

STORM DRAIN IMPROVEMENT PLANS

GENERAL NOTES

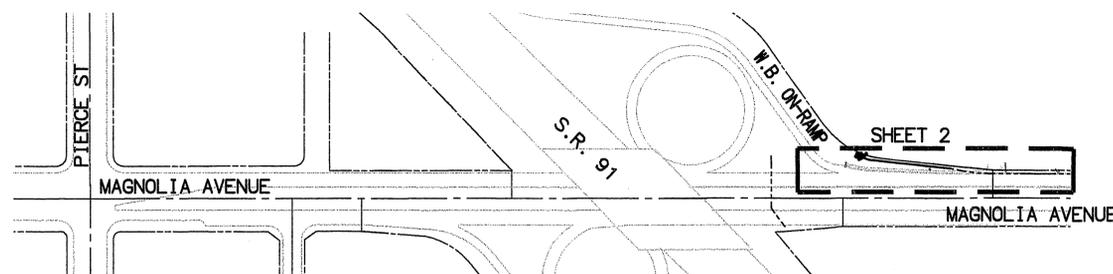
- NO PERSON SHALL PERFORM ANY CONSTRUCTION ACTIVITY OR INSTALL ANY OBJECTS WITHIN THE PUBLIC RIGHTS-OF-WAY OR EASEMENTS OF THE CITY OF RIVERSIDE WITHOUT A VALID CONSTRUCTION PERMIT OR, A STREET OPENING PERMIT OR AN ENCROACHMENT PERMIT ISSUED BY THE CITY'S PUBLIC WORKS DEPARTMENT.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO CLEAR THE RIGHT OF WAY IN ACCORDANCE WITH THE PROVISIONS OF LAW AS IT AFFECTS EACH UTILITY INCLUDING IRRIGATION LINES AND APPURTENANCES AND AT NO COST TO THE CITY.
- CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE CITY OF RIVERSIDE DEPARTMENT OF PUBLIC WORKS, STANDARD DRAWINGS, ITS SUPPLEMENTAL NOTES AND THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION, CURRENT EDITION.
- THE PRIVATE ENGINEER SIGNING THESE PLANS IS RESPONSIBLE FOR ASSURING THE ACCURACY AND ACCEPTABILITY OF 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.
- QUANTITIES SHOWN ARE FOR INFORMATION ONLY AND THE CITY OF RIVERSIDE IS NOT RESPONSIBLE FOR THEIR ACCURACY.
- THE DEVELOPER SHALL BE RESPONSIBLE FOR PRESERVING OR RE-ESTABLISHING AND REFERENCING SURVEY MONUMENTS DESTROYED, DISTURBED OR BURIED AS A RESULT OF CONSTRUCTION SHOWN HEREON.
- ALL FLAGGED ELEVATIONS SHALL BE STAKED IN THE FIELD BY THE PRIVATE SURVEYOR.
- ON ALL AREAS WITHIN PUBLIC RIGHT OF WAY WHERE THE FILL IS ONE (1) FOOT OR GREATER, A LETTER WILL BE REQUIRED FROM THE SOIL ENGINEER, CERTIFYING THE COMPACTION OF THE FILL BELOW SUBGRADE, PRIOR TO ISSUANCE OF THE CONSTRUCTION PERMIT/CUT SHEETS.
- ANY TRAFFIC CONTROL STRIPING OBLITERATED AND/OR BADLY WORN DURING CONSTRUCTION SHALL BE RESTORED BY THE CONTRACTOR WITHIN FIVE DAYS AFTER NOTIFICATION FROM THE CITY INSPECTORS.
- THE CONTRACTOR SHALL CALL IN A LOCATION REQUEST TO UNDERGROUND SERVICE ALERT (USA), PHONE # 1-800-227-2600, TWO WORKING DAYS BEFORE DIGGING. NO CONSTRUCTION PERMIT WILL BE ISSUED BY THE PUBLIC WORKS DEPARTMENT INVOLVING EXCAVATION FOR UNDERGROUND FACILITIES UNLESS THE APPLICANT HAS BEEN PROVIDED AN INQUIRY IDENTIFICATION NUMBER BY U.S.A.
- CONTRACTOR IS TO VERIFY EXISTING JOIN ELEVATIONS PRIOR TO CONSTRUCTION.
- THE STORM DRAIN IS IN STATE RIGHT OF WAY. THE DEVELOPER AND/OR CONTRACTOR SHALL GIVE CALTRANS AND THE CITY 2 DAYS NOTICE PRIOR TO STARTING WORK ON STORM DRAIN.
- BEFORE THE RIP-RAP AT THE OUTLET OF ANY DRAINAGE STRUCTURE IS ACCEPTED BY THE CITY, IT SHALL BE TESTED UNDER FLOWS AS CLOSE AS POSSIBLE TO DESIGN CONDITIONS WITH WATER OBTAINED FROM FIRE HYDRANTS IN THE IMMEDIATE AREA.

