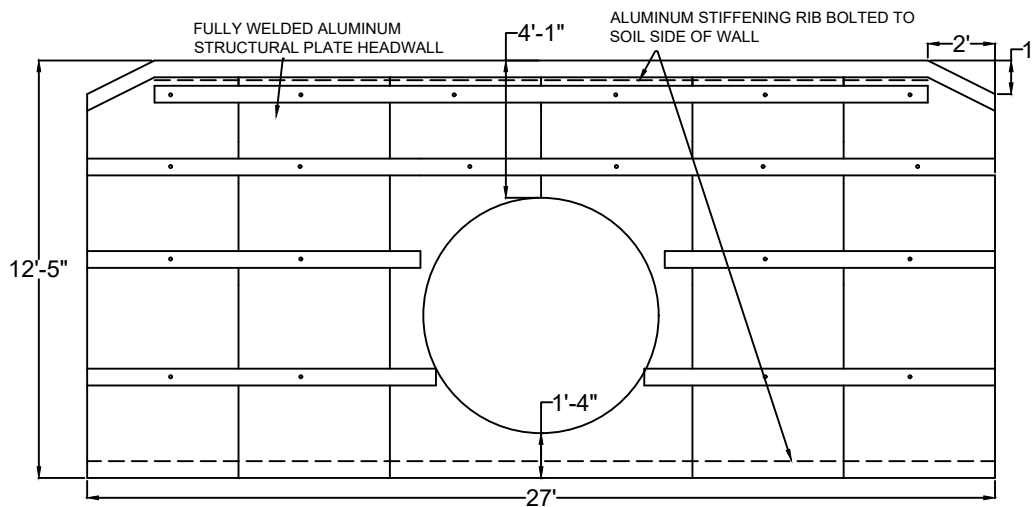


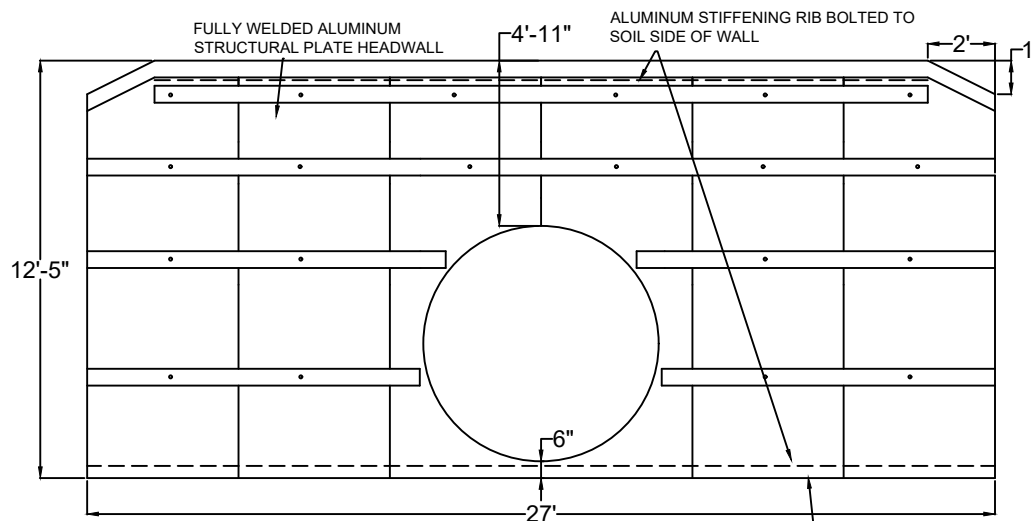
**This electronic collection of documents is provided
for the convenience of the user
and is Not a Certified Document –**

**The documents contained herein were originally issued
and sealed by the individuals whose names and license
numbers appear on each page, on the dates appearing
with their signature on that page.**

