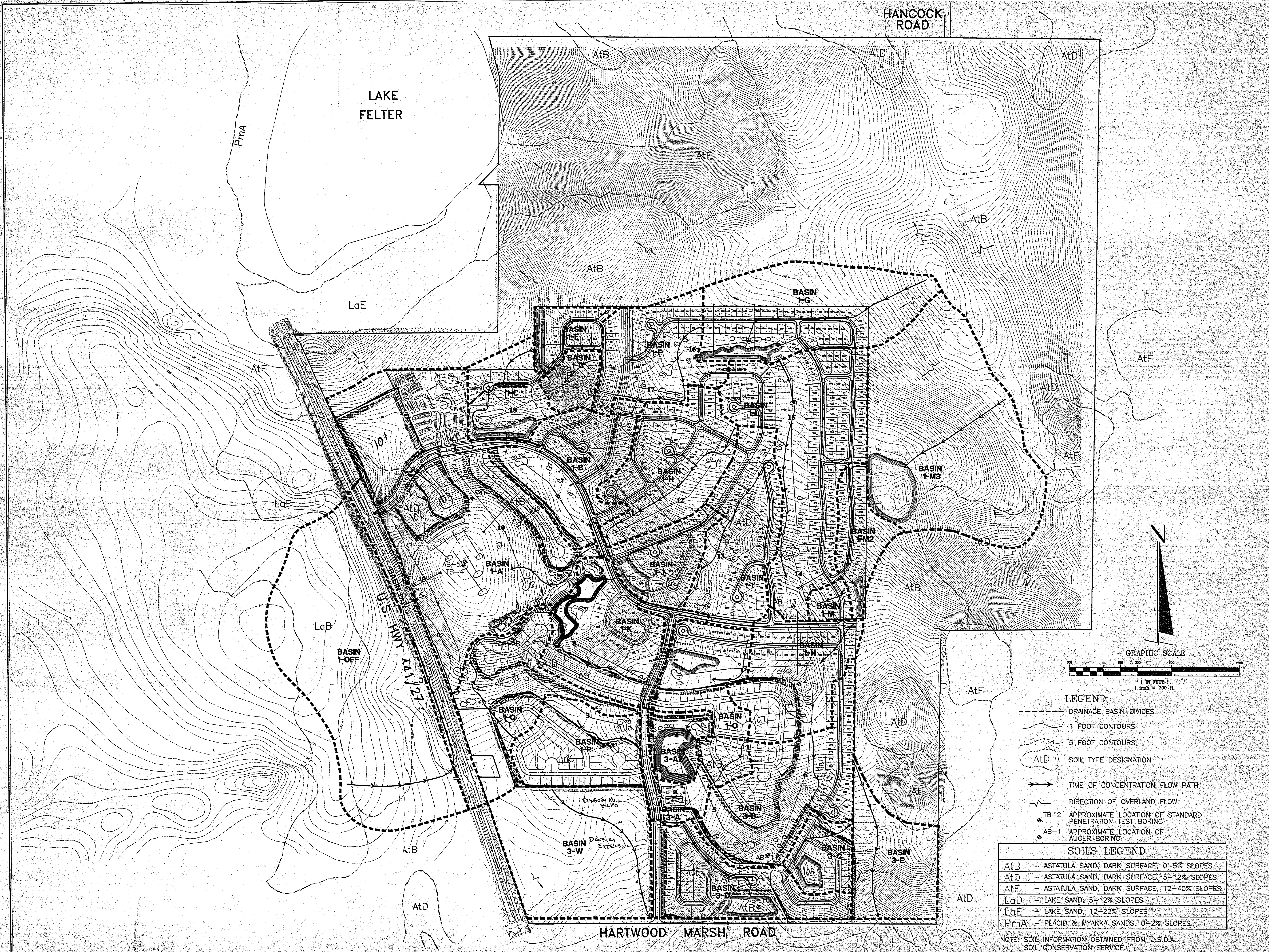


15



Oversized Drawings

1723



LEGEND

- - - DRAINAGE BASIN DIVIDES
- 1 FOOT CONTOURS
- 5 FOOT CONTOURS
- AtD SOIL TYPE DESIGNATION
- TIME OF CONCENTRATION FLOW PATH
- ↗ DIRECTION OF OVERLAND FLOW
- TB-2 APPROXIMATE LOCATION OF STANDARD PENETRATION TEST BORING
- AB-1 APPROXIMATE LOCATION OF AUGER BORING

SOILS LEGEND

AtB	- ASTATULA SAND, DARK SURFACE, 0-5% SLOPES
AtD	- ASTATULA SAND, DARK SURFACE, 5-12% SLOPES
AtE	- ASTATULA SAND, DARK SURFACE, 12-40% SLOPES
LaD	- LAKE SAND, 5-12% SLOPES
LaE	- LAKE SAND, 12-22% SLOPES
PmA	- PLACID. & MYAKKA SANDS, 0-2% SLOPES

NOTE: SOIL INFORMATION OBTAINED FROM U.S.D.A. SOIL CONSERVATION SERVICE.

REVISIONS
 DATE
 ENGINEERS SURVEYORS PLANNERS
FARNER BARLEY AND ASSOCIATES, INC.
 300 North Sinclair Avenue • Fort Myers, Florida 32718 • (904) 341-9401

KINGS RIDGE P.U.D. PHASE IV
 POST-DEVELOPMENT
 MASTER DRAINAGE MAP

DATE 10-24-97
 JOB NO. 941218.017
 DWG. NO. P4-POST
 F.B. PG.
 DRAWN BY DC
 CHKD BY

DEC 15 1997
 DEC 12 1997

CONSTRUCTION PLANS FOR LANCASTER AT KINGS RIDGE

A PLANNED UNIT DEVELOPMENT

Sections 4 & 9, Township 23 S., Range 26 E.

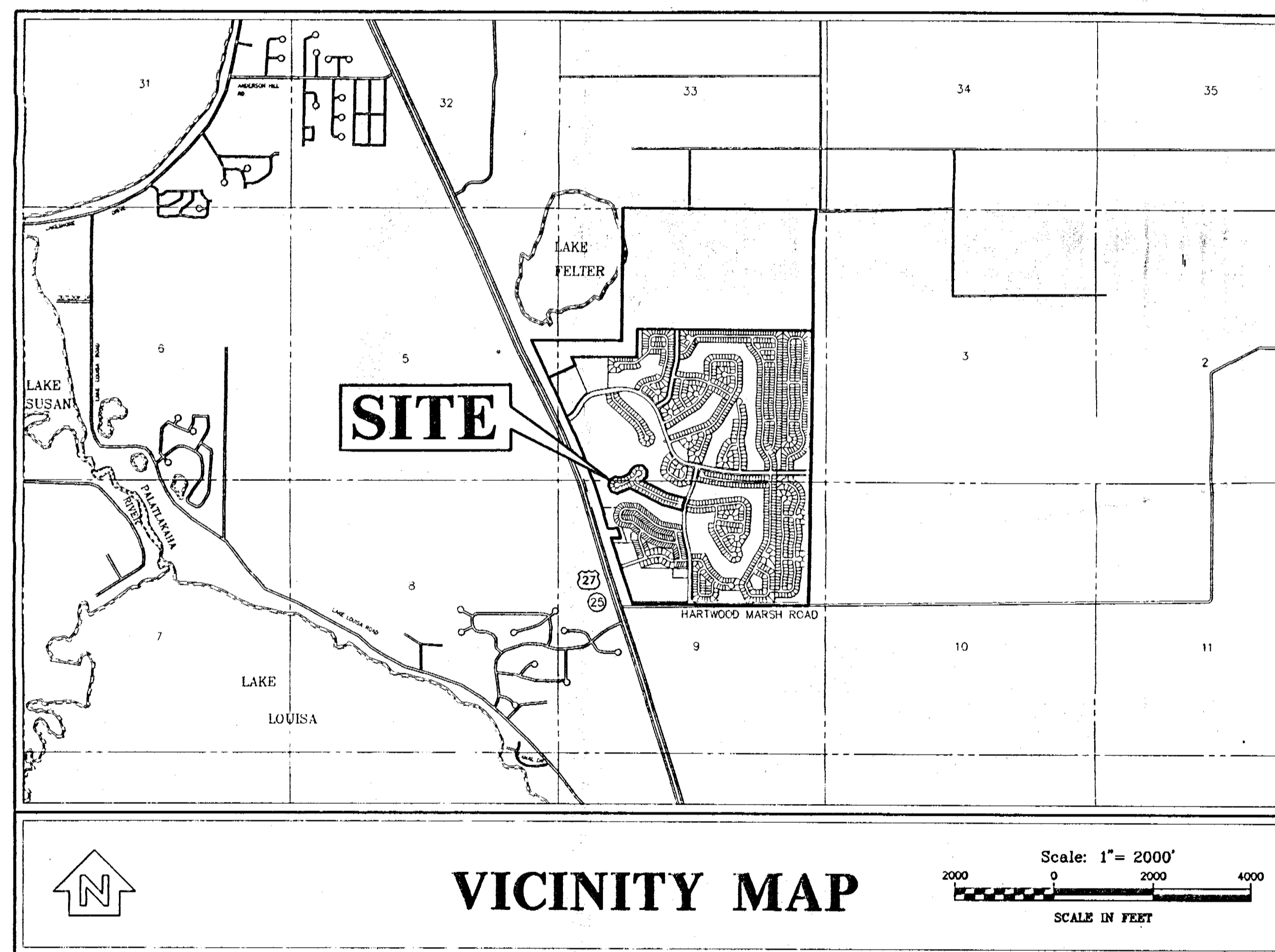
Lake County, Florida

Owner/Developer:

LENNAR ACTIVE ADULT COMMUNITIES
1110 Douglas Avenue
Altamonte Springs, FL 32714
(407) 682-9291

Engineer/Planner:

FARNER, BARLEY & ASSOC., INC.
350 North Sinclair Avenue
Tavares, FL 32778
(352) 343-8481
ROBERT E. FARNER, P.E.



VICINITY MAP

Index of Sheets

- | | |
|-----------------------------------|--------------------------------|
| 1. COVER SHEET | 10. SANITARY SEWER DETAILS |
| 2. PRELIMINARY PLAT | 11. WATER DISTRIBUTION DETAILS |
| 3. MASTER DRAINAGE PLAN | 12. MASTER GRADING PLAN |
| 4. MASTER SANITARY SEWER PLAN | 13. MASTER REUSE PLAN |
| 5. MASTER WATER DISTRIBUTION PLAN | |
| 6. AERIAL PHOTOGRAPH | |
| 7. PLAN AND PROFILE | |
| 8. PLAN AND PROFILE | |
| 9. PAVING AND DRAINAGE DETAILS | |

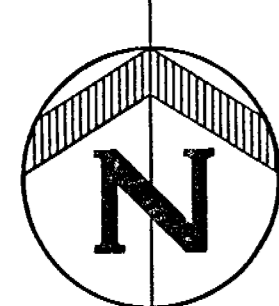
Legal Description

LANCASTER AT KINGS RIDGE
A PARCEL OF LAND LYING WITHIN SECTIONS 4 & 9, TOWNSHIP 23 SOUTH, RANGE 26 EAST, LAKE COUNTY, FLORIDA, DESCRIBED AS FOLLOWS:

COMMENCE AT THE INTERSECTION OF THE SOUTHEASTERLY CORNER OF TRACT 'B', SOUTH HAMPTON AT KINGS RIDGE, AS RECORDED IN PLAT BOOK 38, PAGES 67 AND 68, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA, WITH THE WESTERLY RIGHT-OF-WAY LINE OF DANBURY MILL BOULEVARD, ACCORDING TO THE PLAT OF SUTHERLAND AT KINGS RIDGE, AS RECORDED IN PLAT BOOK 40, PAGES 17 AND 18, PUBLIC RECORDS OF LAKE COUNTY, FLORIDA; SAID POINT BEING ON A CURVE CONCAVE NORTHWESTERLY AND HAVING A RADIUS OF 1185.00 FEET TO WHICH A RADIAL LINE BEARS S72°00'32"E. THENCE RUN SOUTHWESTERLY 130.02 FEET ALONG THE ARC OF SAID CURVED RIGHT-OF-WAY LINE THROUGH A CENTRAL ANGLE OF 0°04'02" TO THE END OF SAID CURVE. THENCE S24°39'52"W 160.95 FEET TO THE POINT OF BEGINNING. THENCE CONTINUE ALONG SAID RIGHT-OF-WAY LINE WITH THE FOLLOWING TWO (2) COURSES: S24°39'52"W 37.59 FEET TO THE BEGINNING OF A CURVE CONCAVE EASTERLY AND HAVING A RADIUS OF 515.00 FEET; THENCE RUN SOUTHERLY 214.65 FEET ALONG THE ARC THEREOF THROUGH A CENTRAL ANGLE OF 23°52'52". THENCE DEPARTING SAID CURVED RIGHT-OF-WAY LINE RUN N75°10'10"W ALONG A NON-RADIAL LINE 420.01 FEET; THENCE N83°21'20"W 748.94 FEET; THENCE S60°39'21"W 36.19 FEET; THENCE S67°44'13"W 105.30 FEET; THENCE S67°22'02"W 137.88 FEET; THENCE N75°02'24"W 123.58 FEET; THENCE N28°10'10"W 125.96 FEET; THENCE N14°48'08"E 125.96 FEET; THENCE N57°46'27"E 125.96 FEET; THENCE S79°15'15"E 62.98 FEET; THENCE S88°14'19"E 55.69 FEET; THENCE N75°58'50"E 56.99 FEET; THENCE N60°39'21"E 125.96 FEET; THENCE N29°34'17"E 83.79 FEET; THENCE N46°59'02"E 91.72 FEET; THENCE N67°11'27"E 61.03 FEET; THENCE S87°8'19"E 106.50 FEET; THENCE S40°32'24"E 131.36 FEET; THENCE S01°58'55"W 125.96 FEET; THENCE S44°57'13"W 92.79 FEET; THENCE S68°14'40"W 27.98 FEET; THENCE S63°21'26"E 489.99 FEET; THENCE S65°17'10"E 66.26 FEET; THENCE S71°59'18"E 61.61 FEET; THENCE S75°10'10"E 338.41 FEET TO THE POINT OF BEGINNING.

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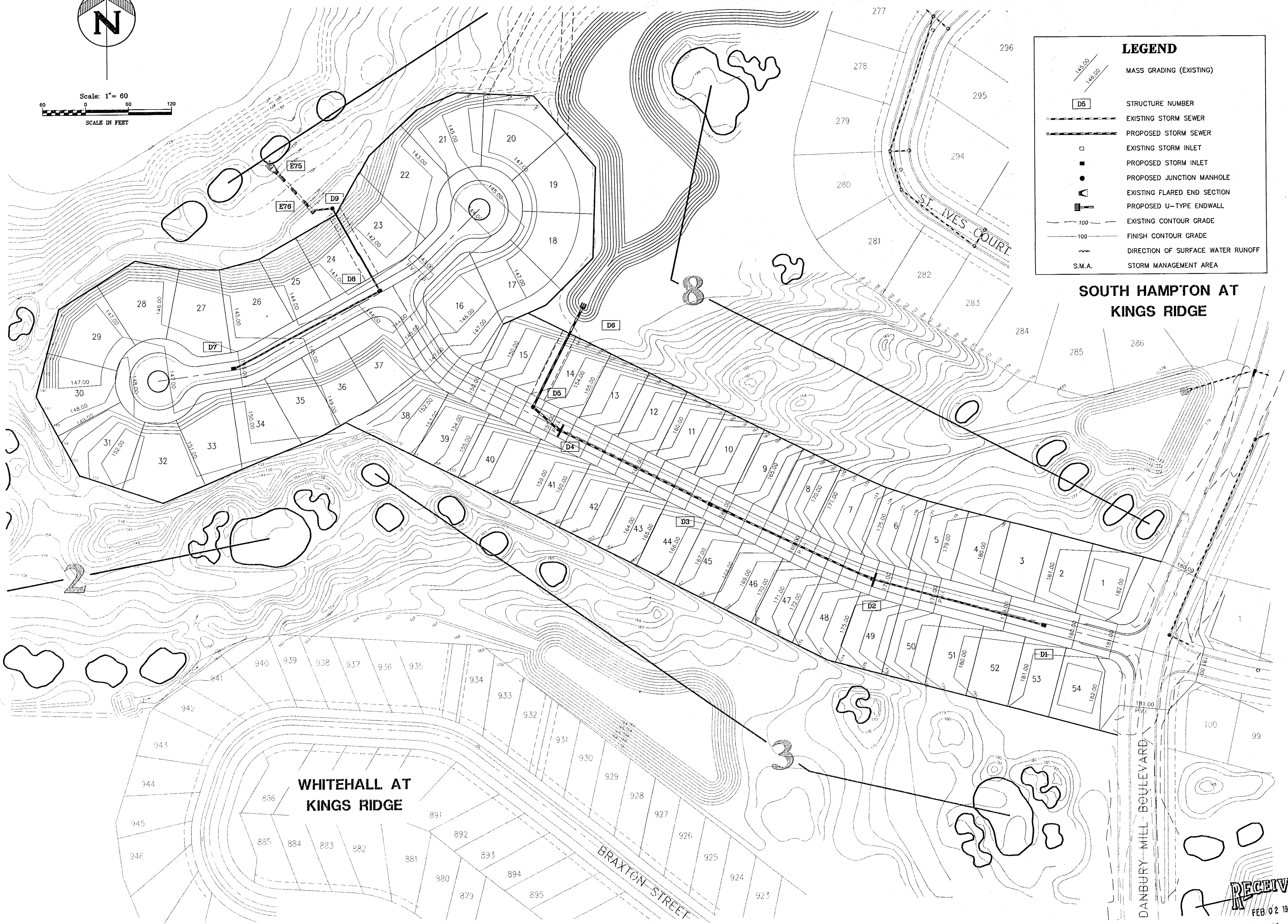


Scale: 1" = 60'
SCALE IN FEET

LEGEND

- MASS GRADING (EXISTING)
- STRUCTURE NUMBER
- EXISTING STORM SEWER
- PROPOSED STORM SEWER
- EXISTING STORM INLET
- PROPOSED STORM INLET
- PROPOSED JUNCTION MANHOLE
- EXISTING FLARED END SECTION
- PROPOSED U-TYPE ENDWALL
- EXISTING CONTOUR GRADE
- FINISH CONTOUR GRADE
- DIRECTION OF SURFACE WATER RUNOFF
- S.M.A. STORM MANAGEMENT AREA

SOUTH HAMPTON AT KINGS RIDGE



WHITEHALL AT KINGS RIDGE

DATE	REVISION

ENGINEERS
SURVEYORS
PLANNERS

**FARNER
BARLEY
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350 North Sinclair Avenue O Tavares, Florida 32778 O (352) 343-8481

LANCASTER AT KINGS RIDGE MASTER DRAINAGE PLAN

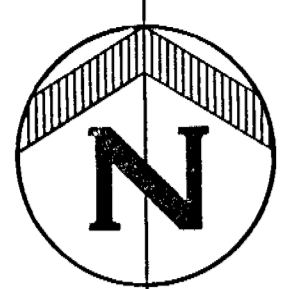
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PROJECT NO.: 941216.080
DATE: JANUARY 1999
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FILE NAME: KR080_03.DWG

