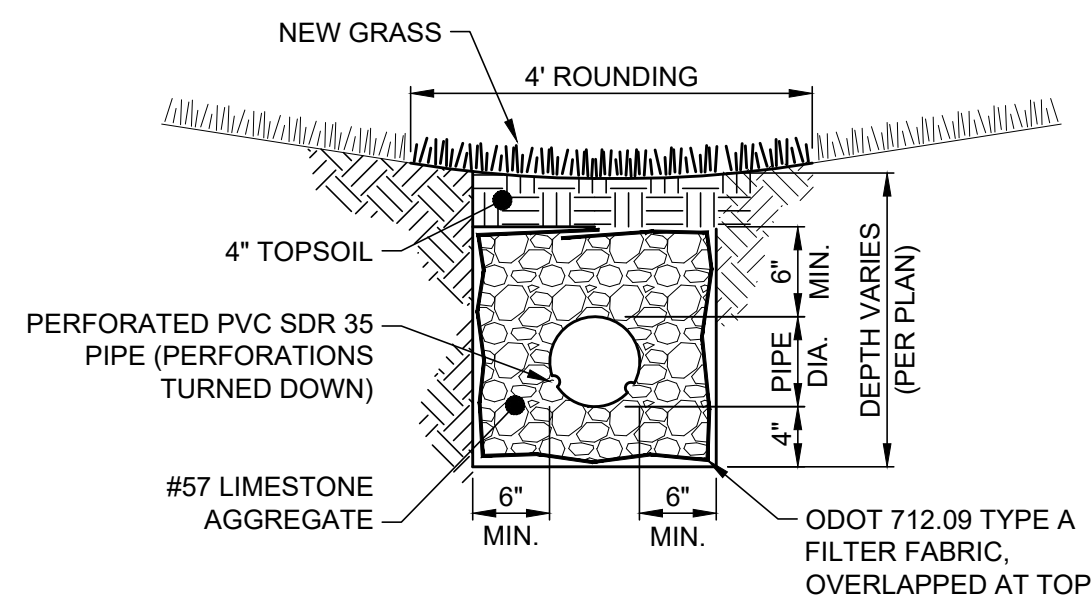


- NOTES:**
- GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
 - FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
 - DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS.
 - DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP & PVC SEWER.
 - ADAPTERS CAN BE MOUNTED ON ANY ANGLE 0° TO 360° TO DETERMINE MINIMUM ANGLE BETWEEN ADAPTERS.

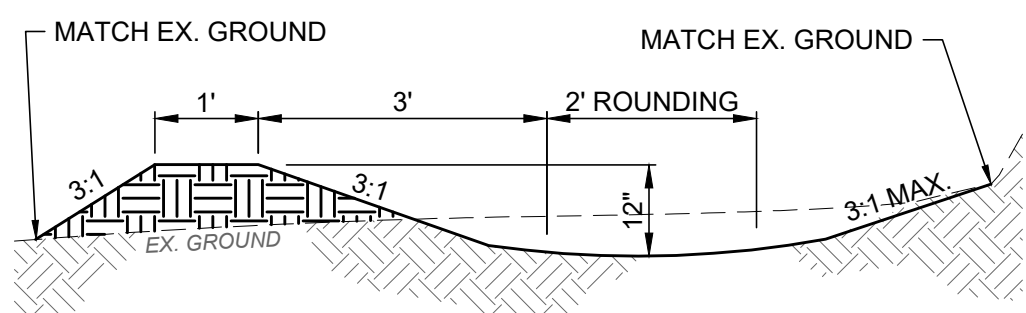
SEE STORM SEWER PROFILES & PROVIDE A 6" SUMP FROM THE LOWEST INVERT SHOWN

THE BACKFILL MATERIAL SHALL BE CRUSHED STONE OR OTHER GRANULAR MATERIAL MEETING THE REQUIREMENTS OF CLASS I, CLASS II, OR CLASS III MATERIAL AS DEFINED IN ASTM D2321. BEDDING & BACKFILL FOR SURFACE DRAINAGE INLETS SHALL BE PLACED & COMPACTED UNIFORMLY IN ACCORDANCE WITH ASTM D2321.

