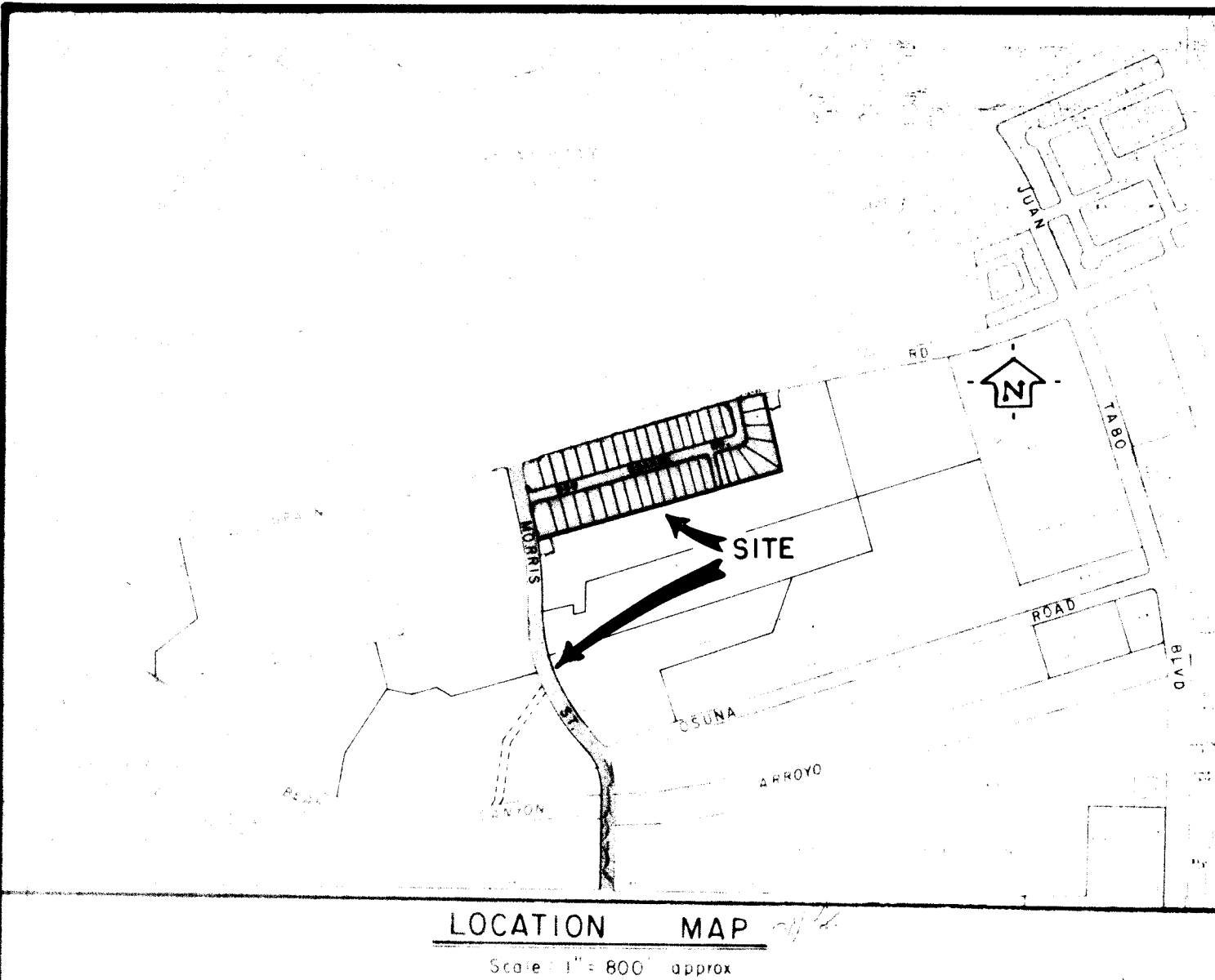




OSO GRANDE UNIT ONE AND MORRIS STREET IMPROVEMENTS PROJECT 3

INDEX TO DRAWINGS

- 1 TITLE SHEET
- 2 PLATS OF GEOMETRY
- REV.1 3 UTILITY PLAN AND PROFILE - MORRIS STREET
- REV.1 4-5 STORM SEWER PLAN AND PROFILE
- REV.1 6-7 STORM SEWER DETAILS AND SECTIONS
- 8-11 STRUCTURAL DETAILS - MORRIS STREET CROSSING
- 12 BRIDGE INLET - SECTIONS AND DETAILS

TRAFFIC HANDLING NOTE

CONTRACTOR MUST SUBMIT A COMPLETE SIGNING AND BARRICADING PLAN TO THE TRAFFIC ENGINEERING DIVISION NINETY-SIX (96) HOURS IN ADVANCE OF CONSTRUCTION AND RECIEVE A BARRICADING PERMIT PRIOR TO CONSTRUCTION.

CONSTRUCTION NOTE:

THIS PROJECT AND CITY PROJECT 1330 AND 1331, INVOLVING WATER LINE, SANITARY SEWER, AND PAVING CONSTRUCTION IN MORRIS STREET AND ADJACENT AREAS, WILL BE UNDER CONSTRUCTION CONCURRENTLY. CONTRACTOR SHALL COORDINATE SCHEDULING AND CONSTRUCTION OF THIS PROJECT SO AS TO MINIMIZE CONSTRUCTION CONFLICTS AND DAMAGE TO PREVIOUSLY CONSTRUCTED FACILITIES

APPROVED FOR CONSTRUCTION

Richard S. Heller
Richard S. Heller, City Engineer

5/17/82
Date

Kent M. Whitman
Kent M. Whitman, P.E.

12/16/81
Date

APPROVAL OF AS BUILT DRAWINGS
ASST. CITY ENGINEER - FIELD
[Signature]
DATE *[Signature]*



1 2 3 4 5 6 7 8 9 10 11 12
26 1 2 3 20 1 3 1332

DATE DEC. 1982
SCALE NONE
DESIGNED K. M. W.
DRAWN W. J. W.
JOB NO. 78-14-025
1 of 12
CORRUBISH-SUTHERS CORPORATION
LAND PLANNING SURVEYING ENGINEERING
201 BUS STOP TUCSON, AZ 85701

PLAN	SURVEYED _____		BY _____	DATE _____
	PLOTTED _____			
NOTE BOOK	ALIGNMENT CHECKED _____			
NO _____	RT. OF WAY CHECKED _____			

PROFILE	SURVIVED _____	BY _____	DATE _____
	ELIMINATED _____ GRADES CHECKED _____ B M NOTED _____		

STUB EAST - LINE D

LINE C

STUB WEST - LINE D

JOINT
GTHS

42 LINE D
SHEET 7

PROJECT #2

PROJECT #3

TAP INTO EX. 16" CCP
FLANGE, AND 8" GAT.
FURNISH THRUST BLOC
SEE DETAIL THIS SHIT.

TAP INTO EX. 16" CCP W/ 8" WELDING NECK,
FLANGE, AND 8" GATE VALVE.
FURNISH THRUST BLOCKS, per City Standards.
SEE DETAIL THIS SHT.

Hand-drawn engineering plan view of a water main installation. The diagram shows a 16-inch water main running horizontally across Morris Street. Key components include a thrust block on the left, a gate valve, a 6-inch 45-degree elbow, and a tap at 15+29. The tap is connected to an existing 16-inch cast iron pipe (CCP) at a 45-degree angle. The main continues to the right, ending at another thrust block. Dimensions include a 5-foot offset from the street centerline, a 50-foot main length, and a 3-foot minimum cover. Pipe segments are labeled as 12-inch 6x8x8 tee, 8-inch gate valve, and 8-inch ACP. Invert elevations are noted as 37.0 and 37.25. A note specifies the use of flanged fittings between the tap and tee. The drawing is signed "dlw" and dated "10/10/10".

NOTE:
CONTRACTOR SHALL CUT PIPE TO REQUIRED PROFILE USING CHISEL TIPPED JACK HAMMER AND LEAVING A 2" RECESSON FROM CHANNEL SIDEWALL. PIPE REINFORCEMENT SHALL THEN BE CUT LEAVING 1" EXPOSED, AND A SMOOTH 2" MORTAR RIM SHALL BE APPLIED ONCE IN PLACE (AND PRIOR TO POURING CHANNEL CONCRETE) CONTRACTOR SHALL ISOLATE PIPE WALL FROM CHANNEL SIDEWALL USING 1/2" EXPANSION JOINT MATERIAL.

APPROVED REV.1
R800 5/28/82

OSO GRANDE SUBDIVISION

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: PROJECT # 3
UTILITY PLAN AND PROFILE
MORRIS ST., N.E.

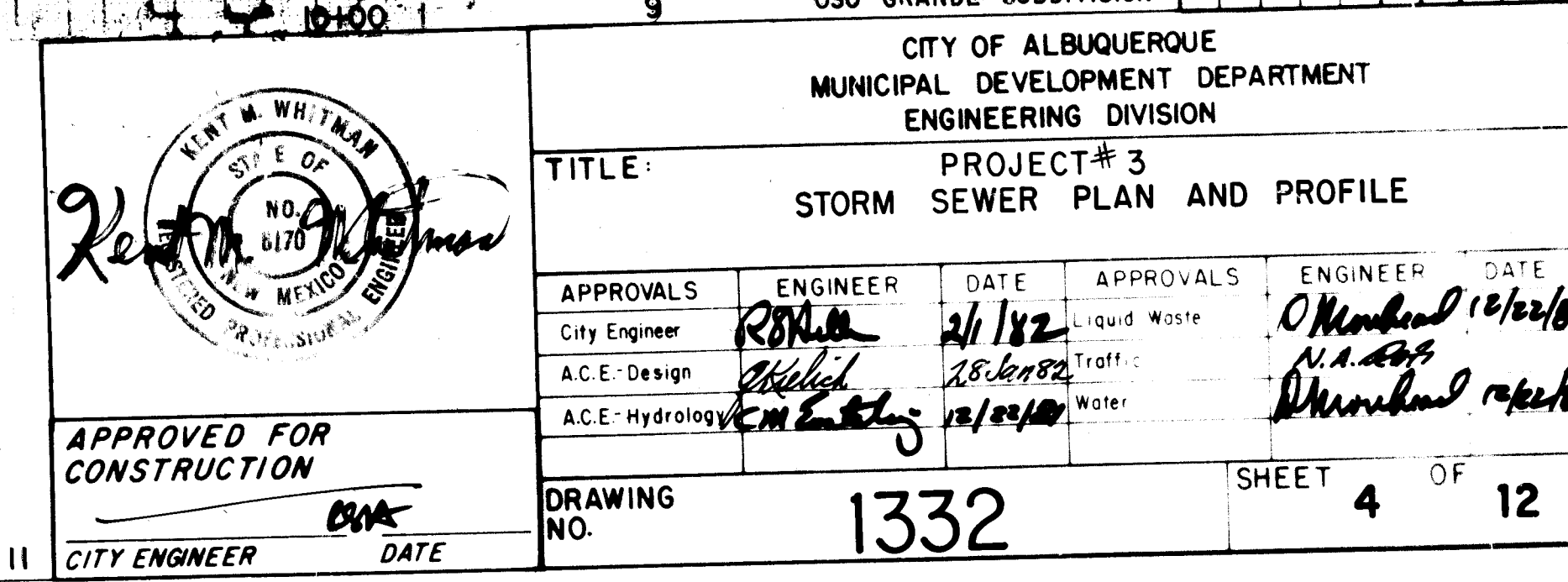
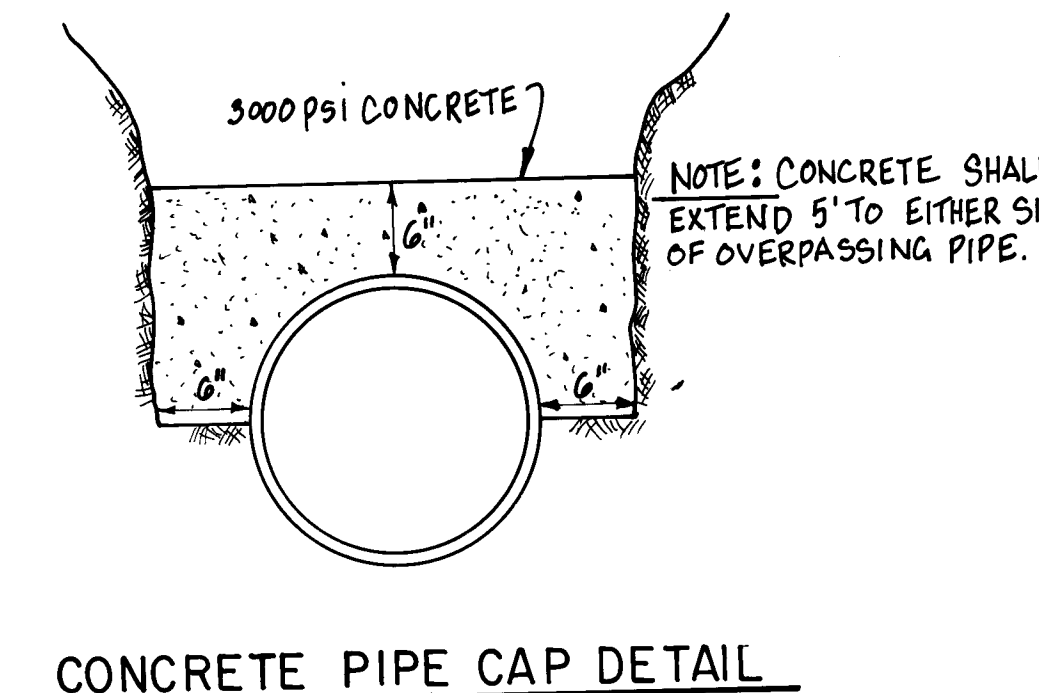
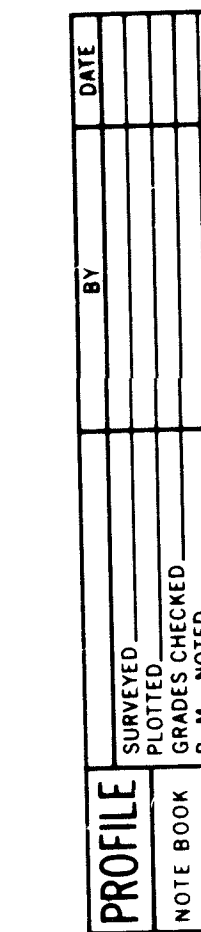
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	2/1/82	Liquid Waste	<i>[Signature]</i>	1/26/81
A.C.E.-Design	<i>[Signature]</i>	2/24/82	Traffic	N.A. <i>[Signature]</i>	
A.C.E.-Hydrology	<i>[Signature]</i>	1/24/82	Water	<i>[Signature]</i>	1/26/81

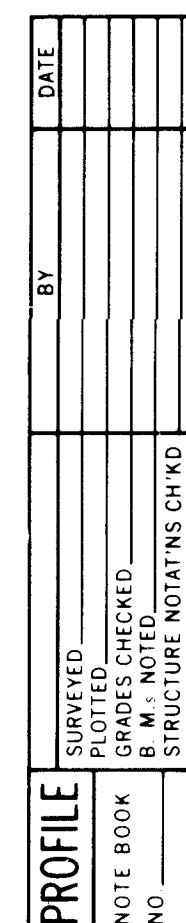
DRAWING NO.	1332	SHEET 3 OF 12
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BENCHMARKS	AS BUILT INFORMATION
BENCHMARK FOR THIS SUBDIVISION IS A.C. IN THE NORTHWEST QUADRANT AT THE NORTHWEST CORNER OF SPAIN ROAD AT REV'D DON DRIVE - "X" CHISELED ON THE SOUTH BONNET BOLT OF A FIRE HYDRANT. ELEVATION = 5640.084	CONTRACTOR WORK COMPLETED BY ACCEPTANCE BY DATE 7/23 VERIFICATION BY DATE 7/23 DRAWINGS DATE 7/23 RECORDED BY DATE NO. MICRO-FILM INFORMATION

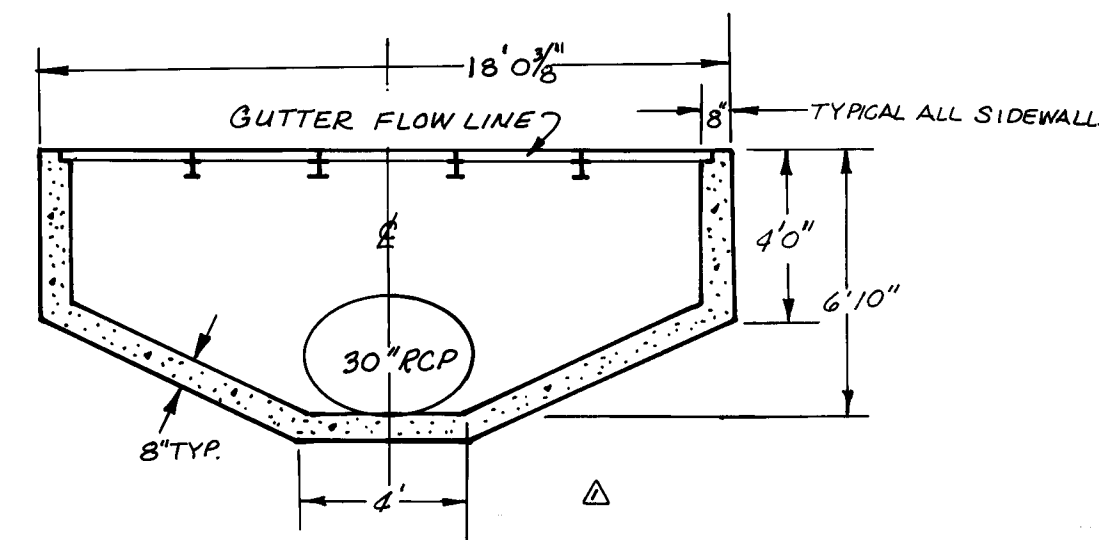
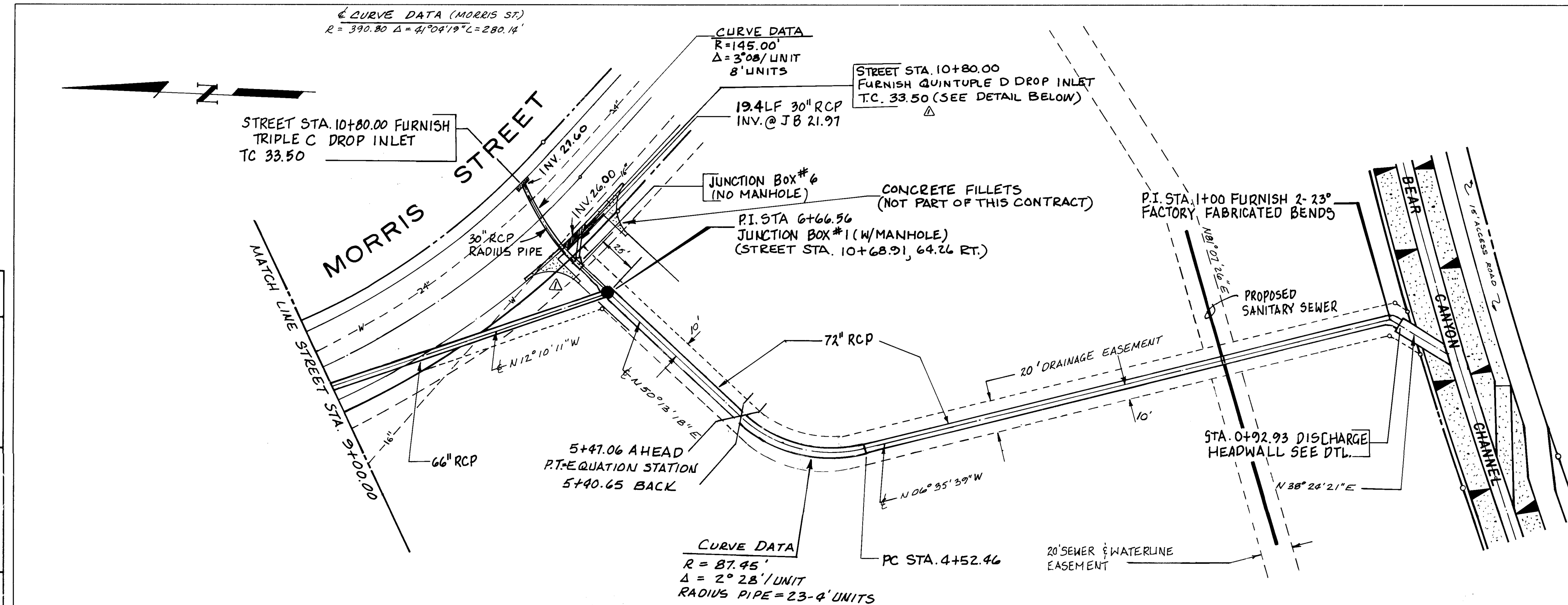
NO.		DATE		REMARKS		BY		REFERENCES			SURVEY INFORMATION		
								MAP NO.	F-27-Z	W.O. NO.	NO.	FIELD	NOTES
								EST. NO.					
DESIGNED BY KCMW DATE OCT. 1981													
DRAWN BY MJW DATE OCT. 1981													
CHECKED BY KCMW DATE NOV. 1981													

PLATE 1 SINGLE PLAN - PROFILE - DOTTED
CHARLES BRUNING COMPANY
MADE IN U.S.A.

