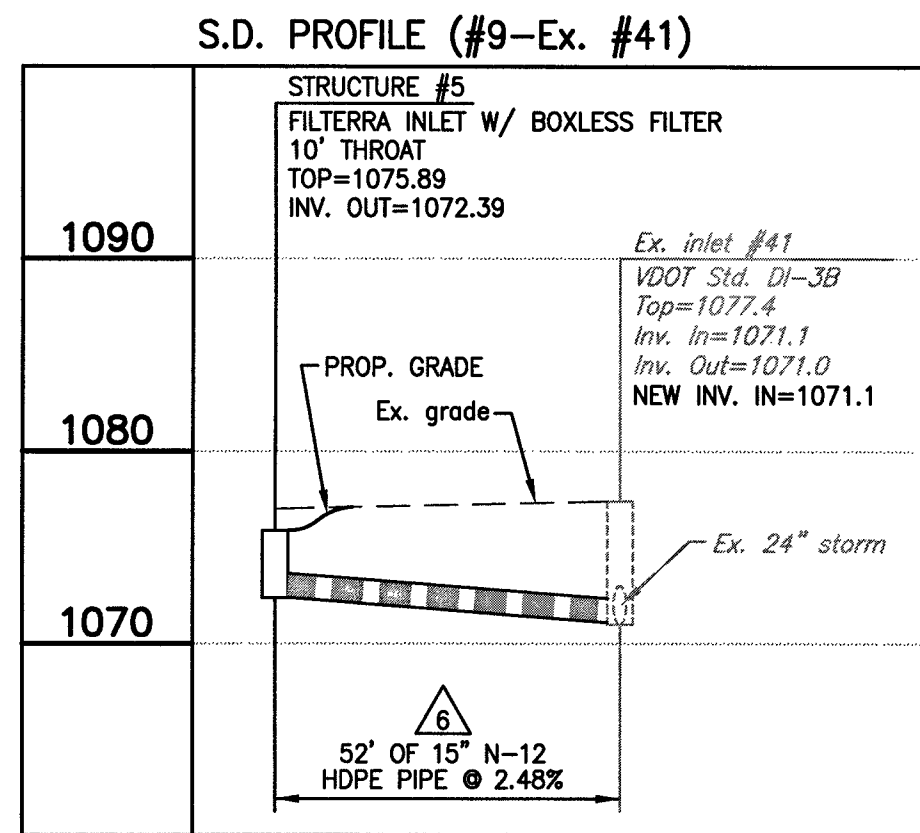
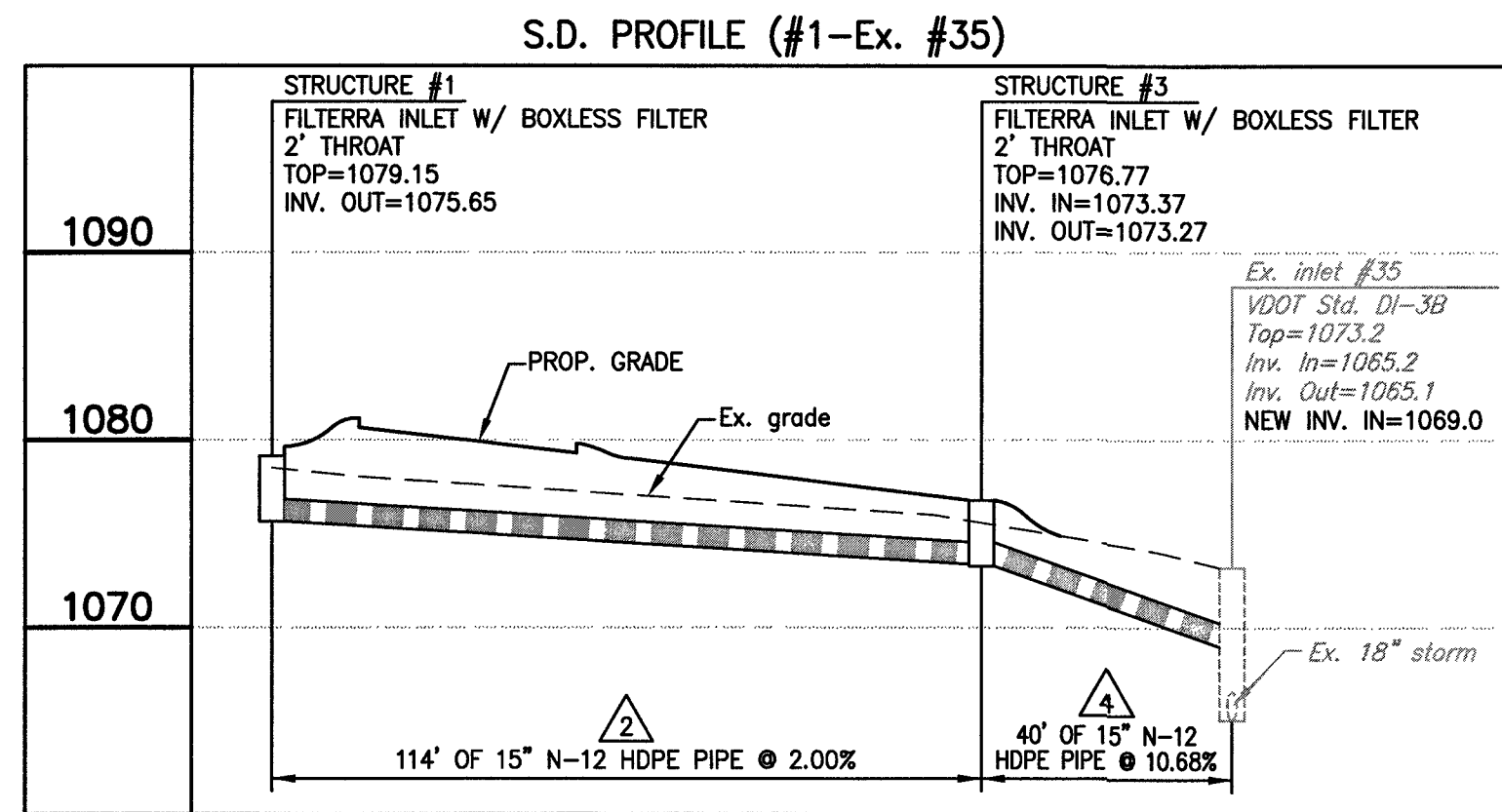




