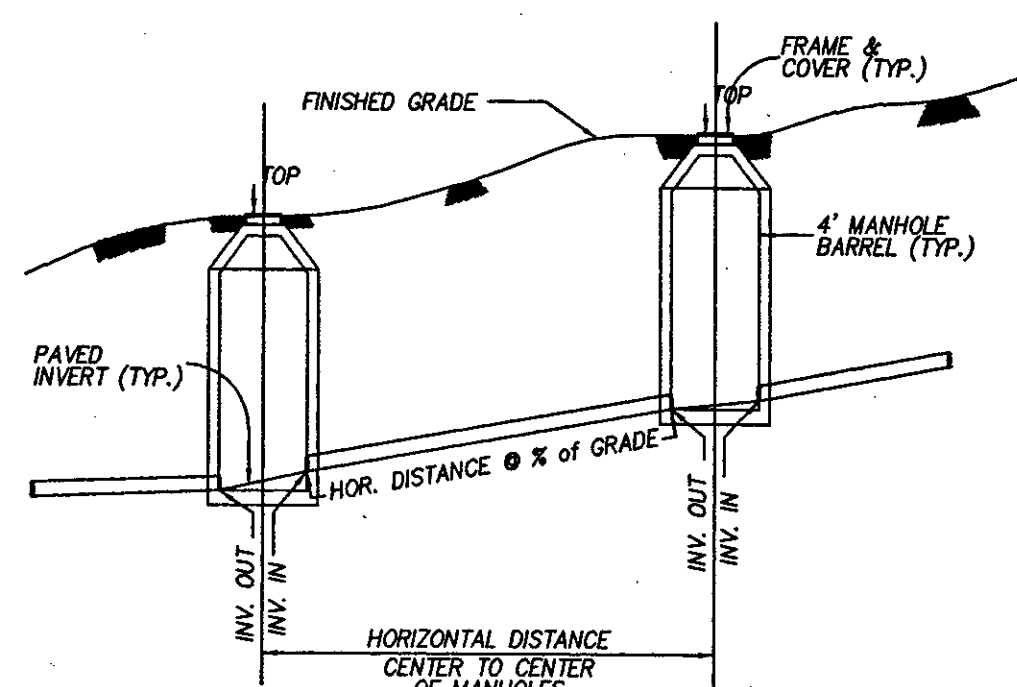
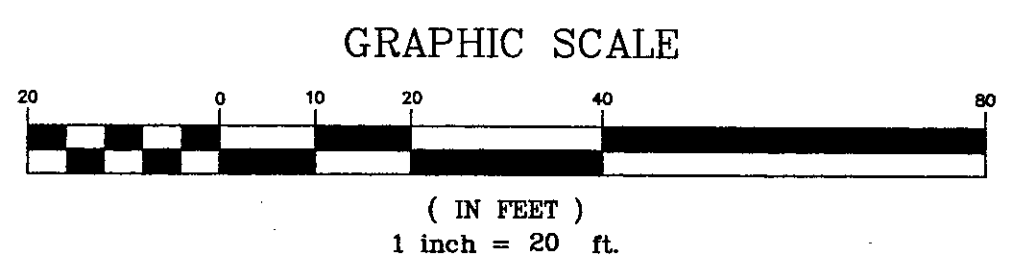