MAGNOLIA VILLAS

TRACT MAP 31132

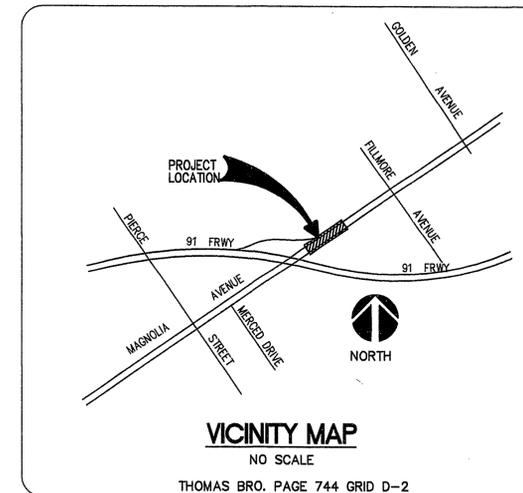
11547 MAGNOLIA AVENUE
RIVERSIDE, CALIFORNIA

CUP P03-0226



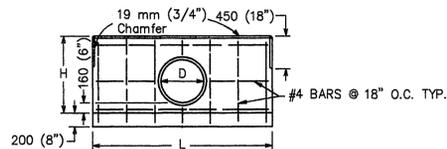
INDEX MAP

SCALE: 1"=200'

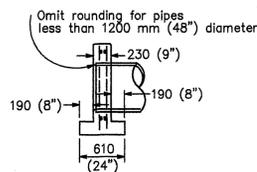


LEGEND

- 12" W — WATER MAIN
- UGC — ELECTRIC SERVICE
- UGT — TELEPHONE SERVICE
- 2" G — GAS SERVICE
- 8" S — SANITARY SEWER
- — STORM DRAIN
- X — FENCE
- ⊙ — FIRE HYDRANT
- ⊙ — WATER METER
- ⊙ — SANITARY SEWER CLEAN-OUT
- ⊙ — GAS METER
- ⊙ — GATE VALVE
- ⊙ — REDUCER
- ⊙ — SANITARY SEWER MANHOLE
- ⊙ — STORM DRAIN MANHOLE
- — PROPERTY LINE
- — PULL BOX
- PP — POWER POLE
- SL — STREET LIGHT
- INV — INVERT
- D — DEPTH



FRONT ELEVATION
SINGLE HEADWALL



SECTION, SINGLE

HEADWALL DETAIL PER CALTRANS 2004 STD PLAN D-89

NO SCALE

STRAIGHT HEADWALLS

D	H	SINGLE	
		L	Conc
300 (12")	810 (32")	1500 (60")	0.45 (0.60)
375 (15")	885 (35")	1800 (72")	0.56 (0.73)
450 (18")	960 (38")	2100 (84")	0.68 (0.89)
525 (21")	1035 (41")	2250 (89")	0.76 (0.76)
600 (24")	1110 (44")	2550 (100")	0.90 (1.00)
675 (27")	1185 (47")	2850 (112")	1.04 (1.36)
750 (30")	1260 (50")	3000 (118")	1.13 (1.48)

SEE CALTRANS STD. D89 FOR COMPLETE DETAILS
() DENOTES IMPERIAL EQUIV. IN INCHES

NOTES

- No deduction made in quantities for thickness of pipe walls.
- All reinforcing steel #4 bars. All vertical and horizontal tie bars 18" maximum spacing.
- Length of wall "W" may be varied to suit conditions encountered in the field, and straight line interpolation may be used to calculate quantities.
- Quantities are for design purposes only.

NOTES:

- EXISTING UTILITIES SHOWN ON THIS PLAN ARE PLOTTED FROM UTILITY RECORDS. THE CONTRACTOR IS REQUIRED TO TAKE DUE PRECAUTIONARY MEASURES TO LOCATE AND PROTECT ALL UTILITIES WHETHER OR NOT SHOWN ON THIS PLAN.
- EXISTING UTILITY CROSSING SHALL BE POTHOLED PRIOR TO START OF CONSTRUCTION TO VERIFY CLEARANCES.