[illegible]



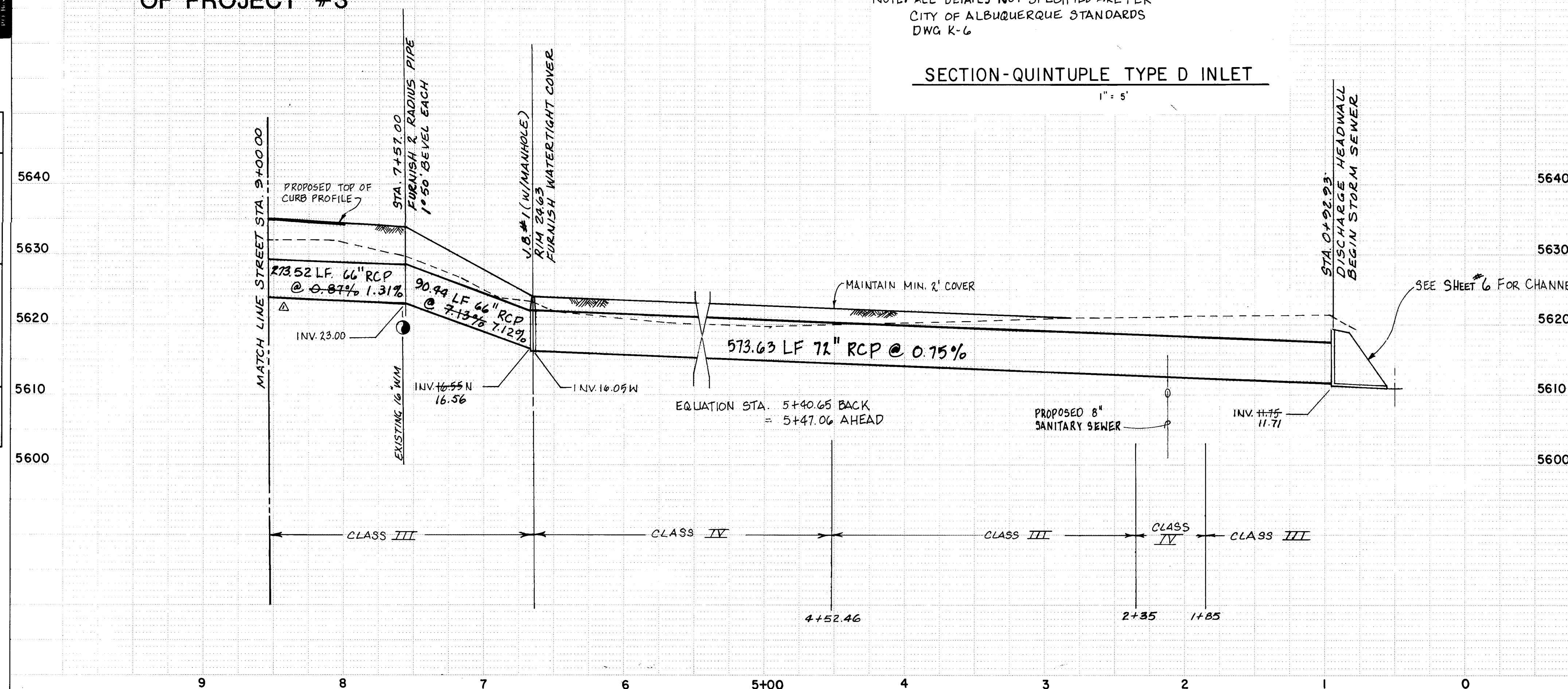
community
sciences
corporation



NOTE: ALL DETAILS NOT SPECIFIED ARE PER
CITY OF ALBUQUERQUE STANDARDS
DWG K-6

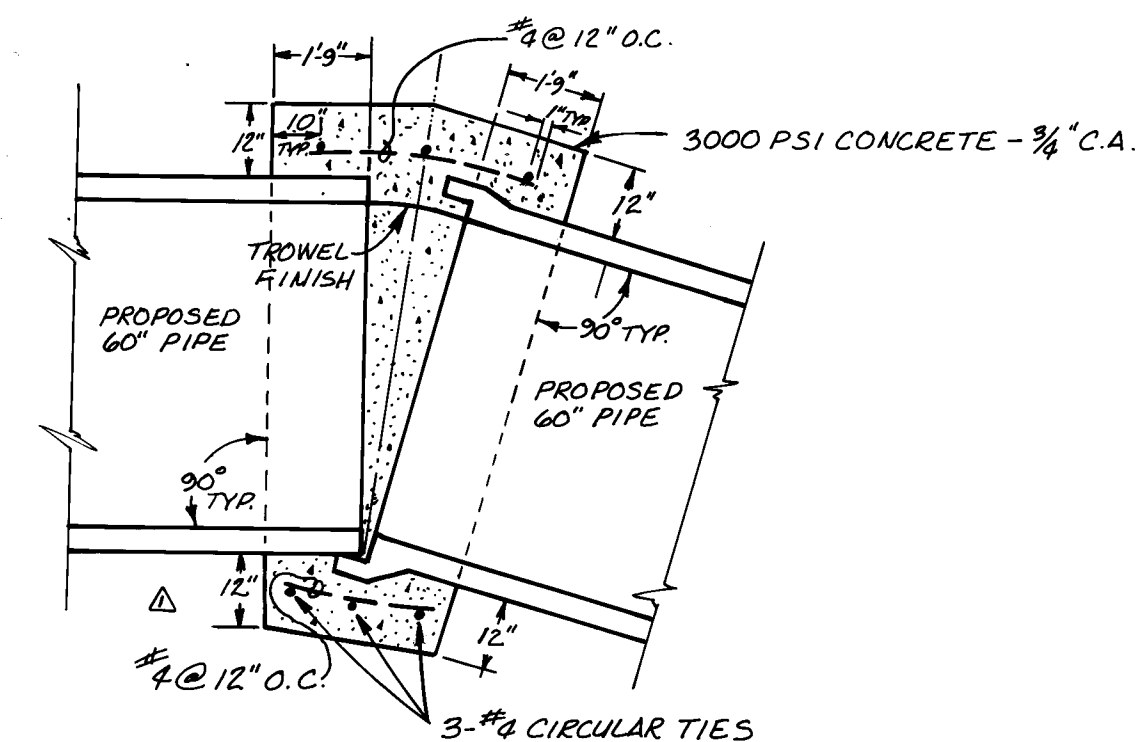
SECTION-QUINTUPLE TYPE D INLET

1" = 5'



NOTES:

- 1) Stations on Drop Inlets refer to center of grate.
- 2) Inv. elevations for pipe refer to "theoretical projection" at center of manhole or inlet, or as shown in details for junction boxes. Slope and distance data on profiles refers to these center of structure locations and pipe elevations at structure walls shall be projected accordingly.
- 3) All RCP shall be Class IV, Wall B, unless otherwise noted.
- 4) Where mitered ends are required on RCP due to vertical and/or horizontal angle intersections with inlets, pipe shall be either chisel "scored" to the required angle or saw-cut with a concrete saw.
- 5) Unless noted otherwise pipes at inlets center on intersecting face.
- 6) Contractor shall field excavate all crossing points with existing utilities and verify that clearance is available as shown before installing any improvements.
- 7) All inlets which receive flow from other inlets upstream shall be furnished with brick and mortar benchwork to provide a continuous invert across the inlet. Benchwork inverts shall be constructed to the widths and depths of the inflow and outflow pipes.
- 8) Invert elevations for drop inlets refer to pipe inverts, and inlet floors will be constructed accordingly to provide the required clearance for fill concrete.



FIELD FABRICATED BEND

n. t. s.

1" = 50' HORIZ.
1" = 10' VERT.

OSO GRANDE SUBDIVISION



**APPROVED FOR
CONSTRUCTION**

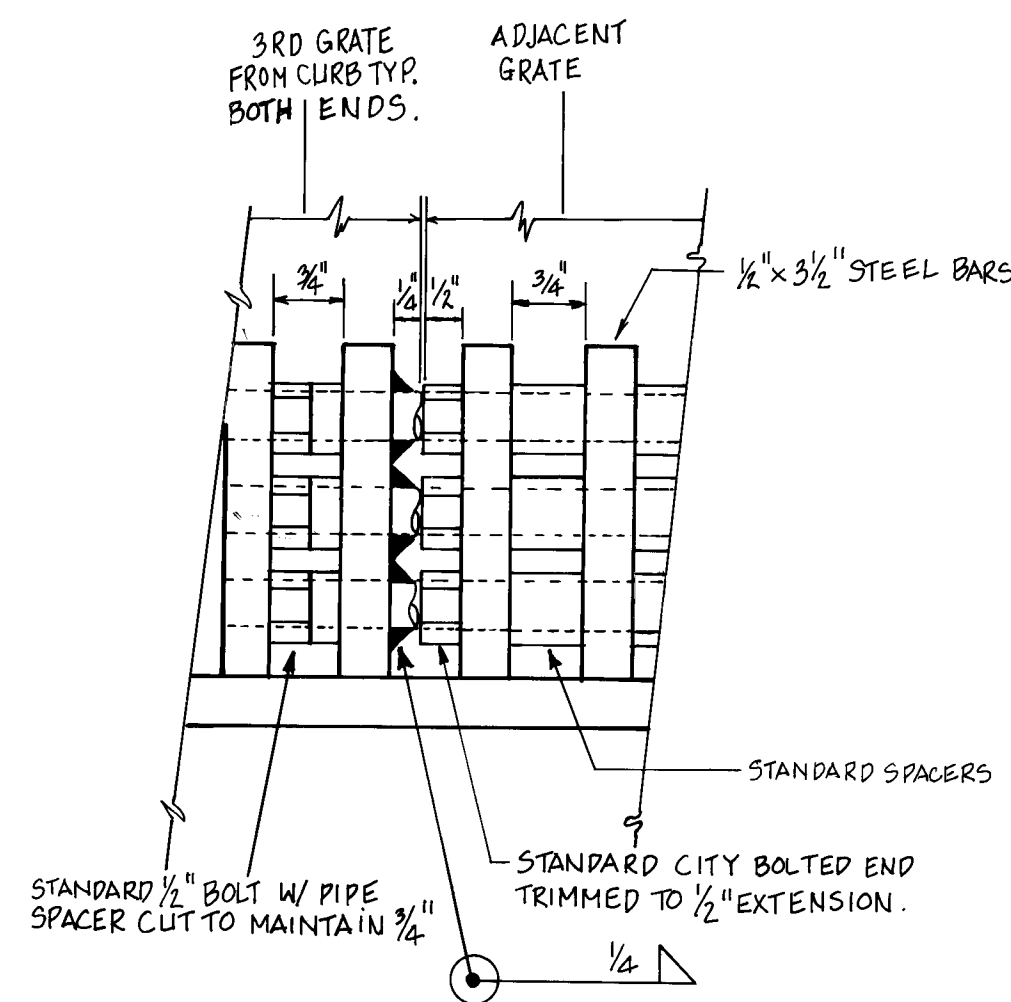
CITY ENGINEER

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

TITLE: PROJECT # 3
STORM SEWER PLAN AND PROFILE

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>R. R. [Signature]</i>	2/1/82	Liquid Waste	<i>[Signature]</i>	12/22/81
A.C.E. Design	<i>[Signature]</i>	2/2/82	Traffic	<i>N. A. [Signature]</i>	
A.C.E. Hydrology	<i>[Signature]</i>	12/22/81	Water	<i>[Signature]</i>	12/22/81

DRAWING NO.	1332	SHEET	5	OF	12
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GRATE SPACING DETAIL

n. t. s.

NOTE: ALL DETAILS NOT SPECIFIED SHALL BE IN ACCORDANCE W/ CITY OF ALBUQUERQUE STANDARD DRWGS K-3, K-8, AND K-9.

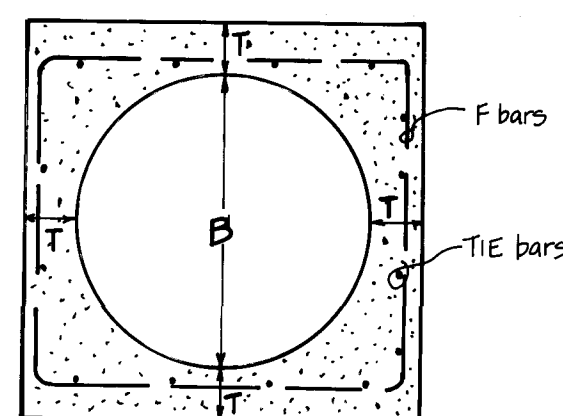
SECTION
n. f. s.

QUADRUPLE TYPE B INLET

n. t. s

NOTES.

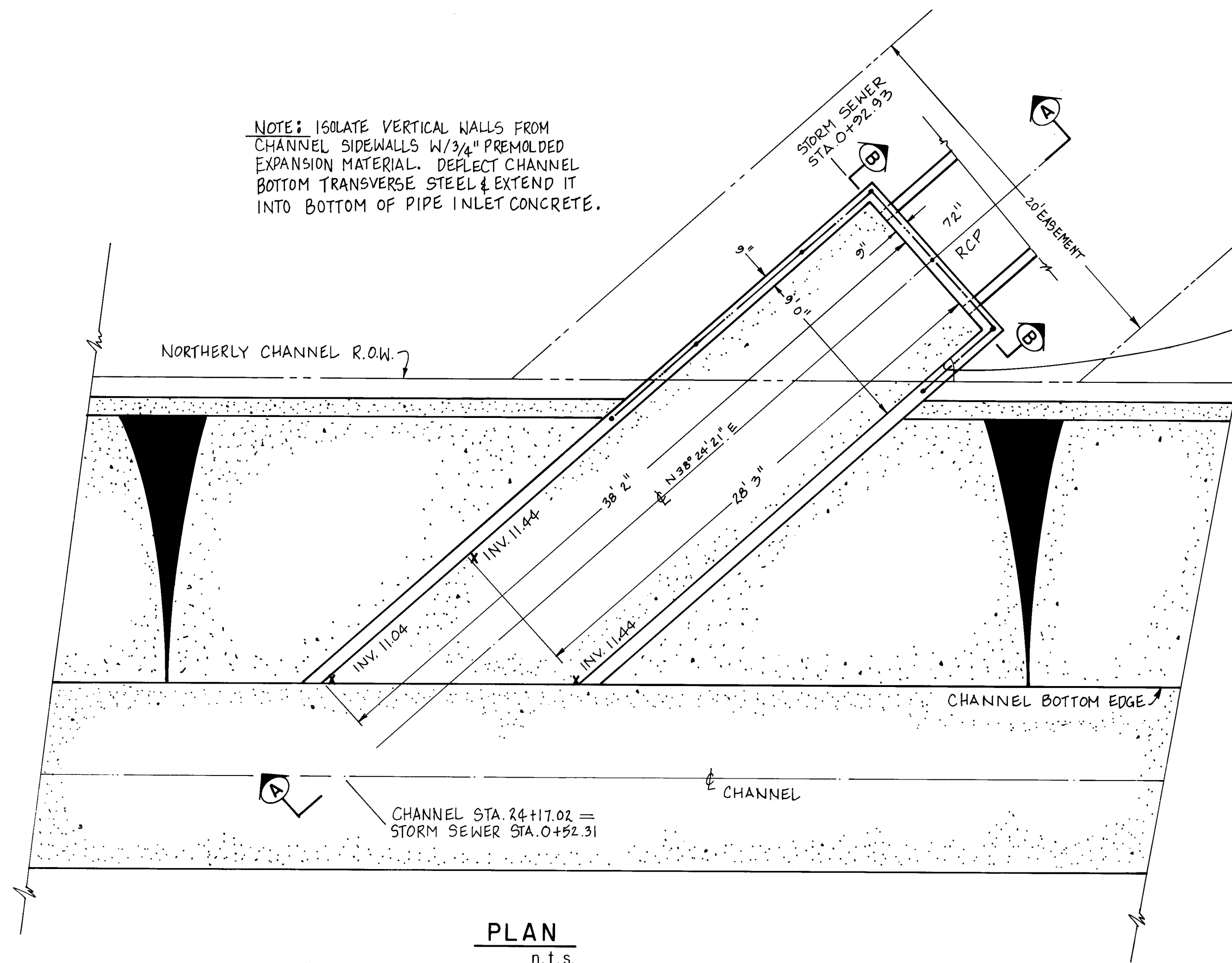
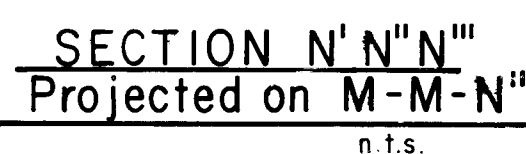
- 1) Several Junction Boxes do not require manholes as shown in this detail. These are called out on the plan. For junction boxes without manholes eliminate X bars and continue C & Tie bars across entire roof of structure.
- 2) For Junction Box #1 where "B" is larger than "D₁" begin taper from D₂ to D₁ following intersection of 66" spur with "straight-thru" portion of box. See Special Geometry Detail for JB#1.
- 3) Furnish Standard Manhole Steps to within 2' of the Junction Box floor.
- 4) All concrete shall have a 28 day compressive strength of 3000psi min. with 3/4" coarse aggregate and 6% air entrainment.
- 5) Inside junction box walls shall be steel trowel finished.
- 6) All reinforcement shall be 36 ksi deformed bars. A & B bar lengths shall be equal to the diagonal outside width of the lateral spur.
- 7) Junction structure shall be poured in one continuous operation except that the Contractor shall have the option of placing a construction joint with a longitudinal keyway at the springline.
- 8) Length "L" may be increased at option of Contractor to meet pipe ends.



