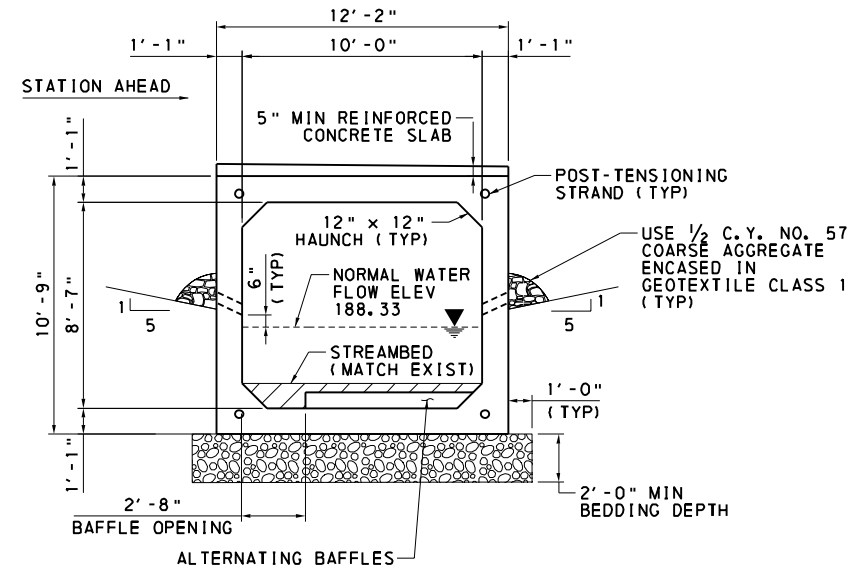


PLAN

0 5 10 FEET



TYPICAL PRECAST CONCRETE BOX SECTION

2 0 2 4 FEET

LEGEND:

- W — EXISTING WATERLINE
- G — EXISTING GAS LINE
- E — EXISTING ELECTRIC LINE
- NO. 8 COARSE AGGREGATE
- ROCK, CLASS R-4 SLOPE PROTECTION
- ROCK, CLASS R-7 CHOKED WITH STREAMBED MATERIAL
- AS-DRILLED SOIL BORING
- — PROPOSED CONTOUR
- - - - EXISTING CONTOUR

VERTICAL CURVE DATA:

SR 4003
 PVI STA 138+20.00
 ELEV = 196.52
 VC = 60.00'
 MO = -0.23'
 SSD = 390'
 +0.84% -2.16%

HYDRAULIC DATA:

DRAINAGE AREA = 0.11 SQ. MI.
 25 YEAR FLOOD : (DESIGN FLOOD)
 MAGNITUDE = 197.83 CFS
 VELOCITY = 5.77 FPS
 W.S. ELEV. = 191.52
 PROPOSED: 197.83 CFS
 EXISTING: 197.83 CFS
 5.85 FPS
 193.02
 100 YEAR RISK ASSESSMENT FLOOD :
 MAGNITUDE = 311.31 CFS
 VELOCITY = 6.53 FPS
 W.S. ELEV. = 192.87
 PROPOSED: 311.31 CFS
 EXISTING: 311.31 CFS
 6.60 FPS
 194.67
 FLOOD OF RECORD - N/A

HORIZONTAL GEOMETRY:

S 71°20'06" E

NOTE: HY-8 CULVERT ANALYSIS DOES NOT PROVIDE HEADWATER VELOCITIES. TAILWATER VELOCITIES PROVIDED.

	EXISTING CONDITIONS	PROPOSED CONDITIONS
UPSTREAM LOW CHORD ELEV (FT)	194.07	194.32
DOWNSTREAM LOW CHORD ELEV (FT)	194.07	194.08
UPSTREAM HYDRAULIC OPENING (SF)	44.87	66.23
DOWNSTREAM HYDRAULIC OPENING (SF)	46.23	74.63

NOTES:

1. FOR GENERAL NOTES, SEE SHEET 2.
2. FOR QUANTITIES AND CULVERT LOAD RATINGS, SEE SHEET 3.
3. FOR STAKE-OUT PLAN, SEE SHEET 4.
4. EXISTING WINGWALLS TO BE TEMPORARILY SUPPORTED UNTIL THE EXISTING 8" GAS LINE IS RELOCATED. SEE CONSTRUCTION AND E&S PLANS.

