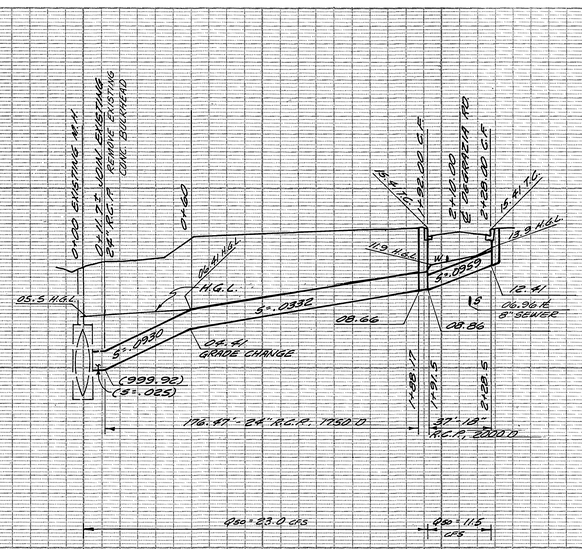
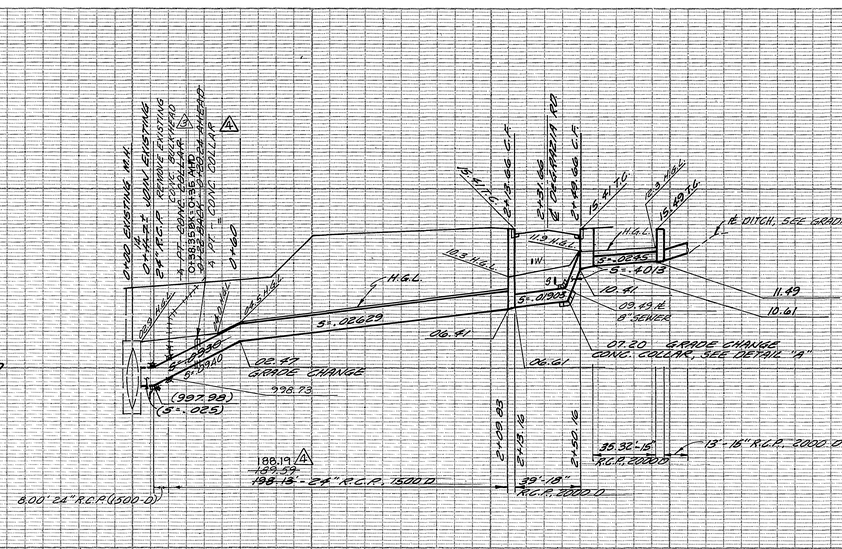
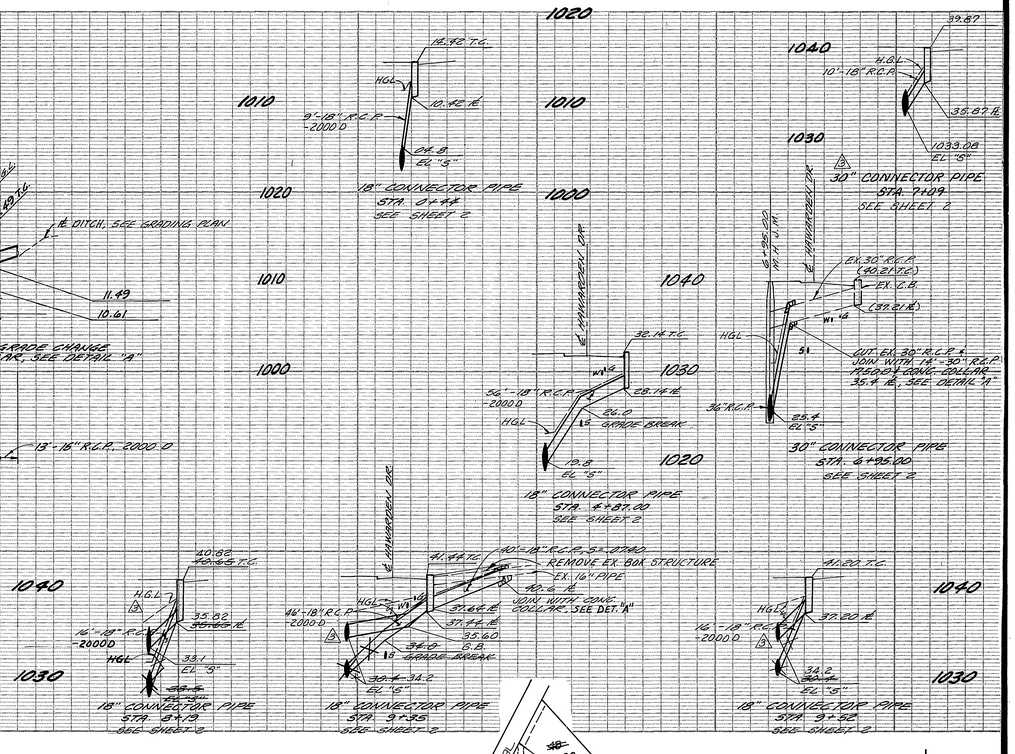
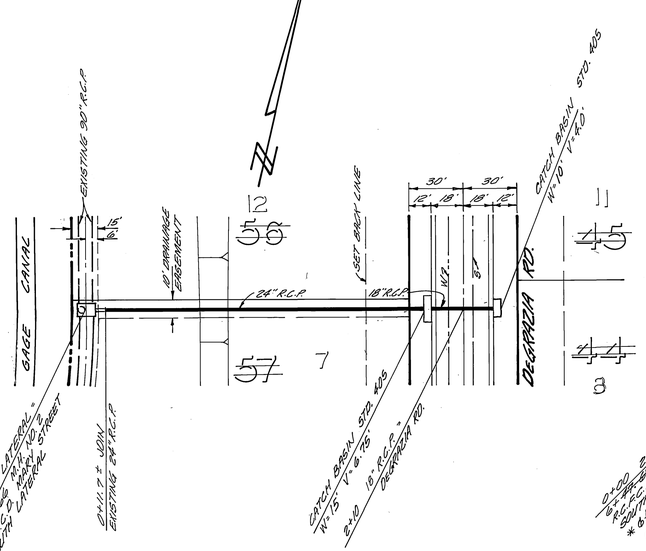


