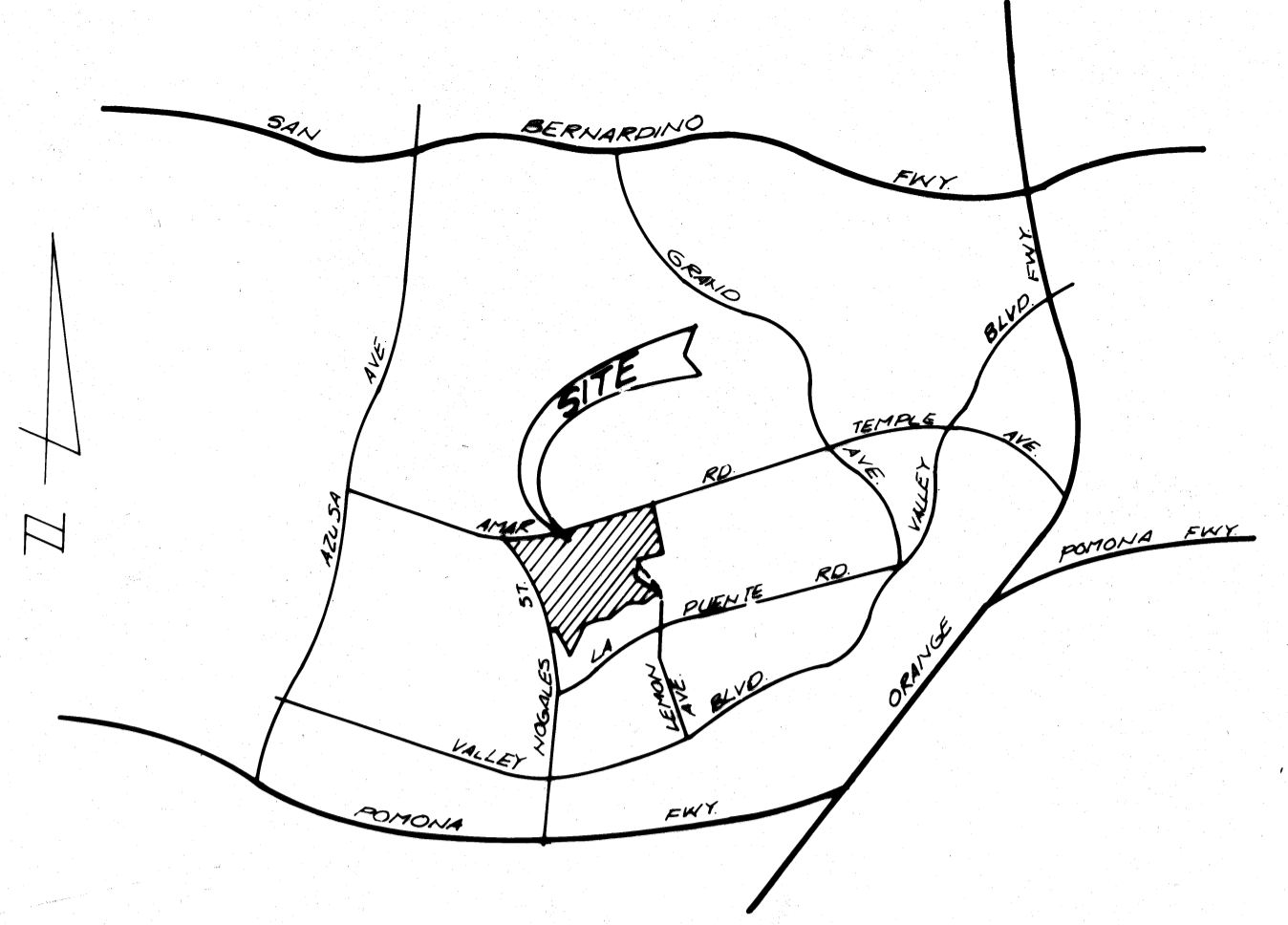


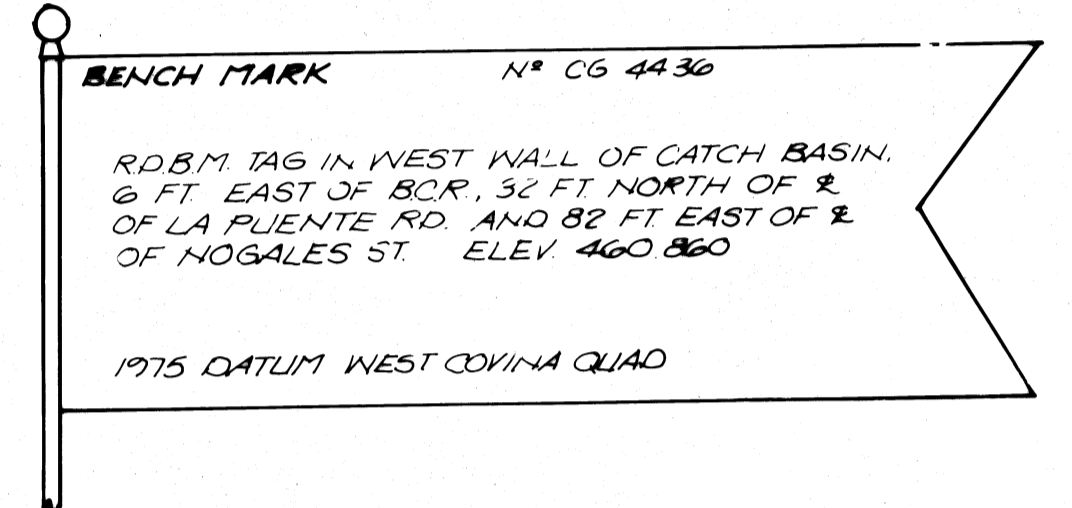
- GENERAL NOTES FOR STORM DRAIN CONSTRUCTION
- ALL PIPE LAID IN OPEN TRENCH SHALL BE BEDDED IN ACCORDANCE WITH LOS ANGELES COUNTY ENGINEER CASE AND BEDDING PER STANDARD NO. D-54
 - 24 HOURS PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL NOTIFY THE WALNUT CITY ENGINEER AT (714) 595-2279.
 - ALL WORK SHALL CONFORM TO THE REQUIREMENTS OF THE STANDARD SPECIFICATIONS FOR PUBLIC WORKS CONSTRUCTION (1979 EDITION) AND TO THE SATISFACTION OF THE CITY ENGINEER.
 - BEFORE WORK COMMENCES, THE CONTRACTOR MUST OBTAIN A PERMIT FROM THE CITY ENGINEER TO EXCAVATE WITHIN CITY STREETS. THE PERMIT WILL BE ISSUED WITHOUT FEE.
 - 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 THE PROPER POSITION UPON COMPLETION OF CONSTRUCTION.
 - EXISTING UTILITIES CROSSING STORM DRAIN SHALL BE SUPPORTED PER L.A.C.F.C.D. STD. 2-D 173.1-3, AS DIRECTED BY THE CITY ENGINEER.
 - THE CONTRACTOR SHALL FURNISH A LETTER OF CERTIFICATION FROM THE PIPE MANUFACTURER AS TO TEST RESULTS OF THE PIPE INSTALLED.
 - R.C.P. SHALL BE MANUFACTURED AND INSPECTED IN ACCORDANCE WITH SECTION 207-2.7, 2.8 AND 2.9 OF STANDARD SPECIFICATIONS.
 - ALL PIPE LENGTHS SHOWN ARE HORIZONTAL PROJECTIONS, UNLESS OTHERWISE NOTED.
 - THIS STORM DRAIN WILL NOT BE ACCEPTED FOR MAINTENANCE UNTILL 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 IN REGARD TO SAFETY ORDERS.
 - THE CONTRACTOR SHALL CONFORM TO THE "MINIMUM PUBLIC SAFETY REQUIREMENTS" AS SHOWN ON LOS ANGELES COUNTY ENGINEER STANDARD S-2.
 - ALL CONCRETE SHALL BE 3,000 POUNDS PER SQUARE INCH PORTLAND CEMENT CONCRETE, UNLESS OTHERWISE SHOWN.
 - REINFORCEMENT SHALL BE REFORMED BARS OF INTERMEDIATE GRADE STEEL AS PER ASTM A-615, GRADE 60.
 - THE INSPECTOR MAY HAVE THE OPTION TO REQUIRE CONCRETE BACKFILL DURING CONSTRUCTION WHEN THE PIPE HAS LESS THAN ONE FOOT OF COVER AND IS SUBJECT TO HEAVY EQUIPMENT TRAFFIC. THE CONCRETE BACKFILL SHALL CONSIST OF 1:3:5 MIX CONCRETE, POURED FROM WALL TO WALL OF TRENCH AND FROM BOTTOM OF TRENCH TO A MINIMUM DEPTH OF 4 INCHES OVER TOP OF PIPE.
 - ALL PIPE SHALL BE PLACED IN A TRENCH IN NATURAL GROUND AND/OR COMPACTED FILL. THE GROUND LEVEL BEFORE THE TRENCHING SHALL BE AT LEAST 3 FEET ABOVE TOP OF PIPE ELEVATION, OR AT FINISH SURFACE ELEVATION, WHICHEVER IS LESS. ALL BACKFILL IN EASEMENTS SHALL BE COMPACTED TO THE DENSITY REQUIRED BY THE GRADING PLAN.
 - ELEVATIONS ARE IN FEET ABOVE USC AND G.S. MEAN SEA LEVEL DATUM OF 1929.
 - GALVANIZE ALL METAL PARTS AFTER FABRICATION.