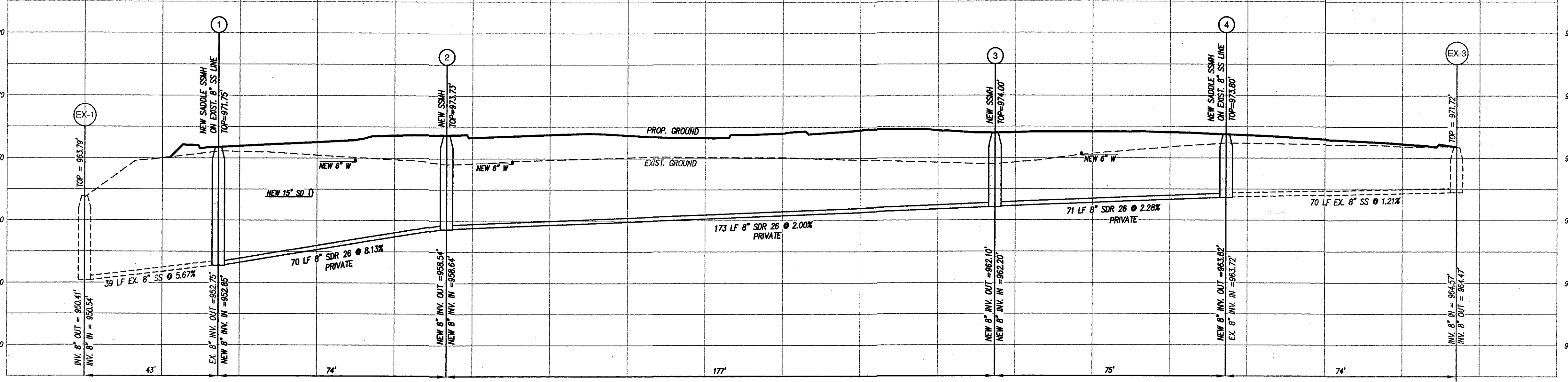
**SANITARY SEWER
HORIZONTAL AND SLOPE DISTANCE DETAIL**

NO SCALE



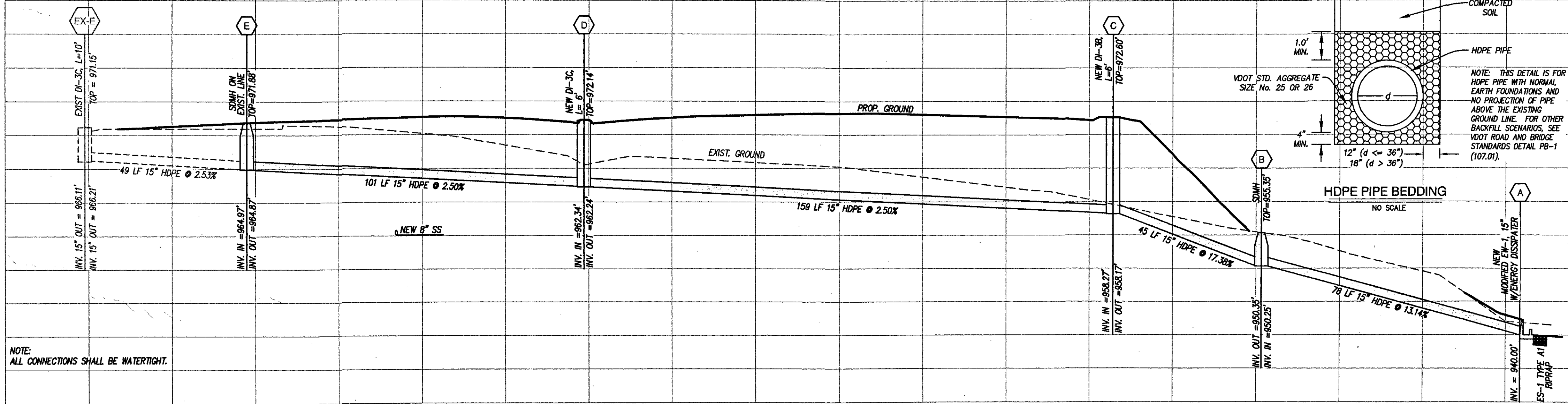
SANITARY SEWER PROFILE

1" = 20' HOR 10' VERT.



