'59" ✓

HD to HC-35
∠ = 90°07'54'
SD = 2527.63
HD = 2527.625

HD to TP #36
∠ = 90°05'04"
SD = 2463.60
HD = 2463.595

9/22/97

834
126



MCFCD — Traverse — Block C

197	196	195
TP #87	→ TP #36	→ HC-36

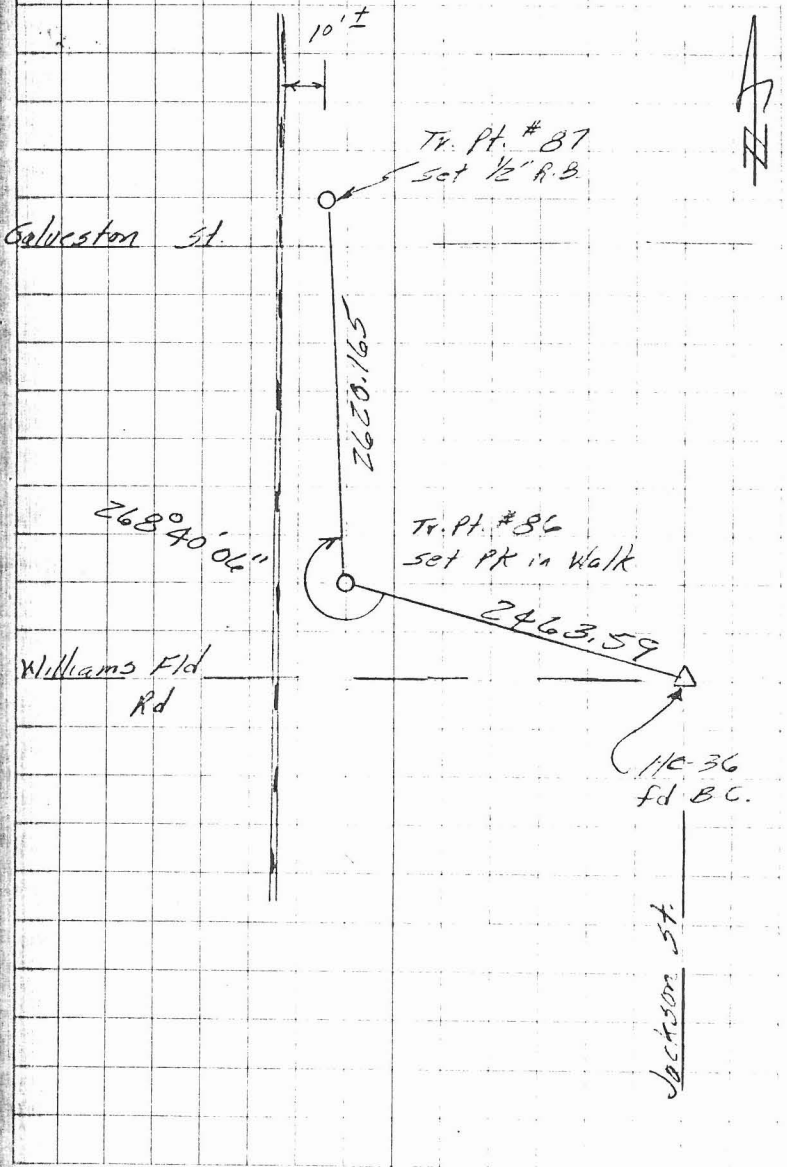
∠#1 = 91°19'48"
∠#6 = 187°59'24"
INT = 91°19'54" ✓
−359°59'60"
268°40'06" ✓

HD to HC-36
ZX = 89°58'45"
SD = 2463.59
HD = 2463.59

HD to TP #87
ZX = 90°02'03"
SD = 2620.15
HD = 2620.15

9/22/87

334/123



MCFCD | Traverse + Blk A 4

196	197	198
TP #86	→ TP #87 →	TP #88

∠#1 = 180°44'55"
∠#6 = 4°29'26"
MN∠ = 180°44'54" ✓

HD to TP #86
ΣA = 90°00'39"
S.D. = 2620.18
H.D. = 2620.18

HD to TP #88
ΣA = 90°04'25"
SD = 1281.32
HD = 1281.32

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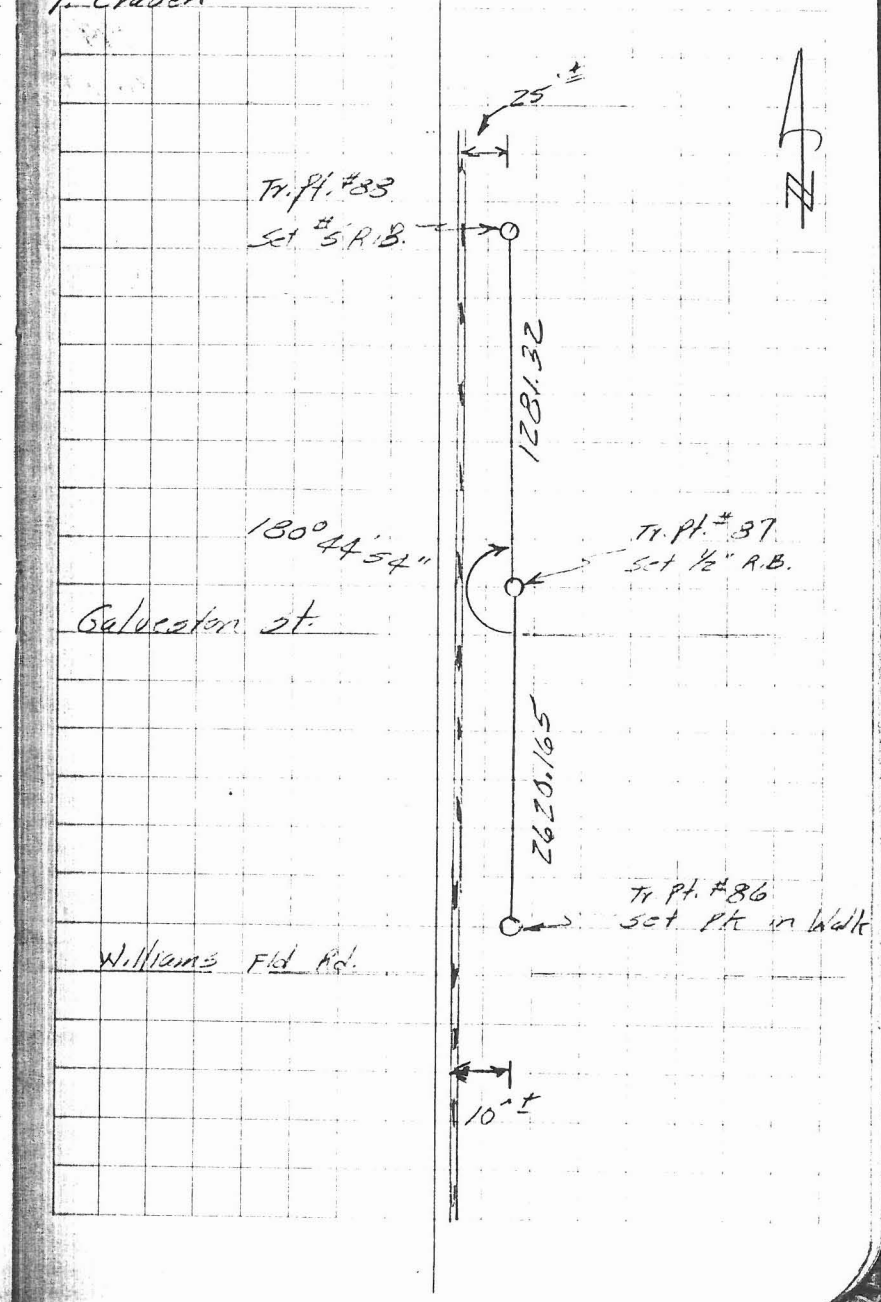
T. Craven