UNAUTHORIZED CHANGES & USES:

THE ENGINEER PREPARING THESE PLANS WILL NOT BE RESPONSIBLE FOR, OR LIABLE FOR, UNAUTHORIZED CHANGES TO OR USES OF THESE PLANS. ALL CHANGES TO THE PLANS MUST BE IN WRITING AND MUST BE APPROVED BY THE PREPARER OF THESE PLANS. CONSTRUCTION CONTRACTOR AGREES THAT IN ACCORDANCE WITH GENERALLY ACCEPTED CONSTRUCTION PRACTICES, CONSTRUCTION CONTRACTOR WILL BE REQUIRED TO ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY, THAT THIS REQUIREMENT SHALL BE MADE TO APPLY CONTINUOUSLY AND NOT BE LIMITED TO NORMAL WORKING HOURS, AND CONSTRUCTION CONTRACTOR FURTHER AGREES TO DEFEND, INDEMNIFY AND HOLD DESIGN PROFESSIONAL HARMLESS FROM ANY AND ALL LIABILITY, REAL OR ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING LIABILITY ARISING FROM SOLE NEGLIGENCE OF DESIGN PROFESSIONAL.

NOTICE TO CONTRACTOR

THE EXISTENCE AND LOCATION OF ANY UNDERGROUND UTILITIES, PIPES AND/OR STRUCTURES SHOWN ON THESE PLANS WERE OBTAINED BY A SEARCH OF AVAILABLE RECORDS. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO EXISTING UTILITIES EXCEPT AS SHOWN. THE CONTRACTOR SHALL ASCERTAIN THE TRUE VERTICAL AND HORIZONTAL LOCATION AND SIZE OF THOSE TO BE USED OF ANY UNDERGROUND UTILITIES AND SHALL BE RESPONSIBLE FOR DAMAGE TO ANY PUBLIC OR PRIVATE UTILITIES, SHOWN OR NOT SHOWN HEREON.

BASIS OF BEARINGS

THE BEARINGS SHOWN HEREON ARE BASED ON THE CENTER LINE OF MAGNOLIA AVENUE PER MAP FILED IN BOOK 155, PAGES 99 TO 101, INCLUSIVE, IN THE RECORDS OF THE COUNTY OF RIVERSIDE, STATE OF CALIFORNIA, BEARING NORTH 56°00'00" EAST

BENCHMARK

CITY OF RIVERSIDE GPS STATION: GPS-71
2 1/2" BRASS DISK STAMPED "CITY OF RIVERSIDE GPS STATION 71 1991 CADME"
SET IN THE SOUTHEAST CORNER OF A CONCRETE SLAB FOR AN ELECTRICAL VAULT IN THE MEDIUM ISLAND OF MAGNOLIA AVENUE, 325 WEST OF THE CENTERLINE OF FILLMORE STREET.
ELEVATION = 705.726 (FEET)



Business Tax Cert. # 118556 EXP. 12/08/05
PREPARED UNDER THE SUPERVISION OF:

Madison-FCS
CIVIL ENGINEERING - LAND SURVEYING
310 SOUTH MAPLE STREET, SUITE A CORONA CA 92880 - (951) 736-3056 FAX (951) 736-3101
CHRISTOPHER E. HAHN, RCE 58971 exp. 6/07

MARK	REVISIONS	APPR. DATE

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY: *[Signature]* DATE: 11/14/05
PRINCIPAL ENGINEER

CITY ENGINEER
DATE: 11/20/05

STORM DRAIN IMPROVEMENTS
MAGNOLIA AVE.
COVER SHEET
11547 Magnolia Avenue
T.M. 31132

