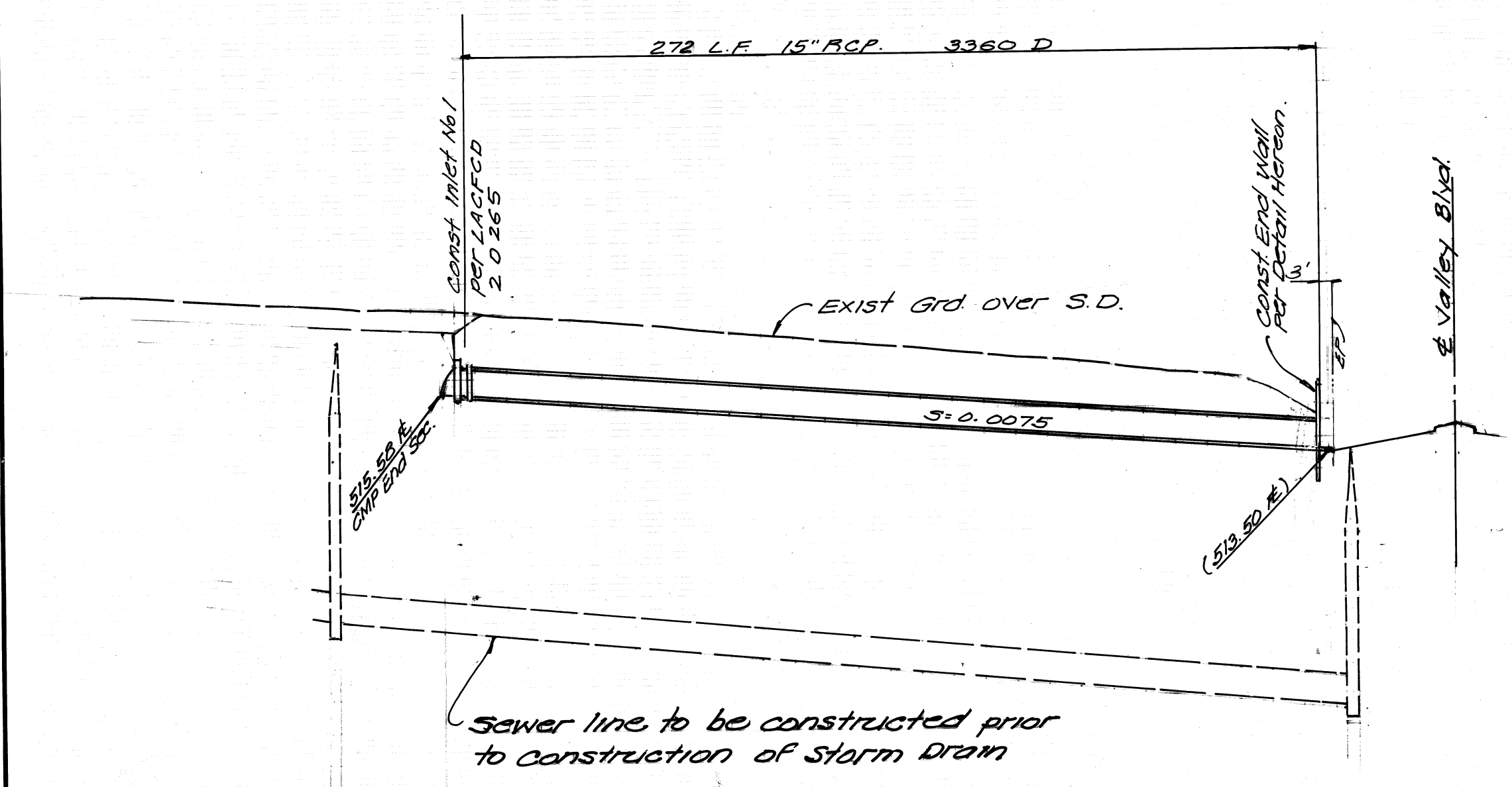
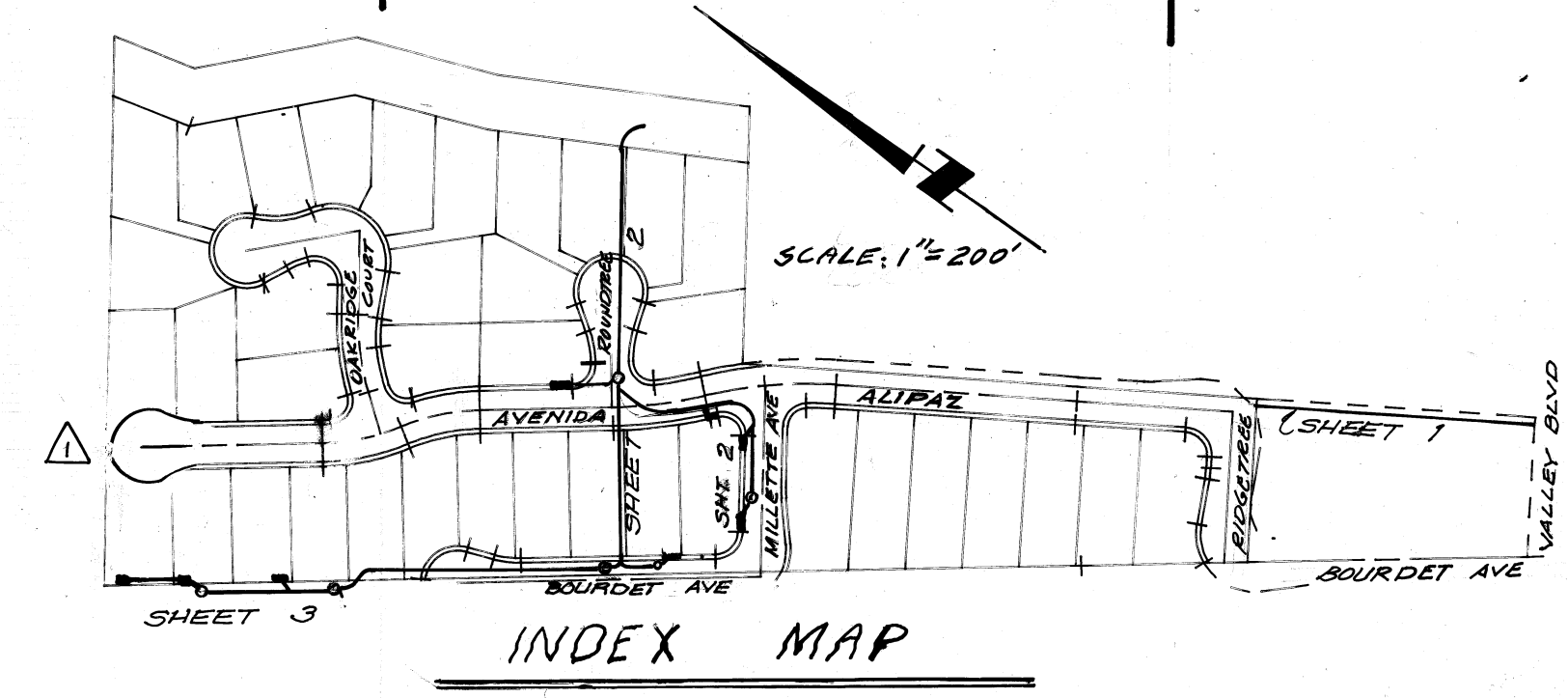