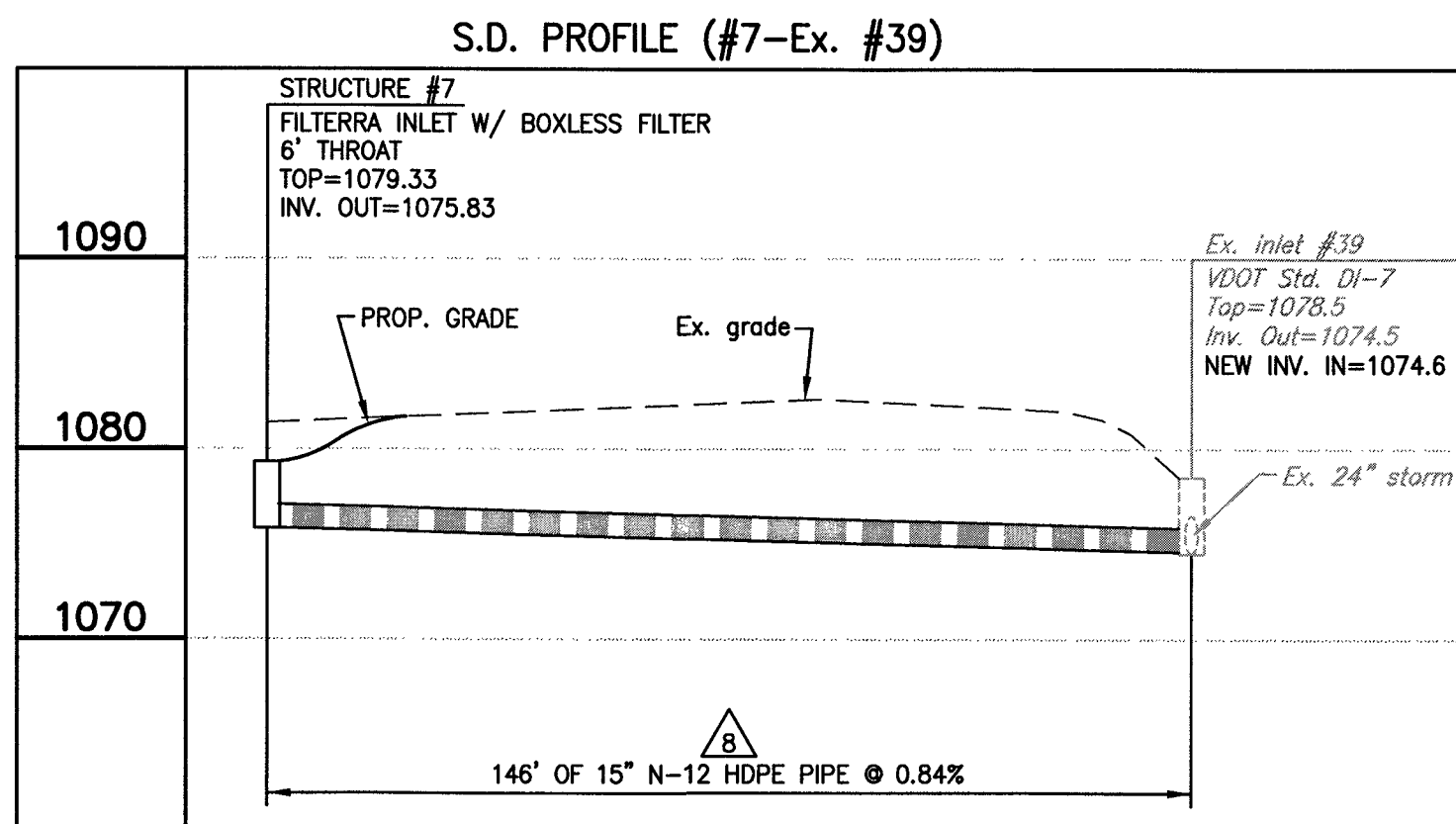
*NOTE: G.C. SHALL PROVIDE ALL TRENCH BOXES FOR PIPE CONSTRUCTION AND COMPLY WITH ALL OSHA STANDARDS AND PROCEDURES.
 *NOTE: MIN. 1' COVER TO BE MAINTAINED BETWEEN BOTTOM OF PVMT SECTION AND TOP OF PIPE (TYP)

