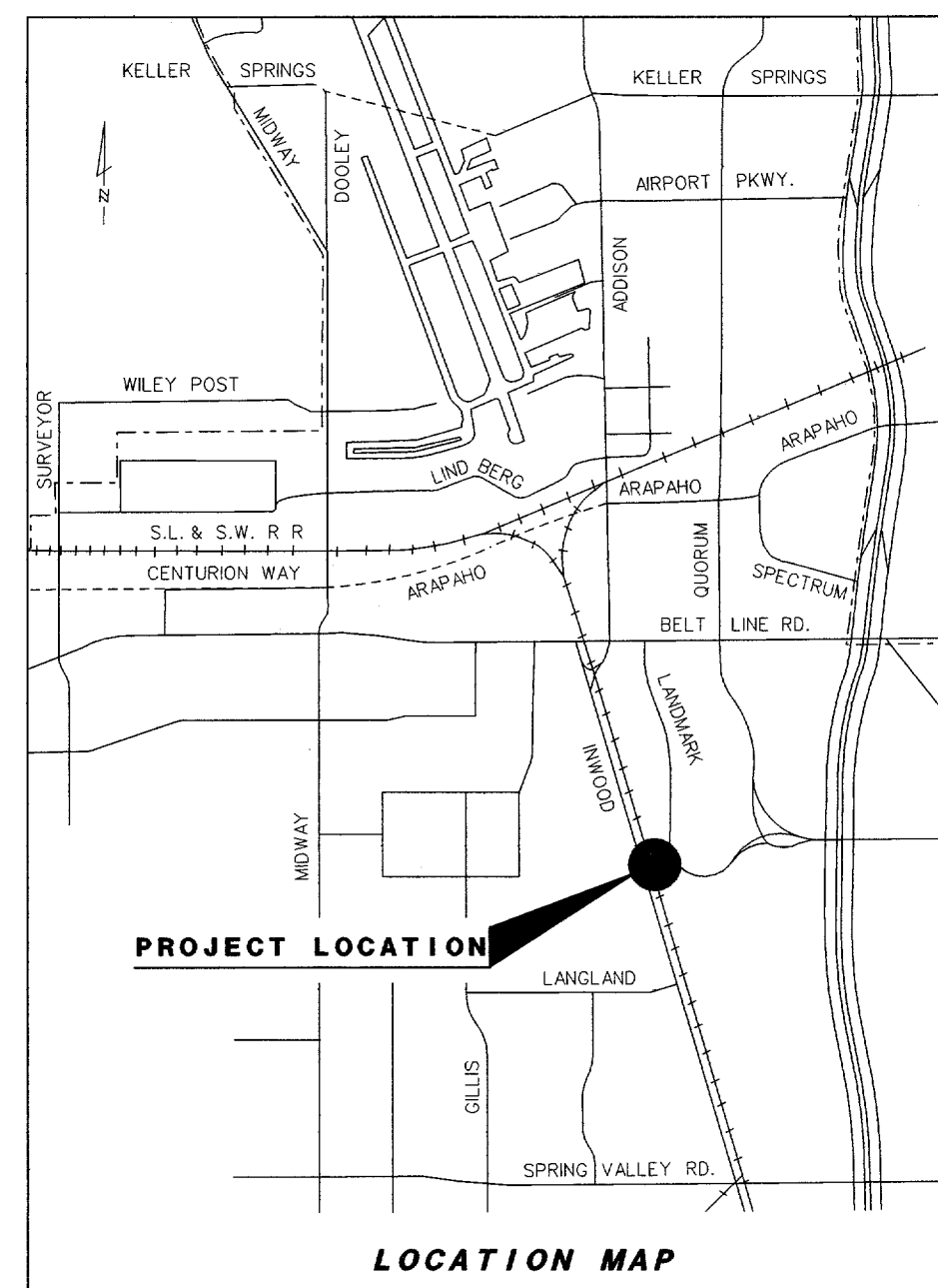


ROADWAY, DRAINAGE AND TRAFFIC SIGNAL DESIGN PLANS
 INWOOD / SOUTH QUORUM ACCESS - PHASE II
 INWOOD CONNECTION

INDEX OF DRAWINGS

SHEET NO.	TITLE
1	COVER SHEET
2-3	TYPICAL SECTIONS
4	GENERAL NOTES AND QUANTITY SUMMARY
5-6	TRAFFIC CONTROL PLAN
7	HORIZONTAL CONTROL DATA
8-10	PLAN AND PROFILE
11	DRAINAGE AREA MAP
12-13	DRAINAGE PLAN AND PROFILE
14	SIGNING AND PAVEMENT MARKING
15	MISCELLANEOUS DETAILS
16	PEDESTRIAN FACILITY CURB RAMPS (PED-02)
16A	PEDESTRIAN FACILITY SIDEWALKS (PED-02)
16B	PEDESTRIAN FACILITY INTERSECTION LAYOUTS AND DETECTABLE WARNINGS (PED-02)
17	MANHOLE TYPE M (MH-M)
18	INLET DETAILS
18A	CURB INLET TYPE C AND EXTENSION TYPE E
19	PRECAST SAFETY END TREATMENT TYPE II (PSET-RC)
20	PAVEMENT MARKINGS (PM-WA(FTW))
21	TEMPORARY EROSION CONTROL (EC(1)-93)
22	TEMPORARY EROSION CONTROL (EC(2)-93)
23	TEMPORARY EROSION CONTROL (EC(6)-93)
24-25	CROSS SECTIONS
26	SIGNAL LAYOUT PLAN
27	SIGNAL LAYOUT TABLES
28	TRAFFIC SIGNAL HEAD DETAILS
29	TRAFFIC SIGNAL POLE FOUNDATIONS
30	GROUND BOX INSTALLATION DETAILS
31	TRANSFORMER BASE DETAILS FOR SIGNAL POLES

BID No.



MAYOR
R. Scott Wheeler

CITY COUNCIL
Bob Barrett
Joe Chow
Diane Mallory
Fred Silver
Glynda Turner
Cathy Ways

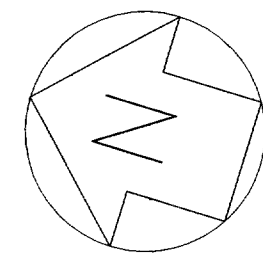
CITY MANAGER:
Ron Whitehead

DIRECTOR OF PUBLIC WORKS
Michael E. Murphy, P.E.



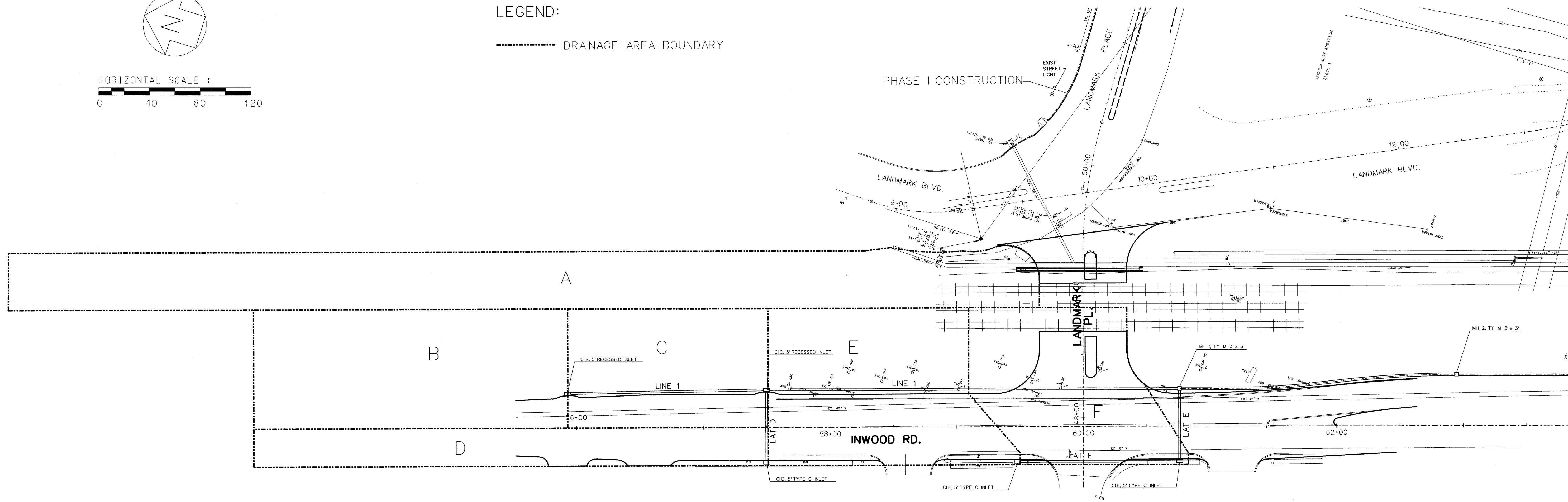
PARSONS

15770 N. DALLAS PKWY., SUITE 500 • DALLAS, TEXAS 75248
 (972) 991-1900 • FAX: (972) 490-9261



HORIZONTAL SCALE :
0 40 80 120

LEGEND:
----- DRAINAGE AREA BOUNDARY



RUNOFF COMPUTATIONS

DA ID	TOTAL AREA AC	Total CA	WEIGHTED C	SUB-AREA			Tc Min.	I-25 IN/HR	Q-25 CFS
				PAVING C=0.95 AC	COMMERCIAL C=0.95 AC	RAILROAD YARD C=0.40 AC			
A	0.847	0.339	0.40			0.847	15	7.77	2.63
B	0.536	0.284	0.53	0.126		0.410	15	7.77	2.21
C	0.341	0.194	0.57	0.105		0.236	15	7.77	1.51
D	0.280	0.266	0.95	0.219	0.060		15	7.77	2.06
E	0.481	0.314	0.65	0.206	0.015	0.260	15	7.77	2.44
F	0.378	0.314	0.83	0.289	0.007	0.081	15	7.77	2.44

STORM SEWER COMPUTATIONS

LINE	FROM	TO	DRAINAGE AREA NO	TOTAL D.A. (AC)	TOTAL C A	LGTH (FT)	TIME OF CONCENTRATION (MINUTES)		FREQ (YRS)	I-25 (IN/HR)	Q-25 (CFS)	DESIGN			REMARKS		
							ALONG SEWER LINE	INLET TIME				USED IN DES	DIA. (IN)	SLOPE PIPE %		H.G.	CAP. (CFS)
LINE 1	CIB	CIC	B	0.54	0.28	157.08						18	0.82	627.52	10.30	4.73	
	CIC	MH 1	B-D	1.16	0.74	326.00		15.0	25	7.77	5.78	18	0.86	627.46	10.53	5.94	
	MH 1	MH 2	B-F	2.02	1.37	216.48		15.0	25	7.77	10.66	24	0.60	626.62	18.98	4.93	
	MH 2	EX. MH	B-F	2.02	1.37	292.51		15.0	25	7.77	10.66	24	0.85	626.20	22.59	4.93	
														625.69			
LAT D	CID	CIC	D	0.28	0.27	59.33		15.0	25	7.77	2.06	18	0.84	627.51	10.43	4.63	
														627.49			
LAT E	CIE	CIF	E	0.48	0.31	128.09		15.0	25	7.77	2.44	18	0.46	626.82	7.72	3.83	
	CIF	MH 1	E-F	0.86	0.63	59.33		15.0	25	7.77	4.88	18	0.73	626.76	9.72	5.52	
														626.65			

STATE OF TEXAS
WEIDONG LI
84718
LICENSED PROFESSIONAL ENGINEER
Weidong Li
5/12/03

INLET COMPUTATIONS

INLET NO.	LOCATION	DA NO.	CA	RUNOFF COMPUTATIONS				CURB INLET DESIGN														REMARKS		
				TIME OF CONCENTRATION ACTUAL (MIN)	DESIGN (MIN)	DESIGN FREQ. (YRS)	I (IN/HR)	Qa (CFS)	CARRY OVER (CFS)	TOTAL Qa (CFS)	Z	Z/N	S (%)	Y (FT)	PONDED WIDTH Y*Z (FT)	A (FT)	QI (CFS)	La=Qa/QI	L (FT)	L/La	A/Y		Q/Qa	Q (CFS)
B	55+93.00, 25.55' LT	B	0.284	15.0	25	7.77	2.20	0.00	2.20	50	3846	0.80	0.19	9.4	0.42	0.65	3.4	5	1.47	2.25	1.00	2.20	0.00	
C	57+50.00, 28.00' LT	C	0.194	15.0	25	7.77	1.51	0.00	1.51	50	3846	0.80	0.16	8.1	0.42	0.62	2.4	5	2.06	2.59	1.00	1.51	0.00	
D	57+50.00, 28.00' RT	D	0.266	15.0	25	7.77	2.06	0.00	2.06	50	3846	0.80	0.18	9.1	0.42	0.64	3.2	5	1.56	2.30	1.00	2.06	0.00	
E	59+48.00, 28.00' RT	E	0.314	15.0	25	7.77	2.44	0.00	2.44	50	3846	1.18	0.18	9.0	0.42	0.64	3.8	5	1.31	2.32	1.00	2.44	0.00	
F	60+76.00, 27.63' RT	F	0.314	15.0	25	7.77	2.44	0.00	2.44	50	3846	1.18	0.18	9.0	0.42	0.64	3.8	5	1.31	2.33	1.00	2.44	0.00	



15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900

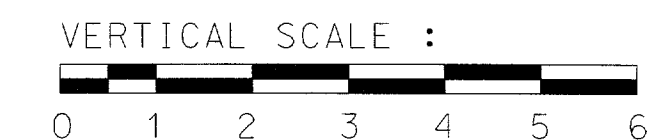
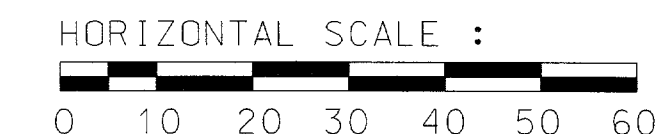
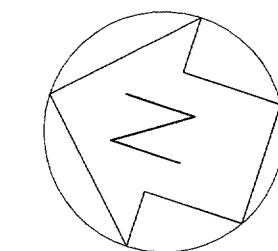
DRAINAGE AREA MAP

INWOOD CONNECTION
DEPARTMENT OF PUBLIC WORKS
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
W.L.	C.W.W.	05/12/03				11

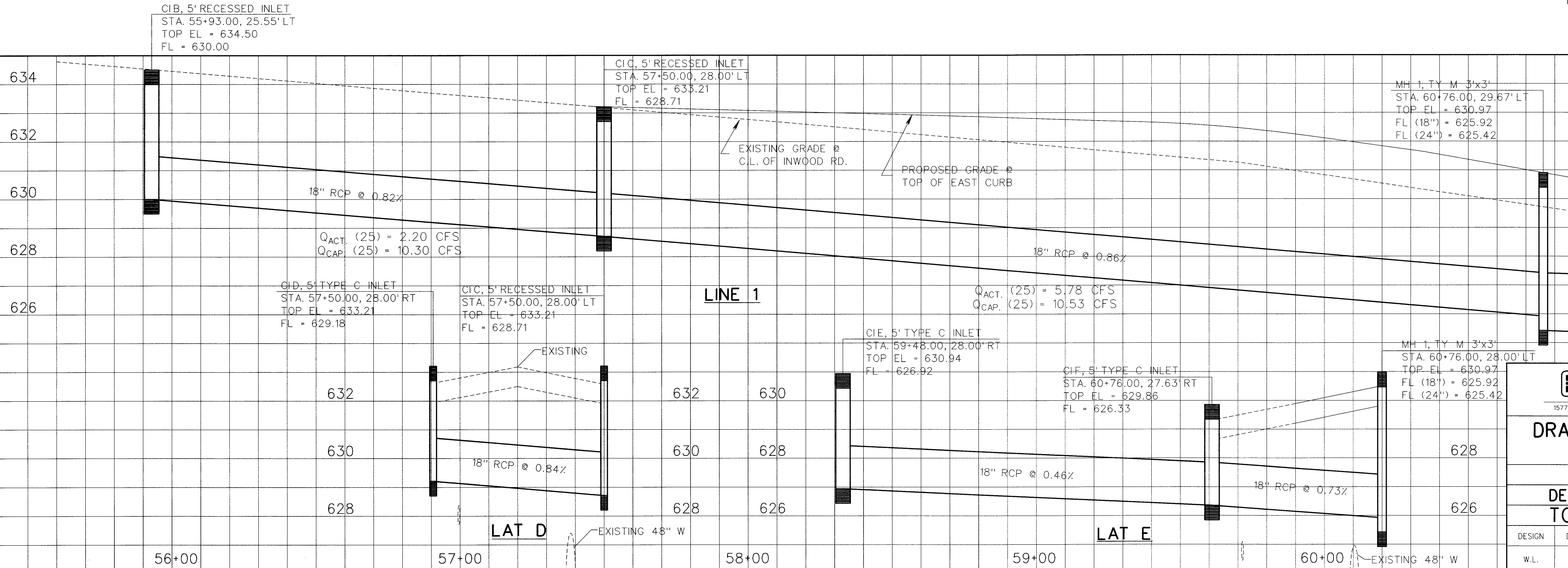
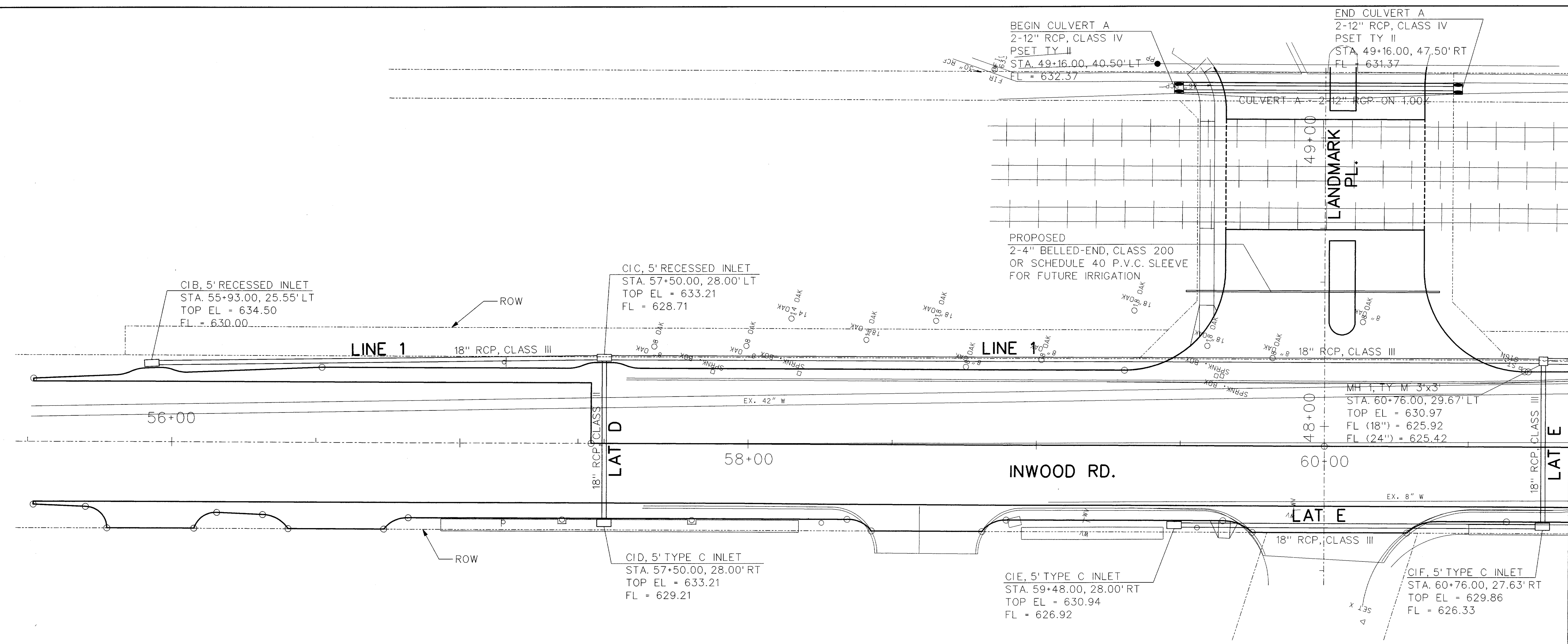
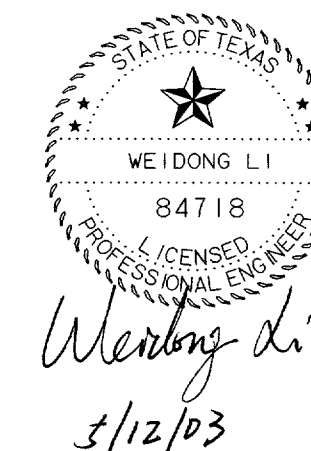
File: DAM

... \66353\Draw\Inwood.dwg 05/12/03 03:44:26 PM



NOTES:

1. ALL DIMENSIONS ARE FACE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. CONTRACTOR TO VERIFY LOCATION OF 48" WATER MAIN AT LATERAL D AND E CROSSINGS.
3. INDICATE TO CUT AND PLUG EXISTING IRRIGATION SYSTEM AT LANDMARK PLACE, AS DIRECTED BY OWNER.
4. THE INFORMATION REGARDING THE SIZE AND LOCATION OF THE EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATE OF THE EXISTING UNDERGROUND UTILITIES IN THE FIELD. CONTRACT IS RESPONSIBLE FOR ANY DAMAGE OCCURED TO EXISTING UTILITIES AND FACILITIES THROUGHOUT THE DURATION OF THIS PROJECT.



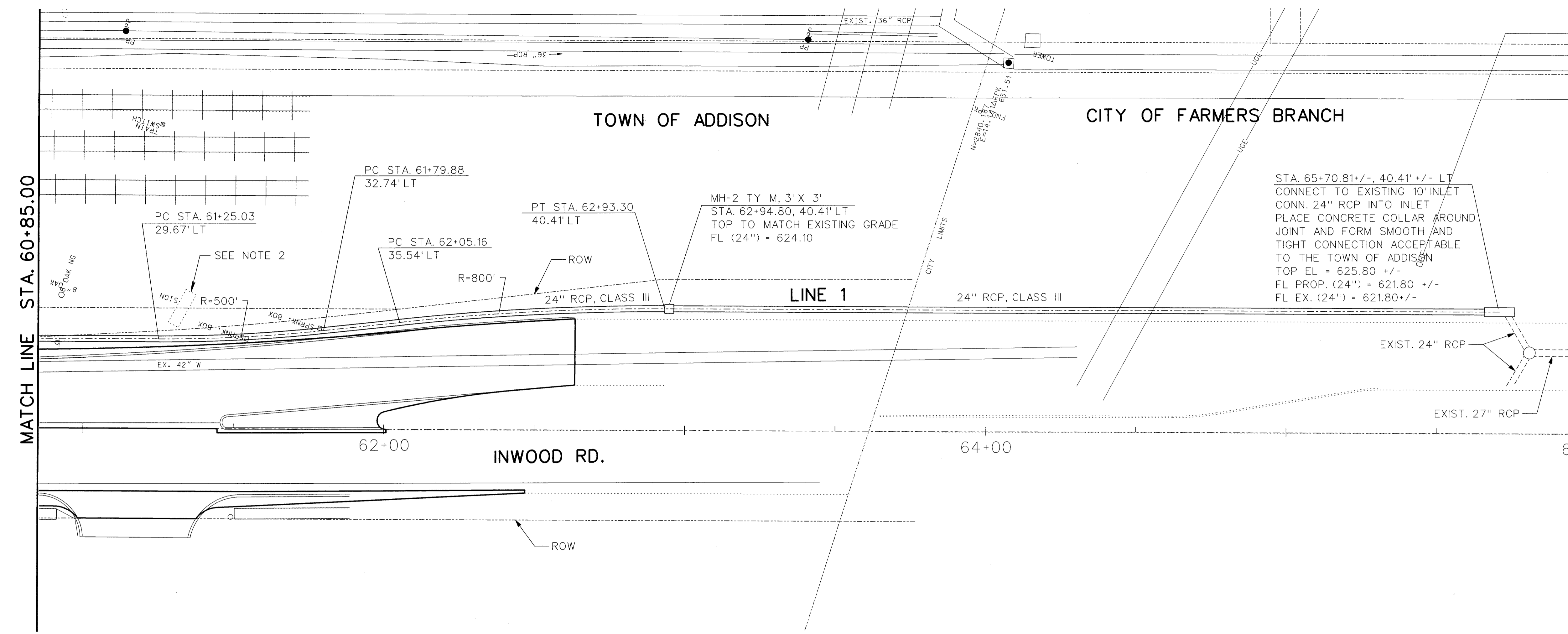
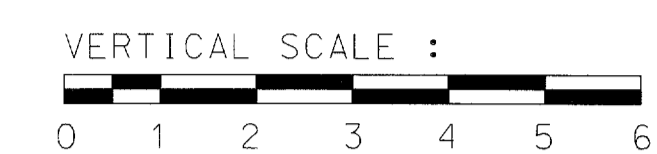
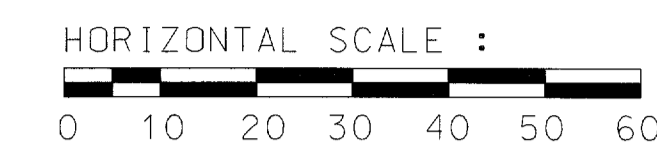
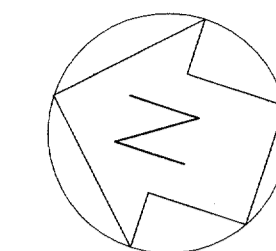
MATCH LINE STA. 60+85.00

MATCH LINE STA. 60+85.00

PARSONS					
15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900					
DRAINAGE PLAN AND PROFILE					
SHEET 1 OF 2					
INWOOD CONNECTION					
DEPARTMENT OF PUBLIC WORKS					
TOWN OF ADDISON, TEXAS					
DESIGN	DRAWN	DATE	SCALE	NOTES	NUMBER
W.L.	C.W.W.	05/12/03	1"=40'H 1"=4' V		12

File : DRN2

...\\s3314\card\inwood set\DRN2.dgn 06/12/03 03:44:27 PM



MATCH LINE STA. 60+85.00

TOWN OF ADDISON

CITY OF FARMERS BRANCH

LINE 1

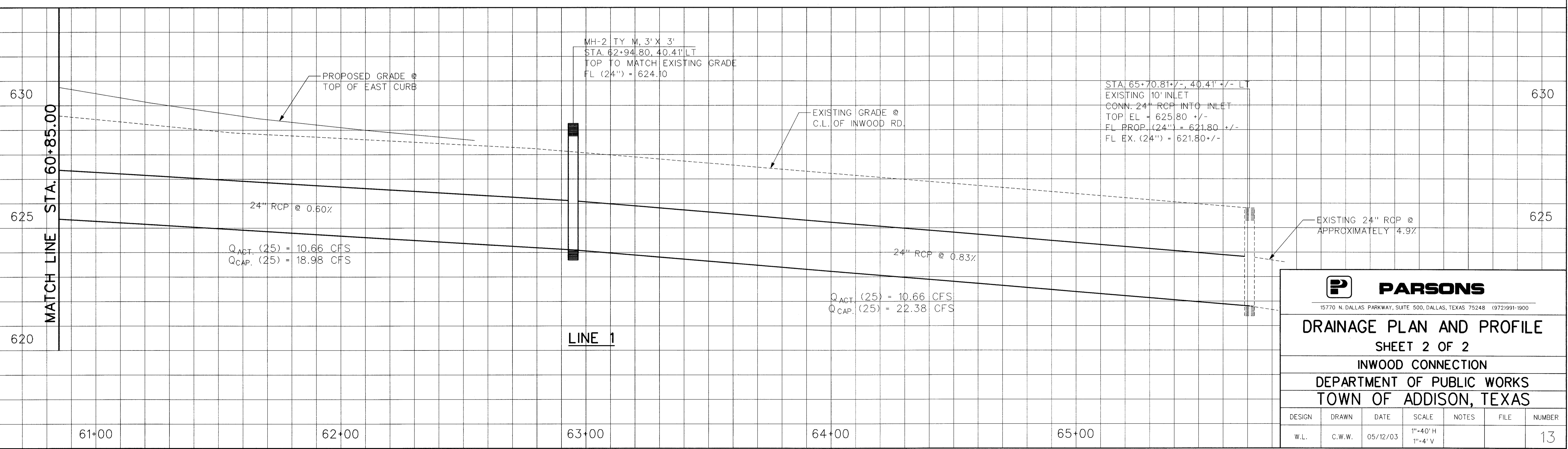
INWOOD RD.

STA. 65+70.81 +/-, 40.41 +/- LT
 CONNECT TO EXISTING 10' INLET
 CONN. 24" RCP INTO INLET
 PLACE CONCRETE COLLAR AROUND
 JOINT AND FORM SMOOTH AND
 TIGHT CONNECTION ACCEPTABLE
 TO THE TOWN OF ADDISON
 TOP EL = 625.80 +/-
 FL PROP. (24") = 621.80 +/-
 FL EX. (24") = 621.80 +/-

NOTES:

1. ALL DIMENSIONS ARE FACE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. CONTRACTOR SHALL PROTECT EXISTING "TOWN OF ADDISON" SIGN AND FOUNDATION AND REPAIR IT AT HIS/HER OWN EXPENSE SHOULD DAMAGE OCCURS.
3. THE INFORMATION REGARDING THE SIZE AND LOCATION OF THE EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATE OF THE EXISTING UNDERGROUND UTILITIES IN THE FIELD. CONTRACT IS RESPONSIBLE FOR ANY DAMAGE OCCURED TO EXISTING UTILITIES AND FACILITIES THROUGHOUT THE DURATION OF THIS PROJECT.

STATE OF TEXAS
 WEIDONG LI
 84718
 LICENSED PROFESSIONAL ENGINEER
Weidong Li
 5/12/03



MATCH LINE STA. 60+85.00

LINE 1

$Q_{ACT. (25)} = 10.66 \text{ CFS}$
 $Q_{CAP. (25)} = 18.98 \text{ CFS}$

$Q_{ACT. (25)} = 10.66 \text{ CFS}$
 $Q_{CAP. (25)} = 22.38 \text{ CFS}$

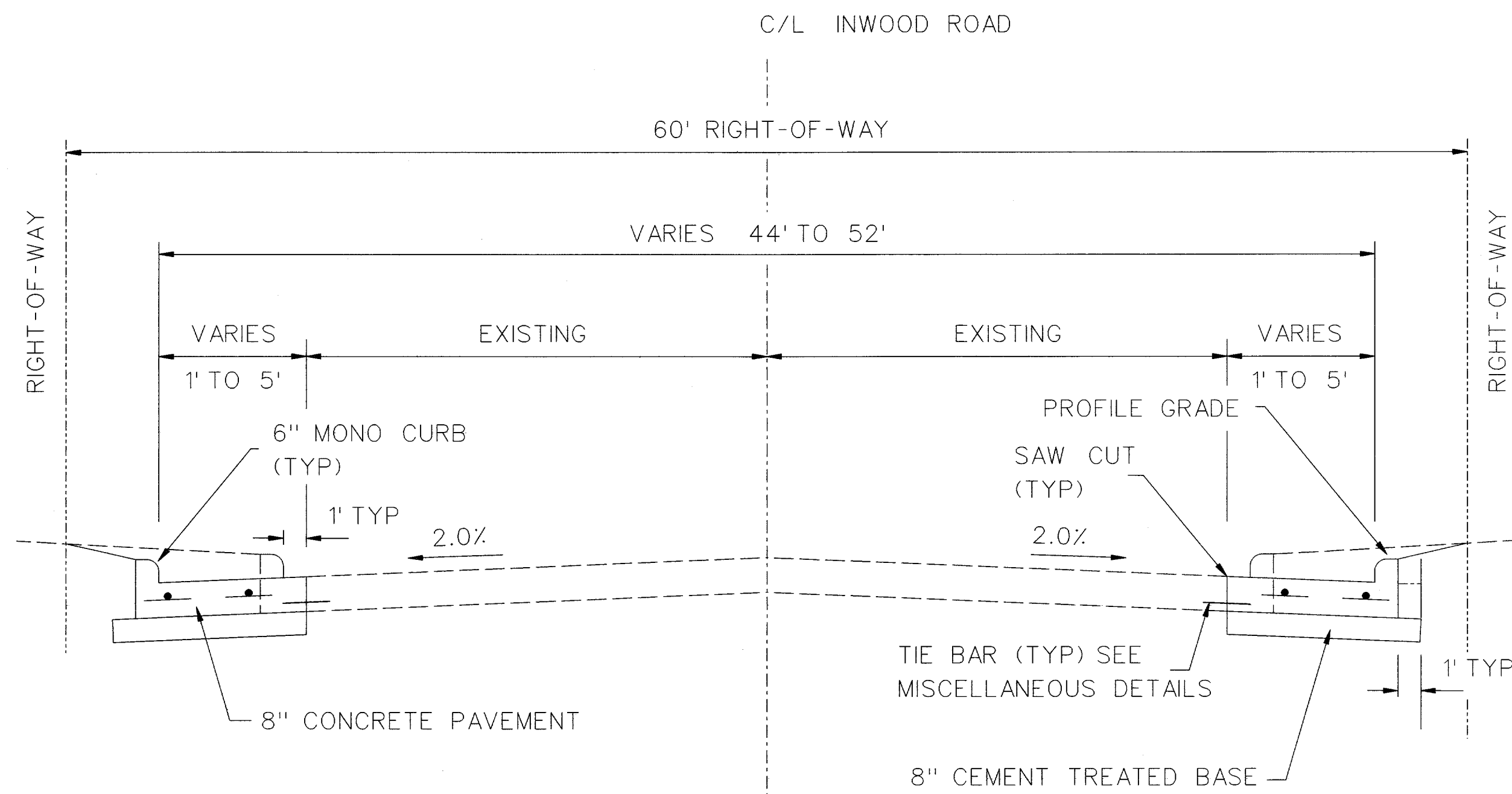
STA. 65+70.81 +/-, 40.41 +/- LT
 EXISTING 10' INLET
 CONN. 24" RCP INTO INLET
 TOP EL = 625.80 +/-
 FL PROP. (24") = 621.80 +/-
 FL EX. (24") = 621.80 +/-

EXISTING 24" RCP @
 APPROXIMATELY 4.9%

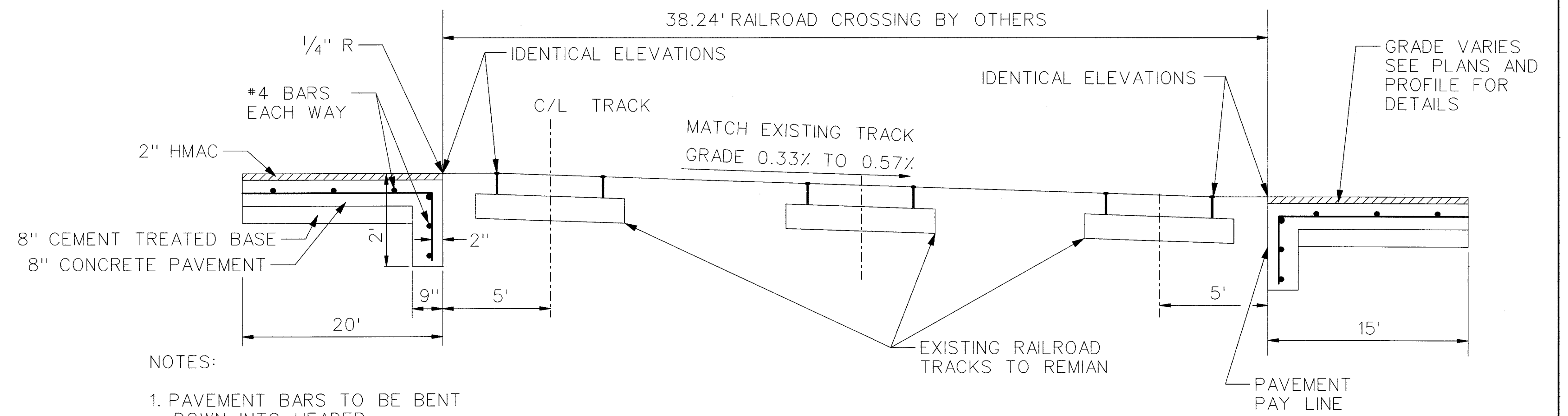
PARSONS						
<small>15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900</small>						
DRAINAGE PLAN AND PROFILE						
SHEET 2 OF 2						
INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
W.L.	C.W.W.	05/12/03	1"=40' H 1"=4' V			13

File: DRPI

...\\B3314\cadd\lms\03_sst\drpl.dgn 05/12/03 03:44:28 PM

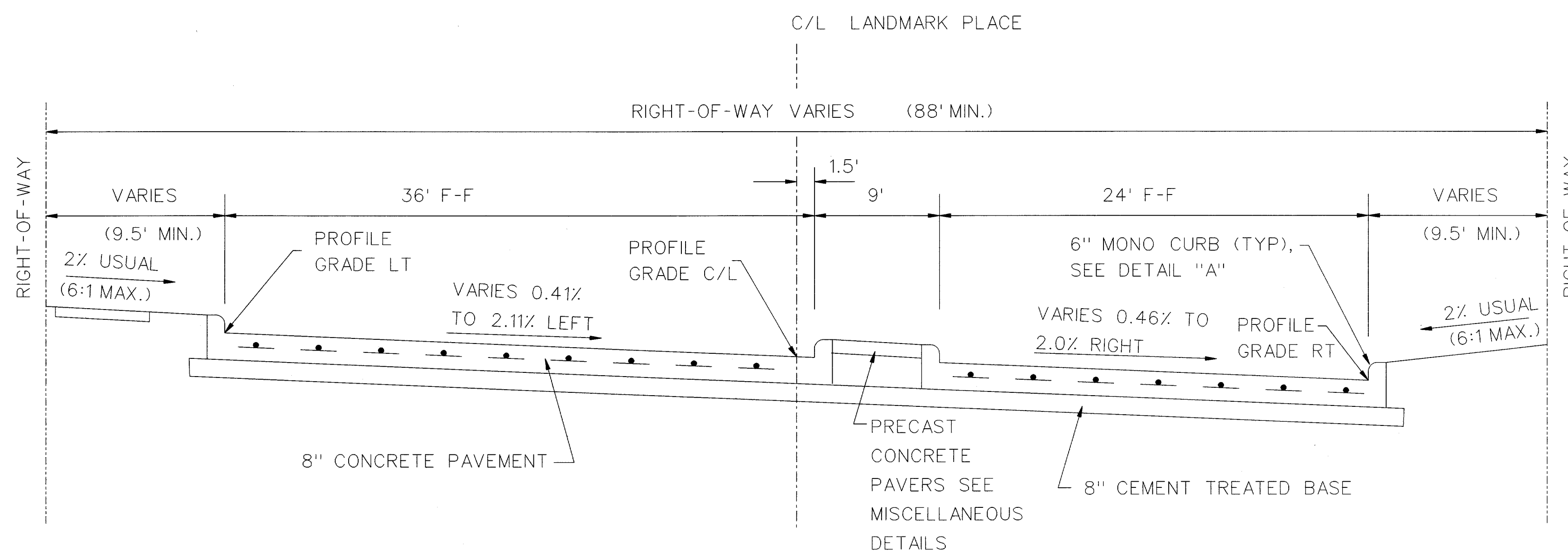


INWOOD ROAD - STA. 55+52.00 TO STA. 56+52.00
NOT TO SCALE

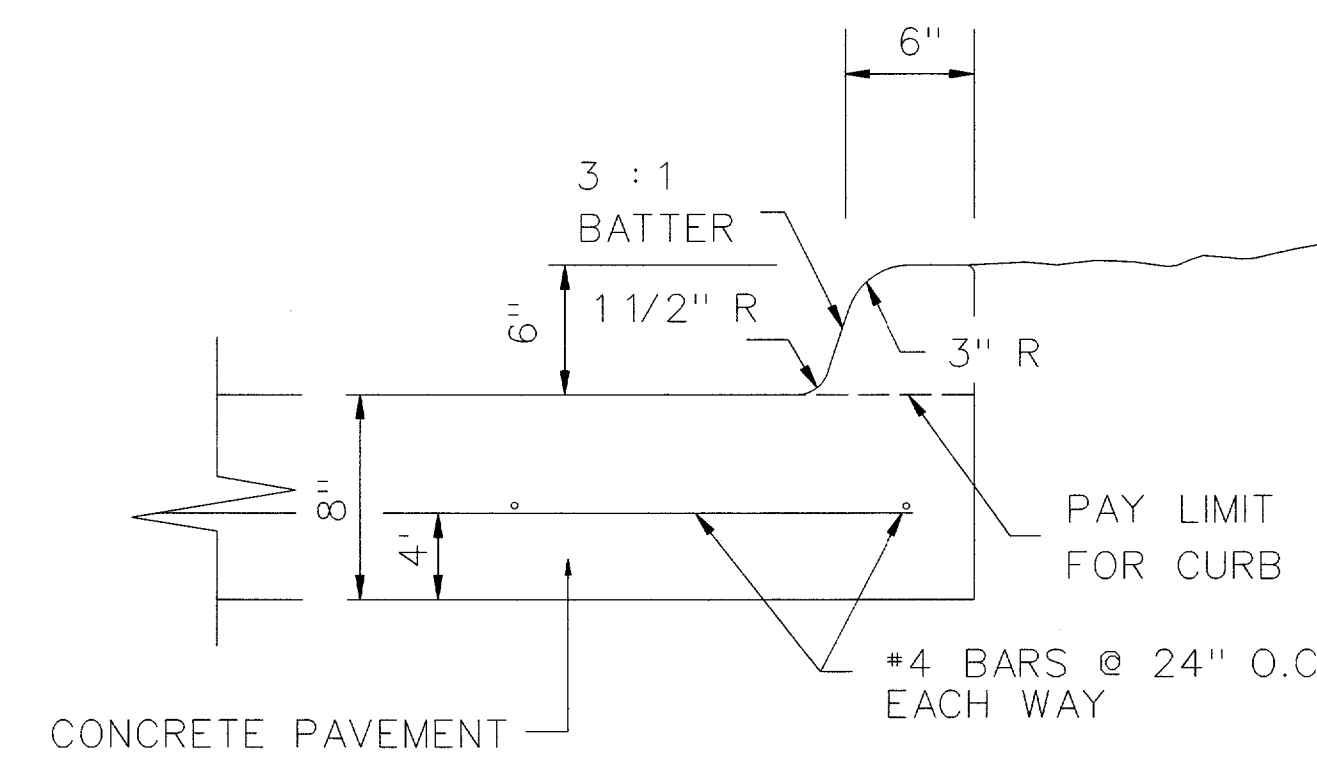


- NOTES:
1. PAVEMENT BARS TO BE BENT DOWN INTO HEADER.
 2. HEADER AND PAVEMENT TO BE MONOLITHIC.

TYPICAL SECTION AT RAILROAD CROSSING
NOT TO SCALE



LANDMARK PLACE - STA. 48+19.15 TO STA. 48+68.65
STA. 49+05.83 TO STA. 49+22.70
NOT TO SCALE

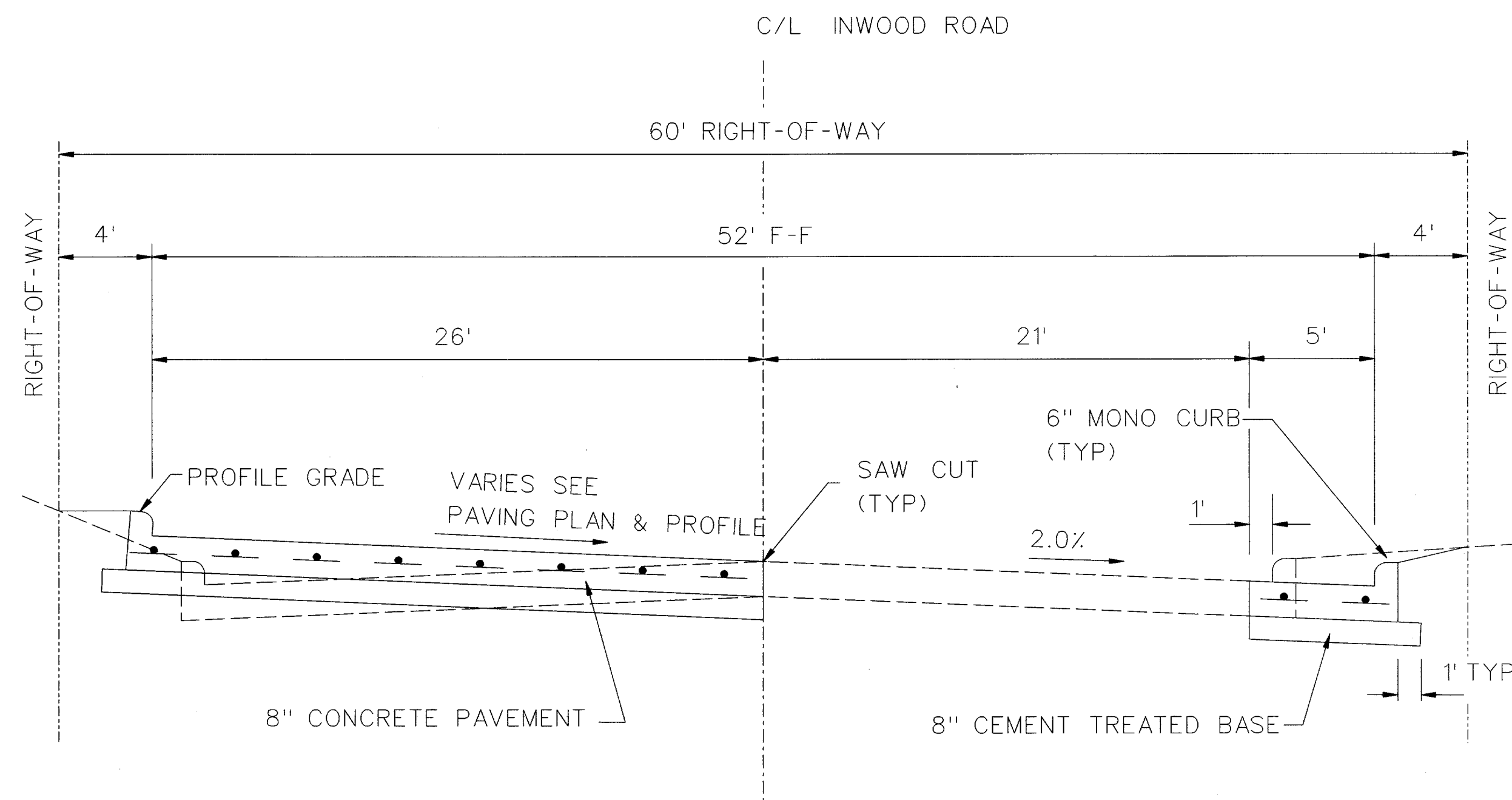


DETAIL "A"
NOT TO SCALE

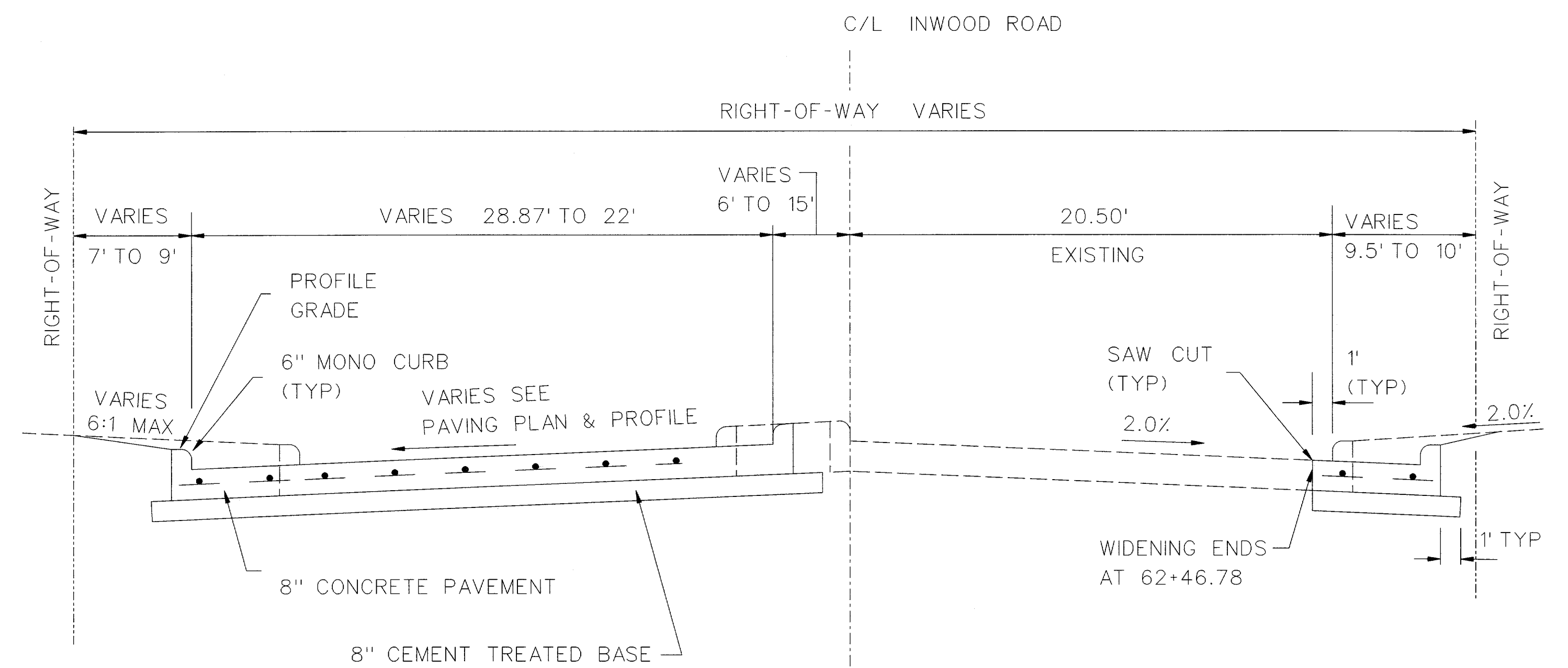
NOTE:
CEMENT TREATED BASE SHALL BE STRENGTH 0, USING EXISTING MATERIAL, 6% OF CEMENT AND ORDINARY COMPACTION.



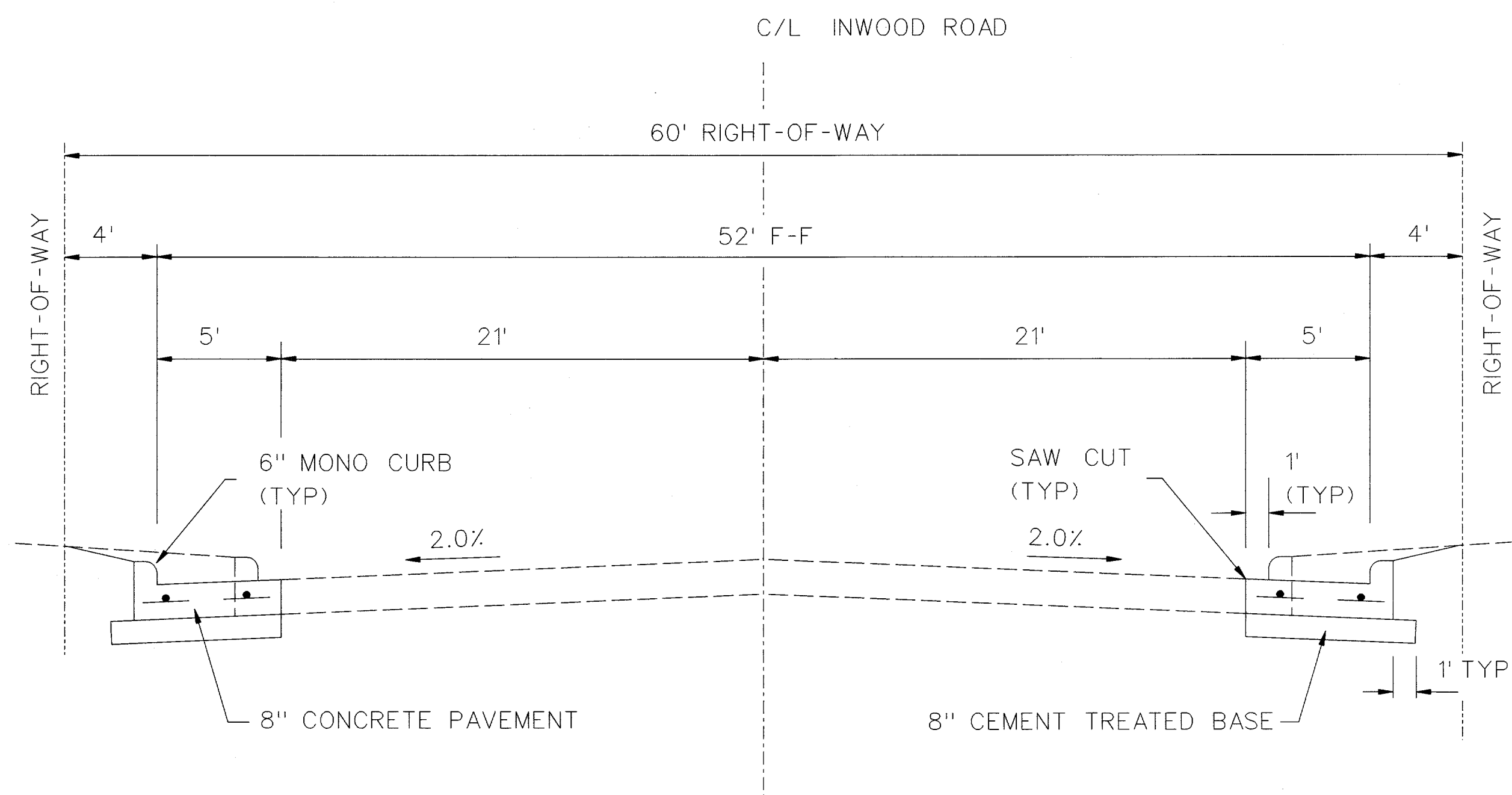
PARSONS 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900						
TYPICAL SECTIONS						
SHEET 1 OF 2						
INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
P.G.W.	C.W.W.	05/12/03				2



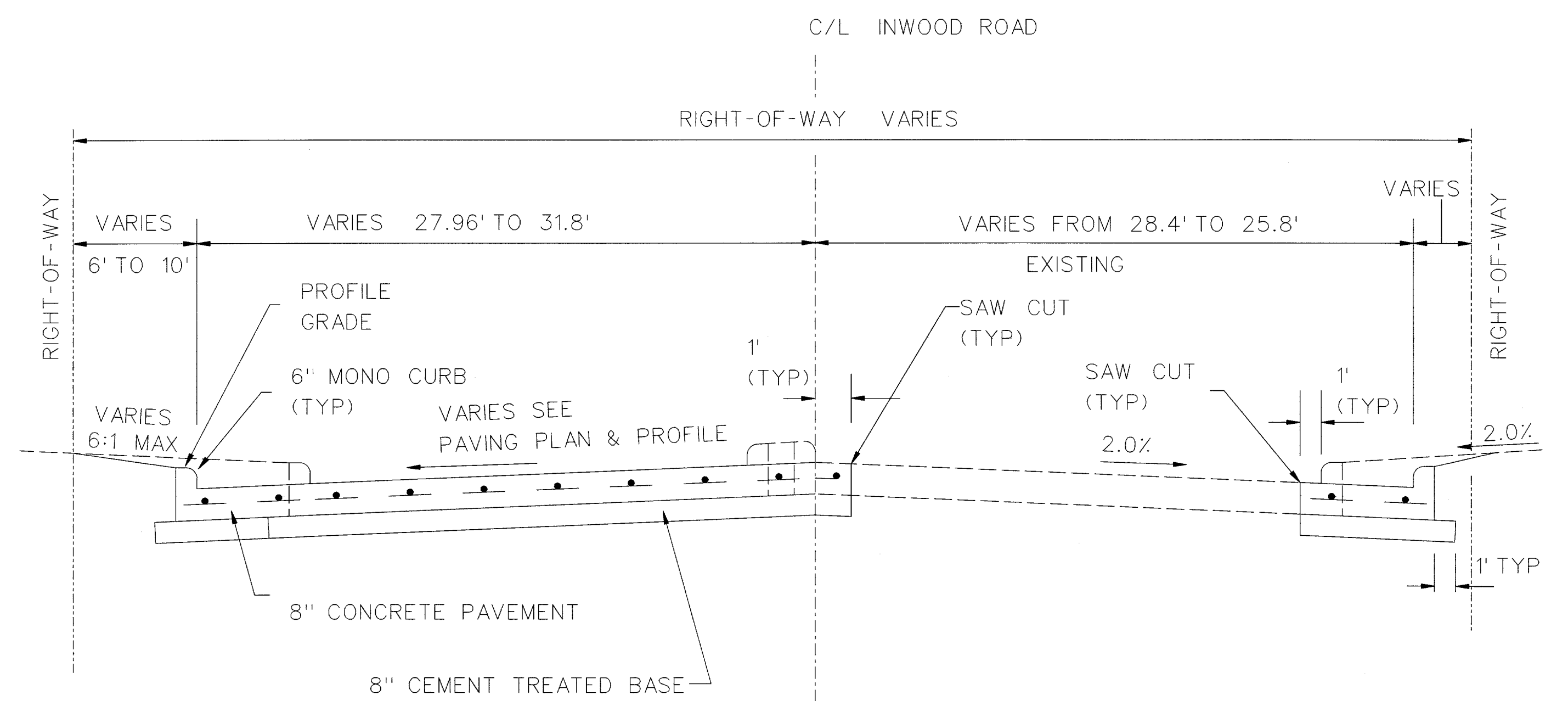
INWOOD ROAD - STA. 57+45.50 TO STA. 61+45.56
NOT TO SCALE



INWOOD ROAD - STA. 61+97.75 TO STA. 62+63.21
NOT TO SCALE

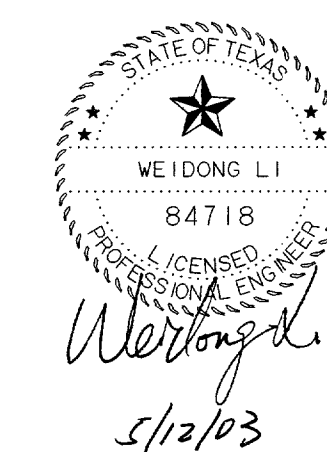


INWOOD ROAD - STA. 56+52.00 TO STA. 57+45.50
NOT TO SCALE



INWOOD ROAD - STA. 61+45.56 TO STA. 61+97.75
NOT TO SCALE

NOTE:
CEMENT TREATED BASE SHALL BE STRENGTH 0,
USING EXISTING MATERIAL, 6% OF CEMENT AND
ORDINARY COMPACTION.



PARSONS 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900						
TYPICAL SECTIONS SHEET 2 OF 2						
INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
P.G.W.	C.W.W.	05/12/03				3

SUMMARY OF QUANTITIES

Item	Description	Unit	Quantity
101	Barricades, Signing, and Traffic Control	MO	6
102	Prepare Right of Way	STA	8
103	Remove Exist Conc Pavement (Include Curb & Drive)	SY	1962.2
104	Cement	TON	57.0
105	Unclassified Street Excavation	CY	321
106	Roadway Embankment	CY	227
107	Hydromulch Bermuda Grass, Water and Fertilizer	SY	1338
108	8" Reinforced Conc Pavement	SY	2690.6
109	8" Cement Treated Base	SY	2874.0
110	Mobilization	LS	1
111	6" Conc Mono Curb	LF	1749.2
112	4" Reinforced Concrete Walk	SY	25.6
113	Reinforced Conc Wheelchair Ramps	EA	2
114	6" Reinforced Conc Driveway	SY	106.3
115	Landscape Pavers	SF	473
116	4" Reflective Pavement Marker, Type II-CR	EA	34
117	4" Round Pavement Marker, Type P-7	EA	102
118	4" Reflective Pavement Marker, Type II-A-A	EA	42
119	4" Round Pavement Marker, Type P-7-YR	EA	152
120	6" x 6" White Jiggle Bars (White) Type 6-1	EA	43
121	24" Wide White Thermoplastic Stop Bar	LF	166
122	12" Wide White Thermoplastic Crosswalk Line	LF	167
123	Thermoplastic Pavement Arrows	EA	10
124	4" Wide Temporary Lane Stripe	LF	3961
125	6" Dia PVC Irrigation Sleeve	LF	88
126	Remove Existing Jiggle Bars	EA	71
127	Concrete Header at Railroad Crossing	CY	7.0
128	2" HMAC TYPE D (SURF)	TON	26.3
129	Adjust Utility Manhole, Valve Box, Etc.	EA	6
201	18" Class III RCP	LF	707
202	24" Class III RCP	LF	486
203	Type M Manhole	EA	2
204	5' Recessed Inlet	EA	2
205	5' Type C Curb Inlet	EA	3
206	Trench Safety Design	LS	1
207	Furnish and Install Trench Safety	LF	1213
208	Inlet Protection	EA	5
209	Rock Filter Dams, Type 1	LF	50
210	Silt Fence	LF	200
211	18" Class IV RCP	LF	88
212	Precast Safety End Treatment (TY II) (2-12"RCP)	EA	2
213	Connect 24" RCP to Existing Inlet	LS	1
301	3" PVC Conduit (Sch 40)(Trenched)	LF	40
302	4" PVC Conduit (Sch 40)(Bored)	LF	250
303	4" RM Conduit (Bored)	LF	90
304	No. 6 AWG Bare Wire	LF	440
305	Ground Box (Type A) W/ Apron	EA	4
306	Traffic Sign (SR3-1)(Mast Arm Mount)(LED Blankout)	EA	2
307	Traffic Sign (SR3-4)(Mast Arm Mount)	EA	4
308	Traffic Sign (SR3-8)(Mast Arm Mount)	EA	2
309	Traffic Sign (R3-5)(Mast Arm Mount)	EA	1
310	Traffic Sign (R10-12S)(Mast Arm Mount)	EA	1
311	Signal Pole Concrete Foundation (Type 30-A)	EA	2
312	Signal Pole Concrete Foundation (Type 36-A)	EA	2
313	12" - 3 Section LED Signal Head (Type V3)	EA	10
314	12" - 4 Section LED Signal Head (Type V4LT)	EA	3
315	12" - 4 Section LED Signal Head (Type V4LT-BM)	EA	3
316	Vacuum Formed Backplate (3 Sec)(12 in)	EA	10
317	Vacuum Formed Backplate (4 Sec)(12 in)	EA	6
318	3 Section Astro Brac w/29" Bands	EA	10
319	4 Section Astro Brac w/29" Bands	EA	6
320	Pedestrian LED Signal Head with Count-Down Timer	EA	2
321	4 Conductor Opticom Cable	LF	800
322	5 Cndr Signal Cable (16 AWG)(IMSA 20-1)	LF	560
323	7 Cndr Signal Cable (16 AWG)(IMSA 20-1)	LF	265
324	16 Cndr Signal Cable (12 AWG)(IMSA 20-1)	LF	970
325	Pedestrian Push Button & R10-4b Sign Assembly	EA	2
326	Opticom Directional Sensors with Mounting Bracket	EA	3
327	Opticom Discriminator Module	EA	1
328	Belden 8281 Coaxial Cable	LF	1270
329	3 Cndr Signal Cable (14 AWG)(IMSA 20-1)	LF	1270
330	19' T-Base Pole w/30' Mast Arm	EA	1
331	19' T-Base Pole w/35' Mast Arm	EA	1
332	28' T-Base Pole w/40' Mast Arm	EA	2
333	Video Camera & Mounting Hardware	EA	5
334	Small Roadside Sign Assembly	EA	11
335	Relocate Small Roadside Sign Assembly	EA	3

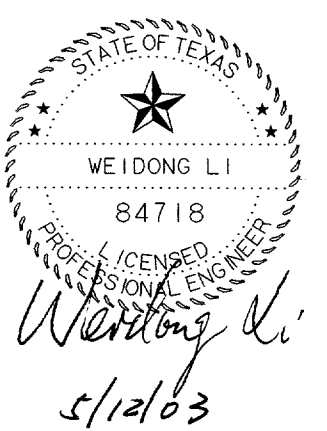
File : NOTE-QUAN


GENERAL NOTES

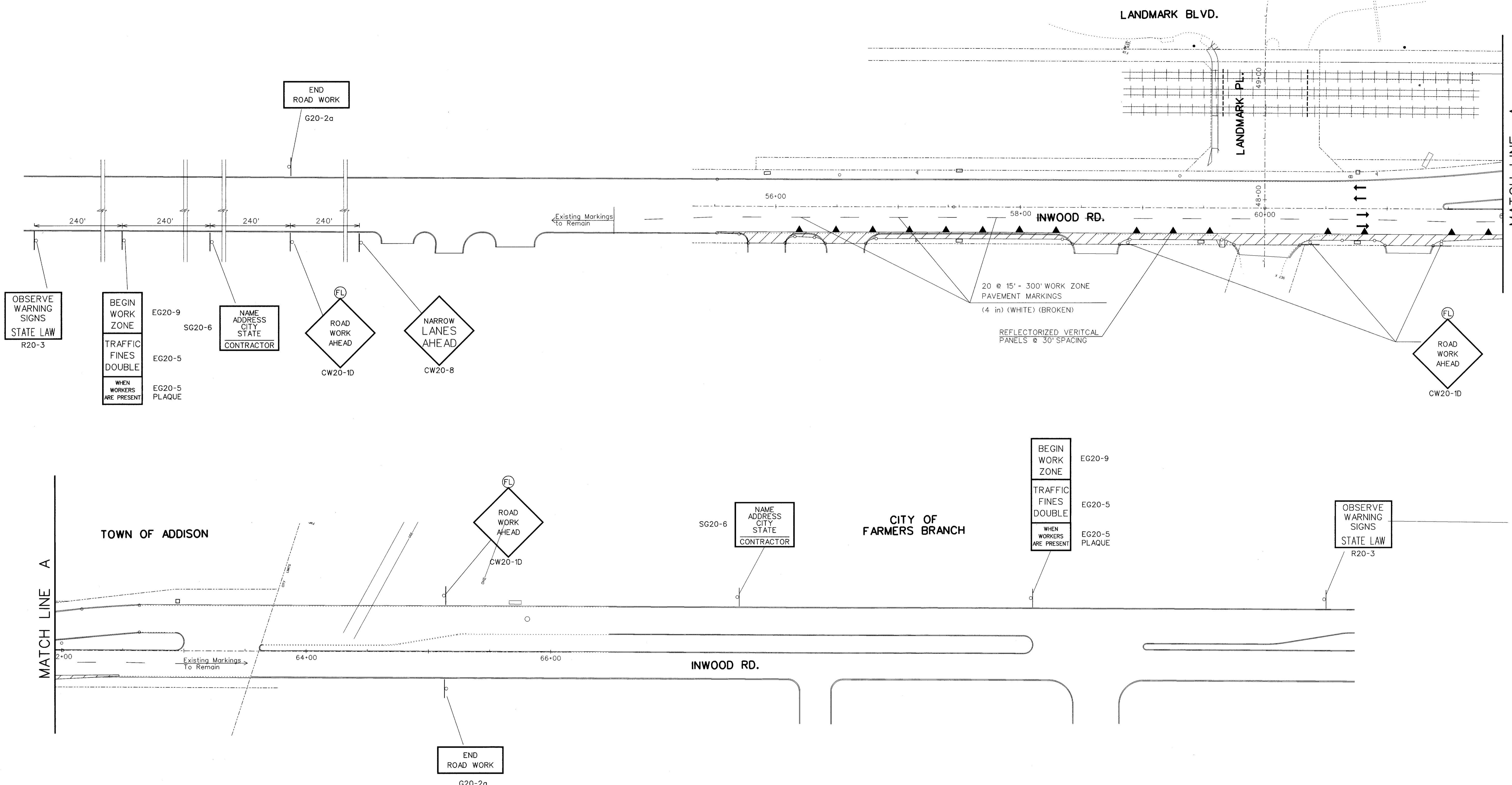
- Contractor shall apply hydromulch with common Bermuda to the entire right of way and shall provide temporary watering until acceptance of the work.
- The contractor shall conduct his operations in such manner as not to interfere with, hinder or obstruct the Railroad Company in any manner whatsoever in the use or operation of its trains or other property. In the performance of said work no construction material or equipment shall be stored on the Railroad's right of way nearer than 26 feet from the centerline of any tracks.
- The Railroad Company will furnish and install concrete crossing panels and automatic warning devices for the railroad crossing. The contractor shall coordinate construction with the Railroad Company for installation.
- Contractor shall dispose of excess or unsuitable excavated material offsite.
- Contractor will clean existing and completed pavements by sweeping as a means of dust control. Sweeping equipment shall be capable of picking up debris and dirt from the pavement by vacuum.
- Until acceptance of the work, Contractor shall promptly repair all potholes or utility cuts in Inwood Road. No cold patches will be allowed for pavement repairs.
- A Traffic Control Plan has been prepared for this project. Any changes or revisions to the Traffic Control Plan must be approved in advance. Contractor must maintain at least two lanes of traffic at all times on existing Inwood Road.
- Contractor shall be responsible for furnishing, installing, moving, replacing, maintaining, and removing all barricades and warning devices used in traffic control. Barricades and warning signs shall be double-weighted to prevent tipping or shall be staked or pinned in a positive manner.
- Contractor shall remove all construction debris before placing backfill behind curbs and in parkways. The top four inches of backfill in parkways and medians shall be topsoil from the project site and capable of sustaining vegetation. Backfill and compaction shall be in accordance with the specifications and special provision.
- Reinforcing steel and dowels shall be supported by approved highchairs or blocks sufficient to maintain their location during concrete placement. Required bar lap shall be 30 diameters minimum.
- All trenches, ditches and excavations shall be backfilled and compacted as directed by owners.
- Contractor shall provide two project signs to show pertinent information about the project. Signs shall be 4' x 8' plywood with blue lettering on white background. The Owner will provide an electronic file showing the Addison logo. Signs shall be placed prior to construction. Signs shall be mounted on skids for use in various locations. Provide sandbags to keep signs upright. The Contractor shall place and move signs as directed by Owner. Contractor shall submit shop drawings for project signs.
- Town inspector to coordinate inspection with the City of Farmers Branch for work to be done in the City of Farmers Branch. Provide Town inspector two working days advance notice prior to working in the City of Farmers Branch.
- Install "Infil-pan" manhole inserts in sanitary manholes remaining in paved streets. Cost shall be subsidiary to adjusting manholes and valve boxes.
- Items shown on the plans to be constructed without an associated pay item shall be considered incidental to the contract.
- The contractor shall maintain all irrigation systems within the limits of the project during the duration of the contract. The contractor is responsible for the prompt repair or replacement of any damage to irrigation lines, valves, and controllers, sprinklers, wiring and appurtenances that are damaged during construction.
- Contractor shall protect the existing pavement and repair it at his own expense should damage occurs.
- Trees marked as to be removed shall be removed and hauled off by the contractor. The Town of Addison shall restore the parkway with new tree plantings and other landscaping items.

EROSION CONTROL NOTES

- Contractor shall comply with the requirements and intent of the NPDES general permit for storm water discharges.
- Contractor will install erosion control measures prior to commencing any construction activity.
- Repairs or modifications to the measures will be made by the contractor if the measures prove ineffective or if additional control measures are necessary.
- Damages to adjacent property or to receiving waters caused by improperly installed or poorly managed erosion control measures are the responsibility of the contractor.
- The contractor shall be responsible for the removal and disposal of any siltation caused by his operations and/or failure of the erosion control measures.
- Inlet protection: The contractor shall provide adequate protection of storm drain inlets. The contractor shall prevent materials from entering the storm drain system.
- The contractor shall stabilize any area where construction activity is to be temporarily or permanently ceased for more than 14 days.
- All disturbed non-paved areas shall be seeded to prohibit erosion as soon as grading is complete and in a manner acceptable with the local governing agency and construction manager.
- Hay bales are not allowed to use on this project. Use rock filter dams instead.

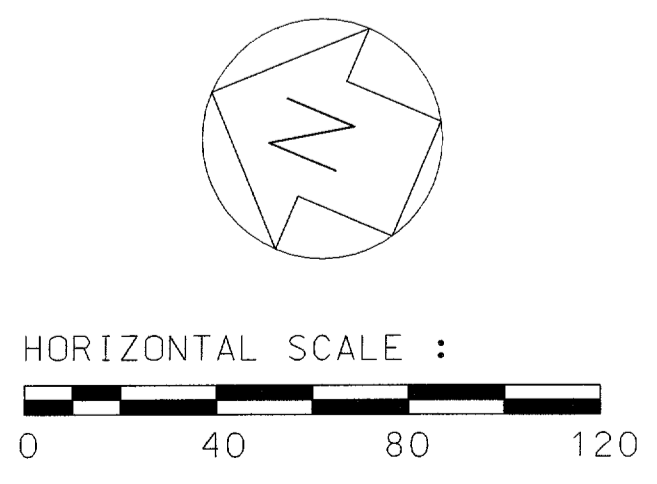


 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900						
GENERAL NOTES AND QUANTITY SUMMARY						
INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
S.L.K.	S.L.K.	05/12/03				4



- LEGEND :
- PROPOSED ROADWAY EDGE
 - EXISTING ROADWAY EDGE
 - ▨ CONSTRUCTION WORK AREA
 - REFLECTORIZED PLASTIC DRUM
 - ▲ REFLECTORIZED VERTICAL PANEL
 - ⊙ SIGN LOCATION
 - ↑ TRAVEL LANE

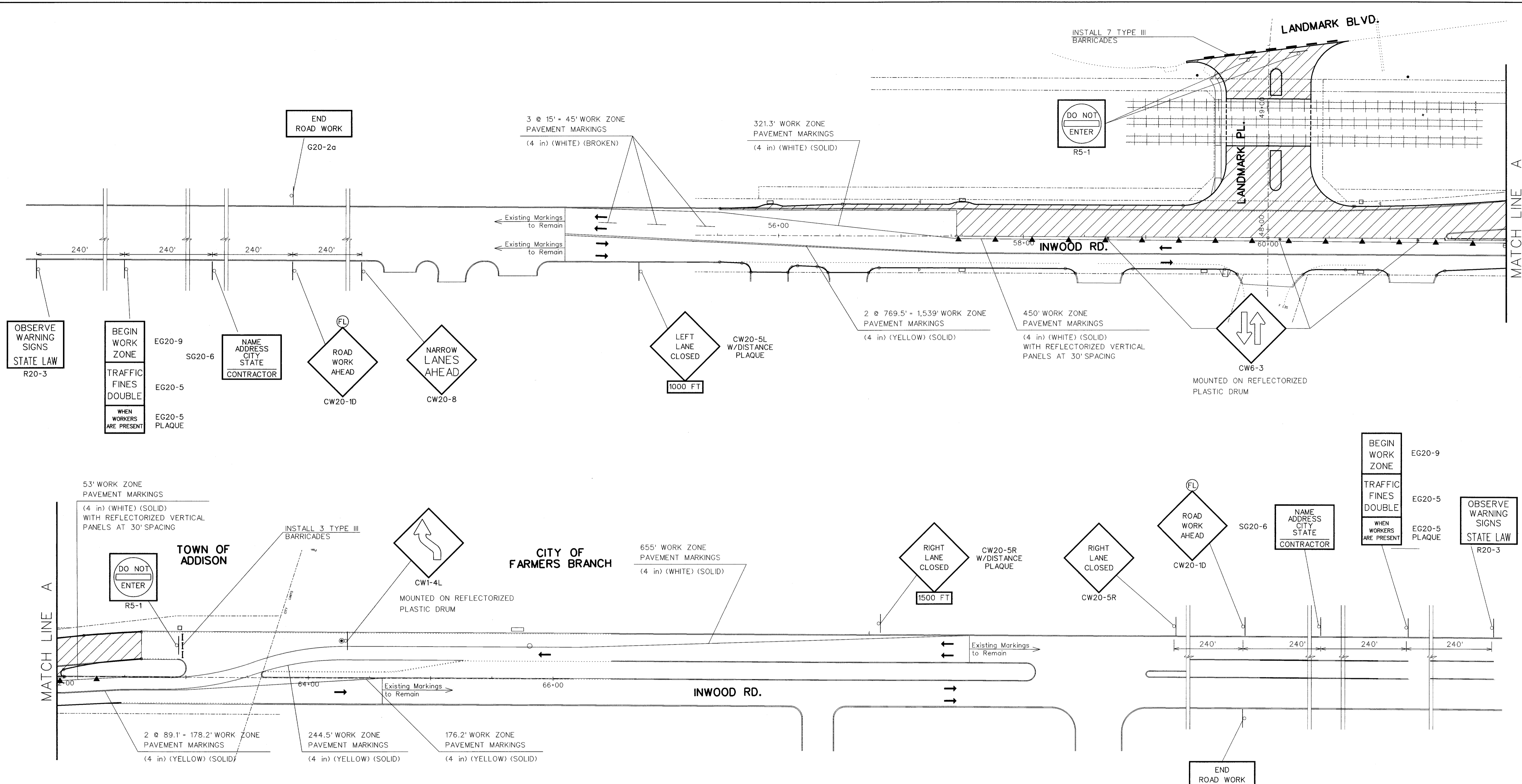
- NOTES :
1. CONSTRUCTION IS LIMITED TO THE SOUTHBOUND DIRECTION ONLY.
 2. CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED TO THEIR ORIGINAL CONDITION OR BETTER.
 3. ALL BARRICADES, DRUMS, AND VERTICAL PANELS SHALL BE EQUIPPED WITH TYPE A WARNING LIGHTS.