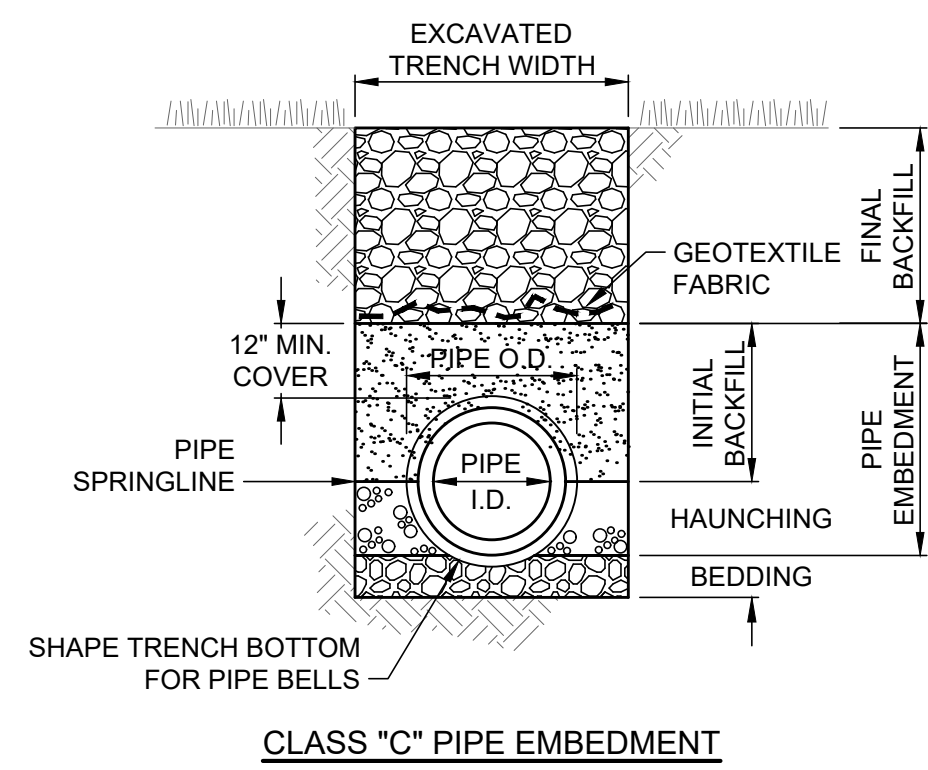
1 NYLOPLAST 8" DRAIN BASIN WITH TYPE H-10 DOME GRATE
NOT TO SCALE



2 INFILTRATION TRENCH DETAIL
NOT TO SCALE



3 SWALE DETAIL
NOT TO SCALE



- EXCAVATED TRENCH WIDTH: MEASURED FROM BOTTOM OF TRENCH TO 12" OVER TOP OF PIPE (WITHIN THE PIPE EMBEDMENT). THE MIN. TRENCH WIDTH SHALL BE 9" AND THE MAX. SHALL BE:
 - O.D.+24" FOR 24" AND SMALLER I.D. PIPE
 - O.D.+30" FOR 27" THRU 72" I.D. PIPE
 - O.D.+48" FOR 84" AND LARGER I.D. PIPE

- FINAL BACKFILL: ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE SHALL BE PREMIUM BACKFILL (ODOT ITEM 304 LIMESTONE). PAVEMENT INCLUDES ROADWAY, SHOULDER AND DRIVEWAY, BUT NOT SIDEWALK. NO SLAG OR SLACKER AGGREGATES ALLOWED. IN ALL OTHER AREAS, THE FINAL BACKFILL SHALL BE SUITABLE ON-SITE MATERIAL.