PROFILE SCALES
 HORIZ. SCALE: 1"=30'
 VERT. SCALE: 1"=10'



*NOTE: G.C. SHALL PROVIDE ALL TRENCH BOXES FOR PIPE CONSTRUCTION AND COMPLY WITH ALL OSHA STANDARDS AND PROCEDURES.
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PROFILE SCALES
 HORIZ. SCALE: 1"=30'
 VERT. SCALE: 1"=10'

EXISTING STORM STRUCTURE SCHEDULE:

- VDOT STD. MH-2
TOP = 1072.0
INV. IN = 1063.0 (#38)
INV. IN = 1060.7 (#25)
INV. OUT = 1060.6
- 23 LF OF 24" HDPE(N-12) PIPE @ 1.30%
- VORTSENTRY VS-70
TOP = 1071.0
INV. IN = 1060.3
INV. OUT = 1060.3
- 111.7 LF OF 24" HDPE(N-12) PIPE @ 1.16%
- 24" HDPE END SECTION
INV. OUT = 1059.00
- VDOT STD. DI-3B
THROAT=14'
TOP = 1073.51
INV. OUT = 1068.0
- 27 LF OF 15" HDPE(N-12) PIPE @ 8.52%
- VDOT STD. DI-3BB
THROAT=10'
TOP = 1073.81
INV. IN = 1065.7
INV. OUT = 1065.6
- 36 LF OF 15" HDPE(N-12) PIPE @ 1.11%
- VDOT STD. DI-3BB
THROAT=18'
TOP = 1073.20
INV. IN = 1065.2
INV. OUT = 1065.1
- 45 LF OF 18" HDPE(N-12) PIPE @ 2.44%
- VDOT STD. DI-3BB
THROAT=8'
TOP = 1073.20
INV. IN = 1064.0
INV. OUT = 1063.9
- 23 LF OF 18" HDPE(N-12) PIPE @ 3.91%
- VDOT STD. DI-7
TYPE I GRATE
TOP = 1078.5
INV. OUT = 1074.5
- 134 LF OF 24" HDPE(N-12) PIPE @ 1.04%
- VDOT STD. MH-2
5' DIA. MANHOLE
TOP = 1080.5
INV. IN = 1075.73 (18")
INV. IN = 1073.1 (24")
INV. OUT = 1073.0
- 136 LF OF 24" HDPE(N-12) PIPE @ 1.40%
- VDOT STD. DI-3B
THROAT=8'
TOP = 1077.4
INV. IN = 1071.1
INV. OUT = 1071.0
- 130 LF OF 24" HDPE(N-12) PIPE @ 1.69%
- VDOT STD. MH-2
TOP = 1075.7
INV. IN = 1068.8 (24")
INV. IN = 1068.6 (15")
SL-1 = 1068.0
INV. OUT = 1058.7
**EXTEND EXISTING 15" RCP APPROXIMATELY 8 LF PRIOR TO SETTING MH
- 101 LF OF HDPE(N-12) PIPE @ 4.65%
- 24" VDOT STD. ES-1
INV. = 1054.0
- VDOT STD. DI-3C
THROAT = 8'
TOP = 1076.7
INV. IN = 1072.4
INV. OUT = 1072.3
- 241 LF OF 15" HDPE(N-12) PIPE @ 2.41%
- 15" HDPE(N-12) END SECTION
INV. = 1078.2