PARSONS 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900						
TRAFFIC CONTROL PLAN PHASE I						
INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
D.J.S.	E.C.S.	05/12/03				5

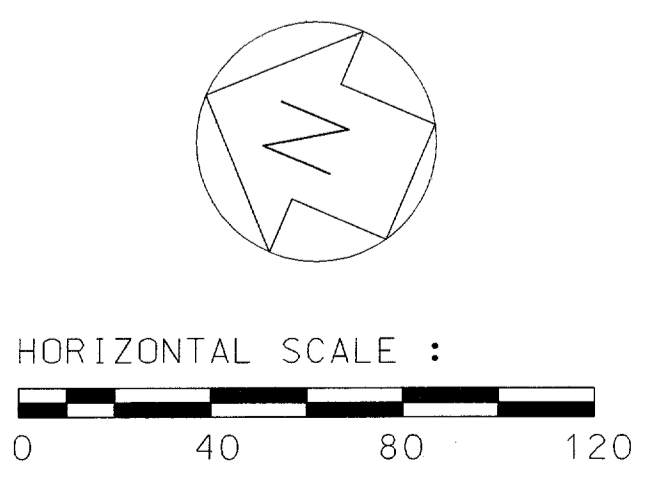
File = INWOOD-TCPI

...\\saw\inwood\set\Inwood-TCPI.dgn 05/12/03 03:41:24 PM



- LEGEND :**
- PROPOSED ROADWAY EDGE
 - EXISTING ROADWAY EDGE
 - ▨ CONSTRUCTION WORK AREA
 - REFLECTORIZED PLASTIC DRUM
 - ▲ REFLECTORIZED VERTICAL PANEL
 - SIGN LOCATION
 - ← TRAVEL LANE
 - (FL) FLASHING TYPE A-LOW INTENSITY WARNING LIGHT

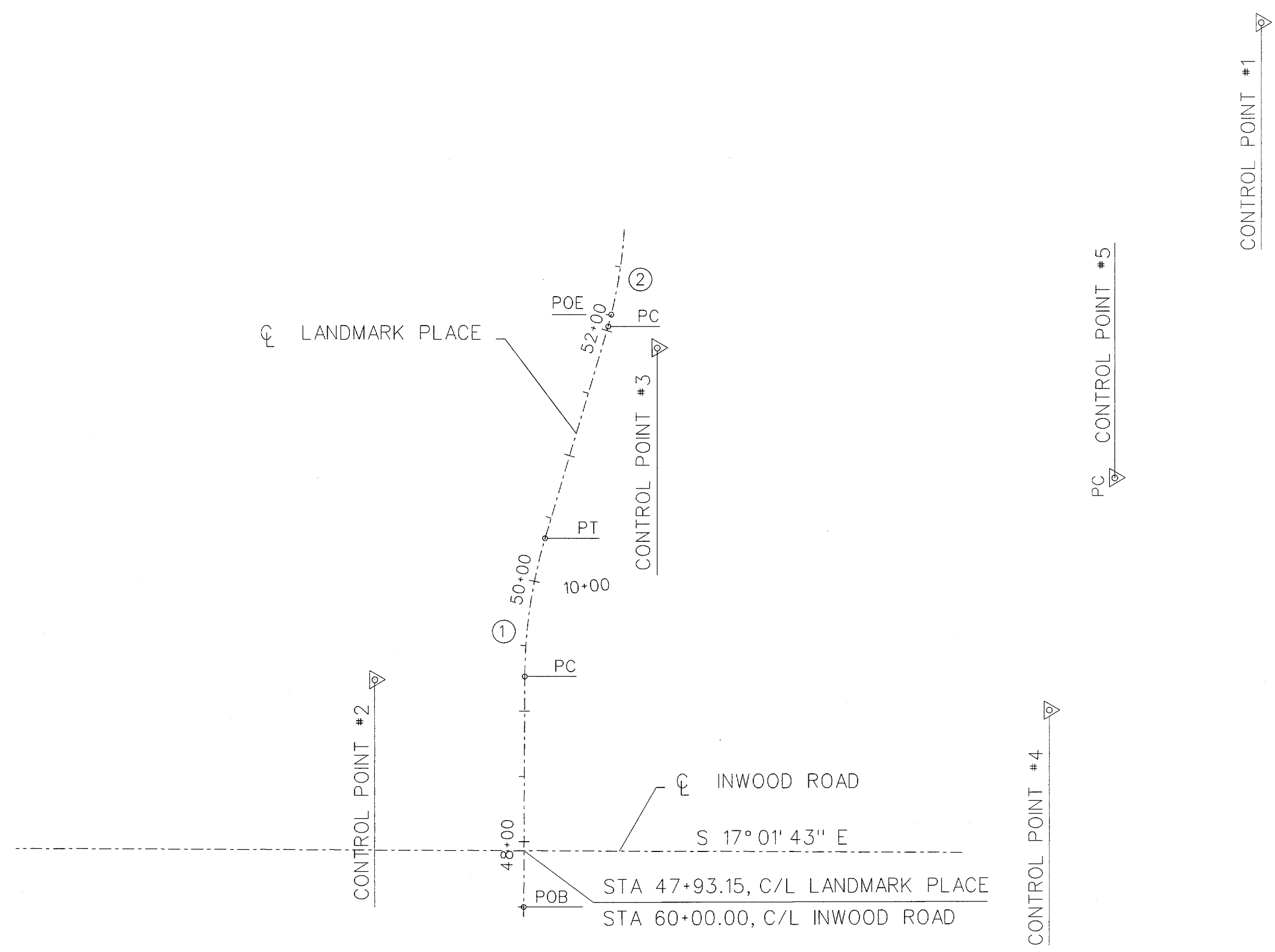
- NOTES:**
- NORTHBOUND INWOOD IS BEING RECONSTRUCTED DURING THIS PHASE, RESULTING IN TWO-WAY TRAFFIC ON THE SOUTHBOUND TRAVEL LANES.
 - CONTRACTOR SHALL RESTORE ALL AREAS DISTURBED TO THEIR ORIGINAL CONDITION OR BETTER.
 - ALL BARRICADES, DRUMS, AND VERTICAL PANELS SHALL BE EQUIPPED WITH TYPE A WARNING LIGHTS.



 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900						
TRAFFIC CONTROL PLAN PHASE II INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
D.J.S.	E.C.S.	05/12/03				6

File: INWOOD-TC2

...:\s\inwood\841\inwood-102.dgn 05/12/03 02:44:24 PM



LANDMARK PLACE CONTROL DATA

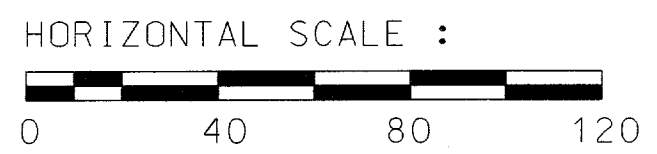
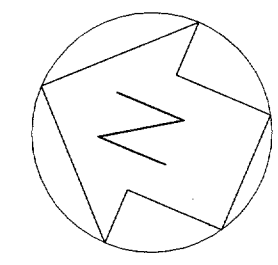
POINT	STATION	BEARING	DISTANCE	NORTH	EAST
POB	49+22.67			3230.9866	115.8022
PC	49+26.80	N72° 56' 43" E	4.13	3232.1976	119.7498
PI, CURVE 1	49+81.02	N72° 56' 43" E	54.22	3248.1005	171.5882
PT	50+34.52	N89° 11' 12" E	54.22	3248.8701	225.8056
PC	52+03.41	N89° 11' 12" E	165.246	3250.9448	394.7294
PI, CURVE 2	52+08.08	N89° 11' 12" E	4.68	3251.0048	399.3911
PT, POE	52+12.76	N87° 50' 23" E	4.68	3251.4004	404.0709

CONTROL POINT DATA

POINT	DESCRIPTION
CONTROL POINT No. 1	IRON ROD (*144) IN CONCRETE MONUMENT LOCATED IN THE NORTHEAST CORNER OF LOT 1, BLOCK 1 OF THE ANDERSON & WHITE ADDITION NORTH: 2841.789 EAST: 765.418 ELEV: 631.92
CONTROL POINT No. 2	IRON ROD (*149) LOCATED APPROX. 8.0' BEHIND CURB & 56.5' NORTH OF POWER POLE *3970026, 3660132 NORTH: 3341.157 EAST: 82.860 ELEV: 633.62
CONTROL POINT No. 3	IRON ROD (*147) LOCATED IN THE NORTHEAST CORNER OF THE QUORUM WEST ADDITION, BLOCK 3 NORTH: 3210.124 EAST: 390.074 ELEV: 636.48
CONTROL POINT No. 4	PK NAIL (*480) IN RR TIE IN THE CENTER OF THE EAST MOST TRACKS, SOUTHWEST OF THE SOUTHWEST CORNER OF QUORUM WEST ADDITION, BLOCK 3 NORTH: 2840.187 EAST: 214.141 ELEV: 631.51
CONTROL POINT No. 5	IRON ROD (*145) LOCATED SOUTHEAST APPROX. 10' BEHIND CURB IN THE SOUTHEAST CORNER OF THE QUORUM WEST ADDITION, BLOCK 3 NORTH: 2845.276 EAST: 388.004 ELEV: 632.34

CURVE DATA

CURVE	Δ	R	L	T
CURVE 1	16.2416	380.00	107.72	54.22
CURVE 2	1.4290	375.00	9.35	4.68



PARSONS
15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972) 991-1900

HORIZONTAL CONTROL DATA

INWOOD CONNECTION

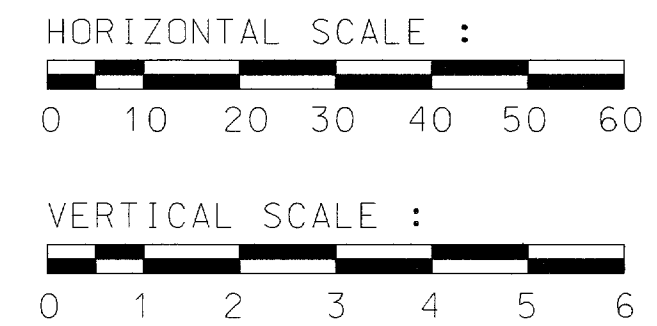
DEPARTMENT OF PUBLIC WORKS

TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
P.G.W.	C.W.W.	05/12/03				7

File : CON-DATA

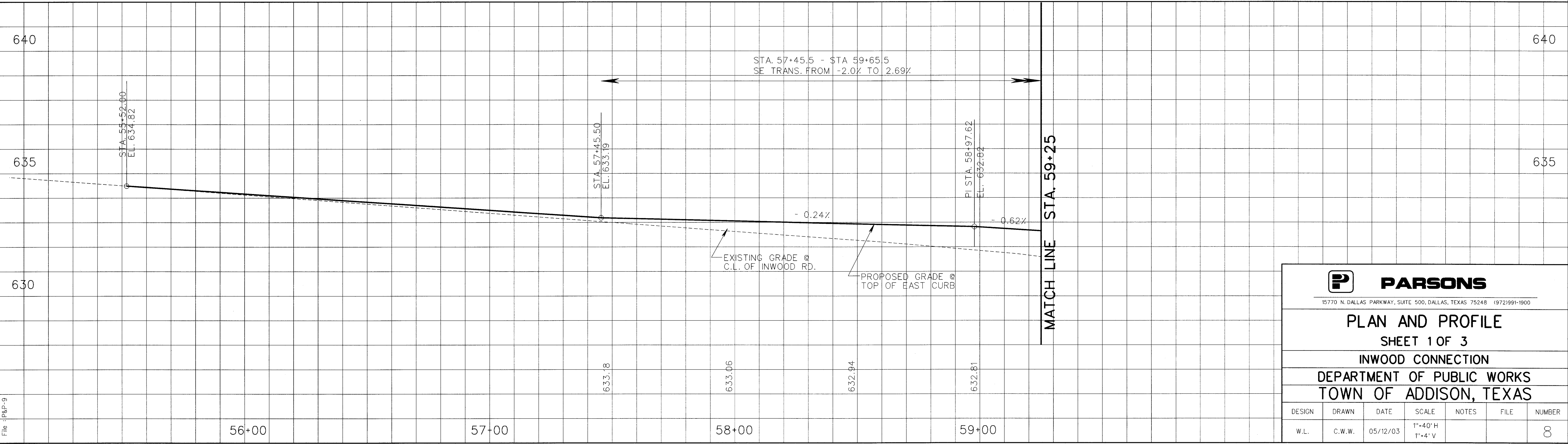
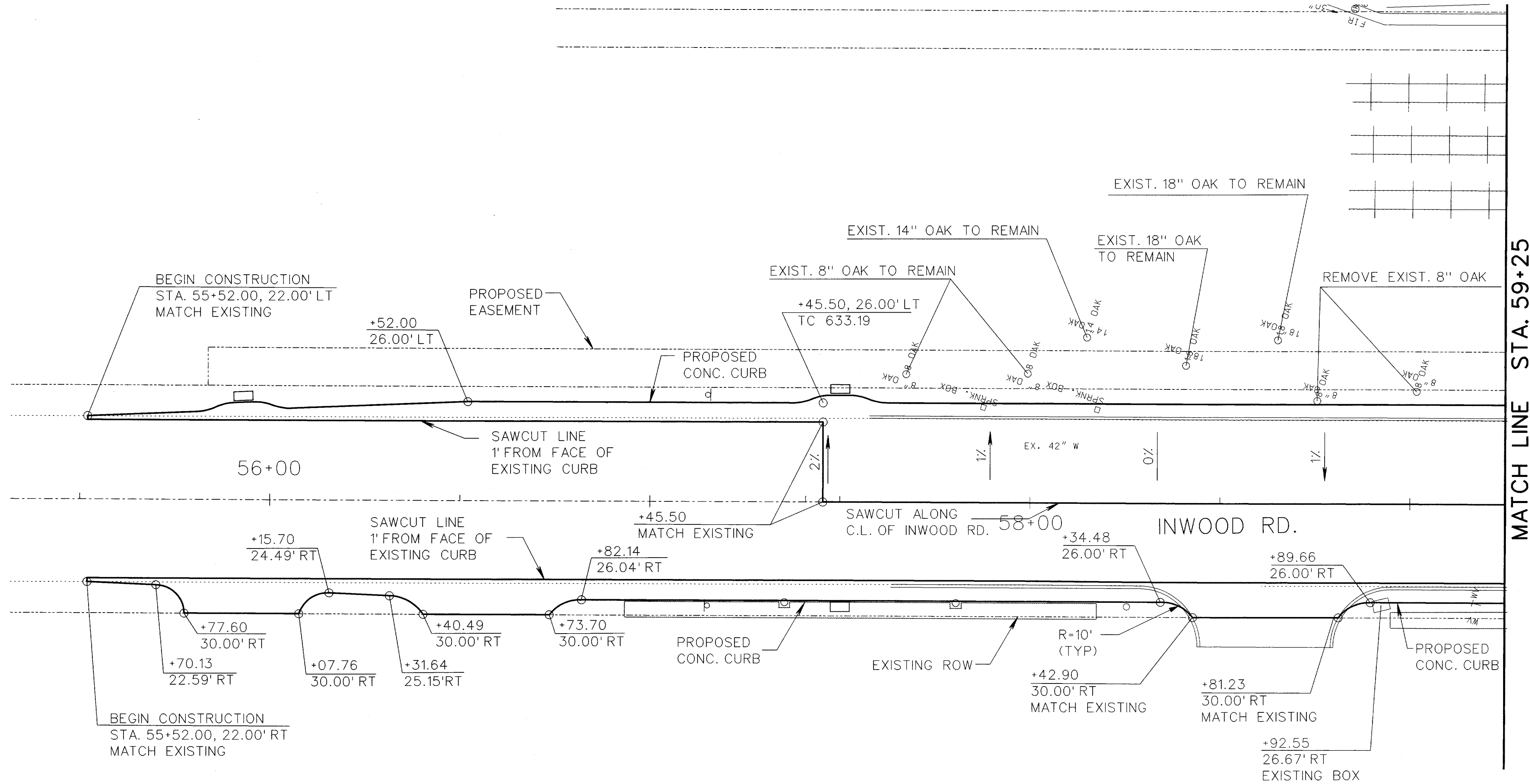
...:\town\inwood\set\con-data.dgn 05/12/03 03:44:25 PM



NOTES:

1. ALL DIMENSIONS ARE FACE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. FOR WIDENING, CONTRACTOR IS TO SAWCUT EXISTING PAVEMENT 1' FROM FACE OF EXISTING CURB AND CONSTRUCT NEW PAVEMENT TO LIMITS AS SHOWN ON THE PLAN USING A CROSS SLOPE OF 2%.
3. ALL EXISTING TREES WITHIN THE PROJECT LIMITS SHALL BE REMOVED AND HAULED OFF BY THE CONTRACTOR. THE TOWN OF ADDISON SHALL RESTORE THE PARKWAYS WITH NEW TREE PLANTINGS AND OTHER LANDSCAPING ITEMS.
4. REMOVE EXISTING CONCRETE PAVEMENT WITHIN LIMITS OF NEW CONSTRUCTION.
5. THE INFORMATION REGARDING THE SIZE AND LOCATION OF THE EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATE OF THE EXISTING UNDERGROUND UTILITIES IN THE FIELD. CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE OCCURRED TO EXISTING UTILITIES AND FACILITIES THROUGHOUT THE DURATION OF THIS PROJECT.

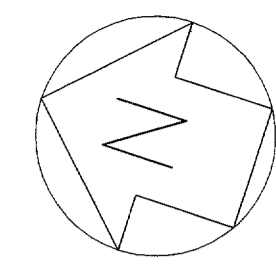
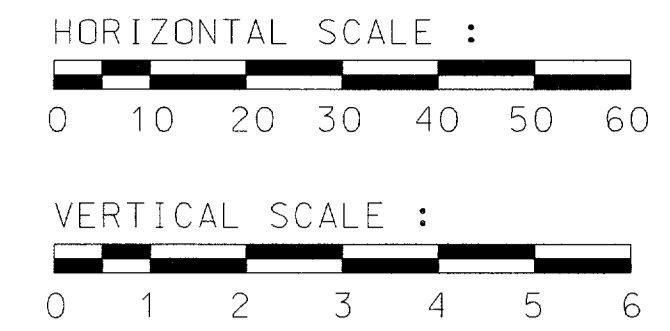
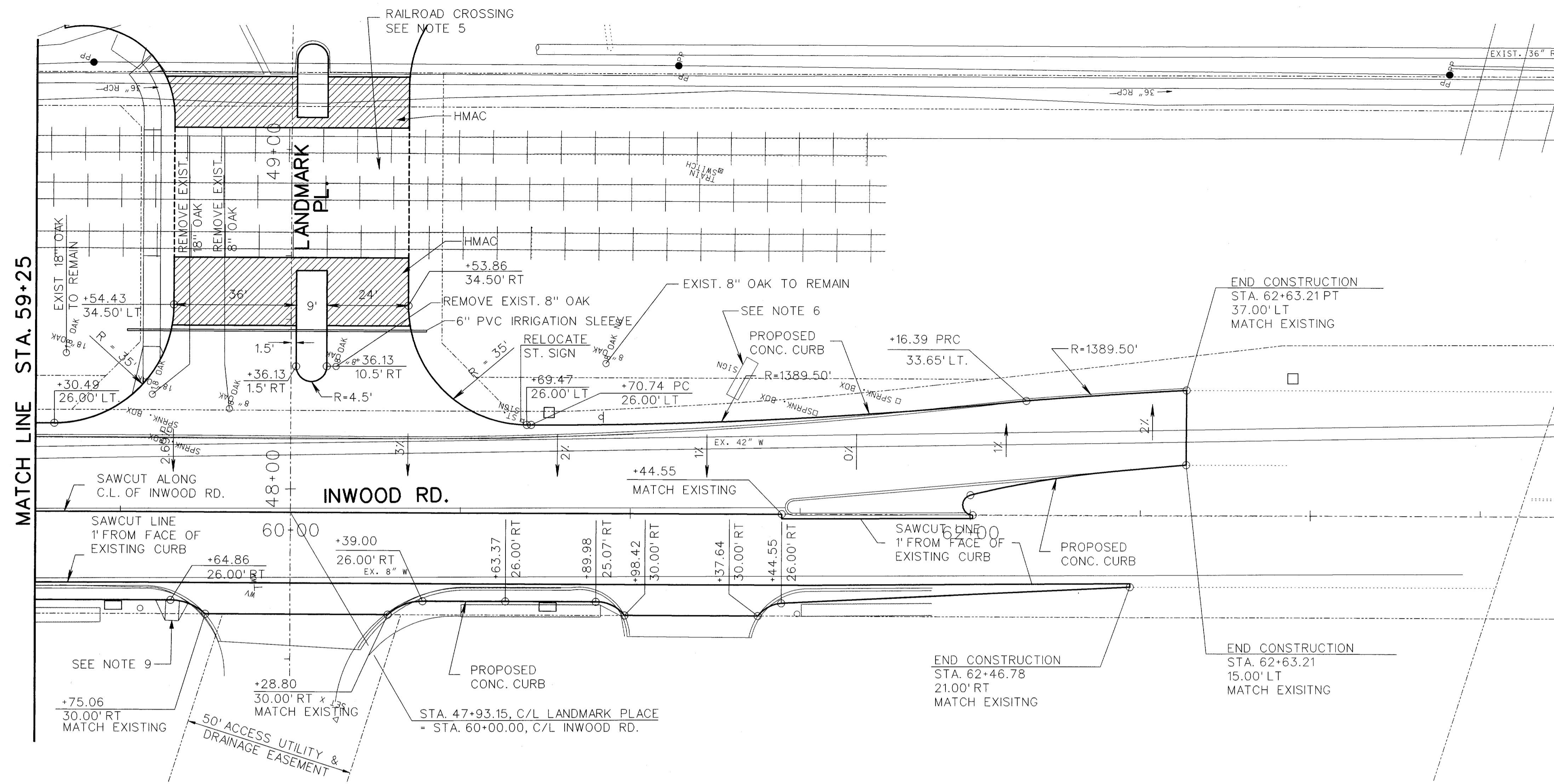
STATE OF TEXAS
WEIDONG LI
84718
LICENSED PROFESSIONAL ENGINEER
Weidong Li
5/12/03



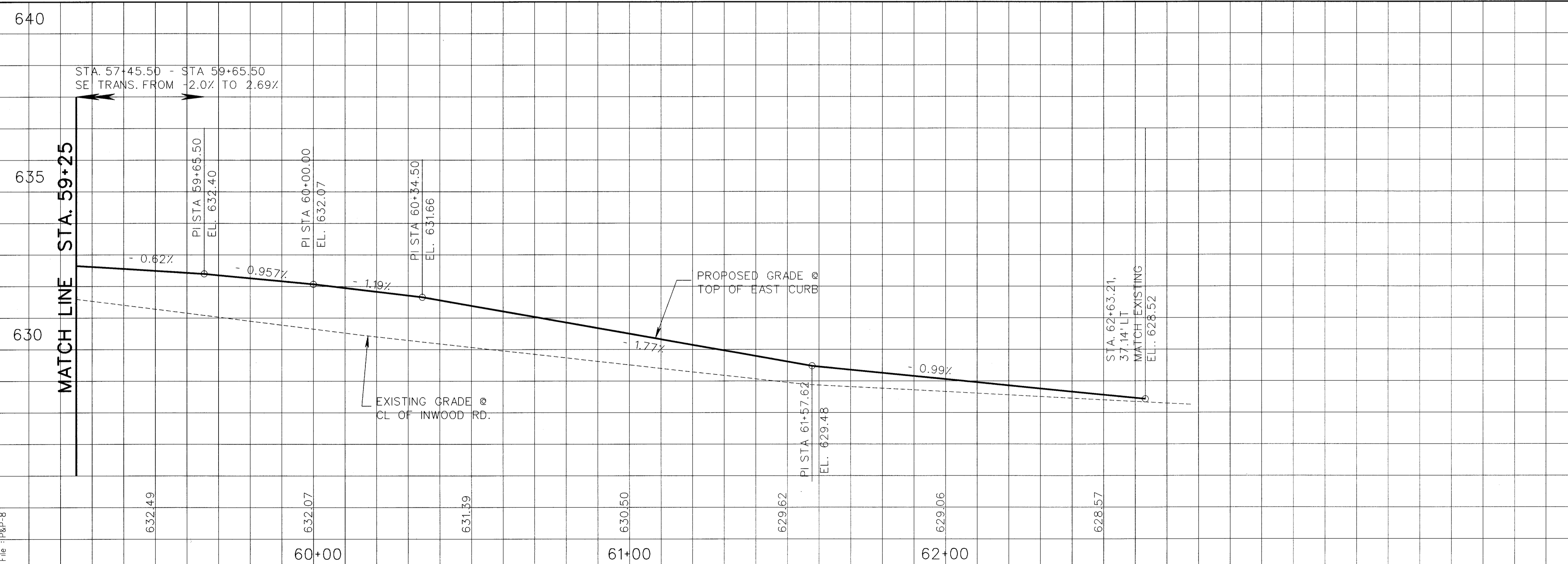
PARSONS <small>15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900</small>						
PLAN AND PROFILE SHEET 1 OF 3 INWOOD CONNECTION DEPARTMENT OF PUBLIC WORKS TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
W.L.	C.W.W.	05/12/03	1"=40' H 1"=4' V			8

File: PRP-9

...:\add\inwood\set\p06-9.dgn 05/12/03 03:44:25 PM



- NOTES:
1. ALL DIMENSIONS ARE FACE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
 2. FOR WIDENING, CONTRACTOR IS TO SAWCUT EXISTING PAVEMENT 1' FROM FACE OF EXISTING CURB AND CONSTRUCT NEW PAVEMENT TO LIMITS AS SHOWN ON THE PLAN USING A CROSS SLOPE OF 2%.
 3. SEE PLAN AND PROFILE SHEET 3 FOR PAVING DETAILS ON LANDMARK PLACE RAIL ROAD CROSSING.
 4. SEE TYPICAL SECTIONS FOR CONSTRUCTION JOINT DETAIL ON LANDMARK PLACE.
 5. CONCRETE CROSSING ON RAILROAD TRACKS SHALL BE PROVIDED BY OTHERS.
 6. CONTRACTOR SHALL PROTECT EXISTING TOWN OF ADDISON SIGN AND FOUNDATION AND REPAIR IT AT HIS/HER OWN EXPENSE SHOULD ANY DAMAGE OCCUR.
 7. REMOVE EXISTING CONCRETE PAVEMENT WITHIN LIMITS OF NEW CONSTRUCTION.
 8. THE INFORMATION REGARDING THE SIZE AND LOCATION OF THE EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATE OF THE EXISTING UNDERGROUND UTILITIES IN THE FIELD. CONTRACT IS RESPONSIBLE FOR ANY DAMAGE OCCURED TO EXISTING UTILITIES AND FACILITIES THROUGHOUT THE DURATION OF THIS PROJECT.
 9. CONSTRUCT CURB TRANSITION PER CURB RAMPS STANDARD SHEET. ADA RAMP TO BE CONSTRUCTED LATER THROUGH SEPARATE CONTRACT.

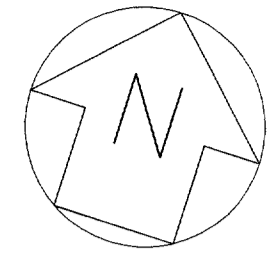
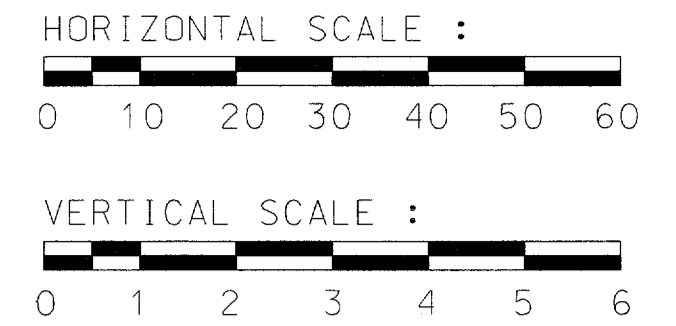
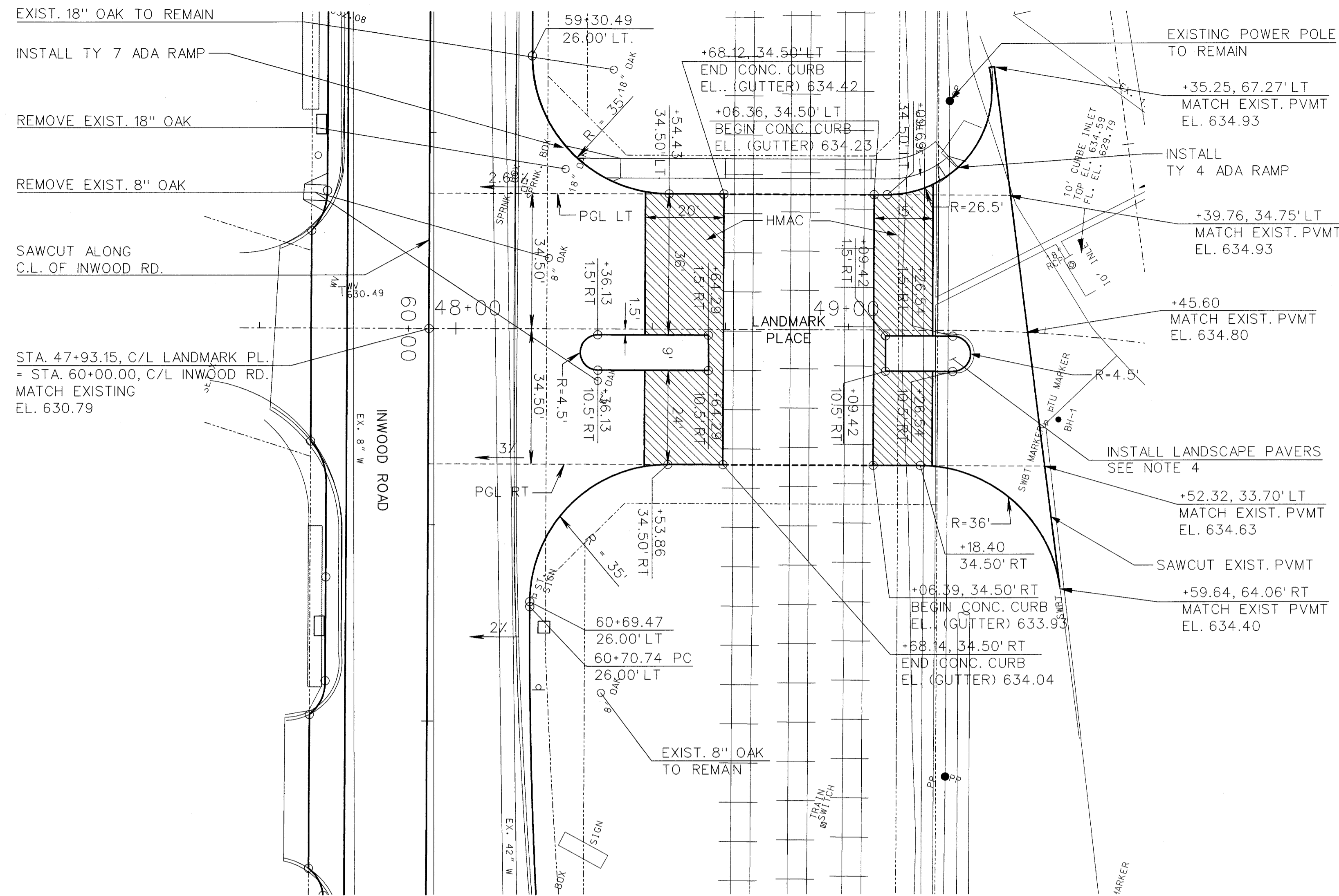


Weidong Li
5/12/03

PARSONS 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900						
PLAN AND PROFILE SHEET 2 OF 3 INWOOD CONNECTION DEPARTMENT OF PUBLIC WORKS TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
W.L.	C.W.W.	05/12/03	1"=40' H 1"=4' V			9

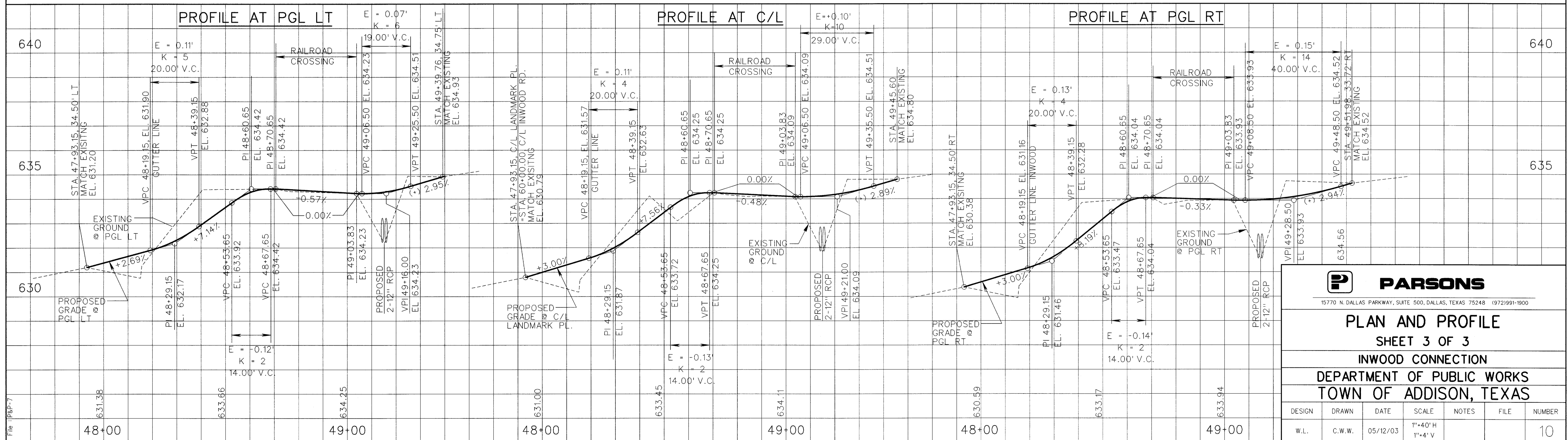
File: P&P-B

...:\cadd\inwood\set\103618.dgn 05/12/03 08:03:30 PM



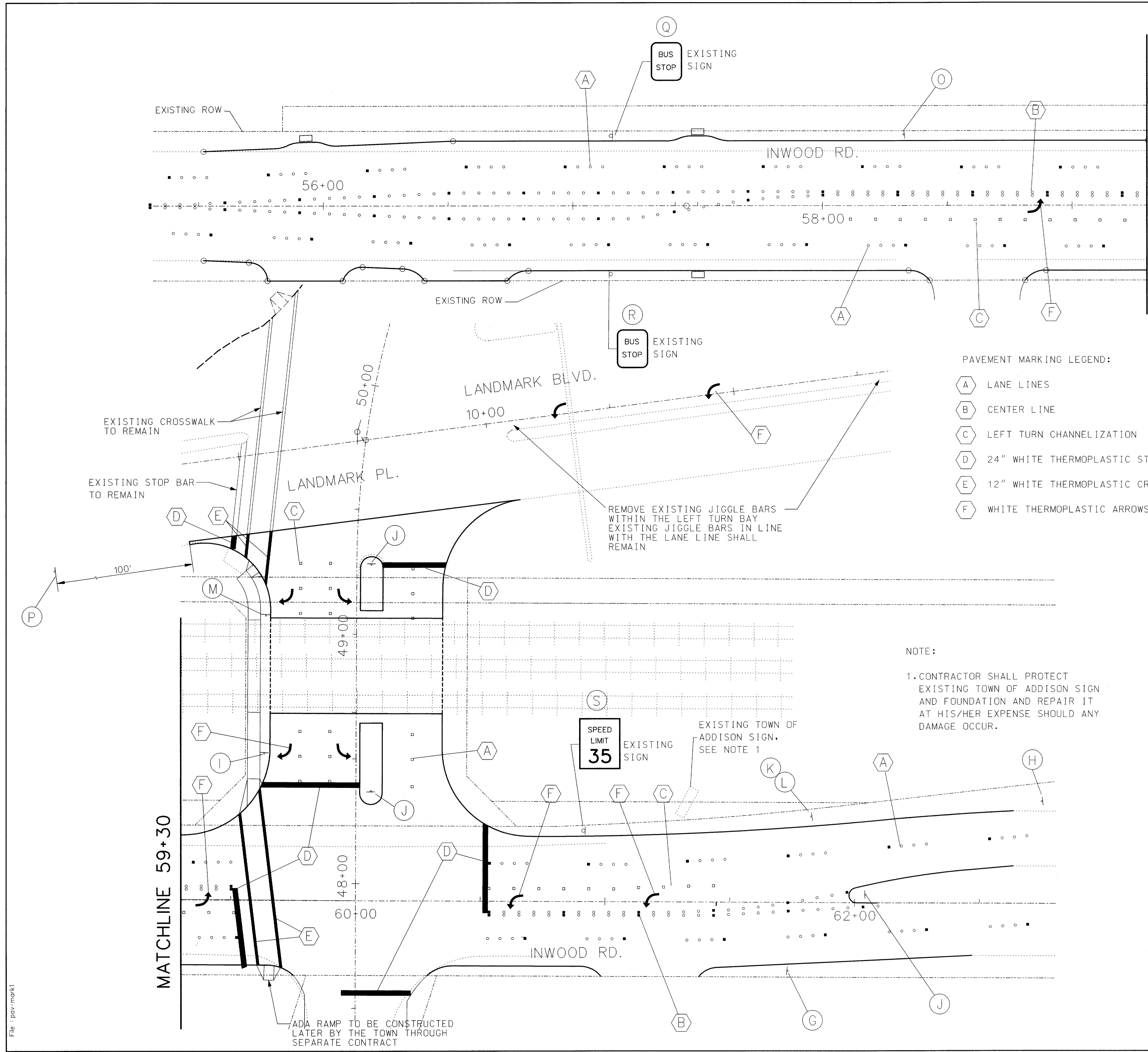
NOTES:

1. ALL DIMENSIONS ARE FACE TO FACE OF CURB, UNLESS OTHERWISE NOTED.
2. SEE PLAN AND PROFILE SHEETS 1 & 2 FOR PAVING DETAILS ON INWOOD ROAD.
3. SEE TYPICAL SECTIONS FOR CONSTRUCTION JOINT DETAIL ON LANDMARK PLACE
4. INSTALL LANDSCAPE PAVERS IN MEDIAN ON LANDMARK PLACE FROM STA. 48+31.63 TO STA. 48+64.29 AND STA. 49+09.42 TO STA. 49+31.11. SEE MISCELLANEOUS DETAILS.
5. REMOVE EXISTING CONCRETE PAVEMENT WITHIN LIMITS OF NEW CONSTRUCTION.
6. THE INFORMATION REGARDING THE SIZE AND LOCATION OF THE EXISTING UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR SHALL VERIFY THE LOCATE OF THE EXISTING UNDERGROUND UTILITIES IN THE FIELD. CONTRACT IS RESPONSIBLE FOR ANY DAMAGE OCCURED TO EXISTING UTILITIES AND FACILITIES THROUGHOUT THE DURATION OF THIS PROJECT.



File: P&P-7

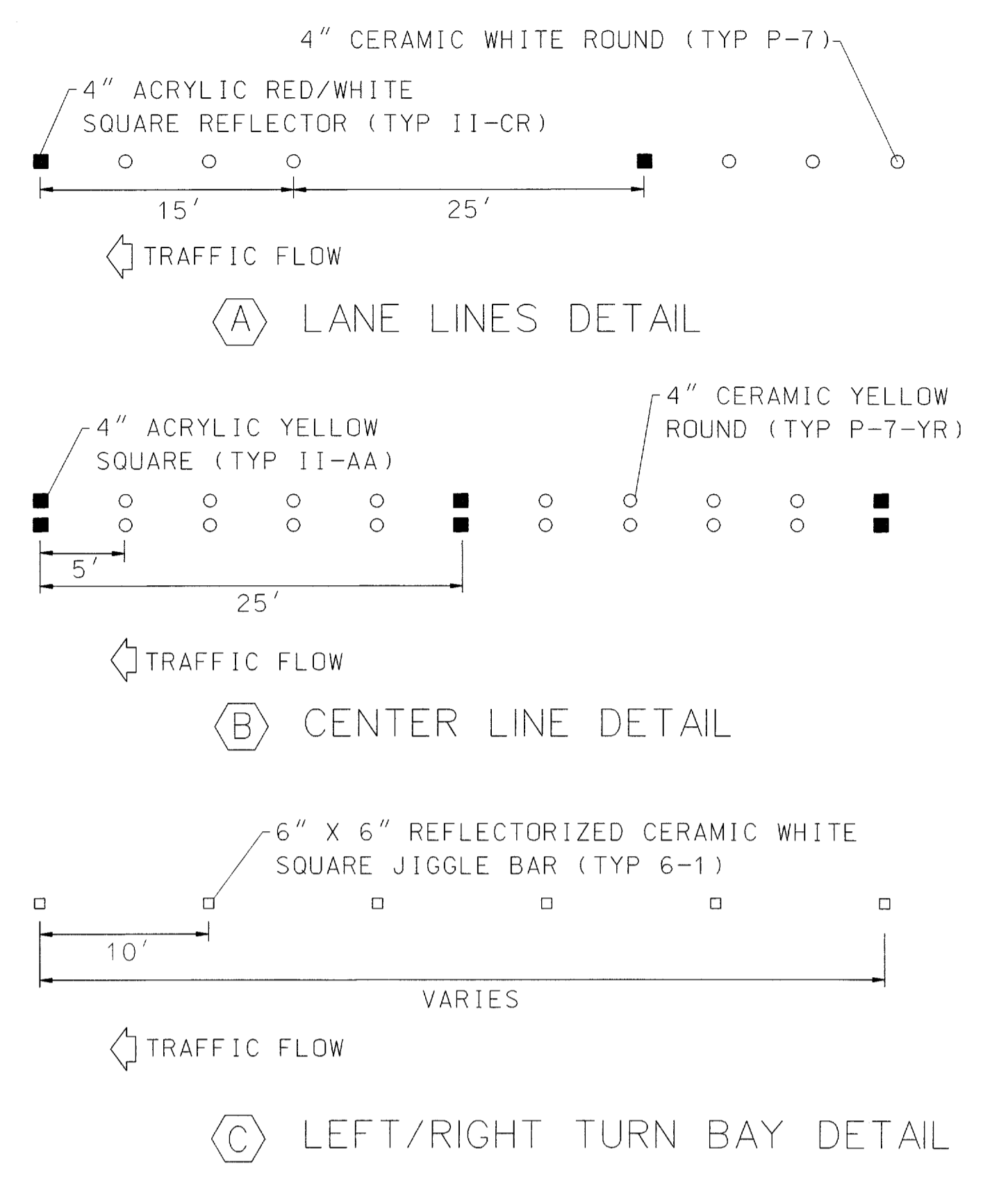
PARSONS 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900					
PLAN AND PROFILE					
SHEET 3 OF 3					
INWOOD CONNECTION					
DEPARTMENT OF PUBLIC WORKS					
TOWN OF ADDISON, TEXAS					
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE NUMBER
W.L.	C.W.W.	05/12/03	1"=40'H 1"=4' V		10



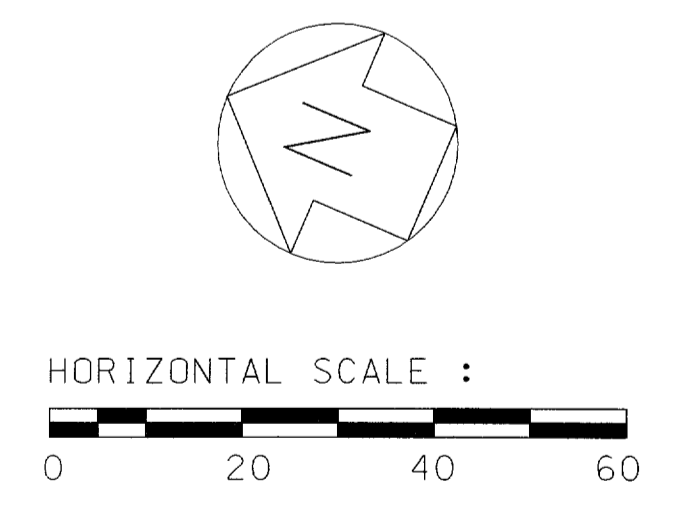
PAVEMENT MARKING LEGEND:

- (A) LANE LINES
- (B) CENTER LINE
- (C) LEFT TURN CHANNELIZATION
- (D) 24" WHITE THERMOPLASTIC STOP BAR
- (E) 12" WHITE THERMOPLASTIC CROSSWALK
- (F) WHITE THERMOPLASTIC ARROWS

NOTE:
 1. CONTRACTOR SHALL PROTECT EXISTING TOWN OF ADDISON SIGN AND FOUNDATION AND REPAIR IT AT HIS/HER EXPENSE SHOULD ANY DAMAGE OCCUR.



SMALL ROADSIDE SIGN SUMMARY			
SIGNS	TYPE	DESCRIPTION	SIZE
(G)	R2-1	SPEED LIMIT (35)	24" x 30"
(H)	W10-2	HIGHWAY-RAIL CROSSING WARNING	30" x 30"
(I)	R3-7R	RIGHT LANE MUST TURN RIGHT	30" x 30"
(J)	R4-7	KEEP RIGHT	24" x 30"
(K)	W3-3	SIGNAL AHEAD	36" x 36"
(L)	W3-3P	SIGNAL AHEAD PLAQUE	24" x 18"
(M)	R3-7R	RIGHT LANE MUST TURN RIGHT	30" x 30"
(O)	R2-1	SPEED LIMIT (35)	24" x 30"
(P)	W10-2	HIGHWAY-RAIL CROSSING WARNING	30" x 30"
(Q)		BUS STOP	EXISTING
(R)		BUS STOP	EXISTING
(S)	R2-1	SPEED LIMIT (35)	EXISTING



STATE OF TEXAS
 WEIDONG LI
 84718
 LICENSED PROFESSIONAL ENGINEER
Wetong Li
 5/12/03

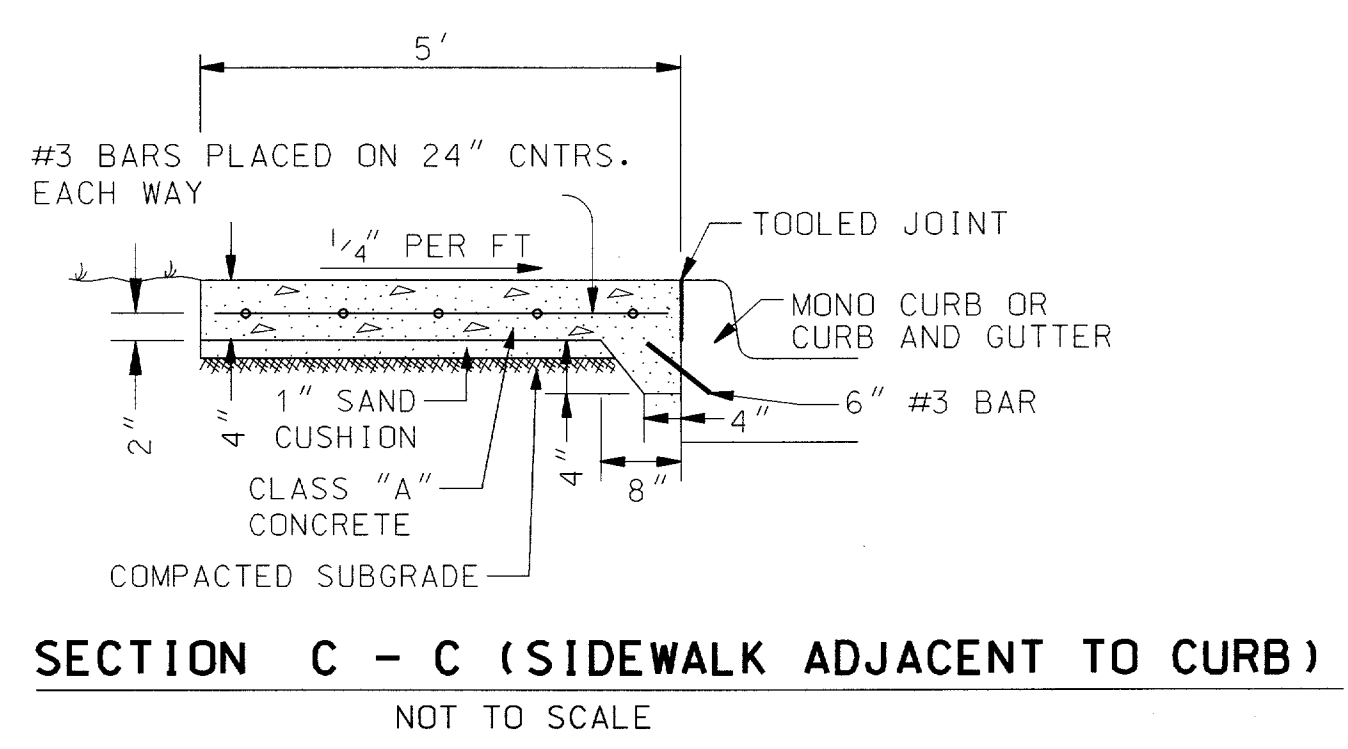
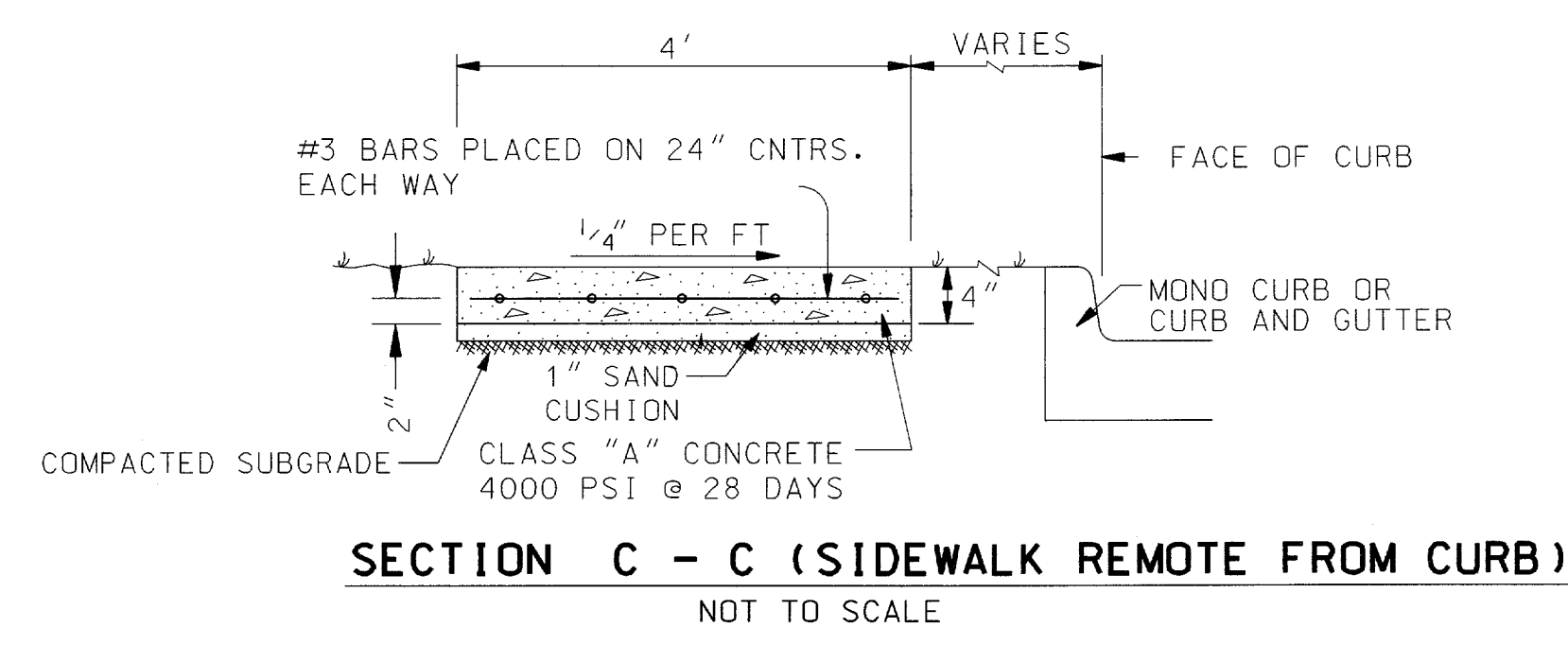
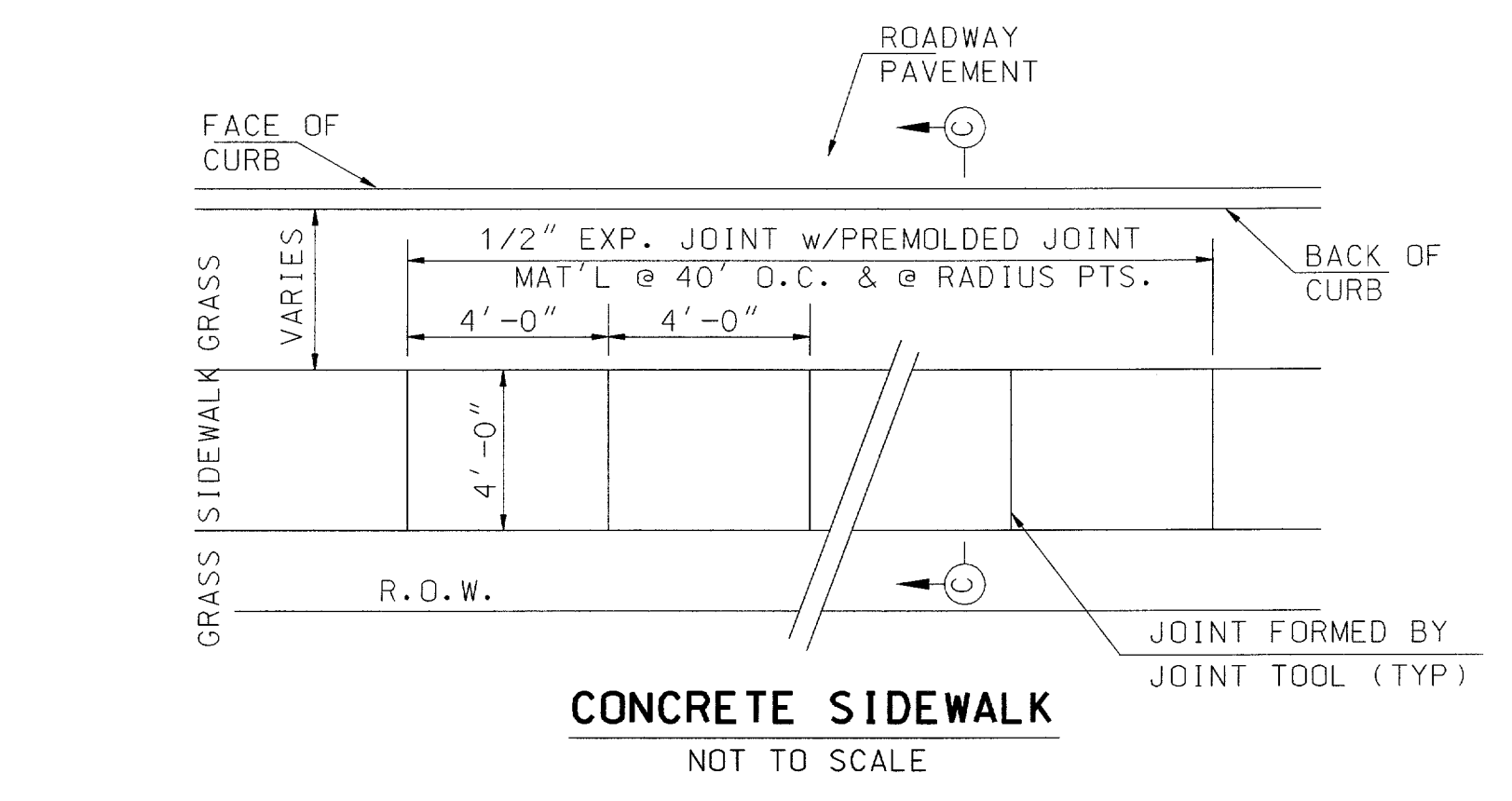
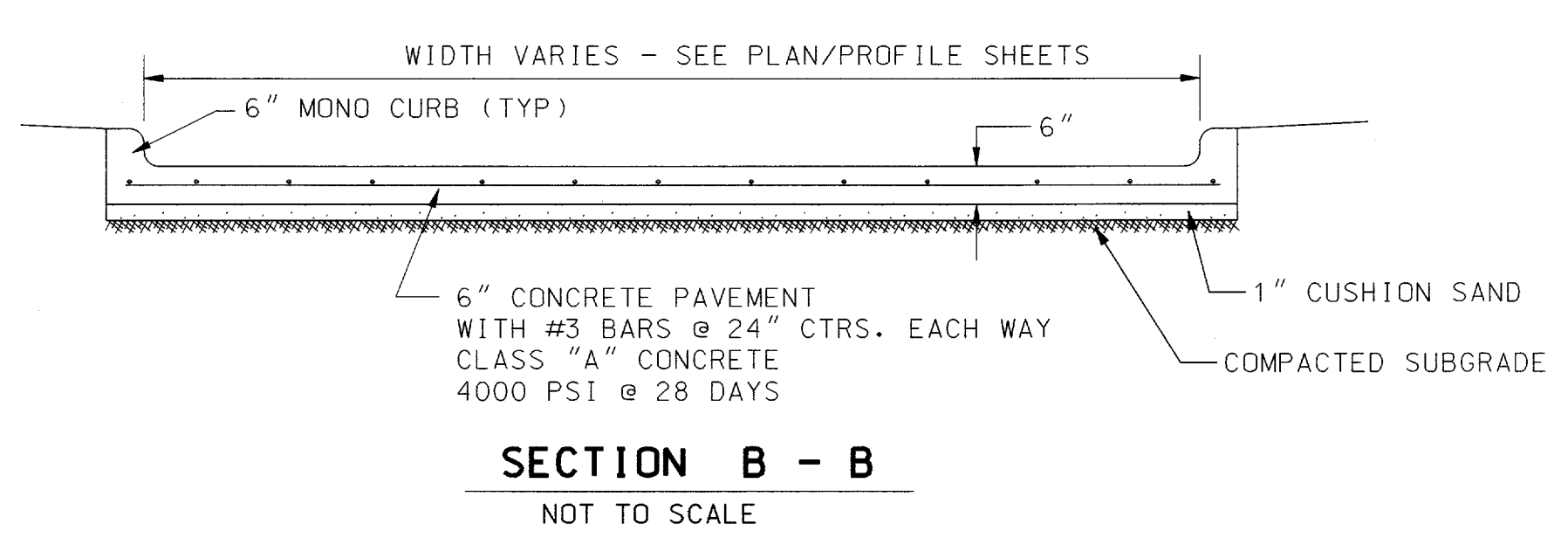
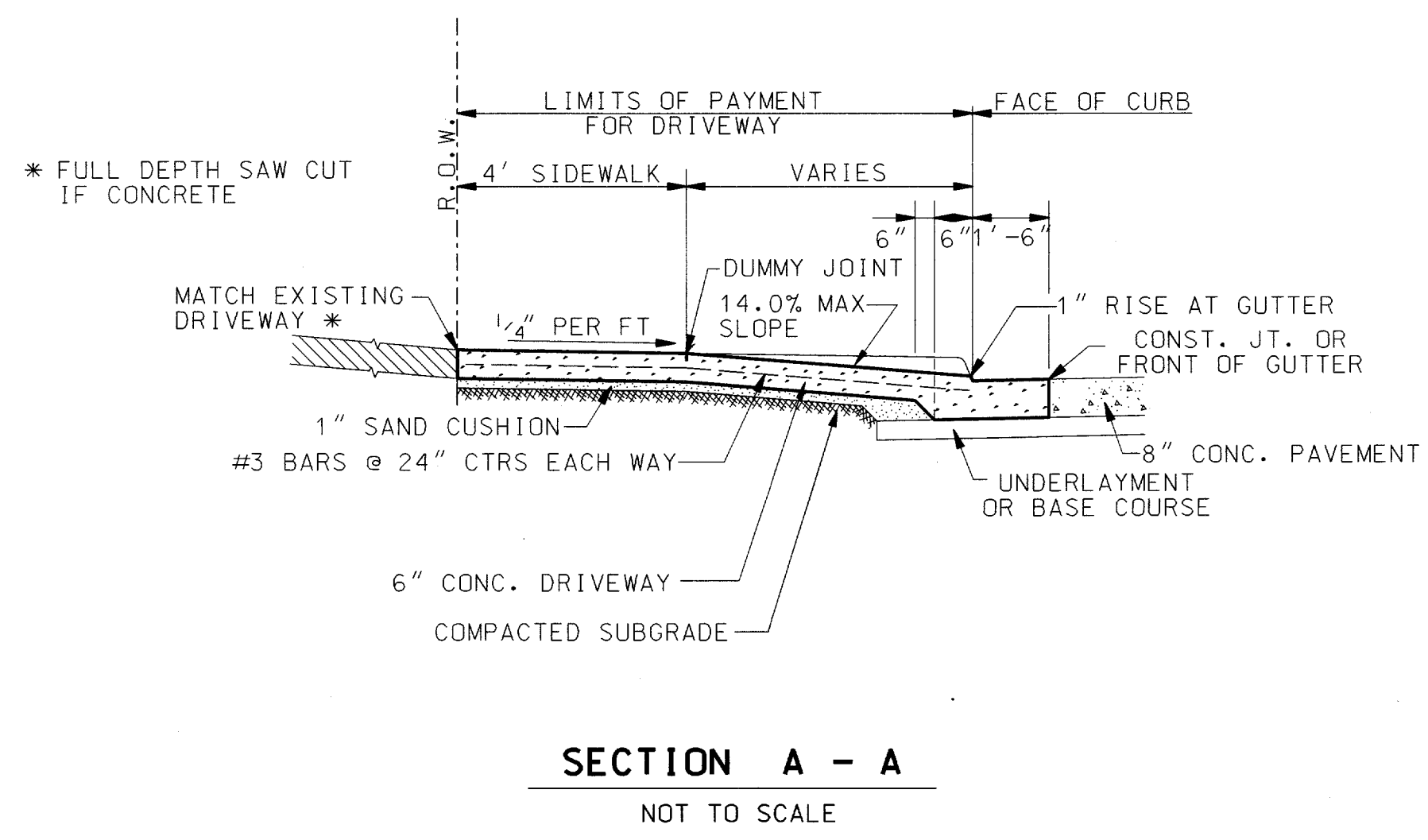
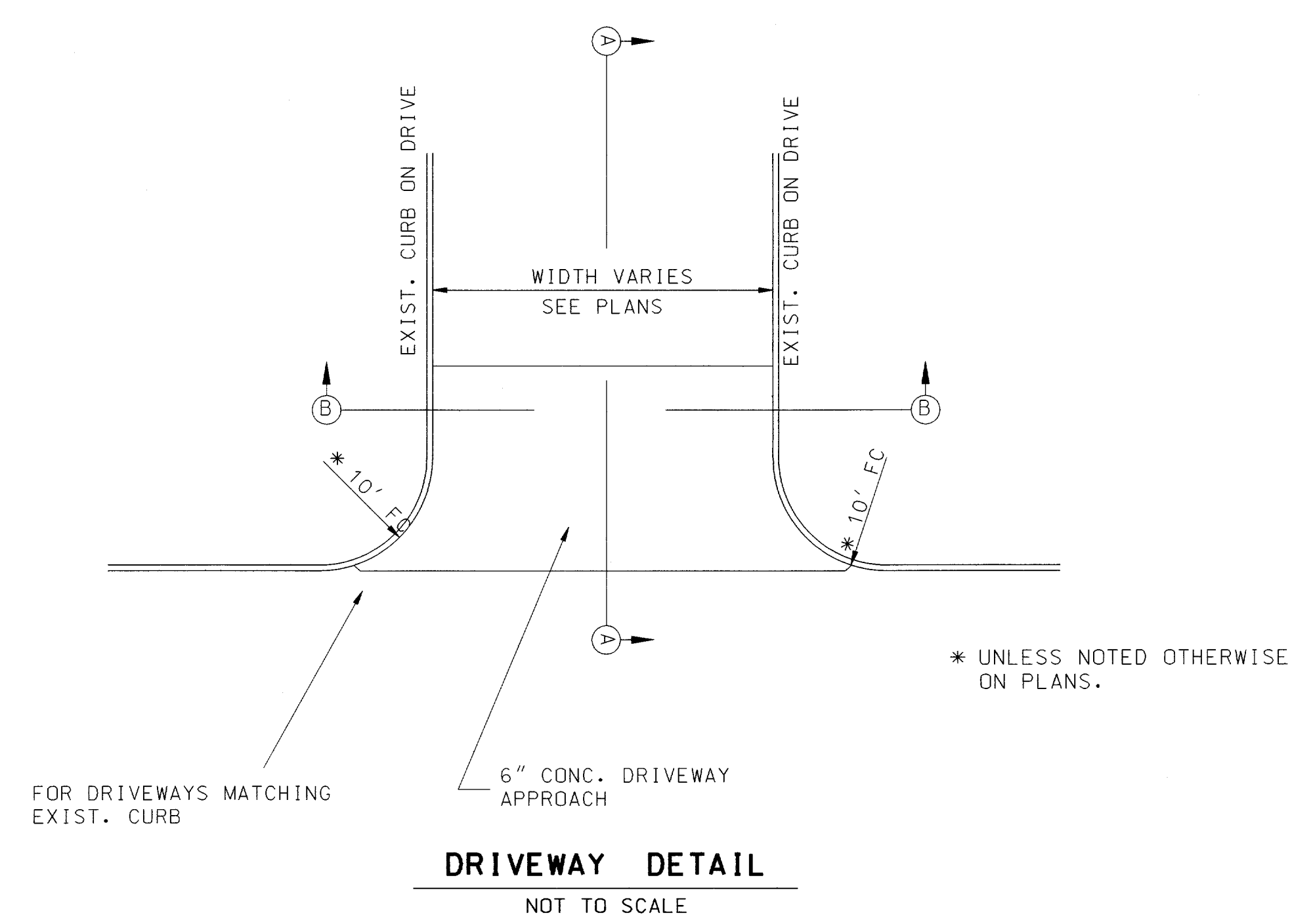
PARSONS
 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900

SIGNING AND PAVEMENT MARKING

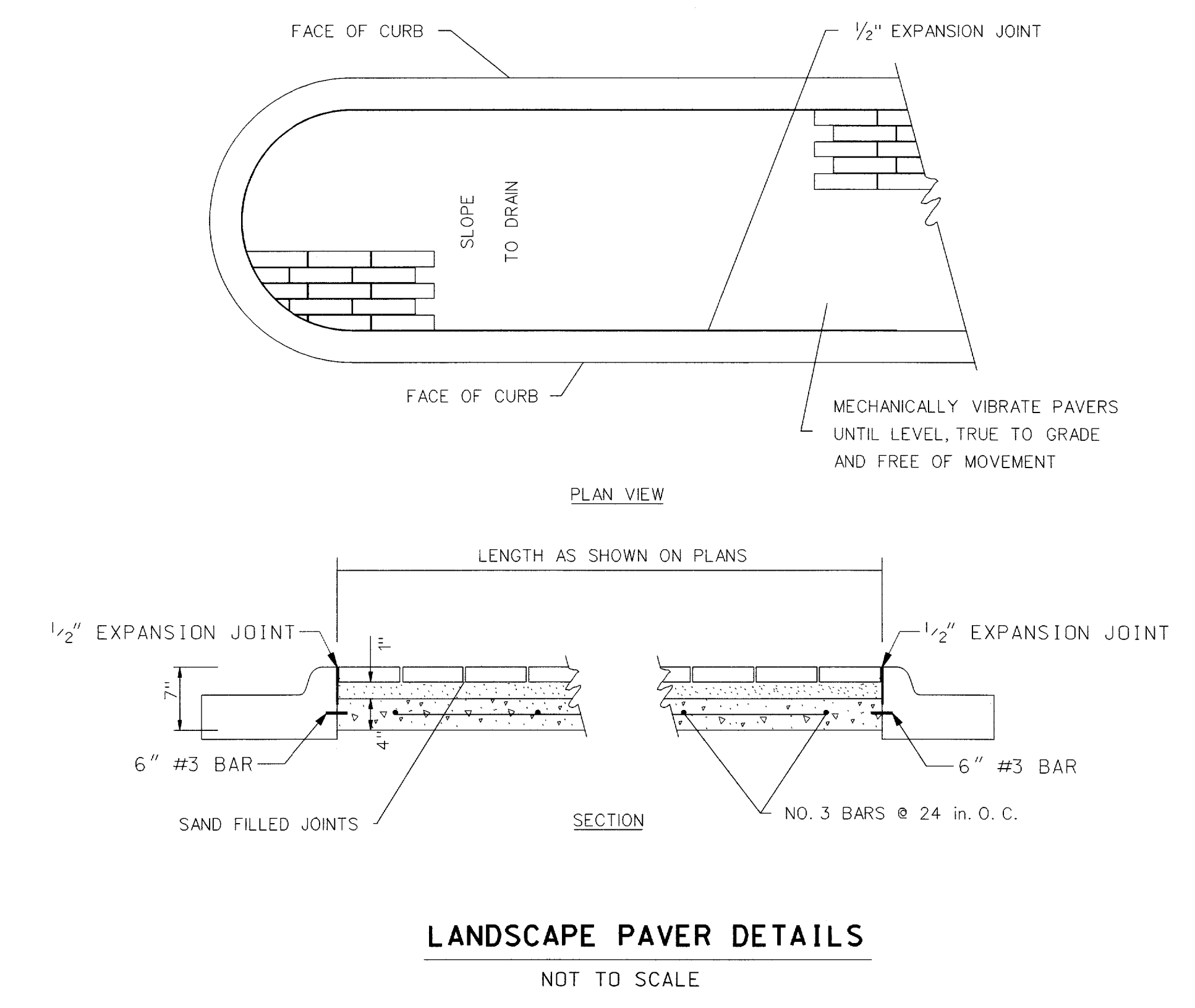
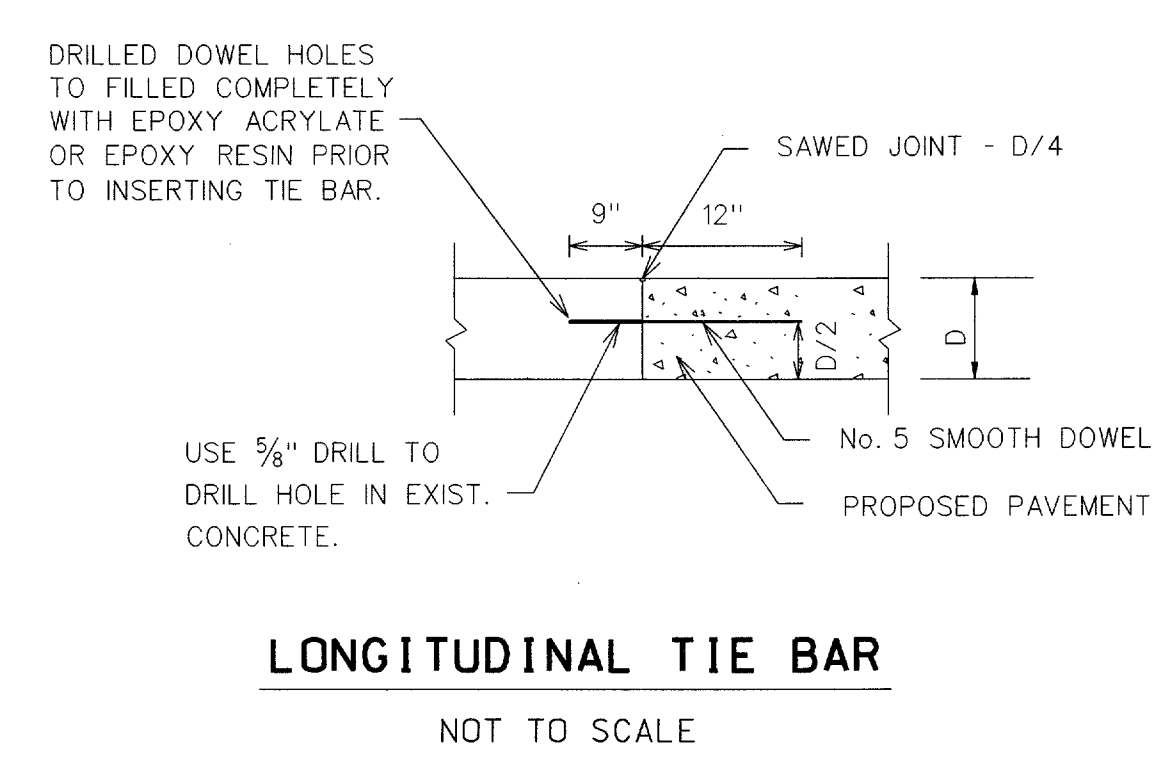
INWOOD CONNECTION
 DEPARTMENT OF PUBLIC WORKS
 TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
S.L.K.	C.W.W.	05/12/03				14

File: pav-mark1



- SIDEWALK NOTES:**
1. THE CONTRACTOR SHALL PROVIDE TOOLED JOINTS USING A JOINTING TOOL APPROVED BY THE ENGINEER.
 2. CONTRACTOR SHALL PROVIDE 1/2" PREMOLDED EXP. JOINT MATERIAL AT THE INTERFACE BETWEEN THE EDGE OF SIDEWALK AND ANY CURB OR WALL.



LANDSCAPE PAVERS:

1. LANDSCAPE PAVERS SHALL BE MODULAR CONCRETE PAVERS, AS MANUFACTURED BY PAVESTONE CO., OR EQUAL. PAVERS SHALL HAVE A COMPRESSIVE STRENGTH GREATER THAN 8000 PSI, A WATER ABSORPTION MAXIMUM OF 5% AND MEET OR EXCEED ASTM C-936. PAVERS SHALL BE INSTALLED IN ACCORDANCE WITH DETAILS SHOWN IN THE PLANS AND PLACED IN A RUNNING BOND PATTERN PARELLEL TO THE CENTERLINE OF THE STREET. COLOR AND PATTERN SHALL BE APPROVED BY OWNER. SUPPORT SLAB AND SAND CUSHION SHALL BE SUBSIDIARY TO LANDSCAPE PAVERS.

