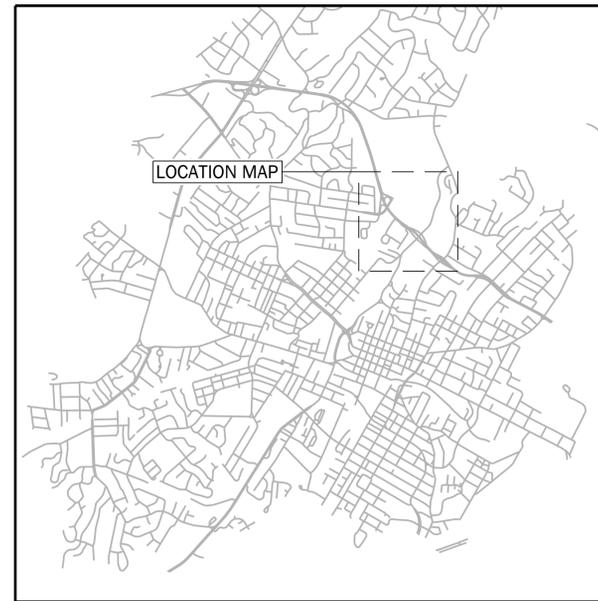
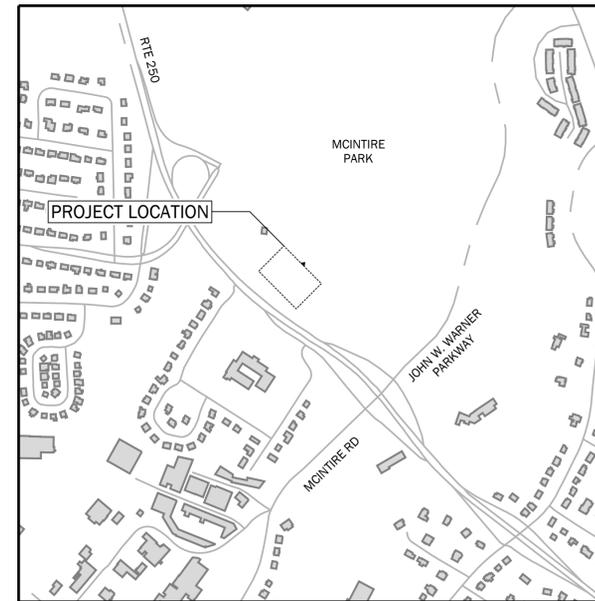


MCINTIRE SKATE PARK RETAINING WALL

FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA



VICINITY MAP
SCALE: 1" = 4000'



LOCATION MAP
SCALE: 1" = 500'



CONTACT INFORMATION:

OWNER: _____
CONTACT: DANIEL MCCLUNG
EMAIL: MCCLUNG@CHARLOTTESVILLE.GOV

ENGINEER OF RECORD: _____
CONTACT: LINE AND GRADE CIVIL ENGINEERING
DANIEL C. HYER, PE
ADDRESS: 113 4TH STREET NE, STE 100
CHARLOTTESVILLE, VA 22902
PHONE: 434-262-0169
EMAIL: DHYER@LINE-GRADE.COM

DESIGN INFORMATION:

DISTURBANCE AREA: 0.137 AC (5,956 SF)
PROPOSED IMPERVIOUS AREA: 500 SF
MISS UTILITY TICKET NO.: B405900950
12 DIGIT HUC CODE: 020802040401

SHEET LIST TABLE

Sheet Number	Sheet Title
C0.0	Title Sheet
C0.1	General Notes
C1.0	Existing Conditions Plan
C2.0	Erosion and Sediment Control Plan
C2.1	Erosion and Sediment Control Details
C3.0	Site Plan
C3.1	Site Details
C3.2	Retaining Wall Details
C3.3	Drainage Details

REVISION LOG

VERSION	DESCRIPTION	RECIPIENT	SUBMITTAL DATE
1	100%	OWNER	04/12/2021

MCINTIRE SKATE PARK RETAINING WALL

FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA

TITLE SHEET



APPROVED DCH

SUBMISSION NO. 1

PROJECT 2103006

THE WORK OF
LINE + GRADE

C0.0

GENERAL CONSTRUCTION NOTES:

- ALL CONSTRUCTION METHODS AND MATERIALS SHALL BE IN ACCORDANCE WITH THE CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS AND SPECIFICATIONS (VDOT RBS&S), VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK, THE RULES AND REGULATIONS WATER AND SANITARY SEWER CONSTRUCTION SPECIFICATIONS AND STANDARDS FOR THE PLAN APPROVING AUTHORITY AND ANY OTHER APPLICABLE FEDERAL, STATE, OR LOCAL ORDINANCES, CODES, AND LAWS.
- CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING ALL CONDITIONS, MATERIALS, DIMENSIONS LOCATIONS AND EXISTING ELEMENTS TO REMAIN IN THE FIELD BEFORE PROCEEDINGS WITH ANY WORK. IF CONDITIONS VARY FROM WHAT IS REPRESENTED IN THE DRAWINGS, THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER.
- EXISTING CONSTRUCTION SHOWN IN THESE DRAWINGS SHALL BE USED AS RELATIVE REFERENCES AND ARE TO BE VERIFIED IN THE FIELD BY THE CONTRACTOR IF DEEMED CRITICAL FOR PROPER EXECUTION OF THE WORK.
- CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DUST CONTROL MEASURES.
- PROVIDE ADEQUATE PROTECTION FOR THE EXISTING BUILDINGS, BUILDING OCCUPANTS, VEHICLES AND PEDESTRIANS AT ALL TIMES IN ACCORDANCE WITH OSHA AND ALL APPLICABLE STATE AND LOCAL CODES.
- MATERIALS AND EQUIPMENT SHALL BE STORED IN APPROVED AREAS TO PREVENT IMPACTS ON VEHICLES AND PEDESTRIANS. CONTRACTOR SHALL BE FULLY RESPONSIBLE FOR MEASURES TAKEN TO ENSURE VEHICULAR AND PEDESTRIAN SAFETY THROUGH THE ENTIRE DURATION OF THE WORK. SAFETY IS PARAMOUNT.
- EQUIPMENT AND MATERIALS SHALL BE STORED IN DESIGNATED AREAS AND SHALL NOT ENCUMBER THE OWNER'S OPERATIONS, SURROUNDING RIGHT OF WAY, OR ADJOINING GROUNDS.
- ALL WORK AREAS SHALL BE CLEANED DAILY.
- CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTION OF BUILDINGS ADJACENT TO WORK AREAS. CONTRACTOR SHALL BE RESPONSIBLE FOR ALL COSTS OF DAMAGES RESULTING FROM CONSTRUCTION ACTIVITIES.
- SECTION CUTS AND DETAIL CALLOUTS INDICATED IN THE DRAWINGS ARE TYPICAL FOR THE PROJECT. THEY ARE TO BE CONSIDERED TYPICAL FOR SIMILAR CONDITIONS AND HAVE NOT BEEN SHOWN EVERYWHERE THEY APPLY.
- CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR JOB SITE SAFETY.
- CONTRACTOR IS RESPONSIBLE FOR COORDINATION OF ALL CONSTRUCTION.
- SYMBOLS IN THE DRAWINGS ARE NOT TO SCALE.
- ALL WORK SHALL BE LAID-OUT PRIOR TO INSTALLATION OF NEW WORK BASED ON MEASUREMENT OF EXISTING CONSTRUCTION AND EXISTING CONSTRUCTION DESIGNATED TO REMAIN AS PART OF THE PROJECT. DO NOT START INSTALLATION OF WORK UNTIL LAY-OUT IS COMPLETE AND POTENTIAL CONFLICTS HAVE BEEN IDENTIFIED AND ADDRESSED.
- THE CONTRACTOR SHALL BE HELD RESPONSIBLE FOR ALL DAMAGE TO THE EXISTING BUILDINGS AND ADJACENT GROUNDS AND PROPERTY CAUSE BY THE CARELESSNESS OR NEGLIGENCE OF HIS WORKMEN. DAMAGE TO PORTIONS OF THE PROPERTY NOT SUBJECT TO WORK UNDER THE CONTRACT SHALL BE REPAIRED TO THE FULL SATISFACTION OF THE OWNER AND ENGINEER, AT THE CONTRACTOR'S EXPENSE.
- PROTECTION OF THE WORK: PROTECT EFFECTIVELY ALL MATERIALS AND EQUIPMENT DURING THE ENTIRE PERIOD OF CONSTRUCTION. REPLACE MATERIALS AND EQUIPMENT DAMAGED, LOST OR STOLEN WITHOUT ADDITIONAL COST TO THE OWNER.
- PROTECT EXISTING MATERIALS DURING INSTALLATION OF TEMPORARY PROTECTION AND CONSTRUCTION. DO NOT DEFACE OR REMOVE EXISTING MATERIALS IF INTENDED TO STAY. ATTACHMENTS OF TEMPORARY PROTECTION TO EXISTING CONSTRUCTION SHALL BE APPROVED BY THE ENGINEER PRIOR TO INSTALLATION.
- OBTAIN ENGINEER REVIEW AND WRITTEN APPROVAL IN THE FORM OF A CONSTRUCTION CHANGE DIRECTIVE OR SUPPLEMENTAL INSTRUCTION BEFORE MAKING CHANGES OR ADDITIONS TO CONSTRUCTION OR REMOVING MATERIALS THAT WERE INTENDED TO REMAIN.
- NOTIFY ENGINEER OF VISIBLE CHANGES IN THE INTEGRITY OF MATERIALS OR COMPONENTS WHETHER DUE TO ENVIRONMENTAL CAUSES INCLUDING BIOLOGICAL ATTACK, UV DEGRADATION, FREEZING OR THAWING OR DUE TO STRUCTURAL DEFECTS INCLUDING CRACKS, MOVEMENT OR DISTORTION. DO NOT PROCEED WITH WORK IN QUESTION UNTIL DIRECTED BY THE ENGINEER.
- WHERE MISSING FEATURES ARE INDICATED TO BE REPAIRED OR REPLACED, PROVIDE FEATURES WHOSE DESIGNS ARE BASED ON ACCURATE DUPLICATIONS RATHER THAN ON CONJECTURAL DESIGNS, SUBJECT TO APPROVAL OF THE ENGINEER.
- WHERE WORK REQUIRES EXISTING FEATURES TO BE REMOVED, CLEANED AND REUSED, PERFORM THESE OPERATIONS WITHOUT DAMAGE TO THE MATERIALS THEMSELVES, TO ADJACENT MATERIALS, OR TO THE SUBSTRATE. WHEN CLEANING, MATCH SAMPLES OF EXISTING MATERIALS THAT HAVE BEEN CLEANED AND IDENTIFIED FOR ACCEPTABLE CLEANING LEVELS. AVOID OVER CLEANING TO PREVENT DAMAGE TO EXISTING MATERIALS DURING CLEANING.
- TEMPORARY MATERIALS MAY BE NEW OR USED, BUT MUST BE ADEQUATE IN FOR REQUIRED USAGE, MUST NOT CREATE UNSAFE CONDITIONS AND MUST NOT VIOLATE REQUIREMENTS OF APPLICABLE CODES AND STANDARDS.
- CONTRACTOR SHALL PROVIDE AND MAINTAIN ADEQUATE FIRE PROTECTION IN THE FORM OF FIRE EXTINGUISHER OR OTHER EFFECTIVE MEANS OF EXTINGUISHING FIRE, READY FOR INSTANT USE, DISTRIBUTED AROUND THE PROJECT AND IN AND ABOUT TEMPORARY, INFLAMMABLE STRUCTURES DURING CONSTRUCTION OF WORK. EXISTING FIRE HOSE CONNECTIONS SHALL BE ACCESSIBLE AT ALL TIMES BY FIRE DEPARTMENT PERSONNEL. MATERIAL SAND DEBRIS SHALL NOT BE STORED IN FRONT OF THE CONNECTION, THUS PREVENTING ACCESS. THE CONTRACTOR SHALL COORDINATE ACCESS PROCEDURES WITH THE FIRE MARSHALL.
- GASOLINE AND OTHER FLAMMABLE LIQUIDS SHALL BE STORED AND DISPENSED FROM UL LISTED SAFETY CONTAINERS IN CONFORMANCE WITH THE NATIONAL BOARD OF FIRE UNDERWRITERS' RECOMMENDATIONS.
- SUBMITTALS ARE NOT REQUIRED IF CONTRACTOR ELECTS TO USE THE PROPRIETARY PRODUCTS LISTED. SUBMITTALS WILL BE REQUIRED IF CONTRACTOR WISHES TO USE ALTERNATE PRODUCTS. ALL ALTERNATE PRODUCTS ARE SUBJECT TO REVIEW AND APPROVAL BY THE ENGINEER AND OWNER.
- CONTRACTOR SHALL CALL MISS UTILITY AT 1-800-552-7001 BEFORE CONSTRUCTION COMMENCES.
- TREE AND PLANT ROOTS OR BRANCHES THAT MAY INTERFERE WITH THE WORK SHALL BE TRIMMED OR CUT ONLY WITH THE APPROVAL OF THE OWNER AND ENGINEER. ANY TREES OR PLANTS WHICH ARE SHOWN TO REMAIN THAT DO NOT INTERFERE WITH THE WORK, BUT ARE DAMAGED BY CONTRACTOR OR HIS SUB-CONTRACTORS, SHALL BE REPLACED BY CONTRACTOR AT NO ADDITIONAL COST.