INDEX TO STANDARD DRAWINGS

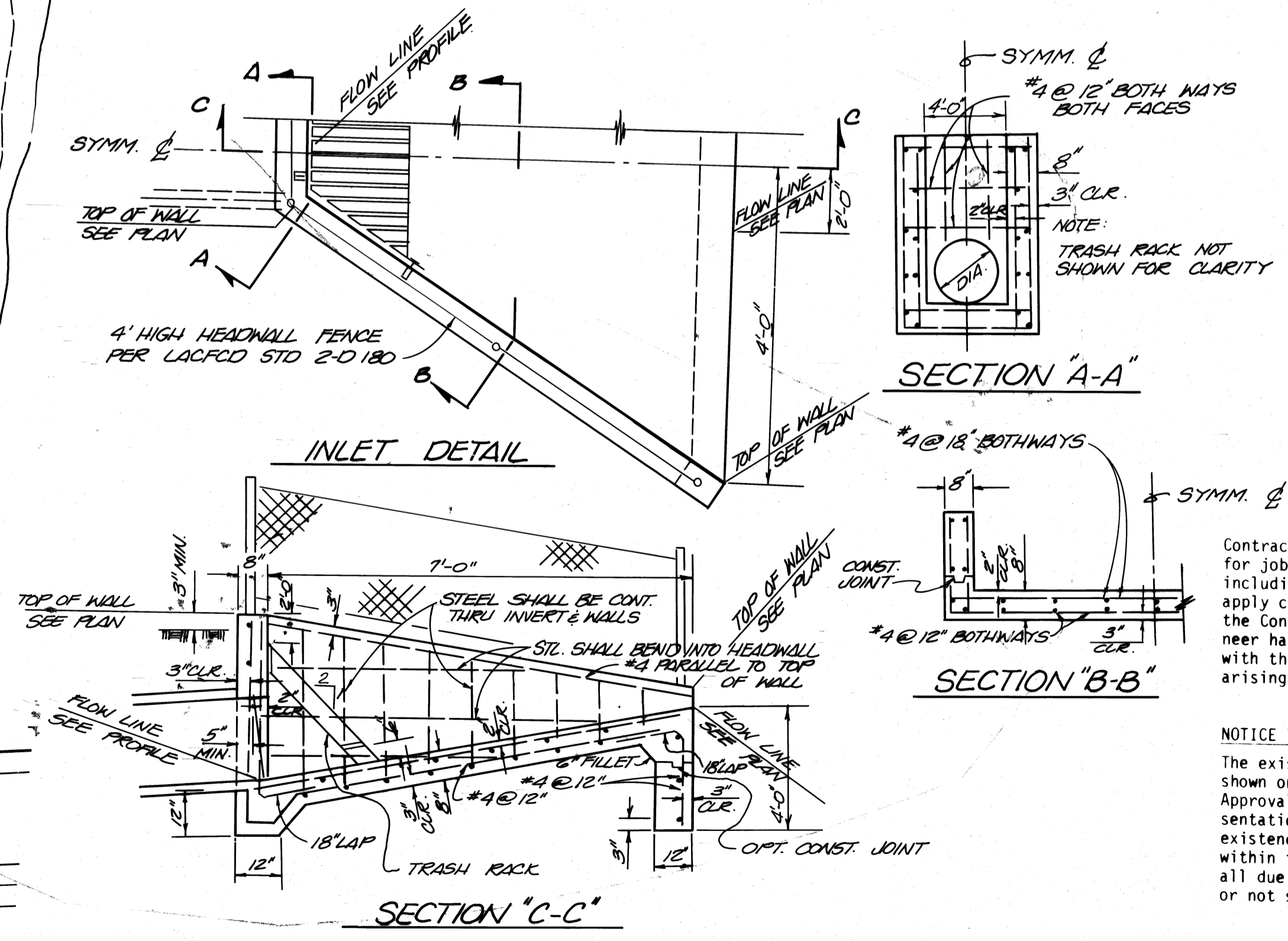
2-D 88	LOCAL DEPRESSION NO. 2
2-D 96	STANDARD DROP STEP
2-D 102	MANHOLE NO. 1
2-D 107	CONCRETE RINGS, REDUCER AND PIPE FOR MANHOLE SHAFT
2-D 112	JUNCTION STRUCTURE NO. 2
2-D 113	MANHOLE NO. 4
2-D 156	MANHOLE FRAME AND COVER FOR CATCH BASINS
2-D 157	CATCH BASIN REINFORCEMENT FOR ROUND MANHOLES.
2-D 160	CATCH BASIN NO. 1
2-D 162	CATCH BASIN NO. 2
2-D 163	CATCH BASIN NO. 3
2-D 172	CATCH BASIN REINFORCEMENT
2-D 173	PIPE SUPPORT ACROSS TRENCHES
2-D 175	REMOVABLE PROTECTION FOR CATCH BASINS
2-D 184	MANHOLE NO. 2
2-D 188	TRANSITION STRUCTURE NO. 3
2-D 190	PIPE CONNECTIONS TO EXISTING STORM DRAINS
2-D 193	JUNCTION STRUCTURE NO. 4
2-D 224	CONNECTION TO CATCH BASIN FOR PIPES 12 INCHES THRU 72 INCHES
2-D 232	DETAIL OF CATCH BASIN OPENING
2-D 264	ADJUSTABLE PROTECTION BAR STIRRUP
2-D 265	INLET NO. 1
2-D 393	CONCRETE COLLAR FOR PIPE 12 INCHES THROUGH 66 INCHES
2-D 472	STANDARD 24-INCH MANHOLE FRAME AND COVER



VICINITY MAP
NO SCALE



AREA SUBJECT TO FLOODING IF STORM DRAIN BECOMES PLUGGED



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 the Project, excepting for liability arising from the sole negligence of the Owner or the Engineer.

NOTICE TO CONTRACTOR
The existence and location of any underground utility pipe or structures shown on these Plans are obtained by a search of available records. Approval of this Plan by the City of Walnut does not constitute a representation as to the accuracy or completeness of the location or the existence or non-existence of any underground utility pipe or structure within the limits of this Project. The Contractor is required to take all due precautionary means to protect the utility lines not of record or not shown on this Plan.

QUANTITY ESTIMATE

ITEM	QUANTITY	UNIT
MANHOLE NO. 1	1	EA.
JUNCTION STRUCTURE NO. 2	2	EA.
MANHOLE NO. 4	1	EA.
CATCH BASIN NO. 1	2	EA.
CATCH BASIN NO. 2	1	EA.
MANHOLE NO. 2	2	EA.
JUNCTION STRUCTURE NO. 4	1	EA.
CONCRETE COLLAR	1	EA.
8\"/>		

NOTE:
QUANTITIES SHOWN ARE APPROXIMATE ONLY IT IS THE CONTRACTORS RESPONSIBILITY TO SUPPLY PIPE SIZE, LENGTH & D-LOADS SHOWN IN PLANS.

REVISIONS

REVISIONS	REVISIONS	REVISIONS
REVISOR	DATE	REVISION

CITY OF WALNUT APPROVED

PLANS PREPARED BY:
Hysaker Associates Inc.
714) 754 1011
3001 Red Hill, Building VI, Suite 212, Costa Mesa, CA 92626