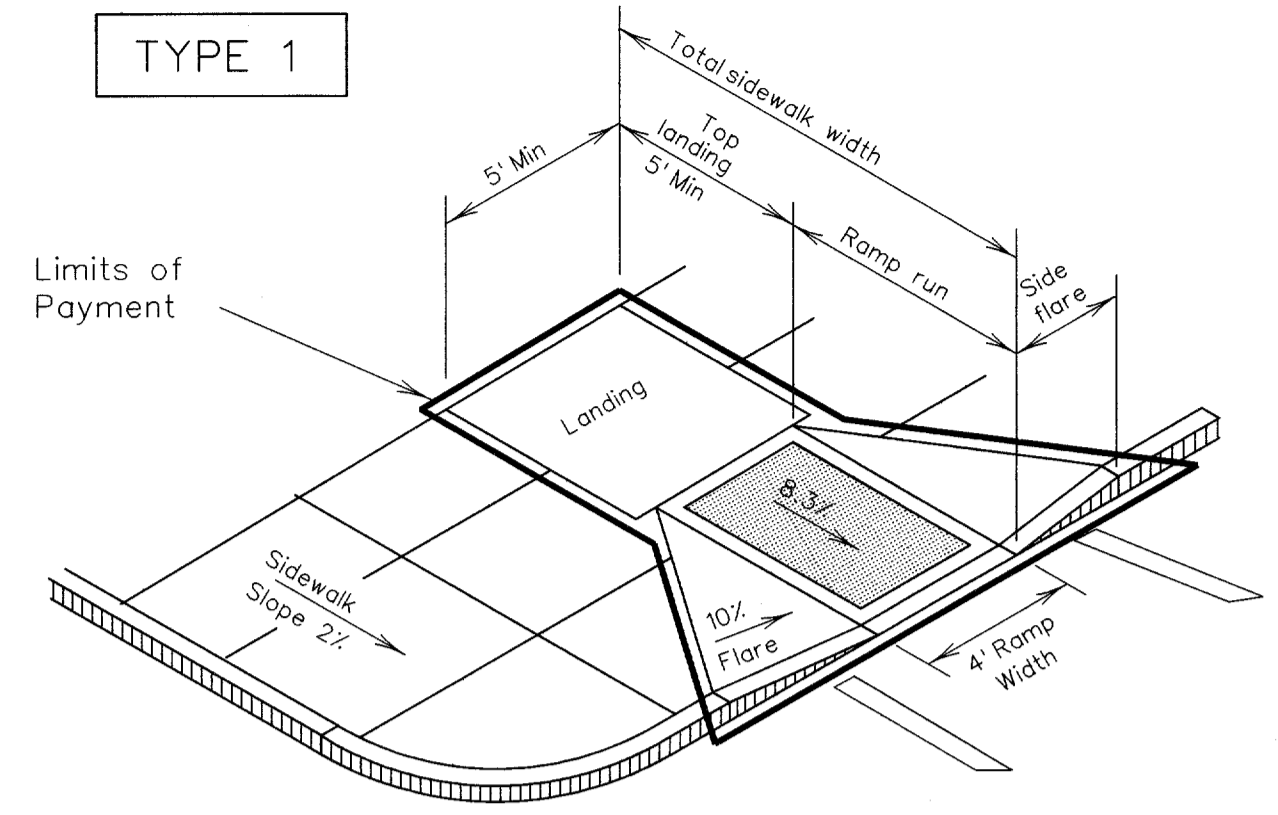
STATE OF TEXAS
WEIDONG LI
84718
LICENSED PROFESSIONAL ENGINEER
Weidong Li
5/12/03

		PARSONS		15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972) 991-1900	
MISCELLANEOUS DETAILS					
INWOOD CONNECTION					
DEPARTMENT OF PUBLIC WORKS					
TOWN OF ADDISON, TEXAS					
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE NUMBER
R.A.Y.	S.L.K.	05/12/03			15

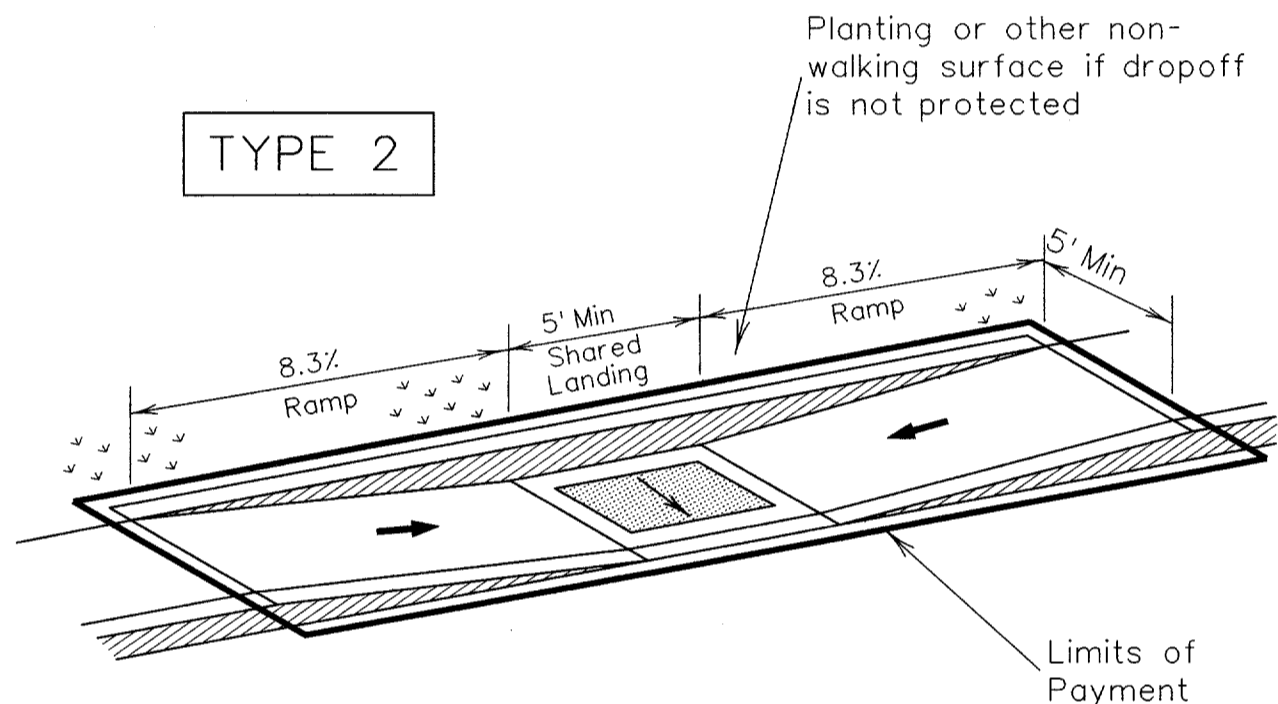
File: RDWY-DET

DISCLAIMER : The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

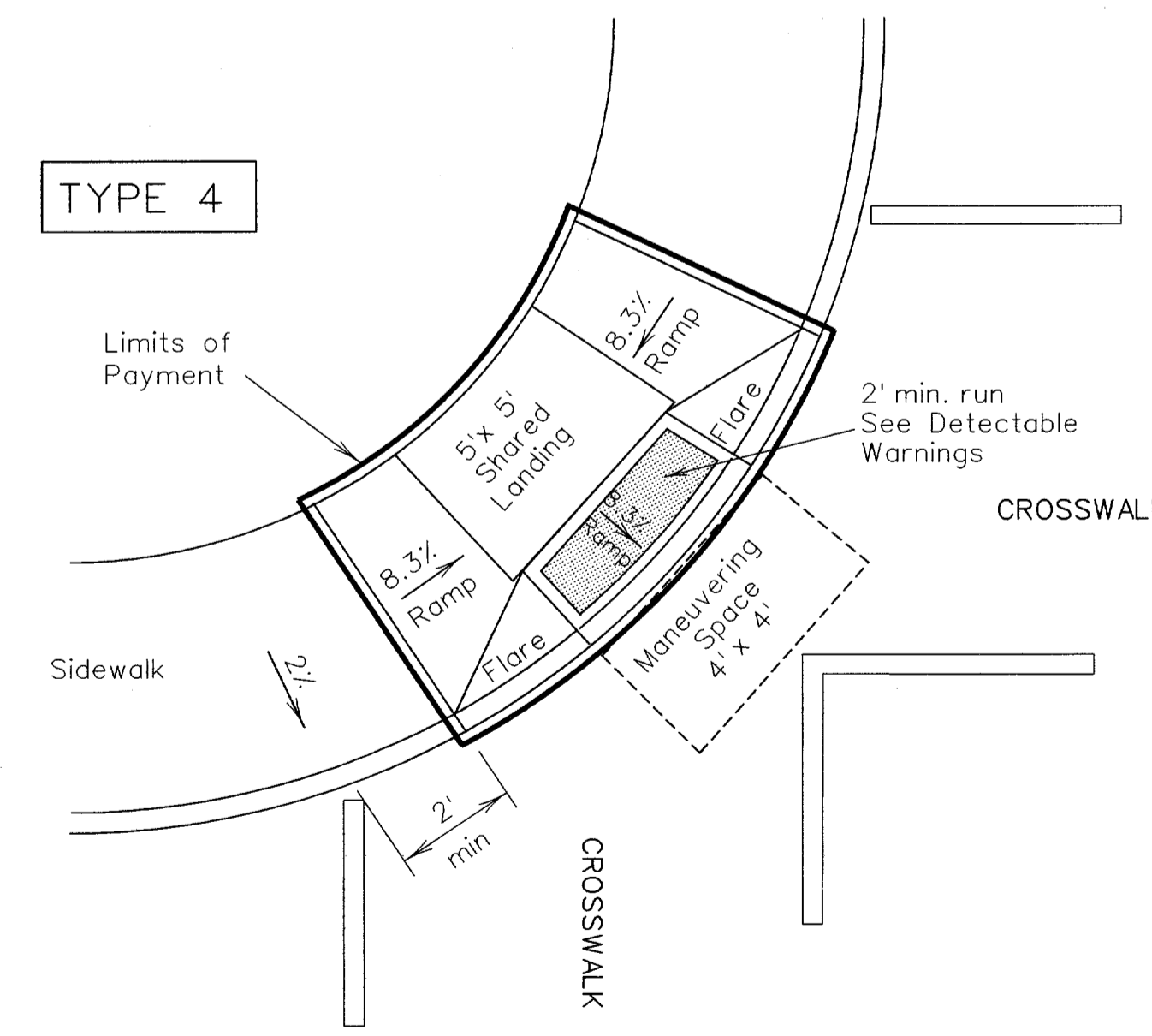
LEVELS DISPLAYED	
1	B2



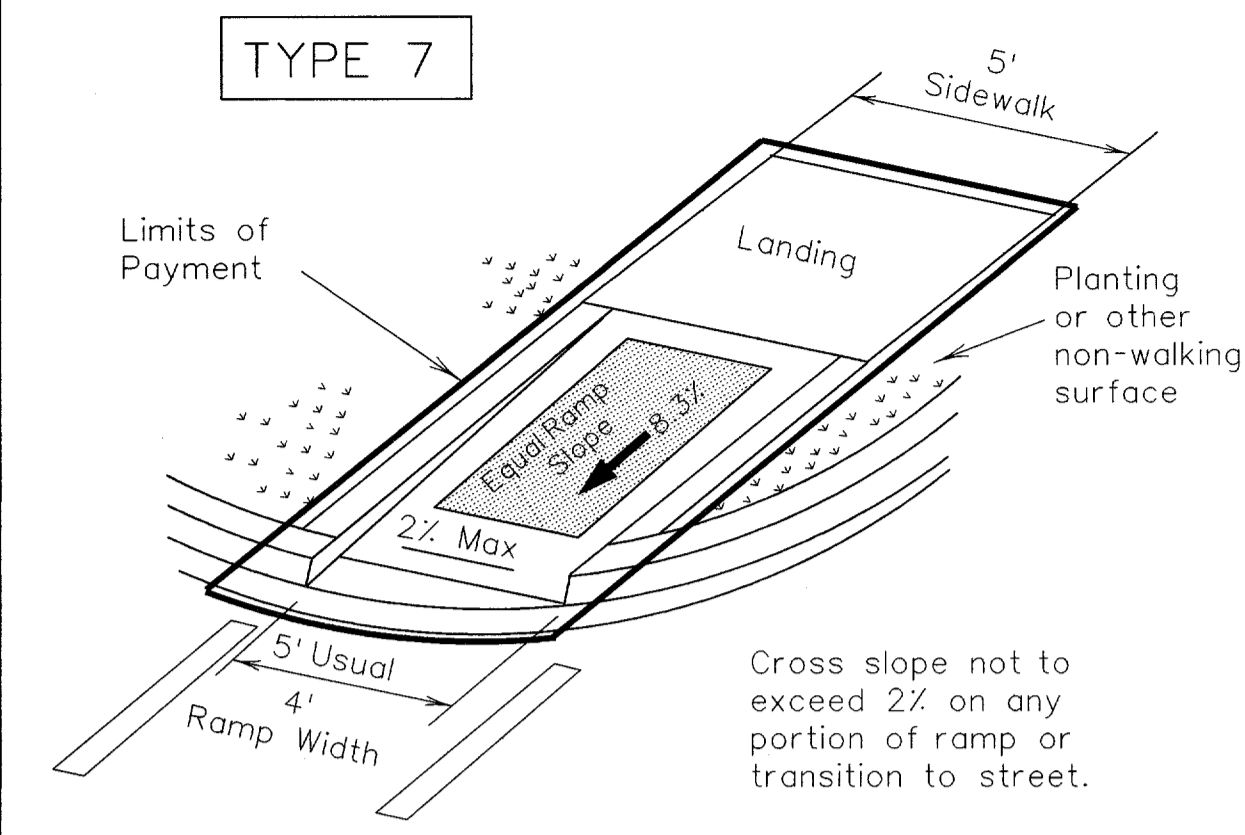
PERPENDICULAR CURB RAMP



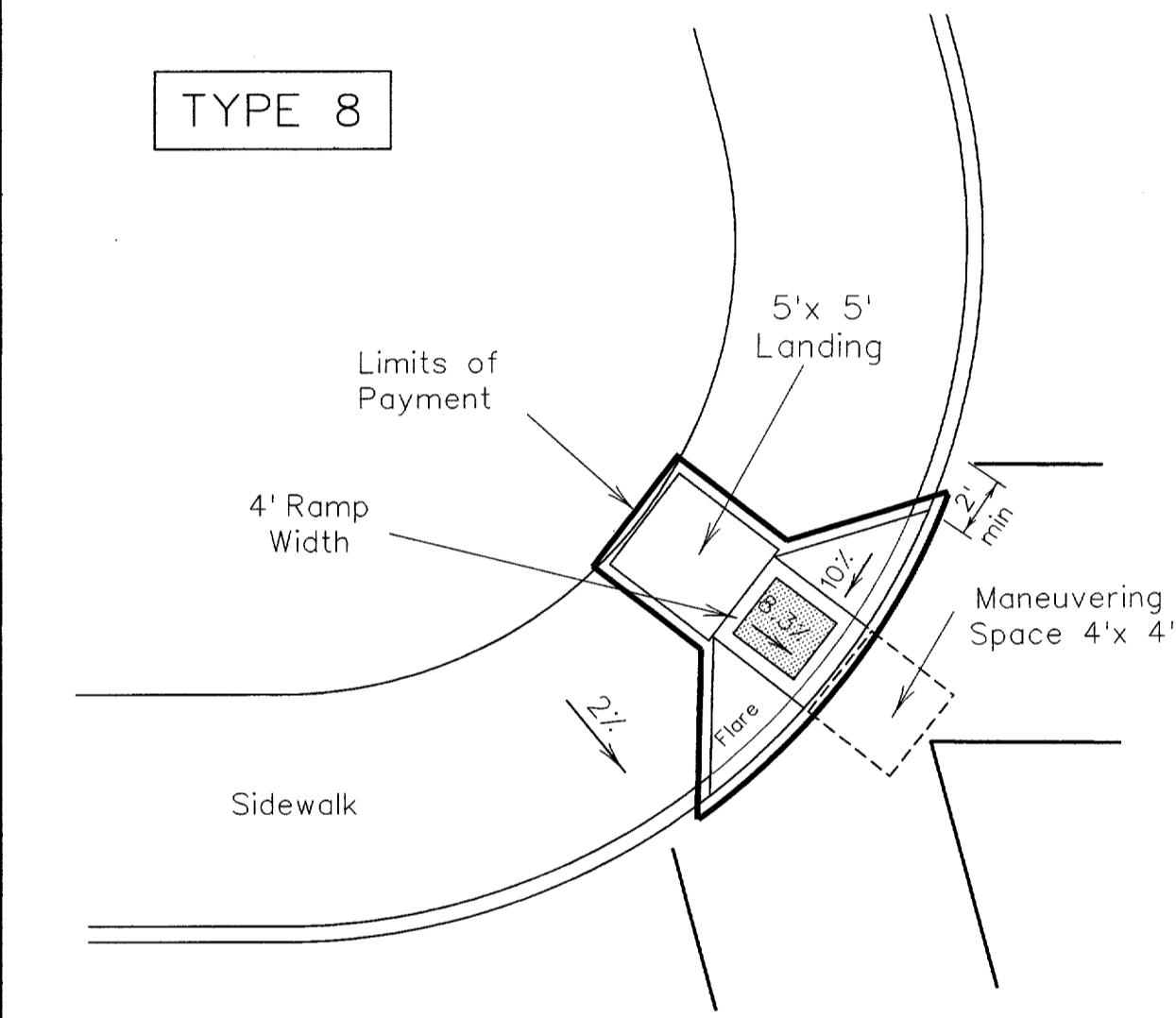
PARALLEL CURB RAMP



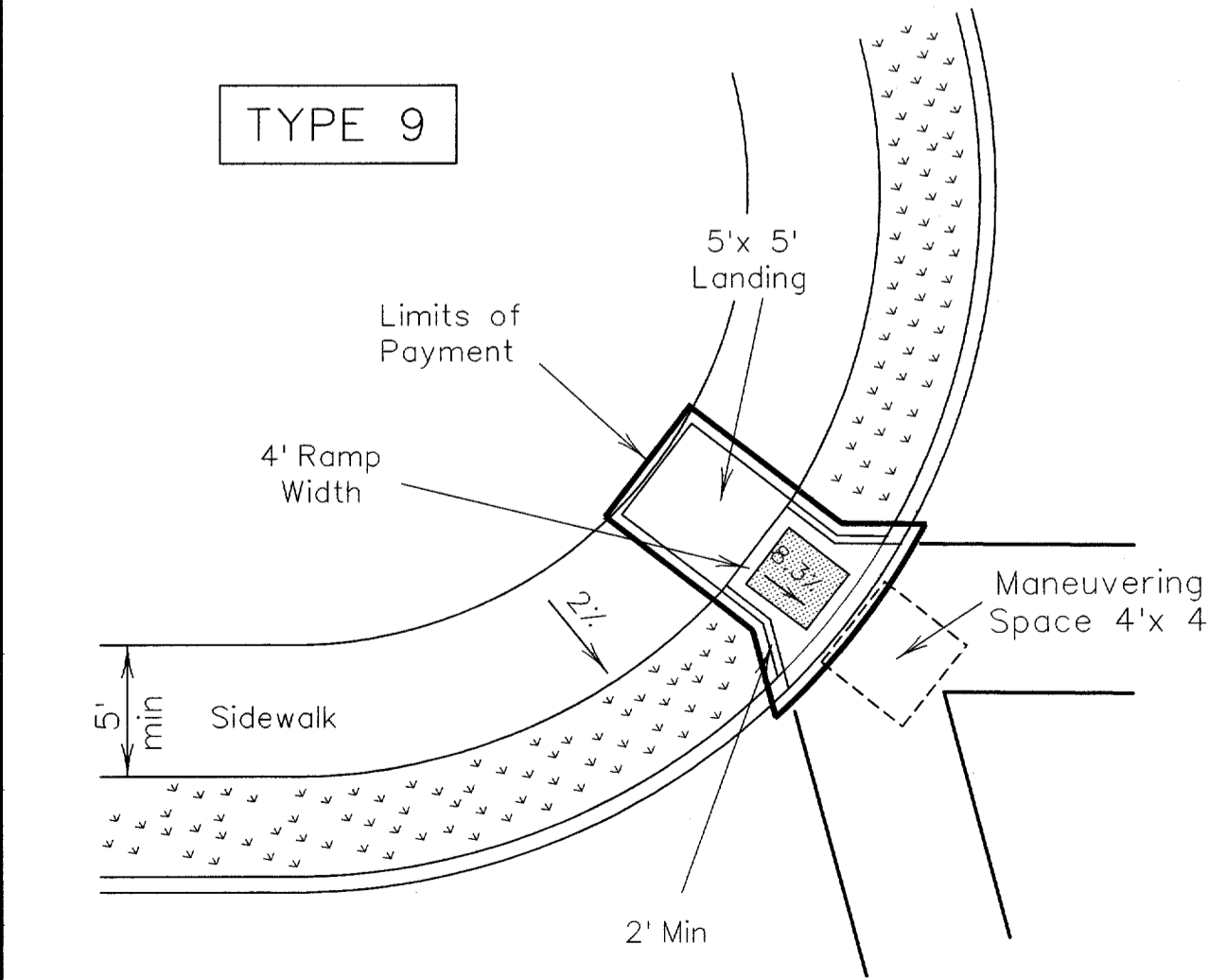
DIAGONAL COMBINATION CURB RAMP
Perpendicular to the Tangent of the Curb Radius and Contained in Crosswalk



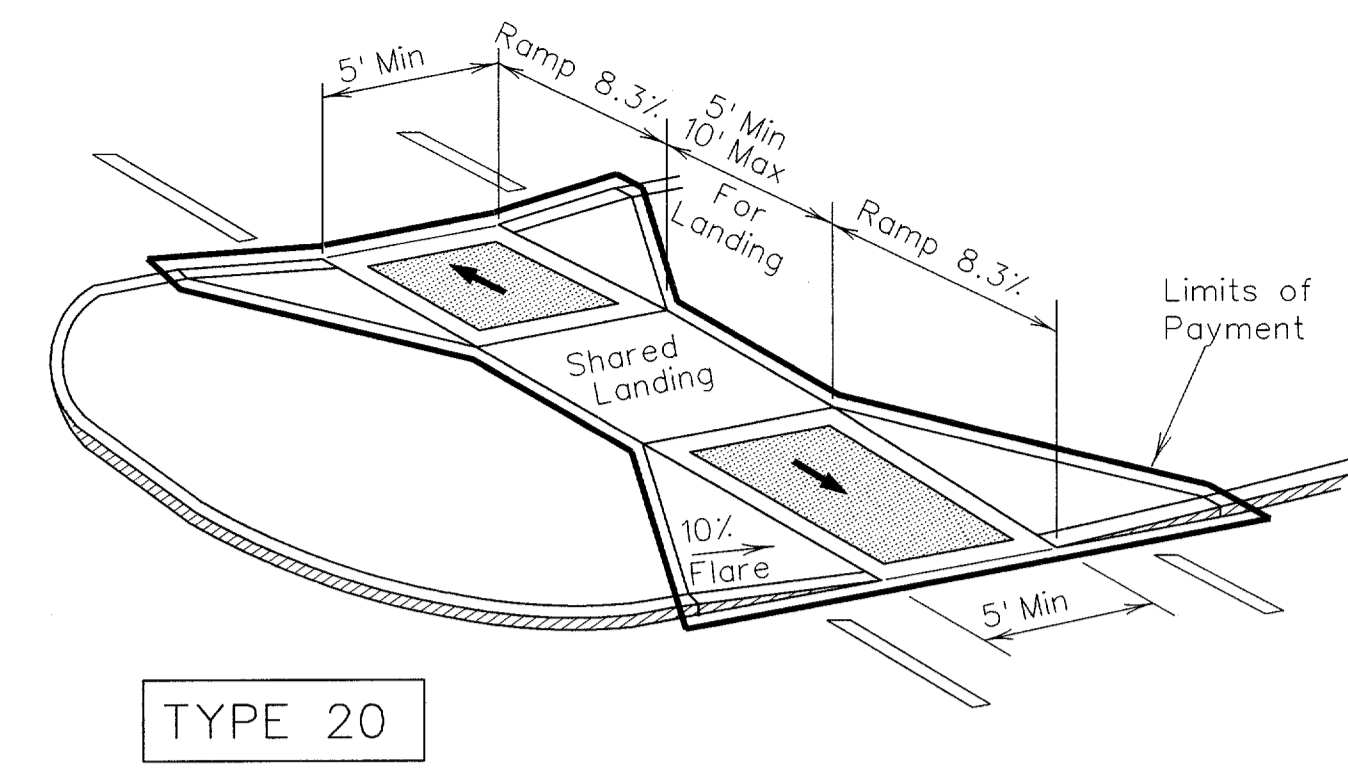
DIRECTIONAL RAMP WITHIN RADIUS



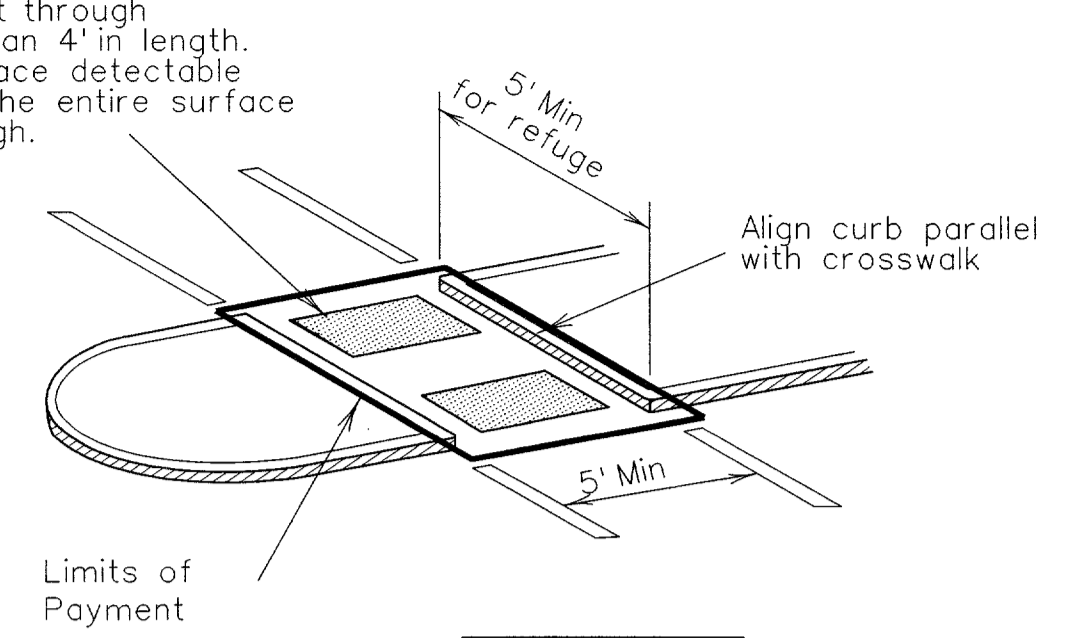
DIAGONAL CURB RAMP (FLARED SIDES)



DIAGONAL CURB RAMP (RETURNED CURB)

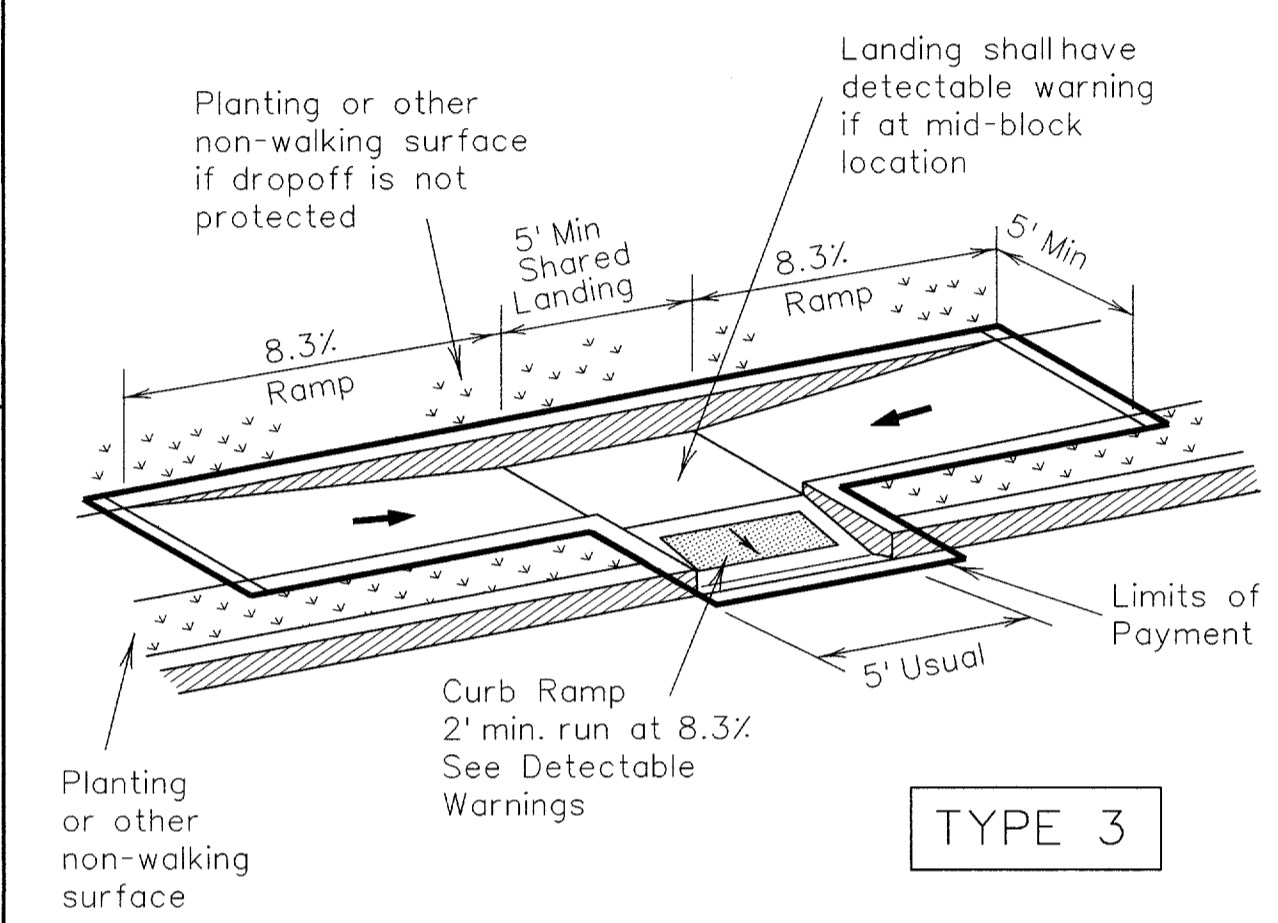


TYPE 20

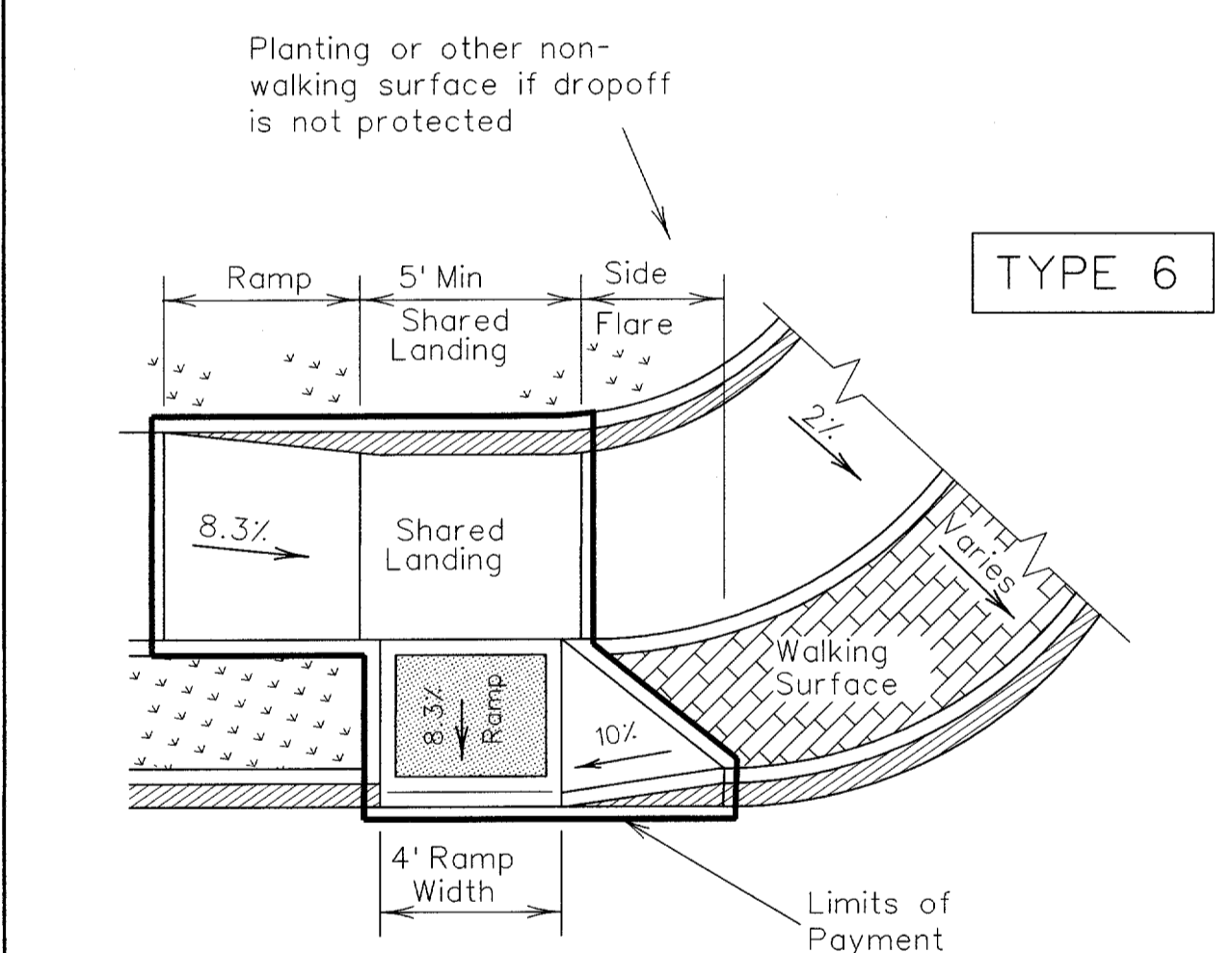


TYPE 21

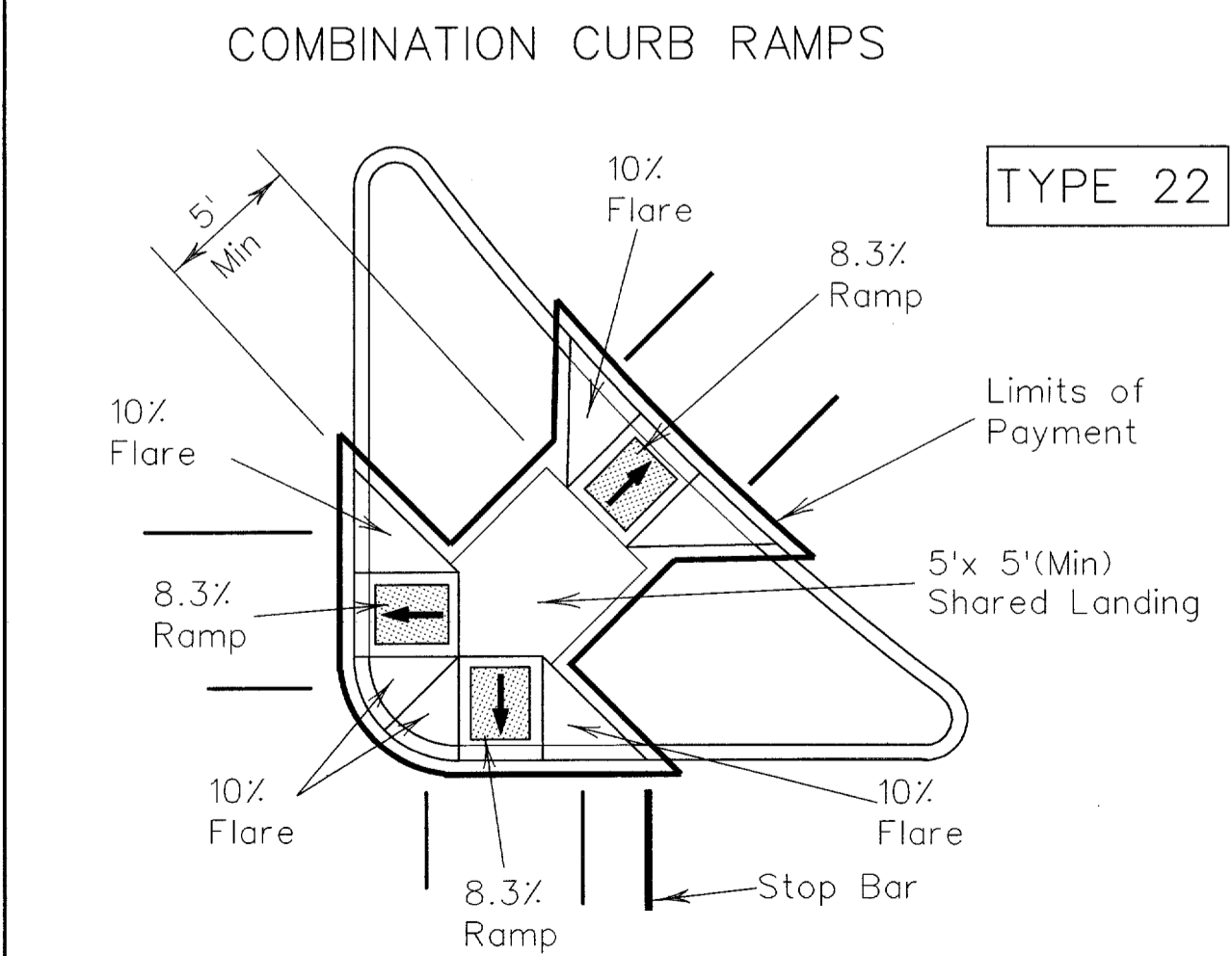
CURB RAMPS AT MEDIAN ISLANDS



TYPE 3



TYPE 6



TYPE 22

COMBINATION ISLAND RAMPS

General Notes

All slopes are maximum allowable. The least possible slope that will still drain properly should be used. Ramp length or grade of approach sidewalks may be adjusted as directed by the Engineer.

The minimum sidewalk width is 5'. Where a 5' sidewalk can not be provided due to site constraints, a minimum 3' sidewalk with 5' x 5' passing areas at intervals not to exceed 200 ft is required.

Landings shall be 5' x 5' minimum with a maximum 2% slope in any direction.

Maneuvering space at the bottom of curb ramps shall be a minimum of 4' x 4' wholly contained within the crosswalk and wholly outside the parallel vehicular travel path.

Maximum allowable cross slope on sidewalk and ramp surfaces is 2%.

Curb ramps with returned curbs may be used only where pedestrians would not normally walk across the ramp. Otherwise, flared sides shall be provided.

All concrete surfaces shall receive a light broom finish unless noted otherwise in the plans.

Ramp textures must consist of truncated domed surfaces. Textures are required to be detectable underfoot. Surfaces that would allow water to accumulate are prohibited.

Additional information on curb ramp location, design, light reflective value and texture may be found in the current edition of the Texas Accessibility Standards (TAS) prepared and administered by the Texas Department of Licensing and Regulation (TDLR).

Raised medians separate opposing directions of traffic and provide a refuge area for pedestrians unable to cross the entire roadway in the allotted signal phase. To serve as a refuge area, the median should be a minimum of 5' wide. Medians should be designed to provide accessible passage over or through them.

Small channelization islands, which can not provide a minimum 5' x 5' landing at the top of ramps, shall be cut through level with the surface of the street.

Crosswalk dimensions, crosswalk markings and stop bar locations shall be as shown elsewhere in the plans. At intersections where crosswalk markings are not required, ramps shall be aligned with theoretical crosswalks, or as directed by the Engineer.

Existing features that comply with TAS may remain in place unless otherwise shown on the plans.

Handrails are not required on curb ramps. Curb ramps shall be provided wherever an accessible route crosses (penetrates) a curb.

Shaded areas indicate locations of detectable warnings. (Color / light reflective value and texture contrast)

Curb ramps and landings shall be constructed and paid for in accordance with Item, "Curb ramp and Landing". Street curb transitions and curb bevels will be paid for in accordance with Item, "Concrete Curb, Gutter and Combined Curb and Gutter".

Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES
CURB RAMPS

PED-02

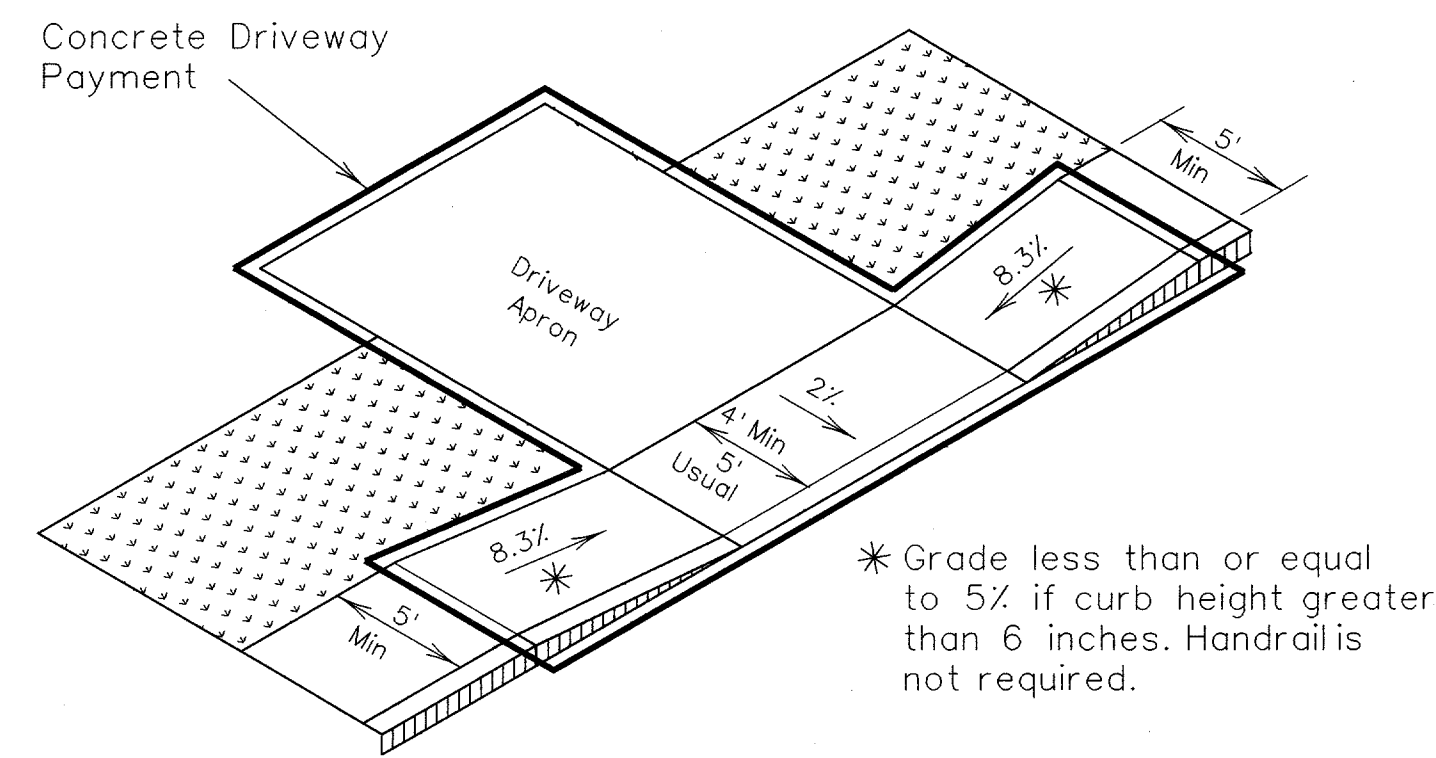
SHEET 1 OF 3

FILE: ped02.dgn	DN: MAM	CK: MAM	DW: BGD	CK:
© TxDOT March 2002	DIST	FED REG	FEDERAL AID PROJECT	SHEET
REVISIONS	6			16
	COUNTY	CONTROL	SECT	JOB
				HIGHWAY

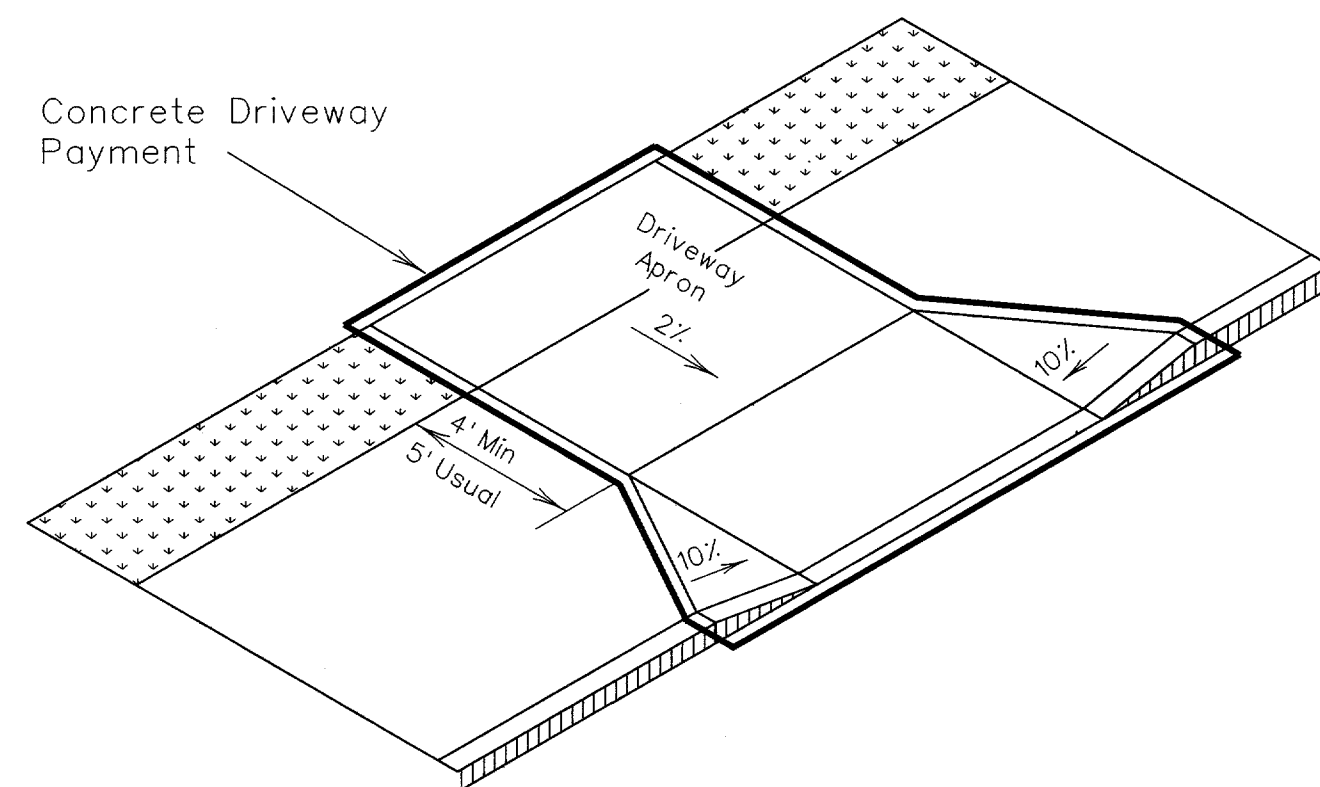
...:\p\l\m\001\SET\PED02.DGN 05/12/03 06:05:12 PM

DISCLAIMER : The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

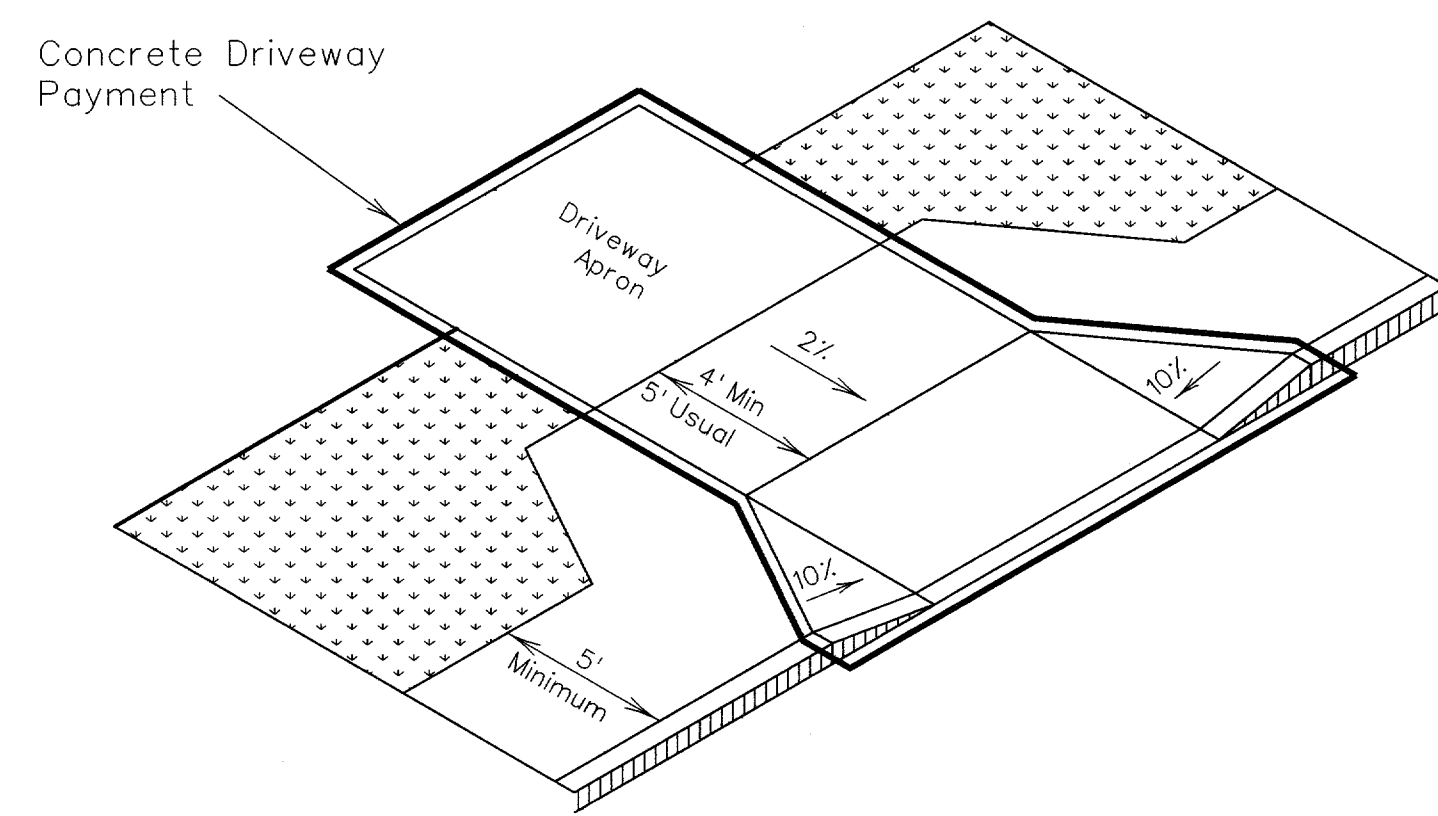
LEVELS DISPLAYED	B2
1	



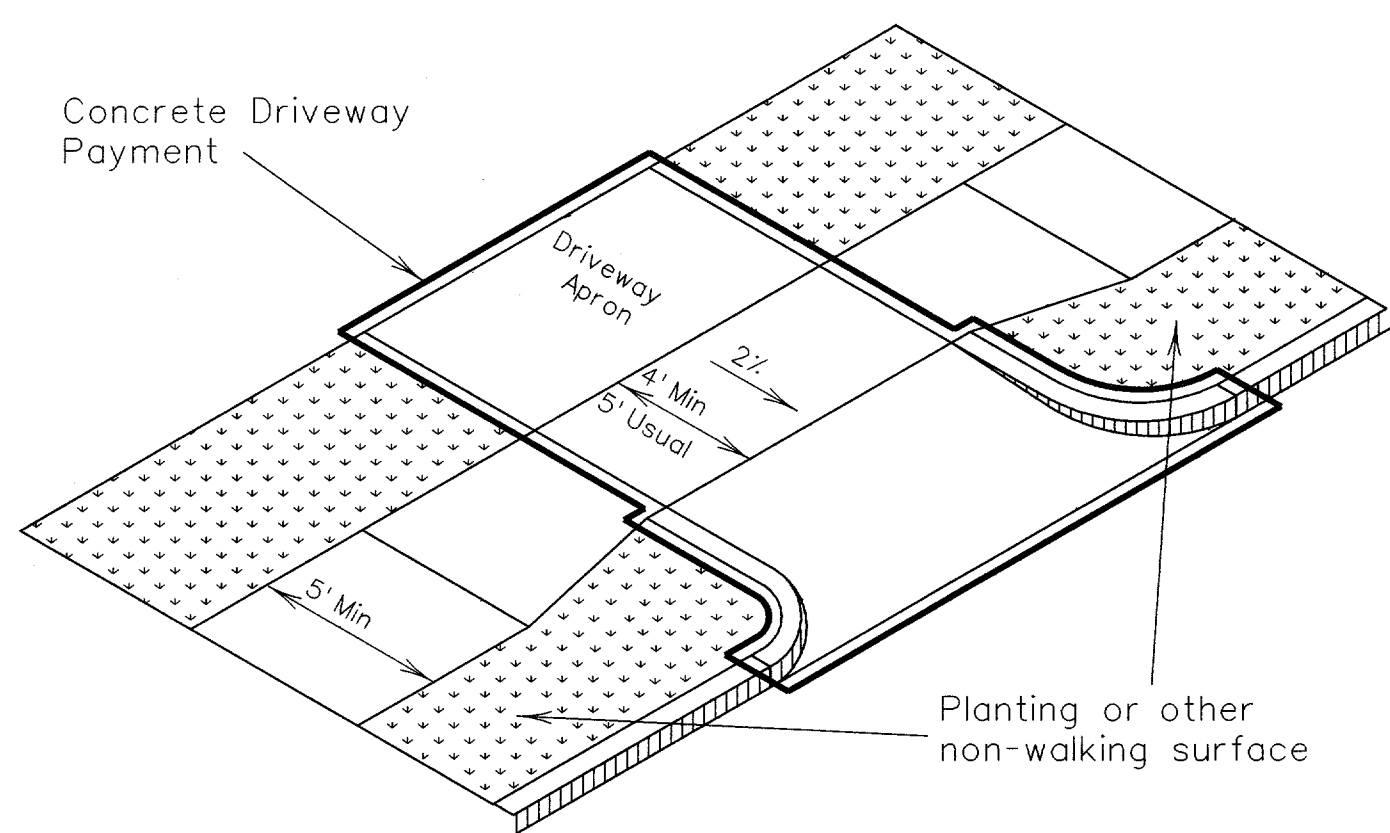
Ramp sidewalk



Wide sidewalk



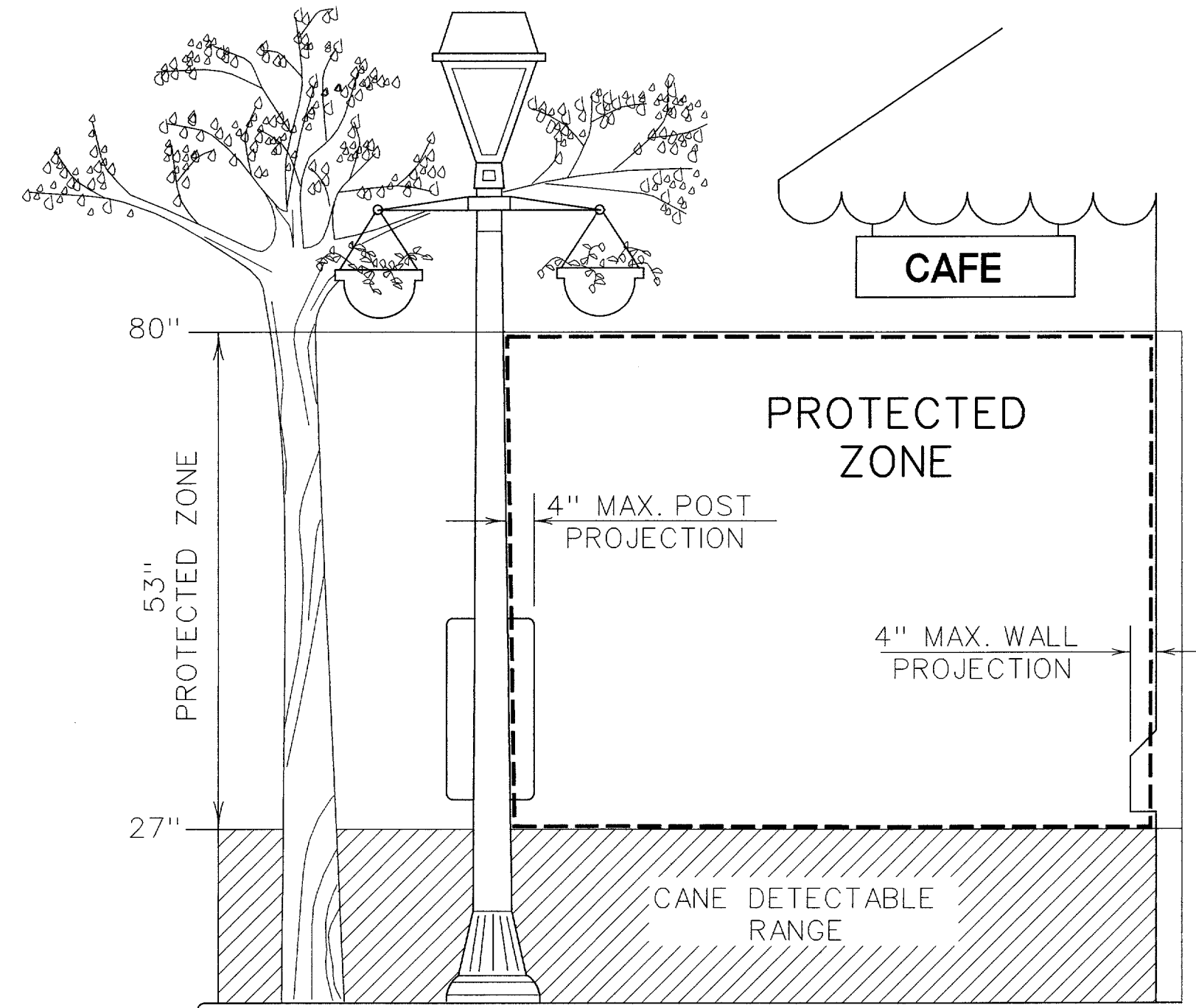
Apron offset sidewalk



Setback sidewalk

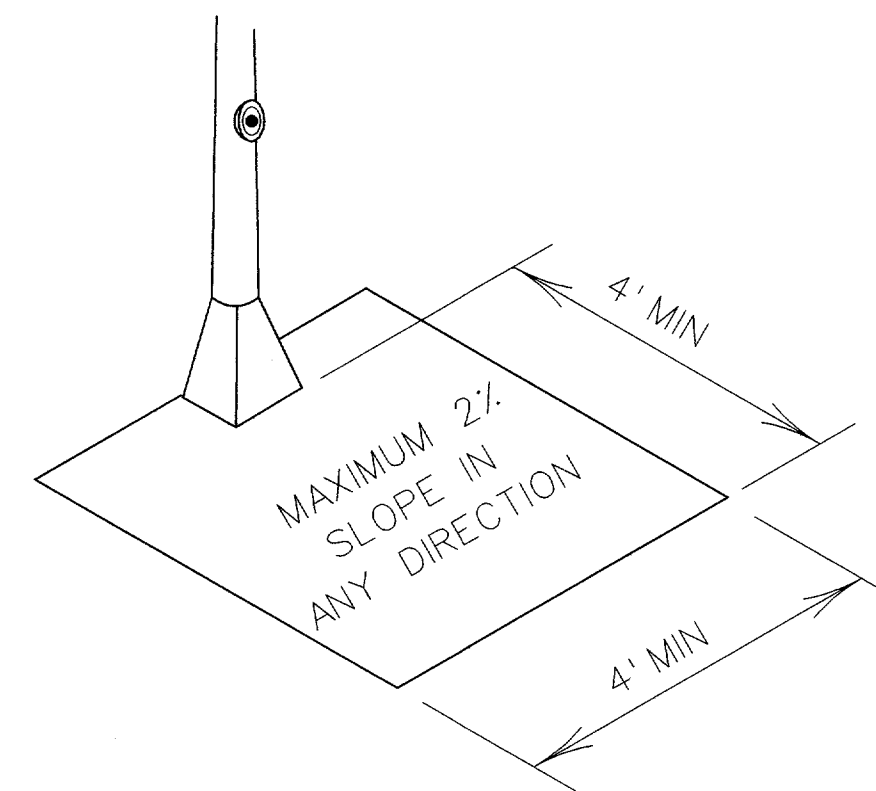
SIDEWALK TREATMENT AT DRIVEWAYS

* Grade less than or equal to 5% if curb height greater than 6 inches. Handrails not required.

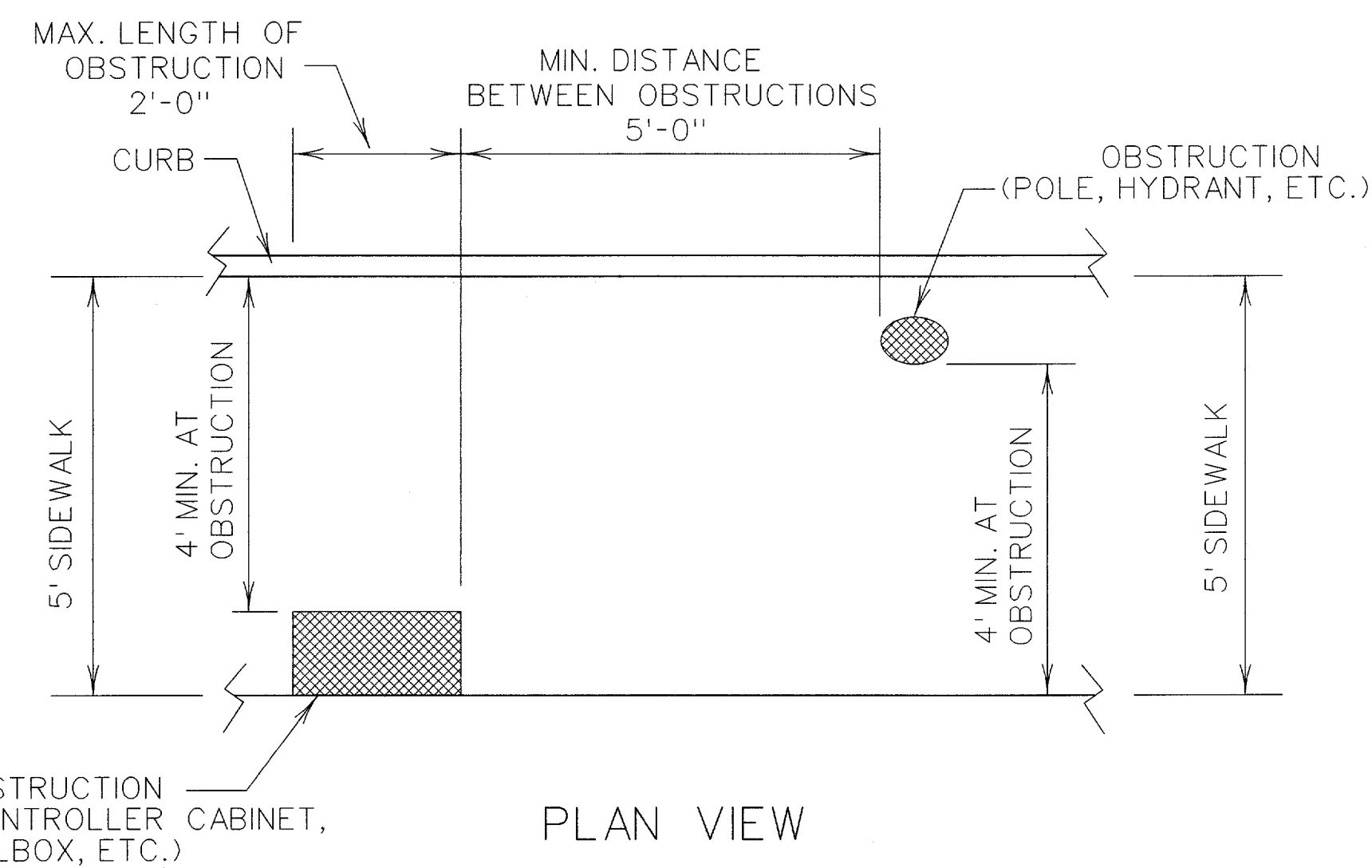


PROTECTED ZONE

In pedestrian circulation area, maximum 4" projection for post or wall mounted objects between 27" and 80" above the surface.



CLEAR GROUND SPACE AT PEDESTRIAN PUSH BUTTON



PLAN VIEW
PLACEMENT OF STREET FIXTURES

(ITEMS NOT INTENDED FOR PUBLIC USE. MINIMUM 4' x 4' CLEAR GROUND SPACE REQUIRED AT PUBLIC USE FIXTURES.)

General Notes

All slopes are maximum allowable. The least possible slope that will still drain properly should be used.

Traffic signal or illumination poles, ground boxes, controller boxes, signs, drainage facilities and other items shall be placed so not to obstruct the accessible route.

Usual sidewalk cross slope equals 1.5%. The maximum allowable sidewalk cross slope equals 2%.

Street grades and cross slopes shall be as shown elsewhere in the plans.

Existing features that comply with TAS may remain in place unless otherwise shown on the plans.

Changes in level greater than 1/4 inch are not permitted.

Any part of the accessible route with a slope greater than 1:20 (5%) shall be considered a ramp. If a ramp has a rise greater than 6 inches or a horizontal projection greater than 72 inches, then it shall have handrails on both sides, with the following exceptions:

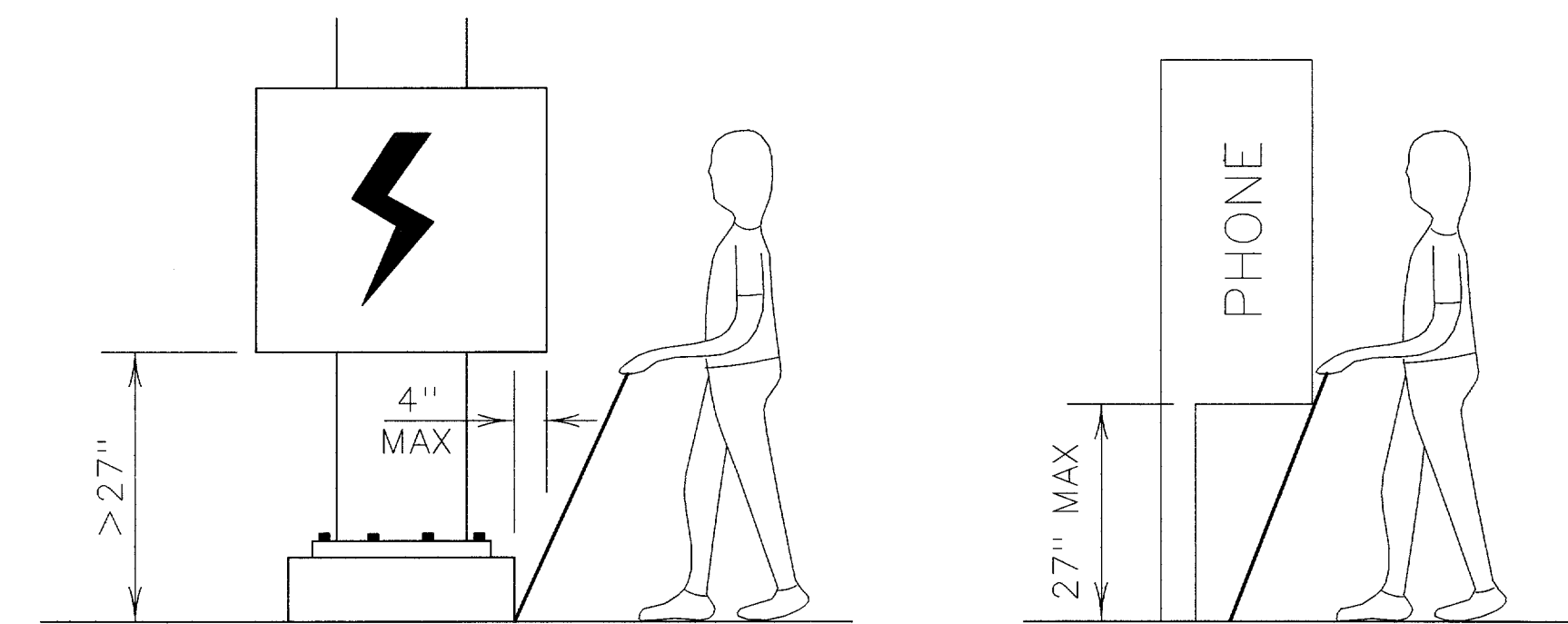
At ramp sidewalks shown at far left.

Handrails are not required on curb ramps. Curb ramps shall be provided wherever an accessible route crosses (penetrates) a curb.

The least possible grade should be used to maximize accessibility. Where structurally impractical to achieve TAS compliance, the running slope of sidewalks and crosswalks, within the public right of way, may follow the grade of the parallel roadway without invoking Texas Accessibility Standards (TAS) variances for landings or handrails. Where a continuous grade greater than 5% must be provided, handrails may be desirable on one or both sides of the sidewalk to improve accessibility. Handrails may also be needed to protect pedestrians from potentially hazardous conditions.

Parabolic crowns may require adjustment in crosswalk areas to limit the crosswalk grade to 5%.

Driveways and turnouts shall be constructed and paid for in accordance with Item, "Driveways and Turnouts". Sidewalks shall be constructed and paid for in accordance with Item, "Sidewalks".



When an obstruction of a height greater than 27" from the surface would create a protrusion of more than 4" into the pedestrian circulation area, construct additional curb or foundation at the bottom to provide a maximum 4" overhang.

Protruding objects of a height 27" are detectable by cane and do not require additional treatment.

DETECTION BARRIER FOR VERTICAL CLEARANCE < 80"

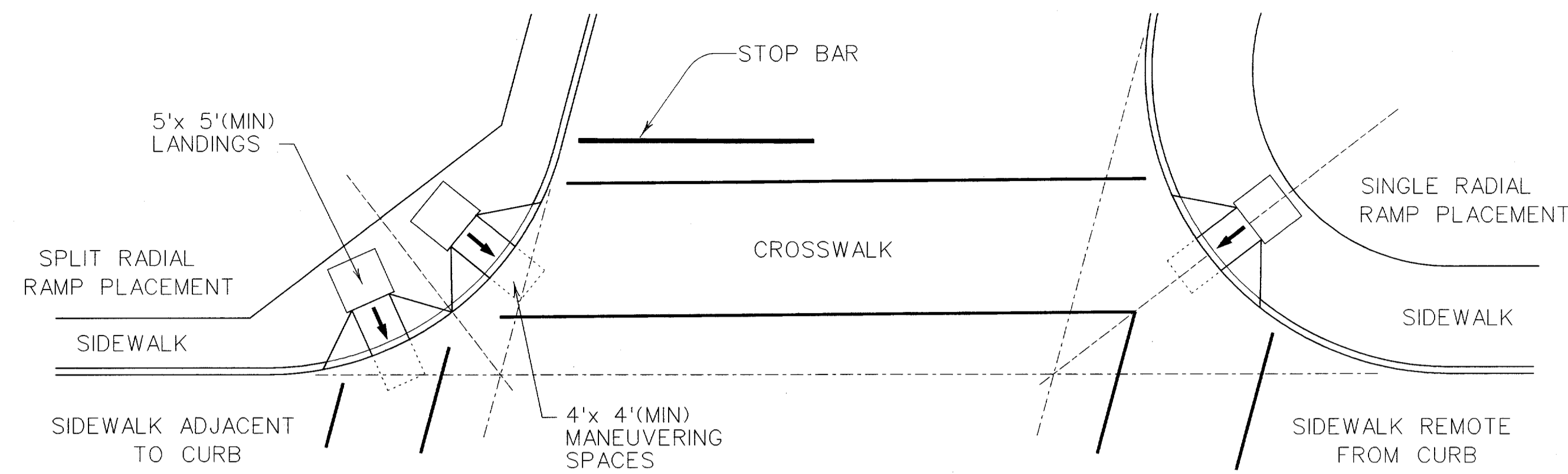
Texas Department of Transportation
Design Division (Roadway)

PEDESTRIAN FACILITIES
SIDEWALKS

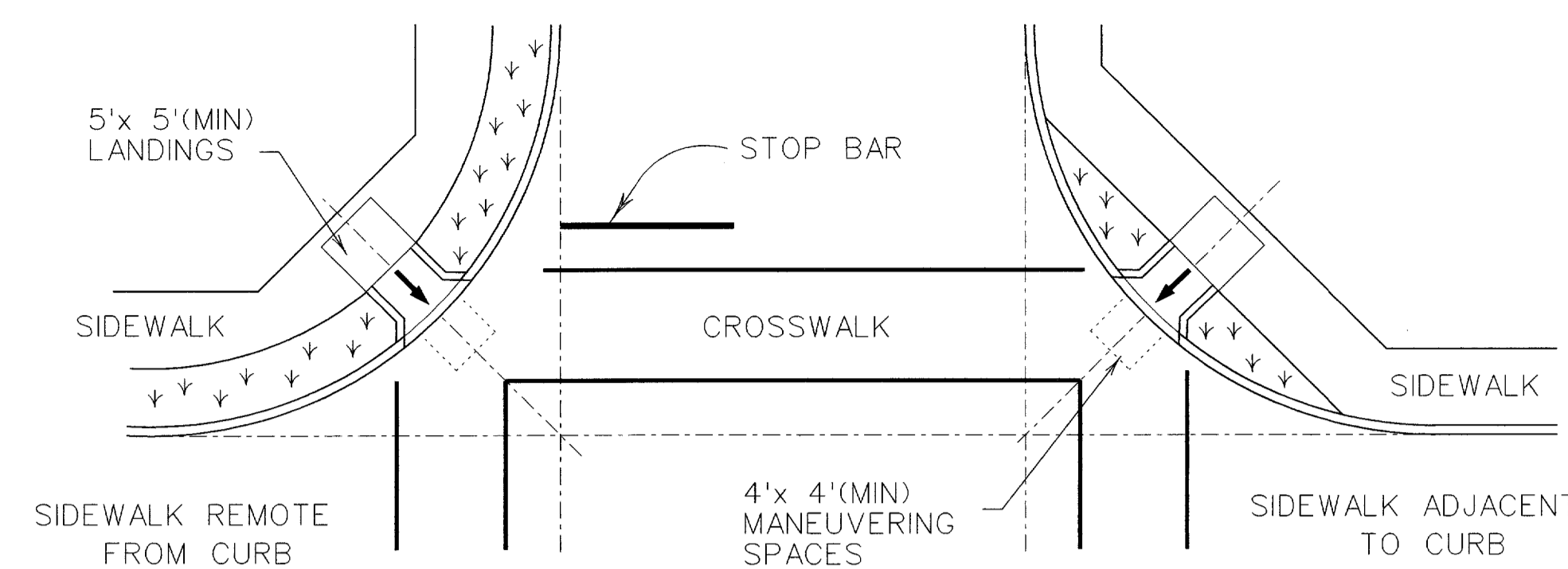
PED-02

SHEET 2 OF 3

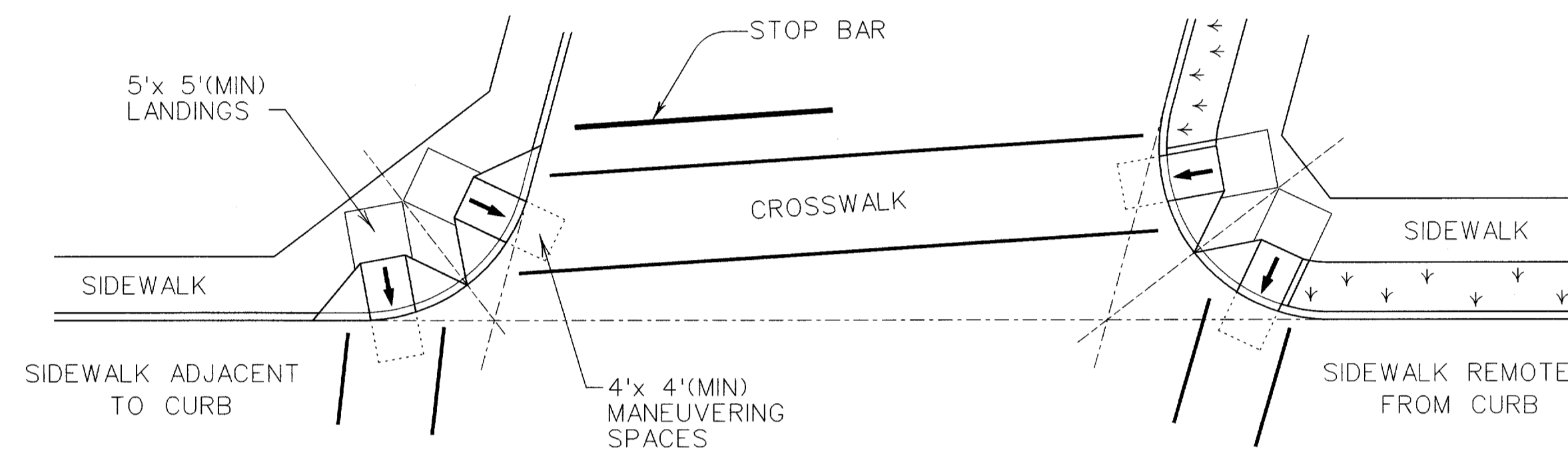
FILE: ped02.dgn	DN: MAM	CK: MAM	DW: BGD	CK:
© TxDOT March 2002	DIST	FED REG	FEDERAL AID PROJECT	SHEET
REVISIONS	6			16A
	COUNTY	CONTROL	SECT	JOB
				HIGHWAY



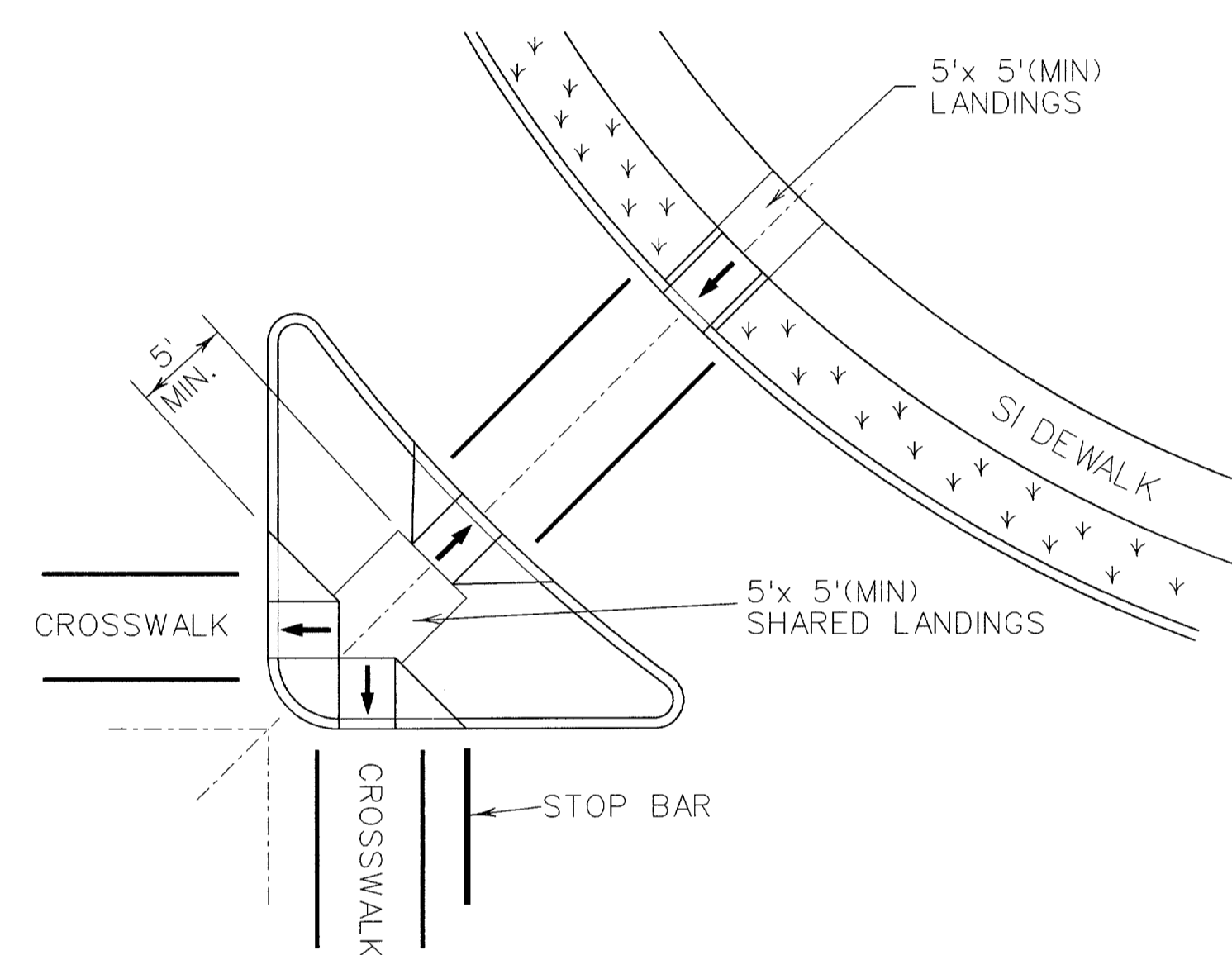
SKewed INTERSECTION WITH "LARGE" RADIUS



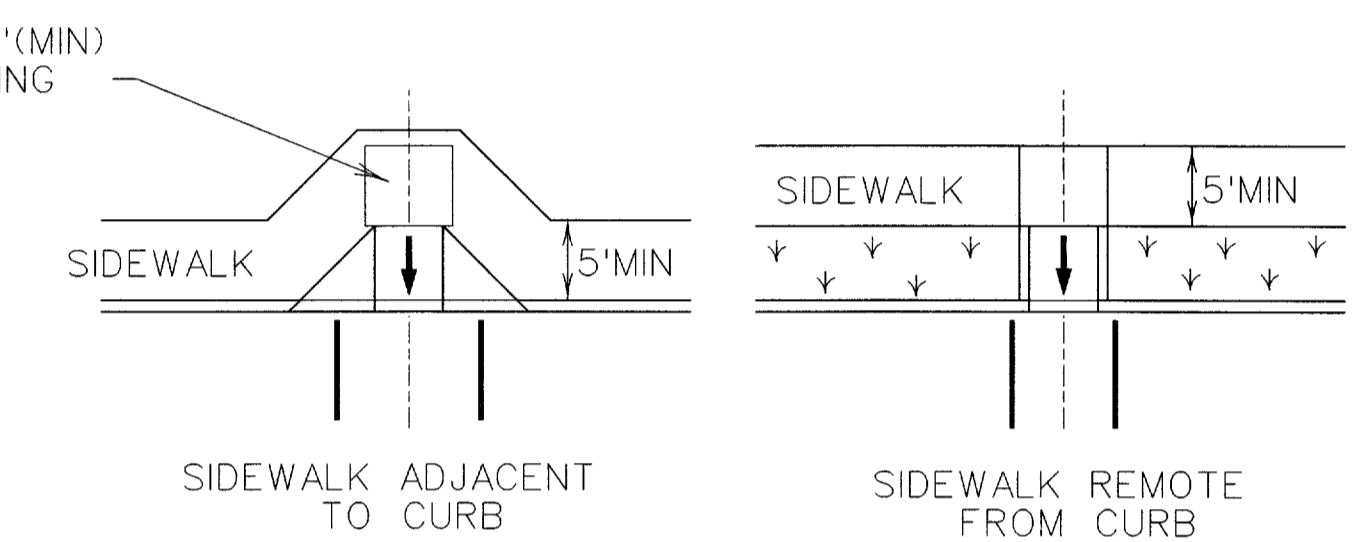
NORMAL INTERSECTION WITH "LARGE" RADIUS



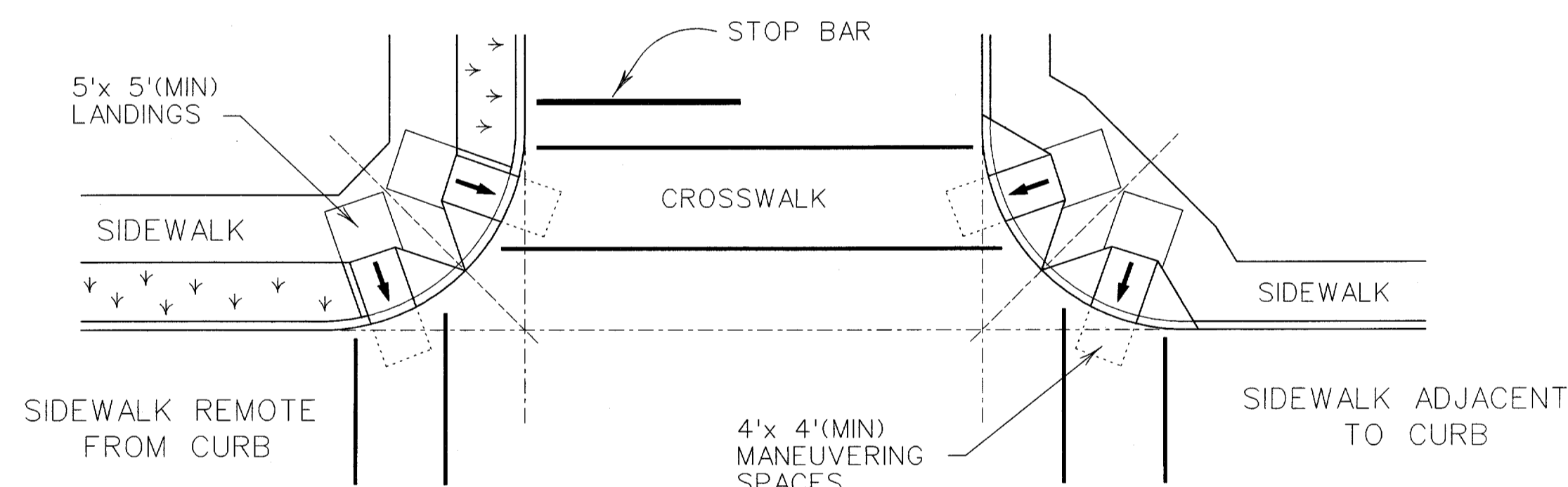
SKewed INTERSECTION WITH "SMALL" RADIUS



AT INTERSECTION W/FREE RIGHT TURN & ISLAND



MID-BLOCK PLACEMENT PERPENDICULAR RAMPs



NORMAL INTERSECTION WITH "SMALL" RADIUS

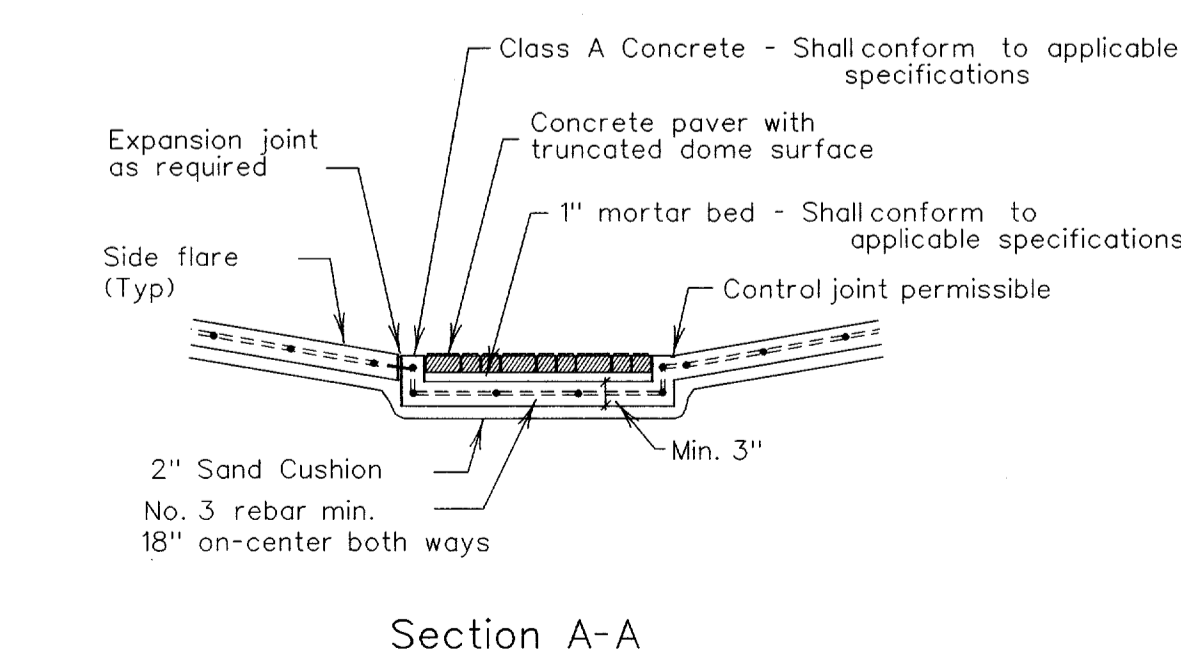
TYPICAL CROSSING LAYOUTS

SEE SHEET 1 OF 3 FOR DETAILS AND DIMENSIONS

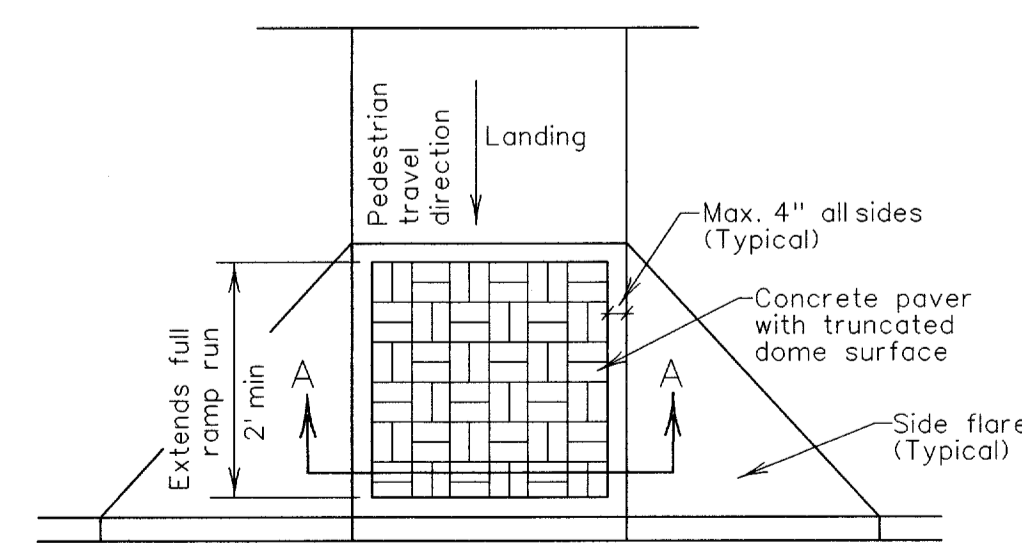
General Notes
 Street grades and cross slopes shall be as shown elsewhere in the plans.
 Ramps are shown here without detectable warnings for simplicity. Detectable warnings are required at the locations shown on the PED Standard (Sheet 1 of 3) and in accordance with the details shown below.
 Small channelization islands, which can not provide a minimum 5' x 5' landing at the top of ramps, shall be cut through level with the surface of the street.

