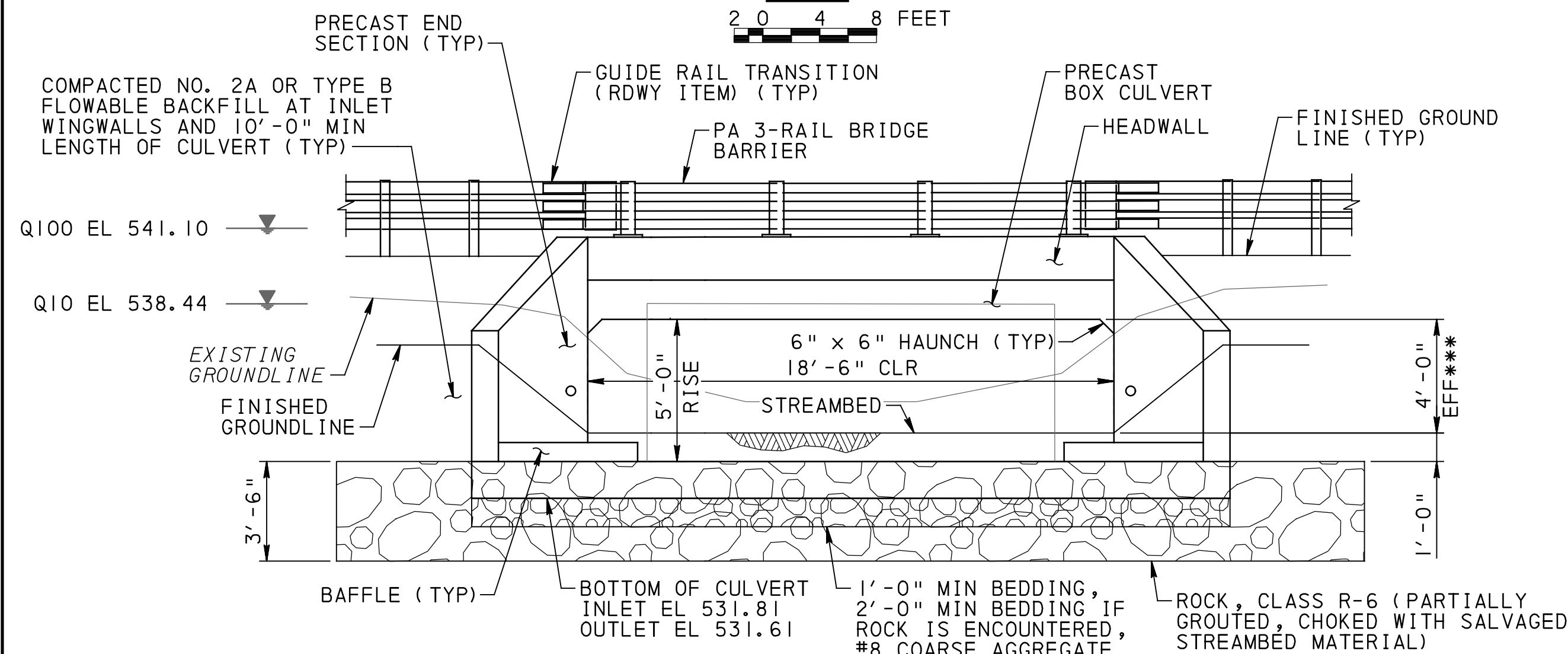


PLAN

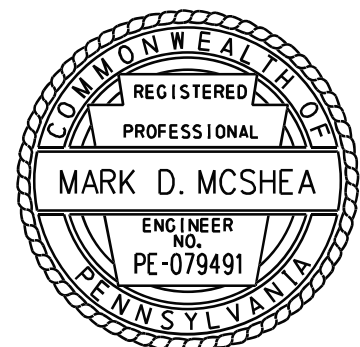
2 0 4 8 FEET



ELEVATION

2 0 2 4 FEET

\*\*\* MIN VERTICAL CLEARANCE REQUIRED = 4'-0"  
MIN VERTICAL CLEARANCE PROVIDED = 4'-0"



PREPARED BY:  
**HDR**  
HDR ENGINEERING, INC.  
3025 CHEMICAL ROAD  
SUITE 110  
PLYMOUTH MEETING, PA 19462

SIGNATURE & DATE *Mark McShea* 11/12/2024

HORIZONTAL CURVE DATA

SR 4075 SURVEY & CONSTR  
PI STA 193+54.11  
 $\Delta = 47^\circ 23' 47''$  RT  
T = 68.03'  
L = 128.22'  
E = 155.00'  
R = 14.27'  
PC STA 192+86.08  
PT STA 194+14.30

VERTICAL PROFILE DATA

PVI STA 193+27.00  
EL 540.80  
VC = 32'  
SSD = 384'  
1.54%  
-1.38%  
PVC STA 193+11.00  
EL 540.55  
HIGH POINT  
STA 193+27.84  
EL 540.68  
PVPC STA 193+43.00  
EL 540.58