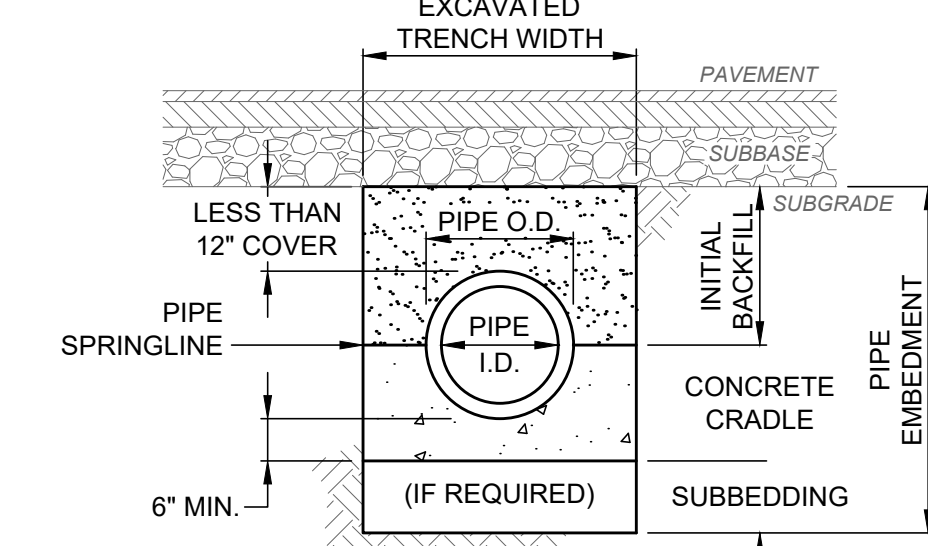
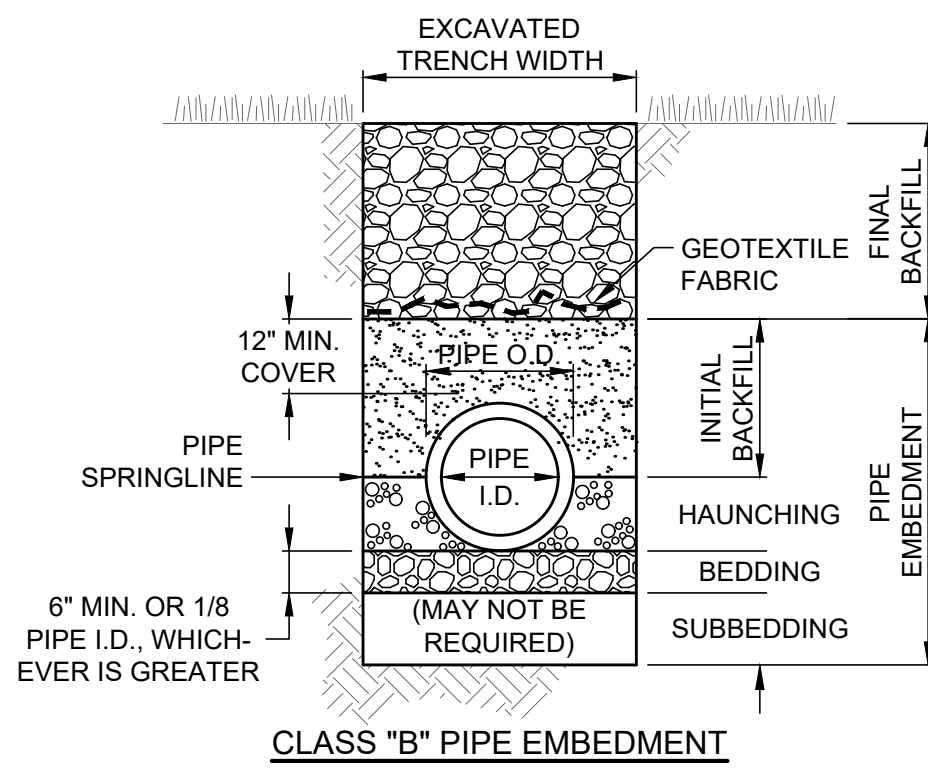
- PIPE EMBEDMENT:
 - CLASS "A": SHALL BE USED FOR ALL PIPES UNDER PAVEMENT OR STRUCTURES WITH LESS THAN 12" OF PIPE COVER TO THE SUBGRADE. THE CONCRETE CRADLE SHALL BE IN ACCORDANCE WITH ODOT ITEM 499, CLASS QC-1. THE INITIAL BACKFILL SHALL BE NO. 57 COURSE INTERLOCKING LIMESTONE AGGREGATE.
 - CLASS "B": SHALL BE USED FOR ALL PIPES UNLESS OTHERWISE NOTED ON THE PLANS. BEDDING AND HAUNCHING SHALL BE NO. 8 OR 57 COURSE INTERLOCKING LIMESTONE AGGREGATE. IN AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE, THE INITIAL BACKFILL SHALL BE NO. 8 OR 57 COURSE INTERLOCKING LIMESTONE AGGREGATE. IN ALL OTHER AREAS, THE INITIAL BACKFILL MAY BE SUITABLE ON-SITE MATERIAL FOR RIGID PIPE, AND SHALL BE NO. 8 OR 57 COURSE INTERLOCKING LIMESTONE AGGREGATE FOR FLEXIBLE PIPE.
 - CLASS "C": SHALL BE USED ONLY FOR DUCTILE IRON WATER MAIN OR FORCE MAIN. THE PIPE EMBEDMENT SHALL BE NO. 8 OR 57 COURSE INTERLOCKING LIMESTONE AGGREGATE IN ALL AREAS UNDER PAVEMENT, STRUCTURES OR WITHIN THE ZONE OF INFLUENCE. IN ALL OTHER AREAS, THE PIPE EMBEDMENT SHALL BE SUITABLE ON-SITE MATERIAL. BEDDING IS NOT REQUIRED. WHERE ROCK OR SHALE IS ENCOUNTERED, BEDDING SHALL BE 6" MIN. OF NO. 8 OR 57 COURSE INTERLOCKING LIMESTONE AGGREGATE OR SAND.

