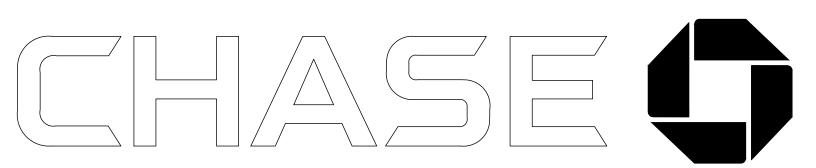
SITE PLAN DOCUMENTS



BANK VIENNA

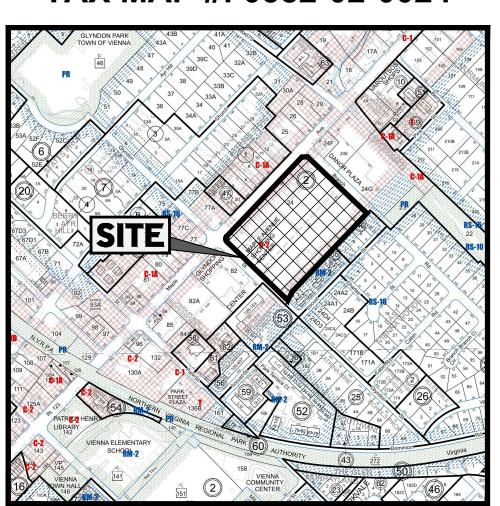
PROPOSED

FINANCIAL INSTITUTION W/ DRIVE-THRU

LOCATION OF SITE 315 MAPLE AVE E, TOWN OF VIENNA, **VIRGINIA**

TAX MAP #: 0382-02-0024





LOCATION MAP SCALE: 1" = 1000'

GRI MAPLE AVENUE, LLC 7200 WISCONSIN AVENUE, SUITE 600 BETHESDA, MD 20814

PLAN REFERENCE: **FAIRFAX COUNTY MAPPER** REVISED: 01-01-2020

PREPARED BY

BOHLER//

DEVELOPER

FIRE MARSHAL NOTES AVAILABLE FIRE FLOW _ (GAL./MIN.) SOURCE OF FIRE FLOW INFO. TYPE OF CONSTRUCTION - USBC (B) BUSINESS USE GROUP CLASSIFICATION - USBC _ 21.5 BUILDING HEIGHT . ☐ YES BUILDING TO BE FULLY SPRINKLERED ☐ NFPA 13 ; ☐ NFPA 13D ; ☐ NFPA 13R IF YES, CHECK APPROPRIATE STANDARD:

1. GEOTECHNICAL REPORT WILL BE REQUIRED IF CLASS II OR CLASS IVA SOILS EXIST ON

2. PROPOSED SANITARY SEWER WILL CONNECT TO THE EXISTING SANITARY SEWER

MAIN. WASTEWATER TREATMENT PLANT FOR THIS SITE IS BLUEMONT PLAINS

PLAN REFERENCES AND CONTACTS

VIENNA VOLUNTEER FIRE

400 CENTER STREET SOUT

DOMINION VIRGINIA POWER

UTILITIES

◆ <u>CABLE</u> COMCAST

LA REASON

LLOYD ROBBINS

PHONE: (703) 886-6484

WASHINGTON GAS

6801 INDUSTRIAL ROAD

THE ABOVE REFERENCED DOCUMENTS ARE INCORPORATED BY REFERENCE AS PART OF THESE PLANS, HOWEVER,

BOHLER DOES NOT CERTIFY THE ACCURACY OF THE WORK REFERENCED OR DERIVED FROM THESE DOCUMENTS, BY

SPRINGFIELD, VA 22151 PHONE: (703) 750-5657

BOB REININGER

11133 MAIN STREET

FAIRFAX, VA 22030

4391 DALE BOULEVARD

22001 LOUDOUN COUNTY PKWY

REBECCA GREENBERG

SPRINGFIELD, VA 2215 PHONE: (703) 750-565

4975 ALLIANCE DRIVE

PHONE: 1- (800) 367-7623

FAIRFAX, VA 22030

ROW JURISDICTION

REFERENCES

DATED: 07/16/20

♦BOUNDARY & TOPOGRAPHIC

INVESTIGATION REPORT:

◆ARCHITECTURAL PLAN:

555 11TH STREET NW, SUITE 200 WASHINGTON, D.C. 20004 DATED: 11/26/2019

GOVERNING AGENCIES

♦ DEPARTMENT OF PLANNING

OTJ ARCHITECTS

AND ZONING

127 CENTER STREET S VIENNA, VIRGINIA 22180 PHONE: (703) 255-6341

EMAIL: DPZ@VIENNAVA.GOV

CONTACT: 12825 WORLDGATE DR. SUITE 700 **HERNDON, VIRGINIA 20170** Phone: (703) 709-9500

(703) 709-9501 VA@BohlerEng.com TRAVIS D'AMICO. P.E.

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PROJECT NARRATIVE

TOTAL SHEETS

THE SITE PLAN IS FOR A FINANCIAL INSTITUTION PROPOSED ON 315 MAPLE AVENUE IN THE TOWN OF VIENNA, TAX MAP #0383-02-0024. THE EXISTING BUILDING AND ASSOCIATED INFRASTRUCTURE IS TO BE DEMOLISHED. THE LAYOUT OF THE LOT IS TO BE REARRANGED TO ACCOMMODATE A PROPOSED BANK DRIVE-THRU ATM AND ASSOCIATED UTILITIES, LANDSCAPING AND STORMWATER MANAGEMENT FACILITIES.

BOHLER

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

REVISIONS

Call before you dig **ALWAYS CALL 811**

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

NOT APPROVED FOR CONSTRUCTION

PROP.

SITE PLAN

DOCUMENTS

PROPOSED

FINANCIAL INSTITUTION

W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA,

VIRGINIA

TAX MAP #: 0382-02-0024

06/04/2021

DRAWN BY:

CAD I.D.:

PROJECT:

1 05/20/2021 REV PER TOWN COMMENTS

COVER SHEET

C-101

REVISION 1 - 05/20/2021

GENERAL NOTE:

T IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT
DRK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE T HE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN PRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE PTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORK AS DEFINED BY THE DRAWINGS ANI

- EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER, IN WRITING, IF ANY ACTUAL SITE CONDITIONS DIFFER FROM THOSE SHOWN ON THESE PLANS, OR IF THE PROPOSED WORK CONFLICTS WITH ANY OTHER SITE FEATURES. 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 REQUIREMENTS, THESE NOTES, AND THE REQUIREMENTS ARTICULATED IN THE NOTES CONTAINED IN ALL THE OTHER DRAWINGS THAT COMPRISE THE PLAN 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
- 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. THIS IS THE CONTRACTOR'S SOLE AND COMPLETE RESPONSIBILITY

WITH THE PROJECT WORK SCOPE, PRIOR TO THE INITIATION AND COMMENCEMENT OF CONSTRUCTION

- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST ENSURE THAT ALL REQUIRED PERMITS AND APPROVALS 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 AUTHORITIES AND HAS ALSO CONFIRMED THAT ALL NECESSARY AND REQUIRED PERMITS HAVE BEEN OBTAINED. THE CONTRACTOR MUST HAVE COPIES OF ALL PERMITS AND APPROVALS ON SITE AT ALL TIMES.
- THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL, AND ALL APPLICABLE REQUIREMENTS, RULES, REGULATIONS, STATUTORY REQUIREMENTS, CODES, LAWS AND STANDARDS OF ALL GOVERNMENTAL ENTITIES WITH JURISDICTION OVER THIS PROJECT. AND ALL PROVISIONS IN AND CONDITIONS OF THE CONSTRUCTION CONTRACT WITH THE OWNER/DEVELOPER INCLUDING ALL EXHIBITS, ATTACHMENTS AND ADDENDA TO SAME
- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST COORDINATE THE BUILDING LAYOUT BY CAREFULLY REVIEWING THE MOST CURRENT ARCHITECTURAL, CIVIL AND STRUCTURAL CONSTRUCTION DOCUMENTS (INCLUDING, BUT NOT LIMITED TO, MECHANICAL, ELECTRICAL, PLUMBING AND FIRE SUPPRESSION PLANS, WHERE APPLICABLE). THE CONTRACTOR MUST IMMEDIATELY NOTIFY OWNER, ARCHITECT AND ENGINEER OF RECORD, IN WRITING, OF ANY CONFLICTS, DISCREPANCIES OR
- AMBIGUITIES WHICH EXIST BETWEEN THESE PLANS AND ANY OTHER PLANS THAT COMPRISE THE CONSTRUCTION DOCUMENTS CONTRACTOR MUST REFER TO AND ENSURE COMPLIANCE WITH THE APPROVED ARCHITECTURAL/BUILDING PLANS OF RECORD FOR EXACT LOCATIONS AND DIMENSIONS OF ENTRY/EXIT POINTS, ELEVATIONS, PRECISE BUILDING DIMENSIONS, AND EXACT BUILDING UTILITY LOCATIONS.
- THE CONTRACTOR MUST FIELD VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION. THE CONTRACTOR MUST IMMEDIATELY NOTIFY ENGINEER OF RECORD, IN WRITING, IF ANY CONFLICTS, DISCREPANCIES, OR AMBIGUITIES EXIST PRIOR TO PROCEEDING WITH CONSTRUCTION. NO EXTRA COMPENSATION WILL BE PAID TO THE CONTRACTOR FOR WORK WHICH HAS TO BE RE-DONE OR REPAIRED DUE TO DIMENSIONS, MEASUREMENTS OR GRADES SHOWN INCORRECTLY ON THESE PLANS PRIOR TO BOTH (A) THE CONTRACTOR GIVING ENGINEER OF RECORD WRITTEN NOTIFICATION OF SAME AND (B) ENGINEER OF RECORD, THEREAFTER, PROVIDING THE CONTRACTOR WITH WRITTEN AUTHORIZATION TO PROCEED WITH SUCH ADDITIONAL WORK.
- THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND MEASUREMENTS INCLUDED ON DESIGN DOCUMENTS HEREIN AND MUST NOT SCALE OFF THE DRAWINGS DUE TO POTENTIAL PRINTING INACCURACIES. ALL DIMENSIONS AND MEASUREMENTS ARE TO BE CHECKED. AND CONFIRMED BY THE GENERAL CONTRACTOR PRIOR TO PREPARATION OF SHOP DRAWINGS. FABRICATION/ORDERING OF PARTS AND MATERIALS AND COMMENCEMENT OF SITE WORK. SITE PLAN DRAWINGS ARE NOT INTENDED AS SURVEY DOCUMENTS. DIMENSIONS SUPERSEDE GRAPHICAL REPRESENTATIONS. THE CONTRACTOR MUST MAKE CONTRACTOR'S OWN MEASUREMENTS FOR LAYOUT OF IMPROVEMENTS.
- $10.\,\,$ THE OWNER AND CONTRACTOR MUST BE FAMILIAR WITH, AND RESPONSIBLE FOR THE PROCUREMENT OF ANY AND ALL CERTIFICATIONS REQUIRED FOR THE ISSUANCE OF A CERTIFICATE OF OCCUPANCY.
- WHEN INCLUDED AS ONE OF THE REFERENCED DOCUMENTS. THE GEOTECHNICAL REPORT. SPECIFICATIONS AND RECOMMENDATIONS SET FORTH THEREIN ARE A PART OF THE REQUIRED CONSTRUCTION DOCUMENTS AND, IN CASE OF CONFLICT, DISCREPANCY OR AMBIGUITY. THE MORE STRINGENT REQUIREMENTS AND/OR RECOMMENDATIONS CONTAINED IN: (A) THE PLANS: AND (B) THE GEOTECHNICAL REPORT AND RECOMMENDATIONS, MUST TAKE PRECEDENCE UNLESS SPECIFICALLY NOTED OTHERWISE ON THE PLANS. THE CONTRACTOR MUST NOTIFY THE ENGINEER OF RECORD. IN WRITING, OF ANY SUCH CONFLICT, DISCREPANCY OR AMBIGUITY BETWEEN THE GEOTECHNICAL REPORT AND PLANS AND SPECIFICATIONS, PRIOR TO PROCEEDING WITH ANY FURTHER WORK IF A GEOTECHNICAL REPORT WAS NOT CREATED. THEN THE CONTRACTOR MUST FOLLOW AND COMPLY WITH ALL OF THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE SPECIFICATIONS WHICH HAVE JURISDICTION OVER THIS PROJECT.
- ENGINEER OF RECORD IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS. HAZARDOUS SUBSTANCES, OR POLLUTANTS ON ABOUT OR UNDER THE PROPERTY THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION (TO BE PERFORMED IN ACCORDANCE WITH CURRENT OSHA STANDARDS) AND ANY ADDITIONAL PRECAUTIONS TO BE TAKEN TO ASSURE THE STABILITY OF ADJACENT, NEARBY AND CONTIGUOUS STRUCTURES AND PROPERTIES. ALL
- OF THIS WORK IS TO BE PERFORMED AT CONTRACTOR'S SOLE COST AND EXPENSE. 14. $\,$ THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT STRUCTURES, ETC. WHICH ARE TO REMAIN EITHER FOR AN INITIAL PHASE OF THE PROJECT OR AS PART OF THE FINAL CONDITION. THE CONTRACTOR IS RESPONSIBLE FOR TAKING ALL APPROPRIATE MEASURES REQUIRED TO ENSURE THE STRUCTURAL STABILITY OF SIDEWALKS AND PAVEMENT LITHLITES BUILDINGS, AND INFRASTRUCTURE WHICH ARE TO REMAIN, AND TO PROVIDE A SAFE WORK AREA FOR THIRD PARTIES, PEDESTRIANS AND ANYONE INVOLVED WITH THE PROJECT.
- 5. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE. ALL DEMOLITION AND CONSTRUCTION WASTES, UNSUITABLE EXCAVATED MATERIAL, EXCESS SOIL AND DEBRIS (SOLID WASTE) MUST BE DISPOSED OF IN ACCORDANCE WITH THE REQUIREMENTS OF ANY AND ALL MUNICIPAL, COUNTY, STATE, AND FEDERAL LAWS AND APPLICABLE CODES WHICH HAVE JURISDICTION OVER THIS PROJECT OR OVER THE CONTRACTOR.
- 16. IT IS THE CONTRACTOR'S SOLE RESPONSIBILITY TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES, TO BE PROMPTLY PROVIDED TO THE OWNER UPON REQUEST.
- THE CONTRACTOR MUST REPAIR, AT CONTRACTOR'S SOLE COST, ALL DAMAGE DONE TO ANY NEW OR EXISTING CONSTRUCTION OR PROPERTY DURING THE COURSE OF CONSTRUCTION, INCLUDING BUT NOT LIMITED TO DRAINAGE, UTILITIES, PAVEMENT, STRIPING, CURB, ETC. AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME TO INCLUDE, BUT NOT BE LIMITED TO, REDESIGN, RE-SURVEY, RE-PERMITTING AND CONSTRUCTION. THE CONTRACTOR IS RESPONSIBLE FOR AND MUST REPLACE ALL SIGNAL INTERCONNECTION CABLE, WIRING CONDUITS, AND ANY UNDERGROUND ACCESSORY EQUIPMENT DAMAGED DURING CONSTRUCTION AND MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE REPAIR OF ANY SUCH NEW OR EXISTING CONSTRUCTION OR PROPERTY MUST RESTORE SUCH CONSTRUCTION OR PROPERTY TO A CONDITION EQUIVALENT TO OR BETTER THAN THE CONDITIONS PRIOR TO COMMENCEMENT OF THE CONSTRUCTION, AND IN CONFORMANCE WITH APPLICABLE CODES, LAWS, RULES, REGULATIONS, STATUTORY REQUIREMENTS AND STATUTES. THE CONTRACTOR MUST BEAR ALL COSTS ASSOCIATED WITH SAME. THE CONTRACTOR MUST, PROMPTLY, DOCUMENT ALL EXISTING DAMAGE AND NOTIFY, IN WRITING, THE OWNER AND THE CONSTRUCTION MANAGER PRIOR TO THE START OF
- 18. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITIES FOR JOB SITE SAFETY JOB SITE SUPERVISION, OR ANYTHING RELATED TO SAME. THE ENGINEER OF RECORD AND BOHLER HAVE NOT BEEN RETAINED TO PERFORM OR TO BE RESPONSIBLE FOR JOB SITE SAFETY. SAME BEING WHOLLY OUTSIDE OF ENGINEER OF RECORD'S AND BOHLER SERVICES AS RELATED TO THE PROJECT. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE TO IDENTIFY OR REPORT ANY JOB SITE SAFETY ISSUES OR ANY JOB SITE CONDITIONS, AT ANY TIME.
- THE CONTRACTOR MUST IMMEDIATELY IDENTIFY IN WRITING. TO THE ENGINEER OF RECORD AND BOHLER. ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY. HEALTH OR GENERAL WELFARE. OR PROJECT COST, IF THE CONTRACTOR PROCEEDS WITH CONSTRUCTION WITHOUT PROVIDING PROPER WRITTEN NOTIFICATION AS DESCRIBED ABOVE. IT WILL BE AT THE CONTRACTOR'S OWN RISK AND, FURTHER, THE CONTRACTOR MUST INDEMNIFY, DEFEND AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER FOR ANY AND ALL DAMAGES, COSTS, INJURIES, ATTORNEY'S FEES AND THE LIKE WHICH RESULT FROM OR ARE IN ANY WAY RELATED TO SAME INCLUDING BUT NOT LIMITED TO ANY THIRD PARTY AND FIRST PARTY CLAIMS
- $20.\,\,$ THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY INJURY OR DAMAGES RESULTING FROM THE CONTRACTOR'S FAILURE TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH THE APPROVED PLANS, AND CURRENT CODES, RULES, STATUTES AND THE LIKE. IF THE CONTRACTOR AND/OR OWNER FAIL TO BUILD OR CONSTRUCT IN STRICT ACCORDANCE WITH APPROVED PLANS, RULES, STATUTES, CODES AND THE LIKE, THE CONTRACTOR AND/OR OWNER AGREE TO AND MUST JOINTLY. INDEPENDENTLY SEPARATELY AND SEVERALLY INDEMNIEY AND HOLD THE ENGINEER OF RECORD AND BOHLER HARMLESS FOR AND FROM ALL INJURIES, CLAIMS AND DAMAGES THAT ENGINEER AND BOHLER SUFFER AND ANY AND ALL COSTS THAT ENGINEER AND
- 21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKER'S COMPENSATION INSURANCE, EMPLOYER'S LIABILITY INSURANCE AND COMMERCIAL GENERAL LIABILITY INSURANCE (CGL) INCLUDING ALSO ALL UMBRELLA COVERAGES. ALL CONTRACTORS MUST HAVE THEIR CGL POLICIES ENDORSED TO NAME BOHLER. AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AS ADDITIONAL NAMED INSUREDS AND TO PROVIDE CONTRACTUAL LIABILITY COVERAGE SUFFICIENT TO INSURE THE (DEFEND, IF APPLICABLE) AND HOLD HARMLESS AND INDEMNITY OBLIGATIONS ASSUMED AND AGREED TO BY THE CONTRACTOR HEREIN. ALL CONTRACTORS MUST FURNISH BOHLER WITH CERTIFICATIONS OF INSURANCE OR CERTIFICATES OF INSURANCE AS EVIDENCE OF THE REQUIRED INSURANCE COVERAGES PRIOR TO COMMENCING ANY WORK AND UPON RENEWAL OF EACH POLICY DURING THE ENTIRE PERIOD OF CONSTRUCTION AND FOR TWO YEARS AFTER THE COMPLETION OF CONSTRUCTION AND AFTER ALL PERMITS ARE ISSUED, WHICHEVER DATE IS LATER. IN ADDITION, ALL CONTRACTORS AGREE THAT THEY WILL, TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, INDEMNIFY, DEFEND AND HOLD HARMLESS BOHLER AND ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS FROM AND AGAINST ANY DAMAGES, INJURIES, CLAIMS, ACTIONS, PENALTIES, EXPENSES, PUNITIVE DAMAGES, TORT DAMAGES, STATUTORY CLAIMS, STATUTORY CAUSES OF ACTION, LOSSES, CAUSES OF ACTION, LIABILITIES OR COSTS, INCLUDING, BUT NOT LIMITED TO, REASONABLE ATTORNEYS' FEES AND DEFENSE COSTS, ARISING OUT OF OR IN ANY WAY CONNECTED WITH OR TO THE PROJECT. INCLUDING ALL CLAIMS BY EMPLOYEES OF THE CONTRACTOR(S). ALL CLAIMS BY THIRD PARTIES AND ALL CLAIMS RELATED TO THE PROJECT. THE CONTRACTOR MUST NOTIFY ENGINEER, IN WRITING, AT LEAST THIRTY (30) DAYS PRIOR TO ANY TERMINATION,
- SUSPENSION OR CHANGE OF ITS INSURANCE HEREUNDER. 22. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES, GENERALLY OR FOR THE CONSTRUCTION MEANS, METHODS, TECHNIQUES OR PROCEDURES FOR COMPLETION OF THE WORK DEPICTED BOTH ON THESE PLANS. AND FOR ANY CONFLICTS IN SCOPE AND REVISIONS THAT RESULT FROM SAME. THE CONTRACTOR IS FULLY AND SOLELY RESPONSIBLE FOR DETERMINING THE MEANS AND METHODS FOR COMPLETION OF THE WORK, PRIOR TO THE COMMENCEMENT OF CONSTRUCTION.
- 23. NEITHER THE PROFESSIONAL ACTIVITIES OF: BOHLER , NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, OFFICERS, DIRECTORS, PARTNERS, SHAREHOLDERS, MEMBERS, PRINCIPALS, COMMISSIONERS, AGENTS, SERVANTS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES, AND ITS SUBCONTRACTORS AND SUBCONSULTANTS AT A CONSTRUCTION/PROJECT SITE (HEREIN "BOHLER PARTIES"), RELIEVES OR WILL RELIEVE THE CONTRACTOR OF AND FROM ITS OBLIGATIONS. DUTIES AND RESPONSIBILITIES INCLUDING. BUT NOT LIMITED TO. CONSTRUCTION MEANS. METHODS. SEQUENCE TECHNIQUES OR PROCEDURES NECESSARY FOR PERFORMING, OVERSEEING, SUPERINTENDING AND COORDINATING THE WORK IN ACCORDANCE WITH THE CONTRACT DOCUMENTS AND COMPLIANCE WITH ALL HEALTH AND SAFETY PRECAUTIONS REQUIRED BY ANY REGULATORY AGENCIES WITH JURISDICTION OVER THE PROJECT AND/OR PROPERTY. BOHLER AND ITS EMPLOYEES, PERSONNEL, AGENTS, SUBCONTRACTORS AND SUBCONSULTANTS HAVE NO AUTHORITY TO EXERCISE ANY CONTROL OVER (OR ANY RESPONSIBILITY FOR) ANY CONSTRUCTION. THE CONTRACTOR OR ITS EMPLOYEES RELATING TO THEIR WORK AND ANY AND ALL HEALTH AND SAFETY PROGRAMS OR PROCEDURES. THE CONTRACTOR IS SOLELY RESPONSIBLE FOR JOB SITE SAFETY. THE CONTRACTOR MUST INDEMNIFY, DEFEND, PROTECT AND HOLD HARMLESS BOHLER FOR AND FROM ANY LIABILITY TO BOHLER RESULTING FROM THE CONTRACTOR'S WORK, SERVICES AND/OR VIOLATIONS OF THIS NOTE, THESE NOTES OR ANY NOTES IN THE PLAN SET AND, FURTHER, THE CONTRACTOR MUST NAME BOHLER AS AN ADDITIONAL INSURED UNDER THE GENERAL CONTRACTOR'S POLICIES OF GENERAL LIABILITY INSURANCE AS DESCRIBED ABOVE.
- WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACT WITH THE OWNER/DEVELOPER, BOHLER WILL REVIEW OR TAKE OTHER APPROPRIATE ACTION ON THE CONTRACTOR SUBMITTALS, SUCH AS SHOP DRAWINGS, PRODUCT DATA, SAMPLES, AND OTHER DATA, WHICH THE CONTRACTOR IS REQUIRED TO SUBMIT, BUT ONLY FOR THE LIMITED PURPOSE OF EVALUATING CONFORMANCE WITH THE DESIGN INTENT AND THE INFORMATION SHOWN IN THE CONSTRUCTION CONTRACT DOCUMENTS. CONSTRUCTION MEANS AND METHODS AND/OR TECHNIQUES OR PROCEDURES, COORDINATION OF THE WORK WITH OTHER TRADES, AND CONSTRUCTION SAFETY PRECAUTIONS ARE THE SOLE RESPONSIBILITY OF THE CONTRACTOR AND BOHLER HAS NO RESPONSIBILITY OR LIABILITY FOR SAME BOHLER WILL PERFORM ITS SHOP DRAWING REVIEW WITH REASONABLE PROMPTNESS. AS CONDITIONS PERMIT. ANY DOCUMENT, DOCUMENTING BOHLER'S REVIEW OF A SPECIFIC ITEM OR LIMITED SCOPE, MUST NOT INDICATE THAT BOHLER HAS REVIEWED THE ENTIRE ASSEMBLY OF WHICH THE ITEM IS A COMPONENT. BOHLER IS NOT RESPONSIBLE FOR ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS, THE CONTRACTOR MUST, IN WRITING, PROMPTLY AND IMMEDIATELY BRING ANY DEVIATIONS FROM THE CONSTRUCTION DOCUMENTS TO BOHI FR'S ATTENTION. BOHI FR IS NOT REQUIRED TO REVIEW PARTIAL SUBMISSIONS OR THOSE FOR WHICH SUBMISSIONS OF CORRELATED ITEMS HAVE NOT BEEN RECEIVED
- 25. IF THE CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN, WITHOUT FIRST OBTAINING THE PRIOR WRITTEN AUTHORIZATION OF THE ENGINEER OF RECORD AND/OR BOHLER FOR ALL DEVIATIONS WITHIN ENGINEER'S SCOPE, THE CONTRACTOR IS SOLELY RESPONSIBLE FOR THE PAYMENT OF ALL COSTS INCURRED IN CORRECTING ANY WORK PERFORMED WHICH DEVIATES FROM THE PLANS, ALL FINES AND/OR PENALTIES ASSESSED WITH RESPECT THERETO AND ALL COMPENSATORY OR PUNITIVE DAMAGES RESULTING THEREFROM AND, FURTHER, MUST DEFEND, INDEMNIFY, PROTECT, AND HOLD HARMLESS THE ENGINEER OF RECORD AND BOHLER PARTIES TO THE FULLEST EXTENT PERMITTED UNDER THE LAW, FOR AND FROM ALL FEES, ATTORNEYS' FEES, DAMAGES, COSTS, JUDGMENTS, CLAIMS, INJURIES, PENALTIES AND THE LIKE RELATED TO SAME.

- 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 CONTRACTOR'S PRICE AND IS THE CONTRACTOR'S SOLE RESPONSIBILITY
- 27. 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 PLAN(S) AND DESIGN; AND, FURTHER, THE ENGINEER OF RECORD AND/OR BOHLER ARE NOT RESPONSIBLE FOR ANY FAILURE TO SO MAINTAIN OR PRESERVE SITE AND/OR DESIGN FEATURES 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 BOHLER PARTIES, HARMLESS FOR ALL INJURIES, DAMAGES AND COSTS THAT ENGINEER OF RECORD AND/OR BOHLER INCUR AS A RESULT OF SAID FAILURE OR FAILURE TO PRESERVE.
- 28. 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 MODIFICATIONS AMENDMENTS OR REVISIONS TO SAME
- 29. 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. 30. THE CONTRACTOR AND THE OWNER MUST INSTALL ALL ELEMENTS AND COMPONENTS IN STRICT 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 SEVERALLY INDEMNIFY DEFEND, PROTECT AND HOLD ENGINEER OF RECORD AND/OR BOHLER PARTIES HARMLESS FOR ALL INJURIES.
- AND DAMAGES THAT ENGINEER SUFFERS AND COSTS THAT ENGINEER INCURS AS A RESULT OF SAID FAILURE. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLLITION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS OR LOCAL GOVERNING AGENCY FOR SITES WHERE ONE (1) ACRE OR MORE IS DISTURBED BY CONSTRUCTION ACTIVITIES (UNLESS THE LOCAL JURISDICTION REQUIRES A DIFFERENT 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 ONCE PER WEEK AND AFTER RAINFALL EVENTS) AND CORRECTIVE MEASURES, AS APPROPRIATE AND FURTHER, THE CONTRACTOR IS SOLELY AND COMPLETELY RESPONSIBLE FOR FAILING TO DO SO
- 32. 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 RECORD'S KNOWLEDGE OR BELIEF AND IN ACCORDANCE WITH COMMON AND ACCEPTED PROCEDURE CONSISTENT WITH THE APPLICABLE STANDARDS OF PRACTICE, AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE OF ANY NATURE OR TYPE, EITHER EXPRESSED OR IMPLIED, UNDER ANY CIRCUMSTANCES.

SITE LAYOUT NOTES

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.

- PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL FROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY, AS INDICATED ON THE APPROVED SOIL EROSION AND SEDIMENT CONTROL PLAN AND IN ACCORDANCE WITH APPLICABLE AND/OR APPROPRIATE AGENCIES' GUIDELINES O 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) AND ANY APPLICABLE STATE OR LOCALLY APPROVED SUPPLEMENTS. 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 IS SOLELY RESPONSIBLE FOR FIELD-VERIFYING THEIR LOCATION. 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 DIMENSION IS TO A PROPERTY LINE, STAKE OUT OF LOCATIONS OF INLETS, LIGHT POLES, ETC. MUST BE PERFORMED IN STRICT ACCORDANCE WITH THE DETAILS, UNLESS NOTED CLEARLY OTHERWISE.

GRADING NOTES

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. 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
- REFERENCED, THE CONTRACTOR MUST HAVE A GEOTECHNICAL ENGINEER PROVIDE WRITTEN SPECIFICATIONS AND RECOMMENDATIONS 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
- MATERIAL SOURCES AND DISPOSAL FACILITIES. THE CONTRACTOR MUST SUPPLY A COPY OF APPROVALS TO 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 PRIOR TO COMMENCING ANY CONSTRUCTION. SHOULD DISCREPANCIES BETWEEN THE PLANS AND INFORMATION

OBTAINED THROUGH FIELD VERIFICATIONS BE IDENTIFIED OR EXIST, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE

- ENGINEER OF RECORD IN WRITING THE CONTRACTOR IS RESPONSIBLE 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 WORK IS PERFORMED. THIS REPORT MUST VERIFY THAT ALL FILLED AREAS AND SUBGRADE AREAS WITHIN THE BUILDING PAD 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 WHICH ARE IN EFFECT AND WHICH ARE APPLICABLE TO THE PROJECT. SUBBASE MATERIAL FOR SIDEWALKS, CURB, OR ASPHALT MUST BE FREE OF ORGANICS AND OTHER UNSUITABLE MATERIALS. SHOULD SUBBASE BE DEEMED 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 INCLUDING. BUT NOT LIMITED TO, EXCAVATION, BACKFILL, AND COMPACTING MUST COMPLY WITH THE RECOMMENDATIONS 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
- (LATEST EDITION) AND ANY AMENDMENTS OR REVISIONS THERETO. 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. IN THE EVENT OF A DISCREPANCY(IES) AND/OR A CONFLICT(S) BETWEEN PLANS, OR RELATIVE TO OTHER PLANS, THE GRADING
- PLAN TAKES PRECEDENCE AND CONTROLS. THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD. IN WRITING, OF ANY DISCREPANCY(IES) AND/OR CONFLICT(S).
- 8. THE CONTRACTOR IS RESPONSIBLE TO IMPORT FILL OR EXPORT EXCESS MATERIAL AS NECESSARY TO CONFORM TO THE PROPOSED GRADING, AND TO BACKFILL EXCAVATIONS FOR THE INSTALLATION OF UNDERGROUND IMPROVEMENTS.

ACCESSIBILITY DESIGN GUIDELINES

(Rev. 1/2020)

(Rev.1/2020)

- 1. 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 ALL DOCUMENTS 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 PUBLIC 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
- A. ACCESSIBLE PARKING SPACES AND ACCESS AISLES SLOPES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION. B. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCHES MINIMUM WIDTH (48-INCHES PREFERRED), OR AS SPECIFIED BY THE GOVERNING AGENCY. UNOBSTRUCTED WIDTH OF TRAVEL (CAR OVERHANGS AND/OR HANDRAILS) MUST NOT REDUCE THIS MINIMUM WIDTH. THE SLOPE MUST NOT EXCEED 1:20 (5.0%) IN THE DIRECTION OF TRAVEL AND MUST NOT EXCEED 1:50 (2.0%) 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 1/2-INCH ARE PERMITTED ONLY IF THEY INCLUDES A 1/4-INCH BEVEL AT A SLOPE NOT STEEPER
- THAN 1:2. NO VERTICAL CHANGES OVER 1/4-INCH ARE PERMITTED. ACCESSIBLE RAMPS 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 HAVE A CLEAR LANDING OF A MINIMUM OF 60-INCHES BY 60-INCHES. HAND RAILS ON BOTH SIDES OF THE RAMP MUST BE PROVIDED ON AN ACCESSIBLE RAMP WITH A RISE GREATER THAN 6-INCHES.
- D. ACCESSIBLE CURB RAMPS MUST NOT EXCEED A SLOPE OF 1:12 (8.3%). WHERE FLARED SIDES ARE PROVIDED, THEY MUST NOT EXCEED 1:10 (10%) SLOPE. <u>LEVEL LANDI</u>NG MUST BE PROVIDED AT RAMPS TOP AT A MINIMUM OF 36-INCHES LONG (48-INCHES PREFERRED). IN ALTERATIONS, WHEN THERE IS NO LANDING AT THE TOP, <u>FLARE SIDES</u> 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 F TRAVEL. THIS LANDING MUST BE SLOPED AWAY FROM THE DOOR NO MORE THAN 1:50 (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 FOR ALTERNATIVE DOORWAY OPENING CONDITIONS. (SEE ICC/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 STEEPER RAMP SLOPES, IN RARE CIRCUMSTANCES. THE CONTRACTOR MUST 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 FREE REGULATIONS AND THE ACCESSIBLE GUIDELINES.
- G. THE CONTRACTOR MUST VERIFY ALL OF THE SLOPES OF THE CONTRACTOR'S FORMS PRIOR TO POURING CONCRETE. IF ANY NON-CONFORMANCE 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 AND/OR REPLACE NON-CONFORMING CONCRETE AND/OR PAVEMENT SURFACES.
- 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.

DEMOLITION NOTES

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 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 OBTAIN ALL APPLICABLE PERMITS FROM THE APPROPRIATE GOVERNMENTAL AUTHORITY(IES) PRIOR TO THE COMMENCEMENT OF ANY ROAD OPENING OR DEMOLITION ACTIVITIES IN OR ADJACENT TO THE RIGHT-OF-WAY
- WHEN 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 THE DEMOLITION (AND/OR REMOVALS) PLAN 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 ACTIVITIES ALL INCIDENTAL WORK NECESSARY FOR THE CONSTRUCTION OF THE 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 TO BE USED MUST BE IN STRICT ACCORDANCE AND 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 THE CONTRACTOR MUST PROVIDE ALL "METHODS 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 TO REMAIN. CONTRACTOR MUST USE NEW MATERIAL FOR ALL REPAIRS. CONTRACTOR'S REPAIRS MUST INCLUDE THE RESTORATION OF ALL ITEMS AND FEATURES REPAIRED TO THEIR PRE-DEMOLITION CONDITION, OR BETTER.
- CONTRACTOR MUST PERFORM ALL REPAIRS AT THE CONTRACTOR'S SOLE EXPENSE 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 OSHA REQUIREMENTS, TO ENSURE PUBLIC AND CONTRACTOR SAFETY AND SAFETY TO ALL PROPERTY ON THE SITE
- OR ADJACENT OR NEAR TO THE SAME THE CONTRACTOR IS RESPONSIBLE FOR JOB SITE SAFETY, WHICH MUST INCLUDE, BUT IS NOT LIMITED TO, THE INSTALLATION AND MAINTENANCE OF BARRIERS, FENCING, OTHER APPROPRIATE AND/OR NECESSARY SAFETY 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
- 8. 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. ALL CONCERNS OR QUESTIONS REGARDING THE APPLICABLE SAFETY STANDARDS. AND/OR THE SAFETY OF 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 RESPONDED TO, BY THE ENGINEER OF RECORD AND/OR BY BOHLER. IN WRITING, ALL DEMOLITION ACTIVITIES MUST 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
- 9. 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 EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED, REMOVED AND/OR ABANDONED IN ACCORDANCE WITH THE JURISDICTION AND UTILITY COMPANY REQUIREMENTS AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES LAWS ORDINANCES AND CODES
- 10. PRIOR TO COMMENCING ANY DEMOLITION. THE CONTRACTOR MUST: A. OBTAIN ALL REQUIRED PERMITS AND MAINTAIN THE SAME ON SITE FOR REVIEW BY THE ENGINEER AND ALL PUBLIC AGENCIES WITH JURISDICTION THROUGHOUT THE DURATION OF THE PROJECT, SITE WORK, AND DEMOLITION
- B. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION, AT LEAST 72 BUSINESS HOURS PRIOR TO THE COMMENCEMENT OF WORK. C. INSTALL THE REQUIRED SOIL EROSION AND SEDIMENT CONTROL MEASURES PRIOR TO SITE DISTURBANCE, AND
- MAINTAIN SAID CONTROLS UNTIL SITE IS STABILIZED D. IN ACCORDANCE WITH STATE LAW, THE CONTRACTOR MUST CALL THE STATE ONE-CALL DAMAGE PROTECTION SYSTEM FOR UTILITY MARK OUT, IN ADVANCE OF ANY EXCAVATION.
- 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 LIMITS OF PROJECT ACTIVITIES. THE CONTRACTOR MUST USE AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL UNDERGROUND UTILITIES.
- F. PROTECT AND MAINTAIN IN OPERATION, ALL ACTIVE UTILITIES AND SYSTEMS THAT ARE NOT BEING REMOVED DURING ANY DEMOLITION ACTIVITIES. 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 ARANDONMENT. THE CONTRACTOR MUST PROVIDE THE LITH ITY ENGINEER AND OWNER WITH IMMEDIATE WRITTEN NOTIFICATION THAT THE EXISTING UTILITIES AND SERVICES HAVE BEEN TERMINATED AND ABANDONED IN ACCORDANCE WITH JURISDICTIONAL AND UTILITY COMPANY REQUIREMENTS.
- H. ARRANGE FOR AND COORDINATE WITH THE APPLICABLE UTILITY SERVICE PROVIDER(S) REGARDING WORKING "OFF-PEAK" HOURS OR ON WEEKENDS AS NECESSARY OR AS REQUIRED TO MINIMIZE THE 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
- IN THE EVENT 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 MATERIALS TO PURSUE PROPER AND COMPLIANT REMOVAL OF SAME
- 11. 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 REQUIREMENTS. PRIOR TO THE COMMENCEMENT OF DEMOLITION ON SITE AND MUST PERFORM ALL AGENCY NOTIFICATIONS AS REQUIRED. AT THE CONTRACTOR'S SOLE EXPENSE
- 12. 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 STRICT ACCORDANCE AND CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS, OR PURSUANT TO THE
- WRITTEN DIRECTION OF THE OWNER'S STRUCTURAL OR GEOTECHNICAL ENGINEER. 13. DEMOLITION ACTIVITIES AND EQUIPMENT MUST NOT USE OR INCLUDE AREAS OUTSIDE THE DEFINED PROJECT LIMIT LINE, WITHOUT SPECIFIC WRITTEN PERMISSION AND AUTHORITY OF AND FROM THE OWNER AND ALL GOVERNMENTAL AGENCIES WITH JURISDICTION
- 14. 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 SUPPORT ALL NEW IMPROVEMENTS AND MUST BE PERFORMED IN COMPLIANCE WITH THE RECOMMENDATIONS. 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 SURFACES MUST BE GRADED TO PROMOTE POSITIVE DRAINAGE. THE CONTRACTOR IS RESPONSIBLE FOR COMPACTION TESTING AND MUST SUBMIT SUCH REPORTS AND RESULTS TO THE ENGINEER OF RECORD AND THE
- 15. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE, NECESSARY AND REQUIRED GOVERNMENTAL AUTHORITIES. PRIOR TO COMMENCING ANY EXPLOSIVE PROGRAM AND/OR ANY DEMOLITION ACTIVITIES, THE CONTRACTOR MUST ENSURE AND OVERSEE THE INSTALLATION OF ALL OF 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 SEISMIC
- VIBRATION TESTING THAT IS REQUIRED TO MONITOR THE EFFECTS ON ALL LOCAL STRUCTURES AND THE 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 COMPLETE, THE CONTRACTOR MUST CLEAN ALL ADJACENT STRUCTURES AND IMPROVEMENTS TO REMOVE ALL 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. 17. PAVEMENT MUST BE SAW CUT IN STRAIGHT LINES, AND EXCEPT FOR EDGE OF BUTT JOINTS, 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. 18. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES THAT ARE CAPPED, ABANDONED IN PLACE, OR RELOCATED DUE TO DEMOLITION ACTIVITIES. THIS RECORD DOCUMENT MUST BE PREPARED IN A NEAT AND WORKMAN-LIKE MANNER AND TURNED OVER TO THE OWNER/DEVELOPER UPON COMPLETION OF THE WORK, ALL OF WHICH IS AT THE CONTRACTOR'S SOLE COST.
- 19. 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 CONSTRUCTION IN THE AREA AROUND THE TANK WHICH EMPTYING, CLEANING AND REMOVAL ARE AT THE CONTRACTOR'S SOLE COST.

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

LIGHTING NOTES

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 LIGHTING CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE PLANS,

INCLUDING BUT NOT LIMITED TO GENERAL NOTES, GRADING AND UTILITY NOTES, SITE SAFETY, AND ALL AGENCY AND

(Rev. 1/2020)

- GOVERNMENTAL REGULATIONS. 3. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER. ACTUAL SUSTAINED SITE ILLUMINATION LEVELS AND PERFORMANCE OF LUMINAIRES MAY VARY DUE TO VARIATIONS IN WEATHER, ELECTRICAL VOLTAGE, TOLERANCE IN LAMPS, THE SERVICE LIFE OF EQUIPMENT AND
- LUMINAIRES AND OTHER RELATED VARIABLE FIELD CONDITIONS. 4. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN 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. THIS WORK SHOULD INCLUDE, BUT IS NOT LIMITED TO, VISUAL OBSERVATION, CLEANING OF LENSES, AND

RE-LAMPING 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 OWNER'S ACCEPTANCE OF THE WORK, THE ABOVE RESPONSIBILITIES BECOMES SOLELY THE OWNER'S. 6. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES. POWER SYSTEM. CONDUITS. WIRING AND OTHER ELECTRICAL COMPONENTS ARE SOLELY THE ARCHITECT'S, MECHANICAL ENGINEER'S AND/OR LIGHTING CONTRACTOR'S RESPONSIBILITY. AS INDICATED IN THE CONSTRUCTION CONTRACT DOCUMENTS. THE LIGHTING CONTRACTOR MUST COORDINATE WITH THE PROJECT ARCHITECT AND/OR ELECTRICAL ENGINEER REGARDING ANY AND ALL POWER SOURCES AND TIMING DEVICES NECESSARY TO MEET THE DESIGN INTENT. THESE ITEMS MUST BE INSTALLED AS REQUIRED BY STATE AND LOCAL REGULATIONS. CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING
- THE CONTRACTOR MUST BRING IMMEDIATELY, IN WRITING, ANY LIGHT LOCATIONS THAT CONFLICT WITH DRAINAGE, UTILITIES, OR OTHER STRUCTURE(S) TO THE ENGINEER OF RECORD'S ATTENTION, PRIOR TO THE COMMENCEMENT OF 8. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND OR ROTATED OPTICS ARE INSTALLED AS INDICATED

FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES.

ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED.

SOIL EROSION & SEDIMENT CONTROL PLAN NOTES (Rev. 1/2020)

- 1. 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.
- 2. EROSION CONTROL MEASURES MUST CONFORM TO THE VIRGINIA 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
- THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY 1.07 ACRES. 4. THE FOLLOWING EROSION CONTROL MEASURES ARE PROPOSED FOR THIS SITE
- A. STABILIZED CONSTRUCTION ENTRANCE/ EXIT A TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/EXIT IS TO BE INSTALLED AT THE DESIGNATED LOCATION SHOWN ON THE PLAN. THIS AREA MUST 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,
- TEMPORARY FILL AND SOIL STOCKPILES. 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
- DISTURBANCE, WHICH MAY BE BEYOND THE LIMITS OF DISTURBED AREA. 5. INSTALLATION OF EROSION CONTROL DEVICES MUST BE IN ACCORDANCE WITH ALL OF THE MANUFACTURER'S
- RECOMMENDATIONS. 6. THE CONTRACTOR MUST INSPECT EROSION CONTROL MEASURES WEEKLY. THE CONTRACTOR MUST REMOVE ANY SILT DEPOSITS GREATER THAN 6" COLLECTED ON THE FILTER FABRIC AND/OR SILT SOCK BARRIERS AND EXCAVATE AND REMOVE ANY SILT
- FROM DROP INLET PROTECTION. THE CONTRACTOR MUST APPLY TEMPORARY SEED AND MULCH TO ALL DISTURBED AREAS THAT WILL NOT BE BROUGHT TO FINISHED GRADE AND VEGETATED WITHIN 7 DAYS. WHEN AREAS ARE DISTURBED AFTER THE GROWING SEASON, THE

CONTRACTOR MUST STABILIZE SAME WITH GEOTEXTILE FABRIC AND MAINTAIN SAME IN STRICT ACCORDANCE WITH BEST

- MANAGEMENT PRACTICES. 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. THE CONTRACTOR MUST BE RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL FROSION CONTROL MEASURES ON THE SITE
- CONTROL MEASURES MUST BE INCLUDED IN THE BID PRICE FOR THE SITE WORK AND THE CONTRACTOR IS RESPONSIBLE FOR ALL SUCH COSTS 10. THE CONTRACTOR MUST CONTINUE TO MAINTAIN ALL EROSION CONTROL MEASURES UNTIL THE COMPLETION OF CONSTRUCTION

UNTIL PERMANENT PAVING AND TURF/LANDSCAPING IS ESTABLISHED. THE COSTS OF INSTALLING AND MAINTAINING THE EROSIO

AND THE ESTABLISHMENT OF VEGETATION. 11. THE CONTRACTOR MUST REMOVE EROSION CONTROL MEASURES. SILT AND DEBRIS AFTER ESTABLISHING PERMANENT VEGETATION COVER OR OTHER INSTALLING A DIFFERENT, SPECIFIED METHOD OF STABILIZATION.

FACILITIES. MEASURES AND STRUCTURES. ADDITIONAL FACILITIES. MEASURES AND STRUCTURES MUST BE INSTALLED WHERE

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. 13. THE CONTRACTOR MUST PROTECT ALL EXISTING TREES AND SHRUBS. THE CONTRACTOR MUST REFER TO THE LANDSCAPE

12 THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL

- AND/OR DEMOLITION PLAN(S) FOR TREE PROTECTION, FENCE LOCATIONS AND DETAILS. 14. THE CONTRACTOR MUST REFER TO GRADING PLANS FOR ADDITIONAL INFORMATION.
- 15. THE CONTRACTOR MUST CLEAN EXISTING AND PROPOSED DRAINAGE STRUCTURES AND INTERCONNECTING PIPES ON OR OFF-SITE AS THE JURISDICTIONAL AGENCY REQUIRES. BOTH AT THE TIME OF SITE STABILIZATION AND AT END OF PROJECT. 16. 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 THE CONTRACTOR MUST IDENTIFY, ON THE PLAN, THE LOCATION OF WASTE CONTAINERS, FUEL STORAGE TANKS, CONCRETE WASHOUT AREAS AND ANY OTHER LOCATIONS WHERE HAZARDOUS MATERIALS ARE STORED.

DRAINAGE AND UTILITY NOTES

- 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. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE <u>APPROXIMATE</u>, AND THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY CONSTRUCTION OR EXCAVATION. THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM ALL SANITARY CONNECTION POINTS AND ALL OTHER UTILITY SERVICE CONNECTION POINTS IN THE FIELD. PRIOR TO COMMENCING ANY CONSTRUCTION. THE
- CONTRACTOR MUST REPORT ALL DISCREPANCIES. ERRORS AND OMISSIONS IN WRITING. TO THE ENGINEER OF RECORD. THE CONTRACTOR MUST VERTICALLY AND HORIZONTALLY LOCATE ALL UTILITIES AND SERVICES INCLUDING, BUT NOT LIMITED TO, GAS, WATER, ELECTRIC, SANITARY AND STORM, TELEPHONE, CABLE, FIBER OPTIC CABLE, ETC. WITHIN THE LIMITS OF DISTURBANCE OR WORK SPACE, WHICHEVER IS GREATER, THE CONTRACTOR MUST USE, REFER TO, AND COMPLY WITH THE REQUIREMENTS OF THE APPLICABLE UTILITY NOTIFICATION SYSTEM TO LOCATE ALL OF THE UNDERGROUND UTILITIES. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION, AT NO COST TO THE OWNER AND AT CONTRACTOR'S SOLE COST AND EXPENSE. THE CONTRACTOR MUST
- BEAR ALL COSTS ASSOCIATED WITH DAMAGE TO ANY EXISTING UTILITIES WHICH OCCURS DURING CONSTRUCTION. THE CONTRACTOR MUST FIELD VERIFY THE PROPOSED INTERFACE POINTS (CROSSINGS) WITH EXISTING UNDERGROUND UTILITIES BY USING A TEST PIT TO CONFIRM EXACT DEPTH, PRIOR TO COMMENCEMENT OF CONSTRUCTION. STORMWATER ROOF DRAIN LOCATIONS ARE BASED ON ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR
- VERIFYING LOCATIONS OF SAME BASED UPON FINAL ARCHITECTURAL PLANS. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, GREASE TRAP REQUIREMENTS AND DETAILS, DOOR ACCESS, AND EXTERIOR GRADING. THE ARCHITECT WILL DETERMINE THE UTILITY SERVICE SIZES. THE CONTRACTOR MUST COORDINATE INSTALLATION OF UTILITY SERVICES WITH THE INDIVIDUAL COMPANIES, TO AVOID CONFLICTS AND TO ENSURE THAT PROPER DEPTHS ARE ACHIEVED. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS OF THE APPLICABLE JURISDICTION AND REGULATORY AGENCIES AND ALL OTHER APPLICABLE REQUIREMENTS, RULES, STATUTES, LAWS, ORDINANCES AND CODES AND, FURTHER, IS RESPONSIBLE FOR COORDINATING THE UTILITY TIE-INS/CONNECTIONS PRIOR TO CONNECTING TO THE EXISTING UTILITY/SERVICE. WHERE A CONFLICT(S) EXISTS BETWEEN THESE DOCUMENTS AND THE ARCHITECTURAL PLANS OR WHERE ARCHITECTURAL PLAN UTILITY CONNECTION
- CONSTRUCTION, MUST RESOLVE SAME ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT AND THE CONTRACTOR MUST COORDINATE SAME WITH THE APPLICABLE UTILITY COMPANY SPECIFICATIONS. WHEN THE PROJECT DOES NOT HAVE GEOTECHNICAL RECOMMENDATIONS FILL AND COMPACTION MUST, AT A MINIMUM, COMPLY WITH THE STATE DOT REQUIREMENTS AND SPECIFICATIONS AND

POINTS DIFFER, THE CONTRACTOR MUST IMMEDIATELY NOTIFY THE ENGINEER OF RECORD, IN WRITING, AND PRIOR TO

- CONSULTANT HAS NO LIABILITY OR RESPONSIBILITY FOR OR AS RELATED TO FILL, COMPACTION AND BACKFILL. 8 DURING THE INSTALLATION OF SANITARY STORM AND ALL UTILITIES. THE CONTRACTOR MUST MAINTAIN A CONTEMPORANEOUS AND THOROUGH RECORD OF CONSTRUCTION TO IDENTIFY THE AS-INSTALLED LOCATIONS OF ALL UNDERGROUND INFRASTRUCTURE. THE CONTRACTOR MUST CAREFULLY NOTE ANY INSTALLATIONS THAT DEVIATE, IN ANY RESPECT, FROM THE INFORMATION CONTAINED IN THESE PLANS. THIS RECORD MUST BE KEPT ON A CLEAN COPY OF THE SITE PLAN. WHICH THE CONTRACTOR MUST PROMPTLY PROVIDE TO THE OWNER IMMEDIATELY UPON THE COMPLETION OF WORK. THE CONTRACTOR MUST ENSURE THAT ALL UTILITY TRENCHES LOCATED IN EXISTING PAVED ROADWAYS INCLUDING SANITARY
- WATER AND STORM SYSTEMS, ARE REPAIRED IN ACCORDANCE WITH REFERENCED MUNICIPAL, COUNTY AND OR STATE DOT DETAILS AS APPLICABLE. THE CONTRACTOR MUST COORDINATE INSPECTION AND APPROVAL OF COMPLETED WORK WITH THE AGENCY WITH JURISDICTION OVER SAME. 10. FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/ OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE
- RESPECTIVE UTILITY COMPANY, REGARDLESS OF WHAT THIS PLAN DEPICTS. 11. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY. THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION

REVISIONS DATE COMMENT 05/20/2021 COMMENTS **REV PER TOWN**



NOT APPROVED FOR CONSTRUCTION

IIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGEN

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

VIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCT DOCUMENT UNLESS INDICATED OTHERWISE. PROJECT No.: DRAWN BY:

06/04/2021

CAD I.D.:

CHECKED BY:

PROJECT: PROP. SITE PLAN

DOCUMENTS

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 Phone: (703) 709-9500 Fax: (703) 709-9501

VA@BohlerEng.com

SHEET TITLE:

GENERAL

<u> </u>	FOR ENTIRE PLAN SET		AE	STANDARD BBREVIATIONS
LIMIT OF WORK		LOW——LOW——		OR ENTIRE PLAN SET
LIMIT OF DISTUR	RBANCE ——	LOD	AC	ACRES
EVICTIVO VOTE	TVDION NOTE TO	DD000077	ADA	AMERICANS WITH DISABILITY ACT
EXISTING NOTE	ONSITE PROPERTY	PROPOSED NOTE	ARCH	ARCHITECTURAL
	LINE / R.O.W. LINE NEIGHBORING		ВС	BOTTOM OF CURB
	PROPERTY LINE / INTERIOR PARCEL LINE		BF	BASEMENT FLOOR
	EASEMENT		BK BL	BLOCK BASELINE
	LINE		BLDG	BUILDING
	SETBACK LINE		ВМ	BUILDING BENCHMARK
			BRL CF	BUILDING RESTRICTION LINE CUBIC FEET
	<u></u>	CURR AND CUTTER	CF	CENTERLINE
		CURB AND GUTTER	CMP	CORRUGATED METAL PIPE
	CONCRETE CURB &	SPILL TRANSITION	CONN	CONNECTION
	GUTTER	DEPRESSED CURB AND GUTTER	CONC	CONCRETE CORRUGATED PLASTIC PIPE
_			CY	CUBIC YARDS
	UTILITY POLE WITH LIGHT		DEC	DECORATIVE
	POLE		DEP	DEPRESSED
	LIGHT		DIP	DUCTILE IRON PIPE DOMESTIC
₽ €	TRAFFIC LIGHT		ELEC	ELECTRIC
0	UTILITY POLE	0	ELEV	ELEVATION
	TYPICAL		EP	EDGE OF PAVEMENT
<u> </u>	LIGHT	<u> </u>	ES EW	EDGE OF SHOULDER END WALL
\$	ACORN LIGHT	ф	EX	EXISTING
	TYPICAL SIGN		FES	FLARED END SECTION
\triangle	PARKING	\triangle	FF FH	FINISHED FLOOR
<u>/X\</u>	COUNTS	<u>/X</u> \	FH FG	FIRE HYDRANT FINISHED GRADE
			G	GRADE
<u> </u>	CONTOUR	190	GF	GARAGE FLOOR (AT DOOR)
169	LINE	187	GH 1 GL	GRADE HIGHER SIDE OF WALL GRADE LOWER SIDE OF WALL
TC 516.4 OR 516.4	SPOT ELEVATIONS	TC 516.00 BC 515.55 MATCH EX (518.02 ±)	GRT	GRATE
			GV	GATE VALVE
SAN	CANITADY	SAN	HDPE	HIGH DENSITY POLYETHYLENE PIPE
#	SANITARY LABEL	#	HP	HIGH POINT
X #	STORM LABEL	X #	HOR	HORIZONTAL
	SANITARY SEWER	SL	HW INT	HEADWALL INTERSECTION
	LATERAL		INV	INVERT
W	UNDERGROUND WATER LINE	W	LF	LINEAR FOOT
E	UNDERGROUND ELECTRIC LINE	Е	LOC	LIMITS OF CLEARING
	UNDERGROUND		LOD	LIMITS OF DISTURBANCE LINE OF SIGHT
	GAS LINE		LP	LOW POINT
OH	OVERHEAD WIRE	OH	L/S	LANDSCAPE
	UNDERGROUND	т	MAX	MAXIMUM
	TELEPHONE LINE UNDERGROUND	_	MIN	MANHOLE
	CABLE LINE	C	MJ	MECHANICAL JOINT
= = = = = = = =	STORM SEWER		ОС	ON CENTER
	SANITARY	s	PA PC	POINT OF ANALYSIS POINT CURVATURE
	SEWER MAIN			POINT CORVATORE POINT OF COMPOUND
V	HYDRANT	A	PCCR	CURVATURE, CURB RETURN
(S)	SANITARY MANHOLE	(<u>©</u>)	PI	POINT OF INTERSECTION POINT OF GRADE
	STORM		PROP	PROPOSED
(D)	MANHOLE	(@)	PT	POINT OF TANGENCY
\otimes^{WM}	WATER METER	•	PTCR	POINT OF TANGENCY, CURB RETURN
₩V	WATER	•	PVC	POLYVINYL CHLORIDE PIPE
_	VALVE		PVI	POINT OF VERTICAL INTERSECTION
	GAS VALVE		PVT	POINT OF VERTICAL TANGENCY
\boxtimes	GAS METER	\boxtimes	R	RADIUS
	TYPICAL END		RCP RET WALL	REINFORCED CONCRETE PIPE RETAINING WALL
~ -	SECTION	A B	RET WALL	RIGHT OF WAY
OR	HEADWALL OR ENDWALL	OR .	S	SLOPE
	GRATE		SAN	SANITARY SEWER
	CURB		SF STA	SQUARE FEET STATION
<u> </u>	INLET	<u></u>	STM	STORM
0	CLEAN OUT	0	S/W	SIDEWALK
(E)	ELECTRIC	Ē	TBR	TO BE REMOVED
	MANHOLE		TBRL TC	TO BE RELOCATED TOP OF CURB
7	TELEPHONE MANHOLE	T	TELE	TELEPHONE
EB	ELECTRIC	EB	TPF	TREE PROTECTION FENCE
	BOX	_	TW	TOP OF WALL
		EP	TYP	TYPICAL
EP	PEDESTAL		ı UGi	UNDERGROUND
EP	PEDESTAL		UP	UTILITY POLE
	MONITORING			UTILITY POLE WIDE
EP	1		UP	
	MONITORING		W/L W/M	WIDE WATER LINE WATER METER
	MONITORING WELL TEST		W/L	WIDE WATER LINE

VDOT GENERAL NOTES REVISED: 10/15/2019

- 1. THESE PLANS WERE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF:
- VDOT SECONDARY STREET ACCEPTANCE REQUIREMENTS (SSAR 24VAC-30-92 EFFECTIVE FEBRUARY 1, 2012 AND VDOT ROAD DESIGN MANUAL APPENDIX B1).
- 2. VDOT APPROVED EXCEPTIONS/WAIVERS (MUST BE INCORPORATED IN THE PLAN):
- ACCESS MANAGEMENT DATE OF APPROVAL: N/A
- SSAR- DATE OF APPROVAL: N/A

ROAD OR TO A STUB OUT) N/A

MOST STRINGENT SHALL GOVERN.

- DESIGN WAIVER DATE OF APPROVAL: N/A OTHER N/A DATE OF APPROVAL: N/A
- 3. SSAR CONNECTIVITY SUMMARY (PROVIDE A CHECK MARK V WHERE APPLICABLE OR WRITE N/A):

CONNECTION BEYOND THAT REFERENCED ABOVE. N/A

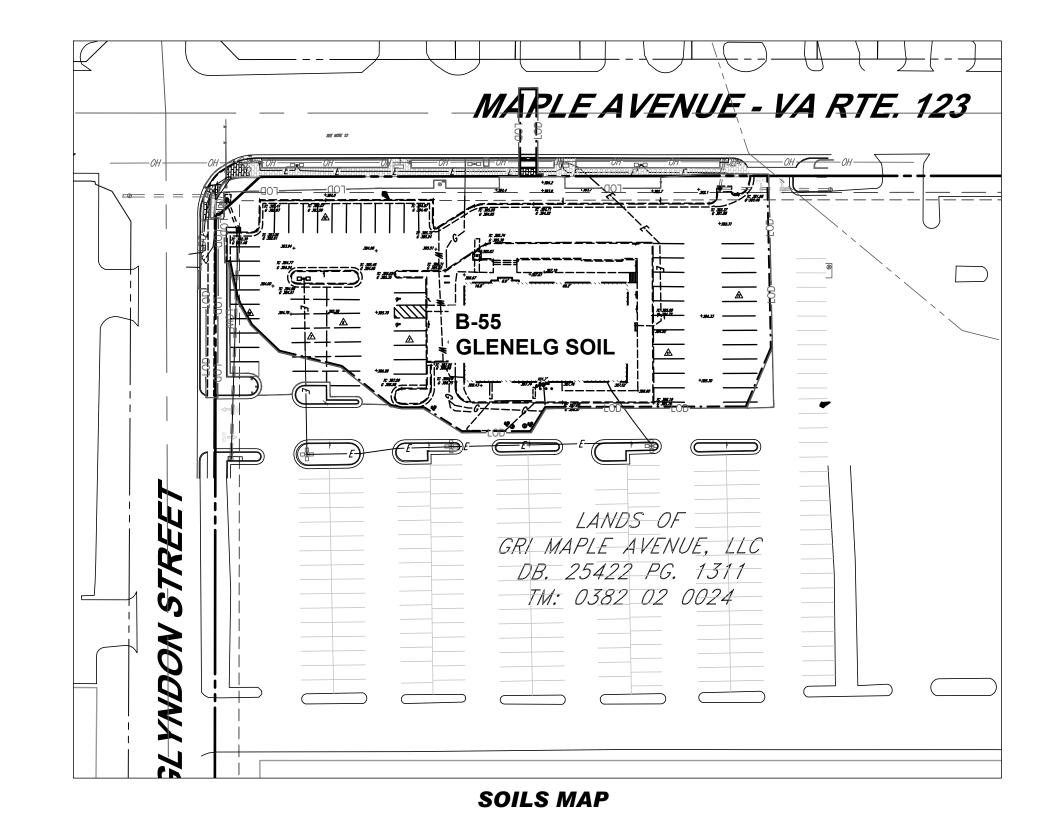
- CONNECTIONS IN MULTIPLE DIRECTIONS (FIRST CONNECTION MUST BE TO A VDOT MAINTAINED ROAD, THE SECOND CONNECTION MAY EITHER BE TO A VDOT
- STUB OUT CONNECTION (THE PROP. RIGHT OF WAY TERMINATES AT PARCEL ABUTTING THE DEVELOPMENT AND CONSISTS OF A SHORT SEGMENT THAT IS
- INTENDED TO SERVE CURRENT AND FUTURE DEVELOPMENT; THE APPLICANT MUST VERIFY THAT CONNECTION WITH A FUTURE STREET IS FEASIBLE) N/A NETWORK ADDITIONS PROVIDING DIRECT ACCESS TO (I) MORE THAN 200 DWELLING UNITS OR (II) LOTS WHOSE TRIP GENERATION IS EXPECTED TO BE OVER
- 4. ALL WORK ON THIS PROJECT SHALL CONFORM TO THE CURRENT EDITIONS OF AND LATEST REVISIONS TO THE VIRGINIA DEPARTMENT OF TRANSPORTATION (VDOT) ROAD AND BRIDGE SPECIFICATIONS AND STANDARDS, THE VIRGINIA EROSION AND SEDIMENT CONTROL REGULATIONS, AND ANY OTHER APPLICABLE STATE, FEDERAL OR LOCAL REGULATIONS. IN CASE OF A DISCREPANCY OR CONFLICT BETWEEN THE STANDARDS OR SPECIFICATIONS AND REGULATIONS, THE

2,000 VPD MAY BE ACCEPTED INTO THE SECONDARY SYSTEM OF STATE HIGHWAYS IF THE NETWORK ADDITION PROVIDES AN ADDITIONAL EXTERNAL

- 5. ALL RIGHT OF WAY DEDICATED TO PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
- 6. ALL UTILITIES, INCLUDING ALL POLES, ARE TO BE RELOCATED AT THE DEVELOPER'S EXPENSE, PRIOR TO CONSTRUCTION.
- 7. THE DEVELOPER IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS AND UTILITIES WHICH OCCUR AS A RESULT OF PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO EXISTING RIGHT OF WAY.
- 8. OPEN CUTTING OF PAVED OR SURFACE TREATED ROADS IS NOT PERMITTED. ALL UTILITIES WHICH WILL BE PLACED UNDER EXISTING STREETS ARE TO BE BORED OR JACKED. ANY EXCEPTIONS, DUE TO EXTENUATING CIRCUMSTANCES, ARE TO BE ADDRESSED AT THE PERMIT STAGE.
- 9. THE PAVEMENT DESIGN IS BASED ON AN ASSUMED CBR VALUE OF 10 (USE A CBR VALUE OF 6 IN LOUDOUN CO.). SOIL TESTS OF SUBGRADE MUST BE SUBMITTED FOR THE ACTUAL DETERMINATION OF THE REQUIRED THICKNESS OF THE PAVEMENT INCLUDING LAYERS OF ASPHALT AND SUBBASE PRIOR TO SUBBASE
- 10. PAVEMENT DESIGN SHALL BE PROVIDED IN ACCORDANCE WITH THE PAVEMENT DESIGN GUIDE FOR SUBDIVISION AND SECONDARY ROADS IN VIRGINIA. FOR PRIMARY ROADS AND INTERSTATE HIGHWAYS WHERE TRUCK TRAFFIC EXCEEDS 5%, PAVEMENT DESIGN SHALL BE PROVIDED IN ACCORDANCE WITH AASHTO GUIDELINES. TYPICAL PAVEMENT SECTIONS SHALL DEPICT THE TOP 6" OF THE SUBGRADE IMMEDIATELY UNDER THE PAVEMENT STRUCTURE COMPACTED TO 100% OF THE THEORETICAL MAXIMUM DRY DENSITY.
- 11. ALL UNTREATED AGGREGATE USED IN BASE OR SUBBASE COURSES SHALL BE 21B, EXCEPT ON ROADS WITH AN ADT OF 1000 VPD OR LESS, WHERE 21A AGGREGATE MAY BE USED. WHEN 21B AGGREGATE IS USED, UD-4 UNDERDRAINS MUST BE PROVIDED.
- 12. A 4" (MIN.) LAYER OF STONE IS REQUIRED BENEATH CURB AND GUTTER (MAY BE SHOWN ON TYPICAL SECTION IN LIEU OF A NOTE).
- 13. THE ENTIRE SURFACE OF THE ROADWAY (OLD AND NEW PORTIONS) SHALL BE OVERLAID AND RE-STRIPED AS REQUIRED BY VDOT PERSONNEL. OVERLAY OF EXISTING PAVEMENT SHALL BE A MINIMUM OF 1.25" DEPTH; ANY COSTS ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE DEVELOPER.
- 14. A SMOOTH GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE EXISTING ROAD TO THE PROPOSED EDGE OF PAVEMENT TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER IN THE ROADWAY.
- 15. ASPHALT PAVEMENT WIDENING SHALL CONFORM TO VDOT STANDARD WP-2.
- 16. ANY TYPE OF REVERSE CURB (SPILL CURB, CG-6R, ETC.) AND TRANSITION TO THESE CURBS SHALL NOT BE USED WITHIN THE PUBLIC RIGHT OF WAY.
- 17. THE COUNTY/TOWN SHALL OBTAIN A PERMIT FOR ALL SIDEWALKS/CROSSWALKS WITHIN THE RIGHT OF WAY THAT DO NOT QUALIFY FOR VDOT MAINTENANCE.
- 18. ADDITIONAL DITCH LININGS OR SILTATION AND EROSION CONTROL MEASURES SHALL BE PROVIDED, AT THE DEVELOPER'S EXPENSE, AS DETERMINED NECESSARY BY VDOT AND/OR THE COUNTY/TOWN DURING FIELD REVIEW. ALL COSTS SHALL BE ASSUMED BY THE DEVELOPER.
- 19. STANDARD GUARDRAILS AND/OR HANDRAILS SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING FIELD REVIEW BY THE COUNTY/TOWN INSPECTOR OR VDOT.
- 20. A LANDSCAPING AND IRRIGATION SYSTEMS PLAN SHALL BE SUBMITTED FOR VDOT APPROVAL PRIOR TO INSTALLING ANY LANDSCAPING AND IRRIGATION SYSTEMS WITHIN THE PUBLIC RIGHT OF WAY.
- 21. FLOWERS, SHRUBS, TREES, AND IRRIGATION SHALL NOT BE PLACED WITHIN STATE MAINTAINED RIGHT OF WAY LIMITS WITHOUT AN APPROVED SET OF PLANS AND AN APPROVED PLANTING AGREEMENT. NO IRRIGATION (SPRINKLER) SYSTEMS, BRICK COLUMNS, END WALLS, AND/OR BRICK MAILBOXES WILL BE CONSTRUCTED OR INSTALLED WITHIN STATE MAINTAINED RIGHT OF WAY LIMITS WITHOUT A PERMIT. ANY OF THE ABOVE ITEMS FOUND IN THE RIGHT OF WAY WITHOUT A PERMIT WILL BE REMOVED, AND ALL COSTS OF THE REMOVAL WILL BE BORNE BY THE OWNER AND/OR DEVELOPER.
- 22. TRAFFIC CONTROL DEVICES OR ADVISORY SIGNS, SUCH AS MULTIWAY STOPS, SPEED LIMITS, WATCH FOR CHILDREN, PEDESTRIAN TRAFFIC ETC., SHALL NOT BE INSTALLED UNLESS SPECIFICALLY APPROVED BY VDOT TRAFFIC ENGINEERING SECTION. SHOULD UNAPPROVED SIGNS BE NOTED AT THE TIME OF VDOT INSPECTION, THE ROAD ACCEPTANCE PROCESS SHALL BE TERMINATED IMMEDIATELY AND NOT RECOMMENCED UNTIL A DETERMINATION IS MADE REGARDING THE APPROVAL OF ANY ADDITIONAL SIGNS. IMMEDIATE REMOVAL OF SUCH SIGNS SHALL NOT NEGATE THE NEED FOR THE SUBMISSION OF A REVISION.
- 23. A SPEED STUDY CERTIFIED BY A PROFESSIONAL ENGINEER SHALL BE SUBMITTED FOR VDOT APPROVAL PRIOR TO THE STREET ACCEPTANCE FOR ANY ROAD TO BE POSTED OTHER THAN THE STATUTORY SPEED LIMIT.
- 24. THE DEVELOPER IS RESPONSIBLE FOR ALL TRAFFIC CONTROL. THE DEVELOPER SHALL SUBMIT A SIGNING, STRIPING AND/OR SIGNALIZATION PLAN TO THE VDOT LAND DEVELOPMENT SECTION PRIOR TO PERMIT APPLICATION. THE DEVELOPER SHALL NOT COMMENCE CONSTRUCTION OF ANY PAVEMENT COURSE WITHOUT
- 25. THE DEVELOPER IS RESPONSIBLE FOR THE DESIGN AND CONSTRUCTION OF ANY TRAFFIC SIGNAL INSTALLATION OR MODIFICATION WHICH WILL BE NECESSARY AS A RESULT OF THE DEVELOPMENT OF THIS SITE.
- 26. DURING CONSTRUCTION, THE MAINTENANCE OF TRAFFIC SHALL CONFORM TO THE REQUIREMENTS IN THE MOST RECENT VERSION OF THE VIRGINIA WORK AREA PROTECTION MANUAL AND THE MUTCD.

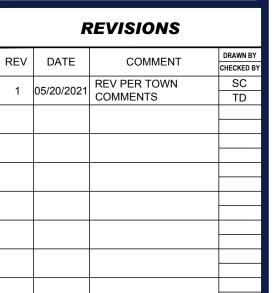
TOWN OF VIENNA GENERAL NOTES

- 1. A PRE-CONSTRUCTION MEETING MUST BE HELD PRIOR TO THE START OF CONSTRUCTION. CALL 703-255-6384 TO SCHEDULE THE PRE-CONSTRUCTION MEETING.
- 2. ALL CONSTRUCTION GENERATED DEBRIS MUST BE HAULED AWAY BY THE CONTRACTOR OR OWNER.
- 3. PRIOR TO THE REMOVAL OF ANY TOWN TREES (TREES WITHIN THE RIGHT OF WAY), THE APPLICANT OR THEIR REPRESENTATIVE SHALL CONTACT THE TOWN OF VIENNA ARBORIST AT 703-255-6360 TO COORDINATE HAVING THE TOWN ARBORIST ONSITE DURING ALL TOWN TREE REMOVAL.
- 4. TREE PROTECTION FOR ANY TOWN TREE, AS SHOWN ON PLAN, MUST BE INSTALLED PRIOR TO ANY SITE WORK.
- 5. IT IS UNLAWFUL TO PERFORM ANY CONSTRUCTION ABOVE FOUNDATION CORNERS PRIOR TO APPROVAL OF SETBACKS. WORK COMPLETED IN VIOLATION OF THIS REQUIREMENT IS SUBJECT TO DEMOLITION.
- 6. ALL DUMPSTERS/PODS ARE TO BE PLACED ON PRIVATE PROPERTY.
- 7. FRONT ELEVATION CHECKS ARE REQUIRED.
- 8. WALL CHECK SURVEYS ARE REQUIRED AND MUST BE SUBMITTED PRIOR TO CONSTRUCTION ABOVE FOUNDATION CORNERS.
- 9. A CERTIFICATE OF OCCUPANCY IS REQUIRED PRIOR TO OCCUPANCY. ALL REQUIRED DOCUMENTATION AND INSPECTIONS MUST BE SUBMITTED/COMPLETED BEFORE THE TOWN OF VIENNA WILL ISSUE A CERTIFICATE OF
- 10. EXISTING SANITARY SEWER LATERALS ARE TYPICALLY CAPPED AT OR NEAR THE PROPERTY LINE. THE REUSE OF THE PORTION OF THE EXISTING SANITARY SEWER LATERAL BETWEEN THE TOWN OWNED SEWER MAIN AND THE CAPPED END MAY BE ALLOWED PROVIDING THAT A LICENSED PLUMBER CERTIFIES THAT THE EXISTING PIECE OF PIPE IS GRADED PROPERLY AND IN LIKE NEW CONDITION. THE REUSE OF A PORTION OF THE EXISTING LATERAL DOES NOT IMPLY THAT THE TOWN IS WARRANTING THE CONDITION IN ANY WAY.



SOIL MAP NOTES:

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





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CONSTRUCTION REVIEW AND APPROVAL. <u>IT IS NOT INTENDED AS A CONSTRUC'</u>

<u>DOCUMENT</u> UNLESS INDICATED OTHERWISE.

PROJECT No.: DRAWN BY: CHECKED BY: 06/04/2021 CAD I.D.:

PROJECT:

PROP. SITE PLAN

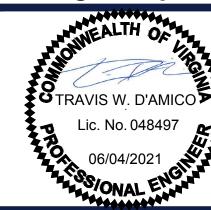
DOCUMENTS



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 Phone: (703) 709-9500 Fax: (703) 709-9501 VA@BohlerEng.com



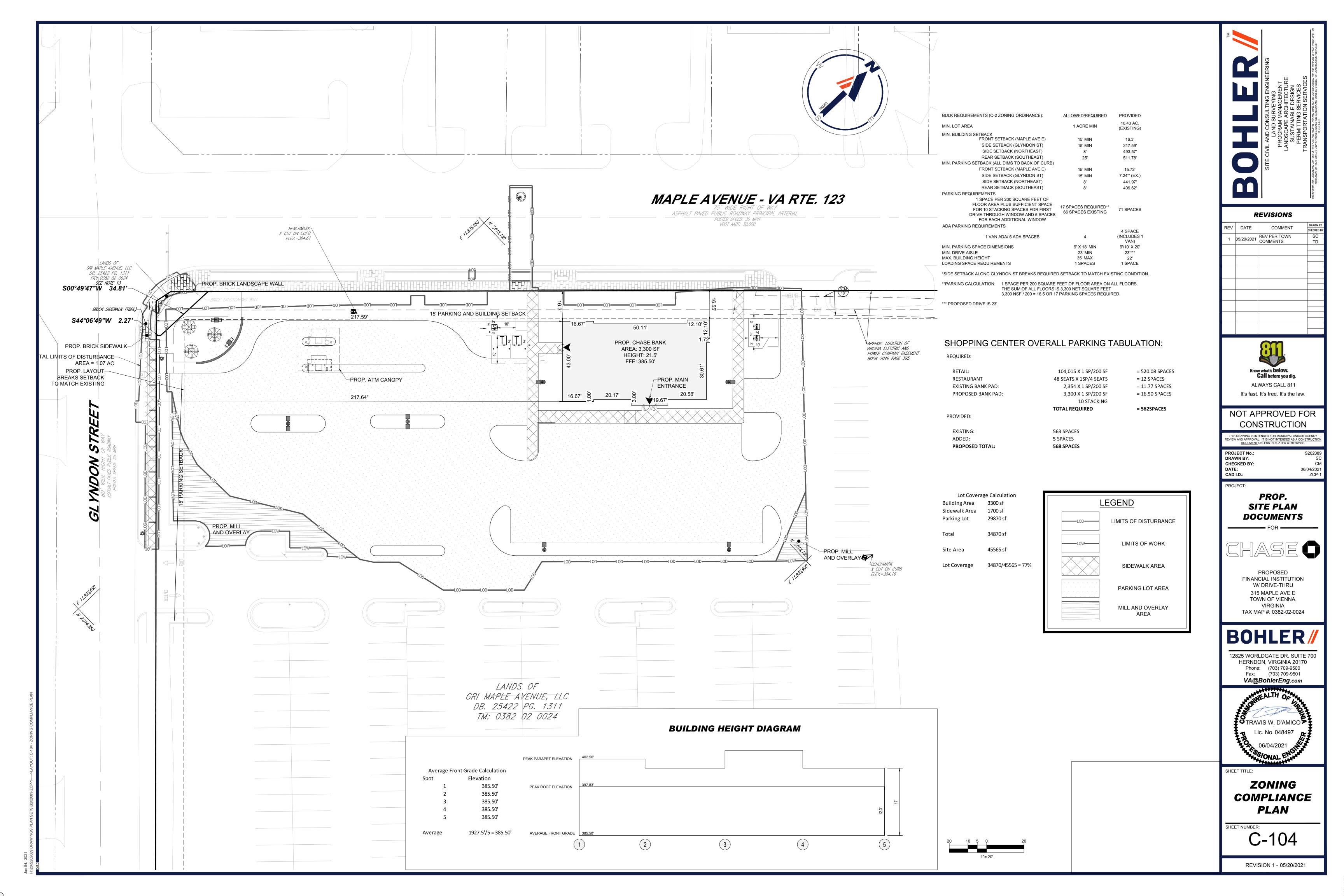
SHEET TITLE:

GENERAL NOTES & LEGEND

REVISION 1 - 05/20/2021

PROPOSED EASEMENT LEGEND

SI	 SIGHT DISTANCE
STM	 STORM DRAIN
SS	 SANITARY SEWER
WDIM	 WATER
PA	 PUBLIC ACCESS
CSE DIM	 COMMON SHARED
IE DIM	 INGRESS-EGRESS
PU	 PUBLIC UTILITY
VAR	 VARIABLE WIDTH S







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CONSTRUCTION

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PROP. SITE PLAN **DOCUMENTS**

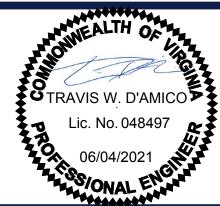
PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA, VIRGINIA

BOHLER

TAX MAP #: 0382-02-0024

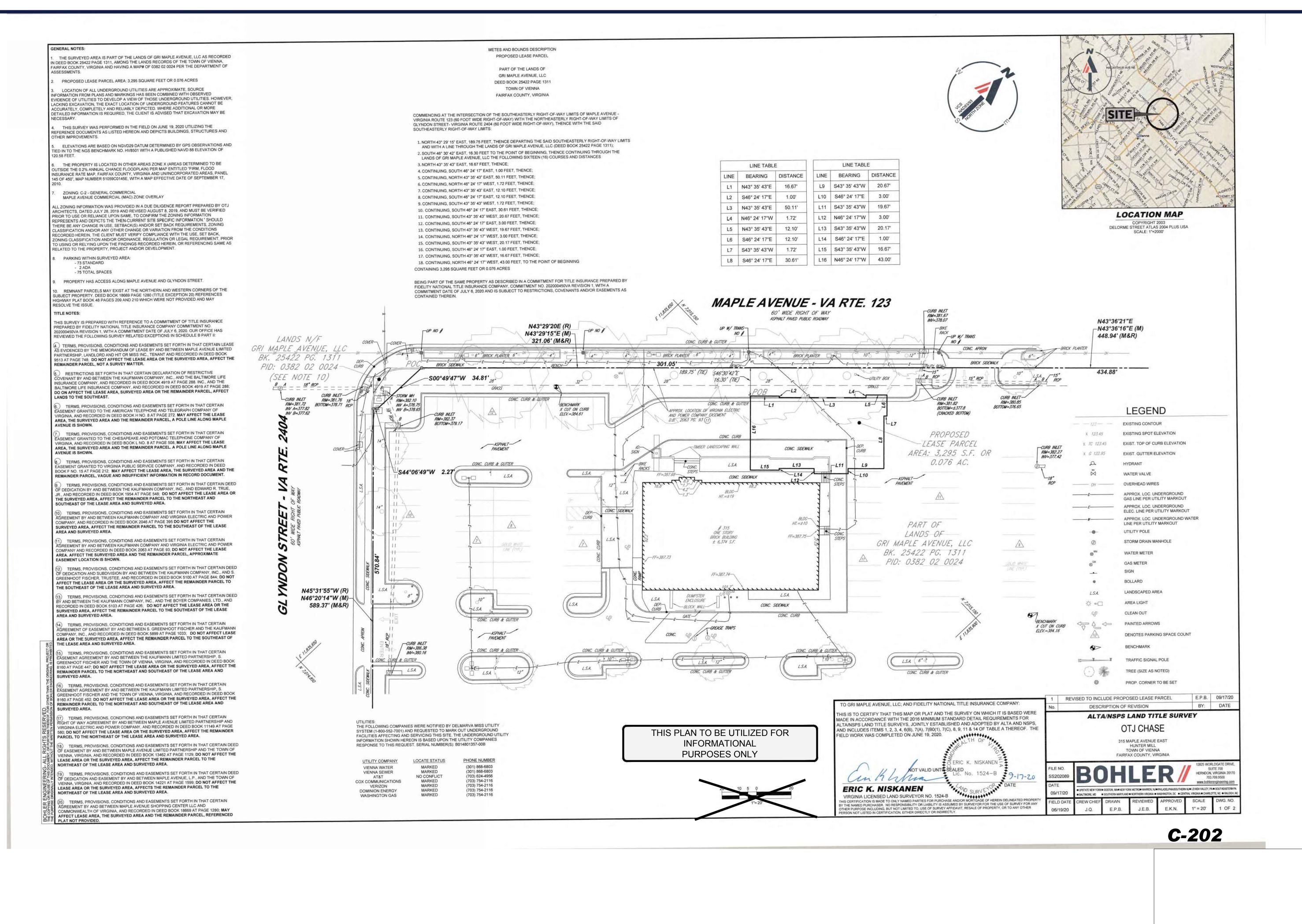
12825 WORLDGATE DR. SUITE 700 HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
Fax: (703) 709-9501

VA@BohlerEng.com



PROPERTY MAP

C-201



IL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
ANDSCAPE ARCHITECTURE

SITE CIVIL AND CONSU-LAND SUF PROGRAM MA LANDSCAPE AF SUSTAINAB

REVISIONS

REV DATE COMMENT DICH CHAPTER TOWN COMMENTS

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PROJECT No.: S202089
DRAWN BY: SC
CHECKED BY: CM

06/04/2021

CAD I.D.:

PROJECT:

PROP.
SITE PLAN

DOCUMENTS

HASE

PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA.