PROPOSED STORM STRUCTURE SCHEDULE:

- 1. FILTER INLET WITH BOXLESS FILTER
2' THROAT
TOP=1079.15
INV. IN=1073.37
INV. OUT=1075.65
PROVIDE 16 S.F. OF FILTER MEDIA
- 2. 114 LF 15" N-12 HDPE PIPE @ 2.00%
- 3. FILTER INLET WITH BOXLESS FILTER
2' THROAT
TOP=1076.77
INV. IN=1073.37
INV. OUT=1073.27
PROVIDE 16 S.F. OF FILTER MEDIA
- 4. 40 LF 15" N-12 HDPE PIPE @ 10.68%
INV. OUT=1069.0
- 5. FILTER INLET WITH BOXLESS FILTER
10' THROAT
TOP=1075.89
INV. OUT=1072.39
PROVIDE 105 S.F. OF FILTER MEDIA
- 6. 52 LF 15" N-12 HDPE PIPE @ 2.48%
INV. OUT=1071.1
- 7. FILTER INLET WITH BOXLESS FILTER
6' THROAT
TOP=1079.33
INV. OUT=1075.83
PROVIDE 75 S.F. OF FILTER MEDIA
- 8. 146 LF OF 15" N-12 HDPE PIPE @ 0.84%
INV. OUT=1074.6

NOTES:
 1. VDOT STD IS-1 INLET SHAPING SHALL BE PROVIDED IN ALL PROPOSED STRUCTURES AND IN ALL EXISTING STRUCTURES IF NOT ALREADY IN PLACE.
 2. NON-SHRINK GROUT SHALL BE USED FOR ALL STORM SEWER PIPE CONNECTIONS.
 3. G.C. IS RESPONSIBLE FOR CONNECTING TO ALL DOWNSPOUTS PER ARCHITECTURAL PLANS AND ENSURING POSITIVE DRAINAGE.

