

un 04, 2021
H:\201\S202069\DRAWINGS\PLAN SETS\S202089-SSD-1 ----> LAYOUT: C-101 COVER

THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING, VIRGINIA, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH ENGINEER PREPARED THESE PLANS. THE CONTRACTOR MUST FIELD VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS. IF ANY DISCREPANCIES ARE IDENTIFIED, THE CONTRACTOR SHALL STOP WORK IMMEDIATELY.

THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE SPECIFICATIONS, THIS SET OF DRAWINGS, AND ALL APPLICABLE CODES, ORDINANCES, REGULATIONS, STANDARDS, AND PERMITS. THESE GENERAL NOTES, THIS SET OF DRAWINGS, ADDITIONAL NOTES AND SPECIFIC PLAN NOTES MAY BE FOUND ON THE INDIVIDUAL PLANS. THESE GENERAL NOTES APPLY TO THIS ENTIRE DOCUMENT PACKAGE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO REVIEW ALL CONSTRUCTION CONTRACT DOCUMENTS INCLUDING, BUT NOT LIMITED TO, ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT AND TO OBTAIN NECESSARY APPROVALS FOR CONSTRUCTION.

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST CONFIRM WITH THE ENGINEER OF RECORD THAT THE LATEST EDITION OF THE DOCUMENTS AND/OR REPORTS REFERENCED WITHIN THE PLAN REFERENCES ARE BEING USED FOR CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN A CURRENT LIST OF SUCH REFERENCES.

PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVAL HAVE BEEN OBTAINED. NO CONSTRUCTION OR FABRICATION IS TO BEGIN UNTIL THE CONTRACTOR HAS RECEIVED AND THOROUGHLY REVIEWED THE CONDITIONS OF APPROVAL TO ALL PLANS AND OTHER DOCUMENTS REVIEWED AND APPROVED BY THE PERMITTING AGENCIES AND HAS OBTAINED ALL NECESSARY PERMITS AND APPROVALS. THE CONTRACTOR SHALL MAINTAIN COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.

26 THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN
ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS, FOR ALL WORK THAT AFFECTS PUBLIC TRAVEL EITHER IN THE
RIGHT OF WAY OR ON SITE. THE COST FOR THIS ITEM MUST BE INCLUDED IN THE CONTRACTORS PRICE AND IS THE CONTRACTORS
27 OWNERS RESPONSIBILITY.

28 OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND
RELATED DOCUMENTS IN STRICT ACCORDANCE WITH THE APPROVED PLANS(S) AND DESIGN; AND, FURTHER, THE ENGINEER OF
RECORD SHALL BE RESPONSIBLE FOR THE PROTECTION AND PRESERVATION OF ALL EXISTING UTILITIES, STRUCTURES, TREES, AND
29 PLANTS. IF OWNER FAILS TO MAINTAIN AND/OR PRESERVE ALL PHYSICAL SITE FEATURES AND/OR DESIGN FEATURES DEPICTED ON THE PLANS
AND RELATED DOCUMENTS, OWNER AGREES TO INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOILER PARTIES, HARMLESS
FOR ALL INJURIES, DAMAGES AND COSTS THAT ENGINEER OF RECORD AND/OR BOHLER INCUR AS A RESULT OF SAID FAILURE OR
30 NEGLIGENCE OR OMISSION.

31 THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ENSURING THAT ALL CONSTRUCTION ACTIVITIES AND MATERIALS COMPLY WITH AND
CONFORM TO APPLICABLE FEDERAL, STATE AND LOCAL RULES AND REGULATIONS, LAWS, ORDINANCES, AND CODES, AND ALL
APPLICABLE REQUIREMENTS OF THE OCCUPATIONAL SAFETY AND HEALTH ACT OF 1970, (29 U.S.C. 651 ET SEQ.) AS AMENDED, AND ANY
32 RULES, REGULATIONS, ORDINANCES, AND CODES THEREAFTER.

33 THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS, AND/OR ANY
OTHER AGENCY WITH JURISDICTION OVER EXCAVATION AND TRENCHING PROCEDURES. ENGINEER OF RECORD AND BOHLER HAS NO
RESPONSIBILITY FOR OR AS RELATED TO EXCAVATION AND TRENCHING PROCEDURES AND WORK.

34 THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND COMPLIANCE WITH AND IN
ACCORDANCE WITH MANUFACTURER'S STANDARDS AND RECOMMENDED INSTALLATION CRITERIA AND SPECIFICATIONS. IF THE
CONTRACTOR AND/OR OWNER FAIL TO DO SO, THEY AGREE TO JOINTLY, INDEPENDENTLY, SEPARATELY, COLLECTIVELY, AND
35 SEVERALLY INDEMNIFY AND HOLD THE ENGINEER OF RECORD AND BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES
AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE.

36 THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE
WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1)
OR MORE OF THE FOLLOWING IS APPLICABLE: (1) EXISTING OR PROPOSED DEVELOPMENT OF 10,000 SQ. FT. OR GREATER
37 THRESHOLD), THE CONTRACTOR MUST ENSURE THAT ALL ACTIVITIES, INCLUDING THOSE OF ALL SUBCONTRACTORS, ARE IN
COMPLIANCE WITH THE SWPPP, INCLUDING BUT NOT LIMITED TO LOGGING ACTIVITIES (MINIMUM ONE PER WEEK AND AFTER RAINFALL
EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY
38 RESPONSIBLE FOR FAILING TO DO SO.

39 AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER OF
RECORD, THE USE OF THE WORDS "CERTIFY" OR "CERTIFICATION" CONSTITUTE(S) AN EXPRESSION ONLY OF PROFESSIONAL OPINION
REGARDING THE INFORMATION WHICH IS THE SUBJECT OF THE ENGINEER OF RECORDS KNOWLEDGE OR BELIEF AND IN ACCORDANCE
40 WITH THE PROFESSIONAL ENGINEERING ACT AND WITH THE ETHICS OF THE PROFESSION. THE USE OF SUCH WORDS SHALL NOT
CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH ALL SUCH NOTES. IN ADDITION, THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.

PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND SEDIMENTATION MEASURES TO PREVENT EROSION PRIOR TO ANY EXCAVATION OR GRADING OPERATIONS. THE CONTRACTOR SHALL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES TO PREVENT SEDIMENT AND/OR LOOSE DEBRIS FROM WASHING ONTO ADJACENT PROPERTIES OR THE RIGHT OF WAY.

ALL DIRECTIONAL TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) FOR THE APPLICABLE STATE OR LOCALLY APPROVED SUPERIOR GUIDELINES, RULES, REGULATIONS, STANDARDS AND THE LIKE.

THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY. THE CONTRACTOR SHALL VERIFY THEIR LOCATION AND DEPTH PRIOR TO THEIR INSTALLATION. THE CONTRACTOR MUST COORDINATE THE RELOCATION OF TRAFFIC SIGNS WITH THE ENTITY WITH JURISDICTION OVER THE PROJECT.

ALL DIMENSIONS SHOWN ARE TO BOTTOM FACE OF CURB, EDGE OF PAVEMENT, OR EDGE OF BUILDING, EXCEPT WHEN NOTED OTHERWISE. IF A PROPERTY LINE IS SHOWN, IT SHALL BE BASED ON THE CENTERLINE OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS, UNLESS NOTED CLEARLY OTHERWISE.

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THEIR ENTIRETY, THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL SPECIFIC NOTICES. SITE GRADING MUST BE PERFORMED IN ACCORDANCE WITH THESE PLANS AND SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AS REFERENCED IN THIS PLAN SET. IF NO GEOTECHNICAL REPORT HAS BEEN OBTAINED BY THE CONTRACTOR, THE CONTRACTOR SHALL OBTAIN A GEOTECHNICAL ENGINEERING REPORT FROM A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE PROJECT IS LOCATED, PRIOR TO THE CONTRACTOR COMMENCING THE GRADING WORK. THE CONTRACTOR MUST FOLLOW THE REQUIREMENTS OF ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS, WHICH HAVE JURISDICTION OVER THIS PROJECT. THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE EROSION CONTROL MEASURES AND DISBURSAL OF MATERIALS. THE CONTRACTOR MUST OBTAIN A COPY OF THE ENGINEER OF RECORD AND THE OWNER PRIOR TO THE CONTRACTOR COMMENCING ANY WORK. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVERT ELEVATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFYING THAT ALL EXISTING UTILITIES SHOULD DISBURSED OBTAINED THROUGH FIELD VERIFICATIONS BE IDENTIFIED OR EXIST. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IN WRITING, OF ANY DISCREPANCIES. FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT, THE CONTRACTOR MUST COMPACT ALL EXCAVATED OR FILLED AREAS IN STRICT ACCORDANCE WITH THE GEOTECHNICAL REPORT'S GUIDANCE. MOISTURE CONTENT AT TIME OF PLACEMENT MUST BE SUBMITTED IN A COMPACTION REPORT PREPARED BY A QUALIFIED GEOTECHNICAL ENGINEER, REGISTERED WITH THE STATE WHERE THE PROJECT IS LOCATED. THE CONTRACTOR SHALL FILL ALL FILL AREAS WITH SUITABLE MATERIALS. ALL EXISTING GRAD AREA AND AREAS TO BE PAVED HAVE BEEN COMPACTED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS AND THE RECOMMENDATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. THE CONTRACTOR SHALL APPLY THE SAME APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES TO SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DETERMINED UNSUITABLE BY OWNER/DEVELOPER, OR OWNER/DEVELOPER'S REPRESENTATIVE, SUBBASE MUST BE REMOVED AND FILLED WITH APPROVED FILL MATERIAL, COMPACTED AS THE GEOTECHNICAL REPORT DIRECTS. EARTHWORK ACTIVITIES SHALL BE LIMITED TO (NOT LIMITED TO) EXCAVATION, FILL, AND COMPACTED TO THE SPECIFICATIONS SET FORTH IN THE GEOTECHNICAL REPORT AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. EARTHWORK ACTIVITIES MUST COMPLY WITH THE STANDARD STATE DOT SPECIFICATIONS FOR ROADWAY CONSTRUCTION AND ALL APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. THE CONTRACTOR SHALL MAINTAIN THE TOPS OF EXISTING MANHOLES, INLET STRUCTURES, AND SANITARY CLEANOUT MUST BE ADJUSTED, AS NECESSARY, TO MATCH PROPOSED FINISHED GRADES WITH NO TRIPPING OR SAFETY HAZARD IN ACCORDANCE WITH ALL APPLICABLE STANDARDS, REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE COORDINATION AND INTERACTION BETWEEN THIS PROJECT RELATIVE TO OTHER PLANS, THE GRADING PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IN WRITING, OF ANY DISCREPANCIES (S) AND/OR CONFLICT(S). THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REPLACING ANY EXCESS MATERIAL, AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS.

ALL ACCESSIBLE (A.K.A. ADA) COMPONENTS AND ACCESSIBLE ROUTES MUST BE CONSTRUCTED TO MEET, AT A MINIMUM, THE MORE STRINGENT OF: (A) THE REQUIREMENTS OF THE "AMERICANS WITH DISABILITIES ACT" (ADA) CODE (42 U.S.C. § 12101 ET SEQ. AND 42 U.S.C. § 4151 ET SEQ.); AND (B) ANY APPLICABLE LOCAL AND STATE GUIDELINES, AND ANY AND ALL AMENDMENTS TO BOTH, WHICH ARE IN EFFECT WHEN THESE PLANS WERE COMPLETED.

THE CONTRACTOR MUST REVIEW THE SPECIFICATIONS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH INDUSTRY GUIDELINES.

THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA) COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE. FINISHED SURFACES ALONG THE ACCESSIBLE ROUTE OF TRAVEL FROM PARKING SPACES TO BUILDING TRANSPORTATION, PEDESTRIAN ACCESS, AND INTER-BUILDING ACCESS, TO POINTS OF ACCESSIBLE BUILDING ENTRANCE/EXIT, MUST COMPLY WITH THE ACCESSIBLE GUIDELINES AND REQUIREMENTS WHICH INCLUDE, BUT ARE NOT LIMITED TO THE FOLLOWING:

- A. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2%) IN ANY DIRECTION.
- B. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCH MINIMUM WALK (48-INCHES RECOMMENDED), OR AS SPECIFIED BY THE GOVERNING AGENCY, WITH SLOPE OF TRAVEL, CAR OVERHANGS AND CURB OVERHANGS (SIDEWALKS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2%) IN CROSS SLOPE. WHERE ACCESSIBLE PATH OF TRAVEL IS GREATER THAN 1' 20 (5.0%), AN ACCESSIBLE RAMP MUST BE PROVIDED ALONG THE ACCESSIBLE PATH OF TRAVEL. OPENINGS MUST NOT EXCEED 1/2-INCH IN WIDTH. VERTICAL CHANGES OF UP TO 1/4" PER 1' ARE PERMITTED IF THEY INCLUDE A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER THAN 12 : 1. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED.
- C. ACCESSIBLE RAMP SLOPES MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES. LEVEL LANDINGS MUST BE PROVIDED AT EACH END OF ACCESSIBLE RAMPS. LANDING MUST PROVIDE POSITIVE DRAINAGE AWAY FROM STRUCTURES, AND MUST NOT EXCEED 1:50 (2.0%) SLOPE IN ANY DIRECTION. RAMPS THAT CHANGE DIRECTION BETWEEN RUNS AT LANDINGS MUST BE AT LEAST 5 FEET MINIMUM. MINIMUM WIDTH OF RAMP AND MINIMUM WIDTH OF THE

D. ACCESSIBLE CURB RUMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%), WHERE FLARED SIDES ARE PROVIDED, THEY MUST NOT EXCEED 1:10 (10%) SLOPE. LEVEL LANDINGS MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 38-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, FLARE SIDES SLOPES MUST NOT EXCEED A SLOPE OF 1:12 (8.3%).
 E. DOORWAY LANDINGS AREAS MUST BE PROVIDED ON THE EXTERIOR SIDE OF ANY DOOR LEADING TO AN ACCESSIBLE PATH OF TRAVEL. THIS LANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN +5.0 (2.0%) FOR POSITIVE DRAINAGE. THIS LANDING AREA MUST BE NO FEWER THAN 60-INCHES (5 FEET) LONG, EXCEPT WHERE OTHERWISE CLEARLY PERMITTED BY ACCESSIBLE STANDARDS OR AN ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE IC/ANSI A117-1.2009 AND OTHER REFERENCES INCORPORATED BY CODE).
 F. WHEN THE PROPOSED CONSTRUCTION INVOLVES RECONSTRUCTION, MODIFICATION, REVISION OR EXTENSION OF OR TO ACCESSIBLE COMPONENTS FROM EXISTING DOORWAYS OR SURFACES, THE CONTRACTOR MUST VERIFY ALL EXISTING ELEVATIONS SHOWN ON THE PLAN. NOTE THAT TABLE 405.2 OF THE DEPARTMENT OF JUSTICE'S ADA STANDARDS FOR ACCESSIBLE DESIGN ALLOWS FOR 1/8" STEPS. IN RARE CASES, WHEN THE EXISTING SURFACE IS NOT ACCESSIBLE, IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IN WRITING, OF ANY DISCREPANCIES AND/OR FIELD CONDITIONS THAT DIFFER IN ANY WAY OR IN ANY RESPECT FROM WHAT IS SHOWN ON THE PLANS BEFORE COMMENCING ANY WORK. CONSTRUCTED IMPROVEMENTS MUST FALL WITHIN THE MAXIMUM AND MINIMUM LIMITATIONS IMPOSED BY THE BARRIER REMOVAL REGULATIONS AND THE ADA STANDARDS.
 G. THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-COMFORMANCE EXISTS OR IS OBSERVED OR DISCOVERED, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IN WRITING, PRIOR TO POURING CONCRETE. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR ALL COSTS TO REMOVE, REPAIR OR REPLACE ANY FORMS NOT PERFORMING CORRECTLY AND/OR WEARING SURFACES.
 H. IT IS STRONGLY RECOMMENDED THAT THE CONTRACTOR REVIEW THE INTENDED CONSTRUCTION TO ENSURE SAME IS CONSISTENT WITH THE LOCAL BUILDING CODE PRIOR TO COMMENCING CONSTRUCTION.

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES. IN THIS CERTIFICATE, THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE THAT THE GENERAL NOTES ARE PART OF THE CONTRACT DOCUMENTS. THE CONTRACTOR MUST CONDUCT DEMOLITION/REMOVALS ACTIVITIES IN SUCH A MANNER AS TO ENSURE MINIMUM INTERFERENCE WITH ROADS, STREETS, SIDEWALKS, WALKWAYS, AND ALL OTHER ADJACENT FACILITIES. THE CONTRACTOR MUST BE RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS AND APPROVALS (IF ANY) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY.

30. DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY. THE CONTRACTOR MUST PROVIDE TRAFFIC CONTROL AND GENERALLY ACCEPTED SAFE PRACTICES IN CONFORMANCE WITH THE CURRENT FEDERAL HIGHWAY ADMINISTRATION "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES" (MUTCD), AND THE FEDERAL, STATE, AND LOCAL REGULATIONS.

31. DEMOLITION (AND ANY OTHER) IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY CONDITIONS REGARDING ITEMS TO BE DEMOLISHED, REMOVED, AND/OR TO REMAIN.

A. THE CONTRACTOR MUST ALSO REVIEW ALL CONSTRUCTION DOCUMENTS AND INCLUDE WITHIN THE DEMOLITION PLAN THE DEMOLITION AND REMOVAL OF ALL STRUCTURES AND ANY NEW SITE IMPROVEMENTS.

B. THIS PLAN IS NOT INTENDED TO AND DOES NOT PROVIDE DIRECTION REGARDING THE MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES TO BE EMPLOYED TO ACCOMPLISH THE WORK, ALL MEANS, METHODS, SEQUENCING, TECHNIQUES AND PROCEDURES ARE TO BE DETERMINED BY THE CONTRACTOR IN CONFORMANCE WITH ALL STATE, FEDERAL, LOCAL, AND JURISDICTIONAL REQUIREMENTS. THE CONTRACTOR MUST COMPLY WITH ALL OSHA AND OTHER SAFETY PRECAUTIONS NECESSARY TO PROVIDE A SAFE WORK SITE FOR THE CONTRACTOR AND THE PUBLIC.

32. THE CONTRACTOR MUST EMPLOY ALL MEANS AND MEANS NECESSARY TO PREVENT MOVEMENT, SETTLEMENT OR COLLAPSE OF EXISTING STRUCTURES, AND ANY OTHER IMPROVEMENTS THAT ARE REMAINING ON OR OFF SITE. THE CONTRACTOR, AT THE CONTRACTOR'S SOLE COST, MUST REPAIR ALL DAMAGE TO ALL ITEMS AND FEATURES THAT ARE NOT TO BE DEMOLISHED OR REMOVED AND TO THE ROADWAY AND ADJACENT FACILITIES AND TO PROVIDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER.

ENGINEER OF RECORD AND/OR BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION. THE CONTRACTOR MUST PROCEED WITH THE DEMOLITION IN A SYSTEMATIC AND SAFE MANNER, COMPLYING WITH ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.

17. THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE FOLLOWING: (A) THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT AREAS, FEATURES AND ITEMS NECESSARY TO PROTECT THE PUBLIC FROM AREAS OF CONSTRUCTION AND CONSTRUCTION ACTIVITIES. THE CONTRACTOR MUST SAFEGUARD THE SITE AS NECESSARY TO PERFORM THE DEMOLITION IN SUCH A MANNER AS TO PREVENT THE ENTRY OF ALL UNAUTHORIZED PERSONS AT ANY TIME, TO OR NEAR THE DEMOLITION AREA.

18. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY, THE CONTRACTOR MUST, IN WRITING, RAISE ANY QUESTIONS CONCERNING THE ACCURACY OR INTENT OF THESE PLANS AND/OR SPECIFICATIONS, AND/OR ANY OTHER APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES. THE CONTRACTOR AND/OR THIRD PARTIES IN PERFORMING THE WORK ON THIS PROJECT, ANY SUCH CONCERNS MUST BE CONVEYED TO THE ENGINEER OF RECORD AND/OR BOHLER. IN WRITING AND MUST ADDRESS ALL ISSUES AND ITEMS THAT MAY BE RAISED BY ANY OF THE ABOVE. ANY DEMOLITION ACTIVITY SHALL BE PERFORMED IN ACCORDANCE WITH THE REQUIREMENTS OF THESE PLANS AND SPECIFICATIONS AND ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS, RULES, REQUIREMENTS, STATUTES, ORDINANCES AND CODES.

19. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS AND IS RESPONSIBLE FOR ALL COORDINATION REGARDING UTILITY DEMOLITION AND/OR DISCONNECTION AS IDENTIFIED OR REQUIRED FOR THE PROJECT. THE CONTRACTOR MUST PROVIDE THE OWNER WITH WRITTEN NOTIFICATION THAT THE SITE'S UTILITIES HAVE BEEN IDENTIFIED, RECORDED AND/OR DISCONNECTED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE JURISDICTION AND UTILITY CARRIER REQUIREMENTS AND ALL OTHER APPLICABLE REGULATIONS, RULES, STATUTES, LAWS, ORDINANCES AND CODES.

1. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION DISTRICT OF ANY DISCOVERY OF A HAZARDOUS MATERIAL WITHIN 24 HOURS PRIOR TO ANY EXCAVATION.
2. 3. INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED.
4. 4. IN ACCORDANCE WITH THE DRAINAGE AND CONSTRUCTION MANUAL, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARKING. IN ADVANCE OF ANY EXCAVATION.
5. 5. LOCATE AND PROTECT ALL UTILITIES AND SERVICES, INCLUDING BUT NOT LIMITED TO GAS, WATER, ELECTRIC, SANITARY AND STORM SEWER, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN AND ADJACENT TO THE EXCAVATION OR PROJECT AREA. THE CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES.
6. 6. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED OR ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
7. 7. G. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) FOR THE TEMPORARY OR PERMANENT TERMINATION OF SERVICE REQUIRED BY THE PROJECT PLANS AND SPECIFICATIONS REGARDING THE METHODS AND MEANS TO CONSTRUCT SAME. THESE ARE NOT THE ENGINEER OF RECORD'S RESPONSIBILITY. IN THE EVENT OF A FAILURE TO COORDINATE WITH THE UTILITY SERVICE PROVIDER(S) TO AVOID THE NECESSITY OF IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
8. 8. H. ADVANCE NOTICE AND COORDINATION WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE IMPACT ON, OF AND TO THE AFFECTED PARTIES, WORK REQUIRED TO BE PERFORMED "OFF-PEAK" IS TO BE PERFORMED AT NO ADDITIONAL COST TO THE OWNER.
9. 9. I. THE EVENT THAT THE CONTRACTOR DISCOVERS ANY HAZARDOUS MATERIAL, THE REMOVAL OF WHICH IS NOT ADDRESSED IN THE PROJECT PLANS AND SPECIFICATIONS, OR THE CONTRACT WITH THE OWNER/DEVELOPER, THE CONTRACTOR MUST IMMEDIATELY CEASE ALL WORK IN THE AREA OF DISCOVERY, AND IMMEDIATELY NOTIFY, IN WRITING AND VERBALLY, THE OWNER AND ENGINEER OF RECORD AND BOHLER, THE DISCOVERY OF SUCH MATERIAL IS TO FURNISH THE CONTRACTOR WITH WRITTEN INSTRUCTIONS AND DIRECTIONS.
10. 10. J. THE CONTRACTOR MUST ENSURE THAT ANY EXISTING ASBESTOS-CONTAINING MATERIALS ENCOUNTERED ARE PROPERLY REMOVED FROM THE SUBJECT PREMISES AND ARE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE AND LOCAL REGULATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TESTING OF SUCH MATERIALS AND AGENCY NOTIFICATIONS AS REQUIRED, AT THE CONTRACTOR'S SOLE EXPENSE.
11. 11. K. THE CONTRACTOR MUST NOT PERFORM ANY EARTH MOVEMENT ACTIVITIES, DEMOLITION OR REMOVAL OF FOUNDATION WALLS, FOOTINGS, OR OTHER MATERIALS WITHIN THE LIMITS OF DISTURBANCE, UNLESS SAME IS IN WRITING ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER.
12. 12. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMITS. THE CONTRACTOR SHALL OBTAIN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENT AGENCIES WITH JURISDICTION.
13. 13. L. THE CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES. BACKFILL MUST BE ACCOMPLISHED WITH APPROVED BACKFILL MATERIALS AND MUST BE SUFFICIENTLY COMPACTED TO MEET ALL CITY, STATE AND FEDERAL REQUIREMENTS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE TESTING AND GUIDANCE ARTICULATED IN THE GEOTECHNICAL REPORT. BACKFILLING MUST OCCUR IMMEDIATELY AFTER DEMOLITION ACTIVITIES AND MUST BE PERFORMED SO AS TO PREVENT WATER ENTERING THE EXCAVATION. FINISHED SURFACING SHALL BE IN ACCORDANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMIT SUCH REPORTS AND RESULTS TO THE ENGINEER OF RECORD AND THE

THE REQUIRED PERMIT AND EXPLOSIVE CONTROL MEASURES THAT THE FEDERAL, STATE, AND LOCAL GOVERNMENTS REQUIRE. THE CONTRACTOR IS ALSO RESPONSIBLE TO CONDUCT AND PERFORM ALL INSPECTION AND SENSITIVE MONITORING ACTIVITIES TO PREVENT AND CONTROL ANY RELEASE OF AIRBORNE DUST, LIKE LEAD, LIKE 16. IN ACCORDANCE WITH FEDERAL, STATE, AND/OR LOCAL STANDARDS. THE CONTRACTOR MUST USE DUST CONTROL MEASURES TO LIMIT AIRBORNE DUST AND DIRT RISING AND SCATTERING IN THE AIR AFTER THE DEMOLITION IS COMPLETED. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT AREAS FROM DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST.

PAVING AND REPAIR OF ALL EXISTING DRIVEWAYS, SIDEWALKS, AND DRIVEWAYS MUST EXTEND TO THE FULL DEPTH OF THE EXISTING PAVEMENT. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE TIME OF EXCAVATION. STOCKPILING OF DEBRIS OUTSIDE OF APPROVED AREAS WILL NOT BE PERMITTED, INCLUDING BUT NOT LIMITED TO, THE PUBLIC RIGHT-OF-WAY.

THE CONTRACTOR SHALL PROVIDE A LOCATION MAP OF THE PROJECT WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE CAPED, ABANDONED IN PLACE, OR RELOCATED TO BE DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON 19. COMPLETION OF THE PROJECT. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL ADJACENT AREAS FROM DUST AND DEBRIS WHICH THE DEMOLITION OPERATIONS CAUSE. THE CONTRACTOR IS RESPONSIBLE FOR RETURNING ALL ADJACENT AREAS TO THEIR "PRE-DEMOLITION" CONDITION AT CONTRACTOR'S SOLE COST.

THE CONTRACTOR MUST EMPTY, CLEAN AND REMOVE FROM THE SITE ALL UNDERGROUND STORAGE TANKS, IF ENCOUNTERED, IN ACCORDANCE WITH FEDERAL, STATE, COUNTY AND LOCAL REQUIREMENTS, PRIOR TO CONTINUING WITH THE DEMOLITION. ALL DEBRIS FROM REMOVAL OPERATIONS MUST BE REMOVED FROM THE SITE AT THE CONTRACTOR'S SOLE COST.

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THE GENERAL NOTES FOR ALL INFORMATION REQUIRED TO PROPERLY DESIGN, CONSTRUCT, MAINTAIN, AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES. THE LIGHTING CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE PLANS AND GENERAL NOTES. THE GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL AGENCY AND GOVERNMENTAL REGULATIONS.

THE LIGHTING PLAN DEPICTS PROPOSED SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE CONTRACTOR. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THE ILLUMINATION DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THE ILLUMINATION. THE PLANS ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE AT GROUND LEVEL UNLESS OTHERWISE NOTED. ILLUMINATION LEVELS ARE SHOWN IN FOOT CANDLES (FC). THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY AND WORK WITHIN THE SPECIFIED ILLUMINATION LEVELS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REPLACING ACCORDING TO MANUFACTURER RECOMMENDATIONS. FAILURE TO FOLLOW THE ABOVE STEPS COULD RESULT IN IMPROPER LIGHT DISTRIBUTION AND FAILURE TO COMPLY WITH THE APPROVED DESIGN. UPON COMPLETION AND ACCEPTANCE OF THE PROJECT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THE LIGHTING PLAN. IT IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, POWER SYSTEM, CONTROLS, WIRING, AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, MECHANICAL ENGINEERS AND/OR LIGHTING ENGINEER'S RESPONSIBILITY.

THE CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY ALL POWER SOURCES AND WIRING DEVICES NECESSARY TO MEET THE DESIGN REQUIREMENTS. THESE ITEMS MUST BE FULLY DESCRIBED IN THE PROJECT STAFF AND THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF ALL UTILITIES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES.

THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER PERFORMANCE OF THE LIGHTING PLAN. THE CONTRACTOR SHALL BE RESPONSIBLE TO ENSURE THAT SHIELDING AND/OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED.

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS. THE GENERAL NOTES ARE REFERENCED HEREIN, AND THE CONTRACTOR MUST REFER TO THEM AND FULLY COMPLY WITH THESE NOTES, IN THEIR ENTIRETY. THE CONTRACTOR MUST BE FAMILIAR WITH AND ACKNOWLEDGE FAMILIARITY WITH ALL OF THE GENERAL NOTES AND ALL OF THE PLANS' SPECIFIC NOTES.

THE CONTRACTOR SHALL CONFORM TO THE VERMONT GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL UNLESS OTHERWISE NOTED, OR UNLESS ENGINEER CLEARLY AND SPECIFICALLY, IN WRITING, DIRECTS OTHERWISE. INSTALLATION OF EROSION CONTROL, CLEARING, AND SITE WORK MUST BE PERFORMED EXACTLY AS INDICATED IN THE EROSION CONTROL CONSTRUCTION NOTES.

THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY 1.07 ACRES.

A. STABILIZED CONSTRUCTION MATERIALS SHALL BE COVERED WITH GRAVEL CONSTRUCTION MATS. ALL EXPOSED SOIL SHALL BE GRADED SO THAT RUNOFF WATER WILL BE RETAINED ON-SITE.

B. SEDIMENT FENCE - INSTALL SILT FENCE(S) AND/OR SILT SOCK AROUND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE, INCLUDING THE EXISTING LOT LINES AND STIPPLES.

C. INSTALL FILTER FABRIC DROP INLET PROTECTION AROUND EACH DRAINAGE INLET AS DRAINAGE STRUCTURES ARE INSTALLED TO REDUCE THE QUANTITY OF SEDIMENT. INSTALL TEMPORARY INLET PROTECTION ON INLETS DOWNSLOPE FROM THE SITE, WHICH WILL BE REMOVED UPON COMPLETION OF THE PROJECT.

D. EROSION CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH ALL OF THE MANUFACTURER'S RECOMMENDATIONS.

E. THE CONTRACTOR MUST INSPECT EROSION CONTROL MEASURES WEEKLY. THE CONTRACTOR MUST REMOVE ANY SILT DEPOSITED ON THE SITE, INCLUDING THE FILTER FABRIC AND/OR SILT SOCK BARRIERS AND EXCAVATE AND REMOVE ANY SILT FROM DRAIN INLET PROTECTION.

F. THE CONTRACTOR MUST APPLY TEMPORARY SEED AND MULCH TO ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO GRASS COVER BY THE END OF THE PROJECT. THE CONTRACTOR SHALL MAINTAIN THE MULCH AND SEED UNTIL THE CONTRACTOR MUST STABILIZE SAME WITH GEOTEXTILE FABRIC AND MAINTAIN SAME IN STRICT ACCORDANCE WITH BEST MANAGEMENT PRACTICES.

G. THE CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL MEASURES IF ENGINEER SO REQUIRES, TO PREVENT ANY, INCLUDING THE INCIDENTAL, DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE.

H. THE CONTRACTOR MUST BE RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT PAVING AND TURL/LANDSCAPING IS ESTABLISHED. THE COSTS OF INSTALLING AND MAINTAINING THE EROSION CONTROL MEASURES MUST BE INCLUDED IN THE BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIBLE FOR ALL SUCH COSTS.

I. THE CONTRACTOR MUST CONTINUE TO MAINTAIN ALL EROSION CONTROL MEASURES UNTIL THE COMPLETION OF CONSTRUCTION OF THE PROJECT.

J. THE CONTRACTOR MUST REMOVE EROSION CONTROL MEASURES, SILT AND DEBRIS AFTER ESTABLISHING PERMANENT VEGETATION COVER OR OTHER INSTALLING A DIFFERENT, SPECIFIED METHOD OF STABILIZATION.

K. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES. THE CONTRACTOR SHALL CONSULT WITH THE LOCAL AGENCY REQUIRED, BOTH AT THE TIME OF INSTALLATION AND NECESSARY TO COMPLY WITH ALL APPLICABLE CODES AND STANDARDS AND/OR TO PREVENT ANY, INCLUDING THE INCIDENTAL, DISCHARGE OF SILT-LADEN RUNOFF FROM EXITING THE SITE.

L. THE CONTRACTOR MUST PREPARE A PLAN FOR EROSION CONTROL MEASURES, INCLUDING THE LOCATION OF ALL LANDSCAPE AND/OR DEMOLITION PLANS) FOR TREE PROTECTION, FENCE LOCATIONS AND DETAILS.

M. THE CONTRACTOR MUST REFER TO GRADING PLANS FOR ADDITIONAL INFORMATION.

N. THE CONTRACTOR MUST CLEAN EXISTING AND PROPOSED DRAINAGE STRUCTURES AND INTERCONNECTING PIPES ON OR BEFORE THE START OF CONSTRUCTION. THE CONTRACTOR SHALL MAINTAIN THE CLEANLINESS OF ALL DRAINAGE STRUCTURES AT THE END OF PROJECT. SOIL EROSION CONTROL MEASURES MUST BE ADJUSTED OR RELOCATED BY THE CONTRACTOR AS IDENTIFIED DURING SITE OBSERVATION IN ORDER TO MAINTAIN THE COMPLETE EFFECTIVENESS OF ALL CONTROL MEASURES.

O. THE CONTRACTOR SHALL MAINTAIN ALL MATERIALS STORED ON THE PROJECT SITE IN PROPERLY IDENTIFIED STORAGE TANKS, CONCRETE WASHOUT AREAS AND ANY OTHER LOCATIONS WHERE HAZARDOUS MATERIALS ARE STORED.

THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT.

[illegible]

REVISIONS

[illegible]

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**PROP.
SITE PLAN
DOCUMENTS**

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

ROLL UP

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DEPARTMENT OF HEALTH OF THE COMMONWEALTH OF MASSACHUSETTS

TRAVIS W. D'AMICO

Lic. No. 048497

06/04/2021

PROFESSIONAL ENGINEER

SHEET TITLE:

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GENERAL

NOTES













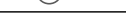
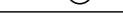


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














C-102

REVISION 1 - 05/20/2021





FOR ENTIRE PLAN SET





EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE
-----	ONSITE PROPERTY LINE / R.O.W. LINE	-----
-----	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE	-----
-----	EASEMENT LINE	-----
-----	SETBACK LINE	-----

	UTILITY POLE WITH LIGHT	
	POLE LIGHT	
	TRAFFIC LIGHT	
	UTILITY POLE	
	TYPICAL LIGHT	
	ACORN LIGHT	
	TYPICAL SIGN	
	PARKING COUNTS	

	SANITARY LABEL	
	STORM LABEL	
	SANITARY SEWER LATERAL	
	UNDERGROUND WATER LINE	
	UNDERGROUND ELECTRIC LINE	
	UNDERGROUND GAS LINE	
	OVERHEAD WIRE	
	UNDERGROUND TELEPHONE LINE	
	UNDERGROUND CABLE LINE	




	HYDRANT	
--	---------	--

	WATER METER	
	WATER VALVE	

	TYPICAL END SECTION	
	HEADWALL OR ENDWALL	

○	CLEAN OUT	○
ⓔ	ELECTRIC MANHOLE	ⓔ










	BOX	
	ELECTRIC PEDESTAL	

	BENCHMARK	
	BORING	

FOR ENTIRE PLAN SET

°	DEGREE
Ø	DIAMETER
#	NUMBER

VDOT GENERAL NOTES

- | PROPOSED EASEMENT LEGEND | | |
|---|-------|------------------|
|  | _____ | SIGHT DISTANCE |
|  | _____ | STORM DRAIN |
|  | _____ | SANITARY SEWER |
|  | _____ | WATER |
|  | _____ | PUBLIC ACCESS |
|  | _____ | COMMON SHARED |
|  | _____ | INGRESS-EGRESS |
|  | _____ | PUBLIC UTILITY |
|  | _____ | VARIABLE WIDTH S |

MAPLE AVENUE - VA RTE. 123

GLYNDON STREET

**B-55
GLENELG SOIL**

LANDS OF
GRI MAPLE AVENUE, LLC
DB. 25422 PG. 1311
TM: 0382 02 0024

60 30 15 0 6

1" = 60'

1. THE ENTIRETY OF THE LIMIT OF DISTURBANCE IS CLASSIFIED AS B-55 SOIL (GLENELG SOIL)



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Call before you dig.**

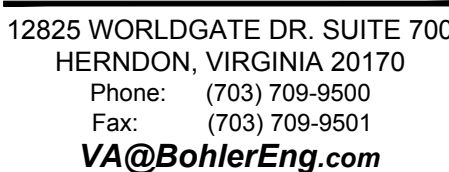
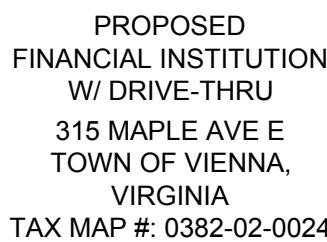
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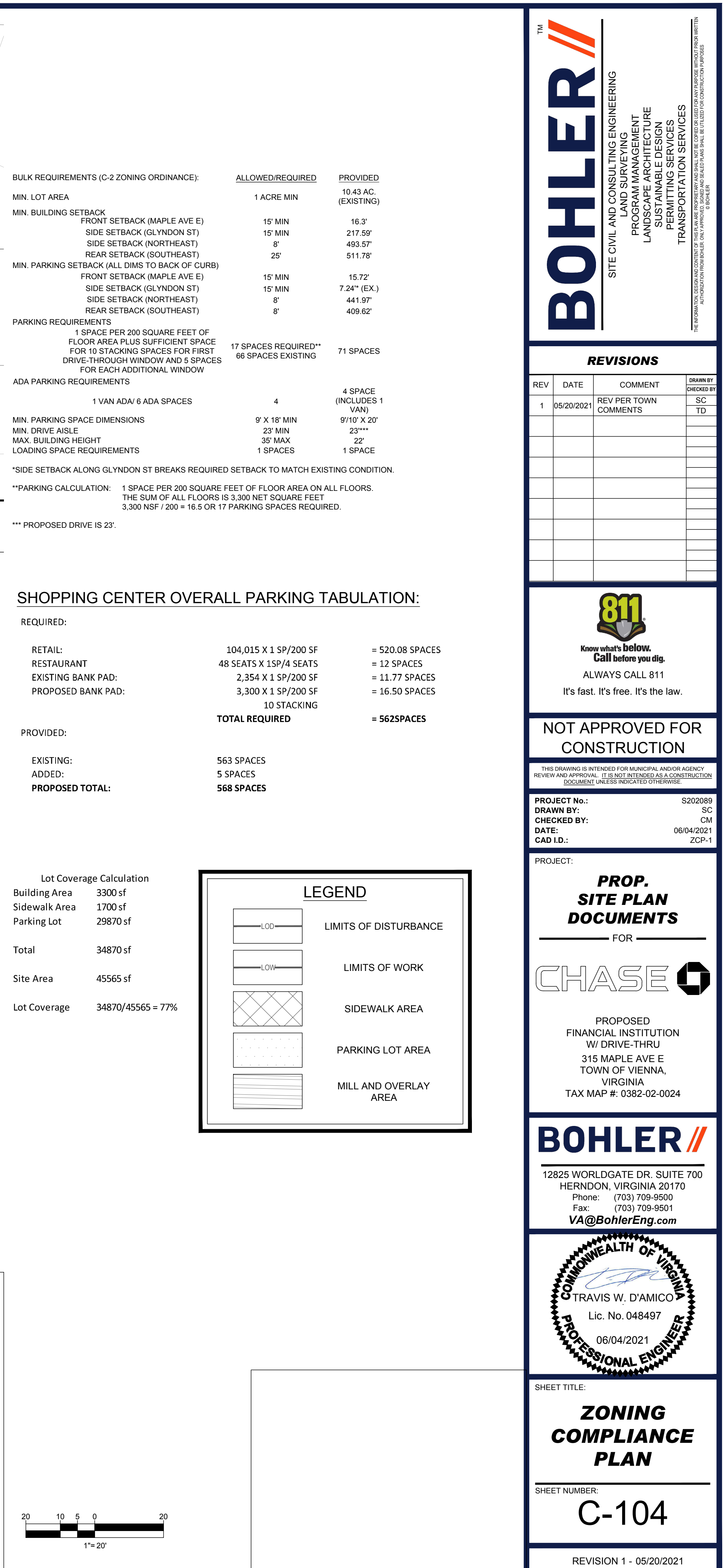
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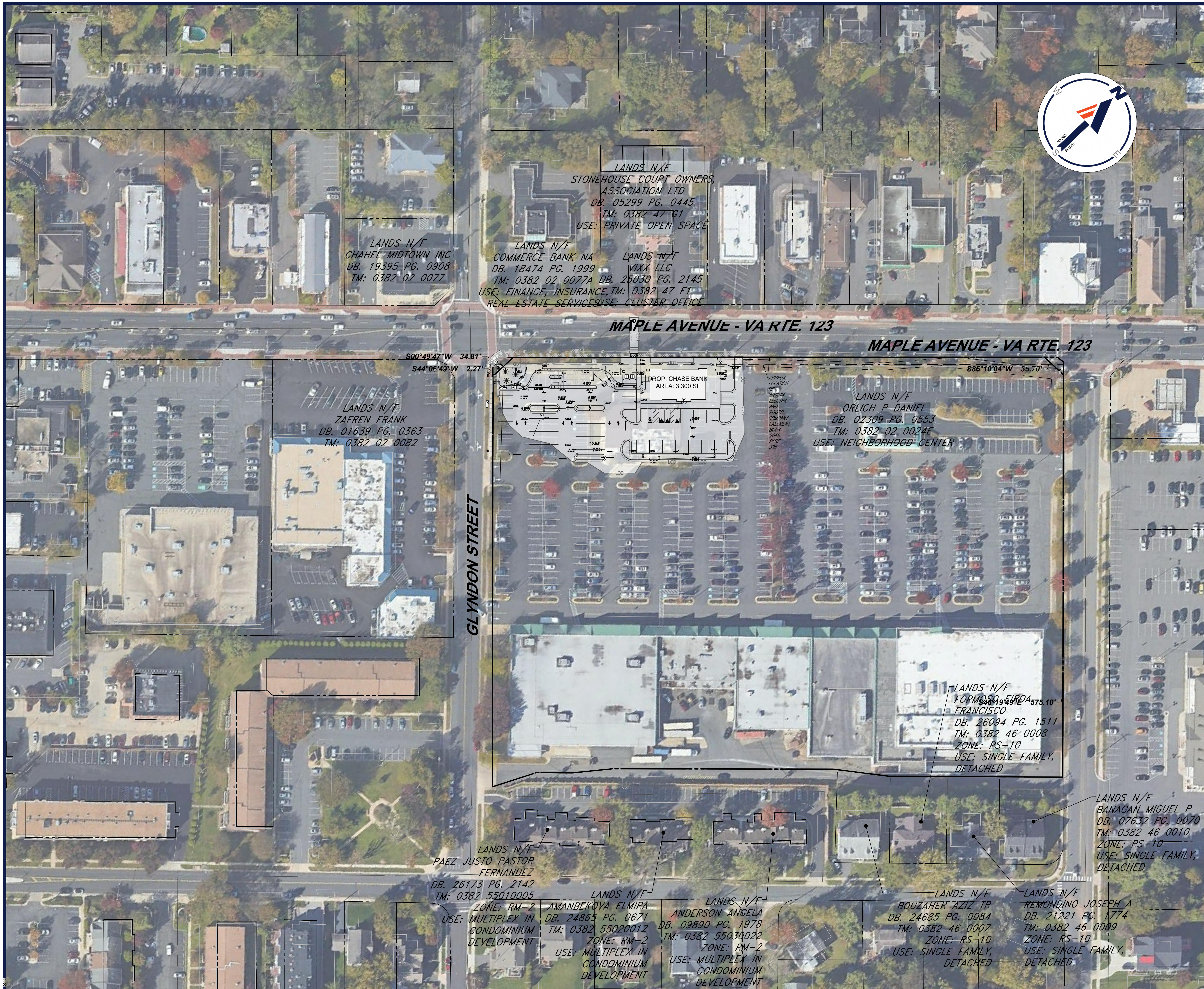
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SHEET NUMBER