9/23/87

904/130



MCFCD Traverse – Block 4

9/23/87

804/132

197	198	199
TP #87	→ TP #88 →	RO-28

$\Sigma \measuredangle$

$\measuredangle$ #1 = 176° 01' 59"

$\measuredangle$ #6 = 336° 11' 54"

$\Sigma \measuredangle$ = 176° 01' 59" ✓

HD to TP #87

$\Sigma \measuredangle$ = 90° 00' 33"

S.D. = 1281.32

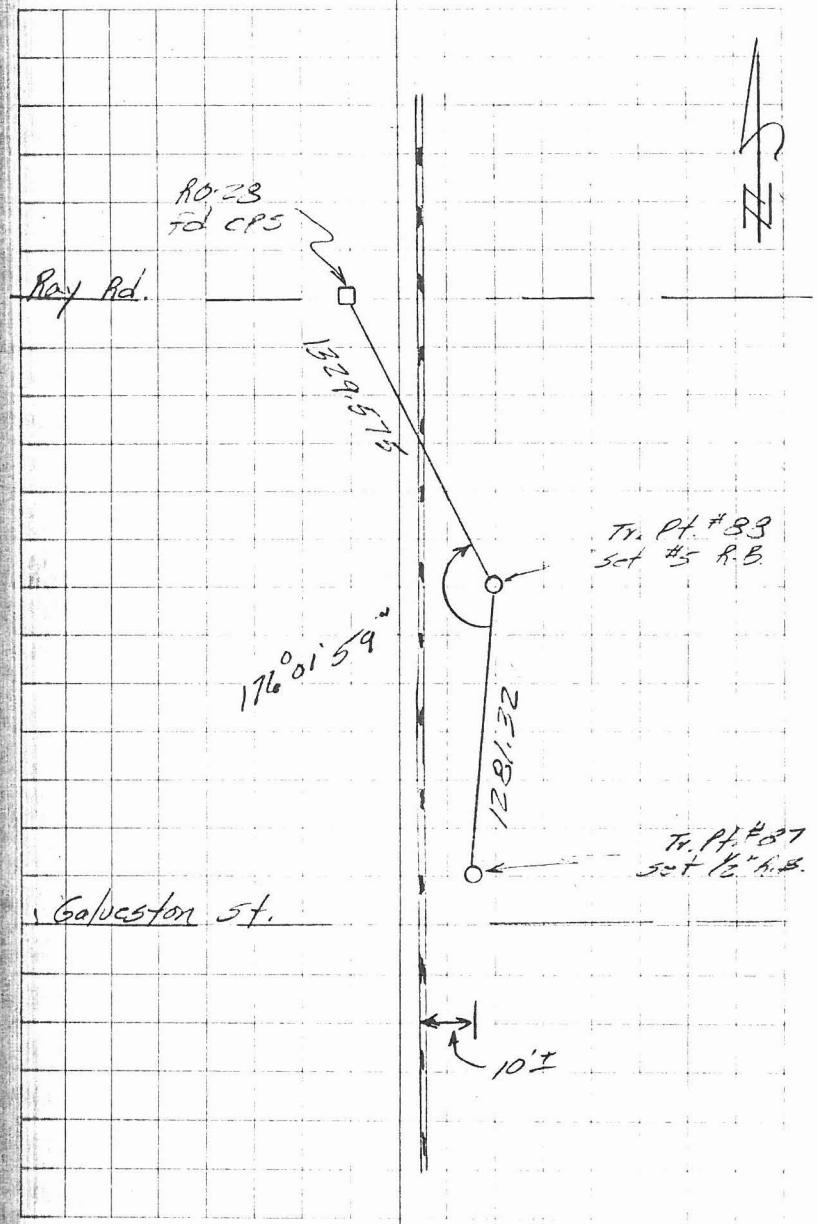
HD. = 1281.32

HD to RO-28

$\Sigma \measuredangle$ = 89° 58' 18"

SD = 1329.57

HD = 1329.57



MCFCD Traverse - Block 2

200	199	198
TP #89	→ RO-28 →	TP #88

T

$\angle$ #1 = 172°31'41"

$\angle$ #6 = 315°10'11"

MN $\angle$ = 172°31'42"

− 359°59'60"

187°28'18" ✓

HD to TP #88

Z $\angle$ = 90°06'30"

SD = 1329.58

HD = 1329.58

HD to TP #89

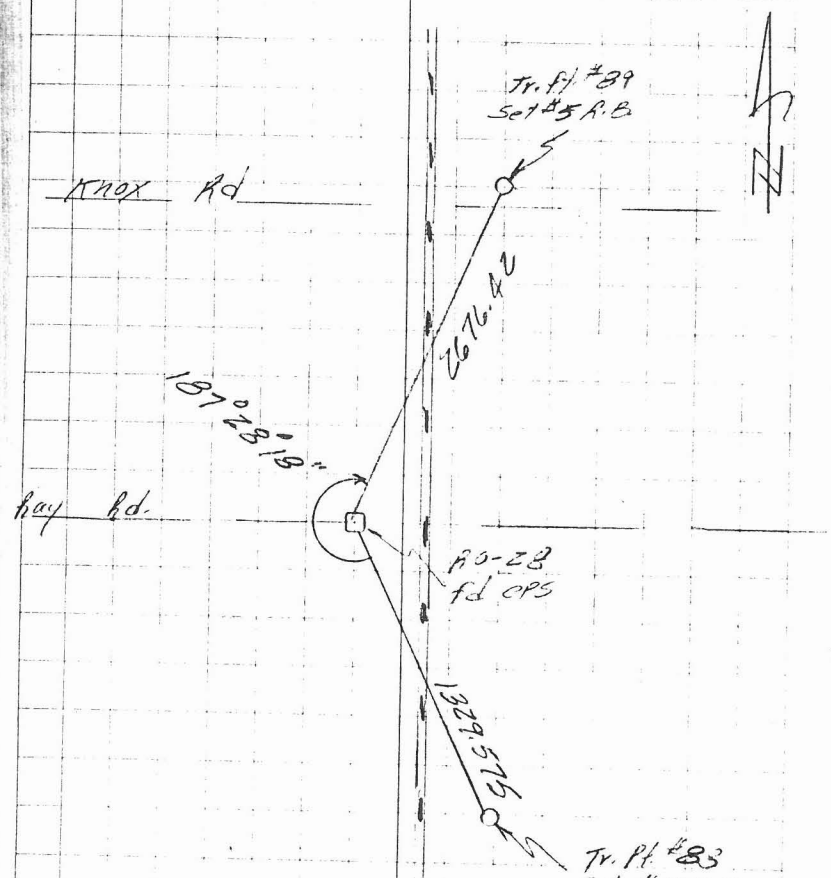
Z $\angle$ = 90°06'51"