WORK AREA PROTECTION AND MAINTENANCE:

- CLEARING AND GRUBBING SHALL BE CONFINED TO THOSE AREAS NEEDED FOR CONSTRUCTION, AND AS SHOWN IN THE DRAWINGS.
- DISTURBED AREAS BEYOND THE ROADWAY CURB AND WHERE INDICATED ON THE PLANS SHALL RECEIVE TOPSOIL AS NECESSARY AND AS DIRECTED. SEEDING MIXTURE SHALL BE DETERMINED BY THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK SECTION 3.32
- CONTRACTOR IS PERMITTED TO WORK IN THE PUBLIC RIGHT-OF-WAY AND ANY TEMPORARY OR PERMANENT EASEMENT SHOWN ON THE PLANS. HOWEVER, CONTRACTOR SHALL NOTIFY PROPERTY OWNER(S) FORTY-EIGHT (48) HOURS PRIOR TO WORKING ON ANY PRIVATE PROPERTY TO COORDINATE ACCESS AND TO DETERMINE A STORAGE AREA FOR MATERIALS IF NEEDED. COORDINATION OF ACCESS TO PUBLIC RIGHT-OF-WAY AND STORAGE OF MATERIALS THEREON SHALL BE COORDINATED WITH THE ENGINEER. CONTRACTOR'S FAILURE TO NOTIFY AND COORDINATE WITH PROPERTY OWNERS AND/OR THE ENGINEER MAY RESULT IN DELAYS. NO ADDITIONAL COMPENSATION OR TIME FOR PERFORMANCE WILL BE GIVEN FOR ANY SUCH DELAYS.
- CONTRACTOR SHALL, AT HIS EXPENSE, MAINTAIN THE WORK SITE IN A CLEAN AND ORDERLY APPEARANCE AT ALL TIMES. ALL DEBRIS AND SURPLUS MATERIAL COLLECTED SHALL BE DISPOSED OF OFF THE WORK SITE BY CONTRACTOR, AT HIS EXPENSE.
- EXISTING LAWNS, TREES, SHRUBS, FENCES, UTILITIES, CULVERTS, WALLS, WALKS, DRIVEWAYS, POLES, SIGNS, RIGHT-OF-WAY MONUMENTS, MAILBOXES AND THE LIKE SHALL BE PROTECTED FROM DAMAGE DURING THE WORK. ANY DAMAGE CAUSED TO SUCH ITEMS SHALL BE REPAIRED OR REPLACED BY CONTRACTOR AT NO ADDITIONAL COST. PROPERTY PINS DISTURBED BY CONTRACTOR THAT ARE NOT SHOWN ON THE PLANS TO BE DISTURBED SHALL BE RESTORED BY LICENSED SURVEYOR AT THE CONTRACTOR'S EXPENSE.
- MEASURES TO CONTROL EROSION AND SEDIMENT SHALL BE PROVIDED PURSUANT TO AND IN COMPLIANCE WITH CURRENT FEDERAL, STATE AND LOCAL REGULATIONS. THE INFORMATION CONTAINED IN THE CONSTRUCTION PLANS AND/OR APPROVAL OF THE PLANS SHALL IN NO WAY RELIEVE THE CONTRACTOR OR HIS AGENT OF ANY LEGAL RESPONSIBILITY WHICH MAY BE REQUIRED BY THE CODE OF VIRGINIA OR ANY ORDINANCE ENACTED BY THE CITY OF CHARLOTTESVILLE. CONTRACTOR SHALL PROVIDE THE NECESSARY DIVERSION DITCHES, DIKES, OR TEMPORARY CULVERTS REQUIRED TO PREVENT MUD AND DEBRIS FROM BEING WASHED ONTO THE STREETS OR ADJACENT PROPERTY. CONTRACTOR'S VEHICLES SHALL BE KEPT CLEAN TO PREVENT MUD OR DUST FROM BEING DEPOSITED ON STREETS. NO AREA SHALL BE LEFT DENUDED FOR MORE THAN SEVEN (7) CALENDAR DAYS.
- CONTRACTOR SHALL CLEAN UP, RESTORE, SEED AND MAINTAIN ALL DISTURBED AREAS IMMEDIATELY UPON COMPLETION OF WORK. TOPSOIL SEED, FERTILIZER AND MULCH SHALL BE PLACED IN ACCORDANCE WITH CITY OF CHARLOTTESVILLE STANDARDS ON ALL DISTURBED AREAS. A PERMANENT STAND OF GRASS ADEQUATE TO PREVENT EROSION SHALL BE ESTABLISHED PRIOR TO FINAL ACCEPTANCE. ALL EROSION AND SEDIMENT CONTROLS SHALL BE REMOVED WITHIN 30 DAYS AFTER THE PROJECT IS STABILIZED. (MS-18)
- FOR FURTHER REQUIREMENTS AND DETAILS OF TREE PRESERVATION, PLANTING, EROSION AND SEDIMENT CONTROL, REFER TO THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.
- AN EROSION AND SEDIMENT CONTROL CERTIFIED RESPONSIBLE LAND DISTURBER (CRLD) IS REQUIRED FOR ALL LAND DISTURBANCE ACTIVITIES.
- THE CONTRACTOR SHALL PROPERLY INSTALL AND MAINTAIN EROSION AND SEDIMENT CONTROLS FOR THE LIFE OF THE PROJECT, AND ROUTINELY CHECK CONTROL DEVICES BEFORE, DURING AND AFTER STORM EVENTS.

UTILITIES:

- PRIOR TO CONSTRUCTION OR EXCAVATION, THE CONTRACTOR SHALL ASSUME RESPONSIBILITY OF LOCATING ANY AND ALL UNDERGROUND UTILITIES (PUBLIC OR PRIVATE) THAT MAY EXIST WITHIN OR CROSS THROUGH THE AREA OF CONSTRUCTION WHETHER OR NOT THEY ARE SHOWN ON THE PLANS. PRIOR TO ANY CONSTRUCTION ACTIVITY, THE CONTRACTOR SHALL CALL "MISS UTILITY OF VIRGINIA" AT 1-800-552-7001. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPAIRING, AT HIS SOLE EXPENSE, ANY EXISTING UTILITY DAMAGED DURING CONSTRUCTION.
- THE PLAN DOES NOT GUARANTEE THE EXISTENCE, NONEXISTENCE, SIZE, TYPE, LOCATION, ALIGNMENT, OR DEPTH OF ANY OR ALL UNDERGROUND UTILITIES OR OTHER FACILITIES. WHERE SURFACE FEATURES (MANHOLES, CATCH BASINS, VALVES, ETC.) ARE UNAVAILABLE OR INCONCLUSIVE, INFORMATION SHOWN MAY BE FROM UTILITY OWNERS RECORDS AND/OR ELECTRONIC LINE TRACING, THE RELIABILITY OF WHICH IS UNCERTAIN. THE CONTRACTOR SHALL PERFORM TEST EXCAVATIONS OR OTHER INVESTIGATION AS NECESSARY TO VERIFY LOCATION AND CLEARANCES.
- WHEN THE WORK CROSSES EXISTING UTILITIES, THE EXISTING UTILITIES SHALL BE ADEQUATELY SUPPORTED AND PROTECTED FROM THE DAMAGE DUE TO THE WORK. ALL METHODS FOR SUPPORTING AND MAINTAINING THE EXISTING UTILITIES SHALL BE APPROVED BY THE RESPECTIVE UTILITY COMPANY AND/OR THE ENGINEER. CONTRACTOR SHALL EXERCISE CARE TO INSURE THAT THE GRADE AND ALIGNMENT OF EXISTING UTILITIES ARE MAINTAINED AND THAT NO JOINTS OR CONNECTIONS ARE DISPLACED. BACKFILL SHALL BE CAREFULLY PLACED AND COMPACTED TO PREVENT FUTURE DAMAGE OR SETTLEMENT TO EXISTING UTILITIES. ANY UTILITIES REMOVED AS PART OF THE WORK, AND NOT INDICATED TO BE REMOVED OR ABANDONED, SHALL BE RESTORED USING MATERIALS AND INSTALLATION EQUAL TO THE UTILITY'S STANDARDS.
- CONTRACTOR SHALL NOTIFY LANDOWNERS, TENANTS AND THE ENGINEER A MINIMUM OF 72 HOURS PRIOR TO THE INTERRUPTION OF ANY SERVICES. SERVICE INTERRUPTIONS SHALL BE KEPT TO A MINIMUM.
- CONTRACTOR TO MAKE ANY NECESSARY ADJUSTMENTS TO ALL UTILITY JUNCTION BOXES, VALVE BOXES, MANHOLES, CLEAN-OUTS, AND OTHER GRADE RELATED ITEMS IN SIDEWALK, ROADWAY, AND/OR ADJACENT AREAS TO MATCH FINISHED GRADE. COSTS ARE TO BE INCLUDED UNDER THE VARIOUS UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE.
- PER THE VIRGINIA DEPARTMENT OF HEALTH WATERWORKS REGULATIONS (PART II, ARTICLE 3, SECTION 12 VAC 5-590 THROUGH 630), ALL BUILDINGS THAT HAVE THE POSSIBILITY OF CONTAMINATING THE POTABLE WATER DISTRIBUTION SYSTEM (HOSPITALS, INDUSTRIAL SITES, BREWERIES, ETC.) SHALL HAVE A BACKFLOW PREVENTION DEVICE INSTALLED WITHIN THE FACILITY. THIS DEVICE SHALL MEET SPECIFICATIONS OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE. SHALL BE TESTED IN REGULAR INTERVALS AS REQUIRED, AND TEST RESULTS SHALL BE SUBMITTED TO THE REGULATORY COMPLIANCE ADMINISTRATOR IN THE DEPARTMENT OF UTILITIES.
- ALL BUILDINGS THAT MAY PRODUCE WASTES CONTAINING MORE THAN ONE HUNDRED (100) PARTS PER MILLION OF FATS, OIL, OR GREASE SHALL INSTALL A GREASE TRAP. THE GREASE TRAP SHALL MEET SPECIFICATIONS OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE, MAINTAIN RECORDS OF CLEANING AND MAINTENANCE, AND BE INSPECTED ON REGULAR INTERVALS BY THE REGULATORY COMPLIANCE ADMINISTRATOR IN THE DEPARTMENT OF UTILITIES.
- CONTACT THE REGULATORY COMPLIANCE ADMINISTRATOR AT 970-3032 WITH ANY QUESTIONS REGARDING THE GREASE TRAP OR BACKFLOW PREVENTION DEVICES.