STORM DRAIN PROFILE

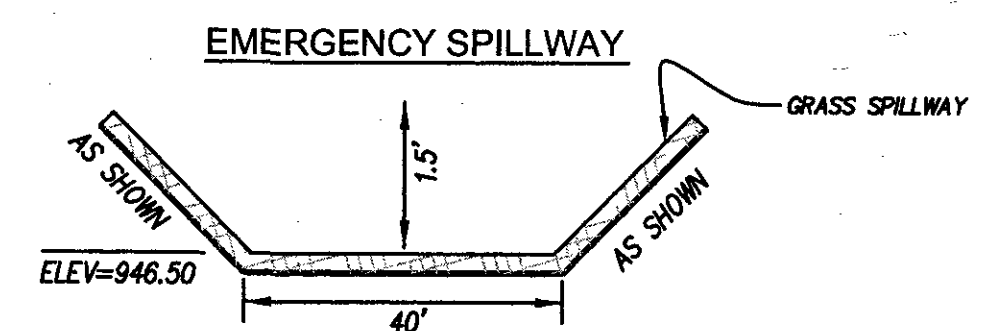
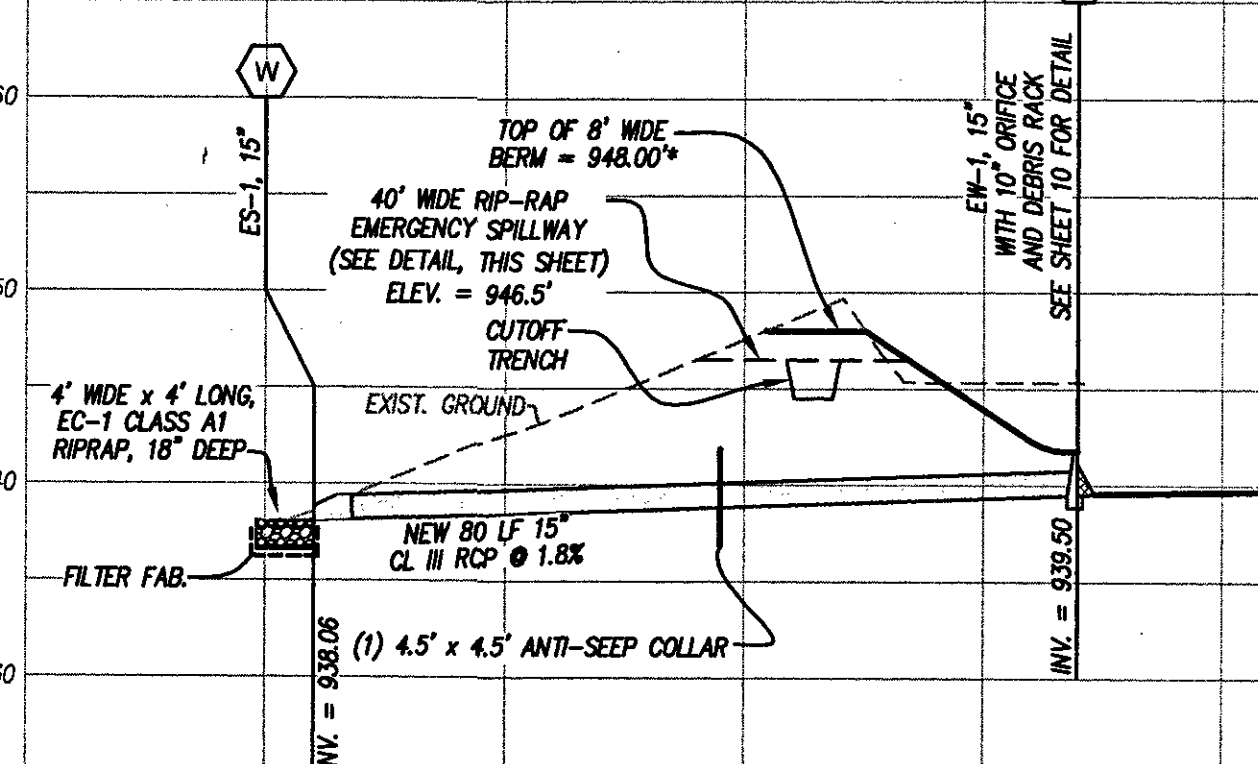
1" = 20' HOR 10' VERT.



NOTE:
ALL CONNECTIONS SHALL BE WATERTIGHT.

SWM POND 2 PROFILE

1" = 20' HOR 10' VERT.

