Rosemary Chiavetta, Secretary
Public Utility Commission
400 North Street
Harrisburg, PA 17120

May 2nd, 2025

RE: **Application of Southeastern Transportation Authority ("SEPTA")**
For Rehabilitation of Bridges at DOT Crossing No. 592988Y (Easton Road) and DOT Crossing No. 592989Y (Keswick Avenue) around Abington Township, Montgomery County

Application Docket No. ___A-2025-3054630 _____

Dear Secretary Chiavetta,

I am writing to resubmit the bridge rehabilitation plans, previously filed under reference number A-2025-3054630. I was informed that the initial submission was rejected due to the requirement for both attachments to be e-filed as a single combined PDF document.

I have now combined the attachments into one PDF document. Please find the updated Plans enclosed with this letter.

Sincerely,

Fuad Khan, Senior Project Engineer
Southern Pennsylvania Transportation Authority
1234 Market Street, 13th Floor
Philadelphia, PA 19107
(215) 580 3332
mkhan@septa.org

Southeastern Pennsylvania
Transportation Authority

ENGINEERING, MAINTENANCE, AND CONSTRUCTION
BRIDGES & BUILDINGS

SUPERSTRUCTURE REPLACEMENT & SUBSTRUCTURE REPAIRS

RRD/MAINLINE MP# 11.62 OVER KESWICK AVE.

BRIDGE REHABILITATION

SEPTA PROJECT NO.: N/A

FTA NO.: N/A

PENNDOT PROJECT NO.: N/A

LIST OF DRAWINGS

SHEET NO.	DRAWING NO.	GENERAL DRAWINGS
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2	G202	ABBREVIATIONS AND LEGEND

SHEET NO.	DRAWING NO.	CIVIL DRAWINGS
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4	C202	EXISTING CONDITIONS PLAN
5	C203	UTILITY PLAN
6	C204	ROADWAY PLAN
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8	C206	ESPC SEQUENCE OF CONSTRUCTION
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SHEET NO.	DRAWING NO.	ROADWAY DRAWINGS
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SHEET NO.	DRAWING NO.	STRUCTURAL DRAWINGS
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16	S202	GENERAL NOTES - STRUCTURAL
17	S203	STAGING
18	S204	EXISTING PLAN AND ELEVATION
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21	S207	FAR ABUTMENT PRECAST CAP PLAN AND ELEVATION
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23	S209	PRECAST CAP SECTIONS
24	S210	PRECAST CAP DETAILS - 1
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ACT NO. NOTIFICATION LIST

CALL BEFORE YOU DIG !!
PENNSYLVANIA LAW REQUIRES
(3) WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND
(10) WORKING DAYS IN DESIGN STAGE
-- STOP & CALL --
Pennsylvania One Call System, Inc.
1-800-242-1776

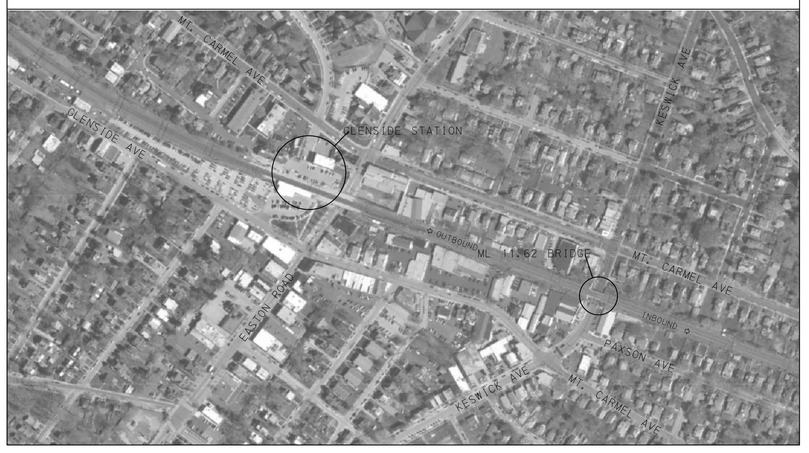
PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

SERIAL NO.'S
20241932307 - ABINGTON TWP.
20241932308 - CHELTENHAM TWP.

CONTACT PHONE LIST

PUSHPINDER SINGH	215-580-8597

LOCATION



SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS

MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS

PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL DAVID J. PHELAN CIVIL 057506
DATE: 11/15/2024

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TEL. 215-569-2900
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
GENERAL
COVER SHEET

SCALE: NO SCALE	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
	CHECKED BY: TAC
WORK ORDER NO.: -	
DRAWING NUMBER: G201	
DWG. NO.: 1 OF 2	
SHT. NO.: 1 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

IFC SUBMISSION

DATE PRINTED: 11/14/2024 12:29:57 PM

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ABBREVIATIONS

ABV	ABOVE
A/C	AIR CONDITIONER
ACST	ACOUSTIC
ADDL	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
AGGR	AGGREGATE
AL	ALUMINUM
ALT	ALTERNATE
ARCH	ARCHITECTURAL
ASB	ASBESTOS
ASPH	ASPHALT
ASPHRS	ASPHALT ROOF SHINGLES
ASSN	ASSOCIATION
ASST	ASSISTANT
ASSY	ASSEMBLY
AVE	AVENUE
AVG	AVERAGE
B	BOTTOM
BALC	BALCONY
BD	BOARD
BETW	BETWEEN
BLDG	BUILDING
BLKG	BLOCKING
BLR	BOILER
BM	BEAM
BM	BENCHMARK
BP	BASE PLATE
BRDG	BRIDGING
BRG	BEARING
BS	BOTH SIDES
BSMT	BASEMENT
CAB	CABINET
CAP	CAPACITY
CARP	CARPET
CDR	COILING DOOR
CER	CERAMIC
CER TILE	CERAMIC TILE
CI	CAST IRON
CIP	CAST-IRON PIPE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMIU	CONCRETE MASONRY INSULATED UNIT
CMU	CONCRETE MASONRY UNIT
CNCL	CONCEALED
CO	CLEANOUT
CO	COMPANY
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CRV	CURVED
CSK	COUNTERSINK
CTD	COATED
CTR	CENTER
CUH	CABINET UNIT HEATER
D	DEPTH
DBL	DOUBLE
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DGL	DIAGONAL
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DL	DEAD LOAD
DMPF	DAMPPROOFING
DN	DOWN
DPN	DEMOUNTABLE PARTITION MANUFACTURER
DR	DOOR
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
E	EAST
EA	EACH
EGEN	EMERGENCY GENERATOR
EF	EXHAUST FAN
EIFS	EXTERIOR INSULATION & FINISH SYSTEM
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENTR	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
FAB	FABRICATE
FBD	FIBERBOARD
FD	FLOOR DRAIN
FDN	FOUNDATION
FDR	FIRE DOOR
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER & CABINET
FHY	FIRE HYDRANT
FIN	FINISH
FL	FLASHING
FLEX	FLEXIBLE
FLG	FLANGE
FLR	FLOOR
FLRG	FLOORING
FP	FIREPROOF
FRP	FIBERGLASS-REINFORCED PLASTICS
FT	FOOT
FTG	FOOTING
FURN	FURNITURE
GA	GAUGE
GALV	GALVANIZED
GAR	GARAGE
GEN	GENERATOR
GL	GLASS
GLU-LAM	GLUE-LAMINATED
GOVT	GOVERNMENT
GR	GRADE
GRD	GROUND
GVL	GRAVEL
GWB	GYPSUM WALLBOARD
GYP	GYPSUM
H	HIGH
HDWE	HARDWARE
HM	HOLLOW METAL
HMD	HOLLOW METAL DOOR
HORIZ	HORIZONTAL
HPT	HIGH POINT
HT	HEIGHT
HTR	HEATER
HVAC	HEATING, VENTILATING, & AIR CONDITIONING
ID	INSIDE DIAMETER
IE	THAT IS
IH	INTAKE HOOD
INSUL	INSULATION
INTR	INTERIOR
JST	JOIST
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LG	LENGTH
LH	LEFT HAND
LIB	LIBRARY
LIN	LINEAR
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LPT	LOW POINT
LT	LIGHT
LWC	LIGHTWEIGHT CONCRETE
MAINT	MAINTENANCE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURER
MGR	MANAGER
MH	MANHOLE
MIL	MILITARY
MIN	MINIMUM
MISC	MISCELLANEOUS
MET	METAL
ML	METAL LATH
MLDG	MOLDING
MLP	METAL LATH AND PLASTER
MO	MASONRY OPENING
MOD	MOTOR OPERATED DAMPER
MTG	MOUNTING
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NRC	NOISE-REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFF	OFFICE
OH	OPPOSITE HAND
OHDR	OVERHEAD DOOR
OPNG	OPENING
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
P/L	PROPERTY LINE
PASS	PASSENGER
PERF	PERFORATED
PL	PLATE
PLAS	PLASTER
PLBG	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
PNT	PAINT
PORC	PORCELAIN
PR	PAIR
PREFAB	PREFABRICATED
PROJ	PROJECT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PTD	PAINTED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
QTF	QUARRY-TILE FLOOR
R	RADIUS
R	RISER
RD	ROOF DRAIN
REFR	REFRIGERATOR
REINF	REINFORCE
REQD	REQUIRED
RET	RETURN
REV	REVISION
REG	REGISTER
RFG	ROOFING
RH	RIGHT HAND
RM	ROOM
RWC	RAIN WATER CONDUCTOR
S	SOUTH
SAPC	SUSPENDED ACOUSTICAL PANEL CEILING
SCHED	SCHEDULE
SDG	SIDING
SEC	SECTION
SF	SQUARE FOOT
SGFT	STRUCTURAL GLAZED FACING TILE
SH	SHOWER
SHM	SECURITY HOLLOW METAL
SHT	SHEET
SI	INTERNATIONAL SYSTEM OF UNITS
SIM	SIMILAR
SKY	SKYLIGHT
SLDR	SLIDING DOOR
SMLS	SEAMLESS
SPEC	SPECIFICATION
SPKLR	SPRINKLER
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE/STRUCTURAL
STWY	STAIRWAY
SUPT	SUPERINTENDENT
SUPVR	SUPERVISOR
SURF	SURFACE
SUSP	SUSPENDED/SUSPENSION
SYS	SYSTEM
T	TREAD
T/	TOP OF
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TAN	TANGENT
TDD	TELECOMMUNICATION DISPLAY DEVICE
TEL	TELEPHONE
TEMP	TEMPORARY
TER	TERRAZZO
THRU	THROUGH
TLT	TOILET
TRTD	TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VAT	VINYL ASBESTOS TILE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VTR	VENT THRU ROOF
W	WEST
W	WIDE
W/	WITH
W/O	WITHOUT
WBD	WALLBOARD
WC	WATER CLOSET
WD	WOOD
WDR	WOOD DOOR
WH	WATER HEATER
WTRPRF	WATERPROOFING
WWF	WELDED WIRE FABRIC
XFMR	TRANSFORMER

LEGEND – SYMBOLS

1 / A101 SCALE: — DRAWING TITLE

TRUE NORTH / N / PROJECT NORTH — NORTH ARROW

A / A200 — ELEVATION REFERENCE: ELEVATION REFERENCE / DWG/SHT NO

1 / A500 — DETAIL REFERENCE

1 / A101 — SECTION REFERENCE

0.0 REF ELEV — REFERENCE ELEVATION LINE

EXISTING DOOR

NEW DOOR

ACCESSIBLE SYMBOL

UP / DN — STAIR/RAMP DIRECTION

X 12 — ROOF PITCH

+24.90 — EXISTING SPOT ELEVATION

+24.90 — NEW SPOT ELEVATION

REVISION CLOUD

SIGN SYMBOL — SIGN NUMBER / SIGN TYPE

SHADE TREE

MULTI-STEM SHADE TREE

FLOWERING TREE

EVERGREEN TREE

SHRUB

ORNAMENTAL GRASS

PERENNIAL

TURF GRASS

RIPARIAN/EROSION CONTROL SEED MIX

EU — EXISTING UNDERGROUND ELECTRIC SERVICE

SSW — EXISTING SANITARY SEWER

W — EXISTING WATER SERVICE

G — EXISTING GAS SERVICE

TU — EXISTING UNDERGROUND TELEPHONE SERVICE

E — EXISTING ELECTRIC SERVICE

T — EXISTING TELEPHONE SERVICE

CTV — EXISTING CABLE TV SERVICE

PL — EXISTING PROPERTY LINE

Z — EXISTING PROPERTY Z LINE

OHW — OVERHEAD WIRE

X — EXISTING FENCE

30 — EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

30 — PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

SIGN

LIGHT POLE

EXISTING INLET

S — EXISTING SANITARY MANHOLE

U — EXISTING UTILITY MANHOLE

D — EXISTING WATER MANHOLE

WV — EXISTING WATER VALVE

U — EXISTING UTILITY VALVE

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CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — DAVID J. PHELAN — ENGINEER — 057506

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

GENERAL

ABBREVIATIONS AND LEGEND

SCALE: NO SCALE | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: DAM | CHECKED BY: TAC
WORK ORDER NO.: -
DRAWING NUMBER: **G202**
DWG. NO.: 2 OF 2
SHT. NO.: 2 OF 48
COMPUTER FILE NO.: | REV. NO.: 00

DATE PRINTED: 11/14/2024 12:29:57 PM
IFC SUBMISSION
C:\PW\WORKING\JACOBS_B&I\DAVIS\WLLD0560802K_SEPTA_GN.DWG

SURVEY NOTES:

1. EXISTING BASE SURVEY BY KMA CONSULTING ENGINEERS, INC (KMA) ON MAY 11, 2022 AND PROVIDED BY SEPTA
2. THIS SURVEY HAS BEEN PREPARED AND COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, EXCEPTIONS OR RESTRICTIONS OF RECORD THAT A TITLE SEARCH MAY DISCLOSE.
3. THE HORIZONTAL DATUM FOR THIS PLAN IS BASED ON NAD83(2011) THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. THE VERTICAL DATUM IS BASED ON NAVD88.
4. SUBSURFACE UTILITIES ARE SHOWN RELATIVE TO THE LOCATION OF THEIR SURFACE FEATURE LOCATIONS. JACOBS DOES NOT WARRANT THAT THEIR UNDERGROUND UTILITIES ARE COMPLETE OR EXACT. JACOBS HAS NOT SURVEYED THE UNDERGROUND UTILITIES. A PENNSYLVANIA ONE CALL WAS COMPLETED ON JULY 11, 2024. SERIAL NO. 20241932307 – ABINGTON TOWNSHIP AND 20241932308 – CHELTENHAM TOWNSHIP
5. THE PROJECT UNITS ARE IN U.S. SURVEY FEET.
6. RIGHT OF WAY FOR KESWICK AVE AS INDICATED ON THE SEPTA VALUATION MAPS. ALL WORK TO OCCUR WITHIN THE LEGAL RIGHT-OF-WAY.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING CURRENT STANDARDS, AS APPLICABLE: MUNICIPAL DETAILS AND STANDARDS, SEPTA STANDARD DETAILS AND SPECIFICATIONS, PENNDOT SPECIFICATIONS (PUB 408), PENNDOT ROADWAY CONSTRUCTION STANDARDS (RC DRAWINGS), PENNDOT TRAFFIC STANDARDS (TC DRAWINGS), PADEP EROSION AND SEDIMENTATION CONTROL STANDARDS DETAILS.
2. THE PROJECT IS NOT LOCATED WITHIN FEMA 100-YEAR FLOODPLAIN.
3. BASED ON REVIEW OF THE EXISTING SITE CONDITIONS, NO PORTION OF THE PROJECT WOULD BE CONSIDERED AS A JURISDICTIONAL WETLAND OR WATERWAY; THEREFORE PERMITS UNDER DEP CHAPTER 105/ USACOE SECTION 404 WILL NOT BE REQUIRED.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. A COPY OF THE APPROVED PLAN MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL EROSION CONTROL MEASURES THAT MAY BE REQUIRED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR IS REQUIRED TO CONTACT THE PADEP AND/OR THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO IMPLEMENT ANY REVISIONS TO THE APPROVED PLAN.
5. NO OBJECTS SHALL BE PLACED, PLANTED, OR SET WITHIN THE AREA OF ANY EASEMENT OR RIGHT-OF-WAY THAT WOULD ADVERSELY IMPACT THE FUNCTION OF THE EASEMENT OR RIGHT-OF-WAY.
6. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS, PERMITS, AND ACCEPTANCE INSPECTIONS FROM ALL REQUIRED AGENCIES.

EXISTING CONDITIONS

1. ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWING FOR THE EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS, CERTAIN DESIGN DRAWINGS FOR ORIGINAL CONSTRUCTION AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE, AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.
2. THE EXACT EXTENT OF CONSTRUCTION OR RESTORATION WORK CANNOT BE NECESSARILY OR ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS, MATERIAL QUANTITIES, AND EXTENT OF THE MODIFICATION WORK SHOWN ON DRAWINGS. PERFORM THE WORK TO MEET FIELD CONDITIONS ENCOUNTERED.
3. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE SEPTA PROJECT MANAGER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE SHOP AND ERECTION PLANS, INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL VERIFY ALL BASELINES AND POINTS OF CONSTRUCTION, THE LOCATION OF ALL NEW CONSTRUCTION, AND VERIFY ALL SETBACKS, OFFSETS, AND CLEARANCES.
2. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO PERMANENT AND TEMPORARY FACILITIES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE A WRITTEN CONSTRUCTION SEQUENCE PLAN AND COORDINATE ANY REQUIRED BREAKS IN UTILITY SERVICE WITH SEPTA AND THE APPROPRIATE UTILITY PRIOR TO COMMENCING ANY WORK REQUIRING A BREAK IN UTILITY SERVICE.
3. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION WASTE FROM THE SITE. ANY MATERIAL REMOVED FROM THE SITE IS TO BE LEGALLY DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL PROVIDE EVIDENCE OF LEGAL DISPOSAL.
5. NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERCEDE ANY DISCREPANCY IN THE SCALING OF THE DRAWINGS. DO NOT SCALE THE DRAWINGS.
6. NO WORK THAT WILL FOUL THE TRACK MAY BE PERFORMED WITHOUT PRIOR SEPTA AUTHORIZATION. SEE SPECIFICATIONS SECTIONS 010600 AND 010650 FOR ADDITIONAL INFORMATION.
7. COORDINATE ANY NEED FOR TRACK OUTAGE WITH THE SEPTA PROJECT MANAGER. APPROVAL FOR TRACK OUTAGE IS SOLELY AT SEPTA'S DISCRETION. SEE SECTION 011000 FOR ADDITIONAL INFORMATION.
8. CONTRACTOR WILL CONTACT THE PA ONE CALL SYSTEM (800-242-1776) NO LESS THAN THREE (3) AND NO MORE THAN TEN (10) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
9. THE CONTRACTOR MUST PROVIDE AND MAINTAIN SAFE PEDESTRIAN ACCESS FROM ALL OPERATIONAL AREAS TO ACTIVE PLATFORMS AND OPERATIONAL STATION BUILDING AT ALL TIMES DURING CONSTRUCTION.
10. THE CONTRACTOR MUST MAINTAIN MINIMUM 10'-WIDE ENTRANCE AND EXIT LANES TO/FROM THE STATION LOT AT ALL TIMES.
11. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY ON-SITE AND OFF-SITE TEMPORARY TRAFFIC CONTROL AND DIRECTIONAL SIGNAGE AND PAVEMENT MARKINGS TO ALLOW SAFE MOVEMENT THROUGH CONSTRUCTION AREAS AND TO AND FROM ALL TEMPORARY AREAS.
12. THE CONTRACTOR WILL ESTABLISH AND MAINTAIN TEMPORARY BENCHMARKS ON-SITE TO PERFORM OPERATIONS DURING CONSTRUCTION.
13. CONTRACTOR SHALL COORDINATE WITH THE MUNICIPALITIES TO RESTORE ANY DISTURBED LANDSCAPING DURING CONSTRUCTION.

OWNERS

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
1234 MARKET STREET, 12TH FLOOR
PHILADELPHIA, PA 19107
PHONE: (215) 580-7800

SITE ADDRESS

KESWICK AVENUE
GLENSIDE, PA 19038

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CHELTENHAM TOWNSHIP SEWER
8230 OLD YORK RD
ELKINS PARK, PA 19027
CONTACT: TOM CINAGLIA
EMAIL: tcinaglia@cheltenham-township.org
(267) 887-1000

LUMEN
CONTACT: JEREMY WEEKS
EMAIL: JEREMY.WEEKS@LUMEN.COM
(610) 879-4047

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
PA1 SYSTEM. INC.
1-800-242-1776
POCS SERIAL NUMBERS:
20241932307
20241932308

ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION PROVIDED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR MUST VERIFY THE LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 1B7 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATIONWORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
E&C DIVISION
1234 MARKET ST, 13TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
Dominic A. Marchesano, Jr
ENGINEER
No. PE084640

Jacobs
2001 MARKET STREET
SUITE 900
PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963
JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
CIVIL
GENERAL NOTES - CIVIL

SCALE: NO SCALE | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: DAM | CHECKED BY: TAC
WORK ORDER NO.: -
DRAWING NUMBER: **C201**
DWG. NO.: 1 OF 8
SHT. NO.: 3 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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DATE PRINTED: 11/14/2024 2:03:25 PM
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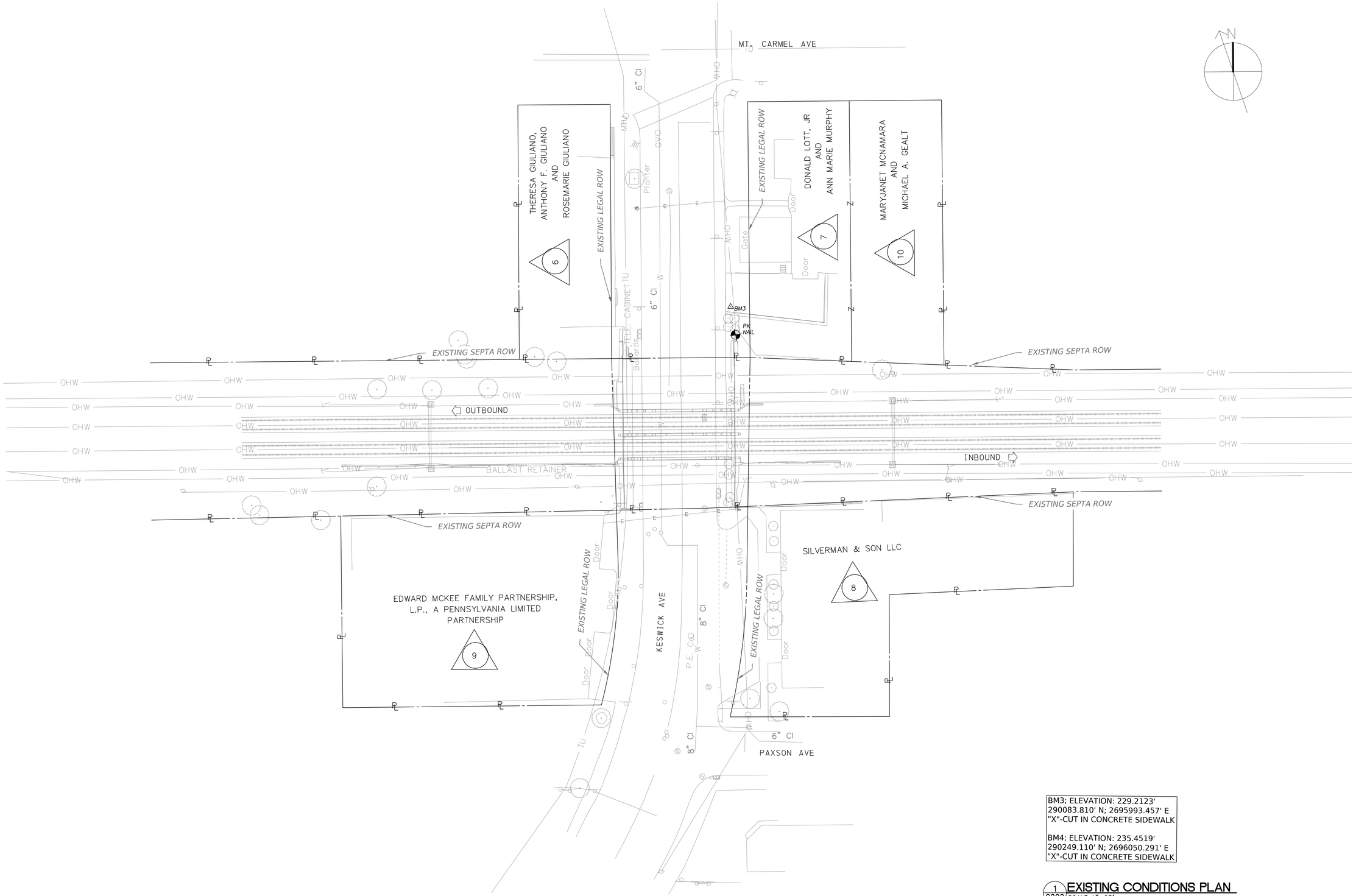

BM3; ELEVATION: 229.2123'
290083.810' N; 2695993.457' E
"X"-CUT IN CONCRETE SIDEWALK

BM4; ELEVATION: 235.4519'
290249.110' N; 2696050.291' E
"X"-CUT IN CONCRETE SIDEWALK

1 C202 EXISTING CONDITIONS PLAN
SCALE: 1"=25'
0 25' 50'

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PHILADELPHIA, PA 19107

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

CIVIL
EXISTING CONDITIONS PLAN

SCALE: 1" = 25' | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: DAM | CHECKED BY: TAC
WORK ORDER NO.: -
DRAWING NUMBER: **C202**
DWG. NO.: 2 OF 8
SHT. NO.: 4 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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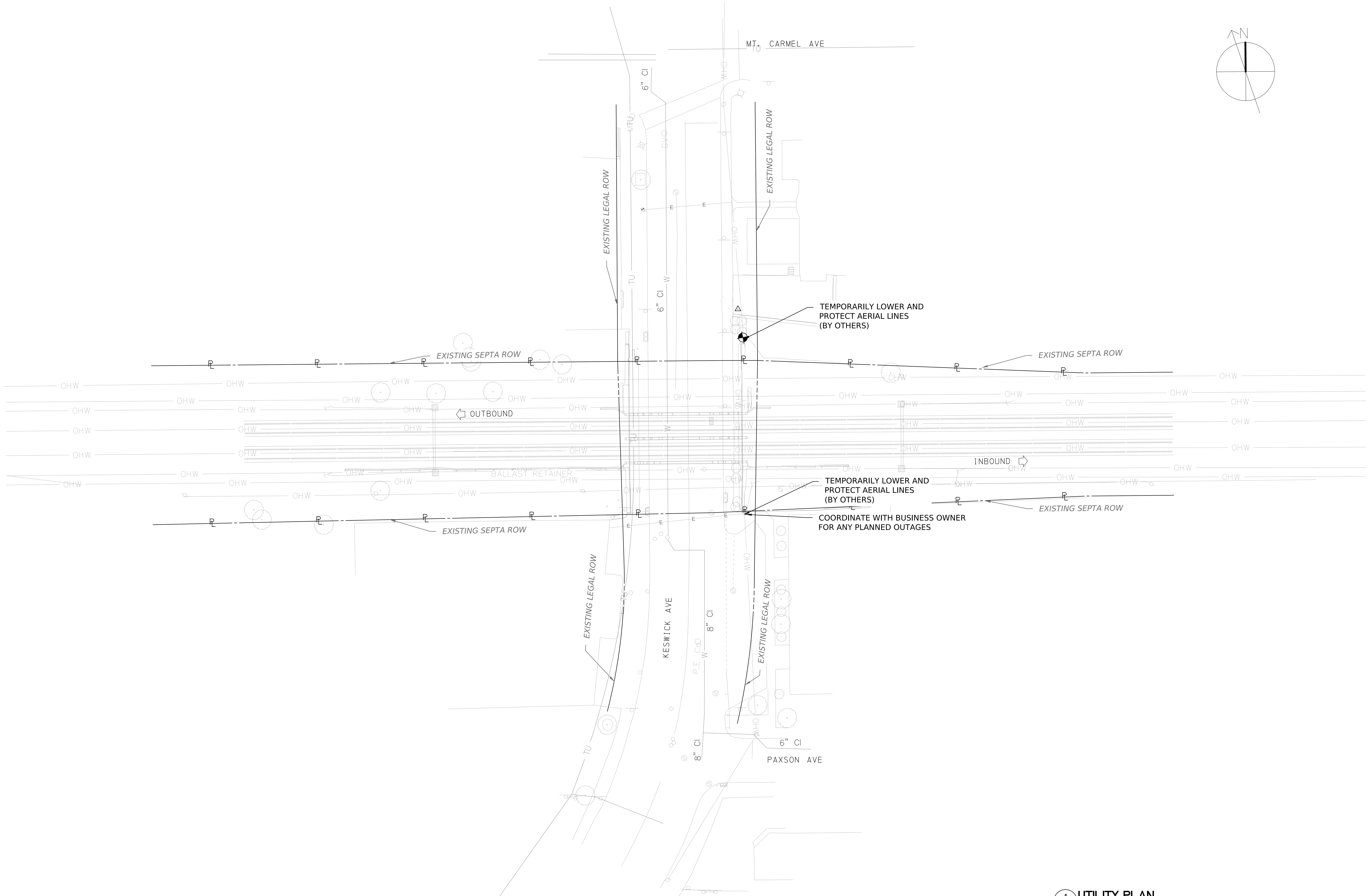

1 C203 UTILITY PLAN
SCALE: 1"=25'

0 25' 50'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EM&C DIVISION
1234 MARKET ST, 13TH FL,
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER

CHIEF SAFETY OFFICER

DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

CHIEF ENGINEER, BRIDGES & BUILDINGS

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MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS

PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CK'D	AP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
CIVIL
UTILITY PLAN

SCALE: 1" = 25'	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
	CHECKED BY: TAC
WORK ORDER NO.: -	
DRAWING NUMBER: C203	
DWG. NO.: 3 OF 8	
SHT. NO.: 5 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

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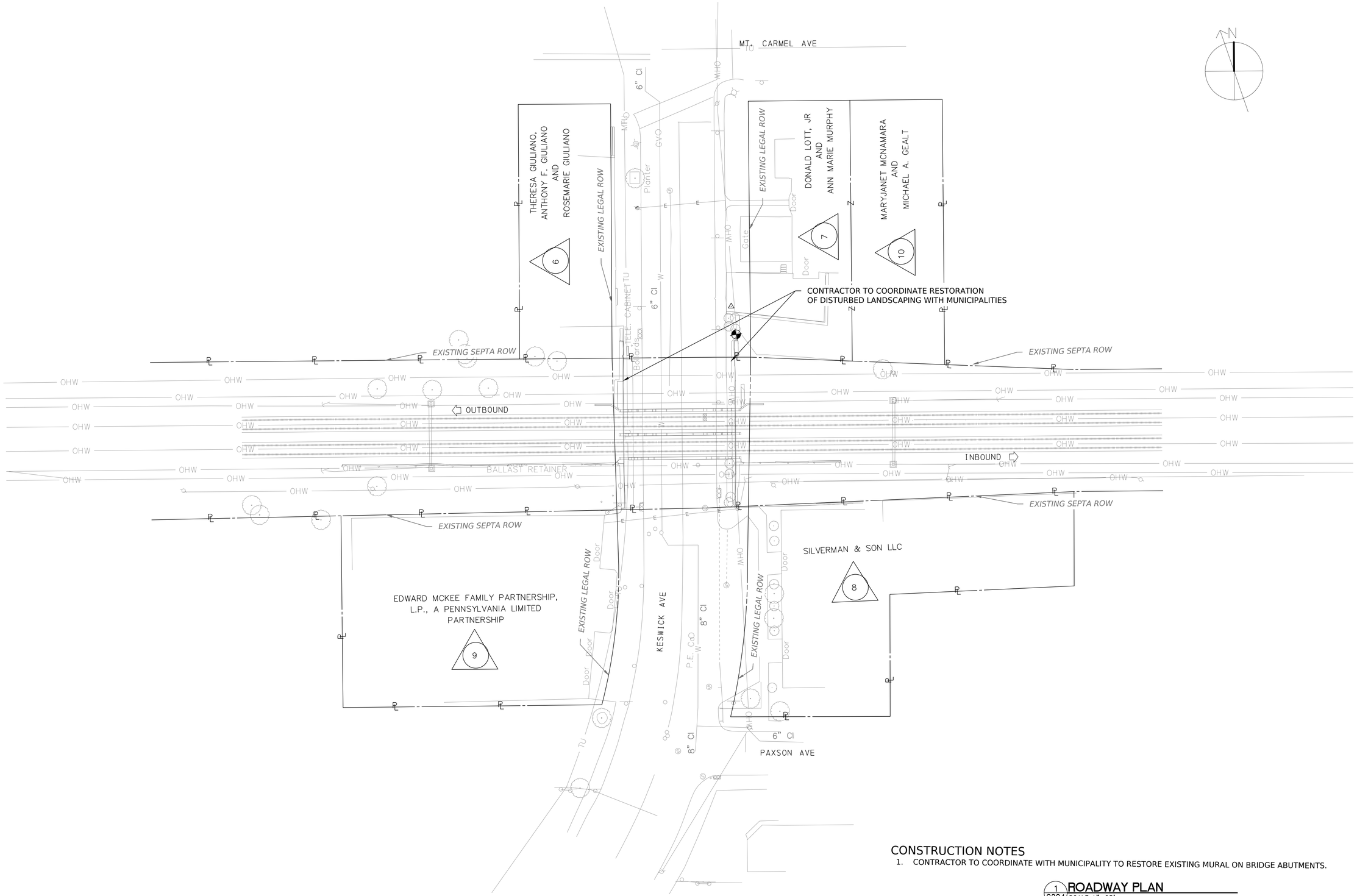

CONSTRUCTION NOTES

1. CONTRACTOR TO COORDINATE WITH MUNICIPALITY TO RESTORE EXISTING MURAL ON BRIDGE ABUTMENTS.

1 C204 ROADWAY PLAN
SCALE: 1"=25'
0 25' 50'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
E&C DIVISION
1234 MARKET ST, 13TH FL,
PHILADELPHIA, PA 19107

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REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

CIVIL
ROADWAY PLAN

SCALE: 1" = 25'	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
	CHECKED BY: TAC
WORK ORDER NO.: -	

DRAWING NUMBER
C204

DWG. NO.:	4	OF	8
SHT. NO.:	6	OF	48

COMPUTER FILE NO.: REV. NO.: 00

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GENERAL NOTES - ESPC (EROSION AND SEDIMENT POLLUTION CONTROL):

1. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), INVITE ALL CONTRACTORS AND A REPRESENTATIVE FROM MONTGOMERY COUNTY CONSERVATION DISTRICT (MCCD) TO AN ON-SITE PRECONSTRUCTION MEETING.

2. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, AND SIGNED BY THE ENGINEER) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBING ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THE SEQUENCE MUST BE APPROVED IN WRITING BY MCCD AND PADEP PRIOR TO IMPLEMENTATION.

5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

6. CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMP'S SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THE ESPC PLAN.

7. APPLY DUST SUPPRESSOR OR OTHER MEASUERS KEEP DUST WITHIN TOLERABLE LIMITS AT THE SITE.

8. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY MCCD AND PADEP.

9. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT PA 25 CODE 260.1 SEQ., 271.1 AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

10. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ONTO THE SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL AS A RESULT OF ANALYTICAL TESTING.

11. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.

12. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUT SLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.

13. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9" IN THICKNESS. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

14. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

15. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. DISTURBED AREAS NEAR SURFACE WATERS SHALL BE BLANKETED WITHIN 50 FEET OF TOP OF BANK OR 100 FEET FROM TOP OF BANK WITHIN HQ/EV WATERSHEDS.

18. ESPC BMPS SHALL REMAIN FUNCTIONAL UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY MCCD.

19. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE CONTRACTOR SHALL CONTACT THE MCCD FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE ESPC BMPS.

20. FAILURE TO CORRECTLY INSTALL ESPC BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF ESPC BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

21. THE CONTRACTOR SHALL PROVIDE VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

22. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION AND CONSTRUCTION MATERIALS/WASTES.

23. CHANNELS HAVING RIP RAP MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.

24. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 9 INCH LAYERED LIFTS AT 95F MAXIMUM DRY DENSITY.

25. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN FOUR (4) DAYS MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATE. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS THAT ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

26. ALL CONCRETE WASH WATER WILL BE DISPOSED OF ACCORDING TO PADEP CHAPTER 102 REGULATIONS.

27. EXCESS SOILS IN THE SUPPORT AREA CAN BE RECYCLED BY GRADING THE SOILS AND STREAM SEDIMENTS WITHIN THE LIMITS OF THE PROJECT AREA AND STABILIZE, OR DISPOSED OF AT A PADEP REGULATED FACILITY. SOILS AND SEDIMENTS TAKEN OFF SITE WILL NEED TO COMPLY WITH PADEP CLEAN FILL POLICIES.

28. UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS, ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SPECIFICATIONS 2020, CHANGE 9 OR CURRENT VERSION.

PROJECT EARTH DISTURBANCE

TOTAL PROPOSED PROJECT EARTH DISTURBANCE	=	11.9K Sq. ft
RAILROAD MAINTENANCE ACTIVITIES	=	11.9K Sq. ft
NON-ROADWAY MAINTENANCE ACTIVITIES	=	NONE

CONTACT INFORMATION

MONTGOMERY COUNTY CONSERVATION DISTRICT
JEFF MCKENNA
143 LEVEL ROAD,
COLLEGEVILLE, PA 19428
610-489-4506 EXT 16

EMERGENCY CONTACT INFORMATION

JOHN KRAFCHIK
PROJECT MANAGER
WALSH CONSTRUCTION
300 S PENNELL ROAD, SUITE 610
MEDIA, PA 19063
CELL: 484-318-9895

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EM&C DIVISION
1234 MARKET ST, 15TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
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SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
RICHARD J. MARUZZI
ENGINEER NO. PE054057E

AEG
American Engineers Group, LLC
A Certified MBE/DBE/SDB/SBE Firm
5095 RITTER ROAD,
SUITE 110
MECHANICSBURG, PA 17055
1-800-733-1102

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
CIVIL
GENERAL NOTES - ESPC

SCALE: NO SCALE | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: MEL | CHECKED BY: JDO
WORK ORDER NO.: -
DRAWING NUMBER: **C205**
DWG. NO.: 5 OF 8
SHT. NO.: 7 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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DATE PRINTED: 11/14/2024 11:27:42 AM
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ESPC SEQUENCE OF CONSTRUCTION

CHAPTER 93 STREAM DESIGNATION:

TOOKANY CREEK TO THE DELAWARE RIVER

WWF & MF

ESPC PLAN CONSTRUCTION SEQUENCE

1. NOTIFY MONTGOMERY CONSERVATION DISTRICT (MCCD) OF PROPOSED START OF WORK, A WEEK IN ADVANCE OF THE START OF WORK DATE.

   MONTGOMERY COUNTY CONSERVATION DISTRICT
   JEFF MCKENNA
   143 LEVEL ROAD,
   COLLEGEVILLE, PA 19428
   610-489-4506 EXT 16

2. IMPLEMENT THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPT), INCLUDING DETOUR, DEVICES AND SIGNAGE.
3. INSTALL ALL BMPS INCLUDING INLET FILTER BAGS IN EACH OF FOUR STORM INLETS, CONCRETE WASHOUT, PUMPED WATER FILTER BAG AND COMPOST FILLED SOCK AS PER THE ESC PLAN.
4. INITIATE GENERAL SITE WORK AND REPAIRS.
5. STABILIZE ALL EARTH DISTURBANCES AS NEEDED.
6. AFTER THE GENERAL SITE IS COMPLETE, REMOVE INSTALLED BMPS.
7. REMOVE THE MPT, INCLUDING DETOUR, DEVICES AND SIGNAGE.
8. INFORM THE MCCD THE WORK IS COMPLETE.

NOTE: ALL WASTE AND CONSTRUCTION DEBRIS FROM THE PROJECT WILL BE DIRECTLY LOADED INTO DUMP BOXES. ALL CONSTRUCTION WASTE MATERIALS AND DEBRIS WILL BE PROCESSED AT A PADEP APPROVED WASTE OR RECYCLING FACILITY.

KESWICK AVE. PROJECT AREA

SOILS

UUGB-URBAN LAND-UDORTHENTS SOILS

URBAN LANDS-80%

UDORTHENTS, SHIST AND GNEISS-15%

MINOR COMPONENTS-5%

SLOPE-8%

RESTRICTIVE ZONE TO BEDROCK-99 INCHES

WATER SUPPLY ZONE 0-60 INCHES

FLOOD FREQUENCY-NONE

DEPTH TO WATER TABLE-60 INCHES

HYDRIC SOILS-NO

HYDROLOGIC SOILS GROUPR-C

GEOLOGY

SHIST AND UNCONSOLIDATED SEDIMENTS

GEOLOGIC HAZARDS

NO EXCAVATION IS PROPOSED FOR THIS PROJECT. NO GEOLOGIC HAZARD NOTED.

SEEDING, SOIL SUPPLEMENTS, AND MULCHING

FORMULA AND SPECIES	% BY WEIGHT	MINIMUM % PURITY	MINIMUM % GERMINATION	MAX % WEED SEED	SEEDING RATE LB/1000 SY (LB/ACRE)
SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX					42.0 (210) TOTAL
• PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT.	20	97	90	0.10	8.5 (42.5)
• CREEPING RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED)	30	97	85	0.10	12.5 (62.5)
• KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS). A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT.	50	97	80	0.15	21.0 (105)
SEEDING - FORMULA T TEMPORARY GRASS MIX					6 (30) TOTAL
OATS (AVENA SATIVA) (SPRING)	100	97	85	0.10	6 (30)
CEREAL RYE (SECALE CEREALE) (FALL)	100	97	85	0.10	6 (30)

FOR INFORMATION ONLY, REFER TO PENNDOT PUBLICATION 408, SECTION 804 FOR COMPLETE AND REGULATORY SPECIFICATION.

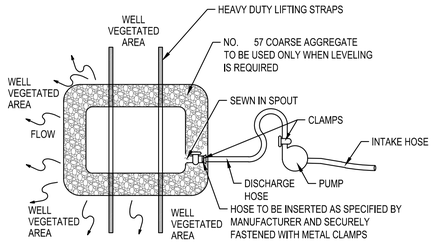
UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS, ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SPECIFICATIONS 2020, CHANGE 9 OR CURRENT VERSION.

SEEDING SCHEDULE

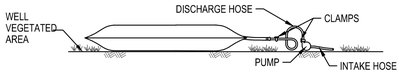
SPREAD SEEDS WHERE TABBED AND AT THE RATES SPECIFIED IN ABOVE TABLE, OR AS OTHERWISE INDICATED. SPREAD SEEDS WITHIN THE FOLLOWING DATES, OR AS OTHERWISE INDICATED OR DIRECTED.

FORMULA B
MARCH 15 TO JUNE 1 AND AUGUST 1 TO OCTOBER 15

FORMULA T
MARCH 15 TO JUNE 1 AND AUGUST 1 TO OCTOBER 15



TOP VIEW

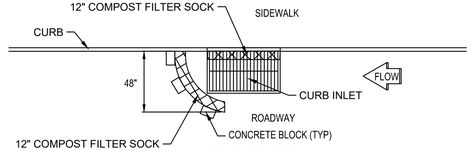


SIDE VIEW

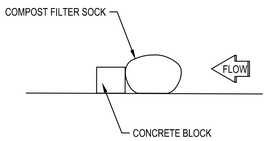
2 C206 **PUMPED WATER FILTER BAG**
SCALE: NONE

PUMPED WATER FILTER BAG NOTES:

1. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
2. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
3. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
4. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
5. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
6. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
7. A PUMP WATER FILTER BAG HAS BEEN ADDED BUT IS NOT SHOWN IN THE PLANS. IN CASE OF STORM EVENT DURING CONSTRUCTION, IT CAN BE USED.



PLAN VIEW



SECTION VIEW

1 C206 **COMPOST FILTER SOCK**
SCALE: NONE

COMPOST FILTER SOCK NOTES:

1. COMPOST FILTER SOCK SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
2. REMOVE SEDIMENT FROM UPSLOPE SIDE WHEN ACCUMULATION HAS REACHED ½ OF EFFECTIVE HEIGHT OF THE COMPOST FILTER SOCK.
3. DAMAGED COMPOST FILTER SOCK SHALL BE REPLACED WITHIN 24 HOURS OF INSPECTION. A SUPPLY OF COMPOST FILTER SOCK SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.
4. COMPOST FILTER SOCK WILL BE FILLED WITH HIGH QUALITY COMPOST.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EMAC DIVISION
1234 MARKET ST, 13TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
RICHARD J. MARUZZI
ENGINEER NO. PE054057E

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American Engineers Group, LLC
A Certified MBE/DBE/SDB/SBE Firm
5095 RITTER ROAD,
SUITE 110
MECHANICSBURG, PA 17055
1-800-733-1102

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
CIVIL
ESPC DETAILS AND SEQUENCE OF CONSTRUCTION

SCALE: NO SCALE	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MEL
	CHECKED BY: JDO
WORK ORDER NO.: -	
DRAWING NUMBER: C206	
DWG. NO.: 6 OF 8	
SHT. NO.: 8 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

DATE PRINTED: 11/14/2024 11:27:55 AM

IFC SUBMISSION

M:\24000\24025 SEPTA MAINLINE BRIDGES\CADD\E_SKENSMICK\24025 SEPTA BRIDGES PLAN-KESWICK-REV.DWG

MT. CARMEL AVE

THERESA GIULIANO,
ANTHONY F. GIULIANO
AND
ROSEMARIE GIULIANO

6

DONALD LOTT, JR
AND
ANN MARIE MURPHY

7

MARYJANET MCNAMARA
AND
MICHAEL A. GEALT

10

EDWARD MCKEE FAMILY PARTNERSHIP,
L.P., A PENNSYLVANIA LIMITED
PARTNERSHIP

9

SILVERMAN & SON LLC

8

KESWICK AVE

PAXSON AVE

EXISTING LEGAL ROW

EXISTING SEPTA ROW

EXISTING BALLAST RETAINER

BALLAST RETAINER

LOD

IFB-1

IFB-2

IFB-3

IFB-4

WPCWO

BM3

PK NAIL

INBOUND

UugB

LEGEND

WPCWO — WOOD PLANK CONCRETE WASHOUT

IFB-# — INLET FILTER BAG

UugB — SOIL TYPE

LOD — LIMIT OF DISTURBANCE

100 YEAR FLOODPLAIN

LOD = 11,870.1476 Sq. ft.

1 / C207 ESPC PLAN
SCALE: 1"=25'

0 25' 50'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EM&C DIVISION
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PHILADELPHIA, PA 19107

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REV	DATE	DESCRIPTION	BY	CKD	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

CIVIL
ESPC PLAN

SCALE: 1" = 25'	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MEL
	CHECKED BY: JDO
WORK ORDER NO.: -	

DRAWING NUMBER
C207

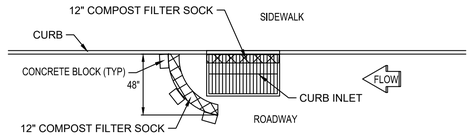
DWG. NO.:	7	OF	8
SHT. NO.:	9	OF	48

COMPUTER FILE NO.: REV. NO.: 00

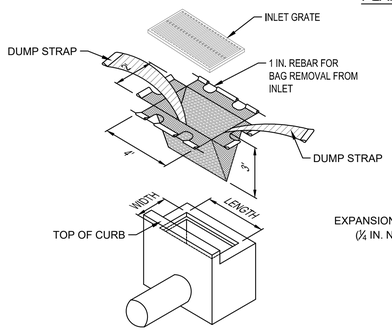
IFC SUBMISSION

DATE PRINTED: 11/14/2024 1:49:36 PM

M:\24000\24025 SEPTA MAINLINE BRIDGES\CADD\E_SIKENS\WICK\24025 SEPTA BRIDGES PLAN-KESWICK-REV.DWG



PLAN VIEW



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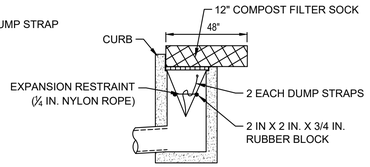
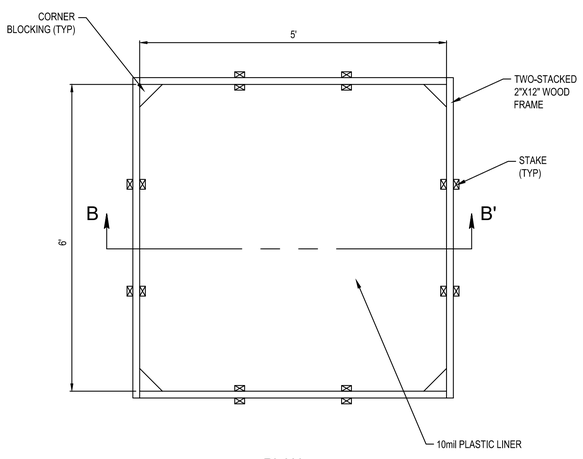


BAG INSTALLATION

2 C208 INLET FILTER BAG
SCALE: NONE
IFB–1

SECTION B-B'

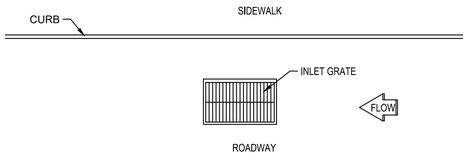


PLAN

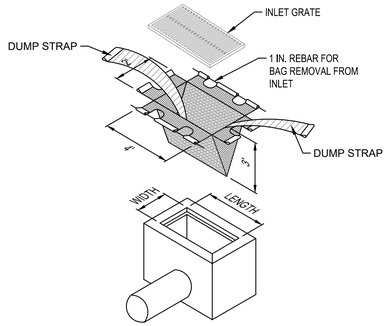
1 C208 WOOD PLANK CONCRETE WASHOUT
SCALE: NONE

WOOD PLANK CONCRETE WASHOUT NOTES:

1. LOAD/UNLOAD SIDE SHOULD FACE DOWN SLOPE.
2. DO NOT PLACE CONCRETE WASHOUT FACILITIES WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
3. PLACE SIGNS ADJACENT TO EACH TEMPORARY CONCRETE WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED IN DESIGNATED AREAS ONLY.
4. ALLOW CONVENIENT ACCESS FOR CONCRETE TRUCKS.
5. PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
6. LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
7. SURFACE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.
8. INSPECT AND VERIFY THAT CONCRETE WASHOUT BMPS ARE IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
9. DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY THE FOLLOWING:
   a. CHECK OVERALL CONDITION AND PERFORMANCE.
   b. CHECK REMAINING CAPACITY (% FULL).
   c. IF USING SELF-INSTALLED WASHOUT FACILITIES, VERIFY PLASTIC LINERS ARE INTACT AND SIDEWALLS ARE NOT DAMAGED.
   d. IF USING PREFABRICATED CONTAINERS, CHECK FOR LEAKS.
10. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
11. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
12. DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND.
13. DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
14. PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION.
15. REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
16. WHEN REMOVING MATERIALS FROM CONCRETE WASHOUT, INSPECT FOR SIGNS OF WEAKENING OR DAMAGE, AND MAKE ANY NECESSARY REPAIRS. RE-LINE THE STRUCTURE WITH NEW PLASTIC AFTER EACH CLEANING IF NECESSARY.
17. WHEN CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE, SLURRIES AND LIQUIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
18. HARDENED CONCRETE CAN BE REMOVED WHOLE OR CAN BE BROKEN UP. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
19. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.



PLAN VIEW
IFB-2



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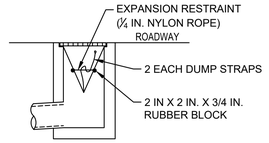
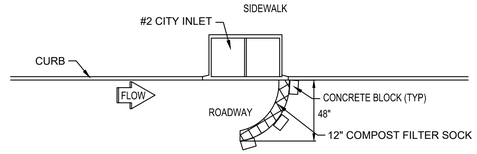
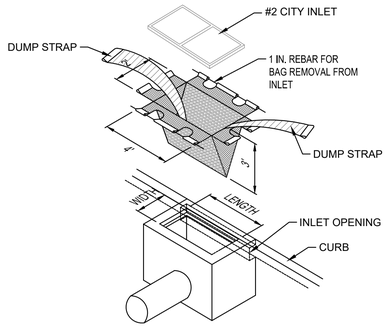


BAG INSTALLATION

3 C208 INLET FILTER BAG
SCALE: NONE
IFB–2



PLAN VIEW
IFB-3, IFB-4



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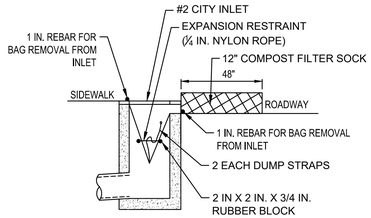

BAG INSTALLATION

4 C208 INLET FILTER BAG
SCALE: NONE
IFB–3 & IFB–4

INLET FILTER BAG NOTES:

1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
3. ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.

SEE SHEET C206 FOR PUMPED WATER FILTER BAG AND COMPOST FILLED FILTER SOCK DETAILS

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EMAC DIVISION
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MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS

PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
RICHARD J. MARUZZI
ENGINEER NO. PE054057E

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1-800-733-1102

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
CIVIL
ESPC DETAILS

SCALE: 1" = 25'
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: MEL
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WORK ORDER NO.: -
DRAWING NUMBER: C208
DWG. NO.: 8 OF 8
SHT. NO.: 10 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 11:28:19 AM
IFC SUBMISSION
M:\24\000\24025 SEPTA MAINLINE BRIDGES\CADD\E_SIKENS\MCK\24025 SEPTA BRIDGES PLAN-KESWICK-REV.DWG

MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) GENERAL NOTES

1. THIS WORK CONSISTS OF THE MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION.

2. FURNISH, ERECT, PLACE, AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES. MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES CONSISTENT WITH THE METHODS INDICATED ON THESE DRAWINGS AND IN THE MOST CURRENT EDITIONS OF:
   - PENNDOT PUBLICATION 35, QUALIFIED PRODUCTS LIST FOR CONSTRUCTION (BULLETIN 15);
   - PA CODE, TITLE 67, CHAPTER 212, OFFICIAL TRAFFIC CONTROL DEVICES;
   - PENNDOT PUBLICATION 111, TRAFFIC CONTROL - PAVEMENT MARKINGS AND SIGNING STANDARDS;
   - PENNDOT PUBLICATION 213, TEMPORARY TRAFFIC CONTROL GUIDELINES;
   - PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS;
   - PENNDOT PUBLICATION 408, HIGHWAY CONSTRUCTION SPECIFICATIONS;
   - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD);

3. IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE THE DEVICES.

4. ARRANGE FOR INSPECTION OF ALL TRAFFIC CONTROL DEVICES PRIOR TO START OF WORK.

5. THE TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY AS SPECIFIED IN SECTION 901.2(a) OF PUBLICATION NO. 408/2020; LATEST REVISION.

6. ALL DISTANCES MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

7. COVER OR REMOVE ALL CONFLICTING SIGNS OR SIGNS NOT IN USE.

8. MAINTAIN A MINIMUM LANE WIDTH OF 10 FEET.

9. INSTALL AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES THAT ARE IN NEW CONDITION THROUGHOUT THE DURATION OF THE PROJECT. ANY DAMAGE INCURRED SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE REPRESENTATIVE.

10. LOCATE ALL SIGNS SO THAT SIGHT DISTANCES WILL NOT BE OBSTRUCTED AT DRIVEWAYS AND LOCAL ROADS.

11. NOTIFY LOCAL EMERGENCY AUTHORITIES (E.G., POLICE, FIRE, MEDICAL), AFFECTED BUSINESSES, SCHOOL DISTRICT(S), THE GENERAL PUBLIC, THE DISTRICT PERMIT MANAGER AND THE DISTRICT AUTOMATED PERMIT ROUTING AND ANALYSIS SYSTEM (APRAS) COORDINATOR AT LEAST FOURTEEN (14) DAYS PRIOR TO ANY SIGNIFICANT TRAFFIC IMPACTS (E.G., LATERAL WIDTH RESTRICTIONS LESS THAN 16 FEET, DETOURS).

12. RESTORE ALL TRAVEL LANES TO NORMAL TRAFFIC FLOW AT THE CLOSE OF EACH WORKING PERIOD UNDER SHORT-TERM CONDITIONS AND REMOVE ALL SHORT-TERM WORK ZONE TRAFFIC CONTROL SIGNING.

13. PROTECT ANY EXCAVATING OBSTRUCTIONS OR CONSTRUCTION WORK, SO AS NOT TO EXPOSE PEDESTRIANS TO HAZARDS.

14. TEMPORARILY COVER OR REMOVE ANY SIGNS THAT ARE IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL MEASURES. DO NOT ATTACH TAPE OR ADHESIVE TO THE FACE OF ANY SIGNS THAT ARE TEMPORARILY COVERED DURING CONSTRUCTION OPERATIONS. ENSURE, DURING THE REMOVAL AND STORAGE OF ALL SIGNS, THAT THE SHEETING FACE IS NOT DAMAGED OR SCRATCHED. REPLACE IN KIND ALL SIGNS AND/OR POSTS DAMAGED DURING REMOVAL, STORAGE, OR REINSTALLATION AT THE CONTRACTOR'S EXPENSE.

15. COMPLY WITH ACT 229 OF DECEMBER 2002 DURING CONSTRUCTION ACTIVITIES.

16. MAINTAIN ACCESS TO LOCAL BUSINESSES AT ALL TIMES.

17. COORDINATE WORK ZONE SIGNING AND OPERATIONS WITH OTHER PROJECTS IN THE AREA.

18. SEQUENCE OF CONSTRUCTION TO BE DETERMINED BY CONTRACTOR AND APPROVED BY THE REPRESENTATIVE PRIOR TO COMMENCING WORK. MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE PATA DRAWINGS IN PENNDOT PUBLICATION 213.

19. POST THE SPECIAL SIGN “THIS STREET TO BE CLOSED FOR MAINTENANCE (START DATE)", TWO WEEKS PRIOR TO THE BEGINNING OF WORK. REMOVE THE SIGNS ONCE CONSTRUCTION BEGINS.

20. NOTIFY THE MUNICIPALITIES AT LEAST 14 DAYS PRIOR TO STARTING EACH PHASE OF WORK AND WITH ANY OTHER ROAD OR SIDEWALK RESTRICTIONS TO ALLOW PUBLIC NOTICE THROUGH THEIR WEBSITE AND NEWSLETTER.

21. NOTIFY SEPTA TWO WEEKS IN ADVANCE OF THE DISCONTINUANCE OF THE EXISTING BUS STOP LOCATIONS, BASED ON ANY PENDING CONSTRUCTION ACTIVITIES THAT WOULD BLOCK ACCESS. ALSO, NOTIFY SEPTA TWO WEEKS IN ADVANCE WHEN NEW STOPS ARE AVAILABLE TO USE.

    CONTACT: MICHAEL DAGOSTINO, MDAGOSTINO@SEPTA.ORG

22. COORDINATE ALL PARKING RESTRICTIONS WITH THE MUNICIPALITIES AT LEAST 2 WEEKS IN ADVANCE OF ANY CLOSURES.

23. THESE PLANS ARE NOT INTENDED TO RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR THE PROTECTION OF THE PUBLIC AND THE CONSTRUCTION PERSONNEL AS SPECIFIED IN SECTION 901.3(A) OF PENNDOT PUBLICATION 408. THE STANDARDS PRESCRIBED ARE A MINIMUM AND ADDITIONAL PROTECTION MAY BE NEEDED IF PROBLEMS ARE ENCOUNTERED DURING THE TERM OF THE CONTRACT. CONSISTENTLY REVIEW THIS PLAN FOR ITS ADEQUACY AND RECOMMEND CHANGES FOR DEPARTMENT AND MUNICIPAL APPROVAL WHEN INADEQUACIES ARE DISCOVERED.

24. CONTRACTOR CANNOT IMPLEMENT DETOUR FOR BRIDGES ML 11.62 AND 11.83 CONCURRENTLY.

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PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
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Dominic A. Marchesano, Jr
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No. PE084640

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2001 MARKET STREET
SUITE 900
PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	JMM

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
ROADWAY
GENERAL NOTES - TRAFFIC

SCALE: NO SCALE
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: DAM
CHECKED BY: JMM
WORK ORDER NO.: -
DRAWING NUMBER
R201
DWG. NO.: 1 OF 4
SHT. NO.: 11 OF 48
COMPUTER FILE NO.:
REV. NO: 00

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DATE PRINTED: 11/14/2024 12:25:26 PM
IFC SUBMISSION

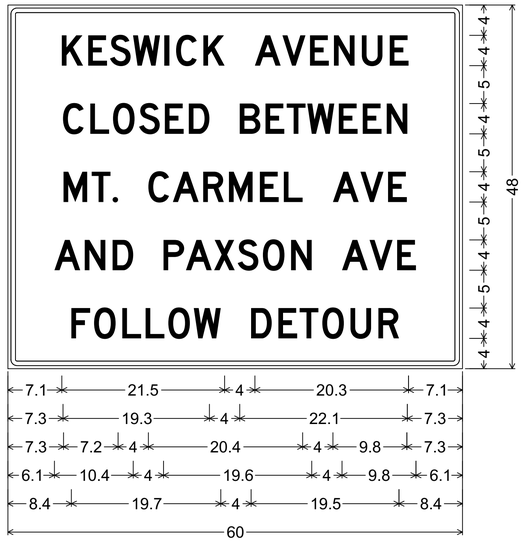
SP-1

1.2" Radius, 0.6" Border, 0.4" Indent, Black on Fluorescent orange;
"KESWICK AVE", B 2K;
Table of widths and spaces

5.3	K 1.8	0.6	E 1.5	0.4	S 1.8	0.3	W 2.5	0.6	I 0.5	0.8	C 1.7	0.8	K 1.7	

4.0	A 2.2	0.2	V 1.9	0.6	E 1.5	5.3

SP-2



1.2" Radius, 0.6" Border, 0.4" Indent, Black on Fluorescent orange;
"KESWICK AVENUE", D 2K;
"CLOSED BETWEEN", D 2K;
"MT. CARMEL AVE", D 2K;
"AND PAXSON AVE", D 2K;
"FOLLOW DETOUR", D 2K;
Table of widths and spaces

7.1	K 2.8	0.7	E 2.5	0.4	S 2.7	0.3	W 3.6	0.6	I 0.6	0.9	C 2.7	0.9	K 2.8	

4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	0.6	N 2.8	0.9	U 2.7	1.0	E 2.5	7.1	

7.3	C 2.7	0.9	L 2.5	0.5	O 2.8	0.6	S 2.7	0.7	E 2.5	0.7	D 2.7	

4.0	B 2.7	0.7	E 2.5	0.3	T 2.5	0.2	W 3.6	0.6	E 2.5	0.6	E 2.5	0.7	N 2.7	7.3

7.3	M 3.2	0.6	T 2.4	0.3	. 0.7	

4.0	C 2.8	0.5	A 3.4	0.6	R 2.7	0.7	M 3.1	1.0	E 2.4	0.7	L 2.5	

4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	7.3

6.1	A 3.4	0.6	N 2.8	0.9	D 2.7

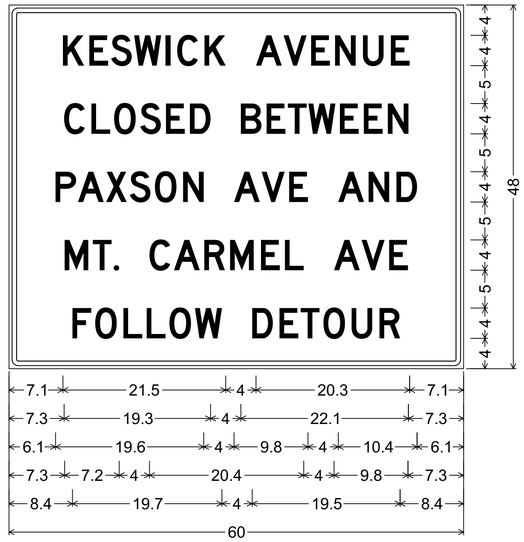
4.0	P 2.8	0.2	A 3.4	0.3	X 2.7	0.4	S 2.8	0.6	O 2.8	0.9	N 2.7

4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	6.1

8.4	F 2.5	0.5	O 2.8	0.9	L 2.5	0.6	L 2.5	0.5	O 2.8	0.5	W 3.6	

4.0	D 2.7	0.9	E 2.5	0.3	T 2.5	0.5	O 2.8	0.9	U 2.7	1.0	R 2.7	8.4

SP-3



1.2" Radius, 0.6" Border, 0.4" Indent, Black on Fluorescent orange;
"KESWICK AVENUE", D 2K;
"CLOSED BETWEEN", D 2K;
"PAXSON AVE AND", D 2K;
"MT. CARMEL AVE", D 2K;
"FOLLOW DETOUR", D 2K;
Table of widths and spaces

7.1	K 2.8	0.7	E 2.5	0.4	S 2.7	0.3	W 3.6	0.6	I 0.6	0.9	C 2.7	0.9	K 2.8	

4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	0.6	N 2.8	0.9	U 2.7	1.0	E 2.5	7.1	

7.3	C 2.7	0.9	L 2.5	0.5	O 2.8	0.6	S 2.7	0.7	E 2.5	0.7	D 2.7	

4.0	B 2.7	0.7	E 2.5	0.3	T 2.5	0.2	W 3.6	0.6	E 2.5	0.6	E 2.5	0.7	N 2.7	7.3

6.1	P 2.8	0.2	A 3.4	0.3	X 2.7	0.4	S 2.8	0.6	O 2.8	0.9	N 2.7

4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	4.0	A 3.4	0.6	N 2.7	0.9	D 2.8	6.1

7.3	M 3.2	0.6	T 2.4	0.3	. 0.7

4.0	C 2.8	0.5	A 3.4	0.6	R 2.7	0.7	M 3.1	1.0	E 2.4	0.7	L 2.5	

4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	7.3

8.4	F 2.5	0.5	O 2.8	0.9	L 2.5	0.6	L 2.5	0.5	O 2.8	0.5	W 3.6	

4.0	D 2.7	0.9	E 2.5	0.3	T 2.5	0.5	O 2.8	0.9	U 2.7	1.0	R 2.7	8.4

NOTE: ALL SIGN DETAIL DIMENSIONS SHOWN IN INCHES, UNLESS OTHERWISE NOTED.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
E&C DIVISION
1234 MARKET ST, 13TH FL,
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
Dominic A. Marchesano, Jr
ENGINEER
No. PE084640

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TEL. 215-569-2900
FAX. 215-569-5963
JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	JMM

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
ROADWAY

SIGN FABRICATION DETAILS

SCALE: NO SCALE
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: DAM
CHECKED BY: JMM
WORK ORDER NO.: -
DRAWING NUMBER: R202
DWG. NO.: 2 OF 4
SHT. NO.: 12 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

IFC SUBMISSION

DATE PRINTED: 11/14/2024 12:25:28 PM

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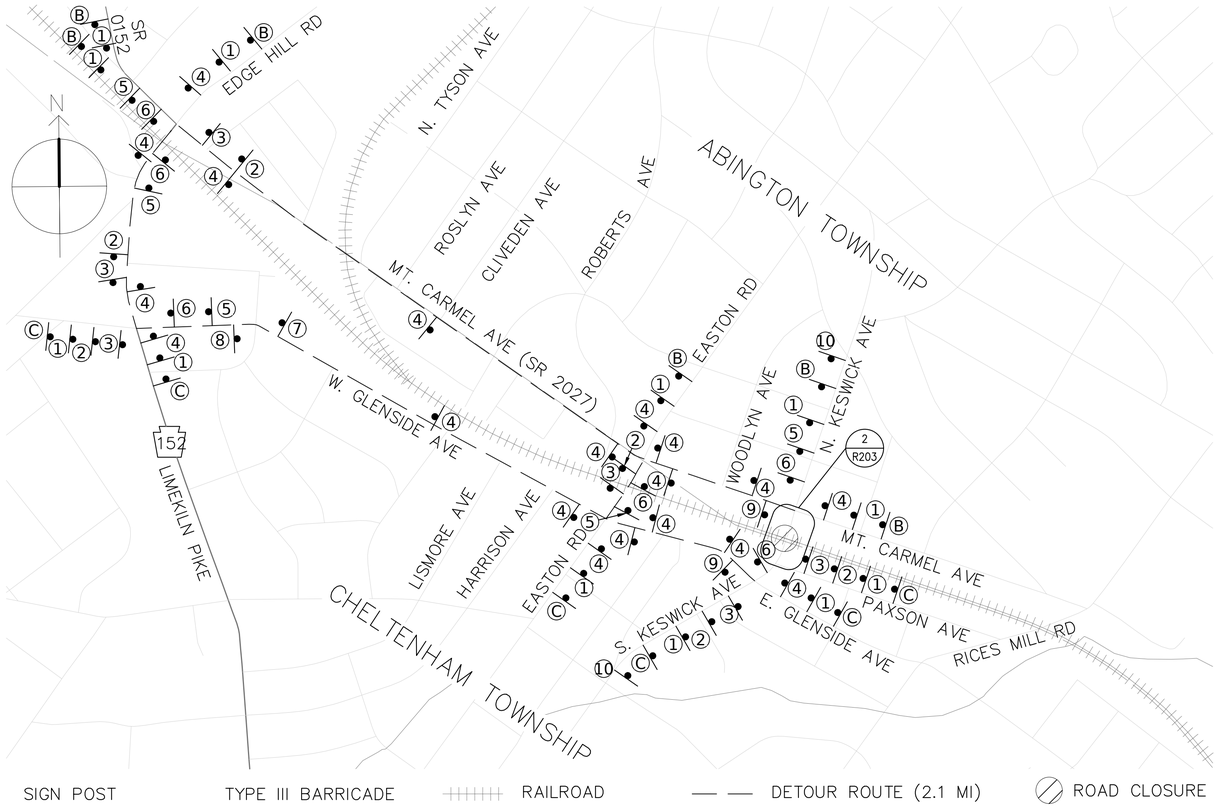
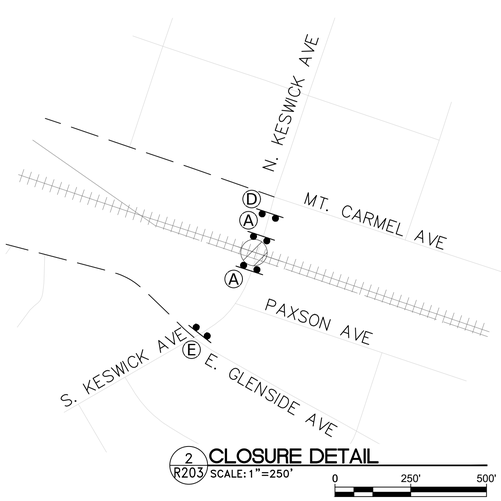


1 R203 VEHICULAR DETOUR PLAN
SCALE: 1"=500' 0 500' 1000'



2 R203 CLOSURE DETAIL
SCALE: 1"=250' 0 250' 500'

① KESWICK AVE / DETOUR AHEAD — SP-1 36"X12" — W20-2 36"X36" W30-1-6 20"X6"

② KESWICK AVE / DETOUR ← — SP-1 36"X12" — M4-9SL 30"X24"

③ KESWICK AVE / DETOUR ← — SP-1 36"X12" — M4-9L 30"X24"

④ KESWICK AVE / DETOUR ↑ — SP-1 36"X12" — M4-9S 30"X24"

⑤ KESWICK AVE / DETOUR → — SP-1 36"X12" — M4-9SR 30"X24"

⑥ KESWICK AVE / DETOUR → — SP-1 36"X12" — M4-9R 30"X24"

⑦ KESWICK AVE / DETOUR ↖ — SP-1 36"X12" — M4-9-1BL 30"X24"

⑧ KESWICK AVE / DETOUR ↗ — SP-1 36"X12" — M4-9-1BR 30"X24"

⑨ KESWICK AVE / END DETOUR — SP-1 36"X12" M4-8A 24"X18"

⑩ THIS STREET TO BE CLOSED FOR MAINTENANCE MAY XX, 2025 — W23-101 96"X48"

Ⓐ ROAD CLOSED — R11-2 48"X30" — TYPE III BARRICADE W/TYPE B FLASHERS

Ⓑ KESWICK AVENUE CLOSED BETWEEN MT. CARMEL AVE AND PAXSON AVE FOLLOW DETOUR — SP-2 60"X48"

Ⓒ KESWICK AVENUE CLOSED BETWEEN PAXSON AVE AND MT. CARMEL AVE FOLLOW DETOUR — SP-3 60"X48"

Ⓓ ROAD CLOSED TO THRU TRAFFIC / DETOUR → — R11-4 60"X30" — TYPE III BARRICADE W/TYPE B FLASHERS — M4-10R 48"X18"

Ⓔ ROAD CLOSED TO THRU TRAFFIC / DETOUR ← — R11-4 60"X30" — TYPE III BARRICADE W/TYPE B FLASHERS — M4-10L 48"X18"

3 R203 SIGN LEGEND
NTS

NOTES:

1. NOTIFY ABINGTON AND CHELTENHAM TOWNSHIPS, PENNDOT DISTRICT 6-0, EMERGENCY SERVICES PROVIDERS, AND LOCAL SCHOOL DISTRICTS A MINIMUM OF TWO (2) WEEKS PRIOR TO THE IMPLEMENTATION OF THIS DETOUR.
2. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES FOR THE ENTIRE DURATION OF THE DETOUR.
3. COORDINATE DETOUR PLAN WITH AREA EVENTS INCLUDING, BUT NOT LIMITED TO, THE GLENSIDE FOOD TRUCK FESTIVAL (SEPTEMBER), WINTERFEST (NOVEMBER/DECEMBER), AND ART FESTIVAL (APRIL 26).
4. COORDINATE DETOUR PLAN WITH OTHER LOCAL PROJECTS. CONTACT TOWNSHIPS, MONTGOMERY COUNTY, AND/OR PENNDOT FOR A LIST OF PLANNED PROJECTS.
5. USE SUFFICIENT NUMBER OF TYPE III BARRICADES TO CLOSE OFF ENTIRE ROAD.
6. INSTALL SIGN W23-101 AT LEAST 2 WEEKS IN ADVANCE OF CLOSURE. REMOVE SIGN AT START OF CLOSURE.
7. SIGN LOCATIONS ARE APPROXIMATE. PLACE SIGNS IN ACCORDANCE WITH PENNDOT PUBLICATION 213.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL ENGINEER
Dominic A. Marchesano, Jr
No. PE084640

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FAX. 215-569-5963
JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	

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MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

ROADWAY

VEHICULAR DETOUR PLAN

SCALE: AS SHOWN	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
WORK ORDER NO.: -	CHECKED BY: JMM

DRAWING NUMBER
R203

DWG. NO.: 3 OF 4
SHT. NO.: 13 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 12:25:30 PM

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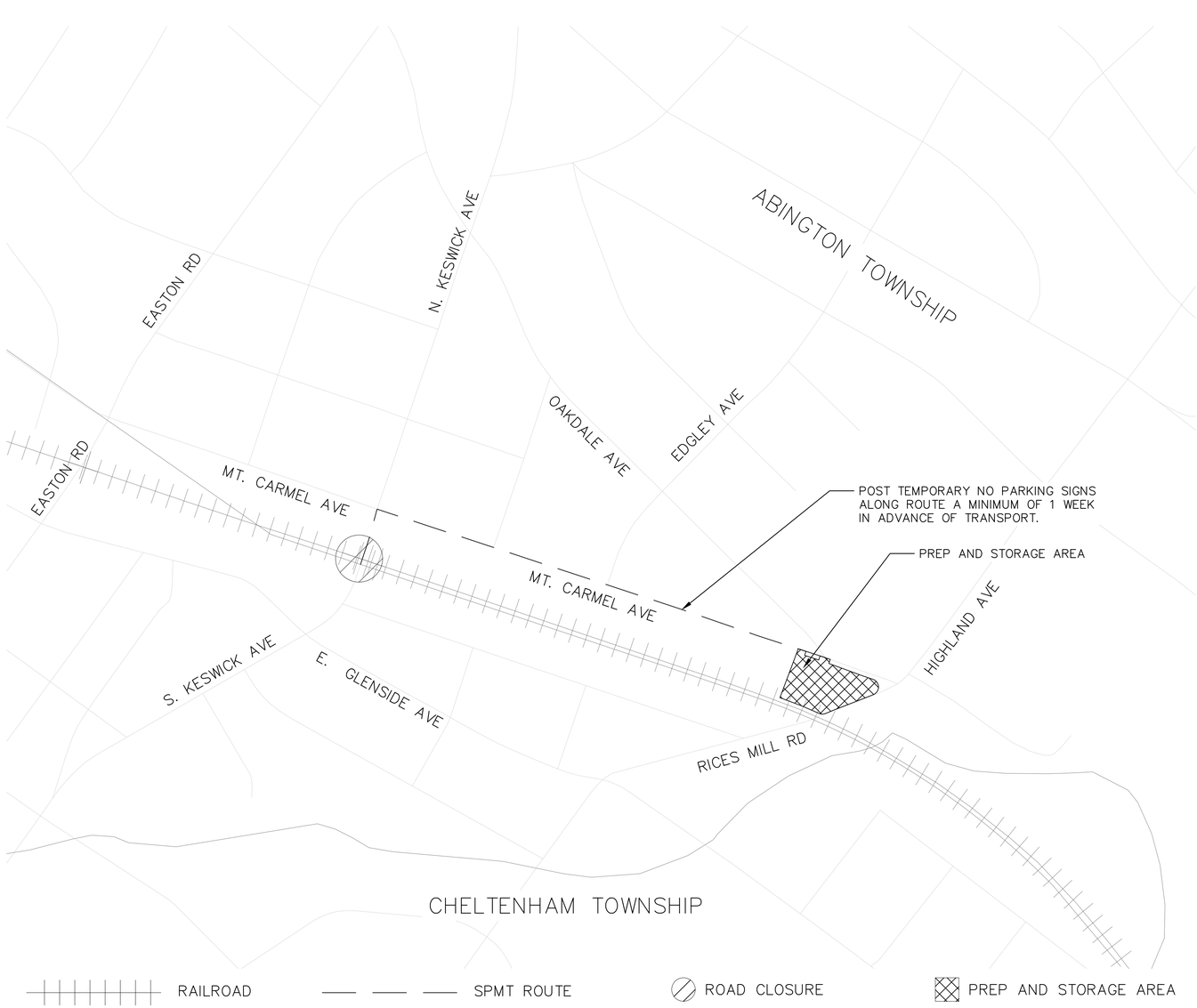

NOTES:

1. NOTIFY ABINGTON AND CHELTENHAM TOWNSHIPS, PENNDOT DISTRICT 6-0, EMERGENCY SERVICES PROVIDERS, AND LOCAL SCHOOL DISTRICTS A MINIMUM OF TWO (2) WEEKS PRIOR TO THE IMPLEMENTATION OF THIS DETOUR.
2. COORDINATE WITH LOCAL TOWNSHIP POLICE FOR TRANSPORT ESCORT.
3. COORDINATE DETOUR PLAN WITH AREA EVENTS INCLUDING, BUT NOT LIMITED TO, THE GLENSIDE FOOD TRUCK FESTIVAL (SEPTEMBER) AND WINTERFEST (NOVEMBER/DECEMBER), AND ART FESTIVAL (APRIL 26).
4. COORDINATE DETOUR PLAN WITH OTHER LOCAL PROJECTS. CONTACT TOWNSHIPS, MONTGOMERY COUNTY, AND/OR PENNDOT FOR A LIST OF PLANNED PROJECTS.
5. PROVIDE FLAGGERS AT EACH INTERSECTION ALONG SELF-PROPELLED MODULAR TRANSPORT ROUTE.

