

CONSTRUCTION PLANS FOR: THE WATERFORD AT HIGHLAND COLONY PARKWAY CAPITAL SENIOR DEVELOPMENT RIDGELAND, MISSISSIPPI

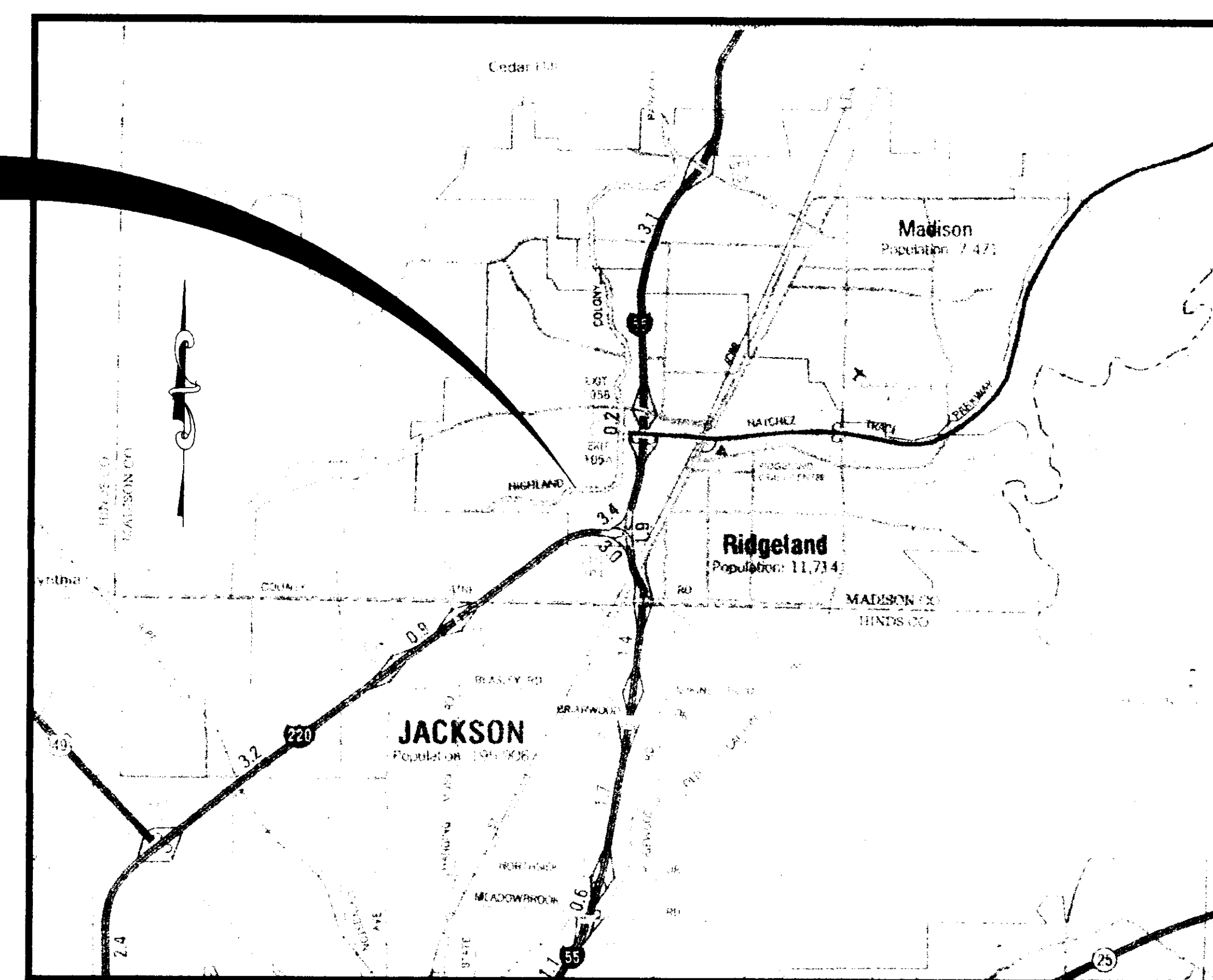
Capital

CITY OF RIDGELAND
In Accordance With Ordinance No. 94002
Architectural Review Approval Date: 11-24-98
Approved By: *[Signature]*

PLANNING REVIEW
Public Works ~~_____~~
Building ~~_____~~ *B.A.J. 11/24/98*
Traffic ~~_____~~
Drainage ~~_____~~
Fire Official ~~_____~~
Site plans will not go forward to
Architectural Review Board or
Mayor and Board of Aldermen without
the above reviews.

RECEIVED
NOV 24 1998
PUBLIC WORKS DEPT.

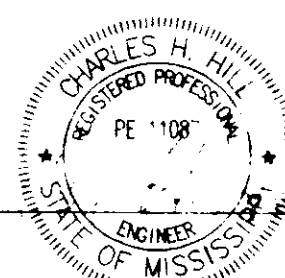
Project
Location



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PWP 5041



Date: _____

CHARLES H. HILL, P.E.
Mississippi License No. 11087

NOVEMBER, 1998

NEEL-SCHAFFER, INC.
Engineers • Planners

REVIEW SET
By: Regulatory Agency
 Owner
 Other CITY OF RIDGELAND

Figure Name: PETTIS
 Course: N 00-01-11 W Distance: 944.8253
 Course: S 87-37-58 E Distance: 525.0000
 Course: S 00-01-11 E Distance: 550.0000
 Course: N 90-00-00 W Distance: 154.5445
 Course: S 00-01-11 E Distance: 29.7492
 Arc Length: 190.4280 Radius: 200.0000 Delta: 54-33-13
 Arc Length: 187.8695 Radius: 118.6475 Delta: -90-43-25
 Arc Length: 259.9290 Radius: 1150.0012 Delta: -12-57-01
 Perimeter: 2842.3365
 Area: 403218.0569 9.2566 acres
 Mapcheck Closure - (Uses listed courses & COGO Units)
 Error of Closure: 0.00030 Course: N 29-26-23 W
 Precision 1: 9623490.74

Vicinity Map
 Scale: 1"=2000'

LEGAL DESCRIPTION:

A TRACT OR PARCEL OF LAND CONTAINING 9.26 ACRES, MORE OR LESS, LYING AND BEING SITUATED IN THE NORTHWEST 1/4 OF THE SOUTHWEST 1/4 OF SECTION 25, T7N-R1E, CITY OF RIDGELAND, MADISON COUNTY, MISSISSIPPI AND BEING MORE PARTICULARLY DESCRIBED AS FOLLOWS:

COMMENCING AT THE SOUTHWEST CORNER OF THE SOUTHWEST 1/4 OF SAID SECTION 25; RUN THENCE NORTH 00 DEGREES 01 MINUTES 00 SECONDS WEST FOR A DISTANCE OF 1364.17 FEET TO A POINT ON THE NORTHERLY RIGHT OF WAY OF HIGHLAND COLONY PARKWAY AND THE POINT OF BEGINNING OF THE HEREIN DESCRIBED PROPERTY; THENCE

NORTH 00 DEGREES 01 MINUTES 11 SECONDS WEST ALONG THE WEST LINE OF SECTION 25 FOR A DISTANCE OF 944.83 FEET; THENCE

SOUTH 87 DEGREES 37 MINUTES 58 SECONDS EAST FOR A DISTANCE OF 525.00 FEET; THENCE

SOUTH 00 DEGREES 01 MINUTES 11 SECONDS EAST FOR A DISTANCE OF 550.00 FEET; THENCE

WEST FOR A DISTANCE OF 154.54 FEET; THENCE

SOUTH 00 DEGREES 01 MINUTES 11 SECONDS EAST FOR A DISTANCE OF 29.74 FEET; THENCE

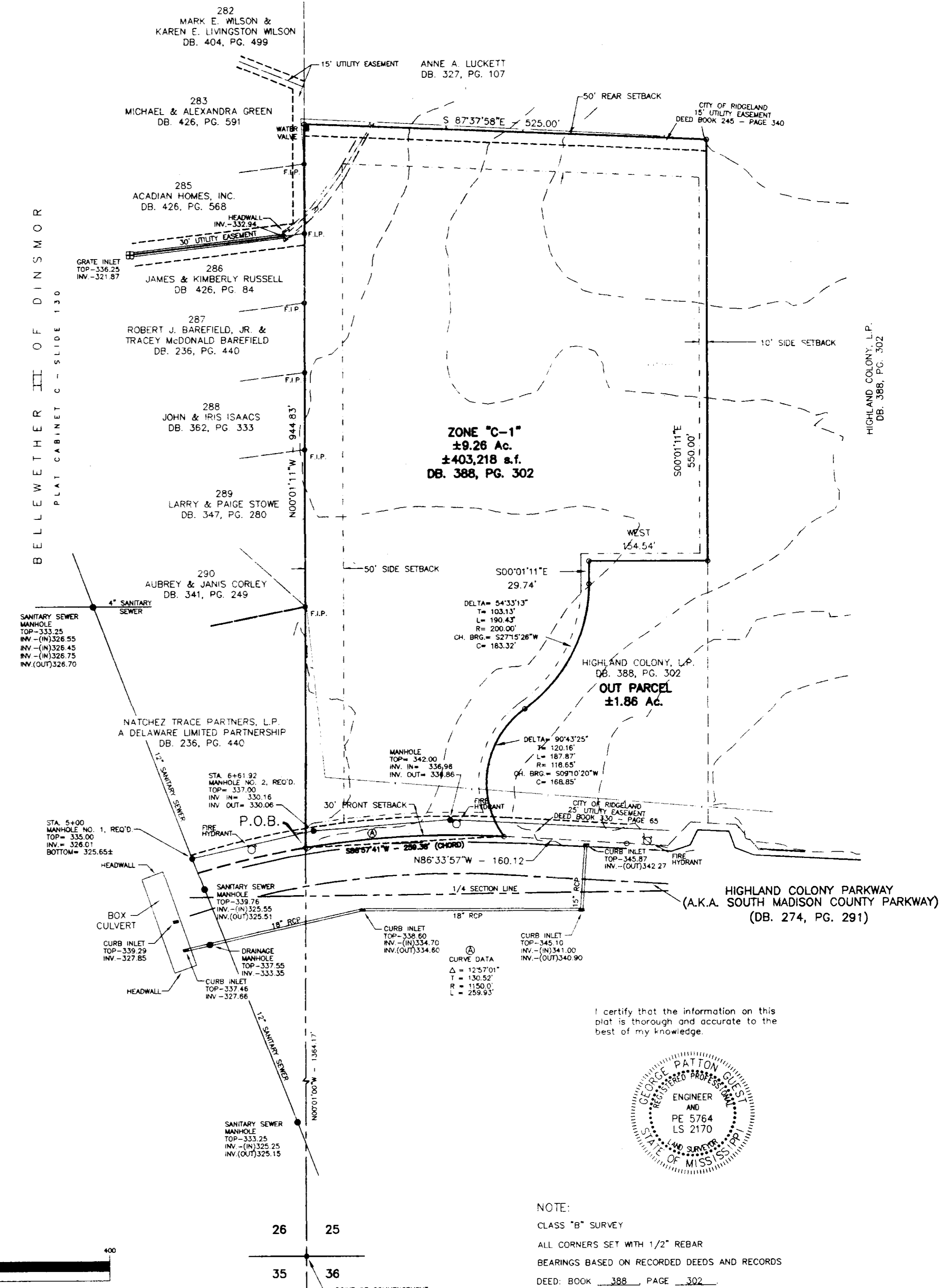
SOUTHWESTERLY ALONG THE ARC OF A CURVE TO THE RIGHT FOR A DISTANCE OF 190.43 FEET, SAID CURVE HAVING A RADIUS OF 200.00 FEET AND A DEFLECTION ANGLE OF 54 DEGREES 33 MINUTES 13 SECONDS (CHORD BEARING AND DISTANCE, SOUTH 27 DEGREES 15 MINUTES 26 SECONDS WEST, 183.32 FEET); THENCE

SOUTHWESTERLY ALONG THE ARC OF A CURVE TO THE LEFT FOR A DISTANCE OF 187.87 FEET, SAID CURVE HAVING A RADIUS OF 118.65 FEET AND A DEFLECTION ANGLE OF 90 DEGREES 43 MINUTES 25 SECONDS (CHORD BEARING AND DISTANCE, SOUTH 9 DEGREES 10 MINUTES 20 SECONDS WEST, 168.85 FEET) TO A POINT ON THE NORTHERLY RIGHT OF WAY OF HIGHLAND COLONY PARKWAY; THENCE

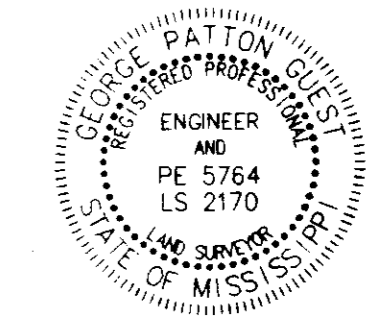
SOUTHWESTERLY ALONG SAID RIGHT OF WAY AND THE ARC OF A CURVE TO THE LEFT FOR A DISTANCE OF 259.93 FEET, SAID CURVE HAVING A RADIUS OF 1150 FEET AND A DEFLECTION ANGLE OF 12 DEGREES 57 MINUTES 01 SECONDS (CHORD BEARING AND DISTANCE, SOUTH 86 DEGREES 57 MINUTES 41 SECONDS WEST, 259.38 FEET) TO THE POINT OF BEGINNING.

SAID PROPERTY IS SUBJECT TO A FIFTEEN (15) FOOT UTILITY EASEMENT LYING SOUTH OF AND ADJACENT TO THE NORTH PROPERTY LINE.

SAID PROPERTY IS SUBJECT TO A TWENTY FIVE (25) FOOT UTILITY EASEMENT LYING NORTH OF AND ADJACENT TO THE SOUTH PROPERTY LINE.



I certify that the information on this plat is thorough and accurate to the best of my knowledge.



NOTE:
 CLASS "B" SURVEY
 ALL CORNERS SET WITH 1/2" REBAR
 BEARINGS BASED ON RECORDED DEEDS AND RECORDS
 DEED: BOOK 388 PAGE 302
 CENTERLINE AND RIGHT-OF-WAY OF HIGHLAND COLONY PARKWAY SHOWN ON THE RIGHT-OF-WAY PLANS OF SOUTH MADISON COUNTY PARKWAY ON FILE IN THE OFFICE OF THE CHANCERY CLERK OF MADISON COUNTY, IN CANTON, MISSISSIPPI.
 THIS SURVEY WAS MADE IN ACCORDANCE WITH THE MINIMUM STANDARD DETAIL REQUIREMENTS OF AN ALTA/ASCM SURVEY.
 FLOOD BOUNDARY NOTE
 THIS PARCEL IS LOCATED IN FLOOD ZONE "X" ACCORDING TO FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 280089 C 0320 D DATED APRIL 15, 1994

File name: D:\DWG\G-1566\1566.MXD, Computer: Server

DRAWN BY: RICHARD SOMERS DATE: 8-13-98 DWG. NO.: 1566WEND	APPROVED BY: PAT QUEST PROJ. NO. G-1566	REVISIONS	Guest Consultants, Inc. CONSULTING ENGINEERS • LAND SURVEYORS TWENTY SIX EASTGATE DRIVE • P.O. BOX 1225 • BRANDON, MS 39043 TELEPHONE (601) 825-8341 FAX (601) 825-3032	PROJECT HIGHLAND COLONY L.P.	SHT. NAME PLAT OF SURVEY JAMES L. PETTIS, III SITUATED IN THE NW 1/4, SW 1/4, SECTION 25, T7N-R1E, CITY OF RIDGELAND, MADISON COUNTY, MISSISSIPPI
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INV. - 332.94

WATER VALVE

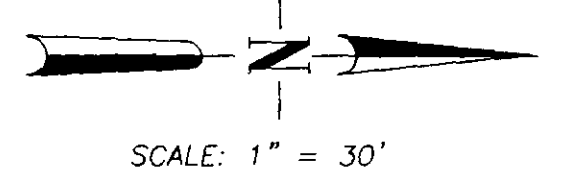
50' SIDE SETBACK LINE

FIRE LANE

50' REAR SETBACK LINE

15' UTILITY EASEMENT

DETENTION BASIN



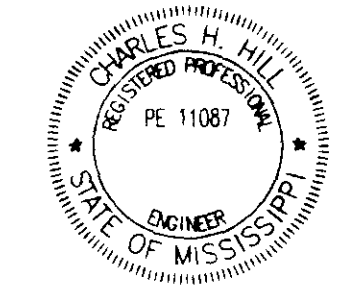
RADIUS CHART

SYMBOL	RADIUS ON THE FACE OF CURB
(A)	6.5'
(B)	10.5'
(C)	13.0'
(D)	14.0'
(E)	15.5'
(F)	16.5'
(G)	20.5'
(H)	24.0'
(I)	24.5'
(J)	25.5'
(K)	30.5'
(L)	31.5'
(M)	36.5'
(N)	40.0'
(O)	48.0'
(P)	50.0'
(Q)	60.5'
(R)	84.5'

POINT #	NORTHING	EASTING
RP-1	8616.6672	12074.6714
RP-2	8643.6672	12060.6466
RP-3	8664.1602	12040.1466
RP-4	8664.1743	12014.1466
RP-5	8643.6672	11993.6466
RP-6	8643.6672	11885.9849
RP-7	8616.6672	11891.2978
RP-8	8659.7948	11877.1203
RP-9	8679.3698	11882.8053
RP-10	8684.7283	11882.8035
RP-11	8689.2194	11856.8020
RP-12	8679.3609	11856.8053
RP-13	8674.7772	11836.8569
RP-14	8701.1464	11830.7978
RP-15	8701.1382	11806.7978
RP-16	8711.5534	11806.7943
RP-17	8776.2104	11830.7720
RP-18	8784.7996	11806.7690
RP-19	8793.5642	11796.4137
RP-20	8789.2479	11779.4692
RP-21	8767.1749	11770.0467
RP-22	8831.4646	11775.8444
RP-23	8853.0098	11765.1001
RP-24	8833.1518	11781.5490
RP-25	8857.1515	11780.7025
RP-26	8833.1568	11796.2524
RP-27	8857.1571	11797.0493
RP-28	8853.0261	11812.6546
RP-29	8822.6604	11806.7560
RP-30	8821.4910	11835.8019
RP-31	8813.8824	11842.3816
RP-32	8776.2193	11856.7720
RP-33	8752.4934	12014.1162
RP-34	8752.5024	12040.1182
RP-35	8982.5023	12040.0370
RP-36	9056.0023	12040.0117
RP-37	9055.9934	12014.0117
RP-38	9079.9788	11990.5616
RP-39	9105.9851	11989.9945
RP-40	9079.9585	11912.6675
RP-41	9063.4528	11896.1737
RP-42	9065.4446	11872.1724
RP-43	9069.4446	11872.1711
RP-44	9079.9410	11861.6675
RP-45	9079.9111	11775.0343
RP-46	9079.9089	11768.5061
RP-47	9105.9089	11768.4972
RP-48	9037.6149	11740.2364
RP-49	9056.0060	11758.6148
RP-50	9047.3772	11767.2495
RP-51	9018.7453	11759.1190
RP-52	9009.8195	11780.6888
RP-53	9009.8237	11793.0584
RP-54	9039.9147	11785.2833
RP-55	9039.9173	11793.0480
RP-56	9040.6418	11852.6317
RP-57	9009.8437	11851.0584
RP-58	9009.8501	11869.7337

NOTES:

1. ALL CURB RADII NOT SHOWN IN THE RADIUS CHART ABOVE, SHALL BE 2.5' ON THE FACE OF CURB
2. ALL DIMENSIONS ALONG AND/OR TO CURB AND BUILDING WALLS ARE TO THE FACE UNLESS OTHERWISE NOTED.
3. ALL TIES TO PROPERTY LINES ARE 90° TO THE PROPERTY LINE.



