BENCH MARK

P.K. & C.A. TAG IN N'LY WING OF C.B. N'LY OF C.L. OF PENNSYLVANIA AVE. 56.5' E'LY OF C.L. IOWA AVE. PER B.M. BOOK ELEVATION 997.258

EXISTING SURFACE OVER ℄ OF S.D.

H.G.L.

H.G.L.

S=0.0195

S=0.0108

EXISTING 42" R.C.P. STORM DRAIN (BOX SPRINGS DRAIN - STAGE IV, LINE "E")

(306+92 RCFCWD STATIONING) 50+85 (996.42 FL)

54+50 ℄ MANHOLE SHAFT RIM ELEV. = 1014.40

56+00 1003.79 FL

1000.36

1000.86

Q=90 cfs; V=12.30 fps (Qexist.=68.2 cfs)
363'-42" R.C.P.; D=1500

Q=90 cfs; V=12.30 fps (Qexist.=68.2 cfs)
367'-36" R.C.P.; D=1750

1020 1015 1010 1005 1000 995 990

50 51 52 53 54 55 56

CAUTION
HIGH PRESSURE GAS LINE

R/W
C&G
3"FUEL (ABAND)
4"HPG
8"IPS
10'-0
44'
CONSTRUCTION C.L.
14'
PROPOSED 42" R.C.P.
EXISTING 42" R.C.P. (BOX SPRINGS DRAIN - STAGE 5, LINE "A")
MONUMENT C.L.
PROPOSED 36" R.C.P.
PENNSYLVANIA AVENUE
18"W
8"S
C&G
R/W
54+50
430

FOR EXISTING C.B. RELOCATIONS SEE PLAN R-3057

(306+92 RCFCWD STATIONING) 50+85 MEET EXISTING 42" R.C.P. STORM DRAIN

NOTE:
FOR PROPOSED STREET IMPROVEMENTS SEE PLAN R-3057

MATCH LINE STATION 56+00

SHEET 2

REGISTERED PROFESSIONAL ENGINEER
BENITO URQUIZA, JR.
No. 33657
Exp. 6-30-94
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
BEN URQUIZA
R.C.E. 33657 Expires: 6/30/94
DATE MAY 7, 1992

MARK	REVISIONS	APPR.	DATE

DESIGNED BY P.W. DRAWN BY LFH CHECKED BY B.U.

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER	5/19/92	BMC
PRINCIPAL ENGINEER	5/16/92	
CHIEF P.W. INSPECTOR	5/15/92	RSC
SURVEYOR	5/18/92	BWH
~~TRAFFIC DIVISION~~		
~~PARKS DEPARTMENT~~		
~~STREET SERVICES~~		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 5/11/92

PENNSYLVANIA AVENUE STORM DRAIN EXTENSION

700' W'ly of Gage Canal to Canyon Crest Drive

ACCOUNT NO. 30-575-295-15

D-610

SHEET 1 OF 4

HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'

BENCH MARK

P.K. & C.A. TAG IN W'LY WING OF C.B. N'LY OF C.L. OF PENNSYLVANIA AVE. 66.5' E'LY OF C.L. IOWA AVE. PER B.M. BOOK ELEVATION 997.258

BENCH MARK: ⚠

P.K. NAIL AND CITY ENGINEER TAG IN THE NORTWEST CORNER OF A CATCH BASIN ALONG THE NORTHERLY CURB OF MARTIN LUTHER KING BLVD. AT THE BCR OF THE NORTHEAST CURB RETURN AT IOWA AVENUE AND MARTIN LUTHER KING BLVD.

POINT ID: H8-L3 ELEVATION: 998.353

EXISTING SURFACE OVER ℄ OF S.D.

58+22 ℄ MANHOLE SHAFT RIM ELEV. = 1021.84

58+74 ℄ MANHOLE SHAFT

CONCRETE SLAB PER PLAN R-3057

E (ABAND)

GAGE CANAL

12" IRR (PROTECT)

12" D (PROTECT)

H.G.L.