1 R204 SELF-PROPELLED MODULAR TRANSPORT (SPMT) ROUTE
SCALE: 1" = 250'
0 250' 500'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
E&C DIVISION
1234 MARKET ST, 13TH FL,
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER

CHIEF SAFETY OFFICER

DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

CHIEF ENGINEER, BRIDGES & BUILDINGS

SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS

MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS

PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL
Dominic A. Marchesano, Jr
ENGINEER No. PE084640

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PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	JMM

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
ROADWAY

SELF-PROPELLED MODULAR TRANSPORT (SPMT) ROUTE

SCALE: 1" = 250'
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: DAM
CHECKED BY: JMM
WORK ORDER NO.: -
DRAWING NUMBER: **R204**
DWG. NO.: 4 OF 4
SHT. NO.: 14 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 12:25:31 PM

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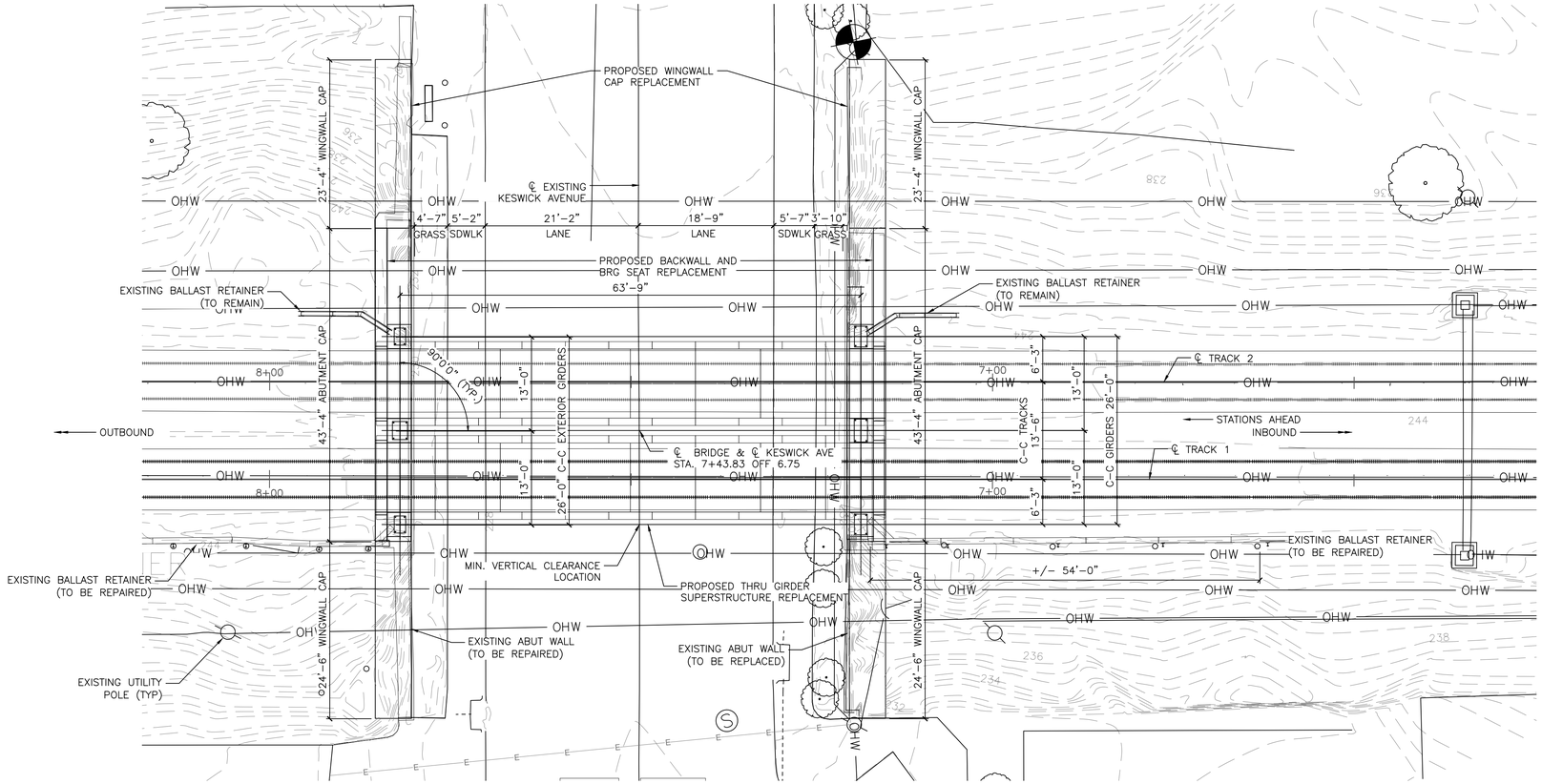
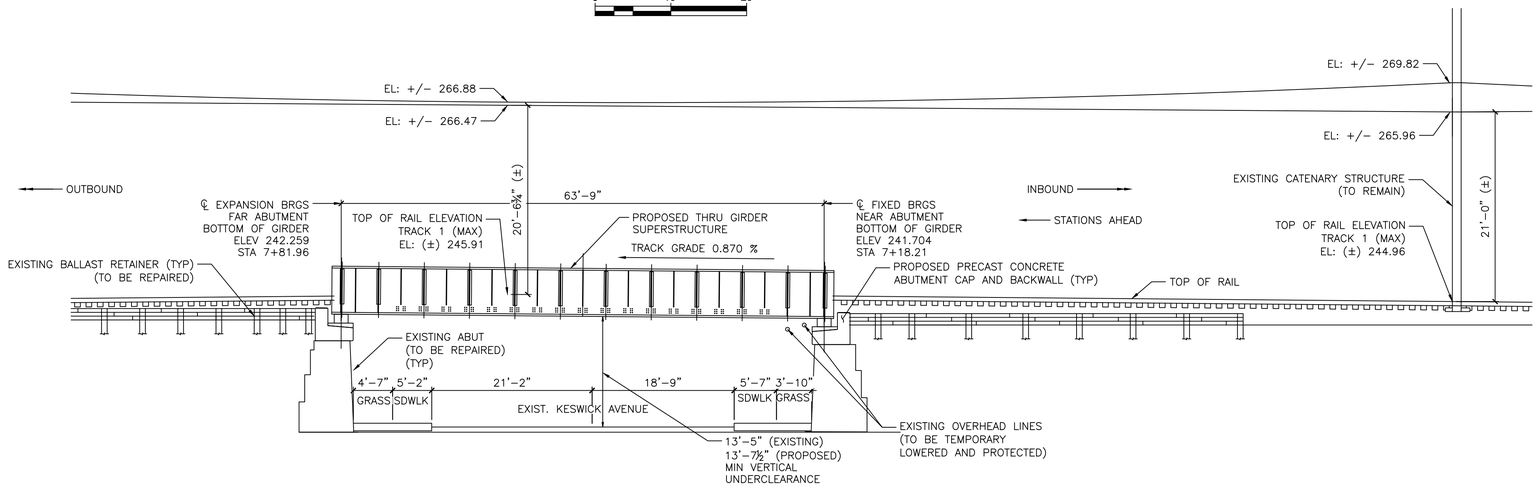


1 S201 PLAN
1" = 10'
0 10' 20



2 S201 ELEVATION
1" = 10'
0 10' 20

SCOPE OF WORK:

1. REPLACE EXISTING BRIDGE SUPERSTRUCTURE.
2. INSTALL NEW PRECAST ABUTMENT CAP.
3. INSTALL NEW WINGWALL CAP.
4. REPAIR EXISTING SUBSTRUCTURE SURFACES TO REMAIN.
5. REPAIR EXISTING BALLAST RETAINER.

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CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL DAVID J. PHELAN ENGINEER 057506

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL

GENERAL PLAN AND ELEVATION

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: S201
DWG. NO.: 1 OF 30
SHT. NO.: 15 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:35:50 AM
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IFC SUBMISSION

A. GENERAL STRUCTURAL NOTES

1. REPRODUCTION OF STRUCTURAL CONTRACT DRAWINGS FOR USE AS SHOP DRAWINGS IS STRICTLY PROHIBITED. SHOP DRAWINGS WHICH ARE PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
2. WORK SHALL BE COORDINATED WITH THE VARIOUS TRADES TO INSURE THAT VARIOUS EMBEDDED ITEMS ARE INCORPORATED, TO AVOID CONFLICT OR INTERFERENCE WITH REINFORCING STEEL OR STRUCTURAL STEEL MEMBERS, AND TO ENSURE TIMELY COMPLETION OF ALL WORK.
3. THE LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE IDENTIFIED IN THE FIELD BEFORE CONSTRUCTION COMMENCES.
4. THE WORK SHOWN ON THE DRAWINGS IS TO BE PERFORMED IN ACCORDANCE WITH THE PA CODE, TITLE 34, LABOR AND INDUSTRY, PART XIV, UNIFORM CONSTRUCTION CODE (UCC) AS APPROPRIATE.
5. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.
6. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING MURALS. UPON COMPLETION OF CONCRETE REPAIR WORK, THE CONTRACTOR SHALL COORDINATE WITH SEPTA FOR THE RESTORATION/REPAINTING BY OTHERS OF THE IMPACTED MURALS (ABINGTON TOWNSHIP ENVIRONMENTAL ADVISORY COUNCIL – ML BRIDGE 11.62, ARCADIA UNIVERSITY – ML BRIDGE 11.83). THE CONTRACTOR SHALL PROVIDE ACCESS AND ASSIST WITH PREPARING THE CONCRETE SURFACES FOR PAINTING.
7. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO OBTAIN CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT TO SUBCONTRACTORS AND SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS.
8. IF A CONFLICT EXISTS AMONG THE STRUCTURAL DRAWINGS, GENERAL NOTES, OR THE SPECIFICATIONS, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE ENGINEER, SHALL GOVERN.
9. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSION OF THE CONTRACTOR OR FOR THEIR FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
10. ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE STRUCTURAL CONTRACT DOCUMENTS WILL BE APPROVED ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:
    - COST SAVINGS TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST.
    - THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE INTERNATIONAL CODE COUNCIL (ICC) AND THE ICC REPORT IS SUBMITTED WITH THE REQUEST. SUBMITTALS NOT SATISFYING THE ABOVE CRITERIA WILL NOT BE CONSIDERED.
11. CONTRACTOR TO ISSUE REQUEST FOR INFORMATION (RFI) FOR ANY INFORMATION NOT CLEAR/NOT SHOWN IN THE DRAWINGS.
12. TYPICAL NOTES AND DETAILS SHOWN ON STRUCTURAL REPAIR DETAILS SHALL BE APPLICABLE TO ALL PARTS OF THE STRUCTURAL WORK EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE ON THE CONTRACT DOCUMENTS. REPAIR DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO THOSE SHOWN FOR THE MOST NEARLY SIMILAR CONDITION ON THE DRAWINGS AS DETERMINED BY THE ENGINEER.
13. NO STRUCTURAL MEMBER SHALL BE CUT NOTCHED OR OTHERWISE ALTERED UNLESS APPROVED IN WRITING BY THE ENGINEER RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS INCURRED BY ENGINEER OF RECORD FOR THE REVIEW.
14. DO NOT SCALE DRAWING DIMENSIONS.
15. FABRICATION PRIOR THE RECEIPT OF AN APPROVED SHOP DRAWINGS SHALL BE AT THE CONTRACTOR'S OWN RISK AND THAT INSTALLATION OF ANY WORK PRIOR THE RECEIPT OF APPROVED SHOP DRAWINGS SHALL BE STRICTLY PROHIBITED.
16. FOR ESTIMATED ELEVATIONS REFER TO THE PLAN SHEETS.
17. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE COMMENCING ANY
18. DEMOLITION. THE CONTRACTOR SHALL VERIFY THE EXTENT AND LOCATIONS OF SITE UTILITIES.
19. THE CONTRACTOR SHALL DESIGN AND INSTALL SHORING TO SUPPORT NEW CONSTRUCTION (VERTICALLY AND LATERALLY) UNTIL STRUCTURAL COMPONENTS HAVE BEEN CONNECTED AS SHOWN ON THE STRUCTURAL DRAWINGS.
20. SHOP DRAWING REVIEW: BY SUBMITTING THE SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT THEY HAVE DETERMINED AND VERIFIED MATERIALS, FIELDS MEASUREMENTS, AND RELATED FIELD CONSTRUCTION CRITERIA (MEANS, METHODS, TECHNIQUES, SEQUENCES, OPERATIONS OF CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO), AND THAT THE CONTRACTOR HAS CHECKED AND COORDINATED THE INFORMATION CONTAINED WITHIN THE SUBMITTAL WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM FULL RESPONSIBILITY FOR THE ACCURACY OF DIMENSIONS AND DETAILS. SUCH REVIEW SHALL NOT CONSTITUTE ACCEPTANCE BY THE ENGINEER OF THE CORRECTNESS OR ADEQUACY OF SUCH SUBMITTALS, NOR WARRANTY THAT THE SUBMITTALS SATISFY THE REQUIREMENTS OF THE CONTRACT.

B. DESIGN CRITERIA

1. AREMA AND ACI318–19
2. SEPTA STRUCTURAL DESIGN CRITERIA AND GUIDELINES, AUGUST 2018.
3. SEPTA STRUCTURAL ENGINEERING RIGHT–OF–WAY DESIGN AND CONSTRUCTION STANDARDS, MARCH 2004.
4. DESIGN LOADS
    a. DEAD LOADS
        i: SELF WEIGHT OF MATERIAL
        ii: FUTURE DEAD LOADS
        iii: FUTURE BALLAST WEIGHT = 65 PSF
    b. LIVE LOAD: COOPER E80 WITH IMPACT PER AREMA "MANUAL OF RAILWAY ENGINEERING AND SEPTA STRUCTURAL DESIGN CRITERIA AND GUIDELINES"
    c. SERVICE LIFE
        i: MAIN LOAD CARRYING MEMBERS – 100 YEARS
        ii: LONG TERM REPAIRS – 20 YEARS

C. CAST–IN–PLACE CONCRETE

1. ALL CONCRETE FOR STRUCTURES SHALL BE AIR–ENTRAINED CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 4500 POUNDS PER SQUARE INCH AT 28 DAYS EXCEPT AS NOTED.
2. REINFORCEMENT BARS SHALL BE NEW BILLET STEEL CONFORMING TO A.S.T.M. DESIGNATION A615, GRADE 60, DEFORMED. BARS SHALL BE GALVANIZED PER A.S.T.M. A767.
3. CONCRETE DESIGN IS IN CONFORMANCE WITH BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318–19).
4. DETAIL, FABRICATE AND ERECT REINFORCEMENT BARS, INCLUDING BAR SUPPORTS, SPACERS, ETC. IN ACCORDANCE WITH "DETAILS AND DETAILING OF CONCRETE REINFORCEMENT." (ACI 315–99).
5. UNLESS SHOWN OTHERWISE, BARS AT SPLICES SHALL BE LAPPED IN ACCORDANCE WITH THE TABLE "REINFORCING STEEL LAP SPLICES AND EMBEDMENTS" SHOWN ON THIS SHEET..
6. CONCRETE COVER FOR REINFORCEMENT BARS SHALL CONFORM TO THE FOLLOWING, UNLESS INDICATED OTHERWISE ON THE DRAWINGS:
    a. UNFORMED SURFACES IN CONTACT WITH GROUND _____ 3 INCHES
    b. FORMED SURFACES IN CONTACT WITH GROUND OR EXPOSED TO WEATHER, AND ALL WALLS _____ 2 INCHES
    c. TOP OF SLABS _____ 2 INCHES
    d. BOTTOM OF SLABS _____ 1 ½ INCHES
7. CHAMFER EXPOSED CONCRETE EDGES 3/4 INCH X 3/4 INCH UNLESS NOTED OTHERWISE.
8. PROVIDE SURFACE–APPLIED WATERSTOPS AT ALL INTERFACES OF NEW AND EXISTING CONCRETE EXPOSED TO SOIL.
9. STANDARDS:
    a. DESIGN – ACI 318–19: AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
    b. AREMA: AMERICAN RAILWAY ENGINEERING AND MAINTENANCE–OF–WAY ASSOCATION.
10. SUBMIT PROPOSED CONCRETE MIX DESIGN TO THE OWNER'S REPRESENTATIVE AND TESTING LABORATORY CONCURRENTLY FOR REVIEW AND APPROVAL.
11. CLEAN AND APPLY BONDING AGENT TO EXISTING CONCRETE SURFACES TO RECEIVE NEW CONCRETE. CONCRETE TO CONFORM WITH THE LATEST ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
12. SECTIONS AND DETAILS MAY NOT SHOW ALL EXISTING CONCRETE REINFORCEMENT. CONTRACTOR TO FIELD VERIFY LOCATION OF EXISTING REINFORCEMENT.
13. PROVIDE BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH REQUIREMENTS OF ACI 315 UNO.
14. NOT ALL ITEMS EMBEDDED IN THE CONCRETE ARE SHOWN ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REINSTALLING ALL EXISTING EMBEDDED ELEMENTS ON THE BRIDGE.
15. EMBEDDED CONDUITS, PIPES, OR OTHER UTILITIES NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER, WHERE EMBEDDED ITEMS ARE ALLOWED, THEY SHALL BE SPACED NOT LESS THAN THREE DIAMETERS ON CENTER EACH WAY BUT WITH NOT LESS THAN TWO INCHES CLEAR SPACE BETWEEN EMBEDDED ITEMS. THE TOTAL DEPTH OF EMBEDDED ITEMS AND THE CLEAR SPACE BETWEEN THEM SHALL NOT EXCEED ⅓ OF THE TOTAL CONCRETE DEPTH AND SHALL BE CONFINED TO THE MIDDLE THIRD OF THE CONCRETE DEPTH.
16. HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS ARE PROHIBITED UNLESS AUTHORIZED BY ENGINEER.
17. MULTIPLE PENETRATIONS SHALL NOT BE SPACED CLOSER THAN 3 TIMES THE DIAMETER OR 3 TIMES OF THE WIDTH OF THE LARGER OPENING WITHOUT APPROVAL BY THE ENGINEER.
18. TYPICAL DETAILS OF REINFORCEMENT SUCH AS HOOKS, BEND DIAMETERS, ETC. SHALL BE IN ACCORDANCE WITH ACI.
19. MECHANICAL REBAR ANCHORS (TERMINATORS) SHALL BE THREADED DEVICES WITH A CAPACITY GREATER THAN THE YIELD STRENGTH OF THE BAR.

D. STRUCTURAL STEEL

1. STRUCTURAL STEEL SHALL CONFORM TO A.S.T.M. A709 GRADE 50.
2. DESIGN, FABRICATION AND ERECTION OF STRUCTURAL STEEL SHALL CONFORM TO THE 2022 A.I.S.C. CODES AND SPECIFICATIONS, INCLUDING THE A.I.S.C. CODE OF STANDARD PRACTICE FOR STEEL BUILDINGS. ALLOWABLE STRESS DESIGN (ASD) SHALL BE USED TO DESIGN AND DETAIL ALL CONNECTIONS.
3. ALL WELDING SHALL CONFORM TO THE AMERICAN WELDING SOCIETY (AWS) – STRUCTURAL WELDING CODE (AWS D1.1) 2020 EDITION & BRIDGE WELDING CODE (AWS D1.5) 2020 EDITION.
4. ALL CONNECTIONS SHALL BE SHOP WELDED ALL AROUND AND GROUND SMOOTH UNLESS NOTED OTHERWISE. FIELD CONNECTIONS SHALL BE MADE WITH HIGH–STRENGTH BOLTS, EXCEPT WHERE WELDING IS INDICATED ON THE DRAWINGS. HIGH–STRENGTH BOLTS SHALL CONFORM TO A.S.T.M. F3125 GRADE A325 BEARING TYPE CONNECTION UNLESS NOTED OTHERWISE.
5. ALL WELD SIZES, NOT INDICATED OR THOSE TO BE DESIGNED FOR MEMBER LOADS GIVEN ON THE DRAWINGS, SHALL COMPLY WITH THE LATEST A.W.S D1.5 BUT IN NO CASE SHALL WELD SIZE BE LESS THAN 3/16 INCH.
6. ALL STEEL FOR ANCHOR RODS SHALL CONFORM TO A.S.T.M. F1554 GRADE 55 UNLESS NOTED OTHERWISE.
7. USE NON–SHRINK GROUT FOR SETTING ANCHOR BOLTS WITH MIN. COMPRESSIVE STRENGTH OF 4000 POUNDS PER SQUARE INCH AT 28 DAYS.
8. NATURAL MILL CAMBER OF BEAMS SHALL BE PLACED UP.
9. ADEQUATE TEMPORARY BRACING SHALL BE PROVIDED DURING CONSTRUCTION.
10. MINIMUM CONNECTION PLATE OR ANGLE THICKNESS TO BE 3/8" (EXCEPT FOR SHIMS) UNLESS NOTED OTHERWISE.
11. ALL STEEL STRUCTURAL MEMBERS AND ACCESSORIES SUCH AS BOLTS, THREADED RODS, ANCHOR RODS, PLATES, BARS, SHIMS, ETC. SHALL BE HOT DIPPED. GALVANIZED (4 MILLS MINIMUM) AND PAINTED PER THE SPECIFICATIONS UNLESS NOTED OTHERWISE. STEEL FOR BALLAST RETAINER WALL AND DECK PLATES NEED NOT BE GALVANIZED, BUT PAINTED PER PROJECT SPECIFICATIONS.
12. SEE SPECIFICATIONS FOR NON–DESTRUCTIVE TESTING REQUIREMENTS.
13. GIRDERS AND FLOORBEAMS ARE FRACTURE CRITICAL MEMBERS (FCM) AND ARE TO MEET THE REQUIREMENTS OF AREMA CHAPTER 15, SECTION 1.14. TENSION ZONES ARE SHOWN ON THE PLANS.

E. WATERPROOFING

1. WATERPROOF NEW CONCRETE SURFACES IN ACCORDANCE WITH SPECIFICATION NO. 071416.
2. WATERPROOF STEEL DECK PLATE AND STEEL BALLAST RETAINER PLATES IN ACCORDANCE WITH SPECIFICATION NO. 071360.

F. PRECAST CONCRETE

1. ALL CONCRETE FOR STRUCTURES SHALL BE AIR–ENTRAINED CONCRETE WITH A MINIMUM COMPRESSIVE STRENGTH OF 5000 POUNDS PER SQUARE INCH AT 28 DAYS EXCEPT AS NOTED.
2. REINFORCEMENT BARS SHALL BE NEW BILLET STEEL CONFORMING TO A.S.T.M. DESIGNATION A615, GRADE 60, DEFORMED. BARS SHALL BE GALVANIZED.
3. CONCRETE DESIGN IS IN CONFORMANCE WITH "BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE" (ACI 318–19).
4. DETAIL, FABRICATE AND ERECT REINFORCEMENT BARS, INCLUDING BAR SUPPORTS, SPACERS, ETC. IN ACCORDANCE WITH "DETAILS AND DETALING OF CONCRETE REINFORCEMENT." (ACI 315–99).
5. UNLESS SHOWN OTHERWISE, BARS AT SPLICES SHALL BE LAPPED IN ACCORDANCE WITH THE TABLE "REINFORCING STEEL LAP SPLICES AND EMBEDMENTS" SHOWN ON THIS SHEET.
6. CONCRETE COVER FOR REINFORCEMENT BARS SHALL BE 1 1/2 INCHES, UNLESS INDICATED OTHERWISE ON THE DRAWINGS. CHAMFER EXPOSED CONCRETE EDGES 3/4 INCH X 3/4 INCH UNLESS NOTED OTHERWISE.
7. INSERTS, PLATES, WELDMENTS, LIFTING DEVICES AND OTHER ITEMS TO BE EMBEDDED IN PRECAST CONCRETE UNITS SHALL BE HOT DIPPED GALVANIZED AND HELD RIGIDLY IN PLACE TO PREVENT MOVEMENT DURING CASTING OPERATIONS.

G. REINFORCING

1. REINFORCING:
MESH: ASTM A–185 (FLAT SHEETS) GALVANIZED PER ASTM A1060.
BARS: ASTM A–615, GRADE 60 – DEFORMED GALVANIZED PER ASTM A767.
2. SPLICES IN REINFORCEMENT: UNLESS OTHERWISE NOTED, SPLICES AND ANCHORAGES SHALL BE PER ACI. STAGGER SPLICES WHEREVER POSSIBLE AND LOCATE SO AS NOT TO IMPAIR STRENGTH OF MEMBERS.
3. REINFORCEMENT WORK OF DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318–19, ACI DETAILING MANUAL (SP 66), CRSI MANUAL OF STANDARD PRACTICE, AND THE STRUCTURAL WELDING CODE – REINFORCING STEEL (AWS D1.1)).
4. PROVIDE AND SCHEDULE ON SHOP DRAWINGS THE NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN POSITION.
5. WHERE CONTINUOUS REINFORCEMENT IS CALLED FOR, IT SHALL BE EXTENDED CONTINUOUSLY AROUND CORNERS AND LAPPED AT SPLICES OR AT DISCONTINUOUS ENDS. LAPS SHALL BE CLASS B TENSION LAP SPLICES, UNO.
6. WHERE REINFORCEMENT IS REQUIRED IN SECTION, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER THE SECTION APPLIES.
7. REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.
8. DOWELS SHALL MATCH BAR SIZES UNLESS OTHERWISE NOTED.
9. WELDED WIRE FABRIC SHALL BE LAPPED 8 INCHES OR 1 ½ SQUARES WHICHEVER IS LARGER AND SHALL BE WIRED TOGETHER.
10. REINFORCEMENT INSTALLATION SHALL BE COMPLETED AT LEAST 24 HOURS BEFORE A CONCRETE PLACEMENT TO ENSURE PROPER TIME IS ALLOWED FOR THE INSPECTION OF THE REINFORCING. NOTIFY THE ENGINEER OF COMPLETION.
11. REINFORCEMENT SHALL BE SECURELY TIED IN PLACE AT THE POSITIONS SHOWN ON THE DRAWINGS BEFORE PLACING CONCRETE.

REINFORCING STEEL LAP SPLICES AND EMBEDMENTS

BAR SIZE	MIN LAP SPLICE LENGTH (INCHES)		MIN EMBEDMENT LENGTH (INCHES)	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
3	21	20	13	12
4	29	20	17	12
5	36	26	21	15
6	43	31	25	18
7	54	39	32	23
8	71	51	42	30
9	90	65	53	38
10	115	82	67	48
11	141	101	83	59

NOTES:
1. TABLE BASED ON ACI 318–19 WITH F'C = 4,000 PSI AND FY = 60,000 PSI.
2. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THE REINFORCEMENT.
3. HORIZONTAL WALL REINFORCEMENT IS CONSIDERED A TOP BAR.
4. TABLE BASED ON CLEAR COVER NOT MORE THAN 2".
5. FOR CONCRETE WITH F'C OF 4500 PSI AND 5000 PSI USE THE SAME DIMENSIONS SHOWN FOR 4000 PSI MINIMUM CONCRETE OR LAP SPLICES SHOWN ON THE DRAWINGS, WHICHEVER IS GREATER.

H. SPECIAL INSPECTION

1. SPECIAL INSPECTION WILL BE IN ACCORDANCE WITH 2018 IBC SECTION 1704 TOGETHER WITH AMENDMENTS TO THE BUILDING CODE FOR THE TOWNSHIP OF ABINGTON, REFER TO THE TABLES CONTAINED ON THESE SHEETS AND SPECIFICATION 01410 FOR PROJECT SPECIFIC INSPECTION TYPES AND FREQUENCIES.
2. SPECIAL INSPECTION IS REQUIRED OF MATERIALS, INSTALLATION, FABRICATION, ERECTION OR PLACEMENT OF COMPONENTS AND CONNECTIONS REQUIRING SPECIAL EXPERTISE TO ENSURE COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS.
3. COORDINATE SCHEDULES WITH AGENCY PERFORMING SPECIAL INSPECTION TO INSURE AMPLE TIME IS AVAILABLE TO PERFORM REQUIRED TASKS.
4. THE SPECIAL INSPECTOR SHALL PROVIDE REPORTS TO THE LOCAL BUILDING OFFICIAL AND THE SEPTA PROJECT MANAGER. THESE REPORTS SHALL BE IN COMPLIANCE WITH THE BUILDING CODE. THE SPECIAL INSPECTOR SHALL IMMEDIATELY NOTIFY THE CONTRACTOR AND SEPTA PROJECT MANAGER IN WRITING OF NON–CONFORMANCE TO THE APPROVED CONSTRUCTION DOCUMENTS, THE BUILDING CODE OR OTHER VIOLATIONS OF THE APPLICABLE REFERENCED MATERIAL STANDARDS IN THE BUILDING CODE WITHIN THE SCOPE OF THE SPECIAL REQUIREMENTS.
5. THE SPECIAL INSPECTION AGENCY SHALL SUBMIT A FINAL REPORT TO THE BUILDING OFFICIAL AND THE SEPTA PROJECT MANAGER STATING WHETHER WORK REQUIRING SPECIAL INSPECTION WAS INSPECTED, REPORTED, AND FOUND TO BE IN COMPLIANCE WITH APPROVED CONSTRUCTION DOCUMENTS, THE BUILDING CODE AND THE APPLICABLE REFERENCED MATERIAL STANDARDS IN THE BUILDING CODE. FINAL REPORTS SHALL CATALOG ALL INSPECTION, TESTING, AND RELATED ENGINEER SIGNED REPORTS. FOLLOW ABINGTON TOWNSHIP AND BUILDING CODE REQUIREMENTS.

INSPECTION OF CONCRETE CONSTRUCTION (2018 IBC TABLE 1704.4)

INSPECTION ITEMS	INSPECTION TASK	FREQUENCY OF INSPECTION	COMMENTS
STRUCTURAL CONCRETE	REINFORCING STEEL AND PLACEMENT	PERIODIC	(1) (3)
	WELDING OF REINFORCEMENT BARS	-------	(4)
	VERIFICATION OF MIX DESIGN	PERIODIC	(1) (3)
	SAMPLES TAKEN FOR STRENGTH, SLUMP, AIR CONTENT, AND CONCRETE TEMPERATURE	PERIODIC	(1) (3)
	INSPECTION OF CONCRETE PLACEMENT	CONTINUOUS	(2) (3)
	MAINTENANCE OF SPECIFIED CURING TEMPERATURE AND TECHNIQUES	PERIODIC	(1) (3)
	FORMWORK FOR SHAPE, LOCATION AND DIMENSIONS	PERIODIC	(1) (3)
	INSPECT BOLTS TO BE INSTALLED IN CONCRETE PRIOR TO AND DURING PLACEMENT OF CONCRETE	CONTINUOUS	(2) (3)
	WATERPROOFING/DAMPROOFING LOCATION AND THICKNESS	PERIODIC	(1) (3)
	ERECTION OF PRECAST CONCRETE	PERIODIC	(1) (3)

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SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.62 REHABILITATION
STRUCTURAL
GENERAL NOTES - STRUCTURAL

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK / CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: S202	
DWG. NO.: 2 OF 30	
SHT. NO.: 16 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

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DATE PRINTED: 11/14/2024 10:35:50 AM

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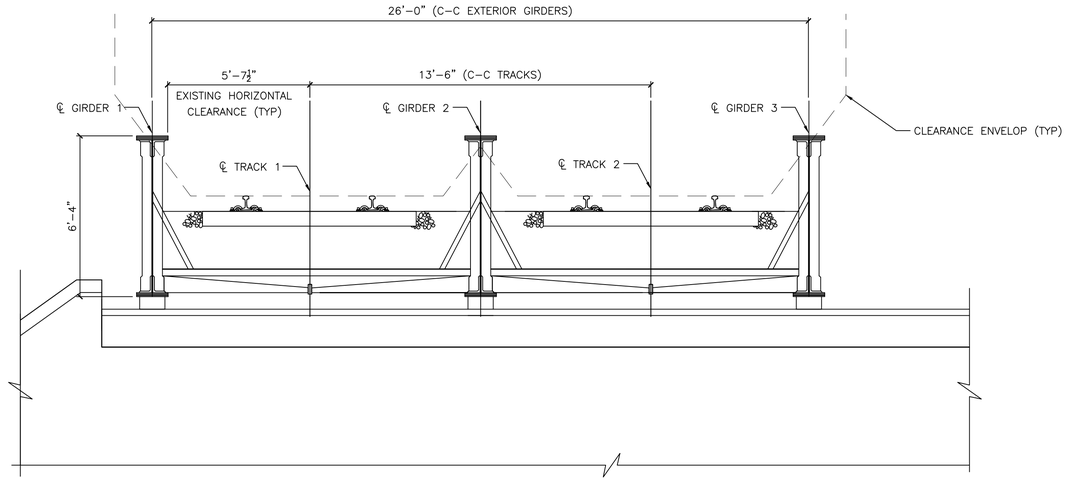
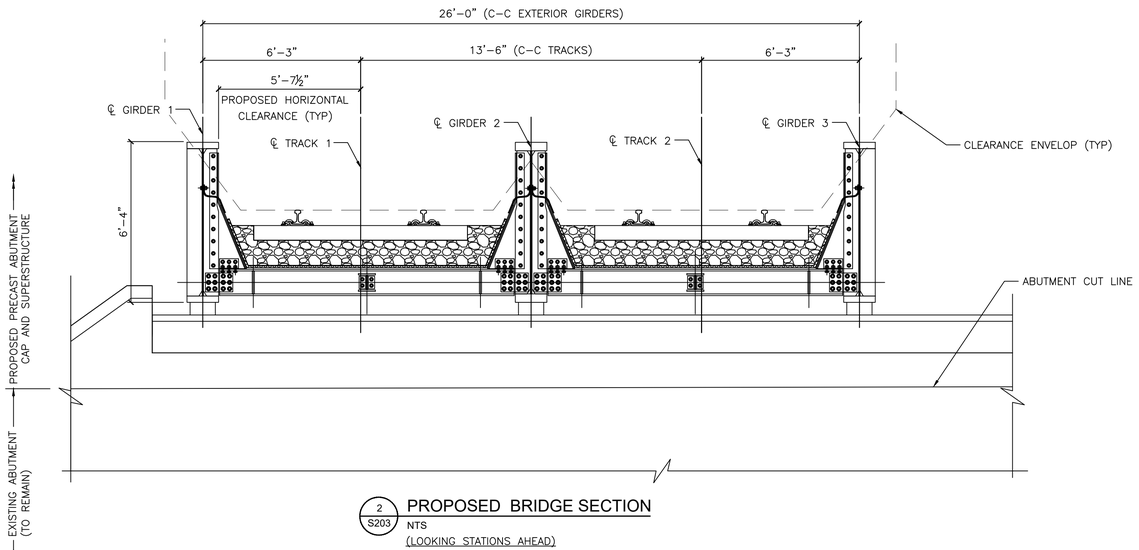


1 / S203 EXISTING BRIDGE SECTION

NTS

(LOOKING STATIONS AHEAD)



2 / S203 PROPOSED BRIDGE SECTION

NTS

(LOOKING STATIONS AHEAD)

NOTES:

1. ACCESS TO SEPTA PROPERTY OUTSIDE THE PRESCRIBED WORK ZONES WILL REQUIRE PERMISSION FROM SEPTA.
2. THE SIDEWALK SHALL REMAIN OPEN AT ALL TIMES WHEN THE CONTRACTOR'S WORK WILL NOT INTERFERE WITH PEDESTRIAN TRAVEL. PROVIDE OVERHEAD PROTECTION FOR PEDESTRIANS.

BRIDGE CONSTRUCTION SEQUENCE:

1. BRIDGE SUPERSTRUCTURE TO BE REPLACED OVER AN EXTENDED WEEKEND TRACK OUTAGE SCHEDULED FOR MEMORIAL DAY WEEKEND IN 2025.
2. ASSEMBLE PROPOSED BRIDGE OFFSITE AT CONTRACTOR YARD PRIOR TO WEEKEND OUTAGE.
3. DURING EXTENDED WEEKEND TRACK OUTAGE, COMPLETE THE FOLLOWING:
   - REMOVE EXISTING BRIDGE USING SELF PROPELLED MODULAR TRANSPORT (SPMT)
   - REMOVE PORTION OF EXISTING ABUTMENT STEM.
   - INSTALL PRECAST ABUTMENT STEM AS INDICATED.
   - INSTALL NEW BRIDGE USING SPMT
4. REFER TO TRAFFIC CONTROL PLANS FOR ADDITIONAL INFORMATION.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

STAGING

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK / CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: **S203**	
DWG. NO.: 3 OF 30	
SHT. NO.: 17 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

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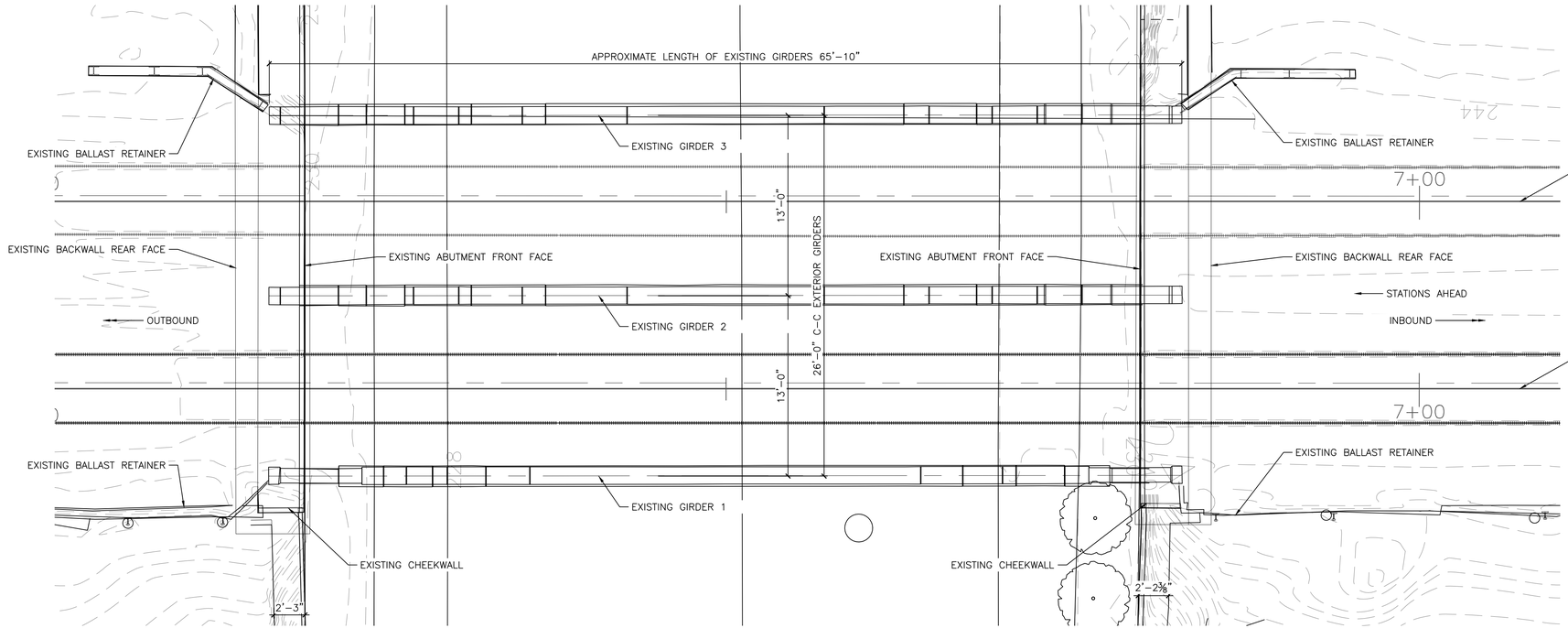
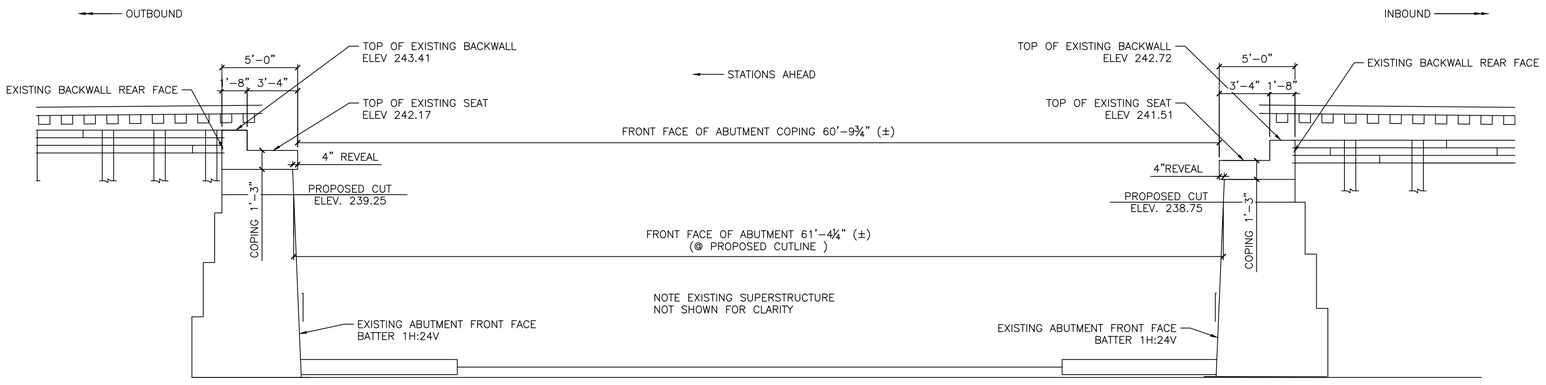


1 S204 PLAN
NTS



2 S204 ELEVATION
NTS

NOTES:

1. ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWING FOR THE EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS, CERTAIN DESIGN DRAWINGS FOR ORIGINAL CONSTRUCTION AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE, AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.
2. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE SEPTA PROJECT MANAGER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE SHOP AND ERECTION PLANS, INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED.
3. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

EXISTING PLAN AND ELEVATION

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK / CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: **S204**	
DWG. NO.: 4 OF 30	
SHT. NO.: 18 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

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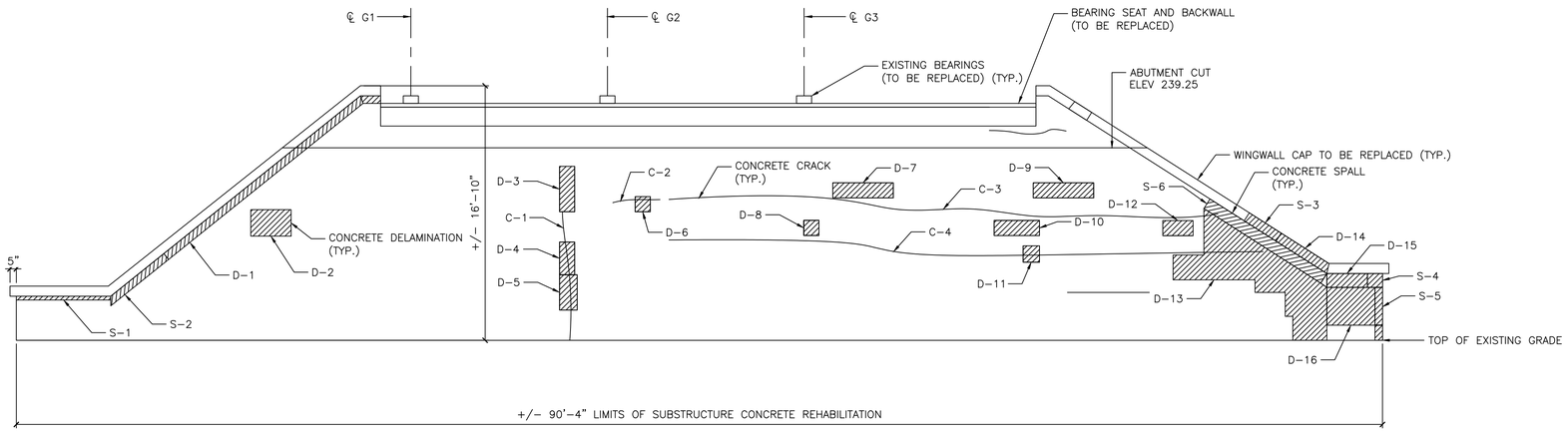
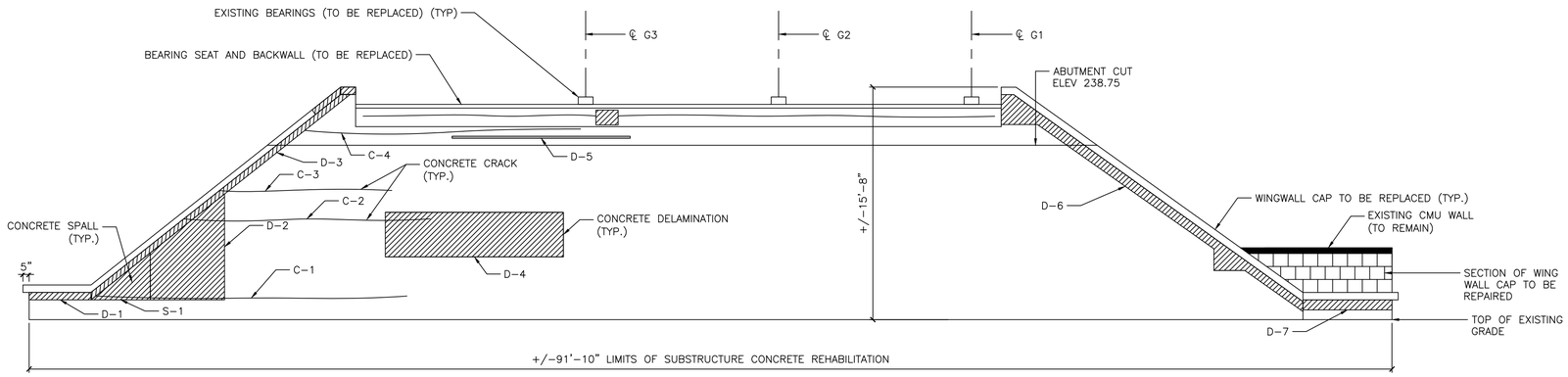


1 / S205 FAR ABUTMENT ELEVATION
NTS
(LOOKING STATIONS AHEAD)

NORTH ABUTMENT REPAIR LOCATIONS & TYPES				
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY	IF & WHERE DIRECTED
D–1	CONCRETE DELAMINATION	SPALL REPAIR	9 SF	1 SF
D–2	CONCRETE DELAMINATION	SPALL REPAIR	5 SF	1 SF
D–3	CONCRETE DELAMINATION	SPALL REPAIR	3 SF	1 SF
D–4	CONCRETE DELAMINATION	SPALL REPAIR	3 SF	1 SF
D–5	CONCRETE DELAMINATION	SPALL REPAIR	3 SF	1 SF
D–6	CONCRETE DELAMINATION	SPALL REPAIR	1 SF	1 SF
D–7	CONCRETE DELAMINATION	SPALL REPAIR	4 SF	1 SF
D–8	CONCRETE DELAMINATION	SPALL REPAIR	1 SF	1 SF
D–9	CONCRETE DELAMINATION	SPALL REPAIR	4 SF	1 SF
D–10	CONCRETE DELAMINATION	SPALL REPAIR	3 SF	1 SF
D–11	CONCRETE DELAMINATION	SPALL REPAIR	2 SF	1 SF
D–12	CONCRETE DELAMINATION	SPALL REPAIR	2 SF	1 SF
D–13	CONCRETE DELAMINATION	SPALL REPAIR	33 SF	4 SF
D–14	CONCRETE DELAMINATION	WW CAP REPLACEMENT	3 SF	1 SF
D–15	CONCRETE DELAMINATION	SPALL REPAIR	3 SF	1 SF
D–16	CONCRETE DELAMINATION	SPALL REPAIR	6 SF	1 SF
S–1	CONCRETE SPALL	SPALL REPAIR	2 SF	1 SF
S–2	CONCRETE SPALL	SPALL REPAIR	3 SF	1 SF
S–3	CONCRETE SPALL	WW CAP REPLACEMENT	2 SF	1 SF
S–4	CONCRETE SPALL	SPALL REPAIR	1 SF	1 SF
S–5	CONCRETE SPALL	SPALL REPAIR	2 SF	1 SF
S–6	CONCRETE SPALL	SPALL REPAIR	7 SF	1 SF
C–1	VERTICAL CRACK	CRACK REPAIR	10 LF	1 LF
C–2	HORIZONTAL CRACK	CRACK REPAIR	4 LF	1 LF
C–3	HORIZONTAL CRACK	CRACK REPAIR	37 LF	4 LF
C–4	HORIZONTAL CRACK	CRACK REPAIR	40 LF	4 LF



2 / S205 NEAR ABUTMENT ELEVATION
NTS
(LOOKING STATIONS BACK)

SOUTH ABUTMENT REPAIR LOCATIONS & TYPES				
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY	IF & WHERE DIRECTED
D–1	CONCRETE DELAMINATION	SPALL REPAIR	3 SF	1 SF
D–2	CONCRETE DELAMINATION	SPALL REPAIR	26 SF	3 SF
D–3	CONCRETE DELAMINATION	SPALL REPAIR	9 SF	1 SF
D–4	CONCRETE DELAMINATION	SPALL REPAIR	36 SF	4 SF
D–5	CONCRETE DELAMINATION	SPALL REPAIR	2 SF	1 SF
D–6	CONCRETE DELAMINATION	SPALL REPAIR	20 SF	2 SF
D–7	CONCRETE DELAMINATION	SPALL REPAIR	5 SF	1 SF
S–1	CONCRETE SPALL	SPALL REPAIR	7 SF	1 SF
C–1	HORIZONTAL CRACK	CRACK REPAIR	20 LF	2 LF
C–2	HORIZONTAL CRACK	CRACK REPAIR	15 LF	2 LF
C–3	HORIZONTAL CRACK	CRACK REPAIR	10 LF	1 LF
C–4	HORIZONTAL CRACK	CRACK REPAIR	20 LF	2 LF

LEGEND:

CONCRETE SPALLING AND DELAMINATION

CONCRETE CRACKING

KEY:
D – DELAMINATION
S – SPALL
C – CRACK

NOTES:

1. ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWING FOR THE EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS, CERTAIN DESIGN DRAWINGS FOR ORIGINAL CONSTRUCTION AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE, AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.
2. THE EXACT EXTENT OF CONSTRUCTION OR RESTORATION WORK CANNOT BE NECESSARILY OR ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS, MATERIAL QUANTITIES, AND EXTENT OF THE MODIFICATION WORK SHOWN ON DRAWINGS. PERFORM THE WORK TO MEET FIELD CONDITIONS ENCOUNTERED.
3. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE SEPTA PROJECT MANAGER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE SHOP AND ERECTION PLANS, INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED.
4. REFER TO PRECAST ABUTMENT CAP AND WINGWALL CAP FOR ADDITIONAL INFORMATION.
5. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.
6. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING MURALS. UPON COMPLETION OF CONCRETE REPAIR WORK, THE CONTRACTOR SHALL COORDINATE WITH SEPTA FOR THE RESTORATION/REPAINTING BY OTHERS OF THE IMPACTED MURALS (ABINGTON TOWNSHIP ENVIRONMENTAL ADVISORY COUNCIL – ML BRIDGE 11.62, ARCADIA UNIVERSITY – ML BRIDGE 11.83). THE CONTRACTOR SHALL PROVIDE ACCESS AND ASSIST WITH PREPARING THE CONCRETE SURFACES FOR PAINTING.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL
SUBSTRUCTURE REHABILITATION

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S205**
DWG. NO.: 5 OF 30
SHT. NO.: 19 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:36:25 AM
IFC SUBMISSION
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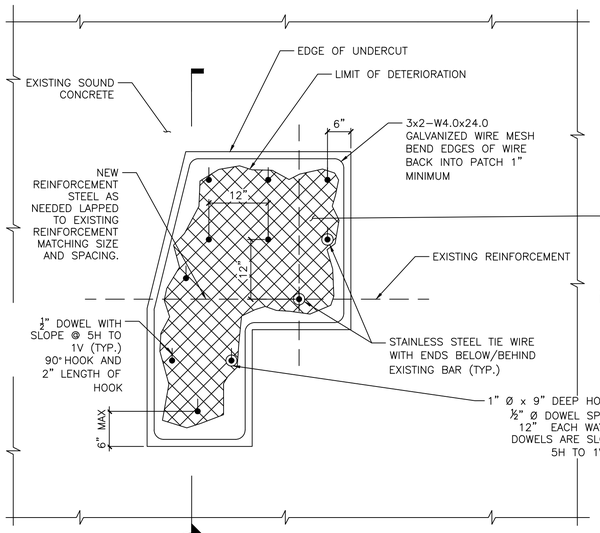
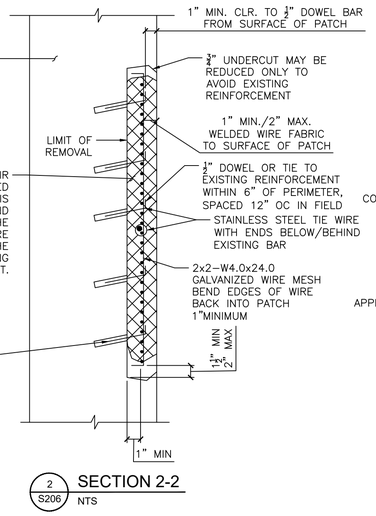
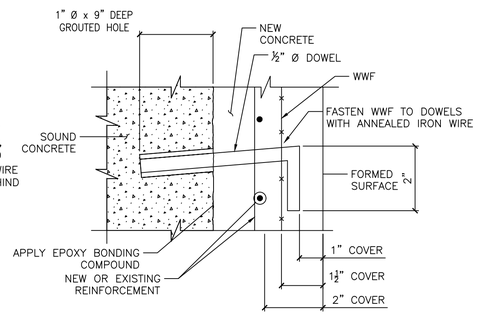


1 S206 ELEVATION VIEW
NTS



2 S206 SECTION 2-2
NTS



3 S206 TYPICAL DOWEL DETAIL
NTS

NOTES:

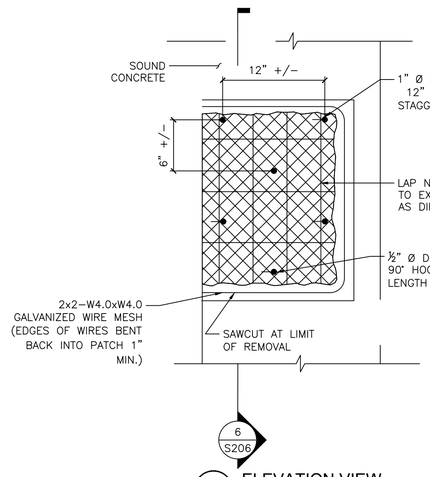
1. PROVIDE GALVANIZED WIRE TIE TO CONNECT EXISTING REINFORCEMENT AND 2x2–W4.0xW4.0 WELDED WIRE MESH ALONG THE PERIMETER OF THE REMOVAL AREA AT A MAXIMUM SPACING OF 6" FROM THE EDGE OF THE REMOVAL. PROVIDE TIES AT 12" SPACING IN BOTH HORIZONTAL AND VERTICAL DIRECTIONS ALONG THE PERIMETER AND WITHIN THE AREA OF REMOVAL. IF EXISTING REINFORCEMENT IS SPACED AT GREATER THAN 12" SPACING OR NOT LOCATED TO PROVIDE TIE LOCATIONS AS LISTED ABOVE, PROVIDE 1/2" GROUTED DOWELS AS SHOWN ON THE DRAWING TO PROVIDE TIE LOCATIONS AT THE SAME SPACINGS.
2. USE ONLY AN APPROVED POLYMER MODIFIED AND SPECIAL CEMENTS, MORTARS AND CONCRETES AS LISTED IN BULLETIN 15.
3. INFORMATION REGARDING THE EXISTING ABUTMENTS IS LIMITED. EXISTING REINFORCEMENT DETAILS ARE UNKNOWN. CONTRACTOR TO DETERMINE APPLICABLE REPAIR TYPE BASED ON CONDITIONS DISCOVERED IN THE FIELD.

LEGEND

– REMOVE DETERIORATED CONCRETE.

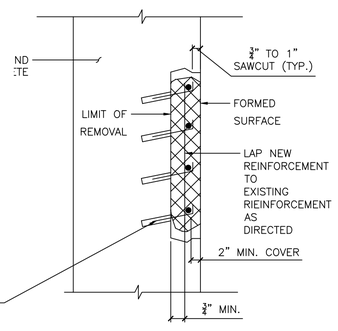
REINFORCED CONCRETE REPAIR TYPE 2A NOTES::

1. SQUARE OFF DETERIORATED CONCRETE TO SOUND CONCRETE WITH A SAWCUT OF 3/4" MINIMUM BUT NOT TO THE DEPTH OF THE REINFORCEMENT STEEL.
2. REMOVE ALL LOOSE AND DELAMINATED CONCRETE TO PROVIDE A SOUND BOND BETWEEN EXISTING CONCRETE AND NEW CONCRETE.
3. IF DETERIORATED CONCRETE EXTENDS BEYOND THE PRIMARY REINFORCEMENT, REMOVE THE CONCRETE TO AT LEAST 1" BEHIND THE REINFORCEMENT.
4. APPLY AN EPOXY BONDING COMPOUND BETWEEN THE EXISTING AND THE NEW CONCRETE
5. WIRE MESH MAY BE SUBSTITUTED FOR NEW REINFORCEMENT IF INDICATED ON DESIGN DRAWINGS.
6. CLEAN EXISTING REINFORCEMENT BY MECHANICAL MEANS.
7. NEW REINFORCEMENT TO BE GALVANIZED.
8. CONCRETE REPAIR TYPE 2A ARE PAYABLE AS CONCRETE REPAIRS TYPE 2.

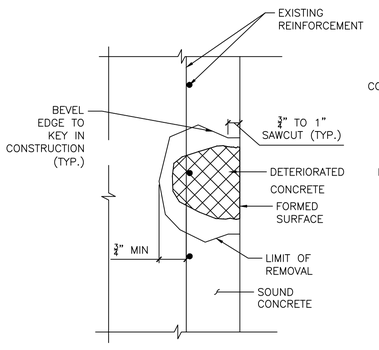


6 S206

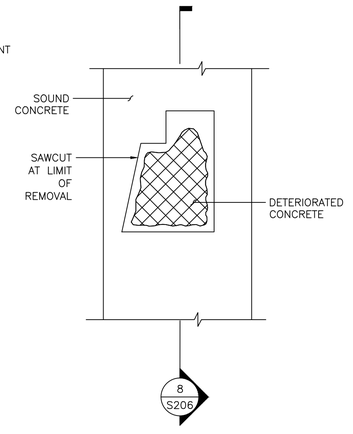
4 S206 ELEVATION VIEW
NTS



5 S206 CONCRETE REPAIR TYPE 2
NTS

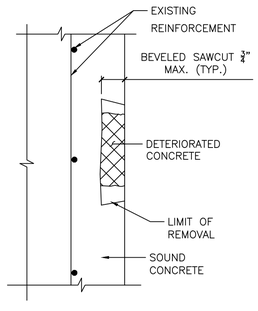


6 S206 SECTION 6-6
NTS



8 S206

7 S206 CONCRETE REPAIR TYPE 1
NTS



8 S206 SECTION 8-8
NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV/	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
SUBSTRUCTURE REPAIR DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK / CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: **S206**	
DWG. NO.: 6 OF 30	
SHT. NO.: 20 OF 48	
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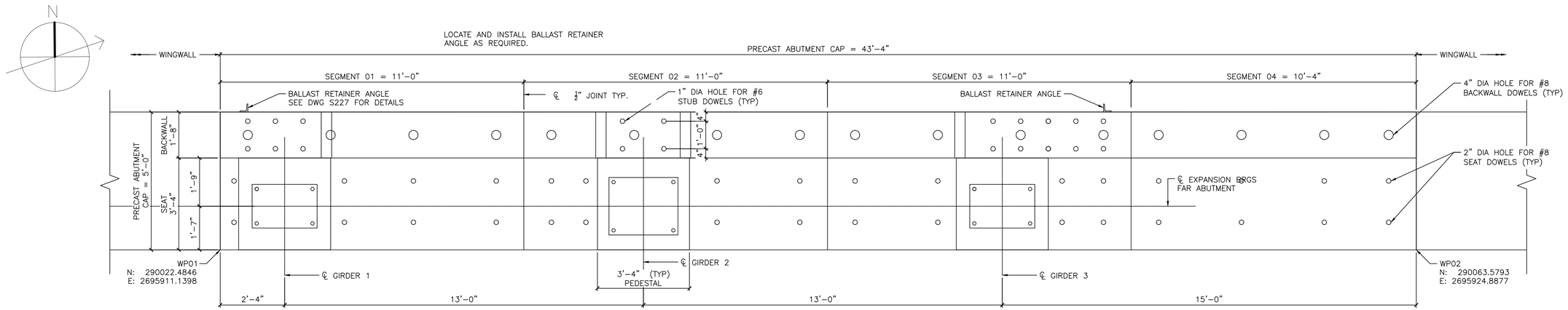
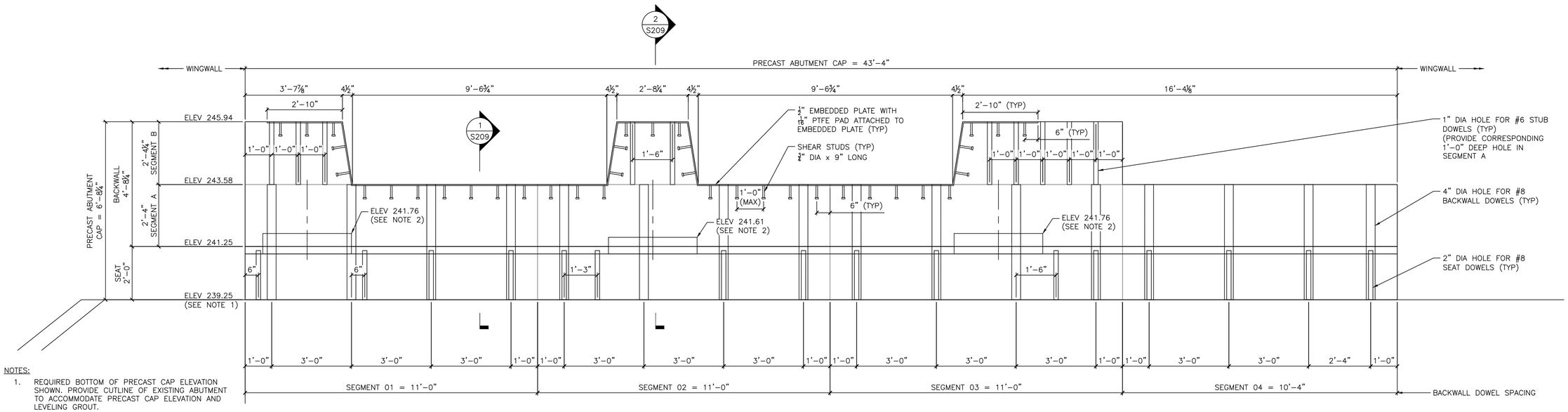


1 S207 FAR ABUTMENT PRECAST CAP PLAN

SCALE: 1/2"=1'-0"

0 1 2 4



NOTES:

1. REQUIRED BOTTOM OF PRECAST CAP ELEVATION SHOWN. PROVIDE CUTLINE OF EXISTING ABUTMENT TO ACCOMMODATE PRECAST CAP ELEVATION AND LEVELING GROUT.
2. PEDESTAL ELEVATIONS NEED TO BE REVISITED AFTER BEARING DESIGN HAS BEEN COMPLETED BY FABRICATOR. ADJUST PEDESTAL HEIGHTS AS REQUIRED TO MAINTAIN AS-DESIGNED BOTTOM OF GIRDER ELEVATIONS

2 S207 FAR ABUTMENT PRECAST CAP ELEVATION

SCALE: 1/2"=1'-0"

0 1 2 4

NOTE THAT ONLY DOWEL HOLE LOCATIONS IN PRECAST ARE SHOWN.

THE DOWEL PORTIONS EMBEDDED INTO THE EXISTING CONCRETE ABUTMENT ARE NOT SHOWN FOR CLARITY.