- GENERAL NOTES FOR STORM DRAIN CONSTRUCTION
- ALL PIPE LAID IN OPEN TRENCH SHALL BE BEDDED IN ACCORDANCE WITH LOS ANGELES COUNTY ENGINEER CASE AND BEDDING PER STD NO. D 54
 - 24 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE WALNUT CITY ENGINEER AT (714) 594-9702
 - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1982 EDITION) 834.24 SUPPLEMENT INCLUDING ALL AMENDMENTS ADOPTED THERETO PRIOR TO THE APPROVAL OF THESE PLANS AND TO THE SATISFACTION OF THE CITY ENGINEER
 - ALL BACKFILL SHALL BE COMPACTED TO A RELATIVE DENSITY OF 90%
 - ALL STATE AND LOCAL TRENCH SAFETY RULES WILL BE RIGIDLY ENFORCED
 - THE CONTRACTOR MUST MAINTAIN ALL TRAFFIC SIGNS IN AN UPRIGHT, READILY DISCERNIBLE POSITION, FREE FROM OBSTRUCTIONS TO MOTORIST'S VISION AND SHALL RESET SAME IN PROPER POSITION UPON COMPLETION OF CONSTRUCTION
 - ANY EXISTING UTILITIES CROSSING THE STORM DRAIN SHALL BE SUPPORTED PER STD NO. 2-D173 AS DIRECTED BY THE CITY ENGINEER
 - RCP SHALL BE MANUFACTURED AND INSPECTED IN ACCORDANCE WITH SECTION 207-2.7.2.8 AND 2.9 OF THE STANDARD SPECIFICATIONS
 - THE CONTRACTOR SHALL FURNISH A LETTER OF CERTIFICATION FROM THE PIPE MANUFACTURER AS TO TEST RESULTS OF THE PIPE INSTALLED
 - ALL PIPE LENGTHS SHOWN ARE HORIZONTAL PROJECTIONS, UNLESS NOTED OTHERWISE
 - THE ENGINEER, J.P. KAPP AND ASSOC., INC. HAS INVESTIGATED ALL AVAILABLE RECORDS OF THE CITY AND OF OTHER PUBLIC UTILITIES INVOLVED, AND ALL KNOWN SUBSTRUCTURES ARE SHOWN HEREON. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE ALL SUBSTRUCTURES, WHETHER SHOWN HEREON OR NOT, AND TO PROTECT THEM FROM DAMAGE. THE CONTRACTOR SHALL BEAR THE TOTAL EXPENSE OF REPAIR OR REPLACEMENT OF ANY SAID SUBSTRUCTURES DAMAGED BY HIS OPERATIONS IN CONNECTION WITH THE PROSECUTION OF SAID WORK
 - ELEVATIONS ARE IN FEET ABOVE USG AND GS MEAN SEA LEVEL DATUM OF 1929
 - THIS STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTENANCE UNTIL THE STREETS HAVE BEEN PAVED, MANHOLES BROUGHT UP TO GRADE, AND THE SYSTEM CLEANED TO THE SATISFACTION OF THE CITY ENGINEER
 - THE CONTRACTOR'S ATTENTION IS DIRECTED TO SECTION 7-10 4.1 OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION RE: SAFETY ORDERS
 - THE CONTRACTOR SHALL CONFORM TO THE "MINIMUM PUBLIC SAFETY REQUIREMENTS" AS SHOWN ON LOS ANGELES COUNTY ENGINEER STANDARD #2
 - ALL CONCRETE SHALL BE 3000 POUNDS PER SQUARE INCH PORTLAND CEMENT CONCRETE, UNLESS OTHERWISE SPECIFIED
 - FINISH ALL EXPOSED EDGES WITH 3/4 INCH CHAMFERS
 - REINFORCEMENT SHALL BE DEFORMED BARS OF INTERMEDIATE GRADE STEEL IN ACCORDANCE WITH ASTM A-615
 - ROCK FOR GROUTED RIPRAP SHALL BE GOOD QUALITY BROKEN CONCRETE AND/OR RIVER RUN ROCK. THE SMALLEST DIMENSION SHALL EXCEED 3 INCHES AND THE LARGEST DIMENSION SHALL NOT EXCEED 18 INCHES. THE LARGEST DIMENSION SHALL NOT EXCEED 4 TIMES THE SMALLEST DIMENSION.
 - THERE SHALL BE A GROUT BED OF AT LEAST 2 INCHES BENEATH THE FIRST LAYER OF ROCK. ALL THE VOIDS BETWEEN THE ROCKS SHALL BE FILLED WITH GROUT. MAXIMUM SPACING BETWEEN ROCKS SHALL BE 2 INCHES
 - SURFACE ROCKS SHALL BE EMBEDDED FROM 1/2 TO 2/3 THEIR MAXIMUM DIMENSIONS

