



OWNER
DEPARTMENT OF
PARKS AND RECREATION

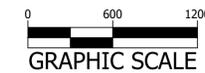
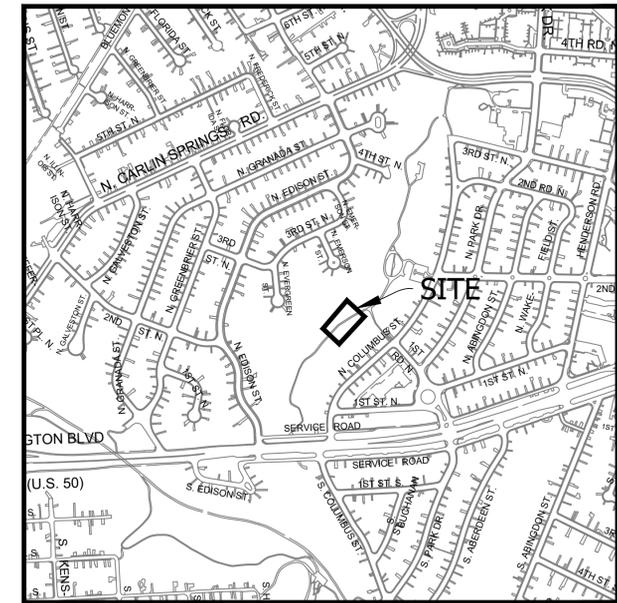
PARK DEVELOPMENT DIVISION
2100 CLARENDON BOULEVARD, SUITE 414
ARLINGTON, VA 22201
PHONE: 703.228.3337
WWW.ARLINGTONVA.US

ENGINEER/CONSULTANT
VOLKERT, INC.

6225 BRANDON AVENUE, SUITE 540
SPRINGFIELD, VA 22150
PHONE: 703.642.8100 FAX: 703.642.8106
WWW.VOLKERT.COM

CONTRACTOR
TO BE DETERMINED

LOCATION MAP



DEPARTMENT OF
ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
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APPROVALS _____ DATE _____

DESIGN TEAM ENGINEER SUPERVISOR _____

CONSTRUCTION MANAGEMENT SUPERVISOR _____

WATER, SEWER, STREETS BUREAU CHIEF _____

TRANSPORTATION DIRECTOR _____

PROJECT MANAGER _____

REVISIONS _____ DATE _____

CONSTRUCTION DRAWINGS FOR: LUBBER RUN PEDESTRIAN BRIDGE PEDESTRIAN BRIDGE OVER LUBBER RUN - LUBBER RUN PARK PROJECT ITB#: 23-DPR-ITBPW-575

GENERAL NOTES:

GENERAL CONSTRUCTION NOTES

- ALL CONSTRUCTION WORK FOR THIS PROJECT SHALL CONFORM TO THE ARLINGTON COUNTY DEPARTMENT OF ENVIRONMENTAL SERVICES, CONSTRUCTION STANDARDS AND SPECIFICATIONS, AND WHERE APPLICABLE THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS, AND ROAD AND BRIDGE STANDARDS. THE LATEST EDITIONS OF EACH RELEVANT MANUAL SHALL BE USED.
- ALL CONSTRUCTION AND WORK ACTIVITIES SHALL COMPLY WITH THE VIRGINIA WORK AREA PROTECTION MANUAL AND ALL OTHER RELEVANT WORK SAFETY REQUIREMENTS, LATEST EDITIONS.
- THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE PROJECT OFFICER OF ANY DISCREPANCIES BETWEEN ACTUAL FIELD CONDITIONS AND THE APPROVED PLANS.
- THE CONTRACTOR SHALL CONTACT "MISS UTILITY" AT 811 FOR MARKING THE LOCATIONS OF EXISTING UNDERGROUND UTILITIES (i.e. WATER, SEWER, GAS, TELEPHONE, ELECTRIC, AND CABLE TV) AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR IS REQUIRED TO IDENTIFY AND PROTECT ALL OTHER UTILITY LINES FOUND IN THE WORK SITE AREA BELONGING TO OTHER OWNERS THAT ARE NOT MEMBERS OF "MISS UTILITY". PRIVATE WATER, SEWER AND GAS LATERALS WILL NOT BE MARKED BY MISS UTILITY OR THE COUNTY. THE CONTRACTOR SHALL LOCATE AND PROTECT THESE SERVICES DURING CONSTRUCTION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR LAYING OUT THE WORK AND SHALL RETAIN A PROFESSIONAL LAND SURVEYOR LICENSED IN THE COMMONWEALTH OF VIRGINIA TO PROVIDE ALL NECESSARY CONSTRUCTION LAYOUTS AND ESTABLISH ALL CONTROL LINES, GRADES, AND ELEVATION DURING CONSTRUCTION. THE CONTRACTOR SHALL SUBMIT A COPY OF ALL CUT SHEETS FOR REVIEW, PER THE SPECIFICATIONS. THE COST OF ALL NECESSARY SURVEYING SERVICES SHALL BE CONSIDERED INCIDENTAL TO THE WORK AND, UNLESS OTHERWISE SPECIFIED, THE COST SHALL BE INCORPORATED INTO THE COSTS FOR RELEVANT ITEMS.
- THE CONTRACTOR SHALL FULLY ACQUAINT HIMSELF WITH THE CONDITIONS OF THE SITE. THE CONTRACTOR SHALL THOROUGHLY EXAMINE AND BE FAMILIAR WITH THE DRAWINGS AND SPECIFICATIONS. SHOULD THE CONTRACTOR FIND ANY DISCREPANCIES, OMISSIONS, AMBIGUITIES, OR CONFLICTS IN OR AMONG THE CONTRACT DOCUMENTS OR BE IN DOUBT AS TO THEIR MEANING, HE SHALL BRING THESE ITEMS TO THE ATTENTION OF THE PROJECT OFFICER FOR DIRECTION BEFORE PROCEEDING WITH WORK. 2. THE CONTRACTOR SHALL OBTAIN ALL NECESSARY PERMITS AND BE RESPONSIBLE FOR ADHERENCE TO ALL ORDINANCES, REGULATIONS, LAWS AND CODES HAVING JURISDICTION OVER THE PROPERTY.
- THE LOCATION OF ALL EXISTING UTILITIES SHOWN ON THESE PLANS ARE FROM BEST AVAILABLE RECORDS AND SHALL BE CONSIDERED TO BE APPROXIMATE. WHEN CONSTRUCTION ACTIVITY REACHES IN PROXIMITY TO EXISTING UTILITIES, THE TRENCH(ES) SHALL BE OPENED A SUFFICIENT DISTANCE AHEAD OF THE WORK OR TEST PITS SHALL BE MADE TO VERIFY THE EXACT LOCATION AND INVERTS OF THE UTILITY TO ALLOW FOR POSSIBLE CHANGES IN THE LINE OR GRADE AS DIRECTED BY OFFICER. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE TO THE EXISTING UTILITIES AND THE RELATED STRUCTURES. ALL EXISTING UTILITY SYSTEMS SHALL BE PROTECTED TO PREVENT DAMAGE DURING THE CONTRACTOR'S OPERATIONS. ANY SYSTEM DAMAGED SHALL BE PROMPTLY REPAIRED AT NO COST TO THE OWNER.
- EXISTING MANHOLE FRAMES, COVERS, VALVE BOXES, AND OTHER APPURTENANCES SHALL BE ADJUSTED TO THE FINAL GRADE OR REPLACED, AS NECESSARY. UNLESS OTHERWISE SPECIFIED, THE COST FOR THIS SHALL BE CONSIDERED INCIDENTAL TO THE WORK, AND SHALL BE INCORPORATED INTO THE COSTS FOR RELEVANT ITEMS.
- THE CONTRACTOR SHALL PROVIDE ADA COMPLIANT ACCESS THROUGH OR AROUND THE SITE AT ALL TIMES AND SHALL ENSURE THE SAFETY OF ALL THOSE PASSING THROUGH OR ADJACENT TO THE SITE.
- ALL SIDEWALK AND CURB AND GUTTER DEMOLITION SHALL BEGIN AND END AT THE CONSTRUCTION JOINT NEAREST TO THE DEPICTED DEMOLITION EXTENTS WITH A NEAT SAWCUT LINE TO FULL DEPTH OF PAVEMENT SECTION.
- THE TRAIL ALONG THE NORTH SIDE OF THE BRIDGE MAY BE USED TO ACCESS THE NORTH ABUTMENT, BUT ONLY SMALL EQUIPMENT SUCH AS PICKUPS OR MINI EXCAVATORS WILL BE ALLOWED. NO HEAVY EQUIPMENT WILL BE PERMITTED TO CROSS THE EXISTING LOW WATER CROSSING (FORD).

STORMWATER AND ENVIRONMENTAL PROTECTION

- THE CONTRACTOR SHALL CONFINE ALL ACTIVITIES AT THE SITE ASSOCIATED WITH CONSTRUCTION ACTIVITIES, TO INCLUDE STORAGE OF EQUIPMENT AND OR MATERIALS, ACCESS TO THE WORK, FORMWORK, ETC. TO WITHIN THE DESIGNATED LIMITS OF DISTURBANCE (LOD).

TREE PROTECTION

- TREES SHALL BE PROTECTED PER THE REQUIREMENTS OF ARLINGTON PARKS & RECREATION STANDARD.
- CONTRACTOR SHALL PREVENT TREE DAMAGE AS DIRECTED BY THE COUNTY WHEN HAULING EQUIPMENT AND MATERIALS TO AND FROM THE SITE.
- CONTRACTOR IS ADVISED TO VISIT THE SITE PRIOR TO SUBMITTING A BID. THERE ARE NUMEROUS EXISTING TREES TO REMAIN AROUND THE PROJECT SITE. THE ACCESS ROUTE ALSO HAS EXTENSIVE TREES WHICH WILL REMAIN. CONTRACTOR IS RESPONSIBLE FOR TREE PRESERVATION AND TREE PRUNING FOR ACCESS TO THE SITE. COORDINATION WITH COUNTY ARBORIST IN REGARDS TO TREE PROTECTION FOR ANY TREE TO REMAIN INSIDE THE LOD AND IN THE SURROUNDING AREA OF THE LOD SHALL BE CONTINUOUS THROUGHOUT CONSTRUCTION

TRAFFIC CONTROL

- CONTRACTOR SHALL NOTIFY THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO DISTURBING ANY EXISTING, OR INSTALLING ANY NEW, TRAFFIC SIGNS, SIGNALS, OR OTHER TRAFFIC CONTROL DEVICES.
- THE CONTRACTOR SHALL PREMARK THE LAYOUT OF ANY PERMANENT TRAFFIC CONTROL STRIPING, INDICATING THE PROPOSED LOCATION AND TYPE OF MARKING TO BE INSTALLED. THE PREMARKING MAY CONSIST OF TYPE D TAPE, CHALK, OR LUMBER CRAYONS. THE CONTRACTOR SHALL ALLOW 3 WORKING DAYS FOR THE INSPECTION AND APPROVAL OF THE PREMARKINGS PRIOR TO PLACING THE PERMANENT MARKINGS.
- THE CONTRACTOR SHALL SUBMIT ANY REQUESTS FOR TEMPORARY "NO PARKING" RESTRICTIONS TO THE PROJECT OFFICER AT LEAST 3 WORKING DAYS PRIOR TO THE DESIRED ONSET OF RESTRICTIONS. PRIOR TO A REQUEST FOR THE REMOVAL OF ACCESS TO ANY ADA PARKING SPACE THE CONTRACTOR MUST HAVE MADE PROVISION FOR ALTERNATIVE ADA PARKING AS INDICATED ON THE APPROVED PLAN OR AS DIRECTED BY THE PROJECT OFFICER.
- WHEN THE APPROVED PLAN CALLS FOR THE REMOVAL OF ANY PARKING METER THE CONTRACTOR MUST MAKE A REQUEST TO THE PROJECT OFFICER AT LEAST ONE WEEK IN ADVANCE OF THE DESIRED REMOVAL. THE PROJECT OFFICER WILL THEN COORDINATE WITH THE COUNTY'S BUS STOP TRAFFIC ENGINEERING AND OPERATIONS.
- THE CONTRACTOR SHALL PRESERVE ALL BUS STOPS, INCLUDING MAINTAINING ADEQUATE ACCESSIBILITY THROUGH AND ADJACENT TO THE CONSTRUCTION FOR BUSES AND THEIR PASSENGERS. THE CONTRACTOR SHALL NOT CLOSE, RELOCATE, OR OTHERWISE MODIFY A BUS STOP WITHOUT PRIOR REQUEST OF THE PROJECT OFFICER. ANY RELOCATION OR CLOSURE OF A BUS STOP SHALL REQUIRE AT LEAST FOUR WEEKS ADVANCE NOTICE FOR COORDINATION WITH THE COUNTY'S BUS STOP COORDINATOR - 703-228-3049.
- WHEN CONDITIONS WARRANT DUE TO TRAFFIC VOLUMES, PATTERNS, OR SPECIAL EVENTS, THE COUNTY MAY SUSPEND OR OTHERWISE DIRECT THE CONTRACTOR'S ACTIVITIES TO PROTECT THE PUBLIC AND OR THE COUNTY'S TRANSPORTATION NETWORK.

WATER DISTRIBUTION, STORM AND SANITARY SEWER SYSTEMS

- UNLESS OTHERWISE DIRECTED, CONTRACTORS ARE EXPRESSLY PROHIBITED FROM OPERATING ANY WATER VALVES OR APPURTENANCES. CONTRACTORS SHALL SUBMIT ALL REQUESTS FOR VALVE OPERATIONS TO THE PROJECT OFFICER AT LEAST 1 WEEK IN ADVANCE OF THE REQUIRED OPERATION.
- IN THE EVENT OF A WATER OR SEWER EMERGENCY, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE COUNTY'S WATER CONTROL CENTER AT 703-228-6555 AND THE PROJECT OFFICER.
- THE CONTRACTOR SHALL COORDINATE ALL UTILITY SHUTOFFS, DISCONNECTS, AND/OR ABANDONMENT WITH UTILITY OWNER AND PROJECT OFFICER AT LEAST 1 WEEK IN ADVANCE OF THE REQUIRED INTERRUPTION.

FIRE DEPARTMENT NOTES:

- ALL EXISTING FIRE HYDRANTS AND FIRE DEPARTMENT CONNECTIONS SHALL BE MAINTAINED UNOBSTRUCTED AND ACCESSIBLE AT ALL TIMES IN ACCORDANCE WITH SECTIONS 508.5.4 AND 508.5.5 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- ACCESS TO BUILDINGS FOR FIREFIGHTING SHALL BE MAINTAINED AT ALL TIMES. EXISTING FIRE APPARATUS ACCESS ROADS (FIRE LANES) SHALL BE KEPT CLEAR OF OBSTRUCTIONS IN ACCORDANCE WITH SECTION 503.4 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE. ACCESS TO CONSTRUCTION SITES SHALL BE PROVIDED AND MAINTAINED IN ACCORDANCE WITH SECTION 1410 OF THE ARLINGTON COUNTY FIRE PREVENTION CODE.
- IN THE EVENT THAT EXISTING FIRE DEPARTMENT CONNECTIONS OR FIRE APPARATUS ACCESS ROADS (FIRE LANES) MUST BE OBSTRUCTED TO FACILITATE CONSTRUCTION ACTIVITIES, CONTACT THE ARLINGTON COUNTY FIRE DEPARTMENT FIRE PREVENTION OFFICE AT 703-228-4644 TO COORDINATE REVIEW AND APPROVAL OF TEMPORARY FIRE DEPARTMENT CONNECTIONS AND/OR FIRE APPARATUS ACCESS ROADS PRIOR TO CREATING THE OBSTRUCTION.

SHEET LIST

SHEET NUMBER	SHEET TITLE
C000.1	COVER SHEET
C006.1	LEGEND
C011.1	EXISTING CONDITIONS
C021.1	DEMOLITION PLAN
C031.1	EROSION & SEDIMENT CONTROL PLAN
C032.1	EROSION & SEDIMENT CONTROL NARRATIVE
C032.2	EROSION & SEDIMENT CONTROL DETAILS
C032.3	SOIL MAP
C032.4	PRE-DEVELOPMENT MAP
C032.5	POST-DEVELOPMENT MAP
C032.6	VRRM

SHEET LIST

SHEET NUMBER	SHEET TITLE
C032.7	WATER QUALITY IMPACT ASSESSMENT
C035.1	STORMWATER POLLUTION PREVENTION PLAN
C035.2	STORMWATER POLLUTION PREVENTION PLAN
C041.1	PLAN & PROFILE
C091.1	TREE INVENTORY AND TREE PROTECTION PLAN
C091.2	TREE PLANTING DETAIL & TREE PROTECTION FENCE
C121.1	MAINTENANCE OF TRAFFIC PLAN
B001.1	GENERAL PLAN AND ELEVATION
B001.2	BRIDGE ELEVATION AND TYPICAL SECTION
B001.3	SUBSTRUCTURE LAYOUT AND RIPRAP DETAILS
B001.4	ABUTMENT A AND B
B001.5	ABUTMENT FOOTING PLAN AND DETAILS
B001.6	REINFORCING STEEL SCHEDULE
B001.7	ENGINEERING GEOLOGY

SWM#

23-0005

ADT

N/A

STREET CLASSIFICATION

N/A

POSTED SPEED

N/A

LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK
PEDESTRIAN BRIDGE OVER LUBBER RUN
COVER SHEET

23-DPR-ITBPW-575

DESIGNED: BD

DRAWN: BD

CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:

AS SHOWN

C000.1

LINETYPE LEGEND

Table with 3 columns: FEATURE, EXISTING, PROPOSED. Lists various features like BUILDING, CENTERLINE / BASELINE, COMMUNICATIONS CABLE, etc., with their corresponding line styles.

SYMBOL LEGEND

Table with 2 columns: EXISTING FEATURE, PROPOSED FEATURE. Lists features like EX CABLE PEDESTAL, EX ELECTRIC BOX, EX FIRE HYDRANT, etc., with their corresponding symbols.

SYMBOL LEGEND

Table with 2 columns: EXISTING FEATURE, PROPOSED FEATURE. Lists features like EX STRIPING, EX BUS STOP with their corresponding symbols.

LABEL LEGEND

Table with 2 columns: EXISTING, PROPOSED. Lists labels for EXISTING SANITARY STRUCTURE NUMBER and EXISTING STORM SEWER STRUCTURE NUMBER.

HATCH LEGEND

Table with 2 columns: Description and Hatch Pattern. Lists hatches for PROP MILL & OVERLAY, PROP FULL DEPTH ASPHALT, PROP CONCRETE, etc.



DEPARTMENT OF ENVIRONMENTAL SERVICES FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606

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SEAL



APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

Table with 2 columns: REVISIONS, DATE. Contains several empty rows for recording revisions.

LUBBER RUN PEDESTRIAN BRIDGE LUBBER RUN PARK

PEDESTRIAN BRIDGE OVER LUBBER RUN

LEGEND

23-DPR-ITBPW-575

DESIGNED: BD

DRAWN: BD

CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:

N/A

GENERAL NOTES

- 1) UTILITY LOCATIONS SHOWN HEREON ARE PER A FIELD SURVEY PERFORMED BY UPI ON 08/25/21.
2) PRIVATE LIGHT FEED GOES ABOVE GROUND AT NOTED LOCATION.
3) WATER LINES WERE OBSERVED TO BE PLASTIC AT NOTED LOCATION AND NOT TRACEABLE BY UPI USING GEOPHYSICAL METHODS AT THE TIME OF THE INVESTIGATION.



UTILITY MARKING NOTES:

- 1) THE LOCATION OF UTILITIES LISTED IN THE TABLE BELOW AND SHOWN ON THIS PLAT ARE FROM OBSERVED EVIDENCE OF ABOVE GROUND APPURTENANCES, SURFACE GROUND MARKINGS, AND EXISTING PLANS AND MAPS.
2) BEFORE DIGGING IN THIS AREA, CALL "MISS UTILITY" 1-800-552-7001 FOR FIELD LOCATIONS (REQUEST FOR GROUND MARKINGS) OF UNDERGROUND UTILITY LINES.
3) THIS INVESTIGATION DOES NOT INCLUDE THE USE OF GROUND PENETRATING RADAR OR INTRUSIVE METHODS OF INVESTIGATION SUCH AS TEST PITS OR BORINGS.
4) THIS INVESTIGATION DOES NOT INCLUDE DESIGNATING SPRINKLER OR IRRIGATION SYSTEMS, BURIED TANKS, SEWER SYSTEMS, NON-CONDUCTIVE UTILITIES, OR WELLS.
5) DETECTING AND DESIGNATING UTILITIES THAT ARE BURIED DIRECTLY BELOW OTHER UTILITIES ARE NOT PROVIDED.

Table with 5 columns: UTILITY DESCRIPTION, PLANS, MARKED, LOCATED, NOTES. Rows include PRIVATE ELECTRIC and PRIVATE WATER.

LEGEND

- Utilities - Electric: EX LIGHT POLE, EX WATER FOUNTAIN, EX WATER MANHOLE
Utilities - Water: EX WATER FOUNTAIN, EX WATER MANHOLE
Utilities - Electric: EX LIGHT POLE, EX WATER FOUNTAIN, EX WATER MANHOLE
Utilities - Miscellaneous: END OF INFORMATION, LIMITS OF UPI UTILITY SURVEY
Linetypes: UGE, W, PRIVATE WATER MARKING
SUE Level B - Field Located (Underground): UGE, W, PRIVATE WATER MARKING

TREE LEGEND

- DECIDUOUS TREE, CONIFEROUS TREE, BUSH, ALUMINUM TREE TAG NUMBER, DT DECIDUOUS TREE, CT CONIFEROUS TREE, CT SZ 15/7 TRUNK SIZE (DIAMETER IN INCHES), TREE COVER (RADIUS IN FEET), TREE TYPE

LEGEND

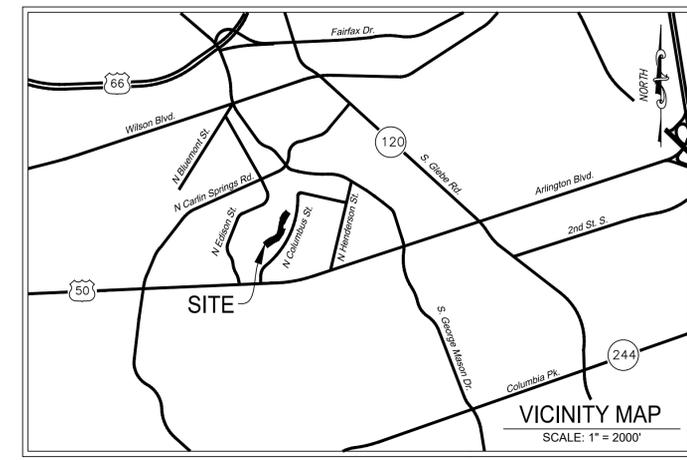
- Utilities - Storm: STORM MANHOLE, STORM CULVERT
Utilities - Sanitary: SANITARY MANHOLE
Utilities - Water: WATER METER, WATER MANHOLE
Utilities - Electric: UTILITY POLE
Surfaces: ASPHALT AREA, CONCRETE AREA, BRICK AREA, GRAVEL AREA
Misc. Structures: SPOT ELEVATION SIGN, HANDICAP PARKING, FLOW DIRECTION
Abbreviations: EX, CONC, EP, RCP, DIP, PVC, CPP
Linetypes: INDEX CONTOUR (10'), INT. CONTOUR (2'), OVERHEAD UTILITY WIRE, SANITARY PIPE, STORM PIPE, EDGE OF WATER

SANITARY STRUCTURE DATA

- RIM EL. = 205.83, INV IN (24" DIP FROM NORTHEAST) = 196.43, INV IN (8" DIP FROM NORTH) = 187.53, INV IN (10" DIP FROM EAST) = 197.03, INV OUT (24" DIP TO 302) = 196.33
RIM EL. = 199.85, INV IN (24" DIP FROM 1491) = 193.35, INV OUT (24" DIP TO 351) = 193.25
RIM EL. = 198.69, INV IN (24" DIP FROM 302) = 189.39, INV OUT (24" DIP TO 1481) = 189.29
RIM EL. = 206.33, INV IN (8" DIP FROM EAST) = 198.13, INV OUT (8" DIP TO 807) = 197.73
RIM EL. = 199.49, INV IN (8" DIP FROM 960) = 190.59, INV OUT (12" DIP TO 1481) = 189.49
RIM EL. = 195.05, INV IN (12" DIP FROM 807) = 187.65, INV IN (24" DIP FROM 351) = 187.35, INV OUT (24" DIP TO 966) = 187.25
RIM EL. = 194.63, INV IN (24" DIP FROM 1481) = 184.53, INV OUT (24" DIP TO 1456) = 184.43

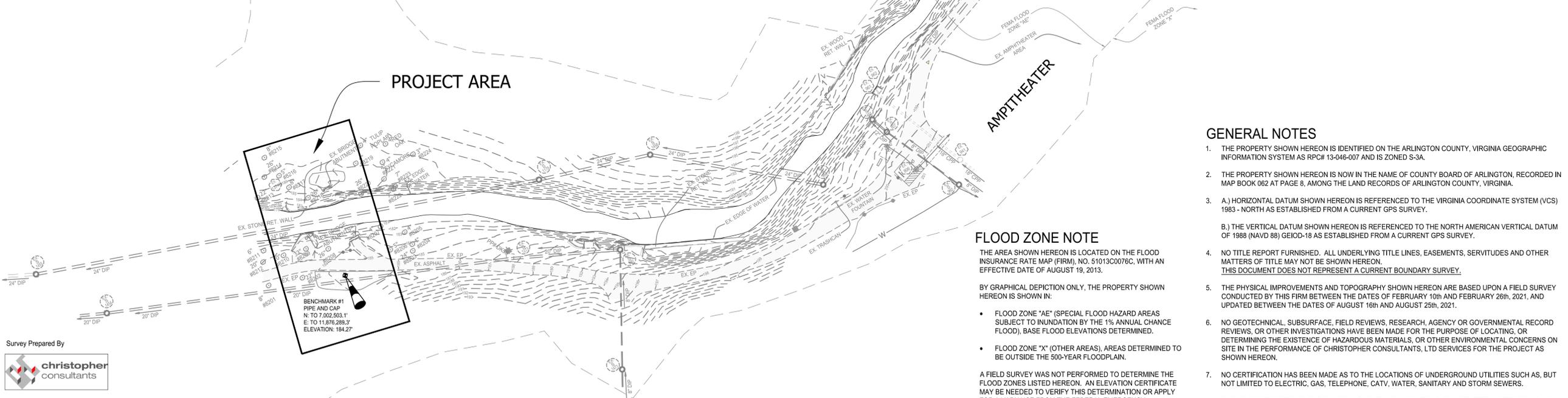
STORM STRUCTURE DATA

- RIM EL. = 204.97, INV IN (18" CPP FROM EAST) = 201.27, INV OUT (18" CPP TO 961) = 197.27
RIM EL. = 194.00, INV IN (18" CPP FROM 941) = 191.60
INV (BLOCKED 12" RCP) = 195.33
INV (12" CMP FROM EAST) = 195.49
INV (10" PVC FROM WEST) = 197.26



SCHEDULE OF TREES

Table with 4 columns: Tree Tag #, Tree Description, Tree Tag #, Tree Description. Lists trees like 8201 DT S28/8 LOCUST, 8202 DT S222/22 W.OAK, etc.