SEE SHEETS S209 AND S211 FOR DOWEL DETAILS.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL

FAR ABUTMENT PRECAST CAP PLAN AND ELEVATION

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
	CHECKED BY: JS
WORK ORDER NO.: -	

DRAWING NUMBER
S207

DWG. NO.:	7	OF	30
SHT. NO.:	21	OF	48
COMPUTER FILE NO.:		REV. NO.:	00

DATE PRINTED: 11/14/2024 10:38:44 AM

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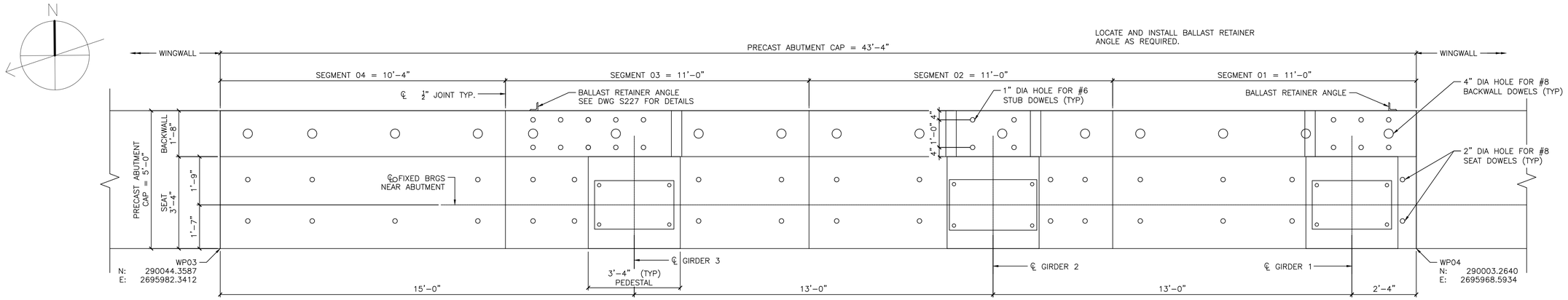
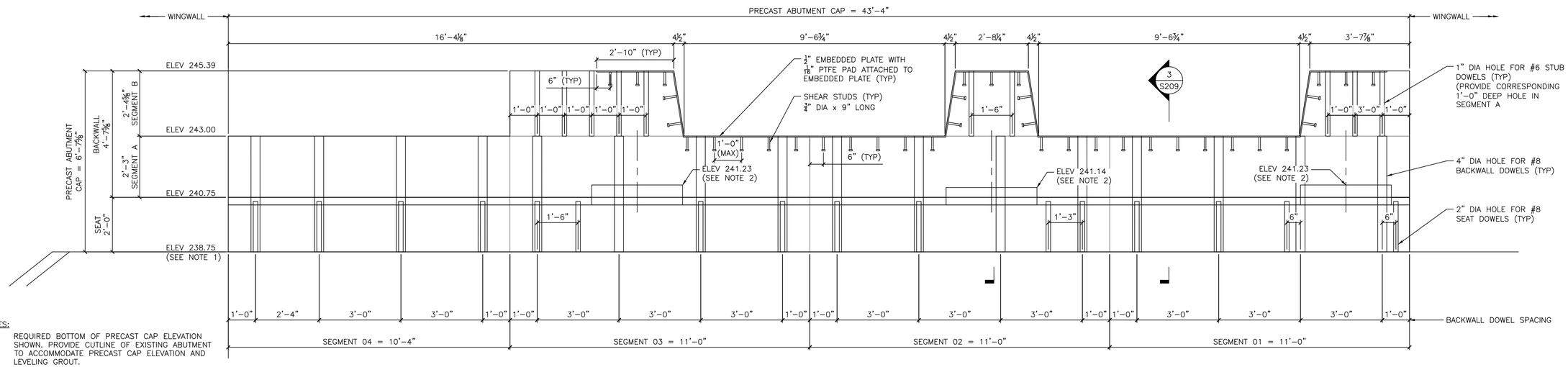


1 S208 NEAR ABUTMENT PRECAST CAP PLAN

SCALE: 1/2"=1'-0"

0 1 2 4

4 S209



NOTES:

1. REQUIRED BOTTOM OF PRECAST CAP ELEVATION SHOWN. PROVIDE CUTLINE OF EXISTING ABUTMENT TO ACCOMMODATE PRECAST CAP ELEVATION AND LEVELING GROUT.
2. PEDESTAL ELEVATIONS NEED TO BE REVISITED AFTER BEARING DESIGN HAS BEEN COMPLETED BY FABRICATOR. ADJUST PEDESTAL HEIGHTS AS REQUIRED TO MAINTAIN AS–DESIGNED BOTTOM OF GIRDER ELEVATIONS

2 S208 NEAR ABUTMENT PRECAST CAP ELEVATION

SCALE: 1/2"=1'-0"

0 1 2 4

NOTE THAT ONLY DOWEL HOLE LOCATIONS IN PRECAST ARE SHOWN.

THE DOWEL PORTIONS EMBEDDED INTO THE EXISTING CONCRETE ABUTMENT ARE NOT SHOWN FOR CLARITY.

SEE SHEETS S209 AND S211 FOR DOWEL DETAILS.

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PROJECT MANAGER

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL

NEAR ABUTMENT PRECAST CAP PLAN AND ELEVATION

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
WORK ORDER NO.: -	CHECKED BY: JS

DRAWING NUMBER
S208

DWG. NO.:	8	OF	30
SHT. NO.:	22	OF	48

COMPUTER FILE NO.: REV. NO.: 00

DATE PRINTED: 11/14/2024 10:38:45 AM

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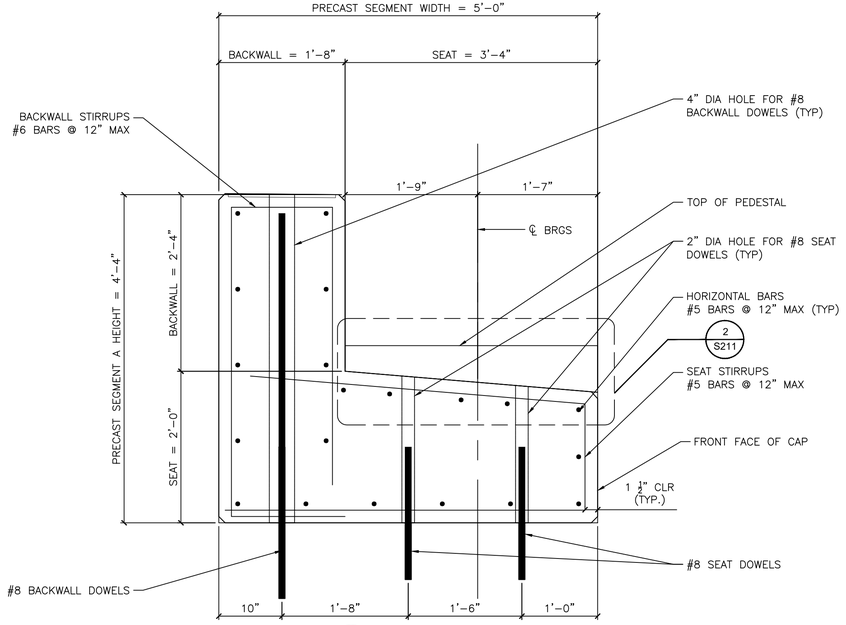
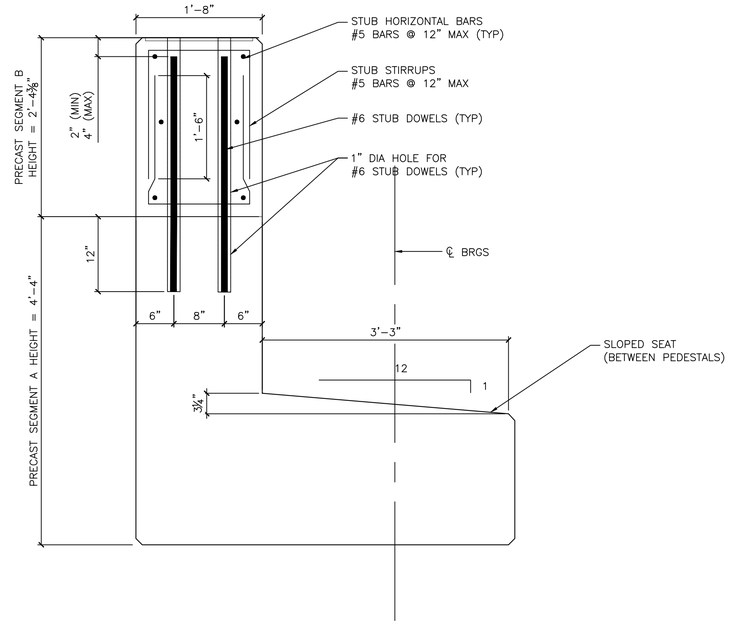


1 S209 SECTION 1 @ FAR ABUTMENT

SCALE: 1"=1'-0"

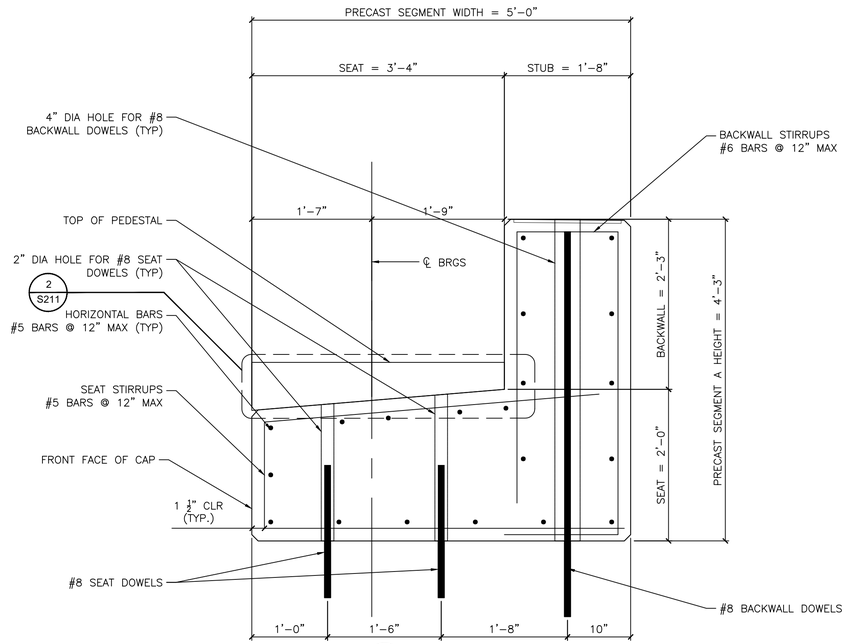
0 1 2



2 S209 SECTION 2 @ FAR ABUTMENT

SCALE: 1"=1'-0"

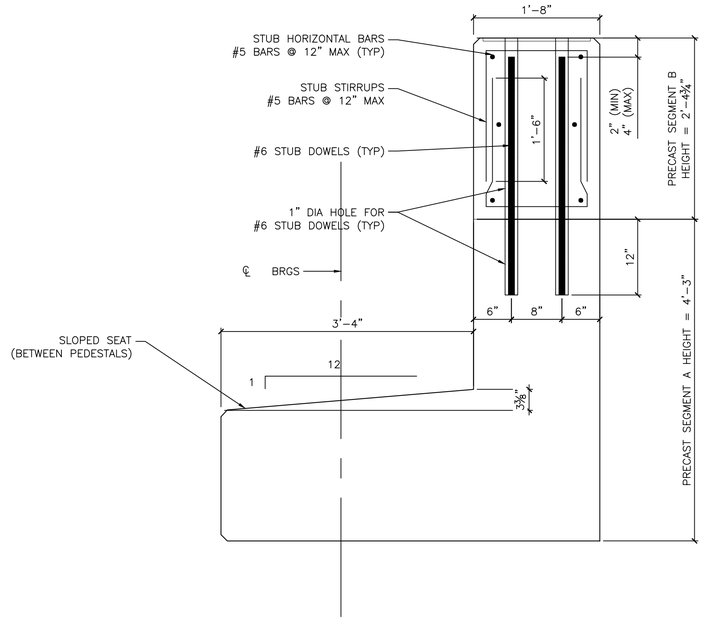
0 1 2



3 S209 SECTION 3 @ NEAR ABUTMENT

SCALE: 1"=1'-0"

0 1 2



4 S209 SECTION 4 @ NEAR ABUTMENT

SCALE: 1"=1'-0"

0 1 2

NOTES:

1. VERTICAL DIMENSIONS ARE TAKE ALONG THE FRONT FACE OF BACKWALL.
2. STEEL EMBEDMENT PLATE AND PEDESTAL REINFORCING NOT SHOWN FOR CLARITY
3. PRECAST SEGMENT PORTIONS SUPPORTING DECK PLATE SHALL BE SLOPED TO MATCH GIRDER/DECK PLATE.
4. SEE DETAIL 3/S211 FOR EMBEDMENT LENGTHS.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
PRECAST CAP SECTIONS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
	CHECKED BY: JS

WORK ORDER NO.: -

DRAWING NUMBER
S209

DWG. NO.: 9 OF 30
SHT. NO.: 23 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:36:47 AM
IFC SUBMISSION
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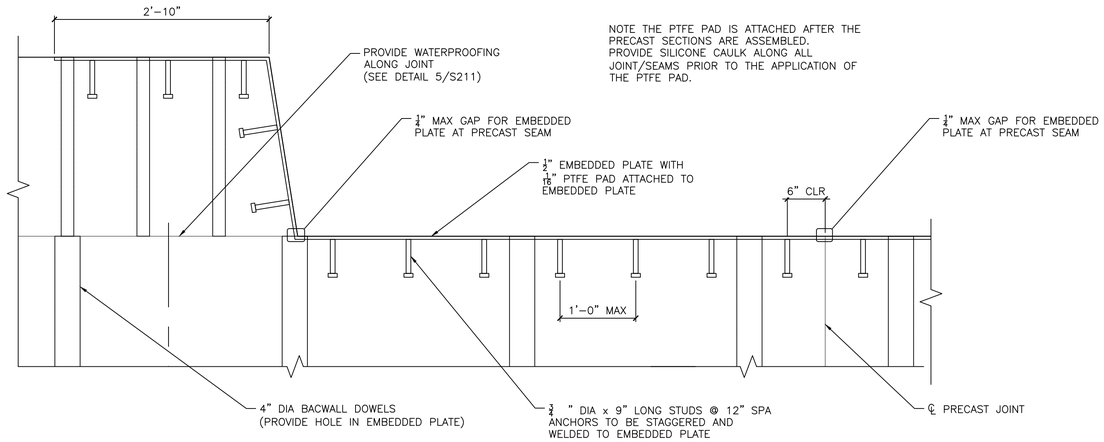
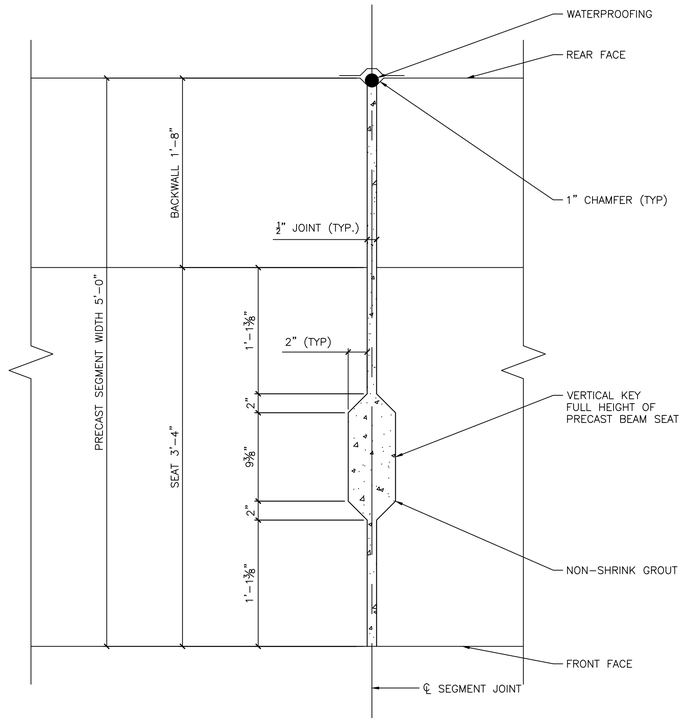
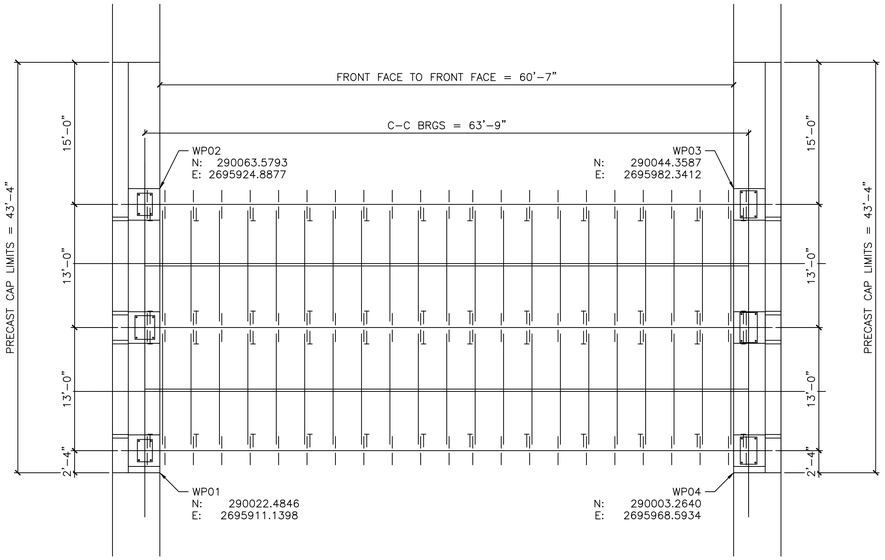


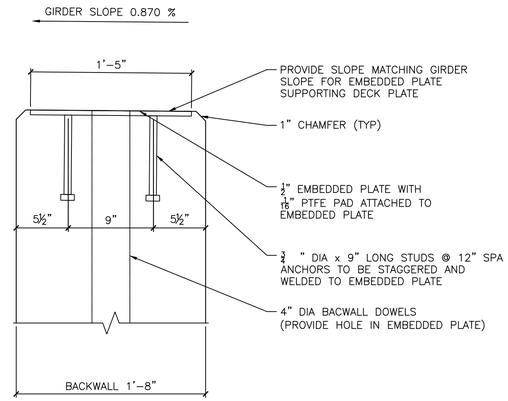
1 / S210 EMBEDDED PLATE PARTIAL ELEVATION
NTS



3 / S210 SEGMENT JOINT DETAIL
NTS



4 / S210 ABUTMENT CAP STAKE-OUT PLAN
NTS



2 / S210 EMBEDDED PLATE SECTION
NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
PRECAST CAP DETAILS - 1

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: PK | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S210**
DWG. NO.: 10 OF 30
SHT. NO.: 24 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:38:48 AM
IFC SUBMISSION
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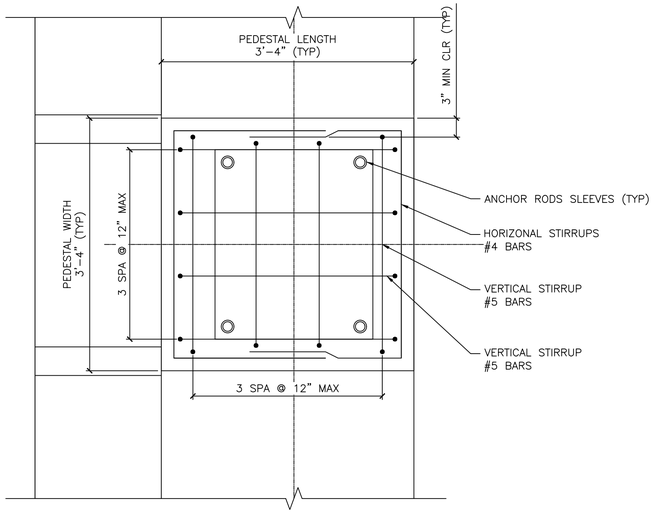
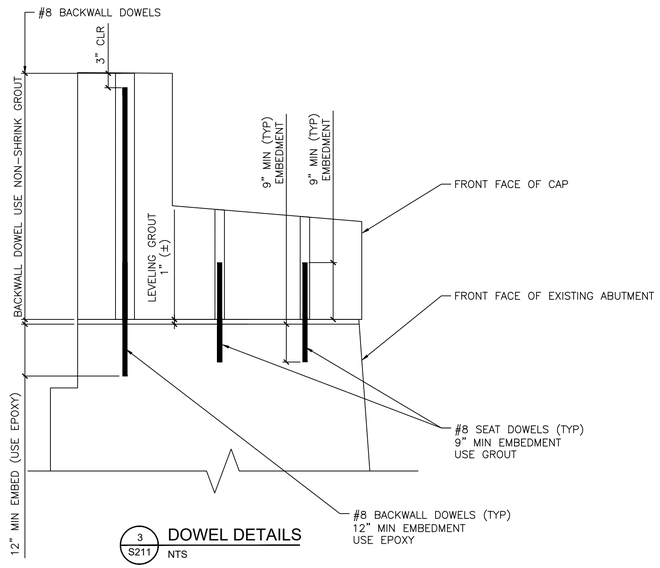
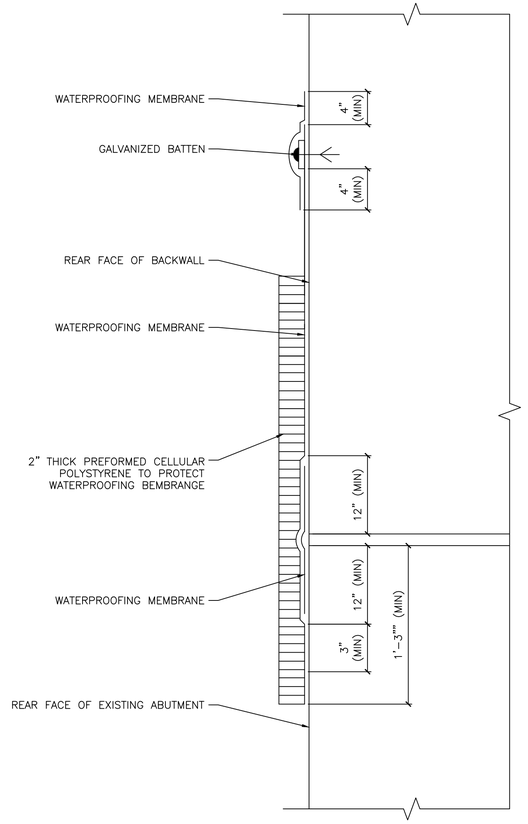


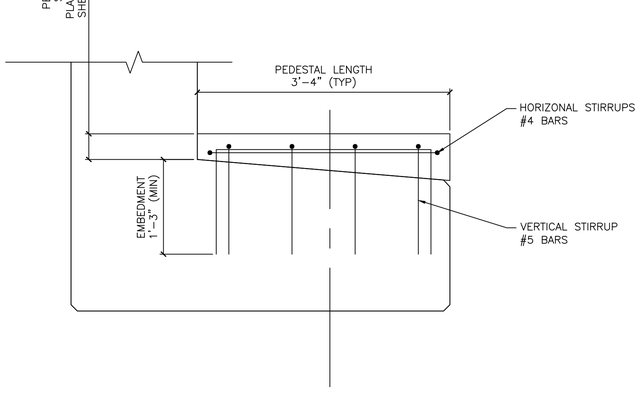
1 S211 **PEDESTAL REINFORCEMENT PLAN**
NTS



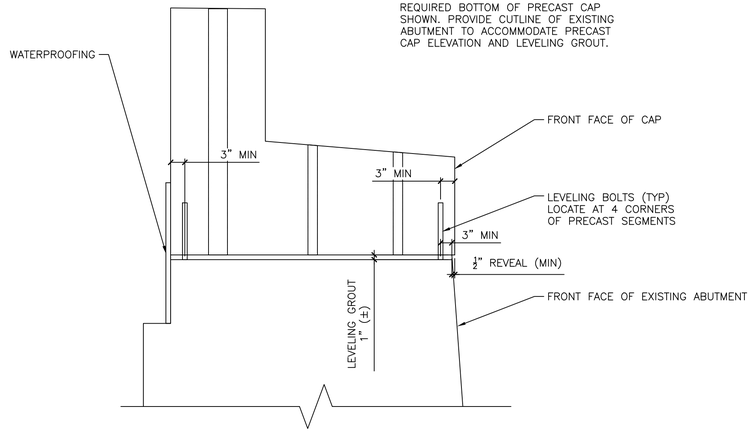
3 S211 **DOWEL DETAILS**
NTS



5 S211 **WATERPROOFING DETAIL**
NTS



2 S211 **PEDESTAL REINFORCEMENT SECTION**
NTS



4 S211 **PRECAST CAP PLACEMENT**
NTS

NOTES:

1. THE STRUCTURE IS DESIGNED TO ACT AS A STRUCTURAL UNIT UPON COMPLETION. DESIGN AND PROVIDE NECESSARY BRACING, TEMPORARY SUPPORTS, AND SHORING TO RESIST FORCES, ON THE STRUCTURE DURING CONSTRUCTION.
2. REPRODUCTION OF STRUCTURAL CONTRACT DRAWINGS FOR USE AS SHOP DRAWINGS IS STRICTLY PROHIBITED. SHOP DRAWINGS WHICH ARE PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
3. WORK SHALL BE COORDINATED WITH THE VARIOUS TRADES TO INSURE THAT VARIOUS EMBEDDED ITEMS ARE INCORPORATED, TO AVOID CONFLICT OR INTERFERENCE WITH REINFORCING STEEL OR STRUCTURAL STEEL MEMBERS, AND TO ENSURE TIMELY COMPLETION OF ALL WORK.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE IDENTIFIED IN THE FIELD BEFORE CONSTRUCTION COMMENCES.
5. THE WORK SHOWN ON THE DRAWINGS IS TO BE PERFORMED IN ACCORDANCE WITH THE PA CODE, TITLE 34, LABOR AND INDUSTRY, PART XIV, UNIFORM CONSTRUCTION CODE (UCC) AS APPROPRIATE.
6. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.

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SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
PRECAST CAP DETAILS - 2

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: PK | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S211**
DWG. NO.: 11 OF 30
SHT. NO.: 25 OF 48
COMPUTER FILE NO.: REV. NO.: 00

DATE PRINTED: 11/14/2024 10:36:50 AM
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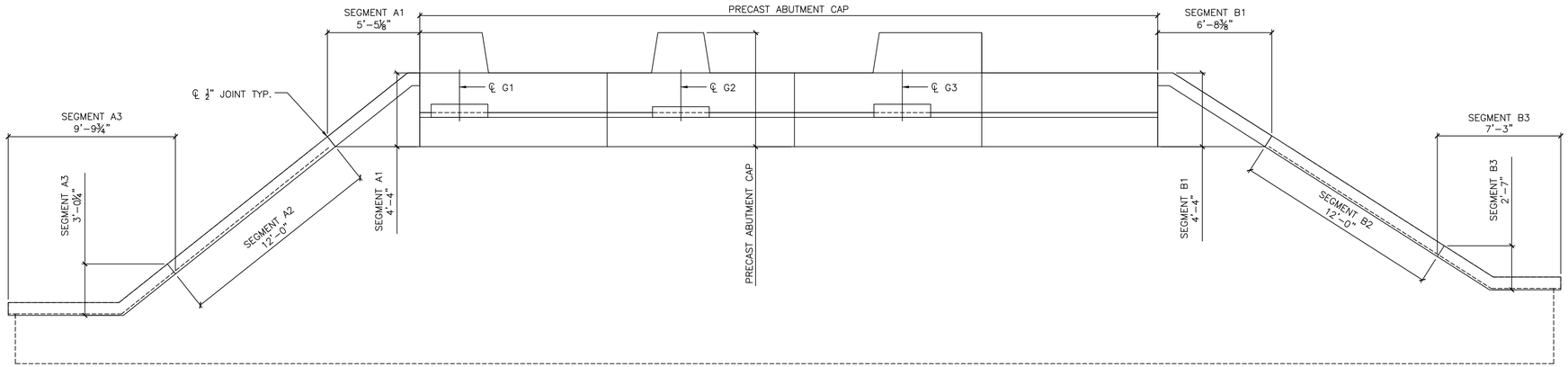
IFC SUBMISSION

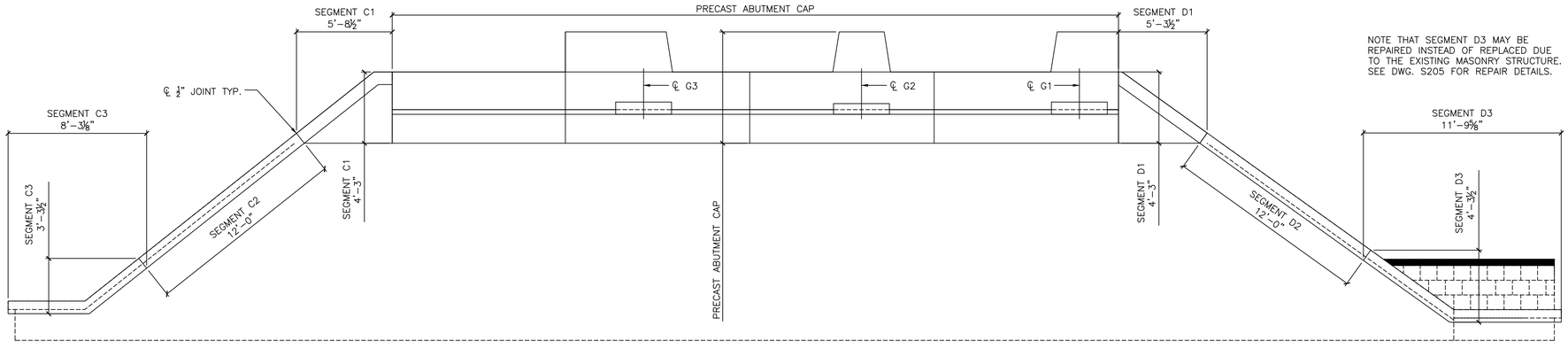


1 S212 **FAR ABUTMENT ELEVATION**

1/4" = 1'-0"

0 1 2 4 8

(LOOKING STATIONS AHEAD)



NOTE THAT SEGMENT D3 MAY BE REPAIRED INSTEAD OF REPLACED DUE TO THE EXISTING MASONRY STRUCTURE. SEE DWG. S205 FOR REPAIR DETAILS.

2 S212 **NEAR ABUTMENT ELEVATION**

1/4" = 1'-0"

0 1 2 4 8

(LOOKING STATIONS BACK)

NOTES:

1. ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWING FOR THE EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS, CERTAIN DESIGN DRAWINGS FOR ORIGINAL CONSTRUCTION AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE, AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.

2. THE EXACT EXTENT OF CONSTRUCTION OR RESTORATION WORK CANNOT BE NECESSARILY OR ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS, MATERIAL QUANTITIES, AND EXTENT OF THE MODIFICATION WORK SHOWN ON DRAWINGS. PERFORM THE WORK TO MEET FIELD CONDITIONS ENCOUNTERED.

3. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE SEPTA PROJECT MANAGER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE SHOP AND ERECTION PLANS, INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED.

4. REFER TO SUBSTRUCTURE REHABILITATION AND PRECAST ABUTMENT CAP FOR ADDITIONAL INFORMATION.

5. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

PRECAST WINGWALL CAP ELEVATIONS

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -

DRAWING NUMBER
S212

DWG. NO.: 12 OF 30
SHT. NO.: 26 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:37:06 AM

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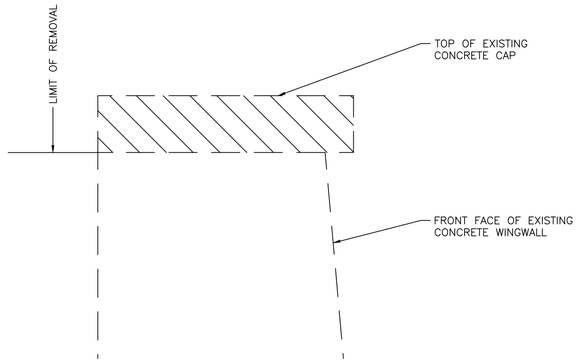
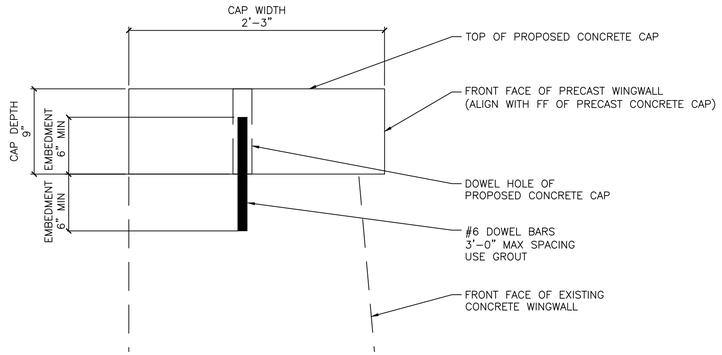
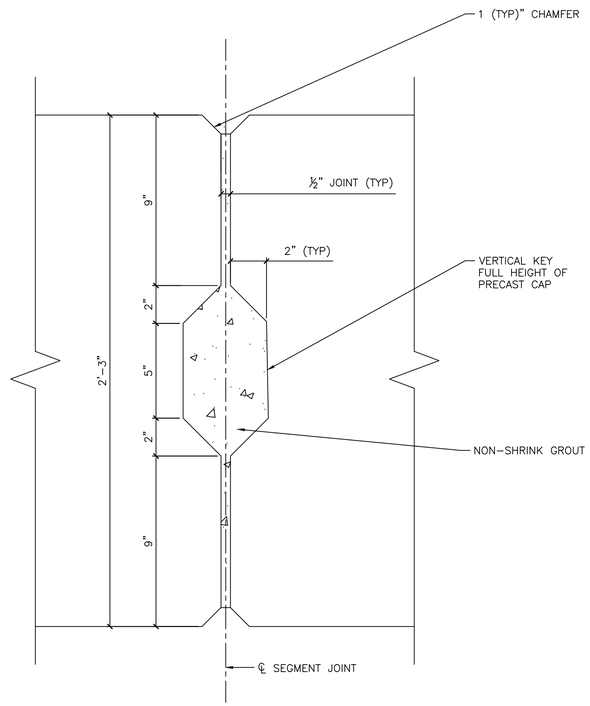


1 S213 EXISTING WINGWALL CAP SECTION
NTS



2 S213 PROPOSED WINGWALL CAP INSTALLATION
NTS



3 S213 SEGMENT JOINT DETAIL
NTS

NOTES:

1. PROVIDE 6" MIN EMBEDMENT INTO SOUND CONCRETE OF EXISTING WINGWALL FOR THE PRECAST WINGWALL CAP DOWEL BARS. USE HIGH STRENGTH GROUT FOR ENTIRE SECTION.

2. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

PRECAST WINGWALL CAP DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
	CHECKED BY: JS

WORK ORDER NO.: -

DRAWING NUMBER
S213

DWG. NO.: 13 OF 30
SHT. NO.: 27 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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DATE PRINTED: 11/14/2024 10:37:08 AM

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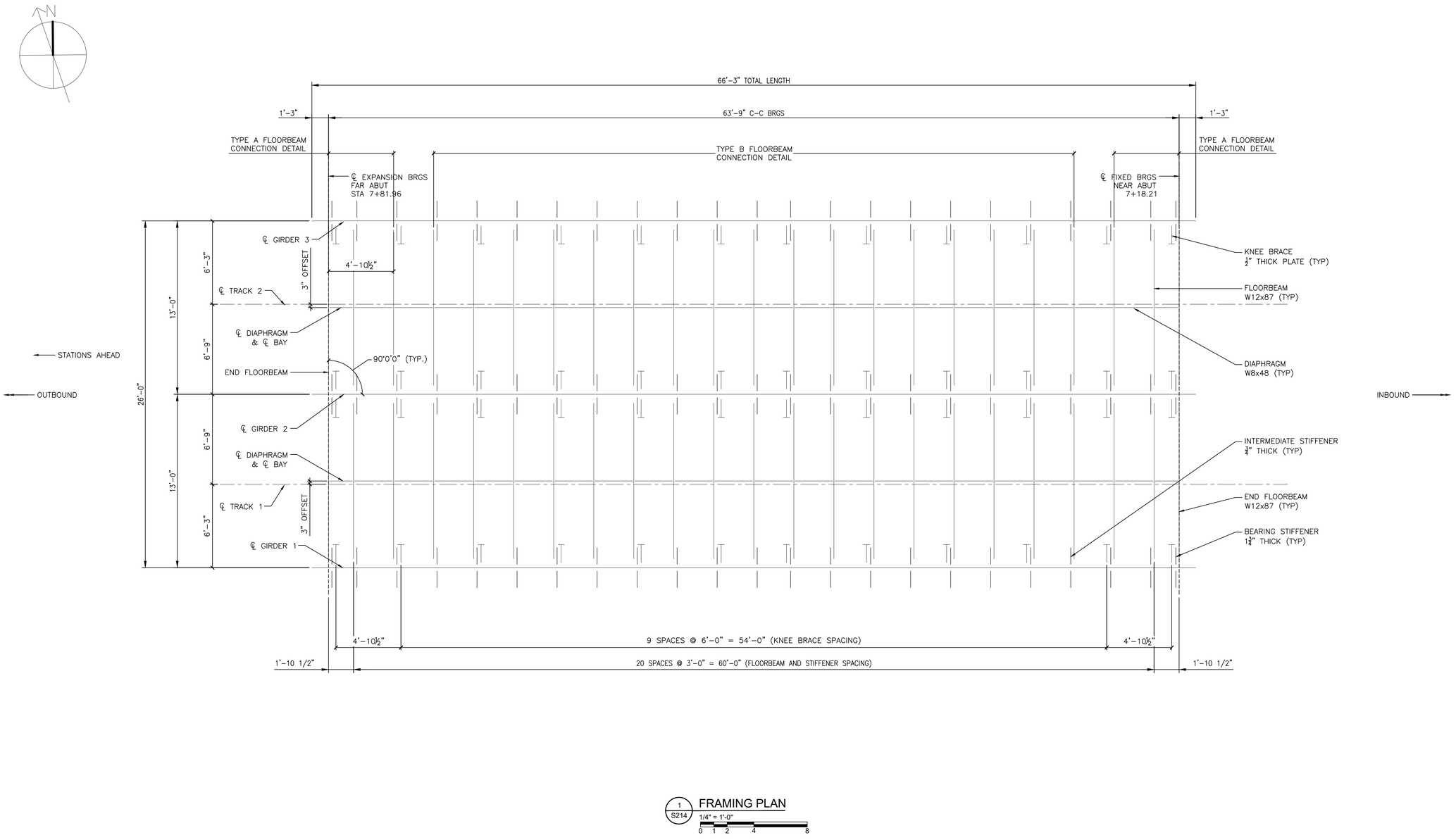

1/S214 FRAMING PLAN

1/4" = 1'-0"

0 1 2 4 8

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

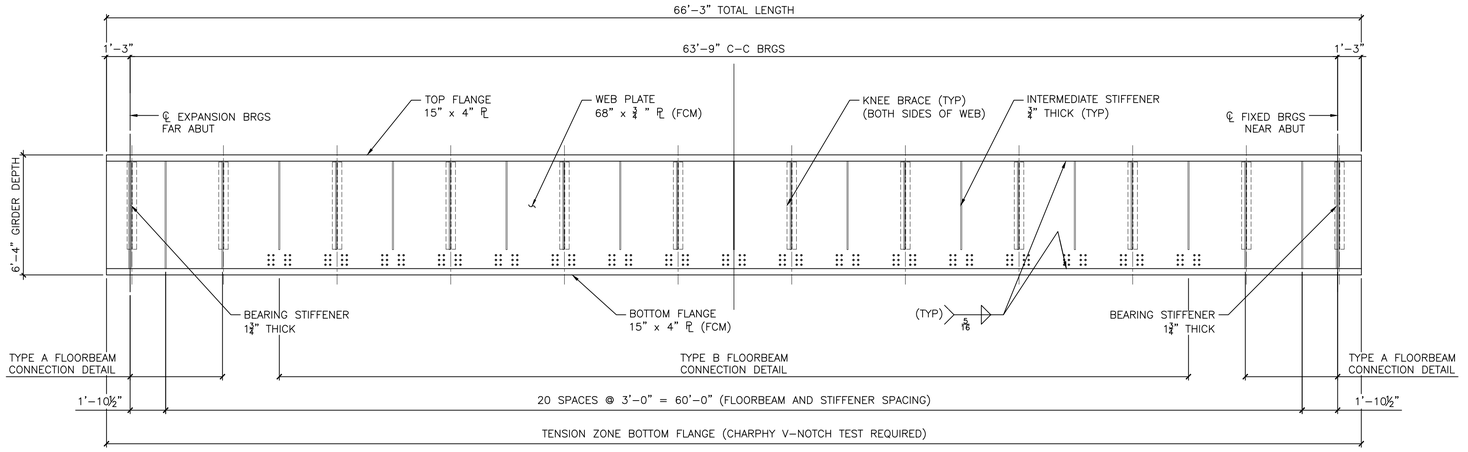
MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
FRAMING PLAN

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S214**
DWG. NO.: 14 OF 30
SHT. NO.: 28 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:37:24 AM
IFC SUBMISSION
C:\PW\WORKING\JACOBS_B&I\DAVIS\WLD\D660089\K_SEPTA_ML_BR_11.62_50 STEEL SUPERSTRUCTURE.DWG

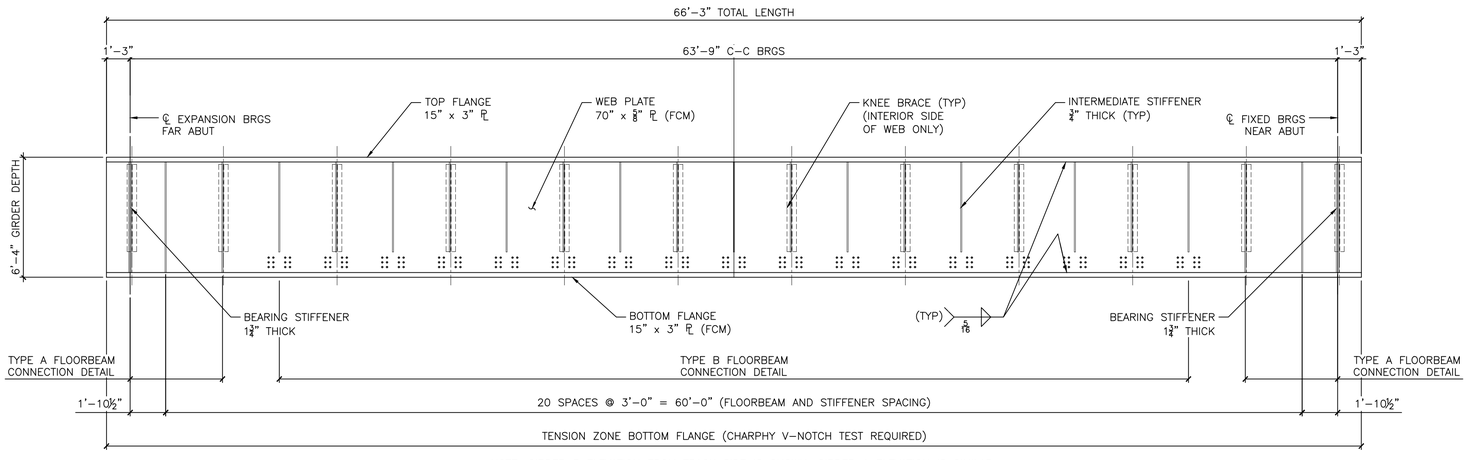


NOTE: GIRDER 2 ELEVATION IS LOOKING NORTH. OPPOSITE FACE IS SIMILAR.

1 / S215 GIRDER ELEVATION - INTERIOR G2

1/4" = 1'-0"

0 1 2 4 8



NOTE: GIRDER 3 ELEVATION FROM TRACK SIDE IS SHOWN. GIRDER 1 ELEVATION IS SIMILAR.

2 / S215 GIRDER ELEVATION - EXTERIOR G1 & G3

1/4" = 1'-0"

0 1 2 4 8

NOTES:

1. NO CAMBER REQUIRED FOR PLATE GIRDER. TOTAL DEAD LOAD DEFLECTIONS OF ¾" AND ⅜" ARE ANTICIPATED FOR THE EXTERIOR AND INTERIOR GIRDERS, RESPECTIVELY.
2. SEE PLANS AND SECTIONS FOR OTHER DETAILS AS APPLICABLE.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

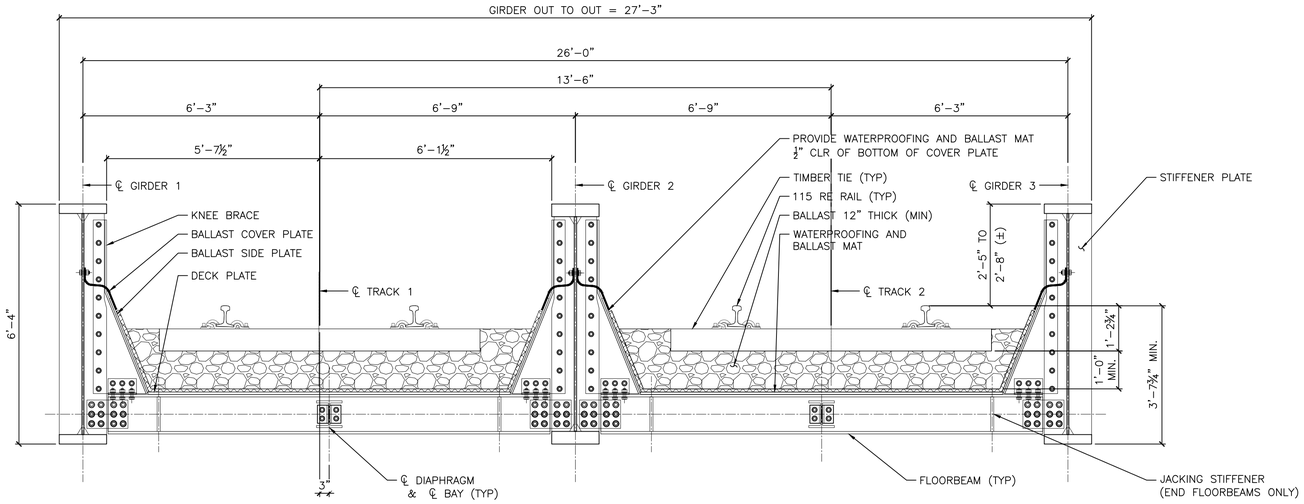
MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
GIRDER ELEVATIONS

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: PK | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S215**
DWG. NO.: 15 OF 30
SHT. NO.: 29 OF 48
COMPUTER FILE NO.: REV. NO.: 00

DATE PRINTED: 11/14/2024 10:37:25 AM
C:\PW\WORKING\JACOBS_B&I\DAVIS\WLD\D0600089\K_SEPTA_ML_BR_11.62_50_STEEL SUPERSTRUCTURE.DWG
IFC SUBMISSION



FRAMING SECTION TYPE A SHOW. TYPE B IS SIMILAR.

1 / S216 TYPICAL SECTION

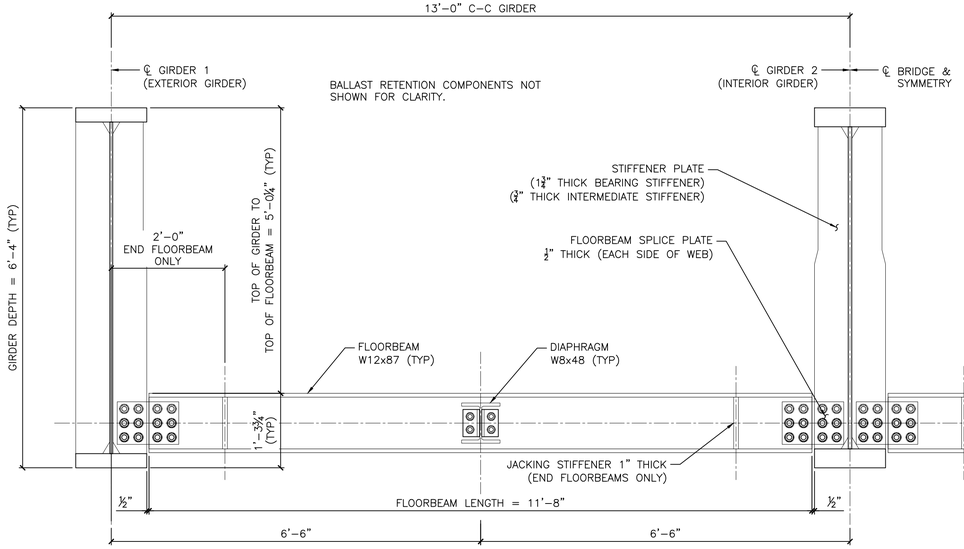
1/2" = 1'-0"

0 1 2 4

(LOOKING STATIONS AHEAD)

NOTES:

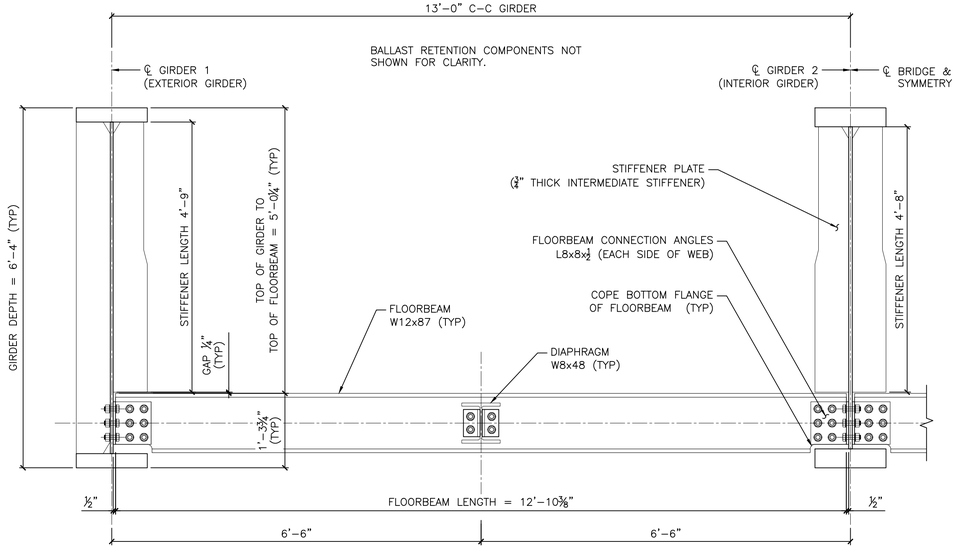
1. TWO TYPES OF FLOORBEAM CONNECTION ARE REQUIRED. SEE FRAMING PLAN AND GIRDER ELEVATION SHEETS FOR LIMIITS.
2. SEE DETAILS SHEETS FOR TYPE A AND TYPE B FLOORBEAM CONNECTIONS.



2 / S216 FRAMING STEEL SECTION - TYPE A

3/4" = 1'-0"

0 1 2 4



3 / S216 FRAMING STEEL SECTION - TYPE B

3/4" = 1'-0"

0 1 2 4

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
TYPICAL SECTIONS

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -

DRAWING NUMBER
S216

DWG. NO.: 16 OF 30
SHT. NO.: 30 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:37:26 AM

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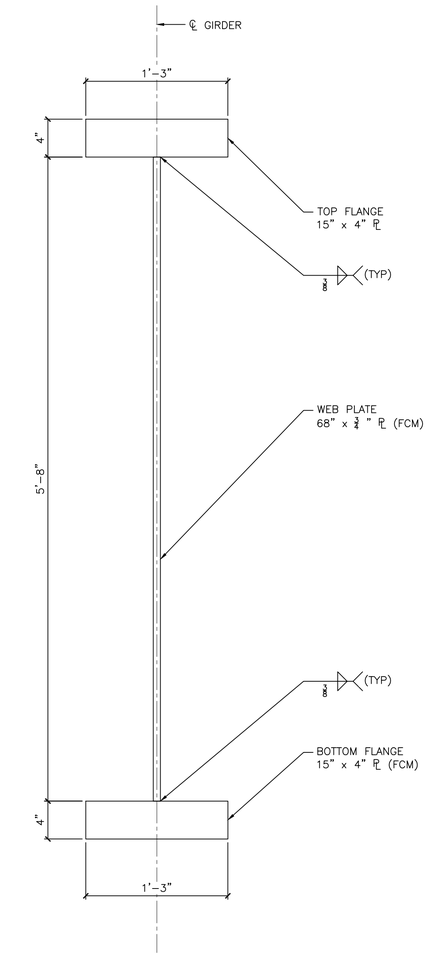
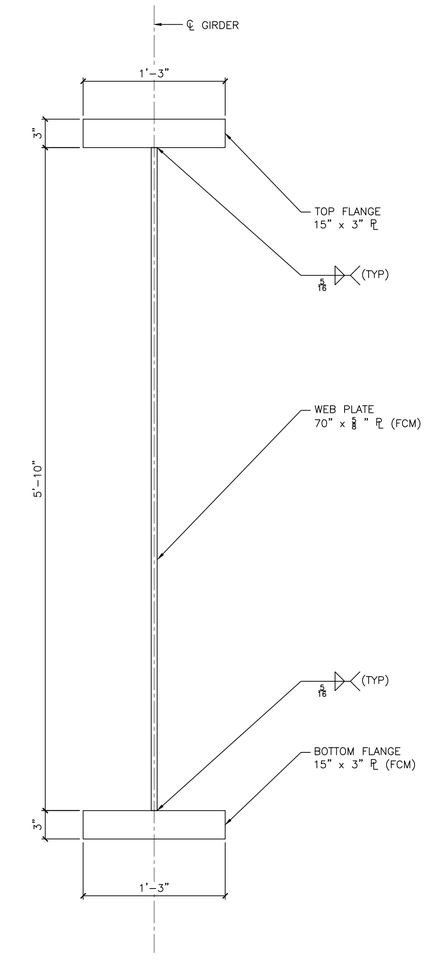


1 S217 INTERIOR GIRDER SECTION

1 1/2" = 1'-0"

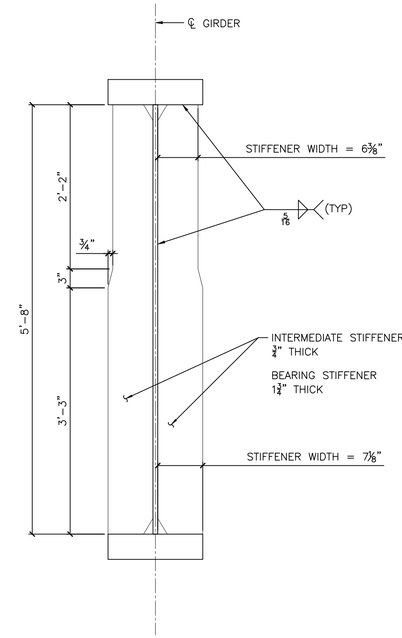
0 1 2



2 S217 EXTERIOR GIRDER SECTION

1 1/2" = 1'-0"

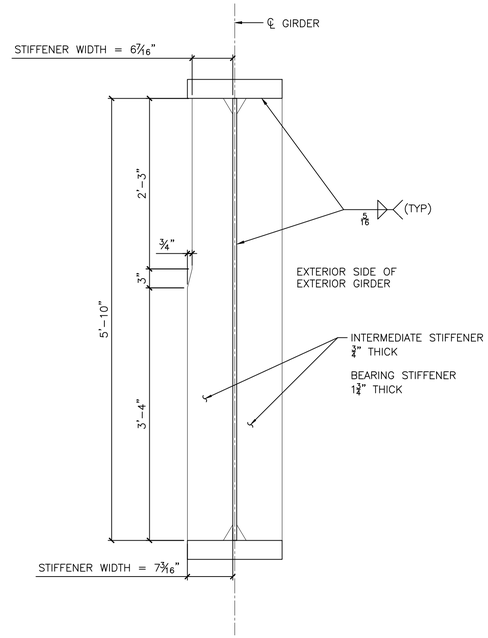
0 1 2



3 S217 INTERIOR GIRDER STIFFENER DETAIL - TYPE A

1" = 1'-0"

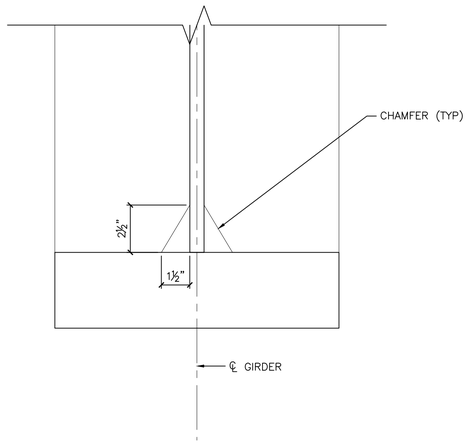
0 1 2



4 S217 EXTERIOR GIRDER STIFFENER DETAIL - TYPE A

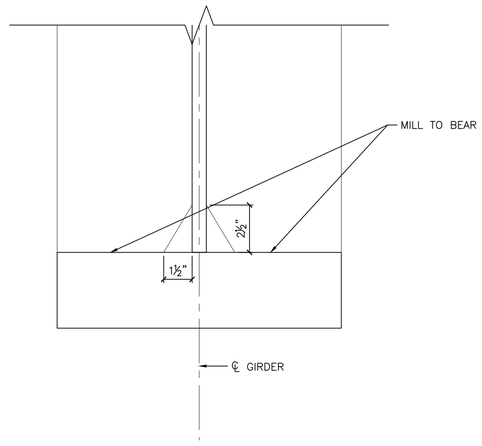
1" = 1'-0"

0 1 2



5 S217 STIFFENER CLIP DETAIL

NTS



6 S217 BEARING STIFFENER

NTS

NOTES:

1. TWO TYPES OF FLOORBEAM CONNECTIONS ARE REQUIRED. SEE FRAMING PLAN AND GIRDER ELEVATION SHEETS FOR LIMIITS.
2. GIRDER SECTIONS ARE APPLICABLE FOR BOTH TYPES OF FLOORBEAM CONNECTIONS.
3. STIFFENER DETAILS SHOWN ARE APPLICABLE FOR TYPE A FLOORBEAM CONNECTIONS.
4. SEE DETAILS SHEETS FOR TYPE A AND TYPE B FLOORBEAM CONNECTIONS.

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FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

GIRDER DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
WORK ORDER NO.: -	CHECKED BY: JS

DRAWING NUMBER
S217

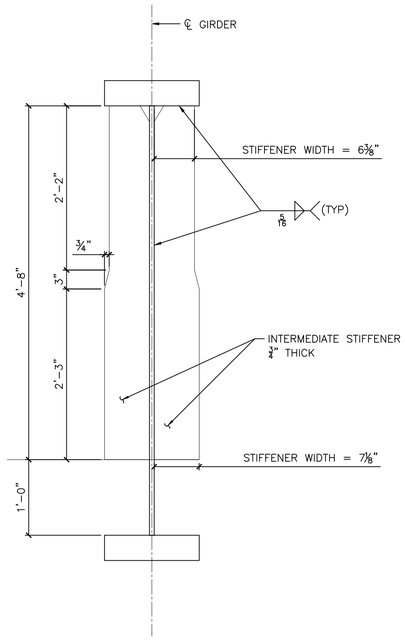
DWG. NO.:	17	OF	30
SHT. NO.:	31	OF	48

COMPUTER FILE NO.: REV. NO.: 00

DATE PRINTED: 11/14/2024 10:37:28 AM

IFC SUBMISSION

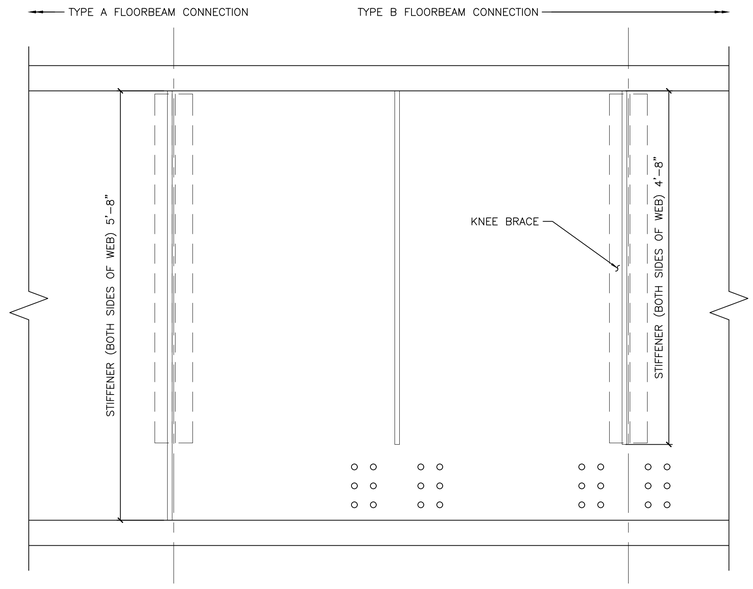
C:\PW\WORKING\JACOBS_B&I\DAVIS\WLD\D660089\K_SEPTA_ML_BR_11.62_50 STEEL SUPERSTRUCTURE.DWG



1 S218 INTERIOR GIRDER STIFFENER DETAIL

1" = 1'-0"

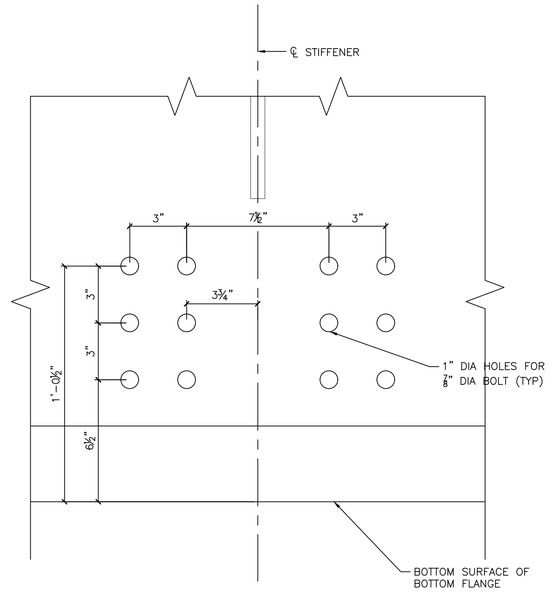
0 1 2



2 S218 INTERIOR GIRDER STIFFENER DETAIL

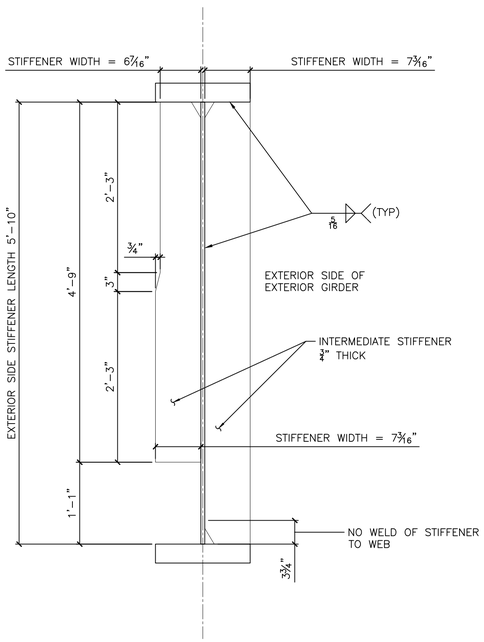
1" = 1'-0"

0 1 2



5 S218 INTERIOR GIRDER STIFFENER DETAIL

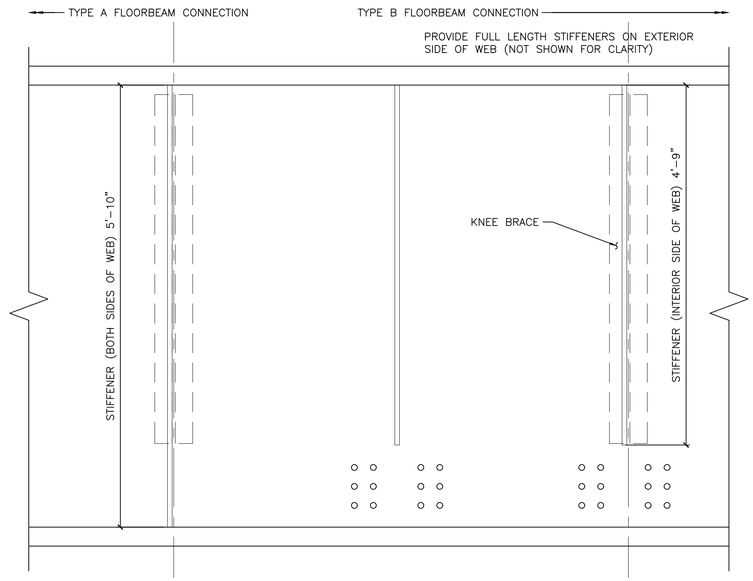
NTS



3 S218 EXTERIOR GIRDER STIFFENER DETAIL

1" = 1'-0"

0 1 2



4 S218 EXTERIOR GIRDER STIFFENER DETAIL

1" = 1'-0"

0 1 2

NOTES:

1. TWO TYPES OF FLOORBEAM CONNECTIONS ARE REQUIRED. SEE FRAMING PLAN AND GIRDER ELEVATION SHEETS FOR LIMIITS.
2. STIFFENER DETAILS SHOWN ARE APPLICABLE FOR TYPE B FLOORBEAM CONNECTIONS.
3. SEE DETAILS SHEET FOR TYPE B FLOORBEAM CONNECTIONS.
4. PROVIDE CLASS B FAYING SURFACE FOR ALL FLOORBEAM CONNECTIONS.

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DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS
PROJECT MANAGER

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
GIRDER DETAILS - TYPE B

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S218**
DWG. NO.: 18 OF 30
SHT. NO.: 32 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

IFC SUBMISSION

DATE PRINTED: 11/14/2024 10:37:30 AM

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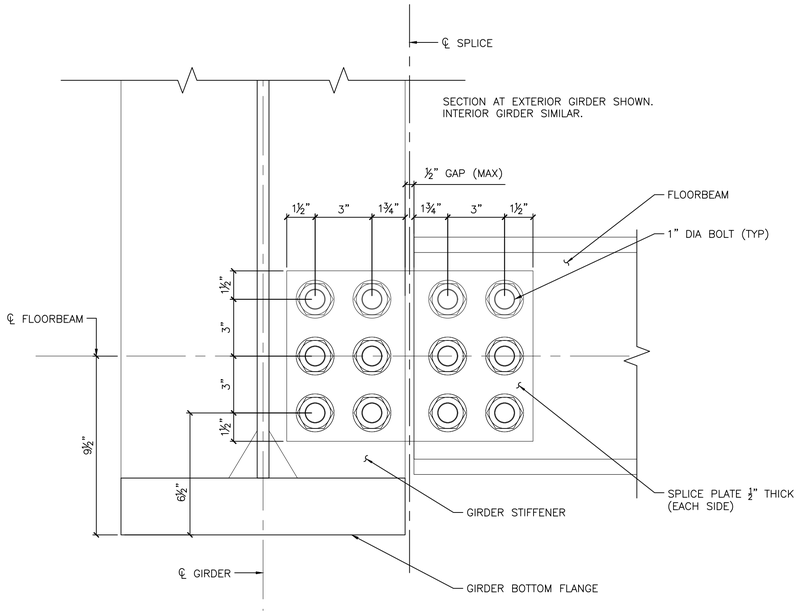
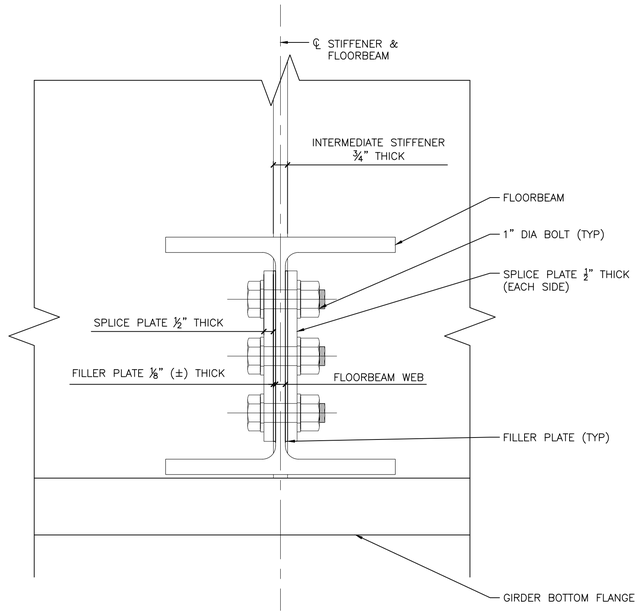
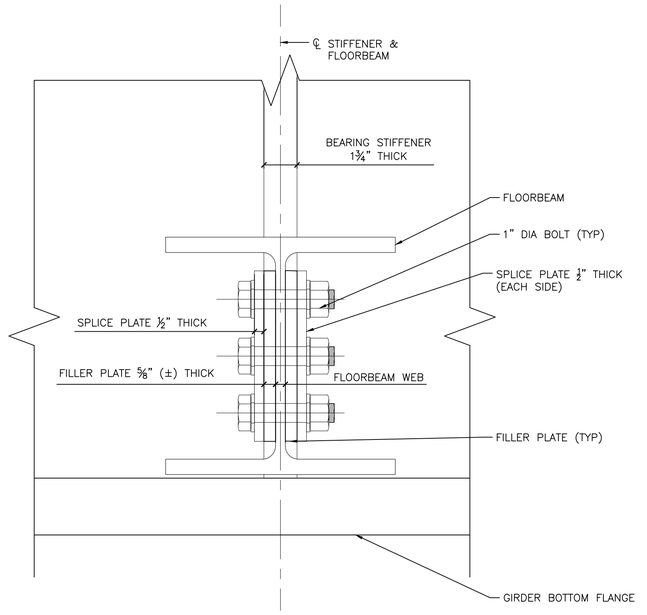


NOTE: EXTERIOR GIRDER SHOWN. INTERIOR GIRDER SIMILAR.