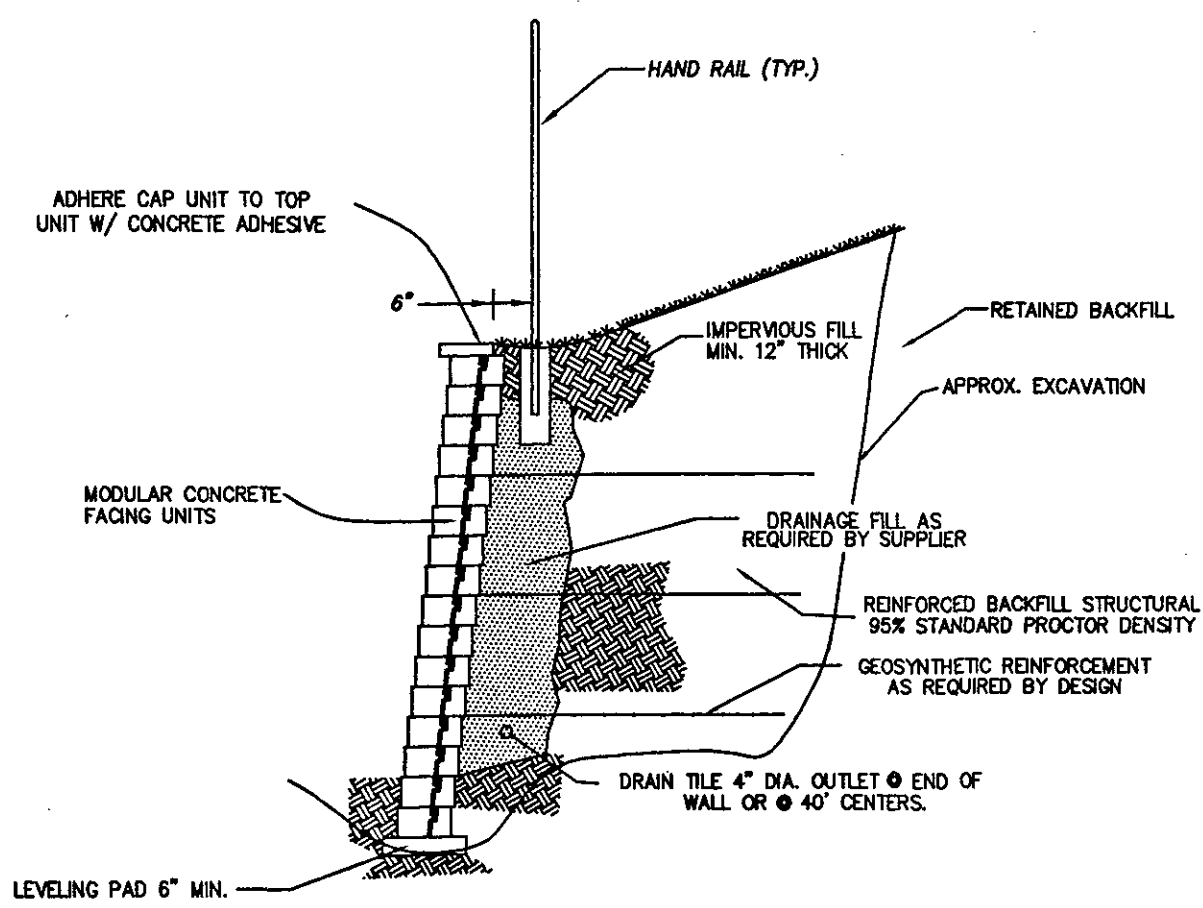