CAPITAL SENIOR DEVELOPMENT

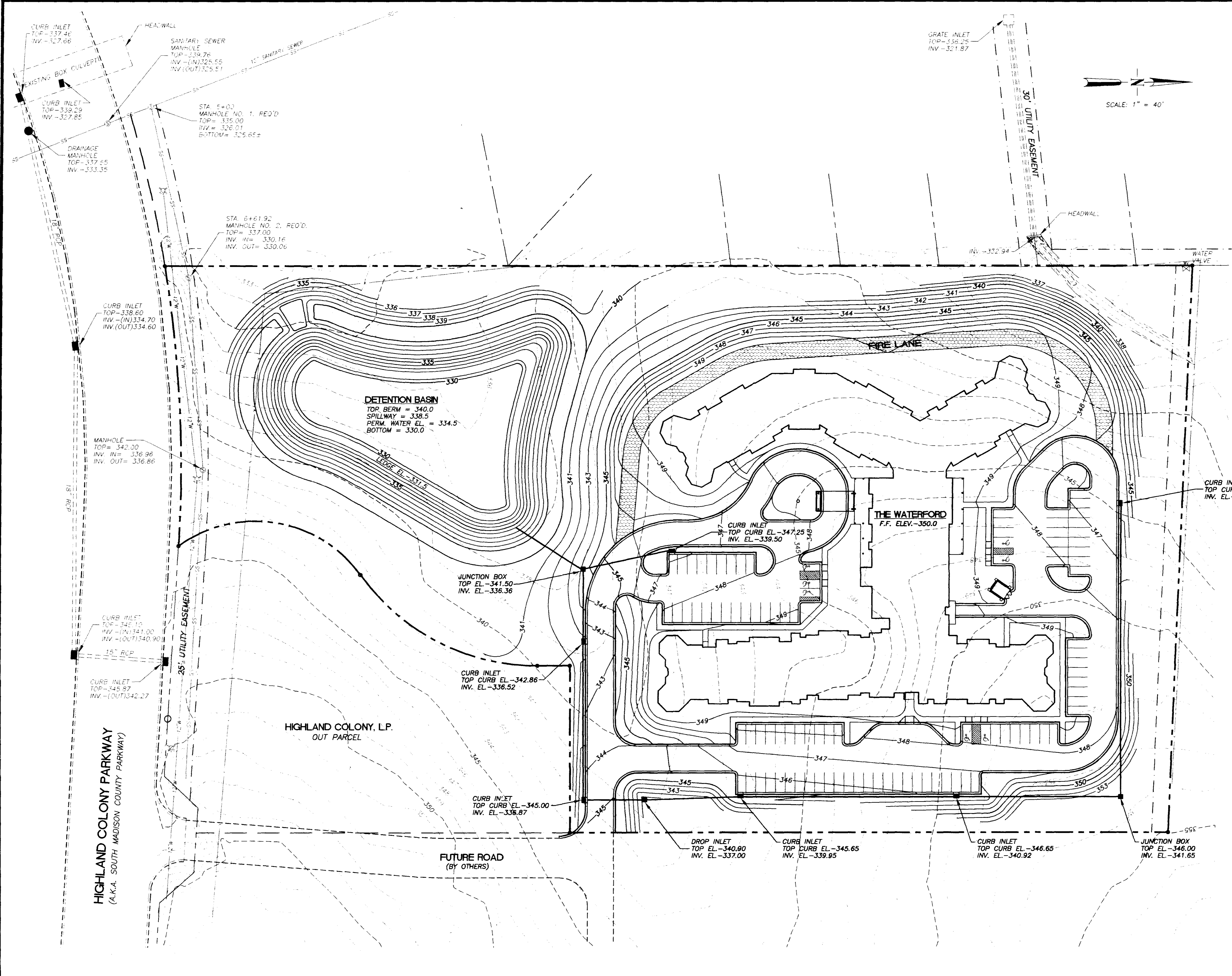
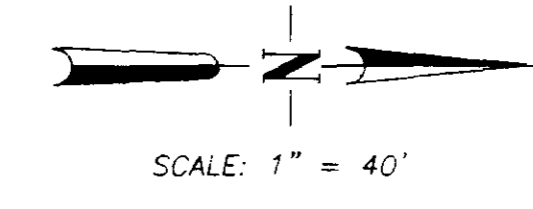
DIMENSIONED SITE PLAN

THE WATERFORD AT
HIGHLAND COLONY PARKWAY

DESIGN M.W.E. 11/98	DRAWN C.R.H. 11/98	CHECKED	NEEL-SCHAFFER, INC. ENGINEERS • PLANNERS	DRAWING NO. C3 OF 11
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SCALE: 1" = 30'

01/25/2001 11:35:00 - 800 - 800



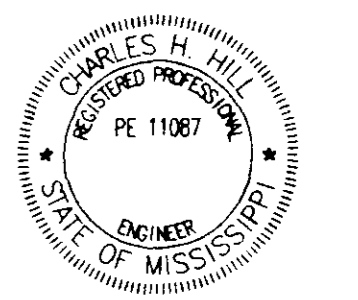
DETENTION BASIN
 TOP BERM = 340.0
 SPILLWAY = 338.5
 PERM. WATER EL. = 334.5
 BOTTOM = 330.0

THE WATERFORD
 F.F. ELEV. = 350.0

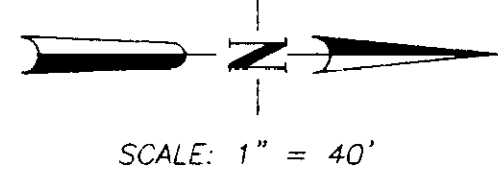
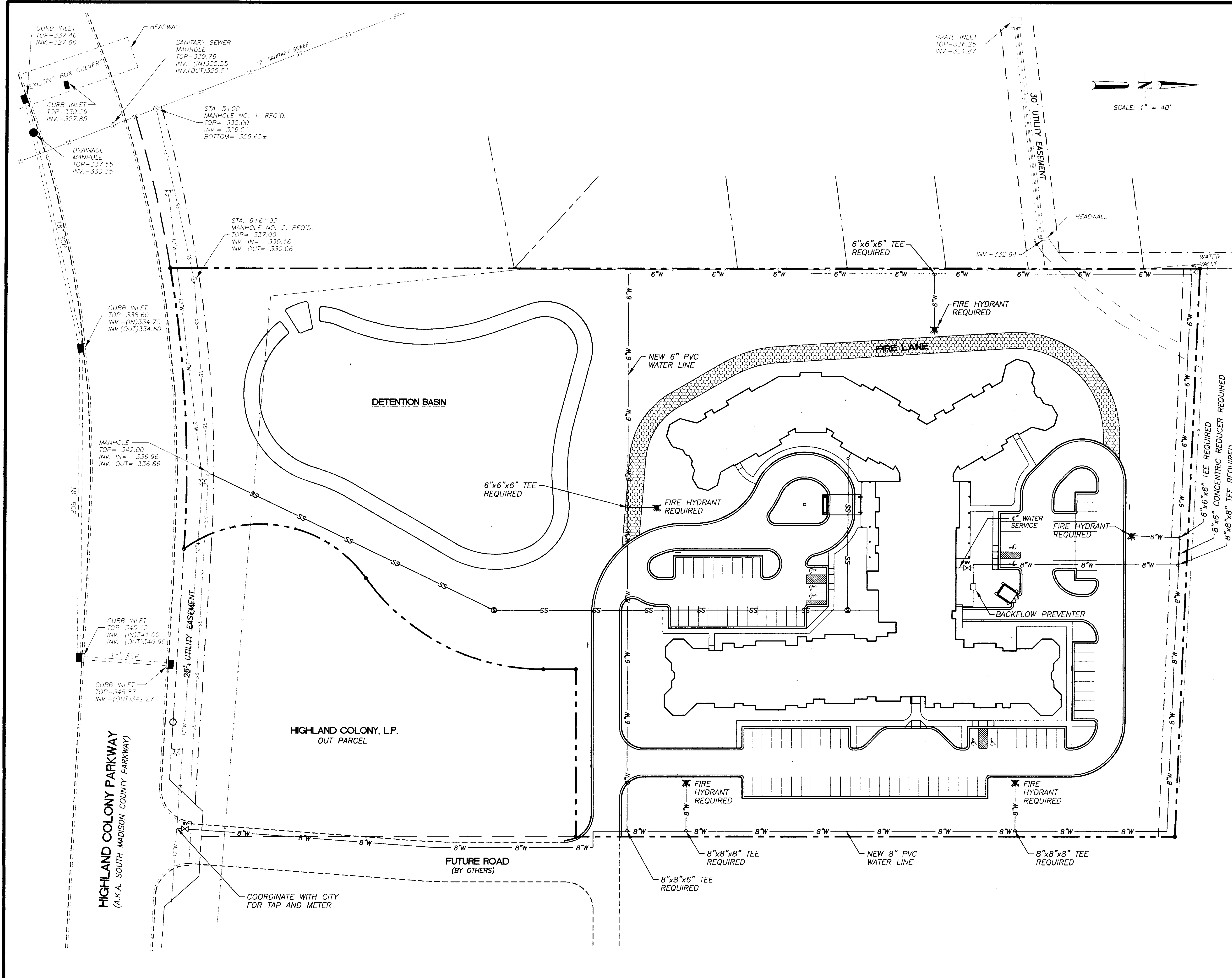
HIGHLAND COLONY PARKWAY
 (A.K.A. SOUTH MADISON COUNTY PARKWAY)

HIGHLAND COLONY, L.P.
 OUT PARCEL

FUTURE ROAD
 (BY OTHERS)



CAPITAL SENIOR DEVELOPMENT	
GRADING AND DRAINAGE PLAN	
THE WATERFORD AT HIGHLAND COLONY PARKWAY	
DESIGN: M.W.E. 11/98	DRAWING NO. C4 OF 11
CPWN: C.R.H. 11/98	NEEL-SCHAFFER, INC. ENGINEERS • PLANNERS
SCALE: 1" = 40'	



GENERAL

THE CONTRACTOR SHALL VERIFY ALL DIMENSIONS WITH THE MOST CURRENT DATA PROVIDED BY THE OWNER.

THE CONTRACTOR SHALL REFER TO ARCHITECTURAL PLANS FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRANCE, SLOPED PAVING, EXIT PORCHES, RAMPS, TRUCK DOCKS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY ENTRANCE LOCATIONS.

ALL WATER AND SANITARY SEWER SERVICES TO BE INSTALLED TO WITHIN 5 FEET OF BUILDING LINE AND PLUGGED. ALL SERVICES SHALL BE CITY OF RIDGELAND STANDARD OR OTHER APPROVED MATERIAL AND INSTALLED PER CITY OR THE MISSISSIPPI STATE DEPARTMENT OF HEALTH AND MDEQ/OPC SPECIFICATIONS.

MINIMUM 36" COVER REQUIRED OVER ALL WATER LINES.

FIRE HYDRANT ASSEMBLY INCLUDES HYDRANT, TEE AND VALVE.

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANY AT LEAST 48 HOURS BEFORE EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.

REFERENCE SHEET C10 OF 11 FOR SANITARY SEWER SYSTEM DETAILS.

REFERENCE SHEET C11 OF 11 FOR STANDARD WATER SYSTEM DETAILS.

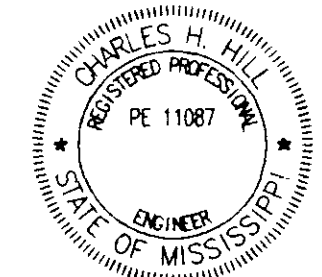
SANITARY SEWER AND WATER CONNECTIONS

CONNECTION OF SANITARY SEWER AND WATER TO THE EXISTING CITY OF RIDGELAND UTILITIES SHALL BE COORDINATED THROUGH THE PUBLIC WORKS DEPARTMENT OF THE CITY OF RIDGELAND. ALL FEES WILL BE THE RESPONSIBILITY OF THE CONTRACTOR.

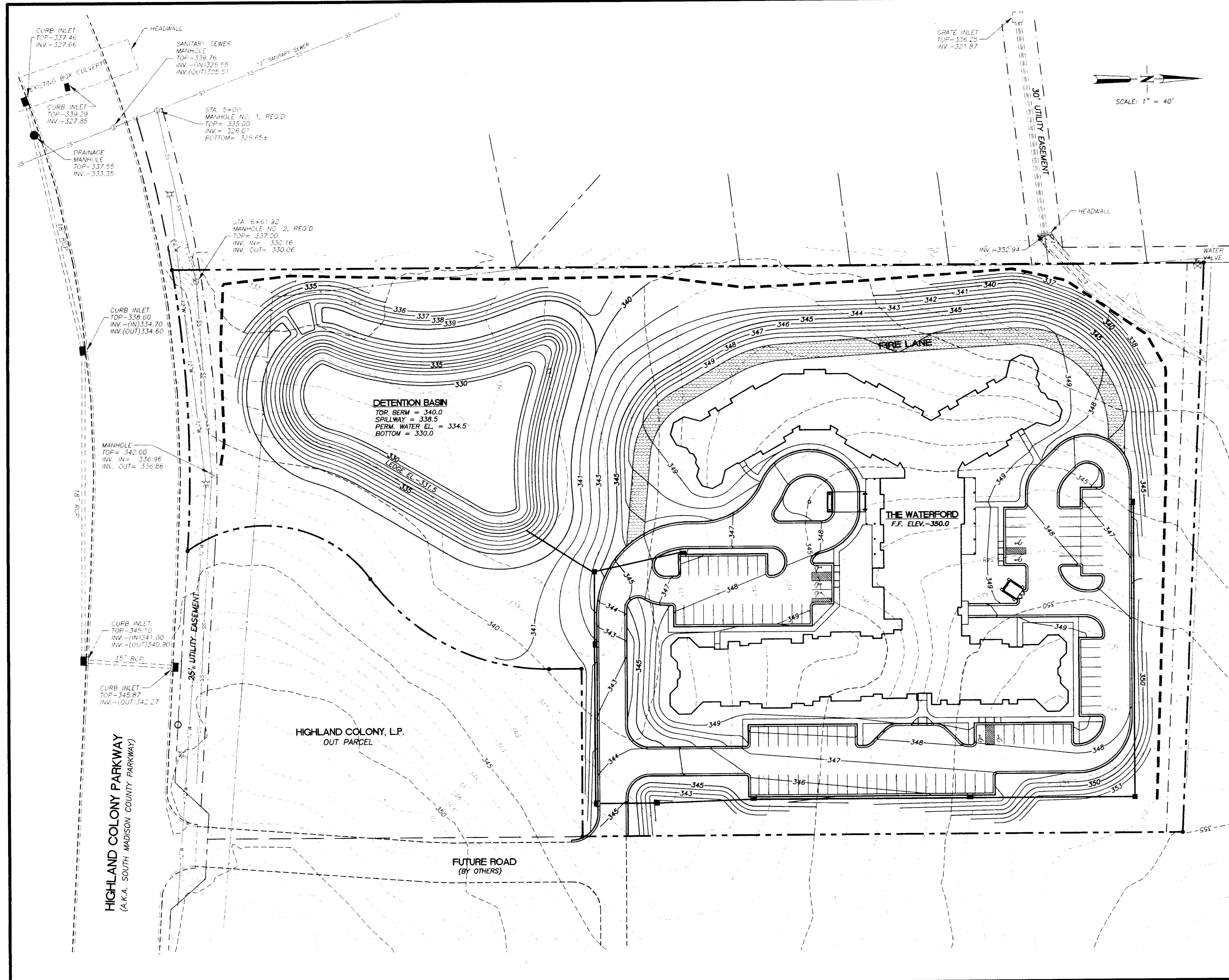
CONTRACTOR SHALL REFER TO ARCHITECT'S PLANS AND SPECIFICATIONS FOR ENTRY LOCATION OF ALL WATER, SEWER SERVICE, ELECTRICAL, TELEPHONE AND GAS SERVICE. CONTRACTOR SHALL COORDINATE INSTALLATION OF UTILITIES IN SUCH A MANNER AS TO AVOID CONFLICTS AND ASSURE PROPER DEPTHS ARE ACHIEVED AS WELL AS COORDINATING WITH THE REGULATORY AGENCY AS TO THE LOCATION AND CONNECTION TO THEIR FACILITIES.

THE SITE CONTRACTOR SHALL COORDINATE THE INSTALLATION OF ALL UNDERGROUND UTILITIES WITH HIS WORK. ALL UNDERGROUND UTILITIES (WATER, SANITARY SEWER, STORM SEWER, ELECTRICAL CONDUIT, IRRIGATION SYSTEMS, AND ANY OTHER MISC. UTILITIES) SHALL BE IN PLACE PRIOR TO THE PLACEMENT OF BASE COURSE MATERIAL, AND THE PLACEMENT OF ANY APPROPRIATE SOIL STABILIZATION.

THE CONTRACTOR SHALL COORDINATE THE LOCATION AND INSTALLATION OF ALL UTILITIES OTHER THAN WATER AND SEWER WITH THE RESPONSIBLE UTILITY COMPANY.



CAPITAL SENIOR DEVELOPMENT	
SITE UTILITY PLAN	
THE WATERFORD AT HIGHLAND COLONY PARKWAY	
DESIGN: M.W.E. 11/98 DRAWN: C.R.H. 11/98 CHECKED: CHD SCALE: 1" = 40'	DRAWING NO. C5 OF 11



STORM WATER POLLUTION PREVENTION
 The Contractor has sole responsibility for obtaining necessary permits for this work. The devices shown on this sheet are not to be used for permits without modifications.

CONSTRUCTION SEQUENCE
 The following construction sequence for Phase I is planned to minimize the amount of sediment movement on site and sediment loss from the project site.

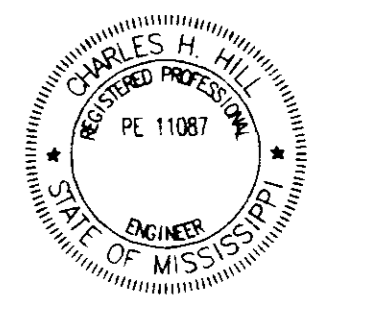
- A. **Site Preparation**
 The grading work will include removal of an existing trash dump, refilling the area as needed, and removal of excess material. The trash material will be removed to an authorized disposal area.
- B. **Silt Fence**
 Silt fence shall be placed on the down slope edge of all graded areas and around the entrance of all storm drain inlets and receiving road culverts. The silt fence shall be installed in the following sequence to minimize silt movement and loss:
 1. Install silt fence in accordance with manufacturers recommendations.
 2. Place a silt fence barrier (six feet on each side) around each storm drain inlet as soon as it is installed. These may need some reworking later as curb lines are installed.
 3. Remove silt fence from storm drain inlets when area is ready for final compaction and placement of surface topping. Remove silt fence from road culvert entrances when the required seeding, mulching and landscaping are complete.
- D. **Storm-Drain System**
 Install the storm-drain system to the grades and elevations of the locations shown on the plans. Care shall be taken to minimize movement of sediment into the storm drain inlets until the road/parking area surface topping is applied. A perimeter silt fence around to drain inlets is the recommended method of inlet protection.
- E. **Vegetation**
 Vegetate and/or landscape all curb, slope, and disturbed areas as soon as possible during the construction operations.

MAINTENANCE PLAN
 Both the short-term (during construction) and long-term (after construction) maintenance needs must be addressed.

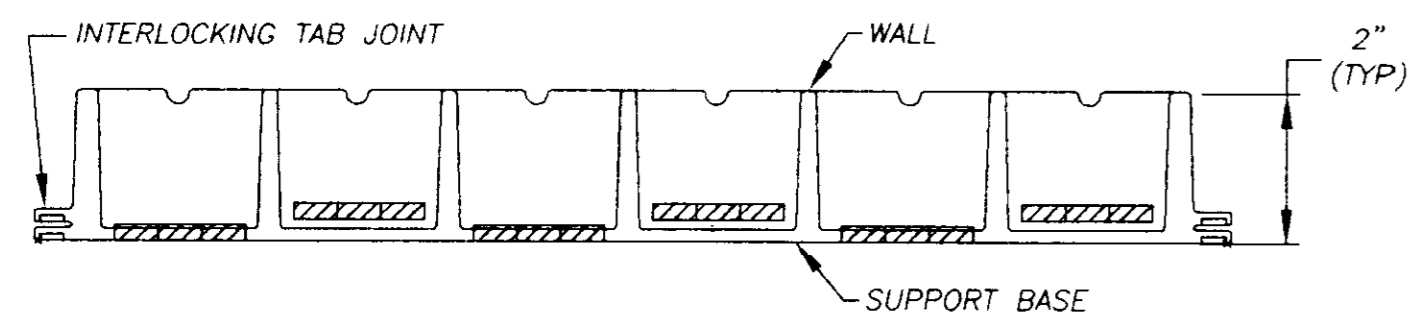
- A. **Short Term**
 All erosion and sediment-control practices will be checked for stability and operation following every runoff producing rainfall, but in no case less than every week. Any needed repairs will be made immediately to maintain the practice performance as designed.
 Sediment will be removed from the upstream face of the silt fence when it increases to about a six-inch depth at the fence. The silt fence will be replaced as necessary to maintain a barrier.
 All vegetated areas will be fertilized and revegetated as needed to maintain a vigorous and dense vegetative cover.
- B. **Long Term**
 All vegetated areas will be maintained in adequate condition to provide proper ground cover and reduce any areas of potential erosion. Where vegetation is lost, the area will be fertilized and seeded or other acceptable methods used to restore proper cover.

LEGEND
 - - - - - Proposed Silt Fence

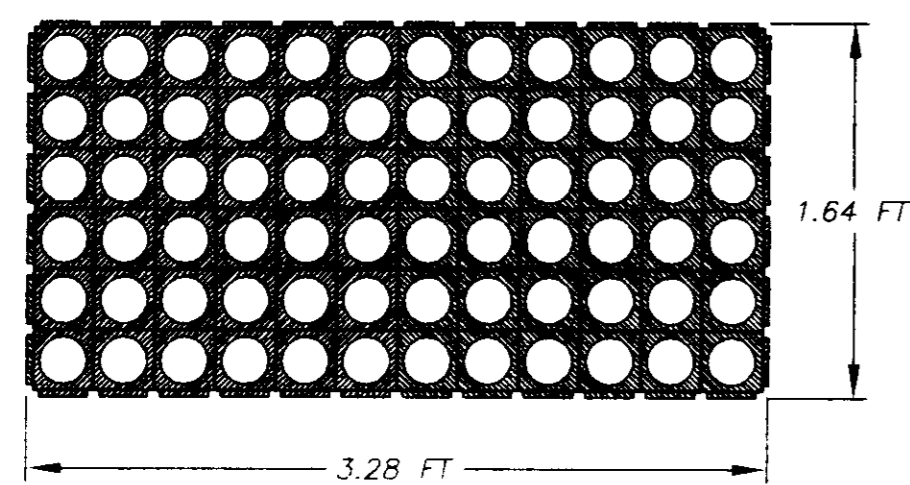
NOTE:
 Synthetic filter fabric shall be a pervious sheet of propylene nylon, polyester and shall be certified by the manufacturer or supplier and conform to the following requirements:
 a) Filtering efficiency (75% minimum)
 b) Tensile strength that 70% maximum elongation=50 lbs./lin. in. (minimum)
 c) Flow rate=0.3 gal./sq. ft./min (minimum)



CAPITAL SENIOR DEVELOPMENT	
EROSION CONTROL PLAN	
THE WATERFORD AT HIGHLAND COLONY PARKWAY	
DESIGN: M.W.E. 11/98	DRAWING NO: C6 OF 11
DRAWN: C.R.H. 11/98	NEEL-SCHAFFER, INC. ENGINEERS • PLANNERS
SCALE: 1" = 40'	



ELEVATION VIEW
N.T.S.

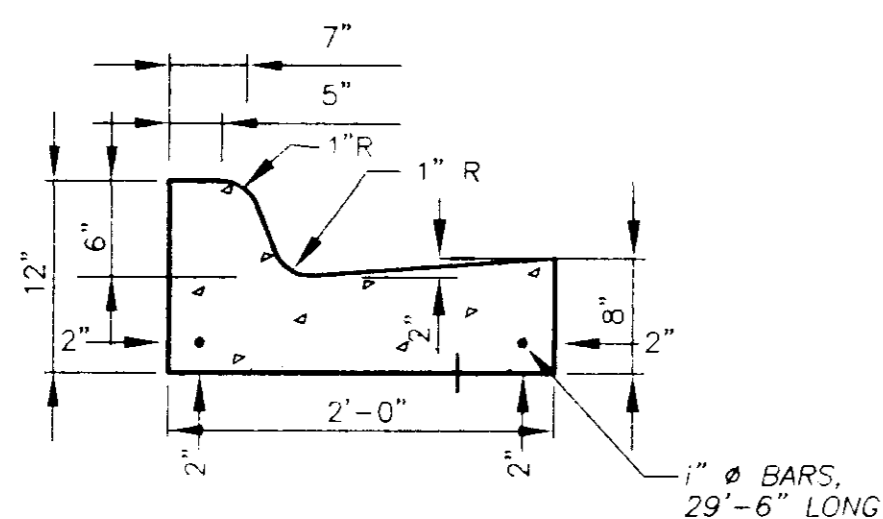


PLAN VIEW
N.T.S.