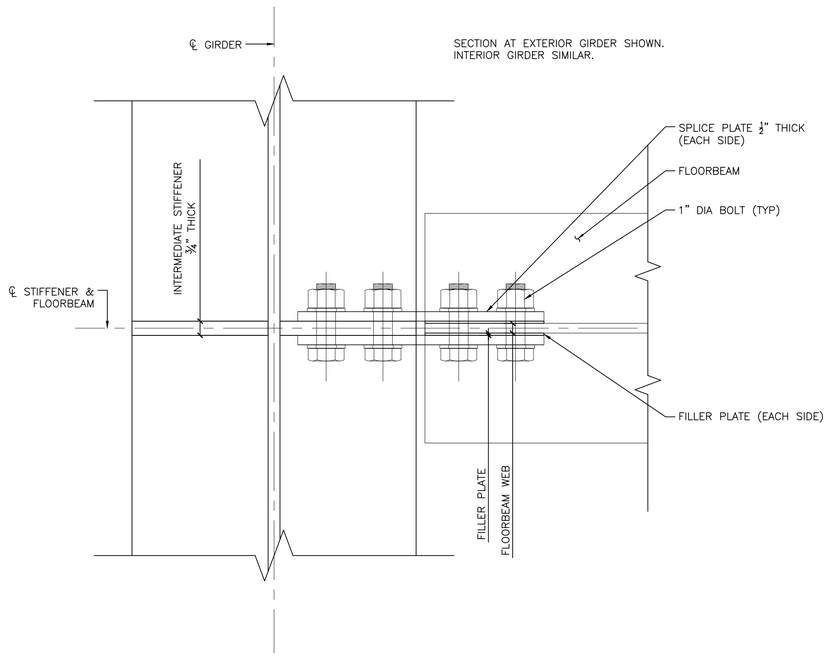
1 / S219 FLOORBEAM CONNECTION DETAIL - 1
NTS



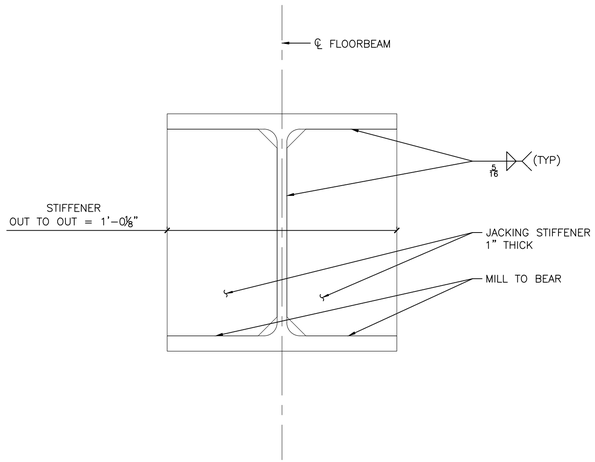
2 / S219 FLOORBEAM CONNECTION DETAIL - 2
NTS



3 / S219 FLOORBEAM CONNECTION DETAIL - 3
NTS



4 / S219 FLOORBEAM CONNECTION DETAIL - 4
NTS



5 / S219 FLOORBEAM CONNECTION DETAIL - 4
NTS

NOTES:

1. ALL BOLTS ARE ASTM F3125 GR A325 SLIP CRITICAL BOLTS.
2. FLOORBEAM CONNECTIONS PLATES AND ANGLES MUST BE THERMALLY CUT OR PLANED.
4. PROVIDE CLASS B FAYING SURFACE FOR ALL FLOORBEAM CONNECTIONS.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

FLOORBEAM CONNECTION DETAILS - TYPE A

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
	CHECKED BY: JS

WORK ORDER NO.: -

DRAWING NUMBER
S219

DWG. NO.: 19 OF 30
SHT. NO.: 33 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

IFC SUBMISSION

DATE PRINTED: 11/14/2024 10:37:32 AM

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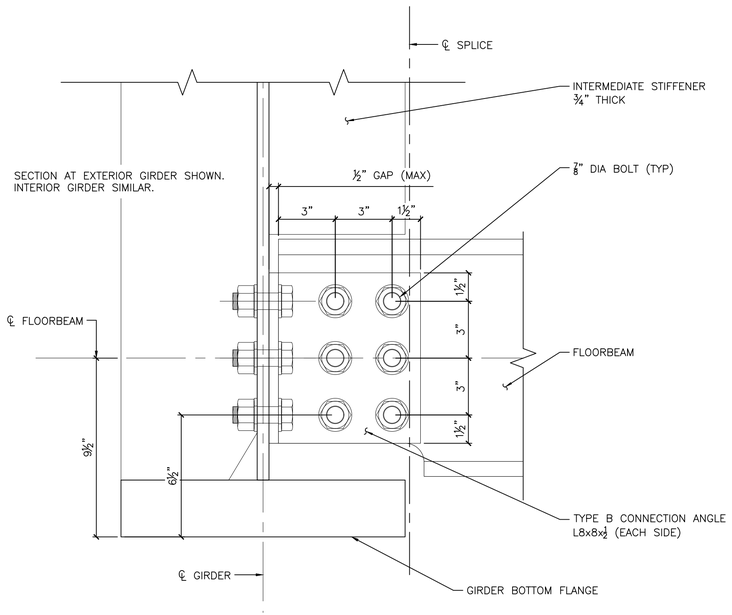
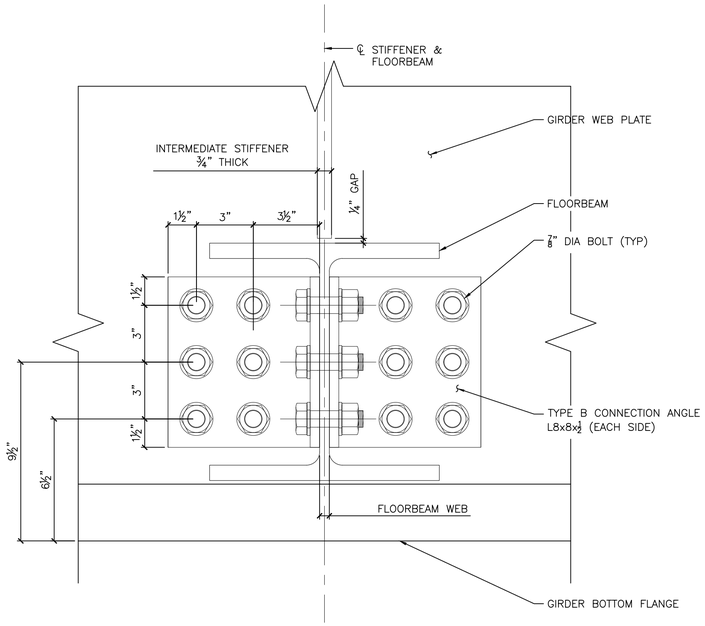
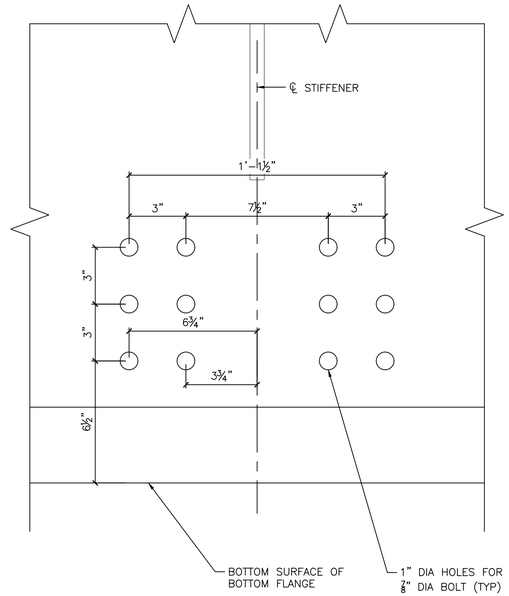


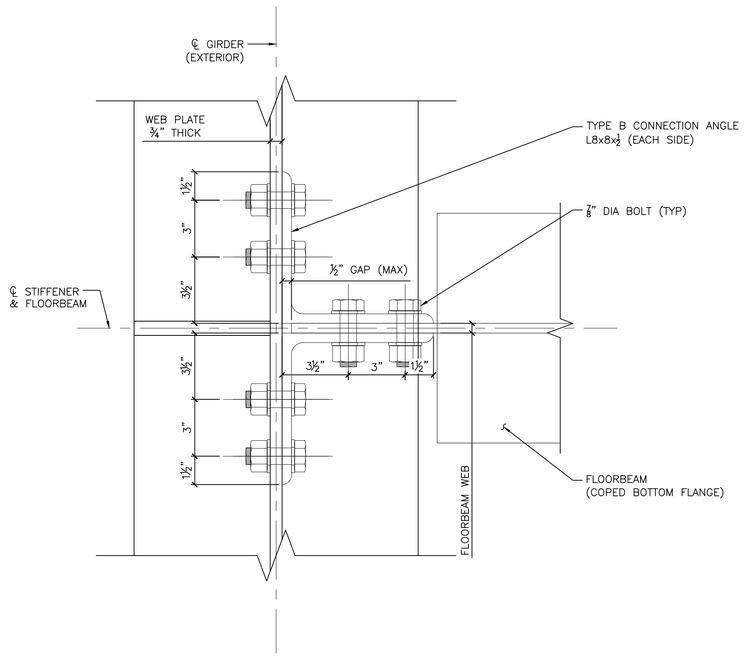
1 S220 FLOORBEAM CONNECTION DETAIL - 1
NTS



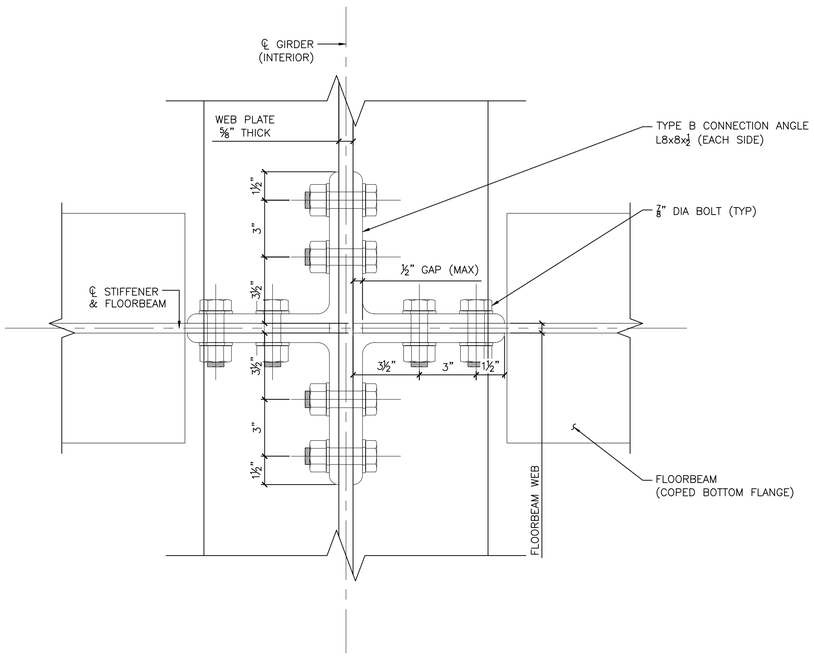
2 S220 FLOORBEAM CONNECTION DETAIL - 2
NTS



5 S220 FLOORBEAM CONNECTION DETAIL - 5
NTS



3 S220 FLOORBEAM CONNECTION DETAIL - 3
NTS



4 S220 FLOORBEAM CONNECTION DETAIL - 4
NTS

NOTES:

1. ALL BOLTS ARE ASTM F3125 GR A325 SLIP CRITICAL BOLTS.
2. ALL ANGLES SHALL BE THERMALLY CUT AND PLANED.
3. TWO TYPES OF FLOORBEAM CONNECTIONS ARE REQUIRED. SEE FRAMING PLAN AND GIRDER ELEVATION SHEETS FOR LIMITS.
4. PROVIDE CLASS B FAYING SURFACE FOR ALL FLOORBEAM CONNECTIONS.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL

FLOORBEAM CONNECTION DETAILS - TYPE B

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -

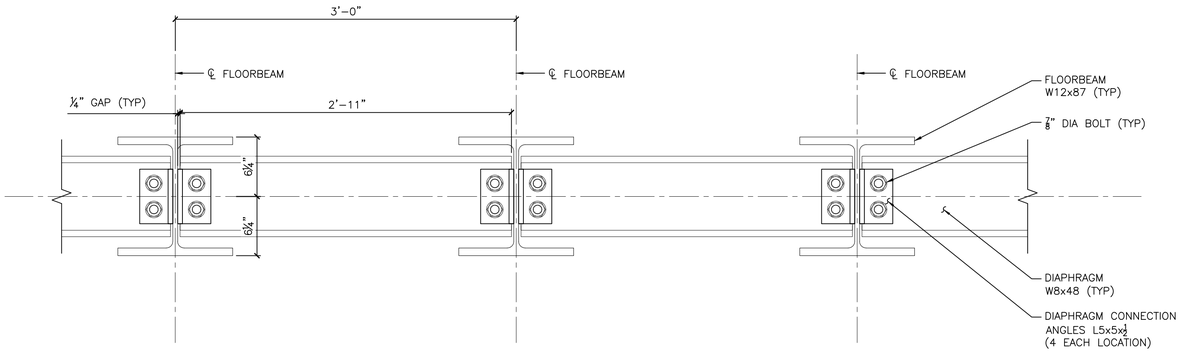
DRAWING NUMBER
S220

DWG. NO.: 20 OF 30
SHT. NO.: 34 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:37:34 AM

IFC SUBMISSION

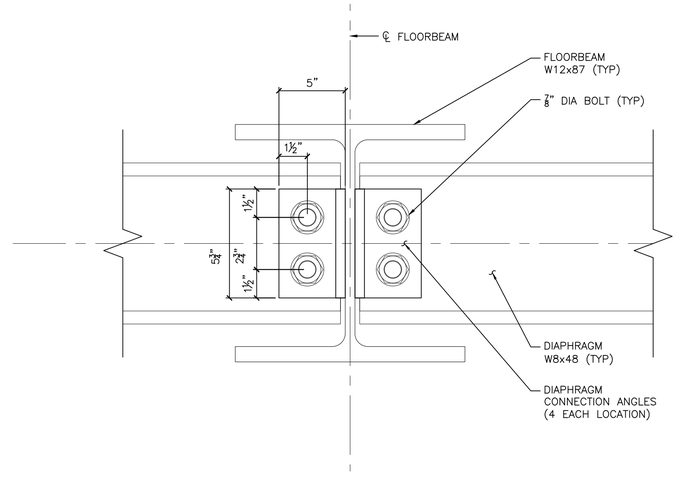
C:\PW\WORKING\JACOBS_B&I\DAVIS\WLD\D660089\K_SEPTA_ML_BR_11.62_50_STEEL SUPERSTRUCTURE.DWG



1 S221 DIAPHRAGM PARTIAL ELEVATION

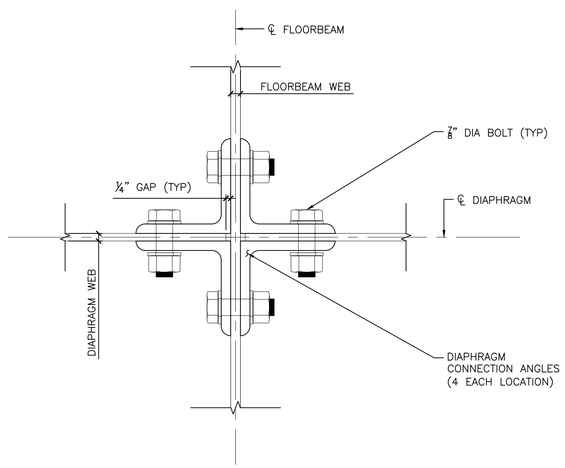
1 1/2" = 1'-0"

0 1 2



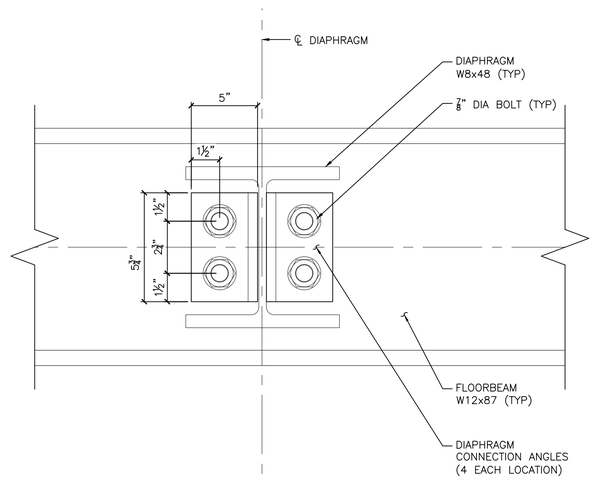
2 S221 DIAPHRAGM CONNECTION DETAIL - 1

NTS



3 S221 DIAPHRAGM CONNECTION DETAIL - 2

NTS



4 S221 DIAPHRAGM CONNECTION DETAIL - 3

NTS

NOTES:

1. ALL BOLTS ARE ASTM F3125 GRADE A325 SLIP CRITICAL BOLTS.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS

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JACOBS ENGINEERING PROJECT NO. L7028100

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00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

DIAPHRAGM CONNECTION DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
WORK ORDER NO.: -	CHECKED BY: JS

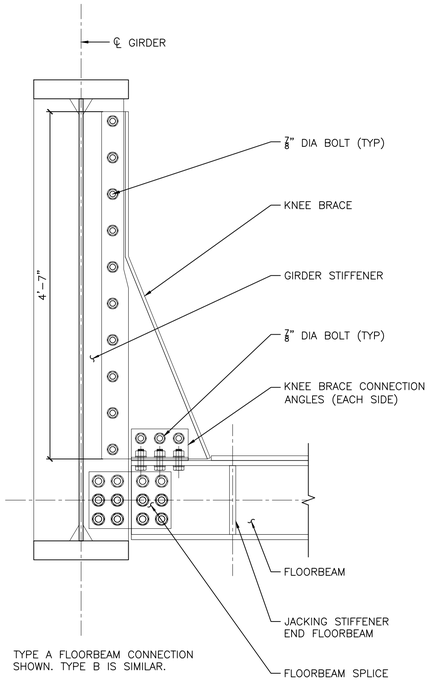
DRAWING NUMBER
S221

DWG. NO.: 21 OF 30
SHT. NO.: 35 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

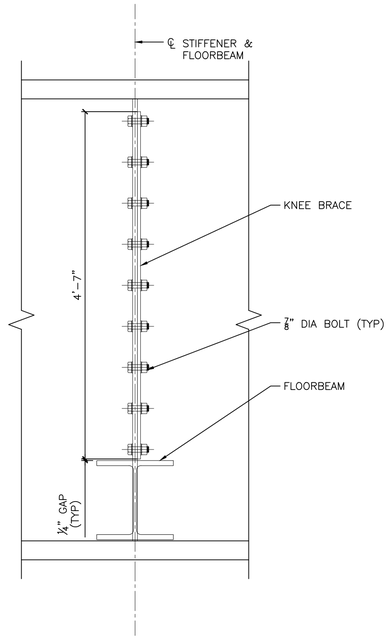
IFC SUBMISSION

DATE PRINTED: 11/14/2024 10:37:35 AM

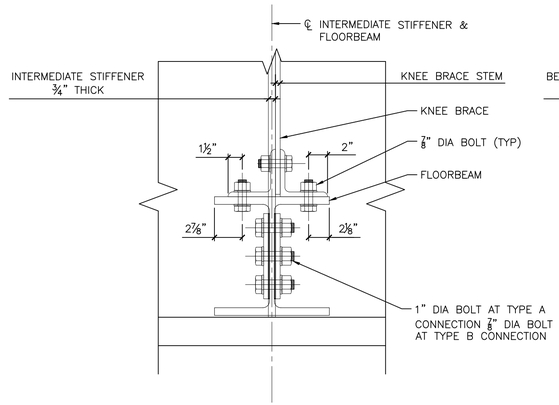
C:\PW\WORKING\JACOBS_B&I\DAVIS\WLD\D660089\K_SEPTA_ML_BR_11.62_50 STEEL SUPERSTRUCTURE.DWG



TYPE A FLOORBEAM CONNECTION SHOWN. TYPE B IS SIMILAR.

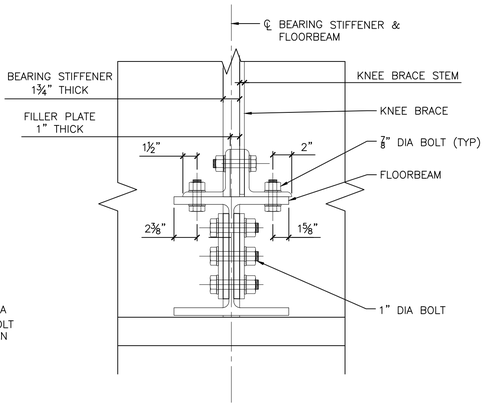


FLOORBEAM SPLICE NOT SHOWN FOR CLARITY



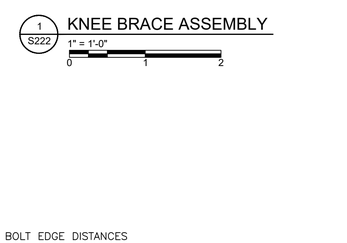
2 / S222 CONNECTION AT INTERMEDIATE STIFFENER

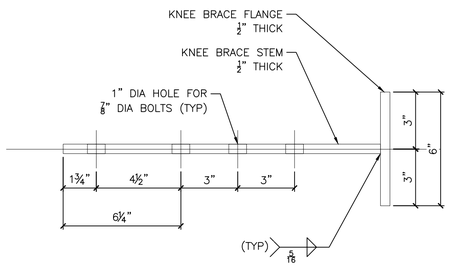
1 1/2" = 1'-0"

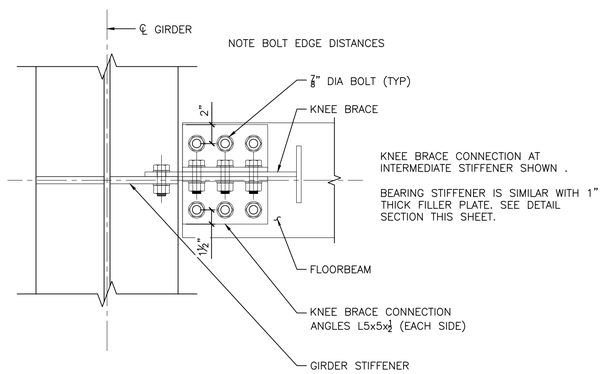


3 / S222 CONNECTION AT BEARING STIFFENER

1 1/2" = 1'-0"

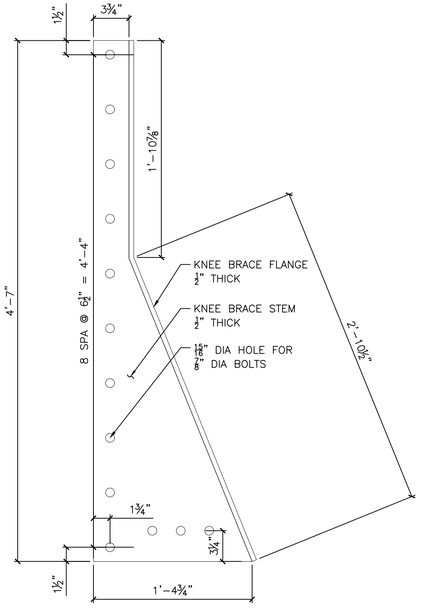






4 / S222 PARTIAL PLAN AT CONNECTION

1 1/2" = 1'-0"



5 / S222 KNEE BRACE DETAILS

1 1/2" = 1'-0"

NOTES:

1. ALL BOLTS ARE ASTM F3125 GRADE A325 SLIP CRITICAL BOLTS.

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SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
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PROJECT MANAGER

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL

KNEE BRACE CONNECTION DETAILS

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: PK | CHECKED BY: JS
WORK ORDER NO.: -

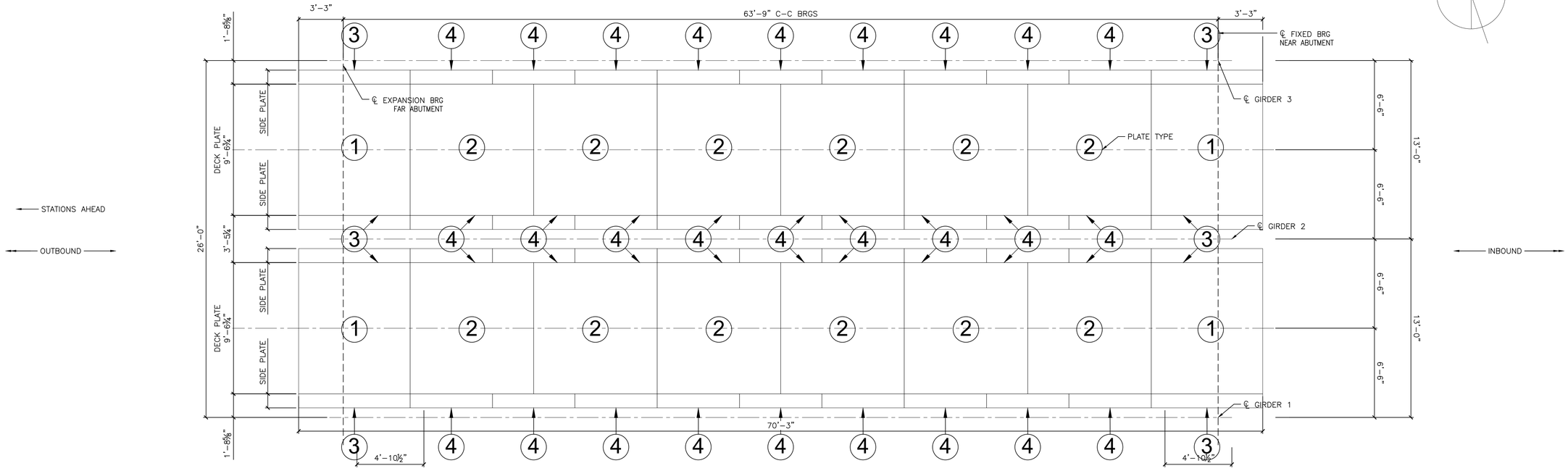
DRAWING NUMBER **S222**

DWG. NO.: 22 OF 30
SHT. NO.: 36 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

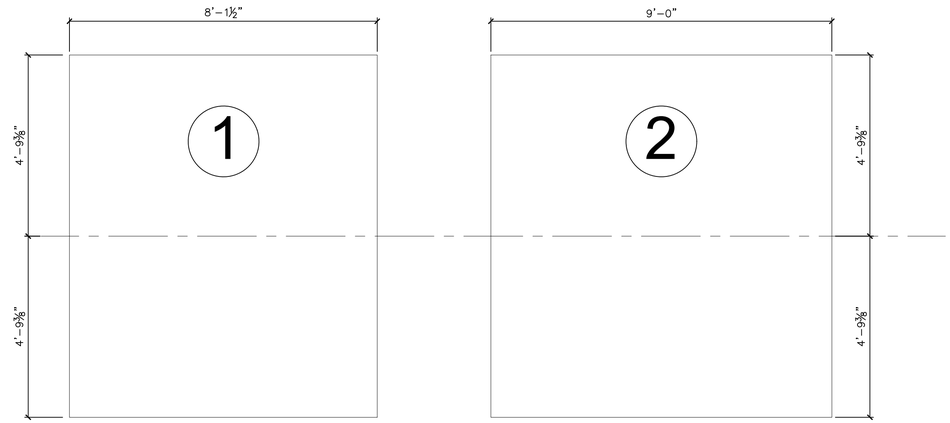
IFC SUBMISSION

DATE PRINTED: 11/14/2024 10:37:38 AM

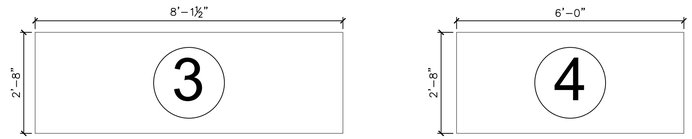
C:\PW\WORKING\JACOBS_B&I\DAVIS\WLD\D660089\K_SEPTA_ML_BR_11.62_50 STEEL SUPERSTRUCTURE.DWG



1 S223 DECK PLATE PLAN
1/4" = 1'-0"
0 1 2 4 8



2 S223 DECK PLATE TYPES
1/2" = 1'-0"
0 1 2 4



3 S223 SIDE PLATE TYPES
1/2" = 1'-0"
0 1 2 4

NOTES:

1. EXTERIOR AND INTERIOR GIRDER ARE DIFFERENT.
2. DECK PLATES ARE ¾" THICK AND SEGMENT ENDS ARE CONNECTED OVER FLANGE OF FLOORBEAMS.
3. SIDE PLATES ARE ½" THICK AND SEGMENT ENDS ARE CONNECTED OVER FLANGE OF KNEE BRACES.
4. SIDE PLATES SHOWN APPROXIMATELY IN PLAN VIEW. SEE DWG S222 FOR SIDE PLATE DETAILS.
5. BENT BALLAST RETAINER PLATE IS NOT SHOWN FOR CLARITY. SEE DWG S223 FOR DETAILS.

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DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

CHIEF ENGINEER, BRIDGES & BUILDINGS

SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS

MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS

PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
DAVID J. PHELAN
ENGINEER
057506

Jacobs
2001 MARKET STREET
SUITE 900
PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

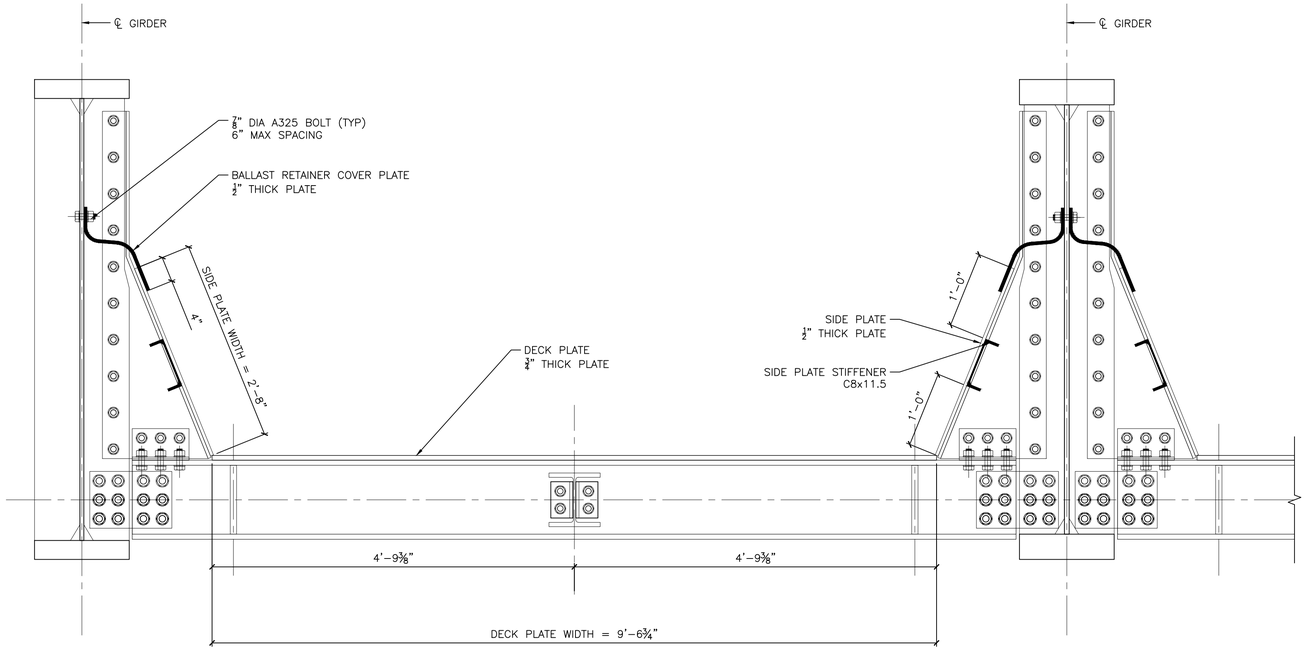
STRUCTURAL
DECK PLATE PLAN

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S223**
DWG. NO.: 23 OF 30
SHT. NO.: 37 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

C:\PW\WORKING\JACOBS_B&I\DAVIS\WLID0560889K_SEPTA_ML_BR_11.62_60\STEEL DECK PLATE.DWG

DATE PRINTED: 11/14/2024 10:37:55 AM

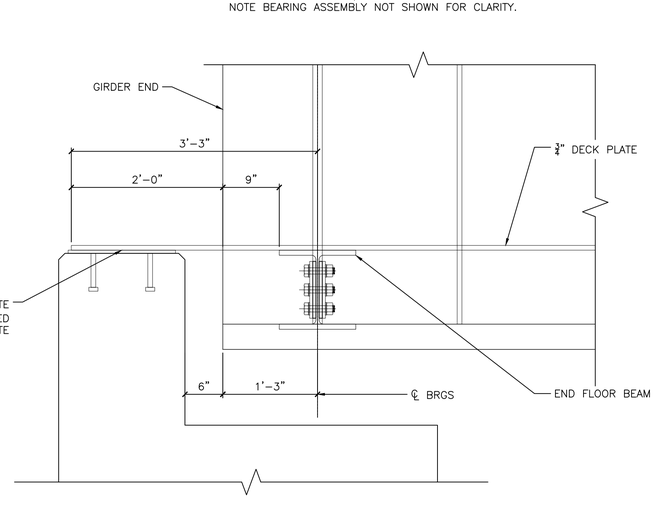
IFC SUBMISSION



1 S224 BALLAST RETENTION SECTION

1" = 1'-0"

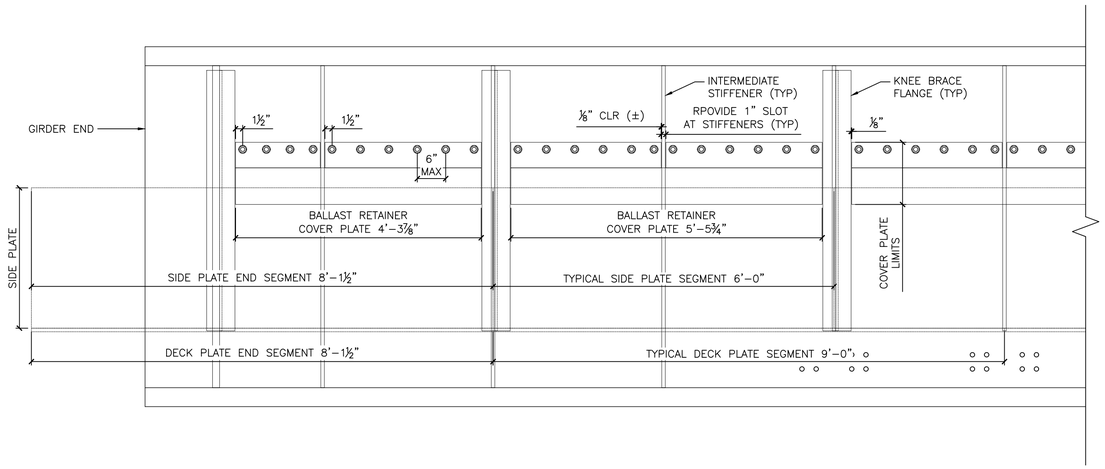
0 1 2



S224 S222 BALLAST RETENTION END SECTION

1" = 1'-0"

0 1 2



3 S224 BALLAST RETENTION ELEVATION

3/4" = 1'-0"

0 1 2 4

NOTES:

1. THE STRUCTURE IS DESIGNED TO ACT AS A STRUCTURAL UNIT UPON COMPLETION. DESIGN AND PROVIDE NECESSARY BRACING, TEMPORARY SUPPORTS, AND SHORING TO RESIST FORCES, ON THE STRUCTURE DURING CONSTRUCTION.
2. REPRODUCTION OF STRUCTURAL CONTRACT DRAWINGS FOR USE AS SHOP DRAWINGS IS STRICTLY PROHIBITED. SHOP DRAWINGS WHICH ARE PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
3. WORK SHALL BE COORDINATED WITH THE VARIOUS TRADES TO INSURE THAT VARIOUS EMBEDDED ITEMS ARE INCORPORATED, TO AVOID CONFLICT OR INTERFERENCE WITH REINFORCING STEEL OR STRUCTURAL STEEL MEMBERS, AND TO ENSURE TIMELY COMPLETION OF ALL WORK.
4. THE LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE IDENTIFIED IN THE FIELD BEFORE CONSTRUCTION COMMENCES.
5. THE WORK SHOWN ON THE DRAWINGS IS TO BE PERFORMED IN ACCORDANCE WITH THE PA CODE, TITLE 34, LABOR AND INDUSTRY, PART XIV, UNIFORM CONSTRUCTION CODE (UCC) AS APPROPRIATE.
6. CONTRACTOR TO VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.

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DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
DECK PLATE SECTION

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK / CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: **S224**	
DWG. NO.: 24 OF 30	
SHT. NO.: 38 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

C:\PW\WORKING\JACOBS_B&I\DAVIS\WI\D0560899K_SEPTA_ML_BR_11.62_60 STEEL DECK PLATE.DWG

DATE PRINTED: 11/14/2024 10:37:56 AM

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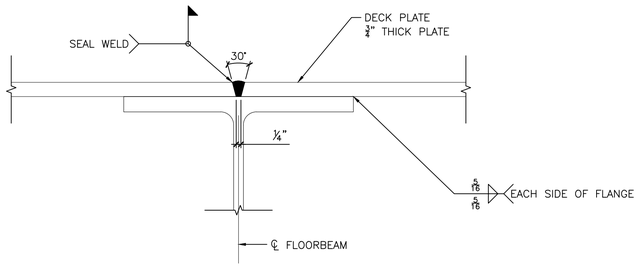
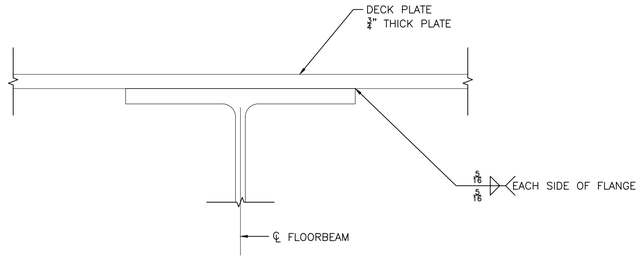
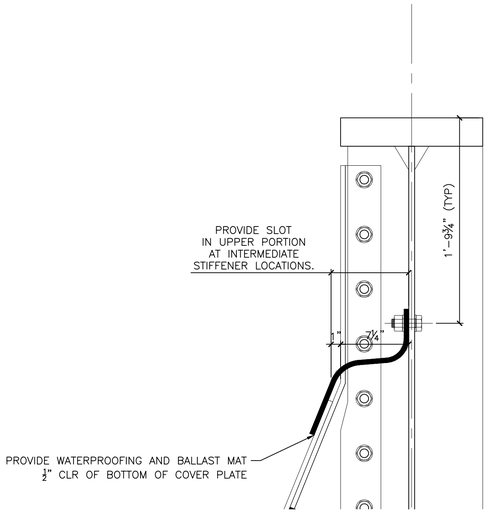


FIELD WELD AT DECK PLATE JONTS

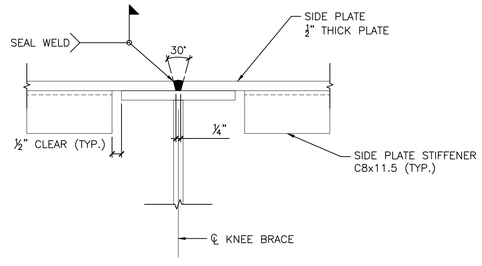


SHOP WELD TO FLOORBEAM

1 / S225 DECK PLATE WELD DETAIL
NTS

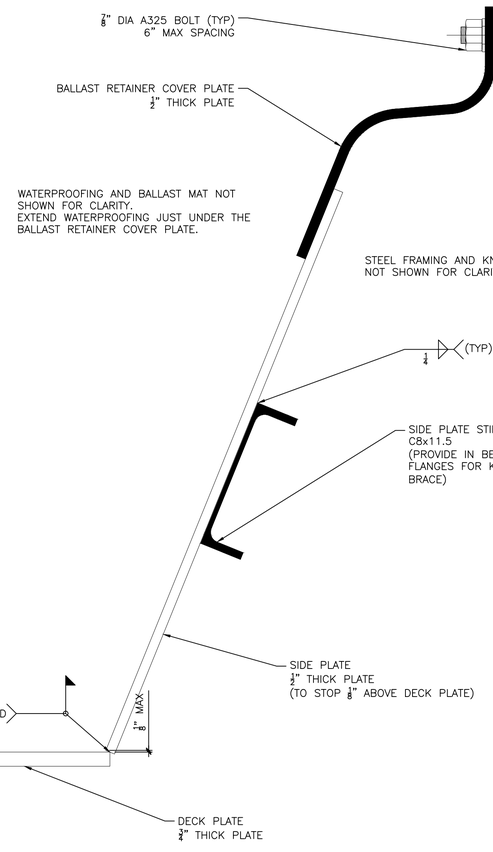


2 / S225 COVER PLATE CONNECTION DETAIL
NTS



FIELD WELD AT SIDE PLATE JONTS

3 / S225 SIDE PLATE WELD DETAIL
NTS



4 / S225 BALLAST RETAINER ASSEMBLY
NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL
DECK PLATE DETAILS

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S225**
DWG. NO.: 25 OF 30
SHT. NO.: 39 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:37:58 AM
IFC SUBMISSION
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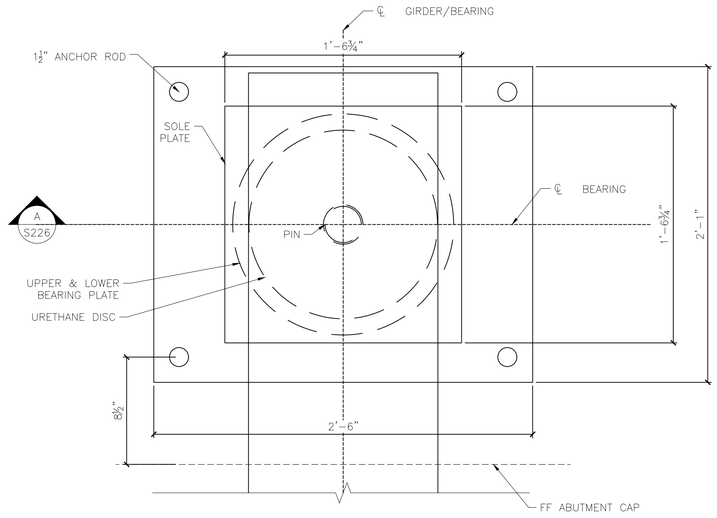
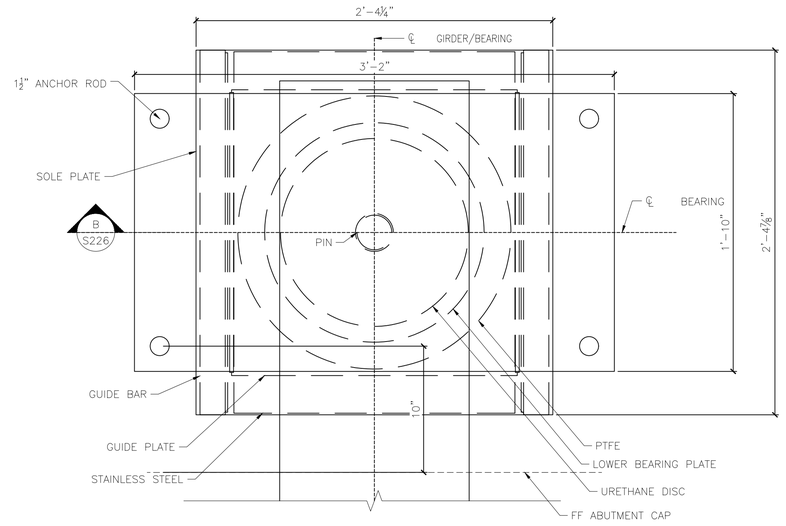


1 S226 FIXED BEARING
NTS



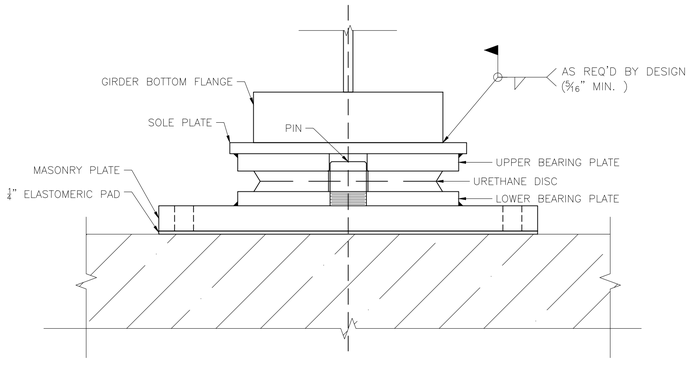
2 S226 EXPANSION BEARING
NTS

INTERIOR GIRDER – BEARING CAPACITY TABLE		
	EXP.	FIXED
SERVICE VERTICAL LOAD (KIPS)	730	730
SERVICE HORIZONTAL LOAD (KIPS)	12	80
LONGITUDINAL DISPLACEMENT (INCHES) ±	2.5	–
LIVE LOAD ROTATION (RADIANS)	0.003	0.003
DEAD LOAD ROTATION (RADIANS)	0.001	0.001
CONSTRUCTION TOLERANCE (RADIANS)	0.005	0.005

EXTERIOR GIRDER – BEARING CAPACITY TABLE		
	EXP.	FIXED
SERVICE VERTICAL LOAD (KIPS)	370	370
SERVICE HORIZONTAL LOAD (KIPS)	12	80
LONGITUDINAL DISPLACEMENT (INCHES) ±	2.5	–
LIVE LOAD ROTATION (RADIANS)	0.002	0.002
DEAD LOAD ROTATION (RADIANS)	0.001	0.001
CONSTRUCTION TOLERANCE (RADIANS)	0.005	0.005

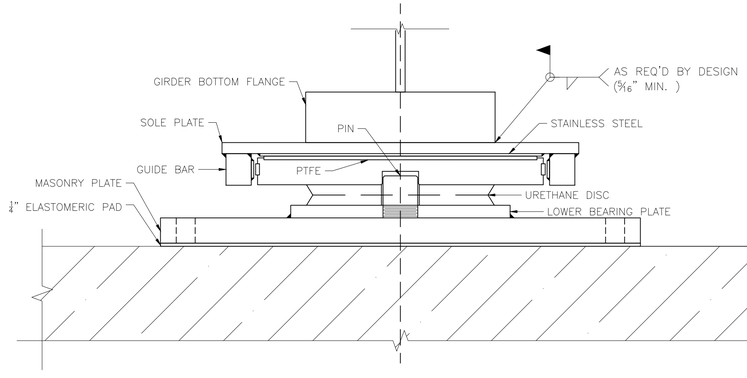
NOTES:

1. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. SCHEMATIC DRAWING FOR BID PURPOSES ONLY. SUPPLIER SHALL PROVIDE DESIGN CALCULATIONS FOR THE BEARING ASSEMBLY & ANCHORAGE IN ACCORDANCE WITH THE SPECIFICATIONS REFERENCED IN THE GENERAL NOTES. SEE BEARING CAPACITY TABLE.
3. SOLE PLATE TO BE BEVELED IN LONGITUDINAL DIRECTION TO ACCOMMODATE SUPERSTRUCTURE SLOPE.
4. BEARING STIFFENERS AND END FLOORBEAM CONNECTION NOT SHOWN FOR CLARITY.
5. ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 55 WITH MINIMUM DIAMETER OF 1 ½".
6. ALL LOADS REPORTED FOR THE GIRDER REACTIONS ARE MAXIMUM RESULTANT LOADS. LOADS ARE REPORTED IN ASD ACCORDANCE WITH AREMA SPECIFICATIONS.



A S226 SECTION A-A
NTS

NEAR ABUTMENT INTERIOR BEAMS



B S226 SECTION B-B
NTS

FAR ABUTMENT INTERIOR BEAMS

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
E&C DIVISION
1234 MARKET ST, 13TH FL,
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER

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DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

CHIEF ENGINEER, BRIDGES & BUILDINGS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

BEARING ASSEMBLY - INTERIOR GIRDER

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
	CHECKED BY: JS

WORK ORDER NO.: -

DRAWING NUMBER
S226

DWG. NO.: 26 OF 30
SHT. NO.: 40 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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DATE PRINTED: 11/14/2024 10:38:14 AM

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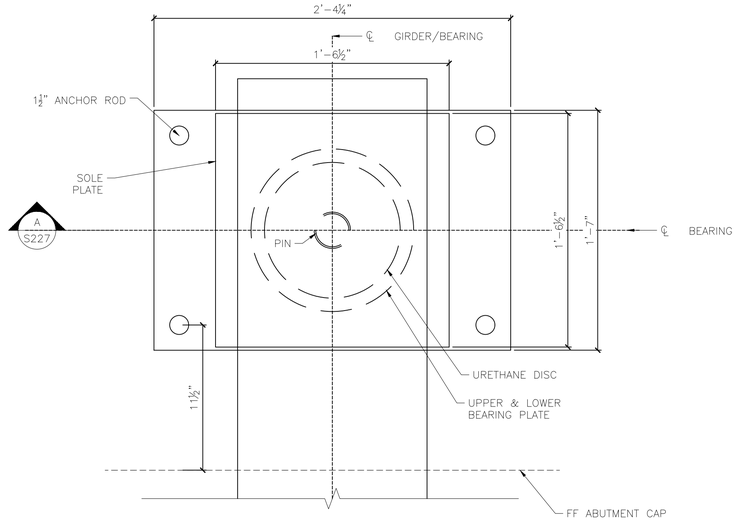
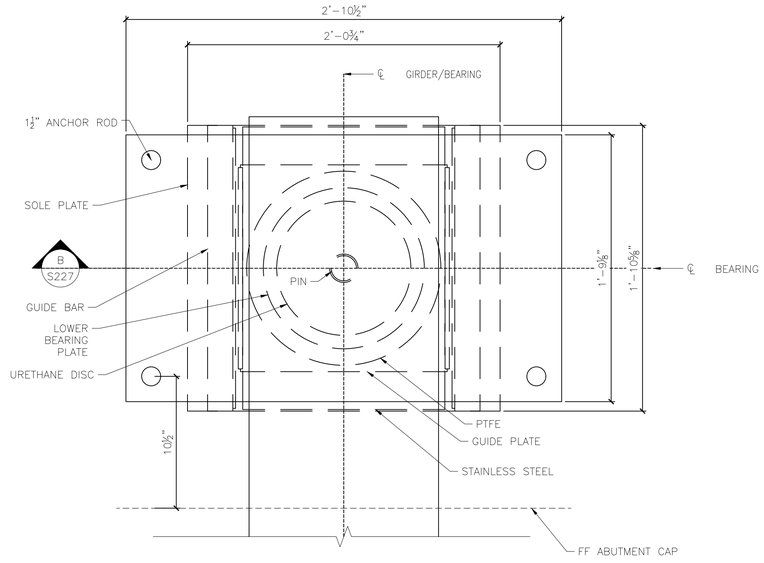


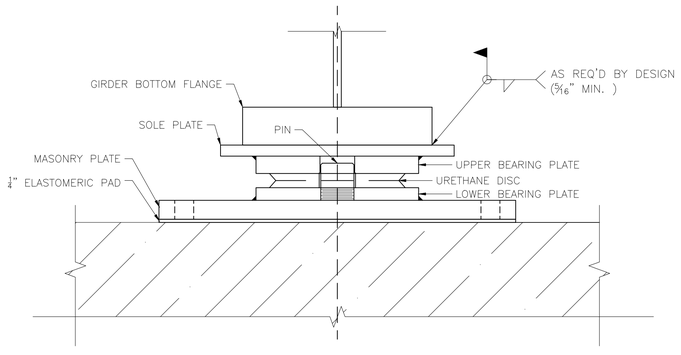
1 S227 FIXED BEARING
NTS



2 S227 EXPANSION BEARING
NTS

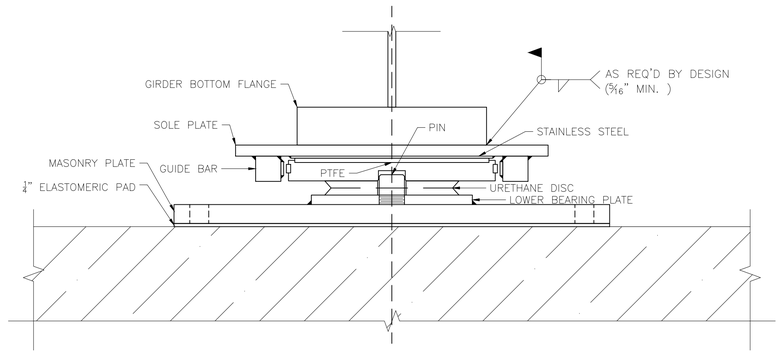
NOTES:

1. SEE GENERAL NOTES FOR ADDITIONAL INFORMATION.
2. SCHEMATIC DRAWING FOR BID PURPOSES ONLY. SUPPLIER SHALL PROVIDE DESIGN CALCULATIONS FOR THE BEARING ASSEMBLY & ANCHORAGE IN ACCORDANCE WITH THE SPECIFICATIONS REFERENCED IN THE GENERAL NOTES. SEE BEARING CAPACITY TABLE.
3. SOLE PLATE TO BE BEVELED IN LONGITUDINAL DIRECTION TO ACCOMMODATE SUPERSTRUCTURE SLOPE.
4. BEARING STIFFENERS AND END FLOORBEAM CONNECTION NOT SHOWN FOR CLARITY.
5. ANCHOR BOLTS SHALL BE ASTM F1554 GRADE 55 WITH MINIMUM DIAMETER OF 1 ½".



A S227 SECTION A-A
NTS

NEAR ABUTMENT EXTERIOR BEAMS



B S227 SECTION B-B
NTS

FAR ABUTMENT EXTERIOR BEAMS

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EM&C DIVISION
1234 MARKET ST, 13TH FL, PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER

CHIEF SAFETY OFFICER

DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

BEARING ASSEMBLY - EXTERIOR GIRDER

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
	CHECKED BY: JS

WORK ORDER NO.: -

DRAWING NUMBER
S227

DWG. NO.: 27 OF 30
SHT. NO.: 41 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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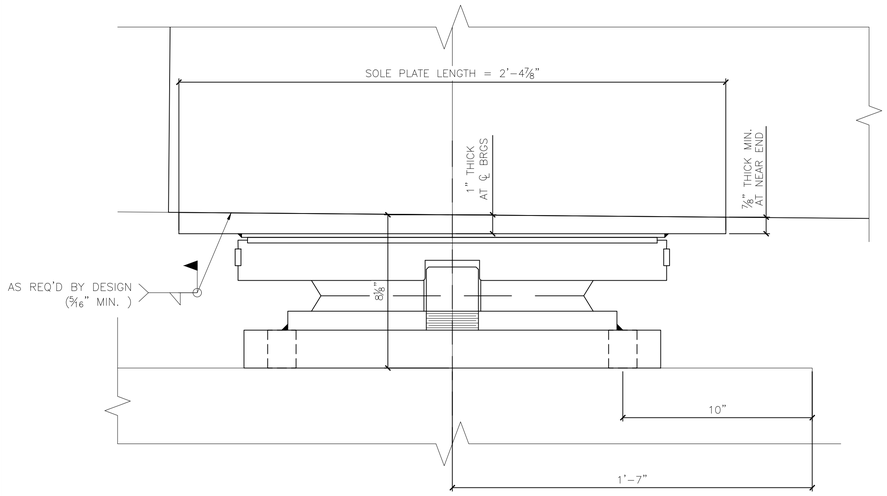
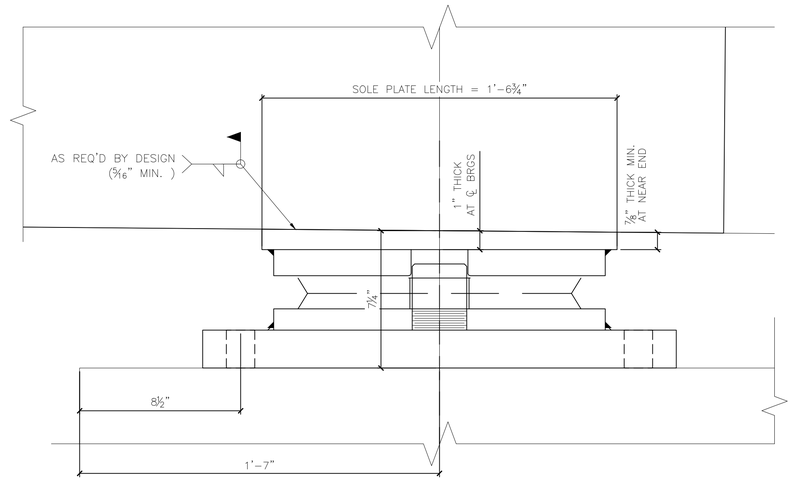
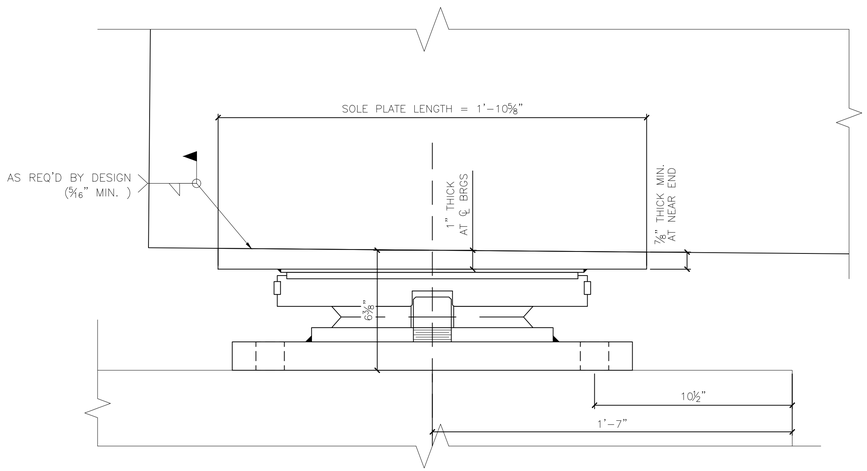


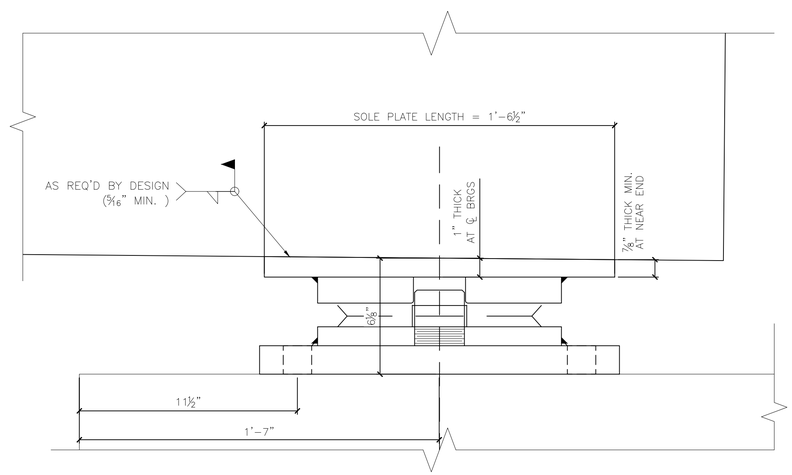
1 S228 SOLE PLATE DETAIL - INTERIOR GIRDER EXPANSION END (FAR)
NTS



2 S228 SOLE PLATE DETAIL - INTERIOR GIRDER FIXED END (NEAR)
NTS



3 S228 SOLE PLATE DETAIL - EXTERIOR GIRDER EXPANSION END (FAR)
NTS



4 S228 SOLE PLATE DETAIL - EXTERIOR GIRDER FIXED END (NEAR)
NTS

NOTES:

1. BEVELED SOLE PLATES ARE TO BE PROVIDED AT EACH END OF THE GIRDER TO ACCOMODATE LONGITUDINAL GRADE OF THE SUPERSTRUCTURE, GIRDER END ROTATIONS, AND ALL APPROPRIATE CONSTRUCTION TOLERANCES.
2. A SOLE PLATE OF THICKNESS OF 1" AT THE CENTERLINE OF BEARING IS PROVIDED TO ACCOMMODATE THE BEVEL REQUIRED TO MATCH THE GIRDER SLOPE.

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MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL
BEARING ASSEMBLY DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK / CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: **S228**	
DWG. NO.: 28 OF 30	
SHT. NO.: 42 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

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DATE PRINTED: 11/14/2024 10:38:17 AM

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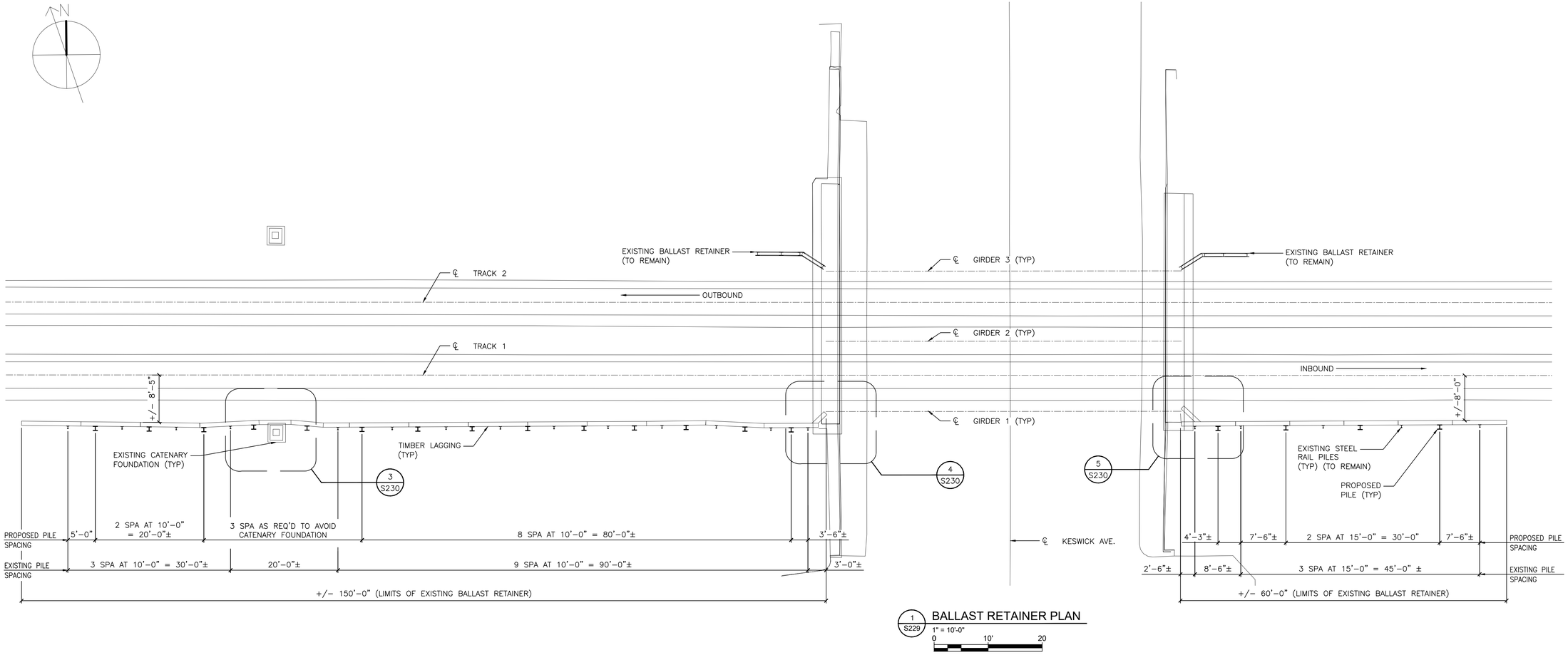
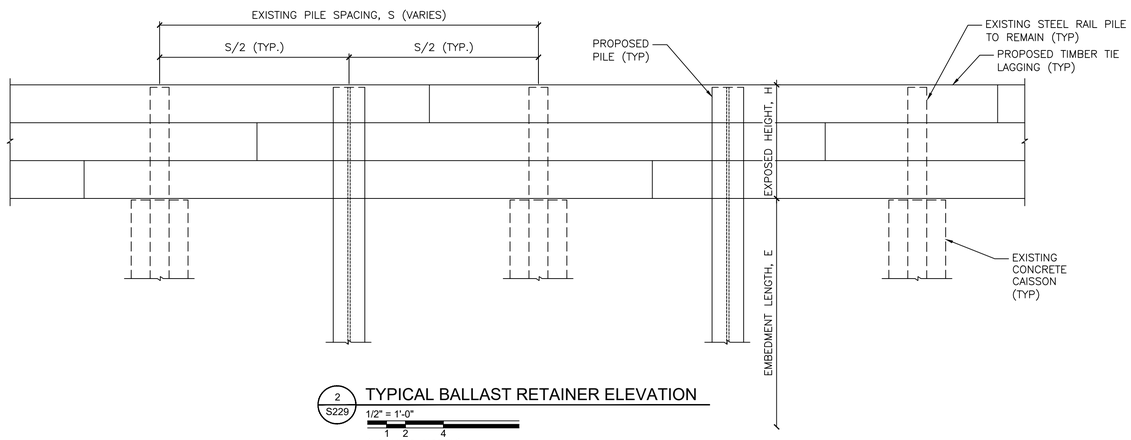


1 S229 BALLAST RETAINER PLAN

1" = 10'-0"

0 10' 20



2 S229 TYPICAL BALLAST RETAINER ELEVATION

1/2" = 1'-0"

0 1 2 4

(LOOKING NORTH)

PILE ALTERNATIVES TABLE

PILE SECTION SIZE	MAXIMUM EXPOSED HEIGHT, H	MINIMUM EMBEDMENT LENGTH, E	MINIMUM TOTAL PILE LENGTH, L	MINIMUM CAISSON DIAMETER, D
HP8x39	3'–0"	9'–6"	12'–6"	N/A
HP8x39	2'–0"	8'–0"	10'–0"	N/A

NOTES:

1. REPLACE ENTIRE TOP ROW OF TIMBER LAGGING. REPLACE ADDITIONAL DAMAGED TIMBER LAGGING.
2. EACH TIE TO BE FIXED TO THE ROW BELOW WITH $\frac{1}{2}$" DIA. ASTM A66 GALVANIZED DRIVE SPIKE. A MINIMUM OF TWO SPIKES PER TIE, WITH A MAXIMUM SPACING OF 10 FT.
3. PROPOSED PILES TO BE INSTALLED AT THE MIDPOINT BETWEEN EACH EXISTING PILE.
4. THE PROPOSED STEEL HP PILES SHALL BE ASTM A572 GR 50. GALVANIZED PER ASTM A123
5. HP PILE SECTIONS ARE TO BE DRIVEN TO THE MINIMUM EMBEDMENT DEPTH AS SHOWN ON THIS SHEET.
6. CONTRACTOR HAS THE OPTION TO USE ANY PROPOSED PILE SECTION SHOWN ON THIS SHEET FOR THE MAXIMUM EXPOSED WALL HEIGHTS ENCOUNTERED IN THE FIELD, PROVIDED THE MINIMUM EMBEDMENT DEPTHS ARE MET.

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PROJECT MANAGER

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057506

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTR.	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION
STRUCTURAL

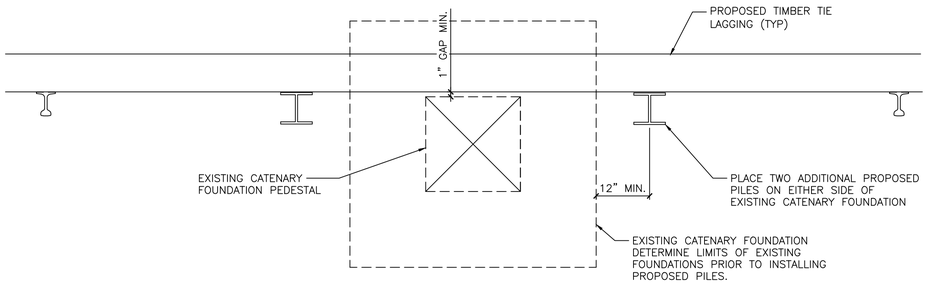
BALLAST RETAINER RECONSTRUCTION - 1

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: PK
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S229**
DWG. NO.: 29 OF 30
SHT. NO.: 43 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

DATE PRINTED: 11/14/2024 10:38:18 AM

IFC SUBMISSION

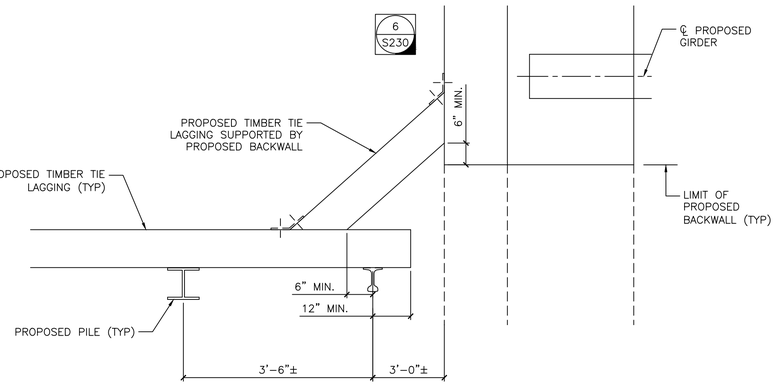
C:\PW\WORKING\JACOBS_B&I\DAVIS\WILD6560089\K_SEPTA_ML_BR_11.62_80_MISCELLANEOUS.DWG



3 / S230 DETAIL AT CATENARY FOUNDATION

1/2" = 1'-0"

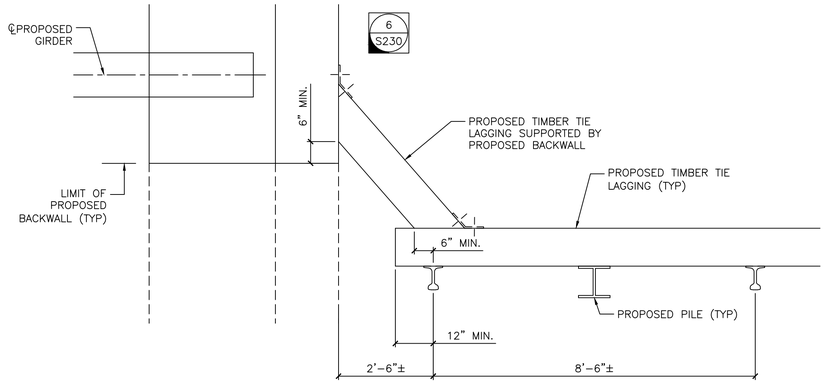
1 2 4



4 / S230 WALL TRANSITION AT WEST ABUTMENT

1/2" = 1'-0"

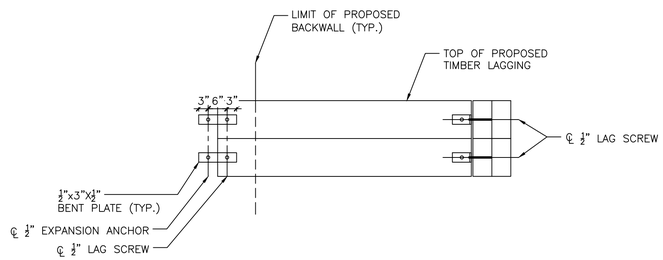
1 2 4



5 / S230 WALL TRANSITION AT EAST ABUTMENT

1/2" = 1'-0"

1 2 4



6 / S230 CONNECTION AT BACKWALL

NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	JS	MC	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

STRUCTURAL

BALLAST RETAINER RECONSTRUCTION - 2

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: PK
	CHECKED BY: JS

WORK ORDER NO.: -

DRAWING NUMBER
S230

DWG. NO.: 30 OF 30
SHT. NO.: 44 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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DATE PRINTED: 11/14/2024 10:38:19 AM

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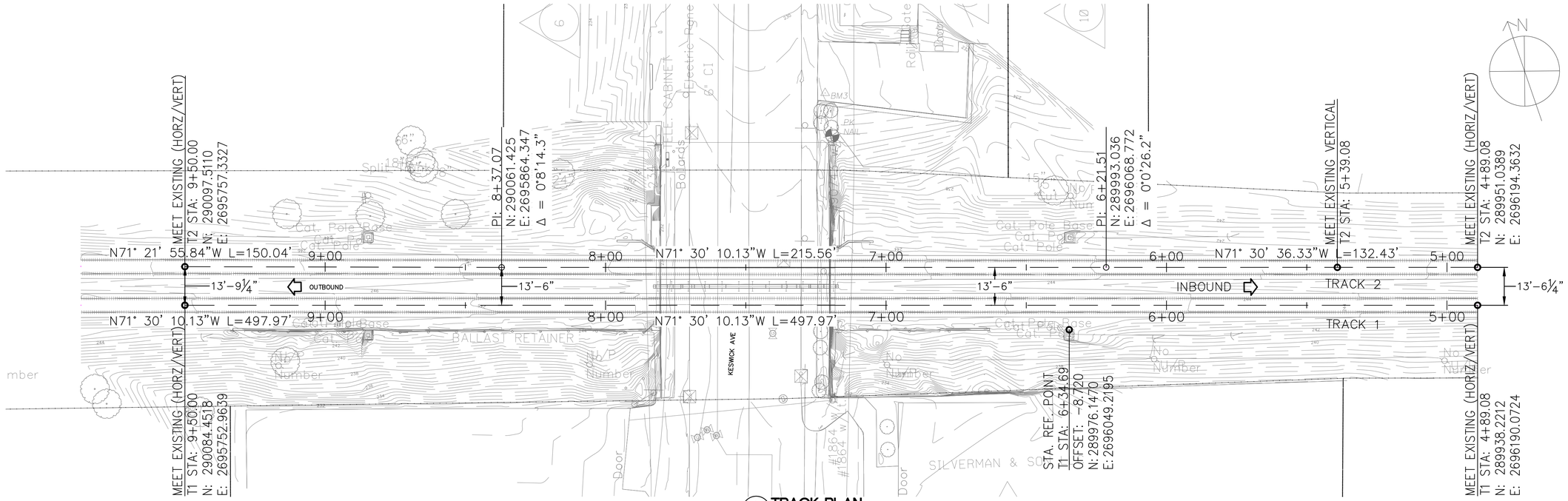
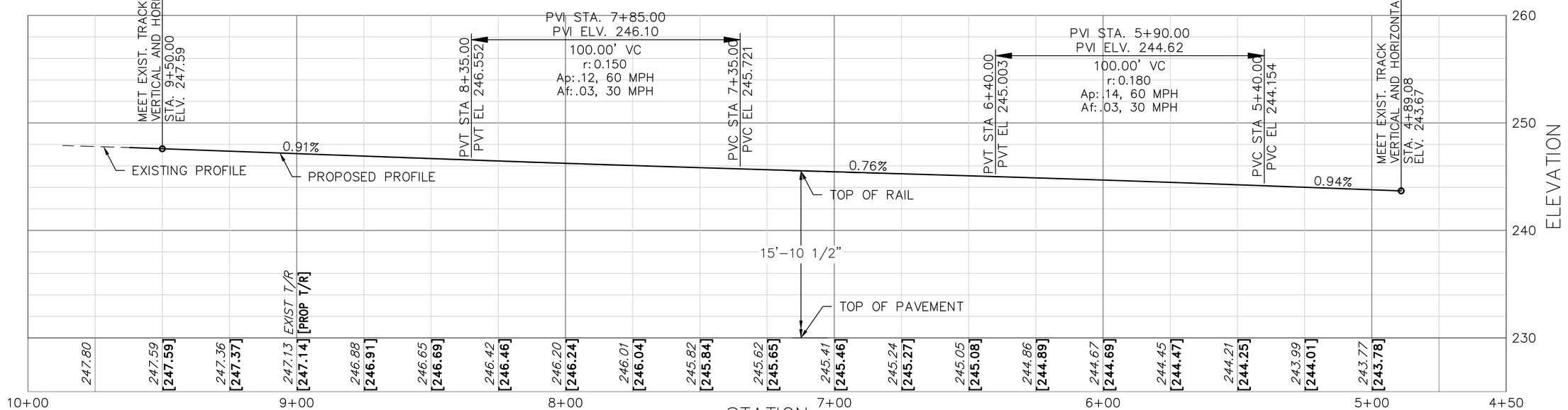


1 T201 **TRACK PLAN**
SCALE: 1"=20'
0 20' 40'

NOTE: FOR BENCHMARK INFORMATION, SEE DWG C202.