**This file or an individual page
shall not be considered a certified document.**



END VIEW- INLET HEADWALL



END VIEW- OUTLET HEADWALL

HEADWALL SET ON
CONCRETE FOOTING-
SEE DETAIL

DESCRIPTION

12B.202311

NCDOT CLEVELAND CO
WOODROW HOYLE RD
OPTION 2

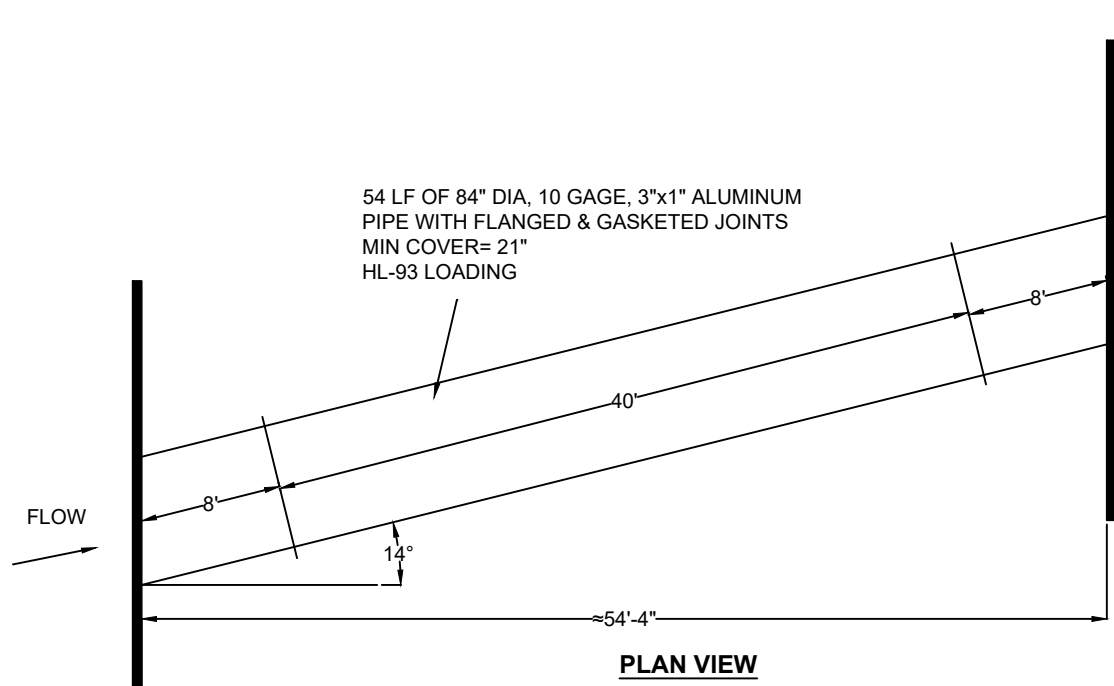
POMONA PIPE PRODUCTS
4611 DUNDAS DR.
GREENSBORO, NC 27407
336-292-8060

POMONA PIPE PRODUCTS
POMONAPIPEPRODUCTS.COM

DATE:
JULY 25, 2022

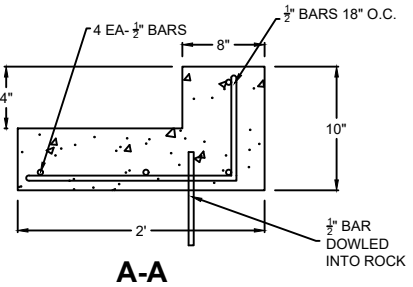
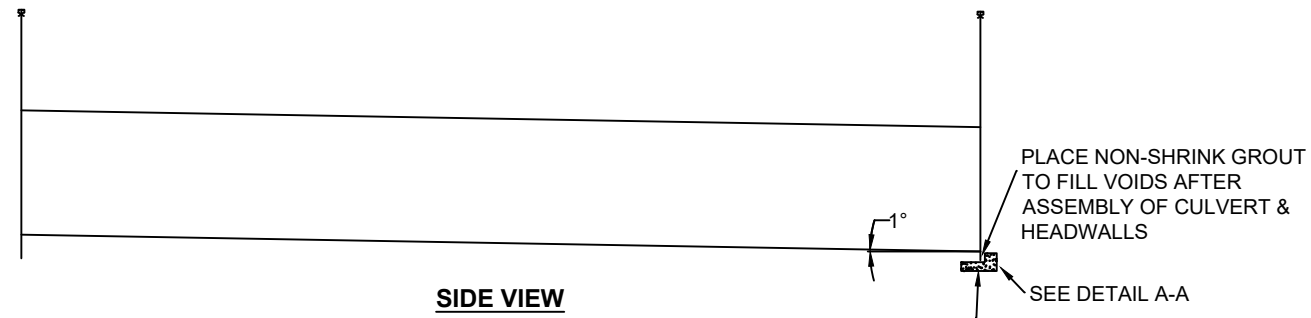
SHEET

NOT TO SCALE



PROPOSED ELEVATIONS:

TOP ϵ ROAD= 1020.99
 TOP HW IN= 1016.62
 TOP HW OUT= 1016.55
 TOP PIPE IN= 1012.54
 TOP PIPE OUT= 1011.64
 INV IN= 1005.54
 INV OUT= 1004.64