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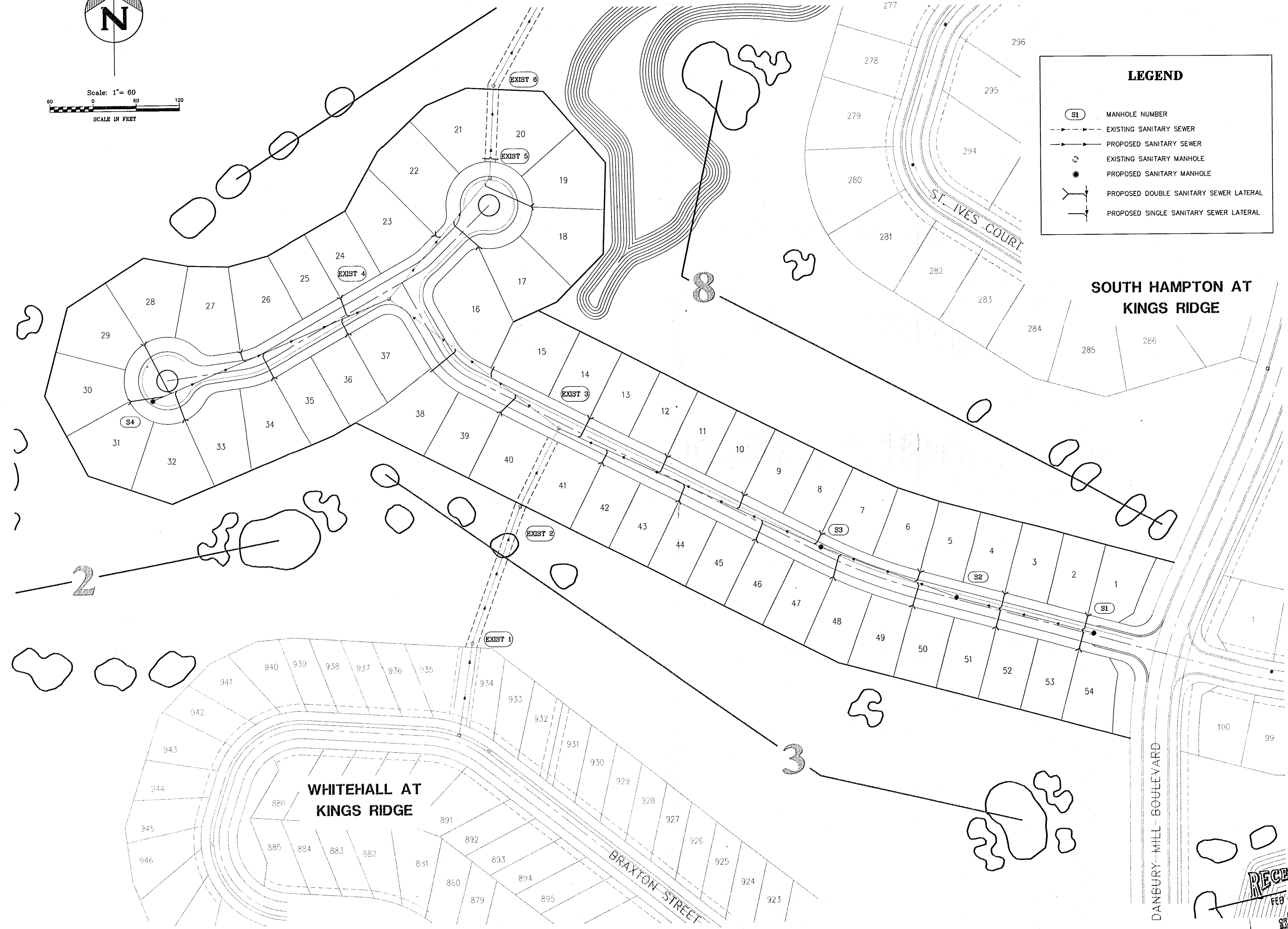
FEB 01 1999



Scale: 1" = 60'
SCALE IN FEET

LEGEND

- (S1) MANHOLE NUMBER
- - - - - EXISTING SANITARY SEWER
- - - - - PROPOSED SANITARY SEWER
- EXISTING SANITARY MANHOLE
- PROPOSED SANITARY MANHOLE
- Y Y PROPOSED DOUBLE SANITARY SEWER LATERAL
- | | PROPOSED SINGLE SANITARY SEWER LATERAL



SOUTH HAMPTON AT KINGS RIDGE

WHITEHALL AT KINGS RIDGE

ENGINEERS
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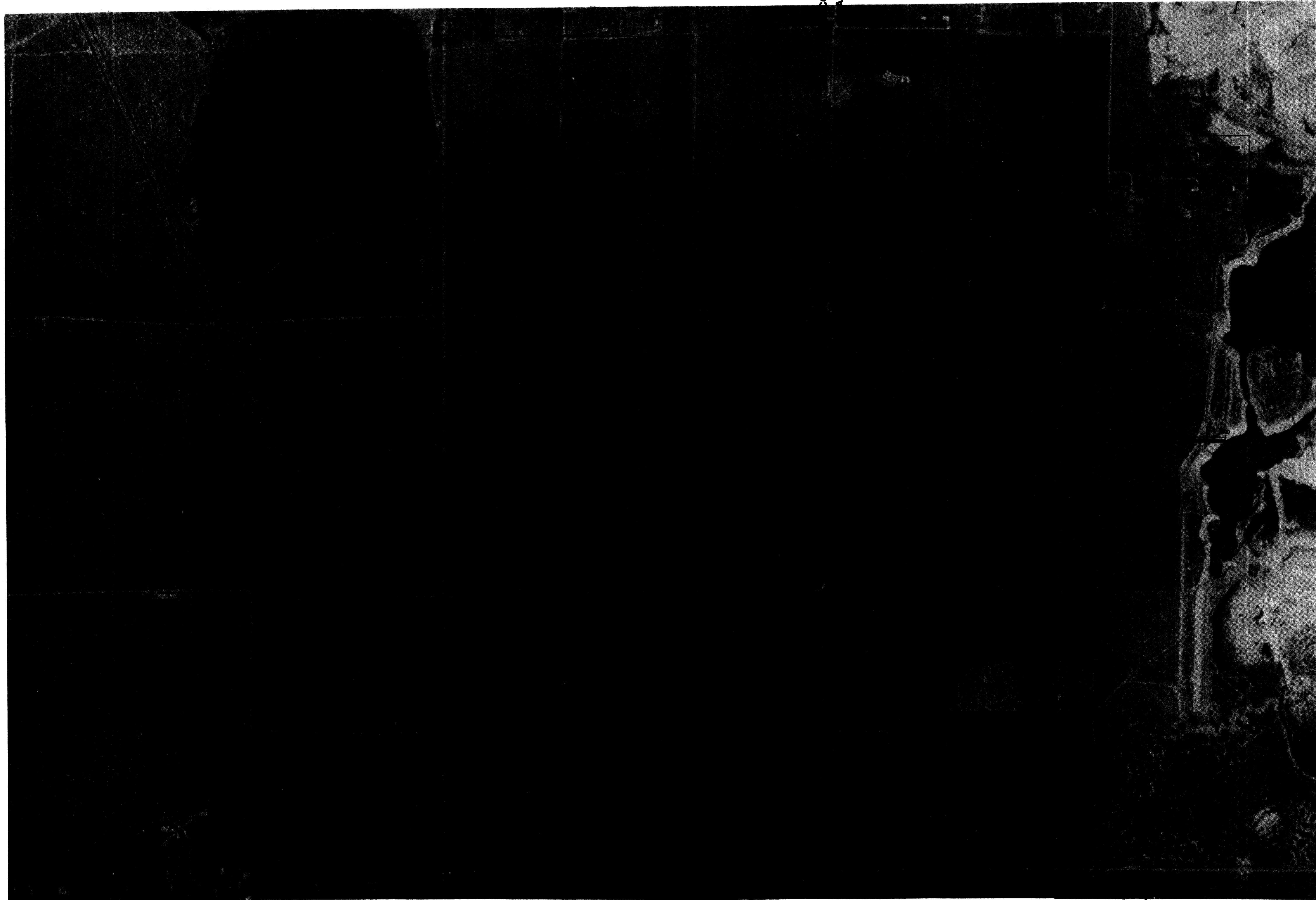
350 North Sinclair Avenue O Tavares, Florida 32778 O (352) 343-8461

**LANCASTER AT KINGS RIDGE
MASTER SANITARY
SEWER PLAN**

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PROJECT NO.: 941216.080
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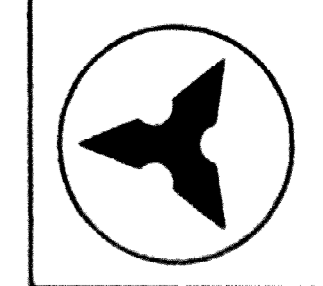
COCK
ROAD

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PROJECT NO. 941216.080
DATE: 1/12/99
DRAWN BY: DM

FILE NAME: KROB.DWG
1/12/99

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2/15/99

**LANCASTER AT
KINGS RIDGE
AERIAL PHOTOGRAPH**

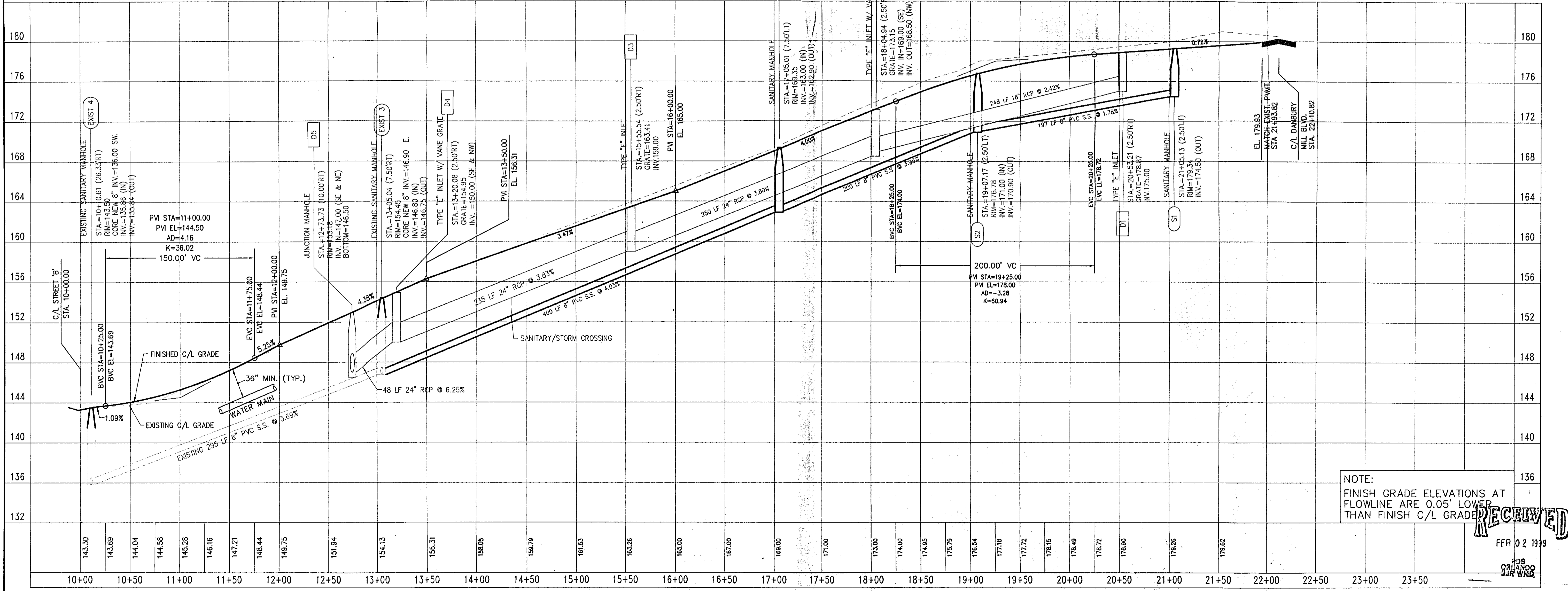
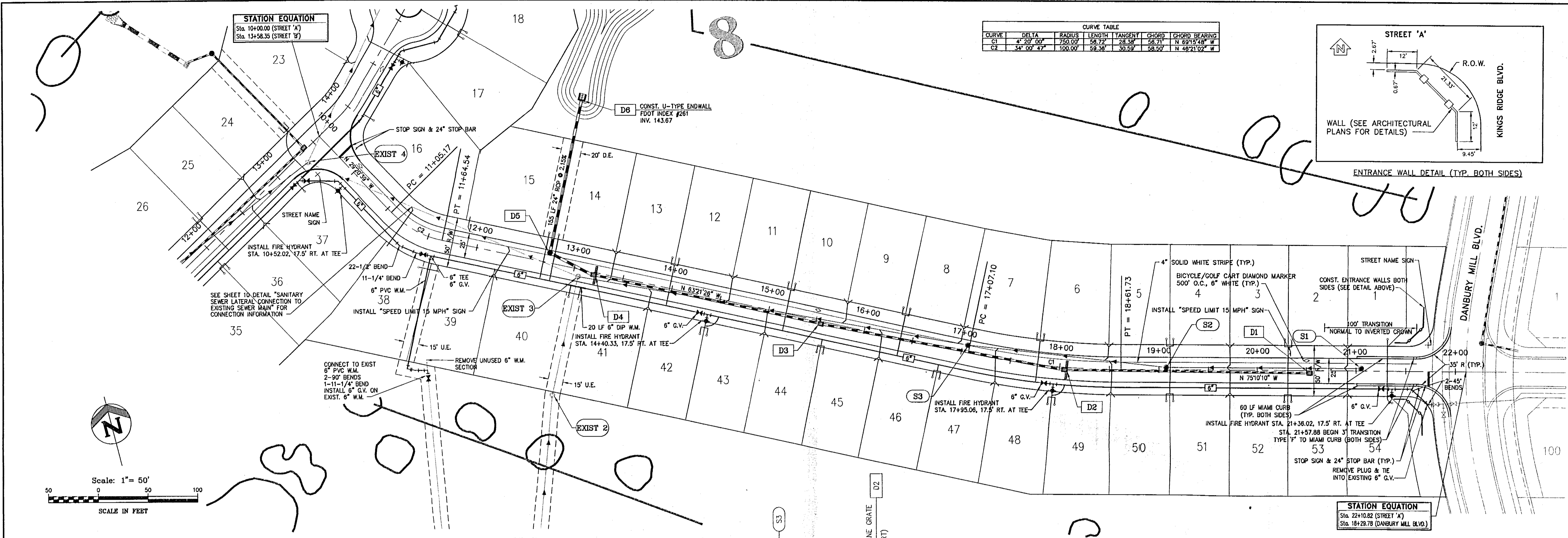


**FARNEY
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AND ASSOCIATES, INC.

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▲ SURVEYORS
▲ PLANNERS

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DATE	REVISION
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NOTE:
FINISH GRADE ELEVATIONS AT
FLOWLINE ARE 0.05' LOWER
THAN FINISH C/L GRADE

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LANCASTER AT KINGS RIDGE

STREET 'A'

PLAN AND PROFILE

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PROJECT NO.: 941216.080
DATE: JAN. 1999
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FILE NAME: KR80.07

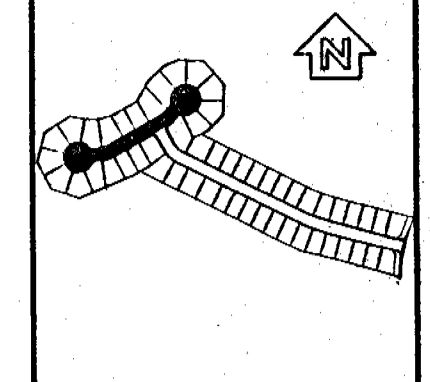
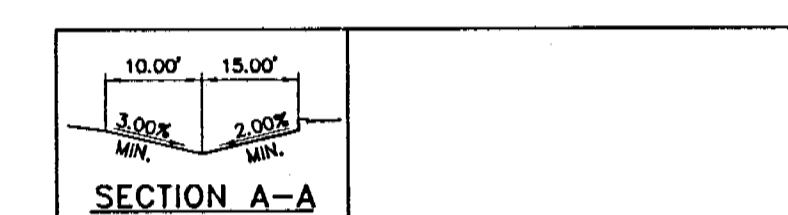
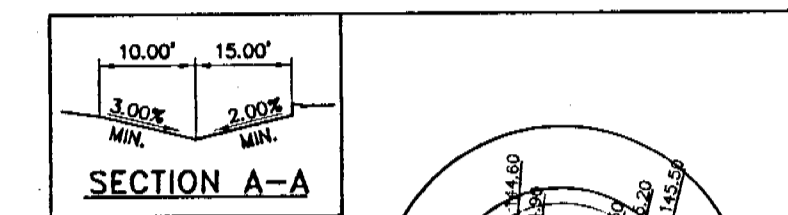
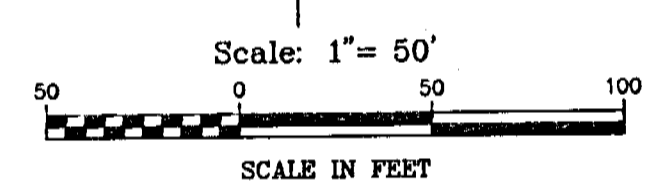
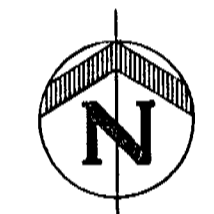
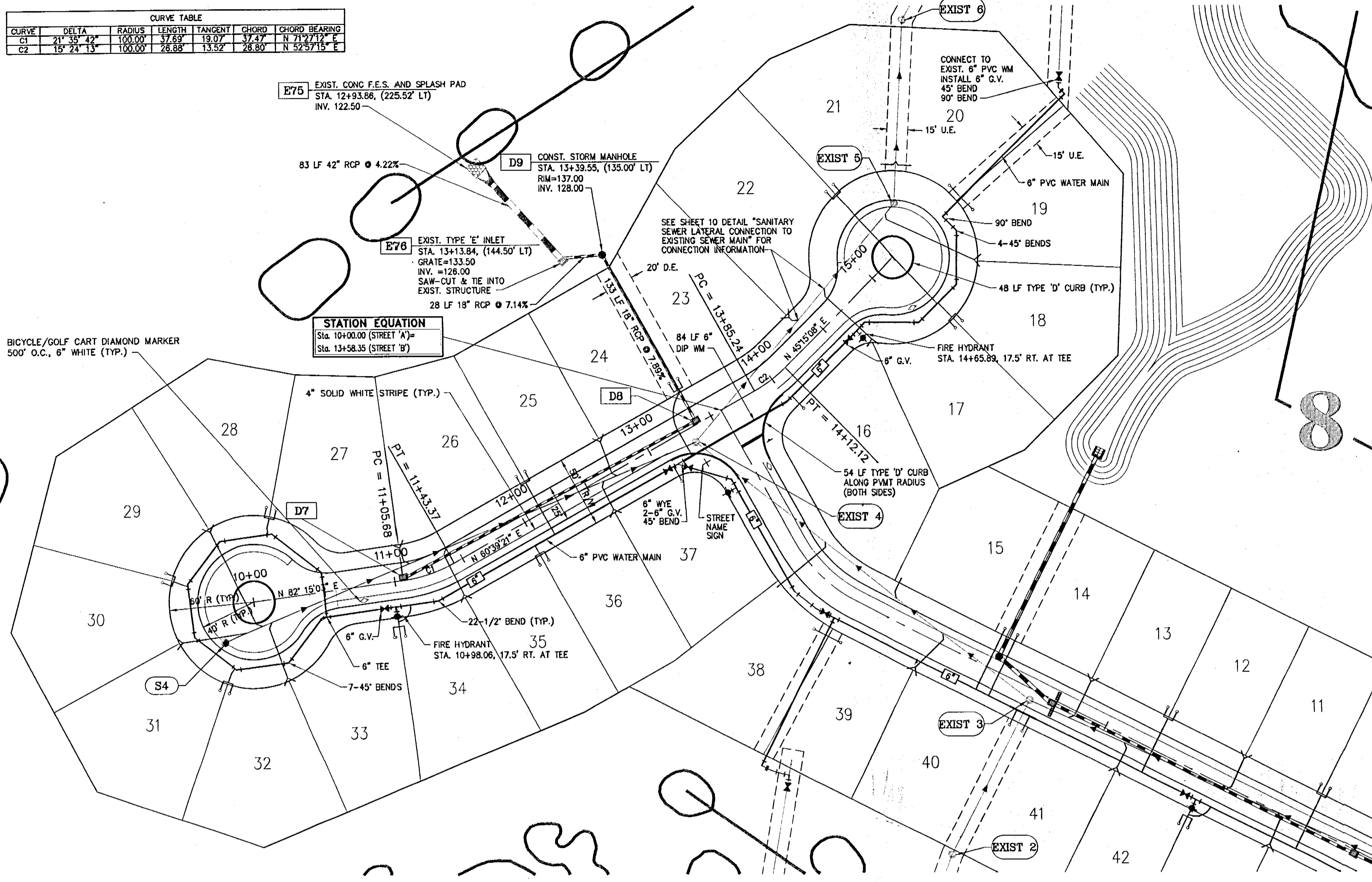
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HORIZONTAL SCALE: 1"=50'
VERTICAL SCALE: 1"=5'