S=0.0195

S=0.0254

58+20 SOUTH INLET

58+20 NORTH INLET

58+19 1008.06

58+24.70 1008.26

58+71 1009.44

58+72

56+00 1003.79 FL

0+00-24"= 58+72-36"

EXISTING SURFACE

PROPOSED FINISHED SURFACE

R/W

℄ MARTIN LUTHER KING BL.

4"-GAS

3"-FUEL (ABAND)

9.91 FL "S"

9.96 FL "R"

13.40 H.G.L.

S=0.0180

24" R.C.P. CLASS IV

SEE ON-SITE IMPROVEMENT PLANS

6"W (PROTECT)

H.G.L.

⚠ PROFILE "A"

"PRIVATE S.D. LATERAL"

9.46 FL 36"

0+11.60 BC 10.01 FL

0+48.24 EC 10.78 FL

61+50 ℄ MANHOLE SHAFT RIM ELEV. = 1028.83

61+50 1016.49

62+00 1017.76 FL

Q=90 cfs, V=15.0 fps (Qexist.=68.2 cfs)
367'-36" R.C.P., D-1750

Q=80.4 cfs, V=16.54 fps (Qexist.=54.5 cfs)
322'-36" R.C.P., D-1750

(Qexist.= 54.5 cfs)
Q=80.4 cfs, V=16.54 fps
396'-36" R.C.P., D-1500

56 57 58 59 60 61 62

1035 1030 1025 1020 1015 1010 1005 1000

405 M

59+72 ℄ C.B. W=7', V=4'-6" SEE SHEET 4 OF 4

NOTE: CURB AND GUTTER AND CATCH BASIN TO BE RELOCATED PER R-3057 SHEET 10 REVISION 1. ⚠1

SEE ON-SITE IMPROVEMENT PLANS

CAUTION
HIGH PRESSURE GAS LINE

22.71 TC 22.21 FL

22.95 TC 22.45 FL

24" RCP

"PRIVATE S.D. LATERAL" ⚠1 SEE PROFILE "A"

0+48.24 EC

0+11.60 BC

R=50'

⚠ MANHOLE "JM" @ STA. 58+72 E=4.6', L=5.6' A=50', B=24", C=4.9', D =36", D =36" ELEV. "S"=1009.91 ELEV. "R"=1009.96

SHEET 1 STATION 56+00

SHEET 3 STATION 62+00

MATCH LINE

MATCH LINE

R/W

C&G

44'

14'

PROPOSED 36" R.C.P.

PENNSYLVANIA AVENUE

MONUMENT C.L.

PROPOSED 36" R.C.P.

CONSTRUCTION C.L.

57 58 59 60 61

57+82 58+00

18" RCP

21.90 TC 21.43 FL

22.29 TC 21.89 FL

C&G

R/W

59+54.5 C.L. C.B. W=14', V=4'-6" (FOR DETAILS SEE SHEET 4 OF 4)

58+20

61+50

CANAL

GAGE

432

430

405 M

JUNCTION STRUCTURES @ STA. 58+20 E=4.7', L=5.7'

NORTH INLET, A=50", B=18", C=4.6', D_1=36", D_2=36"
ELEV. "S"=1009.38, ELEV. "A"=1009.76

SOUTH INLET, A=48", B=18", C=4.8', D_1=36", D_2=36"
ELEV. "S"=1009.30, ELEV. "A"=1009.95

NOTE:
FOR PROPOSED STREET IMPROVEMENTS SEE PLAN R-3057

NOTES:

⬢ NUMBERS ABOVE 100 IN A HEXAGON ON THE PLAN REFER TO THE RESPECTIVE STANDARD DRAWING AND SHALL BE CONSTRUCTED ACCORDINGLY UNLESS MODIFICATIONS ARE NOTED ON THE PLAN OR COVER SHEET. ANY NUMBER SHOWN BELOW THE STANDARD DRAWING NUMBER INDICATES THE SPECIFIC ALTERNATE TO BE CONSTRUCTED.

405 M CONSTRUCT CATCH BASIN PER STD. DRAWING 405. LATERAL PIPE SHALL BE LOCATED AS SHOWN ON THE PLAN.

(1) SECTION OF 36" R.C.P. BETWEEN STATIONS 57+82 AND 58+00 SHALL BE JACKED INTO PLACE UNDER EXISTING GAGE CANAL.