DESCRIPTION

12B.202311

NCDOT CLEVELAND CO
 WOODROW HOYLE RD
 OPTION 2

POMONA PIPE PRODUCTS
 4611 DUNDAS DR
 GREENSBORO, NC 27407
 336-292-8060



POMONAPIPEPRODUCTS.COM

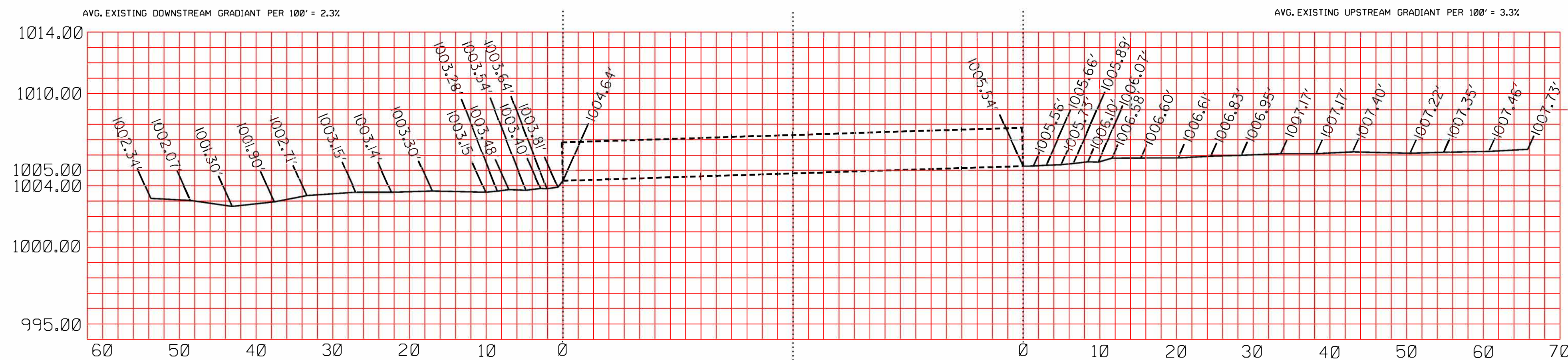
DATE:
 JULY 25, 2022

SHEET

NOT TO SCALE

EXISTING 60" CMP

← FLOW

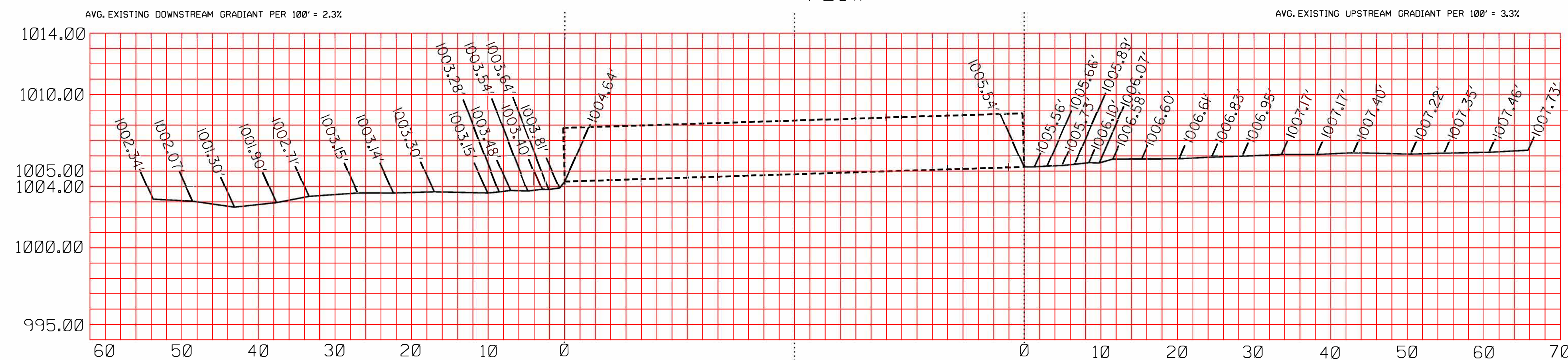


CL

Type = metal corrugated
 Invert Elevation = 1005.54'
 Outlet Elevation = 1004.64'
 Total Length = 60.0'
 Existing Gradient = -0.015%