1 T201 **TRACK 1 PROPOSED PROFILE**
SCALE: AS NOTED

HORZ: 1"=20' 0 20' 40'
VERT: 1"=5' 0 5' 10'

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

TRACK
TRACK 1 PLAN AND PROFILE

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: MJK
CHECKED BY: DAB
WORK ORDER NO.: N/A
DRAWING NUMBER: T201
DWG. NO.: 1 OF 4
SHT. NO.: 45 OF 48
COMPUTER FILE NO.:
REV. NO.: 00

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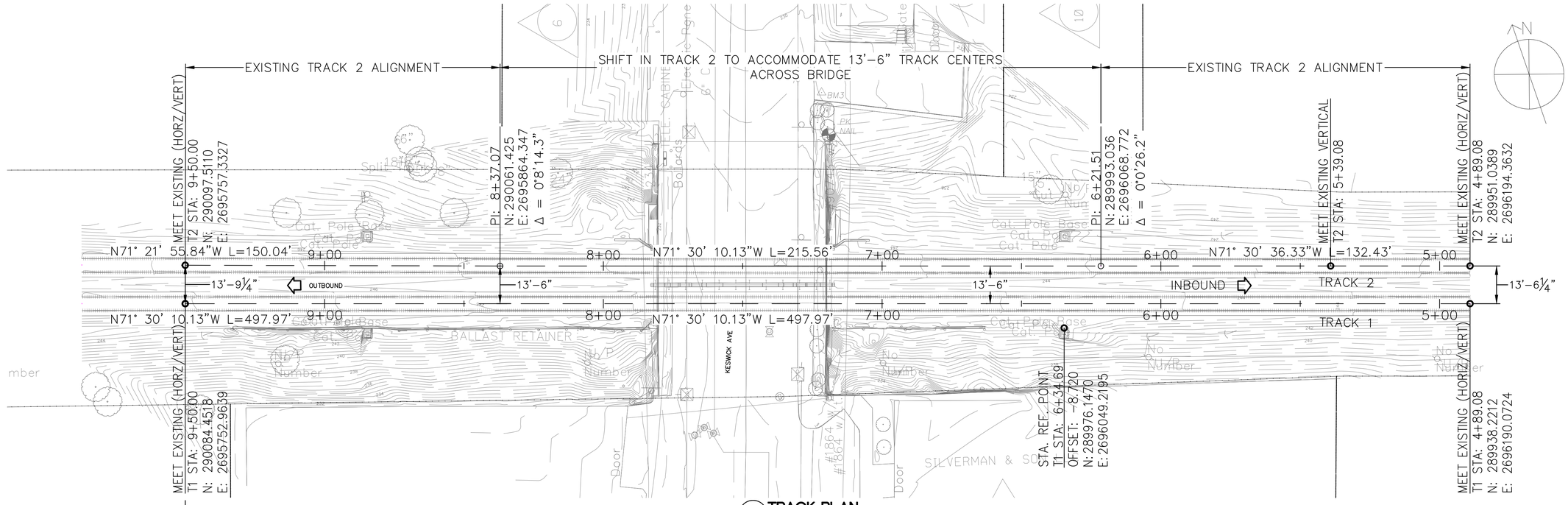
C:\PW\WORKING\JACOBS_B&I\JEG_KUEHNEM\D0581305\TRACK_KESWICKAVE_SHEETS.DWG



1 T202 **TRACK PLAN**
SCALE: 1"=20'
0 20' 40'

1 T202 **TRACK 2 PROPOSED PROFILE**
SCALE: AS NOTED
HORZ: 1"=20' 0 20' 40'
VERT: 1"=5' 0 5' 10'

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

TRACK
TRACK 2 PLAN AND PROFILE

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: MJK | CHECKED BY: DAB
WORK ORDER NO.: N/A
DRAWING NUMBER: **T202**
DWG. NO.: 2 OF 4
SHT. NO.: 46 OF 48
COMPUTER FILE NO.: | REV. NO.: 00

DATE PRINTED: 11/14/2024 1:42:07 PM
IFC SUBMISSION
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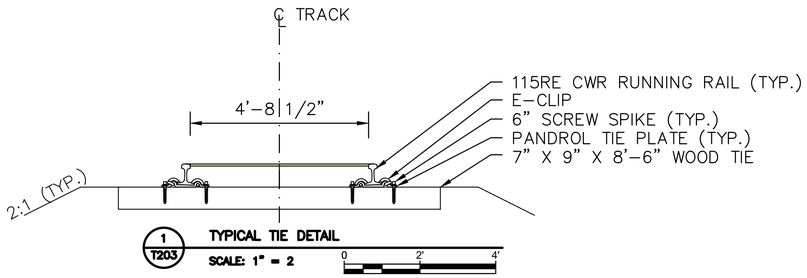
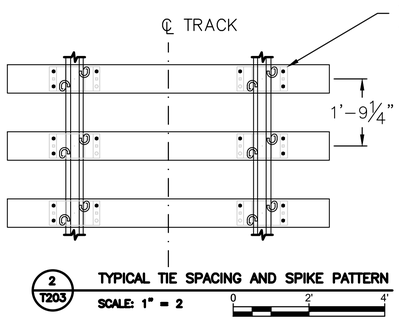
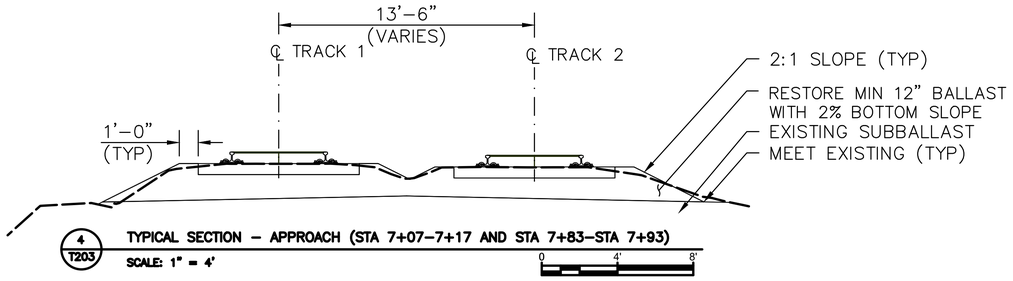


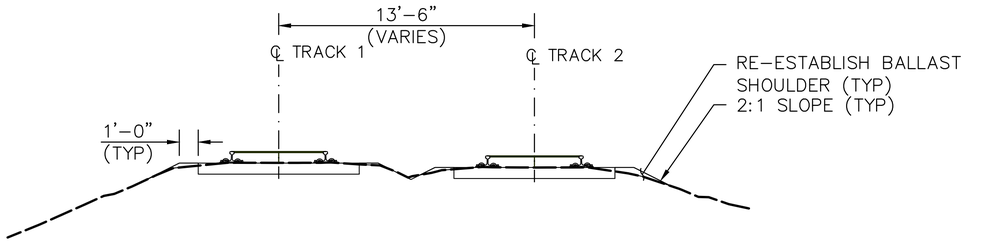
1 T203 **TYPICAL TIE DETAIL**
SCALE: 1" = 2



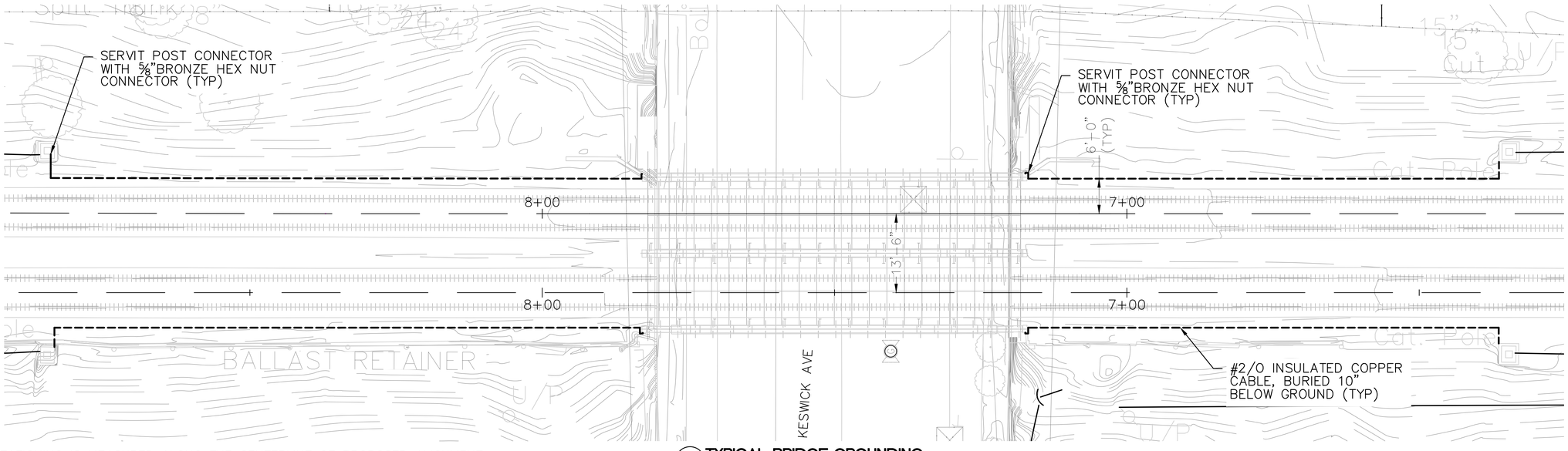
2 T203 **TYPICAL TIE SPACING AND SPIKE PATTERN**
SCALE: 1" = 2



4 T203 **TYPICAL SECTION – APPROACH (STA 7+07–7+17 AND STA 7+83–STA 7+93)**
SCALE: 1" = 4'



5 T203 **TYPICAL SECTION – SURFACE AND LINE (STA 4+89.08–STA 7+07 AND STA 7+93–STA 9+87.11**
SCALE: 1" = 4'



– T203 **TYPICAL BRIDGE GROUNDING**
SCALE: 1"=10'

NOTES:

1. TRACK STATIONING IS MEASURED ALONG THE CENTERLINE OF PROPOSED ALIGNMENT.
2. UTILIZE EXISTING TRACK WHEREVER PRACTICAL TO ACHIEVE THE FINAL ALIGNMENT BY LINING/SURFACING. INSTALL NEW TRACK ON BRIDGE AND WHERE NECESSARY ON THE APPROACHES TO ALLOW FOR CONSTRUCTION OF THE NEW BRIDGE.
3. EXCAVATE EXISTING BALLAST ON EXISTING BRIDGE AND BETWEEN STATIONS 7+07 to 7+93 (10' OFF BRIDGE ON EITHER SIDE). LIMITS CAN BE ADJUSTED IN ORDER TO ACCOMMODATE CONTRACTORS MEAN AND METHODS OF REPLACING BRIDGE.
4. EXISTING HARDPAN SHALL REMAIN UNDISTURBED OUTSIDE BALLAST REMOVAL LIMITS

GROUNDING NOTES:

1. GROUND FASCIA GIRDERS OF EACH BRIDGE TO NEAREST CATENARY STRUCTURE EAST AND WEST OF BRIDGE.
2. PLAN SHOWN IS SCHEMATIC. ADAPT DETAILS TO SPECIFIC LOCATIONS

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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PROJECT MANAGER

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

TRACK

TRACK NOTES, DETAILS, AND TYPICAL SECTIONS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MJK
	CHECKED BY: DAB
WORK ORDER NO.: N/A	
DRAWING NUMBER: T203	
DWG. NO.: 3 OF 4	
SHT. NO.: 47 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

DATE PRINTED: 11/14/2024 1:42:09 PM

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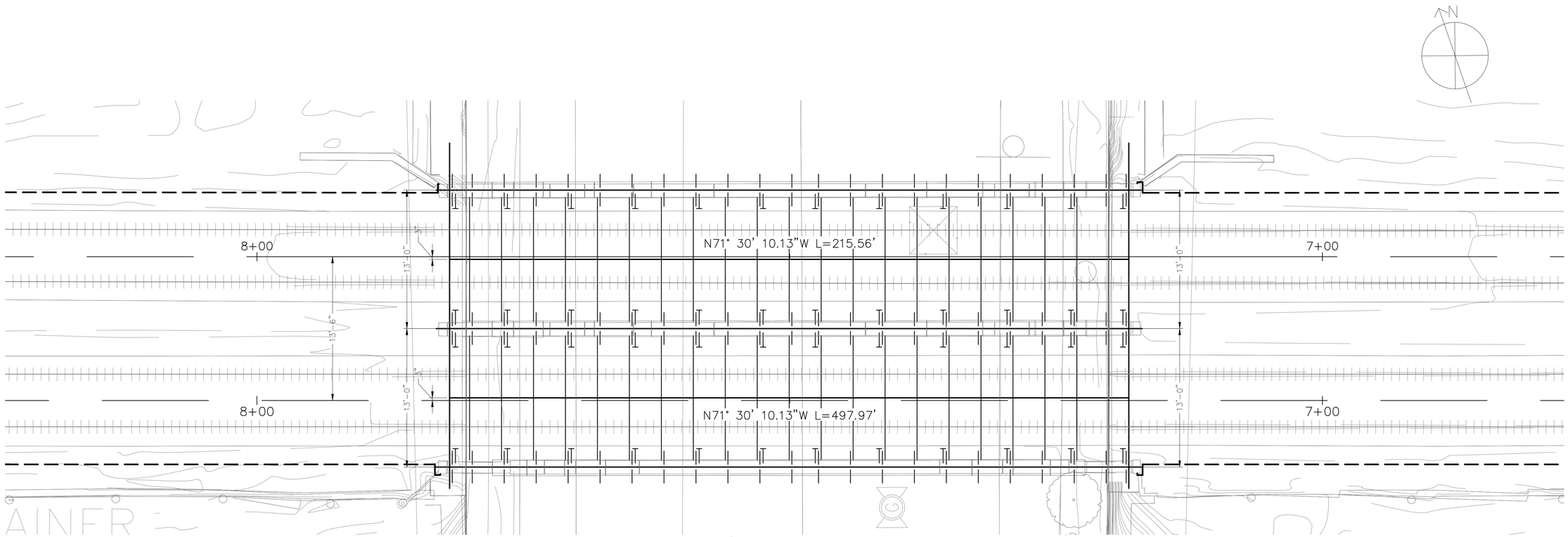
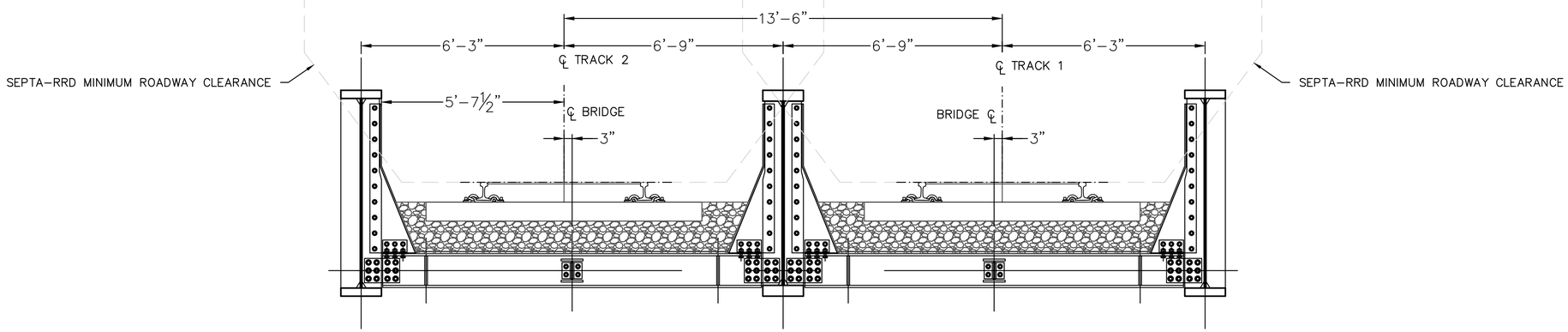


TRACK PLAN
T204 SCALE: 1"=20'
0 20' 40'



TYPICAL SECTION ACROSS BRIDGE
T204 SCALE: 1"=2'
0 2' 4'

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PROJECT MANAGER

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FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.62 OVER KESWICK AVENUE
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.62 REHABILITATION

TRACK

TRACK CLEARANCES AND BRIDGE SECTION

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MJK
	CHECKED BY: DAB
WORK ORDER NO.: N/A	
DRAWING NUMBER: T204	
DWG. NO.: 4 OF 4	
SHT. NO.: 48 OF 48	
COMPUTER FILE NO.:	REV. NO.: 00

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DATE PRINTED: 11/14/2024 1:42:11 PM

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Southeastern Pennsylvania
Transportation Authority

ENGINEERING, MAINTENANCE, AND CONSTRUCTION
BRIDGES & BUILDINGS

BRIDGE WATERPROOFING & SPALL REPAIRS

RRD/MAINLINE MP# 11.83 OVER EASTON ROAD

BRIDGE IMPROVEMENTS

SEPTA PROJECT NO.: N/A

FTA NO.: N/A

PENNDOT PROJECT NO.: N/A

LIST OF DRAWINGS

LIST OF DRAWINGS/ACT NO. NOTIFICATION LIST

ACT NO. NOTIFICATION LIST

CALL BEFORE YOU DIG !!
PENNSYLVANIA LAW REQUIRES
(3) WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND
(10) WORKING DAYS IN DESIGN STAGE
-- STOP & CALL --
Pennsylvania One Call System, Inc.
1-800-242-1776

PENNSYLVANIA ONE CALL SYSTEM, INC. 1-800-242-1776 STOP-CALL BEFORE YOU DIG!

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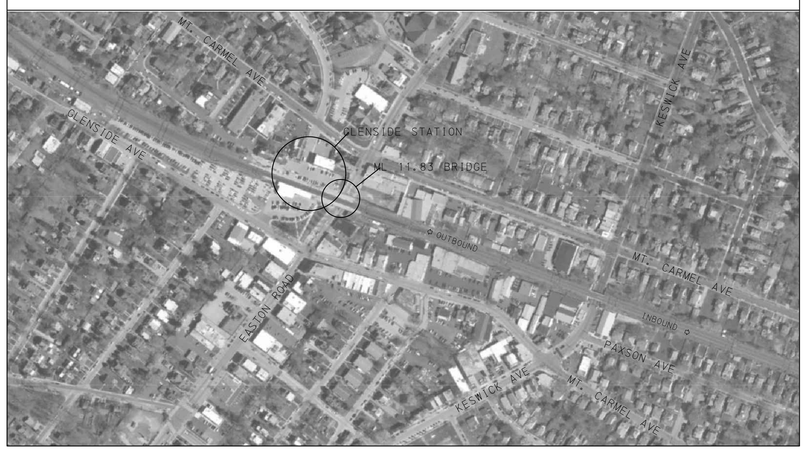
CONTACT PHONE LIST

PUSHPINDER SINGH	215-580-8597

LOCATION



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MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS

PROJECT MANAGER
COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL DAVID J. PHELAN 057506
DATE: 11/15/2024

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
GENERAL
COVER SHEET

SCALE: NO SCALE
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: DAM
CHECKED BY: TAC
WORK ORDER NO.: -
DRAWING NUMBER: **G101**
DWG. NO.: 1 OF 2
SHT. NO.: 1 OF 37
COMPUTER FILE NO.:
REV. NO.: 00

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ABBREVIATIONS

ABV	ABOVE
A/C	AIR CONDITIONER
ACST	ACOUSTIC
ADDL	ADDITIONAL
ADJ	ADJACENT
AFF	ABOVE FINISH FLOOR
AGGR	AGGREGATE
AL	ALUMINUM
ALT	ALTERNATE
ARCH	ARCHITECTURAL
ASB	ASBESTOS
ASPH	ASPHALT
ASPHRS	ASPHALT ROOF SHINGLES
ASSN	ASSOCIATION
ASST	ASSISTANT
ASSY	ASSEMBLY
AVE	AVENUE
AVG	AVERAGE
B	BOTTOM
BALC	BALCONY
BD	BOARD
BETW	BETWEEN
BLDG	BUILDING
BLKG	BLOCKING
BLR	BOILER
BM	BEAM
BM	BENCHMARK
BP	BASE PLATE
BRDG	BRIDGING
BRG	BEARING
BS	BOTH SIDES
BSMT	BASEMENT
CAB	CABINET
CAP	CAPACITY
CARP	CARPET
CDR	COILING DOOR
CER	CERAMIC
CER TILE	CERAMIC TILE
CI	CAST IRON
CIP	CAST-IRON PIPE
CJ	CONTROL JOINT
CL	CENTERLINE
CLG	CEILING
CLO	CLOSET
CLR	CLEAR
CMIU	CONCRETE MASONRY INSULATED UNIT
CMU	CONCRETE MASONRY UNIT
CNCL	CONCEALED
CO	CLEANOUT
CO	COMPANY
COL	COLUMN
COMP	COMPOSITION
CONC	CONCRETE
CONSTR	CONSTRUCTION
CONT	CONTINUOUS
CONTR	CONTRACTOR
CRV	CURVED
CSK	COUNTERSINK
CTD	COATED
CTR	CENTER
CUH	CABINET UNIT HEATER
D	DEPTH
DBL	DOUBLE
DEG	DEGREE
DEPT	DEPARTMENT
DET	DETAIL
DGL	DIAGONAL
DIA	DIAMETER
DIM	DIMENSION
DIV	DIVISION
DL	DEAD LOAD
DMPF	DAMPPROOFING
DN	DOWN
DPN	DEMOUNTABLE PARTITION MANUFACTURER
DR	DOOR
DS	DOWNSPOUT
DW	DISHWASHER
DWG	DRAWING
E	EAST
EA	EACH
EGEN	EMERGENCY GENERATOR
EF	EXHAUST FAN
EIFS	EXTERIOR INSULATION & FINISH SYSTEM
EL	ELEVATION
ELEC	ELECTRICAL
ELEV	ELEVATOR
ENTR	ENTRANCE
EQ	EQUAL
EQUIP	EQUIPMENT
EWC	ELECTRIC WATER COOLER
EXH	EXHAUST
EXIST	EXISTING
EXP	EXPANSION
EXP JT	EXPANSION JOINT
EXT	EXTERIOR
FAB	FABRICATE
FBD	FIBERBOARD
FD	FLOOR DRAIN
FDN	FOUNDATION
FDR	FIRE DOOR
FE	FIRE EXTINGUISHER
FEC	FIRE EXTINGUISHER & CABINET
FHY	FIRE HYDRANT
FIN	FINISH
FL	FLASHING
FLEX	FLEXIBLE
FLG	FLANGE
FLR	FLOOR
FLRG	FLOORING
FP	FIREPROOF
FRP	FIBERGLASS-REINFORCED PLASTICS
FT	FOOT
FTG	FOOTING
FURN	FURNITURE
GA	GAUGE
GALV	GALVANIZED
GAR	GARAGE
GEN	GENERATOR
GL	GLASS
GLU-LAM	GLUE-LAMINATED
GOVT	GOVERNMENT
GR	GRADE
GRD	GROUND
GVL	GRAVEL
GWB	GYPSUM WALLBOARD
GYP	GYPSUM
H	HIGH
HDWE	HARDWARE
HM	HOLLOW METAL
HMD	HOLLOW METAL DOOR
HORIZ	HORIZONTAL
HPT	HIGH POINT
HT	HEIGHT
HTR	HEATER
HVAC	HEATING, VENTILATING, & AIR CONDITIONING
ID	INSIDE DIAMETER
IE	THAT IS
IH	INTAKE HOOD
INSUL	INSULATION
INTR	INTERIOR
JST	JOIST
JT	JOINT
LAB	LABORATORY
LAM	LAMINATE
LAV	LAVATORY
LG	LENGTH
LH	LEFT HAND
LIB	LIBRARY
LIN	LINEAR
LL	LIVE LOAD
LLH	LONG LEG HORIZONTAL
LLV	LONG LEG VERTICAL
LPT	LOW POINT
LT	LIGHT
LWC	LIGHTWEIGHT CONCRETE
MAINT	MAINTENANCE
MAS	MASONRY
MATL	MATERIAL
MAX	MAXIMUM
MECH	MECHANICAL
MEMB	MEMBRANE
MEZZ	MEZZANINE
MFR	MANUFACTURER
MGR	MANAGER
MH	MANHOLE
MIL	MILITARY
MIN	MINIMUM
MISC	MISCELLANEOUS
MET	METAL
ML	METAL LATH
MLDG	MOLDING
MLP	METAL LATH AND PLASTER
MO	MASONRY OPENING
MOD	MOTOR OPERATED DAMPER
MTG	MOUNTING
N	NORTH
NA	NOT APPLICABLE
NIC	NOT IN CONTRACT
NO	NUMBER
NRC	NOISE-REDUCTION COEFFICIENT
NTS	NOT TO SCALE
OA	OVERALL
OC	ON CENTER
OD	OUTSIDE DIAMETER
OFF	OFFICE
OH	OPPOSITE HAND
OHDR	OVERHEAD DOOR
OPNG	OPENING
OPP	OPPOSITE
OSB	ORIENTED STRAND BOARD
P/L	PROPERTY LINE
PASS	PASSENGER
PERF	PERFORATED
PL	PLATE
PLAS	PLASTER
PLBG	PLUMBING
PLYWD	PLYWOOD
PNL	PANEL
PNT	PAINT
PORC	PORCELAIN
PR	PAIR
PREFAB	PREFABRICATED
PROJ	PROJECT
PSF	POUNDS PER SQUARE FOOT
PSI	POUNDS PER SQUARE INCH
PT	POINT
PTD	PAINTED
PTN	PARTITION
PVC	POLYVINYL CHLORIDE
QTF	QUARRY-TILE FLOOR
R	RADIUS
R	RISER
RD	ROOF DRAIN
REFR	REFRIGERATOR
REINF	REINFORCE
REQD	REQUIRED
RET	RETURN
REV	REVISION
REG	REGISTER
RFG	ROOFING
RH	RIGHT HAND
RM	ROOM
RWC	RAIN WATER CONDUCTOR
S	SOUTH
SAPC	SUSPENDED ACOUSTICAL PANEL CEILING
SCHED	SCHEDULE
SDG	SIDING
SEC	SECTION
SF	SQUARE FOOT
SGFT	STRUCTURAL GLAZED FACING TILE
SH	SHOWER
SHM	SECURITY HOLLOW METAL
SHT	SHEET
SI	INTERNATIONAL SYSTEM OF UNITS
SIM	SIMILAR
SKY	SKYLIGHT
SLDR	SLIDING DOOR
SMLS	SEAMLESS
SPEC	SPECIFICATION
SPKLR	SPRINKLER
SPKR	SPEAKER
SQ	SQUARE
SS	STAINLESS STEEL
STD	STANDARD
STL	STEEL
STOR	STORAGE
STRUCT	STRUCTURE/STRUCTURAL
STWY	STAIRWAY
SUPT	SUPERINTENDENT
SUPVR	SUPERVISOR
SURF	SURFACE
SUSP	SUSPENDED/SUSPENSION
SYS	SYSTEM
T	TREAD
T/	TOP OF
T&B	TOP AND BOTTOM
T&G	TONGUE AND GROOVE
TAN	TANGENT
TDD	TELECOMMUNICATION DISPLAY DEVICE
TEL	TELEPHONE
TEMP	TEMPORARY
TER	TERRAZZO
THRU	THROUGH
TLT	TOILET
TRTD	TREATED
TYP	TYPICAL
UNO	UNLESS NOTED OTHERWISE
VAT	VINYL ASBESTOS TILE
VCT	VINYL COMPOSITION TILE
VERT	VERTICAL
VTR	VENT THRU ROOF
W	WEST
W	WIDE
W/	WITH
W/O	WITHOUT
WBD	WALLBOARD
WC	WATER CLOSET
WD	WOOD
WDR	WOOD DOOR
WH	WATER HEATER
WTRPRF	WATERPROOFING
WWF	WELDED WIRE FABRIC
XFMR	TRANSFORMER

LEGEND – SYMBOLS

1 / A101 SCALE: — DRAWING TITLE

TRUE NORTH / N / PROJECT NORTH — NORTH ARROW

A / A200 — ELEVATION REFERENCE: ELEVATION REFERENCE / DWG/SHT NO

1 / A500 — DETAIL REFERENCE

1 / A101 — SECTION REFERENCE

0.0 REF ELEV — REFERENCE ELEVATION LINE

EXISTING DOOR

NEW DOOR

ACCESSIBLE SYMBOL

UP / DN — STAIR/RAMP DIRECTION

12 / X — ROOF PITCH

+24.90 — EXISTING SPOT ELEVATION

+24.90 — NEW SPOT ELEVATION

REVISION CLOUD

SIGN SYMBOL — 1 / R7.15 — SIGN NUMBER / SIGN TYPE

SHADE TREE

MULTI-STEM SHADE TREE

FLOWERING TREE

EVERGREEN TREE

SHRUB

ORNAMENTAL GRASS

PERENNIAL

TURF GRASS

RIPARIAN/EROSION CONTROL SEED MIX

EU — EXISTING UNDERGROUND ELECTRIC SERVICE

SSW — EXISTING SANITARY SEWER

W — EXISTING WATER SERVICE

G — EXISTING GAS SERVICE

TU — EXISTING UNDERGROUND TELEPHONE SERVICE

E — EXISTING ELECTRIC SERVICE

T — EXISTING TELEPHONE SERVICE

CTV — EXISTING CABLE TV SERVICE

PL — EXISTING PROPERTY LINE

Z — EXISTING PROPERTY Z LINE

OHW — OVERHEAD WIRE

X — EXISTING FENCE

30 — EXISTING MAJOR CONTOUR

EXISTING MINOR CONTOUR

30 — PROPOSED MAJOR CONTOUR

PROPOSED MINOR CONTOUR

SIGN

LIGHT POLE

EXISTING INLET

S — EXISTING SANITARY MANHOLE

U — EXISTING UTILITY MANHOLE

D — EXISTING WATER MANHOLE

WV — EXISTING WATER VALVE

U — EXISTING UTILITY VALVE

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EM&C DIVISION
1234 MARKET ST, 13TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
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CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA — REGISTERED PROFESSIONAL — DAVID J. PHELAN — ENGINEER — 057506

Jacobs
2001 MARKET STREET
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PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

GENERAL
ABBREVIATIONS AND LEGEND

SCALE: NO SCALE | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: DAM | CHECKED BY: TAC
WORK ORDER NO.: -
DRAWING NUMBER: **G102**
DWG. NO.: 2 OF 2
SHT. NO.: 2 OF 37
COMPUTER FILE NO.: | REV. NO.: 00

C:\PW\WORKING\JACOBS_B&I\DAVIS\WLID0560802\E_SEPTA_GN.DWG
DATE PRINTED: 11/14/2024 2:23:19 PM
IFC SUBMISSION

SURVEY NOTES:

1. EXISTING BASE SURVEY BY KMA CONSULTING ENGINEERS, INC (KMA) ON MAY 11, 2022 AND PROVIDED BY SEPTA
2. THIS SURVEY HAS BEEN PREPARED AND COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT AND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, EXCEPTIONS OR RESTRICTIONS OF RECORD THAT A TITLE SEARCH MAY DISCLOSE.
3. THE HORIZONTAL DATUM FOR THIS PLAN IS BASED ON NAD83(2011) THE PENNSYLVANIA STATE PLANE COORDINATE SYSTEM, SOUTH ZONE. THE VERTICAL DATUM IS BASED ON NAVD88.
4. SUBSURFACE UTILITIES ARE SHOWN RELATIVE TO THE LOCATION OF THEIR SURFACE FEATURE LOCATIONS. JACOBS DOES NOT WARRANT THAT THEIR UNDERGROUND UTILITIES ARE COMPLETE OR EXACT. JACOBS HAS NOT SURVEYED THE UNDERGROUND UTILITIES. A PENNSYLVANIA ONE CALL WAS COMPLETED ON JULY 11, 2024. SERIAL NO. 20241932547 – CHELTENHAM TOWNSHIP
5. THE PROJECT UNITS ARE IN U.S. SURVEY FEET.
6. RIGHT OF WAY FOR EASTON RD AS INDICATED ON THE SEPTA VALUATION MAPS. ALL WORK TO OCCUR WITHIN THE LEGAL RIGHT-OF-WAY.

GENERAL NOTES:

1. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE FOLLOWING CURRENT STANDARDS, AS APPLICABLE: MUNICIPAL DETAILS AND STANDARDS, SEPTA STANDARD DETAILS AND SPECIFICATIONS, PENNDOT SPECIFICATIONS (PUB 408), PENNDOT ROADWAY CONSTRUCTION STANDARDS (RC DRAWINGS), PENNDOT TRAFFIC STANDARDS (TC DRAWINGS), PADEP EROSION AND SEDIMENTATION CONTROL STANDARDS DETAILS.
2. THE PROJECT IS NOT LOCATED WITHIN FEMA 100-YEAR FLOODPLAIN.
3. BASED ON REVIEW OF THE EXISTING SITE CONDITIONS, NO PORTION OF THE PROJECT WOULD BE CONSIDERED AS A JURISDICTIONAL WETLAND OR WATERWAY; THEREFORE PERMITS UNDER DEP CHAPTER 105/ USACOE SECTION 404 WILL NOT BE REQUIRED.
4. ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENTATION CONTROL PLAN. A COPY OF THE APPROVED PLAN MUST BE ON SITE AT ALL TIMES DURING CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ANY ADDITIONAL EROSION CONTROL MEASURES THAT MAY BE REQUIRED AS CONSTRUCTION PROGRESSES. THE CONTRACTOR IS REQUIRED TO CONTACT THE PADEP AND/OR THE MONTGOMERY COUNTY CONSERVATION DISTRICT TO IMPLEMENT ANY REVISIONS TO THE APPROVED PLAN.
5. NO OBJECTS SHALL BE PLACED, PLANTED, OR SET WITHIN THE AREA OF ANY EASEMENT OR RIGHT-OF-WAY THAT WOULD ADVERSELY IMPACT THE FUNCTION OF THE EASEMENT OR RIGHT-OF-WAY.
6. CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL REQUIRED APPROVALS, PERMITS, AND ACCEPTANCE INSPECTIONS FROM ALL REQUIRED AGENCIES.

EXISTING CONDITIONS

1. ALL DIMENSIONS, ELEVATIONS, AND PHYSICAL CONDITIONS SHOWN ON THE DRAWING FOR THE EXISTING STRUCTURES ARE BASED ON LIMITED FIELD INSPECTIONS, CERTAIN DESIGN DRAWINGS FOR ORIGINAL CONSTRUCTION AND OTHER AVAILABLE SOURCES. SUCH DEPICTIONS OF EXISTING CONSTRUCTION ARE INTENDED TO BE GENERAL, APPROXIMATE, AND LIMITED TO THOSE AREAS FOR WHICH WORK IS REQUIRED, AND ARE PROVIDED ONLY FOR THE CONVENIENCE OF EXISTING CONDITIONS AT THE SITE APPLICABLE TO THE WORK.
2. THE EXACT EXTENT OF CONSTRUCTION OR RESTORATION WORK CANNOT BE NECESSARILY OR ACCURATELY DETERMINED PRIOR TO COMMENCEMENT OF WORK. ACTUAL FIELD CONDITIONS MAY REQUIRE MODIFICATIONS TO THE CONSTRUCTION DETAILS, MATERIAL QUANTITIES, AND EXTENT OF THE MODIFICATION WORK SHOWN ON DRAWINGS. PERFORM THE WORK TO MEET FIELD CONDITIONS ENCOUNTERED.
3. EXAMINE AND FIELD VERIFY ALL EXISTING AND GIVEN DIMENSIONS AND CONDITIONS PRIOR TO COMMENCEMENT OF THE WORK AND FABRICATION OF CONSTRUCTION MATERIALS. REPORT VARIANCES FROM THE DRAWINGS AND SPECIFICATIONS AND POTENTIAL INTERFERENCES PROMPTLY TO THE SEPTA PROJECT MANAGER. INCORPORATE ACTUAL FIELD CONDITIONS AND DIMENSIONS IN THE SHOP AND ERECTION PLANS, INDICATE CHANGES AND ADJUSTMENTS ON DRAWINGS SUBMITTED.

CONSTRUCTION NOTES

1. THE CONTRACTOR SHALL VERIFY ALL BASELINES AND POINTS OF CONSTRUCTION, THE LOCATION OF ALL NEW CONSTRUCTION, AND VERIFY ALL SETBACKS, OFFSETS, AND CLEARANCES.
2. THE CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO PERMANENT AND TEMPORARY FACILITIES THROUGHOUT CONSTRUCTION. THE CONTRACTOR SHALL PROVIDE A WRITTEN CONSTRUCTION SEQUENCE PLAN AND COORDINATE ANY REQUIRED BREAKS IN UTILITY SERVICE WITH SEPTA AND THE APPROPRIATE UTILITY PRIOR TO COMMENCING ANY WORK REQUIRING A BREAK IN UTILITY SERVICE.
3. THE CONTRACTOR SHALL MAINTAIN POSITIVE DRAINAGE AT ALL TIMES DURING CONSTRUCTION.
4. THE CONTRACTOR IS RESPONSIBLE FOR THE REMOVAL OF ALL CONSTRUCTION WASTE FROM THE SITE. ANY MATERIAL REMOVED FROM THE SITE IS TO BE LEGALLY DISPOSED OF BY THE CONTRACTOR. THE CONTRACTOR WILL PROVIDE EVIDENCE OF LEGAL DISPOSAL.
5. NUMERICAL DIMENSIONS AND ELEVATIONS SHOWN SHALL SUPERCEDE ANY DISCREPANCY IN THE SCALING OF THE DRAWINGS. DO NOT SCALE THE DRAWINGS.
6. NO WORK THAT WILL FOUL THE TRACK MAY BE PERFORMED WITHOUT PRIOR SEPTA AUTHORIZATION. SEE SPECIFICATIONS SECTIONS 010600 AND 010650 FOR ADDITIONAL INFORMATION.
7. COORDINATE ANY NEED FOR TRACK OUTAGE WITH THE SEPTA PROJECT MANAGER. APPROVAL FOR TRACK OUTAGE IS SOLELY AT SEPTA'S DISCRETION. SEE SECTION 011000 FOR ADDITIONAL INFORMATION.
8. CONTRACTOR WILL CONTACT THE PA ONE CALL SYSTEM (800-242-1776) NO LESS THAN THREE (3) AND NO MORE THAN TEN (10) WORKING DAYS PRIOR TO BEGINNING CONSTRUCTION.
9. THE CONTRACTOR MUST PROVIDE AND MAINTAIN SAFE PEDESTRIAN ACCESS FROM ALL OPERATIONAL AREAS TO ACTIVE PLATFORMS AND OPERATIONAL STATION BUILDING AT ALL TIMES DURING CONSTRUCTION.
10. THE CONTRACTOR MUST MAINTAIN MINIMUM 10'-WIDE ENTRANCE AND EXIT LANES TO/FROM THE STATION LOT AT ALL TIMES.
11. THE CONTRACTOR IS RESPONSIBLE TO PROVIDE ALL NECESSARY ON-SITE AND OFF-SITE TEMPORARY TRAFFIC CONTROL AND DIRECTIONAL SIGNAGE AND PAVEMENT MARKINGS TO ALLOW SAFE MOVEMENT THROUGH CONSTRUCTION AREAS AND TO AND FROM ALL TEMPORARY AREAS.
12. THE CONTRACTOR WILL ESTABLISH AND MAINTAIN TEMPORARY BENCHMARKS ON-SITE TO PERFORM OPERATIONS DURING CONSTRUCTION.

OWNERS

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
1234 MARKET STREET, 12TH FLOOR
PHILADELPHIA, PA 19107
PHONE: (215) 580-7800

SITE ADDRESS

EASTON ROAD
GLENSIDE, PA 19038

UTILITY CONTACTS

PECO ENERGY
440 PARK AVE
WARMINSTER, PA 18974
CONTACT: NICHOLAS SCURRIA
EMAIL: Nicholas.Scurria@exeloncorp.com
(215) 956-3114

ABINGTON TOWNSHIP SEWER
1176 OLD YORK RD
ABINGTON, PA 19001
CONTACT: GEORGE WRIGLEY
EMAIL: gwrigley@AbingtonPA.gov
(215) 884-8329

COMCAST CABLE
1401 JOHN F KENNEDY BLVD
PHILADELPHIA, PA 19102
CONTACT: ANDREW WILLIAMS
(215) 686-5560

VERIZON PENNSYLVANIA LLC
900 RACE ST, 11TH FLOOR
PHILADELPHIA, PA 19103
CONTACT: ANTHONY PORTOLESE
EMAIL: ANTHONY.S.PORTOLESE@VERIZON.COM
(215) 589-0792

AQUA PENNSYLVANIA
762 LANCASTER AVE
BRYN MAWR, PA 19010
CONTACT: DARRELL DULANY
EMAIL: Ddulany@aquaamerica.com

CHELTENHAM TOWNSHIP SEWER
8230 OLD YORK RD
ELKINS PARK, PA 19027
CONTACT: TOM CINAGLIA
EMAIL: tcinaglia@cheltenham-township.org
(267) 887-1000

CALL BEFORE YOU DIG!
PENNSYLVANIA LAW REQUIRES
3 WORKING DAYS NOTICE FOR
CONSTRUCTION PHASE AND 10 WORKING
DAYS IN DESIGN STAGE - STOP CALL
PA1 SYSTEM. INC.
1-800-242-1776
POCS SERIAL NUMBERS:
20241932547

ALL LOCATIONS OF EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DEVELOPED FROM FIELD LOCATIONS OF VISIBLE ABOVE GROUND UTILITY STRUCTURES AND INFORMATION PROVIDED BY THE UTILITY COMPANIES.

ALL LOCATIONS SHOULD BE CONSIDERED APPROXIMATE. THE CONTRACTOR MUST VERIFY THE LOCATIONS AND DEPTHS OF ALL UNDERGROUND UTILITIES AND FACILITIES BEFORE THE START OF ANY WORK.

AS PER ACT 1B7 HOUSE BILL 2627, BEFORE THE START OF ANY EXCAVATIONWORK THE CONTRACTOR SHALL NOTIFY THE AFFECTED UTILITY COMPANIES THROUGH THE PENNSYLVANIA "ONE CALL SYSTEM" 1-800-242-1776 THREE DAYS PRIOR TO THE START OF ANY EXCAVATION. THE CONTRACTOR SHALL VERIFY THE LOCATION AND DEPTH OF ALL UTILITIES PRIOR TO THE START OF ANY CONSTRUCTION.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
E&C DIVISION
1234 MARKET ST, 13TH FL,
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
Dominic A. Marchesano, Jr
ENGINEER
No. PE084640

Jacobs
2001 MARKET STREET
SUITE 900
PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963
JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	TAC	TAC

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
CIVIL
GENERAL NOTES - CIVIL

SCALE: NO SCALE	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
	CHECKED BY: TAC
WORK ORDER NO.: -	
DRAWING NUMBER: **C101**	
DWG. NO.: 1 OF 7	
SHT. NO.: 3 OF 37	
COMPUTER FILE NO.:	REV. NO.: 00

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DATE PRINTED: 11/14/2024 2:09:03 PM
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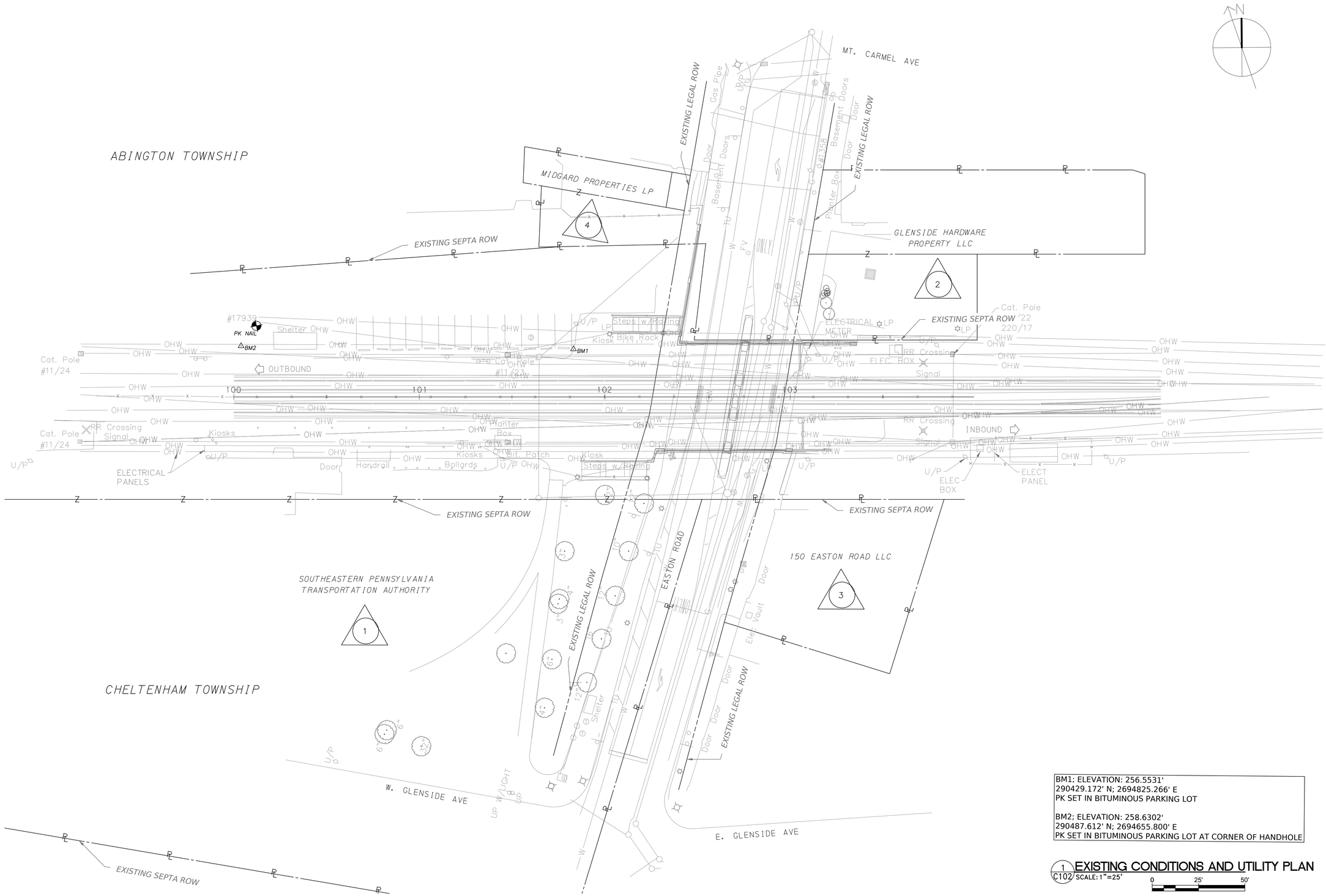

BM1; ELEVATION: 256.5531'
290429.172' N; 2694825.266' E
PK SET IN BITUMINOUS PARKING LOT

BM2; ELEVATION: 258.6302'
290487.612' N; 2694655.800' E
PK SET IN BITUMINOUS PARKING LOT AT CORNER OF HANDHOLE

1 / C102 EXISTING CONDITIONS AND UTILITY PLAN
SCALE: 1"=25'
0 25' 50'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

CIVIL

EXISTING CONDITIONS AND UTILITY PLAN

SCALE: 1" = 25'
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WORK ORDER NO.: -
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DWG. NO.: 2 OF 7
SHT. NO.: 4 OF 37
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ABINGTON TOWNSHIP

MIDGARD PROPERTIES LP

EXISTING LEGAL ROW

EXISTING SEPTA ROW

MT. CARMEL AVE

GLENSIDE HARDWARE PROPERTY LLC

EXISTING SEPTA ROW '22 220/17

CONTRACTOR TO REPAINT WARNING PATTERN STRIPING ON BRIDGE PIERS IF DISTURBED DURING CONSTRUCTION (TYP).

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY

150 EASTON ROAD LLC

EASTON ROAD

CHELTENHAM TOWNSHIP

W. GLENSIDE AVE

E. GLENSIDE AVE

CONSTRUCTION NOTES

1. CONTRACTOR TO COORDINATE WITH MUNICIPALITY TO RESTORE EXISTING MURAL ON BRIDGE ABUTMENTS.

1 C103 ROADWAY PLAN
SCALE: 1"=25'

0 25' 50'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
E&C DIVISION
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PHILADELPHIA, PA 19107

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ROADWAY PLAN

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DRAWING NUMBER
C103

DWG. NO.:	3	OF	7
SHT. NO.:	5	OF	37

COMPUTER FILE NO.: REV. NO.: 00

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DATE PRINTED: 11/14/2024 2:09:05 PM

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GENERAL NOTES - ESPC (EROSION AND SEDIMENT POLLUTION CONTROL):

1. AT LEAST 7 DAYS PRIOR TO STARTING ANY EARTH DISTURBANCE ACTIVITIES (INCLUDING CLEARING AND GRUBBING), INVITE ALL CONTRACTORS AND A REPRESENTATIVE FROM MONTGOMERY COUNTY CONSERVATION DISTRICT (MCCD) TO AN ON-SITE PRECONSTRUCTION MEETING.

2. ALL EARTH DISTURBANCES, INCLUDING CLEARING AND GRUBBING AS WELL AS CUTS AND FILLS SHALL BE DONE IN ACCORDANCE WITH THE APPROVED E&S PLAN. A COPY OF THE APPROVED DRAWINGS (STAMPED, AND SIGNED BY THE ENGINEER) MUST BE AVAILABLE AT THE PROJECT SITE AT ALL TIMES.

3. AT LEAST 3 DAYS PRIOR TO STARTING ANY EARTH DISTURBING ACTIVITIES, OR EXPANDING INTO AN AREA PREVIOUSLY UNMARKED, THE PENNSYLVANIA ONE CALL SYSTEM INC. SHALL BE NOTIFIED AT 1-800-242-1776 FOR THE LOCATION OF EXISTING UNDERGROUND UTILITIES.

4. ALL EARTH DISTURBANCE ACTIVITIES SHALL PROCEED IN ACCORDANCE WITH THE SEQUENCE PROVIDED ON THE PLAN DRAWINGS. DEVIATION FROM THE SEQUENCE MUST BE APPROVED IN WRITING BY MCCD AND PADEP PRIOR TO IMPLEMENTATION.

5. AREAS TO BE FILLED ARE TO BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS AND OTHER OBJECTIONABLE MATERIAL.

6. CLEARING, GRUBBING AND TOPSOIL STRIPPING SHALL BE LIMITED TO THOSE AREAS DESCRIBED IN EACH STAGE OF THE CONSTRUCTION SEQUENCE. GENERAL SITE CLEARING, GRUBBING AND TOPSOIL STRIPPING MAY NOT COMMENCE IN ANY STAGE OR PHASE OF THE PROJECT UNTIL THE E&S BMP'S SPECIFIED BY THE BMP SEQUENCE FOR THAT STAGE OR PHASE HAVE BEEN INSTALLED AND ARE FUNCTIONING AS DESCRIBED IN THE ESPC PLAN.

7. APPLY DUST SUPPRESSOR OR OTHER MEASUERS KEEP DUST WITHIN TOLERABLE LIMITS AT THE SITE.

8. IMMEDIATELY UPON DISCOVERING UNFORESEEN CIRCUMSTANCES POSING THE POTENTIAL FOR ACCELERATED EROSION AND/OR SEDIMENT POLLUTION, THE OPERATOR SHALL IMPLEMENT APPROPRIATE BEST MANAGEMENT PRACTICES TO MINIMIZE THE POTENTIAL FOR EROSION AND SEDIMENT POLLUTION AND NOTIFY MCCD AND PADEP.

9. ALL BUILDING MATERIALS AND WASTES SHALL BE REMOVED FROM THE SITE AND RECYCLED OR DISPOSED OF IN ACCORDANCE WITH THE PADEP'S SOLID WASTE MANAGEMENT REGULATIONS AT PA 25 CODE 260.1 SEQ., 271.1 AND 287.1 ET. SEQ. NO BUILDING MATERIALS OR WASTES OR UNUSED BUILDING MATERIALS SHALL BE BURNED, BURIED, DUMPED, OR DISCHARGED AT THE SITE.

10. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT ANY MATERIAL BROUGHT ONTO THE SITE IS CLEAN FILL. FORM FP-001 MUST BE RETAINED BY THE PROPERTY OWNER FOR ANY FILL MATERIAL AFFECTED BY A SPILL OR RELEASE OF A REGULATED SUBSTANCE BUT QUALIFYING AS CLEAN FILL AS A RESULT OF ANALYTICAL TESTING.

11. SEDIMENT TRACKED ONTO ANY PUBLIC ROADWAY SHALL BE RETURNED TO THE CONSTRUCTION SITE BY THE END OF EACH WORK DAY AND DISPOSED IN A MANNER DESCRIBED IN THIS PLAN. IN NO CASE SHALL THE SEDIMENT BE WASHED, SHOVELED, OR SWEPT INTO ANY ROADSIDE DITCH, STORM SEWER, OR SURFACE WATER.

12. AREAS WHICH ARE TO BE TOPSOILED SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 TO 5 INCHES (6 TO 12 INCHES ON COMPACTED SOILS) PRIOR TO PLACEMENT OF TOPSOIL. AREAS TO BE VEGETATED SHALL HAVE A MINIMUM OF 4 INCHES OF TOPSOIL IN PLACE PRIOR TO SEEDING AND MULCHING. FILL OUT SLOPES SHALL HAVE A MINIMUM OF 2 INCHES OF TOPSOIL.

13. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC. SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES. ALL EARTHEN FILLS SHALL BE PLACED IN COMPACTED LAYERS NOT TO EXCEED 9" IN THICKNESS. FROZEN MATERIALS OR SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILLS. FILL SHALL NOT BE PLACED ON SATURATED OR FROZEN SURFACES.

14. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED IN ACCORDANCE WITH THE STANDARD SPECIFICATION FOR SUBSURFACE DRAIN OR OTHER APPROVED METHOD.

15. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY UPON REACHING FINISHED GRADE. CUT SLOPES IN COMPETENT BEDROCK AND ROCK FILLS NEED NOT BE VEGETATED. DISTURBED AREAS NEAR SURFACE WATERS SHALL BE BLANKETED WITHIN 50 FEET OF TOP OF BANK OR 100 FEET FROM TOP OF BANK WITHIN HQ/EV WATERSHEDS.

18. ESPC BMPS SHALL REMAIN FUNCTIONAL UNTIL ALL AREAS TRIBUTARY TO THEM ARE PERMANENTLY STABILIZED OR UNTIL THEY ARE REPLACED BY ANOTHER BMP APPROVED BY MCCD.

19. UPON COMPLETION OF ALL EARTH DISTURBANCE ACTIVITIES AND PERMANENT STABILIZATION OF ALL DISTURBED AREAS, THE CONTRACTOR SHALL CONTACT THE MCCD FOR AN INSPECTION PRIOR TO REMOVAL/CONVERSION OF THE ESPC BMPS.

20. FAILURE TO CORRECTLY INSTALL ESPC BMPS, FAILURE TO PREVENT SEDIMENT-LADEN RUNOFF FROM LEAVING THE CONSTRUCTION SITE, OR FAILURE TO TAKE IMMEDIATE CORRECTIVE ACTION TO RESOLVE FAILURE OF ESPC BMPS MAY RESULT IN ADMINISTRATIVE, CIVIL, AND/OR CRIMINAL PENALTIES BEING INSTITUTED BY THE PENNSYLVANIA DEPARTMENT OF ENVIRONMENTAL PROTECTION AS DEFINED IN SECTION 602 OF THE PENNSYLVANIA CLEAN STREAMS LAW. THE CLEAN STREAMS LAW PROVIDES FOR UP TO $10,000 PER DAY IN CIVIL PENALTIES, UP TO $10,000 IN SUMMARY CRIMINAL PENALTIES, AND UP TO $25,000 IN MISDEMEANOR CRIMINAL PENALTIES FOR EACH VIOLATION.

21. THE CONTRACTOR SHALL PROVIDE VEGETATIVE COVER OR OTHER PERMANENT NON-VEGETATIVE COVER WITH A DENSITY SUFFICIENT TO RESIST ACCELERATED EROSION. CUT AND FILL SLOPES SHALL BE CAPABLE OF RESISTING FAILURE DUE TO SLUMPING, SLIDING, OR OTHER MOVEMENTS.

22. ALL CHANNELS SHALL BE KEPT FREE OF OBSTRUCTIONS INCLUDING BUT NOT LIMITED TO FILL, ROCKS, LEAVES, WOODY DEBRIS, ACCUMULATED SEDIMENT, EXCESS VEGETATION AND CONSTRUCTION MATERIALS/WASTES.

23. CHANNELS HAVING RIP RAP MUST BE SUFFICIENTLY OVER-EXCAVATED SO THAT THE DESIGN DIMENSIONS WILL BE PROVIDED AFTER PLACEMENT OF THE PROTECTIVE LINING.

24. FILL MATERIAL FOR EMBANKMENTS SHALL BE FREE OF ROOTS, OR OTHER WOODY VEGETATION, ORGANIC MATERIAL, LARGE STONES, AND OTHER OBJECTIONABLE MATERIALS. THE EMBANKMENT SHALL BE COMPACTED IN MAXIMUM 9 INCH LAYERED LIFTS AT 95F MAXIMUM DRY DENSITY.

25. ANY DISTURBED AREA ON WHICH ACTIVITY HAS CEASED AND WHICH WILL REMAIN EXPOSED FOR MORE THAN FOUR (4) DAYS MUST BE STABILIZED IMMEDIATELY. DURING NON-GERMINATING PERIODS, MULCH MUST BE APPLIED AT THE RECOMMENDED RATE. DISTURBED AREAS WHICH ARE NOT AT FINISHED GRADE AND WHICH WILL BE REDISTURBED WITHIN ONE (1) YEAR MAY BE STABILIZED IN ACCORDANCE WITH THE TEMPORARY SEEDING SPECIFICATIONS. DISTURBED AREAS THAT ARE EITHER AT FINISHED GRADE OR WILL NOT BE REDISTURBED WITHIN ONE (1) YEAR MUST BE STABILIZED IN ACCORDANCE WITH THE PERMANENT SEEDING SPECIFICATIONS.

26. ALL CONCRETE WASH WATER WILL BE DISPOSED OF ACCORDING TO PADEP CHAPTER 102 REGULATIONS.

27. EXCESS SOILS IN THE SUPPORT AREA CAN BE RECYCLED BY GRADING THE SOILS AND STREAM SEDIMENTS WITHIN THE LIMITS OF THE PROJECT AREA AND STABILIZE, OR DISPOSED OF AT A PADEP REGULATED FACILITY. SOILS AND SEDIMENTS TAKEN OFF SITE WILL NEED TO COMPLY WITH PADEP CLEAN FILL POLICIES.

28. UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS, ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SPECIFICATIONS 2020, CHANGE 9 OR CURRENT VERSION.

PROJECT EARTH DISTURBANCE

TOTAL PROPOSED PROJECT EARTH DISTURBANCE	=	10.1K Sq. ft
RAILROAD MAINTENANCE ACTIVITIES	=	10.1K Sq. ft
NON-ROADWAY MAINTENANCE ACTIVITIES	=	NONE

CONTACT INFORMATION

MONTGOMERY COUNTY CONSERVATION DISTRICT
JEFF MCKENNA
143 LEVEL ROAD,
COLLEGEVILLE, PA 19428
610-489-4506 EXT 16

EMERGENCY CONTACT INFORMATION

JOHN KRAFCHIK
PROJECT MANAGER
WALSH CONSTRUCTION
300 S PENNELL ROAD, SUITE 610
MEDIA, PA 19063
CELL: 484-318-9895

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EMAC DIVISION
1234 MARKET ST, 15TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
RICHARD J. MARUZZI
ENGINEER
No. PE054057E

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American Engineers Group, LLC
A Certified MBE/DBE/SDB/SBE Firm
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MECHANICSBURG, PA 17055
1-800-733-1102

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
CIVIL
GENERAL NOTES - ESPC

SCALE: NO SCALE	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MEL
	CHECKED BY: JDO
WORK ORDER NO.: -	
DRAWING NUMBER: C104	
DWG. NO.: 4 OF 7	
SHT. NO.: 6 OF 37	
COMPUTER FILE NO.:	REV. NO.: 00

M:\24000\24025 SEPTA MAINLINE BRIDGES\CAD\DE_SE\EASTON\24025 SEPTA BRIDGES PLAN-EASTON-REV.DWG

DATE PRINTED: 11/14/2024 11:25:15 AM

IFC SUBMISSION

ESPC SEQUENCE OF CONSTRUCTION

CHAPTER 93 STREAM DESIGNATION:

TOOKANY CREEK TO THE DELAWARE RIVER

WWF & MF

ESPC PLAN CONSTRUCTION SEQUENCE

1. NOTIFY MONTGOMERY CONSERVATION DISTRICT (MCCD) OF PROPOSED START OF WORK, A WEEK IN ADVANCE OF THE START OF WORK DATE.

   MONTGOMERY COUNTY CONSERVATION DISTRICT

   JEFF MCKENNA
   143 LEVEL ROAD,
   COLLEGEVILLE, PA 19428
   610-489-4506 EXT 16

2. IMPLEMENT THE MAINTENANCE AND PROTECTION OF TRAFFIC (MPT), INCLUDING DETOUR, DEVICES AND SIGNAGE.
3. INSTALL ALL BMPS INCLUDING INLET FILTER BAGS IN EACH OF SIX STORM (2 SET OF 3) INLETS, CONCRETE WASHOUT, PUMPED WATER FILTER BAG AND COMPOST FILLED SOCK AS PER THE ESC PLAN.
4. INITIATE GENERAL SITE WORK AND REPAIRS.
5. STABILIZE ALL EARTH DISTURBANCES AS NEEDED.
6. AFTER THE GENERAL SITE WORK IS COMPLETE, REMOVE THE INSTALLED BMPS.
7. REMOVE THE MPT, INCLUDING DETOUR, DEVICES AND SIGNAGE.
8. INFORM THE MCCD THE WORK IS COMPLETE.

NOTE: ALL WASTE AND CONSTRUCTION DEBRIS FROM THE PROJECT WILL BE DIRECTLY LOADED INTO DUMP BOXES.

ALL CONSTRUCTION WASTE MATERIALS AND DEBRIS WILL BE PROCESSED AT A PADEP APPROVED WASTE OR RECYCLING FACILITY.

EASTON ROAD PROJECT AREA

SOILS

UUGB-URBAN LAND-UDORTHENTS SOILS

URBAN LANDS-80%

UDORTHENTS, SHIST AND GNEISS-15%

MINOR COMPONENTS-5%

SLOPE-8%

RESTRICTIVE ZONE TO BEDROCK-99 INCHES

WATER SUPPLY ZONE 0-60 INCHES

FLOOD FREQUENCY-NONE

DEPTH TO WATER TABLE-60 INCHES

HYDRIC SOILS-NO

HYDROLOGIC SOILS GROUPR-C

GEOLOGY

SHIST AND UNCONSOLIDATED SEDIMENTS

GEOLOGIC HAZARDS

NO EXCAVATION IS PROPOSED FOR THIS PROJECT. NO GEOLOGIC HAZARD NOTED.

SEEDING, SOIL SUPPLEMENTS, AND MULCHING

FORMULA AND SPECIES	% BY WEIGHT	MINIMUM % PURITY	MINIMUM % GERMINATION	MAX % WEED SEED	SEEDING RATE LB/1000 SY (LB/ACRE)
SEEDING AND SOIL SUPPLEMENTS - FORMULA B RESIDENTIAL MIX					42.0 (210) TOTAL
• PERENNIAL RYEGRASS MIXTURE (LOLIUM PERENNE), A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL RYEGRASS COMPONENT.	20	97	90	0.10	8.5 (42.5)
• CREEPING RED FESCUE OR CHEWINGS FESCUE (FESTUCA RUBRA OR SSP COMMUTATE) (IMPROVED AND CERTIFIED)	30	97	85	0.10	12.5 (62.5)
• KENTUCKY BLUEGRASS MIXTURE (POA PRATENSIS), A COMBINATION OF IMPROVED CERTIFIED VARIETIES WITH NO ONE VARIETY EXCEEDING 50% OF THE TOTAL BLUEGRASS COMPONENT.	50	97	80	0.15	21.0 (105)
SEEDING - FORMULA T TEMPORARY GRASS MIX					6 (30) TOTAL
OATS (AVENA SATIVA) (SPRING)	100	97	85	0.10	6 (30)
CEREAL RYE (SECALE CEREALE) (FALL)	100	97	85	0.10	6 (30)

FOR INFORMATION ONLY, REFER TO PENNDOT PUBLICATION 408, SECTION 804 FOR COMPLETE AND REGULATORY SPECIFICATION.

UNLESS OTHERWISE NOTED IN THE PLANS OR SPECIFICATIONS, ALL CONSTRUCTION AND MATERIALS SHALL BE IN ACCORDANCE WITH PENNDOT PUBLICATION 408, SPECIFICATIONS 2020, CHANGE 9 OR CURRENT VERSION.

SEEDING SCHEDULE

SPREAD SEEDS WHERE TABBED AND AT THE RATES SPECIFIED IN ABOVE TABLE, OR AS OTHERWISE INDICATED. SPREAD SEEDS WITHIN THE FOLLOWING DATES, OR AS OTHERWISE INDICATED OR DIRECTED.

FORMULA B
MARCH 15 TO JUNE 1 AND AUGUST 1 TO OCTOBER 15

FORMULA T
MARCH 15 TO JUNE 1 AND AUGUST 1 TO OCTOBER 15

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EMAC DIVISION
1234 MARKET ST, 15TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER

CHIEF SAFETY OFFICER

DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

CHIEF ENGINEER, BRIDGES & BUILDINGS

SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS

MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS

PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED
PROFESSIONAL
RICHARD J. MARUZZI
ENGINEER
NO. PE054057E

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REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

CIVIL

ESPC SEQUENCE OF CONSTRUCTION

SCALE: NO SCALE	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MEL
	CHECKED BY: JDO

WORK ORDER NO.: -

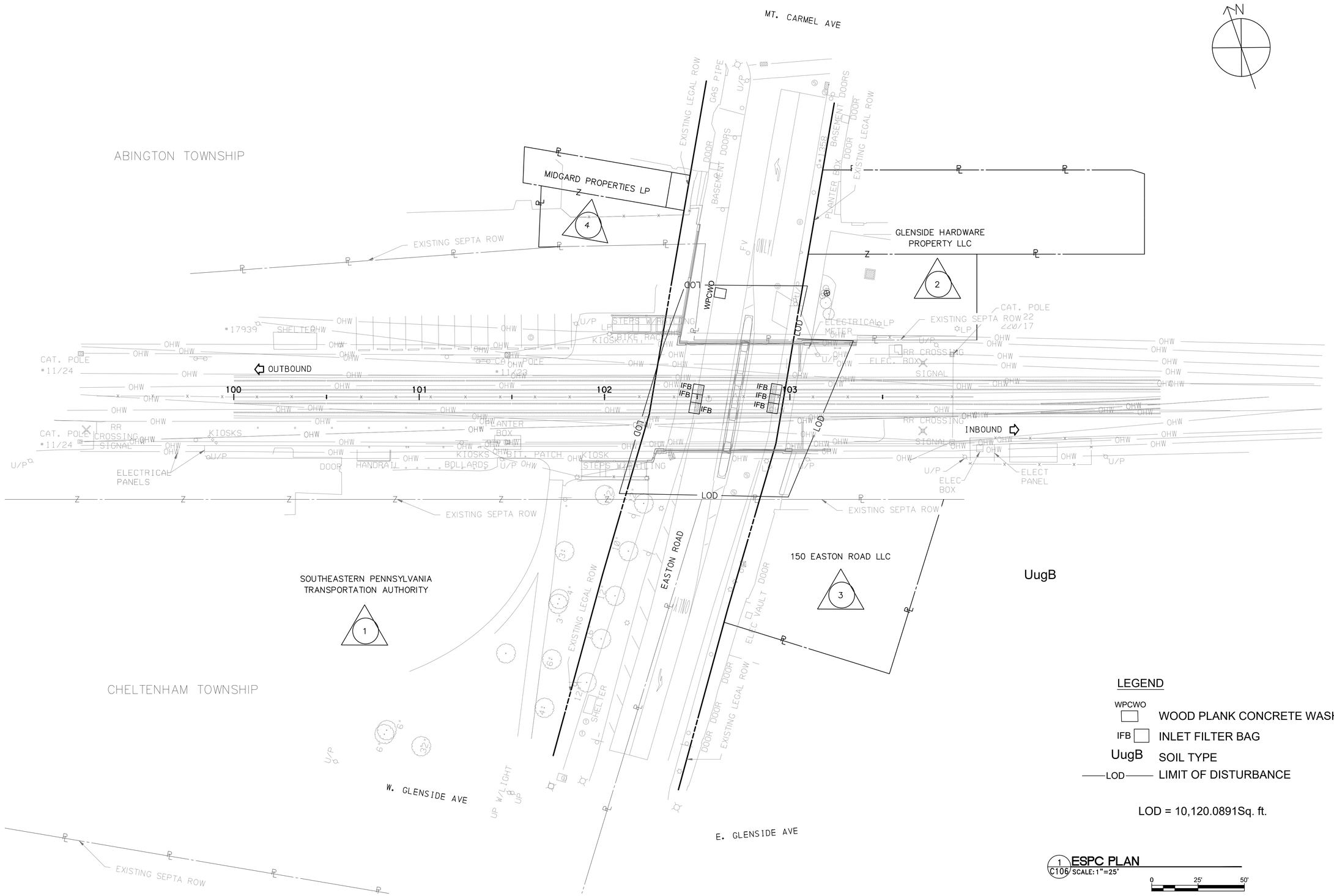
DRAWING NUMBER
C105

DWG. NO.: 5 OF 7
SHT. NO.: 7 OF 37
COMPUTER FILE NO.:
REV. NO: 00

M:\24000\24025 SEPTA MAINLINE BRIDGES\CAD\DE_SI\EASTON\24025 SEPTA BRIDGES PLAN-EASTON-REV.DWG

DATE PRINTED: 11/14/2024 11:25:28 AM

IFC SUBMISSION



LEGEND

WPCWO	WOOD PLANK CONCRETE WASHOUT
IFB	INLET FILTER BAG
UugB	SOIL TYPE
LOD	LIMIT OF DISTURBANCE

LOD = 10,120.0891Sq. ft.

1 C106 **ESPC PLAN**
SCALE: 1"=25'

0 25' 50'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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PHILADELPHIA, PA 19107

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00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

CIVIL
ESPC PLAN

SCALE: 1" = 25'	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MEL
WORK ORDER NO.: -	CHECKED BY: JDO

DRAWING NUMBER
C106

DWG. NO.:	6	OF	7
SHT. NO.:	8	OF	37
COMPUTER FILE NO.:		REV. NO:	00

IFC SUBMISSION

DATE PRINTED: 11/14/2024 11:25:41 AM

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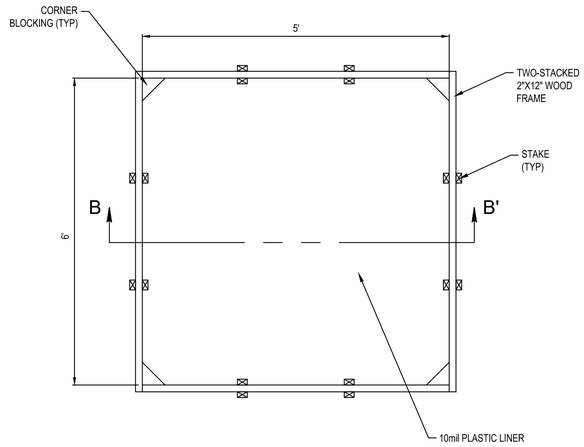
SECTION B-B'

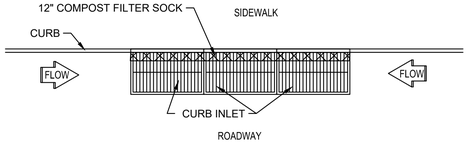


PLAN

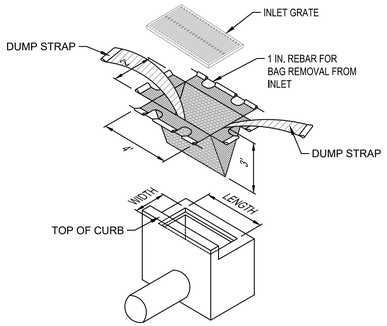
1 WOOD PLANK CONCRETE WASHOUT
C107 SCALE: NONE

WOOD PLANK CONCRETE WASHOUT NOTES:

1. LOAD/UNLOAD SIDE SHOULD FACE DOWN SLOPE.
2. DO NOT PLACE CONCRETE WASHOUT FACILITIES WITHIN 50 FEET OF STORM DRAINS, OPEN DITCHES, OR WATER BODIES.
3. PLACE SIGNS ADJACENT TO EACH TEMPORARY CONCRETE WASHOUT FACILITY TO INFORM CONCRETE EQUIPMENT OPERATORS TO UTILIZE THE PROPER FACILITIES. WASHOUT OF CONCRETE TRUCKS SHALL BE PERFORMED IN DESIGNATED AREAS ONLY.
4. ALLOW CONVENIENT ACCESS FOR CONCRETE TRUCKS.
5. PLASTIC LINING MATERIAL SHALL BE A MINIMUM OF 10 MIL POLYETHYLENE SHEETING AND SHOULD BE FREE OF HOLES, TEARS, OR OTHER DEFECTS THAT COMPROMISE THE IMPERMEABILITY OF THE MATERIAL.
6. LINER SEAMS SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' RECOMMENDATIONS.
7. SURFACE SHALL BE PREPARED FREE OF ROCKS OR OTHER DEBRIS THAT MAY CAUSE TEARS OR HOLES IN THE PLASTIC LINING MATERIAL.
8. INSPECT AND VERIFY THAT CONCRETE WASHOUT BMPS ARE IN PLACE PRIOR TO THE COMMENCEMENT OF CONCRETE WORK.
9. DURING PERIODS OF CONCRETE WORK, INSPECT DAILY TO VERIFY THE FOLLOWING:
   a. CHECK OVERALL CONDITION AND PERFORMANCE.
   b. CHECK REMAINING CAPACITY (% FULL).
   c. IF USING SELF-INSTALLED WASHOUT FACILITIES, VERIFY PLASTIC LINERS ARE INTACT AND SIDEWALLS ARE NOT DAMAGED.
   d. IF USING PREFABRICATED CONTAINERS, CHECK FOR LEAKS.
10. WASHOUT FACILITIES MUST BE CLEANED, OR NEW FACILITIES MUST BE CONSTRUCTED AND READY FOR USE ONCE THE WASHOUT IS 75% FULL.
11. IF THE WASHOUT IS NEARING CAPACITY, VACUUM AND DISPOSE OF THE WASTE MATERIAL IN AN APPROVED MANNER.
12. DO NOT DISCHARGE LIQUID OR SLURRY TO WATERWAYS, STORM DRAINS OR DIRECTLY ONTO GROUND.
13. DO NOT USE SANITARY SEWER WITHOUT LOCAL APPROVAL.
14. PLACE A SECURE, NON-COLLAPSING, NON-WATER COLLECTING COVER OVER THE CONCRETE WASHOUT FACILITY PRIOR TO PREDICTED WET WEATHER TO PREVENT ACCUMULATION AND OVERFLOW OF PRECIPITATION.
15. REMOVE AND DISPOSE OF HARDENED CONCRETE AND RETURN THE STRUCTURE TO A FUNCTIONAL CONDITION. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
16. WHEN REMOVING MATERIALS FROM CONCRETE WASHOUT, INSPECT FOR SIGNS OF WEAKENING OR DAMAGE, AND MAKE ANY NECESSARY REPAIRS. RE-LINE THE STRUCTURE WITH NEW PLASTIC AFTER EACH CLEANING IF NECESSARY.
17. WHEN CONCRETE WASHOUT FACILITIES ARE NO LONGER REQUIRED FOR THE WORK, THE HARDENED CONCRETE, SLURRIES AND LIQUIDS SHALL BE REMOVED AND PROPERLY DISPOSED OF.
18. HARDENED CONCRETE CAN BE REMOVED WHOLE OR CAN BE BROKEN UP. CONCRETE MAY BE REUSED ONSITE OR HAULED AWAY FOR DISPOSAL OR RECYCLING.
19. HOLES, DEPRESSIONS OR OTHER GROUND DISTURBANCE CAUSED BY THE REMOVAL OF THE TEMPORARY CONCRETE WASHOUT FACILITIES SHALL BE BACKFILLED, REPAIRED, AND STABILIZED TO PREVENT EROSION.