HYDRAULIC DATA

BRANCH KIMPLES (DIMPLE) CREEK

RETURN PERIOD - 10 YR FLOOD (DESIGN)

EXISTING: WATER SURFACE EL = 540.35  
Q = 403.00 CFS  
V = 2.7 FPS  
PROPOSED: WATER SURFACE EL = 538.44  
Q = 403.00 CFS  
V = 5.5 FPS

RETURN PERIOD - 100 YR FLOOD

EXISTING: WATER SURFACE EL = 541.10  
Q = 938.00 CFS  
V = 4.0 FPS  
PROPOSED: WATER SURFACE EL = 541.10  
Q = 938.00 CFS  
V = 3.9 FPS

DRAINAGE AREA 0.98 SQ MILES  
FLOOD OF RECORD - UNKNOWN

LEGEND

- \* MEASURED NORMAL TO SR 4075 SURVEY & CONSTR
- \*\* MEASURED NORMAL TO REF LINE
- ▲ REFERENCE LINE IS TANGENT TO SR 4075 SURVEY & CONSTR AT STA 193+26.84.
- ▲▲ MEASURED TO FACE OF THRIE-BEAM TERMINAL CONNECTOR (SEE RC-50M)
- AS-DRILLED SOIL BORING
- INDICATES TRAFFIC DIRECTION
- EXISTING CONTOURS
- PROPOSED CONTOURS

AS-DRILLED BORING TABLE

BORING	STATION	OFFSET
SB-1	193+16.40	6.7' LT
SB-2	193+36.20	6.1' RT

	EXISTING CONDITIONS	PROPOSED CONDITIONS
D/S LOW CHORD EL (FT)	538.44	537.90
U/S LOW CHORD EL (FT)	538.35	538.10
HYDRAULIC OPENING (SF)	47.00	74.00

INDEX OF SHEETS

SHEET NO	DESCRIPTION
1	GENERAL PLAN AND ELEVATION
2	GENERAL NOTES AND LOAD RATINGS
3	QUANTITIES
4	BOX PROFILE, TYPICAL SECTION AND DETAILS
5	STAKE-OUT PLAN AND DECK DETAILS
6	BARRIER DETAILS
7	PRECAST END SECTION DETAILS
8	BAFFLE DETAILS
9	CULVERT DETAILS
10	TEST BORINGS

LIST OF ABBREVIATIONS:

BOT - BOTTOM  
CLR - CLEAR  
CONSTR - CONSTRUCTION  
DIA - DIAMETER  
EA - EACH  
EF - EACH FACE  
EFF - EFFECTIVE  
EL - ELEVATION  
EQ - EQUAL  
EXP - EXPANSION  
FF - FRONT FACE  
GALV - GALVANIZED  
JT - JOINT  
KSF - KIPS PER SQUARE FOOT  
NTS - NOT TO SCALE  
PREM - PREMOLDED  
RF - REAR FACE  
SPA - SPACING  
TYP - TYPICAL

NOTES:

- FOR GENERAL NOTES, SEE SHEET 2.
- FOR QUANTITIES, SEE SHEET 3.

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

S.R. 4075 PREVIOUSLY KNOWN AS L.R. 09061  
BMS STR ID: 09-4075-0060-0000 MPMS/ECMS PROJ: 96069 BRKEY: 69202

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF TRANSPORTATION

BUCKS COUNTY  
S.R. 4075 SECTION HBV  
SEG. 0060 OFF. 0000  
S.R. 4075 STA. 193+26.84

STONY GARDEN ROAD OVER BRANCH KIMPLES (DIMPLE) CREEK  
18'-6" x 5'-0" PRECAST CONCRETE BOX CULVERT  
GENERAL PLAN AND ELEVATION

RECOMMENDED	SHEET 1 OF 10 +SUPPLEMENTAL DRAWINGS
DISTRICT BRIDGE ENGINEER	S-39954

PA 3-RAIL BRIDGE BARRIER	BC-706M	10-07-24
ANCHOR SYSTEMS	BC-734M	2-19-21
WALL CONST & EXP JOINT DETAILS	BC-735M	9-30-16
REINFORCEMENT BAR FABRICATION DETAILS	BC-736M	11-23-22
BRIDGE DRAINAGE	BC-751M	1-31-19
TYPICAL WATERPROOFING AND EXPANSION DETAILS	BC-788M	11-23-22
MECHANICAL CONNECTION DETAILS	BC-798M	2-14-23
CLASSIFICATION OF EARTHWORK FOR STRUCTURES	RC-11M	6-01-10
BACKFILL AT STRUCTURES	RC-12M	11-01-22
GUIDE RAIL TO BRIDGE BARRIER TRANSITIONS	RC-50M	12-18-24
TYPE 31 STRONG POST GUIDE RAIL	RC-51M	12-18-24
DESCRIPTION	DWG. NO.	APP. DATE
SUPPLEMENTAL DRAWINGS		