- SUBBEDDING: WHERE AN UNSTABLE TRENCH BOTTOM CONDITION IS ENCOUNTERED, EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH MATERIAL AS DIRECTED BY THE ENGINEER.

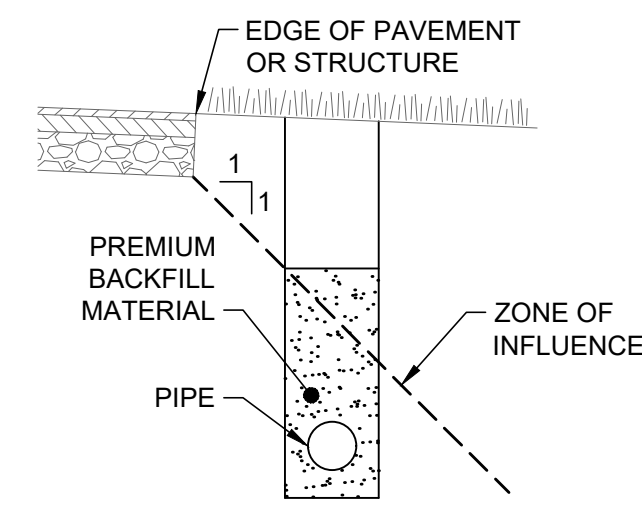
- GEOTEXTILE FABRIC SHALL BE PER ODOT 712.09, TYPE A, AND INSTALLED AFTER ALL INITIAL BACKFILL.

- CLAY TRENCH DAMS SHALL BE REQUIRED AS SHOWN ON PLANS OR AS DIRECTED BY THE ENGINEER.