DISCLAIMER : The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

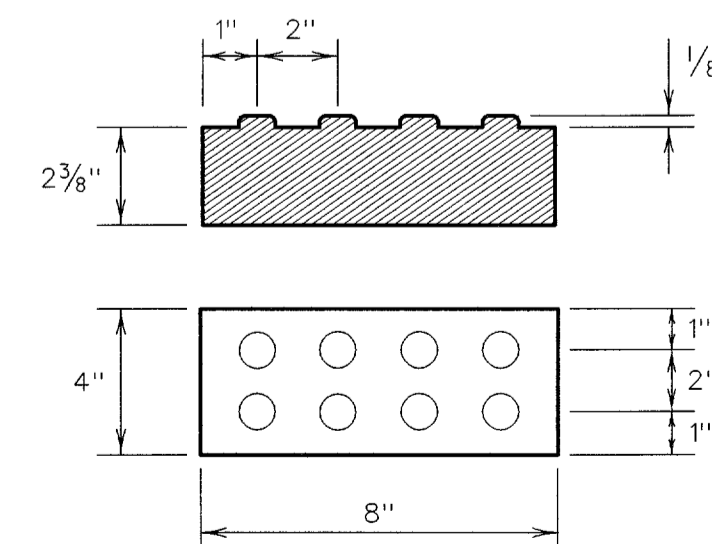
LEVELS DISPLAYED	E2
1	



Section A-A



TYPE A
 Truncated Dome Pattern Curb Ramp
 DETECTABLE WARNINGS



Concrete paver with truncated dome surface

General Notes
 Concrete paver units shall meet all requirements of ASTM C-936, C-33, and shall be laid in a two by two unit basket weave pattern, unless shown otherwise in the plans.
 Domes shall be aligned in the direction of pedestrian travel.
 Concrete paver units shall have a truncated dome top surface for detectable warning to pedestrians.
 Concrete paver unit color for the ramp shall be a contrasting color that provides a light reflective value that significantly contrasts with the adjacent surfaces. The color of the concrete paver units shall be shown elsewhere in the plans. (Adjacent surfaces include side flares).
 Concrete paver units shall be saw cut only and any cut unit shall not be less than 25 percent of a full unit.



PEDESTRIAN FACILITIES
 INTERSECTION LAYOUTS
 AND
 DETECTABLE WARNINGS
 PED-02

SHEET 3 OF 3

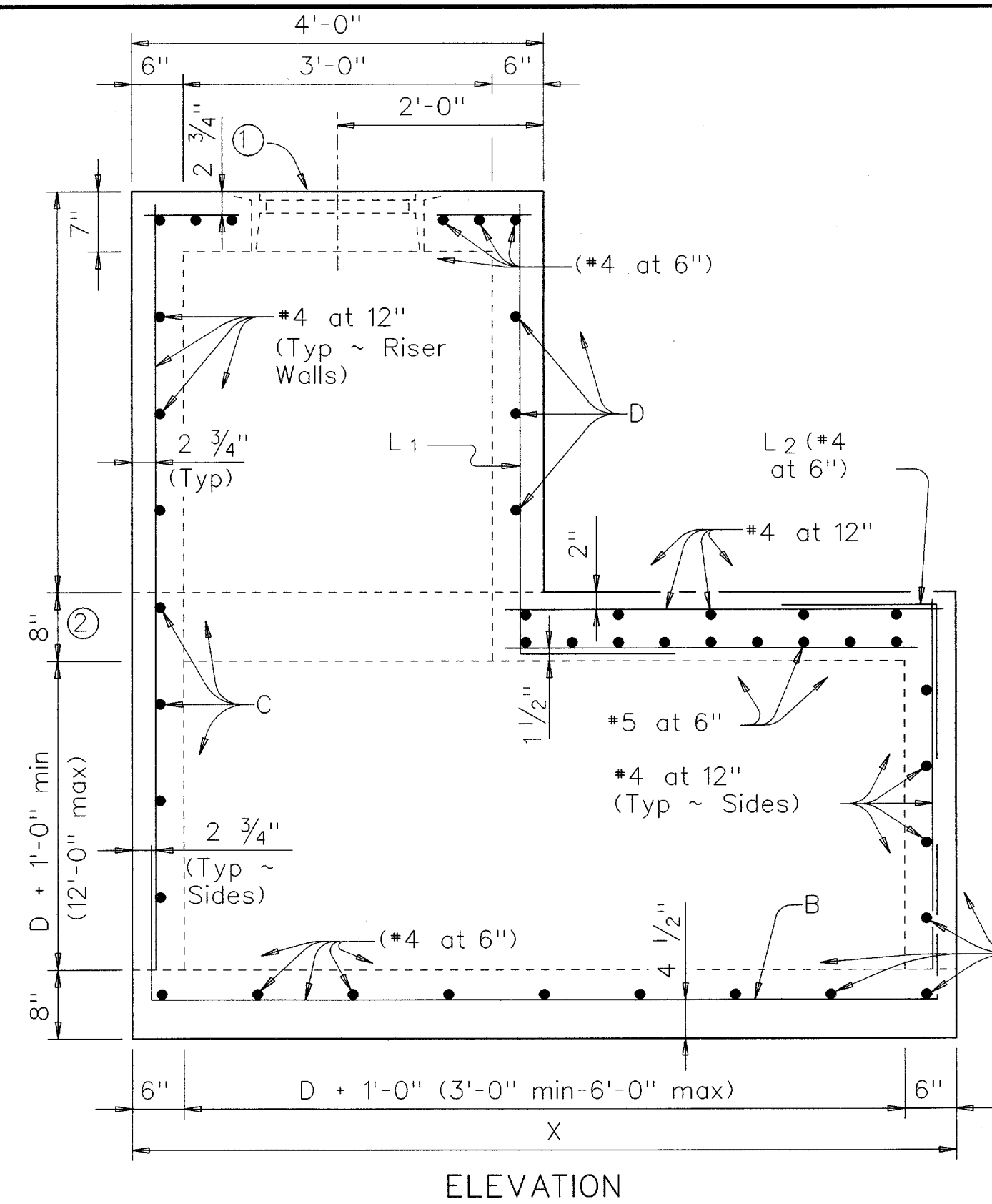
FILE: ped02.dgn	DN: MAM	CK: MAM	DW: BGD	CK:
© TxDOT March 2002	DIST	FED REG	FEDERAL AID PROJECT	SHEET
REVISIONS	6			16B
	COUNTY	CONTROL SECT	JOB	HIGHWAY

... \cadd\lms09\set\ped02.dgn 05/27/03 05:05:14 PM

DISCLAIMER: The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

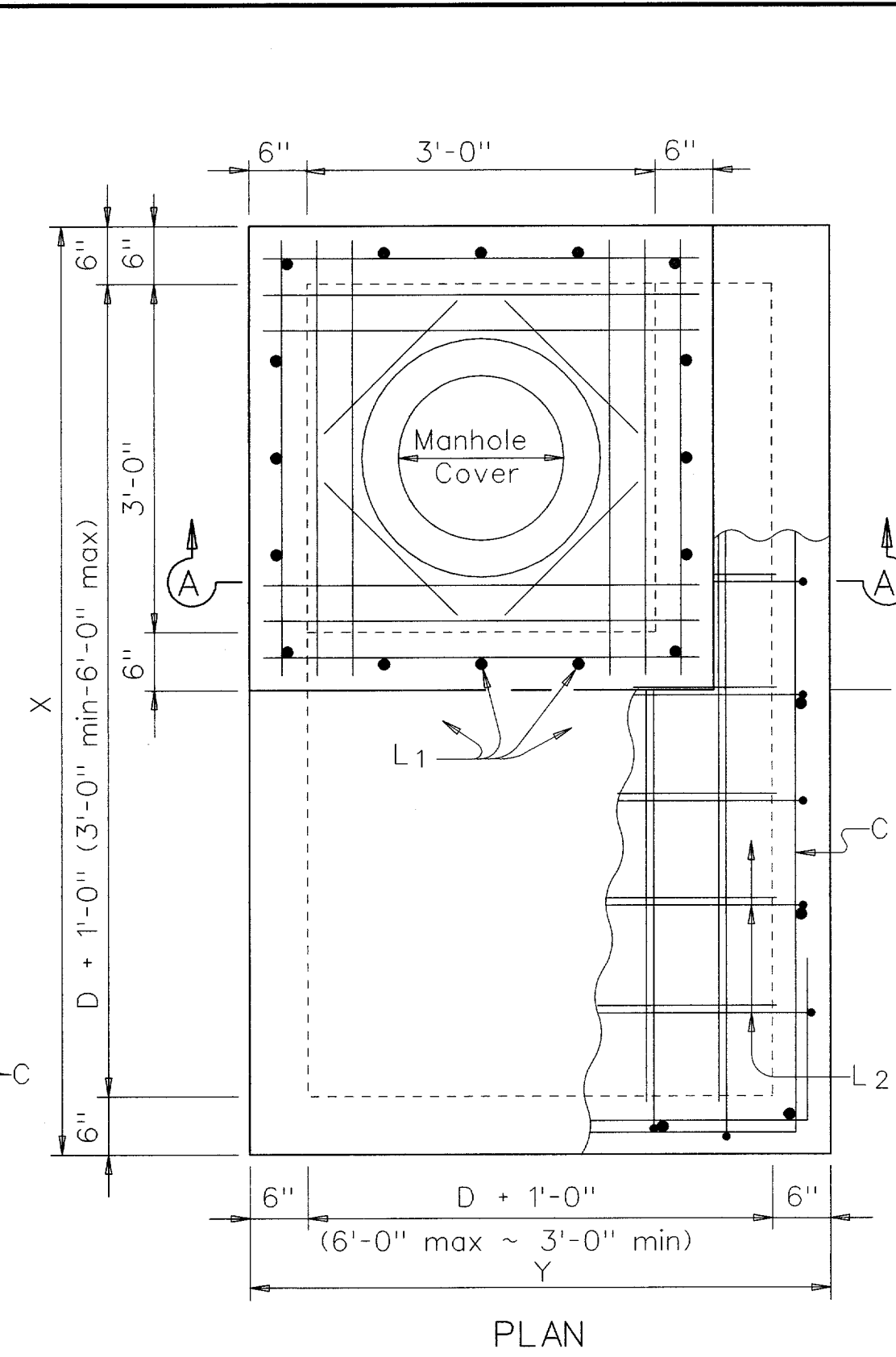
(LV-1.2 for English)

LEVELS DISPLAYED	
1	
2	
3	
4	
5	
6	
7	
8	
9	
10	
11	
12	



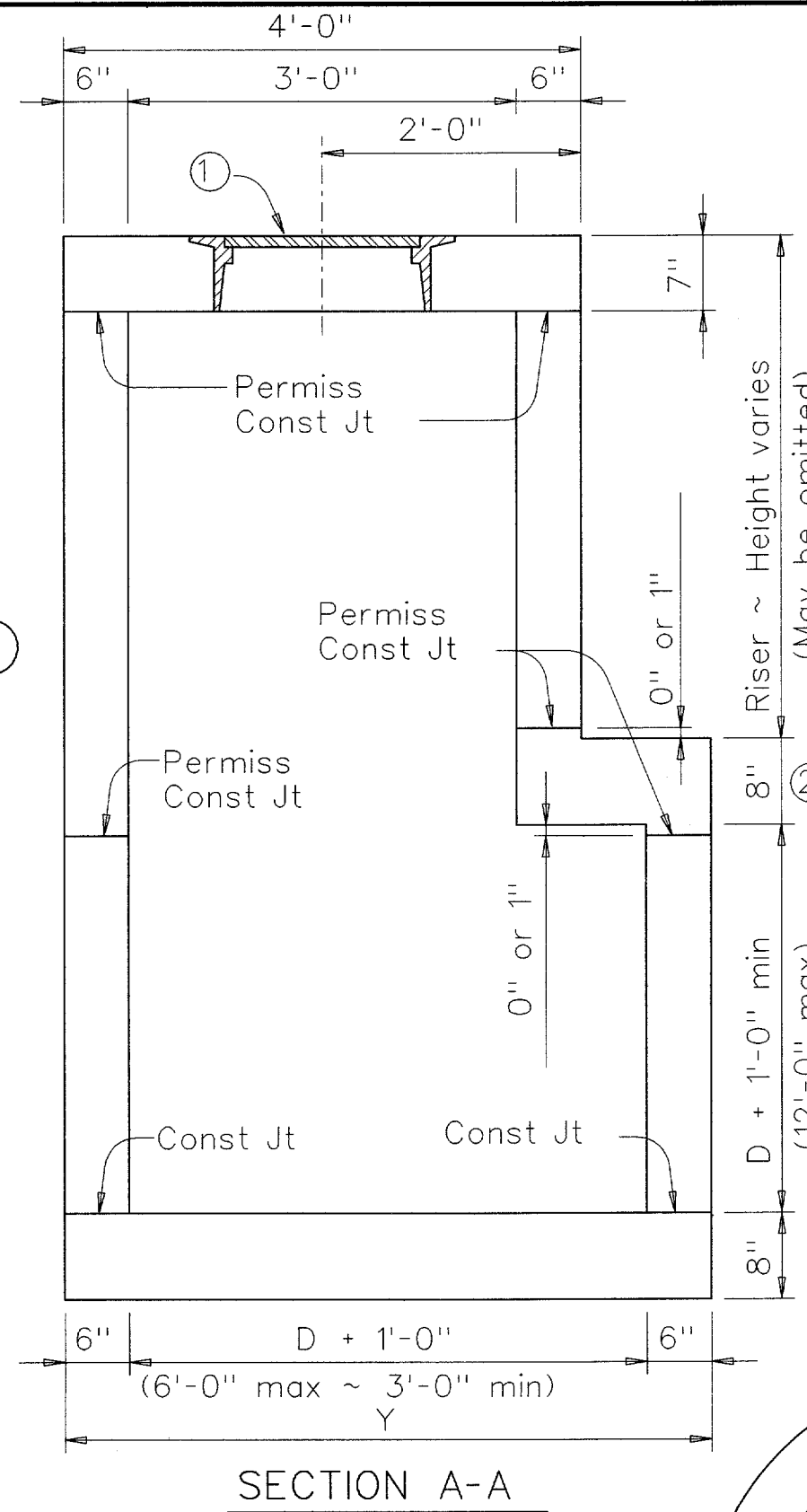
ELEVATION

D = maximum inside diameter of any Pipe entering the side shown or the opposite side

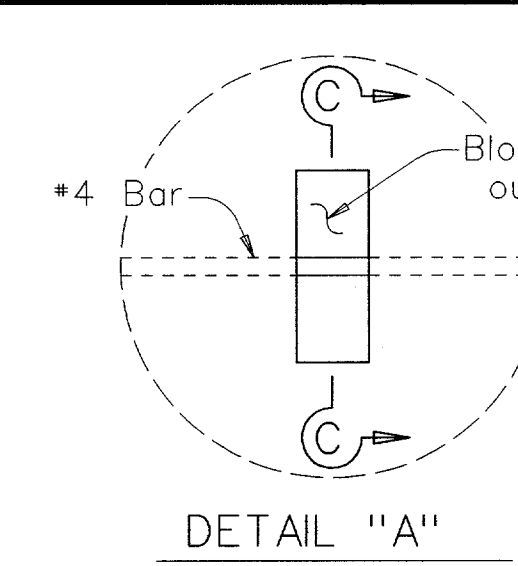


PLAN

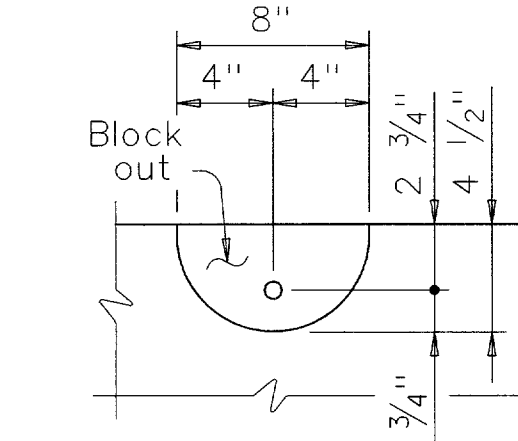
MANHOLE WITH CAST-IN-PLACE RISER



SECTION A-A

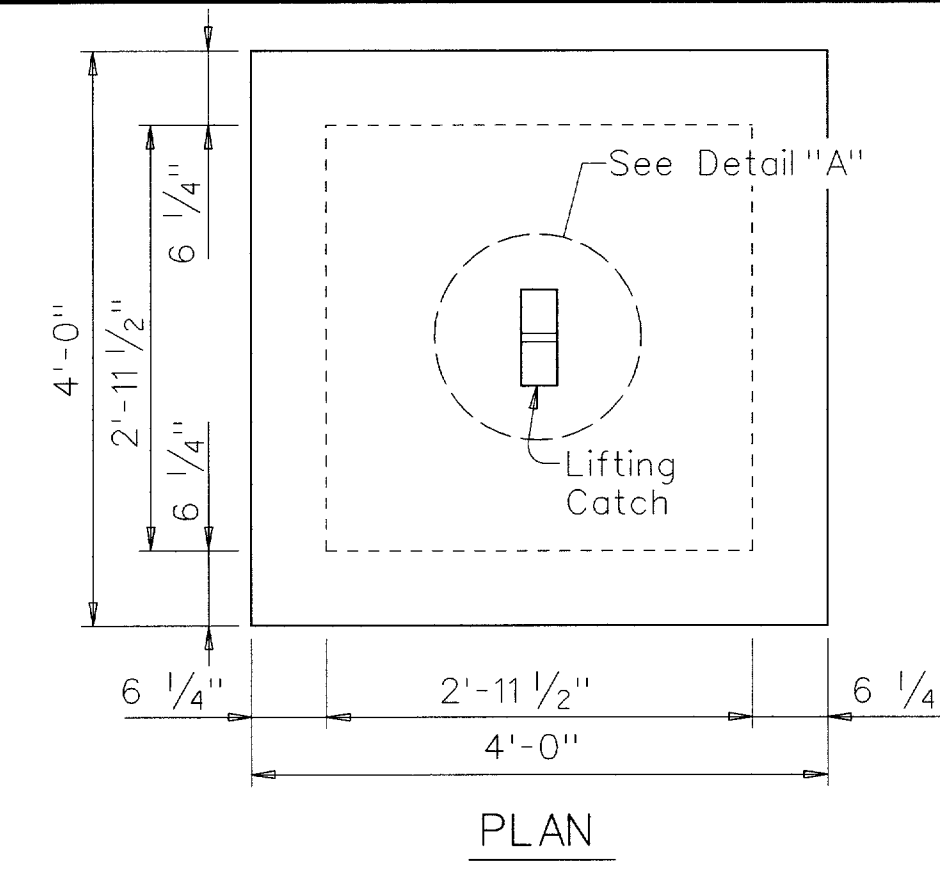


DETAIL "A"



SECTION C-C

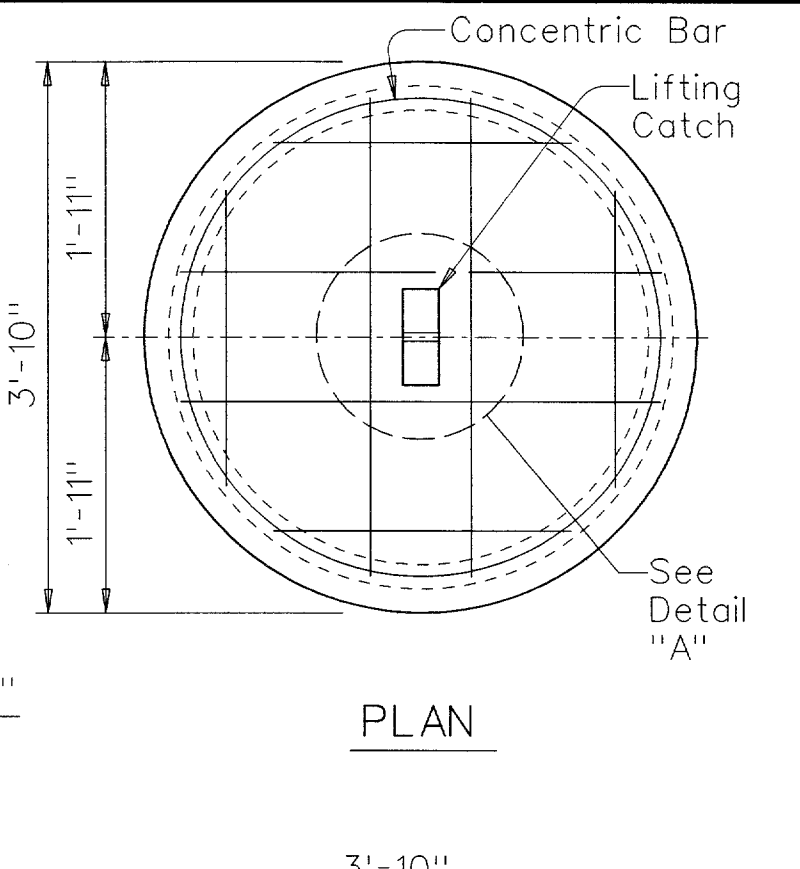
LIFTING CATCH



PLAN

ELEVATION

CAST-IN-PLACE RISER COVER

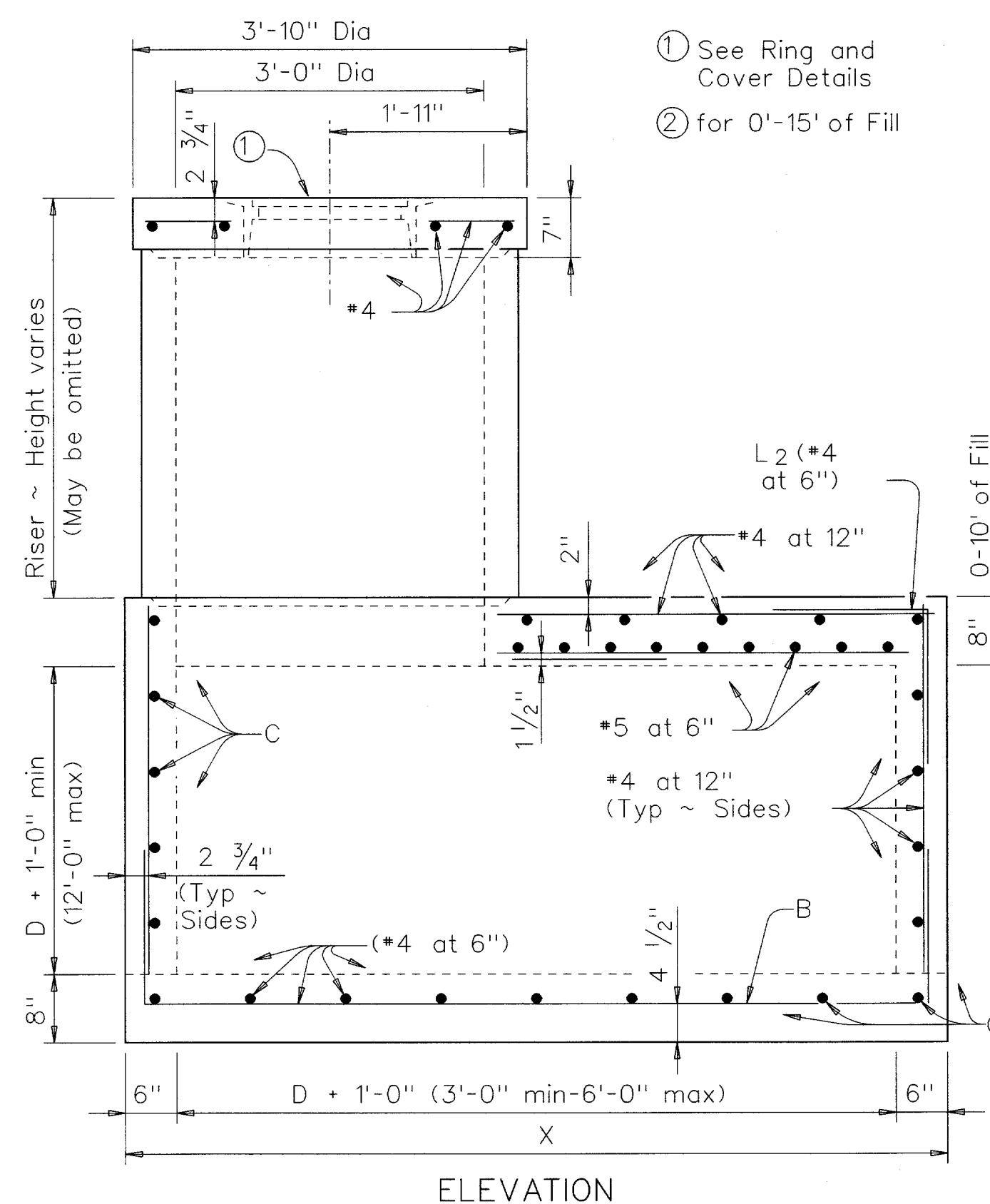


PLAN

ELEVATION

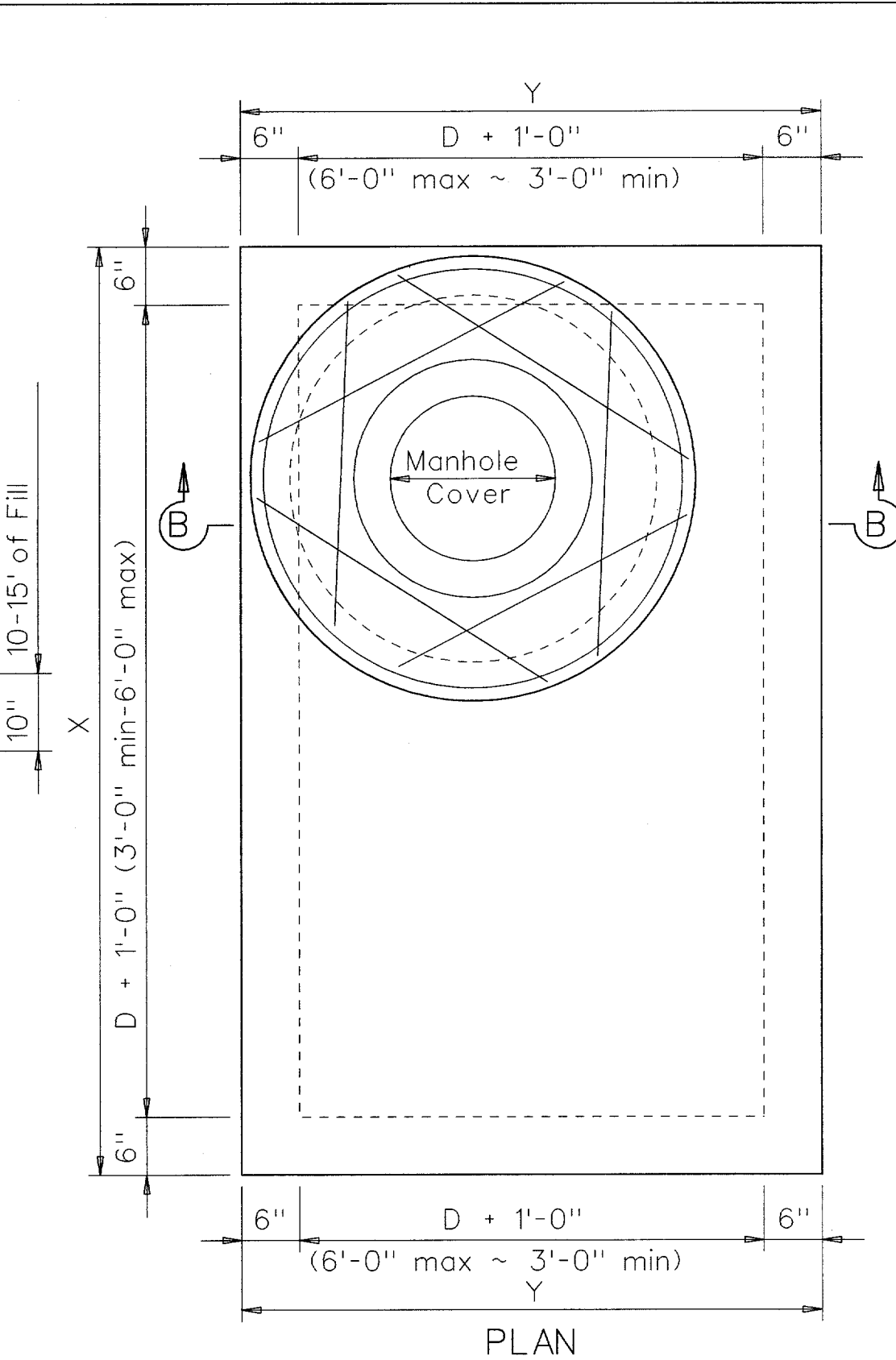
CONCRETE PIPE RISER COVER

OPTIONAL PRECAST CONCRETE LIFT-OFF COVERS



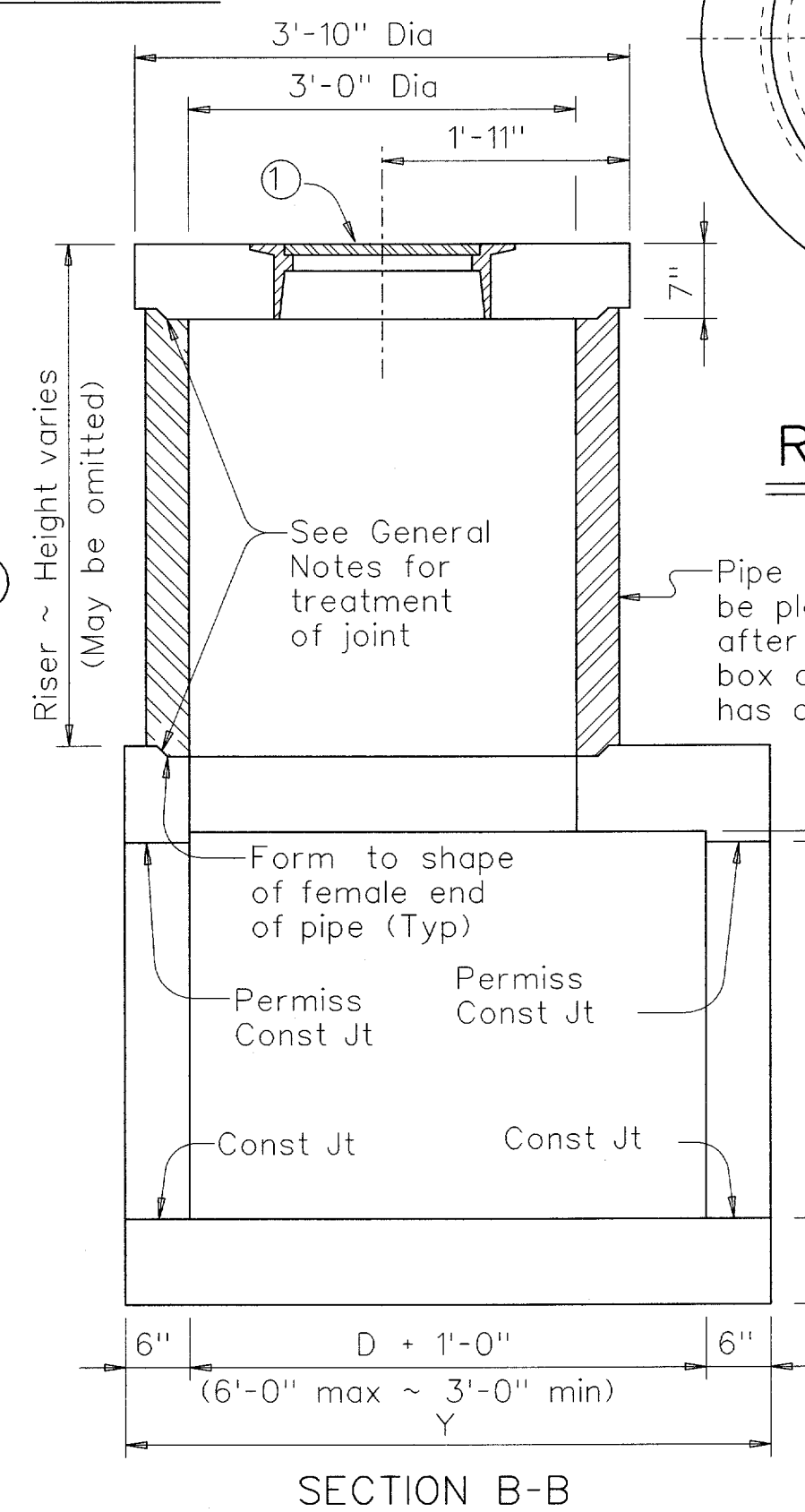
ELEVATION

D = maximum inside diameter of any Pipe entering the side shown or the opposite side

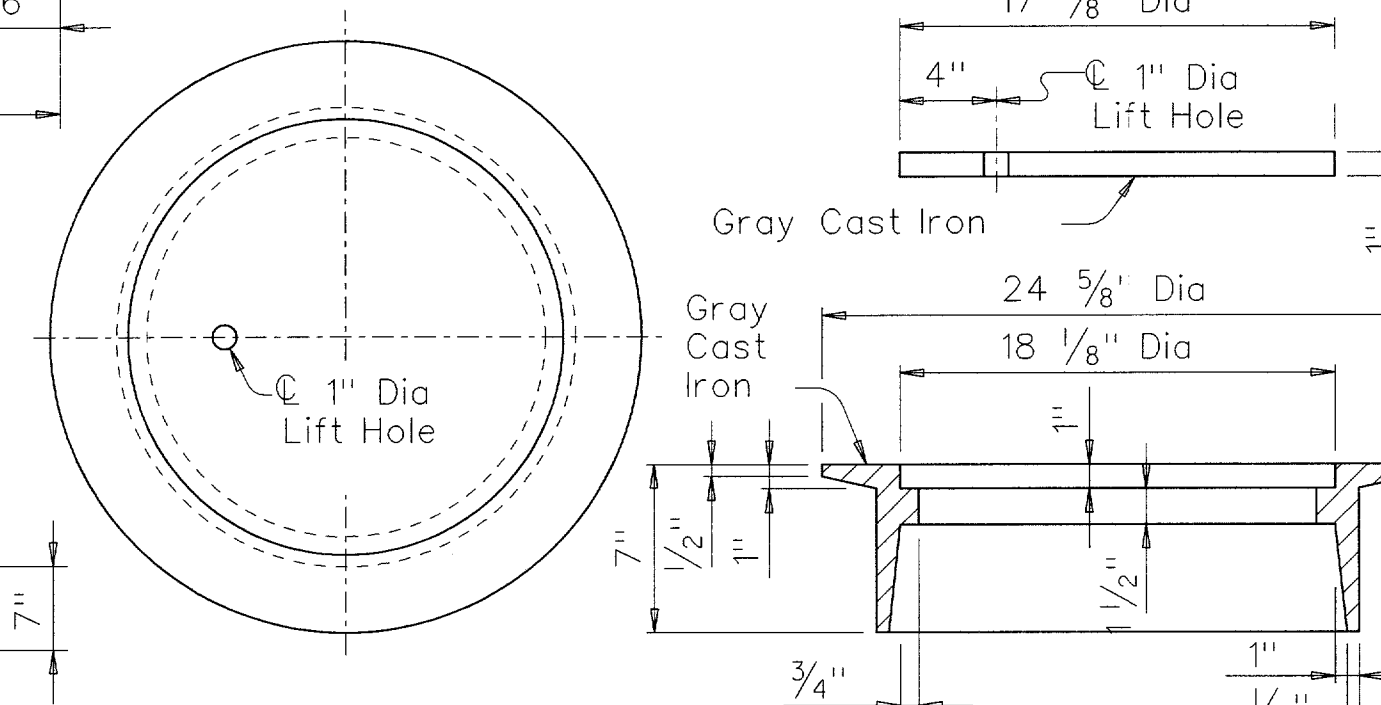


PLAN

OPTIONAL MANHOLE WITH CONCRETE PIPE RISER



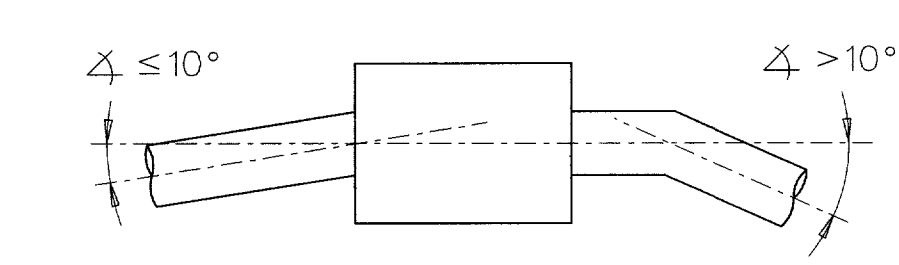
SECTION B-B



RING AND COVER DETAILS (TYPE C)

Approximate Weight = 200 lb

Rings and covers of slightly different dimensions but approximately the same weight may be substituted if approved by the Engineer.



PIPE CONNECTION DETAIL

Connecting pipes should enter within 10° of normal to inlet wall. If necessary, pipe elbow or curved approach alignment should be used to stay within this limit.

GENERAL NOTES:

Unless otherwise shown in the plans, payment will be made for each manhole of the Type M. Exposed edges shall be chamfered 3/4".

Alternate design drawings bearing the seal of a registered professional engineer will be acceptable for precast construction of the manholes.

Shop drawings will not be required. The Contractor may with the approval of the Engineer furnish manholes of equivalent structural design.

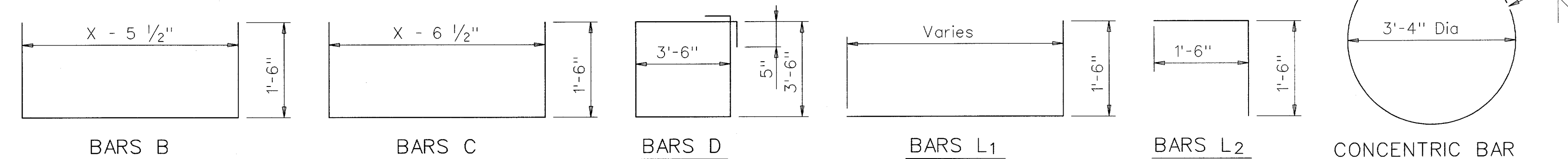
In areas of conflict between reinforcing steel, blockouts, pipes, anchor bolts or other reinforcing steel, the reinforcement shall be bent or adjusted to clear as directed by the Engineer.

The riser may be constructed of reinforced concrete as shown or of Reinforced Concrete Pipe, Class III, in accordance with ASTM Designation C-76. If pipe is used, joints shall conform to the Item "Reinforced Concrete Pipe Culverts". Precast Concrete Lift Off Cover may be substituted for "Ring and Cover".

The riser, either cast-in-place or concrete pipe, may be located in any corner.

All reinforcing steel shall be #4 unless otherwise noted.

Pipes may enter any or all walls. The maximum size of pipe that can be accommodated is 60". More than one pipe may enter a side, subject to the maximum box dimension shown. The clear distance between adjacent pipes should be 9" minimum.

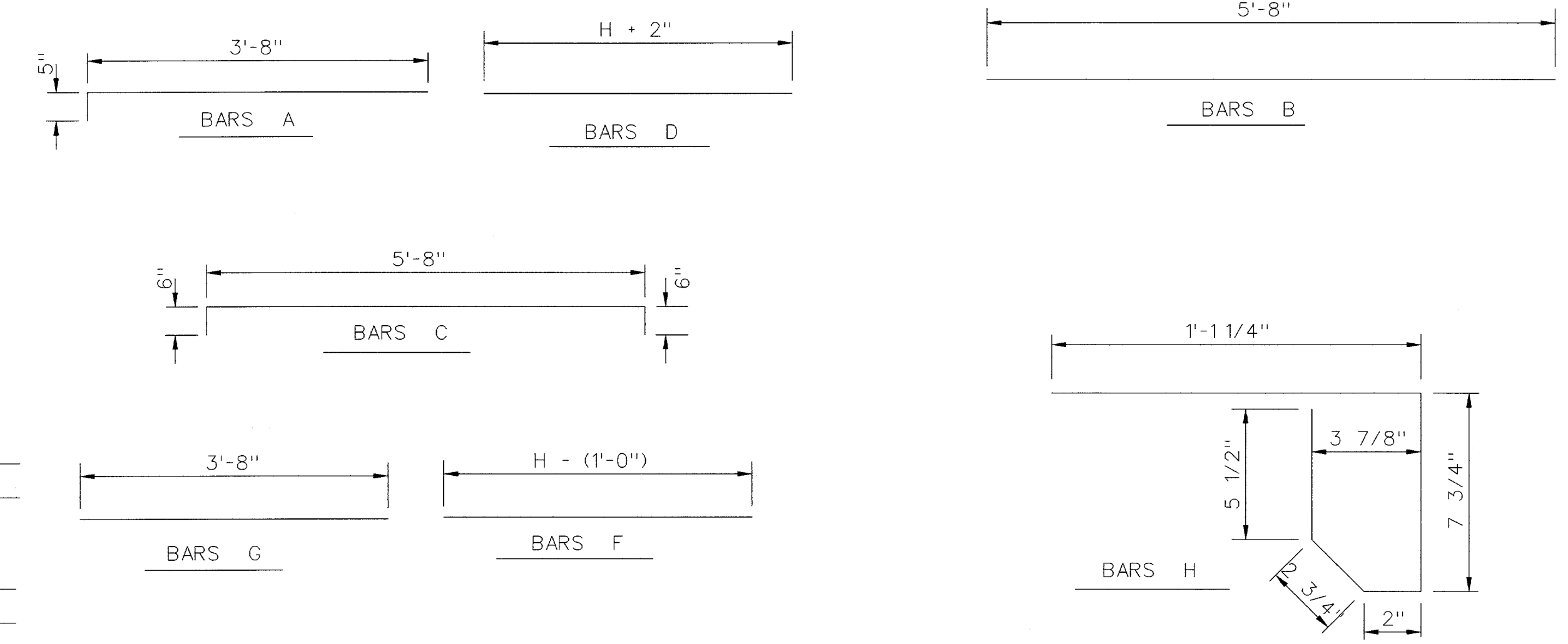
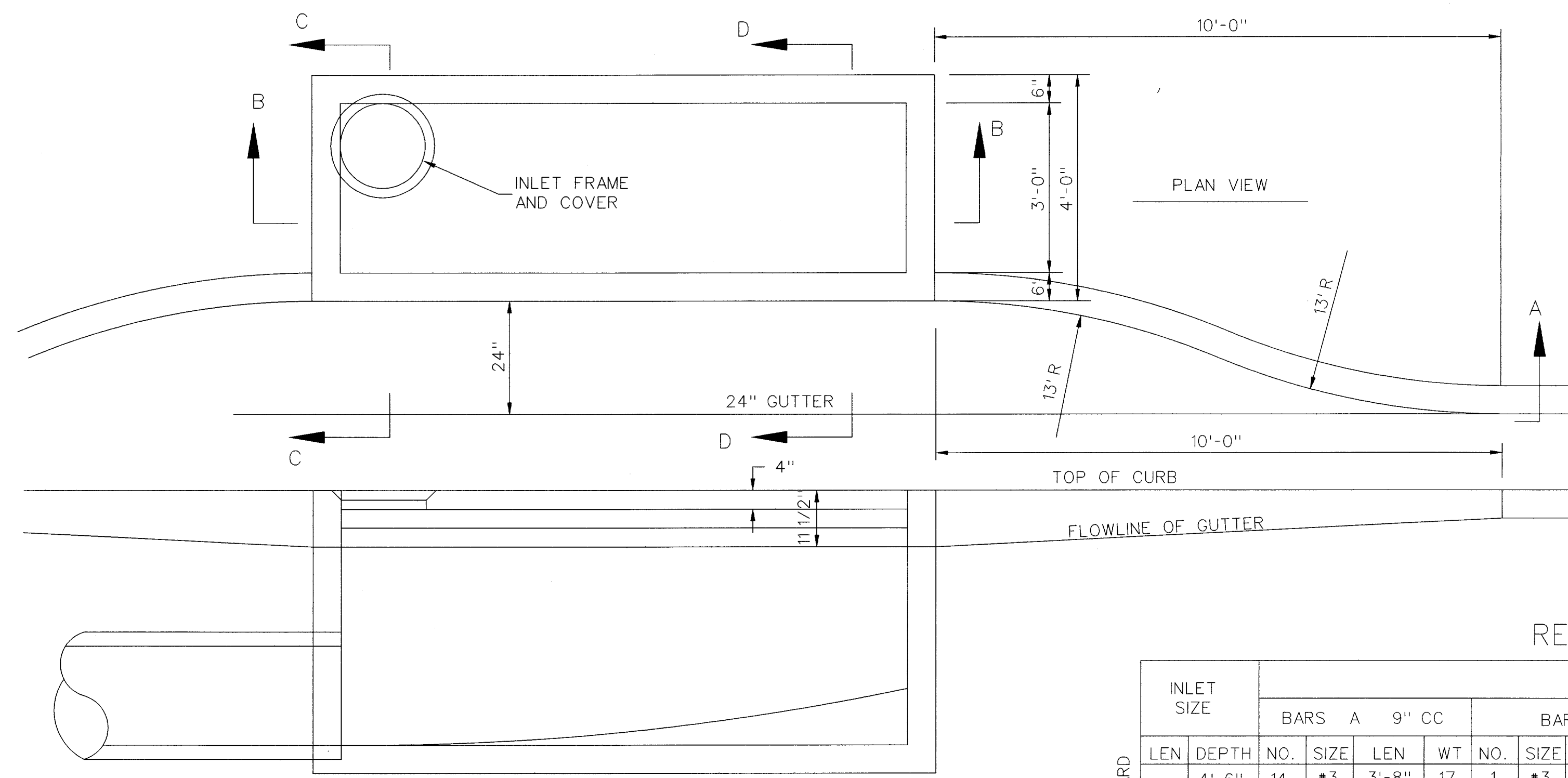


Texas Department of Transportation
Design Division (Bridge)

MANHOLE TYPE M
(JUNCT ON BOX WITH ACCESS)

FILE: mh-mestd.dgn	DN: TxDOT	CK: TER	DW: MCB	CK: TER	STD: B483
ORIG DATE: SEPTEMBER 1996	DIST	FED REG	FEDERAL AID PROJECT	SHEET	
REVISIONS	6			17	
	COUNTY	CONTROL	SECT	JOB	HIGHWAY

MH-M

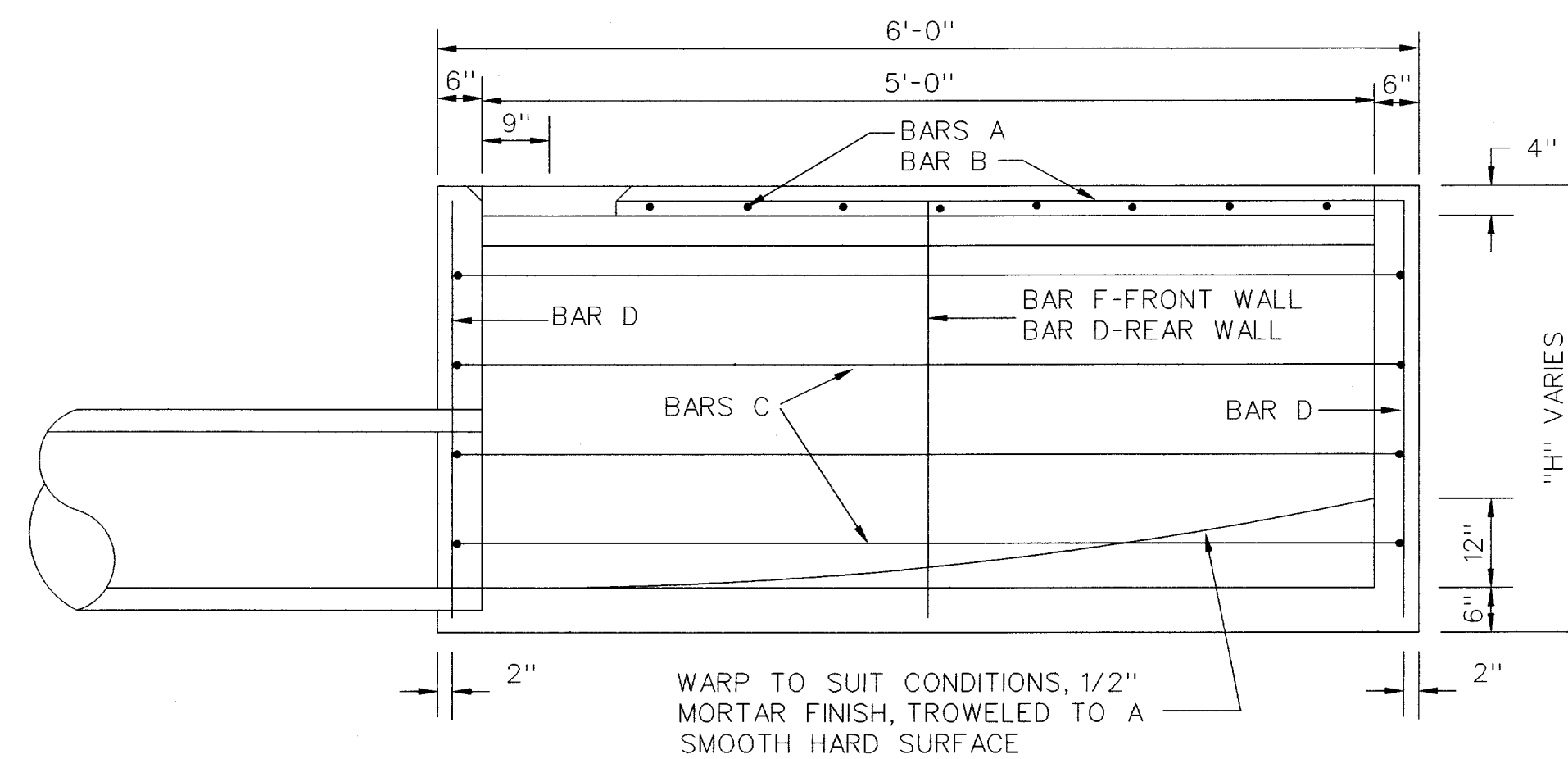


REINFORCING STEEL AND CONCRETE (RECESSED CURB INLET)

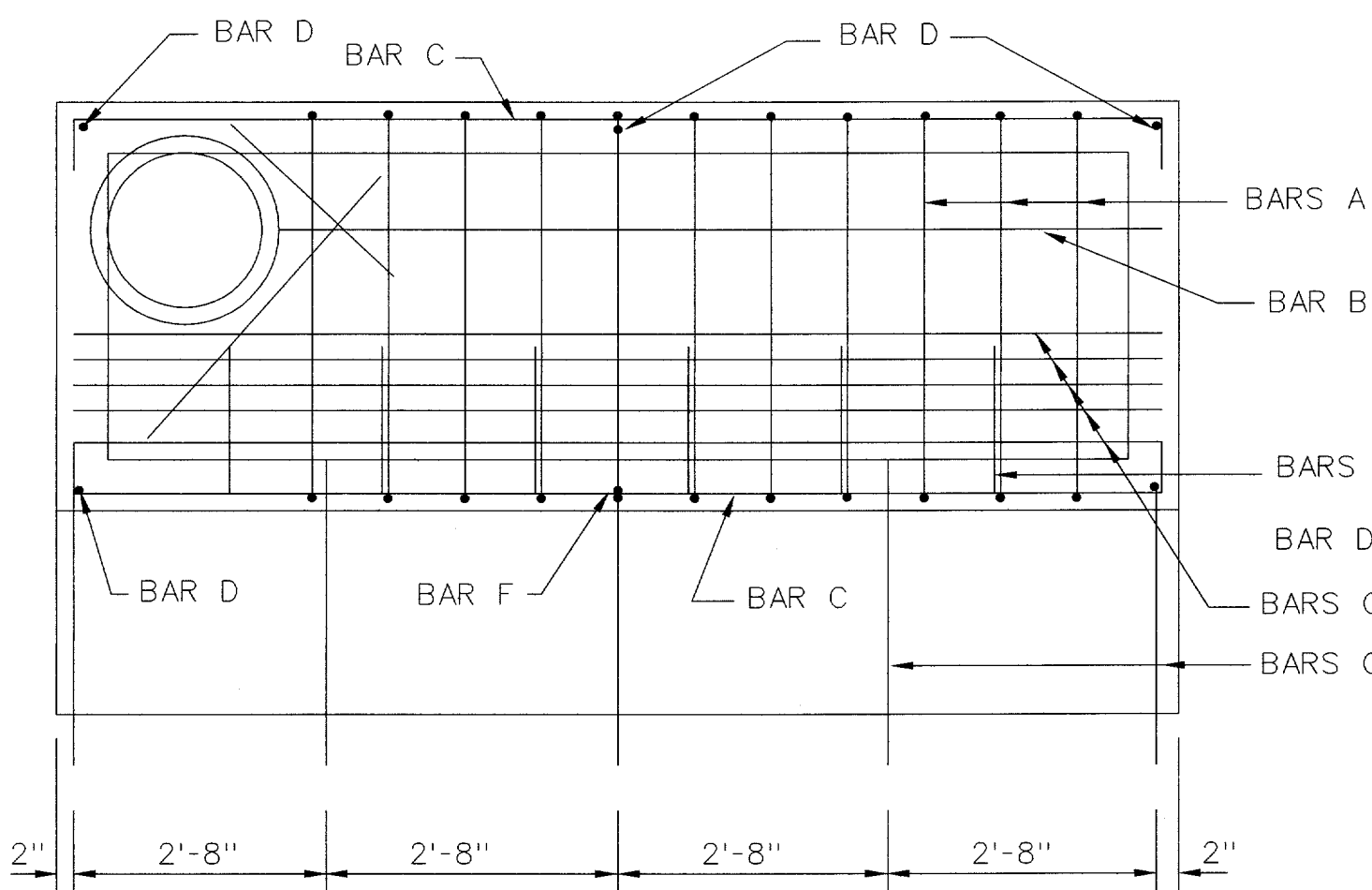
INLET SIZE	STEEL																								TOTALS		5" 110*																		
	BARS A 9" CC				BARS B				BARS C 12" CC				BARS D				BARS F				BARS G				BARS H 18" CC				REIN. (LBS)	CONC. (CY)															
LEN	DEPTH	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT	NO.	SIZE	LEN	WT								
5'	4'-6"	14	*3	3'-8"	17	1	*3	5'-8"	3	12	*4	5'-8"	94	5	*4	4'-8"	16	1	*4	3'-6"	2	5	*3	3'-8"	6														138	3.36					
	5'-0"	14	*3	3'-8"	17	1	*3	5'-8"	3	14	*4	5'-8"	109	5	*4	5'-2"	17	1	*4	4'-0"	3	5	*3	3'-8"	6															155	3.60				
	5'-6"	14	*3	3'-8"	17	1	*3	5'-8"	3	14	*4	5'-8"	109	5	*4	5'-8"	19	1	*4	4'-6"	3	5	*3	3'-8"	6															157	3.84				
5'	4'-6"	14	*3	3'-8"	17	1	*3	5'-8"	3	15	*4	5'-8"	117	5	*4	4'-8"	16	1	*4	3'-6"	2	5	*3	3'-8"	6	6	*3	2'-7"	6	167	3.42														
	5'-0"	14	*3	3'-8"	17	1	*3	5'-8"	3	17	*4	5'-8"	132	5	*4	5'-2"	17	1	*4	4'-0"	3	5	*3	3'-8"	6	6	*3	2'-7"	6	184	3.66														
	5'-6"	14	*3	3'-8"	17	1	*3	5'-8"	3	17	*4	5'-8"	132	5	*4	5'-8"	19	1	*4	4'-6"	3	5	*3	3'-8"	6	6	*3	2'-7"	6	186	3.90														

* FOR CONTRACTOR'S INFORMATION ONLY

SECTION A - A



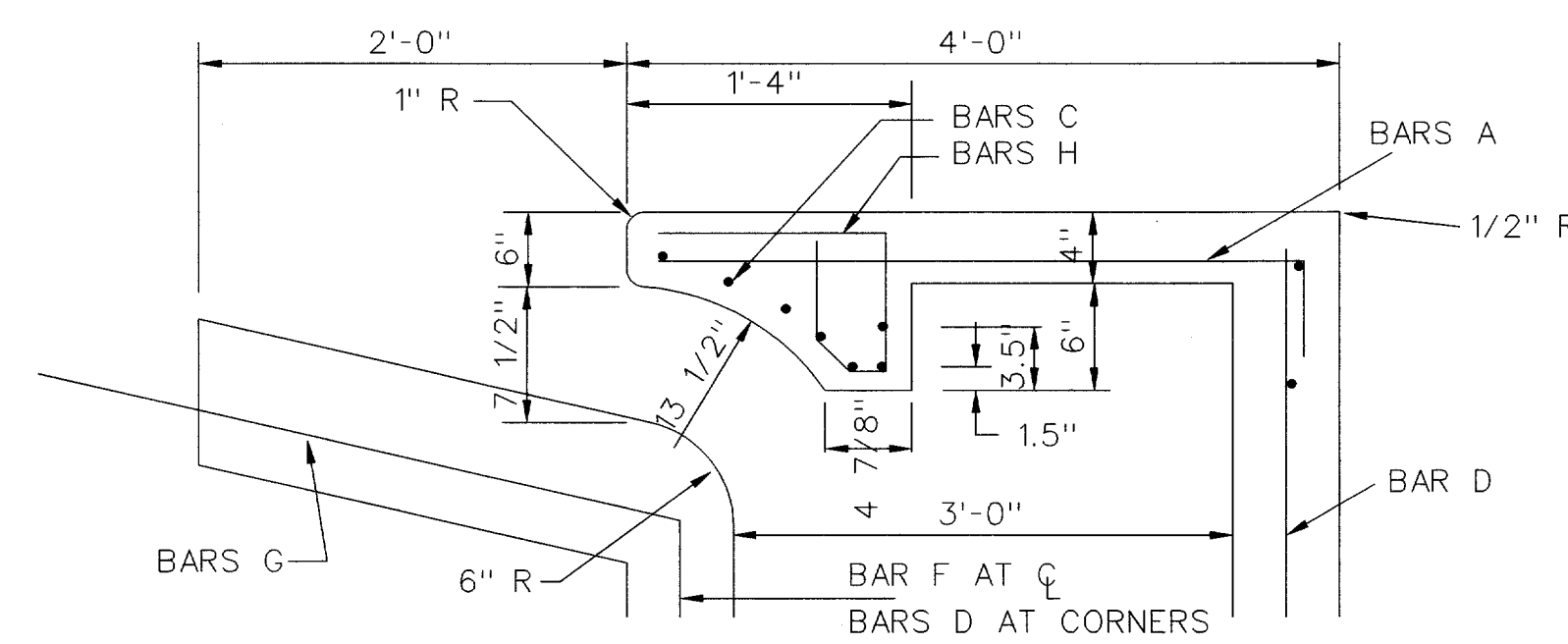
SECTION B - B



REINFORCING PLAN ALTERNATE

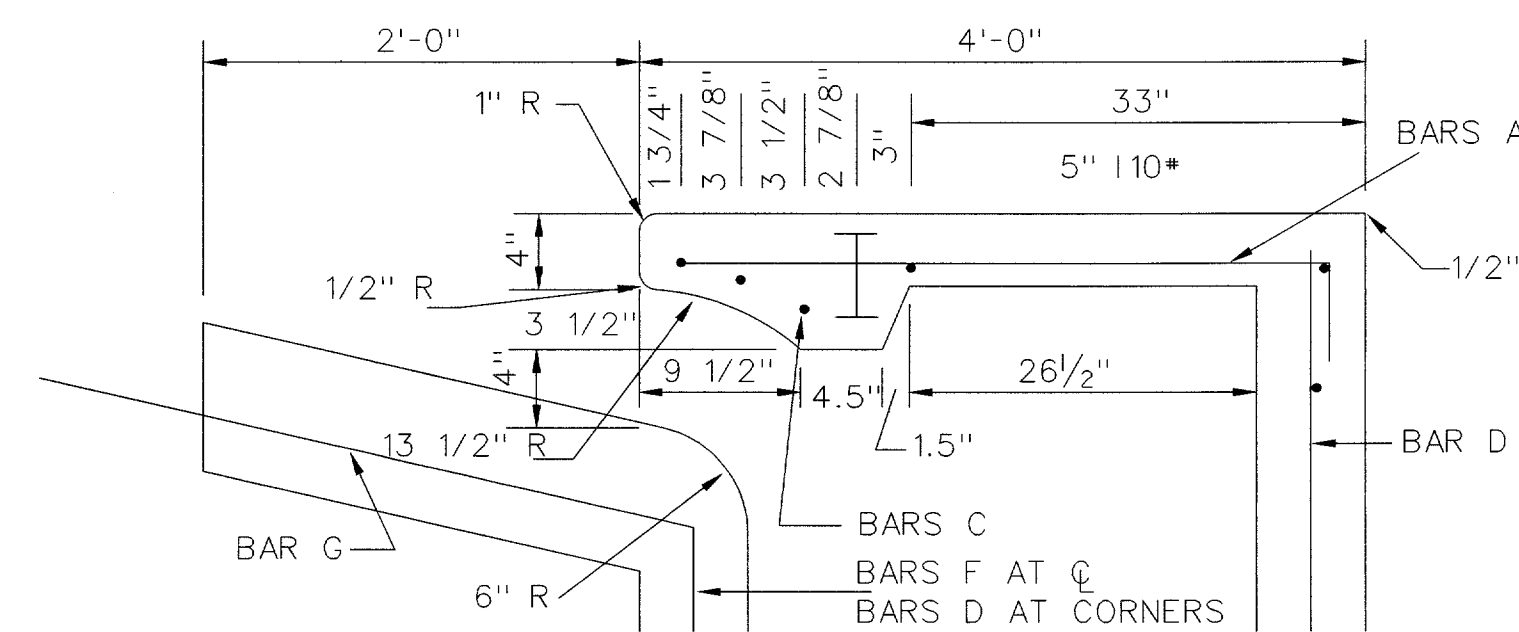
CONCRETE TO BE DEDUCTED FOR PIPE

PIPE SIZE	CONC. CY
18"	0.05
21"	0.07
24"	0.09
27"	0.11
30"	0.14
36"	0.17



SECTION D - D ALTERNATE

SEE STANDARD SECTION D-D AT RIGHT

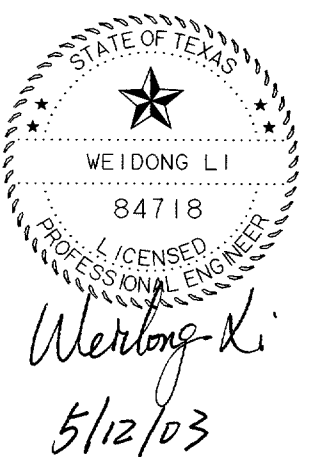


SECTION D - D

STANDARD INLET

GENERAL NOTES :

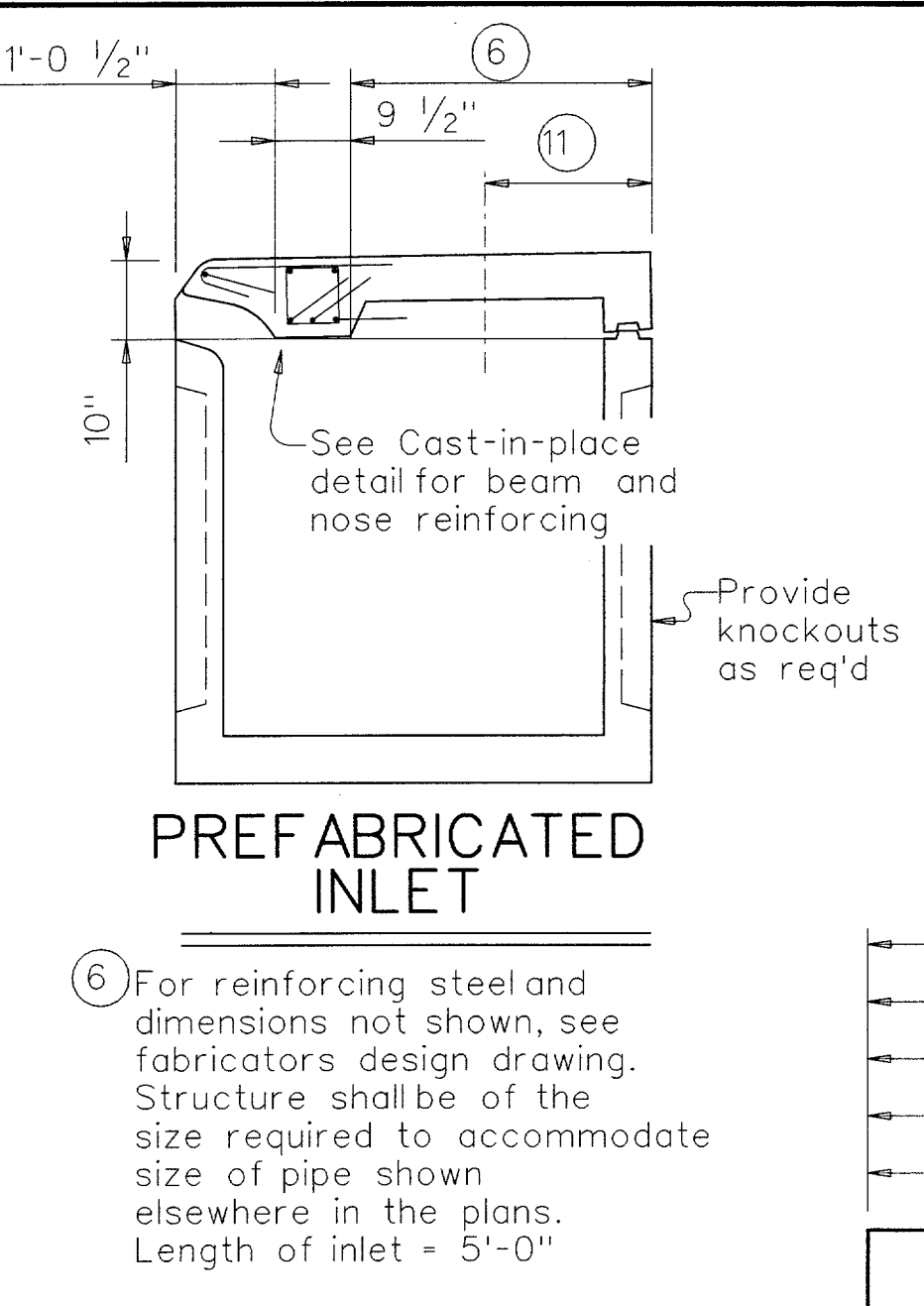
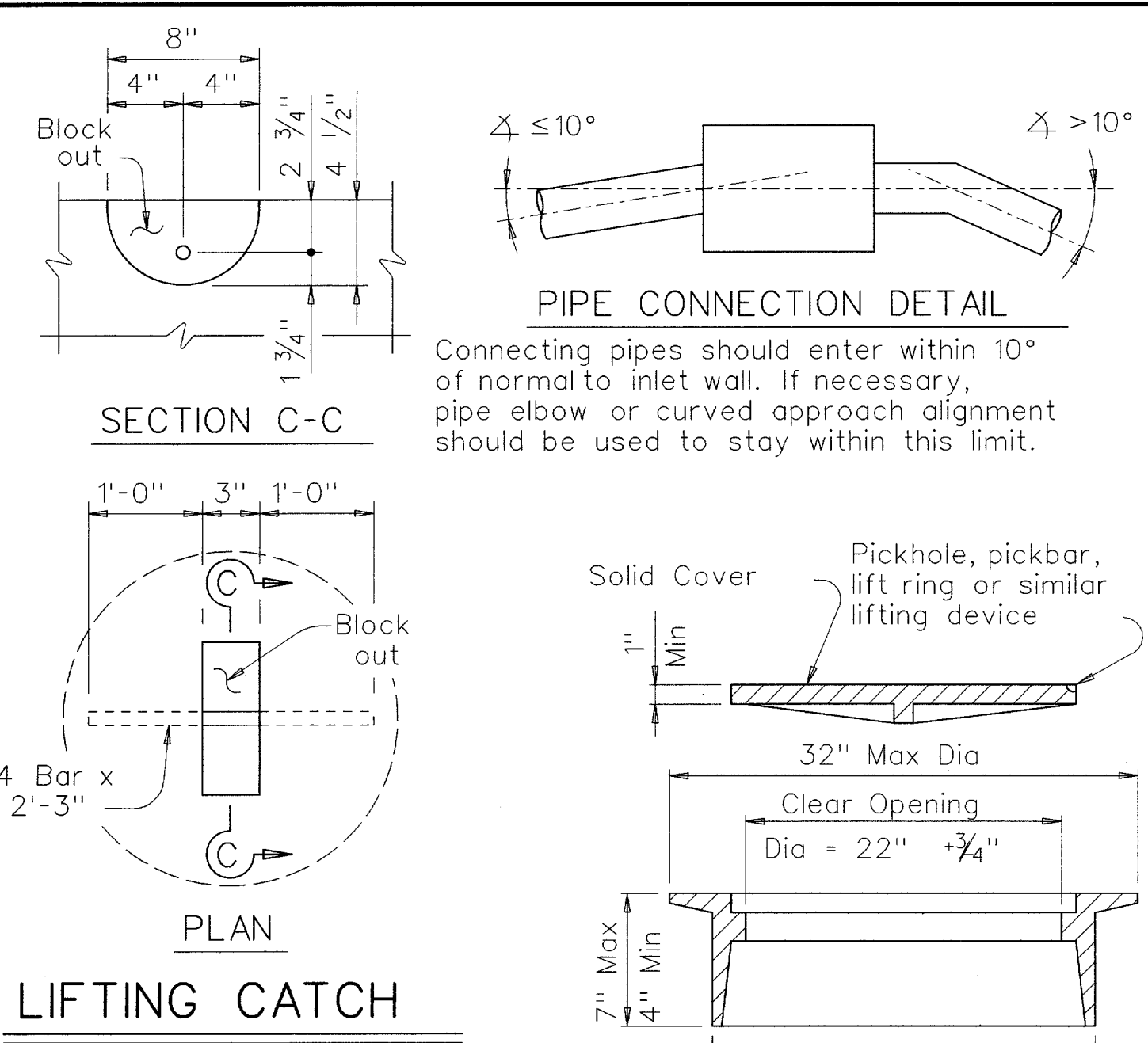
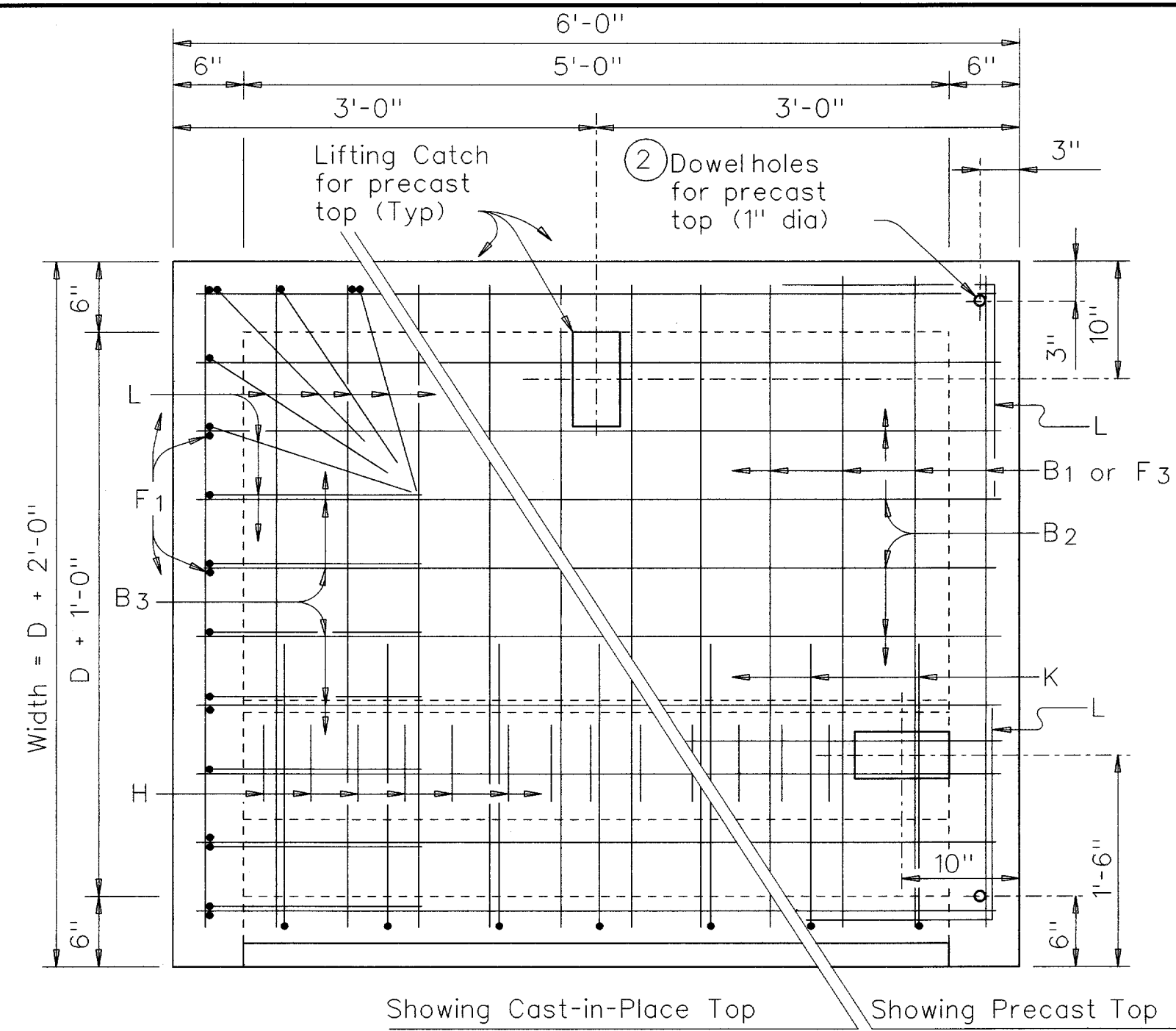
- ALL CONCRETE SHALL BE 3000 PSI.
- LATERAL PIPE MAY ENTER THE INLET AT ANY LOCATION.
- THE 24" GUTTER IN THE FRONT OF THE INLET IS CONSIDERED PART OF THE INLET AND SHALL BE CONSTRUCTED WITH THE INLET.
- THE TOP OF INLET CROSS SLOPE SHALL CONFORM TO THE ADJACENT PARKWAY (2%).
- THE DIMENSIONS RELATING TO THE REINFORCING STEEL ARE TO THE CENTER OF THE BARS.
- FOR INLETS WITH A DEPTH LESS THAN 4' - 6", THE CONTRACTOR SHALL MODIFY THE LENGTH OF STEEL BARS.