FLOOD ZONE NOTE

THE AREA SHOWN HEREON IS LOCATED ON THE FLOOD INSURANCE RATE MAP (FIRM), NO. 51013C0076C, WITH AN EFFECTIVE DATE OF AUGUST 19, 2013.
BY GRAPHICAL DEPICTION ONLY, THE PROPERTY SHOWN HEREON IS SHOWN IN:
FLOOD ZONE "AE" (SPECIAL FLOOD HAZARD AREAS SUBJECT TO INUNDATION BY THE 1% ANNUAL CHANCE FLOOD), BASE FLOOD ELEVATIONS DETERMINED.
FLOOD ZONE "X" (OTHER AREAS), AREAS DETERMINED TO BE OUTSIDE THE 500-YEAR FLOODPLAIN.
A FIELD SURVEY WAS NOT PERFORMED TO DETERMINE THE FLOOD ZONES LISTED HEREON. AN ELEVATION CERTIFICATE MAY BE NEEDED TO VERIFY THIS DETERMINATION OR APPLY FOR A VARIANCE FROM THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

GENERAL NOTES

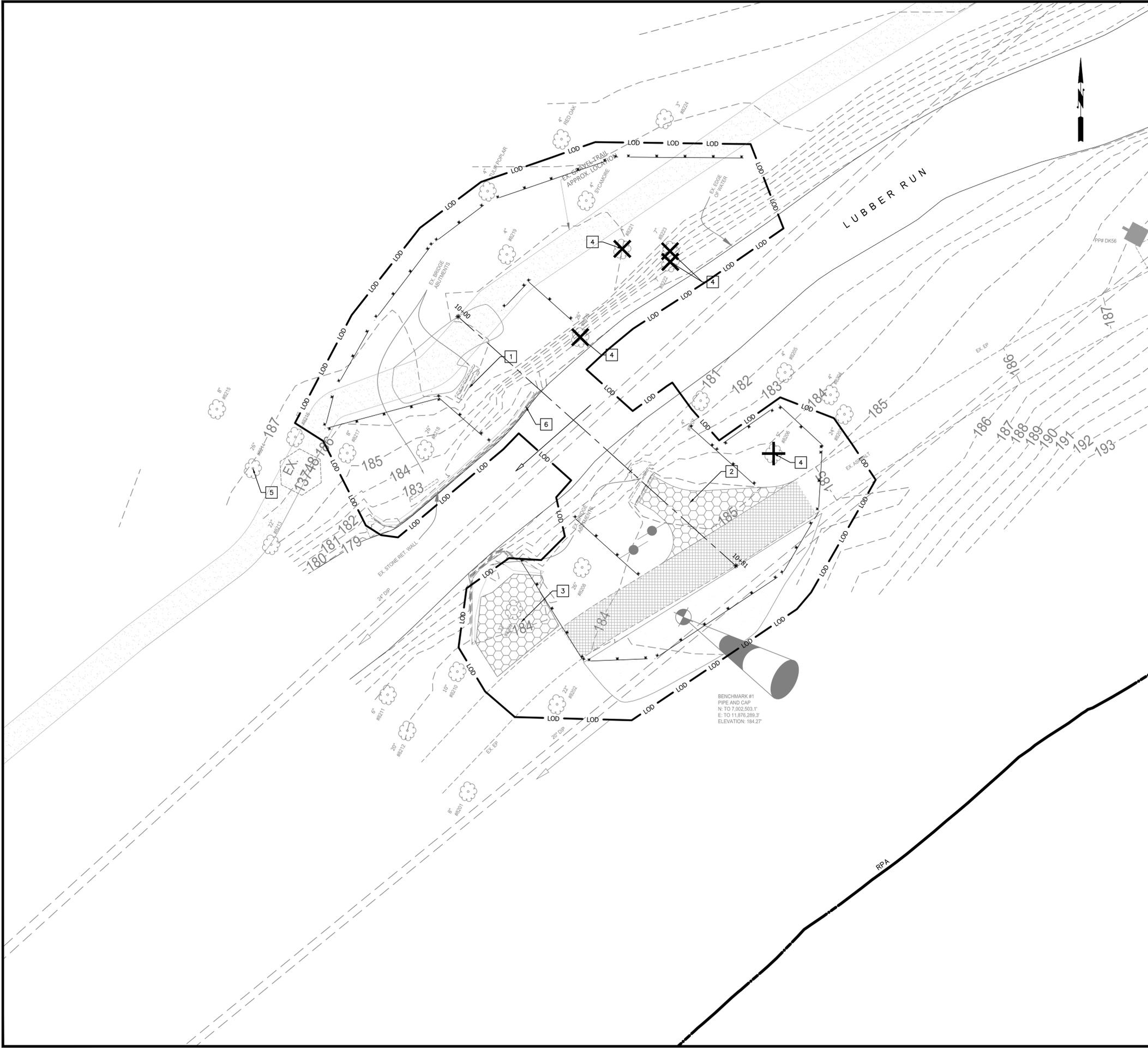
- 1. THE PROPERTY SHOWN HEREON IS IDENTIFIED ON THE ARLINGTON COUNTY, VIRGINIA GEOGRAPHIC INFORMATION SYSTEM AS RPC# 13-046-007 AND IS ZONED S-3A.
2. THE PROPERTY SHOWN HEREON IS NOW IN THE NAME OF COUNTY BOARD OF ARLINGTON, RECORDED IN MAP BOOK 062 AT PAGE 8, AMONG THE LAND RECORDS OF ARLINGTON COUNTY, VIRGINIA.
3. A) HORIZONTAL DATUM SHOWN HEREON IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM (VCS) 1983 - NORTH AS ESTABLISHED FROM A CURRENT GPS SURVEY.
B) THE VERTICAL DATUM SHOWN HEREON IS REFERENCED TO THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) GEIOD-18 AS ESTABLISHED FROM A CURRENT GPS SURVEY.
4. NO TITLE REPORT FURNISHED. ALL UNDERLYING TITLE LINES, EASEMENTS, SERVITUDES AND OTHER MATTERS OF TITLE MAY NOT BE SHOWN HEREON. THIS DOCUMENT DOES NOT REPRESENT A CURRENT BOUNDARY SURVEY.
5. THE PHYSICAL IMPROVEMENTS AND TOPOGRAPHY SHOWN HEREON ARE BASED UPON A FIELD SURVEY CONDUCTED BY THIS FIRM BETWEEN THE DATES OF FEBRUARY 10th AND FEBRUARY 26th, 2021, AND UPDATED BETWEEN THE DATES OF AUGUST 16th AND AUGUST 25th, 2021.
6. NO GEOTECHNICAL, SUBSURFACE, FIELD REVIEWS, RESEARCH, AGENCY OR GOVERNMENTAL RECORD REVIEWS, OR OTHER INVESTIGATIONS HAVE BEEN MADE FOR THE PURPOSE OF LOCATING, OR DETERMINING THE EXISTENCE OF HAZARDOUS MATERIALS, OR OTHER ENVIRONMENTAL CONCERNS ON SITE IN THE PERFORMANCE OF CHRISTOPHER CONSULTANTS, LTD SERVICES FOR THE PROJECT AS SHOWN HEREON.
7. NO CERTIFICATION HAS BEEN MADE AS TO THE LOCATIONS OF UNDERGROUND UTILITIES SUCH AS, BUT NOT LIMITED TO ELECTRIC, GAS, TELEPHONE, CATV, WATER, SANITARY AND STORM SEWERS.
8. DURING THE PROCESS OF OUR PHYSICAL SURVEY NO INDICATIONS OF A CEMETERY WERE FOUND. NO FURTHER INSPECTION OF THIS PROPERTY HAS BEEN MADE FOR POSSIBLE CEMETERIES.

ARLINGTON VIRGINIA DEPARTMENT OF ENVIRONMENTAL SERVICES FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606

Table for APPROVALS and REVISIONS with columns for NAME and DATE. Includes roles like DESIGN TEAM ENGINEER SUPERVISOR, CONSTRUCTION MANAGEMENT SUPERVISOR, WATER, SEWER, STREETS BUREAU CHIEF, TRANSPORTATION DIRECTOR, PROJECT MANAGER.

EXISTING CONDITIONS: LUBBER RUN PEDESTRIAN BRIDGE, LUBBER RUN PARK, PEDESTRIAN BRIDGE OVER LUBBER RUN

23-DPR-ITBPW-575
DESIGNED: BD
DRAWN: BD
CHECKED: BCG
PLOTTED: MARCH 7 2023
SCALE: GRAPHIC SCALE
C011.1



DEMOLITION NOTES

- 1 EXISTING ABUTMENTS TO BE REMOVED
- 2 EXISTING ASPHALT TO BE DEMOLISHED
- 3 EXISTING ASPHALT TO BE REMOVED WITH MANUAL TOOLS. BREAK UP ASPHALT INTO LARGE CHUNKS OF ASPHALT. REMOVAL AND DISPOSAL OF ASPHALT AND EXCAVATION AROUND TREES SHALL EXERCISE CAUTION NOT TO DAMAGE TREE ROOTS. FURNISH AND INSTALL FOUR INCHES OF MULCH LAYER TO REPLACE ASPHALT AREA.
- 4 EXISTING TREE / STUMP TO BE REMOVED
- 5 EXISTING TREE TO BE PARTIALLY REMOVED
SEE SHEET C091.1 FOR DETAILS
- 6 PORTION OF EXISTING STONE WALL TO BE REMOVED
SEE SHEET B001.1 FOR APPROXIMATE LIMITS OF REMOVAL

SEE SHEET C031.1 FOR CONSTRUCTION FENCE AND EROSION & SEDIMENT CONTROL

LEGEND

- MILL & OVERLAY
SEE TYPICAL SECTION FOR DETAILS
- EXISTING GRAVEL
- DEMOLITION AREA
- RESOURCE PROTECTION AREA (RPA)
- LIMITS OF DISTURBANCE
- TREE PROTECTION FENCE

NOTES

- THE ENTIRETY OF THE PROJECT OCCURS WITHIN THE RPA.
- SEE MAINTENANCE OF TRAFFIC PLAN FOR C121.1 AND TREE INVENTORY / TREE PROTECTION PLAN C091.1 FOR ADDITIONAL INSTRUCTION ON DEMOLITION AND PRESERVATION OF EXISTING CONDITIONS DURING CONSTRUCTION.



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SEAL



APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

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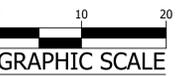
LUBBER RUN PEDESTRIAN BRIDGE
 LUBBER RUN PARK
 PEDESTRIAN BRIDGE OVER LUBBER RUN
 DEMOLITION PLAN

23-DPR-ITBPW-575

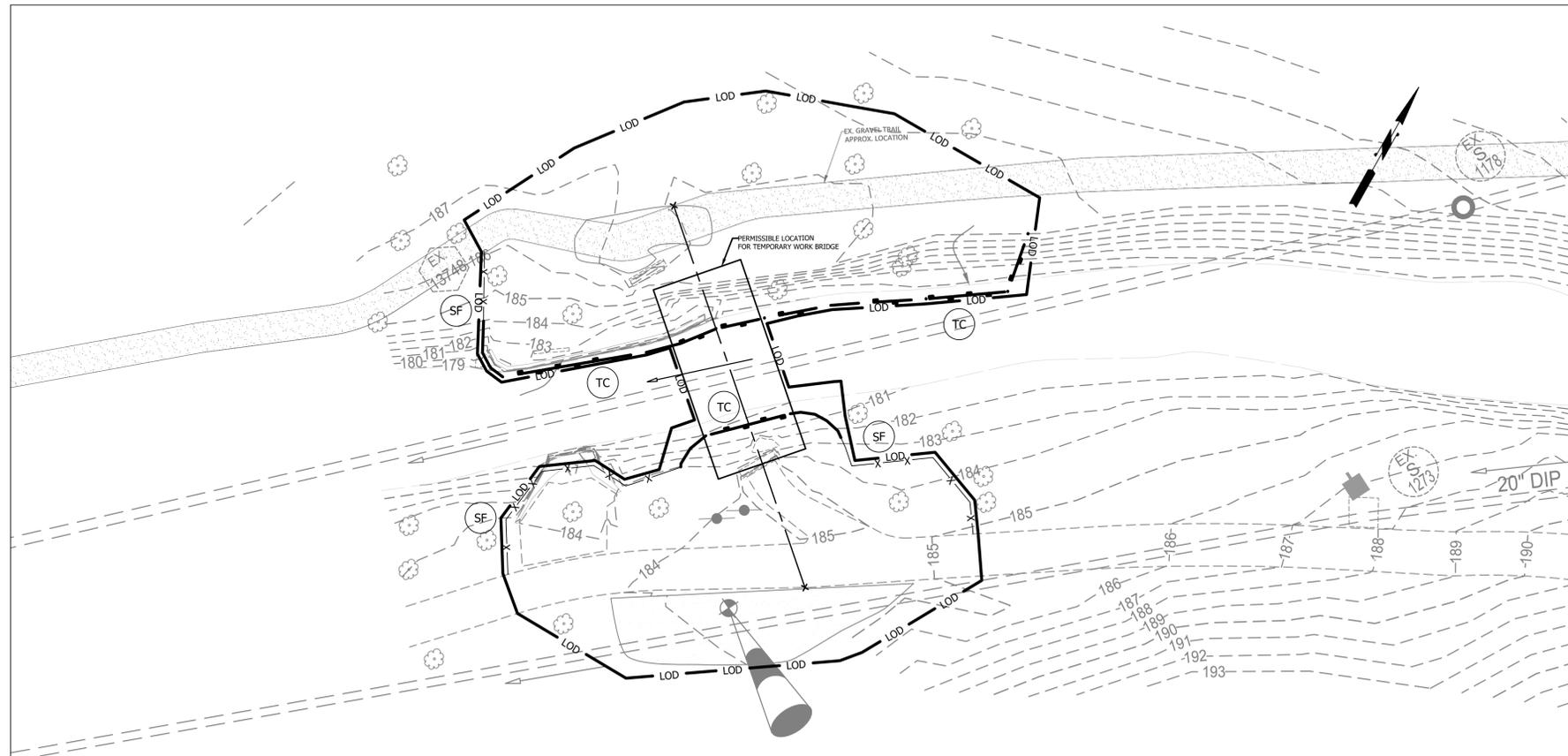
DESIGNED: BD
 DRAWN: BD
 CHECKED: BCG

PLOTTED: MARCH 7 2023

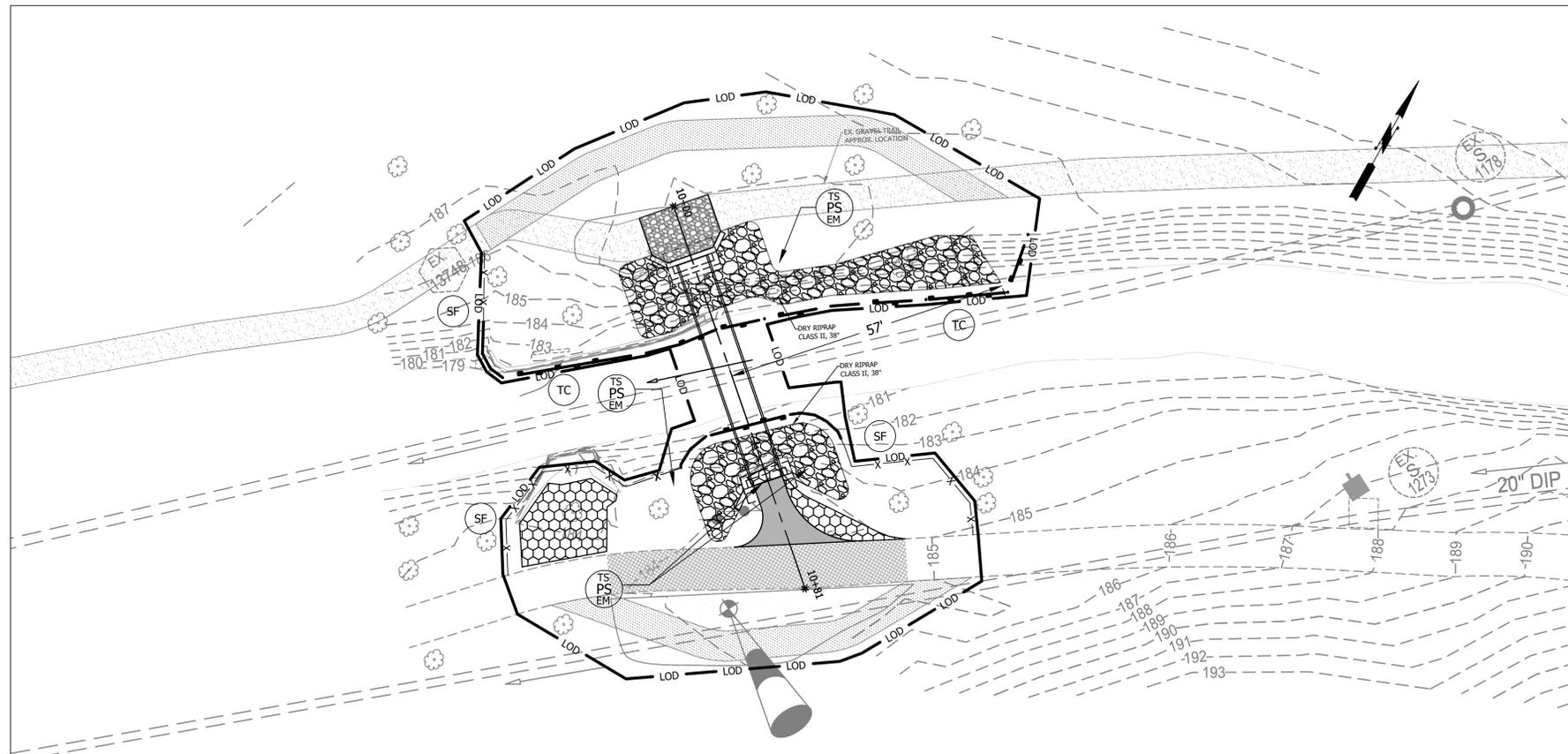
SCALE:



GRAPHIC SCALE



EROSION AND SEDIMENT CONTROL PLAN - EXISTING CONDITION



EROSION AND SEDIMENT CONTROL PLAN - PROPOSED CONDITION

EROSION AND SEDIMENT CONTROL LEGEND

3.05	TEMPORARY SILT FENCE	SF	-X-X-
3.30 3.32 3.36	TOPSOIL PERMANENT SEEDING EC MATTING	TS PS EM	(Circle with TS PS EM)
	LIMITS OF DISTURBANCE	LOD	--- LOD ---
3.27	TURBIDITY CURTAIN	TC	(Circle with TC)
	PROPOSED FULL DEPTH ASPHALT		(Solid grey fill)
	PROPOSED REMOVAL OF EX. PAVEMENT		(Hatched pattern)
	PROPOSED MILL & OVERLAY		(Cross-hatched pattern)
	CRUSHER RUN AGGREGATE NO. 25 OR 26		(Stippled pattern)
	PROP RIPRAP		(Stone pattern)
	EXISTING GRAVEL		(Dotted pattern)
	TEMPORARY 4 INCH MULCH LAYER FOR 6' PATH (SEE ARLINGTON CO. STANDARD 311300.9NS)		(Dotted pattern)

NOTES

1. CONTRACTOR TO APPLY TOPSOIL AND MULCH TO AREAS NOT STABILIZED BY CONCRETE, ASPHALT, OR RIP RAP. EROSION CONTROL MATTING SHALL BE USED TO PROTECT THE TOPSOIL AND MULCH FROM EROSION.
2. ALL PROPOSED WORK FOR THIS PROJECT IS OCCURRING WITHIN THE LIMITS OF THE RPA.
3. FOR RIPRAP DETAILS, SEE SHEETS B001.1 AND B001.3
4. SEE SHEET C121.1 FOR TEMPORARY TRAIL LOCATIONS.
5. TRENCHLESS SILT FENCE MAY BE REQUIRED IN LOCATIONS DETERMINED BY THE COUNTY ARBORISTS. FOR TRENCHLESS SILT FENCE DETAILS, SEE SHEET C032.2. TRENCHLESS SILT FENCE SHALL BE INCLUDED IN THE PRICE BID FOR SILT FENCE, WITH WIRE SUPPORT AND WILL BE MEASURED PER LF.
6. COFFERDAMS TO FACILITATE DEWATERING SHALL BE CONSTRUCTED WITHIN THE LIMITS OF THE TURBIDITY CURTAINS. COFFERDAMS SHALL BE CONSTRUCTED WITH NON-ERODIBLE MATERIAL AND BE REMOVED WHEN NO LONGER NEEDED.
7. AREAS USED FOR CONSTRUCTION STAGING AND TEMPORARY PEDESTRIAN ACCESS SHALL BE RETURNED BACK TO THE ORIGINAL CONDITION AFTER THE CONSTRUCTION IS COMPLETED.

TEMPORARY WORK BRIDGE:

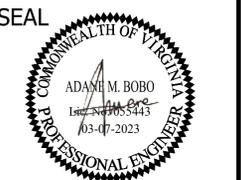
THE CONTRACTOR MAY CONSTRUCT A TEMPORARY WORK BRIDGE TO ACCESS EACH SIDE OF STREAM. THE TEMPORARY WORK BRIDGE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER HOLDING A VALID LICENSE TO PRACTICE ENGINEERING IN THE COMMONWEALTH OF VIRGINIA. WORKING DRAWINGS OF THE WORK BRIDGE SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW 14 DAYS PRIOR TO INSTALLATION OF THE WORK BRIDGE. THE DRAWINGS SHALL INCLUDE PLAN AND PROFILE VIEW, AND DETAILS OF ALL STRUCTURAL MEMBERS AS DETERMINED BY THE CONTRACTOR AND HIS ENGINEER. THE CONTRACTOR SHALL DETERMINE THE METHODS AND MEANS OF SUPPORT REQUIRED FOR THE LOADS IMPOSED BY CONSTRUCTION EQUIPMENT DURING THE CONSTRUCTION OF THE PROJECT.

THE LOCATION OF THE TEMPORARY WORK BRIDGE SHALL BE WITHIN THE LIMITS OF WORK SHOWN ON THE PLANS. THE CONTRACTOR SHALL USE A MATERIAL AND DESIGN FOR THE TEMPORARY WORK BRIDGE THAT DOES NOT IMPACT THE STREAM. ALL SUPPORTS SHALL BE OUTSIDE OF ORDINARY HIGH WATER. WORK BRIDGE MATERIALS AND SUPPORT STRUCTURES SHALL BE NON-ERODIBLE MATERIAL. EQUIPMENT SHALL NOT BE ALLOWED TO ENTER THE WATER TO CONSTRUCT THE WORK BRIDGE.



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APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

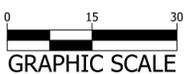
LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK
PEDESTRIAN BRIDGE OVER LUBBER RUN
EROSION & SEDIMENT CONTROL PLAN

23-DPR-ITBPW-575

DESIGNED: AB
DRAWN: AB
CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:



EROSION AND SEDIMENT CONTROL NARRATIVE

PROJECT DESCRIPTION:

THE LUBBER RUN PEDESTRIAN BRIDGE PROJECT WILL CONSIST OF REPLACING THE PEDESTRIAN BRIDGE THAT PREVIOUSLY CROSSED LUBBER RUN. THE PROPOSED BRIDGE WILL BE A SINGLE SPAN PREFABRICATED PEDESTRIAN BRIDGE 6 FT WIDE AND APPROXIMATELY 47 FT LONG. THE PROPOSED BRIDGE WILL BE PLACED IN THE SAME LOCATION AS THE PREVIOUS BRIDGE, WHICH WILL ENABLE STREAM CROSSING AND TRAIL CONNECTION BETWEEN THE EASTERN AND WESTERN PARTS OF LUBBER RUN TRAIL. THE TOTAL PROJECT WORK AREA SUBJECT TO LAND DISTURBING ACTIVITY IS 8,633 SF (0.20 AC). PROJECT WORK INCLUDES:

- FULL DEPTH ASPHALT PAVEMENT
- INSTALLING OF PROPOSED BRIDGE

EXISTING SITE CONDITIONS:

THE PROJECT IS LOCATED AROUND A PARK AREA WHERE IT IS ADJACENT TO LUBBER RUN. THE SITE IS LOCATED WITHIN THE MIDDLE POTOMAC-ANACOSTIA-OCOQUAN WATERSHED WITH THE 8 DIGIT HYDROLOGIC UNIT CODE (HUC) OF 02070010 AND IT HAS HYDROLOGY SOIL GROUP B. THE SOIL TYPE IS "GLENELG-MANOR COMPLEX."

ADJACENT PROPERTIES:

THERE IS A LUBBER RUN TRAIL THAT IS PARALLEL TO THE LUBBER RUN CHANNEL. WHERE ADJACENT AREAS ARE AT A LOWER ELEVATION, SILT FENCE IS PROPOSED TO BE USED AS A PERIMETER CONTROL.

OFF-SITE AREAS:

A MINIMAL AMOUNT OF OFFSITE BORROW MAY BE REQUIRED FOR TOPSOIL IN PROJECT SITE. THE LOCATION AND ENSURING MAINTENANCE OF THE BORROW AREAS IS THE CONTRACTOR'S RESPONSIBILITY.

CRITICAL AREAS:

DISTURBED AREAS SHALL BE MONITORED ROUTINELY FOR SIGNS OF EROSION, AND TEMPORARY STABILIZATION SHALL BE PUT IN PLACE AS NEEDED. PERIMETER CONTROLS SHALL BE MONITORED FREQUENTLY AND CLEARED AS NEEDED. THE PROJECT AREA IS HIGHLY DEVELOPED AND WELL GRADED AND THE PROPOSED IMPROVEMENT WILL SLIGHTLY INCREASE THE EXISTING IMPERVIOUS FOOT PRINT. THE PROPOSED WORK LOCATED NEAR OR IN THE STREAM CONSISTS OF ABUTMENT CONSTRUCTION, SUPERSTRUCTURE CONSTRUCTION, PLACEMENT OF RIP RAP FOR SLOPE PROTECTION, AND CONSTRUCTION OF THE ACCESS ROAD. TURBIDITY CURTAIN AND SILT FENCE ARE PROPOSED FOR STREAM PROTECTION AND ARE TO BE POSITIONED TO ENSURE THE STREAM IS WELL PROTECTED FROM LAND DISTURBING ACTIVITIES. EROSION CONTROL MATTING CONSISTING OF NATURAL FIBERS (PLASTIC-FREE) SHALL BE INSTALLED ON STREAM BANKS.