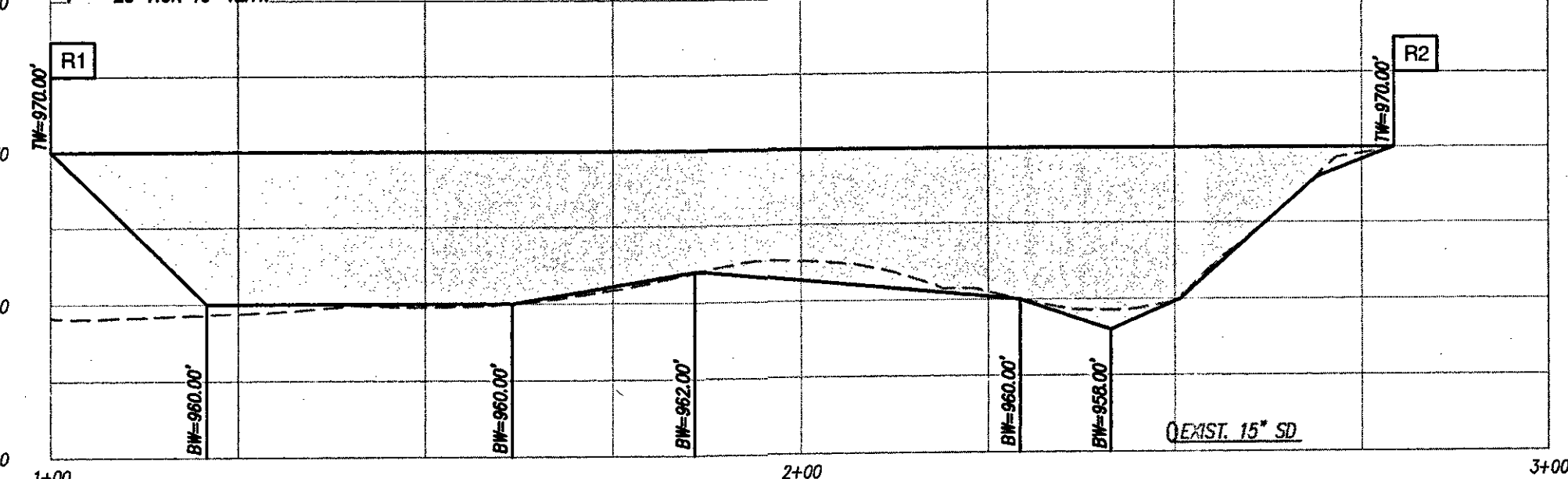