<p>15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900</p>						
<p>INLET DETAILS</p>						
<p>INWOOD CONNECTION</p>						
<p>DEPARTMENT OF PUBLIC WORKS</p>						
<p>TOWN OF ADDISON, TEXAS</p>						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
D.J.S.	E.C.S.	05/12/03				18

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

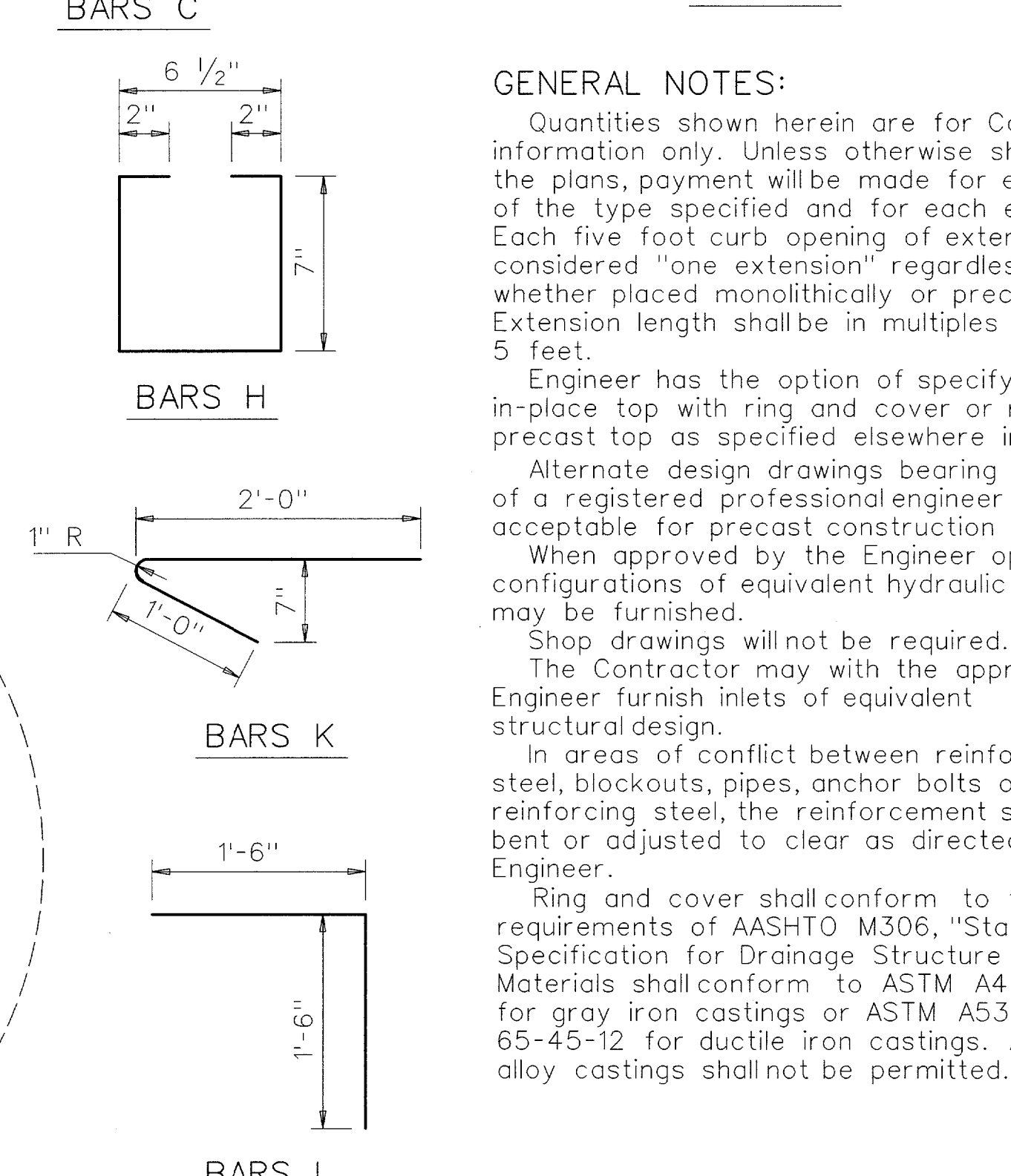
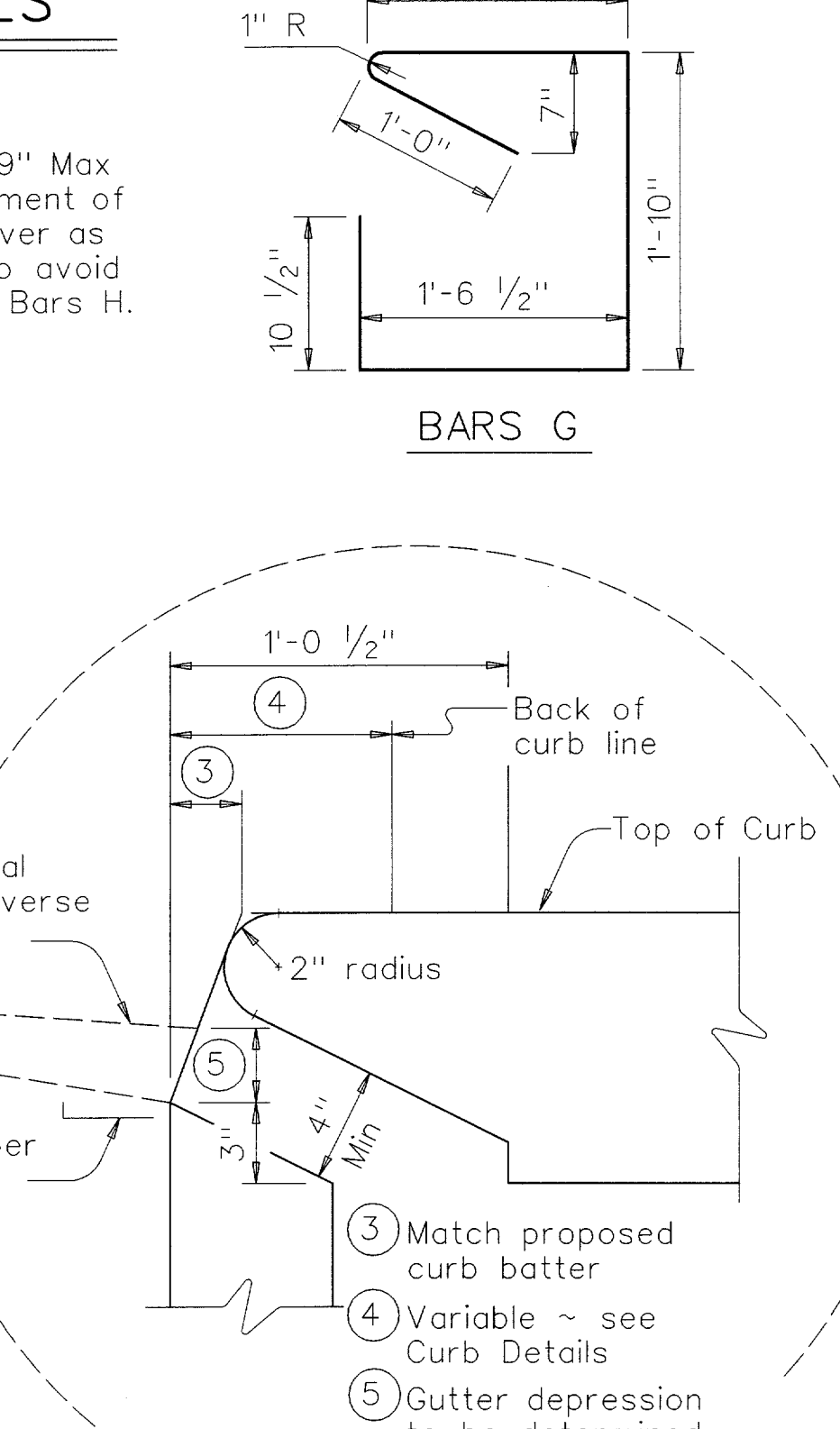
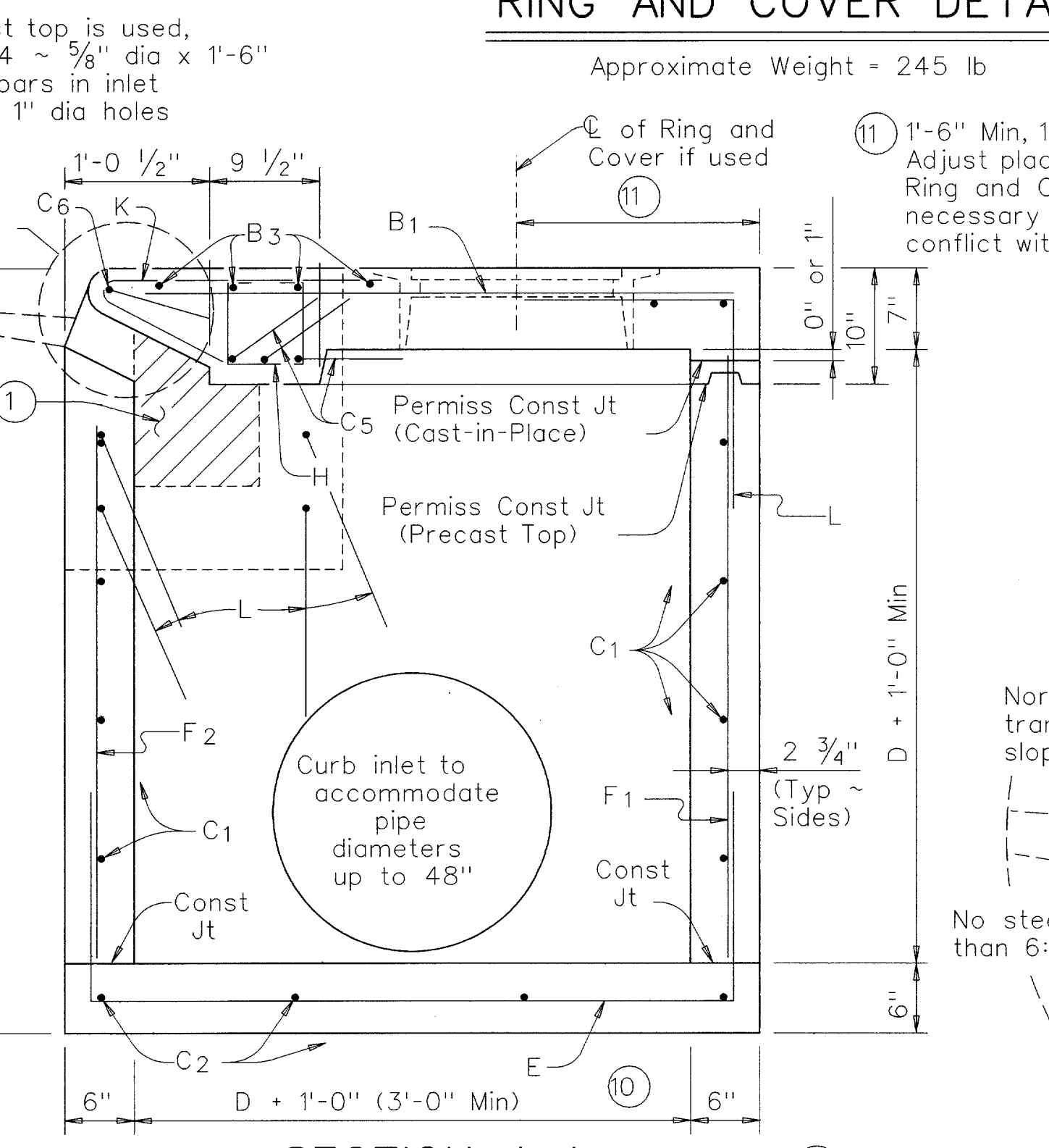
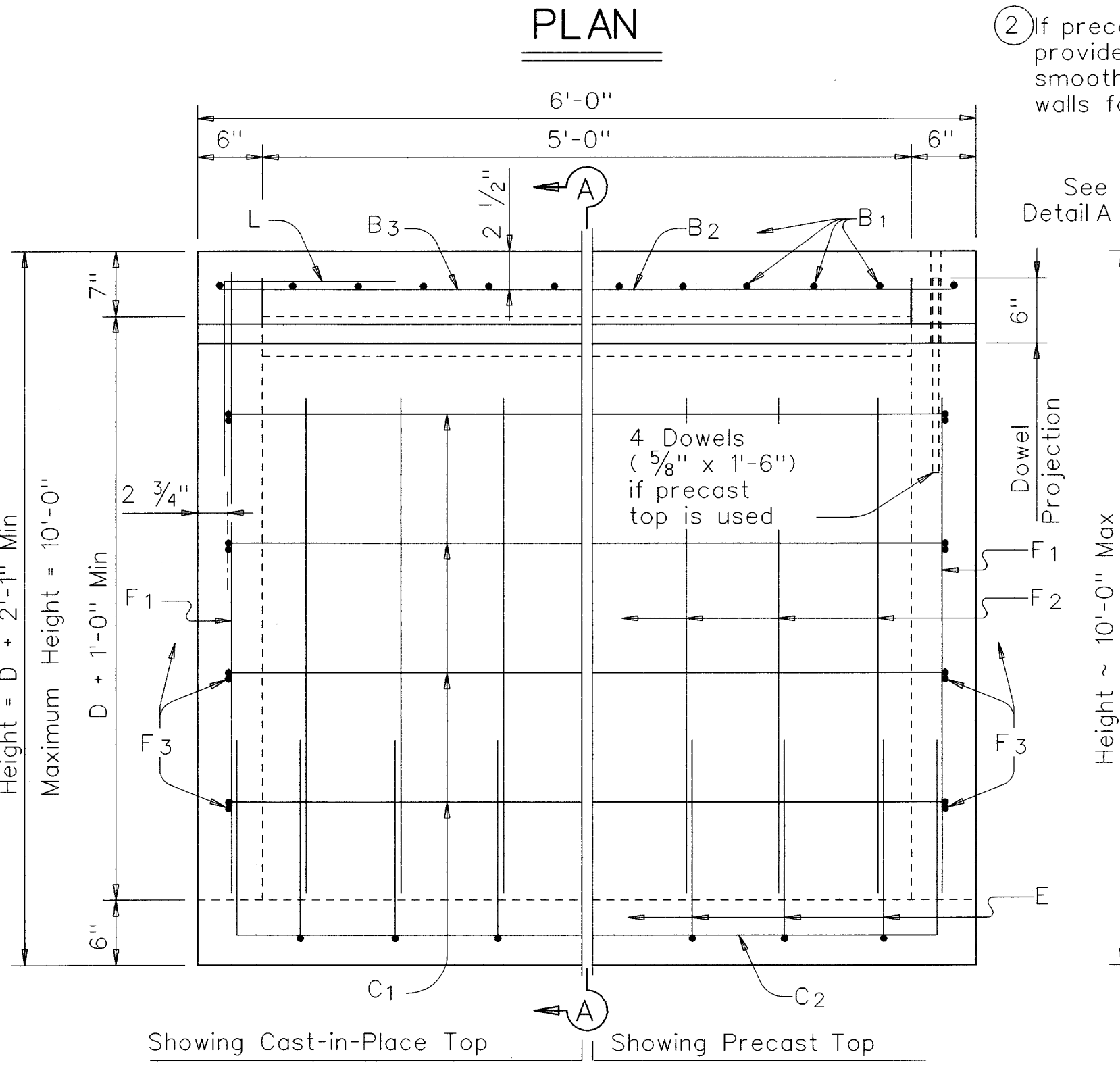
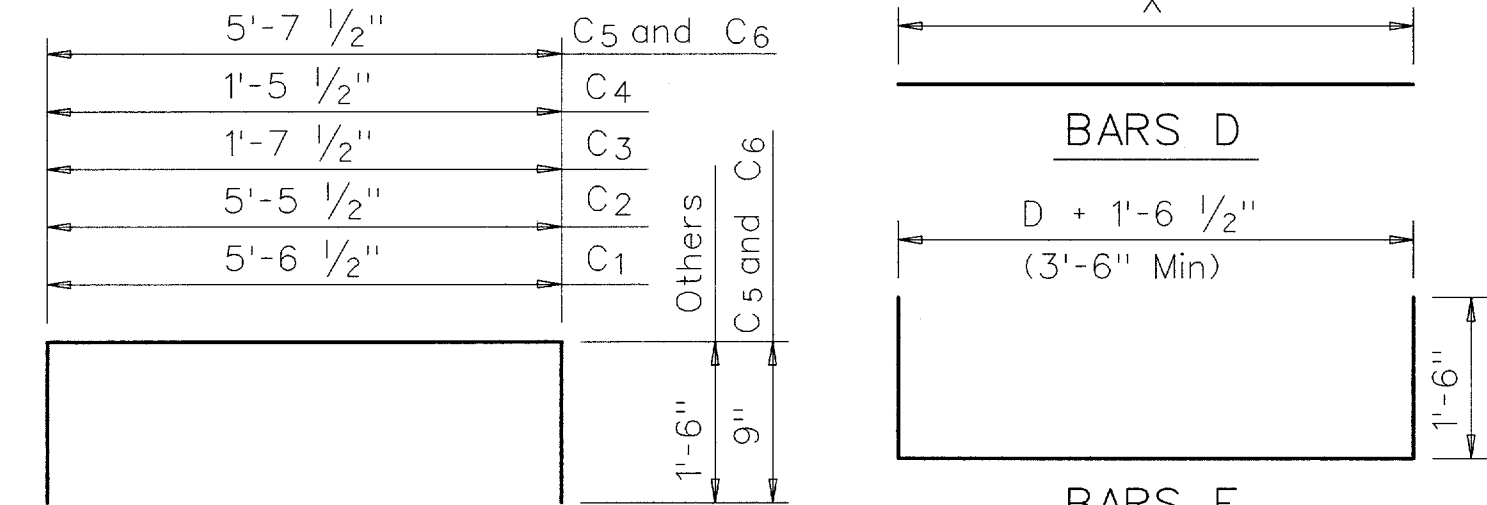
LEVELS DISPLAYED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20
PATH:																				



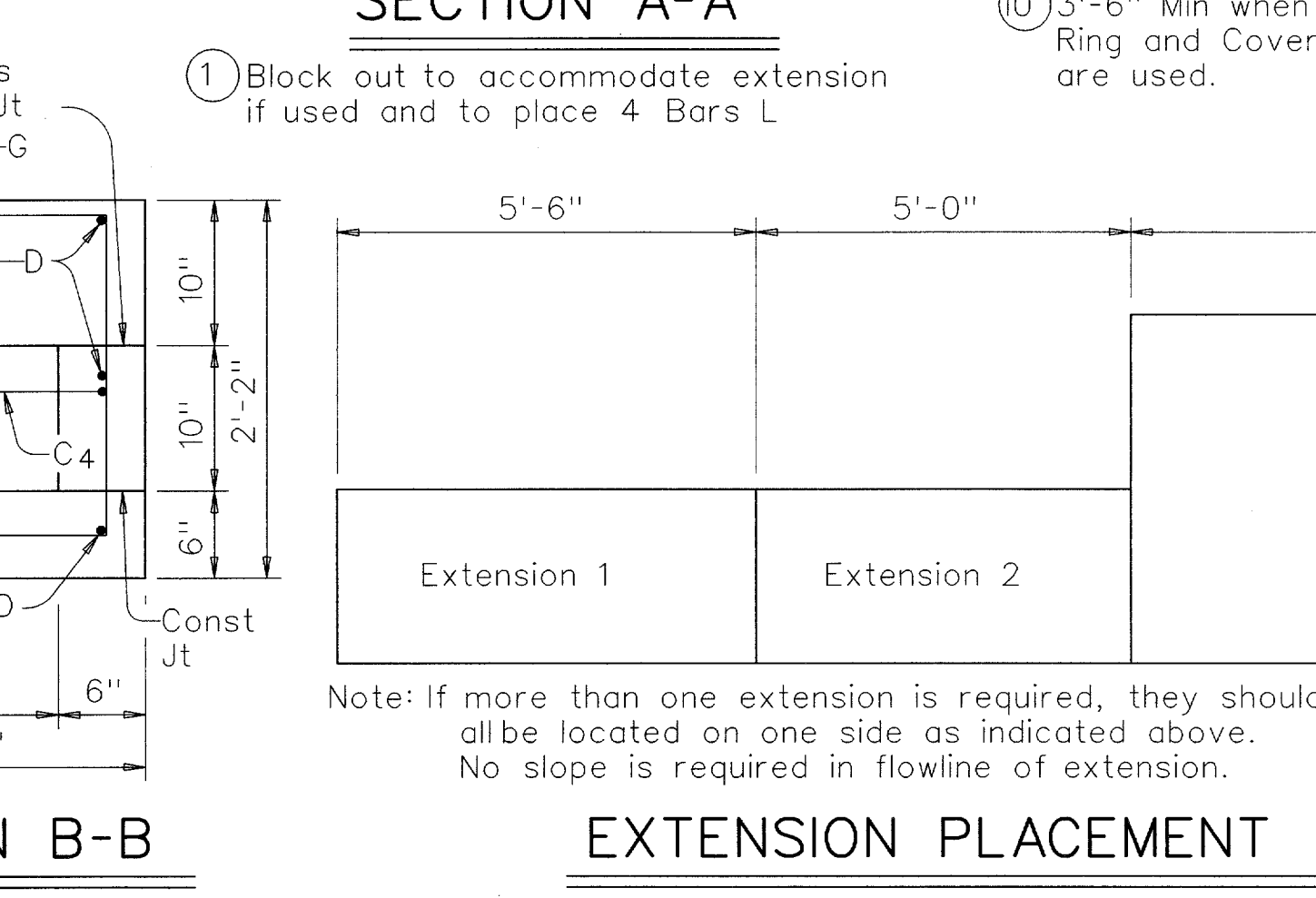
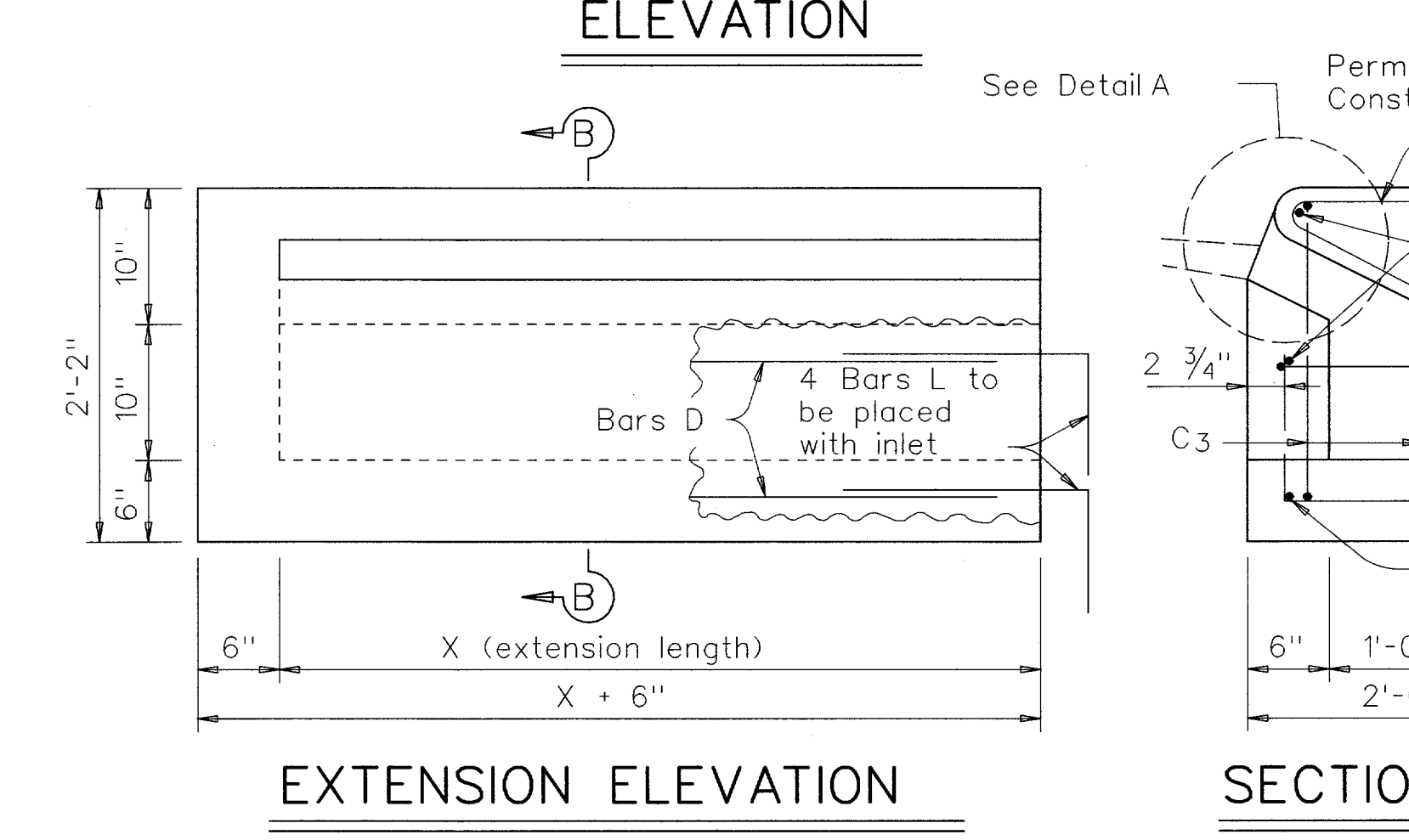
Pipe Size = D	Height	For 4 Foot Width		Per 6 Inch Add'l Width		Per 1 Foot Add'l Height (7)	
		CI "A" Conc	Reinf Steel	CI "A" Conc	Reinf Steel	CI "A" Conc	Reinf Steel
In	Ft	CY	Lb	CY	Lb	CY	Lb
18"	3'-7"	1.6	315	--	--	.33	32
24"	4'-1"	2.0	329	--	--	.33	32
30"	4'-7"	2.4	347	.18	19	.35	33
36"	5'-1"	2.7	361	.19	20	.37	35
42"	5'-7"	3.1	379	.20	21	.39	36
48"	6'-1"	3.5	393	.21	21	.41	38

Bar	Size	Spacing
B1	#4	6"
B2	#5	6"
B3	#4	6"
C1-2	#4	12"
C3-4	#4	(9)
C5	#6	(9)
C6	#4	(9)
D	#4	(9)
E	#4	12"
F1-3	#4	12"
G	#4	6"
H	#3	4"
K	#4	9"
L	#4	6"

(7) For Width (4'-0" Min) = D + 2'-0"
 (8) Does not apply to prefabricated inlets



GENERAL NOTES:
 Quantities shown herein are for Contractor's information only. Unless otherwise shown in the plans, payment will be made for each inlet of the type specified and for each extension. Each five foot curb opening of extension is considered "one extension" regardless of whether placed monolithically or precast. Extension length shall be in multiples of 5 feet.
 Engineer has the option of specifying cast-in-place top with ring and cover or removable precast top as specified elsewhere in plans.
 Alternate design drawings bearing the seal of a registered professional engineer will be acceptable for precast construction of inlets.
 When approved by the Engineer opening configurations of equivalent hydraulic design may be furnished.
 Shop drawings will not be required.
 The Contractor may with the approval of the Engineer furnish inlets of equivalent structural design.
 In areas of conflict between reinforcing steel, blockouts, pipes, anchor bolts or other reinforcing steel, the reinforcement shall be bent or adjusted to clear as directed by the Engineer.
 Ring and cover shall conform to the requirements of AASHTO M306, "Standard Specification for Drainage Structure Castings". Materials shall conform to ASTM A48, Class 35B for gray iron castings or ASTM A536, Grade 65-45-12 for ductile iron castings. Aluminum alloy castings shall not be permitted.



Ext	"X"	CI "A" Conc	Reinf Steel
No.	Ft	CY	Lb
1	5	0.7	104
2	10	1.2	190
3	15	1.8	277
4	20	2.4	366

Texas Department of Transportation
 Bridge Division

CURB INLET TYPE C AND EXTENSION TYPE E (5'-0" NILET)

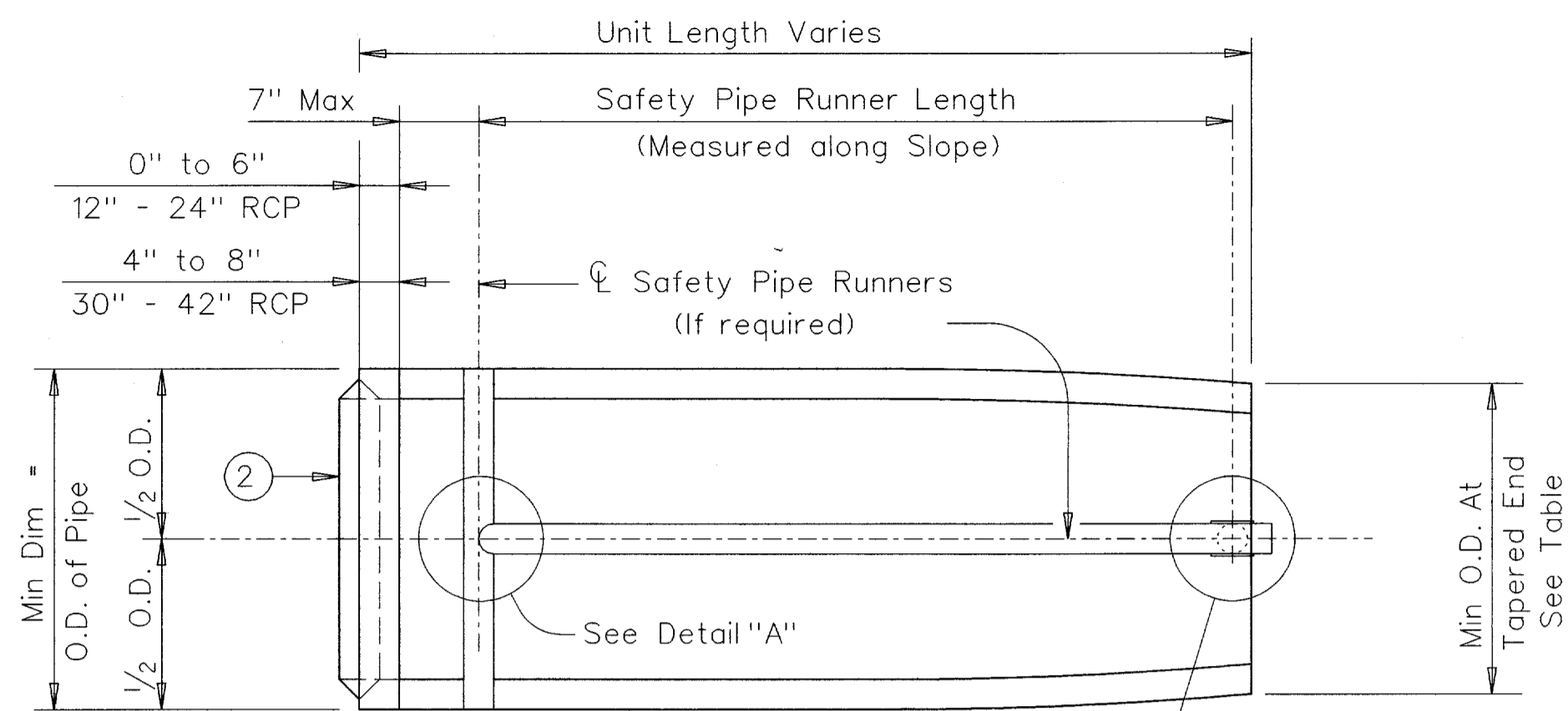
IL-C

FILE: il-cstde.dgn	DN: TxDOT	CK: TER	DW: MCB	CK: TER/GAF
© TxDOT September 2000	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS	COUNTY	CONTROL	SECT	JOB
				HIGHWAY

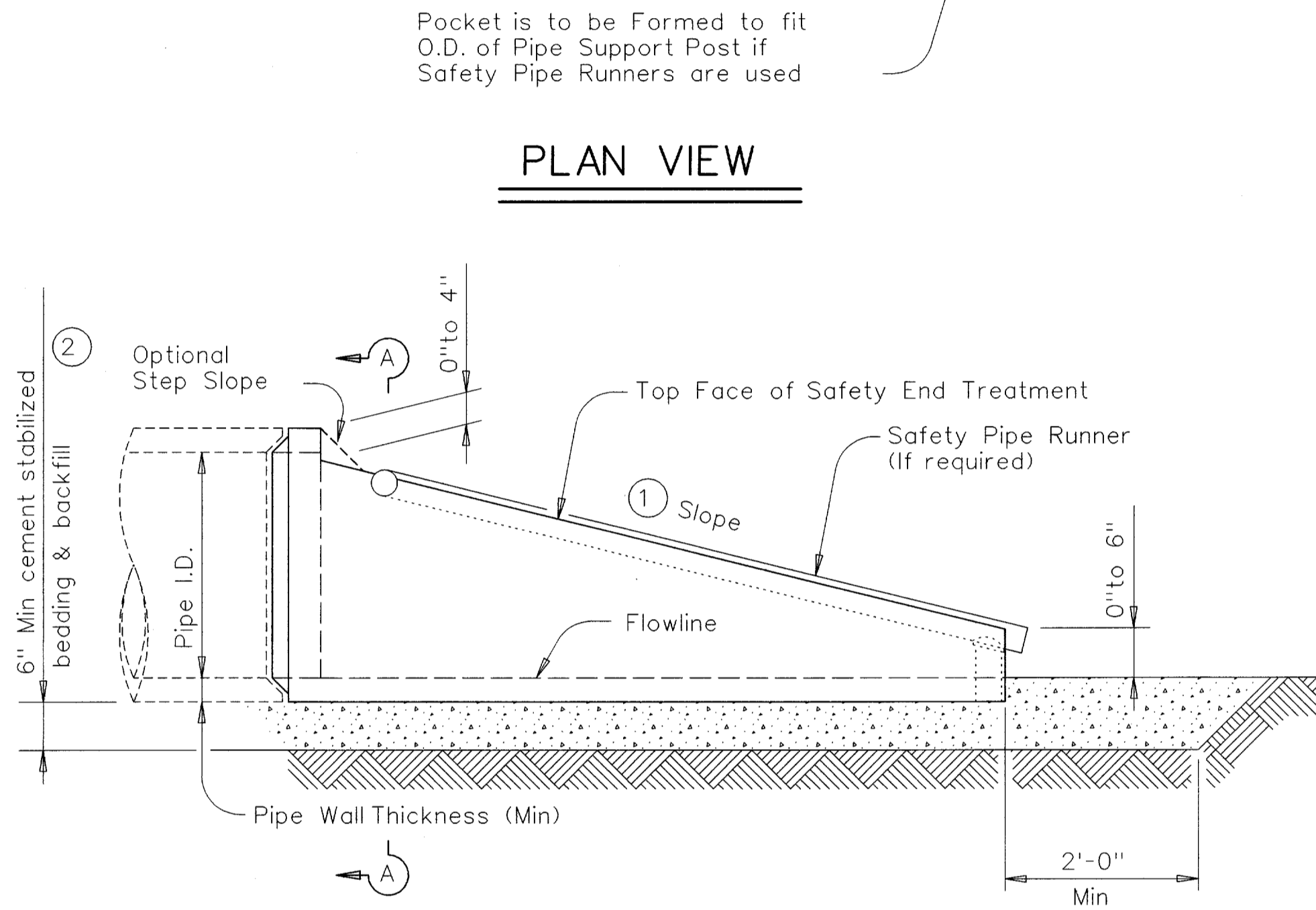
... \cadd\mwdot\set\13\cstde.dgn 06/12/03 06:06:30 PM

DISCLAIMER: The use of this standard is governed by the "Texas Engineering Practice Act". No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

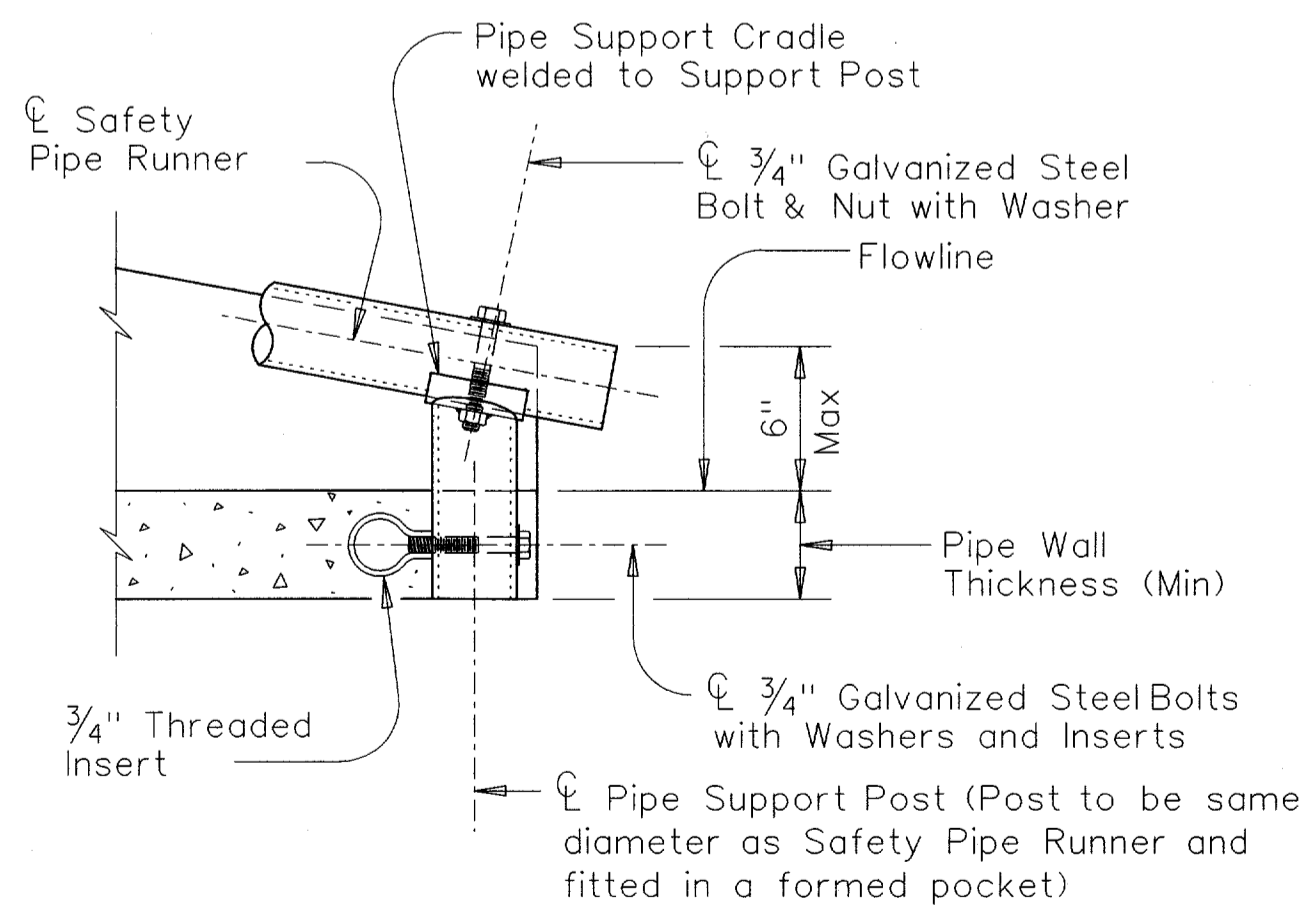
LEVELS DISPLAYED
ACC:



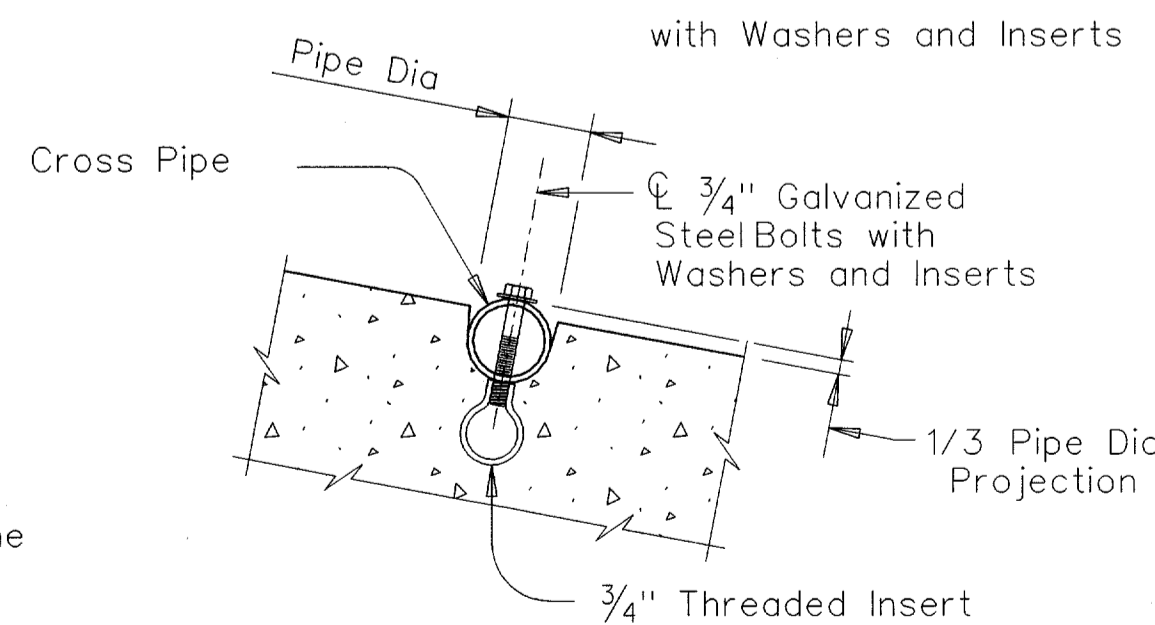
PLAN VIEW



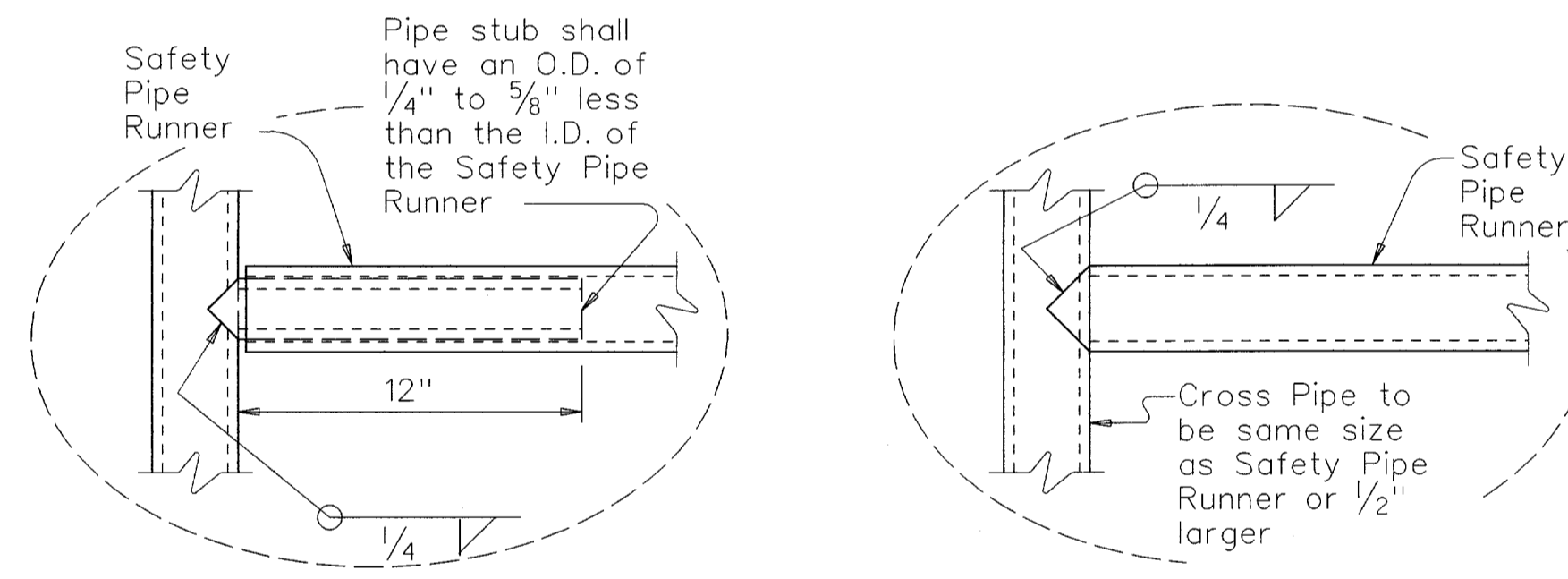
LONGITUDINAL ELEVATION



END DETAIL FOR INSTALLATION OF SAFETY PIPE RUNNERS
(if required)



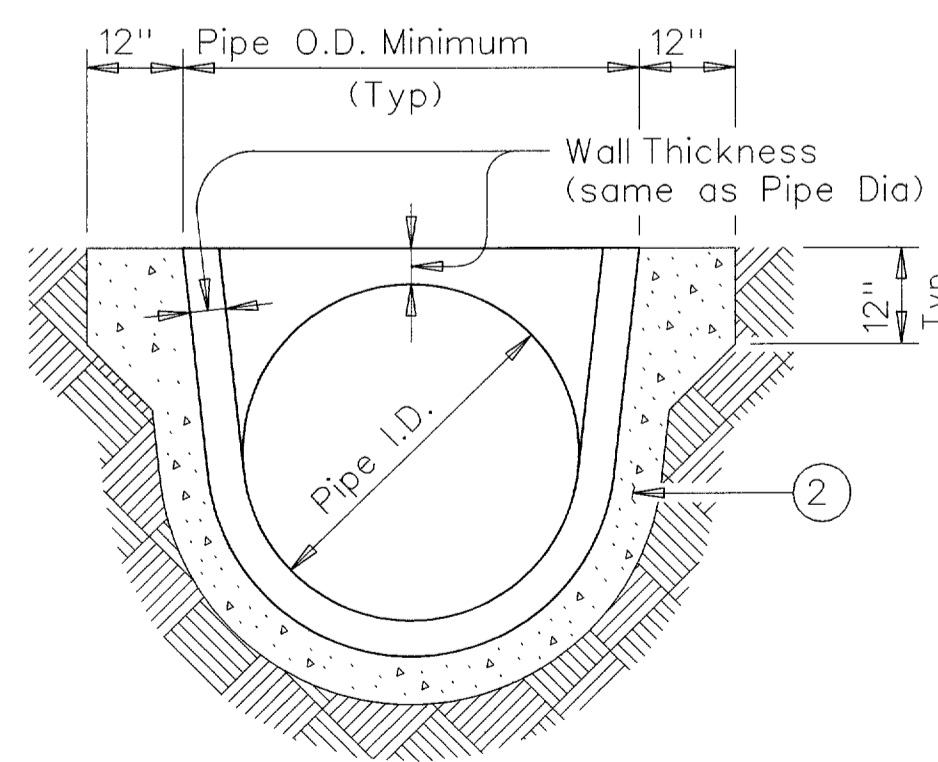
INSTALLATION DETAIL FOR SAFETY PIPE RUNNERS
(if required)



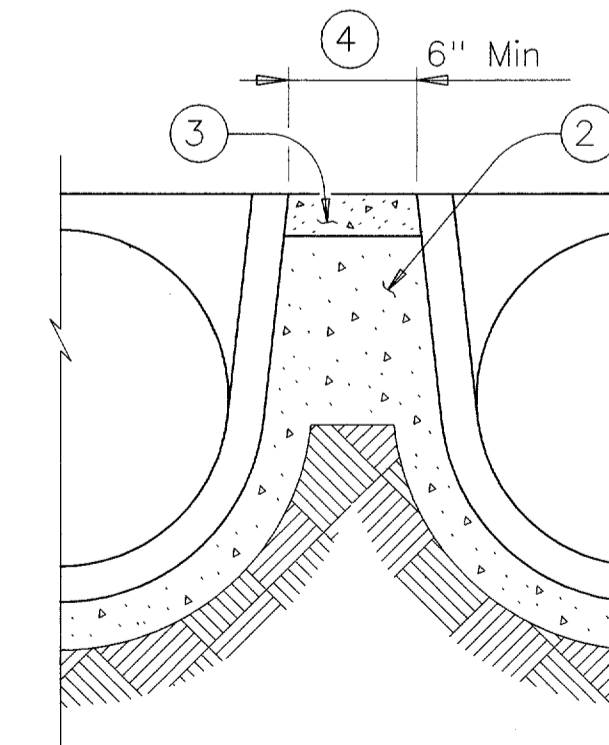
OPTION A

OPTION B

DETAIL A



SECTION A-A



MULTIPLE PIPE INSTALLATION

Maximum Safety Pipe Runner Lengths & Required Safety Pipe Runner Sizes			
Maximum Safety Pipe Runner Length	Required Pipe Runner Size		
	Pipe Size	Pipe O.D.	Pipe I.D.
11'- 2"	3" STD	3.500"	3.068"
15'- 6"	3 1/2" STD	4.000"	3.548"
20'-10"	4" STD	4.500"	4.026"
35'- 4"	5" STD	5.563"	5.047"

- Slope as shown elsewhere in the plans. Slope of 3:1 or flatter is required for vehicle safety.
- Cement stabilized bedding and backfill shall be in accordance with the Item, "Excavation and Backfill for Structures". Bedding and backfill shall be considered subsidiary to the Item "Safety End Treatment". When concrete riprap is specified around the Safety End Treatment backfill shall be as directed by Engineer.
- The top 4" of void between Precast End Treatments shall be filled with concrete Riprap and shall be considered subsidiary to Safety End Treatment.
- Clear distance between pipes shall be adjusted to provide for the minimum distance between safety end treatments.

PIPE I.D.	MINIMUM WALL THICKNESS	MINIMUM O.D.	MIN O.D. AT TAPERED END	MIN REINF REQUIREMENTS (Sq in/ft of pipe)	SLOPE	MINIMUM LENGTH OF UNIT	SINGLE PIPE		MULTIPLE PIPE			
							SKEW	PIPE RUNNERS REQUIRED	SKEW	PIPE RUNNERS REQUIRED		
12"	2"	16"	16"	0.07 CIRC.	3:1	2'-0"	<=45 deg	No	<=45 deg	No		
											4:1	2'-8"
											6:1	4'-0"
15"	2 1/4"	19 1/2"	19"	0.07 CIRC.	3:1	2'-10"	<=45 deg	No	<=45 deg	No		
											4:1	3'-9"
											6:1	5'-8"
18"	2 1/2"	23"	21 1/2"	0.07 CIRC.	3:1	3'-8"	<=45 deg	No	<=45 deg	No		
											4:1	4'-10"
											6:1	7'-3"
24"	3"	30"	27"	0.07 CIRC.	3:1	5'-3"	<=45 deg	No	<=30 deg	No		
											4:1	7'-0"
											6:1	10'-6"
30"	3 1/2"	37"	31"	0.18 CIRC.	3:1	6'-3"	<=15 deg	No	<=15 deg	No		
											4:1	8'-2"
											6:1	12'-1"
36"	4"	44"	36"	0.19 ELIP.	3:1	7'-10"	=0 deg	No	>0 deg	Yes		
											4:1	10'-4"
											6:1	15'-4"
42"	4 1/2"	51"	41 1/2"	0.23 ELIP.	3:1	9'-6"	>0 deg	Yes	>0 deg	Yes		
											4:1	12'-6"
											6:1	18'-7"

GENERAL NOTES:

Precast safety end treatment for reinforced concrete pipe may be used for TYPE II end treatment as specified in Item "Safety End Treatment". When Precast Safety End Treatment is used as a Contractor's alternate to mitered RCP, Riprap will not be required unless noted otherwise on the plans.

All precast concrete end sections shall be manufactured in accordance with Item "Reinforced Concrete Pipe Culverts" and in accordance with ASTM Specification C-76, Class III, Wall B for circular pipe.

Precast concrete end sections shall be provided with a spigot or bellend for compatibility to upstream or downstream end conditions with sufficient annular space to allow for mortar, cold applied asphalt joint compound or pre-formed plastic gasket material.

Methods of lifting shall be provided by the manufacturer for ease of loading, unloading and installation.

Pipe Runners are designed for a traversing load of 1,800 Lbs at yield as recommended by Research Report 280-1, "Safety Treatment of Roadside Cross-Drainage Structures", Texas Transportation Institute, March 1981.

Safety Pipe Runners, Cross Pipes, Pipe Support Posts, and Pipe Stubs shall conform to the requirements of ASTM A53 (Type E or S, Grade B), ASTM A500 (Grade B), or API 5LX52.

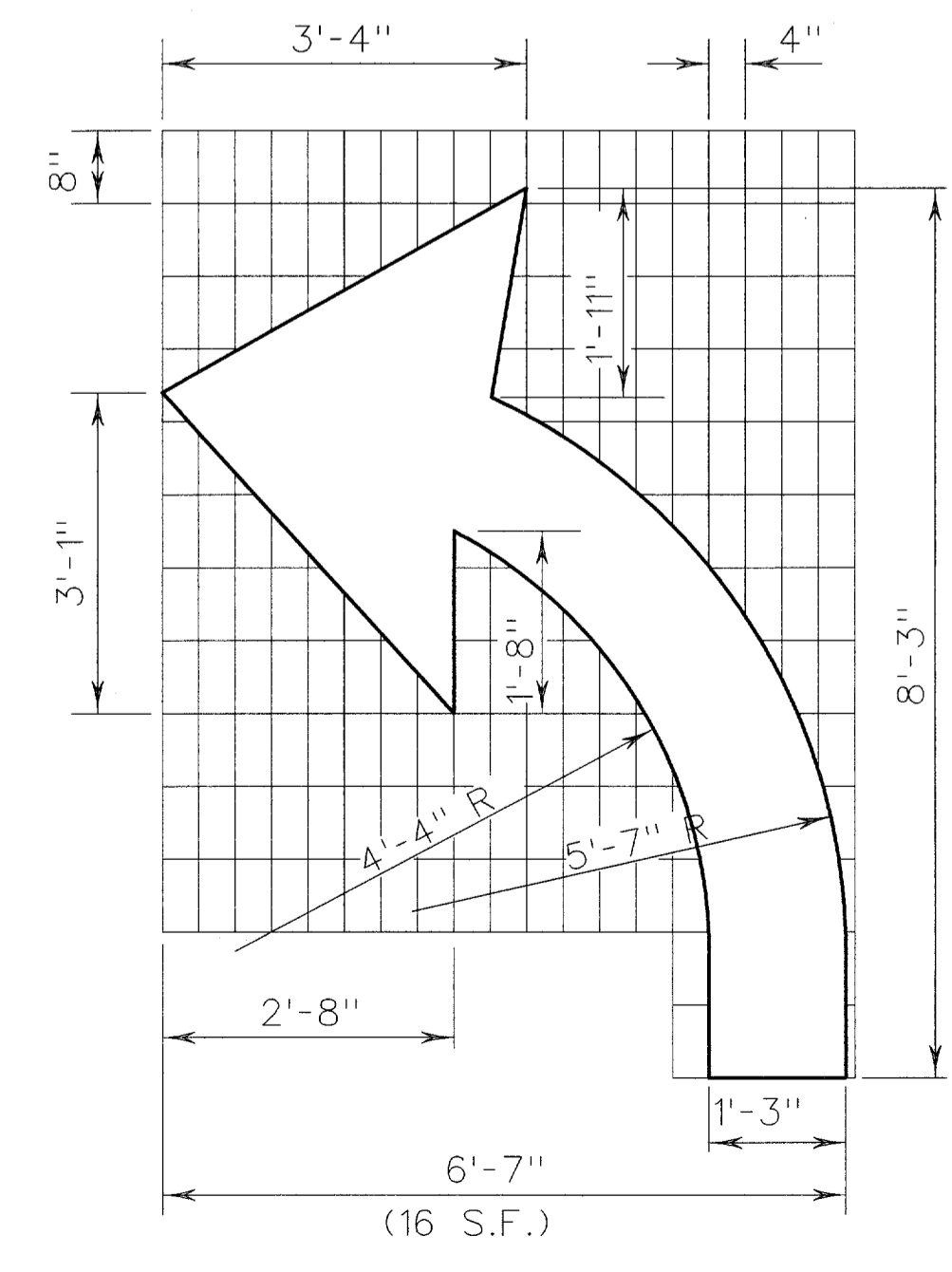
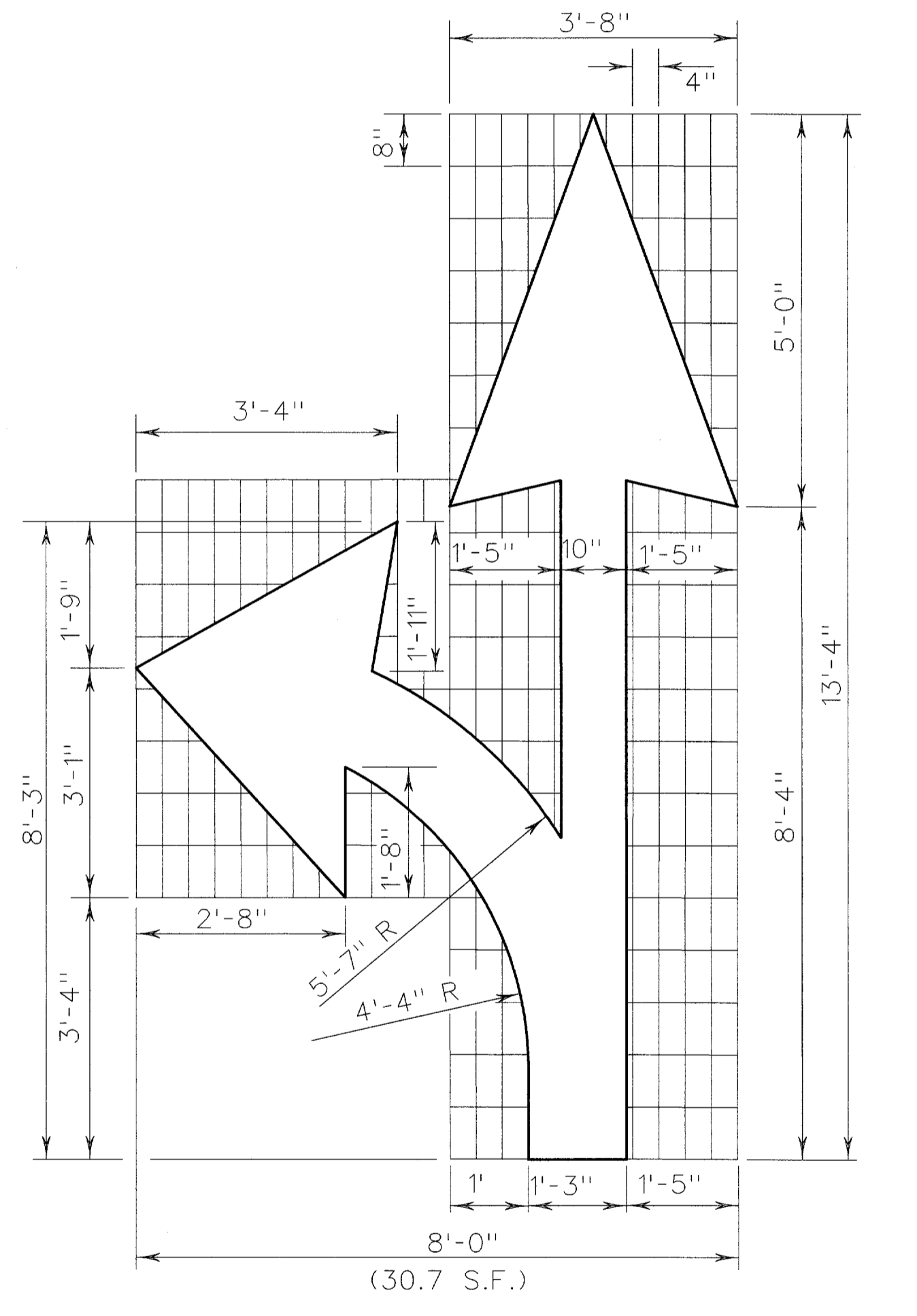
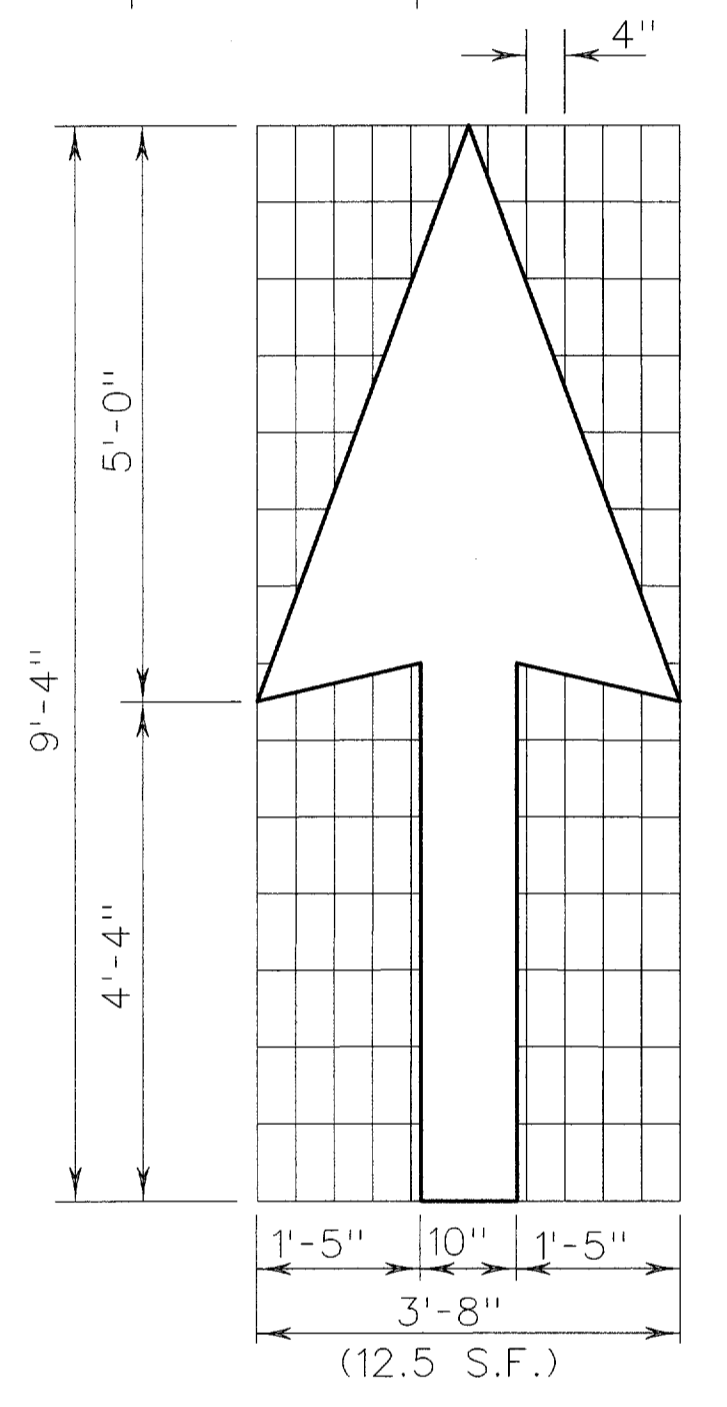
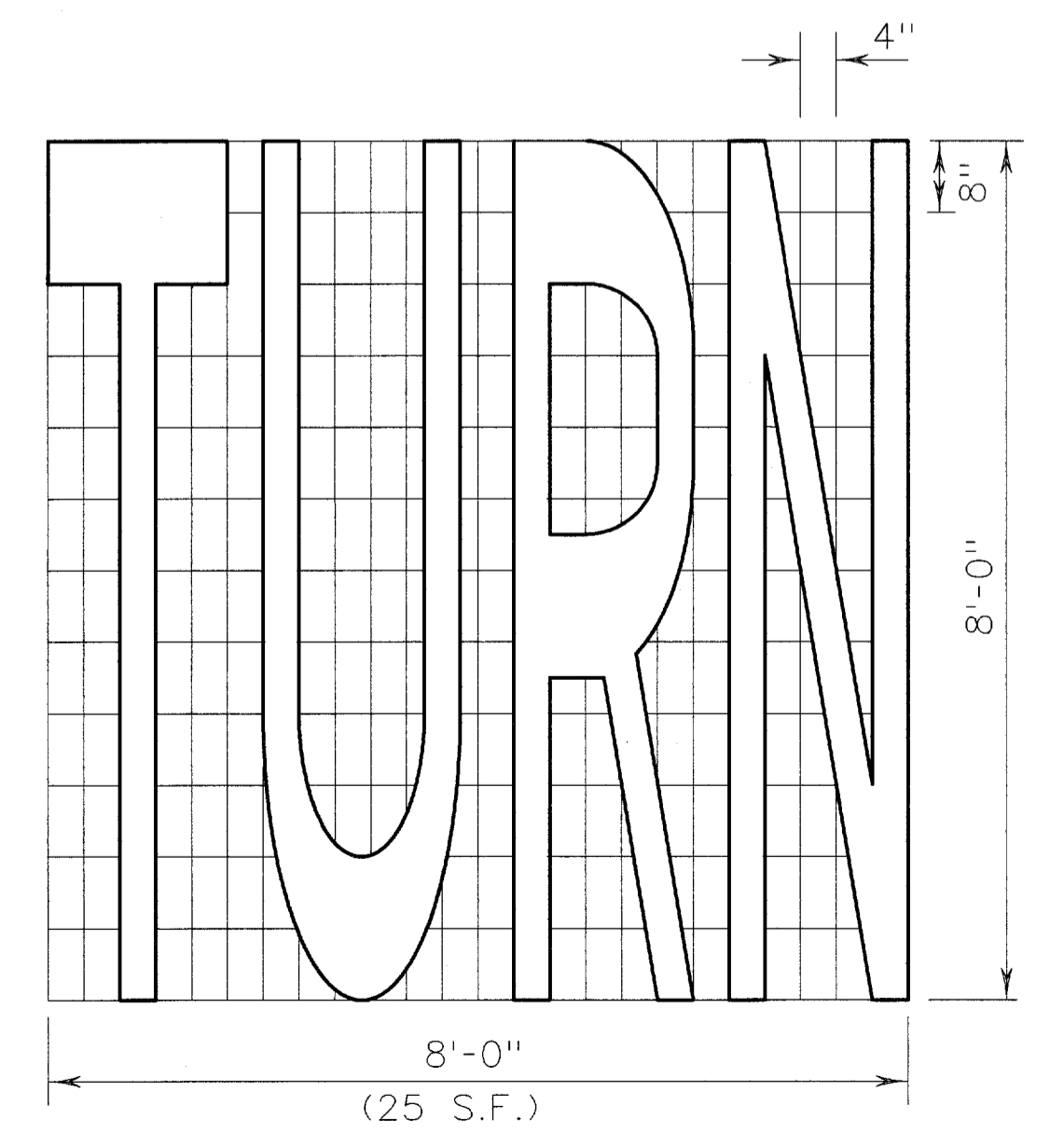
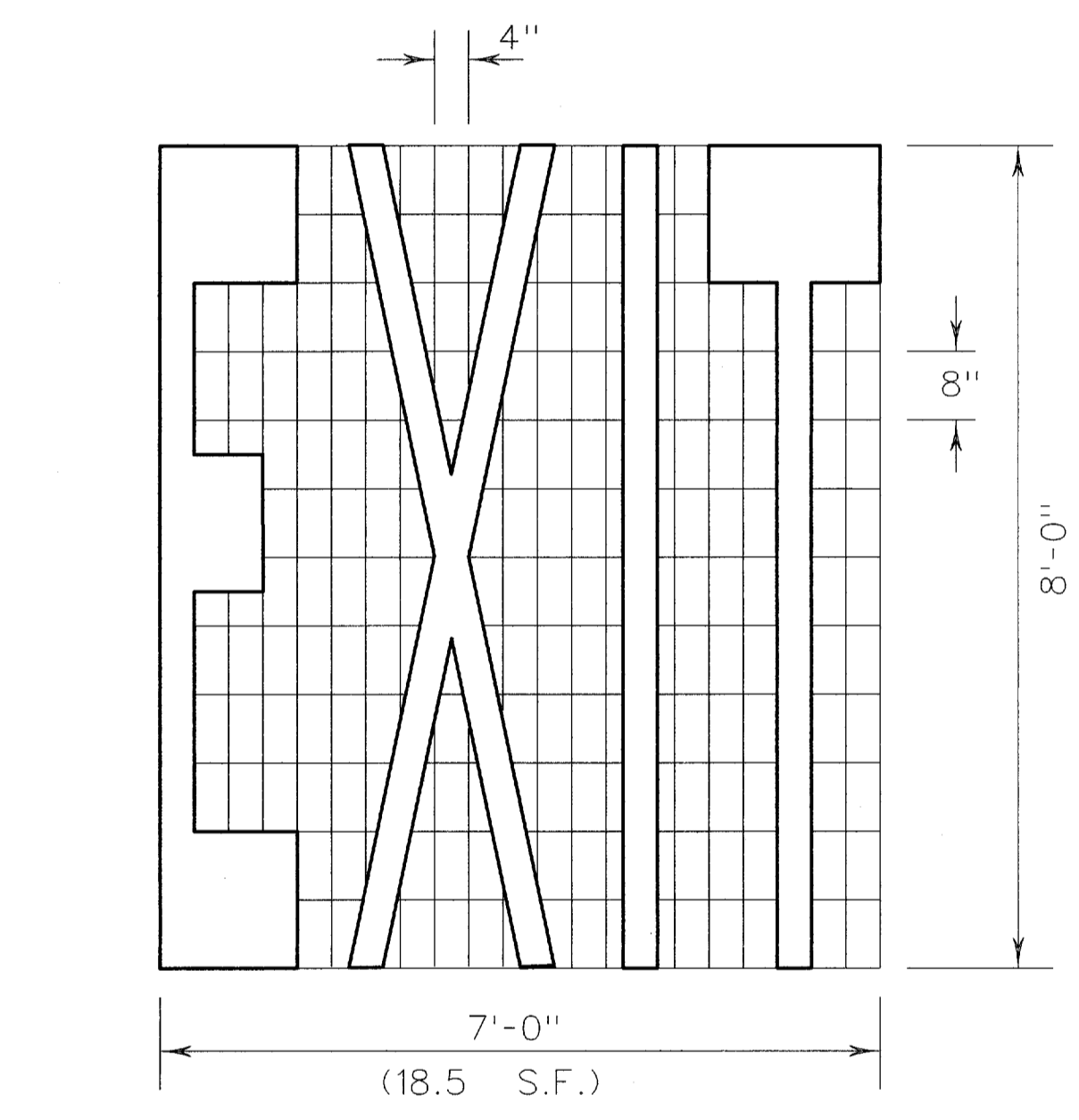
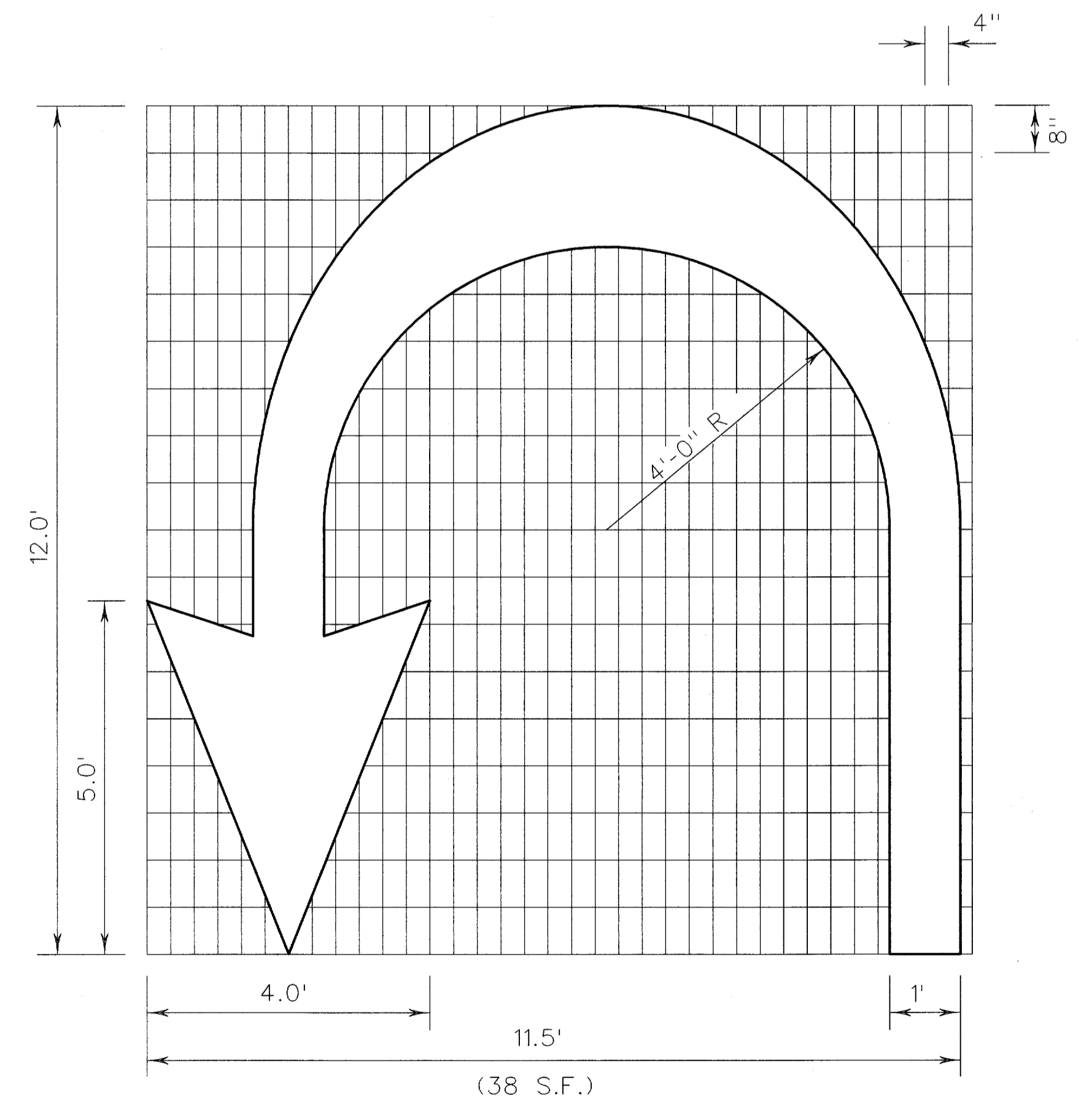
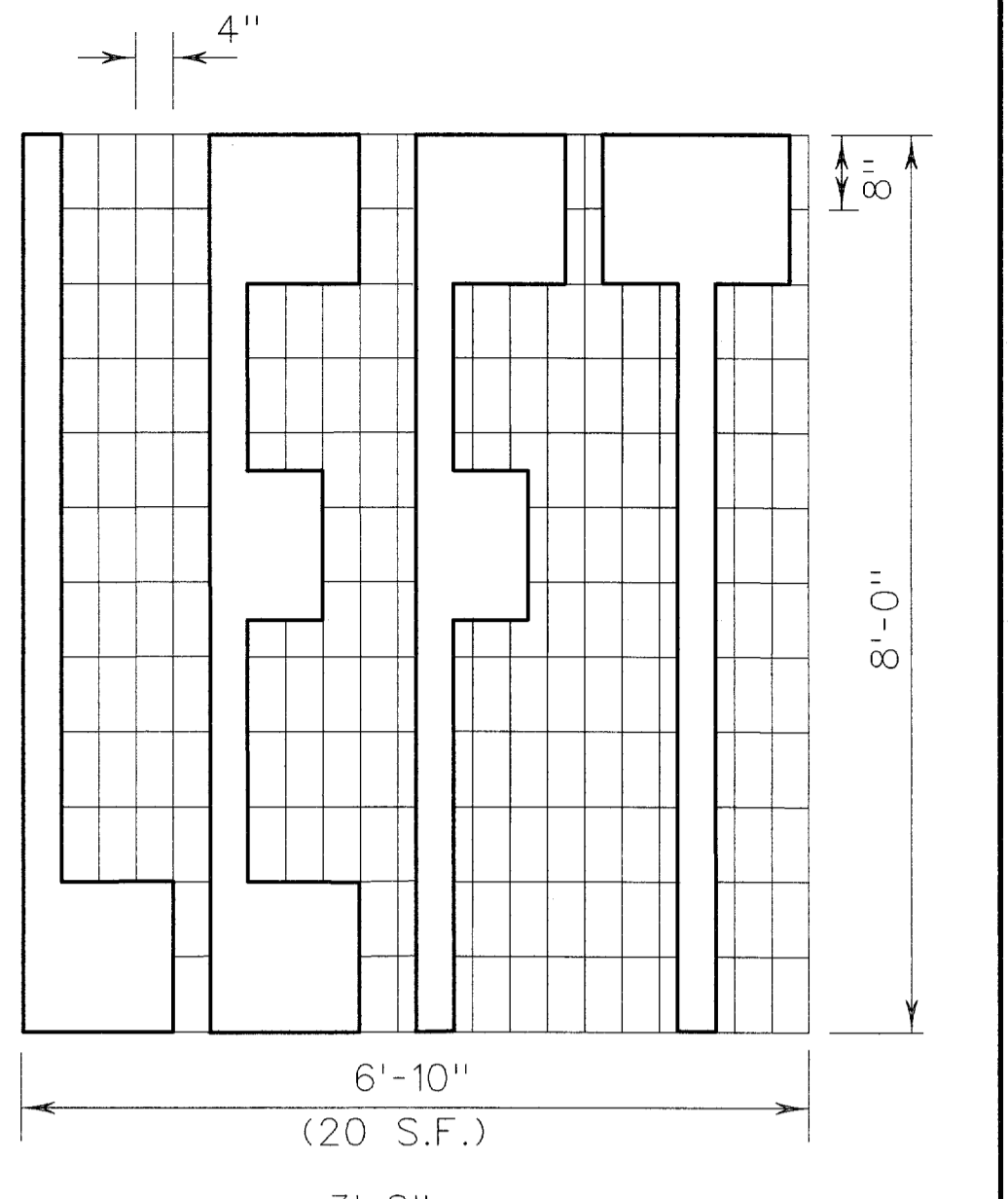
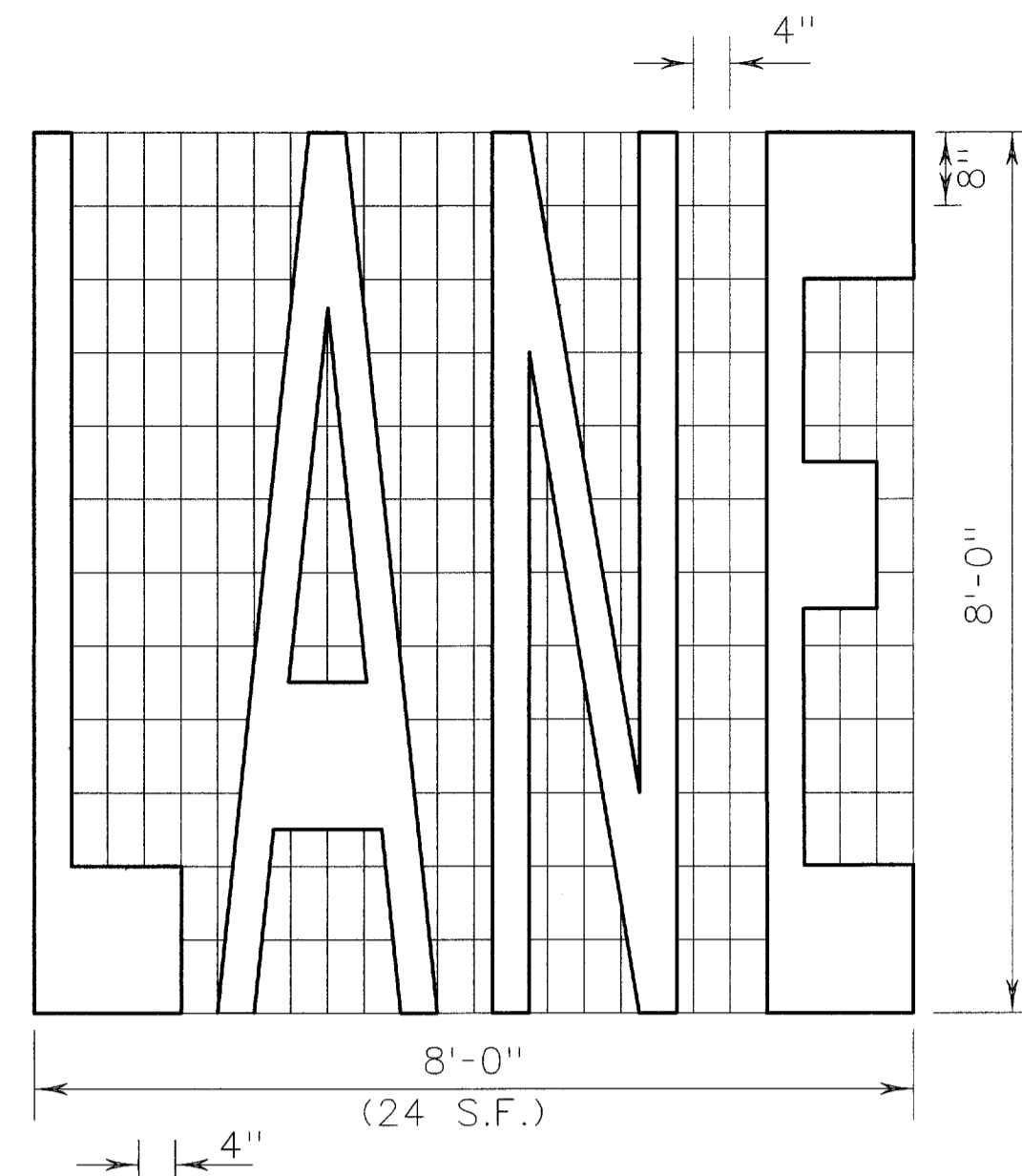
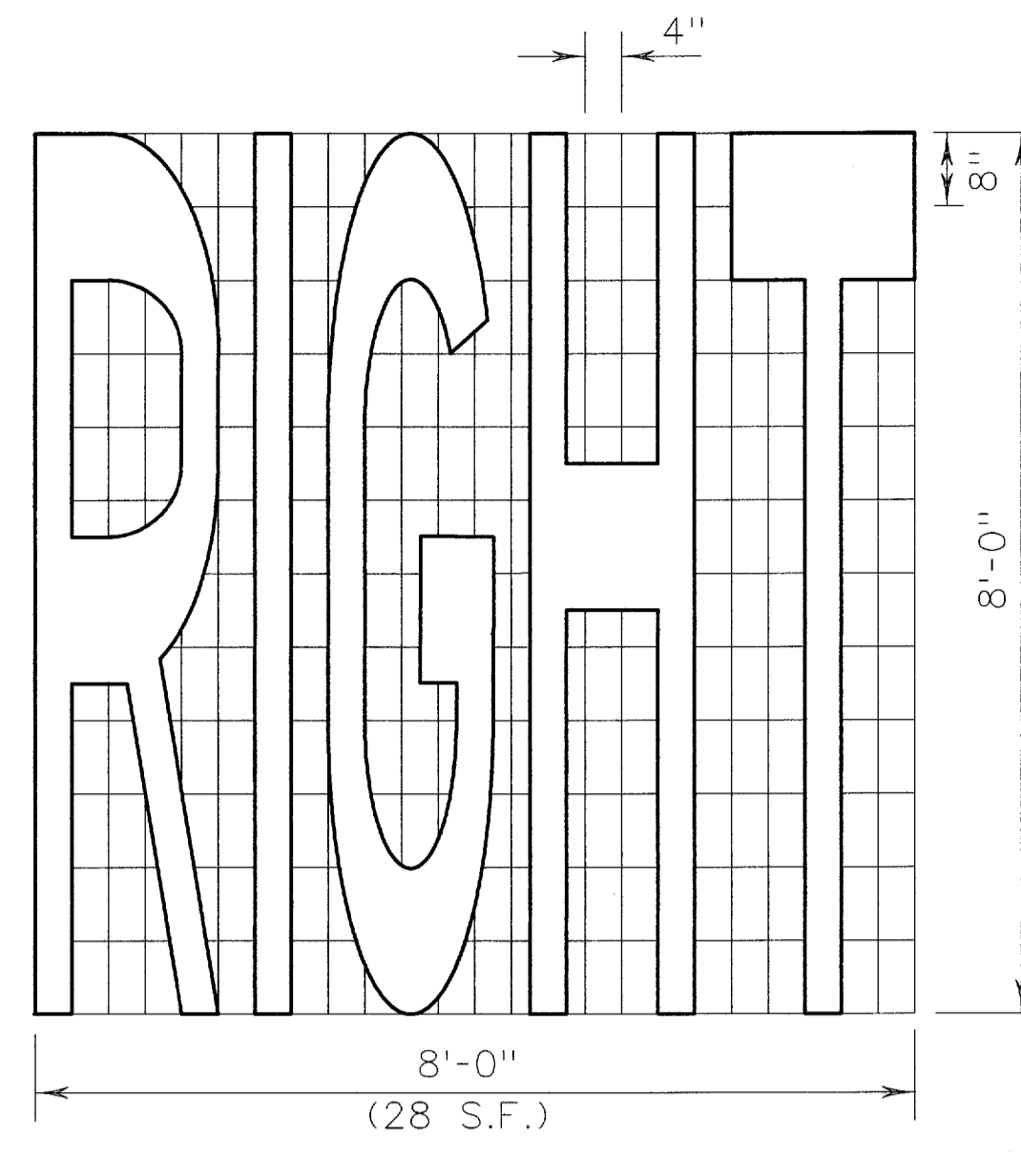
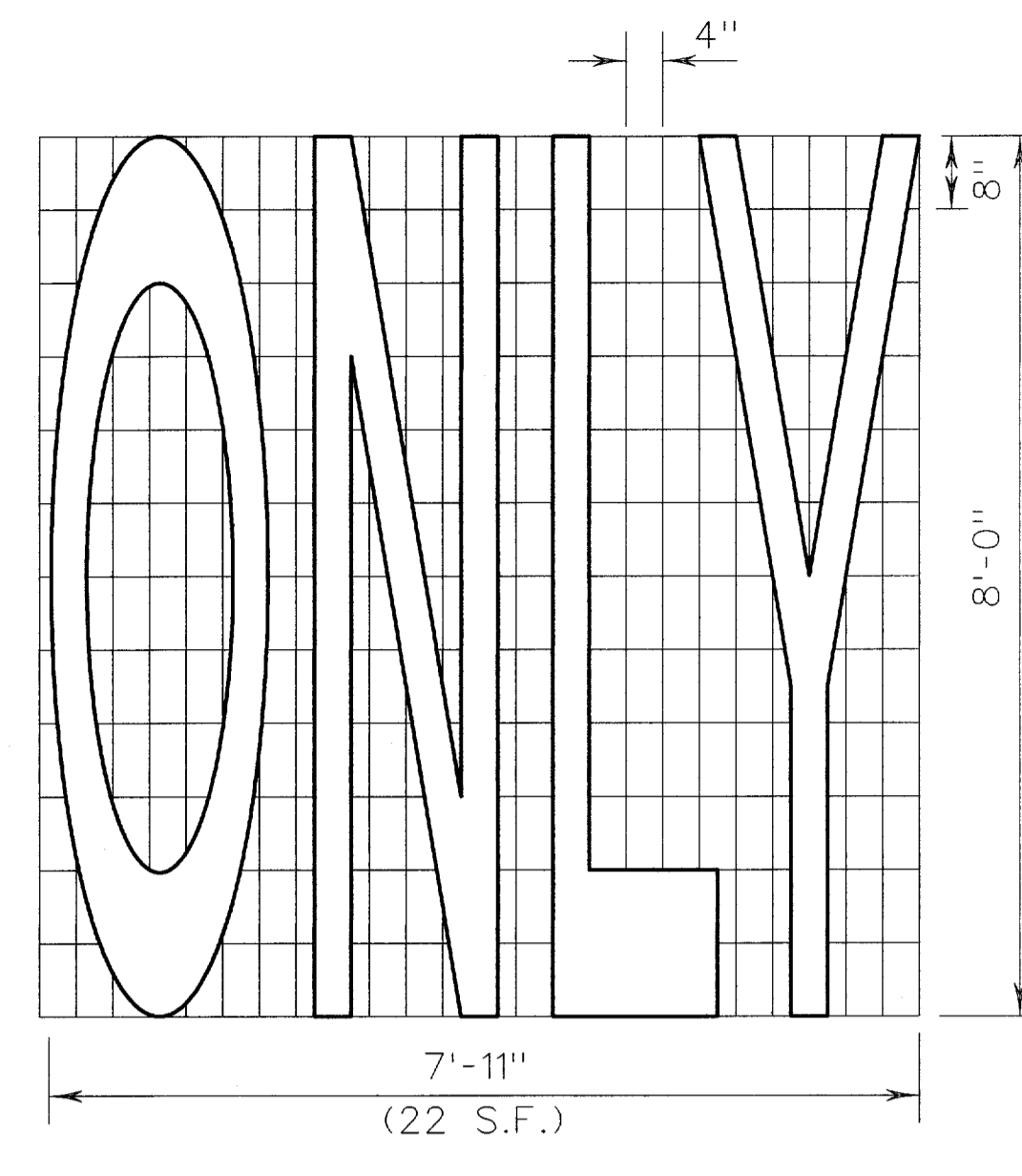
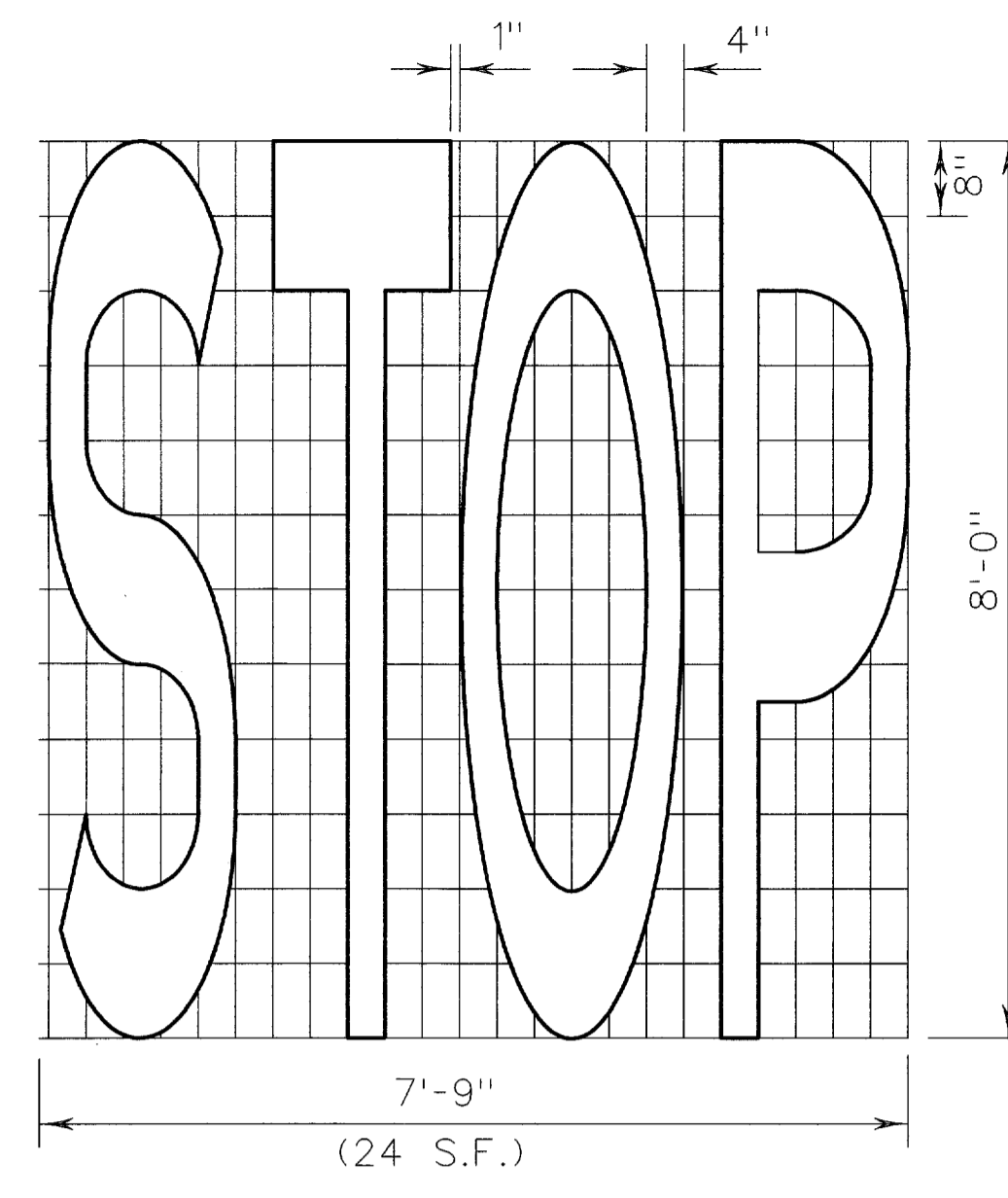
All steel components except reinforcing, shall be galvanized after fabrication. Galvanizing damaged during transport or construction shall be repaired in accordance with the specifications.