BOHLER/

VIRGINIA

TAX MAP #: 0382-02-0024

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

TRAVIS W. D'AMICO
Lic. No. 048497

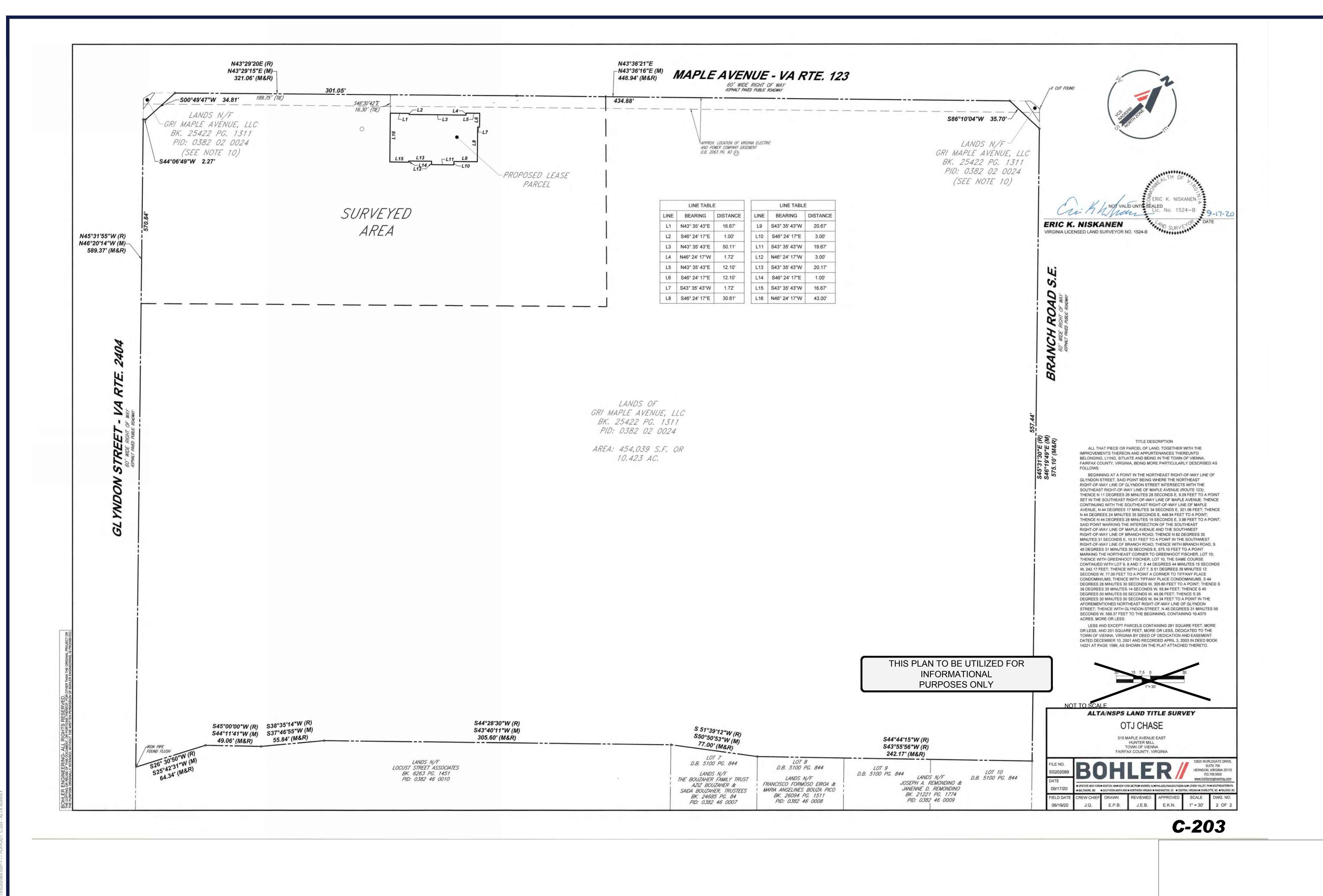
06/04/2021

SHEET TITLE:

ALTA SURVEY

ET NUMBER:

C-202



REVISIONS

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PROJECT No.: DRAWN BY: CHECKED BY:

DATE: CAD I.D.:

PROJECT:

PROP. SITE PLAN

06/04/2021

DOCUMENTS

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

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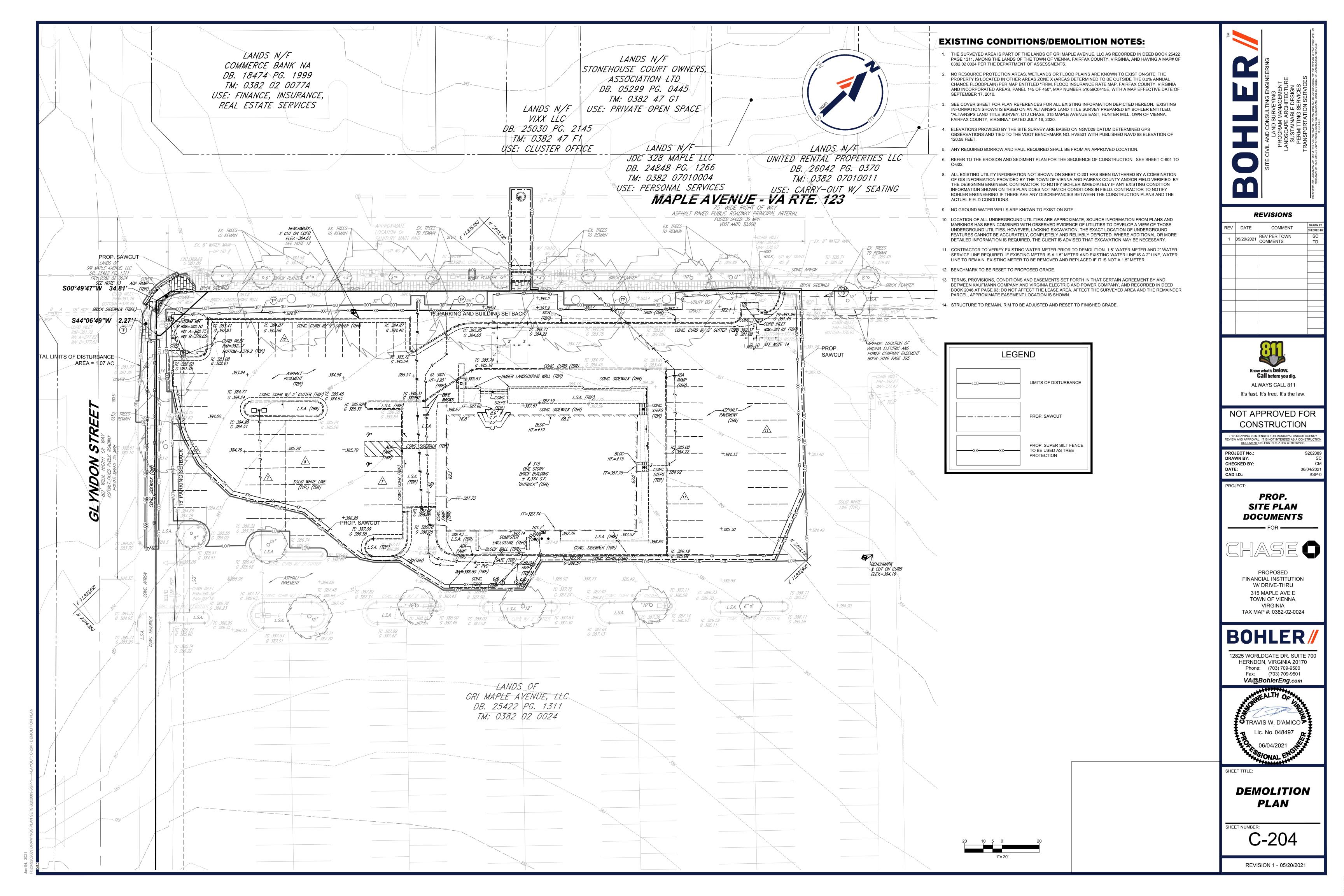
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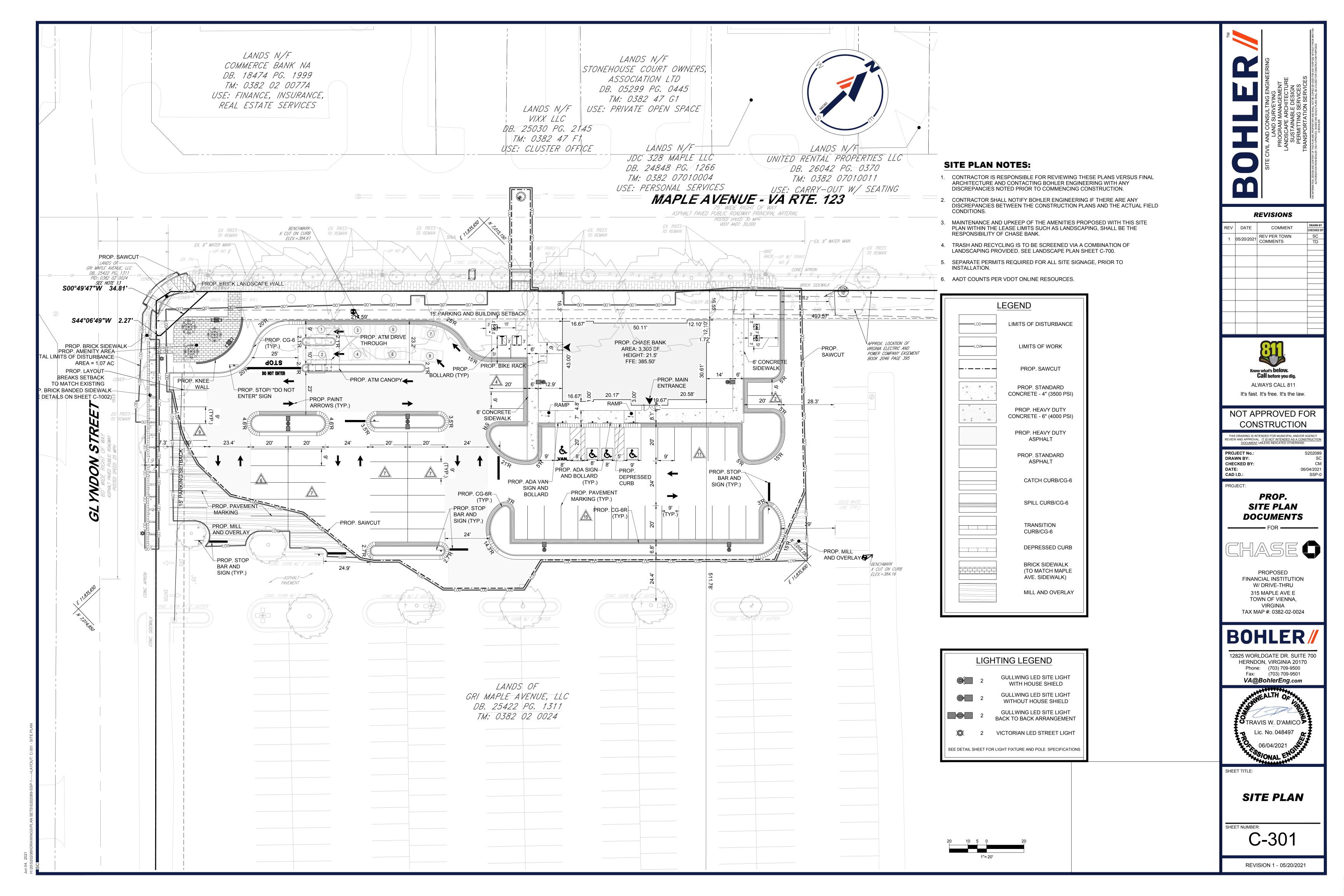
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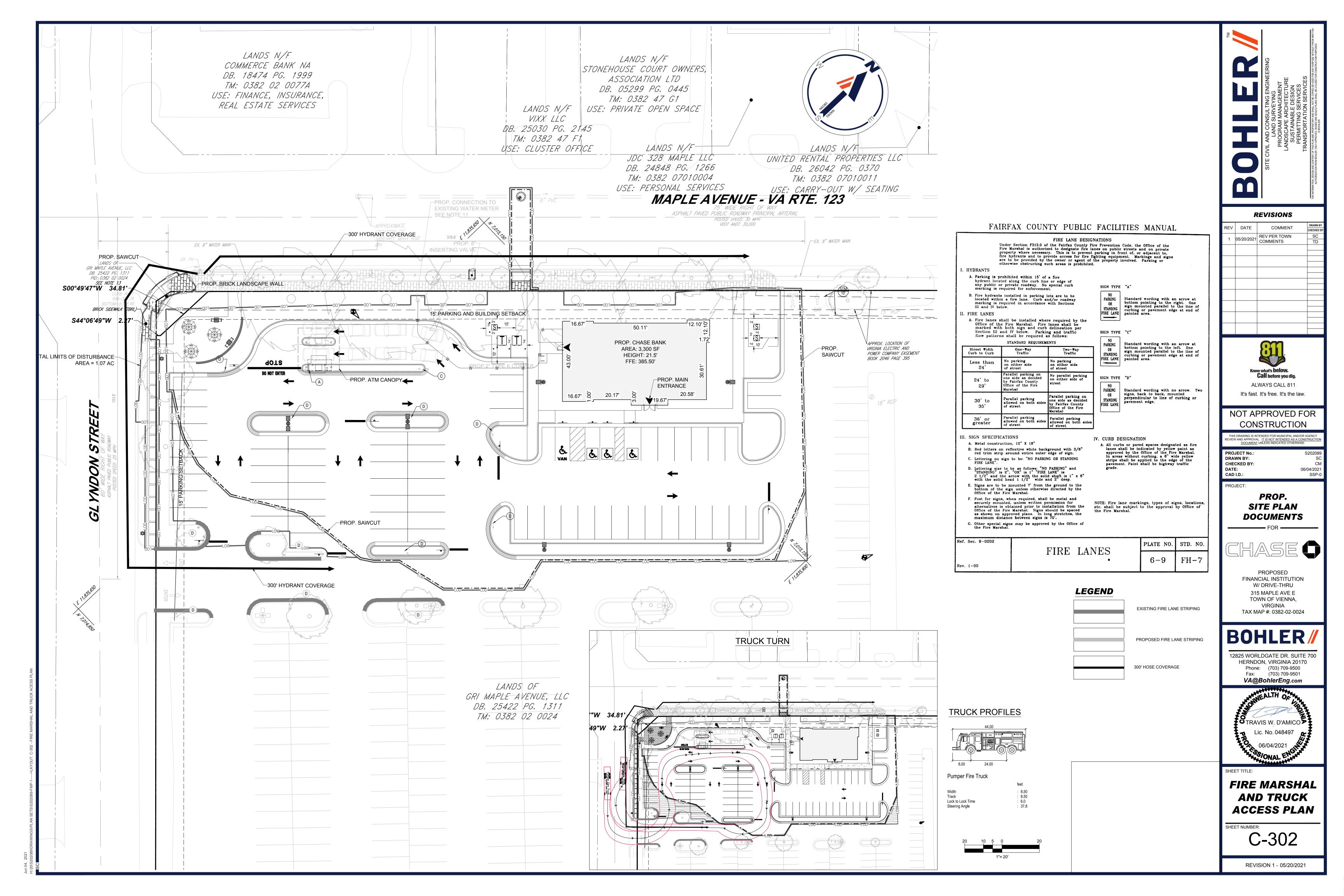
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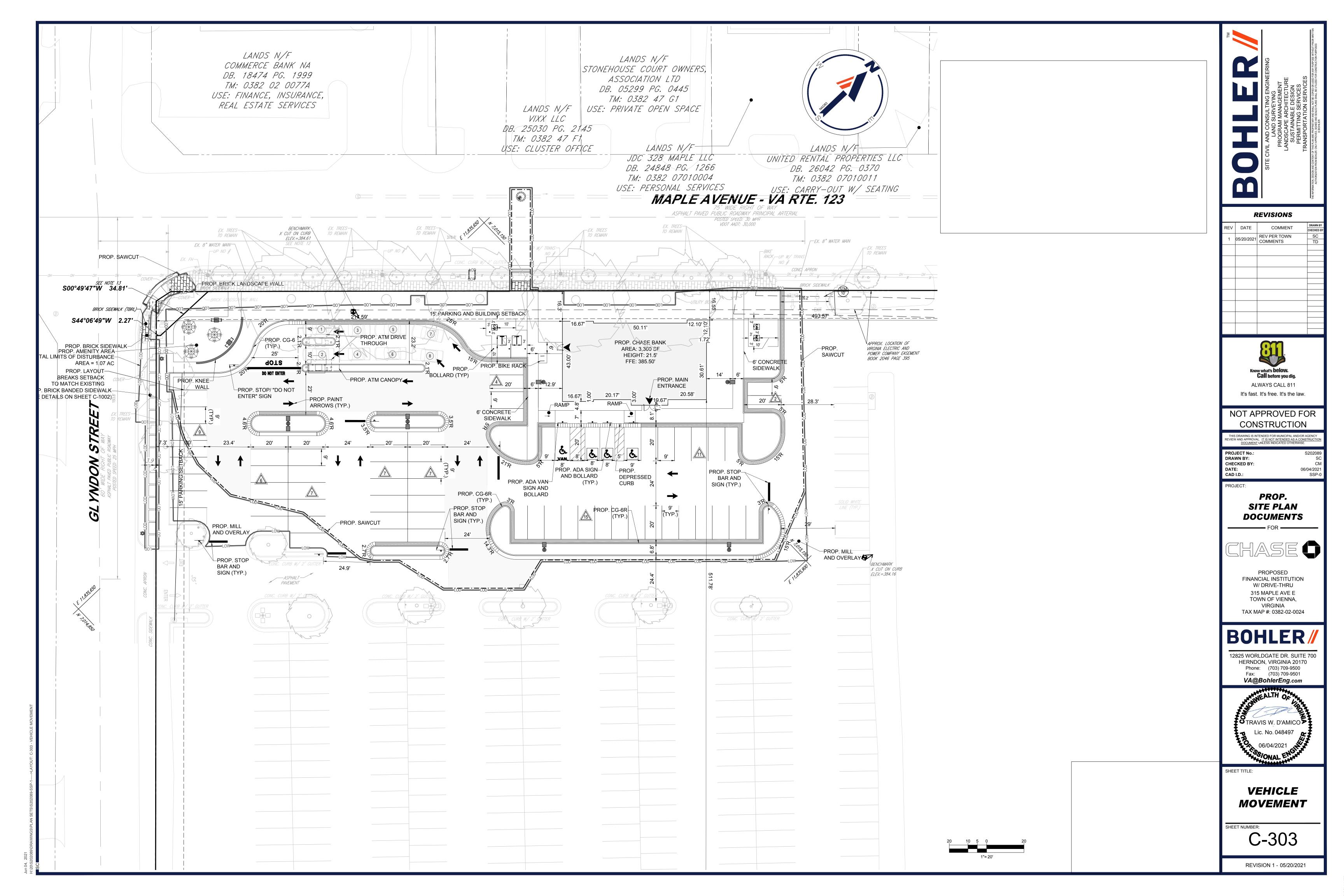
ALTA SURVEY

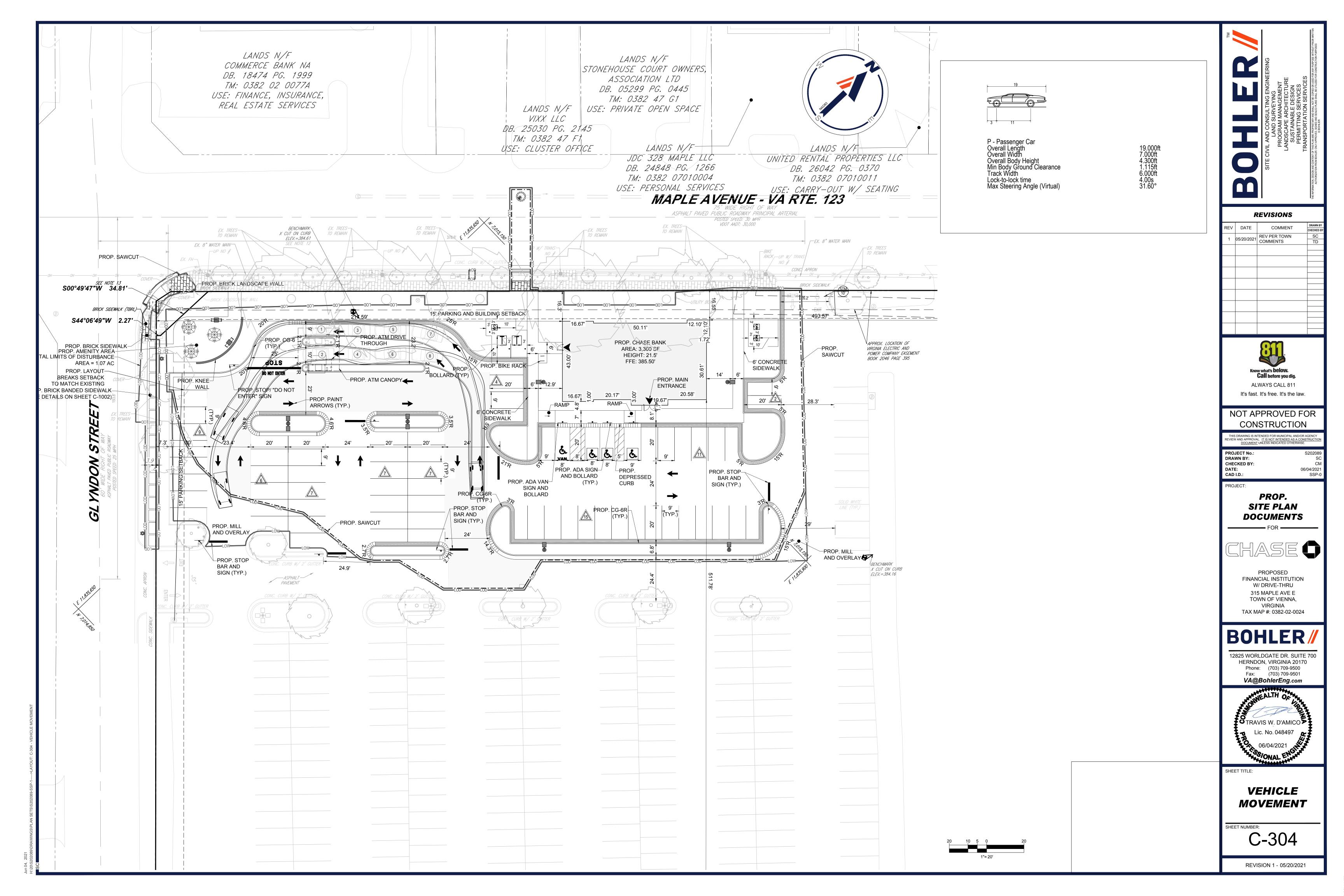
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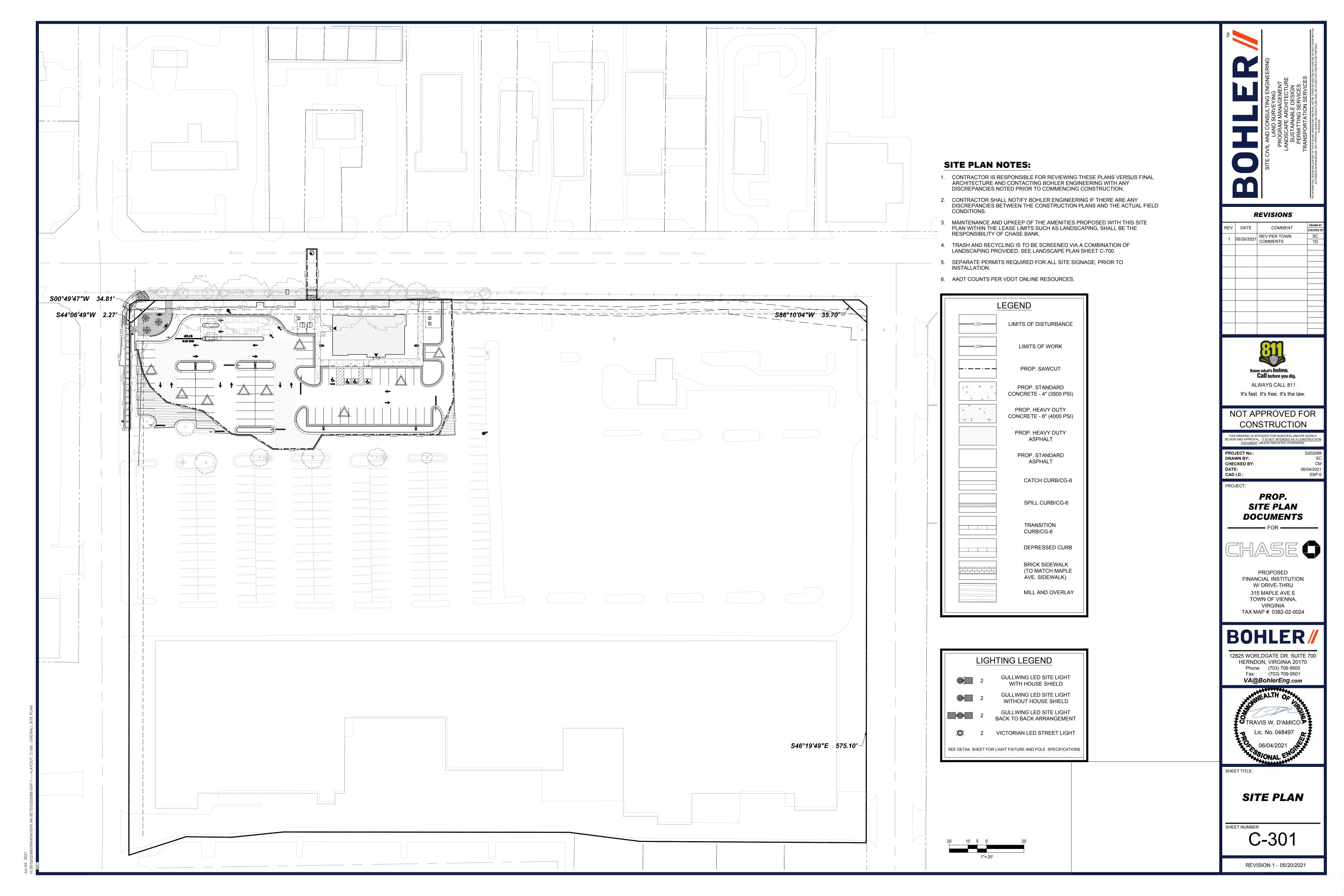


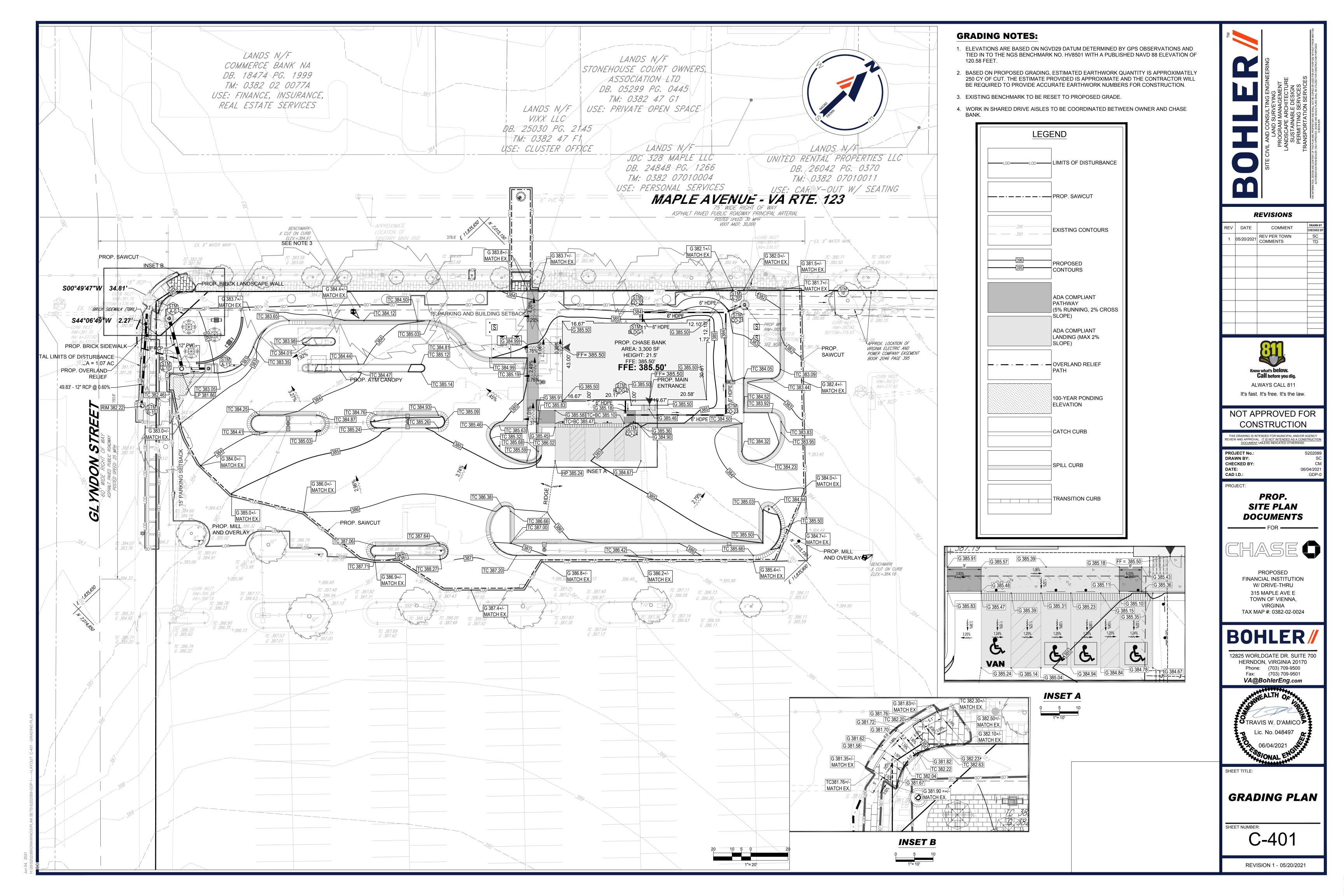


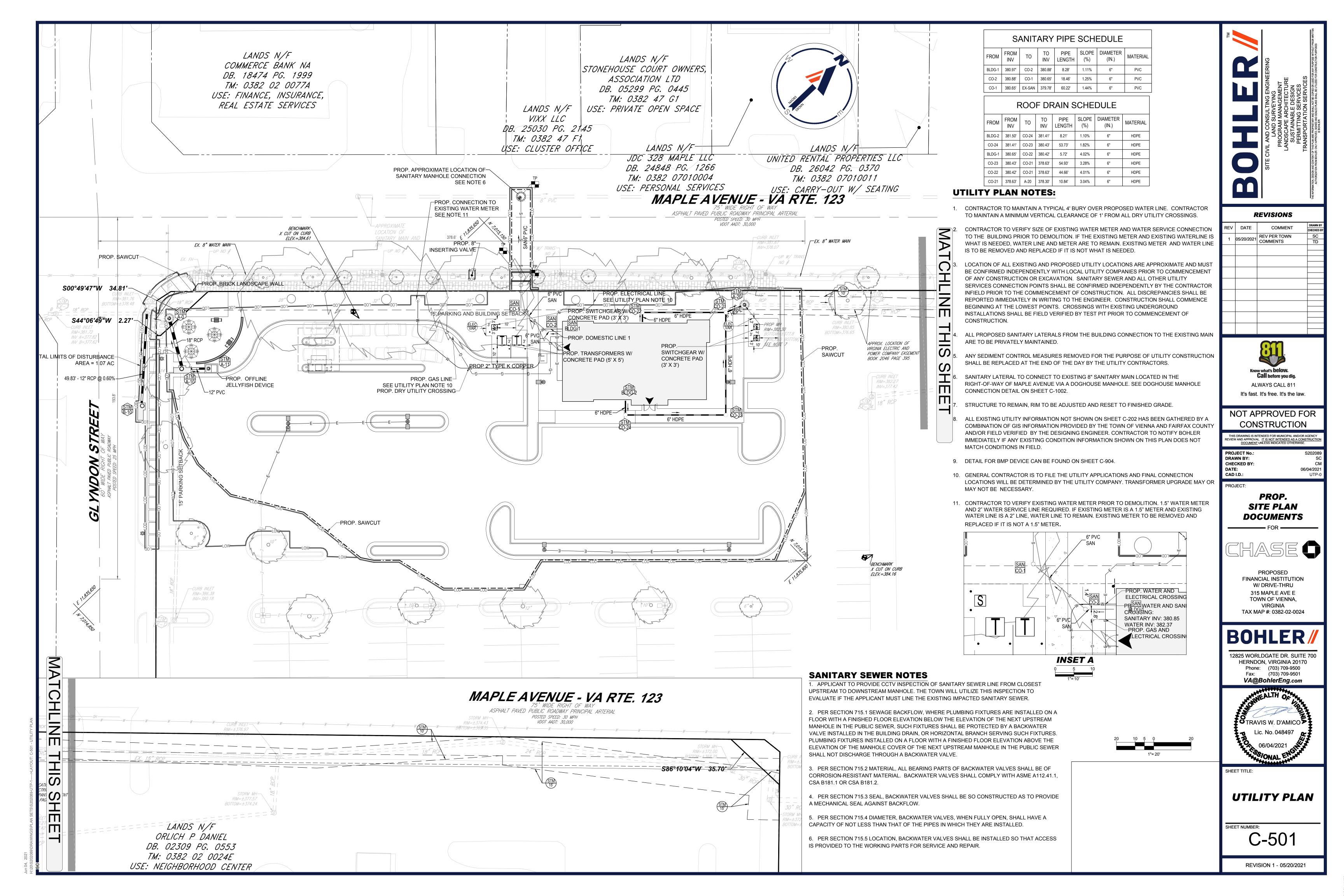


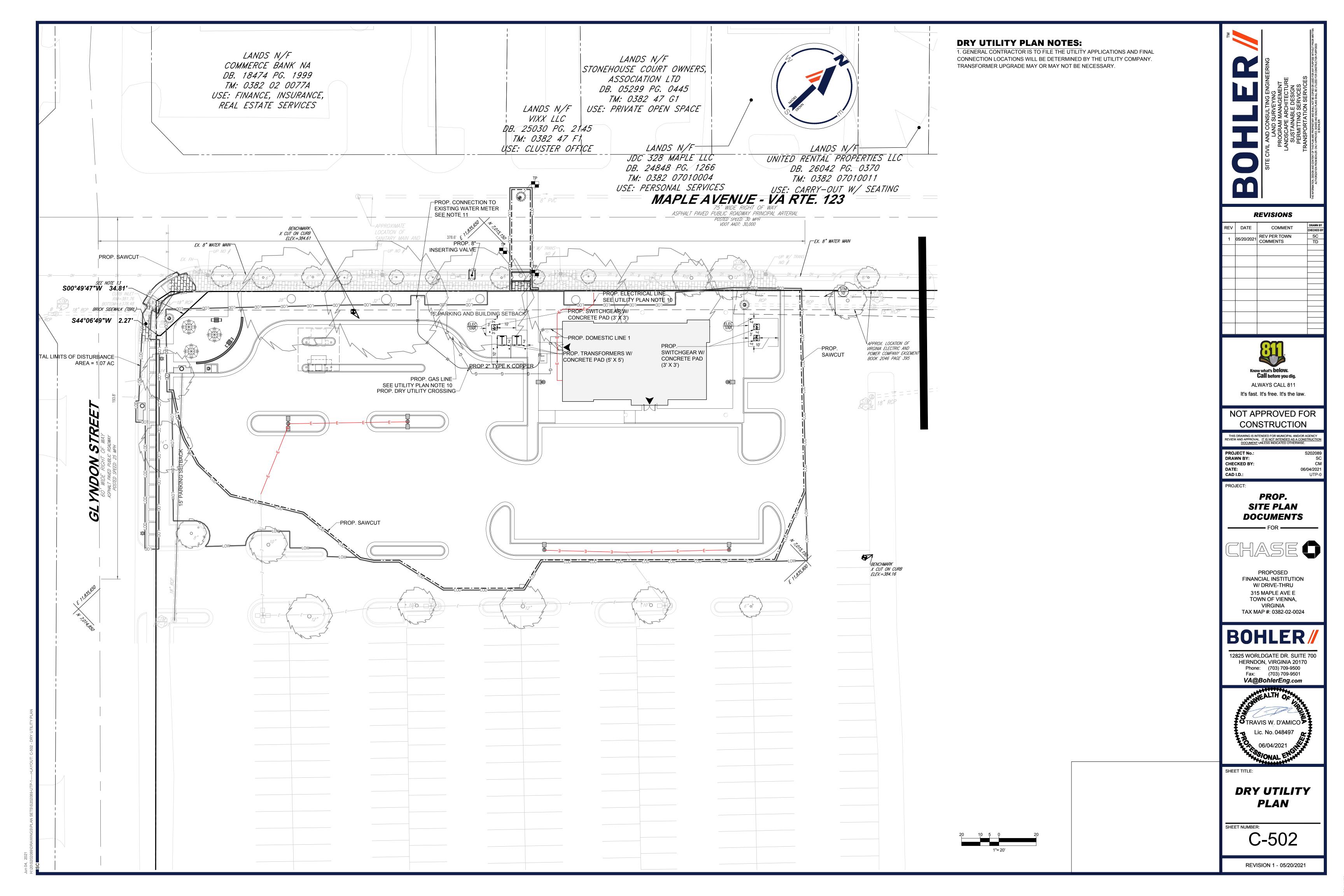


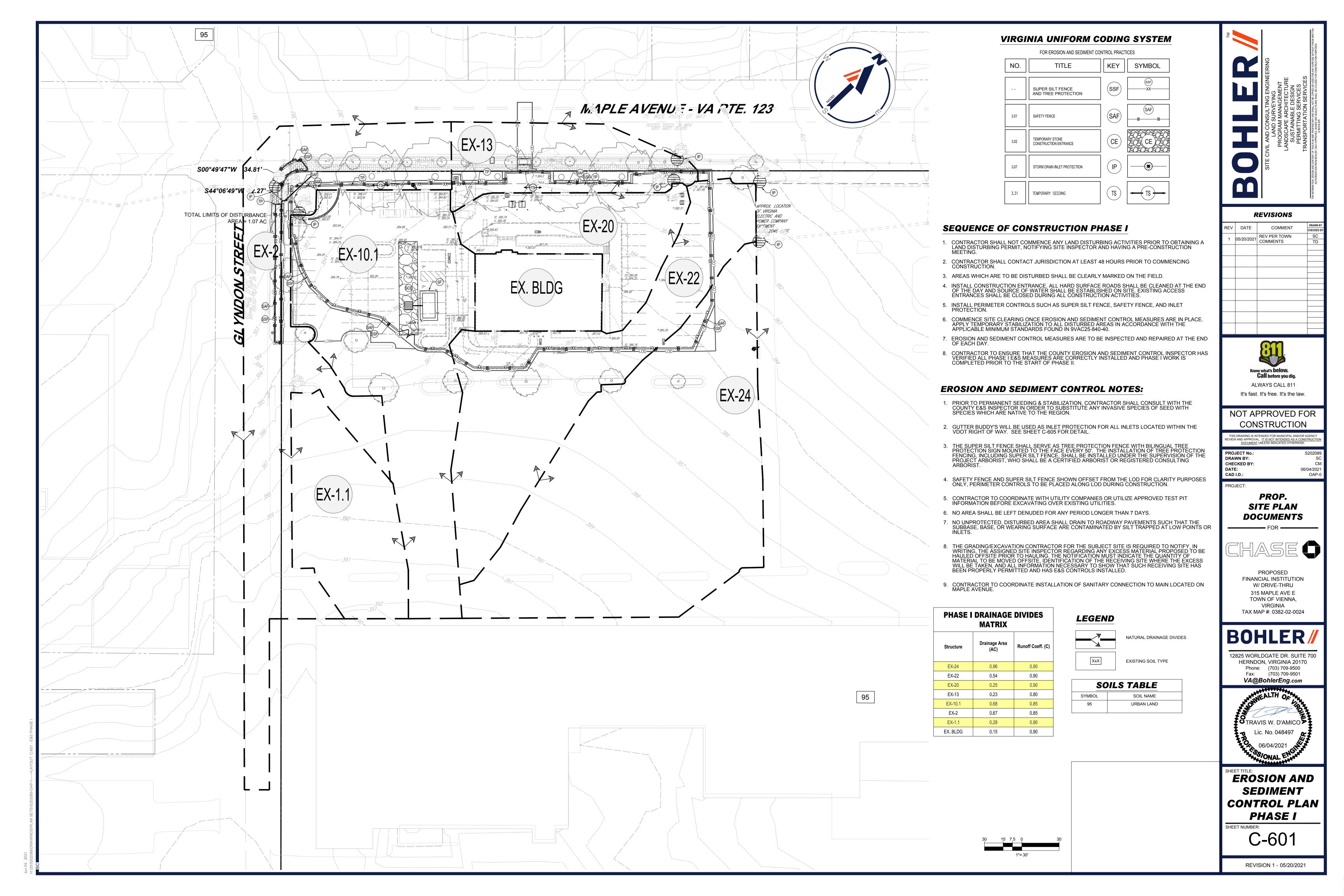


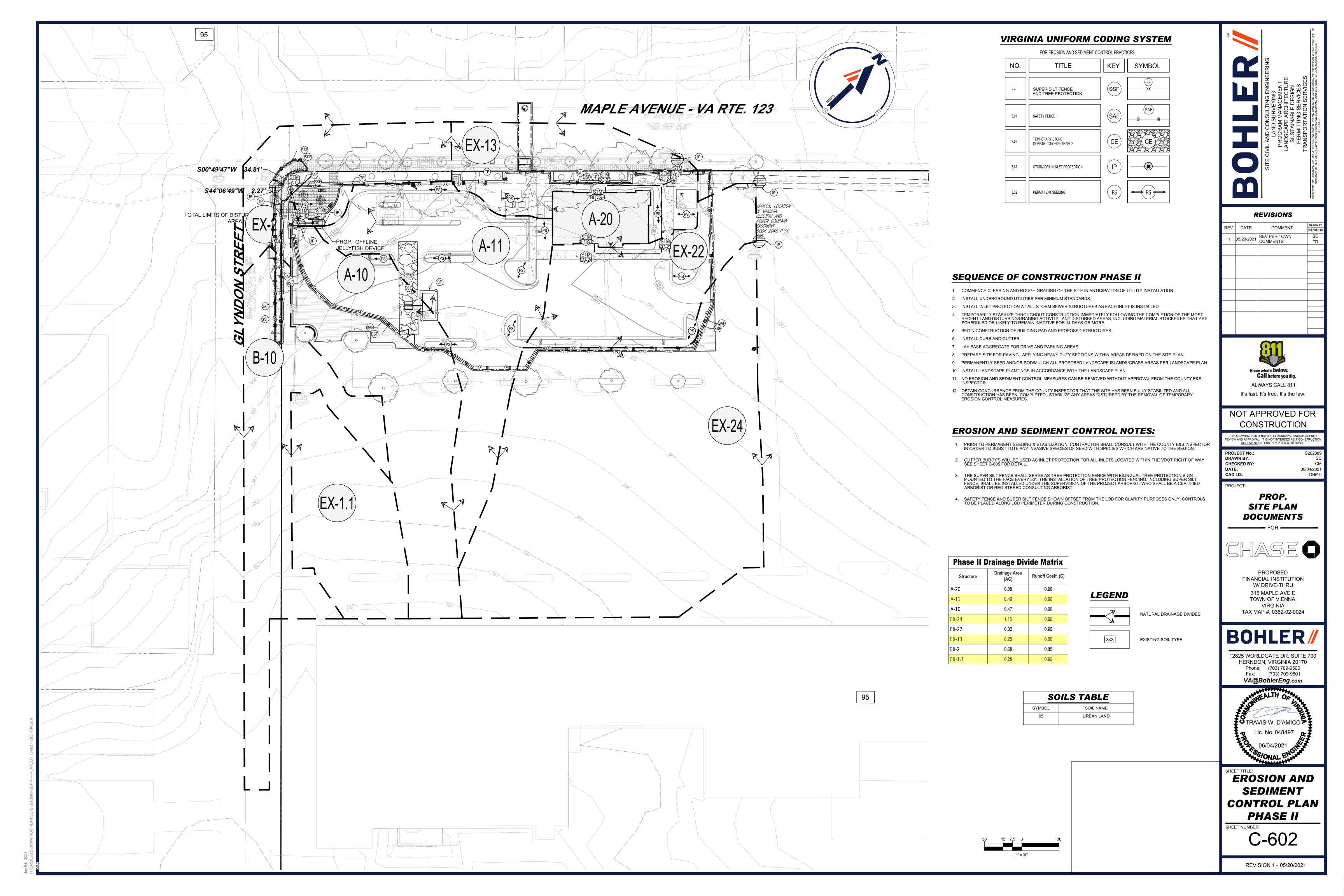












MINIMUM STANDARDS

- 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 APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
- 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, MATURE 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-DISTRUBING 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. RUNOFF COEFFICIENTS USED IN RUNOFF CALCULATIONS SHALL CORRESPOND TO A BARE EARTH 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
- SLOPE 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.