SD = 2676.43

HD = 2676.425

9/23/87

804/134



MCFCD Traverse - Blk 4 9

199	200	201
RO-28	→ TP #89	→ TP #90

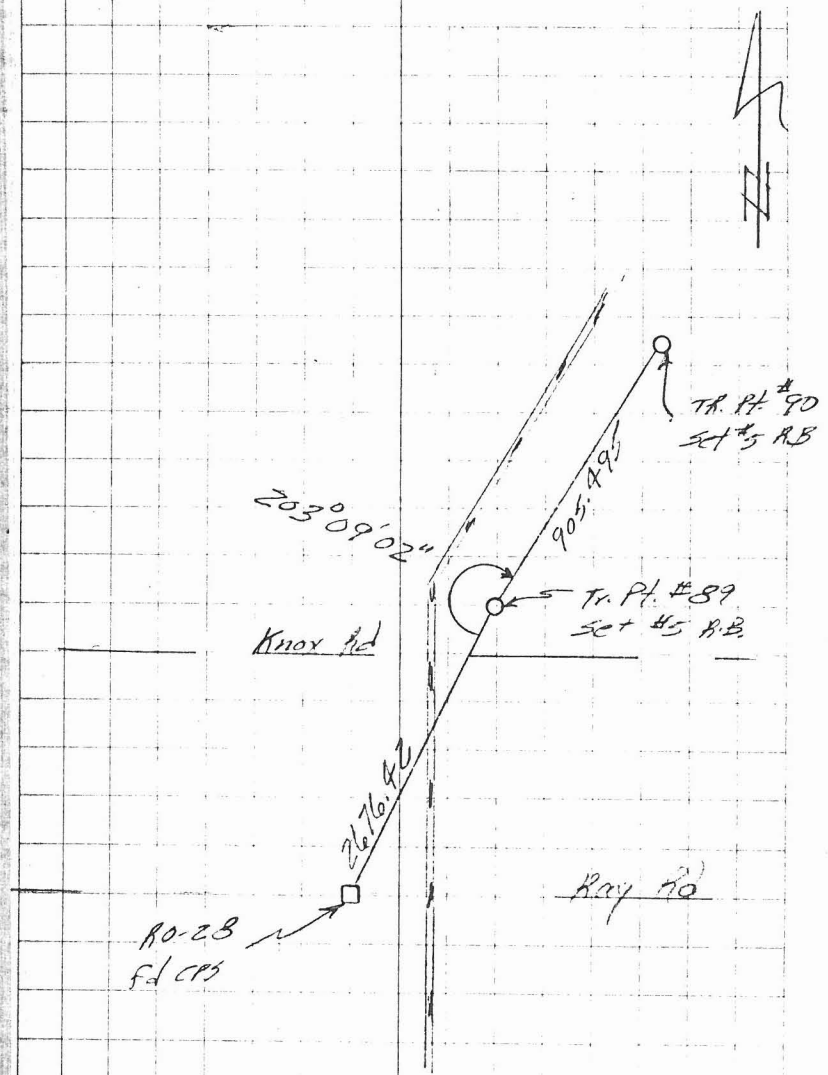
∠#1 = 203°09'02"
∠#6 = 138°54'43"
ΣΔ∠ = 203°09'07" ✓

HD to RO-28
ΣΔ = 89°55'46"
SD = 2676.42
HD = 2676.42

HD to TP #90
ΣΔ = 90°06'48"
SD = 905.48
HD = 905.48

9/23/87

304
136



MCFCD Traverse - Block C

202	201	200
HC-24 →	TP #90 →	TP #89

$\measuredangle$ #1 = 198° 16' 29"

$\measuredangle$ #2 = 109° 38' 54"

MNX = 198° 16' 29" ✓

359° 59' 60" ✓

161° 43' 31"

HD to TP #89

ZX = 89° 59' 30"

SD = 905.51

HD = 905.51

HD to HC-24

ZX = 89° 56' 35"

SD = 1824.06

HD = 1824.06

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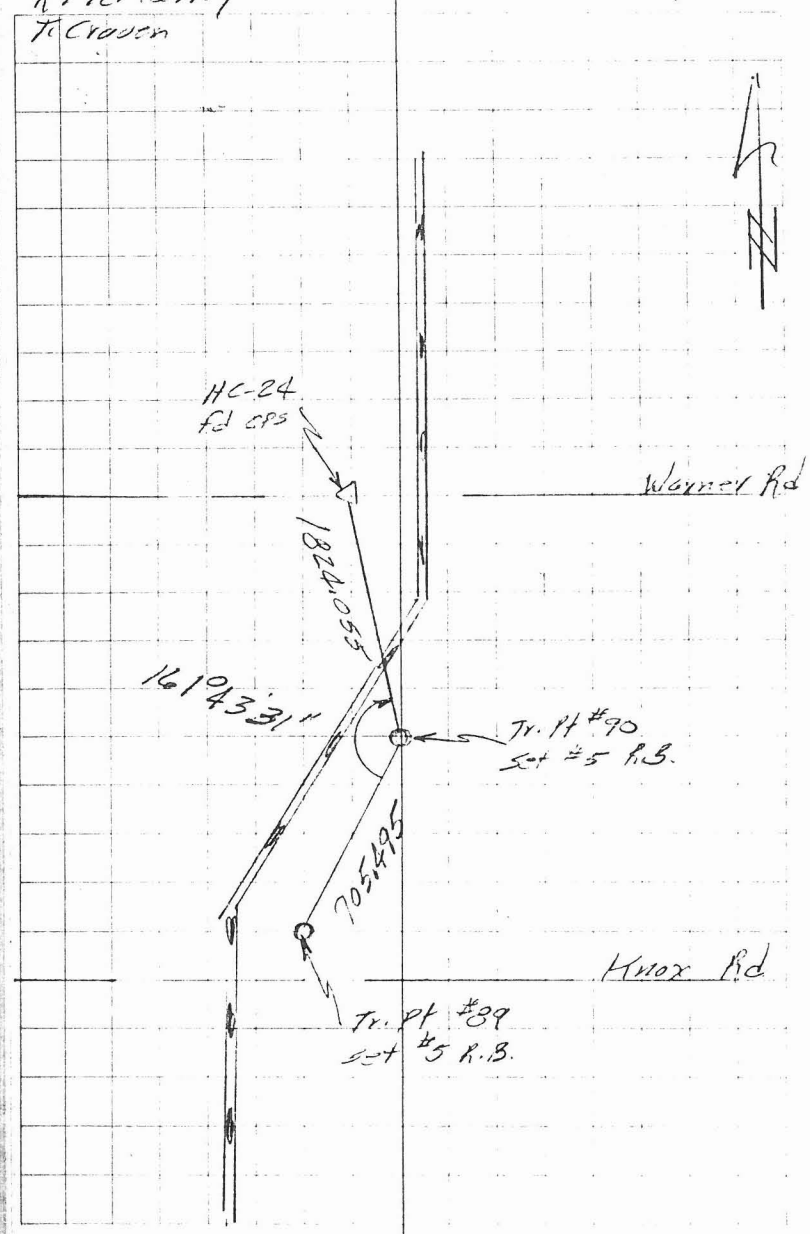
R. McMurrol
To Craven