EROSION AND SEDIMENT CONTROL MEASURES:

THE EROSION AND SEDIMENT CONTROL MEASURES FOR THIS PROJECT AREA SHALL INCLUDE PERIMETER CONTROLS SUCH AS SILT FENCE TO PREVENT SILTY WATER FROM LEAVING THE SITE AND STABILIZATION WITH SOD, MULCH, OR SEEDING AND STRAW OR HAY. FOR SPECIFICS REGARDING INSTALLATION, MAINTENANCE, INSPECTION, AND REMOVAL, REFER TO OTHER SECTIONS OF THIS NARRATIVE AND THE PLANS.

PERMANENT STABILIZATION:

ALL AREAS DISTURBED BY CONSTRUCTION SHALL BE STABILIZED WITH GRASS, MULCH OR SOD. SEE THE PROPOSED PLANS FOR ADDITIONAL INFORMATION.

STORMWATER RUNOFF CONSIDERATIONS:

NO ADDITIONAL IMPERVIOUS AREA WILL BE ADDED TO THIS PROJECT.

TOTAL LAND DISTURBANCE.....= 8,633 SF (0.20 ACRES)

INCREASE IMPERVIOUS AREA.....= 70 SF (0.002 ACRES)

SOILS INFORMATION:

THE FOLLOWING SOILS ARE FOUND ON SITE (SEE SOILS MAP ON SHEET C032.3 FOR LOCATION)

SOIL #:	SOIL NAME:	HYDROLOGIC GROUP:	ERODABILITY:
6D	GLENELG-MANOR COMPLEX	B	N/A

FLOODPLAIN AND RESOURCE PROTECTION AREA (RPA):

THERE ARE FLOODPLAIN AND RESOURCE PROTECTION AREAS LOCATED WITHIN THIS PROJECT SITE.

EROSION & SEDIMENT CONTROL PROJECT PHASING

1. EXISTING CONDITION:

- PRE-CONSTRUCTION MEETING WITH THE PROJECT OFFICER, CONTRACTOR, AND COUNTY INSPECTOR.
- PERFORM INITIAL PERIMETER CLEARING TO INSTALL REMAINDER OF PERIMETER CONTROLS SUCH AS SILT FENCE (SF) PER THE PHASE I PLAN.
- SEED AND MULCH ALL EARTHEN CONTROLS.
- CONTACT ARLINGTON COUNTY PROJECT OFFICER FOR A PERIMETER INSPECTION PRIOR TO CLEARING THE REMAINDER OF THE SITE IN ORDER TO OBTAIN PHASE II GRADING PERMIT.
- CLEAR THE SITE TO THE LIMITS AS SHOWN ON THE CONSTRUCTION PLANS.

2. PROPOSED CONDITION:

- INSTALL TEMPORARY WORK BRIDGE IN ACCORDANCE WITH THE NOTES ON SHEET B001.1. WORK BRIDGE SHALL BE INSTALLED WITHIN THE LIMITS OF DISTURBANCE AND ALL SUPPORTS SHALL BE LOCATED OUTSIDE OF THE STREAM. TEMPORARY WORK BRIDGE SHALL BE CONSTRUCTED WITH NON-ERODIBLE MATERIAL.
- BEGIN CONSTRUCTION OF THE PROPOSED BRIDGE AND SITE GRADING
- THE CONTROL MEASURES MAY NOT BE REMOVED UNTIL ALL OF THE DISTURBED AREAS HAVE BEEN STABILIZED AND ONLY AS APPROVED AND DIRECTED BY THE INSPECTOR.

RUNOFF SHALL BE TREATED WITH SILT FENCE AND TURBIDITY CURTAIN PRIOR TO ENTERING MAJOR STORM SEWER SYSTEMS.

EROSION AND SEDIMENT CONTROL MEASURES

UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND THE ARLINGTON COUNTY EROSION AND SEDIMENT CONTROL ORDINANCE. THE MINIMUM STANDARDS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A VARIANCE.

1. STRUCTURAL PRACTICES

- SILT FENCE - VESCH 3.05
 - SILT FENCE WILL BE INSTALLED WITH THE E&S PLAN TO FILTER RUNOFF FROM DISTURBED AREAS. RUNOFF SHALL NOT BE DIRECTED PARALLEL TO THE INSTALLATION OF SILT FENCE.
 - SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY.
 - CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM UNDERCUTTING.
 - SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE, THE FABRIC SHALL BE REPLACED IMMEDIATELY.
 - SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT. THEY MUST BE REMOVED WHEN DEPOSITS REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
 - ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, THEN PREPARED AND SEEDED.
- TURBIDITY CURTAIN VESCH 3.27
 - TURBIDITY CURTAIN WILL BE INSTALLED WITH THE E&S PLAN TO PROVIDE SEDIMENTATION PROTECTION FOR A WATERCOURSE FROM UP-SLOPE LAND DISTURBANCE OR FROM DREDGING OR FILLING WITHIN THE WATERCOURSE.
 - SHOULD REPAIRS TO THE GEOTEXTILE FABRIC BECOME NECESSARY, MANUFACTURER'S INSTRUCTIONS MUST BE FOLLOWED TO ENSURE THE ADEQUACY OF THE REPAIR.
 - WHEN THE CURTAIN IS NO LONGER REQUIRED AS DETERMINED BY THE INSPECTOR, THE CURTAIN AND RELATED COMPONENTS SHALL BE REMOVED IN SUCH A MANNER AS TO MINIMIZE TURBIDITY.

2. VEGETATIVE PRACTICES

- TOPSOILING (STOCKPILE) - VESCH 3.30
 - TOPSOIL WILL BE STRIPPED FROM AREAS TO BE GRADED AND STOCKPILED FOR LATER USE. STOCKPILE LOCATIONS MAY HAVE TO BE LOCATED OFF-SITE AND ARE TO BE STABILIZED WITH TEMPORARY VEGETATION. PRIOR TO LAND-DISTURBING ACTIVITIES, THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY E&S PLAN (IF THE STOCKPILE IS LOCATED OFF-SITE). THIS SUPPLEMENTAL PLAN SHOULD HAVE TO BE APPROVED BY THE PLAN APPROVING AUTHORITY BEFORE ANY OFF-SITE ACTIVITY COMMENCES.
- TEMPORARY SEEDING - VESCH 3.31
 - ALL DENUDEED AREAS, WHICH WILL BE LEFT DORMANT FOR EXTENDED PERIODS OF TIME SHALL BE SEEDED WITH FAST GERMINATING

- TEMPORARY VEGETATION IMMEDIATELY FOLLOWING GRADING. SELECTION OF THE SEED MIXTURE WILL DEPEND ON THE TIME OF YEAR IT IS APPLIED.
 - SEE SHEET III-288 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH) FOR ALLOWABLE PLANTING MATERIAL, SEEDING RATES, AND DATES. THE PLANTING REQUIREMENTS OF THE "SOUTH" SHALL BE FOLLOWED. LIMING SHALL BE BASED ON TABLE 3.31-A OF VESCH. FERTILIZERS SHALL BE APPLIED AS 600 LB/ACRE. THE FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2-4" OF SOIL. SEED SHALL BE EVENLY APPLIED AND SMALL GRAINS SHALL BE PLANTED NO MORE THAN 1.5" DEEP. SEEDING MADE IN FALL FOR WINTER COVER AND DURING HOT SUMMER MONTHS SHALL BE MULCHED.
 - EROSION CONTROL BLANKET AND MULCHING - VESCH 3.36 AND 3.35
 - EROSION CONTROL BLANKETS WILL BE INSTALLED OVER FILL SLOPES WHICH HAVE BEEN BROUGHT TO FINAL GRADE AND HAVE BEEN SEEDED TO PROTECT THE SLOPES FROM RILL AND GULLY EROSION AND TO ALLOW SEED TO GERMINATE PROPERLY. MULCH (STRAW OR FIBER) WILL BE USED ON RELATIVELY FLAT AREAS AND WILL BE APPLIED AS A SECOND STEP IN SEEDING OPERATION.
 - DUST CONTROL - VESCH 3.39
 - DUST SHALL BE CONTROLLED USING A VARIETY OF METHODS SUCH AS VEGETATIVE COVER, MULCH, TILLAGE, IRRIGATION, SPRAY-ON ADHESIVES, STONE BARRIERS, AND CALCIUM CHLORIDE. THE IMPLEMENTATION OF THE DUST CONTROL METHODS SHALL BE INSTALLED PER SECTION 3.39 OF VESCH
 - PERMANENT SEEDING - VESCH 3.32
 - SINCE THE SUBJECT SITE IS LOCATED WITHIN THE RESOURCE PROTECTED AREA (RPA), A NATIVE SEED MIX SPECIFIED IN THE TABLE SHOWN AT THE END THIS SHEET SHALL BE FOLLOWED FOR FINAL SEEDING MATERIAL, SEEDING RATES, AND DATES OF APPLICATION.
 - SODDING - VESCH 3.33
 - SODDED AREAS SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLANS. SOIL TESTS SHALL BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. PRIOR TO LAYING SOD, SOIL SURFACE SHALL BE CLEAR OF TRASH, DEBRIS AND LARGE OBJECTS. QUALITY OF SOD SHALL BE STATE CERTIFIED TO ENSURE GENETIC PURITY AND HIGH QUALITY. SOD SHALL NOT BE LAID ON FROZEN SOIL SURFACE, OR IN EXCESSIVELY WET OR DRY WEATHER. SOD SHALL BE DELIVERED AND INSTALLED WITHIN 36 HOURS, AND SHALL BE INSTALLED PER PAGE III-339 OF VESCH.

THE EROSION AND SEDIMENT CONTROL INSPECTOR SHALL HAVE THE AUTHORITY TO ADD OR DELETE EROSION AND SEDIMENT CONTROLS AS NEEDED IN THE FIELD. IN ADDITION, NO SEDIMENT TRAPS OR BASINS MAY BE REMOVED WITHOUT PRIOR APPROVAL OF THE INSPECTOR.

EROSION AND SEDIMENT CONTROL MANAGEMENT MEASURES

LANDSCAPE / TREE PRESERVATION NOTES

PRIOR TO ANY LAND DISTURBING ACTIVITY, THE CONTRACTOR SHALL CONTACT THE ARLINGTON COUNTY ARBORIST AND PROJECT OFFICER TO SCHEDULE AN INSPECTION.

LAND CONSERVATION NOTES:

- NO DISTURBED AREA WILL REMAIN DENUDEED FOR MORE THAN 7 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR OR HIS AGENT.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN GRADING. FIRST AREAS TO BE CLEARED ARE TO BE THOSE REQUIRED FOR THE PERIMETER CONTROLS.
- ALL STORM AND SANITARY SEWER LINES NOT IN STREETS ARE TO BE MULCHED AND SEEDED WITHIN 5 DAYS AFTER BACKFILL. NO MORE THAN 100 FEET ARE TO BE OPEN AT ANY ONE TIME.
- ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, SEEDED AND MULCHED WITHIN 5 DAYS AFTER BACKFILLING.
- ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS ARE TO BE MULCHED AND SEEDED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY AFTER GRADING. STRAW OR HAY MULCH IS REQUIRED. THE SAME APPLIES TO ALL SOIL STOCKPILES.
- DURING CONSTRUCTION, ALL STORM SEWER INLETS WILL BE PROTECTED BY INLET PROTECTION.
- ANY DISTURBED AREA NOT COVERED BY NOTE 1 ABOVE AND NOT PAVED, SODDED OR BUILT UPON BY NOV. 1, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE AND OVER-SEEDED BY APRIL 15.
- AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDEED AREAS SHALL BE STABILIZED.

EROSION & SEDIMENT CONTROL PROGRAM:

- THE EROSION CONTROL PLAN IS INTENDED TO ESTABLISH ENTRANCES AND PERIMETER CONTROL MEASURES WHICH INCLUDES SILT FENCE (SF), TURBIDITY CURTAIN (TC), AND OTHER CONTROLS SPECIFIED ON THE PLANS.
- WHERE CONSISTENT WITH JOB SAFETY REQUIREMENTS, ALL EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES. NO MATERIAL SHALL BE PLACED IN STREAMBEDS. ANY STOCKPILED MATERIAL WHICH WILL REMAIN IN PLACE LONGER THAN 7 DAYS SHALL BE SEEDED AND MULCHED. WHEN SPOIL IS PLACED ON THE DOWNHILL SIDE OF TRENCH, IT SHALL BE BACKSLOPED TO DRAIN TOWARD THE TRENCH. WHEN NECESSARY TO DEWATER THE TRENCH, THE PUMP DISCHARGE HOSE SHALL OUTLET IN A STABILIZED AREA OR A SEDIMENT TRAPPING DEVICE.
- ALL PRACTICES AND CONTROL DEVICES DESCRIBED HEREIN SHALL CONFORM TO THE CURRENT VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). IN ADDITION, THE CONTRACTOR SHALL TAKE THE FOLLOWING STEPS TO MINIMIZE THE VOLUME OF SILT:
 - CONTRACTOR SHALL EVALUATE THE SITE TO DETERMINE EXTENSIVE CUT AND FILL AREAS, AND SHALL WORK THOSE AREAS TO MINIMIZE THE USE OF HEAVY EQUIPMENT. CONTRACTOR SHALL BRING DISTURBED AREAS TO GRADE (ROUGH OR FINISHED) AND STABILIZE THOSE AREAS WITH TEMPORARY OR PERMANENT VEGETATION. THESE DISTURBED AREAS SHALL BE STABILIZED PRIOR TO BEGINNING WORK IN ANOTHER AREA.
 - FILL AREAS SHALL BE COMPACTED COMPLETELY PRIOR TO THE END OF EACH WORK DAY. FILL SLOPE SURFACES SHALL BE KEPT ROUGH TO REDUCE SHEET EROSION OF THE SLOPES. CONTRACTOR SHALL RE-DIRECT CONCENTRATED RUNOFF, BY EARTH BERMS OR OTHER DEVICES, AROUND ACTIVELY DISTURBED AREAS TO STABILIZED OUTLETS.
 - CUT SLOPES SHALL BE PROTECTED FROM CONCENTRATED FLOW BY BERMS (ABOVE THE SLOPE) AND DIRECTED AROUND THE DISTURBED AREA TO STABILIZED OUTLETS.
- MEASURES TO CONTROL EROSION AND SILTATION SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT STATE AND LOCAL REGULATIONS. THE INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND/OR THE APPROVAL OF THE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA AND CHAPTER 57 OF THE ARLINGTON COUNTY CODE.
- ALL AREAS, ON OR OFF-SITE, THAT ARE DISTURBED BY THIS CONSTRUCTION AND WHICH ARE NOT PAVED OR BUILT UPON SHALL BE ADEQUATELY STABILIZED TO CONTROL EROSION AND SEDIMENTATION. ACCEPTABLE STABILIZATION SHALL CONSIST OF PERMANENT GRASS SEED MIXTURE OR SOD THAT IS INSTALLED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS. ALL SLOPES 3:1 AND GREATER SHALL BE RECEIVE SOIL STABILIZATION IN ACCORDANCE WITH THE SPECIFICATIONS.
- WHERE STREAM CROSSINGS ARE REQUIRED FOR EQUIPMENT, TEMPORARY CULVERTS SHALL BE PROVIDED.
- FOR FURTHER REQUIREMENTS AND DETAILS OF TREE PRESERVATION, PLANTING, EROSION AND SEDIMENT CONTROL, SEE COUNTY CONSTRUCTION STANDARDS AND SPECIFICATIONS AND/OR THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS VR 625-02-00 EROSION AND SEDIMENT CONTROL REGULATIONS.
- THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
- ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
- A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
- PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN THE AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING, BUT NOT LIMITED TO, OFF-SITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION AND SEDIMENT CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
- THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
- ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
- DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
- THE CONTRACTOR SHALL INSPECT ALL EROSION AND SEDIMENT CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.
- ALL BIOFILTERS SHALL BE KEPT OFF-LINE UNTIL CONSTRUCTION IS COMPLETED AND ALL AREAS HAVE BEEN PROPERLY STABILIZED. THIS SHALL BE ACHIEVED BY USING INLET PROTECTION AT THE CURB CUTS AND STORMWATER CATCH BASINS LEADING DIRECTLY INTO THE BIOFILTERS.
- ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED.

PRE-STORM EROSION & SEDIMENTATION CHECKLIST:

PER GENERAL EROSION AND SEDIMENT CONTROL NOTE 6, THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION AND MAINTENANCE OF ANY ADDITIONAL EROSION AND SEDIMENT CONTROL (ESC) MEASURES NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE COUNTY. THESE SUPPLEMENTARY PRACTICES ARE IN ADDITION TO THOSE SHOWN IN AN EROSION AND SEDIMENT CONTROL PLAN. EROSION AND SEDIMENT CONTROL PRACTICES SHALL BE MODIFIED AS NEEDED TO ENSURE ONLY CLEAR WATER IS DISCHARGED FROM THE SITE.

THE FOLLOWING ACTIONS SHALL BE TAKEN PRIOR TO STORM EVENTS WITH PREDICTED HEAVY AND/OR LARGE VOLUME RAINFALL TO PREVENT SEDIMENT DISCHARGES FROM A CONSTRUCTION SITE. A TYPICAL SUMMER THUNDERSTORM IS AN EXAMPLE OF A STORM EVENT WITH PREDICTED HEAVY AND/OR LARGE VOLUME RAINFALL.

- PERIMETER CONTROLS

- SILT FENCE SHALL BE CHECKED FOR UNDERMINING, HOLES, OR DETERIORATION OF THE FABRIC. FENCING SHALL BE REPLACED IMMEDIATELY IF THE FABRIC IS DAMAGED OR WON. SILT FENCE MUST BE TRENCHED INTO THE GROUND PER STATE SPECIFICATIONS (VESCH STD & SPEC 3.09).
 - WOODEN STAKES OR STEEL POSTS SHALL BE PROPERLY SECURED UPRIGHT INTO THE GROUND. DAMAGED POSTS OR STAKES MUST BE REPLACED.
 - SEDIMENT THAT HAS ACCUMULATED AGAINST THE SILT FENCE SHALL BE REMOVED. ACCUMULATED SEDIMENT MUST BE REMOVED WHEN THE LEVEL REACHES ONE-HALF THE HEIGHT OF THE FENCING.
 - HAY BALES OR A STONE BERM SHALL BE PLACED ACROSS THE CONSTRUCTION ENTRANCE TO PREVENT SEDIMENT FROM LEAVING THE CONSTRUCTION SITE.
- EXPOSED SLOPES AND SOIL
 - EXPOSED SLOPES NOT AT THE FINAL STABILIZATION PHASE SHALL BE COVERED WITH EROSION CONTROL MATTING THAT SHALL BE MADE OF NATURAL FIBERS (PLASTIC-FREE). EROSION CONTROL MATTING SHALL BE INSTALLED ON STREAM BANKS. COVERING MATERIAL SHALL BE PROPERLY SECURED/ANCHORED.
 - CONTROLS SHALL BE INSTALLED TO PREVENT CONCENTRATED FLOW DOWN AN EXPOSED SLOPE. BERMS OR DIVERSION DIKES SHALL BE INSTALLED AT THE TOP OF CUT/EXPOSED SLOPES TO DIRECT STORM FLOW AROUND THE DISTURBED AREA.
 - EXPOSED SLOPES AT THE FINAL STABILIZATION PHASE SHALL BE STABILIZED USING SLOPE STABILIZATION PRACTICES SUCH AS SOIL STABILIZATION BLANKETS OR MATTING AS SPECIFIED IN THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH STD & SPEC 3.36). BLANKETS OR MATS MUST BE PROPERLY SECURED AND ANCHORED TO THE SLOPE USING STAPLES, PINS, OR STAKES.
 - SEEDED AREAS SHALL BE CHECKED AND RESEEDED AS NECESSARY TO COVER EXPOSED SOIL. RECENTLY SEEDED AREAS SHALL BE PROTECTED BY STRAW OR SOIL STABILIZATION BLANKETS TO PREVENT SEEDING FROM BEING WASHED AWAY.
 - STOCKPILES
 - STOCKPILED SOIL AND OTHER LOOSE MATERIALS THAT CAN BE WASHED AWAY SHALL BE COVERED WITH A TARP, PLASTIC SHEETING, OR OTHER STABILIZATION MATTING. THE COVER MUST BE PROPERLY SECURED/ANCHORED DOWN TO PREVENT IT FROM BEING BLOWN OFF AND EXPOSING MATERIALS TO RAIN. CONTROLS SUCH AS HAY BALES OR BOOMS SHALL BE PLACED ALONG THE PERIMETER OF THE STOCKPILE (DOWNHILL SIDE).
 - INLET PROTECTION
 - INLET PROTECTION CONTROLS SHALL BE INSPECTED TO ENSURE THEY ARE FUNCTIONING PROPERLY AND FLOODING WILL NOT OCCUR. CLOGGED OR DAMAGED CONTROLS MUST BE REPLACED IMMEDIATELY. ENSURE CONTROLS ALLOW FOR OVERFLOW/BYPASS OF STORMWATER RUNOFF DURING SIGNIFICANT STORM EVENTS.

IN ADDITION TO THESE PRE-STORM ACTIONS, ALL EROSION AND SEDIMENT CONTROL (ESC) MEASURES MUST BE CHECKED DAILY AND AFTER EACH SIGNIFICANT RAINFALL.

POLLUTION PREVENTION PLAN NOTES (STORMWATER MANUAL - SECTION 2.4)

- ONLY THE FOLLOWING NON-STORMWATER DISCHARGES ARE AUTHORIZED BY ARLINGTON COUNTY'S M4 PERMIT, UNLESS THE STATE WATER CONTROL BOARD, THE VIRGINIA SOIL AND WATER CONSERVATION BOARD (BOARD), OR ARLINGTON COUNTY DETERMINES THE DISCHARGE TO BE A SIGNIFICANT SOURCE OF POLLUTANTS TO SURFACE WATERS:
 - WATER LINE FLUSHING; LANDSCAPE IRRIGATION; DIVERTED STREAM FLOWS; RISING GROUND WATERS; UNCONTAMINATED GROUND WATER INFILTRATION (AS DEFINED AT 40 CFR 35.2005(20)); UNCONTAMINATED PUMPED GROUND WATER; DISCHARGES FROM POTABLE WATER SOURCES; FOUNDATION DRAINS; AIR CONDITIONING CONDENSATION; IRRIGATION WATER; SPRINGS; WATER FROM CRAWL SPACE PUMPS; FOOTING DRAINS; LAWN WATERING; INDIVIDUAL RESIDENTIAL CAR WASHING; FLOWS FROM RIPARIAN HABITATS AND WETLANDS; DECHLORINATED SWIMMING POOL DISCHARGES; DISCHARGES OR FLOWS FROM FIREFIGHTING; AND, OTHER ACTIVITIES GENERATING DISCHARGES IDENTIFIED BY THE DEPARTMENT OF ENVIRONMENTAL QUALITY AS NOT REQUIRING VPDES AUTHORIZATION.
- APPROPRIATE CONTROLS MUST BE IMPLEMENTED TO PREVENT ANY NON-STORMWATER DISCHARGES NOT INCLUDED ON THE ABOVE LIST (E.G., CONCRETE WASH WATER, PAINT WASH WATER, VEHICLE WASH WATER, DETERGENT WASH WATER, ETC.) FROM BEING DISCHARGED INTO ARLINGTON COUNTY'S M4 SYSTEM, WHICH INCLUDES THE CURB AND GUTTER SYSTEM, AS WELL AS CATCH BASINS AND OTHER STORM DRAIN INLETS, OR STREAM NETWORK.
- PER CHAPTER 26 OF THE ARLINGTON COUNTY CODE, IT SHALL BE UNLAWFUL FOR ANY PERSON TO DISCHARGE DIRECTLY OR INDIRECTLY INTO THE STORM SEWER SYSTEM OR STATE WATERS, ANY SUBSTANCE LIKELY, IN THE OPINION OF THE COUNTY MANAGER, TO HAVE AN ADVERSE EFFECT ON THE STORM SEWER SYSTEM OR STATE WATERS.

MAINTENANCE PROGRAM:

THE FOLLOWING IS A PROGRAM OF MAINTENANCE FOR THE MECHANICAL CONTROLS SPECIFIED IN THIS NARRATIVE AND ON THE PLAN:

- THE SITE SUPERINTENDENT OR HIS/HER REPRESENTATIVE SHALL MAKE A VISUAL INSPECTION OF ALL MECHANICAL CONTROLS AND NEWLY STABILIZED AREA (I.E. SEEDED AND MULCHED AND/OR SODDED AREAS) ON A DAILY BASIS; ESPECIALLY AFTER A HEAVY RAINFALL EVENT TO ENSURE THAT ALL CONTROLS ARE MAINTAINED AND PROPERLY FUNCTIONING. ANY DAMAGED CONTROLS SHALL BE REPAIRED PRIOR TO THE END OF THE WORK DAY INCLUDING RE-SEEDING AND MULCHING OR RE-SODDING IF NECESSARY.
- ALL SEDIMENT TRAPPING DEVICES SHALL BE CLEARED OUT AT 50% TRAP CAPACITY AND THE SEDIMENT SHALL BE DISPOSED OF BY SPREADING ON THE SITE OR IF NOT SUITABLE FOR FILL, HAULING AWAY AND DEPOSITING AT AN ACCEPTABLE DUMP SITE.
- THE CONTRACTOR SHALL TAKE SPECIAL CARE TO PREVENT MUD AND/OR OTHER DEBRIS FROM BEING ENTERED ONTO EXISTING SWM/BMP FACILITIES OR DOWNSTREAM WATER WAYS. SHOULD OFF-SITE AREAS BECOME POLLUTED BY CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR CLEANING THE AFFECTED AREAS TO THE SATISFACTION OF THE INSPECTOR.
- AT THE COMPLETION OF CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ANY REMAINING DENUDEED AREAS SHALL BE STABILIZED. CERTAIN DEVICES MAY BE REMOVED PRIOR TO CONSTRUCTION COMPLETION BUT ONLY WITH THE APPROVAL OF THE COUNTY INSPECTOR.
- AFTER CONSTRUCTION OPERATIONS HAVE ENDED, ALL DISTURBED AREAS SHALL BE STABILIZED. UPON APPROVAL OF THE COUNTY INSPECTOR, MECHANICAL SEDIMENT CONTROLS SHALL BE REMOVED AND THE GROUND PERMANENTLY STABILIZED WITH VEGETATION WITHIN 30 DAYS.