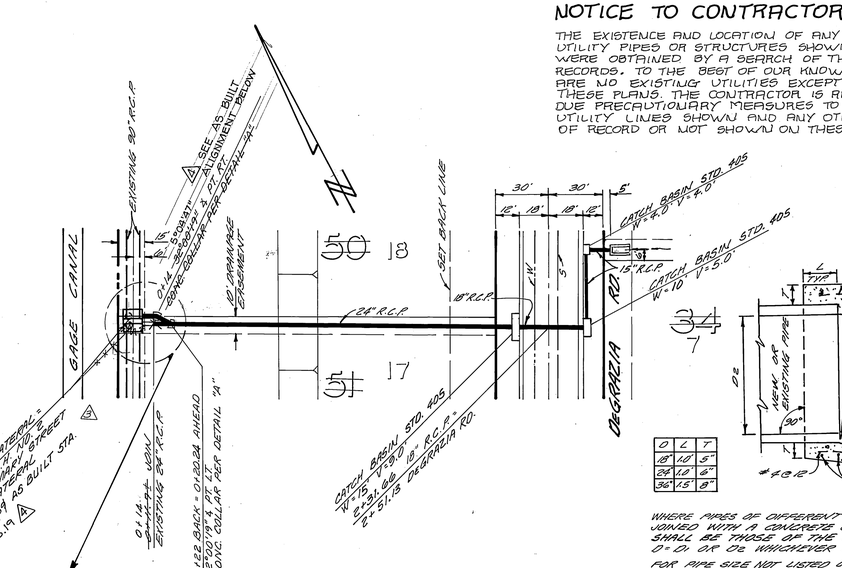


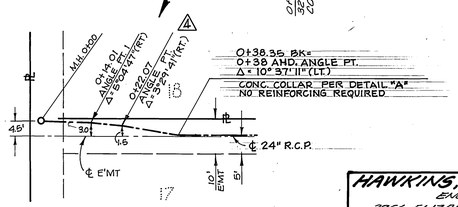


NOTICE TO CONTRACTOR

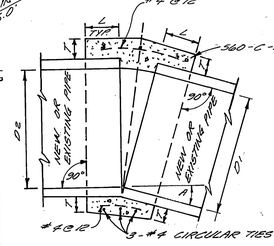
THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITY PIPES OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF THE AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN ON THESE PLANS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO PROTECT THE UTILITY LINES SHOWN AND ANY OTHER LINES NOT OF RECORD OR NOT SHOWN ON THESE PLANS.