TYPICAL POROUS PAVEMENT UNIT

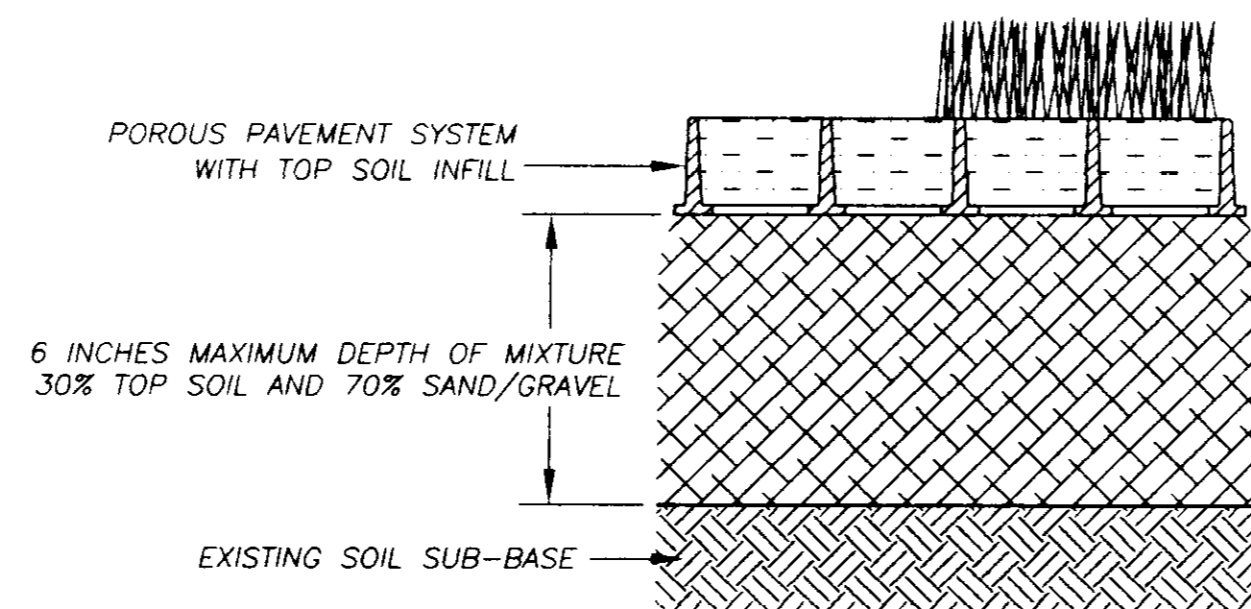
NOTES:

1. FIRE ACCESS LANE FOR FIRE TRUCK, H2O LOADING - INFREQUENT PASSES
2. BASIS OF DESIGN: PRESTO GEOBLOCK SYSTEM

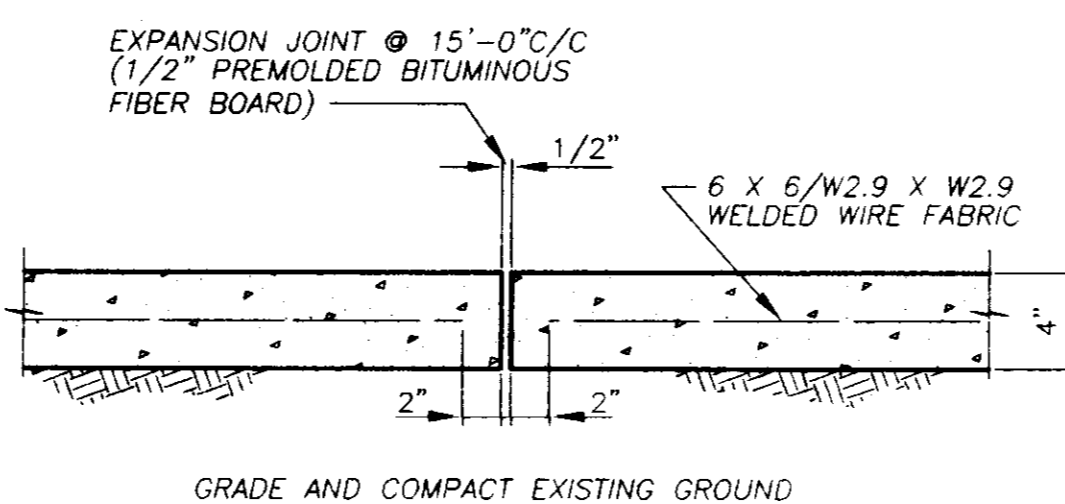


STANDARD CURB AND GUTTER
NOT TO SCALE

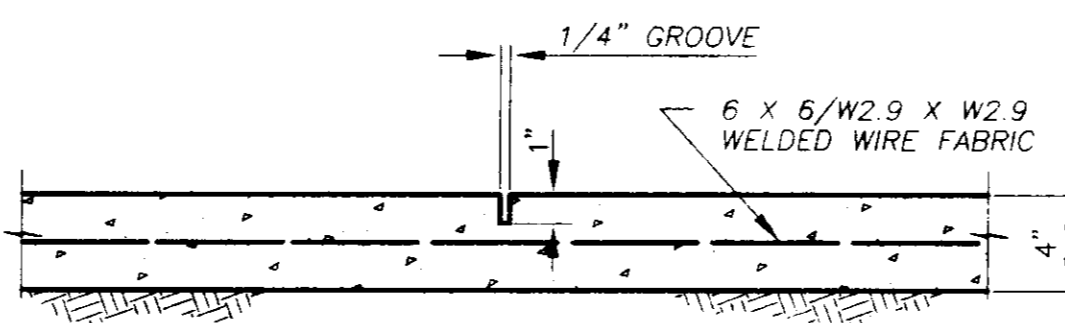
- NOTE:
2 - 1" DOWEL BARS, 15" LONG REQ'D. @ EXPANSION JOINTS. THEY SHALL BE HELD IN PLACE BY APPROVED CHAIRS OR SUPPORTS, & 1" EXPANSION MATERIALS.



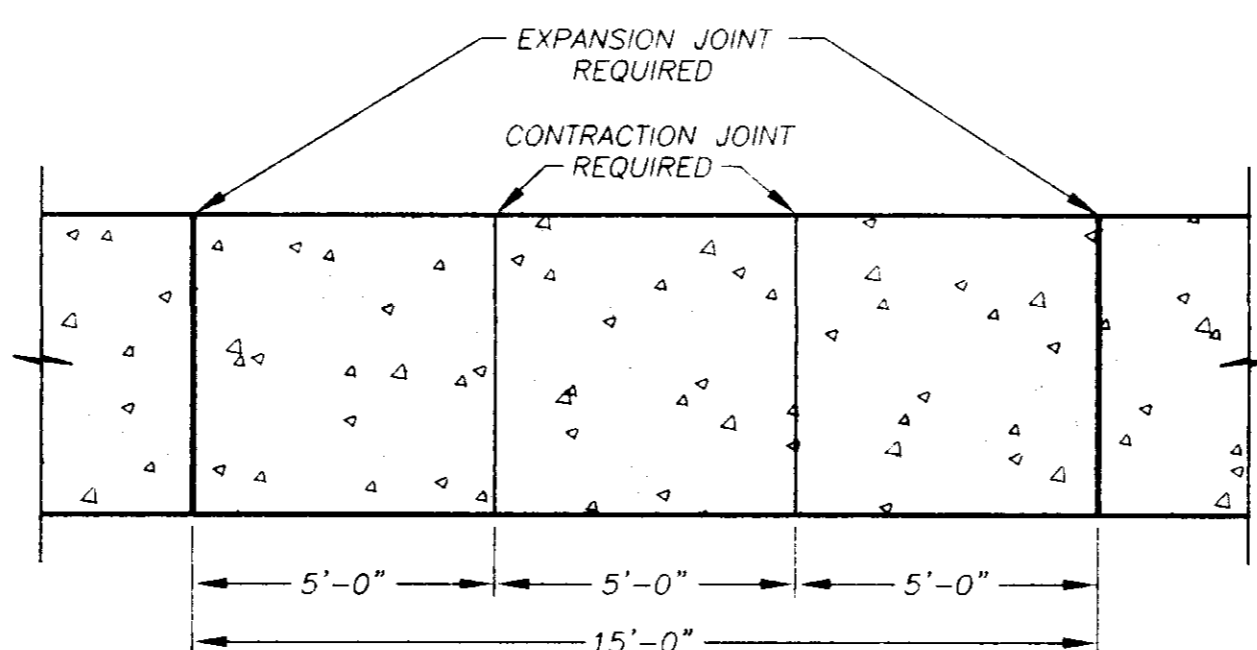
POROUS PAVEMENT DRIVING SURFACE
N.T.S.



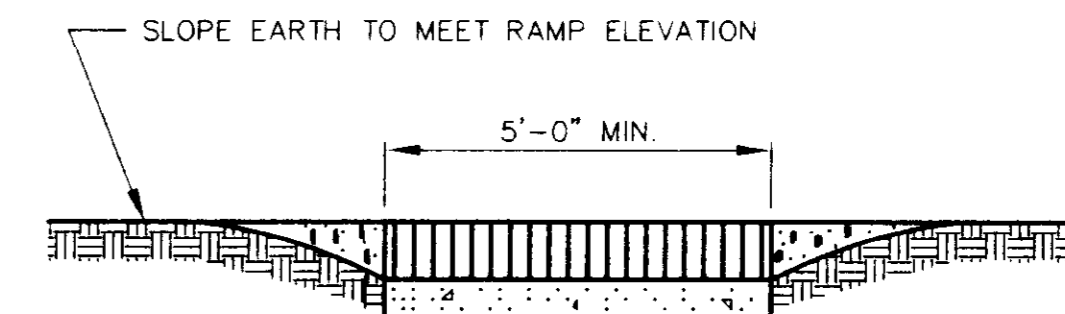
SIDEWALK EXPANSION JOINT DETAIL
NOT TO SCALE



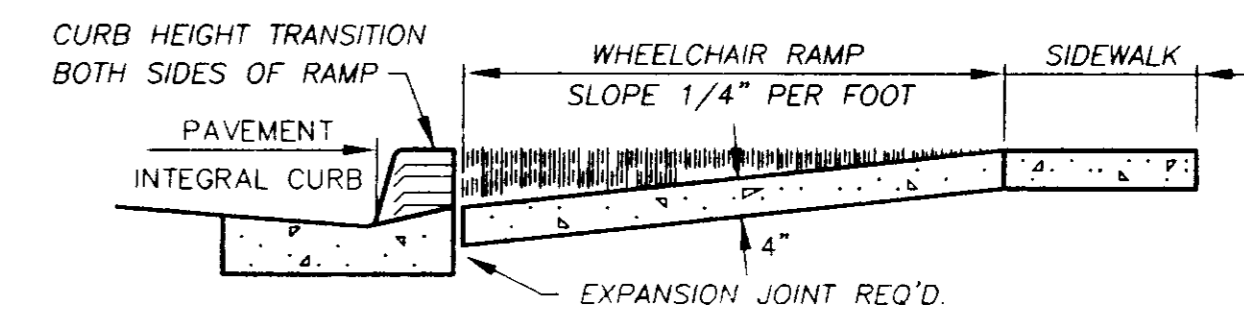
SIDEWALK CONTRACTION JOINT DETAIL
NOT TO SCALE



SIDEWALK JOINT LAYOUT DETAIL
NOT TO SCALE



ELEVATION



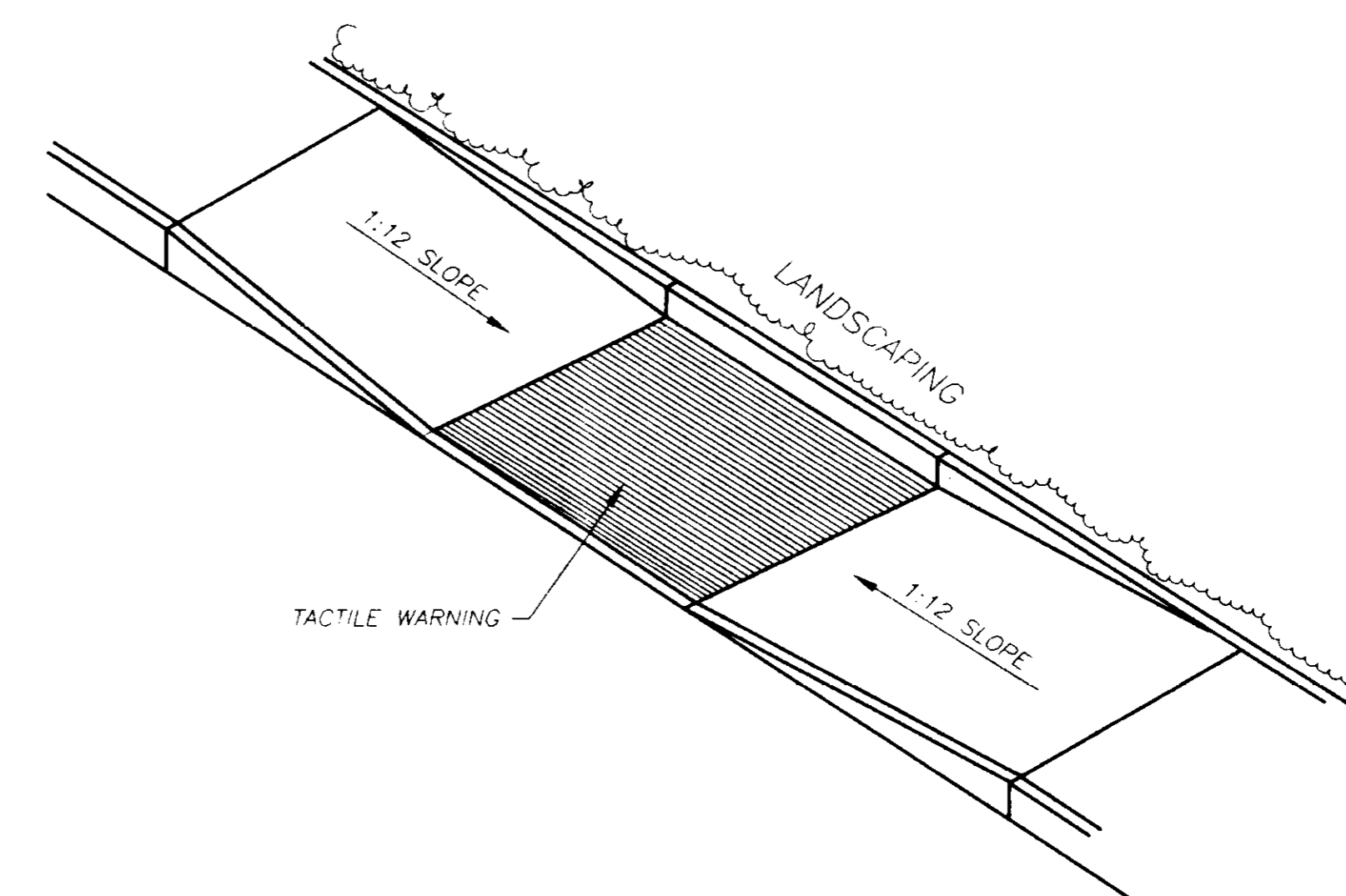
SECTION

WHEEL CHAIR RAMP GENERAL NOTES

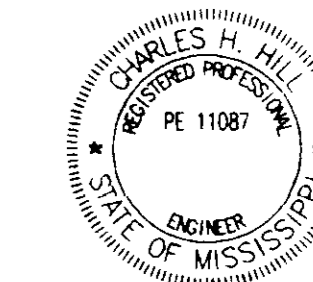
NOT TO SCALE

NOTES:

1. LOCATION OF WHEELCHAIR RAMP TO BE AS SHOWN ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
2. THE SIDEWALK WHEELCHAIR RAMP SHALL BE PAID FOR AS SIDEWALK.
3. THE THICKNESS OF THE SIDEWALK WHEELCHAIR RAMP TO BE A MINIMUM OF 4 INCHES.
4. ALL RAMP SLOPES SHALL NOT BE GREATER THAN 12:1.
5. THE RAMP SURFACE SHALL BE DETECTABLE BY A BLIND PERSON. THE SURFACE MAY BE GROOVED WITH A BROOM-BRUSH IF THE GROOVES ARE DESIGNED SO THAT WATER IS NOT TRAPPED TO FORM ICE.



CURB TRANSITION FOR HANDICAP RAMP
NOT TO SCALE

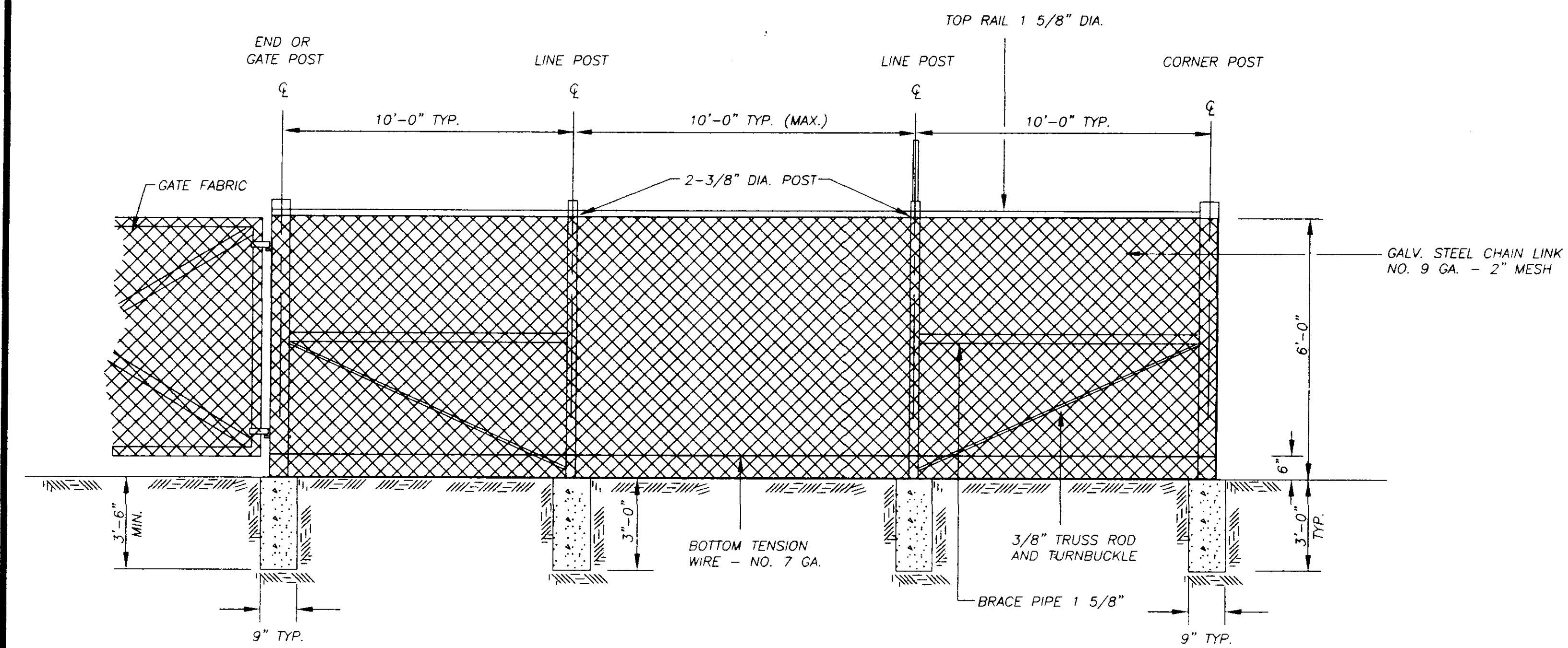


CAPITAL SENIOR DEVELOPMENT

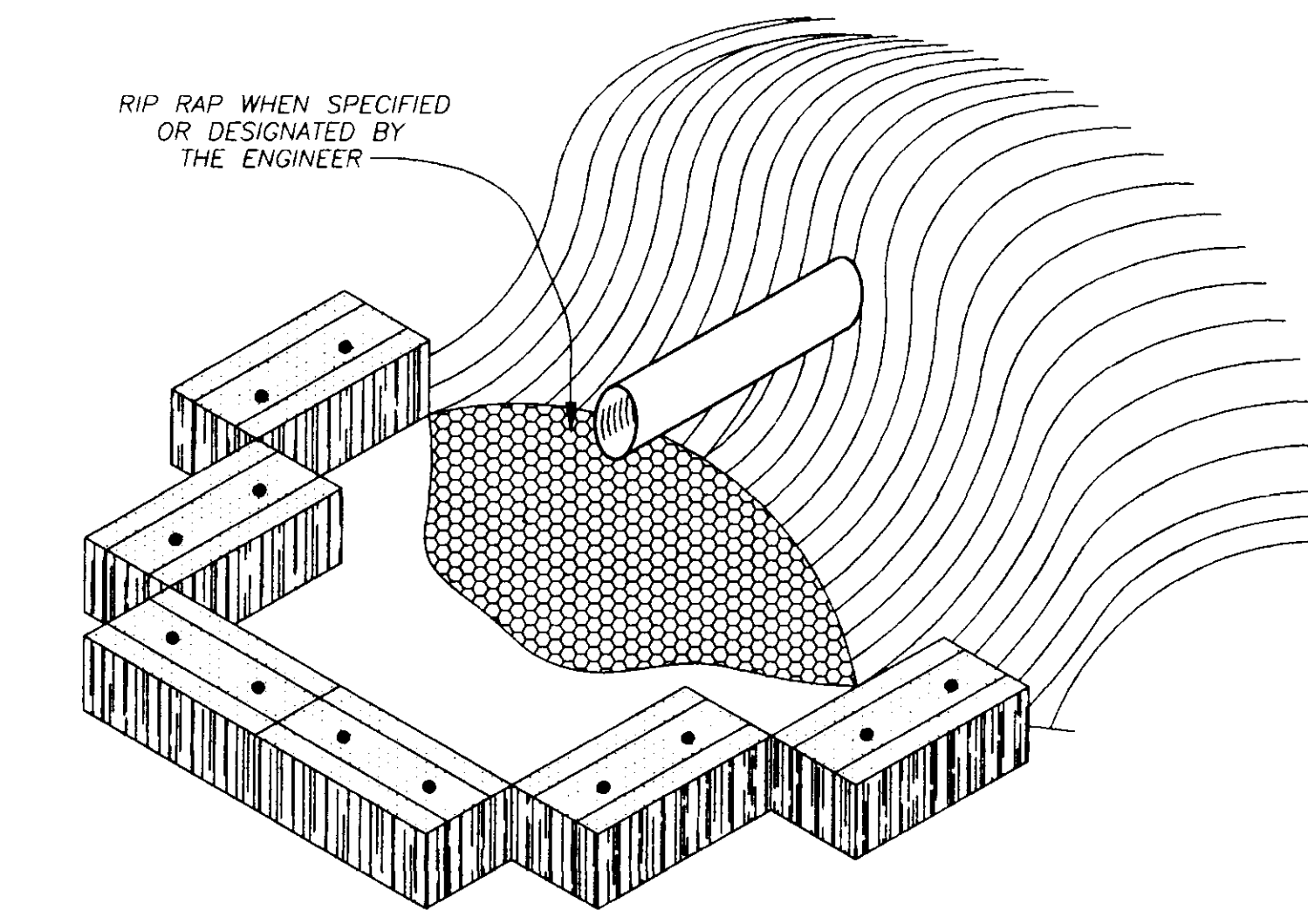
CONSTRUCTION DETAILS

THE WATERFORD AT
HIGHLAND COLONY PARKWAY

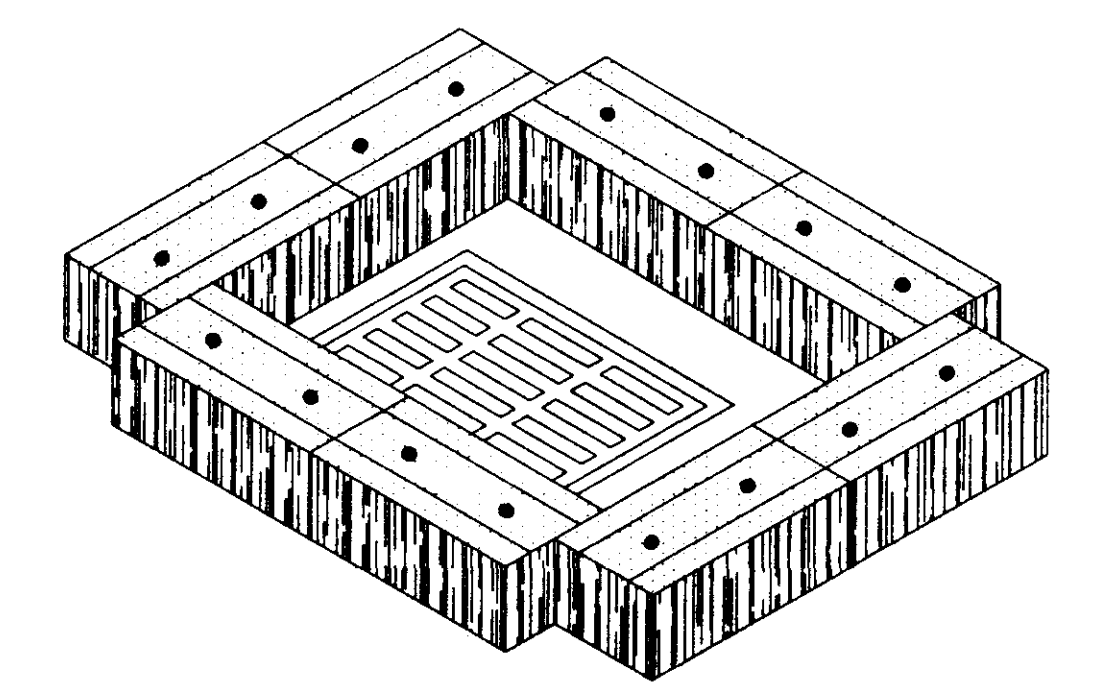
DSGN	M.W.E.	11/98	NEEL-SCHAFFER, INC. ENGINEERS * PLANNERS	DRAWING NO.
DRWN	C.R.H.	11/98		C7 OF 11
CHK'D				
SCALE	N.T.S.			



