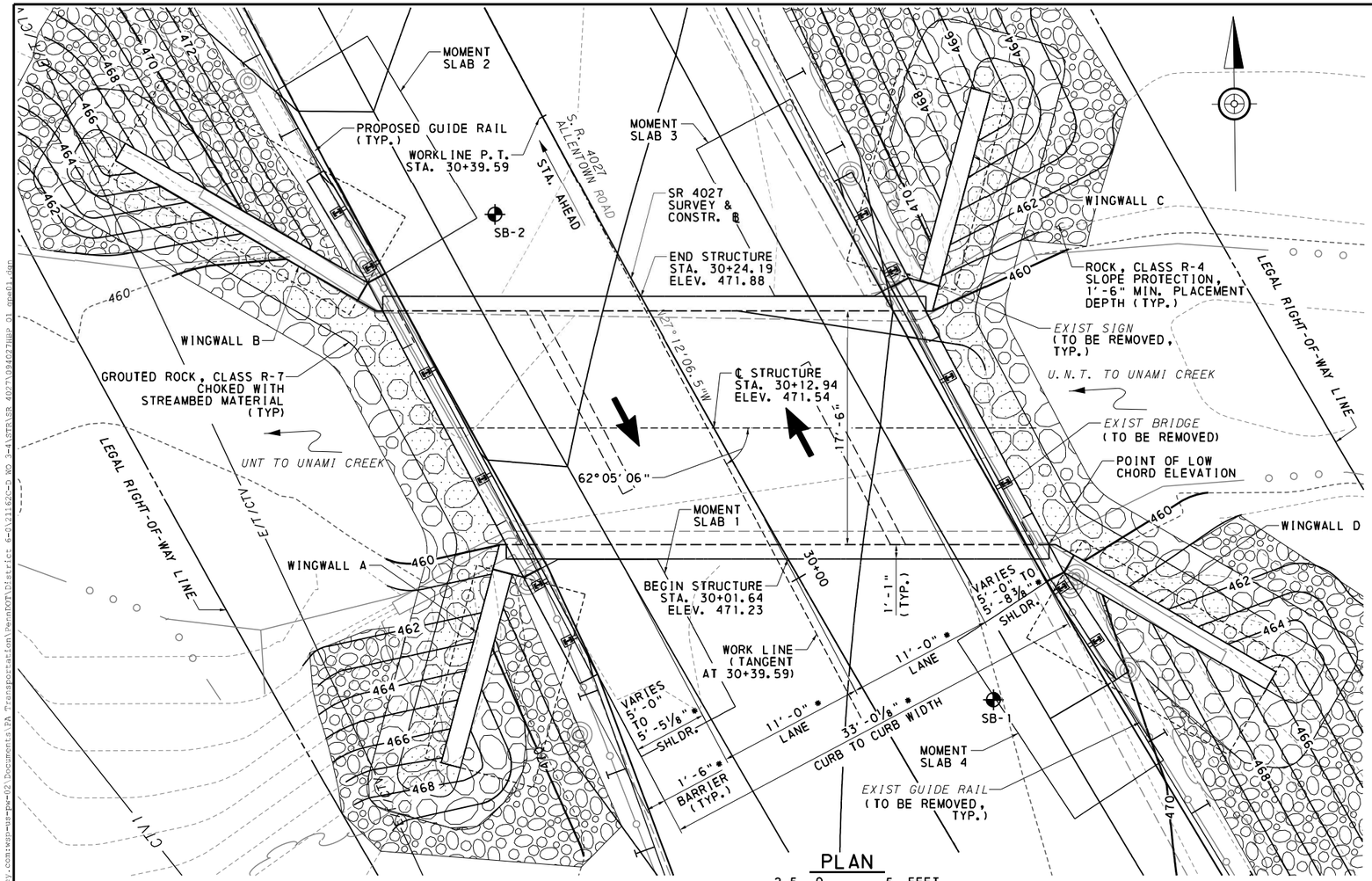
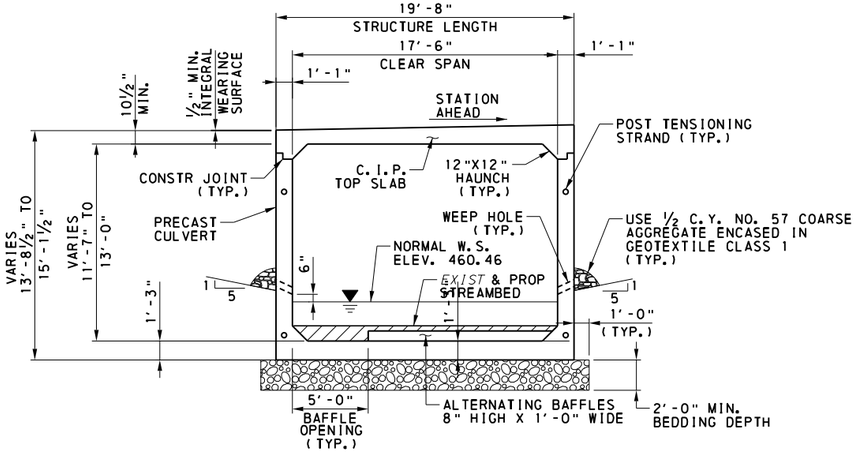


PLAN

2.5 0 5 FEET



TYPICAL PRECAST CONCRETE BOX SECTION

2.5 0 5 FEET

VERTICAL GEOMETRY:

SR 4027
PVI STA 30+10.00
ELEV= 470.78
VC= 150.00'
MO= 0.68'
HLSD= 251'

+1.00% +4.63%

HORIZONTAL CURVE DATA:

SR 4027
PI STA 30+00.50
Δ = 11°27'33"
D = 3°49'11"
T = 150.50'
L = 300.00'
R = 1500.00'
E = 7.53'
PC STA 28+50.00
PT STA 31+50.00

HYDRAULIC DATA:

DRAINAGE AREA = 2.11 SQ. MI.