 WHENEVER WATER SEEPS FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.

 ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRICTION SHALL BE PROTECTED SO THAT
- 10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRICTION 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 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 WATERCOURS 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
 - 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 BACKFILING 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.
- 7. 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-DISTRUBING 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
 - 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 ALL 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
 - (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 BY 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
 - (4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE PLAN-APPROVING AUTHORITY TO PREVENT DOWNSTREAM EROSION.
 - E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE

THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.

- DEVELOPMENT OF THE SUBJECT PROJECT.

 F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION HE SHALL OBTAIN APPROVAL FROM THE LOCALITY OF A PLAN FOR MAINTENANCE OF THE DETENTION FACILITIES. THE PLAN SHALL SET FORTH MAINTENANCE REQUIREMENTS OF THE FACILITY AND THE PERSON RESPONSIBLE FOR PERFORMING THE
- G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATERS 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.

WHEN RUNOFF OUTFALLS INTO A MAN-MADE CHANNEL; OR

- I. INCREASED VOLUMES OF SHEET FLOWS THAT MAY 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.
- J. 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

I. PROJECT DESCRIPTION:

THE SUBJECT SITE CONTAINS AN EXISTING FINANCIAL BUILDING AT THE INTERSECTION OF MAPLE AVENUE E (VA RTE. 123) AND GLYNDON STREET SE. THE PROPOSED DEVELOPMENT 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 VARIANCE. 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

3. SILT FENCE/SUPER SILT FENCE BARRIER - 3.05

CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.

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)

ALL STORM SEWER INLETS, CULVERTS, 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 - 3.3

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 SEEDED 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:

6. THE TOTAL IMPERVIOUS AREA HAS INCREASED BY .003 AC RESULTING IN A 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 DENUDED 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
- 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
- 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 DENUDED AREAS SHALL BE STABILIZED.

XIII. OTHER IMPORTANT NOTES:

AFTER BACKFILL.

- 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)

1. EXISTING SITE CONDITION IS APPROXIMATELY 95% IMPERVIOUS (0.90 C VALUE). PROPOSED CONDITIONS ARE APPROXIMATELY THE SAME IMPERVIOUS PERCENTAGE. SEE SHEET C-903 FOR PIPE COMPUTATIONS PROVING ADEQUACY OF THE DOWNSTREAM PIPES IN THE PRE/POST DEVELOPED CONDITION. THE DENUDED, INTERMEDIATE CONDITIONS REQUIRE A C VALUE OF 0.60 BE USED TO COMPUTE FLOWS TO RECEIVING PIPES. FLOWS WILL BE REDUCED IN THE INTERMEDIATE CONDITIONS (0.6 < 0.9). PROPER SEDIMENT CONTROLS ARE PROVIDED TO CONTAIN SILT ON-SITE, FLOWS REMAIN UNCHANGED IN THE INTERMEDIATE CONDITIONS, AND COMPUTATIONS ON SHEET C-903 SHOW PIPES ARE ADEQUATE TO PASS PRE/POST DEVELOPED FLOWS. NO IMPACTS ON DOWNSTREAM PIPES ARE NOTED DURING THE INTERMEDIATE DENUDED CONDITION AND LTI 05-15 IS SATISFIED.

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 <u>VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK</u> 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.

<u>ES-6</u> 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.

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

REVISIONS

COMMENT

REV DATE

1 05/20/2021 REV PER TOWN COMMENTS TD



NOT APPROVED FOR CONSTRUCTION

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

HIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY

06/04/2021

REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCT DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.: \$2020 DRAWN BY:

CAD I.D.:
PROJECT:

CHECKED BY:

PROP. SITE PLAN

DOCUMENTS



PROPOSED
FINANCIAL INSTITUTION
W/ DRIVE-THRU
315 MAPLE AVE E
TOWN OF VIENNA,
VIRGINIA

TAX MAP #: 0382-02-0024

BOHLER/

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06/04/2021

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SHEET TITLE:

EROSION AND
SEDIMENT
CONTROL

NOTES

EET NUMBER:

TEMPORARY SEEDING

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

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.

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 TE	MPORARY SITES						
	RECOMMENDED						
	APPLICATION OF						
PH TEST	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

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 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.

SEED SHALL BE EVENLY APPLIED WITH A BROADCAST SEEDER, DRIL 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 1/4 INCH TO 1/2 INCH DEEP.

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.

AREAS WHICH FAIL TO ESTABLISH VEGETATIVE COVER ADEQUATE TO | 5 PREVENT RILL EROSION WILL BE RESEEDED 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. DSW	VC						

SODDING

SOIL PREPARATION

APPROVED PLAN.

FERTILIZER FORMULATIONS.

PRIOR TO SOIL PREPARATION, AREAS TO BE SODDED SHALL BE BROUGHT TO FINAL GRADE IN ACCORDANCE WITH THE

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 4. IN FALL, OR 25 LBS./1000 SQ. FT. OF 5-10-10 IN SPRING.

NOTE: EQUIVALENT NUTRIENTS MAY BE APPLIED WITH OTHER

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 (VCIA) 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 VCIA 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 3/4 INCH (± 1/4 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 10-35% OVERLAPPED AND THAT ALL JOINTS ARE BUTTED TIGHT IN ORDER TO PREVENT VOIDS WHICH WOULD CAUSE DRYING LOW-MAINTENANCE TOLERANT 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, RECOMMENDED TALL FESCUE VARIETIES 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 PROMISING TALL FESCUES THE SOIL 4 INCHES BELOW THE SOD IS THOROUGHLY
- 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 | 0-10% 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

- 1. CARE SHOULD BE TAKEN TO PREPARE THE SOIL ADEQUATELY IN ACCORDANCE WITH THIS SPECIFICATION. | MAY BE USED EAST OF ROANOKE AND AT LOWER ELEVATIONS IN THE SOD TYPED SHALL CONSIST OF PLANT MATERIALS ABLE TO WITHSTAND THE DESIGNED VELOCITY (SEE STORMWATER CONVEYANCE CHANNELS, STD. & SPEC. 3.17).
- 2. SOD STRIPS IN WATERWAYS SHALL BE LAID PERPENDICULAR TO THE DIRECTION OF FLOW. CARE SHOULD BE TAKEN TO BUTT ENDS OF STRIPS TIGHTLY.
- 3. 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.
- 4. ALL OTHER SPECIFICATIONS FOR THIS PRACTICE SHALL BE ADHERED TO WHEN SODDING A WATERWAY.

MAINTENANCE OF ESTABLISHED SOD

- 1. 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.
- 2. 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.
- 3. 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.

PERMANENT SEEDING

SODDING TABLE

TYPE OF SOD AVAILABLE IN VIRGINIA AND RECOMMENDED USES

CATEGORY I - RECOMMENDED KENTUCKY BLUEGRASS VARIETIES

CATEGORY II - SPECIAL USE VARIETIES. IF USED, MUST CONTAIN AT

65-100% A-34, ABBEY, ASPEN, ASSET, BARON,

SUFFOLK, VICTA.

GLADE, MIDNIGHT.

PERFORMANCE DATA OR SEED AVAILABILITY.

10-35% DAWN, ESTATE, FREEDOM KELLY.

TALL FESCUE: ADAPTED TO THE ENTIRE STATE

SHENANDOAH, TRIBUTE

BERMUDAGRASS: TUFCOTE IS ADAPTED TO THE

CERTIFIED MIDIRON, TIFGREEN, TIFWAY II,

ZOYSIAGRASS: THIS SOD PERFORMS BEST IN

SOURCE: 1991 VIRGINIA TURFGRASS VARIETY

MINIMUM CARE LAWN

COMMERCIAL OR RESIDENTIAL

- COMMON BERMUDAGRASS

HIGH MAINTENANCE LAWN

- KENTUCKY 31 OR TURF-TYPE TALL

- KENTUCKY 31 OR TURF-TYPE TALL

- HYBRID BERMUDAGRASS (SEED)

GENERAL SLOPE (3:1 OR LESS)

LOW MAINTENANCE SLOPE (STEEPER THAN 3:1)

USE SEASONAL NURSE CROP IN ACCORDANCE WITH SEEDING DATES

- HYBRID BERMUDAGRASS (BY

ESTABLISHMENT METHOD)

OTHER VEGETATIVE

- KENTUCKY 31 FESCUE

- SEASONAL NURSE CROP

- KENTUCKY 31 FESCUE

- SEASONAL NURSE CROP

- SERICEA LESPEDEZA

- COMMON BERMUDAGRASS

SEPTEMBER, OCTOBER THROUGH NOVEMBER 15TH

- RED TOP GRASS

- RED TOP GRASS

FEBRUARY, MARCH THROUGH APRIL

NOVEMBER 16TH THROUGH JANUARY

MAY 1ST THROUGH AUGUST

AS STATED BELOW:

RECOMMENDATIONS, VIRGINIA CROP IMPROVEMENT

WRANGLER.

VICTA

SOUTHWESTERN VIRGINIA.

SOUTHEASTERN VIRGINIA

MEYER, EMERALD

ASSOCIATION

FESCUE

FESCUE

TUFCOTE, AND VAMONT

LEAST 65% CATEGORY I VARIETIES.

SHADE TOLERANT

SHADE TOLERANT

BLACKSBURG, CHERI, CHATEAU

PLUSH, PRINCETON 104, RUGBY,

CLASSIC, COVENTRY, GEORGETOWN

GLADE, HAGA, JULIA, LIBERTY, LOFTS

1757, MERIT, MIDNIGHT, MONOPOLY,

BRISTOL, COLUMBIA, GEORGETOWN,

COLUMBIA, GEORGETOWN, MONOPOLY,

CATEGORY III - PROMISING KENTUCKY BLUEGRASS - LIMITED

AMIGO, APACHE, BONANZA, CHIEFTAIN,

FINELAWN 5GL, MESA, REBEL II,

CERTIFIED ARRIBA, AUSTIN, AVANTI,

ELDORADAO, HUBBARD 87, JAGUAR II

MAVERICK II, MONARCH, OLYMPIC II,

SUNDANCE, TAURUS, THOROUGHBRED

KENTUCKY BLUEGRASS: BARON, CHERI,

COLUMBIA, MONOPOLY, NASSAU, RAM I,

USED EAST OF ROANOKE AND SOUTH OF CHARLOTTESVILLE.

RICHMOND-DANVILLE-NEWPORT NEWS TRIANGLE. MIDIRON MAY BE

TIFGREEN AND TIFWAY MAY BE USED SOUTH OF RICHMOND. VAMONT

TABLE 3.32-D

SITE SPECIFIC SEEDING MIXTURES FOR COASTAL PLAIN

AREA

LBS./ACRE

175/200 LBS

200-250 LBS.

40 LBS. (UNHULLED)

30 LBS. (HULLED)

75 LBS

128 LBS

20 LBS

150 LBS

93-108 LBS.

0-15 LBS

2 LBS.

20 LBS.

20 LBS

150 LBS

ANNUAL RYE

ANNUAL RYE

WINTER RYE

FOXTAIL MILLET

PERMANENT SEEDING

TITAN, TRADITION, VEGAS, WINCHESTER

AZTEC COCHISE, CROSSFIRE,

PHOENIX, SAFARI, SHORTSTOP,

RAM I, TOUCHDOWN, VICTA.

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
- 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

- 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
- THOROUGHLY ROTTED SAWDUST SHALL HAVE 6 POUNDS OF NITROGEN ADDED TO EACH CUBIC YARD AND SHALL BE FREE OF STONES, STICKS, AND FOR CONTINUATION OF PERMANENT SEEDING NOTES, SEE NEXT SHEET 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:

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

NOTE: AN AGRICULTURAL GRADE OF LIMESTONE SHOULD ALWAYS BE

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

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

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.

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.

- 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 CROWNVETCH 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 1/4 TO 1/2 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.

REVISIONS REV DATE COMMENT

REV PER TOWN 05/20/2021 COMMENTS



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

CONSTRUCTION

REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUC <u>DOCUMENT</u> UNLESS INDICATED OTHERWISE. PROJECT No.: DRAWN BY: **CHECKED BY:**

06/04/2021

CAD I.D.: PROJECT:

DATE:

PROP. SITE PLAN

DOCUMENTS

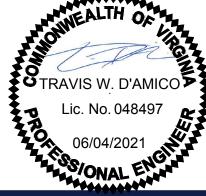
PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA,

VIRGINIA

TAX MAP #: 0382-02-0024

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

> VA@BohlerEng.com CALTH OF



EROSION AND SEDIMENT CONTROL **NOTES**

C-604

REVISION 1 - 05/20/2021

FOR TEMPORARY SEEDING TABLE, SEE NEXT SHEET

SPECIFICATIONS

ORGANIC MULCHES

ORGANIC MULCHES MAY BE USED INA 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

- 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
- 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

- 4. 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.

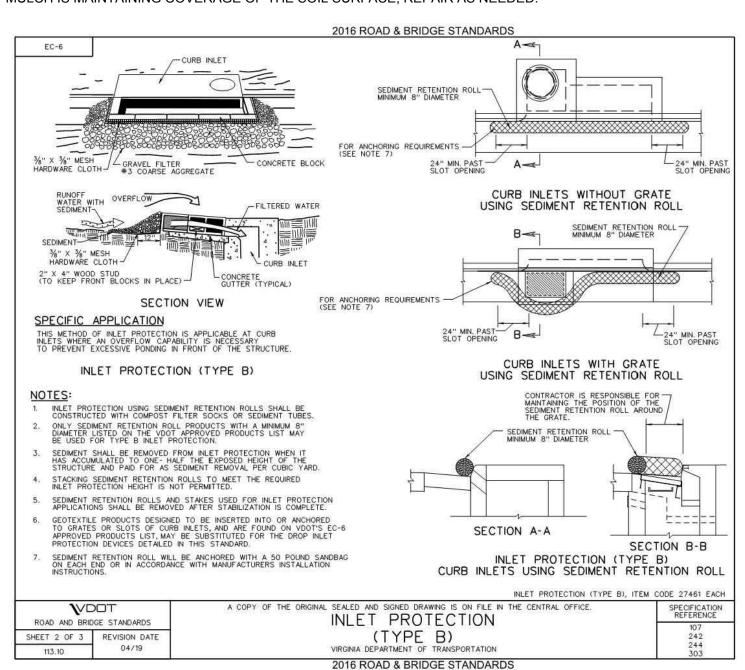
CHEMICAL MULCHES

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 HYDROSEEDED 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 SEEDED AREAS FOR FAILURE AND MAKE NECESSARY REPAIRS AND RE-SEEDINGS WITHIN THE SAME SEASON, IF

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

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

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

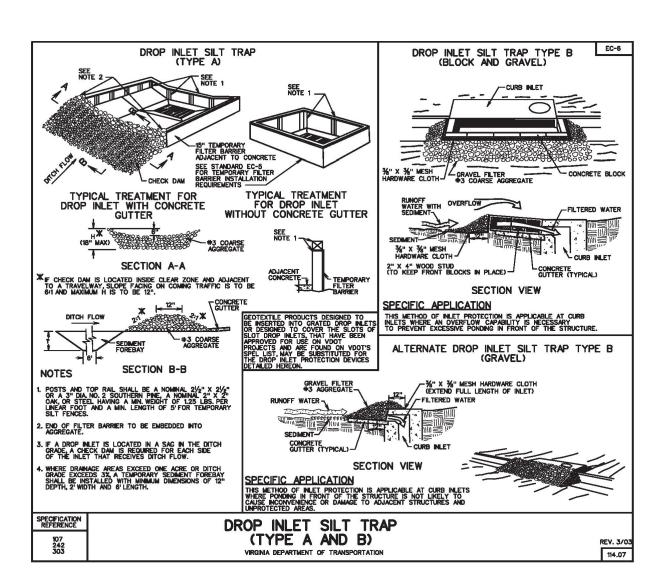
AUGUST 15TH PER 1000 FT.2 PER YEAR

PHOSPHORUS (P) AND POTASH (K) SHOULD ONLY BE

NOTE: THE USE OF SLOW-RELEASE FERTILIZER FORMULATIONS FOR MAINTENANCE OF TURF IS ENCOURAGE. 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 PLANTII

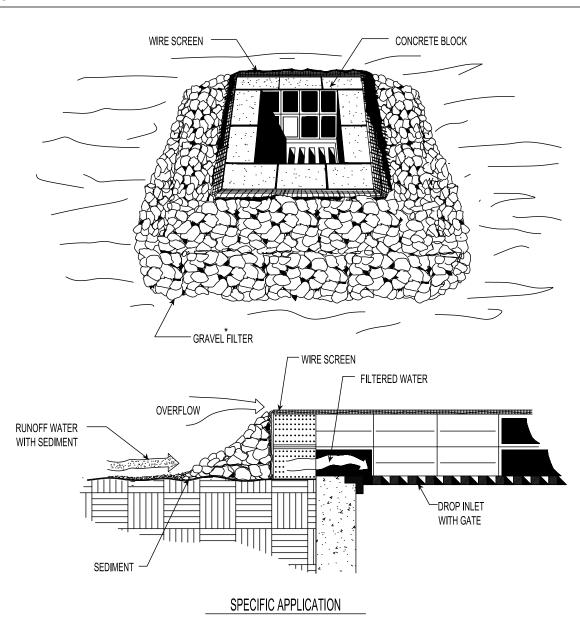


**NOTE: VDOT DETAIL EC-6 (GUTTER BUDDY) TO BE USED FOR ALL STORM INLETS LOCATED IN VDOT MAINTAINED ROADS. GUTTER BUDDY PROTECTION TO BE SELECTED FROM THE APPROVED VDOT LIST FOR INLET PROTECTION.

BLOCK AND GRAVEL DROP INLET SEDIMENT FILTER

PLATE. 3.07-3

REINFORCED CONCRETE



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 #3, #357 OR #5 COARSE AGGREGATE.

SOURCE: VA DSWC

B. IF A STAND HAS LESS THAN 40% COVER. RE-EVALUATE CHOICE OF PLANT MATERIALS AND QUANTITIES OF LIME AND FERTILIZER.

DENSITY. WARM SEASON FERTILIZATION SHOULD BEGIN AT 30 DAYS AFTER PLANTING.

APPLIED ACCORDING TO SOIL TEST.

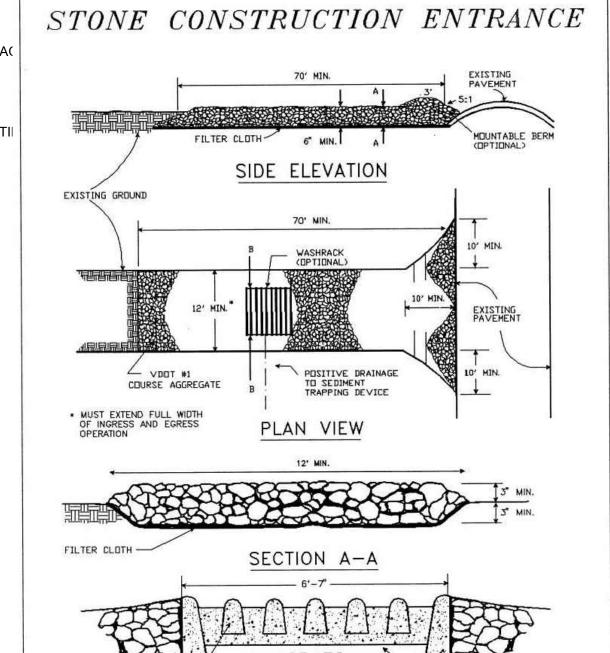
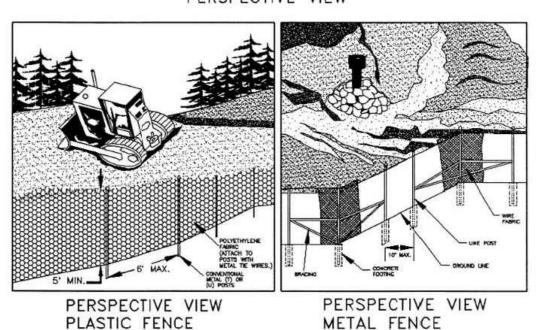


Plate 3.02-1 Source: Adapted from 1983 Maryland Standards for Soil Erosion and Sediment Control, and Va. DSWC

SAFETY FENCE

SECTION B-B

PERSPECTIVE VIEW

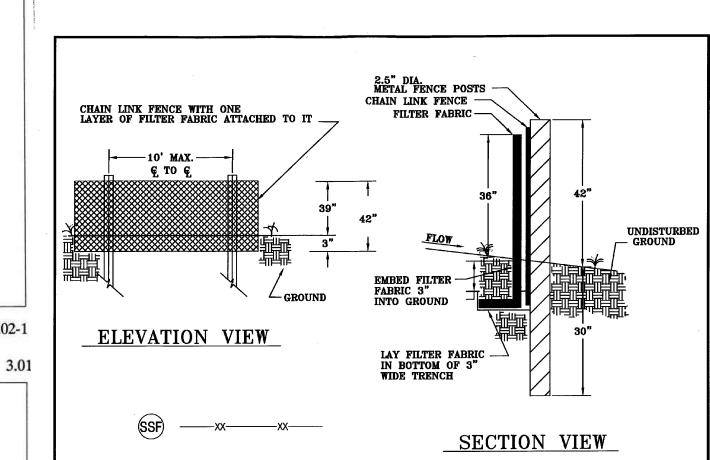


Adapted from Conwed Plastics and VDOT Road and Bridge Standards

Plate 3.01-1

TABLE 3.31-C TEMPORARY SEEDING PLANT MATERIALS, SEEDING RATES, AND DATES SEEDING RATE NORTH SOUTH SPECIES PLANT CHARACTERISTICS 3/1 - | 5/1 - | 8/15 - | 2/15 - | 5/1 - | 9/1 -**ACRE** 1000 FT2 4/30 | 8/15 | 11/1 | 4/30 | 9/1 | 11/15 3 BU (UP TO 100 LBS USE SPRING VARIETIES NOT LESS THAN 50 (E.G., NOBLE) (AVENA SATIVA) 2 LBS. USE FOR LATE FALL SEEDINGS, 2 BU (UP TO 110 LBS WINTER COVER. TOLERATES COLD 2.5 LBS. NOT LESS THAN 50 (SECALE CEREALE) AND LOW MOISTURE LBS.) 50 LBS. WARM-SEASON ANNUAL. DIES AT GERMAN MILLET APPROX. 1 LB. FIRST FROST. MAY BE ADDED TO (SETARIA ITALICA) SUMMER MIXES. MAY BE ADDED IN MIXES. WILL MOW ANNUAL RYEGRASS 60 LBS. OUT OF MOST STANDS. 1 1/2 LBS. (LOLIUM MULTI-FLORUM) WARM-SEASON PERENNIAL, MAY BUNCH WEEPING LOVEGRASS 15 LBS. TOLERATES HOT, DRY SLOPES AND ACID, (ERAGROSTIS CURVULA) Χ INFERTILE SOILS. MAY BE ADDED TO 5 1/2 OZS. MIXES WARM-SEASON ANNUAL LEGUME. KOREAN LESPEDEZA 25 LBS. TOLERATES ACID SOILS. MAY BE (LESPEDEZA STIPULACEA) APPROX. 1 1/2 LBS. ADDED TO MIXES. SOURCE: VA. DSWC

SOURCE: VIRGINIA EROSION AND SEDIMENT **CONTROL HANDBOOK**



FENCING

Chain link fence shall be 39" above grade with 3" embedded for a total fabric width of 42". The post shall be 42" above grade with 30" placed below grade (without concrete) for a total length of 72".

NOTES

- Chain link fence shall be fastened securely to fence posts with wire ties. Filter fabric shall be fastened securely to chain link fence with ties spaced horizontally 24" at the top and midsection.
- Physical properties of the filter fabric shall conform to the latest edition of THE VIRGINIA EROSION & SEDIMENT CONTROL HANDBOOK. When two sections of filter fabric adjoin each other, they shall be overlapped by 6".

SUPER SILT FENCE

ADAPTED FROM FAIRFAX COUNTY PUBLIC FACILITIES MANUAL

REVISIONS COMMENT **REV PER TOWN** 05/20/2021 COMMENTS



NOT APPROVED FOR CONSTRUCTION

EVIEW AND APPROVAL. <u>IT IS NOT INTENDED AS A CONSTRUC'</u>

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PROJECT:

CAD I.D.

PROP. SITE PLAN

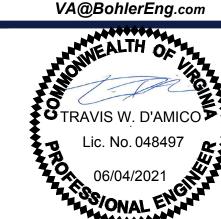
DOCUMENTS

PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E

> TOWN OF VIENNA, VIRGINIA TAX MAP #: 0382-02-0024

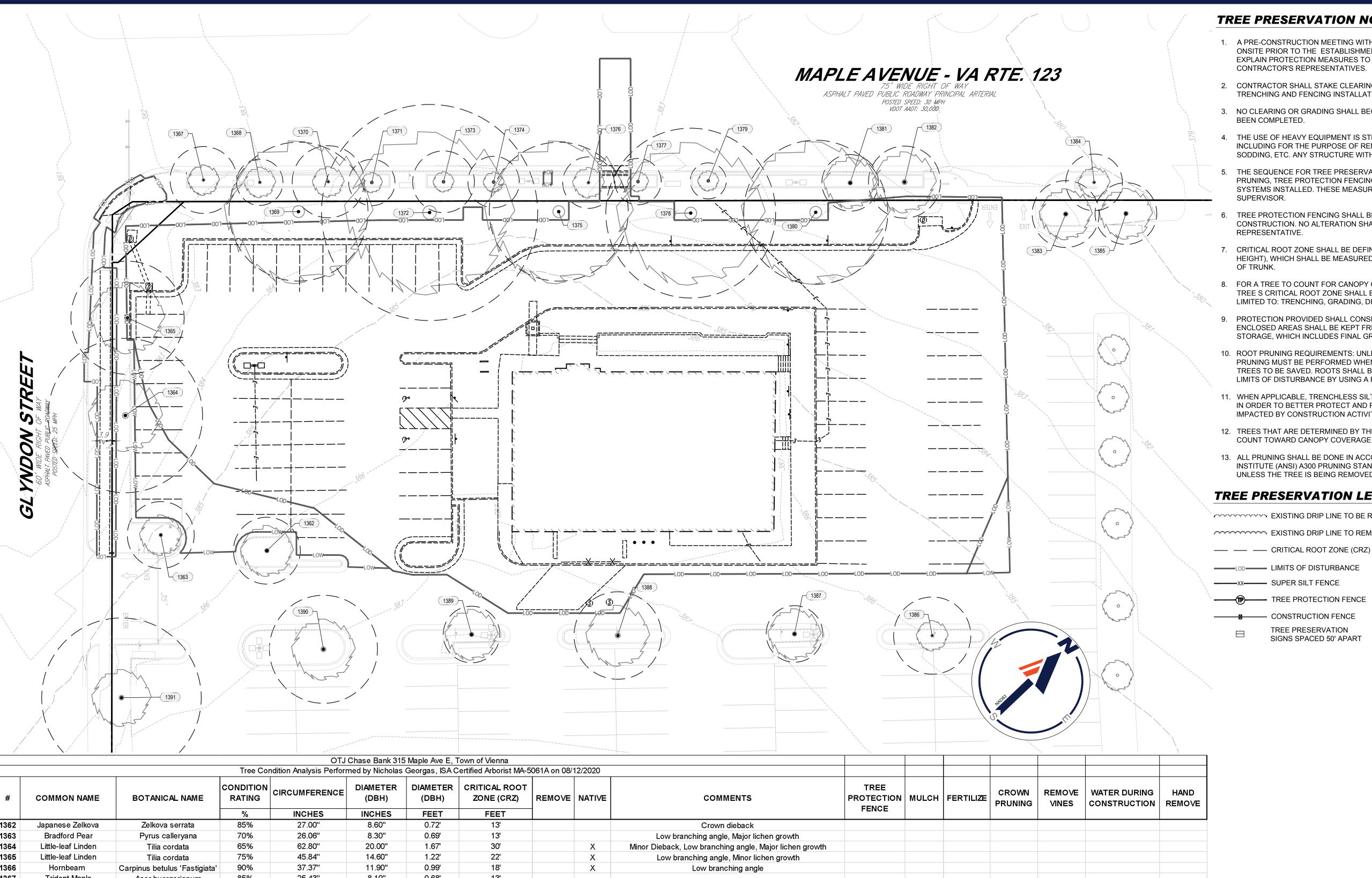
BOHLER

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



EROSION AND SEDIMENT CONTROL NOTES & DETAILS

C-605



1362 1363 1365 0.68' 85% 25.43" 8.10" 1367 Trident Maple Acer buergerianum 80% 18.84" 6.00" 0.50 1368 Trident Maple Acer buergerianum 70% 54.64" 17.40" 27' 1.45' 1369 Acer rubrum Red Maple Cutback, Dieback, Lichen growth 80% 27.95" 8.90" 0.74' 14' 1370 Trident Maple Acer buergerianum 75% 18.53" 5.90" 0.49' 1371 Trident Maple Thin crown, Trunk scar Acer buergerianum 70% 87.92" 28.00" 2.33' 42' 1372 Acer rubrum Dieback, Codominant leader, Lichen growth Red Maple 1373 75% 23.24" 7.40" 0.62' Trident Maple Codominant leader Acer buergerianum 80% 19.15" 6.10" 0.51 1374 Trident Maple Acer buergerianum 1375 70% 56.52" 18.00" 1.50' Acer rubrum Red Maple Cutback, Dieback, Lichen growth 1376 70% 20.72" 6.60" 0.55' **Trident Maple** Major lichen growth, Possible chlorosis, Dieback Acer buergerianum 1377 60% 17.90" 5.70" 0.48' Trunk scar, Lichen growth, Thin crown, Dieback Trident Maple Acer buergerianum 1378 65% 69.08" 22.00" 1.83' 33' Codominant leader, Major dieback, Cutback, Lichen growth Acer rubrum Red Maple 1379 65% 12.87" 4.10" 0.34 Trident Maple Acer buergerianum Trunk scar, Lichen growth, Dieback 1380 70% 57.78" 18.40" 1.53' 28' X Major lichen growth, Cut back Acer rubrum Red Maple 0.56' 1381 75% 21.04" 6.70" Trident Maple Trunk scar, Lichen growth Acer buergerianum 1382 85% 28.89" 9.20" 0.77' Trident Maple Acer buergerianum 75% 26.38" 0.70' 13' 1383 8.40" Acer rubrum X Codominant leader, Lichen growth Red Maple 80% 6.80" 0.57' 1384 Trident Maple 21.35" Acer buergerianum Trunk scar 75% 0.62' Red Maple 23.24" 7.40" Acer rubrum Lichen growth, Dieback 75% 29.52" 9.40" 0.78' Japanese Zelkova Zelkova serrata Lichen growth, Minor dieback, Weak branching angle Zelkova serrata 80% 22.29" 7.10" 0.59' Japanese Zelkova Lichen growth, Weak branching angle 90% 11.10" 17' Japanese Zelkova Zelkova serrata 34.85" 0.93' Weak branching angle 70% 21.04" 6.70" 0.56 Trunk scar, Weak branching angle, Die back Japanese Zelkova Zelkova serrata 90% 43.65" 13.90" 1.16' 21' Pin Oak Quercus palustris 70% 63.11" 20.10" 1.68' 1391 Little-leaf Linden Tilia cordata Codominant leader, Lichen, Low branching angle

TREE PRESERVATION NOTES

- 1. A PRE-CONSTRUCTION MEETING WITH THE TOWN OF VIENNA'S URBAN ARBORIST SHALL BE HELD ONSITE PRIOR TO THE ESTABLISHMENT OF PERIMETER CONTROLS SO THAT THE ARBORIST CAN EXPLAIN PROTECTION MEASURES TO OPERATORS, CONSTRUCTION SUPERVISORS, AND/OR CONTRACTOR'S REPRESENTATIVES.
- 2. CONTRACTOR SHALL STAKE CLEARING LIMITS ONSITE IN ORDER TO FACILITATE LOCATION FOR TRENCHING AND FENCING INSTALLATION FOR TREE PROTECTION.
- 3. NO CLEARING OR GRADING SHALL BEGIN IN AREAS WHERE TREE PRESERVATION MEASURES HAVE NOT BEEN COMPLETED.
- 4. THE USE OF HEAVY EQUIPMENT IS STRICTLY PROHIBITED WITHIN TREE PRESERVATION AREAS, INCLUDING FOR THE PURPOSE OF REMOVING UNWANTED TREES STRUCTURES, PADS, GRADING, SODDING, ETC. ANY STRUCTURE WITHIN THE TREE PRESERVATION AREA SHALL BE REMOVED BY HAND.
- THE SEQUENCE FOR TREE PRESERVATION MEASURES, IF REQUIRED, SHALL BE IN THIS ORDER: ROOT PRUNING, TREE PROTECTION FENCING, TREE PRUNING AND CHEMICAL TREATMENT, AERATION SYSTEMS INSTALLED. THESE MEASURES SHALL BE DIRECTED IN THE FIELD BY THE CONSTRUCTION SUPERVISOR.
- TREE PROTECTION FENCING SHALL BE MAINTAINED BY THE CONTRACTOR THROUGH DURATION OF CONSTRUCTION. NO ALTERATION SHALL OCCUR WITHOUT PRIOR APPROVAL BY A TOWN REPRESENTATIVE.
- 7. CRITICAL ROOT ZONE SHALL BE DEFINED AS 1.5' RADIUS PER 1" OF DBH (DIAMETER AT BREAST HEIGHT), WHICH SHALL BE MEASURED AT A HEIGHT OF 4.5' FROM HIGHEST POINT OF GROUND AT BASE OF TRUNK.
- FOR A TREE TO COUNT FOR CANOPY COVERAGE CREDITS, NO MORE THAN 30% OF THE RESPECTIVE TREE S CRITICAL ROOT ZONE SHALL BE IMPACTED BY CONSTRUCTION ACTIVITIES, INCLUDING BUT NOT LIMITED TO: TRENCHING, GRADING, DIGGING, CUTTING, FILLING, ETC.
- PROTECTION PROVIDED SHALL CONSIST OF FENCING AROUND THE TREE TO THE DRIP LINE, AND ENCLOSED AREAS SHALL BE KEPT FREE OF ALL SOIL, EQUIPMENT, AND CONSTRUCTION MATERIAL STORAGE, WHICH INCLUDES FINAL GRADING AND LANDSCAPING EFFORTS.
- 10. ROOT PRUNING REQUIREMENTS: UNLESS OTHERWISE INSTRUCTED BY THE TOWN S ARBORISTS, ROOT PRUNING MUST BE PERFORMED WHEN LIMITS OF DISTURBANCE FALL WITHIN CRITICAL ROOT ZONE OF TREES TO BE SAVED. ROOTS SHALL BE PRUNED TO A MINIMUM DEPTH OF 12 ' AT OR BEFORE THE LIMITS OF DISTURBANCE BY USING A ROOT PRUNING MACHINE OR VIBRATORY PLOW.
- 11. WHEN APPLICABLE, TRENCHLESS SILT FENCE SHALL BE USED FOR EROSION AND SEDIMENT CONTROL IN ORDER TO BETTER PROTECT AND PRESERVE ADJACENT-NEIGHBORING TREES THAT MAY BE IMPACTED BY CONSTRUCTION ACTIVITIES.
- 12. TREES THAT ARE DETERMINED BY THE TOWN ARBORIST TO BE IN "POOR" CONDITION SHALL NOT COUNT TOWARD CANOPY COVERAGE CALCULATIONS.
- 13. ALL PRUNING SHALL BE DONE IN ACCORDANCE WITH CURRENT AMERICAN NATIONAL STANDARDS INSTITUTE (ANSI) A300 PRUNING STANDARDS. SPIKES SHALL NOT BE USED TO CLIMB LIVE TREES UNLESS THE TREE IS BEING REMOVED.

TREE PRESERVATION LEGEND

`COMMON EXISTING DRIP LINE TO BE REMOVED EXISTING DRIP LINE TO REMAIN

LIMITS OF DISTURBANCE

TREE PROTECTION FENCE

TREE PRESERVATION SIGNS SPACED 50' APART



CONSTRUCTION **EXISTING TREE TO REMAIN**

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PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA

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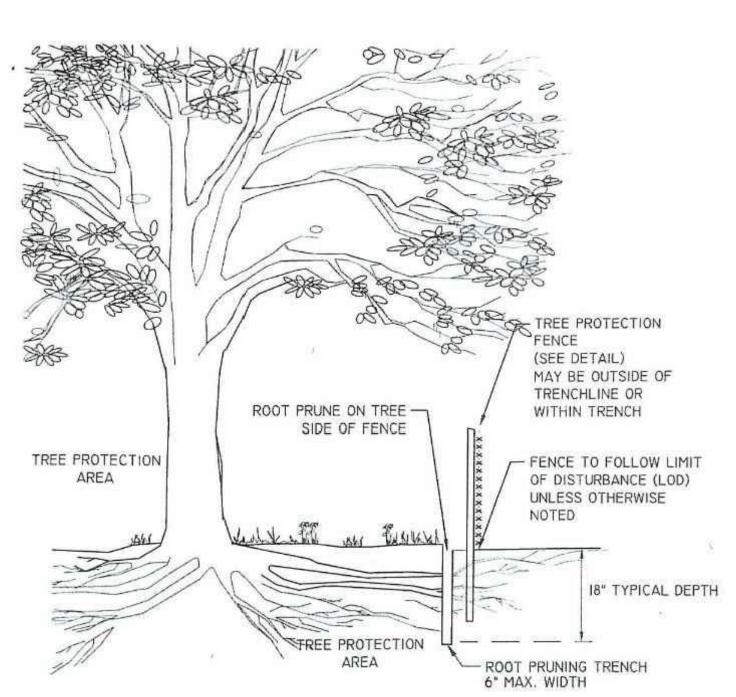


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TREE INVENTORY AND **PRESERVATION** PLAN

C-701



NOTES

I. ROOT PRUNING SHALL BE DONE WITH A TRENCHER OR VIBRATORY PLOW TO A DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND UTILITIES, LEAVE THE ROOT INTACT AND THREAD THE LINES UNDERNEATH.

2. ROOT PRUNING SHALL TAKE PLACE PRIOR TO ANY CLEARING AND GRADING. EXACT LOCATION OF TREE PROTECTION AREAS SHALL BE STAKED OR FLAGGED PRIOR TO TRENCHING.

ROOT PRUNING SHALL BE CONDUCTED WITH THE SUPERVISION OF A CERTIFIED ARBORIST.

4. BACKFILL THE ROOT-PRUNING TRENCH WITH EXCAVATED SOIL AND MULCH AND MARK LOCATION FOR FUTURE REFERENCE. SILT FENCE MAY BE INSTALLED IN TRENCH PRIOR TO BACKFILLING AS LONG AS THE TRENCH IS NOT OPEN FOR LONGER THAN 48 HOURS WITHOUT WATERING.

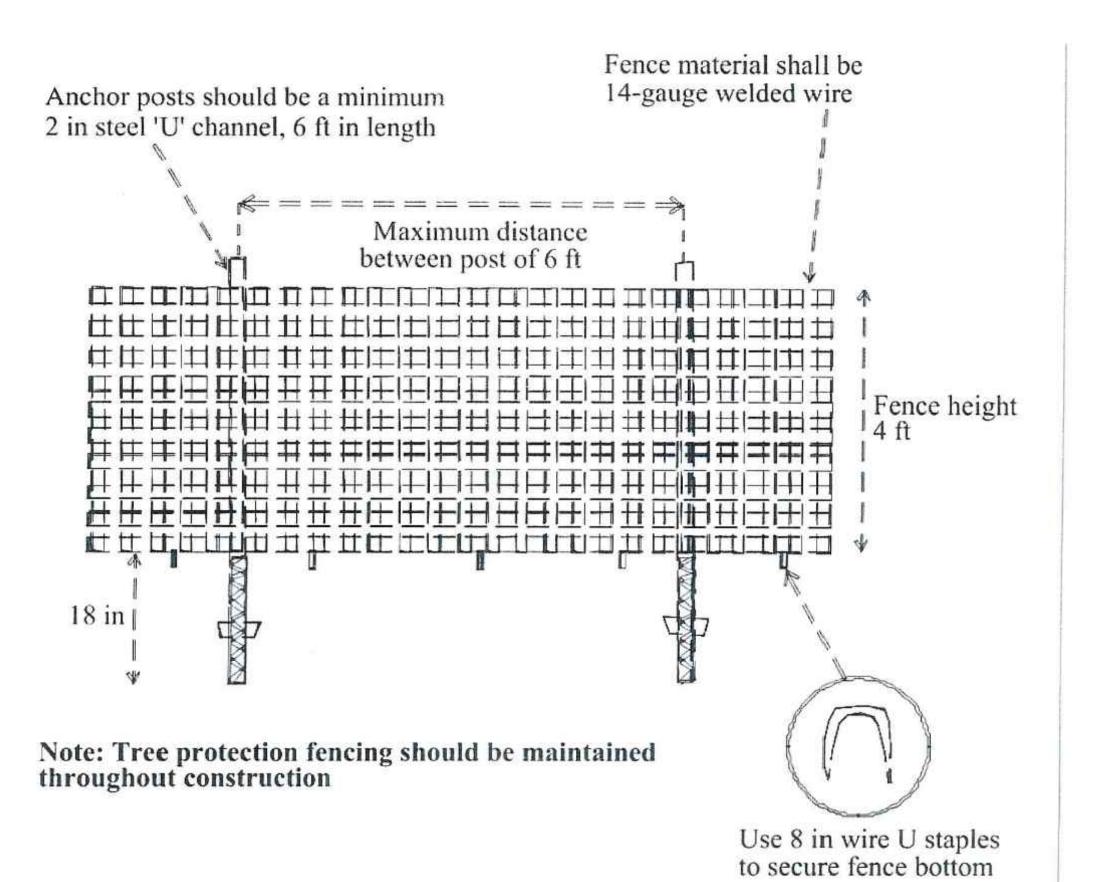
 ROOT PRUNING WORK WILL NOT BE DONE WHEN MORE THAN THE TOP I INCH OF SOIL IS FROZEN.
 ROOT PRUNING WILL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.