1-19-81
FRANK S. HYSAKER RE 1225

CITY OF WALNUT

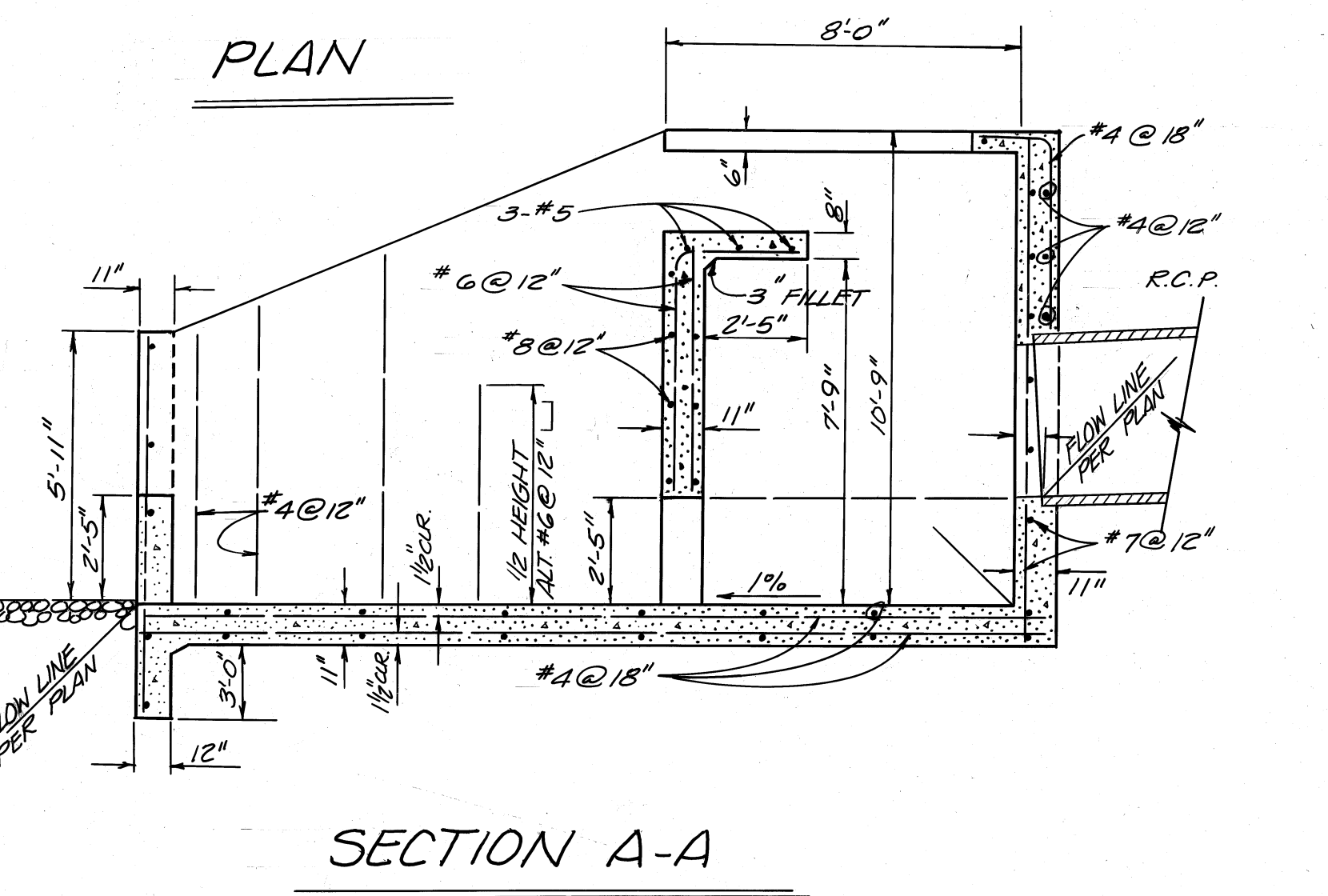
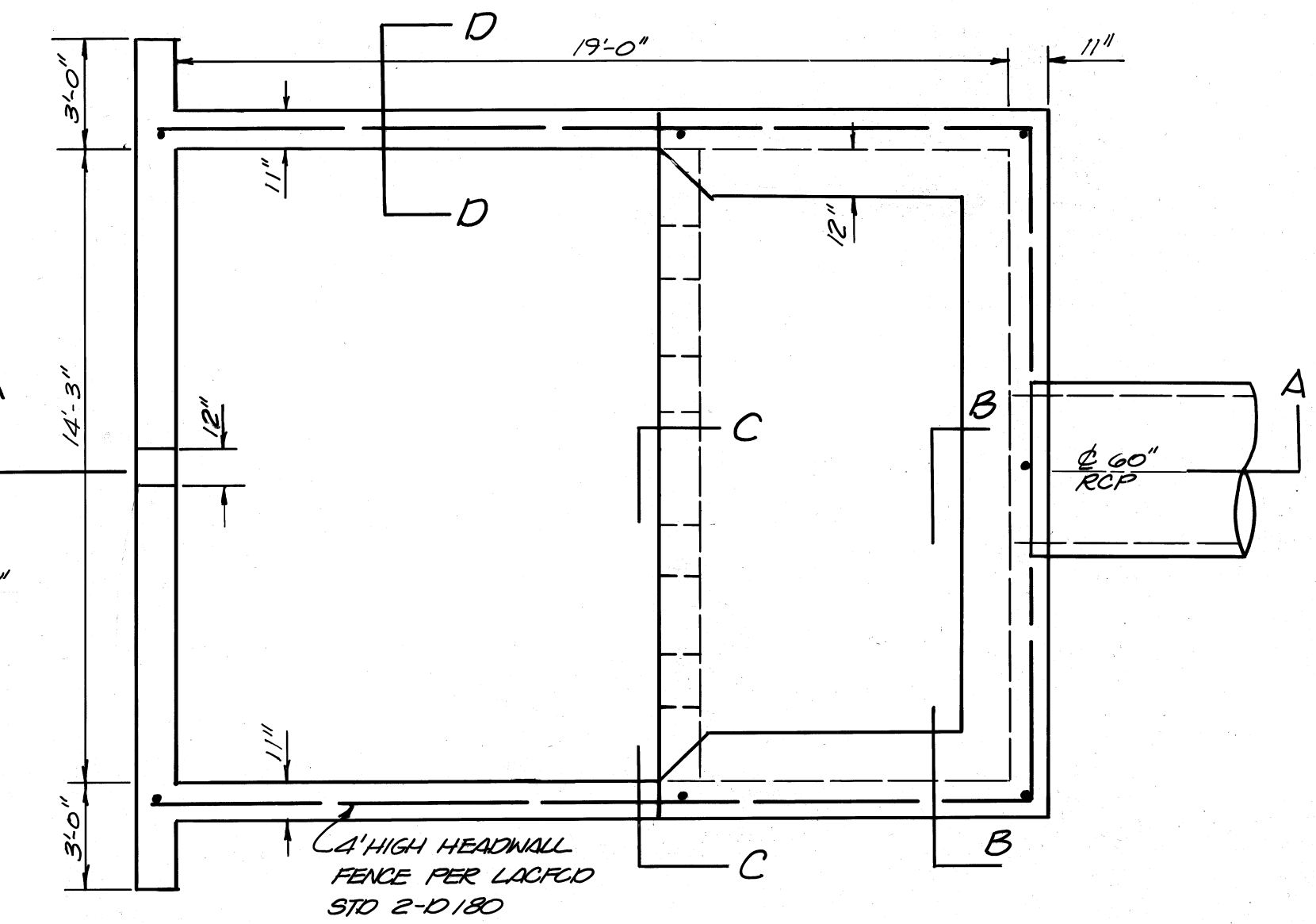
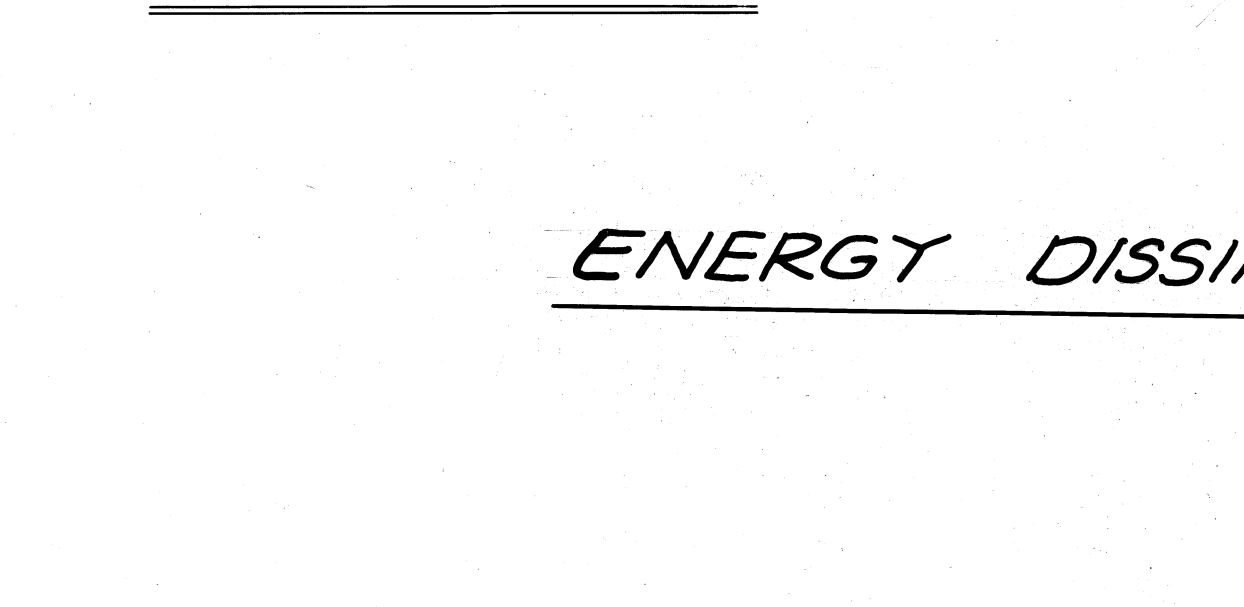