JOHN A. FRIEDRICH NO. 27861 EXP. 3-31-02 CIVIL STATE OF CALIFORNIA

REVISION ⚠1

MADE UNDER THE SUPERVISION OF:

6FB-FRIEDRICH & ASSOC., INC
6529 RIVERSIDE AVE. STE. 230
RIVERSIDE CA 92506 (909) 781-0811

John A. Friedrich 9-13-00
JOHN A. FRIEDRICH RCE 27861 EXP. 3-31-02

REGISTERED PROFESSIONAL ENGINEER BENITO URQUIZA JR. No. 33657 Exp. 6-30-94 CIVIL STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE

BEN URQUIZA
R.C.E. 33657 Expires: 6/30/94

DATE MAY 7, 1992

⚠1 ADDED M.H. & PRIVATE 24" S.D. STA. 58+72 — DESIGNED BY RH DRAWN BY LFH CHECKED BY BU

MARK	REVISIONS	APPR.	DATE
1	ADDED M.H. & PRIVATE 24" S.D. STA. 58+72	TDS	7/14/92

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER	6/8/92	RMG
PRINCIPAL ENGINEER	5/14/92	
CHIEF P.W. INSPECTOR	5/13/92	RSK
SURVEYOR	5/13/92	SPD
~~TRAFFIC DIVISION~~		
~~PARKS DEPARTMENT~~		
~~STREET SERVICES~~		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 5/11/92

PENNSYLVANIA AVENUE STORM DRAIN EXTENSION

700' W'ly of Gage Canal to Canyon Crest Drive

HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'

ACCOUNT NO. 30-575-295-15

D-610

SHEET 2 OF 4

Issued 7-6-92 GA

BENCH MARK

P.K. & C.R. TAG IN W'LY WING OF C.B. N'LY OF C.L. OF PENNSYLVANIA AVE. 56.5' E'LY OF C.L. IOWA AVE. PER B.M. BOOK ELEVATION 997.258

EXISTING STREET SURFACE OVER ℄ OF S.D.

8" IRR. (PROTECT)

62+00
1017.76 FL

H.G.L.
S=0.0254

65+50
C.L. MANHOLE SHAFT
RIM ELEV. = 1038.15

65+50
SOUTH INLET

65+50
1026.65

Q=80.4 cfs, V=16.54 fps (Qexist.=54.5 cfs)
396'-36" R.C.P., D=1500

67+42.25
C.L. MANHOLE SHAFT
RIM ELEV. =1044.20

67+40
NORTH INLET

67+15
15" RCP

S=0.0300

67+51
1032.70

67+40
SOUTH INLET

67+39
1032.32

67+45
1032.52

H.G.L.
S=0.0300

Q=66.1 cfs, (Qexist.=45.0 cfs)
187'-36" R.C.P., D=1500

6'-36" R.C.P., D=1500

1045 1040 1035 1030 1025 1020 1015

62 63 64 65 66 67 68

SHEET 2

MATCH LINE STATION 62+00

R/W
C&G
C&G
R/W

PROPOSED 36" R.C.P.

PENNSYLVANIA AVENUE

MONUMENT C.L.

CONSTRUCTION C.L.

CAUTION
HIGH PRESSURE GAS LINE

U.C.R. ENTRANCE

44.69 T.C.
44.19 F.L.

45.16 T.C.
44.66 F.L.

67+92
W=7'-6"
SEE SHEET 4 OF 4

18" RCP

456

45.20 T.C.
44.70 F.L.

45.95 T.C.
45.45 F.L.

66+70.17
PENN. AVE.