SECTION G-G

n.t.s

JUNCTION BOX DETAILS

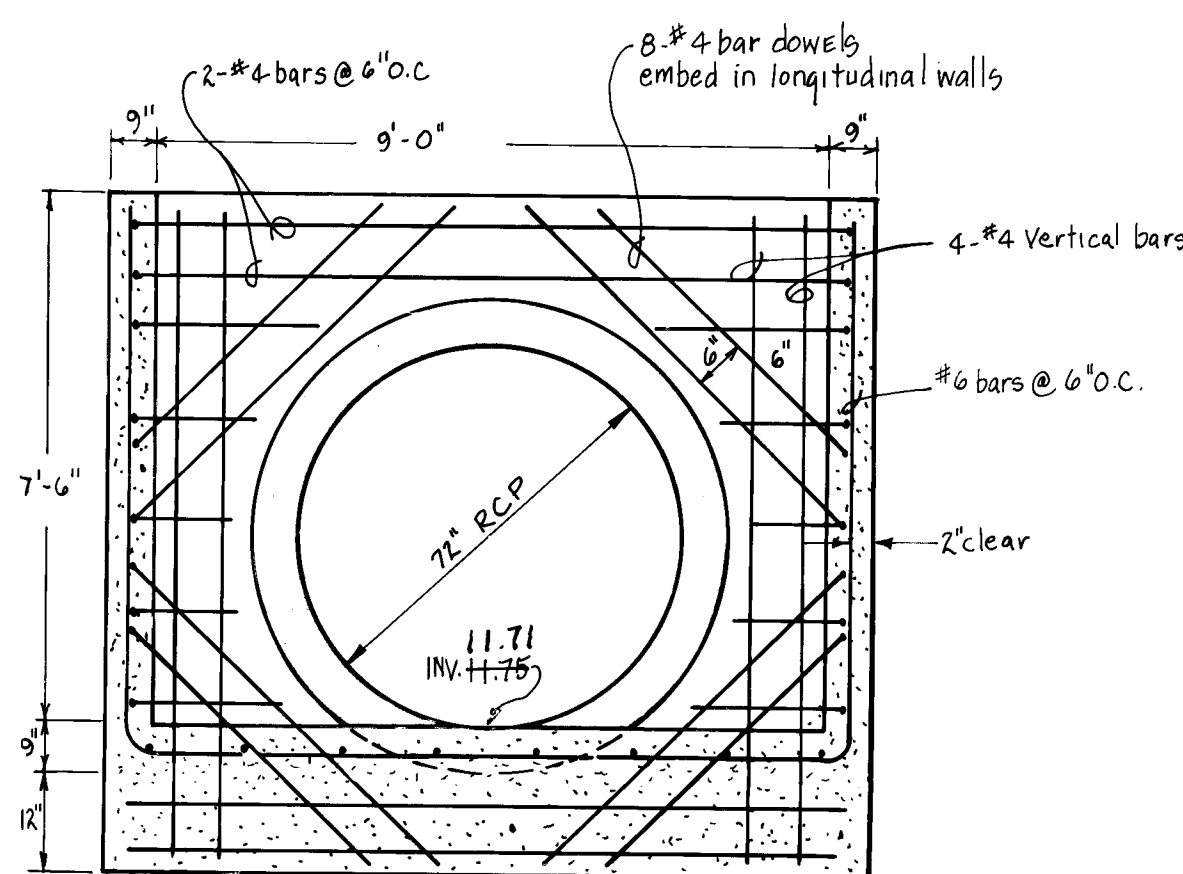


NOTE: ISOLATE VERTICAL WALLS FROM CHANNEL SIDEWALLS W/ 3/4" PREMOLDED EXPANSION MATERIAL. DEFLECT CHANNEL BOTTOM TRANSVERSE STEEL & EXTEND IT INTO BOTTOM OF PIPE INLET CONCRETE.

FURNISH 6' HIGH CHAIN LINK FENCE
PER CITY STANDARD DWG. K-13.
POSTS MAY BE ANCHORED TO WALL
VIA POST SLEEVES OR INDEPENDENTLY
ANCHORED.

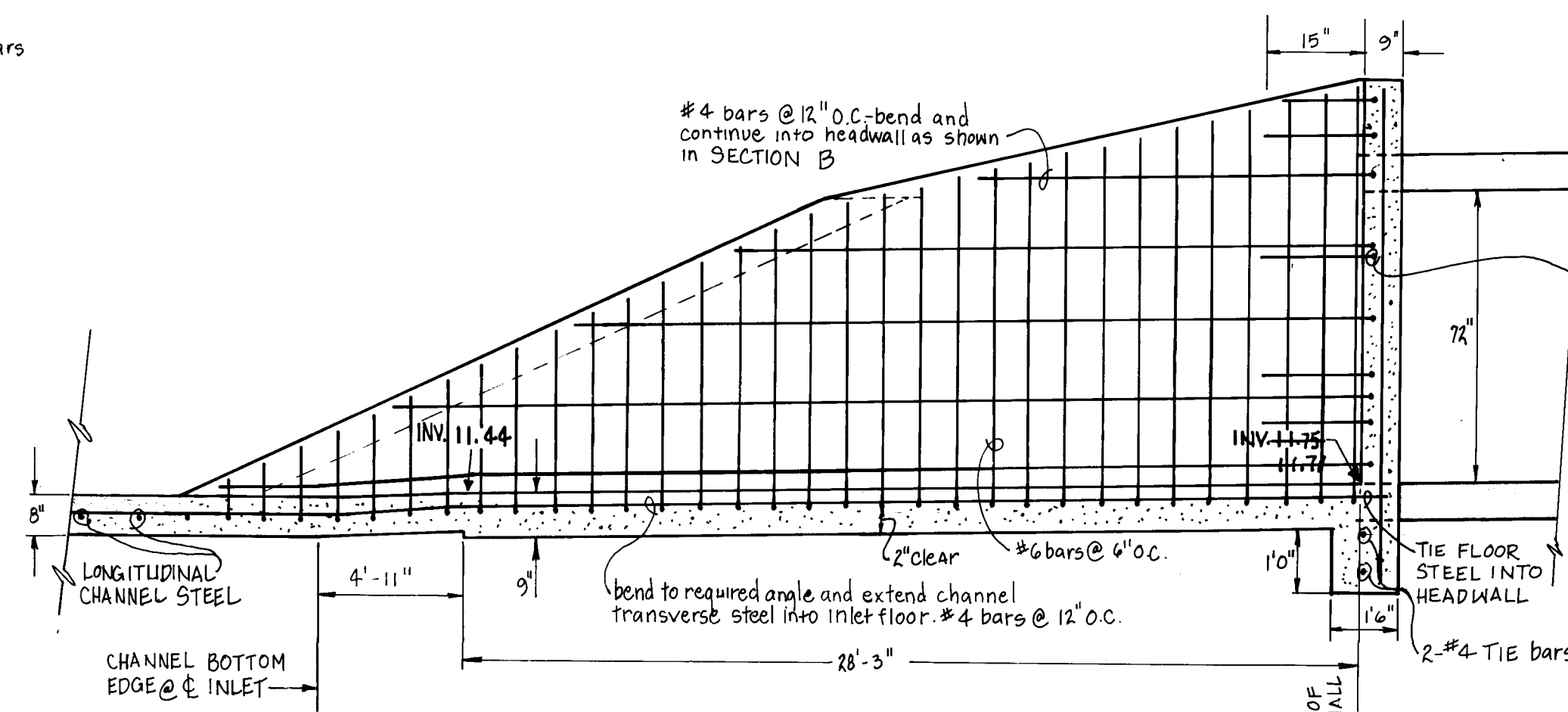
PLAN
n.t.s

n.t.s.



SECTION B-B

n.t.s



SECTION A-A

n.t.s

PIPE INLET DETAILS

n.†s

JUNCTION BOX SPECIFICATIONS																			
JUNCTION BOX	GEOMETRIC								SCHEDULE				REINFORCEMENT				SCHEDULE		
	D ₁	D ₂	B	C	L	E	H	F	T	A	Elev.R	Elev.S	Elev.Q	Elev.U	Tie Bars	A & B Bars	C Bars	X Bars	F Bars
1	42"	72"	66"	9'0"	14'6"	12'0"	8'6"	11"	10"	62°23'29"	17.19	18.25	19.55	16.03	#4 @ 12" o.c.	5-#4 bars @ 3" o.c.	#6 @ 6" o.c.	#4 bent to octagon	#6 @ 6" o.c.
2	60"	66"	36"	11'3"	9'1 1/2"	8'1 1/2"	4'6"	10.5"	6.5"	45° Δ	28.85	26.88	26.00	25.37	#4 @ 12" o.c.	5-#4 bars @ 3" o.c.	#6 @ 6" o.c.	#4 bent to octagon	#4 @ 9" o.c.
3	54"	60"	36"	7'7"	9'0"	8'0"	4'6"	9.5"	6.5"	54°	39.82	38.70	37.93	37.18	#4 @ 12" o.c.	5-#4 bars @ 3" o.c.	#6 @ 8" o.c.	#4 bent to octagon	#4 @ 9" o.c.
4	48"	54"	36"	9'6"	8'0"	7'0"	N/A	9"	6.5"	45°	41.84	40.80	40.01	39.27	#4 @ 12" o.c.	5-#4 bars @ 3" o.c.	#6 @ 8" o.c.	N/A	#4 @ 9" o.c.
5	42"	48"	36"	9'6"	8'0"	7'0"	N/A	8"	6.5"	45°	43.85	42.80	42.24	41.57	#4 @ 12" o.c.	5-#4 bars @ 3" o.c.	#6 @ 8" o.c.	N/A	#4 @ 9" o.c.
6	30"	42"	30"	6'9"	7'3"	6'5"	N/A	7.5"	6"	45° Δ	23.41	21.97	22.54	20.89	#4 @ 12" o.c.	5-#4 bars @ 3" o.c.	#6 @ 9" o.c.	N/A	#4 @ 9" o.c.

**APPROVED FOR
CONSTRUCTION**

CITY ENGINEER PSTA DATE

OSO GRANDE SUBDIVISION

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION

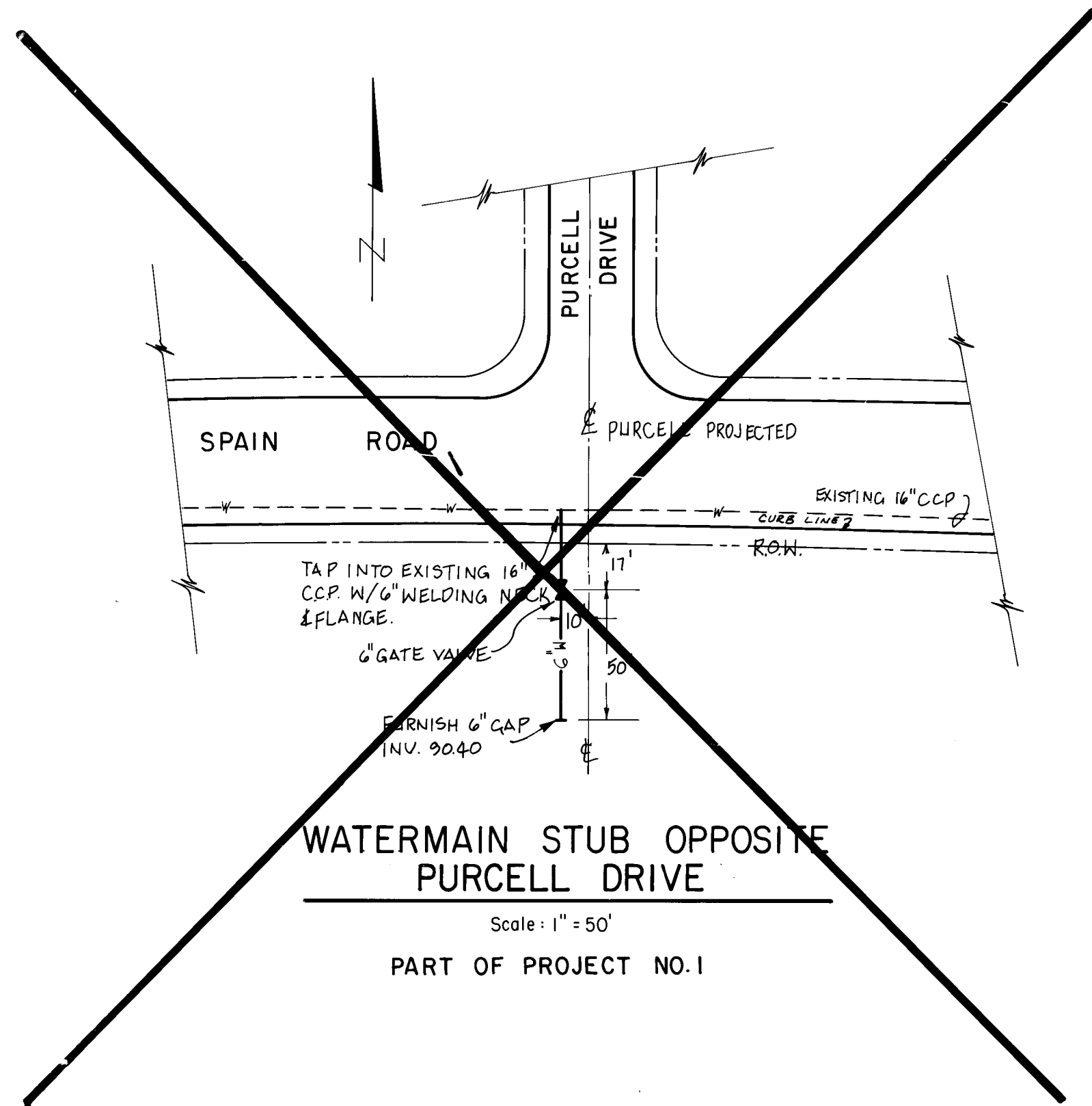
TITLE: **OSO GRANDE STORM SEWER
DETAILS & SECTIONS**

APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	2/1/12	Liquid Waste	N/A	
A.C.E.-Design	<i>[Signature]</i>	28 Jan 82	Traffic	N/A	
A.C.E.-Hydrology	<i>[Signature]</i>	12/20/81	Water	N/A	

