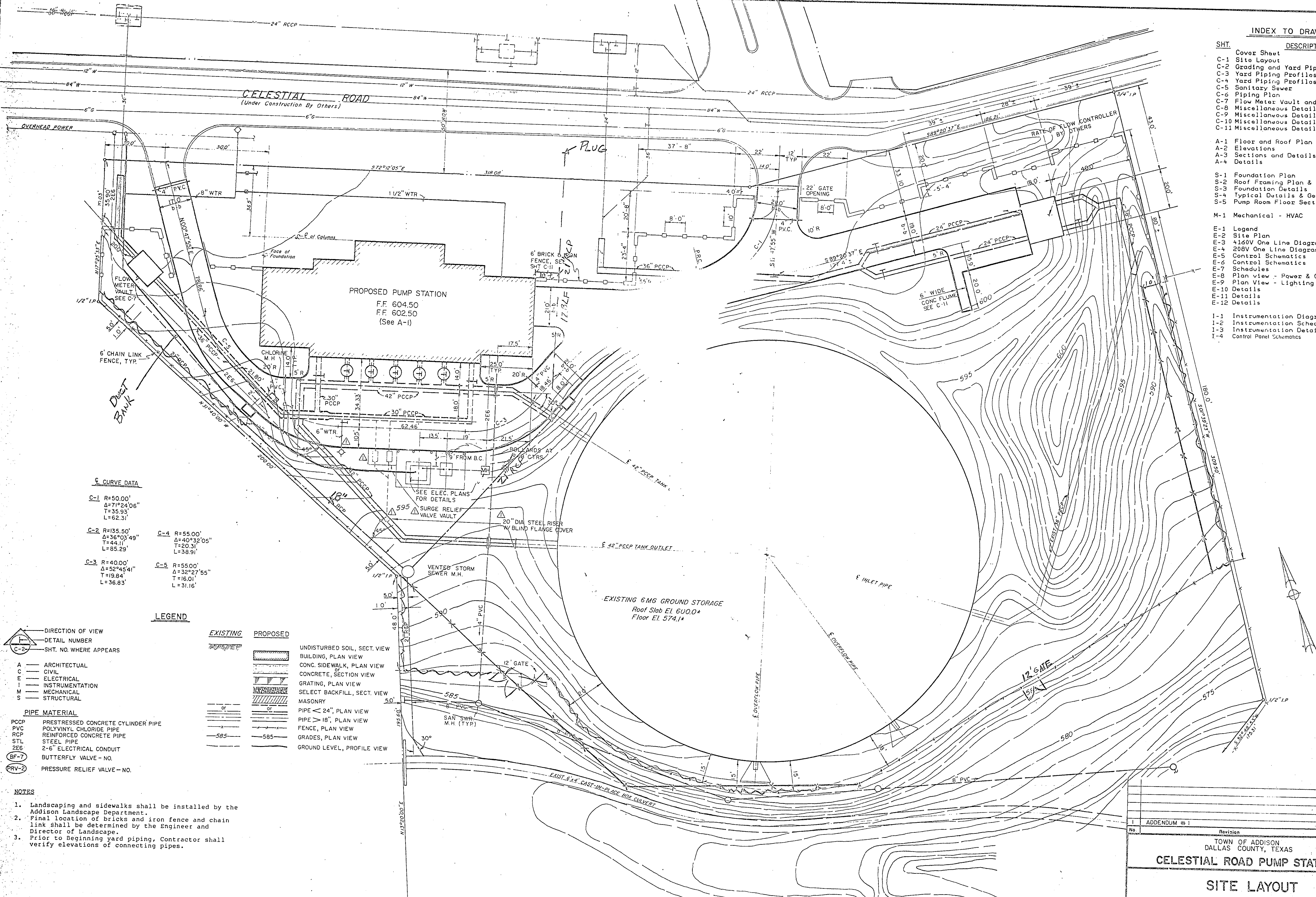


INDEX TO DRAWINGS

SHT.	DESCRIPTION
Cover Sheet	
C-1	Site Layout
C-2	Grading and Yard Piping Plan
C-3	Yard Piping Profiles
C-4	Sanitary Sewer
C-5	Piping Plan
C-6	Flow Meter Vault and Details
C-7	Miscellaneous Details - Paving
C-8	Miscellaneous Details - Drainage
C-9	Miscellaneous Details - Water
C-10	Miscellaneous Details - Site Work
A-1	Floor and Roof Plan
A-2	Elevations
A-3	Sections and Details
A-4	Details
S-1	Foundation Plan
S-2	Roof Framing Plan & Framing Details
S-3	Foundation Details
S-4	Typical Details & General Notes
S-5	Pump Room Floor Sections & Details
M-1	Mechanical - HVAC
E-1	Legend
E-2	Site Plan
E-3	4160V One Line Diagram
E-4	208V One Line Diagram
E-5	Control Schematics
E-6	Control Schematics
E-7	Schedules
E-8	Plan view - Power & Control
E-9	Plan view - Lighting & HVAC
E-10	Details
E-11	Details
E-12	Details
I-1	Instrumentation Diagram
I-2	Instrumentation Schedules
I-3	Instrumentation Details
I-4	Control Panel Schematics



CURVE DATA

C-1	R=50.00' Δ=71°24'06" T=35.93' L=62.31'
C-2	R=135.50' Δ=36°03'49" T=44.11' L=85.29'
C-3	R=40.00' Δ=52°45'41" T=19.84' L=36.83'
C-4	R=55.00' Δ=40°32'05" T=20.31' L=38.91'
C-5	R=55.00' Δ=32°27'55" T=16.01' L=31.16'

LEGEND

EXISTING	PROPOSED	DESCRIPTION
(Symbol)	(Symbol)	UNDISTURBED SOIL, SECT. VIEW
(Symbol)	(Symbol)	BUILDING, PLAN VIEW
(Symbol)	(Symbol)	CONC. SIDEWALK, PLAN VIEW
(Symbol)	(Symbol)	CONCRETE, SECTION VIEW
(Symbol)	(Symbol)	GRATING, PLAN VIEW
(Symbol)	(Symbol)	SELECT BACKFILL, SECT. VIEW
(Symbol)	(Symbol)	MASONRY
(Symbol)	(Symbol)	PIPE < 24", PLAN VIEW
(Symbol)	(Symbol)	PIPE > 18", PLAN VIEW
(Symbol)	(Symbol)	FENCE, PLAN VIEW
(Symbol)	(Symbol)	GRADES, PLAN VIEW
(Symbol)	(Symbol)	GROUND LEVEL, PROFILE VIEW

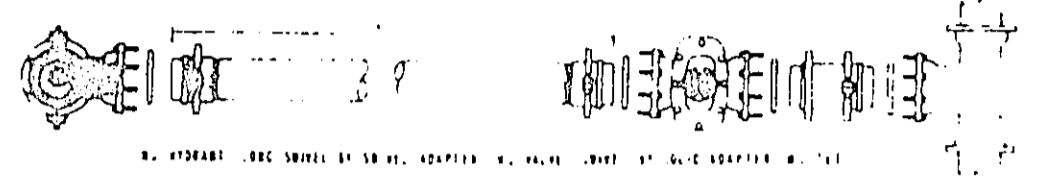
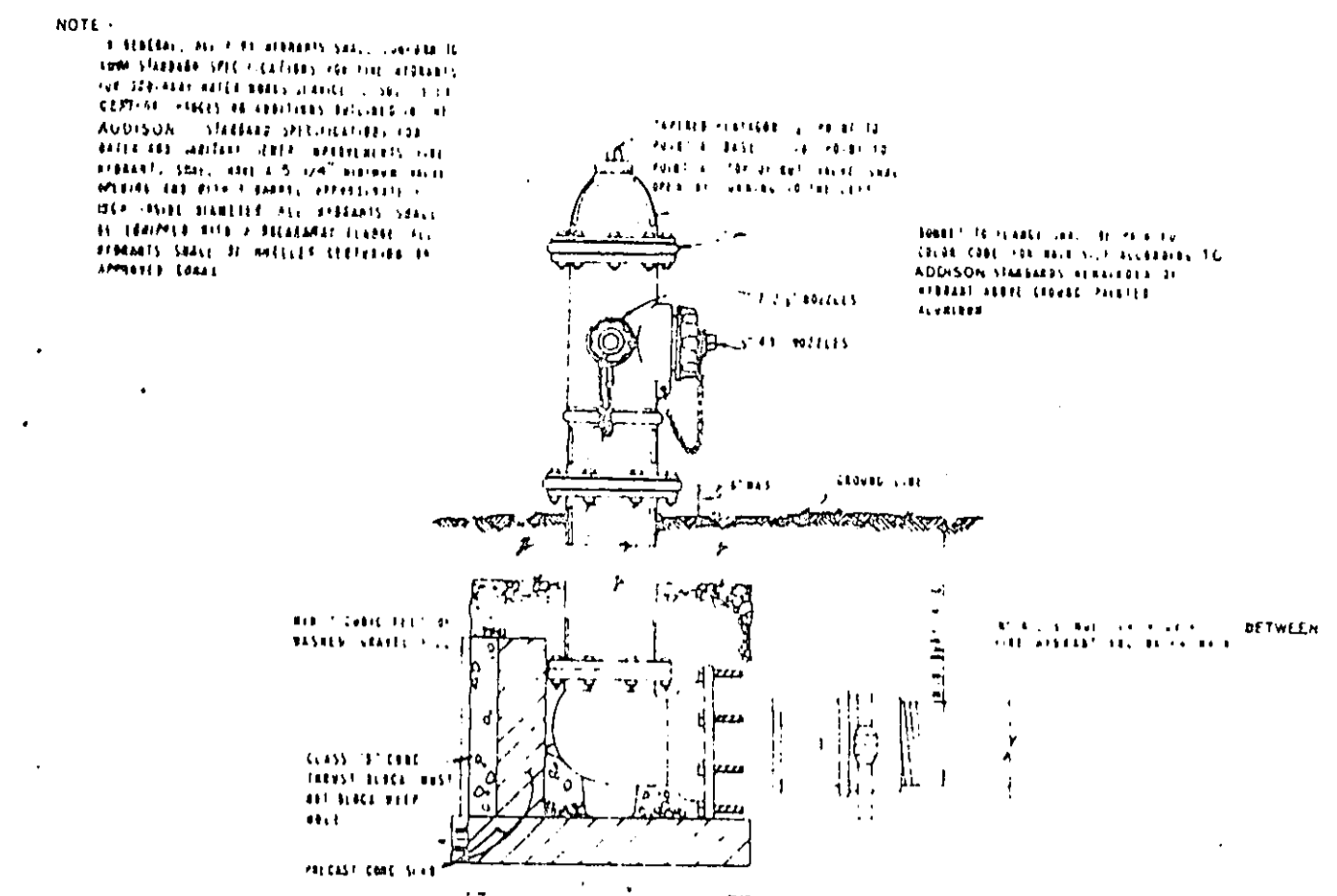
PIPE MATERIAL

PCCP	PRESTRESSED CONCRETE CYLINDER PIPE
PVC	POLYVINYL CHLORIDE PIPE
RCP	REINFORCED CONCRETE PIPE
STL	STEEL PIPE
2EG	2-6" ELECTRICAL CONDUIT
BF-7	BUTTERFLY VALVE - NO.
PRV-2	PRESSURE RELIEF VALVE - NO.

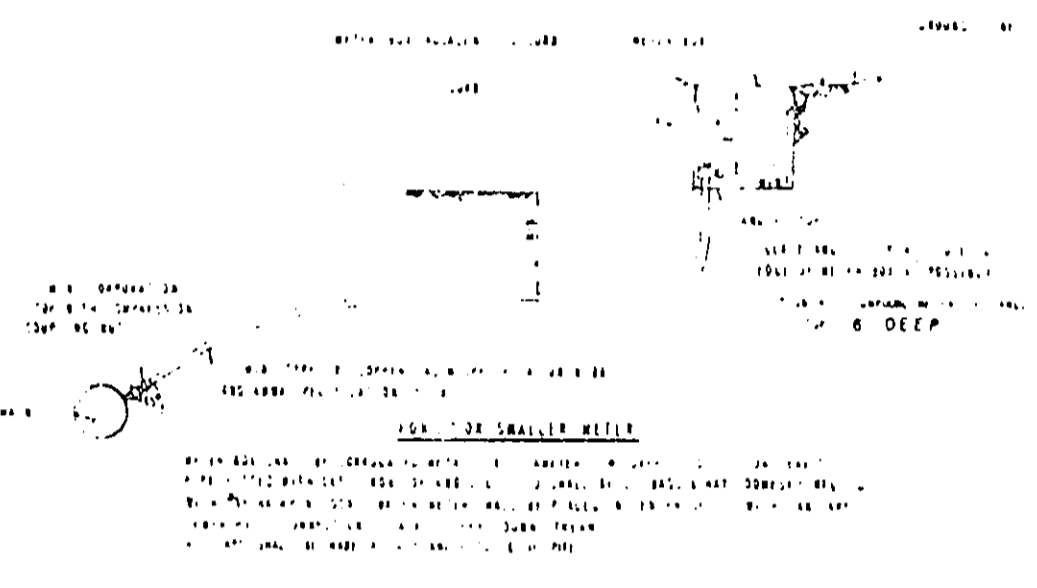
- NOTES**
- Landscaping and sidewalks shall be installed by the Addison Landscape Department.
 - Final location of bricks and iron fence and chain link shall be determined by the Engineer and Director of Landscape.
 - Prior to beginning yard piping, Contractor shall verify elevations of connecting pipes.

ADDENDUM #1		RCH	3-20-87
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
CELESTIAL ROAD PUMP STATION			
SITE LAYOUT			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RCH	Drawn - GAP	Date - JAN, 1987	Job No. - 217
Approved - HWG	Checked - GAF	Scale - 1"=20'	Sheet C-1 OF

Randall C. Hill
2-19-1987

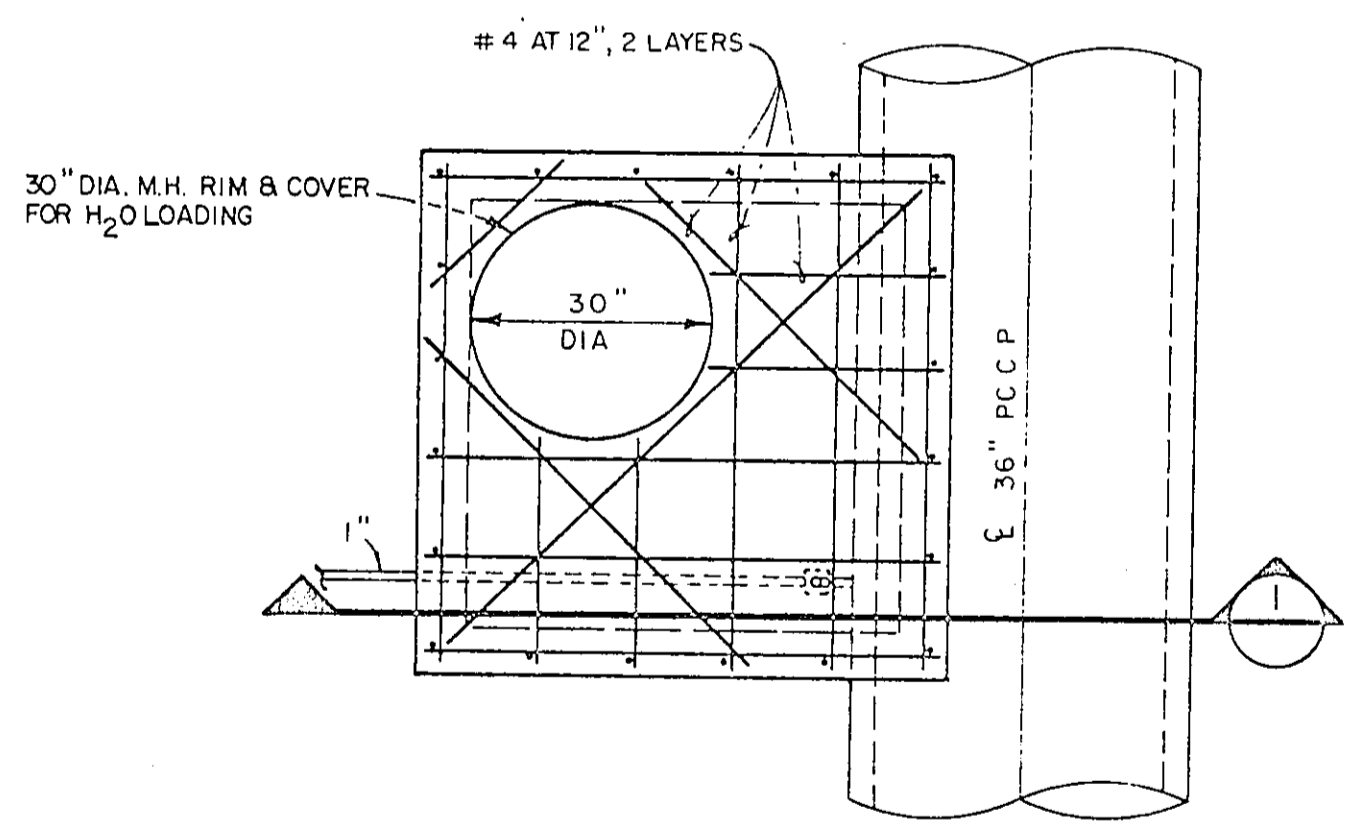


TYPICAL FIRE HYDRANT INSTALLATION

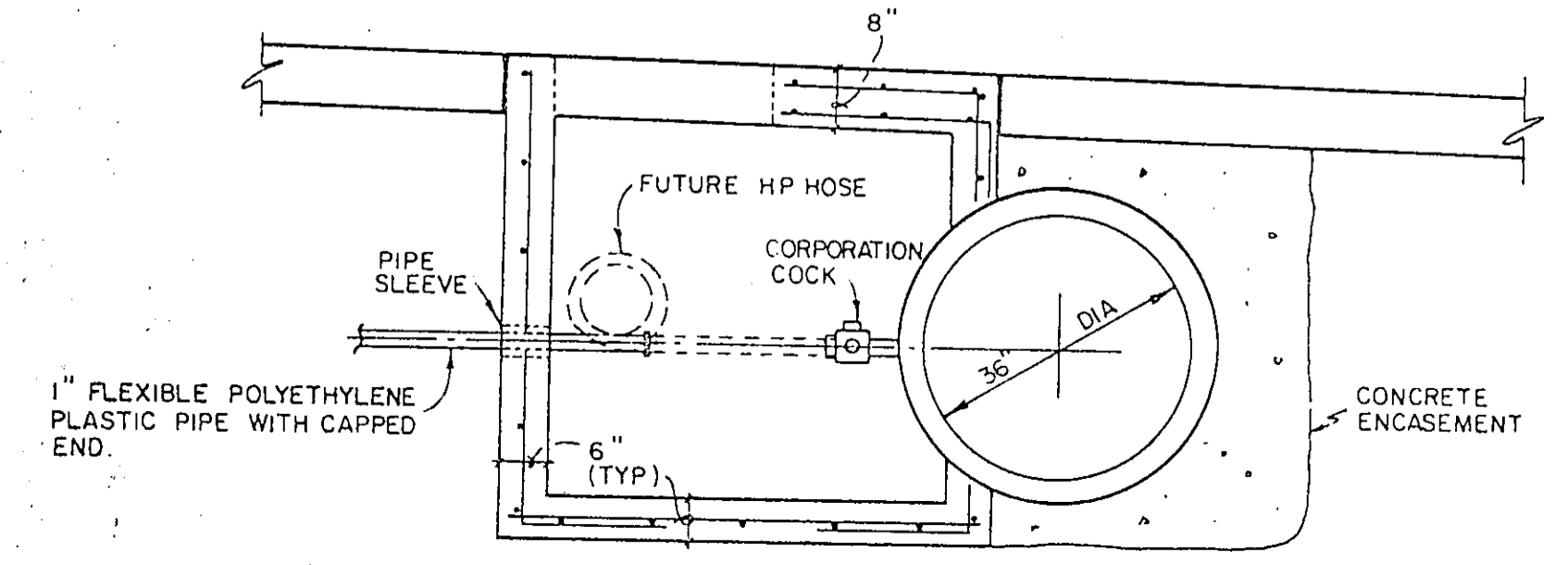


TYPICAL SERVICE CONNECTION WITH METER BOX

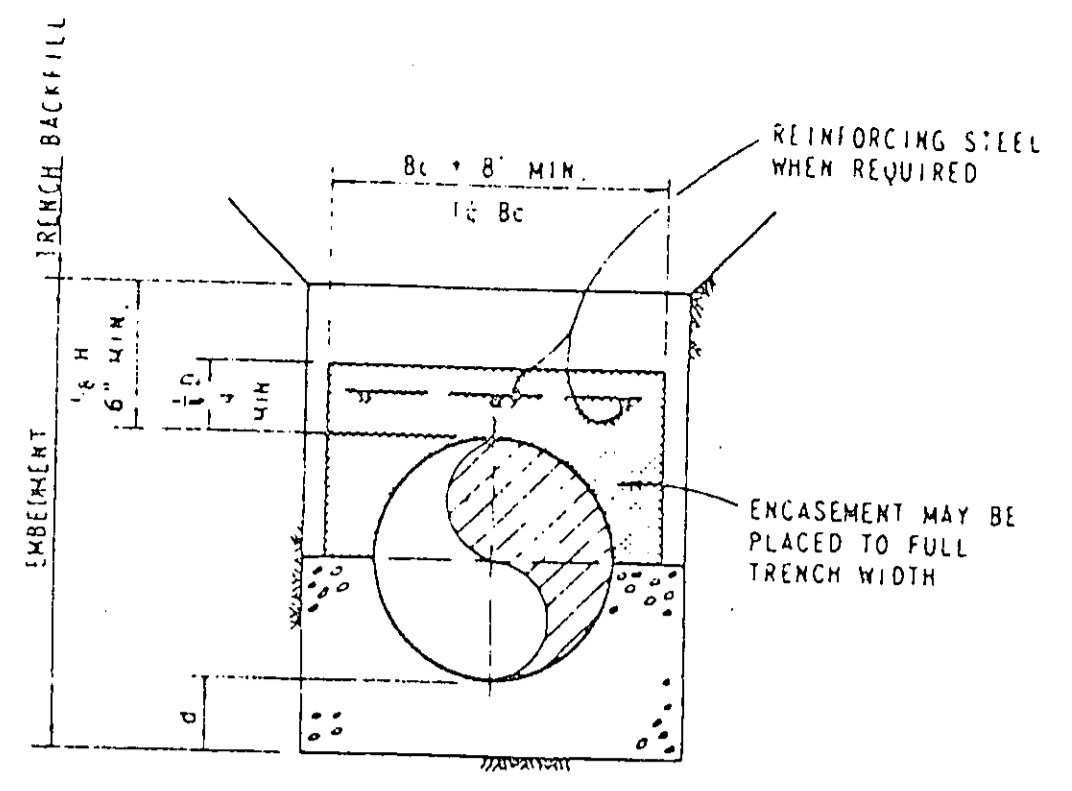
PIPE SIZE	VALVE SIZE	VALVE TYPE	VALVE POSITION	VALVE TYPE	VALVE POSITION
1/2"	1/2"	1/2"	1/2"	1/2"	1/2"
3/4"	3/4"	3/4"	3/4"	3/4"	3/4"
1"	1"	1"	1"	1"	1"
1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"	1 1/2"
2"	2"	2"	2"	2"	2"



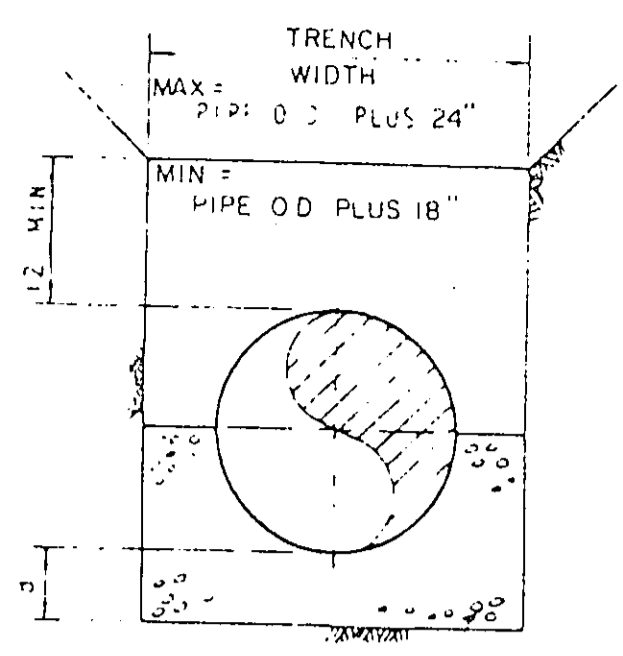
PLAN - CHLORINE M.H.
SCALE - 1/2" = 1'-0"



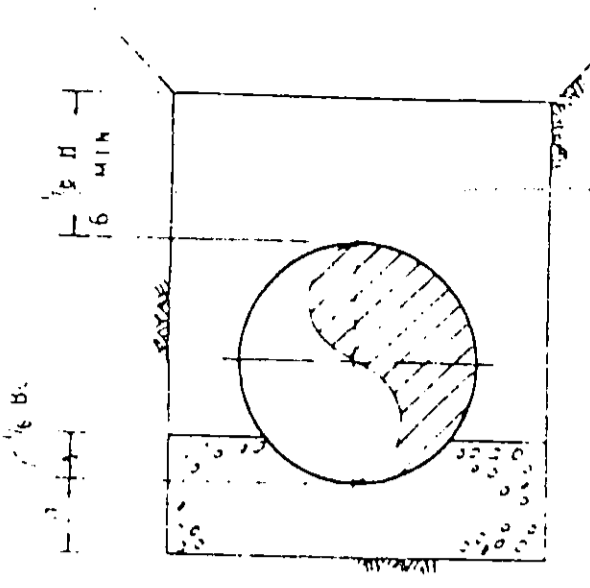
SECTION
SCALE - 1/2" = 1'-0"



CLASS A
REINFORCED $A_s = 1.0\%$ $L = 4.8$
REINFORCED $A_s = 0.4\%$ $L = 3.4$
PLAIN $L = 2.8$



CLASS B
 $L = 1.9$

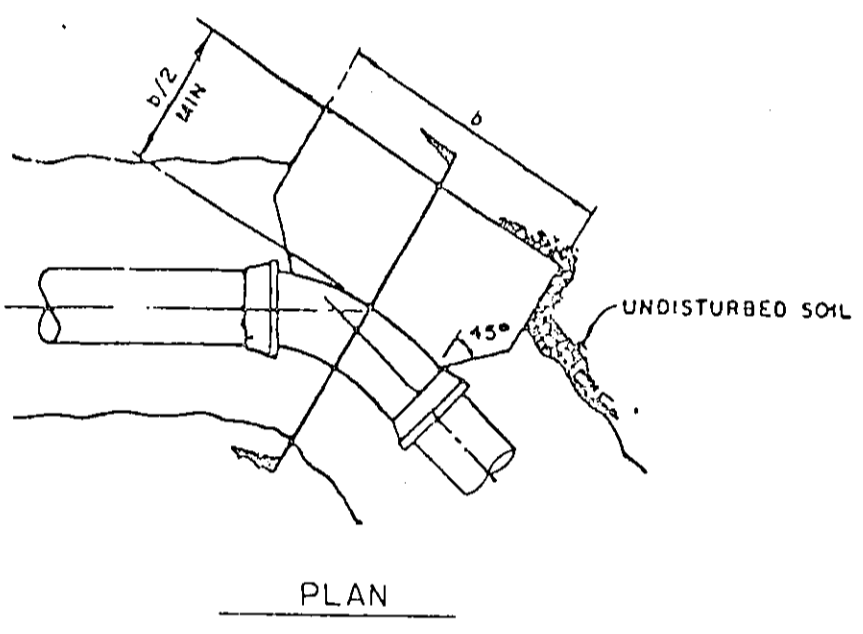


CLASS C
 $L = 1.5$

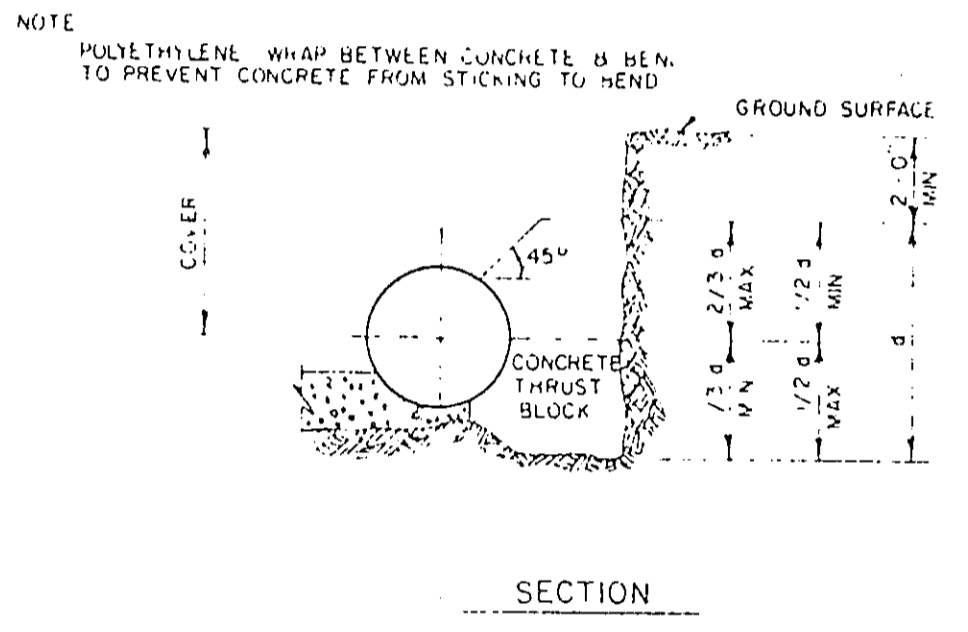
EMBEDMENT NOTES

1. GRANULAR EMBEDMENT SHALL BE CRUSHED 40% OR PER GRAVEL WITH NOT LESS THAN 95% PASSING #10 FOR 30" & LARGER PIPE & NOT LESS THAN 95% RETAINED ON #20. EMBEDMENT SHALL BE PLACED IN NOT MORE THAN 3 THICK LAYERS & COMPACTED BY SLICING WITH A SHOVEL OR
2. COMPACTED EMBEDMENT SHALL BE FINELY DIVIDED JOB EXCAVATION MATERIALS FREE FROM DEBRIS, ORGANIC MATERIALS & ROCKS PLACED IN UNIFORM LAYERS NOT MORE THAN 8" THICK & COMPACT TO 95% MAXIMUM DENSITY AS DETERMINED BY ASTM D698
3. TRENCH WIDTH, IF ACTUAL TRENCH WIDTH IS GREATER THAN MAXIMUM PERMITTED, THEN CONTRACTOR SHALL PROVIDE NEXT HIGHER CLASS OF EMBEDMENT AS APPROVED BY ENGINEER

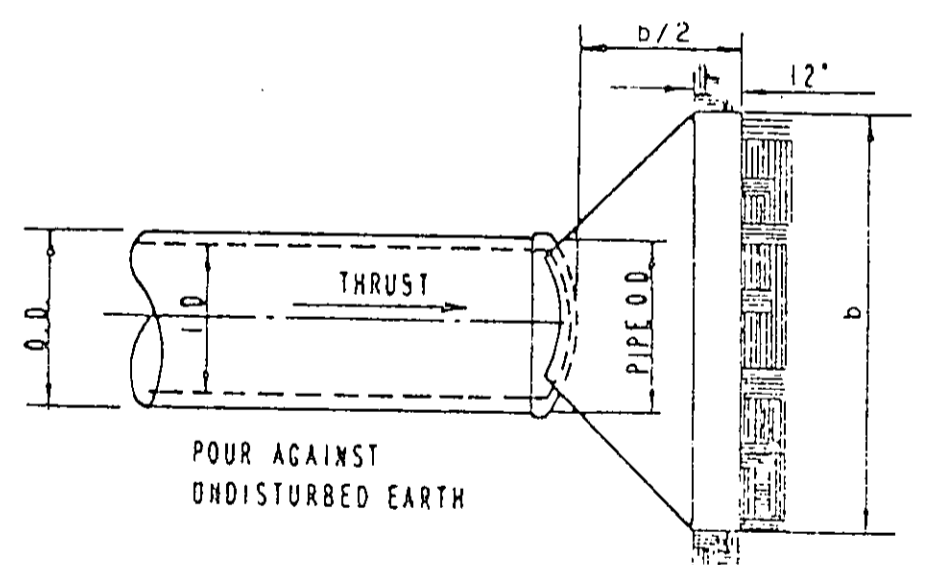
EMBEDMENT FOR P.C.C.P. PIPE



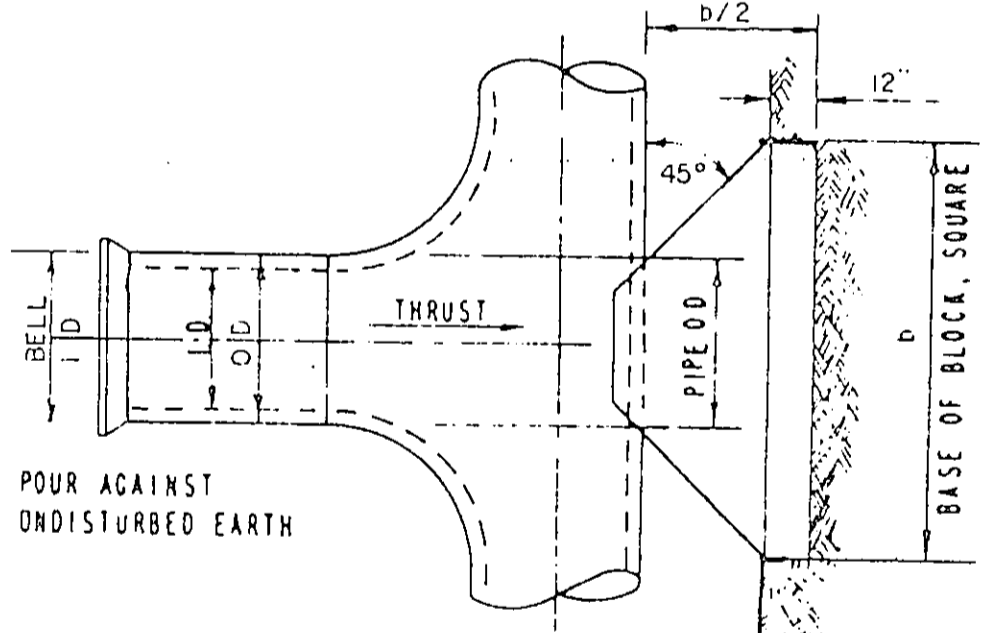
PLAN



SECTION



PLAN OF PLUG THRUST BLOCK



PLAN OF TEE THRUST BLOCK

NOTES:

1. Thrust shall be computed as follows:
Thrust at plug or tee: $T = 0.79 D^2 P$
Thrust at bends: $T = 1.57 D^2 P \sin \frac{\theta}{2}$

θ (Degrees)	T (Pounds)
11 1/4	0.15 D ² P
22 1/2	0.31 D ² P
30	0.41 D ² P
45	0.60 D ² P
90	1.11 D ² P

Where:
T = Thrust, pounds
D = I.D. of bell, in
P = Test pressure of pipeline, PSI
 θ = Deflection of bend, degrees
2. Block area shall be computed as follows:
 $A = \frac{T \text{ lbs}}{25,000 \text{ psf}}$

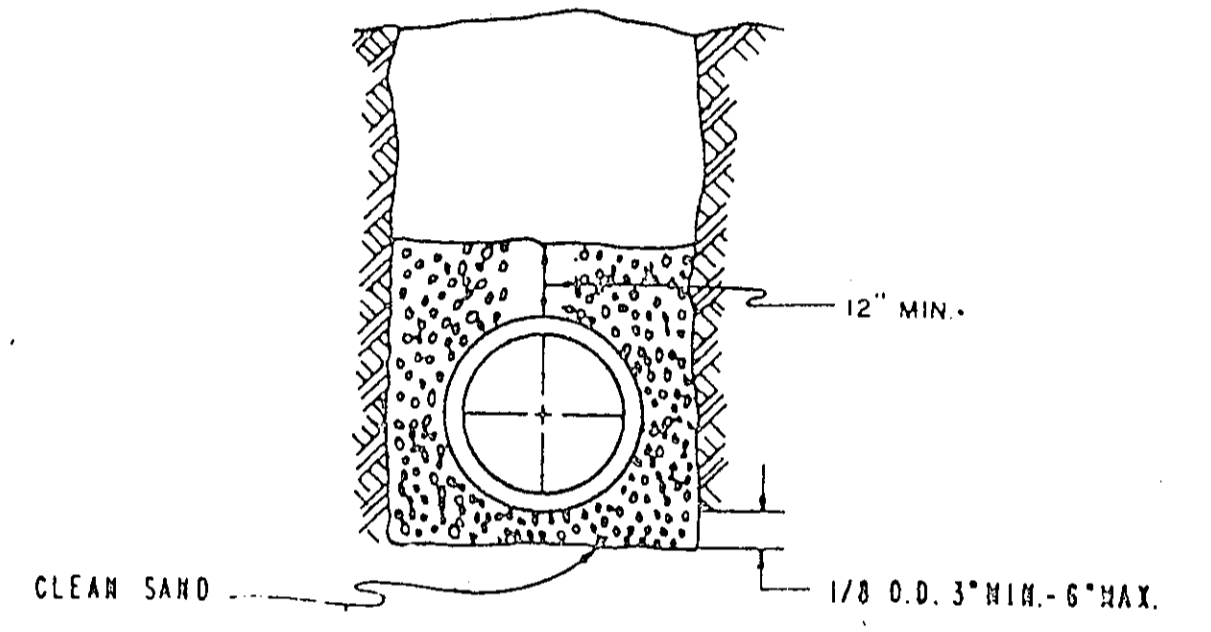
Where:
T = calculated thrust, pounds
A = Area of block against undisturbed soil, square feet

* 25,000 is the maximum end bearing pressure for Austin chalk limestone taken from the soils investigation report.
3. Block dimensions shall be $b = d \sqrt{A}$ except where top of block is within 2 feet of ground surface then $b = \sqrt{A}$. Minimum block dimensions (b & d) shall be at least O.D. of pipe or 1 foot for pipe O.D. 12 inches or less.
4. The bottom of block shall extend at least to the bottom of trench in all cases.
5. Concrete blocking shall be 2000 PSI concrete.
6. Pipe laid in compacted fill shall have restrained joints. Pipe bends in Areas Of Compacted Backfill Such As Excavated Area For Suction Piping, Or Where Thrust Blocks Cannot Be Placed Against Undisturbed rock, Then Pipe Shall Have Restrained Joints To Anchor Pipe

D	DEPTH OF BEDDING MATERIAL BELOW PIPE	
	MIN. SOIL	MIN. ROCK
3" & SMALLER	3"	2"
3.5" TO 10"	4"	3"
10" & LARGER	6"	4"

