DEPARTMENT OF ENERGY & ENVIRONMENT

DISTRICT OF COLUMBIA GENERAL DEMOLITION NOTES:

1. CONTRACTOR SHALL COORDINATE WITH DC WATER & SEWER AUTHORITY, VERIZON, COMCAST, RCN, DCNET, WASHINGTON GAS, BELL ATLANTIC TELEPHONE AND PEPCO TO PROPERLY TERMINATE AND REMOVE EXISTING SERVICE CONNECTIONS TO THE SITE. SERVICES TO ALL EXISTING RESIDENCES AND BUILDINGS WHICH ARE LOCATED ON THIS PROJECT SITE ARE TO BE PROPERLY TERMINATED & REMOVED.
2. CONTRACTOR SHALL WALK THE SITE AND FAMILIARIZE HIM/HERSELF WITH THE SCOPE OF DEMOLITION REQUIRED. ALL DEMOLITION WORK REQUIRED TO CONSTRUCT NEW SITE IMPROVEMENTS SHALL BE PERFORMED BY THE CONTRACTOR AND WILL BE UNCLASSIFIED EXCAVATION.
3. REMOVAL SHALL INCLUDE BUT IS NOT LIMITED TO THE EXCAVATION, HAULING AND DISPOSAL OF CONCRETE PADS, FOUNDATIONS, SLABS, STEPS AND STRUCTURES. ABANDONED UTILITIES, BUILDINGS, PAVEMENT, DECKS, VEGETATION, AND ALL MATERIALS CLEARED AND GRUBBED.
4. THE CONTRACTOR SHALL PROTECT ALL ADJACENT PROPERTY AND STRUCTURES AND UTILITIES ON THE PROPERTY NOT TO BE DEMOLISHED.
5. INDIVIDUAL BUILDING SERVICES ARE NOT INDICATED ON THE DEMOLITION PLAN AND SHALL BE LOCATED AND REMOVED BY THE CONTRACTOR TO THE POINT OF UTILITY COMPANY CUT OFF OR PUBLIC AGENCY MAINTENANCE.
6. ELECTRIC, TELEPHONE, SANITARY SEWER, WATER AND STORM DRAINAGE UTILITIES THAT SERVICE OFF-SITE PROPERTIES SHALL BE MAINTAINED DURING THE CONSTRUCTION PROCESS. (MAINTENANCE SHALL INCLUDE TEMPORARY REROUTING WITH THE APPROVAL OF THE AUTHORITY HAVING JURISDICTION AND THE ARCHITECT.) ANY EXISTING SERVICES INTERRUPTED OR DAMAGED BY THE CONTRACTOR AND/OR HIS OPERATIONS SHALL BE REPAIRED AND / OR REPLACED AS NEEDED AT HIS EXPENSE.
7. EXISTING CURB AND GUTTER, LIGHTS, SIDEWALK, AND UTILITIES WITHIN THE PUBLIC RIGHT-OF-WAY NOT TO BE RECONSTRUCTED SHALL BE MAINTAINED, PROTECTED AND UNDISTURBED DURING DEMOLITION.
8. CONTRACTOR SHALL ERECT ALL NECESSARY PROTECTIVE DEVICES AROUND THE LIMITS OF DEMOLITION AND PROVIDE ANY AND ALL PEDESTRIAN AND VEHICULAR TRAFFIC CONTROL MEASURES DURING CONSTRUCTION AS DETERMINED BY THE OWNER AND DC.
9. PROVIDE SMOOTH SAW CUT OF EXISTING PAVEMENTS, CURBS AND GUTTER AND SIDEWALK TO BE DEMOLISHED.
10. THE CONTRACTOR SHALL PRODUCE A PHOTOGRAPHIC RECORD OF DEVELOPMENT COMMENCING WITH A RECORD OF THE SITE AS IT APPEARS BEFORE DEMOLITION IS BEGUN. AFTERWARDS, A PHOTOGRAPHIC RECORD SHALL BE MAINTAINED DURING CONSTRUCTION AND ENDING WITH A PHOTOGRAPHIC RECORD OF DEVELOPMENT AS IT APPEARS AFTER DEMOLITION. THIS RECORD SHALL BE DELIVERED TO THE OWNER AND ARCHITECT. REFER TO CONTRACT SPECIFICATIONS FOR SPECIFIC INFORMATION.
11. THE SITE SHALL BE FENCED AS NECESSARY TO PREVENT INGRESS/EGRESS BY THE GENERAL PUBLIC TO CONTRACTOR AREAS. FENCE SHALL BE 8' HIGH CHAIN LINK.
12. ALL EXISTING WATER UTILITIES NOTED TO BE ABANDONED/REMOVED SHALL BE DONE PER DC WATER REQUIREMENTS.
    NOTE: ABANDONMENT OF WATER SERVICES
    a. ALL EXISTING WATER SERVICE CONNECTIONS NOTED TO BE ABANDONED ARE TO BE REMOVED AT THE PUBLIC MAIN PER DC WATER REQUIREMENTS
    b. VALVE MANHOLES ON WATER MAINS THAT ARE SHOWN TO BE ABANDONED SHALL BE REMOVED
    c. WATER CONNECTIONS ARE INSTALLED BY CUTTING IN A TEE AND SLEEVE IN THE PUBLIC WATER MAIN WITH A VALVE ON THE BRANCH OF THE TEE. THE ABANDONMENT CONSISTS OF REMOVING THE VALVE AND INSTALLING A PLUG ON THE BRANCH OF THE EXISTING TEE, IF THE TEE IS MECHANICAL JOINT. IF THE EXISTING TEE IS LEAD JOINT AND IS 20" OR SMALLER, THE ENTIRE TEE MUST BE REMOVED FROM THE PUBLIC WATER MAIN AND REPLACED WITH A STRAIGHT RUN OF PIPE. IF THE TEE IS LEAD JOINTS AND IS LARGER THAN 20", THE PIPE OUT OF THE BRANCH OF THE TEE CAN BE CUT AND CAPPED WITH CONCRETE BLOCK AND HARNESS BACK TO THE TEE. THE REMAINING WATER CONNECTION PIPE IS ABANDONED IN PLACE.
    d. WATER SERVICES ARE INSTALLED BY TAPPING THE PUBLIC WATER MAIN AND INSTALLING A CORPORATION STOP. ABANDONMENT CONSISTS OF REMOVING THE CORPORATION STOP AND INSTALLING A PLUG IN THE TAP. THE REMAINING WATER SERVICE PIPE IS ABANDONED IN PLACE.
13. ALL EXISTING SEWERS TO BE ABANDONED/REMOVED SHALL BE DONE PER DC WATER REQUIREMENTS.
    NOTE: ABANDONMENT OF STORM/SEWER SERVICES AND CONNECTIONS
    a. ALL SEWER SERVICE CONNECTIONS NOTED TO BE ABANDONED ARE TO BE ABANDONED AT THE PUBLIC MAIN PER DC WATER REQUIREMENTS
    b. WYE BRANCH CONNECTIONS MUST BE REMOVED AND CONNECTED TO PUBLIC SEWER UP STRAIGHT.
    c. IF CONNECTION GOES TO A MANHOLE, BULK HEAD THE PIPE IN THE MANHOLE.
    d. ABANDONED MANHOLES SHALL BE FILLED WITH LEAN MIX CONCRETE, OR APPROVED EQUIVALENT
    e. SEWERS 36" AND LARGER THAT ARE TO BE ABANDONED SHALL BE FILLED WITH APPROVED SUITABLE MATERIAL
    f. ABANDONMENT OF EXISTING STORM DRAINAGE FACILITIES MUST BE COORDINATED WITH CONSTRUCTION OF REPLACEMENT FACILITIES TO PROVIDE STORMWATER RUNOFF.
14. ALL EXISTING DC WATER UTILITY CONNECTIONS WITHIN PUBLIC SPACE NOTED TO BE ABANDONED SHALL BE DONE PER DC WATER REQUIREMENTS.
    NOTE: ABANDONMENT OF UTILITIES IN PUBLIC SPACE
    a. CONTRACTOR SHALL OBTAIN NECESSARY PUBLIC PERMITS PRIOR TO THE START OF WORK.
    b. IF EXISTING LOCATION OF UTILITY CONNECTIONS TO THE PUBLIC UTILITY COULD NOT BE DETERMINED WITH THE FIELD SURVEY, THE CONTRACTOR SHALL DETERMINE THE LOCATION OF THIS OUTFALL IN THE FIELD PRIOR TO COMMENCING SERVICE UTILITY ABANDONMENT/REMOVAL. THIS WORK SHALL BE DONE IN COORDINATION WITH DC WATER INSPECTORS.
    c. ALL UTILITY DISCONNECT TRENCHES SHALL BE APPROXIMATELY 3' IN WIDTH OR AS DICTATED BY FIELD CONDITIONS. UTILITY DISCONNECT TRENCHES IN PAVED AREAS SHALL BE REPAIRED IN ACCORDANCE WITH DC DPW DWG. NO. 207.01
15. ALL EXISTING UTILITIES WHICH ARE TO REMAIN SHALL BE ADJUSTED TO FINAL GRADE AS NECESSARY BY THE CONTRACTOR.
16. CONTRACTOR SHALL OBTAIN COPIES OF ALL ENVIRONMENTAL REPORTS FOR THIS SITE AND FOLLOW THEIR RECOMMENDATIONS.
17. CONTRACTORS CONSTRUCTION METHODS SHALL NOT INTERRUPT OR IMPEDE USAGE OF OR ACCESS TO ADJACENT BUILDINGS.
18. THIS DEMOLITION PLAN IS DESIGNED TO CURRENT SITE CONDITIONS. IF SITE CONDITIONS CHANGE PRIOR TO THE START OF CONSTRUCTION, CONTRACTOR SHALL CHANGE DEMOLITION PLAN ACCORDINGLY.
19. ALL TREES GREATER THAN 14" IN DIAMETER IN THE DISTRICT OF COLUMBIA ARE CONSIDERED 'SPECIAL TREES' AND WILL REQUIRE A SEPARATE PERMIT FROM THE DISTRICT'S URBAN FORESTRY ADMINISTRATION PRIOR TO DEMOLITION AND/OR REMOVAL. ADDITIONALLY, ALL TREES GREATER THAN 31" IN DIAMETER (100" OR MORE IN CIRCUMFERENCE) ARE CONSIDERED 'HERITAGE TREES' AND WILL REQUIRE A SEPARATE PERMIT FROM THE MAYOR'S OFFICE AND THE DISTRICT'S URBAN FORESTRY ADMINISTRATION. NO TREE REMOVAL OR DEMOLITION ACTIVITY SHALL COMMENCE PRIOR TO THE APPROVAL AND ISSUANCE OF THE APPROPRIATE DISTRICT OF COLUMBIA PERMITS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THESE PERMITS.

ADDITIONAL UTILITY DISCONNECT NOTES:

UTILITY DISCONNECTS FOR WATER & SANITARY SEWER HOUSE CONNECTIONS AND STORM DRAIN CONNECTIONS

1. WATER & SANITARY SEWER HOUSE CONNECTION LATERALS ARE TO BE ABANDONED AT THE PUBLIC MAIN IN ACCORDANCE WITH DC WATER REGULATIONS. AND CAPPED AT THE PROPERTY LINE IN ACCORDANCE WITH THE DISTRICT OF COLUMBIA PLUMBING CODE, UNLESS THESE REQUIREMENTS ARE WAIVED BY DC WATER AND DCRA DUE TO THE ABANDONMENT OF THE MAINS. (SEE DEMOLITION NOTES 12, 13, & 14)
2. ALL ON-SITE STORM DRAIN STRUCTURES AND THEIR ASSOCIATED OUTFALL INTO PUBLIC SPACE ARE TO BE ABANDONED IN ACCORDANCE WITH DC WATER REGULATIONS. (SEE DEMOLITION NOTES 12, 13, & 14)
3. REFER TO TRAFFIC CONTROL PLAN (BY OTHERS) FOR ALL ROAD AND SIDEWALK CLOSING ASSOCIATED WITH THIS PLAN.

THE CONTRACTOR IS RESPONSIBLE FOR NOTIFYING VIKA CAPITOL (202-244-4140) AT LEAST 48-HOURS IN ADVANCE OF ALL PRE-CONSTRUCTION, INSPECTION OR FINAL REVIEW MEETINGS WITH DOEE STAFF.

DOEE GENERAL SEDIMENT & EROSION CONTROL NOTES

DOEE SOIL EROSION AND SEDIMENT CONTROL PLAN GENERAL NOTES	
1.	Following initial land disturbance or re-disturbance, permanent or interim stabilization must be completed within seven (7) calendar days for the surfaces of all perimeter controls, dikes, swales, ditches, perimeter slopes, and slopes greater than three (3) horizontal to one (1) vertical (3:1); and fourteen (14) days for all other disturbed or graded areas on the project site. These requirements do not apply to areas shown on the plan that are used for material storage other than stockpiling, or for those areas on the plan where actual construction activities are being performed. Maintenance shall be performed as necessary so that stabilized areas continuously meet the appropriate requirements of the District of Columbia Standards and Specifications for Soil Erosion and Sediment Control (ESC). [21 DCMR § 542.9 (o)]
2.	ESC measures shall be in place before and during land disturbance. [21 DCMR § 543.6]
3.	Contact DOEE Inspection (202) 535-2977 to schedule a preconstruction meeting at least three (3) business days before the commencement of a land-disturbing activity. [21 DCMR § 503.7 (a)]
4.	A copy of the approved plan set will be maintained at the construction site from the date that construction activities begin to the date of final stabilization and will be available for DOEE inspectors. [21 DCMR § 542.15]
5.	ESC measures shall be in place to stabilize an exposed area as soon as practicable after construction activity has temporarily or permanently ceased but no later than fourteen (14) days following cessation, except that temporary or permanent stabilization shall be in place at the end of each day of underground utility work that is not contained within a larger development site. [21 DCMR § 543.7]
6.	Stockpiled material being actively used during a phase of construction shall be protected against erosion by establishing and maintaining perimeter controls around the stockpile. [21 DCMR § 543.16 (a)]
7.	Stockpiled material not being actively used or added to shall be stabilized with mulch, temporary vegetation, hydro-seed or plastic within fifteen (15) calendar days after its last use or addition. [21 DCMR § 543.16 (b)]
8.	Fill material must be free of contamination levels of any pollutant that is, or may be considered to represent, a possible health hazard to the public or may be detrimental to surface or ground water quality, or which may cause damage to property or the drainage system. All fill material must be free of hazardous materials and comply with all applicable District and federal regulations.
9.	Protect best management practices from sedimentation and other damage during construction for proper post construction operation. [21 DCMR § 543.5]
10.	Request a DOEE inspector's approval after the installation of perimeter erosion and sediment controls, but before proceeding with any other earth disturbance or grading. [21 DCMR § 542.12 (a)]
11.	Request a DOEE inspector's approval after final stabilization of the site and before the removal of erosion and sediment controls. [21 DCMR § 542.12 (b)]
12.	Final stabilization means that all land-disturbing activities at the site have been completed and either of the following two criteria have been met: (1) a uniform (for example, evenly distributed, without large bare areas) perennial vegetative cover with a density of seventy percent (70%) of the native background vegetative cover for the area has been established on all unpaved areas and areas not covered by permanent structures, or (2) equivalent permanent stabilization measures have been employed (such as the use of riprap, gabions, or geotextiles). [21 DCMR § 542.12 (b.1, b.2)]
13.	Follow the requirements of the United States Environmental Protection Agency approved Stormwater Pollution Prevention Plan (SWPPP) and maintain a legible copy of this SWPPP on site. [21 DCMR § 543.10 (b)]
14.	Post a sign that notifies the public to contact DOEE in the event of erosion or other pollution. The sign will be placed at each entrance to the site or as directed by the DOEE inspector. Each sign will be no less than 18 x 24 inches in size and made of materials that will withstand weather for the duration of the project. Lettering will be at least 1 inch in height and easily readable by the public from a distance of twelve feet (12 ft). The sign must direct the public, in substantially the following form: "To Report Erosion, Runoff, or Stormwater Pollution" and will provide the construction site address, DOEE's telephone number (202-535-2977), DOEE's e-mail address (IEB.scheduling@dc.gov), and the 311 mobile app heading ("Construction-Erosion Runoff"). [21 DCMR § 543.22]
If a site disturbs 5,000 square feet of land or greater, the ESC plan must contain the following statement:	
15.	A *Responsible Person* must be present or available while the site is in a land-disturbing phase. The *Responsible Person* is charged with being available to (a) inspect the site and its ESC measures at least once biweekly and after a rainfall event to identify and remedy each potential or actual erosion problem, (b) respond to each potential or actual erosion problem identified by construction personnel, and (c) speak on site with DOEE to remedy each potential or actual erosion problem. A *Responsible Person* shall be (a) licensed in the District of Columbia as a civil or geotechnical engineer, a land surveyor, or architect; or (b) certified through a training program that DOEE approves, including a course on erosion control provided by another jurisdiction or professional association. During construction, the *Responsible Person* shall keep on site proof of professional licensing or of successful completion of a DOEE-approved training program. [21 DCMR § 547]

MINIMUM STORMWATER POLLUTION PREVENTION PLAN: GOOD HOUSEKEEPING NOTES

FUELS AND OILS. ON-SITE REFUELING WILL BE CONDUCTED IN A DEDICATED LOCATION AWAY FROM ACCESS TO SURFACE WATERS. INSTALL CONTAINMENT BERMS AND, OR SECONDARY CONTAINMENTS AROUND REFUELING AREAS AND STORAGE TANKS. SPILLS WILL BE CLEANED UP IMMEDIATELY AND CONTAMINATED SOILS DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL AND DISTRICT OF COLUMBIA REGULATIONS. PETROLEUM PRODUCTS WILL BE STORED IN CLEARLY LABELED TIGHTLY SEALED CONTAINERS. ALL VEHICLES ON SITE WILL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE ACTIVITIES. ANY ASPHALT SUBSTANCES USED ON SITE WILL BE APPLIED ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SPILL KITS WILL BE INCLUDED WITH ALL FUELING SOURCES AND MAINTENANCE ACTIVITIES.

SOLID WASTE. NO SOLID MATERIALS SHALL BE DISCHARGED TO SURFACE WATER. SOLID MATERIALS INCLUDING BUILDING MATERIALS, GARBAGE AND PAINT DEBRIS SHALL BE CLEANED UP DAILY AND DEPOSITED INTO DUMPSTERS, WHICH WILL BE PERIODICALLY REMOVED AND DEPOSITED INTO A LANDFILL.

ABRASIVE BLASTING. WATER BLASTING, SANDBLASTING, AND OTHER FORMS OF ABRASIVE BLASTING ON PAINTED SURFACES BUILT PRIOR TO 1978 MAY ONLY BE PERFORMED IF AN EFFECTIVE CONTAINMENT SYSTEM PREVENTS DISPERSAL OF PAINT DEBRIS.

FERTILIZER FERTILIZERS WILL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER, WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER, AND STORED IN A COVERED SHED. PARTIALLY USED BAGS WILL BE TRANSFERRED TO A SEALABLE BIN TO AVOID SPILLS.

PAINT AND OTHER CHEMICALS. ALL PAINT CONTAINERS AND CURING COMPOUNDS WILL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE. EXCESS PAINT WILL NOT BE DISCHARGES TO THE STORM SEWERS, BUT WILL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S RECOMMENDATIONS. SPRAY GUNS WILL BE CLEANED ON A REMOVABLE TARP. CHEMICALS USED ON SITE ARE KEPT IN SMALL QUANTITIES AND IN CLOSED CONTAINERS UNDERCOVER AND KEPT OUT OF DIRECT CONTACT WITH STORMWATER. AS WITH FUELS AND OILS, ANY INADVERTENT SPILLS WILL BE CLEANED UP IMMEDIATELY AND DISPOSED OF ACCORDING FEDERAL AND DISTRICT OF COLUMBIA REGULATIONS.

CONCRETE. CONCRETE TRUCKS WILL NOT BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH ON SITE, EXCEPT IN A SPECIALLY DESIGNATED CONCRETE DISPOSAL AREA. FORM RELEASE OIL FOR DECORATIVE STONE WORK WILL BE APPLIED OVER A PALLET COVERED WITH AN ABSORBENT MATERIAL TO COLLECT EXCESS FLUID. THE ABSORBENT MATERIAL WILL BE REPLACED AND DISPOSED OF PROPERLY WHEN SATURATED.

WATER TESTING. WHEN TESTING AND, OR CLEANING WATER SUPPLY LINES, THE DISCHARGE FROM THE TESTED PIPE WILL BE COLLECTED AND CONVEYED TO A COMPLETED STORMWATER CONVEYANCE SYSTEM FOR ULTIMATE DISCHARGE INTO A STORMWATER BEST MANAGEMENT PRACTICE (BMP).

SANITARY WASTE. PORTABLE LAVATORIES LOCATED ON SITE WILL BE SERVICES ON A REGULAR BASIS BY A CONTRACTOR. PORTABLE LAVATORIES WILL BE LOCATED IN AN UPLAND AREA AWAY FROM DIRECT CONTACT WITH SURFACE WATERS. ANY SPILLS OCCURRING DURING SERVICING WILL BE CLEANED IMMEDIATELY AND CONTAMINATED SOILS DISPOSED OF IN ACCORDANCE WITH ALL FEDERAL AND DISTRICT OF COLUMBIA REGULATIONS.

TEMPORARY DISCHARGE AUTHORIZATION PERMIT

THIS PERMIT IS REQUIRED TO ALLOW DISCHARGE NON-WASTEWATER FLOWS (E.G., STORMWATER, GROUNDWATER, AND SURFACE WATER RUNOFF FROM CONSTRUCTION/DEWATERING PROJECTS) OR OTHER TEMPORARY DISCHARGES TO THE DISTRICT'S WASTEWATER SYSTEM.

HOW TO ACQUIRE THIS PERMIT: CONTRACTOR SHALL SUBMIT A TEMPORARY DISCHARGE AUTHORIZATION (TDA) PERMIT APPLICATION TO DC WATER'S PRETREATMENT PROGRAM MANAGER. DC WATER WILL DETERMINE THE CONDITIONS UNDER WHICH A TDA PERMIT WILL BE ISSUED AND WHETHER METERING AND FEES ARE REQUIRED.

TIMELINE: THIS PERMIT PROCESS TAKES APPROXIMATELY 2 WEEKS, SO CONTRACTOR SHALL TAKE THE NECESSARY STEPS TO ACQUIRE THIS PERMIT PRIOR TO APPLICABLE CONSTRUCTION ACTIVITY.

MAINTENACE & INSPECTION: ONCE A PERMIT IS OBTAINED, THE PERMITTEE MUST SUBMIT SIGNED AND CERTIFIED PERIODIC SELF-MONITORING REPORTS TO THE PRETREATMENT PROGRAM MANAGER AS REQUIRED UNDER SITE-SPECIFIC CONDITIONS IN THE TDA PERMIT. UNSCHEDULED RANDOM INSPECTIONS OF PROJECT SITES MAY ALSO BE CONDUCTED.

ADDITIONAL NOTES:

1. IF THE VOLUME OF THE DISCHARGE IS GREATER THAN 25,000 GALLONS PER DAY (GPD) AND THE DURATION OF THE DISCHARGE IS GREATER THAN SIX MONTHS, THE APPLICANT MAY BE REQUESTED TO SUBMIT AN INDUSTRIAL USER WASTEWATER DISCHARGE PERMIT APPLICATION.
2. UNCONTAMINATED, NON-WASTEWATER FLOWS MAY ONLY BE DISCHARGED TO THE COMBINED SEWER SYSTEM. IT IS ILLEGAL TO DISCHARGE SUCH FLOWS, INCLUDING GROUNDWATER, TO THE SEPARATE SANITARY SEWER SYSTEM.

MORE INFORMATION CAN BE FOUND AT WWW.DCWATER.COM

GENERAL SEDIMENT & EROSION CONTROL NOTES:

1. ALL SOIL EROSION AND SEDIMENT CONTROL (SESC) METHODS SHALL BE INSTALLED PER STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL FOR THE DISTRICT OF COLUMBIA. ALL SEC CONTROL MEASURES SHALL REMAIN IN PLACE DURING LAND DISTURBANCE, EXCEPT AS OTHERWISE STATED OR APPROVED BY THE DOEE INSPECTOR. IF AN ON-SITE INSPECTION REVEALS FURTHER EROSION CONTROL MEASURES ARE NECESSARY, THE SAME SHALL BE PROVIDED. SEE DDOT'S SESC GENERAL NOTES FOR FURTHER INFORMATION.
2. PHYSICALLY MARK OFF LIMITS OF LAND DISTURBANCE ON THE SITE WITH TAPE, SIGNS OR OTHER METHODS, SO THE WORKERS CAN SEE AREAS TO BE PROTECTED
3. MAINTENANCE SHALL BE PERFORMED
   (A) ROUTINELY TO PREVENT ANY NEW DESTABILIZED AREAS AND TO PREVENT STABILIZED AREAS FROM BECOMING UNSTABILIZED
   (B) AS NECESSARY SO THAT STABILIZED AREAS CONTINUOUSLY MEET APPROPRIATE REQUIREMENTS OF DC'S STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL
4. CONSTRUCTION SITE ACCESS MEASURES SHALL BE INSTALLED NO LATER THAN THE FIRST DAY OF CONSTRUCTION TO MINIMIZE OFF-SITE VEHICLE TRACKING INCLUDING:
   (A) STABILIZED CONSTRUCTION ENTRANCE AT ANY POINT WHERE TRAFFIC LEAVES THE SITE.
   (B) STABILIZE ACCESS ROADS, HAUL ROADS, TEMPORARY CONSTRUCTION PARKING AREAS AND OTHER ONSITE VEHICLE TRANSPORTATION ROUTES WITH STONE
5. ALLEY AND/OR STREET SHALL BE SWEPT CLEAN AT ALL TIMES DURING EXCAVATION AND CONSTRUCTION.
6. ALL CATCH BASINS AND AREA DRAINS SHALL BE PROTECTED DURING EXCAVATION AND CONSTRUCTION. IF ANY CATCH BASIN OR DRAIN BECOMES CLOGGED AS A RESULT OF EXCAVATION OR CONSTRUCTION, THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS CLEANING.
7. GENERAL PRINCIPLES TO SELECTION AND PLACEMENT OF SEDIMENT CONTROL MEASURES:
   (A) UTILIZE DIVERSION DIKE/SWALES TO DIVERT CLEAN RUNOFF FROM OFFSITE OR UNDISTURBED AREAS TO AVOID DISTURBED AREAS AND OUTLET IN STABLE AREAS.
   (B) REMOVE SEDIMENT FROM WATER EXPOSED TO DISTURBED AREAS BEFORE WATER LEAVES THE SITE.
      A. CONCENTRATED FLOW MUST BE DIVERTED TO TRAPPING DEVICE SO SUSPENDED SEDIMENT CAN BE DEPOSITED.
      B. SURFACE RUNOFF DRAINING IN SHEET FLOW MUST BE FILTERED BEFORE WATER LEAVES THE SITE.
8. SEDIMENT TRAPS/BASINS AND OTHER EROSION & SEDIMENT CONTROLS SHALL BE INSTALLED AS SOON AS NEW SITE-RELATED RUNOFF IS DETECTED, BUT NO LATER THAN FIRST PHASE OF LAND GRADING;
9. DEBRIS BASINS, DIVERSIONS, WATERWAYS, AND RELATED STRUCTURES SHALL BE SEEDED AND MULCHED, OR HAVE SOD OR A STABILIZATION BLANKET INSTALLED IMMEDIATELY AFTER THEY ARE BUILT.
10. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE DCRA STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL. REFER TO APPROPRIATE SPECIFICATIONS FOR TEMPORARY SEEDING, PERMANENT SEEDING, MULCHING, SODDING AND GROUND COVERS.
11. ALL CUT/FILL SLOPES SHALL BE STABILIZED IMMEDIATELY WHEN VERTICAL HEIGHT OF THE MULTIPLE LIFTS REACHES 15' OR WHEN GRADING OPERATIONS CEASE AS PRESCRIBED IN THE PLANS.
12. CRITICAL AREA STABILIZATION SHALL BE APPLIED TO CUT AND FILL SLOPES STEEPER THAN 3:1 OR TO EVERY CUT AND FILL SLOPE CONSTRUCTED OUT-OF-PLANTING SEASON UNTIL PERMANENT PROTECTION CAN BE PROVIDED.
13. RESEED ALL DISTURBED AREAS NOT COVERED BY PAVEMENTS, WALLS, BUILDINGS, AND PERMANENT STRUCTURES UPON COMPLETION OF ALL SITE WORK AS PER SEEDING SPECIFICATIONS.
14. SEDIMENT ACCUMULATED IN STRUCTURAL SEC MEASURES MUST BE REMOVED AND DISPOSED OF IN A MANNER THAT MINIMIZES EROSION AND SEDIMENTATION
15. OFF-SITE ACCUMULATIONS OF SEDIMENT SHALL BE REMOVED DAILY DURING CONSTRUCTION AND IMMEDIATELY AT THE REQUEST OF A DOEE INSPECTOR
16. OFF-SITE SPOIL, WASTE, OR BORROW AREAS IN DC OR ON FEDERAL PROPERTY MUST HAVE PRIOR APPROVAL BY DCRA. ALL WASTE & BORROW AREAS OFF-SITE MUST BE PROTECTED BY SEDIMENT CONTROL MEASURES AND STABILIZED IN ACCORDANCE WITH THE ORDINANCES AND REGULATIONS OF THE JURISDICTION WHERE THE SPOIL, WASTE, OR BORROW AREA IS LOCATED/STABILIZED.
17. STOCKPILES:
   (A) STOCKPILES SHOULD BE LOCATED AWAY FROM DRAINAGE PATHS
   (B) SHOULD BE ACCESSED FROM THE UP-GRADIENT SIDE SO THAT PERIMETER CONTROLS CAN REMAIN IN PLACE ON THE DOWN-GRADIENT SIDE.
   (C) SEE DOEE'S SESC GENERAL NOTES 6 & 7 FOR ADDITIONAL REQUIREMENTS
18. SEDIMENT CONTROL FOR UTILITY CONSTRUCTION FOR AREAS OUTSIDE OF DESIGNED CONTROLS OR AS DIRECTED BY ENGINEER OR DCRA INSPECTOR:
   (A) CALL "MISS UTILITY" AT 1-800-257-7777 48 HOURS PRIOR TO THE START OF WORK.
   (B) NO MORE THAN FIVE HUNDRED LINEAR FEET (500') OF TRENCH SHALL BE OPEN AT ANY ONE TIME
   (C) EXCAVATED TRENCH MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF THE TRENCH.
   (D) TRENCHES FOR UTILITY INSTALLATION SHALL BE BACKFILLED, COMPACTED AND STABILIZED AT THE END OF EACH WORKING DAY. NO MORE TRENCHES SHALL BE OPENED THAN CAN BE COMPLETED THE SAME DAY, UNLESS;
   (E) TEMPORARY SILT FENCE SHALL BE PLACED IMMEDIATELY DOWNSTREAM OF ANY DISTURBED AREA INTENDED TO REMAIN DISTURBED FOR MORE THAN ONE DAY.
   (F) INSTALL INTERIM OR PERMANENT STABILIZATION IMMEDIATELY AFTER A UTILITY TRENCH IS REFILLED.
   (G) USE MULCH AND MATTING ON EXCAVATED MATERIAL TO MINIMIZE THEIR EROSION WHEN NATURAL OR ARTIFICIAL GRASS FILTER STRIPS ARE INSTALLED TO RECEIVE STORMWATER RUNOFF FROM THE EXCAVATED MATERIALS.
   (H) WATER PUMPED FROM EXCAVATIONS SHALL BE FILTERED PRIOR TO DISCHARGING TO THE STORM SEWER SYSTEM
19. SEC MEASURE FOR SITE DEMOLITION AND BUILDING RAZE
   (A) AS SOON AS PRACTICABLE GUTTERS AND DOWNSPOUTS SHALL BE INSTALLED TO CONTROL EROSION.
   (B) MEASURES SHALL BE TAKEN TO ACHIEVE NON-ERODING VELOCITY FOR STORMWATER EXITING FROM A ROOF/DOWNSPOUT OR TO TEMPORARILY PIPE THAT STORMWATER DIRECTLY TO STORM DRAIN
   (C) THE SITE WORK SHALL MAXIMIZE THE PRESERVATION OF NATURAL VEGETATION AND LIMIT THE REMOVAL OF VEGETATION TO WHAT IS NECESSARY FOR CONSTRUCTION OR LANDSCAPING ACTIVITIES
   (D) AFTER RAZE OR DEMOS, THERE IS THE NEED FOR GROUND COVER TO PREVENT EROSION AND SEDIMENT RUNOFF FROM OCCURRING, SUCH AS SEED, SOD, PAVE, BRICKBAT OR MULCH, ETC.
20. SEC MEASURES FOR ROADWAY PROJECTS
   (A) ROUGH GRADED RIGHTS-OF-WAY AWAITING INSTALLATION OF UTILITIES OR PAVEMENT SHALL BE PROTECTED BY THE INSTALLATION OF INTERCEPTOR DIKES ACROSS RIGHTS-OF-WAY SO LOCATED AS TO LIMIT ROADWAY GRADE TO A LENGTH BETWEEN DIKES OF NOT MORE THAN FIVE HUNDRED FEET (500 FT); OR
   (B) PERMANENT STABILIZATION OF STREETS AND PARKING AREAS SHALL BE WITH BASE COURSE CRUSHED STONE OR OTHER DOEE-APPROVED MEASURES

MECHANICAL DEVICE MAINTENANCE PROGRAM:

ALL CONTROLS ARE TO BE INSPECTED ON A DAILY BASIS BY THE SITE SUPERINTENDENT OR HIS REPRESENTATIVE, ANY DAMAGED CONTROLS ARE TO BE REPAIRED BY THE END OF THE WORKING DAY.

DOEE INSPECTION SCHEDULING/NOTES

GENERAL INSPECTION NOTES:

A) REQUIRED INSPECTIONS: SEE DOEE'S SESC GENERAL NOTES 3, 4, 9 & 10
B) CONTRACTOR SHALL CONTACT DOEE'S INSPECTIONS (202) 535-2977 TO SCHEDULE A MEETING.
C) THE DEPARTMENT MAY REQUIRE ADDITIONAL INSPECTION(S) AT PARTICULAR STAGES OF CONSTRUCTION AS SPECIFIED IN APPROVED DOEE PLAN, OR AS REQUIRED DURING THE PRECONSTRUCTION MEETING). TO SCHEDULE SUCH INSPECTIONS, CONTRACTOR SHALL CONTACT DOEE AT LEAST THREE (3) BUSINESS DAYS BEFORE ANTICIPATED INSPECTION;

INSPECTIONS REQUIRED PERTAINING TO CONSTRUCTION OF STORMWATER MANAGEMENT (SWM) OR BEST MANAGEMENT PRACTICE (BMP) FACILITY:

A) FOR THE INSTALLATION OF ALL PROPOSED BMP FACILITIES (GREEN ROOF, BIORETENTION, AND TREE PLANTING/ PRESERVATION) REFERENCE THE FOLLOWING CHECKLISTS FROM DOEE'S 2013 STORMWATER MANAGEMENT GUIDEBOOK (SWMG) APPENDIX K: CONSTRUCTION INSPECTION CHECKLIST
B) CONTRACTOR SHALL SCHEDULE A PRECONSTRUCTION INSPECTION BEFORE BEGINNING CONSTRUCTION OF A SWM OR BMP FACILITY; CONTRACTOR SHALL CONTACT DOEE AT LEAST THREE (3) BUSINESS DAYS BEFORE THE START OF THE CONSTRUCTION;
C) CONTRACTOR SHALL SCHEDULE A FINAL CONSTRUCTION INSPECTION FOR THE COMPLETION OF A SWM OR BMP FACILITY. CONTRACTOR SHALL REQUEST A FINAL CONSTRUCTION INSPECTION, AND GIVE THE DEPARTMENT ONE (1) WEEK NOTICE

NO PERSON MAY PROCEED WITH WORK PAST A STAGE OF CONSTRUCTION THAT THE DEPARTMENT HAS IDENTIFIED AS REQUIRING AN INSPECTION UNLESS:

A) THE DEPARTMENT'S INSPECTOR HAS ISSUED AN "APPROVED" OR "PASSED" REPORT;
B) THE DEPARTMENT HAS APPROVED A PLAN MODIFICATION THAT ELIMINATES THE INSPECTION REQUIREMENT; OR
C) THE DEPARTMENT OTHERWISE ELIMINATES/MODIFIES INSPECTION REQUIREMENT IN WRITING

FINAL DOEE APPROVAL IS REQUIRED PRIOR TO SIGN OFF ON THE CERTIFICATE OF OCCUPANCY.

NO PERMITTED STORM WATER BMP IS COMPLETE UNTIL:

1. A FINAL INSPECTION HAS BEEN CONDUCTED, AND
2. AN AS-BUILT PLAN IS SUBMITTED TO DOEE WITHIN 21 DAYS OF FINAL INSPECTION FOR REVIEW AND APPROVAL.

EROSION AND SEDIMENT CONTROL FOR DUST CONTROL

44.0 STANDARDS AND SPECIFICATIONS FOR DUST CONTROL

DEFINITION:
CONTROLLING DUST BLOWING AND MOVEMENT ON CONSTRUCTION SITES AND ROADS.

PURPOSE:
TO PREVENT BLOWING AND MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES, REDUCE ON AND OFF-SITE DAMAGE, HEALTH HAZARDS, AND IMPROVE TRAFFIC SAFETY.

CONDITIONS WHERE PRACTICE APPLIES:
THIS PRACTICE IS APPLICABLE TO AREAS SUBJECT TO DUST BLOWING AND MOVEMENT WHERE ON AND OFF-SITE DAMAGE IS LIKELY WITHOUT TREATMENT.

SPECIFICATIONS:

TEMPORARY METHODS:

A. MULCHES: SEE STANDARDS FOR CRITICAL AREA STABILIZATION WITH MULCHES ONLY. CHEMICAL OR WOOD CELLULOSE FIBER BINDERS MAY BE USED INSTEAD OF ASPHALT TO BIND MULCH MATERIAL.

B. VEGETATIVE COVER: SEE STANDARDS FOR TEMPORARY VEGETATIVE COVER.

C. SPRAY-ON ADHESIVES: ON MINERAL SOILS (NOT EFFECTIVE ON MUCK SOILS). KEEP TRAFFIC OFF THESE AREAS.

	WATER DILUTION	TYPE OF NOZZLE	APPLY GALLONS/AC
ANIONIC ASPHALT EMULSION	7:1	COARSE SPRAY	1,200
LATEX EMULSION	12.5:1	FINE SPRAY	235
RESIN-IN-WATER EMULSION	4:1	FINE SPRAY	300

D. TILLAGE: TO ROUGHEN SURFACE AND BRING CLODS TO THE SURFACE. THIS IS AN EMERGENCY MEASURE WHICH SHOULD BE USED BEFORE SOIL BLOWING STARTS. BEGIN PLOWING ON WINDWARD SIDE OF SITE. CHISEL-TYPE PLOWS SPACED ABOUT 12" APART, SPRING TOOTHED HARROWS, AND SIMILAR PLOWS ARE EXAMPLES OF EQUIPMENT WHICH MAY PRODUCE THE DESIRED EFFECT.

E. IRRIGATION: THIS IS GENERALLY DONE AS AN EMERGENCY TREATMENT. SITE IS SPRINKLED WITH WATER UNTIL THE SURFACE IS MOIST. REPEAT AS NEEDED.

F. BARRIERS: SOLID BOARD FENCES, SNOW FENCES, BURLAP FENCES, CRATE WALLS AND SIMILAR MATERIAL CAN BE USED TO CONTROL AIR CURRENTS AND SOIL BLOWING. BARRIERS PLACED AT RIGHT ANGLES TO PREVAILING CURRENTS AT INTERVALS OF ABOUT 10 TIMES THEIR HEIGHT ARE EFFECTIVE IN CONTROLLING SOIL BLOWING.

G. CALCIUM CHLORIDE: APPLY AT RATE THAT WILL KEEP SURFACE MOIST. MAY NEED RETREATMENT.

PERMANENT METHODS:

H. PERMANENT VEGETATION: SEE STANDARDS FOR PERMANENT VEGETATIVE COVER, AND PERMANENT STABILIZATION WITH SOD. EXISTING TREES OR LARGE SHRUBS MAY AFFORD VALUABLE PROTECTION IF LEFT IN PLACE

I. TOPSOILING: COVERING WITH LESS EROSIVE SOIL MATERIALS. SEE STANDARDS FOR TOPSOILING.

J. STONE: COVER SURFACE WITH CRUSHED STONE OR GRAVEL.

GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
Permit No. SH2400019 Date 04/09/24

These plans are conditionally approved as submitted or noted during plan review and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans. Changes require a revision permit with the revised plans. Trade Permits are required for trade work, e.g. Electrical or Plumbing

HPRB Review - Timothy Dennee - 04-09-2024
Zoning Review - Ernesto Warren - 04-09-2024
Structural Review - Tong Li - 04-09-2024
DOEE SE-SW Review - Saba Gharavi - 04-09-2024

VIKA CAPITOL
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MARET SCHOOL
PROPOSED ATHLETIC FIELDS
SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION
2	8-11-23	DOEE RESUB
1	6-6-23	DDOT/DOEE RESUB

**NOTE
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DISTRICT OF COLUMBIA — KYLE U. OLIVER — PE900770 — 10/03/2023 — CIVIL — PROFESSIONAL ENGINEER

DATE: 23-FEB-2023
DES. KUO DWN. BJR
SCALE: AS SHOWN
PROJECT/FILE NO. VC0626D
SHEET NO. CIV0800

Board of Zoning Adjustment
District of Columbia

DEPARTMENT OF ENERGY & ENVIRONMENT

GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
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DC'S 2013 GREEN CONSTRUCTION CODE (GCC) REQUIREMENTS

SOIL AND WATER QUALITY SHALL BE PROTECTED IN ACCORDANCE WITH SECTION 405.1.4.

SOIL REUSE AND RESTORATION:

SOILS THAT ARE BEING PLACED OR REPLACED ON SITE SHALL BE PREPARED, AMENDED AND PLACED IN A MANNER THAT ESTABLISHES OR RESTORES THE ABILITY OF THE SOIL TO SUPPORT THE VEGETATION THAT HAS BEEN PROTECTED AND THAT WILL BE PLANTED.

405.1.4.1 PREPARATION.

BEFORE PLACING STOCKPILED OR IMPORTED TOPSOILS, COMPLIANCE WITH ALL OF THE FOLLOWING SHALL OCCUR:

1. AREAS SHALL BE CLEARED OF DEBRIS INCLUDING, BUT NOT LIMITED TO, BUILDING MATERIALS, PLASTER, PAINTS, ROAD BASE TYPE MATERIALS, PETROLEUM BASED CHEMICALS, AND OTHER HARMFUL MATERIALS;
2. AREAS OF CONSTRUCTION–COMPACTED SUBSOIL SHALL BE SCARIFIED; AND
3. THE FIRST LIFT OF REPLACED SOIL SHALL BE MIXED INTO SCARIFICATION ZONE TO IMPROVE THE TRANSITION BETWEEN THE SUBSOIL AND OVERLYING SOIL HORIZONS.

   EXCEPTIONS: SCARIFICATION IS PROHIBITED IN ALL OF THE FOLLOWING LOCATIONS:
   - WHERE SCARIFICATION WOULD DAMAGE EXISTING TREE ROOTS.
   - ON INACCESSIBLE SLOPES.
   - ON OR ADJACENT TO TRENCHING AND DRAINAGE INSTALLATIONS.
   - ON AREAS INTENDED BY THE DESIGN TO BE COMPACTED SUCH AS ABUTMENTS, FOOTINGS, INSLOPES.
   - BROWNFIELDS.
   - OTHER LOCATIONS WHERE SCARIFICATION WOULD DAMAGE EXISTING STRUCTURES, UTILITIES & VEGETATION BEING PRESERVED

405.1.4.2 RESTORATION.

SOILS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED IN AREAS THAT WILL NOT BE COVERED BY BUILDINGS, STRUCTURES OR HARDSCAPES. SOIL RESTORATION SHALL COMPLY WITH THE FOLLOWING:

1. ORGANIC MATTER. TO PROVIDE APPROPRIATE ORGANIC MATTER FOR PLANT GROWTH AND FOR WATER STORAGE AND INFILTRATION, SOILS SHALL BE AMENDED WITH A MATURE, STABLE COMPOST MATERIAL SO THAT NOT LESS THAN THE TOP 6 INCHES OF SOIL CONTAINS NOT LESS THAN 3% ORGANIC MATTER. SPHAGNUM PEAT OR ORGANIC AMENDMENTS THAT CONTAIN SPHAGNUM PEAT SHALL NOT BE USED. SOIL ORGANIC MATTER SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D 2974. ORGANIC MATERIALS SELECTED FOR ONSITE AMENDMENT OR FOR BLENDING OF IMPORTED SOILS SHALL BE RENEWABLE WITHIN A 50–YEAR CYCLE.

   EXCEPTION: WHERE THE REFERENCE SOIL FOR A BUILDING SITE HAS AN ORGANIC LEVEL DEPTH OTHER THAN 6 INCHES, SOILS SHALL BE AMENDED TO ORGANIC MATTER LEVELS AND ORGANIC MATTER DEPTH THAT ARE COMPARABLE TO THE SITE'S REFERENCE SOIL.
2. ADDITIONALLY SOIL RESTORATION SHALL COMPLY WITH NOT LESS THAN THREE OF THE FOLLOWING CRITERIA:
   - COMPACTION. BULK DENSITIES WITHIN ROOT ZONE SHALL NOT EXCEED DENSITIES SPECIFIED IN TABLE 405.1.4 AND SHALL BE MEASURED USING A SOIL CONE PENETROMETER IN ACCORDANCE WITH ASAE S313.3. THE ROOT ZONE SHALL BE NOT LESS THAN 6 INCHES, NOR LESS THAN THE SITE'S REFERENCE SOIL, WHICHEVER IS THE GREATER DEPTH. DATA DERIVED FROM A SOIL CONE PENETROMETER SHALL BE REPORTED IN ACCORDANCE WITH ASAE EP542
   - INFILTRATION RATES. INFILTRATION RATE OR SATURATED HYDRAULIC CONDUCTIVITY OF THE RESTORED SOILS SHALL BE COMPARABLE TO THE SITE'S REFERENCE SOIL. INFILTRATION RATES SHALL BE DETERMINED IN ACCORDANCE WITH ASTM D 3385 OR ASTM D 5093. FOR SLOPED AREAS WHERE THE METHODS PROVIDED IN THE REFERENCED STANDARDS CANNOT BE USED SUCCESSFULLY, ALTERNATE METHODS APPROVED BY THE CODE OFFICIAL SHALL BE PERMITTED PROVIDED THAT THE SAME METHOD IS USED TO TEST BOTH REFERENCE SOIL AND ONSITE SOIL.
   - SOIL BIOLOGICAL FUNCTION. WHERE REMEDIATED SOILS ARE USED, THE BIOLOGICAL FUNCTION OF THE SOILS' MINERALIZABLE NITROGEN SHALL BE PERMITTED AS A PROXY ASSESSMENT OF BIOLOGICAL ACTIVITY.
   - SOIL CHEMICAL CHARACTERISTICS. SOIL CHEMICAL CHARACTERISTICS APPROPRIATE FOR PLANT GROWTH SHALL BE RESTORED. THE PH, CATION EXCHANGE CAPACITY AND NUTRIENT PROFILES OF THE ORIGINAL UNDISTURBED SOIL OR THE SITE'S REFERENCE SOIL SHALL BE MATCHED IN RESTORED SOILS. SALINITY SUITABLE FOR REGIONALLY APPROPRIATE VEGETATION SHALL BE ESTABLISHED. SOIL AMENDMENTS AND FERTILIZERS SHALL BE SELECTED FROM THOSE WHICH MINIMIZE NUTRIENT LOADING TO WATERWAYS OR GROUNDWATER.

TABLE 405.1.4
MAXIMUM CONE PENETROMETER READINGS

SURFACE RESISTANCE (PSI)		SUBSURFACE RESISTANCE (PSI)	
ALL TEXTURES SAND	SAND (INCL. LOAMY SAND, SANDY LOAM, SANDY CLAY LOAM, & SANDY CLAY)	SILT (INCLUDES LOAM, SILT LOAM, SILTY CLAY LOAM, & SILTY CLAY)	CLAY (INCLUDES CLAY LOAM)
110	260	260	225

CONSTRUCTION PHASE MOISTURE CONTROL

GCC 502.1.2 – CONSTRUCTION PHASE MOISTURE CONTROL. POROUS OR FIBROUS MATERIALS AND OTHER MATERIALS SUBJECT TO MOISTURE DAMAGE SHALL BE PROTECTED FROM MOISTURE DURING THE CONSTRUCTION PHASE. MATERIAL DAMAGED BY MOISTURE OR THAT ARE VISIBLY COLONIZED BY FUNGI EITHER PRIOR TO DELIVERY OR DURING THE CONSTRUCTION PHASE SHALL BE CLEANED AND DRIED OR, WHERE DAMAGE CANNOT BE CORRECTED BY SUCH MEANS, SHALL BE REMOVED AND REPLACED.

WASTE MANAGEMENT

SITE SHALL COMPLY WITH THE FOLLOWING GREEN CONSTRUCTION CODE REQUIREMENTS:

406.1 – BUILDING SITE WASTE MANAGEMENT REQUIREMENTS.

NOT LESS THAN 75% OF THE LAND–CLEARING DEBRIS FROM A BUILDING SITE SHALL BE DIVERTED FROM LANDFILLS. LAND–CLEARING DEBRIS INCLUDES ROCK, TREES, STUMPS & ASSOCIATED VEGETATION. ADDITIONALLY, BUILDING SITE DEVELOPMENT SHALL INCLUDE THE EFFECTIVE DESTRUCTION & DISPOSAL OF INVASIVE PLANT SPECIES

503.1 – CONSTRUCTION MATERIAL AND WASTE MANAGEMENT REQUIREMENTS.

NOT LESS THAN 50% OF NONHAZARDOUS CONSTRUCTION WASTE SHALL BE DIVERTED FROM DISPOSAL BY RECYCLING OR SALVAGE OF CONSTRUCTION MATERIALS AND WASTE. FOR THE PURPOSES OF THIS SECTION, CONSTRUCTION MATERIALS AND WASTE SHALL INCLUDE BUT ARE NOT LIMITED TO (1) ALL MATERIALS DELIVERED TO THE SITE AND INTENDED FOR INSTALLATION PRIOR TO THE ISSUANCE OF THE CERTIFICATE OF OCCUPANCY, INCLUDING RELATED PACKAGING; AND (2) CONSTRUCTION MATERIALS AND WASTE REMOVED DURING DEMOLITION OR RAZING

RECORDS & SUBMITTALS

THE OWNER, CONTRACTOR OR APPROVED AGENCY SHALL MAINTAIN RECEIPTS AND OTHER DOCUMENTATION RELATED TO WASTE DIVERSION THROUGHOUT THE COURSE OF CONSTRUCTION AS EVIDENCE OF DIVERSION (EG, HAULING RECEIPTS).

NOTE: PERCENTAGE OF MATERIALS TO BE DIVERTED SHALL BE SPECIFIED AND CALCULATED BY WEIGHT OR VOLUME, BUT NOT BOTH.

GREEN BUILDING SUBMITTAL TEMPLATES ARE AVAILABLE ONLINE:
HTTP://DCRA.DC.GOV/PAGE/GREEN–BUILDING–SUBMITTAL–FORM

VERIFICATION.

THE OWNER, CONTRACTOR OR AN APPROVED AGENCY MUST PROVIDE VERIFICATION OF THE PROJECT'S COMPLIANCE WITH THE ABOVE REQUIREMENTS (GCC 406.1 & 503.1)

1. WHEN REQUESTED BY THE CODE OFFICIAL
2. PRIOR TO ISSUANCE OF THE FIRST CERTIFICATE OF OCCUPANCY FOR OCCUPIABLE SPACE IN A STORY ABOVE GRADE PLANE, (OR PRIOR TO FINAL INSPECTION, IF A NEW CERT. OF OCCUPANCY IS NOT REQUIRED)

SEDIMENT & EROSION CONTROL SEQUENCE OF CONSTRUCTION

GENERAL CONSTRUCTION NOTES

- FOR THE INSTALLATION OF ALL PROPOSED BMP FACILITIES (GREEN ROOF, BIORETENTION, AND TREE PLANTING/ PRESERVATION) REFERENCE THE FOLLOWING CHECKLISTS FROM DOEE'S 2020 STORMWATER MANAGEMENT GUIDEBOOK (SWMG):
  - APPENDIX L: CONSTRUCTION INSPECTION CHECKLISTS
  - APPENDIX M: MAINTENANCE INSPECTION CHECKLISTS
- SEE SPECIFIC BMP INSTALLATION NOTES FOR ADDITIONAL CONSTRUCTION SEQUENCING & REQUIREMENTS
- SEE DOEE'S INSPECTION & SCHEDULING NOTES FOR ADDITIONAL INFO/REQUIREMENTS

PRE–DISTURBANCE

1. NOTIFY THE DC SEDIMENT AND EROSION CONTROL INSPECTOR 3 BUSINESS DAYS PRIOR TO ANY LAND DISTURBING ACTIVITIES. PLEASE CALL (202) 535–2977 FOR APPOINTMENT.
2. MEETING WITH THE OWNER'S REPRESENTATIVE SHALL BE HELD PRIOR TO START OF ANY CONSTRUCTION.

SITE ACCESS – BEFORE ANY SITE GRADING ACTIVITIES BEGIN

1. FLAG OFF AREAS TO BE PROTECTED, SUCH AS BUFFER ZONES, DRAINAGE FEATURES, VEGETATED FILTER STRIPS, MATURE TREES, ETC.
2. INSTALL SEDIMENT CONTROLS DOWN GRADIENT OF ACCESS POINT (ON PAVED STREETS THIS MAY CONSIST OF INLET PROTECTION).
3. ESTABLISH VEHICLE TRACKING CONTROL AT SITE ENTRANCES TO PAVED STREETS. FENCE AS NEEDED.
4. NO LATER THAN THE FIRST DAY OF CONSTRUCTION, INSTALL CONSTRUCTION ENTRANCES/SITE ACCESS MEASURES TO MINIMIZE OFF–SITE VEHICLE TRACKING OF SEDIMENTS. EACH CONSTRUCTION ENTRANCE MUST BE STABILIZED AND INCLUDE EACH ADDITIONAL MEASURES REQUIRED TO KEEP SEDIMENT FROM BEING CARRIED ONTO PUBLIC STREETS BY CONSTRUCTION VEHICLES AND WASHED INTO A STORM DRAIN OR WATERWAYS.
5. INSTALL BOUNDARY PERIMETER CONTROLS (CONSTRUCTION FENCING, TREE PROTECTION, FLAGGING, ETC) TO CLEARLY DEFINE THE BOUNDARIES OF THE PROJECT AND LIMIT ACCESS TO AREAS OF THE SITE THAT ARE NOT TO BE DISTURBED.
6. PERFORM STREET SWEEPING AS NEEDED.