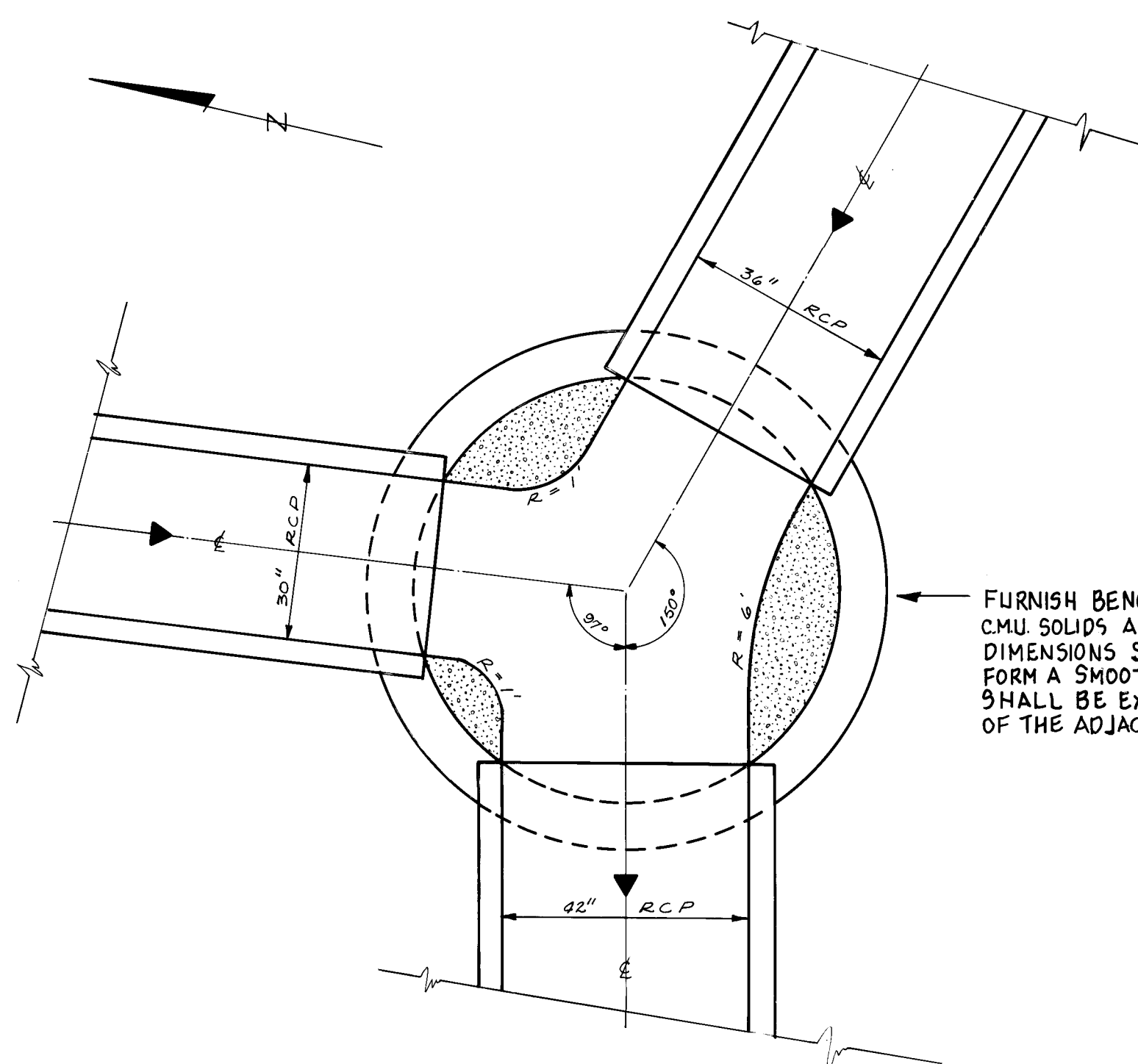
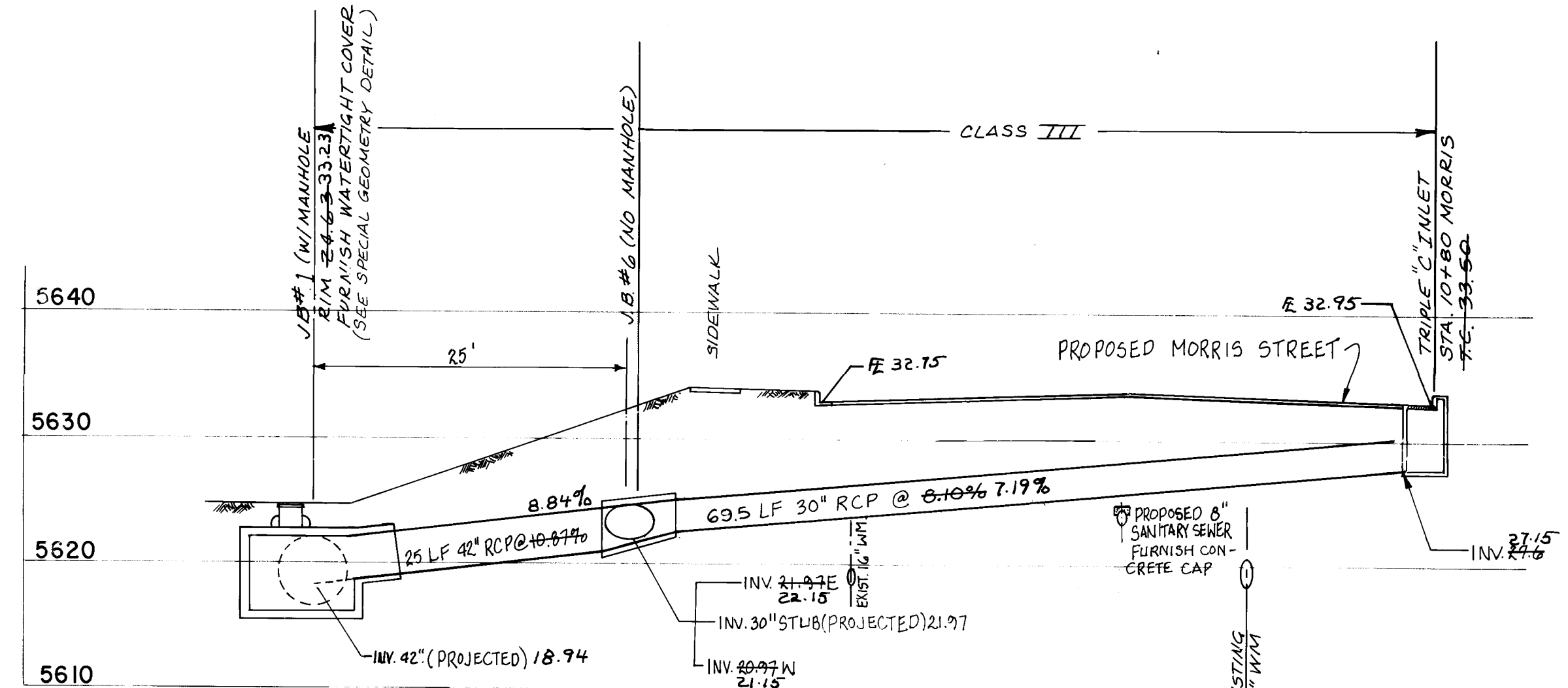
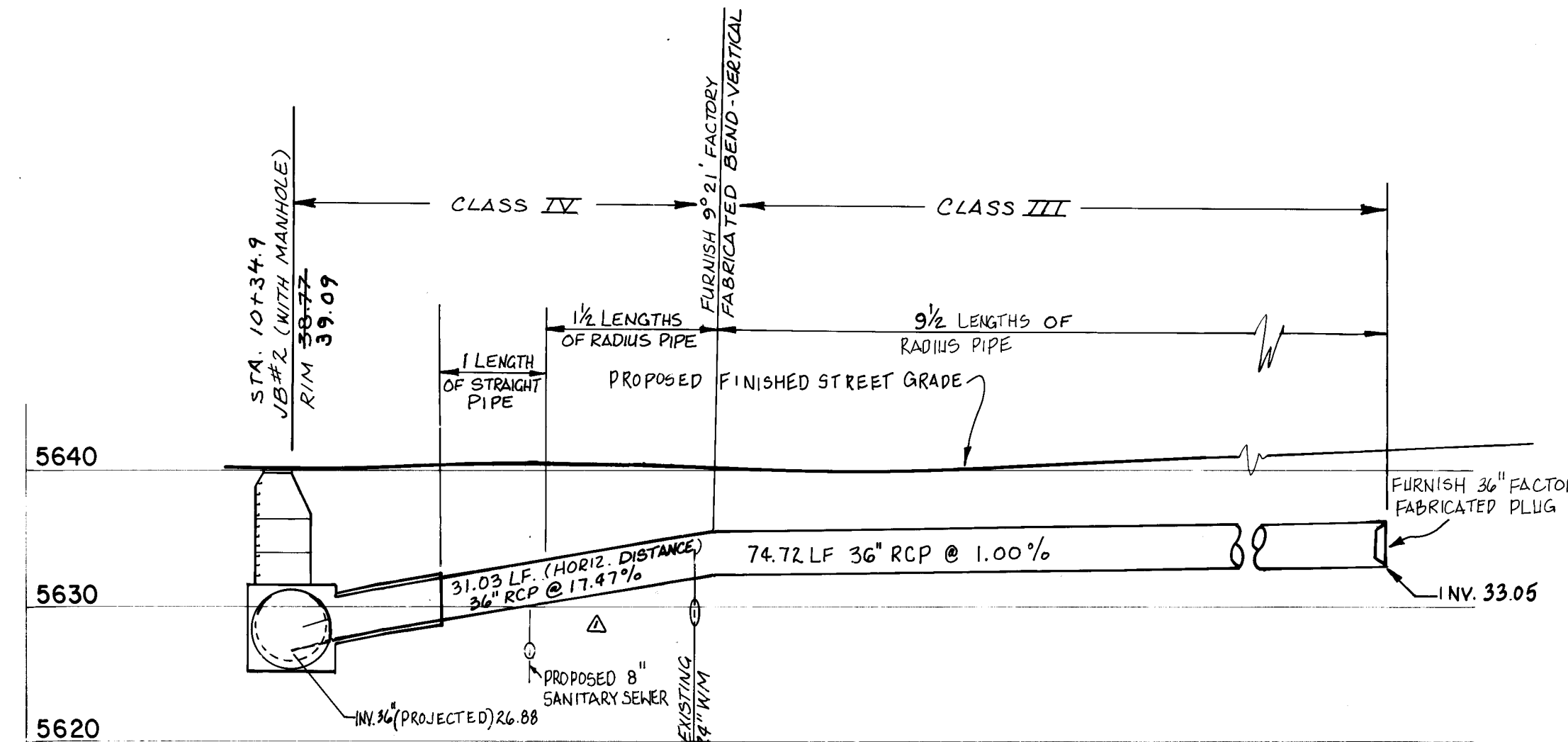
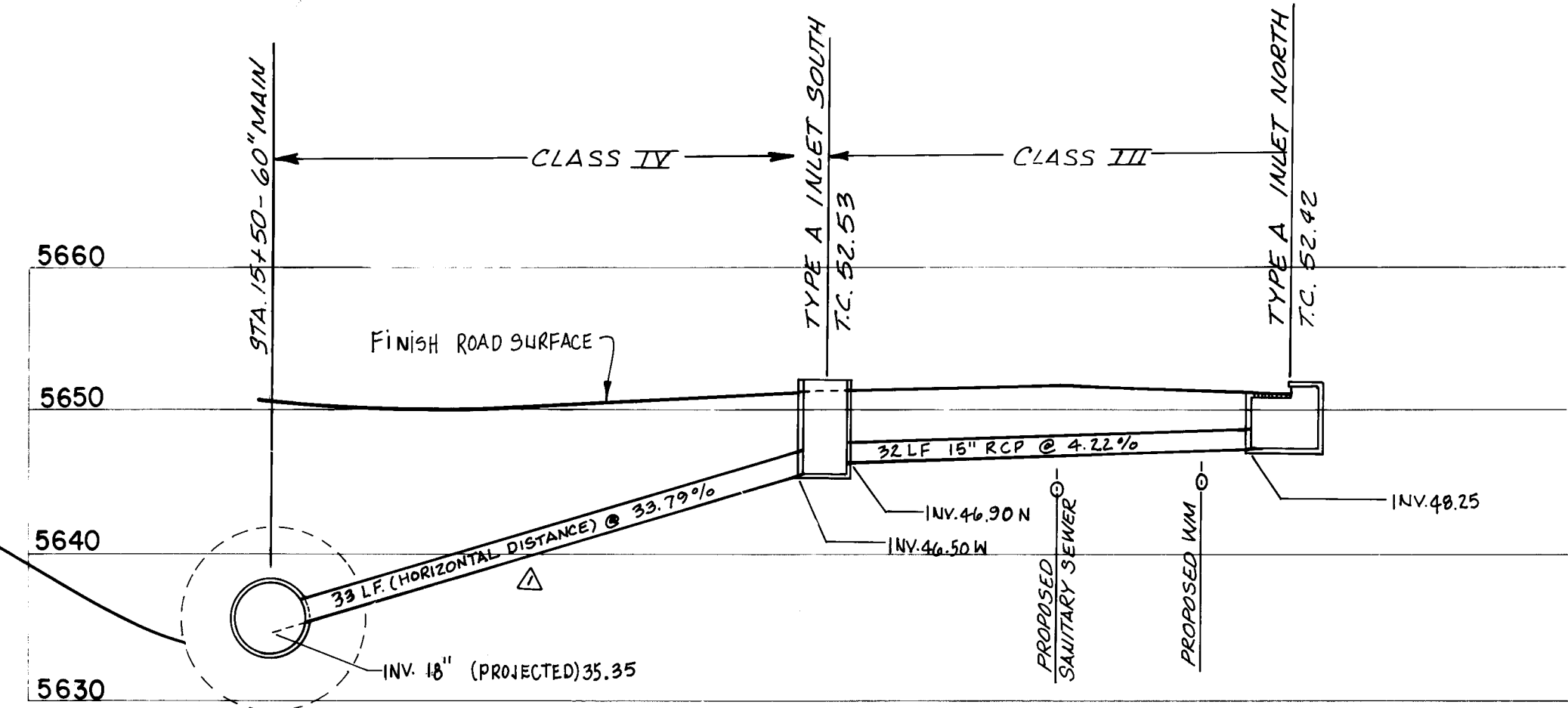
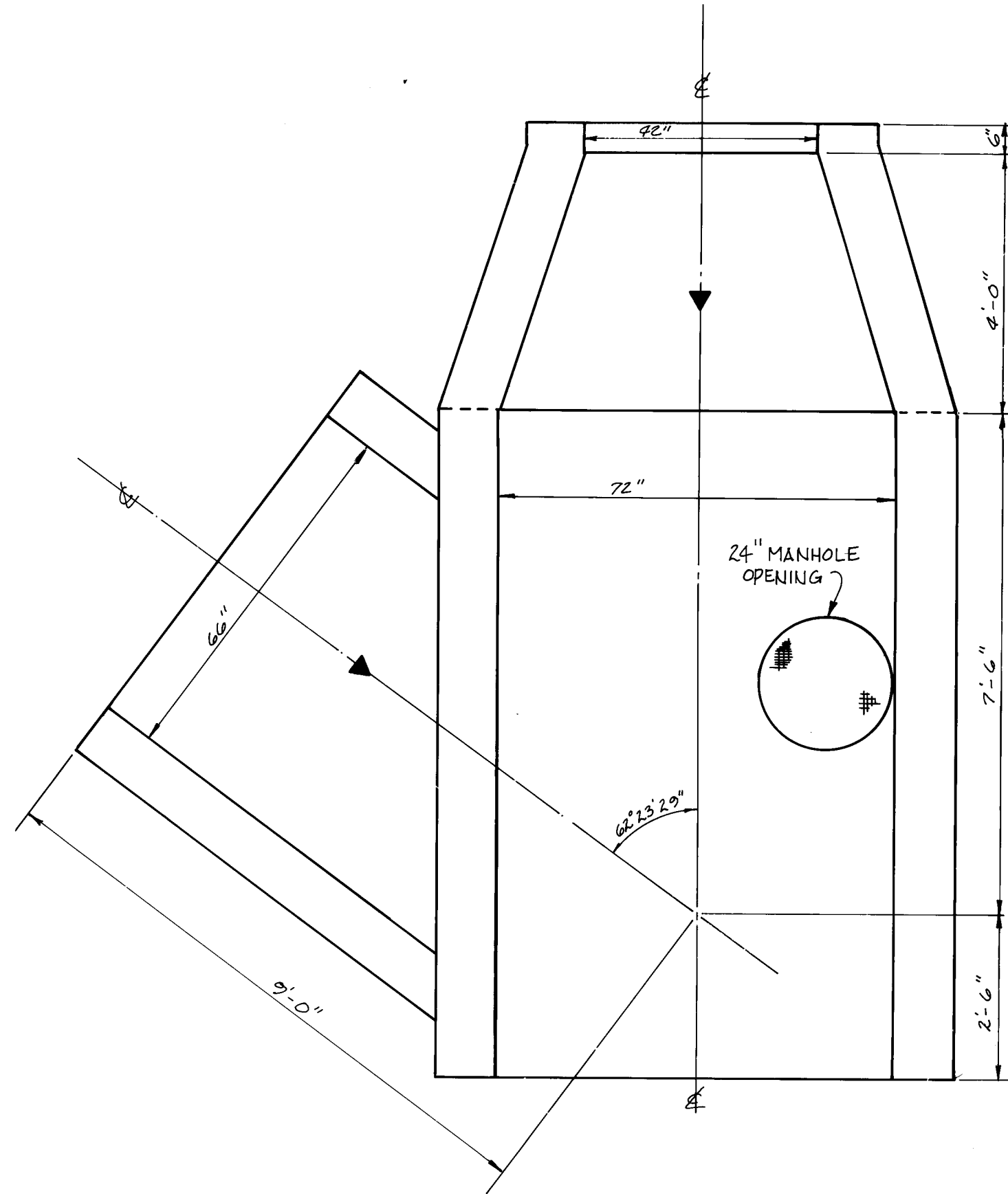
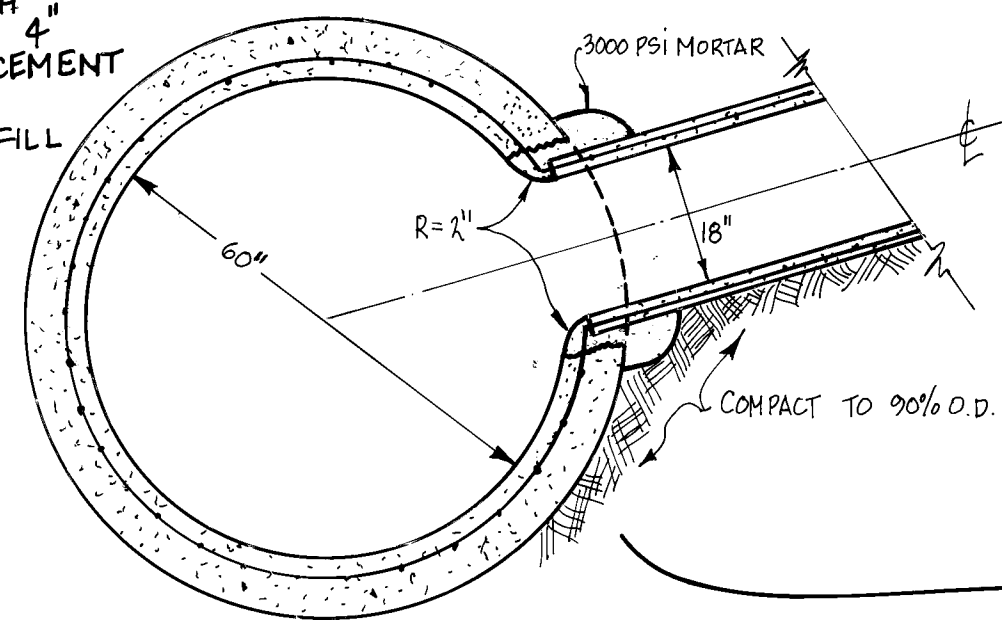
DRAWING
NO.

1332

SHEET 6 OF 12



NOTE: CUT CIRCULAR OPENING IN 60" PIPE WITH CHISEL-TIPPED JACKHAMMER TO A DIAMETER 4" WIDER THAN O.D. OF 18" RCP. EXPOSE REINFORCEMENT IN BOTH PIPE AND SPOT WELD 60" RCP REINFORCEMENT TO 18" RCP REINFORCEMENT THEN FILL ALL VOIDS WITH MORTAR.



FURNISH BENCHWORK CONSTRUCTED OF CMU SOLIDS AND 3000PSI MORTAR TO THE DIMENSIONS SHOWN. BENCHWORK SHALL FORM A SMOOTH "U" SHAPED INVERT AND SHALL BE EXTENDED TO THE ELEVATION OF THE ADJACENT PIPE SOFFIT.

AS BUILT INFORMATION				BENCHMARKS				SURVEY INFORMATION				REFERENCES				REVISIONS			
CONTRACTOR	DATE	INSPECTOR	DATE	CONTRACTOR	DATE	INSPECTOR	DATE	MAP NO.	EST. NO.	W.O. NO.	DATE	MAP NO.	EST. NO.	W.O. NO.	DATE	NO.	DATE	REMARKS	BY

BENCHMARK FOR THIS SUBDIVISION IS LOCATED AT THE NORTHWEST CORNER OF SPAIN ROAD AT REVIL DON DRIVE - "X" CHISELED ON THE SOUTH BONNET BOLT OF A FIRE HYDRANT. ELEVATION = 5640.084