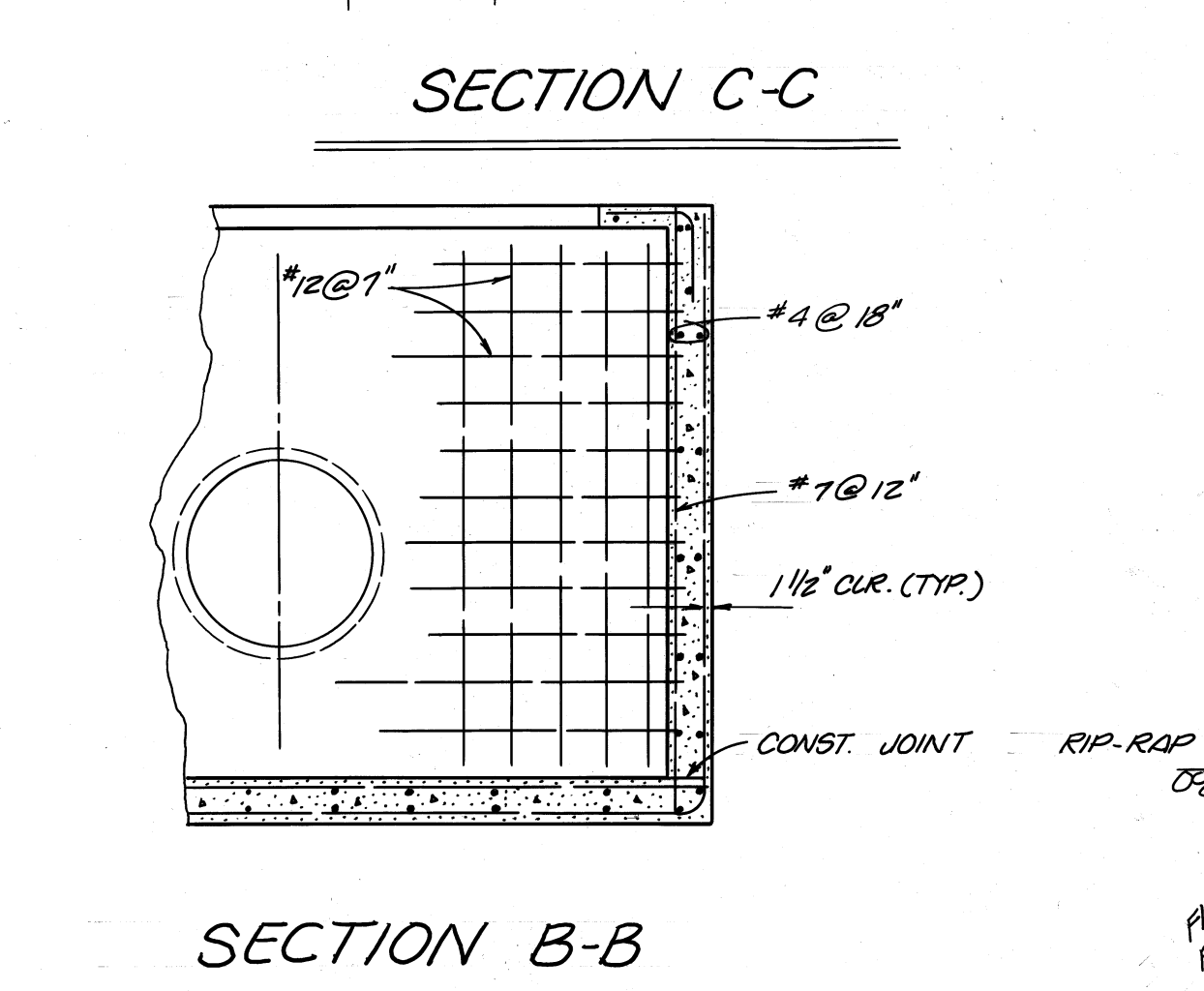
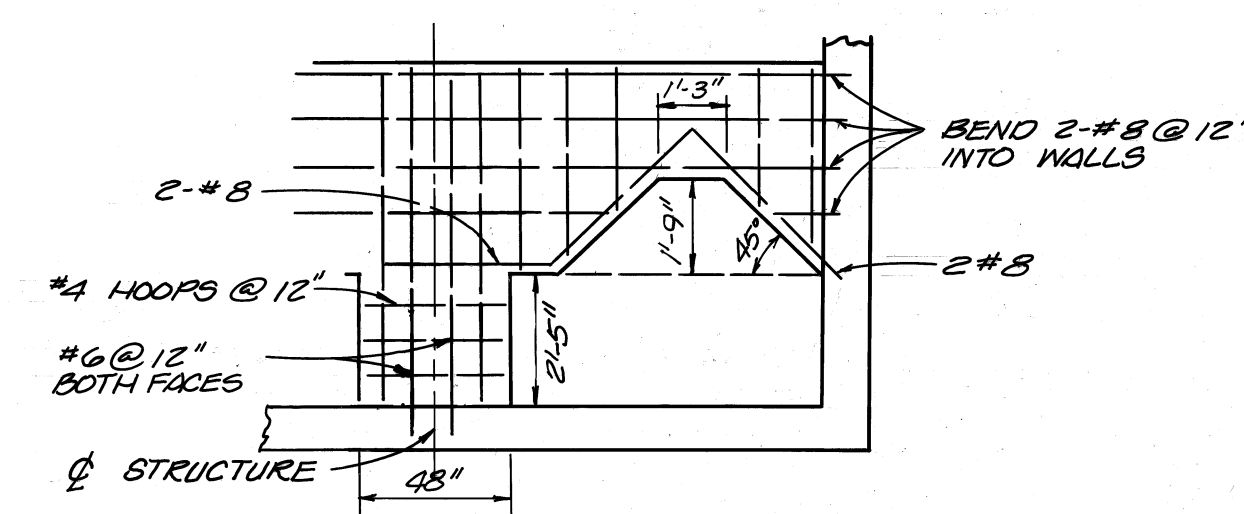
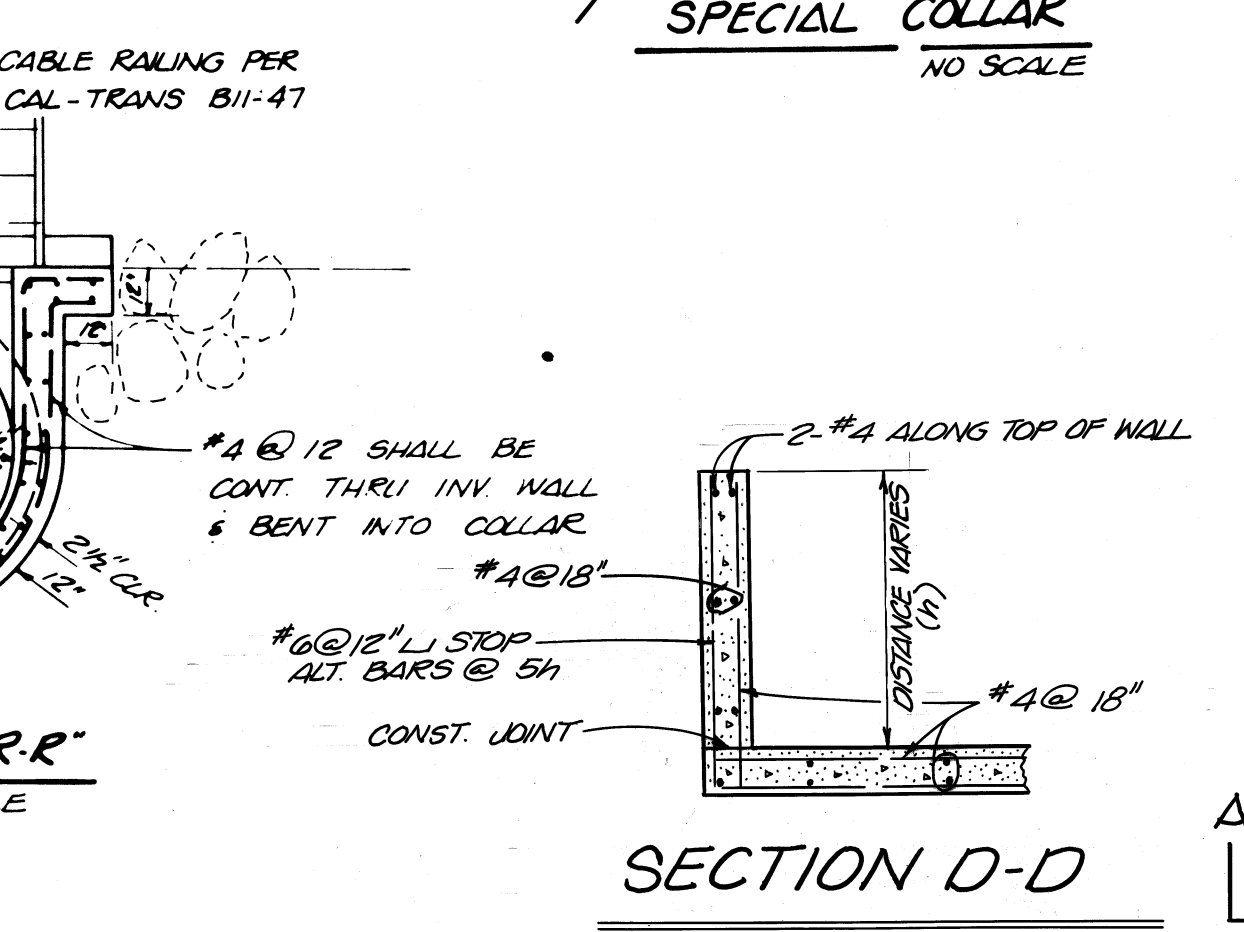
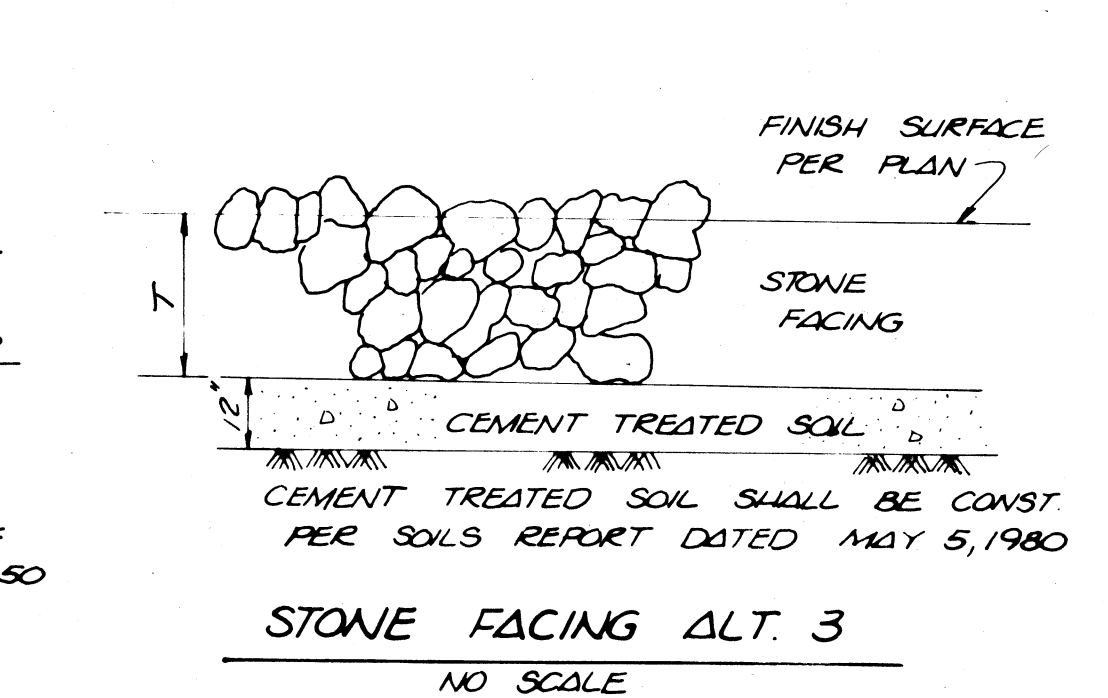