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LANDS N/F
STONEHOUSE COURT OWNERS,
ASSOCIATION LTD
DB. 05299 PG. 0445
TM: 0382 47 61
USE: PRIVATE OPEN SPACE

LANDS N/F
CHAH EL MIDTOWN INC
DB. 19395 PG. 0908
TM: 0382 02 0077

LANDS N/F
COMMERCE BANK NA LANDS N/F
DB. 18474 PG. 1999 WXXX LLC
TM: 0382 02 00774 DB. 25030 PG. 2145
USE: FINANCE, INSURANCE, TM: 0382 47 FT
REAL ESTATE SERVICES USE: CLUSTER OFFICE

MAPLE AVENUE - VA RTE. 123

MAPLE AVENUE - VA RTE. 123

S00°49'47"W 34.81'
S44°06'49"W 2.27

LANDS N/F
ZAFREN FRANK
DB. 01639 PG. 0363
TM: 0382 02 0082

LANDS N/F
ORLICH P DANIEL
DB. 02309 PG. 0553
TM: 0382 02 0024E
USE: NEIGHBORHOOD CENTER

GLYNDON STREET

LANDS N/F
FORMOSO FIRDA
S46°19'49"E 575.10'
FRANCISCO
DB. 26094 PG. 1511
TM: 0382 46 0008
ZONE: RS-10
USE: SINGLE FAMILY,
DETACHED

LANDS N/F
BANAGAN MIGUEL P
DB: 07632 PG. 0070
TM: 0382 46 0010
ZONE: RS-10
USE: SINGLE FAMILY,
DETACHED

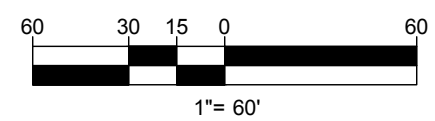
LANDS N/F-
PAEZ JUSTO PASTOR
FERNANDEZ
DB. 26173 PG. 2142
TM: 0382 55010005

LANDS N/F-
AMANBEKOVA ELMIRA
DB. 24865 PG. 0671
TM: 0382 55020012
ZONE: RM-2
USE: MULTIPLEX IN
CONDOMINIUM
DEVELOPMENT

LANDS N/F
ANDERSON ANGELA
DB. 09890 PG. 1978
TM: 0382 55030022
ZONE: RM-2
USE: MULTIPLEX IN
CONDOMINIUM
DEVELOPMENT

LANDS N/F
BOUZAHER AZIZ TR
DB. 24685 PG. 0084
TM: 0382 46 0007
ZONE: RS-10
USE: SINGLE FAMILY,
DETACHED

LANDS N/F
REMONDINO JOSEPH A
DB. 21221 PG. 1774
TM: 0382 46 0009
ZONE: RS-10
USE: SINGLE FAMILY,
DETACHED



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DATE:	06/04/2021
AD I.D.:	SSP-0

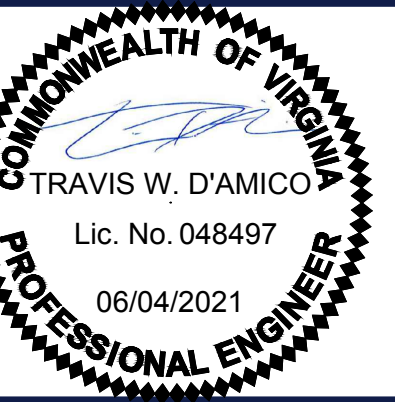
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**PROP.
SITE PLAN
DOCUMENTS**CHASE 

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
X MAP #: 0382-02-0024

BOHLER//

12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
Fax: (703) 709-9501
VA@BohlerEng.com



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June 04, 2021
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CHECKED BY: C
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CAD I.D.: SSP

PROJECT:

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SITE PLAN
DOCUMENTS***

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CHASE

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FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

BOHLER //

12825 WORLDGATE DR. SUITE 700
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Phone: (703) 709-9500
Fax: (703) 709-9501
VA@BohlerEng.com



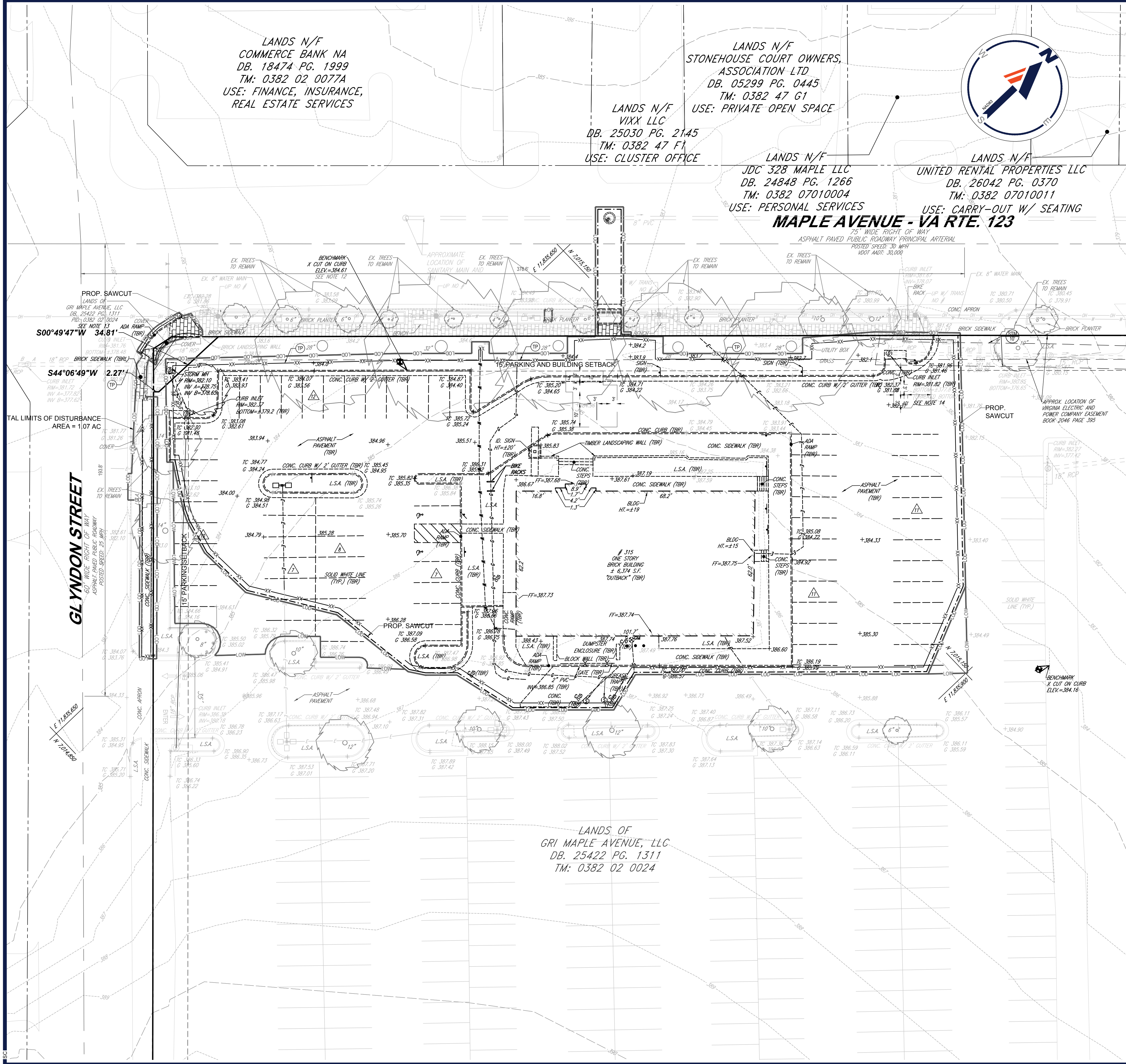
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ALTA SURVEY

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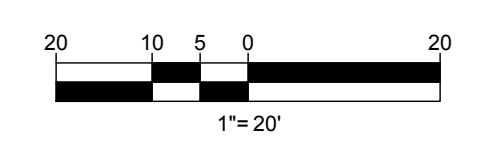
REVISION 1 - 05/20/2021



- EXISTING CONDITIONS/DEMOLITION NOTES:**
- THE SURVEYED AREA IS PART OF THE LANDS OF GRI MAPLE AVENUE, LLC AS RECORDED IN DEED BOOK 25422 PAGE 1311, AMONG THE LANDS OF THE TOWN OF VIENNA, FAIRFAX COUNTY, VIRGINIA, AND HAVING A MAP OF 0382 02 0024 PER THE DEPARTMENT OF ASSESSMENTS.
 - NO RESOURCE PROTECTION AREAS, WETLANDS OR FLOOD PLAINS ARE KNOWN TO EXIST ON-SITE. THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, FAIRFAX COUNTY, VIRGINIA AND INCORPORATED AREAS, PANEL 145 OF 450", MAP NUMBER 51059C0415E, WITH A MAP EFFECTIVE DATE OF SEPTEMBER 17, 2010.
 - SEE COVER SHEET FOR PLAN REFERENCES FOR ALL EXISTING INFORMATION DEPICTED HEREON. EXISTING INFORMATION SHOWN IS BASED ON AN ALTAINSPS LAND TITLE SURVEY PREPARED BY BOHLER ENTITLED, "ALTAINSPS LAND TITLE SURVEY, OTJ CHASE, 315 MAPLE AVENUE EAST, HUNTER MILL, OWN OF VIENNA, FAIRFAX COUNTY, VIRGINIA," DATED JULY 16, 2020.
 - ELEVATIONS PROVIDED BY THE SITE SURVEY ARE BASED ON NGVD29 DATUM DETERMINED GPS OBSERVATIONS AND TIED TO THE VDOT BENCHMARK NO. HV8501 WITH PUBLISHED NAVD 88 ELEVATION OF 120.55 FEET.
 - ANY REQUIRED BORROW AND HAUL REQUIRED SHALL BE FROM AN APPROVED LOCATION.
 - REFER TO THE EROSION AND SEDIMENT PLAN FOR THE SEQUENCE OF CONSTRUCTION. SEE SHEET C-601 TO C-602.
 - ALL EXISTING UTILITY INFORMATION NOT SHOWN ON SHEET C-201 HAS BEEN GATHERED BY A COMBINATION OF GIS INFORMATION PROVIDED BY THE TOWN OF VIENNA AND FAIRFAX COUNTY AND/OR FIELD VERIFIED BY THE DESIGNING ENGINEER. CONTRACTOR TO NOTIFY BOHLER IMMEDIATELY IF ANY EXISTING CONDITION INFORMATION SHOWN ON THIS PLAN DOES NOT MATCH CONDITIONS IN FIELD. CONTRACTOR TO NOTIFY BOHLER ENGINEERING IF THERE ARE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND THE ACTUAL FIELD CONDITIONS.
 - NO GROUND WATER WELLS ARE KNOWN TO EXIST ON SITE.
 - LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. SOURCE INFORMATION FROM PLANS AND MARKINGS HAS BEEN COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.
 - CONTRACTOR TO VERIFY EXISTING WATER METER PRIOR TO DEMOLITION. 1.5" WATER METER AND 2" WATER SERVICE LINE REQUIRED. IF EXISTING METER IS A 1.5" METER AND EXISTING WATER LINE IS A 2" LINE, WATER LINE TO REMAIN. EXISTING METER TO BE REMOVED AND REPLACED IF IT IS NOT A 1.5" METER.
 - BENCHMARK TO BE RESET TO PROPOSED GRADE.
 - TERMS, PROVISIONS, CONDITIONS AND EASEMENTS SET FORTH IN THAT CERTAIN AGREEMENT BY AND BETWEEN KAUFMANN COMPANY AND VIRGINIA ELECTRIC AND POWER COMPANY, AND RECORDED IN DEED BOOK 2046 AT PAGE 93; DO NOT AFFECT THE LEASE AREA. AFFECT THE SURVEYED AREA AND THE REMAINDER PARCEL, APPROXIMATE EASEMENT LOCATION IS SHOWN.
 - STRUCTURE TO REMAIN, RIM TO BE ADJUSTED AND RESET TO FINISHED GRADE.

LEGEND

	LIMITS OF DISTURBANCE
	PROP. SAWCUT
	PROP. SUPER SILT FENCE TO BE USED AS TREE PROTECTION



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SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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PROJECT No.: S202089
DRAWN BY: SC
CHECKED BY: CM
DATE: 06/04/2021
CAD ID: SSP-0

PROJECT:
PROP. SITE PLAN DOCUMENTS
FOR

CHASE

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP # 0382-02-0024

BOHLER

12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
Fax: (703) 709-9501
VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA

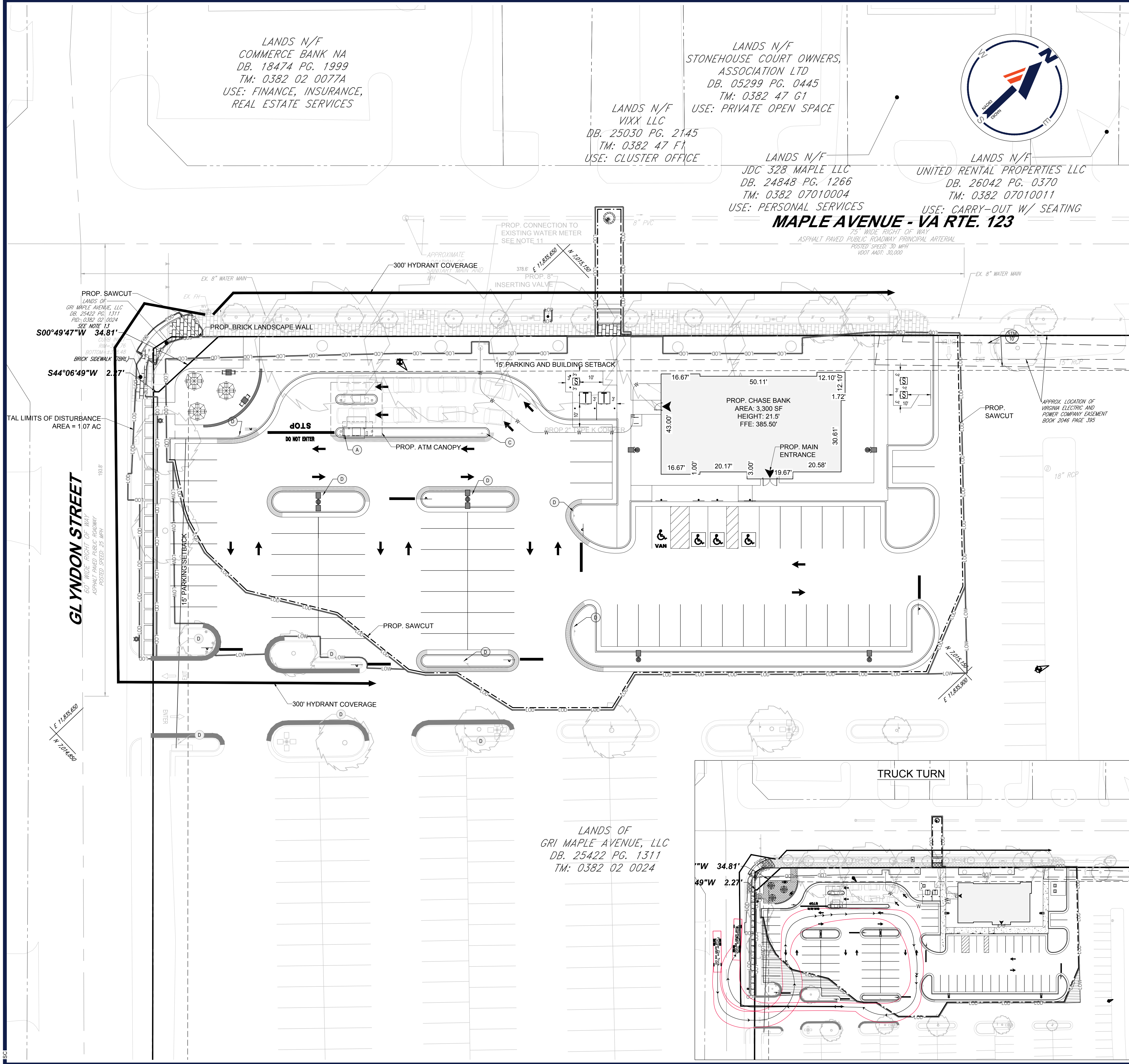
TRAVIS W. D'AMICO
Lic. No. 048497
06/04/2021
PROFESSIONAL ENGINEER

SHEET TITLE:
DEMOLITION PLAN

SHEET NUMBER:
C-204

REVISION 1 - 05/20/2021

June 04, 2021
 H:\2015\202089\DRAWINGS\PLAN SETS\202089-SSP-1----->LAYOUT: C-301 - SITE PLAN



FAIRFAX COUNTY PUBLIC FACILITIES MANUAL

FIRE LANE DESIGNATIONS

Under Section F313.0 of the Fairfax County Fire Prevention Code, the Office of the Fire Marshal is authorized to designate fire lanes on public streets and on private property where necessary. This is to prevent parking in front of, or adjacent to, fire hydrants and to provide access for fire fighting equipment. Markings and signs are to be provided by the owner or agent of the property involved. Parking or otherwise obstructing such areas is prohibited.

I. HYDRANTS

A. Parking is prohibited within 15' of a fire hydrant located along the curb line or edge of any public or private roadway. No special curb marking is required for enforcement.

B. Fire hydrants installed in parking lots are to be located within a fire lane. Curb and/or roadway marking is required in accordance with Sections III and IV below.

II. FIRE LANES

A. Fire lanes shall be installed where required by the Office of the Fire Marshal. Fire lanes shall be marked with both sign and curb delineation per Section III and IV below. Parking and traffic flow patterns shall be required as follows:

Street Width Curb to Curb	One-Way Traffic	Two-Way Traffic
Less than 24'	No parking on either side of street	No parking on either side of street
24' to 29'	Parallel parking on one side as decided by Fairfax County Office of the Fire Marshal	No parallel parking on either side of street
30' to 35'	Parallel parking allowed on both sides of street	Parallel parking on one side as decided by Fairfax County Office of the Fire Marshal
36' or greater	Parallel parking allowed on both sides of street	Parallel parking allowed on both sides of street

III. SIGN SPECIFICATIONS

A. Metal construction, 12" X 18"

B. Red letters on reflective white background with 3/8" red trim strip around entire outer edge of sign.

C. Lettering on sign to be: "NO PARKING OR STANDING FIRE LANE"

D. Lettering size to be as follows: "NO PARKING" and "STANDING" is 2". "OR" is 1". "FIRE LANE" is 2 1/2" and the arrow with the solid shaft is 1" x 8" with the solid head 1 1/2" wide and 2" deep.

E. Signs are to be mounted 7' from the ground to the bottom of the sign, unless otherwise directed by the Office of the Fire Marshal.

F. Post for signs, when required, shall be metal and securely mounted, unless written permission for alternatives is obtained prior to installation from the Office of the Fire Marshal. Signs should be spaced as shown on approved plans. In long stretches, the maximum distance between signs is 70'.

G. Other special signs may be approved by the Office of the Fire Marshal.

IV. CURB DESIGNATION

A. All curbs or paved spaces designated as fire lanes shall be indicated by yellow paint as approved by the Office of the Fire Marshal. In areas without curbing, a 6" wide yellow stripe shall be applied to the edge of the pavement. Paint shall be highway traffic grade.

NOTE: Fire lane markings, types of signs, locations, etc. shall be subject to the approval by Office of the Fire Marshal.

Ref. Sec. 9-0202	FIRE LANES	PLATE NO.	STD. NO.
Rev. 1-00		6-9	FH-7

LEGEND

	EXISTING FIRE LANE STRIPING
	PROPOSED FIRE LANE STRIPING
	300' HOSE COVERAGE

TRUCK PROFILES

Pumper Fire Truck

	feet
Width	8.50
Track	8.50
Lock to Lock Time	6.0
Steering Angle	37.8

20 10 5 0 20
1"=20'

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PERMITTING SERVICES
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CAD ID: SSP-0

PROJECT: **PROP. SITE PLAN DOCUMENTS** FOR

CHASE

PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA, VIRGINIA
TAX MAP # 0382-02-0024

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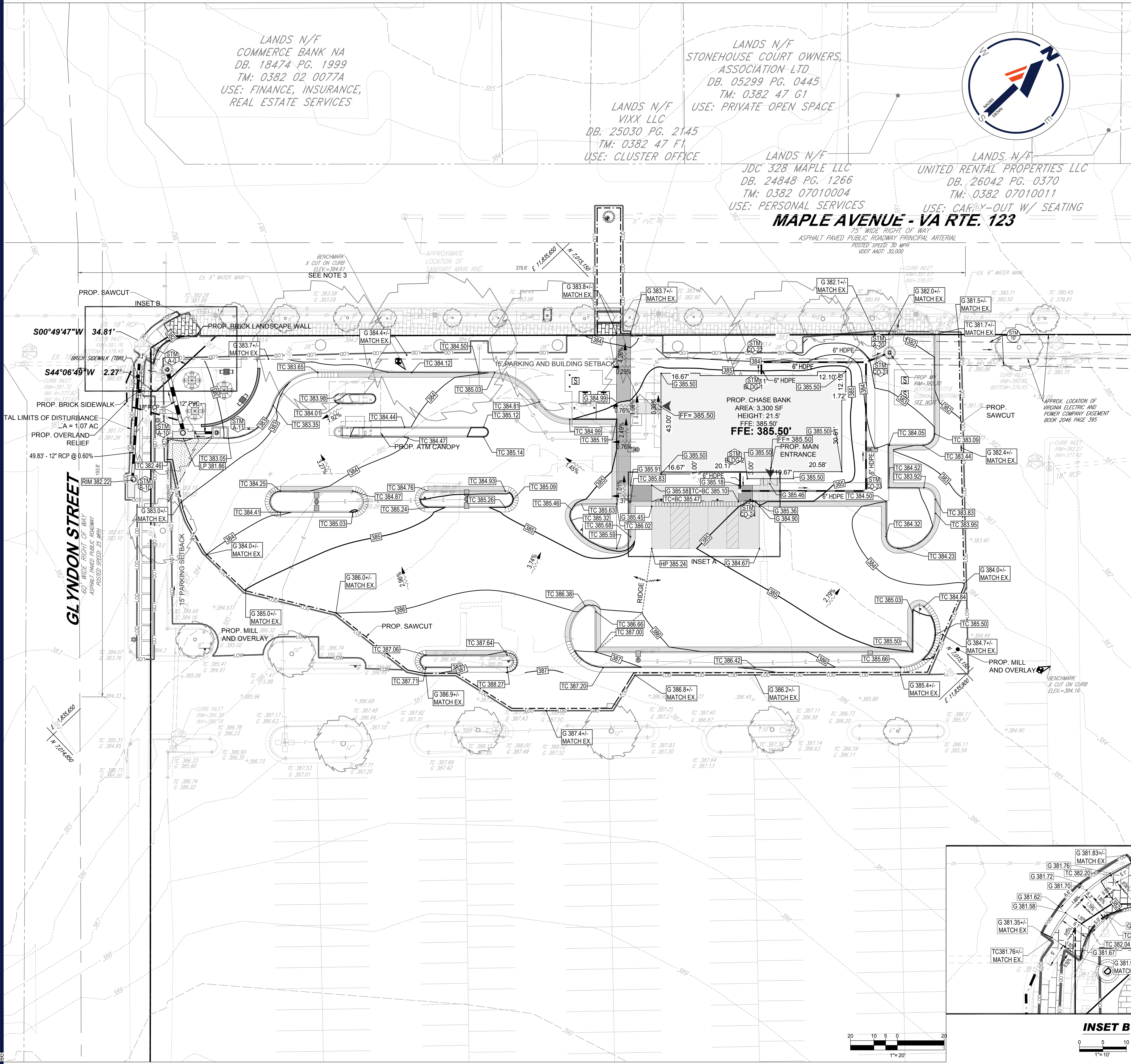
COMMONWEALTH OF VIRGINIA
TRAVIS W. D'AMICO
Lic. No. 048497
06/04/2021
PROFESSIONAL ENGINEER

SHEET TITLE: **FIRE MARSHAL AND TRUCK ACCESS PLAN**

SHEET NUMBER: **C-302**

REVISION 1 - 05/20/2021

un 04, 2021
H:\2015\202089\DRAWINGS\PLAN SETS\202089-SSP-1----->LAYOUT: C-304 - VEHICLE MOVEMENT

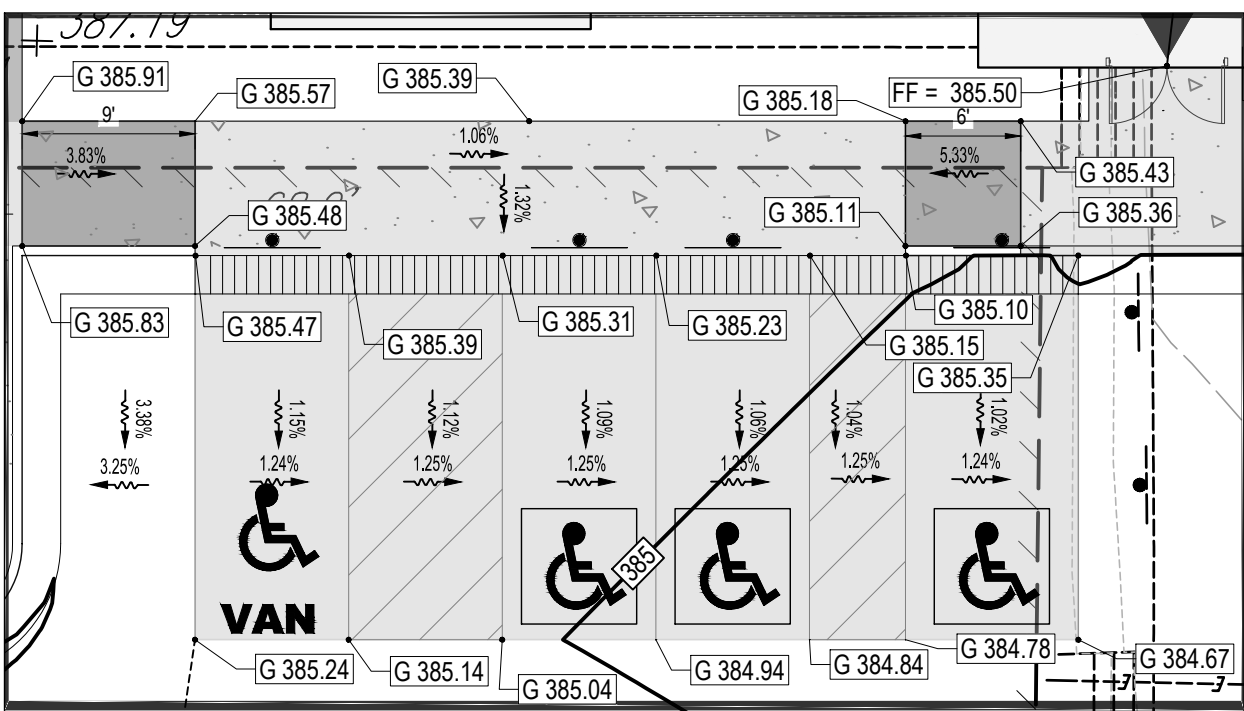


GRADING NOTES:

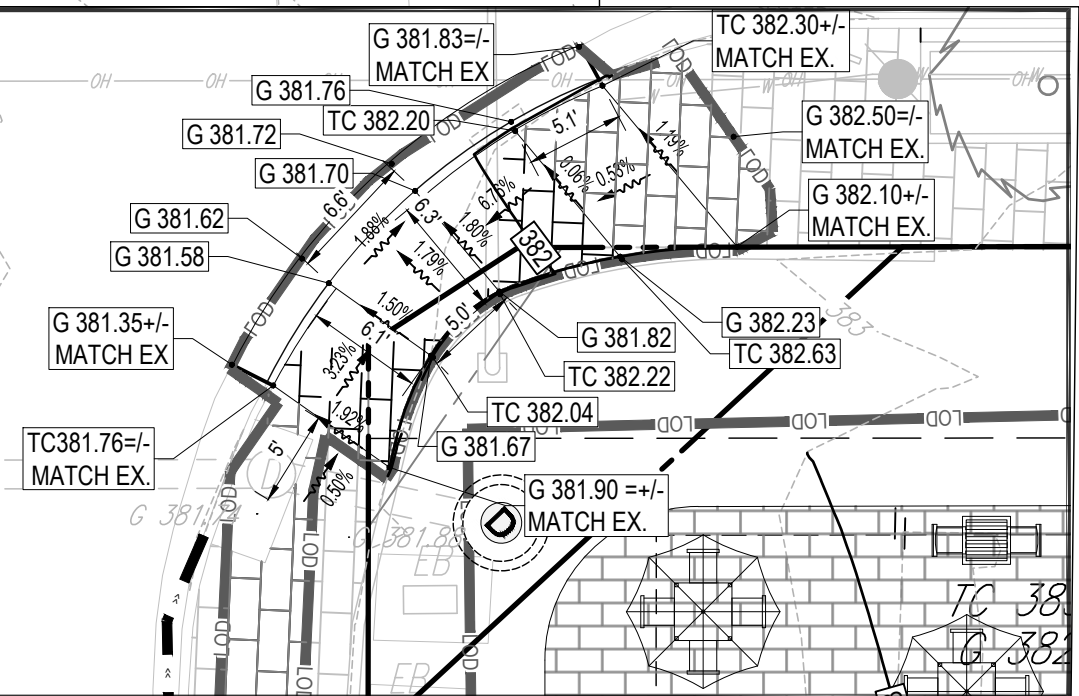
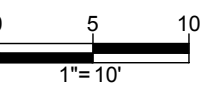
- ELEVATIONS ARE BASED ON NGVD29 DATUM DETERMINED BY GPS OBSERVATIONS AND TIED IN TO THE NGS BENCHMARK NO. HV8501 WITH A PUBLISHED NAVD 88 ELEVATION OF 120.58 FEET.
- BASED ON PROPOSED GRADING, ESTIMATED EARTHWORK QUANTITY IS APPROXIMATELY 250 CY OF CUT. THE ESTIMATE PROVIDED IS APPROXIMATE AND THE CONTRACTOR WILL BE REQUIRED TO PROVIDE ACCURATE EARTHWORK NUMBERS FOR CONSTRUCTION.
- EXISTING BENCHMARK TO BE RESET TO PROPOSED GRADE.
- WORK IN SHARED DRIVE AISLES TO BE COORDINATED BETWEEN OWNER AND CHASE BANK.

LEGEND

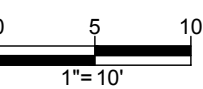
- LIMITS OF DISTURBANCE
- PROP. SAWCUT
- EXISTING CONTOURS
- PROPOSED CONTOURS
- ADA COMPLIANT PATHWAY (5% RUNNING, 2% CROSS SLOPE)
- ADA COMPLIANT LANDING (MAX 2% SLOPE)
- OVERLAND RELIEF PATH
- 100-YEAR PONDING ELEVATION
- CATCH CURB
- SPILL CURB
- TRANSITION CURB



INSET A



INSET B



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CAD ID: GDP-0

PROJECT:
PROP. SITE PLAN DOCUMENTS
FOR



PROPOSED FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
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TAX MAP # 0382-02-0024



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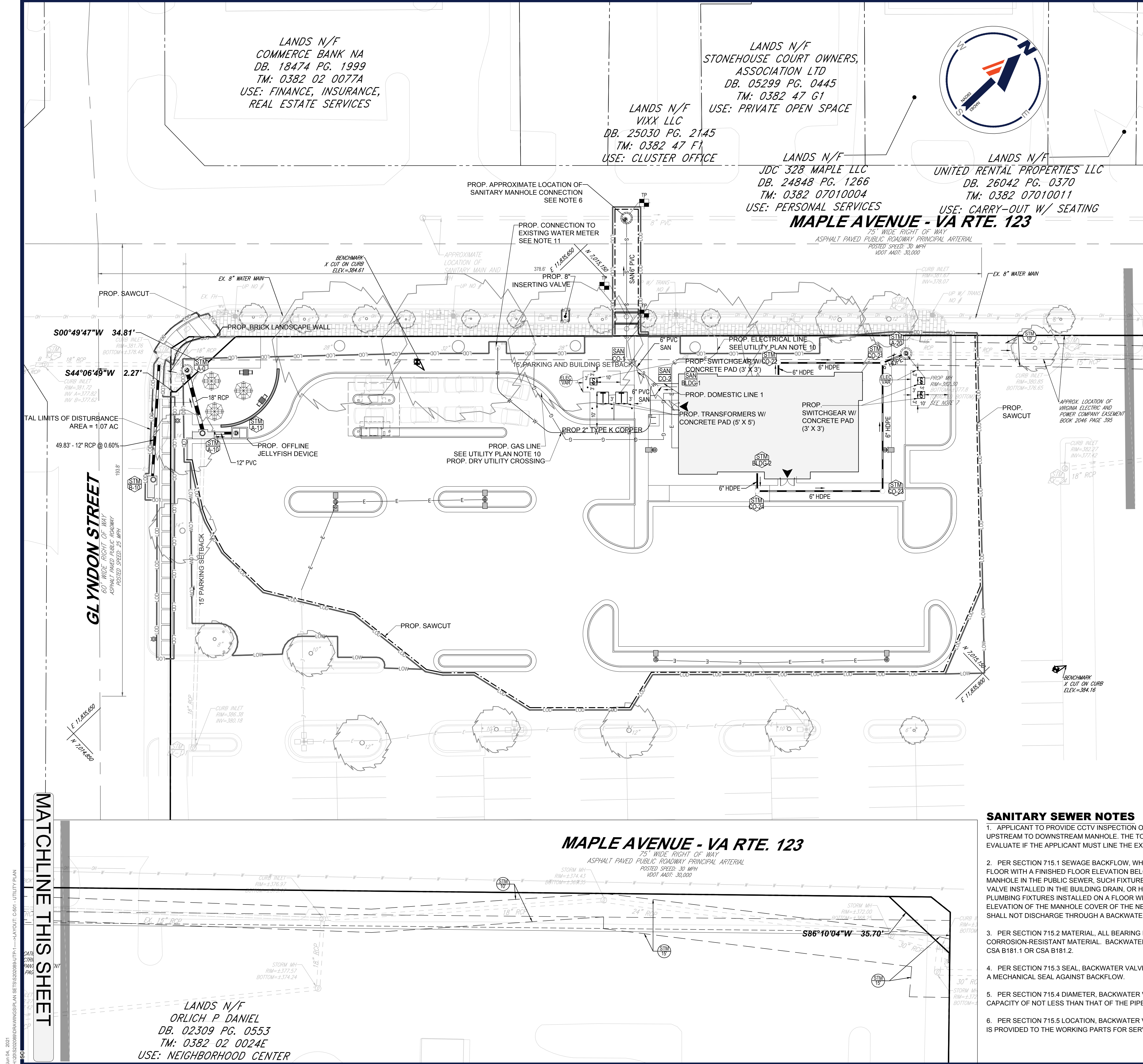
SHEET TITLE:

GRADING PLAN

SHEET NUMBER:

C-401

REVISION 1 - 05/20/2021

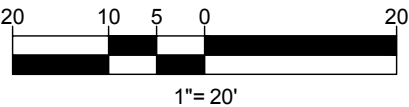
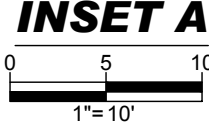
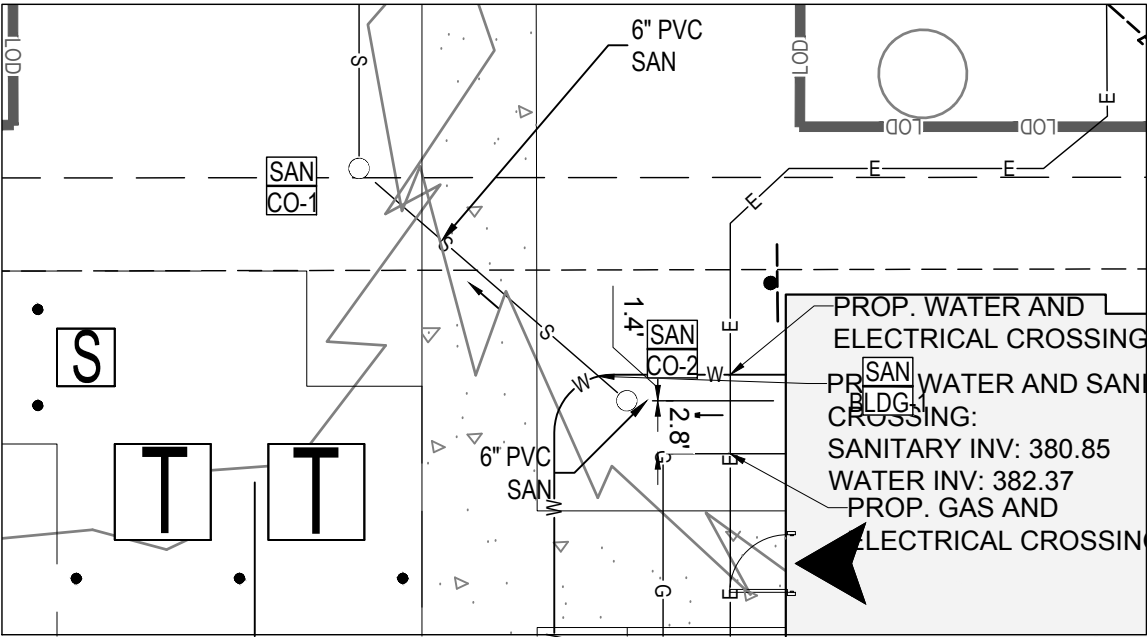


SANITARY PIPE SCHEDULE							
FROM	FROM INV	TO	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
BLDG-1	380.97	CO-2	380.88	8.28'	1.11%	6"	PVC
CO-2	380.88	CO-1	380.65	18.46'	1.25%	6"	PVC
CO-1	380.65	EX-SAN	379.78	60.22'	1.44%	6"	PVC

ROOF DRAIN SCHEDULE							
FROM	FROM INV	TO	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
BLDG-2	381.50	CO-24	381.41	8.21'	1.10%	6"	HDPE
CO-24	381.41	CO-23	380.43	53.73'	1.82%	6"	HDPE
BLDG-1	380.65	CO-22	380.42	5.72'	4.02%	6"	HDPE
CO-23	380.43	CO-21	378.63	54.93'	3.28%	6"	HDPE
CO-22	380.42	CO-21	378.63	44.66'	4.01%	6"	HDPE
CO-21	378.63	A-20	378.30	10.84'	3.04%	6"	HDPE

UTILITY PLAN NOTES:

- CONTRACTOR TO MAINTAIN A TYPICAL 4' BURY OVER PROPOSED WATER LINE. CONTRACTOR TO MAINTAIN A MINIMUM VERTICAL CLEARANCE OF 1' FROM ALL DRY UTILITY CROSSINGS.
- CONTRACTOR TO VERIFY SIZE OF EXISTING WATER METER AND WATER SERVICE CONNECTION TO THE BUILDING PRIOR TO DEMOLITION. IF THE EXISTING METER AND EXISTING WATERLINE IS WHAT IS NEEDED, WATER LINE AND METER ARE TO REMAIN. EXISTING METER AND WATER LINE IS TO BE REMOVED AND REPLACED IF IT IS NOT WHAT IS NEEDED.
- LOCATION OF ALL EXISTING AND PROPOSED UTILITY LOCATIONS ARE APPROXIMATE AND MUST BE CONFIRMED INDEPENDENTLY WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION OR EXCAVATION. SANITARY SEWER AND ALL OTHER UTILITY SERVICES CONNECTION POINTS SHALL BE CONFIRMED INDEPENDENTLY BY THE CONTRACTOR INFIELD PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. ALL DISCREPANCIES SHALL BE REPORTED IMMEDIATELY IN WRITING TO THE ENGINEER. CONSTRUCTION SHALL COMMENCE BEGINNING AT THE LOWEST POINTS. CROSSINGS WITH EXISTING UNDERGROUND INSTALLATIONS SHALL BE FIELD VERIFIED BY TEST PIT PRIOR TO COMMENCEMENT OF CONSTRUCTION.
- ALL PROPOSED SANITARY LATERALS FROM THE BUILDING CONNECTION TO THE EXISTING MAIN ARE TO BE PRIVATELY MAINTAINED.
- ANY SEDIMENT CONTROL MEASURES REMOVED FOR THE PURPOSE OF UTILITY CONSTRUCTION SHALL BE REPLACED AT THE END OF THE DAY BY THE UTILITY CONTRACTORS.
- SANITARY LATERAL TO CONNECT TO EXISTING 8" SANITARY MAIN LOCATED IN THE RIGHT-OF-WAY OF MAPLE AVENUE VIA A DOGHOUSE MANHOLE. SEE DOGHOUSE MANHOLE CONNECTION DETAIL ON SHEET C-1002.
- STRUCTURE TO REMAIN, RIM TO BE ADJUSTED AND RESET TO FINISHED GRADE.
- ALL EXISTING UTILITY INFORMATION NOT SHOWN ON SHEET C-202 HAS BEEN GATHERED BY A COMBINATION OF GIS INFORMATION PROVIDED BY THE TOWN OF VIENNA AND FAIRFAX COUNTY AND/OR FIELD VERIFIED BY THE DESIGNING ENGINEER. CONTRACTOR TO NOTIFY BOHLER IMMEDIATELY IF ANY EXISTING CONDITION INFORMATION SHOWN ON THIS PLAN DOES NOT MATCH CONDITIONS IN FIELD.
- DETAIL FOR BMP DEVICE CAN BE FOUND ON SHEET C-904.
- GENERAL CONTRACTOR IS TO FILE THE UTILITY APPLICATIONS AND FINAL CONNECTION LOCATIONS WILL BE DETERMINED BY THE UTILITY COMPANY. TRANSFORMER UPGRADE MAY OR MAY NOT BE NECESSARY.
- CONTRACTOR TO VERIFY EXISTING WATER METER PRIOR TO DEMOLITION. 1.5" WATER METER AND 2" WATER SERVICE LINE REQUIRED. IF EXISTING METER IS A 1.5" METER AND EXISTING WATER LINE IS A 2" LINE, WATER LINE TO REMAIN. EXISTING METER TO BE REMOVED AND REPLACED IF IT IS NOT A 1.5" METER.