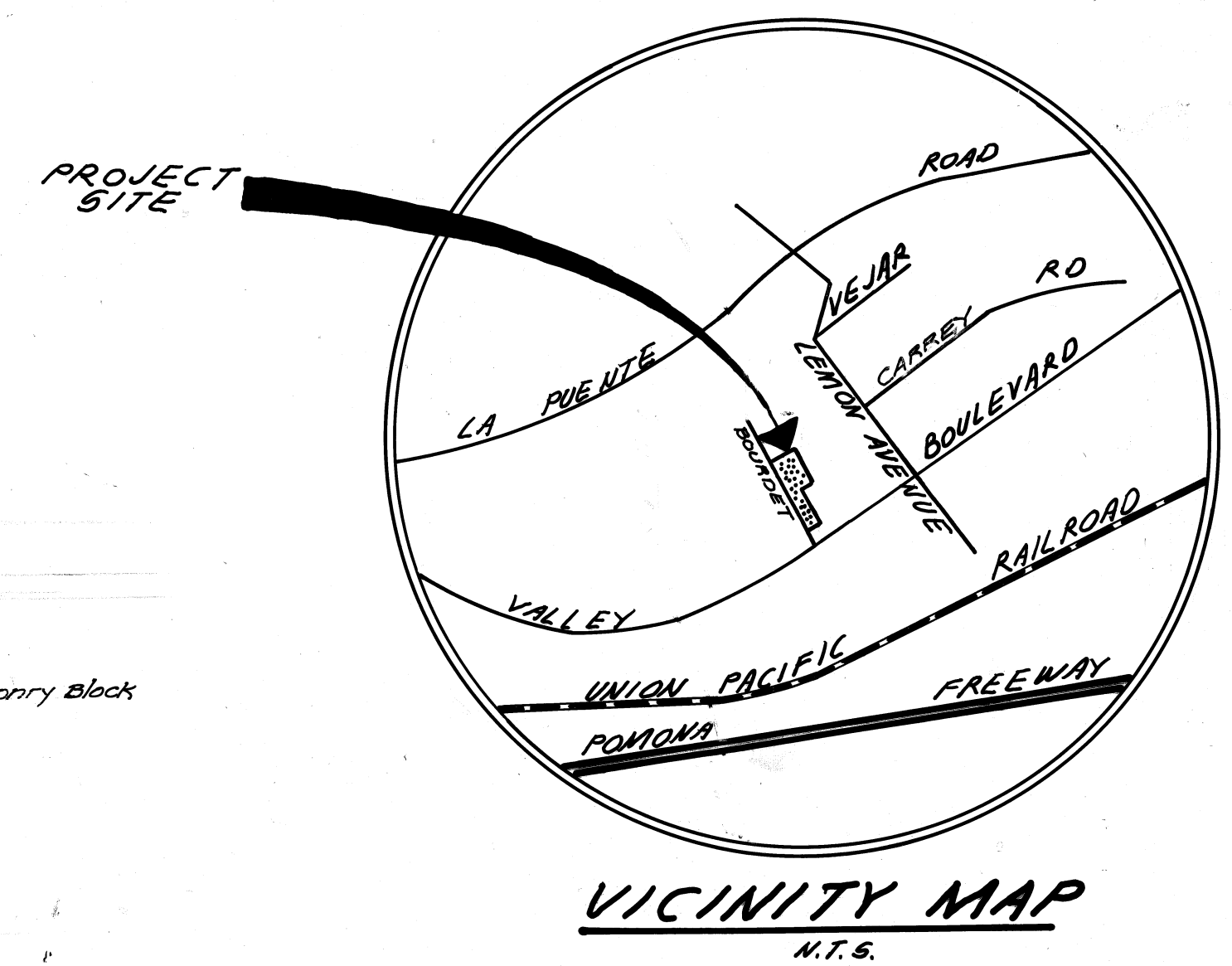
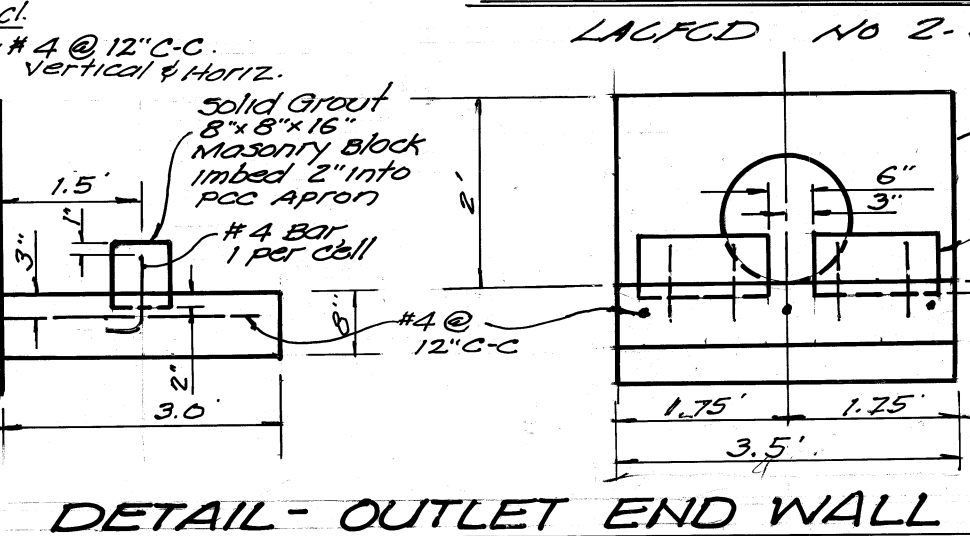
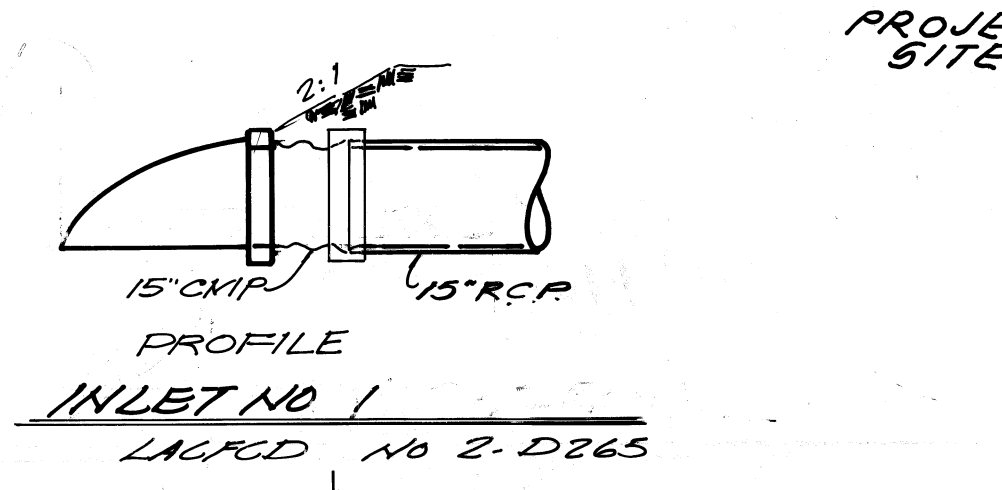
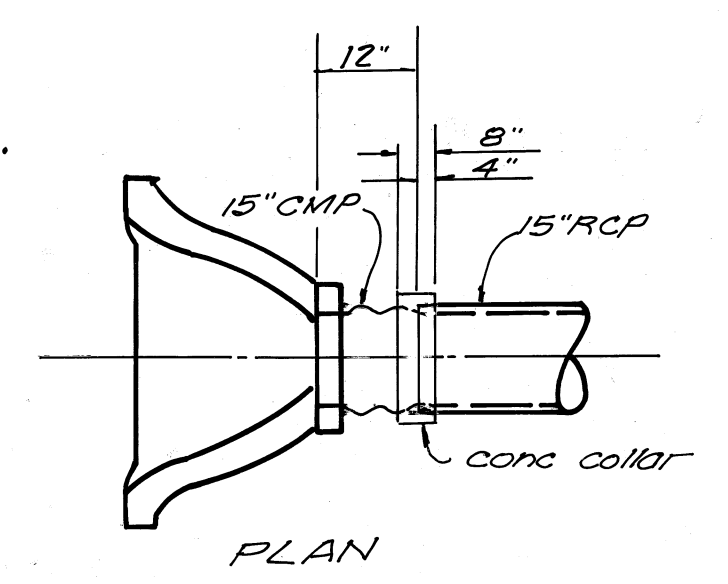
ESTIMATE OF QUANTITY		
ITEM	QUANT.	UNIT
15" RCP 3360 D	272	L.F.
18" RCP 1250 D	164	L.F.
24" RCP 1250 D	482	L.F.
33" RCP 1100 D	169	L.F.
27" RCP 1750 D	243	L.F.
48" RCP 1000 D	2.81	L.F.
End Wall Struct	1	EA.
M.H. # 1	5	EA.
M.H. # 2	1	EA.
Junct Struct. # 2	4	EA.
Trans. Struct. # 3	1	EA.
C.B. # 2, W=7'	2	EA.
C.B. # 3, W=14'	3	EA.
C.B. # 3, W=21'	2	EA.
Local Depression	805	Sq Ft
Conc Backfill	50	L.F.
Inlet No. 1	1	EA.