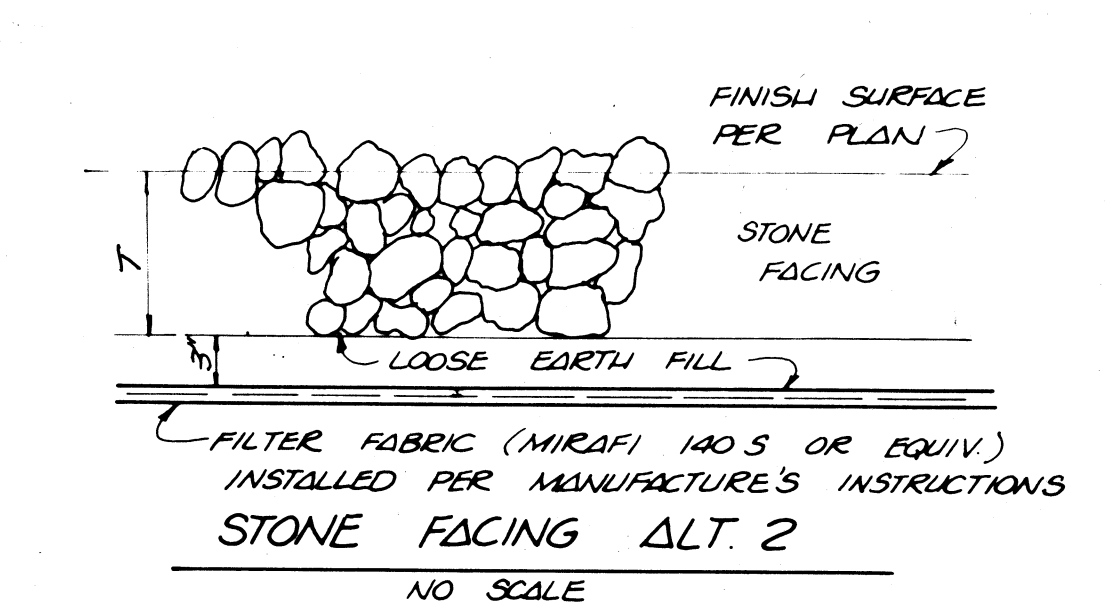
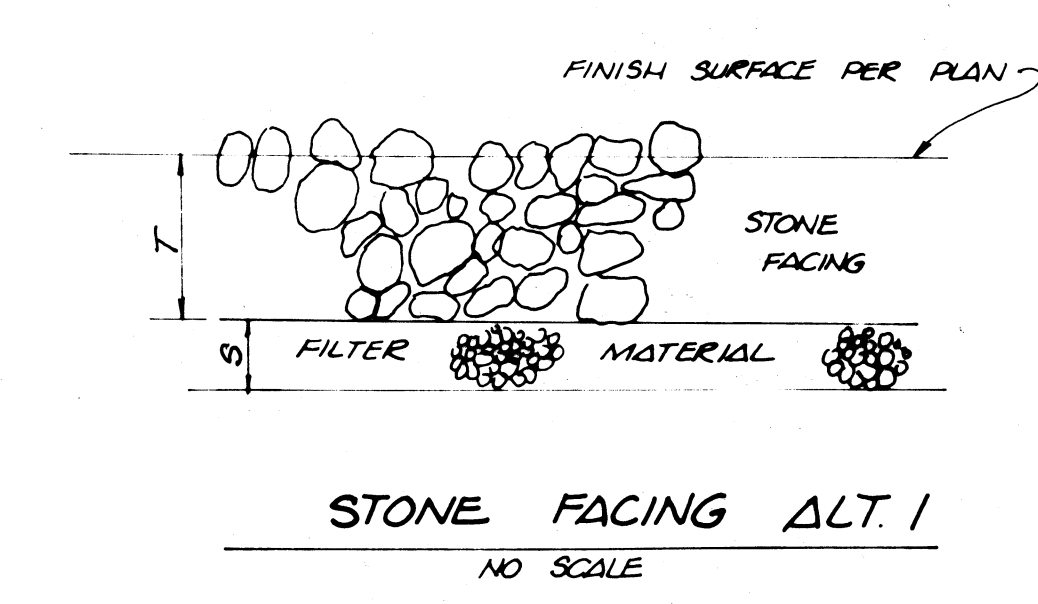
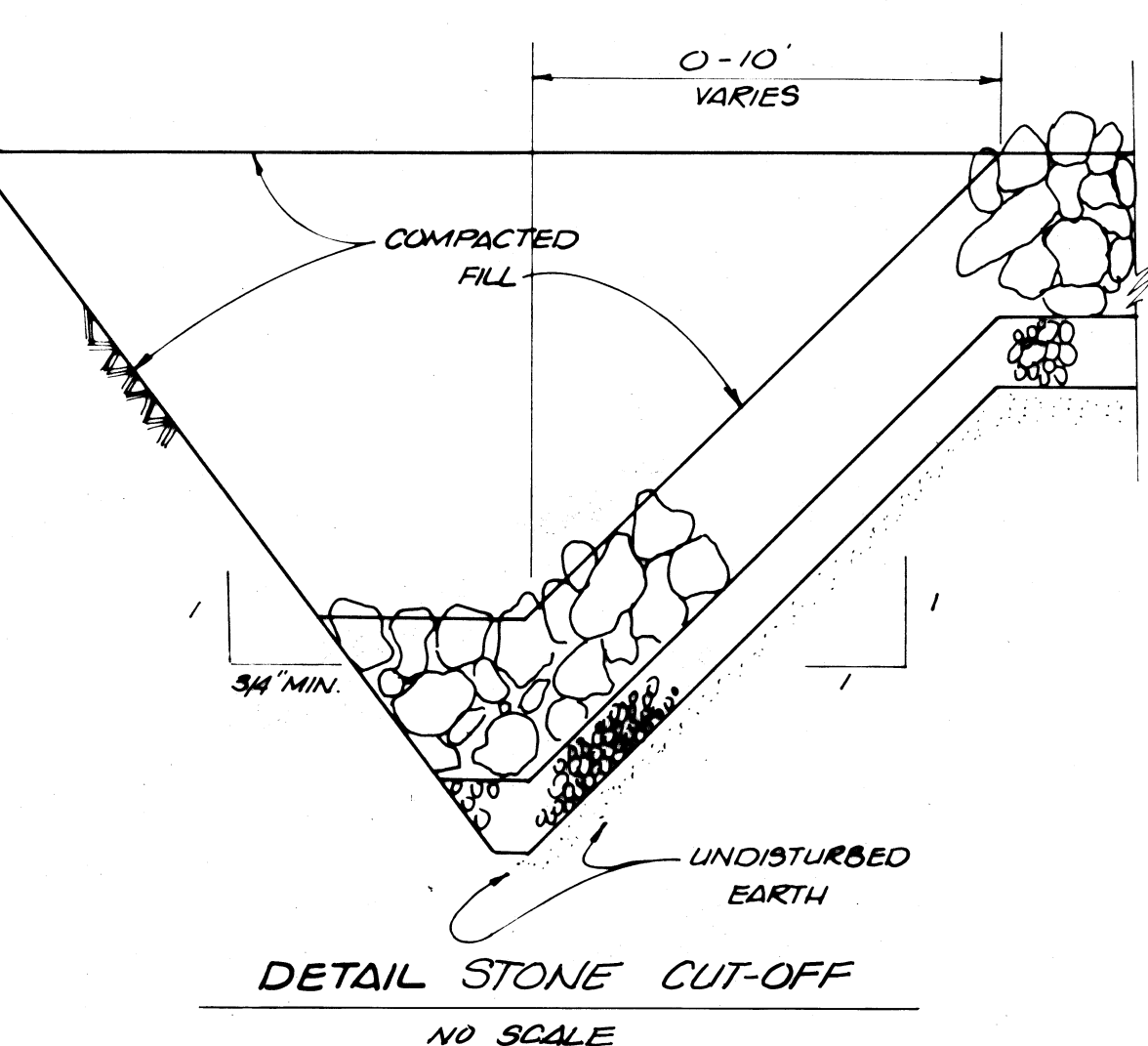
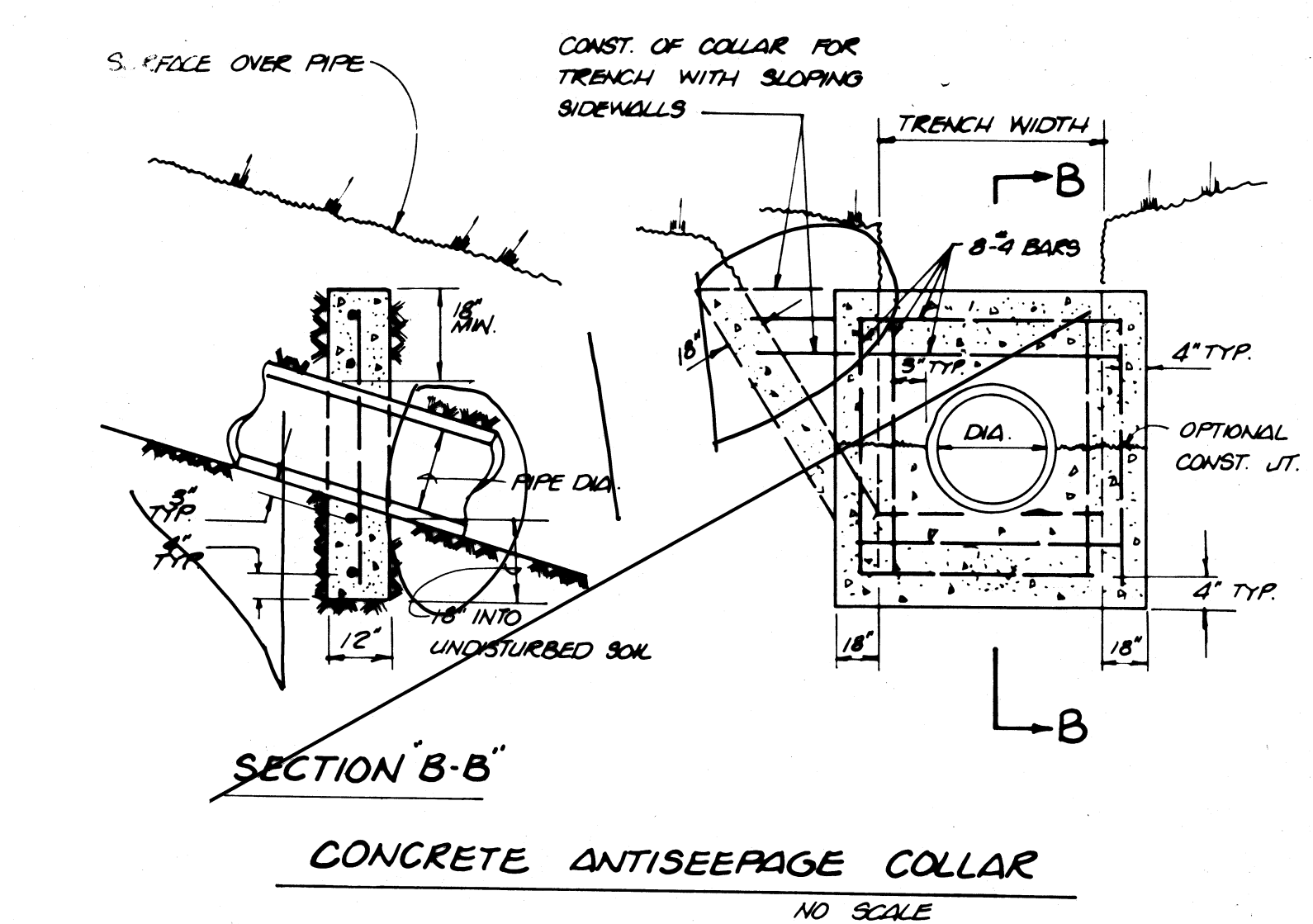