LEGEND

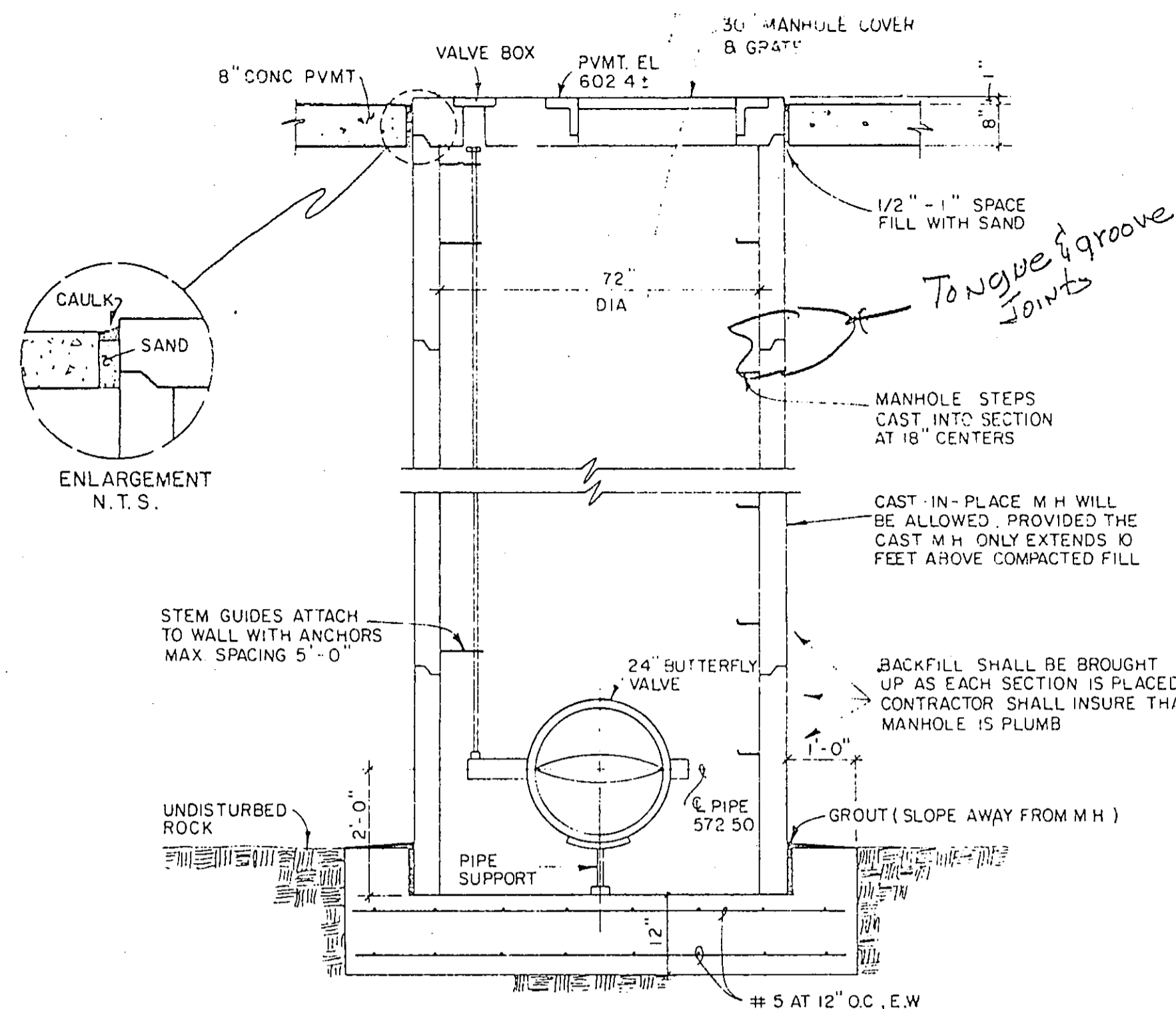
- CONCRETE 2000 PSI MIN
- GRANULAR EMBEDMENT
- COMPACTED EMBEDMENT
- Bc OUTSIDE DIAMETER OF PIPE
- H BACKFILL COVER ABOVE TOP OF PIPE
- D INSIDE PIPE DIAMETER
- d DEPTH OF BEDDING MATERIAL BELOW PIPE
- A_s AREA OF TRANSVERSE STEEL IN THE ARCH EXPRESSED AS A PERCENTAGE OF AREA OF CONCRETE AT INVERT OF CROWN
- L LOAD FACTOR



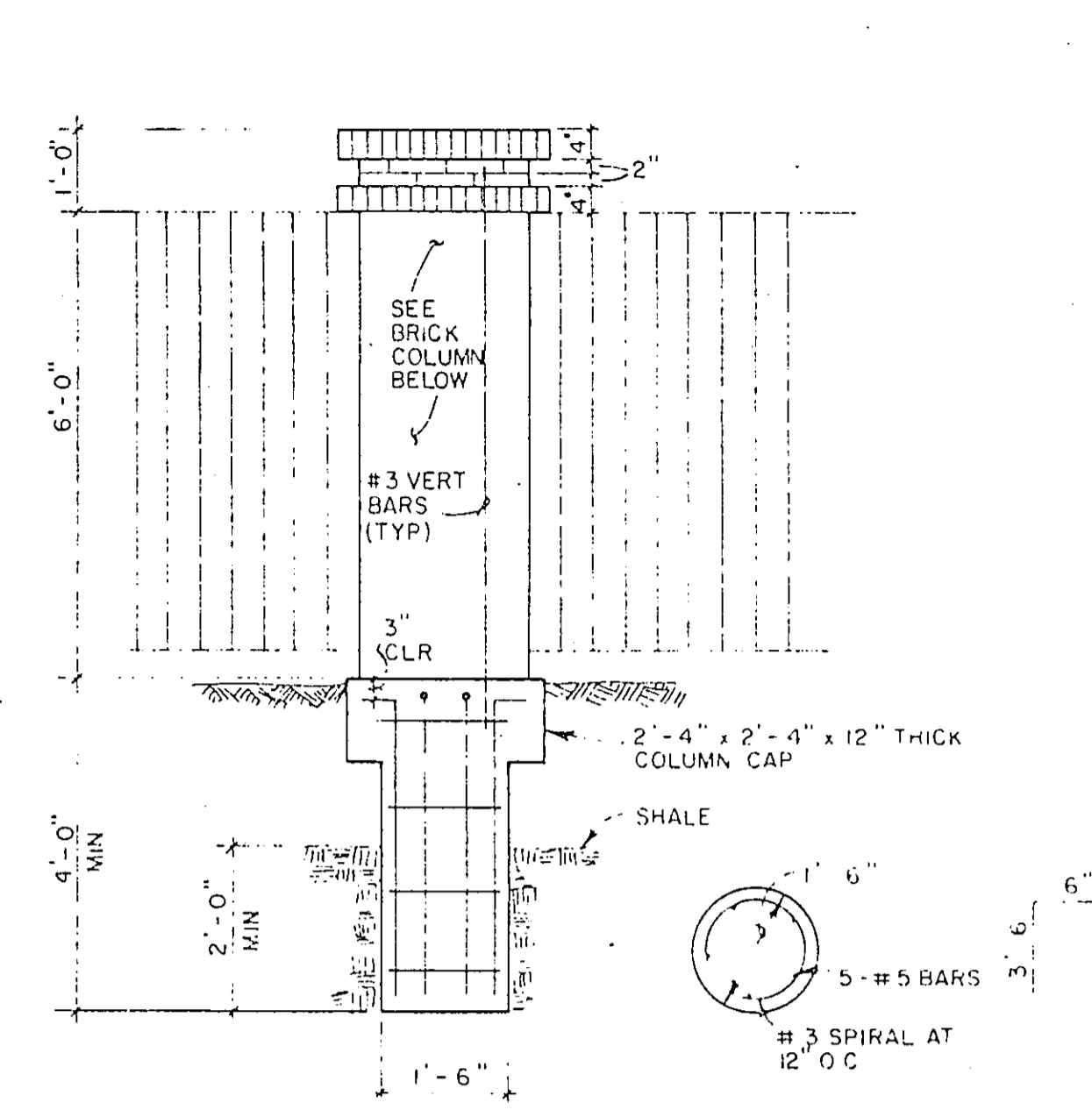
EMBEDMENT FOR PVC PIPE

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS CELESTIAL ROAD PUMP STATION			
MISC. DETAILS - WATER			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - R.C.H.	Drawn - B.S.	Date - JAN., 1987	Job No. - 217
Approved - HWG	Checked - G.A.F.	Scale - AS SHOWN	Sheet - C-10

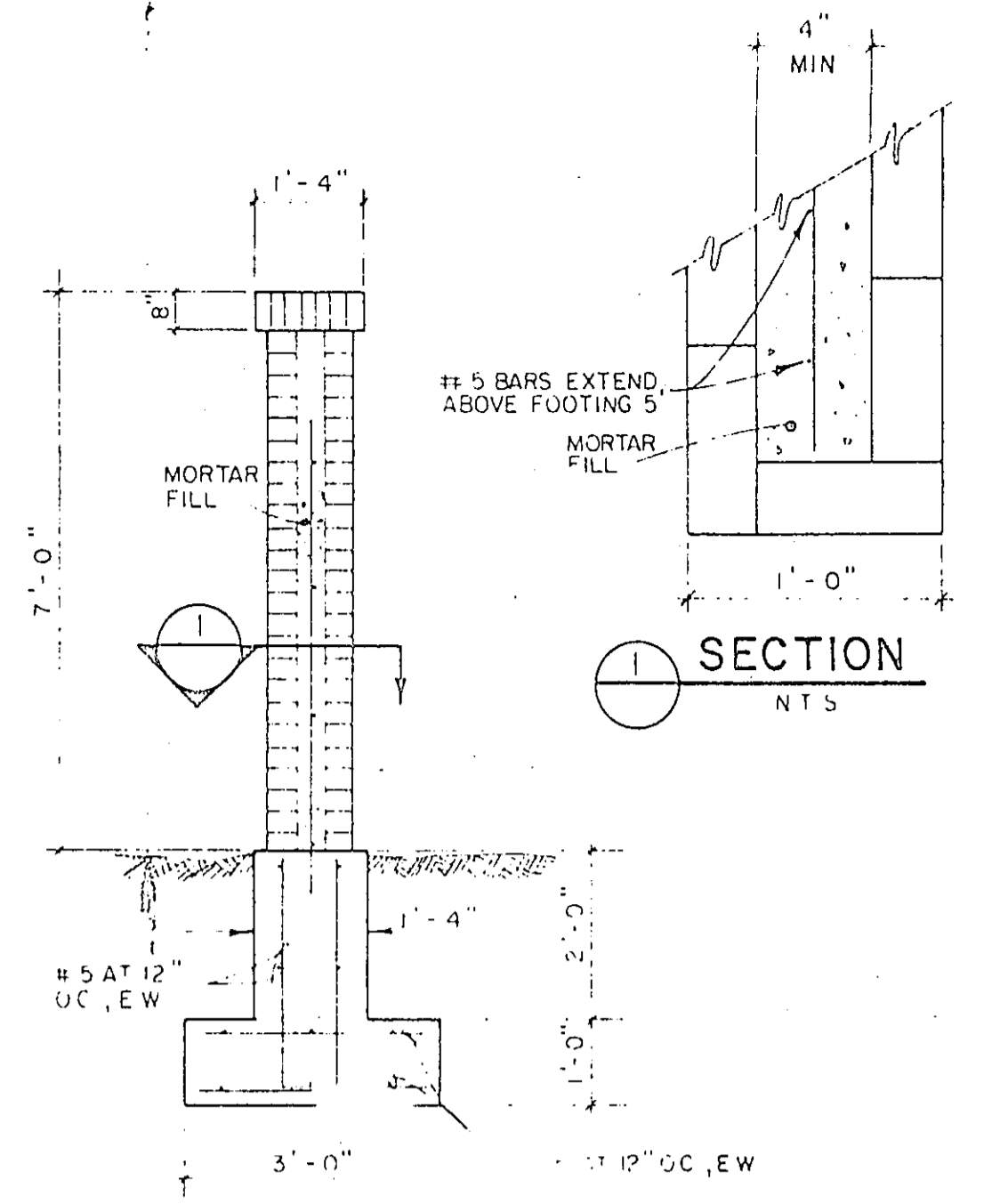
Randall C. Hill
2-19-87



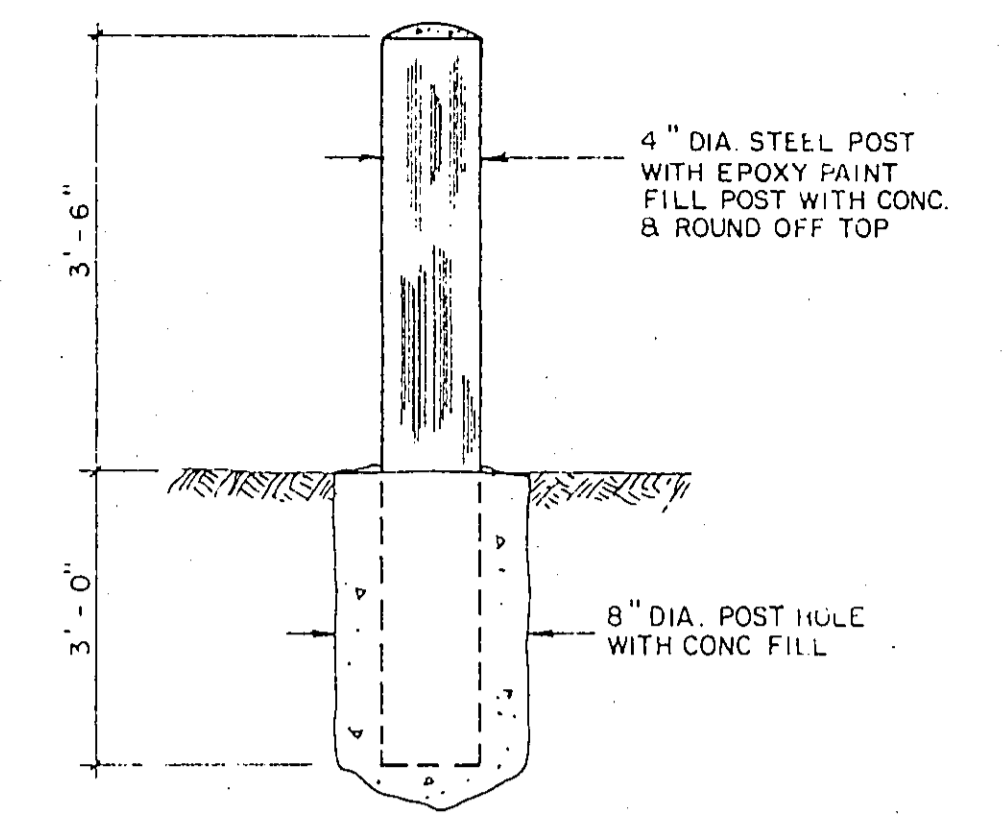
24" VALVE VAULT
SCALE - 1/2" = 1'-0"



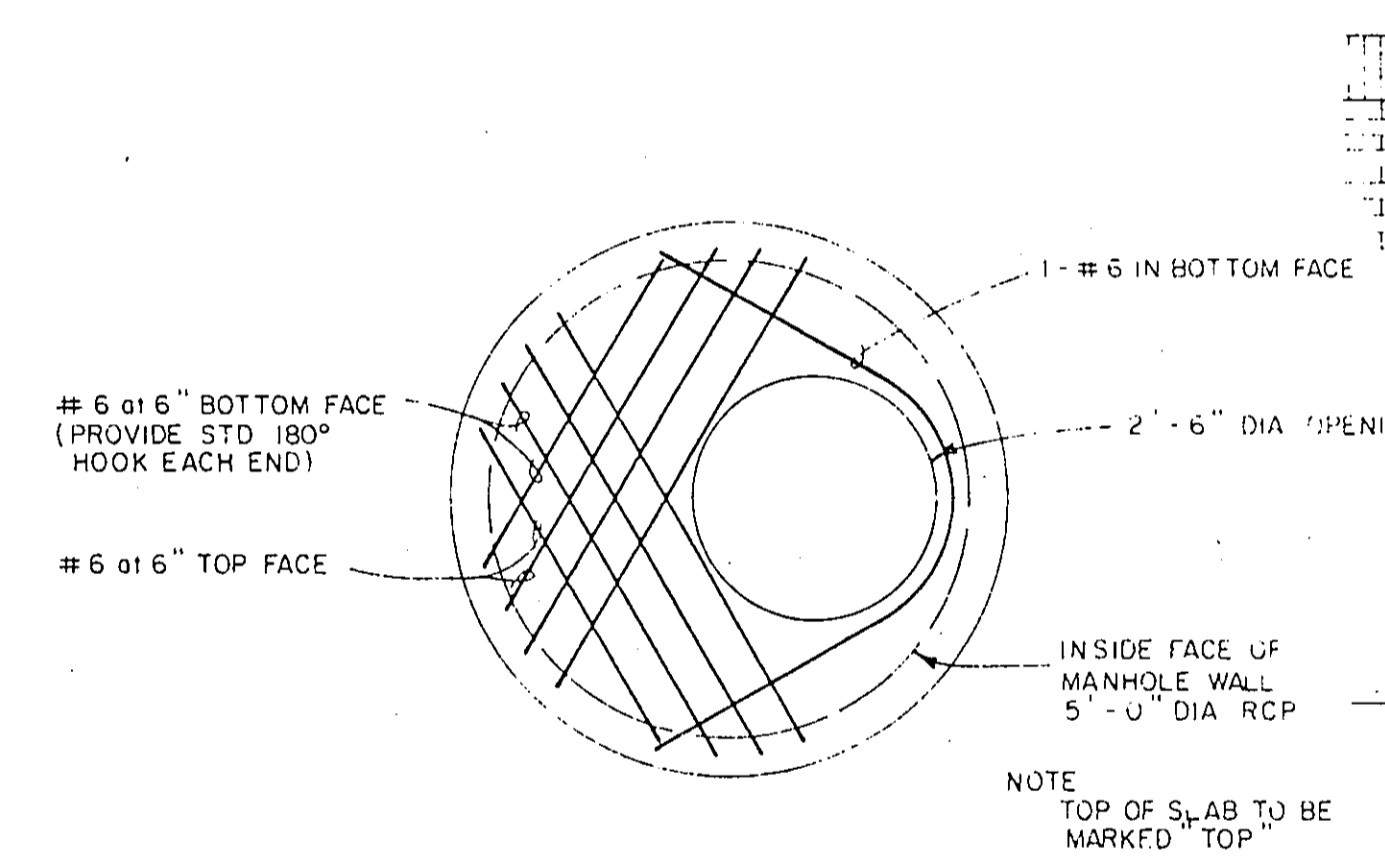
BRICK COLUMN FOOTING
SCALE - 1/2" = 1'-0"



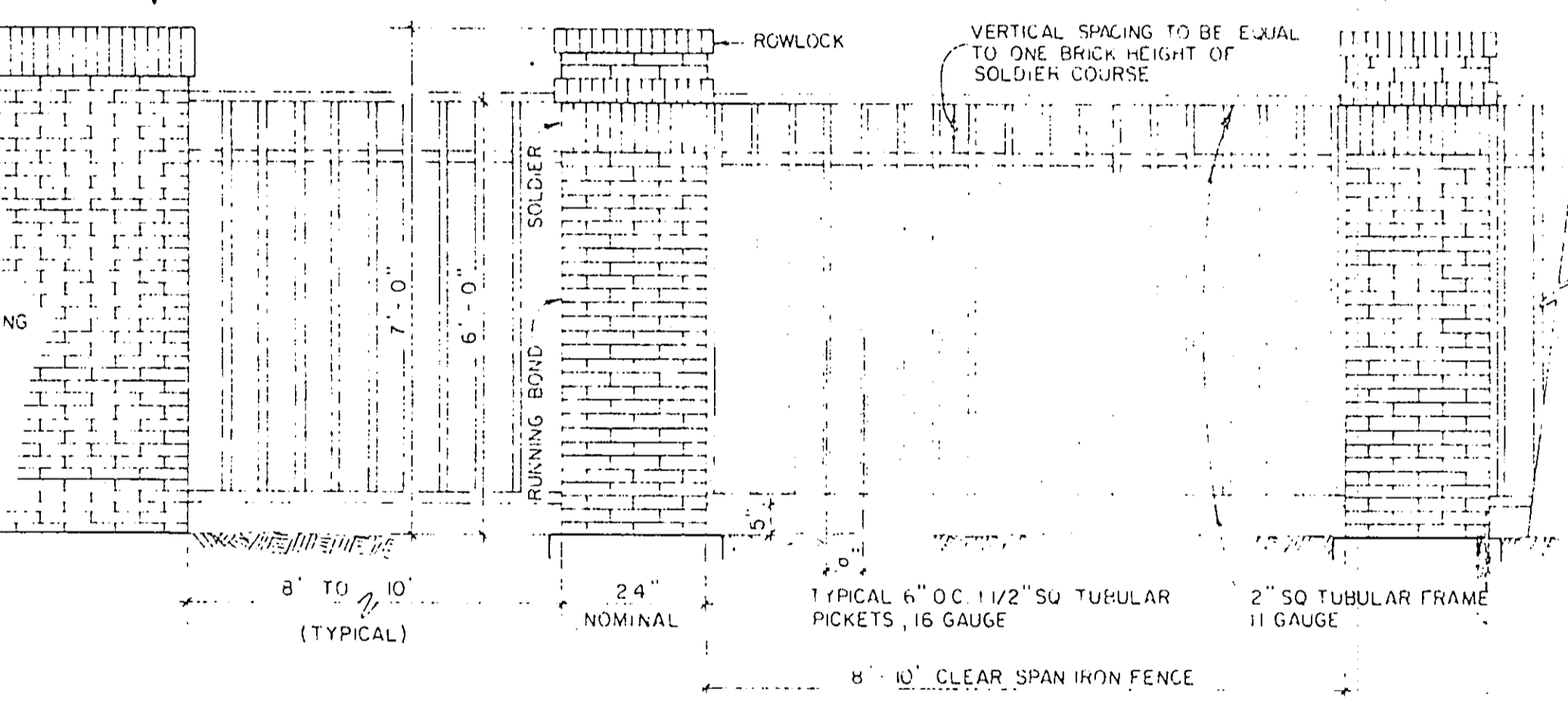
BRICK WALL FOOTING
SCALE - 1/2" = 1'-0"



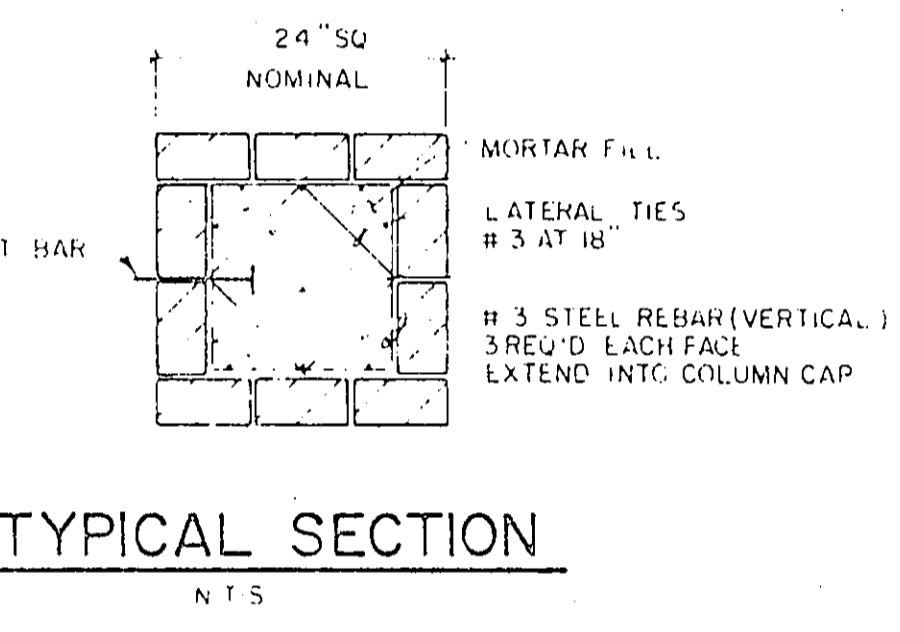
BOLLARD DETAIL
N.T.S.



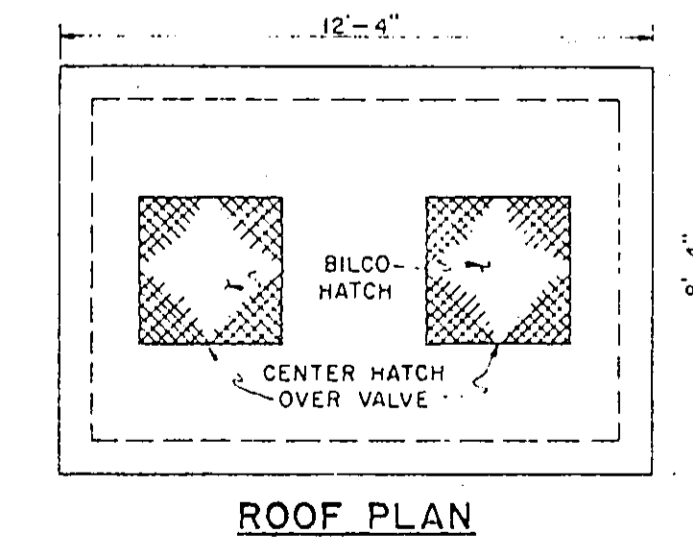
TOP SLAB REINFORCING PLAN
SCALE - 1/2" = 1'-0"



REINFORCED BRICK COLUMNS & IRON FENCE
SCALE - 1/2" = 1'-0"
TYPICAL ELEVATION

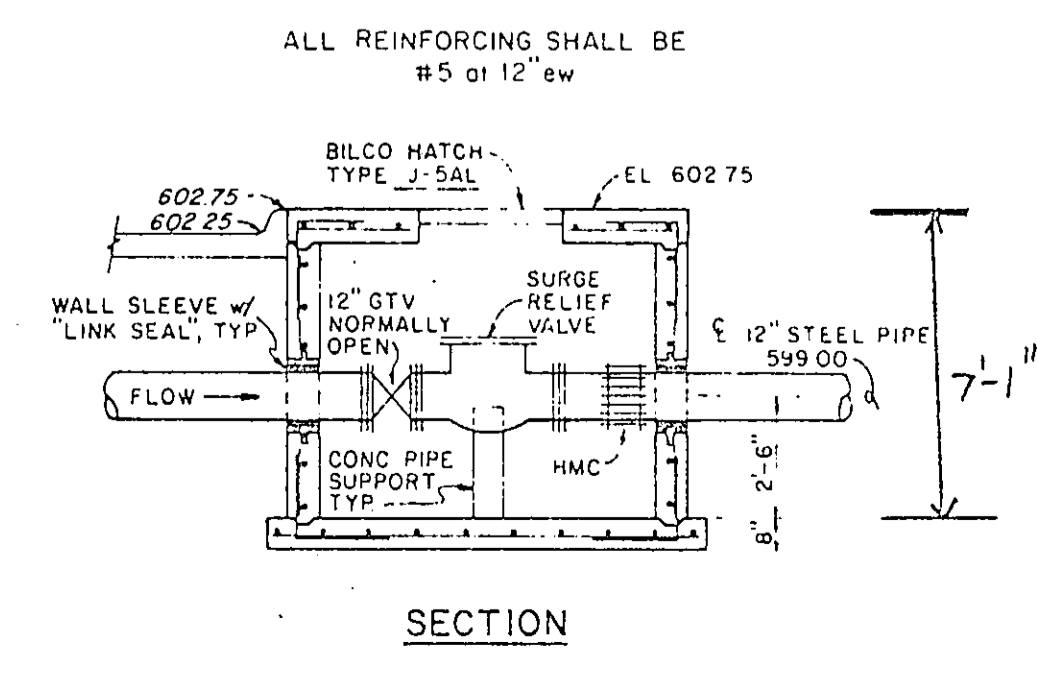


TYPICAL SECTION
N.T.S.

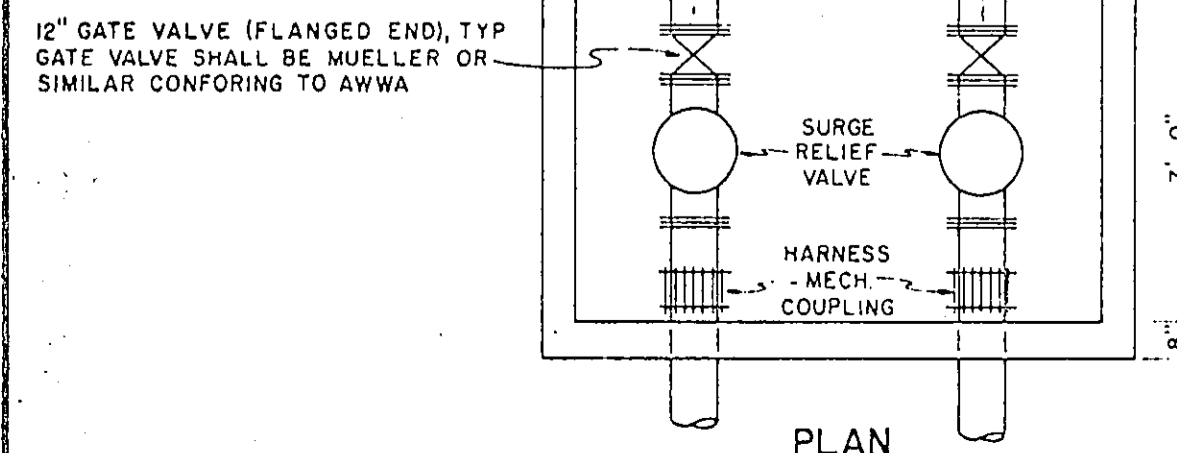


ROOF PLAN

SURGE RELIEF VALVE VAULT
SCALE - 1/4" = 1'-0"

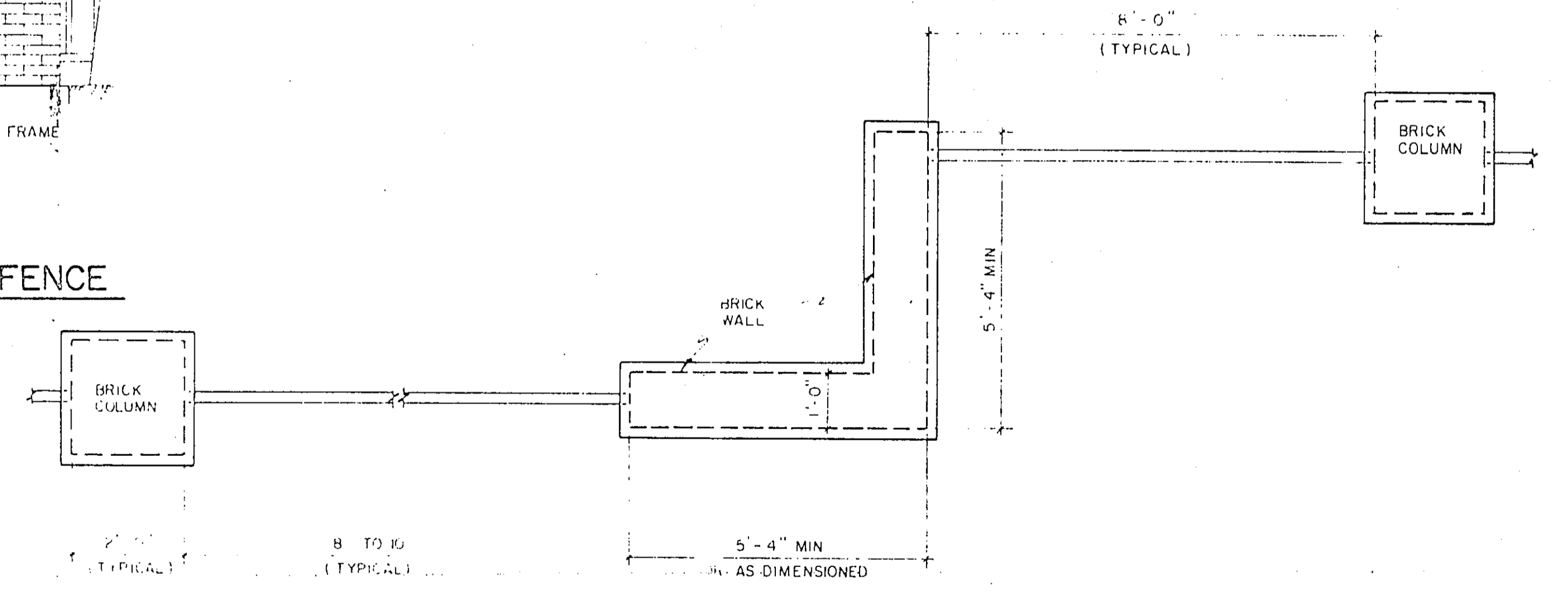


SECTION



PLAN

- NOTES:**
- Dimensions: All nominal
 - Brick: To match brick of pump station.
 - Mortar: Type 'N', struck joints. Not to exceed 1/2".
 - Iron: Must have full depth welds. All weld spots ground smooth. 2 shop coats galvanized primer. 2 coats semigloss - Addison Brown.
 - Bids: Iron & brick fencing to be bid from site layout sheet.
 - 'T' Bar Connectors:
 - The iron contractor shall furnish 2 (two) Tbars per side of iron sections to brick contractor.
 - Locations to be field adjusted and coordinated by both iron and brick contractors and approved by Engineer and Town of Addison Landscape Architect.
 - Elevation Changes: All fencing elevation changes shall occur at fence and column connections. Final locations to be approved by Engineer and Town of Addison Landscape Architect.

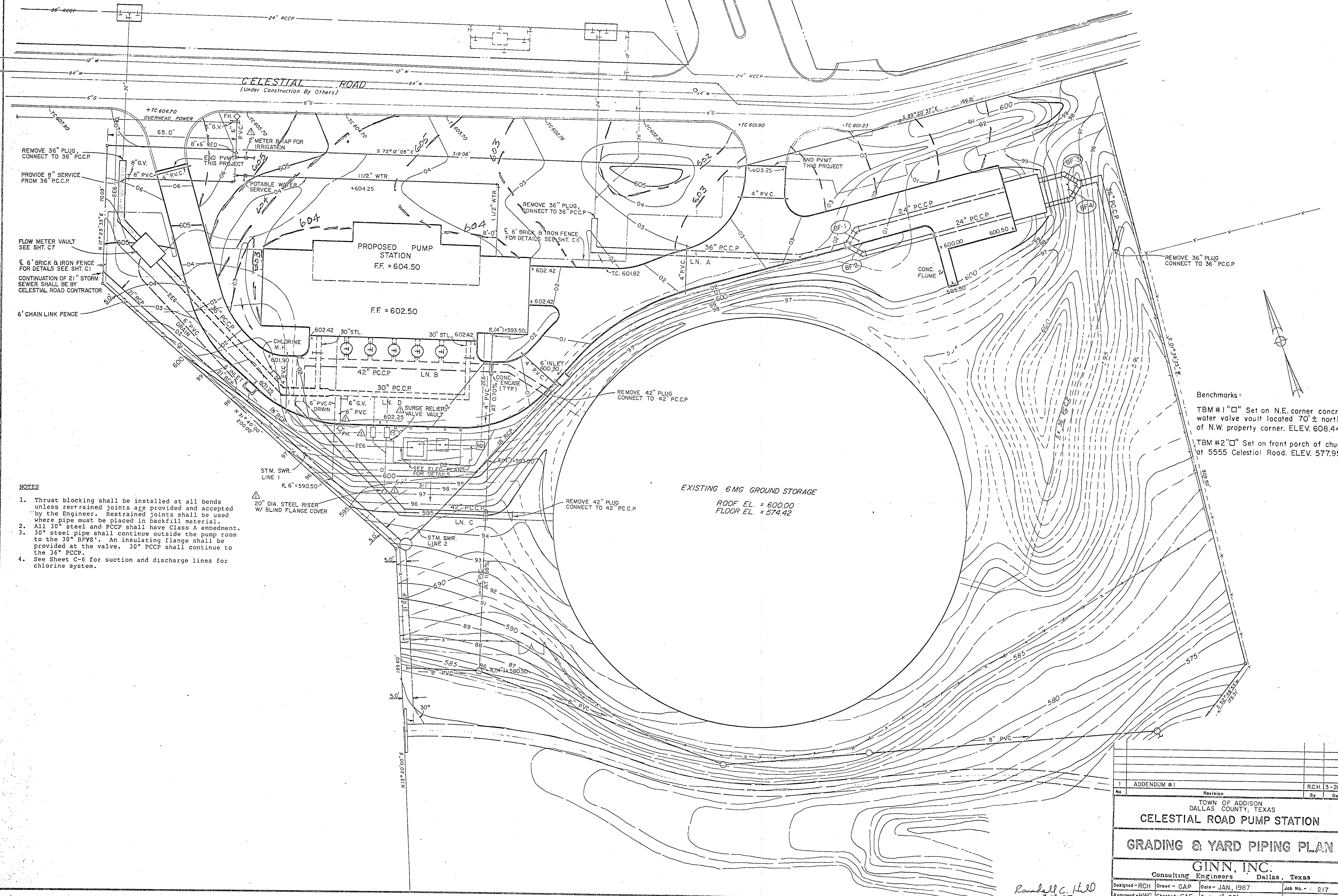


TYPICAL PLAN AT TURNS
SCALE - 1/2" = 1'-0"

- GENERAL NOTES - IRON GATES**
- The entrance and exit gates shall be motor operated and shall be designed to match the iron fence along the front of the property as shown on the plans.
 - The entrance gate and hardware shall span a 24'-0" opening between the brick walls. The exit gate and hardware shall span a 18'-0" opening between two brick columns.
 - The entrance gate shall be operated from a nine button digital keyboard mounted on a post located on the left-hand side of the drive. The keyboard shall allow for a 4-number code which can be changed by Owner. The gate shall remain open until the entering vehicle passes over a loop detector located south of the gate.
 - The exit gate shall open automatically when a vehicle drives over a loop detector located inside the fence area. The gate shall close automatically after the exiting vehicle passes over a loop detector located outside the gate.
 - The Contractor shall submit shop drawings on the gates, gate operators, security code system, and loop detectors.