STREET 'A'

CURVE TABLE						
CURVE	DELTA	RADIUS	LENGTH	TANGENT	CHORD	CHORD BEARING
C1	21° 35' 42"	100.00	37.89	19.07	37.47	N 71° 27' 12" E
C2	19° 24' 13"	100.00	26.85	13.52	26.80	N 52° 57' 15" E

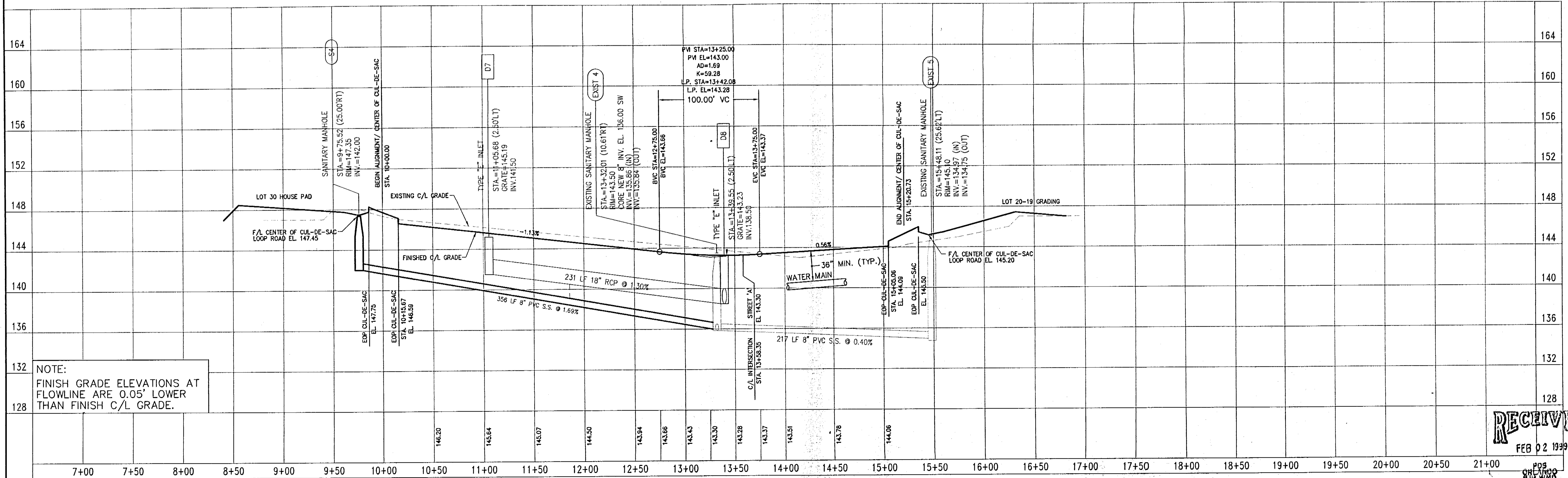


NO.	DATE	REVISION
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NOTE:
FINISH GRADE ELEVATIONS AT
FLOWLINE ARE 0.05' LOWER
THAN FINISH C/L GRADE.

LANCASTER AT KINGS RIDGE
STREET 'B'
PLAN AND PROFILE

CHECKED BY:
PROJECT NO.: 941216.080
DATE: JAN. 1999
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FILE NAME: KRO80_07

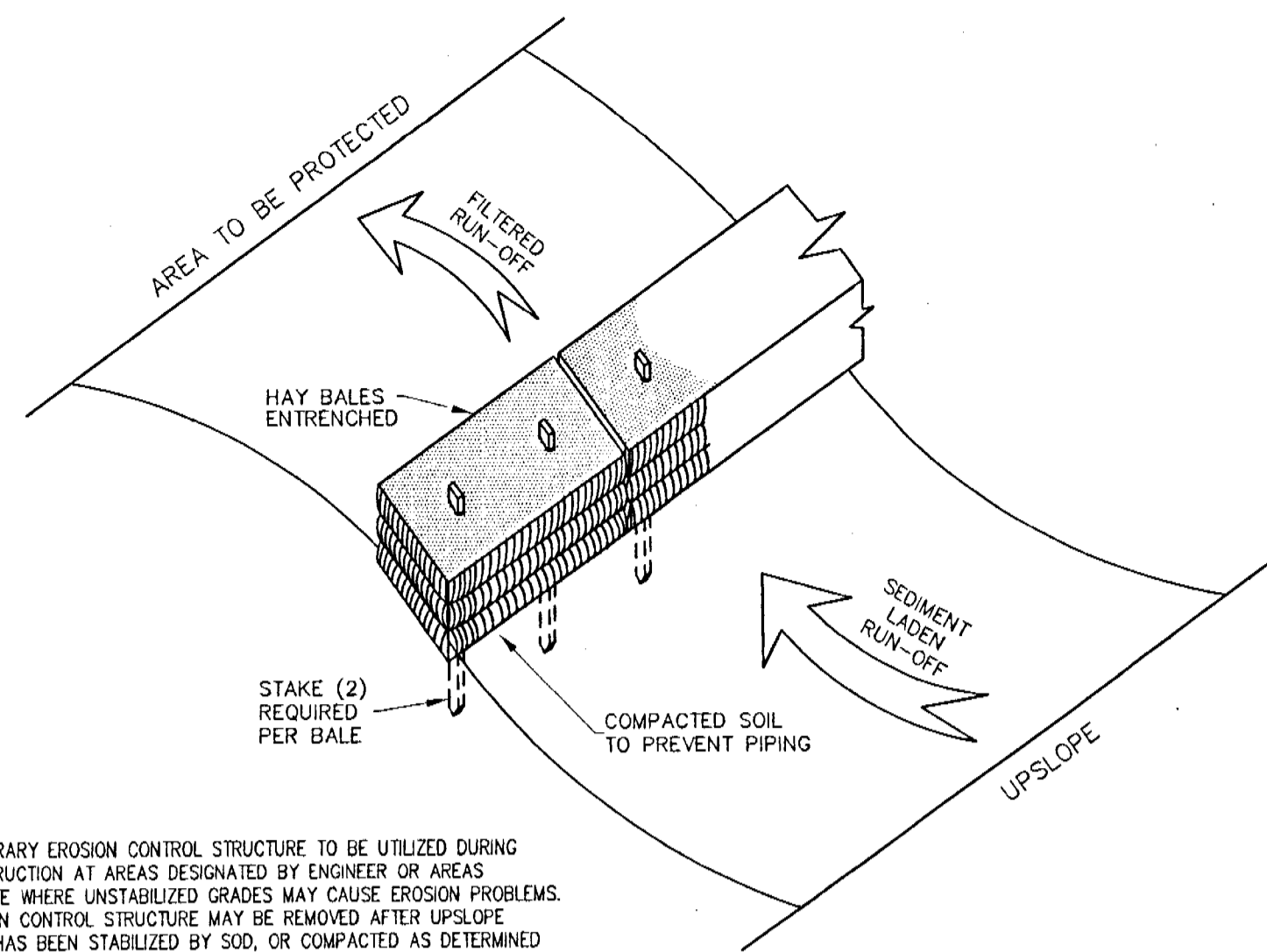
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HORIZONTAL SCALE: 1" = 50'
VERTICAL SCALE: 1" = 5'

STREET 'B'



- NOTES:
- TEMPORARY EROSION CONTROL STRUCTURE TO BE UTILIZED DURING CONSTRUCTION AT AREAS DESIGNATED BY ENGINEER OR AREAS ON-SITE WHERE UNSTABILIZED GRADES MAY CAUSE EROSION PROBLEMS. EROSION CONTROL STRUCTURE MAY BE REMOVED AFTER UPSLOPE AREA HAS BEEN STABILIZED BY SOD, OR COMPACTED AS DETERMINED BY CONTRACTOR.
 - ALTERNATE EROSION CONTROL STRUCTURE:
WOVEN FILTER FABRIC SILT FENCE IN ACCORDANCE WITH F.D.O.T. INDEX #102. FILTER FABRIC IN ACCORDANCE WITH SECTION 985 OF THE F.D.O.T. STANDARD SPECIFICATIONS.

EROSION CONTROL STRUCTURE
NOT TO SCALE

THE FOLLOWING LIST REPRESENTS A BASIC EROSION AND SEDIMENT CONTROL PROGRAM WHICH IS TO BE IMPLEMENTED TO HELP PREVENT OFF-SITE SEDIMENTATION DURING AND AFTER CONSTRUCTION OF THE PROJECT.

PERMANENT EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED AT THE EARLIEST PRACTICAL TIME CONSISTENT WITH GOOD CONSTRUCTION PRACTICES. ONE OF THE FIRST CONSTRUCTION ACTIVITIES SHOULD BE THE PLACEMENT OF PERMANENT AND TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES AROUND THE PERIMETER OF THE PROJECT OR THE INITIAL WORK AREA TO PROTECT THE PROJECT, ADJACENT PROPERTIES AND WATER RESOURCES.

TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE COORDINATED WITH PERMANENT MEASURES TO ASSURE ECONOMICAL, EFFECTIVE AND CONTINUOUS CONTROL THROUGHOUT THE CONSTRUCTION PHASE. TEMPORARY MEASURES SHALL NOT BE CONSTRUCTED FOR EXPEDENCY IN LIEU OF PERMANENT MEASURES.

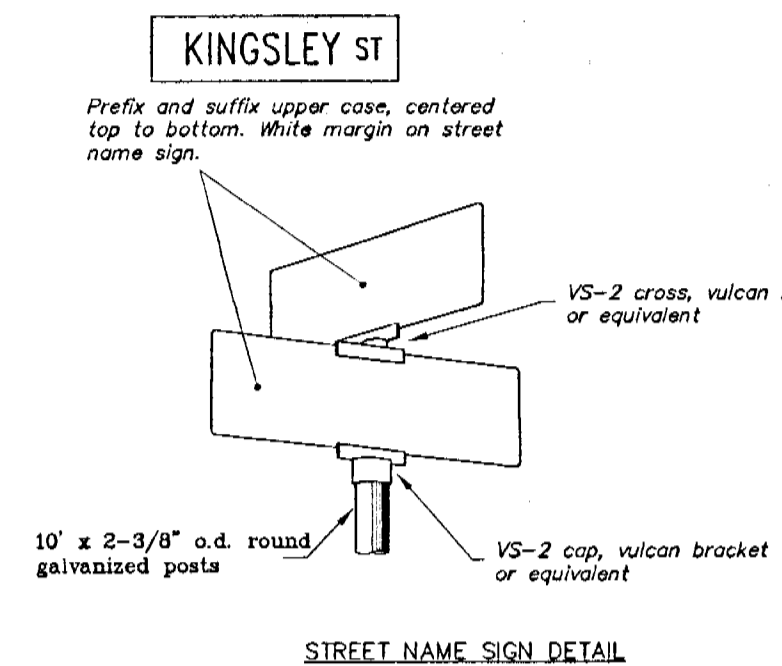
EROSION AND SEDIMENT CONTROL MEASURES SHALL BE ADEQUATELY MAINTAINED TO PERFORM THEIR INTENDED FUNCTION DURING CONSTRUCTION OF THE PROJECT.

NECESSARY REPAIRS TO BARRIERS OR REPLACEMENT OF BARRIERS SHALL BE ACCOMPLISHED PROMPTLY.

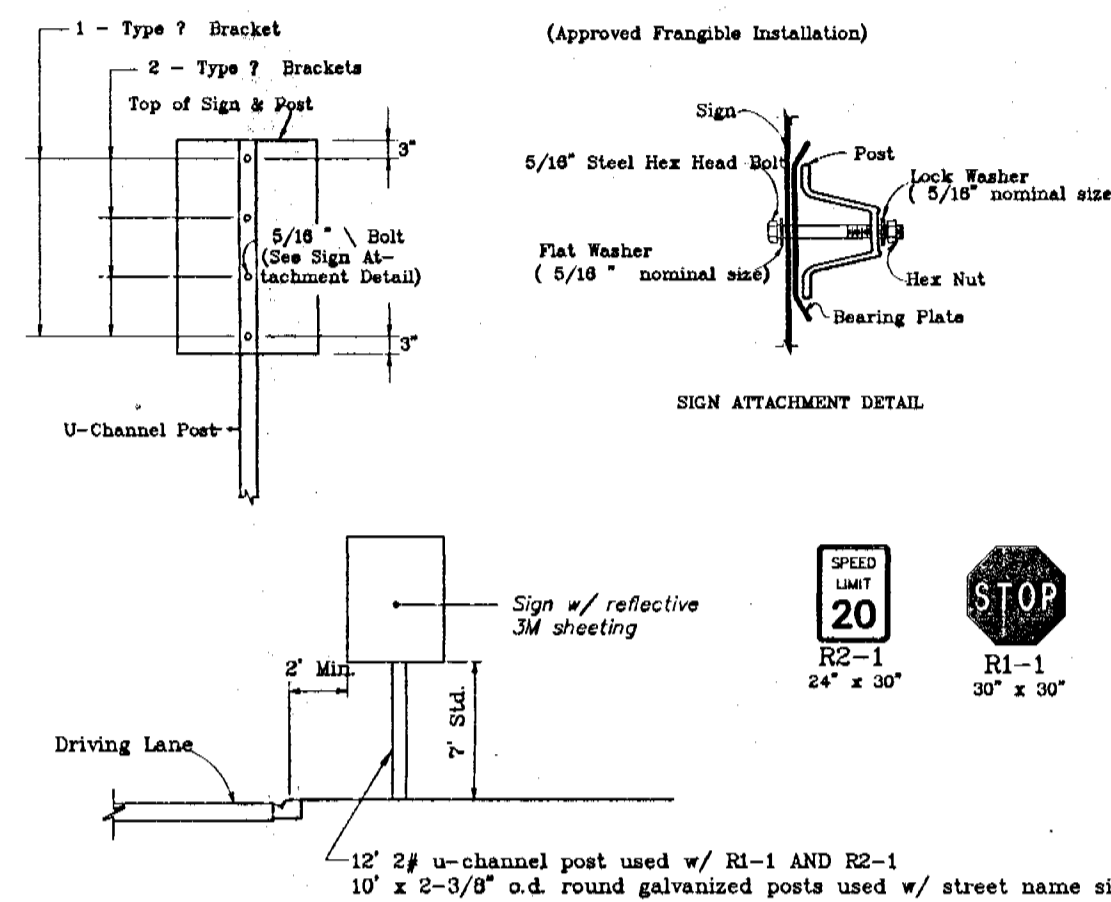
SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH RAINFALL. THEY MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHED APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

MATERIAL FROM SEDIMENT TRAPS SHALL NOT BE STOCKPILED OR DISPOSED OF IN A MANNER WHICH MAKES THEM READILY SUSCEPTIBLE TO BEING WASHED INTO ANY WATERCOURSE BY RUNOFF OR HIGH WATER.

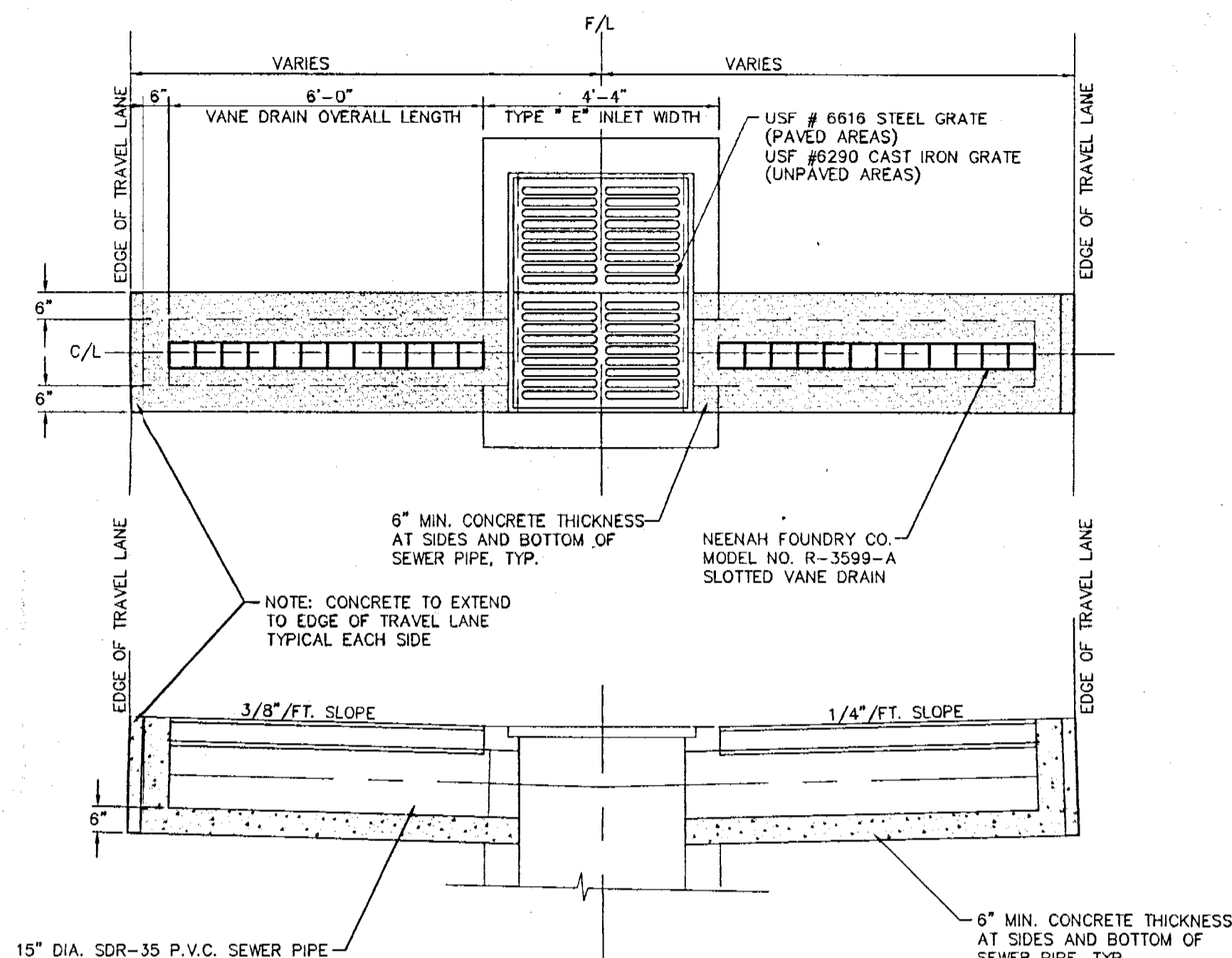
ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE BARRIERS ARE NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEED.