PROFILE SCALE
 HORIZ: 1"=40'
 VERT: 1"=4'

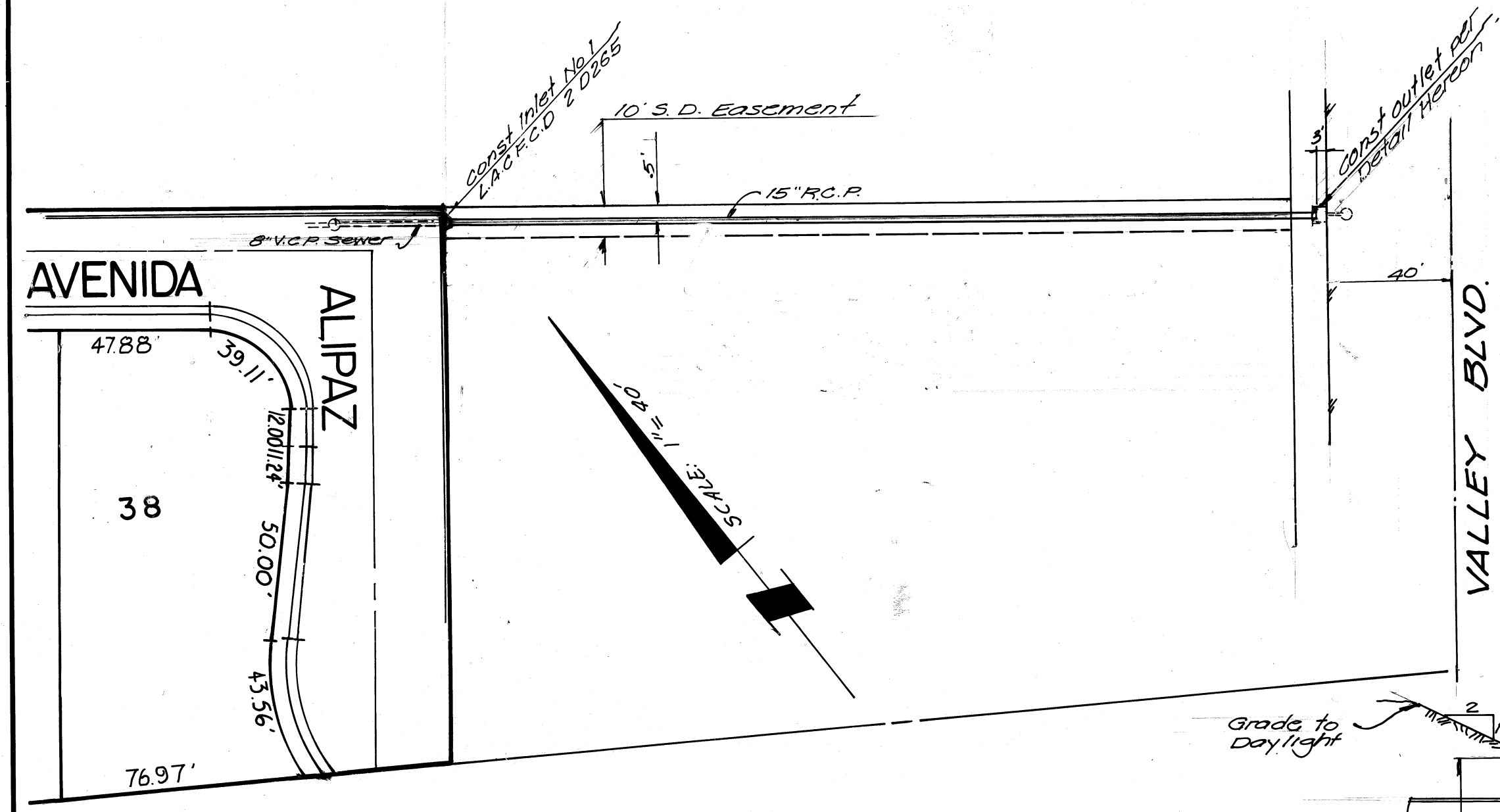


ITEM	QUANT.	UNIT
Outlet Structure	1	EA.
C.B. # 1, W=3.5'	1	EA.
RIP RAP	59	SQ. FT.



LIST OF STANDARD DRAWINGS (L.A.C.F.C.D.)

M.H. # 1	2 D 102
M.H. # 2	2 D 184
JUNC. STRUCTURE NO. 2	2 D 112
TRANSITION STRUCTURE NO. 3	2 D 188
CATCH BASIN NO. 3	2 D 163
CATCH BASIN NO. 2	2 D 162
LOCAL DEPRESSION NO. 2	2 D-8 PIPE BEDDING D54
CATCH BASIN OPENING	2 D 232
CB REINFORCEMENT	2 D 172
CB REINF. (FOR ROUND MH)	2 D 157
STD DROP STEP	2 D 96
MH FRAME AND COVER (FOR CB)	2 D 156
PROTECTION BAR	2 D 175
PROTECTION BAR STIRRUP	2 D 264
SEWER PROTECTION	2 D 251
PROTECTION BARRIER	2 D 261.1 TO .3
CB CONNECTION	2 D 224
CATCH BASIN NO. 1	2 D 160
INLET NO. 1	2-D265
CONC. REINF. STEEL	2 D 171

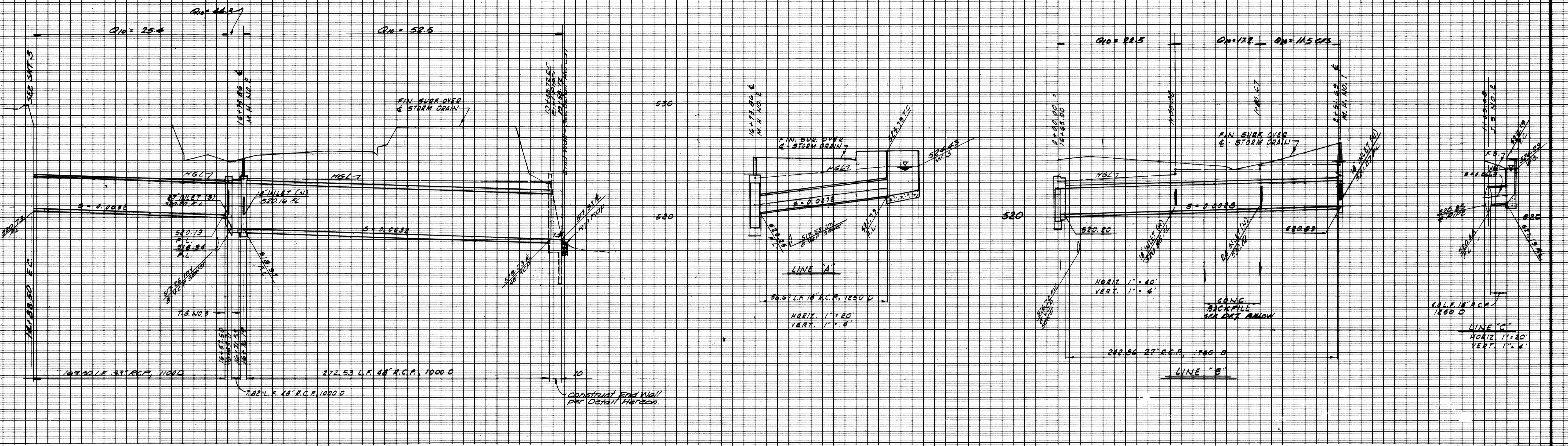


NOTE TO CONTRACTOR
 ENGINEER HAS ATTEMPTED TO SHOW ALL PERTINENT UNDERGROUND UTILITIES OR SUBSTRUCTURES. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO LOCATE AND PROTECT ALL UTILITIES OR SUBSTRUCTURES WHETHER SHOWN OR NOT. THE CONTRACTOR SHALL NOTIFY ALL UTILITY COMPANIES PRIOR TO EXCAVATION OR CONSTRUCTION, TO DETERMINE EXACT LOCATIONS.