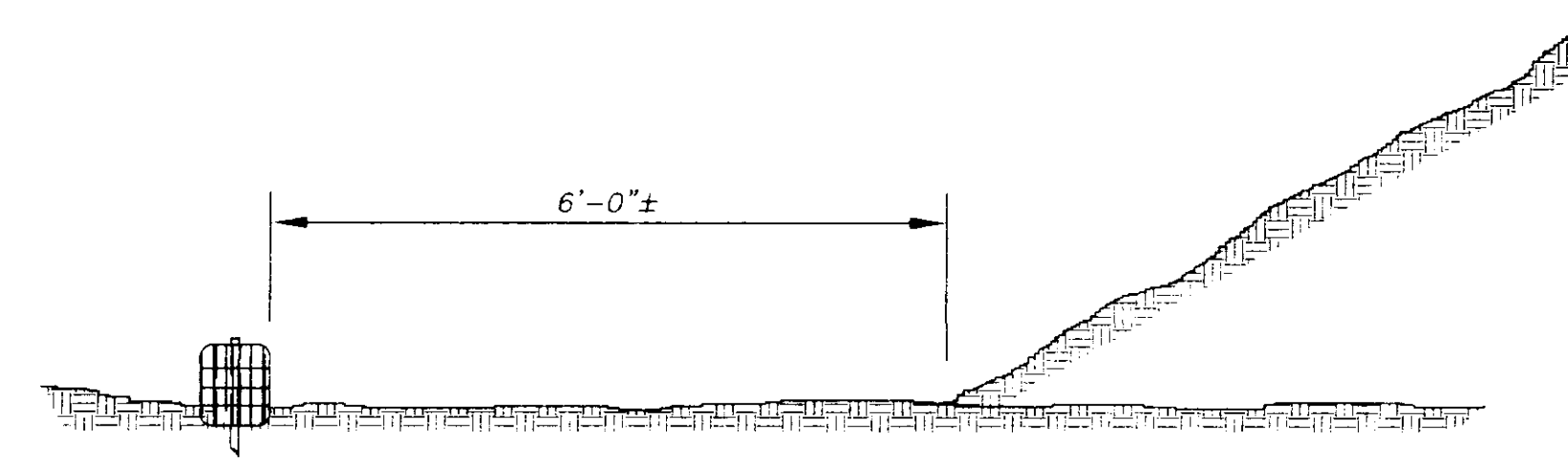
CHAIN LINK FENCE DETAIL
N.T.S.



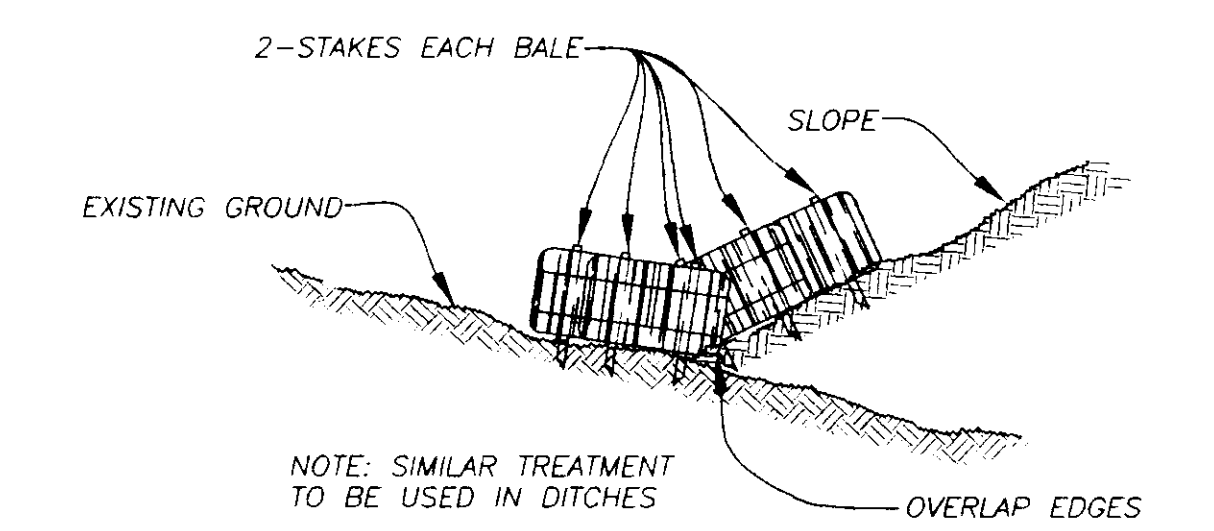
CULVERT
N.T.S.



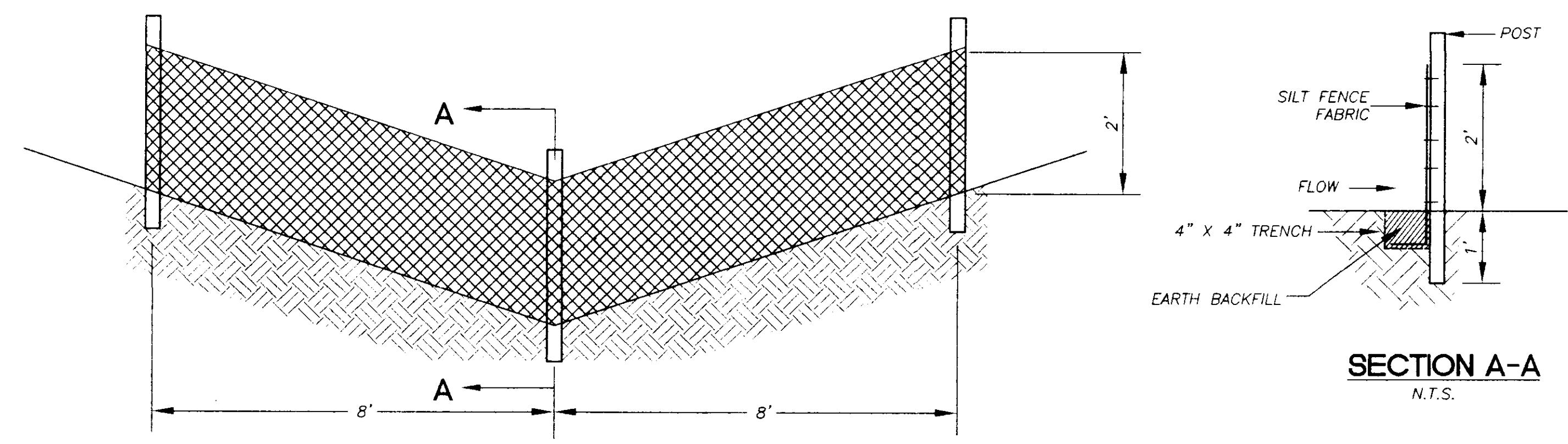
DROP INLET
N.T.S.



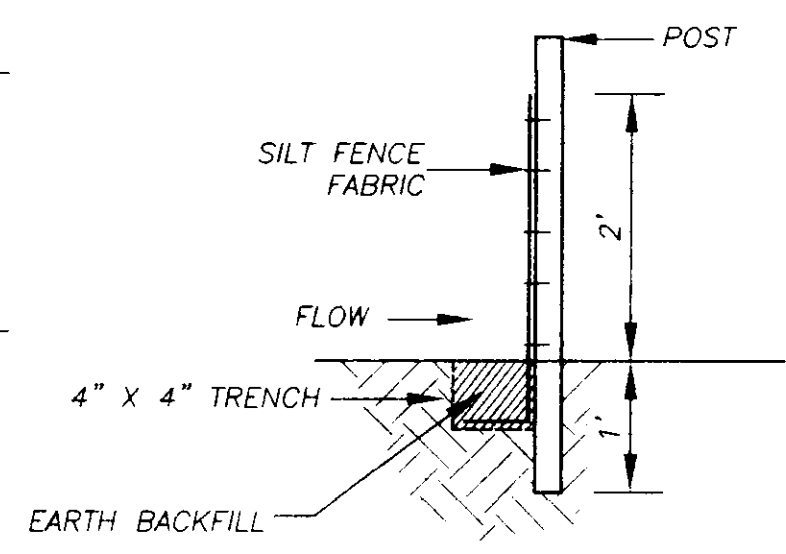
ELEVATION
N.T.S.



ELEVATION
N.T.S.

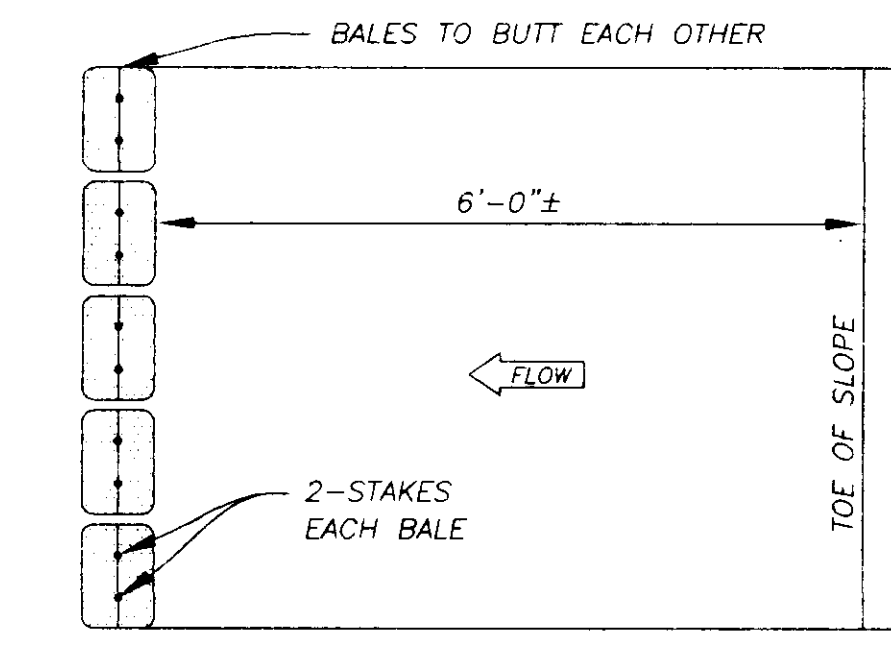


SILT FENCE DETAIL
N.T.S.

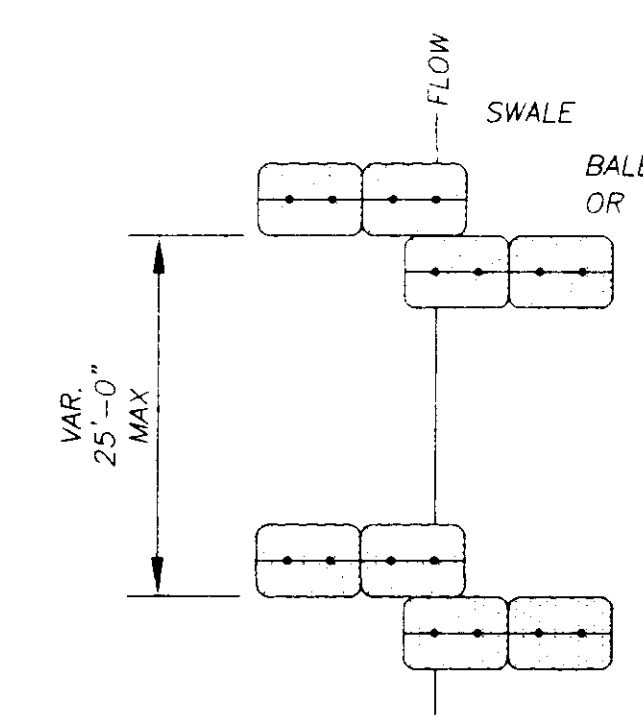


SECTION A-A
N.T.S.

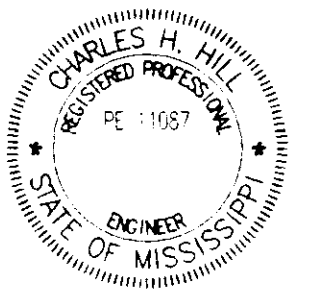
NOTE: MAXIMUM POST SPACING = 10' ON ALL SILT FENCE.



PLAN
N.T.S.

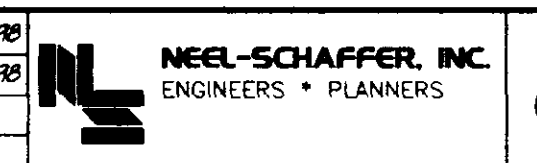


PLAN
N.T.S.

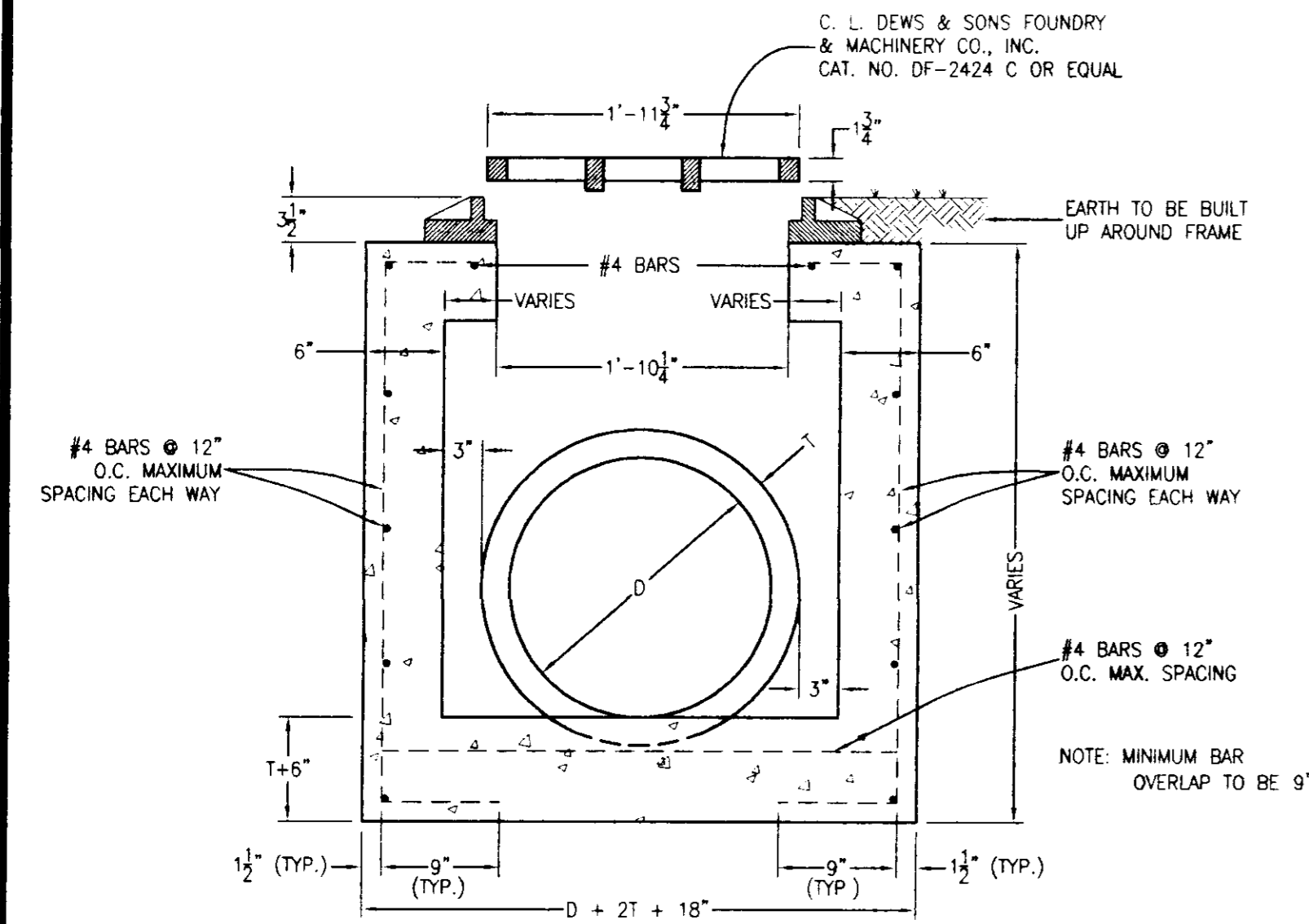


TEMPORARY EROSION CHECKS
HAY OR STRAW BALES

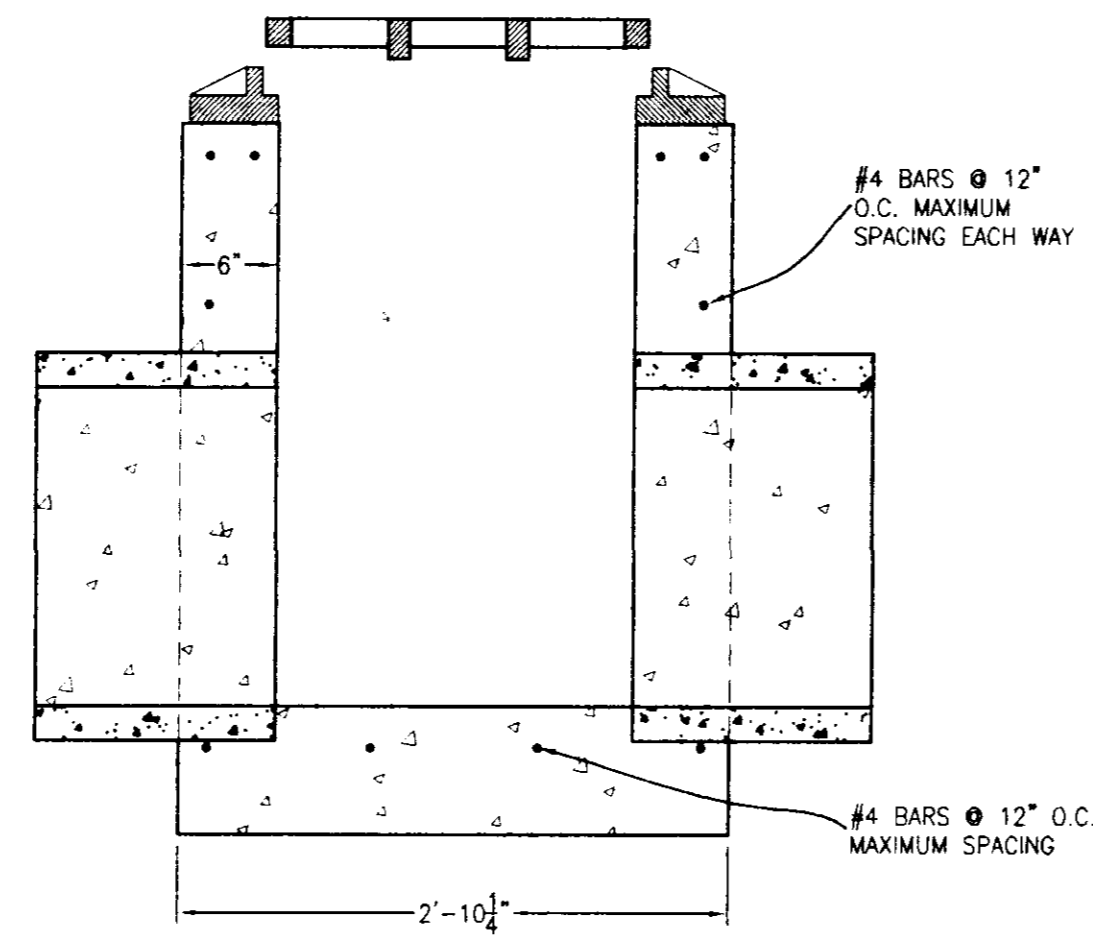
CAPITAL SENIOR DEVELOPMENT	
MISCELLANEOUS DETAILS	
THE WATERFORD AT HIGHLAND COLONY PARKWAY	
DESIGN: M.W.E. 11/98	DRAWING NO. C8 OF 11
DRAWN: C.R.H. 11/98	
CHECKED: [Signature]	
SCALE: N.T.S.	