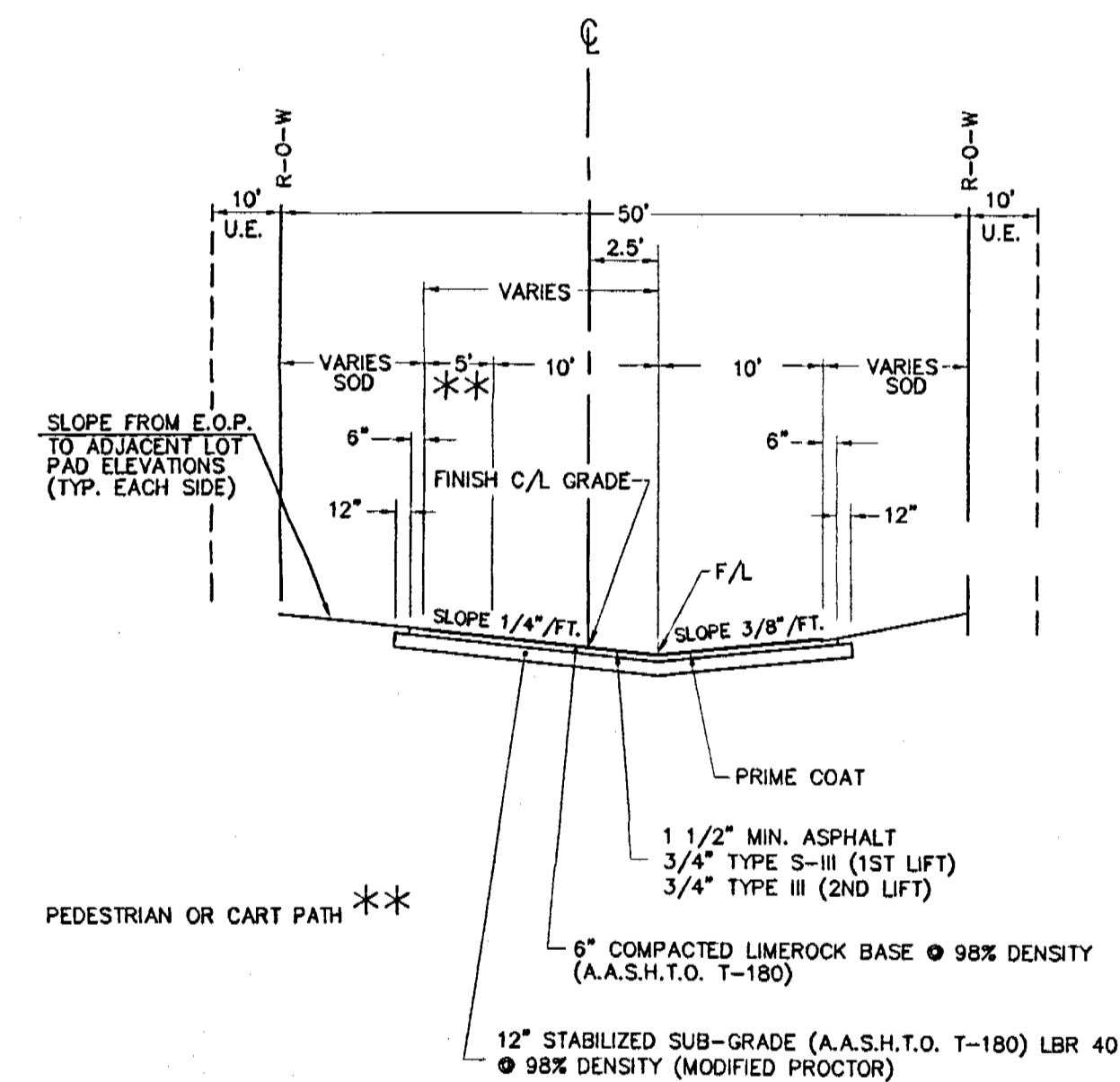
STREET NAME SIGN DETAIL



STREET AND STOP SIGN DETAILS

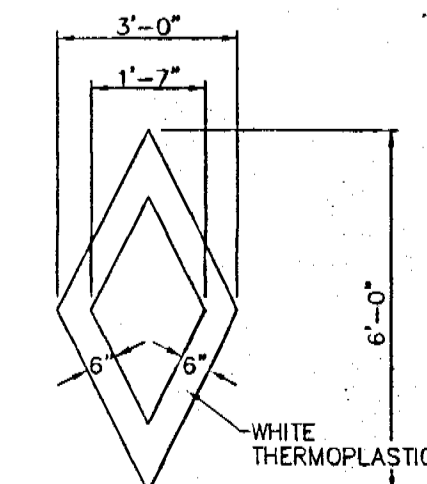


TYPE "E" INLET W/ VANE DRAINS
(TYPE "E" INLET - D.O.T. INDEX NO. 232)
(VANE GRATES AS REQUIRED)



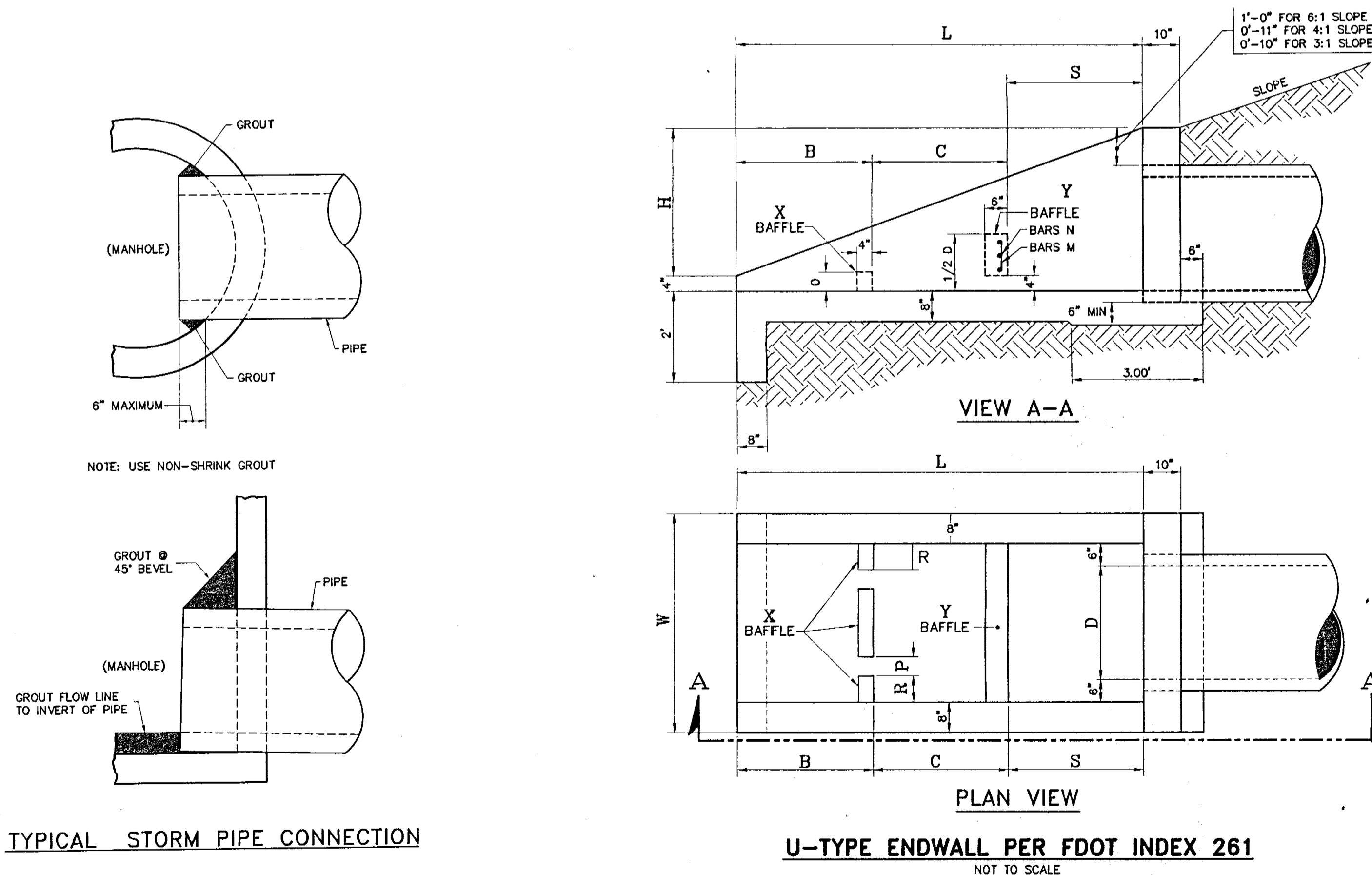
NOTE: P.V.M.T. TO BE LAID IN TWO (2) 3/4" LIFTS THE LAST LIFT TO BE LAID PRIOR TO RELEASE OF P & F BOND.

TYPICAL ROAD SECTION
50' RIGHT OF WAY
N.T.S.



* PAINT SHALL BE USED IF INSTALLED PRIOR TO 2ND LIFT OF ASPHALT, TYPICAL OF ALL PAVEMENT MARKINGS

DIAMOND BICYCLE MARKING
D.O.T. INDEX NO. 17346



DIMENSIONS & QUANTITIES FOR ONE U-ENDWALL

RATE OF SLOPE	PIPE SIZE		BAFFLE LOCATIONS (WHEN REQUIRED)						CONCRETE CLASS I	Reinforced Steel
	D	AREA SQUARE FEET	L	H	W	S	B	C		
3:1	15"	1.23	5'-3"	1'-9"	3'-7"	1'-9"	1'-9"	1'-9"	1.19	51
	18"	1.77	8'-0"	2'-0"	3'-10"	2'-0"	2'-0"	2'-0"	1.42	56
	24"	3.14	7'-8"	2'-8"	4'-4"	2'-8"	2'-8"	2'-8"	1.94	77
	30"	4.91	9'-0"	3'-0"	4'-10"	3'-0"	3'-0"	3'-0"	2.54	96

DIMENSIONS & QUANTITIES FOR ONE U-ENDWALL

RATE OF SLOPE	PIPE SIZE		BAFFLE LOCATIONS (WHEN REQUIRED)						CONCRETE CLASS I	Reinforced Steel
	D	AREA SQUARE FEET	L	H	W	S	B	C		
4:1	15"	1.23	7'-4"	1'-10"	3'-7"	2'-8"	2'-4"	2'-4"	1.54	64
	18"	1.77	8'-4"	2'-1"	3'-10"	2'-10"	2'-8"	2'-8"	1.84	71
	24"	3.14	10'-4"	2'-7"	4'-4"	3'-6"	3'-4"	3'-4"	2.53	92
	30"	4.91	12'-4"	3'-1"	4'-10"	4'-2"	4'-2"	4'-0"	3.34	124

DIMENSIONS & QUANTITIES FOR ONE U-ENDWALL

RATE OF SLOPE	PIPE SIZE		BAFFLE LOCATIONS (WHEN REQUIRED)						CONCRETE CLASS I	Reinforced Steel
	D	AREA SQUARE FEET	L	H	W	S	B	C		
6:1	15"	1.23	11'-8"	1'-11"	3'-7"	3'-10"	3'-10"	3'-10"	1.19	51
	18"	1.77	13'-0"	2'-2"	3'-10"	4'-4"	4'-4"	4'-4"	1.42	56
	24"	3.14	16'-0"	2'-8"	4'-4"	3'-4"	3'-4"	3'-4"	1.94	77
	30"	4.91	19'-0"	3'-2"	4'-10"	6'-4"	6'-4"	6'-4"	2.54	96

DIMENSIONS & QUANTITIES FOR BAFFLES

PIPE SIZE	X BAFFLE			Y BAFFLE		CONCRETE CLASS I	REINF. STEEL
	D	P Width	O Height	R Length	BAR M		
15"	4"	4"	4"	4"	2@4	1@4	4
18"	4"	4"	5"	3@4	2@4	0.10	8
24"	5"	5"	6"	4@4	3@4	0.10	12
30"	5"	5"	7"	4@4	4@4	0.10	16

REVISION

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350 North Sinclair Avenue
Tallahassee, Florida 32378
352-343-8481

**LANCASTER AT
KINGS RIDGE
PAVING AND DRAINAGE DETAILS**

CHECKED BY:

PROJECT NO.: 941216.080

DATE: 1/13/99

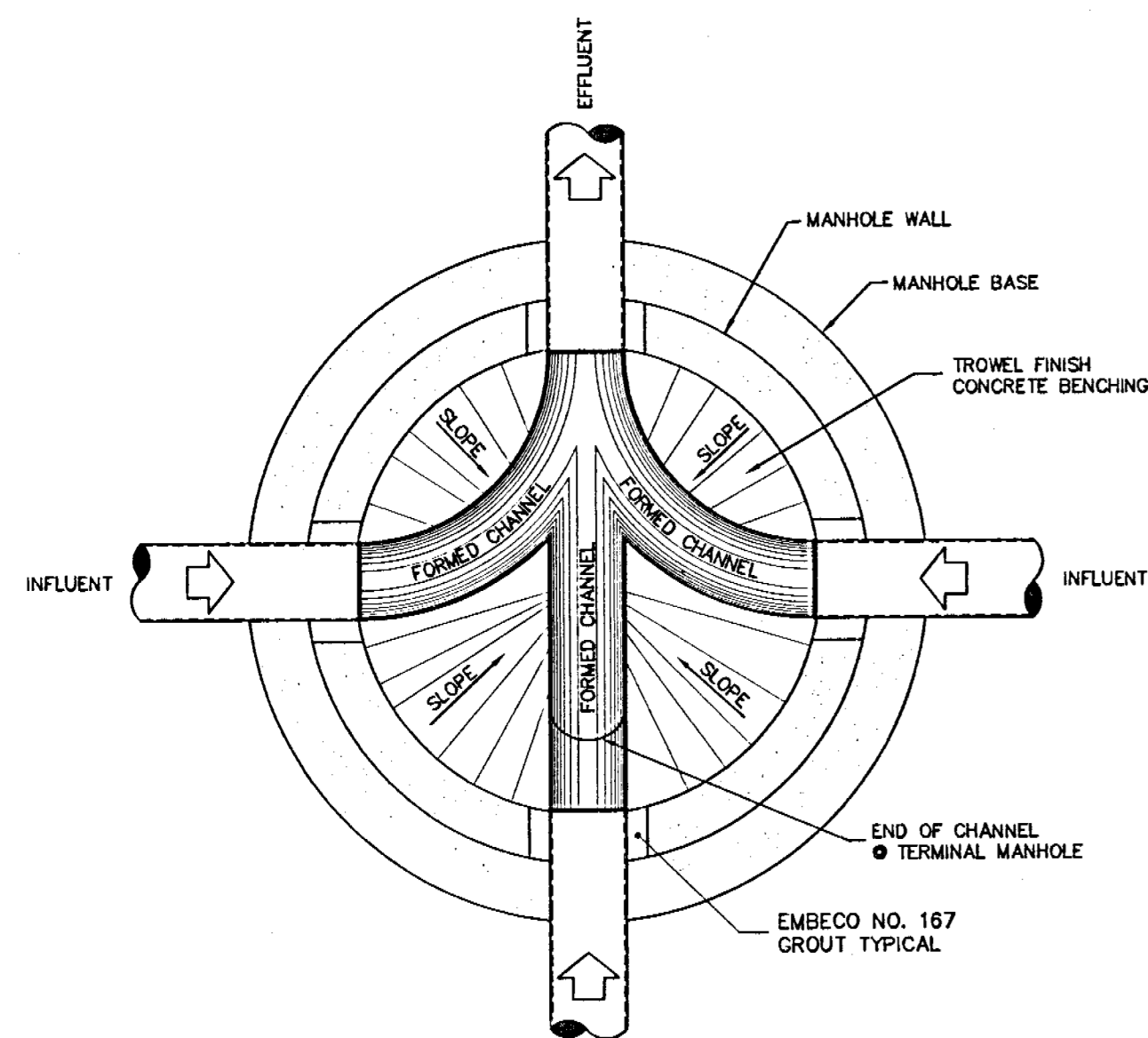
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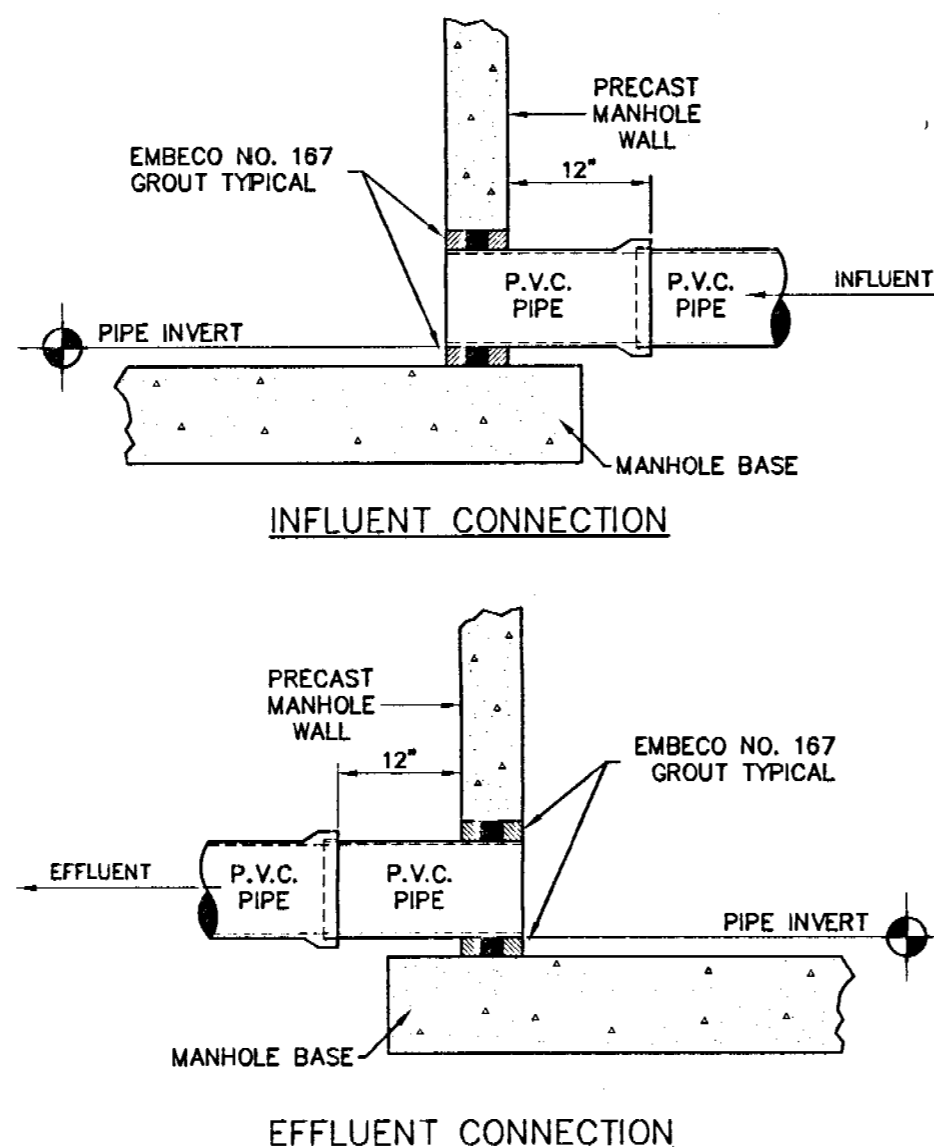
FEB 01 1999



FLOW PATTERNS FOR INVERT CHANNELS

- NOTES:
1. INVERT CHANNELS TO BE CONSTRUCTED FOR SMOOTH FLOW WITH NO OBSTRUCTIONS. HALF PIPE INVERT CHANNELS.
 2. SPILLWAYS SHALL BE CONSTRUCTED BETWEEN PIPES WITH DIFFERENT INVERT ELEVATIONS PROVIDING FOR SMOOTH FLOWS.
 3. CHANNELS FOR FUTURE CONNECTIONS (STUBS) SHALL BE CONSTRUCTED, FILLED WITH SAND AND COVERED WITH 1" OF MORTAR.
 4. WHERE PIPE INVERTS DIFFER BY MORE THAN 2 FEET (2'), PROVIDE A TEE AND DROP-PIPE TO PREVENT SPILLAGE.