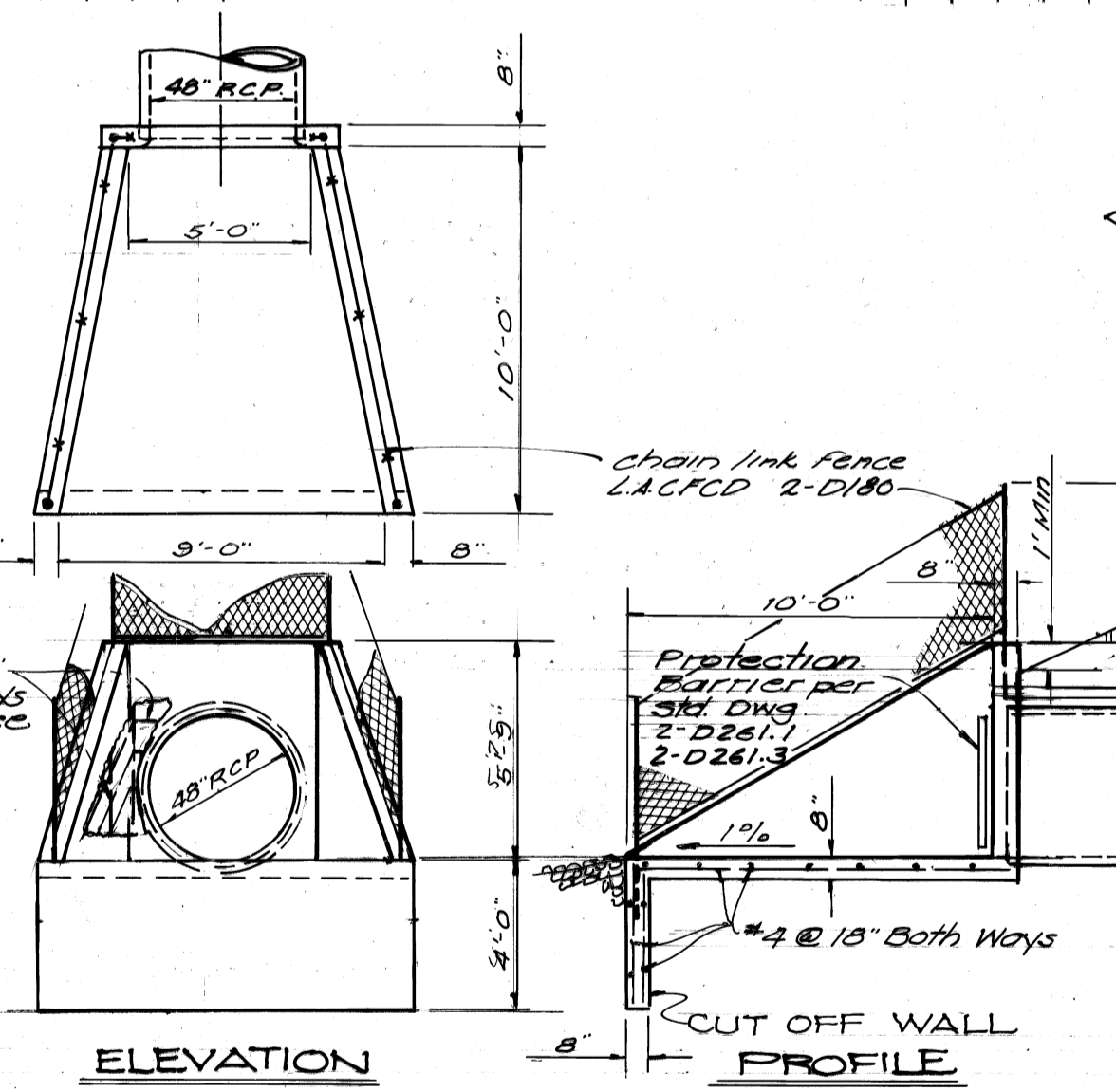
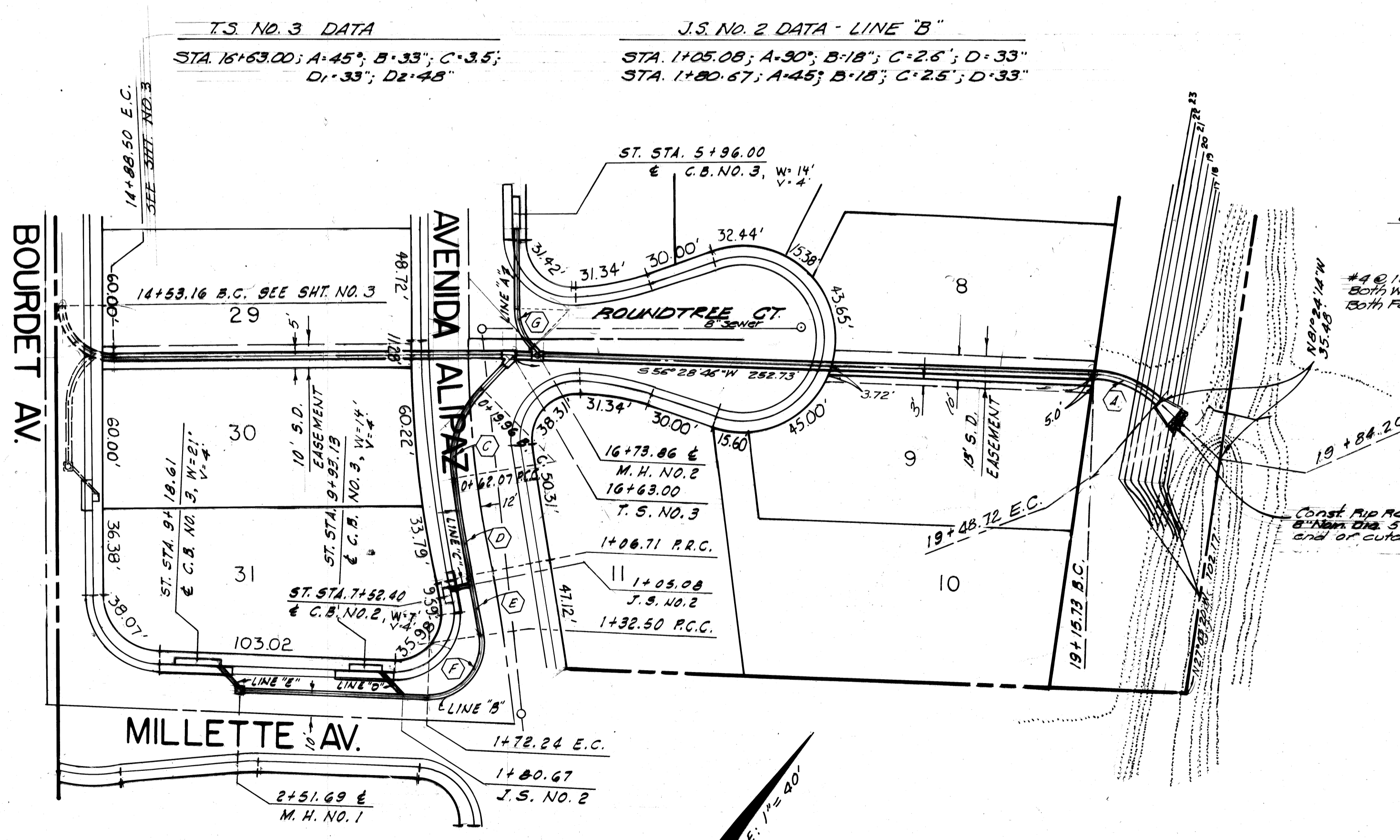
Contractor agrees that he shall assume sole and complete responsibility for job site conditions during the course of construction of this Project, including safety of all persons and property; that this requirement shall apply continuously and not be limited to normal working hours; and that the Contractor shall defend, indemnify and hold the Owner and the Engineer harmless from any and all liability, real or alleged, in connection with the performance of work on this Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