9/24/87

504
133



MCFCD Traverse - Block 4

201 (see pg 46) 202 203

TP#90 → HC-24 → TP#30

T N 35-49-00 E

∠#1 = 206°39'50" 829.65

∠#2 = 159°59'17"

MNX - 206°39'53" ✓

HD to TP#90

∠Z = 90°06'57"

SD = 1824.05

HD - 1824.045

HD to TP#30

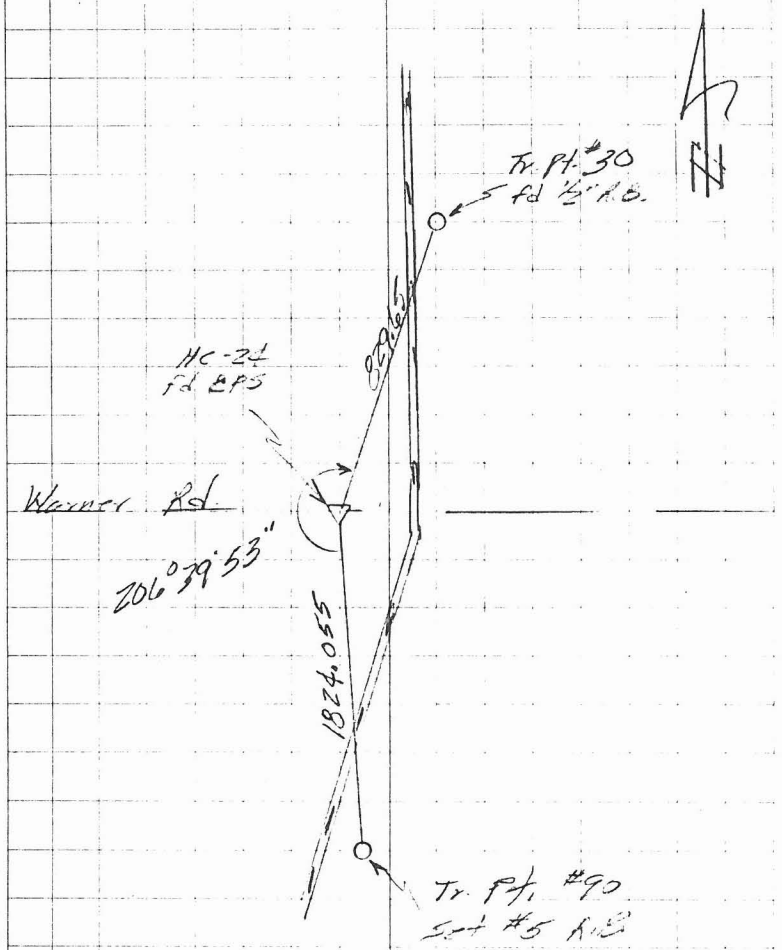
∠Z =

SD =

HD =

9/24/87

304
170



IMCRCO

Traverse - Blk + 5

3½

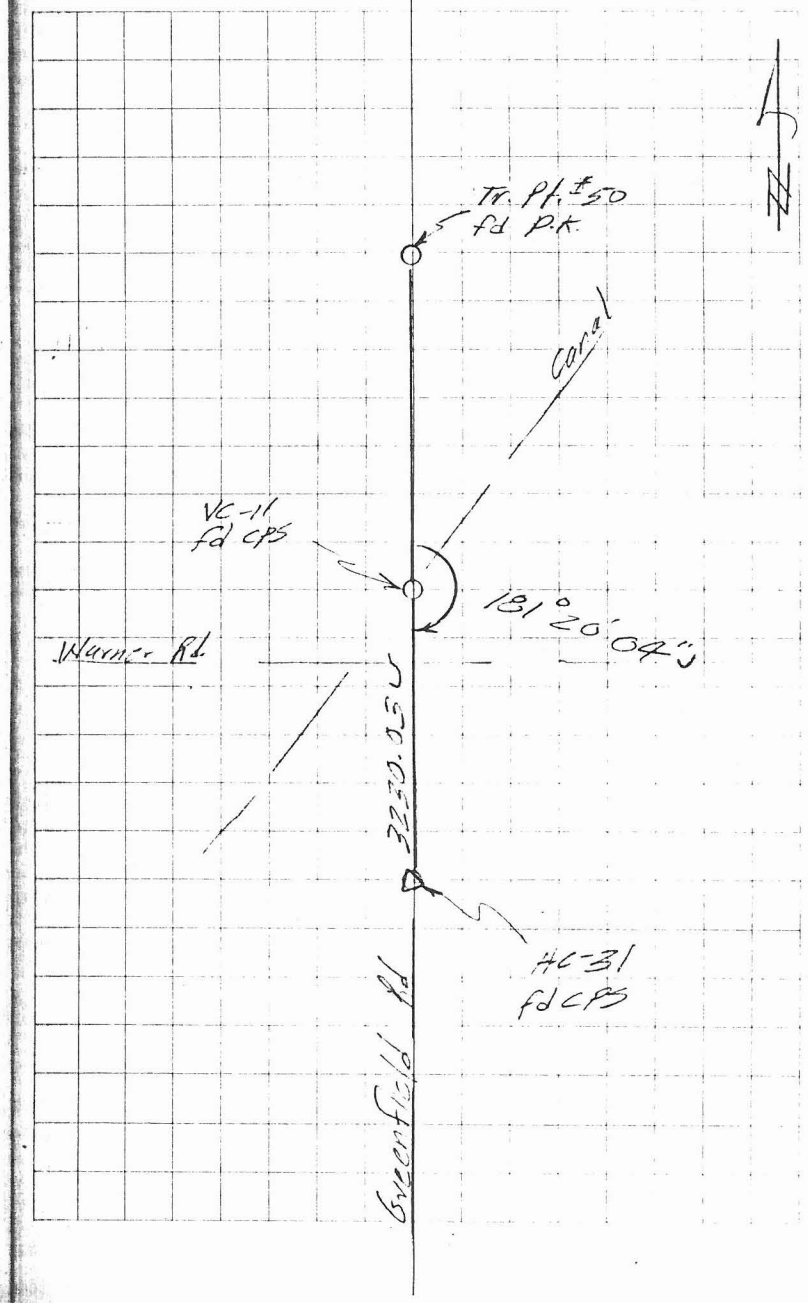
210	109	108
HC-31	VC-11	TP #50

∠#1 = 178°40'03"
∠#2 = 351°59'37"
INT = 178°39'56"
−359°59'60"
181°20'04" ✓

HD to HC-31
ZA = 90°05'09"
SD = 3230.04
HD = 3230.035 ✓

9/24/87

804/172



MCFCD Traverse - Block 5

316	210	211
VC-11	→ HC-31	→ RO-31

$\angle H1 = 179°35'30"$

$\angle H2 = 357°33'22"$

$MN\angle = 179°35'34"$ J

HD to VC-11