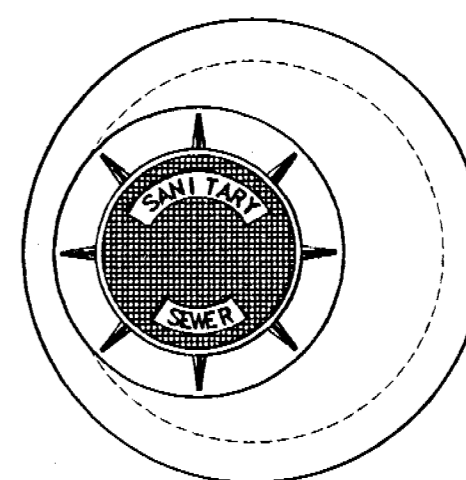
TYPICAL MANHOLE PLAN



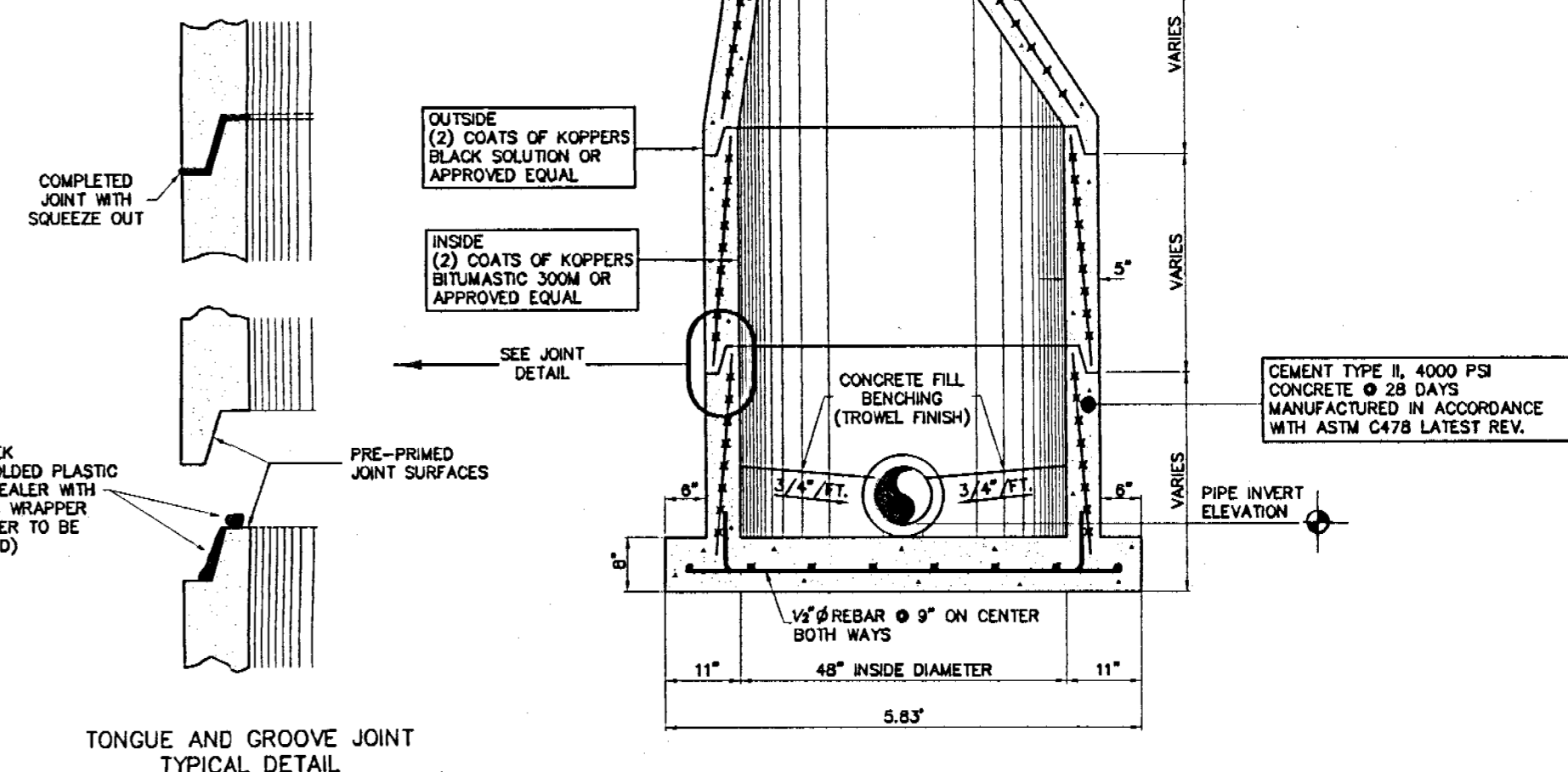
PIPE CONNECTION TO PRECAST SANITARY MANHOLE

GENERAL REUSE AND EFFLUENT REUSE NOTES

1. ALL REUSE AND EFFLUENT REUSE PIPING TO BE OWNED AND MAINTAINED BY THE CITY OF CLERMONT SHALL BE A SOLID PURPLE COLOR.
2. REUSE AND EFFLUENT REUSE MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12". PIPES 14" & LARGER SHALL BE AWWA C-905, DR 25. ALL COUPLINGS, CLEANING COMPOUNDS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING, SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS LATEST RECOMMENDATIONS.
3. DEPTH OF REUSE AND EFFLUENT REUSE LINES TO BE 36" BELOW FINISHED GRADE.
4. REUSE AND EFFLUENT REUSE MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
5. WHERE REUSE, EFFLUENT REUSE AND SEWER MAINS OR POTABLE WATER MAINS CROSS WITH LESS THAN 18" VERTICAL CLEARANCE, THE SEWER OR WATER MAIN WILL BE 20" OF DUCTILE IRON PIPE, CENTERED ON THE POINT OF CROSSING. WHEN A REUSE MAIN PARALLELS A SEWER OR WATER MAIN, A SEPARATION OF AT LEAST 5' (CENTER TO CENTER), OR 3' (OUTSIDE TO OUTSIDE) SHOULD BE MAINTAINED. IF SEPARATION CANNOT BE MAINTAINED, THE REUSE MAIN AND SEWER MAIN OR WATER MAIN SHALL BE DUCTILE IRON PIPE FOR THE PORTION OF THE REUSE MAIN LESS THAN THE REQUIRED SEPARATION FROM THE SEWER MAIN OR WATER MAIN, OR INSTALLATION OF THE REUSE MAIN IN A SEPARATE TRENCH, OR ON AN UNDISTURBED EARTH SHELF, AT LEAST 18" ABOVE THE CROWN OF THE SEWER MAIN OR WATER MAIN.
6. ALL REUSE AND EFFLUENT REUSE MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON PIPE AND SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB.
7. ALL IRRIGATION SLEEVING UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB.

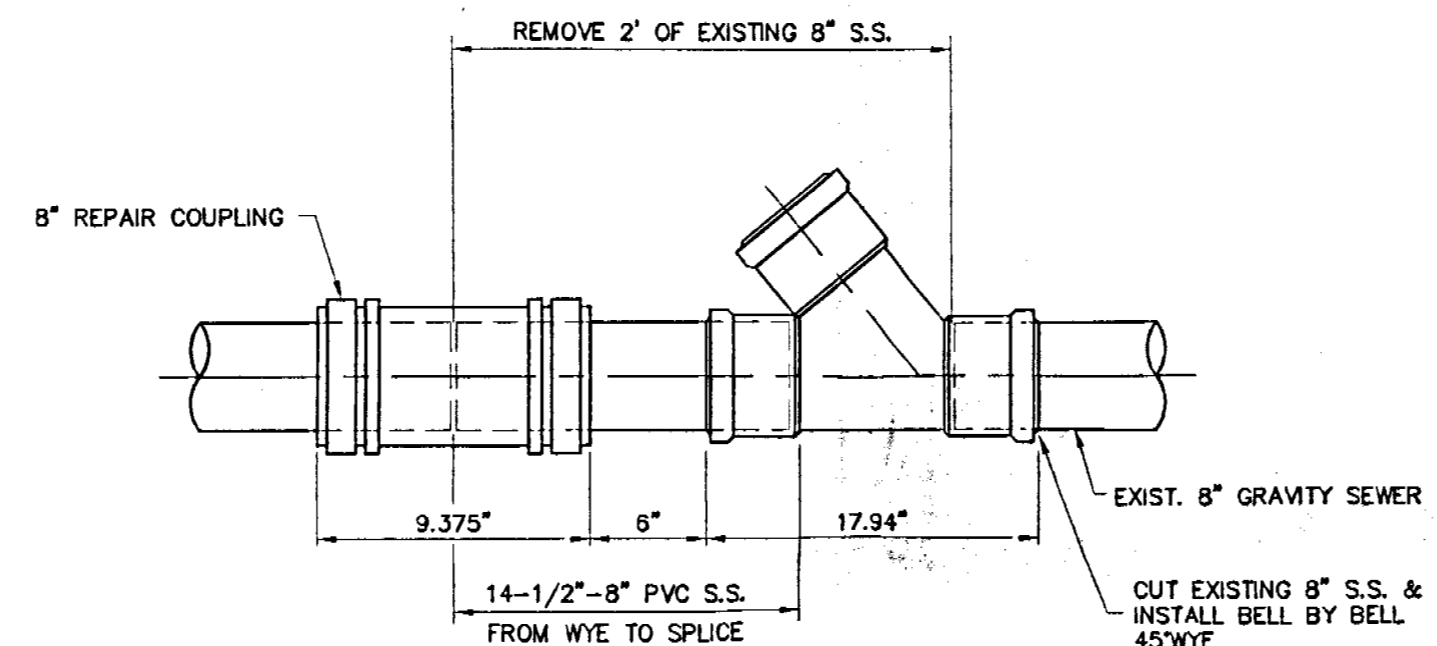


- MANHOLE NOTES -**
1. DROP CONNECTIONS ARE REQUIRED WHENEVER INVERT OF INFLUENT SEWER IS 24" OR MORE ABOVE THE INVERT OF THE MANHOLE.
 2. DROP PIPE AND FITTINGS SHALL BE EQUAL IN SIZE TO THE INFLUENT SEWER.



SANITARY PRECAST MANHOLE DETAIL

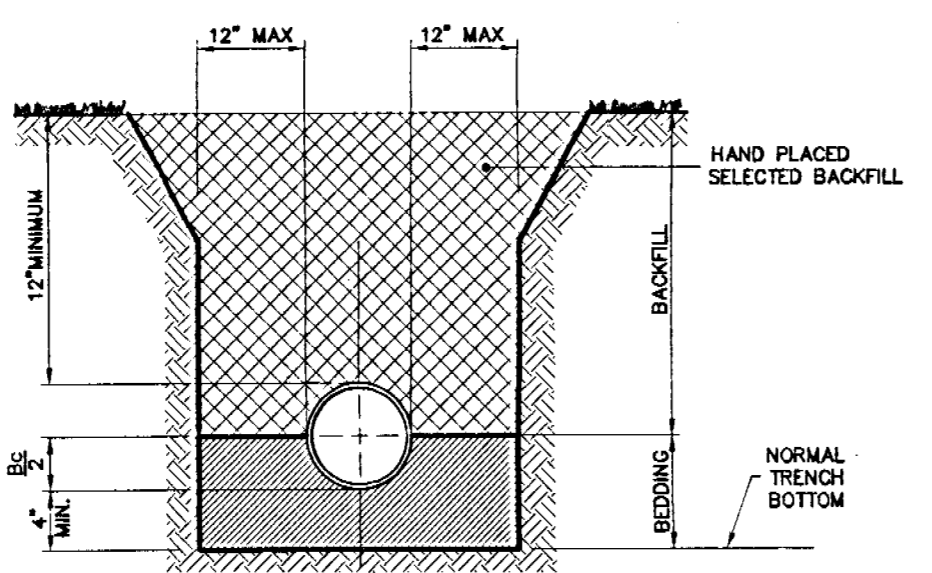
- ALTERNATE-PRECAST MANHOLE TOPS
1. APPROVED CONCENTRIC CONE DESIGN MAY BE USED AS AN ALTERNATE.
 2. APPROVED FLAT SLAB TOP MAY BE USED AS AN ALTERNATE (6" MIN. THICKNESS).



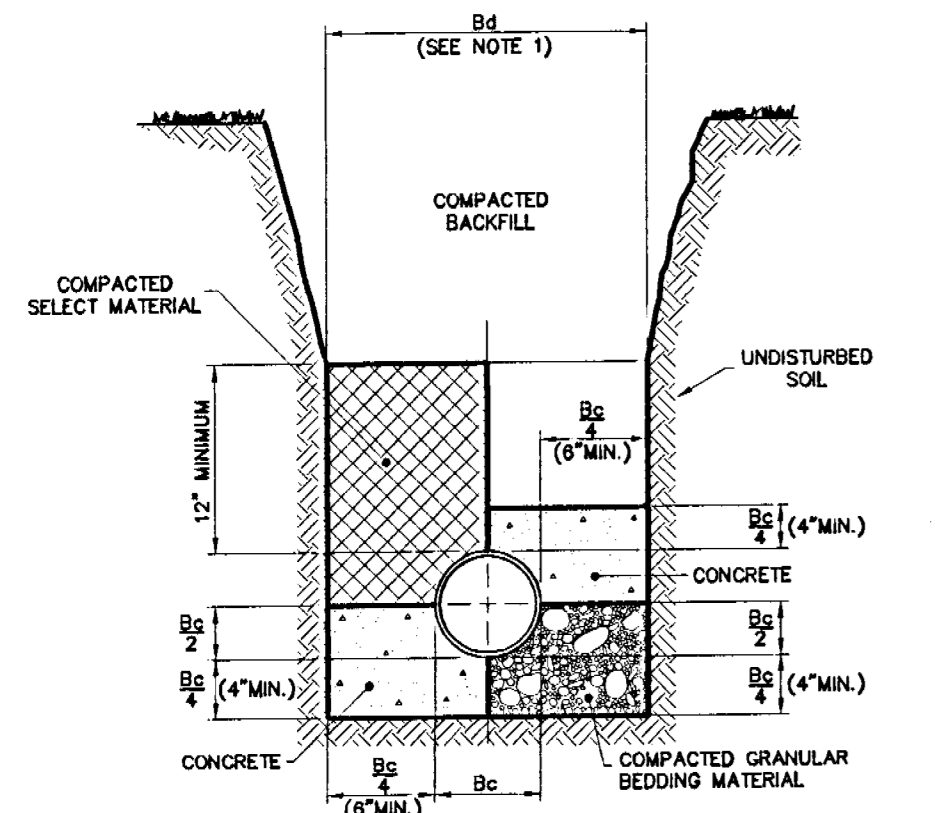
SANITARY SEWER LATERAL CONNECTION TO EXISTING SEWER MAIN

- NOTE: THE REPAIR COUPLING IS SAME CONNECTION AS BELL JOINT w/ GASKET ONLY WITHOUT A STOP.
- NOTE: CITY INSPECTOR WILL BE ONSITE WHEN INSTALLATION IS UNDERWAY.

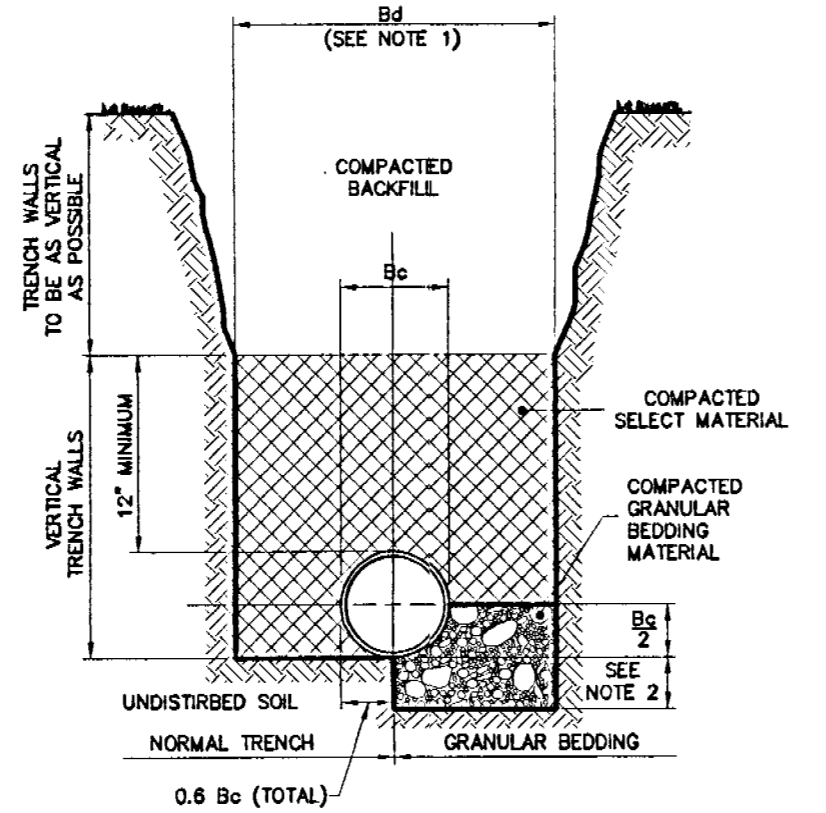
- NOTES: FOR BEDDING AND TRENCHING**
1. Dimension Bc = Pipe O.D.
Dimension Bd = Trench Width at Top of Pipe
Maximum Bd = Bc + 30"
Minimum Bd = Maximum Dimension of Bell + 8" (Unsheeted Trench)
 2. Depth for removal for unsuitable material shall be as required to reach suitable foundation. For rock or other non-cushioning material, depth shall be 6" below bottom of utility.