2613320782

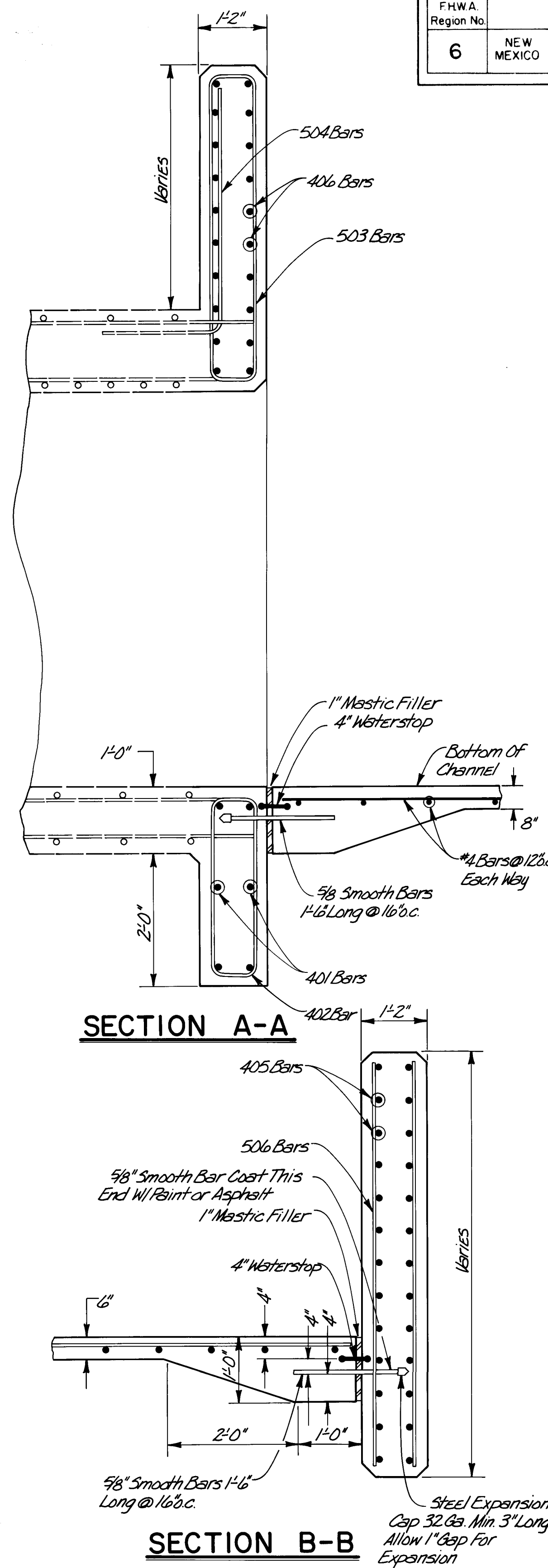
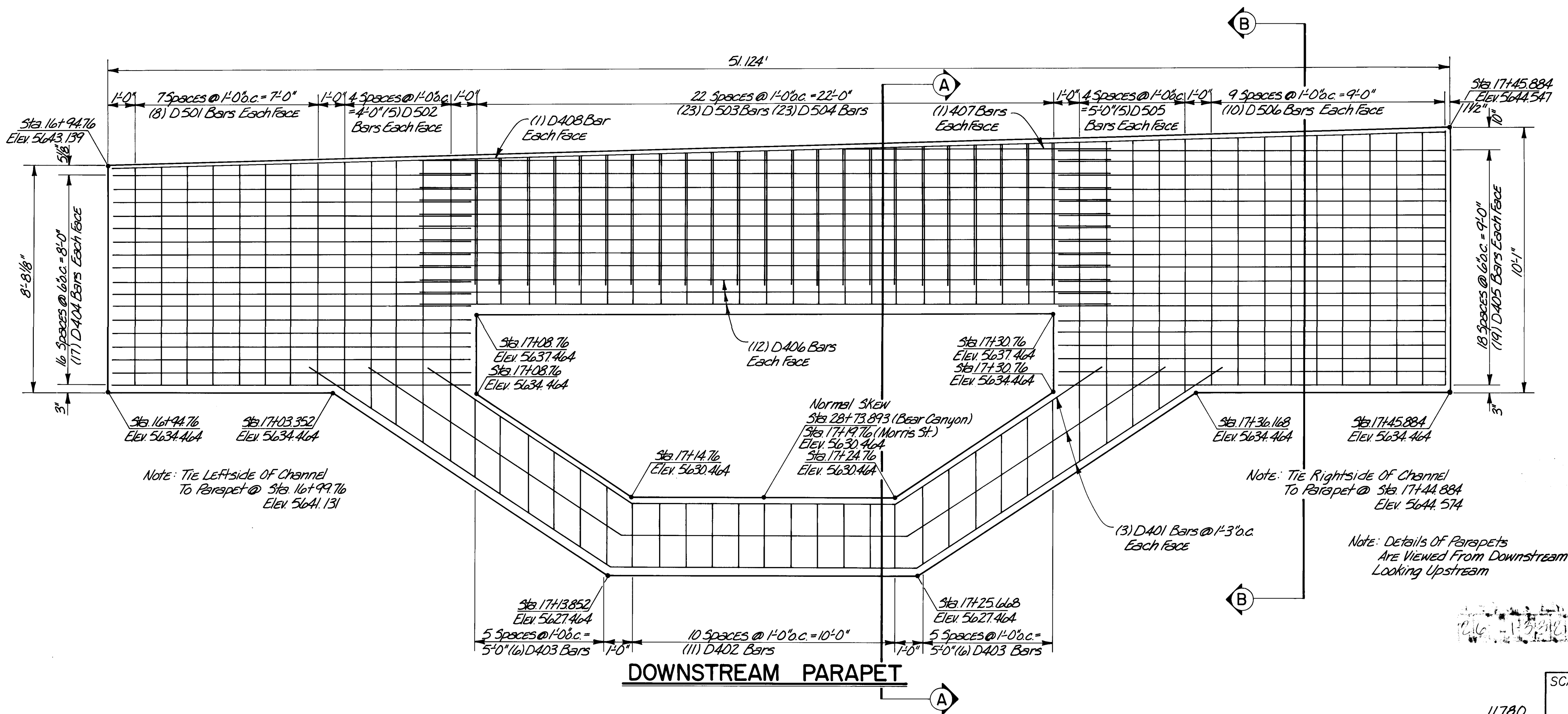
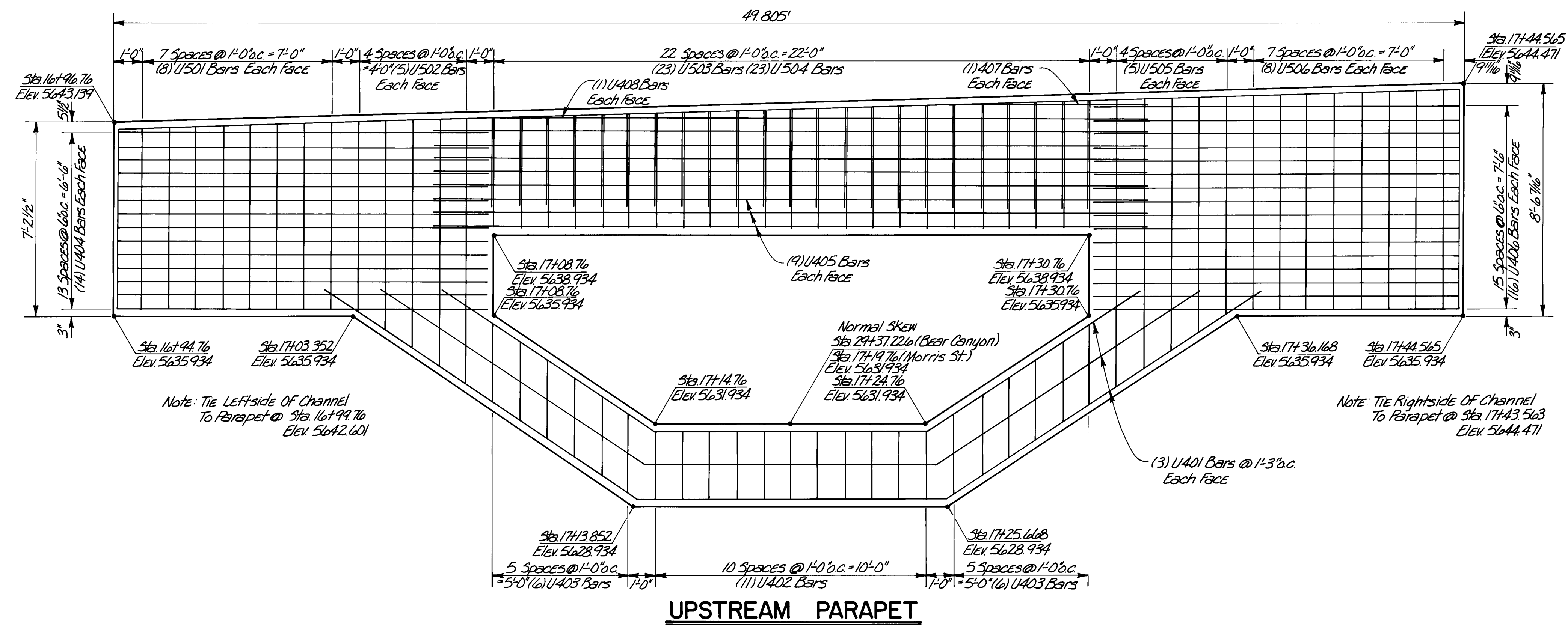
APPROVED REV.1

2613320782

2613320782

APPROVED FOR CONSTRUCTION

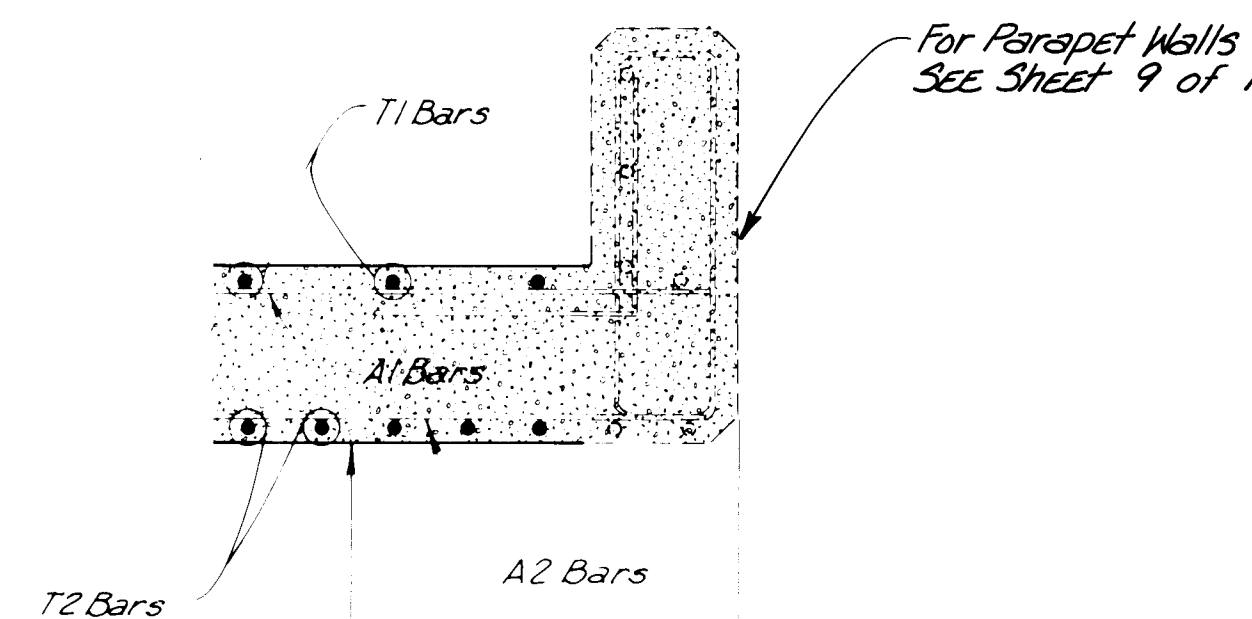
OSO GRANDE SUBDIVISION					
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
PROJECT #3 STORM SEWER, WATERMAIN STUB DETAILS & SECTIONS					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	RMA	2/1/12	Liquid Waste	Shunk	12/22/11
A.C.E.-Design	Shunk	2/1/12	Traffic	N.A.	12/22/11
A.C.E.-Hydrology	Shunk	12/22/11	Water	Shunk	12/22/11
DESIGNED BY KMW DATE OCT 1981					
DRAWN BY KMW DATE OCT 1981					
CHECKED BY KMW DATE 1/24/12					
DRAWING NO. 1332			SHEET 7 OF 12		

[illegible]

PREPARED UNDER THE DIRECTION OF  12-2-81		CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION			
TITLE: PROJECT #3 MORRIS STREET PARAPET WALL DETAIL					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
C.E.	<i>W. White</i>	2/1/82			
ACE DESIGN	<i>W. White</i>	2/1/82	TRAFFIC	N.A. <i>RAA</i>	
PACE MWD	C.M. <i>Enslin</i>	2/1/82			
APPROVED FOR CONSTRUCTION  PACE MWD			DRAWING NO. 1332		
CITY ENGINEER			SHEET 9 OF 12		

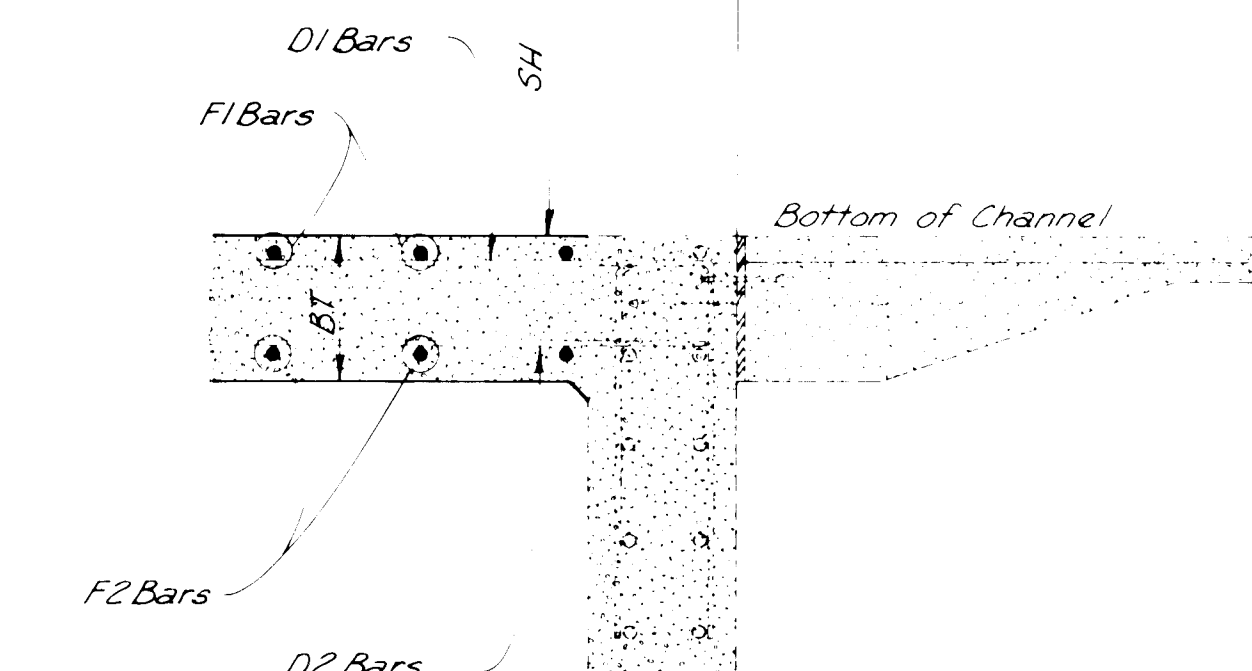
Concrete Volumes
 Barrel = 154.30 cy.
 Upstream Parapet = 16.2 cy.
 Downstream Parapet = 20.0 cy.
 * Total = 190.5 cy.

1. All Concrete Shall Be 4500 psi. 28 Day Concrete As Called For In The Specifications.
2. All Steel Shall Be Grade 60 Deformed Bars As Called For In The Specifications.
3. Box Design Is Based Upon The AASHTO 1977 Specifications Interstate Alternate Loading With Up To 7'-0" Of Cover.
4. Permissible Construction Joint At These Locations
5. 1" Chamfer All Exposed Edges.
6. Vertical Construction Joints Shall Be Keyed Joints Normal To The $\angle$ Of The Structure And Shall Be Located As Approved By The Engineer.
7. All Exposed Surfaces Shall Have A Class II Surface Finish As Specified By The New Standard Specifications For Public Works Construction 1975 Edition.
8. For Specific Bar Details And Lengths See Bar Details Sheet. (Sheet No. 11)
9. For Parapet And Bridge Rail Details. (See Sheet No. 10)



Transition From 2:1 to 1.5:1 Side Slopes
From Sta. 28+38.893 to Sta. 28+73.893

Transition From 1.5:1 to 2:1 Side Slopes
From Sta. 29+37.226 to Sta. 29+72.226



PREPARED UNDER THE DIRECTION OF <i>Daniel Z. Wade</i> 12-2-81		CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION			
		PROJECT # 3 MORRIS STREET TRAPEZOIDAL BOX DETAIL			
APPROVALS <i>C.E.</i> ACE DESIGN <i>ACE DESIGN</i> PREPARED BY <i>ACE DESIGN</i>		ENGINEER <i>R. Wade</i> <i>Wade</i> TRAFFIC <i>Wade</i>		DATE <i>11/1/81</i> <i>11/1/81</i>	
APPROVED FOR CONSTRUCTION <i>R. Wade</i>				N.A. <i>R. Wade</i>	
CITY ENGINEER		DRAWING NO.		SHEET 8 OF 12	
DATE		1332			

TYPICAL TYPE "B" RAIL DETAIL NO SCALE

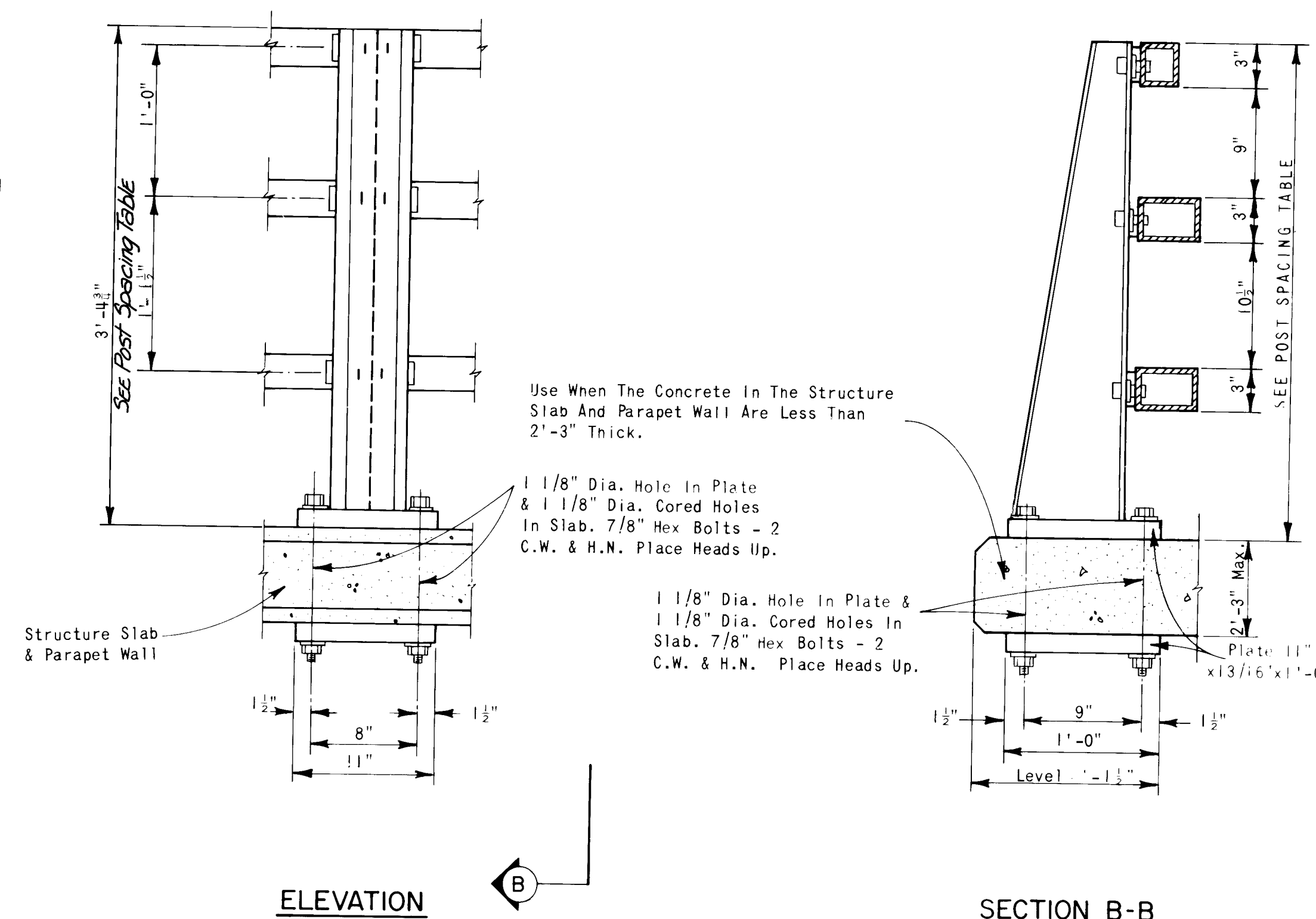
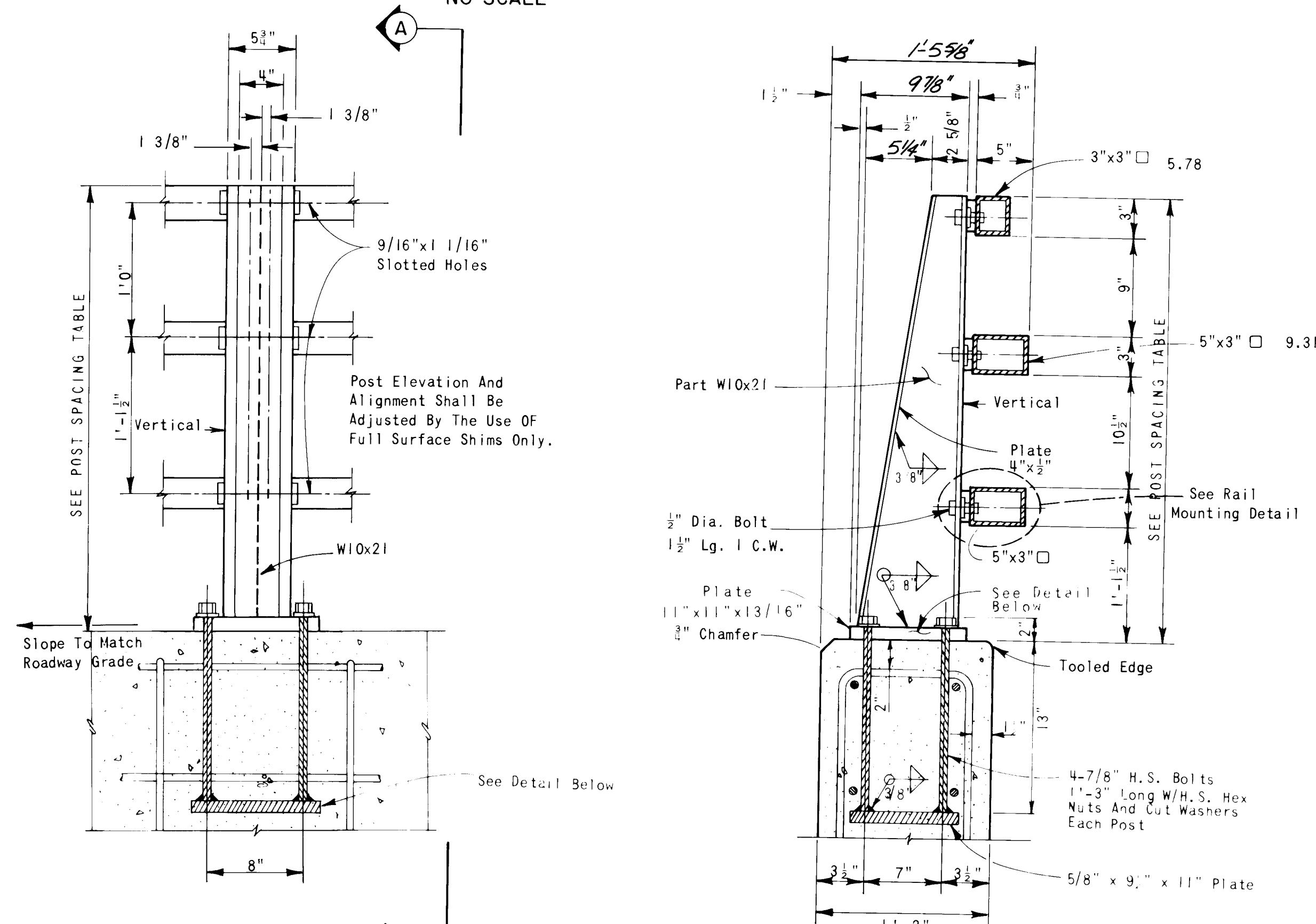
TYPICAL "B" RAIL DETAIL THROUGH RUNDOWN SECTION NO SCALE