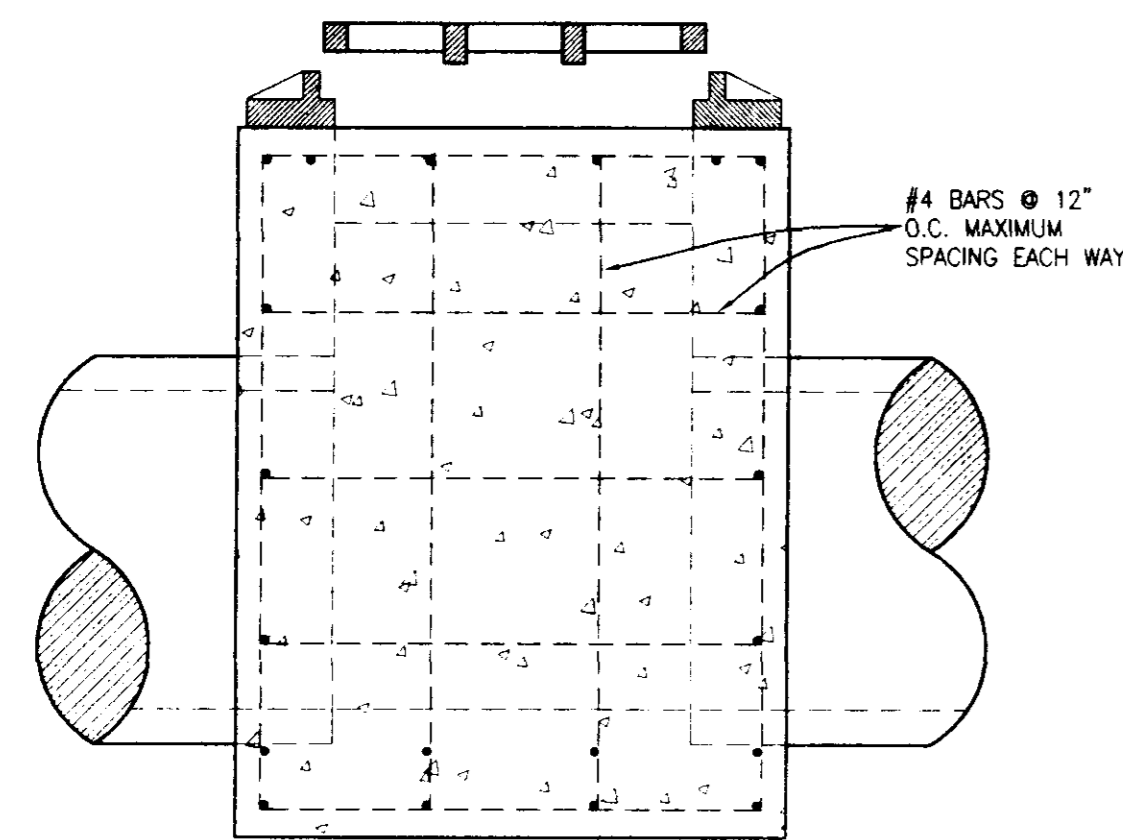
C. L. DEWS & SONS FOUNDRY
& MACHINERY CO., INC.
CAT. NO. DF-2424 C OR EQUAL



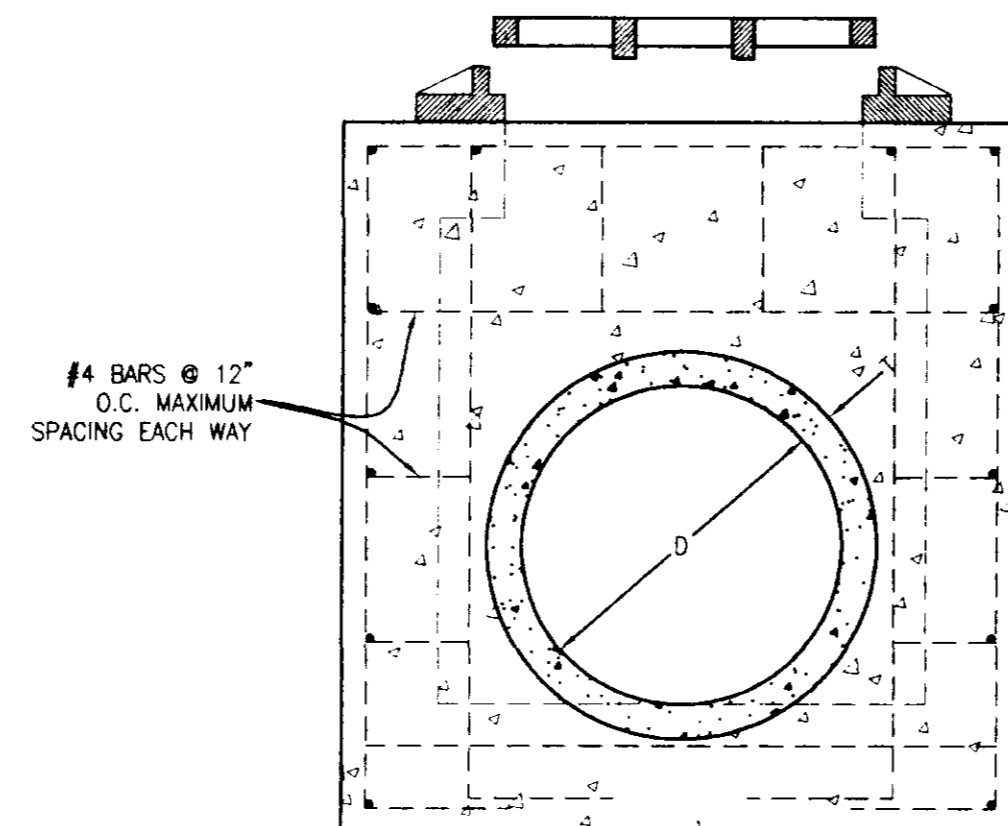
SECTION A-A



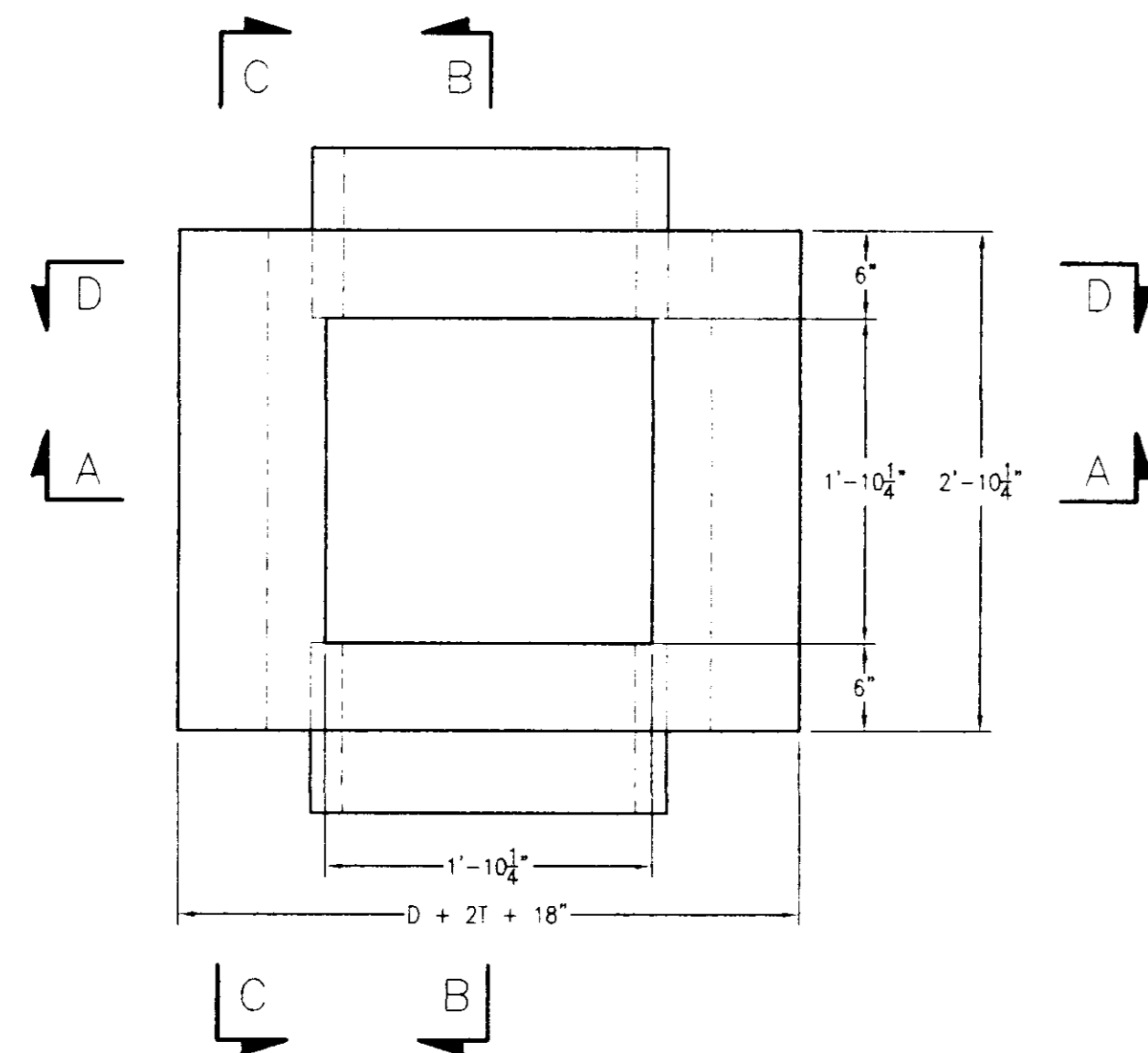
SECTION B-B



SECTION C-C



SECTION D-D

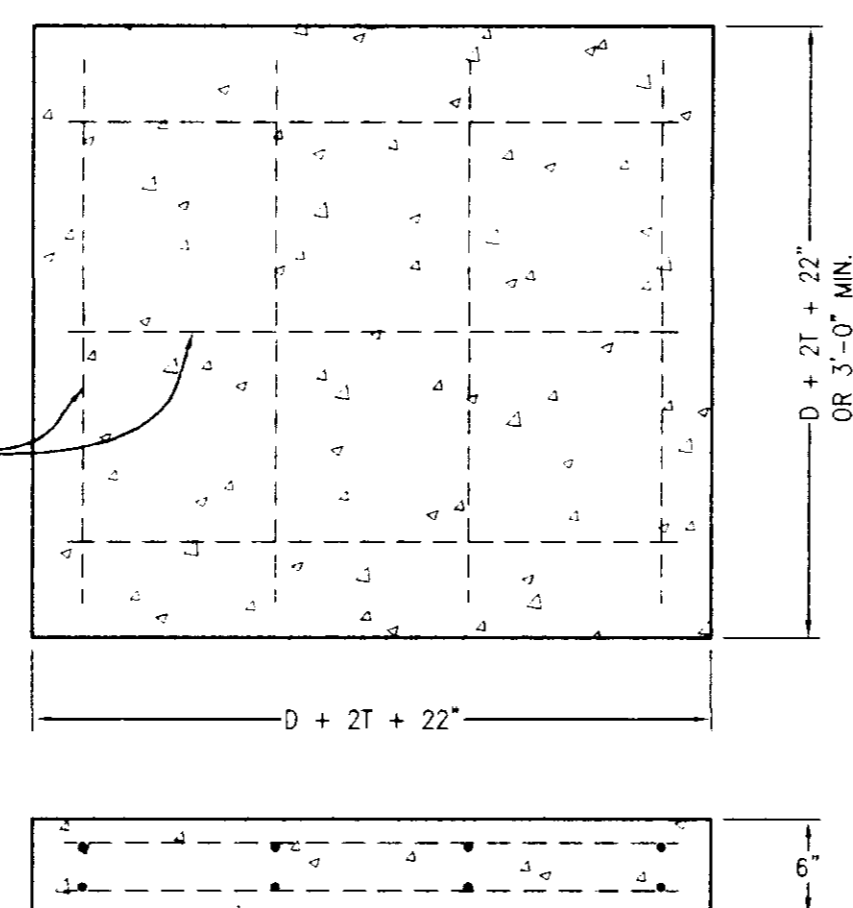


PLAN VIEW

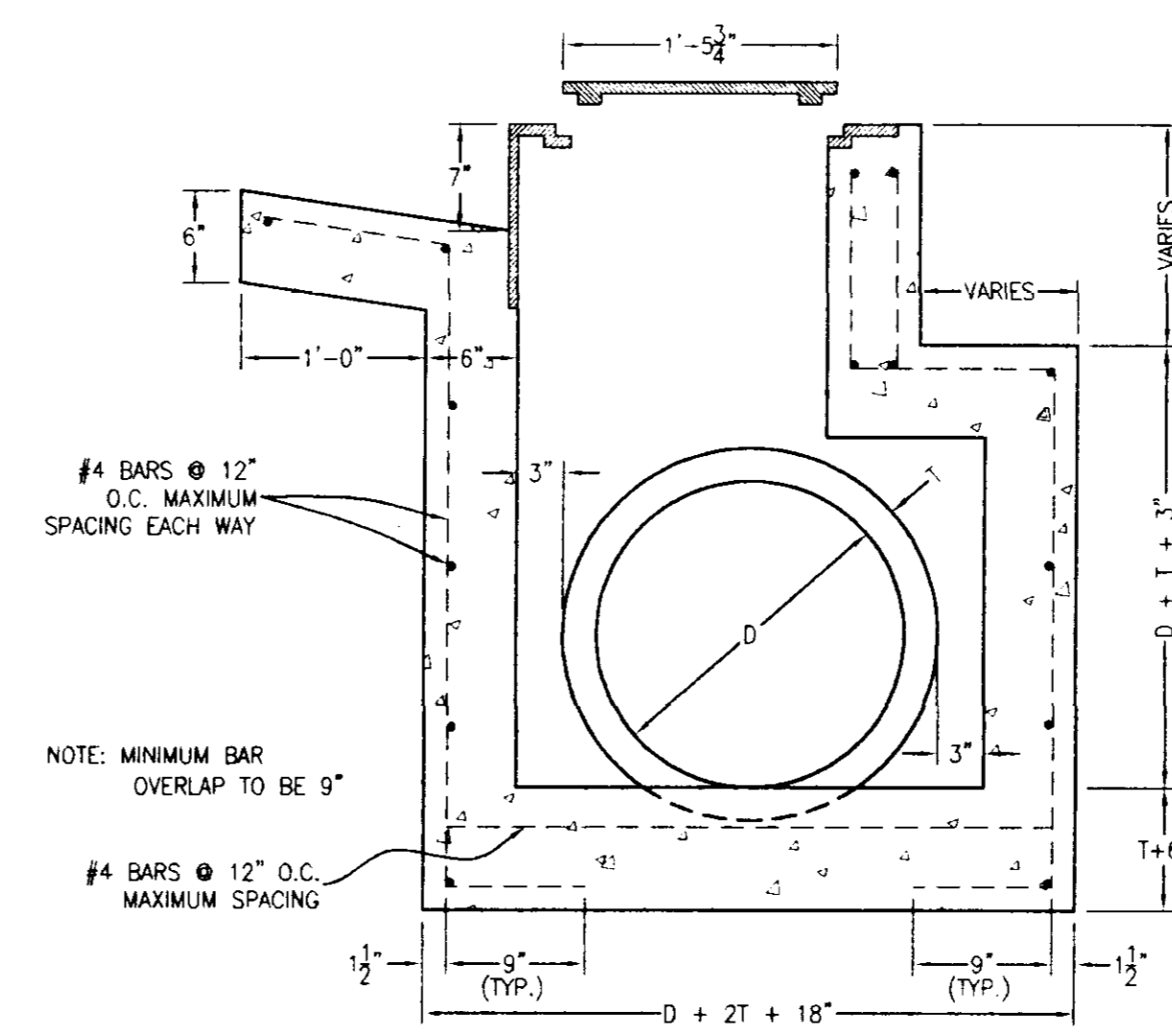
TYPICAL DROP INLET

NOTE: JUNCTION BOXES TO BE CONSTRUCTED AS DETAILED FOR TYPICAL DROP INLET WITH THE FOLLOWING EXCEPTIONS:

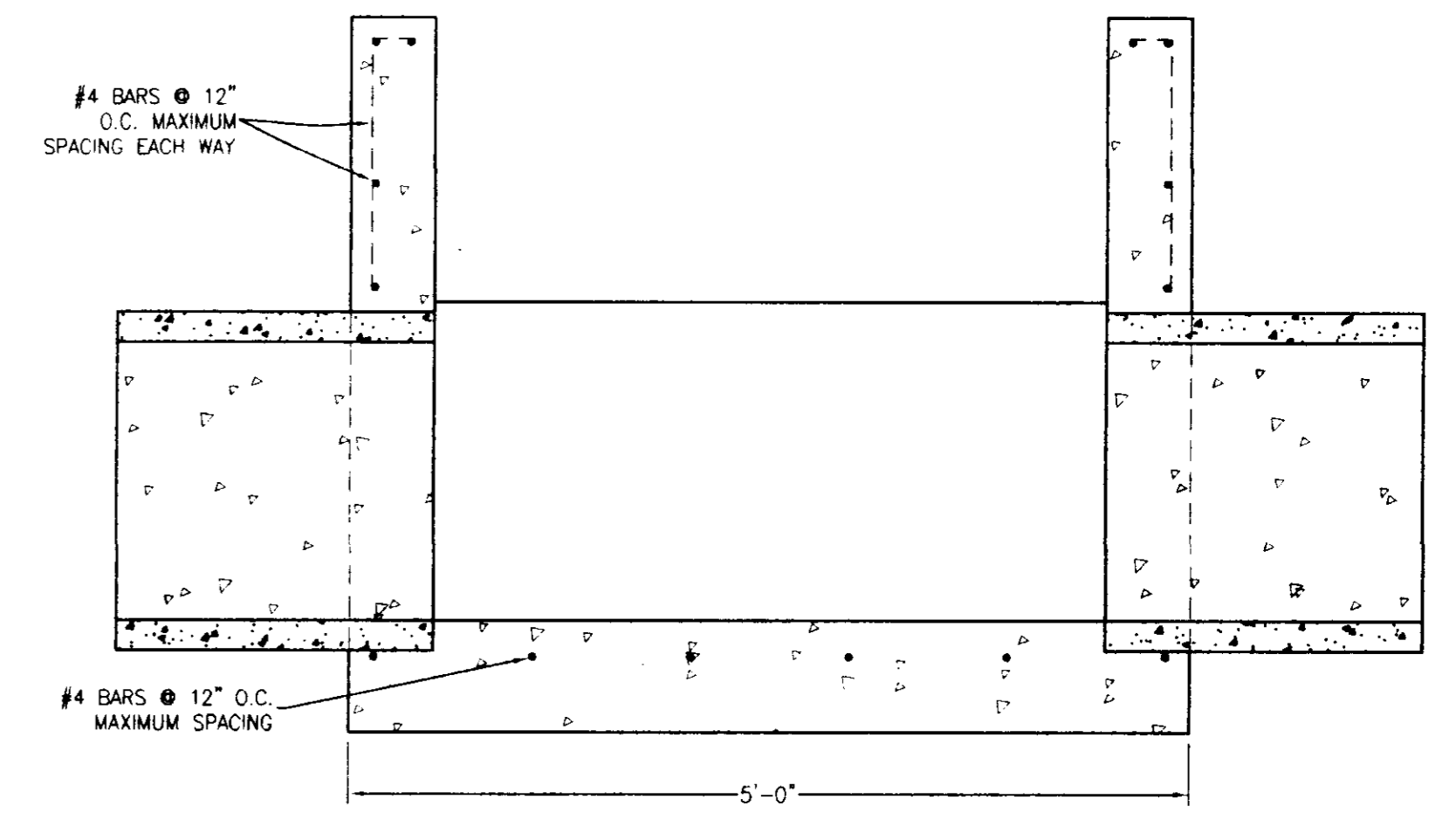
- LIP PROTRUDING INWARD AT TOP OF STRUCTURE AS SHOWN IN SEC. A-A WILL NOT BE REQUIRED.
- CONCRETE TOP SHALL BE PLACED ON TOP OF STRUCTURE AND SHALL EXTEND FROM OUTSIDE EDGE OF BOX TO OUTSIDE EDGE ON ALL SIDES.