15" RCP

18" RCP

38.94 T.C.
38.44 F.L.

39.50 T.C.
39.00 F.L.

65+50
430

65+92
W=14'-2", V=5'-6"
SEE SHEET 4 OF 4

67+40

67+78
W=21', V=4'-6"
SEE SHEET 4 OF 4

PROVIDE 1'x 1'-6" CAST IRON GRATE WITH 1" DIA. PROTECTION BAR

405 M

432

JUNCTION STRUCTURES @ 67+40 E=5.0', L=6.0'

NORTH INLET: A=50", B=18", C=4.6', D_1=36", D_2=36"
ELEV. "S"=1032.65, ELEV. "A"=1032.91

SOUTH INLET: A=46", B=18", C=5.0', D_1=36", D_2=36"
ELEV. "S"=1033.00, ELEV. "A"=1033.70

NOTE:
FOR PROPOSED STREET IMPROVEMENTS SEE PLAN R-3057

REGISTERED PROFESSIONAL ENGINEER
BENITO URQUIZA, JR.
No. 33657
Exp. 6-30-94
CIVIL
STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
BEN URQUIZA
R.C.E. 33657 Expires: 6/30/94
DATE MAY 7, 1992

MARK	REVISIONS	APPR.	DATE

DESIGNED BY PH DRAWN BY LFH CHECKED BY BU

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER	5/8/92	WJG
PRINCIPAL ENGINEER	5/11/92	BU
CHIEF P.W. INSPECTOR	5/7/92	RBC
SURVEYOR	5/8/92	DMH
TRAFFIC DIVISION		
PARKS DEPARTMENT		
STREET SERVICES		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 5/11/92

PENNSYLVANIA AVENUE STORM DRAIN EXTENSION

700' W'ly of Gage Canal to Canyon Crest Drive

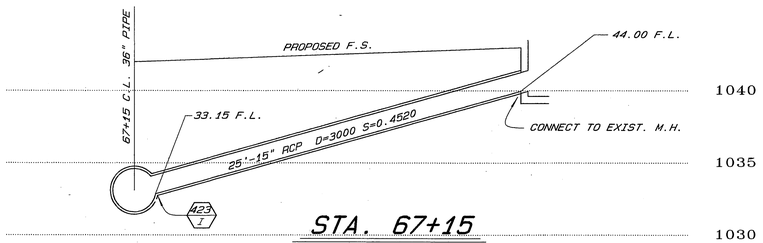
ACCOUNT NO. 30-575-295-15

D-610

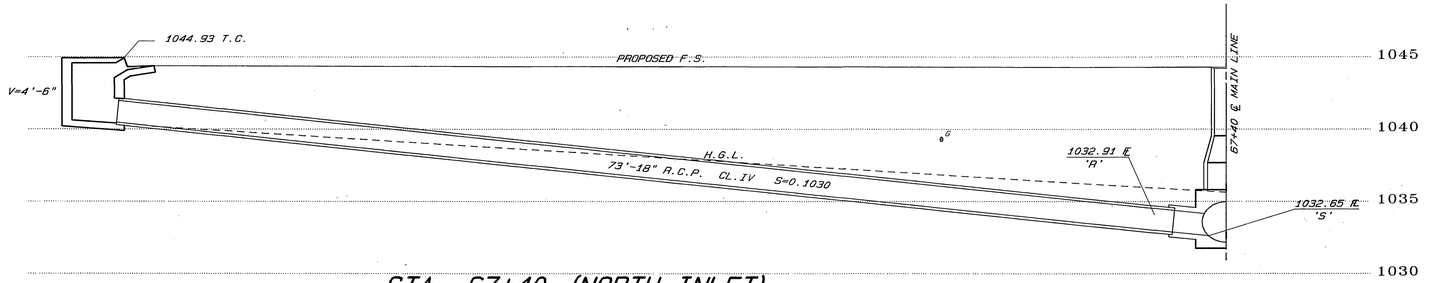
SHEET 3 OF 4

HORIZONTAL SCALE: 1" = 20' VERTICAL SCALE: 1" = 4'