PW04-0963

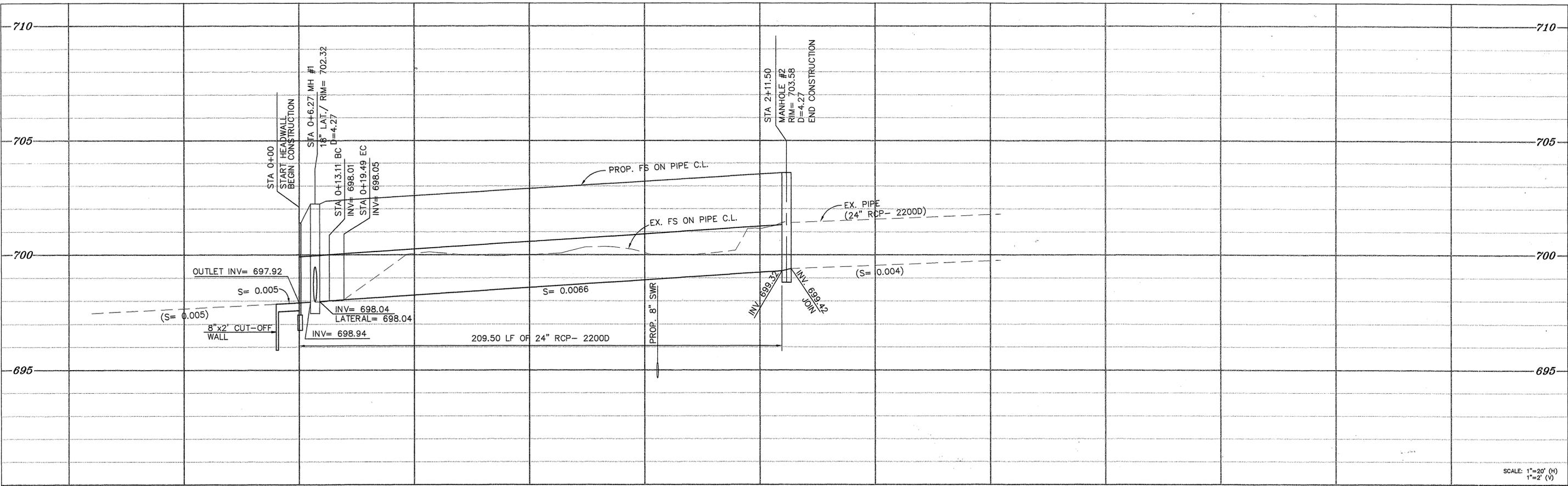
DRAWING NUMBER

D-768

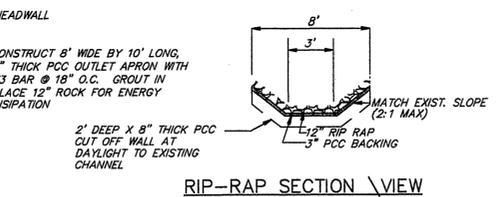
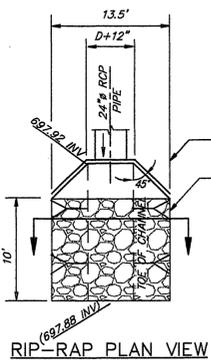
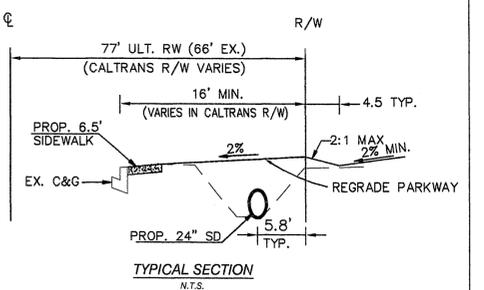
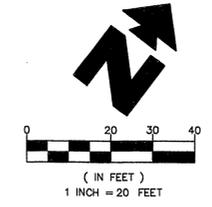
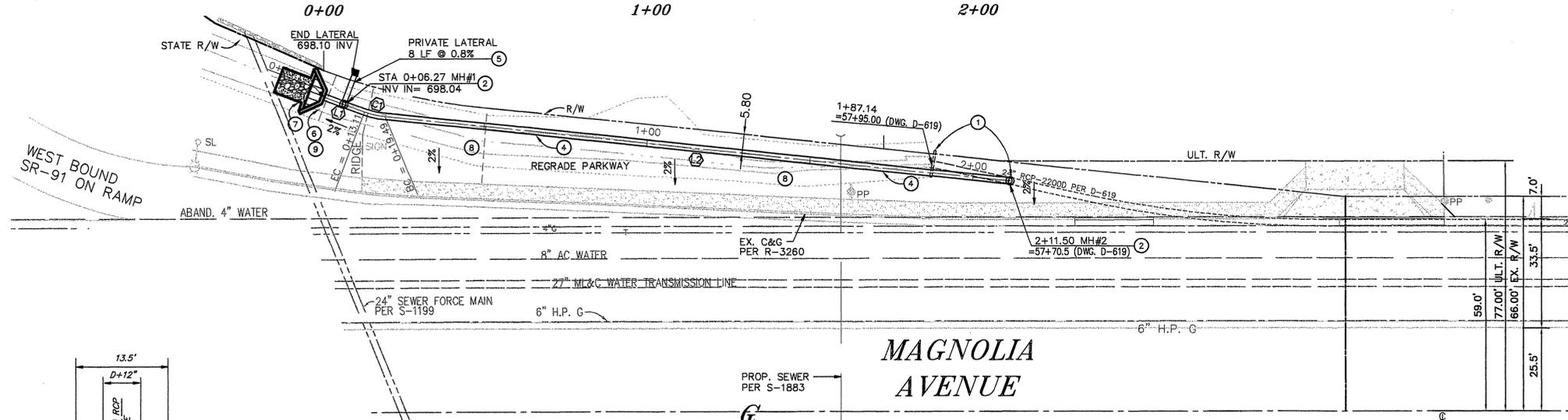
SHEET 1 OF 2