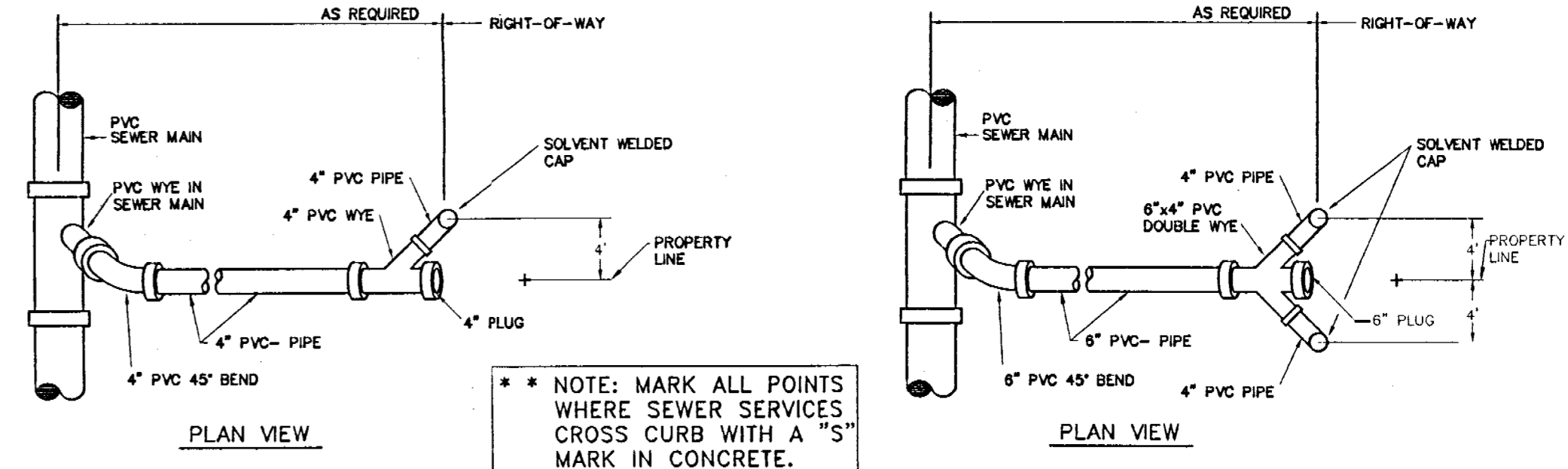
STANDARD BEDDING DETAIL FOR P.V.C. GRAVITY SEWER PIPE TYPICAL



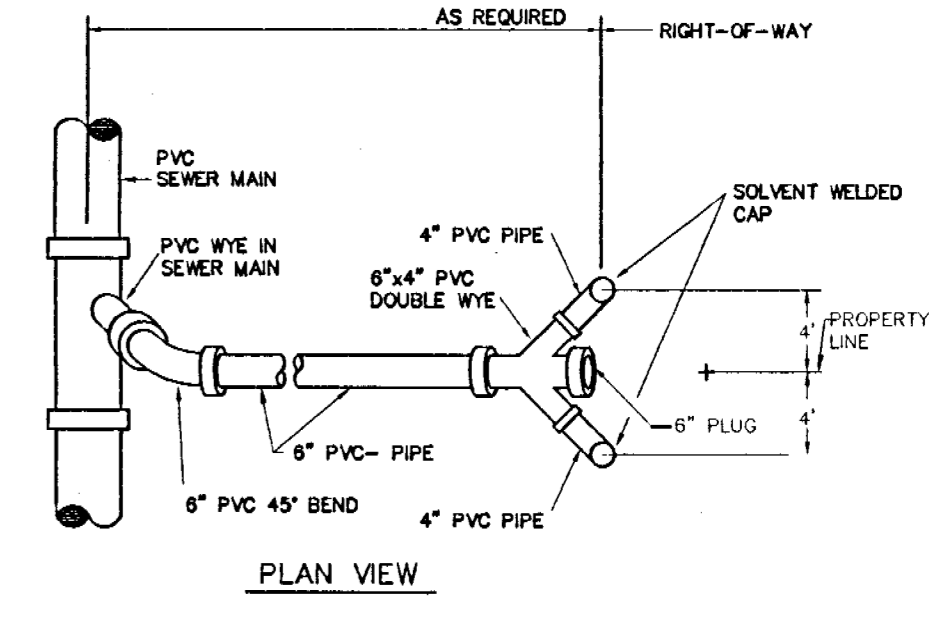
CLASS "A" BEDDING SPECIAL CONDITIONS



CLASS "B" BEDDING NORMAL CONDITIONS



SANITARY SEWER SERVICE PVC SINGLE SERVICE



SANITARY SEWER SERVICE PVC DOUBLE SERVICE

REVISION

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PLANNERS

FARNEY BARLEY AND ASSOCIATES, INC.

350 North Sinclair Avenue O Tavares, Florida 32778 O (352) 343-8461

LANCASTER AT KINGS RIDGE SANITARY SEWER DETAILS

CHECKED BY:

PROJECT NO.: 941216.080

DATE: 1/13/99

DRAWN BY: DM

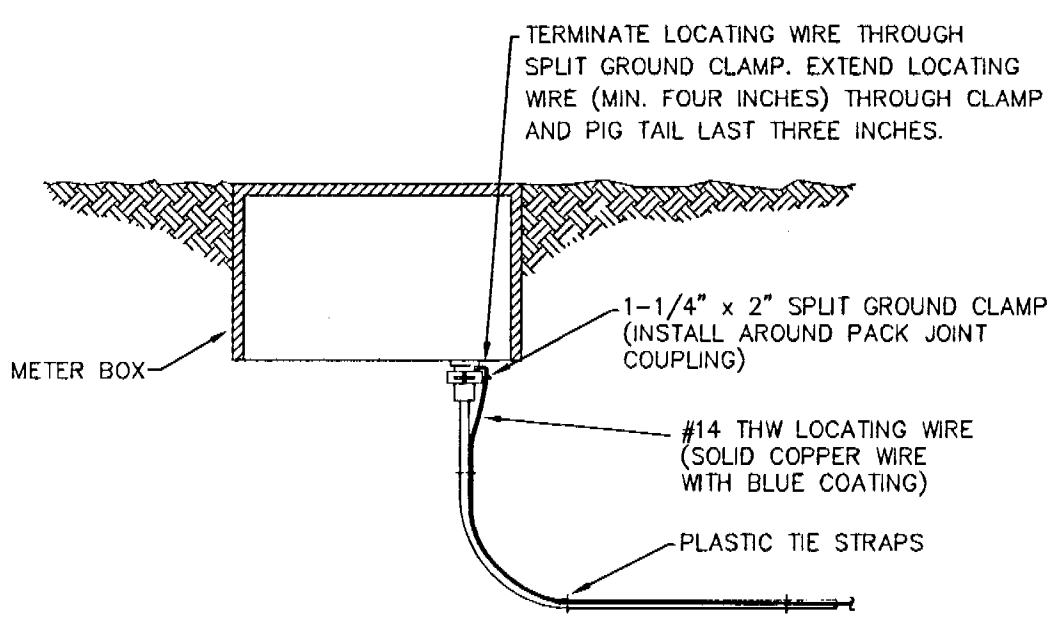
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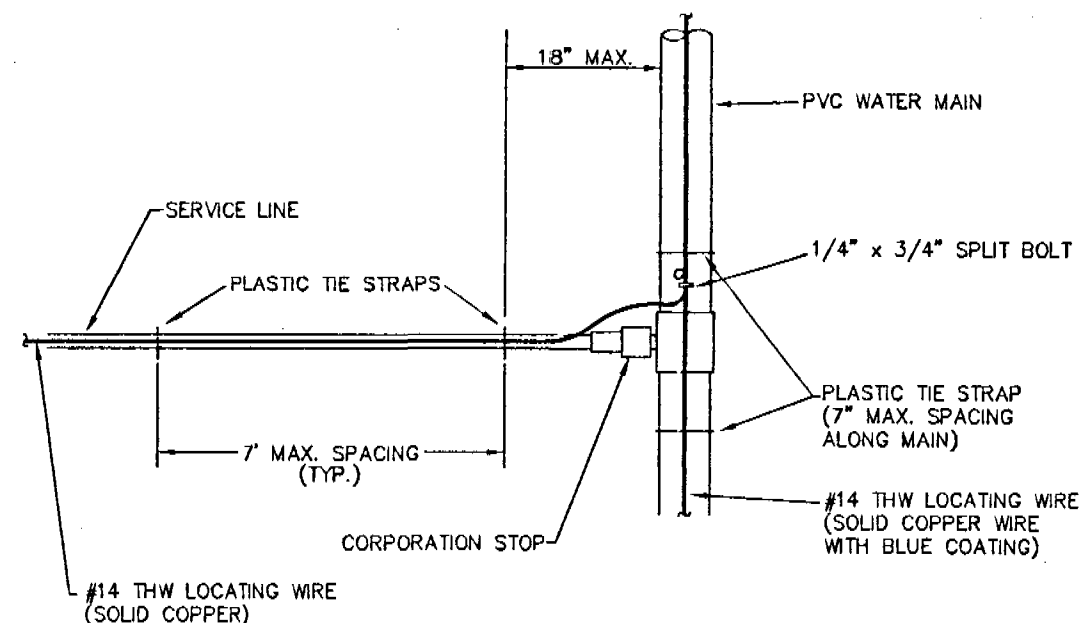
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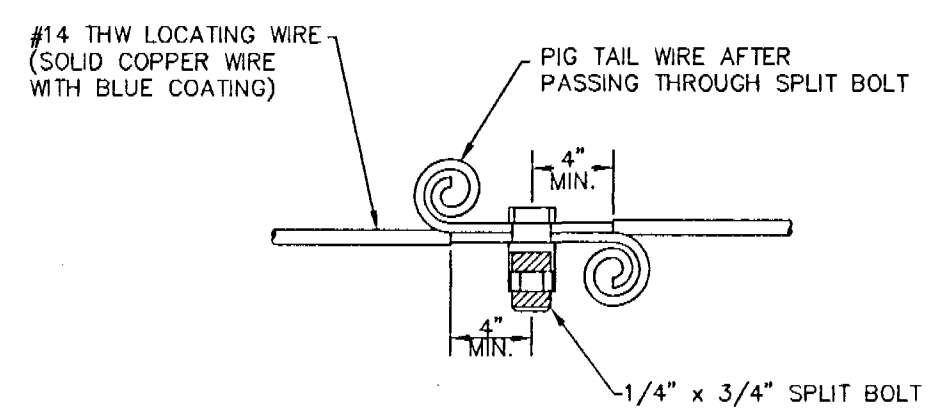
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SERVICE AND METER



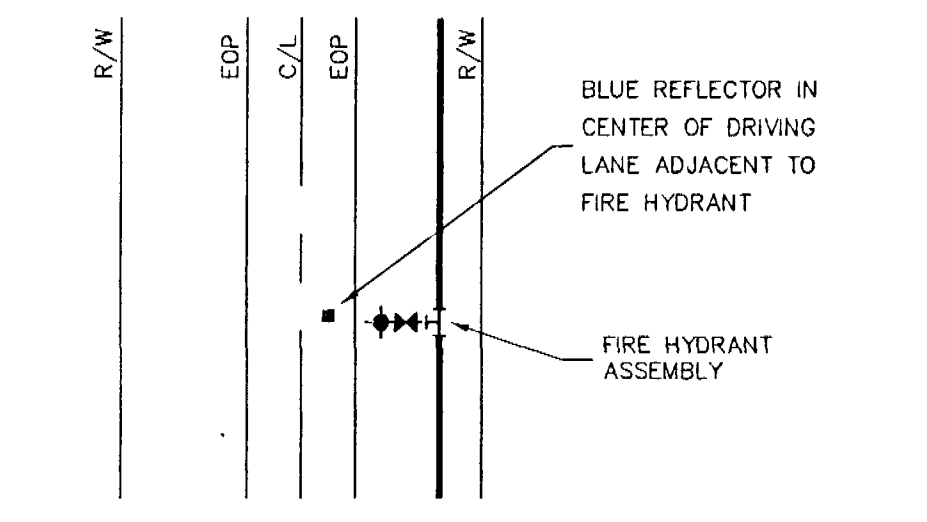
CONNECTION TO PVC MAIN



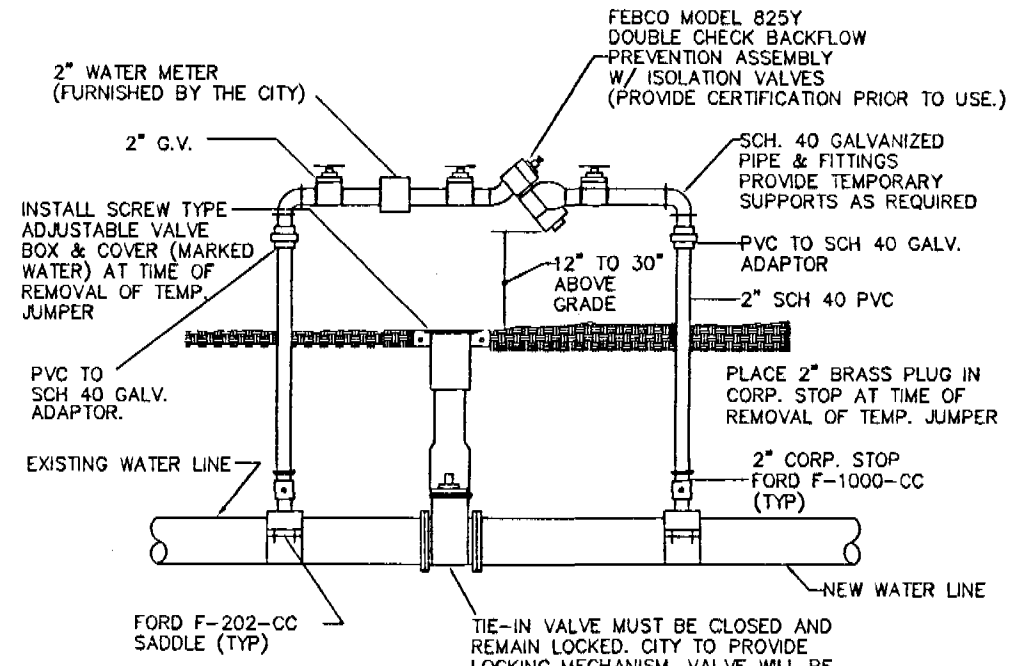
LOCATING WIRE SPLICING

LOCATING WIRE INSTALLATION FOR SINGLE FAMILY WATER SERVICES

- NOTES:
- THE ENDS OF ALL LOCATING WIRES, WHETHER THEY ARE SPLICED, CONNECTED, OR TERMINATED, SHALL HAVE THE LAST THREE INCHES PIG TAILED AS DETAILED HEREON.
 - AFTER INSTALLATION OF THE LOCATING WIRE THE SYSTEM SHALL BE SUBJECTED TO TESTING, PRIOR TO BACKFILL, IN ORDER TO ESTABLISH THAT THE SYSTEM IS FUNCTIONAL.

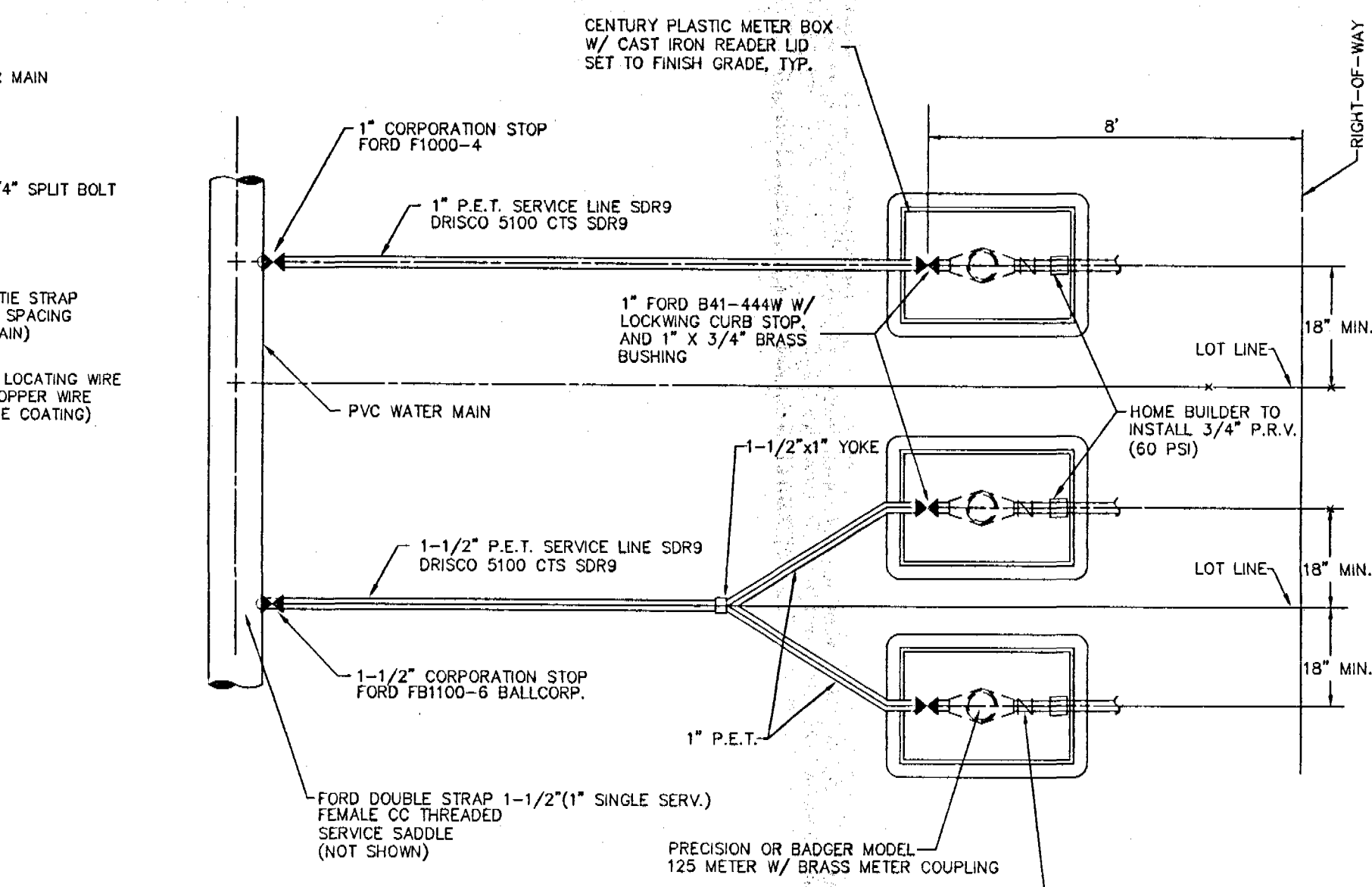


FIRE HYDRANT REFLECTOR DETAIL

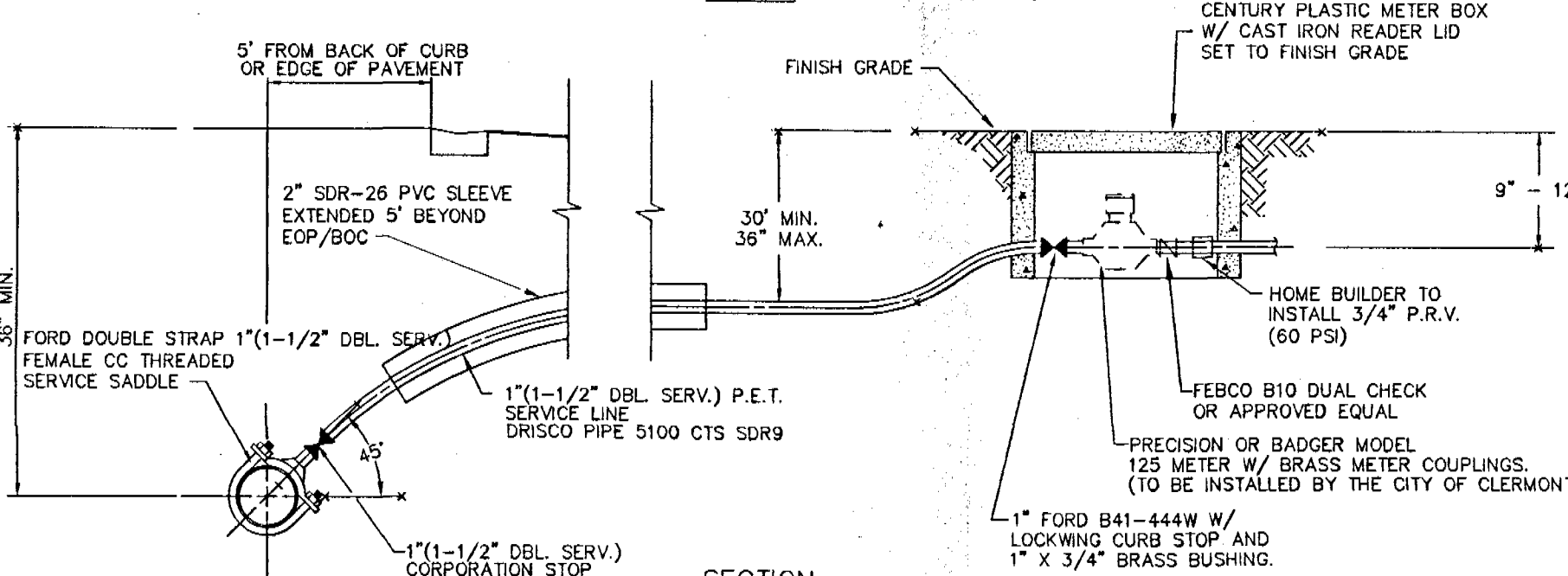


TEMPORARY JUMPER CONNECTION DETAIL

NOTE: LOCATION TO BE DETERMINED AT TIME OF RECONSTRUCTION CONFERENCE W/ CITY.