SANITARY SEWER NOTES

- APPLICANT TO PROVIDE CCTV INSPECTION OF SANITARY SEWER LINE FROM CLOSEST UPSTREAM TO DOWNSTREAM MANHOLE. THE TOWN WILL UTILIZE THIS INSPECTION TO EVALUATE IF THE APPLICANT MUST LINE THE EXISTING IMPACTED SANITARY SEWER.
- PER SECTION 715.1 SEWAGE BACKFLOW, WHERE PLUMBING FIXTURES ARE INSTALLED ON A FLOOR WITH A FINISHED FLOOR ELEVATION BELOW THE ELEVATION OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER, SUCH FIXTURES SHALL BE PROTECTED BY A BACKWATER VALVE INSTALLED IN THE BUILDING DRAIN, OR HORIZONTAL BRANCH SERVING SUCH FIXTURES. PLUMBING FIXTURES INSTALLED ON A FLOOR WITH A FINISHED FLOOR ELEVATION ABOVE THE ELEVATION OF THE MANHOLE COVER OF THE NEXT UPSTREAM MANHOLE IN THE PUBLIC SEWER SHALL NOT DISCHARGE THROUGH A BACKWATER VALVE.
- PER SECTION 715.2 MATERIAL, ALL BEARING PARTS OF BACKWATER VALVES SHALL BE OF CORROSION-RESISTANT MATERIAL. BACKWATER VALVES SHALL COMPLY WITH ASME A112.41.1, CSA B181.1 OR CSA B181.2.
- PER SECTION 715.3 SEAL, BACKWATER VALVES SHALL BE SO CONSTRUCTED AS TO PROVIDE A MECHANICAL SEAL AGAINST BACKFLOW.
- PER SECTION 715.4 DIAMETER, BACKWATER VALVES, WHEN FULLY OPEN, SHALL HAVE A CAPACITY OF NOT LESS THAN THAT OF THE PIPES IN WHICH THEY ARE INSTALLED.
- PER SECTION 715.5 LOCATION, BACKWATER VALVES SHALL BE INSTALLED SO THAT ACCESS IS PROVIDED TO THE WORKING PARTS FOR SERVICE AND REPAIR.

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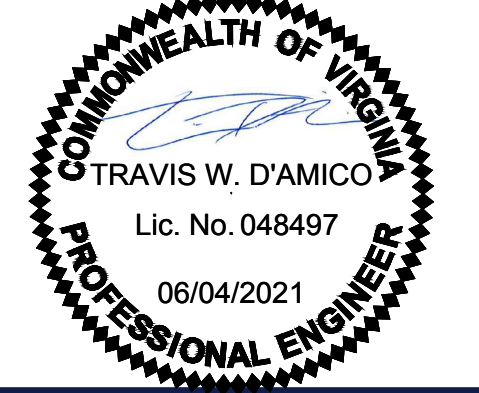
PROPOSED SITE PLAN DOCUMENTS FOR



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SHEET TITLE:

UTILITY PLAN


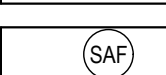
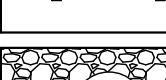
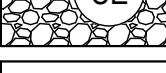
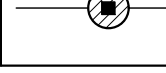
SHEET NUMBER:

C-501

REVISION 1 - 05/20/2021

REVISION 1 - 05/20/2021



NO.	TITLE	KEY	SYMBOL
--	SUPER SILT FENCE AND TREE PROTECTION	SSF	
3.01	SAFETY FENCE	SAF	
3.02	TEMPORARY STONE CONSTRUCTION ENTRANCE	CE	
3.07	STORM DRAIN INLET PROTECTION	IP	
3.32	PERMANENT SEEDING	PS	

SEQUENCE OF CONSTRUCTION PHASE II

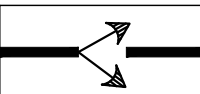
1. COMMENCE CLEARING AND ROUGH GRADING OF THE SITE IN ANTICIPATION OF UTILITY INSTALLATION.
2. INSTALL UNDERGROUND UTILITIES PER MINIMUM STANDARDS.
3. INSTALL INLET PROTECTION AT ALL STORM SEWER STRUCTURES AS EACH INLET IS INSTALLED.
4. TEMPORARILY STABILIZE THROUGHOUT CONSTRUCTION IMMEDIATELY FOLLOWING THE COMPLETION OF THE MOST SCHEDULED LAND DISTURBING/GRADING ACTIVITY. ANY DISTURBED AREAS, INCLUDING MATERIAL STOCKPILES THAT ARE RECENTED OR LIKELY TO REMAIN INACTIVE FOR 14 DAYS OR MORE.
5. BEGIN CONSTRUCTION OF BUILDING PAD AND PROPOSED STRUCTURES.
6. INSTALL CURB AND GUTTER.
7. LAY BASE AGGREGATE FOR DRIVE AND PARKING AREAS.
8. PREPARE SITE FOR PAVING, APPLYING HEAVY DUTY SECTIONS WITHIN AREAS DEFINED ON THE SITE PLAN.
9. PERMANENTLY SEED AND/OR SOD/MULCH ALL PROPOSED LANDSCAPE ISLANDS/GRASS AREAS PER LANDSCAPE PLAN.
10. INSTALL LANDSCAPE PLANTINGS IN ACCORDANCE WITH THE LANDSCAPE PLAN.
11. NO EROSION AND SEDIMENT CONTROL MEASURES CAN BE REMOVED WITHOUT APPROVAL FROM THE COUNTY E&S INSPECTOR.
12. OBTAIN CONCURRENCE FROM THE COUNTY INSPECTOR THAT THE SITE HAS BEEN FULLY STABILIZED AND ALL CONSTRUCTION HAS BEEN COMPLETED. STABILIZE ANY AREAS DISTURBED BY THE REMOVAL OF TEMPORARY EROSION CONTROL MEASURES.

EROSION AND SEDIMENT CONTROL NOTES:

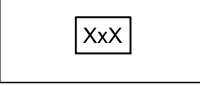
1. PRIOR TO PERMANENT SEEDING & STABILIZATION, CONTRACTOR SHALL CONSULT WITH THE COUNTY E&S INSPECTOR IN ORDER TO SUBSTITUTE ANY INVASIVE SPECIES OF SEED WITH SPECIES WHICH ARE NATIVE TO THE REGION.
2. GUTTER BUDDY'S WILL BE USED AS INLET PROTECTION FOR ALL INLETS LOCATED WITHIN THE VDOT RIGHT OF WAY. SEED SHED C-605 FOR DETAIL.
3. THE SUPER SILT FENCE SHALL SERVE AS TREE PROTECTION FENCING WITH BILINGUAL TREE PROTECTION SIGN PLACED AT THE FENCE LINE 50' FROM THE INSTALLATION OF TREE PROTECTION FENCING. INCLUDING SUPER SILT FENCE, SHALL BE INSTALLED UNDER THE SUPERVISION OF THE PROJECT ARBORIST, WHO SHALL BE A CERTIFIED ARBORIST OR REGISTERED CONSULTING ARBORIST.
4. SAFETY FENCE AND SUPER SILT FENCE SHOWN OFFSET FROM THE LOD FOR CLARITY PURPOSES ONLY. CONTROL TO BE PLACED ALONG LOD PERMETER DURING CONSTRUCTION.

Structure	Drainage Area (AC)	Runoff Coeff. (C)
A-20	0.08	0.90
A-11	0.49	0.90
A-10	0.47	0.90
EX-24	1.15	0.90
EX-22	0.32	0.90
EX-13	0.28	0.80
EX-2	0.68	0.85
EX-1.1	0.28	0.90

LEGEND



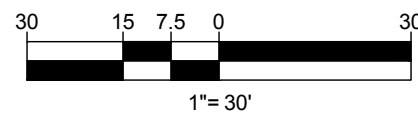
NATURAL DRAINAGE DIVIDES



EXISTING SOIL TYPE

SOILS TABLE

SYMBOL	SOIL NAME
95	URBAN LAND



REVISIONS

[illegible]

Know what's below.
Call before you dig.

ALWAYS CALL 811

fast. It's free. It's the

It's fast. It's free. It's the

NOT APPROVED FOR
CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY
REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION
DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	S202089
DRAWN BY:	SC
CHECKED BY:	CM
DATE:	06/04/2021
CAD I.D.:	OBP-0

PROJECT:

**PROP.
SITE PLAN
DOCUMENTS**

FOR

CHASE

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

BOHLER//

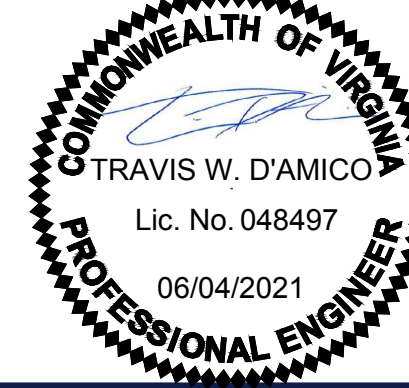
12825 WORLDGATE DR. SUITE 700

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SHEET TITLE:
***EROSION AND
SEDIMENT
CONTROL PLAN
PHASE II***

SHEET NUMBER

C-602

REVISION 1 - 05/20/2021

MINIMUM STANDARDS

1. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE REQUIRED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IS UNIFORM, IS THICK ENOUGH TO SURVIVE AND WILL INHIBIT EROSION.
4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY AND SHALL BE MADE FUNCTIONAL BEFORE UPSLOPE LAND DISTURBANCE TAKES PLACE.
5. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION.
6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN.
 - A. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT TRAP SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA AND THE TRAP SHALL ONLY CONTROL DRAINAGE AREAS LESS THAN THREE ACRES.
 - B. SURFACE RUNOFF FROM DISTURBED AREAS THAT IS COMPRISED OF FLOW FROM DRAINAGE AREAS GREATER THAN OR EQUAL TO THREE ACRES SHALL BE CONTROLLED BY A SEDIMENT BASIN. THE MINIMUM STORAGE CAPACITY OF A SEDIMENT BASIN SHALL BE 134 CUBIC YARDS PER ACRE OF DRAINAGE AREA. THE OUTFALL SYSTEM SHALL, AT MINIMUM, MAINTAIN THE STRUCTURAL INTEGRITY OF THE BASIN DURING A TWENTY-FIVE YEAR STORM OF 24-HOUR DURATION. RUNOFFS FROM A SLOPE FAIRLY ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED, IN CONDITION OR THOSE CONDITIONS EXPECTED TO EXIST WHILE THE SEDIMENT BASIN IS UTILIZED.
7. CUT AND FILL SLOPES SHALL BE DESIGNED AND CONSTRUCTED IN A MANNER THAT WILL MINIMIZE EROSION. SLOPES THAT ARE FOUND TO BE ERODING EXCESSIVELY WITHIN ONE YEAR OF PERMANENT STABILIZATION SHALL BE PROVIDED WITH ADDITIONAL SOIL STABILIZING MEASURES UNTIL THE PROBLEM IS CORRECTED.
8. CONCENTRATED RUNOFF SHALL NOT FLOW DOWN CUT OR FILL SLOPES UNLESS CONTAINED WITHIN AN ADEQUATE TEMPORARY OR PERMANENT CHANNEL, FLUME OR SLOPE DRAIN STRUCTURE.
9. WHENEVER WORK IS DONE FROM A SLOPE FAIRLY ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND THE RECEIVING CHANNEL.
12. WHEN WORK IN A LIVE WATERCOURSE IS PERFORMED, PRECAUTIONS SHALL BE TAKEN TO MINIMIZE ENCROACHMENT, CONTROL SEDIMENT TRANSPORT AND STABILIZE THE WORK AREA TO THE GREATEST EXTENT POSSIBLE DURING CONSTRUCTION. NONERODIBLE MATERIAL SHALL BE USED FOR THE CONSTRUCTION OF CAUSEWAYS AND COFFERDAMS. EARTHEN FILL MAY BE USED FOR THESE STRUCTURES IF ARMORED BY NONERODIBLE COVER MATERIALS.
13. WHEN A LIVE WATERCOURSE MUST BE CROSSED BY CONSTRUCTION VEHICLES MORE THAN TWICE IN ANY SIX-MONTH PERIOD, A TEMPORARY VEHICULAR STREAM CROSSING CONSTRUCTED OF NONERODIBLE MATERIAL SHALL BE PROVIDED.
14. ALL APPLICABLE FEDERAL, STATE AND LOCAL REGULATIONS PERTAINING TO WORKING IN OR CROSSING LIVE WATERCOURSES SHALL BE MET.
15. THE BED AND BANKS OF A WATERCOURSE SHALL BE STABILIZED IMMEDIATELY AFTER WORK IN THE WATERCOURSES IS COMPLETED.
16. UNDERGROUND UTILITY LINES SHALL BE INSTALLED IN ACCORDANCE WITH THE FOLLOWING STANDARDS IN ADDITION TO OTHER APPLICABLE CRITERIA:
 - A. NO MORE THAN 500 LINEAR FEET OF TRENCH MAY BE OPENED AT ONE TIME.
 - B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
 - C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
 - D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
 - E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
 - F. APPLICABLE SAFETY REGULATION SHALL BE COMPLIED WITH.
17. WHEN CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE. WHERE SEDIMENT IS TRANSPORTED ONTO A PAVED OR PUBLIC ROAD SURFACE, THE ROAD SURFACE SHALL BE CLEANED THOROUGHLY AT THE END OF EACH DAY. SEDIMENT SHALL BE REMOVED FROM THE ROADS BY SHOVELING OR SWEEPING AND TRANSPORTED TO A SEDIMENT CONTROL DISPOSAL AREA. STREET WASHING SHALL BE ALLOWED ONLY AFTER SEDIMENT IS REMOVED IN THIS MANNER. THIS PROVISION SHALL APPLY TO INDIVIDUAL DEVELOPMENT LOTS AS WELL AS TO LARGER LAND-DISTURBING ACTIVITIES.
18. ALL TEMPORARY EROSION AND SEDIMENT CONTROL MEASURES SHALL BE REMOVED WITHIN 30 DAYS AFTER FINAL SITE STABILIZATION OR AFTER THE TEMPORARY MEASURES ARE NO LONGER NEEDED, UNLESS OTHERWISE AUTHORIZED BY THE LOCAL PROGRAM AUTHORITY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM THE DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA:
 - A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE RECEIVING CHANNEL, PIPE OR STORM SEWER SYSTEM. FOR THOSE SITES WHERE RUNOFF IS DISCHARGED INTO A PIPE OR PIPE SYSTEM, DOWNSTREAM STABILITY ANALYSES AT THE OUTFALL OF THE PIPE OR PIPE SYSTEM SHALL BE PERFORMED.
 - B. ADEQUACY OF CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER:
 - (1) THE APPLICANT SHALL DEMONSTRATE THAT THE TOTAL DRAINAGE AREA TO THE POINT OF ANALYSIS WITHIN THE CHANNEL IS ONE HUNDRED TIMES GREATER THAN THE CONTRIBUTING DRAINAGE AREA OF THE PROJECT IN QUESTION; OR
 - (2) (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS; AND (B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND (C) THE USE OF A TWO-YEAR STORM TO DEMONSTRATE THAT STORMWATER WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS; AND (C) PIPES AND STORM SEWER SYSTEMS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL BE CONTAINED WITHIN THE PIPE OR SYSTEM.
 - C. IF EXISTING NATURAL RECEIVING CHANNELS OR PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS OR PIPES ARE NOT ADEQUATE, THE APPLICANT SHALL:
 - (1) IMPROVE THE CHANNEL TO A CONDITION WHERE A TEN-YEAR STORM WILL NOT OVERTOP THE BANKS AND A TWO-YEAR STORM WILL NOT CAUSE EROSION TO THE CHANNEL BED OR BANKS; OR
 - (2) IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES; OR
 - (3) DEVELOP A SITE DESIGN THAT WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TWO-YEAR STORM TO INCREASE WHEN RUNOFF OUTFALLS INTO A NATURAL CHANNEL OR WILL NOT CAUSE THE PRE-DEVELOPMENT PEAK RUNOFF RATE FROM A TEN-YEAR STORM TO INCREASE WHEN RUNOFF TO INCREASE WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL.
 - (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE PLAN-APPROVING AUTHORITY TO PREVENT DOWNSTREAM EROSION.
 - D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
 - E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF THE SUBJECT PROJECT.
 - F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION HE SHALL OBTAIN APPROVAL FROM THE LOCAL PLAN-APPROVING AUTHORITY FOR MAINTENANCE OF THE DETENTION FACILITY. THE PLAN SHALL SET FORTH MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE MAINTENANCE.
 - G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
 - H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
 - I. INCREASED VOLUME OF SHEET FLOWS THAT CAUSE EROSION OR SEDIMENTATION ON ADJACENT PROPERTY SHALL BE DIVERTED TO A STABLE OUTLET, ADEQUATE CHANNEL, PIPE OR PIPE SYSTEM, OR TO A DETENTION FACILITY. IN APPLYING THESE STORMWATER RUNOFF CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS. INSTEAD, THE DEVELOPMENT, AS A WHOLE, SHALL BE CONSIDERED TO BE A SINGLE DEVELOPMENT PROJECT. HYDROLOGIC PARAMETERS THAT REFLECT THE ULTIMATE DEVELOPMENT CONDITION SHALL BE USED IN ALL ENGINEERING CALCULATIONS.
 - K. ALL MEASURES USED TO PROTECT PROPERTIES AND WATERWAYS SHALL BE EMPLOYED IN A MANNER WHICH MINIMIZES IMPACTS ON THE PHYSICAL, CHEMICAL AND BIOLOGICAL INTEGRITY OF RIVERS, STREAMS AND OTHER WATERS OF THE STATE.

EROSION AND SEDIMENT CONTROL NARRATIVE

- PROJECT DESCRIPTION:
- THE SUBJECT SITE CONTAINS AN EXISTING FINANCIAL BUILDING AT THE INTERSECTION OF MAPLE AVENUE E (VA RTE. 123) AND GLYNDON STREET. THE PROPOSED OFF-SITE INVOLVES THE TENANT FIT-OUT OF THE EXISTING BUILDING, DEMOLITION OF EXISTING CURB, DEMOLITION OF EXISTING ASPHALT PAVEMENT AND CONCRETE SIDEWALK. THE PROPOSED IMPROVEMENTS INCLUDE CONSTRUCTION OF A 3,300 SF FINANCIAL INSTITUTION, DISCONNECTED DRIVE THRU ATM, NEW CONCRETE SIDEWALK, ASPHALT PAVEMENT, AND UNDERGROUND UTILITIES AS NEEDED. THE DEMOLITION CAN BE SEEN ON THE EXISTING CONDITIONS / DEMOLITION PLAN ON SHEET C-203 AND THE PROPOSED IMPROVEMENTS CAN BE FOUND ON SHEET C-301. THE AREA OF DISTURBANCE FOR THIS PROJECT IS APPROXIMATELY 1.07 ACRES.
- II. EXISTING SITE CONDITIONS:
- THE SITE PARCEL IS IDENTIFIED AS TAX MAP PARCEL # 0383-02-0024. AN EXISTING FINANCIAL INSTITUTION EXISTS ON SITE. WATER DRAINS AWAY FROM THE BUILDING TOWARDS THE NORTHEAST OR TO THE RIGHT OF WAY TO THE WEST OF THE SITE. THE SITE CONTAINS EXISTING LANDSCAPE ISLANDS WITH SMALL SHRUB PLANTINGS.
- III. ADJACENT PROPERTIES:
- THE SITE IS BORDERED ON THE NORTH BY MAPLE AVENUE E (VA RTE. 123). TO THE EAST BY AN EXISTING FINANCIAL INSTITUTION, TO THE SOUTH BY AN EXISTING SHOPPING CENTER, AND TO THE WEST BY GLYNDON STREET SE. NO IMPACTS TO ADJACENT PROPERTIES ARE ANTICIPATED. THERE ARE NO WATER BODIES/WETLANDS IMMEDIATELY DOWNSTREAM OR ADJACENT TO THE SITE.
- IV. OFFSITE AREAS:
- MINIMAL OFF-SITE LAND DISTURBANCE IS ANTICIPATED. THE EXPECTED OFF-SITE DISTURBANCE THAT IS REQUIRED INCLUDES THE TIE-IN OF PROPOSED SIDEWALKS TO EXISTING SIDEWALKS ON MAPLE AVE AND CONNECTION TO THE EXISTING SANITARY MAIN LOCATED ON MAPLE AVENUE. SEE C-301 FOR AN OUTLINE OF THE LIMITS OF DISTURBANCE. IF UNSUITABLE SOILS ARE ENCOUNTERED DURING CONSTRUCTION, IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE PROPER METHOD OF DISPOSAL AND SUBMIT ANY NECESSARY PLANS TO FAIRFAX COUNTY. FURTHERMORE, IF ANY OFFSITE BORROW OR WASTE AREAS ARE NECESSARY, THE CONTRACTOR WILL BE RESPONSIBLE FOR THE FINAL STABILIZATION AND MAINTENANCE OF THOSE OFFSITE AREAS. NO ON-SITE STOCKPILE IS AN ANTICIPATED TO BE REQUIRED FOR CONSTRUCTION.
- V. SOILS:
- NO MARINE CLAYS OR OTHER PROBLEM SOILS ARE KNOWN TO EXIST ON THIS SITE. PER THE OFFICIAL 2010 FAIRFAX COUNTY SOILS MAPS, THE SUBJECT PROPERTY IS LISTED AS "95 - URBAN SOILS."
- VI. CRITICAL EROSION AREAS:
- NO CRITICAL EROSION AREAS ARE KNOWN TO EXIST ON-SITE.
- VII. EROSION AND SEDIMENT CONTROL MEASURES:
- ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PROTECTION SHALL BE CONSTRUCTED AND MAINTAINED ACCORDING TO THE MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK (VESCH). THE MINIMUM STANDARDS OF VESCH SHALL BE ADHERED TO UNLESS OTHERWISE WAIVED OR APPROVED BY A PREVALENT SPECIFIC EROSION AND SEDIMENT CONTROL MEASURES UTILIZED IN THIS PROJECT INCLUDE THE FOLLOWING:
1. SAFETY FENCE - 3.01
A SAFETY FENCE SHALL BE INSTALLED AS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS PHASE I AND II TO PREVENT PUBLIC ACCESS TO THE DISTURBED SITE WHERE OTHER CONTROLS (SSF, ETC) ARE NOT PRESENT TO ACT AS A BARRIER.
 2. TEMPORARY STONE CONSTRUCTION ENTRANCE - 3.02
CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.
 3. SILT FENCE/SUPER SILT FENCE BARRIER - 3.05
SILT FENCE/SUPER SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWN SLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW.
 4. STORM DRAIN INLET PROTECTION - 3.07/EC-3 LINING (GUTTER BUDDY)
STORM SEWER INLETS AND BMP STRUCTURES SHALL BE PROTECTED DURING CONSTRUCTION. SEDIMENT-LADEN WATER SHALL BE FILTERED PRIOR TO ENTERING THE STORM SEWER INLETS AND BMP STRUCTURE.
 5. TEMPORARY SEEDING - 3.31
TEMPORARY SEEDING SHALL BE PROVIDED TO REDUCE EROSION AND SEDIMENTATION BY STABILIZING DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINAL GRADE FOR A PERIOD OF MORE THAN 14 DAYS, AND TO REDUCE DAMAGE FROM SEDIMENT AND RUNOFF TO DOWNSTREAM OR OFF-SITE AREAS, AND TO PROVIDE PROTECTION TO BARE SOILS EXPOSED DURING CONSTRUCTION UNTIL PERMANENT VEGETATION OR OTHER EROSION CONTROL MEASURES CAN BE ESTABLISHED.
 6. PERMANENT SEEDING - 3.32
SEE NEXT SHEET FOR PERMANENT SEEDING SPECIFICATIONS.
 7. DUST CONTROL - 3.39
DUST CONTROL SHALL BE PROVIDED TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT AIR HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARMFUL ANIMAL OR PLANT LIFE.
- VIII. MAINTENANCE PROGRAM:
1. SILT FENCE SHALL BE INSPECTED AT THE END OF EACH DAY AND AFTER EACH RAINFALL. ANY REQUIRED REPAIRS OR REPLACEMENTS SHALL BE DONE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED BY HAND AFTER EACH RAINFALL AND AT ANY TIME DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER.
 2. INLET PROTECTIONS SHALL BE INSPECTED AT THE END OF EACH DAY AND AFTER EACH RAINFALL. ANY REQUIRED REPAIRS SHALL BE DONE IMMEDIATELY.
 3. ALL SEEDING AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STAND IS MAINTAINED. AREAS SHOULD BE FERTILIZED AND RESEEDED AS NEEDED.
 4. PERMANENT OR TEMPORARY SOIL STABILIZATION SHALL BE APPLIED TO DENUDED AREAS WITHIN SEVEN (7) DAYS AFTER FINAL GRADE IS REACHED ON ANY PORTION OF THE SITE. TEMPORARY SOIL STABILIZATION SHALL BE APPLIED WITHIN SEVEN (7) DAYS TO DENUDED AREAS THAT MAY NOT BE AT FINAL GRADE BUT WILL REMAIN DORMANT FOR MORE THAN 14 DAYS.
 5. NO UNPROTECTED, UNDISTURBED AREA SHALL DRAIN TO ROADWAY PAVEMENTS SUCH THAT THE SUBBASE, BASE OR WEARING SURFACES ARE CONTAMINATED BY SILT TRAPPED AT LOW POINTS OR INLETS.
 6. ADJACENT ROADWAYS AND ENTRANCES WILL BE KEPT CLEAN FROM ACCUMULATED DEBRIS AT ALL TIMES.
- IX. PERMANENT STABILIZATION:
- TEMPORARY AND FINAL SEEDING WILL BE PROVIDED IN ACCORDANCE TO VESCH REQUIREMENTS THROUGHOUT CONSTRUCTION AS STATED ABOVE.
- X. STORMWATER RUNOFF CONSIDERATIONS:
1. THE TOTAL IMPERVIOUS AREA HAS INCREASED BY .003 AC RESULTING IN AN INCREASE IN POST-DEVELOPMENT RUNOFF. THE MAJORITY OF THE RUNOFF WILL BE CAPTURED IN CURB INLETS WITHIN THE EXISTING SITE AND ROUTED THROUGH A SERIES OF EXISTING STORM PIPES TO THE EXISTING STORM SYSTEM.
- XI. CALCULATIONS:
1. NO TEMPORARY SEDIMENT BASINS, DIVERSIONS, CHANNELS, ETC., ARE APPLICABLE FOR THE PROPOSED SITE. A MINIMAL INCREASE OF RUNOFF FROM THE PRE-DEVELOPED TO POST-DEVELOPED RATES (0.01 CFS) IS THE RESULT OF PROPOSED WORK WITH THIS PLAN.
 2. A STORMWATER BMP IS NOT REQUIRED FOR THIS SITE. OFF-SITE NUTRIENT CREDITS WILL BE PURCHASED FOR THIS PROJECT.

- XII. GENERAL LAND CONSERVATION NOTES:
 1. NO DISTURBED AREA WHICH IS NOT ACTIVELY BEING WORKED SHALL REMAIN DENUDE FOR MORE THAN 14 CALENDAR DAYS UNLESS OTHERWISE AUTHORIZED BY THE DIRECTOR.
 2. ALL E&S CONTROL MEASURES APPROVED WITH THE PHASE ONE E&S CONTROL PLAN SHALL BE PLACED AS THE FIRST STEP IN GRADING.
 3. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET SHALL BE OPEN AT ANY ONE TIME.
 4. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL.
 5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS SHALL BE SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY (AS SOON AS POSSIBLE BUT NO LATER THAN 48 HOURS) AFTER COMPLETION OF GRADING. STRAW OR HAY MULCH IS REQUIRED. ALL SOIL STOCKPILES SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER GRADING.
 6. DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS, MAINTAINED AND MODIFIED DURING CONSTRUCTION PROGRESS AS REQUIRED.
 7. ANY DISTURBED AREA NOT COVERED BY § 11-0406.1 AND NOT PAVED, SODDED OR BUILT UPON BY NOV. 1, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE AND OVER-SEEDED BY APRIL 15.
 8. AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDE AREAS SHALL BE STABILIZED.
- XIII. OTHER IMPORTANT NOTES:
 1. ALL AREAS TO BE PAVED MAY BE STABILIZED BY INSTALLATION BY BASE AND SUBBASE MATERIALS INSTEAD OF TEMPORARY VEGETATION COVER.
 2. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING MUD FROM TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING THE PUBLIC RIGHT-OF-WAY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAR THE STREETS AND TAKE WHATEVER MEASURES NECESSARY TO ENSURE THAT THE STREETS ARE MAINTAINED IN A CLEAN AND DUST-FREE CONDITION AT ALL TIMES.
 3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE WORK IN SUCH A MANNER AS TO PREVENT THE WASHING OF ANY TOPSOIL OR DEBRIS INTO ADJACENT PROPERTIES.
 4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE AND MAINTAIN A WATER TRUCK ON SITE AT ALL TIMES FOR THE PURPOSE OF WASHING CONSTRUCTION VEHICLES AT THE STONE CONSTRUCTION ENTRANCE PRIOR TO THEIR ENTERING THE RIGHT-OF-WAY. SEDIMENT LADEN RUNOFF SHALL BE DIRECTED AWAY FROM THE RIGHT-OF-WAY AND TOWARDS AN EROSION AND SEDIMENT CONTROL DEVICE PRIOR TO DISCHARGE INTO THE PUBLIC STORM SYSTEM.
 5. BORROW OR HAUL (IF REQUIRED) SHALL BE FROM AN APPROVED OFFSITE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL RELATED PERMITS.
 6. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, GROUNDWATER AND SOIL SHALL BE DISPOSED OF IN A MANNER WHICH DOES NOT SPILL ONTO EXISTING PAVEMENT AND CLOG EXISTING INLETS.
 7. SOIL STOCKPILE IS NOT ANTICIPATED FOR THIS PROJECT. EXCESS SPOIL WILL BE HAULED FROM THE SITE.
- XIV. LTI 05-15 COMPLIANCE (POTENTIAL FOR INCREASED RUNOFF DURING CONSTRUCTION)

GENERAL EROSION AND SEDIMENT CONTROL NOTES (TABLE 6-1-VESCH)

ES-1 UNLESS OTHERWISE INDICATED, ALL VEGETATIVE AND STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE CONSTRUCTED AND MAINTAINED ACCORDING TO MINIMUM STANDARDS AND SPECIFICATIONS OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.

ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.

ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING AND GRADING.

ES-4 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLANS SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.

ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED, OFFSITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.

ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.

ES-7 ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.

ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.

ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

TEMPORARY SEEDING

SPECIFICATIONS
PRIOR TO SEEDING, INSTALL NECESSARY EROSION CONTROL PRACTICES SUCH AS DIKES, WATERWAYS, AND BASINS.

PLANT SELECTION
SELECT PLANTS APPROPRIATE TO THE SEASON AND SITE CONDITIONS FROM TABLES 3.31-B AND 3.31-C. NOTE THAT TABLE 3.31-B PRESENTS PLANTS WHICH CAN BE USED WITHOUT EXTENSIVE EVALUATION OF SITE CONDITIONS, TABLE 3.31-C PRESENTS MORE IN-DEPTH INFORMATION ON THE PLANT MATERIALS.

SEEDBED PREPARATION
TO CONTROL EROSION ON BARE SOIL SURFACES, PLANTS MUST BE ABLE TO GERMINATE AND GROW. SEEDBED PREPARATION IS ESSENTIAL.

LIMING
AN EVALUATION SHOULD BE CONDUCTED TO DETERMINE IF LIME IS NECESSARY FOR TEMPORARY SEEDING. IN MOST SOILS, IT TAKES UP TO 6 MONTHS FOR A PH ADJUSTMENT TO OCCUR FOLLOWING THE APPLICATION OF LIME. THEREFORE, IT MAY BE DIFFICULT TO JUSTIFY THE COST OF LIMING A TEMPORARY SITE, ESPECIALLY WHEN THE SOIL WILL LATER BE MOVED AND REGARDED. THE FOLLOWING TABLE MAY BE USED TO DETERMINE THE ACTUAL NEED ALONG WITH SUGGESTED APPLICATION RATES.

TABLE 3.31-A LIMING REQUIREMENTS FOR TEMPORARY SITES	
PH TEST	RECOMMENDED APPLICATION OF AGRICULTURAL LIMESTONE
BELOW 4.2	3 TONS PER ACRE
4.2 TO 5.2	2 TONS PER ACRE
5.2 TO 6	1 TON PER ACRE

SOURCE: VA. DSWC

FERTILIZER
SHALL BE APPLIED AS 600 LBS./ACRE OF 10-20-10 (14 LBS./1,000 SQ. FT.) OR EQUIVALENT NUTRIENTS. LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 2 TO 4 INCHES OF THE SOIL IF POSSIBLE.

SURFACE ROUGHENING
IF THE AREA HAS BEEN RECENTLY LOOSENED OR DISTURBED, NO FURTHER ROUGHENING IS REQUIRED. WHEN THE AREA IS COMPACTED, CRUSTED, OR HARDENED, THE SOIL SURFACE SHALL BE LOOSENED BY DISCING, RAKING, HARROWING, OR OTHER ACCEPTABLE MEANS (SEE SURFACE ROUGHENING, STD. & SPEC. 3.29).

TRACKING
TRACKING WITH BULLDOZER CLEATS IS MOST EFFECTIVE ON SANDY SOILS. THIS PRACTICE OFTEN CAUSES UNDUE COMPACTION OF THE SOIL SURFACE, ESPECIALLY IN CLAYEY SOILS, AND DOES NOT AID PLANT GROWTH AS EFFECTIVELY AS OTHER METHODS OF SURFACE ROUGHENING.

SEEDING
SEED SHALL BE EVENLY APPLIED WITH A BROADCAST SEEDER, DRILL, CULTIPACKER SEEDER OR HYDROSEEDER. SMALL GRAINS SHALL BE PLANTED NO MORE THAN 1½ INCHES DEEP. SMALL SEEDS, SUCH AS KENTUCKY BLUEGRASS, SHOULD BE PLANTED NO MORE THAN ¼ INCH TO ½ INCH DEEP.

MULCHING
SEEDINGS MADE IN FALL FOR WINTER COVER AND DURING HOT AND DRY SUMMER MONTHS SHALL BE MULCHED ACCORDING TO MULCHING, STD. & SPEC. 3.35, EXCEPT THAT HYDROMULCHES (FIBER MULCH) WILL NOT BE CONSIDERED ADEQUATE. STRAW MULCH SHOULD BE USED DURING THESE PERIODS.

TEMPORARY SEEDINGS MADE UNDER FAVORABLE SOIL AND SITE CONDITIONS DURING OPTIMUM SPRING AND FALL SEEDING DATED MAY NOT REQUIRE MULCH.

RE-SEEDING
AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO PREVENT RILL EROSION WILL BE RESEEDDED AS SOON AS SUCH AREAS ARE IDENTIFIED.

TABLE 3.31-B "ACCEPTABLE TEMPORARY SEEDING PLANT MATERIALS "QUICK REFERENCE FOR ALL REGIONS"		
PLANTING DATES	SPECIES	RATE (LBS./ACRE)
SEPT. 1 - FEB. 15	50/50 MIX OF ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM) & CEREAL (WINTER) RYE (SECALE CEREALE)	50 - 100
FEB. 16. - APR. 30	ANNUAL RYEGRASS (LOLIUM MULTI-FLORUM	60 - 100
MAY 1 - AUG. 31	GERMAN MILLET (SETARIAITALICA)	50

SOURCE: VA. DSWC

FOR TEMPORARY SEEDING TABLE, SEE NEXT SHEET

SODDING

SOIL PREPARATION

- PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE APPROVED PLAN.
- SOIL TESTS SHOULD BE MADE TO DETERMINE THE EXACT REQUIREMENTS FOR LIME AND FERTILIZER. SOIL TESTS MAY BE CONDUCTED BY THE STATE LABORATORY AT VPI & SU OR A REPUTABLE COMMERCIAL LABORATORY. INFORMATION ON STATE SOIL TESTS IS AVAILABLE FROM COUNTY OR CITY AGRICULTURAL EXTENSION AGENTS.

UNDER DIFFICULT CIRCUMSTANCES WHERE IT IS NOT POSSIBLE TO OBTAIN A SOIL TEST, THE FOLLOWING SOIL AMENDMENTS SHALL BE MADE:

PULVERIZED AGRICULTURAL LIMESTONE AT 90 LBS./1000 SQ. FT. (2 TONS/ACRE).

FERTILIZER AT 25 LBS./1000 SQ. FT. (1000 LBS./ACRE) OF 10-10-10 IN FALL, OR 25 LBS./1000 SQ. FT. OF 5-10-10 IN SPRING.

NOTE: EQUIVALENT NUTRIENTS MAY BE APPLIED WITH OTHER FERTILIZER FORMULATIONS.

THESE AMENDMENTS SHALL BE SPREAD EVENLY OVER THE AREA TO BE SODDED, AND INCORPORATED (IF POSSIBLE) INTO THE TOP 3 TO 6 INCHES OF THE SOIL BY DISCING, HARROWING OR OTHER ACCEPTABLE MEANS.

- PRIOR TO LAYING SOD, THE SOIL SURFACE SHALL BE CLEAR OF TRASH, DEBRIS, LARGE ROOTS, BRANCHES, STONES AND CLODS IN EXCESS OF 1 INCH IN LENGTH OR DIAMETER. SOD SHALL NOT BE APPLIED TO GRAVEL OR OTHER NON-SOIL SURFACES.
- ANY IRREGULARITIES IN THE SOIL SURFACE RESULTING FROM TOP-SOILING OR OTHER OPERATIONS SHALL BE FILLED OR LEVELED IN ORDER TO PREVENT THE FORMATION OF DEPRESSIONS OR WATER POCKETS.
- AREAS TO BE TOPSOILED AND TOPSOIL USED SHALL FULFILL THE REQUIREMENTS OF TOPSOILING, STD. & SPEC. 3.30. NO SOD SHALL BE SPREAD ON SOIL WHICH HAS BEEN TREATED WITH SOIL STERILANTS OR ANY OTHER TOXIC HERBICIDES UNTIL ENOUGH TIME HAS ELAPSED TO PERMIT DISSIPATION OF TOXIC MATERIALS.