SITE GRADING – SITE CLEARING & GRUBBING

1. INSTALL RUNOFF PERIMETER CONTROLS – AS NEEDED ON DOWN–GRADIENT PERIMETER OF SITE (SILT FENCE, INLET PROTECTION, PERIMETER DIKE/SWALE).
2. ALL PERIMETER CONTROLS SHALL BE INSTALLED PER THE SEC PHASE 1 PLAN PRIOR TO COMMENCING LAND DISTURBANCE
3. LIMIT CONSTRUCTION ACTIVITIES TO AREAS PLANNED FOR DISTURBANCE AND PROTECT UNDISTURBED AREAS WITHIN THE SITE.
4. IF APPLICABLE, PRESERVE VEGETATIVE BUFFER AT SITE PERIMETER.
5. ESTABLISH CONSTRUCTION ROUTES; DESIGNATE AREAS FOR PARKING
6. CREATE STABILIZED STAGING AREA.
7. LOCATE PORTABLE TOILETS ON FLAT SURFACES AWAY FROM DRAINAGE PATHS. STAKE IN AREAS SUSCEPTIBLE TO HIGH WINDS.
8. CONSTRUCT CONCRETE WASHOUT AREA AND PROVIDE SIGNAGE.
9. ESTABLISH WASTE DISPOSAL AREAS.
10. INSTALL SEDIMENT BASINS / TRAPS. SEDIMENT TRAPS OR BASINS AND OTHER EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED NO LATER THAN THE FIRST PHASE OF LAND GRADING.
11. SEDIMENT TRAPS OR BASINS AND OTHER EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED AS SOON AS NEW SITE–RELATED RUNOFF IS DETECTED AND EMPLOYED AT ALL TIMES TO PROTECT INLETS OR STORM SEWERS BELOW SILT–PRODUCING AREAS.
12. IMMEDIATELY AFTER DEBRIS BASINS, DIVERSIONS, WATERWAYS, AND RELATED STRUCTURES ARE BUILT, THEY MUST BE SEEDED AND MULCHED OR HAVE A SOD AND STABILIZATION BLANKET INSTALLED.
13. CONSTRUCT ONSITE DIKE/SWALE TO DIRECT ONSITE WATER TO CONTROLLED OUTFALLS DURING GRUBBING AND CLEARING.
14. BEGIN CLEARING AND DEMOLITION OF THE SITE AND EXISTING BUILDINGS.
15. BEGIN OVERALL SITE GRADING AND TOPSOIL STRIPPING
16. SEPARATE AND STOCKPILE TOPSOIL, LEAVE ROUGHENED AND/OR COVER.
17. PROTECT STOCKPILES WITH PERIMETER CONTROL BMPS (SILT FENCES). USE APPROPRIATE EROSION CONTROLS FOR STOCKPILES DURING INACTIVITY; SEE GENERAL SEC NOTES FOR TREATMENT OF STOCKPILES
18. LEAVE DISTURBED AREA OF SITE IN A ROUGHENED CONDITION TO LIMIT EROSION. STABILIZE DISTURBED AREAS WHERE CONSTRUCTION WILL CEASE FOR MORE THAN 14 DAYS.
19. WATER DISTURBED AREA TO MINIMIZE DUST BUT NOT TO A POINT THAT WATERING CREATES RUNOFF.
20. PERMANENTLY STABILIZE ALL AREAS THAT WILL NOT BE REGRADED FOR AT LEAST 1–YEAR.
21. REMOVE OFF–SITE ACCUMULATIONS OF SEDIMENT DAILY DURING CONSTRUCTION AND IMMEDIATELY AT THE REQUEST OF A DOEE INSPECTOR.
22. ONCE FINAL GRADE IS MET, PERMANENTLY STABILIZE ALL DISTURBED AREAS.
23. PERFORM ROUTINE MAINTENANCE TO PREVENT ANY NEW DESTABILIZED AREAS.
24. CONTRACTOR TO MOVE TOWARD SEC PHASE 2 PLAN.

UTILITY AND INFRASTRUCTURE INSTALLATION

1. INSTALL UTILITIES; CLOSE TRENCH AS SOON AS POSSIBLE (GENERALLY AT END OF DAY)
2. USE ROUGH–CUT STREET CONTROL OR INSTALL ROAD BASE FOR STREETS THAT WILL NOT BE PROMPTLY PAVED.
3. INSTALL GUTTERS, CURBS, STORM INLETS, SEWER MANHOLES AT FINAL GRADE
4. PROVIDE INLET PROTECTION TO ALL INSTALLED STORM DRAIN INLETS AS THEY ARE BROUGHT ON–LINE.
5. FLUSH ALL NEW AND EXISTING STORM DRAIN PIPE TO ENSURE THAT THE SYSTEM IS FREE OF SEDIMENT.
6. PROTECT AND REPAIR BMPS, AS NECESSARY.

BUILDING CONSTRUCTION & ROAD FINISHING

1. IMPLEMENT MATERIALS MANAGEMENT AND GOOD HOUSEKEEPING PRACTICES FOR BUILDING ACTIVITIES.
2. USE PERIMETER CONTROLS FOR TEMPORARY STOCKPILES FROM FOUNDATION EXCAVATIONS.
3. AS EXCAVATION OF THE BUILDING BEGINS, CONTRACTOR SHALL INSTALL A SUMP PIT TO REMOVE EXCESS WATER UNTIL THE FOUNDATION/BUILDING IS BROUGHT TO GRADE

FINAL GRADING & ROAD FINISHING

1. REMOVE TEMPORARY CONCRETE WASHOUT AREA
2. REMOVE EXCESS OR WASTE MATERIALS.
3. REMOVE STORED MATERIALS.
4. FINALIZE PAVEMENT ACTIVITIES

FINAL STABILIZATION & LANDSCAPING

1. SEED AND MULCH/TACKIFY; INSTALL BLANKETS ON STEEP SLOPES.
2. INSTALL PROPOSED LANDSCAPING
3. MONITOR STABILIZED AREAS UNTIL FINAL STABILIZATION IS REACHED
4. REMOVE ALL TEMPORARY CONTROL BMPS UPON APPROVAL OF DOEE INSPECTOR AND OWNER'S REPRESENTATIVE. STABILIZE ANY AREAS DISTURBED BY THIS REMOVAL WITH EROSION CONTROLS

FOLLOWING CONSTRUCTION

AT COMPLETION OF LAND DISTURBING ACTIVITY, GIVE NOTICE TO THE DOEE INSPECTOR ONE WEEK NOTICE TO REQUEST A FINAL CONSTRUCTION INSPECTION. SEE DOEE INSPECTION NOTES FOR MORE INFORMATION

CONSTRUCTION & MAINTENANCE INSPECTION CHECKLISTS FOR EACH APPLICABLE BMP CAN BE FOUND IN DOEE'S 2020 STORMWATER MANAGEMENT GUIDEBOOK – APPENDICES L & M.

VEGETATIVE STABILIZATION

I. DEFINITION

USING VEGETATION AS COVER FOR BARREN SOIL TO PROTECT IT FROM FORCES THAT CAUSE EROSION. THIS SPECIFICATION INCLUDES BOTH TEMPORARY AND PERMANENT STABILIZATION.

II. PURPOSE

USE VEGETATIVE STABILIZATION SPECIFICATIONS TO PROMOTE THE ESTABLISHMENT OF VEGETATION ON EXPOSED SOIL. WHEN SOIL IS STABILIZED WITH VEGETATION, THE SOIL IS LESS LIKELY TO ERODE AND MORE LIKELY TO ALLOW INFILTRATION OF RAINFALL, THEREBY REDUCING SEDIMENTS LOADS AND RUNOFF TO DOWNSTREAM AREAS AND IMPROVING WILDLIFE HABITAT AND VISUAL RESOURCES.

III. CONDITIONS WHERE PRACTICE APPLIES

USE THIS PRACTICE ON DENUDED AREAS AS SPECIFIED ON THE ESC AND SWM PLANS. IT MAY BE USED ON HIGHLY ERODIBLE OR CRITICALLY ERODING AREAS. THIS SPECIFICATION IS DIVIDED INTO TEMPORARY SEEDING, TO QUICKLY ESTABLISH VEGETATIVE COVER FOR SHORT DURATION (UP TO ONE YEAR), AND PERMANENT SEEDING, FOR LONG–TERM VEGETATIVE COVER. EXAMPLES OF APPLICABLE AREAS FOR TEMPORARY SEEDING ARE TEMPORARY SOIL STOCKPILES, CLEARED AREAS BEING LEFT IDLE BETWEEN CONSTRUCTION PHASES, AND EARTH DIKES OR OTHER TEMPORARY EROSION CONTROL MEASURES. EXAMPLES OF PERMANENT SEEDING INCLUDE LAWNS, DAMS, CUT AND FILL SLOPES, AND OTHER AREAS AT FINAL GRADE.

VEGETATIVE STABILIZATION MUST BE IN PLACE TO STABILIZE THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3:1 WITHIN 7 DAYS. ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE MUST BE STABILIZED WITHIN 14 DAYS.

IV. DESIGN CRITERIA

DESIGN CRITERIA FOR BOTH TEMPORARY AND PERMANENT VEGETATIVE STABILIZATION INCLUDES SEED SPECIFICATIONS, SEED MIXTURES, AND SOIL AMENDMENTS.

SEED SPECIFICATION

FOR BOTH TEMPORARY AND PERMANENT SOIL STABILIZATION, SEED MUST MEET THE FOLLOWING SPECIFICATIONS:

1. ALL SEED MUST BE SUBJECT TO RETESTING BY A RECOGNIZED SEED LABORATORY WITHIN THE 6 MONTHS IMMEDIATELY PRECEDING THE DATE OF SOWING SUCH MATERIAL ON THE SITE.
NOTE: SEED TAGS MUST BE MADE AVAILABLE TO THE INSPECTOR TO VERIFY TYPE AND RATE OF SEED USED.

2. SEED QUALITY MUST BE CONSISTENT WITH THE CRITERIA OUTLINED IN TABLE 2.2

3. THE INOCULANT FOR TREATING LEGUME SEED IN THE SEED MIXTURES MUST BE A PURE CULTURE OF NITROGEN–FIXING BACTERIA PREPARED SPECIFICALLY FOR THE SPECIES. DO NOT USE INOCULANTS BEYOND THE DATE INDICATED ON THE CONTAINER. ADD FRESH INOCULANT AS DIRECTED ON THE PACKAGE. USE 4 TIMES THE RECOMMENDED RATE WHEN HYDROSEEDING.
NOTE: IT IS VERY IMPORTANT TO KEEP INOCULANT AS COOL AS POSSIBLE UNTIL IT IS USED. TEMPERATURES ABOVE 75–80°F CAN WEAKEN BACTERIA AND MAKE THE INOCULANT LESS EFFECTIVE.

Table 2.2 Quality of Seed

Species	Minimum Seed Purity (%)	Minimum Seed Germination (%)
Cool-Season Grasses		
Barley	98	85
Bentgrass, Creeping	95	85
Bluegrass, Canada	90	80
Bluegrass, Kentucky	97	80
Bluegrass, Rough	96	80
Fescue, Chewings	97	85
Fescue, Creeping Red	97	85
Fescue, Hard	97	85
Fescue, Sheep	97	85
Fescue, Tall	97	85
Oats	98	85
Orchardgrass	90	80
Redtop	92	80
Rye, Cereal	98	85
Ryegrass, Annual or Perennial	97	85
Saltgrass, Alkali	85	80
Wheat	98	85
Wild Rye, Canada	85	70
Warm-Season Grasses		
Bluestem, Big	60	60
Bluestem, Little	55	60
Deertongue	95	75
Indiangrass	60	60
Millet, Foxtail or Pearl	98	80
Panicgrass, Coastal	95	70
Switchgrass	95	75
Legumes/Forbs		
Clover, Alsike	99	85
Clover, Red	99	85
Clover, White	99	90
Flatpea	98	75
Lespedeza, Common	98	80
Pea, Partridge	98	70
Trefoil, Birdsfoot	98	85

TEMPORARY STABILIZATION

USE TEMPORARY SEEDING TO PROVIDE COVER ON DISTURBED AREAS FOR UP TO 12 MONTHS. LONGER DURATION OF VEGETATIVE COVER REQUIRES PERMANENT SEEDING.

INCLUDE IN THE PLAN THE FOLLOWING TEMPORARY SEEDING SUMMARY (TABLE 2.3) THAT IDENTIFIES TEMPORARY SEEDING MATERIALS RATES, SPECIES, AND FERTILIZER/LIME RATES. USE TABLE 2.4 TO COMPLETE THE SUMMARY TABLE.IF TABLE 2.3 IS NOT PUT ON THE PLANS AND COMPLETED, THEN TABLE 2.4 MUST BE PUT ON THE PLANS.

SOIL TESTS ARE NOT REQUIRED FOR TEMPORARY SEEDING, BUT THE PLAN SHOULD IDENTIFY RECOMMENDED FERTILIZER AND/OR LIME APPLICATION RATES. IF SOIL TESTING IS COMPLETED, REPORT THE TESTING AGENCY'S RESULTS ON THE PLANS. IF SOIL TEST HAS BEEN PERFORMED, DELETE THE RATES SHOWN IN TABLE 2.3 AND WRITE IN THE RATES RECOMMENDED BY THE TESTING AGENCY.

Table 2.3 Temporary Seeding Summary

Temporary Seeding Summary					
Seed Mixture				Fertilizer Rate (10-10-10)	Lime Rate
Species	Seeding Rate (indicate units)	Seeding Dates	Seeding Depths		
ANNUAL RYEGRASS	40 LBS/AC	FEB 15 –APR 30 AUG 15 –NOV 30	0.5 INCHES	436 lb/ac (10 lb/ 1,000 ft²)	2 tons/ac (90 lb/ 1,000 ft²)
OAT	72 LBS/AC	FEB 15 –APR 30 AUG 15 –NOV 30	1 INCH		
WHEAT	120 LBS/AC	FEB 15 –APR 30 AUG 15 –NOV 30	1 INCE		

Seed mixtures appropriate to the District of Columbia for temporary seeding are included in Table 2.4, along with appropriate seeding rates, depths, and planting dates.

VEGETATIVE STABILIZATION (cont'd)

SEED MIXTURES APPROPRIATE TO THE DISTRICT OF COLUMBIA FOR TEMPORARY SEEDING ARE INCLUDED IN TABLE 2.4, ALONG WITH APPROPRIATE SEEDING RATES, DEPTHS, AND PLANTING DATES.

Table 2.4 Temporary Seeding for Site Stabilization

Plant Species	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/1,000 ft²	Seeding Depth (inches)[2]	Recommended Seeding Dates Plant Hardiness Zone 7a and 7b[3]
Cool-Season Grasses				
Annual Ryegrass	40	1.0	0.5	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Barley	96	2.2	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Oats	72	1.7	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Wheat	120	2.8	1.0	Feb. 15 to Apr. 30; Aug. 15 to Nov. 30
Cereal Rye	112	2.8	1.0	Feb. 15 to Apr. 30; Aug. 15 to Dec. 15
Warm-Season Grasses				
Foxtail Millet	30	0.7	0.5	May 1 to Aug. 14
Pearl Millet	20	0.5	0.5	May 1 to Aug. 14

Notes:
[1]Seeding rates for the warm-season grasses are in pounds of pure live seed (PLS). Actual planting rates must be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses.

Seeding rates listed above are for temporary seedings, when planted alone. When planted as a nurse crop with permanent seed mixes, use 1/3 of the seeding rate listed above for barley, oats, and wheat. For smaller-seeded grasses (annual ryegrass, pearl millet, foxtail millet), do not exceed more than 5% (by weight) of the overall permanent seeding mix. Generally, do not use cereal rye as a nurse crop unless planting will occur in very late fall beyond the seeding dates for other temporary seedings. Cereal rye has allelopathic properties that inhibit the germination and growth of other plants. If it must be used as a nurse crop, seed at 1/3 of the rate listed above.

Oats are the recommended nurse crop for warm-season grasses.

[2]For sandy soils, plant seeds at twice the depth listed above.

[3]The planting dates listed are averages and may require adjustment to reflect local conditions.

PERMANENT STABILIZATION

FOR PERMANENT SEEDINGS, THE PLAN MUST INCLUDE THE PERMANENT SEEDING SUMMARY BELOW IN TABLE 2.5. THE SUMMARY TABLE WAS COMPLIED USING TABLES 2.6 AND 2.7 IN THE DOEE DESIGN MANUAL.

Table 2.5 Permanent Seeding Summary

Permanent Seeding Summary								
	Seed Mixture				Fertilizer Rate (10-20-20)			Lime Rate
No.	Species	Application Rate (lb/ac)	Seeding Dates	Seeding Depths	N	P_2O_5	K_2O	
	KENTUCKY BLUEGRASS	87 LBS/AC	FEB 15–APR 30 AUG 15–NOV 30	0.5 INCHES	45 lb/ac (1.0 lb/ 1,000 ft²)	90 lb/ac (2 lb/ 1,000 ft²)	90lb/ac (2 lb/ 1,000 ft²)	2 tons/ac (90 lb/ 1,000 ft²)
	TALL FESCUE	130 LBS/AC	FEB 15–APR 30 AUG 15–NOV 30	0.5 INCHES				
	PERENNIAL RYE GRASS	87 LBS/AC	FEB 15–APR 30 AUG 15–NOV 30	0.5 INCHES				

TURFGRASS MIXTURES

SELECT A SEED MIXTURE FROM TABLE 2.6, USING TABLE 2.7(CONDITIONS BY MIX) AS A GUIDELINE. SOME GUIDANCE FOR COMMON MIXES IS AS FOLLOWS:

1. KENTUCKY BLUEGRASS (FULL SUN MIXTURES) – FOR USE IN AREAS THAT RECEIVE INTENSIVE MANAGEMENT. THE RECOMMENDED CERTIFIED KENTUCKY BLUEGRASS CULTIVARS SEEDING RATE IS 1.5 TO 2 LBS PER 1000 SQUARE FT. CHOOSE A MINIMUM OF 3 BLUEGRASS CULTIVARS RANGING FROM A MINIMUM OF 10% TO A MAXIMUM OF 35% OF THE MIXTURE BY WEIGHT.
2. KENTUCKY BLUEGRASS/PERENNIAL RYE(FULL SUN MIXTURE) – FOR USE IN FULL SUN AREAS WHERE RAPID ESTABLISHMENT IS NECESSARY AND WHEN TURF WILL RECEIVE MEDIUM TO INTENSIVE MANAGEMENT. THE CERTIFIED PERENNIAL RYEGRASS CULTIVARS/CERTIFIED KENTUCKY BLUEGRASS SEEDING RATE IS 2 LBS MIXTURE PER 1000 SQUARE FEET. A MINIMUM OF 3 KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM 10% TO 35% OF THE MIXTURE BY WEIGHT.
3. TALL FESCUE/KENTUCKY BLUEGRASS (FULL SUN MIXTURE) – FOR USE IN DROUGHT PRONE AREAS AND/OR FOR AREAS RECEIVING LOW TO MEDIUM MANAGEMENT IN FULL SUN TO MEDIUM SHADE. THE RECOMMENDED MIXTURE INCLUDE 95% TO 100% CERTIFIED TALL FESCUE CULTIVARS AND 0% TO 5% CERTIFIED KENTUCKY BLUEGRASS CULTIVARS. THE SEEDING RATE IS 5 TO 8 LBS PER 1000 SQUARE FEET. ONE OR MORE CULTIVARS MAY BE BLENDED.
4. KENTUCKY BLUEGRASS/FINE FESCUE(SHADE MIXTURE) – FOR USE IN AREAS WITH SHADE IN BLUEGRASS LAWNS OR FOR ESTABLISHMENT IN HIGH QUALITY, INTENSIVELY MANAGED TURF AREA. THE MIXTURE INCLUDES 30% TO 40% CERTIFIED KENTUCKY BLUEGRASS CULTIVARS AND 60% TO 70% OF CERTIFIED FINE FESCUE. THE SEEDING RATE IS 1½ TO 3LBS PER 1000 SQUARE FEET. A MINIMUM OF 3 KENTUCKY BLUEGRASS CULTIVARS MUST BE CHOSEN, WITH EACH CULTIVAR RANGING FROM A MINIMUM OF 10% TO A MAXIMUM OF 35% OF THE MIXTURE BY WEIGHT.

NOTE: SELECT TURFGRASS VARIETIES FROM THOSE LISTED IN THE MOST CURRENT MARYLAND – VIRGINIA TURFGRASS VARIETY RECOMMENDATION WORK GROUP LIST (HTTP://WWW.PUBS.EXT.VT.EDU/).

Table 2.6 Recommended Permanent Seeding Mixtures by Site Condition or Purpose

Site Condition or Purpose of the Planting	1	2	3	4	5	6	7	8	9	10	11	12	13
Steep Slopes, Roadsides	R	R	R	A	R	A				A	A	R	R
Sand and Gravel Pits, Sanitary Landfills	R	R	R	A	R	A				A	A	R	
Salt-Damaged Areas	A												R
Mine Spoil, Dredged Material, and Spoil Banks	A		R	A	A								
Utility Rights-of-Way	R	R	R	R	R	R	A			R	R	R	
Dikes and Dams	A	A	R	A		R	R	A		R	R	R	
Berms and Low Embankments (not on Ponds)	R	R	R	R	R	R	A	A		R	R	R	A
Pond and Channel Banks, Streambanks	R	R	R	R	A	A	A			A	A		
Grassed Waterways, Diversions, Terraces, Spillways	A				A	R	R	A	R		R		A
Bottom of Drainage Channels, Swales, Detention Basins				A		R	A			A	R		R
Field Borders, Filter Strips, Contour Buffer Strips	R	R	R	A	A	R	A	R	R	R	R	R	A
Wastewater Treatment Strips and Areas								R	A	A			
Heavy Use Areas (Grass Loafing Paddocks for Livestock)								R					
Athletic Fields, Residential and Commercial Lawns							A	R	R		R		
Recreation Areas							R	R	R		R		

R = Recommended mix for this site condition or purpose.
A = Alternative mix, depending on site conditions.

Table 2.7 Selected List of Permanent Herbaceous Seeding Mixtures

Mix	Recommended Cultivar	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/ 1,000 ft²	Soil Drainage Class[2]	Max. Height (in.)	Maint. Level[3]	Remarks
Warm-Season/Cool-Season Grass Mixes							
1. SELECT ONE WARM-SEASON GRASS:				E–P	4–7	C–D	All species are native to the area.
Switch Grass (*Panicum virgatum*)	Blackwell, Carthage, Cave-in-the-Rock, or Shelter	10	0.23				Plant this mix with a regular grass drill.
OR Coastal Panic Grass (*Panicum amarum var. amarulum*)	Atlantic	10	0.23				Coastal panicgrass is best adapted to Zones 7a and 7b.
AND ADD: Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	15	0.34				Creeping red fescue is a cool-season grass that will provide erosion protection while the warm-season grass (switchgrass or coastal panicgrass) is becoming established.
PLUS ONE OF THE FOLLOWING LEGUMES:							
Partridge Pea (*Chamaecrista fasciculate*)	Common	4	0.09				Switchgrass, coastal panicgrass, the 'Dawson' variety of creeping red fescue, and partridge pea are moderately salt tolerant. Do not use bush clover or wild indigo on wet sites.
Bush Clover (*Lespedeza capitate*)	Common	2	0.05				
Wild Indigo (*Baptisia tinctoria*)	Common	2	0.05				
2. Big Bluestem (*Andropogon gerardii*)	Niagara or Rountree	6	0.14	E–MW	6–8	C–D	All species are native to the area.
Indiangrass (*Sorghastrum nutans*)	Rumsey	6	0.14				The indiangrass and bluestems have fluffy seeds. Plant with a specialized native seed drill.
Little Bluestem (*Schizachyrium scoparium*)	Aldous or Blaze	4	0.09				
Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	15	0.34				Creeping red fescue is a cool-season grass that will provide erosion protection while the warm-season grasses are becoming established.
PLUS ONE OF THE FOLLOWING LEGUMES:							
Partridge Pea (*Chamaecrista fasciculata*)	Common	4	0.09				
Bush Clover (*Lespedeza capitata*)	Common	2	0.05				
Wild Indigo (*Baptisia tinctoria*)	Common	2	0.05				
Showy Tick-Trefoil (*Desmodium canadense*)	Common	1	0.05				

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MARET SCHOOL
PROPOSED ATHLETIC FIELDS
SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION
2	8-11-23	DOEE RESUB
1	6-6-23	DDOT/DOEE RESUB

**NOTE
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DISTRICT OF COLUMBIA ★ KYLE U. OLIVER ★ PE900770 ★ 10/03/2023 ★ CIVIL ★ PROFESSIONAL ENGINEER

DATE: 23–FEB–2023
DES. KUO DWN. BJR
SCALE: AS SHOWN
PROJECT/FILE NO. VC0626D
SHEET NO. CIV0810

DEPARTMENT OF ENERGY & ENVIRONMENT

GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
Permit No. SH2400019 Date 04/09/24

These plans are conditionally approved as submitted or noted during plan review and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans. Changes require a revision permit with the revised plans. Trade Permits are required for trade work, e.g. Electrical or Plumbing

HPRB Review - Timothy Dennee - 04-09-2024
Zoning Review - Ernesto Warren - 04-09-2024
Structural Review - Tong Li - 04-09-2024
DOEE SE-SW Review - Saba Gharavi - 04-09-2024

VEGETATIVE STABILIZATION (cont'd)

Mix	Recommended Cultivar	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/1,000 ft²	Soil Drainage Class[2]	Max. Height (in.)	Maint. Level[3]	Remarks
Warm-Season/Cool-Season Grass Mixes							
3. SELECT THREE GRASSES:							
Deertongue (*Dichanthelium clandestinum*)	Tioga	20	0.46				Excellent for excessively droughty, low pH (acidic) soils.
Canada Wild Rye (*Elymus canadensis*)	Common	3	0.07				
Redtop (*Agrostis gigantean*)	Streaker	1	0.02	E–MW	4–8	C–D	Canada wild rye and redtop are cool-season grasses that will provide erosion protection while the warm-season grass (deertongue) is becoming established.
PLUS THE FOLLOWING LEGUME:							
Common Lespedeza (*Lespedeza striata*)	Kobe	10	0.23				Common lespedeza ('Kobe' variety) is a reseeding annual.
4. Deertongue (*Dichanthelium clandestinum*)	Tioga	15	0.34				
Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	20	0.46				
Virginia Wild Rye (*Elymus virginicus*)	Common	5	0.11	W–P	2–3	C–D	Use Virginia wild rye on moist, shady sites. Use Canada wild rye on droughty sites.
OR Canada Wild Rye (*Elymus canadensis*)	Common	5	0.11				
Cool-Season Grass Mixes							
5. SELECT TWO GRASSES: Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	20	0.46				Use creeping red fescue in heavy shade and on moist sites.
OR							
Hard Fescue (*Festuca trachyphylla*)	Beacon, Gotham, Spartan II, Sword	20	0.46				Perennial ryegrass and redtop will establish more rapidly than either fescue. Redtop tolerates wet sites better than ryegrass.
Perennial Ryegrass (*Lolium perenne*)	Blazer (II), Pennfine	10	0.23	E–SP	2–3	B–D	Flatpea will suppress woody vegetation. Plant in the spring, or as a dormant seeding in late fall or winter. It must be incorporated into the soil or covered with mulch. It may not be winter-hardy if planted late summer to fall. Caution: Flatpea can spread aggressively, and can be toxic to livestock.
OR							
Redtop (*Agrostis gigantean*)	Streaker	1	0.02				
AND ADD THE FOLLOWING LEGUME:							
Flatpea (*Lathyrus sylvestris*)	Lathco	15	0.34				

Mix	Recommended Cultivar	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/1,000 ft²	Soil Drainage Class[2]	Max. Height (in.)	Maint. Level[3]	Remarks
Cool-Season Grass Mixes							
6. Tall Fescue (*Lolium arundinaceum*) (*formerly Festuca arundinacea*)	Recommended turf-types[4]	40	0.93				
Perennial Ryegrass (*Lolium perenne*)	Blazer (II), Pennfine	25	0.57	W–SP	2–3	C–D	
PLUS THE FOLLOWING LEGUME:							
White Clover (*Trifolium repens*)	Common	5	0.11				
7. Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	60	1.38	W–MW	1–2	C–D	This mix has good shade tolerance.
Kentucky Bluegrass (*Poa pratensis*)	Recommended turf-types[4]	15	0.34				
8. Tall Fescue (*Lolium arundinaceum*) (formerly *Festuca arundinacea*)	Recommended turf-types[4]	100	2.3	E–SP	2–3	A–D	Tall fescue produces a dense turf if frequently mowed, but tends to be clumpy if mowed only occasionally. For best results, recommend using a blend of 3 cultivars. Use low-endophyte cultivars in areas where livestock may graze.
9. SELECT ONE SPECIES OF FESCUE: Tall Fescue (*Lolium arundinaceum*) (formerly *Festuca arundinacea*)	Recommended turf-types[4]	60	1.38				Good for highly managed athletic fields. Tall fescue is more suitable for compacted, high use areas and on moist sites.
OR Hard Fescue (*Festuca trachyphylla*)	Beacon, Gotham, Spartan II, Sword	40	0.92				Hard fescue produces finer-textured turf with more shade tolerance.
AND ADD:							
Kentucky Bluegrass (*Poa pratensis*)	Recommended turf-types[4]	40	0.92	W–SP	2–3	A–B	Use tall fescue instead of hard fescue for wastewater treatment strips and areas.
Perennial Ryegrass (*Lolium perenne*)	Blazer (II), Pennfine	20	0.46				For best results, recommend using a blend of 3 cultivars each for tall fescue and Kentucky bluegrass.