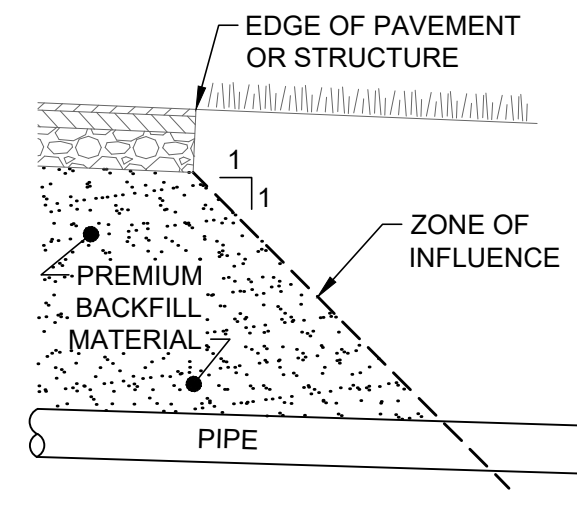
5 TRENCHING, EMBEDMENT AND BACKFILL DETAIL
NOT TO SCALE



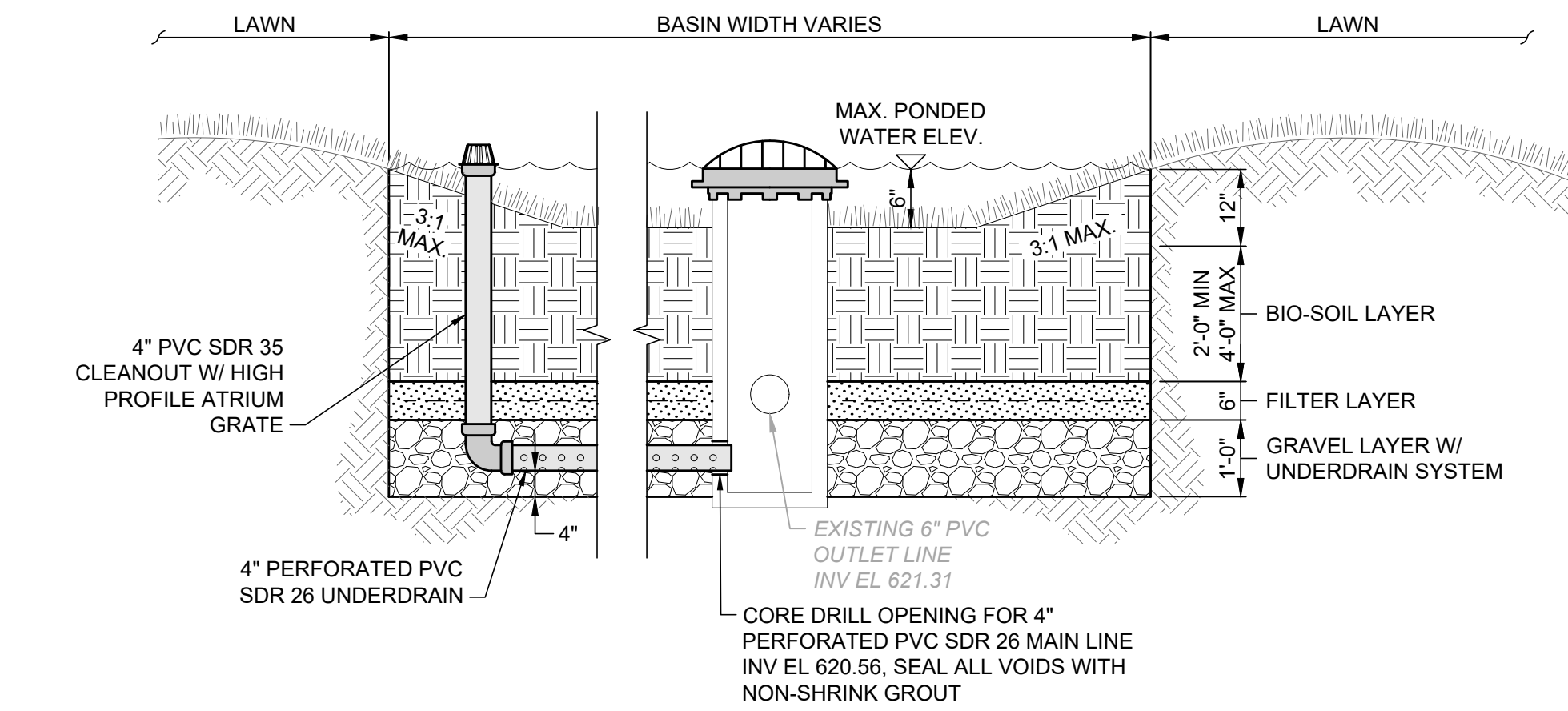
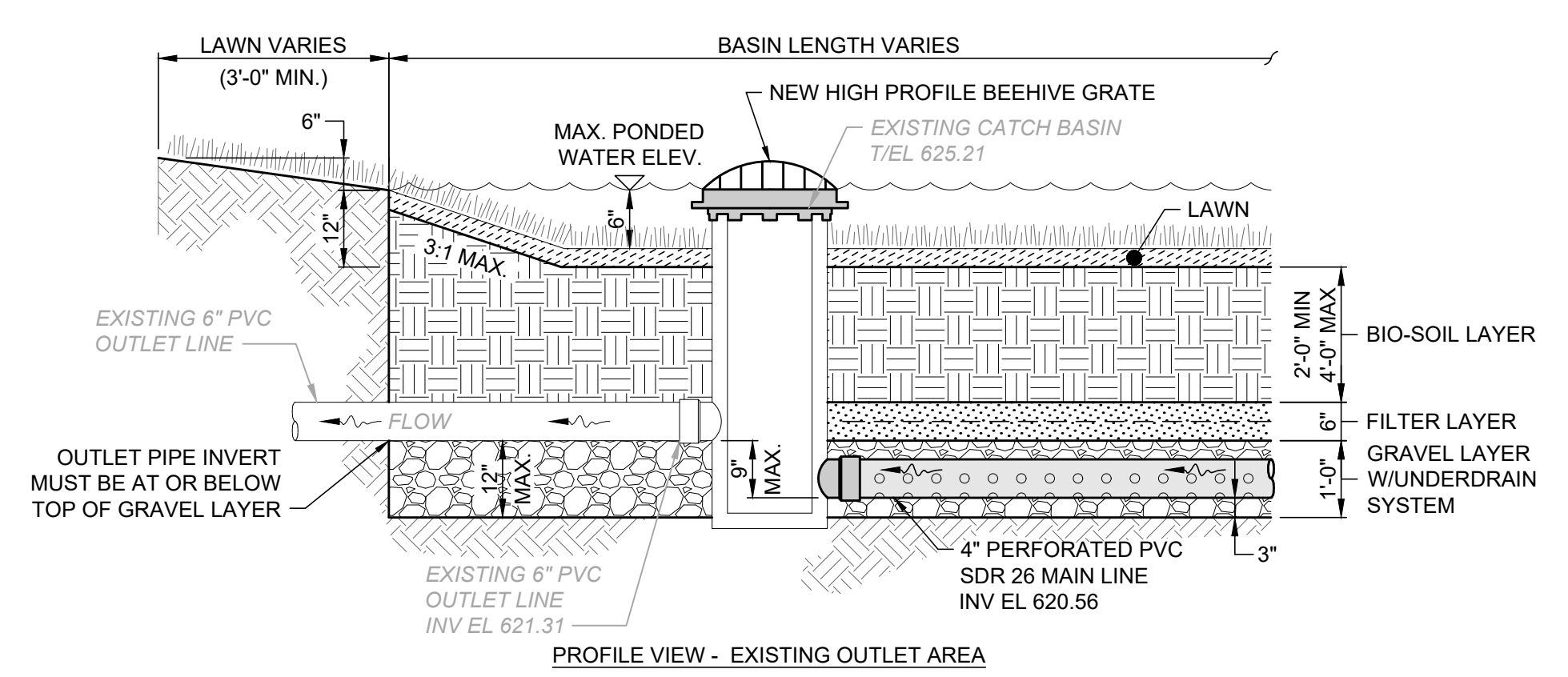
CLASS "A" PIPE EMBEDMENT