Texas Department of Transportation
Bridge Division

PRECAST SAFETY END TREATMENT TYPE II ~ CROSS DRAINAGE

PSET-RC

FILE: psetrcse.dgn	DN: RLW	CK: KLR	DW: JTR	CK: GAF
© TxDOT September 2000	DISTRICT	FEDERAL AID PROJECT		SHEET 19
REVISIONS Nov 2001 - Added General Note about Riprap.	COUNTY	CONTROL SECT	JOB	HIGHWAY

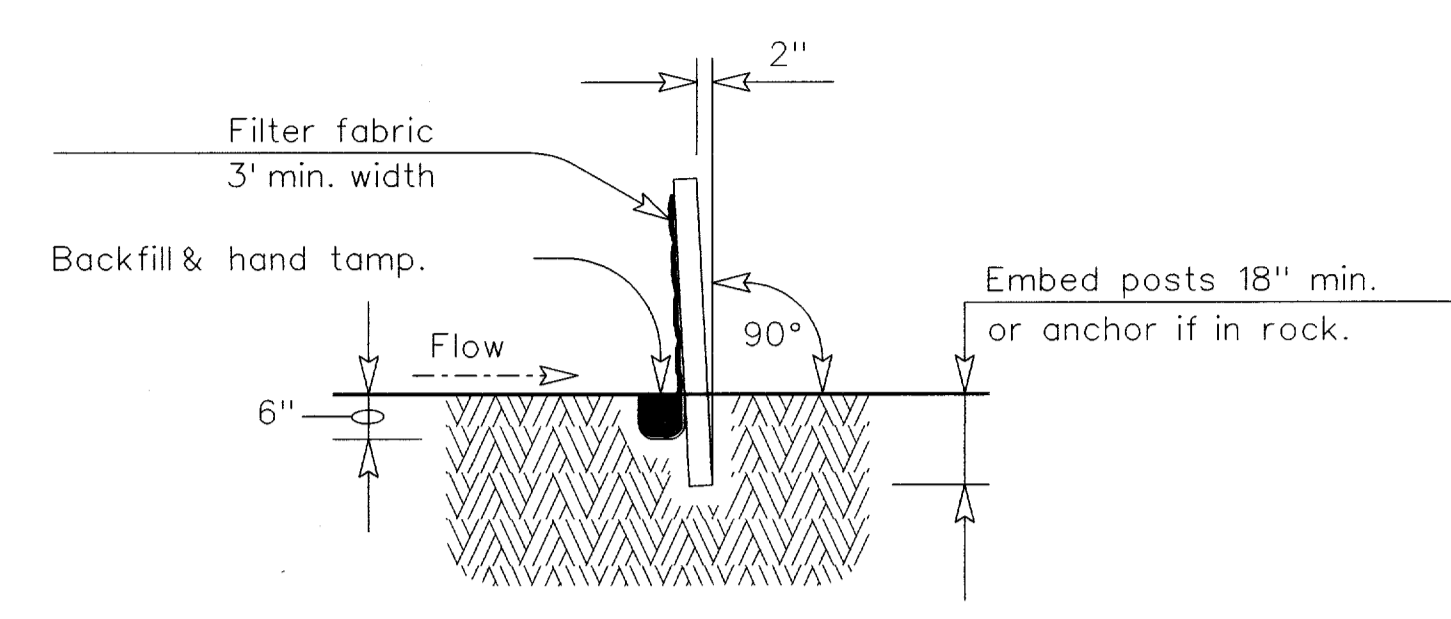


TEXAS DEPARTMENT OF TRANSPORTATION
PAVEMENT MARKINGS
(WORDS and ARROWS) (FTW)
PM-WA(FTW) SHEET 1 of 1

DRAWN	FEED. (BY/NO.)	STATE	STATE PROJECT NO.	HIGHWAY NO.
CHECKED				
TRACED	STATE DIST. NO.	COUNTY	CONTROL NO.	SECTION NO.
CHECKED				
				SHEET NO. 20

DISCLAIMER : The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

LEVELS DISPLAYED	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
	1	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	48
	49	50	51	52	53	54	55	56	57	58	59	60	61	62	63	



SECTION A-A

SEDIMENT CONTROL FENCE USAGE GUIDELINES

A sediment control fence may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A 2 year storm frequency may be used to calculate the flow rate to be filtered.

Sediment control fence should be sized to filter a max. flow through rate of 100 GPM/FT. Sediment control fence is not recommended to control erosion from a drainage area larger than 2 acres.

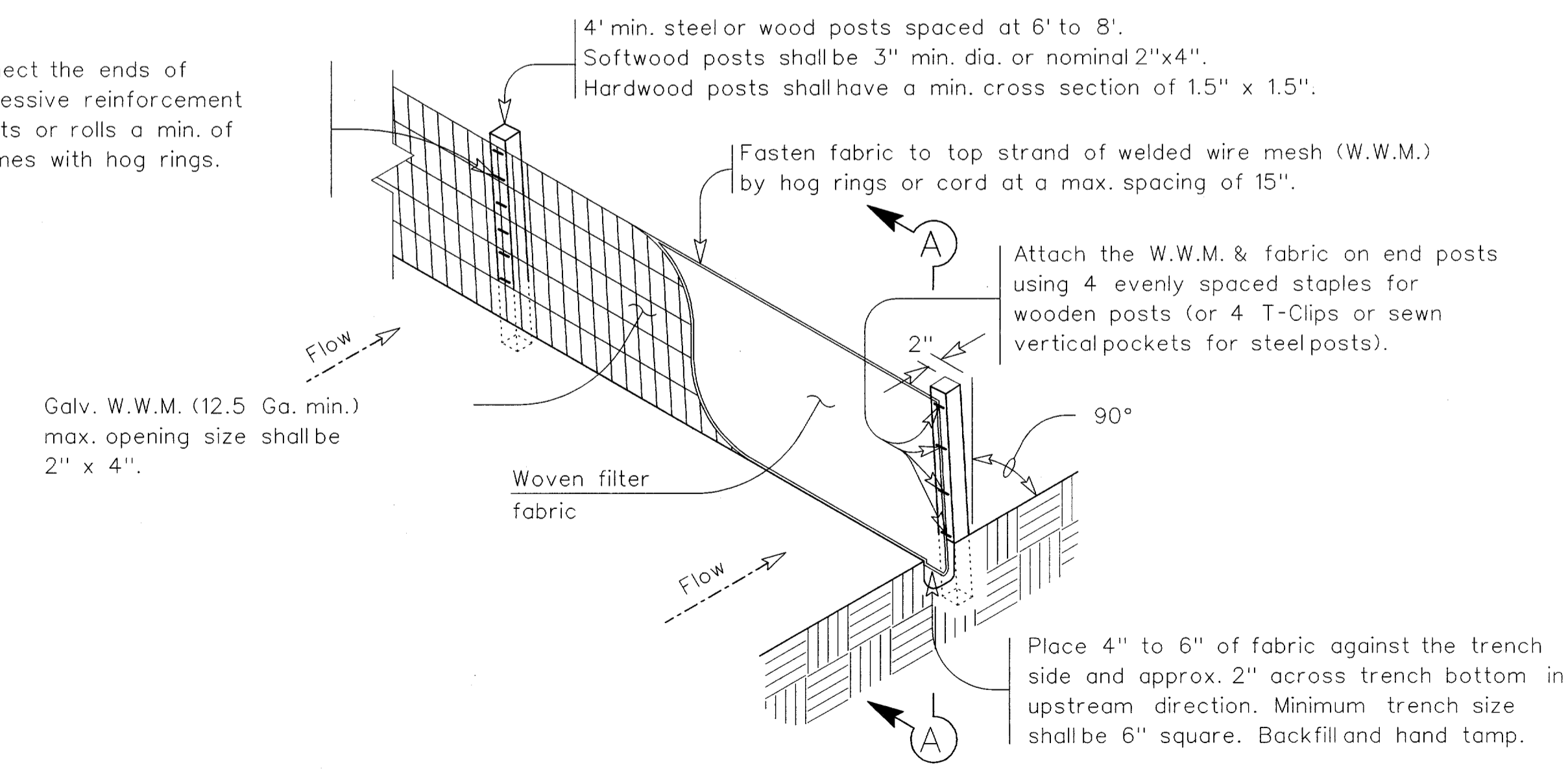
PLAN SHEET LEGEND



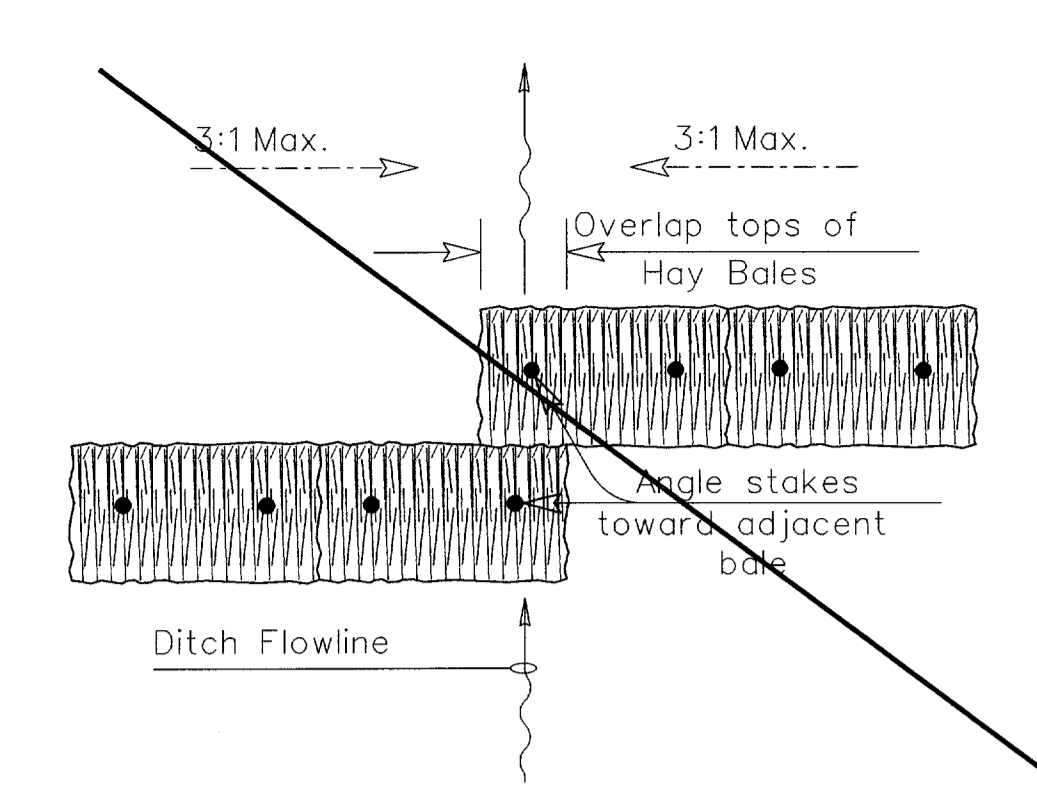
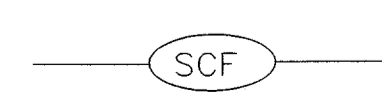
GENERAL NOTES

- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

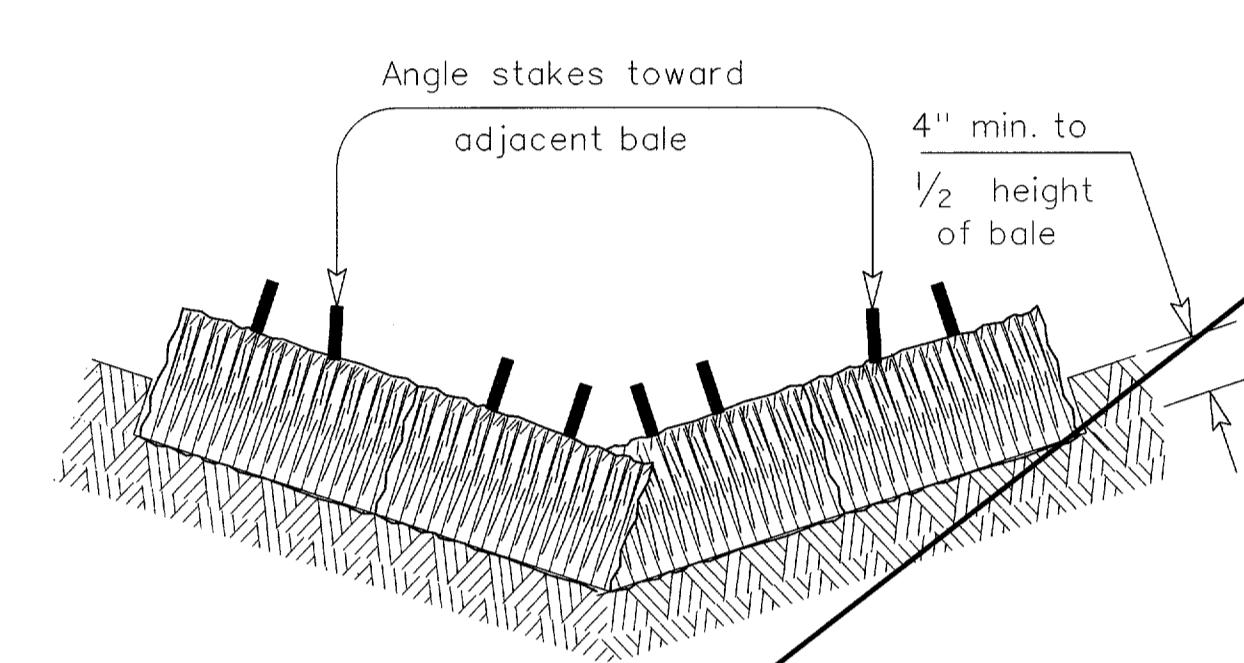
Connect the ends of successive reinforcement sheets or rolls a min. of 6 times with hog rings.



TEMPORARY SEDIMENT CONTROL FENCE

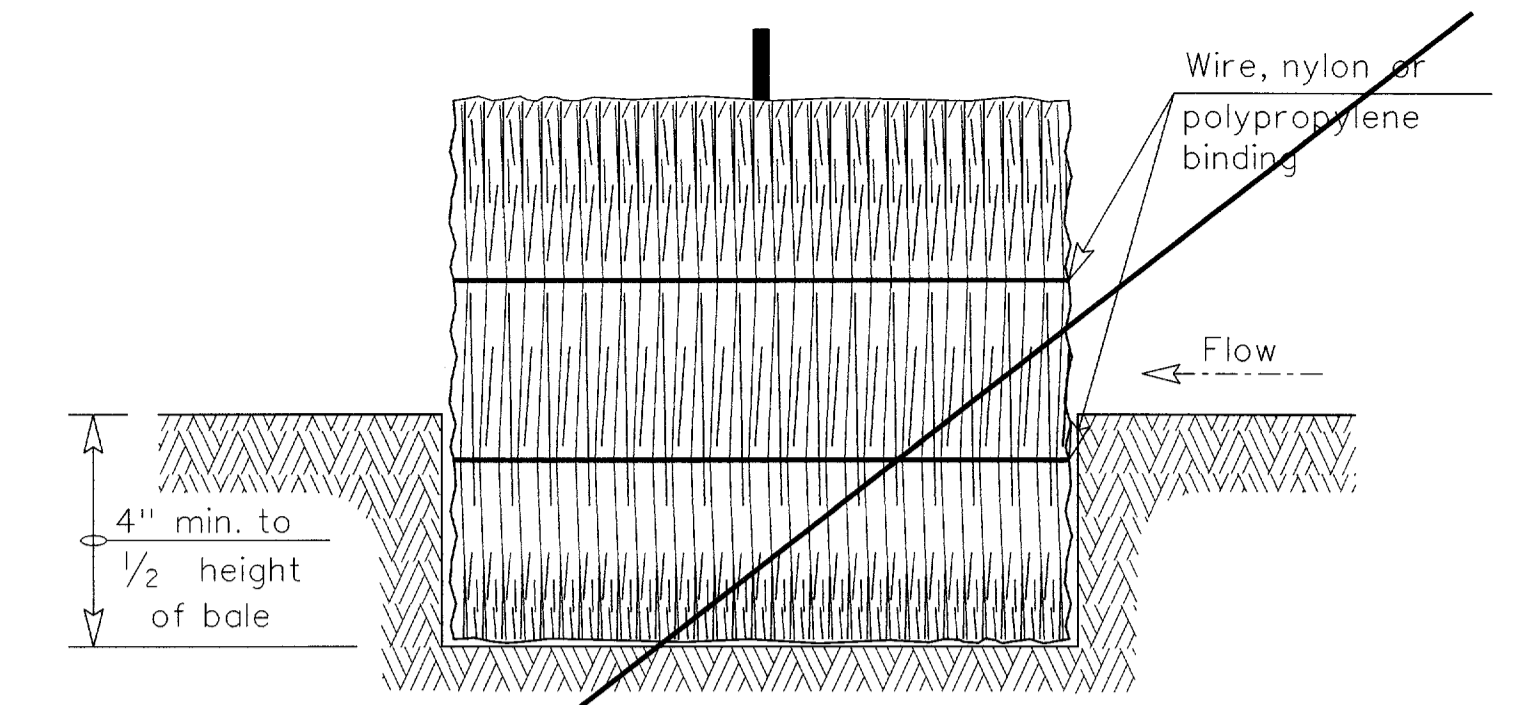


PLAN VIEW

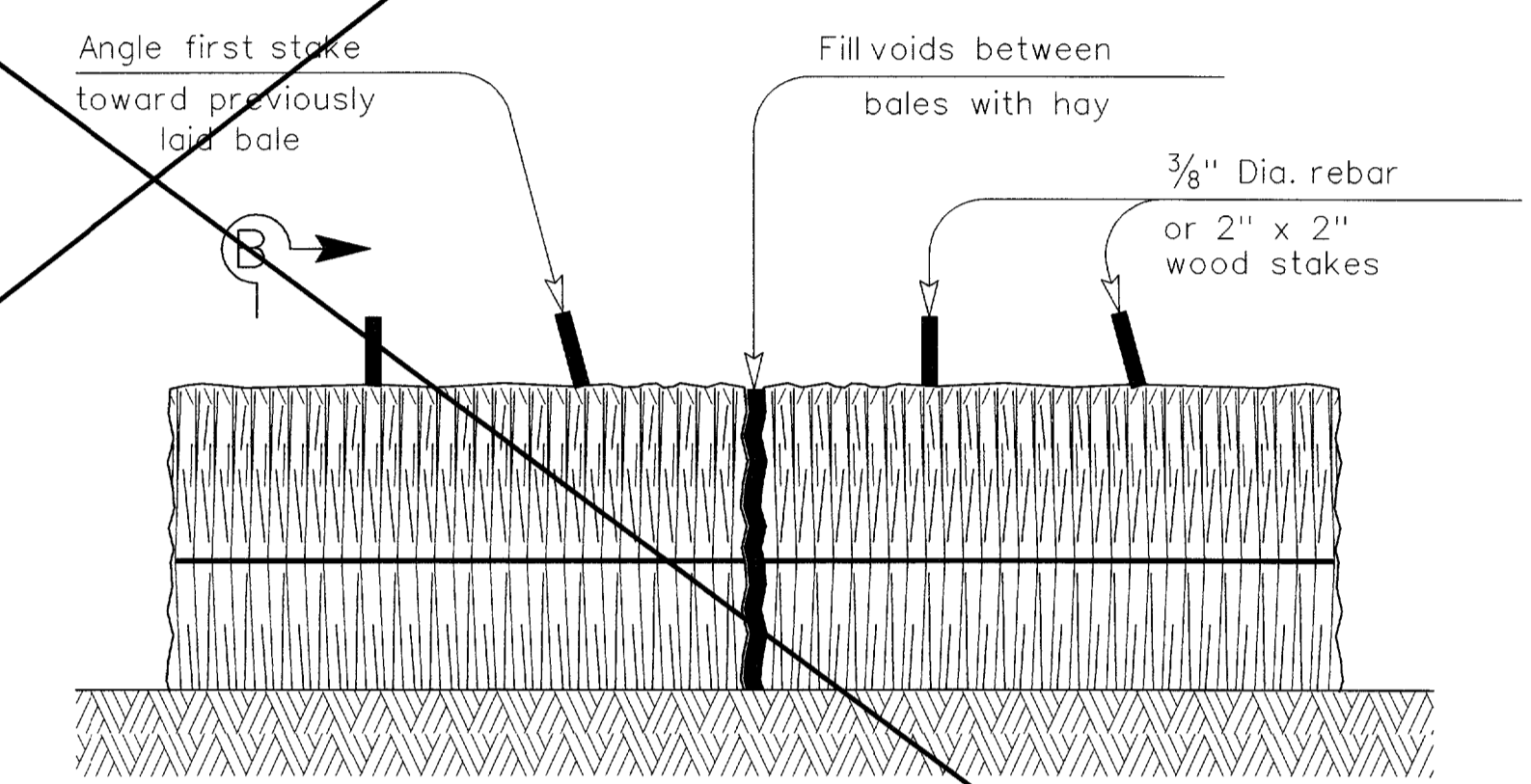


PROFILE VIEW

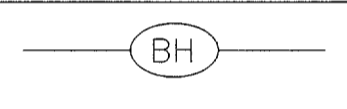
PLANS SHEET LEGEND



SECTION B-B



BALED HAY FOR EROSION CONTROL



GENERAL NOTES

- Hay bales shall be a minimum of 30" in length and weigh a minimum of 50 Lbs.
- Hay bales shall be bound by either wire or nylon or polypropylene string. The bales shall be composed entirely of vegetative matter.
- Hay bales shall be embedded in the soil a minimum of 4" and where possible 1/2 the height of the bale.
- Hay bales shall be placed in a row with ends tightly abutting the adjacent bales. The bales shall be placed with bindings parallel to the ground.
- Hay bales shall be securely anchored in place with 3/8" Dia. rebar or 2" x 2" wood stakes, driven through the bales. The first stake shall be angled towards the previously laid bale to force the bales together.
- The guidelines shown hereon are suggestions only and may be modified by the Engineer.

BALED HAY USAGE GUIDELINES

A Baled Hay installation may be constructed near the downstream perimeter of a disturbed area along a contour to intercept sediment from overland runoff. A two year storm frequency may be used to calculate the flow rate to be filtered. The installation should be sized to filter a maximum flow thru rate of 5 GPM/FT² of cross sectional area. Baled Hay may be used at the following locations:

- Where the runoff approaching the baled hay flows over disturbed soil for less than 100'. If the slope of the disturbed soil exceeds 10%, the length of slope upstream the baled hay should be less than 50'.
- Where the installation will be required for less than 3 months.
- Where the contributing drainage area is less than 1/2 acre.

For Baled Hay installations in small ditches, the additional following considerations apply:

- The ditch sideslopes should be graded as flat as possible to maximize the drainage flowrate thru the hay.
- The ditch should be graded large enough to contain the overtopping drainage when sediment has filled to the top of the baled hay.

Bales should be replaced usually every 2 months or more often during wet weather when loss of structural integrity is accelerated.

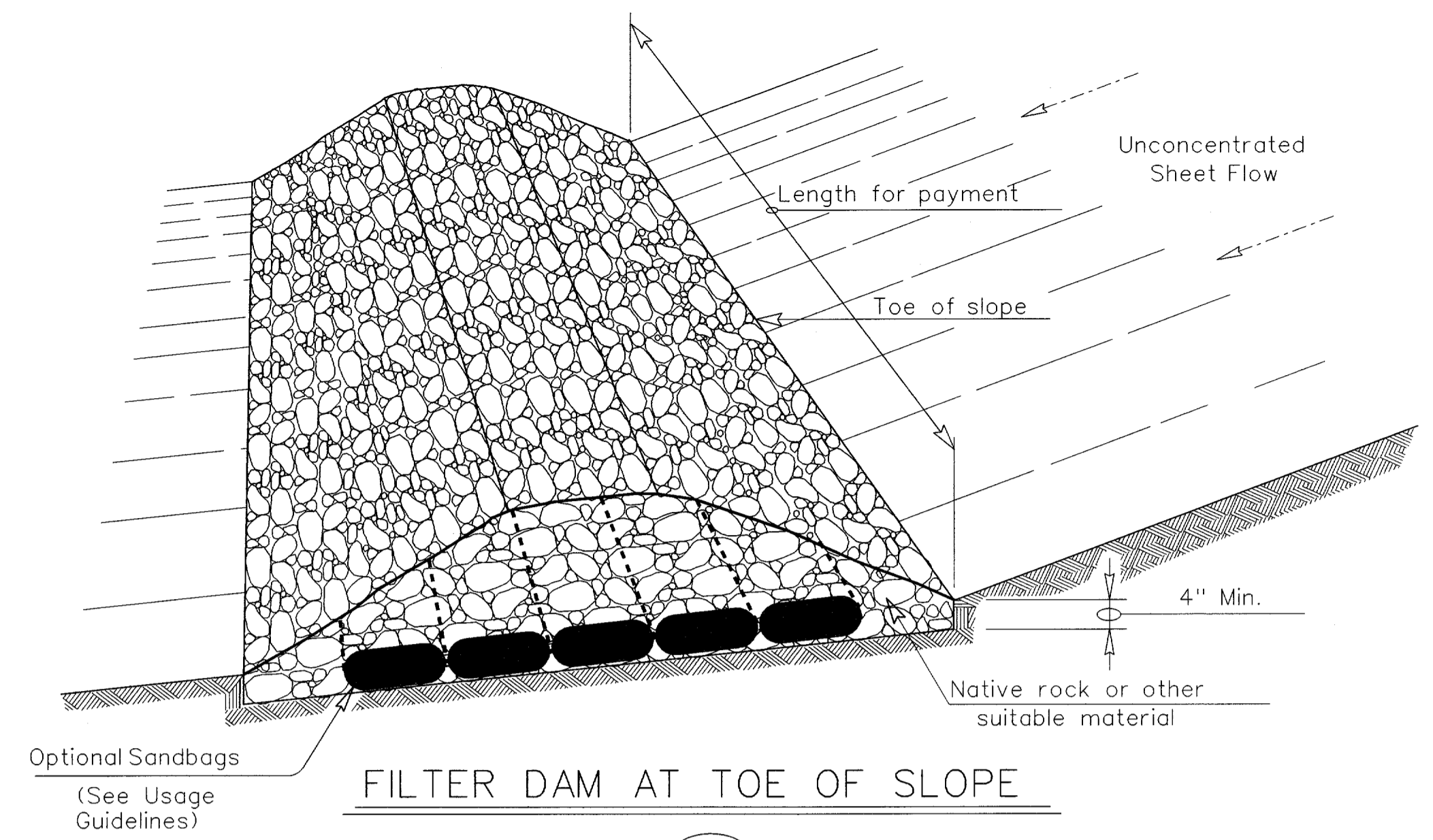


TEMPORARY EROSION, SEDIMENT AND WATER POLLUTION CONTROL MEASURES FENCED & BALED HAY EC(1)-93

FILE: EC193.DGN	DN: HEJ	CK: HEJ	DW: BGD	CK:
© TxDOT	JUNE 1993	DISTRICT	FEDERAL AID PROJECT	SHEET
REVISIONS				21
COUNTY	CONTROL	SECT	JOB	HIGHWAY

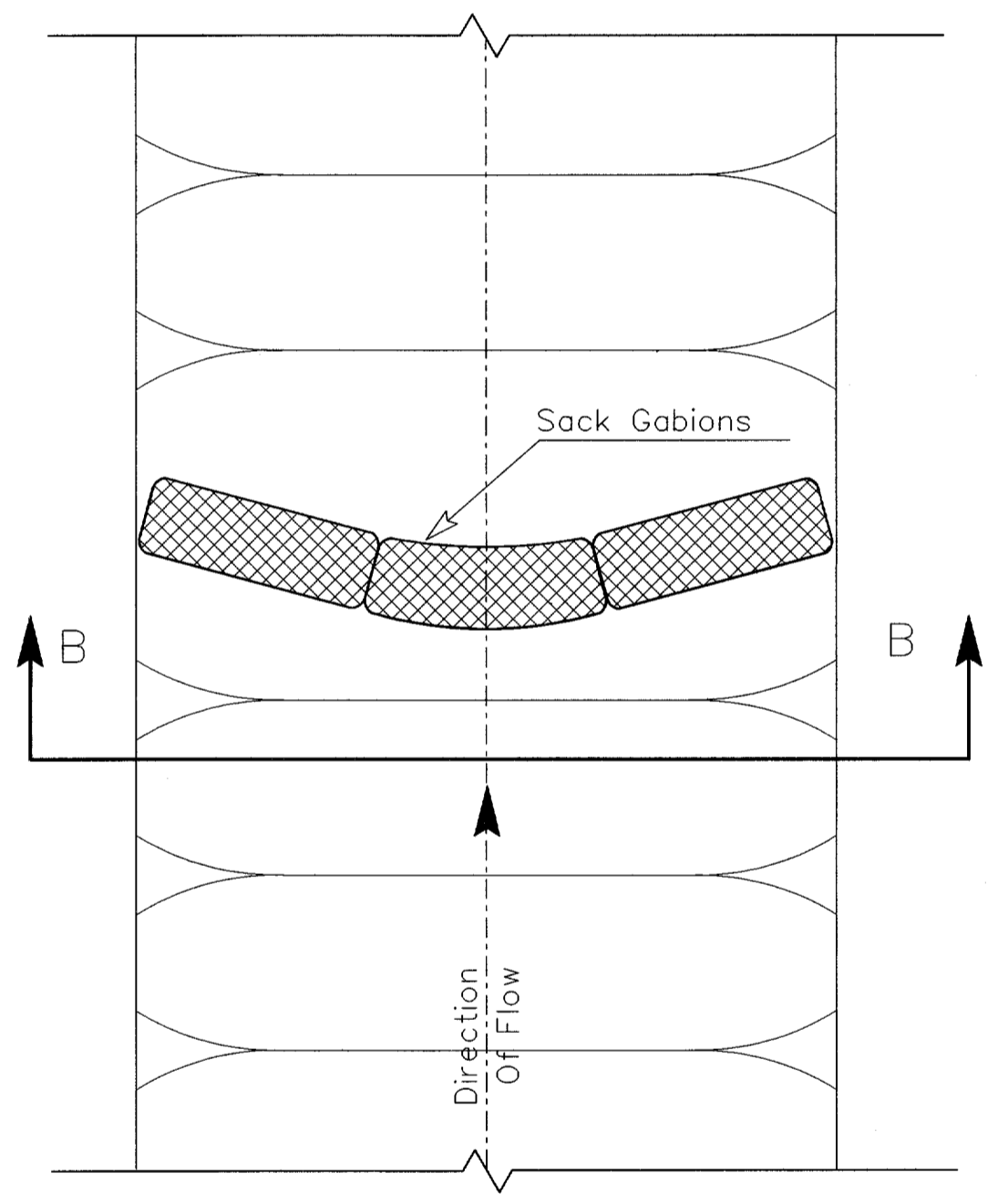
DISCLAIMER : The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

LEVELS DISPLAYED
 1 3 4 5 6 7 8 9 10 11 12 13 14 15 16
 17 18 19 20 21 22 23 24 25 26 27 28 29 30 31 32
 33 34 35 36 37 38 39 40 41 42 43 44 45 46 47 48
 49 50 51 52 53 54 55 56 57 58 59 60 61 62 63

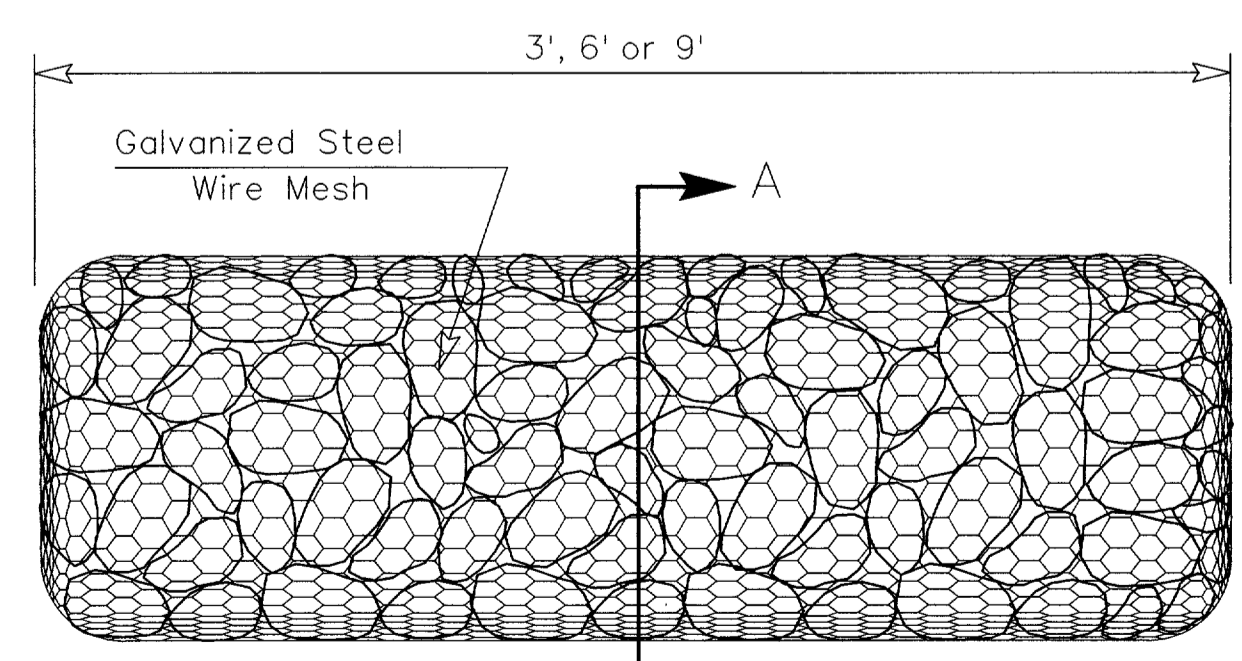


FILTER DAM AT TOE OF SLOPE

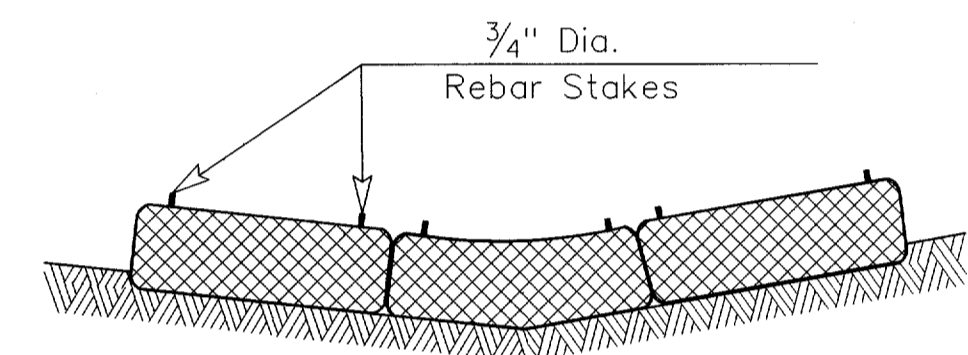
RFD1
 TYPE 1



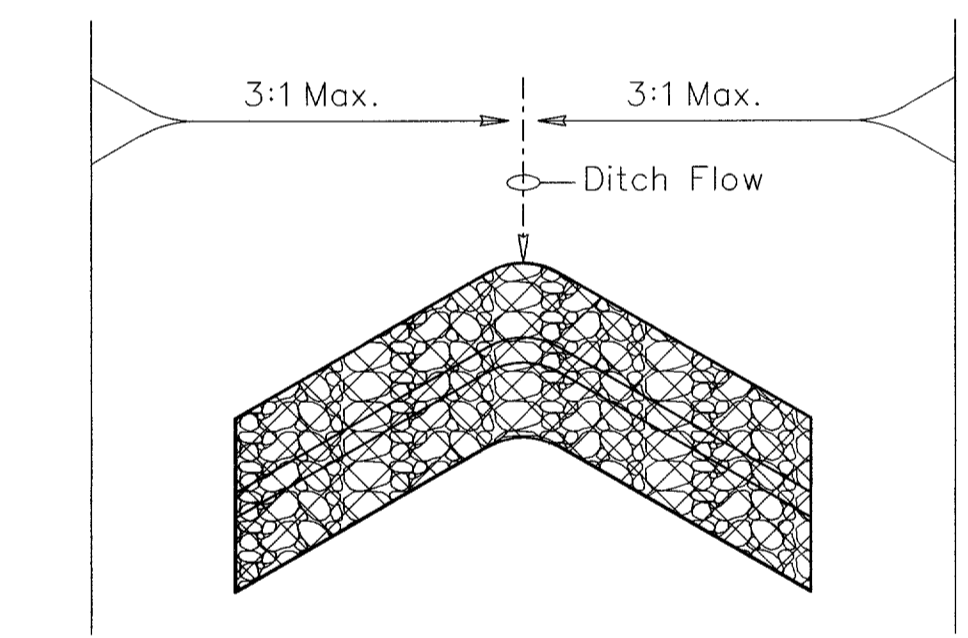
PLAN VIEW



TYPE 4 (SACK GABIONS)



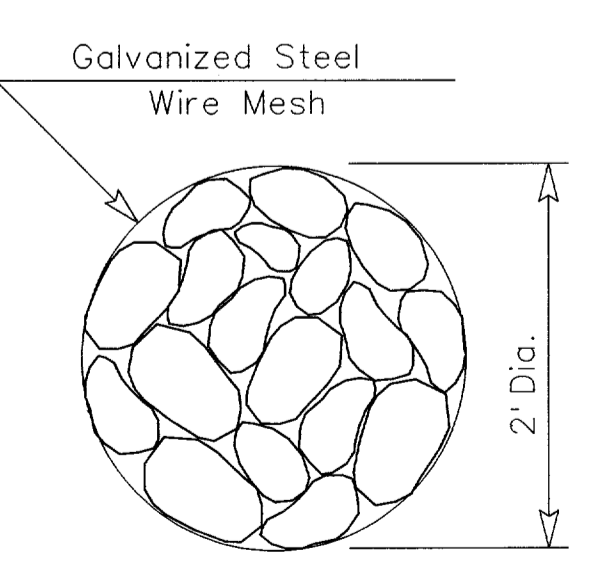
SECTION B-B



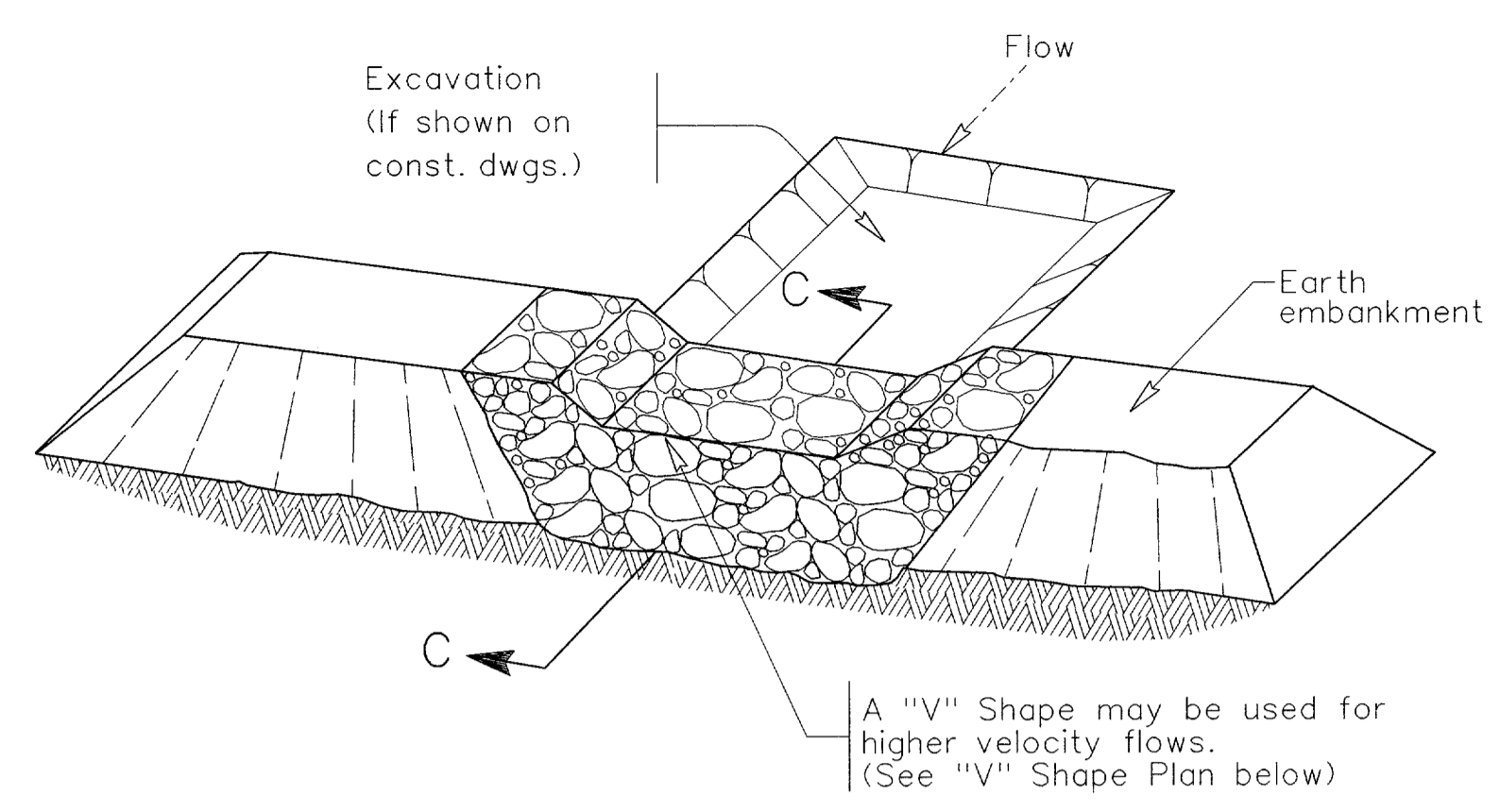
**"V" SHAPE
 (Plan View)**

PLANS SHEET LEGEND

- Type 1 Rock Filter Dam — RFD1
- Type 2 Rock Filter Dam — RFD2
- Type 3 Rock Filter Dam — RFD3

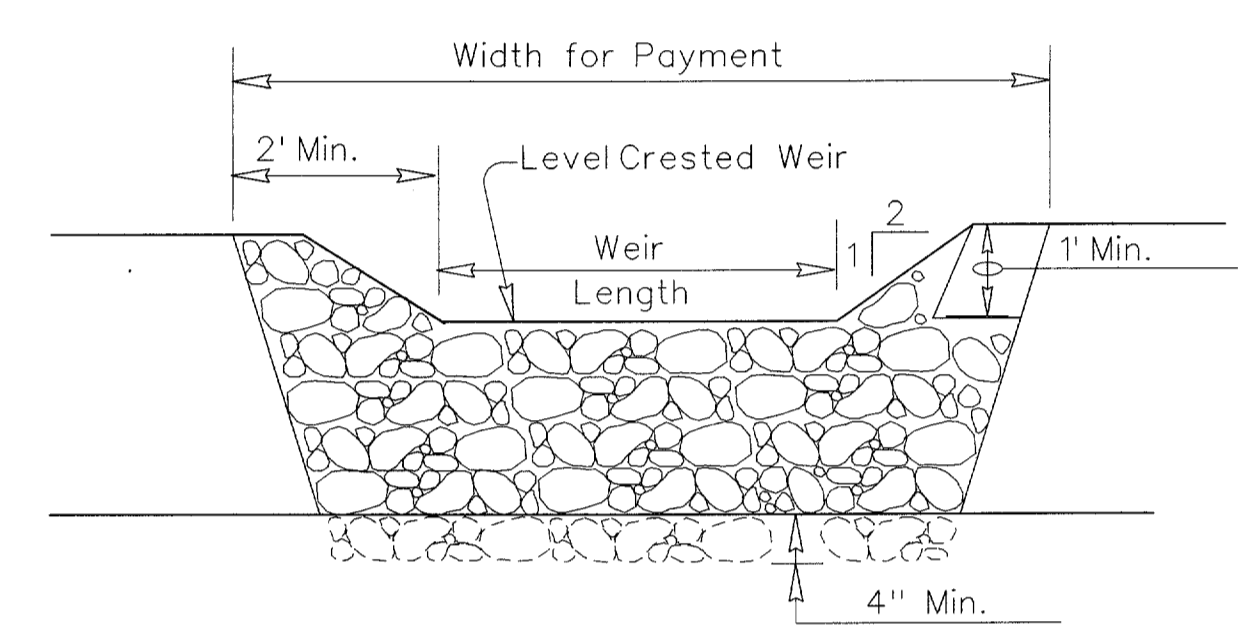


SECTION A-A

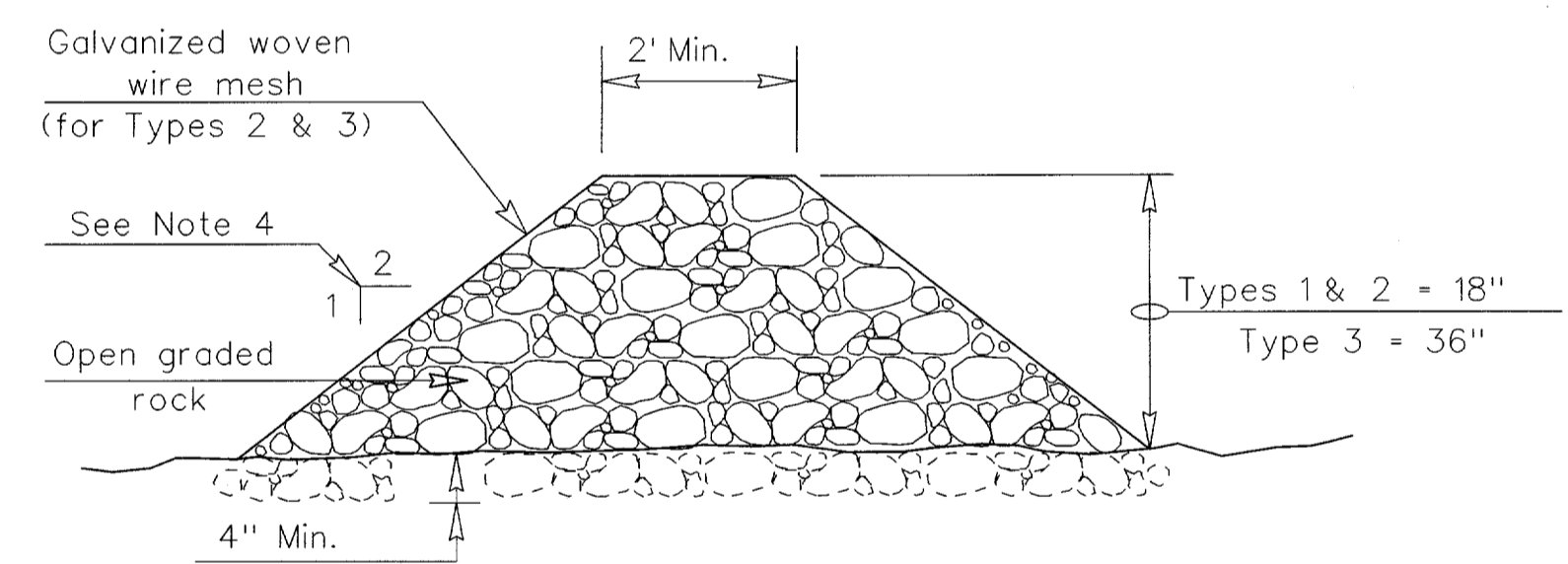


FILTER DAM AT SEDIMENT TRAP

RFD1 OR RFD2
 TYPE 1 OR TYPE 2



PROFILE



SECTION C-C

ROCK FILTER DAM USAGE GUIDELINES

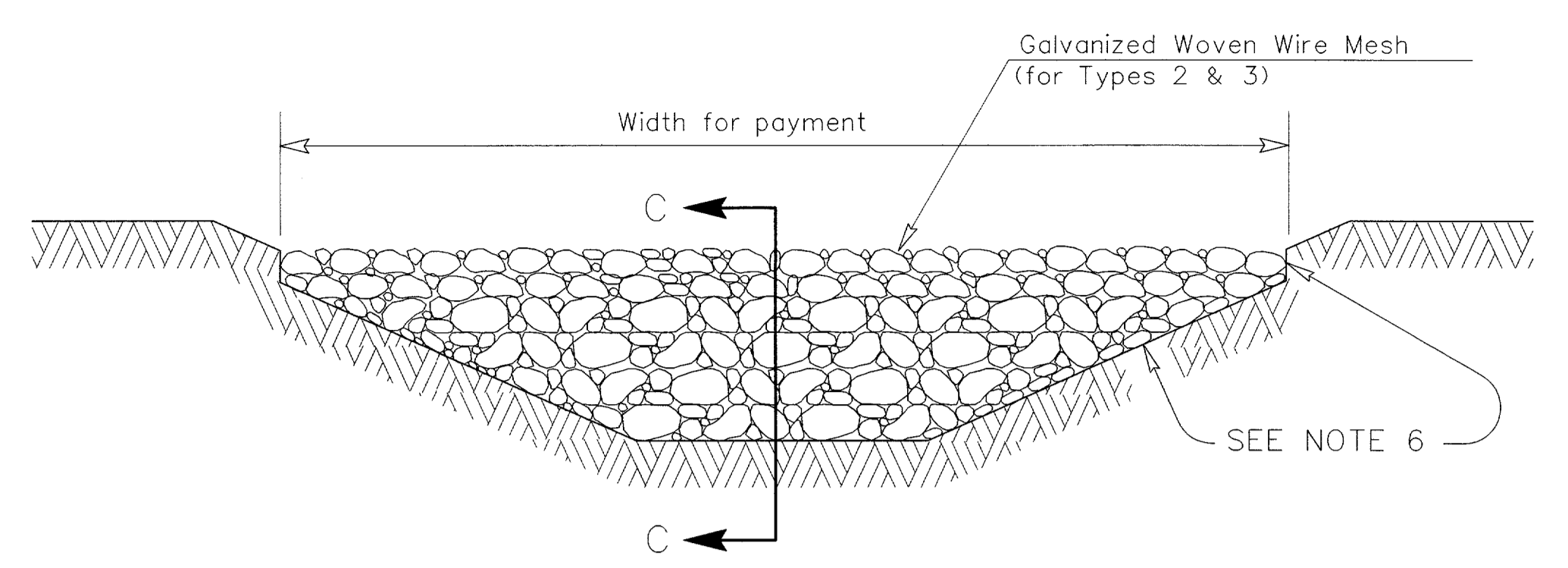
Rock Filter Dams should be constructed downstream from disturbed areas to intercept sediment from overland runoff and/or concentrated flow. The dams should be sized to filter a maximum flow through rate of 60 GPM/FT of cross sectional area. A 2 year storm frequency may be used to calculate the flow rate.

Type 1 (18" high with no wire mesh): Type 1 may be used at the toe of slopes, around inlets, in small ditches, and at dike or swale outlets. This type of dam is recommended to control erosion from a drainage area of 5 acres or less. Type 1 may not be used in concentrated high velocity flows (approx. 8 Ft/Sec or more) in which aggregate wash out may occur. Sandbags may be used at the embedded foundation (4" deep min.) for better filtering efficiency of low flows if called for on the plans or directed by the Engineer.

Type 2 (18" high with wire mesh): Type 2 may be used in ditches and at dike or swale outlets.

Type 3 (36" high with wire mesh): Type 3 may be used in stream flow and should be secured to the stream bed.

Type 4 (Sack gabions): Type 4 May be used in ditches and smaller channels to form an erosion control dam.



FILTER DAM AT CHANNEL SECTIONS

RFD1 OR RFD2 OR RFD3
 TYPE 1 OR TYPE 2

GENERAL NOTES

1. If shown on the plans or directed by the Engineer, filter dams should be placed near the toe of slopes where erosion is anticipated, upstream and/or downstream at drainage structures, and in roadway ditches and channels to collect sediment.
2. Materials (aggregate, wire mesh, sandbags, etc.) shall be as indicated by the specification for "Rock Filter Dams for Erosion and Sedimentation Control".
3. The rock filter dam dimensions shall be as indicated on the SW3P plans.
4. Side slopes should be 2:1 or flatter. Dams within the safety zone shall have sideslopes of 6:1 or flatter.
5. Maintain a minimum of 1' between top of rock filter dam weir and top of embankment for filter dams at sediment traps.
6. Filter dams should be embedded a minimum of 4" into existing ground.
7. The sediment trap for ponding of sediment laden runoff shall be of the dimensions shown on the plans.
8. Rock filter dam types 2 & 3 shall be secured with 20 gauge galvanized woven wire mesh with 1" diameter hexagonal openings. The aggregate shall be placed on the mesh to the height & slopes specified. The mesh shall be folded at the upstream side over the aggregate and tightly secured to itself on the downstream side using wire ties or hog rings. In stream use the mesh should be secured or staked to the stream bed prior to aggregate placement.
9. Sack Gabions should be staked down with 3/4" dia. rebar stakes.
10. Flow outlet should be onto a stabilized area (vegetation, rock, etc.).
11. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

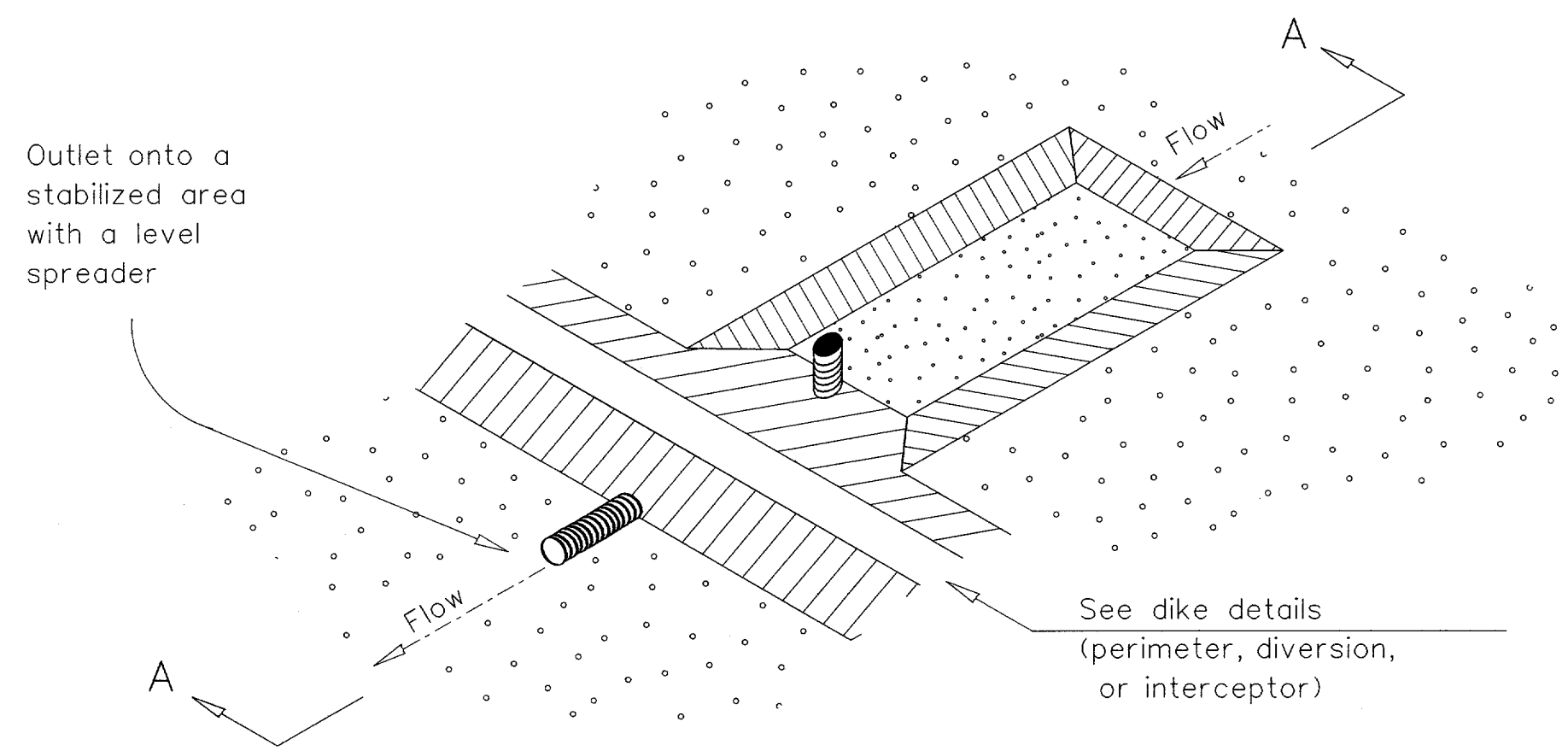


**TEMPORARY EROSION,
 SEDIMENT AND WATER
 POLLUTION CONTROL MEASURES
 ROCK FILTER DAMS
 EC(2)-93**

FILE: EC293.DGN	DN: HEJ	CK: HEJ	DW: BGD	CK:
© TxDOT	JUNE 1993	DISTRICT	FEDERAL AID PROJECT	SHEET
REVISIONS				22
COUNTY	CONTROL	SECT	JOB	HIGHWAY

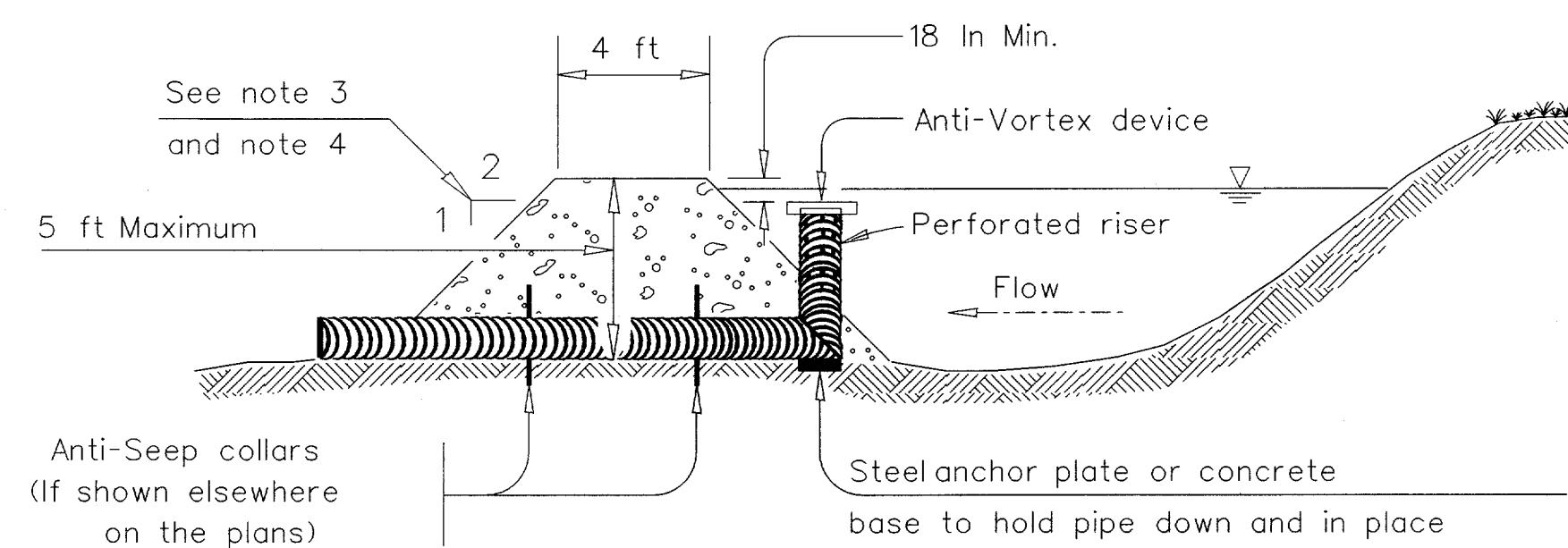
... \capal\moad set\ec293.dgn 05/12/03 06:31 PM

DISCLAIMER: The use of this standard is governed by the Texas Engineering Practice Act. No warranty of any kind is made by TxDOT for any purpose whatsoever. TxDOT assumes no responsibility for the conversion of this standard to other formats or for incorrect results or damages resulting from its use.