ROOT PRUNING
SECTION

NOT TO SCALE

URBAN TREE FOUNDATION © 2014

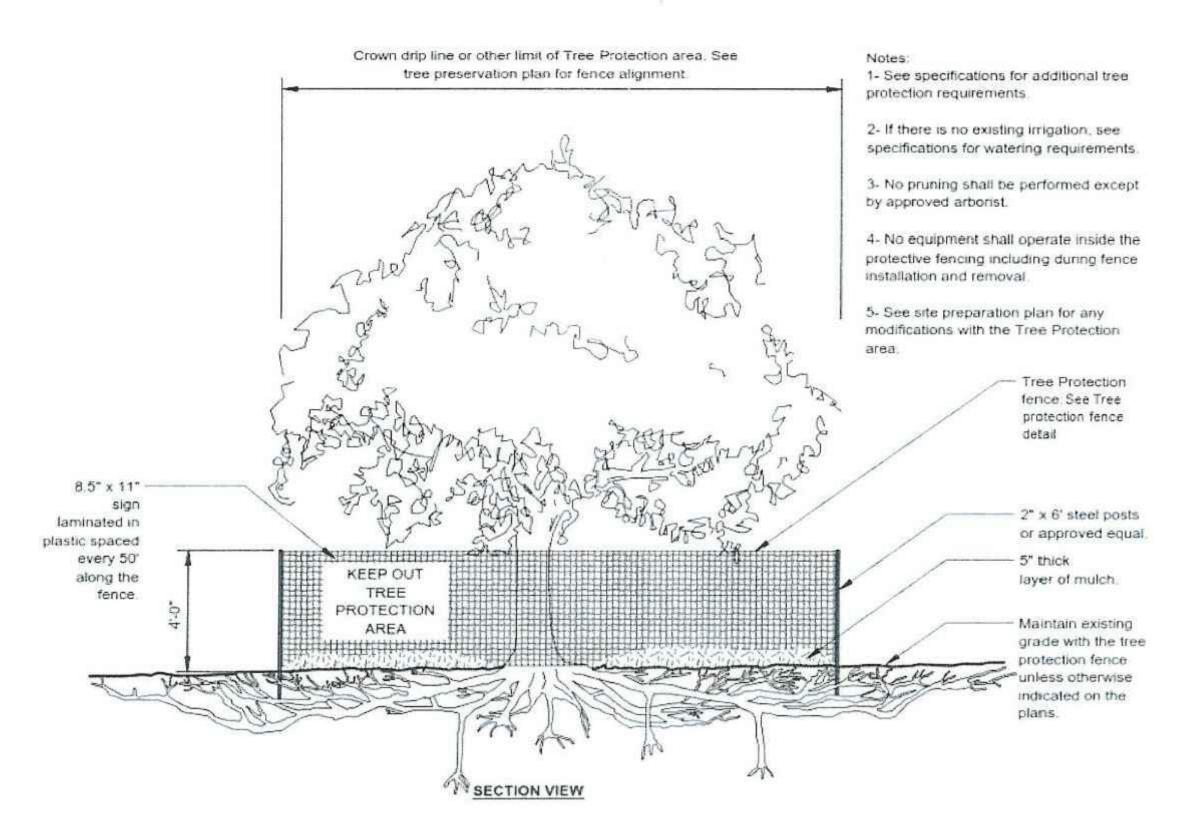
CPEN SOURCE PREE TO USE



TREE PROTECTION FENCE INSTALLATION
(SCALE: N.T.S.)
(SOURCE: PFM 6-12)

One central leader

CROWN OBSERVATIONS - HIGH BRANCHED



S-X TREE PROTECTION

Example 1.50" 0.50" 6.33 ACCEPTABLE than 0.66. Aspect ratio of B:A less than 0.66 as measured 1" above the top of the branch union. (Several codominant Example 4.0" 3.0" 0.75 greater than 0.66. Aspect ratio of B:A greater than or equal to 0.66 as measured 1" above the top of the branch union. 1- Aspect ratio shall be less than 0.66 on all branch unions. Aspect ratio is the diameter of branch (B) divided by the diameter of the trunk (A) as measured 1" above the top of the branch union. 2- Any tree not meeting the crown observations detail may be rejected.

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LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
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TOWN OF VIENNA,

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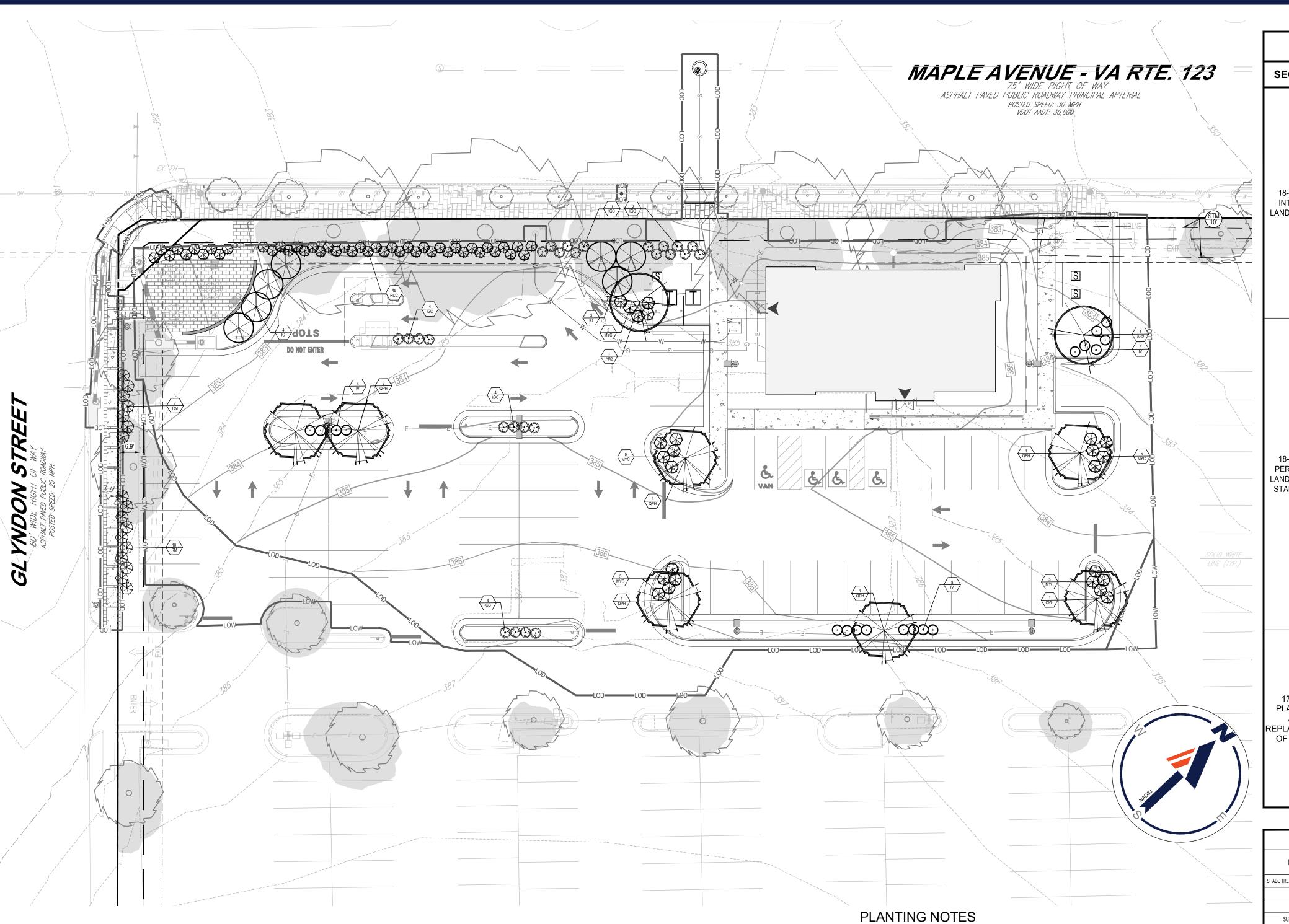
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EET TITLE:

TREE

PRESERVATION DETAILS

C-702



	TOWN OF VIENNA COMPLIANCE CHART			
SECTION	REQUIREMENTS	CALCULATIONS (REQUIRED/PROPOSED)	COMPLIANC	
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		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 EVER 8 SPACES • 72 SPACES X (1/8) = 9 TREES REQUIRES • 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 ANDSCAPING 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	COMPLIES	
		10 AGGREGATE CALIPER INCHES (ACI) PER 100 LF 3376 LF X (10/100) = 14 ACI CONTINUOUS ROW OF EVERGREEN SHRUBS PROPOSED: 6.9' LANDSCAPE STRIP (EXISTING) EXISTING TREES (1363, 1364, 1365, 1366) PROVIDE 54.80" ACI CONTINUOUS ROW OF EVERGREEN SHRUBS	COMPLIES	
17-15.1. PLANTING AND EPLACEMENT 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 1.04 AC OR 45,646 SF ZONE C-2 (10%) NET EXISTING TREE CANOPY 29,807 SF NET EXISTING TREE CANOPY PROVIDED WITH "GIANT FOOD STORE #63 #359 MAPLE AVENUE 43,351 SF EAST MAPLE AVENUE SHOPPING CENTER" APPROVED AUG 13, 2003 PROPOSED LANDSCAPING WITH 4,100 SF	COMPLIES	

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL. / HT.	CONT.	CROWN COVERAGE ALLOWANCE (CCA)	TOTAL (CCA)
HADE TREES							
AR2	2	ACER RUBRUM	RED MAPLE	2 1/2-3" CAL. / 10- 12'	B+B	300	600
QPH	7	QUERCUS PHELLOS	WILLOW OAK	2 1/2-3" CAL. / 10- 12'	B+B	300	2,100
SUBTOTAL:	9	•				TOTAL	2,700
EVERGREEN TREES							
Ю	7	ILEX OPACA	AMERICAN HOLLY	6-8' 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	NA
SUBTOTAL:	18						
EVERGREEN SHRUBS							
IGC	26	ILEX GLABRA 'COMPACTA'	DWARF INKBERRY HOLLY	24-30" HT. & SPREAD	#5 CAN	NA NA	NA
MYC	25	MYRICA CERIFERA 'DON'S DWARF'	DWARF WAX MYRTLE	4'-5' HT. & SPREAD	B+B	NA NA	NA
RCC	45	RHODODENDRON CATAWBIENSE 'CHIONOIDES'	CHINOIDES RHODODENDRON	24-30" HT. & SPREAD	B+B	NA NA	NA
RM	17	RHODODENDRON MAXIMUM 'ROSEBAY'	ROSEBAY RHODODENDRON	4-5' HT. & SPREAD	B+B	NA NA	NA
SUBTOTAL:	113	1		· '			



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PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA, VIRGINIA

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SHEET TITLE:

LANDSCAPE PLAN

REVISION 1 - 05/20/2021

- 1. 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.
- 2. NEW PLANTINGS SHALL BE A MINIMUM OF 2.0"-2.5" CALIPER FOR DECIDUOUS TREES AND 6'-8' HEIGHT FOR EVERGREENS.
- 3. A MINIMUM OF TWO DIFFERENT TREE SPECIES WILL BE REQUIRED WHEN PLANTING 3-5 NEW TREES ON
- 4. A MINIMUM OF THREE DIFFERENT TREE SPECIES WILL BE REQUIRED FOR 6-9 NEW TREES INSTALLED ON
- 5. A MINIMUM OF FOUR DIFFERENT TREE SPECIES WILL BE REQUIRED FOR 10+ NEW TREE PLANTINGS ON SITE. 6. "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
- 7. 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

AND SMALL EVERGREEN TREES" SHALL BE INSTALLED NO CLOSER THAN 15' O.C.

- 8. 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.
- 9. 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

PLANTING NOTES:

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 HEELED-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 LOOSENED 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

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 DESCRIBED 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 PREFORMED 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.

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, WEFDING, 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

		TOTAL				
BETULA NIGRA RIVER BIRCH	3" cal. 7'-8' B&B	4	SEE DECIDUOUS TREE PLANTING DETAIL	314	1256	
FAGUS GRANDIFOLIA AMERIÇAN BEECH	3" cal. 7'-8' B&B	2	SEE DECIDUOUS TREE PLANTING DETAIL	177	354	- 2 FG = 354 SF
GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' / SHADEMASTER THORNLESS HONEYLOCUST	3" cal. 7'-8' B&B	23	SEE DECIDUOUS TREE PLANTING DETAIL	314	7222	- 1 GT = 314 SF
HYDDRANGEA QUERCIFOLIA OAKLEAF HYDRANGEA	24"-36" SPR. CONT.	10	SEE SHRUB PLANTING DETAIL	00	00	
ILEX GLABRA INKBERRY HOLLY	18"-24" SPR. CONT.	8	SEE SHRUB PLANTING DETAIL	00	00	
ITEA VIRGINICA VIRGINIA SWEETSPIRE	15"-18" SPR. CONT.	8	SEE SHRUB PLANTING DETAIL	00	00	
PYRUS CALLERYANA 'BRADFORD' BRADFORD PEAR	3" cal. 7'-8' B&B	3	SEE DECIDUOUS TREE PLANTING DETAIL	254	762	
QUERCUS RUBRA RED OAK	3" cal. 7-8' B&B	14	SEE DECIDUOUS TREE PLANTING DETAIL	254	3556	
SALIX MONTSUDANA "TORTUOSA" CORKSCREW WILLOW	3" cal. 7'-8' B&B	3	SEE DECIDUOUS TREE PLANTING DETAIL	177	531	
VIBURNUM DENTATUM ARROWWOOD VIBURNUM	24"-30" SPR. B&B	6	SEE SHRUB PLANTING DETAIL	00	00	
QUERCUS ALBA WHITE OAK	3"-CAL. 7-8'-B&B	6	SEE DECIDUOUS TREE PLANTING DETAIL	254	1524	- 2 QA = 508 SF
ACER RUBRUM RED MAPLE	3" cal. B&B	2	SEE DECIDUOUS TREE PLANTING DETAIL	314	628	
F F / C	RIVER BIRCH FAGUS GRANDIFOLIA AMERICAN BEECH GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' / SHADEMASTER THORNLESS HONEYLOCUST HYDDRANGEA QUERCIFOLIA OAKLEAF HYDRANGEA ILEX GLABRA INKBERRY HOLLY ITEA VIRGINICA VIRGINIA SWEETSPIRE PYRUS CALLERYANA 'BRADFORD' BRADFORD PEAR QUERCUS RUBRA RED OAK SALIX MONTSUDANA "TORTUOSA" CORKSCREW WILLOW VIBURNUM DENTATUM ARROWWOOD VIBURNUM QUERCUS ALBA WHITE OAK ACER RUBRUM	RIVER BIRCH FAGUS GRANDIFOLIA AMERICAN BEECH GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' / SHADEMASTER THORNLESS HONEYLOCUST HYDDRANGEA QUERCIFOLIA OAKLEAF HYDRANGEA INKBERRY HOLLY ITEA VIRGINICA VIRGINIA SWEETSPIRE PYRUS CALLERYANA 'BRADFORD' BRADFORD PEAR QUERCUS RUBRA RED OAK SALIX MONTSUDANA "TORTUOSA" CORKSCREW WILLOW VIBURNUM DENTATUM ARROWWOOD VIBURNUM QUERCUS ALBA WHITE OAK ACER RUBRUM 3" cal. 7'-8' B&B 3"-CAL. 7-8'-B&B 3"-CAL. 7-8'-B&B 3"-CAL. 7-8'-B&B 3" cal. 7'-8'-B&B 3"-CAL. 7-8'-B&B 3"-CAL. 7-8'-B&B 3" cal. 7'-8'-B&B 3"-CAL. 7-8'-B&B 3" cal.	RIVER BIRCH FAGUS GRANDIFOLIA AMERIÇAN BEECH GLEDITSIA TRIACANTHOS INERMIS 'SHADEMASTER' / SHADEMASTER THORNLESS HONEYLOCUST HYDDRANGEA QUERCIFOLIA OAKLEAF HYDRANGEA INKBERRY HOLLY ITEA VIRGINICA VIRGINIA SWEETSPIRE PYRUS CALLERYANA 'BRADFORD' BRADFORD PEAR QUERCUS RUBRA RED OAK SALIX MONTSUDANA "TORTUOSA" CORK\$CREW WILLOW VIBURNUM DENTATUM ARROWWOOD VIBURNUM QUERCUS ALBA WHITE OAK QUERCUS ALBA WHITE OAK ACER RUBRUM 3" cal. 7'-8' B&B 4" 3" cal. 7'-8' B&B 5" 6 3" cal. 7'-8' B&B 6 3" cal. 7'-8' B&B 6 ACER RUBRUM 3" cal. 7'-8' B&B 6 3" -CAL. 7-8' B&B	T'-8' B&B 7'-8' B&B 7'-8' B&B 3" cal. 7'-8' B&B 2 SEE DECIDUOUS TREE PLANTING DETAIL SEE DECIDUOUS TREE PLANTING DETAIL SEE DECIDUOUS TREE PLANTING DETAIL 3" cal. 7'-8' B&B 3" cal. 7'-8' B&B 3" cal. 7'-8' B&B 23 SEE DECIDUOUS TREE PLANTING DETAIL SEE SHRUB PLANTING DETAIL SEE SHRUB PLANTING DETAIL CONT. 10 SEE SHRUB PLANTING DETAIL CONT. SEE SHRUB PLANTING DETAIL SEE DECIDUOUS TREE PLANTING DETAIL SEE SHRUB PLANTING DETAIL SEE DECIDUOUS TREE	TO SEE SHRUB PLANTING DETAIL TO SEE DECIDUOUS TREE PLANTING DETAIL TO SEE SHRUB PLANTING DETAI	RIVER BIRCH 7'-8' B&B 3" col. 7'-8' BBB 3" col. 7'-8' BBB 3" col. 7'-8' BBB 3" col. 7'-8' BBB 4" PLANTING DETAIL 177 354 SEE DECIDUOUS TREE PLANTING DETAIL 00 00 00

TREE CANOPY COMPUTATIONS: REQUIRED TREE COVER (10%) = 0.1 X 10.4375 X 43,560 = 45,466 SF EX. TREE COVER TO REMAIN (SEE SH. 9) 30,643 SF -836 SF = 29,807 SF 15,482 - 1,176 SF = 14,306 SF ADDITIONAL PLANTINGS - 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 NURSERYMENS 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.

TOTAL TREE CANOPY LOST FROM TREES TO BE REMOVED = 2.012 SF TOTAL TREE CANOPY GAINED FROM PROPOSED TREES = 4,100 SF **NET GAIN IN TREE CANOPY =** 2,088 SF

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 PLANTING HOLE. 4" MOUNDED MULCH SAUCER

REMOVE TOP 1/3 OF BURLAP FROM BALL AND CUT/REMOVE ALL ATTACHED STRING AND ROPE (IF WIRE BASKET IS USED IN CONJUNCTION WITH BURLAP BALL THEN CUT THE TOP 2/3 OF THE BASKET AND REMOVE CUTTINGS FROM

- TREE SHALL BEAR SAME RELATION

NOTES:

4" SHREDDED HARDWOOD MULCH (DO NOT MOUND NEAR TRUNK)

3-2"x2" OAK STAKES SET 18" BELOW TREE PIT, 120" APART IN UNDISTURBED GROUND DO NOT DRIVE STAKES INTO ROOTBALL.

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

DECIDUOUS TREE PLANTING NOT TO SCALE

TWICE BALL DIAMETER

ROOTBALL

ROOTBALL

REMOVE COLLAR FROM PEAT ALL CONTAINERS TO BE

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 IT'S NURSERY FIELD GROWTH GRADE.

FIBER POT AND VERTICALLY CUT ROOTS IN 3 PLACES TO PROMOTE ROOT GROWTH

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 BACKFILL 1/2 OF MATERIAL, WATER, ALLOW SOIL TO SETTLE. DO NOT COMPACT. FINISH BACKFILLING. WATER AFTER MULCHING.

SHRUB PLANTING NOT TO SCALE

QUALITY SHREDDED TOPSOIL

OLD FILL AND COMPACTED

MATERIAL TO BE REMOVED.

SAW CUT EX. PAVEMENT

AND GUTTER.

AT FACE OF PROP. CURB

PATCH EX. PAVEMENT TO FACE OF CURB AND GUTTER FOLLOWING

CURB CONSTRUCTION.

CG-6, CG-6R OR CG-2 PER PLAN

MINIMUM

TWICE BALL DIAMETER

0

0 0 HOPPIN VENUE, EA

4

0

2

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**

4" MIN. 21A

1" SM-2A OVERLAY AT END OF CONSTRUCTION -

- PAVEMENT AND BASE MATERIAL IN LANDSCAPE AREA TO BE REMOVED AND SURFACE BELOW EXISTING

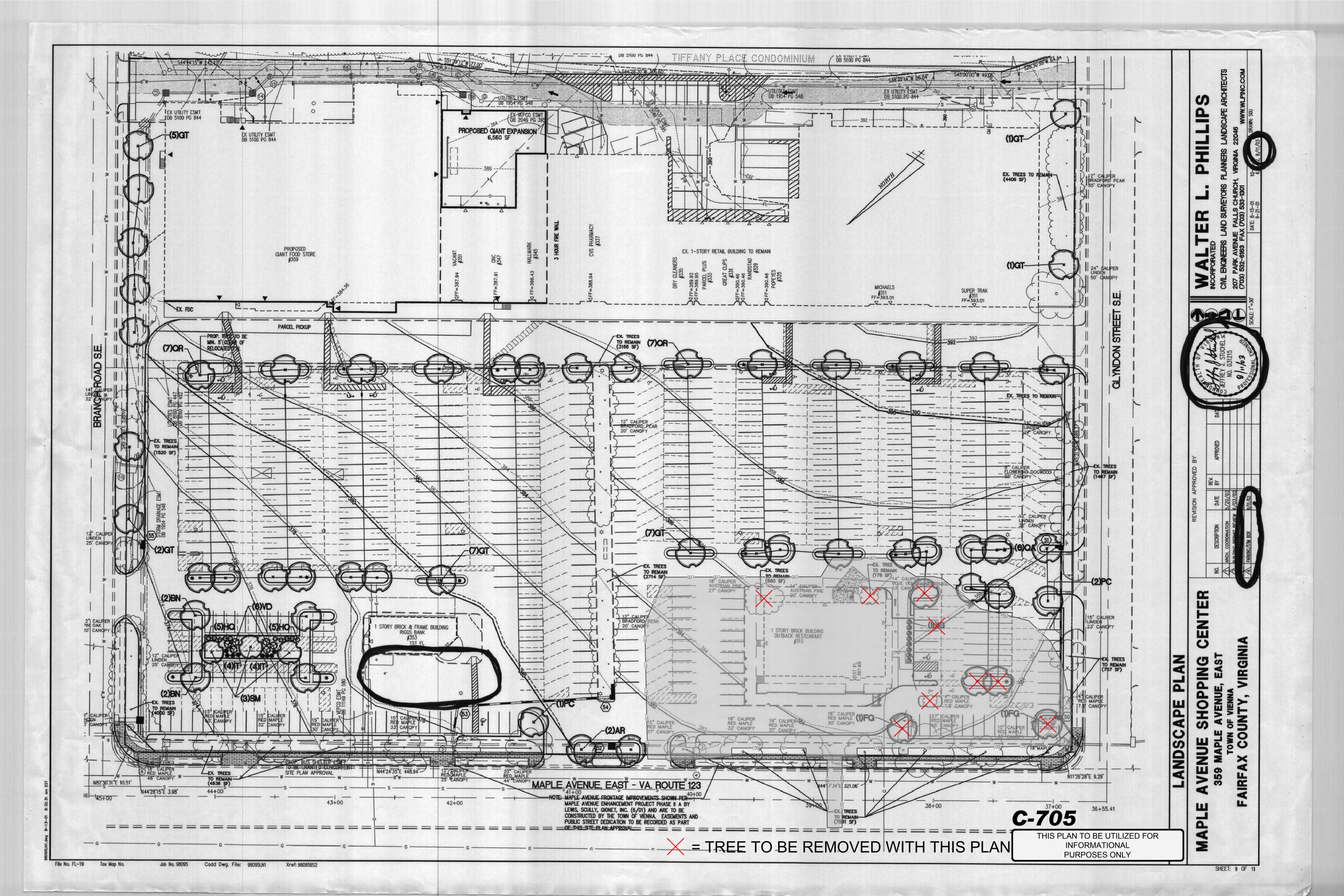
(OR BUILD UP EX. PAVEMENT ELEVATION PER

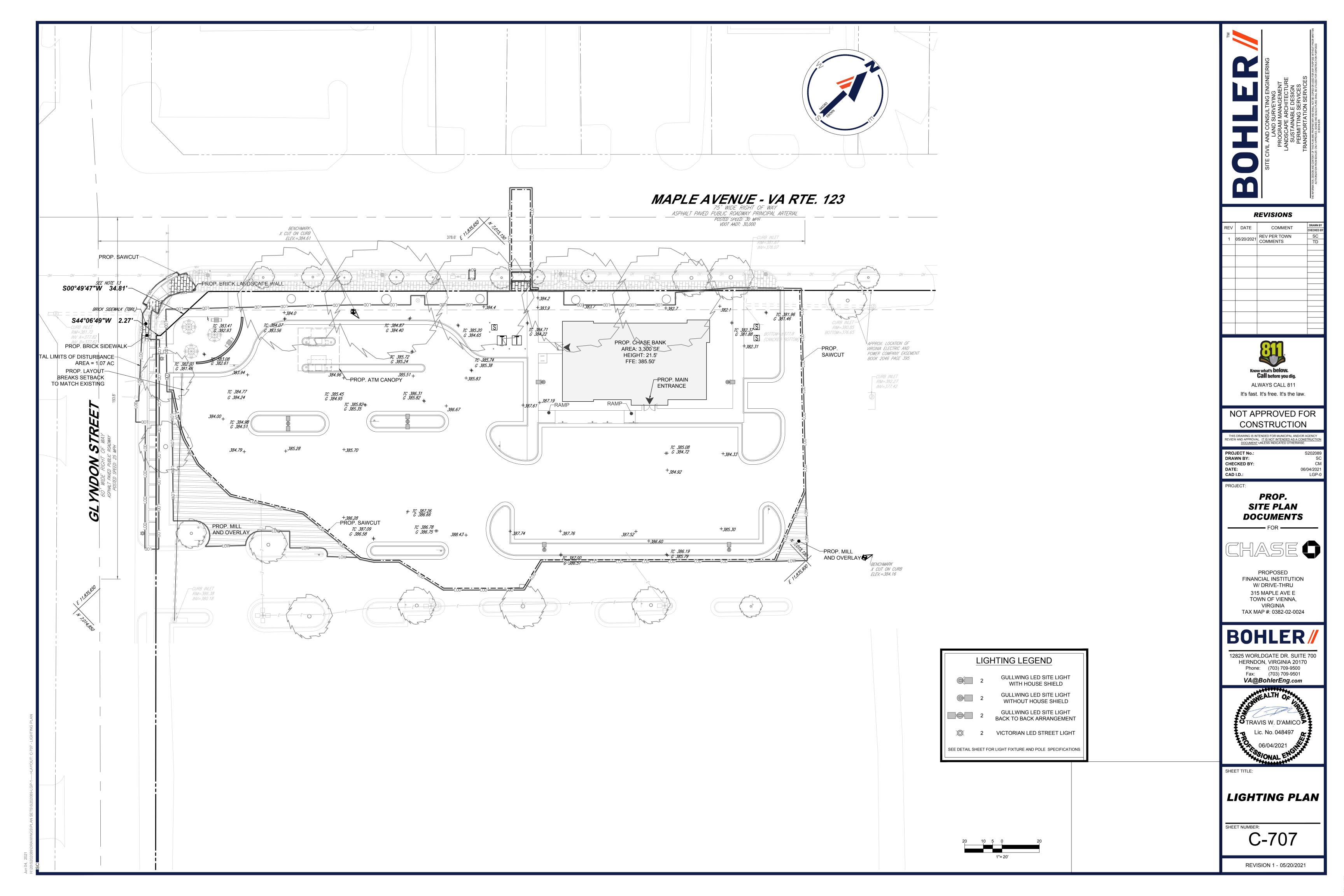
PAVEMENT SECTION TO BE SCARIFIED.

GRADING PLAN.)

EXISTING PAVEMENT SURFACE

SHEET: 10 OF 11





LANDSCAPE SPECIFICATIONS

HE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR

- A. GENERAL ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS
- B. TOPSOIL NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS
- C. LAWN ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES. 1.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED 1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS. 1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
- D. MULCH THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

F FFRTII IZFR

- 1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A
- WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE. 1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY

F PLANT MATERIAL

- 1.1 ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE
- 1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL
- 1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION. 1.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 11/4", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED PLANTS SHALL NOT BE BOUND WITH
- WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. 1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE
- 1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE. 1.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE
- LONGEST BRANCH 1.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL

3. GENERAL WORK PROCEDURES

- A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF
- B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

- A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.
- B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE
- C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK

- A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.
- . A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.
- C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION GRADING TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.
- D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

- A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY
- B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY.

- COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY 1.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC
- MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF
- OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5. 1.2 TO INCREASE DRAINAGE MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX.
- 1.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE

SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.

- B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL
- C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED 13. CLEANUF BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
- D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

- CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.
- B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS
-). ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1 000 SQUARE FOOT AREA) 1.1. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL 1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP
- E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

- A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.
- B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.
- C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.
- D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING
- E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.
- F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN MUST BE INSTALLED. INSPECTED AND APPROVED BY THE APPROVING AGENCY THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS
- 1.1. PLANTS: MARCH 15 TO DECEMBER 15
- 1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
- G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.
- H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY. THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING
- ACER RUBRUM PLATANUS X ACERIFOLIA BETULA VARIETIES POPULOUS VARIETIES CARPINUS VARIETIES PRUNUS VARIETIES CRATAEGUS VARIETIES PYRUS VARIETIES QUERCUS VARIETIES LIQUIDAMBER STYRACIFLUA TILIA TOMENTOSA LIRIODENDRON TULIPIFERA ZELKOVA VARIETIES
- PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY: • 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME • 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS: A) 2 TABLETS PER 1 GALLON PLANT
 - B) 3 TABLETS PER 5 GALLON PLANT C) 4 TABLETS PER 15 GALLON PLANT
- D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK
- J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND
- K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP
- . ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.
- M. GROUND COVER AREAS SHALL RECEIVE A 1/4" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION
- N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.
- O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.
- P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

- A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.
- B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.
- C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.
- D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.
- E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.
- F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.
- A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED
- B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.
- C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

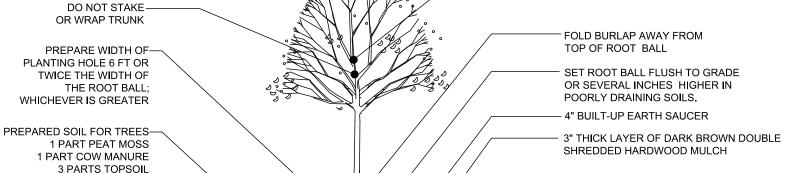
- A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.
- B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.
- C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CUI TIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.
- D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH. ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

- A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE. THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED
- B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE

ONLY TREES WITH ONE MAIN LEADER SHALL BE PURCHASED. DO NOT PRUNE TREE AT PLANTING UNLESS DIRECTED TO BY PROJECT LANDSCAPE ARCHITECT DO NOT STAKE OR -FOLD BURLAP AWAY FROM TOP OF WRAP TRUNK ROOT BALL SET ROOT BALL FLUSH TO GRADE OR PREPARE WIDTH OF -SEVERAL INCHES HIGHER IN PLANTING HOLE 6 FT POORLY DRAINING SOILS. OR TWICE THE WIDTH OF THE ROOT BALL; - 4" BUILT-UP EARTH SAUCER WHICHEVER IS GREATER - 3" THICK LAYER OF DARK BROWN DOUBLE SHREDDED HARDWOOD MULCH PREPARED SOIL FOR-TREES 1 PART PEAT MOSS 1 BEFORE PLANTING ADD 3 TO 4" PART COW MANURE 3 OF WELL-COMPOSTED LEAVES PARTS TOPSOIL OR RECYCLED YARD WASTE TO BED AND TILL INTO TOP 6" OF PREPARED SOIL. 4-6" DEEPER THAN ROOT BALL UNDISTURBED-SUBGRADE - REMOVE THE TOP 1/3 OF THE WIRE BASKET IF PRESENT. ANY AND ALL TWINE SHALL BE REMOVED DIG WIDE. SHALLOW HOLE-FROM THE TREE BEFORE BACKFILLING. BURLAP SHALI WITH TAMPED SIDES BE FOLDED BACK INTO PLANTING HOLE TAMP SOIL SOLIDLY AROUND-BASE OF ROOT BALL - SET ROOT BALL ON FIRM REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

EVERGREEN TREE PLANTING DETAIL NOT TO SCALE

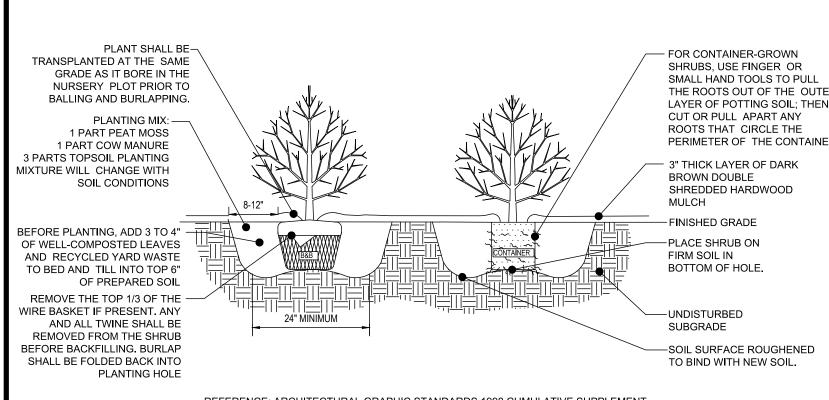




- BEFORE PLANTING ADD 3 TO 4" OF WELL-COMPOSTED LEAVES OR UNDISTURBED-RECYCLED YARD WASTE TO BED SUBGRADE AND TILL INTO TOP 6" OF PREPARED SOIL. 4-6" DEEPER THAN ROOT BALL
- DIG WIDE. SHALLOW HOLE--REMOVE THE TOP 1/3 OF THE WIRE BASKET IF WITH TAMPED SIDES PRESENT. ANY AND ALL TWINE SHALL BE REMOVED FROM THE TREE BEFORE BACKFILLING. BURLAP SHALL BE FOLDED BAC TAMP SOIL SOLIDLY INTO PLANTING HOLE AROUND BASE OF **ROOT BALL** -SET ROOT BALL ON FIRM

REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT **DECIDUOUS TREE PLANTING DETAIL**

NOT TO SCALE

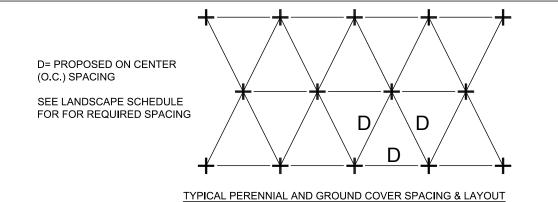


REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT **DECIDUOUS AND EVERGREEN** SHRUB PLANTING DETAIL

NOT TO SCALE

-PLANT MATERIAL SPACED AS SPECIFIED. INCORPORATE 2" OF PEAT INTO 6" OF-SEE LANDSCAPE SCHEDULE FOR PROPOSED PLANTING MIXTURE. AS SPECIFIED 3" THICK LAYER OF DARK BROWN DOUBLE SHREDDED HARDWOOD MULCH -FINISHED GRADE -MINIMUM 6" TOPSOIL-—EXISTING SUBSOIL

TYPICAL PERENNIAL AND GROUND COVER PLANTING



PERENNIAL/GROUND COVER PLANTING DETAIL

MATERIAL

1.1. SEED MIXTURE MUST BE COMPRISED OF THE FOLLOWING VARIETIES AND AT THE SPECIFIED COMPOSITION: 80% - TURF TYPE TALL FESCUE SEED

TREE PLANTING ON SLOPE DETAIL

- 1.1.3. 10% ANNUAL RYE GRASS SEED
- 1.2. INSTALLATION RATES SEED: LAWN SEED SHOULD BE APPLIED AT A RATE OF 7 LBS/1,000 SF
- ANALYSIS OR 2,000 LBS PER ACRE (46 LBS/1,000 SF) IF NO SOIL ANALYSIS IS PERFORMED. FERTILIZER: COMMERCIAL GRADE 12-20-12 SHOULD BE APPLIED AT A RATE OF 250 LBS PER PER ACRE (5.8
- LBS/ 1 000 SE LIQUID OR DRY LIME: LIQUID LIME SHOULD BE APPLIED AT A RATE OF 2.5 GALLONS PER ACRE OR NEUTRA LIME DRY APPLIED AT A RATE OF 80LBS PER ACRE IN AREAS OF ACIDIC SOILS TO ASSURE GERMINATION
- MULCH: WHEAT OAT OR BARLEY STRAW MULCH SHALL BE APPLIED AT A RATE OF 80 LBS PER 1 000 SE DO NOT INSTALL MULCH SO THICK THAT IT COMPLETELY COVERS THE GROUND. TOPSOIL SHOULD BE VISIBLE THROUGH THE STRAW LAYER.

2. EXECUTION AND PREPARATION:

- 2.1. A SOIL ANALYSIS SHOULD BE PERFORMED TO ASSESS THE FERTILITY NEEDS AND PH OF THE SOIL. ALL INSTALLATION AREAS SHOULD BE PREPARED TO AGRICULTURAL STANDARD RECOMMENDED BY THE DEPARTMENT OF AGRICULTURE WITHIN THE STATE WHERE THE WORK IS BEING PERFORMED. AGRICULTURAL LIME OR PELLETIZED LIME SHOULD BE ADDED DURING THE GROUND PREPARATION STAGE AT
- THE RATE RECOMMENDED ACCORDING TO SOIL ANALYSIS 2.2. ALL WEEDS AND UNDESIRABLE PLANTS SHOULD BE REMOVED BEFORE PLANTING BY METHOD OF SPRAYING OR TILLAGE. A NON-SELECTIVE HERBICIDE CAN BE SPRAYED ONE MONTH PRIOR TO PLANTING TO KILL ALL WEEDS AND UNDESIRABLE PLANTS THAT MAY COMPETE WITH THE NEW SEEDLINGS. TILLAGE CAN BE PERFORMED AT LEAST 4 WEEKS PRIOR TO PLANTING AND AGAIN 2 WEEKS AFTER THE INITIAL TILLAGE. THE TILLAGE PROCEDURE CAN BE ADVANTAGEOUS IF LARGE AMOUNTS OF ORGANIC DEBRIS ARE PRESENT ON
- THE INSTALLATION AREAS 2.3. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2"
- FIRM THE SEEDBED. THIS PROCESS HELPS ACHIEVE THE DESIRED FIRMNESS. SOIL SHOULD BE FIRMED TO 85% OF COMPACTION.

INSTALLATION:

- EQUIPMENT USED TO SPREAD SEED SHOULD HAVE SUFFICIENT CAPACITY TO HOLD AND AGITATE SEED
- 3.3. SEED MAY NEED TO BE APPLIED AT A HALF RATE IN ALTERNATING DIRECTIONS TO ENSURE AN EVEN
- COVERAGE OF SEED 3.4. LIQUID LIME OR NEUTRA LIME DRY SHOULD BE TOPICALLY APPLIED TO AREAS WITH ACIDIC SOILS TO ASSIST THE SEED GERMINATION AND VEGETATION GROWTH DURING THE FIRST 90 DAYS. LIQUID LIME SHOULD BE
- DETERMINED BY THE INITIAL SOIL ANALYSIS. IF NO SOIL ANALYSIS IS AVAILABLE EVENLY APPLY 12-20-12 STARTER FERTILIZER AT A RATE OF 250LBS PER ACRE (5.8LBS/1000 SQUARE FEET) 3.6. A ROLLED EROSION CONTROL PRODUCT CAN BE APPLIED OVER THE TOP OF SEED IN STEEP SLOPE SITUATIONS TO HELP PREVENT SEED FROM WASHING AND REINFORCE VEGETATION THROUGH

4. MAINTENANCE

- 4.1. FREQUENT LIGHT IRRIGATION WILL NEED TO BE APPLIED TO SEEDED AREAS IF NO NATURAL RAIN EVENTS HAVE OCCURRED WITHIN 2 WEEKS OF SEEDING. AFTER SEED GERMINATION HAS OCCURRED AND PLANTS ARE VISIBLE THE FREQUENCY OF IRRIGATION CAN BE CUT BACK WITH HEAVIER APPLICATION RATES.
- 4.2. REPAIR ALL SEED WASHINGS AND EROSION.

TENANT MAINTENANCE RESPONSIBILITIES

- UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, CHASE BANK IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALI INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING WITHIN THE LEASE LIMITS, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:
- ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVFI
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY

SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

SEEDING SPECIFICATIONS

NOTE: TREE STAKING TO BE REMOVED

DO NOT WRAP TRUNK-

2 PER TREE

EXISTING GRADE—

1 PART PEAT MOSS

3 PARTS TOPSOIL

1 PART COW MANURE

UNDISTURBED SUBGRADE-

REINFORCED RUBBER HOSE (1/2"-

PREPARED SOIL FOR TREES-

TAMP SOIL SOLIDLY AROUND BASE-

OF ROOT BALL

12 GAUGE GALVANIZED WIRE GUYS TWISTED-

2" DIA. HARDWOOD STAKES 2/3 TREE HT.—

AFTER 2 GROWING SEASONS

- 10% KENTUCKY BLUEGRASS SEED 1.1.2.
- LIME: AGRICULTURAL OR PELLETIZED LIME SHOULD BE APPLIED AT SPECIFIED RATE ACCORDING TO SOIL
- AND INITIAL ESTABLISHMENT

- 2.4. AREAS TO BE PLANTED SHOULD BE ROLLED WITH A CULTI-PACKER, TURF ROLLER, OR SIMILAR DEVICE TO

- 3.1. STRICTLY COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS. EVENLY IN A CYCLONE OR DROP PATTERN. HYDROSEEDING MAY ALSO BE PERFORMED WITH THE ENGINEER/ARCHITECT'S APPROVAL
- APPLIED AT A RATE OF 2.5 GALLONS PER ACRE OR NEUTRA LIME DRY AT A RATE OF 80LBS PER ACRE. 3.5. FERTILIZER SHOULD BE SPREAD EVENLY OVER THE SEEDED AREAS AT THE RECOMMENDED RATE
- ESTABLISHMENT. (FOLLOW REC PRODUCT MANUFACTURER RECOMMENDATIONS.)

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.

VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED.

SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.

ONLY TREES WITH ONE MAIN LEADER SHALL BE

PURCHASED. DO NOT PRUNE TREE AT PLANTING

UNLESS DIRECTED TO BY PROJECT LANDSCAPE

-BEFORE PLANTING ADD 3 TO 4" OF WELL-COMPOSTED

LEAVES OR RECYCLED YARD WASTE TO BED, AND TIL

-REMOVE THE TOP 1/3 OF THE WIRE BASKET IF

BE FOLDED BACK INTO PLANTING HOLE

PRESENT. ANY AND ALL TWINE SHALL BE REMOVED

FROM THE TREE BEFORE BACKFILLING, BURLAP SHA

-SET ROOT BALL FLUSH TO GRADE OR

SEVERAL INCHES HIGHER IN POORLY

-3" THICK I AYER OF DARK BROWN

DOUBLE SHREDDED HARDWOOD

INTO TOP 6" OF PREPARED SOIL.