QUALITY OF SOD

- SOD USED SHALL BE STATE-CERTIFIED. CERTIFIED TURFGRASS SOD IS GROWN FROM CERTIFIED SEED, INSPECTED AND CERTIFIED BY THE VIRGINIA CROP IMPROVEMENT ASSOCIATION (VOCIA) OR THE CERTIFYING AGENCY IN OTHER STATES. THIS ENSURES GENETIC PURITY, HIGH QUALITY, FREEDOM FROM NOXIOUS WEEDS AND EXCESSIVE INSECT OR DISEASE PROBLEMS. THE SOD MUST MEET PUBLISHED STATE STANDARDS AND BEAR AN OFFICIAL BLUE "CERTIFIED TURF" LABEL ON THE BILL OF LADING.
- HIGH-QUALITY SOD IS ALSO AVAILABLE OUTSIDE OF THE VOCIA CERTIFIED SOD PROGRAM. WHEN PURCHASING THIS SOD, THE CONSUMER IS ENCOURAGED TO BE AWARE OF FACTORS WHICH ARE IMPORTANT IN DETERMINING SOD QUALITY. HIGH-QUALITY SOD WILL CONTAIN THE BEST VARIETIES AND BE FREE OF SERIOUS DISEASE, INSECT, OR WEED PROBLEMS. IT WILL BE DENSE, HAVE GOOD COLOR, AND HOLD TOGETHER WELL.
- SOD SHALL BE MACHINE CUT AT A UNIFORM SOIL THICKNESS OF ¾ INCH (± ¼ INCH) AT THE TIME OF CUTTING. THIS THICKNESS SHALL EXCLUDE SHOOT GROWTH AND THATCH.
- PIECES OF SOD SHALL BE CUT TO THE SUPPLIER'S STANDARD WIDTH AND LENGTH, WITH A MAXIMUM ALLOWABLE DEVIATION IN ANY DIMENSION OF 5%. TORN OR UNEVEN PADS WILL NOT BE ACCEPTABLE.
- STANDARD SIZE SECTIONS OF SOD SHALL BE STRONG ENOUGH TO SUPPORT THEIR OWN WEIGHT AND RETAIN THEIR SIZE AND SHAPE WHEN SUSPENDED FROM A FIRM GRASP ON ONE END OF THE SECTION.
- SOD SHALL NOT BE CUT OR LAID IN EXCESSIVELY WET OR DRY WEATHER.
- SOD SHALL BE HARVESTED, DELIVERED, AND INSTALLED WITHIN A PERIOD OF 36 HOURS.

CHOOSING APPROPRIATE TYPES OF SOD

THE TYPE OF SOD USED MUST BE COMPOSED OF PLANTS ADAPTED TO THE LOCALITY. USE TABLE 3.33-A TO SELECT THE TYPE OF SOD BEST SUITED TO YOUR AREA.

SOD INSTALLATION (SEE PLATE 3.33-1)

- SOD SHOULD NOT BE LAID ON SOIL SURFACES THAT ARE FROZEN.
- DURING PERIODS OF HIGH TEMPERATURE, THE SOIL SHALL BE LIGHTLY IRRIGATED IMMEDIATELY PRIOR TO LAYING THE SOD, TO COOL THE SOIL AND REDUCE ROOT BURNING AND DIEBACK.
- THE FIRST ROW OF SOD SHALL BE LAID IN A STRAIGHT LINE WITH SUBSEQUENT ROWS PLACED PARALLEL TO AND BUTTING TIGHTLY AGAINST EACH OTHER. LATERAL JOINTS SHALL BE STAGGERED TO PROMOTE MORE UNIFORM GROWTH AND STRENGTH. CARE SHALL BE EXERCISED TO ENSURE THAT SOD IS NOT STRETCHED OR OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING OF THE ROOTS.
- ON SLOPES 3:1 OR GREATER, OR WHEREVER EROSION MAY BE A PROBLEM, SOD SHALL BE LAID WITH STAGGERED JOINTS AND SECURED BY STAPLING OR OTHER APPROVED METHODS. SOD SHALL BE INSTALLED WITH THE LENGTH PERPENDICULAR TO THE SLOPE (ON THE CONTOUR).
- AS SODDING OF CLEARLY DEFINED AREAS IS COMPLETED, SOD SHALL BE ROLLED OR TAMPED TO PROVIDE FIRM CONTACT BETWEEN ROOTS AND SOIL.
- AFTER ROLLING, SOD SHALL BE IRRIGATED TO A DEPTH SUFFICIENT THAT THE UNDERSIDE OF THE SOD PAD AND THE SOIL 4 INCHES BELOW THE SOD IS THOROUGHLY WET.
- UNTIL SUCH TIME A GOOD ROOT SYSTEM BECOMES DEVELOPED, IN THE ABSENCE OF ADEQUATE RAINFALL, WATERING SHALL BE PERFORMED AS OFTEN AS NECESSARY TO MAINTAIN MOIST SOIL TO A DEPTH OF AT LEAST 4 INCHES.
- THE FIRST MOWING SHALL NOT BE ATTEMPTED UNTIL THE SOD IS FIRMLY ROOTED, USUALLY 2-3 WEEKS. NOT MORE THAN ONE THIRD OF THE GRASS LEAF SHALL BE REMOVED AT ANY ONE CUTTING.

SODDED WATERWAYS

- CARE SHOULD BE TAKEN TO PREPARE THE SOIL ADEQUATELY IN ACCORDANCE WITH THIS SPECIFICATION. THE SOD TYPED SHALL CONSIST OF PLANT MATERIALS ABLE TO WITHSTAND THE DESIGNED VELOCITY (SEE STORMWATER CONVEYANCE CHANNELS, STD. & SPEC. 3.17).
- SOD STRIPS IN WATERWAYS SHALL BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY.
- AFTER ROLLING OR TAMPING, SOD SHALL BE PEGGED OR STAPLED TO RESIST WASHOUT DURING THE ESTABLISHMENT PERIOD. JUTE MESH OR OTHER NETTING MAY BE PEGGED OVER THE DOS FOR EXTRA PROTECTION IN CRITICAL AREAS.
- ALL OTHER SPECIFICATIONS FOR THIS PRACTICE SHALL BE ADHERED TO WHEN SODDING A WATERWAY.

MAINTENANCE OF ESTABLISHED SOD

- DURING THE 2 TO 3 WEEKS ESTABLISHMENT STAGE, SOD SHALL BE WATERED A S NECESSARY TO MAINTAIN ADEQUATE MOISTURE IN THE ROOT ZONE AND PREVENT DORMANCY OF SOD.
- NO MORE THAN ONE THIRD OF THE SHOOT (GRASS LEAF) SHOULD BE REMOVED IN ANY MOWING. GRASS HEIGHT SHOULD BE MAINTAINED BETWEEN 2 AND 3 INCHES UNLESS OTHERWISE SPECIFIED.
- AFTER THE FIRST GROWING SEASON, ESTABLISHED SOD WILL REQUIRE FERTILIZATION AND MAY REQUIRE LIME. FOLLOW SOIL TEST RECOMMENDATIONS WHEN POSSIBLE, OR APPLY MAINTENANCE LEVELS AS OUTLINED IN TABLE 3.33-B.

TABLE 3.33-A SODDING TABLE TYPE OF SOD AVAILABLE IN VIRGINIA AND RECOMMENDED USES	
CATEGORY I - RECOMMENDED KENTUCKY BLUEGRASS VARIETIES	
65-100%	A-34, ABBEY, ASPEN, ASSET, BARON, BLACKSBURG, CHERI, CHATEAU, CLASSIC, COVENTRY, GEORGETOWN, GLADE, HAGA, JULIA, LIBERTY, LOFTS 1757, MERIT, MIDNIGHT, MONOPOLY, PLUSH, PRINCETON 104, RUGBY, SUFFOLK, VICTA.
CATEGORY II - SPECIAL USE VARIETIES. IF USED, MUST CONTAIN AT LEAST 65% CATEGORY I VARIETIES.	
SHADE TOLERANT	
10-35%	BRISTOL, COLUMBIA, GEORGETOWN, GLADE, MIDNIGHT.
LOW-MAINTENANCE TOLERANT	
10-35%	COLUMBIA, GEORGETOWN, MONOPOLY, RAM I, TOUCHDOWN, VICTA.
CATEGORY III - PROMISING KENTUCKY BLUEGRASS - LIMITED PERFORMANCE DATA OR SEED AVAILABILITY.	
SHADE TOLERANT	
10-35%	DAWN, ESTATE, FREEDOM KELLY.
TALL FESCUE: ADAPTED TO THE ENTIRE STATE	
RECOMMENDED TALL FESCUE VARIETIES	
90-100%	AMIGO, APACHE, BONANZA, CHIEFTAIN, FINELAWN 5GL, MESA, REBEL II, SHENANDOAH, TRIBUTE
PROMISING TALL FESCUES	
CERTIFIED ARRIBA, AUSTIN, AVANTI, AZTEC COCHISE, CROSSFIRE, ELDORADO, HUBBARD 87, JAGUAR II, MAVERICK II, MONARCH, OLYMPIC II, PHOENIX, SAFARI, SHORTSTOP, SUNDANCE, TAURUS, THOROUGHbred, TITAN, TRADITION, VEGAS, WINCHESTER, WRANGLER.	
0-10%	KENTUCKY BLUEGRASS: BARON, CHERI, COLUMBIA, MONOPOLY, NASSAU, RAM I, VICTA
BERMUDAGRASS: TUF-COTE IS ADAPTED TO THE RICHMOND-DANVILLE-NEWPORT NEWS TRIANGLE. MIDIRON MAY BE USED EAST OF ROANOKE AND SOUTH OF CHARLOTTESVILLE. TIFGREEN AND TIFWAY MAY BE USED SOUTH OF RICHMOND. VAMONT MAY BE USED EAST OF ROANOKE AND AT LOWER ELEVATIONS IN SOUTHWESTERN VIRGINIA.	
CERTIFIED MIDIRON, TIFGREEN, TIFWAY II, TUF-COTE, AND VAMONT	
ZOYSIAGRASS: THIS SOD PERFORMS BEST IN SOUTHEASTERN VIRGINIA.	
MEYER, EMERALD	

SOURCE: 1991 VIRGINIA TURFGRASS VARIETY RECOMMENDATIONS, VIRGINIA CROP IMPROVEMENT ASSOCIATION

TABLE 3.32-D PERMANENT SEEDING SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN AREA	
MINIMUM CARE LAWN	TOTAL LBS./ACRE
COMMERCIAL OR RESIDENTIAL - KENTUCKY 31 OR TURF-TYPE TALL FESCUE - COMMON BERMUDAGRASS	175/200 LBS. 75 LBS.
HIGH MAINTENANCE LAWN	
- KENTUCKY 31 OR TURF-TYPE TALL FESCUE - HYBRID BERMUDAGRASS (SEED) - HYBRID BERMUDAGRASS (BY OTHER VEGETATIVE ESTABLISHMENT METHOD)	200-250 LBS. 40 LBS. (UNHULLED) 30 LBS. (HULLED)
GENERAL SLOPE (3:1 OR LESS)	
- KENTUCKY 31 FESCUE - RED TOP GRASS - SEASONAL NURSE CROP	128 LBS. 2 LBS. 20 LBS. 150 LBS.
LOW MAINTENANCE SLOPE (STEEPER THAN 3:1)	
- KENTUCKY 31 FESCUE - COMMON BERMUDAGRASS - RED TOP GRASS - SEASONAL NURSE CROP - SERICEA LESPEDEZA	93-108 LBS. 0-15 LBS. 2 LBS. 20 LBS. 150 LBS.

USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES AS STATED BELOW:
- FEBRUARY, MARCH THROUGH APRIL ANNUAL RYE
- MAY 1ST THROUGH AUGUST FOXTAIL MILLET
- SEPTEMBER, OCTOBER THROUGH NOVEMBER 15TH ANNUAL RYE
- NOVEMBER 16TH THROUGH JANUARY WINTER RYE

PERMANENT SEEDING

SPECIFICATIONS

SELECTION OF PLANT MATERIALS

- SELECTION OF PLANT MATERIALS IS BASED ON CLIMATE, TOPOGRAPHY, SOILS, LAND USE, AND PLANTING SEASON. TO DETERMINE WHICH PLANT MATERIALS ARE BEST ADAPTED TO A SPECIFIC SITE, USE TABLES 3.32-A AND 3.22-B WHICH DESCRIBE PLANT CHARACTERISTICS AND LIST RECOMMENDED VARIETIES.
- APPROPRIATE SEEDING MIXTURES FOR VARIOUS SITE CONDITIONS IN VIRGINIA ARE GIVEN IN TABLES 3.32-C, 3.32-D AND 3.32-E. THESE MIXTURES ARE DESIGNED FOR GENERAL USE, AND ARE KNOWN TO PERFORM WELL ON THE SITES DESCRIBED. CHECK TABLES 3.32-A AND 3.32-B FOR RECOMMENDED VARIETIES.
- A MORE EXTENSIVE DESCRIPTION OF PLANT MATERIALS (GRASSES AND LEGUMES), THEIR USAGE AND PICTORIAL REPRESENTATION CAN BE FOUND IN APPENDIX 3.32-C.

SEEDBED REQUIREMENTS

VEGETATION SHOULD NOT BE ESTABLISHED ON SLOPES THAT ARE UNSUITABLE DUE TO INAPPROPRIATE SOIL TEXTURE, POOR INTERNAL STRUCTURE OR INTERNAL DRAINAGE, VOLUME OF OVERLAND FLOW, OR EXCESSIVE STEEPNESS, UNTIL MEASURES HAVE BEEN TAKEN TO CORRECT THESE PROBLEMS.

TO MAINTAIN A GOOD STAND OF VEGETATION, THE SOIL MUST MEET CERTAIN MINIMUM REQUIREMENTS AS A GROWTH MEDIUM. THE EXISTING SOIL MUST HAVE THESE CHARACTERISTICS:

- ENOUGH FINE-GRAINED MATERIAL TO MAINTAIN ADEQUATE MOISTURE AND NUTRIENT SUPPLY.
- SUFFICIENT PORE SPACE TO PERMIT ROOT ZONE. THE DEPTH TO ROCK OR IMPERMEABLE LAYERS SUCH AS HARDPANS SHALL BE 12 INCHES OR MORE, EXCEPT ON SLOPES STEEPER THAN 2:1 WHERE THE ADDITION OF SOIL IS NOT FEASIBLE.
- SUFFICIENT DEPTH OF SOIL TO PROVIDE AN ADEQUATE ROOT ZONE. THE DEPTH TO ROCK OR IMPERMEABLE LAYERS SUCH AS HARDPANS SHALL BE 12 INCHES OR MORE, EXCEPT ON SLOPES STEEPER THAN 2:1 WHERE THE ADDITION OF SOIL IS NOT FEASIBLE.
- A FAVORABLE PH RANGE FOR PLANT GROWTH. IF THE SOIL IS SO ACIDIC THAT A PH RANGE OF 6.0-7.0 CANNOT BE ATTAINED BY ADDITION OF PH-MODIFYING MATERIALS, THEN THE SOIL IS CONSIDERED AN UNSUITABLE ENVIRONMENT FOR PLANT ROOTS AND FURTHER SOIL MODIFICATION WOULD BE REQUIRED.
- FREEDOM FROM TOXIC AMOUNTS OF MATERIALS HARMFUL TO PLANT GROWTH.
- FREEDOM FROM EXCESSIVE QUANTITIES OF ROOTS, BRANCHES, LARGE STONES, LARGE CLODS OF EARTH, OR TRASH OF ANY KIND. CLODS AND STONES MAY BE LEFT ON SLOPES STEEPER THAN 3:1 IF THEY DO NOT SIGNIFICANTLY IMPEDE GOOD SEED SOIL CONTACT.

IF ANY OF THE ABOVE CRITERIA CANNOT BE MET, I.E., IF THE EXISTING SOIL IS TOO COARSE, DENSE, SHALLOW, ACIDIC, OR CONTAMINATED TO FOSTER VEGETATION, THEN TOPSOIL SHALL BE APPLIED IN ACCORDANCE WITH TOPSOILING, STD. & SPEC. 3.30.

NECESSARY STRUCTURAL EROSION AND SEDIMENT CONTROL PRACTICES WILL BE INSTALLED PRIOR TO SEEDING. GRADING WILL BE CARRIED OUT ACCORDING TO THE APPROVED PLAN.

SURFACES WILL BE ROUGHENED IN ACCORDANCE WITH SURFACE ROUGHENING, STD. & SPEC. 3.29.

SOIL CONDITIONERS

IN ORDER TO MODIFY THE TEXTURE, STRUCTURE, OR DRAINAGE CHARACTERISTICS OF A SOIL, THE FOLLOWING MATERIALS MAY BE ADDED TO THE SOIL:

- PEAT IS A VERY COSTLY CONDITIONER, BUT WORKS WELL. IF ADDED, IT SHALL BE SPHAGNUM MOSS PEAT, HYPNUM MOSS PEAT, REED-SEDGE PEAT HUMUS, FROM FRESH-WATER SOURCES. PEAT SHALL BE SHREDDED AND CONDITIONED IN STORAGE PILES FOR AT LEAST SIX MONTHS AFTER EXCAVATION.
- SAND SHALL BE CLEAN AND FREE OF TOXIC MATERIALS. SEND MODIFICATION IS INEFFECTIVE UNLESS YOU ARE ADDING 80 TO 90% SAND ON A VOLUME BASIS. THIS IS EXTREMELY DIFFICULT TO DO ON-SITE. IF THIS PRACTICE IS CONSIDERED, CONSULT A PROFESSIONAL AUTHORITY TO ENSURE THAT IT IS DONE PROPERLY.
- VERMICULITE SHALL BE HORTICULTURAL GRADE AND FREE OF TOXIC SUBSTANCES. IT IS AN IMPRACTICAL MODIFIER FOR LARGER ACREAGE DUE TO EXPENSE.
- RAW MANURE IS MORE COMMONLY USED IN AGRICULTURAL APPLICATIONS. HOWEVER, WHEN STORED PROPERLY AND ALLOWED TO COMPOST, IT WILL STABILIZE NITROGEN AND OTHER NUTRIENTS. MANURE, IN ITS COMPOSTED FORM, IS A VIABLE SOIL CONDITIONER; HOWEVER, ITS USE SHOULD BE BASED ON SITE-SPECIFIC RECOMMENDATIONS OFFERED Y A PROFESSIONAL IN THIS FIELD.
- THOROUGHLY ROTTED SAWDUST SHALL HAVE 6 POUNDS OF NITROGEN ADDED TO EACH CUBIC YARD AND SHALL BE FREE OF STONES, STICKS, AND TOXIC SUBSTANCES.
- THE USE OF TREATED SEWAGE SLUDGE HAS BENEFITED FROM CONTINUING ADVANCEMENTS IN ITS APPLICATIONS IN THE AGRICULTURAL COMMUNITY. WHEN COMPOSTED, IT OFFERS AN ALTERNATIVE SOIL AMENDMENT. LIMITATIONS INCLUDE A POTENTIALLY UNDESIRABLE PH (BECAUSE OF LIME ADDED DURING THE TREATMENT PROCESS) AND THE POSSIBLE PRESENCE OF HEAVY METALS. THIS PRACTICE SHOULD B E THOROUGHLY EVALUATED BY A PROFESSIONAL AND BE USED IN ACCORDANCE WITH ANY LOCAL, STATE, AND FEDERAL REGULATIONS.

LIME AND FERTILIZER

LIME AND FERTILIZER NEEDS SHOULD BE DETERMINED BY SOIL TESTS. SOIL TESTS MAY BE PERFORMED BY THE COOPERATIVE EXTENSION SERVICE SOIL TESTING LABORATORY AT VPI & SU, OR BY A REPUTABLE COMMERCIAL LABORATORY. INFORMATION CONCERNING THE STATE SOIL TESTING LABORATORY IS AVAILABLE FROM COUNTY EXTENSION AGENTS. REFERENCE APPENDIX 3.32-D FOR LIMING APPLICATIONS (IN LBS.) NEEDED TO CORRECT UNDESIRABLE PH FOR VARIOUS SOIL TYPES.

UNDER UNUSUAL CONDITIONS WHERE IT IS NOT POSSIBLE TO OBTAIN A SOIL TEST, THE FOLLOWING SOIL AMENDMENTS WILL BE APPLIED:

LIME

COASTAL PLAIN: 2 TONS/ACRE PULVERIZED AGRICULTURAL GRAD LIMESTONE (90 LBS./ 1000 FT.²).

NOTE: AN AGRICULTURAL GRADE OF LIMESTONE SHOULD ALWAYS BE USED.

FERTILIZER

MIXED GRASSES AND LEGUMES:
1000 LBS./ACRE 10-20-10 OR EQUIVALENT NUTRIENTS (23 LBS./1000 FT.²)

LEGUME STANDS ONLY:
1000 LBS./ACRE 5-20-10 (23 LBS./ 1000 FT.²) IS PREFERRED;HOWEVER, 1000 LBS./ACRE OF 10-20-10 OR EQUIVALENT MAY BE USED.

GRASS STANDS ONLY:
1000 LBS./ACRE 10-20-10 OR EQUIVALENT NUTRIENTS, (23 LBS./1000 FT.²).

OTHER FERTILIZER FORMULATIONS, INCLUDING SLOW-RELEASE SOURCES OF NITROGEN(PREFERRED FROM A WATER QUALITY STANDPOINT), MAY BE USED PROVIDED THEY CAN SUPPLY THE SAME AMOUNTS AND PROPORTIONS OF PLANT NUTRIENTS.

INCORPORATION -

LIME AND FERTILIZER SHALL BE INCORPORATED INTO THE TOP 4-6 INCHES OF THE SOIL BY DISCING OR OTHER MEANS WHENEVER POSSIBLE. FOR EROSION CONTROL, WHEN APPLYING LIME AND FERTILIZER WITH A HYDROSEEDER, APPLY TO TOUGH, LOOSE SURFACE.

SEEDING

- CERTIFIED SEED WILL BE USED FOR ALL PERMANENT SEEDING WHENEVER POSSIBLE. CERTIFIED SEED IS INSPECTED BY THE VIRGINIA CROP IMPROVEMENT ASSOCIATION OR THE CERTIFYING AGENCY IN OTHER STATES. THE SEED MUST MEET PUBLISHED STATE STANDARDS AND BEAR AN OFFICIAL "CERTIFIED SEED" LABEL (SEE APPENDIX 3.32-A).
- LEGUME SEED SHOULD BE INOCULATED WITH THE INOCULANT APPROPRIATE TO THE SPECIES. SEED OF THE LESPEDEZAS, THE CLOVERS AND CROWWEATCH SHOULD BE SCARIFIED TO PROMOTE UNIFORM GERMINATION.
- APPLY SEED UNIFORMLY WITH A BROADCAST SEEDER, DRILL, CULTI-PACKER SEEDER, OR HYDROSEEDER ON A FIRM, FRIABLE SEEDBED. SEEDING DEPTH SHOULD BE ¼ TO ½ INCH.
- TO AVOID POOR GERMINATION RATES AS A RESULT OF SEED DAMAGE DURING HYDROSEEDING, IT IS RECOMMENDED THAT IF A MACHINERY BREAKDOWN OF 30 MINUTES TO 2 HOURS OCCURS, 50% MORE SEED BE ADDED TO THE TANK, BASED ON THE PROPORTION OF THE SLURRY REMAINING IN THE TANK. BEYOND 2 HOURS, A FULL RATE OF NEW SEED MAY BE NECESSARY.

OFTEN HYDROSEEDING CONTRACTORS PREFER NOT TO APPLY LIME IN THEIR RIGS AS IT IS ABRASIVE. IN INACCESSIBLE AREAS, LIME MAY HAVE TO BE APPLIED SEPARATELY IN PALLETIZED OR LIQUID FORM. SURFACE ROUGHENING IS PARTICULARLY IMPORTANT WHEN HYDROSEEDING, AS A ROUGHENING SLOPE WILL PROVIDE SOME NATURAL COVERAGE OF LIME, FERTILIZER AND SEED.

LEGUME INOCULANTS SHOULD BE APPLIED AT FIVE TIMES THE RECOMMENDED RATE WHEN INOCULANT IS INCLUDED IN THE HYDROSEEDER SLURRY.

MULCHING

ALL PERMANENT SEEDING MUST BE MULCHED IMMEDIATELY UPON COMPLETION OF SEED APPLICATION. REFER TO MULCHING, STD. & SPEC. 3.35.

MAINTENANCE OF NEW SEEDINGS

IN GENERAL, A STAND OF VEGETATION CANNOT BE DETERMINED TO BE FULLY ESTABLISHED UNTIL IT HAS BEEN MAINTAINED FOR ONE FULL YEAR AFTER PLANTING.

IRRIGATION: NEW SEEDINGS SHOULD BE SUPPLIED WITH ADEQUATE MOISTURE. SUPPLY WATER AS NEEDED, ESPECIALLY LATE IN THE SEASON, IN ABNORMALLY HOT OR DRY WEATHER, OR ON ADVERSE SITES. WATER APPLICATION RATES SHOULD BE CONTROLLED TO PREVENT EXCESSIVE RUNOFF. INADEQUATE AMOUNTS OF WATER MAY BE MORE HARMFUL THAN NO WATER.

FOR CONTINUATION OF PERMANENT SEEDING NOTES, SEE NEXT SHEET

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CAD ID: SSD-0

PROJECT:

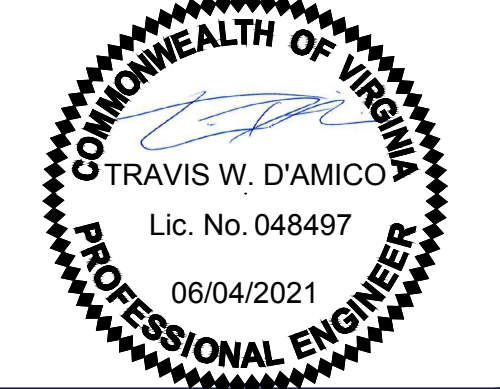
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SITE PLAN
DOCUMENTS
FOR



PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #. 0382-02-0024



12825 WORLDGATE DR. SUITE 700
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SHEET TITLE
EROSION AND
SEDIMENT
CONTROL
NOTES

SHEET NUMBER:

C-604

REVISION 1 - 05/20/2021

MULCHING

SPECIFICATIONS

ORGANIC MULCHES

ORGANIC MULCHES MAY BE USED IN A Y AREA WHERE MULCH IS REQUIRED, SUBJECT TO THE RESTRICTIONS NOTED IN TABLE 3.35-A.

MATERIALS: SELECT MULCH MATERIAL BASED ON SITE REQUIREMENTS, AVAILABILITY OF MATERIALS, AND AVAILABILITY OF LABOR AND EQUIPMENT. TABLE 3.35-A LISTS THE MOST COMMONLY USED ORGANIC MULCHES. OTHER MATERIALS, SUCH AS PEANUT HULLS AND COTTON BURS, MAY BE USED WITH THE PERMISSION OF THE LOCAL PLAN-APPROVING AUTHORITY.

PRIOR TO MULCHING: COMPLETE THE REQUIRED GRADING AND INSTALL NEEDED DESIMENT CONTROL PRACTICES.

LIME AND FERTILIZER SHOULD BE INCORPORATED AND SURFACE ROUGHING ACCOMPLISHED AS NEEDED. SEED SHOULD BE APPLIED PRIOR TO MULCHING EXCEPT IN THE FOLLOWING CASES:

- A. WHERE SEED IS TO BE APPLIED AS PART OF A HYDROSEEDER SLURRY CONTAINING FIBER MULCH.
- B. WHERE SEED IS TO BE APPLIED FOLLOWING A STRAW MULCH SPREAD DURING WINTER MONTHS.

APPLICATION: MULCH MATERIALS SHALL BE SPREAD UNIFORMLY, BY HAND OR MACHINE.

WHEN SPREADING STRAW MULCH BY HAND, DIVIDE THE AREA TO BE MULCHED INTO APPROXIMATELY 1,000 SQ. FT. SECTIONS AND PLACE 70-90 LBS. (1½ TO 2 BALES) OF STRAW IN EACH SECTION TO FACILITATE UNIFORM DISTRIBUTION.

MULCH ANCHORING: STRAW MULCH MUST BE ANCHORED IMMEDIATELY AFTER SPREADING TO PREVENT DISPLACEMENT. OTHER ORGANIC MULCHES LISTED IN TABLE 3.35-A DO NOT REQUIRE ANCHORING. THE FOLLOWING METHODS OF ANCHORING STRAW MAY BE USED:

- MULCH ANCHORING TOOL (OFTEN REFERRED TO AS A KRIMPER OR KRIMPER TOOL): THIS IS A TRACTOR-DRAWN IMPLEMENT DESIGNED TO PUNCH MULCH INTO THE SOIL SURFACE. THIS METHOD PROVIDES GOOD EROSION CONTROL WITH STRAW. IT IS LIMITED TO USE ON SLOPES NO STEEPER THAN 3:1, WHERE EQUIPMENT CAN OPERATE SAFELY. MACHINERY SHALL BE OPERATED ON THE CONTOUR.
- FIBER MULCH: A VERY COMMON PRACTICE WITH WIDESPREAD USE TODAY. APPLY FIBER MULCH BY MEANS OF A HYDROSEEDER AT A RATE OF 500-750 LBS./ACRE OVER TOP OF STRAW MULCH OR HAY. IT HAS AN ADDED BENEFIT OF PROVIDING ADDITIONAL MULCH TO THE NEWLY SEEDD AREA.
- LIQUID MULCH BINDERS: APPLICATION OF LIQUID MULCH BINDERS AND TACKIFIERS SHOULD BE HEAVIEST AT EDGES OF AREAS AND AT CRESTS OF RIDGES AND BANKS, TO PREVENT DISPLACEMENT. THE REMAINDER OF THE AREA SHOULD HAVE BINDER APPLIED UNIFORMLY. BINDERS MAY BE APPLIED AFTER MULCH IS SPREAD OR MAY BE SPRAYED INTO THE MULCH AS IT IS BEING BLOWN ONTO THE SOIL.

THE FOLLOWING TYPES OF BINDERS MAY BE USED:

A. SYNTHETIC BINDERS - FORMULATED BINDERS OR ORGANICALLY FORMULATED PRODUCTS MAY BE USED AS RECOMMENDED BY THE MANUFACTURER TO ANCHOR MULCH.

B. ASPHALT - ANY TYPE OF ASPHALT THIN ENOUGH TO BE BLOWN FROM SPRAY EQUIPMENT IS SATISFACTORY. RECOMMENDED FOR USE ARE RAPID CURING (RC-70, RC-250, RC-800), MEDIUM CURING (MC-250, MC-800) AND EMULSIFIED ASPHALT (SS-1, CSS-1, CMS-2, MS-2, RS-1, RS-2, CRS-1, AND CRS-2).

APPLY ASPHALT AT 0.10 GALLON PER SQUARE YARD (10 GAL. / 1000 SQ. FT. OR 430 GAL./ACRE). DO NOT USE HEAVIER APPLICATIONS AS IT MAY CAUSE THE STRAW TO "PERCH" OVER RILLS. ALL ASPHALT DESIGNATIONS ARE FROM THE ASPHALT INSTITUTE SPECIFICATIONS.

*NOTE: THIS PARTICULAR METHOD IS NOT USED AS COMMONLY TODAY AS IT ONCE WAS IN THE PAST. THE DEVELOPMENT OF HYDRAULIC SEEDING EQUIPMENT PROMOTED THE INDUSTRY TO TURN SYNTHETIC OR ORGANICALLY BASED BINDERS AND PACIFIERS. WHEN THIS METHOD IS USED, ENVIRONMENTAL CONCERNS SHOULD BE ADDRESSED TO ENSURE THAT PETROLEUM-BASED PRODUCTS DO NOT ENTER VALUABLE WATER SUPPLIES. AVOID APPLICATIONS INTO WATERWAYS OR CHANNELS.

- MULCH NETTINGS: LIGHTWEIGHT PLASTIC, COTTON, OR PAPER NETS MAY BE STAPLED OVER THE MULCH ACCORDING TO MANUFACTURER'S RECOMMENDATIONS.
- PEG AND TWINE: BECAUSE IT IS LABOR-INTENSIVE, THIS METHOD IS FEASIBLE ONLY IN SMALL AREAS WHERE OTHER METHODS CANNOT BE USED. DRIVE 8 TO 10-INCH WOODEN PEGS TO WITHIN 3 INCHES OF THE SOIL SURFACE, EVERY 4 FEET IN ALL DIRECTIONS. STAKES MAY BE DRIVEN BEFORE OR AFTER STRAW IS SPREAD. SECURE MULCH BY STRETCHING TWINE BETWEEN PEGS IN A CRISS-CROSS-WITHIN-A SQUARE PATTERN. TURN TWINE 2 OR MORE TIMES AROUND EACH PEG.

CHEMICAL MULCHES

CHEMICAL MULCHES* MAY BE USED ALONE ONLY IN THE FOLLOWING SITUATIONS:

- A. WHERE NO OTHER MULCHING MATERIAL IS AVAILABLE.
- B. IN CONJUNCTION WITH TEMPORARY SEEDING DURING THE TIMES WHEN MULCH IS NOT REQUIRED FOR THAT PRACTICE.
- C. FROM MARCH 15 TO MAY 1 AND AUGUST 15 TO SEPTEMBER 30, PROVIDED THAT THEY ARE USED ON AREAS WITH SLOPES NO STEEPER THAN 4:1, WHICH HAVE BEEN ROUGHENED IN ACCORDANCE WITH SURFACE ROUGHENING, STD. & SPEC. 3.29. IF RILL EROSION OCCURS, ANOTHER MULCH MATERIAL SHALL BE APPLIED IMMEDIATELY.

*NOTE: CHEMICAL MULCHES MAY BE USED TO BIND OTHER MULCHES OR WITH FIBER MULCH IN A HYDROSEEDD SLURRY AT ANY TIME. MANUFACTURER'S RECOMMENDATIONS FOR APPLICATION OF CHEMICAL MULCHES SHALL BE FOLLOWED.

MAINTENANCE

ALL MULCHES AND SOIL COVERINGS SHOULD BE INSPECTED PERIODICALLY (PARTICULARLY AFTER RAINSTORMS) TO CHECK FOR EROSION. WHERE EROSION IS OBSERVED IN MULCHED AREAS, ADDITIONAL MULCH SHOULD BE APPLIED. NETS AND MATS SHOULD BE INSPECTED AFTER RAINSTORMS FOR DISLOCATION OR FAILURE. IF WASHOUTS OR BREAKAGE OCCUR, RE-INSTALL, NETTING OR MATTING AS NECESSARY AFTER REPAIRING DAMAGE TO THE SLOPE OR DITCH. INSPECTIONS SHOULD TAKE PLACE UP UNTIL GRASSES ARE FIRMLY ESTABLISHED. WHERE MULCH IS USED IN CONJUNCTION WITH ORNAMENTAL PLANTINGS, INSPECT PERIODICALLY THROUGHOUT THE YEAR TO DETERMINE IF MULCH IS MAINTAINING COVERAGE OF THE SOIL SURFACE; REPAIR AS NEEDED.

PERMANENT SEEDING NOTES CONTINUED

RE-SEEDING: INSPECT SEEDD AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RE-SEEDINGS WITHIN THE SAME SEASON, IF POSSIBLE.

A. IF VEGETATIVE COVER IS INADEQUATE TO PREVENT RILL EROSION, OVER-SEED AND FERTILIZE IN ACCORDANCE WITH SOIL TEST RESULTS.

B. IF A STAND HAS LESS THAN 40% COVER, RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER. THE SOIL MUST BE TESTED TO DETERMINE IF ACIDITY OR NUTRIENT IMBALANCES ARE RESPONSIBLE. RE-ESTABLISH THE STAND FOLLOWING SEEDBED PREPARATION AND SEEDING RECOMMENDATIONS.

FERTILIZATION: COOL SEASON GRASSES SHOULD BEGIN TO BE FERTILIZED 90 DAYS AFTER PLANTING TO ENSURE PROPER STAND AND DENSITY. WARM SEASON FERTILIZATION SHOULD BEGIN AT 30 DAYS AFTER PLANTING.

APPLY MAINTENANCE LEVELS OF FERTILIZER AS DETERMINED BY SOIL TEST. IN THE ABSENCE OF A SOIL TEST, FERTILIZATION SHOULD BE AS FOLLOWS:

COOL SEASON GRASSES

4 LBS. NITROGEN (N)
1 LB. PHOSPHORUS (P) > PER 1000 FT.² PER YEAR
2 LBS. POTASH (K)

SEVENTY-FIVE PERCENT OF THE TOTAL REQUIREMENTS SHOULD BE APPLIED BETWEEN SEPTEMBER 1 AND DECEMBER 31ST. THE BALANCE SHOULD BE APPLIED DURING THE REMAINDER OF THE YEAR. MORE THAN 1 LB. OF SOLUBLE NITROGEN PER 1000 FT.² SHOULD NOT BE APPLIED AT ANY ONE TIME.

WARM SEASON GRASSES

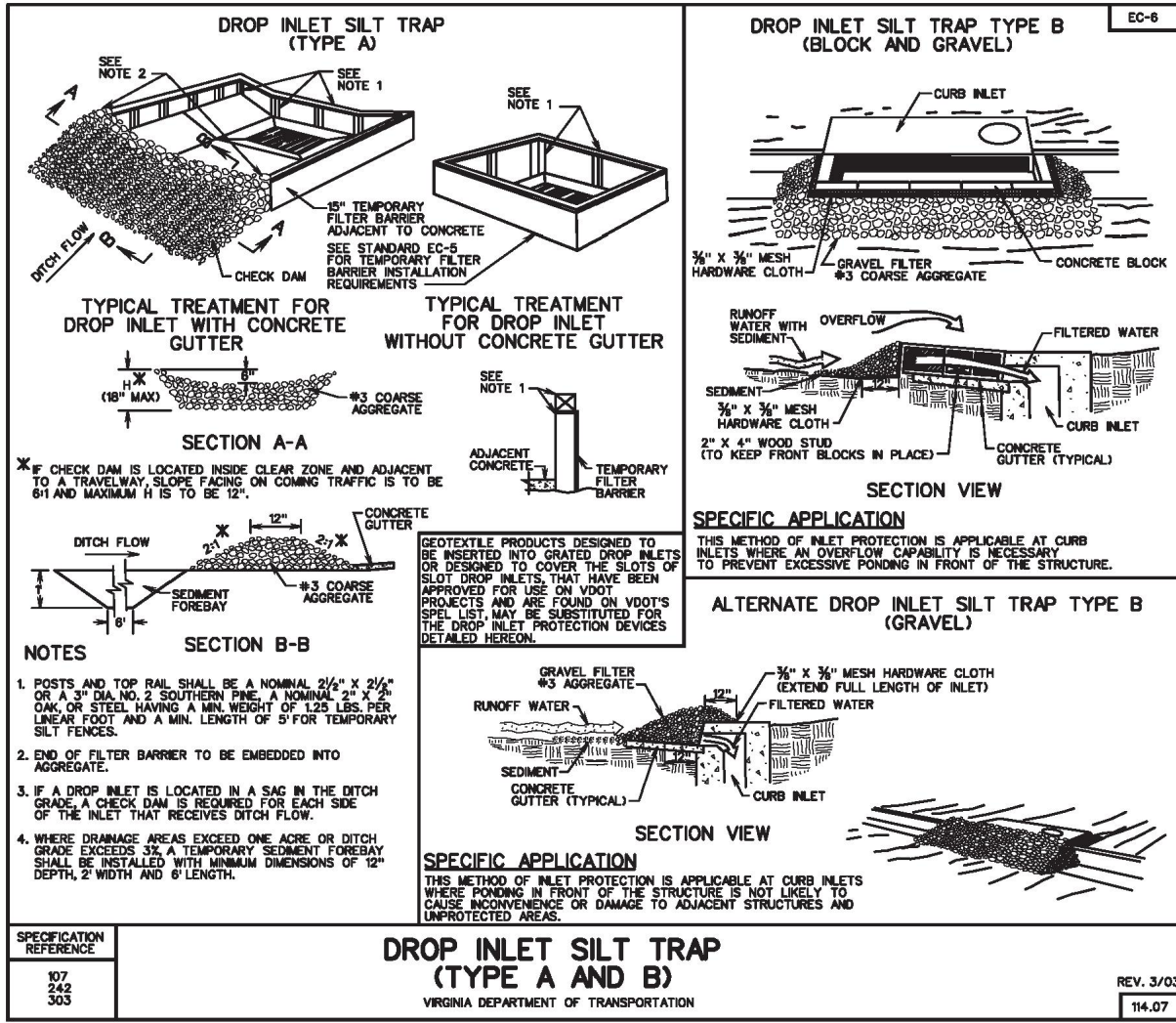
APPLY 4-5 LBS. NITROGEN (N) BETWEEN MAY 1 AND AUGUST 15TH PER 1000 FT.² PER YEAR.

PHOSPHORUS (P) AND POTASH (K) SHOULD ONLY BE APPLIED ACCORDING TO SOIL TEST.

NOTE: THE USE OF SLOW-RELEASE FERTILIZER FORMULATIONS FOR MAINTENANCE OF TURF IS ENCOURAGED. NUMBER OF APPLICATIONS AND THE IMPACT ON GROUNDWATER.