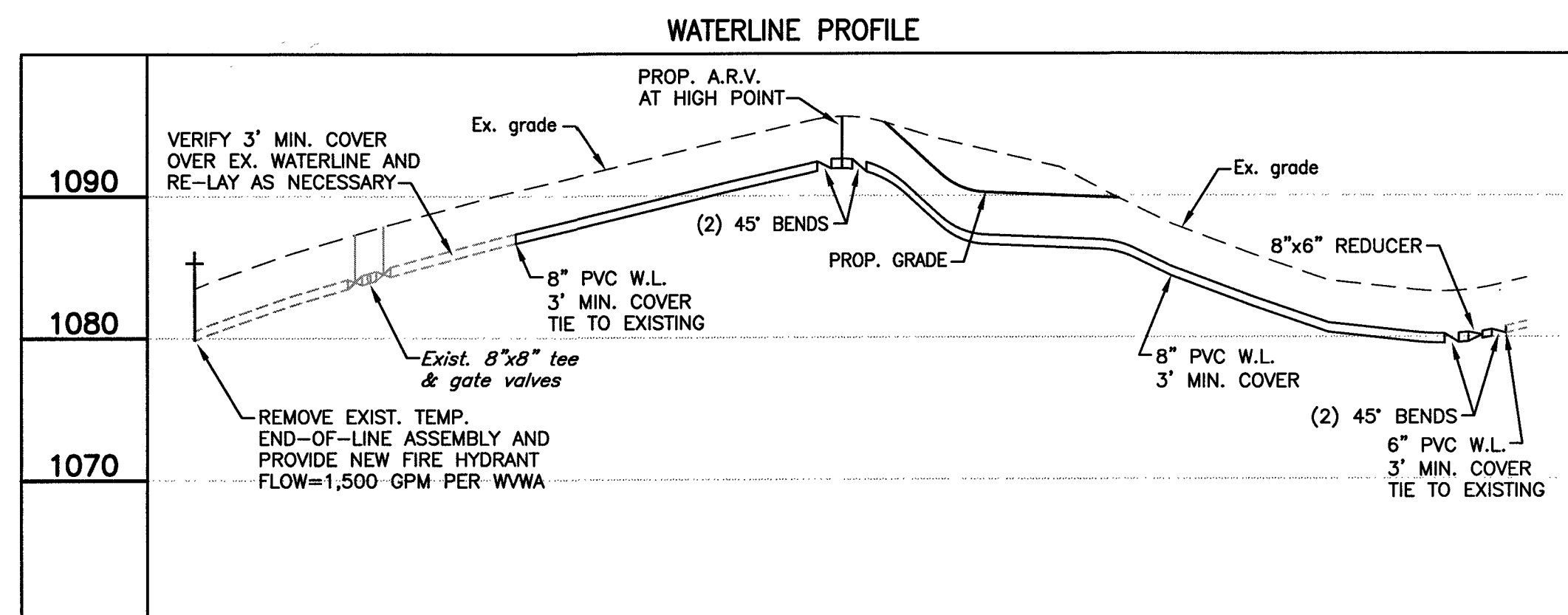
SANITARY SEWER PIPE SCHEDULE:

FROM	INV	TO	INV	PIPE	SLOPE
BLDG	1076.5	D	1075.0	25"-6" SDR-35 PVC @ 6.00%	
D	1075.0	C	1073.8	79"-6" SDR-21 PVC @ 1.52%	