PLAN



SECTION

WATER SERVICE CONNECTION DETAILS

(NOTE: METERS TO BE INSTALLED BY CITY OF CLERMONT)

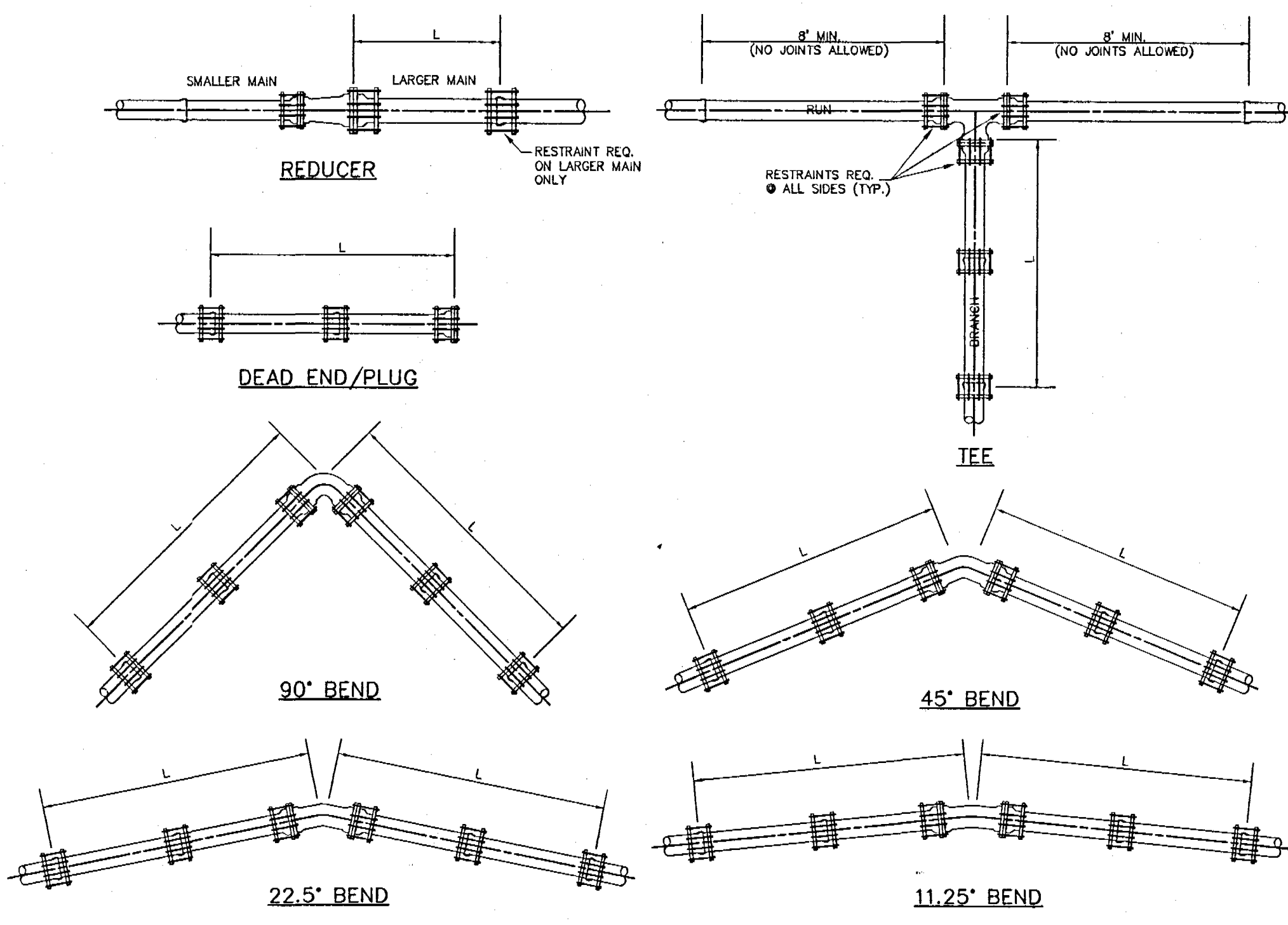


TABLE OF THRUST RESTRAINT LENGTHS

PIPE SIZE (Inches)	90° BEND		45° BEND		22 1/2° BEND		11 1/4° BEND		TEES		DEAD END & PLUG		REDUCER		
	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	P.V.C. (L)	DUCTILE IRON (L)	PIPE SIZES	P.V.C. (L)	DUCTILE IRON (L)
4	20'	16'	8'	7'	4'	3'	2'	15'	10'	45'	28'	6"x4"	32'	21'	
6	28'	22'	12'	9'	6'	4'	3'	2'	33'	21'	63'	40'	8"x8"	34'	22'
8	36'	29'	15'	12'	7'	6'	4'	3'	52'	33'	82'	52'	10"x8"	33'	21'
10	43'	34'	18'	14'	9'	7'	4'	3'	68'	43'	98'	62'	12"x10"	34'	21'
12	50'	40'	21'	17'	10'	8'	5'	4'	85'	53'	116'	73'	14"x12"	63'	40'
14	57'	46'	24'	20'	12'	9'	6'	5'	102'	63'	132'	84'	16"x14"	63'	40'
16	63'	51'	26'	21'	13'	10'	6'	5'	116'	73'	148'	93'			

THRUST RESTRAINT DESIGN NOTES

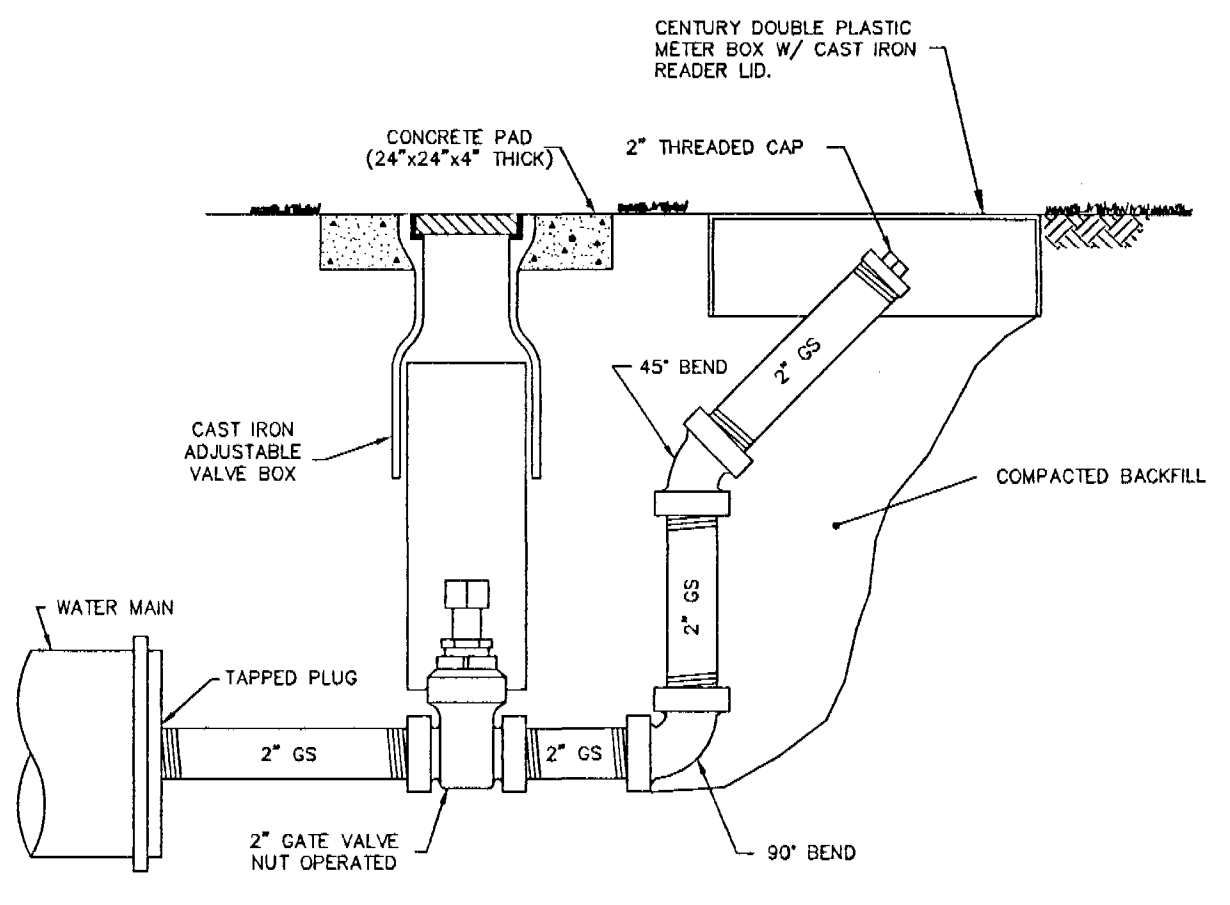
- RESTRAINT JOINTS, FITTINGS, & VALVE REQUIREMENTS CALCULATED BY THE THRUST RESTRAINT DESIGN PROGRAM PROVIDED BY EBAA IRON SALES, INC.
- DATA BASED ON MAX. WATER PRESSURE OF 150 p.s.i., THE UNIFIED SOILS CLASSIFICATION SYSTEM (SOIL TYPE SP), THE PIPE BEDDED IN NATIVE SOIL W/ A MINIMUM OF 2'5" COMPACTED FILL OVER THE PIPE, AND USING A SAFETY FACTOR OF 1.5 FOR THE DATA.
- ALL FITTINGS & VALVES TO BE RESTRAINED WITH "MECA-LUG" RESTRAINTS, & ALL BELL & SPIGOT JOINTS TO BE RESTRAINED WITH A RESTRAINING HARNESS WITHIN THE REQUIRED LENGTH OF RESTRAINED PIPE (L).

THRUST RESTRAINT DETAILS

GENERAL WATER NOTES

- WATER SYSTEM COMPONENTS SHALL BE INSTALLED IN STRICT ACCORDANCE WITH ALL LOCAL CODES AND REGULATIONS, CLEANED, DISINFECTED AND BACTERIOLOGICALLY CLEARED FOR SERVICE IN ACCORDANCE WITH THE LATEST AWWA STANDARDS AND CHAPTER 62-555
- ALL PIPING SHALL BEAR THE "NSF" SEAL FOR POTABLE WATER.
- WATER MAINS SHALL BE PVC CONFORMING TO AWWA C-900, DR 18 FOR PIPE SIZES 4"-12", PIPE 14" OR LARGER SHALL BE AWWA C-905, DR 18. ALL COUPLINGS, CLEANING COMPONENTS, SOLVENTS, LUBRICANTS, AND PIPE PREPARATION, FOR LAYING, SHALL BE IN ACCORDANCE WITH THE PIPE MANUFACTURERS LATEST RECOMMENDATIONS.
- DEPTH OF WATER LINES TO BE MINIMUM 36" BELOW FINISHED GRADE.
- WATER MAINS TO BE LOCATED 5' FROM BACK OF CURB OR EDGE OF PAVEMENT UNLESS OTHERWISE NOTED.
- WHERE WATER MAINS CROSS SANITARY HAZARDOUS (SANITARY SEWER, FORCE MAIN, OR REUSE WATER MAINS) WITH LESS THAN 18" VERTICAL SEPARATION, THE SANITARY HAZARD SHALL BE CONSTRUCTED OF DUCTILE IRON FOR A DISTANCE OF 20' CENTERED AT THE POINT OF CROSSING. WHERE WATER MAINS RUN PARALLEL TO SAID SANITARY HAZARDOUS WITH LESS THAN 10" HORIZONTAL SEPARATION, THE SANITARY HAZARD SHALL BE CONSTRUCTED OF DUCTILE IRON UNTIL A 10' HORIZONTAL SEPARATION CAN BE MAINTAINED. IN THE CASE OF REUSE WATER A 5' HORIZONTAL SEPARATION WITH PARALLEL WATER MAINS SHALL BE MAINTAINED. WHERE WATER MAINS CANNOT MAINTAIN 18" VERTICAL OR 10' HORIZONTAL SEPARATION WITH STORM SEWER, THE WATER MAIN SHALL BE CONSTRUCTED OF DUCTILE IRON FOR A DISTANCE OF 20' OR UNTIL A 10' HORIZONTAL SEPARATION CAN BE MAINTAINED.
- ALL WATER MAINS UNDER PAVEMENT SHALL BE DUCTILE IRON AND SHALL EXTEND 5' BEYOND THE BACK OF CURB.
- ALL SLEEVES UNDER PAVEMENT SHALL EXTEND 5' BEYOND THE BACK OF CURB.

NOTE: MARK ALL POINTS WHERE WATER SERVICES CROSS CURB WITH A "W" MARK IN CONCRETE.