FHWA Region No.	NEW MEXICO	SHEET NO.	TOTAL SHEETS
6			

GENERAL NOTES

PLAN	DATE	BY
SURVEYED		
NOTED		
ALIGNED		
CHECKED		
BY		

PROFILE	DATE	BY
SURVEYED		
NOTED		
ALIGNED		
CHECKED		
BY		

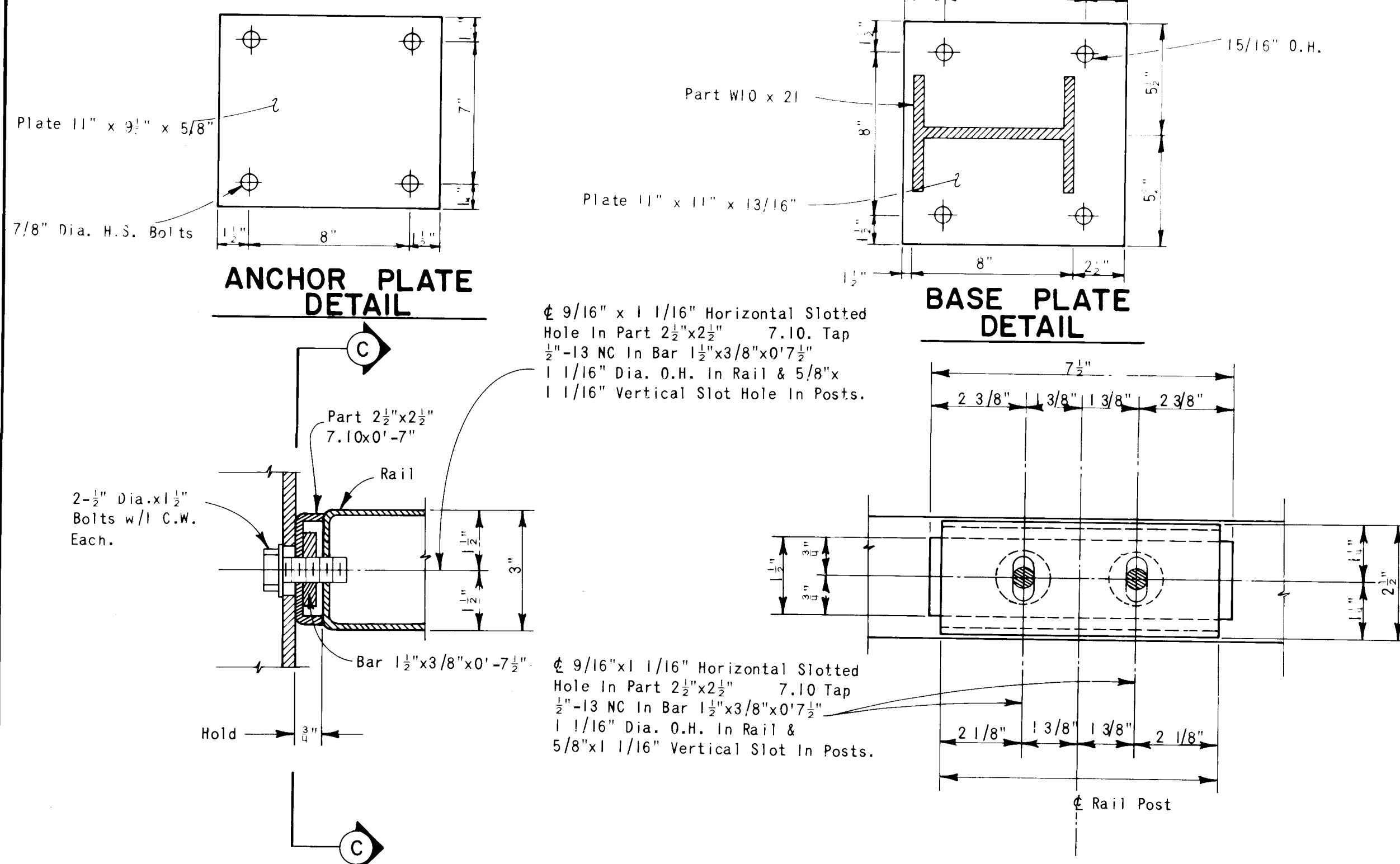


ELEVATION

SECTION A-A

ELEVATION

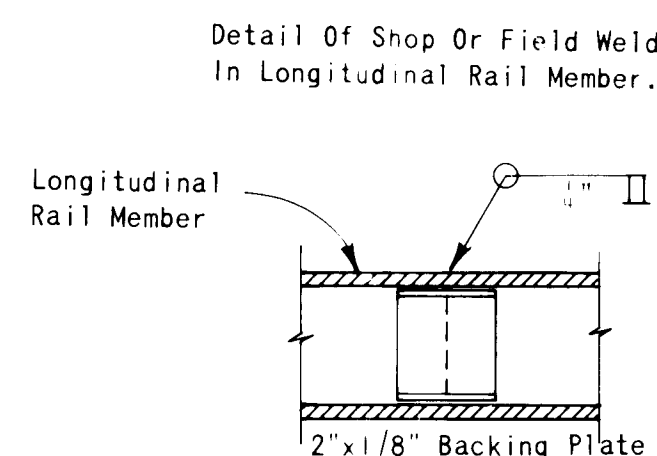
SECTION B-B



RAIL MOUNTING DETAIL
NO SCALE

SECTION C-C
NO SCALE

RAIL END DETAIL
NO SCALE



RAIL SPLICE DETAIL
NO SCALE

POST SPACING TABLE									
STRUCTURE LOCATION	PARAPET LOCATION	RAIL LENGTH	POST 1 STA.	POST 1 HT.	POST 2 STA.	POST 2 HT.	POST 3 STA.	POST 3 HT.	POST 4 STA.
Morris Str.	UPSTREAM	4'-10"	166+96.76	3'-6"	174+59.93	3'-6"	174+59.93	3'-6"	174+59.93
Bear Canyon	DOWNSTREAM	5'-1"	166+96.76	3'-6"	174+59.93	3'-6"	174+59.93	3'-6"	174+59.93
	UPSTREAM								
	DOWNSTREAM								
	UPSTREAM								
	DOWNSTREAM								
	UPSTREAM								
	DOWNSTREAM								
	UPSTREAM								
	DOWNSTREAM								

MAXIMUM POST SPACING TABLE	
Maximum Spacing	TYPE OF STEEL A.S.T.M. DESIGN
8'-6"	5" x 3"
9'-2"	A501
10'-10"	A500 Grade A
	A500 Grade B
	A500 or A501

POST SHIMS
TYPE "B" RAIL
NO SCALE

P = 1'-0" & 0'-11" Q = 0'-4" & 0'-7"
One Shim P = 1'-1 1/2" & One Shim Q = 1'-0"
For Each Type B Rail Post. Post Shims Are To Be Used Between Post And Concrete Where Necessary.