25 YEAR FLOOD : (DESIGN FLOOD)

	PROPOSED:	EXISTING:
MAGNITUDE =	1254 CFS	1254 CFS
VELOCITY =	3.47 FPS	3.28 FPS
W.S. ELEV. =	468.24	469.46

100 YEAR FLOOD : (FEMA 100 YEAR FLOOD)

	PROPOSED:	EXISTING:
MAGNITUDE =	1760 CFS	1760 CFS
VELOCITY =	3.15 FPS	2.44 FPS
W.S. ELEV. =	470.29	471.30

FLOOD OF RECORD - N/A

	EXISTING CONDITIONS	PROPOSED CONDITIONS
LOW CHORD ELEV (FT)	467.06	469.46
HYDRAULIC OPENING (SF)	130.93	184.20

STRUCTURE BORING LOG SCHEDULE

BORING NO.	SR 4027 SURVEY & CONSTRUCTION ℄ STA	OFFSET
SB-1	29+84.71	8.05 R
SB-2	30+34.73	6.67 L

NOTES:

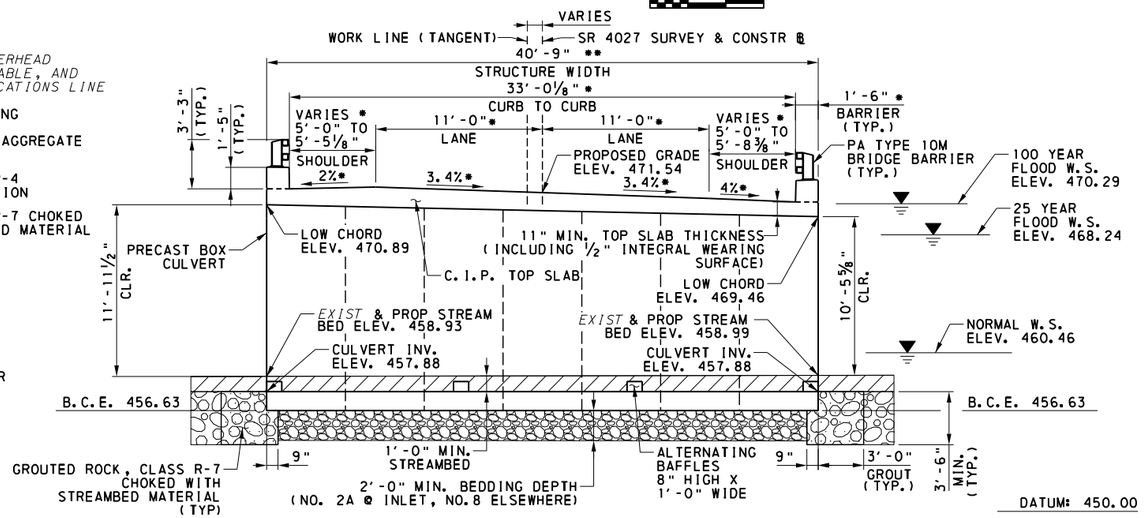
1. FOR GENERAL NOTES, SEE SHEET 2.
2. FOR QUANTITIES AND CULVERT LOAD RATINGS, SEE SHEET 3.
3. FOR STAKE-OUT PLAN, SEE SHEET 4.

LEGEND:

—E/T/CTV— EXISTING OVERHEAD ELECTRIC, CABLE, AND TELECOMMUNICATIONS LINE
PROPOSED BORING
NO. 8 COARSE AGGREGATE
ROCK, CLASS R-4 SLOPE PROTECTION
ROCK, CLASS R-7 CHOKED WITH STREAMBED MATERIAL

* DIMENSIONS SHOWN MEASURED PERPENDICULAR TO ROADWAY SURVEY & CONSTR. ℄

** DIMENSIONS SHOWN MEASURED ALONG CULVERT ℄



ELEVATION

2.5 0 5 FEET

INDEX OF DRAWINGS

SHEET NO.	TITLE
1	GENERAL PLAN & ELEVATION
2	GENERAL NOTES
3	QUANTITIES & RATINGS
4	STAKE-OUT PLAN
5	CULVERT TYPICAL SECTION
6	C.I.P. TOP SLAB
7	CORNER DETAILS
8	MOMENT SLABS
9	WINGWALLS A & B
10	WINGWALLS C & D
11	BAFFLE LAYOUT
12	BARRIER DETAILS - INLET
13	BARRIER DETAILS - OUTLET
14	POST TENSIONING AND WATERPROOFING DETAILS
15	REINFORCEMENT BAR SCHEDULE
16	STRUCTURE BORING LOG

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

SR 4027 PREVIOUSLY KNOWN AS LR 09107

BMS STR ID: 09-4027-0190-0000 MPMS/ECMS PROJ: 102320 BRKEY: 7403

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

DATE:

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF TRANSPORTATION

BUCKS COUNTY
S.R. 4027, SECTION HBP
SEG. 0190 OFFSET 0000
S.R. 4027 STA. 30+12.94
OVER U.N.T. TO UNAMI CREEK
SINGLE CELL PRECAST CONC BOX CULVERT

GENERAL PLAN & ELEVATION

RECOMMENDED

DISTRICT BRIDGE ENGINEER

SHEET 1 OF 16
+ SUPPLEMENTAL DRWGS.

S-38298

DES. LML	CKD. MM	DWN. MM	CKD. AIS

WSP - STRUCTURES CADD DATA
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