Addendum #1		RCH	3/19/87
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
CELESTIAL ROAD PUMPING STATION			
MISC. DETAILS - SITE WORK			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - RCH	Drawn - BS	Date - JAN., 1987	Job No - 217
Approved - HWG	Checked - GAF	Scale - AS SHOWN	Sheet - C-11

Randall C. Hill
2-19-87

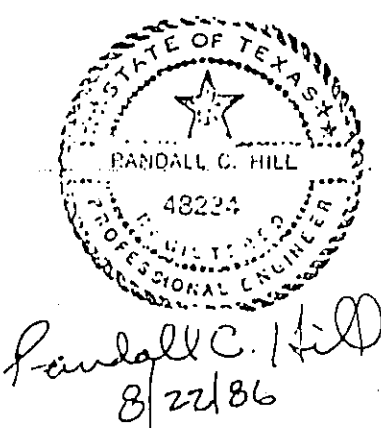
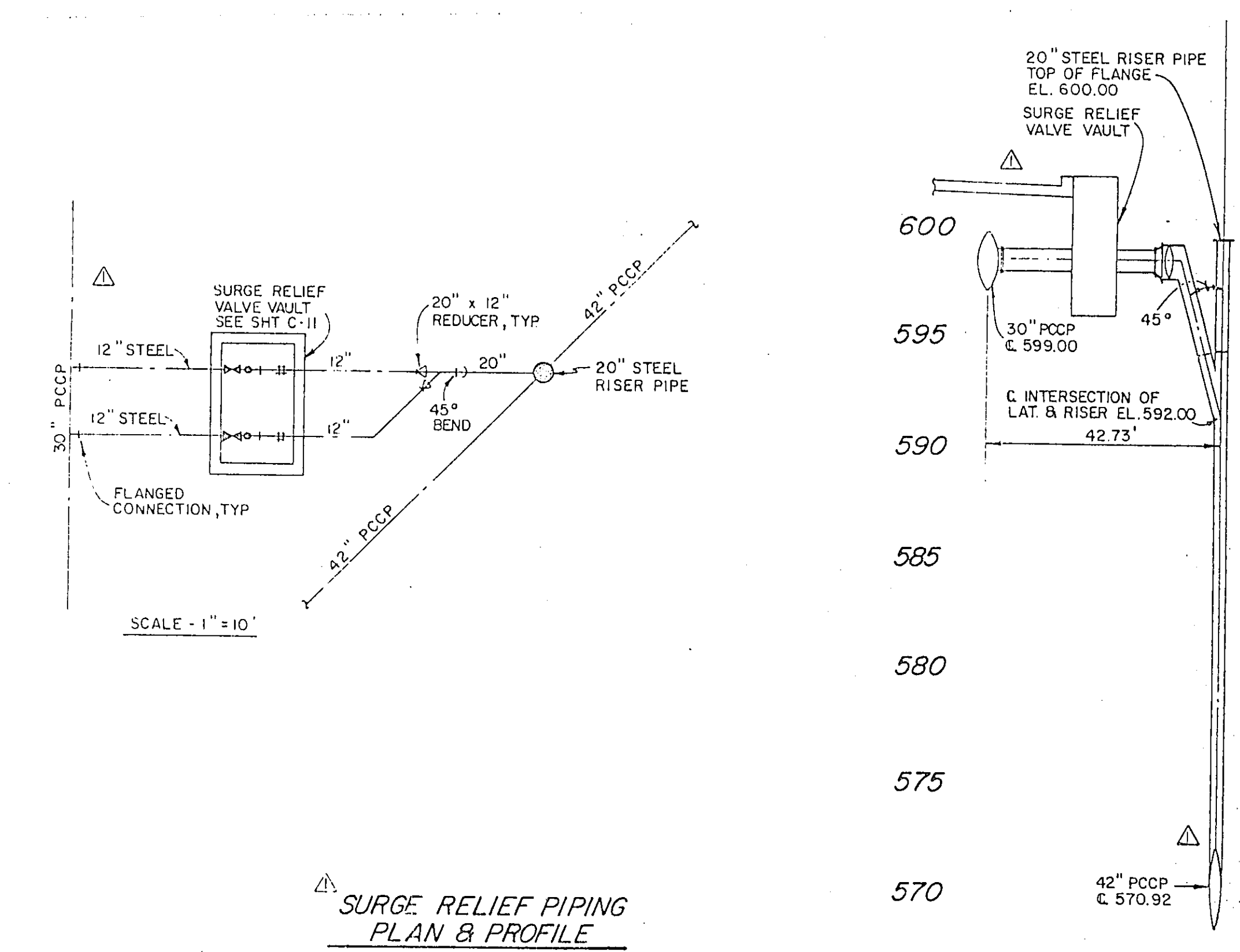
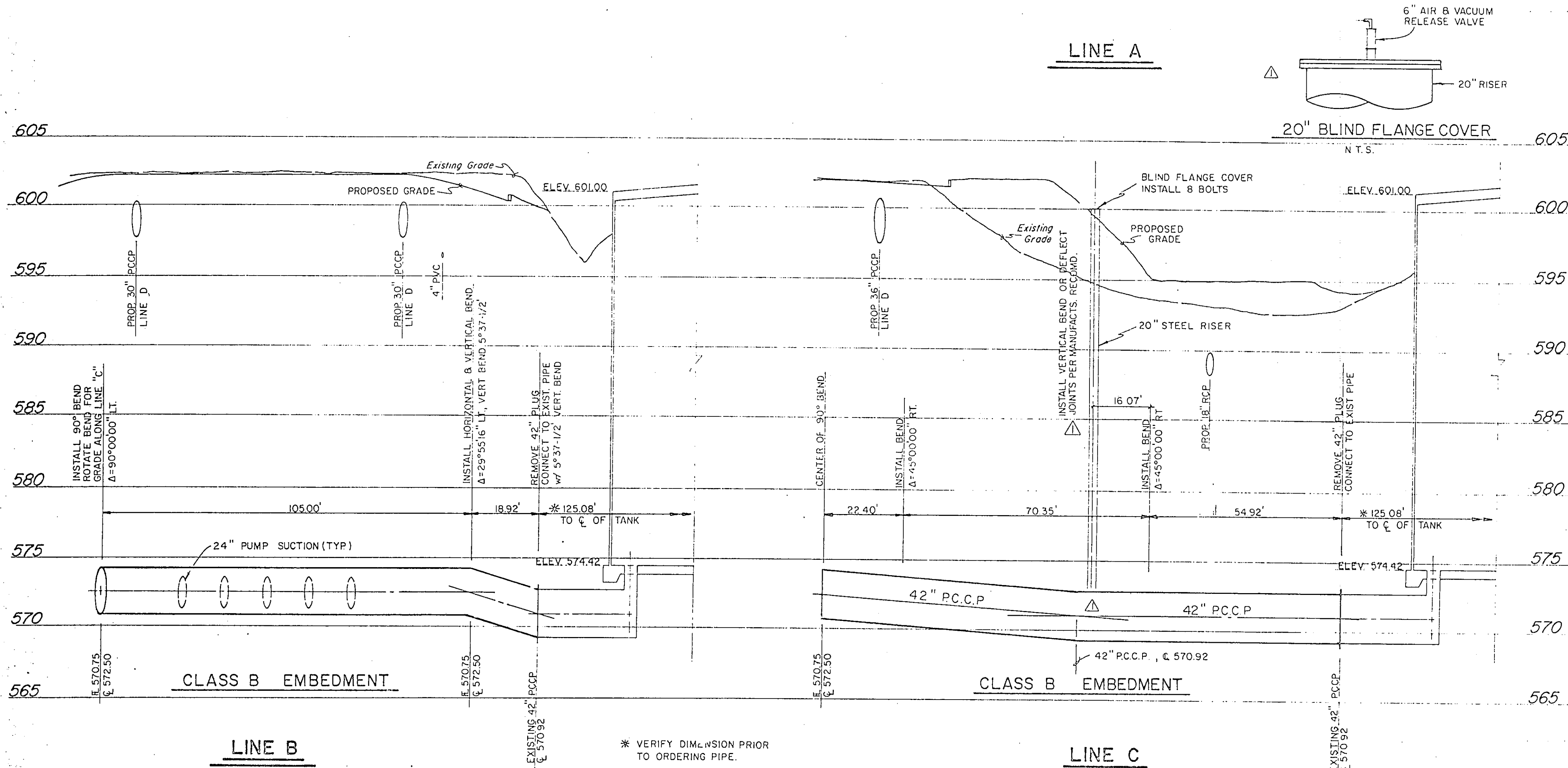
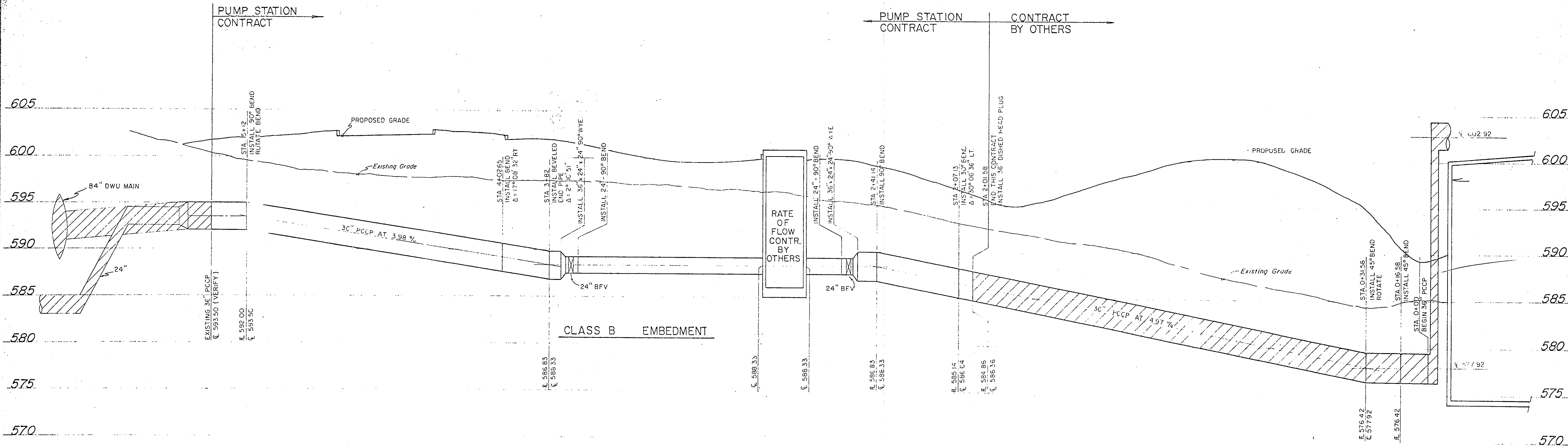


- NOTES**
1. Thrust blocking shall be installed at all bends unless restrained joints are provided and accepted by the Engineer. Restrained joints shall be used where pipe must be placed in backfill material.
 2. All 30" steel and PCCP shall have Class A embedment.
 3. 30" steel pipe shall continue outside the pump room to the 30" BFYS'. An insulating flange shall be provided at the valve. 30" PCCP shall continue to the 36" PCCP.
 4. See Sheet C-6 for suction and discharge lines for chlorine system.

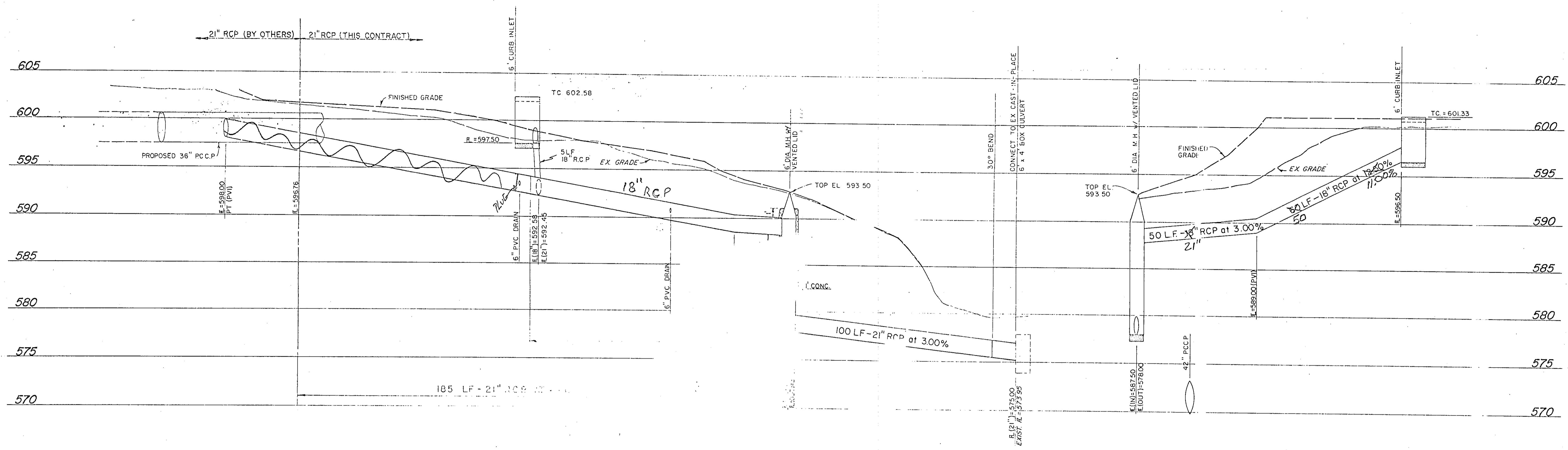
Benchmarks:
 TBM #1 "□" Set on N.E. corner concrete water valve vault located 70' ± north of N.W. property corner. ELEV. 608.44
 TBM #2 "□" Set on front porch of church at 5555 Celestial Road. ELEV. 577.95

Randall C. HED
 2-19-87

ADDENDUM #1		RCH. 3-20-87
No.	Revision	By Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS		
CELESTIAL ROAD PUMP STATION		
GRADING & YARD PIPING PLAN		
GINN, INC. Consulting Engineers Dallas, Texas		
Designed - RCH	Drawn - GAP	Date - JAN, 1987
Approved - HWG	Checked - GAF	Scale - 1"=20'
		Job No. - 217
		Sheet C-2 of

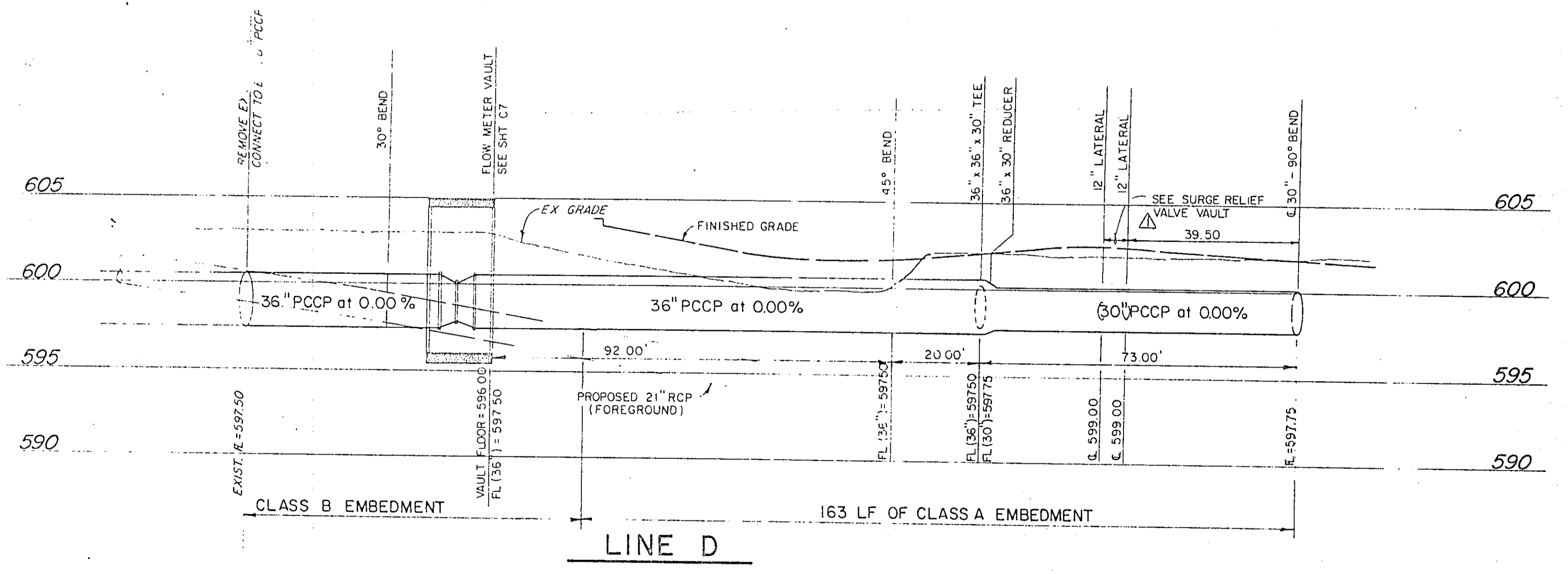


ADDENDUM #1		Revision		R.C.H. 3-20-87	
No.		By	Date		
TOWN OF ADDISON DALLAS COUNTY, TEXAS					
CELESTIAL ROAD PUMP STATION					
YARD PIPING PROFILES					
GINN, INC. Consulting Engineers Dallas, Texas					
Designed - RCH	Drawn - GAP	Date - JAN., 1984	Job No. - 217		
Approved - HWG	Checked - GAF	Scale - 1" = 20'H / 1" = 5'V	Sheet C-3		



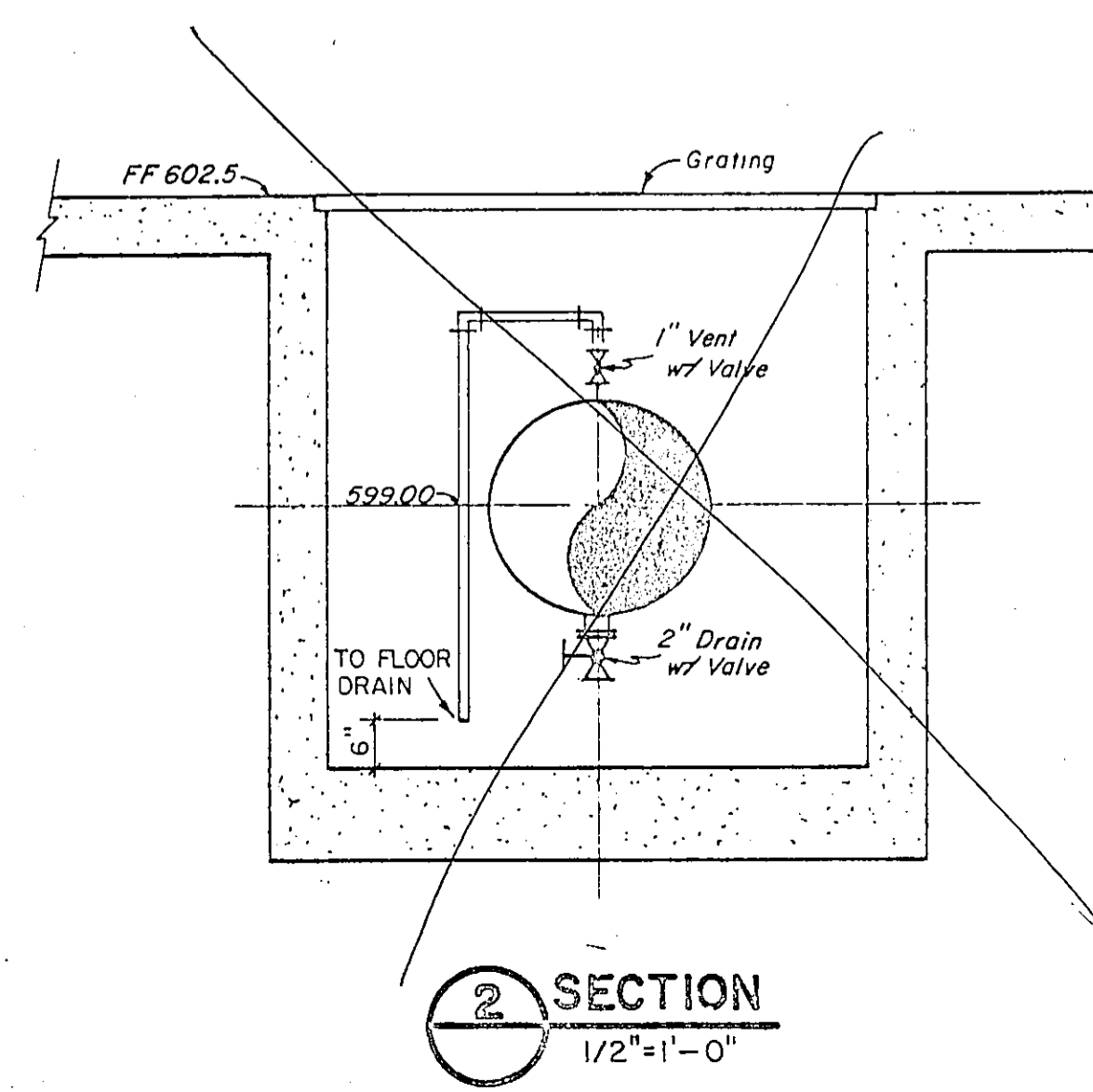
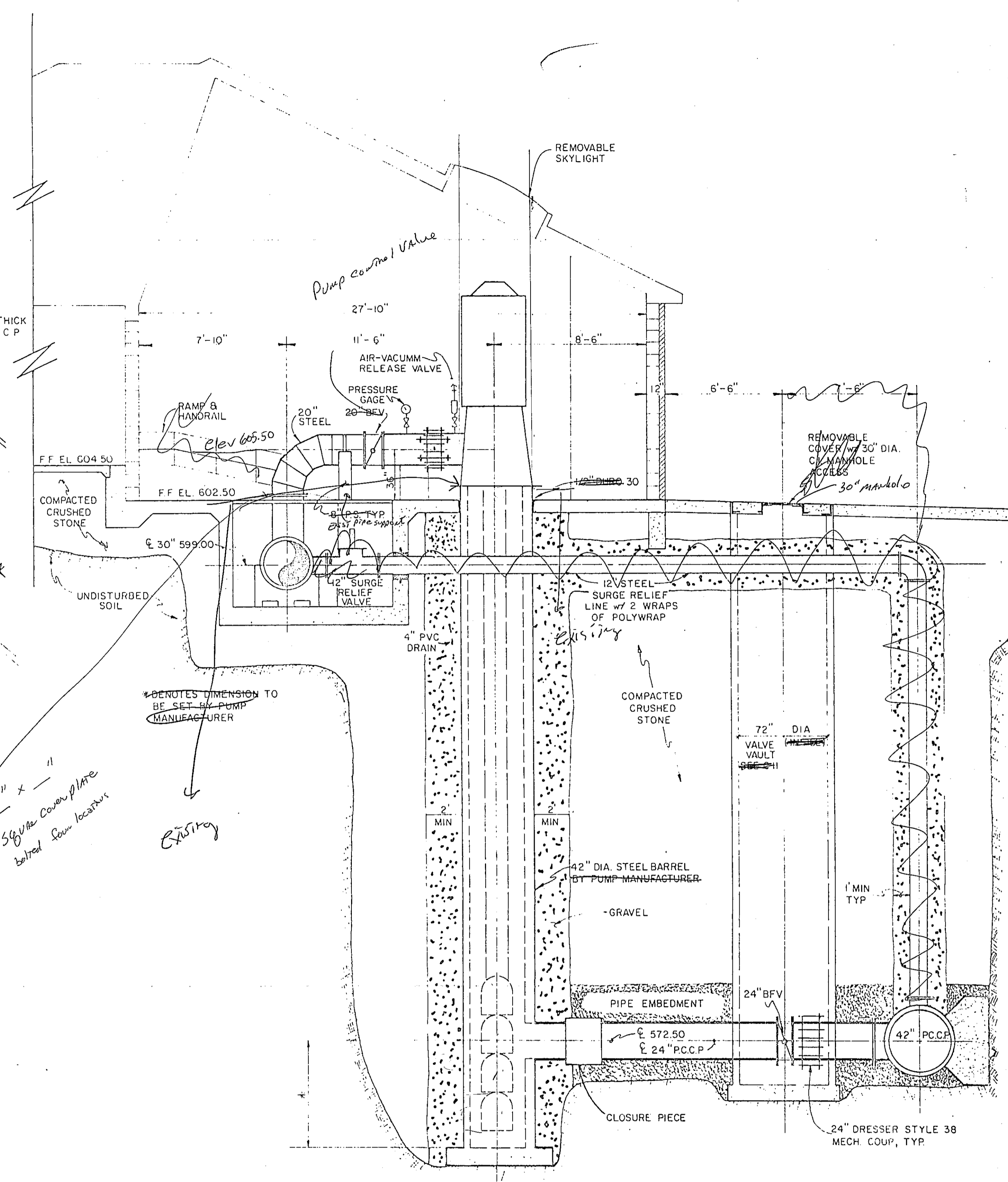
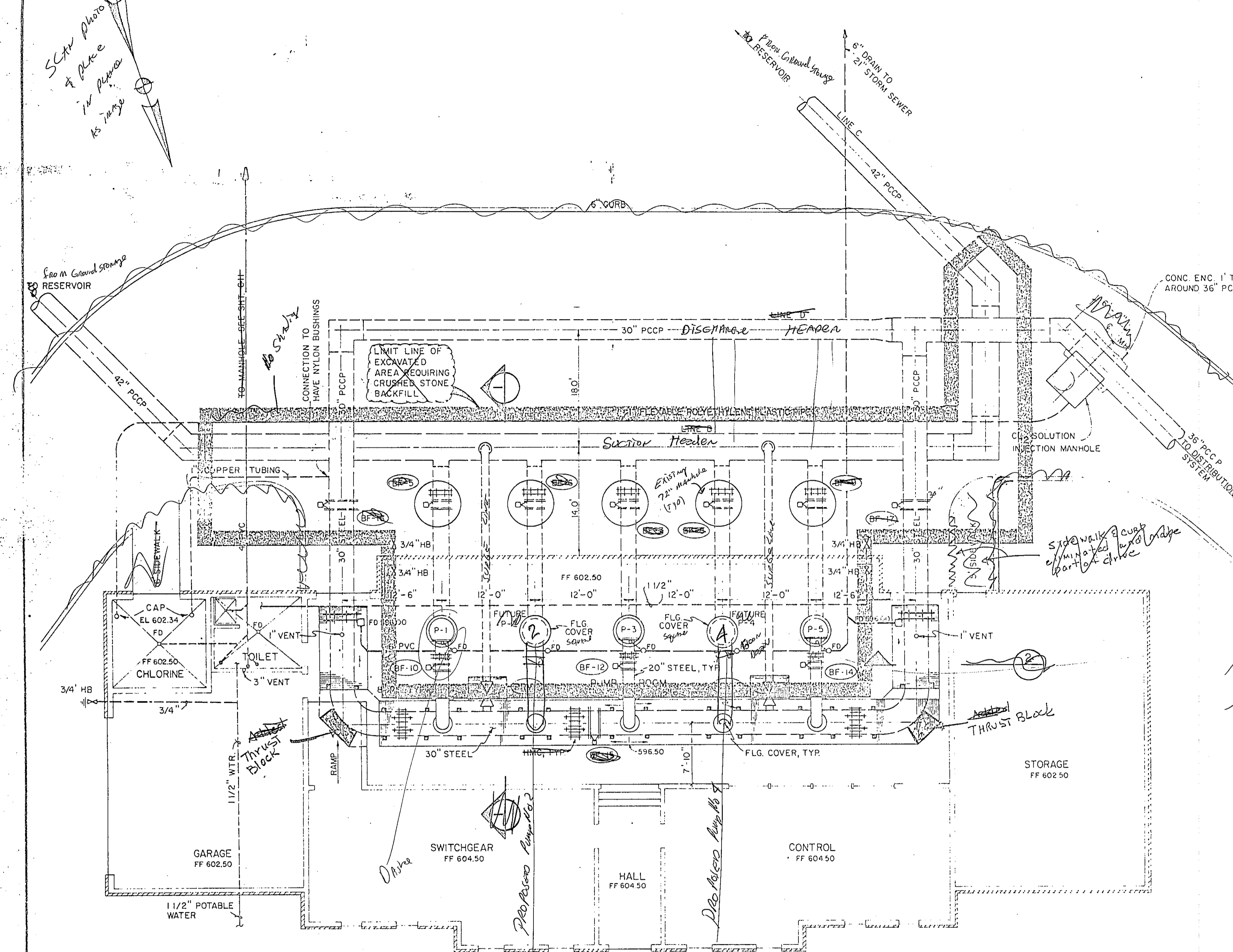
STORM DRAINAGE LINE 2

STORM DRAINAGE LINE 2



No.	ADDENDUM #1	Revision	RCH	3-20-87
		By		Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS				
CELESTIAL ROAD PUMP STATION				
YARD PIPING PROFILES				
GINN, INC. Consulting Engineers Dallas, Texas				

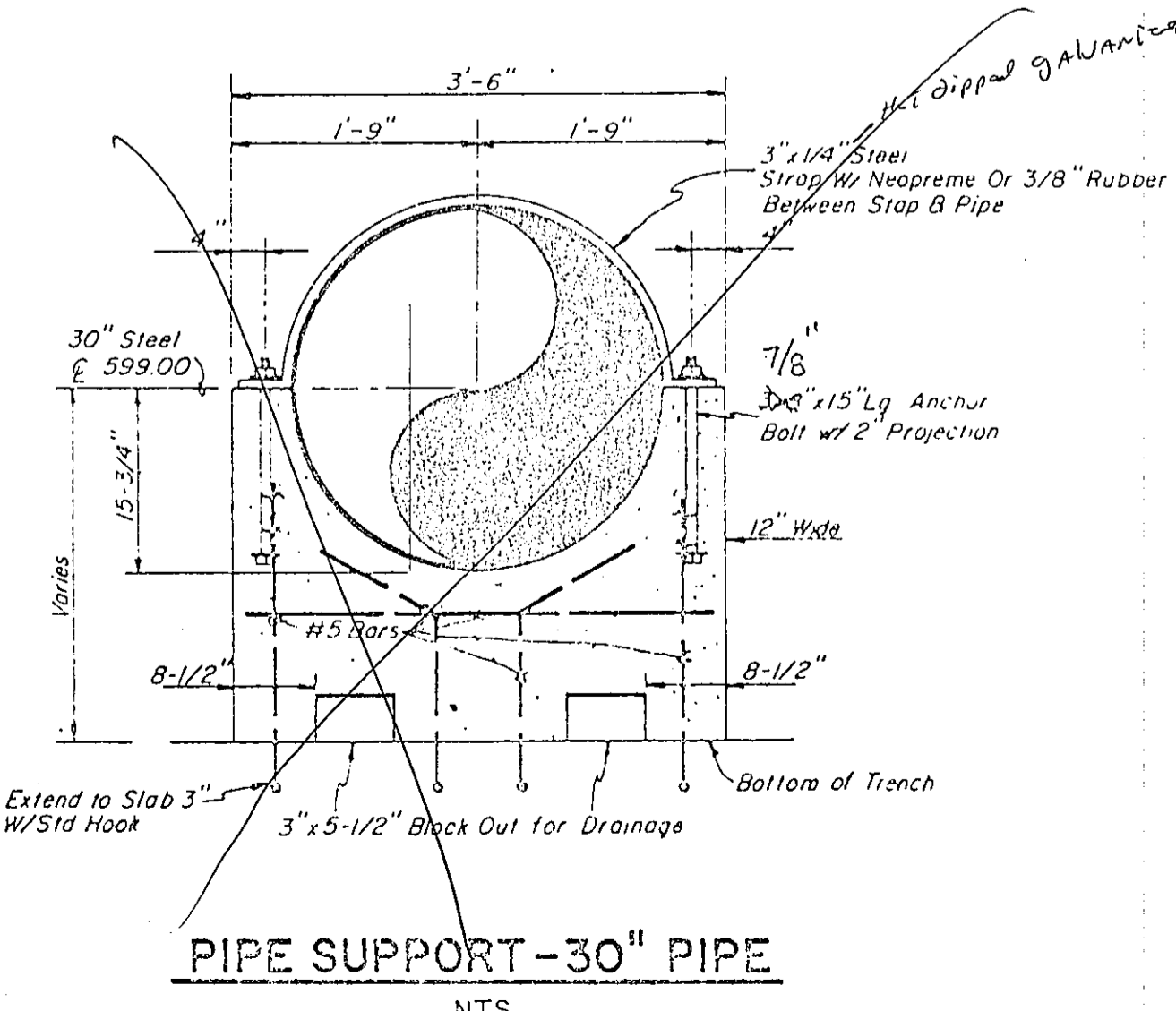
5' dia. Photo
to place
in place
to range



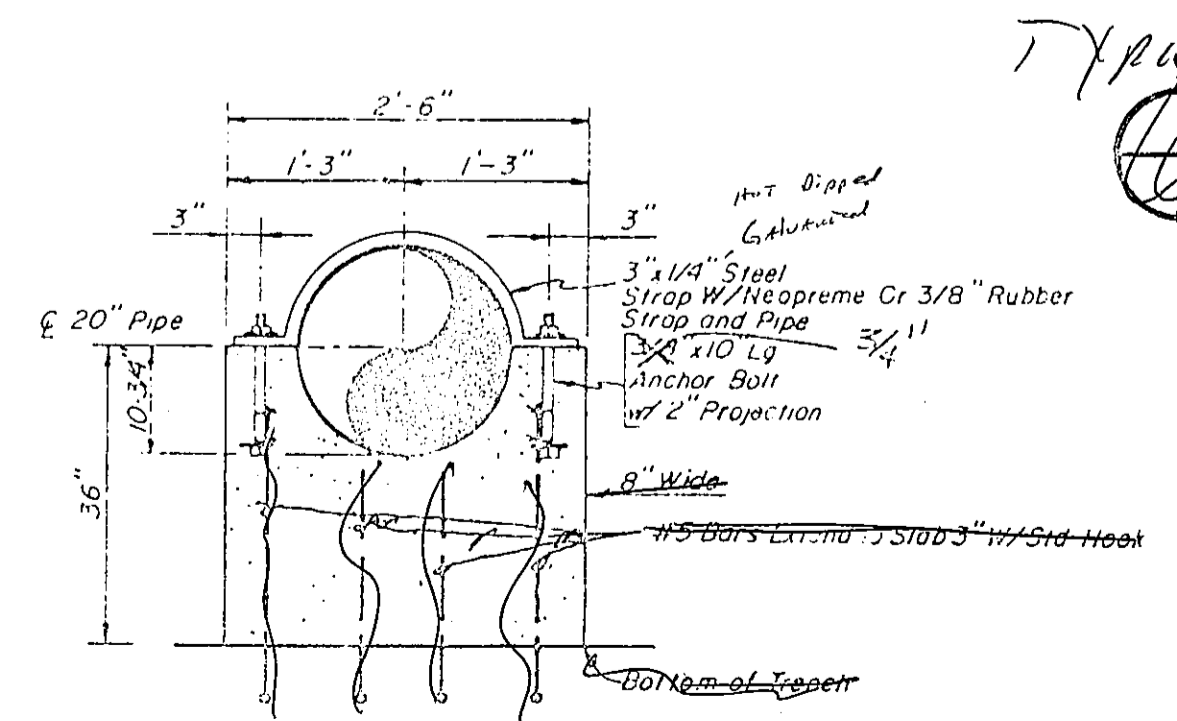
PIPING PLAN
1/8" = 1'-0"

- NOTE:**
1. FOR STRUCTURAL DETAILS OF PIPE CHANNEL SEE SHT. S-5
 2. PS DENOTES PIPE SUPPORT
 3. SEE A-1 FOR BUILDING DIMENSIONS
 4. CHLORINE ROOM SHALL BE PIPED FOR FUTURE CHLORINE EQUIPMENT. EXTEND PIPE MIN 2" ABOVE FLOOR

1. Contractor shall run pump drains into floor drains. Pump drains shall be 2 inch schedule 40 PVC.



PIPE SUPPORT - 30" PIPE
NTS

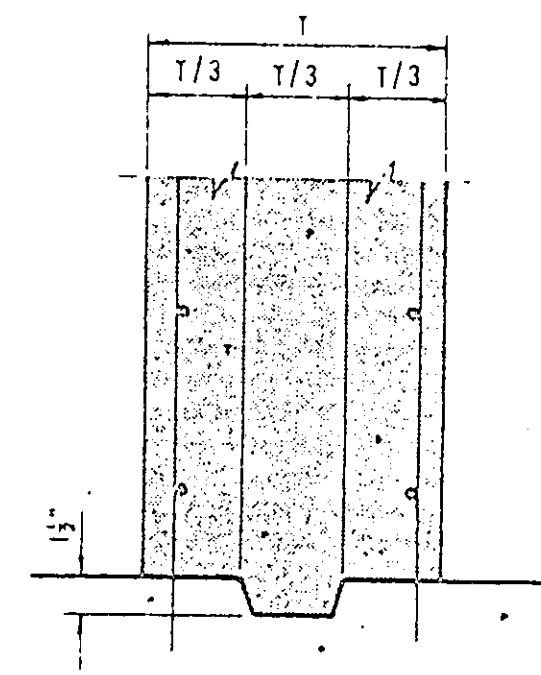


PIPE SUPPORT - 20" PIPE
NTS

TYPICAL PUMP SECTION
1/4" = 1'-0"

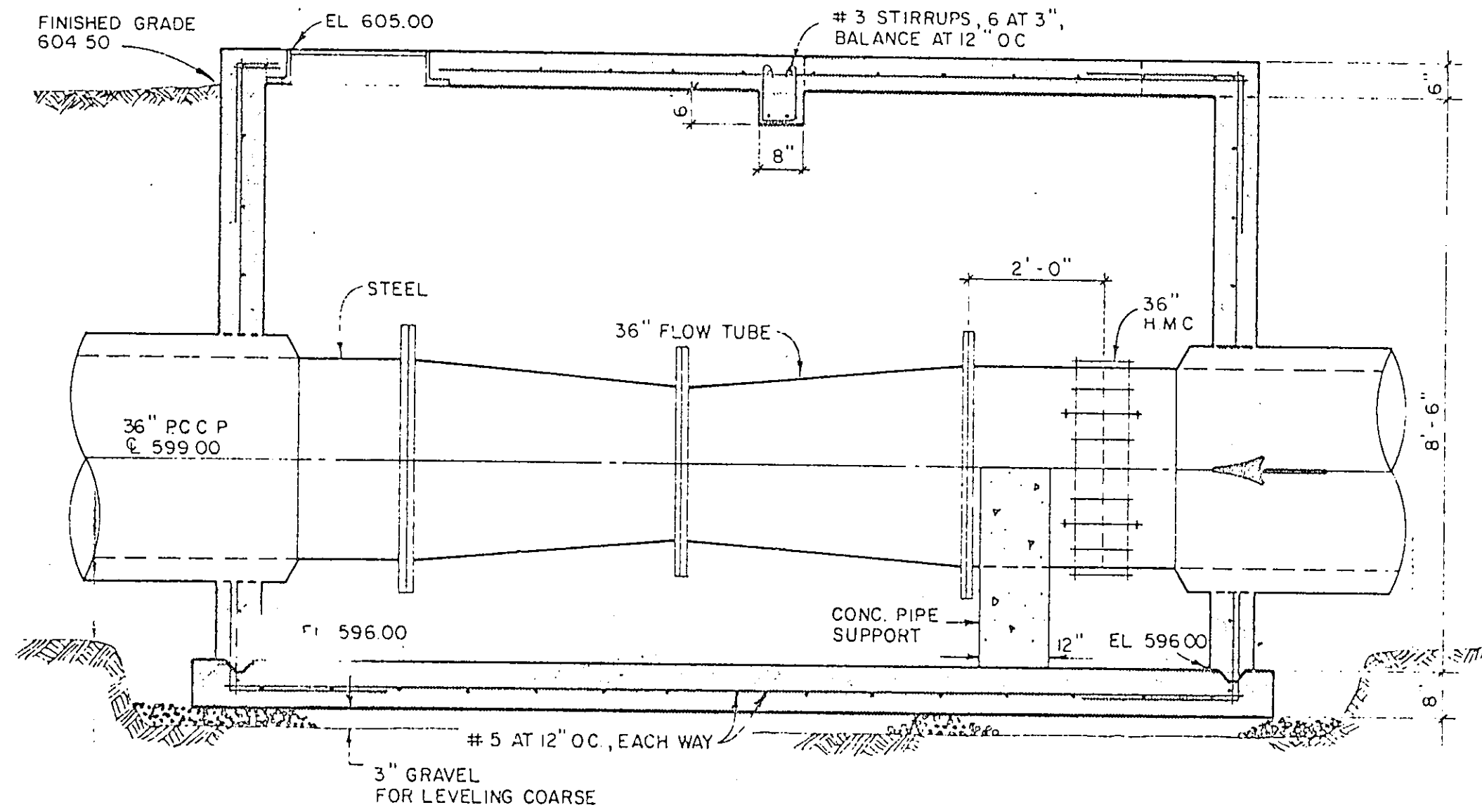
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS CELESTIAL ROAD PUMP STATION			
PIPING PLAN			
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - RCH	Drawn - GAF	Date - JAN, 1987	Job No. - 217
Approved - HWC	Checked - GAF	Scale - AS SHOWN	Sheet C-5 OF