SCALE:
NO SCALE

PREPARED UNDER THE DIRECTION OF
DANIEL W. WOOD
12-2-81

APPROVED FOR CONSTRUCTION
CITY ENGINEER
DATE

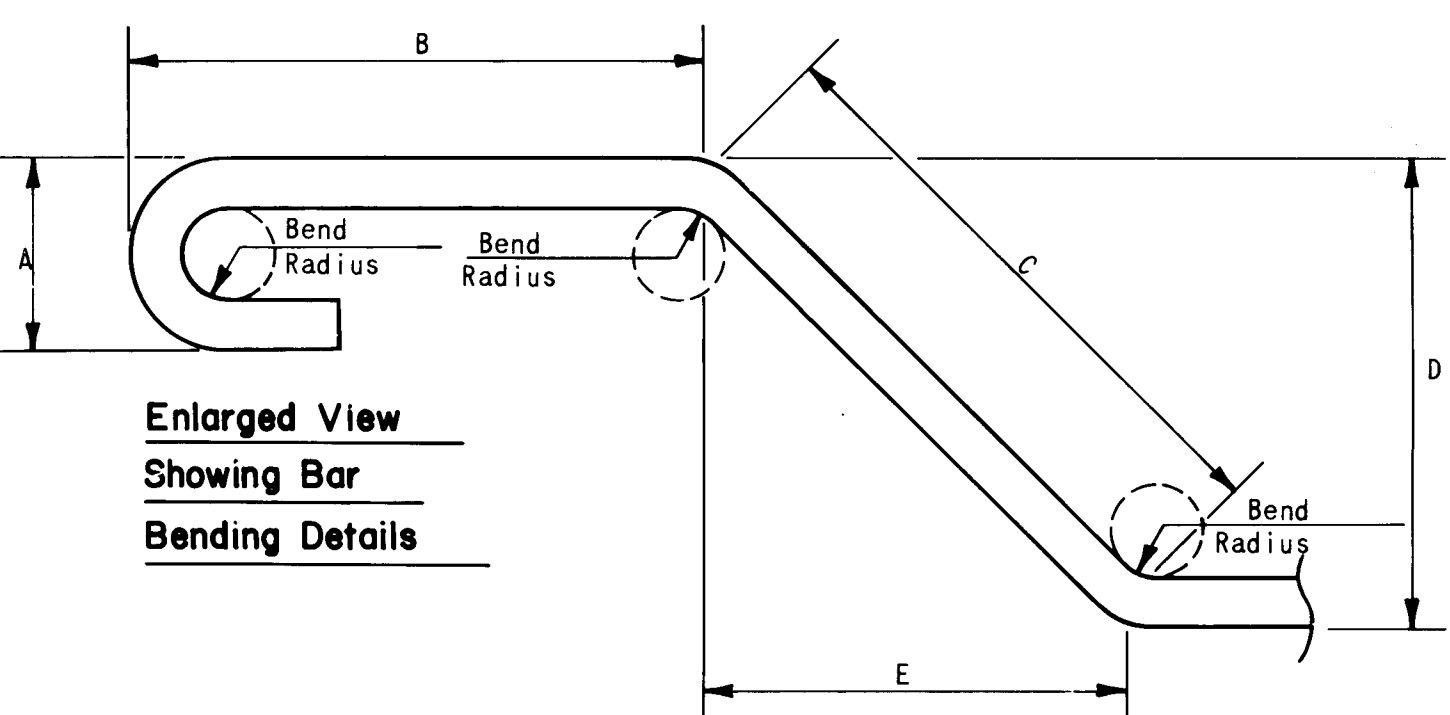
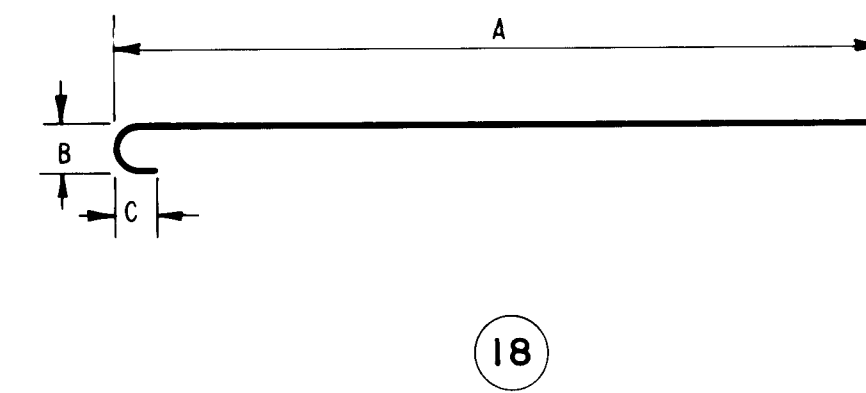
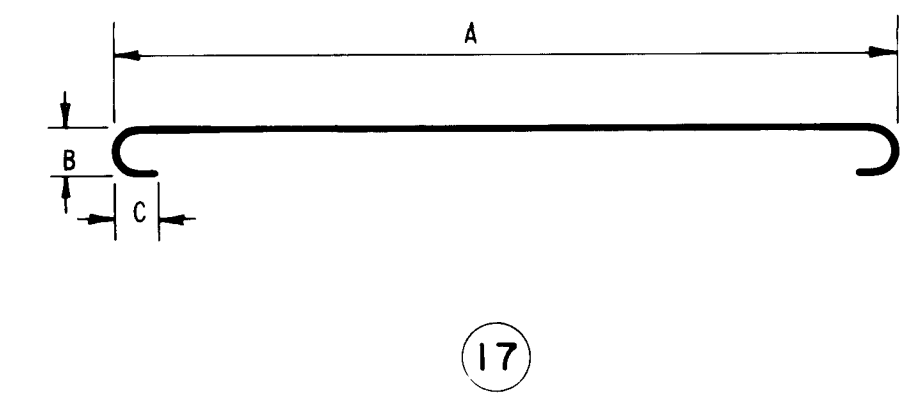
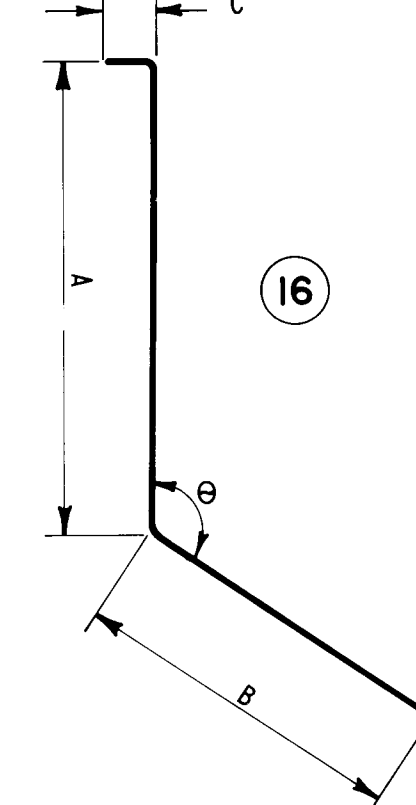
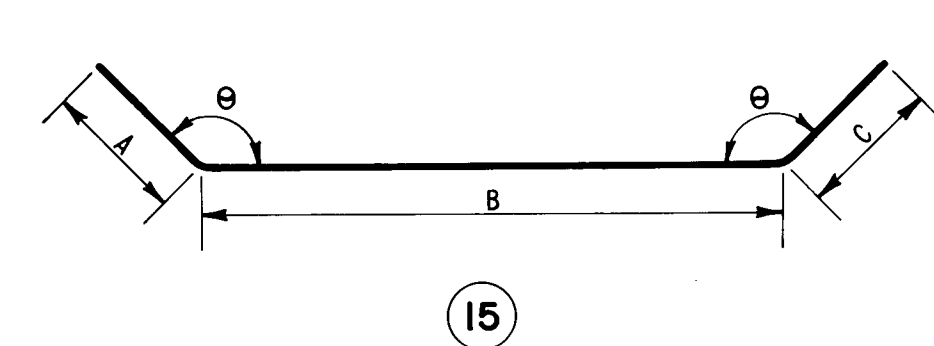
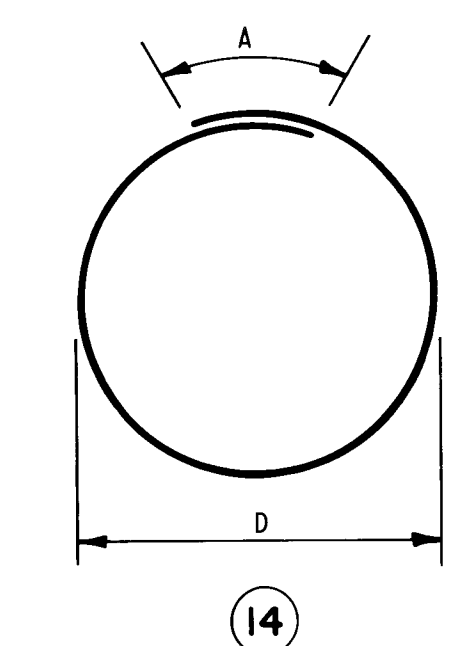
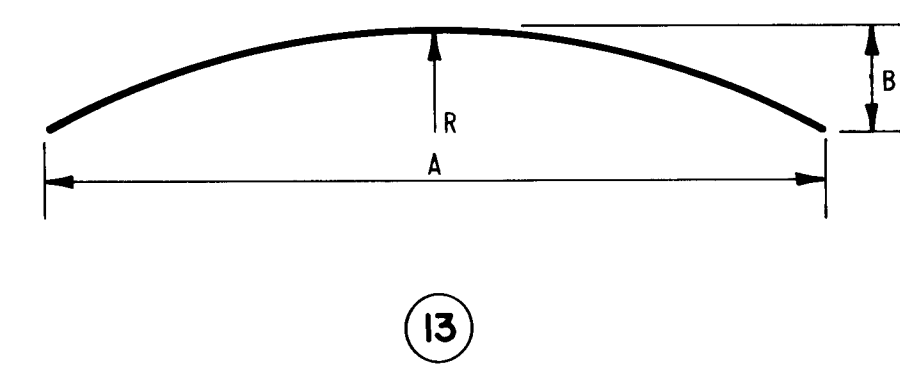
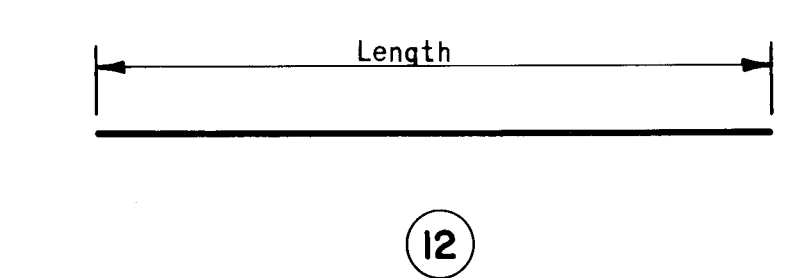
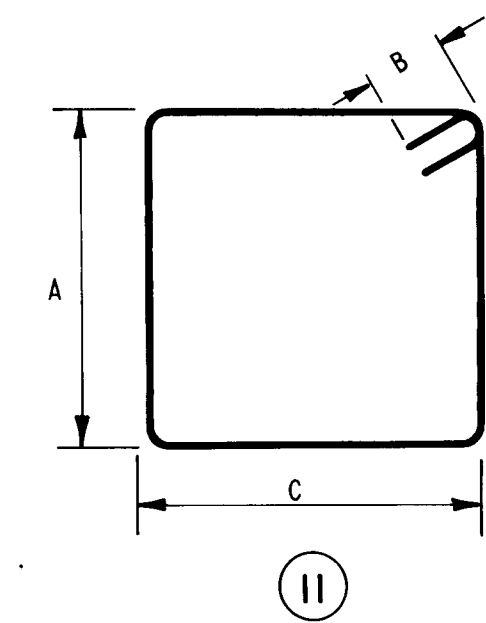
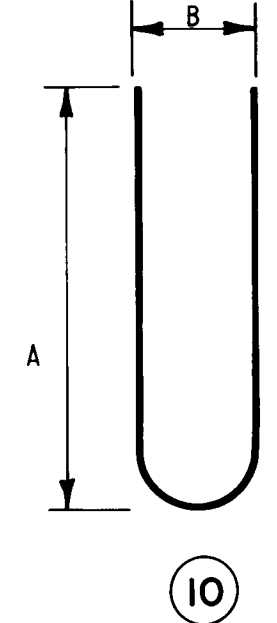
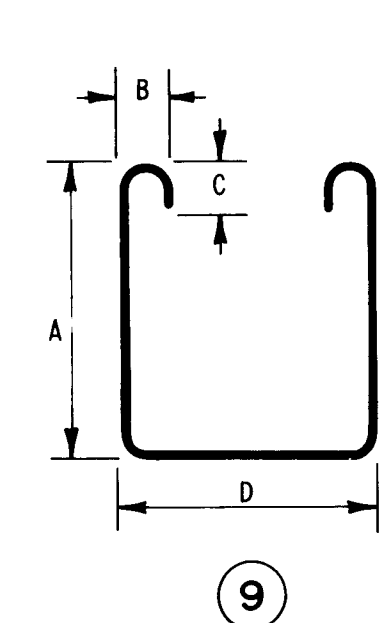
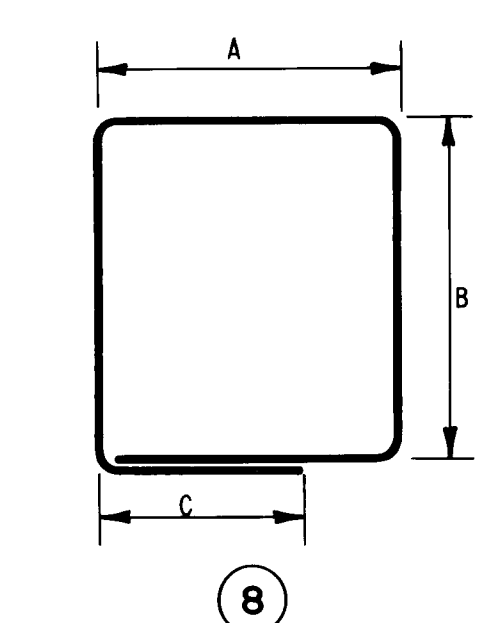
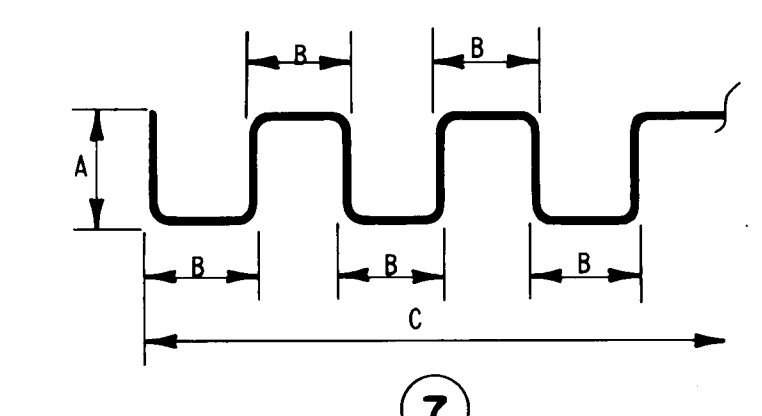
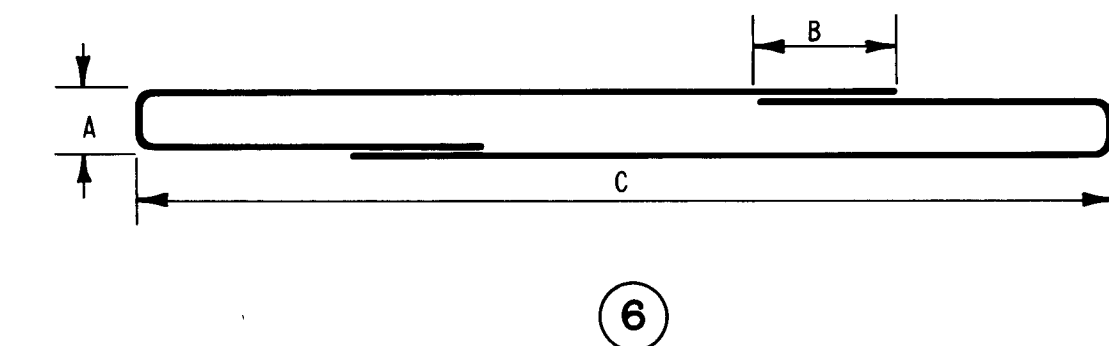
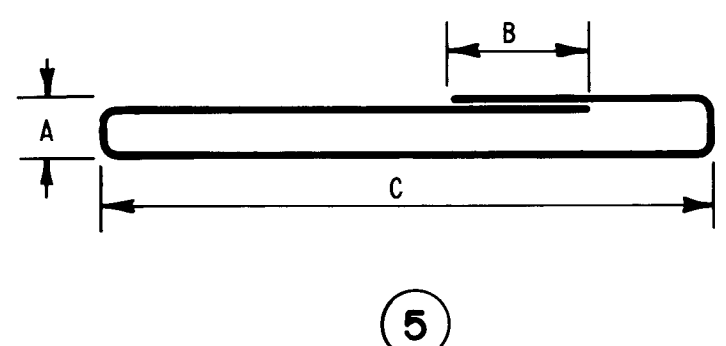
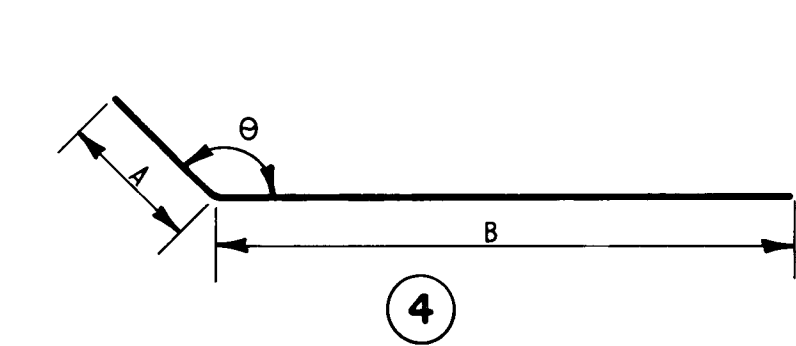
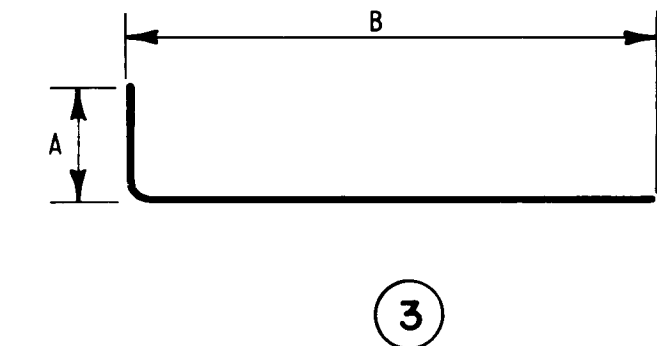
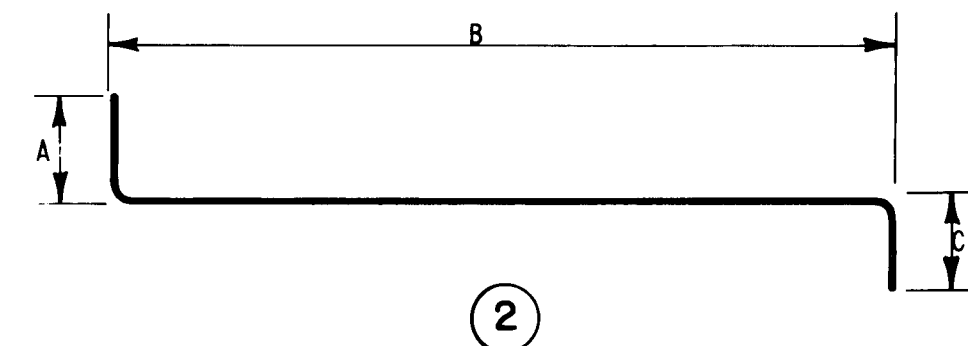
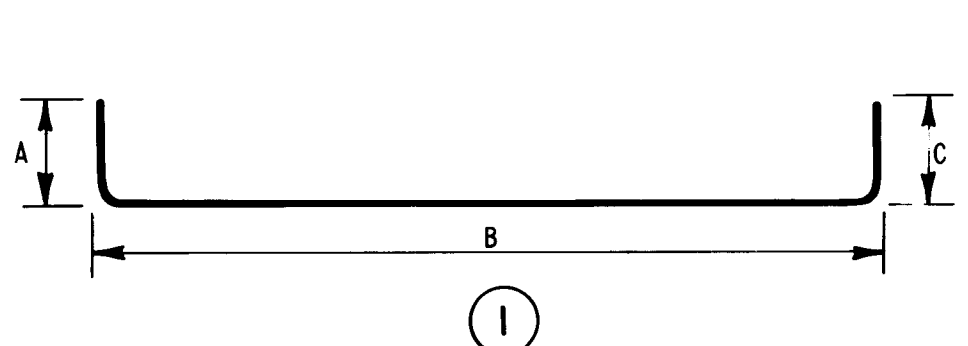
CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
PROJECT # 3 MORRIS STREET TRAPEZOIDAL BOX RAILING DETAIL					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
ACE DESIGN	3/1/81	3/1/81	ACE DESIGN	3/1/81	3/1/81
ACE DESIGN	3/1/81	3/1/81	ACE DESIGN	3/1/81	3/1/81
DRAWING NO. 1332			SHEET 10 OF 12		

PLAN

DATE	BY
SURVEYED	
NOTE BOOK	
NO.	

PROFILE

DATE	BY
SURVEYED	
NOTE BOOK	
NO.	



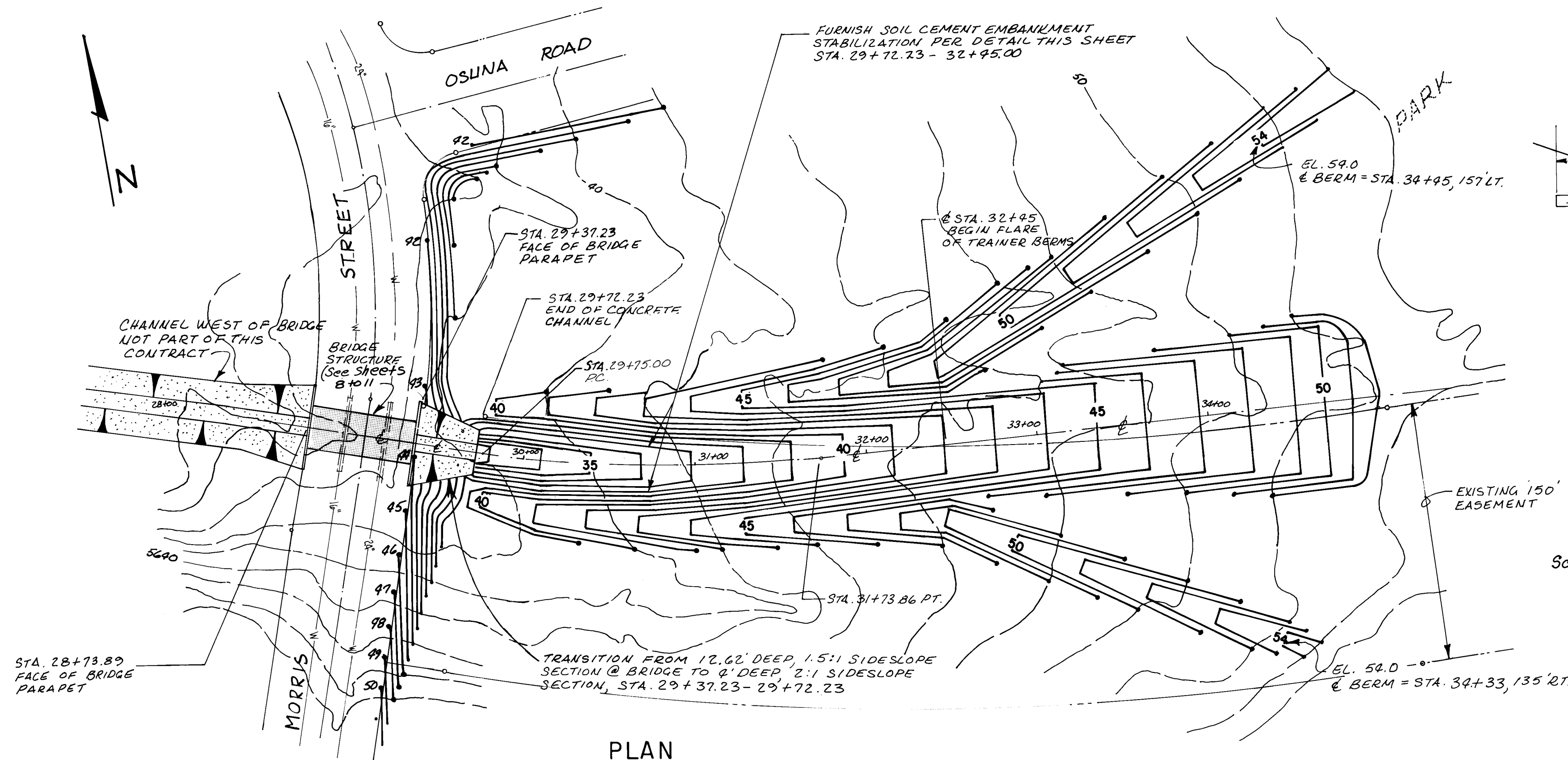
"A" Dimensions On 180° Hooks To Be Shown Only Where Necessary To Restrict Hook Size, Otherwise Standard Hooks Are To Be Used. Where "A" Is Not Shown, "A" Will Be Kept Equal To Or Less Than "D". Where "A" Can Exceed "D", It Should Be Shown. "D" Dimensions On Stirrups To Be Shown Where Necessary To Fit Within Concrete. Where Slope Differs From 45° Dimensions "D" And "E" Must Be Shown.

NO. OF BARS	SIZE	LENGTH FT. IN.	MARK	TYPE	LENGTH VARIES	FROM	TO	A	B	C	D	θ	R
25	4	62' 6"	A1	12									
25	7	62' 6"	A2	12									
6	4	62' 6"	B1	12									
6	4	62' 6"	B2	12									
16	4	62' 6"	C1	12									
16	4	62' 6"	C2	12									
11	4	62' 6"	D1	12									
11	4	62' 6"	D2	12									
61	6	19' 6"	F1	15				4'9"	10'0"	4'9"		146°	
61	4	14' 3"	F2	15				2'0"	10'3"	2'0"		146°	
122	4	8' 7"	S1	16				3'10"	4'0"	9"		124°	
122	6	11' 10"	S2	4				3'10"	8'0"			124°	
120	6	7' 10"	S3	4				3'10"	4'0"			124°	
61	4	24' 2"	T1	12									
121	10	24' 2"	T2	12									
3	4		D401	15	Varies	28'6"	39'2"	4'3"	13'9"	10'0"	11'8"	9'3"	13'9"
17	4	13' 8"	D404	12									
19	4	14' 10"	D405	12									
12	4	26' 4"	D406	12									
1	4	9' 6"	D407	12									
1	4	49' 11"	D408	12									
8	5		D501	12	Varies	8'4"	8'6"						
5	5		D502	12	Varies	8'4"	11'6"						
5	5		D505	12	Varies	12'2"	9'7"						
10	5		D506	12	Varies	9'6"	9'8"						
6	4	8' 6"	D402	5				11"	1'3"	2'7"			
12	4	9' 4"	D403	5				11"	1'3"	3'0"			
23	5		D503	5	Varies	14'5"	15'9"	11"	1'3"	5'6"	6'2"		
23	5		D504	3	Varies	6'9"	7'6"	2'0"	4'9"	5'6"			
3	4		U401	15	Varies	28'6"	39'2"	4'3"	13'9"	10'0"	11'8"	9'3"	13'9"
14	4	13' 8"	U404	12									
16	4	13' 6"	U405	12									
9	4	26' 4"	U406	12									
1	4	8' 3"	U407	12									
1	4	49' 6"	U408	12									
8	5		U501	12	Varies	6'8"	6'11"						
5	5		U502	12	Varies	7'0"	9'11"						
5	5		U505	12	Varies	10'9"	8'3"						
8	5		U506	12	Varies	8'0"	8'2"						
6	4	8' 6"	U402	5				11"	1'3"	2'7"			
12	4	9' 4"	U403	5				11"	1'3"	3'0"			
23	5		U503	5	Varies	11'7"	13'1"	11"	1'3"	4'1"	4'10"		
23	5		U504	3	Varies	5'3"	6'0"	2'0"	3'3"	4'0"			

GENERAL NOTES
1. All Dimensions Are Out To Out Of Bar.
2. Bending Radius For All Bends Shall Be As Shown Below.
BAR SIZE BEND RADIUS
#3 Thru #8 3 Bar Diameters
#9 Thru #11 4 Bar Diameters
#14 Thru #18 5 Bar Diameters
3. Figures In Circle Show Type.
4. The Contractor Is Responsible For Confirming And Correlating All Quantities And Dimensions.