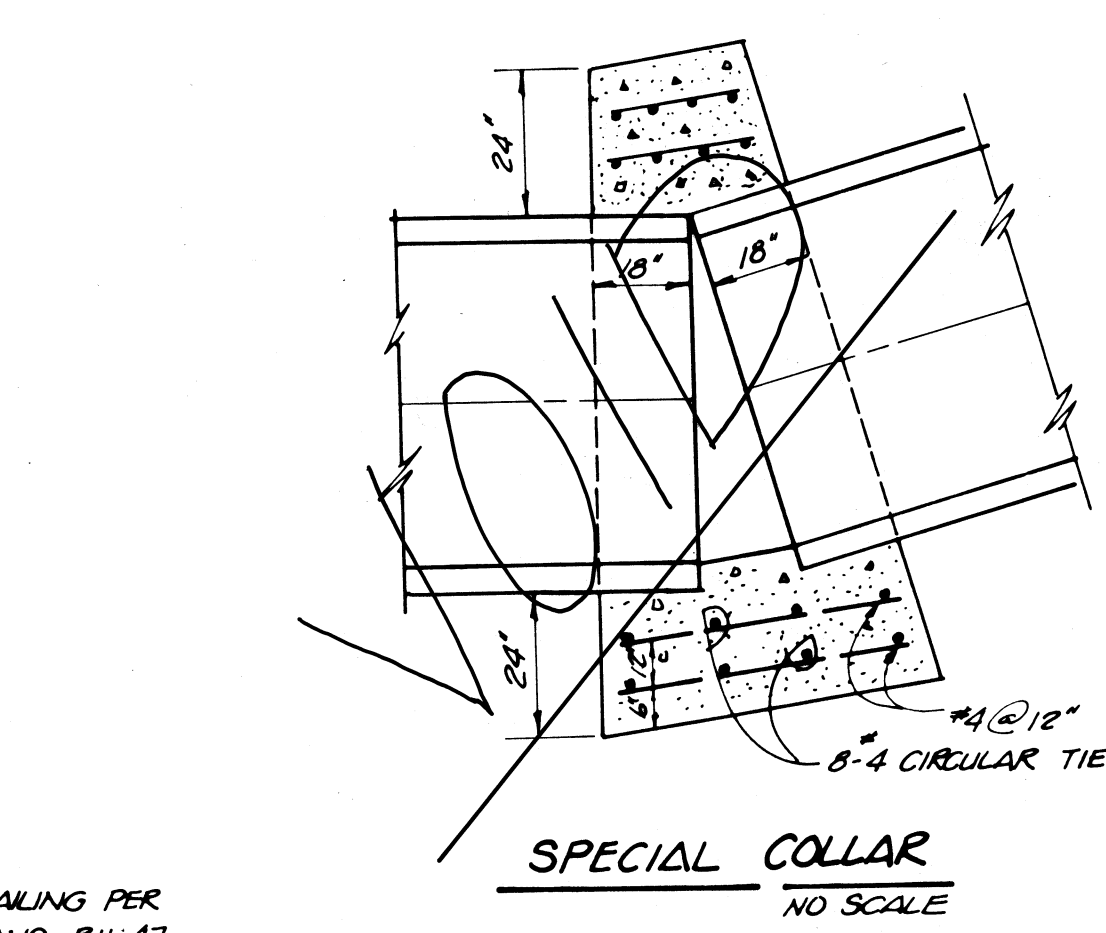
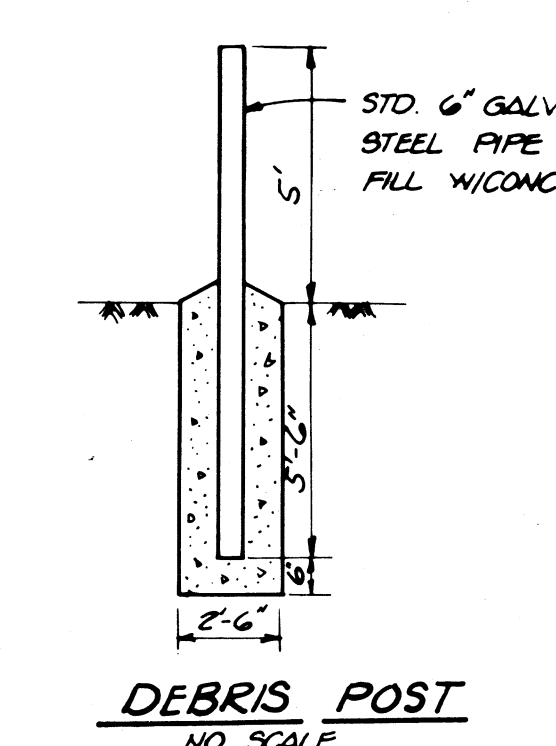
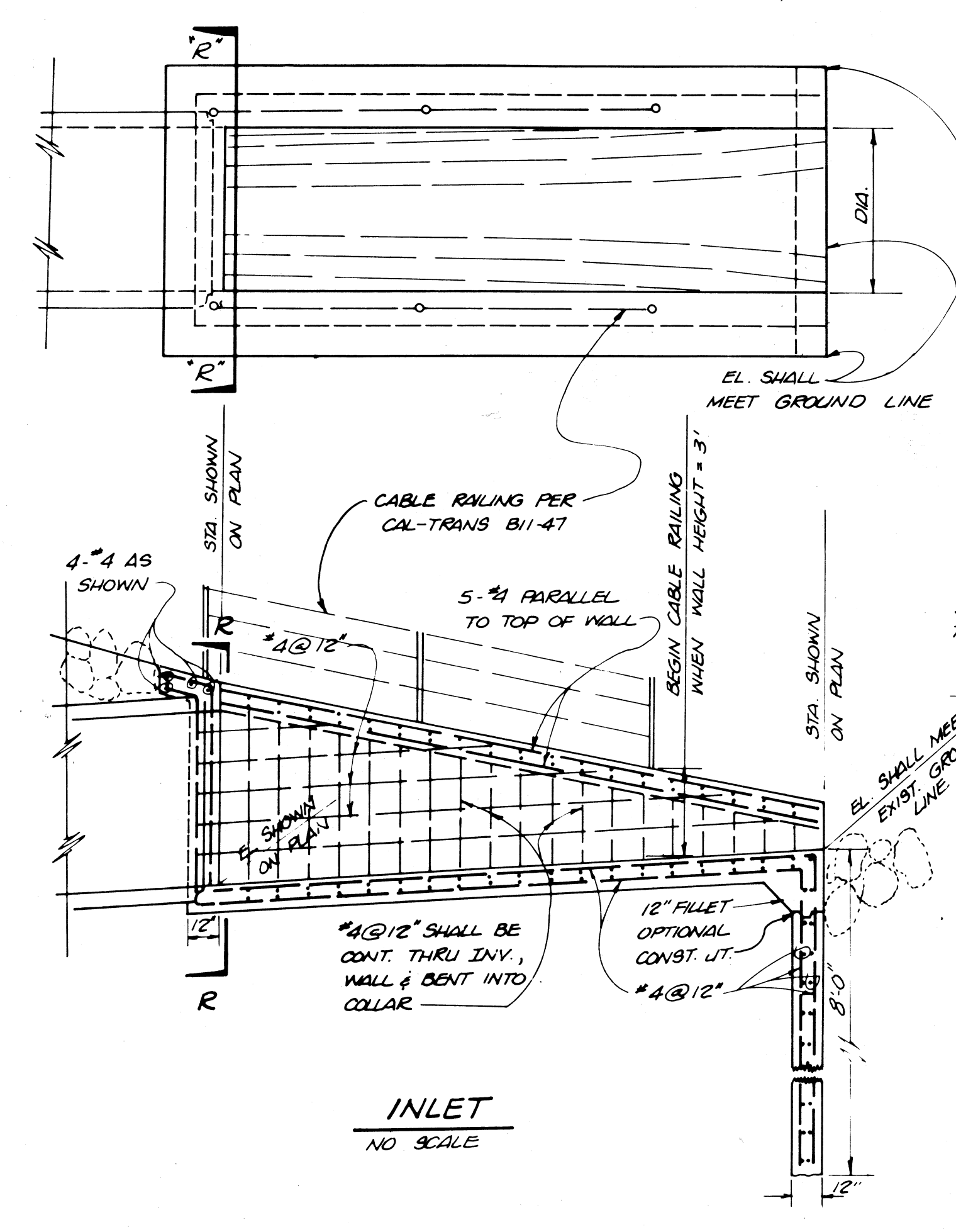
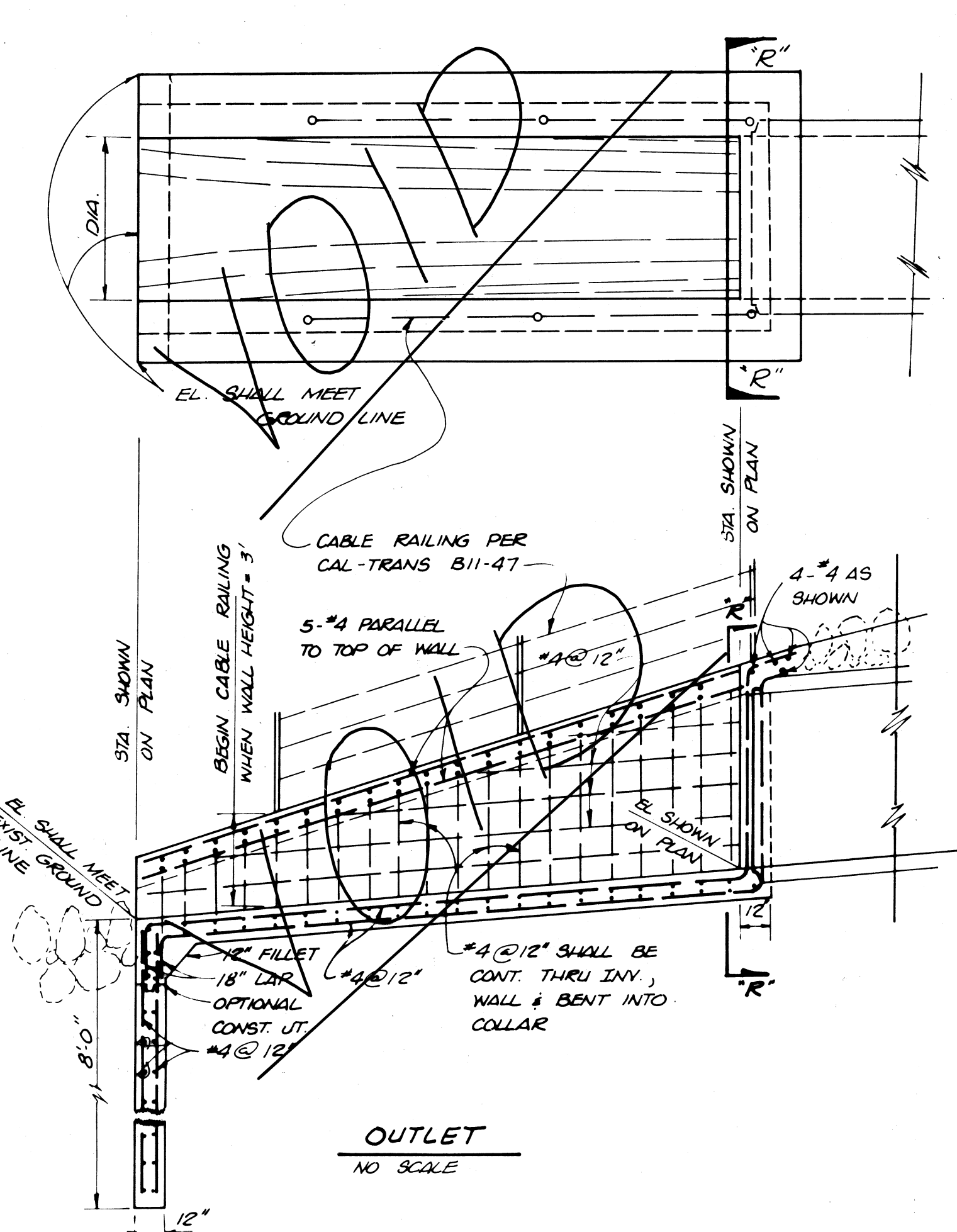
STORM DRAIN IMPROVEMENTS