ADDITIONAL INFORMATION ON THE SUCCESSFUL ESTABLISHMENT OF GRASSES AND LEGUMES

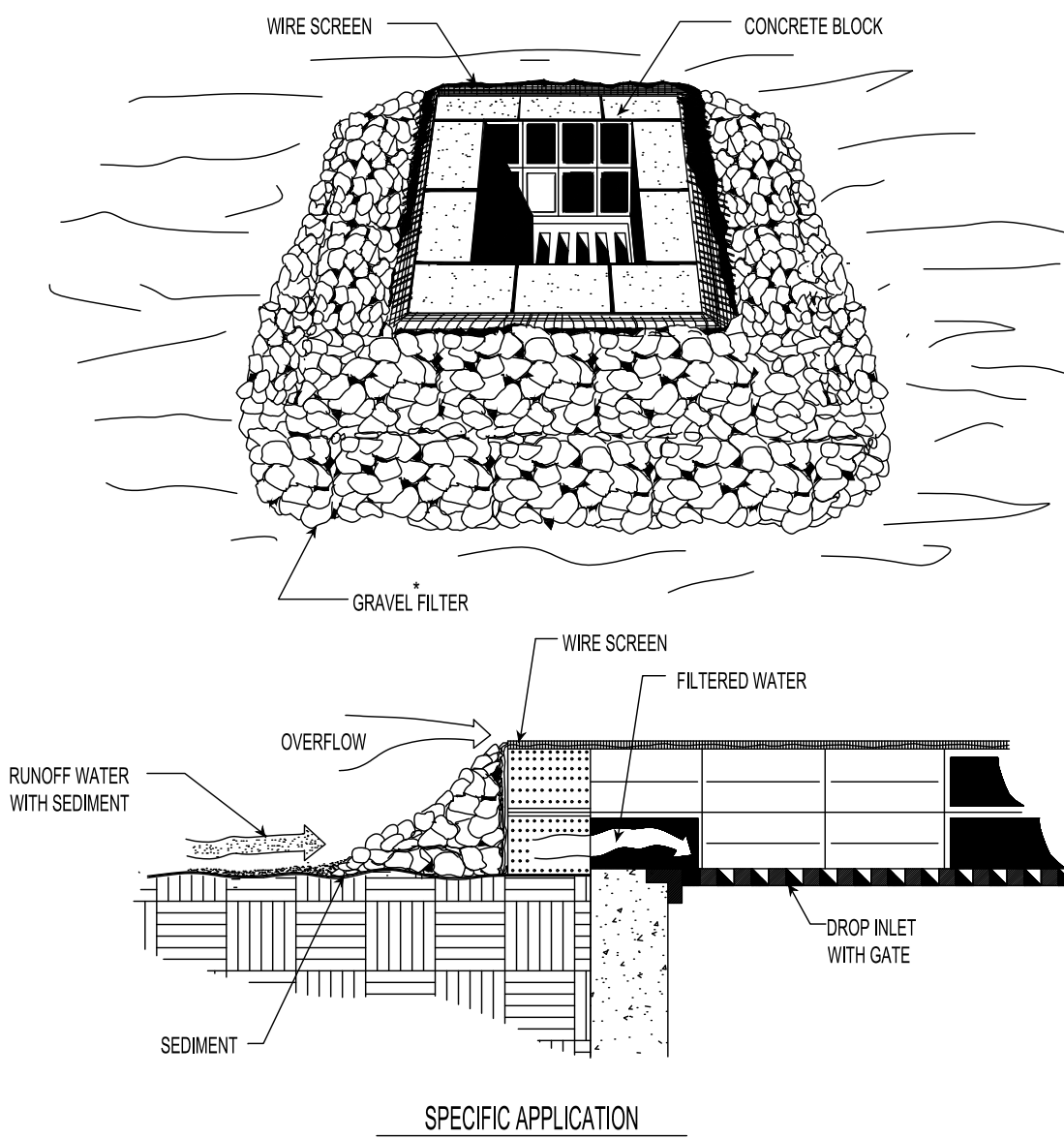
SEE APPENDIX 3.32-B FOR "HELPFUL HINTS" IN ACHIEVING HIGH SUCCESS RATES IN GRASS OR LEGUME PLANTING.



*NOTE: VDOT DETAIL EC-6 (GUTTER BUDDY) TO BE USED FOR ALL STORM INLETS LOCATED IN VDOT MAINTAINED ROADS. GUTTER BUDDY PROTECTION TO BE SELECTED FROM THE APPROVED VDOT LIST FOR INLET PROTECTION.

BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

PLATE 3.07-3

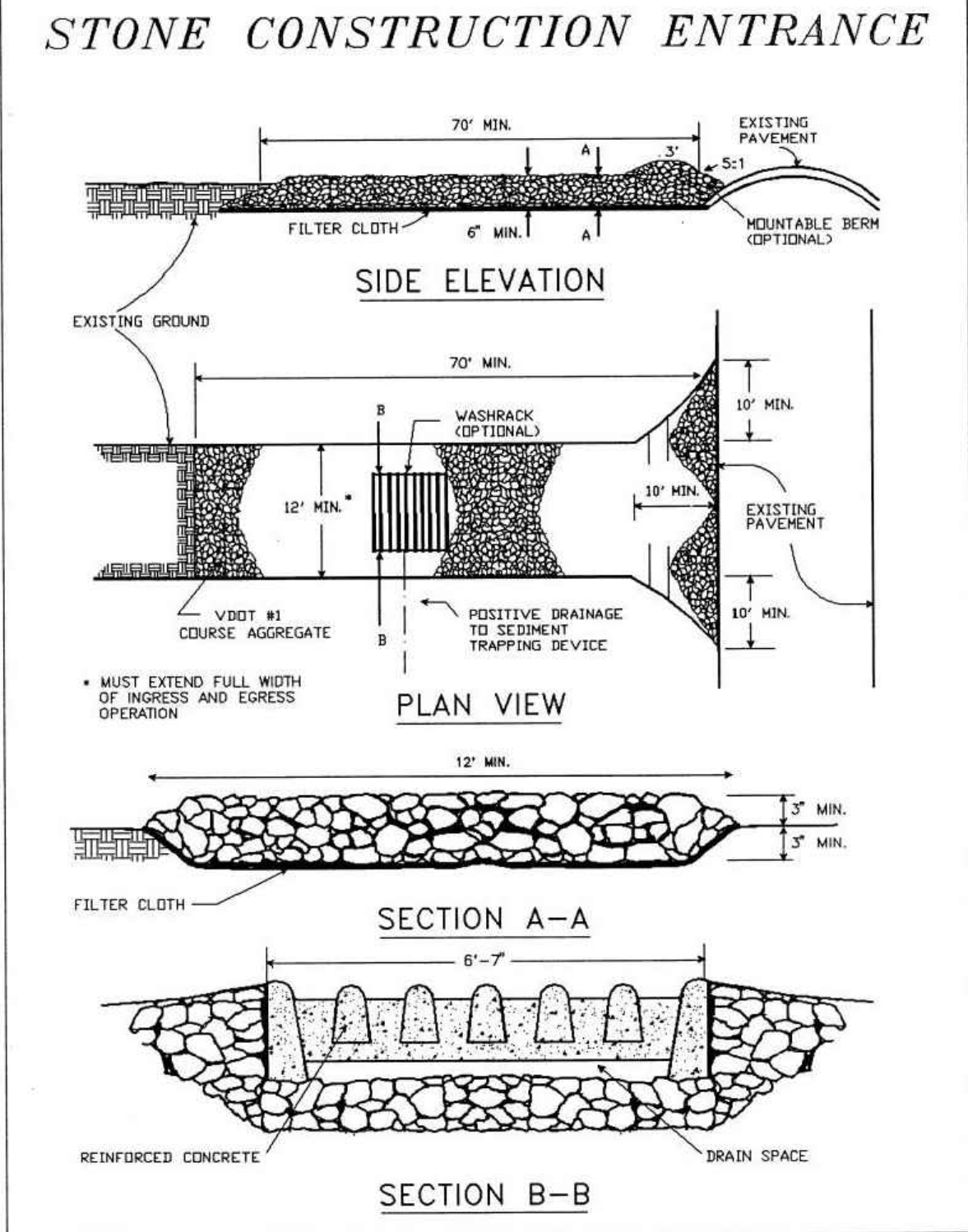


THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY FLOWS ARE EXPECTED AND WHERE AN OVERFLOW CAPACITY IS NECESSARY TO PREVENT EXCESSIVE PONDING AROUND THE STRUCTURE.

* GRAVEL SHALL BE VDOT #5, #57 OR #5 COARSE AGGREGATE.

SOURCE: VA DSWC

1992

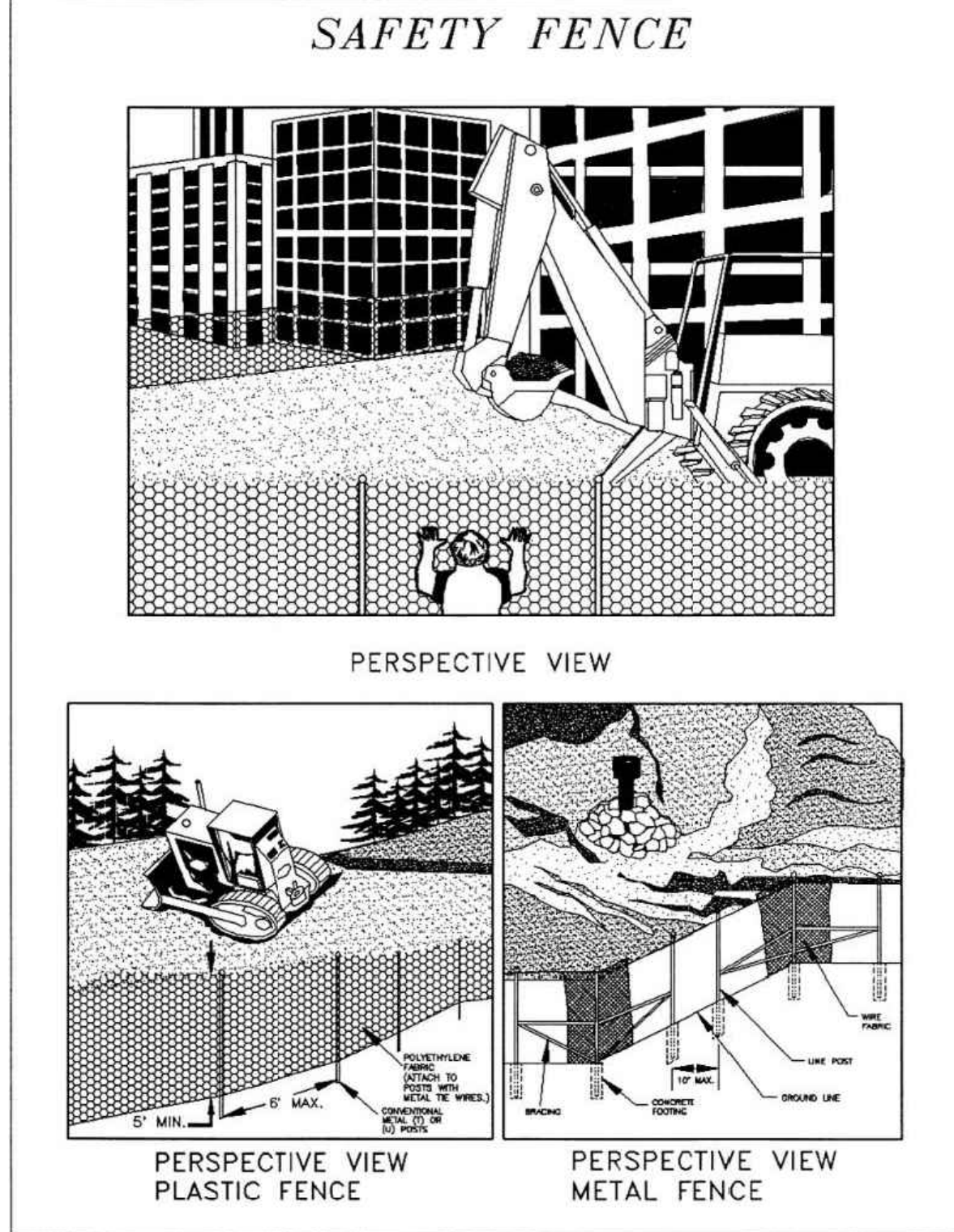


Source: Adapted from 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

Plate 3.02-1

SOURCE: VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK

1992



Source: Adapted from Conwed Plastics and VDOT Road and Bridge Standards

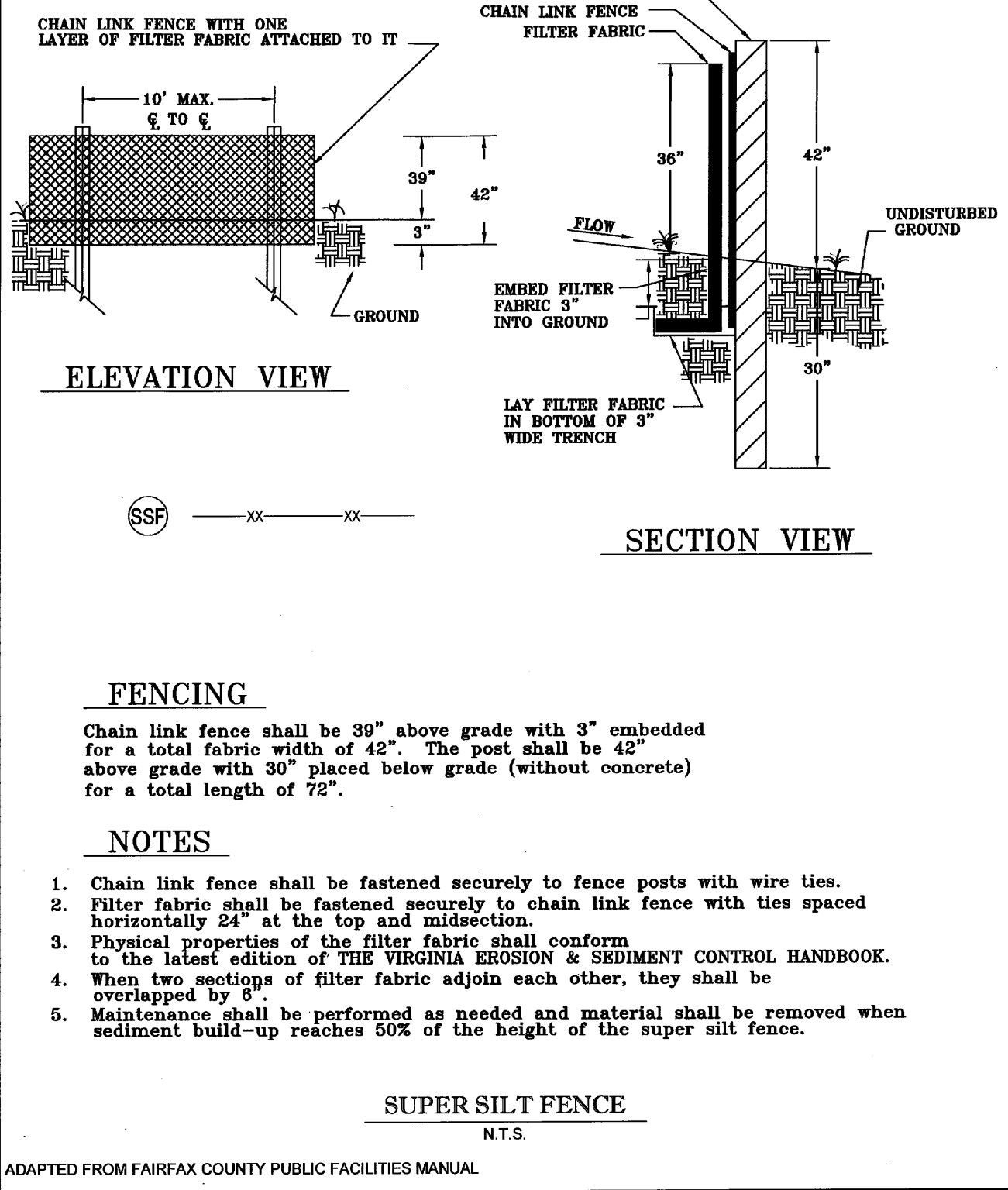
Plate 3.01-1

TABLE 3.31-C

TEMPORARY SEEDING PLANT MATERIALS, SEEDING RATES, AND DATES									
SPECIES	SEEDING RATE		NORTH			SOUTH			PLANT CHARACTERISTICS
	ACRE	1000 FT2	3/1 - 4/30	5/1 - 8/15	8/15 - 11/1	2/15 - 4/30	5/1 - 9/1	9/1 - 11/15	
OATS (AVENA SATIVA)	3 BU (UP TO 100 LBS., NOT LESS THAN 50 LBS.)	2 LBS.	X	-	-	X	-	-	USE SPRING VARIETIES (E.G., NOBLE)
RYE (SECALE CEREALE)	2 BU (UP TO 110 LBS., NOT LESS THAN 50 LBS.)	2.5 LBS.	X	-	X	X	-	X	USE FOR LATE FALL SEEDINGS. WINTER COVER. TOLERATES COLD AND LOW MOISTURE
GERMAN MILLET (SETARIA ITALICA)	50 LBS.	APPROX. 1 LB.	-	X	-	-	X	-	WARM-SEASON ANNUAL. DIES AT FIRST FROST. MAY BE ADDED TO SUMMER MIXES.
ANNUAL RYEGRASS (LOLIUM MULTI-FLOSUM)	60 LBS.	1 1/2 LBS.	X	-	X	X	-	X	MAY BE ADDED IN MIXES. WILL MOW OUT OF MOST STANDS.
WEEPING LOVEGRASS (ERAGROSTIS CURVULA)	15 LBS.	5 1/2 OZS.	-	X	-	-	X	-	WARM-SEASON PERENNIAL. MAY BUNCH. TOLERATES HOT, DRY SLOPES AND ACID, INFERTILE SOILS. MAY BE ADDED TO MIXES.
KOREAN LESPEDEZA (LESPEDEZA STIPULACEA)	25 LBS.	APPROX. 1 1/2 LBS.	X	X	-	X	X	-	WARM-SEASON ANNUAL LEGUME. TOLERATES ACID SOILS. MAY BE ADDED TO MIXES.

SOURCE: VA. DSWC

3.02



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DRAWN BY: SC
CHECKED BY: CM
DATE: 06/04/2021
CAD ID: SSD-0

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PROP. SITE PLAN DOCUMENTS
FOR

CHASE logo

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315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

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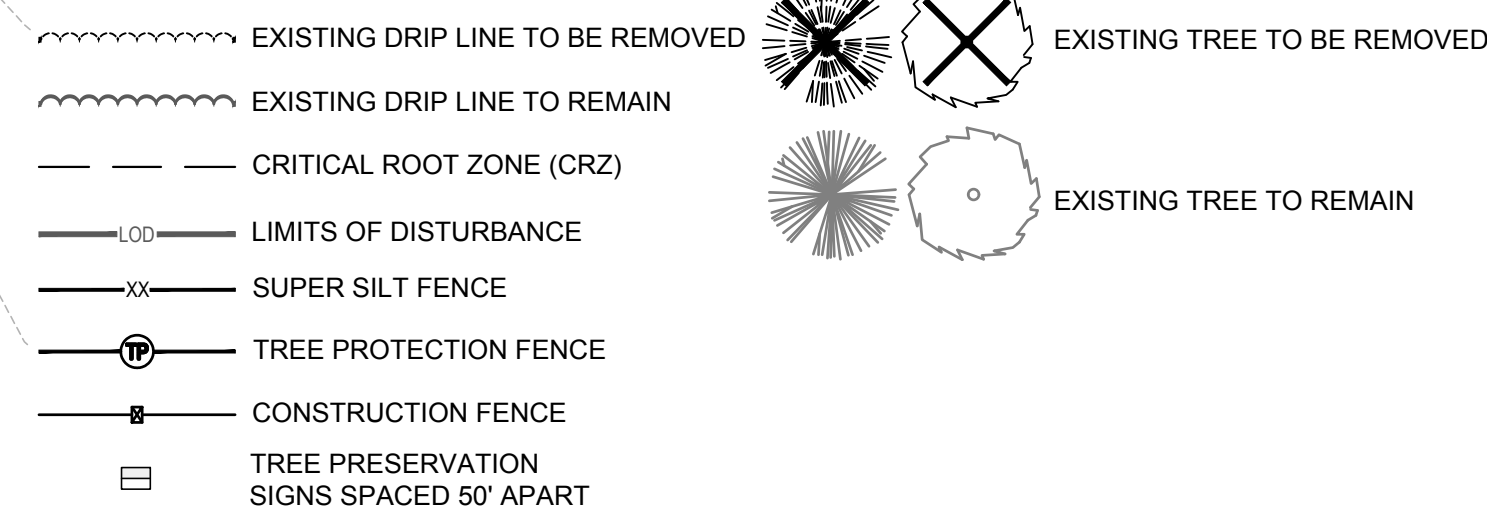
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Professional Engineer seal for Travis W. D'Amico, License No. 048497, dated 06/04/2021.

EROSION AND SEDIMENT CONTROL NOTES & DETAILS

SHEET NUMBER:
C-605

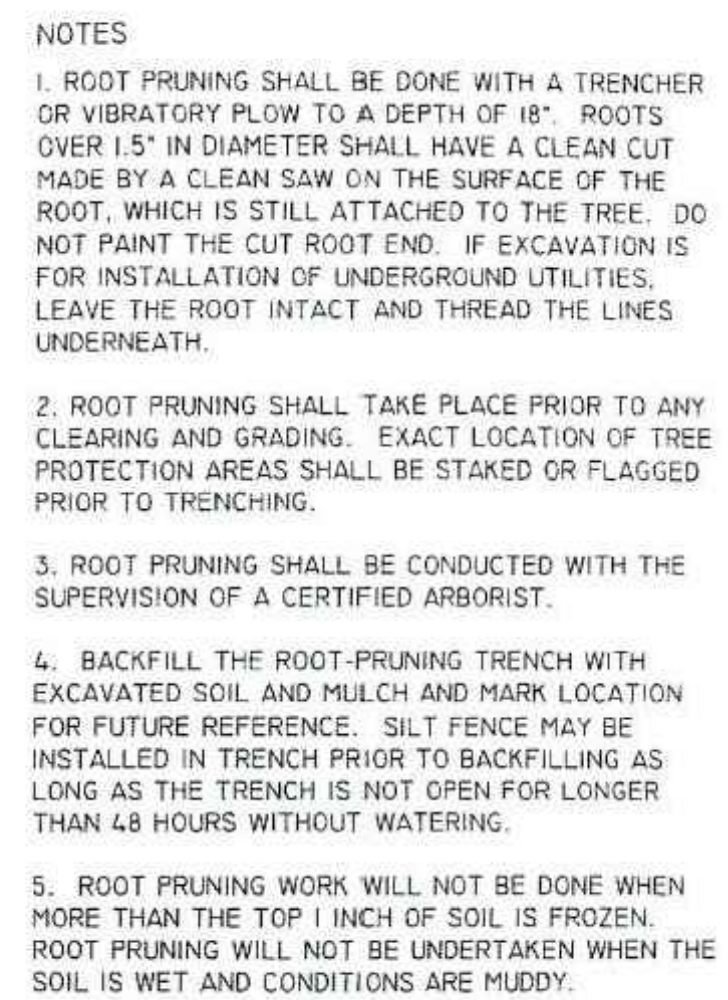
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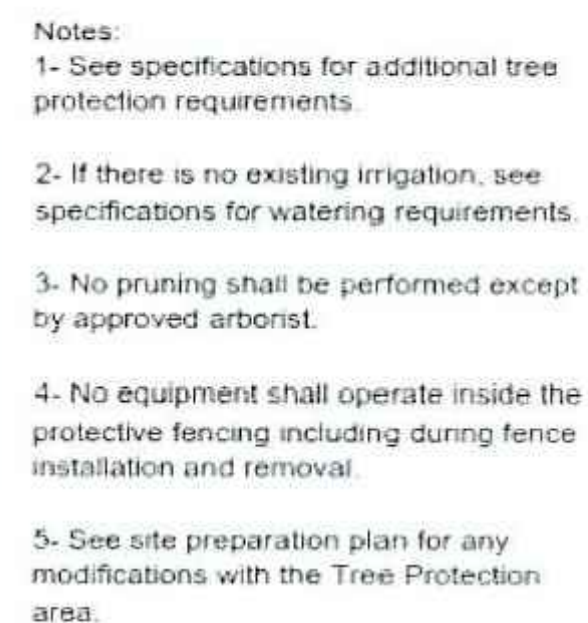
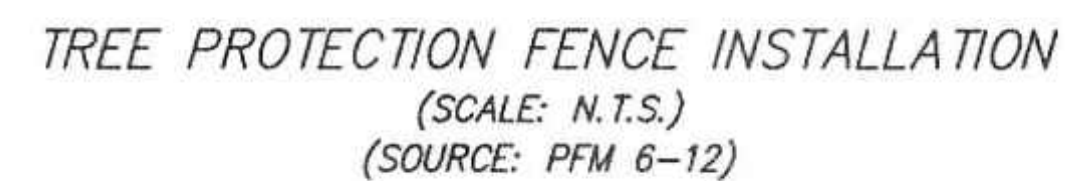
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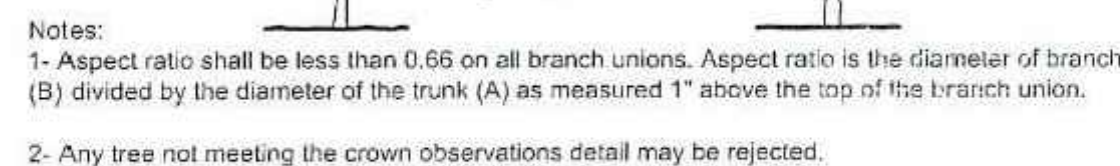
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DATE:	06/04/2021
CAD I.D.:	LSP-0

PROJECT:

**PROP.
SITE PLAN
DOCUMENTS**

_____ FOR _____

CHASE 

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

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SHEET TITLE:

TREE PRESERVATION DETAILS

SHEET NUMBER:

C-702

REVISION 1 - 05/20/2021

GLYNDON STREET
60' WIDE RIGHT OF WAY
ASPHALT PAVED PUBLIC ROADWAY
POSTED SPEED: 30 MPH

MAPLE AVENUE - VA RTE. 123

75' WIDE RIGHT OF WAY
ASPHALT PAVED PUBLIC ROADWAY PRINCIPAL ARTERIAL
POSTED SPEED: 30 MPH
VDOT ADOT: 30,000

PLANTING NOTES

- NEWLY PLANTED TREES SHALL BE HEALTHY AND VIGOROUS, AND MEET ALL ANSI STANDARDS. ALL NEWLY INSTALLED TREES THAT ARE REQUIRED BY THE TREE CONSERVATION PLAN, WHICH IN THE OPINION OF THE TOWN ARBORIST ARE DEAD OR ARE NOT HEALTHY, SHALL BE REPLACED BY THE CONTRACTOR.
- NEW PLANTINGS SHALL BE A MINIMUM OF 2.0'-2.5' CALIPER FOR DECIDUOUS TREES AND 6'-8' HEIGHT FOR EVERGREENS.
- A MINIMUM OF TWO DIFFERENT TREE SPECIES WILL BE REQUIRED WHEN PLANTING 3-5 NEW TREES ON SITE.
- A MINIMUM OF THREE DIFFERENT TREE SPECIES WILL BE REQUIRED FOR 6-9 NEW TREES INSTALLED ON SITE.
- A MINIMUM OF FOUR DIFFERENT TREE SPECIES WILL BE REQUIRED FOR 10+ NEW TREE PLANTINGS ON SITE.
- "LARGE SHADE TREES" SHALL BE INSTALLED NO CLOSER THAN 30' ON-CENTER. "MEDIUM SHADE TREES" AND "MEDIUM EVERGREEN TREES" SHALL BE INSTALLED NO CLOSER THAN 20' O.C. "SMALL ORNAMENTAL AND SMALL EVERGREEN TREES" SHALL BE INSTALLED NO CLOSER THAN 15' O.C.
- PLANTING SHALL BE DONE ONLY WITHIN THE FOLLOWING LISTED DATES. ANY TREE PLANTED OUTSIDE OF THESE PLANTING SEASONS WILL BE REJECTED BY THE TOWN ARBORIST UPON INSPECTION: SPRING PLANTING SEASON: MARCH 15 - MAY 30, FALL PLANTING SEASON: SEPTEMBER 15 - NOVEMBER 30
- IF NOT COMPLETED DURING THE ACCEPTED PLANTING SEASONS, A PLANTING SEASON WAIVER WILL BE REQUIRED FOR TREES/SHRUBS THAT MUST BE INSTALLED FOR CANOPY COVERAGE OR OTHER REQUIREMENTS AS SPECIFIED ON THE APPROVED PLANS FOR FINAL OCCUPANCY. CONSIDERATION AND APPROVAL OF A PLANTING SEASON WAIVER SHALL BE AT THE DISCRETION OF THE HEAD ARBORIST, OR HIS/HER DESIGNEE.
- IF A PLANTING SEASON WAIVER IS GRANTED, THE APPLICANT SHALL POST A BOND (CASH OR SURETY) COVERING ANY TREE PLANTINGS REQUIRED FOR CANOPY COVERAGE FOR THE SITE.

HATCH LEGEND

EXISTING TREE CANOPY TO BE PRESERVED

TOWN OF VIENNA COMPLIANCE CHART

SECTION	REQUIREMENTS	CALCULATIONS (REQUIRED/PROPOSED)	COMPLIANCE
18-95.12.A INTERIOR LANDSCAPING	INTERIOR PARKING LOT LANDSCAPING LANDSCAPING ISLANDS SHALL BE LOCATED AT THE END OF PARKING BAYS AND HAVE A MINIMUM SIZE OF 180 SQUARE FEET FOR SINGLE LOADED PARKING BAYS, AND A MINIMUM SIZE OF 360 SQUARE FEET FOR DOUBLE-LOADED BAYS. CANOPY OR SHADE TREES SHALL BE DISTRIBUTED THROUGHOUT THE PARKING LOT FOR THE PURPOSE OF HEAT ABATEMENT. NO PARKING SPACE SHALL BE SEPARATED FROM THE TRUNK OF A SHADE OR CANOPY TREE BY MORE THAN 70 FEET. A RATIO OF ONE TREE PER EIGHT PARKING SPACES SHALL BE PROVIDED. EACH LANDSCAPING ISLAND SHALL CONTAIN AT LEAST FOUR SHRUBS, PLANTED IN ACCORDANCE WITH THESE STANDARDS.	INTERIOR PARKING LOT LANDSCAPING REQUIRED: • PLANTING ISLANDS AT THE END OF EVERY ROW • PARKING SPACE NO MORE THAN 70' FROM A TREE • 72 PARKING SPACES PROPOSED • 1 TREE FOR EVERY 8 SPACES • 72 SPACES X (1/8) = 9 TREES REQUIRED • 4 SHRUBS PER LANDSCAPE ISLAND PROPOSED: • INTERIOR PLANTING ISLANDS HAVE BEEN PROVIDED AT THE END OF EVERY ROW • NO PARKING SPACE IS GREATER THAN 70' FROM AN INTERIOR PARKING LOT TREE • 9 TREES PROVIDED • 4 SHRUBS PER LANDSCAPE ISLAND	COMPLIES
18-95.12.B PERIMETER LANDSCAPING STANDARDS	PERIMETER PARKING LOT LANDSCAPING THE MINIMUM WIDTH OF A PERIMETER LANDSCAPE STRIP SERVING A PARKING LOT SHALL BE EIGHT FEET EVERGREEN SHRUBS SHALL BE USED TO FORM THE CONTINUOUS VISUAL SCREEN IN THE PERIMETER LANDSCAPE STRIP. IN ADDITION TO THE EVERGREEN SHRUB REQUIREMENTS, EACH PERIMETER LANDSCAPE STRIP SHALL INCLUDE AT LEAST TEN AGGREGATE CALIPER INCHES (ACI), MEASURED AT INSTALLATION, OF CANOPY TREES PER 100 LINEAR FEET OF LANDSCAPE STRIP. UNDERSTORY TREES MAY BE USED BENEATH OVERHEAD UTILITIES. AT LEAST 25 PERCENT OF THE REQUIRED TREES AND SHRUBS SHALL PROVIDE A SEASONAL COLOR WITH EVERGREEN AND FLOWERING TREES.	(A) NORTHWEST PROPERTY LINE (MAPLE AVENUE - VA RTE 123) REQUIRED: 8' LANDSCAPE STRIP 10 AGGREGATE CALIPER INCHES (ACI) PER 100 LF 336 LF X (10/100) = 34 ACI CONTINUOUS ROW OF EVERGREEN SHRUBS PROPOSED: 8' LANDSCAPE STRIP EXISTING TREES (1369, 1372, 1375, 1378, 1380) PROVIDE 103.80" ACI CONTINUOUS ROW OF EVERGREEN SHRUBS (B) SOUTHWEST PROPERTY LINE (GLYDON STREET) REQUIRED: 8' LANDSCAPE STRIP 10 AGGREGATE CALIPER INCHES (ACI) PER 100 LF 3376 LF X (10/100) = 14 ACI CONTINUOUS ROW OF EVERGREEN SHRUBS PROPOSED: 8' LANDSCAPE STRIP (EXISTING) EXISTING TREES (1363, 1364, 1365, 1366) PROVIDE 54.80" ACI CONTINUOUS ROW OF EVERGREEN SHRUBS	COMPLIES
17-15.1. PLANTING AND REPLACEMENT OF TREES	20 YEAR CANOPY CALCULATIONS A. THE PRELIMINARY PLAT REQUIRED BY THIS ARTICLE SHALL BE ACCOMPANIED BY A PLAN PROVIDING FOR THE PLANTING AND REPLACEMENT OF TREES ON SITE DURING DEVELOPMENT TO THE EXTENT THAT, AT MATURITY OF 20 YEARS, MINIMUM TREE CANOPIES OR COVERS WILL BE PROVIDED IN THE RESPECTIVE ZONING DISTRICTS OF THE TOWN AS FOLLOWS: 1. 20 PERCENT TREE CANOPY IN THE RS-16, RS-12.5 AND RS-10 ZONES. 2. 15 PERCENT IN THE RM-2 AND RTH ZONES. 3. 10 PERCENT TREE CANOPY IN THE T, C-1, C-1A, C-2, CMP AND CM ZONES	20 YEAR CANOPY CALCULATIONS GROSS SITE AREA: 10.43 AC OR 454,658 SF CANOPY COVERAGE REQUIRED ZONE C-2 (10%): 1.04 AC OR 45,646 SF NET EXISTING TREE CANOPY: 29,807 SF NET EXISTING TREE CANOPY PROVIDED WITH "GIANT FOOD STORE #63 #359 MAPLE AVENUE EAST MAPLE AVENUE SHOPPING CENTER" APPROVED AUG 13, 2003: 43,351 SF PROPOSED LANDSCAPING WITH THIS PLAN: 4,100 SF TOTAL CANOPY PROVIDED: 47,451 SF (10.44%) CANOPY PROVIDED	COMPLIES

LANDSCAPE SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL. / HT.	CONT.	CROWN COVERAGE ALLOWANCE (CCA)	TOTAL (CCA)
SHADE TREES							
ARZ	2	ACER RUBRUM	RED MAPLE	2 1/2" CAL / 15-12	B+B	300	600
QPH	7	QUERCUS PHellos	WILLOW OAK	2 1/2" CAL / 15-12	B+B	300	2,100
SUBTOTAL	9					TOTAL	2,700
EVERGREEN TREES							
ID	7	ILEX OPACA	AMERICAN HOLLY	B+HT.	B+B	200	1400
SUBTOTAL	7					TOTAL	1400
DECIDUOUS SHRUBS							
IV	18	ITEA VIRGINICA 'HENRY'S GARNET'	GARNET SWEETSPIRE	24-30" HT. & SPREAD	#5 CAN	NA	NA
SUBTOTAL	18						
EVERGREEN SHRUBS							
KGC	26	ILEX GLABRA COMPACTA	DWARF INBERRY HOLLY	24-30" HT. & SPREAD	#5 CAN	NA	NA
MYC	25	MYRTICA CERIFERA 'DON'S DWARF'	DWARF WAX MYRTLE	4-5" HT. & SPREAD	B+B	NA	NA
RDC	45	RHOODOENDERON 'ATAMORSE' 'CHANDIDES'	CHANDIDES RHOODOENDERON	24-30" HT. & SPREAD	B+B	NA	NA
RM	17	RHOODOENDERON 'NANUM ROSEBAY'	ROSEBAY RHOODOENDERON	4-5" HT. & SPREAD	B+B	NA	NA
SUBTOTAL	113						

20 10 5 0 20
1" = 20'

REVISIONS

REV	DATE	COMMENT	CHECKED BY	DRAWN BY
1	05/20/2021	REV PER TOWN COMMENTS	SC	TD



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PROJECT No.: S202089
DRAWN BY: SC
CHECKED BY: CM
DATE: 06/04/2021
CAD ID: LSP-0

PROPOSED SITE PLAN DOCUMENTS FOR



PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP # 0382-02-0024

BOHLER

12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
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VA@BohlerEng.com

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

C-703

REVISION 1 - 05/20/2021

PLANTING NOTES:

1. MATERIAL STANDARDS:

ALL PLANT MATERIAL SHALL MEET OR EXCEED PLANT LIST SIZES AND THE SHAPE RELATIONSHIPS AND BALL DIAMETERS AS SPECIFIED IN THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN. NO MATERIAL SHALL BE ACCEPTED WHICH IS NOT PEST AND DISEASE FREE AND HAS NOT BEEN HARDENED OFF BY ONE FULL SEASON OF SIMILAR CLIMATE AND CONDITIONS.

ALL SHRUBS SHALL BE DENSE, HEAVY TO THE GROUND, AND WELL GROWN, SHOWING EVIDENCE OF HAVING BEEN PRUNED AND SHEARED REGULARLY, AND SHALL HAVE A HEALTHY NORMAL ROOT SYSTEM. PLANTS SHALL BE FRESHLY DUG AND NOT HEED-IN STOCK FROM COLD STORAGE. ALL PLANTS SHALL BE NURSERY GROWN (EXCEPT AS NOTED BELOW). PLANTS SHALL NOT BE PRUNED PRIOR TO DELIVERY.

2. LIST OF PLANT MATERIAL:

THE CONTRACTOR WILL VERIFY THE PLANT QUANTITIES PRIOR TO BIDDING AND ANY DISCREPANCIES SHALL BE BROUGHT TO THE ATTENTION OF THE LANDSCAPE ARCHITECT/OWNER'S AGENT. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS REQUIRED TO COMPLETE THE WORK SHOWN ON THE DRAWINGS. SUBSTITUTION SHALL NOT BE MADE WITHOUT THE WRITTEN APPROVAL OF THE LANDSCAPE ARCHITECT/OWNER'S AGENT. THIS CONTRACT WILL BE BASED ON THE BIDDER HAVING VERIFIED PRIOR TO BIDDING THE AVAILABILITY OF THE REQUIRED PLANT MATERIAL AS SPECIFIED ON THE PLANT MATERIAL LIST. ALL PLANTS SHALL BE PROPERLY MARKED FOR IDENTIFICATION.

3. PLANT BED PREPARATION:

APPROXIMATELY ONE WEEK PRIOR TO BEGINNING PLANTING OPERATIONS, ALL PLANT BEDS SHOULD BE WATERED TO GERMINATE ANY WEED SEED. TWO TO FIVE DAYS LATER, SPRAY PLANT BEDS WITH "ROUNDUP" OR OTHER APPROVED SYSTEMIC WEED KILLER, APPLIED AT THE MANUFACTURER'S RECOMMENDED RATE OF DILUTION AND COVERAGE. AT THE TIME OF PLANTING, THOROUGHLY TILL ALL PLANT BEDS TO A DEPTH OF 6" AFTER APPLYING A MINIMUM OF 3" OF ACCEPTABLE GRADE PEAT MOSS. PEAT MOSS OR OTHER ACCEPTABLE DECOMPOSED ORGANIC MATTER SHOULD ALSO BE ADDED TO THE PLANTING PITS SUFFICIENT TO RAISE THE ORGANIC CONTENT TO A MINIMUM OF 5%.

4. SOIL MIX:

SOIL MIX WILL BE 1/3 EXISTING SOIL, 2/3 TOPSOIL / PEAT OR EQUAL ORGANIC MATERIAL, THOROUGHLY MIXED AND HOMOGENIZED. IF CLAY SOILS EXIST, IT IS TO BE REPLACED WITH A MINIMUM OF 6" OF TOPSOIL. ACCEPTANCE OF SOIL SHALL BE DEPENDENT ON THE RESULTS OF A SOIL TEXT TO INCLUDE PERCENTAGE OF ORGANIC MATTER, PH, AND SOLUBLE SALTS TO THE CITY / COUNTY ARBORIST PRIOR TO SOIL PREPARATION AND PLANTING. SOIL SHALL BE FILLED TO TOP OF CURB. ENTIRE TREE AND SHRUB CORRIDORS, RATHER THAN INDIVIDUAL PITS SHALL BE LOOSENEED TO THE DEPTH OF THE ROOT SYSTEMS OF THE PLANTS TO BE INSTALLED.

5. PLANTING:

BACKFILLING SHALL BE DONE WITH 1/3 EXISTING SOIL FREE OF STONES, SUBSOIL, CLAY LUMPS, STUMPS, ROOTS, WEEDS, BERMUDA GRASS, LITTER, TOXIC SUBSTANCES, OR ANY OTHER MATERIAL WHICH MAY BE HARMFUL TO PLANT GROWTH OR HINDER GRADING, PLANTING, OR MAINTENANCE OPERATIONS. SHOULD ANY UNFORESEEN OR UNSUITABLE PLANTING CONDITIONS ARISE, SUCH AS FAULTY SOIL DRAINAGE OR CHEMICAL RESIDUES, THE CONTRACTOR SHALL NOTIFY THE OWNER AND AWAIT INSTRUCTIONS FOR POSSIBLE EXTRA WORK BEFORE PLANTING. THE CONTRACTOR WILL BE RESPONSIBLE FOR ADEQUATE DRAINAGE FROM ALL PLANTS. THE PLANT SHALL BE SET PLUMB AND STRAIGHT, AND SHALL BE STAKED AT THE TIME OF PLANTING. BACKFILL SHALL BE WELL WORKED ABOUT THE ROOTS AND SETTLED BY WATERING. PLANTS SHALL BE PLANTED AS TO BEAR SAME RELATION TO FINISH GRADE AS THEY DID TO THEIR NURSERY FIELD GROWN GRADE. SAUCERS SHALL BE FORMED ABOVE EXISTING GRADE AND AROUND THE OUTER RIM OF PLANT PIT.

ALL TREES SHALL BE PLANTED VERTICALLY AND BACKFILL COMPACTED WITH WATER AND RODDING TO REMOVE ALL VOIDS AND TO SEAT ROOT BALL. SEE TREE PLANTING DETAILS. TREES TRANSPLANTED BY MACHINE SHALL BE MOVED BY MACHINES THAT PROVIDE A MINIMUM BALL DIAMETER OF 9" PER 1" OF TREE CALIPER. HOLES ARE TO BE DUG BY THE SAME SIZE MACHINE AS THE ONE TRANSPORTING THE PLANT. THE PLANT MATERIAL SHALL BE TRANSPLANTED IN APPROXIMATELY THE SAME GROWING CONDITIONS AS IT IS PRESENTLY GROWING, IN ITEMS OF SOIL TYPE AND MOISTURE CONTENT. FERTILIZE AND DESCRIBE IN THESE PLANS AND SPECIFICATIONS.