Mix	Recommended Cultivar	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/1,000 ft²	Soil Drainage Class[2]	Max. Height (in.)	Maint. Level[3]	Remarks
Cool-Season Grass Mixes							
10. Orchardgrass (*Dactylis glomerata*)	Any	25	0.57				Low maintenance mix that is easy to establish.
Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	10	0.23				
Redtop (*Agrostis gigantean*)	Streaker	1	0.02	W–SP	2–3	C–D	
Alsike Clover (*Trifolium hybridum*)	Common	3	0.07				Alsike clover can be toxic to horses.
White Clover (*Trifolium repens*)	Common	3	0.07				Omit the clovers if using this mix for wastewater treatment strips and areas.
11. Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	30	0.69				
Chewings Fescue (*Festuca rubra ssp. commutata*)	Radar	30	0.69				
Kentucky Bluegrass (*Poa pratensis*)	Recommended turf-types[4]	20	0.46	E–MW	2–3	B–D	
OPTIONAL ADDITION Rough Bluegrass (*Poa trivialis*)	Common	15	0.34				Add rough bluegrass in moist, shady conditions.
12. Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	25	0.57				Attractive mix of fine fescues and wildflowers for low maintenance conditions. Once well-established, the grasses may tend to outcompete the wildflowers.
Hard Fescue (*Festuca trachyphylla*)	Beacon, Gotham, Spartan II, Sword	25	0.57				
Sheep Fescue (*Festuca ovina*)	Common or Bighorn	25	0.57				Wildflowers are best established by broadcasting and cultipacking on a prepared seedbed. Drilling can be also used, but care must be taken so that seeds are not drilled too deep.
PLUS WILDFLOWER MIX:							
Black-eyed Susan (*Rudbeckia hirta*)	Common	2	0.05				
Lance-leaved Coreopsis (*Coreopsis lanceolata*)	Common	2	0.05	E–MW	2–3	C–D	Hydroseeding is not recommended for this mix if wildflowers are used. (They have very small seeds.)
Partridge Pea (*Chamaecrista fasciculate*)	Common	5	0.11				
OR ADD CLOVER MIX:							
White Clover (*Trifolium repens*)	Common	3	0.07				
Red Clover (*Trifolium pretense*)	Any	3	0.07				

Mix	Recommended Cultivar	Seeding Rate[1] lb/ac	Seeding Rate[1] lb/1,000 ft²	Soil Drainage Class[2]	Max. Height (in.)	Maint. Level[3]	Remarks
Cool-Season Grass Mixes							
13. Alkali Saltgrass (*Puccinellia distans*)	Fults or Salty	20	0.46				This is the recommended mix for saline sites. Saltgrass will persist only under saline conditions.
Creeping Red Fescue (*Festuca rubra var. rubra*)	Navigator II	15	0.34				
Fowl Meadowgrass (*Poa palustris*)	Common	2	0.05	W–P	2–3	B–D	For best results, use only the 'Dawson' variety of creeping red fescue. It is a salt-tolerant variety.
OPTIONAL ADDITION Creeping Bentgrass (*Agrostis stolonifera*)	Seaside	2	0.05				Add bentgrass for wetter conditions.

Notes:
1. Seeding Rates: Seeding rates for the warm-season grasses are in pounds of Pure Live Seed (PLS). Actual planting rates must be adjusted to reflect percent seed germination and purity, as tested. Adjustments are usually not needed for the cool-season grasses, legumes, or wildflowers. All legume seeds must be inoculated before planting with the appropriate Rhizobium bacteria. When feasible, scarify hard-seeded legumes scarified to improve germination.
2. Soil Drainage Class (refer to the county soil survey for further information):
   E - Excessively Drained; W - Well Drained; MW - Moderately Well Drained; SP - Somewhat Poorly Drained; P - Poorly Drained.
3. Maintenance Level:
   A - Intensive mowing (every 2–4 days), fertilization, lime, insect and weed control, and watering (examples: high maintenance lawns and athletic fields).
   B - Frequent mowing (every 4–7 days), occasional fertilization, lime, pest control, and watering (examples: residential, school, and commercial lawns).
   C - Periodic mowing (every 7–14 days), occasional fertilization and lime (examples: residential lawns, parks).
   D - Infrequent or no mowing, fertilization, or lime after the first year of establishment (examples: wildlife areas, roadsides, steep banks).
4. Turf-type cultivars of tall fescue and Kentucky bluegrass must be selected based on recommendations of the Maryland-Virginia Turfgrass Variety Recommendation Work Group.
   Kentucky Bluegrass – Individual varieties selected must make up not less than 10%, nor more than 35% of the total mixture on a weight basis. All varieties must be certified. Selections can be made from Category I alone or various combinations of Categories I and II. Kentucky bluegrasses listed as "Promising" (Category II below) can account for no more than 35% of the blend by weight).
   Category I – Recommended Kentucky Bluegrass Varieties (65% to 100% of blend by weight). Aries, Blue Bank, Blue Coat, Blue Note, Bolt, Full Back, Hampton, Legend, Midnight, Noble, Skye, and Sudden Impact[3].
   Category II – Promising Kentucky Bluegrasses (10% to 35% on a weight basis). Aramintha, Barvette HGT, Endurance, Heidi, Keeneland, Mazama, Merlot, NuChicago, Oasis, Skye, and Wildhorse[1] (Wildhorse is only for mixing with tall fescue).
   Tall Fescue – Both recommended and promising varieties can be used in the VCIA Sod Certification Program.
   Category I – Recommended Tall Fescue Varieties (90% to 100% on a weight basis). Annapolis, Avenger II, Black Tail, Bladerunner II[4], Bullseye, Catalyst, Dakota[4], Embrace, Falcon V, Firecracker SLS[2], Guardian 41[4], Gazelle II, Golconda[4], Gold Medallion, GTO, Hemi[3], Inferno, Integrity, Justice, Leonardo[2], Maestro, Michelangelo, Mustang 4, Penn RK4, Persuasion[4], Raptor III, Rebel IV, Reflection, Regenerate, Rendition RX, Rockwell, Saltillo, Screamer LS, Speedway[4], Spyder LS, SR 8650[4], Sunset Gold, Supersonic, Technique, Temple, Thor, Titanium 2LS, Titan Rx, Turbo, Turbo RZ[4], Xtender, and Xtremegreen.
   Category II – Promising tall fescue varieties (may be 90% to 100% of the mixture on a weight basis): 4th Millennium, Amity, Bloodhound, Crossfire 4, Fantasia, Fayette, Fesnova, Firebird 2, Firewall, Foxhound, Grande 3, Hot Rod, Houndog 8, Hover, Maestro, Nightcrawler, Paramount, Persuasion, Rebel V, Rebounder, Rhambler 2 SRP, Rhizing Moon, Rowdy, Swagger, Terrano, Traverse II SRP, Trinity, Turfway, Valkyrie LS, and Wichita.
   Kentucky bluegrass varieties recommended for mixing with tall fescue sod to enhance sod strength (up to 10% of the seed mixture by weight): All cultivars in Categories I and II above. Note recommendation of hybrid bluegrasses as promising varieties for mixtures with turf-type tall fescues in the traditionally warmer climates of Virginia.
   Varieties marked with superscript notations denote the following:
   1. To be considered for removal in 2018 due to declining performance relative to other varieties.
   2. To be considered for removal in 2018 due to declining seed quality.
   3. To be considered for removal in 2018 due to the absence of recent testing of certified seed lots in MD and VA.
   4. To be considered for removal in 2018 due to lack of recent testing in MD and VA.

SOD GRASS

1. CLASS OF TURFGRASS SOD MUST COMPLY WITH THE GRASS VARIETIES LISTED IN TABLE 2.7. MAKE SOD LABELS AVAILABLE TO THE JOB FOREMAN AND INSPECTOR.
2. MACHINE CUT SOD AT A UNIFORM SOIL THICKNESS OF ¾in. , AT THE TIME OF CUTTING. MEASUREMENT FOR THICKNESS MUST EXCLUDE TOP GROWTH AND THATCH. INDIVIDUAL PIECES OF SOD MUST BE CUT TO SUPPLIER'S WIDTH AND LENGTH. MAXIMUM ALLOWABLE DEVIATION FROM STANDARD WIDTHS AND LENGTHS IS 5%. BROKEN PADS AND TORN OR UNEVEN ENDS WILL NOT BE ACCEPTABLE.
3. STANDARD SIZE SECTIONS OF SOD MUST BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED VERTICALLY WITH A FIRM GRASP ON THE UPPER 10% OF THE SECTION.
4. DO NOT HARVEST OR TRANSPLANT SOD WHEN MOISTURE CONTENT(EXCESSIVELY DRY OR WET) MAY ADVERSELY AFFECT ITS SURVIVAL.
5. HARVEST, DELIVER, AND INSTALL SOD WITHIN A PERIOD OF 36 HOURS. SOD NOT TRANSPLANTED WITHIN THIS PERIOD MUST BE APPROVED BY AN AGRONOMIST OR SOIL SCIENTIST PRIOR TO ITS INSTALLATION.

PLANTING DATES

THE RECOMMENDED PLANTING DATES FOR PERMANENT COVER CAN BE FOUND IN TABLE 2.8

Table 2.8 Recommended Planting Dates for Permanent Cover

Type of Plant Material	Planting Dates
Seeds - Cool-Season Grasses (includes mixes with forbs and/or legumes)	Feb 15 to Apr 30 Aug 15 to Oct 31 Nov 1 to Nov 30[3]
Seeds - Warm-Season/Cool-Season Grass Mixes (includes mixes with forbs and/or legumes)	Feb 15 to Apr 30[4] May 1 to May 31[5]
Sod - Cool-Season	Feb 15 to Apr 30 May 1 to Sep 30[5] Oct 1 to Dec 1[5, 6]

Notes:
1. When seeding toward the end of the listed planting dates, or when conditions are expected to be less than optimal, select an appropriate nurse crop from Table 2.4 Temporary Seeding for Site Stabilization and plant together with the permanent seeding mix.
2. When planted during the growing season, most of these materials must be purchased and kept in a dormant condition until planting.
3. Recommend adding a nurse crop, as noted above, if planting during this period.
4. Warm-season grasses need a soil temperature of at least 50 degrees F in order to germinate. If soil temperatures are colder than 50 degrees, or moisture is not adequate, the seeds will remain dormant until conditions are favorable. In general, planting during the latter portion of this period allows more time for weed emergence and weed control prior to planting. When selecting a planting date, consider the need for weed control vs. the likelihood of having sufficient moisture for later plantings, especially on droughty sites.
5. Additional planting dates during which supplemental watering may be needed to ensure plant establishment.
6. Frequent freezing and thawing of wet soils may result in frost-heaving of materials planted in late fall, if plants have not sufficiently rooted in place. Sod usually needs 4 to 6 weeks to become sufficiently rooted.

MINIMUM SOIL CRITERIA

MINIMUM SOIL CONDITIONS REQUIRED FOR PERMANENT VEGETATIVE ESTABLISHMENT INCLUDE THE FOLLOWING:

1. SOIL pH MUST BE BETWEEN 6.0 AND 7.0
2. SOLUBLE SALTS MUST BE LESS THAN 500 PARTS PER MILLION (ppm).
3. THE SOIL MUST CONTAIN LESS THAN 40% CLAY BUT ENOUGH FINE GRAINED MATERIAL(>30% SILT PLUS CLAY) TO PROVIDE THE CAPACITY TO HOLD A MODERATE AMOUNT OF MOISTURE. AS AN EXCEPTION, IT IS ACCEPTABLE TO PLANT LOVEGRASS OR SERECIA LESPEDEZA IN SANDY SOIL (<30% SILT PLUS CLAY).
4. SOIL MUST CONTAIN 1.5% MINIMUM ORGANIC MATTER BY WEIGHT.
5. SOIL MUST CONTAIN SUFFICIENT PORE SPACE TO PERMIT ADEQUATE ROOT PENETRATION.
6. IF THESE CONDITIONS CANNOT BE MET BY SOILS ON SITE, TOPSOIL MUST BE ADDED AS REQUIRED IN SECTION 2.6 TOPSOILING.

SOIL AMENDMENTS (FERTILIZER AND LIME SPECIFICATIONS)

1. SOIL TEST MUST BE PERFORMED TO DETERMINE THE EXACT RATIOS AND APPLICATION RATES FOR BOTH LIME AND FERTILIZER ON SITES WITH DISTURBED AREAS OVER 5 ACRES. SOIL ANALYSIS MAY BE PERFORMED BY THE UNIVERSITY OF THE DISTRICT OF COLUMBIA OR A CERTIFIED COMMERCIAL LABORATORY. SOIL SAMPLES TAKEN FOR ENGINEERING PURPOSES MAY BE USED FOR CHEMICAL ANALYSES.
2. FERTILIZERS MUST BE UNIFORM IN COMPOSITION, FREE FLOWING, AND SUITABLE FOR ACCURATE APPLICATION BY APPROVED EQUIPMENT. MANURE MAY BE SUBSTITUTED FOR FERTILIZER WITH PRIOR APPROVAL FROM DOEE. DELIVER ALL FERTILIZERS TO THE SITE FULLY LABELED PER APPLICABLE LAWS AND BEAR THE NAME, TRADE NAME OR TRADEMARK, AND WARRANTY OF THE PRODUCER.
3. LIME MATERIALS MUST BE GROUND LIMESTONE (HYDRATED OR BURNT LIME MAY BE SUBSTITUTED) CONTAINING AT LEAST 50% TOTAL OXIDES (CALCIUM OXIDE PLUS MAGNESIUM OXIDE). LIMESTONE MUST BE GROUND TO SUCH FINENESS THAT AT LEAST 505 WILL PASS THROUGH A #100 MESH SIEVE AND 98% TO 100% WILL PASS THOUGH A #20 MESH SIEVE.

V. CONSTRUCTION SPECIFICATIONS

SITE PREPARATION

1. INSTALL EROSION AND SEDIMENT CONTROL STRUCTURES (EITHER TEMPORARY OR PERMANENT) SUCH AS DIVERSIONS, GRADE STABILIZATION STRUCTURES, BERMS, WATERWAYS, OR SEDIMENTS CONTROL BASINS.
2. PERFORM ALL GRADING OPERATIONS AT RIGHT ANGLES TO THE SLOPE. FINAL GRADING AND SHAPING IS NOT USUALLY NECESSARY FOR TEMPORARY SEEDING.
3. SCHEDULE REQUIRED SOIL TESTS TO DETERMINE SOIL AMENDMENT COMPOSITION AND APPLICATION RATES FOR SITES HAVING DISTURBED AREA OVER 5 ACRES.
4. DISTRIBUTE LIME AND FERTILIZER EVENLY AND INCORPORATE THEM INTO TOP 3 TO 5 INCHES OF SOIL BY DISKING OR OTHER SUITABLE MEANS.
5. WHERE THE SUBSOIL IS EITHER HIGHLY ACIDIC OR COMPOSED OF HEAVY CLAYS, SPREAD GROUND LIMESTONE AT THE RATE OF 4 TO 8 TONS PER ACRE (200 TO 400 LBS PER 1000 SQUARE FEET) PRIOR TO THE PLACEMENT OF TOPSOIL.

SEEDBED PREPARATION

1. TEMPORARY SEEDING
   a. SEEDBED PREPARATION MUST CONSIST OF LOOSENING SOIL TO A DEPTH OF 3 TO 5 INCHES BY MEANS OF SUITABLE AGRICULTURAL OR CONSTRUCTION EQUIPMENT, SUCH AS DISC HARROWS OR CHISEL PLOWS OR RIPPERS MOUNTED ON CONSTRUCTION EQUIPMENT. TRACK SLOPED AREAS (GREATER THAN 3:1) LEAVING THE SURFACE IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE.
   b. APPLY FERTILIZER AND LIME AS PRESCRIBED ON THE PLANS.
   c. INCORPORATE LIME AND FERTILIZER INTO TOP 3 TO 5 INCHES OF SOIL DISKING OR OTHER SUITABLE MEANS.
2. PERMANENT SEEDING – MAINTAIN AREAS PREVIOUSLY GRADED IN CONFORMANCE WITH THE DRAWINGS IN A TRUE AND EVEN GRADE, THEN SCARIFIED OR OTHERWISE LOOSENED TO A DEPTH OF 3 TO 5 INCHES TO PERMIT BONDING OF THE TOPSOIL TO THE SURFACE AREA AND TO CREATE HORIZONTAL EROSION CHECK SLOTS TO PREVENT TOPSOIL FROM SLIDING DOWN A SLOPE.

APPLY SOIL AMENDMENTS AS PER SOIL TEST AS INCLUDED ON THE PLANS.

MIX SOIL AMENDMENTS INTO THE TOP 3 TO 5 INCHES OF TOPSOIL BY DISKING OR OTHER SUITABLE MEANS. RAKE LAWN AREAS TO SMOOTH THE SURFACE, REMOVE LARGE OBJECTS LIKE STONES AND BRANCHES, AND READY THE AREA FOR SEED APPLICATION. WHERE SITE CONDITIONS WILL NOT PERMIT NORMAL SEEDBED PREPARATION, LOOSEN SURFACE SOIL BY DRAGGING WITH HEAVY CHAIN OR OTHER EQUIPMENT TO ROUGHEN THE SURFACE. TRACK STEEP SLOPED (STEEPER THAN 3:1) BY A DOZER LEAVING THE SOIL IN AN IRREGULAR CONDITION WITH RIDGES RUNNING PARALLEL TO THE CONTOUR OF THE SLOPE. THE TOP 1 TO 3 INCHES OF SOIL SHOULD BE LOOSE AND FRIABLE. SEEDBED LOOSENING MAY NOT BE NECESSARY ON NEWLY DISTRIBUTED AREAS.

3. METHODS OF SEEDING – APPLY SEED UNIFORMLY WITH HYDROSEEDER (SLURRY INCLUDES SEED, FERTILIZER AND MULCH), BROADCAST OR DROP SEEDER, OR A CULTIPACKER SEEDER.
   a. HYDROSEEDING
      i. IF FERTILIZER IS BEING APPLIED AT THE TIME OF SEEDING, THE APPLICATION RATES WILL NOT EXCEED THE FOLLOWING: NITROGEN, MAXIMUM OF 100 LBS PER ACRE TOTAL OF SOLUBLE NITROGEN; P205 (PHOSPHOROUS), 200 LBS PER ACRE; K20 (POTASSIUM), 200 LBS PER ACRE.
      ii. LIME – USE ONLY GROUND AGRICULTURE LIMESTONE, (UP TO 3 TONS PER ACRE MAY BE APPLIED BY HYDROSEEDING). NORMALLY, NOT MORE THAN 2 TONS PER ACRE ARE APPLIED BY HYDROSEEDING AT ANY ONE TIME. DO NOT USE BURNT OR HYDRATED LIME WHEN HYDROSEEDING.
      iii. SEED AND FERTILIZER MUST BE MIXED ON SITE AND SEEDING MUST BE DONE IMMEDIATELY AND WITHOUT INTERRUPTION.
      iv. FIBER MULCH MAY BE INCORPORATED INTO THE HYDROSEEDING MIXTURE. CONSULT SECTION 2.7 MULCHING FOR STANDARDS AND SPECIFICATIONS FOR MULCH MATERIALS.
   b. DRY SEEDING – THIS INCLUDES USE OF CONVENTIONAL DROP OR BROADCAST SPREADERS.
      i. INCORPORATE SEED SPREAD DRY INTO THE SUBSOIL AT THE RATES PRESCRIBED ON THE TEMPORARY OR PERMANENT SEEDING SUMMARIES OR TABLE 2.4 AND 2.7. THE SEEDED AREA MUST THEN BE ROLLED WITH A WEIGHTED ROLLER TO PROVIDE GOOD SEED TO SOIL CONTACT.
      ii. WHERE PRACTICAL, APPLY SEED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.
   c. DRILL OR CULTIPACKER SEEDING – MECHANIZED SEEDERS THAT APPLY AND COVER SEED WITH SOIL.
      i. CULTIPACKING SEEDERS ARE REQUIRED TO BURY THE SEED IN SUCH A FASHION AS TO PROVIDE AT LEAST ¼ INCHES OF SOIL COVERING. SEEDBED MUST BE FIRM AFTER PLANTING.
      ii. WHERE PRACTICAL, APPLY SEED IN TWO DIRECTIONS PERPENDICULAR TO EACH OTHER. APPLY HALF THE SEEDING RATE IN EACH DIRECTION.

4. SOD INSTALLATION – DURING PERIODS OF EXCESSIVELY HIGH TEMPERATURE OR IN AREAS HAVING DRY SUBSOIL, THE SUBSOIL MUST BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD.

THE FIRST ROW OF SOD MUST BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO TIGHTLY WEDGED AGAINST EACH OTHER. LATERAL JOINTS MUST BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. ENSURE THAT SOD D IS NOT STRETCHED OR OVERLAPPED AND ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS, WHICH WOULD CAUSE AIR DRYING OF THE ROOTS.

WHEREVER POSSIBLE, LAY SOD WITH THE LONG EDGES PARALLEL TO THE CONTOUR AND WITH STAGGERING JOINTS. ROLL AND TAMP, PEG, OR OTHERWISE SECURE SOD TO PREVENT SLIPPAGE ON SLOPED AND TO ENSURE SOLID CONTACT BETWEEN SOD ROOTS AND THE UNDERLYING SOIL SURFACE.

IMMEDIATELY WATER SOD FOLLOWING ROLLING OR TAMPING UNTIL THE UNDERSIDE OF THE NEW SOD PAD AND SOIL SURFACE BELOW THE SOD ARE THOROUGHLY WET. COMPLETE THE OPERATION OF LAYING, TAMPING AND IRRIGATING FOR ANY PIECE OF SOD WITHIN 8HOURS.

5. INCREMENTAL STABILIZATION – CUT SLOPES

DRESS, PREPARE, SEED, AND MULCH ALL CUT SLOPES AS THE WORK PROGRESSES. EXCAVATE AND STABILIZE SLOPES IN EQUAL INCREMENTS NOT TO EXCEED 15 FT.

THE CONSTRUCTION SEQUENCE IS AS FOLLOWS (REFER TO FIGURE 2.1):

a. EXCAVATE AND STABILIZE ALL TEMPORARY SWALES, SIDE DITCHES, OR BERMS THAT WILL BEUSED TO CONVEY RUNOFF FROM THE EXCAVATION.
b. PERFORM PHASE 1 EXCAVATION, DRESS, AND STABILIZE
c. PERFORM PHASE 2 EXCAVATION, DRESS, AND STABILIZE. OVERSEED PHASE 1 AREAS IF NECESSARY.
d. PERFORM FINAL EXCAVATION, DRESS, AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS IF NECESSARY.

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING AND PLACEMENT OF TOPSOIL (IF REQUIRED AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OF COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

Chapter 2 Soil Stabilization

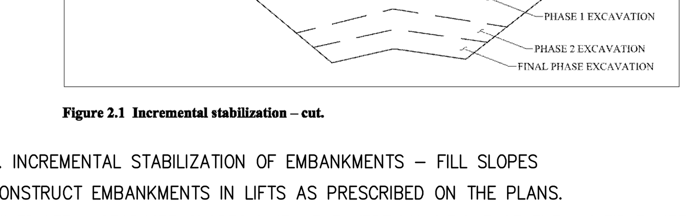

Figure 2.1 Incremental stabilization – cut.

6. INCREMENTAL STABILIZATION OF EMBANKMENTS – FILL SLOPES

CONSTRUCT EMBANKMENTS IN LIFTS AS PRESCRIBED ON THE PLANS.

IMMEDIATELY STABILIZE SLOPES WHEN THE VERTICAL HEIGHT OF THE MULTIPLE LIFTS REACHES 15 FT, OR WHEN THE GRADING OPERATION CEASES AS PRESCRIBED IN THE PLANS.

AT THE END OF EACH DAY, CONSTRUCT TEMPORARY BERMS AND PIPE SLOPE DRAINS ALONG THE TOP EDGE OF THE EMBANKMENT TO INTERCEPT SURFACE RUNOFF AND CONVEY IT DOWN THE SLOPE IN A NON-EROSIVE MANNER TO A SEDIMENT TRAPPING DEVICE.

THE CONSTRUCTION SEQUENCE IS AS FOLLOWS (REFER TO FIGURE 2.2):

a. EXCAVATE AND STABILIZE ALL TEMPORARY SWALES, SIDE DITCHES, OR BERMS THAT WILL BE USED TO DIVERT RUNOFF AROUND THE FILL. CONSTRUCT SLOPE SILT FENCE ON LOW SIDE OF FILL AS SHOWN IN FIGURE 2.2, UNLESS OTHER METHODS SHOWN ON THE PLANS ADDRESS THIS AREA.
b. PLACE PHASE 1 EMBANKMENT, DRESS AND STABILIZE.
c. PLACE PHASE 2 EMBANKMENT, DRESS AND STABILIZE.

PLACE FINAL PHASE EMBANKMENT, DRESS AND STABILIZE. OVERSEED PREVIOUSLY SEEDED AREAS AS NECESSARY.

NOTE: ONCE THE PLACEMENT OF FILL HAS BEGUN THE OPERATION SHOULD BE CONTINUOUS FROM GRUBBING THROUGH THE COMPLETION OF GRADING PLACEMENT OF TOPSOIL (IF REQUIRED) AND PERMANENT SEED AND MULCH. ANY INTERRUPTIONS IN THE OPERATION OR COMPLETING THE OPERATION OUT OF THE SEEDING SEASON WILL NECESSITATE THE APPLICATION OF TEMPORARY STABILIZATION.

Chapter 2 Soil Stabilization

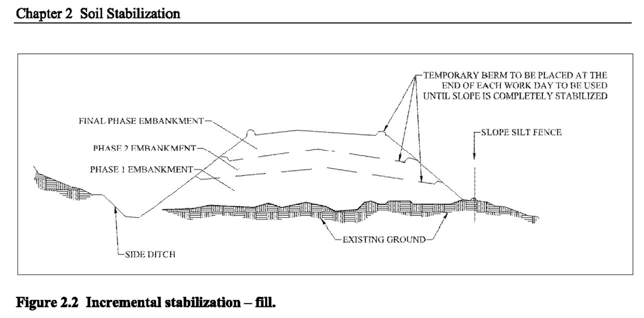

Figure 2.2 Incremental stabilization – fill.

VI. MAINTENANCE

GRASS MAINTENANCE

1. INSPECT ALL SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS, REPLACEMENTS, AND RESEEDINGS WITHIN THE PLANNING SEASON,
2. ONCE THE VEGETATION IS ESTABLISHED, THE SITE MUST HAVE 95% GROUND COVER TO BE CONSIDERED ADEQUATELY STABILIZED.
3. IF THE STAND PROVIDES BETWEEN 40% GROUND COVERAGE, REESTABLISH FOLLOWING ORIGINAL LIME, FERTILIZER, SEEDBED PREPARATION AND SEEDING RECOMMENDATION.
4. IF THE STAND PROVIDES BETWEEN 40% AND 94% GROUND COVERAGE, OVERSEEDING AND FERTILIZING USING HALF OF THE RATES ORIGINALLY APPLIED MAY BE NECESSARY
5. MAINTENANCE FERTILIZER RATES FOR PERMANENT SEEDINGS ARE SHOWN IN TABLE 2.9.