ARLINGTON COUNTY - RESOURCE PROTECTION AREA NATIVE SEED MIX:

Percent of Mix (%)	Latin Name	Common Name
20	<i>Lolium multiflorum</i>	Annual rye
30	<i>Elymus virginicus</i>	Virginia wild rye
25	<i>Panicum clandestinum</i>	Deer-tongue grass
15	<i>Elymus riparius</i>	Riverbank wild rye
5	<i>Elymus hystrix</i>	Bottlebrush grass
2	<i>Chamaecrista fasciculata</i>	Partridge pea
1	<i>Solidago rugosa</i>	Rough-stemmed goldenrod
1	<i>Asclepias syriaca</i>	Common milkweed
1	<i>Euthamia graminifolia</i>	Grass-leaved goldenrod

Apply at 50 lbs/acre (2 lb/1000 sf) between August 15th and May 15th.



DEPARTMENT OF ENVIRONMENTAL SERVICES
FACILITIES & ENGINEERING DIVISION
ENGINEERING BUREAU
2100 CLARENDON BOULEVARD, SUITE 813
ARLINGTON, VA 22201
PHONE: 703.228.3629
FAX: 703.228.3606

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SEAL



APPROVALS

DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS

DATE

REVISIONS	DATE

LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK

PEDESTRIAN BRIDGE OVER LUBBER RUN

EROSION & SEDIMENT CONTROL NARRATIVE

23-DPR-ITBPW-575

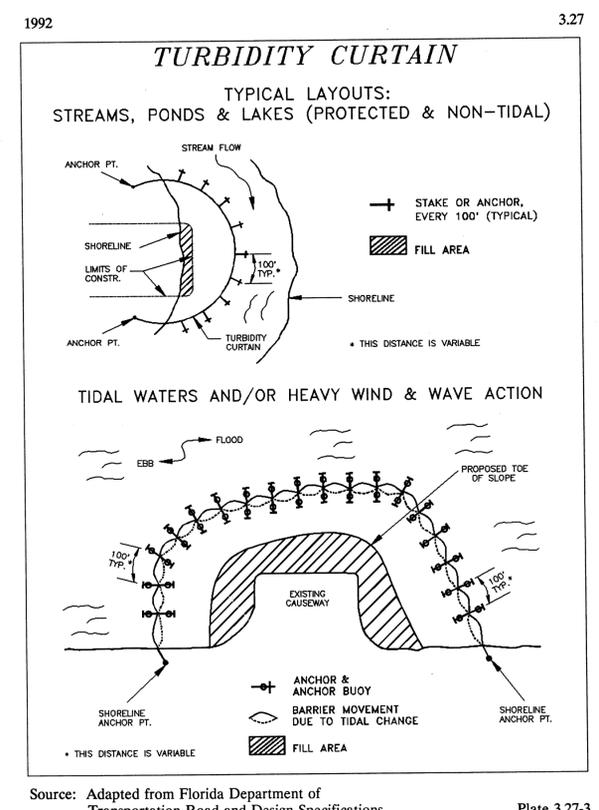
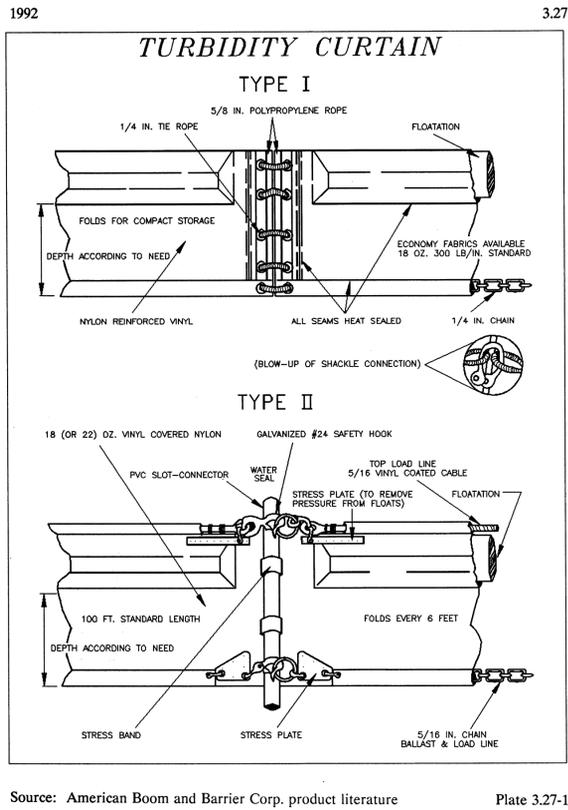
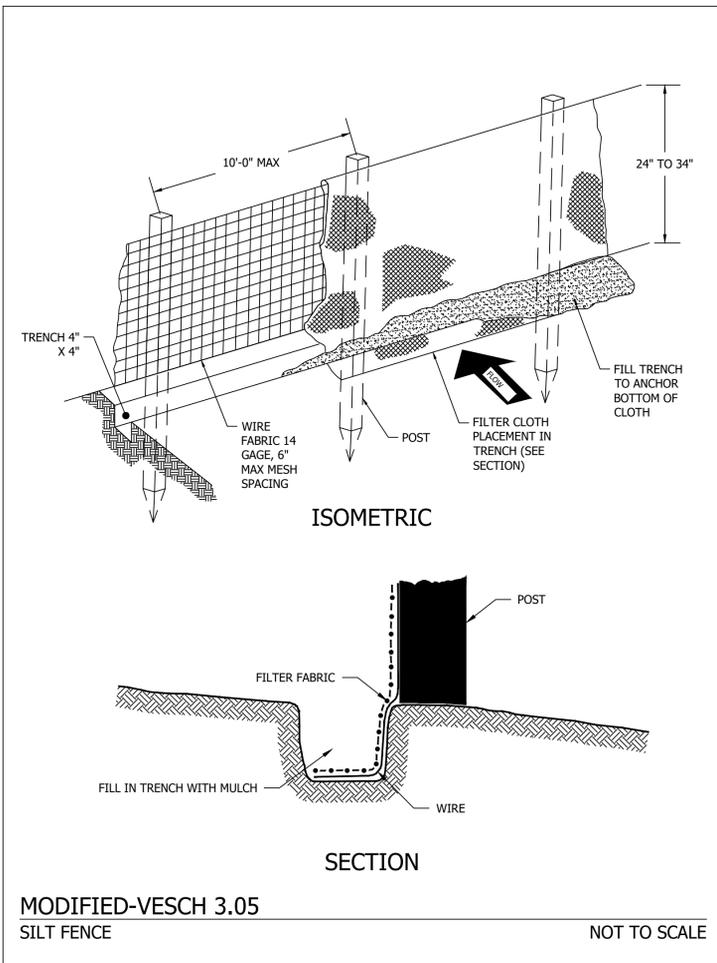
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DRAWN: AB
CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:

N/A

C032.1



APPROVALS	DATE
DESIGN TEAM ENGINEER SUPERVISOR	
CONSTRUCTION MANAGEMENT SUPERVISOR	
WATER, SEWER, STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	
PROJECT MANAGER	

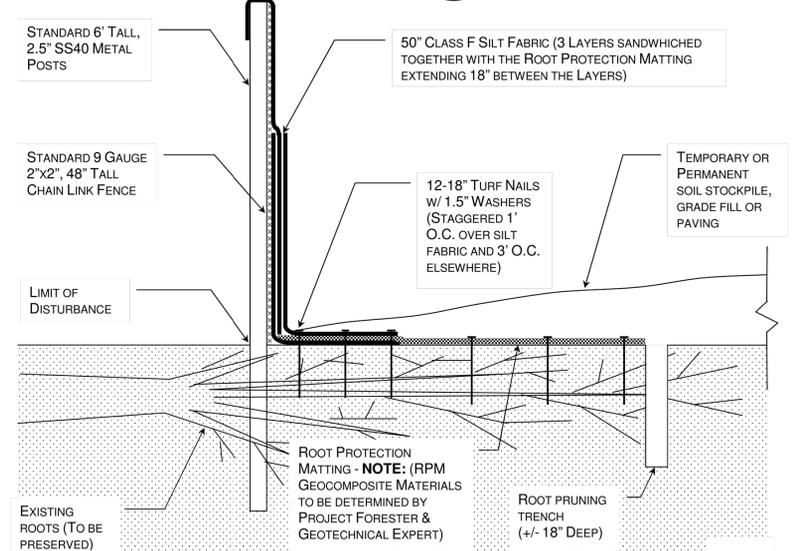
REVISIONS	DATE

LUBBER RUN PEDESTRIAN BRIDGE
 LUBBER RUN PARK
 PEDESTRIAN BRIDGE OVER LUBBER RUN
**EROSION & SEDIMENT CONTROL
 DETAILS**

23-DPR-ITBPW-575
 DESIGNED: AB
 DRAWN: AB
 CHECKED: BCG
 PLOTTED: MARCH 7 2023

SCALE:
 N/A

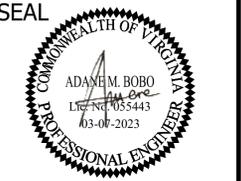
TRENCHLESS SUPER SILT FENCE
 SECTION NOT-TO-SCALE



Custom Soil Resource Report Soil Map

ARLINGTON VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES
 FACILITIES & ENGINEERING DIVISION
 ENGINEERING BUREAU
 2100 CLARENDON BOULEVARD, SUITE 813
 ARLINGTON, VA 22201
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CONSTRUCTION MANAGEMENT SUPERVISOR	
WATER, SEWER, STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	
PROJECT MANAGER	

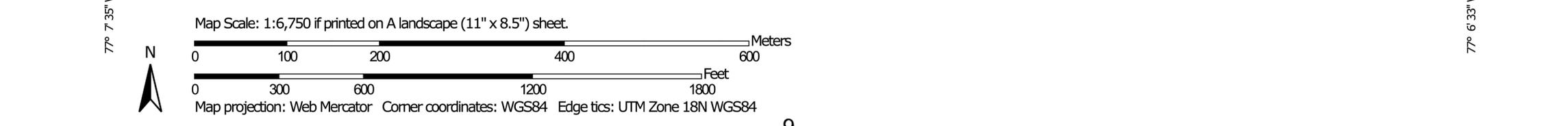
REVISIONS	DATE

LUBBER RUN PEDESTRIAN BRIDGE
 LUBBER RUN PARK
 PEDESTRIAN BRIDGE OVER LUBBER RUN
SOIL MAP

23-DPR-ITBPW-575
 DESIGNED: AB
 DRAWN: AB
 CHECKED: BCG
 PLOTTED: MARCH 7 2023

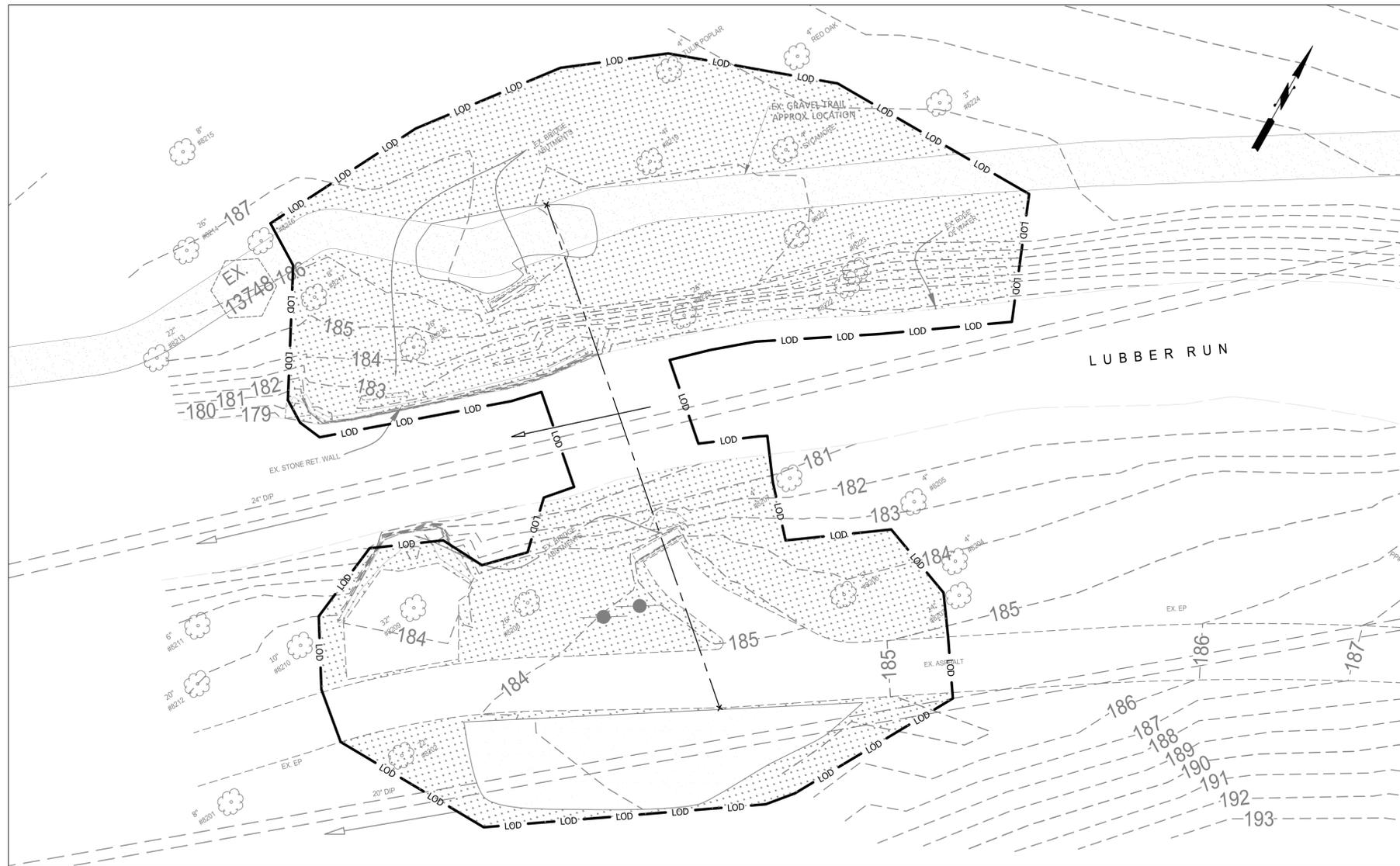
SCALE:
AS SHOWN

C032.3



38° 52' 28" N 77° 7' 35" W
 315600 315700 315800 315900 316000 316100 316200 316300 316400 316500 316600 316700 316800 316900 317000
 4304900 4304800 4304700 4304600 4304500 4304400 4304300 4304200 4304100
 38° 51' 57" N 77° 6' 33" W

Soil Map may not be valid at this scale.



PRE-DEVELOPMENT CONDITIONS

LEGEND

-  PRE-DEVELOPMENT GRASS/MULCH AREA
-  EXISTING GRAVEL
-  LOD LIMIT OF DISTURBANCE

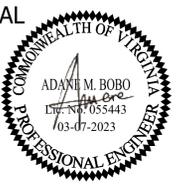
	TOTAL PROJECT AREA			
	PRE-DEV.		POST-DEV.	
	SF	AC	SF	AC
PERVIOUS AREA	7,406	0.17	7,336	0.17
IMPERVIOUS AREA	1,227	0.03	1,297	0.03
TOTAL LIMIT OF DISTURBANCE			8,633 SF (0.20 AC)	
CHANGE IN IMPERVIOUS			70 SF (0.002 AC)	



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APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

NO.	DESCRIPTION	DATE

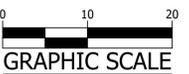
LUBBER RUN PEDESTRIAN BRIDGE
 PEDESTRIAN BRIDGE OVER LUBBER RUN
 PRE-DEVELOPMENT &
 POST-DEVELOPMENT MAP

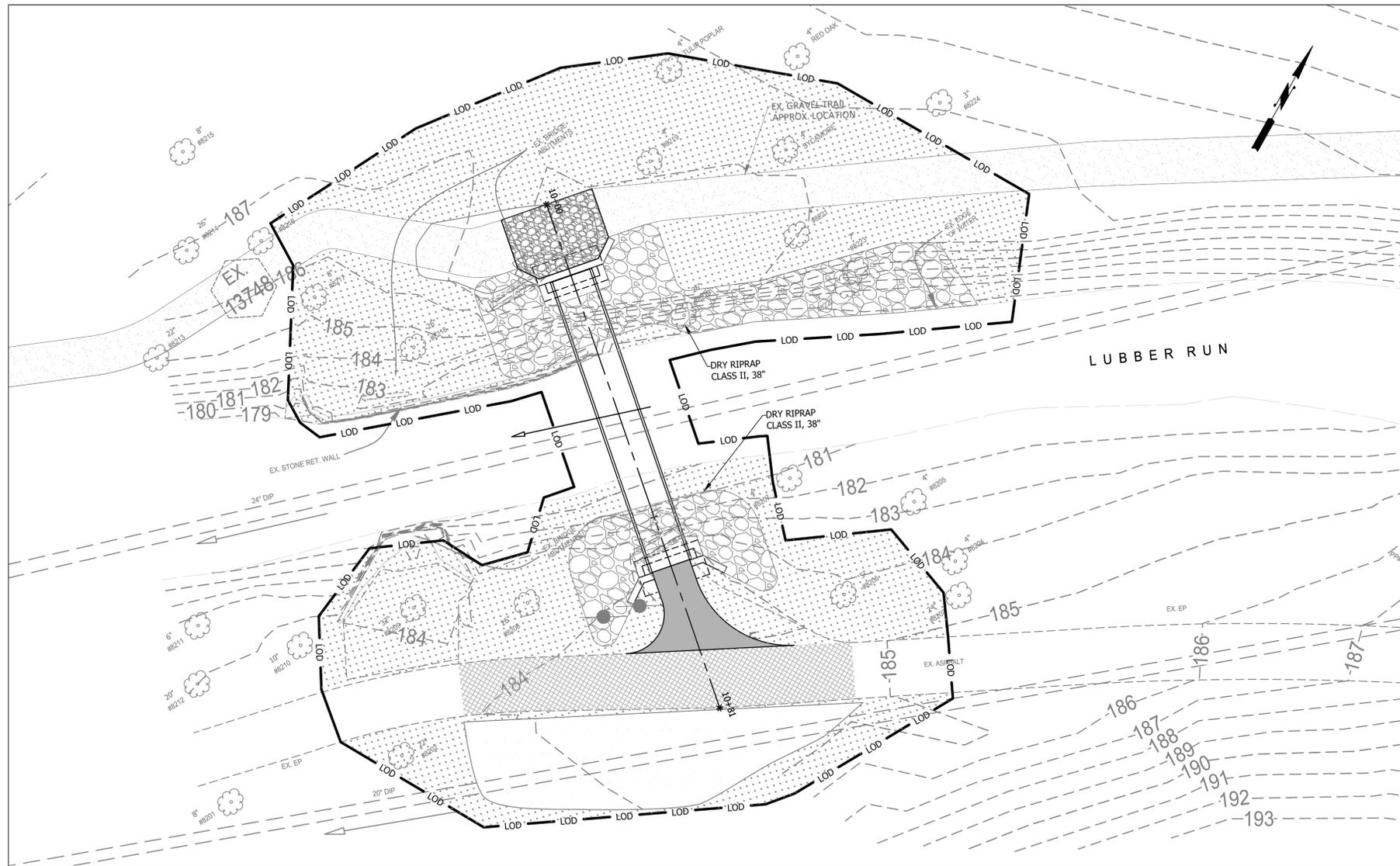
23-DPR-ITBPW-575

DESIGNED: AB
 DRAWN: AB
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PLOTTED: MARCH 7 2023

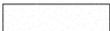
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POST-DEVELOPMENT CONDITIONS

LEGEND

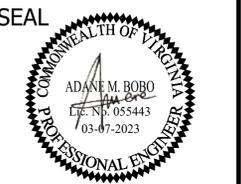
-  POST-DEVELOPMENT GRASS/MULCH AREA
-  PROP MILL & OVERLAY
SEE TYPICAL SECTION FOR DETAILS
-  EXISTING GRAVEL
-  PROP FULL DEPTH ASPHALT
SEE TYPICAL SECTION FOR DETAILS
-  CRUSHER RUN AGGREGATE NO. 25 OR 26
-  PROP RIPRAP
-  LOD ——— LIMIT OF DISTURBANCE

TOTAL PROJECT AREA				
	PRE-DEV.		POST-DEV.	
	SF	AC	SF	AC
PERVIOUS AREA	7,406	0.17	7,336	0.17
IMPERVIOUS AREA	1,227	0.03	1,297	0.03
TOTAL LIMIT OF DISTURBANCE	8,633 SF (0.20 AC)			
CHANGE IN IMPERVIOUS	70 SF (0.002 AC)			



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DESIGN TEAM ENGINEER SUPERVISOR _____

CONSTRUCTION MANAGEMENT SUPERVISOR _____

WATER, SEWER, STREETS BUREAU CHIEF _____

TRANSPORTATION DIRECTOR _____

PROJECT MANAGER _____

REVISIONS _____ DATE _____

NO.	DESCRIPTION	DATE

LUBBER RUN PEDESTRIAN BRIDGE
 PEDESTRIAN BRIDGE OVER LUBBER RUN
 PRE-DEVELOPMENT &
 POST-DEVELOPMENT MAP

23-DPR-ITBPW-575

DESIGNED: AB
 DRAWN: AB
 CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:



Project Name: Lubber Run Pedestrian Bridge		CLEAR ALL		data input cells	
Date: 12/6/2022				constant values	
Linear Development Project? Yes				calculation cells	
				final results	
Site Information					
Post-Development Project (Treatment Volume and Loads)					
Enter Total Disturbed Area (acres) → 0.20			Check: TRUE		
Maximum reduction required: 20%			BMP Design Specifications List: 2013 Draft Stds & Specs		
The site's net increase in impervious cover (acres) is: 0			Linear project? Yes		
Post-Development TP Load Reduction for Site (lb/yr): 0.03			Land cover areas entered correctly? ✓		
			Total disturbed area entered? ✓		
Pre-ReDevelopment Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) – undisturbed forest/open space					0.00
Managed Turf (acres) – disturbed, graded for yards or other turf to be mowed/managed			0.17		0.17
Impervious Cover (acres)			0.03		0.03
					0.20
Post-Development Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) – undisturbed, protected forest/open space or reforested land					0.00
Managed Turf (acres) – disturbed, graded for yards or other turf to be mowed/managed			0.17		0.17
Impervious Cover (acres)			0.03		0.03
Area Check	OK.	OK.	OK.	OK.	0.20
Constants					
Annual Rainfall (inches)		Runoff Coefficients (Rv)			
43		A Soils	B Soils	C Soils	D Soils
Target Rainfall Event (inches)	1.00	Forest/Open Space	0.02	0.03	0.04
Total Phosphorus (TP) EMC (mg/L)	0.26	Managed Turf	0.15	0.20	0.22
Total Nitrogen (TN) EMC (mg/L)	1.86	Impervious Cover	0.95	0.95	0.95
Target TP Load (lb/acre/yr)	0.41				
P) (unitless correction factor)	0.90				
LAND COVER SUMMARY -- PRE-REDEVELOPMENT					
Land Cover Summary-Pre			Land Cover Summary-Post (Final)		
Pre-ReDevelopment	Listed	Adjusted ¹	Post ReDev. & New Impervious	Post-ReDevelopment	Land Cover Summary-Post
Forest/Open Space Cover (acres)	0.00	0.00	Forest/Open Space Cover (acres)	0.00	Post-Development New Impervious
Weighted Rv(forest)	0.00	0.00	Weighted Rv(forest)	0.00	
% Forest	0%	0%	% Forest	0%	
Managed Turf Cover (acres)	0.17	0.17	Managed Turf Cover (acres)	0.17	
Weighted Rv(turf)	0.25	0.25	Weighted Rv (turf)	0.25	
% Managed Turf	85%	85%	% Managed Turf	85%	
Impervious Cover (acres)	0.03	0.03	Impervious Cover (acres)	0.03	New Impervious Cover (acres)
Rv(impervious)	0.95	0.95	Rv(impervious)	0.95	0.00
% Impervious	15%	15%	% Impervious	15%	Rv(impervious)
Total Site Area (acres)	0.20	0.20	Final Site Area (acres)	0.20	--
Site Rv	0.36	0.36	Final Post Dev Site Rv	0.36	
			ReDev Site Rv	0.36	
Treatment Volume and Nutrient Load					
Pre-ReDevelopment Treatment Volume (acre-ft)	0.0059	0.0059	Final Post-Development Treatment Volume (acre-ft)	0.0059	Post-Development Treatment Volume (acre-ft)
Pre-ReDevelopment Treatment Volume (cubic feet)	258	258	Final Post-Development Treatment Volume (cubic feet)	258	Post-Development Treatment Volume (cubic feet)
Pre-ReDevelopment TP Load (lb/yr)	0.16	0.16	Final Post-Development TP Load (lb/yr)	0.16	Post-Development TP Load (lb/yr)
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	0.81	0.81	Final Post-Development TP Load per acre (lb/acre/yr)	0.81	Post-Development TP Load per acre (lb/acre/yr)
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.08			Max. Reduction Required (Below Pre-ReDevelopment Load)
					20%
					TP Load Reduction Required for Redeveloped Area (lb/yr)
					0.03
					TP Load Reduction Required for New Impervious Area (lb/yr)
					0
Post-Development Requirement for Site Area					
TP Load Reduction Required (lb/yr)		0.03			
Linear Project TP Load Reduction Required (lb/yr): 0.03					
Nitrogen Loads (Informational Purposes Only)					
Pre-ReDevelopment TN Load (lb/yr)	1.16		Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	1.16	

PROJECT DESCRIPTION

The Lubber Run Pedestrian Bridge Project proposes to replace a pedestrian bridge over Lubber Run in Arlington County, Virginia. The new bridge will be placed in the same location as the old bridge and enables stream crossing and trail connection between the eastern and western parts of Lubber Run Trail. The bridge will have a minimum capacity to carry bikes and pedestrians and will help improve access for people walking, biking, and rolling. An RPA exemption is requested for this project because it provides a link to a planned County trail system.

APPLICABILITY OF SWM CRITERIA

Per the Virginia Stormwater Management Program (VSMP) criteria set forth in 9VAC25-870-66, the developmental regulations and post-construction requirements of Technical Criteria IIB are applicable to any re-development or new-development projects with Regulated Land Disturbance Area of one acre or greater, or 2,500 square feet or greater in designated Chesapeake Bay Preservation Areas (CBPA), including Resource Protection Areas (RPA). The RPA Map shows that the project is within the limits of the RPA for the Lubber Run base channel. Therefore, the 2,500 square foot limit of land disturbance area applies to Stormwater Management (SWM) and Erosion and Sediment Control (ESC) requirements.