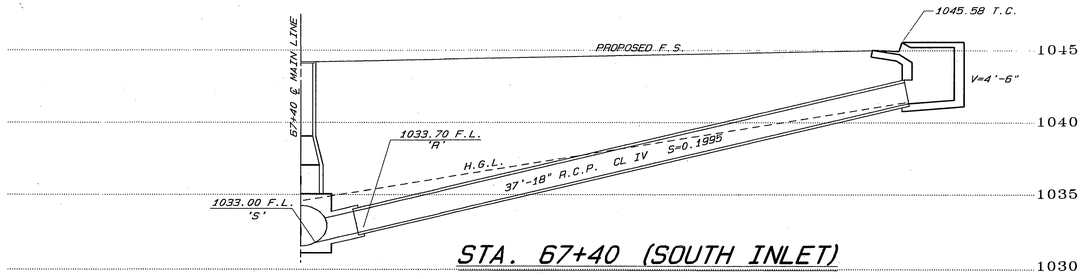
INDEXED 7-6-94 LFH



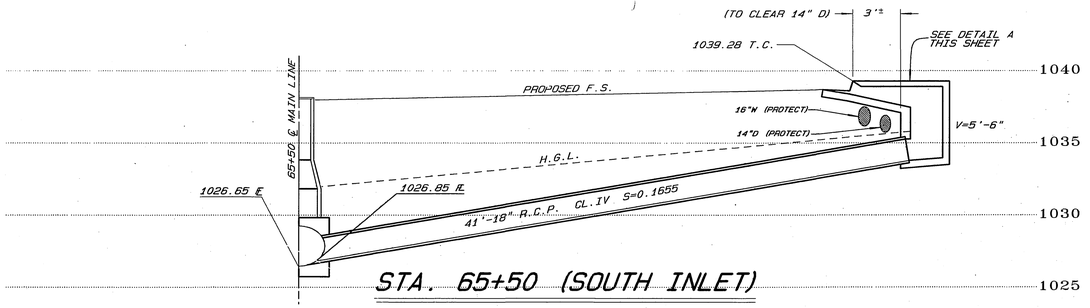
STA. 67+15



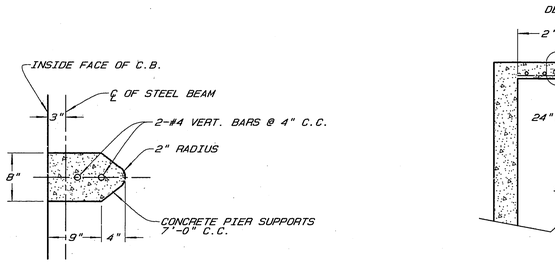
STA. 67+40 (NORTH INLET)



STA. 67+40 (SOUTH INLET)

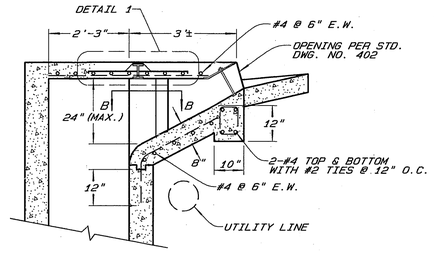


STA. 65+50 (SOUTH INLET)



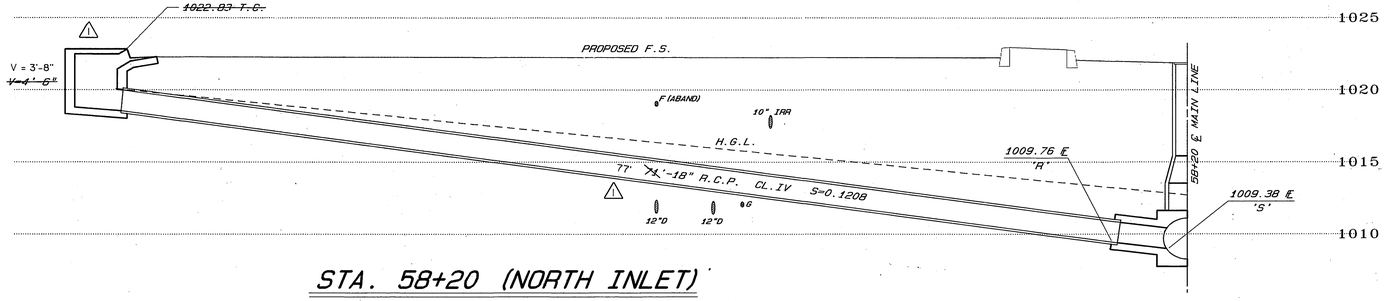
SECTION B-B

SCALE: 1"=1'-0"