AS BUILT ALIGNMENT OF △4 24" R.C.P. STORM DRAIN



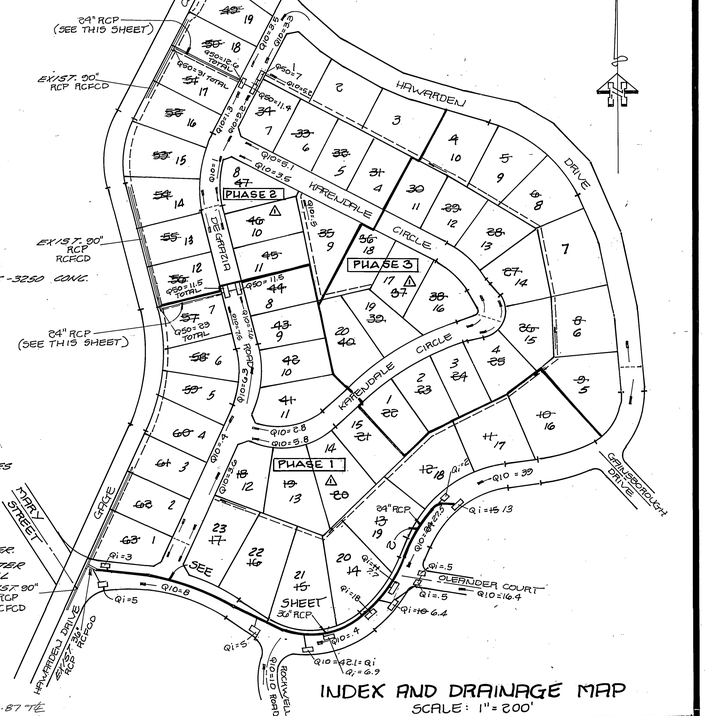
O	L	T
18"	1.0	5"
24"	1.0	6"
36"	1.5	8"

WHERE PIPES OF DIFFERENT DIAMETERS ARE JOINED WITH A CONCRETE COLLAR, L AND T SHALL BE THOSE OF THE LARGER PIPE. O = D OR D₂ WHICHEVER IS GREATER.

FOR PIPE SIZE NOT LISTED USE NEXT SIZE LARGER.

WHERE REINFORCING IS REQUIRED THE DIAMETER OF THE CIRCULAR TIES SHALL BE O + (2 x WALL THICKNESS) + 8".

DETAIL "A"



INDEX AND DRAINAGE MAP
SCALE: 1" = 200'

GENERAL NOTES

CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, 1973 EDITION.

DEVELOPER TO GIVE RCFC 5 DAYS WRITTEN NOTICE PRIOR TO STARTING WORK ON STORM DRAIN.

THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY FOR THE WORK HEREON. IN THE EVENT OF DISCREPANCIES ARISING DURING CONSTRUCTION, THE PRIVATE ENGINEER SHALL BE RESPONSIBLE FOR DETERMINING AN ACCEPTABLE SOLUTION AND REVISING THE PLANS FOR APPROVAL BY THE CITY.

HAWKINS, ROBERTSON & ASSOC.
ENGINEERS · SURVEYORS
3756 ELIZABETH ST. RIVERSIDE, CALIF.
Dale B. Hawkins 7-31-81
R.C.E. 17055 DATE

BENCH MARK: F.D. BRASS DISC STAMPED (U.S.A.) CASHED IN INT. VICTORIA AVE. & WASHINGTON ST. ELEV. 735.13 ELEV. 827.939

MARK	REVISIONS	APPR.	DATE
△1	ADD AS BUILT ALIGN. LAT. BET. L016 178.18	WHL	9/11/86
△2	ADDED C.P. PROFILE @ STA. 7+09.67	WHL	2/10/87
△3	REVISED CONNECTOR PIPE GRADES	WHL	11/9/87
△4	CHANGED LOT NUMBERS 5,6,10, 11	WHL	11/9/87
△5	PHASED PLANS FOR CONSTRUCTION	WHL	6-23-88

DESIGNED BY D.B.H. DRAWN BY R.L.E. CHECKED BY E. Proctor

CITY OF RIVERSIDE, CALIFORNIA
PUBLIC WORKS DEPARTMENT

APPROVED BY	BY	DATE
PRINCIPAL ENGINEER		
PARK DEPARTMENT		
TRAFFIC DIVISION		
CHIEF PUB. WKS. ENGR.		