The proposed pedestrian bridge will have newly constructed components for the superstructure and the substructure. The superstructure will be a prefabricated steel truss bridge with a wooden deck using southern yellow pine with a span of 46' – 8" from the center of bearing. The substructure will have the concrete abutments supported by spread footing. Along with the constructed pedestrian bridge is a sidewalk tie-in from an existing sidewalk on the west side of the Lubber Run Trail. The project is proposed to be entirely constructed within the existing footprint of Lubber Run Trail. No subgrade excavation or clearing/grading of the surroundings is proposed.

The total regulated land disturbance for the proposed improvement is 8,633 SF, which is greater than the 2,500 SF limit. Therefore, to comply with the VSMP requirements, the stormwater management plan is required to be developed for the project. Based on the Part IIB Technical Criteria, the Total Phosphorus generated by the proposed improvements and that needs to be treated is calculated using the VRRM spreadsheet. The total phosphorus load reduction required for the project is 0.03 lb/yr. The water quality requirements of the VSMP will be achieved through the use of available phosphorus credits. The stormwater from the disturbed area is discharged into Lubber Run. The one percent rule is used to meet the water quantity requirements of the VSMP. The regulated land disturbance for the project is 8,633 SF (0.20 ac), which is less than 1% of the total drainage area that drains into the stream immediately upstream of the bridge, 890 ac. The outfall points are also located within the FEMA regulated floodplain; therefore, the water quantity requirement of the VSMP for the project is met at the project site using the one percent rule.

SUMMARY

The Lubber Run Pedestrian Bridge Project disturbs more than 2,500 square feet and is located in the RPA; therefore, the SWM plan is required for the project. The water quality requirements of the project will be met using nutrient credit purchase. The water quantity requirements of the project will be met using the one percent rule.



DEPARTMENT OF PARKS AND RECREATION
Park Development Division
2100 Clarendon Boulevard, Suite 414, Arlington, Virginia 22201
TEL 703.228.7141 www.arlingtonva.us

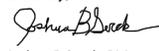
February 22, 2023

Qianqian Li
2100 Clarendon Blvd, Suite 710
Arlington, VA 22201
(703) 228-6570

RE: BMP Stormwater Credit Request
LDAP22-00161 Lubber Run Pedestrian Bridge
200 N Columbus Street
Arlington, VA 22203

Dear Qianqian Li,

The Arlington County Department of Parks and Recreation (DRP) is requesting to use **0.03 pounds of DPR's available phosphorus Credits** for the Lubber Run Pedestrian Bridge project at 200 N Columbus Street

Sincerely,

Joshua B Serck, RLA

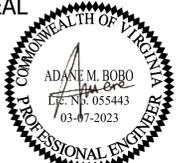
cc: file



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FACILITIES & ENGINEERING DIVISION
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ADAM M. BOBO
LICENSE NO. 055443
03-07-2023
PROFESSIONAL ENGINEER

APPROVALS	DATE
DESIGN TEAM ENGINEER SUPERVISOR	
CONSTRUCTION MANAGEMENT SUPERVISOR	
WATER, SEWER, STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	
PROJECT MANAGER	

REVISIONS	DATE

LUBBER RUN PEDESTRIAN BRIDGE

PEDESTRIAN BRIDGE OVER LUBBER RUN

WATER QUALITY IMPACT ASSESSMENT

23-DPR-ITBPW-575

DESIGNED: AB
DRAWN: AB
CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:



GRAPHIC SCALE

Appendix C. Water Quality Impact Assessment Data Sheet

Project Address: Lubber Run Pedestrian Bridge over Lubber Run		Date: December 6, 2022	
Applicant Name/Affiliation: Department of Parks and Recreation		Applicant Contact Information (phone and email): Joshua B. Serck, RLA, 703-228-7141, jserck@arlingtonva.us	
Owner/Client Name: Department of Parks and Recreation		Owner/Client Contact Information (phone and email): Joshua B. Serck, RLA, 703-228-7141, jserck@arlingtonva.us	
Section 1: Type of activity proposed			
Activity type (check all that apply):		<input type="checkbox"/> Deck, patio, or retaining wall <input type="checkbox"/> Landscaping (includes tree removal) <input type="checkbox"/> Utility work <input type="checkbox"/> Fence <input checked="" type="checkbox"/> Other (please describe): Public Work Pedestrian Bridge	
<input type="checkbox"/> New construction (residential, commercial, public, etc.) <input type="checkbox"/> Alteration of non-residential structure <input type="checkbox"/> Residential addition <input type="checkbox"/> Detached residential structure			
Section 2: Key details of the proposed activity			
Complete all that apply		Explanation	
Total area of disturbance on parcel (sf)	8,633 SF	Includes building footprint plus a 10-foot buffer. Also includes all soil disturbance, ingress/egress areas, stockpiling areas, etc.	
Area of disturbance within RPA (sf)	8,633 SF	Includes removal of trees ≥ 3" in diameter	
Area of disturbance on slopes greater than or equal to 15 percent located adjacent to landward RPA boundary (sf)	0 SF	Does not apply to RPA parcels along Chain Bridge Road (15 percent and greater slopes are included as part of RPA)	
Complete all fields		Existing condition	Proposed condition
RPA encroachment (ft)	Left third of parcel or site	0	0
	Middle third of parcel or site	N/A	N/A
	Right third of parcel or site	0	0
Total development footprint in RPA (sf)	8,633 SF	8,633 SF	The existing footprint includes the area of any existing structures, patios, decks, walkways, etc. Proposed footprint is the anticipated post-project area of all structures, additions, decks, walkways, regraded area behind a retaining wall, etc.
Impervious footprint in RPA (sf)	1,227 SF	1,297 SF	Total area of impervious surfaces within the RPA (rooftops, pavement, etc.)
(OVER)			
STAFF USE ONLY			
Building/demolition/LDA/Fence permit number(s):			
Major WQIA required? <input type="checkbox"/> Yes <input type="checkbox"/> No			
Date WQIA/Exception request information complete:			
Date Chesapeake Bay Preservation Ordinance and E/S ordinance (if applicable) approvals issued in Permits Plus:			

Section 3: Plan and Narrative

Provide a plan showing the location of the proposed activity, along with the RPA boundary. Briefly describe the proposed project, including any potential water quality impacts and mitigation measures proposed. The narrative must address three impact categories 1. Tree/vegetation impacts, 2. Stormwater and runoff 3. Erosion and sediment control. Please refer to the WQIA plan/narrative checklist for additional information.

PROJECT DESCRIPTION

The purpose of this project is to replace the previous Lubber Run Pedestrian bridge over Lubber Run in Arlington County, VA. The proposed bridge will be a single span, prefabricated pedestrian bridge 6' wide and is 46'-8" long. The new bridge will be placed in the same location as the old bridge and enables stream crossing and trail connection between the eastern and western parts of Lubber Run Trail. The bridge will have a minimum capacity to carry bikes and pedestrians and will help improve access for people walking, biking, and rolling. An RPA exemption is requested for this project because it provides a link to a planned County trail system.

APPLICABILITY OF SWM CRITERIA

Per the Virginia Stormwater Management Program (VSMP) criteria set forth in 9VAC25-870-66, the developmental regulations and post-construction requirements of Technical Criteria IIB are applicable to any re-development or new-development projects with Regulated Land Disturbance Area of one acre or greater, or 2,500 square feet or greater in designated Chesapeake Bay Preservation Areas (CBPA), including Resource Protection Areas (RPA). The RPA Map shows that the project is within the limits of the RPA for the Lubber Run base channel. Therefore, the 2,500 square foot limit of land disturbance area applies to Stormwater Management (SWM) and Erosion and Sediment Control (ESC) requirements.

The proposed pedestrian bridge will have newly constructed components for the superstructure and the substructure. The superstructure will be a prefabricated steel truss bridge with a wooden deck using southern yellow pine with a span of 46' - 8" from the center of bearing. The substructure will have the concrete abutments supported by spread footing. Along with the constructed pedestrian bridge is a sidewalk tie-in from an existing sidewalk on the west side of the Lubber Run Trail. The project is proposed to be entirely constructed within the existing footprint of Lubber Run Trail. No subgrade excavation or clearing/grading of the surroundings is proposed.

The total regulated land disturbance for the proposed improvement is 8,633 SF, which is greater than the 2,500 SF limit. Therefore, to comply with the VSMP requirements, the stormwater management plan is required to be developed for the project. Based on the Part IIB Technical Criteria, the Total Phosphorus generated by the proposed improvements and that needs to be treated is calculated using the VRRM spreadsheet. The total phosphorus load reduction required for the project is 0.03 lb/yr. The water quality requirements of the VSMP will be achieved through the purchase of nutrient credits. The stormwater from the disturbed area is discharged into Lubber Run. The one percent rule is used to meet the water quantity requirements of the VSMP. The regulated land disturbance for the project is 8,633 SF (0.20 ac), which is less than 1% of the total drainage area that drains into the stream immediately upstream of the bridge, 890 ac. The outfall points are also located within the FEMA regulated floodplain; therefore, the water quantity requirement of the VSMP for the project is met at the project site using the one percent rule.

WATER QUALITY DISCUSSION

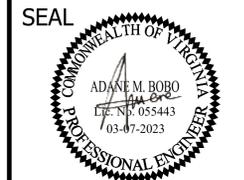
The proposed project will not have a negative impact on Lubber Run All disturbed area consists of removing, modifying, and replacing an existing impervious area with new impervious area. The pollutant loading for this project will not change under post-development conditions.

EROSION AND SEDIMENT CONTROL

E&S is limited to placement of the proposed bridge and grading, riprap, and mulch.

Additional Water Quality Impact Assessment Information

The information supplied on this form satisfies the minimum requirements for a Minor Water Quality Impact Assessment. For projects that disturb over 2500 square feet, elements of a Major Water Quality Impact Assessment may also be required, depending on the nature and extent of the proposed RPA encroachment, as outlined in Section 61-12 of the ordinance.



APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

LUBBER RUN PEDESTRIAN BRIDGE
PEDESTRIAN BRIDGE OVER LUBBER RUN
WATER QUALITY IMPACT ASSESSMENT

23-DPR-ITBPW-575

DESIGNED: AB
DRAWN: AB
CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:



STORMWATER POLLUTION PREVENTION PLAN
Lubber Run Pedestrian Bridge

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) COVER PAGE

For Construction Activities At:
Lubber Run Pedestrian Bridge
Over Lubber Run Intersecting Lubber Run Trail
Arlington, VA 22203

Latitude: 38.8693 N (decimal degrees)
Longitude: -77.1183 W (decimal degrees)

Construction Activity Operator:
Insert Company/Organization Name
Insert Name
Insert Address
Insert City, State, Zip Code
Insert Telephone Number
Insert Email Address
Insert 24-hour Emergency Contact

SWPPP Preparation Date:
November 10, 2022

CERTIFICATION

"I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations."

Operator Name: _____
Title: _____
Signature: _____
Date: _____

Arlington County – SWPPP 9/2016

STORMWATER POLLUTION PREVENTION PLAN
Lubber Run Pedestrian Bridge

1.0 SWPPP Documents Located Onsite & Available for Review

SWPPP Document Type	Located Onsite & Available for Review?	
Registration Statement	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
Notice of Coverage Letter	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
Construction General Permit	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
Pollution Prevention Plan	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
Erosion & Sediment Control Plan (or agreement in lieu of)	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA
Stormwater Management Plan	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> NA

2.0 Authorized Non-Stormwater Discharges

Type of Authorized Non-Stormwater Discharge	Likely Present at Your Project Site?	
External buildings wash down	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Uncontaminated foundation or footing drains	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No
Uncontaminated excavation dewatering	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Landscape irrigation	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No
Others [describe]	<input type="checkbox"/> Yes	<input type="checkbox"/> No

3.0 Pollution Prevention Awareness

Employees will be given a "walk through" of the site identifying areas of possible pollution and will be shown Erosion and Sediment Controls and Pollution Prevention Practices (identified in Sections 4.0 and 5.0 of this SWPPP) that are applicable to their assigned job duties. A refresher meeting and "walk through" will be conducted on an as needed basis.

4.0 Erosion & Sediment Controls

Select all that apply	Erosion & Sediment Control	Estimated Installation Date	Estimated Removal Date	Responsible Party
<input checked="" type="checkbox"/>	Construction Entrance (Std. & Spec. 3.02)			Construction Activity Operator (See Cover Page of this SWPPP)
<input checked="" type="checkbox"/>	Silt Fence (Std. & Spec. 3.05)			
<input type="checkbox"/>	Culvert Inlet Protection (Std. & Spec. 3.06)		NA	
<input type="checkbox"/>	Outlet Protection (Std. & Spec. 3.18)		NA	
<input checked="" type="checkbox"/>	Temporary Seeding (Std. & Spec. 3.31)	As required by 3.31	NA	
<input checked="" type="checkbox"/>	Permanent Seeding (Std. & Spec. 3.32)		NA	
<input type="checkbox"/>	Sodding (Std. & Spec. 3.33)		NA	
<input checked="" type="checkbox"/>	Mulching (Std. & Spec. 3.35)		NA	
<input type="checkbox"/>	Safety Fence (Std. & Spec. 3.01)			

Arlington County – SWPPP 9/2016

STORMWATER POLLUTION PREVENTION PLAN
Lubber Run Pedestrian Bridge

<input type="checkbox"/>	Storm Drain Inlet Protection (Std. & Spec 3.08)			
<input type="checkbox"/>	Dewatering (Std. & Spec 3.26)			
<input checked="" type="checkbox"/>	Turbidity Curtain (Std. & Spec 3.27)			
<input checked="" type="checkbox"/>	Tree Protection (Arlington County Std. & Spec.)			
<input type="checkbox"/>	Others [describe]			

Arlington County – SWPPP 9/2016

STORMWATER POLLUTION PREVENTION PLAN
BR02 - Shirlington Road Pedestrian Bridge Project

5.0 Potential Sources of Pollution & Pollution Prevention Practices

Pollutant-Generating Activity	Likely Present at your Project Site?	Pollutants										Pollution Prevention Practice	Responsible Party
		Sediment	Nutrients	Heavy Metals	pH (acids and bases)	Pesticides & Herbicides	Oil & Grease	Bacteria & Viruses	Trash, Debris, Solids	Other Toxic Chemicals			
Clearing, grading, excavating, and un-stabilized areas	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	X									X	(1)	Construction Activity Operator (See Cover Page of this SWPPP)
Paving operations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	X					X			X	(2)		
Concrete washout and cement waste	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			X	X					X	(3)		
Structure construction, stucco, painting, and cleaning	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No			X	X					X	X	(4)	
Dewatering operations	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	X	X							X	(5)		
Material delivery and storage	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	X	X	X	X		X			X	X	(6)	
Material use during building process	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		X	X	X		X			X	X	(7)	
Solid waste disposal	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No									X	X	(8)	
Sanitary waste	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No		X		X					X	(9)		
Landscaping operations	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	X	X		X					X	X	(10)	
Others [describe]	<input type="checkbox"/> Yes <input type="checkbox"/> No	<input checked="" type="checkbox"/>	(11)										

Arlington County – SWPPP 9/2016

STORMWATER POLLUTION PREVENTION PLAN
BR02 - Shirlington Road Pedestrian Bridge Project

Pollution Prevention Practices:

- Clearing, grading, excavating and un-stabilized areas** – Utilize erosion and sediment controls to prevent sediment laden or turbid runoff from leaving the construction site. Dispose of clearing debris at acceptable disposal sites. Apply permanent or temporary stabilization, sodding and/or mulching to denuded areas in accordance with the erosion and sediment control specifications and the general VPDES permit for discharges of stormwater from construction activities.
- Paving operations** – Cover storm drain inlets during paving operations and utilize pollution prevention materials such as drip pans and absorbent/oil dry for all paving machines to limit leaks and spills of paving materials and fluids.
- Concrete washout and cement waste** – Direct concrete wash water into a leak-proof container or leak-proof settling basin that is designed so that no overflows can occur due to inadequate sizing or precipitation. Hardened concrete wastes shall be removed and disposed of in a manner consistent with the handling of other construction wastes.
- Structure construction, stucco, painting and cleaning** – Enclose, cover or berm building material storage areas if susceptible to contaminated stormwater runoff. Conduct painting operations consistent with local air quality and OSHA regulations. Mix paint indoors, in a containment area or in a flat unpaved area. Prevent the discharge of soaps, solvents, detergents and wash water from construction materials, including the clean-up of stucco paint, form release oils and curing compounds.
- Dewatering operations** – Construction site dewatering from building footings or other sources may not be discharged without treatment. Sediment laden or turbid water shall be filtered, settled or similarly treated prior to discharge.
- Material delivery and storage** – Designate areas of the construction site for material delivery and storage. Place near construction entrances, away from waterways, and avoid transport near drainage paths or waterways.
- Material use during building process** – Use materials only where and when needed to complete the construction activity. Follow manufacturer's instructions regarding uses, protective equipment, ventilation, flammability and mixing of chemicals.
- Solid waste disposal** – Designate a waste collection area on the construction site that does not receive a substantial amount of runoff from upland areas and does not drain directly to a waterway. Ensure that containers have lids so they can be covered before periods of rain, and keep containers in a covered area whenever possible. Schedule waste collection to prevent the containers from overflowing.
- Sanitary waste** – Prevent the discharge of sanitary waste by providing convenient and well-maintained portable sanitary facilities. Locate sanitary facilities in a convenient location away from waterways.
- Landscaping operations** – Maintain as much existing vegetation as practicable. Apply permanent or temporary stabilization, sodding and/or mulching to denuded areas in accordance with the erosion and sediment control specifications and the general VPDES permit for discharges of stormwater from construction activities. Apply nutrients in accordance with manufacturer's recommendations and not during rainfall events.
- Others** – If applicable, describe your Pollution Prevention Practices.

6.0 Stormwater Management Controls

Select all that apply	Stormwater Management Control	Estimated Installation Date	Responsible Party
<input type="checkbox"/>	Post-development Stormwater Management Controls provided by a Larger Common Plan of Development or Sale	NA	Common Plan Construction Activity Operator
<input type="checkbox"/>	Rooftop Disconnection		Construction Activity Operator (See Cover Page of this SWPPP)
<input type="checkbox"/>	Sheet flow to Vegetated Filter (1 or 2)		
<input type="checkbox"/>	Grass Channel		
<input type="checkbox"/>	Rainwater Harvesting		
<input type="checkbox"/>	Permeable Pavement (1 or 2)		

Arlington County – SWPPP 9/2016

STORMWATER POLLUTION PREVENTION PLAN
BR02 - Shirlington Road Pedestrian Bridge Project

Select all that apply	Stormwater Management Control	Estimated Installation Date	Responsible Party
<input type="checkbox"/>	Infiltration (1 or 2)		Construction Activity Operator (See Cover Page of this SWPPP)
<input type="checkbox"/>	Bioretention (1 or 2)		
<input type="checkbox"/>	Others [describe]		
<input type="checkbox"/>	Exempted	NA	NA

7.0 Spill Prevention & Response

Most spills can be cleaned up following manufacturer specifications. Absorbent/oil dry, sealable containers, plastic bags, and shovels/brooms are suggested minimum spill response items that should be available at this location.

1st Priority: Protect all people
2nd Priority: Protect equipment and property
3rd Priority: Protect the environment

- Check for hazards (flammable material, noxious fumes, cause of spill) – if flammable liquid, turn off engines and nearby electrical equipment. If serious hazards are present leave the area and call 911. **LARGE SPILLS ARE LIKELY TO PRESENT A HAZARD.**
- Make sure the spill area is safe to enter and that it does not pose an immediate threat to health or safety of any person.
- Stop the spill source.
- Call co-workers and supervisor for assistance and to make them aware of the spill and potential dangers.
- If possible, stop spill from entering drains (use absorbent or other material as necessary).
- Stop spill from spreading (use absorbent or other material).
- If spilled material has entered a storm sewer, contact locality's storm water department.
- Clean up spilled material according to manufacturer specifications, for liquid spills use absorbent materials and do not flush area with water.
- Properly dispose of cleaning materials and used absorbent material according to manufacturer specifications.

Emergency Contacts:

Normal Working Hours
DEQ Northern Regional Office 703-583-3800

Nights, Holidays & Weekends
VA Dept. of Emergency Management 804-674-2400
24 Hour Reporting Service

Local Contacts
Arlington County Fire & Police 703-558-2222
DES Water, Sewer, Streets 24-Hour Emergency 703-228-6555
Washington Gas Emergency 703-750-1400

Arlington County – SWPPP 9/2016



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APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK
PEDESTRIAN BRIDGE OVER LUBBER RUN
STORMWATER POLLUTION PREVENTION PLAN

23-DPR-ITBPW-575

DESIGNED: AB
DRAWN: AB
CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:

N/A

STORMWATER POLLUTION PREVENTION PLAN
BR02 - Shirlington Road Pedestrian Bridge Project

8.0 Self Inspections Report & Corrective Action Log (make additional copies as necessary)

Qualified Inspector

Company/Organization:
Name:
Telephone Number:
Qualifications:

Inspection Schedule

Discharges to impaired waters, surface waters within a TMDL watershed, or exceptional waters:

Once every 4 business days.

Inspection Date:

Type of Inspection: Regular Pre-storm event During storm event Post-storm event

Phase of construction: Pre-Con DEMO Clearing Building Grading Final Stabilization

Is a copy of the SWPPP available on site? Yes No Is the SWPPP complete? Yes No

Are there any discharges at the time of this inspection? Yes No If yes, describe:

Have any discharge occurred since the last inspection? Yes No If yes, describe:

Table with 4 columns: Best Management Practices (BMPs), In Compliance with SWPPP?, Corrective Action Needed: Responsible Party & Notes, Date Corrective Action Taken. Rows include questions about construction exits, perimeter controls, storm drain inlets, and discharge points.

Arlington County - SWPPP 9/2016

STORMWATER POLLUTION PREVENTION PLAN
BR02 - Shirlington Road Pedestrian Bridge Project

Table with 4 columns: Best Management Practices (BMPs), In Compliance with SWPPP?, Corrective Action Needed: Responsible Party & Notes, Date Corrective Action Taken. Rows include questions about slopes, washout facilities, trash/litter, non-stormwater discharges, natural resources, vehicle fueling, and materials storage.

Non - Compliance Describe any incidents of non-compliance not described above (use another page is necessary)

Certification

I certify under penalty of law that I have read and understand this document and that this document and all attachments were prepared in accordance with a system designed to assure that qualified personnel properly gathered and evaluated the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Operator or Assigned Qualified Personnel Name:

Signature:

Date:

Arlington County - SWPPP 9/2016

STORMWATER POLLUTION PREVENTION PLAN
BR02 - Shirlington Road Pedestrian Bridge Project

9.0 Grading & Stabilization Activities Log

Table with 5 columns: Date Grading Activity Initiated, Description of the Grading Activity (including location), Date Grading Activity Ceased, Date Stabilization Measures Initiated, Description of the Stabilization Measure (including location).

10.0 SWPPP Modification & Update Log

Table with 3 columns: Modification Date, Description of the Modification / Update (name & title that request the modification), Modification Prepared By (name & title).

Arlington County - SWPPP 9/2016

INSTRUCTIONS for COMPLETING the
SINGLE FAMILY RESIDENCE, COMMON PLAN of DEVELOPMENT or SALE
STORMWATER POLLUTION PREVENTION PLAN (SWPPP)

General

A Stormwater Pollution Prevention Plan (SWPPP) must be developed prior to obtaining locality (e.g., City, County, Town) authorization to commence land disturbance.

SWPPP Cover Page

For a construction activity, enter the project/site name and physical address (if available), including city (or town), state and zip code. Enter the latitude and longitude in decimal degrees of the construction activity.

Enter the Construction Activity Operator's company/organization name, the Operator's name and mailing address, including city (or town), state, and zip code, telephone number, email address (if available), and a 24-hour emergency contact.

Enter the SWPPP preparation date.

The Construction Activity Operator identified on the cover page of the SWPPP is responsible for certifying the information contained therein. Please sign the certification in INK. Please note that state statutes require the SWPPP to be signed as follows:

- (1) For a corporation: by a responsible corporate officer;
(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively;
(3) For a municipality, state, federal, or other public agency: by either a principal executive officer or ranking elected official.

Section 1.0 SWPPP Documents Located Onsite & Available for Review

Utilize the provided checklist to ensure that the required SWPPP documents are located onsite and are available for review, if applicable.

Section 2.0 Authorized Non-Stormwater Discharges

Identify the authorized non-stormwater discharges likely to be present at the project site. If an unlisted authorized non-stormwater discharge is likely to be present at the project site, provide it here.

Section 3.0 Pollution Prevention Awareness

Provide employees with a "walk through" of the project site and identify areas of possible pollution, erosion and sediment controls, and pollution prevention practices which are applicable to their assigned job duties. Conduct refresher meetings and perform additional "walk throughs" on an as needed basis.

Section 4.0 Erosion & Sediment Controls

Identify the erosion and sediment controls to be implemented at the project site. For each erosion and sediment control, enter the estimated installation date and estimated removal date. If an unlisted erosion and sediment control will be implemented at the project site, provide the applicable information here.

Section 5.0 Potential Sources of Pollution & Pollution Prevention Practices

Identify the pollutant-generating activities likely to be present at the project site, implement and maintain the corresponding pollution prevention practices. If an unlisted pollutant-generating activity is likely to be present at the project site, describe it, identify the associated pollutant(s), and provide the corresponding pollution prevention practice(s) to be implemented and maintained.

Section 6.0 Stormwater Management Controls

Identify the stormwater management controls to be implemented at the project site, if applicable. For each stormwater management control, enter the estimated installation date. If an unlisted stormwater management control will be implemented at the project site, provide the applicable information here.

Section 7.0 Spill Prevention & Response

Most spills can be cleaned up following manufacturer specifications. The priority should be to protect all people, equipment, property, and the environment. Enter the telephone number of your local fire and police departments.

Section 8.0 Inspections & Corrective Action Log

Enter the qualified inspector's company/organization name, the inspector's name, telephone number, and qualifications. Select the applicable inspection type, enter the construction activity inspection date, and enter the date and rainfall amount of the last measurable storm event (if applicable). Identify if the implemented best management practices are in compliance with the SWPPP. Enter corrective actions needed, the party responsible for implementing the corrective actions, and the date corrective actions were taken, if applicable. Make additional copies of the inspection and corrective action log as necessary.

Section 9.0 Grading & Stabilization Activities Log

Enter the date grading activities were initiated, a description of the grading activities including location, the date grading activities ceased, the date stabilization measures were initiated, and a description of the stabilization measures including location.

Section 10.0 SWPPP Modification & Update Log

Enter the SWPPP modification date, description of the SWPPP modification/update, and the name and title of the SWPPP modification preparer, if applicable.