Mark	Description	By	Chk'd.	Recm'd.	Date
REVISIONS					

BORING NO.	SR 4003 SURVEY & CONSTR @ STATION	OFFSET
SB-1	138+51.84	7.26' R
SB-2	137+75.24	7.21' R

SR 4003 PREVIOUSLY KNOWN AS LR 46063
 BMS STR ID: 46-4003-0030-1070 MPMS/ECMS PROJ: 102320 BRKEY: XXXXX

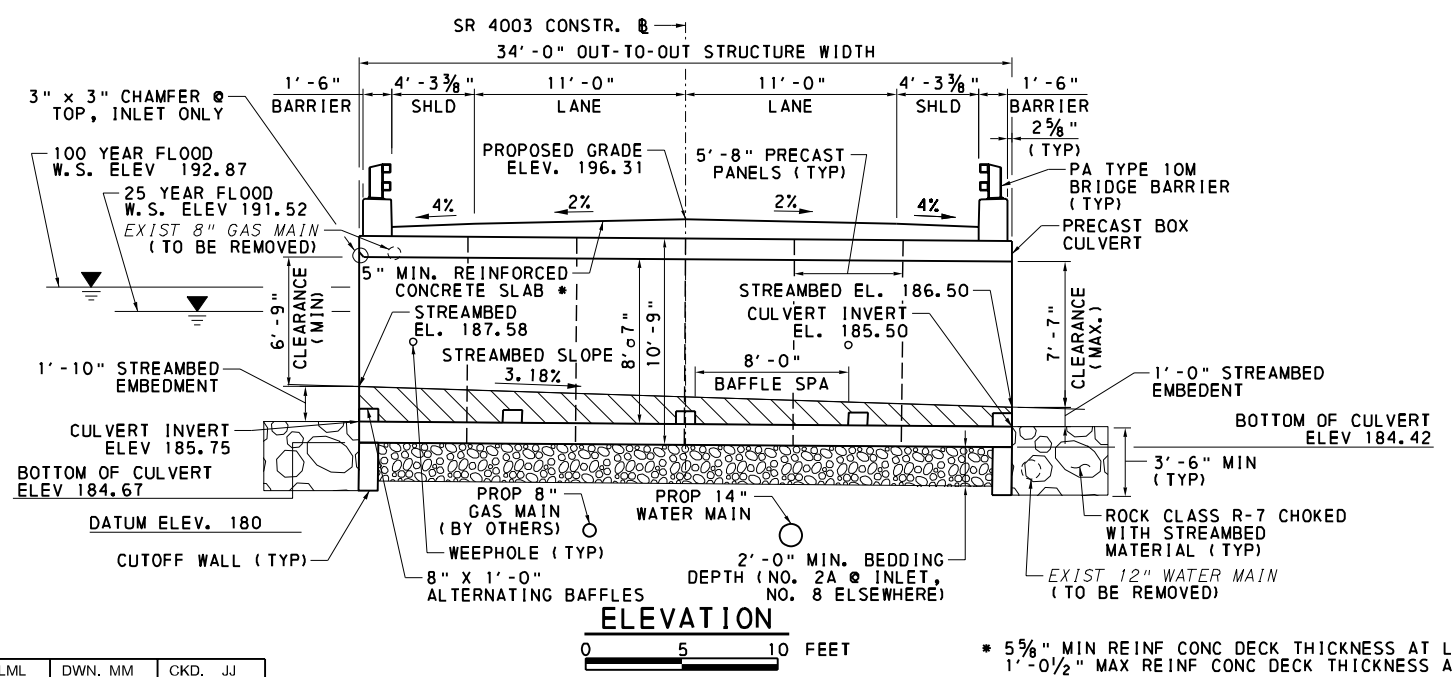
COMMONWEALTH OF PENNSYLVANIA
 DEPARTMENT OF TRANSPORTATION

MONTGOMERY COUNTY
 SR 4003, SECTION HBP
 SEG. 0030 OFFSET 1070
 SR 4003 STA. 138+18.64
 OVER CROSSMANS RUN
 SINGLE CELL PRECAST CONC. BOX CULVERT
 GENERAL PLAN AND ELEVATION



WSP USA, Inc.
 1700 Market Street
 Suite 1050
 Philadelphia, PA 19103

RECOMMENDED _____ SHEET 1 OF 15
 + SUPPLEMENTAL DRWGS.
 _____ DISTRICT BRIDGE ENGINEER S-38308



ELEVATION

0 5 10 FEET

* 5/8" MIN REINF CONC DECK THICKNESS AT LEFT GUTTERLINE,
 1'-0 1/2" MAX REINF CONC DECK THICKNESS AT CROWN.