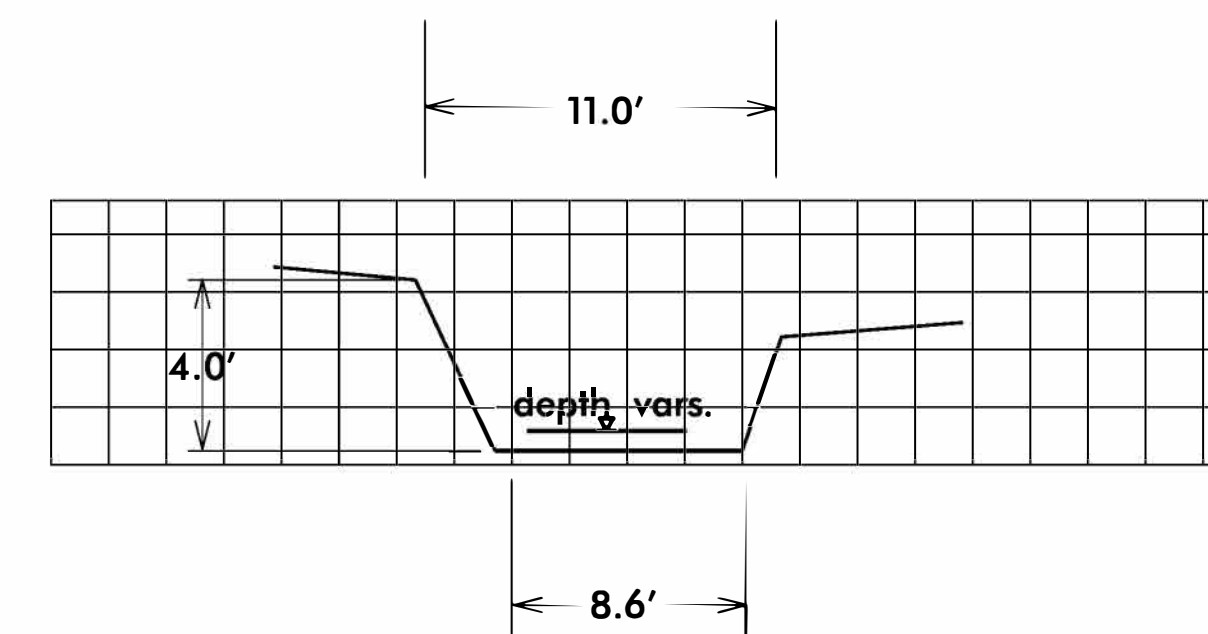
PROPOSED 84" ALUMINUM PIPE

← FLOW

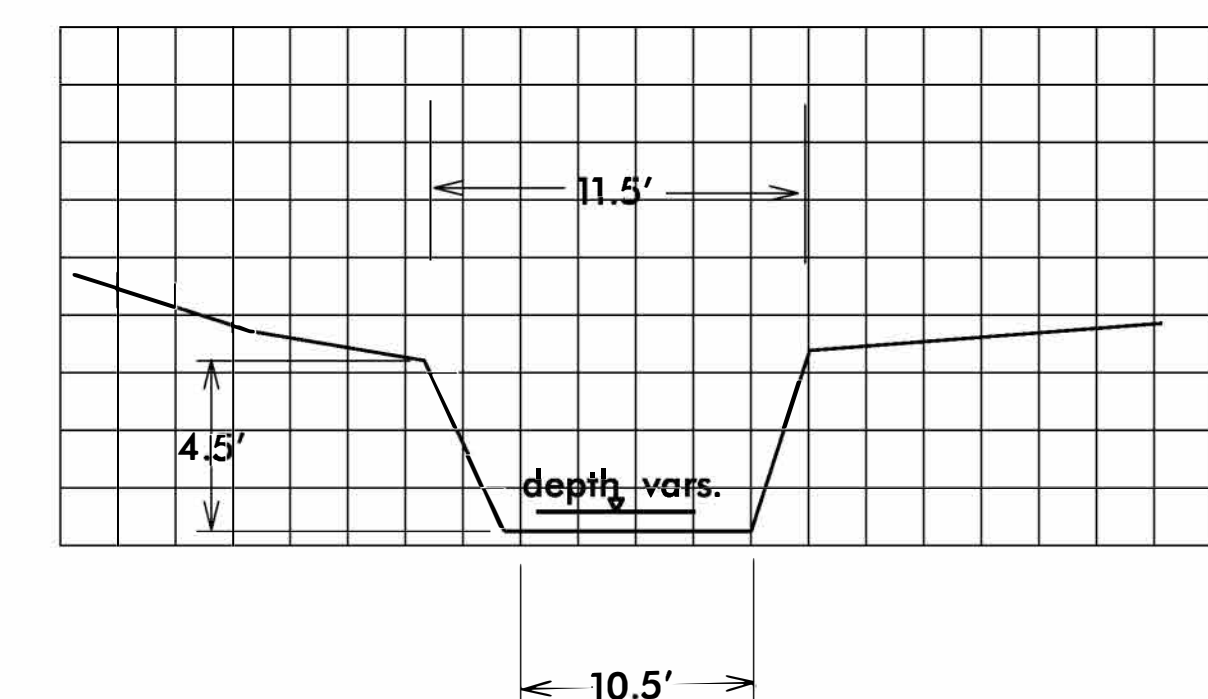


CL

Type = ALUMINUM PIPE
 Invert Elevation = 1005.54'
 Outlet Elevation = 1004.64'
 Total Length = 54.0'
 Proposed Gradient = 0.015%