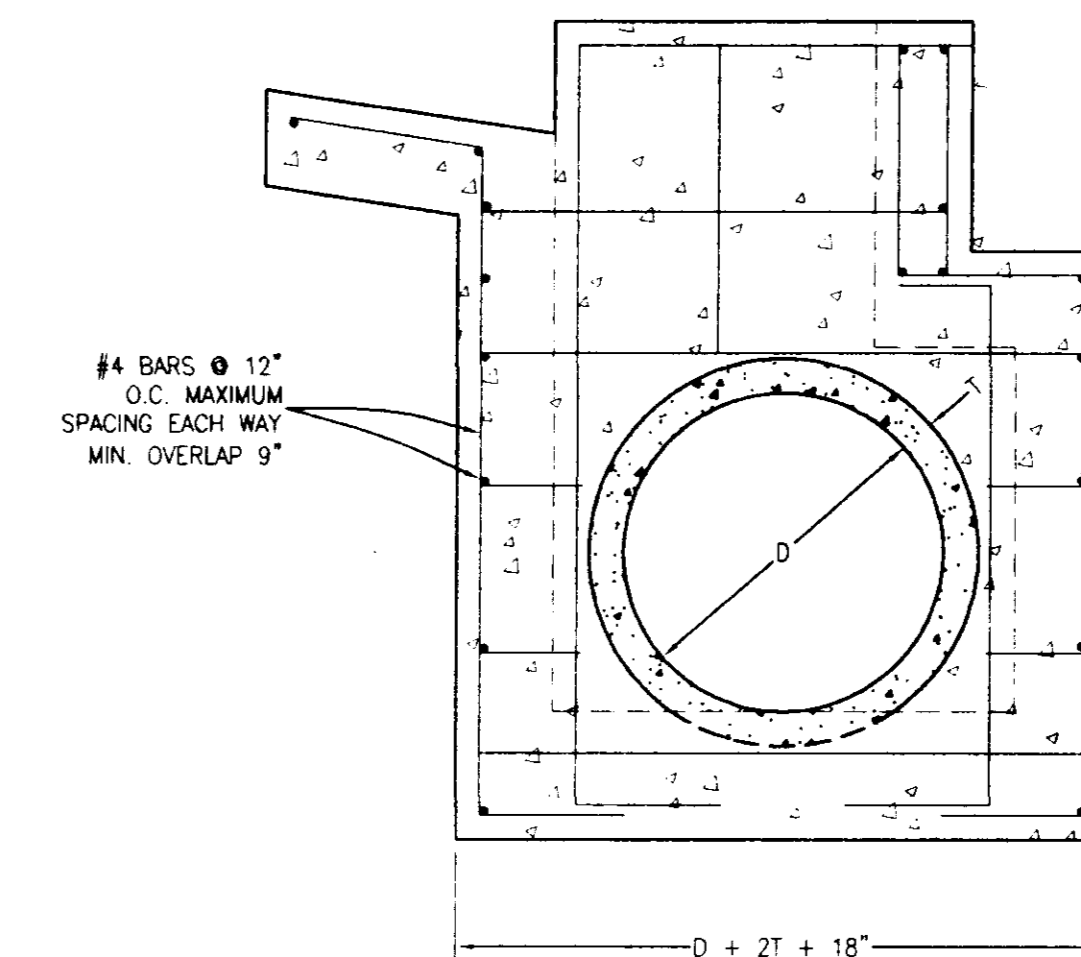
JUNCTION BOX TOP



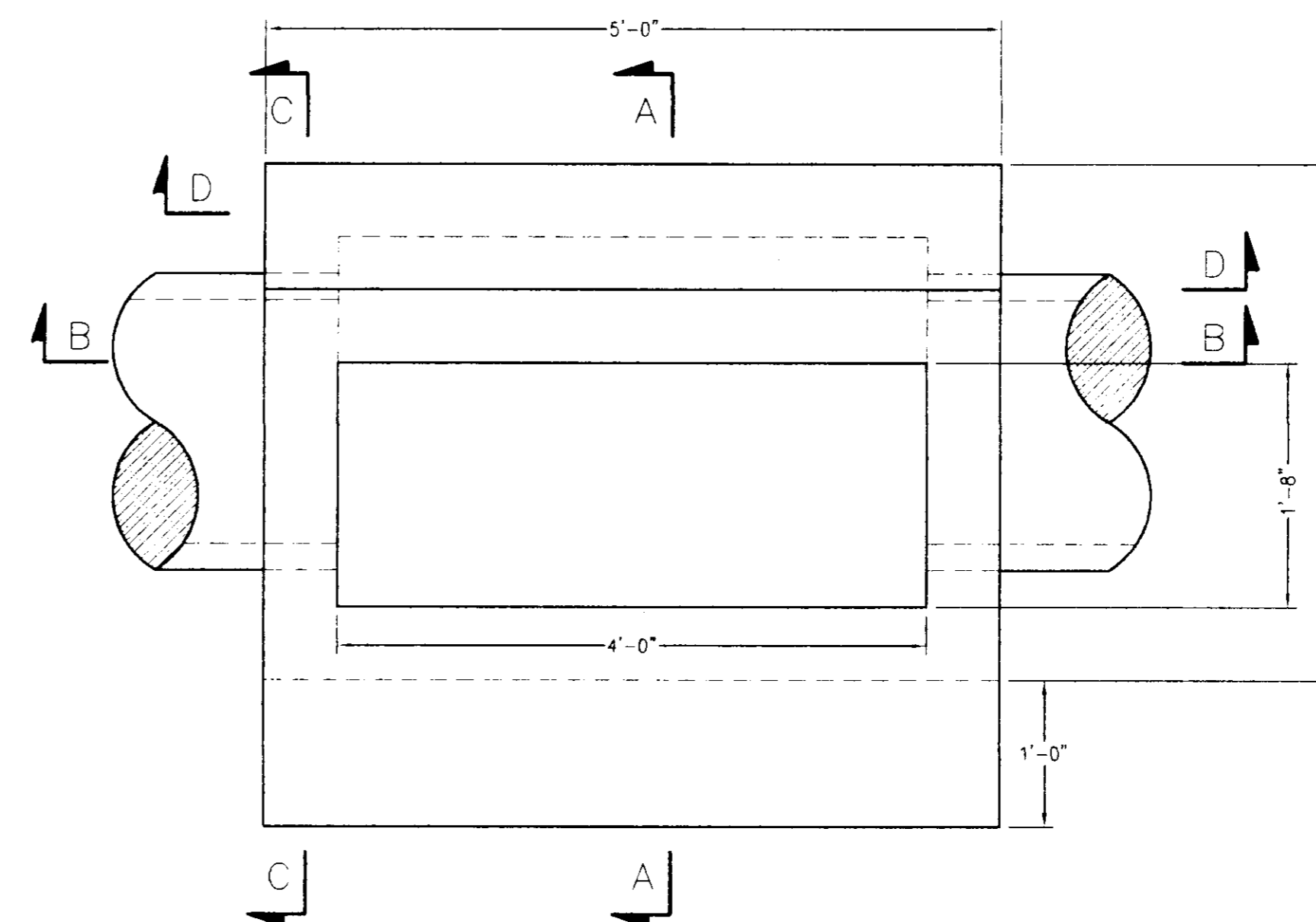
SECTION A-A



SECTION B-B

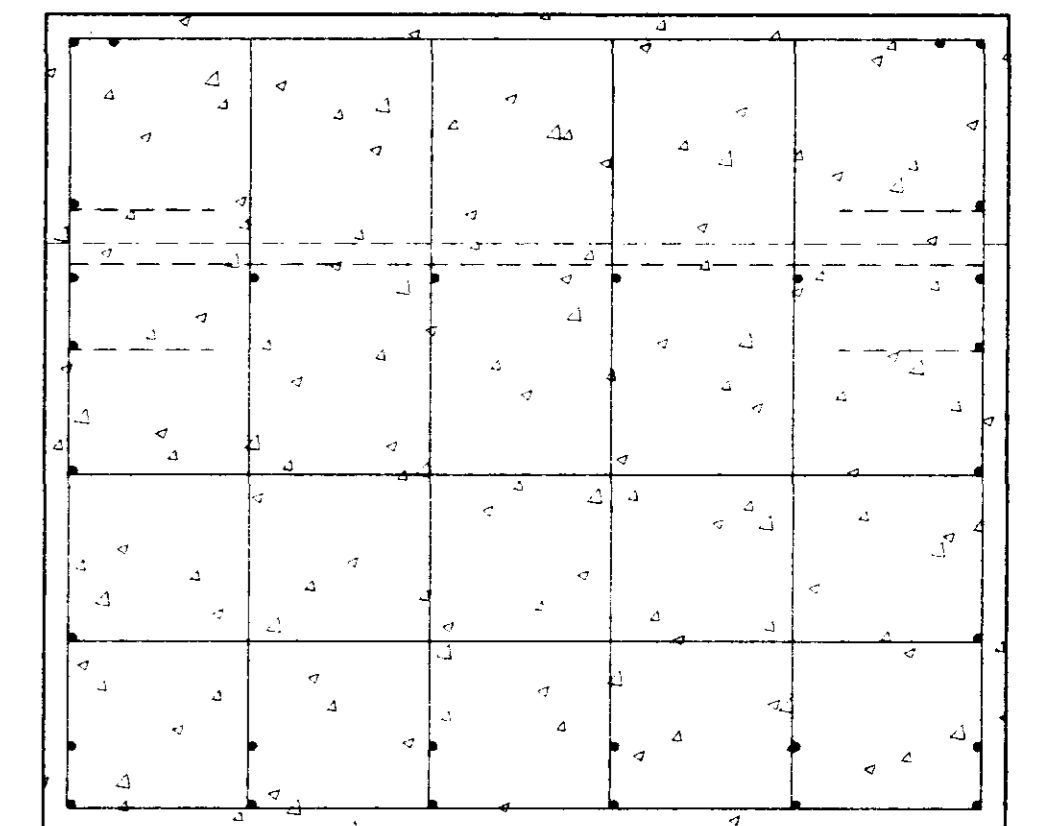


SECTION C-C



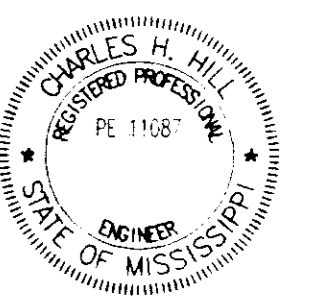
PLAN VIEW

TYPICAL CURB INLET



SECTION D-D

NOTE: ALL REINFORCING BARS SHOWN ARE #4's



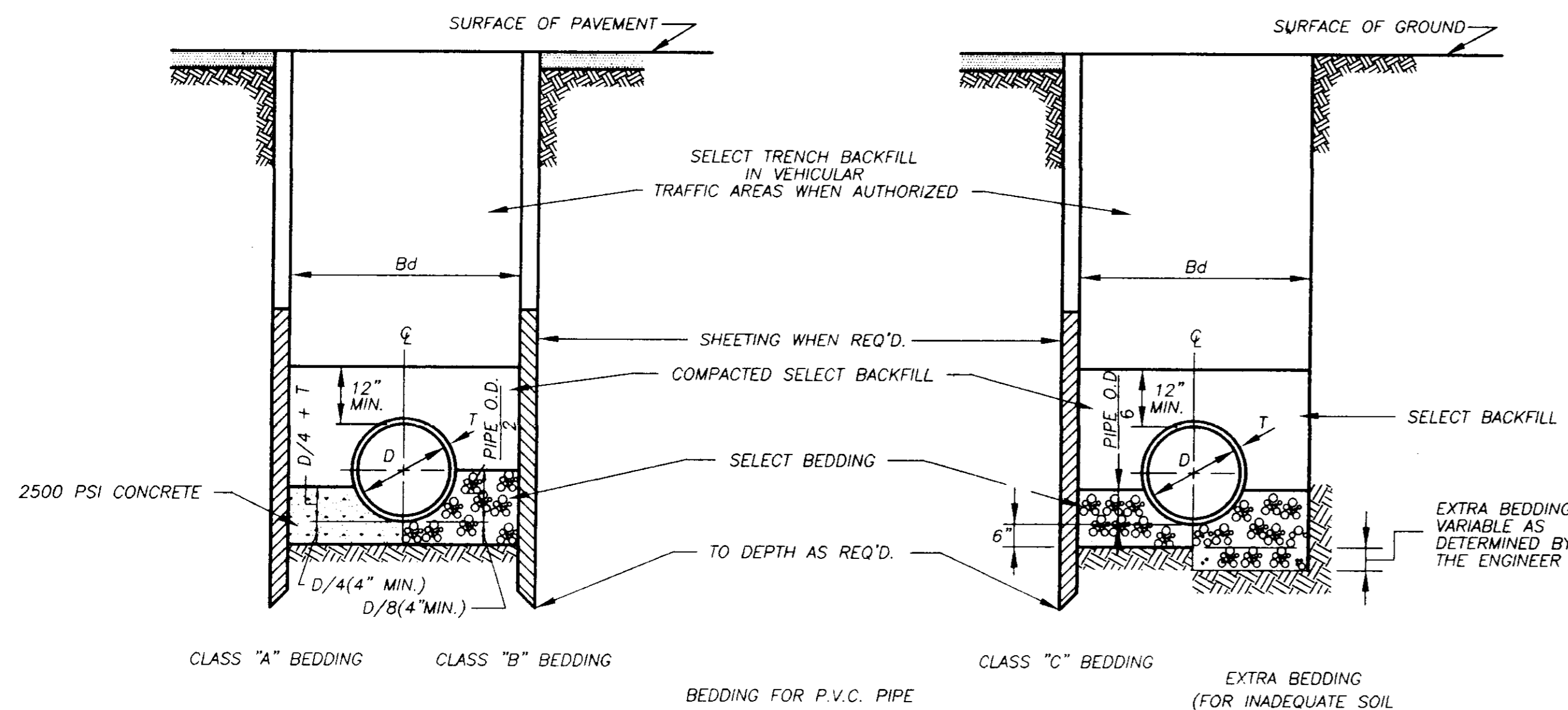
CAPITAL SENIOR DEVELOPMENT

STORM SEWER SYSTEM DETAILS

THE WATERFORD AT
HIGHLAND COLONY PARKWAY

DSGN: M.W.E. 11/98		DRAWING NO.
DRWN: N.S. 11/98		C9 OF 11
CHKD:		
SCALE: N.T.S.		

D:\3540-11\3540gr6.dwg



TYPICAL TRENCH DETAILS
NOT TO SCALE

CLASS "A" BEDDING

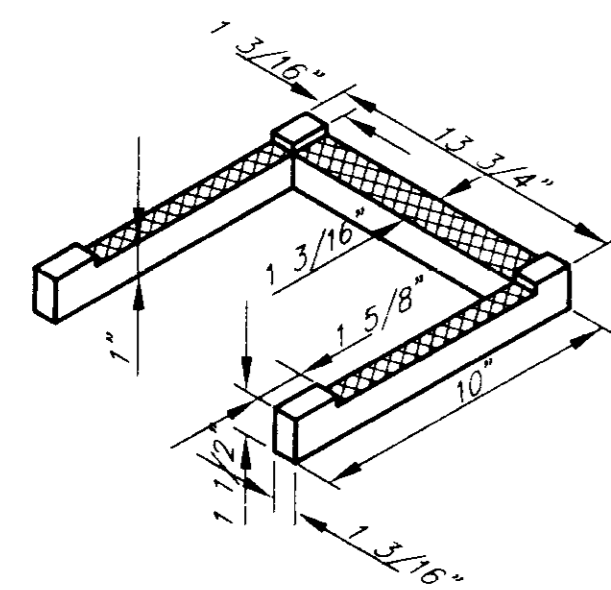
MATERIAL SHALL BE 2500 PSI CONCRETE CRADLES. THE PIPE SHALL BE LAID ON CONCRETE SADDLES CONSTRUCTED TO PROVIDE VERTICAL AND LATERAL SUPPORT FOR THE PIPE WHILE THE CRADLE IS BEING PLACED. PIPE SUPPORTS OF WOOD BLOCKS, LOOSE BRICK, ETC., WILL NOT BE PERMITTED. THE CRADLE SHALL BE POURED AFTER THE JOINTS HAVE BEEN MADE, CARE BEING TAKEN TO PREVENT MOVEMENT OF THE PIPE. WHENEVER THE CONTRACTOR PLACES CONCRETE OUTSIDE THE DIMENSIONS SHOWN ON THE DRAWINGS, THE COST OF SUCH CONCRETE WILL BE AT THE CONTRACTOR'S EXPENSE.

CLASS "B" BEDDING

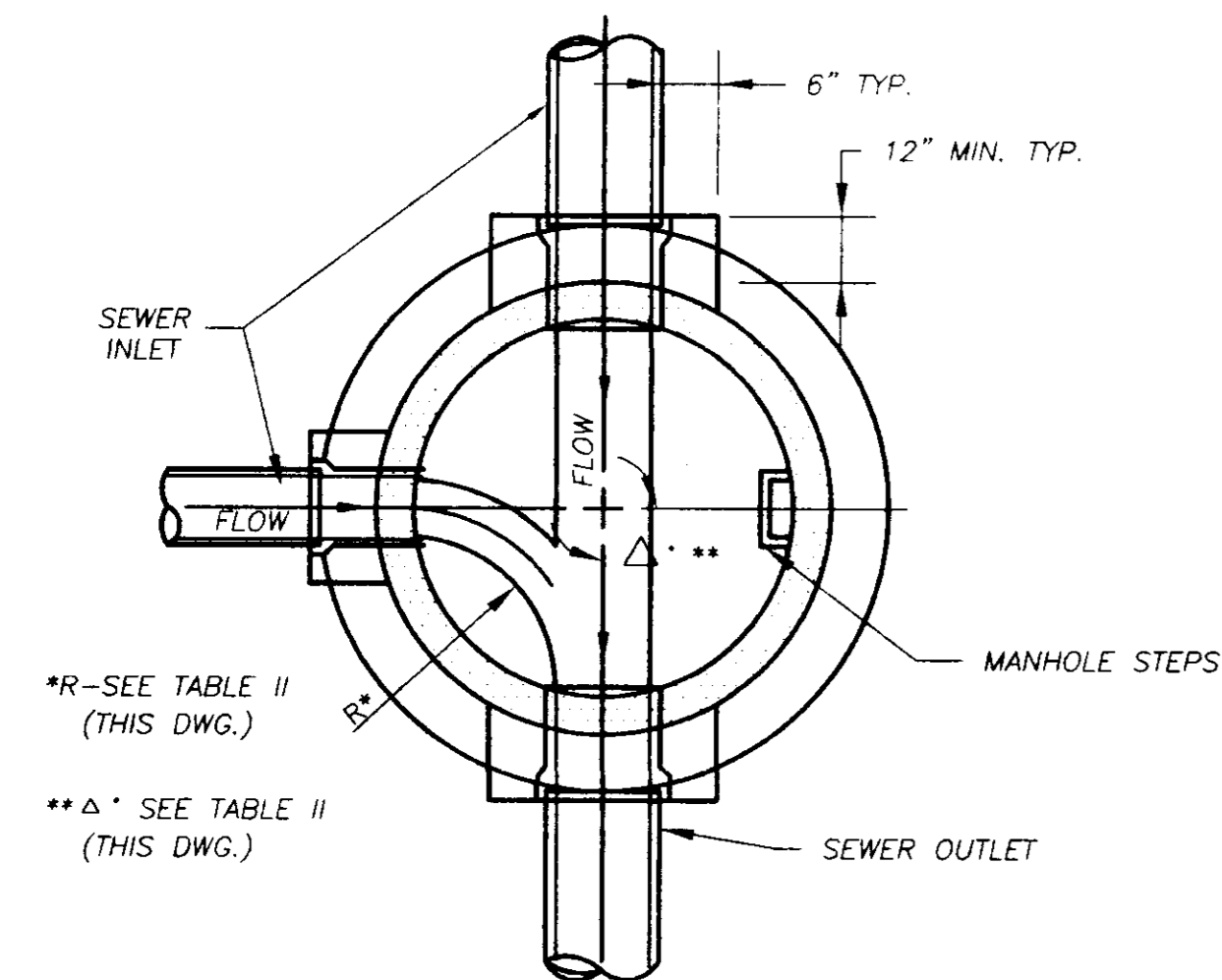
MATERIAL SHALL BE SELECT BEDDING AS SPECIFIED. MATERIAL SHALL BE CAREFULLY PLACED AND THOROUGHLY COMPACTED BY TAMPING.

CLASS "C" BEDDING (STANDARD BEDDING)

MATERIAL SHALL BE THE SAME AS FOR CLASS "B" BEDDING AND SHALL BE PLACED AS SHOWN BY STANDARD DETAILS FOR THE TYPE OF PIPE USED.



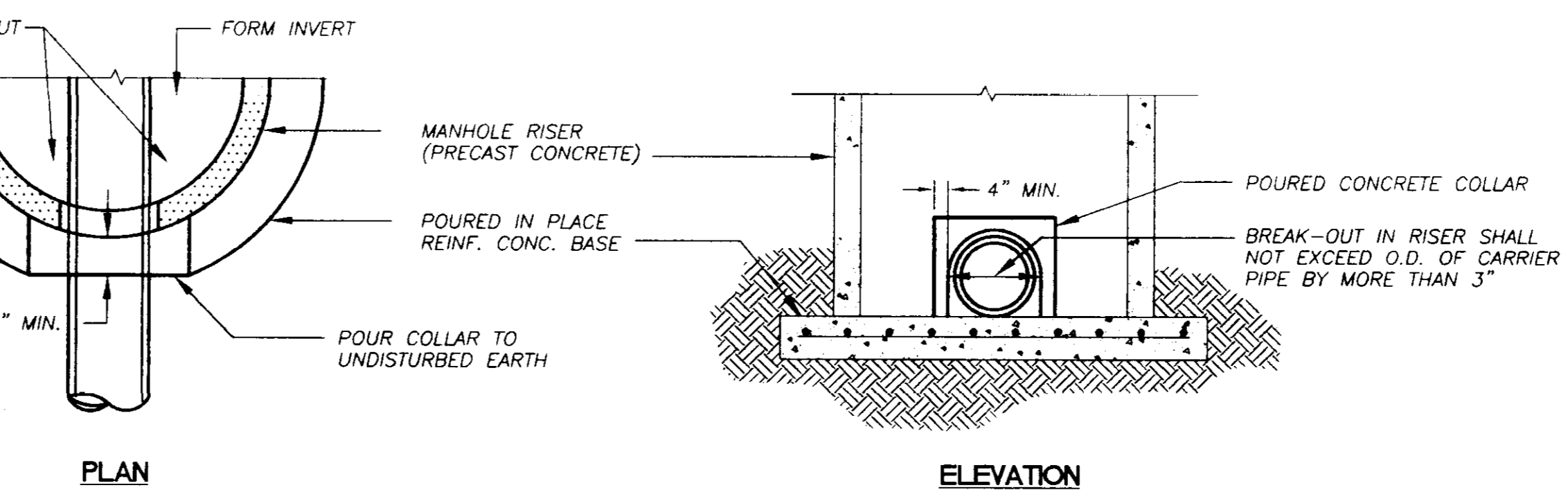
MANHOLE STEP DETAIL
NOT TO SCALE



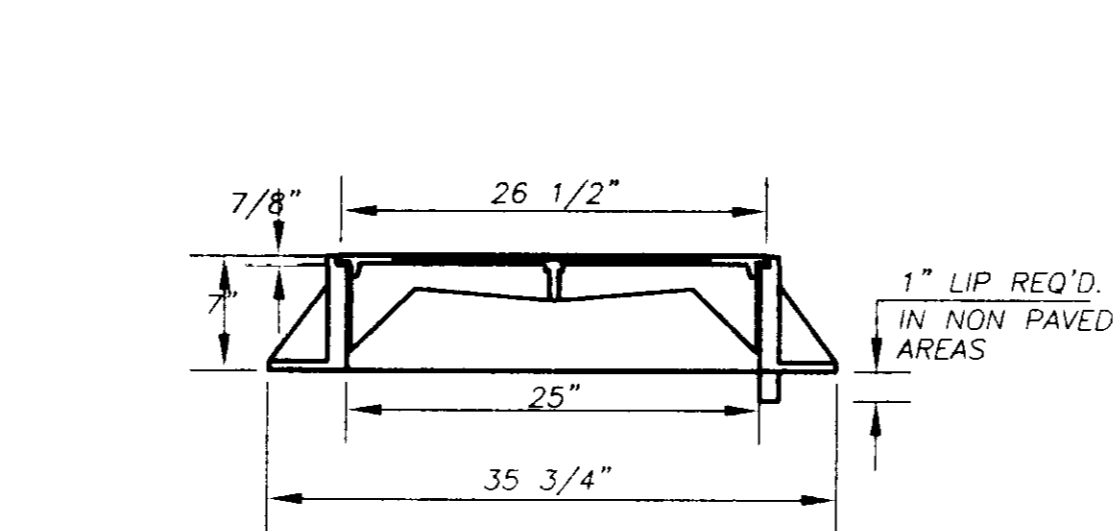
SECTIONAL PLAN STANDARD MANHOLE
NOT TO SCALE

TABLE II GOVERNING DIMENSIONS FOR MANHOLES			
PIPE SIZE	Δ ANGLE	BASE DIAMETER **	"R" *
8" THRU 12"	0° TO 90°	4'	1'- 6"
15"	0° TO 60°	4'	1'- 10"
15"	60° TO 90°	4'	1'- 10"
18"	0° TO 60°	4'	2'- 3"
18"	60° TO 90°	4'	1'- 10"
21"	0° TO 60°	4'	2'- 7"
21"	60° TO 90°	5'	2'- 4"
24"	0° TO 45°	4'	3'- 0"
24"	45° TO 90°	5'	2'- 3"
30"	0° TO 60°	5'	3'- 9"
30"	60° TO 90°	6'	2'- 8"
36"	0° TO 60°	6'	4'- 6"
36"	60° TO 90°	7'	3'- 11"
42"	0° TO 60°	7'	5'- 3"
42"	60° TO 90°	8'	4'- 7"
48"	0° TO 60°	8'	6'- 0"
48"	60° TO 90°	9'	5'- 3"