$E\angle = 89°57'52"$

SD = 3230.03

HD = 3230.03 J

HD to RO-31

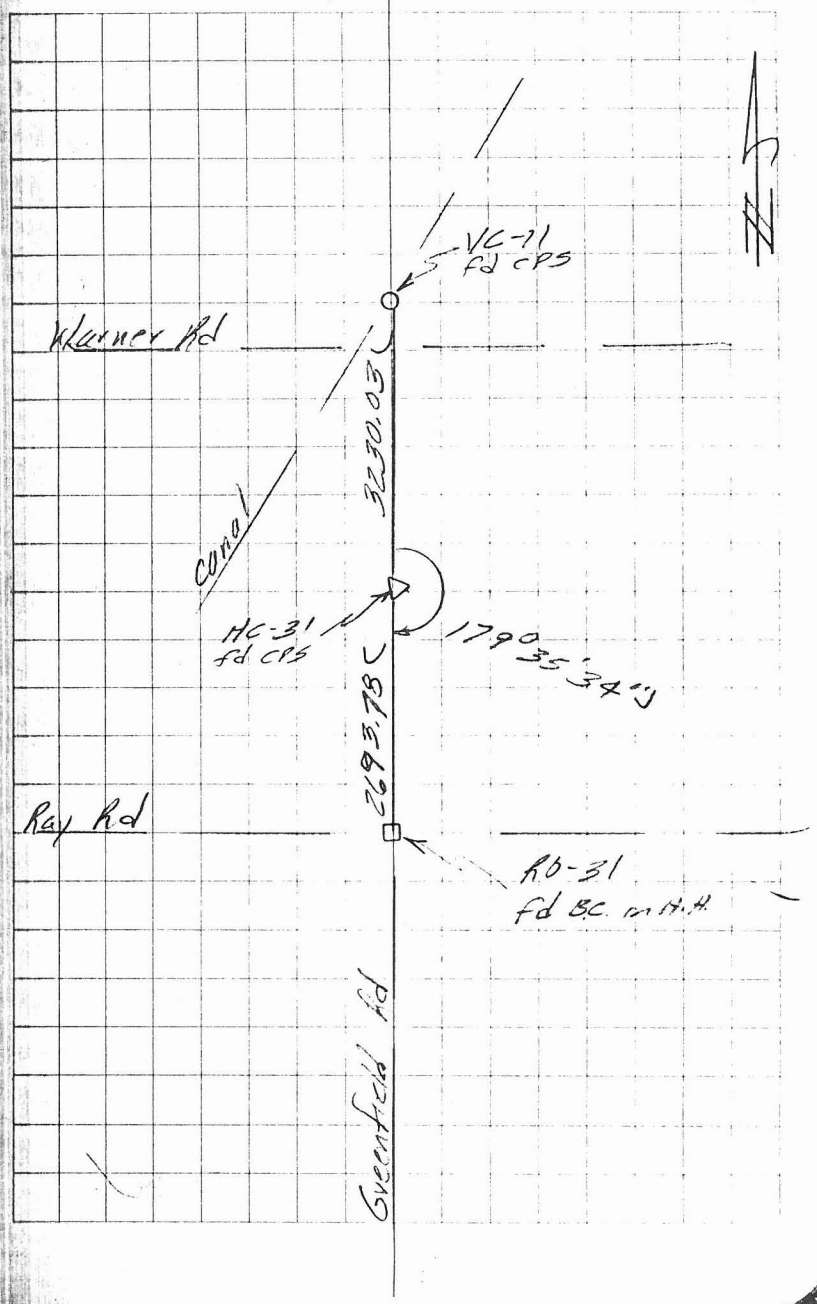
$E\angle = 89°54'06"$

SD = 2693.80

HD = 2693.79 J

3/24/87

804/142



MCFCD Traverse - Block 6

(Not a Part of Block 5)

263 264 265

TP #91 → RO-31 → HC-33

$\angle$ #1 = 167°54'48"

$\angle$ #2 = 287°28'48"

$\angle$ N = 167°54'48" ✓

HO to TP #91

$\angle$ = 89°56'11"

S.D. = 3479.21

HD = 3479.21 ✓

HO to HC-33

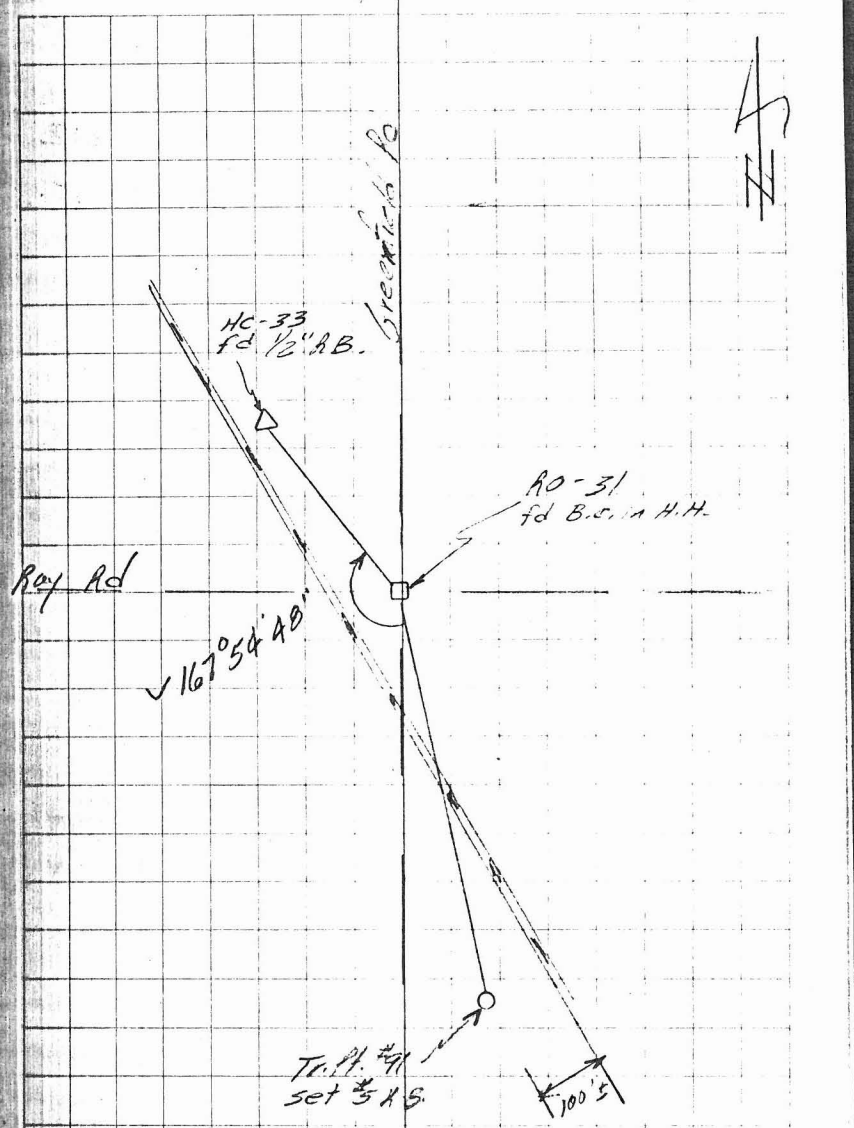
$\angle$ = 90°27'24"

SD = 1092.31

HD = 1092.275 ✓

9/24/37

334
116



MCFCD | Traverse | - Blatt 5

(Con't from Pg 144)

210	211	212
HC-31	RO-31	TP #92

$\measuredangle$ #1 = 269°49'15"

$\measuredangle$ #6 = 178°55'27"

MN $\measuredangle$ = 269°49'15" ✓

HD to HC-31

ZA = 90°09'06"