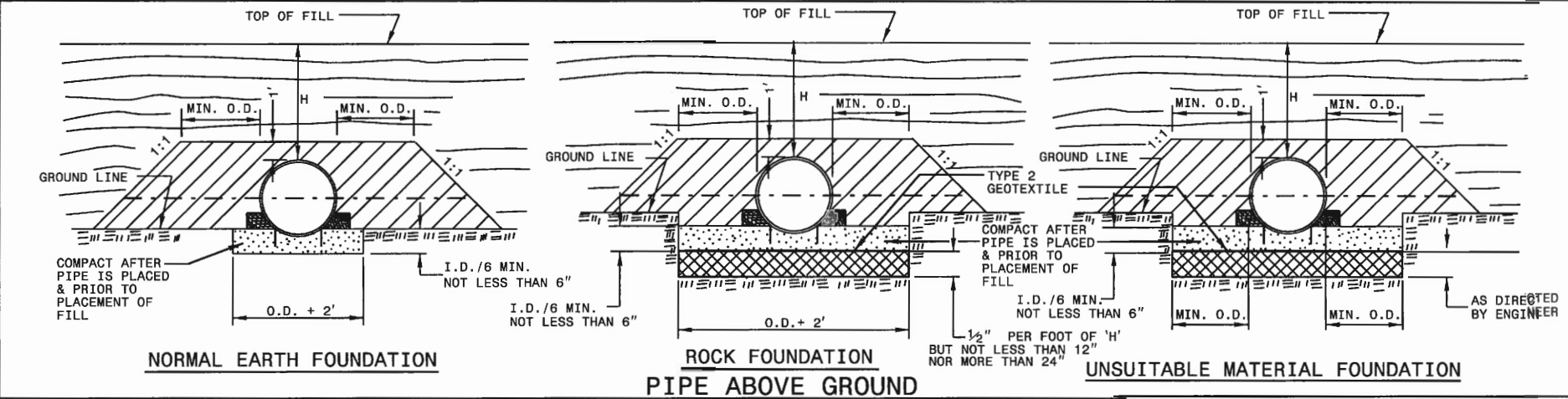
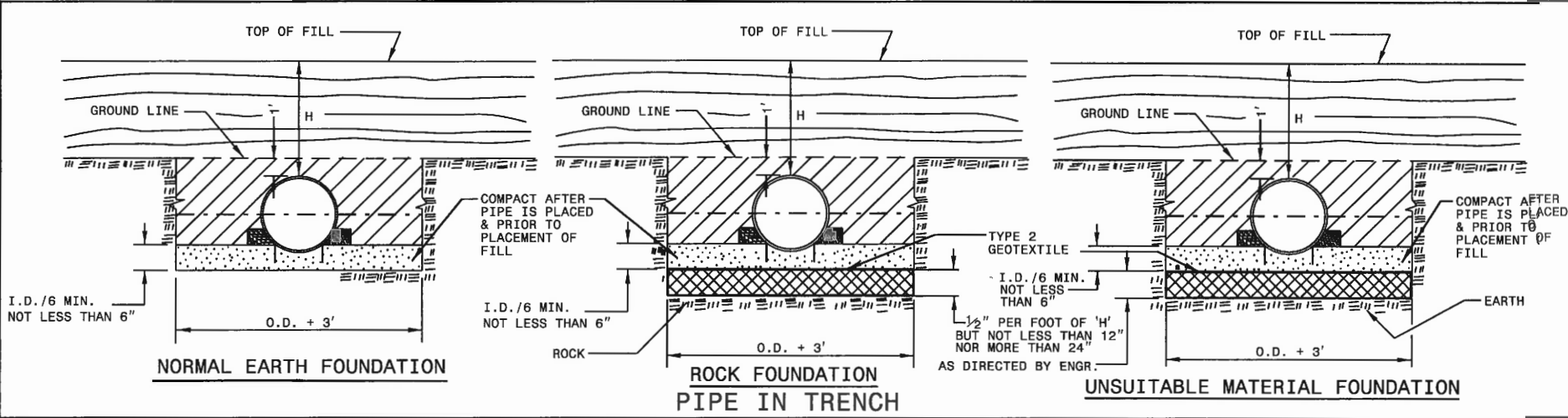


Average Typical Upstream Section



Average Typical Downstream Section

PIPE REPLACEMENT
 WOODROW HOYLE RD SR 1624
 CLEVELAND COUNTY NC



GENERAL NOTES:

- I.D. = THE MAXIMUM HORIZONTAL INSIDE DIAMETER DIMENSION.
- O.D. = THE MAXIMUM HORIZONTAL OUTSIDE DIAMETER DIMENSION.
- H = THE FILL HEIGHT MEASURED VERTICALLY AT ANY POINT ALONG THE PIPE FROM THE TOP OF THE PIPE TO THE TOP OF THE EMBANKMENT AT THAT POINT.

TAKE CARE TO FULLY COMPACT HAUNCH ZONE OF PIPE BACKFILL.

LOOSELY PLACED SELECT MATERIAL CLASS III OR CLASS II, TYPE 1 FOR PIPE BEDDING. LEAVE SECTION DIRECTLY BENEATH PIPE UNCOMPACTED AS PIPE SEATING AND BACKFILL WILL ACCOMPLISH COMPACTION.

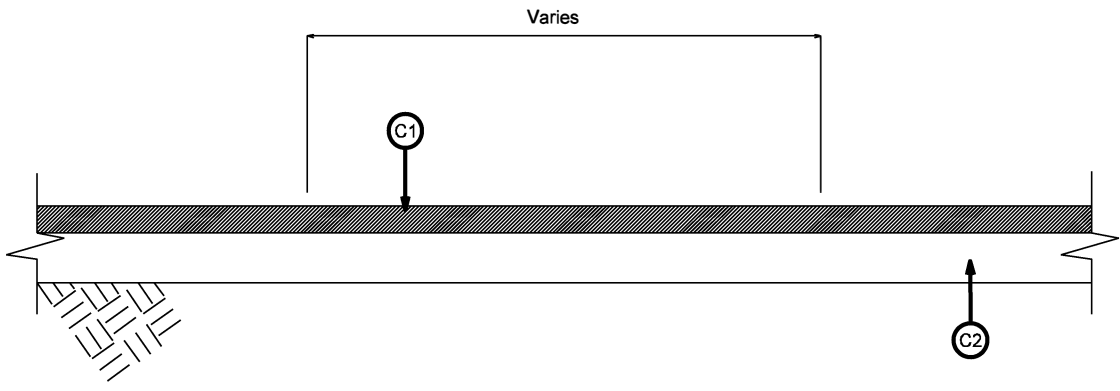
DO NOT OPERATE HEAVY EQUIPMENT OVER ANY PIPE CULVERT UNTIL THE PIPE CULVERT HAS BEEN PROPERLY BACKFILLED AND COVERED WITH AT LEAST 3 FEET OF APPROVED MATERIAL.