C	1073.8	B	1072.6	79"-6" SDR-21 PVC @ 1.52%	
B	1072.6	A	1071.8	51"-6" SDR-35 PVC @ 1.57%	
A	1071.8	ex	1071.0	50"-6" SDR-35 PVC @ 1.60%	

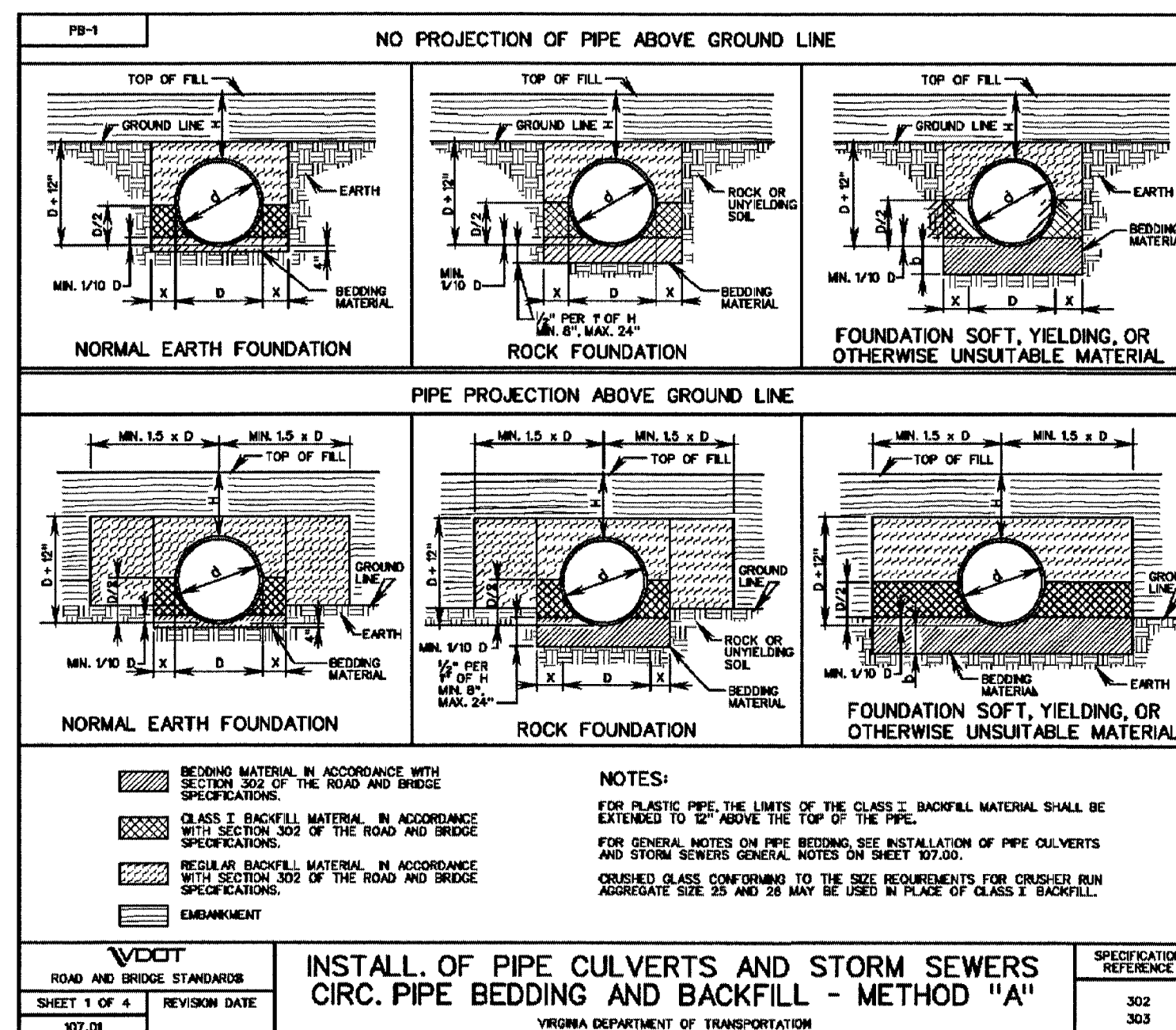
SANITARY SEWER STRUCTURE SCHEDULE:

- Ex. s.s. cleanout
Top=Approx. 1080.0
Inv.=1071.0 (Plan Elevation)
- A. S.S. CLEANOUT (TRAFFIC-BEARING)
TOP=1082.0
INV.=1071.8
- B. S.S. CLEANOUT (TRAFFIC-BEARING)
TOP=1080.5
INV.=1072.6
- C. S.S. CLEANOUT
TOP=1079.75
INV.=1073.8
- D. S.S. CLEANOUT
TOP=1079.6
INV.=1075.0

NOTES:
 1. ALL SANITARY SEWER PIPE SHALL BE SDR-35 PVC PIPE UNLESS OTHERWISE SPECIFIED.

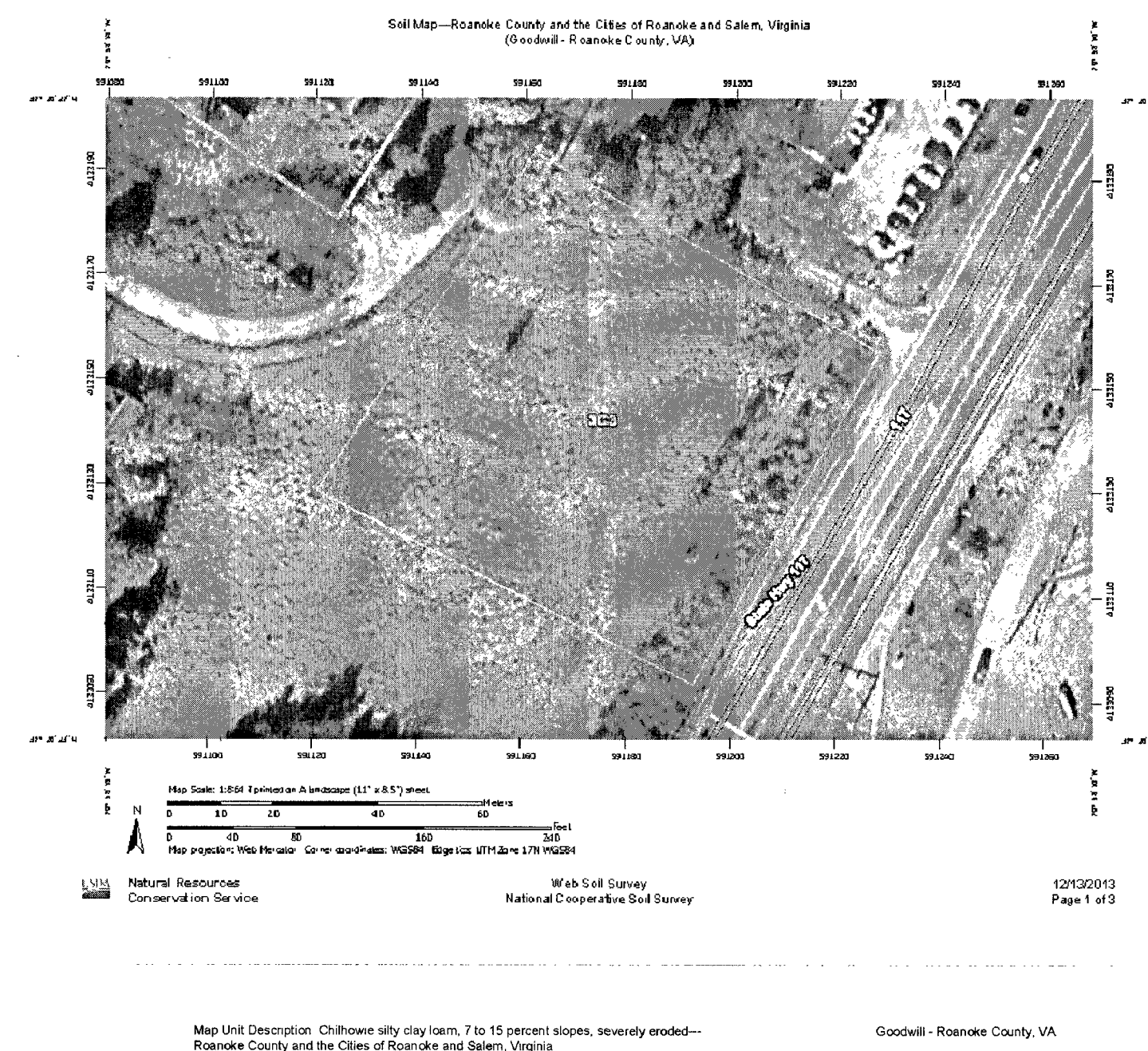


PROFILE SCALES
 HORIZ. SCALE: 1"=30'
 VERT. SCALE: 1"=10'



NOTES:
 FOR PLASTIC PIPE THE LIMITS OF THE CLASS II BACKFILL MATERIAL SHALL BE EXTENDED 10' TO 15' ABOVE THE TOP OF THE PIPE.
 FOR GENERAL NOTES ON PIPE BEDDING, SEE INSTALLATION OF PIPE CULVERTS AND STORM SEWERS GENERAL NOTES ON SHEET 107.00.
 CRUSHED CLASS II CONFORMING TO THE SIZE REQUIREMENTS FOR CRUSHER RUN AGGREGATE SIZE 25 AND 26 MAY BE USED IN PLACE OF CLASS II BACKFILL.

SOIL DATA:



Roanoke County and the Cities of Roanoke and Salem, Virginia

3C3—Chilhowie silty clay loam, 7 to 15 percent slopes, severely eroded

Map Unit Setting
 Mean annual precipitation: 30 to 45 inches
 Mean annual air temperature: 60 to 67 degrees F
 Frost-free period: 171 to 207 days

Map Unit Composition
 Chilhowie and similar soils: 75 percent

Description of Chilhowie

Setting
 Landform: Hills
 Landform position (two-dimensional): Backslope, shoulder, summit
 Landform position (three-dimensional): Interfluvial, nose slope, side slope
 Drainage class: Convex
 Parent material: Residual weathered from limestone and calcareous shale

Properties and qualities
 Slope: 7 to 15 percent
 Depth to restrictive feature: 20 to 39 inches to lithic bedrock
 Drainage class: Well drained
 Capacity of the most limiting layer to transmit water (Ksat): Very low to moderately high (0.00 to 0.20 in/hr)
 Depth to water table: More than 80 inches
 Frequency of flooding: None
 Frequency of ponding: None
 Available water capacity: Low (about 3.8 inches)

Interpretive groups
 Farmland classification: Not prime farmland
 Land capability (nonirrigated): 4e
 Hydrologic Soil Group: C

Typical profile
 0 to 5 inches: Silty clay loam
 5 to 24 inches: Clay
 24 to 34 inches: Silty clay