SHRUBS AND TREE-FORM SHRUBS SHOULD BE TURNED IN PLANT PIT TO OBTAIN BEST FOLIAGE RELATIONSHIP TO RELOCATION PRIOR TO STARTING BACKFILL. GROUND COVERS SHALL BE PLANTED AFTER MULCH HAS BEEN INSTALLED. NO PLANTS EXCEPT SPREADING GROUND COVERS OR ESPALIER MATERIAL SHALL BE PLANTED CLOSER THAN 30" TO BUILDINGS, WALKS, OR CURBS.

6. STAKING AND GUYING:

STAKING AND GUYING SHALL BE PERFORMED ONLY IF NOTED AS REQUIRED ON THE PLANS. IF REQUIRED, THE STAKES AND GUYS ARE TO BE REMOVED WITH THE FIRST YEAR'S PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE TREE DUE TO IMPROPER USE OF STAKING AND GUYING TECHNIQUES. IF THE OWNER FINDS IMPROPER APPLICATION OF THE STAKING AND GUYING AND IS DETRIMENTAL TO THE TREE, THE OWNER MAY REQUEST COMPENSATION FROM THE CONTRACTOR.

7. MULCH:

ALL PLANT BEDS AND SAUCERS SHALL BE THOROUGHLY MULCHED WITH SHREDDED HARDWOOD. MULCH SHALL BE A MINIMUM OF 4" AND NOT TO EXCEED 6". ONE THOROUGH WEEDING AND REPLENISHING OF MULCH SHALL BE REQUIRED IMMEDIATELY PRIOR TO THE INSPECTION AT THE END OF THE GUARANTEE PERIOD.

8. NO BARE SPOTS:

ALL AREAS SHALL BE COVERED BY BUILDINGS, PAVING, PLANTING, GRASS OR MULCH, WITH THE EXCEPTION OF THE "NATURAL" AREAS IF NOTED ON PLANS. THESE "NATURAL" AREAS SHALL BE CLEANED OF ALL UNSIGHTLY AND HAZARDOUS DEBRIS (CANS, BOTTLES, TRASH, ETC.) WHILE LEAVING LEAVES AND OTHER NATURAL GROUND COVERS. ALL UNMOWED AREAS SHALL BE MARKED WITH WHITE STAKES SPACED AT 20' O/C UNTIL VISIBLE MOWING EDGE IS ESTABLISHED. NO AREAS ARE TO BE LEFT BARE.

9. MAINTENANCE:

THE CONTRACTOR SHALL BE RESPONSIBLE, DURING THE CONTRACT AND UP TO THE TIME OF ACCEPTANCE, FOR KEEPING THE PLANTING AND WORK INCIDENTAL THERETO IN GOOD CONDITION. THIS MAY BE ACCOMPLISHED BY REPLANTING, PLANT REPLACEMENT, WATERING, WEEDING, CULTIVATING, PRUNING, SPRAYING, RESTAKING AND CLEANING UP; AND BY PERFORMING ALL OTHER NECESSARY OPERATIONS OF CARE FOR PROMOTION OF GOOD PLANT GROWTH SO THAT ALL WORK IS IN SATISFACTORY CONDITION AT TIME OF ACCEPTANCE. THIS MAINTENANCE SHALL BE AT NO ADDITIONAL COST TO THE OWNER.

10. SCHEDULE AND APPROVALS:

THE LANDSCAPE CONTRACTOR SHALL SUBMIT A WRITTEN SCHEDULE OF OPERATIONS AND WRITTEN REQUESTS FOR APPROVALS IN ACCORDANCE WITH PROJECT SPECIFICATIONS OR AS OTHERWISE AGREED UPON WITH THE OWNER.

11. GUARANTEE:

ALL PLANTS SHALL BE GUARANTEED FOR A MAXIMUM OF ONE YEAR OR FOR THE DURATION OF ONE FULL GROWING SEASON, BEGINNING APRIL 1 AND ENDING NOVEMBER 1, AFTER PLANTING, AND SHALL BE ALIVE AND IN SATISFACTORY GROWTH AT THE END OF THE GUARANTEE PERIOD. GUARANTEE SHALL COVER BOTH LABOR AND MATERIALS. EARTH SAUCERS AND STAKES AND GUYS SHALL BE REMOVED AND TREES AND SHRUBS MULCHED TO 3" DEPTH JUST PRIOR TO EXPIRATION OF THE ONE-YEAR GUARANTEE. THE OWNER SHALL BE NOTIFIED IN WRITING WHEN THIS WORK IS TO OCCUR.

ALL REPLACEMENTS SHALL BE PLANTS OF THE SAME KIND AS ORIGINALLY PLANTED AND SHALL BE OF SIZE EQUAL TO THAT ATTAINED BY ADJACENT PLANTS OF THE SAME KIND AT TIME OF REPLACEMENT. ALL COSTS OF REPLACEMENT PLANTING SHALL BE BORNE BY THIS CONTRACTOR.

LANDSCAPE SCHEDULE

KEY	BOTANICAL / COMMON NAME	SIZE	QTY.	TOTAL	REMARKS		
BN	BETULA NIGRA RIVER BIRCH	3" cal. 7'-8' B&B	4		SEE DECIDUOUS TREE PLANTING DETAIL	314	1256
FG	FAGUS GRANDIFOLIA AMERICAN BEECH	3" cal. 7'-8' B&B	2		SEE DECIDUOUS TREE PLANTING DETAIL	177	354
GT	GLEDITSIA TRIACANTHOS INERMIS "SHADEMASTER" / SHADEMASTER THORNLESS HONEYLOCUST	3" cal. 7'-8' B&B	23		SEE DECIDUOUS TREE PLANTING DETAIL	314	7222
HQ	HYDRANGEA QUERCIFOLIA OAKLEAF HYDRANGEA	24"-36" SPR. CONT.	10		SEE SHRUB PLANTING DETAIL	00	00
IG	ILEX GLABRA INKBERRY HOLLY	18"-24" SPR. CONT.	8		SEE SHRUB PLANTING DETAIL	00	00
IV	ITEA VIRGINICA VIRGINIA SWEETSPICE	15"-18" SPR. CONT.	8		SEE SHRUB PLANTING DETAIL	00	00
PC	PYRUS CALLERYANA "BRADFORD" BRADFORD PEAR	3" cal. 7'-8' B&B	3		SEE DECIDUOUS TREE PLANTING DETAIL	254	762
QR	QUERCUS RUBRA RED OAK	3" cal. 7'-8' B&B	14		SEE DECIDUOUS TREE PLANTING DETAIL	254	3556
SM	SALIX MONTSUDANA "TORTUOSA" CORKSCREW WILLOW	3" cal. 7'-8' B&B	3		SEE DECIDUOUS TREE PLANTING DETAIL	177	531
VD	VIBURNUM DENTATUM ARROWWOOD VIBURNUM	24"-30" SPR. B&B	6		SEE SHRUB PLANTING DETAIL	00	00
QA	QUERCUS ALBA WHITE OAK	3"-CAL. 7'-8"-B&B	6		SEE DECIDUOUS TREE PLANTING DETAIL	254	1524
AR	ACER RUBRUM RED MAPLE	3" cal. B&B	2		SEE DECIDUOUS TREE PLANTING DETAIL	314	628

TOTAL COVERAGE: 15,842 SF

- 2 FG = 354 SF

- 1 GT = 314 SF

- 2 QA = 508 SF

- 5 TOTAL TREES = 1,176 SF

TREE CANOPY COMPUTATIONS:

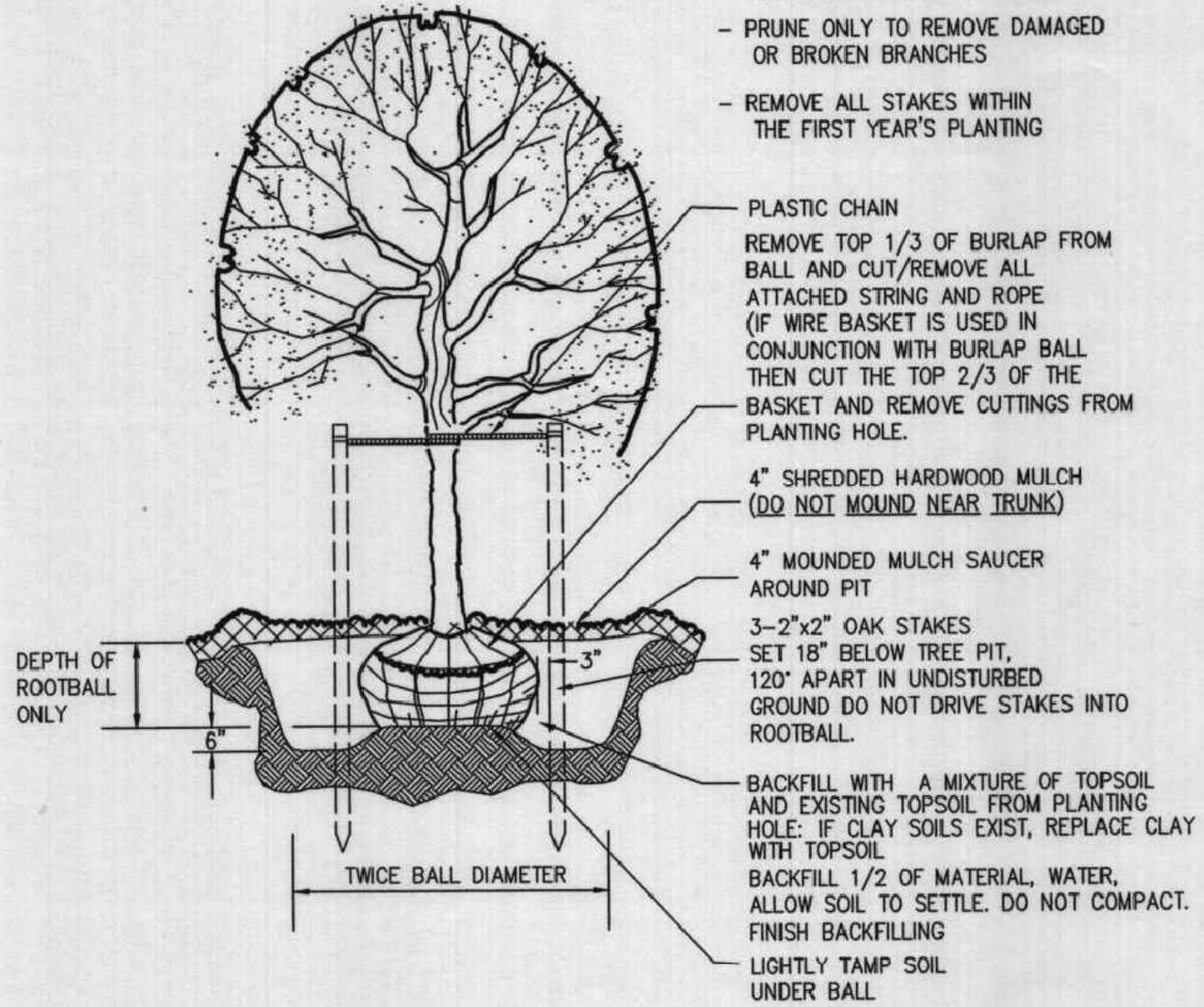
REQUIRED TREE COVER (10%) = $0.1 \times 10,437.5 \times 43,560 = 45,466 \text{ SF}$
EX. TREE COVER TO REMAIN (SEE SH. 9) = 30,643 SF - 836 SF = 29,807 SF
ADDITIONAL PLANTINGS = 75,482 - 1,176 SF = 14,306 SF
TOTAL = 46,125 - 2,012 SF = 44,113 SF

ALL TREES PLANTED SHALL MEET THE SPECIFICATIONS OF THE AMERICAN ASSOCIATION OF NURSERYMEN.

THE PLANTING OF TREES SHALL BE DONE IN ACCORDANCE WITH EITHER THE STANDARDIZED LANDSCAPE SPECIFICATIONS JOINTLY ADOPTED BY THE VIRGINIA NURSERYMEN'S ASSOCIATION, THE VIRGINIA SOCIETY OF LANDSCAPE DESIGNERS AND THE VIRGINIA CHAPTER OF THE AMERICAN SOCIETY OF LANDSCAPE ARCHITECTS, OR THE ROAD AND BRIDGE SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION.

NOTES:

- TREE SHALL BEAR SAME RELATION TO FINISHED GRADE AS IT DID TO NURSERY FIELD GROWTH GRADE
- STAKE DECIDUOUS TREES UNDER 12" ONLY IF NOTED ON PLANS
- PRUNE ONLY TO REMOVE DAMAGED OR BROKEN BRANCHES
- REMOVE ALL STAKES WITHIN THE FIRST YEAR'S PLANTING



DECIDUOUS TREE PLANTING
NOT TO SCALE

NOTE:

12" MIN. MULCH LINE PAST CANOPY OF SHRUB AT TIME OF FINAL INSPECTION

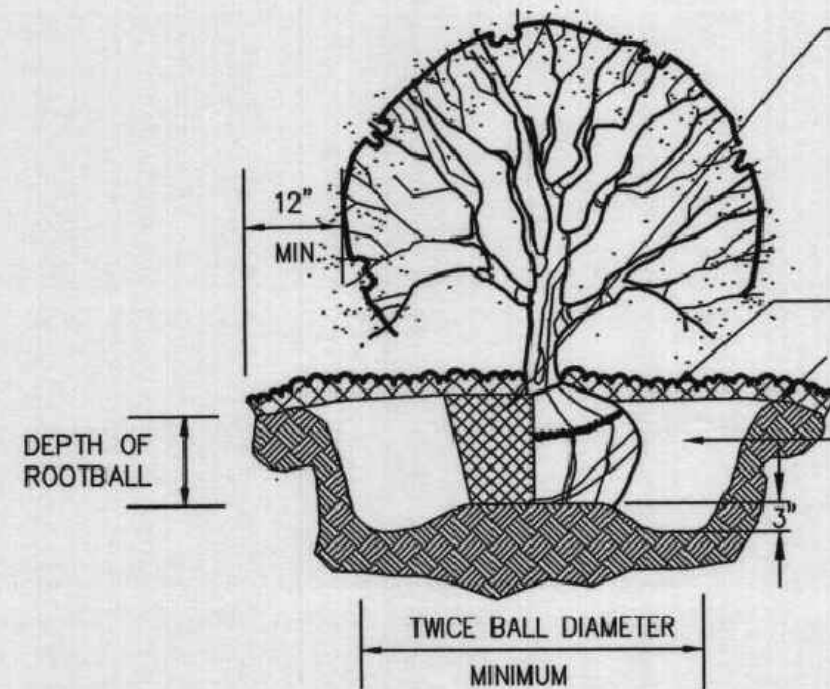
SHRUB SHALL BEAR SAME RELATION TO FINISH GRADE AS IT DID TO ITS NURSERY FIELD GROWTH GRADE.

REMOVE COLLAR FROM PEAT FIBER POT AND VERTICALLY CUT ROOTS IN 3 PLACES TO PROMOTE ROOT GROWTH

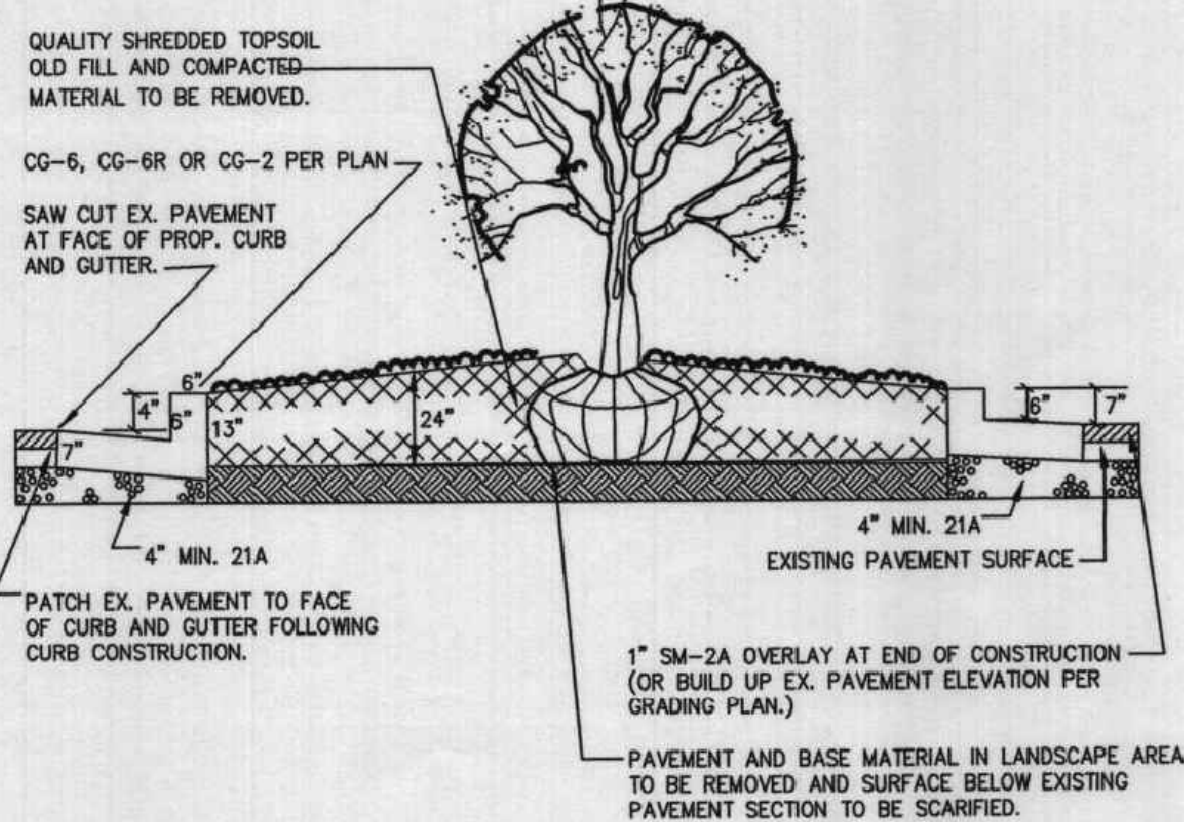
ALL CONTAINERS TO BE REMOVED PRIOR TO PLANTING

4" SHREDDED HARDWOOD MULCH (DO NOT MOUND NEAR TRUNK)
4" MOUNDED MULCH SAUCER AROUND PIT

BACKFILL WITH A MIXTURE OF TOPSOIL AND EXISTING TOPSOIL FROM PLANTING HOLE. IF CLAY SOILS EXIST, REPLACE CLAY WITH TOPSOIL.
BACKFILL 1/2 OF MATERIAL, WATER, ALLOW SOIL TO SETTLE. DO NOT COMPACT. FINISH BACKFILLING. WATER AFTER MULCHING.



SHRUB PLANTING
NOT TO SCALE



NOTE: PROPOSED CURB TO BE PLACED GENERALLY TO MATCH EXISTING GRADE EXCEPT AS INDICATED BY SPOT ELEVATIONS ON PLANS.

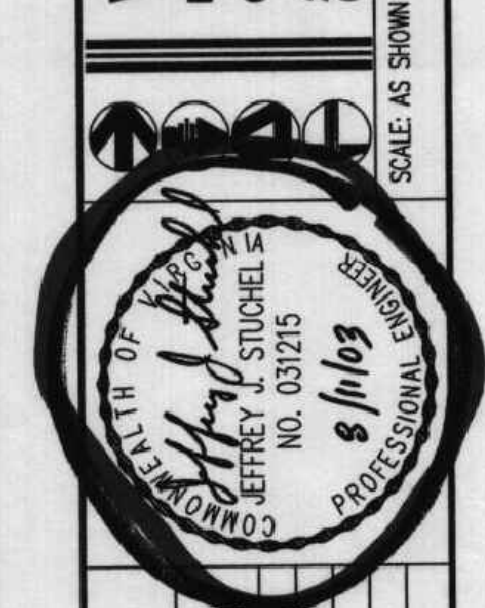
LANDSCAPE ISLAND PLACEMENT DETAIL
NOT TO SCALE

THIS PLAN TO BE UTILIZED FOR
INFORMATIONAL
PURPOSES ONLY

C-704

LANDSCAPE NOTES AND DETAILS
MAPLE AVENUE SHOPPING CENTER
359 MAPLE AVENUE, EAST
TOWN OF VIENNA
FAIRFAX COUNTY, VIRGINIA

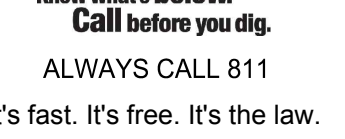
WALTER L. PHILLIPS
INCORPORATED
CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS
207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046
(703) 532-0163 FAX (703) 532-0164
WWW.WLPHINC.COM
DRAWN: SQUJDK
DATE: 8-15-03



REVISION	APPROVED BY	DATE
1	WALTER L. PHILLIPS	8/1/03



75' WIDE RIGHT OF WAY
ASPHALT PAVED PUBLIC ROADWAY PRINCIPAL ARTERIAL
POSTED SPEED: 30 MPH
VDOT AADT: 30,000

[illegible]





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PROJECT:

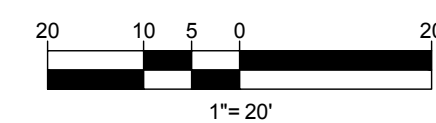
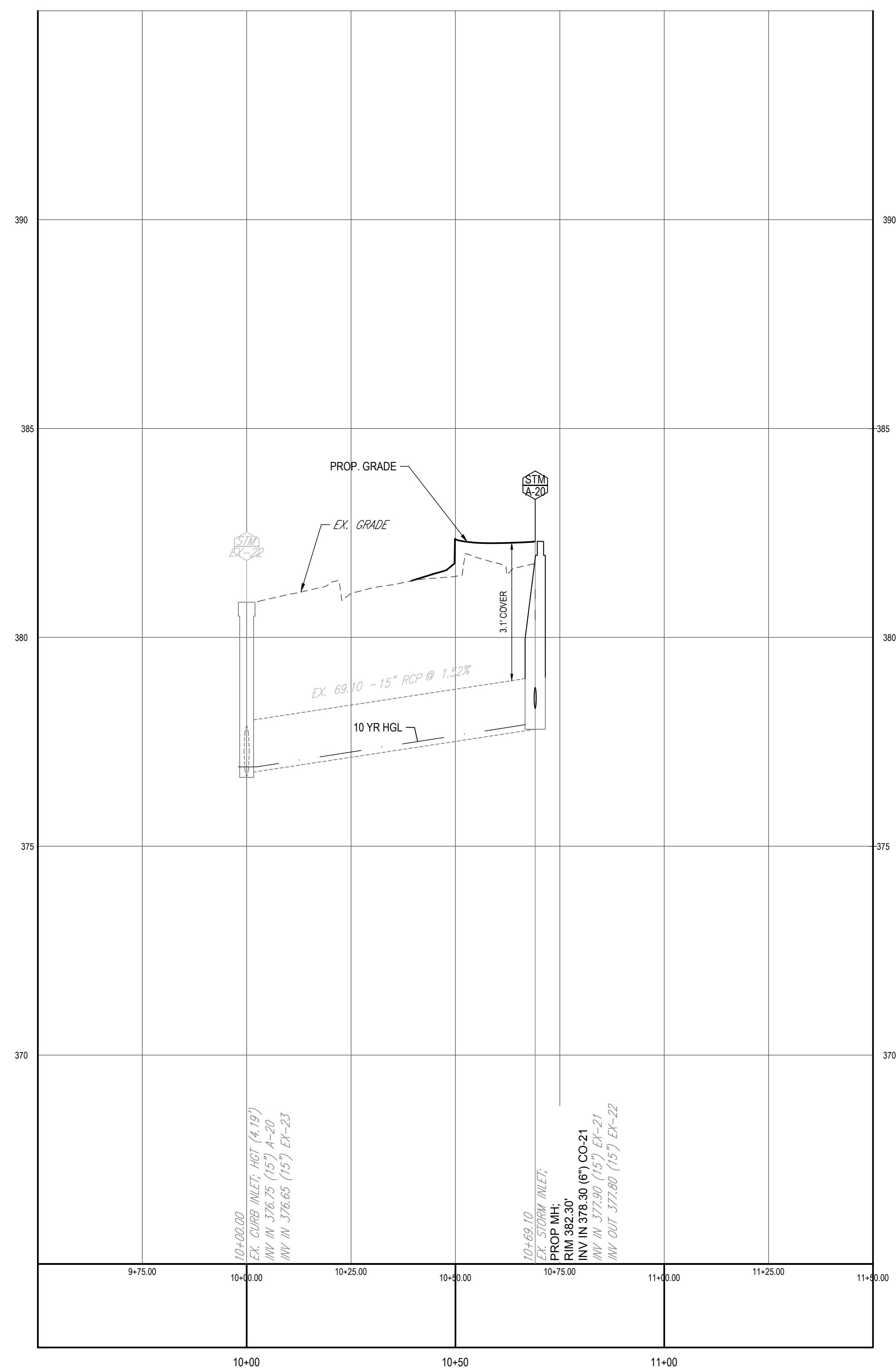
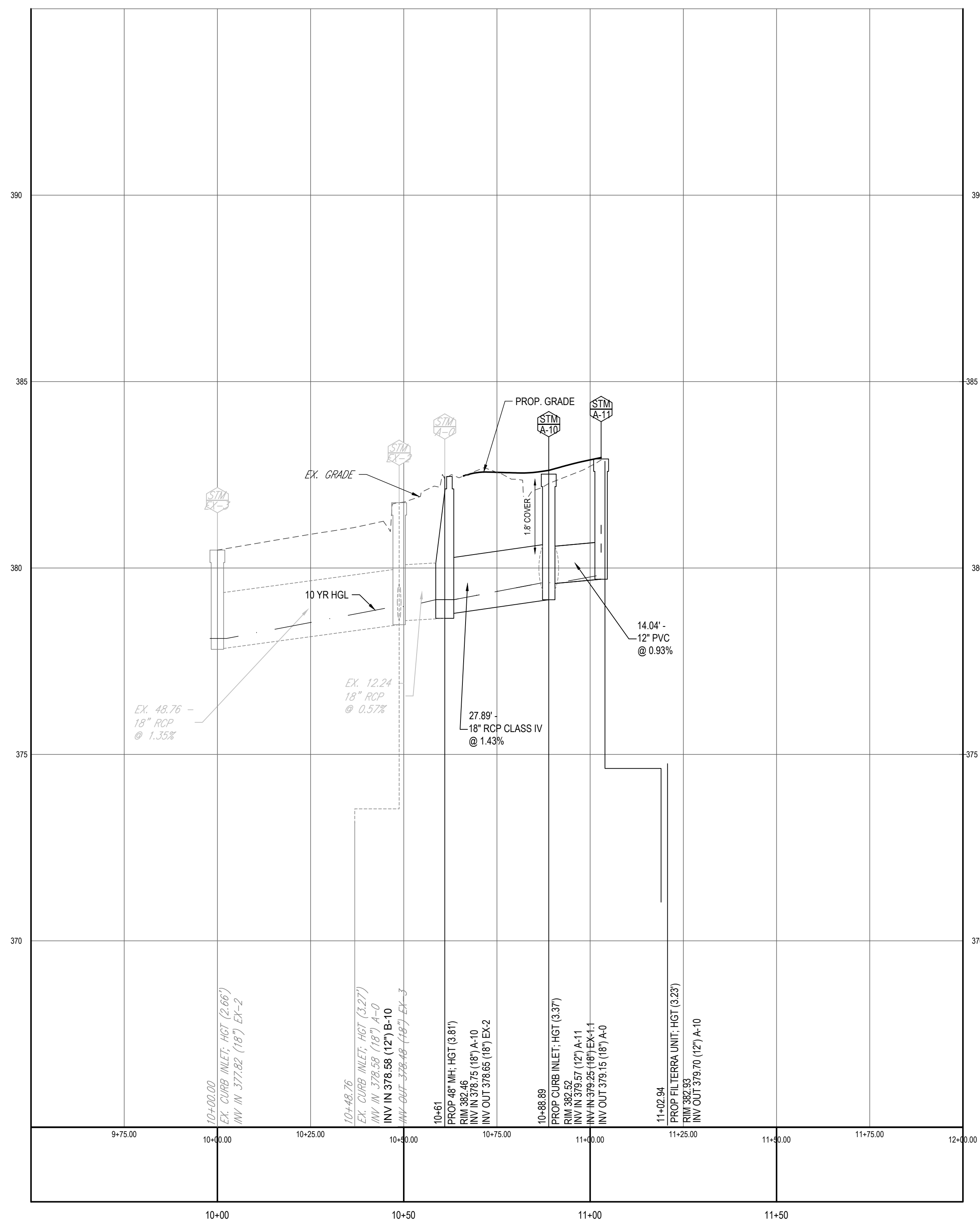
**BOHLER //**

COMMONWEALTH OF VIRGINIA
Travis W. D'Amico
 TRAVIS W. D'AMICO
 Lic. No. 048497
 06/04/2021
 PROFESSIONAL ENGINEER

REVISION 1 - 05/20/2021

- | | | |
|---|---|---|
|  | 2 | GULLWING LED SITE LIGHT
WITH HOUSE SHIELD |
|  | 2 | GULLWING LED SITE LIGHT
WITHOUT HOUSE SHIELD |
|  | 2 | GULLWING LED SITE LIGHT
BACK TO BACK ARRANGEMENT |
|  | 2 | VICTORIAN LED STREET LIGHT |



[illegible]

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PROJECT No.:	S202089
DRAWN BY:	SC
CHECKED BY:	CM
DATE:	06/04/2021
CAD I.D.:	PPD-0

PROJECT:

***PROP.
SITE PLAN
DOCUMENTS***

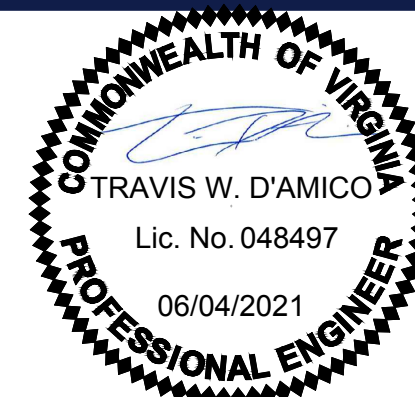
_____ FOR _____



PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

BOHLER //

12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
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VA@BohlerEng.com



SHEET TITLE:

STORM PROFILES

SHEET NUMBER: _____

C-801

REVISION 1 - 05/20/2021

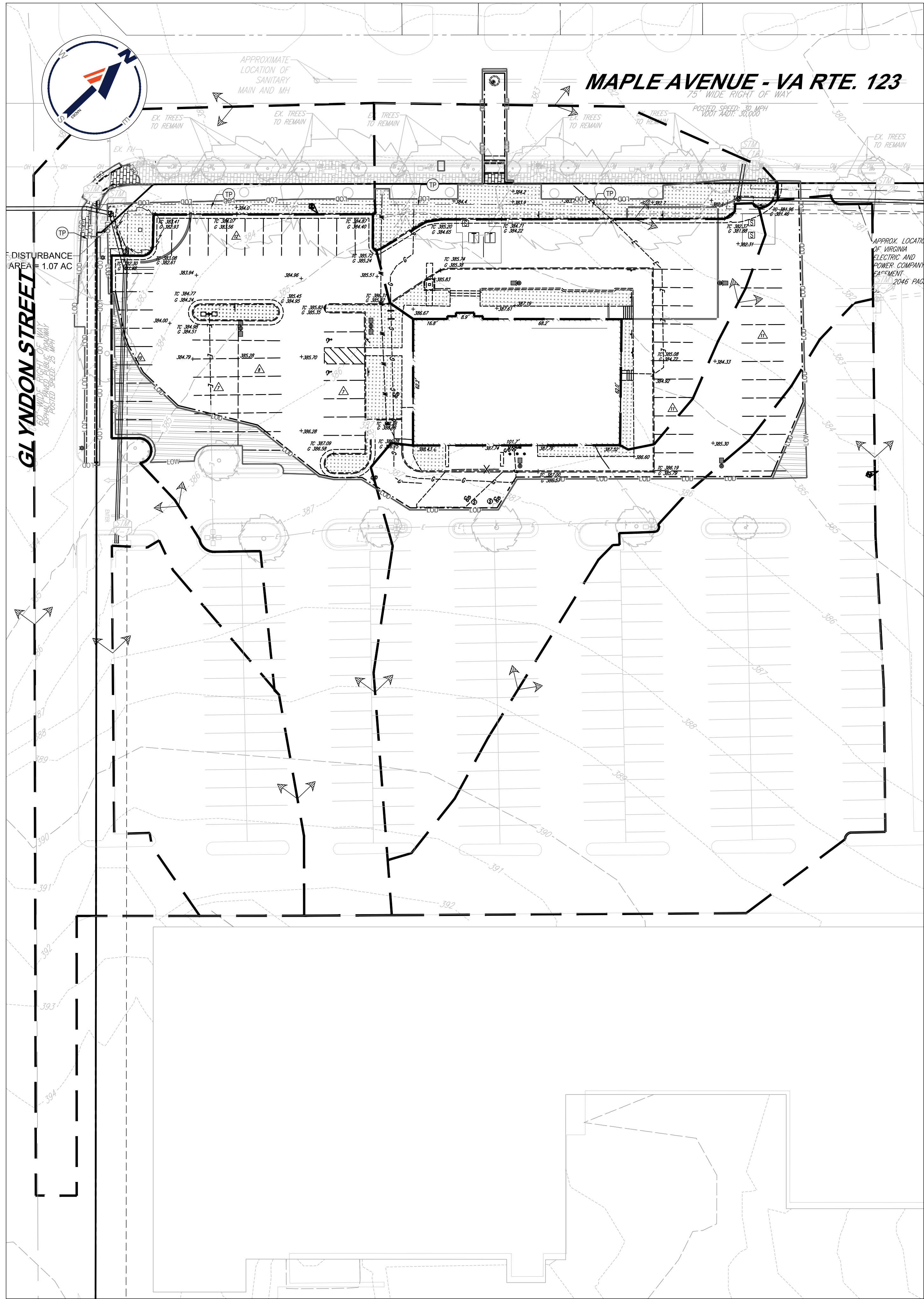
10 YEAR STORM COMPUTATIONS

From Point	To Point	Drain Area (acres)	Runoff Coeff. C	CA		Inlet Time (min)	Rainfall Intensity (in/hr)	Q			Invert Elev.		Length (ft)	Slope (%)	Dia. (in)	n	Capacity (cfs)	Velocity (fps)	Flow Time		Q / Qfull	V / Vfull	Vfull	Remarks
				Incr.	Σ			Incr.	Known (cfs)	Σ (cfs)	Upper (ft)	Lower (ft)							Incr. (min)	Σ (min)				
A-11	A-10	0.49	0.90	0.44	0.44	5.00	6.77	2.98		2.98	379.70	379.57	14.04	0.93%	12	0.011	4.06	5.61	14.04	5.04	0.73	1.08	5.17	
A-10	A-0	0.47	0.90	0.42	1.11	5.61	6.61	2.78	--	7.34	379.15	378.75	27.89	1.43%	18	0.013	12.61	7.37	0.06	5.67	0.58	1.03	7.14	
A-0	EX-2	--	--	--	1.11	5.67	6.59	--	--	7.32	378.65	378.58	12.24	0.57%	18	0.013	7.97	5.10	0.04	5.71	0.92	1.13	4.51	
EX-2	EX-3	0.26	0.85	0.22	1.69	5.71	6.58	1.45	--	11.13	378.48	377.82	48.76	1.35%	18	0.013	12.25	7.84	0.10	5.81	0.91	1.13	6.93	
EX-3	EX-4	--	--	--	1.69	5.81	6.56	--	--	11.08	377.62	374.94	79.14	3.39%	18	0.013	19.38	11.32	0.12	5.93	0.57	1.03	10.97	
EX-4	EX-5	--	--	--	1.69	5.93	6.52	--	--	11.03	374.84	370.44	151.44	2.91%	18	0.013	17.95	10.63	0.24	6.17	0.61	1.05	10.16	
EX-5	EX-6	--	--	--	1.69	6.17	6.46	--	--	10.92	370.34	370.11	37.00	0.62%	24	0.013	17.88	5.95	0.10	6.27	0.61	1.05	5.69	
EX-6	EX-7	5.45	0.75	4.09	5.78	14.56	4.69	19.19	--	27.12	370.01	369.68	20.35	1.62%	24	0.013	28.89	10.44	0.03	14.59	0.94	1.14	9.19	
EX-7	EX-8	--	--	--	5.78	14.59	4.69	--	--	27.10	369.58	365.34	264.31	1.60%	24	0.013	28.73	10.38	0.42	15.01	0.94	1.14	9.14	
EX-8	EX-9	--	--	--	5.78	15.01	4.62	--	--	26.70	365.24	362.35	173.47	1.67%	30	0.013	53.08	10.81	0.27	15.28	0.50	1.00	10.81	
EX-9	EX-10	--	--	--	5.78	15.28	4.59	--	--	26.56	362.25	362.12	10.10	1.29%	30	0.013	46.66	9.81	0.02	15.30	0.57	1.03	9.51	
EX-10	EX-11	33.50	0.75	25.13	30.91	19.23	4.24	106.46	--	130.95	362.02	353.38	502.76	1.72%	48	0.013	188.81	16.11	0.52	19.75	0.69	1.07	15.03	
EX-11	EW-1	14.14	0.75	10.61	41.52	29.78	3.28	34.80	--	136.18	353.28	348.00	265.55	1.99%	48	0.013	203.09	17.13	0.26	30.04	0.67	1.06	16.16	
B-10	EX-2	0.42	0.85	0.36	0.36	5.00	6.77	2.44	--	2.44	378.88	378.58	49.83	0.60%	12	0.013	2.77	3.97	0.21	5.21	0.88	1.13	3.53	
EX-1.1	A-10	0.28	0.90	0.25	0.25	5.00	6.77	1.69	--	1.69	380.18	379.25	134.96	0.69%	18	0.013	8.74	3.70	0.61	5.61	0.19	0.75	4.95	
EX-21	A-20	0.27	0.90	0.24	0.24	5.00	6.77	1.62	--	1.62	378.07	377.90	17.19	0.99%	15	0.013	6.44	4.36	0.07	5.07	0.25	0.83	5.25	
A-20	EX-22	--	--	--	0.24	5.07	6.75	--	0.46	2.08	377.80	376.75	69.10	1.52%	15	0.013	7.98	5.40	0.21	5.28	0.26	0.83	6.51	
EX-22	EX-23	0.32	0.90	0.29	0.53	5.28	6.70	1.94	--	4.01	376.65	373.57	130.00	2.37%	15	0.013	9.97	7.67	0.28	5.56	0.40	0.94	8.12	
EX-24	EX-25	1.15	0.85	0.98	0.98	5.00	6.77	6.83	--	6.63	377.42	374.47	131.60	2.24%	18	0.013	15.77	8.42	0.26	5.26	0.42	0.94	8.92	
EX-25	EX-23	--	--	--	0.98	5.26	6.70	--	--	6.57	374.37	373.57	33.33	2.40%	18	0.013	16.32	8.72	0.06	5.32	0.40	0.94	9.23	
EX-23	EX-26	--	--	--	1.51	5.56	6.62	--	--	10.46	373.47	369.45	118.71	3.39%	18	0.013	19.38	11.14	0.18	5.74	0.54	1.02	10.97	
EX-26	EX-27	--	--	--	1.51	5.74	6.57	--	--	10.39	369.35	368.35	123.12	0.81%	24	0.013	20.44	6.51	0.32	6.06	0.51	1.00	6.51	
EX-27	EX-28	--	--	--	1.51	6.06	6.49	--	--	10.26	368.25	368.10	21.46	0.70%	30	0.013	34.38	5.99	0.06	6.12	0.30	0.86	7.00	
EX-28	EX-29	--	--	--	1.51	6.12	6.47	--	--	10.24	368.00	367.92	10.90	0.73%	30	0.013	35.23	6.14	0.03	6.15	0.29	0.86	7.18	
EX-29	EX-30	--	--	--	1.51	6.15	6.47	--	--	10.22	367.82	367.54	23.57	1.19%	30	0.013	44.83	7.34	0.05	6.20	0.23	0.80	9.13	
EX-30	EX-31	4.03	0.85	3.43	4.94	6.20	6.45	22.13	--	32.33	367.44	366.04	45.62	3.07%	30	0.013	72.05	14.15	0.05	6.25	0.45	0.96	14.68	
EX-31	EX-32	--	--	--	4.94	6.25	6.44	--	--	32.27	365.94	365.46	34.78	1.38%	36	0.013	78.57	10.49	0.06	6.31	0.41	0.94	11.11	
EX-32	EX-33	--	--	--	4.94	6.31	6.42	--	--	32.20	365.36	363.38	145.62	1.36%	36	0.013	77.98	10.41	0.23	6.54	0.41	0.94	11.03	
EX-33	EX-34	--	--	--	4.94	6.54	6.36	--	--	31.90	363.28	362.18	76.58	1.44%	36	0.013	80.15	10.48	0.12	6.66	0.40	0.92	11.34	
EX-34	EX-35	6.67	0.85	5.67	6.66	6.66	6.33	35.90	--	67.64	362.08	360.37	103.81	1.65%	36	0.013	85.83	13.41	0.13	6.79	0.79	1.10	12.14	
EX-35	EW-2	--	--	--	10.61	6.79	6.30	--	--	67.28	360.27	359.80	28.83	1.63%	36	0.013	85.39	13.34	0.04	6.83	0.79	1.10	12.08	