- SPRINGLINE OF PIPE
- SELECT BACKFILL MATERIAL CLASS III OR CLASS II, TYPE 1 ABOVE AND BELOW SPRINGLINE.
- APPROVED SUITABLE LOCAL MATERIAL.
- UNDISTURBED EARTH MATERIAL
- SELECT MATERIAL CLASS V OR VI FOR FOUNDATION CONDITIONING. ENCAPSULATE WITH TYPE 2 GEOTEXTILE AS DIRECTED BY THE ENGINEER.

STATE OF NORTH CAROLINA
 DEPT. OF TRANSPORTATION
 DIVISION OF HIGHWAYS
 RALEIGH, N.C.

ROADWAY STANDARD DRAWING FOR
METHOD OF PIPE INSTALLATION
 FLEXIBLE PIPE

12B.202311



Asphalt Pavement Repair Typical Section

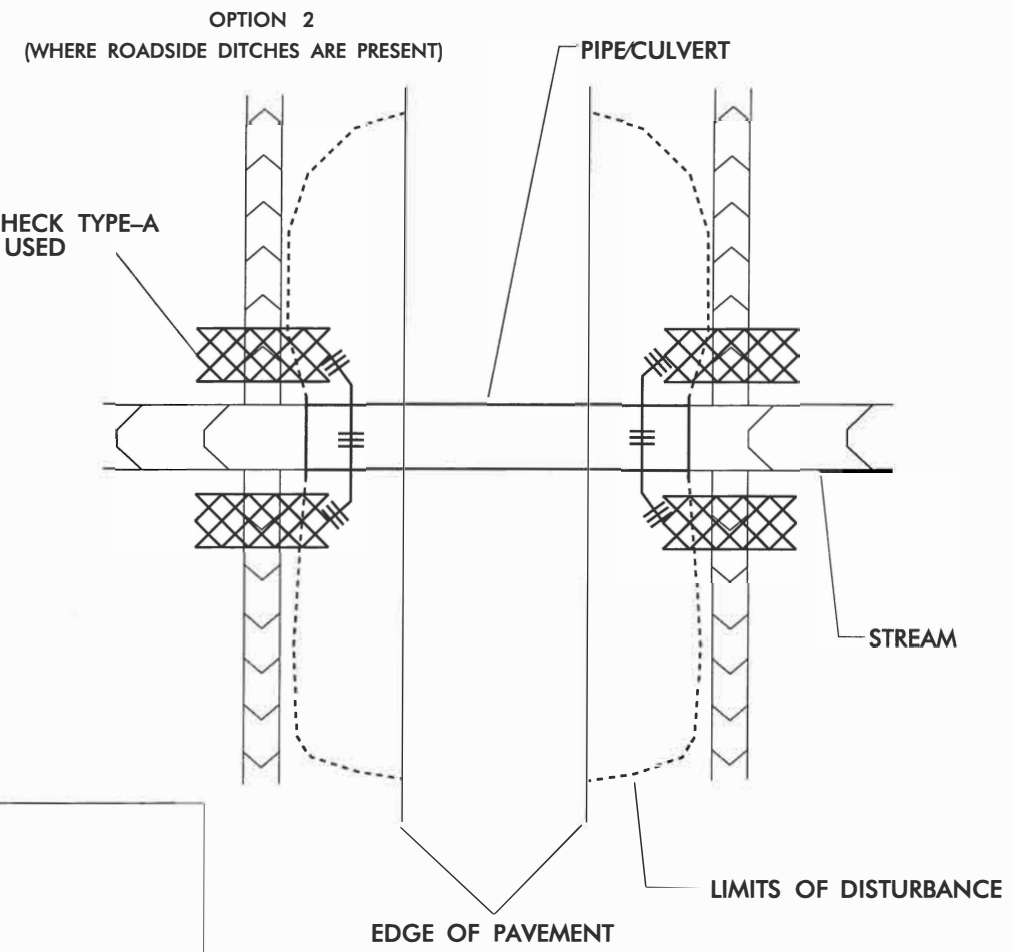
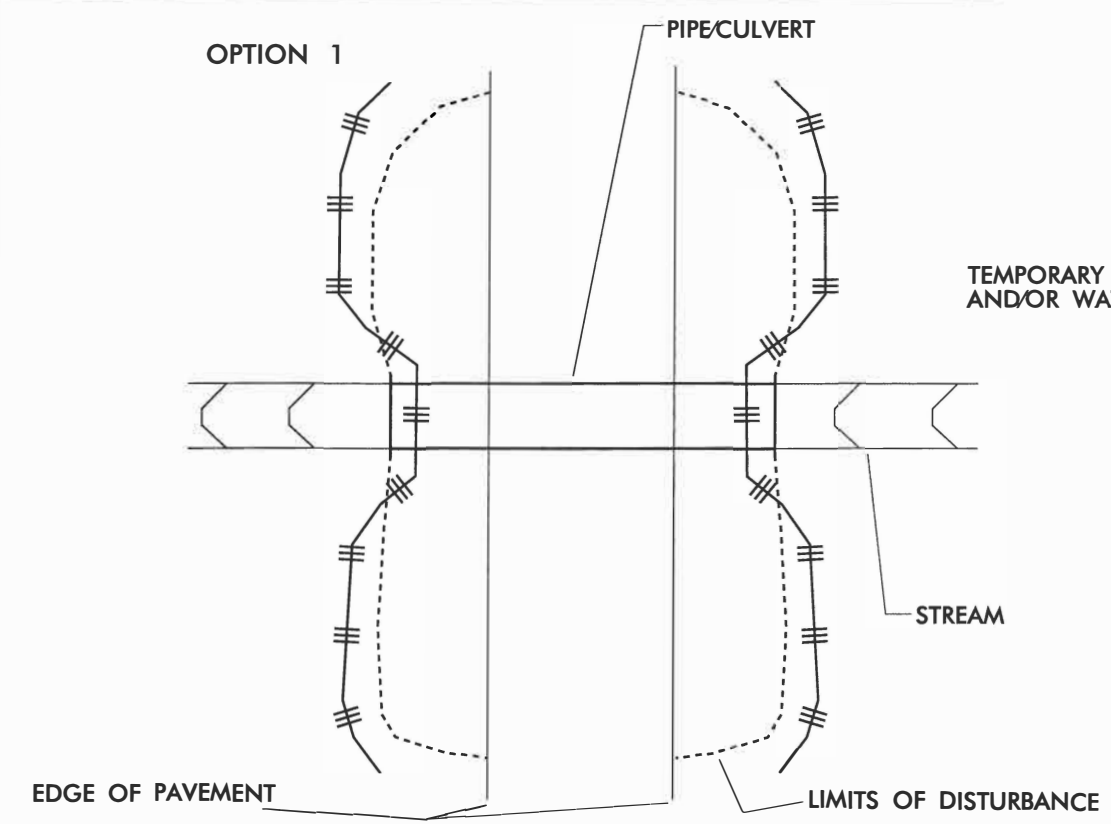
C1	Prop. Approx. 1.5" of Asphalt Conc. Surface Course Type S 9.5C at a rate of 168 lbs per syd
C2	Prop. Approx. 4" of Asphalt Conc. Base Course Type B 19.0C at a rate of 448 lbs per syd