PLAN VIEW



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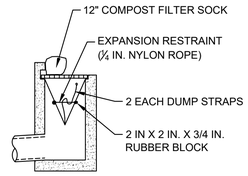
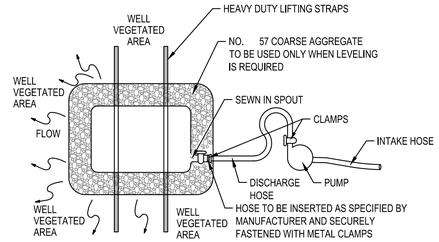


BAG INSTALLATION

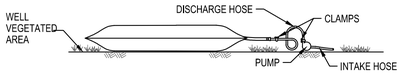
2 INLET FILTER BAG
C107 SCALE: NONE

INLET FILTER BAG NOTES:

1. MAXIMUM DRAINAGE AREA = 1/2 ACRE.
2. INLET PROTECTION SHALL NOT BE REQUIRED FOR INLET TRIBUTARY TO SEDIMENT BASIN OR TRAP. BERMS SHALL BE REQUIRED FOR ALL INSTALLATIONS.
3. ROLLED EARTHEN BERM SHALL BE MAINTAINED UNTIL ROADWAY IS STONED. ROAD SUBBASE BERM SHALL BE MAINTAINED UNTIL ROADWAY IS PAVED. SIX INCH MINIMUM HEIGHT ASPHALT BERM SHALL BE MAINTAINED UNTIL ROADWAY SURFACE RECEIVES FINAL COAT.
4. AT A MINIMUM, THE FABRIC SHALL HAVE A MINIMUM GRAB TENSILE STRENGTH OF 120 LBS, A MINIMUM BURST STRENGTH OF 200 PSI, AND A MINIMUM TRAPEZOIDAL TEAR STRENGTH OF 50 LBS. FILTER BAGS SHALL BE CAPABLE OF TRAPPING ALL PARTICLES NOT PASSING A NO. 40 SIEVE.
5. INLET FILTER BAGS SHALL BE INSPECTED ON A WEEKLY BASIS AND AFTER EACH RUNOFF EVENT. BAGS SHALL BE EMPTIED AND RINSED OR REPLACED WHEN HALF FULL OR WHEN FLOW CAPACITY HAS BEEN REDUCED SO AS TO CAUSE FLOODING OR BYPASSING OF THE INLET. DAMAGED OR CLOGGED BAGS SHALL BE REPLACED. A SUPPLY SHALL BE MAINTAINED ON SITE FOR REPLACEMENT OF BAGS. ALL NEEDED REPAIRS SHALL BE INITIATED IMMEDIATELY AFTER THE INSPECTION. DISPOSE OF ACCUMULATED SEDIMENT AS WELL AS ALL USED BAGS ACCORDING TO THE PLAN NOTES.



TOP VIEW

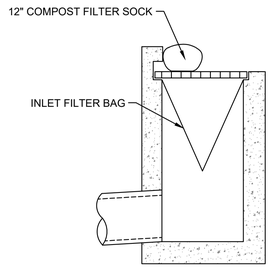


SIDE VIEW

3 PUMPED WATER FILTER BAG
C107 SCALE: NONE

PUMPED WATER FILTER BAG NOTES:

1. A SUITABLE MEANS OF ACCESSING THE BAG WITH MACHINERY REQUIRED FOR DISPOSAL PURPOSES SHALL BE PROVIDED. FILTER BAGS SHALL BE REPLACED WHEN THEY BECOME 1/2 FULL OF SEDIMENT. SPARE BAGS SHALL BE KEPT AVAILABLE FOR REPLACEMENT OF THOSE THAT HAVE FAILED OR ARE FILLED. BAGS SHALL BE PLACED ON STRAPS TO FACILITATE REMOVAL UNLESS BAGS COME WITH LIFTING STRAPS ALREADY ATTACHED.
2. BAGS SHALL BE LOCATED IN WELL-VEGETATED (GRASSY) AREA, AND DISCHARGE ONTO STABLE, EROSION RESISTANT AREAS. WHERE THIS IS NOT POSSIBLE, A GEOTEXTILE UNDERLAYMENT AND FLOW PATH SHALL BE PROVIDED. BAGS MAY BE PLACED ON FILTER STONE TO INCREASE DISCHARGE CAPACITY. BAGS SHALL NOT BE PLACED ON SLOPES GREATER THAN 5%. FOR SLOPES EXCEEDING 5%, CLEAN ROCK OR OTHER NON-ERODIBLE AND NON-POLLUTING MATERIAL MAY BE PLACED UNDER THE BAG TO REDUCE SLOPE STEEPNESS.
3. NO DOWNSLOPE SEDIMENT BARRIER IS REQUIRED FOR MOST INSTALLATIONS. COMPOST BERM OR COMPOST FILTER SOCK SHALL BE INSTALLED BELOW BAGS LOCATED IN HQ OR EV WATERSHEDS, WITHIN 50 FEET OF ANY RECEIVING SURFACE WATER OR WHERE GRASSY AREA IS NOT AVAILABLE.
4. THE PUMP DISCHARGE HOSE SHALL BE INSERTED INTO THE BAGS IN THE MANNER SPECIFIED BY THE MANUFACTURER AND SECURELY CLAMPED. A PIECE OF PVC PIPE IS RECOMMENDED FOR THIS PURPOSE.
5. THE PUMPING RATE SHALL BE NO GREATER THAN 750 GPM OR 1/2 THE MAXIMUM SPECIFIED BY THE MANUFACTURER, WHICHEVER IS LESS. PUMP INTAKES SHALL BE FLOATING AND SCREENED.
6. FILTER BAGS SHALL BE INSPECTED DAILY. IF ANY PROBLEM IS DETECTED, PUMPING SHALL CEASE IMMEDIATELY AND NOT RESUME UNTIL THE PROBLEM IS CORRECTED.
7. A PUMP WATER FILTER BAG HAS BEEN ADDED BUT IS NOT SHOWN IN THE PLANS. IN CASE OF STORM EVENT DURING CONSTRUCTION, IT CAN BE USED.



SECTION VIEW

COMPOST FILTER SOCK NOTES:

1. COMPOST FILTER SOCK SHALL BE INSPECTED WEEKLY AND AFTER EACH RUNOFF EVENT.
2. REMOVE SEDIMENT FROM UPSLOPE SIDE WHEN ACCUMULATION HAS REACHED ½ OF EFFECTIVE HEIGHT OF THE COMPOST FILTER SOCK.
3. DAMAGED COMPOST FILTER SOCK SHALL BE REPLACED WITHIN 24 HOURS OF INSPECTION. A SUPPLY OF COMPOST FILTER SOCK SHALL BE MAINTAINED ON SITE FOR THIS PURPOSE.
4. COMPOST FILTER SOCK WILL BE FILLED WITH HIGH QUALITY COMPOST.

4 COMPOST FILTER SOCK
C107 SCALE: NONE

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EMAC DIVISION
1234 MARKET ST, 15TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES, & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
RICHARD J. MARUZZI
ENGINEER NO. PE054057E

AEG
American Engineers Group, LLC
A Certified HSE/QSE/SQS/SSE Firm
5095 RITTER ROAD, SUITE 110
MECHANICSBURG, PA 17055
1-800-733-1102

REV	DATE	DESCRIPTION	BY	CKD	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MEL	JDO	ACP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
CIVIL
ESPC DETAILS

SCALE: NO SCALE	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MEL
WORK ORDER NO.: -	CHECKED BY: JDO
DRAWING NUMBER: C107	
DWG. NO.: 7 OF 7	
SHT. NO.: 9 OF 37	
COMPUTER FILE NO.:	REV. NO.: 00

DATE PRINTED: 11/14/2024 11:25:52 AM
IFC SUBMISSION
M:\24000\24025 SEPTA MAINLINE BRIDGES\CAD\E_SIE\ASTON\24025 SEPTA BRIDGES PLAN-EASTON-REV.DWG

MAINTENANCE AND PROTECTION OF TRAFFIC (MPT) GENERAL NOTES

1. THIS WORK CONSISTS OF THE MAINTENANCE OF TRAFFIC AND THE PROTECTION OF THE TRAVELING PUBLIC APPROACHING THE CONSTRUCTION AREA AND WITHIN THE LIMITS OF CONSTRUCTION.

2. FURNISH, ERECT, PLACE, AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES. MAINTAIN TRAFFIC DURING HOURS OF CONSTRUCTION AND AT ALL OTHER TIMES CONSISTENT WITH THE METHODS INDICATED ON THESE DRAWINGS AND IN THE MOST CURRENT EDITIONS OF:
   - PENNDOT PUBLICATION 35, QUALIFIED PRODUCTS LIST FOR CONSTRUCTION (BULLETIN 15);
   - PA CODE, TITLE 67, CHAPTER 212, OFFICIAL TRAFFIC CONTROL DEVICES;
   - PENNDOT PUBLICATION 111, TRAFFIC CONTROL - PAVEMENT MARKINGS AND SIGNING STANDARDS;
   - PENNDOT PUBLICATION 213, TEMPORARY TRAFFIC CONTROL GUIDELINES;
   - PENNDOT PUBLICATION 236, HANDBOOK OF APPROVED SIGNS;
   - PENNDOT PUBLICATION 408, HIGHWAY CONSTRUCTION SPECIFICATIONS;
   - MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD);

3. IMMEDIATELY UPON COMPLETION OF THE WORK, REMOVE THE DEVICES.

4. ARRANGE FOR INSPECTION OF ALL TRAFFIC CONTROL DEVICES PRIOR TO START OF WORK.

5. THE TRAFFIC CONTROL PLAN DOES NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITY AS SPECIFIED IN SECTION 901.2(a) OF PUBLICATION NO. 408/2020; LATEST REVISION.

6. ALL DISTANCES MAY BE ADJUSTED SLIGHTLY TO FIT FIELD CONDITIONS.

7. COVER OR REMOVE ALL CONFLICTING SIGNS OR SIGNS NOT IN USE.

8. MAINTAIN A MINIMUM LANE WIDTH OF 10 FEET.

9. INSTALL AND MAINTAIN TRAFFIC CONTROL SIGNS AND DEVICES THAT ARE IN NEW CONDITION THROUGHOUT THE DURATION OF THE PROJECT. ANY DAMAGE INCURRED SHALL BE IMMEDIATELY REPAIRED OR REPLACED BY THE CONTRACTOR TO THE SATISFACTION OF THE REPRESENTATIVE.

10. LOCATE ALL SIGNS SO THAT SIGHT DISTANCES WILL NOT BE OBSTRUCTED AT DRIVEWAYS AND LOCAL ROADS.

11. NOTIFY LOCAL EMERGENCY AUTHORITIES (E.G., POLICE, FIRE, MEDICAL), AFFECTED BUSINESSES, SCHOOL DISTRICT(S), THE GENERAL PUBLIC, THE DISTRICT PERMIT MANAGER AND THE DISTRICT AUTOMATED PERMIT ROUTING AND ANALYSIS SYSTEM (APRAS) COORDINATOR AT LEAST FOURTEEN (14) DAYS PRIOR TO ANY SIGNIFICANT TRAFFIC IMPACTS (E.G., LATERAL WIDTH RESTRICTIONS LESS THAN 16 FEET, DETOURS).

12. RESTORE ALL TRAVEL LANES TO NORMAL TRAFFIC FLOW AT THE CLOSE OF EACH WORKING PERIOD UNDER SHORT-TERM CONDITIONS AND REMOVE ALL SHORT-TERM WORK ZONE TRAFFIC CONTROL SIGNING.

13. PROTECT ANY EXCAVATING OBSTRUCTIONS OR CONSTRUCTION WORK, SO AS NOT TO EXPOSE PEDESTRIANS TO HAZARDS.

14. TEMPORARILY COVER OR REMOVE ANY SIGNS THAT ARE IN CONFLICT WITH THE TEMPORARY TRAFFIC CONTROL MEASURES. DO NOT ATTACH TAPE OR ADHESIVE TO THE FACE OF ANY SIGNS THAT ARE TEMPORARILY COVERED DURING CONSTRUCTION OPERATIONS. ENSURE, DURING THE REMOVAL AND STORAGE OF ALL SIGNS, THAT THE SHEETING FACE IS NOT DAMAGED OR SCRATCHED. REPLACE IN KIND ALL SIGNS AND/OR POSTS DAMAGED DURING REMOVAL, STORAGE, OR REINSTALLATION AT THE CONTRACTOR'S EXPENSE.

15. COMPLY WITH ACT 229 OF DECEMBER 2002 DURING CONSTRUCTION ACTIVITIES.

16. MAINTAIN ACCESS TO LOCAL BUSINESSES AT ALL TIMES.

17. COORDINATE WORK ZONE SIGNING AND OPERATIONS WITH OTHER PROJECTS IN THE AREA.

18. SEQUENCE OF CONSTRUCTION TO BE DETERMINED BY CONTRACTOR AND APPROVED BY THE REPRESENTATIVE PRIOR TO COMMENCING WORK. MAINTENANCE AND PROTECTION OF TRAFFIC DURING CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE APPLICABLE PATA DRAWINGS IN PENNDOT PUBLICATION 213.

19. POST THE SPECIAL SIGN "THIS STREET TO BE CLOSED FOR MAINTENANCE (START DATE)", TWO WEEKS PRIOR TO THE BEGINNING OF WORK. REMOVE THE SIGNS ONCE CONSTRUCTION BEGINS.

20. NOTIFY THE MUNICIPALITIES AT LEAST 14 DAYS PRIOR TO STARTING EACH PHASE OF WORK AND WITH ANY OTHER ROAD OR SIDEWALK RESTRICTIONS TO ALLOW PUBLIC NOTICE THROUGH THEIR WEBSITE AND NEWSLETTER.

21. NOTIFY SEPTA TWO WEEKS IN ADVANCE OF THE DISCONTINUANCE OF THE EXISTING BUS STOP LOCATIONS, BASED ON ANY PENDING CONSTRUCTION ACTIVITIES THAT WOULD BLOCK ACCESS. ALSO, NOTIFY SEPTA TWO WEEKS IN ADVANCE WHEN NEW STOPS ARE AVAILABLE TO USE.

    CONTACT: MICHAEL DAGOSTINO, MDAGOSTINO@SEPTA.ORG

22. THESE PLANS ARE NOT INTENDED TO RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY FOR THE PROTECTION OF THE PUBLIC AND THE CONSTRUCTION PERSONNEL AS SPECIFIED IN SECTION 901.3(A) OF PENNDOT PUBLICATION 408. THE STANDARDS PRESCRIBED ARE A MINIMUM AND ADDITIONAL PROTECTION MAY BE NEEDED IF PROBLEMS ARE ENCOUNTERED DURING THE TERM OF THE CONTRACT. CONSISTENTLY REVIEW THIS PLAN FOR ITS ADEQUACY AND RECOMMEND CHANGES FOR DEPARTMENT AND MUNICIPAL APPROVAL WHEN INADEQUACIES ARE DISCOVERED.

23. CONTRACTOR CANNOT IMPLEMENT DETOUR FOR BRIDGES ML 11.62 AND 11.83 CONCURRENTLY.

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PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

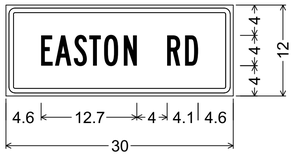
REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	JMM

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
ROADWAY
GENERAL NOTES - TRAFFIC

SCALE: NO SCALE
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: DAM
CHECKED BY: JMM
WORK ORDER NO.: -
DRAWING NUMBER: **R101**
DWG. NO.: 1 OF 4
SHT. NO.: 10 OF 37
COMPUTER FILE NO.:
REV. NO: 00

C:\PWWORKING\JACOBS_B&I\DAV\SVN\LD0560101\E_SEPTA_R100.DWG
DATE PRINTED: 11/14/2024 12:26:15 PM
IFC SUBMISSION

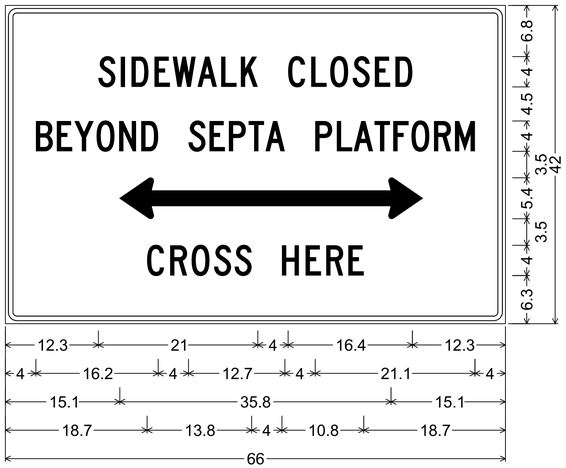
SP-1



1.2" Radius, 0.6" Border, 0.4" Indent, Black on Fluorescent orange;
"EASTON RD", B 2K;
Table of widths and spaces

4.6	E 1.6	0.3	A 2.1	0.4	S 1.7	0.3	T 1.5	0.5	O 1.8	0.8	N 1.7	
	4.0	R 1.7	0.6	D 1.8	4.6							

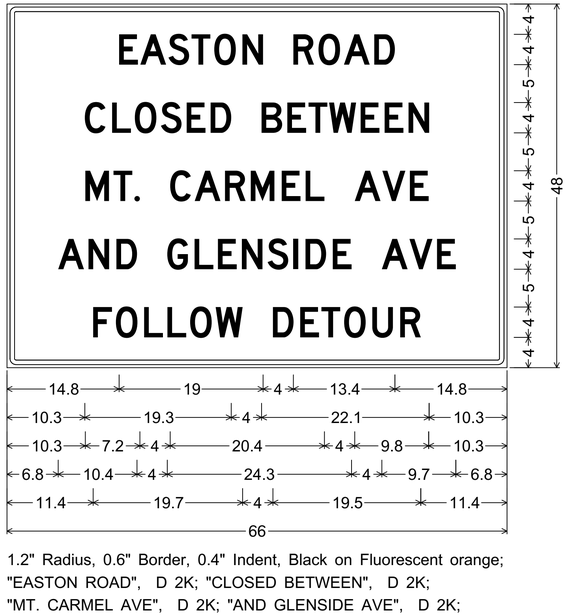
SP-PED



1.5" Radius, 0.6" Border, 0.4" Indent, Black on White;
"SIDEWALK CLOSED", C 2K;
"BEYOND SEPTA PLATFORM", C 2K 77% spacing;
Standard Arrow Custom 35.8" X 5.4" 180°;
"CROSS HERE", C 2K;
Table of widths and spaces

12.3	S 2.2	0.7	I 0.6	0.8	D 2.3	0.8	E 2.0	0.4	W 3.0	0.3	A 2.5	0.6	L 2.0	0.6	K 2.2					
	4.0	C 2.3	0.8	L 2.0	0.5	O 2.3	0.6	S 2.3	0.7	E 2.0	0.7	D 2.2	12.3							
4.0	B 2.3	0.5	E 2.0	0.3	Y 2.6	0.3	O 2.4	0.6	N 2.3	0.6	D 2.3									
	4.0	S 2.2	0.5	E 2.1	0.5	P 2.2	0.4	T 2.0	0.2	A 2.6										
	4.0	P 2.2	0.6	L 2.1	0.2	A 2.5	0.2	T 2.1	0.4	F 2.0	0.4	O 2.4	0.6	R 2.2	0.5	M 2.7	4.0			
15.1	⟵ 35.8	15.1																		
18.7	C 2.2	0.8	R 2.3	0.6	O 2.3	0.6	S 2.3	0.5	S 2.2											
	4.0	H 2.2	0.9	E 2.1	0.6	R 2.3	0.7	E 2.0	18.7											

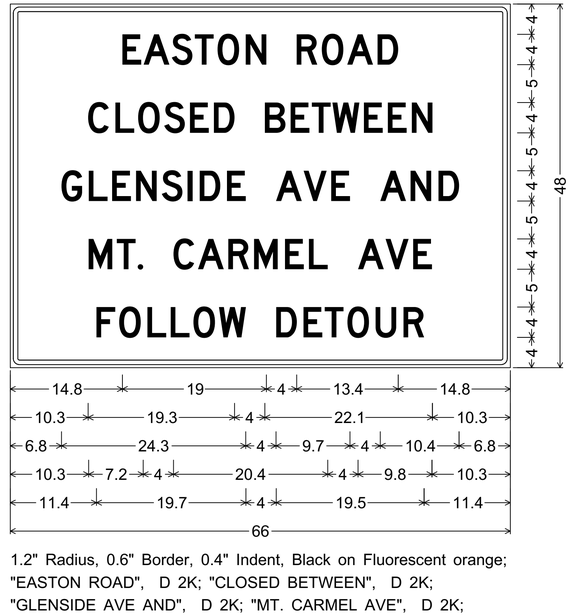
SP-2



1.2" Radius, 0.6" Border, 0.4" Indent, Black on Fluorescent orange;
"EASTON ROAD", D 2K; "CLOSED BETWEEN", D 2K;
"MT. CARMEL AVE", D 2K; "AND GLENSIDE AVE", D 2K;
"FOLLOW DETOUR", D 2K;
Table of widths and spaces

14.8	E 2.5	0.3	A 3.4	0.3	S 2.7	0.4	T 2.4	0.6	O 2.8	0.9	N 2.7									
	4.0	R 2.7	0.6	O 2.9	0.5	A 3.4	0.6	D 2.7	14.8											
10.3	C 2.7	0.9	L 2.5	0.5	O 2.8	0.6	S 2.7	0.7	E 2.5	0.7	D 2.7									
	4.0	B 2.7	0.7	E 2.5	0.3	T 2.5	0.2	W 3.6	0.6	E 2.5	0.6	E 2.5	0.7	N 2.7	10.3					
10.3	M 3.2	0.6	T 2.4	0.3	. 0.7															
	4.0	C 2.8	0.5	A 3.4	0.6	R 2.7	0.7	M 3.1	1.0	E 2.4	0.7	L 2.5								
	4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	10.3													
6.8	A 3.4	0.6	N 2.7	0.9	D 2.8															
	4.0	G 2.7	0.9	L 2.4	0.6	E 2.5	0.7	N 2.7	0.7	S 2.7	0.7	I 0.6	1.0	D 2.7	0.9	E 2.5				
	4.0	A 3.4	0.2	V 3.1	0.6	E 2.4	6.8													
11.4	F 2.5	0.5	O 2.8	0.9	L 2.5	0.6	L 2.5	0.5	O 2.8	0.5	W 3.6									
	4.0	D 2.7	0.9	E 2.5	0.3	T 2.5	0.5	O 2.8	0.9	U 2.7	1.0	R 2.7	11.4							

SP-3



1.2" Radius, 0.6" Border, 0.4" Indent, Black on Fluorescent orange;
"EASTON ROAD", D 2K; "CLOSED BETWEEN", D 2K;
"GLENSIDE AVE AND", D 2K; "MT. CARMEL AVE", D 2K;
"FOLLOW DETOUR", D 2K;
Table of widths and spaces

14.8	E 2.5	0.3	A 3.4	0.3	S 2.7	0.4	T 2.4	0.6	O 2.8	0.9	N 2.7									
	4.0	R 2.7	0.6	O 2.9	0.5	A 3.4	0.6	D 2.7	14.8											
10.3	C 2.7	0.9	L 2.5	0.5	O 2.8	0.6	S 2.7	0.7	E 2.5	0.7	D 2.7									
	4.0	B 2.7	0.7	E 2.5	0.3	T 2.5	0.2	W 3.6	0.6	E 2.5	0.6	E 2.5	0.7	N 2.7	10.3					
6.8	G 2.7	0.9	L 2.4	0.6	E 2.5	0.7	N 2.7	0.7	S 2.7	0.7	I 0.6	1.0	D 2.7	0.9	E 2.5					
	4.0	A 3.4	0.2	V 3.1	0.6	E 2.4	4.0	A 3.4	0.6	N 2.8	0.9	D 2.7	6.8							
10.3	M 3.2	0.6	T 2.4	0.3	. 0.7															
	4.0	C 2.8	0.5	A 3.4	0.6	R 2.7	0.7	M 3.1	1.0	E 2.4	0.7	L 2.5								
	4.0	A 3.4	0.2	V 3.1	0.6	E 2.5	10.3													
11.4	F 2.5	0.5	O 2.8	0.9	L 2.5	0.6	L 2.5	0.5	O 2.8	0.5	W 3.6									
	4.0	D 2.7	0.9	E 2.5	0.3	T 2.5	0.5	O 2.8	0.9	U 2.7	1.0	R 2.7	11.4							

NOTE: ALL SIGN DETAIL DIMENSIONS SHOWN IN INCHES, UNLESS OTHERWISE NOTED.

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PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
Dominic A. Marchesano, Jr
ENGINEER
No. PE084640

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SUITE 900
PHILADELPHIA, PA. 19103
TEL. 215-569-2900
FAX. 215-569-5963
JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	JMM

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

ROADWAY
SIGN FABRICATION DETAILS

SCALE: NO SCALE	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
WORK ORDER NO.: -	CHECKED BY: JMM

DRAWING NUMBER
R102

DWG. NO.:	2	OF	4
SHT. NO.:	11	OF	37

COMPUTER FILE NO.: REV. NO.: 00

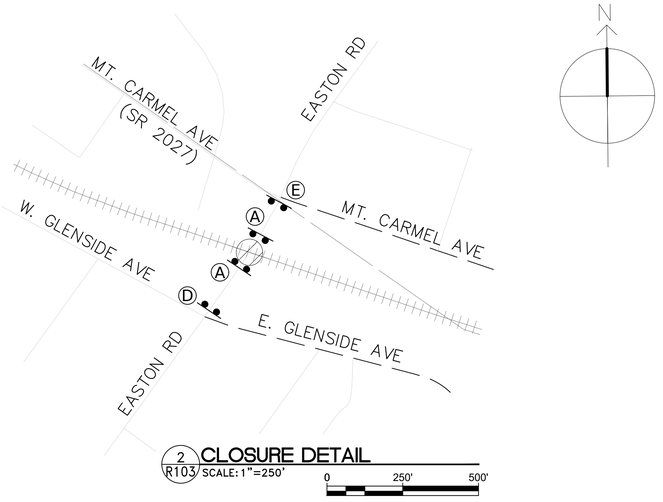
C:\PWWORKING\JACOBS_B&I\DAV\SW\LD0560101\E_SEPTA_R100.DWG
DATE PRINTED: 11/14/2024 12:26:16 PM
IFC SUBMISSION

SIGN POST | TYPE III BARRICADE | RAILROAD | DETOUR ROUTE (0.5 MI) | ROAD CLOSURE

1 R103 VEHICULAR DETOUR PLAN
SCALE: 1"=500' 0 500' 1000'

NOTES:

1. NOTIFY ABINGTON AND CHELTENHAM TOWNSHIPS, PENNDOT DISTRICT 6-0, EMERGENCY SERVICES PROVIDERS, AND LOCAL SCHOOL DISTRICTS A MINIMUM OF TWO (2) WEEKS PRIOR TO THE IMPLEMENTATION OF THIS DETOUR.
2. MAINTAIN ACCESS TO ALL BUSINESSES AND RESIDENCES FOR THE ENTIRE DURATION OF THE DETOUR.
3. MAINTAIN PEDESTRIAN ACCESS TO PLATFORM STAIRS AT ALL TIMES.
4. PERFORM WORK IN A MANNER TO MAINTAIN PEDESTRIAN ACCESS TO PLATFORM AT ALL TIMES.
5. WHEN IT IS NOT FEASIBLE TO MAINTAIN PEDESTRIAN CONNECTION BETWEEN INBOUND AND OUTBOUND STAIRS, UTILIZE PEDESTRIAN DETOUR.
6. COORDINATE DETOUR PLAN WITH AREA EVENTS INCLUDING, BUT NOT LIMITED TO, THE GLENSIDE FOOD TRUCK FESTIVAL (SEPTEMBER), WINTERFEST (NOVEMBER/DECEMBER), AND ART FESTIVAL (APRIL 26).
7. COORDINATE DETOUR PLAN WITH OTHER LOCAL PROJECTS. CONTACT TOWNSHIPS, MONTGOMERY COUNTY, AND/OR PENNDOT FOR A LIST OF PLANNED PROJECTS.
8. USE SUFFICIENT NUMBER OF TYPE III BARRICADES TO CLOSE OFF ENTIRE ROAD.
9. INSTALL SIGN W23-101 AT LEAST 2 WEEKS IN ADVANCE OF CLOSURE. REMOVE SIGN AT START OF CLOSURE.
10. SIGN LOCATIONS ARE APPROXIMATE. PLACE SIGNS IN ACCORDANCE WITH PENNDOT PUBLICATION 213.



2 R103 CLOSURE DETAIL
SCALE: 1"=250' 0 250' 500'

① EASTON RD / DETOUR AHEAD — SP-1 30"X12" — W20-2 36"X36" W30-1-6 20"X6"

② EASTON RD / DETOUR — SP-1 30"X12" — M4-9SL 30"X24"

③ EASTON RD / DETOUR — SP-1 30"X12" — M4-9L 30"X24"

④ EASTON RD / DETOUR — SP-1 30"X12" — M4-9S 30"X24"

⑤ EASTON RD / DETOUR — SP-1 30"X12" — M4-9SR 30"X24"

⑥ EASTON RD / DETOUR — SP-1 30"X12" — M4-9R 30"X24"

⑦ EASTON RD / END DETOUR — SP-1 30"X12" M4-8A 24"X18"

⑧ THIS STREET TO BE CLOSED FOR MAINTENANCE MAY XX, 2025 — W23-101 96"X48"

Ⓐ ROAD CLOSED — R11-2 48"X30" — TYPE III BARRICADE W/TYPE B FLASHERS

Ⓑ EASTON ROAD CLOSED BETWEEN MT. CARMEL AVE AND GLENSIDE AVE FOLLOW DETOUR — SP-2 66"X48"

Ⓒ EASTON ROAD CLOSED BETWEEN GLENSIDE AVE AND MT. CARMEL AVE FOLLOW DETOUR — SP-3 66"X48"

Ⓓ ROAD CLOSED TO THRU TRAFFIC / DETOUR — R11-4 60"X30" — TYPE III BARRICADE W/TYPE B FLASHERS — M4-10R 48"X18"

Ⓔ ROAD CLOSED TO THRU TRAFFIC / DETOUR — R11-4 60"X30" — TYPE III BARRICADE W/TYPE B FLASHERS — M4-10L 48"X18"

3 R103 SIGN LEGEND
NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	JMM

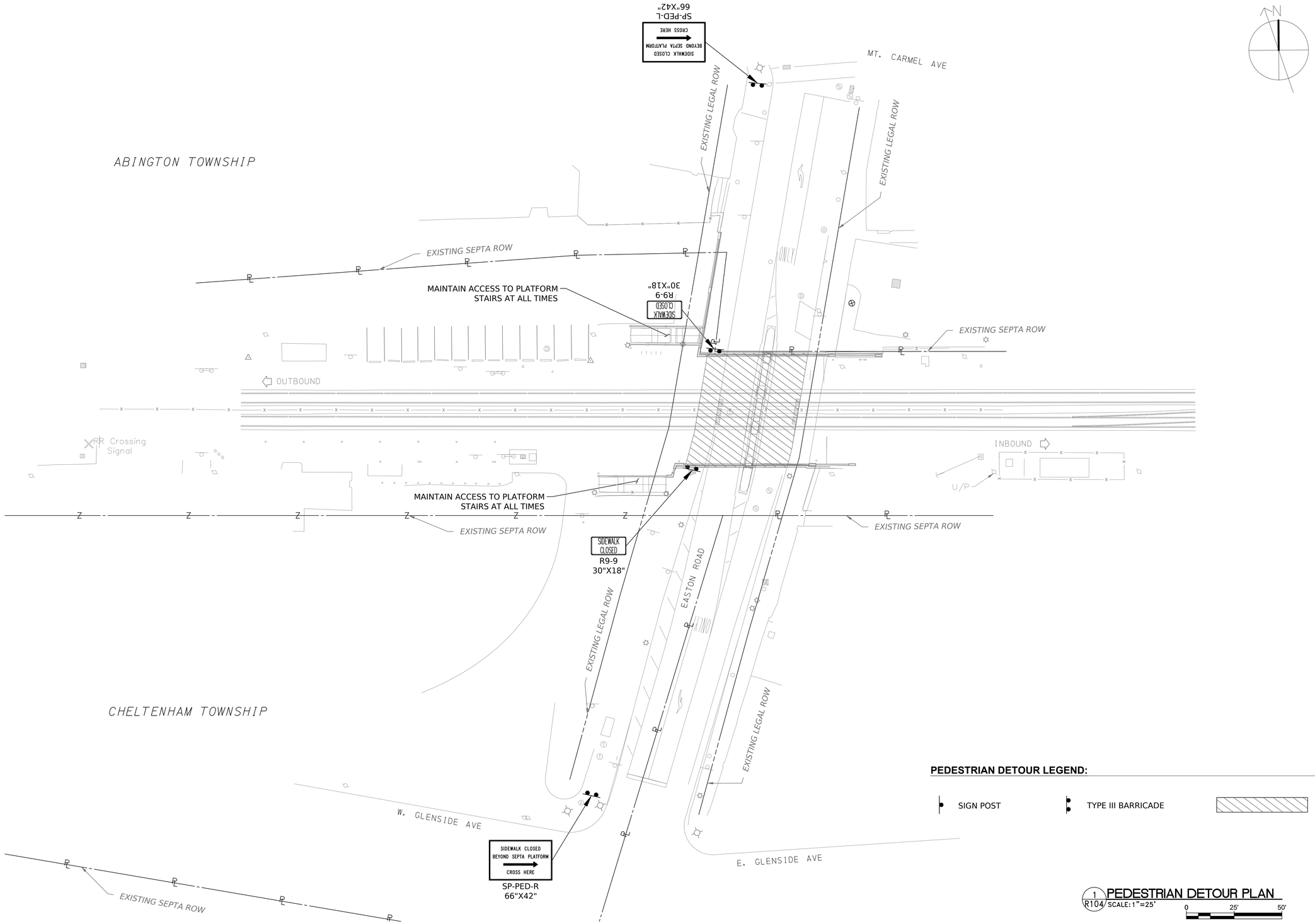
MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
ROADWAY
VEHICULAR DETOUR PLAN

SCALE: AS SHOWN	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
WORK ORDER NO.: -	CHECKED BY: JMM

DRAWING NUMBER: **R103**

DWG. NO.: 3 OF 4
SHT. NO.: 12 OF 37
COMPUTER FILE NO.:
REV. NO.: 00

C:\PWWORKING\JACOBS_B&I\DAV\SWL\D0560101\E_SEPTA_R100.DWG
DATE PRINTED: 11/14/2024 12:26:19 PM
IFC SUBMISSION



PEDESTRIAN DETOUR LEGEND:

SIGN POST | TYPE III BARRICADE | WORK ZONE

1 R104 PEDESTRIAN DETOUR PLAN
SCALE: 1"=25'
0 25' 50'

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	DAM	JMM	JMM

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

ROADWAY

PEDESTRIAN DETOUR PLAN

SCALE: 1" = 25'	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: DAM
	CHECKED BY: JMM
WORK ORDER NO.: -	
DRAWING NUMBER: R104	
DWG. NO.: 4 OF 4	
SHT. NO.: 13 OF 37	
COMPUTER FILE NO.:	REV. NO.: 00

DATE PRINTED: 11/14/2024 12:26:20 PM
IFC SUBMISSION
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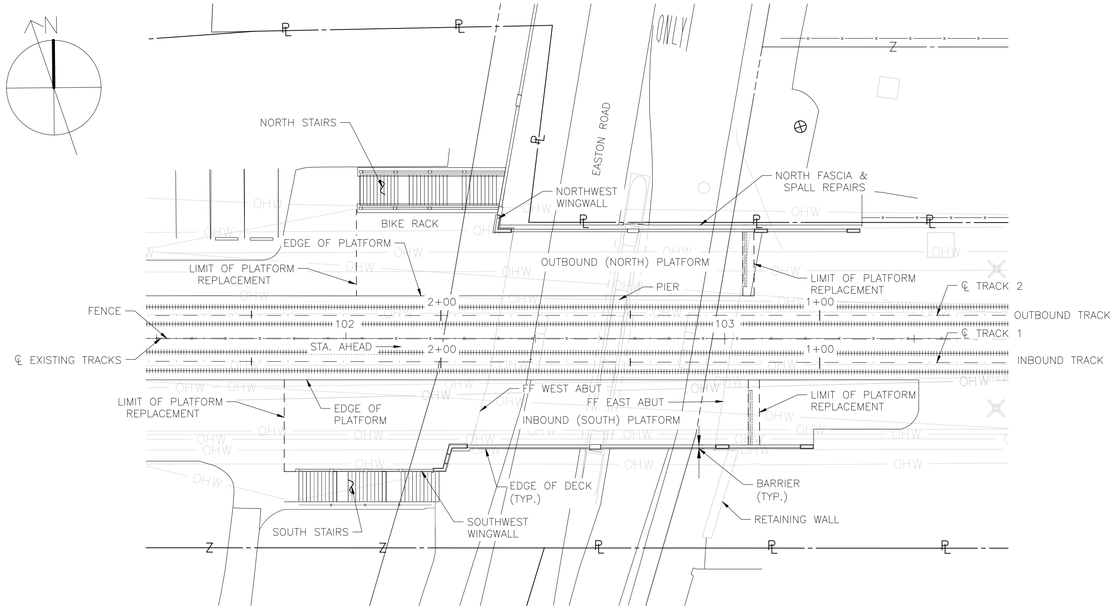
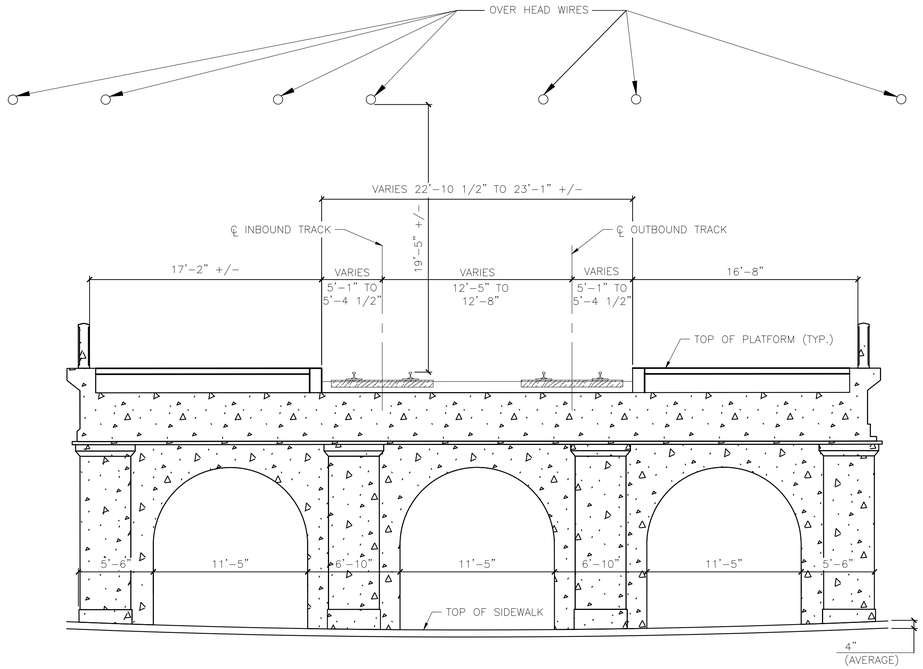
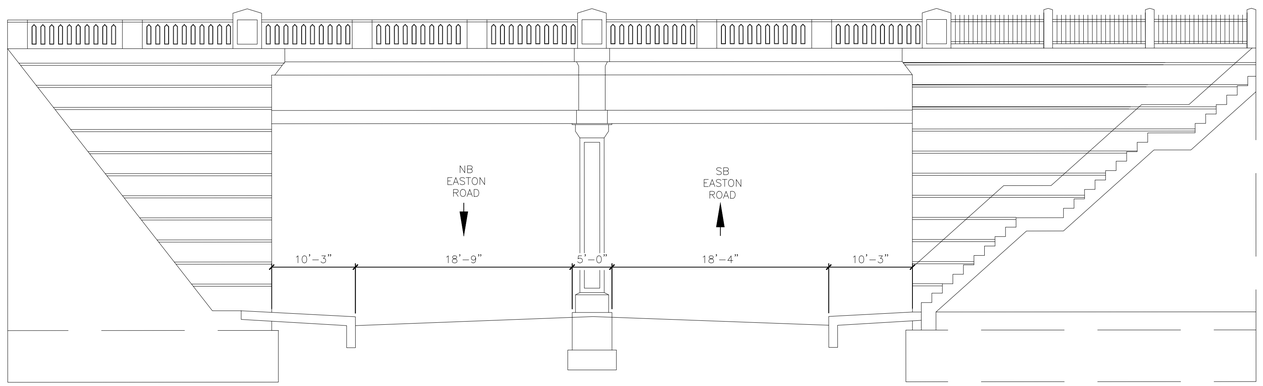


1 S101 **GENERAL PLAN**
SCALE: 1"=20'
0 20' 40'



2 S101 **TYPICAL SECTION AT PIER**
NTS



3 S101 **NORTH ELEVATION**
NTS

SCOPE OF WORK

1. REMOVE AND REPLACE PORTION OF INBOUND AND OUTBOUND PLATFORMS.
2. REMOVE EXISTING BALLAST AND RAILS (SEPTA FORCE ACCOUNT).
3. SOUND AND REMOVE ALL UNSOUND AND DELAMINATED MATERIAL FROM TOP SIDE OF BRIDGE SUPERSTRUCTURE.
4. REPAIR DETERIORATED CONCRETE ON THE TOP SIDE OF SUPERSTRUCTURE AND APPLY WATERPROOFING MEMBRANE.
5. REPLACE BALLAST AND RAILS (SEPTA FORCE ACCOUNT).
6. REPAIR CONCRETE SUBSTRUCTURES TO THE LIMITS SHOWN ON THESE PLANS.
7. REMOVE AND REPLACE TOP OF RETAINING WALL, CURB AND BARRIER AT SOUTH STAIRS.
8. REMOVE AND REPLACE DETERIORATED CONCRETE ON INDIVIDUAL STEPS AT NORTH AND SOUTH STAIRS.
9. REMOVE AND REPLACE DETERIORATED CONCRETE ON THE SOUTHEAST WINGWALL.
10. REMOVE AND REPAIR EXISTING NORTH FASCIA LOOSE & DELAMINATED CONCRETE.
11. PROVIDE SPALL REPAIRS AS NEEDED. LOCATIONS TO BE VERIFIED BY SEPTA PROJECT MANAGER.
12. TEMPORARY REMOVAL OF ANY RAILINGS, TICKET MACHINES, BIKE RACKS, AND/OR SIGNAGE IS INCIDENTAL TO THE PROJECT. ANY ITEMS REMOVED MUST BE RESET ONCE REPAIRS ARE COMPLETED.

LEGEND:

- X = FENCE
- W = WATER LINE
- TU = UNDERGROUND TELEPHONE LINE
- S = SEWER PIPE
- G G = UNDERGROUND GAS PIPE
- E E = UNDERGROUND ELECTRIC
- = WATER PIPE
- MANHOLE COVER
- RAILROAD CROSSING SIGN
- LIGHTPOLE
- DRAIN

NOTES:

1. REFER TO DWG S114 TO S116 FOR REPAIR DETAILS.

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CHIEF SAFETY OFFICER

DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

CHIEF ENGINEER, BRIDGES & BUILDINGS

SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS

MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS

PROJECT MANAGER

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL
GENERAL PLAN & ELEVATION

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
	CHECKED BY: JS
WORK ORDER NO.: -	

DRAWING NUMBER
S101

DWG. NO.:	1	OF	20
SHT. NO.:	14	OF	37

COMPUTER FILE NO.: - REV. NO.: 00

DATE PRINTED: 11/14/2024 11:48:39 AM

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GENERAL STRUCTURAL NOTES

A. GENERAL

1. REPRODUCTION OF STRUCTURAL CONTRACT DRAWINGS FOR USE AS SHOP DRAWINGS IS STRICTLY PROHIBITED. SHOP DRAWINGS WHICH ARE PRODUCED IN SUCH A MANNER WILL BE REJECTED AND RETURNED WITHOUT REVIEW.
2. WORK SHALL BE COORDINATED WITH THE VARIOUS TRADES TO ENSURE THAT VARIOUS EMBEDDED ITEMS ARE INCORPORATED, TO AVOID CONFLICT OR INTERFERENCE WITH REINFORCING STEEL OR STRUCTURAL STEEL MEMBERS, AND TO ENSURE TIMELY COMPLETION OF ALL WORK.
3. THE LOCATION OF ALL UNDERGROUND UTILITIES SHALL BE IDENTIFIED IN THE FIELD BEFORE CONSTRUCTION COMMENCES.
4. THE WORK SHOWN ON THE DRAWINGS IS TO BE PERFORMED IN ACCORDANCE WITH THE PA CODE, TITLE 34, LABOR AND INDUSTRY, PART XIV, UNIFORM CONSTRUCTION CODE (UCC) AS APPROPRIATE.
5. CONTRACTOR TO FIELD VERIFY ALL DIMENSIONS PRIOR TO SHOP DRAWING PREPARATION.
6. DIMENSIONS, ELEVATIONS, AND ANY OTHER CONDITIONS OF ANY EXISTING STRUCTURES OR OTHER FEATURES SHALL BE FIELD VERIFIED BY THE GENERAL CONTRACTOR AND ANY DISCREPANCIES WITH THE CONTRACT DRAWINGS REPORTED TO THE ARCHITECT AND ENGINEER BEFORE PROCEEDING WITH THE AFFECTED PART OF THE WORK. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS AND FOR SAFETY PRECAUTIONS AND PROGRAMS DURING THE CONSTRUCTION PROCESS.
7. IT IS THE GENERAL CONTRACTOR'S RESPONSIBILITY TO OBTAIN CONTRACT DOCUMENTS AND LATEST ADDENDA AND TO SUBMIT TO SUBCONTRACTORS AND SUPPLIERS PRIOR TO THE SUBMITTAL OF SHOP DRAWINGS.
8. IF A CONFLICT EXISTS AMONG THE STRUCTURAL DRAWINGS, GENERAL NOTES, OR THE SPECIFICATIONS, THE STRICTEST REQUIREMENTS, AS INDICATED BY THE ENGINEER, SHALL GOVERN.
9. THE STRUCTURAL ENGINEER OF RECORD SHALL NOT BE RESPONSIBLE FOR THE ACTS OR OMISSION OF THE CONTRACTOR OR FOR THEIR FAILURE TO CARRY OUT THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS.
10. ANY MATERIALS OR PRODUCTS SUBMITTED FOR APPROVAL THAT ARE DIFFERENT FROM THE MATERIAL OR PRODUCTS SPECIFIED IN THE STRUCTURAL CONTRACT DOCUMENTS WILL BE APPROVED ONLY IF THE FOLLOWING CRITERIA ARE SATISFIED:
    a. A COST SAVINGS TO THE OWNER IS DOCUMENTED AND SUBMITTED WITH THE REQUEST.
    b. THE MATERIAL OR PRODUCT HAS BEEN APPROVED BY THE INTERNATIONAL CODE COUNCIL (ICC) AND THE ICC REPORT IS SUBMITTED WITH THE REQUEST. SUBMITTALS NOT SATISFYING THE ABOVE CRITERIA WILL NOT BE CONSIDERED.
11. CONTRACTOR TO ISSUE REQUEST FOR INFORMATION (RFI) FOR ANY INFORMATION NOT CLEAR/NOT SHOWN IN THE DRAWINGS.
12. TYPICAL NOTES AND DETAILS SHOWN ON STRUCTURAL REPAIR DETAILS SHALL BE APPLICABLE TO ALL PARTS OF THE STRUCTURAL WORK EXCEPT WHERE SPECIFICALLY REQUIRED OTHERWISE ON THE CONTRACT DOCUMENTS. REPAIR DETAILS NOT SPECIFICALLY SHOWN SHALL BE SIMILAR TO THOSE SHOWN FOR THE MOST NEARLY SIMILAR CONDITION ON THE DRAWINGS AS DETERMINED BY THE ENGINEER.
13. NO STRUCTURAL MEMBER SHALL BE CUT, NOTCHED OR OTHERWISE ALTERED UNLESS APPROVED IN WRITING BY THE ENGINEER OF RECORD. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY AND ALL COSTS INCURRED BY ENGINEER OF RECORD FOR THE REVIEW.
14. DO NOT SCALE DRAWING DIMENSIONS.
15. FABRICATION PRIOR TO THE RECEIPT OF AN APPROVED SHOP DRAWINGS SHALL BE AT THE CONTRACTOR'S OWN RISK AND THAT INSTALLATION OF ANY WORK PRIOR TO RECEIPT OF APPROVED SHOP DRAWINGS SHALL BE STRICTLY PROHIBITED.
16. FOR ESTIMATED ELEVATIONS REFER TO THE PLAN SHEETS.
17. THE CONTRACTOR SHALL VERIFY EXISTING CONDITIONS BEFORE COMMENCING ANY DEMOLITION. THE CONTRACTOR SHALL VERIFY THE EXTENT AND LOCATIONS OF SITE UTILITIES.
18. THE CONTRACTOR SHALL DESIGN AND INSTALL SHORING TO SUPPORT NEW CONSTRUCTION (VERTICALLY AND LATERALLY) UNTIL STRUCTURAL COMPONENTS HAVE BEEN CONNECTED AS SHOWN ON THE STRUCTURAL DRAWINGS.
19. SHOP DRAWING REVIEW: BY SUBMITTING THE SHOP DRAWINGS, THE CONTRACTOR REPRESENTS THAT THEY HAVE DETERMINED AND VERIFIED MATERIALS, FIELD MEASUREMENTS, AND RELATED FIELD CONSTRUCTION CRITERIA (MEANS, METHODS, TECHNIQUES, SEQUENCES, OPERATIONS OF CONSTRUCTION, AND SAFETY PRECAUTIONS AND PROGRAMS INCIDENTAL THERETO), AND THAT THE CONTRACTOR HAS CHECKED AND COORDINATED THE INFORMATION CONTAINED WITHIN THE SUBMITTAL WITH THE REQUIREMENTS OF THE WORK AND THE CONTRACT DOCUMENTS. REVIEW BY THE ENGINEER SHALL NOT RELIEVE THE CONTRACTOR FROM FULL RESPONSIBILITY FOR THE ACCURACY OF DIMENSIONS AND DETAILS. SUCH REVIEW SHALL NOT CONSTITUTE ACCEPTANCE BY THE ENGINEER OF THE CORRECTNESS OR ADEQUACY OF SUCH SUBMITTALS, NOR A WARRANTY THAT THE SUBMITTALS SATISFY THE REQUIREMENTS OF THE CONTRACT.

B. DESIGN CRITERIA

1. AREMA AND ACI318-19
2. SEPTA STRUCTURAL DESIGN CRITERIA AND GUIDELINES
3. SEPTA STRUCTURAL ENGINEERING RIGHT-OF-WAY DESIGN AND CONSTRUCTION STANDARDS

C. REINFORCED CONCRETE

1. ALL CONCRETE FOR STRUCTURES SHALL BE AIR-ENTRAINED CONCRETE WITH THE FOLLOWING MINIMUM COMPRESSIVE STRENGTHS AT 28 DAYS.
    A. PRECAST MEMBER ——— 5000 POUNDS PER SQUARE INCH
    B. SLABS ON GRADE ——— 4000 POUNDS PER SQUARE INCH
    C. ALL OTHER REPAIRS ——— 4500 POUNDS PER SQUARE INCH
2. REINFORCEMENT BARS SHALL BE NEW BILLET STEEL CONFORMING TO A.S.T.M. DESIGNATION A615, GRADE 60, DEFORMED. BARS SHALL BE GALVANIZED PER A.S.T.M. A767.
3. CONCRETE DESIGN IS IN CONFORMANCE WITH 'BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE' (ACI 318-19).
4. DETAIL, FABRICATE AND ERECT REINFORCEMENT BARS, INCLUDING BAR SUPPORTS, SPACERS, ETC. IN ACCORDANCE WITH ACI.
5. UNLESS SHOWN OTHERWISE, BARS AT SPLICES SHALL BE LAPPED IN ACCORDANCE WITH THE TABLE "REINFORCING STEEL LAP SPLICES AND EMBEDMENTS" SHOWN ON THIS SHEET.
6. CONCRETE COVER FOR REINFORCEMENT BARS SHALL CONFORM TO THE FOLLOWING, UNLESS INDICATED OTHERWISE ON THE DRAWINGS.
    A. UNFORMED SURFACES IN CONTACT WITH GROUND ——— 3 INCHES
    B. FORMED SURFACES IN CONTACT WITH GROUND OR EXPOSED TO WEATHER, AND ALL WALLS ——— 2 INCHES
    C. TOP OF SLABS ——— 2 INCHES
    D. BOTTOM OF SLABS ——— 1 1/2 INCHES
7. CHAMFER EXPOSED CONCRETE EDGES 3/4 INCH X 3/4 INCH UNLESS NOTED OTHERWISE.
8. PROVIDE SURFACE-APPLIED WATERSTOPS AT ALL INTERFACES OF NEW AND EXISTING CONCRETE EXPOSED TO SOIL.
9. STANDARDS:
    DESIGN - ACI 318-19: AMERICAN CONCRETE INSTITUTE BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
    AREMA: AMERICAN RAILWAY ENGINEERING AND MAINTENANCE-OF-WAY ASSOCATION.
10. SUBMIT PROPOSED CONCRETE MIX DESIGN TO THE OWNER'S REPRESENTATIVE AND TESTING LABORATORY CONCURRENTLY FOR REVIEW AND APPROVAL.
11. CLEAN AND APPLY BONDING AGENT TO EXISTING CONCRETE SURFACES TO RECEIVE NEW CONCRETE. CONCRETE TO CONFORM WITH THE LATEST ACI BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE.
12. SECTIONS AND DETAILS MAY NOT SHOW ALL EXISTING CONCRETE REINFORCEMENT. CONCRACTOR TO FIELD VERIFY LOCATION OF EXISTING REINFORCEMENT.
13. PROVIDE BAR SUPPORTS AND SPACERS IN ACCORDANCE WITH REQUIREMENTS OF ACI 315, UNO.
14. NOT ALL ITEMS EMBEDDED IN THE CONCRETE ARE SHOWN ON THE STRUCTURAL DRAWINGS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING AND REINSTALLING ALL EXISTING EMBEDDED ELEMENTS ON THE BRIDGE.
15. EMBEDDED CONDUITS, PIPES, OR OTHER UTILITIES NOT SHOWN ON THE STRUCTURAL DRAWINGS SHALL NOT BE PERMITTED WITHOUT WRITTEN PERMISSION FROM THE ENGINEER. WHERE EMBEDDED ITEMS ARE ALLOWED, THEY SHALL BE SPACED NOT LESS THAN THREE DIAMETERS ON CENTER EACH WAY BUT WITH NOT LESS THAN TWO INCHES CLEAR SPACE BETWEEN EMBEDDED ITEMS. THE TOTAL DEPTH OF EMBEDDED ITEMS AND THE CLEAR SPACE BETWEEN THEM SHALL NOT EXCEED 1/3 OF THE TOTAL CONCRETE DEPTH AND SHALL BE CONFINED TO THE MIDDLE THIRD OF THE CONCRETE DEPTH.
16. HORIZONTAL CONSTRUCTION JOINTS IN CONCRETE POURS ARE PROHIBITED UNLESS AUTHORIZED BY ENGINEER.
17. MULTIPLE PENETRATIONS SHALL NOT BE SPACED CLOSER THAN 3 TIMES THE DIAMETER OR 3 TIMES THE WIDTH OF THE LARGER OPENING WITHOUT APPROVAL BY THE ENGINEER.
18. TYPICAL DETAILS OF REINFORCEMENT SUCH AS HOOKS, BEND DIAMETERS, ETC. SHALL BE IN ACCORDANCE WITH ACI.
19. MECHANICAL REBAR ANCHORS (TERMINATORS) SHALL BE THREADED DEVICES WITH A CAPACITY GREATER THAN THE YIELD STRENGTH OF THE BAR.

REINFORCING STEEL LAP SPLICES AND EMBEDMENTS

BAR SIZE	MIN LAP SPLICE LENGTH (INCHES)		MIN EMBEDMENT LENGTH (INCHES)	
	TOP BARS	OTHER BARS	TOP BARS	OTHER BARS
3	21	20	13	12
4	29	20	17	12
5	36	26	21	15
6	43	31	25	18
7	54	39	32	23
8	71	51	42	30
9	90	65	53	38
10	115	82	67	48
11	141	101	83	59

NOTES:

1. TABLE BASED ON ACI 318-19 WITH F'C = 4,000 PSI AND FY = 60,000 PSI.
2. TOP BARS ARE HORIZONTAL BARS WITH MORE THAN 12" DEPTH OF CONCRETE CAST BELOW THE REINFORCEMENT.
3. HORIZONTAL WALL REINFORCEMENT IS CONSIDERED A TOP BAR.
4. TABLE BASED ON CLEAR COVER NOT MORE THAN 2".
5. FOR CONCRETE WITH F'C OF 4500 PSI AND 5000 PSI USE THE SAME DIMENSIONS SHOWN FOR 4000 PSI MINIMUM CONCRETE OR LAP SPLICES SHOWN ON THE DRAWINGS, WHICHEVER IS GREATER.

D. WATERPROOFING

1. WATERPROOF NEW CONCRETE SURFACES IN ACCORDANCE WITH SPECIFICATIONS SECTION 071416.

E. REINFORCING

1. REINFORCING:

    MESH: ASTM A-185 (FLAT SHEETS) GALVANIZED PER ASTM A1060.
    BARS: ASTM A-615, GRADE 60 - DEFORMED GALVANIZED PER ASTM A767.
2. SPLICES IN REINFORCEMENT: UNLESS OTHERWISE NOTED, SPLICES AND ANCHORAGES SHALL BE PER ACI. STAGGER SPLICES WHEREVER POSSIBLE AND LOCATE SO AS NOT TO IMPAIR STRENGTH OF MEMBERS.
3. REINFORCEMENT WORK OF DETAILING, FABRICATION, AND ERECTION SHALL CONFORM TO THE BUILDING CODE REQUIREMENTS FOR REINFORCED CONCRETE (ACI 318-19, ACI DETAILING MANUAL (SP 66), CRSI MANUAL OF STANDARD PRACTICE, AND THE STRUCTURAL WELDING CODE - REINFORCING STEEL (AWS D1.1)).
4. PROVIDE AND SCHEDULE ON SHOP DRAWINGS THE NECESSARY ACCESSORIES TO HOLD REINFORCEMENT SECURELY IN POSITION.
5. WHERE CONTINUOUS REINFORCEMENT IS CALLED FOR, IT SHALL BE EXTENDED CONTINUOUSLY AROUND CORNERS AND LAPPED AT SPLICES OR AT DISCONTINUOUS ENDS. LAPS SHALL BE CLASS B TENSION LAP SPLICES, UNO.
6. WHERE REINFORCEMENT IS REQUIRED IN SECTION, REINFORCEMENT IS CONSIDERED TYPICAL WHEREVER THE SECTION APPLIES.
7. REINFORCEMENT SHALL BE CONTINUOUS THROUGH CONSTRUCTION JOINTS.
8. DOWELS SHALL MATCH BAR SIZES UNLESS OTHERWISE NOTED.
9. WELDED WIRE FABRIC SHALL BE LAPPED 8 INCHES OR 1 1/2 SQUARES WHICHEVER IS LARGER AND SHALL BE WIRED TOGETHER.
10. REINFORCEMENT INSTALLATION SHALL BE COMPLETED AT LEAST 24 HOURS BEFORE A CONCRETE PLACEMENT TO ENSURE PROPER TIME IS ALLOWED FOR THE INSPECTION OF THE REINFORCING. NOTIFY THE ENGINEER OF COMPLETION.
11. REINFORCEMENT SHALL BE SECURELY TIED IN PLACE AT THE POSITIONS SHOWN ON THE DRAWINGS BEFORE PLACING CONCRETE
12. WHERE REINFORCEMENT IS NOT SHOWN ON DRAWINGS, PROVIDE REINFORCEMENT IN ACCORDANCE WITH APPLICABLE DETAILS AS INDICATED IN THE TYPICAL DETAILS. IN NO CASE SHALL THE REINFORCEMENT BE LESS THAN THE MINIMUM PERMITTED BY THE APPLICABLE CODES.

F. SLAB-ON-GRADE PLACEMENT:

1. SLABS SHALL BE PLACED ON AASHTO NO. 57 OR 10 STONE AS SHOWN ON THESE PLANS.
2. REMOVE AND REPLACE UNSUITABLE MATERIAL WITH AASHTO NO. 57 STONE.
3. THE DESIGN OF CONCRETE MIXES, LOCATING OF CONSTRUCTION JOINTS IN SLABS, STAGGERING OF POUR PLACEMENTS, LOCATION OF POUR STRIPS, AND PLACEMENT AND CURING PROCEDURES ARE TO BE PERFORMED BY THE CONTRACTOR IN A MANNER THAT WILL MINIMIZE SHRINKAGE CRACKING OF THE SLABS.
4. SUBSEQUENT PLACEMENT OF ALTERNATE SLAB STRIPS SHOULD NOT BE MADE SOONER THAN 24 HOURS AFTER THE COMPLETION OF SLAB FINISHING OPERATIONS AND THE INITITATION OF CURING PROCEDURES.
5. THE CONTRACTOR SHALL REPAIR SHRINKAGE CRACKS DESIGNATED AS UNACCEPTABLE BY THE ENGINEER BY EPOXY INJECTION AT NO ADDITIONAL COST TO THE CONTRACT.
6. REPAIR MATERIAL SHALL BE APPROPRIATE FOR THE APPLICATION AS RECOMMENDED BY THE MANUFACTURER.
7. THE CONTRACTOR SHALL SUBMIT FOR REVIEW PRIOR TO THE DEVELOPMENT OF SLAB REINFORCING SHOP DRAWINGS, A PROPOSED SLAB CONSTRUCTION JOINT LAYOUT PLAN, ALONG WITH PROPOSED METHODS FOR CONTROLLING SHRINKAGE CRACKING IN THE SLABS. CONTROL JOINT SPACING NOT TO EXCEED 15 FEET IN ANY DIRECTION, WITH CONTROL JOINT LAYOUT CREATING RECTANGULAR SHAPED SLAB SECTIONS. CONTROL JOINT SLAB RECTANGULAR SHAPE CONFIGURATION NOT TO EXCEED A LENGTH TO WIDTH RATIO OF 1.5 IN ANY DIRECTION.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER
CHIEF SAFETY OFFICER
DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS
PROJECT MANAGER

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
GENERAL NOTES - STRUCTURAL (1 OF 2)

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: WD | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S102**
DWG. NO.: 2 OF 20
SHT. NO.: 15 OF 37
COMPUTER FILE NO.: - | REV. NO.: 00

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GENERAL STRUCTURAL NOTES

G. ANCHORAGE TO CONCRETE:

ANCHOR RODS

1. ANCHOR RODS SHALL BE ASTM F1554 GRADE 55 W/S1 SUPPLEMENT, UNLESS NOTED OTHERWISE. FURNISH ANCHOR RODS PREFABRICATED WITH MATCHING DOUBLE HEAVY HEX NUTS JAMMED AT THE END EMBEDDED IN CONCRETE. FURNISH HARDENED PLATE WASHERS, DOUBLE HEAVY HEX NUTS FOR SECURING THE BASE PLATE TO THE ANCHOR RODS. ANCHOR BOLTS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 OR STAINLESS STEEL ASTM F593 GROUP 3 (TYPE 316).
2. PLATE WASHERS SHALL BE WELDED ALL AROUND WHERE AISC OVERSIZED HOLES ARE USED AT BASE PLATES.
3. ANCHOR RODS SHALL HAVE SUFFICIENT LENGTH TO PROVIDE THE MINIMUM EMBEDMENT SHOWN ON THE DRAWINGS (MEASURED FROM THE FACE OF CONCRETE) WITH ADEQUATE EXTENSION AS REQUIRED TO RECEIVE THE GROUT PAD, BASE PLATE, AND FULL THREAD PROJECTION FOR NUT INSTALLATION + 1/2" ABOVE THE INSTALLED NUTS.
4. ANCHOR ROD INSTALLATION SHALL BE COORDINATED WITH REINFORCING AND FORMWORK. AFTER BASE INSTALLATION, ANCHOR ROD NUTS SHALL BE INSTALLED TO A FULLY-TIGHT CONDITION UNLESS NOTED OTHERWISE.
5. NO HEATING OR BENDING OF THE ANCHOR RODS IS PERMITTED.

NON-SHRINK GROUT

1. NON-SHRINK GROUT SHALL BE CEMENTITIOUS HIGH PRECISION, NATURAL AGGREGATE, NON-METALLIC, NON-STAINING, NON-SHRINKABLE GROUT CONFORMING TO ASTM C1107. GROUT SHALL HAVE A SPECIFIED MINIMUM COMPRESSIVE STRENGTH OF 8,000 PSI AT 5 DAYS. PRE-GROUTING OF BASE PLATES SHALL NOT BE PERMITTED.

POST-INSTALLED ANCHORAGE TO CONCRETE

1. ANCHOR CAPACITY USED IN DESIGN SHALL BE BASED ON THE TECHNICAL DATA PUBLISHED IN THE ICC APPROVAL REPORT. SUBSTITUTION REQUESTS MUST INCLUDE ICC ESR REPORT SHOWING COMPLIANCE WITH RELEVANT BUILDING CODE AND INSTALLATION CATEGORY AND BE APPROVED IN WRITING BY THE CONTRACTING OFFICER'S REPRESENTATIVE/ENGINEER OF RECORD PRIOR TO USE. THE DESIGN OF POST-INSTALLED ANCHORS OR REINFORCING BARS TO CONCRETE SHALL BE PERFORMED PER THE ANCHORAGE REQUIREMENTS OF THE ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
2. INSTALL ANCHORS PER THE MANUFACTURER INSTRUCTIONS, AS INCLUDED IN THE ANCHOR PACKAGING.
3. ANCHOR CAPACITY IS DEPENDENT UPON SPACING BETWEEN ADJACENT ANCHORS AND EDGE DISTANCE. INSTALL ANCHORS IN ACCORDANCE WITH SPACING AND EDGE CLEARANCES INDICATED ON THE DRAWINGS.
4. EXISTING REINFORCING BARS IN THE STRUCTURE MAY CONFLICT WITH SPECIFIC ANCHOR LOCATIONS. UNLESS NOTED OTHERWISE ON THE DRAWINGS, THE CONTRACTOR SHALL LOCATE THE POSITION OF THE EXISTING REINFORCING BARS AND AVOID CUTTING.

EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED ANCHORS SHALL CONSIST OF THE FOLLOWING ANCHOR TYPES, OR APPROVED EQUAL. POST-INSTALLED ANCHORS SHALL BE HOT DIPPED GALVANIZED IN ACCORDANCE WITH ASTM A153 OR STAINLESS STEEL ASTM F593 GROUP 3 (TYPE 316).

DRILLED-IN SCREW ANCHORS INTO CONCRETE

1. HILTI KWIK HUS-EZ SCREW ANCHORS PER ICC ESR-3027
2. SIMPSON TITEN HD SCREW ANCHOR PER ICC ESR-2713

DRILLED-IN EXPANSION ANCHORS INTO CONCRETE

1. HILTI KWIK-BOLT TZ EXPANSION ANCHOR PER ICC ESR-1917
2. SIMPSON STRONG BOLT 2 WEDGE ANCHOR PER ICC ESR-3037

ADHESIVE ANCHORS AND REBAR DOWELING INTO CONCRETE

1. HILTI "HIT-HY 200" ADHESIVE ANCHOR SYSTEM WITH HILTI HAS THREADED ROD PER ICC ESR-3187
2. SIMPSON SET-XP ADHESIVE ANCHORING SYSTEM PER ICC ESR-2508

POST-INSTALLED REBAR DOWELING INTO CONCRETE

1. THE DESIGN OF STRAIGHT POST-INSTALLED REINFORCING BARS SHALL BE PERFORMED PER THE DEVELOPMENT AND SPLICE REQUIREMENTS OF THE ACI 318 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE.
2. THE EPOXY SYSTEM SHALL BE TESTED IN ACCORDANCE WITH THE ICC-ES ACCEPTANCE CRITERIA FOR POST-INSTALLED EPOXY ANCHORS IN CONCRETE ELEMENTS (AC 308), TABLE 3.8. ICC-ES EVALUATION SERVICE REPORT SHOWING COMPLIANCE WITH IBC AS REQUIRED.
3. POST-INSTALLED REINFORCING BAR INSTALLATION SHALL BE PERFORMED PER THE MANUFACTURER'S PRINTED INSTALLATION INSTRUCTIONS AS INCLUDED IN THE ANCHOR PACKAGING. PER ACI, INSTALLER CERTIFICATION REQUIRED FOR REBAR INSTALLED IN HORIZONTAL TO VERTICAL APPLICATIONS THAT ARE SUBJECT TO SUSTAINED TENSION LOADS. SUBMIT DOCUMENTATION OF INSTALLER CERTIFICATION PRIOR TO COMMENCEMENT OF ANCHOR INSTALLATION.
4. THE POSITION OF EXISTING REINFORCING BARS IN THE CONCRETE STRUCTURE SHALL BE LOCATED PRIOR TO POST-INSTALLING REBAR. EXISTING REBAR SHALL BE LOCATED USING GPR, X-RAY, CHIPPING OR OTHER APPROVED MEANS.
5. MECHANICALLY ROUGHEN EXISTING CONCRETE SURFACE TO A MINIMUM AMPLITUDE OF ¼ INCH.
6. EXCEPT WHERE INDICATED ON THE DRAWINGS, POST-INSTALLED REBAR SHALL CONSIST OF THE FOLLOWING EPOXY SYSTEMS:
   a. HILTI "HIT-HY 200" PER ICC ESR-3187
   b. SIMPSON "SET-XP" ADHESIVE ANCHORING SYSTEM PER ICC ESR-2508

H. SPECIAL INSPECTIONS

1. THESE INSPECTIONS DO NOT RELIEVE THE CONTRACTOR OF HIS OR HER RESPONSIBILITIES TO CARRY OUT HIS OWN QUALITY CONTROL INSPECTIONS AND TESTING.