EARTH WORK AND SITE CONDITIONS:

- EXCEPT AS OTHERWISE SHOWN ON THE PLANS, ALL CUTS AND FILLS SHALL BE NO GREATER THAN 3:1.
- UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, ALL FILL MATERIALS SHALL BE COMPACTED TO 95% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99 METHOD A, WITHIN PLUS OR MINUS 2% OF OPTIMUM MOISTURE, FOR THE FULL WIDTH AND THE DEPTH OF THE FILL.
- THE CONTRACTOR SHALL ADD, CHANGE, OR RELOCATE EROSION AND SEDIMENT CONTROLS AT THE DIRECTION OF THE CITY OF CHARLOTTESVILLE E&S INSPECTOR TO THEIR SATISFACTION AT NO ADDITIONAL COST TO THE OWNER.
- ALL GRADING AND IMPROVEMENTS TO BE CONFINED TO THE PROJECT AREA UNLESS OTHERWISE INDICATED.
- PROPOSED GRADES SHALL BE FIELD ADJUSTED TO CONFORM TO THE INTENT OF THE TYPICAL SECTIONS. A SMOOTH GRADE SHALL BE MAINTAINED FROM THE BASELINE TO THE PROPOSED EDGE OF PAVEMENT OR FACE OF CURB TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR PONDING OF WATER ON ALL PAVED SURFACES.
- CONTRACTOR SHALL MAINTAIN A SMOOTH GRADE TO THE PROPOSED EDGE OF PAVEMENT OR FACE OF CURB TO PROVIDE POSITIVE DRAINAGE ON ALL PAVED SURFACES. ANY AREAS WHERE WATER IS IMPOUNDED SHALL BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL COST. POSITIVE DRAINAGE OF ALL ROADWAY AREAS TO THE STORM DRAIN INLETS OR OTHER ACCEPTABLE DRAINAGE CHANNELS AS NOTED ON THE PLANS IS REQUIRED.
- CONTRACTOR SHALL MAINTAIN EXISTING STREAMS, DITCHES, DRAINAGE STRUCTURES, CULVERT AND FLOWS AT ALL TIMES DURING THE WORK. CONTRACTOR SHALL PAY FOR ALL PERSONAL INJURY AND PROPERTY DAMAGE WHICH MAY OCCUR AS A RESULT OF FAILING TO MAINTAIN ADEQUATE DRAINAGE.
- ALL PIPES, DIPS AND OTHER STRUCTURES SHALL BE INSPECTED BY THE ENGINEER BEFORE BEING BACKFILLED OR BURIED. THE ENGINEER MAY REQUIRE CONTRACTOR, AT NO ADDITIONAL COST, TO UNCOVER AND RE-COVER SUCH STRUCTURES IF THE HAVE BEEN BACKFILLED OR BURIED WITHOUT SUCH INSPECTION.
- ALL STORM CHANNELS, DRAINS, AND SEWER SYSTEMS SHALL BE CLEANED UPON COMPLETION OF THE PROPOSED WORK. SEDIMENT, CHEMICALS, AND/OR DEBRIS REMOVED FROM THESE SYSTEMS SHALL BE REMOVED AND DISPOSED OF PROPERLY.

MAINTENANCE OF TRAFFIC:

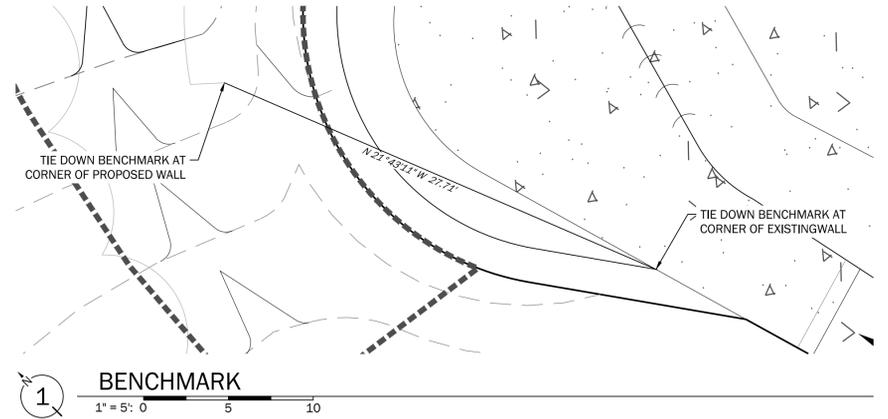
- TEMPORARY STREET CLOSURE PERMIT REQUIRED FOR CLOSURE OF SIDEWALKS, PARKING SPACES AND ROADWAYS AND IS SUBJECT TO APPROVAL BY THE CITY OF CHARLOTTESVILLE TRAFFIC ENGINEER.
- THE VIRGINIA WORK AREA PROTECTION MANUAL AND THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SHALL GOVERN ALL TEMPORARY TRAFFIC CONTROL OPERATIONS THROUGHOUT CONSTRUCTION OF THIS PROJECT. ADHERENCE TO APPLICABLE PROVISIONS OF THE MANUAL IS REQUIRED OF THE CONTRACTOR EVEN THOUGH DETAILED REFERENCE TO ALL SUCH PROVISIONS MAY NOT BE CONTAINED IN THE PLANS.
- ALL EXISTING RESIDENTIAL AND COMMERCIAL ENTRANCES SHALL BE MAINTAINED AT ALL TIMES, UNLESS OTHERWISE DIRECTED BY THE ENGINEER.
- NO TEMPORARY PAVEMENT MARKING SHALL BE ALLOWED ON THE FINAL ASPHALT SURFACE COURSE.
- THE CONTRACTOR SHALL MAINTAIN ALL LANES OF TRAVEL OPEN FROM 6:30 AM TO 9:00 AM AND 3:00 PM TO 5:00 PM UNLESS DEEMED UNNECESSARY BY THE ENGINEER. SHORT PERIODS OF ONE WAY FLAGGING OPERATIONS MAY BE CONDUCTED OUTSIDE THE HOURS MENTIONED ABOVE.
- ALL TRAFFIC SIGNALS SHALL BE ADJUSTED AS DEEMED NECESSARY BY THE ENGINEER PRIOR TO ANY TRAFFIC CHANGES.
- WHEN WORK IN THE EXCAVATION AREA IS DISCONTINUED FOR A SHORT PERIOD OF TIME, AS AT NIGHT, THE CONTRACTOR SHALL BACKFILL THE CUT AREAS ADJACENT TO THE BUSTING PAVEMENT WITH A 'FILLET OF MATERIAL'. THE FILLET SHALL BE COMPOSED OF THE SAME MATERIAL (EXCAVATION, BORROW, BASE COURSE, ETC.) ALL COSTS FOR PLACING AND REMOVING THIS FILLET OF MATERIAL SHALL BE INCLUDED IN THE PRICE BID FOR OTHER BID ITEMS OF WORK ON THIS PROJECT, AND NO ADDITIONAL CHARGE WILL BE ALLOWED.
- EXISTING SURFACE, AGGREGATE BASE AND SUBBASE MATERIAL WHICH WILL BE DEMOLISHED OR OBLITERATED DURING CONSTRUCTION AND WHICH IS SUITABLE FOR MAINTENANCE OF TRAFFIC AS DETERMINED BY THE ENGINEER, SHALL BE SALVAGED AND UTILIZED FOR MAINTENANCE OF TRAFFIC PRIOR TO THE USE OF COMMERCIAL MATERIAL. WHEN NOT SPECIFIED AS A SEPARATE PAY ITEM, THE REMOVAL AND SALVAGING OF EXISTING SURFACES AND AGGREGATE BASE AND SUBBASE MATERIAL WILL BE MEASURED AND PAID FOR AS REGULAR EXCAVATION IN ACCORDANCE WITH SECTION 303 OF THE VDOT ROAD AND BRIDGE SPECIFICATIONS.
- CONSTRUCT ALL INTERSECTIONS AND DRIVEWAYS UNDER TRAFFIC.
- IF USED, TEMPORARY TRAFFIC BARRIER SERVICE SHALL BE INSTALLED AND REMOVED SO AS NOT TO PRESENT ANY BLUNT END OR HAZARD TO THE MOTORING PUBLIC.
- CONTRACTOR SHALL NOTIFY TRANSIT PROVIDERS A MINIMUM OF TWO WEEKS PRIOR TO ANY IMPACT OR DISRUPTION TO REGULAR SERVICE OR STOPS.
- ALL EXISTING PAVEMENT MARKINGS CONFLICTING WITH PROPOSED CONSTRUCTION PAVEMENT MARKINGS (IF USED) SHALL BE ERADICATED.
- INSTALLATION AND REMOVAL OF TEMPORARY TRAFFIC CONTROL DEVICES SHALL BE IN ACCORDANCE WITH THE SECTION 6G.25 OF THE WORK AREA PROTECTION MANUAL.
- USE APPROPRIATE SIGNS TO SHIFT PEDESTRIAN TRAFFIC AS NEEDED.
- CONTRACTOR SHALL ASSURE ENDS OF TEMPORARY CONCRETE BARRIER (IF USED) DO NOT OBSTRUCT INTERSECTION SIGHT LINES.

FIRE PREVENTION:

- SMOKING SHALL ONLY BE ALLOWED IN DESIGNATED SPACES WITH PROPER RECEPTACLES. "NO SMOKING" SIGNS SHALL BE POSTED AT EACH BUILDING SITE AND WITHIN EACH BUILDING DURING CONSTRUCTION PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
- OVERHEAD WIRING OR OTHER OVERHEAD OBSTRUCTIONS SHALL NOT BE LOWER THAN 13 FEET 6 INCHES OVER A PUBLIC STREET PER THE VIRGINIA STATEWIDE FIRE PREVENTION CODE.
- CONTRACTOR SHALL ENSURE THAT BUILDING STREET NUMBERS ARE PLAINLY VISIBLE FROM THE FRONTAGE STREET AT ALL TIMES DURING CONSTRUCTION FOR EMERGENCY RESPONDERS, PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
- AN APPROVED WATER SUPPLY FOR FIRE PROTECTION SHALL BE MADE AVAILABLE AS SOON AS COMBUSTIBLE MATERIALS ARRIVE ON SITE. WASTE AND COMBUSTIBLE DEBRIS SHALL BE REMOVED FROM THE BUILDING AT THE END OF EACH DAY AND DISPOSED OF IN ACCORDANCE WITH VIRGINIA STATEWIDE FIRE PREVENTION CODE.
- OPERATIONS INVOLVING THE USE OF CUTTING AND WELDING SHALL BE DONE IN ACCORDANCE WITH CHAPTER 35 OF THE VIRGINIA STATEWIDE FIRE PREVENTION CODE.
- FIRE EXTINGUISHERS SHALL BE PROVIDED WITH NOT LESS THAN ONE APPROVED PORTABLE FIRE EXTINGUISHER AT EACH STAIRWAY ON ALL FLOOR LEVELS WHERE COMBUSTIBLE MATERIALS HAVE ACCUMULATED IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE PREVENTION CODE.
- VEHICULAR ACCESS FOR FIRE FIGHTING SHALL BE PROVIDED AT ALL CONSTRUCTION AND DEMOLITION SITES AND TO WITHIN 100 FEET OF TEMPORARY OR PERMANENT FIRE DEPARTMENT CONNECTIONS. VEHICULAR ACCESS SHALL BE CAPABLE OF SUPPORTING FIRE APPARATUS AND VEHICLE LOADING UNDER ALL WEATHER CONDITIONS IN ACCORDANCE WITH THE VIRGINIA STATEWIDE FIRE PREVENTION CODE.

CONCRETE AND ASPHALT:

- ALL MATERIAL INSIDE FORMS SHALL BE CLEAN AND FREE OF ALL ROCKS AND OTHER LOOSE DEBRIS. SUB-BASE MATERIAL SHALL BE COMPACTED BY MECHANICAL MEANS.
- CONCRETE SHALL NOT BE PLACED UNLESS THE AIR TEMPERATURE IS AT LEAST 40 DEGREES FAHRENHEIT (F) IN THE SHADE AND RISING.
- CONCRETE SHALL NOT BE PLACED UNTIL STEEL DOWELS HAVE BEEN INSTALLED IN EXISTING CONCRETE IN ACCORDANCE WITH CITY OF CHARLOTTESVILLE STANDARDS.
- 1/2" PREMOLDED EXPANSION JOINT MATERIAL SHALL BE PLACED AT A MAXIMUM OF 30' INTERVALS ON NEW SIDEWALK, CURB, CURB & GUTTER, AT EACH END OF DRIVEWAY ENTRANCES, AT EACH END OF HANDICAP RAMPS, SOME POINT ON ENTRANCE WALKS AND STEPS ADJUSTMENTS, AND ALONG BUILDINGS AND WALLS WHERE NEW CONCRETE SIDEWALKS ARE PLACED AGAINST THEM.
- ALL EXISTING CURBS, CURB & GUTTER, SIDEWALK AND STEPS TO BE REMOVED SHALL BE TAKEN OUT TO THE NEAREST JOINT. DEMOLITION AND DISPOSAL COST TO BE INCLUDED IN OTHER UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
- EXISTING ASPHALT CONCRETE PAVEMENT SHALL BE SAW CUT AND REMOVED AS PER THE SPECIFICATIONS. REMOVAL SHALL BE DONE IN SUCH A MANNER AS TO NOT TEAR, BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL, ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO THE DIRECTION OF TRAFFIC.
- DISPOSAL OF ALL EXCESS AND DEMOLITION MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR.