** To be paid as Asphalt Plant Mix Pavement Repair (Ton)

**Division 12
Secondary Road
Pavement Repair Detail**

PROJECT REFERENCE NO.	SHEET NO.
12B.202311	9
R/W SHEET NO.	
ROADWAY DESIGN ENGINEER	HYDRAULICS ENGINEER

ROADSIDE ENVIRONMENTAL UNIT
DEPARTMENT OF TRANSPORTATION
DIVISION OF HIGHWAYS
RALEIGH, N.C.
2018 STANDARD SPECIFICATIONS
DRAWINGS NOT DRAWN TO SCALE



LEGEND:

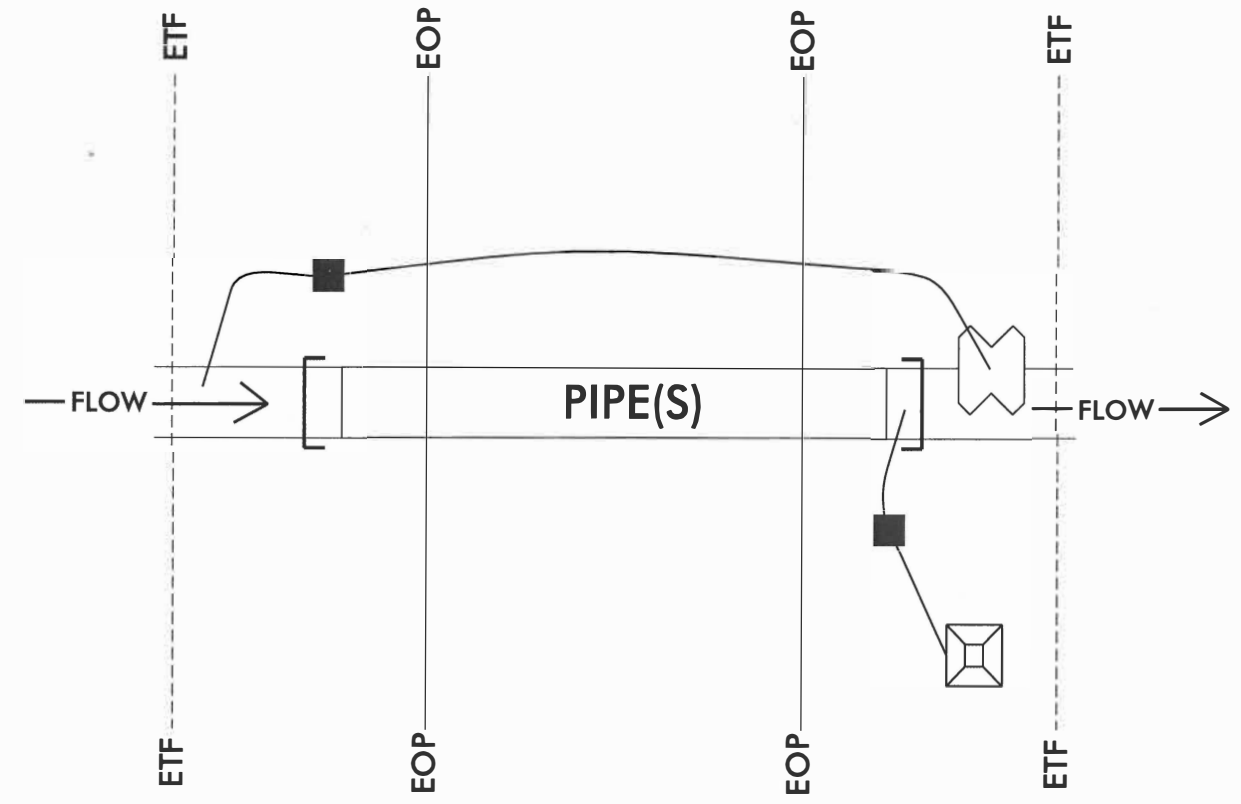
- IMPERVIOUS DIKE
- PUMP
- SPECIAL STILLING BASIN
- STABILIZED DISCHARGE PAD (GEOTEXTILE)
- EOP** EDGE OF PAVEMENT
- ETF** EXISTING TRANSPORTATION FACILITY (ROW)
- TEMPORARY ROCK SILT CHECK TYPE-A AND/OR WATTLE
- TEMPORARY SILT FENCE