RETAINING WALL NOTES:

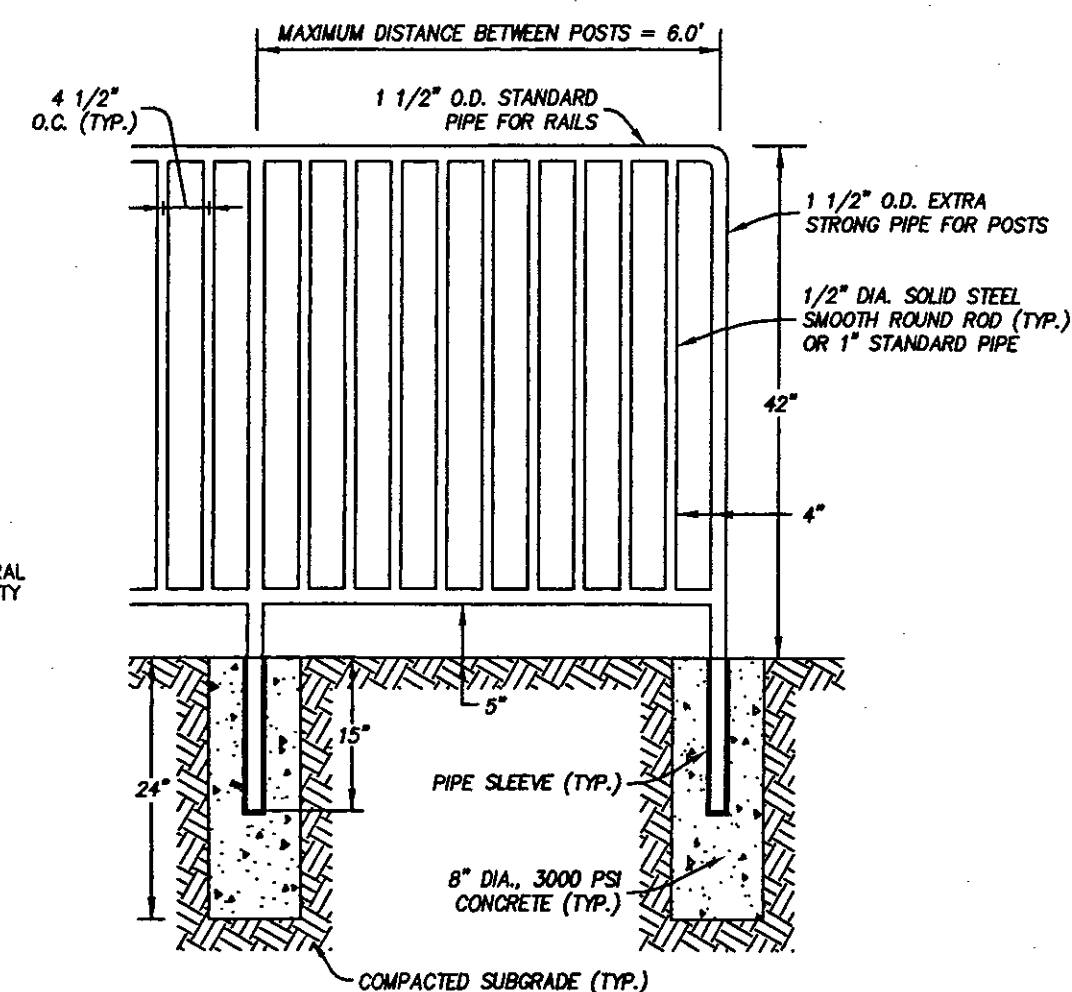
1. WALL DETAILS AND PROFILES SHOWN IN THESE PLANS ARE FOR SCHEMATIC DETAIL ONLY.
2. WALL DESIGNER SHALL PROVIDE TO THE OWNER DESIGN DRAWINGS FOR THE RETAINING WALL. RETAINING WALL DESIGN DRAWINGS SHALL INCLUDE TYPE AND STYLE OF WALLS AND INCLUDE HANDRAIL/GUARDRAIL REQUIREMENTS AND DESIGN. DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF VIRGINIA. WALL INFORMATION SHOWN IN THESE PLANS ARE FOR SCHEMATIC DETAIL ONLY. LUMSDEN ASSOCIATES ASSUMES NO RESPONSIBILITY OR LIABILITY RELATING TO FAILURES RESULTING FROM SAME.
3. A QUALIFIED GEOTECHNICAL ENGINEER SHOULD MONITOR THE INSTALLATION OF THE RETAINING WALL AND THE CONSTRUCTION OF THE CUT AND FILL SLOPES TO INSURE ADEQUATE SOIL COMPACTION, TESTING, STABILIZATION, SLOPE STABILITY, AND STRUCTURAL INTEGRITY, ETC. GEOTECHNICAL ENGINEER SHALL BE LICENSED AS A PROFESSIONAL ENGINEER IN THE STATE OF VIRGINIA.

RETAINING WALL PROFILE

1" = 20' HOR 10' VERT.



NOTE:
WALL DESIGNER SHALL PROVIDE TO THE OWNER DESIGN DRAWINGS FOR THE RETAINING WALLS. SUCH DRAWINGS TO INCLUDE TYPE AND STYLE. DRAWINGS SHALL BE SIGNED AND SEALED BY A REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF VIRGINIA. WALL DETAILS AND PROFILES SHOWN IN THESE PLANS ARE FOR SCHEMATIC DETAIL ONLY.



NOTE: HAND RAIL SHALL BE PRIMED AND RECEIVE TWO COATS OF ENAMEL PAINT (COLOR: GRAY).