Arlington County - SWPPP 9/2016



DEPARTMENT OF ENVIRONMENTAL SERVICES FACILITIES & ENGINEERING DIVISION ENGINEERING BUREAU 2100 CLARENDON BOULEVARD, SUITE 813 ARLINGTON, VA 22201 PHONE: 703.228.3629 FAX: 703.228.3606

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SEAL



APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

LUBBER RUN PEDESTRIAN BRIDGE LUBBER RUN PARK PEDESTRIAN BRIDGE OVER LUBBER RUN STORMWATER POLLUTION PREVENTION PLAN

23-DPR-ITBPW-575

DESIGNED: AB

DRAWN: AB

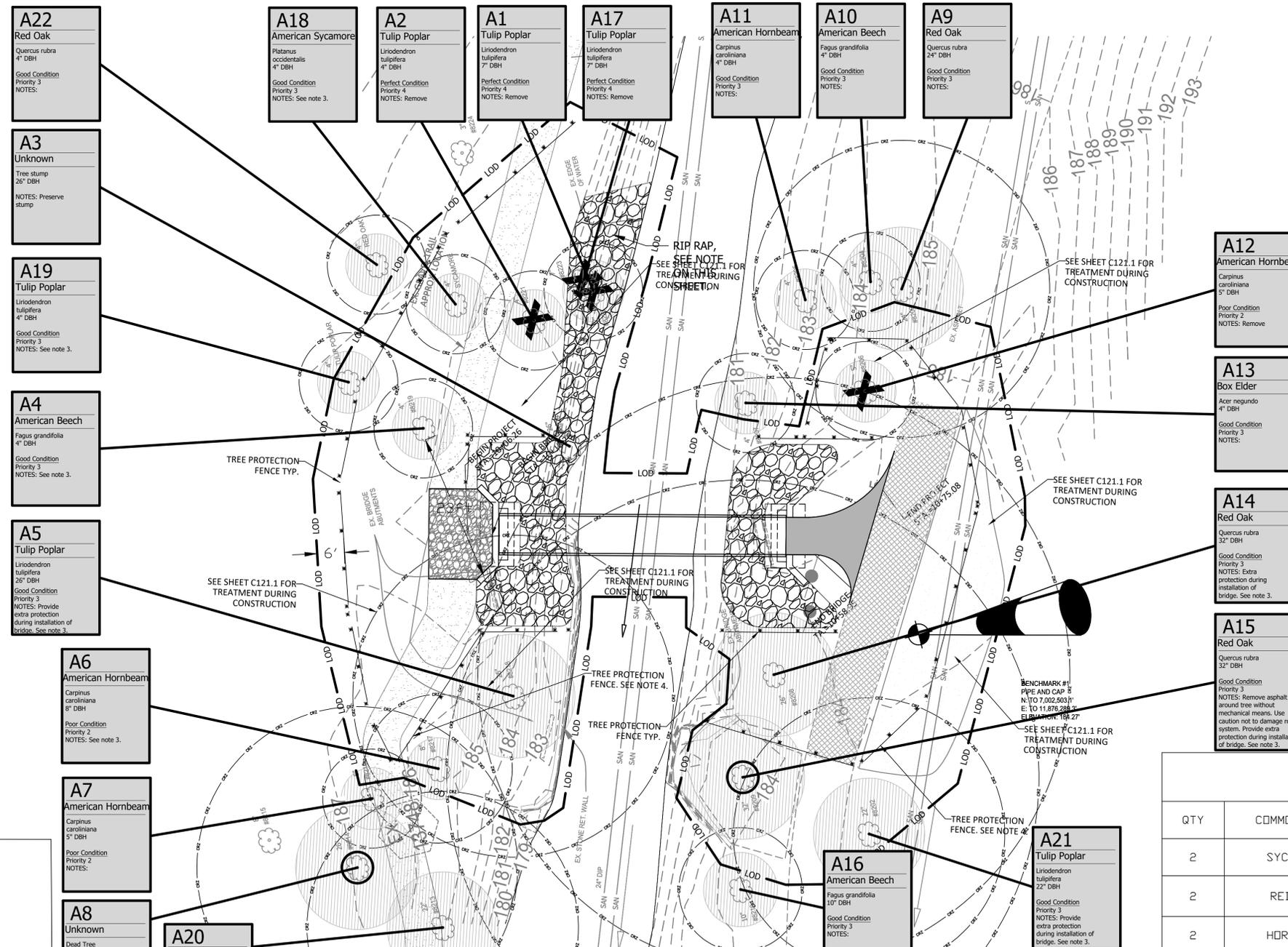
CHECKED: BCG

PLOTTED: MARCH 7 2023

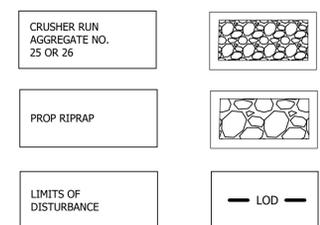
SCALE:

N/A

C035.2



LEGEND



NOTES:

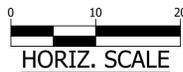
- SEE DRAWINGS B001.1 FOR FURTHER DIRECTION ON LOCATION AND PLACEMENT FOR RIPRAP.
- THE CONTRACTOR SHALL PROVIDE AND INSTALL TREE SPECIES AS SHOWN IN THE PLANT SCHEDULE. TREES SHALL BE PLANTED WITHIN THE PROJECT LIMITS. FINAL LOCATION OF EACH TREE SHALL BE DETERMINED BY THE COUNTY ARBORIST PRIOR TO THE ARRIVAL OF TREES. PROTECT TREES AS NECESSARY IF TREES ARE NOT INSTALLED IMMEDIATELY UPON ARRIVAL.
- CONTRACTOR SHALL INSTALL TRUNK PROTECTION FOR ANY TREE WITHIN THE LOD TO REMAIN. SEE DETAIL 3 ON SHEET C091.2
- CONTRACTOR SHALL COORDINATE WITH COUNTY ARBORIST ABOUT RELOCATION OF TREE PROTECTION FENCING PRIOR TO ARRIVAL OF EQUIPMENT FOR THE INSTALLATION OF REPLACEMENT BRIDGE.
- AT ANY POINT DURING CONSTRUCTION, DPR URBAN FORESTER MAY REQUEST ADDITIONAL TREE PROTECTION/CONSTRUCTION, ROOT MATTING AND/OR MULCH.

PLANT SCHEDULE

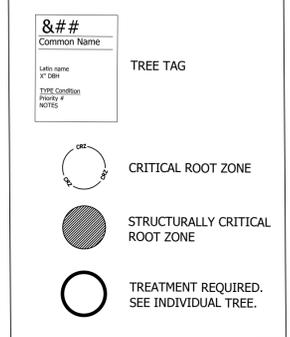
QTY	COMMON NAME	LATIN NAME	SIZE
2	SYCAMORE	Platanus occidentalis	1.5" CAL.
2	RED OAK	Quercus rubra	1.5" CAL.
2	HORNBEAM	Carpinus caroliniana	1.5" CAL.

TREE PRESERVATION AND REMOVAL TABLE

Preserve or Remove	Tree #	DBH (Inches)	CRZ (Feet)	S-CRZ (Feet)	Condition Rating %	Species	Common name	Species Rating	Replacement Value	Replacements	Priority (1-4)	Comments
Remove	A01	7	8	5	90%	Liriodendron tulipifera	Tulip	80	5.04	2	4	Remove and discard
Remove	A02	4	8	5	90%	Liriodendron tulipifera	Tulip	80	2.88	1	4	Remove and discard
Preserve	A03	26	26	10	30%	Unknown	Unknown	0	0	0	1	Preserve stump
Preserve	A04	4	8	5	60%	Fagus grandifolia	American Beech	90	2.16	0	3	
Preserve	A05	26	26	10	60%	Liriodendron tulipifera	Tulip	80	12.48	0	3	
Preserve	A06	8	12	5	60%	Carpinus caroliniana	American Hornbeam	90	4.32	0	2	
Preserve	A07	5	8	5	60%	Carpinus caroliniana	American Hornbeam	90	2.7	0	2	
See Comments	A08	26	26	10	60%	Unknown	Unknown	0	0	0	3	Remove top of tree
Preserve	A09	24	24	10	60%	Quercus rubra	Red Oak	90	12.96	0	3	
Preserve	A10	4	8	5	60%	Fagus grandifolia	American Beech	90	2.16	0	3	
Preserve	A11	4	8	5	60%	Carpinus caroliniana	American Hornbeam	90	2.16	0	3	
Remove	A12	5	8	5	60%	Carpinus caroliniana	American Hornbeam	90	2.7	1	2	Remove and discard
Preserve	A13	4	8	5	60%	Acer negundo	Box Elder	90	2.16	0	3	
Preserve	A14	32	48	10	60%	Quercus rubra	Red Oak	90	17.28	0	3	
Preserve	A15	32	48	10	60%	Quercus rubra	Red Oak	90	17.28	0	3	Remove asphalt around tree
Preserve	A16	10	10	6	60%	Fagus grandifolia	American Beech	90	5.4	0	3	
Remove	A17	7	8	5	90%	Liriodendron tulipifera	Tulip	80	5.04	2	4	Remove and discard
Preserve	A18	4	8	0	60%	Platanus occidentalis	American Sycamore	60	1.44	0	3	
Preserve	A19	4	8	5	60%	Liriodendron tulipifera	Tulip	80	1.92	0	3	
Preserve	A20	22	22	9	60%	Liriodendron tulipifera	Tulip	80	10.56	0	3	
Preserve	A21	22	22	9	60%	Liriodendron tulipifera	Tulip	80	10.56	0	3	
Preserve	A22	4	8	5	60%	Quercus rubra	Red Oak	90	2.16	0	3	
Total										6		



LEGEND



Priority - this is meant to capture a tree's "priority for preservation" relating to tree preservation planning on development projects. The tree is rated using its condition as a guide, but assessor also takes into account other factors, such as: species desirability, species longevity, uniqueness, aesthetics both of the tree itself and its relation to the site and other factors as seen fit. This is meant to be a qualitative rating based solely on the site at the time of the inventory (and does not account for any proposed plans).

- Priority 4 = highest priority for protection (i.e. particularly good condition, unique tree and/or should be protected at all reasonable cost).
- Priority 3 = high fair condition tree well worth protecting though not uniquely valuable.
- Priority 2 = poor condition average tree that will not be missed if it were gone, not worth any special protection measures.
- Priority 1 = trees that should be removed under most any circumstances (invasive/undesirable species, poor or dead trees, particularly high risk situations, etc).

ARLINGTON VIRGINIA
 DEPARTMENT OF ENVIRONMENTAL SERVICES
 FACILITIES & ENGINEERING DIVISION
 ENGINEERING BUREAU
 2100 CLARENDON BOULEVARD, SUITE 813
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 PHONE: 703.228.3629
 FAX: 703.228.3606

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SEAL
 COMMONWEALTH OF VIRGINIA
 OLIVER HOHM
 No. 1168
 03-07-2023
 LANDSCAPE ARCHITECT

APPROVALS	DATE
DESIGN TEAM ENGINEER SUPERVISOR	
CONSTRUCTION MANAGEMENT SUPERVISOR	
WATER, SEWER, STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	
PROJECT MANAGER	
REVISIONS	DATE
Addendum 01	3-27-23
ADDENDUM	

LUBBER RUN PEDESTRIAN BRIDGE
 LUBBER RUN PARK
 PEDESTRIAN BRIDGE OVER LUBBER RUN
 TREE INVENTORY AND
 TREE PROTECTION PLAN

23-DPR-ITBPW-575
 DESIGNED: BD
 DRAWN: WA
 CHECKED: OB
 PLOTTED: MARCH 27 2023

SCALE:
 AS SHOWN

NOTES

1. AT PLANTING PRUNE ONLY CROSSING LIMBS, BROKEN OR DEAD BRANCHES, AND ANY BRANCHES THAT POSE A HAZARD TO PEDESTRIANS PER ANSI STANDARD A300. DO NOT PRUNE INTO OLD WOOD ON EVERGREENS.

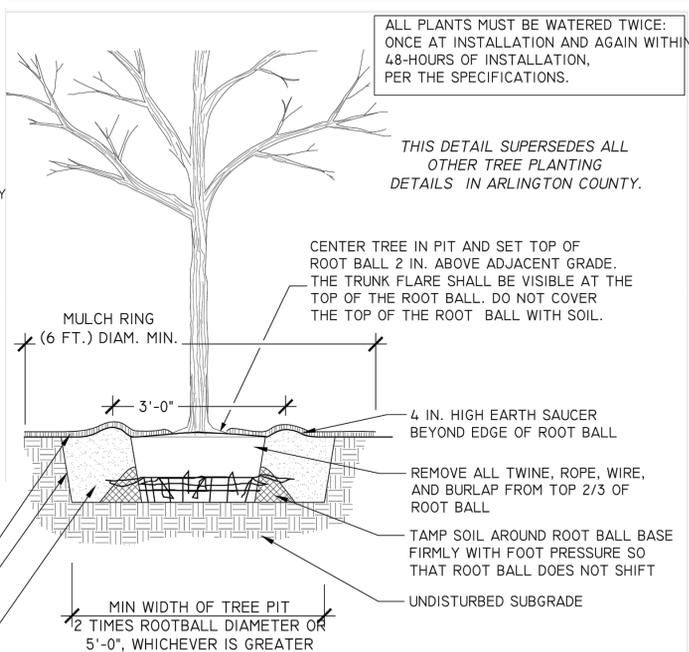
2. CONTRACTOR SHALL MAXIMIZE EXCAVATED AREA FOR TREE PIT WITHOUT ADVERSELY IMPACTING ADJACENT SITE FEATURES.

3. UNLESS OTHERWISE DIRECTED BY ARLINGTON COUNTY URBAN FORESTER, BACKFILL SOIL MIXTURE WILL BE 3/4 EXISTING SOIL CLEANED OF DEBRIS (GRAVEL, ROCKS, STICKS, TRASH, ETC.) AND MIXED WITH 1/4 ORGANIC MATERIAL (COMPOSTED BARK, LEAF MOLD, OR OTHER PLANT DEBRIS PROCESSED TO A POINT OF DECAY AND APPROVED BY THE URBAN FORESTER; PEAT MOSS SHALL NOT BE USED).

4. CONTRACTOR SHALL LEGALLY REMOVE EXCESS SOIL & DEBRIS FROM SITE.

5. TREES PLANTED WITHOUT THE TRUNK FLARE VISIBLE WILL BE REJECTED.

6. TREES MAY ONLY BE STAKED IF REQUIRED BY THE COUNTY URBAN FORESTER. REFER TO STAKING DETAILS.



ALL PLANTS MUST BE WATERED TWICE: ONCE AT INSTALLATION AND AGAIN WITHIN 48-HOURS OF INSTALLATION, PER THE SPECIFICATIONS.

THIS DETAIL SUPERSEDES ALL OTHER TREE PLANTING DETAILS IN ARLINGTON COUNTY.

CENTER TREE IN PIT AND SET TOP OF ROOT BALL 2 IN. ABOVE ADJACENT GRADE. THE TRUNK FLARE SHALL BE VISIBLE AT THE TOP OF THE ROOT BALL. DO NOT COVER THE TOP OF THE ROOT BALL WITH SOIL.

MULCH RING (6 FT.) DIAM. MIN.

3'-0"

4 IN. HIGH EARTH SAUCER BEYOND EDGE OF ROOT BALL

REMOVE ALL TWINE, ROPE, WIRE, AND BURLAP FROM TOP 2/3 OF ROOT BALL

TAMP SOIL AROUND ROOT BALL BASE FIRMLY WITH FOOT PRESSURE SO THAT ROOT BALL DOES NOT SHIFT

UNDISTURBED SUBGRADE

3 IN. SHREDDED HARDWOOD MULCH; MULCH MUST BE 6 IN. AWAY FROM TREE TRUNK

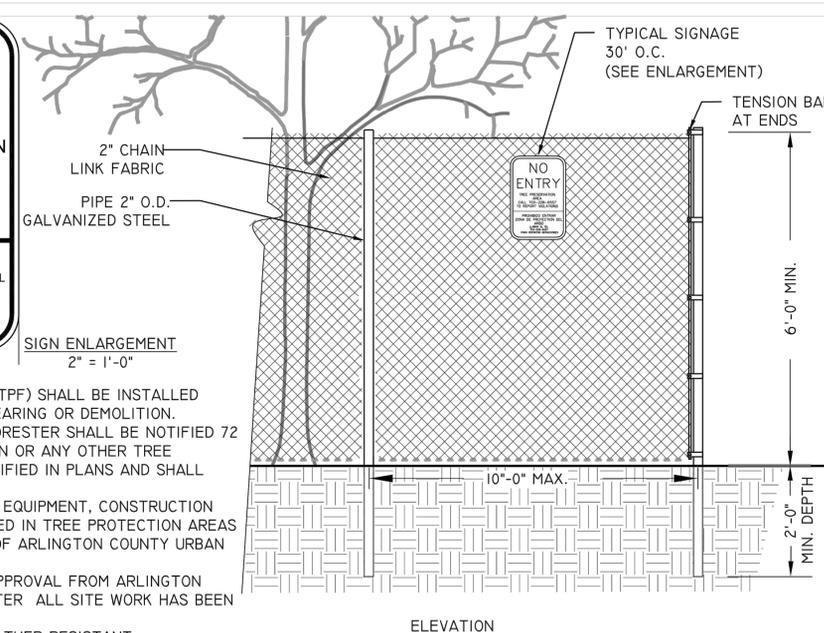
ROUGHEN SIDES OF PLANTING HOLE BACKFILL SOIL MIXTURE FOR ENTIRE TREE PIT AREA X ROOTBALL DEPTH SOIL SHALL BE FIRMED IN 8" LIFTS

MIN WIDTH OF TREE PIT 2 TIMES ROOTBALL DIAMETER OR 5'-0", WHICHEVER IS GREATER

2 TREE PLANTING DETAIL

C091.2 FOR OPEN PLANTING AREAS FREE OF PAVING OR GRATES 329300.1 (2019)

NOT TO SCALE



NOTES:

1. TREE PROTECTION FENCE (TPF) SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION. ARLINGTON COUNTY URBAN FORESTER SHALL BE NOTIFIED 72 HOURS PRIOR TO INSTALLATION OR ANY OTHER TREE PRESERVATION MEASURE SPECIFIED IN PLANS AND SHALL APPROVE LAYOUT.

2. NO PERSONNEL, VEHICLES, EQUIPMENT, CONSTRUCTION MATERIALS OR DEBRIS ALLOWED IN TREE PROTECTION AREAS WITHOUT WRITTEN CONSENT OF ARLINGTON COUNTY URBAN FORESTER.

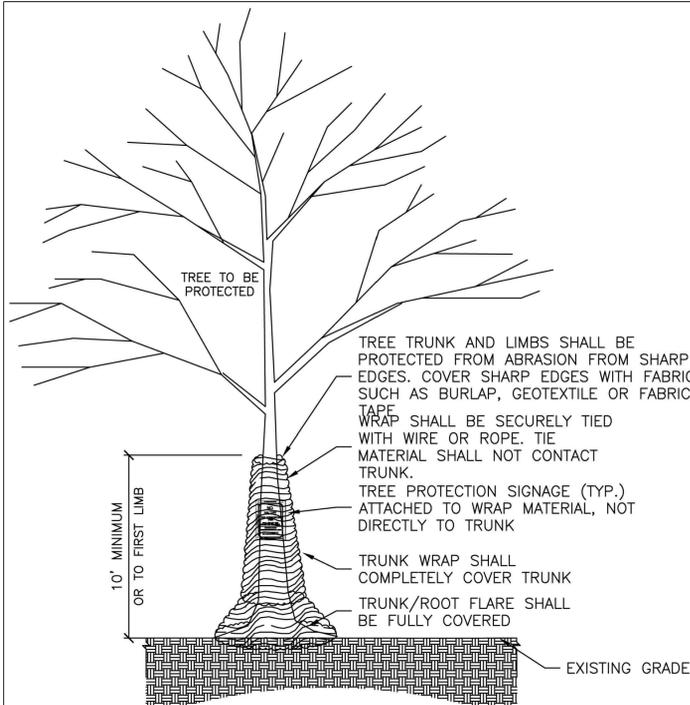
3. REMOVE TPF ONLY WITH APPROVAL FROM ARLINGTON COUNTY URBAN FORESTER AFTER ALL SITE WORK HAS BEEN COMPLETED.

4. SIGN MATERIAL TO BE WEATHER RESISTANT.

1 6' CHAIN LINK TREE PROTECTION FENCE

C091.2 311300.1 (2016) (02231.1)

1/2" = 1'-0"



TREE TO BE PROTECTED

TREE TRUNK AND LIMBS SHALL BE PROTECTED FROM ABRASION FROM SHARP EDGES. COVER SHARP EDGES WITH FABRIC SUCH AS BURLAP, GEOTEXTILE OR FABRIC TAPES

WRAP SHALL BE SECURELY TIED WITH WIRE OR ROPE. TIE MATERIAL SHALL NOT CONTACT TRUNK.

TREE PROTECTION SIGNAGE (TYP.) ATTACHED TO WRAP MATERIAL, NOT DIRECTLY TO TRUNK

TRUNK WRAP SHALL COMPLETELY COVER TRUNK

TRUNK/ROOT FLARE SHALL BE FULLY COVERED

EXISTING GRADE

10' MINIMUM OR TO FIRST LIMB

NOTES:

- 1. TRUNK WRAP MATERIAL SHALL BE DOUBLE SIDED GEOCOMPOSITE, GEONET CORE WITH NON-WOVEN COVERING (SUCH AS TENAX TENDRAIN 770/2) OR EQUIVALENT.
2. WRAP SHALL BE INSTALLED BY A CERTIFIED ARBORIST.
3. WRAP SHALL BE INSTALLED PRIOR TO ANY SITE WORK, CLEARING OR DEMOLITION.
4. WRAP SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION. REMOVE WRAP ONLY WITH APPROVAL AND AFTER ALL SITE WORK HAS BEEN COMPLETED.
5. WRAP SHALL BE REMOVED PROMPTLY AFTER CONSTRUCTION.
6. MAJOR SCAFFOLD LIMBS MAY ALSO REQUIRE THIS PROTECTION AS DIRECTED BY THE PROJECT ARBORIST.

3 TREE TRUNK & LIMB PROTECTION WRAP (TYP.)

C091.2 1" = 1"



WRAP MUST EXTEND AS HIGH AS ADJACENT MACHINERY THAT IS WORKING ADJACENT TO THE TREES. INDEPENDENT ARBORIST AND ARLINGTON COUNTY ARBORIST MAY REQUIRE DOUBLE WRAP OR HEAVY DUTY WRAP IN AREAS OF MAJOR EXCAVATION.



APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

LUBBER RUN PEDESTRIAN BRIDGE LUBBER RUN PARK PEDESTRIAN BRIDGE OVER LUBBER RUN TREE PLANTING DETAIL & TREE PROTECTION FENCE

23-DPR-ITBPW-575

DESIGNED: BD DRAWN: WA CHECKED: OB

PLOTTED: MARCH 7 2023

SCALE:

AS SHOWN

RPC # 13-046-007
M/B 82 PG. 8
ZONED: S-3A
COUNTY BOARD OF ARLINGTON

AMPITHEATER

CONSTRUCTION NOTES

- EXISTING TREE NOT TO BE DISTURBED
SEE TREE INVENTORY PLAN FOR ADDITIONAL INFORMATION
- CONSTRUCTION ACCESS ROUTE
- REMOVE TREE / STUMP
- WORK AREA
- TEMPORARY 10 INCH MULCH LAYER
- TEMPORARY 4 INCH MULCH LAYER FOR 6' PATH
(SEE ARLINGTON CO. STANDARD 311300.9NS)
- LOD LIMIT OF DISTURBANCE

EXISTING SIGNS TO BE TEMPORARILY REMOVED IF NECESSARY. SIGNS SHALL BE REPLACED BY THE CONTRACTOR AT THE COMPLETION OF THE PROJECT. COST OF SIGN REMOVAL AND REPLACEMENT SHALL BE INCLUDED IN THE COST OF CONSTRUCTION ACCESS AND RESTORATION

SUGGESTED SEQUENCE OF CONSTRUCTION

1. ACCESS THE SITE IN ACCORDANCE WITH THE DETAILS AND NOTES SHOWN ON THIS SHEET.
2. INSTALL EROSION AND SEDIMENT CONTROL MEASURES
3. INSTALL TREE PROTECTION MEASURES AND RECEIVE APPROVAL FROM COUNTY ARBORIST.
4. ESTABLISH ACCESS TO THE WEST SIDE OF THE STREAM BY CONSTRUCTING A TEMPORARY WORK BRIDGE OR BY OTHER APPROVED MEANS.
5. CONSTRUCT TEMPORARY PEDESTRIAN DETOURS AND TREE PROTECTION ON BOTH SIDES OF THE STREAM.
6. COMPLETE TREE REMOVAL AS SHOWN ON SHEET C091.1.
7. REMOVE EXISTING ABUTMENT ON THE WEST SIDE OF THE STREAM.
8. CONSTRUCT AND BACKFILL ABUTMENT A AND PLACE RIPRAP ON THE WEST SIDE OF THE STREAM.
9. COMPLETE GRADING AND FINISHED SURFACING FOR THE TRAIL BEHIND ABUTMENT A.
10. COMPLETE TREE PLANTING AND REMOVE THE PEDESTRIAN DETOUR AND TREE PROTECTION ON THE WEST SIDE OF THE STREAM.
11. TRANSFER ALL EQUIPMENT AND MATERIALS TO THE EAST SIDE OF THE STREAM AND REMOVE ANY TEMPORARY ACCESS STRUCTURES.
12. REMOVE EXISTING ABUTMENT AND ASPHALT PAVEMENT ON THE EAST SIDE OF THE STREAM.
13. CONSTRUCT AND BACKFILL ABUTMENT B AND PLACE RIPRAP ON THE EAST SIDE OF THE STREAM.
14. PERFORM A WALKTHROUGH TO DETERMINE ACCESS FOR PREFABRICATED TRUSS. PERFORM TREE PRUNING TO PREVENT DAMAGE TO BRANCHES ALONG THE ACCESS PATH.
15. DELIVER AND INSTALL PREFABRICATED TRUSS.
16. COMPLETE ASPHALT PAVING OPERATIONS.
17. COMPLETE TREE PLANTING
18. REMOVE THE PEDESTRIAN DETOUR AND TREE PROTECTION ON THE EAST SIDE OF THE STREAM.
19. REMOVE EROSION AND SEDIMENT CONTROL MEASURES.