Table 2.9 Maintenance Fertilization for Permanent Seeding

Seeding Mixture	Type	Seeding Rate lb/ac	Seeding Rate lb/1,000 ft²	Time	Mowing
Tall fescue makes up 70% or more of cover.	10-10-10	500	11.5	Yearly or as needed.	Not closer than 3 inches, if occasional mowing is desired.
	30-10-10	400	9.2	Fall	
Birdsfoot trefoil.	0-20-0	400	9.2	Spring, the year following establishment, and every 4 to 5 years, after.	Mow no closer than 2 inches.
Fairly uniform stand of tall fescue or birdsfoot trefoil.	5-10-10	500	11.5	Fall, the year following establishment, and every 4 to 5 years, after.	Not required, no closer than 4 inches in the fall after seed has matured.
Weeping lovegrass fairly uniform plant distribution.	5-10-10	500	11.5	Spring, the year following establishment, and every 3 to 4 years, after.	Not required, not closer than 4 inches in fall after seed has matured.
Red & chewings fescue, Kentucky bluegrass, hard fescue mixtures.	20-10-10	250	5.8	September, 30 days later.	Mow no closer than 2 inches for red fescue and Kentucky bluegrass, 3 inches for fescue.
		100	2.3	December, May 20, June 30, if needed.	
Red & chewings fescue, Kentucky bluegrass, hard fescue mixtures.	20-10-10	250	5.8	September, 30 days later.	Mow no closer than 2 inches for red fescue and Kentucky bluegrass, 3 inches for fescue.
		100	2.3	December, May 20, June 30, if needed.	

SOD MAINTENANCE

1. IN THE ABSENCE OF ADEQUATE RAINFALL, PERFORM WATERING DAILY OR AS OFTEN AS NECESSARY DURING THE FIRST WEEK AND IN SUFFICIENT QUANTITIES TO MAINTAIN MOIST SOIL TO A DEPTH OF 4 INCHES. WATER DURING THE HEAT OF THE DAY TO PREVENT WILTING.
2. AFTER THE FIRST WEEK, SOD WATERING IS REQUIRED AS NECESSARY TO MAINTAIN ADEQUATE MOISTURE CONTENT.
3. DO NOT ATTEMPT THE FIRST MOWING OF SOD UNTIL THE SOD IS FIRMLY ROOTED. DO NOT REMOVE MORE THAN A THIRD OF THE GRASS LEAF BY THE INITIAL CUTTING OR SUBSEQUENT CUTTINGS. MAINTAIN GRASS HEIGHT BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.

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ENGINEERS ★ PLANNERS ★ LANDSCAPE ARCHITECTS ★ SURVEYORS ★ GEOMATICS
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MARET SCHOOL
PROPOSED ATHLETIC FIELDS
SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION
2	8-11-23	DOEE RESUB
1	6-6-23	DDOT/DOEE RESUB

**NOTE
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DISTRICT OF COLUMBIA ★ KYLE U. OLIVER ★ PE900770 ★ 10/3/2023 ★ CIVIL ★ PROFESSIONAL ENGINEER

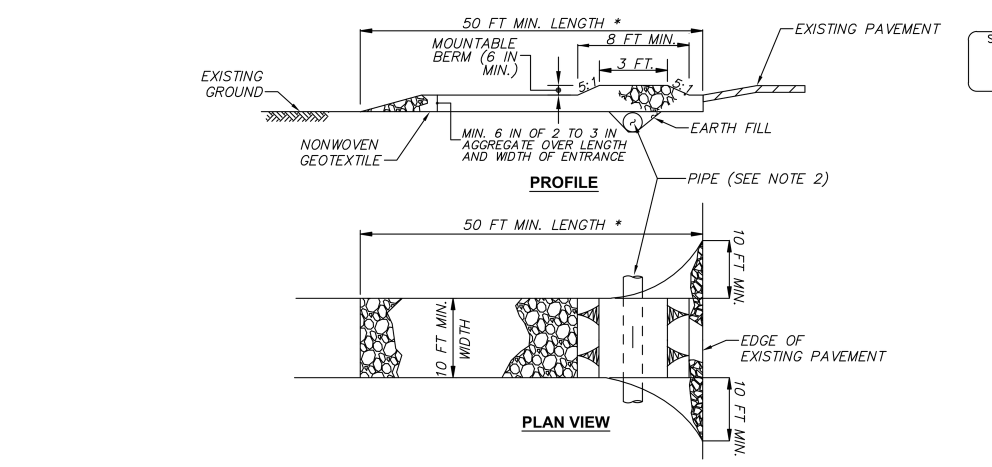
DATE: 23-FEB-2023
DES. KUO DWN. BJR
SCALE: AS SHOWN
PROJECT/FILE NO. VC0626D
SHEET NO. CIV0820

DEPARTMENT OF ENERGY & ENVIRONMENT

GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
Permit No. SH2400019 Date 04/09/24

These plans are conditionally approved as submitted or noted during plan review and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans. Changes require a revision permit with the revised plans. Trade Permits are required for trade work, e.g. Electrical or Plumbing

HPRB Review - Timothy Dennee - 04-09-2024
Zoning Review - Ernesto Warren - 04-09-2024
Structural Review - Tong Li - 04-09-2024
DOEE SE-SW Review - Saba Gharavi - 04-09-2024



CONSTRUCTION SPECIFICATIONS

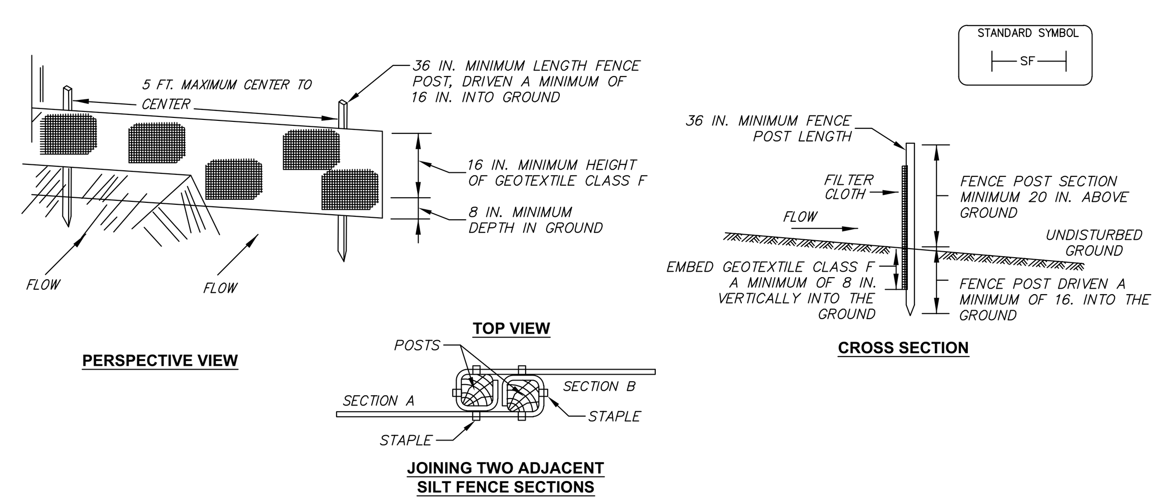
1. PLACE THE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE A MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE-FAMILY RESIDENCE LOT) AND A MINIMUM WIDTH OF 10 FEET. FLARE THE SCE AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE MAINTAINING POSITIVE DRAINAGE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. PROVIDE PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN THE SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

DATE APPR REVISED ISSUED: REFERENCE

STABILIZED CONSTRUCTION ENTRANCE

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
DWG. NO 201.1

1 CIV0830 CONSTRUCTION ENTRANCE
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

1. FENCE POSTS MUST BE A MINIMUM OF 36 IN. LONG DRIVEN 16 IN. MINIMUM INTO THE GROUND. WOOD POSTS MUST BE OF SOUND QUALITY HARDWOOD WITH 1-1/2 IN. MINIMUM WIDTH WHEN SQUARE CUT, OR 1-3/4 IN. MINIMUM DIAMETER WHEN ROUND. STEEL POSTS MUST BE STANDARD T OR U SECTION WEIGHING NOT LESS THAN 1.00 POUND PER LINEAR FOOT.
2. FASTEN GEOTEXTILE SECURELY TO EACH FENCE POST WITH WIRE TIES OR STAPLES AT TOP AND MID-SECTION. GEOTEXTILE MUST MEET THE FOLLOWING REQUIREMENTS (GEOTEXTILE CLASS F):

PROPERTY	VALUE	TEST METHOD
TENSILE STRENGTH	50 LBS/IN (MIN.)	ASTM D-4595
TENSILE MODULUS	20 LBS/IN (MIN.)	ASTM D-4595
FLOW RATE	0.3 GAL/FT² /MINUTE (MAX.)	ASTM D-5141
FILTERING EFFICIENCY	75% (MIN.)	ASTM D-5141

3. WHERE ENDS OF GEOTEXTILE FABRIC COME TOGETHER, OVERLAP, FOLD, AND STAPLE THEM TO PREVENT SEDIMENT BYPASS.
4. INSPECT SILT FENCE AFTER EACH RAINFALL EVENT, AT LEAST DAILY DURING SUSTAINED RAINFALL EVENTS, AND MAINTAIN WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHES 30% OF THE FABRIC HEIGHT.

DATE APPR REVISED ISSUED: REFERENCE

SILT FENCE-1

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
DWG. NO 301.1

SILT FENCE DESIGN CRITERIA:

TABLE 3.1: SILT FENCE SLOPE LENGTH AND FENCE LENGTH CONSTRAINTS		
SLOPE STEEPNESS	SLOPE LENGTH (MAXIMUM) (FEET)	SILT FENCE LENGTH (MAXIMUM) (FEET)
FLATTER THAN 50:1 (2%)	UNLIMITED	UNLIMITED
> 50:1 TO 10:1 (2% to 10%)	125	1,000
> 10:1 TO 5:1 (10% to 20%)	100	750
> 5:1 TO 3:1 (20% to 33%)	60	500
> 3:1 TO 2:1 (33% to 50%)	40	250
> 2:1 (> 50%)	20	125

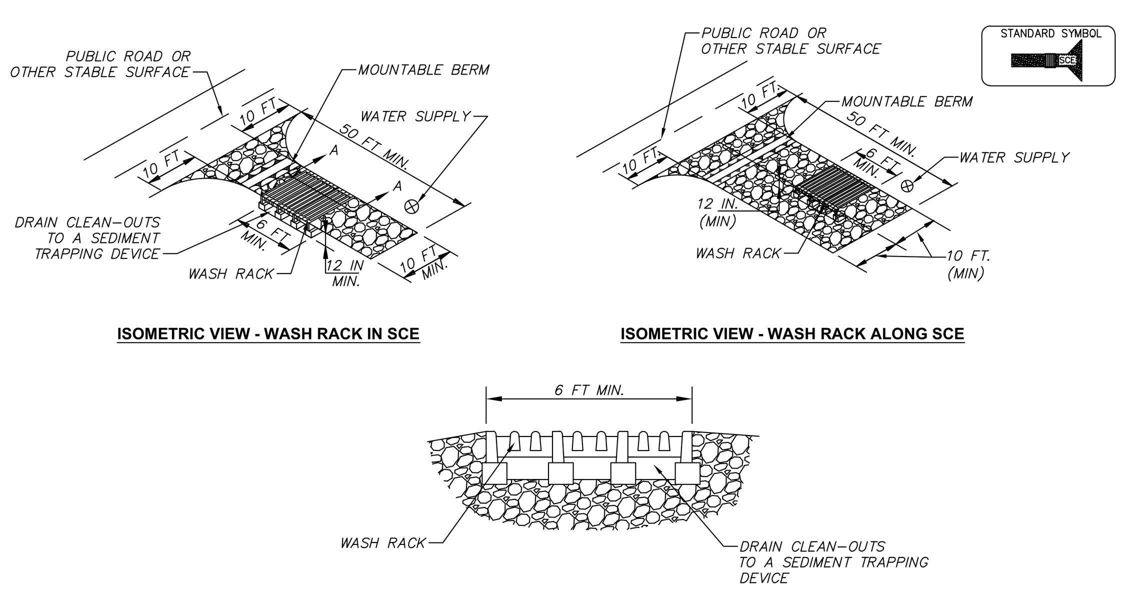
NOTE:
- IN AREAS OF LESS THAN 2% SLOPE AND SANDY SOILS (USDA GENERAL CLASSIFICATION SYSTEM, SOIL CLASS A) MAXIMUM SLOPE LENGTH AND SILT FENCE LENGTH WILL BE UNLIMITED. IN THESE AREAS A SILT FENCE MAY BE THE ONLY PERIMETER CONTROL REQUIRED.
- TO AVOID CIRCUMVENTION, EXTEND THE ENDS OF THE SILT FENCE UPSLOPE TO PREVENT WATER AND SEDIMENT FROM FLOWING AROUND THE ENDS OF THE FENCE.

DATE APPR REVISED ISSUED: REFERENCE

SILT FENCE-2

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
DWG. NO 301.2

3 CIV0830 SILT FENCE
NOT TO SCALE



CONSTRUCTION SPECIFICATIONS

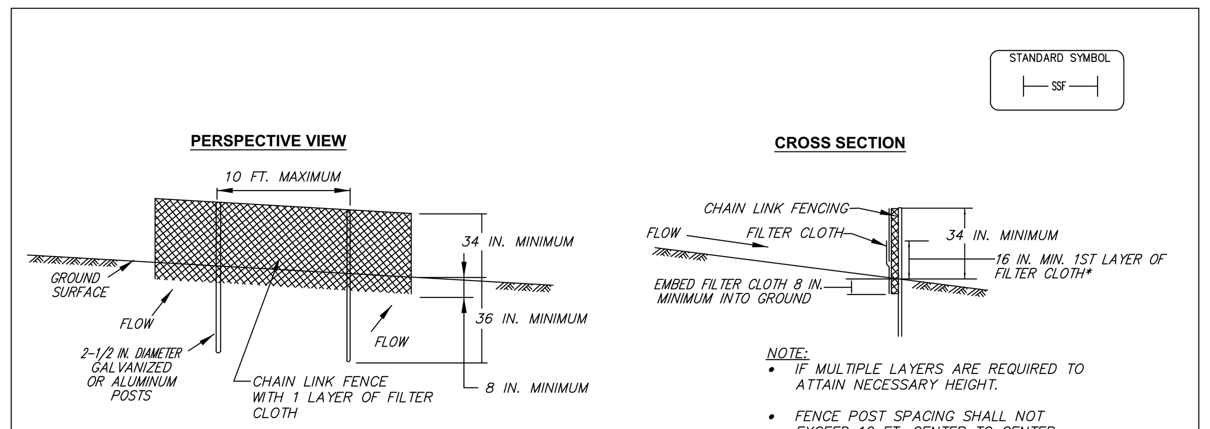
1. USE A WASH RACK DESIGNED AND CONSTRUCTED/MANUFACTURED FOR THE ANTICIPATED TRAFFIC LOADS. CONCRETE, STEEL, OR OTHER MATERIALS ARE ACCEPTABLE. PRE-FABRICATED UNITS SUCH AS CATTLE GUARDS ARE ACCEPTABLE. USE MINIMUM DIMENSION OF 6 FEET x 10 FEET. ORIENT DIRECTION OF RIBS AS SHOWN ON THE DETAIL. APPROACHES TO THE WASH RACK SHOULD BE A MINIMUM OF 25 FEET ON BOTH SIDES.
2. INSTALL PRIOR TO, ALONG SIDE OF, OR AS PART OF THE SCE.
3. DIRECT WASH WATER TO AN APPROVED SEDIMENT TRAPPING DEVICE.
4. KEEP AREA UNDER WASH RACK FREE OF ACCUMULATED SEDIMENT. IF DAMAGED, REPAIR OR REPLACE WASH RACK.

DATE APPR REVISED ISSUED: REFERENCE

STABILIZED CONSTRUCTION ENTRANCE WITH WASH RACK

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
DWG. NO 202.1

2 CIV0830 CONSTRUCTION ENTRANCE WITH WASH RACK
NOT TO SCALE



NOTE:
- IF MULTIPLE LAYERS ARE REQUIRED TO ATTAIN NECESSARY HEIGHT.
- FENCE POST SPACING SHALL NOT EXCEED 10 FT. CENTER TO CENTER.

CONSTRUCTION SPECIFICATIONS

1. FENCING MUST BE AT LEAST 42 INCHES IN HEIGHT AND CONSTRUCTED IN ACCORDANCE WITH THE LATEST DISTRICT DEPARTMENT OF TRANSPORTATION (DDOT) DETAILS FOR CHAIN LINK FENCING. THE DDOT SPECIFICATION FOR A 6-FOOT FENCE MUST BE USED, SUBSTITUTING MINIMUM 42-INCH FABRIC AND 6-FOOT LENGTH POSTS. POSTS DO NOT NEED TO BE SET IN CONCRETE.
2. SECURELY FASTEN CHAIN LINK FENCE TO THE FENCE POSTS WITH WIRE TIES. THE LOWER TENSION WIRE, BRACE AND TRUSS RODS, DRIVE ANCHORS AND POST CAPS ARE NOT REQUIRED EXCEPT ON THE ENDS OF THE FENCE.
3. SECURELY FASTEN GEOTEXTILE TO THE CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID-SECTION.
4. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES INTO THE GROUND.
5. WHEN TWO SECTIONS OF GEOTEXTILE FABRIC ADJOIN EACH OTHER, FOLD AND OVERLAP BY 6 INCHES.
6. GEOTEXTILE MUST MEET THE FOLLOWING REQUIREMENTS FOR GEOTEXTILE CLASS F (FROM TABLE 3.2-SEE BELOW):

PROPERTY	VALUE	TEST METHOD
TENSILE STRENGTH	50 LBS/IN (MIN.)	ASTM D-4595
TENSILE MODULUS	20 LBS/IN (MIN.)	ASTM D-4595
FLOW RATE	0.3 GAL/FT² /MINUTE (MAX.)	ASTM D-5141
FILTERING EFFICIENCY	75% (MIN.)	ASTM D-5141

7. INSPECT SUPER SILT FENCE AFTER EACH RAINFALL EVENT, AT LEAST DAILY DURING SUSTAINED RAINFALL EVENTS, AND MAINTAIN WHEN BULGES OCCUR OR WHEN SEDIMENT ACCUMULATION REACHES 30% OF THE FABRIC HEIGHT.

DATE APPR REVISED ISSUED: REFERENCE

SUPER SILT FENCE-1

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
DWG. NO 302.1

SUPER SILT FENCE DESIGN CRITERIA:

TABLE 3.3: SUPER SILT FENCE SLOPE LENGTH AND FENCE LENGTH CONSTRAINTS			
SLOPE	SLOPE STEEPNESS	SLOPE LENGTH (MAXIMUM) (FEET)	SUPER SILT FENCE LENGTH (MAXIMUM) (FEET)
0 – 10%	0 – 10:1	Unlimited	Unlimited
10 – 20%	10:1 – 5:1	200	1,500
20 – 33%	5:1 – 3:1	150	1,00
33 – 50%	3:1 – 2:1	100	500
> 50%	> 2:1	50	250

NOTE:
- TO AVOID CIRCUMVENTION, EXTEND THE ENDS OF THE SILT FENCE 5 HORIZONTAL FEET UPSLOPE AT 45-DEGREE ANGLES RELATIVE TO THE MAIN FENCE ALIGNMENT TO PREVENT SEDIMENT ACCUMULATION.

DATE APPR REVISED ISSUED: REFERENCE

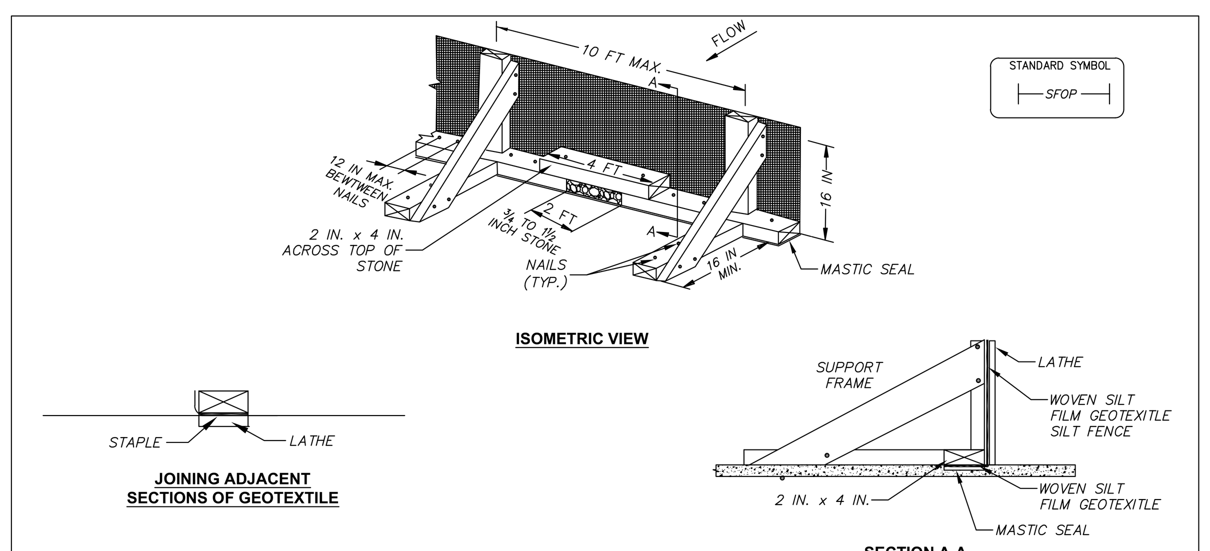
SUPER SILT FENCE-2

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
DWG. NO 302.2

4 CIV0830 SUPER SILT FENCE
NOT TO SCALE

CONSTRUCTION ENTRANCE SPECIFICATIONS

1. LOCATED AT EVERY POINT WHERE CONSTRUCTION TRAFFIC ENTERS OR LEAVES A CONSTRUCTION SITE & SHOULD NOT BE USED ON EXISTING PAVEMENT
2. CRUSHED AGGREGATE (2" TO 3"), OR EQUIVALENT SHALL BE PLACED AT LEAST 6" DEEP OVER THE ENTIRE ENTRANCE. APPROACHES TO THE WASH RACK SHOULD BE LINED WITH CRUSHED AGGREGATE (2"-3") 4 ROCK A MINIMUM OF 25' ON BOTH SIDES.
3. GEOTEXTILE CLASS SE SHALL BE PLACED OVER THE EXISTING GROUND PRIOR TO STONE.
4. STANDARD DIMENSIONS SHOWN ON STANDARD CONSTRUCTION DETAIL 2. LENGTH AS REQUIRED, BUT NOT LESS THAN 50' (EXCEPT ON RESIDENCE LOT WERE A 30' MIN LENGTH WOULD APPLY.) ENTRANCE SHOULD FLARE AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
5. A METAL WASH RACK IS AN ACCEPTABLE ALTERNATIVE TO REINFORCED CONCRETE.
6. THE WASH RACK SHOULD DISCHARGE TO A SEDIMENT REMOVAL FACILITY, SUCH AS A VEGETATED FILTER STRIP OR INTO A CHANNEL LEADING TO A SEDIMENT REMOVAL DEVICE, (IE. SEDIMENT TRAP OR TANK.)
7. IF ENTRANCE IS NOT AT A HIGH SPOT, ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED UNDER THE ENTRANCE TO MAINTAIN POSITIVE DRAINAGE. THE PIPE SHALL BE A MINIMUM OF 6" IN DIAMETER AND SHALL BE PROTECTED WITH A MOUNTABLE BERM.
8. WHERE THE STABILIZED CONSTRUCTION ENTRANCE CREATES AN OPENING IN PERIMETER SILT FENCE, THE SILT FENCE SHALL BE SECURELY TIED INTO THE MOUNTABLE BERM AT ITS CENTERLINE TO PROVIDE A CONTINUOUS BARRIER.
9. STABILIZED CONSTRUCTION ENTRANCES WITH WASH RACKS SHOULD BE MAINTAINED TO THE SPECIFIED DIMENSIONS BY ADDING ROCK WHEN NECESSARY AT THE END OF EACH WORKDAY. A STOCKPILE OF ROCK MATERIAL SHALL BE KEPT ONSITE FOR THIS PURPOSE.
10. SEDIMENT DEPOSITED ON PAVED ROADWAYS SHALL BE REMOVED AND RETURNED TO THE CONSTRUCTION SITE. NOTE: WASHING THE ROADWAY OR SWEEPING THE DEPOSITS INTO ROADWAY DITCHES, SEWERS, CULVERTS, OR OTHER DRAINAGE WAYS IS NOT ACCEPTABLE UNLESS A SEDIMENT FILTER BED IS INSTALLED IN THE DITCH OR CATCH BASIN.



CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH BY 4 INCH LUMBER.
2. USE WOVEN SLIT FILM GEOTEXTILE, AS SPECIFIED IN APPENDIX A.
3. SPACE UPRIGHT SUPPORTS NO MORE THAN 10 FEET APART.
4. PROVIDE A 2-FOOT OPENING BETWEEN EVERY SET OF SUPPORTS AND PLACE STONE IN THE OPENING OVER GEOTEXTILE.
5. KEEP SILT FENCE TAUT AND SECURELY STAPLE TO THE UPSLOPE SIDE OF UPRIGHT SUPPORTS. EXTEND GEOTEXTILE UNDER 2x4.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN – OVERLAP, FOLD, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL. ATTACH LATHE.
7. PROVIDE A MASTIC SEAL BETWEEN PAVEMENT, GEOTEXTILE, AND 2x4 TO PREVENT SEDIMENT-LADEN WATER FROM ESCAPING BENEATH SILT FENCE INSTALLATION.
8. SECURE BOARDS TO PAVEMENT WITH 40D 5-INCH MINIMUM LENGTH NAILS.
9. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. MAINTAIN WATER TIGHT SEAL ALONG BOTTOM. REPLACE STONE IF DISPLACED.

DATE APPR REVISED ISSUED: REFERENCE

SILT FENCE ON PAVEMENT

DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
DWG. NO 310.1

5 CIV0830 SILT FENCE IN PAVEMENT
NOT TO SCALE

VIKA CAPITOL
ENGINEERS ★ PLANNERS ★ LANDSCAPE ARCHITECTS ★ SURVEYORS ★ GEOMATICS
PROJECT COORDINATOR: BRIAN RUHL
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VIKA CAPITOL, LLC ★ 4910 MASSACHUSETTS AVENUE, NW SUITE 16
WASHINGTON, DC 20016 ★ PHONE: 202.244.4140
W W W . V I K A C A P I T O L . C O M

MARET SCHOOL PROPOSED ATHLETIC FIELDS
SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION
2	8-11-23	DOEE RESUB
1	6-6-23	DDOT/DOEE RESUB

DATE: 23-FEB-2023
DES. KUO DWN. BJR
SCALE: AS SHOWN
PROJECT/FILE NO. VC0626D
SHEET NO. CIV0830

**NOTE
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DISTRICT OF COLUMBIA ★ KYLE U. OLIVER PE900770 CIVIL 10/03/2023 ★ PROFESSIONAL ENGINEER

GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
Permit No. SH2400019 Date 04/09/24

These plans are conditionally approved as submitted or noted during plan review and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans. Changes require a revision permit with the revised plans. Trade Permits are required for trade work, e.g. Electrical or Plumbing

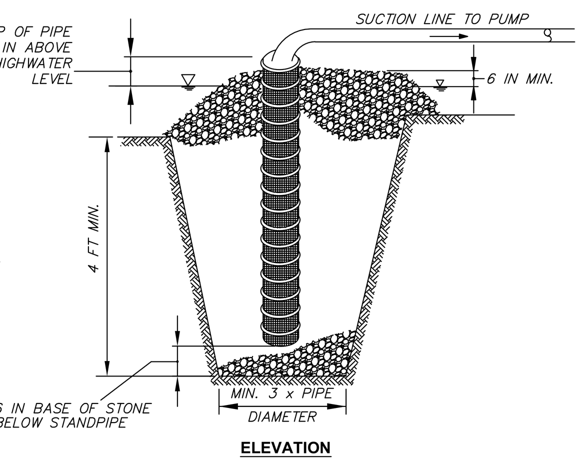
HPRB Review - Timothy Dennee - 04-09-2024
Zoning Review - Ernesto Warren - 04-09-2024
Structural Review - Tong Li - 04-09-2024
DOEE SE-SW Review - Saba Gharavi - 04-09-2024

1 SUMP PIT DETAIL (CIV0840) — NOT TO SCALE

STANDARD SYMBOL: SP

NOTE:

- ANY DISCHARGE TO COMBINED SEWERS REQUIRES A TEMPORARY DISCHARGE AUTHORIZATION PERMIT FROM DC WATER. ANY DISCHARGE TO THE DISTRICT MS4 OR TO A SURFACE WATER BODY FROM AN ELIGIBLE PROJECT, AS REGULATED BY THE CONSTRUCTION GENERAL PERMIT (CGP), REQUIRES A NOTICE OF INTENT (NOI) FROM EPA. ONCE DETERMINED THAT THE PROJECT HAS STORMWATER RUNOFF THAT MUST BE DISCHARGED ON A TEMPORARY BASIS, CONTACT DC WATER OR EPA FOR PERMIT INFORMATION.