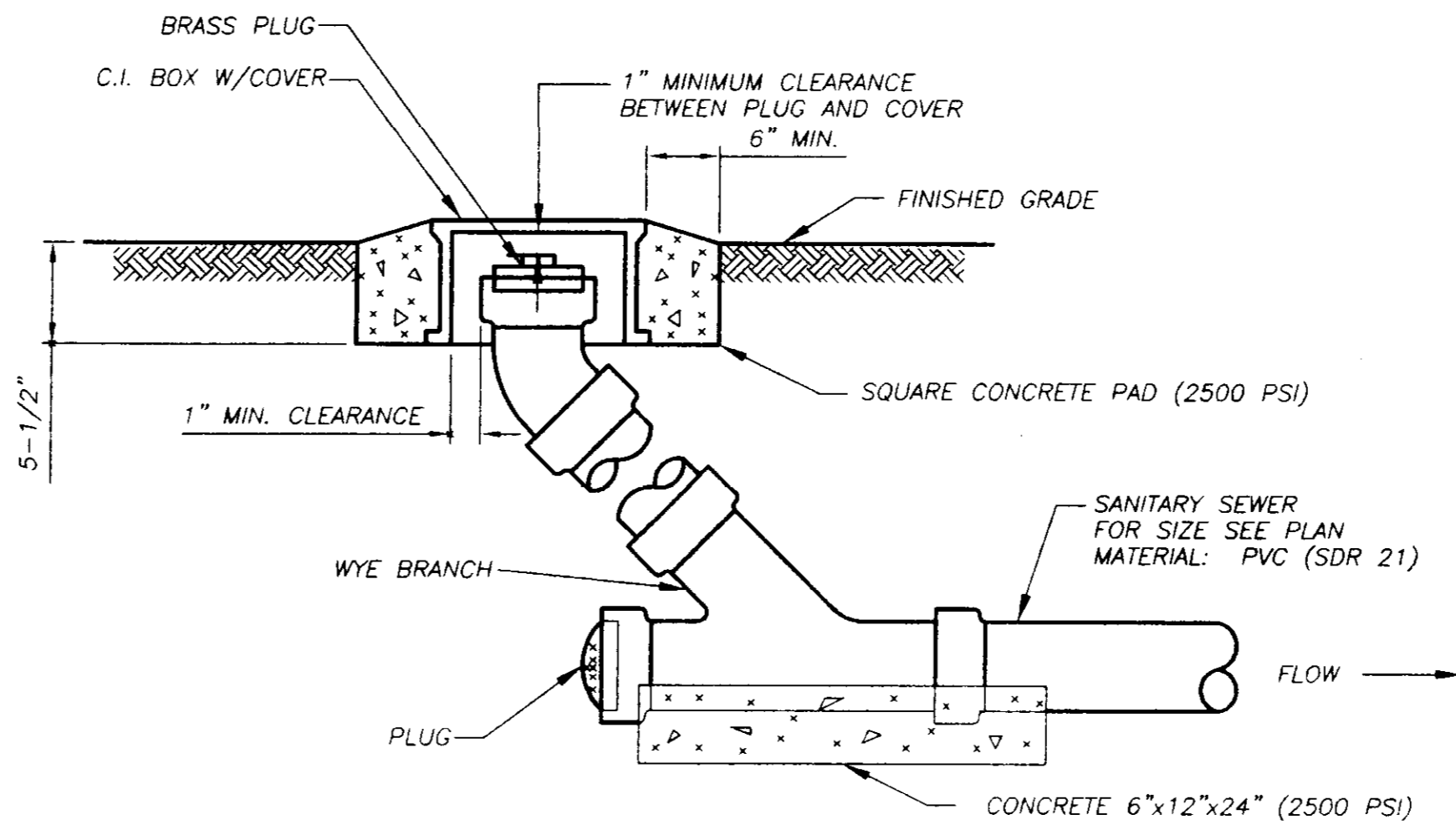
* SEE SECTIONAL PLAN, STANDARD MANHOLE
** PRECAST MANHOLE



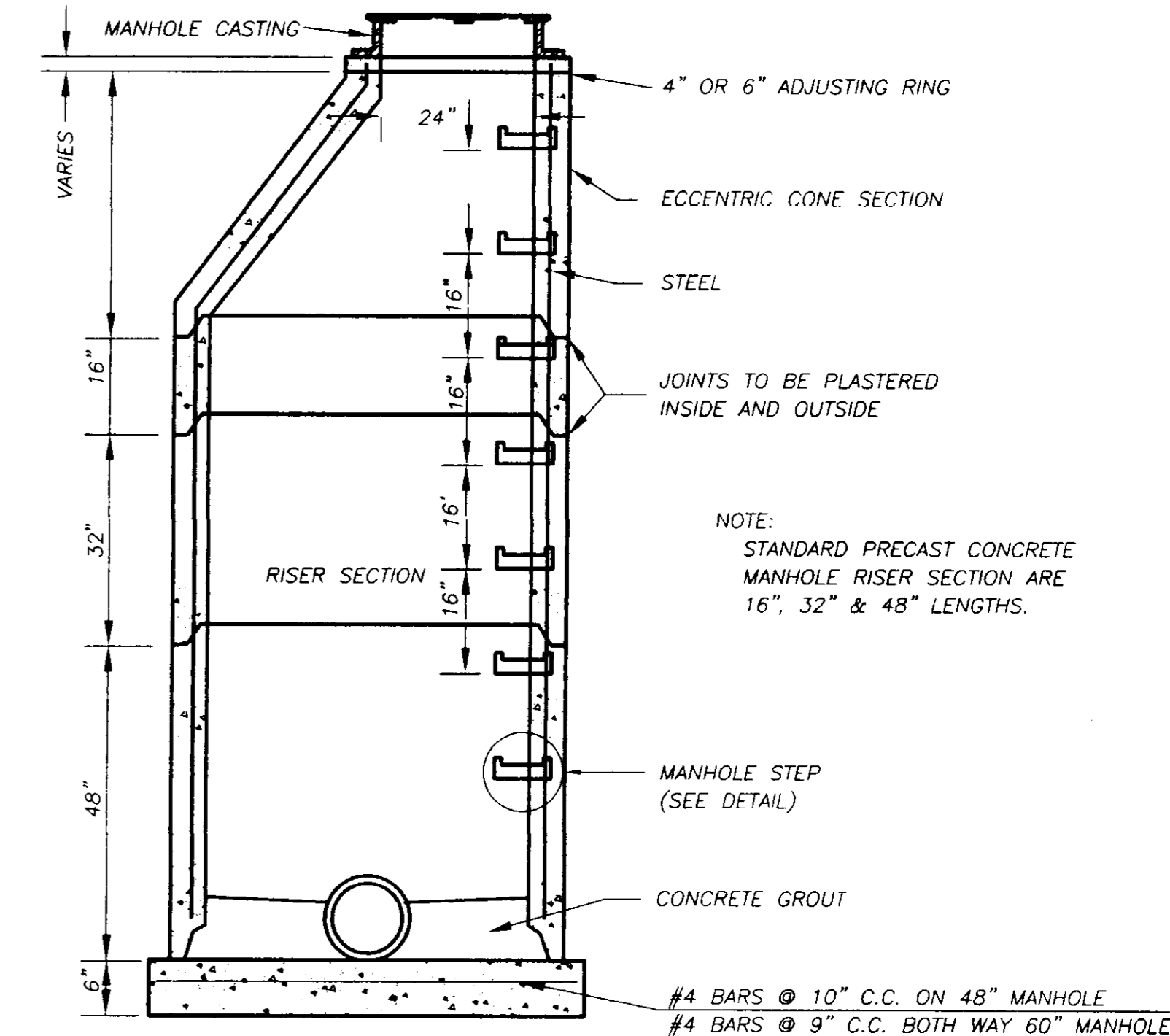
TYP. DETAIL OF SEWER PIPE CONNECTION TO EXISTING MANHOLE
NOT TO SCALE



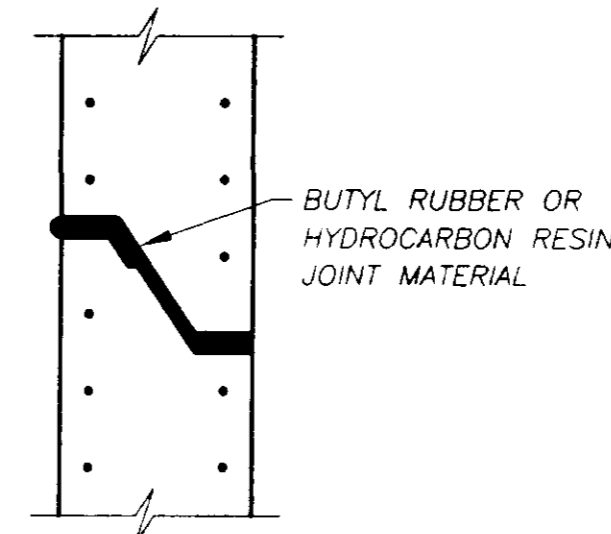
TOP PLAN OF COVER
SECTION
FRAME & COVER WEIGHT 420 LBS.
STANDARD MANHOLE FRAME AND COVER
NOT TO SCALE



GRAVITY CLEANOUT DETAIL
NOT TO SCALE



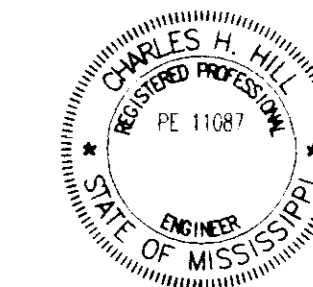
SECTION OF PRECAST CONCRETE MANHOLE
NOT TO SCALE



TYPICAL PRECAST CONCRETE MANHOLE JOINT DETAIL
NOT TO SCALE

SANITARY SEWER NOTES:

- MANHOLE INTERIOR TO BE COATED WITH 20 MIL. THICKNESS GLIDDEN TOP SERVICE BLACK BITUMINOUS COATING (OR APPROVED EQUAL) APPLIED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.
- MAXIMUM PERMITTED INFILTRATION/EXFILTRATION IS 200 GALLONS PER INCH DIAMETER PER MILE PER DAY.
- PIPE TO MANHOLE CONNECTIONS: PVC PIPE - INSTALL PRE-MOLDED FLEXIBLE MANHOLE JOINT SEAL DEVICE TO CONNECT PIPE TO MANHOLE WALL.
- INSTALLATION OF SANITARY SEWER MAINS & SERVICES: WHEN A SEWER SERVICE LINE CROSSES WITHIN 18" BELOW A WATER MAIN, OR WITHIN 10' ON EITHER SIDE, THE SEWER SERVICE OR MAIN SHALL BE 160 P.S.I. PVC WATER PIPE FOR A DISTANCE OF 10' EITHER SIDE OF THE WATER SUPPLY MAIN.

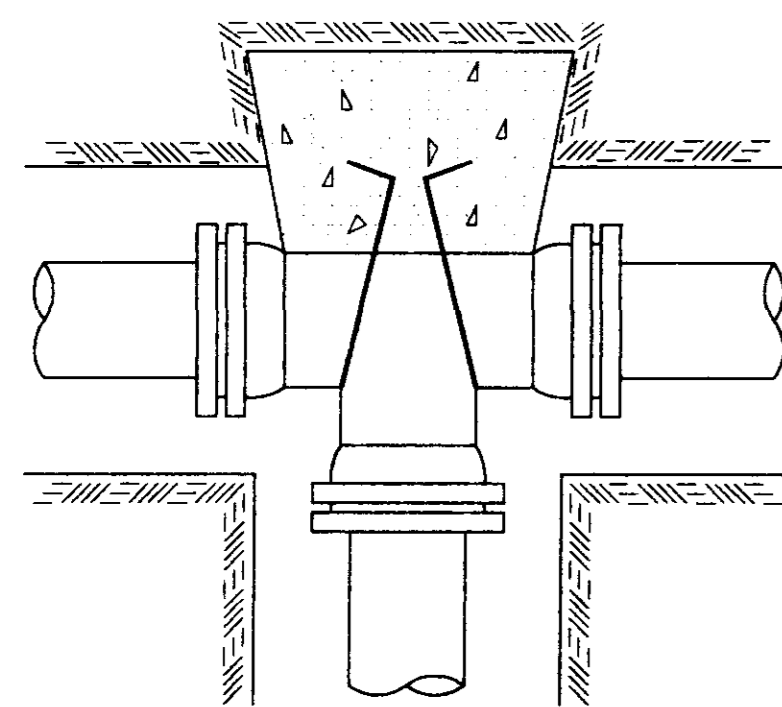


CAPITAL SENIOR DEVELOPMENT

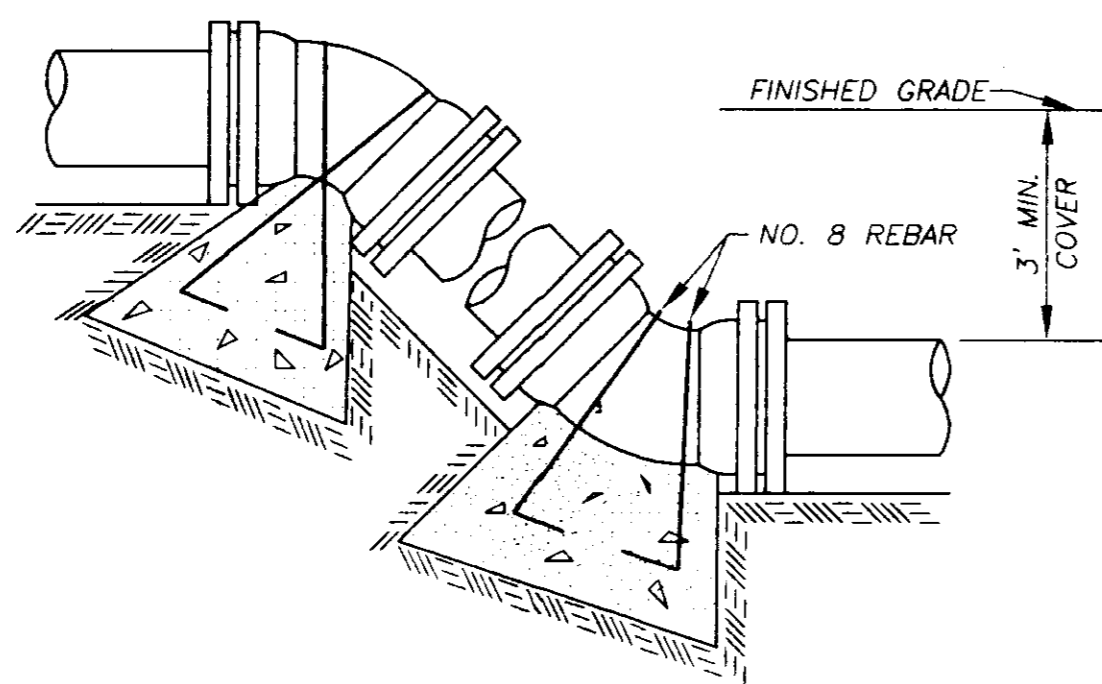
SANITARY SEWER SYSTEM DETAILS

THE WATERFORD AT
HIGHLAND COLONY PARKWAY

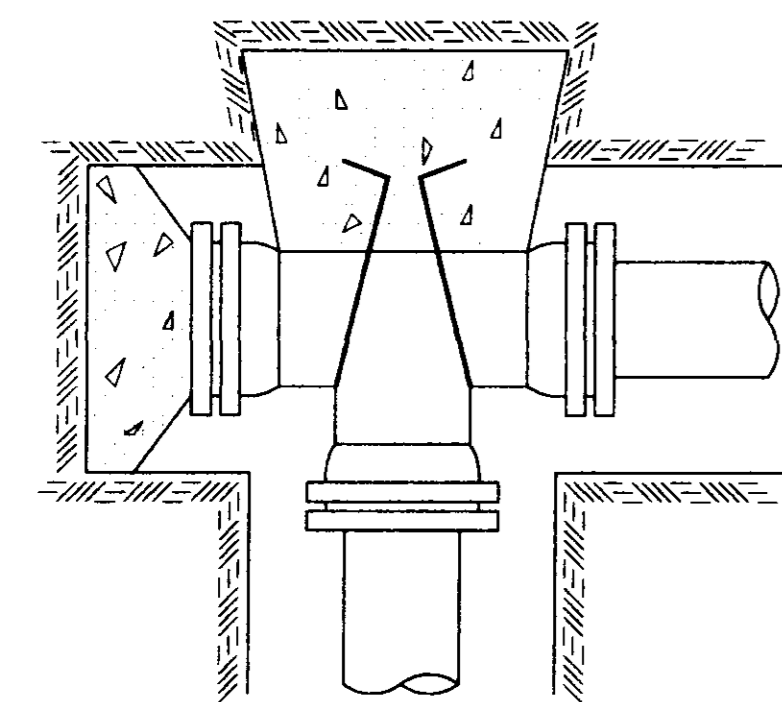
DSCN: M.W.E. 11/98
DRWN: C.R.H. 11/98
CHKD:
SCALE: N.T.S.
NEEL-SCHAFFER, INC.
ENGINEERS + PLANNERS
DRAWING NO.
C10 OF 11