PARALLEL ZONE OF INFLUENCE

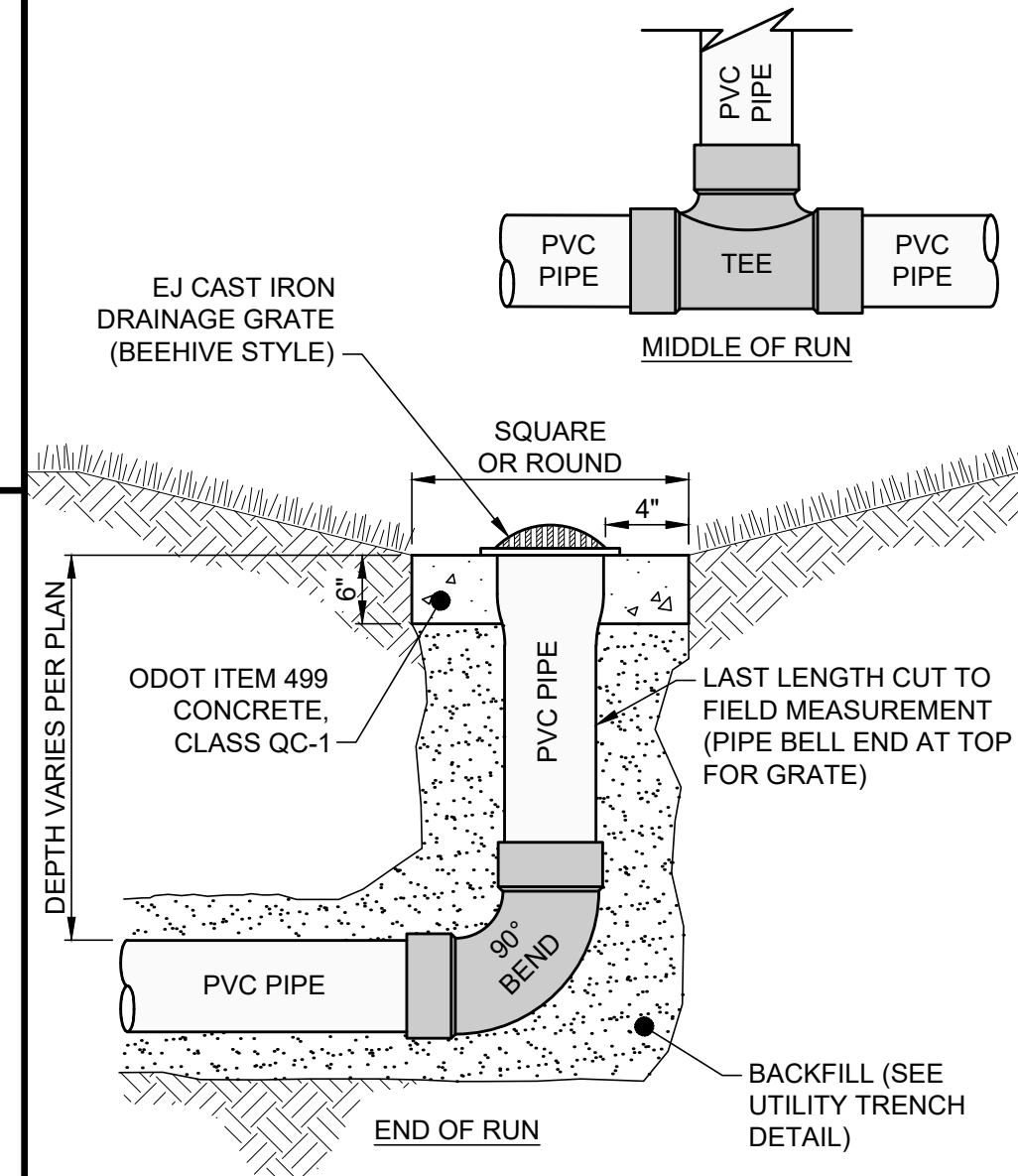


TRANSVERSE ZONE OF INFLUENCE



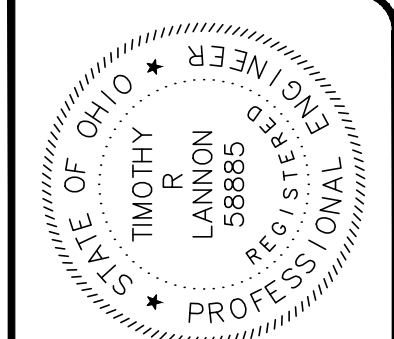
- NOTES:**
- THIS DETAIL IS FOR REFERENCE AND DIMENSION CONTROL ONLY; NOT ALL ITEMS SHOWN MAY APPLY. SEE VARIOUS PLAN SHEETS FOR ACTUAL CONFIGURATION, CONTOURS, INLET BASIN AND PIPE SIZES, QUANTITIES, ELEVATIONS, PIPE SLOPES AND LANDSCAPING PLACEMENT.
 - PAINT ALL PVC APPURTENANCES EXTRUDING FROM THE GROUND SURFACE BLACK (E.G. NYLOPLAST INLET BASIN, RISER PIPE, CLEANOUT CAP, ETC.).
 - ROCK SHALL BE 4" TO 6" DIA. RIVERSTONE COBBLES (50%) WITH 1" TO 3" DIA. RIVERSTONE COBBLES (50%).

6 BIOSWALE DETAIL
NOT TO SCALE



- NOTES:**
- SEE PLANS FOR ACTUAL SIZES.

4 YARD INLET DETAIL
NOT TO SCALE



NO.	REVISION	DATE
A	ADDENDUM #2 - REPLACE SHEET	1/22/2020

BID SET	ISSUED FOR:	12/19/2019	AS NOTED	RDS	RDS	CEC
SCALE:	DESIGNED BY:					
	DRAWN BY:					
	CHECKED BY:					

CITY OF WILLOWICK
MARRY PARK EXERCISE TRAIL IMPROVEMENTS PROJECT
WILLOWICK, OHIO
LAKE COUNTY
CONSTRUCTION DETAILS - 10 SERIES
CONSTRUCTION DETAILS 1

PROJECT NO.	19023301
DISCIPLINE	GENERAL
SHEET NAME	10G-01
SHEET	9A
OF	12