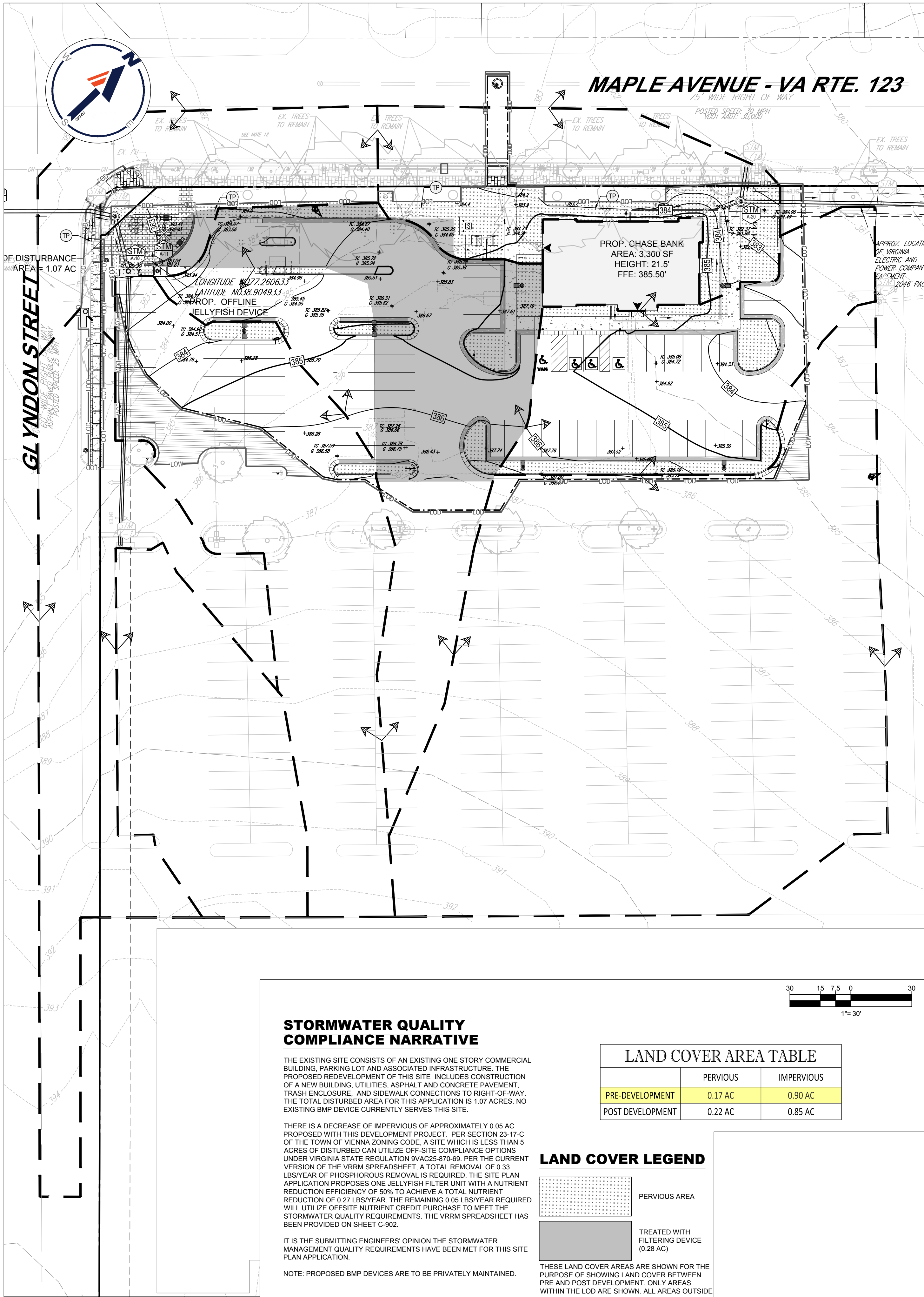
10 YEAR HGL COMPUTATIONS

Structure No.	Outlet WSE	Do (in)	Qo	Lo	Sfo (%)	Hf	JUNCTION LOSS														Final H	Inlet WSE	Top / Throat Elev.	Inlet Shaping	Pre-Cast Structure	Junction Loss Reduction	Remarks
							Vo	Ho	Qi	Vi	Qi - Vi	Vi^2/2g	Hi	Angle	K	Hd	Ht	1.3 Ht	0.5 Ht								
EX-11	351.20	48	136.18	265.55	0.90%	2.39	17.13	1.14	130.95	16.11	2109.21	4.03	1.41	—	—	0.00	2.55	3.32	1.66	4.05	355.25	358.70	Yes	—	Yes		
EX-10	355.25	48	130.95	502.76	0.83%	6.77	16.11	1.01	26.56	9.81	260.54	1.50	0.52	76	0.64	0.96	2.49	3.23	1.62	8.39	363.64	365.83	Yes	—	Yes		
EX-9	363.64	30	26.56	10.10	0.42%	0.04	9.81	0.37	26.70	10.81	288.74	1.82	0.64	—	—	0.00	1.01	—	0.50	0.55	364.18	365.46	Yes	—	Yes		
EX-8	364.18	30	26.70	173.47	0.42%	1.06	10.81	0.45	27.10	10.38	281.29	1.67	0.59	13	0.09	0.15	1.19	—	0.59	1.65	365.83	367.96	Yes	—	Yes		
EX-7	365.83	24	27.10	264.31	1.44%	3.79	10.38	0.42	27.12	10.44	283.02	1.69	0.59	7	0.05	0.08	1.09	—	0.54	4.34	370.17	373.44	Yes	—	Yes		
EX-6	370.17	24	27.12	20.35	1.44%	0.29	10.44	0.42	10.92	5.95	65.02	0.55	0.19	86	0.68	0.38	0.99	1.29	0.65	0.94	371.11	373.18	Yes	—	Yes		
EX-5	371.11	24	10.92	37.00	0.23%	0.09	5.95	0.14	11.03	10.63	117.21	1.75	0.61	57	0.53	0.92	1.68	—	0.84	0.92	372.03	374.34	Yes	—	Yes		
EX-4	372.03	18	11.03	151.44	1.10%	2.81	10.63	0.44	11.08	11.32	125.42	1.99	0.70	20	0.16	0.32	1.45	—	0.73	3.53	375.57	378.88	Yes	—	Yes		
EX-3	375.57	18	11.08	79.14	1.11%	2.05	11.32	0.50	11.13	7.84	87.29	0.96	0.33	20	0.16	0.15	0.99	—	0.49	2.55	378.11	381.22	Yes	—	Yes		
EX-2	378.11	18	11.13	48.76	1.12%	0.55	7.84	0.24	7.32	5.10	37.32	0.40	0.14	11	0.07	0.03	0.41	—	0.20	0.75	378.87	381.26	Yes	—	Yes		
A-0	378.87	18	7.32	12.24	0.49%	0.06	5.10	0.10	7.34	7.37	54.07	0.84	0.30	12	0.08	0.07	0.46	—	0.23	0.29	379.16	382.45	Yes	Yes	Yes		
A-10	379.16	18	7.34	27.89	0.49%	0.14	7.37	0.21	2.98	5.61	16.71	0.49	0.17	62	0.56	0.27	0.66	0.85	0.43	0.56	379.72	381.76	Yes	Yes	Yes		
A-11	379.72	12	2.98	14.04	0.50%	0.07	5.61	0.12									0.12	0.16	0.08	0.15	379.87	382.36	Yes	Yes	Yes		
EX-1.1	379.72	18	1.69	134.96	0.03%	0.46	3.70	0.05									0.05	0.07	0.03	0.50	380.21	385.88	Yes	—	Yes		
B-10	378.87	12	2.44	49.83	0.47%	0.23	3.97	0.06										0.06	0.08	0.04	0.27	379.14	381.72	Yes	Yes	Yes	
EX-35	362.20	36	67.28	28.83	1.02%	0.29	13.34	0.69	67.64	13.41	906.78	2.79	0.98	—	—	0.00	1.67	—	0.83	1.13	363.33	366.14	Yes	—	Yes		
EX-34	363.33	36	67.64	103.81	1.03%	1.07	13.41	0.70	31.90	10.48	334.23	1.71	0.60	—	—	0.00	1.30	1.68	0.84	1.91	365.24	366.41	Yes	—	Yes		
EX-33	365.24	36	31.90	76.58	0.23%	0.18	10.48	0.43	32.20	10.41	335.35	1.69	0.59	—	—	0.00	1.02	—	0.51	0.68	365.92	368.00	Yes	—	Yes		
EX-32	365.92	36	32.20	145.62	0.23%	0.34	10.41	0.42	32.27	10.49	338.59	1.71	0.60	—	—	0.00	1.02	—	0.51	0.85	366.77	370.28	Yes	—	Yes		
EX-31	366.77	36	32.27	34.78	0.23%	0.08	10.49	0.43	32.33	14.15	457.44	3.11	1.09	—	—	0.00	1.52	—	0.76	0.84	367.61	370.81	Yes	—	Yes		
EX-30	367.61	30	32.33	45.62	0.62%	0.28	14.15	0.78	10.22	7.34	75.04	0.84	0.29	—	—	0.00	1.07	1.39	0.70	0.96	368.59	371.15	Yes	—	Yes		
EX-29	368.59	30	10.22	23.57	0.06%	0.01	7.34	0.21	10.24	61.14	62.84	0.59	0.20	—	—	0.00	0.41	—	0.21	0.22	368.81	372.00	Yes	—	Yes		
EX-28	368.81	30	10.24	10.90	0.06%	0.01	6.14	0.15	10.26	5.99	61.45	0.56	0.20	—	—	0.00	0.34	—	0.17	0.18	368.99	371.50	Yes	—	Yes		
EX-27	368.99	30	10.26	21.46	0.06%	0.01	5.99	0.14	10.39	6.51	67.61	0.66	0.23	—	—	0.00	0.37	—	0.18	0.20	369.19	372.00	Yes	—	Yes		
EX-26	369.19	24	10.39	123.12	0.21%	0.26	6.51	0.16	10.46	11.14	116.56	1.93	0.68	—	—	0.00	0.84	—	0.42	0.68	369.87	374.43	Yes	—	Yes		
EX-25	373.92	18	6.57	33.33	0.39%	0.45	8.72	0.30	6.63	8.42	55.85	1.10	0.39	—	—	0.00	0.68	—	0.34	0.79	374.71	378.66	Yes	—	Yes		
EX-24	374.71	18	6.63	131.60	0.40%	2.71	8.42	0.28										0.28	0.36	0.18	2.89	377.60	381.77	Yes	—	Yes	
EX-23	369.87	18	10.46	118.71	0.99%	3.60	11.14	0.48	6.57	8.72	57.27	1.18	0.41	—	—	0.00	0.90	—	0.45	4.05	373.92	376.47	Yes	—	Yes		
EX-22	373.92	15	4.01	130.00	0.39%	2.73	7.67	0.23	2.08	5.40	11.23	0.45	0.16	—	—	0.00	0.39	0.50	0.25	2.98	376.90	380.35	Yes	—	Yes		
EX-21	377.91	15	1.62	17.19	0.06%	0.16	4.36	0.07										0.07	0.10	0.05	0.21	378.12	381.17	Yes	—	Yes	
A-20	376.90	15	2.08	69.10	0.10%	0.90	5.40	0.11	1.62	4.36	7.06	0.29	0.10	—	—	0.00	0.22	—	0.11	1.01	377.91	382.29	Yes	Yes	Yes		

PRE DEVELOPMENT



POST DEVELOPMENT



STORMWATER QUALITY COMPLIANCE NARRATIVE

THE EXISTING SITE CONSISTS OF AN EXISTING ONE STORY COMMERCIAL BUILDING, PARKING LOT AND ASSOCIATED INFRASTRUCTURE. THE PROPOSED REDEVELOPMENT OF THIS SITE INCLUDES CONSTRUCTION OF A NEW BUILDING, UTILITIES, ASPHALT AND CONCRETE PAVEMENT, TRASH ENCLOSURE, AND SIDEWALK CONNECTIONS TO RIGHT-OF-WAY. THE TOTAL DISTURBED AREA FOR THIS APPLICATION IS 1.07 ACRES. NO EXISTING BMP DEVICE CURRENTLY SERVES THIS SITE.

THERE IS A DECREASE OF IMPERVIOUS OF APPROXIMATELY 0.05 AC PROPOSED WITH THIS DEVELOPMENT PROJECT. PER SECTION 23-17-C OF THE TOWN OF VIENNA ZONING CODE, A SITE WHICH IS LESS THAN 5 ACRES OF DISTURBED CAN UTILIZE OFF-SITE COMPLIANCE OPTIONS UNDER VIRGINIA STATE REGULATION 9VAC25-870-80. PER THE CURRENT VERSION OF THE VRRM SPREADSHEET, A TOTAL REMOVAL OF 0.33 LBS/YEAR OF PHOSPHOROUS REMOVAL IS REQUIRED. THE SITE PLAN APPLICATION PROPOSES ONE JELLYFISH FILTER UNIT WITH A NUTRIENT REDUCTION EFFICIENCY OF 50% TO ACHIEVE A TOTAL NUTRIENT REDUCTION OF 0.27 LBS/YEAR. THE REMAINING 0.06 LBS/YEAR REQUIRED WILL UTILIZE OFFSITE NUTRIENT CREDIT PURCHASE TO MEET THE STORMWATER QUALITY REQUIREMENTS. THE VRRM SPREADSHEET HAS BEEN PROVIDED ON SHEET C-902.

IT IS THE SUBMITTING ENGINEERS' OPINION THE STORMWATER MANAGEMENT QUALITY REQUIREMENTS HAVE BEEN MET FOR THIS SITE PLAN APPLICATION.

NOTE: PROPOSED BMP DEVICES ARE TO BE PRIVATELY MAINTAINED.

LAND COVER AREA TABLE

	PERVIOUS	IMPERVIOUS
PRE-DEVELOPMENT	0.17 AC	0.90 AC
POST DEVELOPMENT	0.22 AC	0.85 AC

LAND COVER LEGEND

PERVIOUS AREA
TREATED WITH FILTERING DEVICE (0.28 AC)
THESE LAND COVER AREAS ARE SHOWN FOR THE PURPOSE OF SHOWING LAND COVER BETWEEN PRE AND POST DEVELOPMENT. ONLY AREAS WITHIN THE LOD ARE SHOWN. ALL AREAS OUTSIDE THE LOD WILL REMAIN THE SAME LAND COVER AS THE EXISTING CONDITION.

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	05/20/2021	REV PER TOWN COMMENTS	SC



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PROJECT No.: S202089
DRAWN BY: SC
CHECKED BY: CM
DATE: 06/04/2021
CAD ID: SWP-0

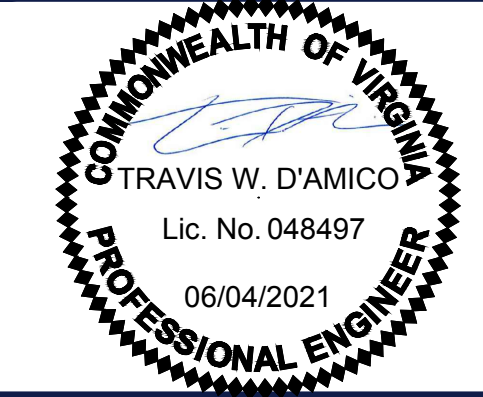
PROJECT:
PROP. SITE PLAN DOCUMENTS
FOR



PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024



12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
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VA@BohlerEng.com



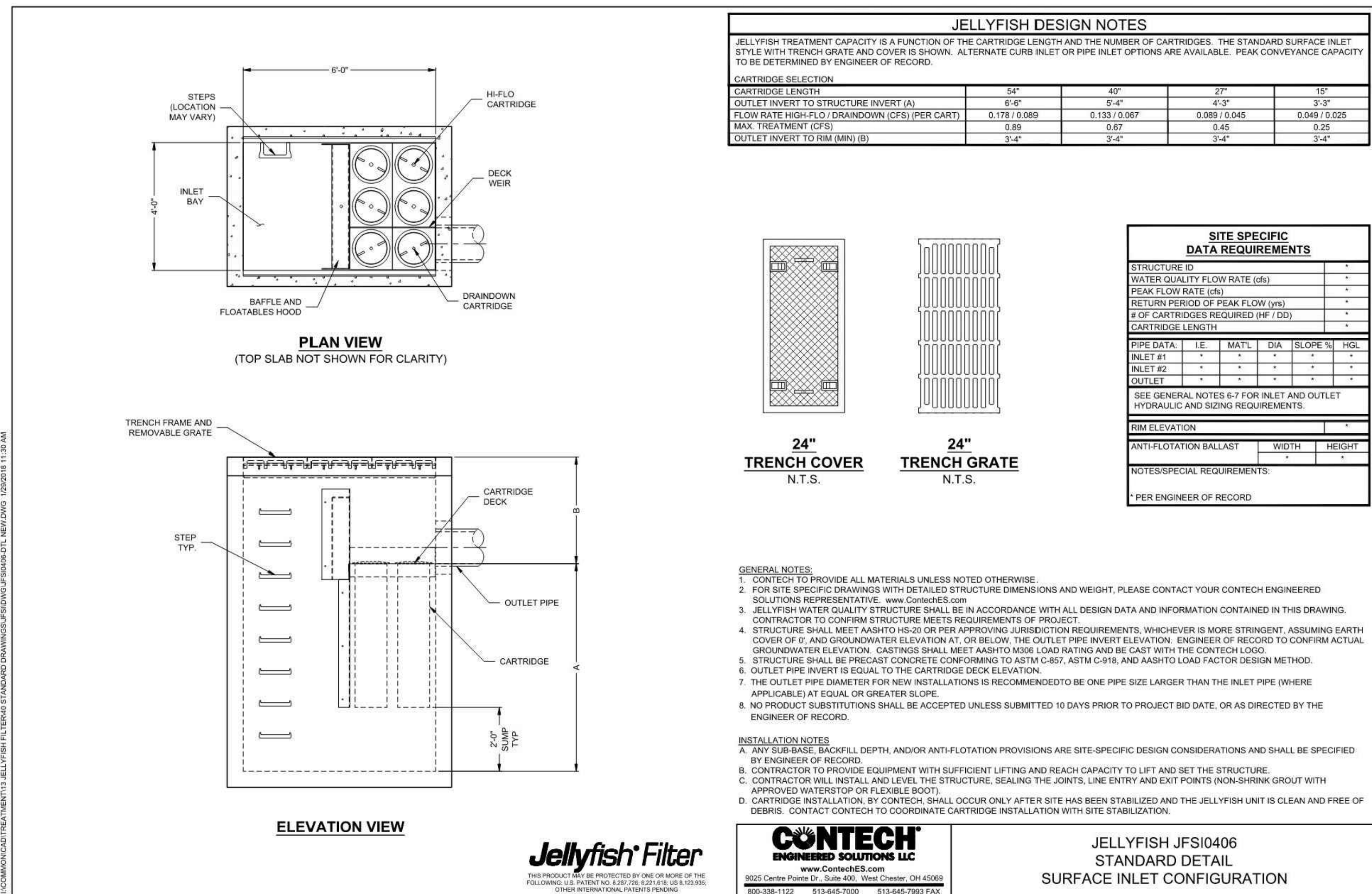
SHEET TITLE:
STORMWATER QUALITY AND COMPLIANCE

SHEET NUMBER:
C-901

REVISION 1 - 05/20/2021



REVISION 1 - 05/20/2021



Jellyfish®

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REVISIONS

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PROJECT No.:	S202089
DRAWN BY:	SC
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DATE:	06/04/2021
CAD I.D.:	SWP-0

PROJECT:

**PROP.
SITE PLAN
DOCUMENTS**

— FOF



PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

BOHLER//

12825 WORLDGATE DR. SUITE 700
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VA@BohlerEng.com



SHEET TITLE:

STORMWATER DETAILS

SHEET NUMBER

C-904

REVISION 1 - 05/20/2021



Hydrograph

Flow (cfs)

Time (hours)

11.8

Runoff

Type II 24-hr
1-Year Rainfall=2.62"
Runoff Area=0.380 ac
Runoff Volume=2,866 cf
Runoff Depth>2.08"
Tc=5.0 min
CN=95

Hydrograph

Flow (cfs)

Time (hours)

Inflow Area=46,609 sf

Legend: Inflow (green), Primary (blue)

Peak values: 3.71 cfs, 3.71 cfs

Hydrograph

Flow (cfs)

Time (hours)

3.5 cfs

5.5 cfs

Inflow Area=46,174 sf

Legend: Inflow (green), Primary (blue)

Hydrograph

Flow (cfs)

Time (hours)

2.62 cfs

Type II 24-hr
1-Year Rainfall=2.62"
Runoff Area=0.690 ac
Runoff Volume=5,205 cf
Runoff Depth>2.08"
Tc=5.0 min
CN=95

Runoff

Hydrograph

Flow (cfs)

Time (hours)

11.89

Type II 24-hr
1-Year Rainfall=2.62"
Runoff Area=0.500 ac
Runoff Volume=3,432 cf
Runoff Depth>1.89"
Tc=5.0 min
CN=93

Runoff

Hydrograph

Type II 24-hr
1-Year Rainfall=2.62"
Runoff Area=0.560 ac
Runoff Volume=4,224 cf
Runoff Depth>2.08"
Tc=5.0 min
CN=95

Flow (cfs)

Time (hours)

Runoff

[illegible]

PROJECT:

— FOR

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

12825 WORLDGATE DR. SUITE 700
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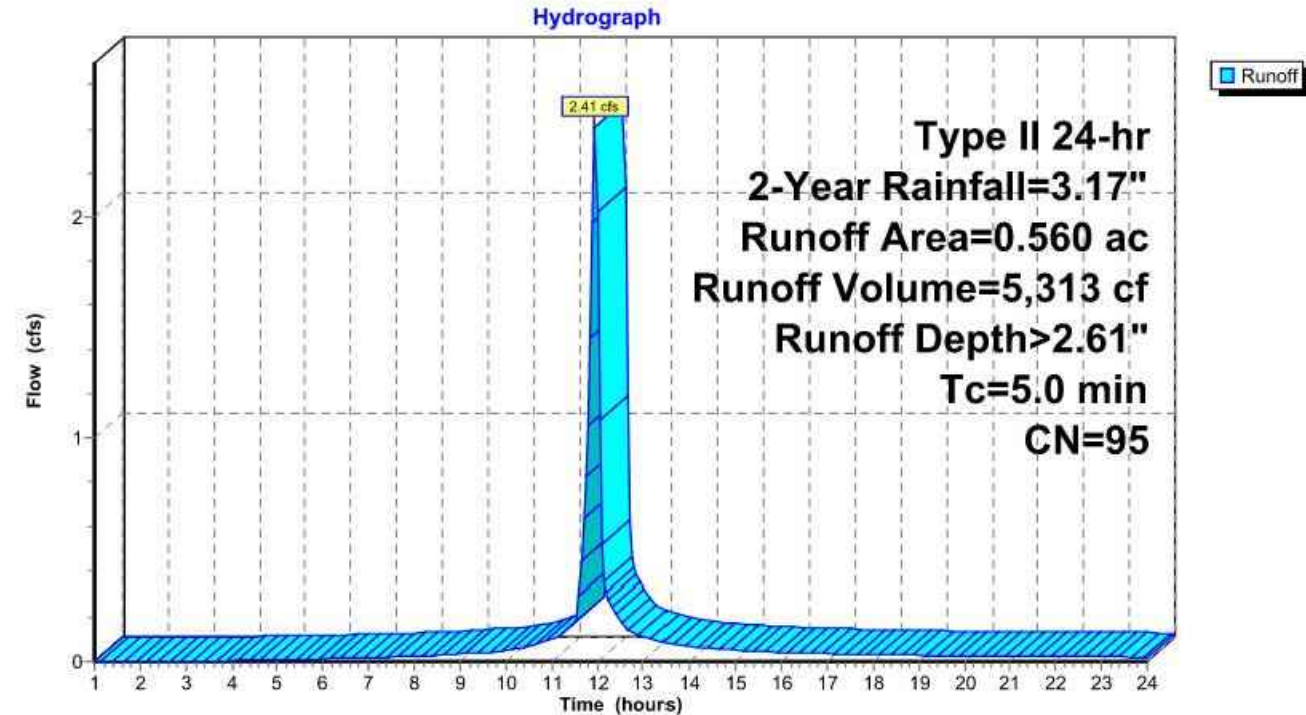
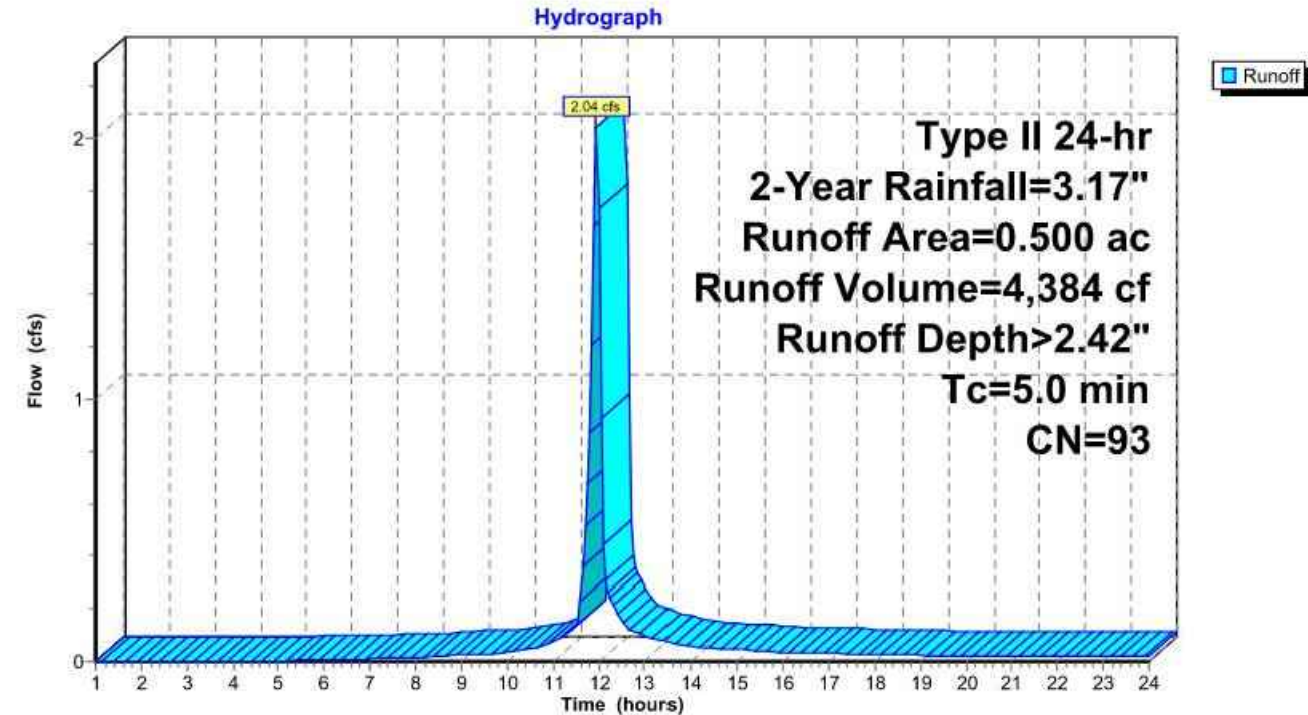
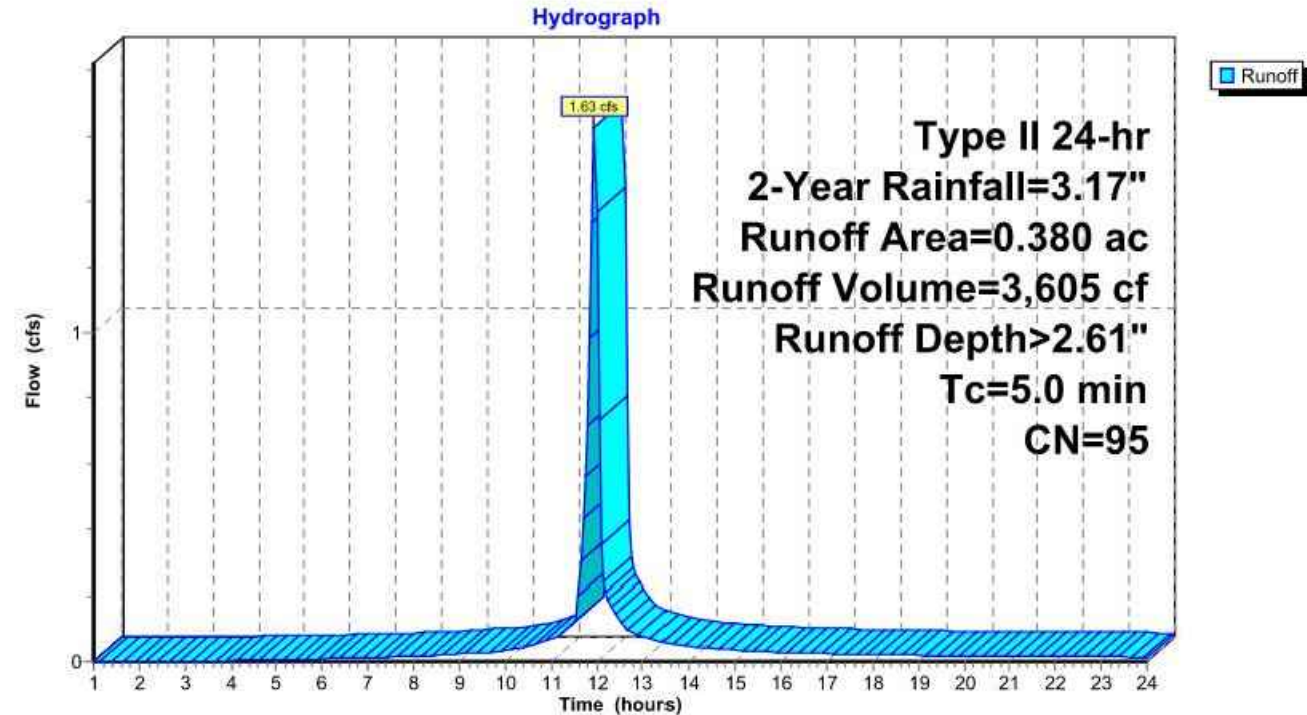
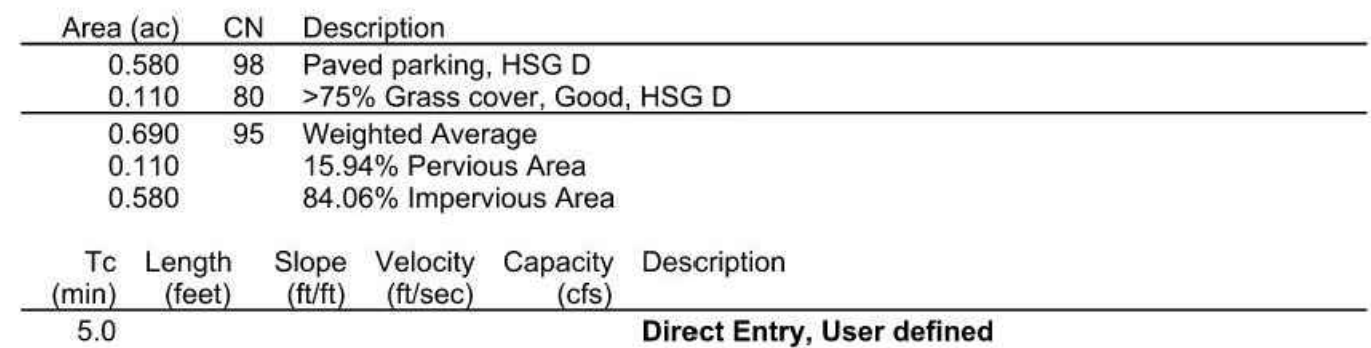
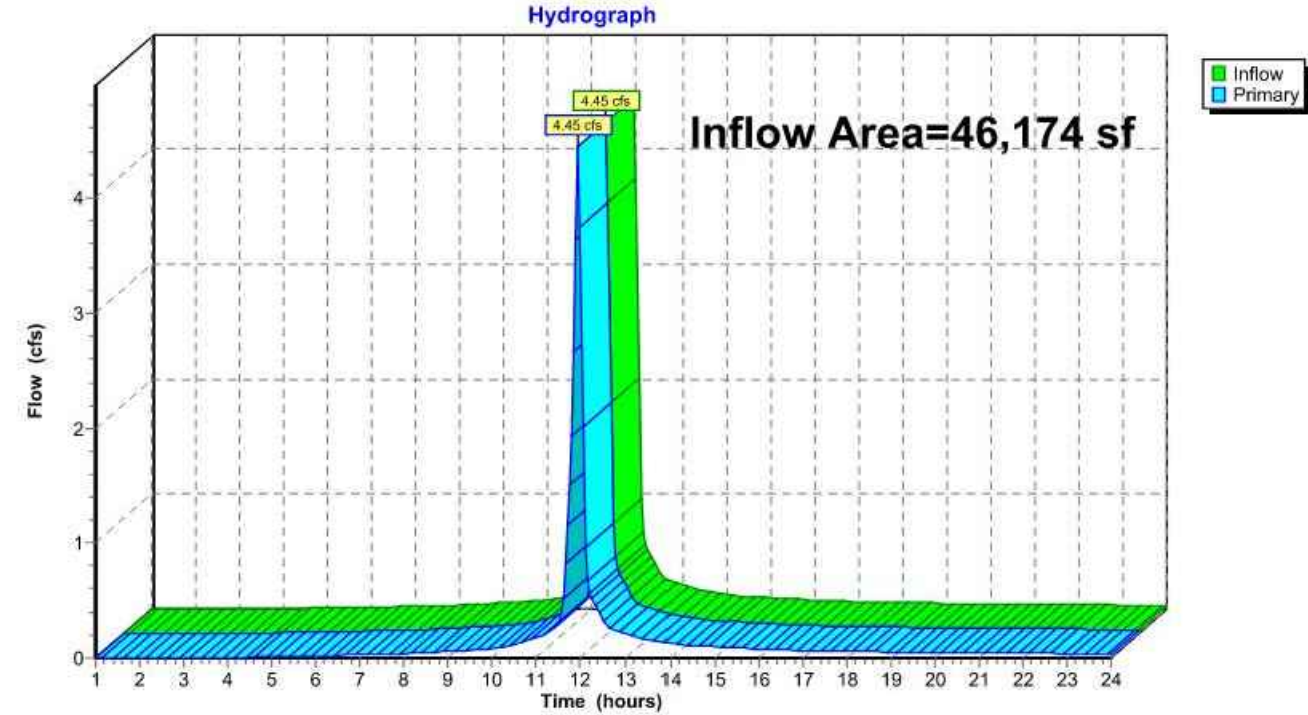
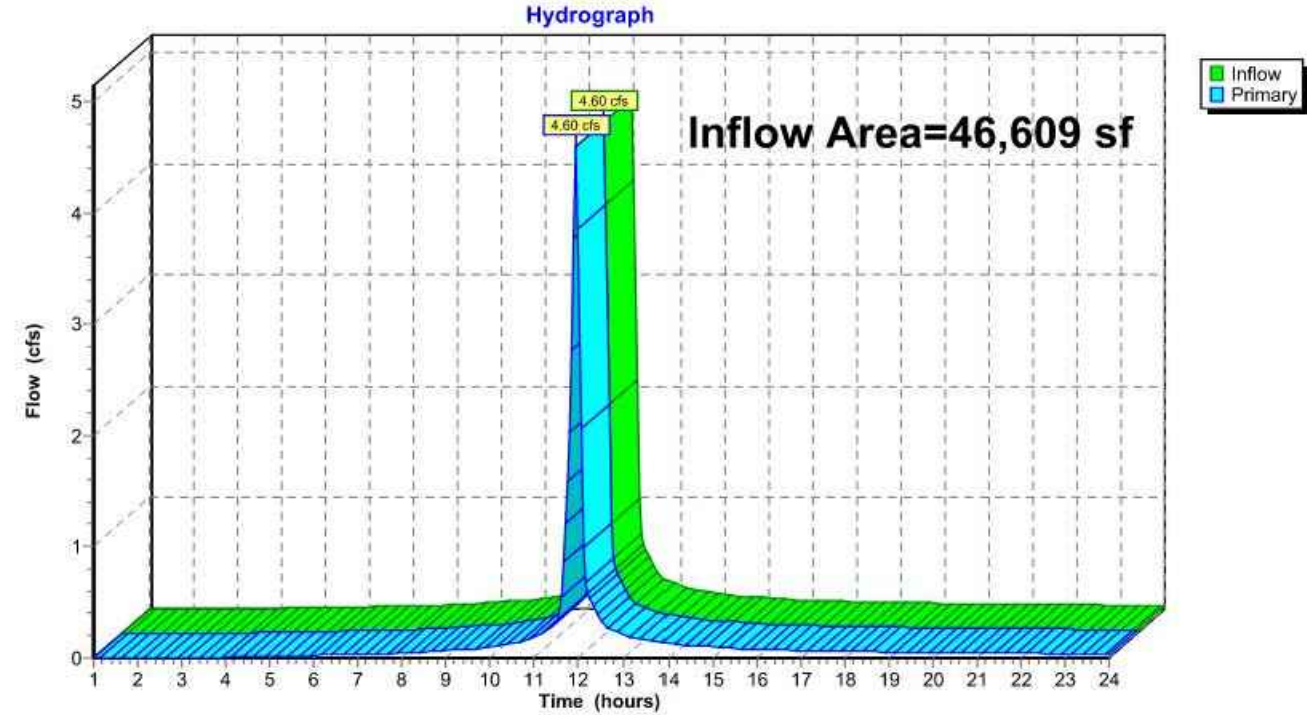