SD: 2693.78

HD: 2693.77 ✓

HD to TP #92

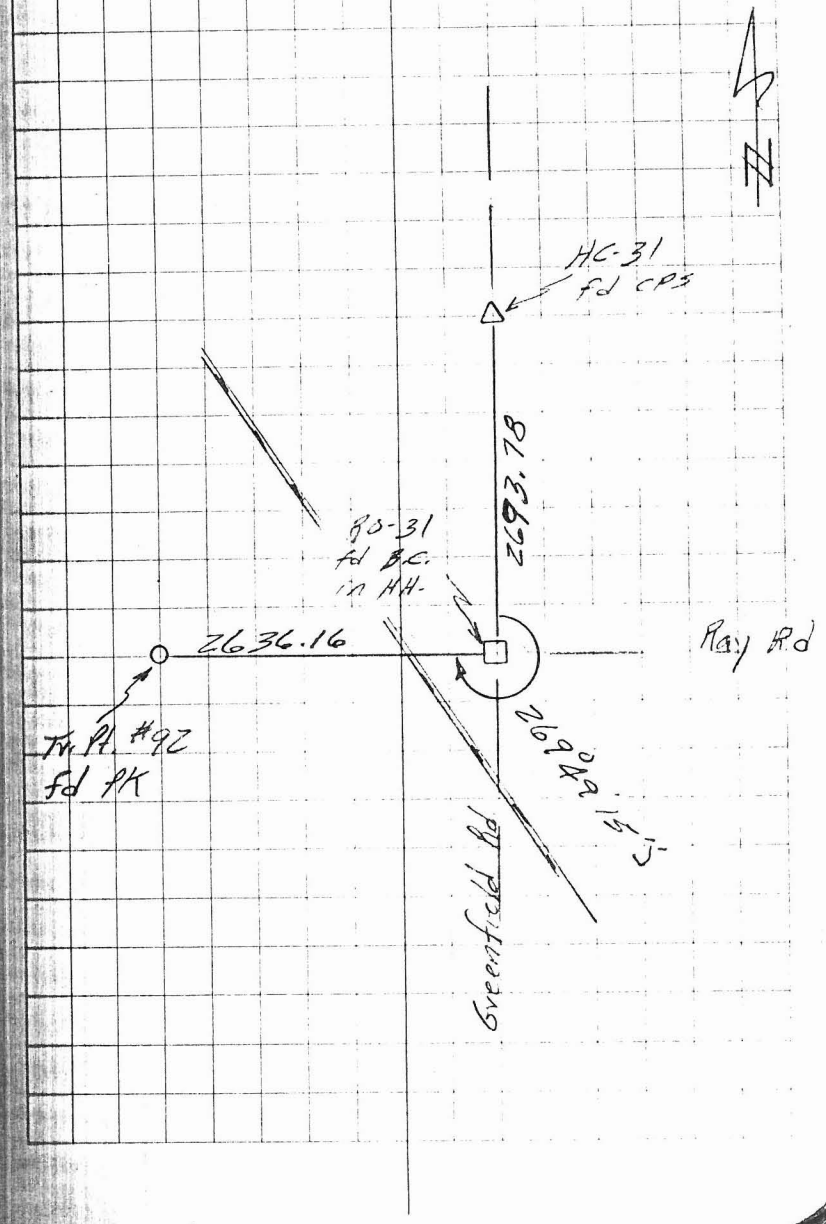
ZA = 90°14'51"

SD: 2636.19

HD: 2636.165 ✓

9/24/87

8.4
143



MCFCD Traverse - Block 5

9/24/87

Sht 4 of 5

211 → 212 → 213

RO-31 → TP #92 → RO-30

$\measuredangle$ #1 = 179°32'03"

$\measuredangle$ #6 = 357°12'18"

MN $\measuredangle$ = 179°32'03" J

HD to RO-31

ZA = 89°48'55"

SD = 2636.17

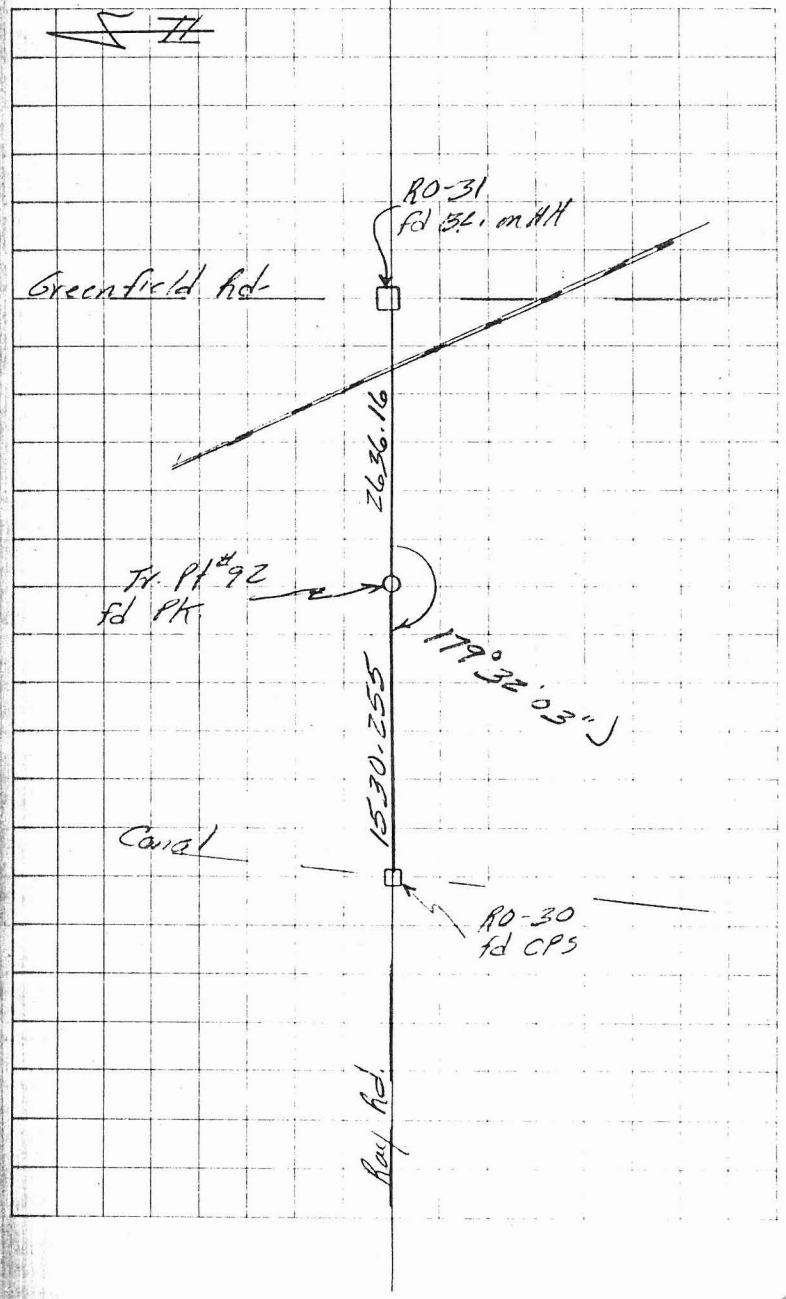
HD = 2636.155 V

HD to RO-30

ZA = 90°02'54"

SD = 1530.26

HD = 1530.26 V



MCFCD Traverse — Block 5

212 213 214

TP #92 → RO-30 → Sec Cor.