Randall C. Held
2-19-87

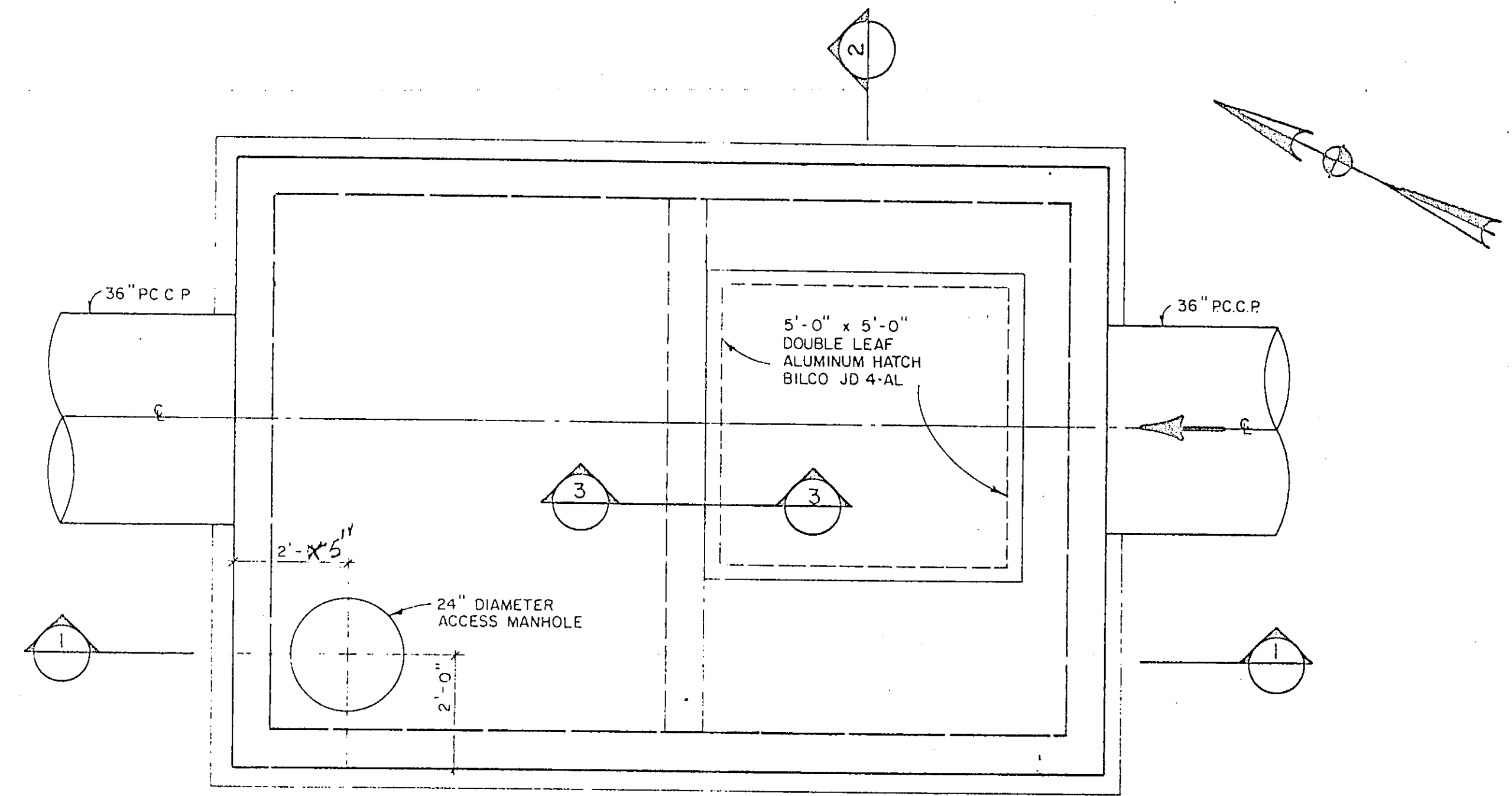


BASE OF WALLS

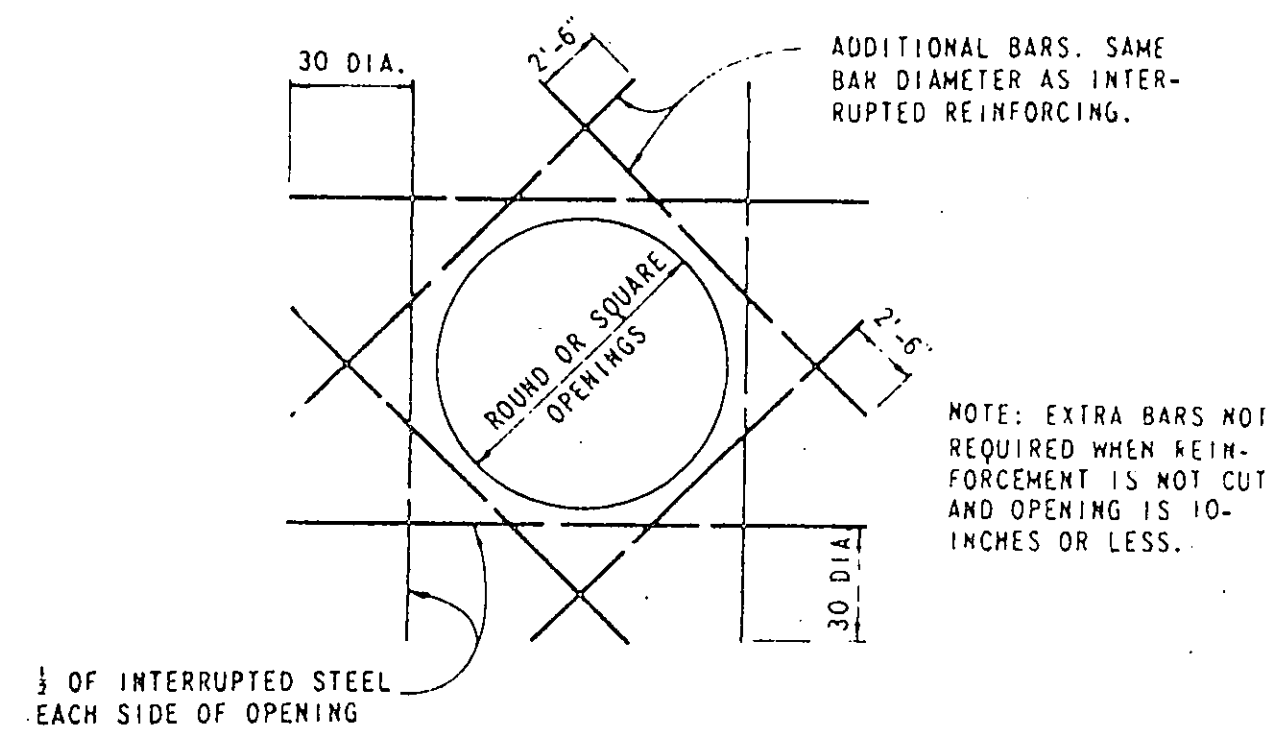
JOINTS WITHOUT WATER STOPS



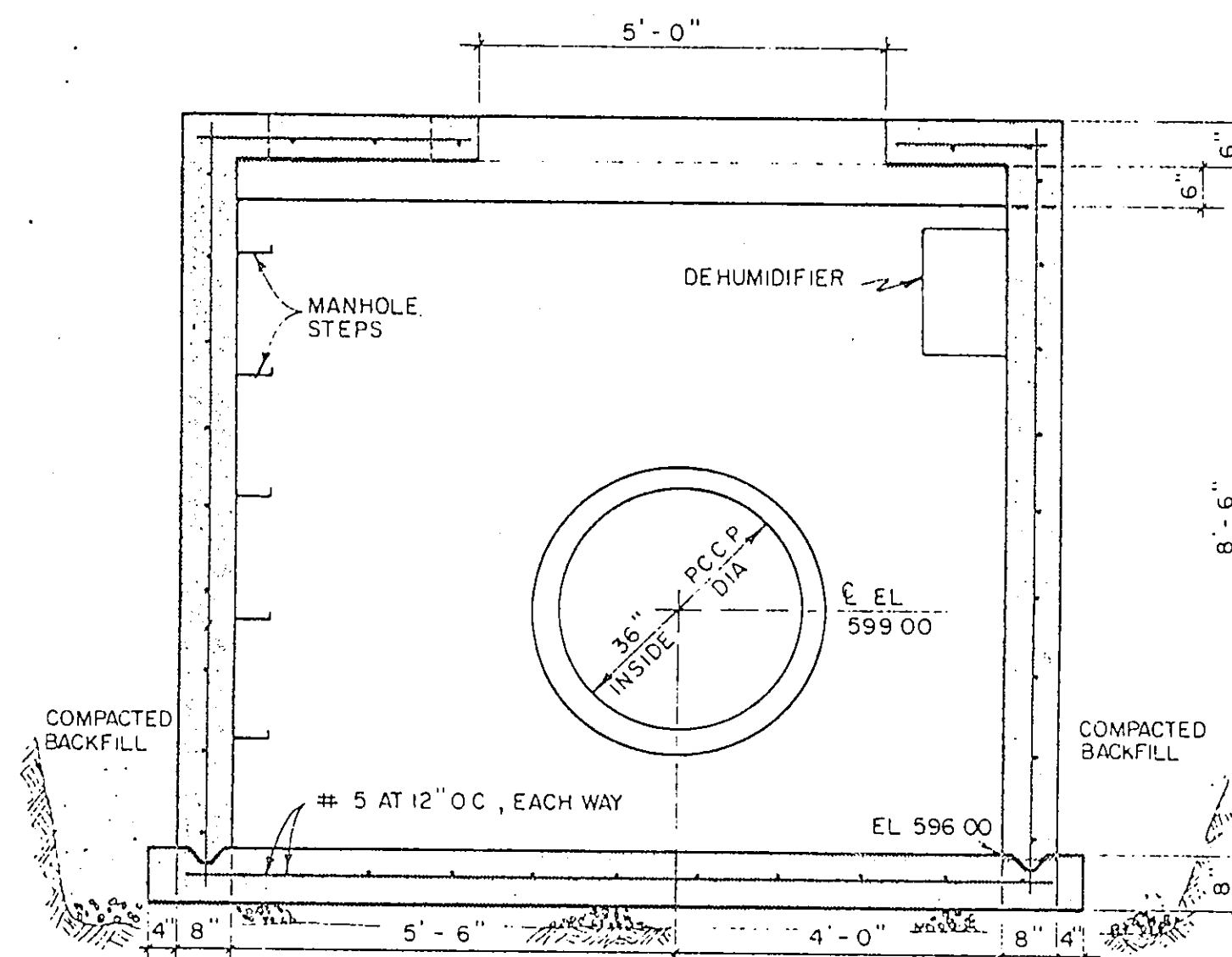
SECTION 1
SCALE - 1/2" = 1'-0"



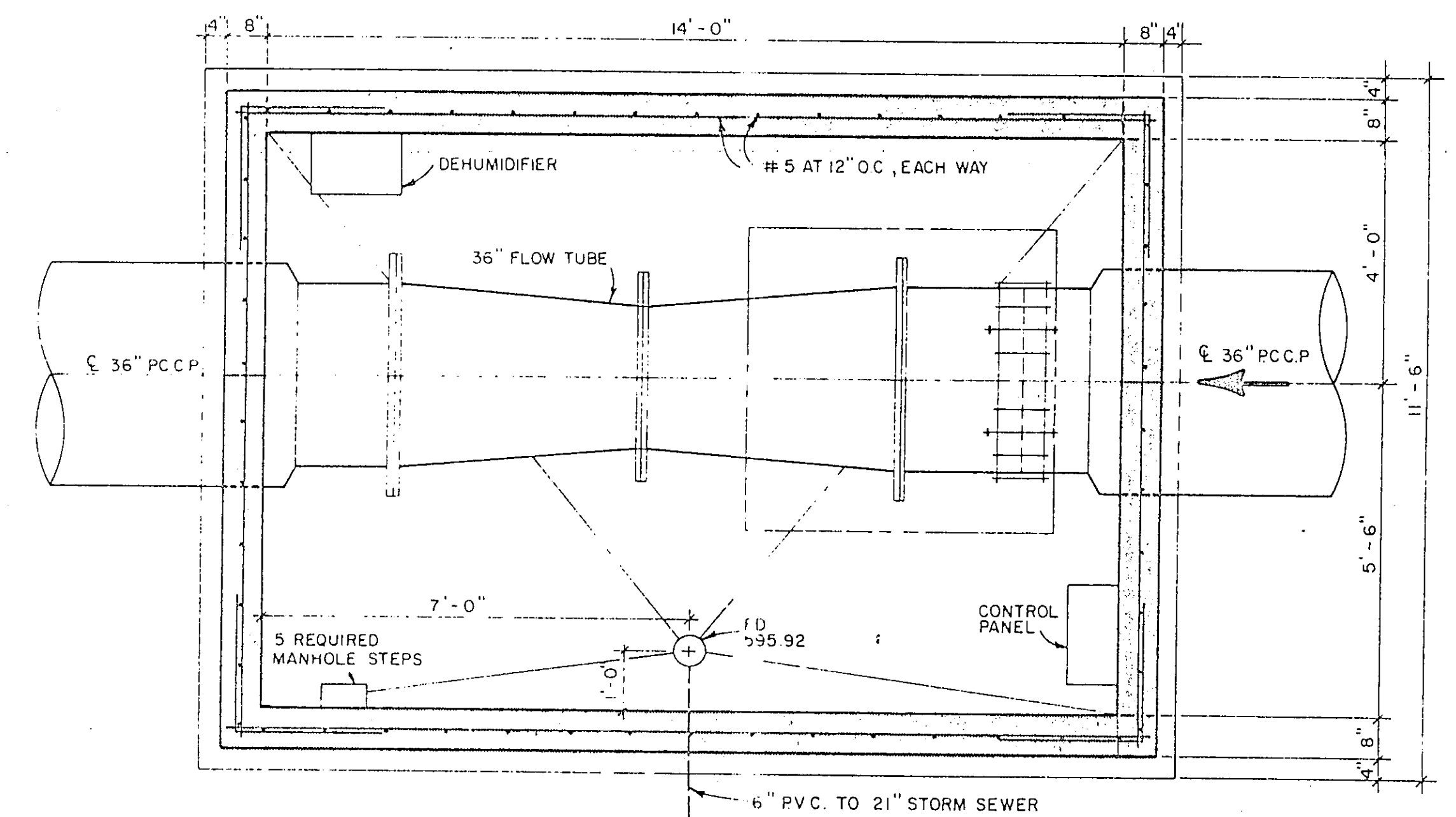
ROOF PLAN
SCALE - 1/2" = 1'-0"



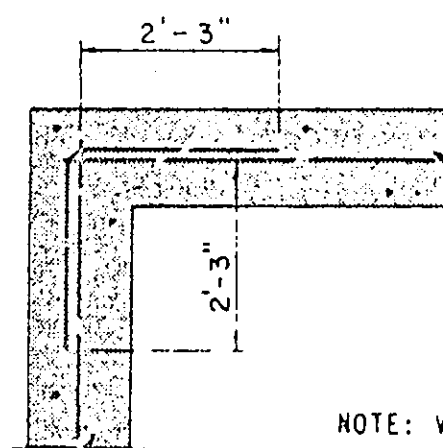
REINFORCING AT OPENINGS



SECTION 2
SCALE - 1/2" = 1'-0"

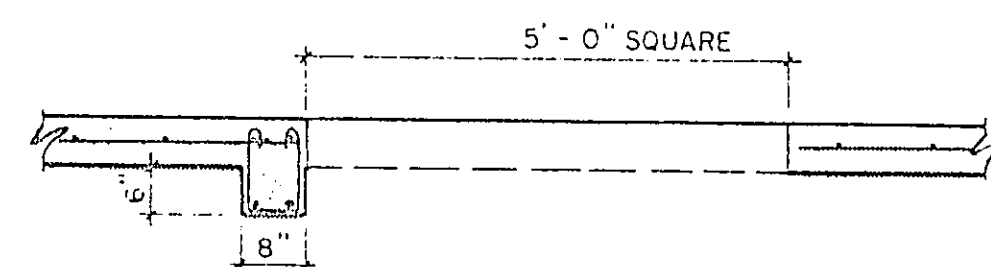


SECTIONAL PLAN
SCALE - 1/2" = 1'-0"



NOTE: VERTICAL REINFORCING NOT SHOWN.

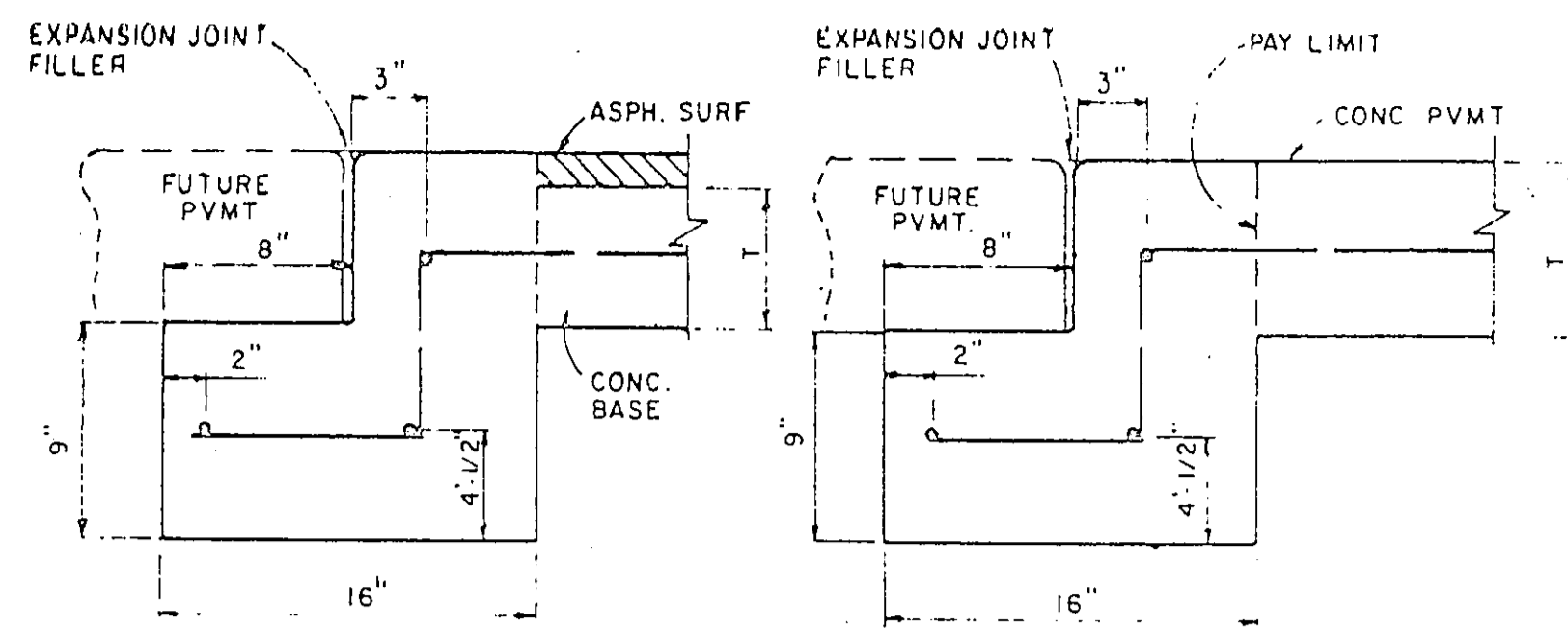
TYPICAL CORNER REINFORCING DETAILS
(PLAN VIEW)



SECTION 3
SCALE - 1/2" = 1'-0"

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
CELESTIAL ROAD PUMP STATION			
FLOW METER VAULT & DETAILS			
GINN, INC. Consulting Engineers, Dallas, Texas			
Designed - R.C.H.	Drawn - B.S.	Date - JAN., 1987	Job No - 217
Approved - HWG	Checked - G.A.F.	Scale - AS SHOWN	Sheet C7

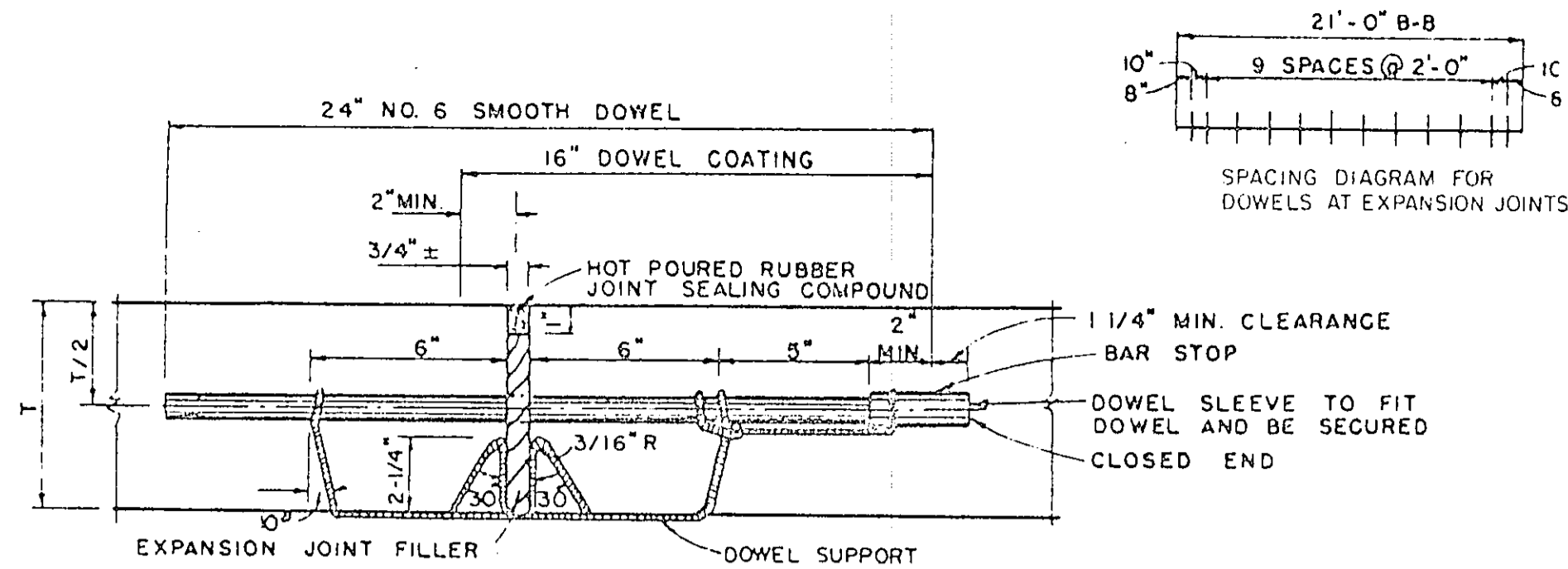
Randall C. Hill
2-19-87



PAVEMENT BARS TO BE BENT DOWN INTO HEADER. HEADER AND PAVEMENT TO BE MONOLITHIC.

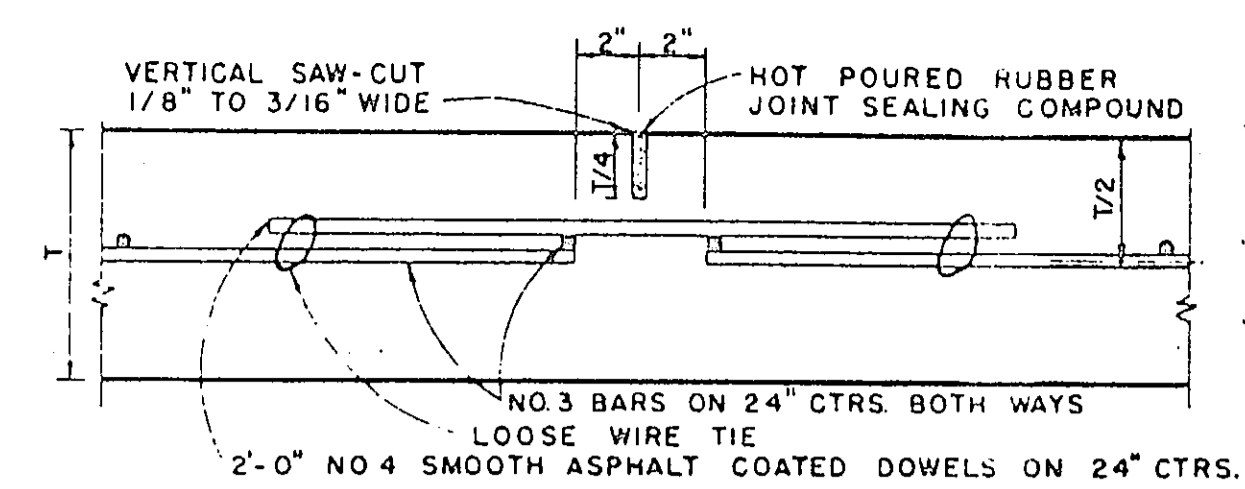
STREET HEADER

N.T.S.



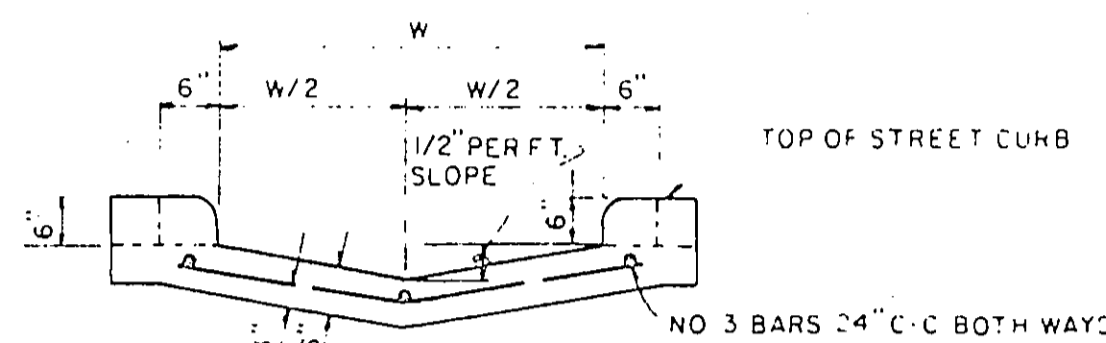
TRANSVERSE EXPANSION JOINT

IDENTICAL FOR STREETS & ALLEYS
N.T.S.

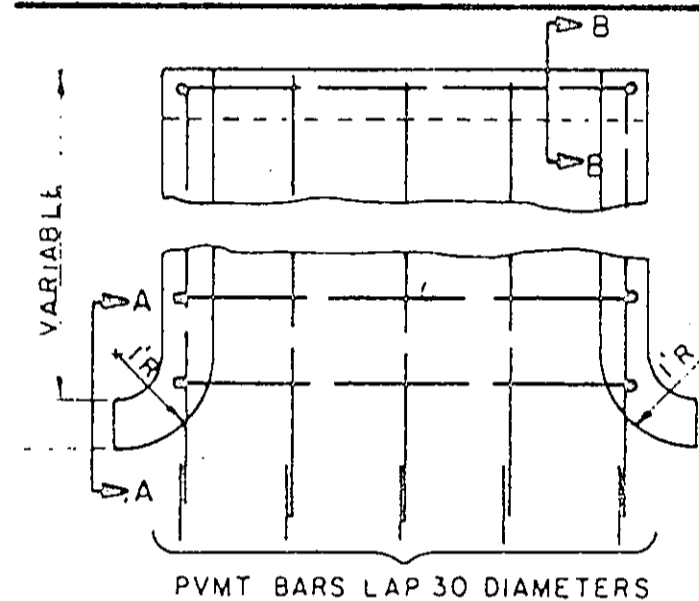
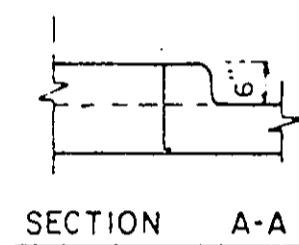


TRANSVERSE CONTRACTION JOINT

IDENTICAL FOR STREETS AND ALLEYS EXCEPT ALLEY LONGITUDINAL REINFORCING BARS.
N.T.S.



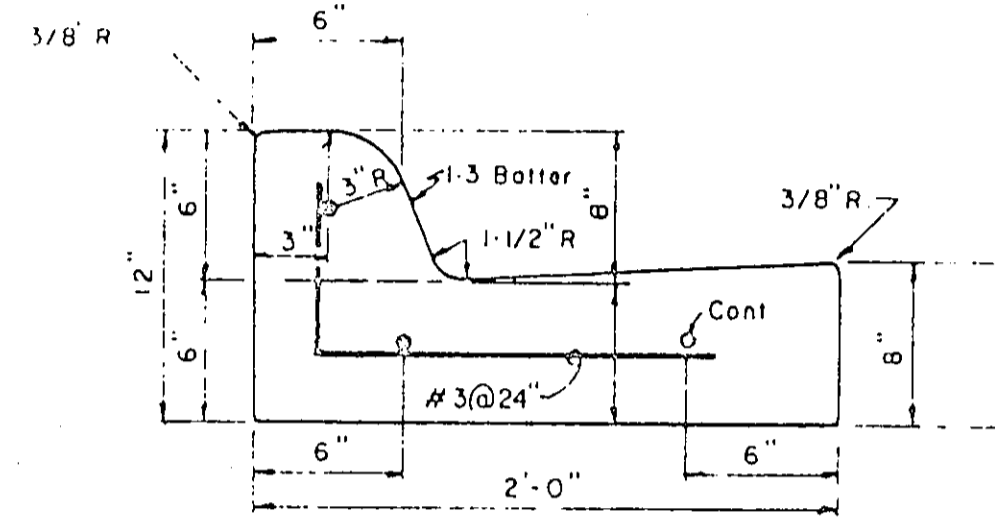
SECTION AT CURB FACE



PLAN

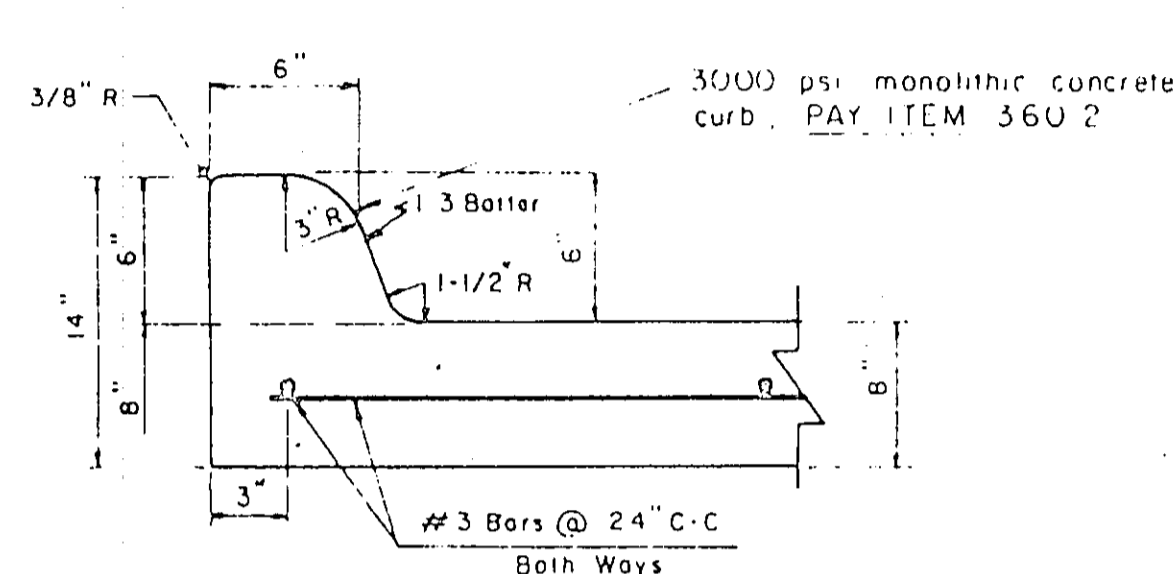
FLUME

N.T.S.



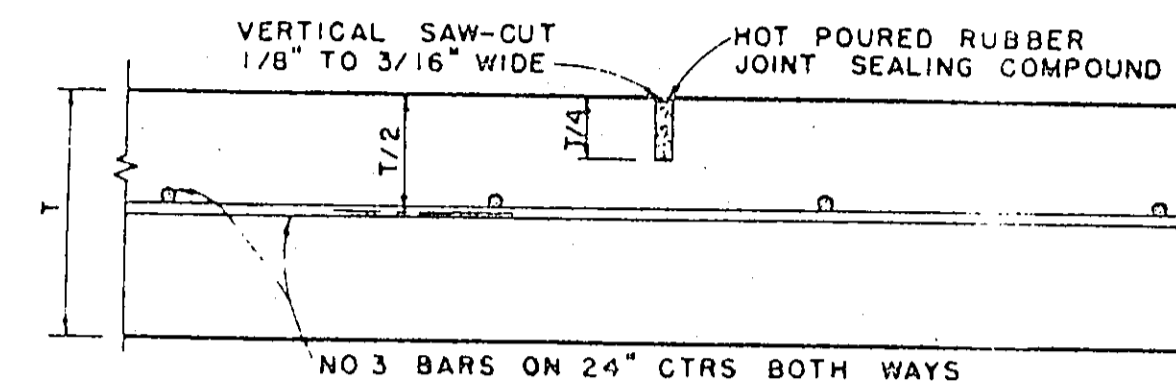
SEPARATE CURB & GUTTER

REINFORCEMENT SHALL BE NO. 3 BARS
N.T.S.



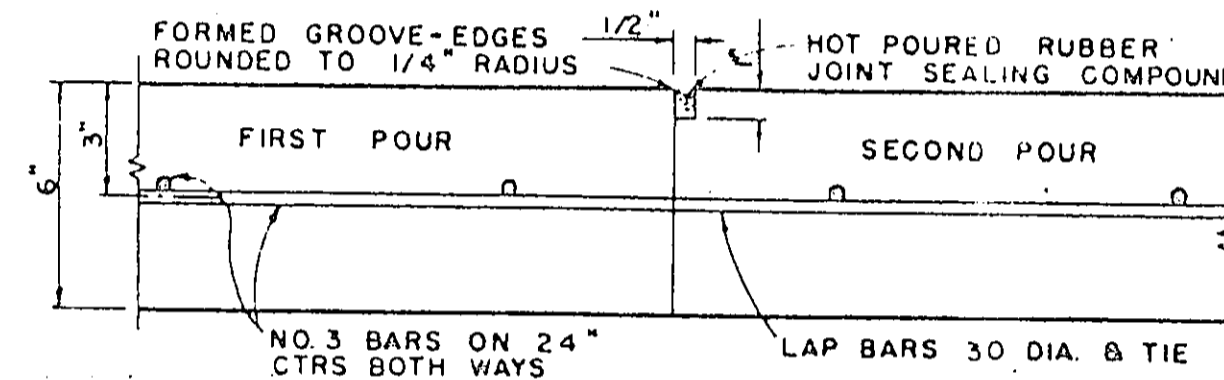
6" INTEGRAL CURB & GUTTER DETAIL

N.T.S.



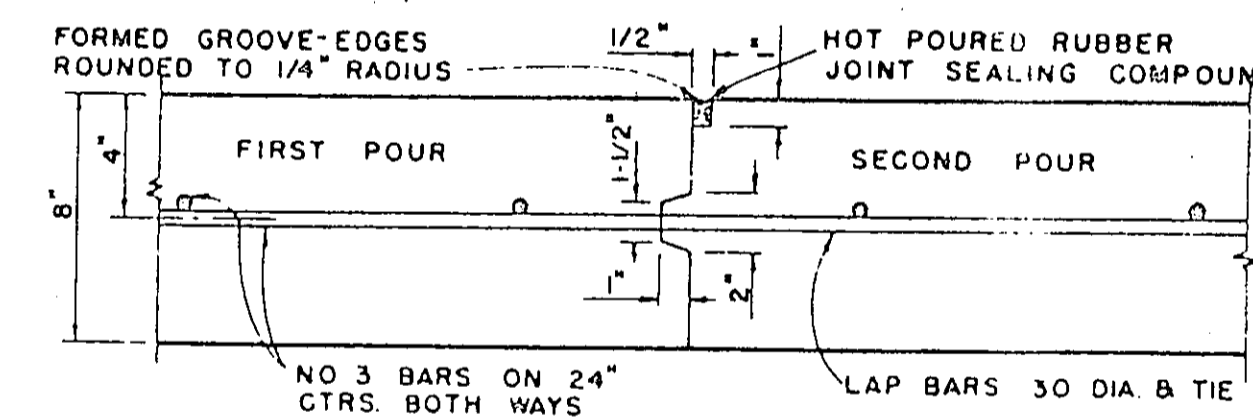
SAWED DUMMY JOINT

IDENTICAL FOR STREETS AND ALLEYS EXCEPT ALLEY LONGITUDINAL REINFORCEMENT BARS
N.T.S.



CONSTRUCTION JOINT

FOR 6" THICKNESS PAVEMENT OR BASE
IDENTICAL FOR STREETS AND ALLEYS EXCEPT ALLEY LONGITUDINAL REINFORCEMENT BARS
N.T.S.

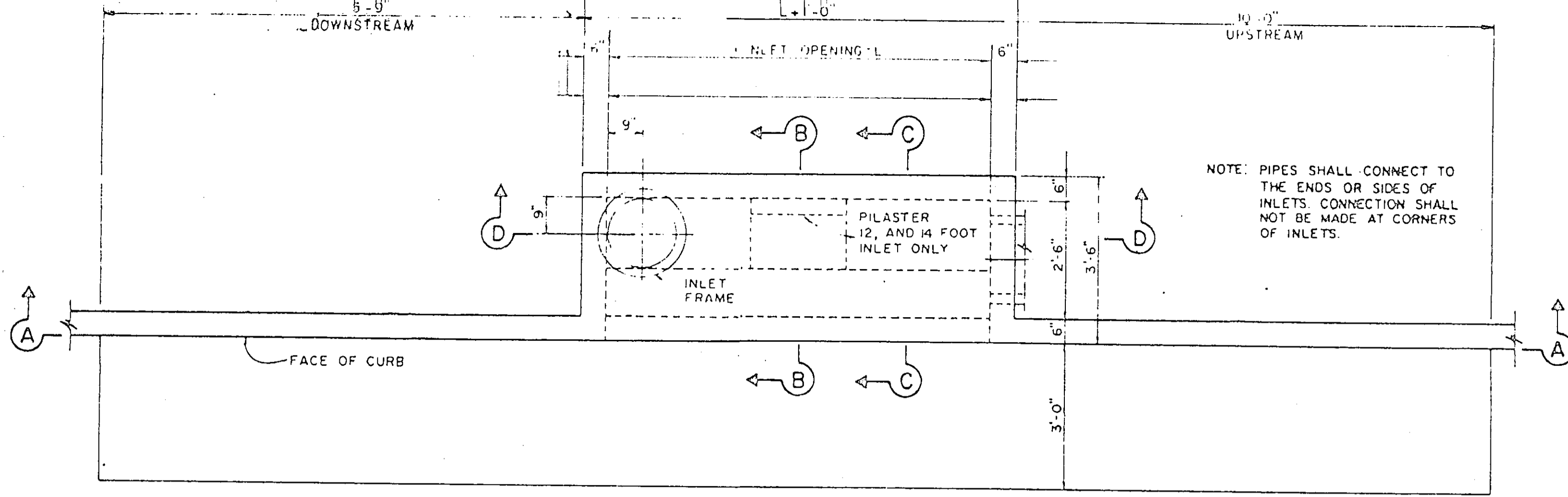


CONSTRUCTION JOINT

FOR 8" THICKNESS PAVEMENT OR BASE
N.T.S.