GENERAL SURVEY NOTES:

TOPOGRAPHY SOURCE: ACTUAL GROUND SURVEY (SEE ATTACHED SURVEY ON APPROVED PLANS)
 BASIS OF DATUM: HORIZONTAL: NAD-83 VIRGINIA SOUTH ZONE (GPS DERIVED)
 VERTICAL: NAVD-88 (GPS DERIVED)
 BENCHMARKS: (SEE IMAGES ABOVE)

MCINTIRE SKATE PARK RETAINING WALL

FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA

GENERAL NOTES



APPROVED DCH

SUBMISSION NO. 1

PROJECT 2103006

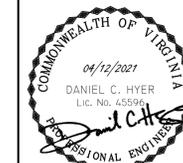
THE WORK OF
LINE + GRADE

CO.1

MCINTIRE SKATE PARK RETAINING WALL

FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA

EXISTING CONDITIONS PLAN



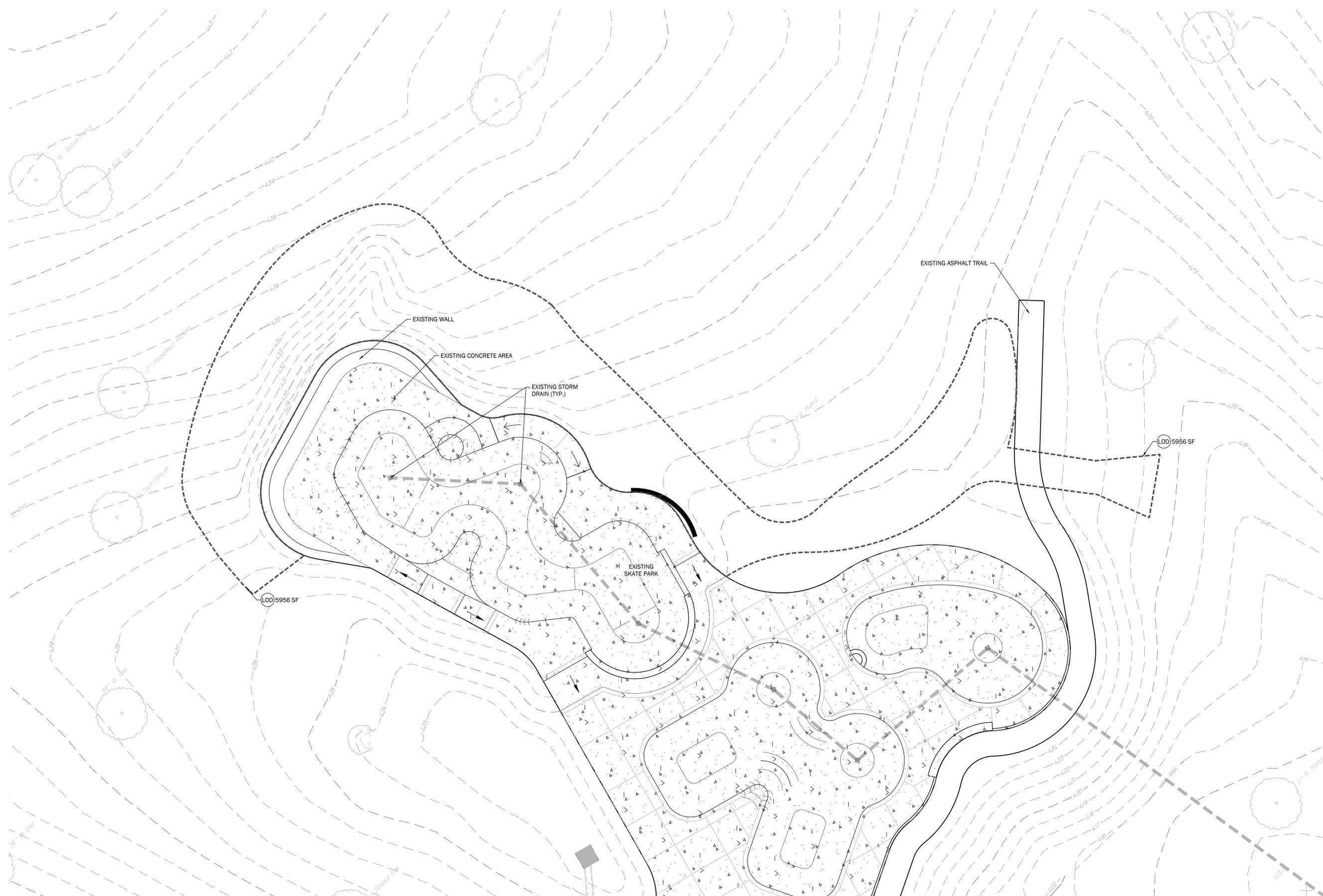
APPROVED DCH

SUBMISSION NO. 1

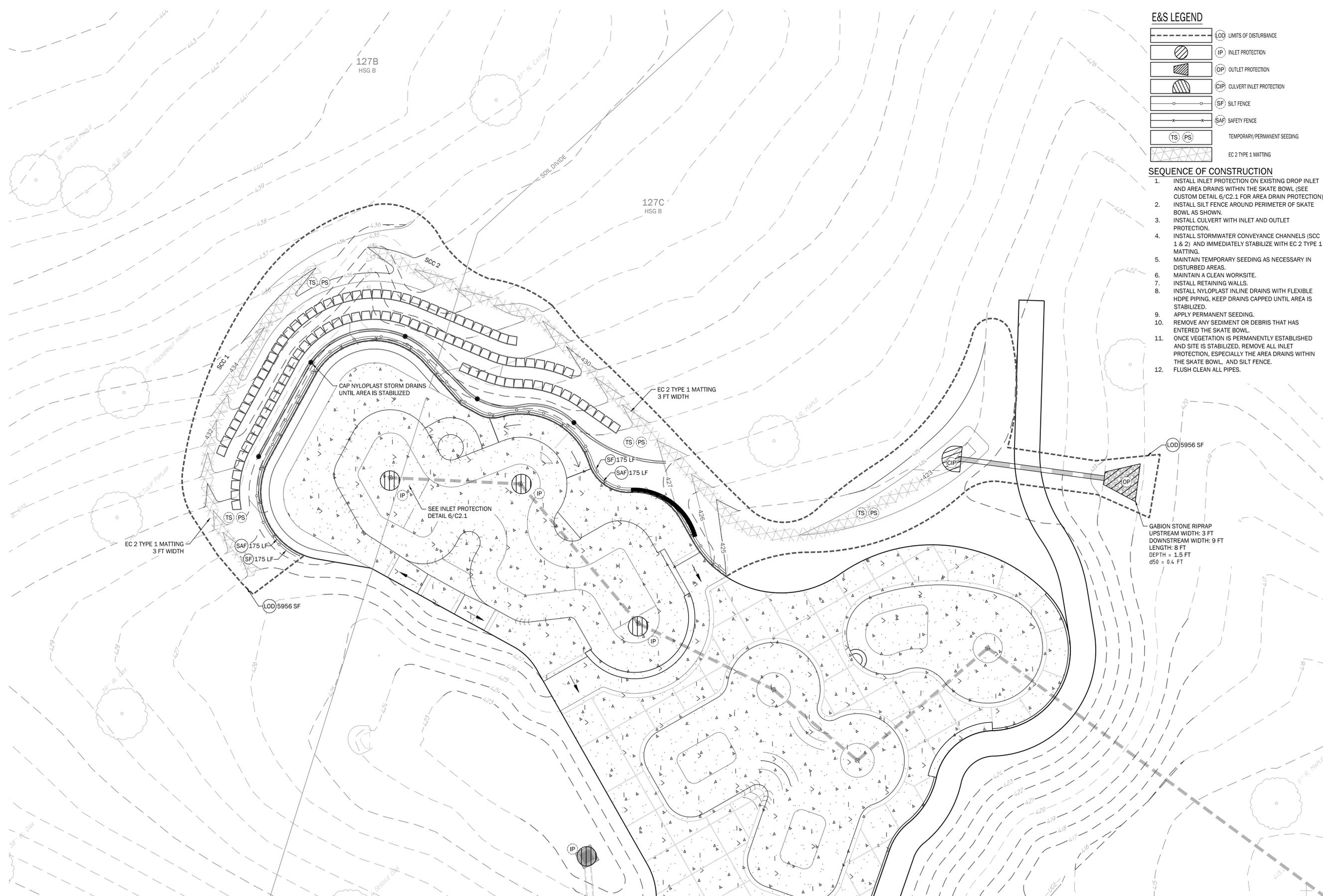
PROJECT 2103006

THE WORK OF
LINE + GRADE

C1.0



1 EXISTING CONDITIONS PLAN
1" = 10' 0"



E&S LEGEND

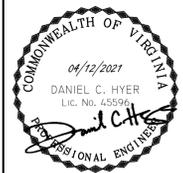
- LIMITS OF DISTURBANCE
- INLET PROTECTION
- OUTLET PROTECTION
- CULVERT INLET PROTECTION
- SILT FENCE
- SAFETY FENCE
- TEMPORARY/PERMANENT SEEDING
- EC 2 TYPE 1 MATTING

SEQUENCE OF CONSTRUCTION

1. INSTALL INLET PROTECTION ON EXISTING DROP INLET AND AREA DRAINS WITHIN THE SKATE BOWL (SEE CUSTOM DETAIL 6/C2.1 FOR AREA DRAIN PROTECTION).
2. INSTALL SILT FENCE AROUND PERIMETER OF SKATE BOWL AS SHOWN.
3. INSTALL CULVERT WITH INLET AND OUTLET PROTECTION.
4. INSTALL STORMWATER CONVEYANCE CHANNELS (SCC 1 & 2) AND IMMEDIATELY STABILIZE WITH EC 2 TYPE 1 MATTING.
5. MAINTAIN TEMPORARY SEEDING AS NECESSARY IN DISTURBED AREAS.
6. MAINTAIN A CLEAN WORKSITE.
7. INSTALL RETAINING WALLS.
8. INSTALL NYLOPLAST INLINE DRAINS WITH FLEXIBLE HDPE PIPING. KEEP DRAINS CAPPED UNTIL AREA IS STABILIZED.
9. APPLY PERMANENT SEEDING.
10. REMOVE ANY SEDIMENT OR DEBRIS THAT HAS ENTERED THE SKATE BOWL.
11. ONCE VEGETATION IS PERMANENTLY ESTABLISHED AND SITE IS STABILIZED, REMOVE ALL INLET PROTECTION, ESPECIALLY THE AREA DRAINS WITHIN THE SKATE BOWL, AND SILT FENCE.
12. FLUSH CLEAN ALL PIPES.