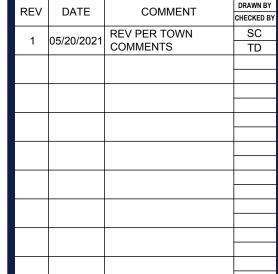
-SET ROOT BALL ON FIRM PAD

IN BOTTOM OF HOLE

-4" BUILT-UP FARTH SAUCER

DRAINING SOILS.

REVISIONS





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> PROP. SITE PLAN

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DOCUMENTS

PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU

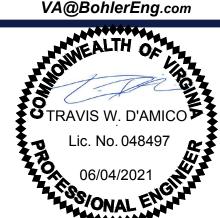
315 MAPLE AVE E

TOWN OF VIENNA,

VIRGINIA

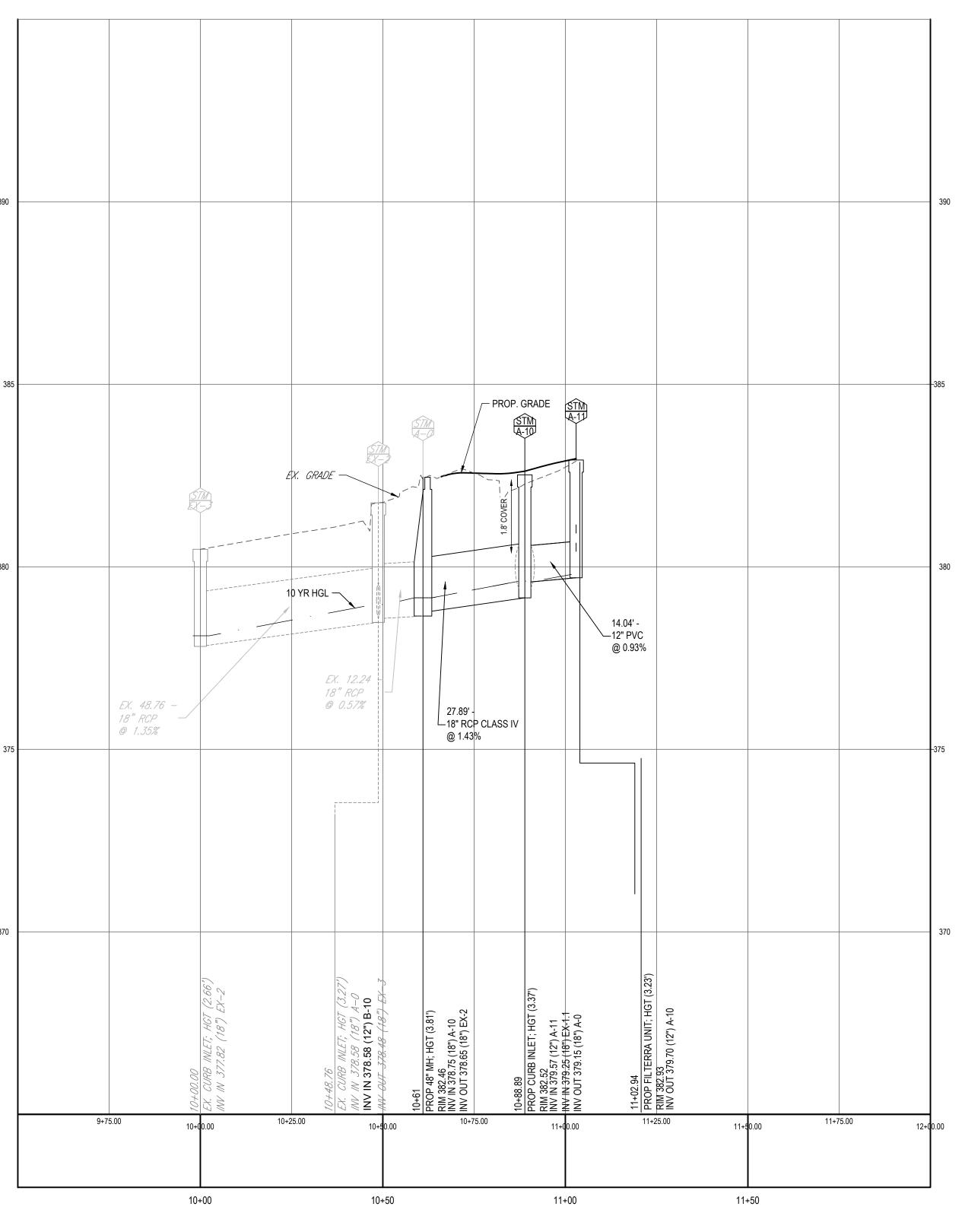
TAX MAP #: 0382-02-0024

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

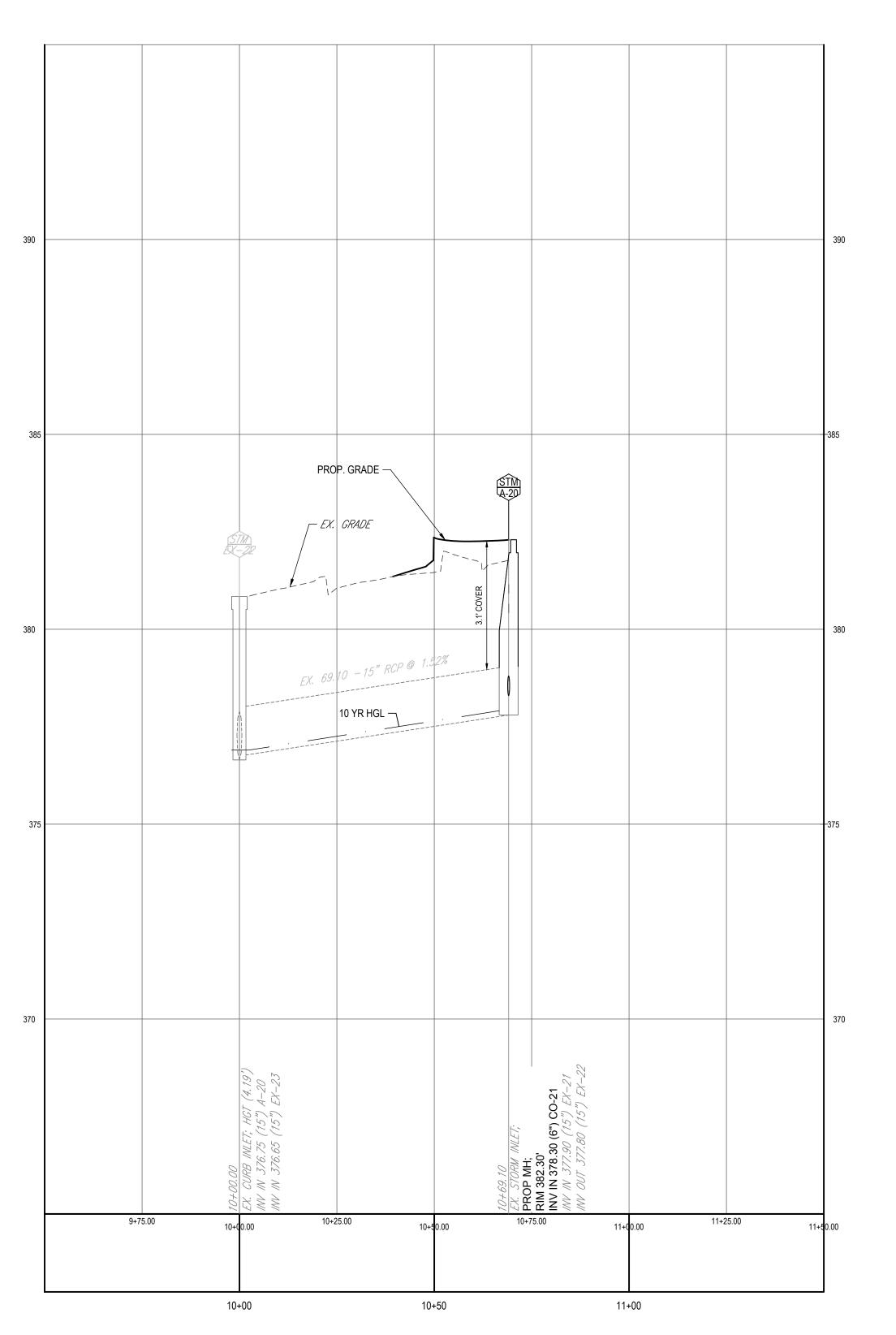


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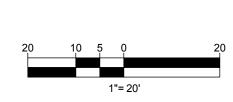
LANDSCAPE **DETAILS**



PROPOSED STORM PROFILE - EX-3 TO A-11 SCALE: 1"= 20 ' HORIZONTAL 1"= 2 ' VERTICAL



PROPOSED STORM PROFILE - EX-22 TO A-20 SCALE: 1"= 20 ' HORIZONTAL 1"= 2 ' VERTICAL



REVISIONS					
OMMENT					
R TOWN ENTS					



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PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA,

BOHLER/

VIRGINIA TAX MAP #: 0382-02-0024

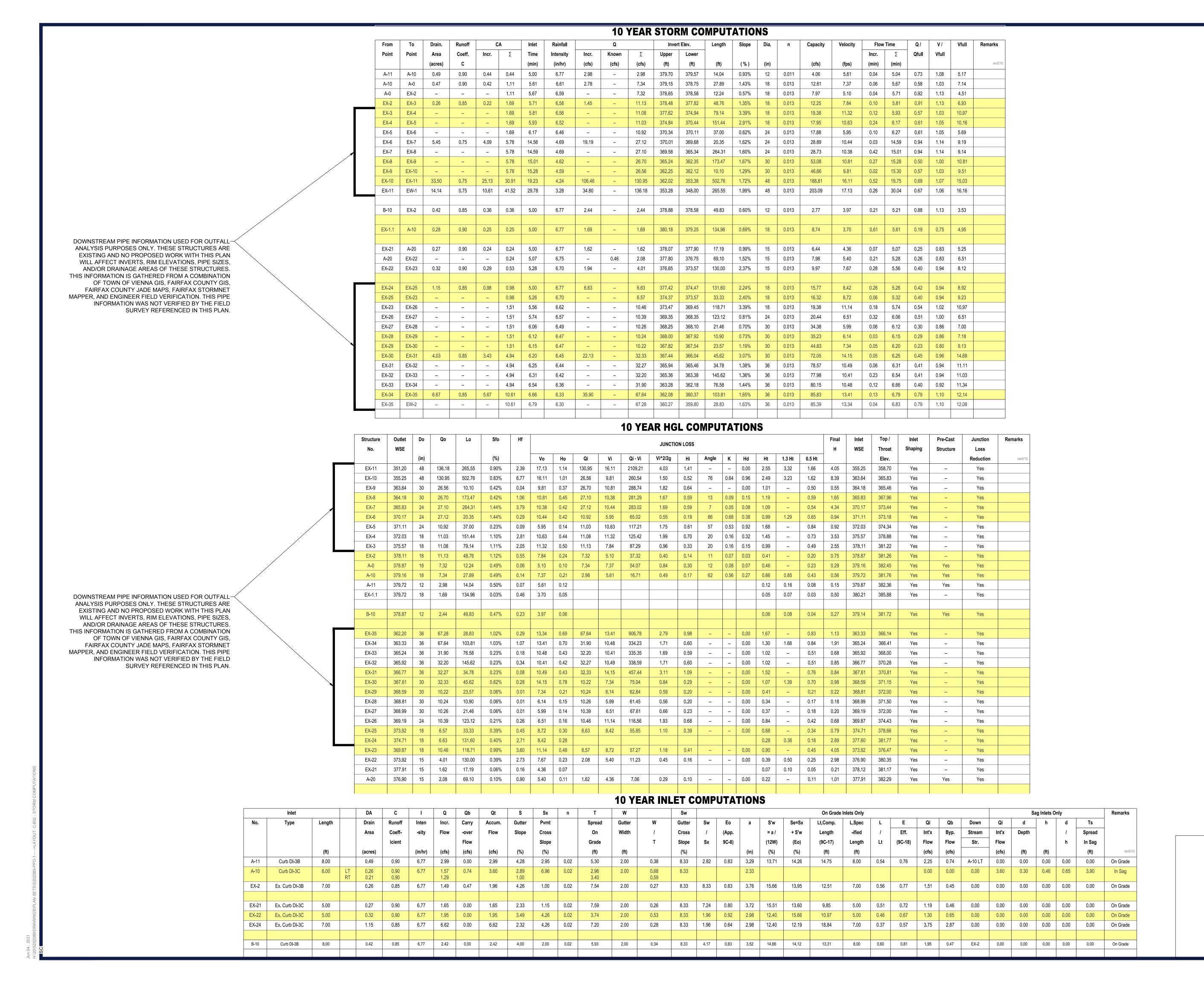
12825 WORLDGATE DR. SUITE 700 HERNDON, VIRGINIA 20170
Phone: (703) 709-9500
Fax: (703) 709-9501

VA@BohlerEng.com

SHEET TITLE:

STORM **PROFILES**

C-801



REVISIONS

ΞV	DATE	TE COMMENT	
= V	DATE	COMMENT	CHECKED BY
1	05/20/2021	REV PER TOWN	SC
1	03/20/2021	COMMENTS	TD

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06/04/2021

PROPOSED FINANCIAL INSTITUTION

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

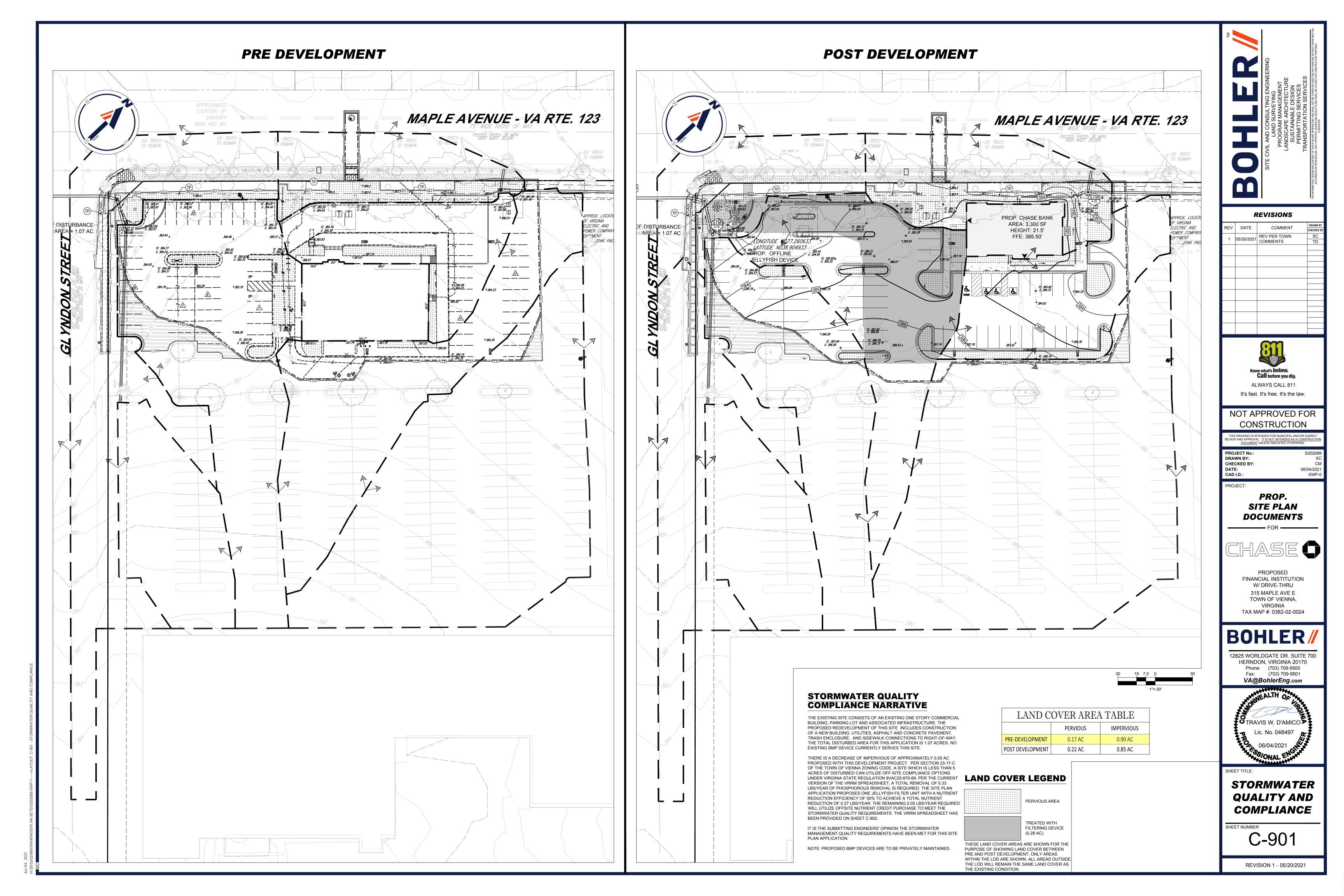
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SHEET TITLE:

STORM COMPUTATIONS

C-802



CLEAR ALL (Ctrl+Shift+R)

data input cells constant values calculation cells final results

Site Information

Constants

Annual Rainfall (inches) Target Rainfall Event (inches)

Total Phosphorus (TP) EMC (mg/L)

Total Nitrogen (TN) EMC (mg/L) Target TP Load (lb/acre/yr)

Pj (unitless correction factor)

Post-Development Project (Treatment Volume and Loads)

1.00

0.26 1.86

0.41 0.90

Enter Total Disturbed Area (acres) \rightarrow	1.07
Maximum reduction required:	20%
The site's net increase in impervious cover (acres) is:	0
Post-Development TP Load Reduction for Site (lb/yr):	0.33

Enter Total Disturbed Area (acres) $ ightarrow$	1.07
Maximum reduction required:	20%
ite's net increase in impervious cover (acres) is:	0
Development TP Load Reduction for Site (lb/yr):	0.33

	A Soils	B Soils	C Soils	D Soils	Totals
est/Open Space (acres) undisturbed					0.00
est/open space					0.00
naged Turf (acres) disturbed, graded					0.17
yards or other turf to be				0.17	0.17
pervious Cover (acres)				0.90	0.90
					1.07

ost-Development Land Cover (acres)					
	A Soils	B Soils	C Soils	D Soils	Totals
orest/Open Space (acres) undisturbed,					0.00
otected forest/open space or reforested					0.00
anaged Turf (acres) disturbed, graded					0.22
r yards or other turf to be				0.22	0.22
npervious Cover (acres)				0.85	0.85
Area Check	OK.	OK.	OK.	OK.	1.07

Runoff Coefficier	nts	(Rv)	

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

0.00

0.00

0%

0.22

0.25

21%

0.85

0.95

79%

1.07

0.81

0.0719

3,131

1.97

1.84

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious

Forest/Open Space

Cover (acres)

Weighted Rv(forest)

% Forest

Managed Turf Cover

Weighted Rv (turf)

% Managed Turf

Impervious Cover

(acres)

Rv(impervious)

% Impervious

Final Site Area (acres

Final Post Dev Site Rv

Final Post-

Development

Treatment Volume (acre-ft)

Final Post-

Treatment Volume

(cubic feet)

Final Post-

(lb/yr)

TP Load per acre (lb/acre/yr)

TP Load Reduction Required (lb/yr)

Land Cover Sum	mary-Pre	
Pre-ReDevelopment	Listed	Adjusted ²
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.17	0.17
Weighted Rv(turf)	0.25	0.25
% Managed Turf	16%	16%
Impervious Cover (acres)	0.90	0.90
Rv(impervious)	0.95	0.95
% Impervious	84%	84%
Total Site Area (acres)	1.07	1.07
Site Rv	0.84	0.84

Pre-ReDevelopment Treatment Volume (acre-ft)	0.0748	0.0748
Pre-ReDevelopment Treatment Volume (cubic feet)	3,258	3,258
Pre-ReDevelopment TP Load (lb/yr)	2.05	
Pre-ReDevelopment TP Load per acre (Ib/acre/yr)	1.91	1.91
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopmen pervious land proposed for new impervi	0.44	

Treatment Volume and Nutrient Load

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on

¹ Adjusted Land Cover Summary:
Pre ReDevelopment land cover minus pervious land cover (forest/open space or
managed turf) acreage proposed for new impervious cover.

	Post-Development Requirement for Site Area
ew development load limit, 0.41 lbs/acre/year).	
orumn i snows load reduction requirement for new impervious cover (based on	

Nitrogen Loads (Informational Purposes Only)

	Pre-ReDevelopment TN Load (lb/yr)	14.64
--	--------------------------------------	-------

Final Post-Development TN Load	
(Post-ReDevelopment & New	14.07
Impervious) (lb/yr)	

Post-Development New Impervious

New Impervious Cover

Rv(impervious)

Post-Development

Treatment Volume

Post-Development

Treatment Volume

(cubic feet)

Post-Development TP

Load (lb/yr)

TP Load Reduction

Required for New

Impervious Area

(lb/yr)

Check:	
BMP Design Specifications List:	2013 Draft Stds & Specs
Linear project?	No
Land cover areas entered correctly?	✓

Total disturbed area entered?

Land Cover Summary-Post

Post-ReDevelopment

0.00

0.00

0%

0.22

0.25

21%

0.85

0.95

79%

1.07

0.81

0.0719

1.97

0.33

Forest/Open Space

Cover (acres)

Weighted Rv(forest)

% Forest

Managed Turf Cover

Weighted Rv (turf)

% Managed Turf

ReDev. Impervious

Cover (acres)

Rv(impervious)

% Impervious Total ReDev. Site Area

ReDev Site Rv

Post-ReDevelopment

Post-ReDevelopment

(cubic feet)

Post-ReDevelopment

Load (TP)

(lb/yr)*

Post-ReDevelopment TP

(lb/acre/yr)

ax. Reduction Required

(Below Pre-

Re Development Load)

TP Load Reduction Required for

Redeveloped Area

(lb/yr)

0.33

Treatment Volume

Treatment Volume

Treatment Volume and Nutrient Load

(acres)

LAND COVER SUMMARY -- POST DEVELOPMENT Land Cover Summary-Post

Site	Results (W	ater Qualit	ty Complia	nce)		
Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.85	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.24	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.22	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.04	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	
						_

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft ³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	1.97	0.00	0.00	0.00	0.00	1.97
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.27	0.00	0.00	0.00	0.00	0.27
TP LOAD REMAINING (lb/yr)	1.70	0.00	0.00	0.00	0.00	1.70
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	1.97
TP LOAD REDUCTION REQUIRED (lb/yr)	0.33
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.27
TP LOAD REMAINING (lb/yr):	1.70
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.06

Total Nitrogen (For Information Purposes)

<u> </u>		
POST-DEVELOPMENT LOAD (Ib	/yr)	14.07
NITROGEN LOAD REDUCTION ACHIEVED (Ib		
EMAINING POST-DEVELOPMENT NITROGEN LOAD (Ib	/yr)	14.07

Drainage Area A

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)					0.00	0.00
Managed Turf (acres)				0.22	0.22	0.25
Impervious Cover (acres)				0.85	0.85	0.95
						Ť

Total 1.07 Stormwater Rest Management Practices (RR = Runoff Reduction)

Stormwater Best Managem	ent Praction	es (RR = R	unoff Redu	ction)									Select from dropdown lists-
Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft ³)	Runoff Reduction (ft ³)	Remaining Runoff Volume (ft ³)	Total BMP Treatment Volume (ft ³)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (Ib)	Remaining Phosphorus Load (Ib)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)												
14.a. Manufactured Treatment Device- Hydrodynamic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	
14.b. Manufactured Treatment Device-Filtering	0	0.04	0.24	0	0	864	864	50	0.00	0.54	0.27	0.27	
14.c. Manufactured Treatment Device-Generic	0			0	0	0	0	20	0.00	0.00	0.00	0.00	

Cita Dagulta /Matau Ouglitu Campalianaa

<u>-</u>						
Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	0.85	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.24	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.22	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.04	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft³) 3,131

ction volunte and it by brainage Area						
	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft ³)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (Ib/yr)	1.97	0.00	0.00	0.00	0.00	1.97
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.27	0.00	0.00	0.00	0.00	0.27
TP LOAD REMAINING (lb/yr)	1.70	0.00	0.00	0.00	0.00	1.70
NITEOGEN LOAD BEDLICTION ACHIEVED (IL/va)	0.00	0.00	0.00	0.00	0.00	0.00

1010111101	
FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	
TP LOAD REDUCTION REQUIRED (lb/yr)	
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.27
TP LOAD REMAINING (lb/yr):	1.70

	R	REVISIONS	
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06/04/2021 SWP-0

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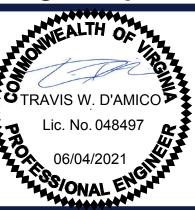
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PROP. SITE PLAN **DOCUMENTS**

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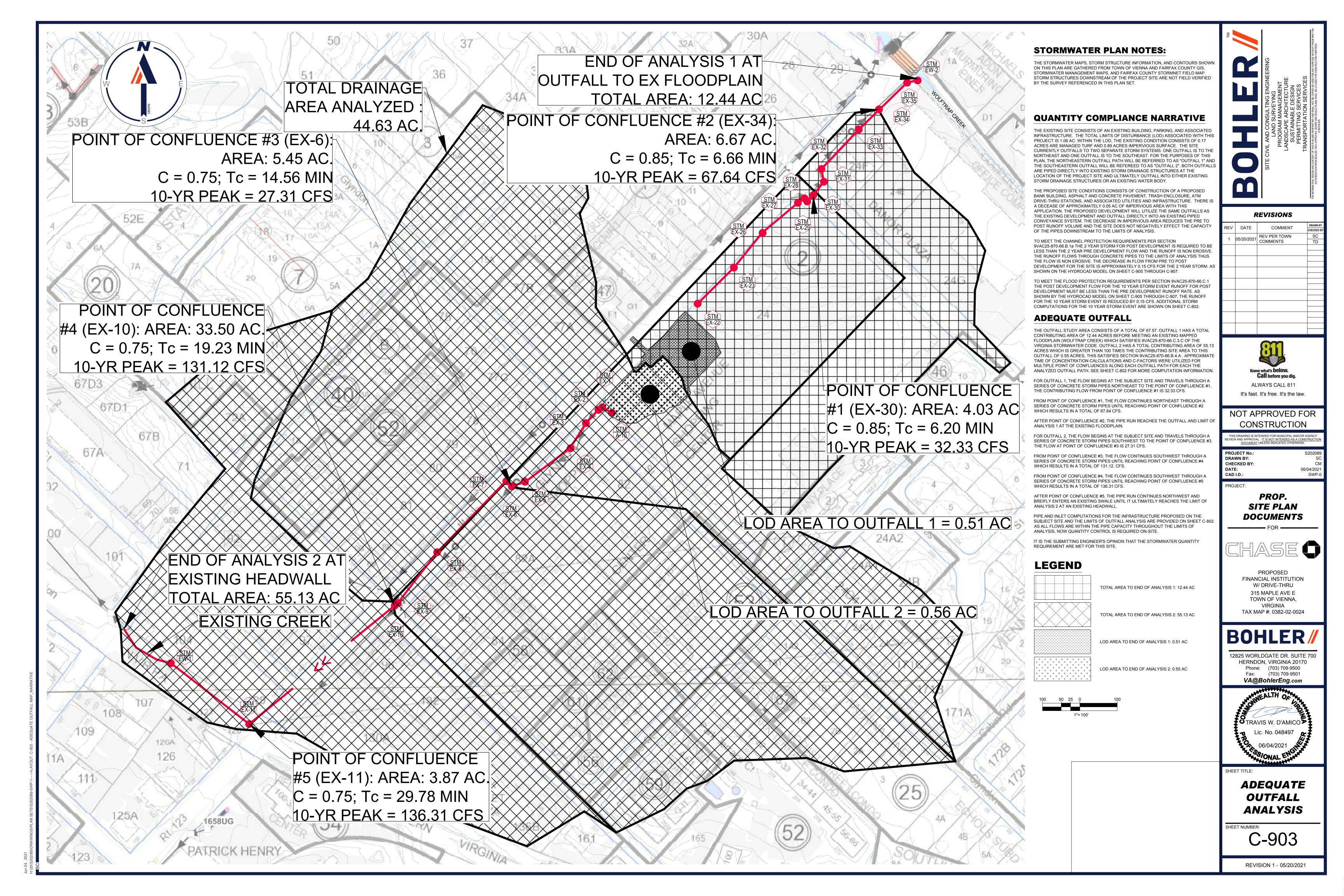


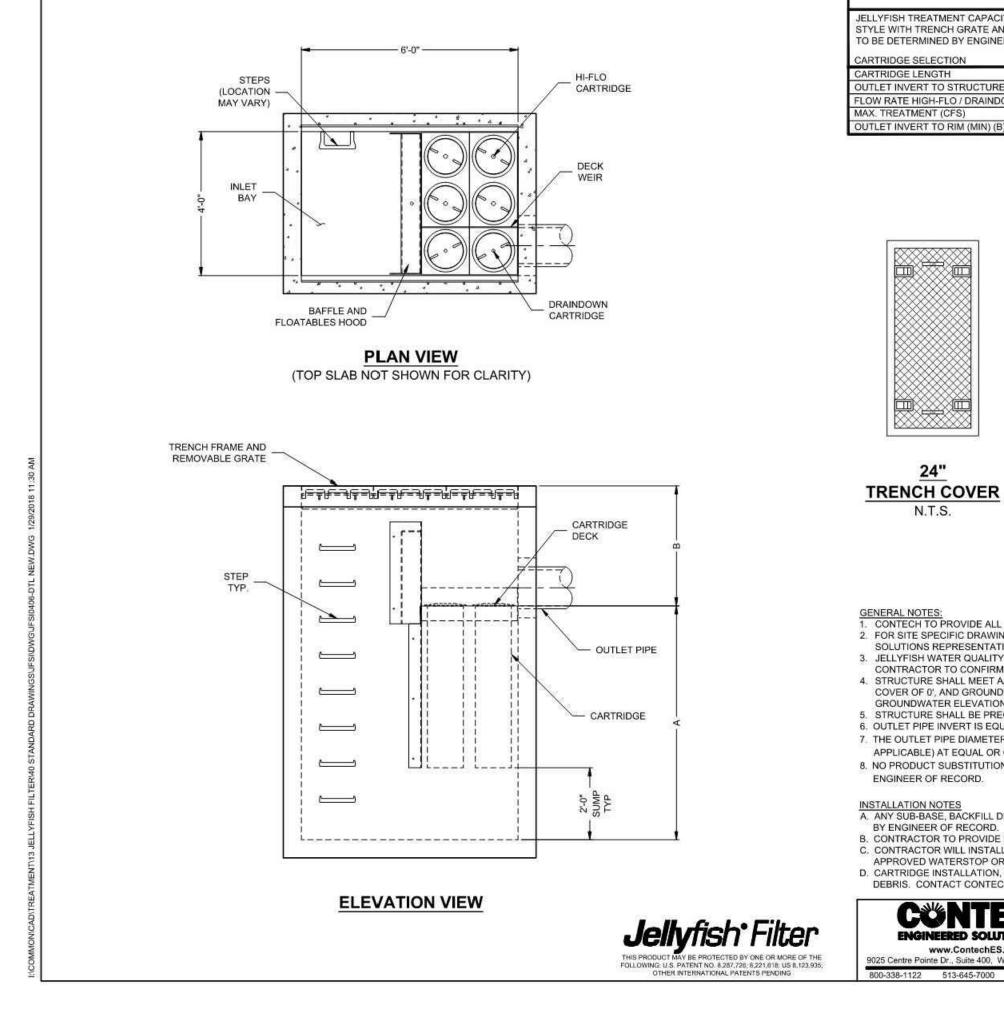
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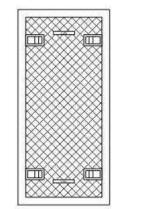
VRRM SPREADSHEET

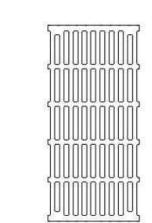
C-902





JEL	LYFISH DES	IGN NOTES		
JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE STYLE WITH TRENCH GRATE AND COVER IS SHOWN. ALTI TO BE DETERMINED BY ENGINEER OF RECORD. CARTRIDGE SELECTION			이 사람들이 얼마나 되었습니다. 이번 사람들은 사람들은 아니라 살아 없는데 얼마나 없었다.	
CARTRIDGE LENGTH	54"	40"	27"	15"
CARTRIDGE LENGTH OUTLET INVERT TO STRUCTURE INVERT (A)	54" 6'-6"	40" 5'-4"	27" 4'-3"	15" 3'-3"
The state of the s			7/	
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"





TRENCH GRATE

ETURN PERIOD OF PEAK FLOW (yrs) OF CARTRIDGES REQUIRED (HF / DD) SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

SITE SPECIFIC DATA REQUIREMENTS

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED

SOLUTIONS REPRESENTATIVE. www.ContechES.com 3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.

CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.

4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL

GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO. 5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD. 6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION. 7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDEDTO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE

APPLICABLE) AT EQUAL OR GREATER SLOPE. 8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE

INSTALLATION NOTES

A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED.

BY ENGINEER OF RECORD. B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE. C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH

APPROVED WATERSTOP OR FLEXIBLE BOOT). D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

www.ContechES.com 9025 Centre Pointe Dr., Suite 400, West Chester, OH 4506

JELLYFISH JFSI0406 STANDARD DETAIL SURFACE INLET CONFIGURATION



JELLYFISH® FILTER **INSPECTION & MAINTENANCE GUIDE**

Jellyfish units are often just one of many structures in a more comprehensive stormwater drainage and treatment system. In order for maintenance of the Jellyfish filter to be successful, it is imperative that all other components be properly maintained. The maintenance and repair of upstream facilities should be carried out prior to Jellyfish maintenance activities.

In addition to considering upstream facilities, it is also important to correct any problems identified in the drainage area. Drainage area concerns may include: erosion problems, heavy oil loading, and discharges of inappropriate materials.

TABLE OF CONTENTS

nspection and Maintenance Overview
nspection Procedure
Aaintenance Procedure
artridge Assembly & Cleaning
nspection Process

REVISIONS REV DATE COMMENT 1 05/20/2021 REV PER TOWN COMMENTS



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PROJECT:

PROP. SITE PLAN **DOCUMENTS**



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

STORMWATER **DETAILS**

C-904





Maintenance frequencies and requirements are site specific and vary depending on pollutant loading. Additional maintenance activities 4. Inspection is required immediately after an upstream oil, fuel or may be required in the event of non-storm event runoff, such as base-flow or seasonal flow, an upstream chemical spill or due to excessive sediment loading from site erosion or extreme runoff events. It is a good practice to inspect the system after major storm The following procedure is recommended when performing

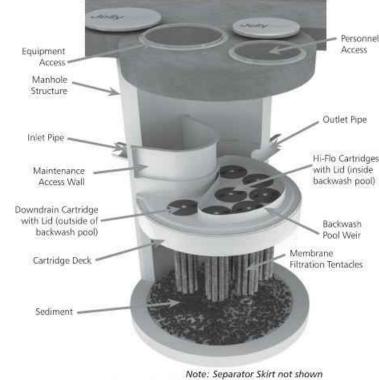
Inspection activities are typically conducted from surface observations and include:

- Observe if standing water is present Observe if there is any physical damage to the deck or
- cartridge lids Observe the amount of debris in the Maintenance

Access Wall (MAW) or inlet bay for vault systems

Maintenance activities include:

- Removal of oil, floatable trash and debris
- Removal of collected sediments
- Rinsing and re-installing the filter cartridges Replace filter cartridge tentacles, as needed



2.0 Inspection Timing

Inspection of the Jellyfish Filter is key in determining the maintenance requirements for, and to develop a history of, the site's pollutant loading characteristics. In general, inspections should be performed at the times indicated below; or per the approved project stormwater quality documents (if applicable), whichever is more

1. A minimum of quarterly inspections during the first year of operation to assess the sediment and floatable pollutant accumulation, and to ensure proper functioning of the system.

Inspection is recommended after each major storm event.

2. Inspect the MAW or inlet bay for floatable pollutants such as

lowering a sediment probe until contact is made with the floor

of the structure. Record sediment depth, and presences of any

receptacles, and backwash pool weir, for damaged or broken

· Inspect the cartridge deck for standing water, and/or

Standing water inside the backwash pool, but not

No standing water under normal operating conditions.

outside the backwash pool indicates, that the filter

4. Inspect cartridge lids. Missing or damaged cartridge lids to be

Inspect the MAW (where appropriate), cartridge deck and

Measure oil and sediment depth in several locations, by

other chemical spill.

3.0 Inspection Procedure

trash, debris, and oil sheen.

replaced.

components.

3.1 Dry weather inspections

sediment on the deck.

cartridges need to be rinsed.

Provide traffic control measures as necessary.

infrastructure. inspection and maintenance plan developed in the first year of Any appreciable sediment (≥1/16") accumulated on the operation. Minimum frequency should be once per year. deck surface should be removed.

 Observe the rate and movement of water in the unit. Note the depth of water above deck elevation within the

5.1 Filter Cartridge Removal MAW or inlet bay

3.2 Wet weather inspections

 Less than 6 inches, flow should be exiting the cartridge 1. lids of each of the draindown cartridges (i.e. cartridges located outside the backwash pool). Greater than 6 inches, flow should be exiting the

Standing water outside the backwash pool is not

caused by high water elevation in the receiving

anticipated and may indicate a backwater condition

water body, or possibly a blockage in downstream

- cartridge lids of each of the draindown cartridges and each of the hi-flo cartridges (i.e. cartridges located inside the backwash pool), and water should be overflowing the backwash pool weir.
- 18 inches or greater and relatively little flow is exiting the cartridge lids and outlet pipe, this condition indicates that the filter cartridges need to be rinsed.

4.0 Maintenance Requirements

Required maintenance for the Jellyfish Filter is based upon results of the most recent inspection, historical maintenance records, or the site specific water quality management plan; whichever is more frequent. In general, maintenance requires some combination of the

- Sediment removal for depths reaching 12 inches or greater, or within 3 years of the most recent sediment cleaning, whichever occurs sooner.
- 2. Floatable trash, debris, and oil removal.
- Deck cleaned and free from sediment.
- Filter cartridges rinsed and re-installed as required by the most recent inspection results, or within 12 months of the most recent filter rinsing, whichever occurs sooner.
- 5. Replace tentacles if rinsing does not restore adequate hydraulic capacity, remove accumulated sediment, or if damaged or missing. It is recommended that tentacles should remain in service no longer than 5 years before replacement.
- Damaged or missing cartridge deck components must be repaired or replaced as indicated by results of the most recent
- The unit must be cleaned out and filter cartridges inspected immediately after an upstream oil, fuel, or chemical spill. Filter cartridge tentacles should be replaced if damaged or compromised by the spill.

5.0 Maintenance Procedure

The following procedures are recommended when maintaining the Jellyfish Filter:

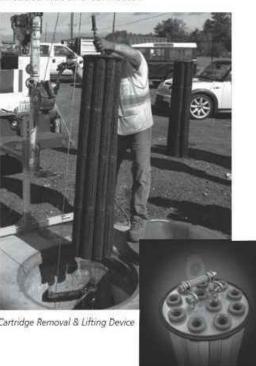
- Provide traffic control measures as necessary.
- Open all covers and hatches. Use ventilation equipment as required, according to confined space entry procedures. Caution: Dropping objects onto the cartridge deck may cause damage.

- Perform Inspection Procedure prior to maintenance activity.
- 4. To access the cartridge deck for filter cartridge service, descend into the structure and step directly onto the deck. Caution: Do not step onto the maintenance access wall (MAW) or backwash pool weir, as damage may result. Note that the cartridge deck may be slippery.
- 5. Maximum weight of maintenance crew and equipment on the cartridge deck not to exceed 450 lbs.

- Remove a cartridge lid.
- Remove cartridges from the deck using the lifting loops in the cartridge head plate. Rope or a lifting device (available from Contech) should be used. Caution: Should a snag occur, do not force the cartridge upward as damage to the tentacles may result. Wet cartridges typically weigh between 100 and
- Replace and secure the cartridge lid on the exposed empty receptacle as a safety precaution. Contech does not recommend exposing more than one empty cartridge receptacle at a time.

5.2 Filter Cartridge Rinsing

Remove all 11 tentacles from the cartridge head plate. Take care not to lose or damage the O-ring seal as well as the plastic threaded nut and connector.



- 2. Position tentacles in a container (or over the MAW), with the threaded connector (open end) facing down, so rinse water is flushed through the membrane and captured in the container.
- 3. Using the Jellyfish rinse tool (available from Contech) or a low-pressure garden hose sprayer, direct water spray onto the tentacle membrane, sweeping from top to bottom along the length of the tentacle. Rinse until all sediment is removed from the membrane. Caution: Do not use a high pressure sprayer or focused stream of water on the membrane. Excessive water pressure may damage the membrane.

Collected rinse water is typically removed by vacuum hose.

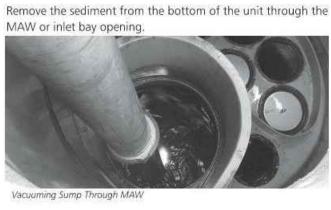
5. Reassemble cartridges as detailed later in this document. Reuse O-rings and nuts, ensuring proper placement on each tentacle.

5.3 Sediment and Flotables Extraction

- Perform vacuum cleaning of the Jellyfish Filter only after filter cartridges have been removed from the system. Access the lower chamber for vacuum cleaning only through the maintenance access wall (MAW) opening. Be careful not to damage the flexible plastic separator skirt that is attached to the underside of the deck on manhole systems. Do not lower the vacuum wand through a cartridge receptacle, as damage to the receptacle will result.
- Vacuum floatable trash, debris, and oil, from the MAW opening or inlet bay. Alternatively, floatable solids may be removed by a net or skimmer.



- 3. Pressure wash cartridge deck and receptacles to remove all sediment and debris. Sediment should be rinsed into the sump area. Take care not to flush rinse water into the outlet pipe.
- 4. Remove water from the sump area. Vacuum or pump equipment should only be introduced through the MAW or
- Remove the sediment from the bottom of the unit through the



6. For larger diameter Jellyfish Filter manholes (≥8-ft) and some vaults complete sediment removal may be facilitated by removing a cartridge lid from an empty receptacle and inserting a jetting wand (not a vacuum wand) through the receptacle. Use the sprayer to rinse loosened sediment toward the vacuum hose in the MAW opening, being careful not to damage the

5.4 Filter Cartridge Reinstallation and Replacement

- Cartridges should be installed after the deck has been cleaned. It is important that the receptacle surfaces be free from grit and
- Remove cartridge lid from deck and carefully lower the filter cartridge into the receptacle until head plate gasket is seated squarely in receptacle. Caution: Do not force the cartridge downward; damage may occur.
- Replace the cartridge lid and check to see that both male threads are properly seated before rotating approximately 1/3 of a full rotation until firmly seated. Use of an approved rim gasket lubricant may facilitate installation. See next page for additional details.
- If rinsing is ineffective in removing sediment from the tentacles, or if tentacles are damaged, provisions must be made to replace the spent or damaged tentacles with new tentacles. Contact Contech to order replacement tentacles.