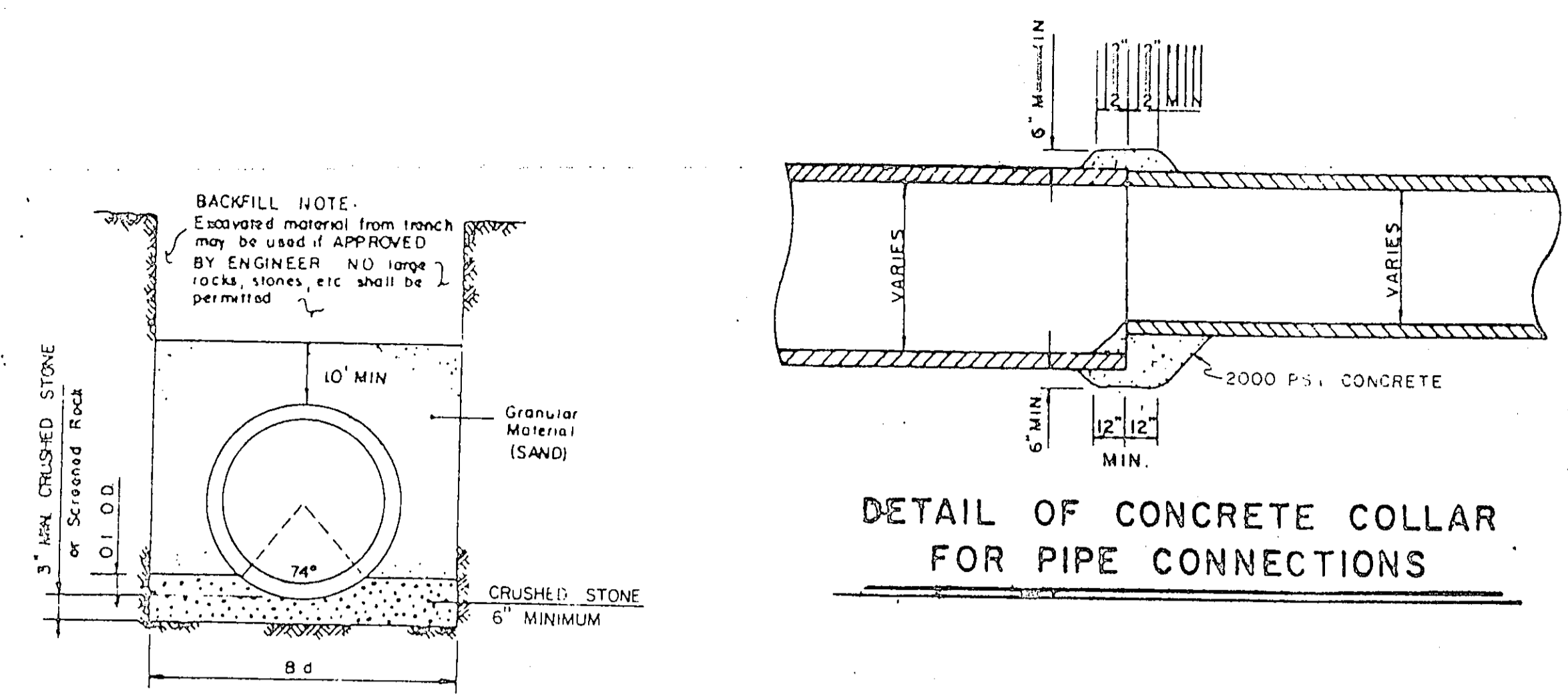
Randall C. Hood
2-19-87

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS CELESTIAL ROAD PUMP STATION			
MISC. DETAILS - PAVING			
GINN, INC. Consulting Engineers, Dallas, Texas			
Designed - R.C.H.	Drawn - B.S.	Date - JAN., 1987	Job No. - 217
Approved - HWG	Checked - G.A.F.	Scale - AS SHOWN	Sheet - CB

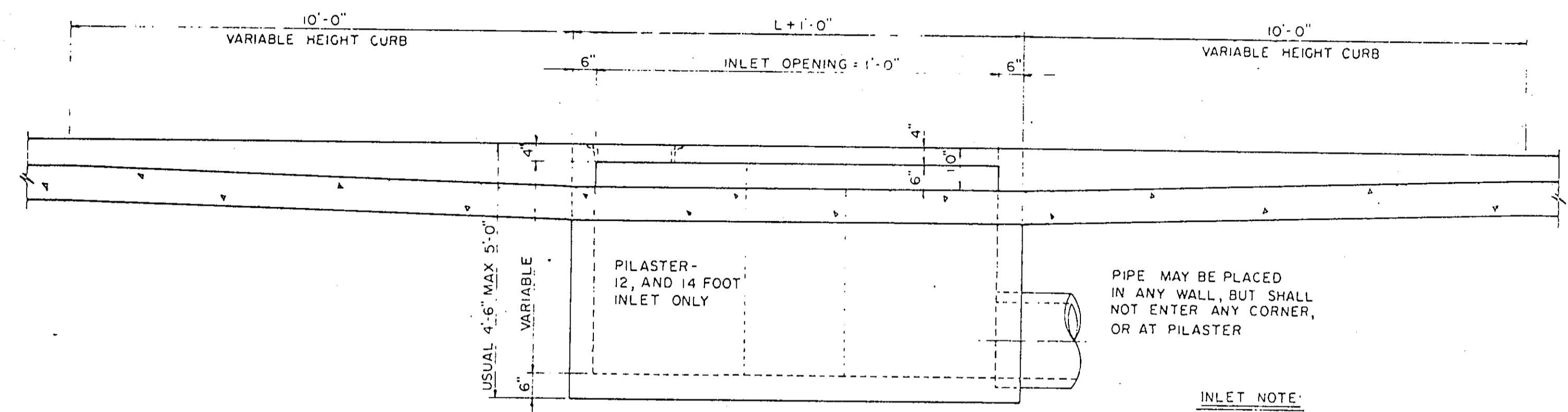


PLAN - STANDARD INLET

STORM SEWER EMBEDMENT					
PIPE DIAM.	CU. YDS. PER 100 LF		GRANULAR MATERIAL		STONE
	I.D.	O.D.	B.d	MINIMUM	
15"	19"	39"	4.53	22.28	
18"	22.5"	42"	5.13	25.15	
21"	26"	45"	5.76	28.03	
24"	29.5"	48"	6.42	30.94	
27"	33"	51"	7.11	33.86	
30"	37"	54"	7.85	36.72	
33"	40.5"	57"	8.59	39.64	
36"	44"	60"	9.36	42.58	
39"	47.5"	63"	10.16	45.53	
42"	51"	66"	10.99	48.51	
48"	58"	72"	12.72	54.51	
54"	65"	78"	14.57	60.37	
60"	72"	84"	16.53	65.71	
66"	79"	90"	18.60	72.92	
72"	86"	96"	20.79	79.19	
78"	93"	102"	23.08	85.53	
84"	100"	108"	25.49	91.95	
90"	108.5"	115"	28.47	99.02	
96"	114"	120"	30.64	104.98	
102"	122.5"	129"	34.66	141	

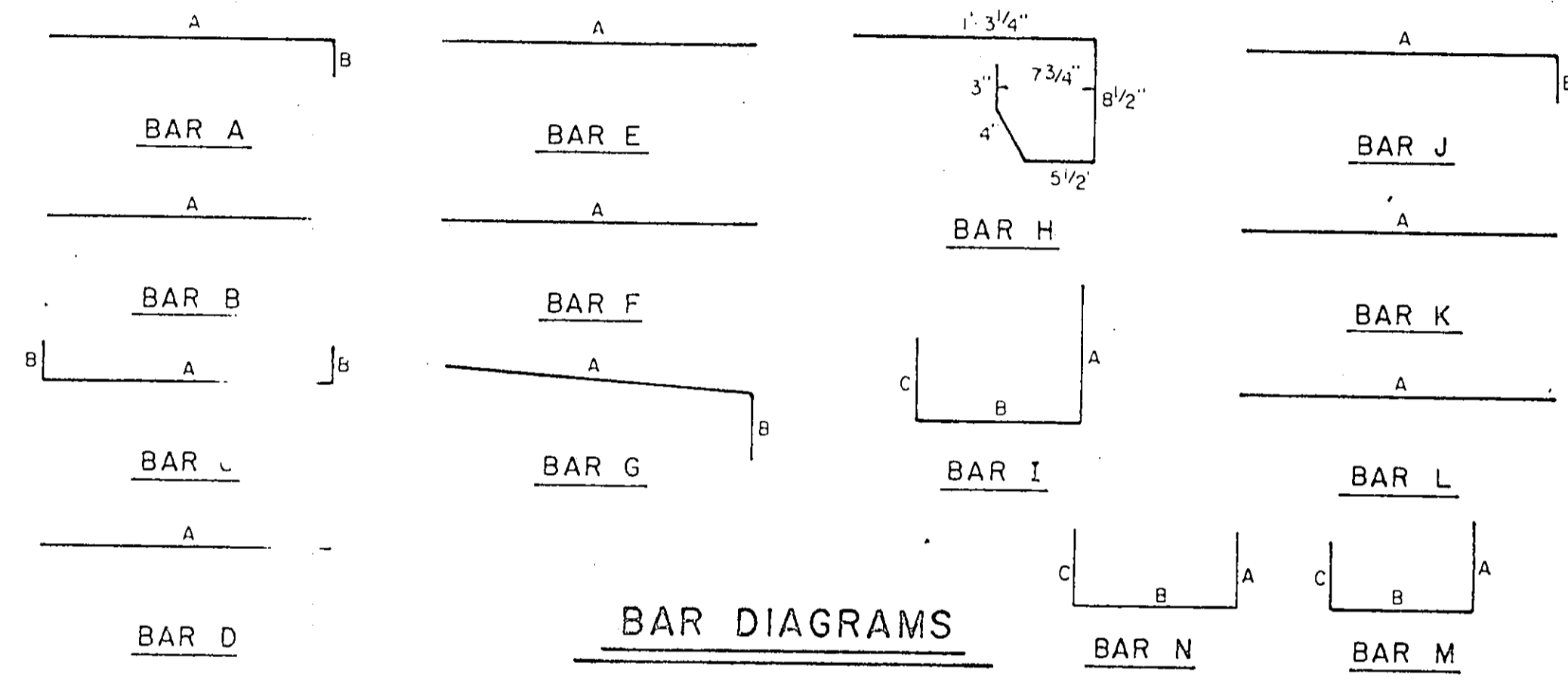


DETAIL OF CONCRETE COLLAR FOR PIPE CONNECTIONS



4, 6, 8, 10, 12, AND 14 FOOT INLETS

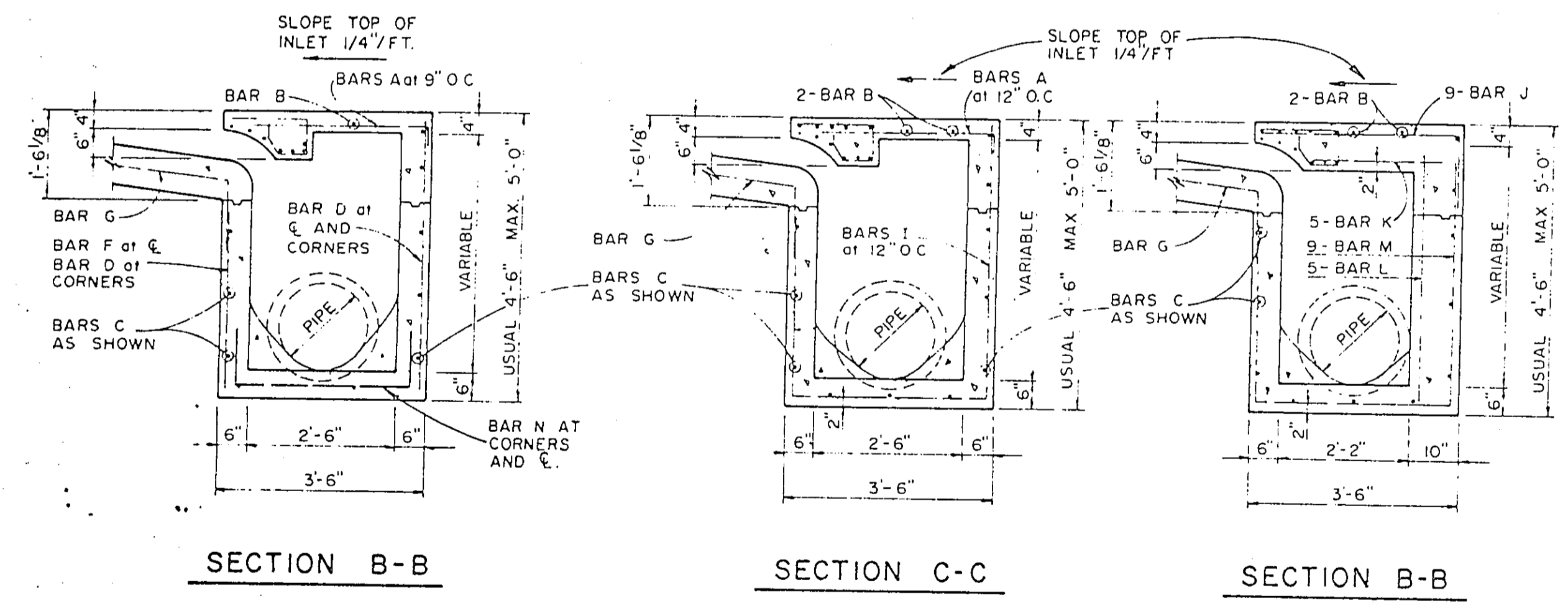
INLET NOTE:
WHERE INLETS ARE INDICATED TO BE MODIFIED, REFER TO PLAN/PROFILE SHEETS FOR ELEV. DIFFERENT SIZES ON MODIFICATIONS. ALL OTHER ITEMS SHALL REMAIN AS SHOWN ON THIS STANDARD DETAIL SHEET.



BAR DIAGRAMS

REINFORCING STEEL SCHEDULE

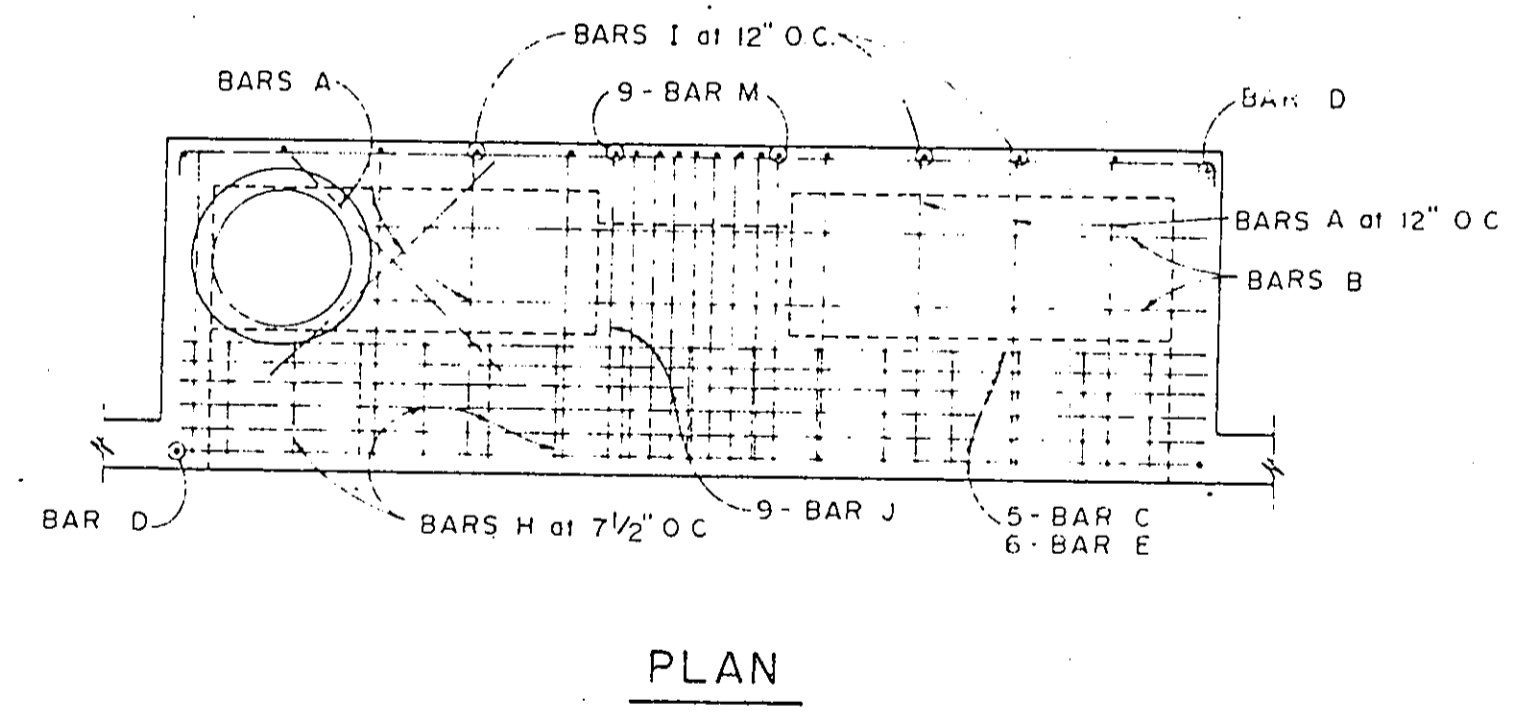
DIMENSIONS SHOWN ARE FOR MAXIMUM SIZE INLETS						
INLET LENGTH	BAR TYPE	BAR DIA (1/8 IN)	NO. REQ'D	BAR DIMENSIONS		
				A	B	C
4	A	3	6	3'-2"	0'-3"	-
	B	3	1	2'-10"	-	-
	C	4	15	4'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
6	A	3	9	3'-2"	0'-3"	-
	B	3	1	4'-10"	-	-
	C	4	15	6'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	3	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
8	A	3	12	3'-2"	0'-3"	-
	B	3	1	6'-10"	-	-
	C	4	15	8'-8"	0'-6"	-
	D	4	5	4'-8"	-	-
	F	4	1	3'-2"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	4	*	*	*
	N	3	3	3'-2"	3'-2"	3'-2"
10	A	3	10	3'-2"	0'-3"	-
	B	3	2	8'-10"	-	-
	C	4	16	10'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	10'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	15	*	*	*
	I	4	8	4'-8"	3'-2"	3'-2"
	L	4	5	4'-3"	-	-
12	A	3	12	3'-2"	0'-3"	-
	B	3	2	10'-10"	-	-
	C	4	16	12'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	12'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	18	*	*	*
	I	4	10	4'-8"	3'-2"	3'-2"
	J	5	9	3'-2"	1'-3"	-
	K	4	5	2'-3"	-	-
	L	4	5	4'-3"	-	-
	M	5	9	4'-3"	3'-2"	3'-9"
14	A	3	14	3'-2"	0'-3"	-
	B	3	2	10'-10"	-	-
	C	4	16	14'-8"	0'-6"	-
	D	4	4	4'-8"	-	-
	E	5	6	14'-8"	-	-
	G	3	5	2'-0"	1'-3"	-
	H	3	21	*	*	*
	I	4	12	4'-8"	3'-2"	3'-2"
	J	5	9	3'-2"	1'-3"	-
	K	4	5	2'-3"	-	-
	L	4	5	4'-3"	-	-
	M	5	9	4'-3"	3'-2"	3'-9"



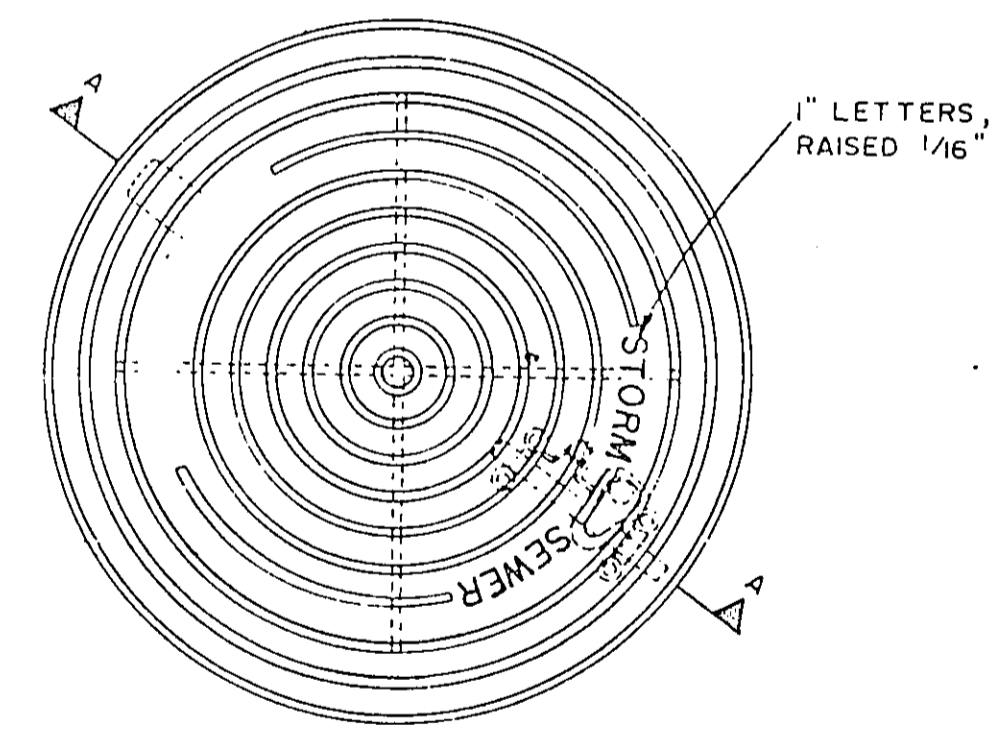
SECTION B-B

SECTION C-C

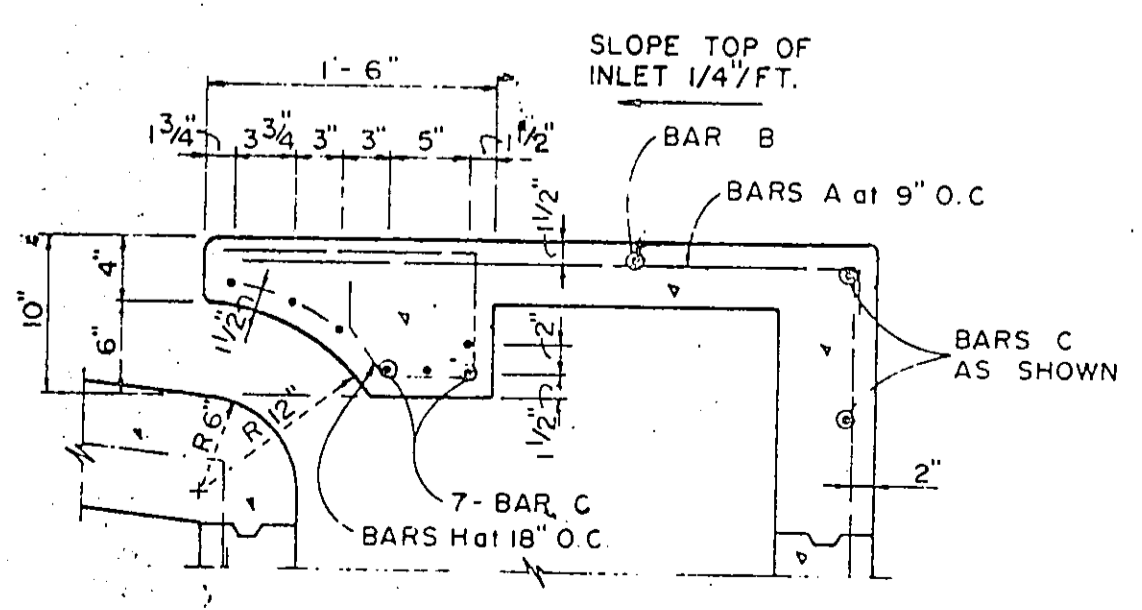
SECTION B-B



PLAN

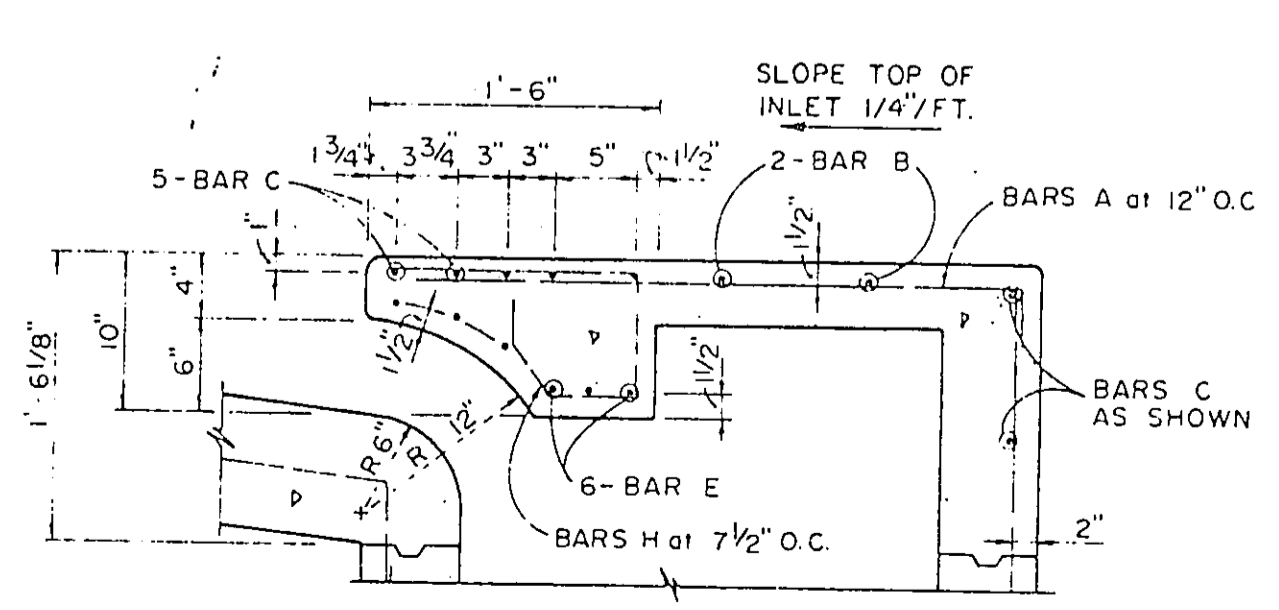


PLAN OF FRAME



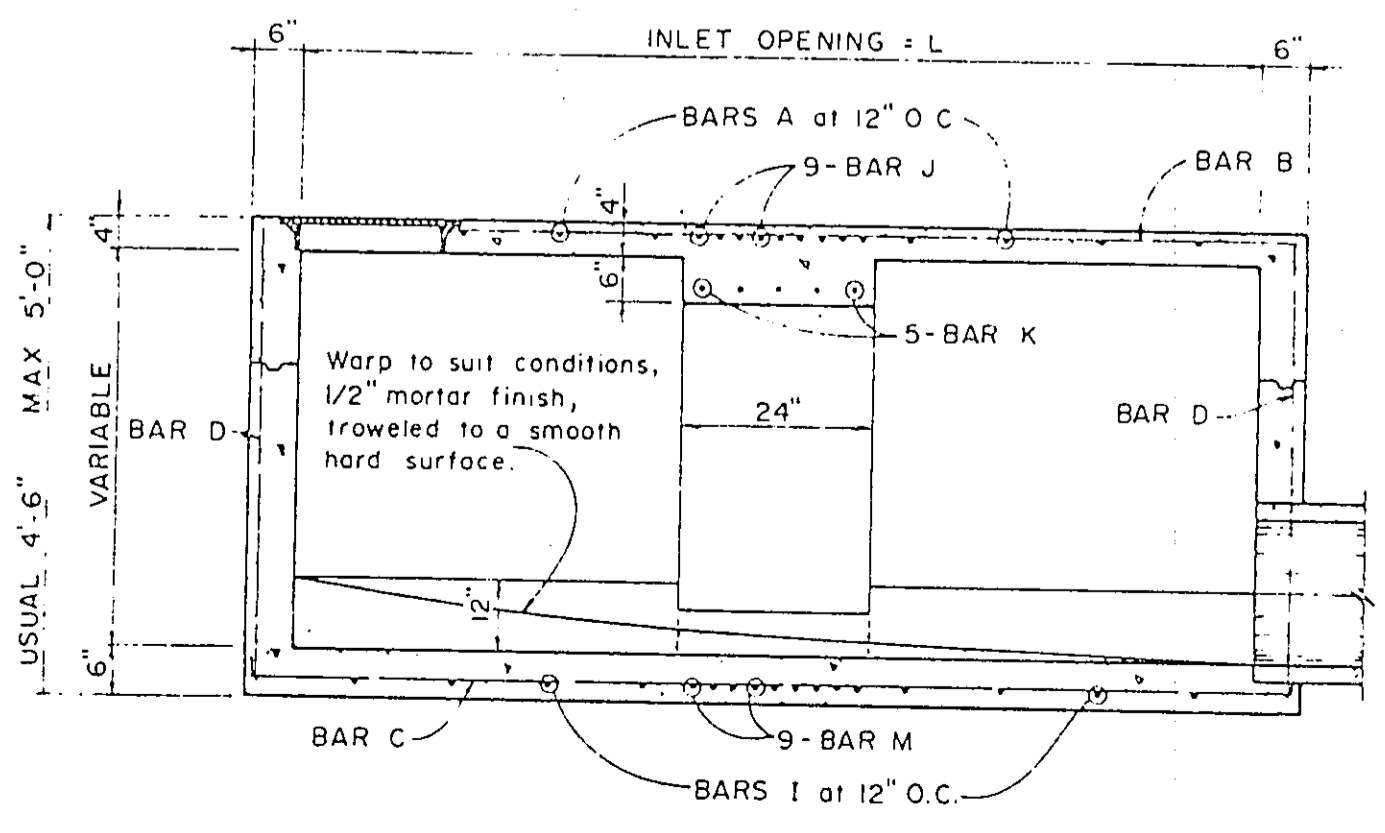
SECTION C-C

4, 6, AND 8 FOOT INLETS

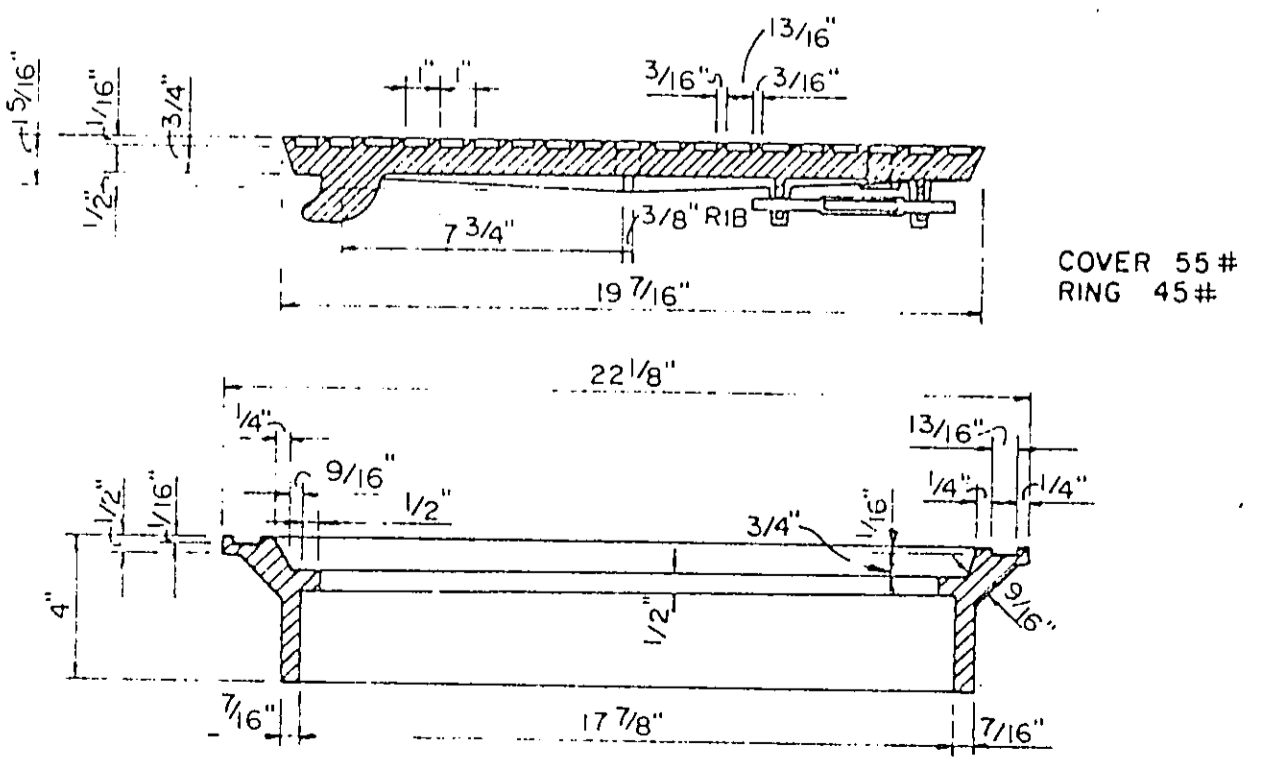


SECTION C-C

10, 12, AND 14 FOOT INLETS

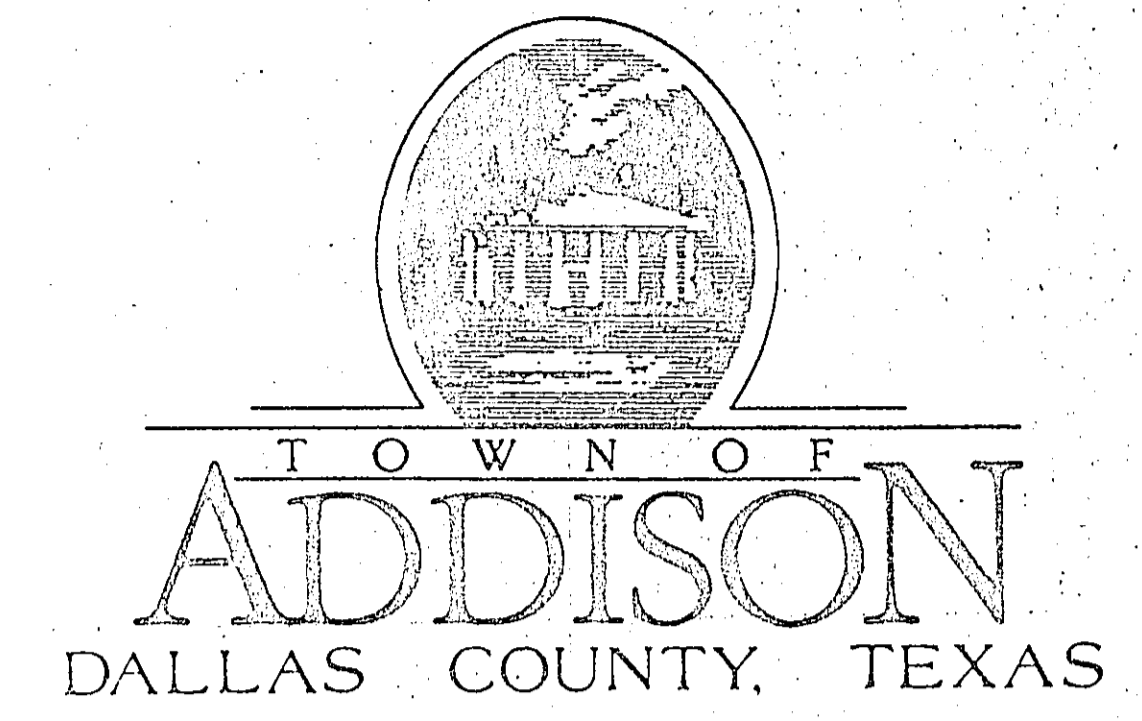
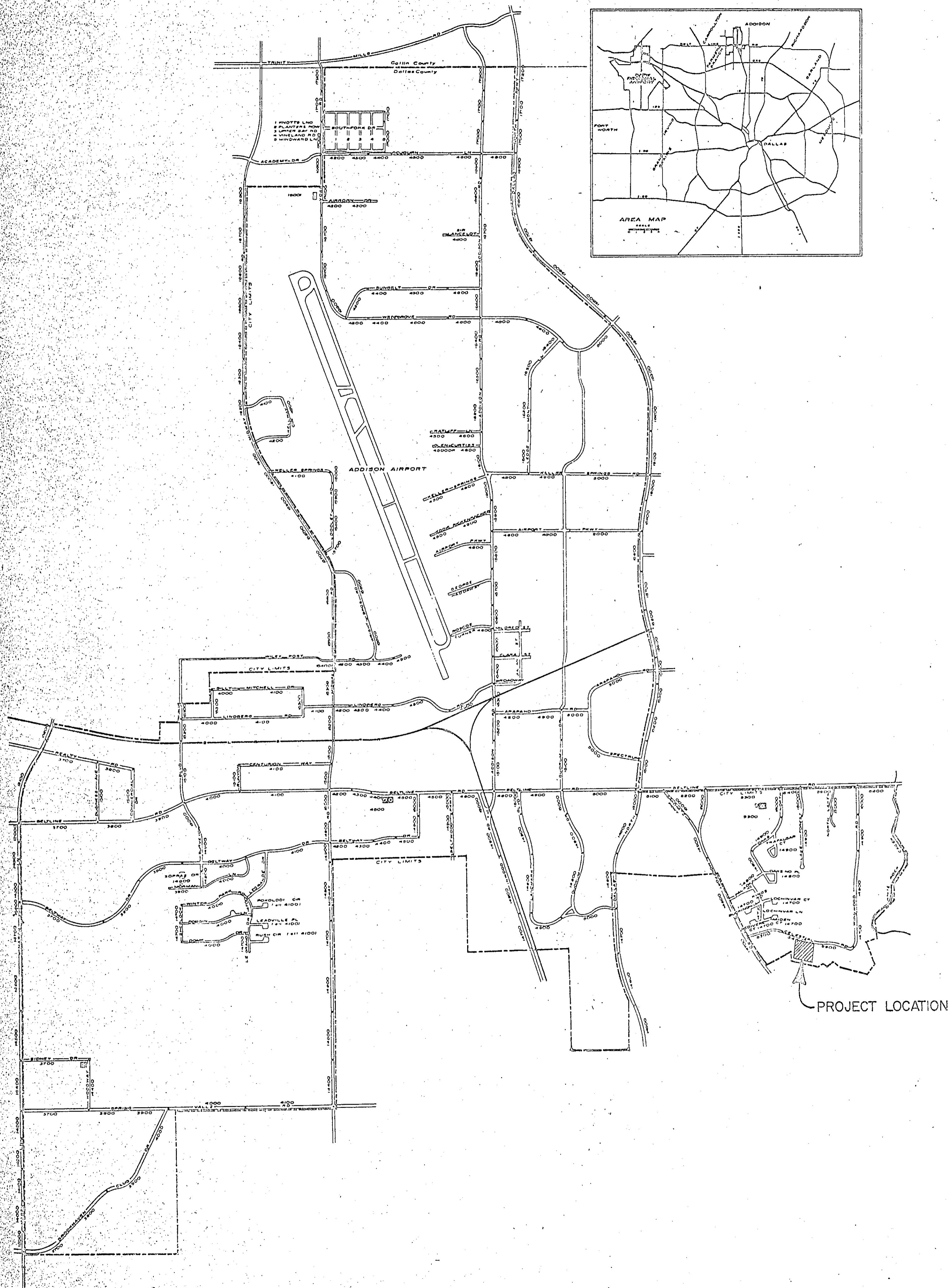