HORIZ. SCALE: AS SHOWN VERT. SCALE: N/A

INDEXED 11-28-05 LH



SCALE: 1"=20' (H)
1"=2' (V)

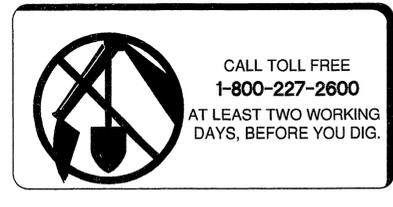


CONSTRUCTION NOTES:		ESTIMATED QUANTITY	
1	SAWCUT AND REMOVE EXIST. STORM PIPE & HEADWALL	25	LF
2	CONSTRUCT MANHOLE "EZ" PER CITY OF RIVERSIDE STD. 431	2	EA.
3	NOT USED	-	-
4	PROVIDE & INSTALL 24" (2200 D) RCP STORM DRAIN WITH CASE 1 BEDDING PER CITY STD. 452.	210	LF
5	PROVIDE & INSTALL 18" (2000 D) RCP STORM DRAIN WITH CASE 1 BEDDING PER CITY STD. 452.	8	LF
6	CONSTRUCT PCC PIPE HEADWALL PER CALTRANS STD D89 D=24" [800 mm], L=8.33'. SEE DETAIL ON SHT. 1	1	EA.
7	CONSTRUCT 3" THICK PCC OUTLET APRON 8' X 10' LONG W/ 12" ROCK SPACED ALONG INVERT FOR ENERGY DISSIPATION. SEE DETAIL HEREON.	80	SF
8	BACKFILL & REGRADE EXISTING PARKWAY TO 2% TYPICAL CROSS-SLOPE	-	-
9	CONSTRUCT SLOPED PROTECTION BARRIER PER APWA STD. 360-0 (DETAILS ON SHT. 3)	1	EA.

NOTE: PRIVATE LATERAL PER ENCROACHMENT PERMIT.

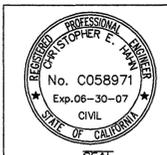
LINE TABLE		
LINE	LENGTH	BEARING
L1	13.11	N76°36'06"E
L2	192.02	N61°59'24"E

CURVE TABLE			
CURVE	LENGTH	RADIUS	ANGLE
C1	6.38	25.00	14°36'42"



CALL TOLL FREE
1-800-227-2600
AT LEAST TWO WORKING DAYS, BEFORE YOU DIG.

BENCHMARK
CITY OF RIVERSIDE GPS STATION: GPS-71
2 1/2" BRASS DISK STAMPED "CITY OF RIVERSIDE GPS STATION 71 1991 CADME" SET IN THE SOUTHEAST CORNER OF A CONCRETE SLAB FOR AN ELECTRICAL VAULT IN THE MEDIUM ISLAND OF MAGNOLIA AVENUE, 325 WEST OF THE CENTERLINE OF FILLMORE STREET.
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8-19-05
CHRISTOPHER E. HAHN, RCE 58971 exp. 6/07

MARK	REVISIONS	APPR.	DATE

CITY OF RIVERSIDE
PUBLIC WORKS DEPARTMENT

APPROVED BY: _____ DATE: _____ BY: _____
PRINCIPAL ENGINEER

DESIGNED BY: CEH DRAWN BY: CEH CHECKED BY: CEH

STORM DRAIN PLAN & PROFILE
MAGNOLIA AVE.
FROM STA. 0+00 TO STA. 2+10.86 & LATERAL T.M. 31132

DRAWING NUMBER: **D-768**
SHEET **2** OF **2**

HORIZ. SCALE: 1"=20' VERT. SCALE: 1"=2'

PW04-0963

8/2

INDEXED 11-28-05 fH