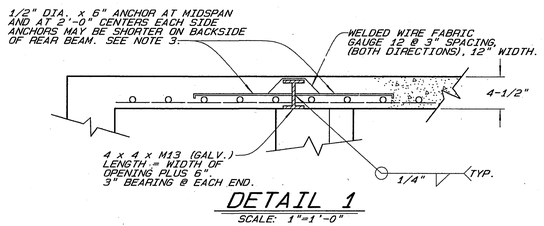


DETAIL "A" CATCH BASIN MODIFICATION

SCALE: 1/2"=1'-0"



STA. 58+20 (NORTH INLET)

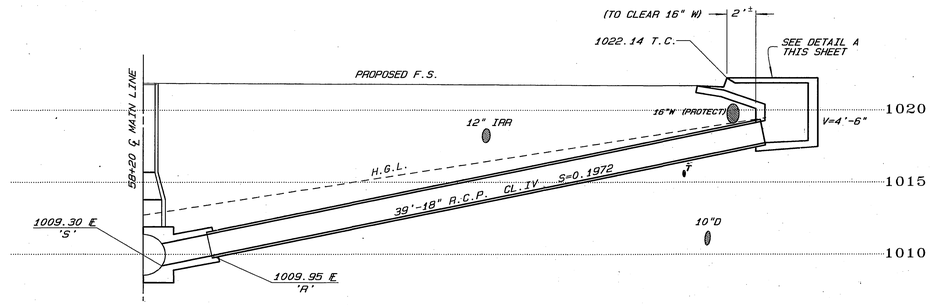


DETAIL 1

SCALE: 1"=1'-0"

NOTES:

1. DETAILS NOT SHOWN SHALL BE PER STANDARD DRAWING NO. 405.
2. PLACE STEPS IN END WALL OF CATCH BASIN.
3. ELECTRICALLY WELDED STUDS 1/2" x 8" NELSON H4F OR EQUAL MAY BE USED IN LIEU OF THE DEFORMED BAR ANCHORS.



STA. 58+20 (SOUTH INLET)

NOTE:
ALL UTILITY LOCATIONS AND DEPTHS ON THIS DRAWING SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTING LATERALS AND CATCH BASINS

REVISION 1

MADE UNDER THE SUPERVISION OF:
GFB-FRIEDRICH & ASSOC., INC.
6529 RIVERSIDE AVE STE. 230
RIVERSIDE CA 92506-(909) 781-0811

JOHN A. FRIEDRICH RCE 27861 EXP. 3-31-02 9-13-00

REGISTERED PROFESSIONAL ENGINEER JOHN A. FRIEDRICH NO. 27861 EXP. 3-31-02 CIVIL STATE OF CALIFORNIA

REGISTERED PROFESSIONAL ENGINEER BENITO URQUIZA, JR. No. 33657 Exp. 6-30-94 CIVIL STATE OF CALIFORNIA

ENGINEER IN RESPONSIBLE CHARGE
BEN URQUIZA
R.C.E. 33657 Expires: 6/30/94
DATE MAY 7, 1992

MARK	REVISIONS	APPR.	DATE
1	EXTEND 18" RCP 6'S CONST. NEW CB	MG	9-13-00

DESIGNED BY PH. DRAWN BY LFH CHECKED BY B.U.

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY	DATE	BY
DEPUTY P.W. ENGINEER	5/18/92	RMG
PRINCIPAL ENGINEER	5/18/92	JS
CHIEF P.W. INSPECTOR	5/27/92	BSC
SURVEYOR	5/18/92	BPH
TRAFFIC DIVISION		
PARKS DEPARTMENT		
STREET SERVICES		

APPROVED BY
PUBLIC WORKS DIRECTOR
DATE 5/11/92

PENNSYLVANIA AVENUE STORM DRAIN EXTENSION

700' W'ly of Gage Canal to Canyon Crest Drive

HORIZONTAL SCALE: 1" = 50' VERTICAL SCALE: 1" = 5'

ACCOUNT NO. 30-575-295-15

D-610

SHEET 4 OF 4

INDEXED 7-6-94 GH