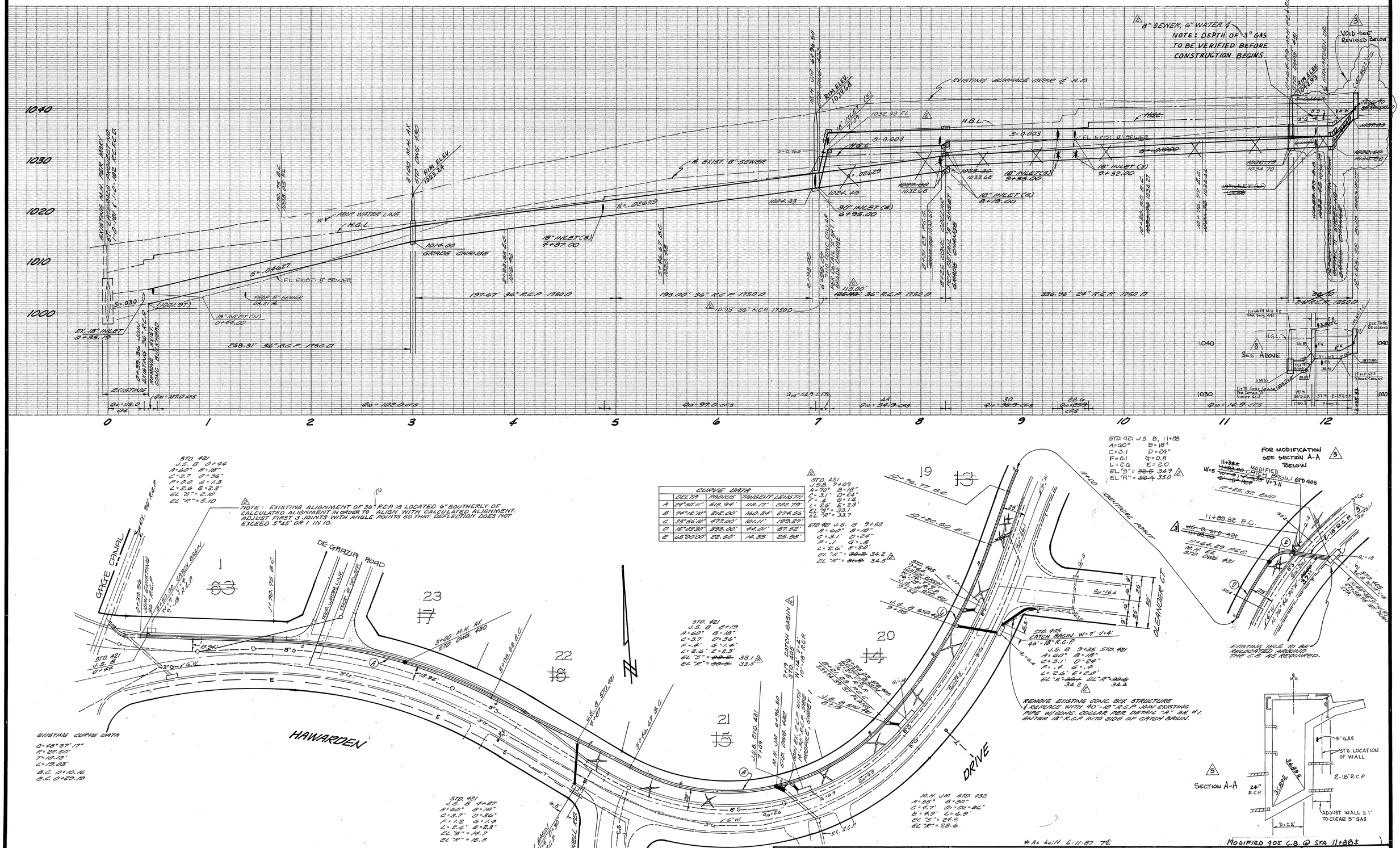
APPROVED BY [signature]
DIRECTOR OF PUBLIC WORKS
DATE 8/26/82

TRACT 10005
STORM DRAIN PLAN
DEGRAZIA ROAD
10' DRAINAGE EASEMENTS

SCALE: HORIZ. : 1"=40' VERT. : 1"=8'

ACCOUNT No.
DRAWING NUMBER
0-407
SHEET 1 OF 2
FILE NO. 3137-A

△4 As built 6-11-87 TE



STD. 421 J.S. B 0+44 A=60° B=18" C=5.7 D=36" F=2.0 G=1.3 L=2.6 E=2.3' EL "S"= 2.10 EL "R"= 5.10

EX. 30" R.C.P.

GAGE CANAL

Ø1+33.86 JOIN EXISTING 18" R.C.P.

STA 0+00 CATCH BASIN W=5'-7" V=7.11 9'-10" R.C.P.

1+20.78 P.R.C.