STATEMENT OF STRUCTURAL SPECIAL INSPECTION

1. SPECIAL INSPECTION MUST CONFORM TO CHAPTER 17 OF THE IBC.
2. SPECIAL INSPECTION AND ASSOCIATED TESTING MUST BE PERFORMED BY A QUALIFIED INSPECTION AND TESTING AGENCY MEETING THE REQUIREMENTS OF THE IBC.
3. STRUCTURAL OBSERVATION FOR SEISMIC RESISTANCE IS NOT REQUIRED PER IBC SECTION 1704.6.1.
4. STRUCTURAL OBSERVATION FOR WIND RESISTANCE IS NOT REQUIRED PER IBC SECTION 1704.6.2.
5. SPECIAL INSPECTION FOR WIND RESISTANCE IS NOT REQUIRED PER IBC SECTION 1705.11.
6. SPECIAL INSPECTIONS ARE REQUIRED FOR THE FOLLOWING MATERIALS AND INSTALLATIONS:
   CONCRETE: 2018 IBC 1705.3

I. MURALS & ARTWORK

1. THE CONTRACTOR SHALL MINIMIZE DISTURBANCE TO EXISTING MURALS. UPON COMPLETION OF CONCRETE REPAIR WORK, THE CONTRACTOR SHALL COORDINATE WITH SEPTA FOR THE RESTORATION/REPAINTING BY OTHERS OF THE IMPACTED MURALS (ARCADIA UNIVERSITY – ML BRIDGE 11.83). THE CONTRACTOR SHALL PROVIDE ACCESS AND ASSIST WITH PREPARING THE CONCRETE SURFACES FOR PAINTING.

REPAIR QUANTITY TABLE

KEY:

D = DELAMINATION

S = SPALL

C = CRACK

R = RECONSTRUCTION

SOUTH STAIR REPAIR LOCATIONS & TYPES – (SEE DWG. S109)			
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY
S-1	CONCRETE SPALL	CENTER STEP 1 – STAIR REPAIR	8 SF
S-2	CONCRETE SPALL	UPPER STEP 1 – STAIR REPAIR	8 SF
S-3	CONCRETE SPALL	UPPER STEP 10 – STAIR REPAIR	8 SF
S-4	CONCRETE SPALL	TOP LANDING – TYPE 1 SPALL REPAIR	8 SF

NORTH STAIR REPAIR LOCATIONS & TYPES – (SEE DWG. S109)			
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY
S-1	CONCRETE SPALL	LOWER STEP 4 LEFT HALF – STAIR REPAIR	4 SF
S-2	CONCRETE SPALL	LOWER STEP 5 RIGHT HALF – STAIR REPAIR	4 SF
S-3	CONCRETE SPALL	LOWER STEP 6 – STAIR REPAIR	8 SF
S-4	CONCRETE SPALL	LOWER STEP 7 RIGHT HALF – STAIR REPAIR	4 SF
S-5	CONCRETE SPALL	CENTER STEP 1 – STAIR REPAIR	8 SF
S-6	CONCRETE SPALL	CENTER STEPS 5, 6 & 7 – STAIR REPAIR	24 SF
S-7	CONCRETE SPALL	CENTER STEP 10 – STAIR REPAIR	8 SF
S-8	CONCRETE SPALL	UPPER LANDING – TYPE 1 SPALL REPAIR	8 SF
S-9	CONCRETE SPALL	UPPER STEP 1 – STAIR REPAIR	8 SF
S-10	CONCRETE SPALL	UPPER STEP 5 – STAIR REPAIR	8 SF
S-11	CONCRETE SPALL	UPPER STEP 8 – STAIR REPAIR	8 SF
S-12	CONCRETE SPALL	UPPER STEP 11 – STAIR REPAIR	8 SF
S-13	CONCRETE SPALL	TOP LANDING – TYPE 1 SPALL REPAIR	8 SF

WEST ABUTMENT REPAIR LOCATIONS & TYPES – (SEE DWG. S110)			
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY
S-1	CONCRETE SPALL	NORTHWEST CORNER – TYPE 2 SPALL REPAIR	34 SF
S-2	CONCRETE SPALL	SOUTHWEST CORNER – TYPE 2 SPALL REPAIR	12 SF
R-1	BARRIER REPLACEMENT	SOUTHWEST WW & BARRIER – REPLACEMENT	37 LF
C-1	VERTICAL CRACK	NORTHWEST CORNER BARRIER – CRACK REPAIR	3.5 LF
C-2	VERTICAL CRACK	SOUTHWEST WW – CRACK REPAIR	8 LF

PIER REPAIR LOCATIONS & TYPES – (SEE DWG. S111)			
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY
S-1	CONCRETE SPALL	COLUMN 1 – TYPE 2 SPALL REPAIR	98 SF
S-2	CONCRETE SPALL	COLUMN 2 – TYPE 2 SPALL REPAIR	112 SF
S-3	CONCRETE SPALL	COLUMN 3 – TYPE 2 SPALL REPAIR	112 SF
S-4	CONCRETE SPALL	COLUMN 4 – TYPE 2 SPALL REPAIR	98 SF
S-5	CONCRETE SPALL	EAST FACE – TYPE 2 SPALL REPAIR	4 SF
S-6	CONCRETE SPALL	EAST FACE – TYPE 2 SPALL REPAIR	4 SF
S-7	CONCRETE SPALL	NORTH NOSE – TYPE 2 SPALL REPAIR	7.5 SF
S-8	CONCRETE SPALL	WEST FACE – TYPE 2 SPALL REPAIR	4 SF
S-9	CONCRETE SPALL	CURB/FOOTING – MEDIAN REPAIR	196 SF
C-1	VERTICAL CRACK	EAST FACE COLUMN 1 – CRACK REPAIR	4.5 LF
C-2	VERTICAL CRACK	EAST FACE COLUMN 2 – CRACK REPAIR	4 LF
C-3	VERTICAL CRACK	EAST FACE CENTER ARCH – CRACK REPAIR	2 LF
C-4	VERTICAL CRACK	EAST FACE COLUMN 3 – CRACK REPAIR	5 LF
C-5	VERTICAL CRACK	EAST FACE RIGHT ARCH – CRACK REPAIR	2 LF
C-6	VERTICAL CRACK	WEST FACE COLUMN 1 – CRACK REPAIR	4 LF
C-7	VERTICAL CRACK	WEST FACE COLUMN 2 – CRACK REPAIR	4 LF
C-8	VERTICAL CRACK	WEST FACE CENTER ARCH – CRACK REPAIR	2 LF
C-9	VERTICAL CRACK	WEST FACE COLUMN 3 – CRACK REPAIR	4 LF
C-10	VERTICAL CRACK	WEST FACE COLUMN 4 – CRACK REPAIR	4 LF

EAST ABUTMENT REPAIR LOCATIONS & TYPES – (SEE DWG. S112)			
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY
S-1	CONCRETE SPALL	NORTHEAST CORNER – TYPE 2 SPALL REPAIR	12 SF
S-2	CONCRETE SPALL	SOUTHEAST RETAINING WALL – TYPE 2 SPALL REPAIR	262 SF
C-1	VERTICAL CRACK	ABUTMENT FACE – CRACK REPAIR	15 LF

NORTH FASCIA REPAIR LOCATIONS & TYPES – (SEE DWG. S113)			
ITEM NO.	DESCRIPTION	REPAIR TYPE	QTY
S-1	CONCRETE SPALL	TYPE 2 SPALL REPAIR	582 SF

REPAIR NOTES:

1. CONTRACTOR TO REMOVE DEFECTIVE CONCRETE UNTIL SOUND CONCRETE IS ESTABLISHED. QUANTITIES AND REPAIR TYPE NEED TO BE REASSESSED BY THE CONTRACTOR AFTER REMOVAL OF DEFECTS.
2. REFER TO INDIVIDUAL DETAILS FOR LOCATIONS FOR EACH REPAIR ITEM. SEE DWGS S109 TO S113.
3. FOR REPAIR DETAILS SEE DWGS S114 TO S116.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION
STRUCTURAL

GENERAL NOTES - STRUCTURAL (2 OF 2)

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: WD | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S103**
DWG. NO.: 3 OF 20
SHT. NO.: 16 OF 37
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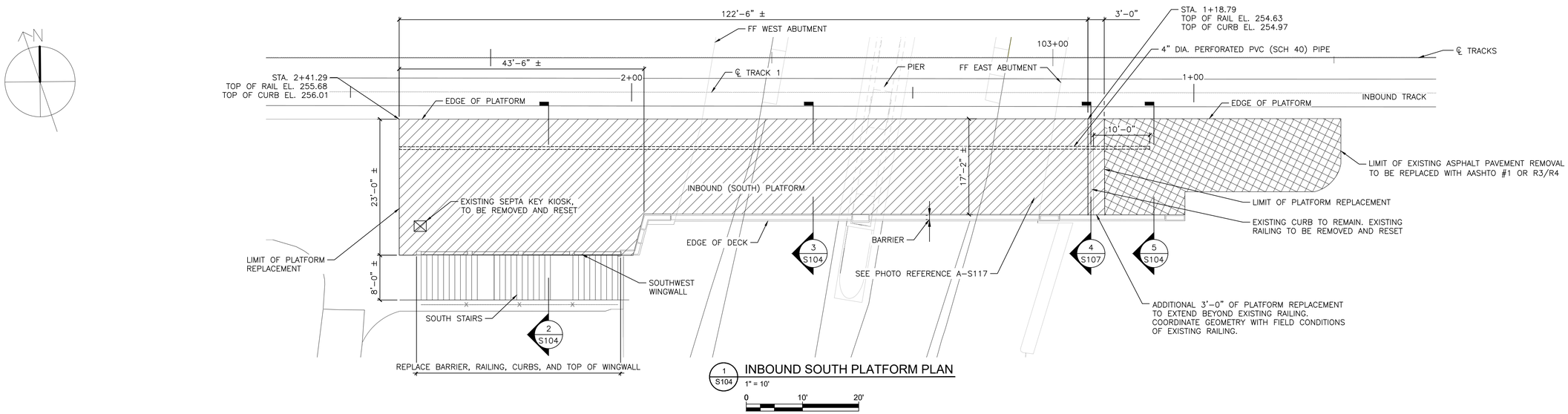
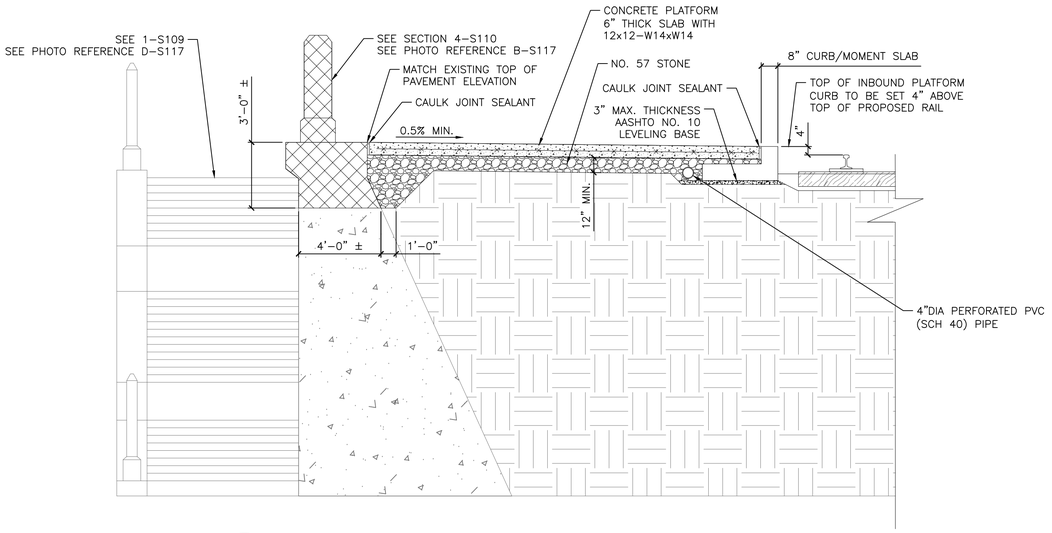
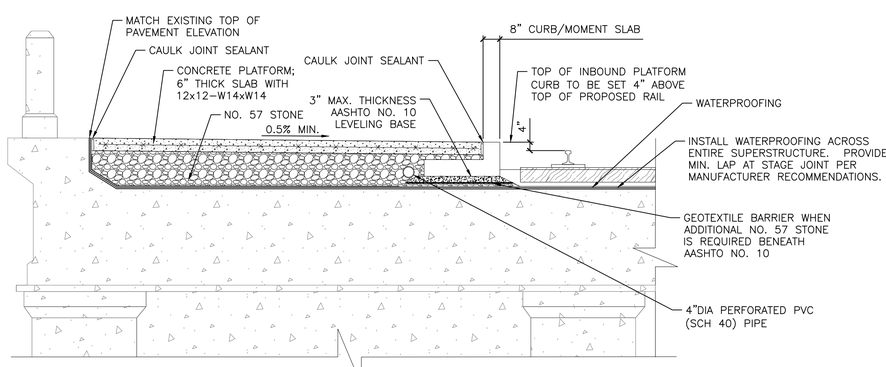


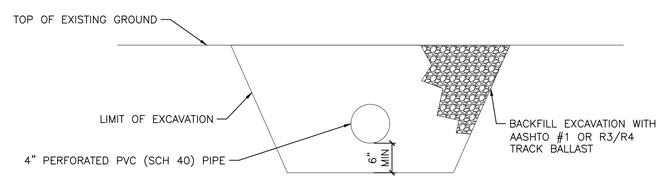
1 S104 **INBOUND SOUTH PLATFORM PLAN**
1" = 10'
0 10' 20'



2 S104 **SOUTHWEST WINGWALL AND INBOUND PLATFORM SECTION**
NTS



3 S104 **INBOUND PLATFORM SECTION**
NTS



5 S104 **UNDERDRAIN EXTENSION SECTION**
NTS

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00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
INBOUND PLATFORM

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
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S104

DWG. NO.: 4 OF 20
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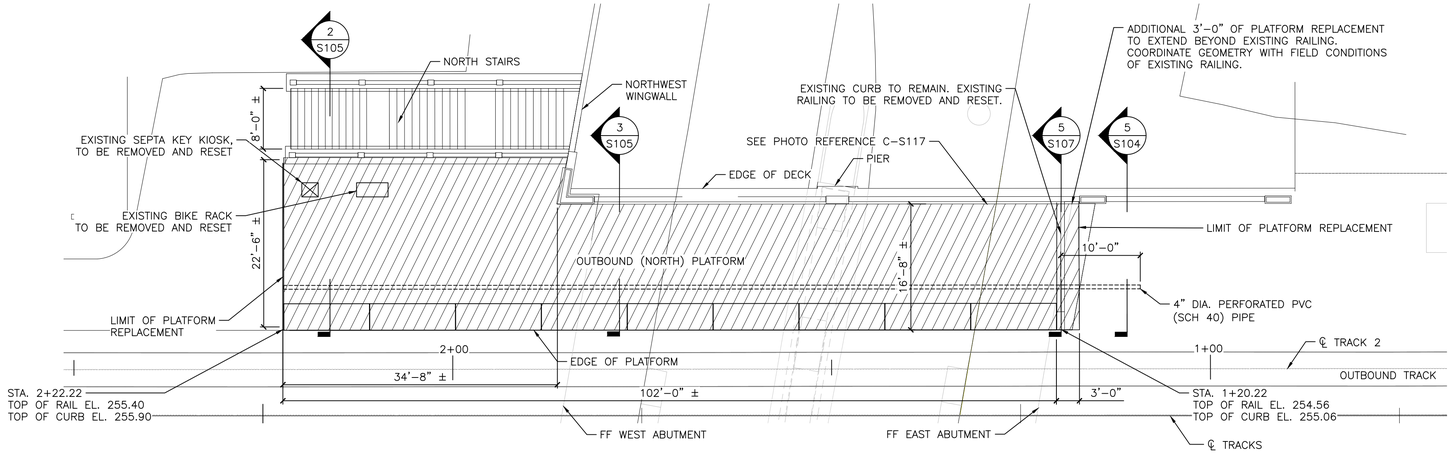
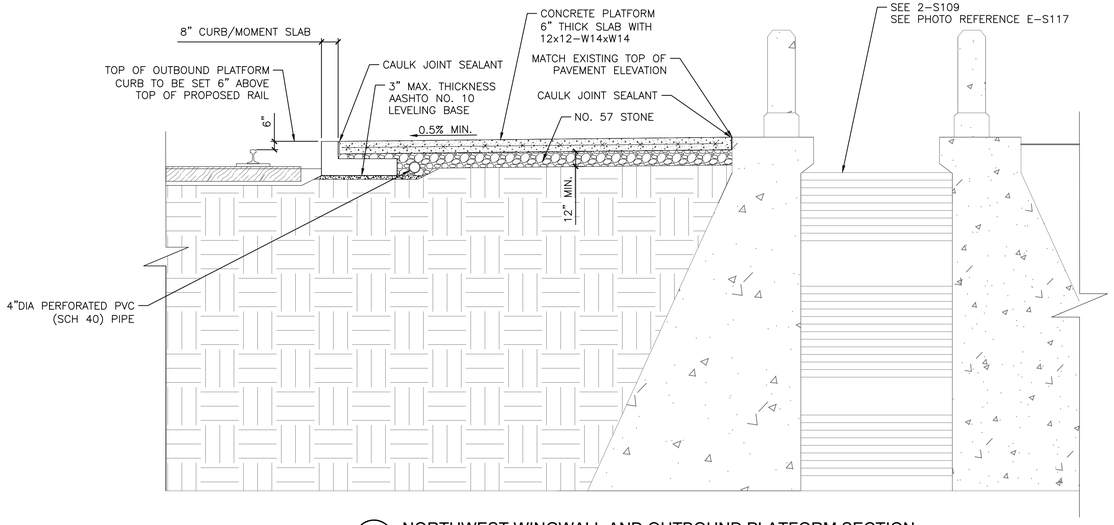


1 S105 **OUTBOUND NORTH PLATFORM PLAN**

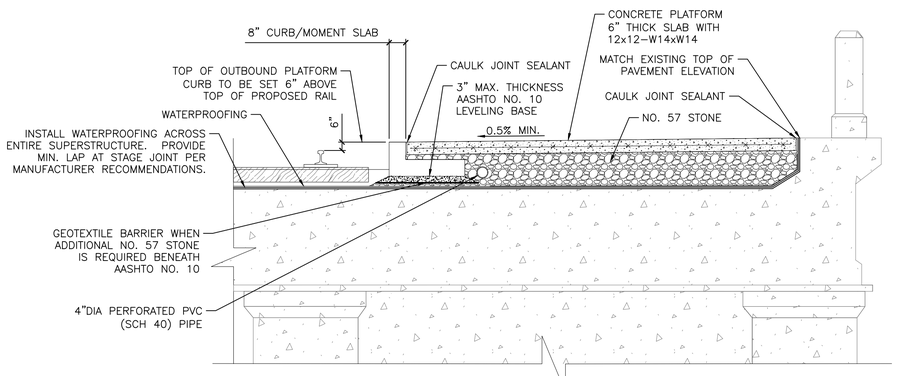
SCALE: 1"=10'

0 10' 20'



2 S105 **NORTHWEST WINGWALL AND OUTBOUND PLATFORM SECTION**

NTS



3 S105 **OUTBOUND PLATFORM SECTION**

NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

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MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL
OUTBOUND PLATFORM

SCALE: AS NOTED	SCALE FACTOR: 1:1
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S105

DWG. NO.: 5 OF 20
SHT. NO.: 18 OF 37
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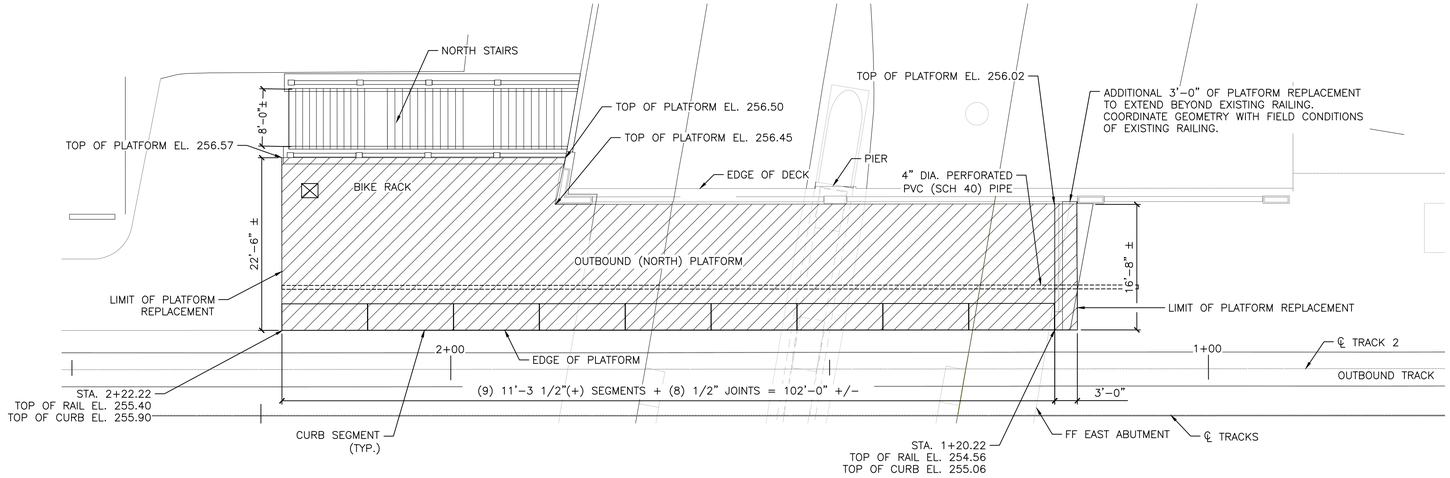
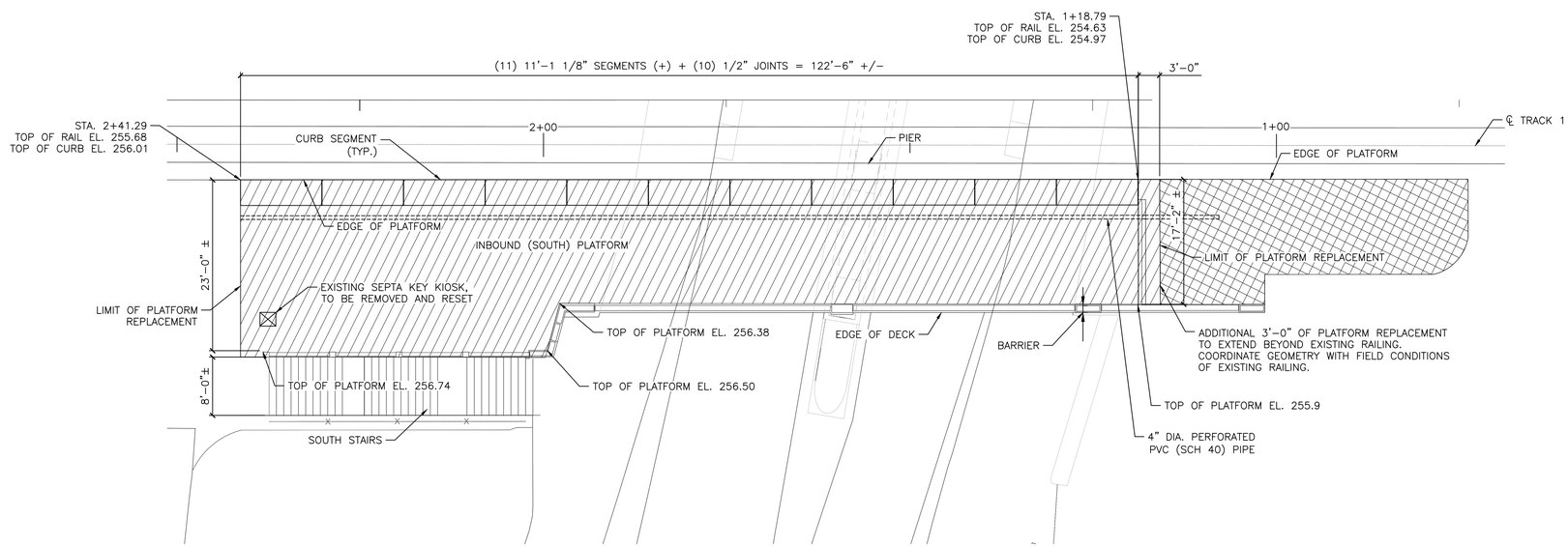


1 / S106 OUTBOUND PLATFORM - CURB SEGMENT LAYOUT

SCALE: 1"=10'

0 10' 20'



2 / S106 INBOUND PLATFORM - CURB SEGMENT LAYOUT

SCALE: 1"=10'

0 10' 20'

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REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL

PLATFORM CURB LAYOUT

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
	CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: **S106**	
DWG. NO.: 6 OF 20	
SHT. NO.: 19 OF 37	
COMPUTER FILE NO.: -	REV. NO.: 00

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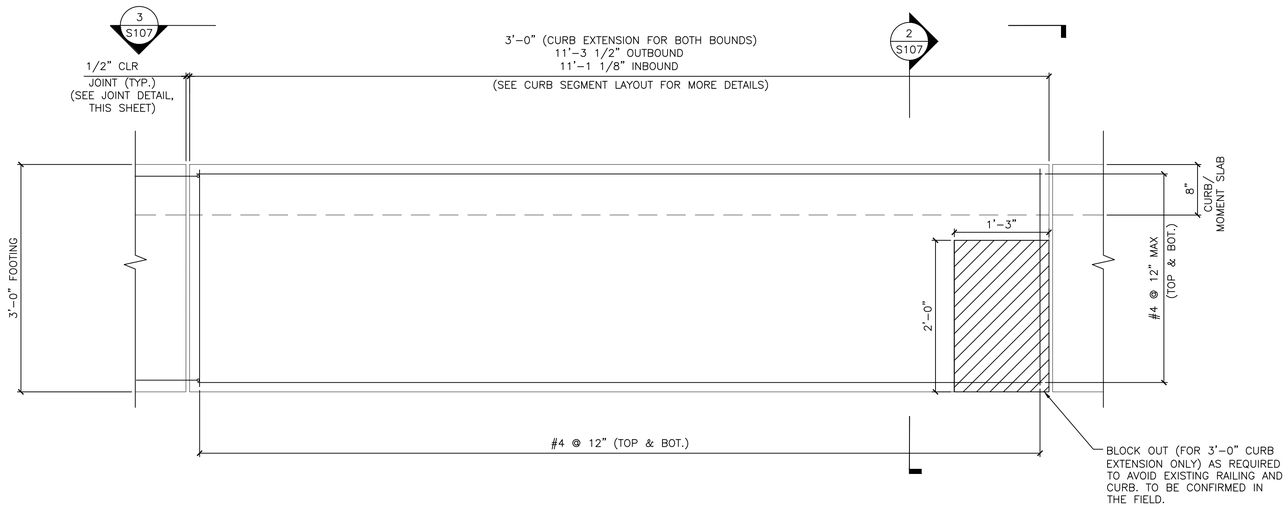
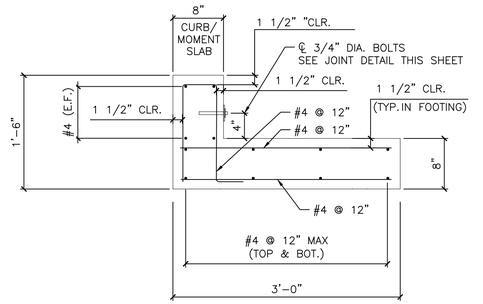
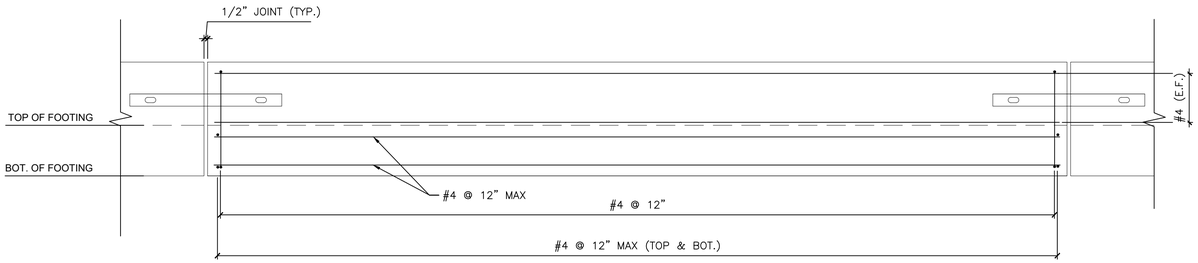


1 S107 **TYPICAL CURB FOOTING PLAN**
SCALE: 1"=10'
0 10' 20'



2 S107 **SECTION**
SCALE: 1"=10'
SEE S104 AND S105 FOR BACKFILL DETAIL
0 10' 20'



3 S107 **SECTION**
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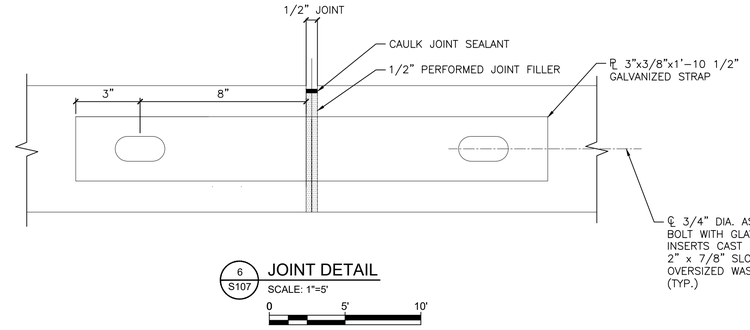
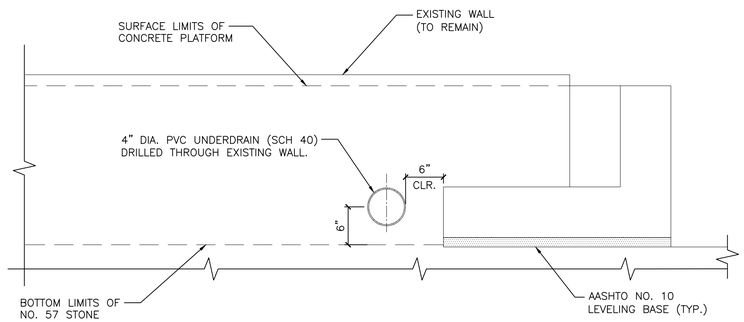
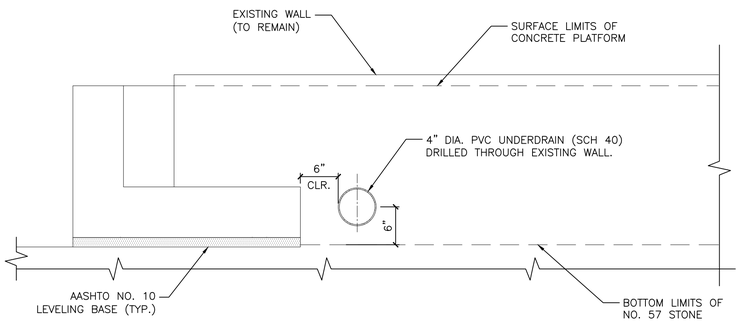
0 10' 20'



6 S107 **JOINT DETAIL**
SCALE: 1"=5'
0 5' 10'



4 S107 **SECTION**
NTS



5 S107 **SECTION**
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
PLATFORM CURB DETAILS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
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WORK ORDER NO.: -	

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S107

DWG. NO.:	7	OF	20
SHT. NO.:	20	OF	37

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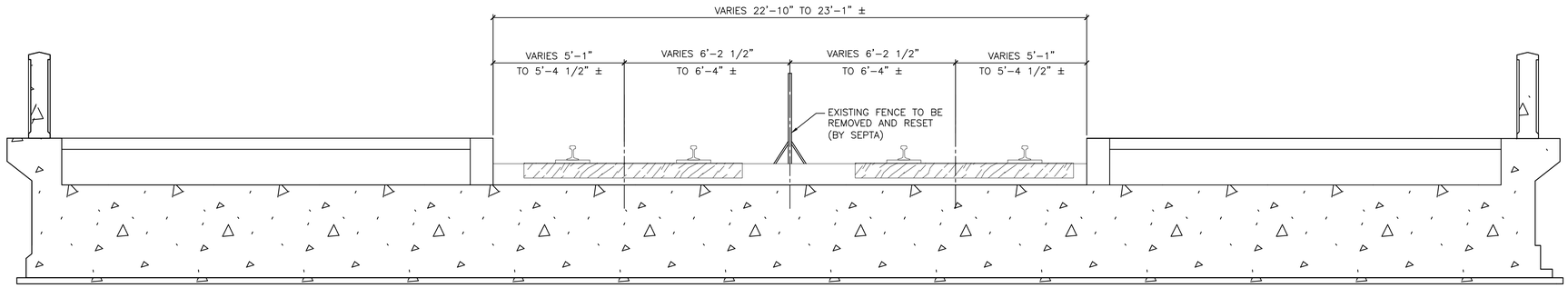
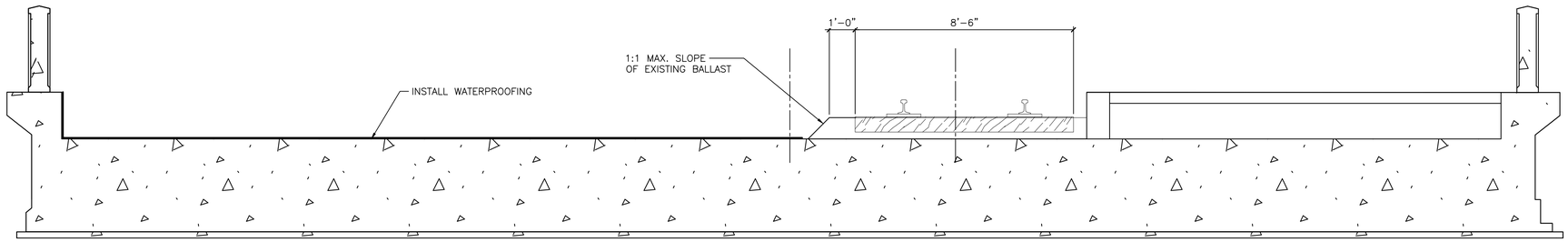


1 S108 **EXISTING SECTION**

SCALE: 3/8" = 1'-0"

0 3/8" 3/4"

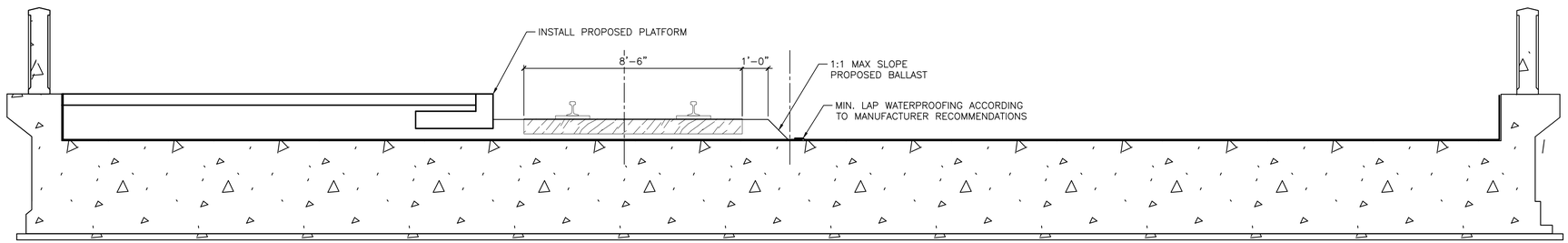


2 S108 **CONSTRUCTION STAGE 1**

SCALE: 3/8" = 1'-0"

0 3/8" 3/4"

EITHER INBOUND OR OUTBOUND TRACK CAN BE RECONSTRUCTED IN STAGE 1. CONTRACTOR TO COORDINATE WITH SEPTA FORCES PRIOR TO START OF WORK.

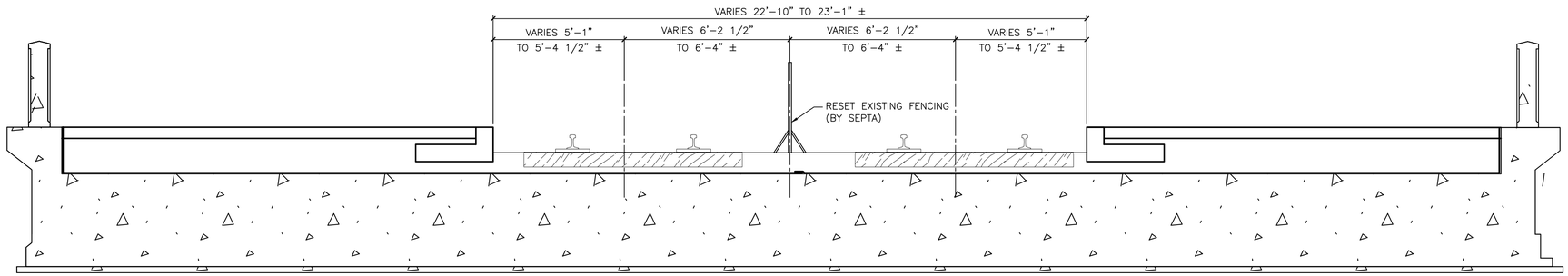


3 S108 **CONSTRUCTION STAGE 2**

SCALE: 3/8" = 1'-0"

0 3/8" 3/4"

EITHER INBOUND OR OUTBOUND TRACK CAN BE RECONSTRUCTED IN STAGE 2. CONTRACTOR TO COORDINATE WITH SEPTA FORCES PRIOR TO START OF WORK.



4 S108 **PROPOSED SECTION**

SCALE: 3/8" = 1'-0"

0 3/8" 3/4"

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
EM&C DIVISION
1234 MARKET ST, 13TH FL.
PHILADELPHIA, PA 19107

CHIEF OPERATING OFFICER

CHIEF SAFETY OFFICER

DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL

CHIEF ENGINEER, BRIDGES & BUILDINGS

SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS

MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS

PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
DAVID J. PHELAN
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057506

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TEL. 215-569-2900
FAX. 215-569-5963

JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL

CONSTRUCTION STAGING SECTIONS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD / CHECKED BY: JS
WORK ORDER NO.: -	

DRAWING NUMBER
S108

DWG. NO.:	8	OF	20
SHT. NO.:	21	OF	37
COMPUTER FILE NO.: -		REV. NO.:	00

DATE PRINTED: 11/14/2024 11:49:13 AM

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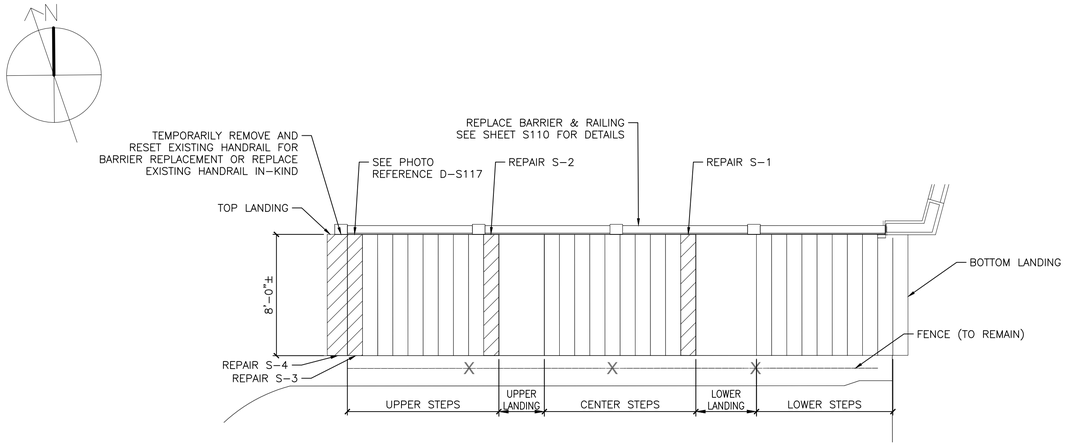
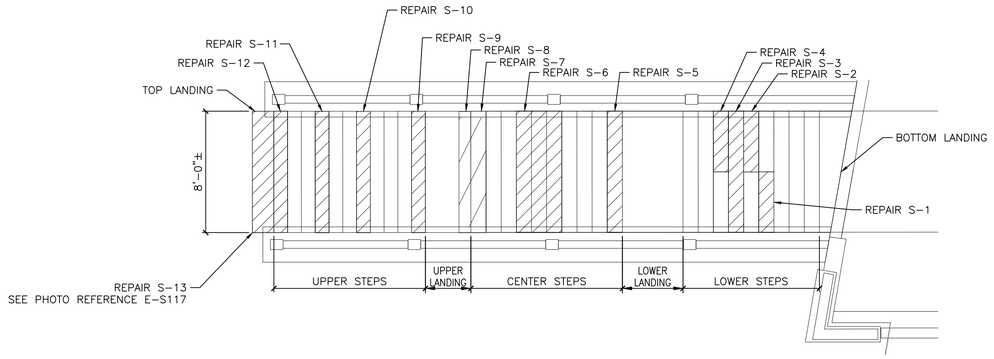


1 / S109 INBOUND (SOUTH) PLATFORM STAIRS PLAN
NTS



2 / S109 OUTBOUND (NORTH) PLATFORM STAIRS PLAN
NTS

NOTES:
1. FOR REPAIR TYPE & QUANTITY TABLES, SEE DWG S103.
2. FOR REPAIR DETAILS, SEE DWGS S114 TO S116.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL
NORTH & SOUTH STAIRS

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: WD | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S109**
DWG. NO.: 9 OF 20
SHT. NO.: 22 OF 37
COMPUTER FILE NO.: - | REV. NO.: 00

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DATE PRINTED: 11/14/2024 11:49:31 AM
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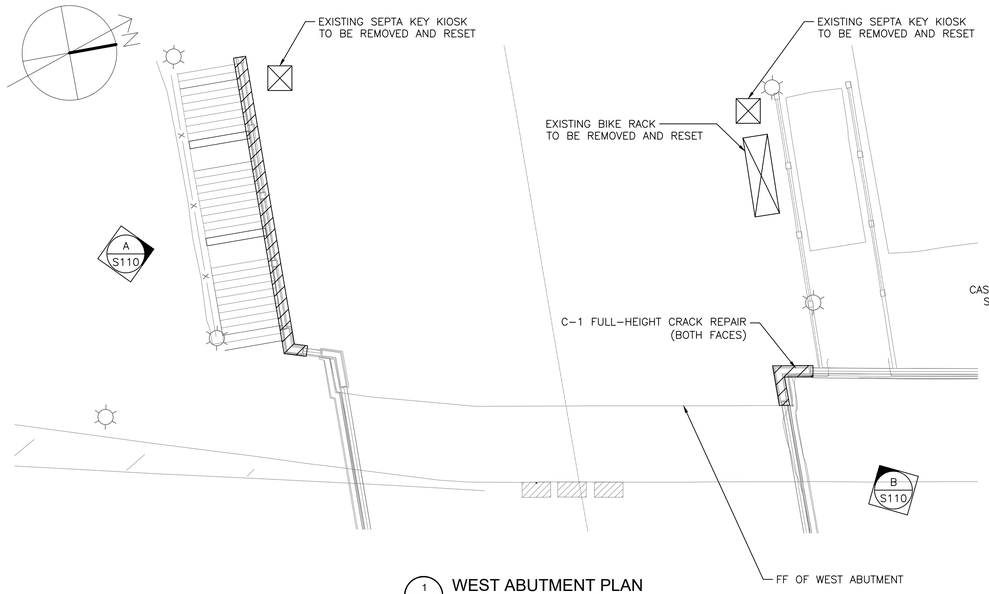
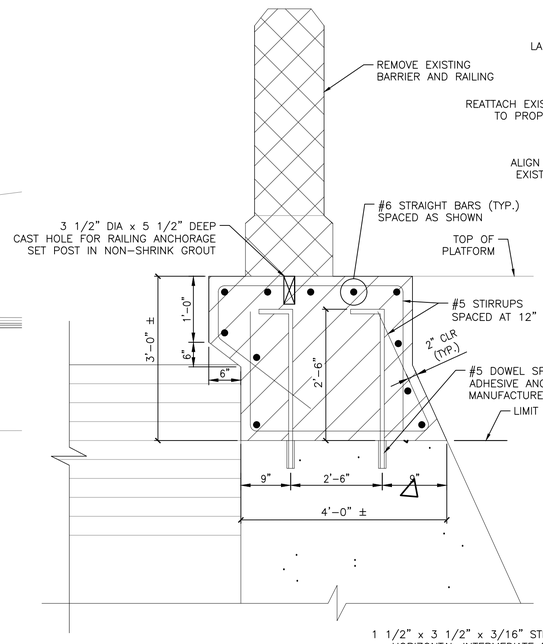
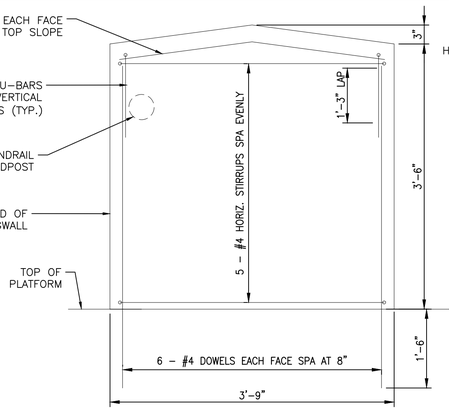


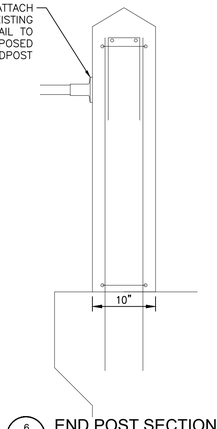
1 S110 **WEST ABUTMENT PLAN**
SCALE: 1"=10'
0 10' 20'



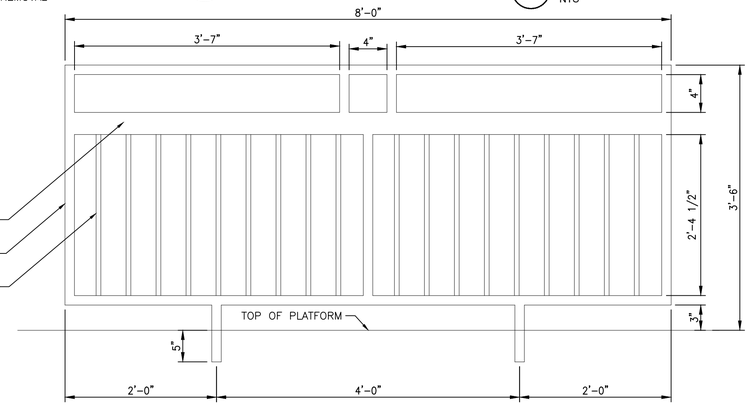
4 S110 **SECTION**
NTS



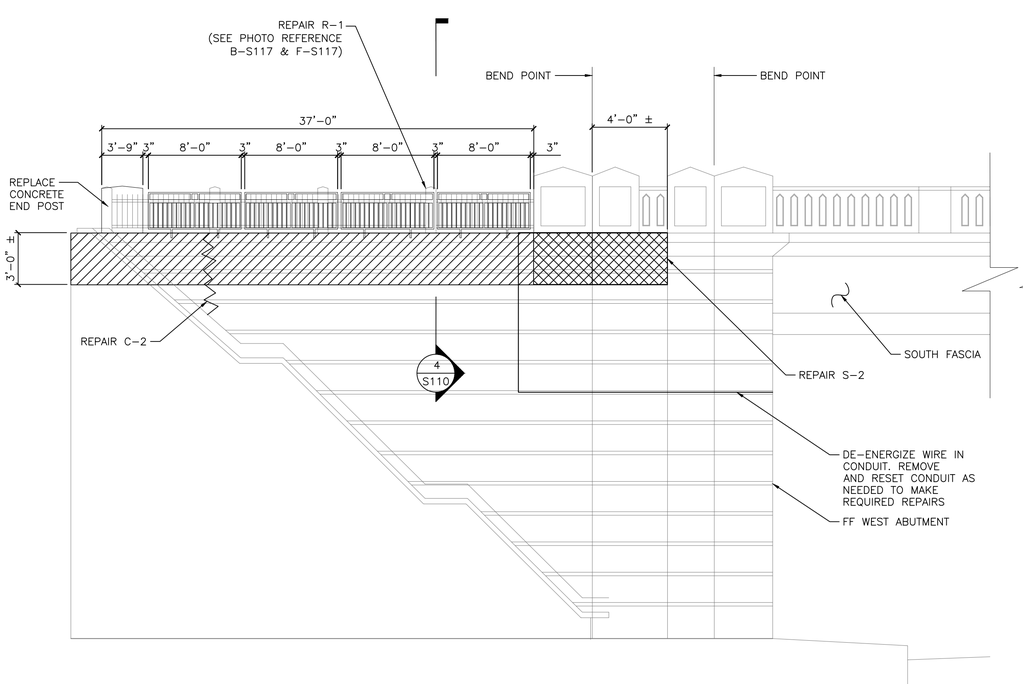
5 S110 **END POST ELEVATION**
NTS



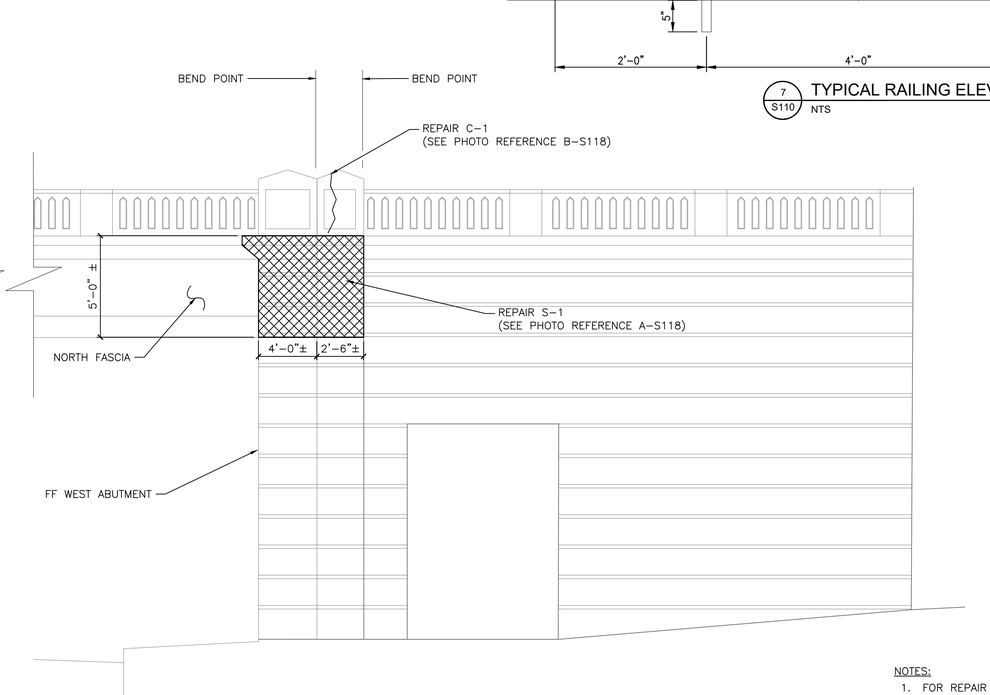
6 S110 **END POST SECTION**
NTS



7 S110 **TYPICAL RAILING ELEVATION**
NTS



A S110 **SOUTHWEST WINGWALL & CORNER ELEVATION**
NTS



B S110 **NORTHWEST WINGWALL & CORNER ELEVATION**
NTS

NOTES:
1. FOR REPAIR TYPE & QUANTITY TABLES, SEE DWG S103.
2. FOR REPAIR DETAILS, SEE DWGS S114 TO S116.

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MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
WEST ABUTMENT PLAN & WINGWALLS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD / CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: **S110**	
DWG. NO.: 10 OF 20	
SHT. NO.: 23 OF 37	
COMPUTER FILE NO.: -	REV. NO.: 00

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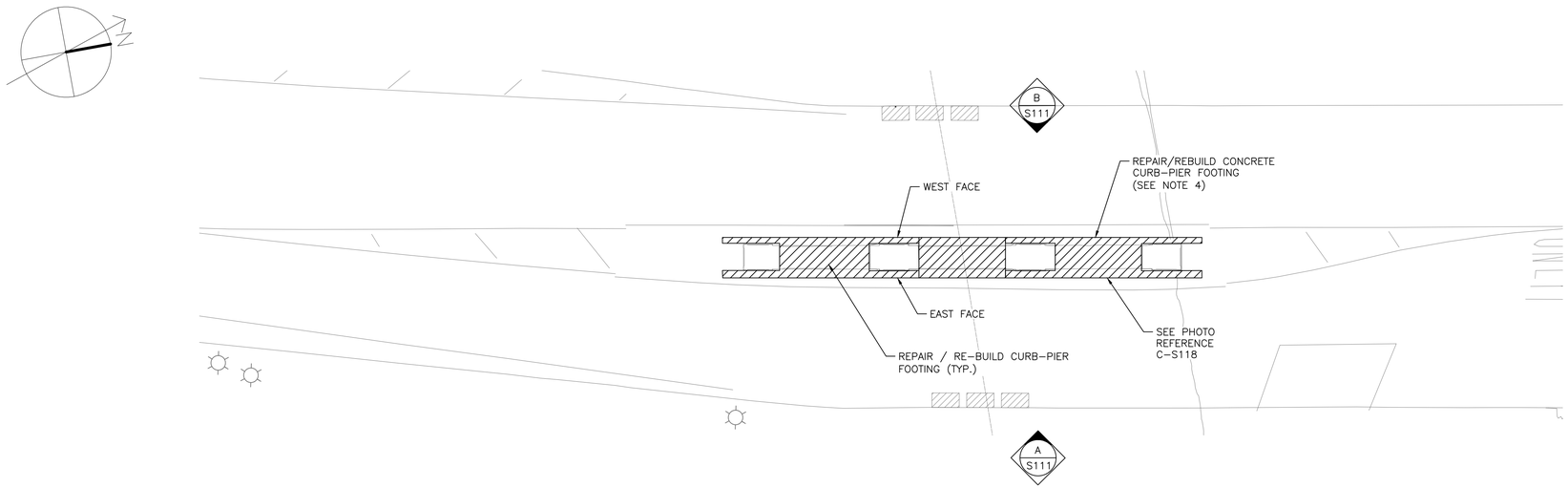
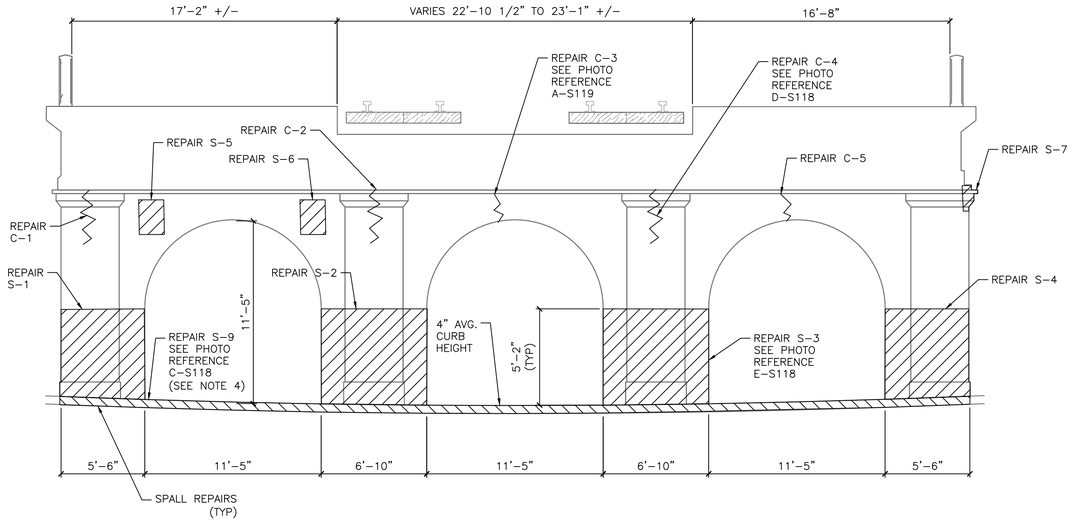
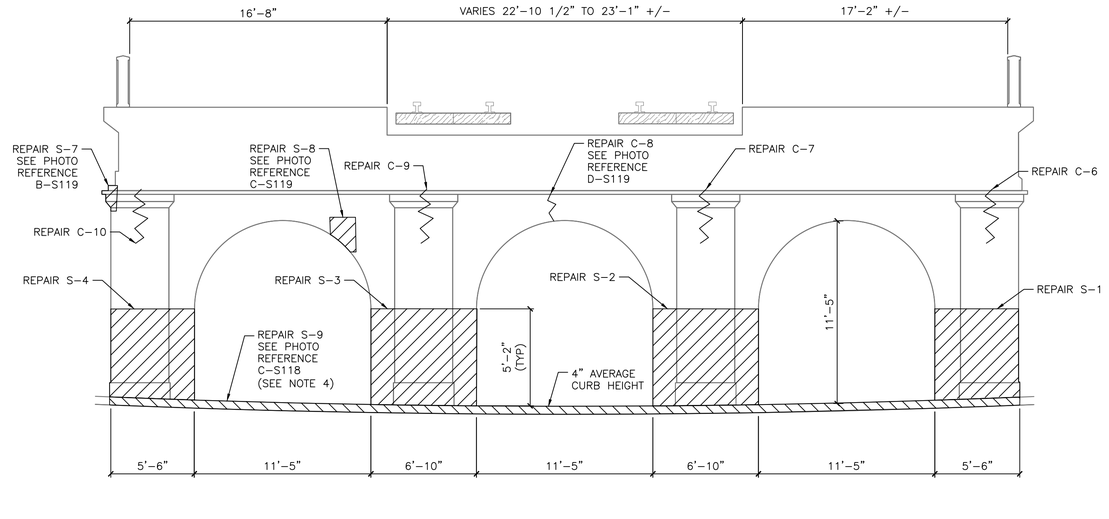
DATE PRINTED: 11/14/2024 11:49:52 AM
IFC SUBMISSION



1 S111 **PIER PLAN**
NTS



A S111 **PIER EAST FACE ELEVATION**
NTS



B S111 **PIER WEST FACE ELEVATION**
NTS

NOTES:

1. FOR REPAIR TYPE & QUANTITY TABLES, SEE DWG S103.
2. FOR REPAIR DETAILS, SEE DWGS S114 TO S116.
3. REPAINT BLACK AND YELLOW STRIPES ON THE PIER AFTER THE REPAIRS, WITH MATCHING PAINT, COLOR, SHADE AND TEXTURE. COORDINATE PAINTING REQUIREMENTS WITH TOWNSHIP.
4. EXISTING MEDIAN CURB IS INTEGRAL WITH THE PIER FOUNDATION. DO NOT CUT ANY EXISTING REINFORCING. SUPPLEMENT ANY BROKEN BARS OR BARS EXHIBITING SECTION LOSS WITH NEW GALVANIZED BARS OF THE SAME DIAMETER.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL
PIER PLAN & ELEVATION

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: WD | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S111**
DWG. NO.: 11 OF 20
SHT. NO.: 24 OF 37
COMPUTER FILE NO.: - | REV. NO.: 00

DATE PRINTED: 11/14/2024 11:49:54 AM
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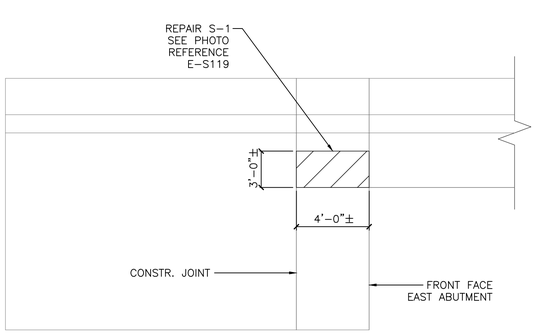
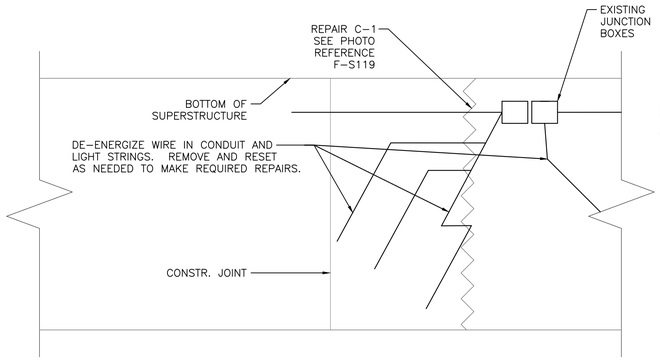
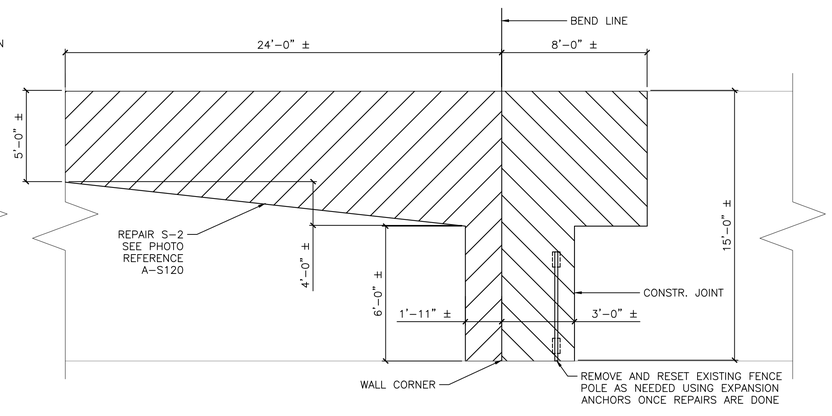
1 S112 EAST ABUTMENT PLAN
NTS



A S112 NORTHEAST ABUTMENT CORNER ELEVATION
NTS



B S112 EAST ABUTMENT WALL ELEVATION
NTS



C S112 SOUTHEAST ABUTMENT CORNER & RETAINING WALL ELEVATION
NTS

NOTES:
1. FOR REPAIR TYPE & QUANTITY TABLES, SEE DWG S103.
2. FOR REPAIR DETAILS, SEE DWGS S114 TO S116.

SOUTHEASTERN PENNSYLVANIA TRANSPORTATION AUTHORITY
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1234 MARKET ST, 13TH FL,
PHILADELPHIA, PA 19107

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DEPUTY CHIEF OPERATIONS OFFICER - BUS/RAIL
CHIEF ENGINEER, BRIDGES & BUILDINGS
SENIOR PROGRAM MANAGER, BRIDGES & BUILDINGS
MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS
PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL

EAST ABUTMENT PLAN & WINGWALLS

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
	CHECKED BY: JS

WORK ORDER NO.: -

DRAWING NUMBER
S112

DWG. NO.: 12 OF 20
SHT. NO.: 25 OF 37
COMPUTER FILE NO.: -
REV. NO.: 00

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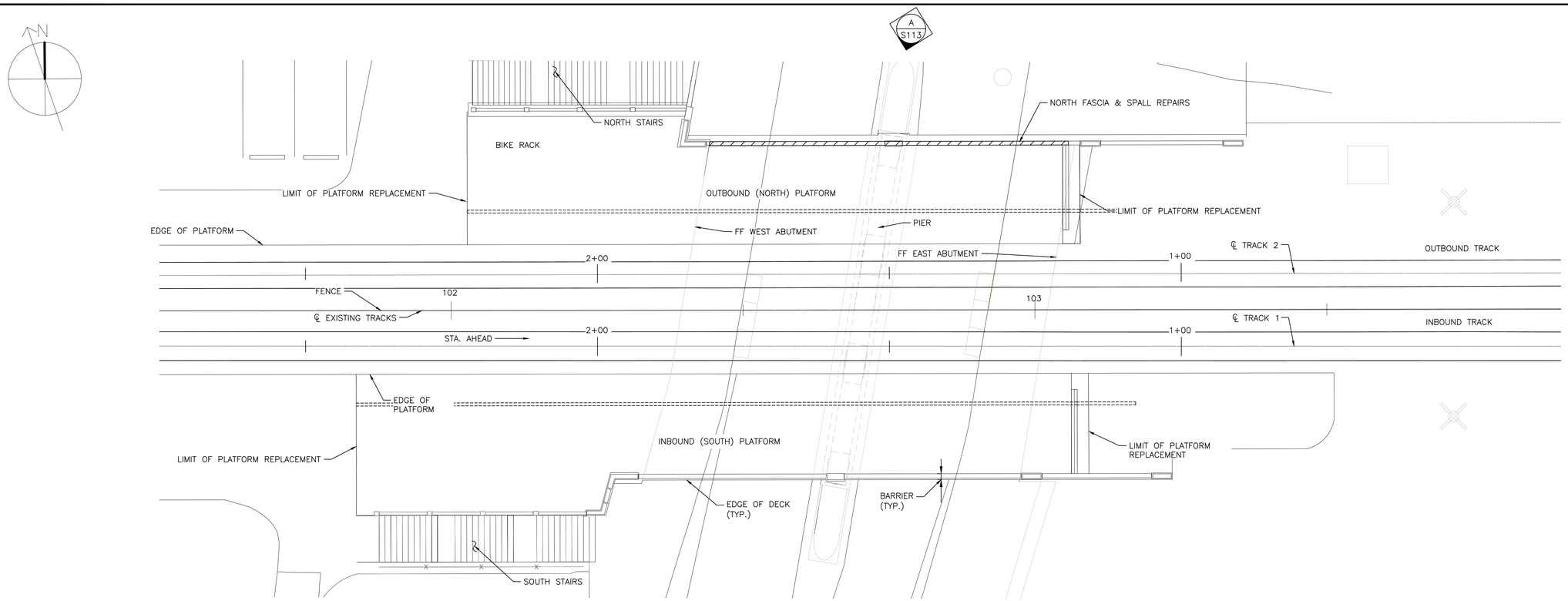
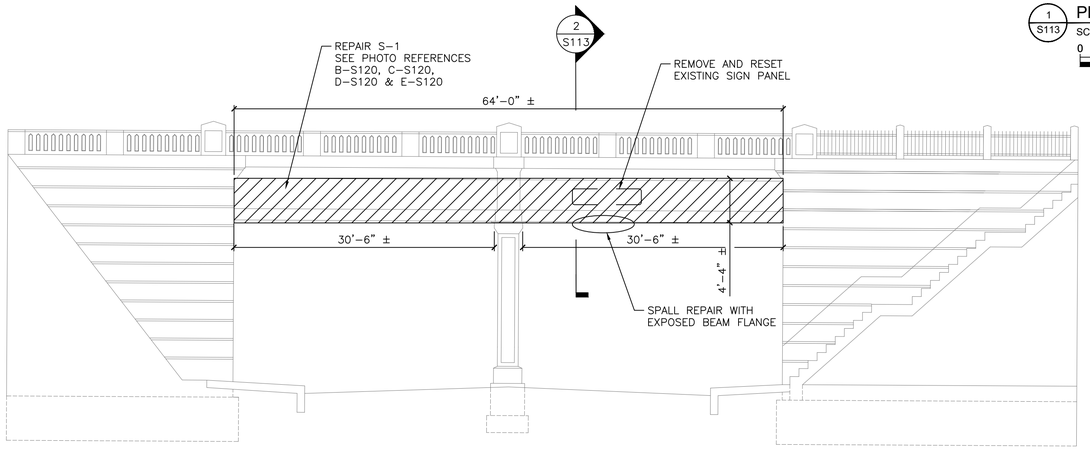
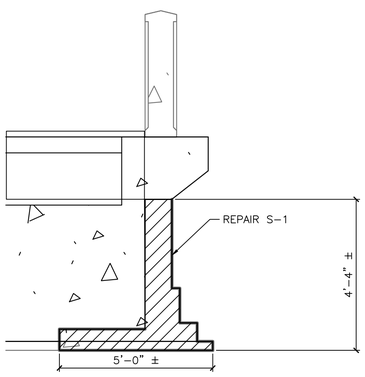


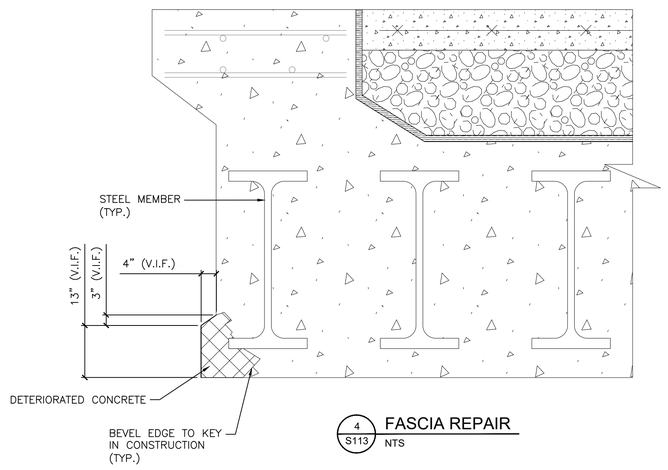
1 S113 **PLAN**
SCALE: 1"=20'
0 20' 40'



A S113 **NORTH FASCIA ELEVATION**
NTS



3 S113 **FASCIA REPAIR DETAIL**
NTS



4 S113 **FASCIA REPAIR**
NTS

2 S113 **NORTH FASCIA SECTION**
NTS

NOTES:
1. FOR REPAIR TYPE & QUANTITY TABLES, SEE DWG S103.
2. FOR REPAIR DETAILS, SEE DWGS S114 TO S116.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL
BRIDGE FASCIA AND BARRIER

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
WORK ORDER NO.: -	CHECKED BY: JS

DRAWING NUMBER
S113

DWG. NO.:	13	OF	20	
SHT. NO.:	26	OF	37	
COMPUTER FILE NO.: -				REV. NO.: 00

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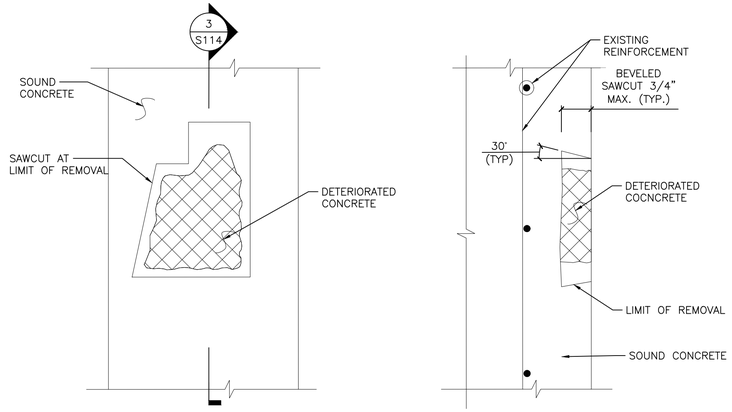
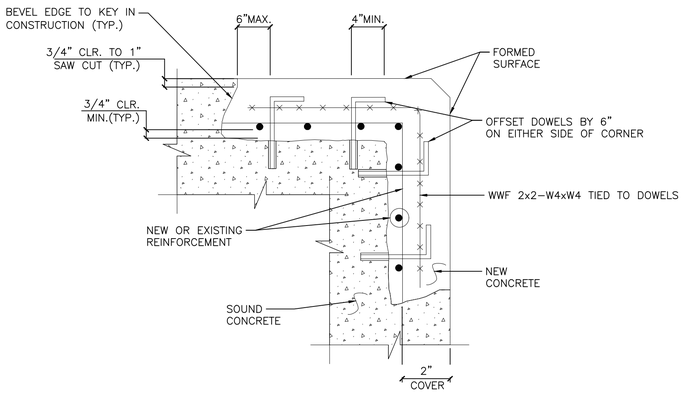


2 S114 **ELEVATION VIEW**

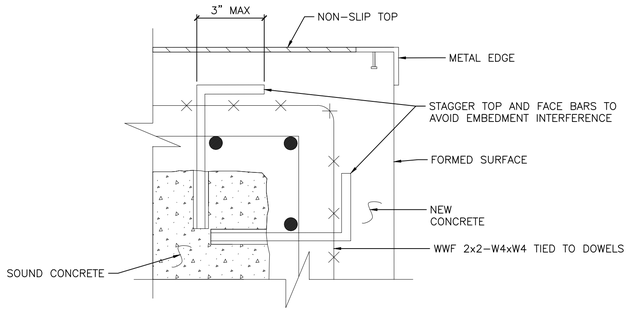
3 S114 **SECTION**

1 S114 CONCRETE REPAIR TYPE 1
NTS

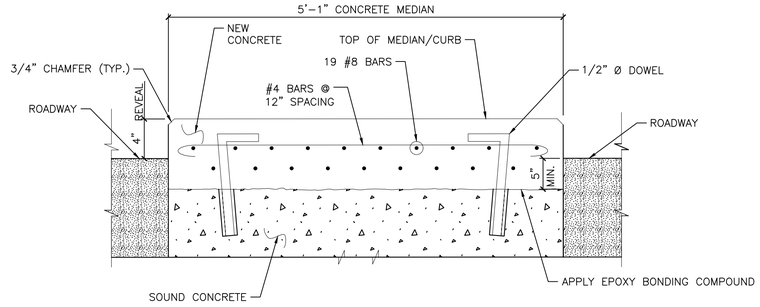
NOTE : REPAIR TYPE 1 IS USED WHEN DEPTH OF DETERIORATED CONCRETE IS LESS THAN OR EQUAL TO 3/4" FOR REPAIR NOTES SEE SHEET S116



5 S114 TYPICAL CORNER REPAIR DETAIL
NTS



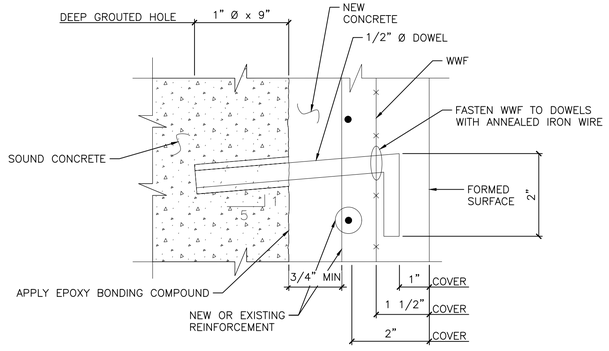
7 S114 STAIR REPAIR DETAIL
NTS



6 S114 MEDIAN REPAIR DETAIL
NTS

LEGEND :

– REMOVE DETERIORATED CONCRETE.