TRACT 36673 LINE "A"
AMAR ROAD VICINITY LEMON CREEK

125A

TR. 36673 STORM DRAIN IMPROVEMENTS SHEET 1 OF 4

WPC 179



2. FILTER MATERIAL
THE FOLLOWING CRITERIA IS TO BE MET WHEN SELECTING THE FILTER BLANKET MATERIAL:

D15 FILTER D85 BASE	< 5	D15 FILTER D15 BASE	< 40	D50 FILTER D50 BASE
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AND

D15 RIP RAP D85 FILTER	< 5	D15 RIP RAP D15 FILTER	< 40	D50 RIP RAP D50 FILTER
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BASE REFERS TO THE MATERIAL UNDERLYING THE FILTER, THE NATURAL BANK MATERIAL.

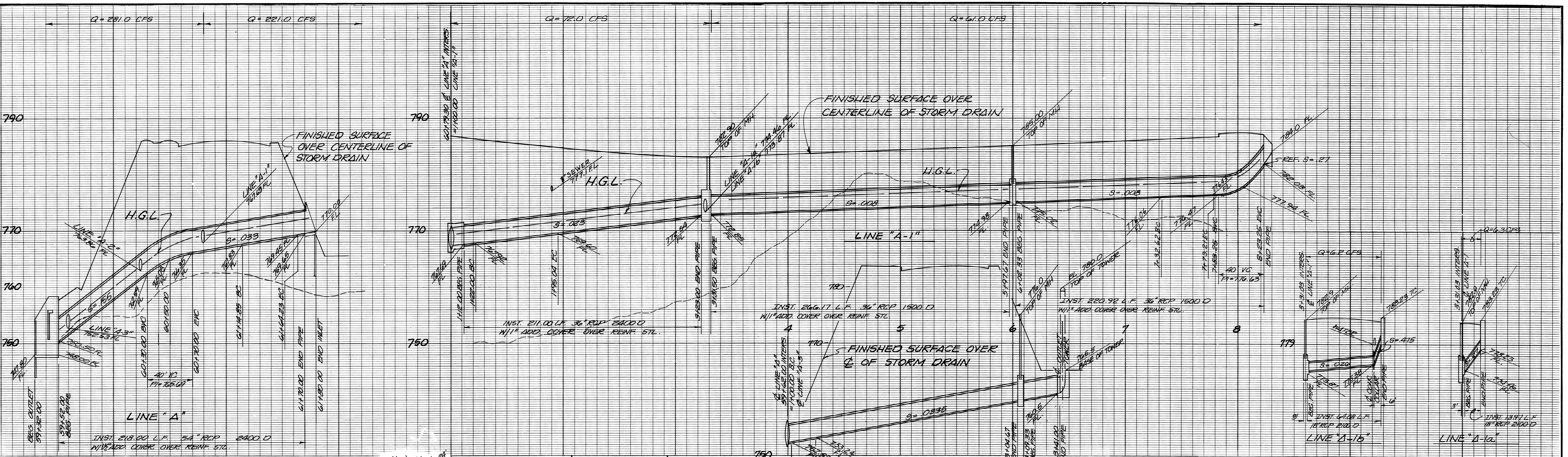
D15 FOR EXAMPLE REFERS TO THE 15 PER CENT SIZE OF THE MATERIAL AND SO FORTH FOR THE OTHER VALUES; D50 AND D85.

STONE FACING TABLE

STONE	THICKNESS	GRADATION	THE ROCK FOR STONE FACING SHALL HAVE THE FOLLOWING GRADATION (SIZE % LARGER THAN)
B (100 LB)	21" 6"	300 LB/0-5% ; 100 LB/50-100% ; 50 LB/95-100%	
G (1 TON)	51" 12"	2 TON/0-5% ; 1 TON/50-100% ; 1/2 TON 95-100%	
U (4 TON)	81" 12"	8 TON/0-5% ; 4 TON/50-100% ; 2 TON 95-100%	

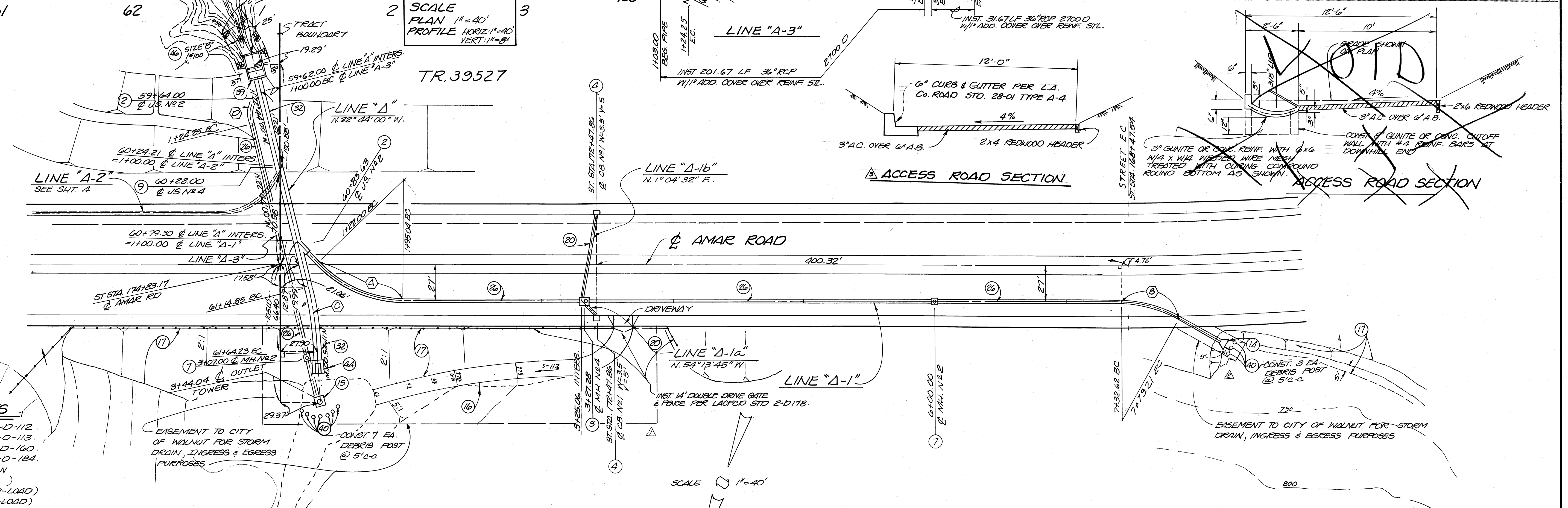
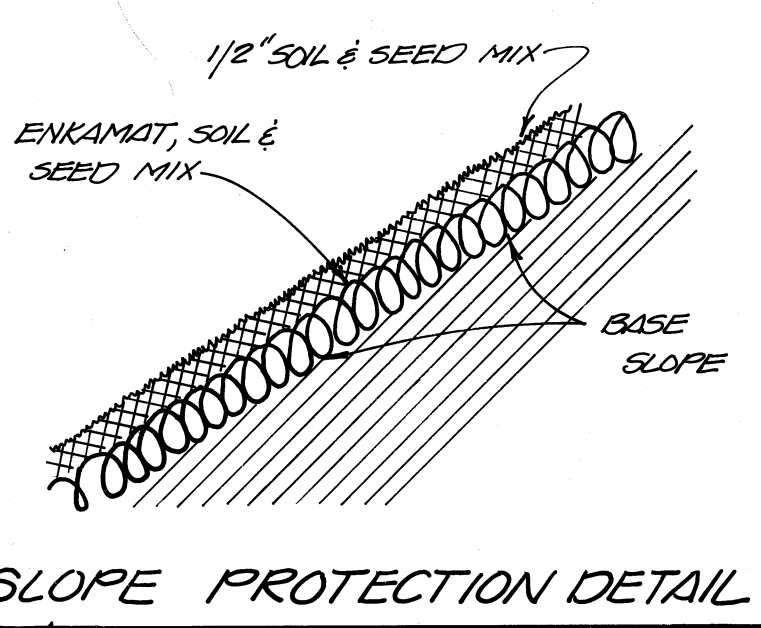
ENERGY DISSIPATOR DETAILS

REVISIONS				CITY OF WALNUT APPROVED	PLANS PREPARED BY: Hupner Associates Inc. Planning, Engineering & Surveying (714) 754-1031	CITY OF WALNUT STORM DRAIN IMPROVEMENTS TRACT 36673 - LINE "A" AMAR ROAD VICINITY LEMON CREEK DETAILS
REVIEWED BY: _____	RE. N° _____	REVISOR BY: _____	RE. N° _____	DATE: _____	DATE: 1/19/81	TR. 36673
APPROVED: _____	DATE: _____	APPROVED: _____	DATE: _____	APPROVED: _____	DATE: _____	STORM DRAIN IMPROVEMENTS
						SHEET 2 OF 4



☉ CURVE DATA

Δ	R	L	T
46° 29' 45"	90'	73.04'	38.66'
29° 39' 45"	90'	46.59'	23.83'
11° 19' 00"	250'	49.38'	34.71'
61° 45' 14"	225'	24.25'	13.45'



- CONSTRUCTION NOTES**
- CONST. J.S. N#2 PER LACPCD STD. 2-D-112.
 - CONST. MH. N#4 PER LACPCD STD. 2-D-113.
 - CONST. CB. N#1 PER LACPCD STD. 2-D-160.
 - CONST. MH. N#2 PER LACPCD STD. 2-D-184.
 - CONST. 12' ACCESS ROAD PER SECT. HEREON
 - CONST. INLET PER DETAIL (SEE SHT. 1)
 - INSTALL 18" RCP (SEE PROFILE FOR D-LOAD)
 - INSTALL 36" RCP (SEE PROFILE FOR D-LOAD)
 - INSTALL 54" RCP (SEE PROFILE FOR D-LOAD)
 - CONST. DEBRIS POST PER DETAIL (SEE SHT. 2)
 - CONST. INLET PER DETAIL (SEE SHT. 2)
 - CONST. ENERGY DISSIPATOR PER DETAIL (SEE SHT. 2)
 - CONST. OUTLET TOWER PER DETAIL (SEE SHT. 4)
 - CONST. STONE FACING PER DETAIL (SEE SHT. 2)
 - CONST. J.S. N#4 PER LACPCD STD. 2-D-183.
 - CONST. BANK PROTECTION - PROTECT WITH ENKAMAT 700 OR EQUIVALENT (INSTALL PER MANUFACTURERS INSTRUCTIONS & SECTION HEREON)