NOTES

1. SEE TREE INVENTORY AND TREE PROTECTION PLAN SHEET (C091.1) FOR DETAIL INFORMATIONS ON TREES TO REMAIN AND TREES FOR REMOVAL. TREES TO REMAIN WITHIN CLOSE PROXIMITY (5 FEET FROM JOB SITE) SHALL BE FULLY PROTECTED AT ALL TIMES. PRIOR TO THE INSTALLATION OF THE BRIDGE, THE SITE AND ACCESS TO THE SITE WILL BE EVALUATED BY THE CONTRACTOR AND THE COUNTY FOR TREE PROTECTION AND TREE PRUNING. COST OF ADDITIONAL TREE PROTECTION AND PRUNING SHALL BE INCLUDED IN THE COST OF CONSTRUCTION ACCESS AND RESTORATION.
2. CONTRACTOR SHALL MAINTAIN PEDESTRIAN ACCESS AROUND THE PROJECT SITE AS SHOWN IN THE PLANS THROUGHOUT THE COURSE OF THE PROJECT.
3. CONTRACTOR SHALL MAINTAIN A LAYER OF MULCH OVER TREE ROOT AREAS AS SHOWN IN THE PLANS. DISTRIBUTION OF MULCH LAYER WILL BE CONDUCTED ON A WEEKLY BASIS. CONTRACTOR IS RESPONSIBLE FOR MAINTAINING COVER AND REPAIR CONDITIONS AS THEY ARISE.
4. CLEARING FOR CONSTRUCTION OF TEMPORARY 6' MULCH PATH SHALL BE INCLUDED IN THE COST OF THE 4" DOUBLE SHREDDED HARDWOOD MULCH, COMPACTED. NO SEPARATE PAYMENT SHALL BE MADE FOR THIS WORK.
5. THE SUGGESTED SEQUENCE OF CONSTRUCTION SHOWN FOR TREE PLANTING SHALL BE ADJUSTED AS NECESSARY TO ENSURE TREES ARE PLANTED DURING THE CORRECT TREE PLANTING SEASONS.

NOTE: DIMENSIONS SHOWN ARE APPROXIMATE AND MAY BE ADJUSTED AS NECESSARY WITH APPROVAL FROM THE PROJECT OFFICER.

ARLINGTON VIRGINIA
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SEAL

APPROVALS	DATE
DESIGN TEAM ENGINEER SUPERVISOR	
CONSTRUCTION MANAGEMENT SUPERVISOR	
WATER, SEWER, STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	
PROJECT MANAGER	

REVISIONS	DATE

LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK

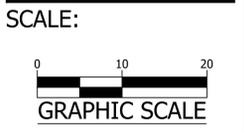
PEDESTRIAN BRIDGE OVER LUBBER RUN

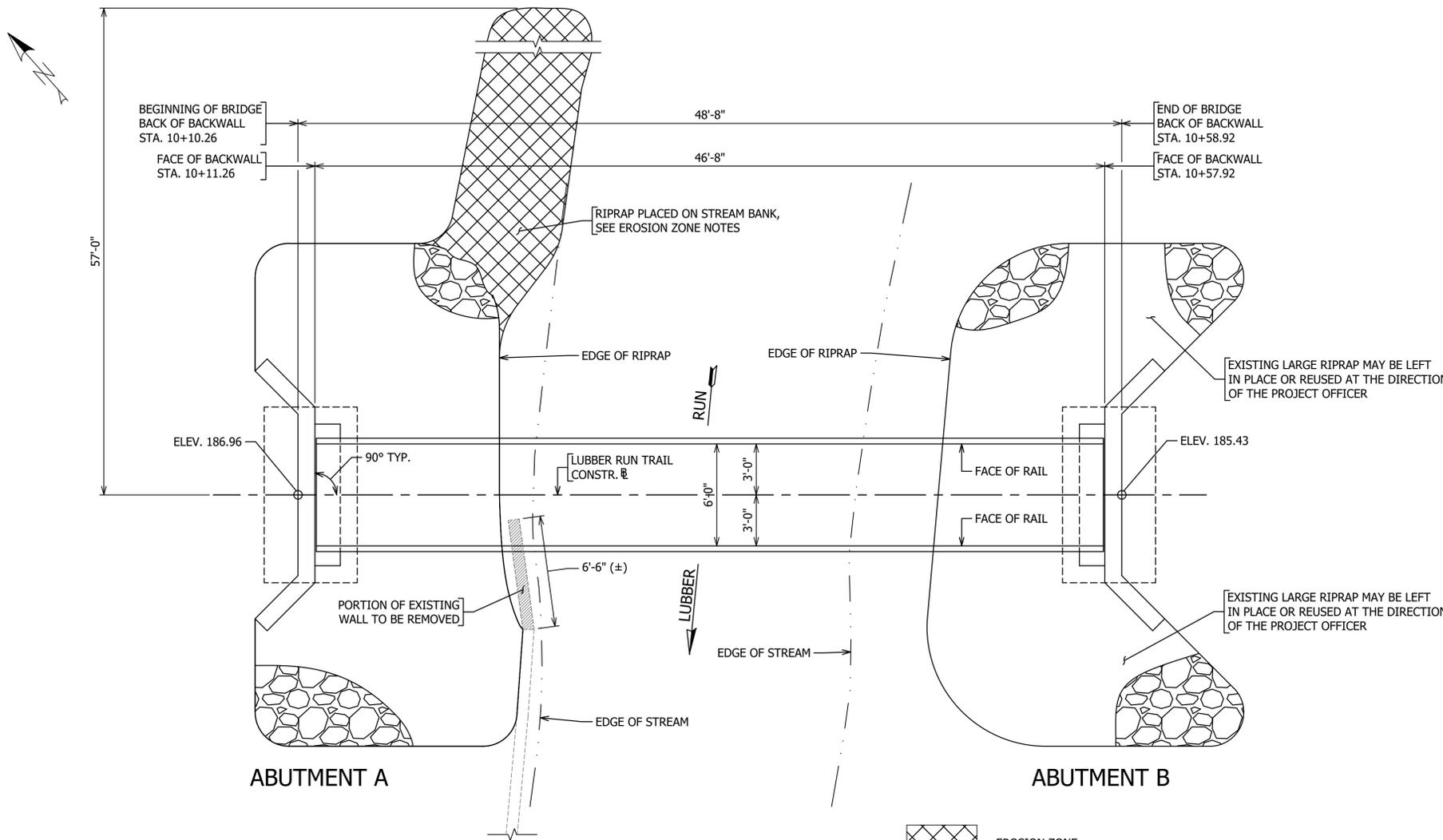
MAINTENANCE OF TRAFFIC PLAN

23-DPR-ITBPW-575

DESIGNED: BD
DRAWN: BD
CHECKED: BCG

PLOTTED: MARCH 7 2023

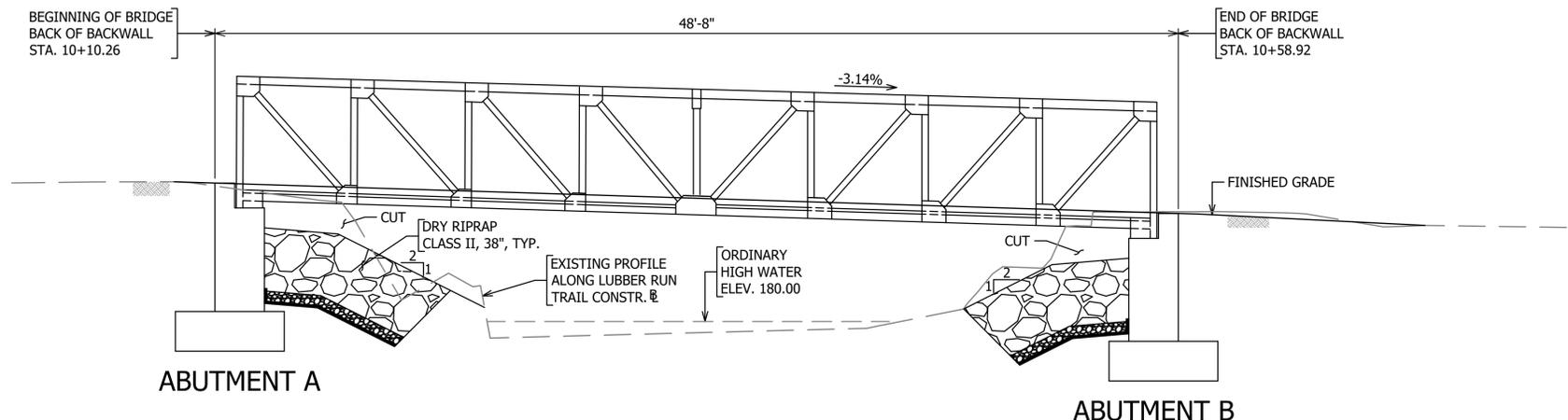




PLAN

= EROSION ZONE

RIPRAP IN THE "EROSION ZONE" SHALL BE DRY RIPRAP CLASS I, 26" AND PLACED IN A MANNER THAT WILL CAUSE MINIMUM DISTURBANCE TO THE STREAM AND VEGETATION. NO EXCAVATION OR TREE ROOT REMOVAL WILL BE PERMITTED WITHIN THE LIMITS OF THE "EROSION ZONE". RIPRAP IN THE "EROSION ZONE" SHALL BE PLACED TO CREATE A SMOOTH TRANSITION TO THE EXISTING BANKS AT THE DIRECTION OF THE COUNTY PROJECT OFFICER.



ELEVATION

NOTE:
TRUSS SHOWN IN ELEVATION VIEW IS FOR ILLUSTRATIVE PURPOSES ONLY, SEE NOTES AND PROJECT MANUAL FOR DESIGN REQUIREMENTS.

GENERAL NOTES

WIDTH: 6'-0" FACE-TO-FACE OF RAILS.
 SPAN LAYOUT: 46'-8" STEEL TRUSS SPAN.
 CAPACITY: 90 PSF PEDESTRIAN LIVE LOAD AND 4,000 LBS VEHICULAR LIVE LOAD
 DRAINAGE AREA: 1.46 SQ. MI.
 SPECIFICATIONS:
 CONSTRUCTION: VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS, 2020.
 DESIGN: AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 8TH EDITION, 2017.
 LRFD GUIDE SPECIFICATIONS FOR THE DESIGN OF PEDESTRIAN BRIDGES, 2ND EDITION, 2009.
 STANDARDS: VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS, 2016; INCLUDING ALL CURRENT REVISIONS.

THESE PLANS ARE INCOMPLETE UNLESS ACCOMPANIED BY THE SUPPLEMENTAL SPECIFICATIONS AND SPECIAL PROVISIONS INCLUDED IN THE CONTRACT DOCUMENTS.

SUPERSTRUCTURE FOR PEDESTRIAN BRIDGE SHALL BE DESIGNED, FABRICATED AND SUPPLIED BY THE TRUSS MANUFACTURER. SHOP DRAWINGS SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW AND APPROVAL. FOR ADDITIONAL NOTES, SEE SHEET B001.2.

CONCRETE IN SUBSTRUCTURE SHALL BE CLASS A3 IN ACCORDANCE WITH SECTION 217 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.

PERMEABILITY TESTING DOES NOT APPLY TO THIS PROJECT.

FOOTINGS SHALL BEAR ON FIRM MATERIAL WITH A MINIMUM NOMINAL BEARING RESISTANCE OF 6.8 KSF.

IF GEOTECHNICAL ENGINEER DETERMINES THAT UNDERCUT EXCAVATION IS REQUIRED TO ACHIEVE THE REQUIRED BEARING CAPACITY, THE COST OF UNDERCUT EXCAVATION SHALL BE MEASURED IN CY AND PAID FOR AT THE UNIT COST FOR STRUCTURAL EARTHWORK. THE COST OF FILLING COMPACTED VDOT 21A SHALL BE CONSIDERED INCIDENTAL AND WILL NOT BE MEASURED FOR PAYMENT.

DEFORMED REINFORCING BARS SHALL CONFORM TO ASTM A615, GRADE 60. ALL REINFORCING BAR DIMENSIONS ON THE DETAILED DRAWINGS ARE TO CENTERS OF BARS EXCEPT WHERE OTHERWISE NOTED AND ARE SUBJECT TO FABRICATION AND CONSTRUCTION TOLERANCES.

THE CONTRACTOR SHALL BACKFILL AREAS WITH APPROVED MATERIALS PER THE REQUIREMENTS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION. THE COST OF BACKFILL IS INCLUDED IN THE COST OF STRUCTURAL EXCAVATION.

PREFABRICATED STEEL TRUSS SHALL BE PAID ON A LUMP SUM BASIS, THE PRICE SHALL INCLUDE DESIGN, FABRICATION, DELIVERY, ERECTION, RUB RAILS, SAFETY RAILS, TOE PLATES, BEARING ASSEMBLIES, AND ANY ASSOCIATED FALSE WORK OR TEMPORARY SUPPORTS.

ALL COST ASSOCIATED WITH SITE ACCESS AND STAGING SHALL BE INCLUDED IN THE LUMP SUM BID PRICE FOR CONSTRUCTION ACCESS AND RESTORATION. THE LUMP SUM PRICE SHALL INCLUDE ALL COSTS FOR STORING EQUIPMENT AND MATERIALS, TEMPORARY GRADING, TEMPORARY WORK BRIDGE, AND RESTORING THE AREA TO ITS ORIGINAL CONDITION AFTER CONSTRUCTION IS COMPLETE.

REMOVE EXISTING ABUTMENTS AND PORTION OF EXISTING WALL AS SHOWN. THIS COST SHALL BE INCLUDED IN THE PRICE BID FOR REMOVE EXISTING STRUCTURES.

TEMPORARY WORK BRIDGE:

THE CONTRACTOR MAY CONSTRUCT A TEMPORARY WORK BRIDGE TO ACCESS EACH SIDE OF STREAM. THE TEMPORARY WORK BRIDGE SHALL BE DESIGNED BY A REGISTERED PROFESSIONAL ENGINEER HOLDING A VALID LICENSE TO PRACTICE ENGINEERING IN THE COMMONWEALTH OF VIRGINIA. WORKING DRAWINGS OF THE WORK BRIDGE SHALL BE SUBMITTED TO THE ENGINEER FOR REVIEW 14 DAYS PRIOR TO INSTALLATION OF THE WORK BRIDGE. THE DRAWINGS SHALL INCLUDE PLAN AND PROFILE VIEW, AND DETAILS OF ALL STRUCTURAL MEMBERS AS DETERMINED BY THE CONTRACTOR AND HIS ENGINEER. THE CONTRACTOR SHALL DETERMINE THE METHODS AND MEANS OF SUPPORT REQUIRED FOR THE LOADS IMPOSED BY CONSTRUCTION EQUIPMENT DURING THE CONSTRUCTION OF THE PROJECT.

THE LOCATION OF THE TEMPORARY WORK BRIDGE SHALL BE WITHIN THE LIMITS OF WORK SHOWN ON THE PLANS. THE CONTRACTOR SHALL USE A MATERIAL AND DESIGN FOR THE TEMPORARY WORK BRIDGE THAT DOES NOT IMPACT THE STREAM. ALL SUPPORTS SHALL BE OUTSIDE OF ORDINARY HIGH WATER. WORK BRIDGE MATERIALS AND SUPPORT STRUCTURES SHALL BE NON-ERODIBLE MATERIAL. EQUIPMENT SHALL NOT BE ALLOWED TO ENTER THE WATER TO CONSTRUCT THE WORK BRIDGE.

THE COST OF THE DESIGN, INSTALLATION, AND REMOVAL OF THE TEMPORARY WORK BRIDGE, WHEN NO LONGER REQUIRED, SHALL BE INCLUDED IN PRICE BID FOR CONSTRUCTION ACCESS AND RESTORATION. THIS PRICE SHALL BE FULL COMPENSATION FOR ALL LABOR, TOOLS, MATERIALS, EQUIPMENT, AND INCIDENTALS REQUIRED FOR THE SATISFACTORY COMPLETION OF THE WORK.

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SEAL

APPROVALS	DATE
DESIGN TEAM ENGINEER SUPERVISOR	
CONSTRUCTION MANAGEMENT SUPERVISOR	
WATER, SEWER, STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	
PROJECT MANAGER	

REVISIONS	DATE

LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK

PEDESTRIAN BRIDGE OVER LUBBER RUN

GENERAL PLAN AND ELEVATION

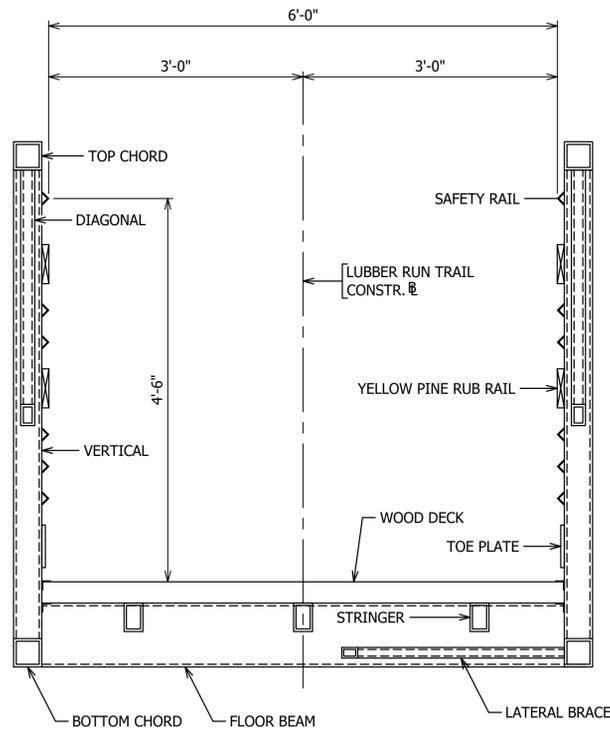
23-DPR-ITBPW-575

DESIGNED: DJ
 DRAWN: DJ
 CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:

1/4" = 1'-0"



TRANSVERSE SECTION

SCALE: 1" = 1'-0"

NOTES:

THE SUPERSTRUCTURE SHALL BE A STEEL TRUSS BRIDGE AND SHALL BE DESIGNED AND MANUFACTURED BY CONTECH ENGINEERED SOLUTIONS AT WWW.CONTECHES.COM OR EQUIVALENT AS APPROVED BY THE PROJECT OFFICER.

THE TRUSS STRUCTURE SHALL BE A TRUSS (SIMILAR TO THE CONTECH CONNECTOR TRUSS) AND INCLUDE A WOOD DECK CONSISTING OF SOUTHERN YELLOW PINE.

THE TRUSS FABRICATOR SHALL PROVIDE A PLATE ON THE BRIDGE WITH LOAD CAPACITY AND DATE OF MANUFACTURE.

THE CONTRACTOR SHALL COORDINATE WITH THE TRUSS MANUFACTURER FOR BEARING DETAILS AND SHALL PROVIDE BEARING AND ANCHOR BOLT DESIGN FOR THE ENGINEER'S REVIEW AND APPROVAL. ANCHOR BOLTS SHALL BE LOCATED A MINIMUM OF 6" FROM THE EDGE OF THE ABUTMENT SEAT AND HAVE A MINIMUM EMBEDMENT LENGTH OF 2'-0".

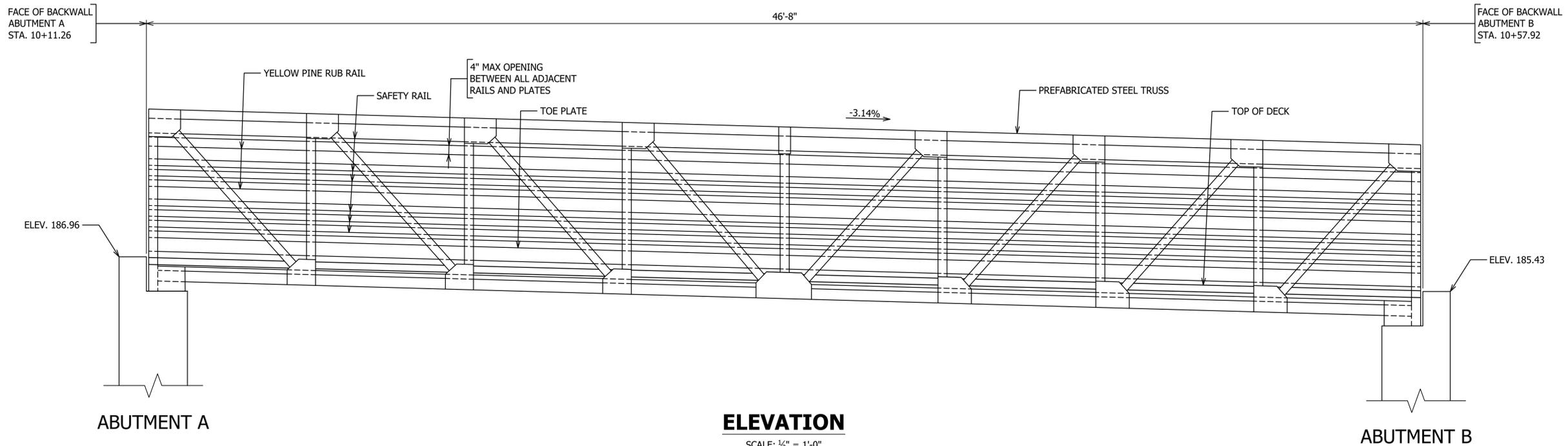
THE STRUCTURE DEPTH, MEASURED FROM TOP OF DECK TO THE LOWEST POINT ON THE STRUCTURE, SHALL BE A MAXIMUM OF 1'-3".

LOWER CHORD MEMBERS SHALL ALLOW FOR FREE DRAINAGE AND BE CONFIGURED AS TO NOT CAPTURE DEBRIS.

THE SUBSTRUCTURE IS DESIGNED AND SIZED FOR A TOTAL SUPERSTRUCTURE WEIGHT OF 13,000 LBS. SHOULD THE WEIGHT BE GREATER THAN THIS VALUE, THE TRUSS MANUFACTURER SHALL BRING IT TO THE ATTENTION OF THE ENGINEER TO RE-EVALUATE THE DESIGN OF THE SUBSTRUCTURE.

ALL PREFABRICATED TRUSS COMPONENTS SHALL BE UNPAINTED WEATHERING STEEL UNLESS NOTED OTHERWISE.

THE STEEL TRUSS AND BEARING ANCHORAGE SHALL BE DESIGNED TO RESIST A STREAM VELOCITY OF 13.5 FT/SEC, ASSUMING THE TRUSS IS OVERTOPPED DURING THE DESIGN STORM EVENT.



ELEVATION

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

SEAL



APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR _____

CONSTRUCTION MANAGEMENT SUPERVISOR _____

WATER, SEWER, STREETS BUREAU CHIEF _____

TRANSPORTATION DIRECTOR _____

PROJECT MANAGER _____

REVISIONS DATE

NO.	DESCRIPTION	DATE

LUBBER RUN PEDESTRIAN BRIDGE
 LUBBER RUN PARK
 PEDESTRIAN BRIDGE OVER LUBBER RUN
BRIDGE ELEVATION AND TYPICAL SECTION

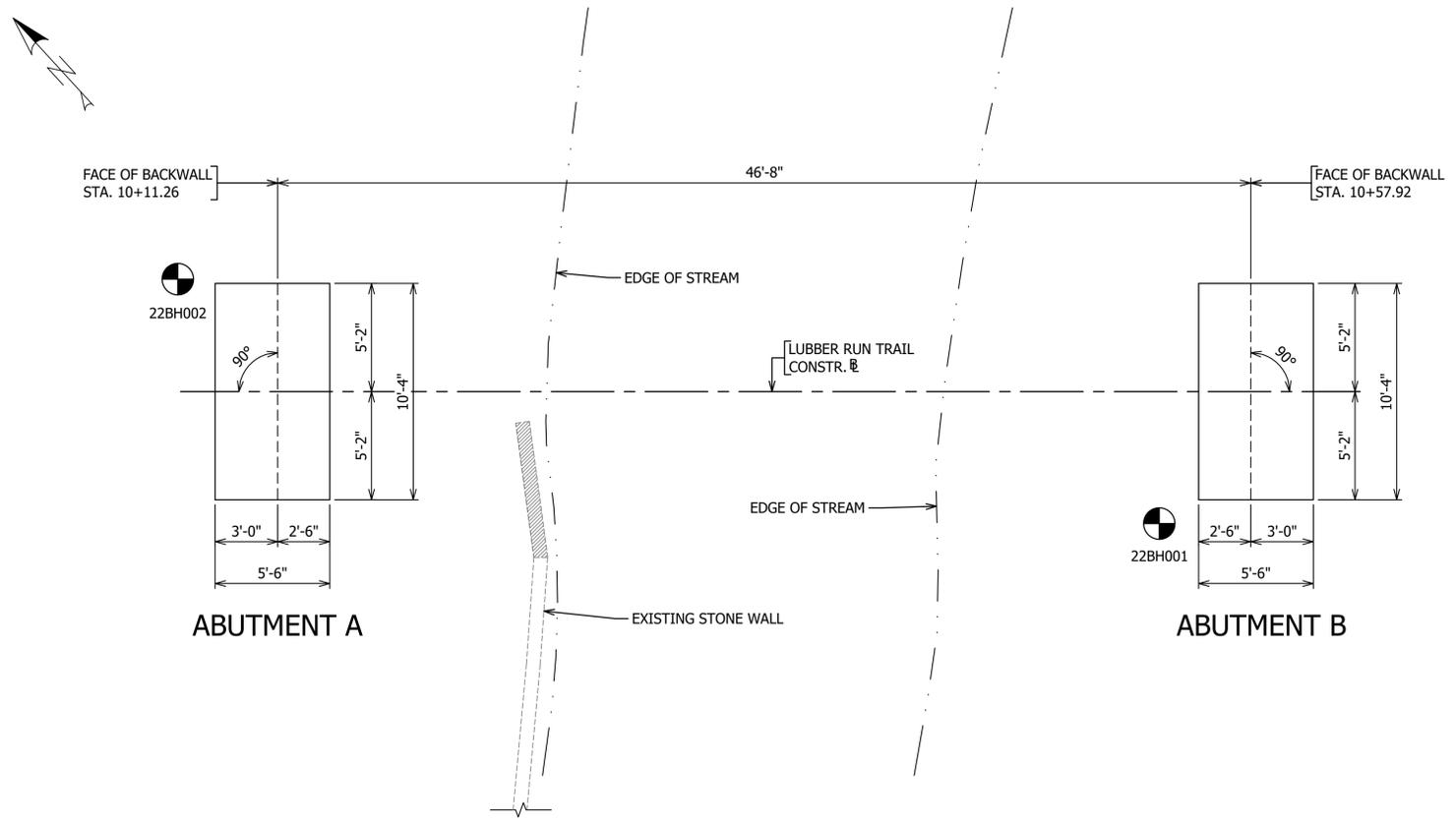
23-DPR-ITBPW-575

DESIGNED: DJ
 DRAWN: DJ
 CHECKED: BCG

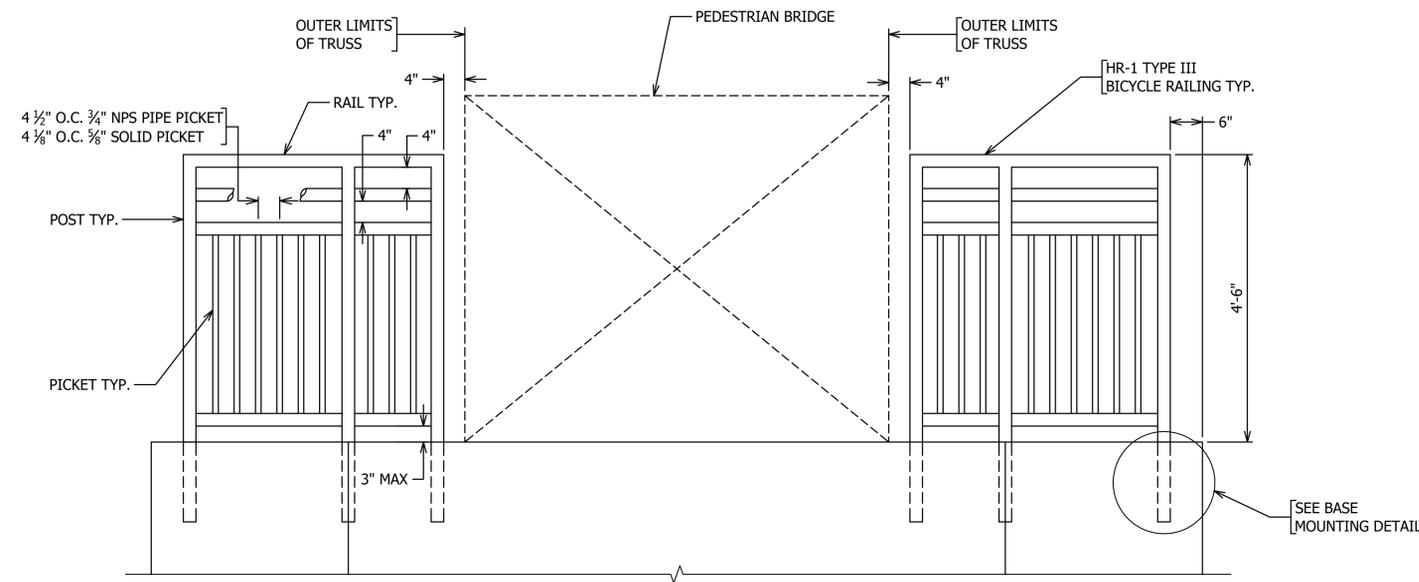
PLOTTED: MARCH 7 2023

SCALE:

AS SHOWN



SUBSTRUCTURE LAYOUT
SCALE: 1/4" = 1'-0"

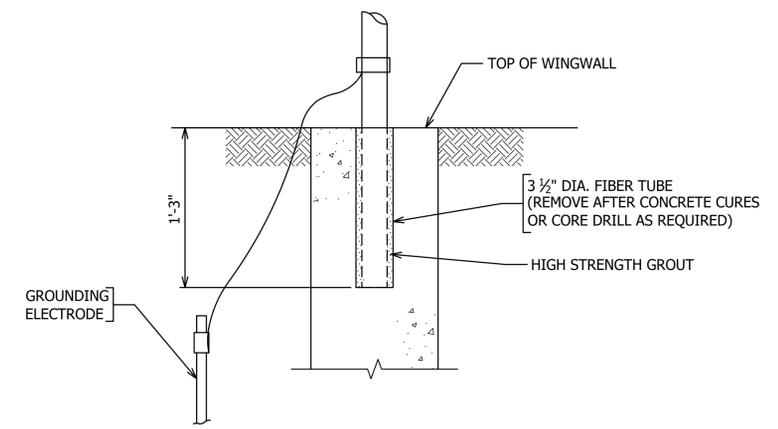


DEVELOPED ELEVATION OF HR-1 TYPE III BICYCLE RAILING
SCALE: 3/4" = 1'-0"

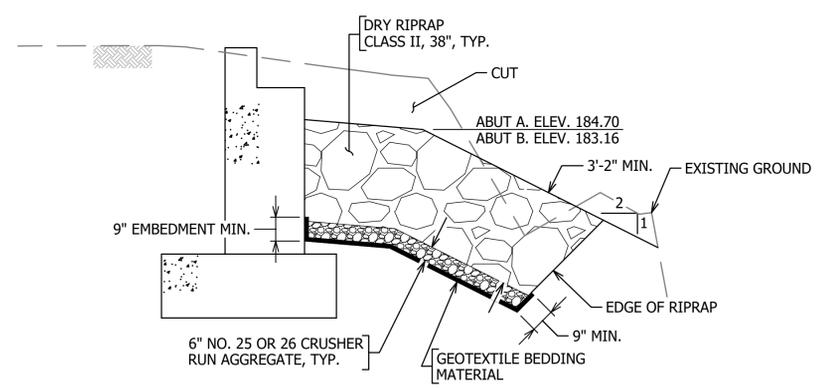
POSTS: 2" MIN. NPS (2.375" O.D.) SCHEDULE 80 PIPE
RAILS: 2" MIN. NPS (2.375" O.D.) SCHEDULE 40 PIPE
PICKETS: 3/4" MIN. NPS (1.05" O.D.) SCHEDULE 40 PIPE
OR 5/8" MIN. SOLID STEEL SMOOTH ROUND ROD

NOTES:

- THIS LAYOUT IS TO BE USED ONLY FOR THE PURPOSE OF LOCATING FOOTINGS. FOR DETAILS NOT SHOWN, SEE ABUTMENT DETAILS ON SHEETS B001.4 AND B001.5.
- ☉ = BORING LOCATION, FOR DETAILS SEE SHEET B001.7.
- RIPRAP SHALL BE PLACED AS SHOWN IN A MANNER AS TO CAUSE MINIMUM DISTURBANCE TO THE STREAM. EXCAVATION IN THE STREAM WILL NOT BE PERMITTED.
- THE CONTRACTOR SHALL SUBMIT DRAWINGS DETAILING ALL ASPECTS OF FABRICATION AND INSTALLATION OF RAILING FOR APPROVAL BY THE ENGINEER, PRIOR TO INSTALLATION. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, HOLDING A VALID LICENSE TO PRACTICE ENGINEERING IN THE COMMONWEALTH OF VIRGINIA.
- ALL RAILING COMPONENTS SHALL BE GALVANIZED IN ACCORDANCE WITH THE CURRENT ROAD AND BRIDGE SPECIFICATIONS. TO ACHIEVE A UNIFORM COATING ON ALL SURFACES VENTING AND DRAINAGE HOLES FOR GALVANIZING SHALL BE INCLUDED IN THE SHOP DRAWINGS.
- ALL POSTS AND PICKETS SHALL BE SET PLUMB.
- RAILINGS SHALL BE GROUNDED AND EFFECTIVELY BONDED. GROUNDING MATERIALS INSTALLATION TO BE IN ACCORDANCE WITH VDOT STANDARD FE-6.
- COMMERCIALY AVAILABLE RAILING SYSTEMS MAY BE USED IN LIEU OF DESIGNING AND FABRICATING THE RAILING. DOCUMENTATION FROM THE MANUFACTURER VERIFYING THAT PROJECT REQUIREMENTS ARE MET WITH THE RAILING SYSTEM SHALL BE SUBMITTED WITH THE INSTALLATION DRAWINGS AND APPROVED BY THE ENGINEER.
- HANDRAIL TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE.
- FOR WINGWALL DETAILS, SEE SHEETS B001.4 AND B001.5.



BASE MOUNTING DETAIL
SCALE: 1 1/2" = 1'-0"



TYPICAL RIPRAP DETAIL
SCALE: 3/8" = 1'-0"

ARLINGTON VIRGINIA
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SEAL

BRIAN C. GRAHAM
Lic. No. 937140
03-07-2023
PROFESSIONAL ENGINEER

APPROVALS	DATE
DESIGN TEAM ENGINEER SUPERVISOR	
CONSTRUCTION MANAGEMENT SUPERVISOR	
WATER, SEWER, STREETS BUREAU CHIEF	
TRANSPORTATION DIRECTOR	
PROJECT MANAGER	

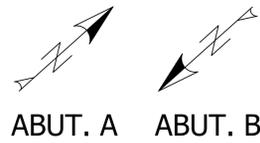
REVISIONS	DATE

LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK
PEDESTRIAN BRIDGE OVER LUBBER RUN
SUBSTRUCTURE LAYOUT
AND RIPRAP DETAILS

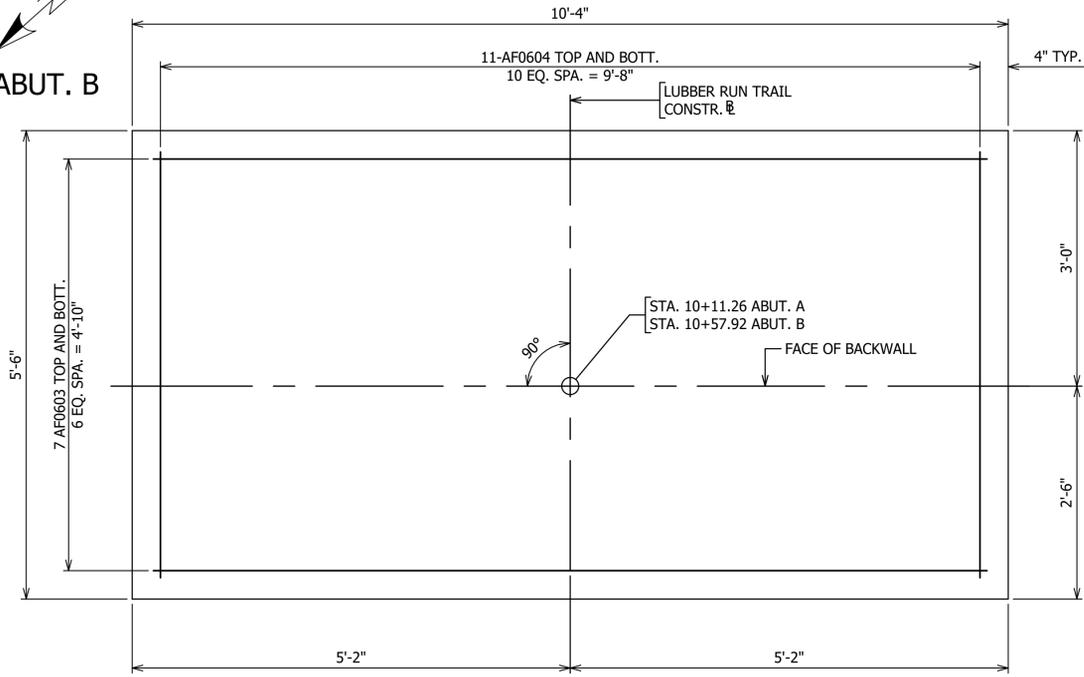
23-DPR-ITBPW-575
DESIGNED: DJ
DRAWN: DJ
CHECKED: BCG
PLOTTED: MARCH 7 2023

SCALE:
AS SHOWN

REVISED ON 1/24/2022

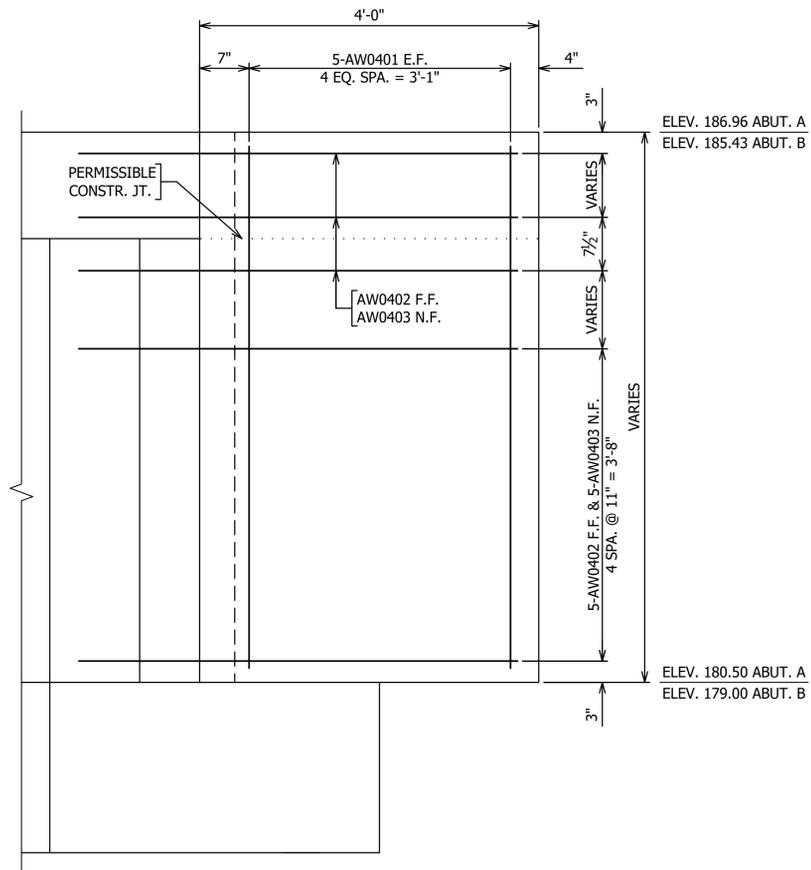


ABUT. A ABUT. B



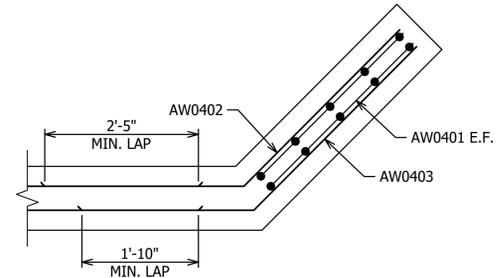
FOOTING REINFORCEMENT PLAN

SCALE: 1" = 1'-0"



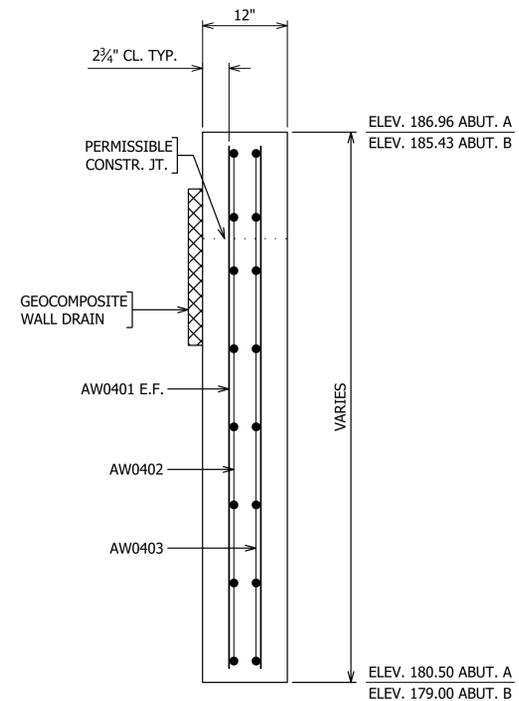
VIEW B-B

SCALE: 3/4" = 1'-0"



CORNER REINFORCEMENT DETAIL

LAP BARS WITH AW0401 E.F. IN ABUTMENT BACKWALL, AW0502 F.F. IN ABUTMENT STEM
SCALE: 3/4" = 1'-0"



SECTION C-C

SCALE: 3/4" = 1'-0"

NOTES:

FOR LOCATION OF VIEW B-B, SEE SHEET B001.4.

FOR LOCATION OF SECTION C-C, SEE SHEET B001.4.

E.F. = EACH FACE
N.F. = NEAR FACE
F.F. = FAR FACE



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SEAL



APPROVALS DATE

DESIGN TEAM ENGINEER SUPERVISOR

CONSTRUCTION MANAGEMENT SUPERVISOR

WATER, SEWER, STREETS BUREAU CHIEF

TRANSPORTATION DIRECTOR

PROJECT MANAGER

REVISIONS DATE

NO.	DESCRIPTION	DATE

LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK
PEDESTRIAN BRIDGE OVER LUBBER RUN
ABUTMENT FOOTING PLAN AND
DETAILS

23-DPR-ITBPW-575

DESIGNED: DJ
DRAWN: DJ
CHECKED: BCG

PLOTTED: MARCH 7 2023

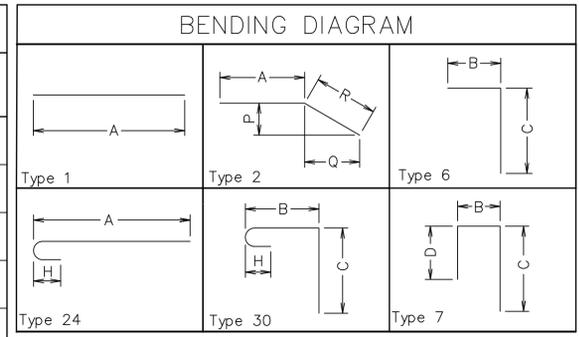
SCALE:

AS SHOWN

B001.5

FILENAME: XXXX-BRIDGE.DWG PATH: T:\1009400 - MASTER-ARLINGTON COUNTY ON-CALL\1009467 - LUBBER RUN PEDESTRIAN BRIDGE 2107 DESIGN\DWG PLOTTED BY: DEVINJI

REINFORCING STEEL SCHEDULE							DIMENSION TABLE																
MARK	NO.	BAR SIZE	PIN DIA. FT-IN	LENGTH FT-IN		WEIGHT (LBS.)	LOCATION	TYPE	A	B	C	D	E	F	G	H	I	J	K	L	V	N	
				FT-IN	FT-IN				FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN	FT-IN
ABUTMENT A - FOOTING																							
AF0501	11	5	3 3/4	4-04	50	Footing	24	3-09								5							
AF0502	11	5	3 3/4	3-09	43	Footing	1	3-09															
AF0503	14	6	3 3/4	9-10	207	Footing	1	9-10															
AF0604	22	6		5-00	165	Footing	1	5-00															
TOTAL	WEIGHT IN	PRECEDING	GROUP OF BARS		465																		
ABUTMENT A - NEAT																							
AV0401	9	4	3	5-07	34	Backwall	7	4-11	6 1/2	2-02	3-01												
AV0502	9	5	3 3/4	4-11	46	Stem	1	4-11	2-00 1/2	4-10													
AV0503	9	5	3 3/4	7-04	69	Stem	30	7-04															
AH0401	4	4		9-10	26	Backwall	1	9-10															
AH0502	6	5		9-10	62	Stem	1	9-10															
AH0503	6	5		7-10	49	Stem	1	7-10															
AH0604	4	6	3	7-10	47	Stem	1	7-10	2-00 1/2	1-06	1-06												
AH0405	14	4	3	4-10	45	Stem	7	4-10															
AW0401	24	4	3	6-01	98	Wingwall	1	6-01															
AW0402	16	4	3	6-07	70	Wingwall	2	3-01 5/8				2-05 1/2	2-05 1/2	3-05 1/2									
AW0403	16	4	3	6-05	68	Wingwall	2	2-09				2-07 1/4	2-07 1/4	3-08									
TOTAL	WEIGHT IN	PRECEDING	GROUP OF BARS		613																		
ABUTMENT B - FOOTING																							
AF0501	11	5	3 3/4	4-04	50	Footing	24	3-09															
AF0502	11	5	3 3/4	3-09	43	Footing	1	3-09															
AF0503	14	6	3 3/4	9-10	207	Footing	1	9-10															
AF0604	22	6		5-00	165	Footing	1	5-00															
TOTAL	WEIGHT IN	PRECEDING	GROUP OF BARS		465																		
ABUTMENT B - NEAT																							
AV0401	9	4	3	5-07	34	Backwall	7	4-11	6 1/2	2-02	3-01												
AV0502	9	5	3 3/4	4-11	46	Stem	1	4-11	2-00 1/2	4-10													
AV0503	9	5	3 3/4	7-04	69	Stem	30	7-04															
AH0401	4	4		9-10	26	Backwall	1	9-10															
AH0502	6	5		9-10	62	Stem	1	9-10															
AH0503	6	5		7-10	49	Stem	1	7-10															
AH0604	4	6	3	7-10	47	Stem	1	7-10	2-00 1/2	1-06	1-06												
AH0405	14	4	3	4-10	45	Stem	7	4-10															
AW0401	24	4	3	6-01	98	Wingwall	1	6-01															
AW0402	16	4	3	6-07	70	Wingwall	2	3-01 5/8				2-05 1/2	2-05 1/2	3-05 1/2									
AW0403	16	4	3	6-05	68	Wingwall	2	2-09				2-07 1/4	2-07 1/4	3-08									
TOTAL	WEIGHT IN	PRECEDING	GROUP OF BARS		613																		



NOTES:
 DIMENSIONS IN BENDING DIAGRAM ARE OUT-TO-OUT BARS
 WEIGHTS IN SCHEDULE ARE BASED ON DENSITY OF 490 LB/FT³

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SEAL
 COMMONWEALTH OF VIRGINIA
 BRIAN C. GRAHAM
 Lic. No. 837140
 PROFESSIONAL ENGINEER
 03-07-2023

APPROVALS _____ **DATE** _____

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CONSTRUCTION MANAGEMENT SUPERVISOR _____

WATER, SEWER, STREETS BUREAU CHIEF _____

TRANSPORTATION DIRECTOR _____

PROJECT MANAGER _____

REVISIONS _____ **DATE** _____

LUBBER RUN PEDESTRIAN BRIDGE
 LUBBER RUN PARK

PEDESTRIAN BRIDGE OVER LUBBER RUN

REINFORCING STEEL SCHEDULE

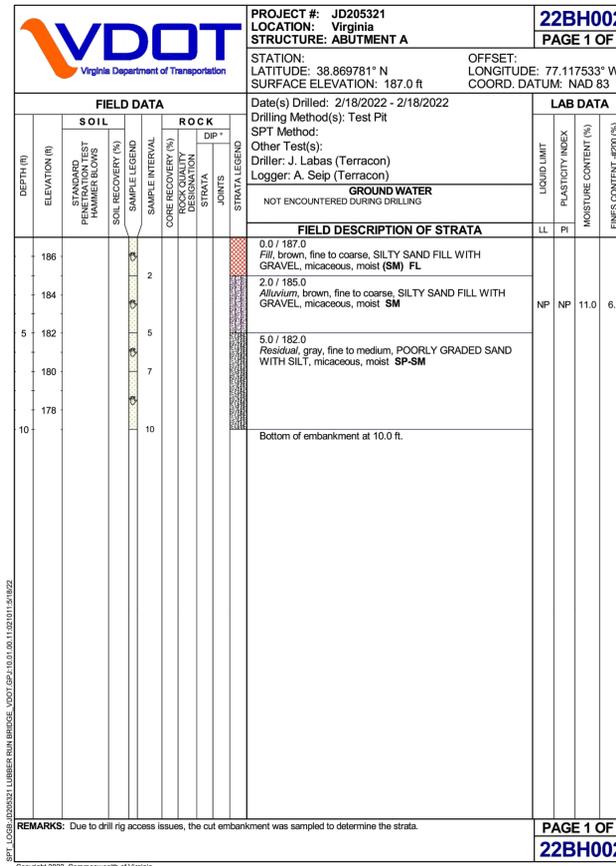
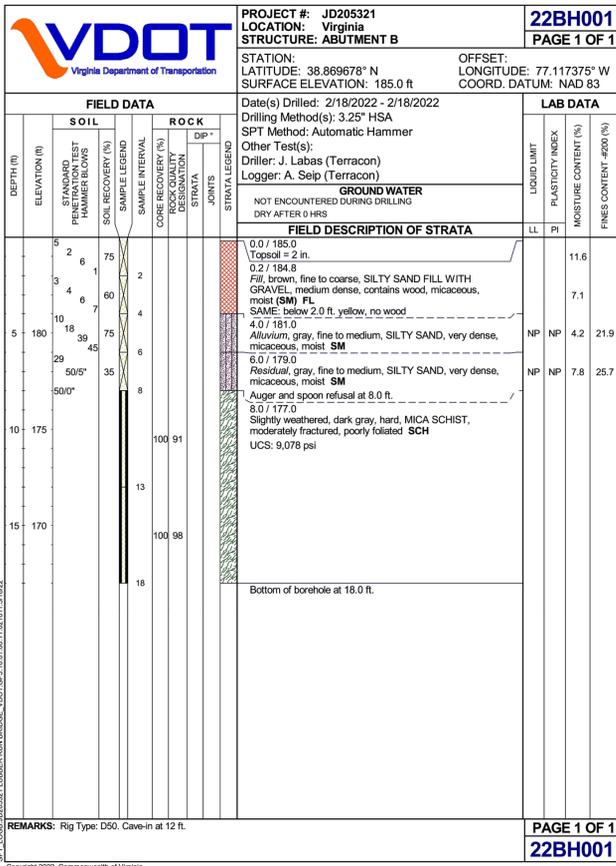
23-DPR-ITBPW-575

DESIGNED: DJ
 DRAWN: DJ
 CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:

NOT TO SCALE



THE SUBSURFACE INFORMATION SHOWN ON THE BORING LOGS IN THESE PLANS WAS OBTAINED WITH REASONABLE CARE AND RECORDED IN GOOD FAITH SOLELY FOR USE BY THE COUNTY IN ESTABLISHING DESIGN CONTROLS FOR THE PROJECT. THE COUNTY HAS NO REASON TO SUSPECT THAT SUCH INFORMATION IS NOT REASONABLY ACCURATE AS AN APPROXIMATE INDICATION OF THE COUNTY DOES NOT IN ANY WAY WARRANT OR GUARANTEE THAT SUCH DATA CAN BE PROJECTED AS INDICATIVE OF CONDITIONS BEYOND THE LIMITS OF THE BORING SHOWN; AND ANY SUCH PROJECTIONS BY BIDDERS ARE PURELY INTERPRETIVE AND ALTOGETHER SPECULATIVE. FURTHER, THE COUNTY DOES NOT IN ANY WAY GUARANTEE, EITHER EXPRESSLY OR BY IMPLICATION, THE SUFFICIENCY OF THE INFORMATION FOR BID PURPOSES.



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TRANSPORTATION DIRECTOR

PROJECT MANAGER

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LUBBER RUN PEDESTRIAN BRIDGE
LUBBER RUN PARK
PEDESTRIAN BRIDGE OVER LUBBER RUN
ENGINEERING GEOLOGY

23-DPR-ITBPW-575

DESIGNED: DJ
DRAWN: DJ
CHECKED: BCG

PLOTTED: MARCH 7 2023

SCALE:

NONE

B001.7