CITY OF WALNUT APPROVED <i>[Signature]</i> 4/16/81	PLANS PREPARED BY: J.P. KAPP & ASSOCIATES, INC. CONSULTING CIVIL ENGINEERS 15892 PASADENA AVE. TUSTIN, CALIFORNIA 92680 PHONE (714) 730 5757	REVISIONS	
		23 FEB 81 DATE	6/24/82 RE NO. 22015 DATE 7/12/82

CITY OF WALNUT	
STORM DRAIN	
TR. 39017	WPC 166
SHT. 1	OF 3

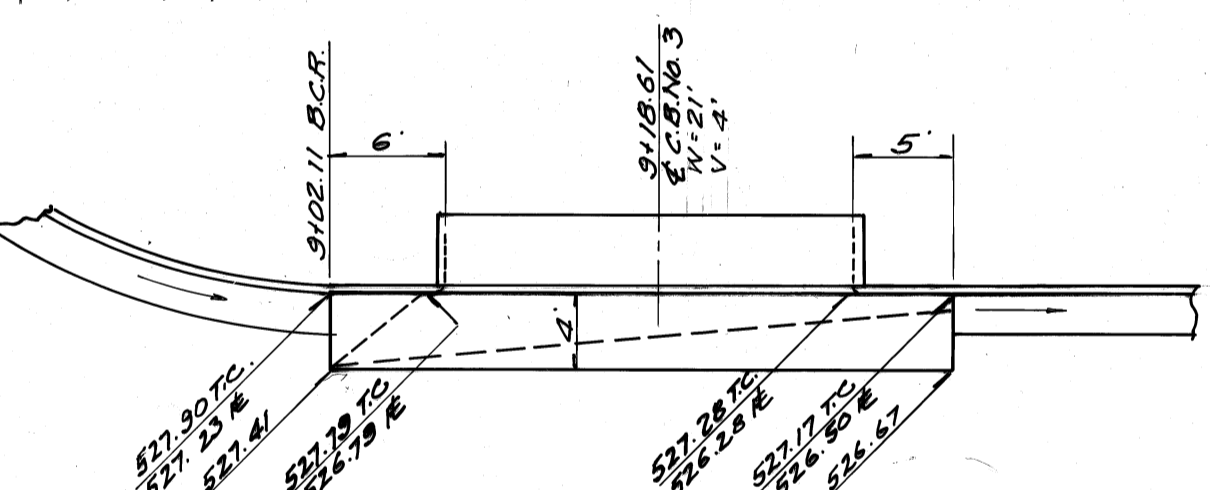


15+00 16+00 17+00 18+00 19+00 20+00

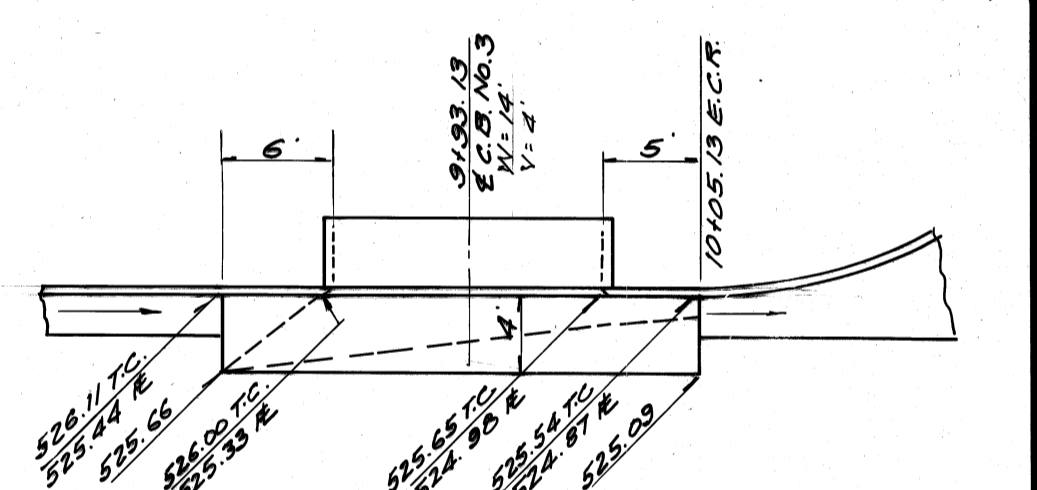


END WALL DETAIL
NO SCALE
& STORM DRAIN CURVE DATA

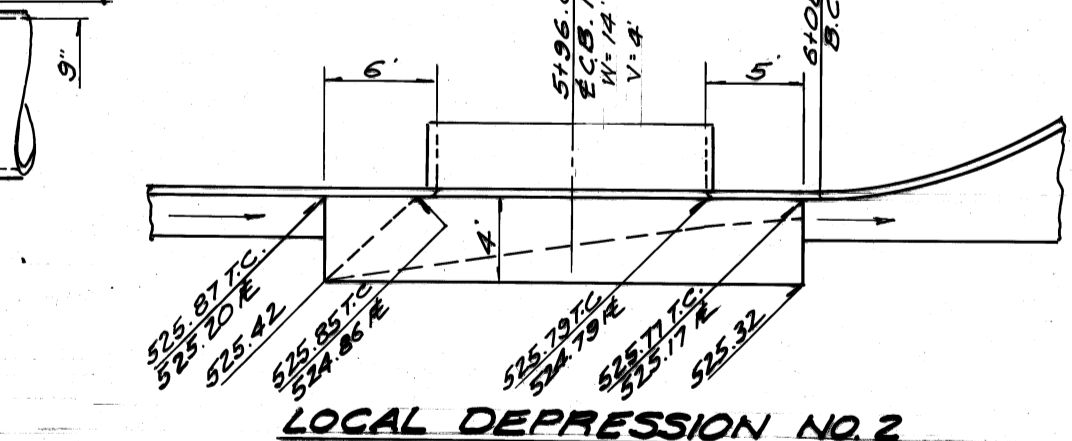
LETTER	R	d	T	L
A	45.00'	42°00'00"	17.27'	32.99'
B	45.00'	53°36'52"	22.74'	42.11'
C	512.00'	04°59'43"	22.33'	44.64'
D	488.00'	03°01'42"	12.90'	25.79'
E	22.50'	101°12'27"	27.40'	39.74'
F	22.50'	45°00'00"	9.32'	17.67'



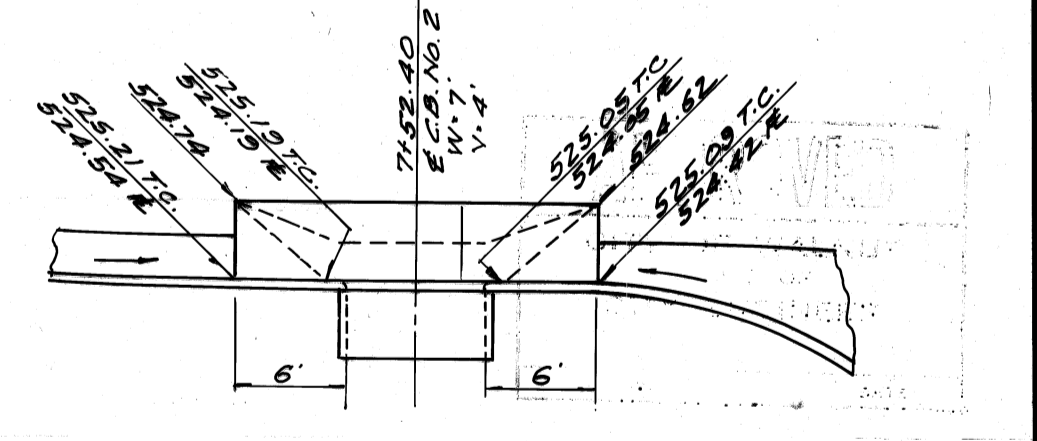
LOCAL DEPRESSION NO. 2
L.A.C.F.C.D. NO. 2-D88 CASE B
(MILLETTE AVE)