REVISIONS

△ REVISED R/W OF EASEMENT	△ REVISED ACCESS ROAD SECTION	
△ REVISE DEBRIS POSTS		

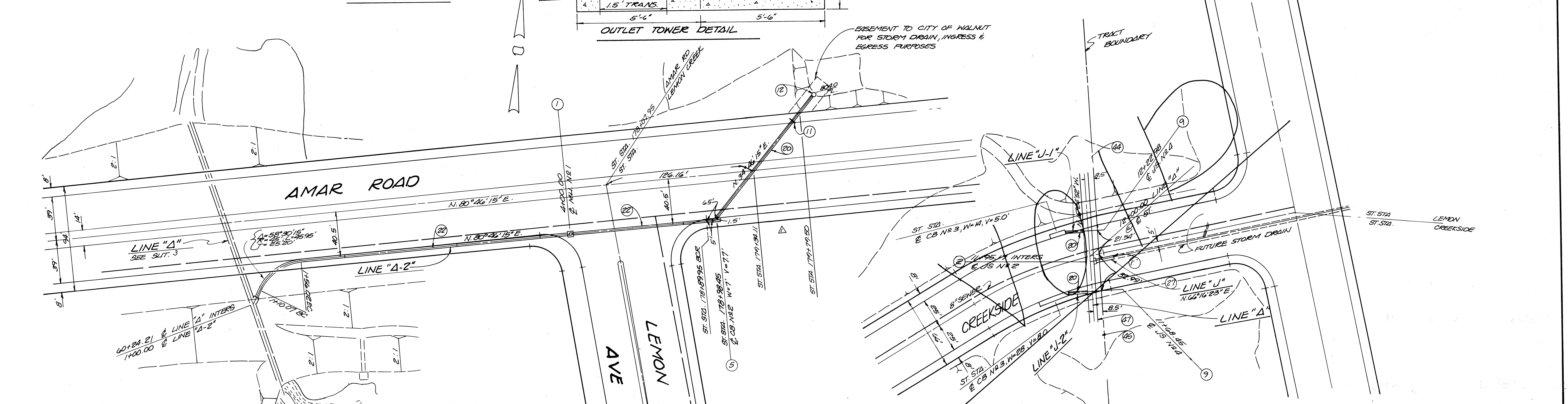
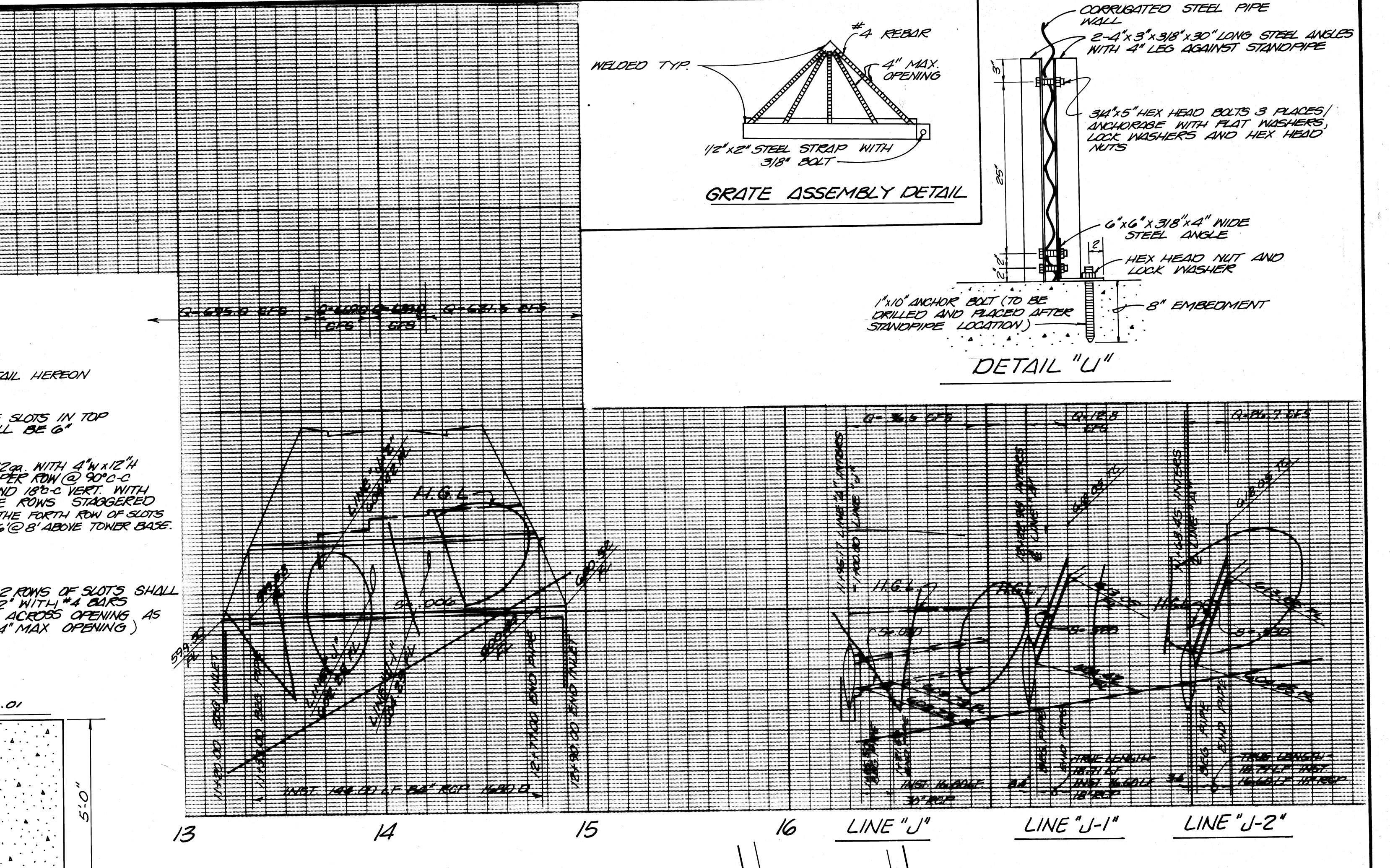
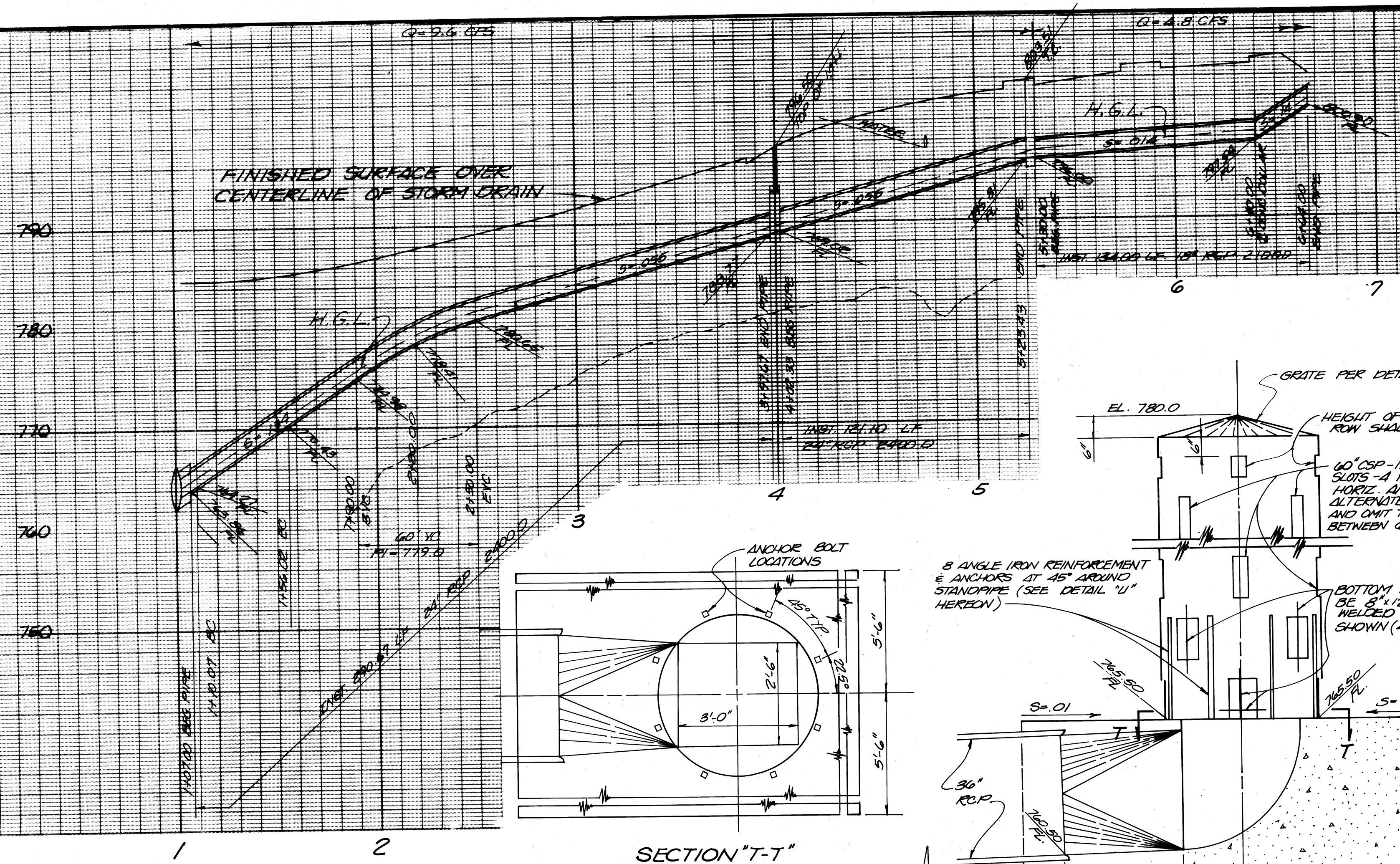
REVISED BY: *Steve E. [Signature]* N° 25167 DATE: 5/12/81
 APPROVED: *[Signature]* DATE: 11/3/81

CITY OF WALNUT APPROVED

PLANS PREPARED BY:
Hunsaker & Associates
 Planning, Engineering & Surveying
 Inc. (714) 754-1011
 3001 Red Hill Building VI, Suite 212, Costa Mesa, CA 92626

REVISIONS:
 REVISED BY: *Frank Salinger* N° 12225 DATE: 1/19/81
 APPROVED: *[Signature]* DATE: 1/19/81

CITY OF WALNUT
STORM DRAIN IMPROVEMENTS
 LINE "A" STA. 59+42 TO 61+95 & LINE "A-1"
 TR. 36673 STORM DRAIN IMPROVEMENTS SHEET 3 OF 4
 125C
 WFC 179



- CONSTRUCTION NOTES**
- ⑤ - CONST. CB N#2 PER LACFCD STD. 2-D-162
 - ⑦ - CONST. CONC. COLLAR PER LACFCD STD. 2-D-393
 - ⑫ - CONST. 8" BRICK & MORTAR PLUG OR JOIN IF GRADING STRUCTURE IS EXISTING.
 - ⑯ - INSTALL 18" RCP (SEE PROFILE FOR D-LOAD)
 - ⑰ - INSTALL 24" RCP (SEE PROFILE FOR D-LOAD)
 - ⑴ - CONST. MH, N#1 PER LACFCD STD. 2-D-102

REVISIONS				CITY OF WALNUT APPROVED	PLANS PREPARED BY:
Δ	REVISED SURVEY TIES			 CITY ENGINEER / FRANK S. PHILLIPS RE 12725	 Planning, Engineering & Surveying 3001 Red Hill, Building VI, Suite 212, Costa Mesa, CA 92626 (714) 754-1011
	REVISED BY: <i>Steve Elend</i> RE N# 25167	REVISED BY:	REVISED BY:		
	APPROVED: <i>J.W. Smith</i> DATE: 5/19/81	APPROVED:	APPROVED:		

CITY OF WALNUT	
STORM DRAIN IMPROVEMENTS	
LINE "A-2"	
TR. 36673	125D
STORM DRAIN IMPROVEMENTS	SHEET 4 OF 4
WPC 179	