PREPARED UNDER THE DIRECTION OF
James L. Ward
12-2-81
APPROVED FOR CONSTRUCTION
CITY ENGINEER
DATE

CITY OF ALBUQUERQUE
MUNICIPAL DEVELOPMENT DEPARTMENT
ENGINEERING DIVISION
PROJECT #3
MORRIS STREET
TRAPEZOIDAL BOX BAR BENDING DETAIL
APPROVALS ENGINEER DATE APPROVALS ENGINEER DATE
DESIGNED BY DLW DATE 11-81
DRAWN BY SAH DATE 11-81
CHECKED BY DLW DATE 11-81
DRAWING NO. 1332
SHEET 11 OF 12



PLAN

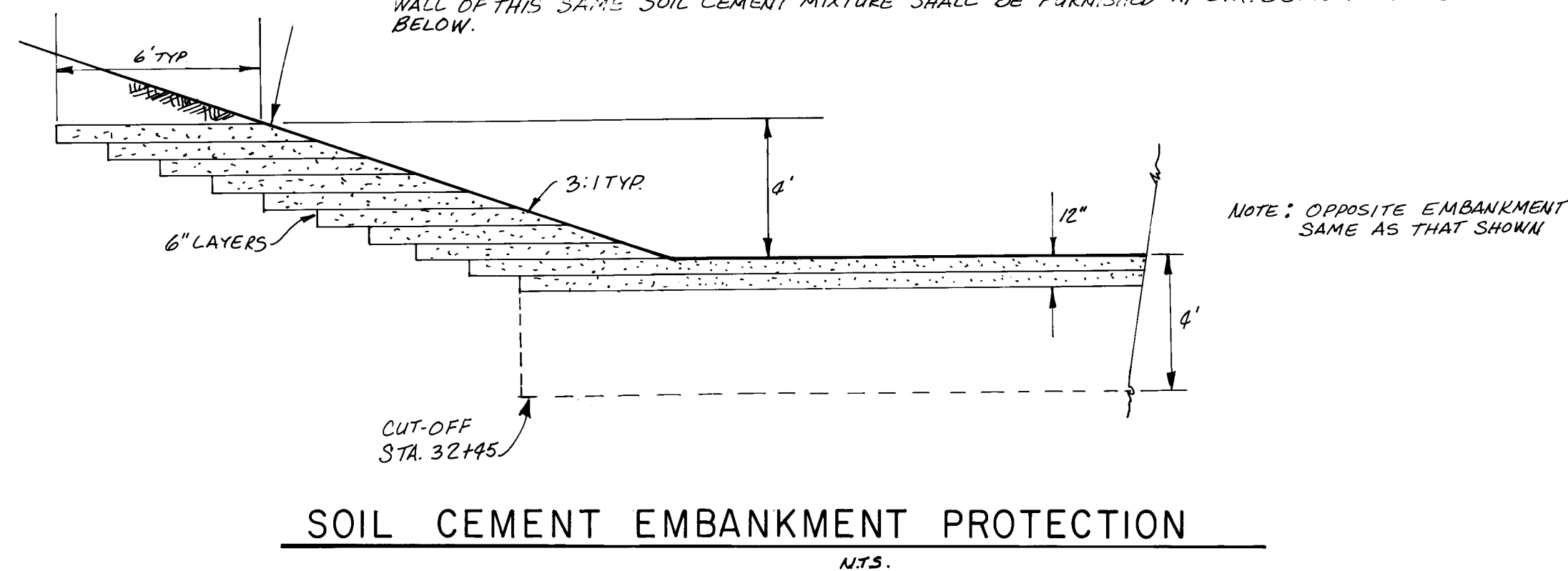
TEMPORARY CHANNEL TRAINER INLET

- NOTES**
- BERMS SHALL HAVE 10' TOP WIDTH AND 3:1 SIDESLOPES ON ALL SIDES.
 - BOTTOM WIDTH OF CHANNEL TRAINER INLET TAPERS IN ACCORDANCE WITH THE FOLLOWING TABLE:
- | STATION | BOTTOM WIDTH | STATION | BOTTOM WIDTH |
|----------|--------------|----------|--------------|
| 29+76.25 | 10 | 33+00 | 40 |
| 31+00.00 | 15 | 34+00 | 62 |
| 32+00.00 | 25 | 36+77.66 | 88 |
- COMPACT ALL FILL TO 90% O.D.D. (MODIFIED) UNLESS OTHERWISE NOTED.

Curve Data (Channel)

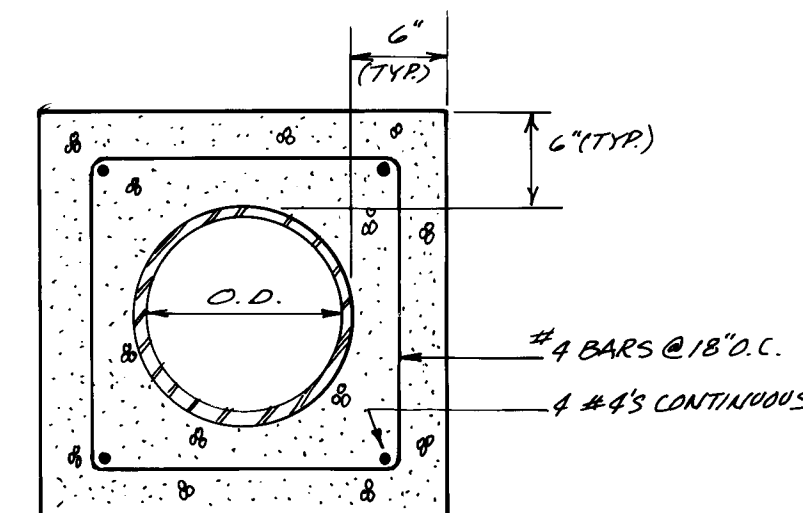
R = 759.58
 L = 198.86'
 Δ = 15°00'00"
 T = 100.00'

SOIL CEMENT EMBANKMENT STABILIZATION: SOIL CEMENT SHALL BE CONSTRUCTED FROM NATIVE GRANULAR SOILS WITH A 5% PORTLAND CEMENT CONTENT (BY WEIGHT) AND THOROUGHLY MIXED W/ WATER TO OPTIMUM MOISTURE CONTENT. MIXTURE SHALL BE PROCESSED IN 6" LIFTS WITHIN 2 HRS. OF MIXING AND COMPACTED TO 95% OPTIMUM DRY DENSITY (MODIFIED) USING SMOOTHED WHEELED VIBRATORY ROLLING EQUIPMENT. EMBANKMENT SHALL BE KEPT MOIST FOR 3 DAYS FOLLOWING PLACEMENT. AS AN ALTERNATE, CONTRACTOR MAY UTILIZE PLANT MIXED CEMENT TREATED BASE PER CURRENT CITY SPECIFICATIONS FOR ARTERIAL PAVEMENT. A 2" THICK X 9" DEEP CUT-OFF WALL OF THIS SAME SOIL CEMENT MIXTURE SHALL BE FURNISHED AT STA. 32+45 PER THE SECTION BELOW.

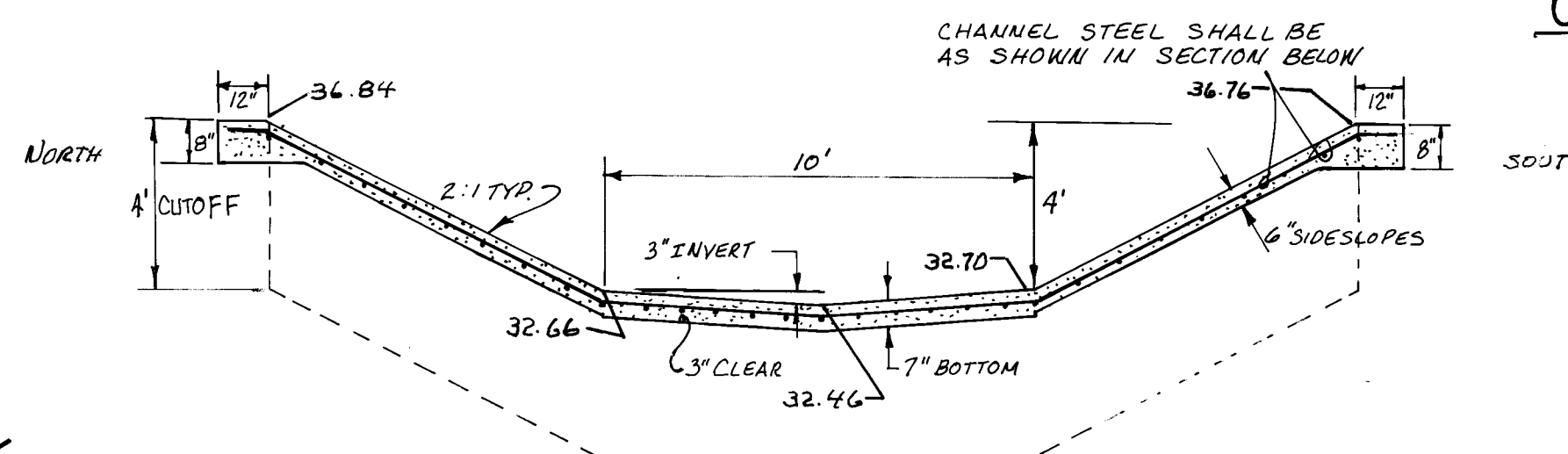


SOIL CEMENT EMBANKMENT PROTECTION

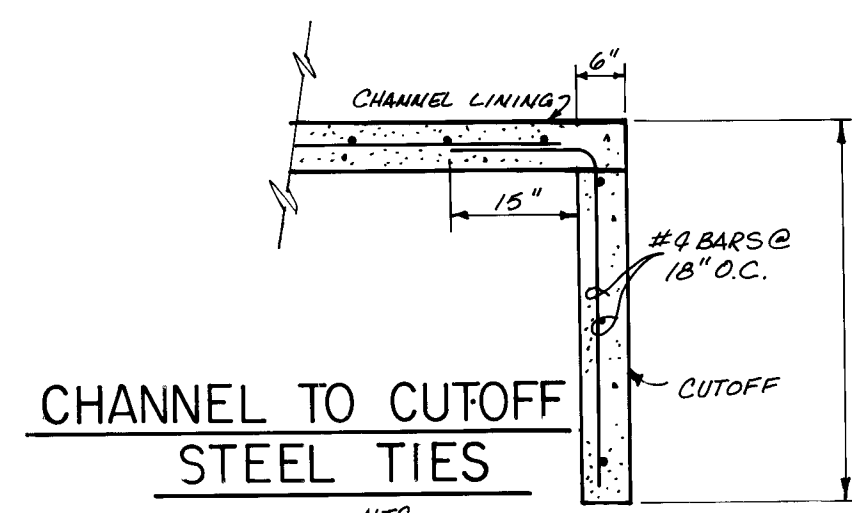
SCALE: 1" = 50 HORIZ.
 1" = 5 VERT.



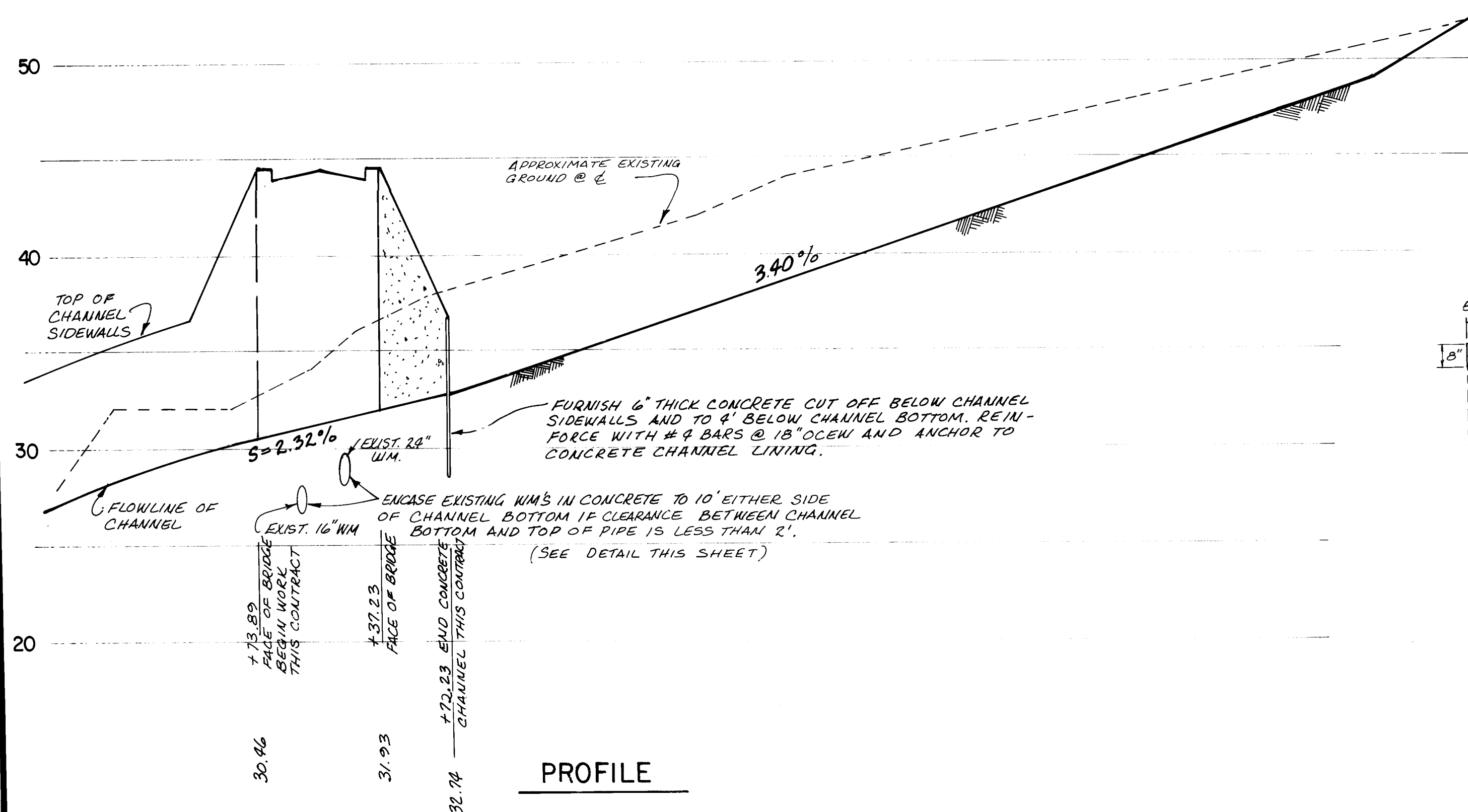
CONCRETE PIPE ENCASEMENT
DETAIL



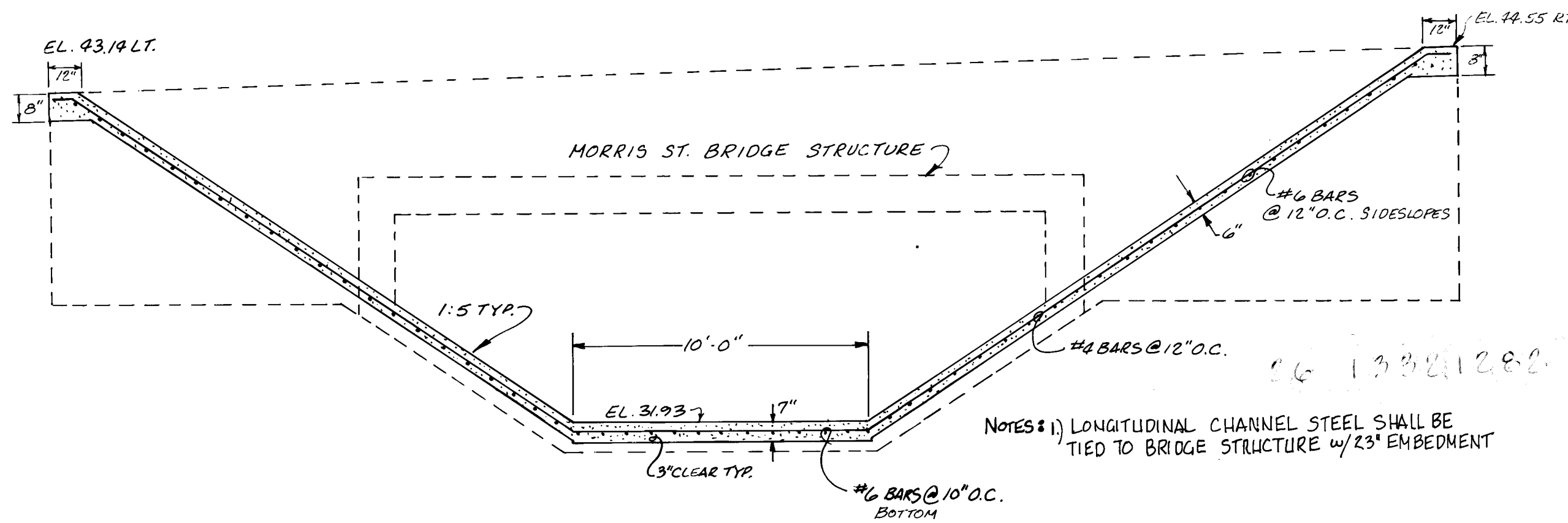
CHANNEL SECTION STA. 29+72.23



CHANNEL TO CUTOFF
STEEL TIES



PROFILE



CHANNEL SECTION - STA. 29+37.23

NOTES: 1) LONGITUDINAL CHANNEL STEEL SHALL BE TIED TO BRIDGE STRUCTURE W/ 23" EMBEDMENT

Kent M. W. Johnson

APPROVED FOR
CONSTRUCTION
[Signature]
CITY ENGINEER DATE

CITY OF ALBUQUERQUE MUNICIPAL DEVELOPMENT DEPARTMENT ENGINEERING DIVISION					
TITLE: BRIDGE INLET PROJECT 3					
APPROVALS	ENGINEER	DATE	APPROVALS	ENGINEER	DATE
City Engineer	<i>[Signature]</i>	2/1/82	Liquid Waste	<i>[Signature]</i>	1/15/82
A.C.E.-Design	<i>[Signature]</i>	2/1/82	Traffic	<i>[Signature]</i>	1/15/82
A.C.E.-Hydrology	<i>[Signature]</i>	1/14/82	Water	<i>[Signature]</i>	1/15/82
DESIGNED BY K.M.W. DATE 1/11/82			DRAWN BY W.W.W. DATE " "		
CHECKED BY C.M.W. DATE " "			REVISIONS		
DRAWING NO. 1332			SHEET 12 OF 12		