LINE + GRADE
CIVIL ENGINEERING

MCINTIRE SKATE PARK RETAINING WALL
FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA
EROSION AND SEDIMENT CONTROL PLAN

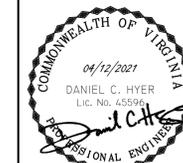


APPROVED DCH
SUBMISSION NO. 1
PROJECT 2103006

THE WORK OF
LINE + GRADE

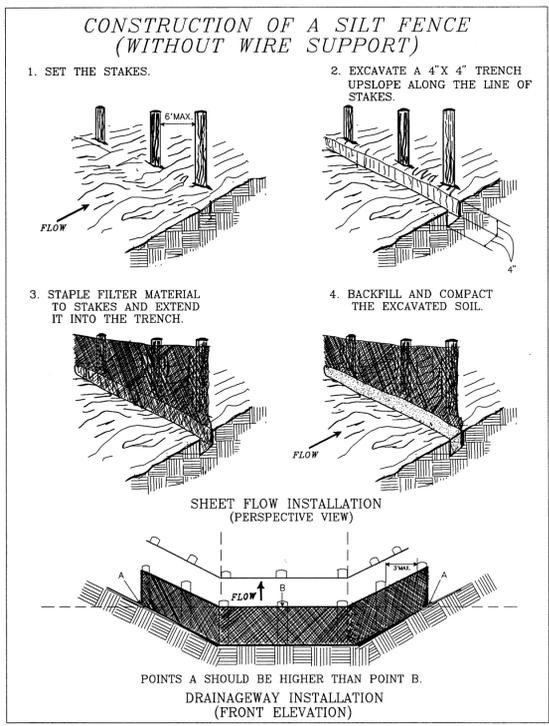
C2.0

1 EROSION AND SEDIMENT CONTROL PLAN
1" = 10' 0" 10 20



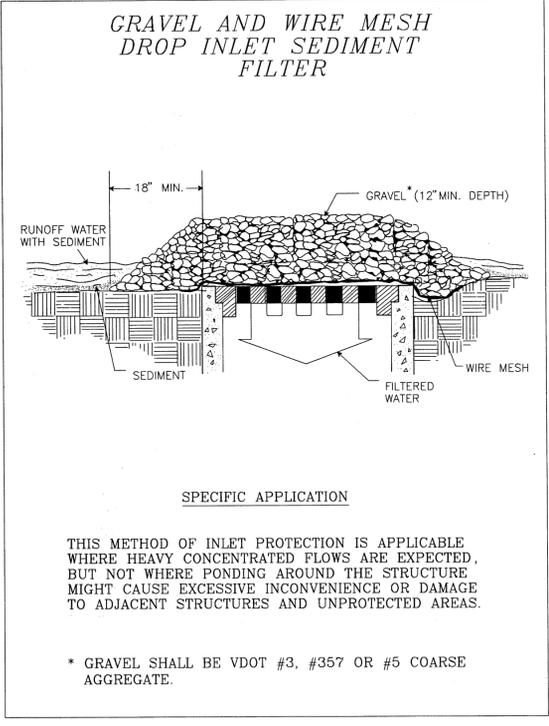
APPROVED DCH
SUBMISSION NO. 1
PROJECT 2103006
THE WORK OF
LINE + GRADE

C2.1



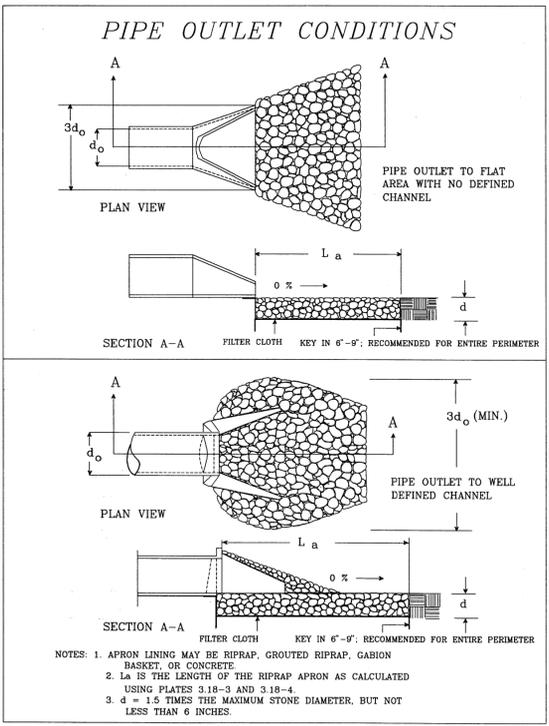
Source: Adapted from Installation of Straw and Fabric Filter Barriers for Sediment Control, Sherwood and Wyant Plate 3.05-2

① 3.05-2 SILT FENCE



Source: Va. DSWC Plate 3.07-2

② 3.07-2 GRATE INLET PROTECTION (GRAVEL)



Source: Va. DSWC Plate 3.18-1

③ 3.18-1 OUTLET PROTECTION

TABLE 3.31-B (REVISED JUNE 2003) TEMPORARY SEEDING SPECIFICATIONS QUICK REFERENCE FOR ALL REGIONS

APPLICATION	SPECIES	APPLICATION RATES
Sept. 1 - Feb. 15	50/50 Mix of Annual Ryegrass (Lolium multi-florum) & Cereal Rye (Hordeum polystrichon)	50-100 (lbs./acre)
Feb. 16 - Apr. 30	Annual Ryegrass (Lolium multi-florum)	60-100 (lbs./acre)
May 1 - Aug. 31	Cereal Rye (Hordeum polystrichon)	50 (lbs./acre)

FERTILIZER & LIME

Apply 10-10-10 Fertilizer at a rate of 450 lbs./acre (or 20 lbs. / 1,000 sq. ft.)
Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

NOTE:
1. A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site.
2. Incorporate the lime and fertilizer into the top 4-6 inches of the soil by disking or by other means.
3. When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4 2003 Nutrient Management for Development Sites at <http://www.dca.virginia.gov/Programs/water/StormwaterManagement/Publications.aspx>

TABLE 3.32-D (REVISED JUNE 2003) PERMANENT SEEDING SPECIFICATIONS FOR PIEDMONT AREA

LAND USE	SPECIES	APPLICATION RATES PER ACRE
Minimum Care Lawn (Commercial or Residential)	Tall Fescue ¹ Perennial Ryegrass Kentucky Bluegrass ²	95-100% 0.5% 0.5% Total: 1.75-2.00 lbs.
High Maintenance Lawn	Tall Fescue ¹	Total: 200-250 lbs.
General Slope (3:1 or less)	Tall Fescue ¹ Red Top Grass of Creeping Red Fescue Seasonal Nurse Crop ³	128 lbs. 2 lbs. 20 lbs. Total: 130 lbs.
Low Maintenance Slope (Steeper than 3:1)	Tall Fescue ¹ Red Top Grass of Creeping Red Fescue Seasonal Nurse Crop ³ Crownvetch ³	108 lbs. 2 lbs. 20 lbs. 20 lbs. Total: 150 lbs.

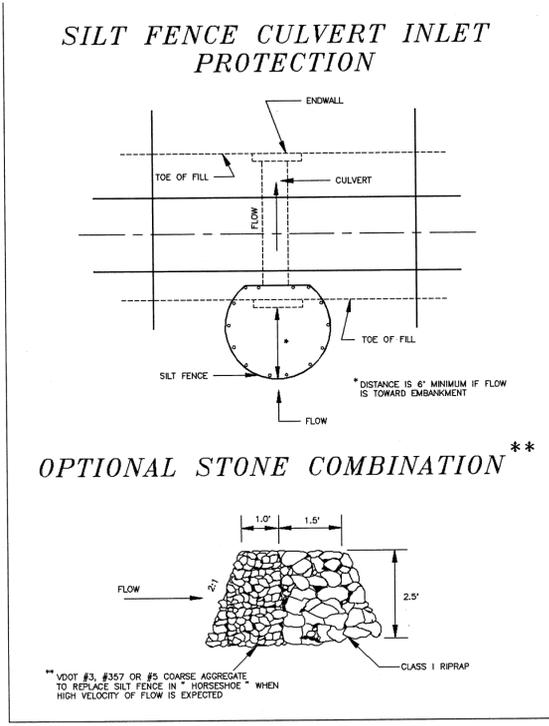
NOTE:
1. When selecting varieties of turfgrass, use the Virginia Crop Improvement Association (VCA) recommended turfgrass variety list. Quality seed will bear a label indicating that they are approved by VCA. A current turfgrass variety list is available at the local County Extension office or through VCA at 604-544-4884 or at <http://vaolan.ces.vt.edu/html/turf/turfpublications/publications2.html>
2. Use seasonal nurse crop in accordance with the seeding dates as stated below:
February 15th - April _____ Annual Rye
May 1st - August 15th _____ Fescue Millet
August 16th - October _____ Annual Rye
November - February 15th _____ Winter Rye
3. Substitute Sericea lespedeza for Crownvetch east of Farmville, VA. May through September use hulled seed, all other periods, use unhusked Sericea. If Ryegrass is used, increase rate to 30 lbs./acre. If Weeping Lovegrass is used, include in any slope or low maintenance mixture during warmer seeding periods, increase to 30-40.

FERTILIZER & LIME

Apply 10-20-10 Fertilizer at a rate of 500 lbs./acre (or 12 lbs. / 1,000 sq. ft.)
Apply Pulverized Agricultural Limestone at a rate of 2 tons/acre (or 90 lbs. / 1,000 sq. ft.)

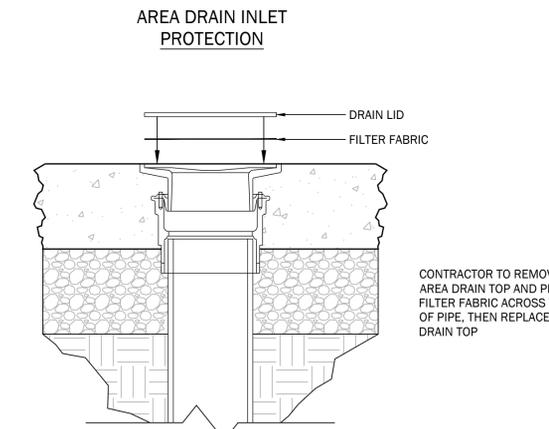
NOTE:
A soil test is necessary to determine the actual amount of lime required to adjust the soil pH of site. Incorporate the lime and fertilizer into the top 4-6 inches of the soil by disking or by other means. When applying Slowly Available Nitrogen, use rates available in Erosion & Sediment Control Technical Bulletin #4 2003 Nutrient Management for Development Sites at <http://www.dca.virginia.gov/Programs/water/StormwaterManagement/Publications.aspx>

④ SEEDING SCHEDULES



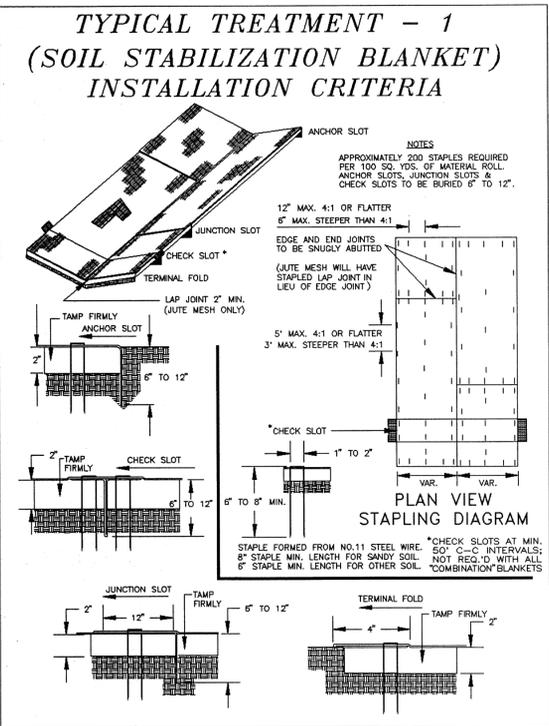
Source: Adapted from VDOT Standard Sheets and Va. DSWC Plate 3.08-1