ELEVATION

CONSTRUCTION SPECIFICATIONS

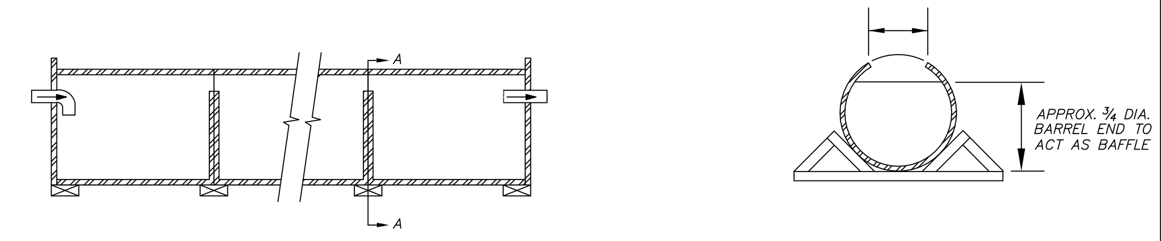
1. WRAP THE PIPE WITH ¼ INCH GALVANIZED HARDWARE CLOTH AND THEN GEOTEXTILE OVER THE HARDWARE CLOTH.
2. EXCAVATE THE PIT TO 3 TIMES THE PIPE DIAMETER AND 4 FEET IN DEPTH. PLACE CLEAN ¾ TO 1–½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
3. SET THE TOP OF PIPE A MINIMUM OF 12 INCHES ABOVE THE ANTICIPATED WATER SURFACE ELEVATION.
4. BACKFILL PIT AROUND THE OUTER PIPE WITH ¾ TO 1–½ INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
5. PLACE THE SUCTION HOSE FROM THE PUMP INSIDE THE PIPE TO BEGIN DEWATERING. PLACE THE DISCHARGE HOSE IN A STABILIZED AREA DOWNSLOPE OF UNSTABILIZED AREAS TO PREVENT EROSION. MEADOW OR WOODED AREAS ARE PREFERRED DISCHARGE LOCATIONS BUT STORM DRAINS AND PAVED AREAS ARE ACCEPTABLE.

DATE	APPR			
REVISED			SUMP PIT	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 702.1

2 PORTABLE SEDIMENT TANK 1 DETAIL (CIV0840) — NOT TO SCALE

SOURCE: USDA–NRCS

STANDARD SYMBOL: PST



ELEVATION — SECTION A-A

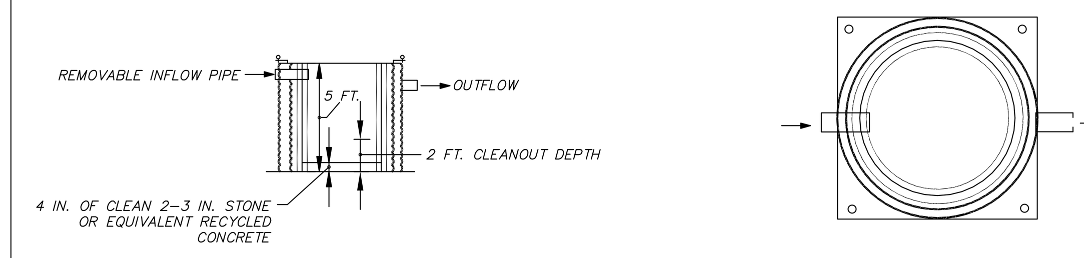
CONSTRUCTION SPECIFICATIONS

1. CONSTRUCT THE STRUCTURE WITH STEEL DRUMS, STURDY WOOD, OR OTHER MATERIAL SUITABLE FOR HANDLING THE PRESSURE EXERTED BY THE VOLUME OF WATER.
2. SEDIMENT TANKS HAVE A MINIMUM DEPTH OF 2 FEET.
3. ONCE THE WATER LEVEL NEARS THE TOP OF THE TANK, SHUT OFF THE PUMP WHILE THE TANK DRAINS AND ADDITIONAL CAPACITY IS MADE AVAILABLE.
4. DESIGN THE TANK TO ALLOW FOR EMERGENCY FLOW OVER TOP OF THE TANK.

DATE	APPR			
REVISED			PORTABLE SEDIMENT TANK - 1 (HORIZONTAL)	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 703.1

3 PORTABLE SEDIMENT TANK 2 DETAIL (CIV0840) — NOT TO SCALE

STANDARD SYMBOL: PST



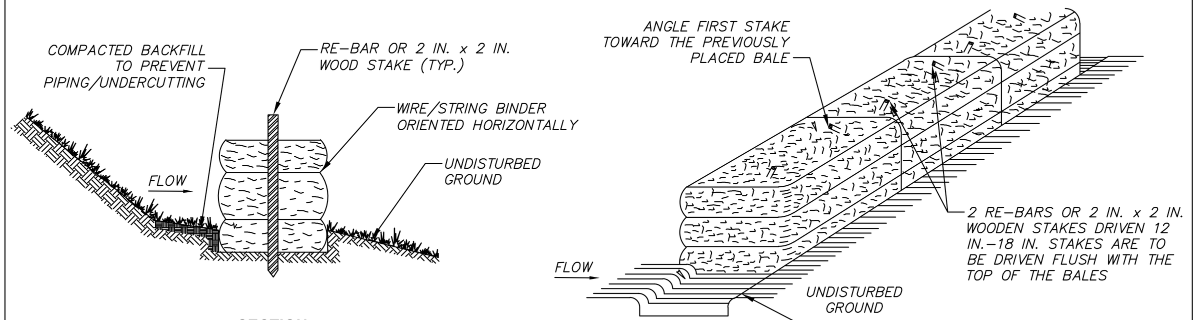
ELEVATION — PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER FOR THE INNER PIPE. LINE PIPE WITH NONWOVEN GEOTEXTILE SANDWICHED BETWEEN, AND ATTACHED TO, ¼ INCH HARDWARE CLOTH.
2. OVERLAP GEOTEXTILE 8 INCHES MINIMUM AT VERTICAL SEAM AND AT THE BOTTOM PLATE.
3. ANCHOR GEOTEXTILE AT BOTTOM OF TANK WITH 4 INCHES OF 2 TO 3 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE.
4. USE 72 INCH CORRUGATED METAL OR PLASTIC OUTER PIPE WITH PERMANENT OUTFLOW PIPE WITH INVERT LOWER THAN INFLOW PIPE.
5. INFLOW PIPE MUST DISCHARGE INTO INNER PIPE AND BE REMOVABLE.
6. PLACE TANK ON LEVEL SURFACE AND DISCHARGE TO A STABLE AREA AT A NON–EROSIVE RATE.

DATE	APPR			
REVISED			PORTABLE SEDIMENT TANK - 2 (VERTICAL)	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 703.2

4 STRAW BALE DIKE (CIV0840) — NOT TO SCALE



SECTION — PERSPECTIVE VIEW

CONSTRUCTION SPECIFICATIONS

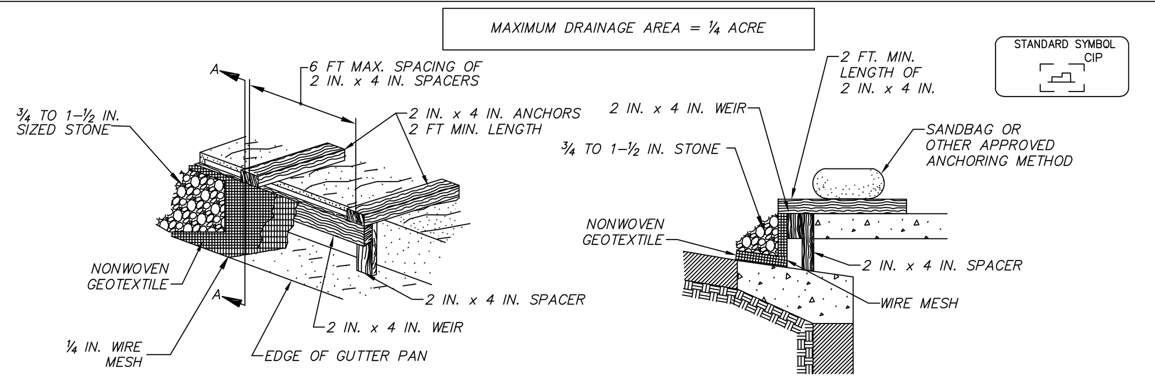
1. PLACE BALES IN A ROW ON THE CONTOUR WITH THE ENDS OF EACH BALE TIGHTLY ABUTTING THE ADJACENT BALES.
2. ENTRENCH EACH BALE 4 INCHES MINIMUM INTO THE SOIL AND PLACE SO THE BINDINGS ARE HORIZONTAL. SOME OF THE EXCAVATED SOIL MUST BE BUILT UP AND COMPACTED AT THE UPSTREAM EDGE OF THE DIKE TO PREVENT PIPING AND UNDERCUTTING.
3. SECURELY ANCHOR BALES IN PLACE BY EITHER TWO STAKES OR RE–BARS DRIVEN THROUGH THE BALE 12 TO 18 INCHES INTO THE GROUND. DRIVE THE FIRST STAKE IN EACH BALE TOWARD THE PREVIOUSLY LAID BALE AT AN ANGLE TO FORCE THE BALES TOGETHER. DRIVE THE STAKES FLUSH WITH THE TOP OF THE BALE.
4. IMMEDIATELY INSPECT STRAW BALE BARRIERS AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL EVENTS. RE–DRIVE THE ANCHORING STAKES IF THEY BECOME EXPOSED. REMOVE SEDIMENT WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
5. REMOVE ALL BALES WHEN THE SITE HAS BEEN STABILIZED. GRADE FLUSH AND STABILIZE THE TRENCH WHERE THE BALES WERE LOCATED.

DATE	APPR			
REVISED			STRAW BALE DIKE	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 305.1

5 CURB INLET PROTECTION (CIV0840) — NOT TO SCALE

MAXIMUM DRAINAGE AREA = ¼ ACRE

STANDARD SYMBOL: CIP



ISOMETRIC — SECTION A-A

CONSTRUCTION SPECIFICATIONS

1. ATTACH A CONTINUOUS PIECE OF 1/2 INCH x 1/2 INCH WIRE MESH, (30 INCHES MINIMUM WIDTH BY THROAT LENGTH, PLUS 4 FEET) TO THE 2–INCH x 4–INCH WEIR (MEASURING THROAT LENGTH PLUS 2 FEET) AS SHOWN ON THE STANDARD DRAWING.
2. PLACE A CONTINUOUS PIECE OF GEOTEXTILE CLASS E OF THE SAME DIMENSIONS AS THE WIRE MESH OVER THE WIRE MESH AND SECURELY ATTACH TO THE 2–INCH x 4–INCH WEIR.
3. SECURELY NAIL THE 2–INCH x 4–INCH WEIR TO A 9–INCH LONG VERTICAL SPACER TO BE LOCATED BETWEEN THE WEIR AND THE INLET FACE (MAXIMUM 4 FEET APART).
4. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL (MINIMUM 2–FOOT LENGTHS OF 2–INCHES x 4–INCHES TO THE TOP OF THE WEIR AT SPACER LOCATIONS). EXTEND THESE 2–INCH x 4–INCH ANCHORS ACROSS THE INLET TOP AND BE HELD IN PLACE BY SANDBAGS OR ALTERNATE WEIGHT.
5. PLACE THE ASSEMBLY SO THAT THE END SPACERS ARE 1 FOOT BEYOND BOTH ENDS OF THE THROAT OPENING.
6. FORM THE 1/2–INCH x 1/2–INCH WIRE MESH AND THE GEOTEXTILE FABRIC TO THE CONCRETE GUTTER AND AGAINST THE FACE OF THE CURB ON BOTH SIDES OF THE INLET. PLACE CLEAN 3/4 TO 1–1/2 INCH STONE OVER THE WIRE MESH AND GEOTEXTILE IN SUCH A MANNER AS TO PREVENT WATER FROM ENTERING THE INLET UNDER OR AROUND THE GEOTEXTILE.
7. THIS TYPE OF PROTECTION MUST BE INSPECTED FREQUENTLY AND THE GEOTEXTILE FABRIC AND STONE REPLACED WHEN CLOGGED WITH SEDIMENT.
8. ASSURE THAT STORM FLOWS DO NOT BYPASS THE INLET BY INSTALLING A TEMPORARY EARTH OR ASPHALT DIKE TO DIRECT THE FLOW TO THE INLET.
9. IF THERE ARE ANY SIGNS OF STREET FLOODING OR WATER PONDING, THIS STRUCTURE MUST BE CLEANED OR REPLACED, OR REDESIGNED WITH A VIABLE ALTERNATIVE SUCH AS 3.3 FILTER SOCK.

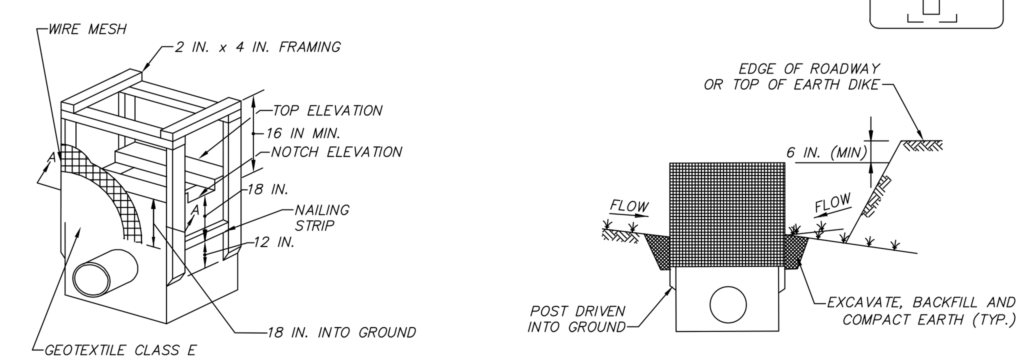
*NOTE: FILTER SOCK IS AN ALTERNATIVE WHICH IS EASIER TO INSTALL AND MAINTAIN THAN THIS STANDARD DESIGN.

DATE	APPR			
REVISED			CURB INLET PROTECTION STORM DRAIN INLET PROTECTION	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 307.3

6 STANDARD INLET PROTECTION (CIV0840) — NOT TO SCALE

MAXIMUM DRAINAGE AREA = ¼ ACRE

STANDARD SYMBOL: SIP



ISOMETRIC — SECTION A-A

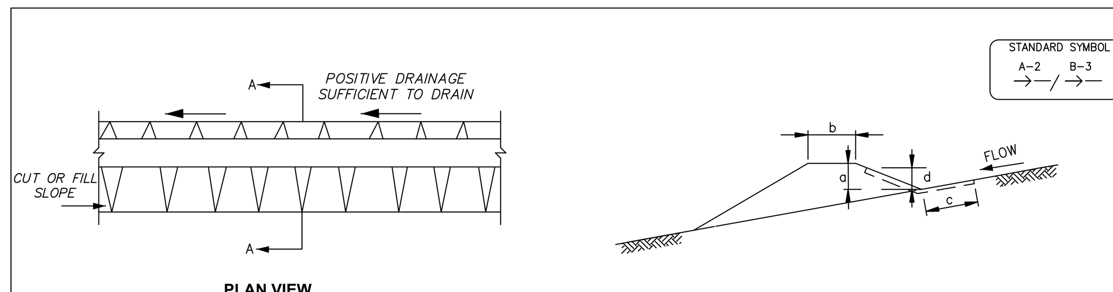
CONSTRUCTION SPECIFICATIONS

1. EXCAVATE COMPLETELY AROUND THE INLET TO A DEPTH OF 18 INCHES BELOW THE NOTCH ELEVATION.
2. DRIVE 2–INCH x 4–INCH CONSTRUCTION GRADE LUMBER POSTS 1 FOOT INTO THE GROUND AT EACH CORNER OF THE INLET. PLACE NAIL STRIPS BETWEEN THE POSTS ON THE ENDS OF THE INLET. ASSEMBLE THE TOP PORTION OF THE 2–INCH x 4–INCH FRAME USING THE OVERLAP JOINT SHOWN ON DETAIL 307.1. THE TOP OF THE FRAME (WEIR) MUST BE 6 INCHES BELOW ADJACENT ROADWAYS WHERE FLOODING AND SAFETY ISSUES MAY ARISE.
3. STRETCH 1/2–INCH x 1/2–INCH WIRE MESH TIGHTLY AROUND THE FRAME AND FASTEN SECURELY. THE ENDS MUST MEET AND OVERLAP AT A POST.
4. STRETCH THE GEOTEXTILE CLASS E TIGHTLY OVER THE WIRE MESH WITH THE GEOTEXTILE EXTENDING FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. FASTEN THE GEOTEXTILE FIRMLY TO THE FRAME. THE ENDS OF THE GEOTEXTILE MUST MEET AT A POST, BE OVERLAPPED AND FOLDED, THEN FASTENED DOWN.
5. BACKFILL AROUND THE INLET IN COMPACTED 6–INCH LAYERS UNTIL THE LAYER OF EARTH IS LEVEL WITH THE NOTCH ELEVATION ON THE ENDS AND TOP ELEVATION ON THE SIDES.
6. IF THE INLET IS NOT IN A SUMP, CONSTRUCT A COMPACTED EARTH DIKE ACROSS THE DITCH LINE DIRECTLY BELOW IT. THE TOP OF THE EARTH DIKE SHOULD BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME.
7. THE STRUCTURE MUST BE INSPECTED PERIODICALLY AND AFTER EACH RAIN AND THE GEOTEXTILE REPLACED WHEN IT BECOMES CLOGGED.

DATE	APPR			
REVISED			STANDARD INLET PROTECTION STORM DRAIN INLET PROTECTION	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 307.1

7 EARTH DIKE (CIV0840) — NOT TO SCALE

STANDARD SYMBOL: A–2 / B–3



PLAN VIEW — CONTINUOUS GRADE 0.5% MIN. TO 10% MAX. SLOPE — SECTION A-A

FLOW CHANNEL STABILIZATION LINING OPTIONS

GRADE 0.5% MIN. 10% MAX

1. SEED AND COVER WITH STRAW MULCH.
2. SEED AND COVER WITH EROSION CONTROL MATTING, OR LINE WITH SOD.
3. 4 TO 7–INCH STONE OR RECYCLED CONCRETE EQUIVALENT PRESSED INTO SOIL USING CONSTRUCTION EQUIPMENT IN A MINIMUM 7–INCH LAYER.

DIKE TYPE

	A	B
a – DIKE HEIGHT	18 IN MIN.	30 IN MIN.
b – DIKE WIDTH	24 IN MIN.	36 IN MIN.
c – FLOW WIDTH	4 FT MIN.	6 FT MIN.
d – FLOW DEPTH	12 IN MIN.	24 IN MIN.

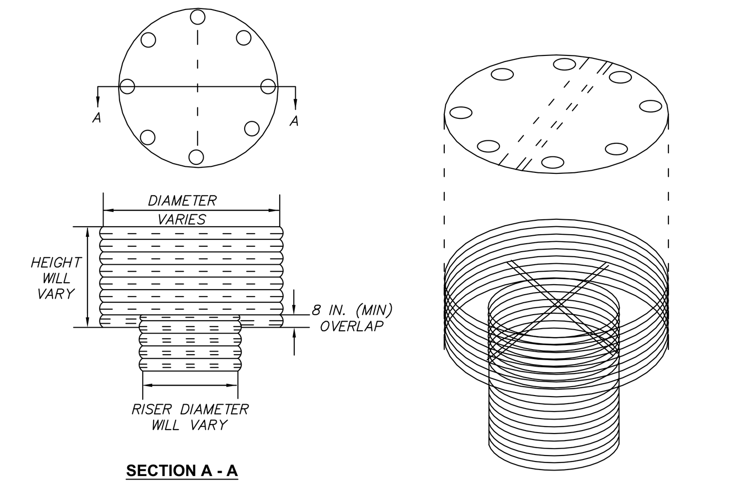
CONSTRUCTION SPECIFICATIONS

1. ALL TEMPORARY EARTH DIKES MUST HAVE UNINTERRUPTED POSITIVE GRADE TO AN OUTLET. EARTH DIKES HAVING LONGITUDINAL SLOPES FLATTER THAN 1% SHOULD HAVE SPOT ELEVATIONS ALONG THE FLOW LINE.
2. DIRECT DIVERTED RUNOFF FROM DISTURBED AREAS TO A SEDIMENT TRAPPING DEVICE.
3. OUTLET DIVERTED RUNOFF FROM UNDISTURBED AREAS DIRECTLY ONTO AN UNDISTURBED, STABILIZED AREA AT A NON–EROSIVE VELOCITY (≤ 4 FEET PER SECOND FOR WELL–ESTABLISED TURFGRASS).
4. REMOVE AND DISPOSE OF ALL TREES, BRUSH, STUMPS, OBSTRUCTIONS, AND OTHER OBJECTIONABLE MATERIAL SO AS NOT TO INTERFERE WITH THE PROPER FUNCTIONING OF THE EARTH DIKE BERM AND FLOW CHANNEL.
5. EXCAVATE OR SHAPE THE DIKE TO LINE, GRADE, AND CROSS SECTION AS REQUIRED TO MEET THE CRITERIA SPECIFIED HEREIN AND BE FREE OF BANK PROJECTIONS OR OTHER IRREGULARITIES WHICH WILL IMPEDE NORMAL FLOW.
6. COMPACT THE FILL BY EARTH MOVING EQUIPMENT IN MAXIMUM 12–INCH LIFTS.
7. PLACE ALL EARTH REMOVED AND NOT NEEDED FOR CONSTRUCTION SO THAT IT WILL NOT INTERFERE WITH THE FUNCTIONING OF THE EARTH DIKE BERM AND FLOW CHANNEL.
8. STABILIZE FLOW CHANNEL AS REQUIRED BY DESIGN SELECTION USING TABLE 4.3 OR TABLE 4.4. STONE LINING MUST HAVE GEOTEXTILE UNDERLAYMENT OF CLASS SD TYPE I NON–WOVEN OR PE TYPE I NON–WOVEN FABRIC.
9. PROVIDE INSPECTION AND MAINTENANCE PERIODICALLY, AFTER EACH RAIN EVENT, AND DAILY DURING A PROLONGED RAIN EVENT.

DATE	APPR			
REVISED			EARTH DIKE - 1	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 403.1

8 TRASH RACK/ANTI–VORTEX DEVICE (CIV0840) — NOT TO SCALE

STANDARD SYMBOL: TR

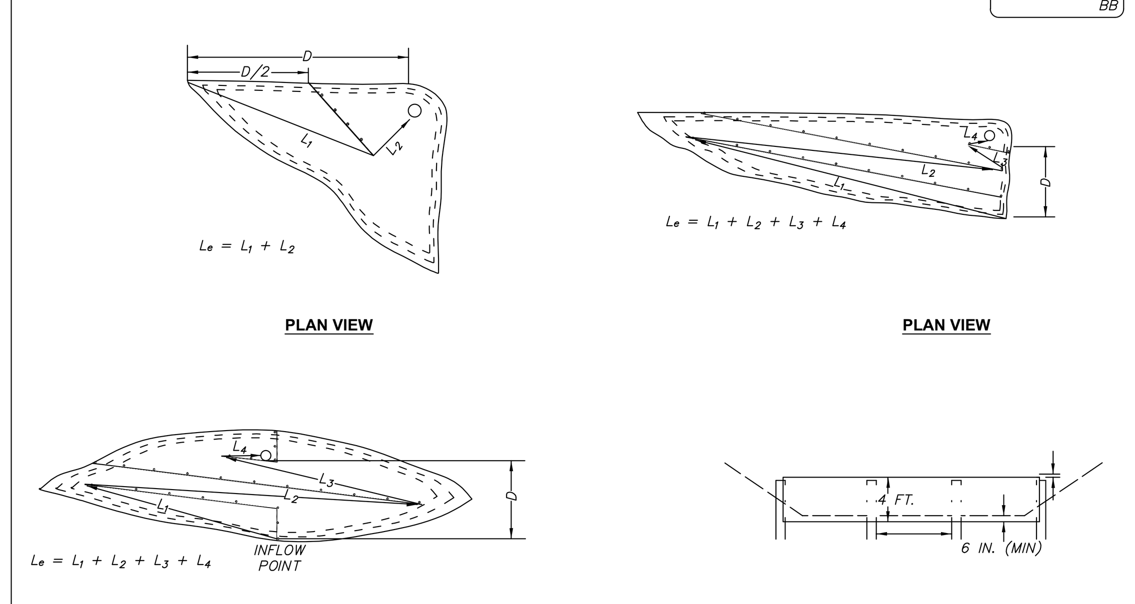


SECTION A - A — ISOMETRIC VIEW

DATE	APPR			
REVISED			CONCENTRIC TRASH RACK AND ANTI-VORTEX DEVICE SEDIMENT BASIN	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 602.3

9 BAFFLE BOARDS (CIV0840) — NOT TO SCALE

STANDARD SYMBOL: BB



D = DISTANCE BETWEEN INFLOW AND OUTFLOW

A = AREA OF PERMANENT POOL

W_e = EFFECTIVE WIDTH

L_e = TOTAL DISTANCE FROM THE INFLOW POINT AROUND THE BAFFLES TO THE RISER.