SECTION D-D FOR 12' & 14' ONLY



SECTION OF FRAME AND COVER

INLET FRAME AND COVER



CONSTRUCTION PLANS FOR

CELESTIAL ROAD PUMP STATION

MAYOR:
JERRY REDDING

COUNCIL MEMBERS:
BOBBY HATFIELD
LYNN SPRULL
RICHARD ROPER
JIM DUFFY
JOHN NOLAN

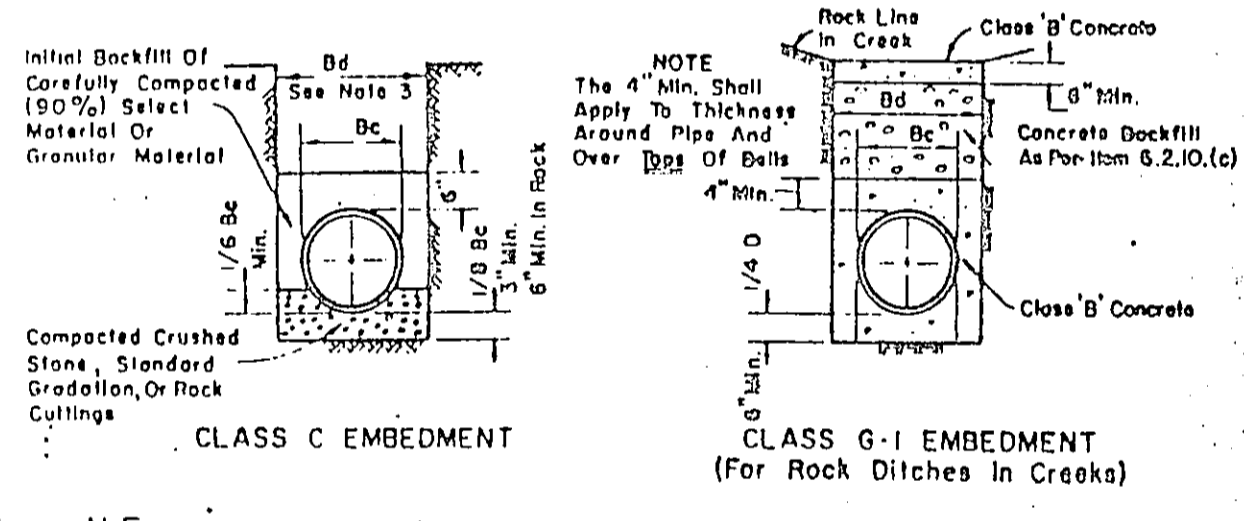
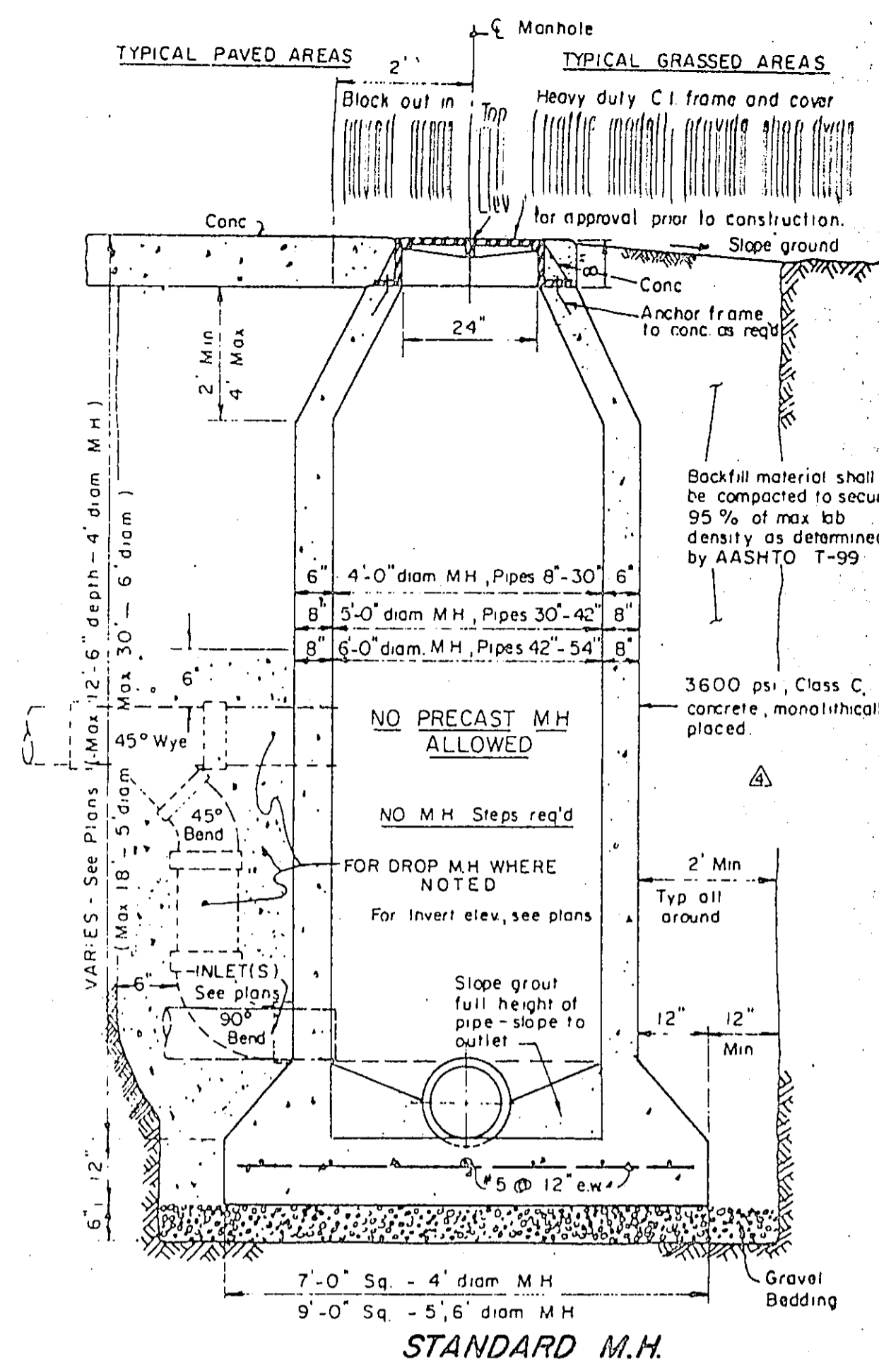
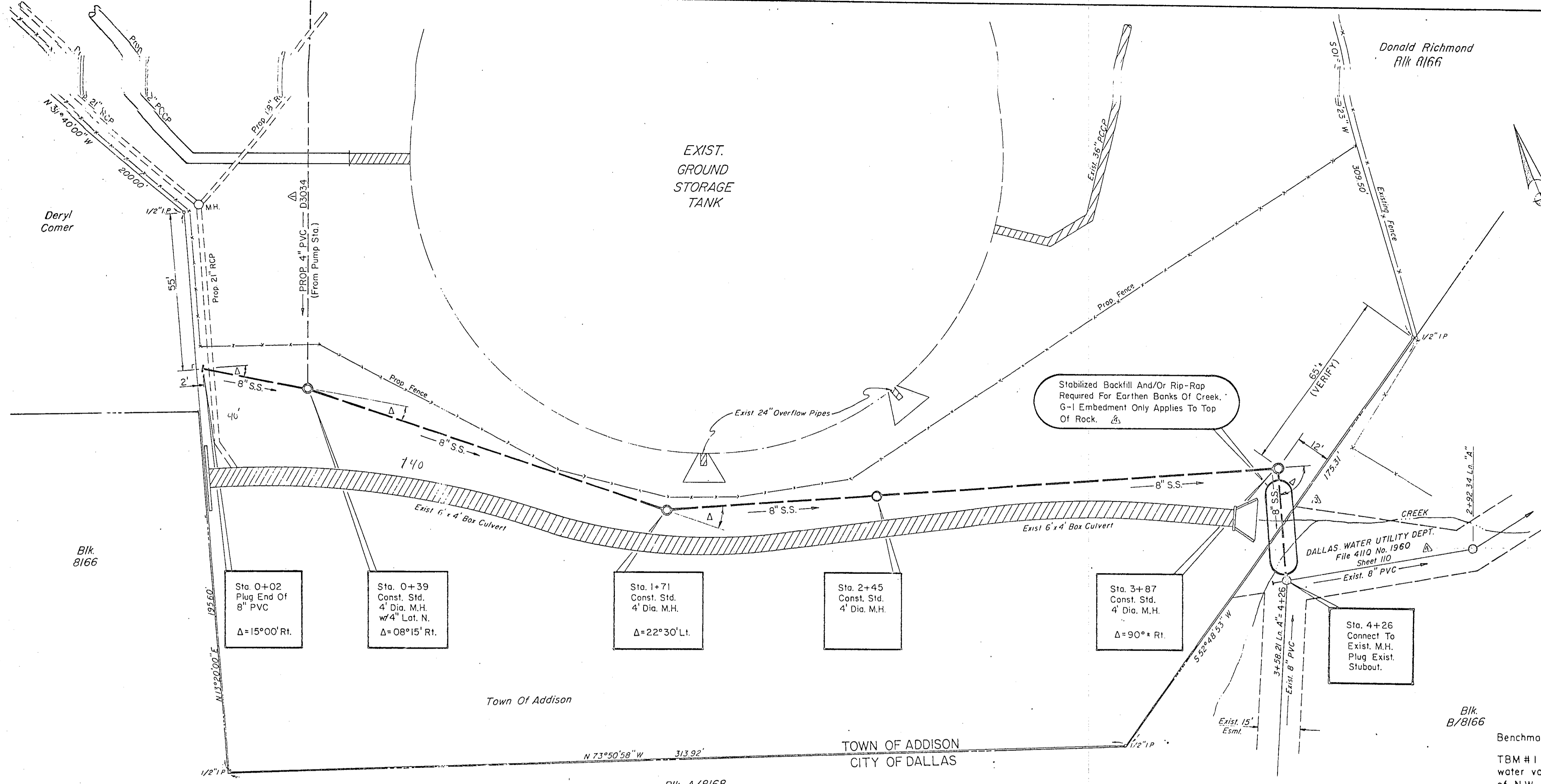
CITY MANAGER:
RON WHITEHEAD

DIRECTOR OF UTILITIES:
DON PREECE

Approved by: *Jerry Redding* Date: 5-1-87
APPROVED BY: JERRY REDDING, MAYOR OF ADDISON

Allyce H.

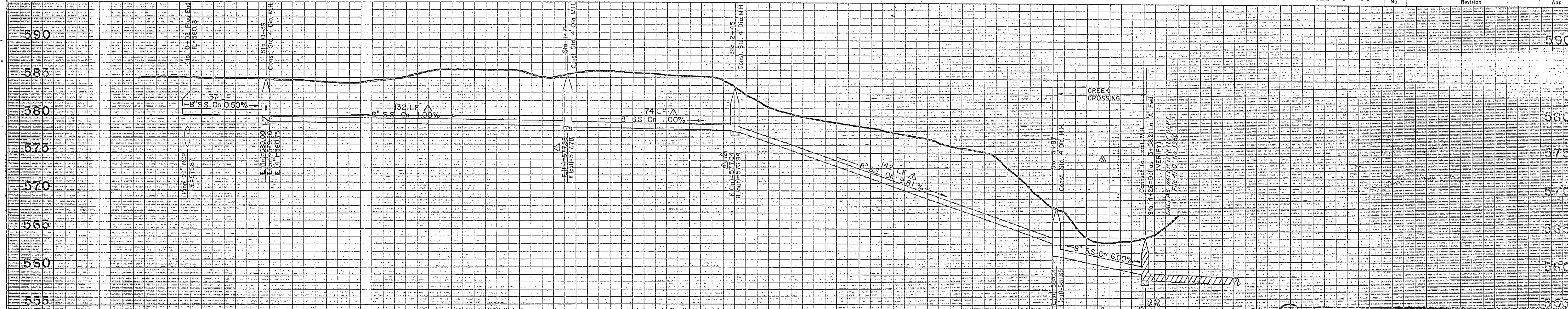
GINN, INC.
Consulting Engineers Dallas, Texas
1987



Benchmarks:

TBM #1 "□" Set on N.E. corner concrete water valve vault located 70 ± north of NW property corner. ELEV. 608.44
 TBM #2 "□" Set on front porch of church at 5555 Celestial Road ELEV. 577.95

No.	Revision	App.
1	Add Embedment Note B. Sht. No., Delete MH Option	RCH
2	Revise Alignment & Profile	RCH
3	Correct Elevations	RCH
4	Addendum No. 2	RCH
5		App.

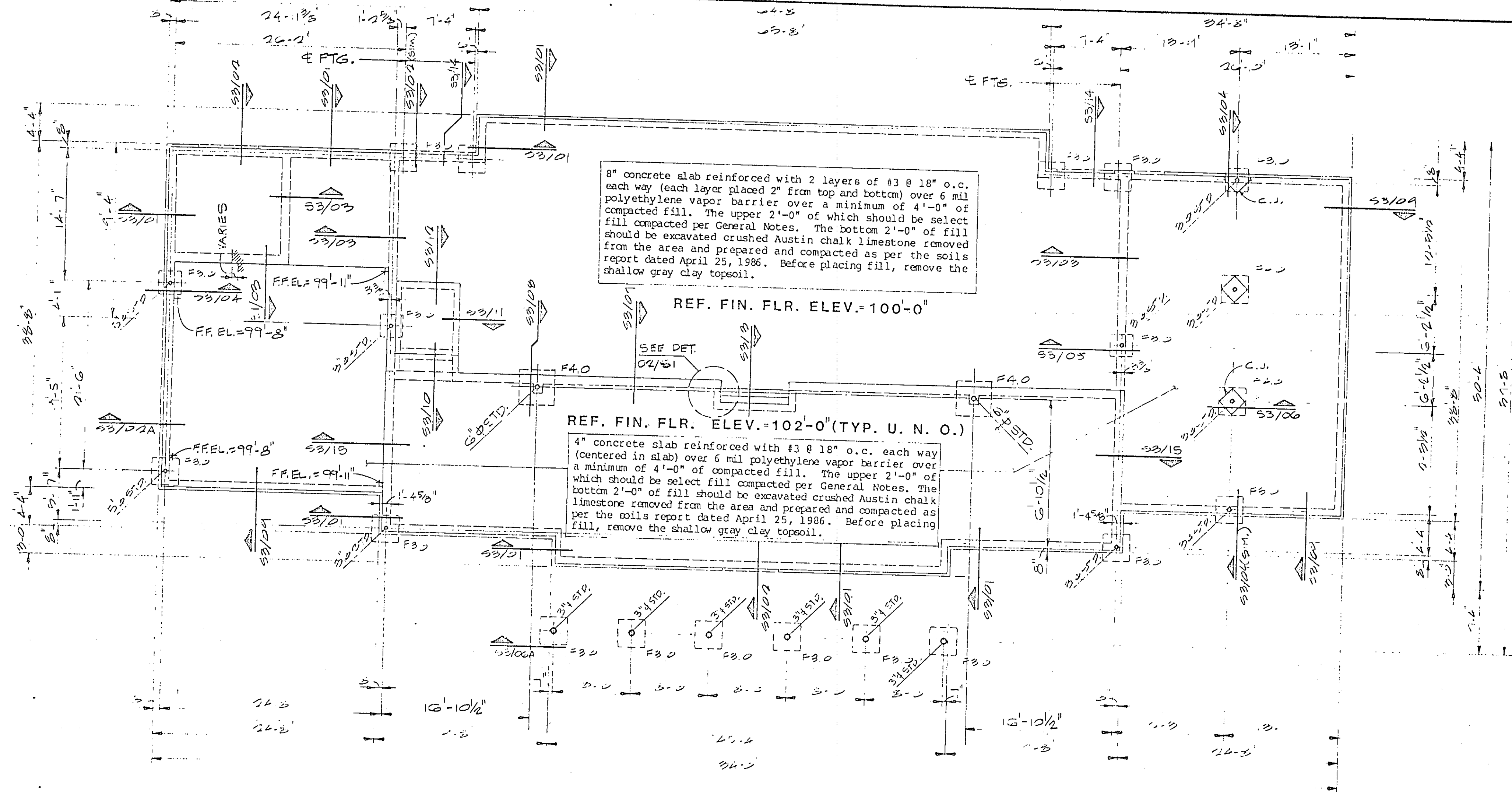
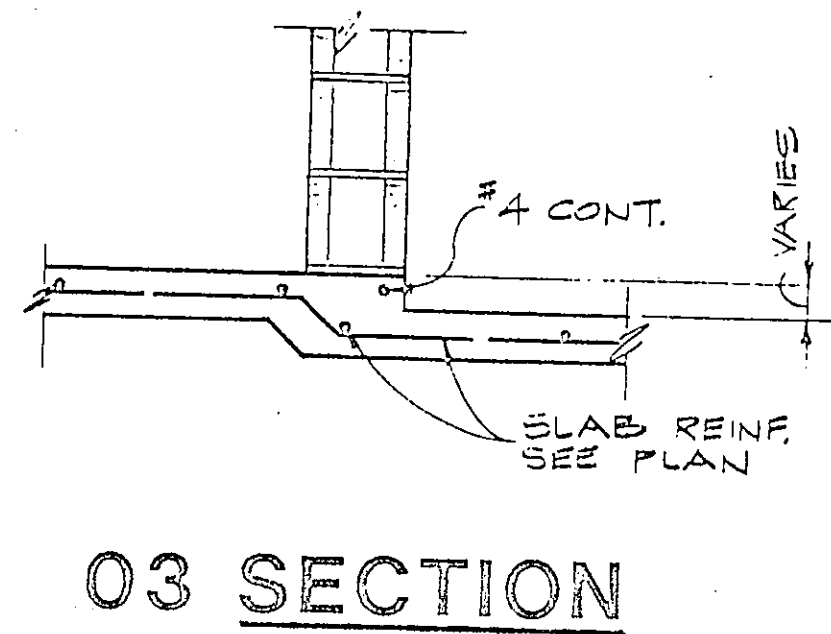


385 LF 8" PVC Sewer Pipe, ASTM D3034 (SDR 35) or ASTM F 769/D3212 Class "C" Embedment
 39 LF 8" PVC Sew. Pipe Class "G-1" Embedment

110

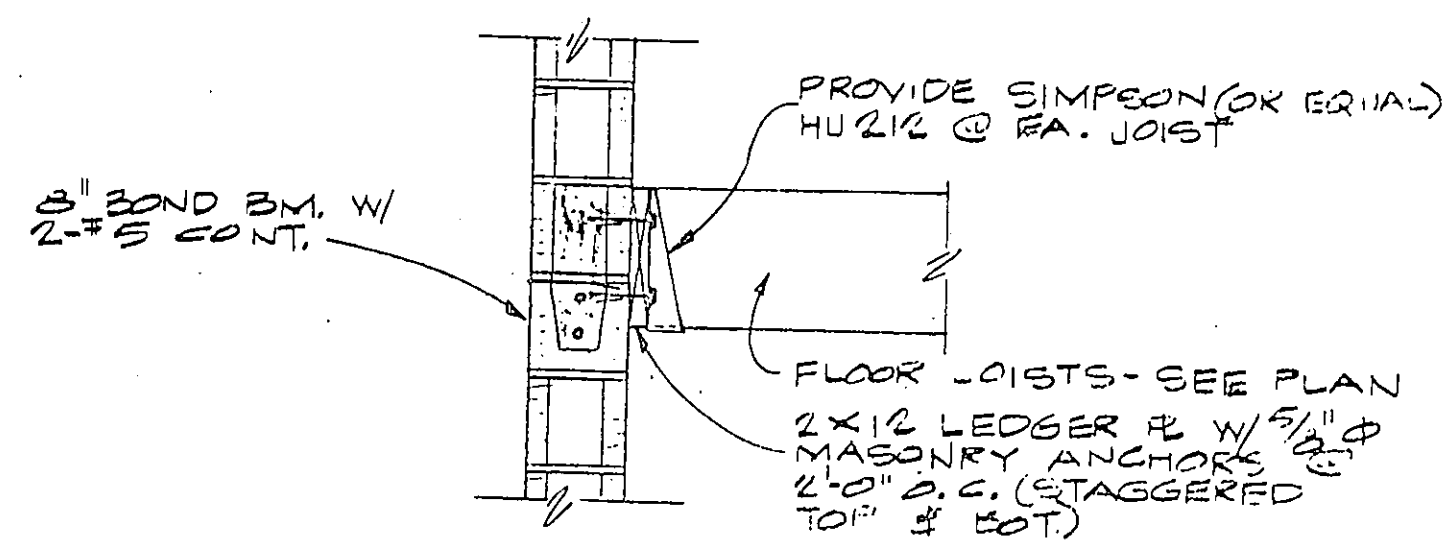
SANITARY SEWER
CELESTIAL ROAD PUMP STATION
TOWN OF ADDISON
DALLAS WATER UTILITY DEPT.
CITY OF DALLAS, TEXAS

DESIGN	DRAWN	DATE	SCALE	NOTES	FILE	N.

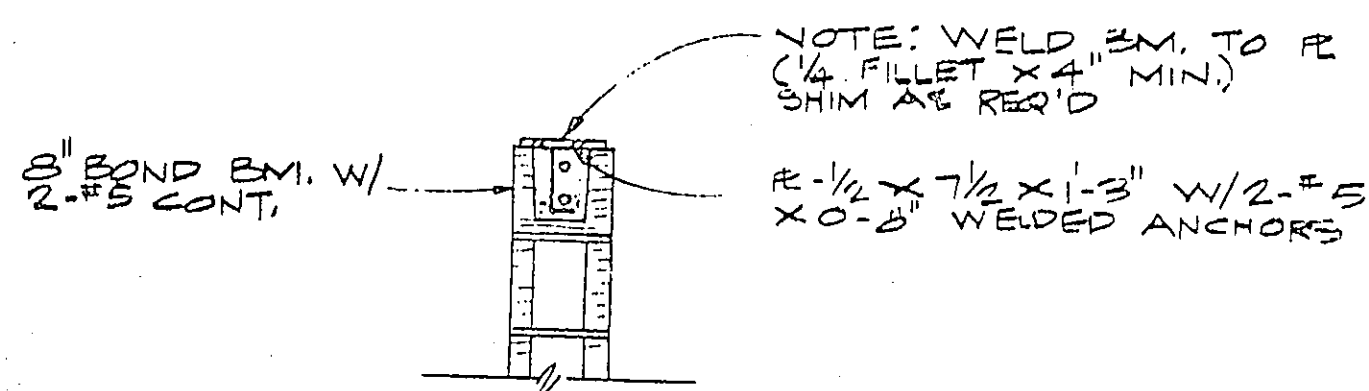


Plan Notes

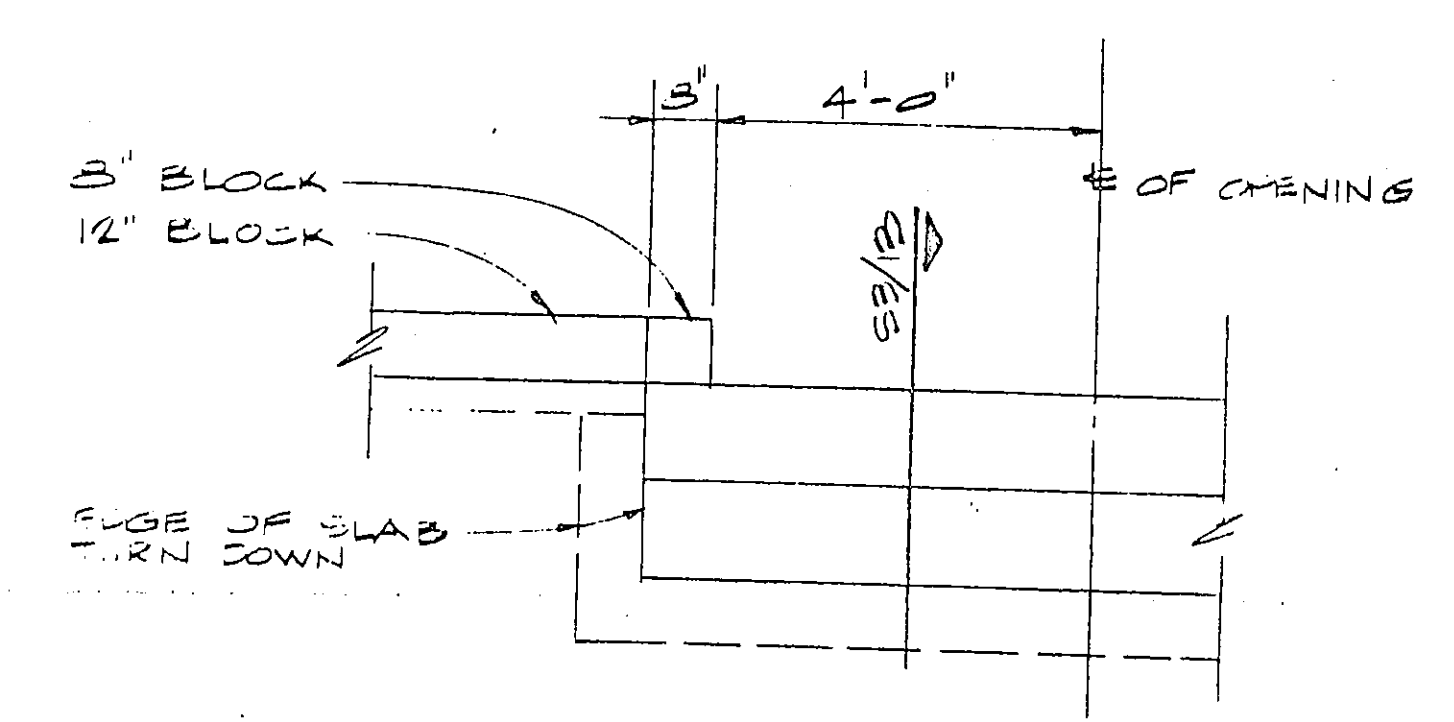
1. Refer S4 for General Notes, typical details, footing schedule and base schedule.
2. Refer S2 for wood framing notes.
3. C.J. - Indicates construction joint.



04 SECTION

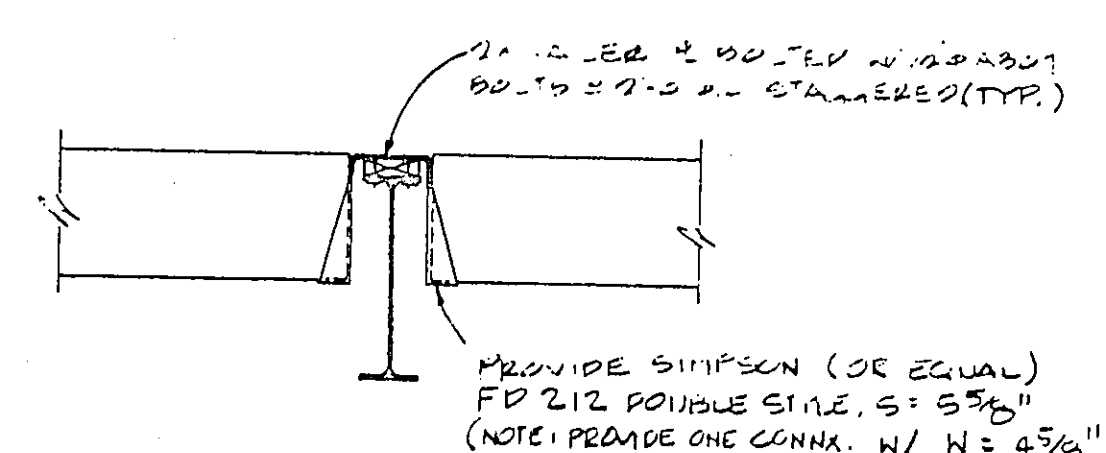
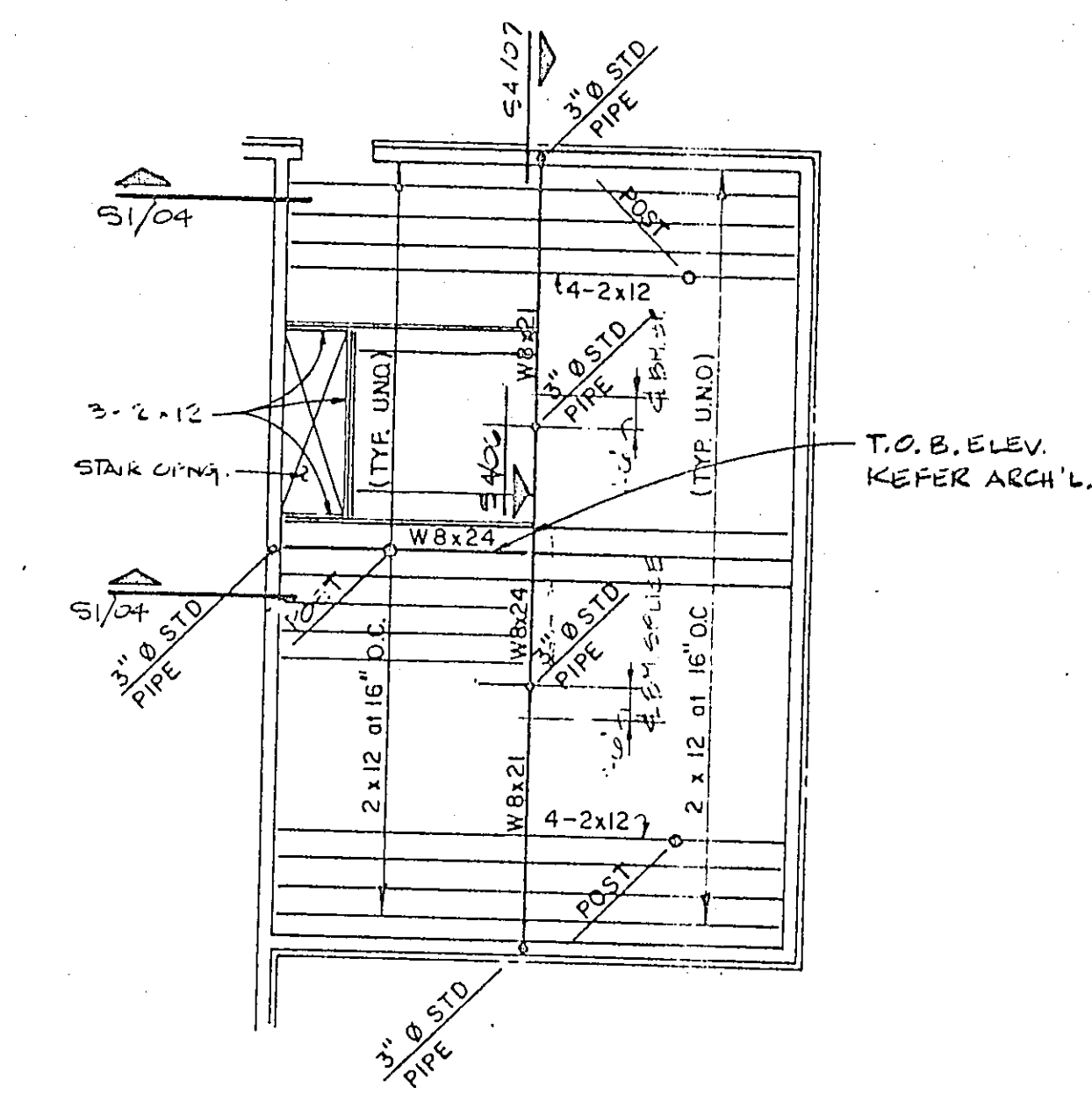
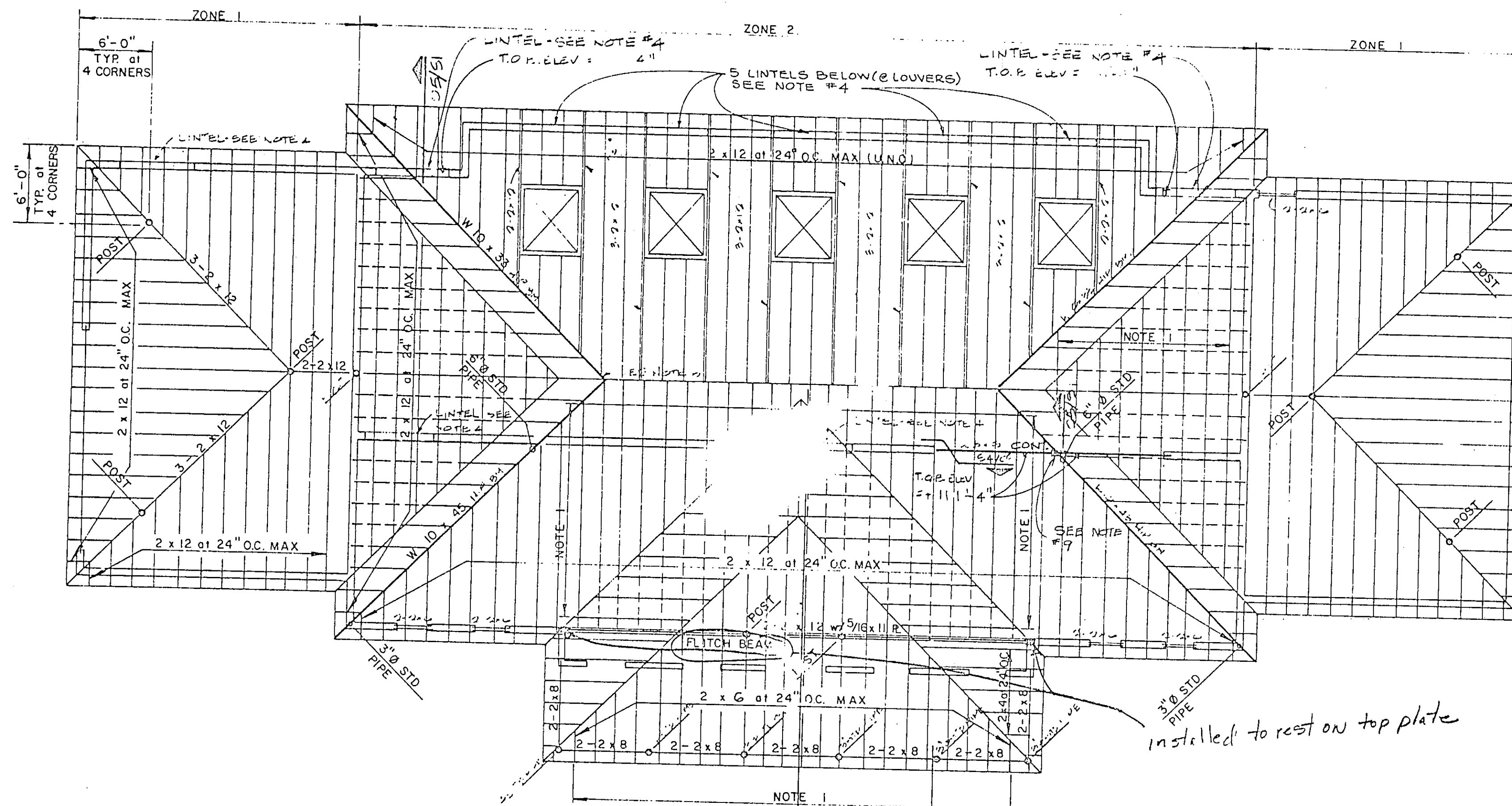
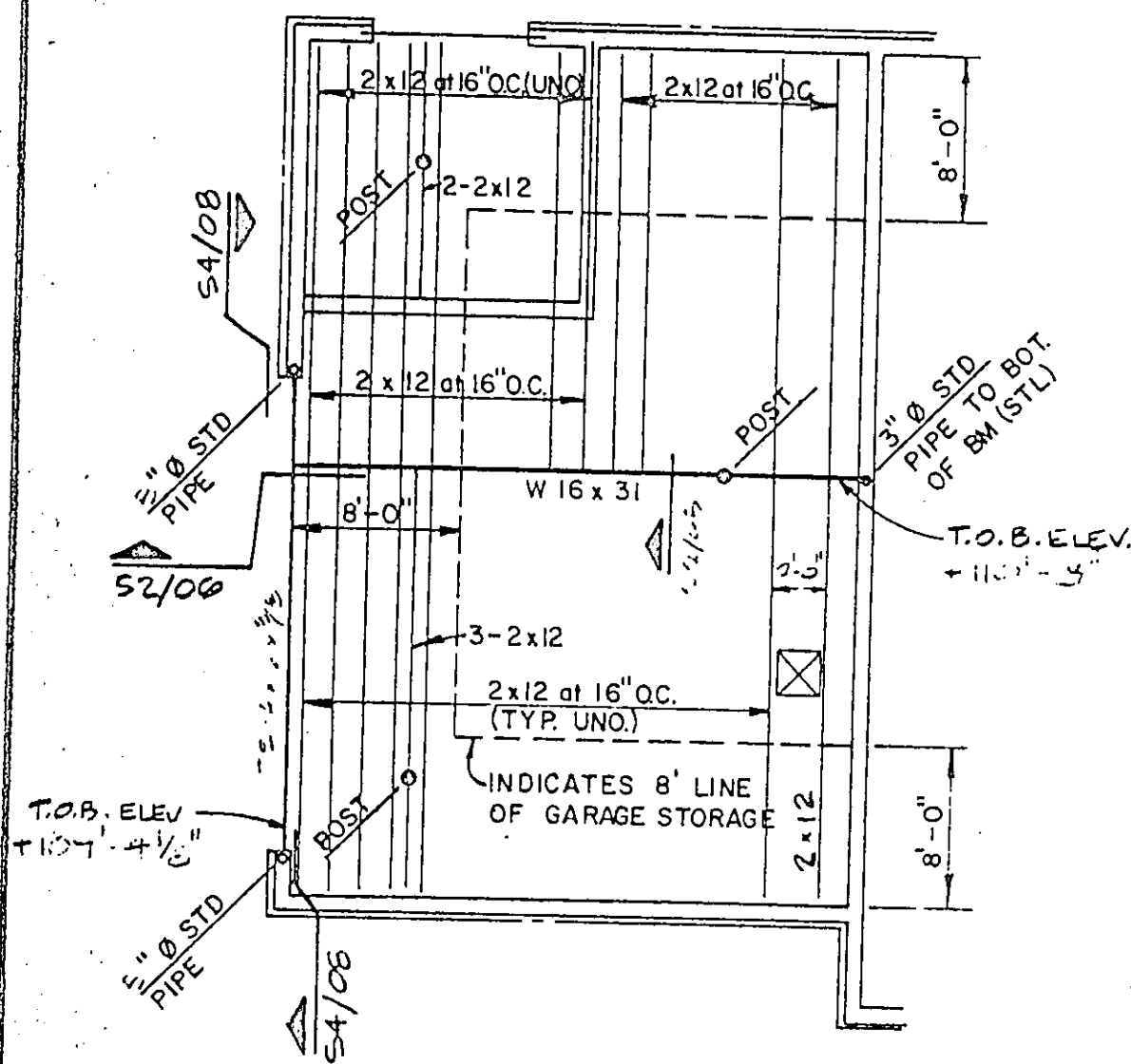


05 SECTION



02 DETAIL

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS CELESTIAL ROAD PUMP STATION			
HIXSON & HARRIS, INC.		FOUNDATION DETAILS	
Structural Engineers		Highland Park West 4300 Mesquite Avenue, Suite 115 Dallas, Texas 75209 (214) 528-3931	
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - C.S.	Drawn - S.L.C.	Date - JANUARY, 1987	Job No. - 217
Approved -	Checked - D.K.		