∠#1 = 181°11'57"

∠#2 = 2°23'48"

∠NA = 181°11'54" ✓

HD to Sec Cor. = 1109.08

215 213 212

TP #93 → RO-31 → TP #92

∠#1 = 249°33'25"

∠#2 = 57°20'43"

∠NA = 249°33'27" ✓

−359°59'60"

110°26'33" ✓

HD to TP #92

∠ = 90°01'18"

SD = 1530.25

HD = 1530.25 ✓

HD to T.P #93

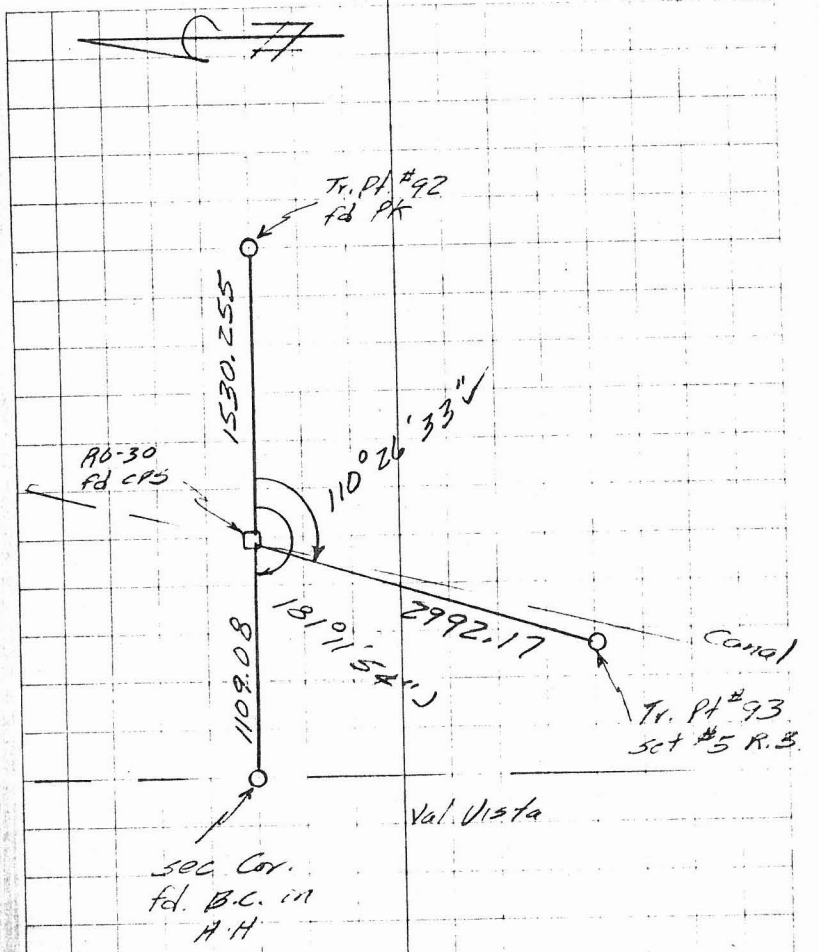
∠ = 90°02'34"