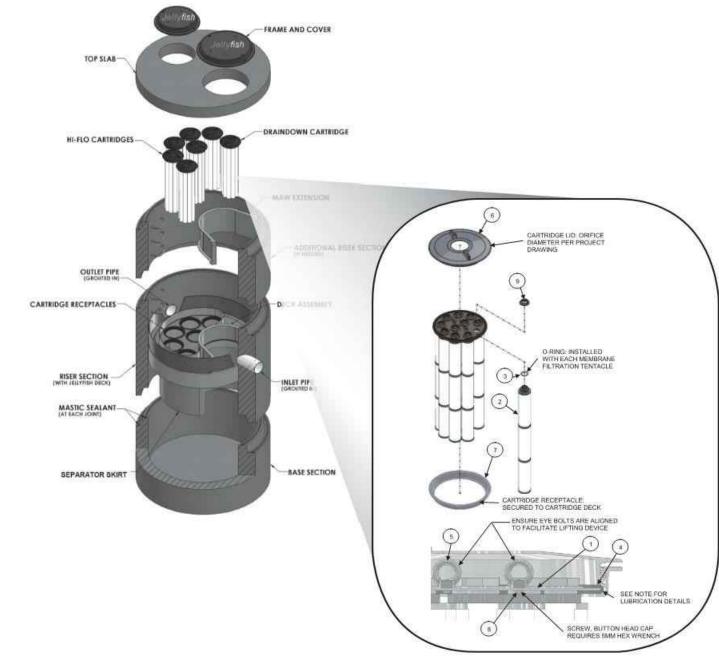
5.5 Chemical Spills

Caution: If a chemical spill has been captured, do not attempt maintenance. Immediately contact the local hazard response gency and contact Contech.

5.6 Material Disposal

The accumulated sediment found in stormwater treatment and conveyance systems must be handled and disposed of in accordance with regulatory protocols. It is possible for sediments to contain measurable concentrations of heavy metals and organic chemicals (such as pesticides and petroleum products). Areas with the greatest potential for high pollutant loading include industrial areas and heavily traveled roads. Sediments and water must be disposed of in accordance with all applicable waste disposal regulations. When scheduling maintenance, consideration must be made for the disposal of solid and liquid wastes. This typically requires coordination with a local landfill for solid waste disposal. For liquid waste disposal a number of options are available including a municipal vacuum truck decant facility, local waste water treatment plant or on-site treatment and discharge.

Jellyfish Filter Components & Filter Cartridge Assembly and Installation



ITEM NO.	DESCRIPTION
1	JF HEAD PLATE
2	JF TENTACLE
3	JF O-RING
4	JF HEAD PLATE GASKET
5	JF CARTRIDGE EYELE
6	JF 14IN COVER
7	JF RECEPTACLE
8	BUTTON HEAD CAP SCREW M6X14MM SS
9	JF CARTRIDGE NUT

TABLE 2: APPROVED GASKET LUBRICANTS

Head Plate Gasket Installation: and liberally apply a lubricant from Table 2: Approved Gasket Lubricants onto the gasket where it contacts the Receptacle (Item 7) and Cartridge Lide (ITem 6). Follow Lubricant manufacturer's instructions.

drop down and properly seat. Then rotate Cartridge Lid clock-wise approximately one-third of a full rotation until Cartridge Lid is firmly secured, creating a watertight seal.

Install Head Plate Gasket (Item 4) onto the Head Plate (Item 1) Rotate Cartridge Lid counter-clockwise until both male threads

Owner:	_	<u> </u>	Jellyfish Model No:	
Location:		j)	GPS Coordinates:	
Land Use:	Commercial:	Industrial:		Service Station:
Ro	adway/Highway:	Airport:		Residential:
Date/Time:				
Inspector:				
Maintenance Contractor:				
Visible Oil Present: (Y/N)				
Oil Quantity Removed:				
Floatable Debris Present: (Y/N)				
Floatable Debris Removed: (Y/N)				
Water Depth in Backwash Pool				
Draindown Cartridges externally rinsed and recommissioned: (Y/N)				
New tentacles put on Draindown Cartridges: (Y/N)				
Hi-Flo Cartridges externally rinsed and recommissioned: (Y/N)				
New tentacles put on Hi-Flo Cartridges: (Y/N)				
Sediment Depth Measured: (Y/N)				
Sediment Depth (inches or mm):				
Sediment Removed: (Y/N)				
Cartridge Lids intact: (Y/N)				
Observed Damage:				
Comments:				



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Drawings and specifications are available at www.conteches.com/jellyfish.

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The product(s) described may be protected by one or more of the following US patents: 5,322,629; 5,624,576; 5,707,527; 5,759,415; 5,788,848; 5,985,157; 6,027,639; 6,350,374; 6,406,218; 6,641,720; 6,511,595; 6,649,048; 6,991,114; 6,998,038; 7,186,058; related foreign patents or other patents pending. Jellyfish Maintenance 8/19

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<u>DOCUMENT</u> UNLESS INDICATED OTHERWISE.

PROJECT No.: DRAWN BY: **CHECKED BY:**

06/04/2021

CAD I.D.: PROJECT:

PROP. SITE PLAN

DOCUMENTS



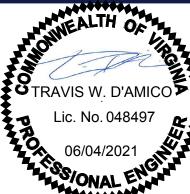
PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA, VIRGINIA

BOHLER

TAX MAP #: 0382-02-0024

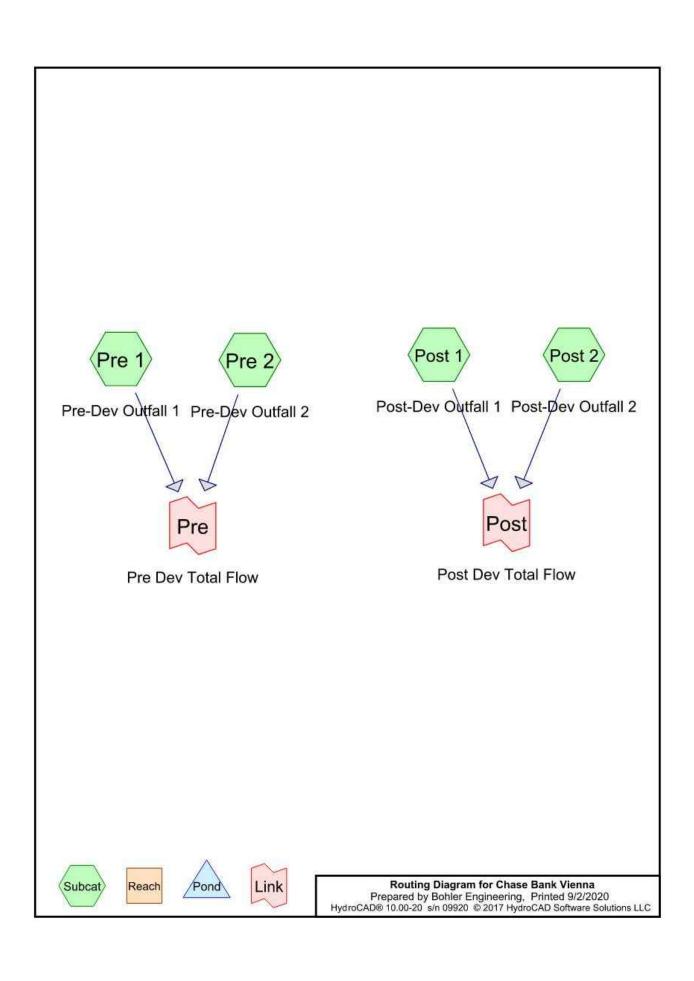
12825 WORLDGATE DR. SUITE 700 HERNDON, VIRGINIA 20170 Phone: (703) 709-9500

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



SHEET TITLE:

STORMWATER DETAILS

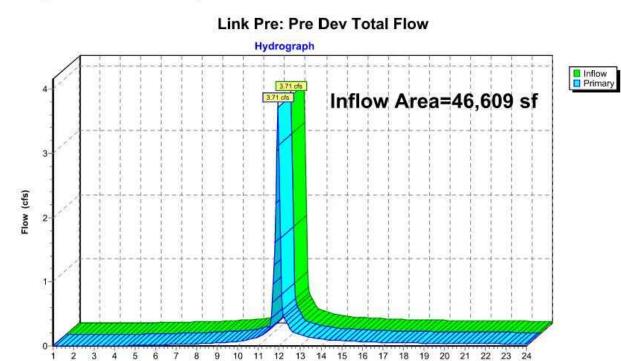


Type II 24-hr 1-Year Rainfall=2.62" Chase Bank Vienna Prepared by Bohler Engineering Printed 9/2/2020 HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC

Summary for Link Pre: Pre Dev Total Flow

Inflow Area = 46,609 sf, 84.11% Impervious, Inflow Depth > 2.08" for 1-Year event Inflow = 3.71 cfs @ 11.95 hrs, Volume= 8,071 cf Primary = 3.71 cfs @ 11.95 hrs, Volume= 8,071 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs



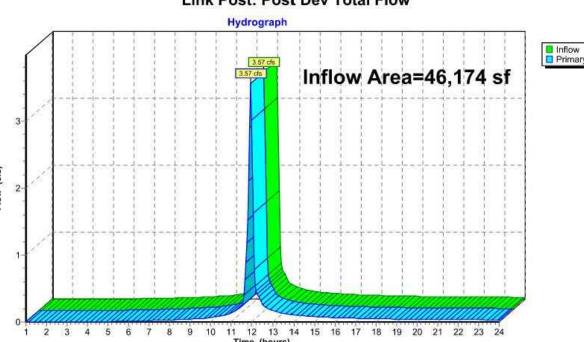
Type II 24-hr 1-Year Rainfall=2.62" Chase Bank Vienna Prepared by Bohler Engineering Printed 9/2/2020 HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC

Summary for Link Post: Post Dev Total Flow

Inflow Area = 46,174 sf, 79.25% Impervious, Inflow Depth > 1.99" for 1-Year event 3.57 cfs @ 11.95 hrs, Volume= 7,657 cf Primary = 3.57 cfs @ 11.95 hrs, Volume= 7,657 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link Post: Post Dev Total Flow



Type II 24-hr 1-Year Rainfall=2.62" Chase Bank Vienna Prepared by Bohler Engineering Printed 9/2/2020 HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 4

Summary for Subcatchment Pre 1: Pre-Dev Outfall 1

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.39 cfs @ 11.95 hrs, Volume= 5,205 cf, Depth> 2.08"

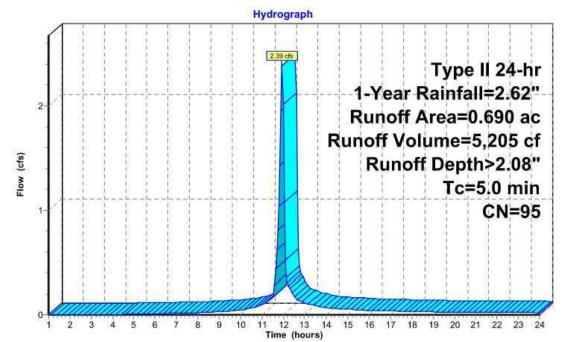
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 1-Year Rainfall=2.62"

Area (ac) CN Description 0.580 98 Paved parking, HSG D 0.110 80 >75% Grass cover, Good, HSG D 0.690 95 Weighted Average 0.110 15.94% Pervious Area 0.580 84.06% Impervious Area

Tc Length Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs)

Direct Entry, User defined

Subcatchment Pre 1: Pre-Dev Outfall 1



REVISIONS

	REV	DATE	COMMENT	DRAWNDI
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	'	03/20/2021	COMMENTS	TD
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PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU 315 MAPLE AVE E TOWN OF VIENNA. VIRGINIA

TAX MAP #: 0382-02-0024

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

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

SHEET TITLE:

STORMWATER **ROUTINGS**

C-906

REVISION 1 - 05/20/2021

Chase Bank Vienna Type II 24-hr 1-Year Rainfall=2.62" Printed 9/2/2020 Prepared by Bohler Engineering HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 2

Summary for Subcatchment Post 1: Post-Dev Outfall 1

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.62 cfs @ 11.95 hrs, Volume= 3,432 cf, Depth> 1.89"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 1-Year Rainfall=2.62"

Area (ac) CN Description

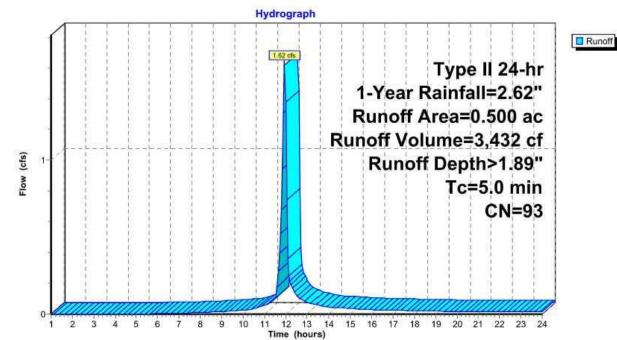
0.360 98 Paved parking, HSG D 0.140 80 >75% Grass cover, Good, HSG D

0.500 93 Weighted Average 28.00% Pervious Area 0.140

0.360 72.00% Impervious Area Tc Length Slope Velocity Capacity Description

(min) (feet) (ft/ft) (ft/sec) (cfs) Direct Entry, User Entry

Subcatchment Post 1: Post-Dev Outfall 1



[49] Hint: Tc<2dt may require smaller dt Runoff = 1.94 cfs @ 11.95 hrs, Volume= 4,224 cf, Depth> 2.08" Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 1-Year Rainfall=2.62" Area (ac) CN Description 0.480 98 Paved parking, HSG D 0.080 80 >75% Grass cover, Good, HSG D 0.560 95 Weighted Average 14.29% Pervious Area 0.080 0.480 85.71% Impervious Area Tc Length Slope Velocity Capacity Description

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Chase Bank Vienna

Prepared by Bohler Engineering

(min) (feet) (ft/ft) (ft/sec) (cfs)

Subcatchment Post 2: Post-Dev Outfall 2

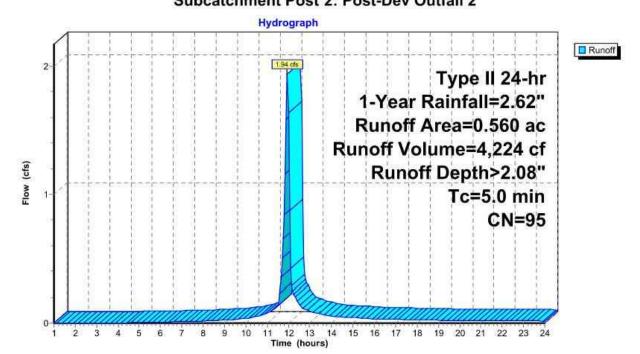
Direct Entry, User Entry

Summary for Subcatchment Post 2: Post-Dev Outfall 2

Type II 24-hr 1-Year Rainfall=2.62"

Printed 9/2/2020

Page 3



Area (ac) CN Description 0.320 98 Paved parking, HSG D 0.060 80 >75% Grass cover, Good, HSG D 0.380 95 Weighted Average 15.79% Pervious Area 0.060 0.320 84.21% Impervious Area Tc Length Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs) Direct Entry, User defined Subcatchment Pre 2: Pre-Dev Outfall 2 Hydrograph 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

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23 24 Time (hours)

Summary for Subcatchment Pre 2: Pre-Dev Outfall 2

Type II 24-hr 1-Year Rainfall=2.62"

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Page 5

Runoff = 1.32 cfs @ 11.95 hrs, Volume= 2,866 cf, Depth> 2.08" Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 1-Year Rainfall=2.62"

Chase Bank Vienna

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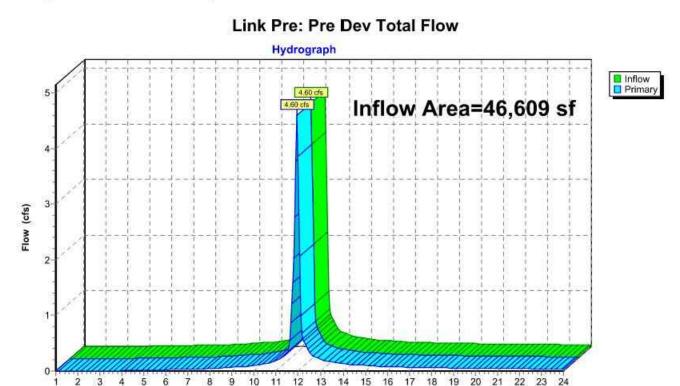
[49] Hint: Tc<2dt may require smaller dt

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Summary for Link Pre: Pre Dev Total Flow

Inflow Area = 46,609 sf, 84.11% Impervious, Inflow Depth > 2.61" for 2-Year event
Inflow = 4.60 cfs @ 11.95 hrs, Volume= 10,152 cf
Primary = 4.60 cfs @ 11.95 hrs, Volume= 10,152 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

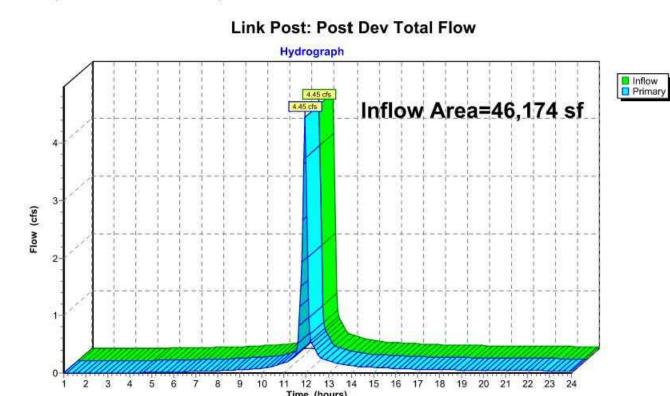


Chase Bank ViennaType II 24-hr2-Year Rainfall=3.17"Prepared by Bohler EngineeringPrinted9/2/2020HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLCPage 12

Summary for Link Post: Post Dev Total Flow

Inflow Area = 46,174 sf, 79.25% Impervious, Inflow Depth > 2.52" for 2-Year event
Inflow = 4.45 cfs @ 11.95 hrs, Volume= 9,697 cf
Primary = 4.45 cfs @ 11.95 hrs, Volume= 9,697 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs



Chase Bank ViennaType II 24-hr2-Year Rainfall=3.17"Prepared by Bohler EngineeringPrinted9/2/2020HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLCPage 10

Summary for Subcatchment Pre 1: Pre-Dev Outfall 1

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.96 cfs @ 11.95 hrs, Volume= 6,547 cf, Depth> 2.61"

(ft/ft) (ft/sec) (cfs)

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 2-Year Rainfall=3.17"

 Area (ac)
 CN
 Description

 0.580
 98
 Paved parking, HSG D

 0.110
 80
 >75% Grass cover, Good, HSG D

 0.690
 95
 Weighted Average

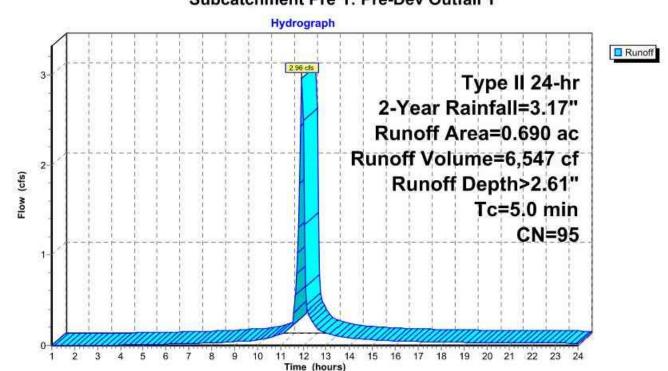
 0.110
 15.94% Pervious Area

 0.580
 84.06% Impervious Area

 Tc
 Length
 Slope
 Velocity
 Capacity
 Description

Subcatchment Pre 1: Pre-Dev Outfall 1

Direct Entry, User defined



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Type II 24-hr 2-Year Rainfall=3.17"
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Page 11

Summary for Subcatchment Pre 2: Pre-Dev Outfall 2

[49] Hint: Tc<2dt may require smaller dt

Runoff = 1.63 cfs @ 11.95 hrs, Volume= 3,605 cf, Depth> 2.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 2-Year Rainfall=3.17"

 Area (ac)
 CN
 Description

 0.320
 98
 Paved parking, HSG D

 0.060
 80
 >75% Grass cover, Good, HSG D

 0.380
 95
 Weighted Average

 0.060
 15.79% Pervious Area

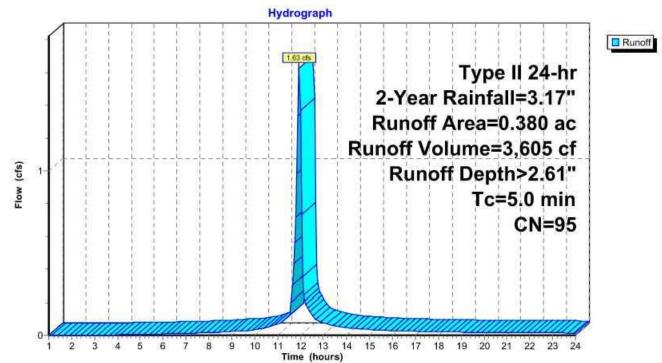
 0.320
 84.21% Impervious Area

 Tc
 Length
 Slope
 Velocity
 Capacity
 Description

 (min)
 (feet)
 (ft/ft)
 (ft/sec)
 (cfs)

Subcatchment Pre 2: Pre-Dev Outfall 2

Direct Entry, User defined



Chase Bank Vienna

Type II 24-hr 2-Year Rainfall=3.17"

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Summary for Subcatchment Post 1: Post-Dev Outfall 1

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.04 cfs @ 11.95 hrs, Volume= 4,384 cf, Depth> 2.42"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 2-Year Rainfall=3.17"

 Area (ac)
 CN
 Description

 0.360
 98
 Paved parking, HSG D

 0.140
 80
 >75% Grass cover, Good, HSG D

 0.500
 93
 Weighted Average

 0.140
 28.00% Pervious Area

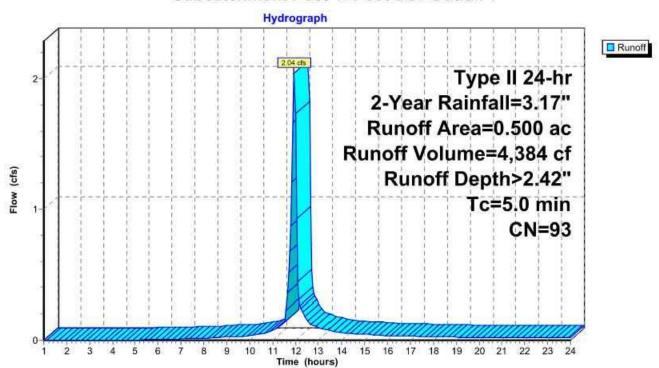
 0.360
 72.00% Impervious Area

 Tc
 Length
 Slope
 Velocity
 Capacity
 Description

 (min)
 (feet)
 (ft/ft)
 (ft/sec)
 (cfs)

Subcatchment Post 1: Post-Dev Outfall 1

Direct Entry, User Entry



Chase Bank Vienna
Type II 24-hr 2-Year Rainfall=3.17"
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Summary for Subcatchment Post 2: Post-Dev Outfall 2

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.41 cfs @ 11.95 hrs, Volume= 5,313 cf, Depth> 2.61"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 2-Year Rainfall=3.17"

 Area (ac)
 CN
 Description

 0.480
 98
 Paved parking, HSG D

 0.080
 80
 >75% Grass cover, Good, HSG D

 0.560
 95
 Weighted Average

 0.080
 14.29% Pervious Area

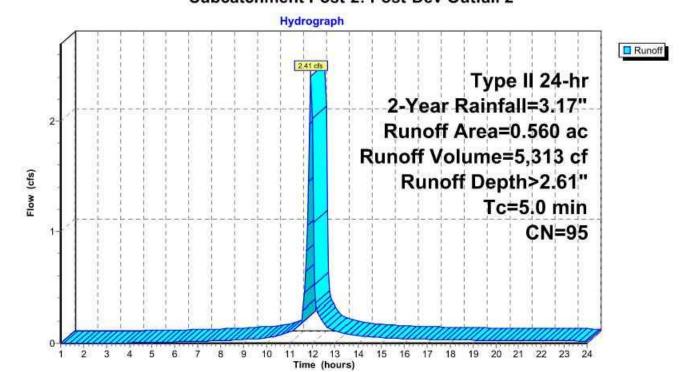
 0.480
 85.71% Impervious Area

 Tc Length (fill)
 Slope Velocity Capacity Description (fill)

 (min)
 (feet)
 (ftl/ft)

 5.0
 Direct Entry, User Entry

Subcatchment Post 2: Post-Dev Outfall 2



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

REVISIONS

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 \$C

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 \$WP-0

PROJECT:

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DOCUMENTS

HASE

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**

TRAVIS W. D'AMICO
Lic. No. 048497

06/04/2021

SHEET TITLE:

STORMWATER ROUTINGS

EET NUMBER:

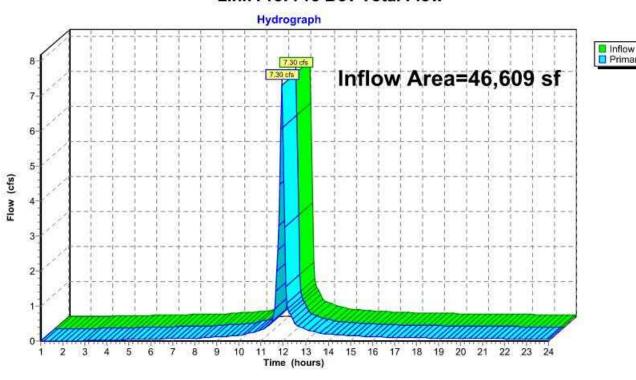
C-907

Summary for Link Pre: Pre Dev Total Flow

46,609 sf, 84.11% Impervious, Inflow Depth > 4.29" for 10-Year event Inflow Area = Inflow = 7.30 cfs @ 11.95 hrs, Volume= 16,655 cf Primary = 7.30 cfs @ 11.95 hrs, Volume= 16,655 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link Pre: Pre Dev Total Flow



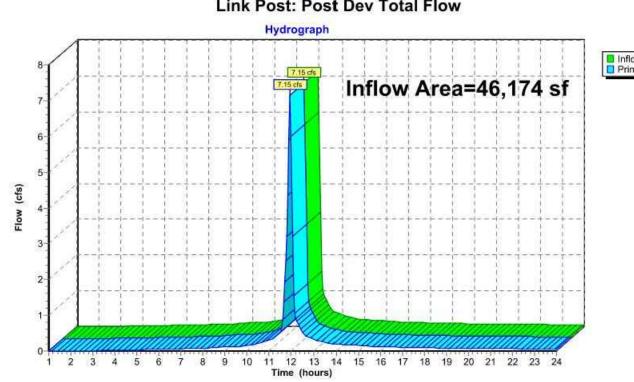
Type II 24-hr 10-Year Rainfall=4.87" Chase Bank Vienna Printed 9/2/2020 Prepared by Bohler Engineering HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC

Summary for Link Post: Post Dev Total Flow

46,174 sf, 79.25% Impervious, Inflow Depth > 4.18" for 10-Year event Inflow Area = 7.15 cfs @ 11.95 hrs, Volume= 16,099 cf Primary = 7.15 cfs @ 11.95 hrs, Volume= 16,099 cf, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs

Link Post: Post Dev Total Flow



Type II 24-hr 10-Year Rainfall=4.87" Chase Bank Vienna Printed 9/2/2020 Prepared by Bohler Engineering HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC

Summary for Subcatchment Pre 1: Pre-Dev Outfall 1

[49] Hint: Tc<2dt may require smaller dt

Runoff = 4.71 cfs @ 11.95 hrs, Volume= 10,740 cf, Depth> 4.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 10-Year Rainfall=4.87"

Area (ac) CN Description

0.580 98 Paved parking, HSG D 0.110 80 >75% Grass cover, Good, HSG D

0.690 95 Weighted Average

15.94% Pervious Area 0.110

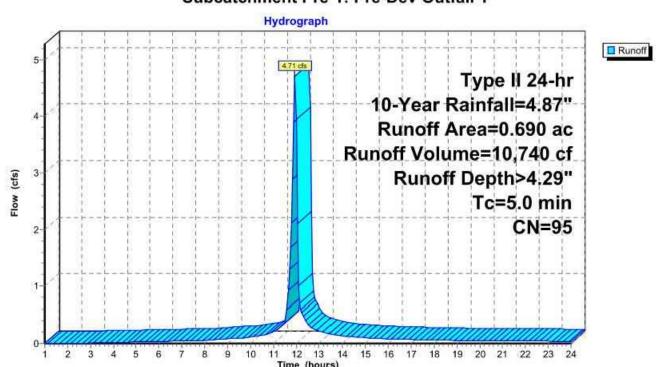
84.06% Impervious Area 0.580

Tc Length Slope Velocity Capacity Description

(ft/ft) (ft/sec) (cfs)

Subcatchment Pre 1: Pre-Dev Outfall 1

Direct Entry, User defined



Type II 24-hr 10-Year Rainfall=4.87" Chase Bank Vienna Prepared by Bohler Engineering Printed 9/2/2020 HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC

Summary for Subcatchment Pre 2: Pre-Dev Outfall 2

[49] Hint: Tc<2dt may require smaller dt

Runoff = 2.59 cfs @ 11.95 hrs, Volume= 5,915 cf, Depth> 4.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 10-Year Rainfall=4.87"

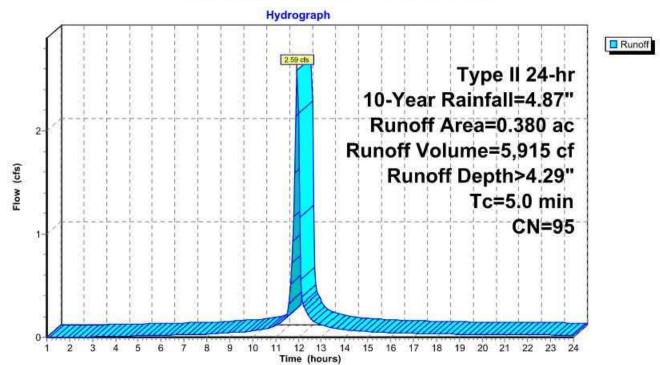
Area (ac) CN Description 0.320 98 Paved parking, HSG D 0.060 80 >75% Grass cover, Good, HSG D 0.380 95 Weighted Average 15.79% Pervious Area 0.060

0.320 84.21% Impervious Area

Tc Length Slope Velocity Capacity Description

(min) (feet) (ft/ft) (ft/sec) (cfs) Direct Entry, User defined

Subcatchment Pre 2: Pre-Dev Outfall 2



Type II 24-hr 10-Year Rainfall=4.87" Chase Bank Vienna Prepared by Bohler Engineering Printed 9/2/2020 HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 14

Summary for Subcatchment Post 1: Post-Dev Outfall 1

[49] Hint: Tc<2dt may require smaller dt

7,383 cf, Depth> 4.07" Runoff = 3.32 cfs @ 11.95 hrs, Volume=

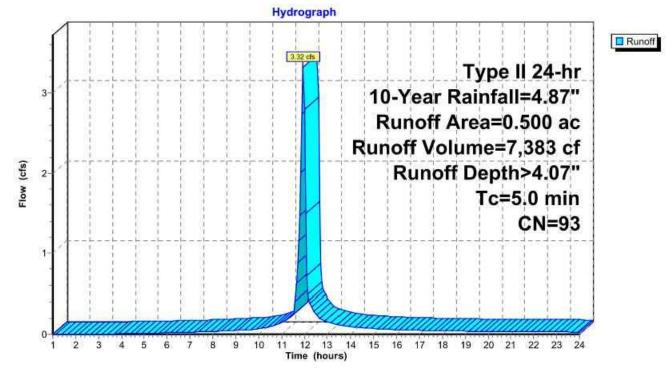
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 10-Year Rainfall=4.87"

Area (ac) CN Description 0.360 98 Paved parking, HSG D 0.140 80 >75% Grass cover, Good, HSG D 0.500 93 Weighted Average 28.00% Pervious Area 0.140 72.00% Impervious Area 0.360

Tc Length Slope Velocity Capacity Description (feet) (ft/ft) (ft/sec) (cfs)

Direct Entry, User Entry

Subcatchment Post 1: Post-Dev Outfall 1



Type II 24-hr 10-Year Rainfall=4.87" Chase Bank Vienna Prepared by Bohler Engineering Printed 9/2/2020 HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC

Summary for Subcatchment Post 2: Post-Dev Outfall 2

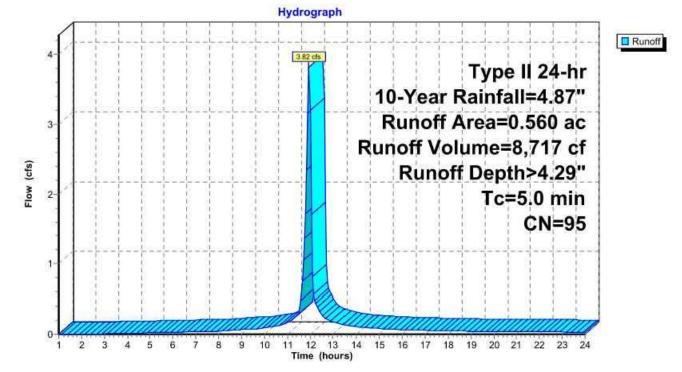
[49] Hint: Tc<2dt may require smaller dt

Runoff = 3.82 cfs @ 11.95 hrs, Volume= 8,717 cf, Depth> 4.29"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs Type II 24-hr 10-Year Rainfall=4.87"

Area (ac) CN Description 0.480 98 Paved parking, HSG D 0.080 80 >75% Grass cover, Good, HSG D 0.560 95 Weighted Average 0.080 14.29% Pervious Area 85.71% Impervious Area 0.480 Tc Length Slope Velocity Capacity Description (min) (feet) (ft/ft) (ft/sec) (cfs) Direct Entry, User Entry

Subcatchment Post 2: Post-Dev Outfall 2



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REV DATE COMMENT 1 05/20/2021 REV PER TOWN COMMENTS



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CHECKED BY: DATE: CAD I.D.:

PROJECT:

PROP. SITE PLAN **DOCUMENTS**

06/04/2021 SWP-0

PROPOSED

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

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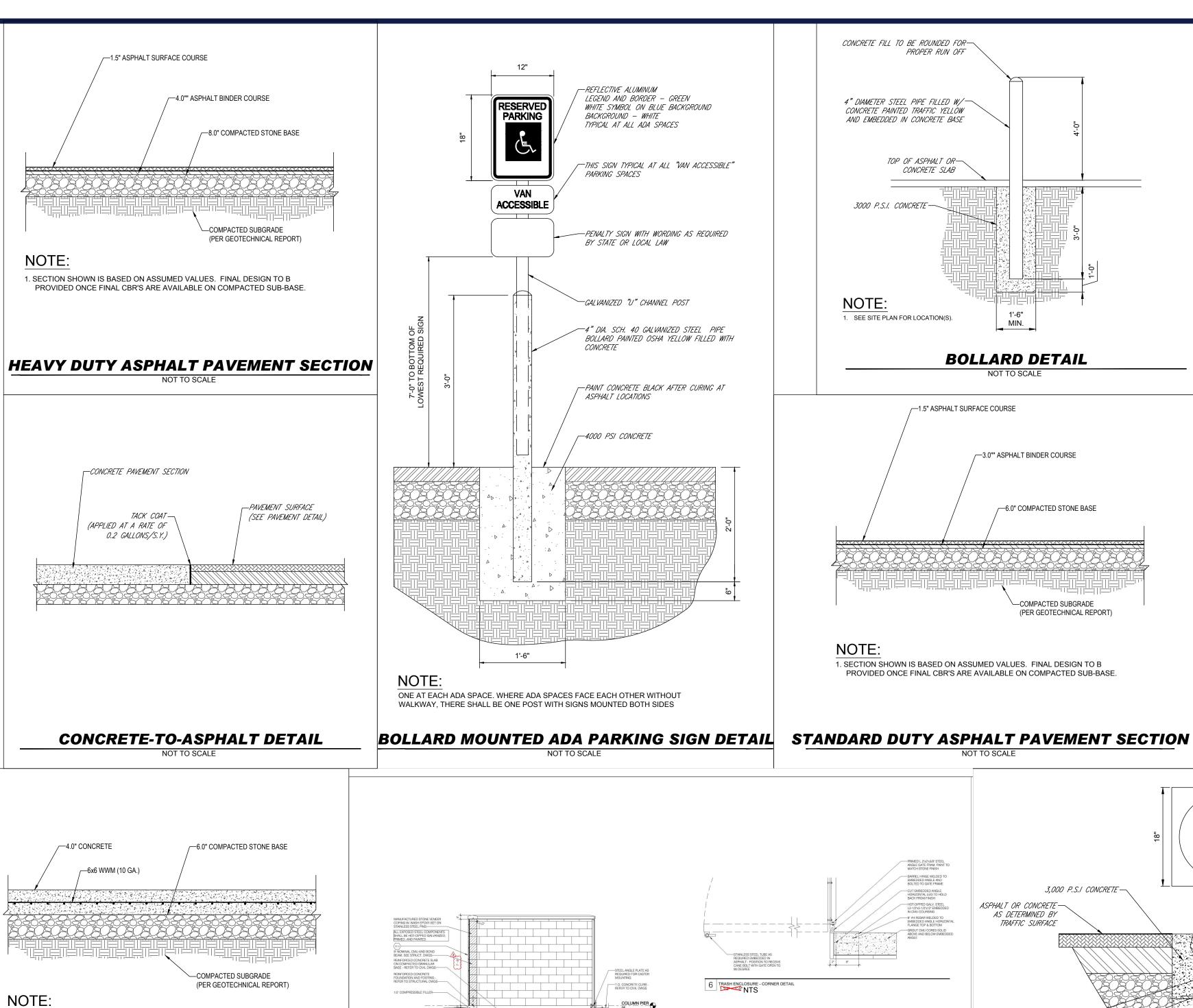
12825 WORLDGATE DR. SUITE 700 HERNDON, VIRGINIA 20170 Phone: (703) 709-9500 Fax: (703) 709-9501

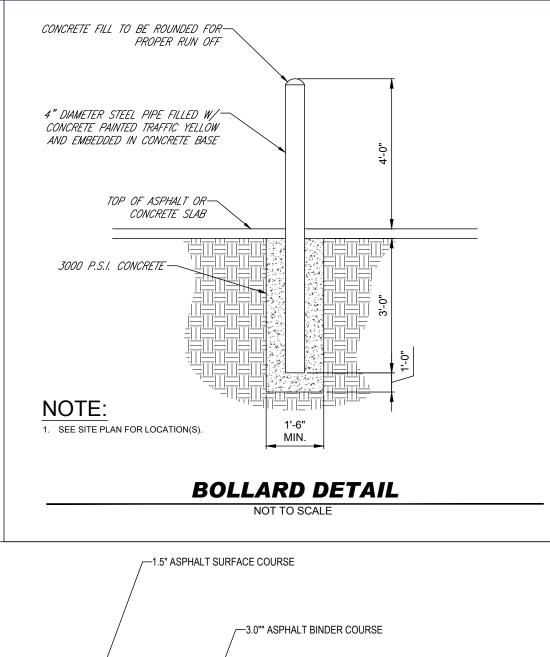
VA@BohlerEng.com TRAVIS W. D'AMICO Lic. No. 048497 06/04/2021

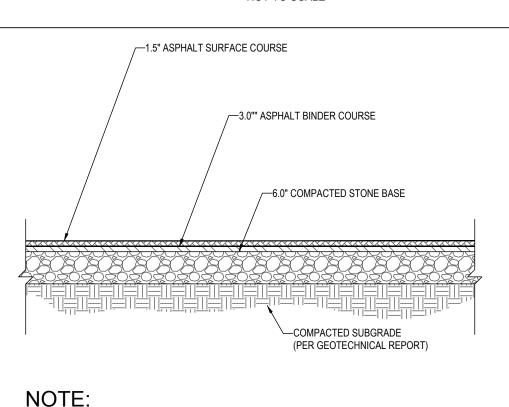
SHEET TITLE:

STORMWATER ROUTINGS

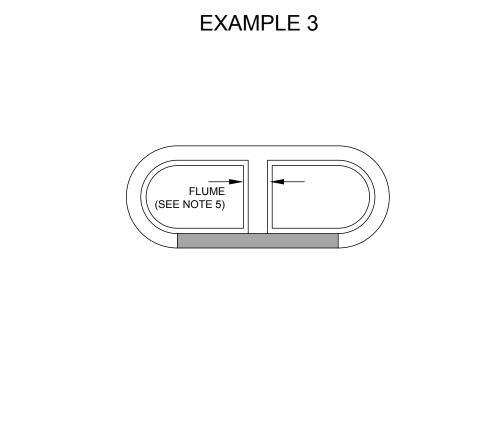
C-908





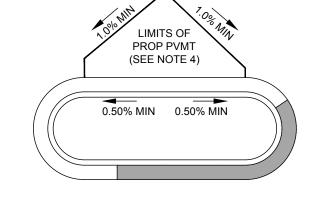


1. SECTION SHOWN IS BASED ON ASSUMED VALUES. FINAL DESIGN TO B PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.



EXAMPLE ONE

NOT TO SCALE



EXAMPLE TWO

1. CONTRACTOR TO INSTALL CURB AND GUTTER AT ELEVATION OF EXISTING PAVEMENT (ELEVATION AT EDGE OF GUTTER PAN MATCHES ELEVATION AT EXISTING PAVEMENT, UNLESS PLANS AND/OR SCHEMATICS INDICATE

TRANSITIONS BETWEEN SPILL AND COLLECTOR SECTIONS. 3. PLAN INTENT IS TO PROVIDE A MINIMUM SLOPE OF 0.50% ALONG COLLECTOR CURB. IF FIELD CONDITIONS AND/OR PLAN REPRESENTATION DOES NOT PROVIDE MINIMUM SLOPE REQUIREMENTS, CONTRACTOR IS TO

CONTACT ENGINEER PRIOR TO POURING CURB AND GUTTER. BOHLER SHALL BE HELD HARMLESS FOR ANY

2. CONTRACTOR TO PROVIDE GUTTER PANS (COLLECTOR/SPILL) PER GRADING PLAN. SHADED GUTTER PAN REPRESENTS FULL SPILL SECTION, NON-SHADED IS COLLECTOR. CONTRACTOR TO PROVIDE 3 FOOT

CURB AND GUTTER POURED THAT DOES NOT MEET MINIMUM REQUIREMENTS. 4. IN THOSE SITUATIONS WHERE RE-GRADING OF PARKING AND PAVEMENT REMOVAL IS NECESSARY (SEE EXAMPLE 2), THE CONTRACTOR IS TO VERIFY THAT THE RESULTANT GRADIENT AT THE HIGH SIDE OF THE

5. IN ISLANDS WHERE FLUMES ARE INDICATED, THE CONTRACTOR SHALL PROVIDE A FLAT BOTTOMED FLUME AT THE SPECIFIED WIDTH. MINIMUM FLUME SLOPE SHALL BE 0.50%.

ISLAND PROVIDES 1% PAVEMENT SLOPE, PER PLAN INTENT.

EXAMPLE THREE

NOT APPROVED FOR CONSTRUCTION

REVIEW AND APPROVAL. <u>IT IS NOT INTENDED AS A CONSTRUCT DOCUMENT</u> UNLESS INDICATED OTHERWISE.

Call before you dig.

ALWAYS CALL 811

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

REVISIONS

1 05/20/2021 REV PER TOWN COMMENTS

COMMENT

REV DATE

PROJECT No.: DRAWN BY: CHECKED BY:

DATE: CAD I.D.:

PROJECT:

PROP.