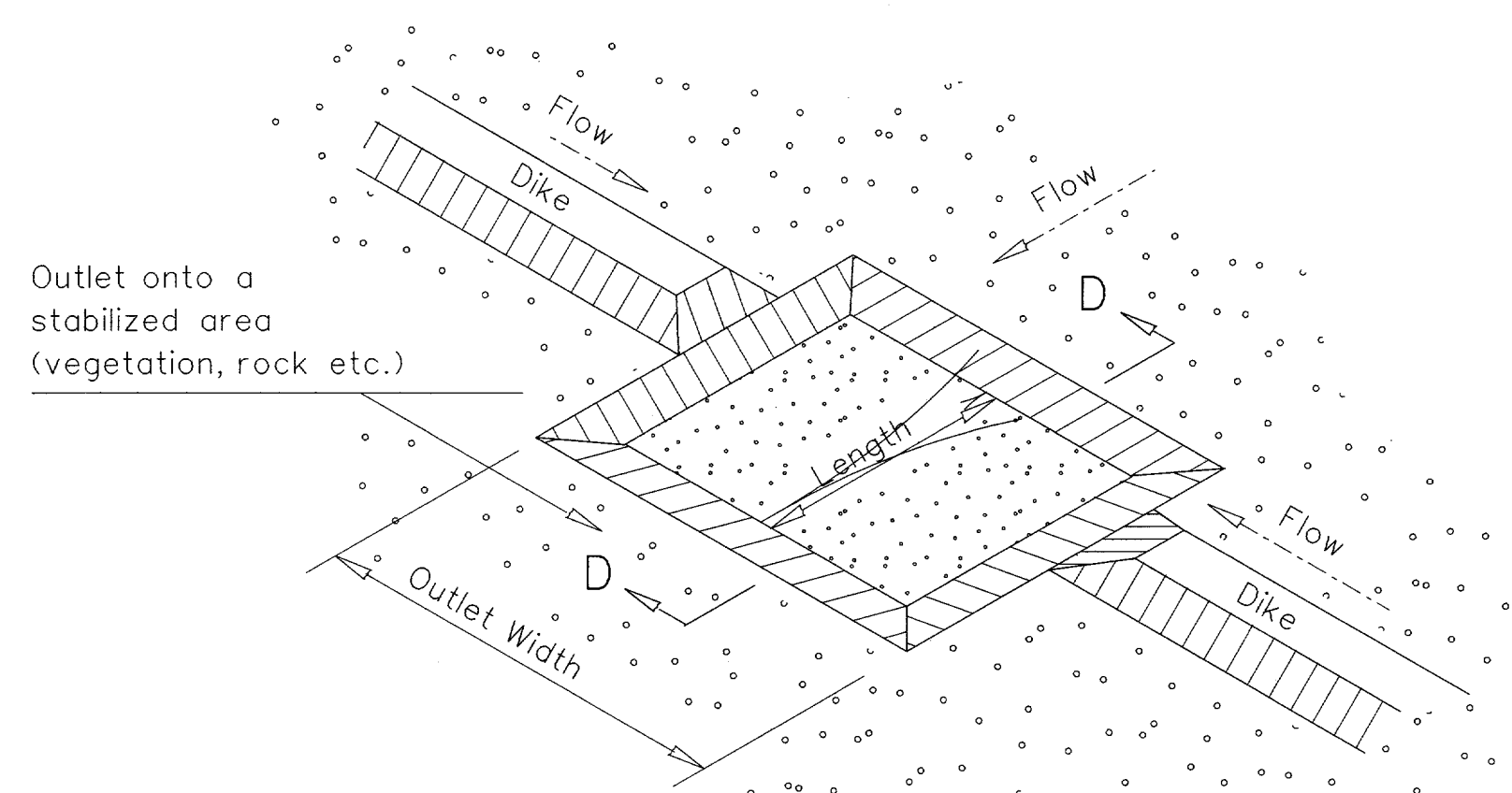


SEDIMENT BASIN AND/OR TRAP WITH PIPE OUTLET

ST/PO

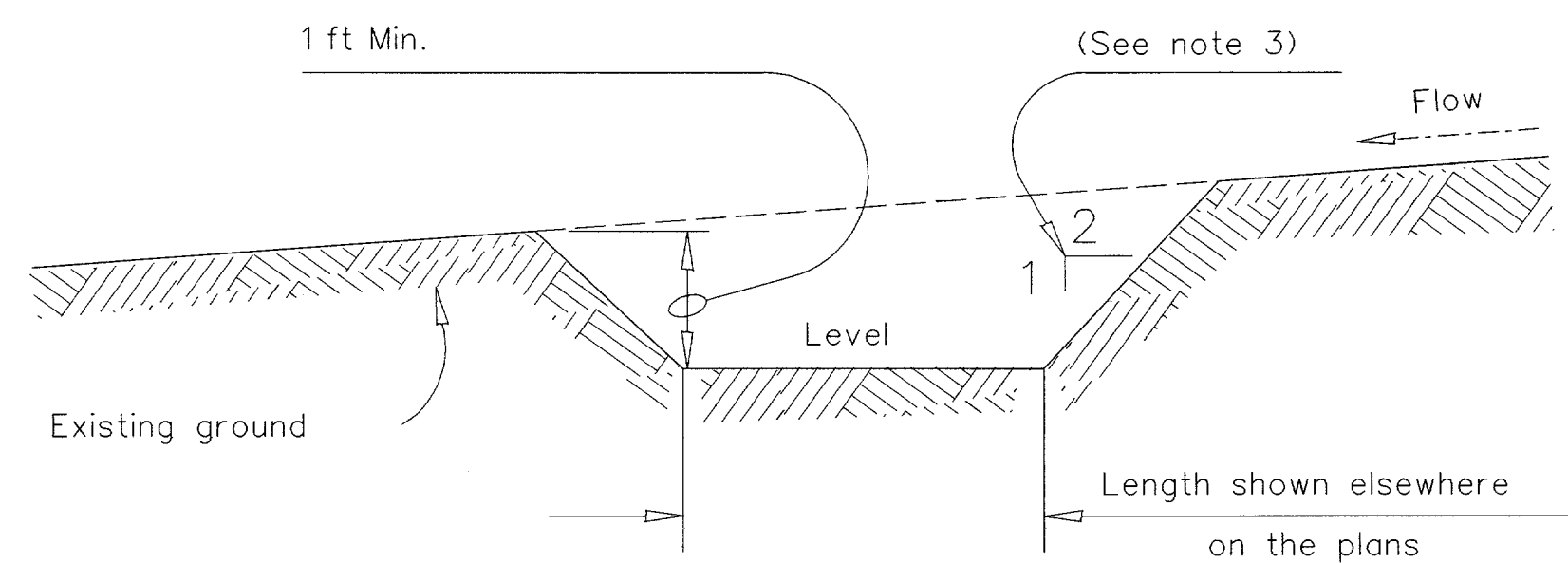


SECTION A-A

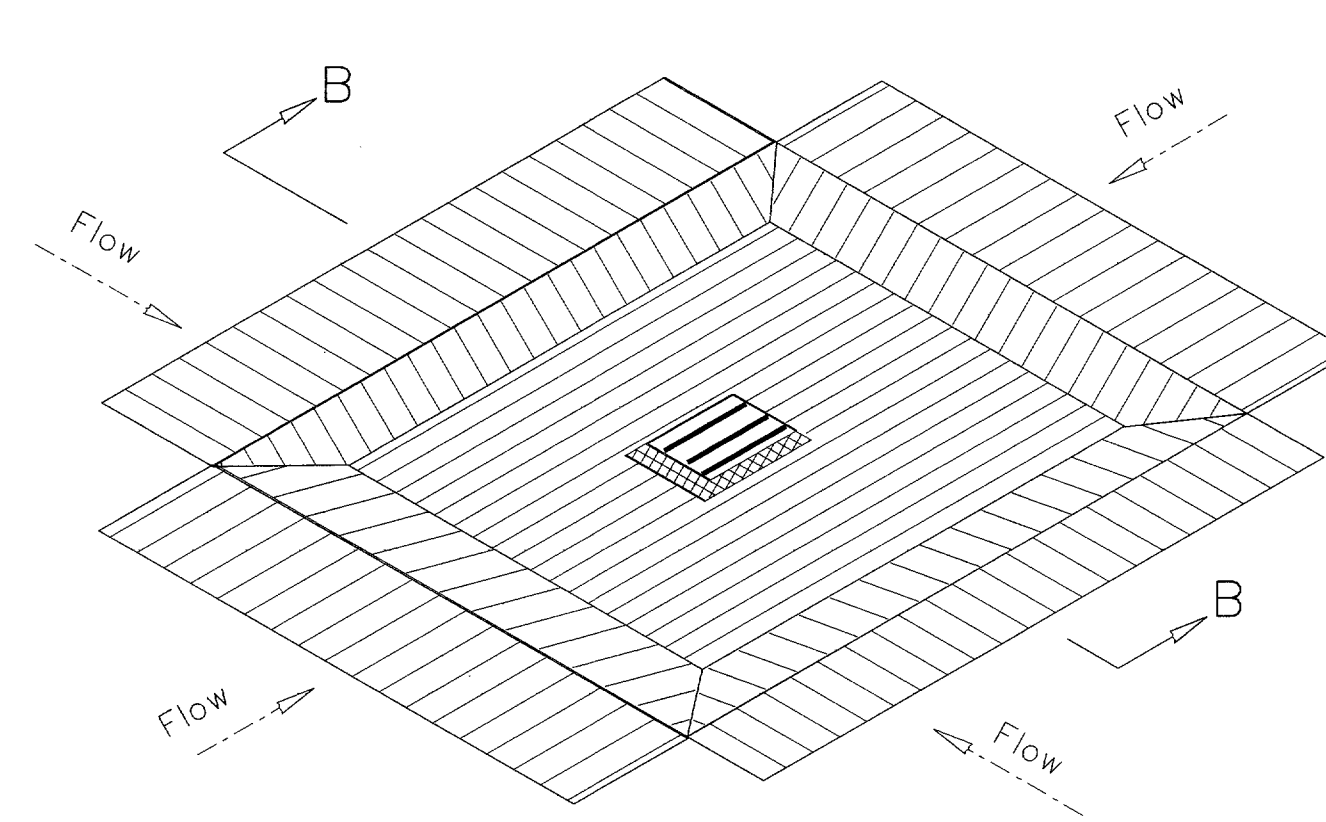


SEDIMENT TRAP WITH LEVEL STABILIZED OUTLET

ST

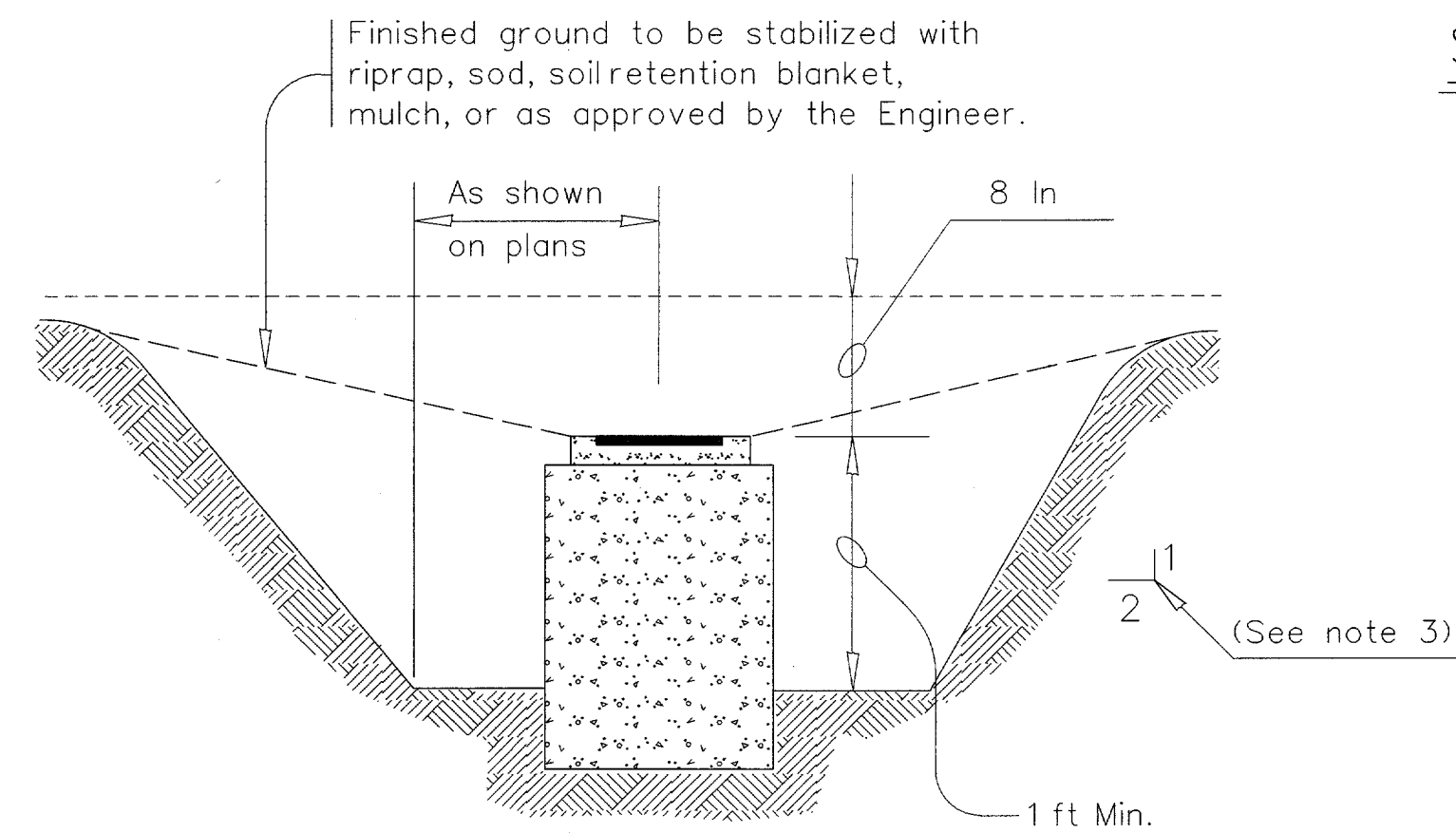


SECTION D-D

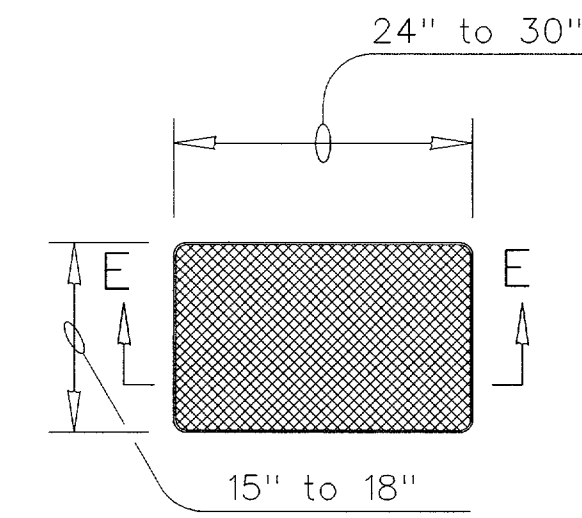


DROP INLET SEDIMENT TRAP

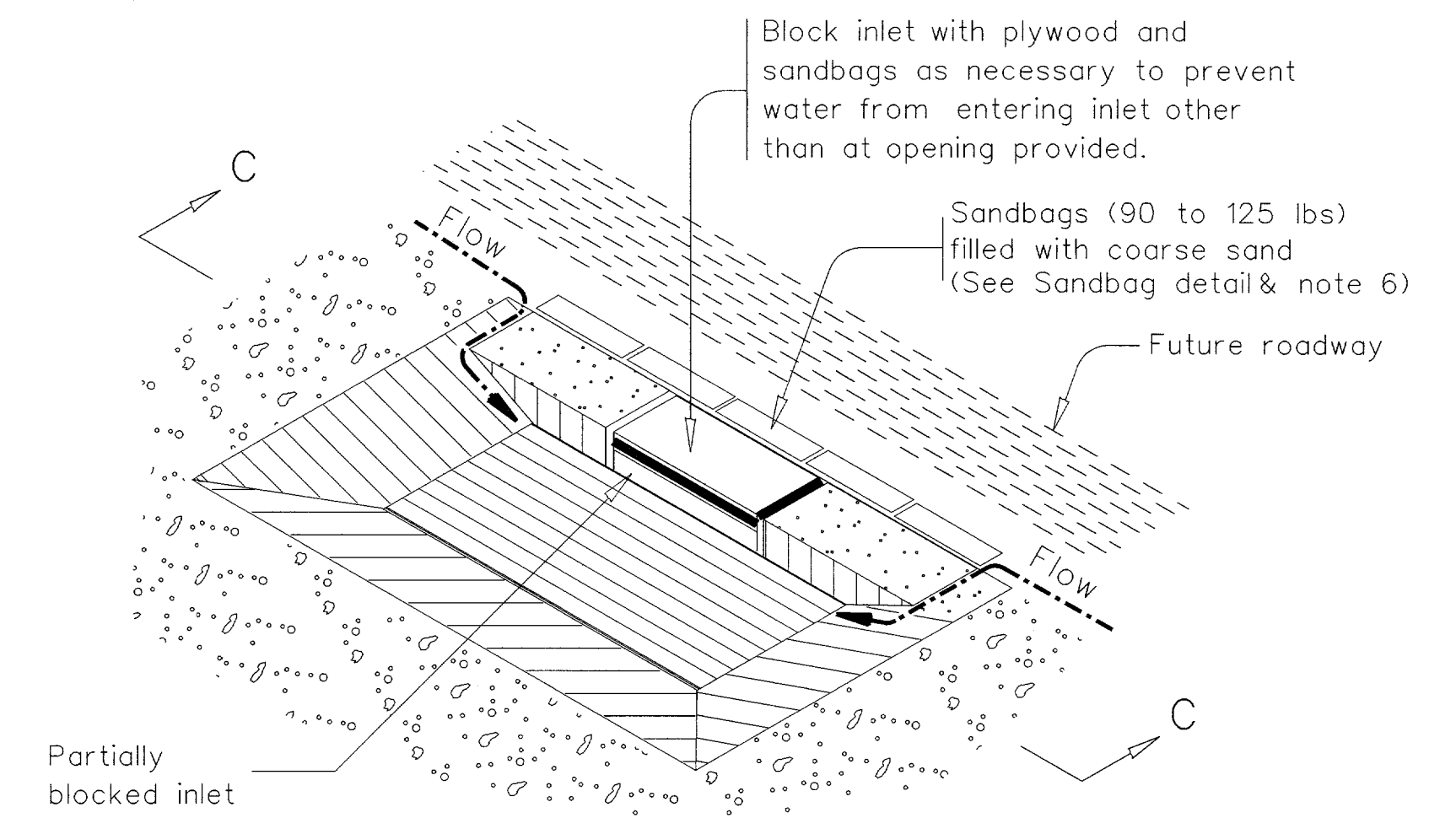
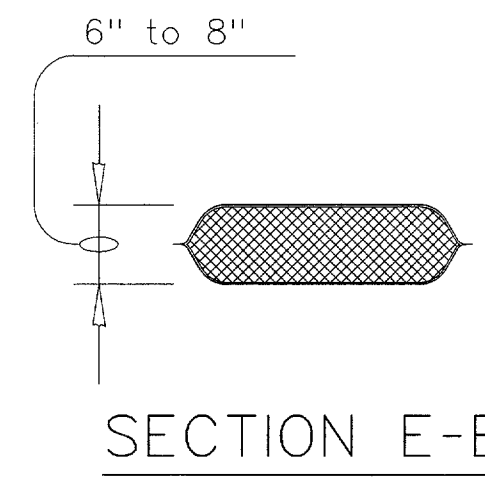
ST-DI



SECTION B-B

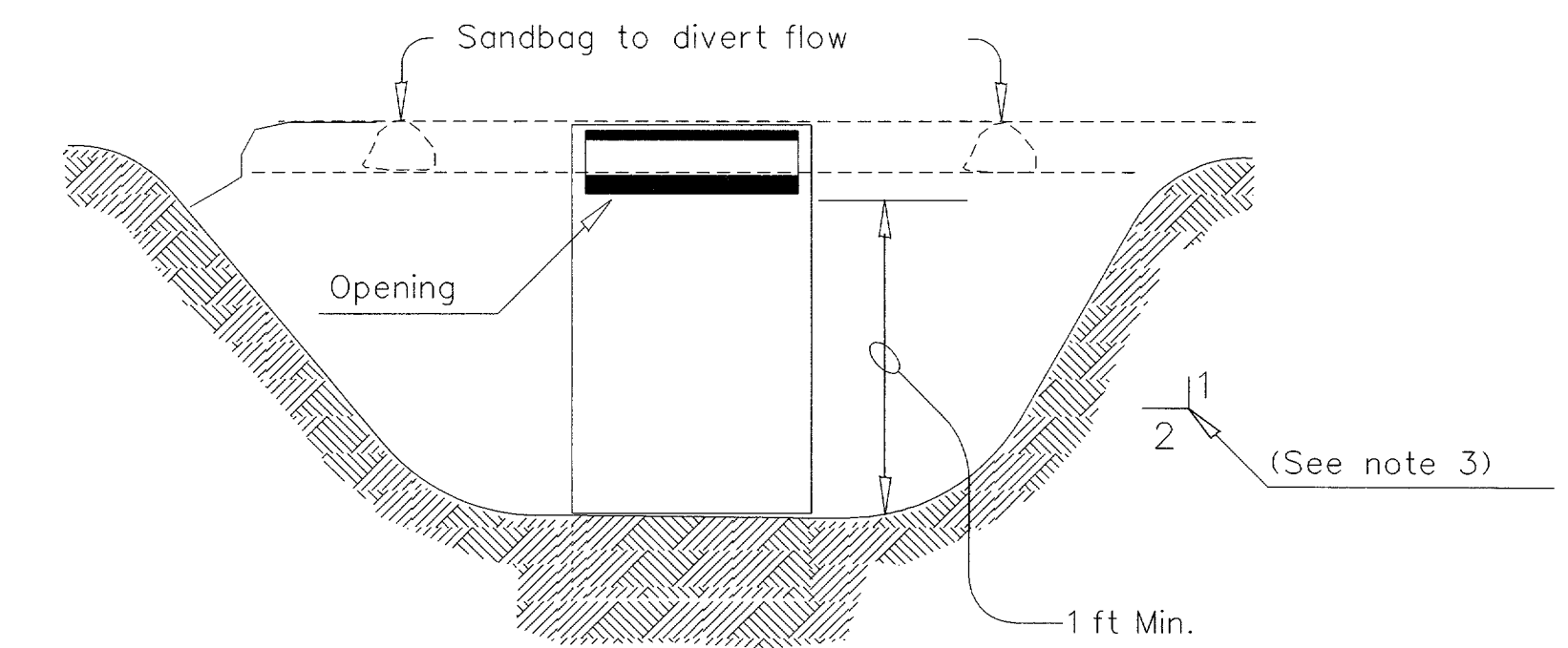


SANDBAG DETAIL



CURB INLET SEDIMENT TRAP

ST-CI



SECTION C-C

GENERAL NOTES

1. Pipe outlet material shall conform to the Item "Pipe Underdrains" or as accepted by the Engineer.
2. All pipe connections shall be watertight.
3. Side slopes within the safety clear zone of a roadway shall be 6:1 or flatter. Protect the traveling public from inlet stacks within the clear zone.
4. Sediment basins shall have side slopes of 3:1 or flatter.
5. The dimensions and limits of excavation for sediment basins and traps will be as shown elsewhere on the plans.
6. The sandbag material shall be made of polypropylene, polyethylene or polyamide woven fabric, min. unit weight 4 ounces/SY, Mullen burst strength exceeding 300 psi and ultraviolet stability exceeding 70%.
7. The guidelines shown hereon are suggestions only and may be modified by the Engineer.

SEDIMENT BASIN & TRAP USAGE GUIDELINES

A sediment basin and/or trap may be used to precipitate sediment out of runoff draining from an unstabilized area.

Basins: The drainage area for a sediment basin should not exceed 100 acres. The basin capacity shall be at least 1800 CF/Acre of drainage area (0.5" over the drainage area). If the disturbed area draining to the basin is larger than 10 acres, the basin capacity should be 3600 CF/Acre (1.0" over the drainage area).

The basin should have a 40 hour draw-down time with an emergency spillway. The spillway may be designed to pass the peak rate of runoff from a 25 year frequency storm. The 100 year storm should be investigated to consider possible flooding impacts.

The entrance into the basin should be protected from erosion. The basin should be cleaned when the capacity has been reduced by 1/3.

Traps: The drainage area for a sediment trap should not exceed 5 acres. The trap capacity should be 1800 CF/Acre (0.5" over the drainage area).

Sediment traps should be placed in the following locations:

1. Within drainage ditches spaced @ 500' on center
2. Immediately preceding ditch inlets
3. Just before the drainage enters a water course
4. Just before the drainage leaves the right of way

The trap outlet may either be through a perforated riser and pipe assembly designed to achieve a 40 hour draw-down time or over a level stabilized area (vegetation, rock, etc.).

The trap should be cleaned when the capacity has been reduced by 1/2 or the sediment has accumulated to a depth of 1', whichever is less.

PLANS SHEET LEGEND

- ST/PO
Sediment Basin and/or Trap with Pipe Outlet
- ST-DI
Drop Inlet Sediment Trap
- ST-CI
Curb Inlet Sediment Trap
- ST
Sediment Trap with Level Stabilized Outlet

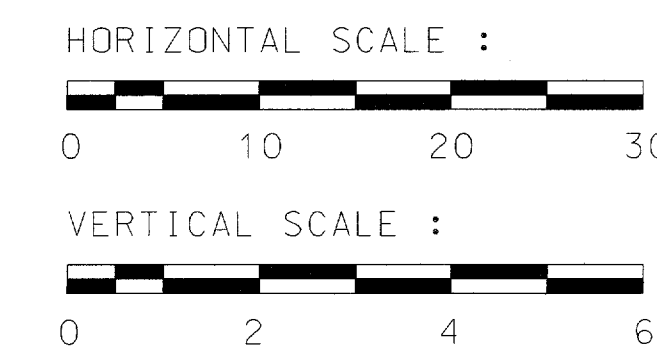
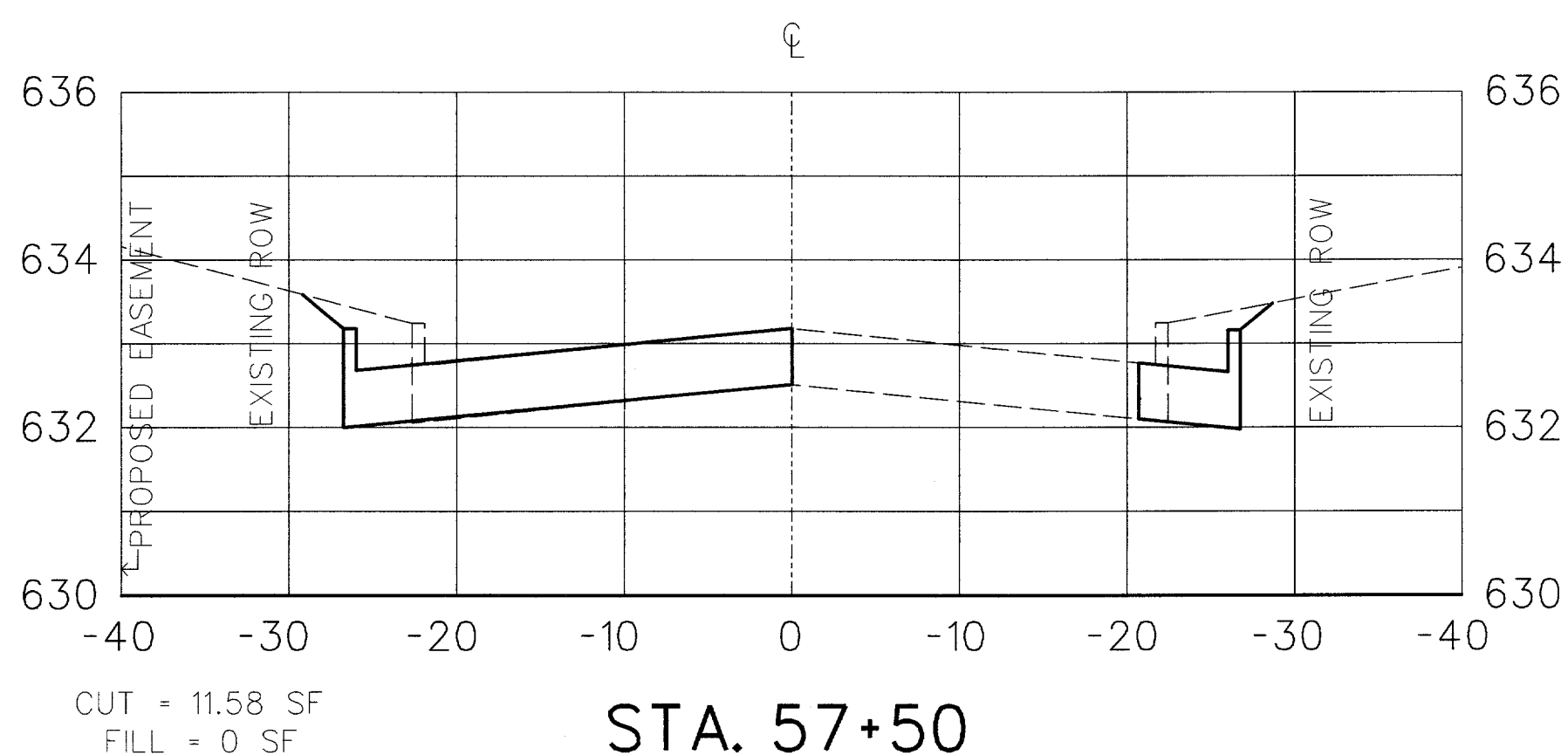
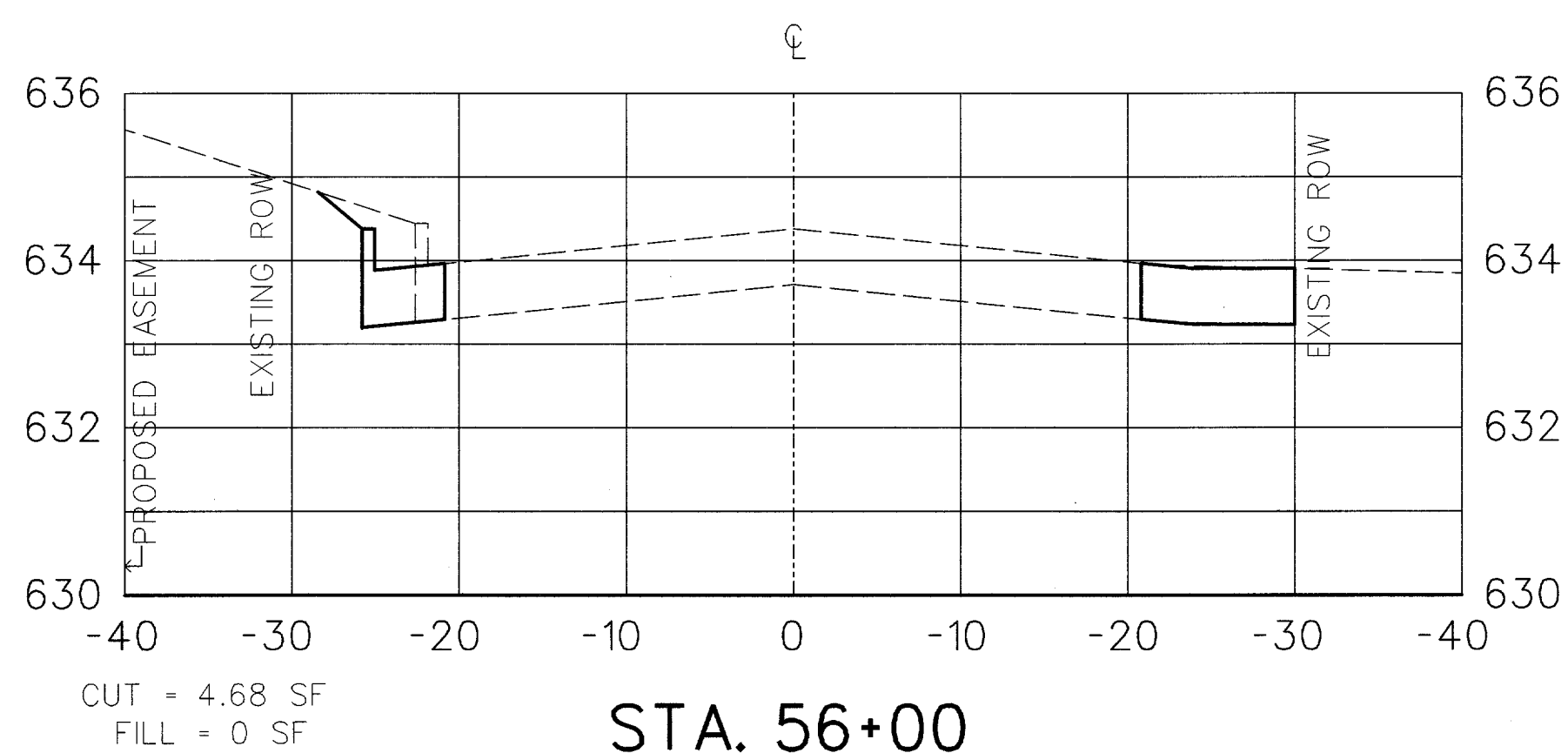
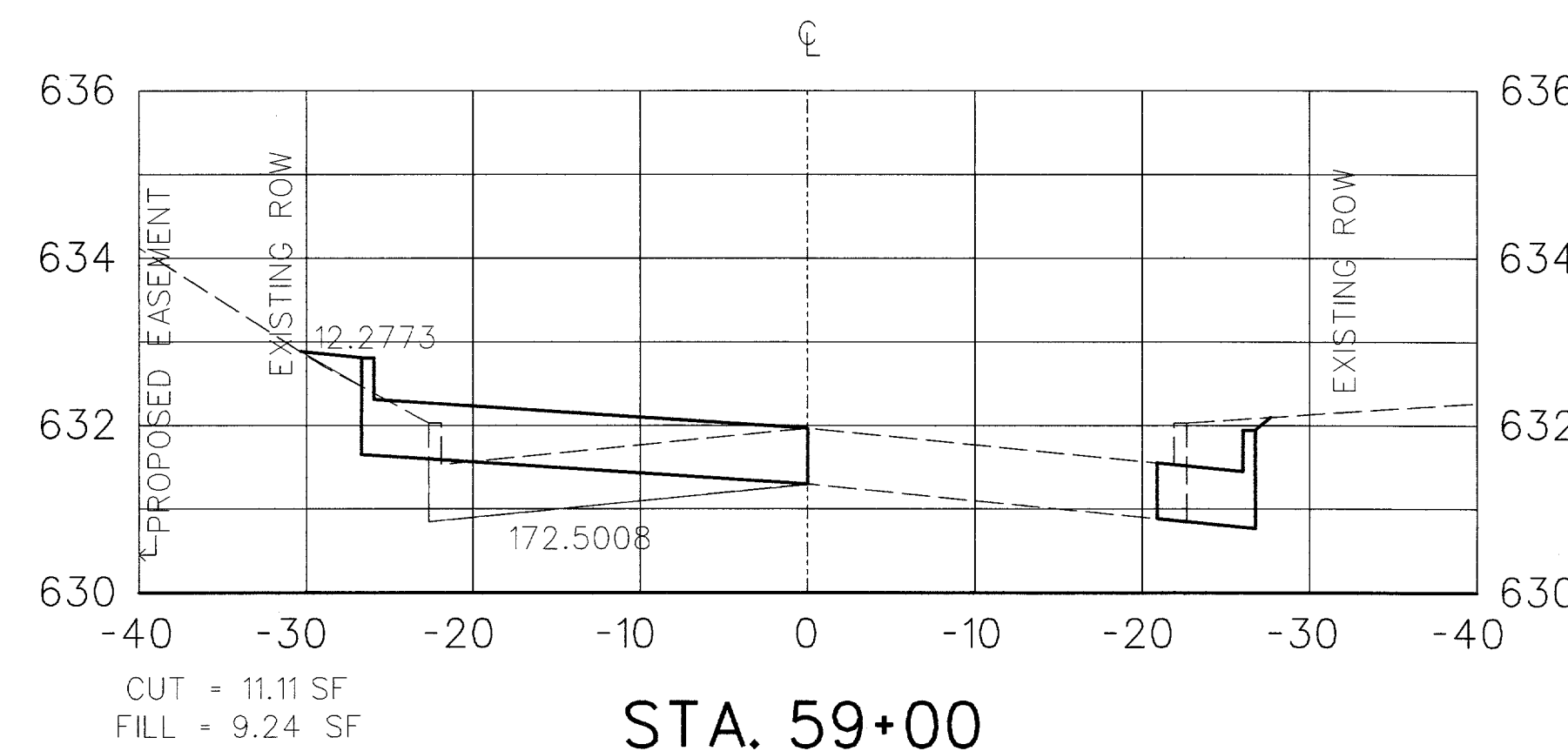
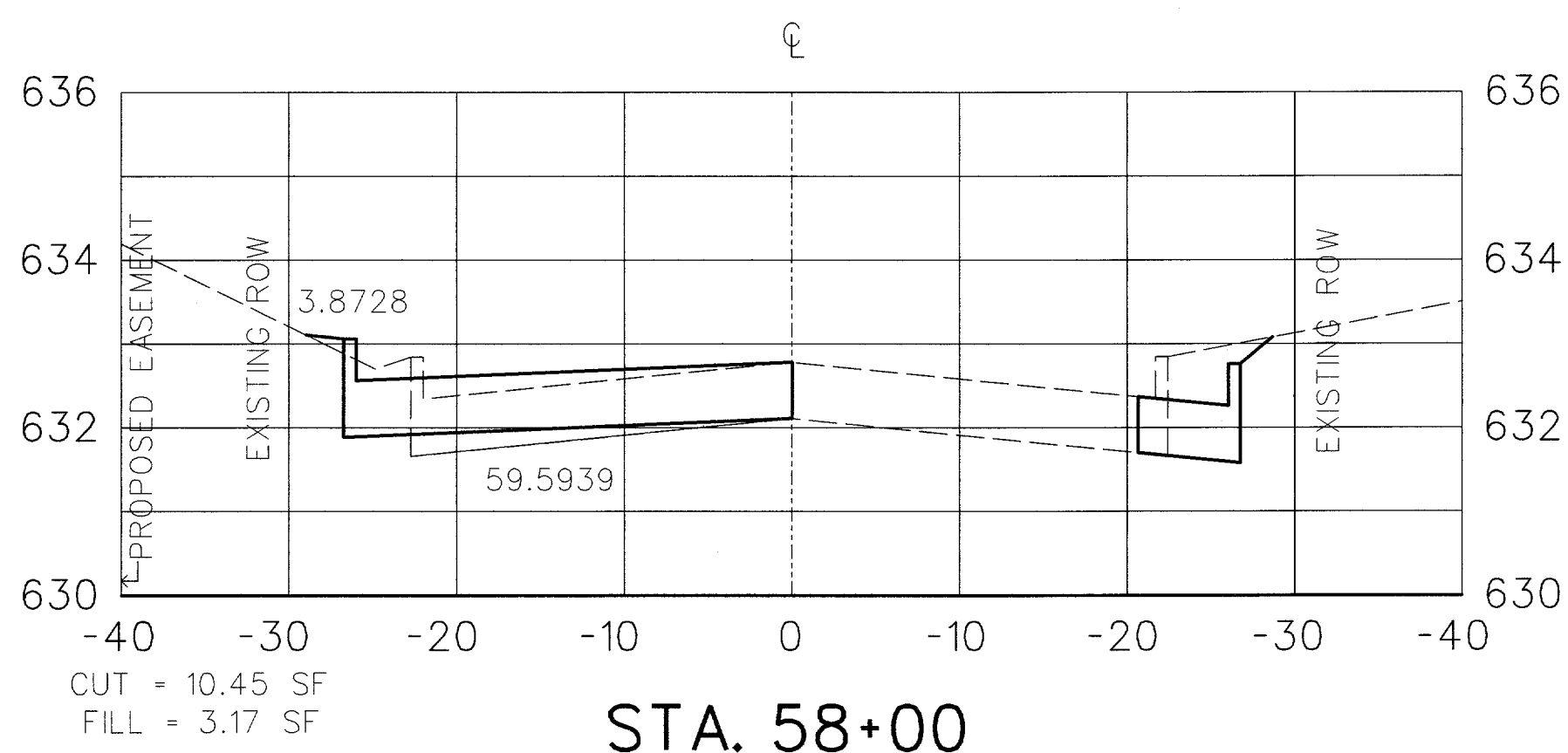
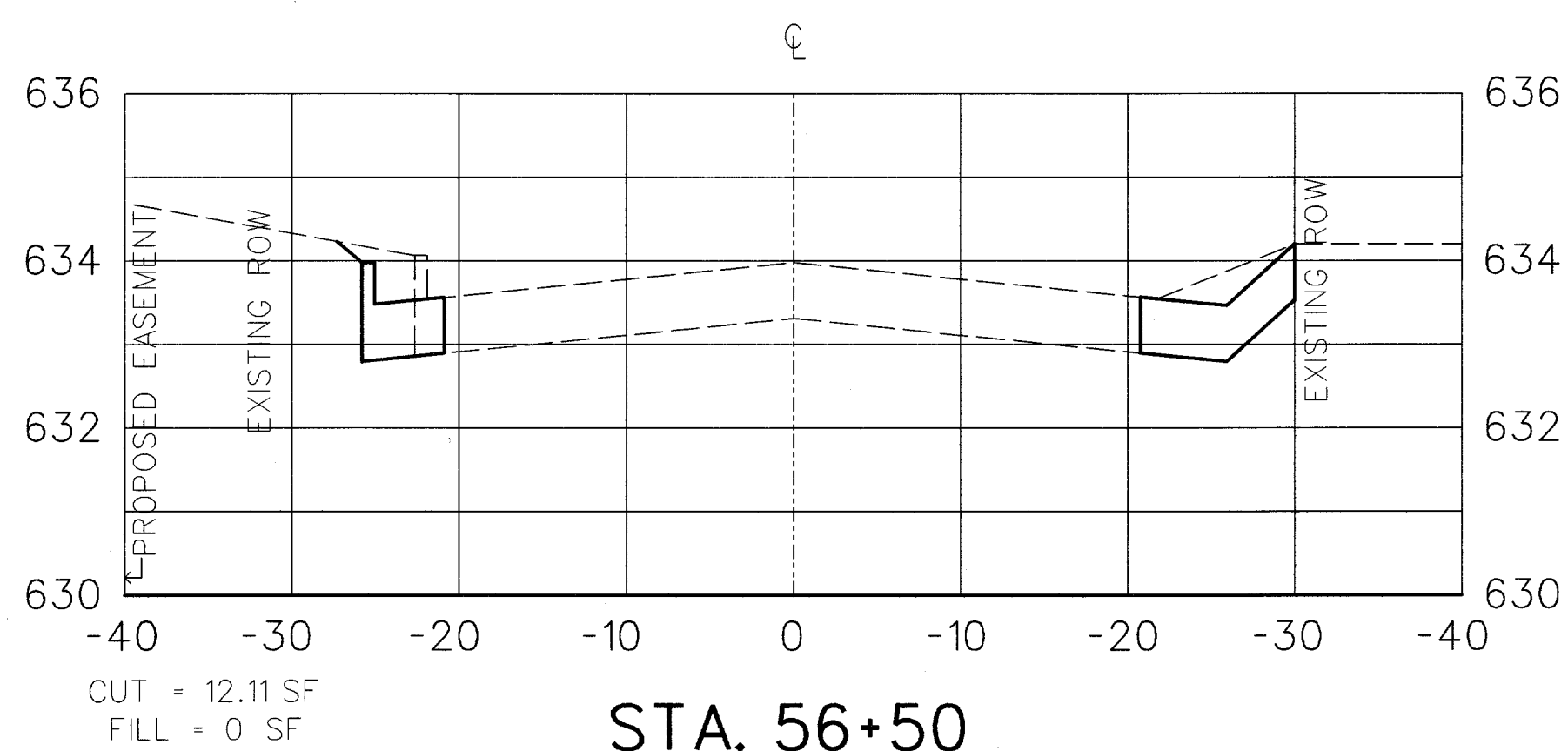
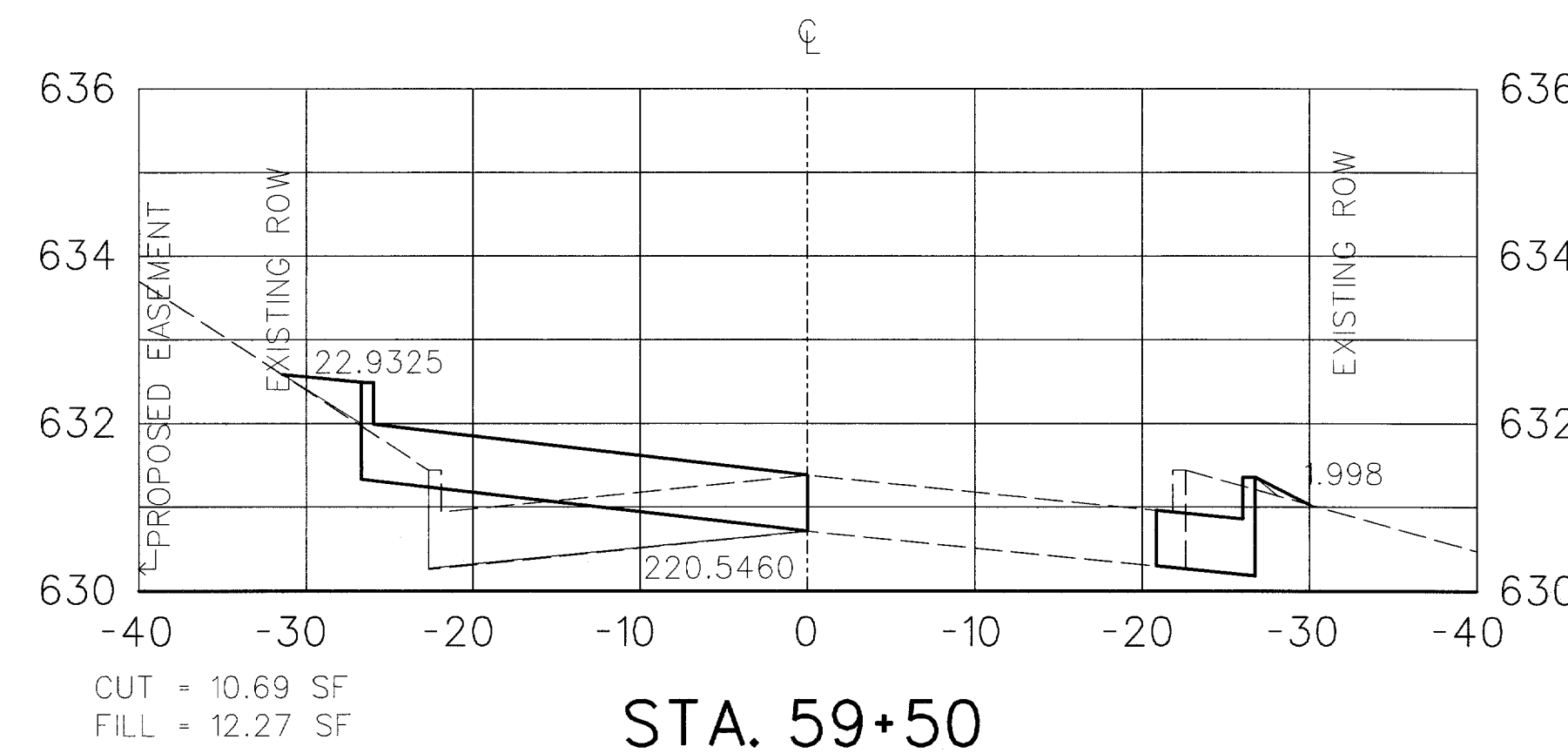
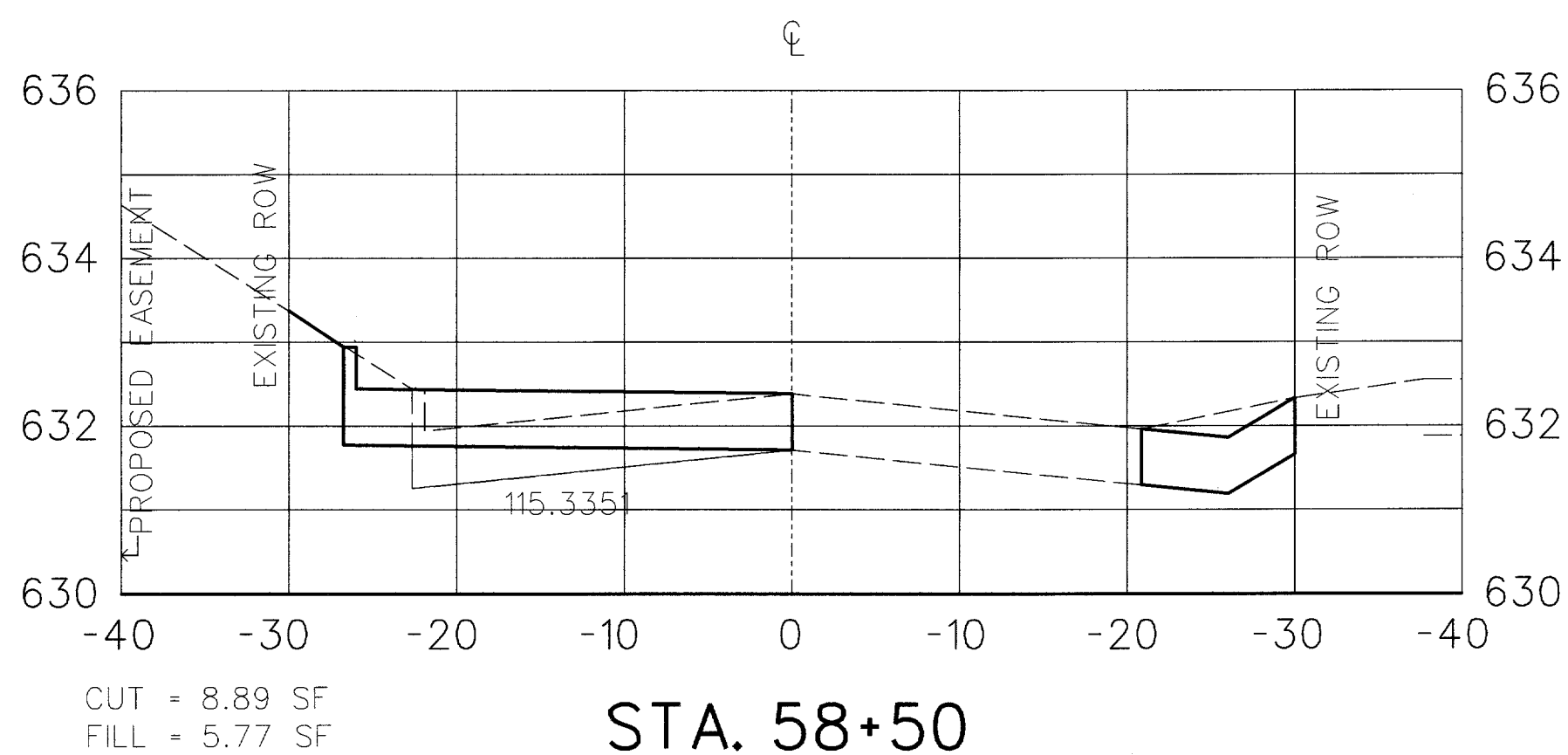
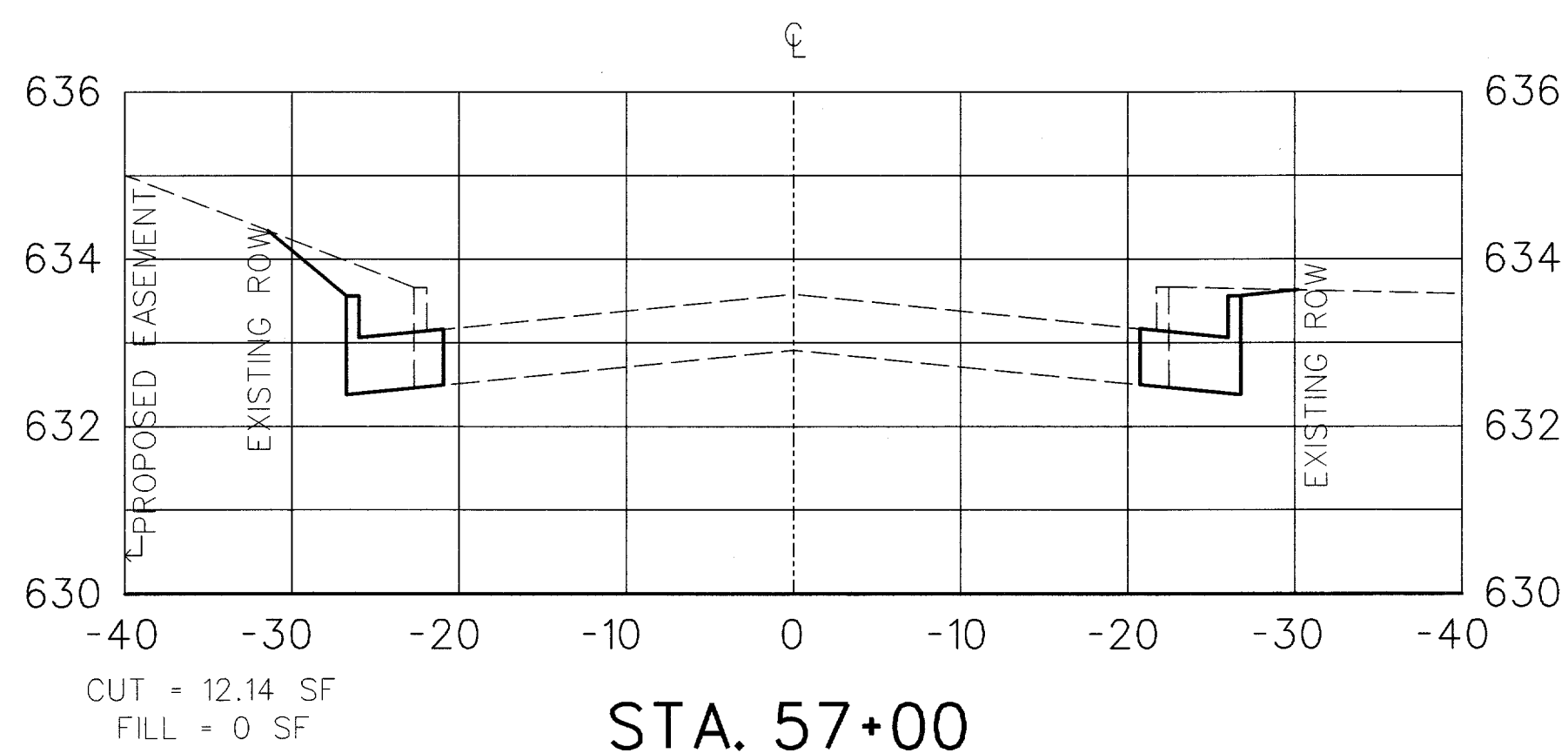
Texas Department of Transportation
Design Division (Roadway)

TEMPORARY EROSION,
SEDIMENT AND WATER
POLLUTION CONTROL MEASURES
SEDIMENT BASINS AND TRAPS
(EARTHWORK FOR EROSION CONTROL)

EC(6)-93

FILE: EC693.DGN	DN: HEJ	CK: HEJ	DW: BGD	CK:
© TxDOT MAY 1993	DISTRICT	FEDERAL AID PROJECT		SHEET
REVISIONS				23
COUNTY		CONTROL SECT	JOB	HIGHWAY

LEVELS DISPLAYED	1
------------------	---

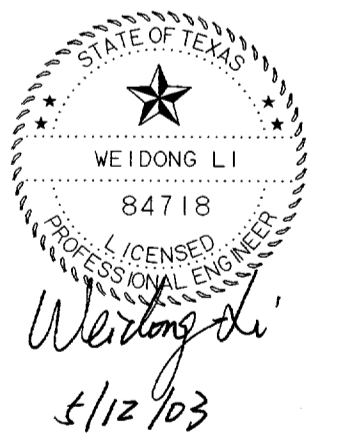
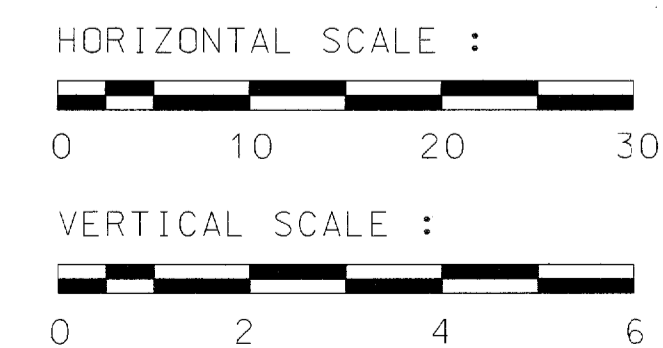
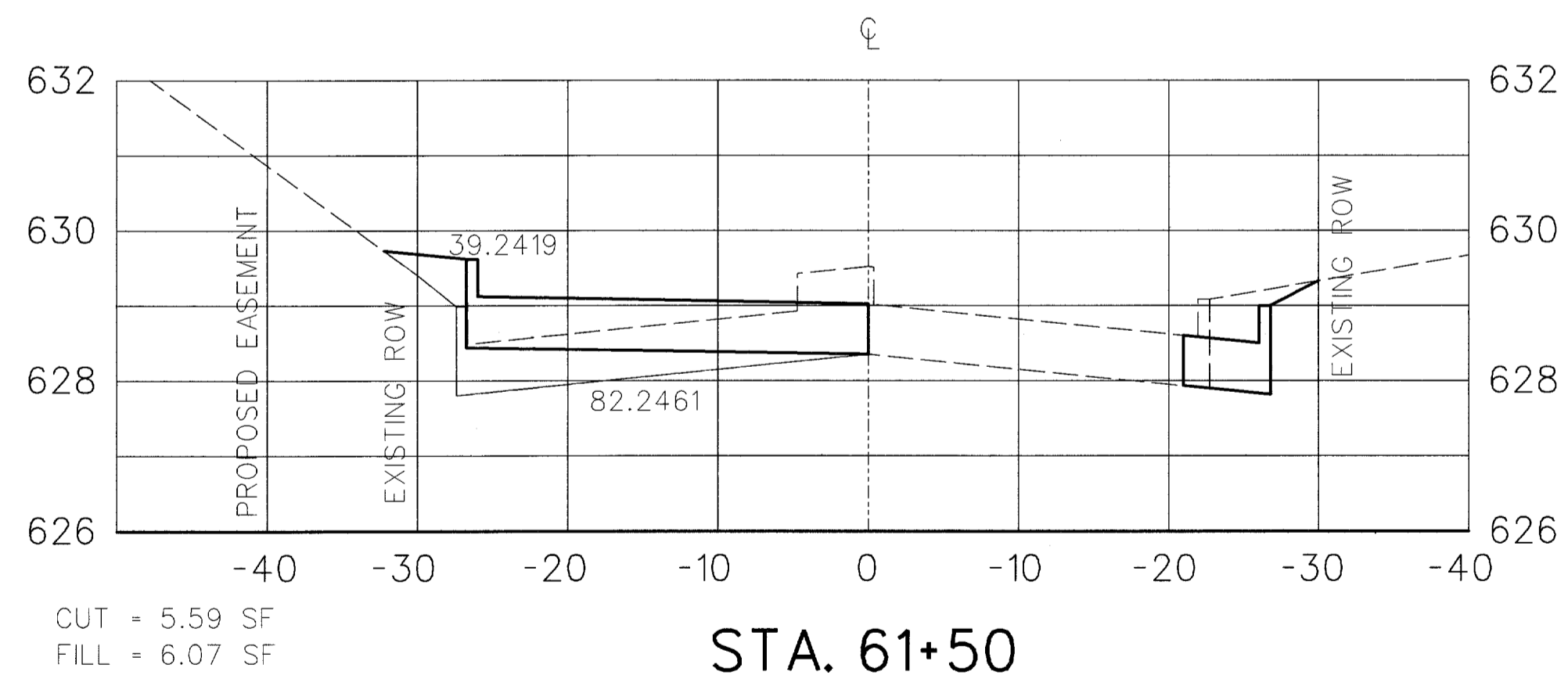
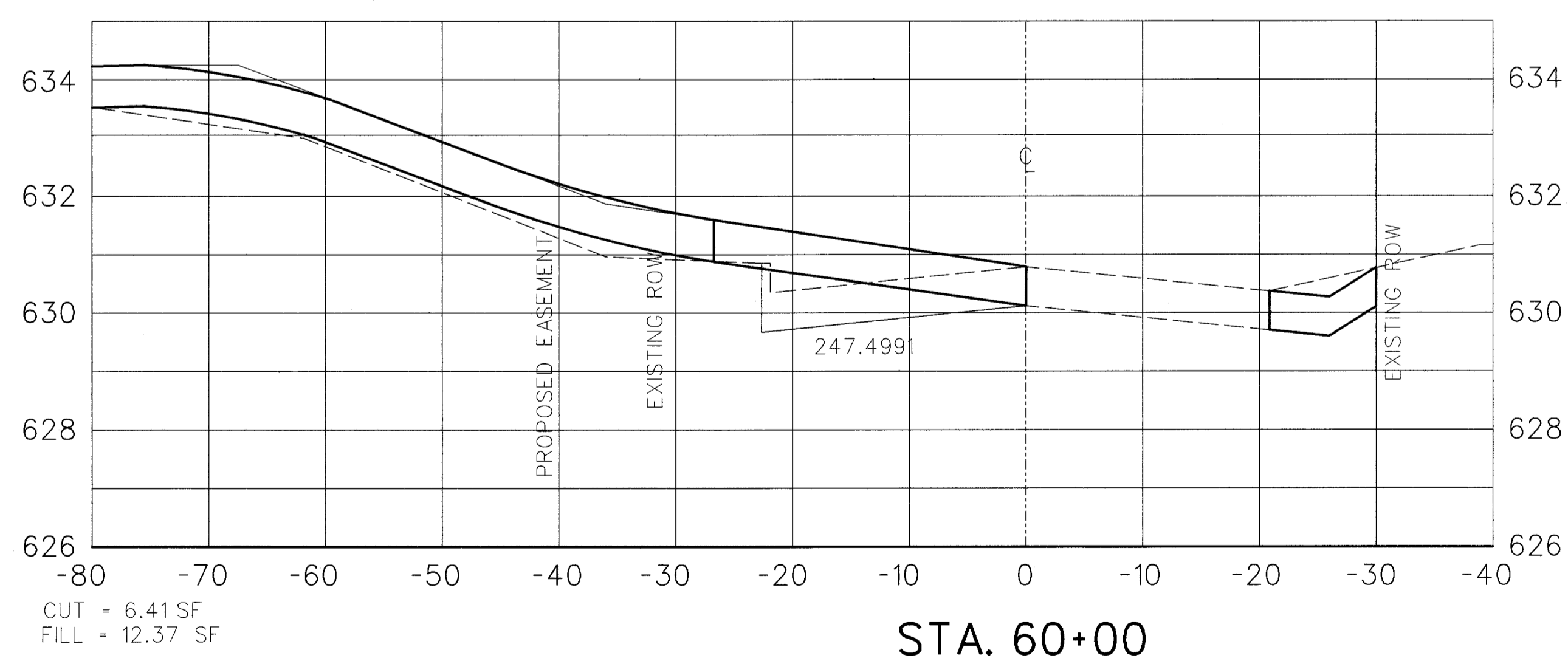
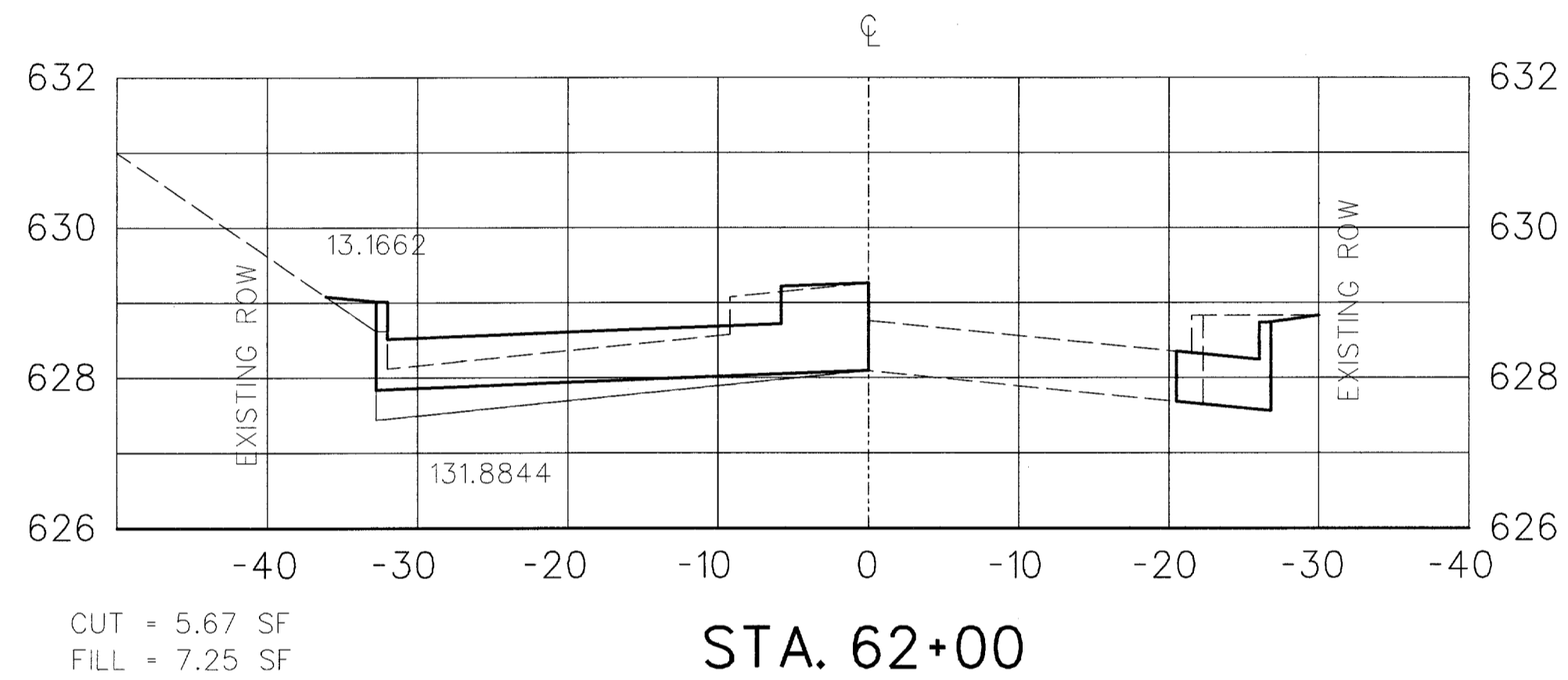
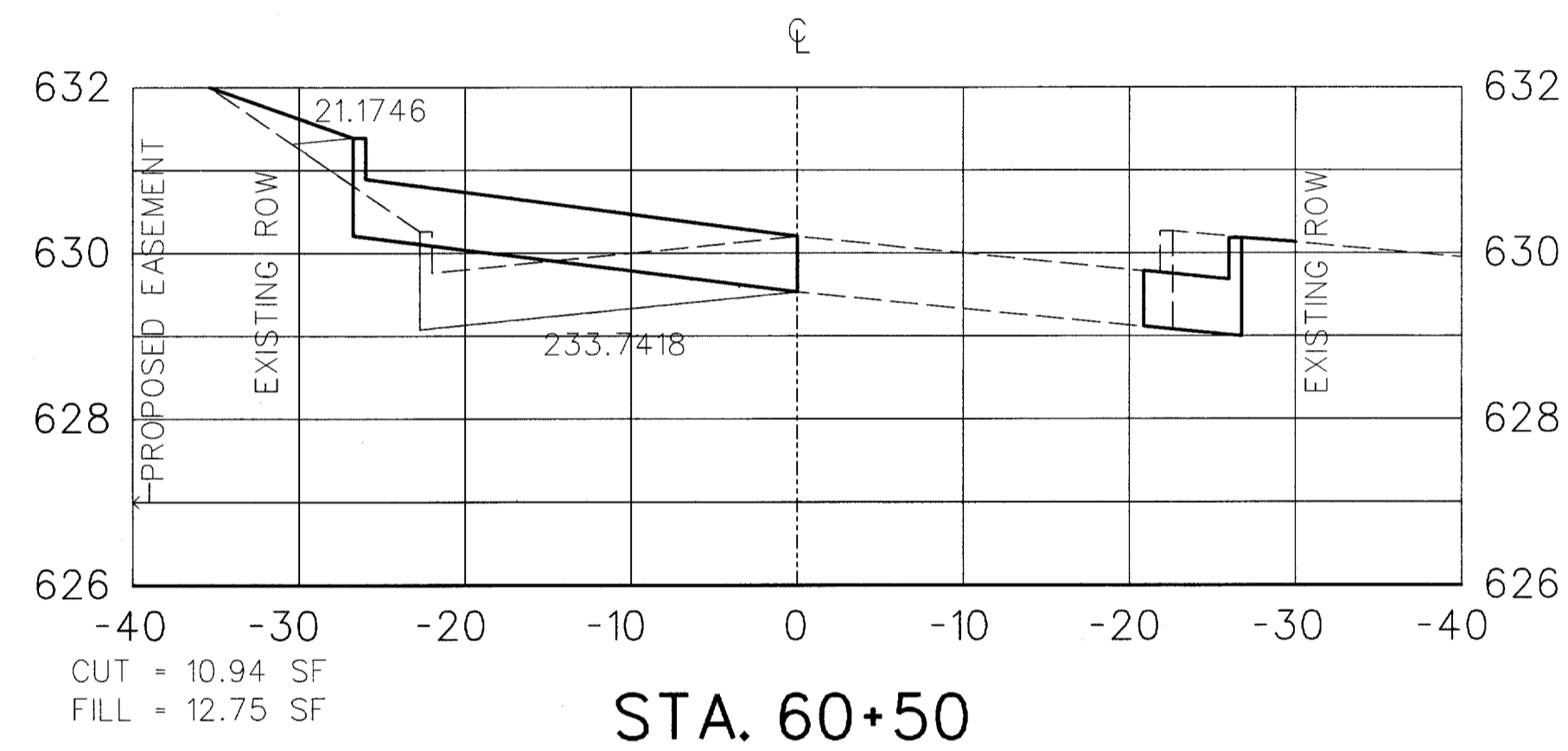
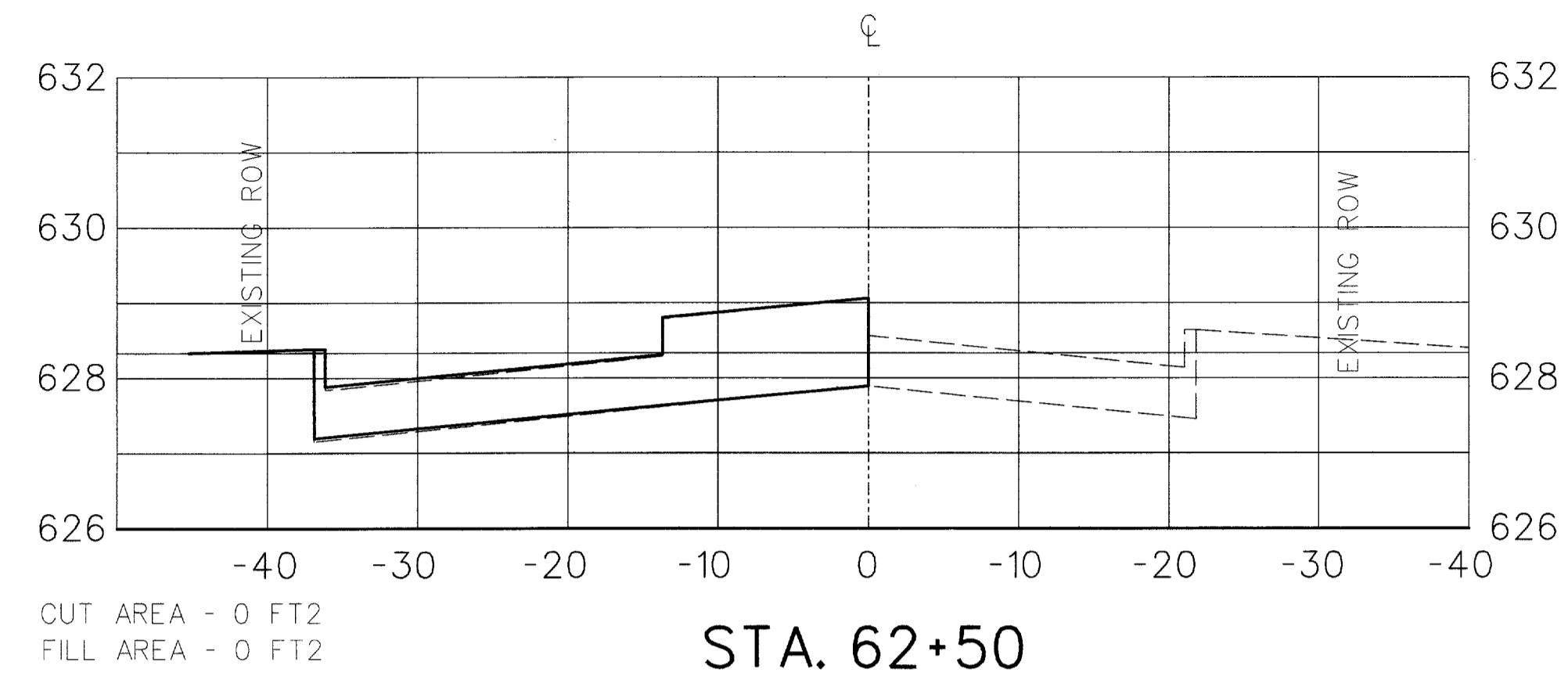
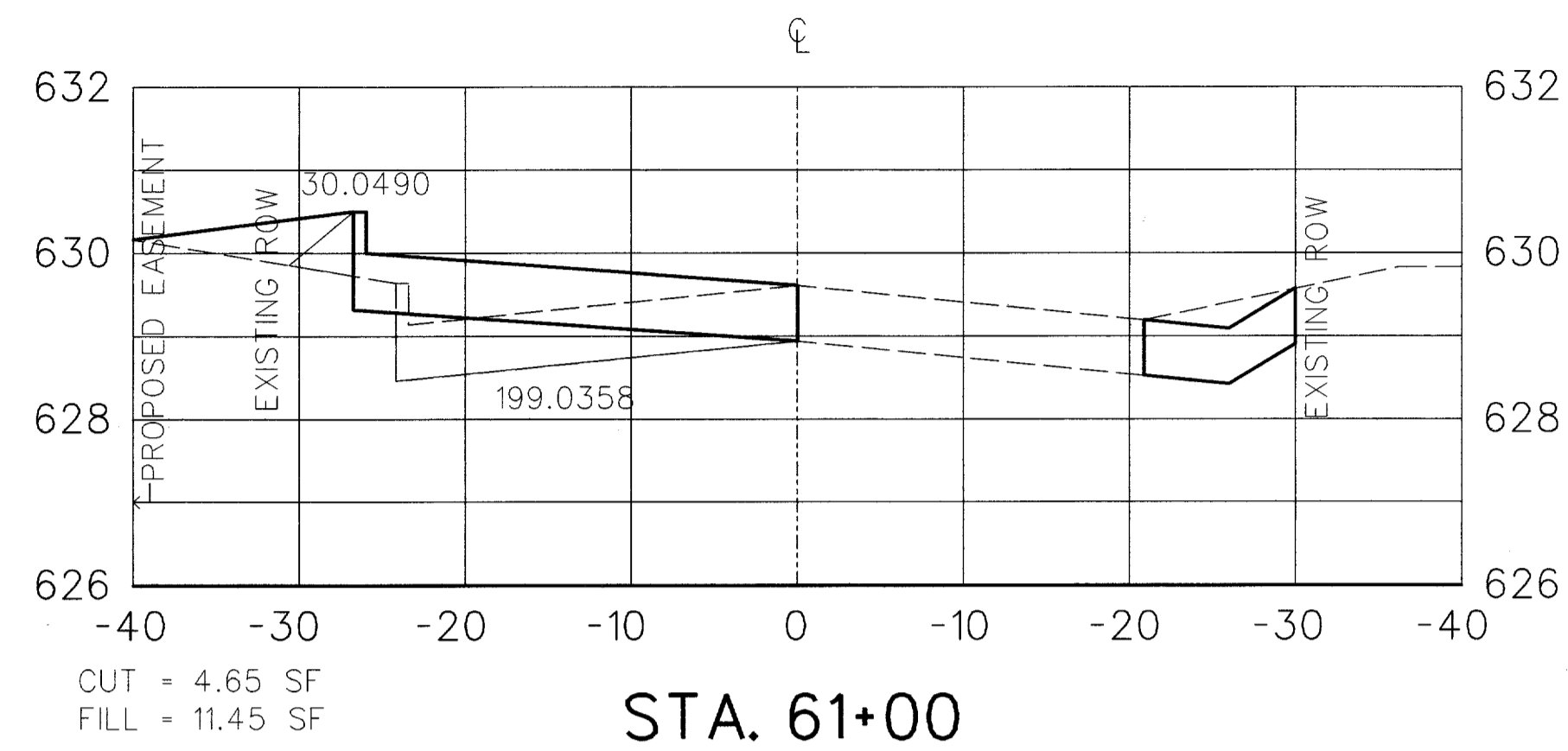


STATE OF TEXAS
WEIDONG LI
84718
LICENSED PROFESSIONAL ENGINEER
Weidong Li
5/12/03

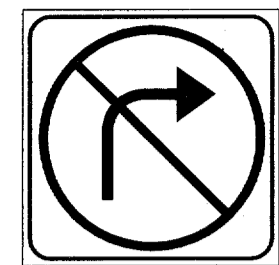
PARSONS <small>15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900</small>						
CROSS SECTIONS SHEET 1 OF 2 INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
S.L.K.	C.W.W. E.C.S.	05/12/03				24

File : CROSS-SEC-1

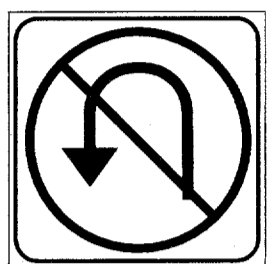
...:\add\inwood\sec1\cross-sec-1.dgn 05/12/03 03:44:31 PM



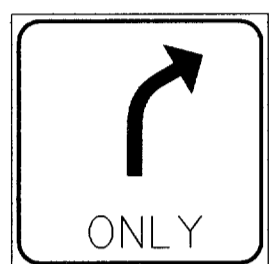
PARSONS <small>15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900</small>						
CROSS SECTIONS SHEET 2 OF 2 INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
S.L.K.	S.L.K.	05/12/03				25



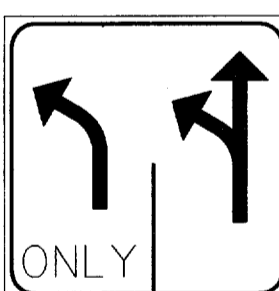
SR3-1
(LED BLANKOUT
SIGN)



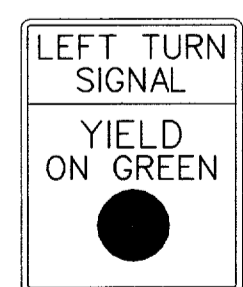
SR3-4



R3-5



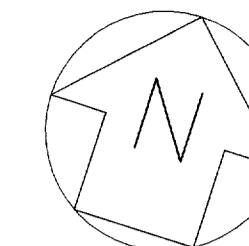
SR3-8



R10-12S

SIGN SUMMARY							
LOCATIONS	SIGN TYPE	DESCRIPTION	SIZE	LOCATIONS	SIGN TYPE	DESCRIPTION	SIZE
T-2	R10-12S	LEFT TURN YIELD	30" x 36"	T-6	SR3-8	LANE ASSIGNMENT	36" x 36"
T-2	SR3-4	NO U-TURN	30" x 30"	T-6	SR3-4	NO U-TURN	EXISTING
T-3	SR3-4	NO U-TURN	30" x 30"	T-7	SR3-4	NO U-TURN	30" x 30"
T-3	R3-5	RIGHT ONLY	30" x 36"	T-8	SR3-1*	NO RIGHT TURN	30" x 30"
T-3	SR3-8	LANE ASSIGN.	36" x 36"	T-8	SR3-4	NO U-TURN	EXISTING
T-4	SR3-4	NO U-TURN	30" x 30"	T-8	SR3-8	LANE ASSIGNMENT	EXISTING
T-4	R10-12S	LEFT TURN YIELD	30" x 36"				
T-4	SR3-1*	NO RIGHT TURN	30" x 30"				
T-5	SR3-4	NO U-TURN	EXISTING				

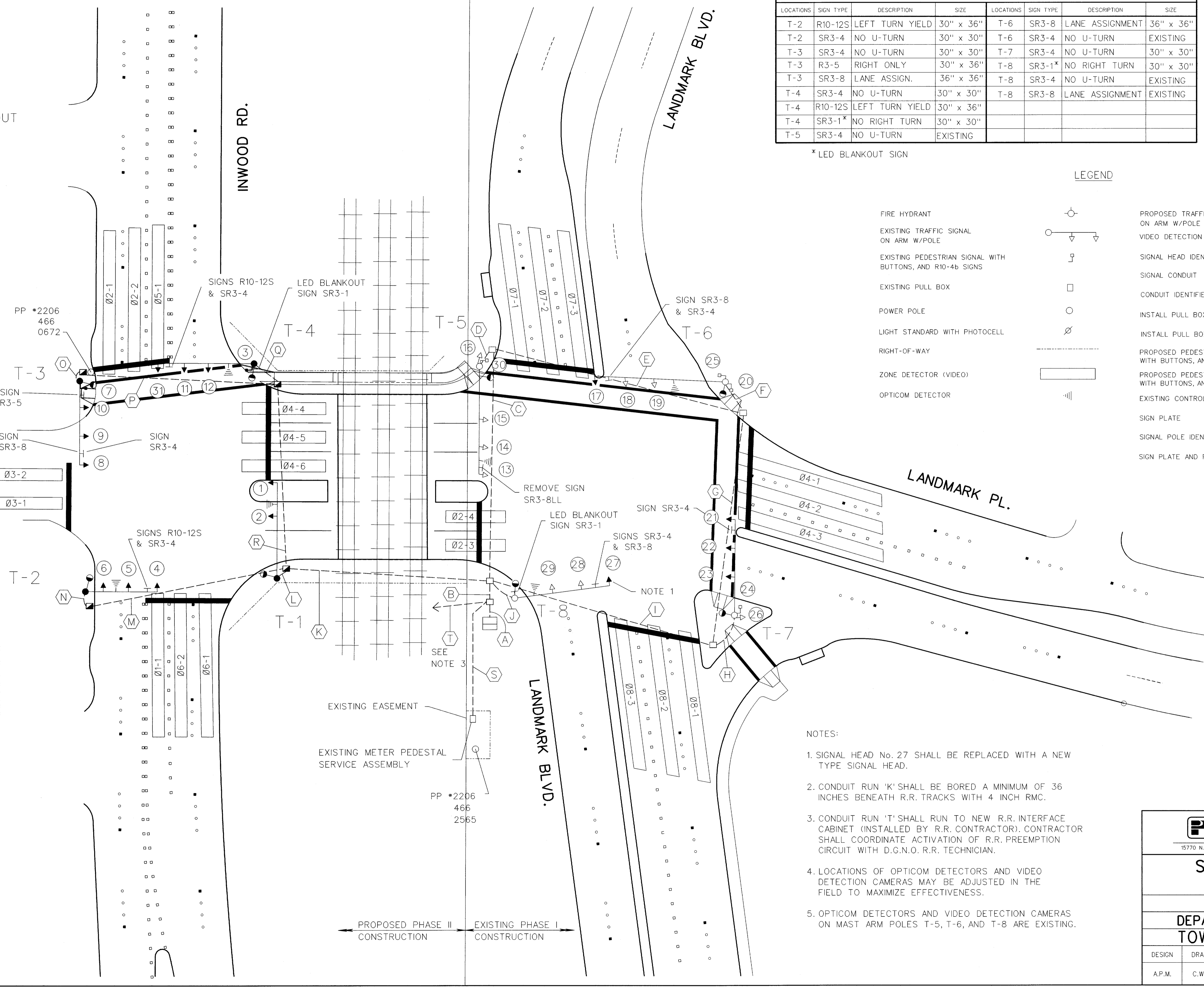
* LED BLANKOUT SIGN



HORIZONTAL SCALE : 1" = 40'
0 10 20 30 40 50 60

LEGEND

FIRE HYDRANT		PROPOSED TRAFFIC SIGNAL ON ARM W/POLE	
EXISTING TRAFFIC SIGNAL ON ARM W/POLE		VIDEO DETECTION CAMERA	
EXISTING PEDESTRIAN SIGNAL WITH BUTTONS, AND R10-4b SIGNS		SIGNAL HEAD IDENTIFIER	
EXISTING PULL BOX		SIGNAL CONDUIT	
POWER POLE		CONDUIT IDENTIFIER	
LIGHT STANDARD WITH PHOTOCELL		INSTALL PULL BOX TYPE A	
RIGHT-OF-WAY		INSTALL PULL BOX TYPE C	
ZONE DETECTOR (VIDEO)		PROPOSED PEDESTRIAN SIGNAL WITH BUTTONS, AND R10-4b SIGNS	
OPTICOM DETECTOR		PROPOSED PEDESTAL POLE W/SIGNALS WITH BUTTONS, AND R10-4b SIGNS	
		EXISTING CONTROLLER FOUNDATION/CABINET	
		SIGN PLATE	
		SIGNAL POLE IDENTIFIER	
		SIGN PLATE AND POLE TO BE INSTALLED	



- NOTES:
1. SIGNAL HEAD No. 27 SHALL BE REPLACED WITH A NEW TYPE SIGNAL HEAD.
 2. CONDUIT RUN 'K' SHALL BE BORED A MINIMUM OF 36 INCHES BENEATH R.R. TRACKS WITH 4 INCH RMC.
 3. CONDUIT RUN 'T' SHALL RUN TO NEW R.R. INTERFACE CABINET (INSTALLED BY R.R. CONTRACTOR). CONTRACTOR SHALL COORDINATE ACTIVATION OF R.R. PREEMPTION CIRCUIT WITH D.G.N.O. R.R. TECHNICIAN.
 4. LOCATIONS OF OPTICOM DETECTORS AND VIDEO DETECTION CAMERAS MAY BE ADJUSTED IN THE FIELD TO MAXIMIZE EFFECTIVENESS.
 5. OPTICOM DETECTORS AND VIDEO DETECTION CAMERAS ON MAST ARM POLES T-5, T-6, AND T-8 ARE EXISTING.