FORMULA: $W_e = (A/2)^{1/2}$, $L_e \geq W_e \times 2$

DATE	APPR			
REVISED			BAFFLE BOARDS SEDIMENT BASIN	DISTRICT OF COLUMBIA DEPARTMENT OF ENERGY & ENVIRONMENT
ISSUED:		REFERENCE		DWG. NO 602.1

VIKA CAPITOL — ENGINEERS ★ PLANNERS ★ LANDSCAPE ARCHITECTS ★ SURVEYORS ★ GEOMATICS

PROJECT COORDINATOR: BRIAN RUHL
ruhl@vikacapitol.com
VIKA CAPITOL, LLC ★ 4910 MASSACHUSETTS AVENUE, NW SUITE 16
WASHINGTON, DC 20016 ★ PHONE: 202.244.4140
WWW.VIKACAPITOL.COM

MARET SCHOOL PROPOSED ATHLETIC FIELDS

SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

**NOTE
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DISTRICT OF COLUMBIA — KYLE U. OLIVER — PE900770 — CIVIL — PROFESSIONAL ENGINEER — 10/03/2023

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION
2	8–11–23	DOEE RESUB
1	6–6–23	DDOT/DOEE RESUB

DATE: 23–FEB–2023

DES. KUO — DWN. BJR

SCALE: AS SHOWN

PROJECT/FILE NO. VC0626D

SHEET NO. CIV0840

DEPARTMENT OF ENERGY & ENVIRONMENT

TREE PROTECTION NOTES DURING CONSTRUCTION

- IF CONFLICT WITH EX TREES NOTED FOR PRESERVATION ARISES, PERMIT HOLDER MUST SUSPEND ALL WORK THAT CONTRIBUTES TO CONFLICT AND IMMEDIATELY CONTACT UFA WARD ARBORIST TO RECEIVE CLEARANCE TO CONTINUE THE CONFLICTING WORK.
- STREET TREES NOTED FOR PRESERVATION: ONLY INSTALL TRENCHLESS SILT/SUPER SILT FENCE METHODS WITHIN THE ROOT ZONE OF A STREET TREE; TRENCHLESS METHODS SUCH AS FILTER LOGS OR AN APPROVED EQUIVALENT SHALL BE USED. (NOTE: THE ROOT ZONE IS MEASURED AT 4.5' ABOVE GRADE FROM THE NEAR SIDE OF THE TRUNK TO THE DISTANCE THAT EQUALS THE TREE DIAMETER X 1.5 FT. OR TO THE DRIP LINE OF TREE WHICHEVER IS GREATER.)
- IF UTILITY TRENCH WORK IS WITHIN 10 FT OF EX TREE (MEASURING FROM NEAR SIDE OF TREE TRUNK TO EDGE OF EXCAVATION), IN LIEU OF STANDARD UTILITY TRENCHING / ROOT PRUNING, THE WORK WITHIN THE TREE'S ROOT ZONE SHALL BE DONE SO VIA PNEUMATIC EXCAVATION ("AIRSPADING"), OR HYDRO EXCAVATION OR HORIZONTAL TUNNELING (OPTIONAL FOR USE ONLY IF UTILITY IS LOCATED 30 BELOW GRADE). CONTRACTOR SHALL CONTACT WARD ARBORIST TO DISCUSS OPTIONS

REGULATED TREE PROTECTIONS AND PERMITS

- HERITAGE TREES ARE EXISTING TREES WITH A CIRCUMFERENCE OF 100 OR LARGER ARE CONSIDERED HERITAGE TREES AND MAY NOT BE REMOVED.
- SPECIAL TREES ARE EXISTING TREES BETWEEN 44" TO 100" IN CIRCUMFERENCE (Ø≈ 14" TO 31.8). SPECIAL TREE REMOVAL PERMIT MUST BE ACQUIRED FROM DDOT–UFA PRIOR TO REMOVAL. UNLESS PREVIOUSLY ACQUIRED, CONTRACTOR MUST APPLY FOR A CONSTRUCTION/EXCAVATION PERMIT FOR ITS REMOVAL @ $55 PER INCH DIAMETER
- PUBLIC STREET TREES ARE ANY TREE LOCATED BETWEEN THE PUBLIC STREET AND SIDEWALK. ANY PLANTING, PRUNING, REPLACEMENT OR REMOVAL OF A PUBLIC STREET TREE REQUIRES A PERMIT FROM DDOT'S UFA. UNLESS PREVIOUSLY ACQUIRED, CONTRACTOR MUST APPLY FOR A CONSTRUCTION/EXCAVATION PERMIT FOR SUCH IMPACTS, WHICH INCLUDES COMPENSATION AS FOLLOWS:
  - o TREE PRUNING: $75 PER TREE
  - o REMOVAL OF HEALTHY STREET TREE: $200 PER INCH DIAMETER, OR
  - o REPLACEMENT OF UNHEALTHY OR HAZARDOUS STREET TREE: PLANTING NEW TREE(S) @ 1:1 RATIO.

GENERAL CRITERIA FOR PROTECTING TREES

1. TREES WITHIN 25' OF A BUILDING SITE AND ASSOCIATED GRADING, PARKING & UTILITY EXTENSIONS SHALL BE BOXED IN TO PREVENT MECHANICAL INJURY. BOX SHOULD BE AS CLOSE AS POSSIBLE TO DRIP LINE OF TREE.
2. BOARDS WILL NOT BE NAILED TO TREES DURING BUILDING OPERATIONS.
3. HEAVY EQUIPMENT OPERATORS WILL BE CAUTIONED TO AVOID DAMAGE TO EXISTING TREE TRUNKS & ROOTS DURING LAND LEVELING OPERATIONS. TUNNEL UNDER ROOT SYSTEM WHEN INSTALLING UTILITY LINES, IF POSSIBLE
4. TREE TRUNKS AND EXPOSED ROOTS AND LIMBS DAMAGED DURING EQUIPMENT OPERATIONS WILL BE CARED FOR AS PRESCRIBED BY A FORESTER OR LICENSED TREE EXPERT.
5. WOOD CHIPS SPREAD AT 4" DEPTH CAN BE USED IN WOODED AREA TO HELP PREVENT SOIL COMPACTION & DAMAGE TO TREES.
6. THE USE OF HEAVY EQUIPMENT ON ROOT SYSTEMS OF DESIRABLE TREES MUST BE AVOIDED TO PREVENT SOIL COMPACTION. ALL CONSTRUCTION SHOULD BE KEPT OUT OF THE DRIP LINE OF PROTECTED TREES. PROTECTIVE FENCING SHALL BE UTILIZED FOR TREES BEING RETAINED AND SHALL BE LOCATED AT THE DRIP LINE.
7. BROAD LEAF TREES SHOULD RECEIVE A HEAVY APPLICATION OF COMPLETE FERTILIZER TO AID THEIR RECOVERY FROM POSSIBLE DAMAGE CAUSED BY CONSTRUCTION OPERATIONS. FERTILIZATION SHOULD BE DONE DURING WINTER AND/OR EARLY SPRING FOLLOWING COMPLETION OF CONSTRUCTION; APPLIED AT THE FOLLOWING RATE: 2 TO 4 LBS. OF 10–6–4 FOR EACH INCH OF TRUNK DIAMETER MEASURED AT 4.5' ABOVE GROUND LINE. FERTILIZER SHOULD BE APPLIED IN HOLES 1" IN DIAMETER 18" DEEP. SPACED ABOUT 2' APART AT THE DRIP LINE OF THE TREE.
8. DURING THE FIRST TWO SUMMERS FOLLOWING CONSTRUCTION, IT IS DESIRABLE THAT THE TREES RECEIVE ADEQUATE AMOUNTS OF WATER.

TREE PRESERVATION NOTES

1. TREES WITHIN OR DIRECTLY ADJACENT TO THE LIMITS OF WORK MUST BE PROTECTED WITH 6 FT TALL CHAIN LINK FENCE TO THE EXTENT OF THE EXISTING TREE BOX OR TO THE ROOT ZONE IN A PLANTING STRIP.
2. TREE PROTECTION FENCE SHALL BE INSTALLED TO NO LESS THAN A 4 FT X 9 FT AREA.
3. ALL TREE AND ROOT PROTECTION MEASURES AND EXCAVATION OPERATIONS SHALL COMPLY WITH THE CURRENT VERSION OF THE DISTRICT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES, SECTIONS 207.03, 608.07, AND 608.08.
4. ALL UTILITY WORK SHALL BE CONDUCTED SO AS TO AVOID INJURY TO TREE TRUNKS, BRANCHES, AND ROOTS. WHEN UTILITIES MUST BE INSTALLED WITHIN THE ROOT ZONE OF A STREET TREE, TUNNELING (PNEUMATIC EXCAVATION OR HYDROEXCAVATION) SHALL BE USED IN LIEU OF TRENCHING AND ROOT PRUNING.
5. THE ROOT ZONE IS MEASURED FROM THE NEAR SIDE OF THE TRUNK TO THE DISTANCE THAT EQUALS THE TREE'S DIAMETER (MEASURED AT 4.5' ABOVE GRADE) X 1 FT (PREFERRED 1.5 FT).
6. IF THERE ARE ANY TREE–RELATED CONFLICTS ON THIS JOB SITE, PERMIT HOLDER MUST SUSPEND ALL WORK THAT CONTRIBUTES TO THE CONFLICT AND IMMEDIATELY CONTACT WARD ARBORIST, WARD X ARBORIST AT ARBORIST.EMAIL@DC.GOV OR ARBORIST–PHONE–NUMBER TO RECEIVE CLEARANCE TO CONTINUE CONFLICTING WORK.

DDOT TREE PROTECTION NOTES

THE CONTRACTOR MUST ADHERE TO THE FOLLOWING TREE PROTECTION CONDITIONS:

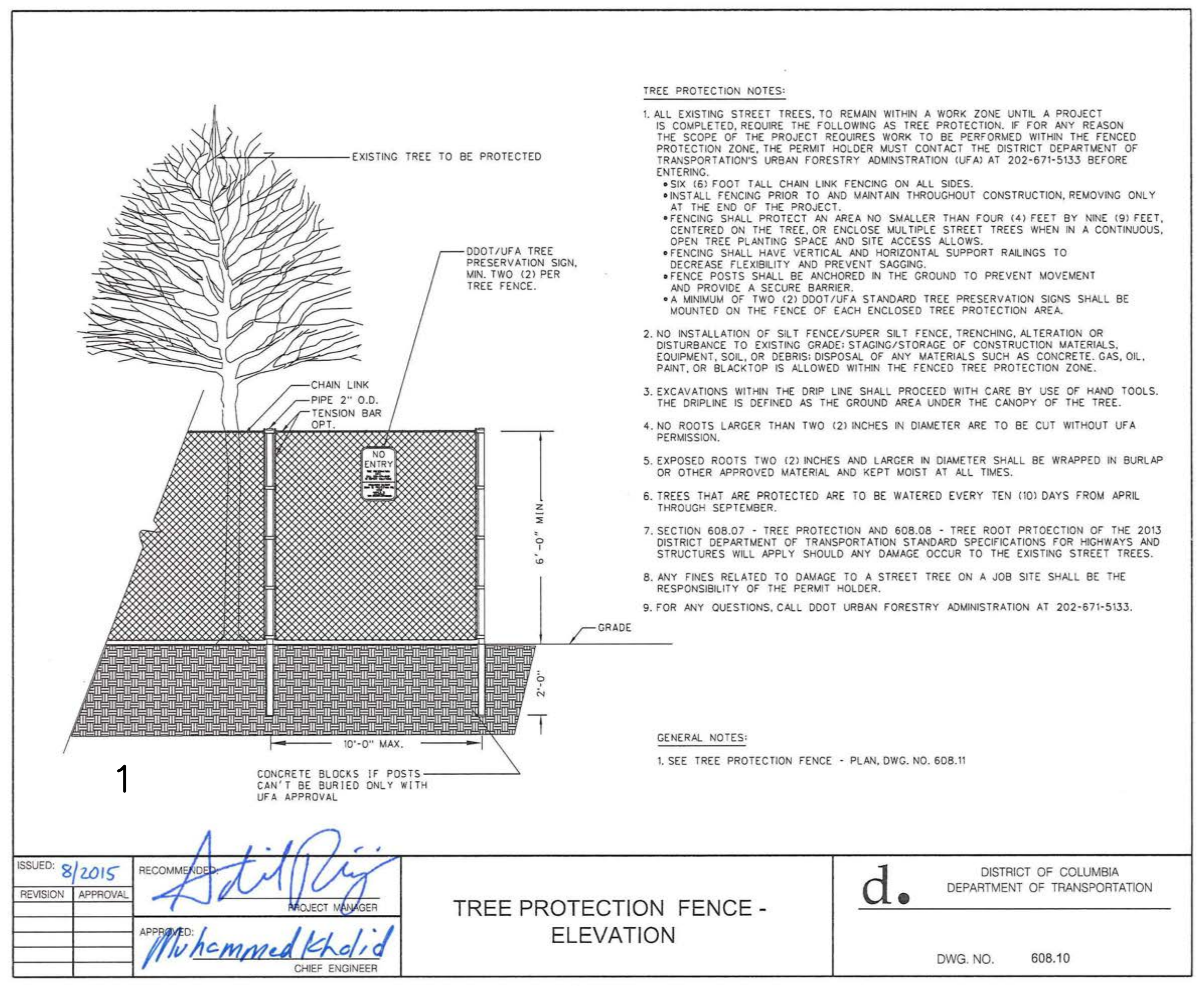
1. ALL PROTECTION MEASURES AND EXCAVATION OPERATIONS SHALL COMPLY WITH THE 2013 DISTRICT DEPARTMENT OF TRANSPORTATION STANDARD SPECIFICATIONS FOR HIGHWAYS AND STRUCTURES (GOLD BOOK) – SECTIONS 207.03, 608.07 AND 608.08 AND DDOT STANDARD DRAWINGS 608.10, 608.11, AND 608.12
2. TREES WITHIN OR DIRECTLY ADJACENT TO THE LIMITS OF WORK MUST BE PROTECTED WITH 6 FT. TALL CHAIN LINK FENCE TO THE EXTENT OF THE TREE BOX (MINIMUM 4 FT. X 9 FT.) OR TO THE CRITICAL ROOT ZONE IN A PLANTING STRIP/OPEN SPACE. IF THE TREE IS ON A SLOPE, MULTI–STEMMED AND/OR SPLITS BELOW 4.5 FEET, PLEASE REFER TO THE FOLLOWING LINK FOR MEASURING DBH – HTTP://WWW.PHYTOSPHERE.COM/TREEORD/MEASURINGDBH.HTML
3. NONE OF THE FOLLOWING SHALL OCCUR WITHIN THE CRITICAL ROOT ZONE OF A TREE:
   - 3.1. ALTERATION OR DISTURBANCE TO EXISTING GRADE
   - 3.2. STAGING/STORAGE OF CONSTRUCTION MATERIALS, EQUIPMENT, SOIL, OR DEBRIS; DISPOSAL OF ANY LIQUIDS E.G. CONCRETE, GAS, OIL, PAINT
   - 3.3. BLACKTOP
   - 3.4. TRENCHING
4. INSTALL ONLY TRENCHLESS SILT/SUPER SILT FENCE METHODS WITHIN THE CRITICAL ROOT ZONE OF A TREE; TRENCHLESS METHODS SUCH AS FILTER LOGS, SILT SOXX OR AN APPROVED EQUIVALENT SHALL BE USED.
5. NO HEAVY EQUIPMENT SHALL BE USED TO EXCAVATE WITHIN THE CRITICAL ROOT ZONE. EXCAVATIONS SHALL PROCEED WITH CARE BY USE OF HAND TOOLS OR EQUIPMENT THAT WILL NOT CAUSE INJURY TO TREE TRUNKS, BRANCHES, AND ROOTS.
6. NO ROOTS GREATER THAN TWO (2) INCHES IN DIAMETER SHALL BE CUT WITHOUT AN ARBORISTS PERMISSION. EXPOSED ROOTS 2 INCHES AND LARGER IN DIAMETER SHALL BE WRAPPED IN BURLAP OR OTHER APPROVED MATERIAL AND KEPT MOIST AT ALL TIMES.
7. IF FOR ANY REASON THE SCOPE OF THE PROJECT REQUIRES WORK TO BE PERFORMED WITHIN THE FENCED PROTECTION ZONE, THE PERMIT HOLDER MUST CALL THE DISTRICT DEPARTMENT OF TRANSPORTATION'S URBAN FORESTRY DIVISION (UFD) AT 202–671–5133 TO RECEIVE CLEARANCE TO CONTINUE THE CONFLICTING WORK. DDOT ARBORIST RANJIT BABRA ranjit.babra@dc.gov.

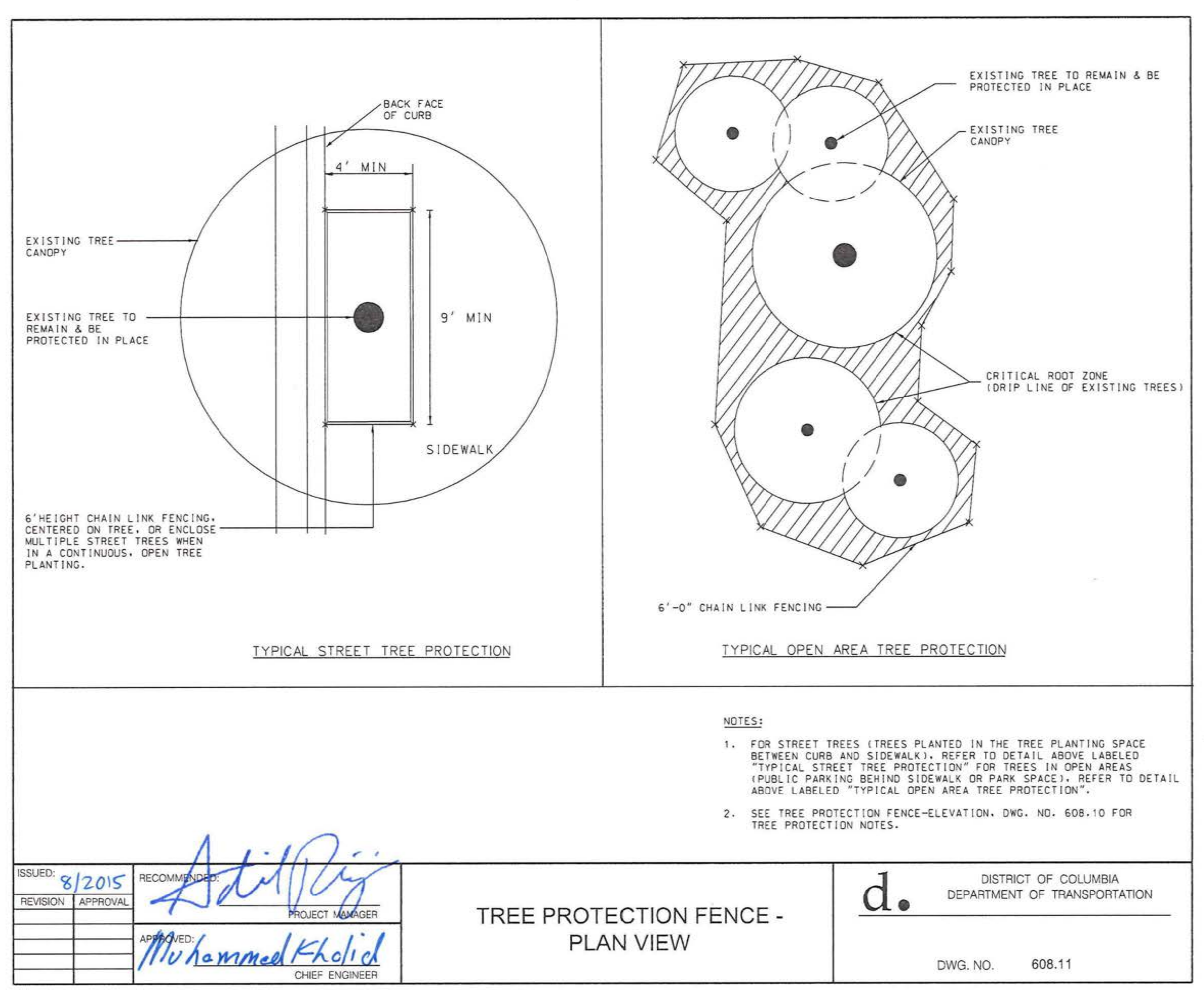
TREE COORDINATION NOTES

UFA WARD ARBORIST FOR PROJECT SITE

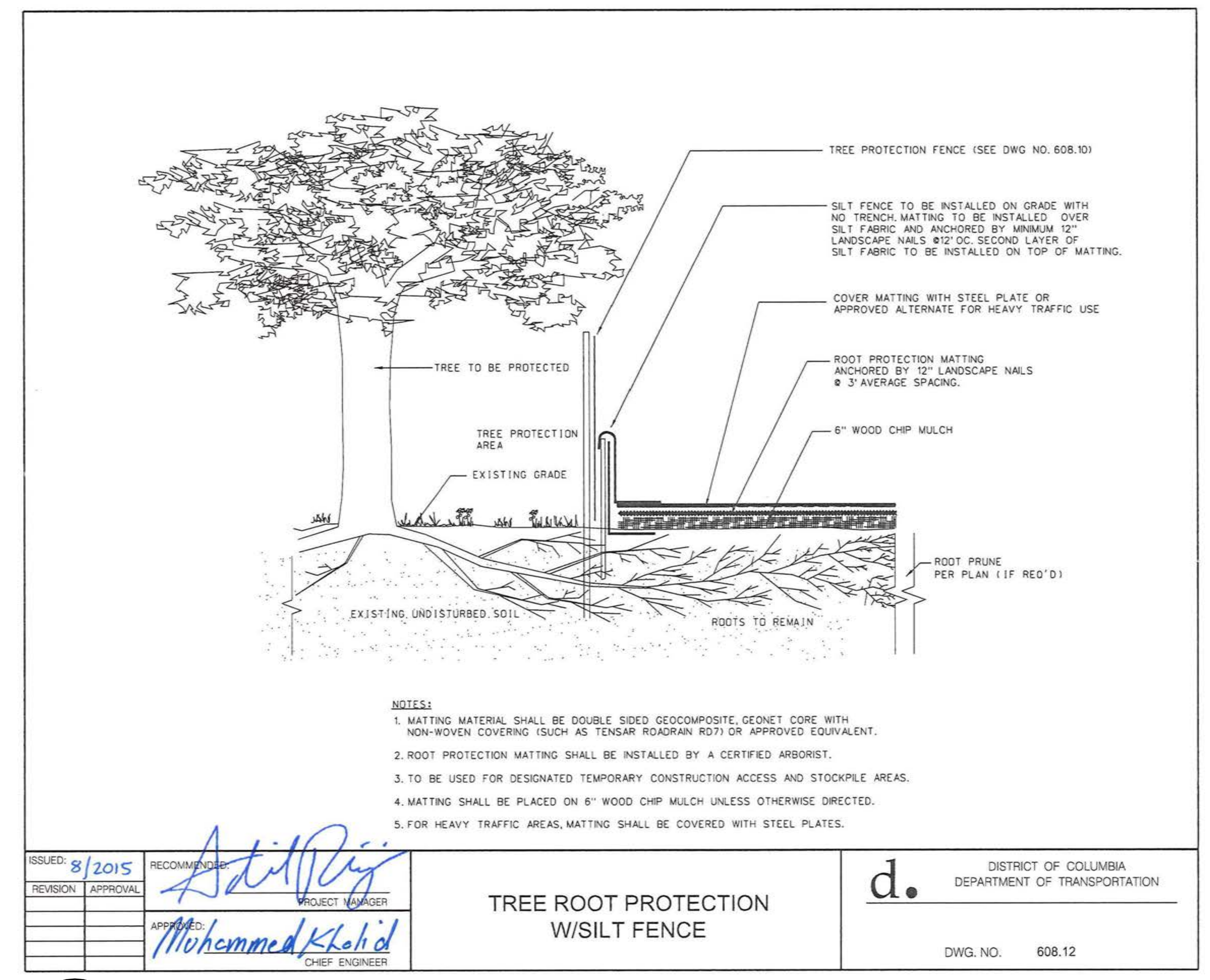
WARD ARBORIST CONTACT INFO

WARD: 4
ARBORIST: RANJIT BABRA
CONTACT: ranjit.babra@dc.gov

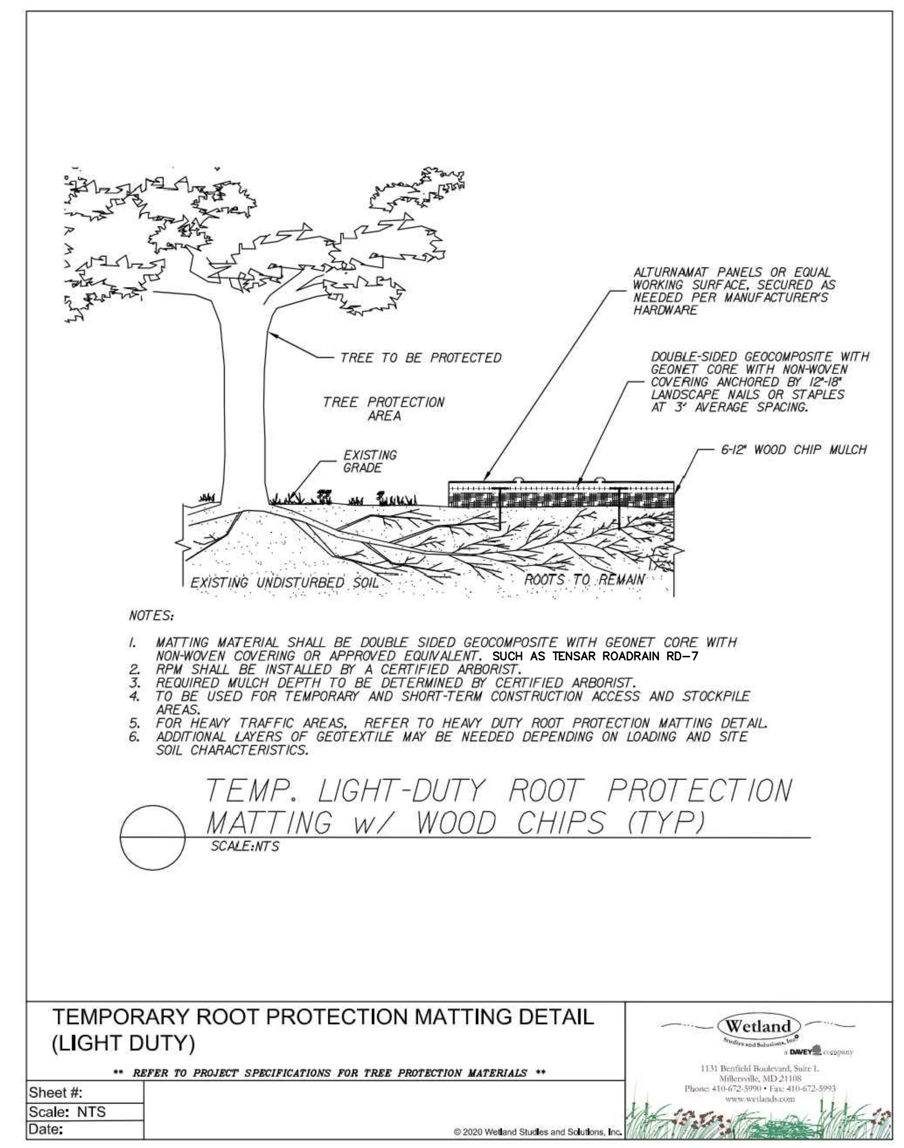




1 CIV0850 TREE PROTECTION FENCE DETAIL
NOT TO SCALE



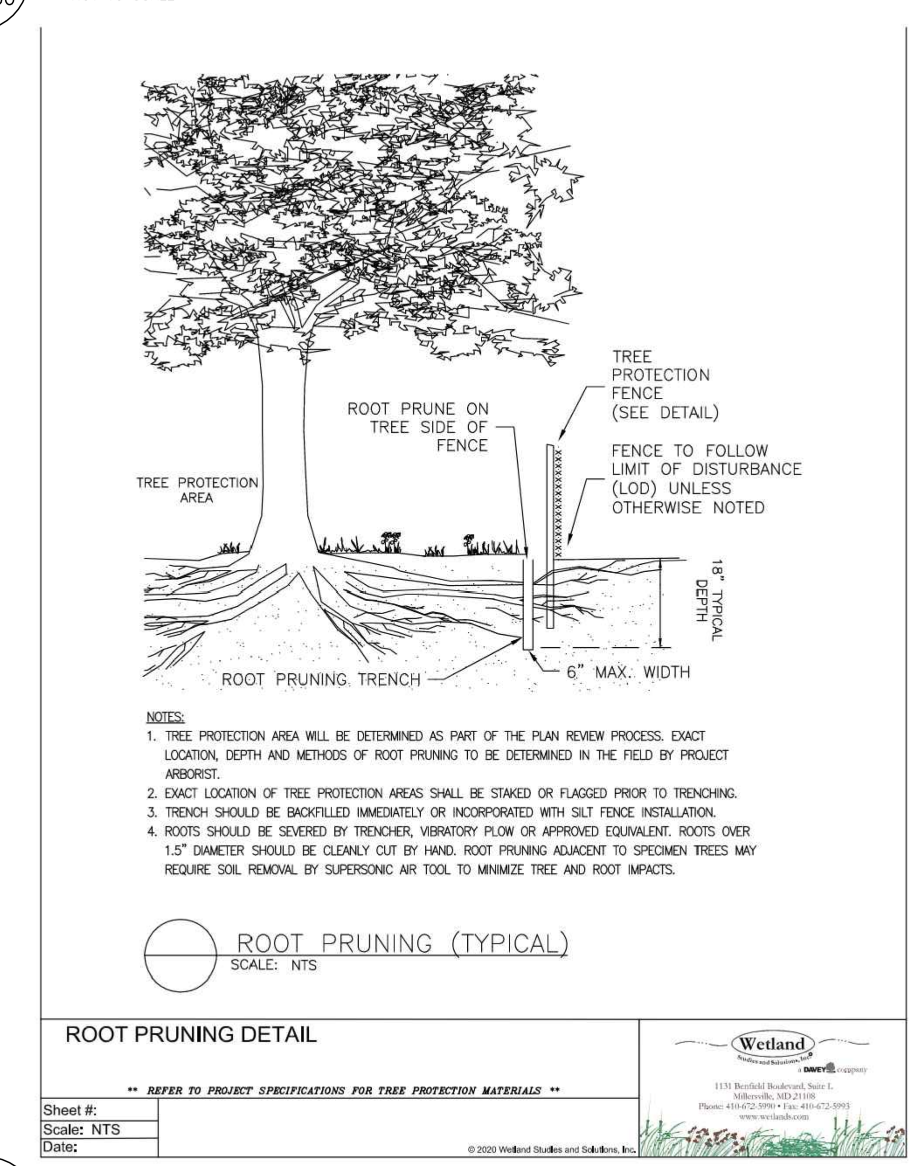
2 CIV0850 TREE ROOT PROTECTION WITH SILT FENCE DETAIL
NOT TO SCALE



NOTES:

1. THIS LIGHT DUTY ROOT PROTECTION DETAIL SHALL ONLY BE INSTALLED WITH THE APPROVAL OF THE ARBORIST

3 CIV0850 TEMPORARY ROOT PROTECTION MATTING DETAIL (LIGHT DUTY)
NOT TO SCALE



4 CIV0850 ROOT PRUNING DETAIL
NOT TO SCALE

GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
Permit No. SH2400019 Date 04/09/24

These plans are conditionally approved as submitted or noted during plan review and are subject to field inspection. Approved plans must be kept on site and are needed for all inspections. No changes or modifications to these plans. Changes require a revision permit with the revised plans. Trade Permits are required for trade work, e.g. Electrical or Plumbing

HPRB Review - Timothy Dennee - 04-09-2024
Zoning Review - Ernesto Warren - 04-09-2024
Structural Review - Tong Li - 04-09-2024
DOEE SE-SW Review - Saba Gharavi - 04-09-2024

VIKA CAPITOL
ENGINEERS ★ PLANNERS ★ LANDSCAPE ARCHITECTS ★ SURVEYORS ★ GEOMATICS
PROJECT COORDINATOR: BRIAN RUHL
ruhl@vikacapitol.com
★ VIKA CAPITOL, LLC ★ 4910 MASSACHUSETTS AVENUE, NW SUITE 16 ★ WASHINGTON, DC 20016 ★ PHONE: 202.244.4140 ★ WWW.VIKACAPITOL.COM ★

MARET SCHOOL
PROPOSED ATHLETIC FIELDS
SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SEDIMENT AND EROSION CONTROL NOTES AND DETAILS

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION
2	8–11–23	DOEE RESUB
1	6–6–23	DDOT/DOEE RESUB

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DISTRICT OF COLUMBIA ★ KYLE U. OLIVER ★ PE900770 ★ CIVIL ★ PROFESSIONAL ENGINEER ★ 10/03/2023

DATE: 23–FEB–2023
DES. KUO DWN. BJR
SCALE: AS SHOWN
PROJECT/FILE NO. VC0626D
SHEET NO. CIV0850

DEPARTMENT OF ENERGY & ENVIRONMENT

GOVERNMENT OF THE DISTRICT OF COLUMBIA
PERMIT OPERATIONS DIVISION
PLANS APPROVED
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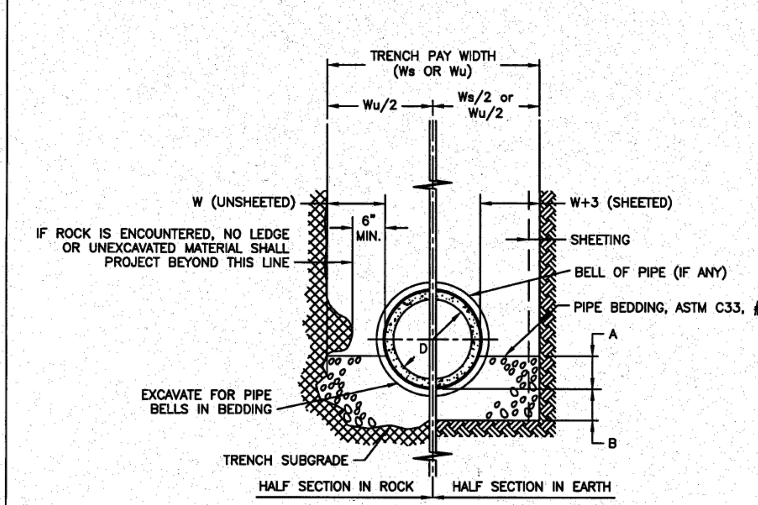
Structural Review - Tong Li - 04-09-2024
DOEE SE-SW Review - Saba Gharavi - 04-09-2024

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-12.01 1 OF 2



APPROVED DATE: June 20, 2003 — DIRECTOR, DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES	REVISION NO.: 0; DATE: 6/20/03; PREPARED BY: OBG/BKJV; CHECKED BY: W.DARROW	STANDARD DETAIL — CONCRETE PIPE SEWER TRENCH LAYING CONDITION

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-12.01 2 OF 2

PIPE DIAMETER	PIPE BEDDING DIMENSION				TRENCH PAY WIDTH	
D	W	A	B IN SOIL	B IN ROCK	UNSHEETED Wu	SHEETED Ws
12"	12"	5"	3"	6"	3' – 4"	3' – 10"
15"	12"	5"	3"	6"	3' – 7"	4' – 1"
18"	12"	6"	3"	6"	3' – 11"	4' – 5"
21"	12"	7"	3"	6"	4' – 3"	4' – 9"
24"	12"	8"	3"	6"	4' – 6"	5' – 0"
27"	18"	8"	3"	6"	5' – 9"	6' – 3"
30"	18"	9"	4"	9"	6' – 1"	6' – 7"
33"	18"	10"	4"	9"	6' – 5"	6' – 11"
36"	18"	10"	4"	9"	6' – 8"	7' – 2"
42"	18"	13"	4"	9"	7' – 3"	7' – 9"
48"	24"	15"	4"	9"	8' – 10"	9' – 4"
54"	24"	16"	4"	9"	9' – 5"	9' – 11"
60"	24"	18"	4"	9"	10' – 0"	10' – 6"
66"	24"	20"	6"	12"	10' – 7"	11' – 1"
72"	24"	22"	6"	12"	11' – 2"	11' – 8"
78"	24"	23"	6"	12"	11' – 9"	12' – 3"
84"	24"	25"	6"	12"	12' – 4"	12' – 10"
90"	24"	27"	6"	12"	12' – 11"	13' – 5"
96"	24"	28"	6"	12"	13' – 6"	14' – 0"
102"	24"	30"	6"	12"	14' – 1"	14' – 7"
108"	24"	32"	6"	12"	14' – 8"	15' – 2"

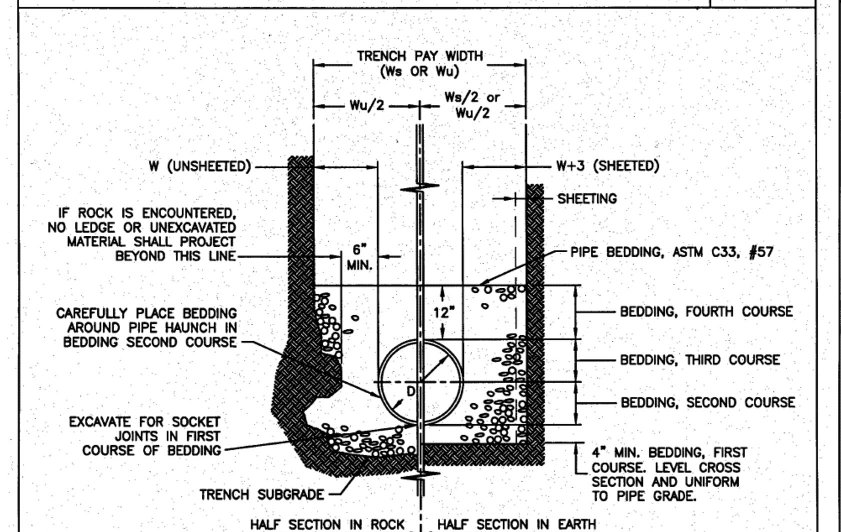
NOTES:
1. IF NECESSARY TO EXCEED W BELOW A HORIZONTAL PLANE 1'–0" ABOVE TOP OF PIPE, SEE SPECIFICATION SECTION 02220.
2. SHEETING, IF USED, SHALL BE REMOVED IN CONJUNCTION WITH THE BACKFILLING OPERATION UNLESS OTHERWISE SPECIFIED OR SHOWN ON DRAWING. HOWEVER, IF APPROVED IN WRITING, SHEETING MAY BE CUT-OFF AND LEFT IN PLACE BELOW A LINE 1'–0" ABOVE THE TOP OF THE PIPE OR AS DIRECTED BY THE ENGINEER.

APPROVED DATE: June 20, 2003 — DIRECTOR, DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES	REVISION NO.: 0; DATE: 6/20/03; PREPARED BY: OBG/BKJV; CHECKED BY: W.DARROW	STANDARD DETAIL — CONCRETE PIPE SEWER TRENCH LAYING CONDITION

49

1 CONCRETE SEWER TRENCH/CRADLE DETAIL (CIV0900)
NOT TO SCALE

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-15.01 1 OF 1



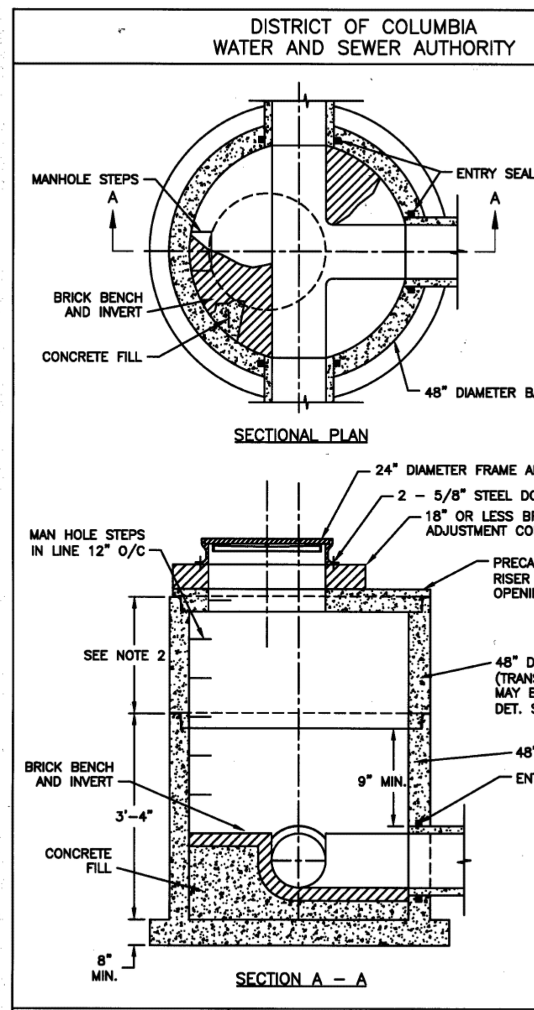
TRENCH PAY WIDTH (Ws OR Wu)			
PIPE DIAMETER D	TRENCH WIDTH CLEAR W	TRENCH PAY WIDTH Wu	TRENCH PAY WIDTH Ws
10"	12"	2'–11"	3'–5"
12"	12"	3'–0"	3'–6"
15"	12"	3'–3"	3'–9"
18"	12"	3'–7"	4'–1"
21"	12"	3'–10"	4'–4"
24"	12"	4'–1"	4'–7"
27"	12"	5'–4"	5'–10"

NOTES:
1. IF NESSARY TO EXCEED W BELOW A HORIZONAL PLANE 1'–0" ABOVE TOP OF PIPE, SEE SPECIFICATION SECTION 02220.
2. SHEETING, IF USED, SHALL BE REMOVED IN CONJUNTION WITH THE BACKFILLING OPERATION UNLESS OTHERWISE SPECIFIED OR SHOWN ON DRAWING.

APPROVED DATE: June 20, 2003 — DIRECTOR, DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES	REVISION NO.: 0; DATE: 6/20/03; PREPARED BY: OBG/BKJV; CHECKED BY: W.DARROW	STANDARD DETAIL — POLYVINYL CHLORIDE (PVC) PIPE SEWER TRENCH LAYING CONDITION

2 PVC SEWER TRENCH/CRADLE DETAIL (CIV0900)
NOT TO SCALE

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-20.01 1 OF 1

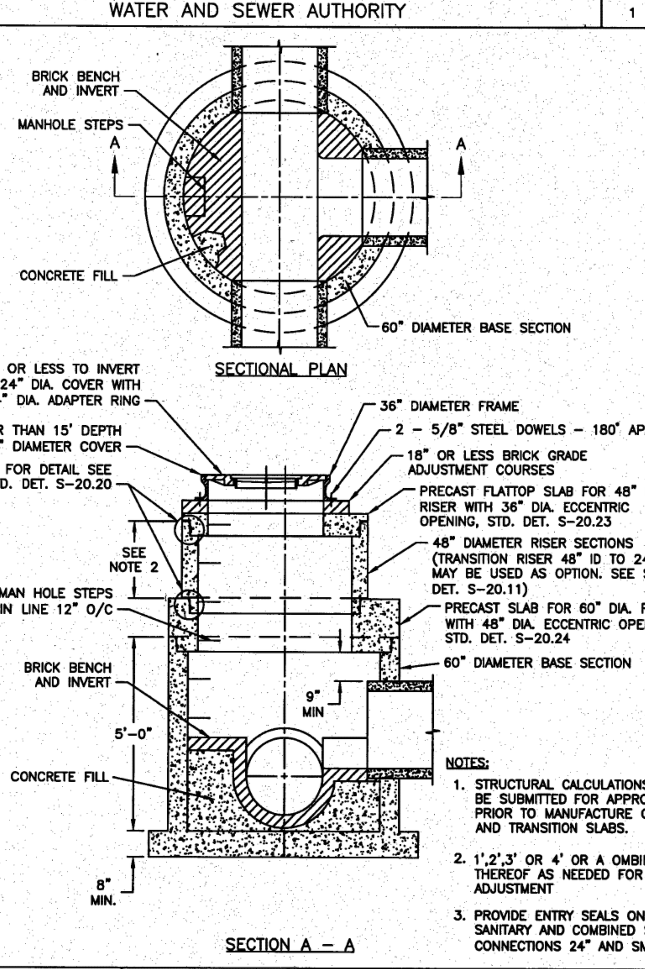


NOTES:
1. STRUCTURAL CALCULATIONS MUST BE SUBMITTED FOR APPROVAL PRIOR TO MANUFACTURE OF BASE AND TRANSITION SLABS.
2. 1',2',3' OR 4' OR A OMBINATION THEREOF AS NEEDED FOR GRADE ADJUSTMENT
3. PROVIDE ENTRY SEALS ON SANITARY AND COMBINED SEWER CONNECTIONS 24" AND SMALLER.

APPROVED DATE: June 20, 2003 — DIRECTOR, DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES	REVISION NO.: 0; DATE: 6/20/03; PREPARED BY: OBG/BKJV; CHECKED BY: W.DARROW	STANDARD DETAIL — PRECAST CONCRETE MANHOLE FOR NEW 10" THRU 21" DIAMETER SEWERS (48" DIAMETER PRECAST BASE)

3 48" PRECAST CONCRETE MANHOLE DETAIL (CIV0900)
NOT TO SCALE

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-20.02 1 OF 1



NOTES:
1. STRUCTURAL CALCULATIONS MUST BE SUBMITTED FOR APPROVAL PRIOR TO MANUFACTURE OF BASE AND TRANSITION SLABS.
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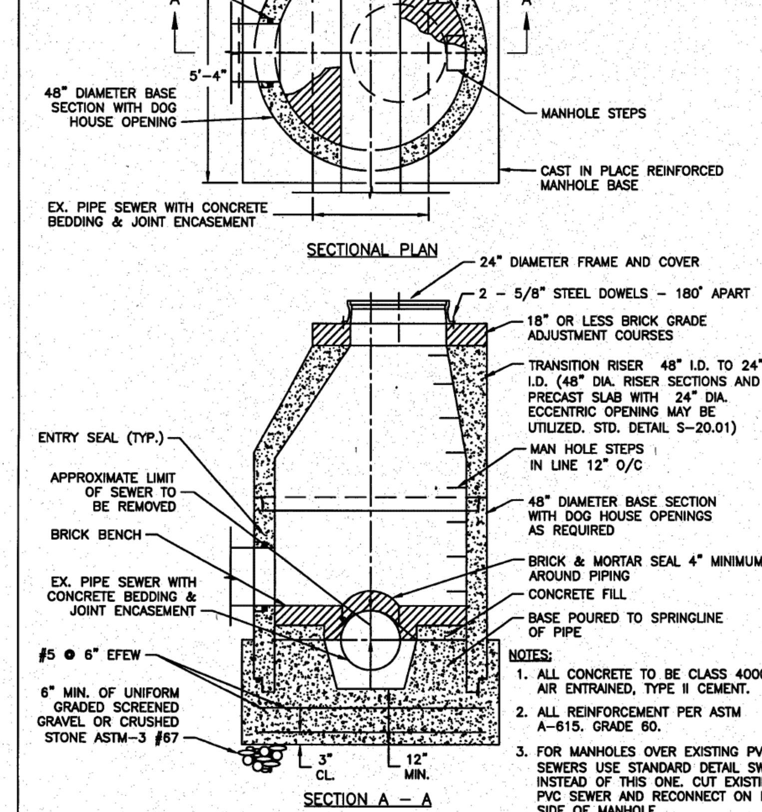
3. PROVIDE ENTRY SEALS ON SANITARY AND COMBINED SEWER CONNECTIONS 24" AND SMALLER.

APPROVED DATE: June 20, 2003 — DIRECTOR, DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES	REVISION NO.: 0; DATE: 6/20/03; PREPARED BY: OBG/BKJV; CHECKED BY: W.DARROW	STANDARD DETAIL — PRECAST CONCRETE MANHOLE FOR NEW 24" THRU 30" DIAMETER SEWERS (60" DIAMETER PRECAST BASE)

4 60" PRECAST CONCRETE MANHOLE DETAIL (CIV0900)

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-20.11 1 OF 1



NOTES:
1. ALL CONCRETE TO BE CLASS 4000. AIR ENTRAINED, TYPE II CEMENT.
2. ALL REINFORCEMENT PER ASTM A–615. GRADE 60.
3. FOR MANHOLES OVER EXISTING PVC SEWERS USE STANDARD DETAIL SW/20.01 INSTEAD OF THIS ONE. CUT EXISTING PVC SEWER AND RECONNECT ON EITHER SIDE OF MANHOLE

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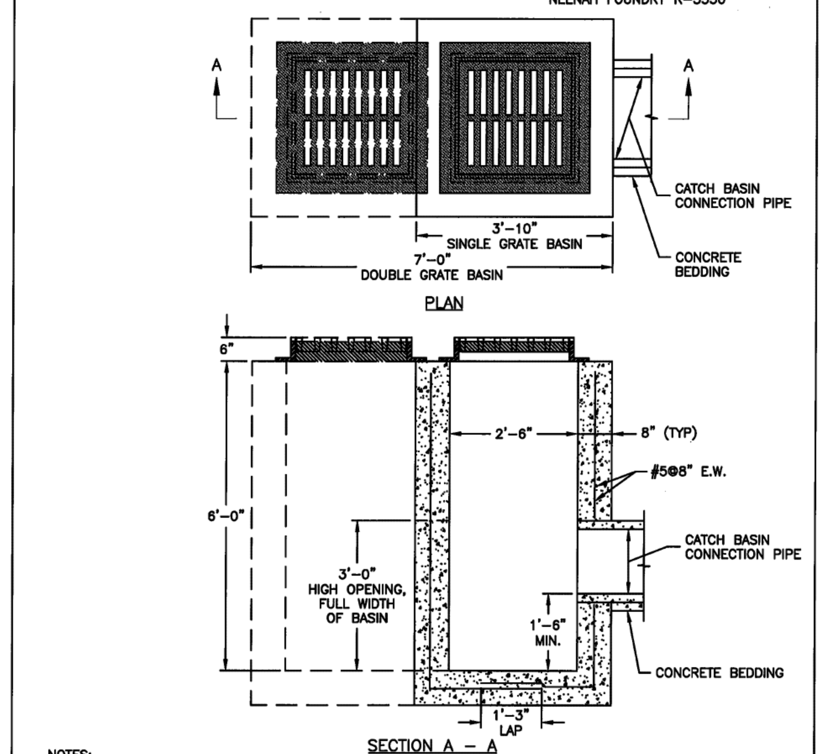
5 48" PRECAST CONCRETE DOGHOUSE MANHOLE (CIV0900)
NOT TO SCALE

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-30.30 1 OF 2



NOTES:
1. GRAY IRON CASTING PER ASTM A–48, CLASS 30A.
2. ALL MACHINE FINISH TO BE A.S.A. SPECIFICATION, ROUGHNESS SYMBOL 250, TOLERANCE –0 + 1/16".
3. ALL CONCRETE TO BE CLASS 4000, AIR ENTRAINED TYPE II CEMENT.
4. BASIN TO BE USED IN UNPAVED AREAS ONLY.
5. REINFORCING SHALL BE CENTERED IN WALL AND BASE AND SHALL CONFORM TO ASTM A615 GRADE 60.

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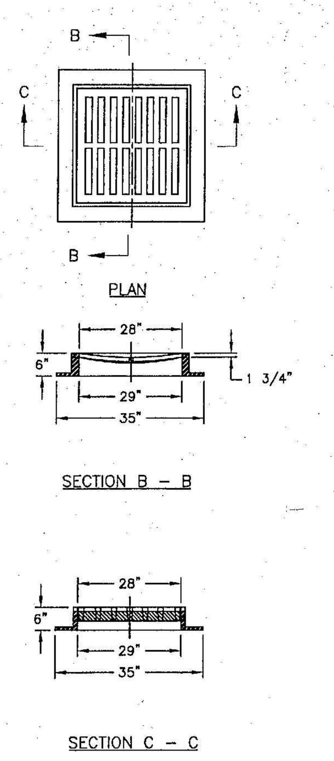
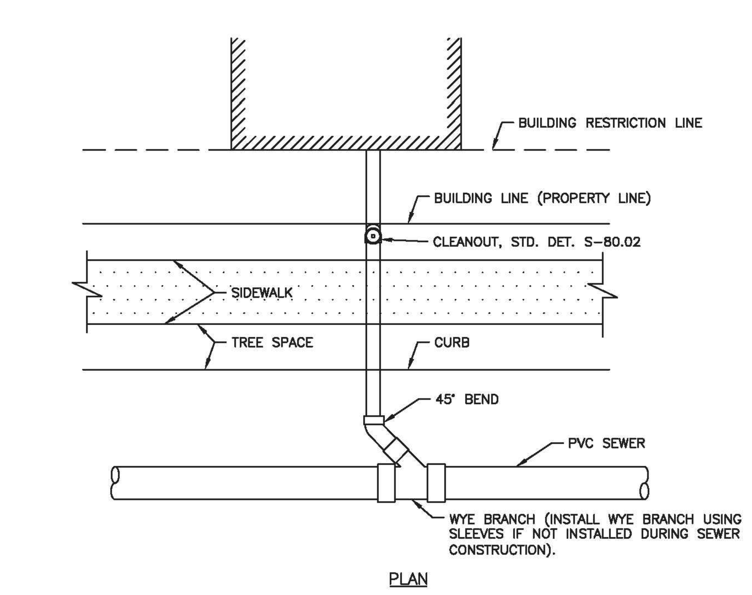
DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-30.30 2 OF 2



APPROVED DATE: June 20, 2003 — DIRECTOR, DEPARTMENT OF ENGINEERING AND TECHNICAL SERVICES	REVISION NO.: 0; DATE: 6/20/03; PREPARED BY: OBG/BKJV; CHECKED BY: W.DARROW	STANDARD DETAIL — FIELD INLET GRATE TYPE CATCH BASIN

6 GRATE CATCH BASIN (CIV0900)
NOT TO SCALE

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-80.01 1 OF 1



NOTES:
1. MATERIALS AND WORKMANSHIP BETWEEN THE WYE BRANCH AND THE BUILDING MUST BE IN ACCORDANCE WITH D.C. PLUMBING CODE.
2. VERTICAL BENDS FOR GRADE (NOT SHOWN) MAY BE REQUIRED ON SEWER LATERAL.

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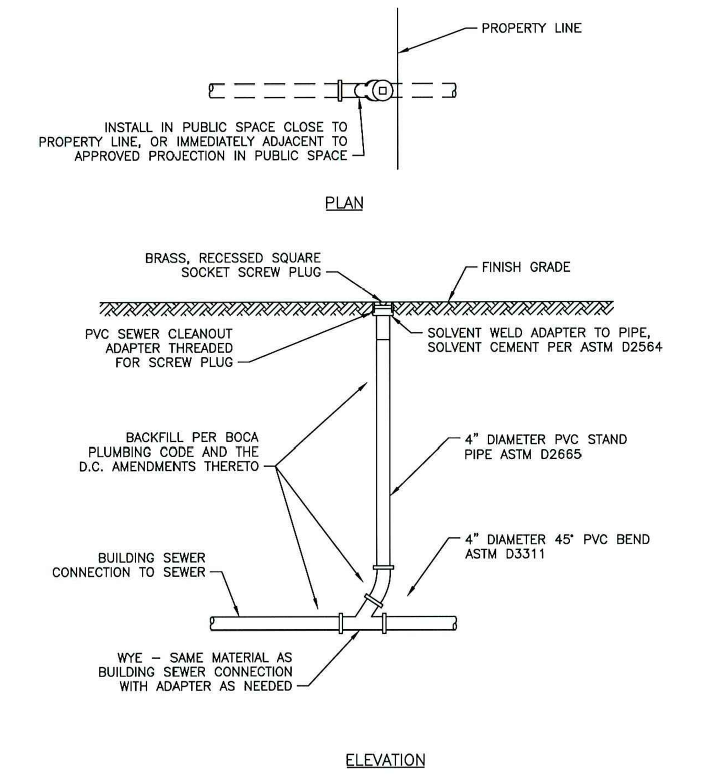
7 WYE BRANCH CONNECTION DETAIL (CIV0900)
NOT TO SCALE

DISTRICT OF COLUMBIA WATER AND SEWER AUTHORITY — S-80.02 1 OF 1



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8 CLEANOUT DETAIL (CIV0900)
NOT TO SCALE

VIKA CAPITOL
ENGINEERS ★ PLANNERS ★ LANDSCAPE ARCHITECTS ★ SURVEYORS ★ GEOMATICS
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★ W W W . V I K A C A P I T O L . C O M ★

MARET SCHOOL PROPOSED ATHLETIC FIELDS
SQUARE 2319, LOT 832
5901 UTAH AVE NW
WASHINGTON, D.C. 20015

SITE DETAILS

VIKA CAPITOL REVISIONS

#	DATE	DESCRIPTION
2	8-11-23	DOEE RESUB
1	6-6-23	DDOT/DOEE RESUB

**NOTE
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DISTRICT OF COLUMBIA — KYLE U. OLIVER — PE900770 — CIVIL — PROFESSIONAL ENGINEER — 10/03/2023

DATE: 23-FEB-2023
DES. KUO DWN. BJR
SCALE: AS SHOWN
PROJECT/FILE NO. VC0626D
SHEET NO. CIV0900