SITE PLAN **DOCUMENTS**

06/04/2021 SSD-0

PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU

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

BOHLER

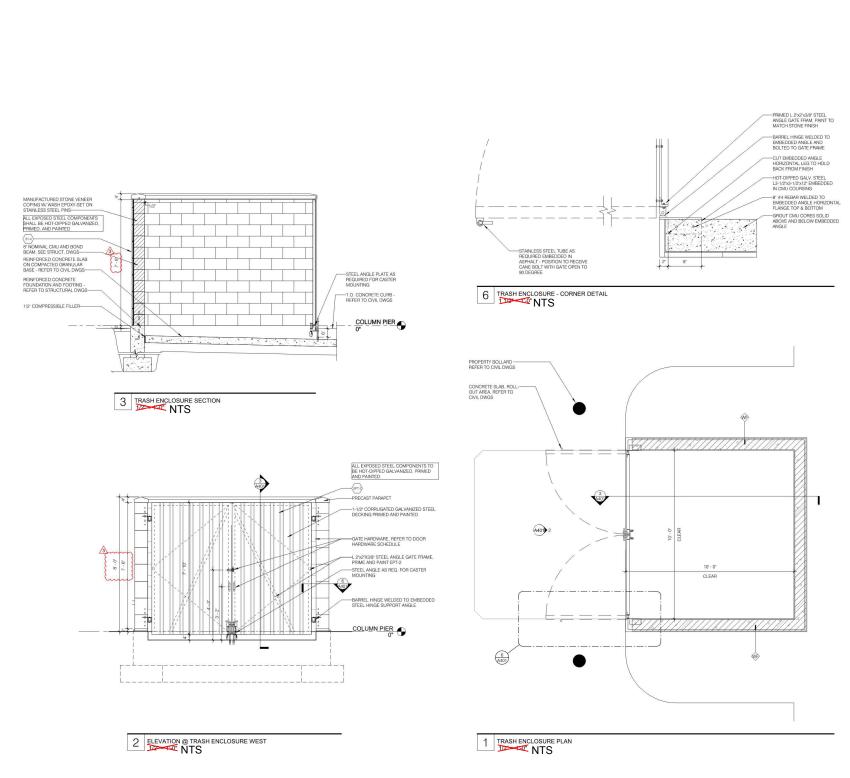
12825 WORLDGATE DR. SUITE 700 HERNDON, VIRGINIA 20170 Phone: (703) 709-9500 Fax: (703) 709-9501 VA@BohlerEng.com

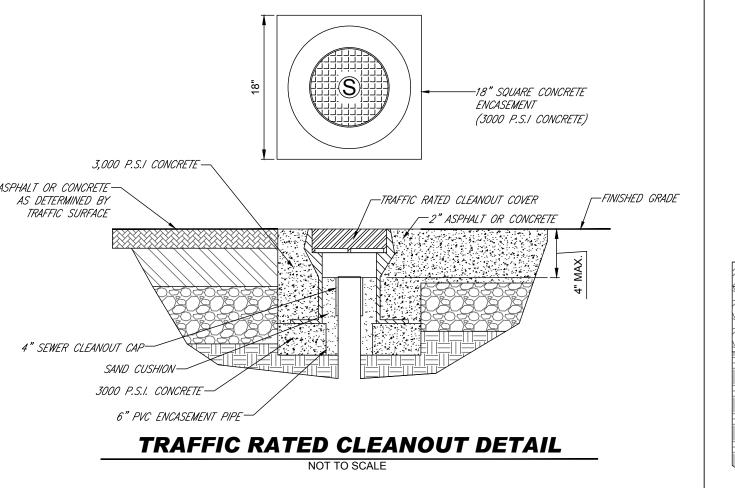
SHEET TITLE:

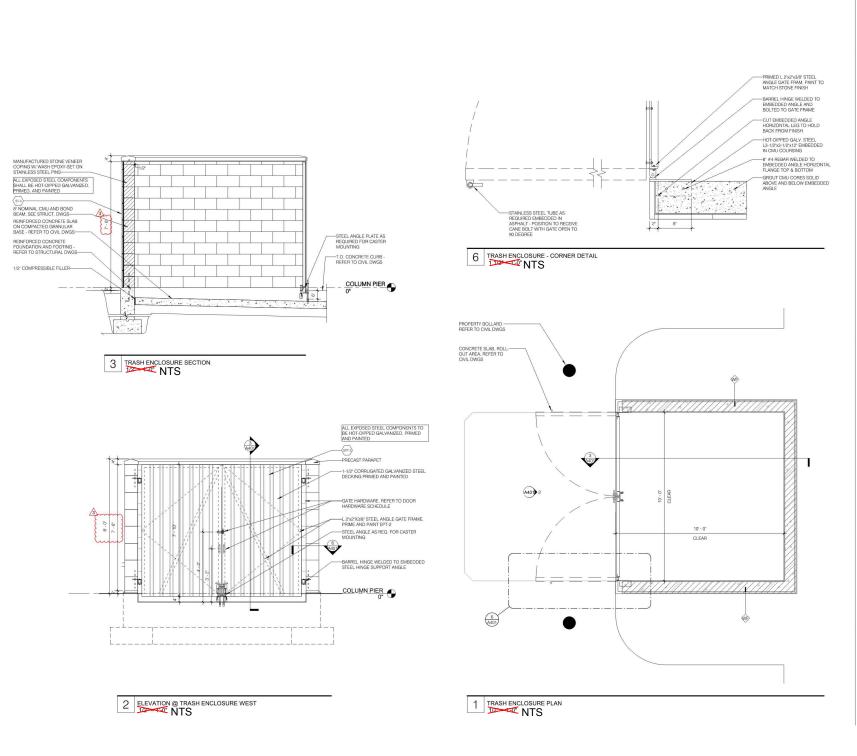
SITE DETAILS

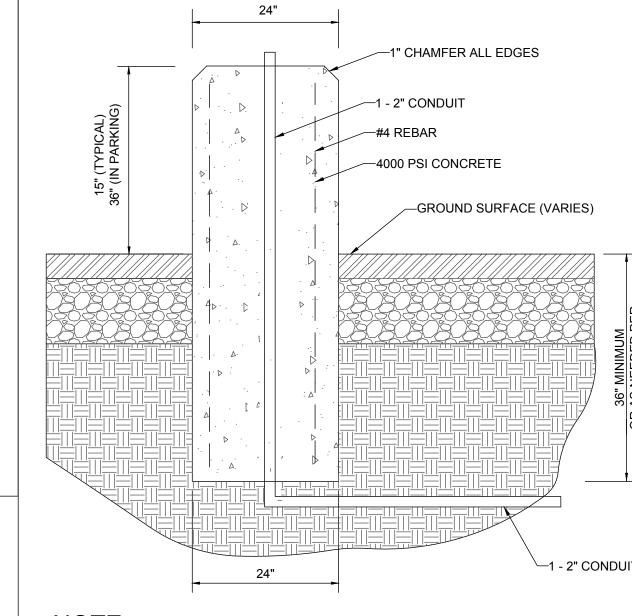
C-1001

REVISION 1 - 05/20/2021









PROVIDE DOCUMENTATION FOR FINAL LIGHT POLE BASE DESIGN.

FINISHED GRADE--PAVEMENT SURFACE (SEE PAVEMENT DETAIL) NOTES: 1. EXPANSION JOINTS TO BE INSTALLED AT 20' INTERVALS. 2. THIS ITEM MAY BE PRECAST OR CAST IN PLACE. 3. CONCRETE TO BE CLASS A3 IF CAST IN PLACE OR 4000 P.S.I. IF PRECAST. HEADER CURB DETAIL

NOT TO SCALE

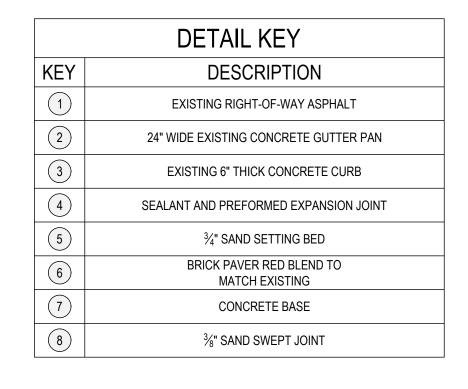
1. SECTION SHOWN IS BASED ON ASSUMED VALUES. FINAL DESIGN TO B PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

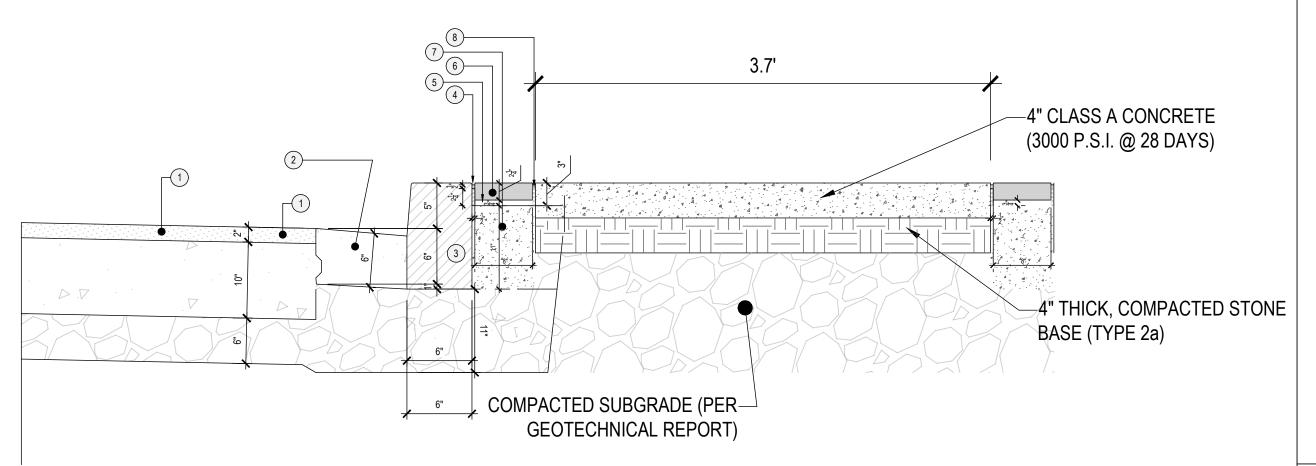
HEAVY DUTY CONCRETE SECTION

36" CAL _1 - 2" CONDUIT NOTE: THIS DETAIL SERVES AS A GUIDELINE ONLY. STRUCTURAL ENGINEER TO DESIGN AND

ASPHALT OR CONCRETE -

CONCRETE LIGHT POLE BASE





Project Name:

BRICK BANDED SIDEWALK CROSS-SECTION VIEW

BRICK BANDING-CONCRETE SIDEWALK-GRASS AREA-CONC. 6" CURB-CONC. GUTTER-

BRICK BANDED SIDEWALK PLAN VIEW

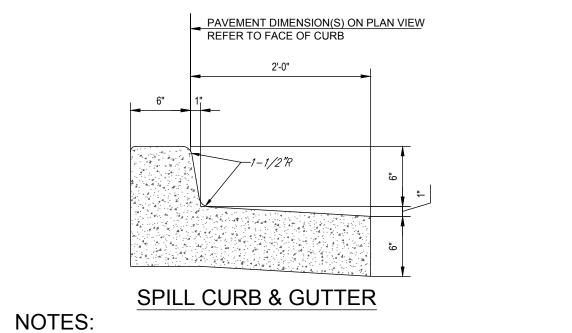


JP Morgan Chase Maple Ave. Bank Branch

315 Maple Ave. E

tuuress.	SIS WILDIE TWEEL					
	<u>Vienna, VA 22180</u>					
Type of Occupancy	y: Mercantile					
ı	Fixture	Fixture Value 35 psi	9	No. of Fixtures		Fixture Value
Sec. Francisco		- 15- - 15-	STATES			
Bathtub		8	× _			-
Bedpan Washers		10			50	
Combination Sink	k and Tray	3				
Dental Unit		1	х		s = .	<u>-</u>
Dental Lavatory	6.01.0	2	× _	<u> </u>	_ =	<u> </u>
Drinking Fountain		1	× _	1	- ·	1
Mark of L	- Public	2	× _		. T	
	1/2" Connection	3	× _	*	- =	-
	3/4" Connection	7	× _	1	- 🗏	7 4
	" Connection	2	х _	2		4
	" Connection	4	× _		-	.
Laundry Tray -		3	× _		- 📱	<u> </u>
	3/4" Connection	7	× _		5)	-
Shower Head (Sh	1/2" Connection	4	х_		= :	<u> </u>
		3 7	× _	4		-
- Urinal - Pedesta	3/4" Connection	_20	× -	1		7
- Wall Flu		35	× -			
		12 2	× _			
	(2 ft. Unit)	4	× _		- =	<u>s</u>
Wash Sink (Each Water Closet -		35	× _		- 📱	-
	Tank Type	33	× –	2	- 📱	6
	1/2" Connection	4	× –	552	- 📱	0
	3/4" Connection	10	× –		-	-
	e - 1/2" Connection	5	372		28 6	5
**asimig iviacimi	- 3/4" Connection	12	x _			
	- 1" Connection	25	^ -			<u>-</u>
Hose Connection	(Wash Down) - 1/2"	6	x -		- <u>-</u>	<u> </u>
nose connection	- 3/4"	10	x –		- =	=
	-16				-0.	
		No.		fixture Total		25
WEALTHOR			Maxir	mum Demand		21.5 GPM
411				Meter Size		1 5"

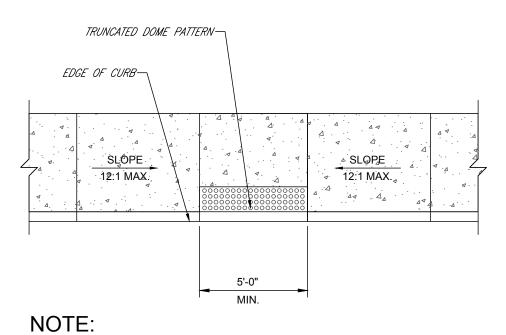
1.5" certify that the above information is true and correct. JOHN PHILLIP SAMSON Lic. No. 0402061323 05.11.2021



PAVEMENT DIMENSION(S) ON PLAN
VIEW REFER TO FACE OF CURB **COLLECTOR CURB & GUTTER**

- 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.

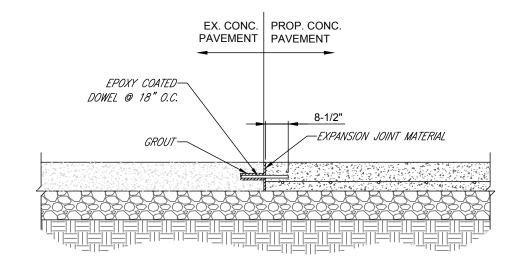
CONCRETE CURB & GUTTER DETAIL



ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA

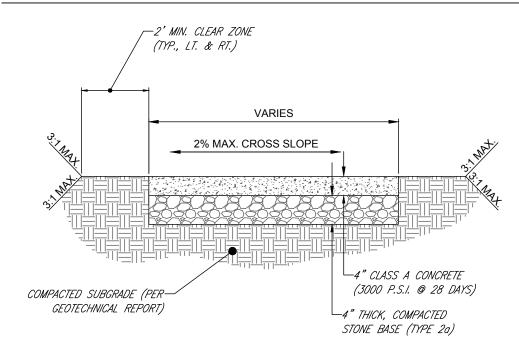
ACCESSIBLE GUIDELINES.

ADA ACCESSIBLE RAMP DETAIL



1. CONTRACTOR TO BLOW OUT DUST FROM DRILLED HOLES PRIOR TO APPLYING

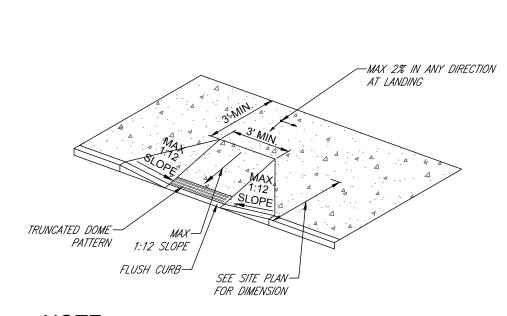
CONCRETE DOWELING DETAIL



NOTE:

1. EXPANSION JOINTS 1/2" WIDE PREMOLDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS, CRACK CONTROL JOINTS TO BE SPACED AT INTERVALS EQUAL

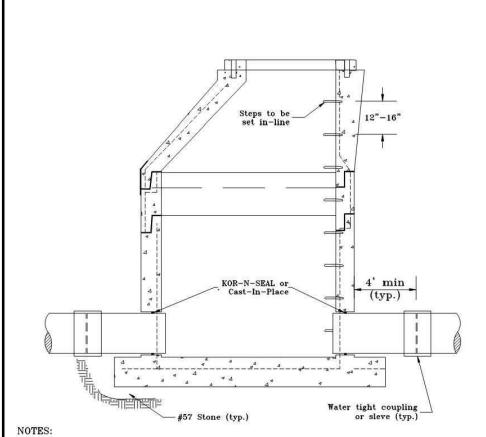
CONCRETE SIDEWALK DETAIL



1. ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA ACCESSIBLE GUIDELINES.

ADA ACCESSIBLE RAMP DETAIL

FAIRFAX COUNTY PUBLIC FACILITIES MANUAL



Contractor must have adequate equipment to pump around existing line while manhole is cut in.

- c. Concrete to be Class A-4. All reinforcing steel to meet the current requirements of ASTM Spec. A-614.
- Manhole sections to meet the current requirements of ASTM Spec. C-47B.
- Tapered joint with O-Ring Gasket, or single offset joint with rubber gasket, to meet current requirements of ASTM Spec. C-443. 6. MH sections to be cast in the base a min. of 2 inch.
- . Joint configuration may be cast bell-up or spitot-up. 8. holes in precast units are to be 4 inch min. 8 inch max. larger than the outside dia. of

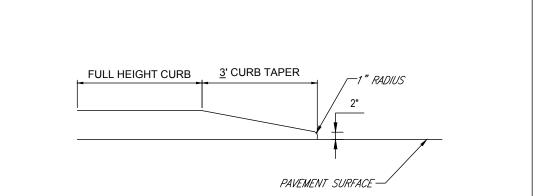
5 - 10

9. Base section to	e. provide min. 6 inch opening and bottom of bell an	d spigot joint.
Ref. Sec. 10-0102.5D(7),	DDEGAGE GONGDEED	PLATE NO.

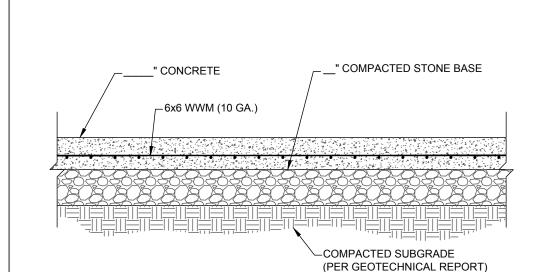
PRECAST CONCRETE

CUT-IN MANHOLE

NOT TO SCALE



CURB TAPER DETAIL



NOTE: 1. SECTION SHOWN IS BASED ON AN ANTICIPATED CBR OF __ PER GEOTECHNICAL REPORT PREPARED BY _____, ENTITLED _____, DATED _____ (PROJECT #____). FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON

COMPACTED SUB-BASE.

(TBD) STANDARD DUTY CONCRETE SECTION

NOT TO SCALE

REVISIONS

REV	DATE	COMMENT	DRAWN BY
KEV	DATE	COMMENT	CHECKED BY
1	05/20/2021	REV PER TOWN	SC
'	03/20/2021	COMMENTS	TD



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NOT APPROVED FOR CONSTRUCTION

PROJECT No.: DRAWN BY: CHECKED BY: 06/04/2021 SSD-0

DATE: CAD I.D.: PROJECT:

PROP. SITE PLAN

DOCUMENTS

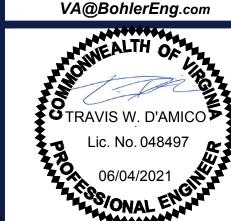


PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU

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



SHEET TITLE:

SITE DETAILS

C-1002

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.



rdering (Suide						example:	SSS-20-4-7-D1-BRP
efix	Height	Pole Size	Gauge	Drilling	Finish		Options	
SSS	10 12 14 15 18 20	4	11	D1 1 Way D2 2 Way D2@90 2 Way at 90' D3 3 Way D3@120 3 Way at 120' D4 4 Way T2 2 3/8" OD	PP BRP BLP WP NP GV FPGV	Prime Painted Bronze Paint Black Paint White Paint Natural Aluminum Paint Galvanized (No Paint) Finished Paint over	VDA AHH Nipples and Couplings CL	Vibration Dampener Additional Hand Hole Coupling - Internal thread Indicate size (1/2", 3/4", 1", 1 1/4",
	25 20 25 30		7	Tenon T4 4" OD Tenon	oc	Galvanized (specify color) Optional Color Paint (Specify RAL designation ex: OC-RAL7024) and Special Color Paint	Single Mount	11/2") Indicate height above base and orientation to hand hole. See Pole Orientataion Information on Page 5.
	20 25 30	5	11		2330	(Specify. Must supply color chip.)	Bullhorn Brackets	Single - 1.9" OD Single - 2.4" OD
	20 25 30 35		7.				24	Indicate height above base and orientation to hand hole. See Pole Orientation Information on Page 5.
	30 35	6	7	-			Motion Response Provisions MSM	Motion Sensor Mounting Provision
	40						INCIN	for LED Luminaires available with Motion Response Minimum Pole Height is 18'. Includes a special hand hole with 1/2' coupling placed in the cover plate, 180° to the hand hole, 15' above the pole base.
		ļ						Refer to Steel Pole Accessories on e-catalog for additional accessories.

CONTRACTOR SHALL VERIFY POLE SIZE, COLOR, AND HEIGHT IN FIELD AND MATCHING EXISTING PRIOR TO ORDERING OR INSTALLATION.

Poles Straight Square Steel

Pole Data						
	Pole Specs				Anchor Bolt Data?	
Product Catalog Number	Height (ft)	Pole Diameter (inches)	Wall Thickness (inches)	Bolt Circle (inches)	Bolt Size (inches)	Max Proj. (inches)
SSS-10-4-11	10	4	0.12	8	3/4 x 17 x 3	4
SSS-12-4-11	12	4	0.12	8	3/4 x 17 x 3	4
SSS-14-4-11	14	4	0.12	8	3/4 x 17 x 3	4
SSS-15-4-11	15	4	0.12	8	3/4 x 17 x 3	4
SSS-18-4-11	18	4	0.12	8	3/4 x 17 x 3	4
SSS-20-4-11	20	4	0.12	8	3/4 x 17 x 3	4
SSS-20-4-7	20	4	0.18	8	3/4 x 17 x 3	4
SSS-25-4-11	25	4	0.12	8	3/4 x 17 x 3	4
SSS-25-4-7	25	4	0.18	8	3/4 x 17 x 3	4
SSS-30-4-7	30	4	0.18	8	3/4 x 17 x 3	4
SSS-20-5-11	20	5	0.12	11	3/4 x 17 x 3	4
SSS-20-5-7	20	5	0.18	11	3/4 x 17 x 3	4
SSS-25-5-11	25	5	0.12	11	3/4 x 17 x 3	4
SSS-25-5-7	25	5	0.18	11	3/4 x 17 x 3	4
SSS-30-5-11	30	5	0.12	11	3/4 x 17 x 3	4
SSS-30-5-7	30	5	0.18	11	3/4 x 17 x 3	4
SSS-30-6-7	30	6	0.18	12	1 x 36 x 4	4
SSS-35-5-7	35	5	0.18	- 11	3/4 x 17 x 3	4
SSS-35-6-7	35	6	0.18	12	1 x 36 x 4	4
SSS-40-6-7	40	6	0.18	12	1 x 36 x 4	4

				Maximum L	uminaire Lo	ading'		EPA ft ² EI 23.9 : 18.8 : 15.1 : 11.8 : 9.2 : 6.7 : 11.8 : 2.6 : 7.7 : 4.4 : 12.7 : 21.4 : 6.3 :		
			High V	Vind Conditions			Norm	al Wind Cond	Conditions	
	7	130 MPH		120 MPH		110 MPH	100 MPH	90 MPH	80 MPH	
Product Catalog Number	EPA ft ²	Max Weight (lbs)	EPA ft ²	Max Weight (lbs)	EPA ft ²	Max Weight (lbs)	EPA ft ²	EPA ft ²	EPA ft	
SSS-10-4-11	9.9	248	12.0	300	14.5	363	18.9	23.9	30.6	
SSS-12-4-11	7.4	185	9.2	230	11.3	283	14.8	18.8	24.4	
SSS-14-4-11	5.5	138	7.0	175	8.8	220	11.7	15.1	19.9	
SSS-15-4-11	3.8	95	5.0	125	6.7	168	8.9	11.8	15.9	
SSS-18-4-11	2.3	58	3.5	88	4.8	120	6.7	9.2	12.6	
SSS-20-4-11	120		1.9	48	3.3	83	4.5	6.7	9.6	
SSS-20-4-7	4.3	108	5.6	140	7.4	185	8.8	11.8	16.0	
SSS-25-4-11	-	- 5	-		-	-	1.0	2.6	4.8	
SSS-25-4-7	1.6	40	2.6	65	3.8	95	5.4	7.7	10.8	
SSS-30-4-7	0.75	<i>₹</i> 6	12	===	1.2	50	2.6	4.4	6.7	
SSS-20-5-11	3.5	88	5	125	7	175	9.4	12.7	17.7	
SSS-20-5-7	6.2	155	8.2	205	10.7	270	16.2	21.4	28.1	
SSS-25-5-11		===	l-	-	2.1	53	3.7	6.3	9.8	
SSS-25-5-7	2.7	68	4.3	108	6.3	158	9.5	13.3	18.5	
SSS-30-5-11	3.77.4	77.4					-	2	4.7	
SSS-30-5-7	12.5	20		20	2	50	3.9	6.7	10.7	
SSS-30-6-7	848	¥1	3.3	83	5.6	140	9	13.2	19	
SSS-35-5-7	-	4.5	ii.	=	=	-		2.5	5.9	
SSS-35-6-7	(-)	=:	-	-	-	-	4.2	7.6	12.4	
SSS-40-6-7	(=	- 20	-	150	-	136	95	3	7.2	

08-SSS4_Spec_Sheet-V1 09/19 page 1 of 5 08-SSS4_Spec_Sheet-V1 09/19 page 2 of 5

SITE LIGHT POLE SPECIFICATION

Urban HADCO Victorian by (Signify V72 Post top, large

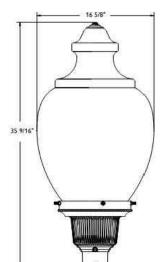
Hadco Victorian V72 LED post top is a traditionally styled luminaire with a highly efficient LED lamp inside. This LED lamp provides energy efficiency without sacrificing lumens for much needed safety along walkways in cities and neighborhoods. It also allows for lower maintenance due to a longer life and fewer internal parts. Powered by TrueForce LED lamp, V72 is a fiscally economical choice for communities on a budget. TrueForce LED lamp is shipped with the luminaire.

Project	
Location	
Cat.No:	
Туре.	
Lumens:	06
Notes:	

Series V72	Finish	Optics	Photo control	Socket	Wattage	Voltage
V72 Victorian large	A Black B White G Verde H Bronze I Gray J Green	TO Clear TOC Visual comfort	N None B Button eye	D Medium G Mogul	26L730 ¹ 26L740 ¹ 35L730 ² 35L740 ² 38L730R ² 38L740R ³ 55L730 ²	E 120V F 208 V G 240V H 277V

1. Only available with medium (D) socket. 2. Only available with mogul (G) socket

Dimensions



Height: 35-9/16* / 90cm EPA: 1.17 sq. ft (maximum) Weight: 32 lbs / 14.52 kg (maximum)

Width: 16-5/8" / 42cm diameter

CONTRACTOR SHALL VERIFY POLE SIZE, COLOR, AND HEIGHT IN FIELD AND MATCHING EXISTING PRIOR TO ORDERING OR INSTALLATION.

LED Wattage and Lumen Values: Victorian V72

Post top, large

Ordering Code:	Average System Wattage (W)	Delivered Lumens	Efficacy (LPW)	BUG Rating
TO-26L730	26W	2887	112	B1-U5-G2
TO-35L730	35W	4665	137	B1-U5-G3
TO-38L730R	38W	4708	126	B1-U5-G3
TO-55L730	55W	7343	140	B2-U5-G

Clear Textured Glob	e 4000K	Lamp			
Ordering Code:	Average System Wattage (W)	Delivered Lumens	Efficacy (LPW)	BUG Rating	
T0-26L740	26W	3101	126	B1-U5-G2	
TO-35L740	35W	4665	136	B1-U5-G3	
TO-38L740R	38W	5258	139	B2-U5-G3	
TO-55L740	55W	7885	152	B2-U5-G4	

ordering Code:	Average System Wattage(W)	Lumens	(LPW)	BUG Rating	Ordering Code:	Average System Wattage (W)	Lumens	(LPW)	Rating
0-26L740	26W	3101	126	B1-U5-G2	TOC-26L740	26W	3109	126	B1-U5-G2
0-35L740	35W	4665	136	B1-U5-G3	TOC-35L740	35W	4677	137	B1-U5-G3
0-38L740R	38W	5258	139	B2-U5-G3	TOC-38L740R	38W	5271	139	B2-U5-G3
0-55L740	55W	7885	152	B2-U5-G4	TOC-55L740	55W	7905	153	B2-U5-G4

TOC-35L730

TOC-38L730R

T0C-55L730

4677 139 B1-U5-G3

4720 126 B1-U5-G3

Values from photometric tests performed in accordance with IESNA LM-79 and are representative of the configurations shown. Actual performance may vary due to installation and environmental variables, LED and driver tolerances, and field measurement considerations. It is highly recommended to confirm performance with a NOTE: Some data may be scaled based on tests of similar (but not identical) luminaires. Contact factory for configurations not shown.

Specifications:

360 low-copper die-cast aluminum alloy. Fitter: Slip Fitter Dimensions: 3" I.D. x 3" deep. Lamp included. Medium or Mogul Base socket

Nominal. Power factor of 90% minimum Electronic driver, operating range 50/60 Hz. Auto-adjusting universal voltage input from 120 to 277 VAC Maximum ambient operating temperature from -40F(-40C) to 130F(55C) Luminaire Useful Life

50,000 hours L70 25C All non-ferrous fasteners prevent corrosion and ensure longer life.

Color in accordance with the AAMA 2603 standard. Application of polyester powder coat paint (4 mils/100 microns) with ± 1 mils / 24 microns of tolerance. The Thermosetting resins provides a discoloration resistant finish in lamp, composed of high-performance white LEDs.
Color temperature, 3000 or 4000 Kelvin, CRI 70 accordance with the ASTM D2244 standard, as well as luster retention in keeping with the ASTM well as luster retention in keeping with the ASTM D523 standard and humidity proof in accordance with the ASTM D2247 standard. The surface reatment achieves a minimum of 2000 hours for salt spray resistant finish in accordance with testing performed and per ASTM B117 standard.

Certifications and Compliance cETL listed to Canadian safety standards for wet locations. Manufactured to ISO 9001:2008 Standards, UL8750 and UL1598 compliant, ETL listed to U.S. safety standards for wet locations LED products manufacturing standard cETL listed to Canadian safety standards for wet Electrostatic discharge (ESD) such as light locations. LM80 & LM79 tested. emitting diodes (LEDs) are assembled in impliance with IEC61340 5 1 and ANSI/ ESD S20.20 standards so as to eliminate ESD events 5 year extended warranty. that could decrease the useful life of the product

Quality Control

The manufacturer must provide a written

American national Standard for Roadway

confirmation of its ISO 9001 2008 and ISO

14001 2004 International Quality Standards

Certification. Meets the ANSI C136.31 2010,

Luminaire Vibration specifications for Normal

18 AWG wire, 6" (152mm) minimum exceeding from

The information presented in this document is not intended as any commercial offer and does not form part of any quotation or contract.

STREET LIGHTING SPECIFICATION

Site & Area G GARDCO Gullwing LED by (Signify GL18 Large

Gardco Gullwing LED luminaires combine LED performance excellence and advanced Gardco LED thermal management technology with the distinct Gullwing style to provide outdoor area lighting that is both energy efficient and aesthetically pleasing.



Ordering guide Example: GL18-APD-1-4-80LA-4853-NW-120-BRP-LF 105LA-4870 3 160LA-481A 1ype 3 48 LEDs, 1A 3-90 180LA-6490 1ype 3@90' 64 LEDs, 900mA 3-270 210LA-641A Type 3@270 64 LEDs. IA 210LA-641A Optional Color
Specify optional
color or RAL
ex-OC-LGP or OC
RAL 7034

Optional Color
Internal Houseside Shield
(types 2-3, 4 only)

CLR⁴ Clear Glass Lens
(reduces performance) 200LA-9670 Recessed 4-90 J-Box Type 4@90 230LA-9680 96 LEDs, 800mA RPA1 3" Round Pole Adapter Required for 3" O.D. round or tapeted round poles where top O.D. is less than 4" Wall Mount. Surface 5 310La-961A 961 EDs. 900 mA 961 EDs. 900 mA 961 EDs. 900 mA 8' mounting heights LLC3^{1,5} #3 lens for RPA2 4" and 5" Round Pole Adapter 9-20' mounting heights LC7 - #7 lens for 21-40' mounting heights Required for 4"-5" O.D. MA Mast Arm Fitter - Mounts to a 2-3/8* O.D. mast arm Network system (SiteWise) TR1¹⁰ Single Transition SW-MRI3 luminaire mounted TR2⁶⁰ Twin Transition PTF2³ Pole Top Fitter 2 3/8" - 3" Dia Tenon sensor option Typ∈7 PTF3* Pole Top Fitter 3" - 3 1/2" Dia Tenon Available 120-277V only. 10. Mounts to a 2-3/8" Top Tenon. Specify a round pole with a 6. Luminaire door frame and optic assembly provided standard without glass lens. Specify **CLR** option for clear glass lens. Works with 3-pin or 5-pin NEMA photocell/dimming device. Available 120 or 277V only II. Not available in 120' mounting configurations

CONTRACTOR SHALL VERIFY LIGHTS IN FIELD AND MATCHING PRIOR TO ORDERING OR INSTALLATION.

8. If ordered with DIM, APD, MRI, APD-MRI, dimming will not be

connected to NEMA receptacle.

9 Works with 3-pin or 5-pin NEMA photocell/dimming device and auxiliary connections are not connected

ABOVE GRADE

HEIGHT

17' MODEL

SITE LIGHTING SPECIFICATION

Decorative Lamp Post - CF50 / Base D3M

· For other tenon sizes contact the factory.

Receptacle housing and a

· Other accessories are shown on the Accessories

NEC-approved cover with 15A GFCI

12"/305 mm below the top of the pole.

receptacle. Standard location is

 Fluted, tapered composite pole · Direct embedded and anchor base models XTREME[®] elastomeric urethane base cover

Not available in 480V.

Gullwing_GL18_LED 05/20 page 1 of 8

Ordering Information: Sample Catalog Number Logic AB BLK 30 RC CF50-D3M

Cat No.	Description	Cat No.	Description	
6	6 feet /1.8 M	30	3" (76 mm) O.D.	
7	7 feet /2.1 M	40	4" (102 mm) O.D.	
8	8 feet /2.4 M	99	Custom Tenon O.D.	
9	9 feet /2.7 M	• For c	ther tenon sizes contact the	
10	10 feet /3.0 M			
11 11 feet /3.4 M		F Optio	ns	
12	12 feet /3.7 M	Cat No.	Description	
13	13 feet /4.0 M	RC	Receptacle housing a	
14	14 feet /4.3 M		NEC-approved cover	
15	15 feet /4.6 M		receptacle. Standard	
16	16 feet /4.9 M		12"/305 mm below the	
17	17 feet /5.2 M		r accessories are shown on	
C Insta	llation Method	speci	fication sheet.	
Cat No.	Description			
DE	Direct Embedded			
AB	Anchor Base			

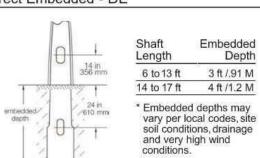
Cat No. Description BLK Black DBZ Dark Bronze Dark Green SLV Silver White WHT Grey Custom Color - Please provide a min. 3" x 3" color chip. Please provide a four digit RAL color number.

CONTRACTOR SHALL VERIFY LIGHTS IN FIELD AND MATCHING PRIOR TO ORDERING OR INSTALLATION.

HEIGHT: 24"/610 mm BASE DIAMETER: 18"/460 mm

CF50-D3M Fluted, tapered composite pole shaft

Direct Embedded - DE



PERFORMANCE CRITERIA
The post shall be designed with a minimum safety factory of 1.5:1
and have no more than a 15% deflection at full wind loading. The post shall deflect no more than 2.5% of the above grade length with 100 lbs of lateral top load (stiffness). Poles shall be tested and rated

Direct embedded poles shall have two 2.5 inch (64 mm) diameter below finished grade. Embedded depths may vary per local codes,

Anchor bases shall be constructed of hot dipped galvanized steel. The

bonded to the pole for mounting a post-top luminaire or arm.

per ASTM G154, with no dulling or chalking of the surface. ORNAMENTAL BASE COVER

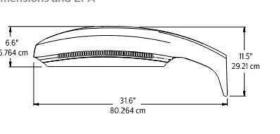
The ornamental decorative base cover shall be one or two piece and constructed of a proprietary elastomeric urethane and finished to match the post. The base shall be corrosion free and extremely resistant to impact and chipping.

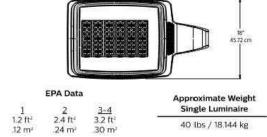
GL18 Gullwing LED luminaire

Ordering guide

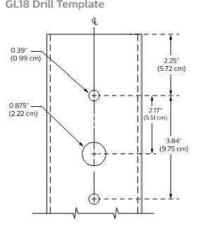
Prefix	Controls	Optical System*	Wattage	LED Color	Voltage	Finish	Options
GL18-RK 18" Gullwing LED Retrofit Kit	DIM with 0-10v Dimming APD with Automatic Profile Dimming	2 Type 2 2-90 Type 2@50' 2-270 Type 2@270' 3 Type 3 3-90 Type 3@90' 3-270 Type 3@270' 4 4-90 Type 4@90' 4-270 Type 4@270' 5 Type 5	50LA-4835 48 LEDS, 350mA 80LA-4853 48 LEDS, 530mA 105LA-4870 48 LEDS, 530mA 160LA-481A 48 LEDS, IA 180LA-6490 64 LEDS, 900mA 210LA-641A 64 LEDS, IA 200LA-9670 96 LEDS, 700mA 230LA-9680 96 LEDS, 800mA 265LA-9690 96 LEDS, 900 mA 310LA-961A 96 LEDS, IA	NW Neutral White 4000K, 70 min CRI CW Cool White 5700K, 70 min CRI WW Warm White 3000K, 70 min CRI	120 208 240 277 347 480 UNV (20-277V) HVU (347-480V)	BLP Black Paint WP White Paint BRP Bronze Paint NP Natural Aluminum Paint OC Optional Color Specify outbond color or RAL ax: OC LGP or OC-RAL 7024 SC Special Color Specify Must supply color chip. Requires factory quote	IS Internal Houseside Shield (types 2, 3, 4 only)

Dimensions and EPA

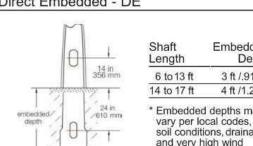




GL18 Drill Template



Gullwing_GL18_LED 05/20 page 2 of 8



Specifications

The CF50 pole shaft shall be round tapered with 16 flutes and a .14"/3.6 mm per foot taper. The hand hole shall be 2.5"/64 mm x 5"/127 mm with a cover. The shaft shall be constructed using an advanced resin transfer manufacturing process to produce an ornamental pole with extremely precise detail on the shaft flutes. The shaft shall be non-conductive and chemically inert. The fluting extends to the end of the pole and on embedded-type post shall serve as a resistance to rotation.

per ANSI C136.20-2012.

DIRECT EMBEDDED INSTALLATION holes at 180 degrees for conduit entrance 24 inches (610 mm) site soil conditions, drainage and very high wind conditions.

base shall be factory bonded to the post. The anchor base shall have four holes at ninety degrees, accommodating a bolt circle as indicated POST TOP

A painted aluminum or galvanized steel tenon shall be factory

The surface of the pole shall be uniform and consistent for the entire length of the post. A UV-resistant catalyzed urethane coating shall be extremely durable and retains its gloss after a 5000 hour exposure test

WIND SPEED (MPH) WITH 3 SECOND GUST FACTOR

valmont **₹**

Anchor Base Installation - AB

6' - 17' 9" - 11" 10" 3/4" x 30" (229 mm - 279 mm) (254 mm)

6 feet/1.8 M 55 11.9 9.4 7.5 6.1 5.0 4.2 3.6

7 feet/2.1 M 58 11.9 9.4 7.5 6.1 5.0 4.2 3.6

9 feet/2.7 M 64 11.9 9.4 7.5 6.1 5.0 4.2 3.5

11 feet/3.4 M 70 11.9 9.4 7.4 6.0 4.9 4.1 3.4 12 feet/3.7 M 75 11.9 9.3 7.4 5.9 4.8 4.0 3.3

13 feet/4.0 M 78 11.9 9.2 7.3 5.8 4.7 3.9 3.2

15 feet/4.6 M 86 11.7 9.0 7.0 5.6 4.5 3.6 3.0 16 feet/4.9 M 90 10.7 8.2 6.3 5.0 4.0 3.2 2.6

17 feet/5.2 M 95 10.4 7.9 6.1 4.8 3.8 3.0 2.4

Wind speed values are for a 3 second gust per ASCE. Calculated per

ANSI C136.20-2012. Assumes load 12 inches above the pole top.

Safety factor = 1.5:1, Maximum weight for tenon mount is 100 lbs.

Contact factory for AASHTO or specific local codes.

14 feet/4.3 M 82 11.8 9.1 7.1 5.7 4.6 3.7 3.1

0 10 feet/3.0 M 67 11.9 9.4 7.5 6.1 5.0 4.2 3.5

8 feet/2.4 M 61 11.9 9.4 7.5 6.1 5.0 4.2 3.6

REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE. PROJECT No.:

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1 05/20/2021 REV PER TOWN COMMENTS

COMMENT

REV DATE

PROJECT:

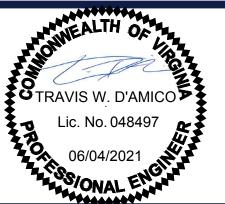
PROP. SITE PLAN

DOCUMENTS

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 Phone: (703) 709-9500 Fax: (703) 709-9501 VA@BohlerEng.com



SHEET TITLE:

SITE DETAILS

C-1003

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STREET LIGHT POLE SPECIFICATION

Victorian_V72 02/19 page 1 of 2



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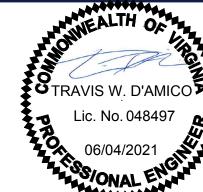
PROP. SITE PLAN **DOCUMENTS**



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BOHLER//

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



GEOTECHNICAL REQUIREMENTS

C-1101

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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

CORRESPONDENCE

C-1201

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