STATE OF TEXAS
 ALAN P. McNEIL
 69951
 LICENSED PROFESSIONAL ENGINEER
 Alan P. McNeil
 5/12/03

PARSONS
 15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900

SIGNAL LAYOUT PLAN

INWOOD CONNECTION

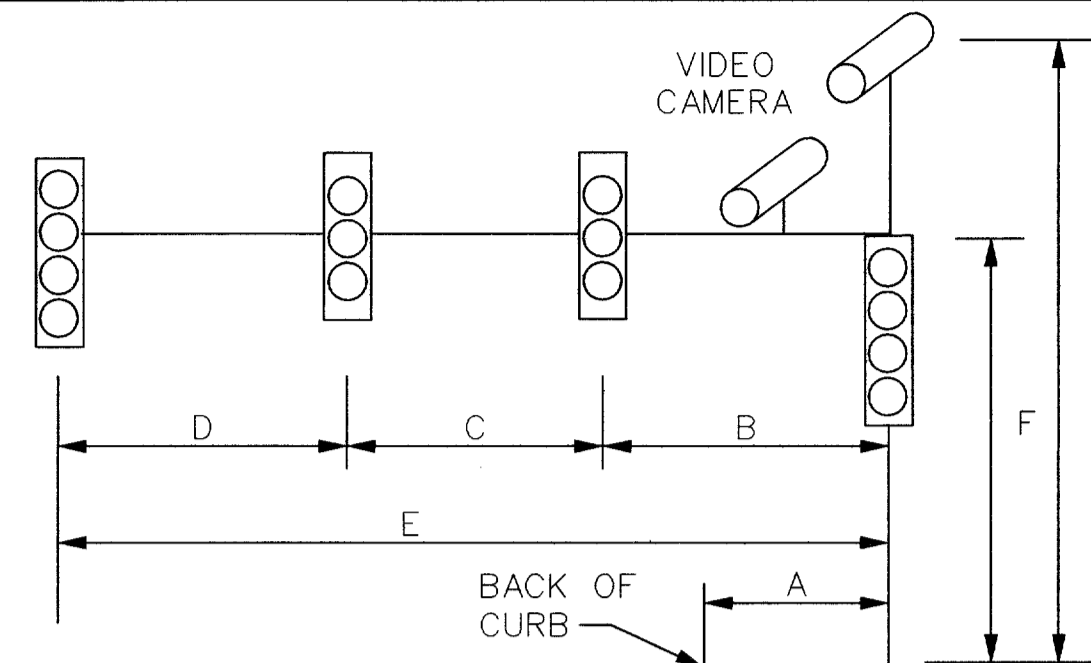
DEPARTMENT OF PUBLIC WORKS

TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
A.P.M.	C.W.W.	05/12/03				26

File: SIGNAL-LAYOUT

SIGNAL HEAD AND POLE PLACEMENT



SIGNAL HEAD AND POLE PLACEMENT (FEET)

POLE NO.	A	B	C	D	E	F	FND
T-1	3	23	12	---	40	28	36-A
T-2	2	8	11	11	30	19	30-A
T-3	5	13	11	11	35	19	30-A
T-4	5	18	11	11	40	28	36-A
T-5	5	23	11	11	45	19	EXIST.
T-6	7	30	12	12	55	28	EXIST.
T-7	5	18	11	11	40	28	EXIST.
T-8	5	18	11	11	40	28	EXIST.

SIGNAL POLE CONDUCTORS

POLE NUMBER	OPTICOM	5-CNDR	7-CNDR	COAX	3-CNDR
T-1	55	115	---	35	35
T-2	50	75	55	30	30
T-3	---	165	---	30	30
T-4	60	110	65	35	35
T-5	---	---	---	---	---
T-6	---	---	80	---	---
T-7	---	95	65	---	---
T-8	---	---	---	---	---
TOTAL (LF)	165	560	265	130	130

CONDUIT SUMMARY

SIZE	TYPE	LENGTH (LF)
1" PVC	TRENCH	-
2" PVC	TRENCH	-
3" PVC	TRENCH	40
4" PVC	BORE	250
4" PVC	TRENCH	-
4" RM	BORE	90

GROUND BOX SUMMARY

TYPE	EA
A	4
C	-

CABLE TERMINATION CHART

CABLE CONDUCTOR	T-1 (16 CNDR)		T-2 (16 CNDR)		T-3 (16 CNDR)		T-4 (16 CNDR)		T-5 (16 CNDR)		T-6 (16 CNDR)		T-7 (16 CNDR)		T-8 (10 CNDR)	
	S.H. NO.	INDICATION	S.H. NO.	INDICATION	S.H. NO.	INDICATION	S.H. NO.	INDICATION	S.H. NO.	INDICATION	S.H. NO.	INDICATION	S.H. NO.	INDICATION	S.H. NO.	INDICATION
BLACK	SPARE		4	<- Y	SPARE		31	<- Y	SPARE		SPARE		21	<- Y	SPARE	
WHITE		COMMON		COMMON		COMMON		COMMON		COMMON		COMMON		COMMON		COMMON
RED	1-2	R	5-6	R	8-10	R	11-12	R	13-15	R	17-19	R	21-23	R	27-29	R
GREEN	1-2	G	5-6	G	8-10	G/ <- G	11-12	G	13-15	G	17-19	G/ <- G	21-23	G	27-29	G/ <- G
ORANGE	1-2	Y	5-6	Y	8-10	Y	11-12	Y	13-15	Y	17-19	Y	21-23	Y	27-29	Y
BLUE	SPARE		4	<- G	SPARE		31	<- G	SPARE		SPARE		21	<- G	SPARE	
WHT/BLK	SPARE		SPARE			PB COM		PB COM		PB COM		PB COM		PB COM		SPARE
RED/BLK	SPARE		SPARE		7	DW	3	DW	30	DW	20	DW	24	DW	SIGN SR3-1	
GRN/BLK	SPARE		SPARE		7	W	3	W	30	W	20	W	24	W	SPARE	
ORN/BLK	SPARE		4	Y	SPARE		SPARE		16	Y	SPARE		26	Y	SPARE	
BLU/BLK	SPARE		SPARE		SPARE		SPARE		SPARE		PB 25	Ø4	PB 24	Ø8		
BLK/WHT	SPARE		SPARE		PB 7	Ø4	PB 3	Ø4	PB 30	Ø4	PB 20	Ø8	SPARE			
RED/WHT	SPARE		4	R	SPARE		SIGN SR3-1		16	R	25	DW	SPARE			
GRN/WHT	SPARE		4	G	SPARE		SPARE		16	G	25	W	SPARE			
BLU/WHT	SPARE		SPARE		SPARE		SPARE		SPARE		SPARE		26	G		
BLK/RED	SPARE		SPARE		SPARE		SPARE		SPARE		SPARE		26	R		
WHT/RED																
ORN/RED																
BLU/RED																

SIGNAL HEADS

NO	TYPE	PHASE	BACKPLATE		SIGNAL HEAD		PED SIG SEC
			3 SEC	4 SEC	3 SEC	4 SEC	
1-2	V3	Ø3	2		2		
4	V4LT*	Ø5+O.L. B		1		1	
5-6	V3	O.L. 2	2		2		
8	V4LT	O.L. C		1		1	
9-10	V3	O.L. C	2		2		
11-12	V3	O.L. 6	2		2		
13-15	V3	O.L. 4	EXIST.		EXIST.		
16	V3	O.L. 7	EXIST.		EXIST.		
17	V4LT	Ø8		1		1	
18-19	V3	Ø8	EXIST.		EXIST.		
21	V4LT*	O.L. A+D		1		1	
22-23	V3	O.L. A	2		2		
26	V3	O.L. 4	EXIST.		EXIST.		
27	V4LT	Ø7		1		1	
28-29	V3	Ø7	EXIST.		EXIST.		
31	V4LT*	Ø1+O.L. 6		1		1	
3,7	PED	Ø4					2
20,24	PED	Ø8					EXIST.
25,30	PED	Ø4					EXIST.
TOTALS	---	---	10	6	10	6	2

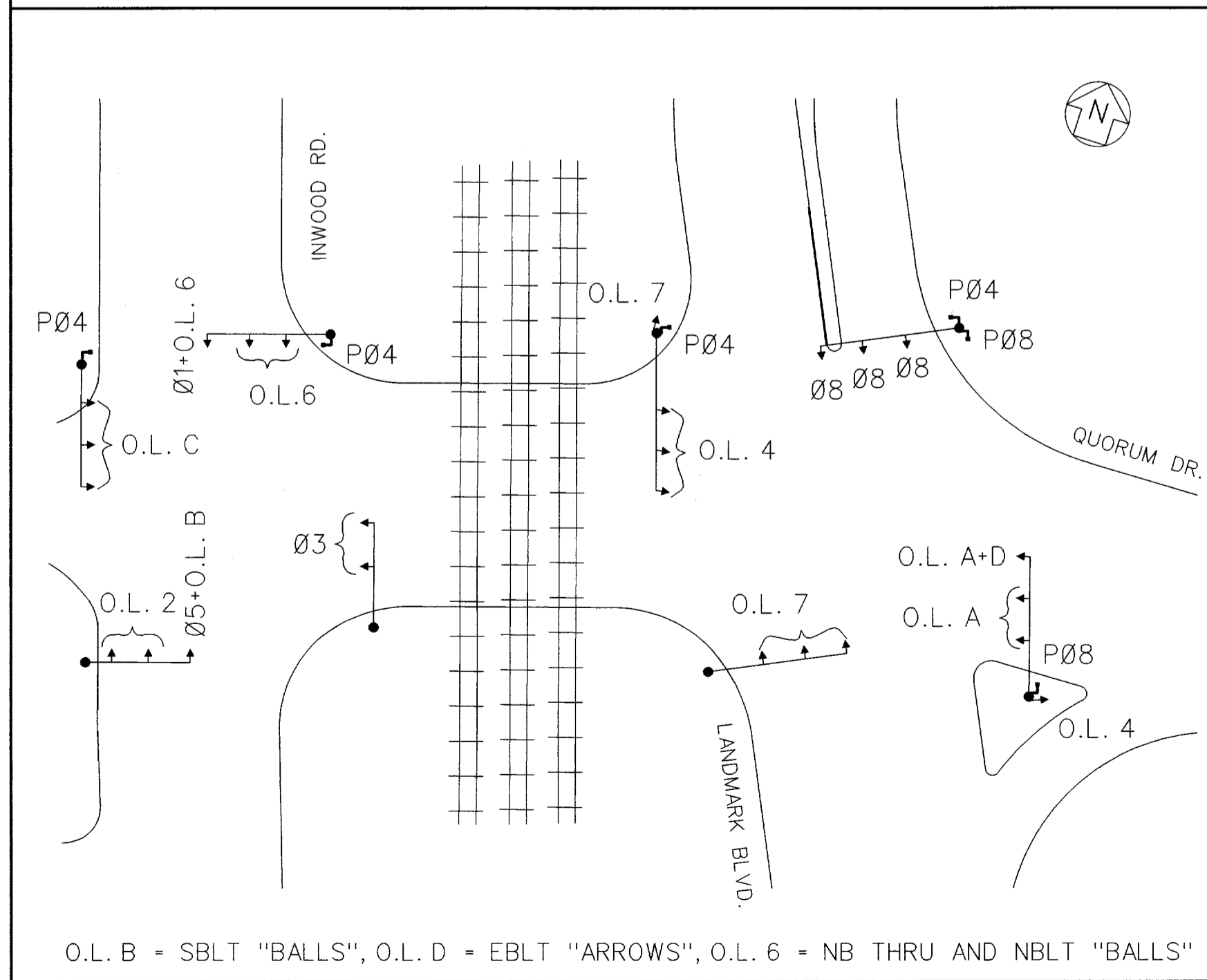
* -USE GREEN/YELLOW BI-MODAL TURN ARROW.

CONDUIT RUNS

RUN NO.	QUANTITY	SIZE	TYPE	METHOD	*4 XHHW	*6 BARE	COAX CABLE	4 CNDR OPTICOM	3 CNDR (VIDEO)	*12 XHHW	10 CNDR	16 CNDR	CONDUIT LENGTH	CABLE LENGTH	RUN NO.
A	2	4"	PVC	Exist.			5	3	5			4	10	15	A
B	2	4"	PVC	Exist.			5	3	5			4	15	20	B
C	1	4"	PVC	Exist.									100	110	C
D	1	3"	PVC	Exist.									10	15	D
E	1	4"	PVC	Exist.									115	125	E
F	1	3"	PVC	Exist.									20	25	F
G	1	4"	PVC	Exist.									105	115	G
H	1	3"	PVC	Exist.			1		1				20	25	H
I	1	4"	PVC	Exist.			1		1				100	110	I
J	1	3"	PVC	Exist.									15	20	J
K	1	4"	RMC	Bored			1	4	3	4		4	90	100	K
L	1	3"	PVC	Trench			1	1	1	1		1	5	10	L
M	1	4"	PVC	Bored			1	1	1	1		1	85	95	M
N	1	3"	PVC	Trench			1	1	1	1		1	10	15	N
O	1	3"	PVC	Trench			1	1	1	1		1	10	15	O
P	1	4"	PVC	Bored			1	1	1	1		1	85	95	P
Q	1	3"	PVC	Trench			1	1	1	1		1	15	20	Q
R	1	4"	PVC	Bored			1	2	1	2		2	80	90	R
S	1	2"	PVC	Exist.									50	60	S
*T															T
TOTAL(LF)	---	---	---	---	---	---	440	1140	635	1140	---	---	970	---	---

* TO SITE OF NEW R.R. INTERFACE EQUIPMENT.

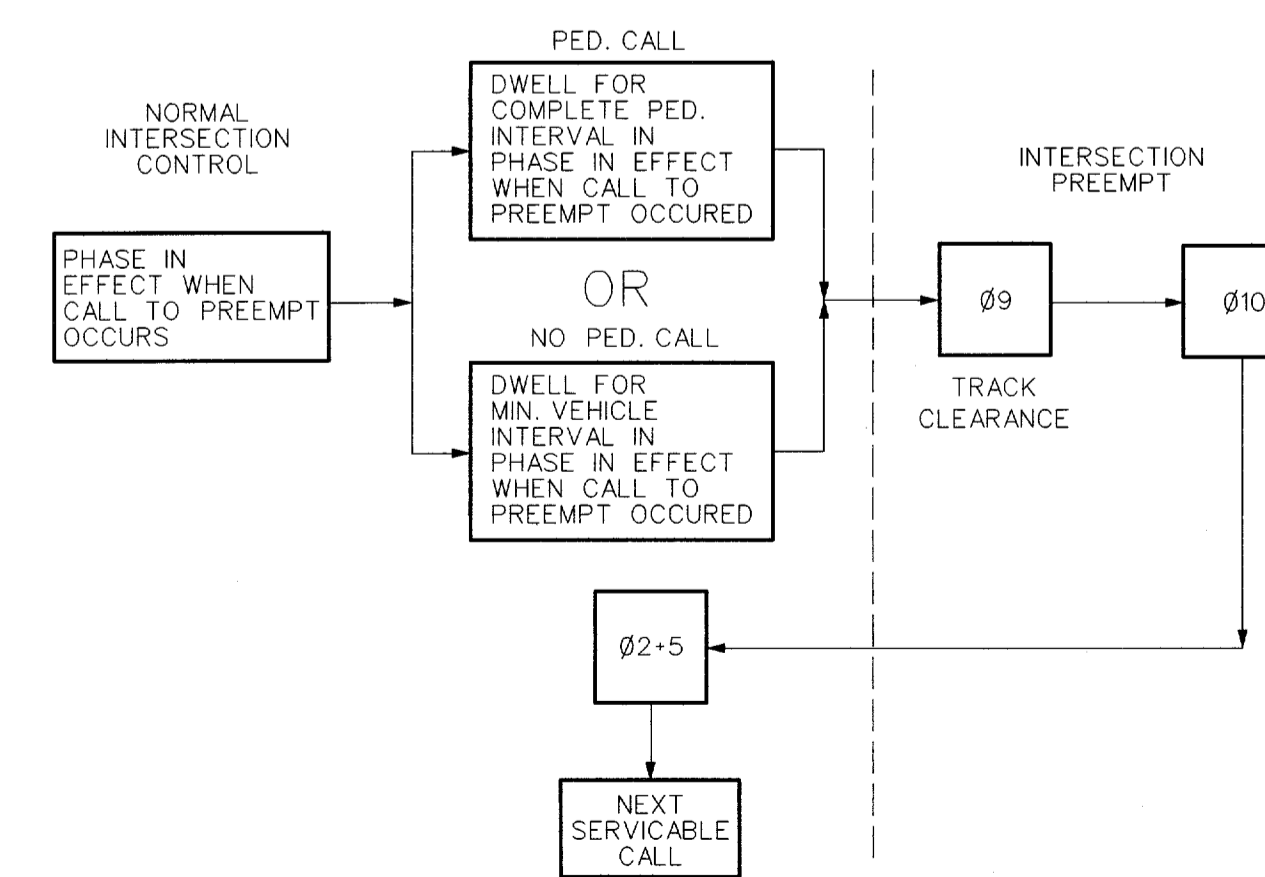
SIGNAL HEAD PHASING



O.L. B = SBLT "BALLS", O.L. D = EBLT "ARROWS", O.L. 6 = NB THRU AND NBLT "BALLS"

ECONOLITE ASC-2 PROGRAMMING

- Ø1 = N.B.L.T. (INWOOD)
- O.L. 2 = Ø2+10
- Ø3 = E.B. THRU
- O.L. 4 = Ø3+4
- Ø5 = S.B.L.T. (INWOOD)
- O.L. 6 = Ø6+10
- O.L. 7 = Ø7+10
- Ø8 = N.B.L.T. & THRU (LANDMARK)
- O.L. A = Ø3+4+5+6+9
- O.L. B = Ø2 BUT NOT Ø10
- O.L. C = Ø4+7+8+9
- O.L. D = Ø5+6+9



RAILROAD PREEMPT SEQUENCE DIAGRAM

Ø9 = O.L. A+C+D (TRACK CLEARANCE)
 Ø10 = Ø2, Ø6, Ø7 (PREEMPTION PHASES)



Alan P. McNeil
5/12/03



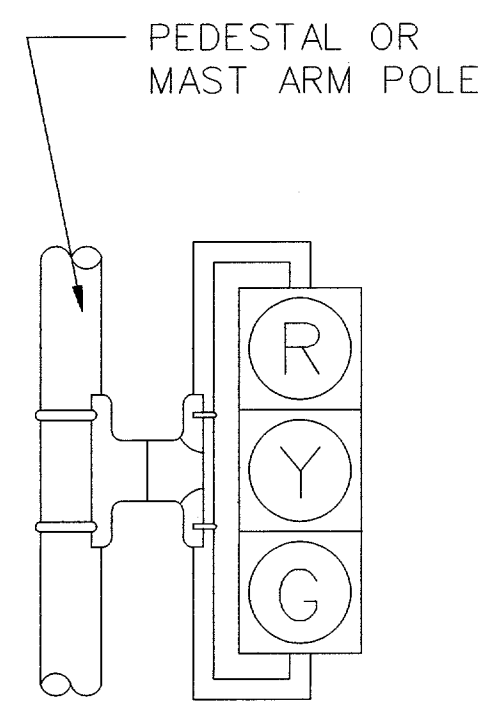
15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900

SIGNAL LAYOUT TABLES

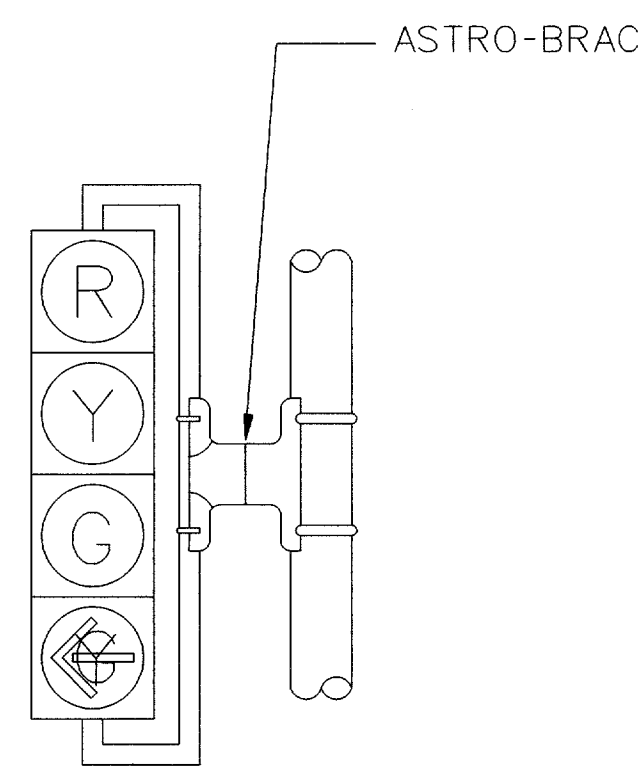
INWOOD CONNECTION

**DEPARTMENT OF PUBLIC WORKS
TOWN OF ADDISON, TEXAS**

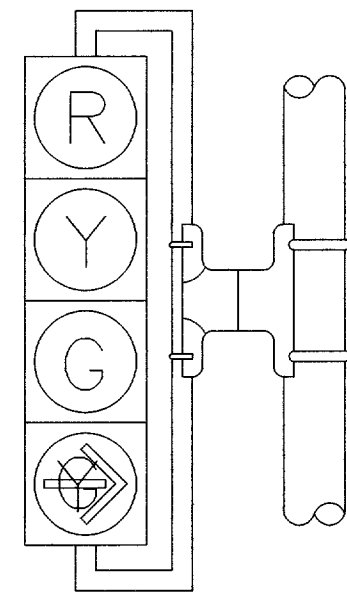
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
A.P.M.	C.W.W.	05/12/03				27



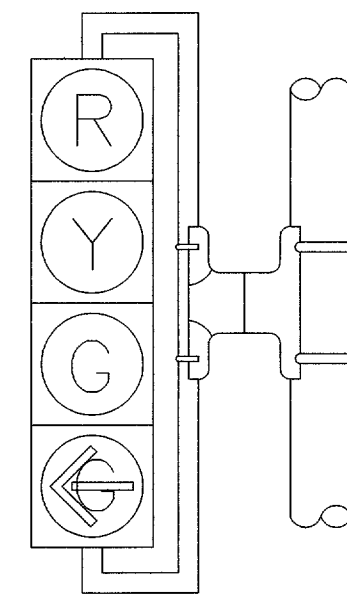
V3



V4LT(BM)

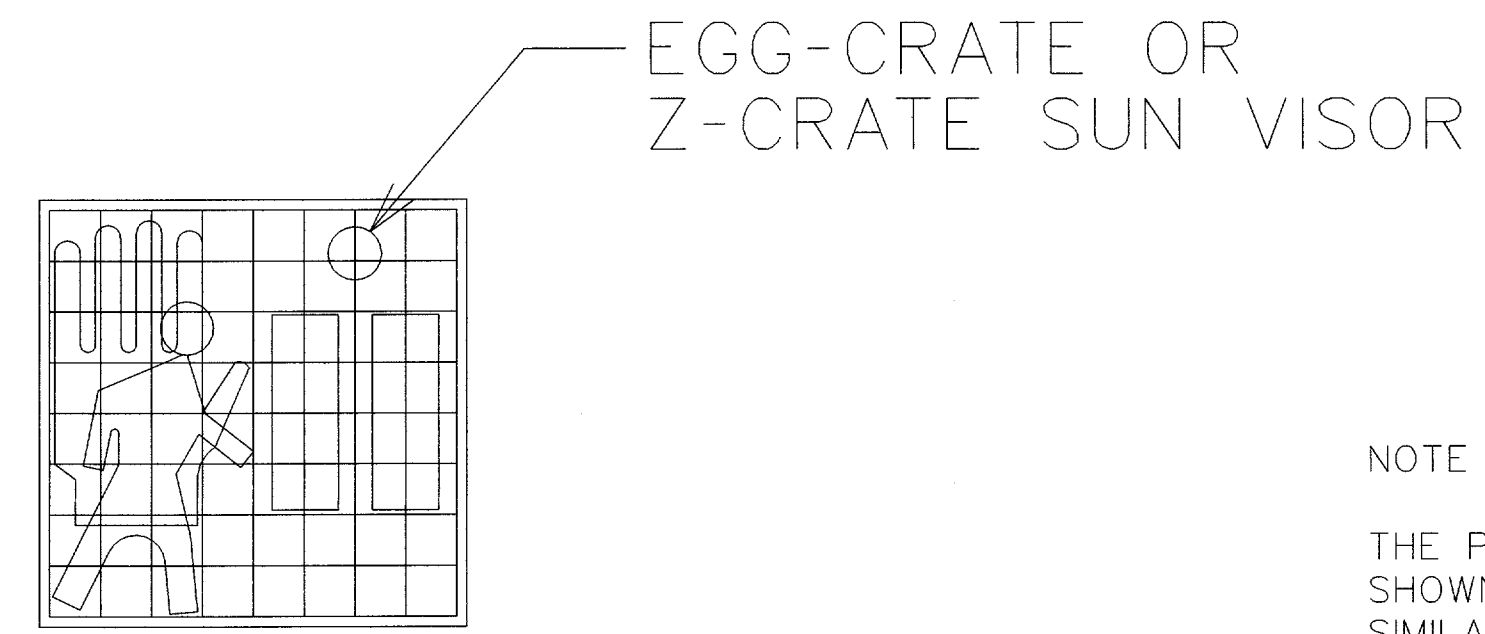


V4RT(BM)

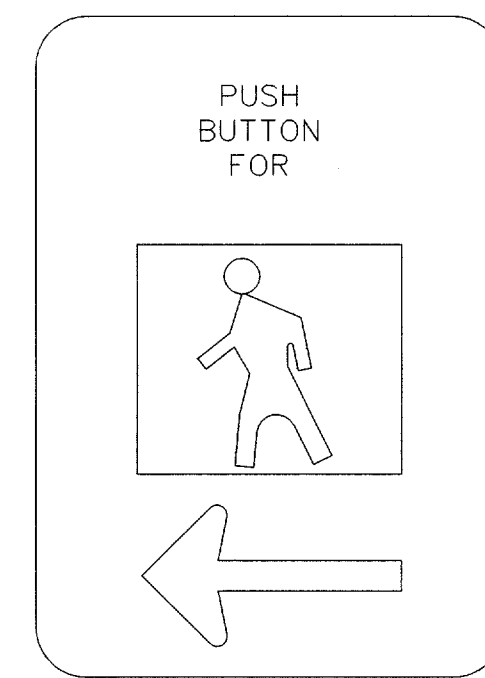


V4LT

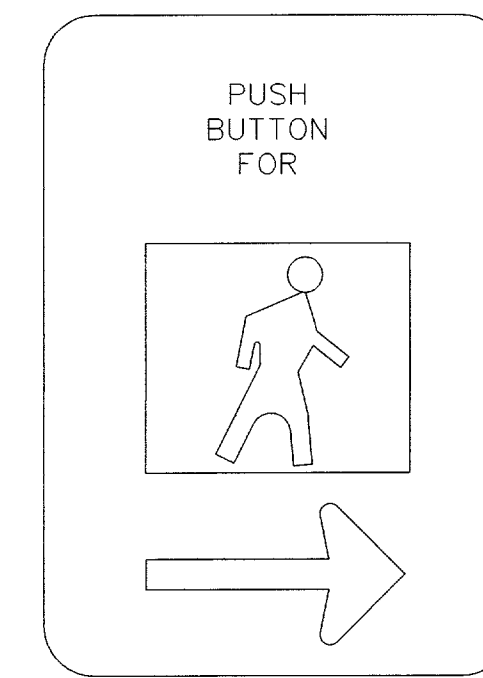
BI-MODAL GREEN/YELLOW ARROWS



PEDESTRIAN SIGNAL HEAD WITH COUNT-DOWN TIMER

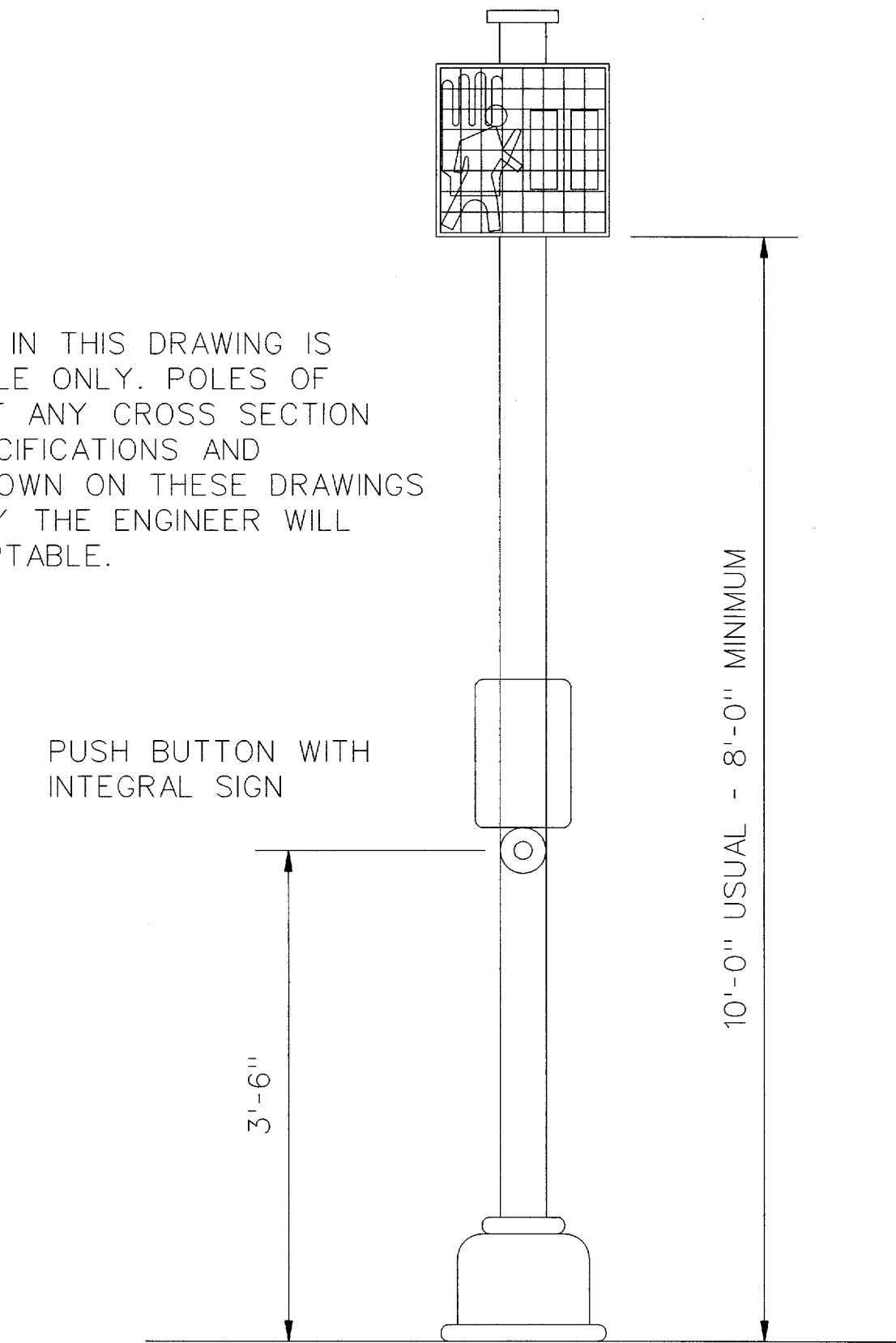


SIGN R10-4bL
9" x 12"



SIGN R10-4bR
9" x 12"

PEDESTRIAN PUSH BUTTON SIGN DETAILS



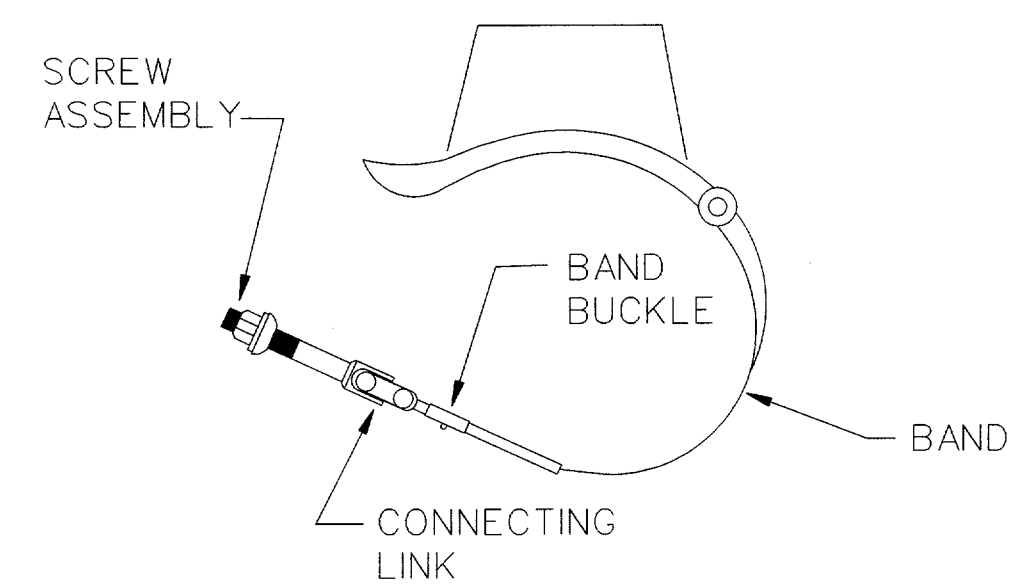
POST DETAIL

NOTE :

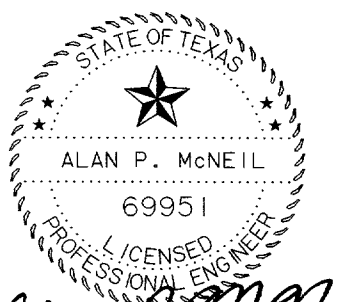
THE POLE SHOWN IN THIS DRAWING IS SHOWN AS EXAMPLE ONLY. POLES OF SIMILAR DESIGN OF ANY CROSS SECTION AND MEETING SPECIFICATIONS AND REQUIREMENTS SHOWN ON THESE DRAWINGS AND APPROVED BY THE ENGINEER WILL BE DEEMED ACCEPTABLE.

NOTES :

1. ALL VEHICLE SIGNAL HEAD LENSES SHALL BE 12" IN DIAMETER AND ALL PEDESTRIAN HEAD LENSES SHALL BE 16" x 18".
2. VEHICLE SIGNAL HEADS SHALL BE MOUNTED WITH "ASTRO BRACS" AND APPROPRIATE TUBING, PAINTED BLACK. ALL PEDESTRIAN SIGNAL HEADS SHALL BE MOUNTED WITH CLAM SHELL HARDWARE. ALL SIGNALS TO BE BLACK.
3. ALL VEHICLE SIGNAL VISORS SHALL BE TUNNEL VISORS.
4. ALL POLE MOUNTED VEHICLE AND PEDESTRIAN SIGNAL HEADS SHALL BE INSTALLED ON THE AWAY-FROM-TRAFFIC SIDE OF THE PEDESTAL OR MAST ARM POLE.
5. ALL VEHICLE SIGNAL HEADS WILL BE PROVIDED WITH BLACK 5" POLYCARBONATE VACUUM FORMED BACKPLATES.
6. ALL WIRING FOR VEHICLE AND PEDESTRIAN SIGNALS SHALL BE TOTALLY ENCLOSED WITHIN THE SIGNAL MOUNTING HARDWARE.
7. ALL MAST ARM AND POLE MOUNTED SIGNS SHALL BE MOUNTED WITH ASTRO SIGN-BRAC OR SIGNFIX ALUMINUM CHANNEL.
8. ALL PEDESTRIAN SIGNAL HEADS AND PUSH BUTTON SIGNS SHALL DISPLAY THE SYMBOLIZED MESSAGES SHOWN ON THIS SHEET (A.D.A. APPROVED).
9. SYMBOLIZED MESSAGE HEIGHT SHALL BE 10 INCHES MINIMUM.
10. PROVIDE LED LAMPS IN ALL VEHICLE AND PEDESTRIAN SIGNALS.
11. PROVIDE LED LAMPED COUNT DOWN ASSEMBLIES IN ALL PEDESTRIAN SIGNALS.



ASTRO BRAC



Alan P. McNeil
5/12/03



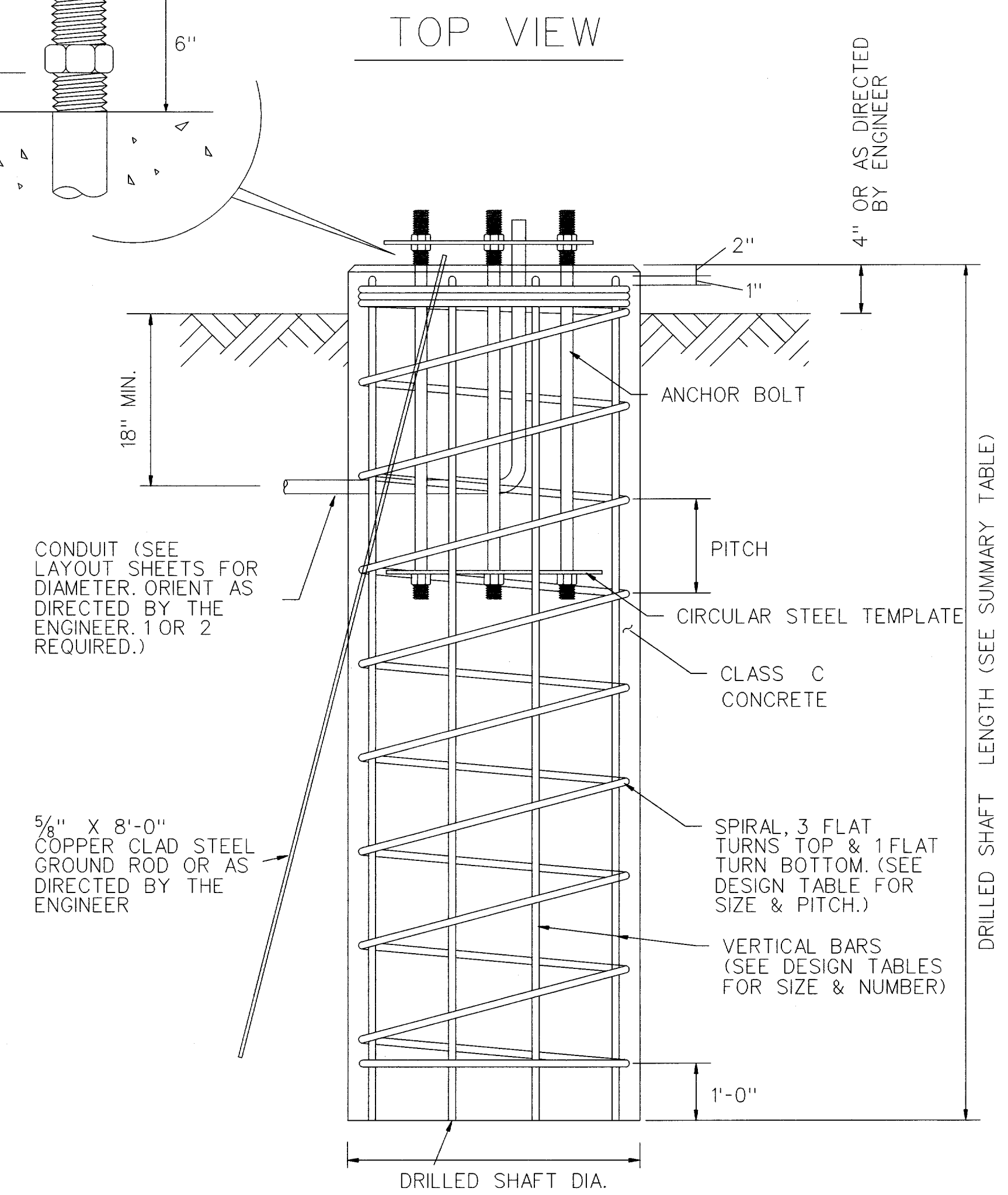
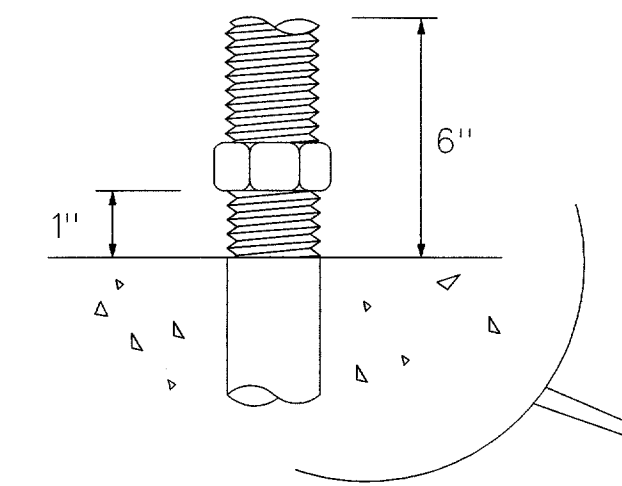
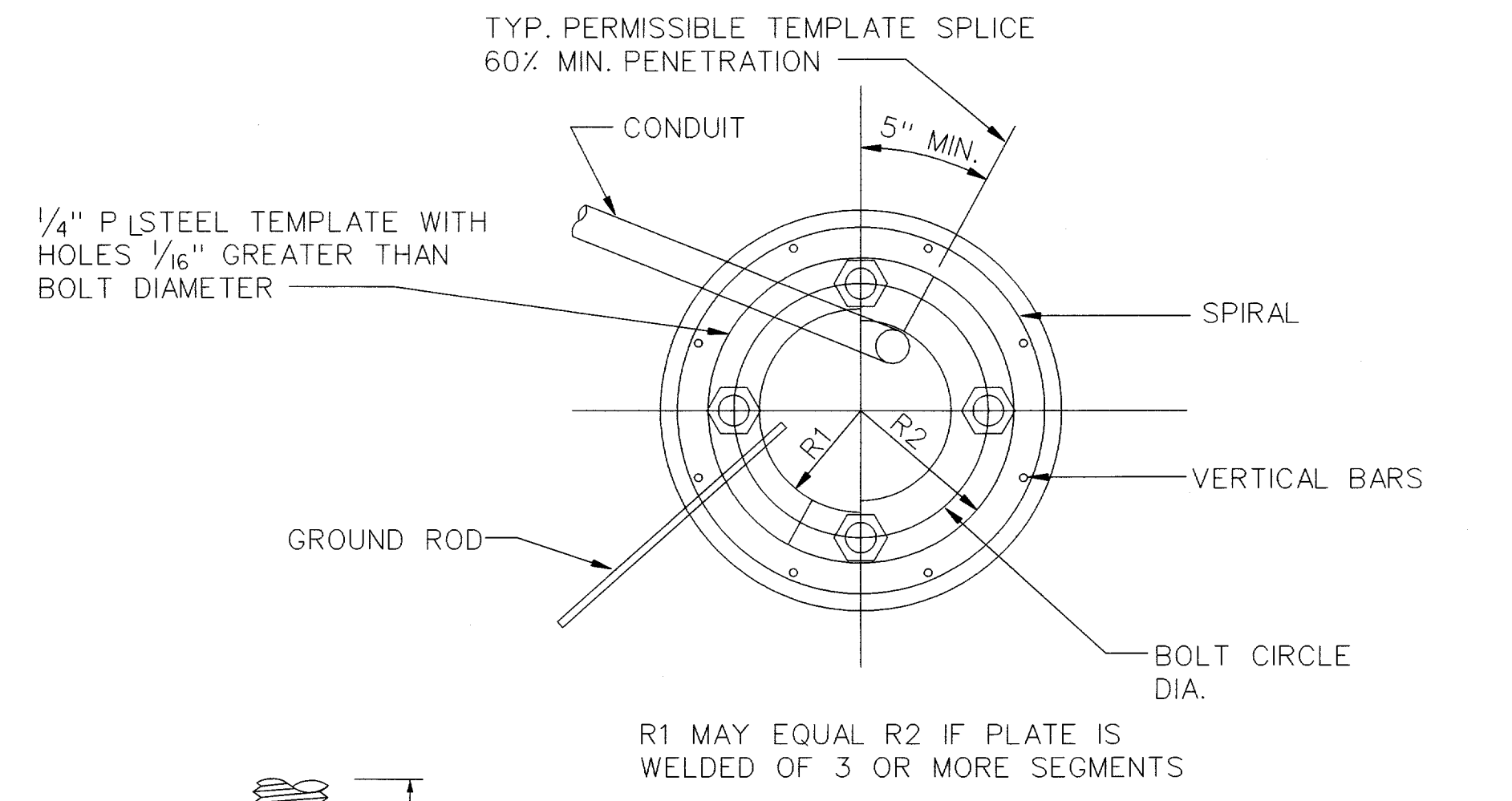
15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900

TRAFFIC SIGNAL HEAD DETAILS

INWOOD CONNECTION

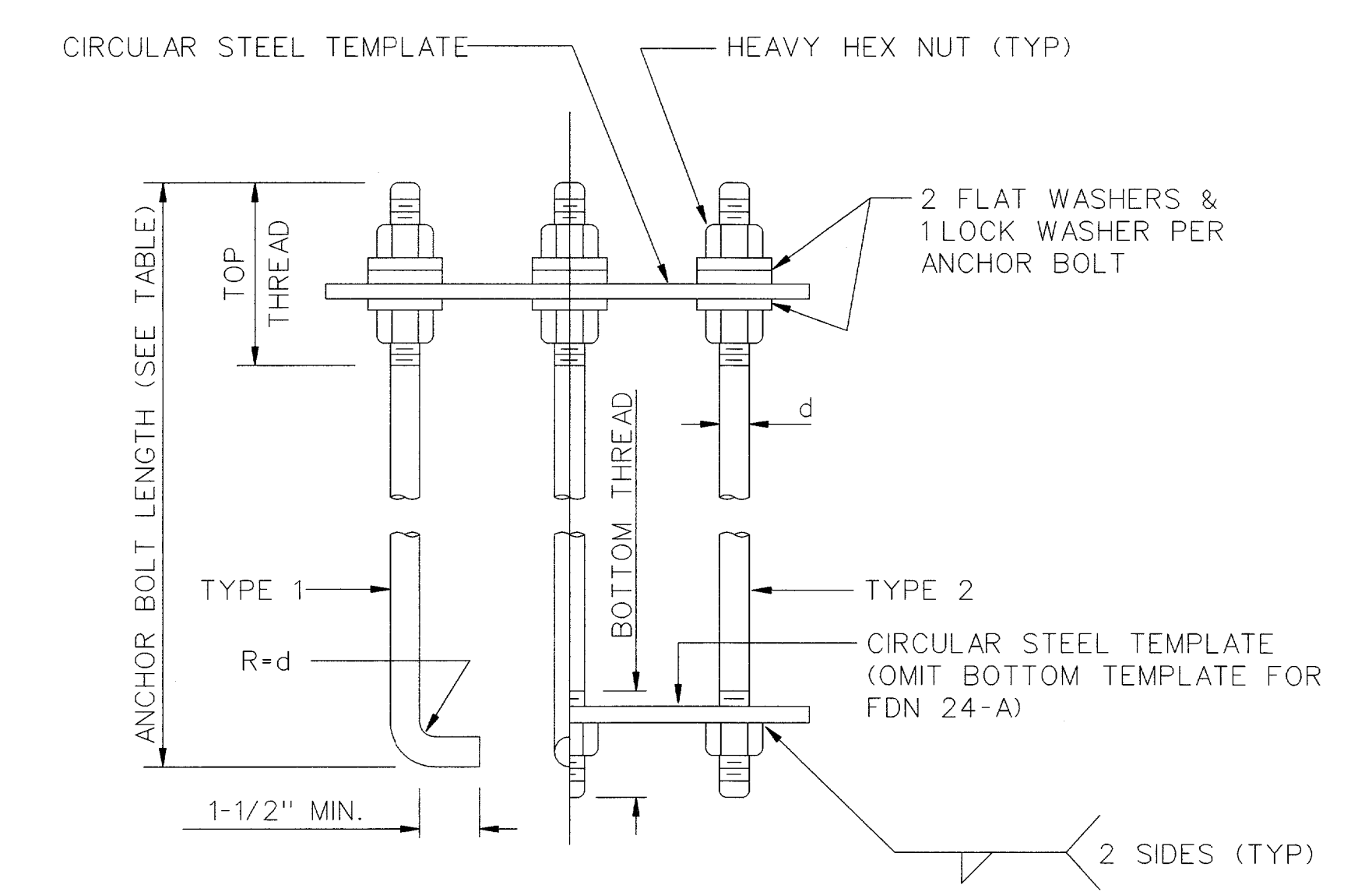
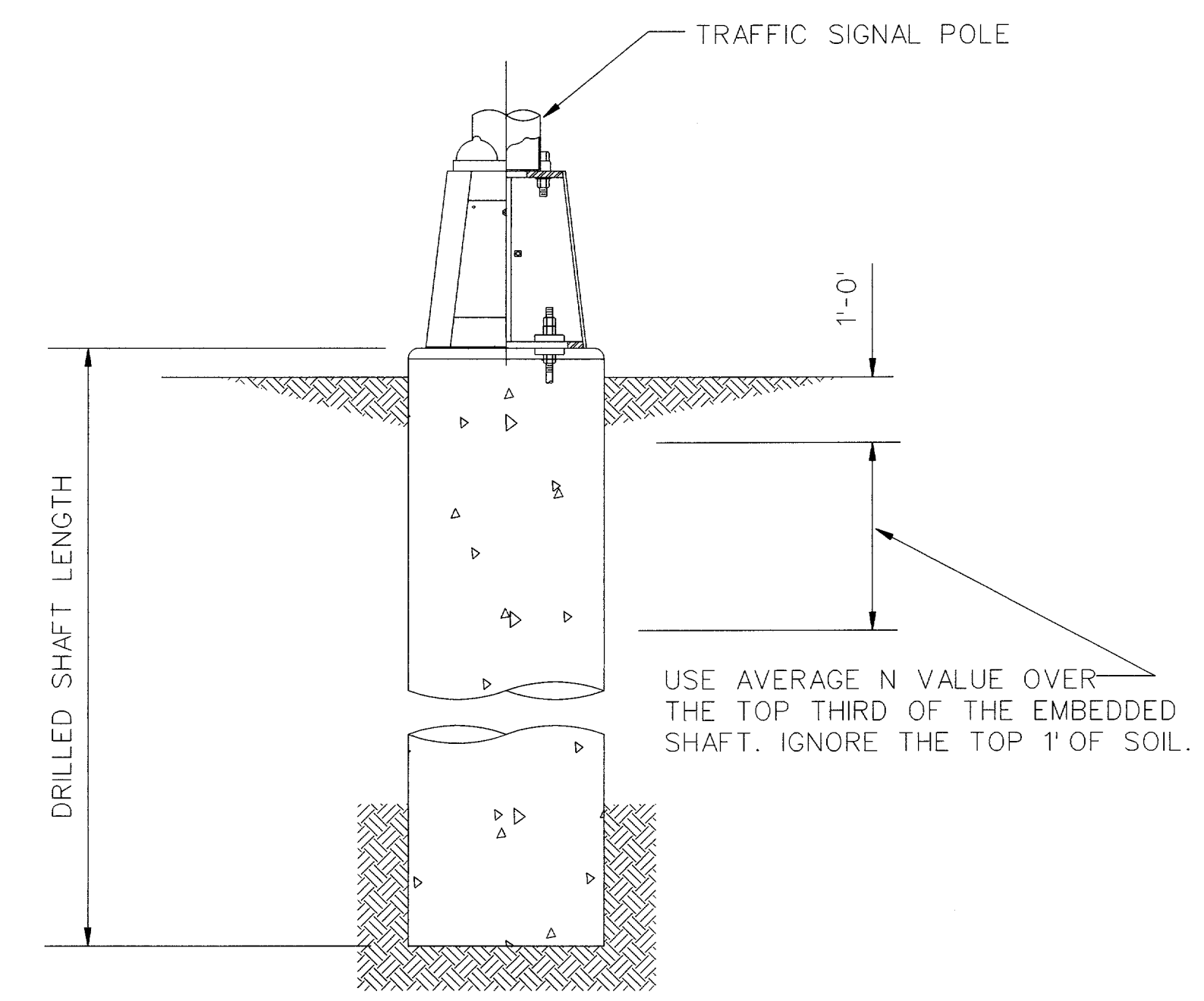
DEPARTMENT OF PUBLIC WORKS
TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
A.P.M.	C.W.W.	05/12/03				28



VERTICAL BARS MAY REST ON BOTTOM OF DRILLED HOLE IF MATERIAL IS FIRM ENOUGH TO DO SO WHEN CONCRETE IS PLACED

FOUNDATION DETAILS



HOOKED ANCHOR (TYPE 1) NUT ANCHOR (TYPE 2)

ANCHOR BOLT ASSEMBLY

BOLT DIAMETER	*BOLT LENGTH	TOP THREAD	BOTTOM THREAD	BOLT CIRCLE	R2	R1
3/4"	1'-6"	3"	-	12-3/4"	7-1/8"	5-5/8"
1-1/2"	3'-4"	6"	2"	17"	10"	7"
1-3/4"	3'-10"	7"	2-1/4"	19"	11-1/4"	7-3/4"
2"	4'-3"	8"	2-1/2"	21"	12-1/2"	8-1/2"

* MINIMUM DIMENSIONS GIVEN, LONGER BOLTS ARE ACCEPTABLE

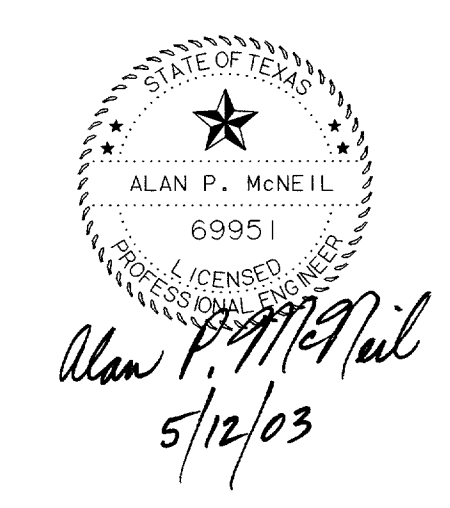
INSTALLATION PROCEDURE :

THREADS OF ANCHOR BOLTS SHALL BE COATED WITH PIPE JOINT COMPOUND PRIOR TO INSTALLATION OF UPPER NUTS WHEN ERECTING POLE. AFTER POLE IS PLUMBED AND IN PERMANENT ALIGNMENT, THE EXPOSED THREADS OF PAINTED BOLTS SHALL BE CLEANED AND AN ADDITIONAL COATING OF ZINC-RICH PAINT APPLIED TO SEAL THE BOLT THREAD-NUT JOINT.

FDN TYPE	DRILLED SHAFT DIA	REINFORCING STEEL		DRILLED SHAFT LENGTH-ft (3), (4), (5)			ANCHOR BOLT DESIGN (1)				FOUNDATION DESIGN LOAD (2)	
		VERT BARS	SPIRAL & PITCH	TEXAS CONE PENETROMETER N blows/ft			ANCHOR BOLT DIA	Fy (ksi)	BOLT CIR DIA	ANCHOR TYPE	MOMENT K-ft	SHEAR Kips
				10	15	40						
24-A	24"	4-#5	#2 at 12"	5.7	5.3	4.5	3/4"	36	12 3/4"	1	10	1
30-A	30"	8-#9	#3 at 6"	11.3	10.3	8.0	1 1/2"	55	17"	2	87	3
36-A	36"	10-#9	#3 at 6"	13.2	12.0	9.4	1 3/4"	55	19"	2	131	5
36-B	36"	12-#9	#3 at 6"	15.2	13.6	10.4	2 "	55	21"	2	190	7

NOTES :

- (1) ANCHOR BOLT DESIGN DEVELOPS THE FOUNDATION CAPACITY GIVEN UNDER FOUNDATION DESIGN LOADS.
- (2) FOUNDATION DESIGN LOADS ARE THE ALLOWABLE MOMENTS AND SHEARS AT THE BASE OF THE STRUCTURE.
- (3) FIELD PENETROMETER READINGS AT A DEPTH OF APPROXIMATELY 3 TO 5 FEET MAY BE USED TO ADJUST SHAFT LENGTHS.
- (4) IF ROCK IS ENCOUNTERED, THE DRILL SHAFT SHALL EXTEND A MINIMUM OF TWO DIAMETERS INTO SOLID ROCK.
- (5) DECIMAL LENGTHS IN DESIGN TABLE ARE TO ALLOW INTERPOLATION FOR OTHER PENETROMETER VALUES.



PARSONS
15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900

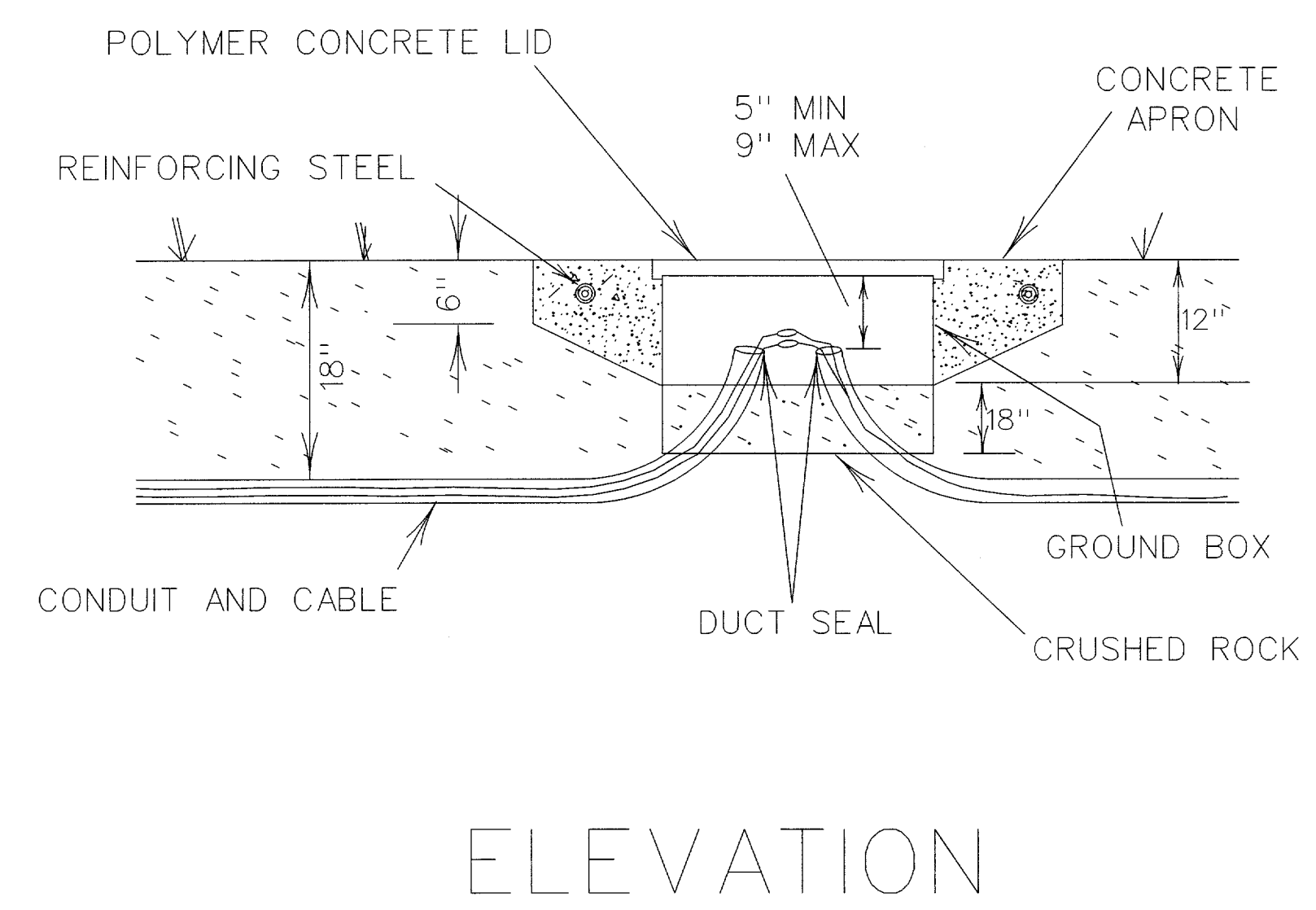
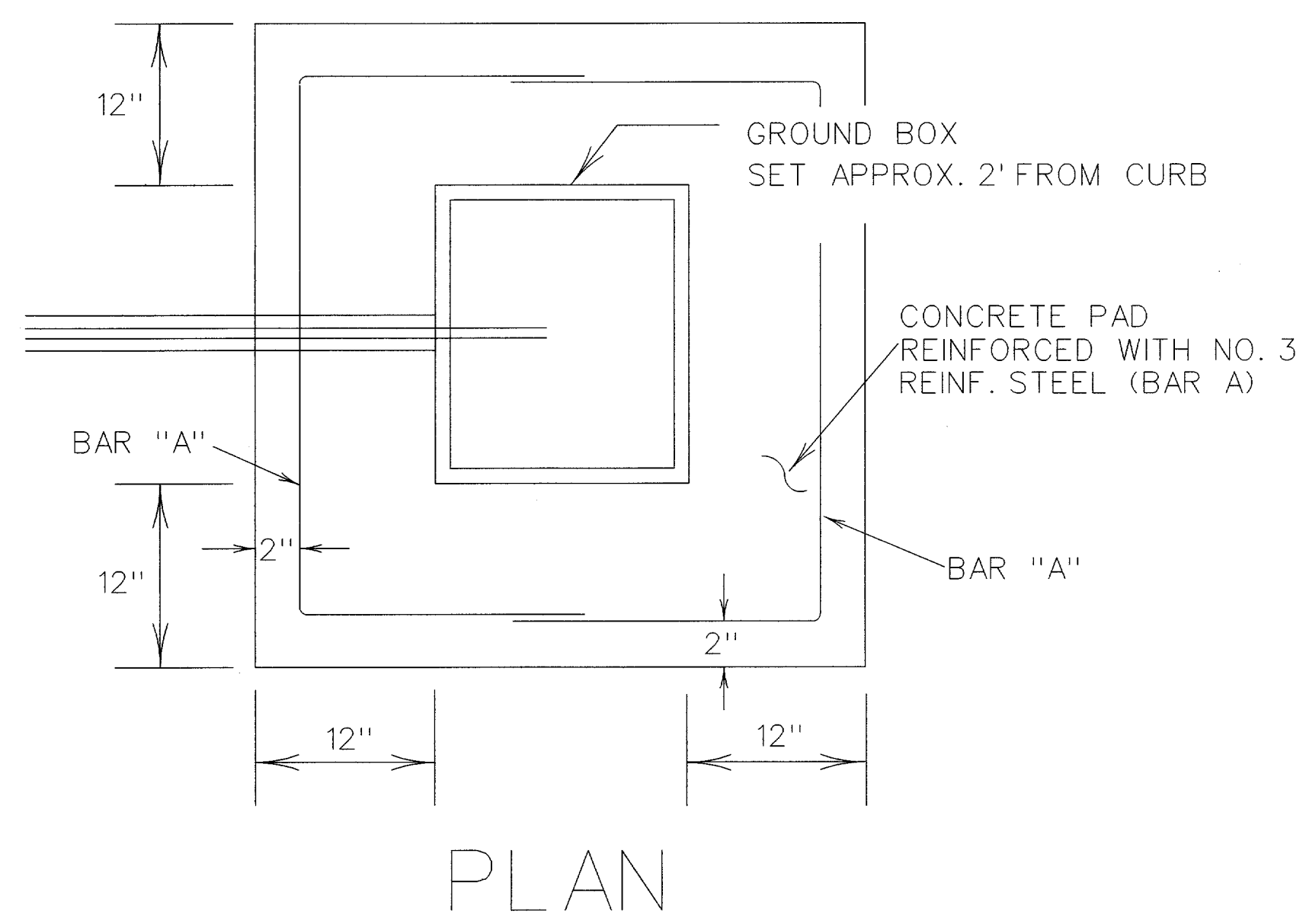
TRAFFIC SIGNAL POLE FOUNDATIONS

INWOOD CONNECTION

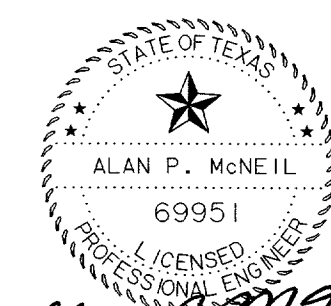
DEPARTMENT OF PUBLIC WORKS

TOWN OF ADDISON, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
A.P.M.	C.W.W.	05/12/03				29



GROUND BOX INSTALLATION DETAILS



Alan P. McNeil
5/12/03

PARSONS

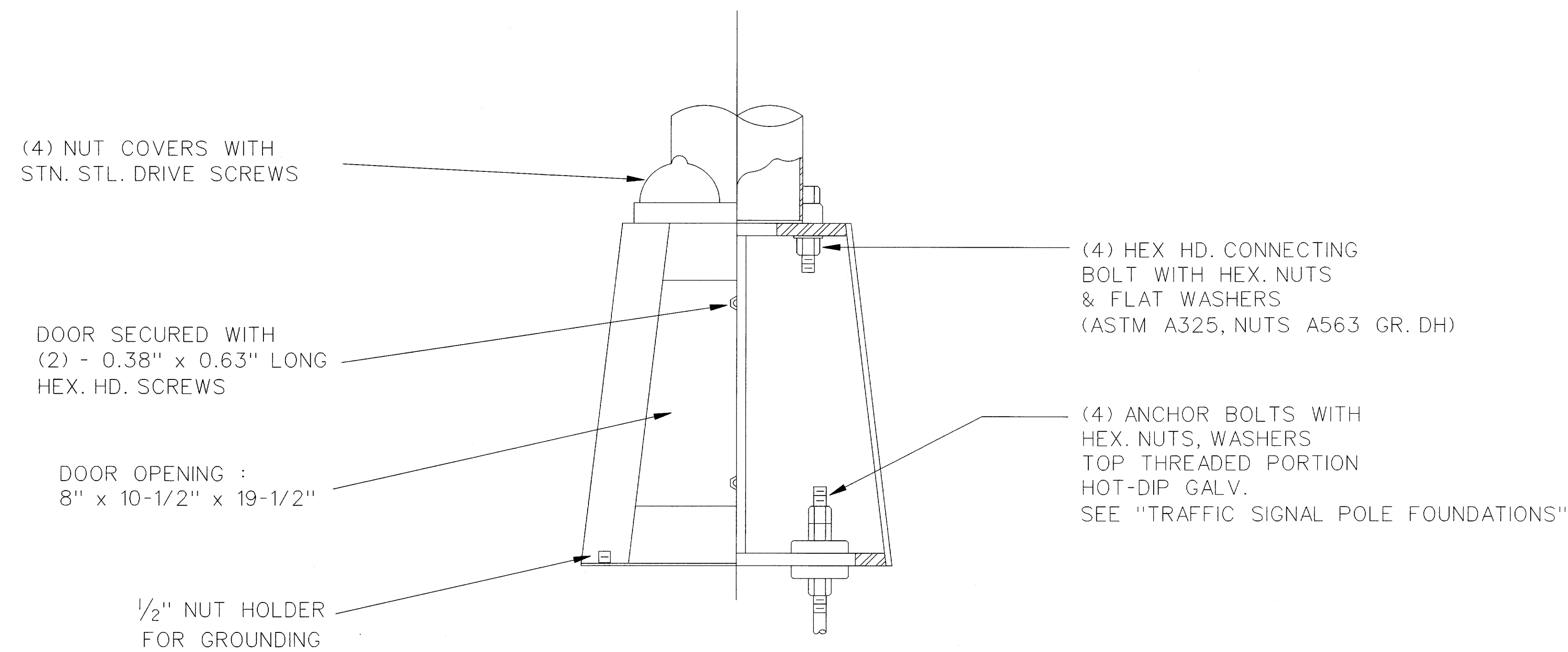
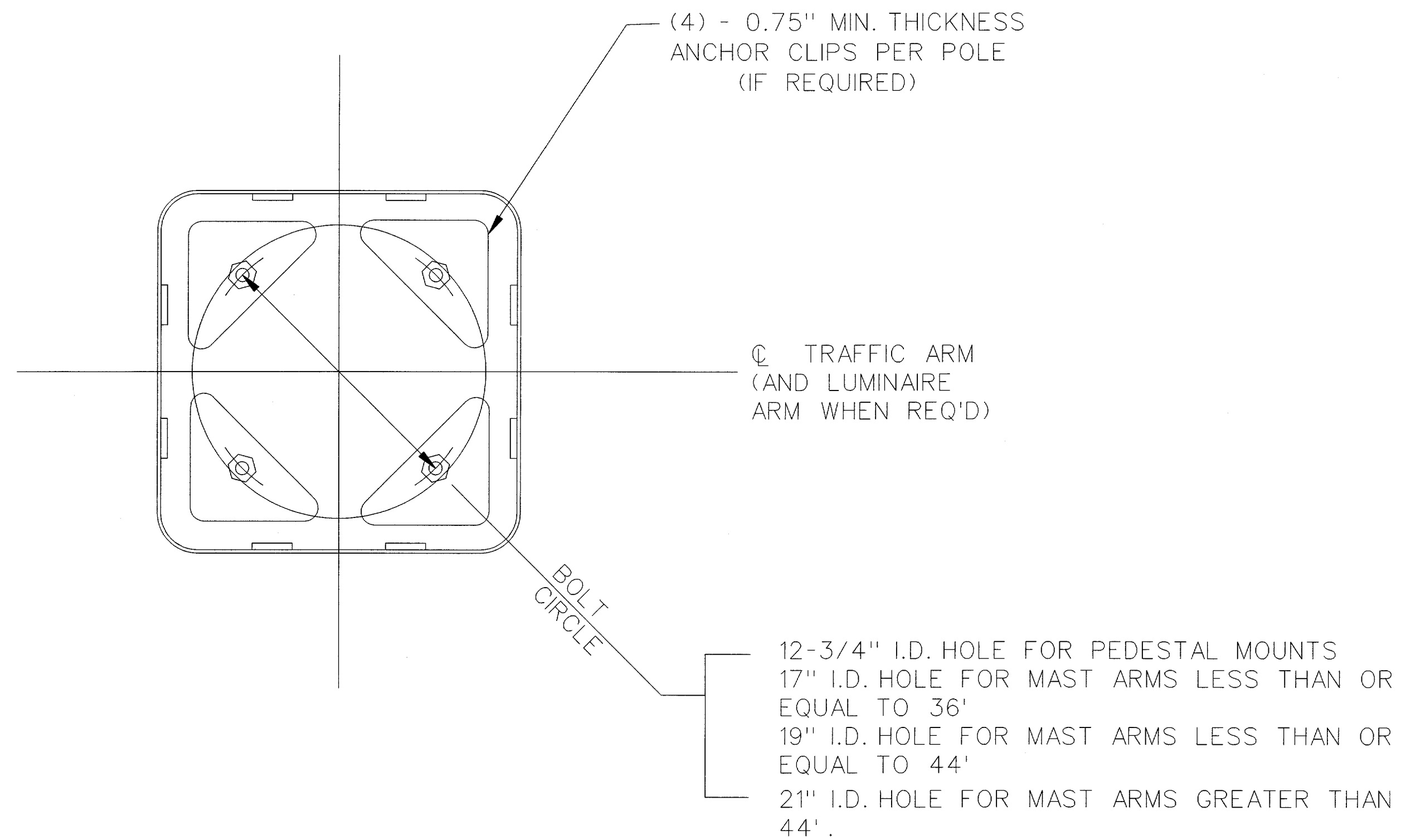
15770 N DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900

**GROUND BOX
INSTALLATION DETAILS**

INWOOD CONNECTION

**DEPARTMENT OF PUBLIC WORKS
TOWN OF ADDISON, TEXAS**

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
A.P.M.	C.W.W.	05/12/03				30



TRANSFORMER BASE MOUNTING DETAILS



Alan P. McNeil
5/12/03

PARSONS <small>15770 N. DALLAS PARKWAY, SUITE 500, DALLAS, TEXAS 75248 (972)991-1900</small>						
TRANSFORMER BASE DETAILS FOR SIGNAL POLES						
INWOOD CONNECTION						
DEPARTMENT OF PUBLIC WORKS						
TOWN OF ADDISON, TEXAS						
DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	NUMBER
A.P.M.	C.W.W.	05/12/03				31