⑤ 3.08-1 CULVERT INLET PROTECTION



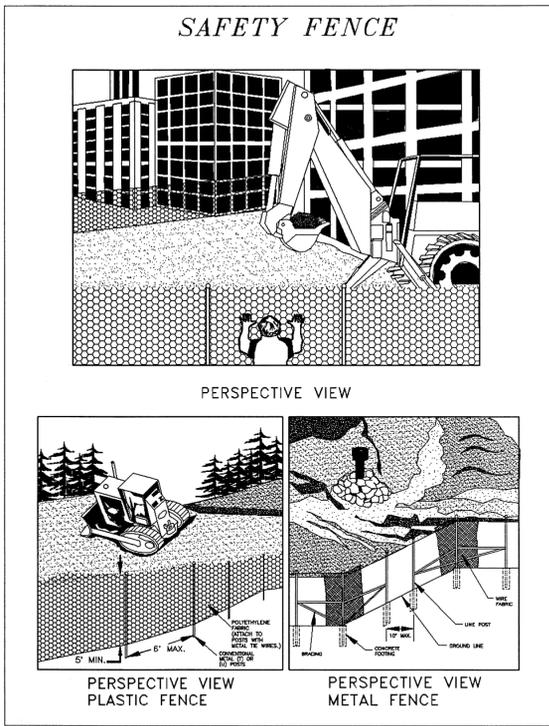
Source: Va. DSWC Plate 3.08-1

⑥ AREA DRAIN INLET PROTECTION



Source: VDOT Road and Bridge Standards Plate 3.36-2

⑦ 3.36-2 EC-2 INSTALLATION



Source: Adapted from Conwed Plastics and VDOT Road and Bridge Standards Plate 3.01-1

⑧ 3.01-1 SAFETY FENCE

LINE & CURVE DATA TABLE

Line #/Curve #	Length	Direction/Delta	Radius
C1	4.529	009.9796	26,000
C2	38.480	084.7985	26,000
C3	4.530	017.3031	15,000
C4	13.599	037.1033	21,000
C5	31.704	086.5005	21,000
C6	6.795	019.4670	20,000
C7	13.592	025.9561	30,003
C8	6.796	015.5754	25,000
C9	15.865	036.3596	25,000
L1	22.634	N73° 49' 43.54"E	
L2	20.370	S22° 29' 57.96"E	
L3	22.634	S73° 49' 43.54"W	
L4	20.370	N22° 29' 57.96"W	
L5	6.791	S22° 30' 00.93"E	
L6	11.317	S10° 06' 52.95"E	

2 WALL GEOMETRY DIAGRAM
1" = 10' 0"

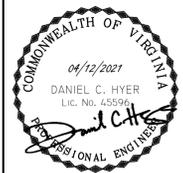


1 SITE PLAN
1" = 10' 0"

MCINTIRE SKATE PARK RETAINING WALL

FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA

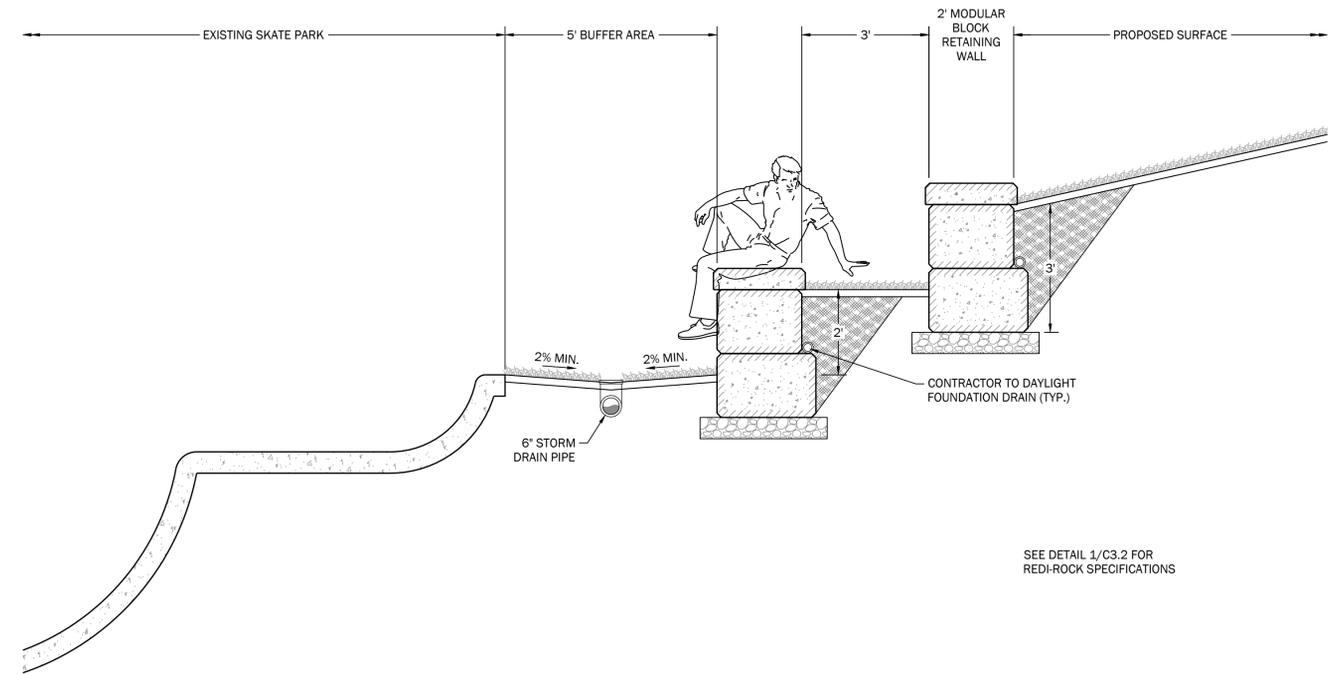
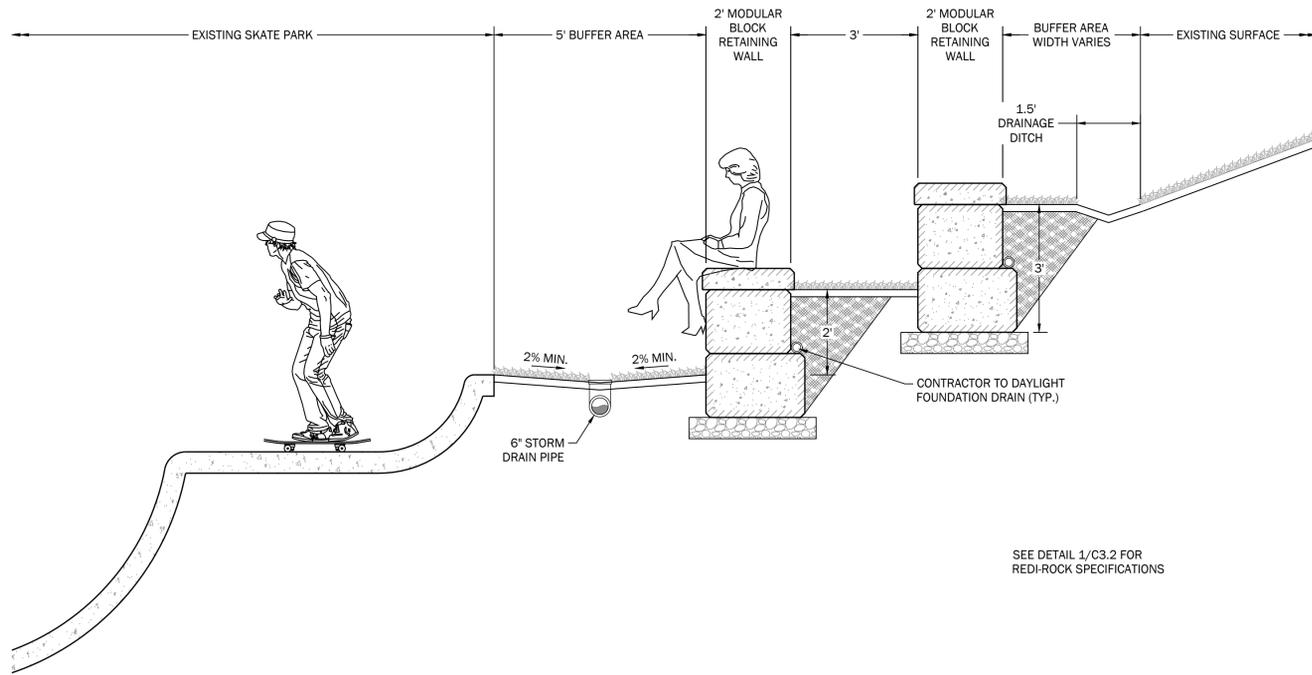
SITE PLAN



APPROVED DCH
SUBMISSION NO. 1
PROJECT 2103006

THE WORK OF
LINE + GRADE

C3.0

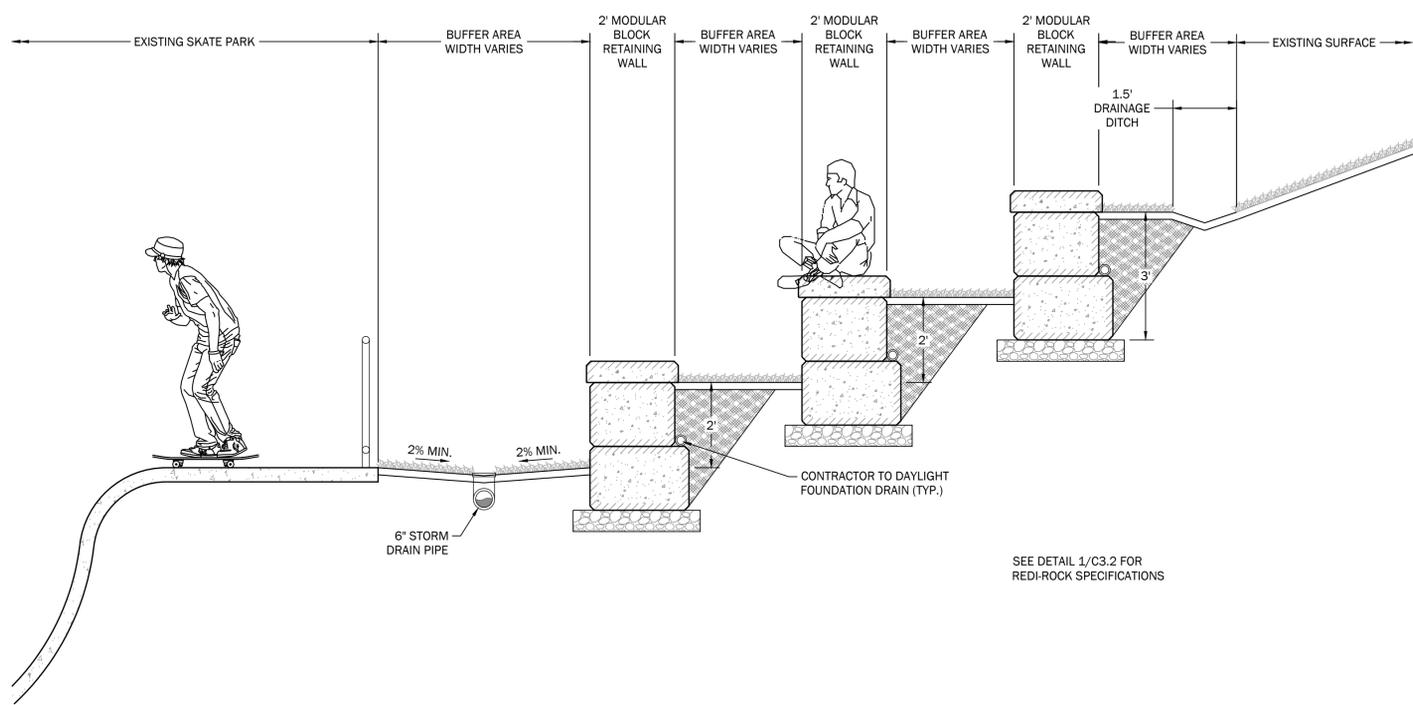


1 SECTION
1" = 2'-0"

2 SECTION
1" = 2'-0"

SEE DETAIL 1/C3.2 FOR REDI-ROCK SPECIFICATIONS

SEE DETAIL 1/C3.2 FOR REDI-ROCK SPECIFICATIONS

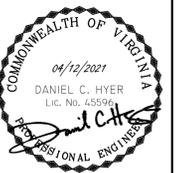


3 SECTION
1" = 2'-0"

SEE DETAIL 1/C3.2 FOR REDI-ROCK SPECIFICATIONS

MCINTIRE SKATE PARK RETAINING WALL
FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA

SITE DETAILS



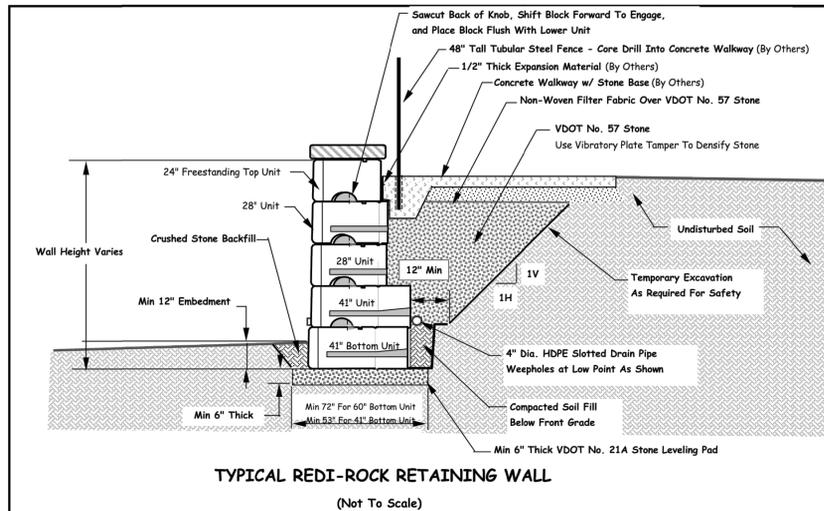
APPROVED DCH

SUBMISSION NO. 1

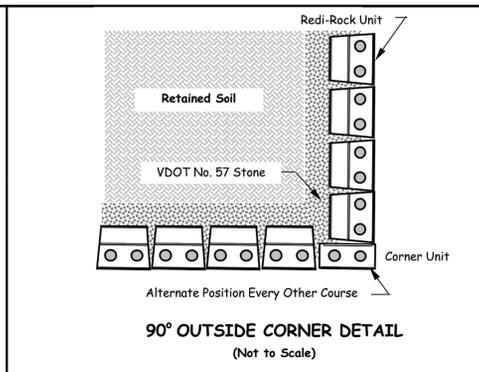
PROJECT 2103006

THE WORK OF
LINE + GRADE

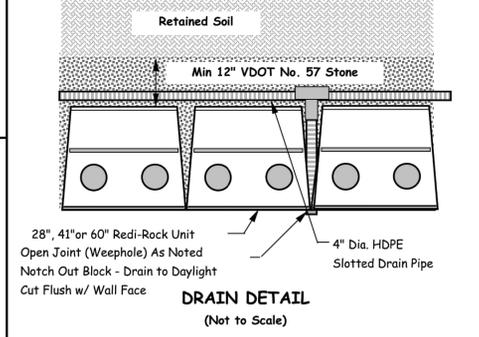
C3.1



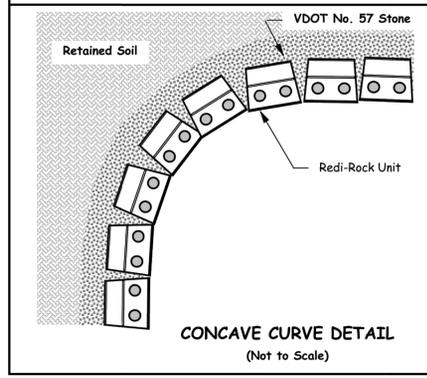
TYPICAL REDI-ROCK RETAINING WALL
(Not To Scale)



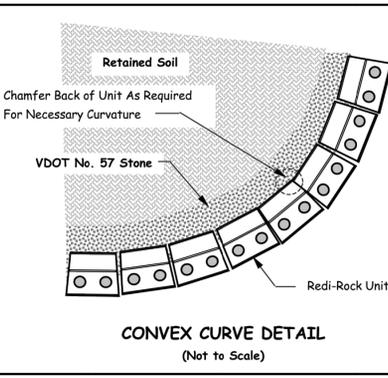
90° OUTSIDE CORNER DETAIL
(Not to Scale)



DRAIN DETAIL
(Not to Scale)



CONCAVE CURVE DETAIL
(Not to Scale)



CONVEX CURVE DETAIL
(Not to Scale)

GENERAL NOTES - REDI-ROCK:

- 1.0 STRIP VEGETATIVE AND ORGANIC SOIL FROM THE WALL AND GEGRID ALIGNMENT.
- 2.0 BENCH CUT ALL EXCAVATED SLOPES.
- 3.0 DO NOT EXCAVATE BEYOND EXCAVATION LINES SHOWN ON PLAN UNLESS DIRECTED BY THE GEOTECHNICAL ENGINEER TO REMOVE UNSUITABLE SOIL.
- 4.0 CONTRACTOR SHALL ENSURE TEMPORARY EXCAVATIONS ARE STABLE AND PROVIDE EXCAVATION SUPPORT IF NEEDED.
- 5.0 GEOTECHNICAL ENGINEER SHALL VERIFY FOUNDATION SOILS AS BEING COMPETENT PER THE DESIGN PARAMETERS.
- 6.0 LEVELING PAD SHALL CONSIST OF COMPACTED SAND, GRAVEL, OR COMBINATION AND SHALL BE A MINIMUM 6-INCH THICK LAYER SUPPORTED BY UNDISTURBED SOIL OR ENGINEERED FILL. WIDTH OF LEVELING PAD SHALL BE 40 INCHES FOR 28" UNITS. WIDTH OF LEVELING PAD SHALL BE 53 INCHES FOR 41" UNITS. WIDTH OF LEVELING PAD SHALL BE 72 INCHES FOR 60" UNITS.
- 7.0 A 4-INCH-DIAMETER SLOTTED HDPE DRAINAGE PIPE SHALL BE INSTALLED BEHIND THE WALL AND CONNECT TO YARD DRAIN IN FRONT OF WALL AT NOTED ON GRADING PLAN.
- 8.0 DRAINAGE AGGREGATE SHALL CONSIST OF CLEAN ANGULAR GRAVEL (VDOT NO. 57 STONE) WITH A MINIMUM 12" THICKNESS, MEETING THE FOLLOWING GRADATION AS DETERMINED IN ACCORDANCE WITH ASTM D-422.

SIEVE SIZE	PERCENTAGE PASSING
1-1/2 INCH	100
1 INCH	95-100
1/2 INCH	25 - 60
NO. 4	0-10
NO. 200	0-5
- 9.0 REDI-ROCK UNITS MOLDED DIMENSIONS SHALL BE 18 INCHES HIGH, 46 INCHES WIDE ALONG THE FACE AND 24", 28", 41" AND 60" FROM FACE TO REAR AS NOTED ON WALL PROFILE AND SHALL NOT DIFFER MORE THAN ± 2% DEVIATION IN THE FACE AND SHALL NOT DIFFER MORE THAN ± 2% DEVIATION IN THE FACE DIMENSIONS AND ± 1 INCH IN FROM FRONT TO BACK. WEIGHT OF REDI-ROCK 24" FREESTANDING UNITS = 1,496 LBS ±; WEIGHT OF REDI-ROCK 28" MIDDLE UNITS = 1,630 LBS ±; WEIGHT OF REDI-ROCK 28" BOTTOM UNITS = 1,768 LBS ±; WEIGHT OF REDI-ROCK 41" MIDDLE UNITS = 2,351 LBS ±; WEIGHT OF REDI-ROCK 41" BOTTOM UNITS = 2,486 LBS ±; WEIGHT OF REDI-ROCK 60" MIDDLE UNITS = 3,290 LBS ±; WEIGHT OF REDI-ROCK 60" BOTTOM UNITS = 3,420 LBS ±.
- 10.0 NO SETBACK (VERTICAL WALL APPLICATION) SHALL BE MAINTAINED ALONG STAIRS BY SAWCUTTING THE BACK OF THE KNOB AS NOTED (SEE REDI-ROCK UNIT DETAIL, SHEET 1 OF 6).
- 11.0 FIELD ADJUSTMENTS OF BLOCK ALIGNMENT MAY BE MADE WITH THE USE OF SHIMS OR ASPHALT SHINGLES TO RAISE ONE COURSE OF BLOCK BY A MAXIMUM OF 1/4 INCH VERTICAL HEIGHT.
- 12.0 BACKFILL WEDGE SHALL CONSIST OF ALL VDOT NO. 57 STONE MEETING THE FOLLOWING GRADATION, AS DETERMINED IN ACCORDANCE WITH ASTM D-422.

SIEVE SIZE	PERCENTAGE PASSING
1-1/2 INCH	100
1 INCH	95-100
1/2 INCH	25 - 60
NO. 4	0-10
NO. 200	0-5
- 13.0 A VIBRATORY PLATE TAMPER SHALL BE USED TO DENSIFY VDOT NO. 57 STONE. COMPACTION TESTS CAN BE WAIVED WHERE VDOT NO. 57 STONE IS USED AS REINFORCED FILL.
- 14.0 ALL OTHER ENGINEERED FILL SHALL CONSIST OF ON-SITE SOIL CLASSIFIED AS GW, GP, GM, GC, SW, SP, SM, SC, CL OR ML WHICH ARE FREE OF ORGANICS OR OTHER DELETERIOUS, NON-SOIL MATERIALS. ENGINEERED FILL SHALL BE PLACED IN 8-INCH LIFTS AND COMPACTED TO A MINIMUM OF 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698). COMPACTION TESTS SHALL BE PERFORMED AS THE WALL IS INSTALLED. COMPACTION WITHIN 3 FEET OF THE WALL SHALL BE LIMITED TO HAND-OPERATED EQUIPMENT.
- 15.0 FILTER FABRIC (MIRAFIT 140N OR EQUIVALENT) SHALL BE PROVIDED AS A GRADE SEPARATOR BETWEEN THE STONE AND THE SOIL FILL SLOPE ABOVE THE WALL WHERE APPLICABLE.
- 16.0 FILL PLACED WITHIN 12 INCHES FROM THE TOP OF THE WALL AND TO RE-ESTABLISH GRADE ALONG THE SLOPE SHALL CONSIST OF INORGANIC SOIL, FREE OF DEBRIS OR OTHER DELETERIOUS MATERIALS, AND MEET THE MINIMUM SOIL SHEAR STRENGTH VALUES AS OUTLINED IN THE DESIGN PARAMETERS FOR RETAINED SOIL - NOTE 4.
- 17.0 COMPACTION SHALL BE TO A MINIMUM OF 95% OF MAXIMUM STANDARD PROCTOR DENSITY (ASTM D-698). COMPACTION TESTS SHALL BE PERFORMED AS THE WALL IS INSTALLED. COMPACTION WITHIN 3 FEET OF THE WALL SHALL BE LIMITED TO HAND-OPERATED EQUIPMENT.
- 18.0 CONTRACTOR SHALL SLOPE SITE GRADES TO DIRECT SURFACE RUNOFF AWAY FROM WALL AT END OF EACH DAY TO AVOID WATER DAMAGING THE WALL WHILE UNDER CONSTRUCTION.
- 19.0 ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT, OR TURF SHALL BE INSTALLED IMMEDIATELY AFTER WALL IS COMPLETE.
- 20.0 IF SITE AND SOIL CONDITIONS, WALL GEOMETRY, OR WALL LOADINGS ARE DIFFERENT THAN THE DRAWINGS AND THE DESIGN PARAMETERS, THE CONTRACTOR MUST CONTACT THE WALL DESIGN ENGINEER PRIOR TO PROCEEDING WITH THE CONSTRUCTION OF THE WALL.