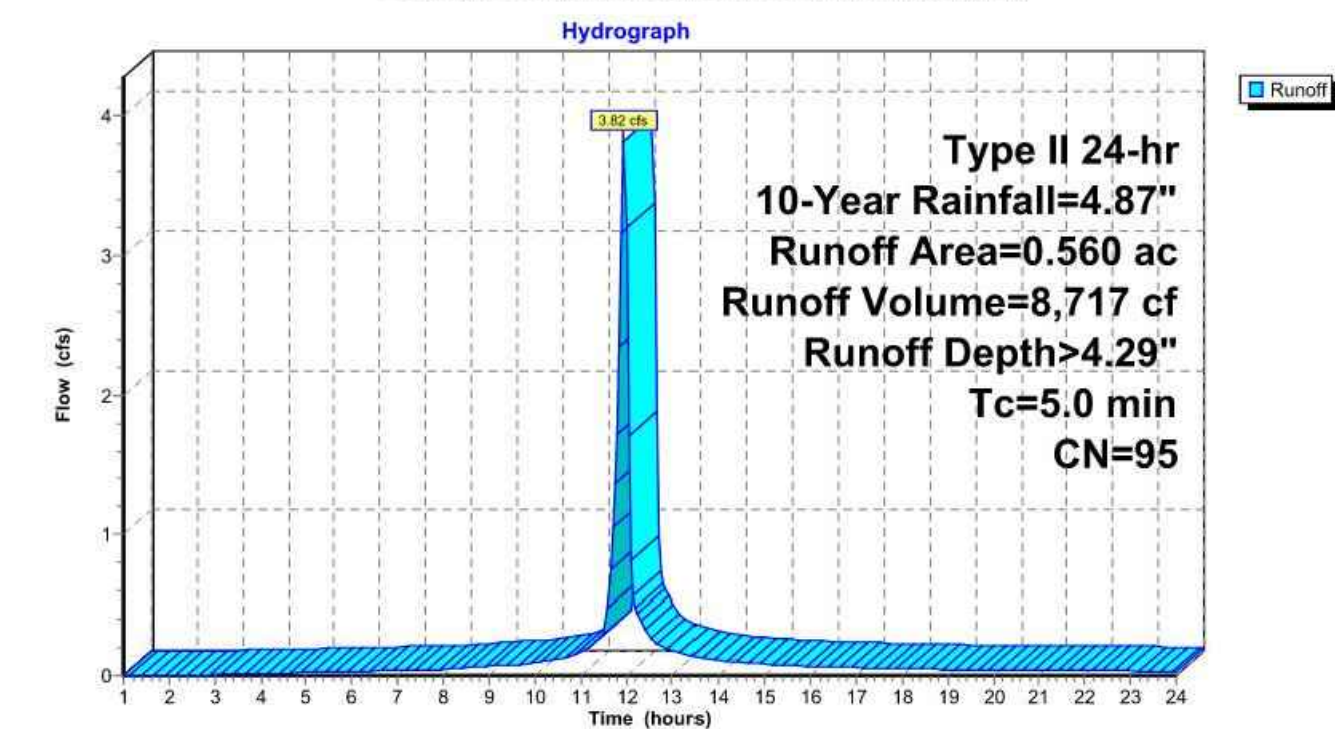
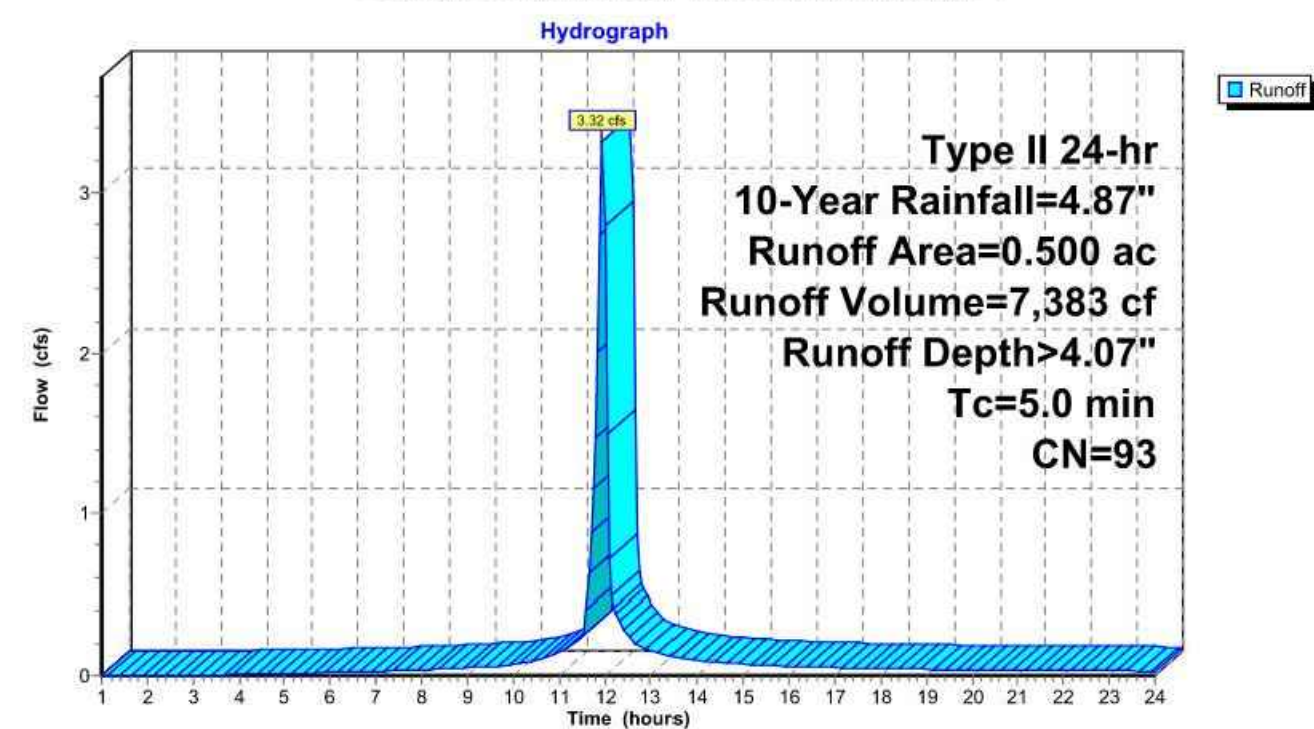
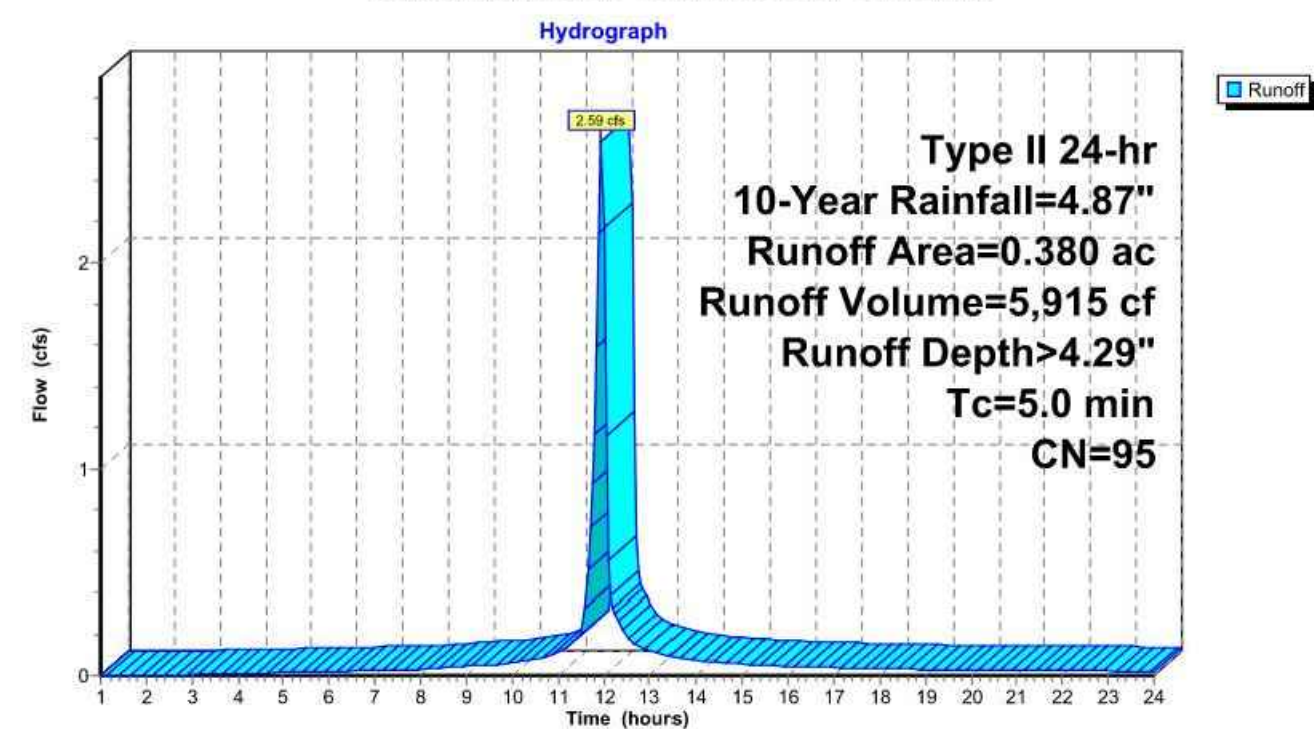
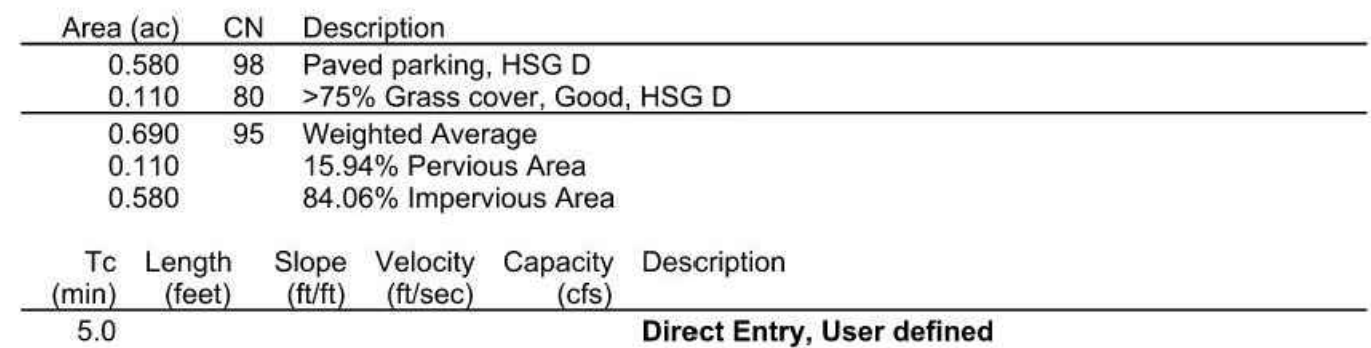
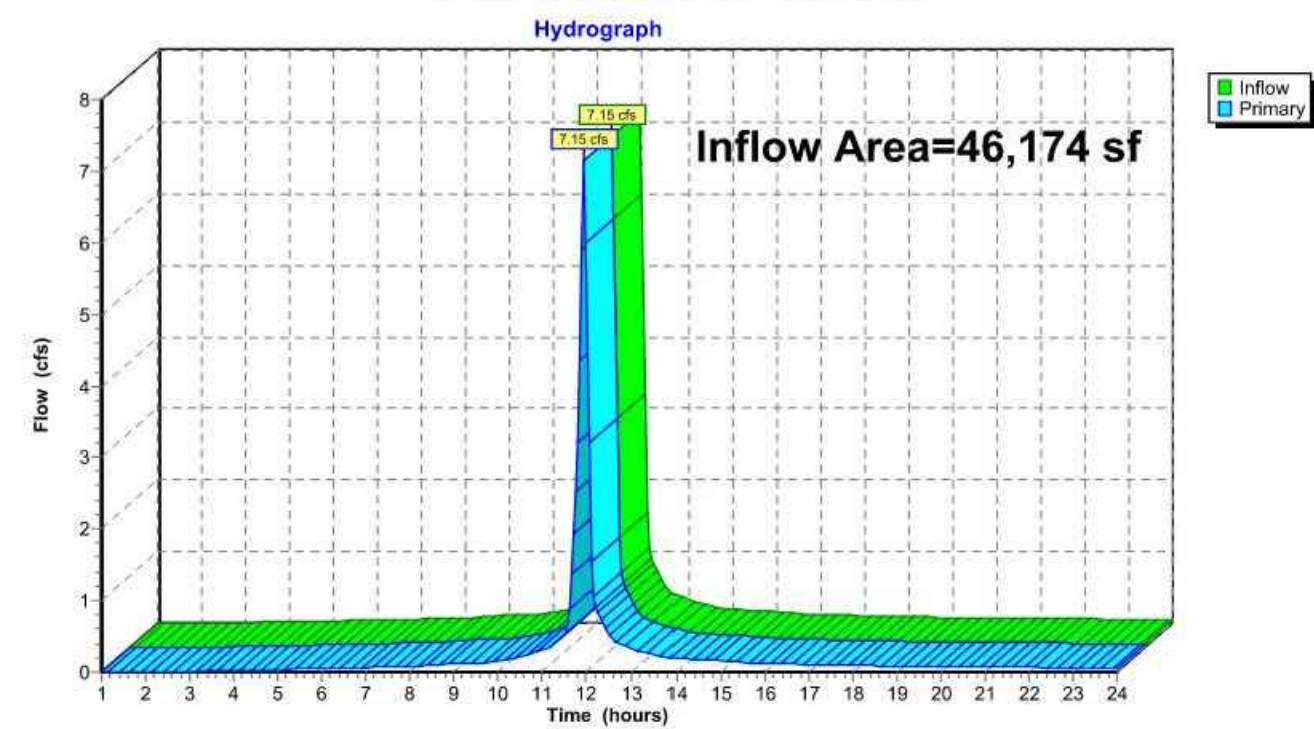
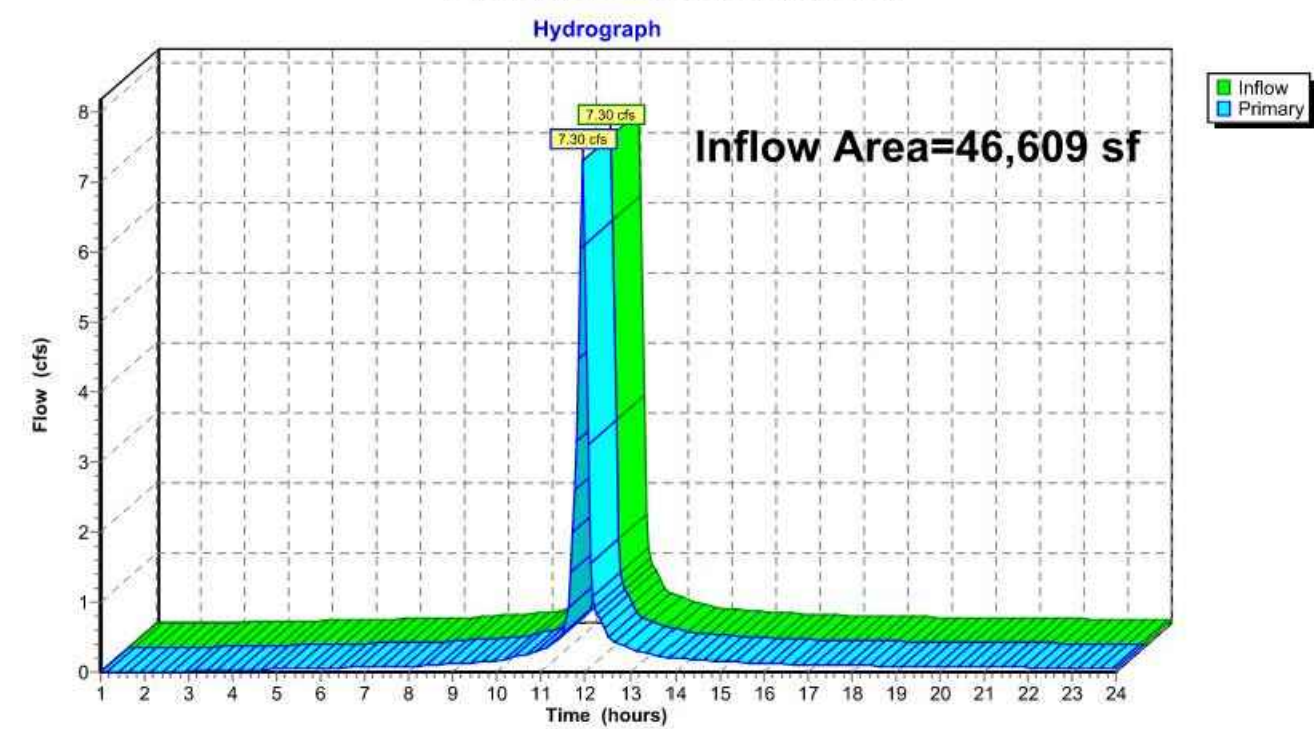
STORMWATER ROUTINGS

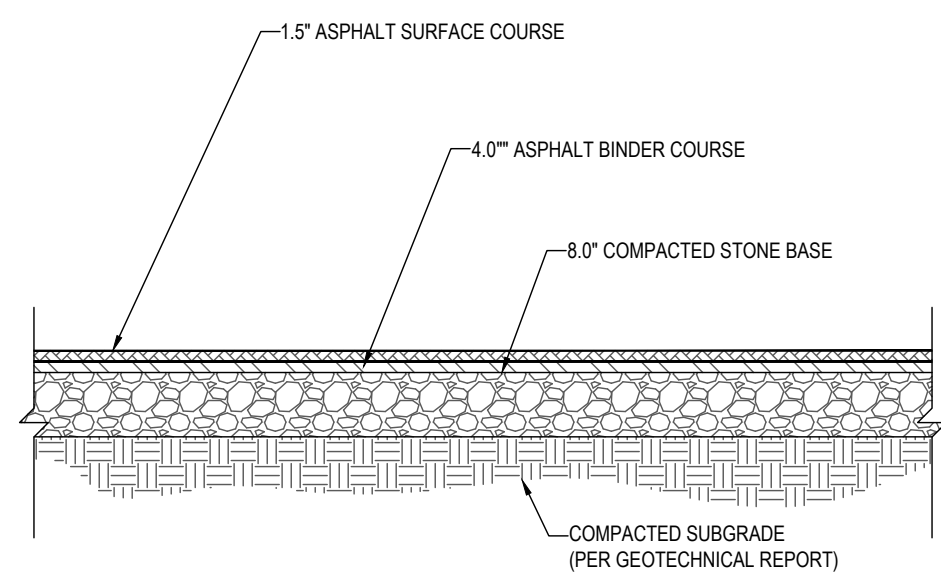
SHEET NUMBER:

C-906

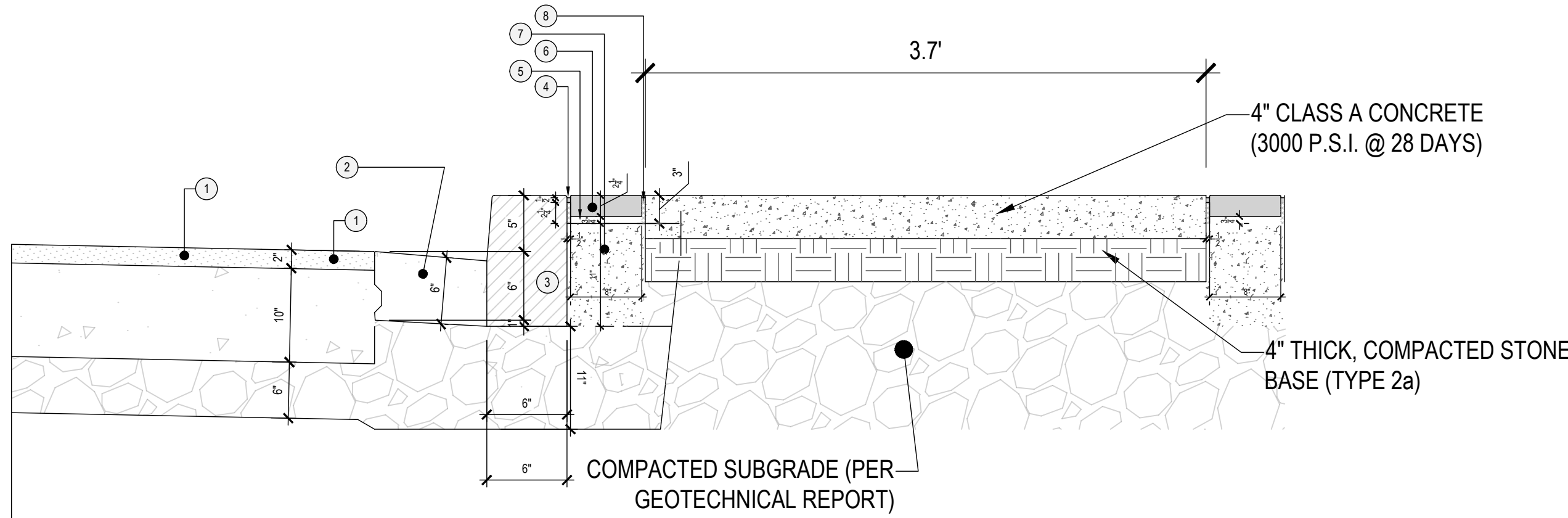
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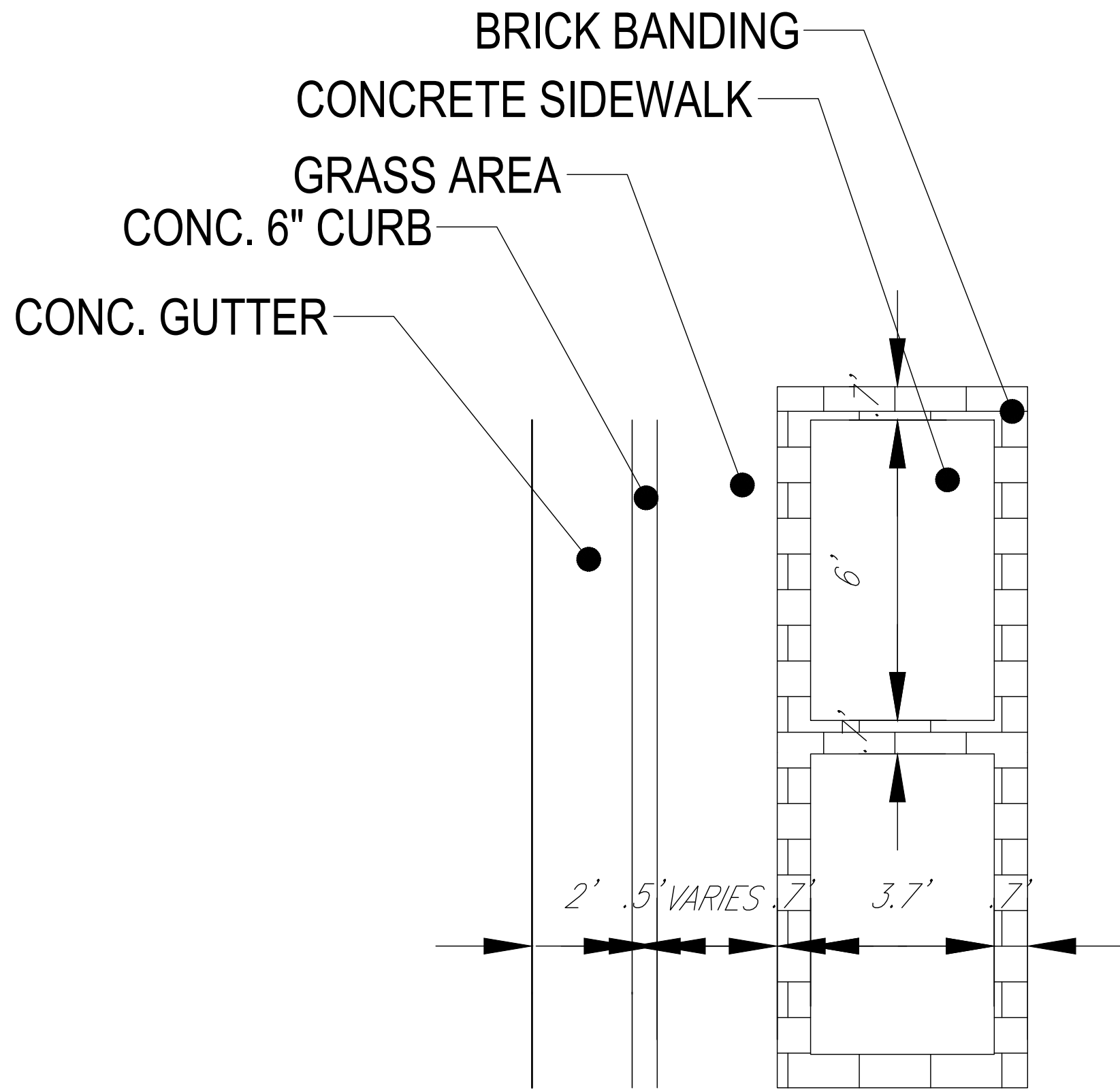




KEY	DESCRIPTION
①	EXISTING RIGHT-OF-WAY ASPHALT
②	24" WIDE EXISTING CONCRETE GUTTER PAN
③	EXISTING 6" THICK CONCRETE CURB
④	SEALANT AND PREFORMED EXPANSION JOINT
⑤	¾" SAND SETTING BED
⑥	BRICK PAVER RED BLEND TO MATCH EXISTING
⑦	CONCRETE BASE
⑧	¾" SAND SWEEP JOINT



BRICK BANDED SIDEWALK CROSS-SECTION VIEW



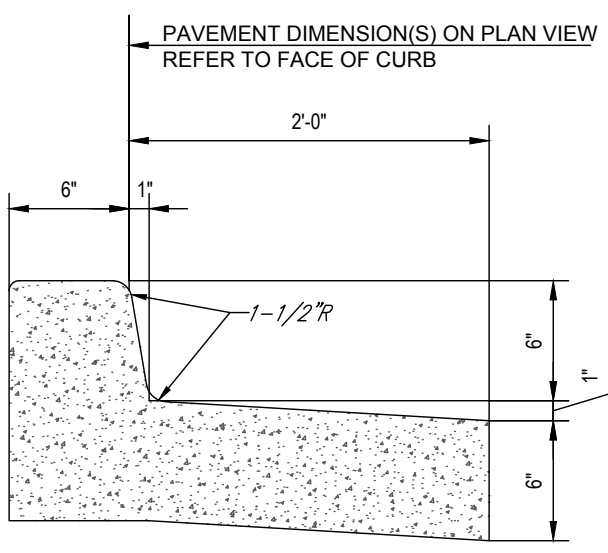
BRICK BANDED SIDEWALK PLAN VIEW

**DEPARTMENT OF PUBLIC UTILITIES
DOMESTIC WATER METER SIZING FORM**

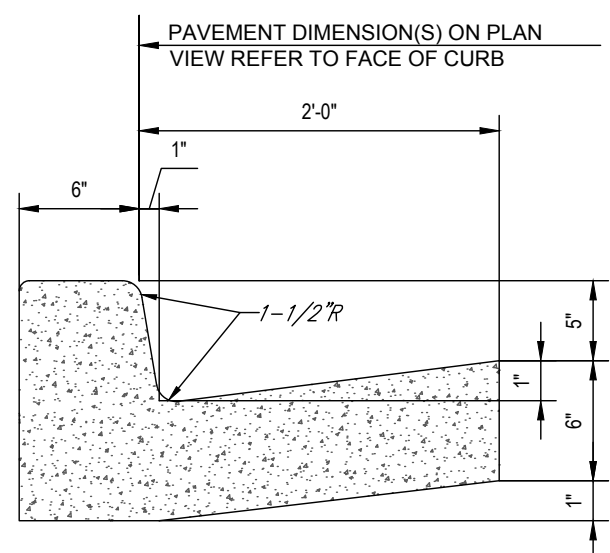
Project Name:	JP Morgan Chase Maple Ave. Bank Branch			
Address:	315 Maple Ave. E Vienna, VA 22180			
Type of Occupancy:	Mercantile			
Fixture	Fixture Value 35 psi	No. of Fixtures	Fixture Value	
Bathtub	8	x		
Bedpan Washers	10	x		
Combination Sink and Tray	3	x		
Dental Unit	1	x		
Dental Lavatory	2	x		
Drinking Fountain - Cooler	1	x	1	1
- Public	2	x		
Kitchen Sink - 1/2" Connection	3	x		
- 3/4" Connection	7	x	1	7
Lavatory - 3/8" Connection	2	x	2	4
- 1/2" Connection	4	x		
Laundry Tray - 1/2" Connection	3	x		
- 3/4" Connection	7	x		
Shower Head (Shower Only)	4	x		
Service Sink - 1/2" Connection	3	x		
- 3/4" Connection	7	x	1	7
Urinal - Pedestal Flush Valve	35	x		
- Wall Flush Valve	12	x		
- Trough (2 ft. Unit)	2	x		
Wash Sink (Each Set of Faucets)	4	x		
Water Closet - Flush Valve	35	x		
- Tank Type	3	x	2	6
Dishwasher - 1/2" Connection	4	x		
- 3/4" Connection	10	x		
Washing Machine - 1/2" Connection	5	x		
- 3/4" Connection	12	x		
- 1" Connection	25	x		
Hose Connection (Wash Down) - 1/2"	6	x		
- 3/4"	10	x		
Combined Fixture Total			25	
Maximum Demand			21.5 GPM	
Meter Size			1.5"	



I certify that the above information is true and correct.
Signature: *John Phillip Samson*



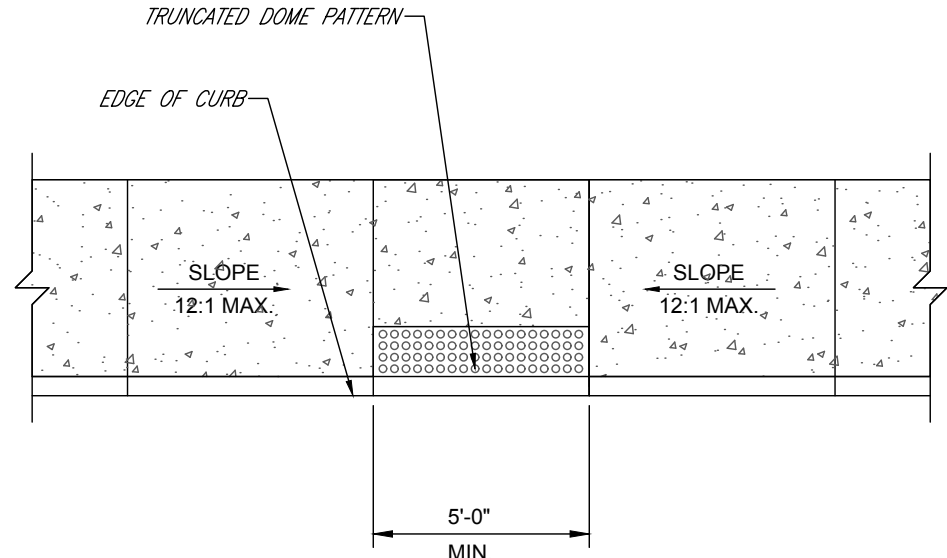
SPILL CURB & GUTTER



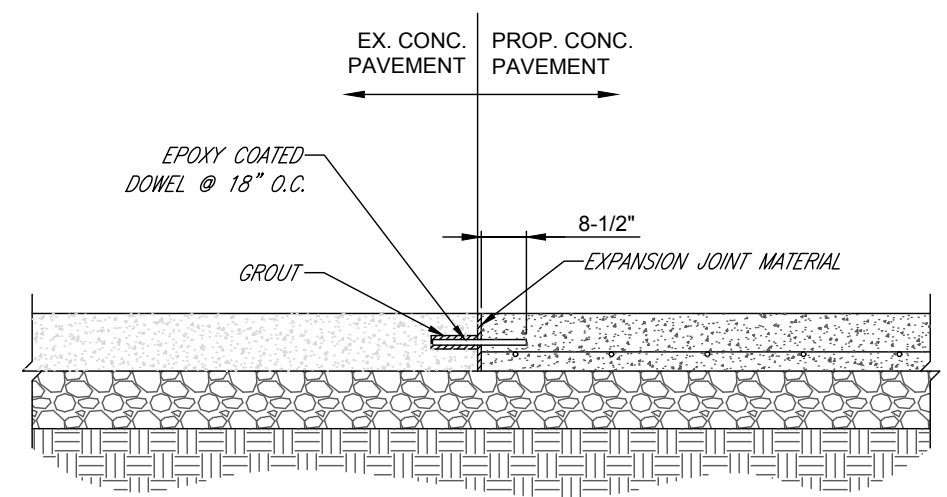
COLLECTOR CURB & GUTTER

- NOTES:**
1. CONCRETE FOR CURBING SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 3,000 P.S.I. @ 28 DAYS.
 2. CONSTRUCTION STAKING FOR CURB INSTALLATION SHALL BE REFERENCED (CUT OR FILL) TO THE TOP OF CURB.
 3. AT CONTRACTOR'S OPTION, THE GUTTER THICKNESS MAY BE INCREASED AT THE EDGE OF PAVEMENT TO MAKE BOTTOM OF GUTTER CONTIGUOUS WITH BOTTOM OF ASPHALT PAVEMENT.
 4. CONTRACTION JOINTS SHALL BE PLACED @ 10'-0" O.C. TOOLED 1/4" (±1/16") WIDE, 1" DEEP. EXPANSION JOINTS SHALL BE PLACED @ 40'-0" INTERVALS, MAXIMUM, AND ALL P.C.'S.
 5. GUTTER PAN SLOPE TO BE ADJUSTED WITHIN ACCESSIBLE PARKING SPACES TO MATCH SLOPE BETWEEN SPOT ELEVATIONS.

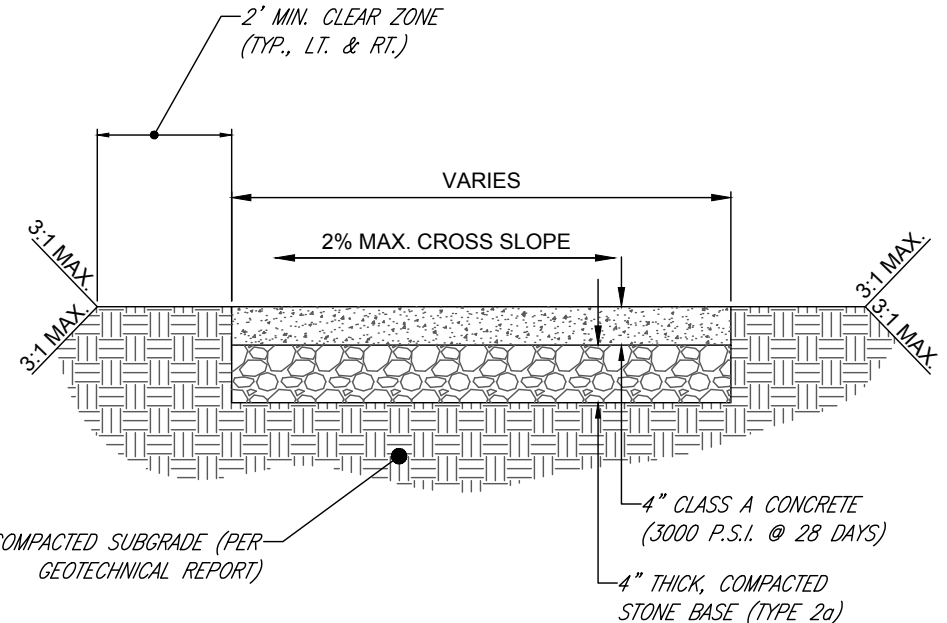
CONCRETE CURB & GUTTER DETAIL
NOT TO SCALE



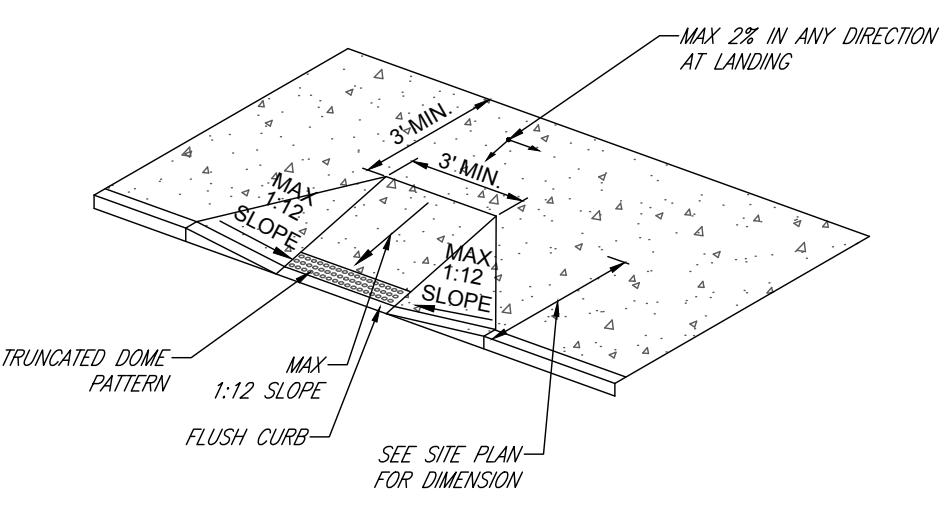
ADA ACCESSIBLE RAMP DETAIL
NOT TO SCALE



CONCRETE DOWELING DETAIL
NOT TO SCALE

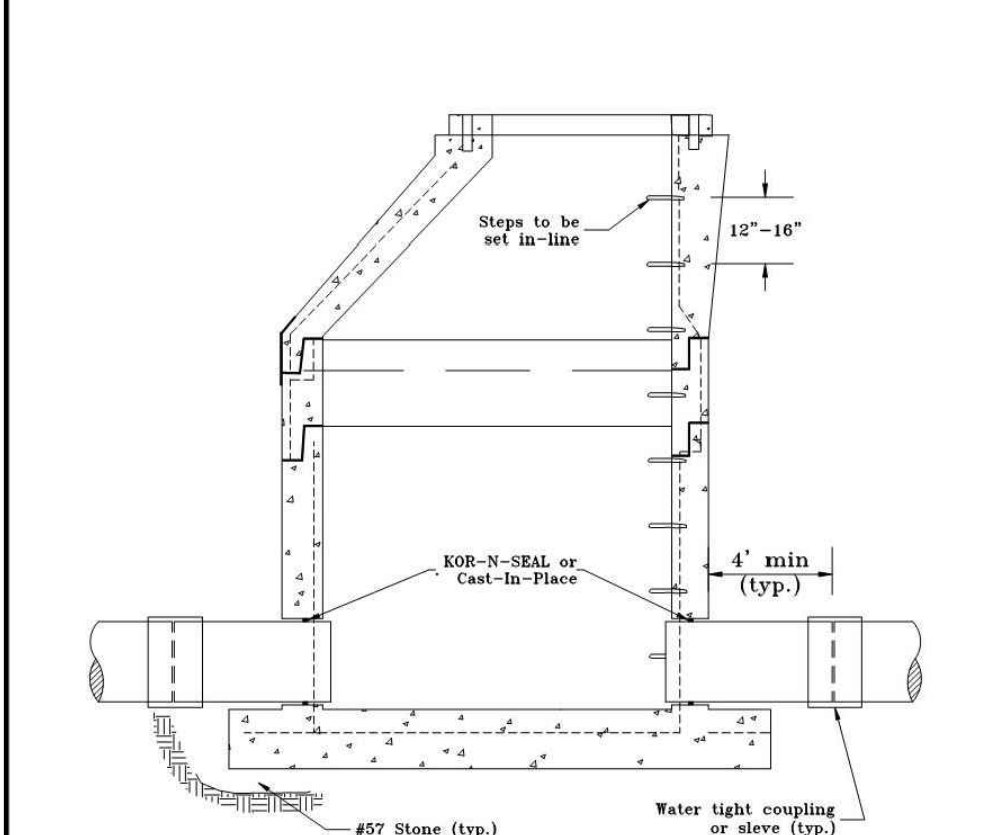


CONCRETE SIDEWALK DETAIL
NOT TO SCALE

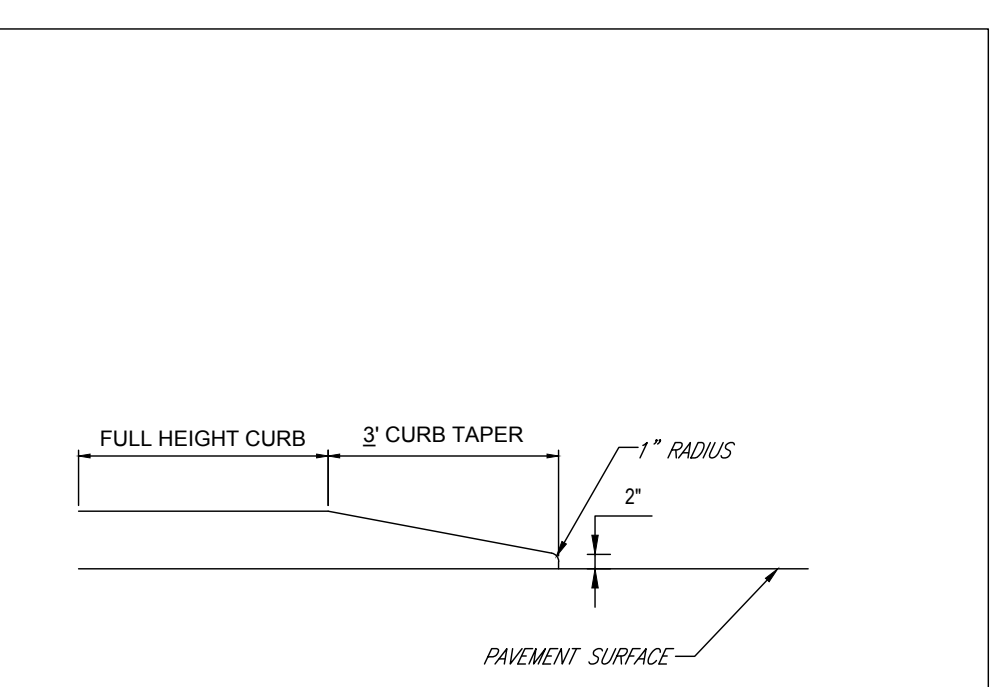


ADA ACCESSIBLE RAMP DETAIL
NOT TO SCALE

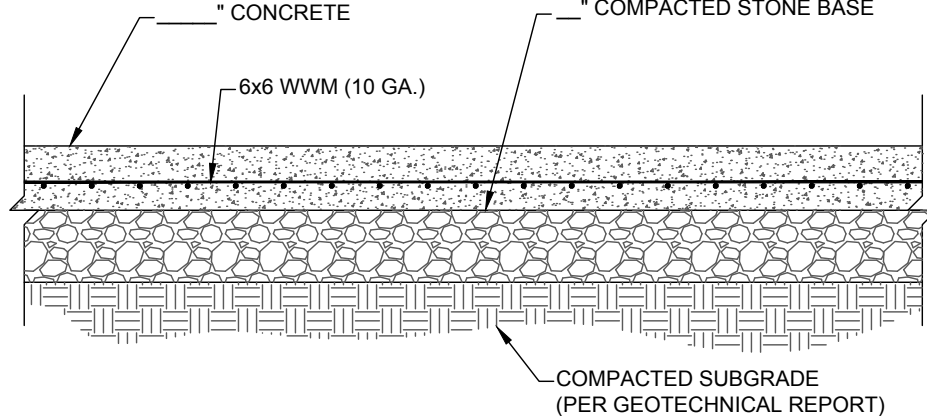
FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



ADA ACCESSIBLE RAMP DETAIL
NOT TO SCALE



CURB TAPER DETAIL
NOT TO SCALE



STANDARD DUTY CONCRETE SECTION
NOT TO SCALE

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

REVISIONS

REV	DATE	COMMENT	DRAWN BY
1	05/20/2021	REV PER TOWN COMMENTS	SC
			TD



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PROJECT No.: S202089
DRAWN BY: SC
CHECKED BY: CM
DATE: 06/04/2021
CAD ID: SSD-0

PROPOSED SITE PLAN DOCUMENTS

CHASE

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA
TAX MAP #: 0382-02-0024

BOHLER

12825 WORLDGATE DR. SUITE 700
HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
Fax: (703) 709-9501
VA@BohlerEng.com



SHEET TITLE:

SITE DETAILS

SHEET NUMBER:
C-1002

REVISION 1 - 05/20/2021

GARDCO
by @ignify

Pole/Bracket

Site and Area Poles

Straight Square Steel

The Gardco SSS straight steel pole consists of a one-piece square fabricated steel lighting standard. The carbon steel base plate is secured to the shaft with a continuous circumferential weld providing excellent strength and integrity. The poles are finished with an electrostatically applied, thermally cured TGIC polyester powdercoat.

Project	Location	City	Notes

Ordering Guide							example: SSS-20-4-7-D1-BRP	
Profile	Height	Pole Size	Gauge	Drilling	Finish	Options		
SSS	10	4	11	D1	1 Way	PP	Prime Painted	
	12			D2	2 Way	BP	Bronze Paint	
	14			D3	3 Way at 90°	BLP	Black Paint	
	16			D4	4 Way	NP	Natural Aluminum Paint	
	18			D5	5 Way at 120°	WP	White Paint	
	20			D6	6 Way	GP	Galvanized (No Paint)	
	22	7	T4	T2	2.3/8" Over Tension	FCV	Finished Paint over Tension	
	24			T4	2.3/8" Over Tension	OC	Optional Color Coat	
	26							
	28							
30	5	11			SC	Specify RAL designation or GC, RAL 7042 and Specify RAL designation or GC		



CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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DRAWN BY:	SC
CHECKED BY:	CM
DATE:	06/04/2021
CAD I.D.:	SSD-0

PROJECT:

**PROP.
SITE PLAN
DOCUMENTS**

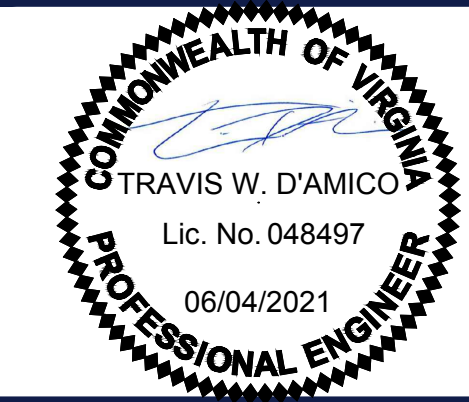
_____ FOR _____



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TAX MAP #: 0382-02-0024



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Fax: (703) 709-9501
VA@BohlerEng.com



SHEET TITLE:

GEOTECHNICAL REQUIREMENTS

SHEET NUMBER:

C-1101

REVISION 1 - 05/20/2021

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WITH SECOND SUBMISSION.**