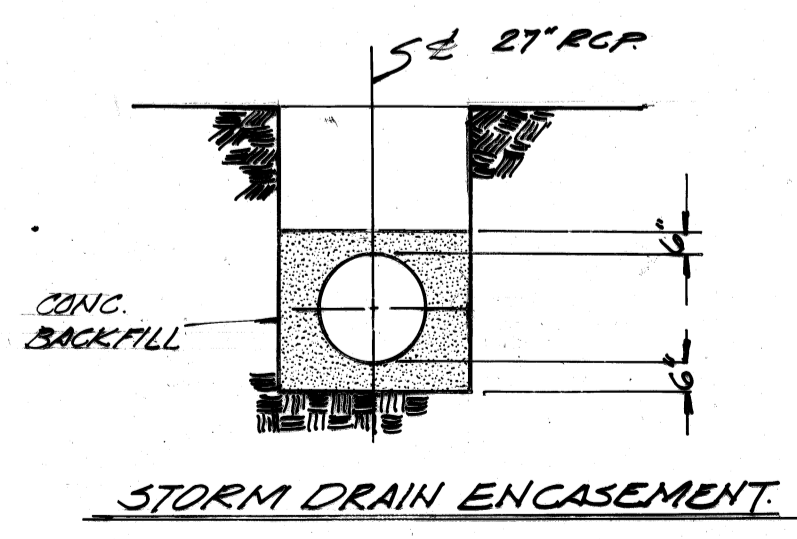
LOCAL DEPRESSION NO. 2
L.A.C.F.C.D. NO. 2-D88 CASE B
(MILLETTE AVE)



LOCAL DEPRESSION NO. 2
L.A.C.F.C.D. NO. 2-D88 CASE B
(AVENIDA ALIPAZ)



LOCAL DEPRESSION NO. 2
L.A.C.F.C.D. NO. 2-D88 CASE C
(AVENIDA ALIPAZ)