DESIGN PARAMETERS:

- 1 BUILDING CODES: 2012 VIRGINIA UNIFORM STATEWIDE BUILDING CODE (USBC) AND 2012 INTERNATIONAL BUILDING CODE (IBC).
- 2 THE WALL PROFILE IS BASED ON INTERPRETATION OF THE GRADING AND DRAINAGE PLAN, SHEET NO. C400, DATED MAY 22, 2017, PREPARED BY LINE+GRADE, CIVIL ENGINEERING.
- 3 WALL DETAILS SHOWN ON THIS PLAN ARE FOR REDI-ROCK 28", 41" AND 60" UNITS, AND 24" FREESTANDING TOP UNITS WITH 6" THICK CAP UNIT (AS NOTED). USE 24" CORNER (RIGHT AND LEFT) UNIT AT STEP UPS (AS NOTED).
- 4 ENGINEERED FILL BEHIND REDI-ROCK UNITS SHALL CONSIST OF VDOT NO. 57 STONE (MIN 12" THICKNESS) PLUS ALL VDOT NO. 57 STONE IN THE BACKFILL WEDGE BEHIND THE WALL.
- 5 THE DESIGN OF THE REDI-ROCK RETAINING WALL SYSTEM ASSUMES THE FOLLOWING PARAMETERS:

SOIL CONDITIONS	SOIL Type	γ _{sat} (PCF)	FRICITION ANGLE Φ ₁ (DEG)	COHESION (PSF)
BACKFILL WEDGE	VDOT No. 57 Stone	110	42	0
FOUNDATION SOIL	On-Site Soil	120	28	100
- 6 SOIL STRENGTH PARAMETERS ARE BASED ON USE OF ALL VDOT NO. 57 STONE IN THE BACKFILL WEDGE AND SOIL FILL BELOW THE FOUNDATION DRAIN. A VIBRATORY PLATE TAMPER SHALL BE USED TO DENSIFY THE STONE. DO NOT USE HIGH PLASTICITY CLAY (CH-MH), WET SOILS, ROOTS OR TOPSOIL IN BACKFILL WEDGE.

ANY SOFT, SATURATED SOIL ENCOUNTERED IN SUBGRADE SHALL BE UNDERCUT AND REPLACED WITH CRUSHED STONE TO STABILIZE THE FOUNDATION SUBGRADE OR AS DIRECTED BY THE GEOTECHNICAL ENGINEER.

WALL A - MAXIMUM WALL HEIGHT = 4.5 FEET (INCLUDING EMBEDMENT)
 WALL B - MAXIMUM WALL HEIGHT = 12 FEET (INCLUDING EMBEDMENT)
 WALL C - MAXIMUM WALL HEIGHT = 7.5 FEET (INCLUDING EMBEDMENT)

FRONT SLOPE = LEVEL TO MAX. 3H:1V
 BACKSLOPE = LEVEL
 SURCHARGE AT TOP OF WALL = 100 PSF

FACTOR OF SAFETY (SLIDING RESISTANCE) ≥ 1.5
 FACTOR OF SAFETY (OVERTURNING) ≥ 2.0
 DESIGN SOIL BEARING CAPACITY = 1,500 PSF TO 2,500 PSF

1326 E. HIGH STREET
City of Charlottesville, Virginia

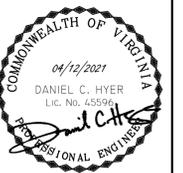
Scale:	N/A	Project No.	
Date:		Sheet	
Revision:	---		

1 (1) REDI-ROCK CORNER INSTALLATION

2 (2) REDI-ROCK CORNER INSTALLATION

LINE+GRADE
CIVIL ENGINEERING

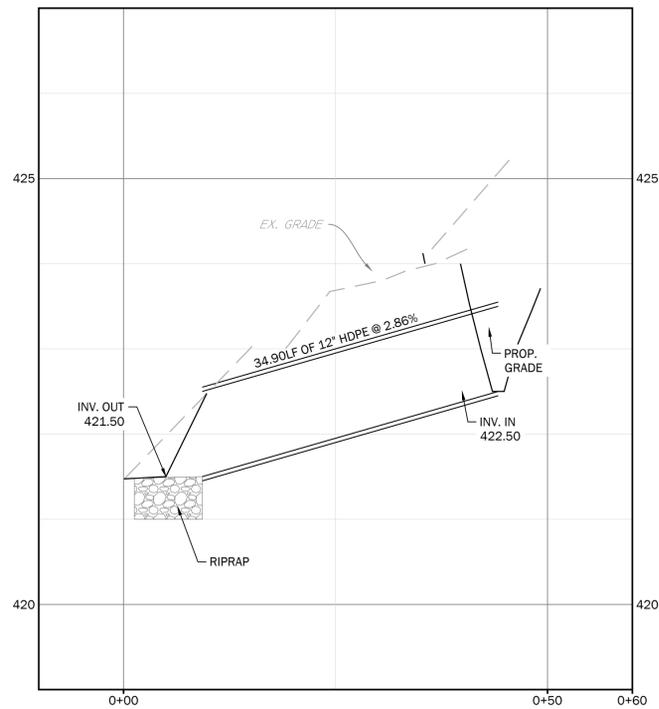
MCINTIRE SKATE PARK RETAINING WALL
FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA
RETAINING WALL DETAILS



APPROVED	DCH
SUBMISSION NO.	1
PROJECT	2103006

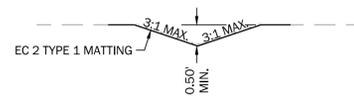
THE WORK OF
LINE + GRADE
C3.2

- NOTE:
1. TOP OF WALL SPOT ELEVATIONS SHOWN ON C3.0 DO NOT INCLUDE CAPSTONE

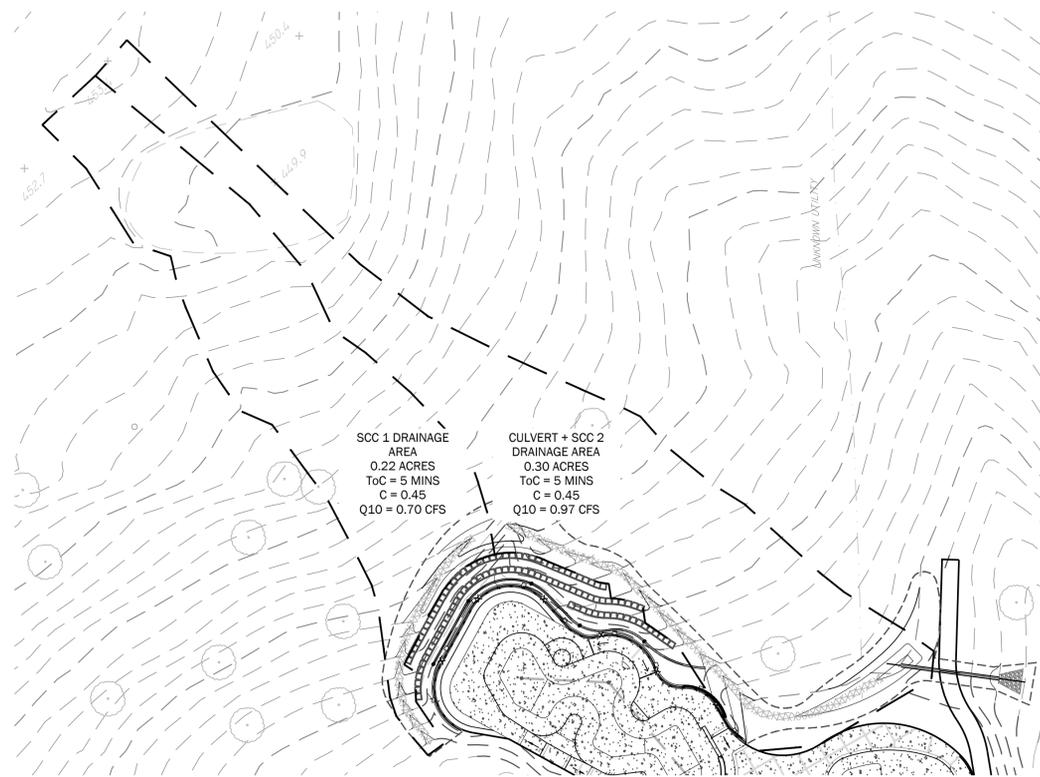


1 CULVERT PROFILE

H: 1" = 10' 0
V: 1" = 1' 0

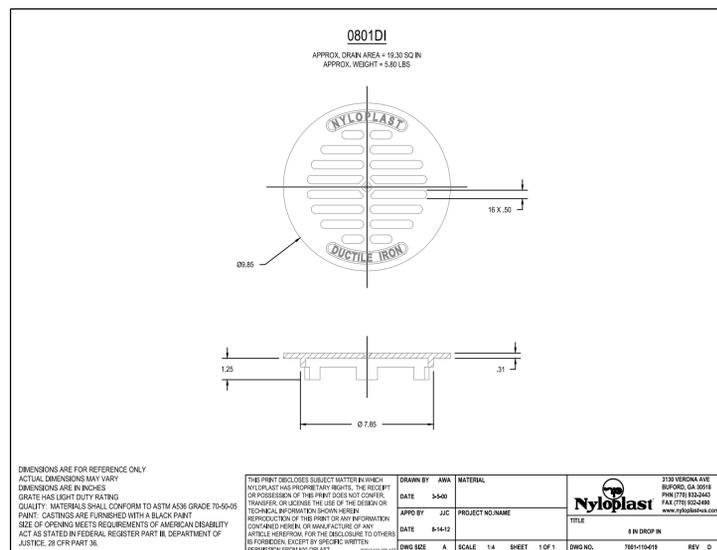


2 SCC 1 & 2 SECTION



3 CULVERT & SCC DRAINAGE MAP

1" = 30' 0



4 NYLOPLAST DRAIN DETAIL

10-YR STORM PIPE COMPUTATIONS													
Line ID	Drainage Area (Ac)	Runoff Coeff. (C)	Tc (min)	Intensity (I) (in/hr)	Incremental Q (cfs)	Known Q (cfs)	Inv. Up (ft)	Inv. Down (ft)	Pipe Length (ft)	Pipe Slope (%)	Pipe Size (in)	Pipe Capacity (cfs)	Velocity (ft/s)
CULVERT	0.30	0.45	5.0	7.20	0.97	0.97	422.50	421.50	35.00	2.86%	12	6.52	5.91

DESIGN CHANNEL CROSS SECTION ANALYSIS - 2 YR STORM

Label	Cross-Section Shape	Friction Method	Channel Lining	Invert Elevation	Slope (%)*	n Value	Discharge (ft³/s)	Normal Depth (ft)	WSEL (ft)	Flow Area (ft²)	Velocity (ft/s)	Wetted Perimeter (ft)	Critical Depth (ft)	Top Width (ft)	Hydraulic Radius (ft)	Critical Slope (ft/ft)	Velocity Head (ft)	Permissible Velocity (ft/s)	Specific Energy (ft)	Froude Number	Flow Type
SCC 1	V-SHAPED	Mannings	EC 2 Type 1	426.50	14.29%	0.030	0.54	0.22	426.72	0.15	3.72	1.39	0.29	1.32	0.10	25.84%	0.21	4.00	0.44	1.98	Supercritical
SCC 2	V-SHAPED	Mannings	EC 2 Type 1	422.50	10.00%	0.030	0.74	0.26	422.76	0.20	3.65	1.64	0.33	1.56	0.12	19.52%	0.21	4.00	0.47	1.78	Supercritical

DESIGN CHANNEL CROSS SECTION ANALYSIS - 10 YR STORM

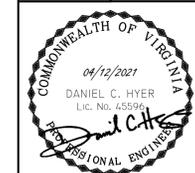
Label	Cross-Section Shape	Friction Method	Channel Lining	Invert Elevation	Slope (%)*	n Value	Discharge (ft³/s)	Normal Depth (ft)	WSEL (ft)	Flow Area (ft²)	Velocity (ft/s)	Wetted Perimeter (ft)	Critical Depth (ft)	Top Width (ft)	Hydraulic Radius (ft)	Critical Slope (ft/ft)	Velocity Head (ft)	Permissible Velocity (ft/s)	Specific Energy (ft)	Froude Number	Flow Type
SCC 1	V-SHAPED	Mannings	EC 2 Type 1	426.5	5.56%	0.030	0.70	0.28	426.78	0.24	2.98	1.77	0.33	1.68	0.13	11.79%	0.14	4	0.42	1.40	Supercritical
SCC 2	V-SHAPED	Mannings	EC 2 Type 1	422.5	10.00%	0.030	0.97	0.29	422.79	0.25	3.84	1.83	0.37	1.74	0.14	18.75%	0.23	4.00	0.52	1.78	Supercritical

*MAXIMUM SLOPE USED TO CALCULATE 2 YR STORM VELOCITY, MINIMUM SLOPE USED TO CALCULATED 10 YR STORM DEPTH

MCINTIRE SKATE PARK RETAINING WALL

FIELD DIRECTIVE
CHARLOTTESVILLE, VIRGINIA

DRAINAGE DETAILS



APPROVED DCH

SUBMISSION NO. 1

PROJECT 2103006

THE WORK OF
LINE + GRADE

C3.3