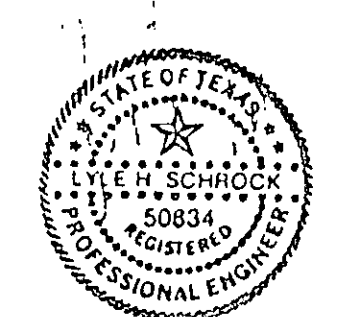
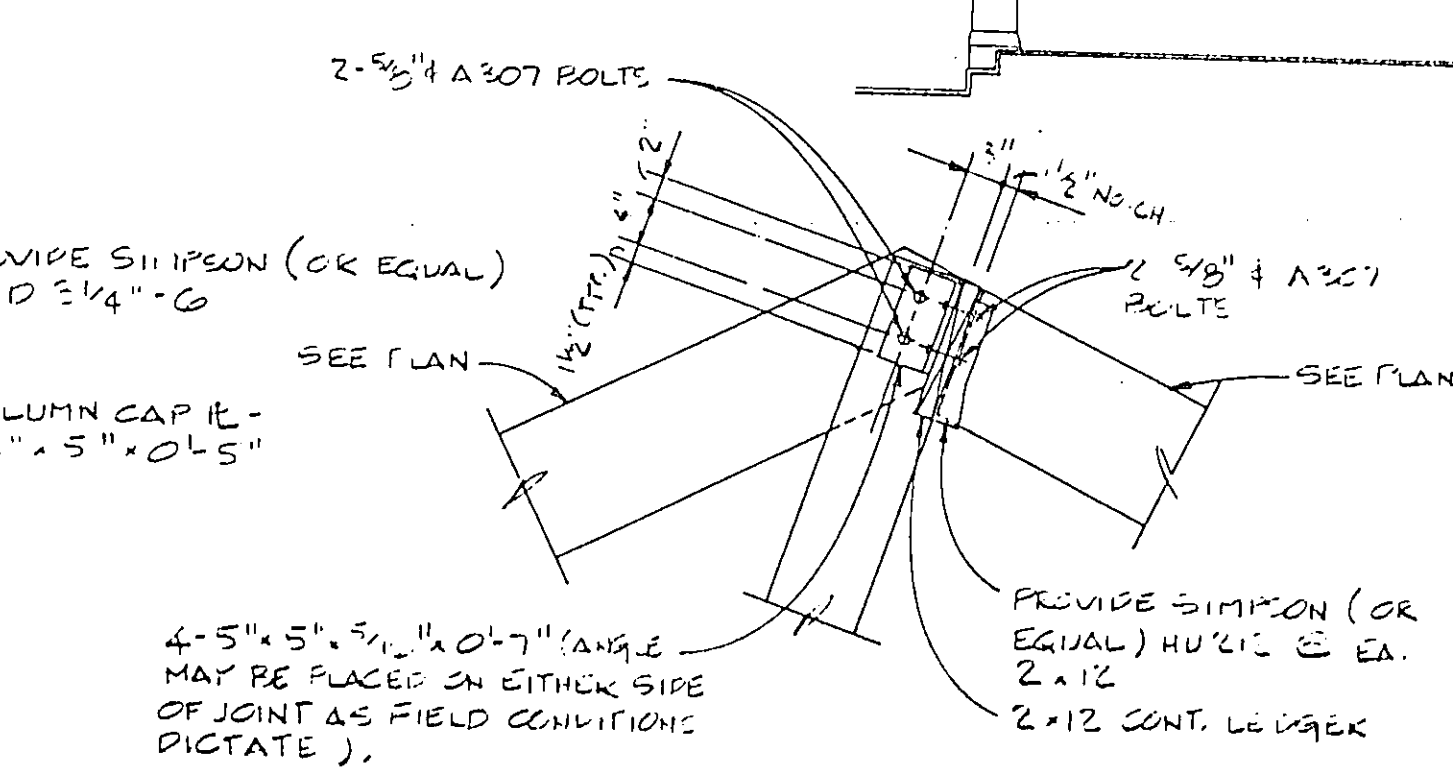
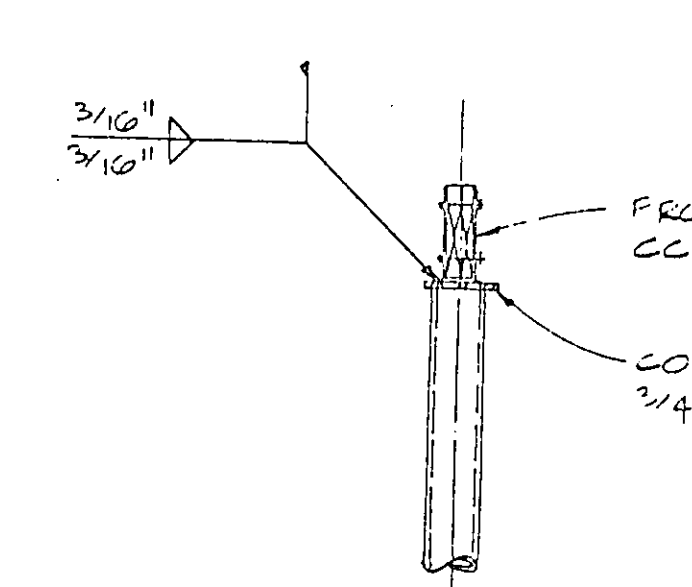
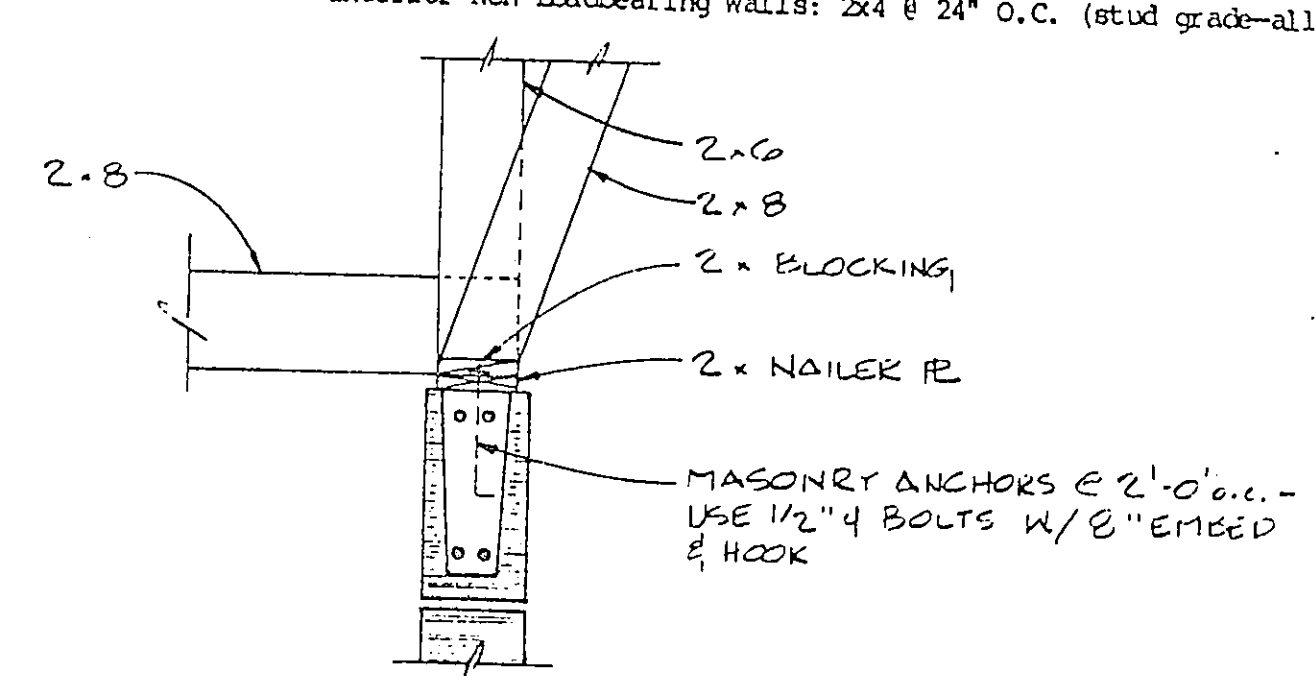
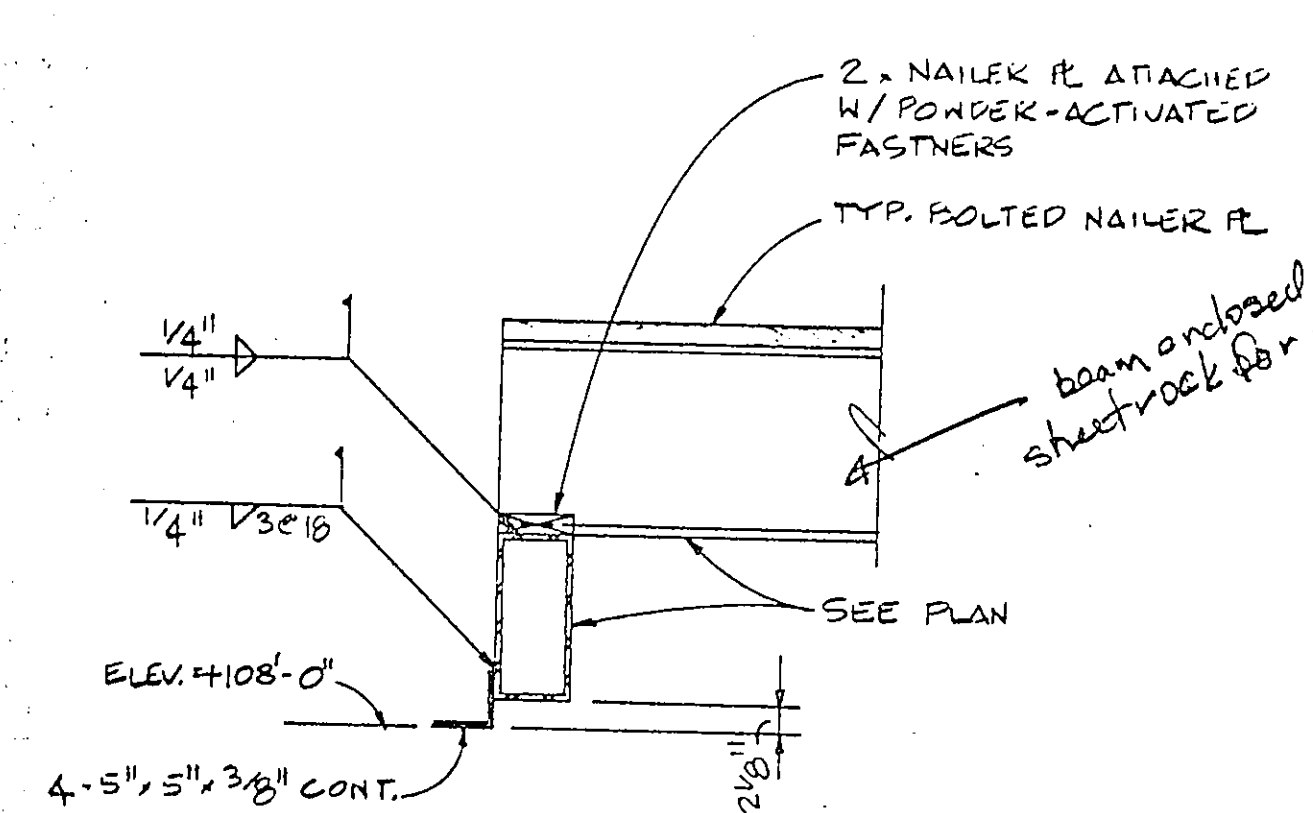
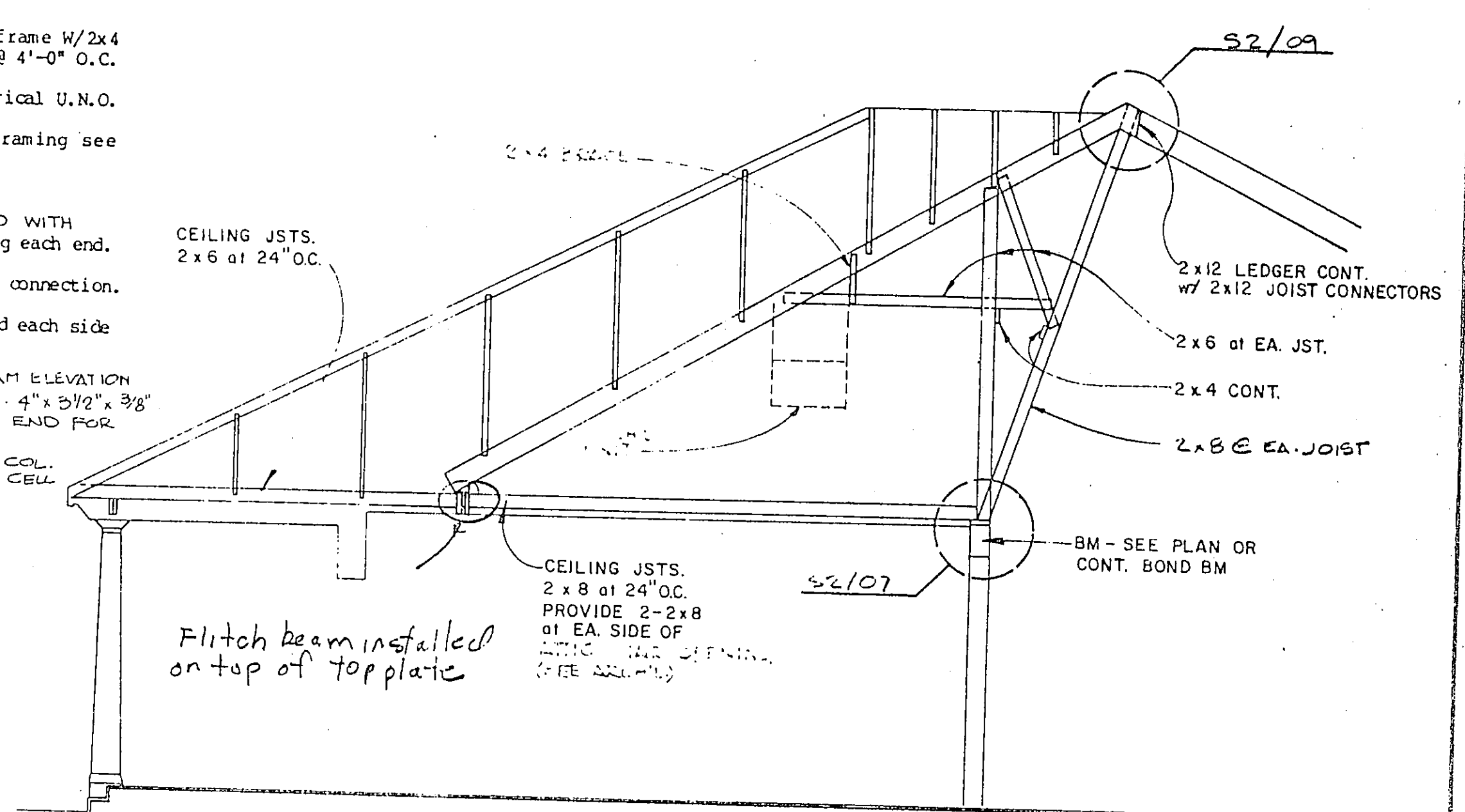
Wood Framing Notes

- This project shall meet all requirements of the City of Addison, Texas.
- Design loads:

Roof	16 PSF LL	15 PSF DL
Floors:		
Attic Storage	125 PSF LL	10 PSF DL
Garage Storage	40 PSF LL	10 PSF DL
- All joists, beams, and headers shall be #2 kiln-dried Southern Pine or #2 grade Douglas Fir-Larch as follows:
 - Douglas Fir-Larch
Single member use - - - - - F = 1,250 PSI; E = 1,700,000 PSI
Repetitive member use - - - - - F = 1,450 PSI; E = 1,700,000 PSI
 - Southern Pine
Single member use - - - - - F = 1,300 PSI; E = 1,600,000 PSI
Repetitive member use - - - - - F = 1,500 PSI; E = 1,600,000 PSI
- Provide Jamb stud plus stud for header spans 4'-6" or less and two jamb studs plus two studs for spans over 4'-6" except as noted. Headers in non-loading walls not shown on the plans to be on flat 2x4 headers in exterior walls not shown to be two 2x4's.
- Where beams are perpendicular to walls, provide one stud for each member at each end.
- All load bearing walls are indicated by shading.
- Provide continuous horizontal blocking between studs in 2x stud walls @ a maximum spacing of 6'-0" o.c. where wall is not sheathed.
- All fitch beams shall be bolted together between with 1/2" diameter A307 bolts staggered top and bottom (3" clear at top and bottom) at 24" o.c. max. cluster 2 bolts at each end of fitch beam.
 - Exterior walls - 2x6 @ 16" O.C. (#2 KD Southern Pine or #2 Grade Douglas Fir-Larch)
 - Interior Load-Bearing Walls: 2x6 @ 16" O.C. (#2 KD Southern Pine or #2 Douglas Douglas Fir-Larch)
 - Interior Non-Loadbearing Walls: 2x4 @ 24" O.C. (stud grade-all woods).

PLAN NOTES:

- Provide 2x4 @ 24" O.C. job frame W/2x4 supports off of 2x12 rafters @ 4'-0" O.C.
- Framing not shown to be symmetrical U.N.O.
- Zone - Indicates roof deck framing see plywood roof deck notes on 54
- Lintel-16" Deep trough W/2x5 top and bottom FILLED WITH CONCRETE, minimum 24" bearing each end.
- Provide one sided beam to beam connection.
- Post to be minimum 3-2x4 nailed each side @ 6" O.C. w/100 common nails.
- T.O.B. INDICATES TOP OF BEAM ELEVATION
- LOOSE LINTEL - PROVIDE L-4" x 3/12" x 3/8" (LV) W/8" MIN. BEARING EA END FOR OPENINGS 6'-0" AND LESS.
- PROVIDE 1-4" WIDE BLOCK COL. W/2-#5 (FULL HGT) IN EA. CELL (GROUT SOLID)



No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
CELESTIAL ROAD PUMP STATION			
[TU] HIXSON & HARRIS, INC.		ROOF FRAMING PLAN & FRAMING DETAILS	
Structural Engineers		Highland Park West (214) 228-3931 4300 MacArthur Avenue, Suite 105 Dallas, TX 75246	
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - C.S.	Drawn - S.L.C.	Date - JANUARY 1987	Job No. - 217
Approved -	Checked - R.K.	Scale - AS NOTED	Sheet 52 of 5

General

- This project shall meet all requirements of the City of Addison, Texas.
- Live Loads: Wind Loads—Per UBC, see wood framing notes for additional loads.
- Foundations are designed to meet the recommendations contained in a soil report prepared for this project by John H. Haynes & Associates, Inc. dated April 24, 1985 and additional report dated April 25, 1986.
- All fill material shall have a maximum plasticity index of between 4 and 12 and shall be compacted to a minimum density of 95% standard proctor at or slightly above its optimum moisture content as determined by that test, unless otherwise noted. Shore all walls and grade beams as required during compaction operation.
- Foundation design is based on allowable bearing pressure of 2,000 PSP.
- Shop Drawings: Two prints and one sepia tracing of each drawing is to be submitted to the structural engineer for review. Distribution of prints is to be made only from returned sepia bearing a signed review stamp. No work on items shown thereon is to proceed unless the stamp clearly indicates "NO EXCEPTIONS TAKEN" or "MAKE CORRECTIONS NOTED". General Contractor shall precheck all shop drawings before submission to engineer for review. Structural plans shall not be reproduced for use as part of the shop drawings. Allow two weeks for engineer to review.
- Exposed faces of grade beams shall be rubbed within 24 hours after pouring.
- General Contractor shall verify the size and location of all mechanical equipment on roof and suspended floors, if any. Principal openings are shown on the drawings. Additional openings and sleeves shall penetrate the floor through members prior to beginning construction.
- General Contractor shall verify all dimensions shown on the structural drawings with the architectural drawings. Contractor shall verify dimensions before construction and notify architect of any discrepancies before proceeding with the work.

Concrete

- All concrete and metal reinforcement shall be fabricated and placed in conformity with the "ACI STANDARD BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318-83).
- Poured in place concrete shall strictly adhere to the proportions established in design mixes, consisting of the actual materials to be used during construction, for several strengths and uses intended. These design mixes are to be prepared by a prequalified laboratory, and the materials and test results are to be approved by the engineer prior to use.
- Poured in place concrete is to be normal weight and is to develop a compressive strength of 3000 PSI at 28 days.
- Unless noted, metal reinforcement for poured in place concrete to be ASTM A-615 Grade 60, Grade 40, stirrups and ties. Welded wire fabric shall conform to ASTM A-105.
- Contractor shall verify the presence, location, sizes and correctness of all openings, slab depressions and embedments required prior to concreting. No openings shall be permitted through beams, joists or columns unless shown on the structural drawings or approved by the structural engineer.
- Proper accessories/supports are to be used as noted and approved on the shop drawings. Provide galvanized or plastic coated chairs and bar supports at all supports or soffits of all exposed members. All reinforcing to be securely and accurately held in locations shown on plans prior to the placement of concrete.
- Clear minimum coverage of concrete over reinforcing bars shall be as follows:
Concrete placed against earth: 3"
Formed concrete against earth: 1 1/2"
Beams to ties/stirrups: 1 1/2"
Top and bottom of slabs: 3/4"
- Construction joints of all types may be used only where shown on fabricator's reviewed placing drawings. All construction joints not shown on plans shall be keyed and located at midspan. Reinforcing shall be continuous thru joint.
- Provide corner bars in all beams and walls of same size and spacing as adjacent bars, unless noted otherwise. Lap 30 bar diameters.
- Earthformed grade beams will not be allowed.

Structural Steel

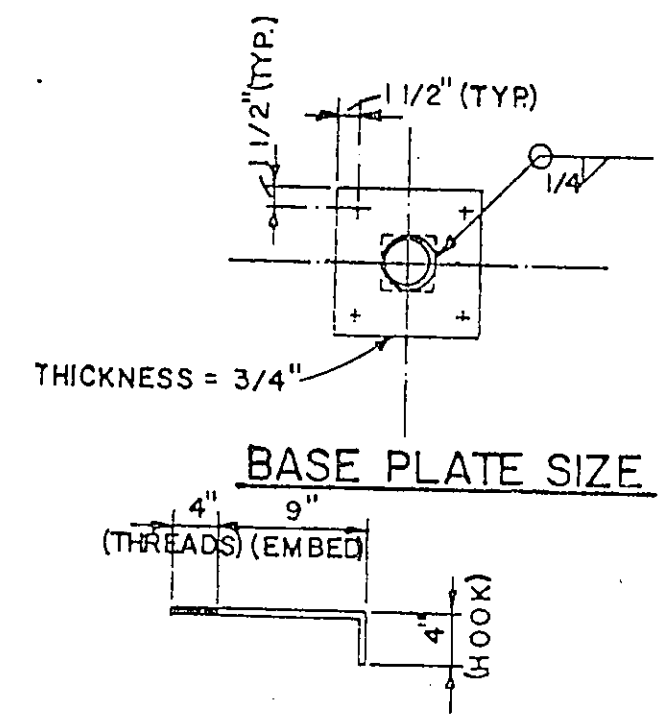
- All structural steel shall be fabricated and erected in conformity with the requirements of the Eighth Edition, AISC "MANUAL OF STEEL CONSTRUCTION".
- Except as shown or noted, all structural shapes and plates are to be ASTM A-36 material. Structural tubing to be ASTM A-500, Grade B. Pipe columns to be ASTM A-501.
- Unless otherwise shown or noted, connection at non-continuous joints shall be detailed as required by Part 4, AISC Manual. Framed beam connections, for one-half the allowable loads for beams tabulated in Part 2 of the AISC Manual. Field connections at non-continuous joints are to be bolted or welded.
- All welding shall conform to recommendations of A.W.S. and all welds, including field, shall be made only by certified welders. Use E70XX electrodes.
- All bolts not otherwise specified shall be 3/4", high strength bearing type (ASTM A-325) with washers. Provide two nuts and washers each with each anchor bolt required.
- Provide bolts and punch holes in structural and misc. metal for attachments/wood nailers as required on the architectural, mechanical or structural drawings.
- All structural and misc. metal is to be cleaned prior to shop painting/shipment in accordance with the Structural Steel Painting Council requirements for the following grade: Power Tool.
- Shop painting shall conform to the following specifications: Trussed steel joints: TYP-636. (Asphalt paints not permitted) Shapes, plates, etc.: TYP-636. Brush applied 1.5 mil. dry min. Spray applied 1.5 mil. dry min.

Plywood Roof Deck Notes:

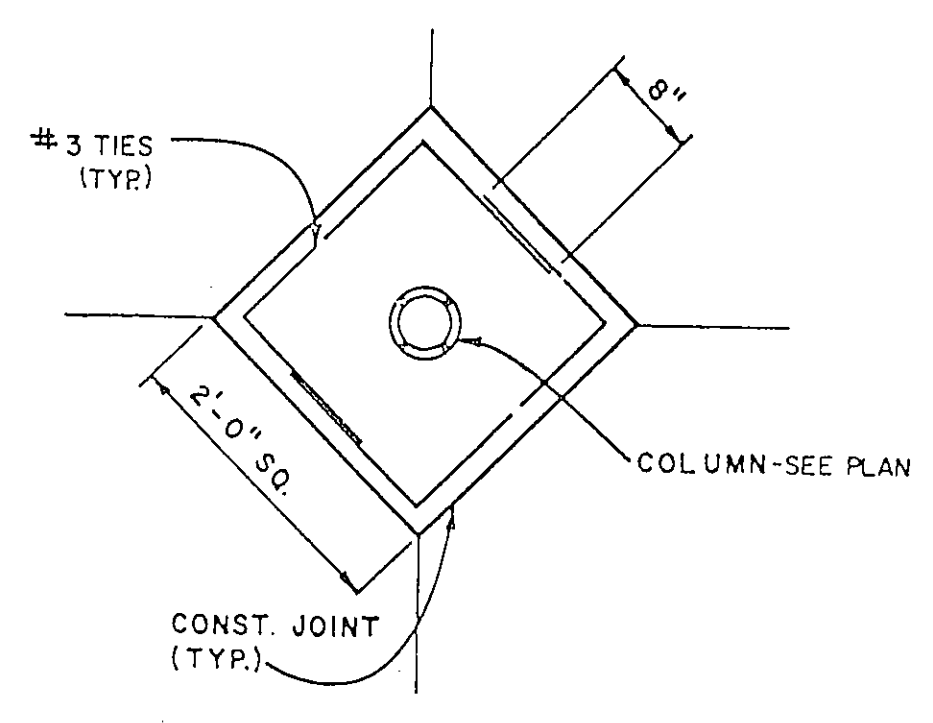
- Provide 1/2" (U.N.C.) plywood panels structure I grade.
- All plywood panels to be blocked on all edges.
- Deck is to be installed with panel long dimension perpendicular to roof truss direction and stagger panels.
- Nail spacing: (See plan for zone locations).
Zone 1:
6" O.C. @ roof perimeter (diaphragm)
6" O.C. @ other panel edges
12" O.C. @ intermediate framing members
Zone 2:
4" O.C. @ roof perimeter (diaphragm boundaries)
6" O.C. @ other panel edges
12" O.C. @ intermediate framing members
- Use 10d nails with 1 5/8" minimum penetration into blocking and framing members.

Masonry Notes:

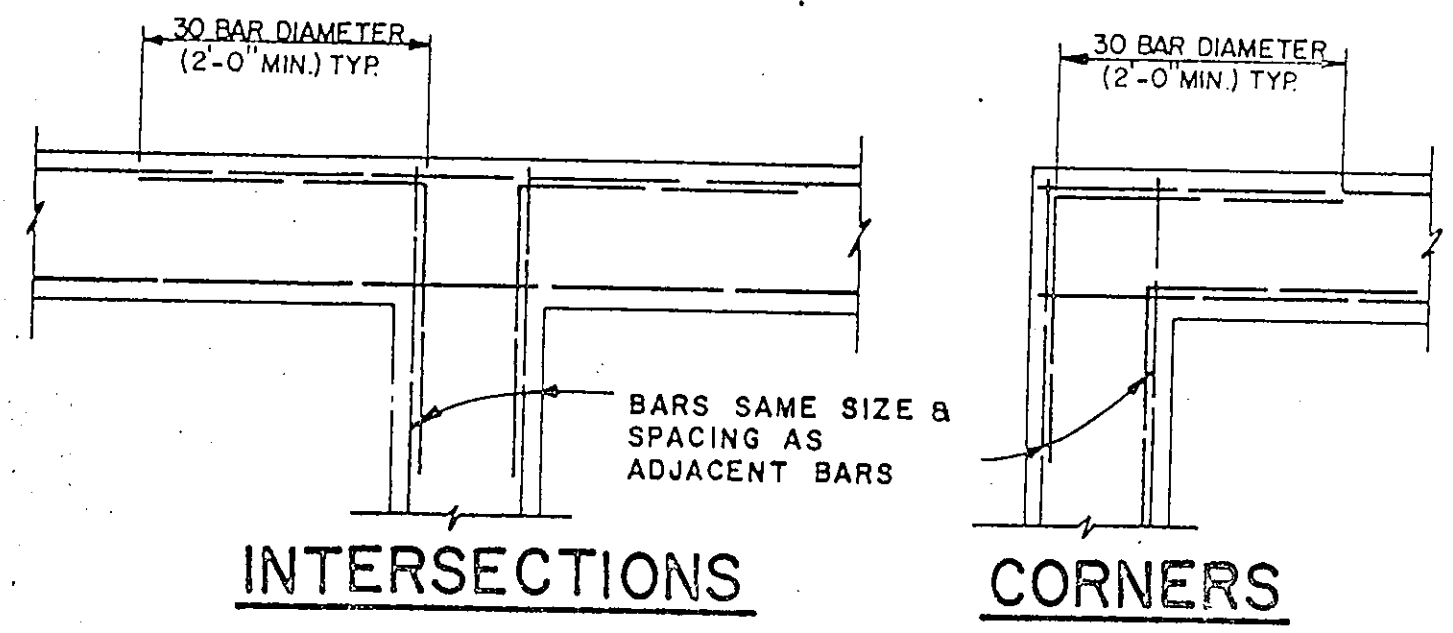
- Concrete masonry shall be hollow concrete units - Grade N.
- Mortar used shall be type S.
- Special inspection is not required.
- All cells containing reinforcement shall be filled solidly with grout per ASTM-476.
- Provide two cells each side of all openings with one #5 bar to top of wall (include @ louvers).
- Horizontal wall reinforcing used shall be standard truss at 16" by Duro - Wall, or equal.
- Lapped splices for reinforcement shall not be less than 30 bar diameters. Welded or mechanical connections shall develop the strength of reinforcement.
- All units shall be laid with full mortar beds on the face shells. All head joints shall be filled solidly with mortar for a distance in from the face of the unit not less than the thickness of the longitudinal face shells.
- Unless the wall is to be poured solid, end walls and cross webs forming cells to be filled shall be full bedded in mortar to prevent leakage of grout.
- All reinforcing shall be in place prior to grouting. Vertical reinforcing bars shall be held in position at top and bottom and at intervals not further apart than 192 bar diameters.
- Shoring for block lintels shall remain in place of a minimum of 15 days after the wall has been completed.
- Lintels above doors and windows shall be 8" deep with two #5 bars top and bottom, and extend 2'0" past each side of opening.



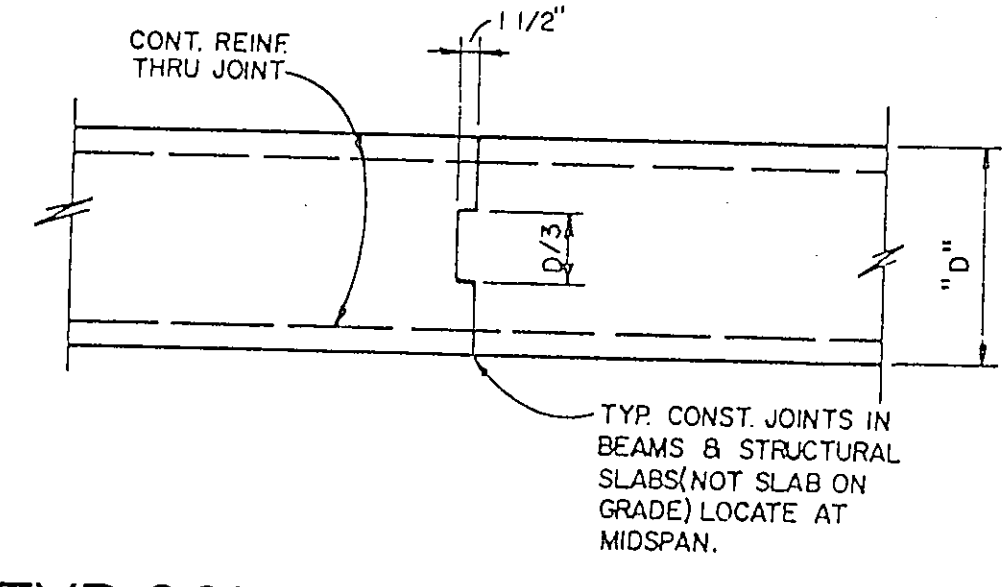
A-307 ANCHOR BOLT
01 BASE PL. DETAIL



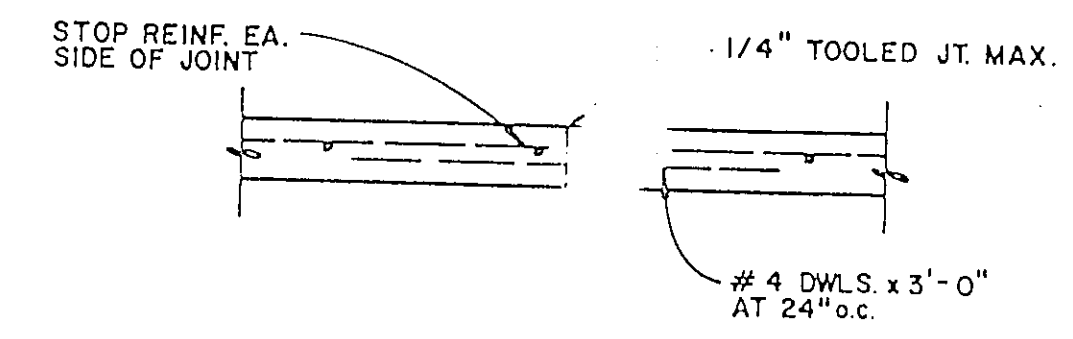
02 TYP. CONSTRUCTION JOINT AT INTERIOR COLUMN DET.



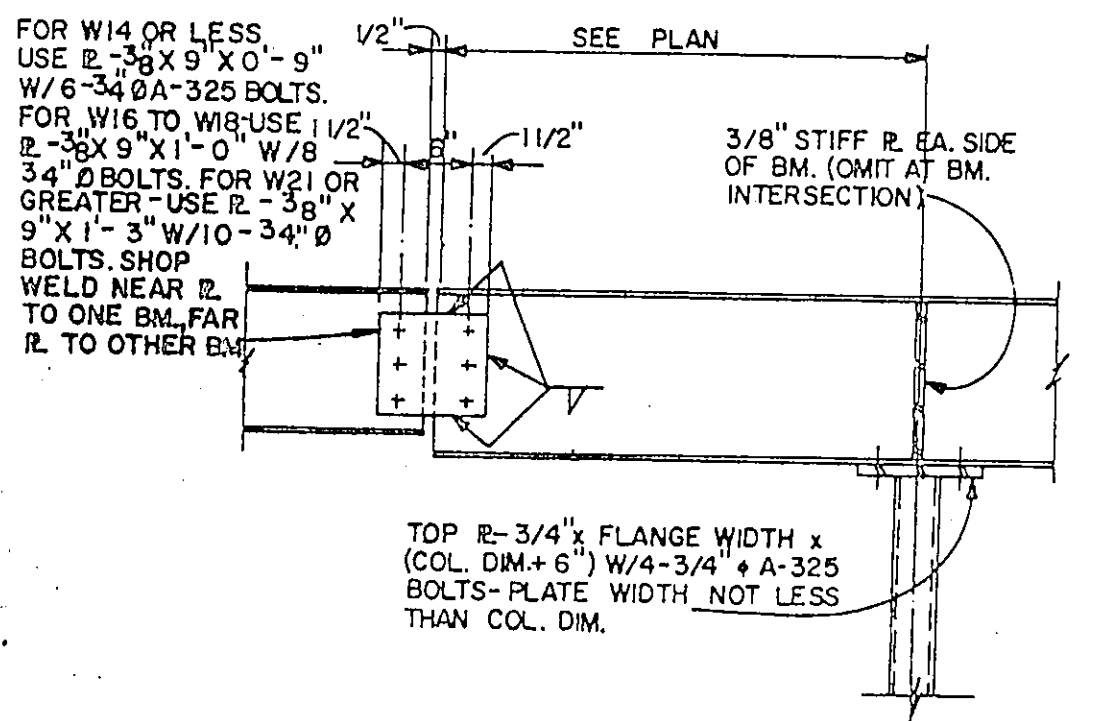
03 CORNER BAR DETAIL AT ALL WALLS AND BEAM



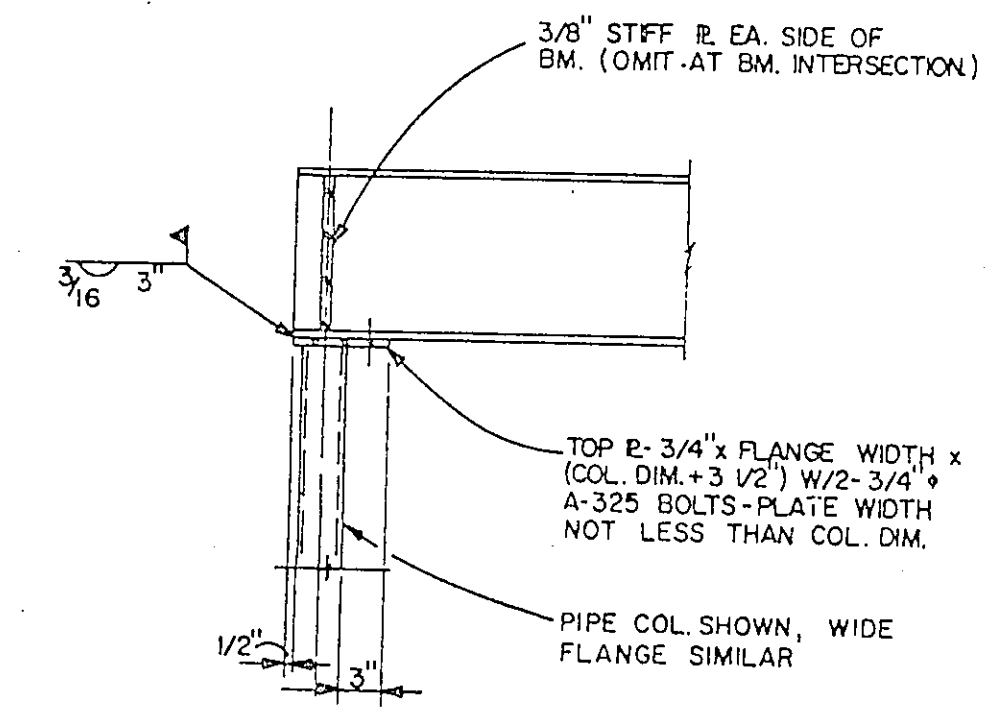
04 TYP. CONST. JOINT DETAIL (FOR BEAMS & STRUCTURAL SLABS ONLY.)