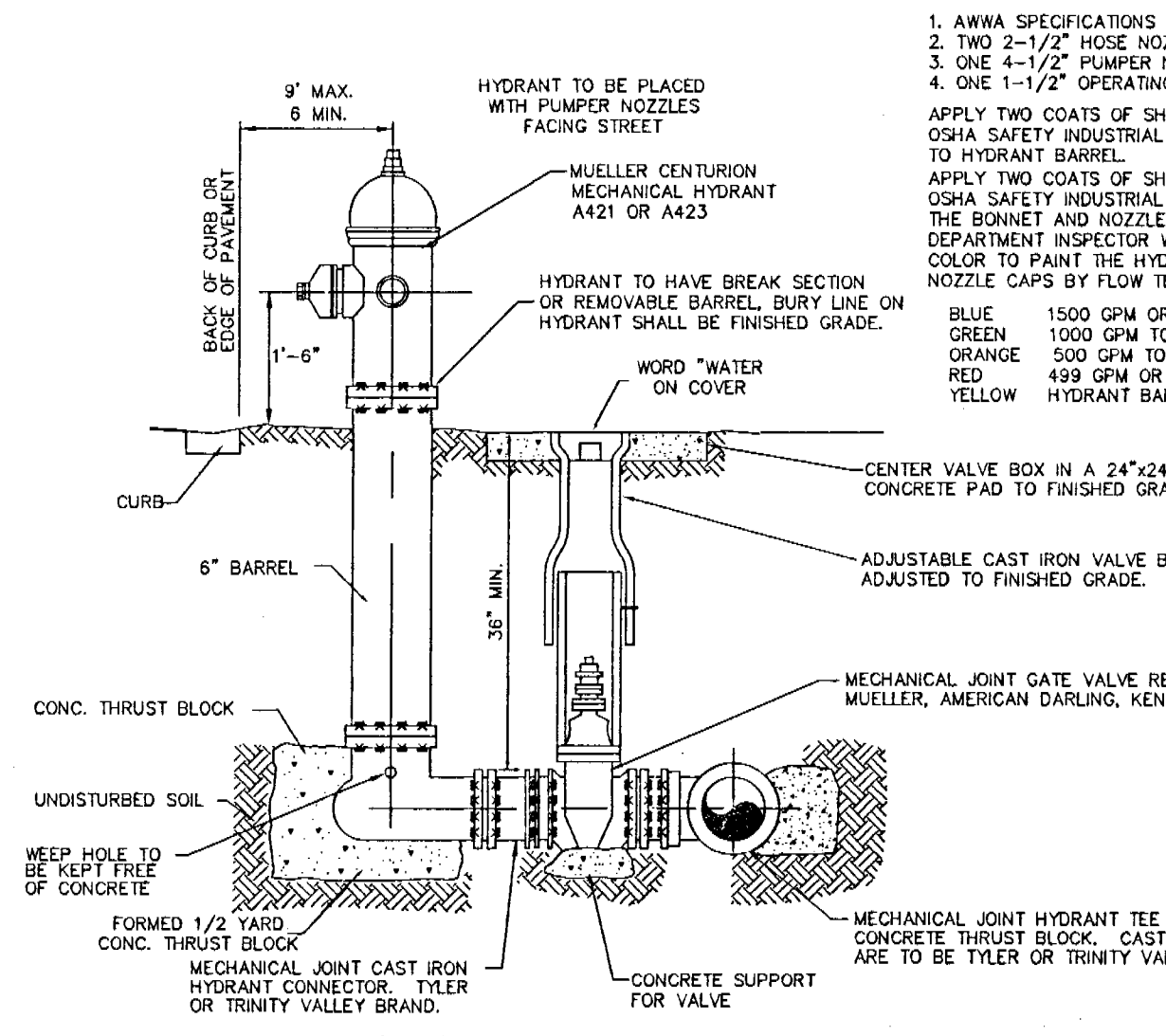


BLOWOFF VALVE DETAIL

NOT TO SCALE

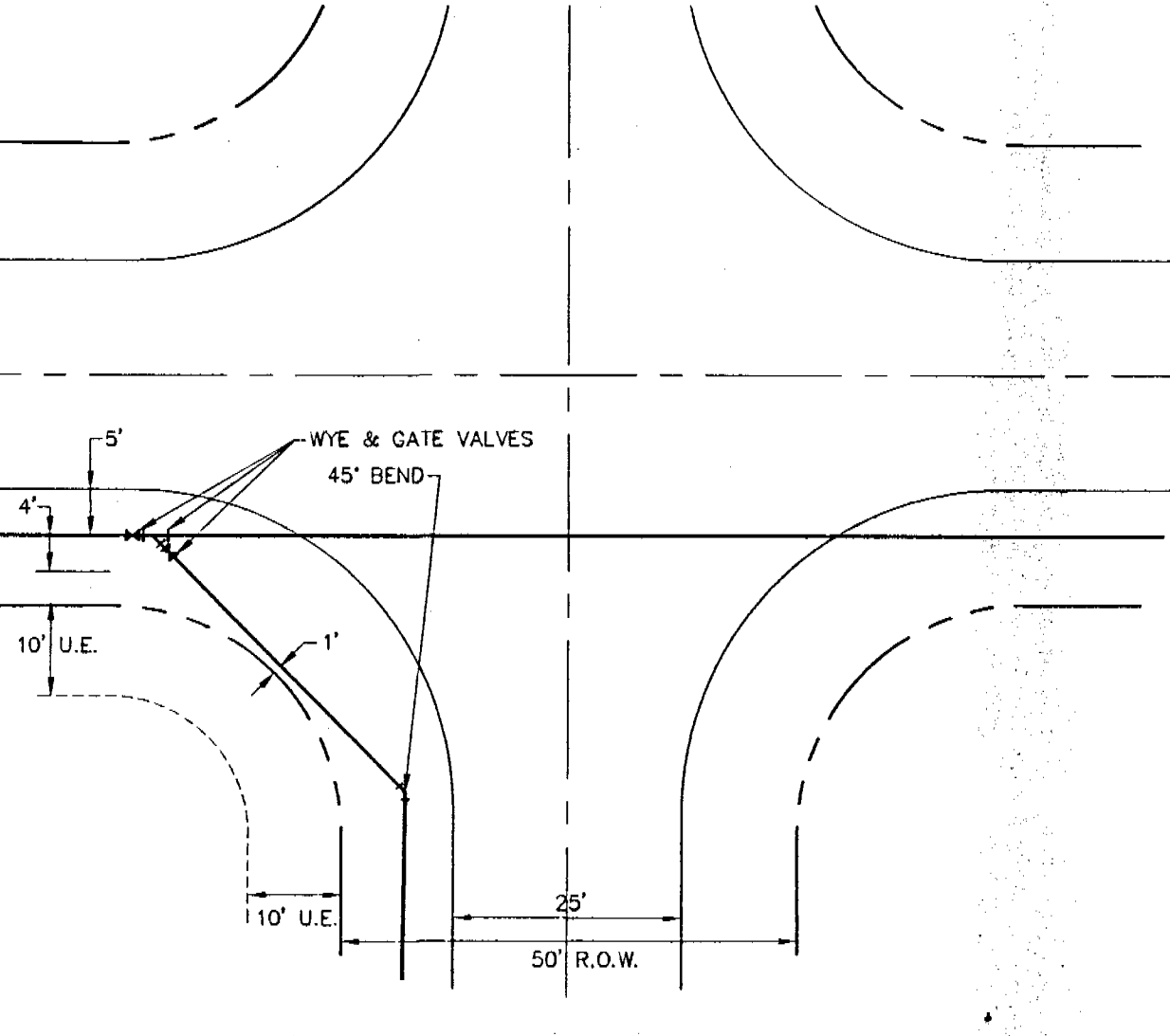
SPECIFICATIONS

- AWWA SPECIFICATIONS C-902
 - TWO 2-1/2" HOSE NOZZLE DISCHARGE
 - ONE 4-1/2" PLUMBER NOZZLE DISCHARGE
 - ONE 1-1/2" OPERATING NUT, LEFT
- APPLY TWO COATS OF SHERWIN WILLIAMS OSHA SAFETY INDUSTRIAL YELLOW PAINT TO HYDRANT BARREL.
- APPLY TWO COATS OF SHERWIN WILLIAMS OSHA SAFETY INDUSTRIAL ENAMEL PAINT TO THE BONNET AND NOZZLE CAPS. THE UTILITY DEPARTMENT INSPECTOR WILL DETERMINE THE COLOR TO PAINT THE HYDRANT BONNET AND NOZZLE CAPS BY FLOW TESTING HYDRANT.
- BLUE 1500 GPM OR MORE (SHERWIN WILLIAMS #544088)
- GREEN 1000 GPM TO 1499 GPM (SHERWIN WILLIAMS #544514)
- ORANGE 500 GPM TO 999 GPM (SHERWIN WILLIAMS #544523)
- RED 499 GPM OR LESS (SHERWIN WILLIAMS #544335)
- YELLOW HYDRANT BARREL (SHERWIN WILLIAMS #544337)



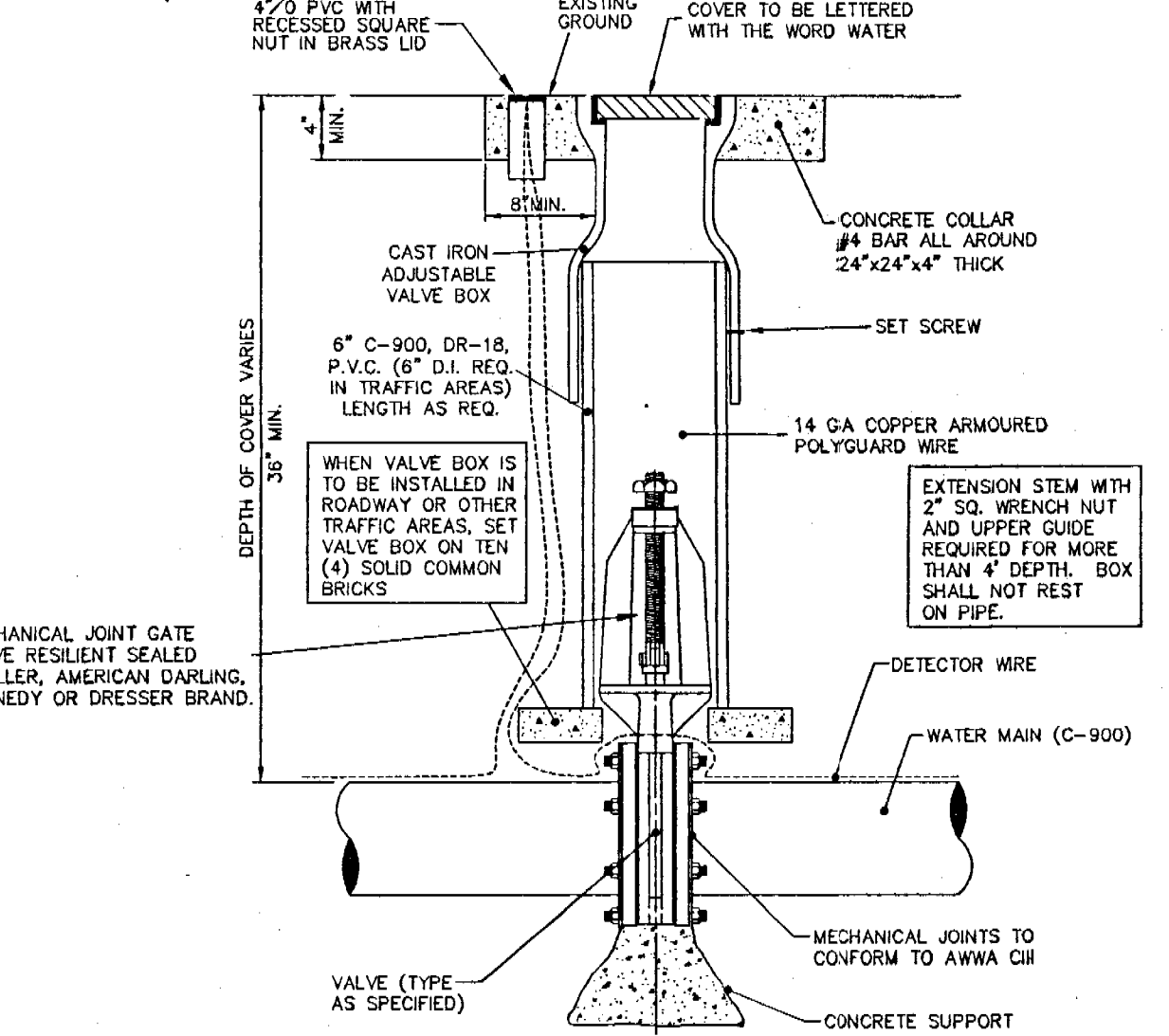
FIRE HYDRANT WITH VALVE

(STANDARD FIRE HYDRANT ASSEMBLY)



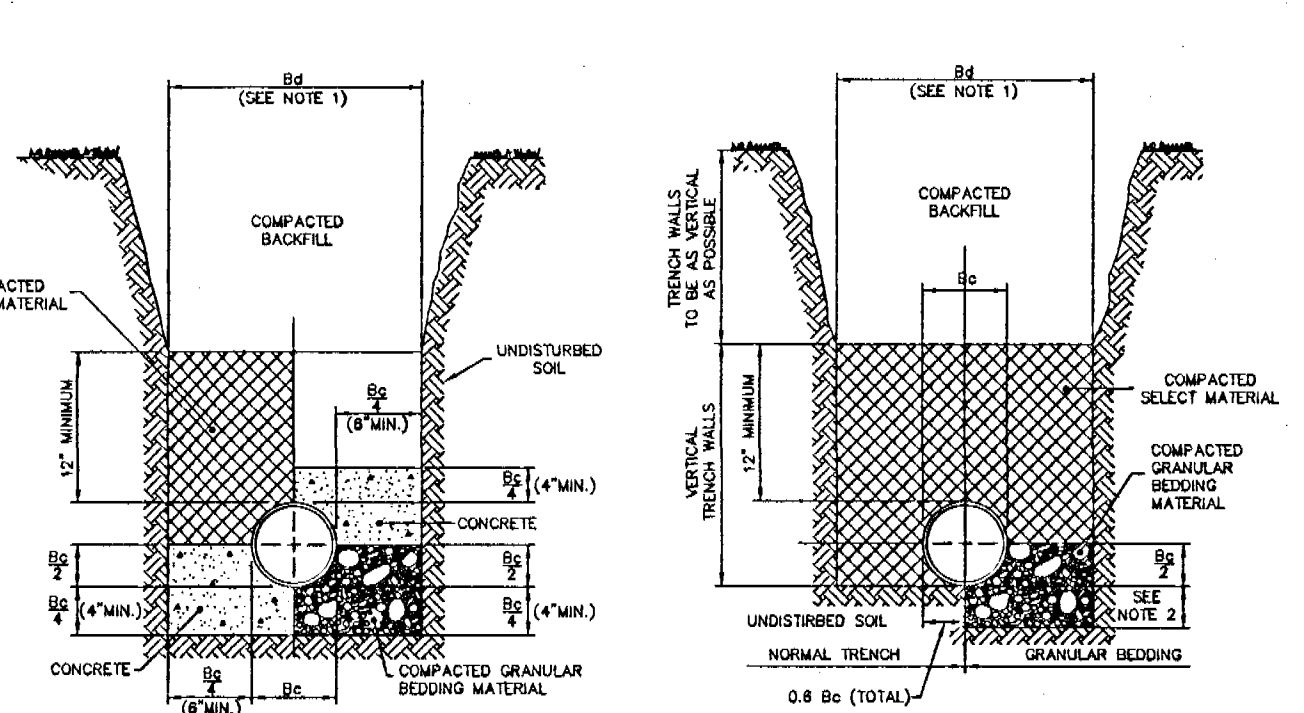
TYPICAL INTERSECTION DETAIL

1" = 20'



GATE VALVE & BOX

NOT TO SCALE



CLASS "A" BEDDING SPECIAL CONDITIONS

CLASS "B" BEDDING NORMAL CONDITIONS

NOTES: FOR BEDDING AND TRENCHING

- Dimension B₂ = Pipe O.D.
Dimension B₃ = Trench Width at Top of Pipe
Maximum B₄ = B₂ + 30"
Minimum B₄ = Maximum Dimension of Bell + 8" (Unsheeted Trench)
- Depth for removal for unsuitable material shall be as required to reach suitable foundation. For rock or other non-cushioning material, depth shall be 6" below bottom of utility.

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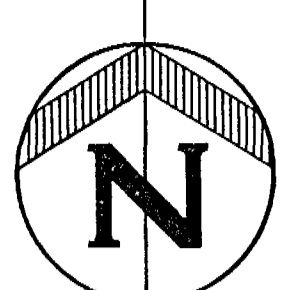
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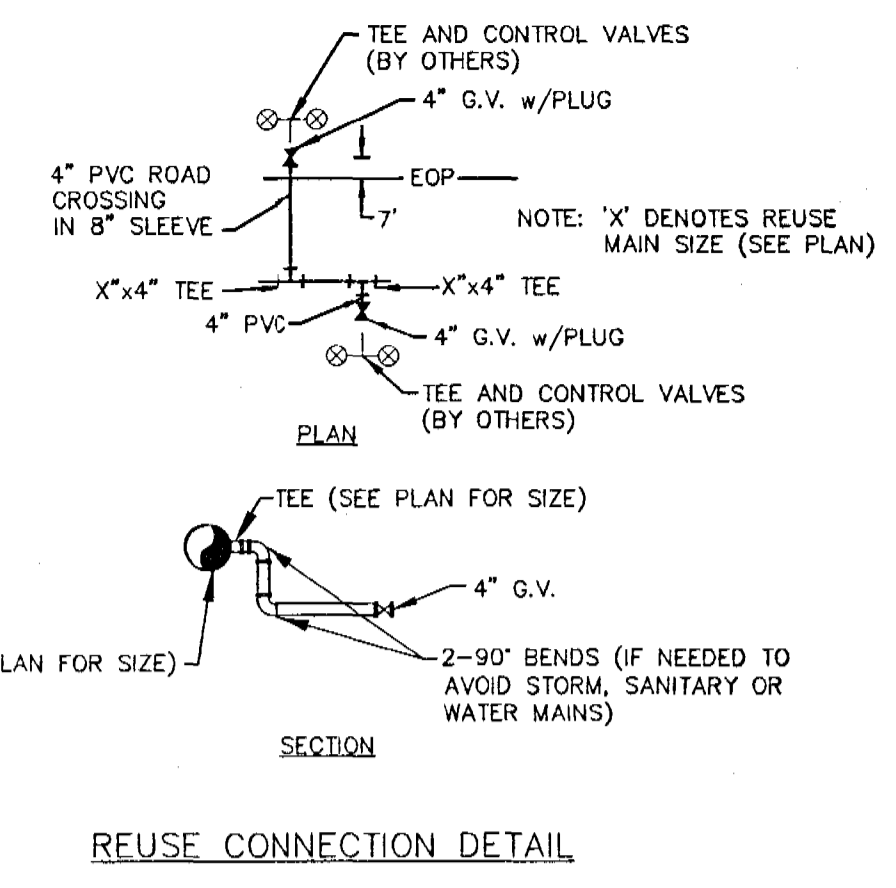
FARNEY BARLEY
AND ASSOCIATES, INC.

350 North Sinclair Avenue O Tequesta, Florida 32778 O (352) 343-8481

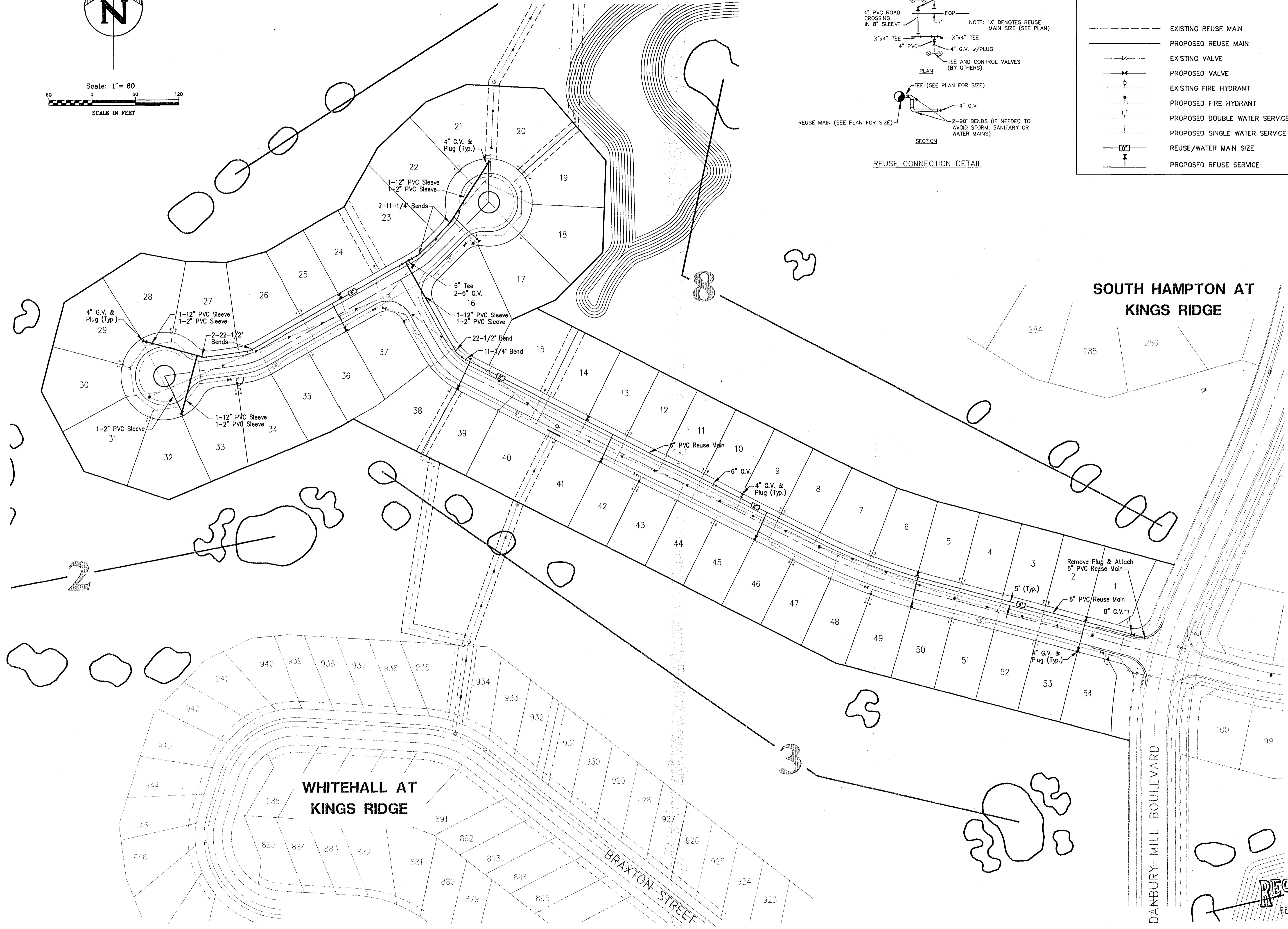
LANCASTER AT
KINGS RIDGE
WATER DISTRIBUTION DETAILS



Scale: 1" = 80'
SCALE IN FEET



LEGEND	
	EXISTING REUSE MAIN
	PROPOSED REUSE MAIN
	EXISTING VALVE
	PROPOSED VALVE
	EXISTING FIRE HYDRANT
	PROPOSED FIRE HYDRANT
	PROPOSED DOUBLE WATER SERVICE
	PROPOSED SINGLE WATER SERVICE
	REUSE/WATER MAIN SIZE
	PROPOSED REUSE SERVICE



SOUTH HAMPTON AT KINGS RIDGE

WHITEHALL AT KINGS RIDGE

BRAXTON STREET

DANBURY MILL BOULEVARD

DATE	REVISION

ENGINEERS
SURVEYORS
PLANNERS

**FARNER
BARLEY
AND ASSOCIATES, INC.**

350 North Sinclair Avenue O Tavares, Florida 32778 O (352) 343-8481

**LANCASTER AT KINGS RIDGE
MASTER REUSE
DISTRIBUTION PLAN**

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