S.D. = 2992.17

H.D = 2992.17 ✓

9/24/87

301/152



MCFCD

Traverse + Block 5

9/24/37

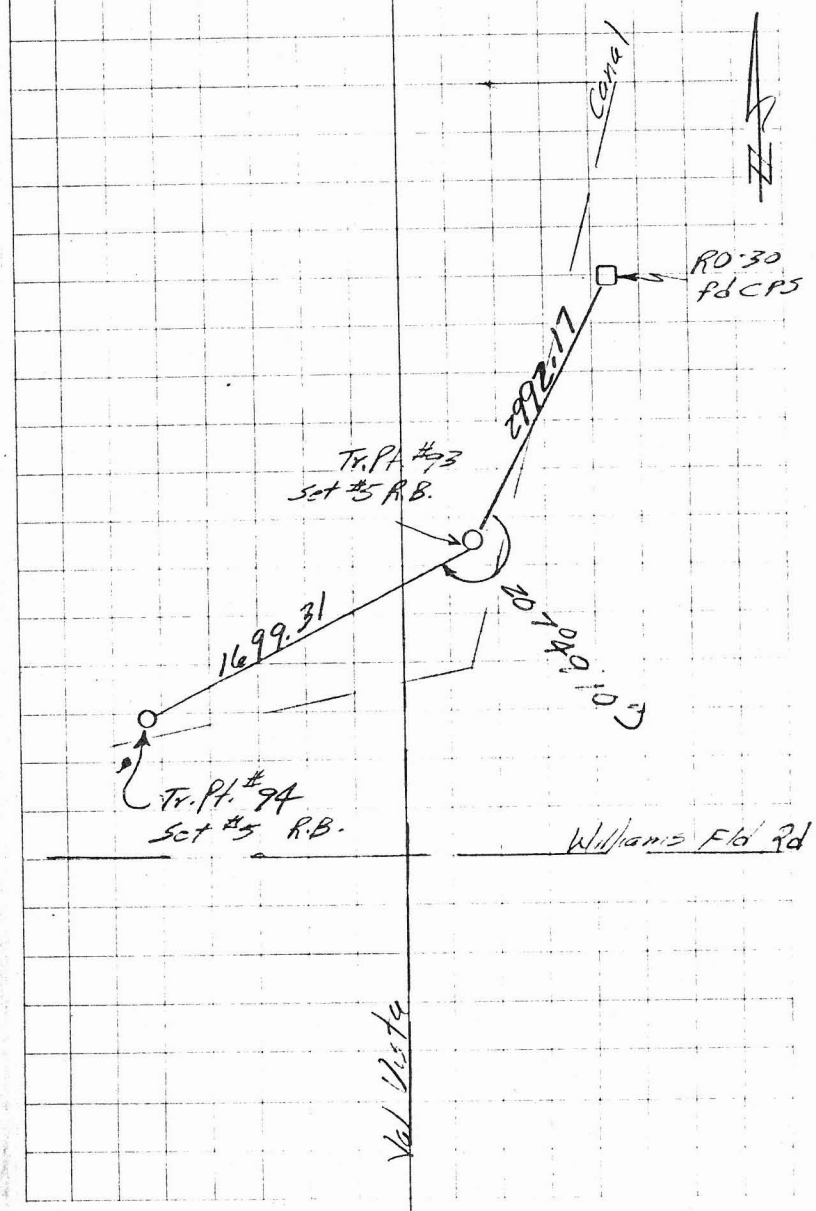
804
154

213	215	216
RO-30	→ TP #93	→ TP #94

∠#1 = 207°49'06"
∠#2 = 166°55'00"
MI∠ = 207°49'10" ✓

HD to RO-30
Z∠ = 89°59'45"
SD = 2992.17
HD = 2992.17 ✓

HD to TP #94
Z∠ = 90°03'17"
SD = 1699.31
HD = 1699.31 ✓



MCFCD Traverse - Block 5

9/24/37

304/156

217 216 215

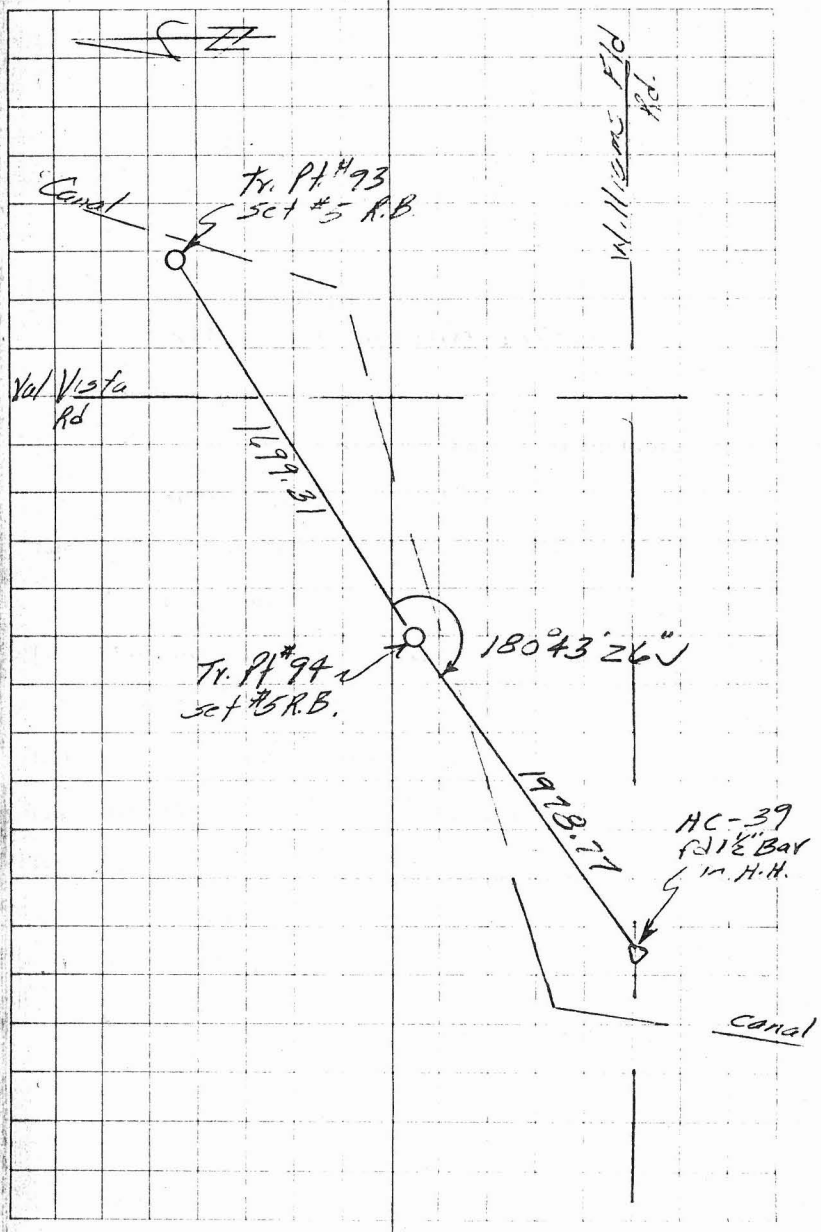
HC-39 → TP#94 → TP#93

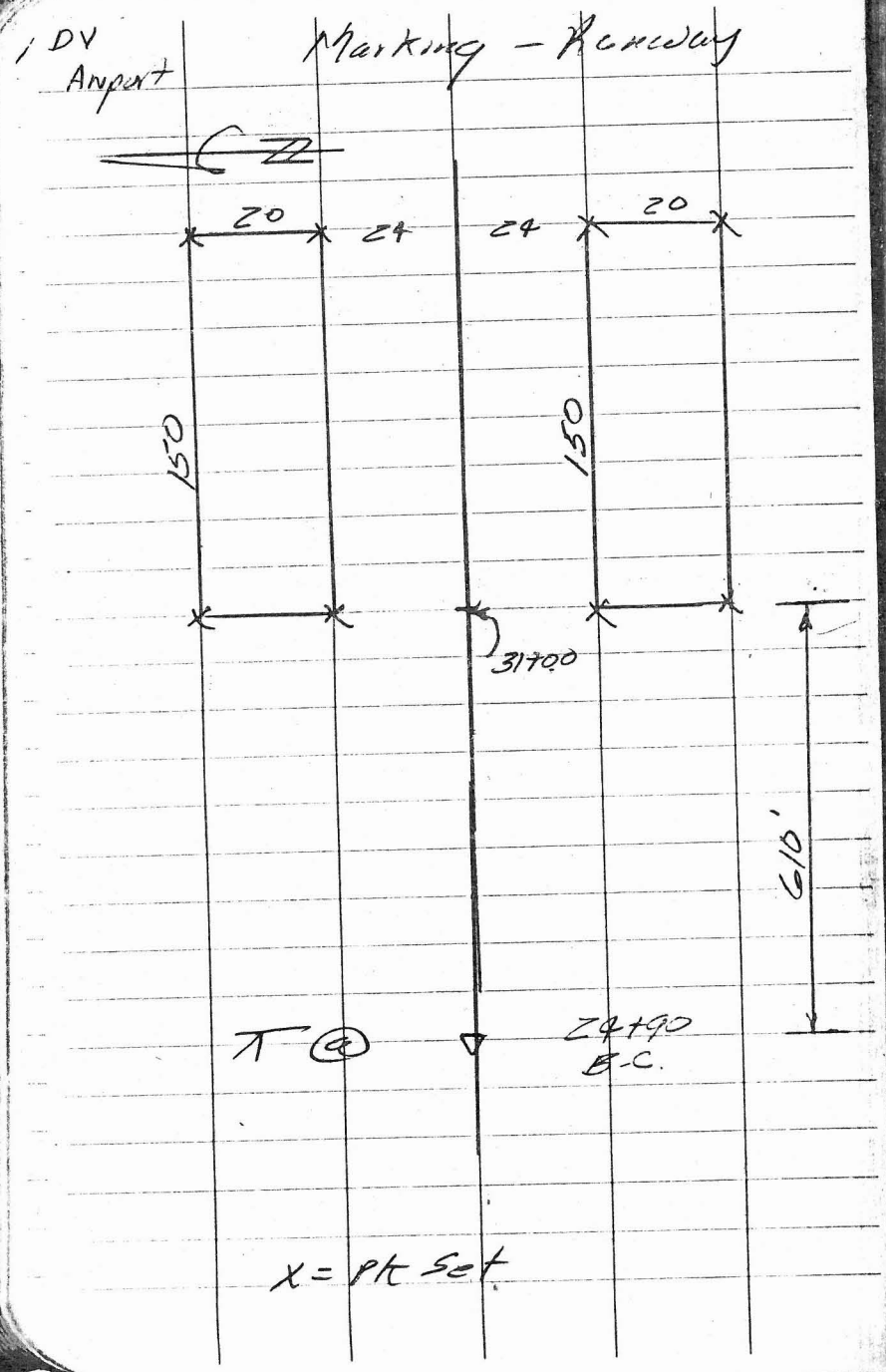
∠#1 = 179°16'21" (179°16'33")
∠#6 = 355°39'17" (355°39'36")
MR∠ = 179°16'33" (179°16'36")
Use 179°16'34"
− 359°59'60"
180°43'26" ✓

HD to TP#93
Z∠ = 89°59'48"
SD = 1699.31
HD = 1699.31 ✓

HD to HC-39
Z∠ = 90°03'24"
S.D. = 1978.78
H.D. = 1978.78 ✓

(See Bk 808 - Pg 1)





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