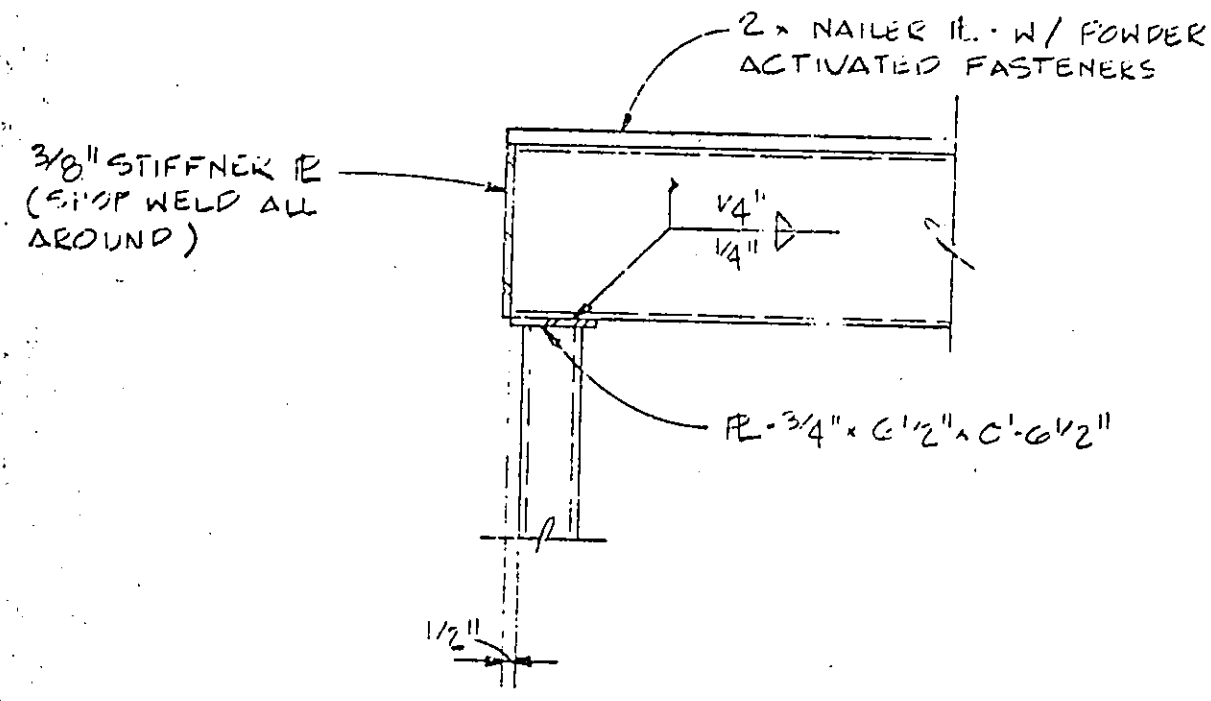
05 TYP. CONSTR. JOINT DETAIL (THRU SLAB ON GRADE)



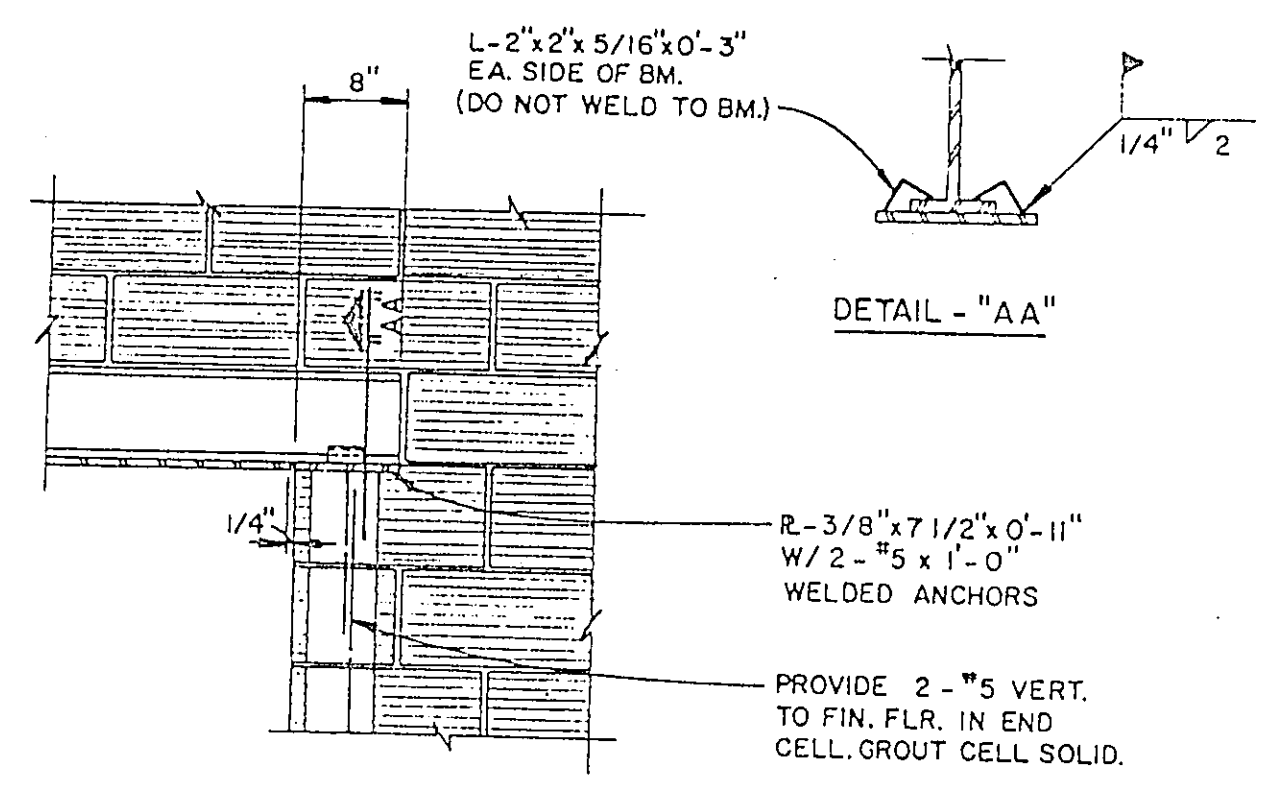
06 TYP. BM. SPLICE & INTERIOR COL. CONNX.



07 TYP. END COL. CONNX.



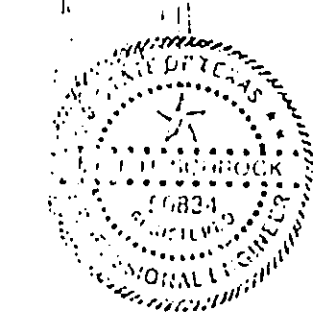
08 SECTION



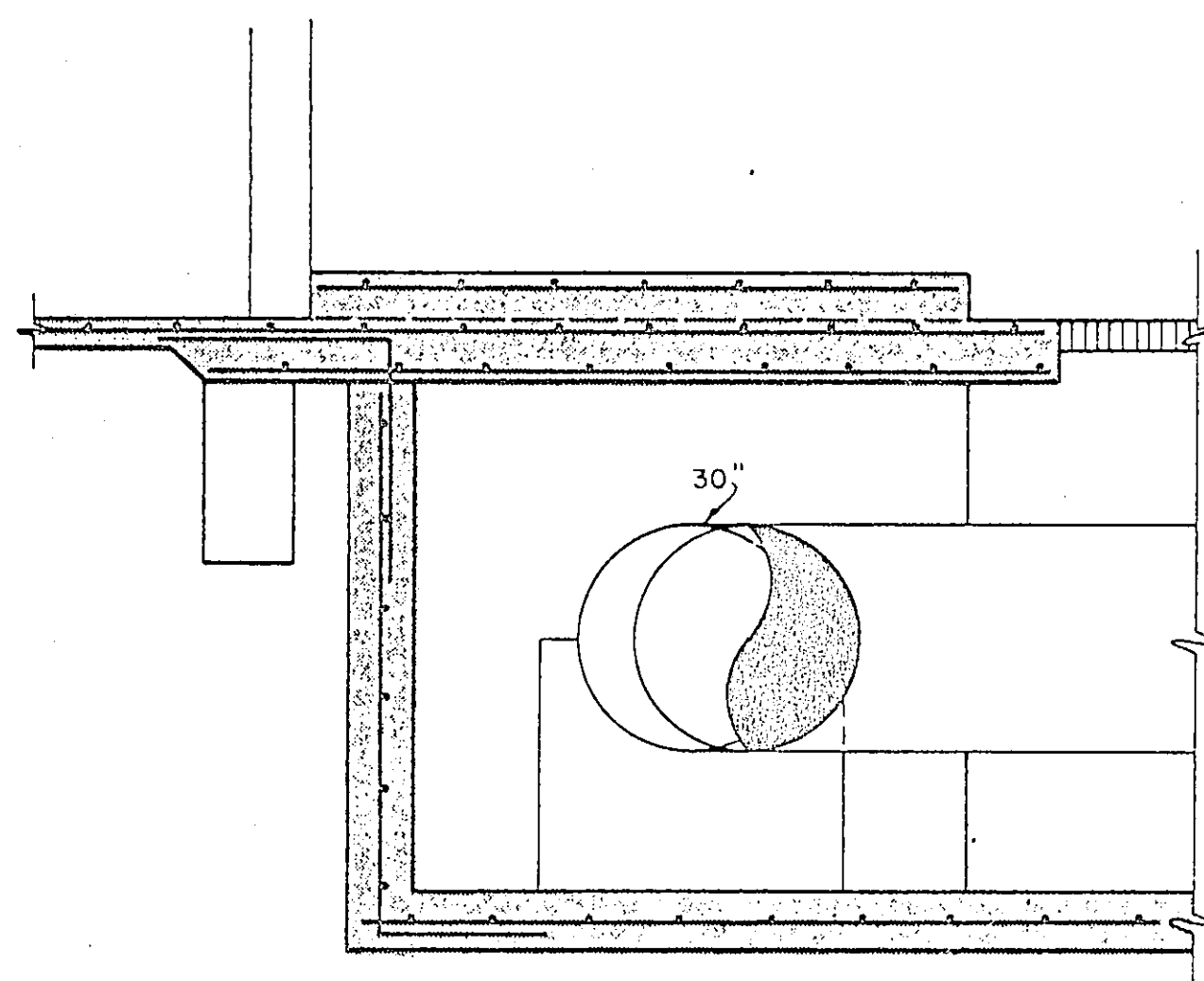
09 SECTION

NO.	REVISION	DATE

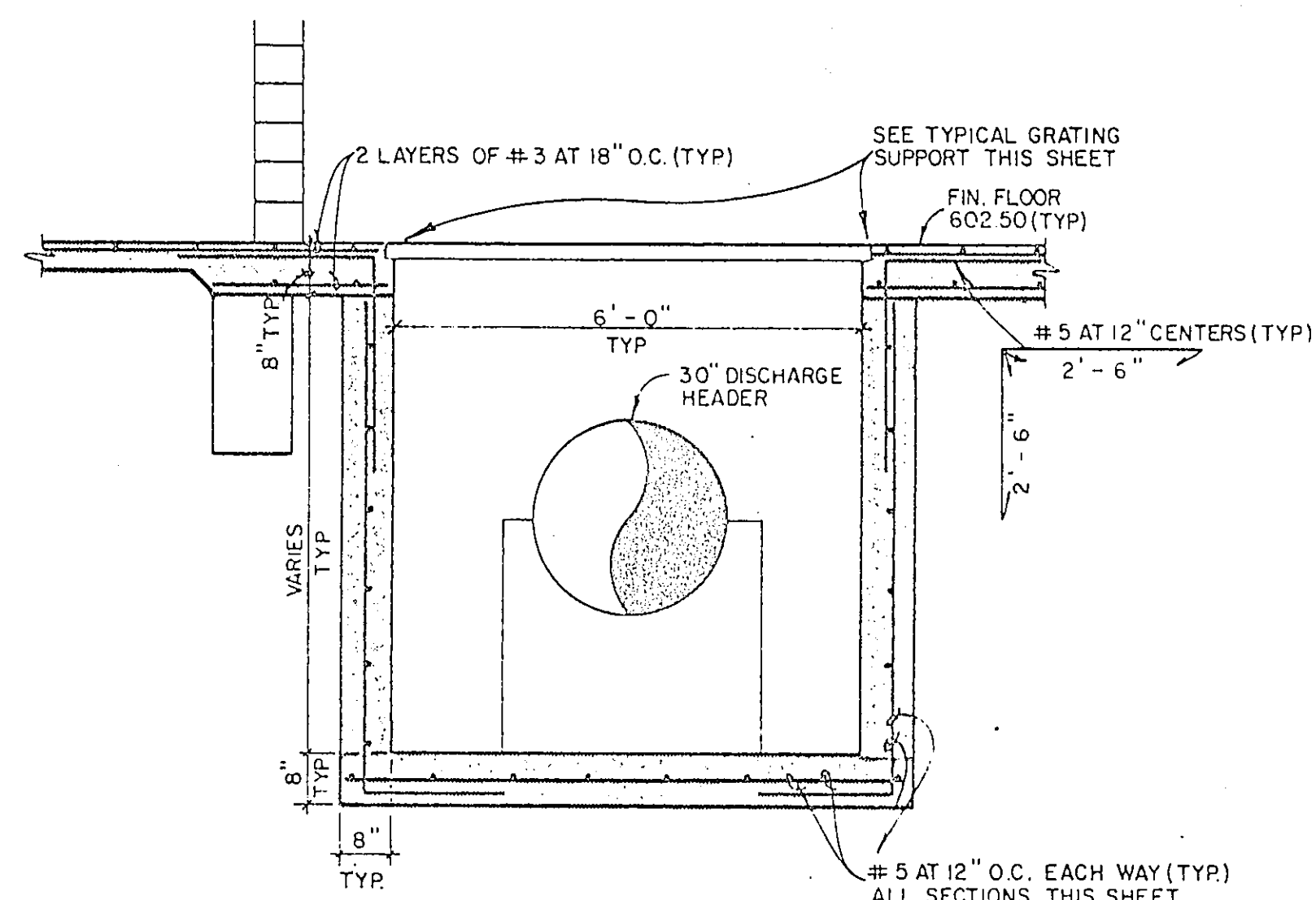
NO.	REVISION	DATE



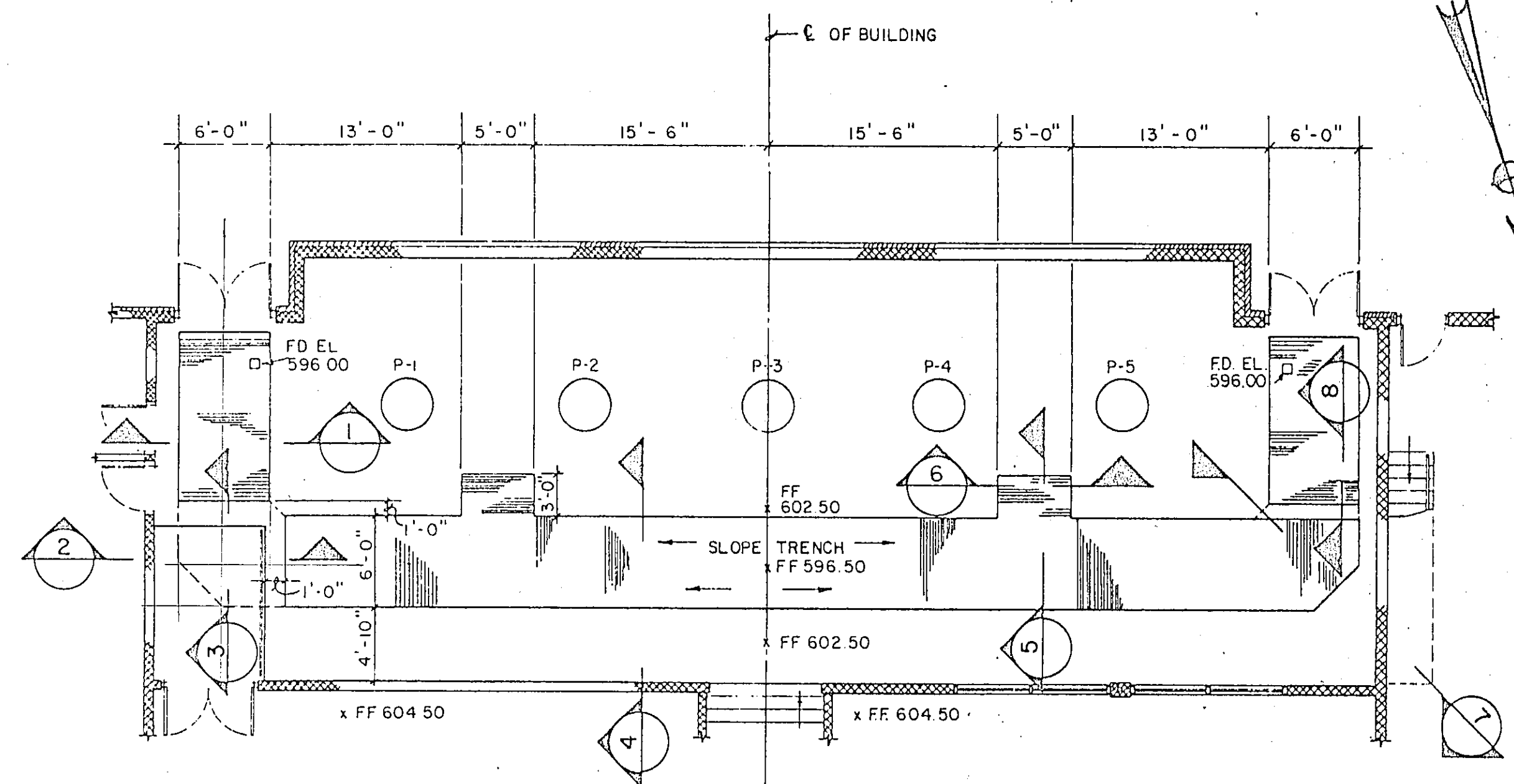
No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS CELESTIAL ROAD PUMP STATION			
HIXSON & HARRIS, INC. TYPICAL DETAILS & GENERAL NOTES			
Structural Engineers		Highland Park West 4300 MacArthur Avenue, Suite 115 Dallas, Texas 75229 (214) 528-3931	
GINN, INC.			
Consulting Engineers Dallas, Texas			
Designed - C.S.	Drawn - S.L.C.	Date - JANUARY, 1987	Job No. - 217
Approved -	Checked - R.K.	Scale - 3/4" = 1'-0"	Sheet 54 OF 5



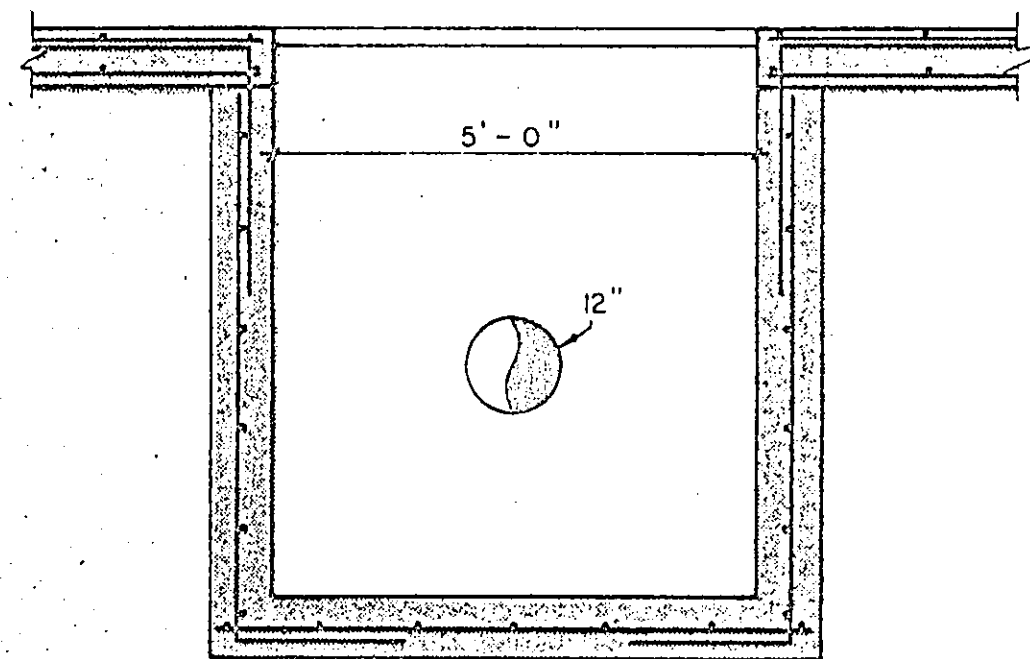
SECTION 2
SCALE - 1/2" = 1'-0"



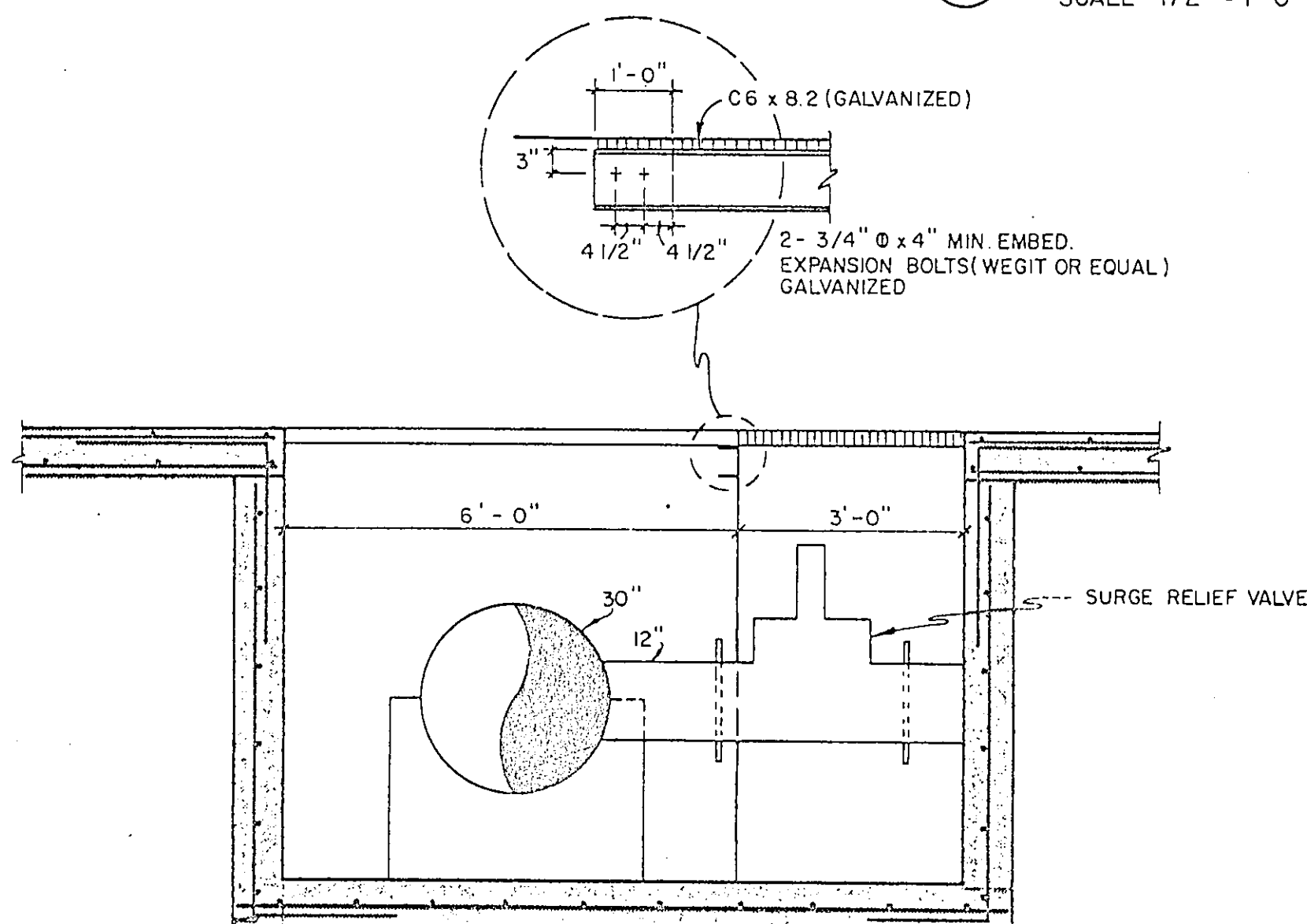
SECTION 1
SCALE - 1/2" = 1'-0"



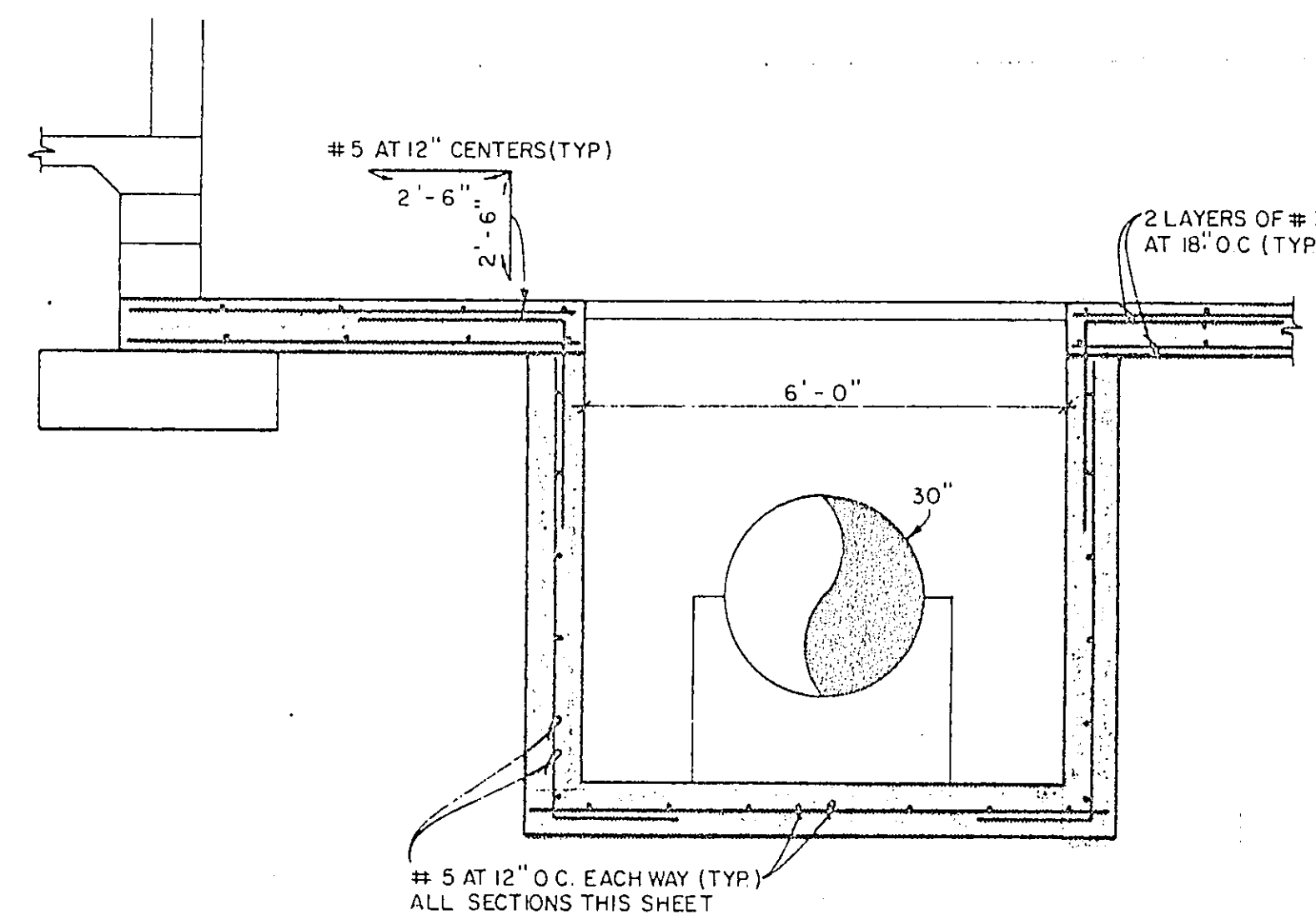
PUMP ROOM FOUNDATION PLAN
SCALE - 1/8" = 1'-0"
* ALL SECTIONS ARE SHOWN ON THIS SHEET



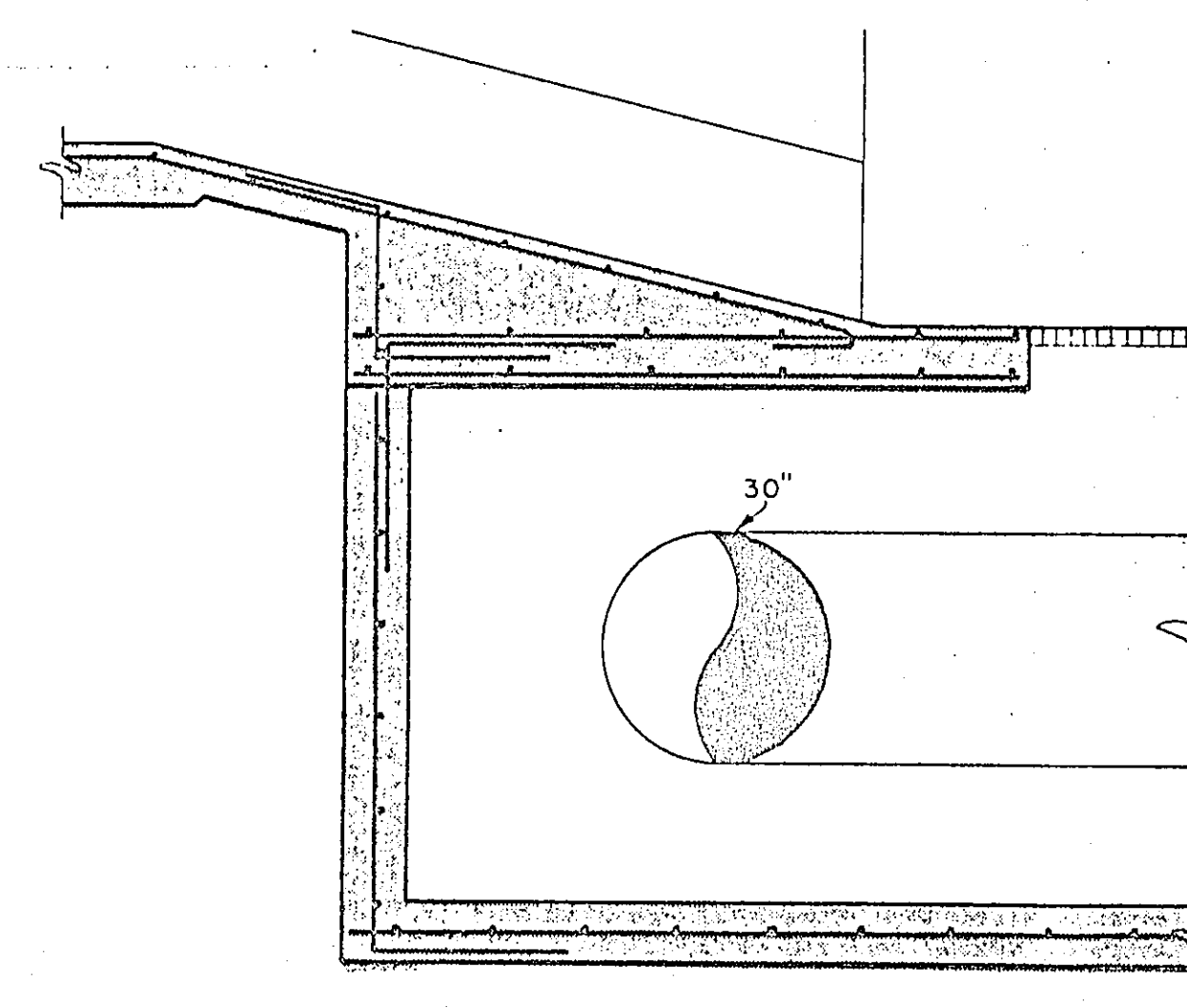
SECTION 6
SCALE - 1/2" = 1'-0"



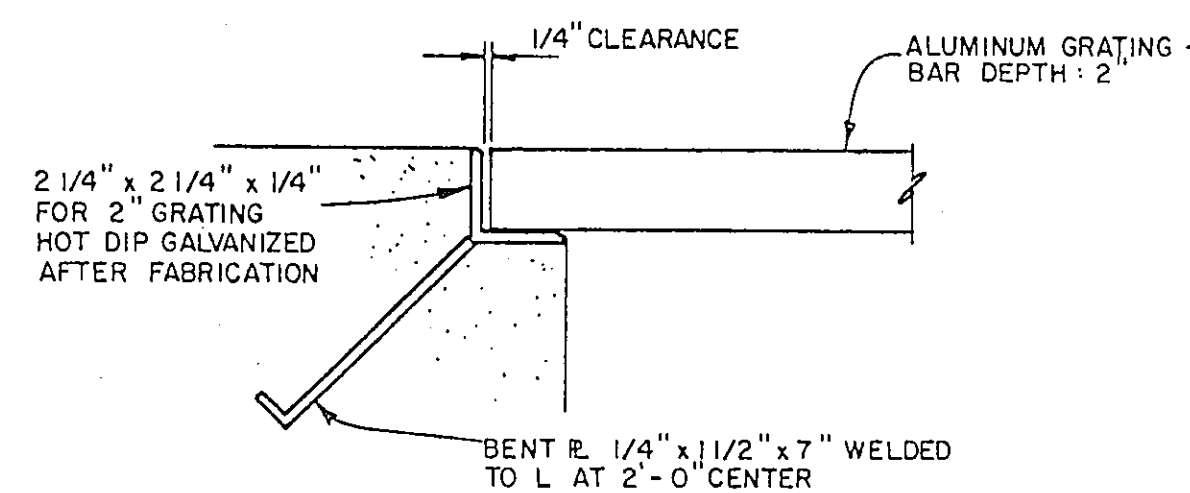
SECTION 5
SCALE - 1/2" = 1'-0"



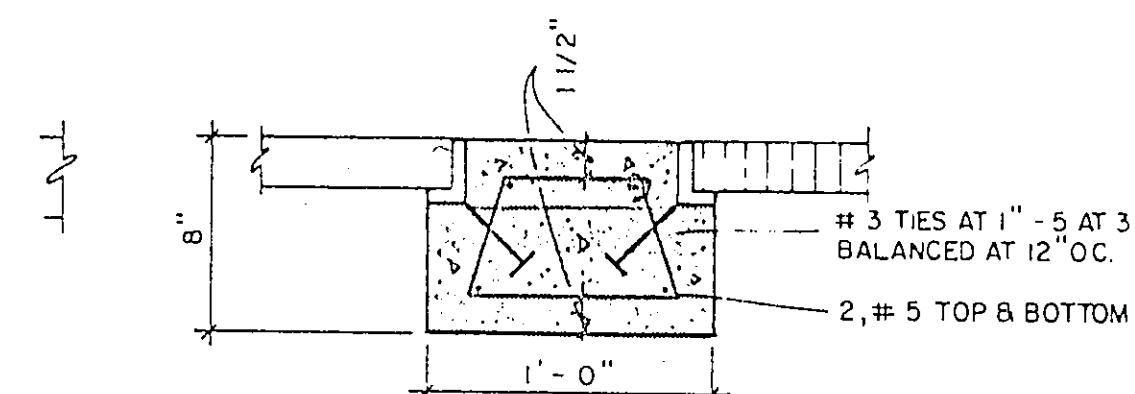
SECTION 4
SCALE - 1/2" = 1'-0"



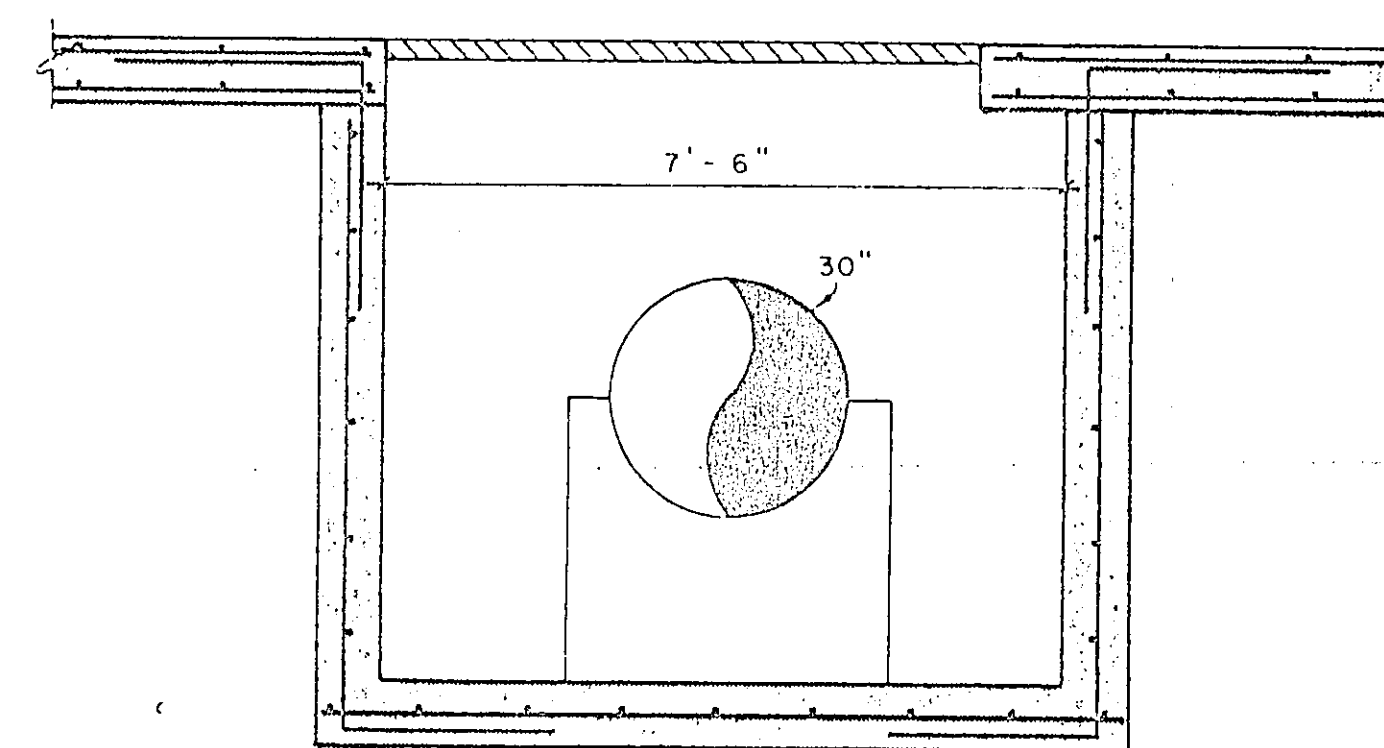
SECTION 3
SCALE - 1/2" = 1'-0"



TYPICAL GRATING SUPPORT
N.T.S.



SECTION 8
SCALE - 1/2" = 1'-0"



SECTION 7
SCALE - 1/2" = 1'-0"

- NOTES:
1. DEPTH OF PIT VARIES FROM 596.50 TO 596.00
 2. WIDTH OF PIT SHALL BE 6'-0" ALONG 30" HEADER
 3. WALL THICKNESS SHALL BE 8"
 4. FLOOR THICKNESS SHALL BE 8"
 5. UNLESS OTHERWISE NOTED, ALL REINFORCING SHALL BE # 5 AT 12" CENTERS.

No.	Revision	By	Date
TOWN OF ADDISON DALLAS COUNTY, TEXAS			
CELESTIAL ROAD PUMP STATION			
PUMP ROOM FOUNDATION PLAN			
GINN, INC. Consulting Engineers Dallas, Texas			
Designed - R.C.H.	Drawn - B.S.	Date - JAN., 1987	Job No - 217
Approved - HWG	Checked - G.A.F.	Scale - AS SHOWN	Sheet - S5

Fundall G. Hill
2-19-87