STORM DRAIN ENCASUREMENT

APPROVED
CITY OF WALNUT
OFFICE OF
CITY ENGINEER
By: [Signature] DATE: 11/14/18

TR.39017 SHT. 2 OF 3

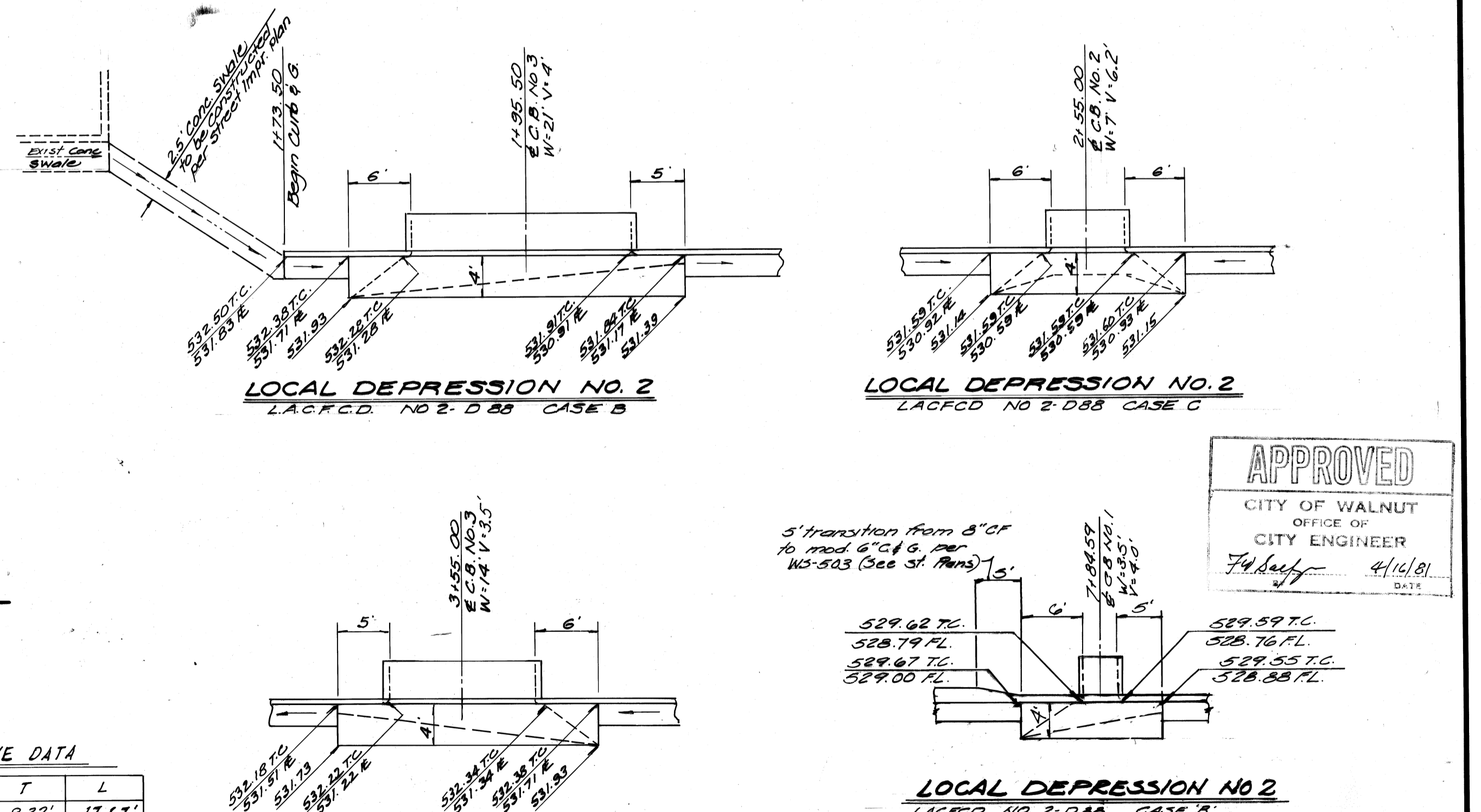
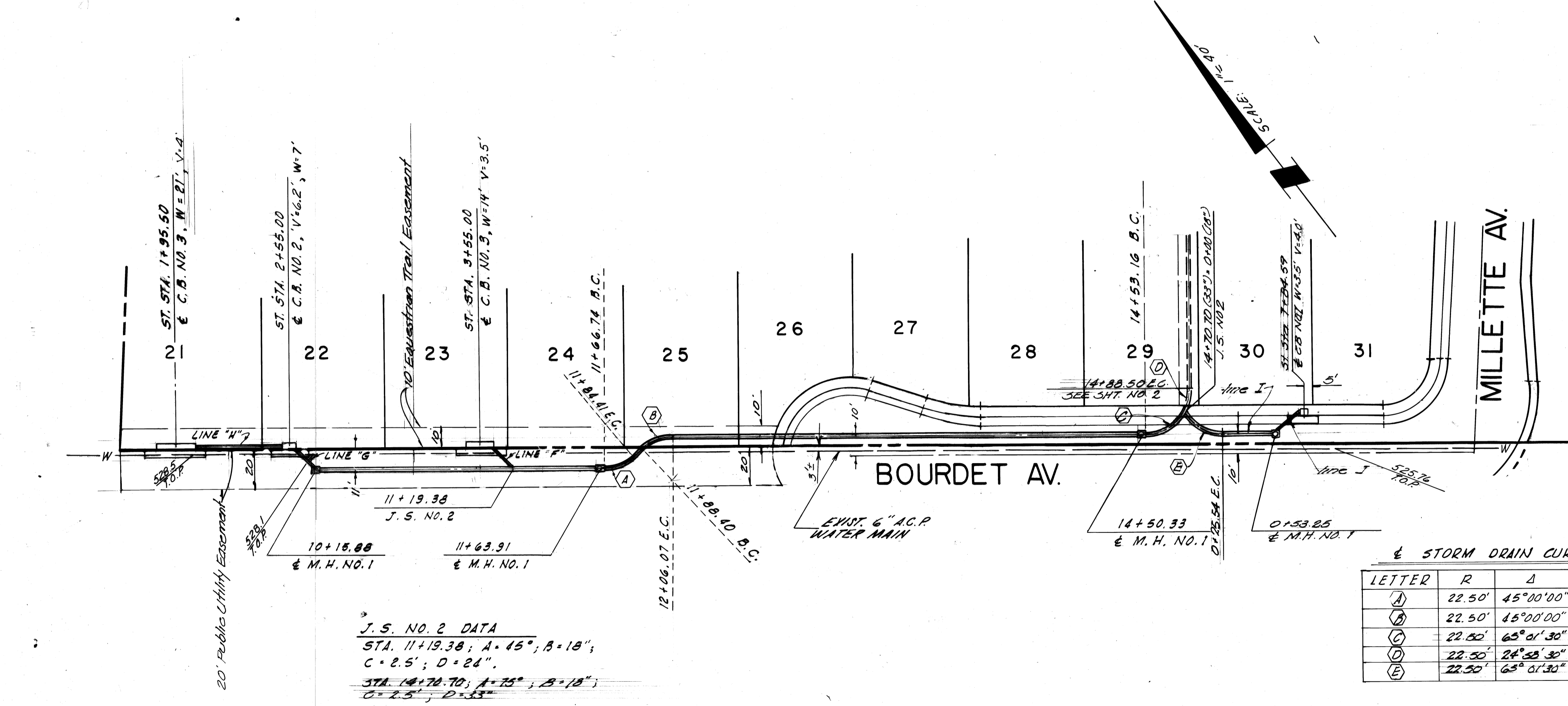
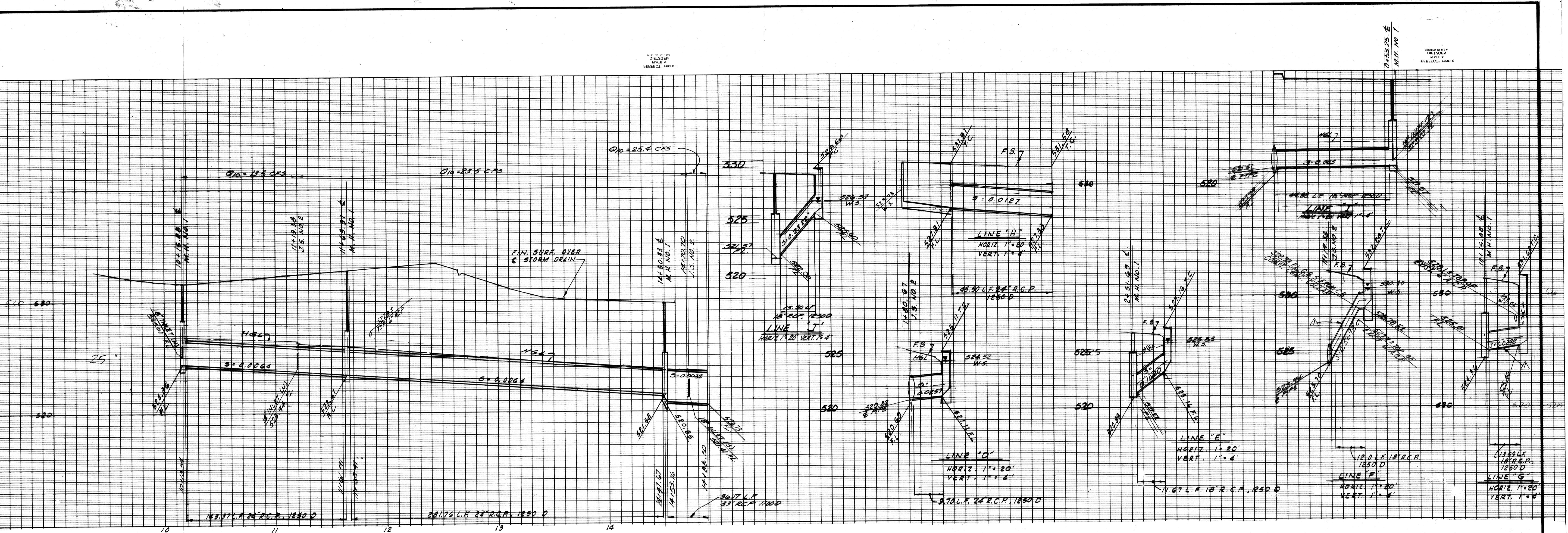
CITY OF WALNUT
STORM DRAIN

118B

PLANS PREPARED BY
J.P. KAPP & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS
15892 PASADENA AVE
TUSTIN, CALIFORNIA 92680
PHONE (714) 730-5757

REVISIONS

REVISOR: _____ R.E. NO. _____
APPROVED: _____ DATE _____



J.S. NO. 2 DATA
STA. 11+19.38; A=15°, B=18°;
C=2.5'; D=24'
STA. 14+78.70; A=75°, B=18°;
C=2.5'; D=53'

STORM DRAIN CURVE DATA

LETTER	R	Δ	T	L
A	22.50'	45°00'00"	9.32'	17.67'
B	22.50'	45°00'00"	9.32'	17.67'
C	22.50'	65°01'30"	14.54'	25.54'
D	22.50'	24°28'30"	4.98'	9.50'
E	22.50'	65°01'30"	14.54'	25.54'

APPROVED
CITY OF WALNUT
OFFICE OF
CITY ENGINEER
4/16/81

PLANS PREPARED BY
J.P. KAPP & ASSOCIATES, INC.
CONSULTING CIVIL ENGINEERS
15992 PASADENA AVE.
TUSTIN, CALIFORNIA 92680
PHONE (714) 750-5757

REVISIONS
LINES F & G C.B. VALUES ADJUSTED TO
ACCOMMODATE EXIST. WATER MAIN 6/29/82
REVISED BY J.P. KAPP R.E. NO. 22015
APPROVED DATE 7/12/82

REVISIONS
REVISED BY _____ R.E. NO. _____
APPROVED DATE _____

TR. 39017 SHT. 3 OF 3 SHT. 3
CITY OF WALNUT
STORM DRAIN
118C
WPC 166