DE GRAZIA ROAD

PROP. WATER LINE

PROP. 8" SEWER

18.24'

8"S

3"G

L 6"W

3'-0" MH. AX STD. DWG. 420

3+28.69 E.C.

STD. 421 J.S. B 0+44

EXISTING CURVE DATA
D=48°27'17"
R=22.50'
T=10.12'
L=19.03'
B.C. 0+10.16
E.C. 0+29.19

HAWARDEN

NOTE: EXISTING ALIGNMENT OF 36" R.C.P. IS LOCATED 6" SOUTHERLY OF CALCULATED ALIGNMENT. IN ORDER TO ALIGN WITH CALCULATED ALIGNMENT, ADJUST FIRST 3 JOINTS WITH ANGLE POINTS SO THAT DEFLECTION DOES NOT EXCEED 5°45' OR 1 IN 10.

CURVE DATA				
	DELTA	RADIUS	TANGENT	LENGTH
A	24°30'11"	513.94'	119.17'	222.79'
B	74°12'19"	212.00'	160.34'	274.56'
C	23°56'10"	477.00'	101.11'	199.27'
D	15°49'30"	333.00'	44.01'	87.52'
E	65°00'00"	22.50'	14.33'	25.53'

STD. 421 J.S. B 7+09 A=70° B=18" C=3.1' D=24" F=.4' G=.8 L=2.6' E=2.0' EL "S"= 33.1 EL "R"= 34.2

STD 421 J.S. B 9+52 A=90° B=18" C=3.1' D=24" F=.1 G=.8 L=2.6' E=2.0' EL "S"= 34.2 EL "R"= 34.5

STD. 421 J.S. B 9+19 A=60° B=18" C=3.7' D=36" F=.4' G=1.4' L=2.6' E=2.3' EL "S"= 33.1 EL "R"= 33.3

STD. 421 J.S. B 4+87 A=60° B=18" C=3.7' D=36" F=1.2 G=1.4 L=2.6' E=2.3' EL "S"= 14.7 EL "R"= 15.3

CATCH BASIN W=7'-0" V=7.09 6'-10" R.C.P.

6.5'

ROCKWELL RD.

STD. 421 J.S. B 9+19 A=60° B=18" C=3.7' D=36" F=.4' G=1.4' L=2.6' E=2.3' EL "S"= 33.1 EL "R"= 33.3

7+19 CATCH BASIN STD. 405 W=14'-0" V=7.11 10'-18" R.C.P.

STD. 421 J.S. B 9+19

M.H. JM 6+96.50 STD. DWG. 432

ON EL. R.C.P. WITH 45° ANGLE, SHEET 1

J.S. B STD. 421 9+19

J.S. B STD. 421 9+19

M.H. JM STD. 432 A=55° B=30° C=5.7' D=72"-36" E=9.9' L=6.9' EL "S"= 24.5 EL "R"= 28.6

STD. 421 J.S. B 7+09 A=70° B=18" C=3.1' D=24" F=.4' G=.8 L=2.6' E=2.0' EL "S"= 32.5 34.9 EL "R"= 32.4 35.0

11+00 INDUSTRIAL POINT

10+76.77 E.C.

10+20.50 E.C.

STD. 405 CATCH BASIN W=7' V=7.11 9'-10" R.C.P. J.S. B 9+35 STD. 421

J.S. B STD. 421 9+35

Q10=16.4

45°

30'

25'

OLEANDER CT.

STD. 405 CATCH BASIN W=7' V=7.11 46'-18" R.C.P. J.S. B 9+35 STD. 421 A=60° B=18" C=3.1' D=24" F=.4' G=.4' L=2.6' E=2.0' EL "S"= 32.5 34.2 EL "R"= 32.9 34.4

REMOVE EXISTING CONC. BOX STRUCTURE & REPLACE WITH 90'-18" R.C.P. JOIN EXISTING PIPE W/CONC. COLLAR SEE DETAIL "A" STK. #1. ENTER 18" R.C.P. INTO SIDE OF CATCH BASIN.

FOR MODIFICATION SEE SECTION A-A BELOW

11+38± MODIFIED W=5' CATCH BASIN V=7.11 STD 405

12+25.32 END

11+89.82 E.C.

11+66.29 R.C.C. M.H. #2 STD. DWG. #431

11+86.69 P.R.C.

45 L 18 RCP 421

S=.03

S=.02

S=.04

S=.05

S=.02

S=.03

S=.04

S=.05

S=.02

S=.03

S=.04

S=.05

S=.02

S=.03