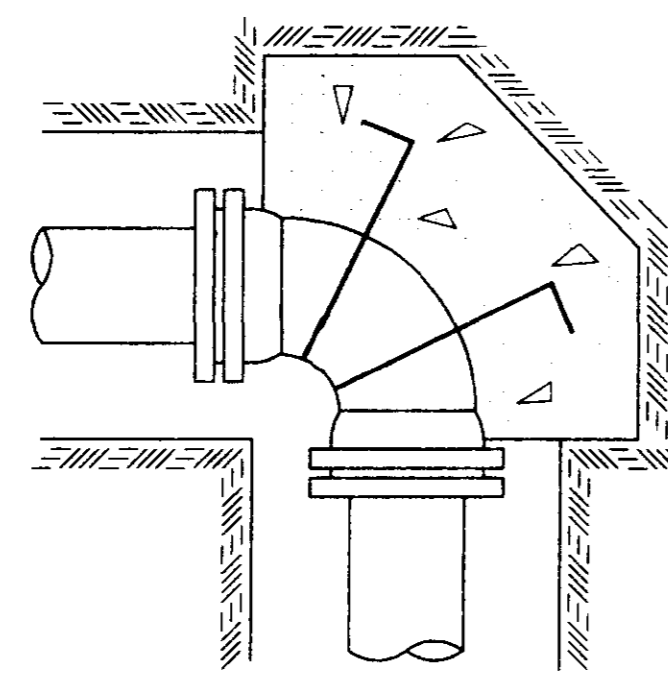
TEE



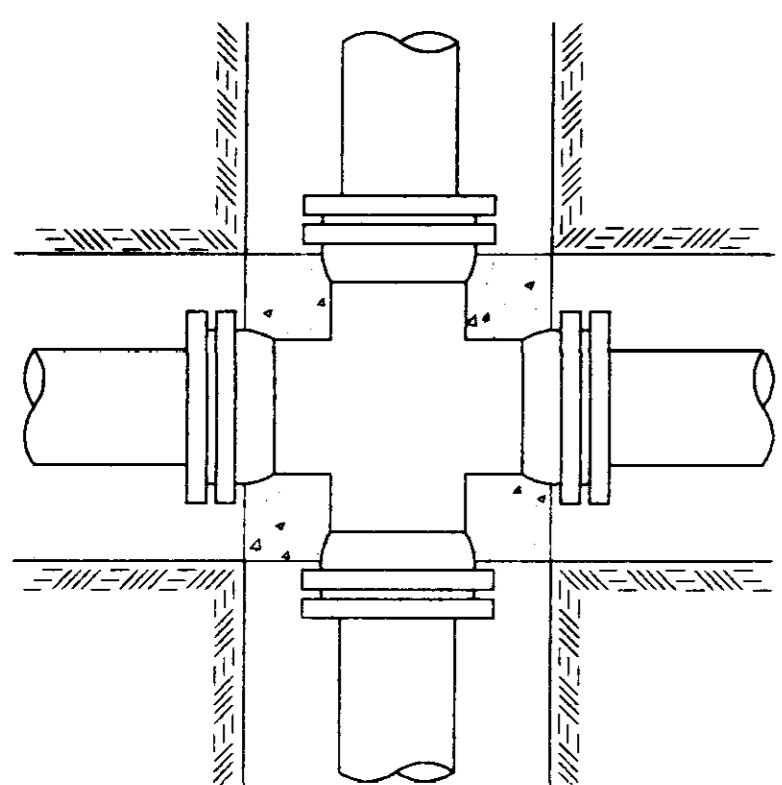
VERTICAL BENDS



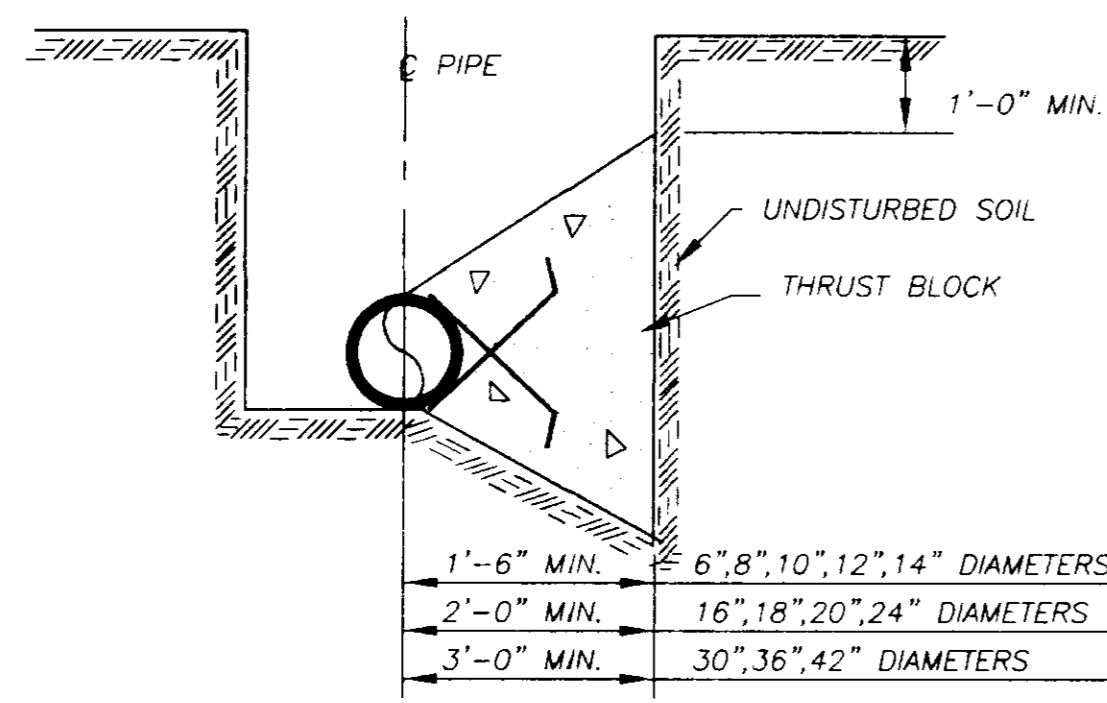
PLUGGED TEE



90° BEND



CROSS



TYPICAL CROSS SECTION

TYPICAL THRUST BLOCKING IN WATER MAINS

NOTE: ALL THRUST BLOCKS 2,500 PSI CONCRETE AGAINST UNDISTURBED EARTH

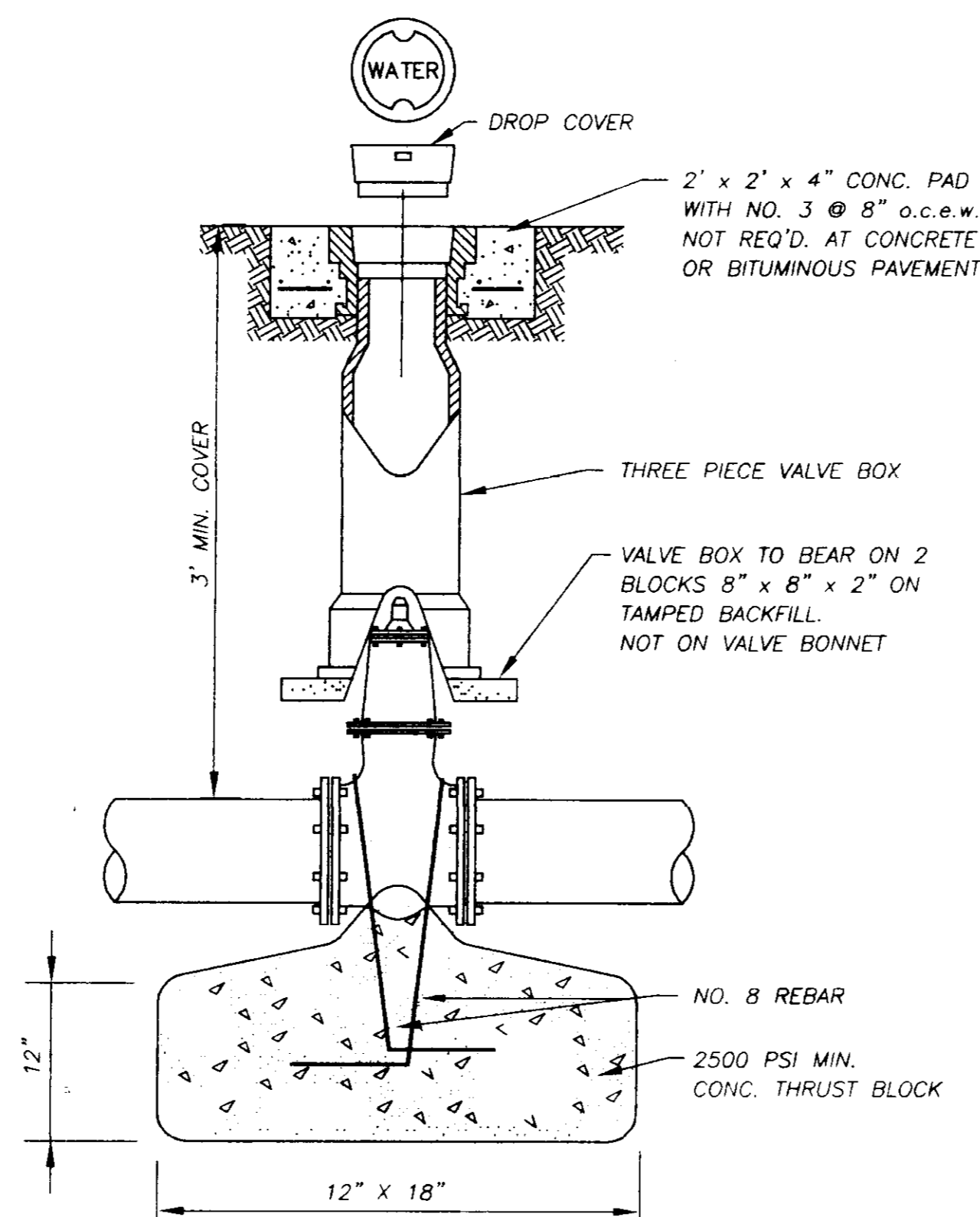
BEARING AREA IN SQ. FT.

NOMINAL PIPE DIAMETER (IN)	VERTICAL BENDS					NOMINAL PIPE DIAMETER (IN)	VERTICAL BENDS				
	DEAD-END OR TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND		DEAD-END OR TEE	90° BEND	45° BEND	22 1/2° BEND	11 1/4° BEND
6	2.5	3.0	2.0	2.0	2.0	6	—	—	26.0(1.0)	14.0(0.5)	7.0(0.3)
8	4.0	6.0	3.0	2.0	2.0	8	—	—	45.0(1.7)	25.0(0.9)	13.0(0.5)
10	6.0	9.0	5.0	2.5	2.0	10	—	—	68.0(2.5)	37.0(1.4)	19.0(0.7)
12	9.0	11.0	6.0	3.5	2.0	12	—	—	97.0(3.6)	52.0(1.9)	27.0(1.0)
14	12.0	18.0	9.0	5.0	2.5	14	—	—	130(4.8)	70.0(2.6)	36.0(1.3)
16	16.0	22.5	12.0	6.0	3.0	16	—	—	168(6.2)	91.0(3.4)	46.0(1.7)
18	20.0	28.0	15.0	8.0	4.0	18	—	—	211(7.8)	114(4.2)	58.0(2.2)
20	24.5	34.0	19.0	10.0	5.0	20	—	—	259(9.6)	140(5.2)	72.0(2.6)
24	35.0	49.0	27.0	14.0	7.0	24	—	—	370(13.7)	200(7.4)	102(3.8)
30	54.0	76.0	41.0	21.0	10.0	30	—	—	568(21.1)	308(11.4)	156(5.8)
36	77.0	108.0	59.0	30.0	15.0	36	—	—	814(30.1)	440(16.3)	225(8.3)
42	104.0	146.0	79.0	40.0	20.0	42	—	—	1100(40.7)	595(22.0)	303(11.2)

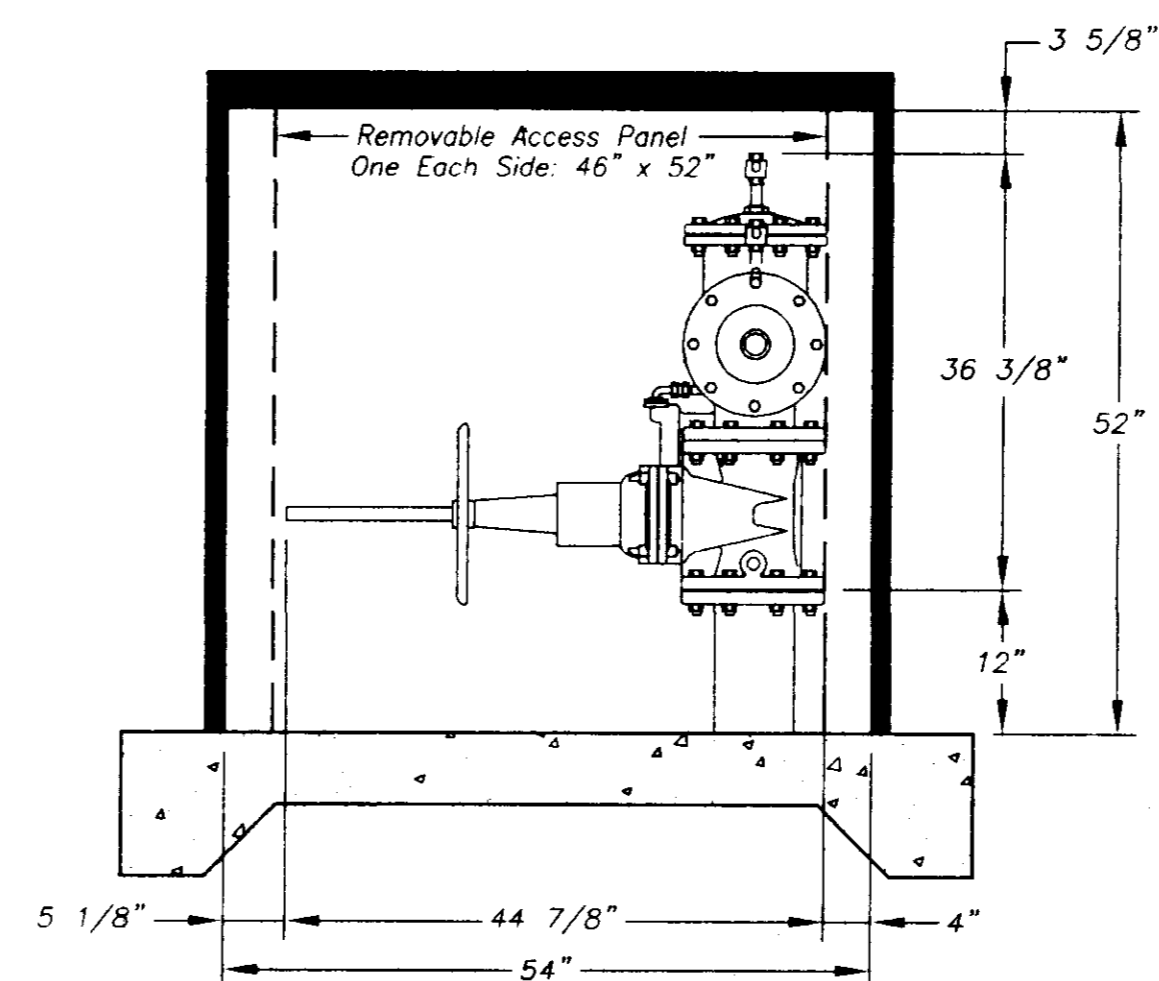
VOLUME OF BLOCKS INCLUDING SOIL LOAD CU. FT. (CU. YDS.)

NOTE: ABOVE VALUES CALCULATED USING P=100 AND ALLOWANCE. SOIL BRG. = 1500 PSF. FOR DIFFERENT P, MULTIPLY ABOVE VALUES BY P/100. FOR DIFFERENT SOIL BRG, MULTIPLY ABOVE VALUES BY 1500/S.B.

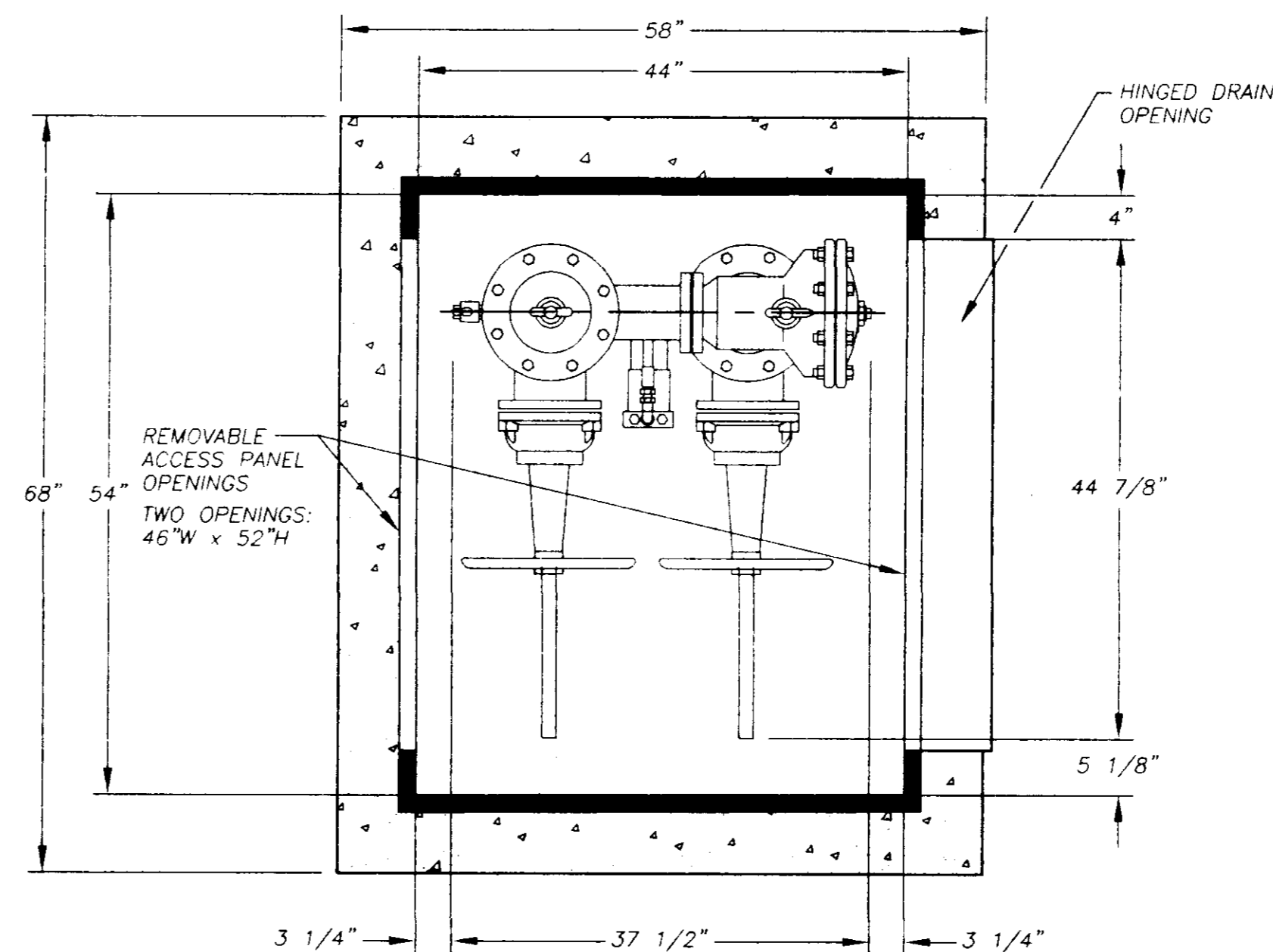
NOTE: ABOVE VALUES REPRESENT THE VOLUME OF BLOCKS INCLUDING SOIL LOAD IN CU.FT. (CU.YDS.) THE VALUES WERE CALCULATED USING A P=100 PSI AND A S.F.=1.5. FOR DIFFERENT P, MULTIPLY VALUES BY P/100.



GATE VALVE DETAIL
NOT TO SCALE

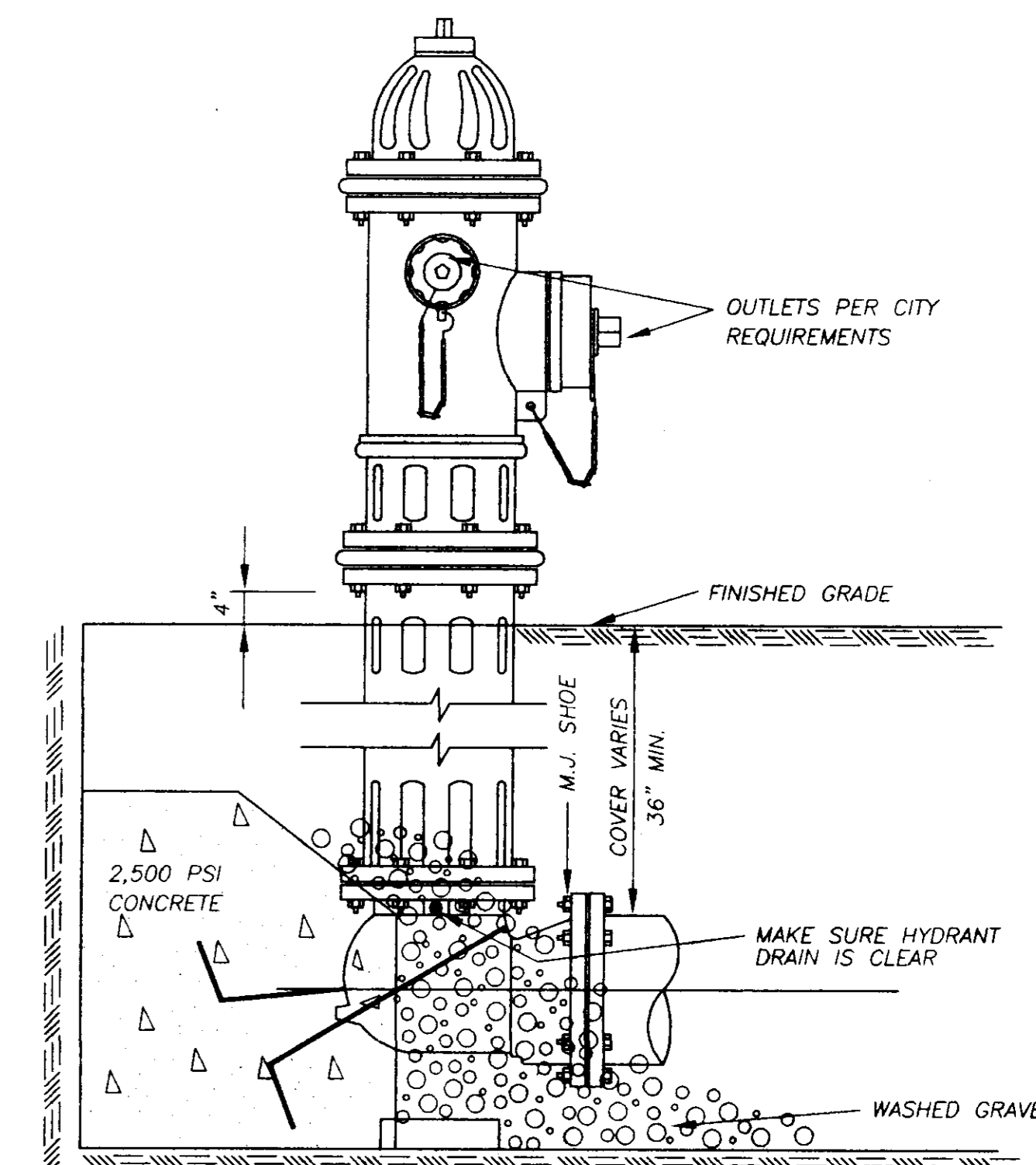


ELEVATION

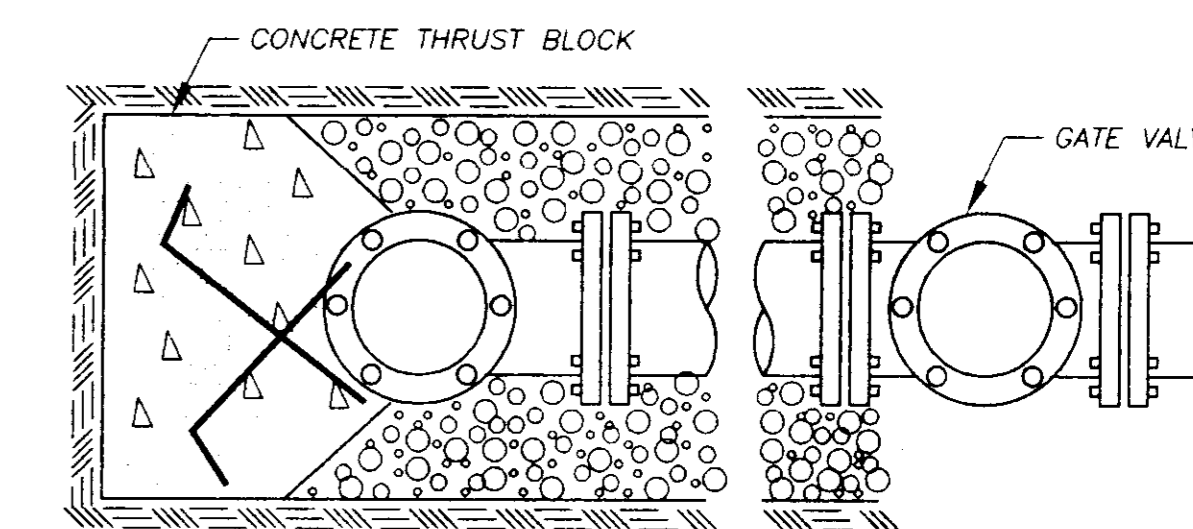


PLAN
BACKFLOW PREVENTER DETAIL
NOT TO SCALE

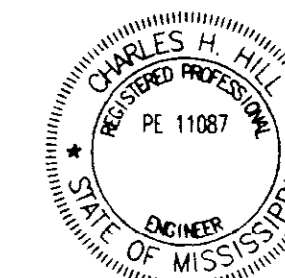
- NOTES:
- CONCRETE SHALL BE 2500 PSI
 - REINFORCING - #8 @ 12" O.C.E.W.
 - BASIS OF DESIGN: HYDROCOWL MODEL 800TLUB80-AL ENCLOSURE W/ FEBCO 8" 880 OS&Y BACKFLOW PREVENTER



ELEVATION



PLAN
TYPICAL FIRE HYDRANT INSTALLATION
NOTE: GATE VALVES WILL BE REQUIRED ON ALL FIRE HYDRANT LEGS. NOT TO SCALE



CAPITAL SENIOR DEVELOPMENT

STANDARD WATER SYSTEM DETAILS

THE WATERFORD AT
HIGHLAND COLONY PARKWAY

DSGN: M.W.E. 11/78
DRWN: C.R.H. 11/78
CHK'D:
SCALE: N.T.S.

NEEL-SCHAFFER, INC.
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DRAWING NO.
C11 OF 11