SEQUENCE OF CONSTRUCTION FOR TYPICAL WORK AREA:

1. INSTALL SPECIAL STILLING BASIN.
2. INSTALL UPSTREAM PUMP, TEMPORARY FLEXIBLE HOSE, AND STABILIZED DISCHARGE PAD.
3. PLACE UPSTREAM IMPERVIOUS DIKE AND BEGIN PUMPING OPERATIONS FOR STREAM DIVERSION DISCHARGING ONTO STABILIZED OUTLET PAD.
4. PLACE DOWNSTREAM IMPERVIOUS DIKE AND PUMPING APPARATUS. DEWATER WORK ZONE. AREA TO BE DEWATERED SHALL BE EQUAL TO ONE DAY'S WORK.
5. INSTALL PIPE(S), STREAM BED STABILIZATION, AND SLOPE STABILIZATION AS DIRECTED.
6. EXCAVATE ANY ACCUMULATED SILT AND DEWATER BEFORE REMOVAL OF IMPERVIOUS DIKES. REMOVE IMPERVIOUS DIKES, PUMPS, TEMPORARY FLEXIBLE HOSE, AND STABILIZED DISCHARGE PAD. (DOWNSTREAM IMPERVIOUS DIKES FIRST).
7. REMOVE SPECIAL STILLING BASIN AND RESTORE AREA TO ORIGINAL CONDITIONS.
8. STABILIZE ALL DISTURBED AREAS THROUGHOUT PROJECT WITH SEED AND MATTING FOR EROSION CONTROL.

NOTES:

INSTALL EROSION CONTROL MEASURES PRIOR TO ANY EARTH DISTURBING ACTIVITIES. INSTALL SPECIAL SEDIMENT CONTROL FENCE BREAKS OR TEMPORARY ROCK SILT CHECKS TYPE-A AT LOW POINTS IN SILT FENCE.
FOR OPTION 1 INSTALL SILT FENCE SUCH THAT ALL EARTH DISTURBANCE IS CONTAINED. FOR CULVERT CONSTRUCTION SEQUENCING SEE THE PUMP AROUND DETAIL OR CONSULT "BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES".
ALL EXCAVATION IN JURISDICTIONAL STREAMS SHALL BE PERFORMED IN ONLY DRY OR ISOLATED SECTIONS OF THE WORK ZONE.
IMPERVIOUS DIKES ARE TO BE USED TO ISOLATE WORK FROM STREAM FLOW WHEN NECESSARY. MAINTENANCE OF STREAM FLOW OPERATIONS SHALL BE INCIDENTAL TO THE WORK. THIS INCLUDES THE DISCHARGE PAD, DIVERSION PIPES, PUMPS, AND HOSES.
PUMPS AND HOSES SHALL BE OF SUFFICIENT SIZE TO MAINTAIN STREAM FLOW AND TO DEWATER THE WORK AREA.
INSTALL SPECIAL STILLING BASIN IN VEGETATED AREA WITHIN RIGHT OF WAY. DISCHARGE SHOULD BE DIRECTED THROUGH VEGETATED BUFFER AWAY FROM WORK SITE.
INSTALL SILT FENCE AS DIRECTED TO CONTAIN DISTURBED AREAS AND/OR EXCAVATED STOCKPILES. BORROW MATERIAL FROM OR DISPOSAL OF MATERIAL TO ANY UNPERMITTED SITE WILL REQUIRE A RECLAMATION PLAN.
INSTALL PIPE(S) IN JURISDICTIONAL AREAS IN ACCORDANCE WITH NCDOT BEST MANAGEMENT PRACTICES FOR CONSTRUCTION AND MAINTENANCE ACTIVITIES MANUAL.



PUMP-AROUND OPERATION FOR PIPE REPLACEMENT IN JURISDICTIONAL STREAMS EROSION CONTROL DETAIL