8 S114 TYPICAL DOWEL DETAIL
NTS

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PROJECT MANAGER

COMMONWEALTH OF PENNSYLVANIA REGISTERED PROFESSIONAL DAVID J. PHELAN ENGINEER 057506

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
REPAIR DETAILS - 1 OF 3

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: WD | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S114**
DWG. NO.: 14 OF 20
SHT. NO.: 27 OF 37
COMPUTER FILE NO.: - | REV. NO.: 00

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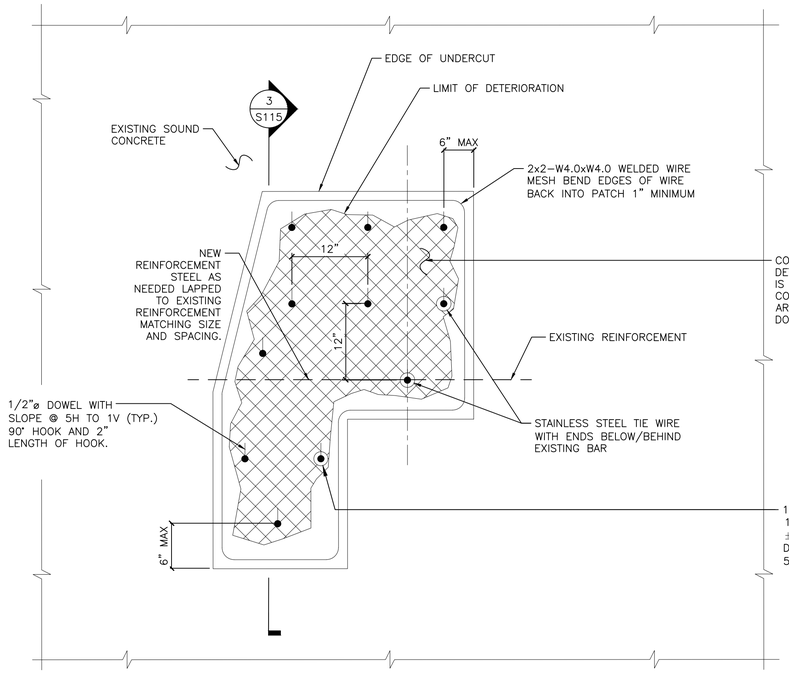
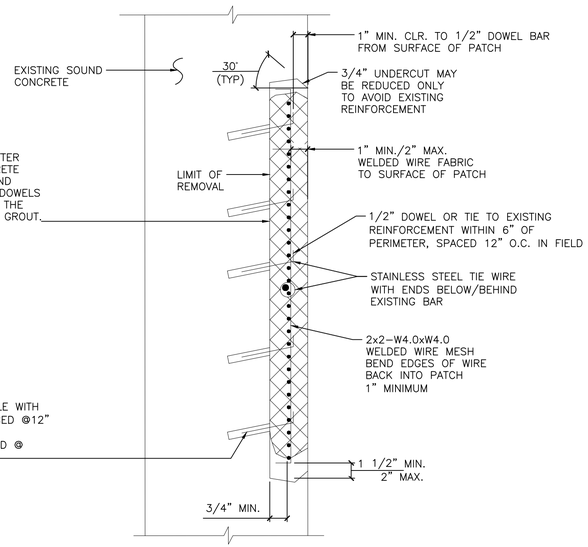


2 S115 ELEVATION VIEW
NTS



3 S115 SECTION
NTS

NOTE :

PROVIDE GALVANIZED WIRE TIE TO CONNECT EXISTING REINFORCEMENT AND 2x2–W4.0xW4.0 WELDED WIRE MESH ALONG THE PERIMETER OF THE REMOVAL AREA AT A MAXIMUM SPACING OF 6" FROM THE EDGE OF THE REMOVAL. PROVIDE TIES AT 12" SPACING IN BOTH HORIZONTAL AND VERTICAL DIRECTIONS ALONG THE PERIMETER AND WITHIN THE AREA OF REMOVAL. IF EXISTING REINFORCEMENT IS SPACED AT GREATER THAN 12" SPACING OR NOT LOCATED TO PROVIDE TIE LOCATIONS AS LISTED ABOVE, PROVIDE 1/2" GROUTED DOWELS AS SHOWN ON THE DRAWING TO PROVIDE TIE LOCATIONS AT THE SAME SPACINGS.

SUBMIT POLYMER MODIFIED AND SPECIAL CEMENTS, MORTARS AND CONCRETES FOR APPROVAL.

LEGEND :

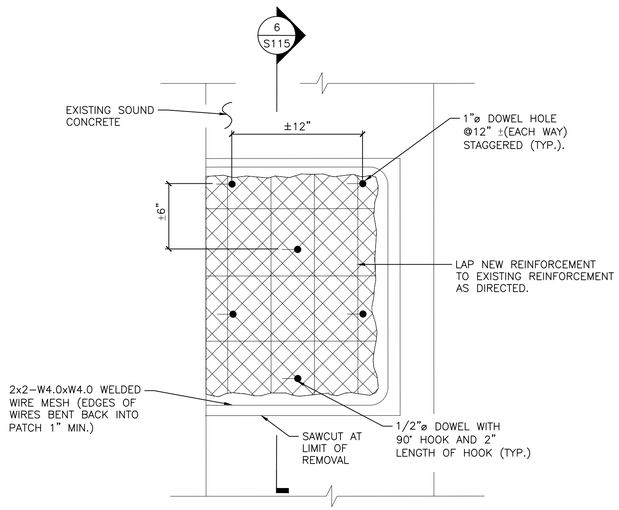
– REMOVE DETERIORATED CONCRETE AND REPLACE

REINFORCED CONCRETE REPAIR TYPE 2A NOTES:

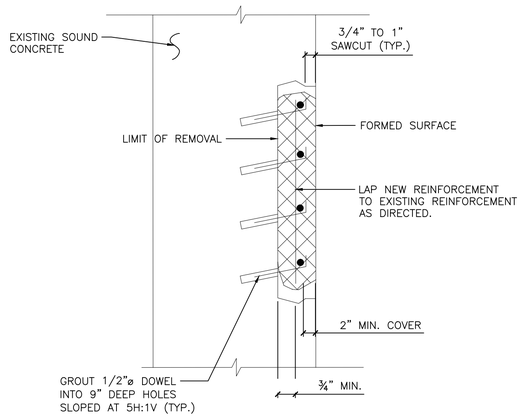
1. SQUARE OFF DETERIORATED CONCRETE TO SOUND CONCRETE WITH A SAWCUT OF 3/4" MINIMUM BUT NOT TO THE DEPTH OF THE REINFORCEMENT STEEL.
2. REMOVE ALL LOOSE AND DELAMINATED CONCRETE TO PROVIDE A SOUND BOND BETWEEN EXISTING CONCRETE AND NEW CONCRETE.
3. IF DETERIORATED CONCRETE EXTENDS BEYOND THE PRIMARY REINFORCEMENT, REMOVE THE CONCRETE TO AT LEAST 3/4" BEYOND THE REINFORCEMENT.
4. USE AN EPOXY BONDING COMPOUND MEETING THE REQUIREMENTS OF ASTM C881. COAT CONTACT SURFACES OF REPAIR AREAS WITH CONCRETE BONDING COMPOUND. PLACE CONCRETE AGAINST CONTACT SURFACES WHILE EPOXY BONDING COMPOUND IS STILL TACKY TO ENSURE BOND BETWEEN CONTACT SURFACES AND FRESH CONCRETE. WIRE BRUSH OR SANDBLAST HARDENED EPOXY BEFORE RECOATING WITH FRESH EPOXY.
5. WIRE MESH MAY BE SUBSTITUTED FOR NEW REINFORCEMENT IF INDICATED ON DESIGN DRAWINGS.
6. CLEAN EXISTING REINFORCEMENT BY MECHANICAL MEANS.
7. NEW REINFORCEMENT TO BE GALVANIZED.
8. CONCRETE REPAIR TYPE 2A ARE PAYABLE AS CONCRETE REPAIRS TYPE 2.

1 S115 **CONCRETE REPAIR TYPE 2A**

NOTE : REPAIR TYPE 2A IS USED WHEN DEPTH OF DETERIORATION IS GREATER THAN 3/4" AND EXISTING REINFORCEMENT IS SPACED GREATER THAN 12" ON CENTERS.



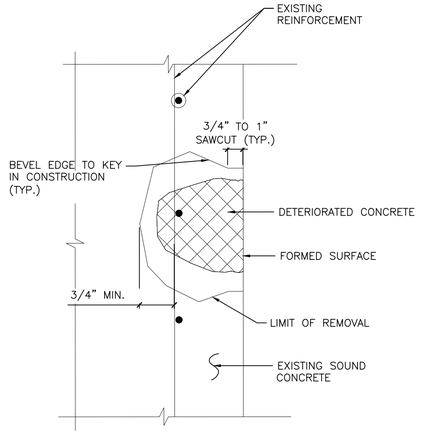
5 S115 ELEVATION VIEW
NTS



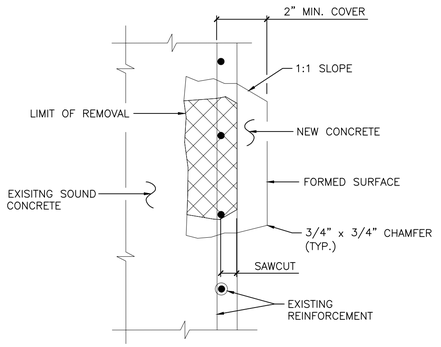
6 S115 NEW REINFORCEMENT SECTION
NTS

4 S115 **CONCRETE REPAIR TYPE 2**

NOTE : REPAIR TYPE 2 IS USED WHEN DEPTH OF DETERIORATED CONCRETE IS GREATER THAN 3/4" AND EXISTING REINFORCEMENT SPACED ≤ 12" ON CENTERS. SEE NOTES ON SHEET S116.



6 S115 EXISTING REINFORCEMENT SECTION
NTS



6 S115 BLISTER SECTION
NTS

NOTE : CONCRETE REPAIR TYPE 2 DETAIL FOR AREAS WITH EXISTING REINFORCEMENT HAVING LESS THAN 2" OF COVER

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL
REPAIR DETAILS - 2 OF 3

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
	CHECKED BY: JS
WORK ORDER NO.: -	
DRAWING NUMBER: S115	
DWG. NO.: 15 OF 20	
SHT. NO.: 28 OF 37	
COMPUTER FILE NO.: -	REV. NO: 00

DATE PRINTED: 11/14/2024 11:50:17 AM
IFC SUBMISSION
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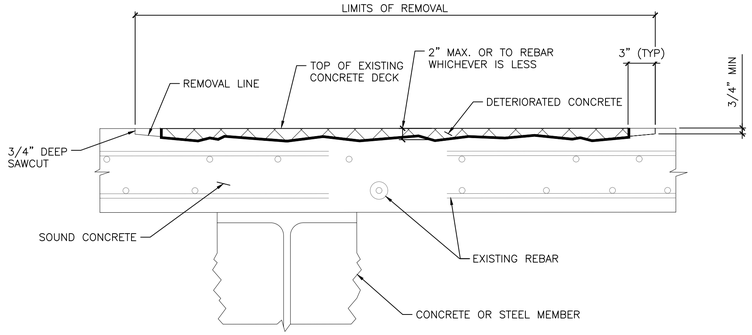
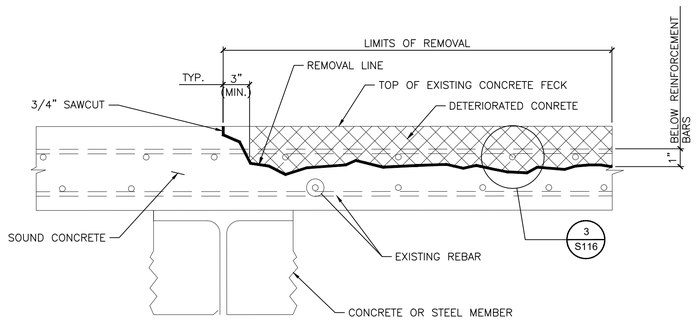


1 S116 DECK REPAIR TYPE 1 **
NTS

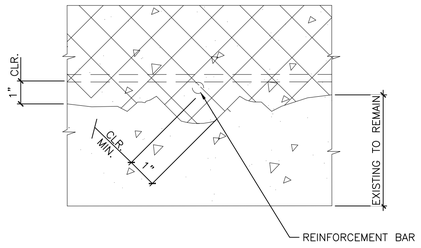
** TYPE 1 REPAIR IS TO BE RARELY USED.
USE TYPE 2 REPAIRS IN MOST SITUATIONS.

DECK REPAIR TYPE 1 NOTES:

1. DECK REPAIR TYPE 2 MAY BE REQUIRED WITHIN THE AREA OF A DECK REPAIR TYPE 1.



2 S116 DECK REPAIR TYPE 2
NTS



3 S116 DETAIL
NTS

NOTE:
USE WHEN THE EXPOSURE OF THE PRIMARY LONGITUDINAL REINFORCEMENT IS MORE THAN ONE HALF THE BAR DIAMETER OR WHERE FULL EXPOSURE OR REBAR IS REQUIRED BY THE ENGINEER.

REINFORCED CONCRETE REPAIR TYPE 1 NOTES:

1. SQUARE OFF DETERIORATED CONCRETE TO SOUND CONCRETE WITH A SAWCUT OF 3/4" MAXIMUM.

2. REMOVE ALL LOOSE AND DELAMINATED CONCRETE TO PROVIDE A SOUND BOND BETWEEN EXISTING CONCRETE AND PATCHING MATERIAL. APPLY A RAPID HARDENING CONCRETE PATCHING MATERIAL ACCORDING TO MANUFACTURER'S INSTRUCTIONS. USE A RAPID HARDENING CONCRETE PATCHING MATERIAL, SUCH AS SIKATOP PLUS 111, SPEED CRETE RED LINE OR EQUIVALENT. SUBMIT MATERIAL FOR APPROVAL PRIOR TO BEGINNING WORK.

REINFORCED CONCRETE REPAIR TYPE 2 NOTES:

1. SQUARE OFF DETERIORATED CONCRETE TO SOUND CONCRETE WITH A SAWCUT OF 3/4" MINIMUM TO 1" MAXIMUM BUT NOT TO THE DEPTH OF THE REINFORCEMENT STEEL. BACK BEVEL EDGE BEYOND SAWCUT.

2. USE HAND TOOLS TO REMOVE ALL LOOSE AND DELAMINATED CONCRETE THAT PROVIDES A SOUND BOND BETWEEN EXISTING CONCRETE AND NEW CONCRETE. PNEUMATIC HAMMERS WITH IMPACT RATINGS OF 30 FT/LB OR LESS MAY BE USED IF REQUIRED.

3. IF DETERIORATED CONCRETE EXTENDS BEYOND THE PRIMARY REINFORCEMENT, REMOVE THE CONCRETE TO AT LEAST 3/4" BEYOND THE REINFORCEMENT.

4. USE AN EPOXY BONDING COMPOUND MEETING THE REQUIREMENTS OF ASTM C881. COAT CONTACT SURFACES OF REPAIR AREAS WITH CONCRETE BONDING COMPOUND. PLACE CONCRETE AGAINST CONTACT SURFACES WHILE EPOXY BONDING COMPOUND IS STILL TACKY TO ENSURE BOND BETWEEN CONTACT SURFACES AND FRESH CONCRETE. WIRE BRUSH OR SANDBLAST HARDENED EPOXY BEFORE RECOATING WITH FRESH EPOXY.

5. USE DOWELS ONLY WHEN DEPTH OF DETERIORATED CONCRETE IS GREATER THAN 2'-0" AND NEW OR EXISTING REINFORCEMENT CANNOT ADEQUATELY BE DEVELOPED BY LAPPING WITH EXISTING REINFORCEMENT.

6. USE A PACHOMETER TO LOCATE EXISTING REINFORCEMENT WHEN DRILLING DOWEL HOLES TO AVOID DRILLING THRU EXISTING BARS.

7. AN APPROVED EPOXY ANCHORING SYSTEM IN 90° HOLES MAY REPLACE GROUT IN SLOPED HOLES. USE A 6" MINIMUM EMBEDMENT AND IN ACCORDANCE WITH THE MANUFACTURERS INSTRUCTIONS.

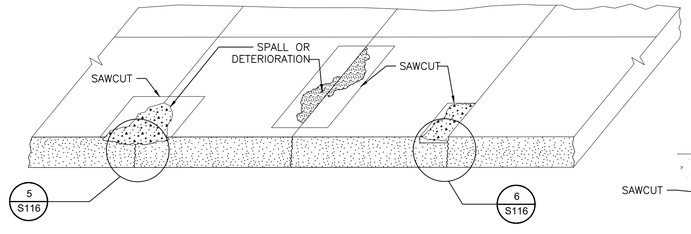
8. A #4 DEFORMED REINFORCEMENT BENT "L" BAR MAY REPLACE THE ½" DOWEL HOOK.

9. ALTERNATE WIRE MESH MAY BE SUBSTITUTED FOR 2x2–W4.0xW4.0, PROVIDED WIRE SPACING DOES NOT EXCEED 4" AND AN EQUIVALENT STEEL AREA IS PROVIDED. NEW REINFORCEMENT BARS MAY BE OMITTED IF WIRE MESH STEEL AREA EXCEEDS EXISTING REINFORCEMENT.

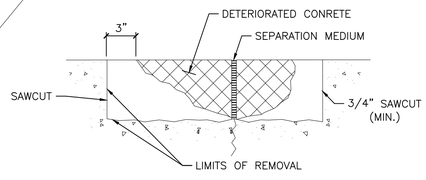
10. CLEAN EXISTING REINFORCEMENT BY MECHANICAL MEANS.

11. LAP EQUIVALENT NEW REINFORCEMENT TO THE EXISTING REINFORCEMENT AS DIRECTED.

12. REINFORCEMENT BARS TO BE GALVANIZED.



4 S116 SPALL REPAIR AT JOINT
NTS



5 S116 DETAIL
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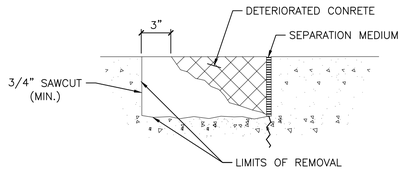
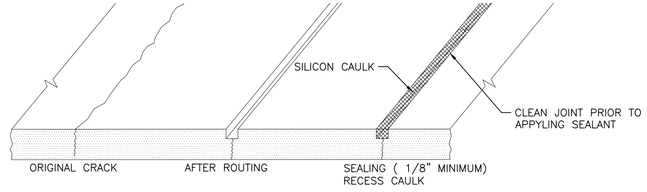


6 S116 DETAIL
NTS

NOTE:
MAKE VERTICAL 3/4" DEEP SAWCUT APPROX. 3" FROM DISTRESSED AREA. REMOVE ALL CONCRETE WITHIN SAWED AREA TO SOUND CONCRETE OR 1" MINIMUM DEPTH TO MAINTAIN AND PROTECT JOINT. USE A SEPARATION MEDIUM AND PATCH PER NOTES AND AS SHOWN. AFTER CURING, CLEAN AND APPLY JOINT SEALANT.



7 S116 TYPICAL CRAC REPAIR PROCEDURE
NTS

NOTE:
FOR SILICONE CRACK SEAL USE SIKASIL 728 NS, SPECTREM 800 LOW MODULUS SILICONE OR EQUIVALENT. SUBMIT MATERIAL FOR APPROVAL PRIOR TO BEGINNING WORK.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
REPAIR DETAILS - 3 OF 3

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: WD
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S116**
DWG. NO.: 16 OF 20
SHT. NO.: 29 OF 37
COMPUTER FILE NO.: -
REV. NO.: 00

DATE PRINTED: 11/14/2024 11:50:19 AM
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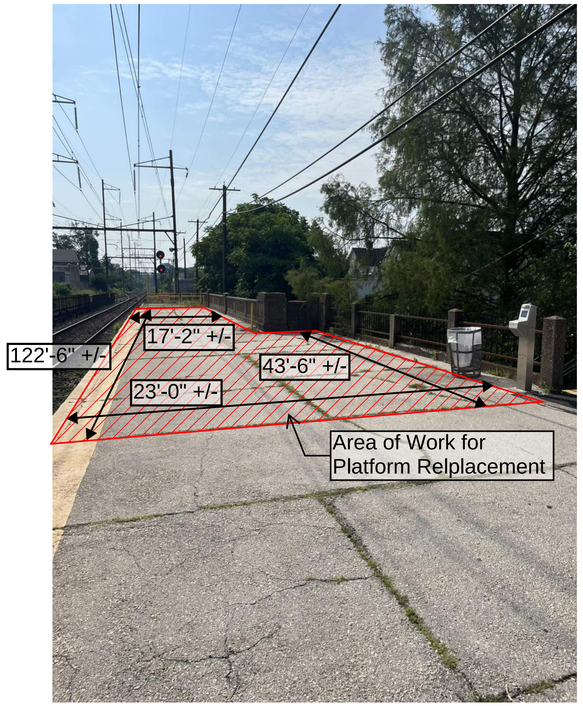
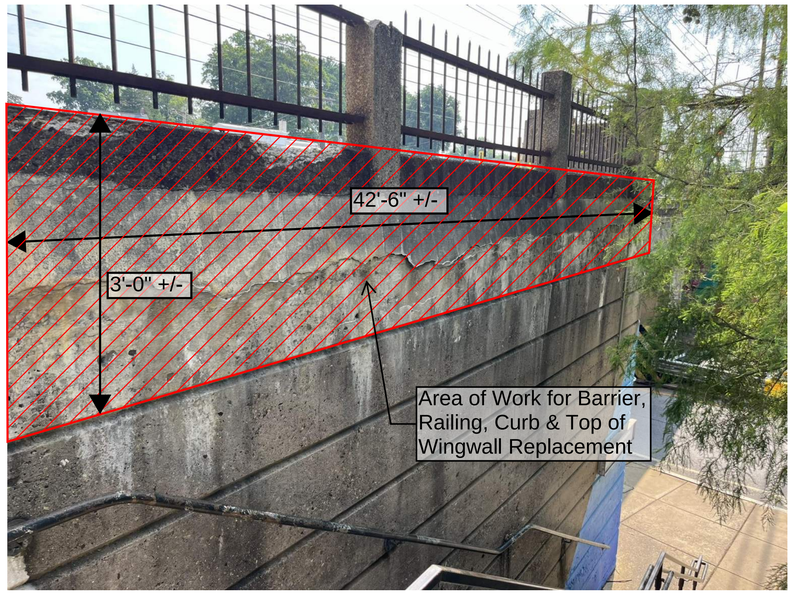
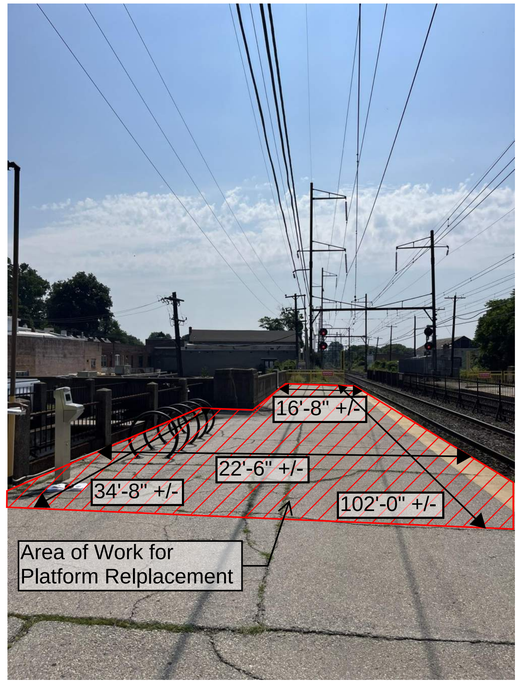


A S117 INBOUND PLATFORM REPAIRS
NTS



B S117 INBOUND PLATFORM BARRIER AND WINGWALL REPAIRS
NTS



C S117 OUTBOUND PLATFORM REPAIRS
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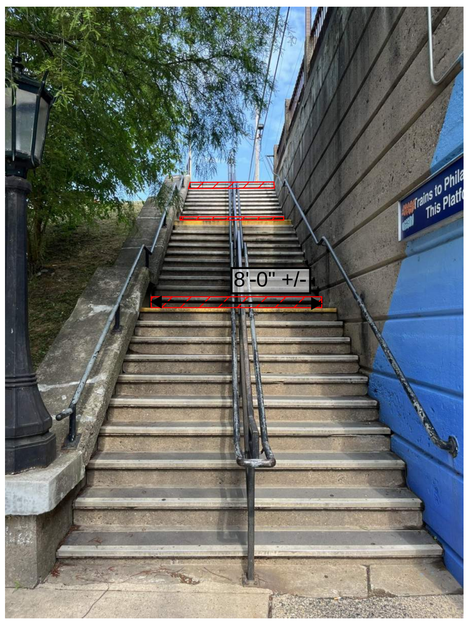

D S117 INBOUND PLATFORM STAIRS (SOUTH) REPAIRS
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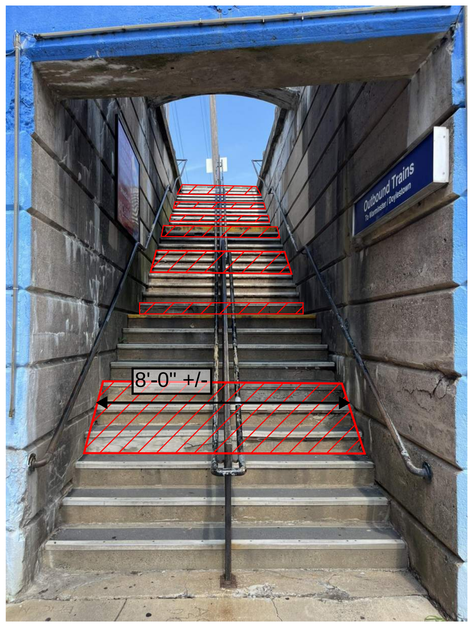
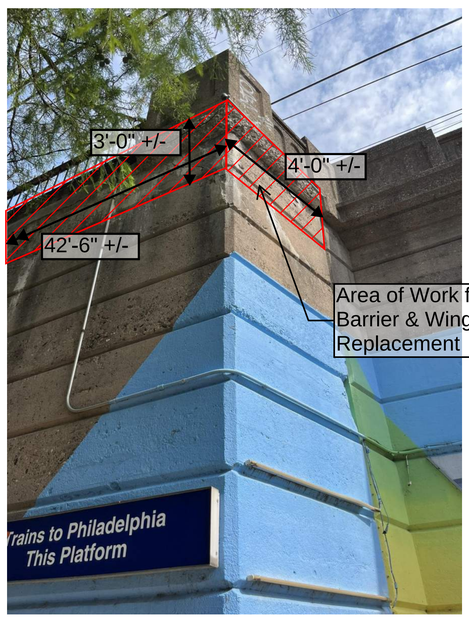


E S117 OUTBOUND PLATFORM STAIRS (NORTH) REPAIRS
NTS



F S117 SOUTHWEST ABUTMENT CORNER -
INBOUND PLATFORM AND WINGWALL REPAIRS
NTS

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MANAGER OF STRUCTURAL ENGINEERING, BRIDGES & BUILDINGS
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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL
PICTURE REFERENCE - 1 OF 4

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: WD
WORK ORDER NO.: -	CHECKED BY: JS

DRAWING NUMBER
S117

DWG. NO.:	17	OF	20
SHT. NO.:	30	OF	37

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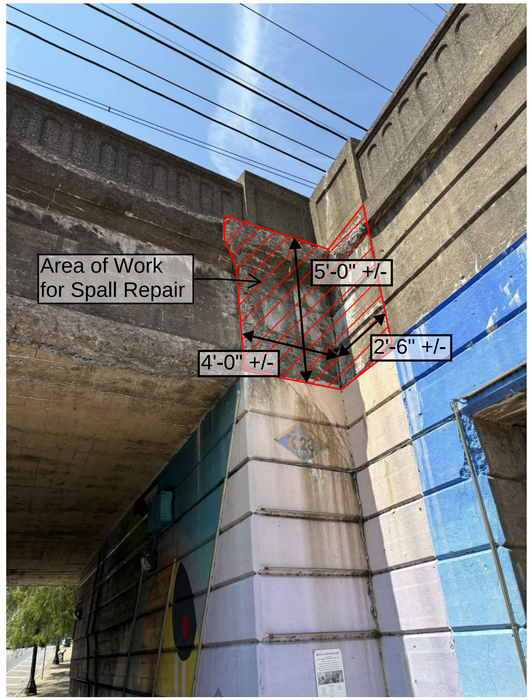

A S118 NORTHWEST ABUTMENT CORNER SPALL REPAIRS
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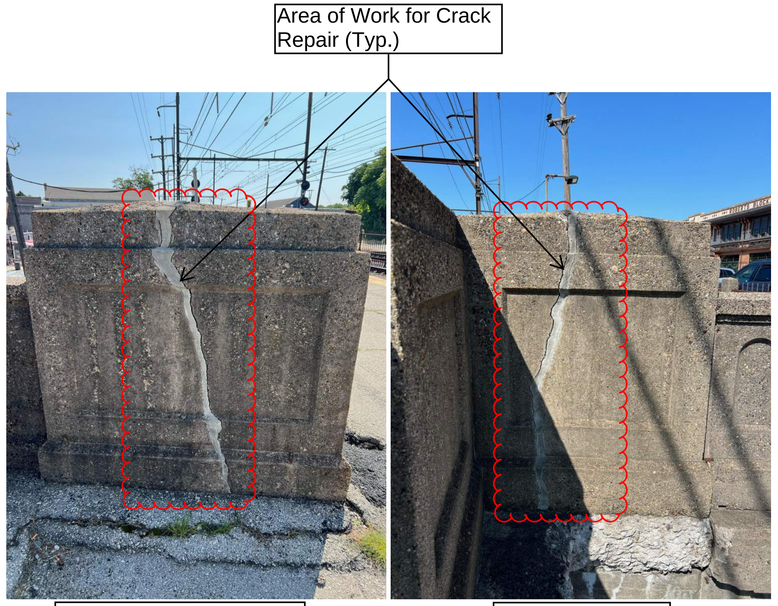

B S118 NORTHWEST ABUTMENT CORNER BARRIER CRACK REPAIRS
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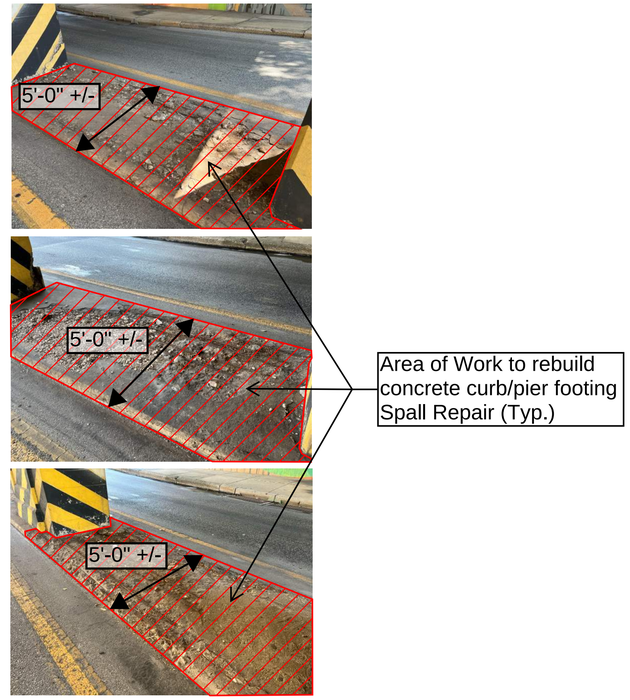
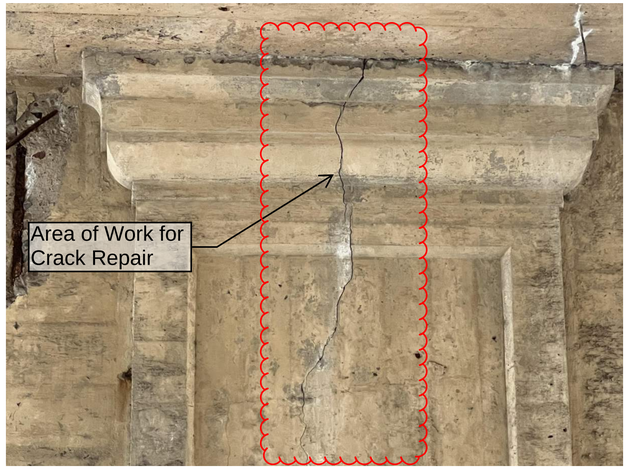
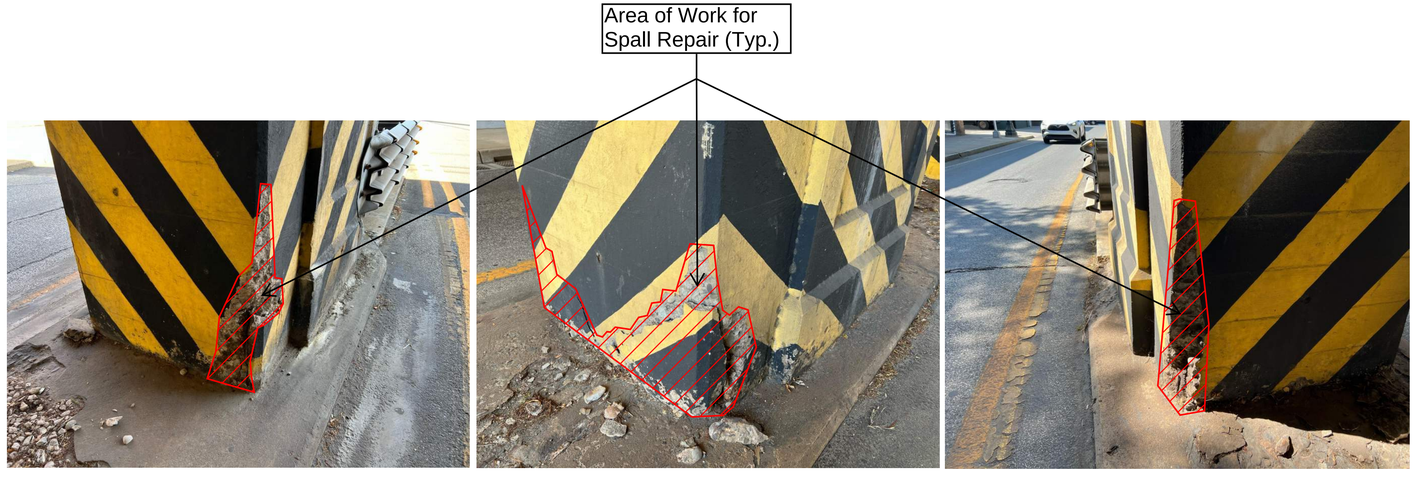


C S118 PIER CURB/MEDIAN REPAIRS
NTS



D S118 PIER CRACK REPAIRS - EAST SIDE
NTS



E S118 PIER COLUMN SPALL REPAIRS
NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

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00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

STRUCTURAL

PICTURE REFERENCE - 2 OF 4

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: WD | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S118**
DWG. NO.: 18 OF 20
SHT. NO.: 31 OF 37
COMPUTER FILE NO.: - | REV. NO.: 00

DATE PRINTED: 11/14/2024 12:18:07 PM

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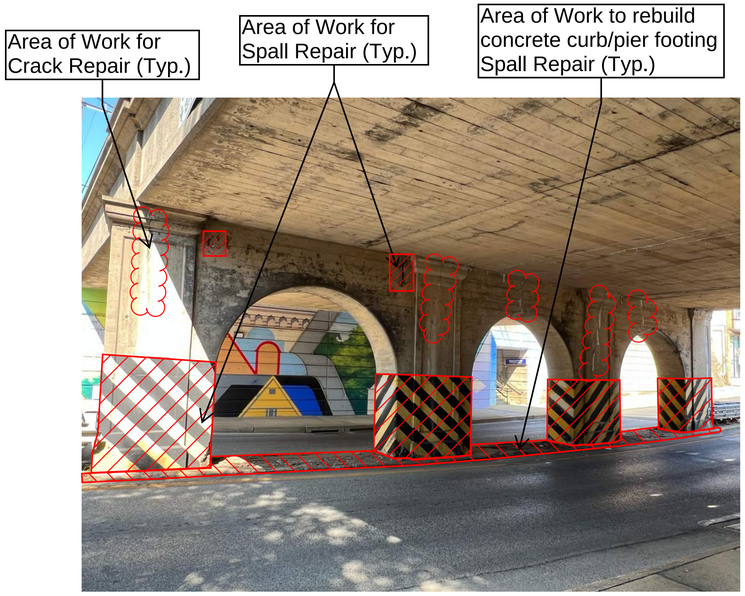
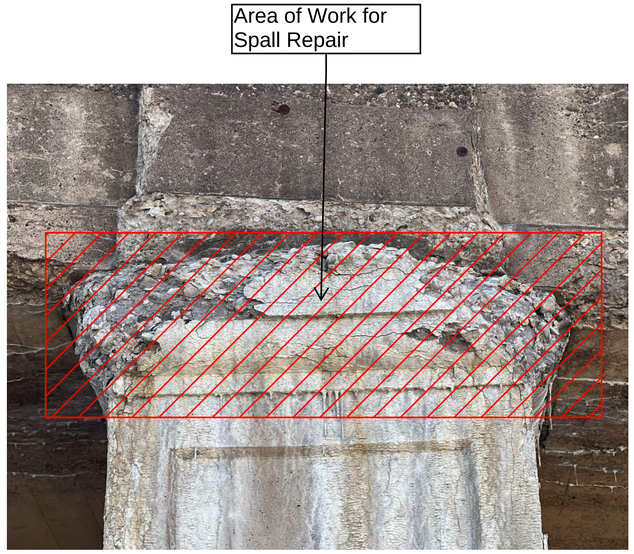


A S119 PIER REPAIRS SUMMARY - EAST SIDE
NTS



B S119 PIER COLUMN SPALL REPAIRS
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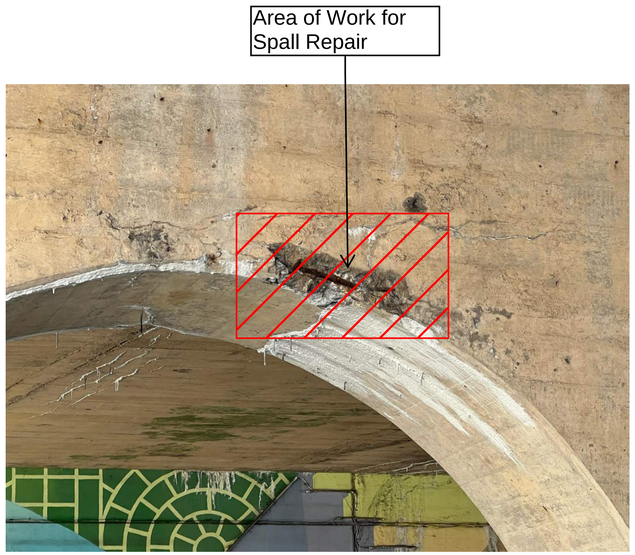
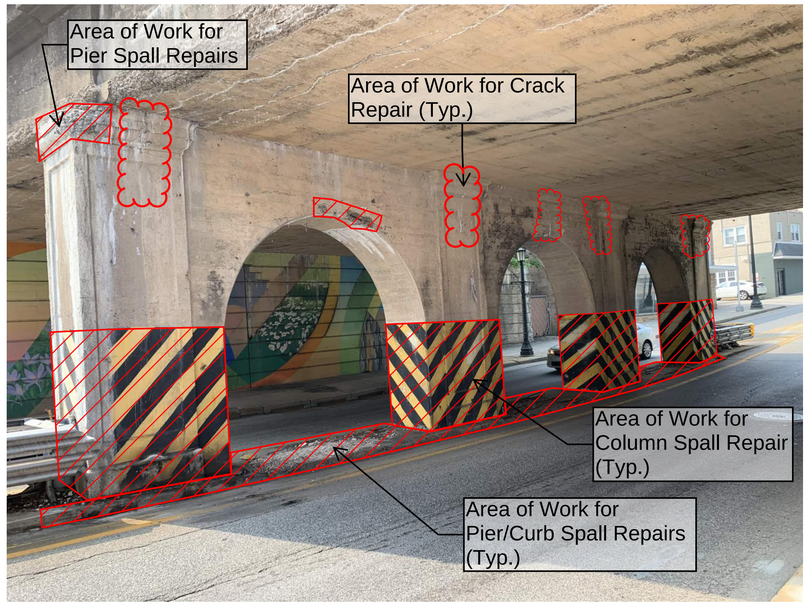
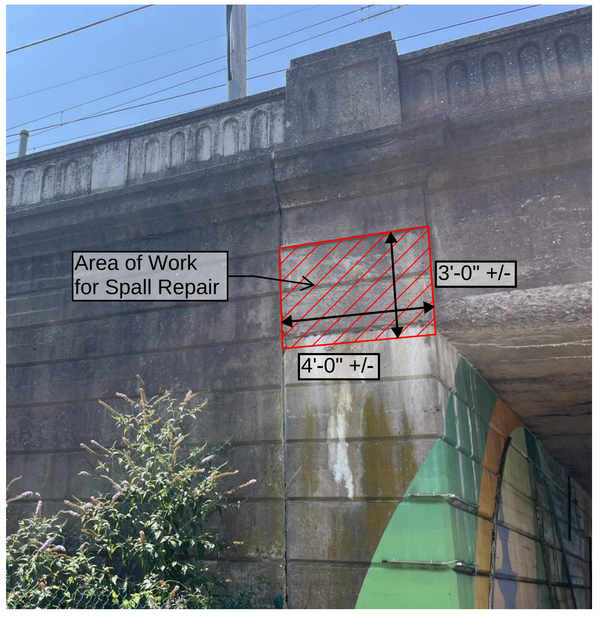


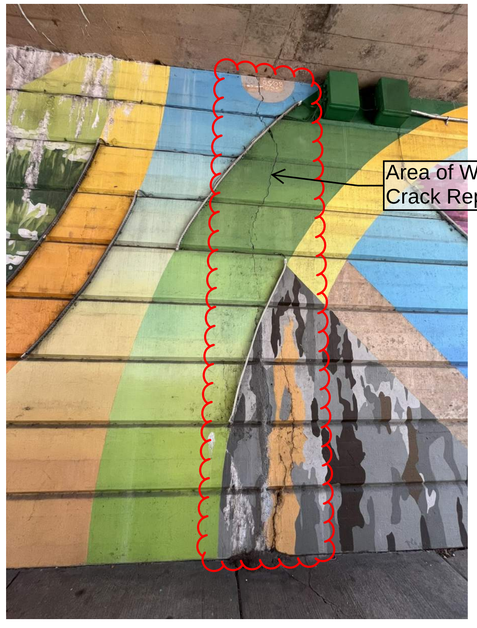
C S119 PIER ARCH SPALL REPAIRS
NTS



D S119 PIER REPAIRS SUMMARY - WEST SIDE
NTS



E S119 EAST ABUTMENT - NORTHEAST CORNER SPALL REPAIR
NTS



F S119 EAST ABUTMENT WALL CRACK REPAIR
NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
PICTURE REFERENCE - 3 OF 4

SCALE: AS NOTED
SCALE FACTOR: 1:1
DATE: NOV 2024
DRAWN BY: WD
CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S119**
DWG. NO.: 19 OF 20
SHT. NO.: 32 OF 37
COMPUTER FILE NO.: -
REV. NO.: 00

DATE PRINTED: 11/14/2024 11:30:26 AM
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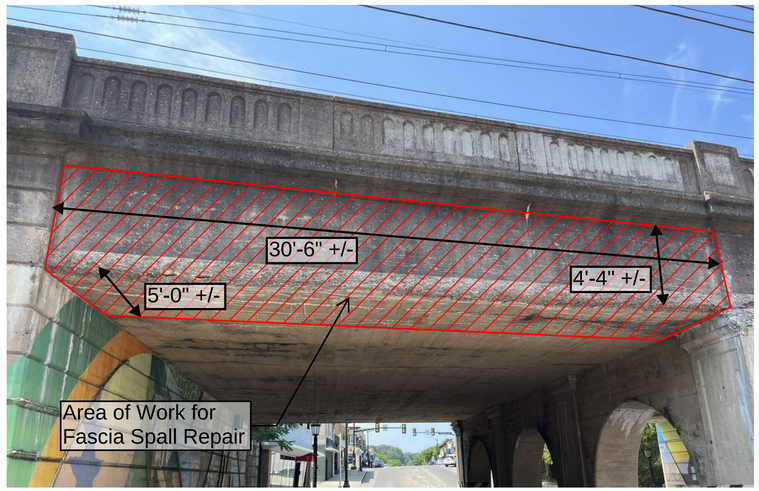
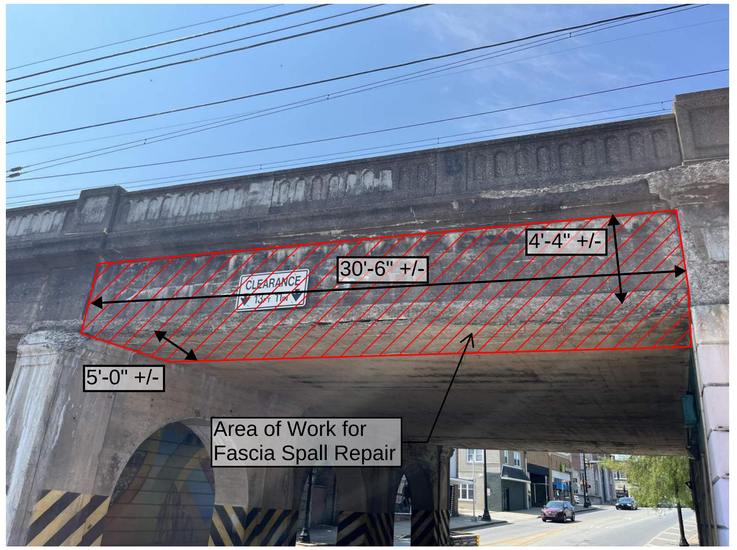
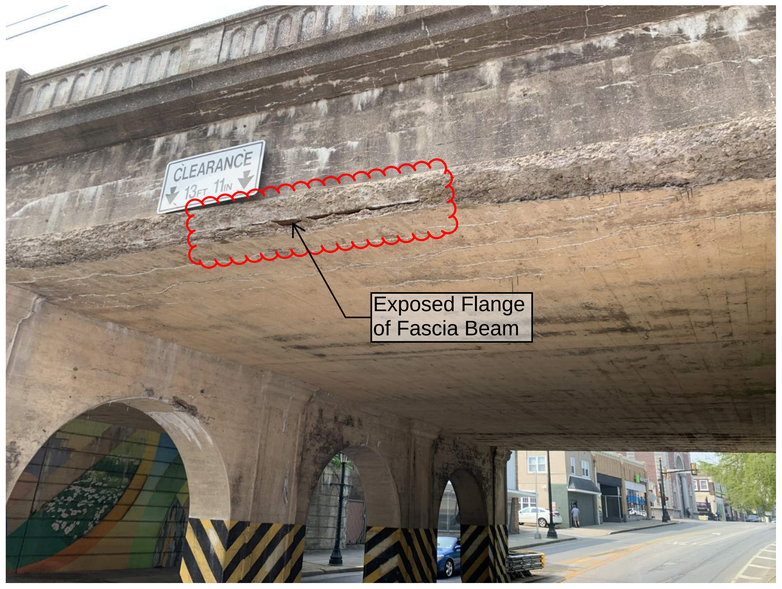
A S120 EAST ABUTMENT - SOUTHEAST RETAINING WALL SPALL REPAIR
NTS



B S120 NORTH FASCIA - SPALL REPAIRS OVER NORTHBOUND LANES
NTS



C S120 NORTH FASCIA - SPALL REPAIRS OVER SOUTHBOUND LANES
NTS



D S120 NORTH FASCIA - SPALL REPAIRS
WITH EXPOSED FLANGE OVER SOUTHBOUND LANES
NTS

E S120 NORTH FASCIA - SPALL REPAIRS
NTS

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CK'D	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	WD	JS	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA
BRIDGE 11.83 REHABILITATION
STRUCTURAL
PICTURE REFERENCE - 4 OF 4

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: WD | CHECKED BY: JS
WORK ORDER NO.: -
DRAWING NUMBER: **S120**
DWG. NO.: 20 OF 20
SHT. NO.: 33 OF 37
COMPUTER FILE NO.: - | REV. NO.: 00

DATE PRINTED: 11/14/2024 11:50:27 AM
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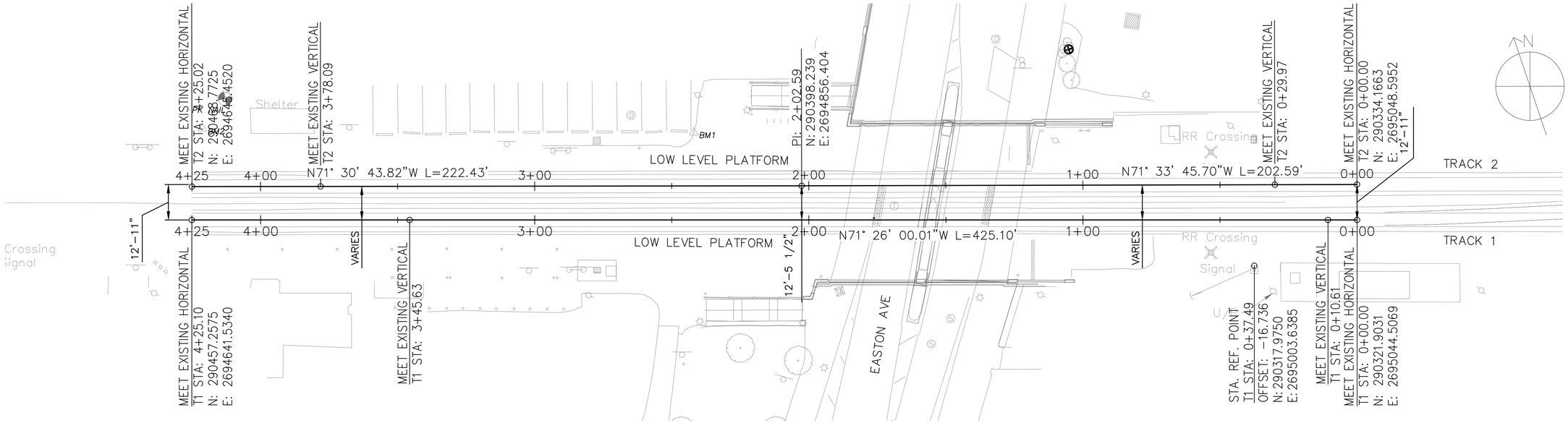
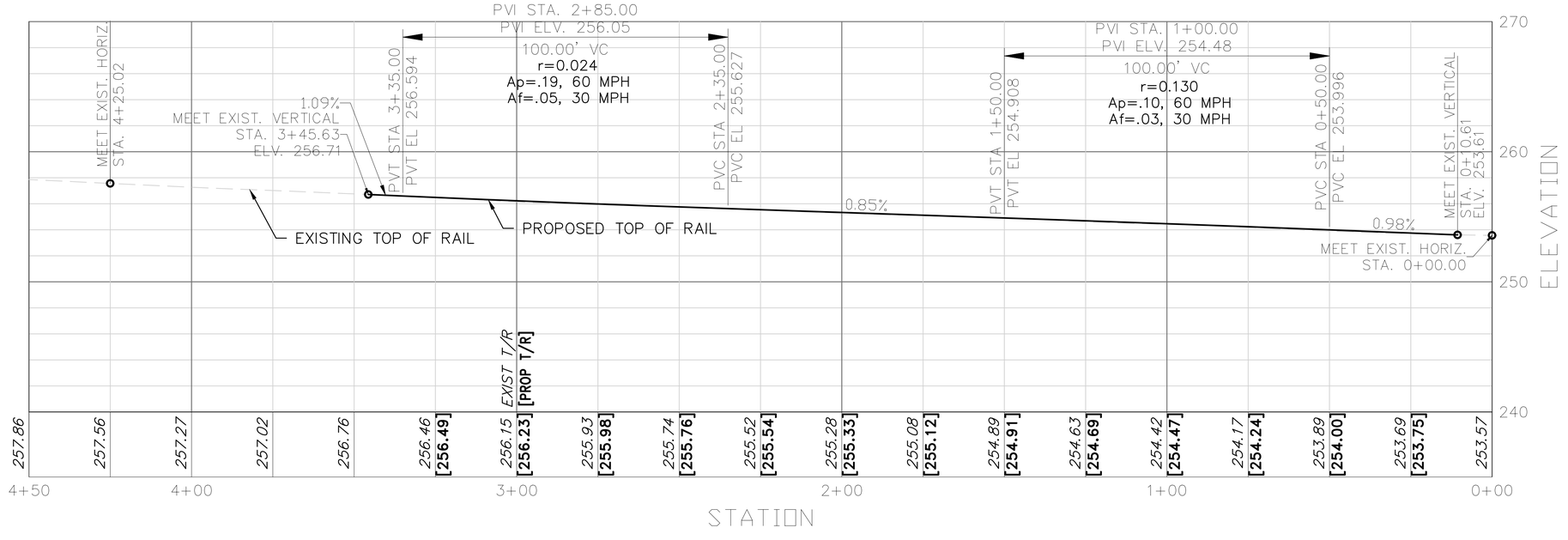


NOTE: FOR BENCHMARK INFORMATION, SEE DWG C102.

1 T101 **TRACK PLAN**
SCALE: 1"=20'
0 20' 40'



2 T101 **TRACK 1 PROPOSED PROFILE**
SCALE: AS NOTED

HORZ: 1"=20' 0 20' 40'
VERT: 1"=5' 0 5' 10'

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REV	DATE	DESCRIPTION	BY	CKD	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

TRACK
TRACK 1 PLAN AND PROFILE

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MJK
	CHECKED BY: DAB
WORK ORDER NO.: N/A	
DRAWING NUMBER: T101	
DWG. NO.: 1 OF 4	
SHT. NO.: 34 OF 37	
COMPUTER FILE NO.:	REV. NO.: 00

DATE PRINTED: 11/14/2024 1:45:44 PM

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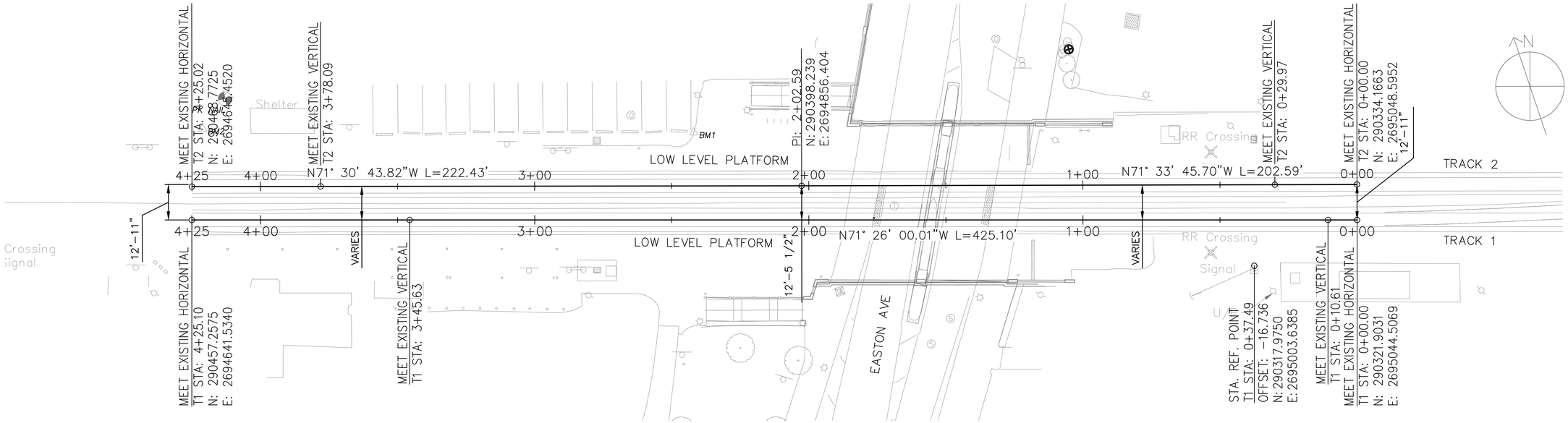
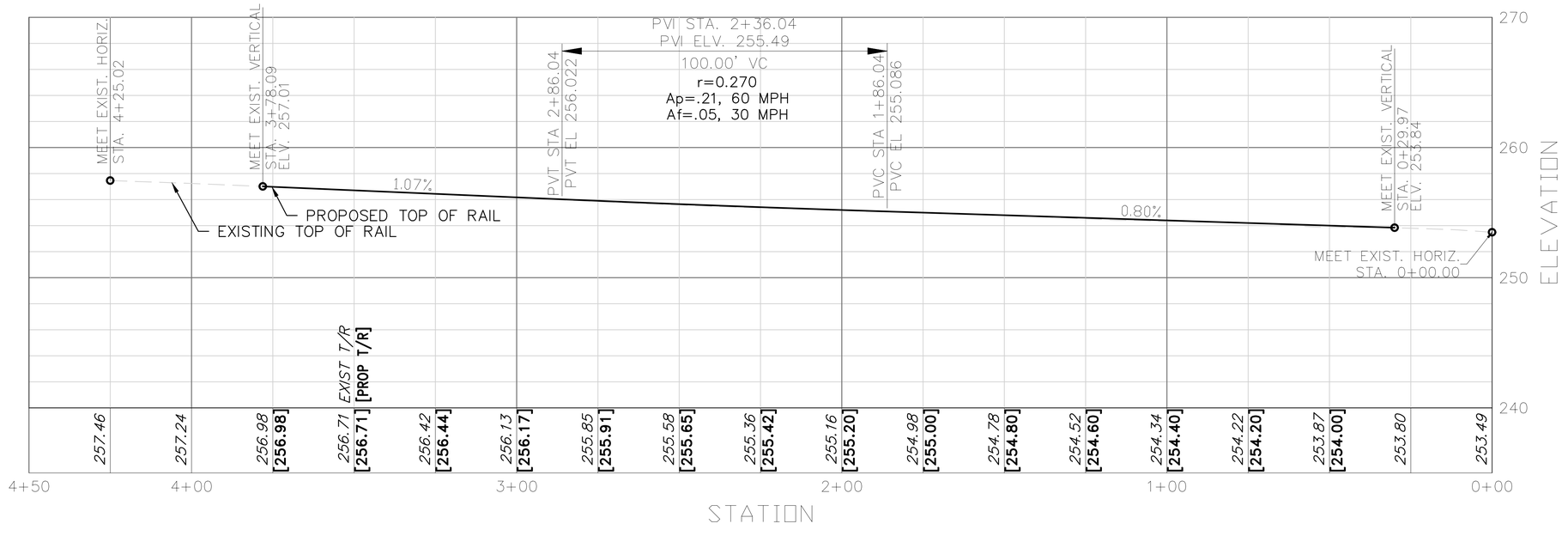


NOTE: FOR BENCHMARK INFORMATION, SEE DWG C102.

1 T102 **TRACK PLAN**
SCALE: 1"=20'
0 20' 40'



2 T102 **TRACK 2 PROPOSED PROFILE**
SCALE: AS NOTED

HORZ: 1"=20' 0 20' 40'
VERT: 1"=5' 0 5' 10'

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APD
00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

TRACK
TRACK 2 PLAN AND PROFILE

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MJK
	CHECKED BY: DAB
WORK ORDER NO.: N/A	
DRAWING NUMBER: T102	
DWG. NO.: 2 OF 4	
SHT. NO.: 35 OF 37	
COMPUTER FILE NO.:	REV. NO.: 00

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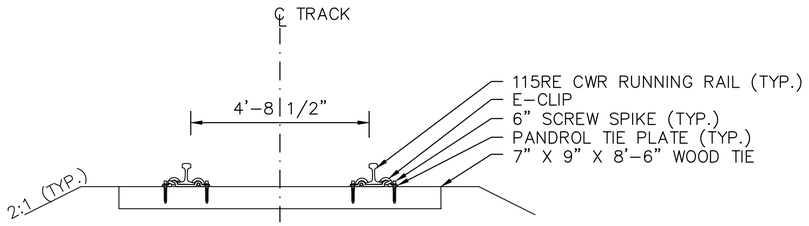
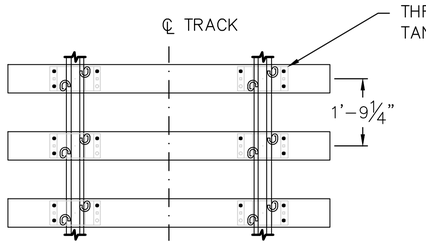
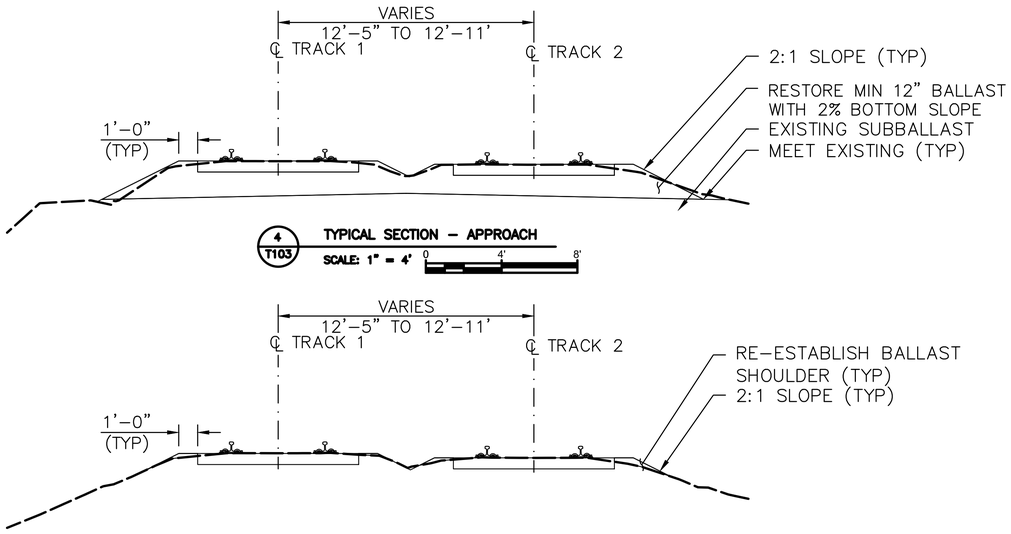


1 T203 **TYPICAL TIE DETAIL**
SCALE: 1" = 2 (0, 2', 4')

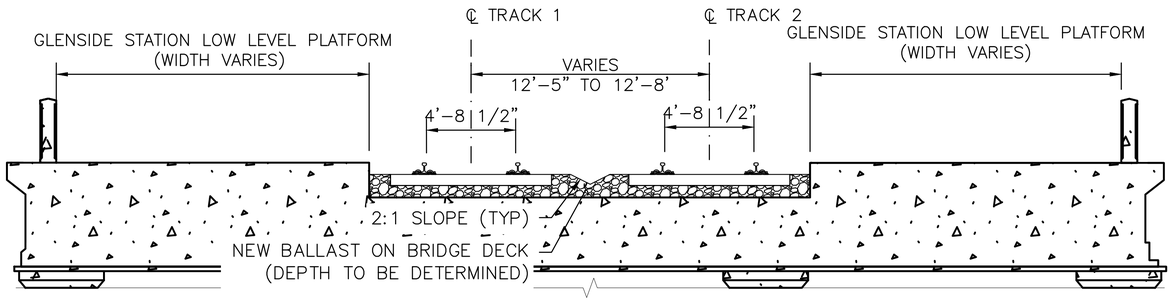


2 T203 **TYPICAL TIE SPACING AND SPIKE PATTERN**
SCALE: 1" = 2 (0, 2', 4')



4 T103 **TYPICAL SECTION – APPROACH**
SCALE: 1" = 4' (0, 4', 8')

5 T103 **TYPICAL SECTION – SURFACE AND LINE**
SCALE: 1" = 4' (0, 4', 8')



6 T103 **TYPICAL SECTION – BRIDGE**
SCALE: 1" = 4' (0, 4', 8')

NOTES:

1. TRACK STATIONING IS MEASURED ALONG THE CENTERLINE OF PROPOSED ALIGNMENT.
2. UTILIZE EXISTING TRACK WHEREVER PRACTICAL TO ACHIEVE THE FINAL ALIGNMENT BY LINING/SURFACING. INSTALL NEW TRACK ON BRIDGE AND WHERE NECESSARY ON THE APPROACHES TO ALLOW FOR CONSTRUCTION OF THE NEW BRIDGE.
3. EXCAVATE EXISTING BALLAST TO DEPTH NECESSARY TO CONSTRUCT THE NEW BRIDGE EXISTING HARDPAN SHALL REMAIN UNDISTURBED.

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JACOBS ENGINEERING PROJECT NO. L7028100

REV	DATE	DESCRIPTION	BY	CKD	APP'D
00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION
TRACK

TRACK NOTES, DETAILS, AND TYPICAL SECTIONS

SCALE: AS NOTED | SCALE FACTOR: 1:1
DATE: NOV 2024 | DRAWN BY: MJK | CHECKED BY: DAB
WORK ORDER NO.: N/A
DRAWING NUMBER: **T103**
DWG. NO.: 3 OF 4
SHT. NO.: 36 OF 37
COMPUTER FILE NO.:
REV. NO.: 00

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DATE PRINTED: 11/14/2024 1:45:48 PM
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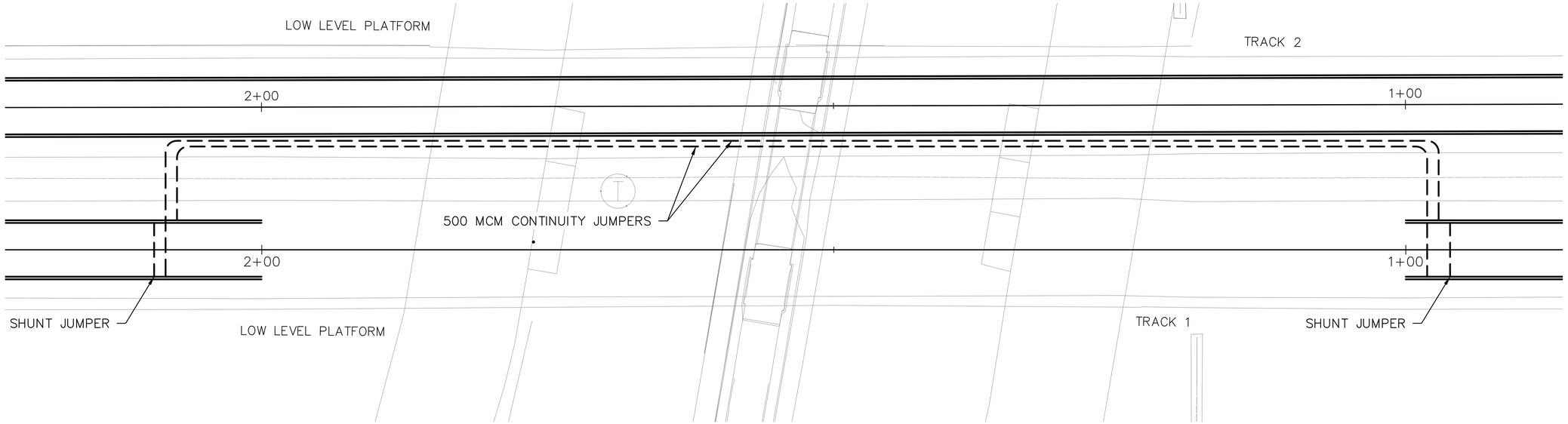
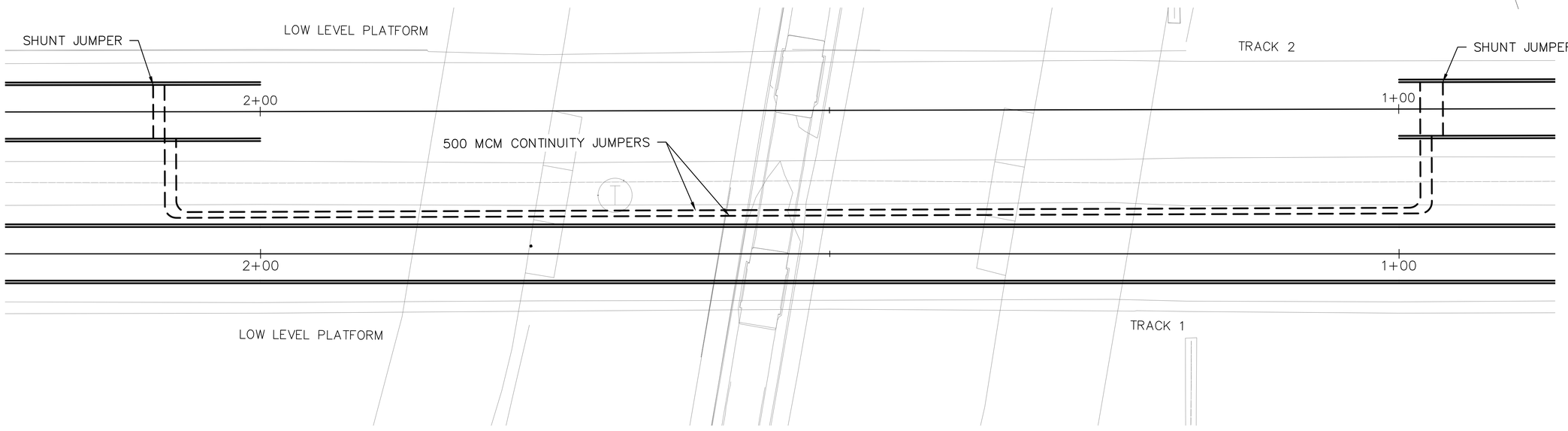


1 / T104 **TEMPORARY TRACK 1 RAIL RETURN AND JUMPER CABLE PLAN**
SCALE: 1"=10'

0 10' 20'



2 / T104 **TEMPORARY TRACK 2 RAIL RETURN AND JUMPER CABLE PLAN**
SCALE: 1"=10'

0 10' 20'

NOTES:
1. REMOVAL LIMITS MAY BE MODIFIED TO ACCOMMODATE LIMITS OF BRIDGE REHAB
2. PROTECT JUMPERS DURING CONSTRUCTION OF OUT OF SERVICE TRACK
3. VISUALLY INSPECT ALL RAIL RETURN CABLES PRIOR TO COMMENCE OF WORK EACH DAY
4. CONNECT CABLES TO TRACK USING EITHER RAIL CLAMPS OR CEMBRE BOLTED CONNECTIONS AS DIRECTED BY SEPTA. DO NOT CAD WELD CABLES.
5. DETAIL IS GENERIC AND LIMITS SHALL BE EXTENDED WHERE DEEMED NECESSARY BY TRACK WORK.

STATEMENT OF WORK:

1. TAKE TRACK OUT OF SERVICE
2. SEPTA TO INSTALL CONTINUITY JUMPER AND SHUNT JUMPER FOR TRACK
3. REMOVE PORTION OF TRACK (OUT OF SERVICE).
4. COMPLETE REHAB OF BRIDGE
5. INSTALL NEW TRACK SECTION
6. SEPTA TO REMOVE CONTINUITY JUMPER AND SHUNT FROM TRACK
7. RETURN TRACK TO SERVICE

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00	11/15/24	ISSUED FOR CONSTRUCTION	MJK	DAB	DP

MAINLINE BRIDGE MP 11.83 OVER EASTON ROAD
RRD MAINLINE, GLENSIDE, PA

BRIDGE 11.83 REHABILITATION

TRACK
TRACK SHUNTING PLAN

SCALE: AS NOTED	SCALE FACTOR: 1:1
DATE: NOV 2024	DRAWN BY: MJK
	CHECKED BY: DAB
WORK ORDER NO.: N/A	
DRAWING NUMBER: T104	
DWG. NO.: 4 OF 4	
SHT. NO.: 37 OF 37	
COMPUTER FILE NO.:	REV. NO.: 00

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