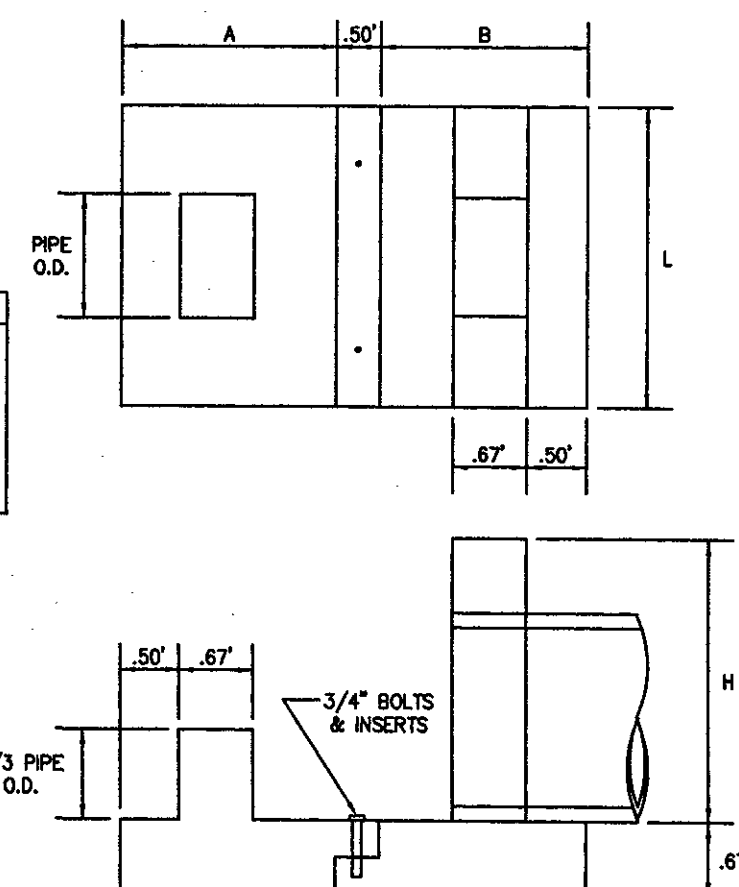
RETAINING WALL WITH HAND RAIL

NO SCALE

PIPE I.D.	H	L	A	B
12"	2.00'	4.00'	1.83'	1.83'
15"	2.25'	5.00'	1.83'	1.83'
18"	2.50'	6.00'	1.83'	1.83'
24"	3.17'	8.00'	1.83'	1.83'
30"	3.75'	10.00'	1.83'	1.83'
36"	4.50'	12.00'	1.83'	1.83'
42"	4.79'	14.00'	3.00'	2.83'
48"	5.33'	16.00'	3.00'	2.83'

NOTES:

1. CONCRETE 4,000 P.S.I.
2. REINFORCING #4 @ 6" C.C. E.W. DOUBLE ROW THROUGHOUT.
3. FOUR (4) BOLTS AND INSERTS ARE REQUIRED FOR 42" AND 48" EW-1.
4. PLACE CLASS II RIP RAP ALONG THE PERIMETER OF THE STRUCTURE TO PREVENT SCOUR AND EROSION.



EW-1 MODIFIED WITH ENERGY DISSIPATER

NO SCALE

**PROFILES AND
STORMWATER DETAILS**

**SITE DEVELOPMENT PLAN
FOR
WESTLAKE ASSISTED LIVING
BUILDING ADDITION
PREPARED FOR
R & P SML FACILITY LLC
SITUATED ALONG CAREFREE COURT
FRANKLIN COUNTY, VIRGINIA**

NO.	DATE	DESCRIPTION
1		
2		
3		
4		
5		

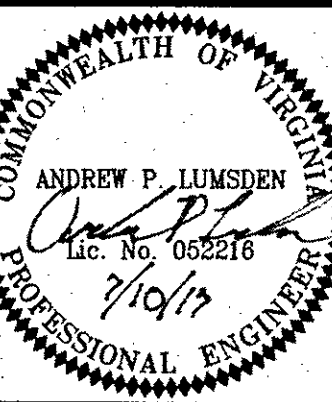
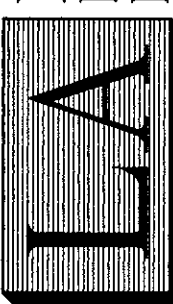
DATE: July 10, 2017

SCALE: AS SHOWN

COMMISSION NO: 16-178

SHEET 6 OF 10

LUMSDEN ASSOCIATES, P.C.
ENGINEERS-SURVEYORS-PLANNERS
ROANOKE, VIRGINIA



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