

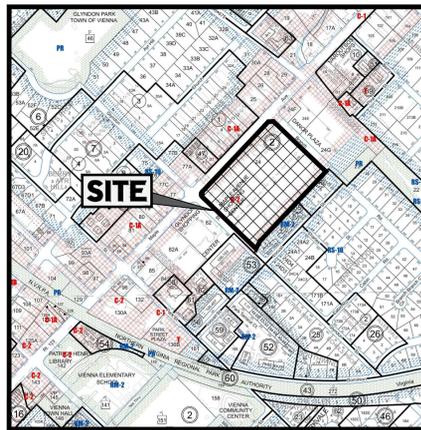
# SITE PLAN DOCUMENTS

FOR



## 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'  
PLAN REFERENCE:

Copyright  
FAIRFAX COUNTY MAPPER  
REVISED: 01-01-2020

**OWNER**

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

**DEVELOPER**

OTJ ARCHITECTS  
555 11TH STREET, NW, SUITE 200  
WASHINGTON, DC 20004  
CONTACT: AARON WEST  
PHONE: (202) 621-1392

PREPARED BY



CONTACT:

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

- NOTE:
1. GEOTECHNICAL REPORT WILL BE REQUIRED IF CLASS II OR CLASS IVA SOILS EXIST ON SITE.
  2. PROPOSED SANITARY SEWER WILL CONNECT TO THE EXISTING SANITARY SEWER MAIN. WASTEWATER TREATMENT PLANT FOR THIS SITE IS BLUEMONT PLAINS TREATMENT AREA.

**PLAN REFERENCES AND CONTACTS**

**REFERENCES**

- **BOUNDARY & TOPOGRAPHIC SURVEY:**  
BOHLER  
12825 WORLDGATE DRIVE  
HERNDON, VA 20170  
DATED: 07/16/20  
SS020289  
ELEVATIONS: VCS NAD83/93NF
- **GEOTECHNICAL INVESTIGATION REPORT:**  
TBD
- **ARCHITECTURAL PLAN:**  
OTJ ARCHITECTS  
555 11TH STREET NW, SUITE 200  
WASHINGTON, D.C. 20004  
DATED: 11/09/2019
- **GOVERNING AGENCIES**
- **DEPARTMENT OF PLANNING AND ZONING**  
127 CENTER STREET S  
VIENNA, VIRGINIA 22180  
PHONE: (703) 255-0341  
EMAIL: DPZ@VIENNA.VA.GOV
- **FIRE DEPARTMENT**  
CONTACT - POSITION  
VIENNA VOLUNTEER FIRE DEPARTMENT  
400 CENTER STREET SOUTH  
VIENNA, VA 22180  
PHONE: (703) 938-2242
- **UTILITIES**
- **ELECTRIC**  
DOMINION VIRGINIA POWER  
BOB REININGER  
11133 MAIN STREET  
FAIRFAX, VA 22030  
PHONE: (703) 934-2594
- **CABLE**  
COMCAST  
LA REASON  
4391 DALE BOULEVARD  
WOODBRIDGE, VA 22193  
PHONE: (703) 789-9351
- **TELEPHONE**  
VERIZON  
LLOYD ROBBINS  
22001 LOVDOWN COUNTY PKWY  
ASHBURN, VA 20174  
PHONE: (703) 898-6484
- **GAS**  
WASHINGTON GAS  
PAT ESTRADA-PALMA  
6801 INDUSTRIAL ROAD  
SPRINGFIELD, VA 22151  
PHONE: (703) 750-5657
- **WATER**  
DEPARTMENT OF PUBLIC WORKS  
REBECCA GREENBERG  
127 CENTER STREET SOUTH  
VIENNA, VA 22180  
SPRINGFIELD, VA 22151  
PHONE: (703) 750-565
- **ROW JURISDICTION**
- **VDOT**  
4975 ALLIANCE DRIVE  
FAIRFAX, VA 22030  
PHONE: 1-(800) 367-7623

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 OTHERS.

**FIRE MARSHAL NOTES**

AVAILABLE FIRE FLOW TBD (GAL./MIN.)  
SOURCE OF FIRE FLOW INFO. TBD  
TYPE OF CONSTRUCTION - USBC IB  
USE GROUP CLASSIFICATION - USBC (B) BUSINESS  
BUILDING HEIGHT 21.5 (FT.)  
BUILDING TO BE FULLY SPRINKLERED  YES  NO  
IF YES, CHECK APPROPRIATE STANDARD:  NFPA 13 ;  NFPA 13D ;  NFPA 13R

**GENERAL NOTE:**  
IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO REVIEW ALL OF THE DRAWINGS AND SPECIFICATIONS ASSOCIATED WITH THIS PROJECT WORK SCOPE PRIOR TO THE INITIATION OF CONSTRUCTION. SHOULD THE CONTRACTOR FIND A CONFLICT WITH THE DOCUMENTS RELATIVE TO THE SPECIFICATIONS OR APPLICABLE CODES, IT IS THE CONTRACTOR'S RESPONSIBILITY TO NOTIFY THE PROJECT ENGINEER OF RECORD IN WRITING PRIOR TO THE START OF CONSTRUCTION. FAILURE BY THE CONTRACTOR TO NOTIFY THE PROJECT ENGINEER SHALL CONSTITUTE ACCEPTANCE OF FULL RESPONSIBILITY BY THE CONTRACTOR TO COMPLETE THE SCOPE OF THE WORKS AS DEFINED BY THE DRAWINGS AND IN FULL COMPLIANCE WITH ALL APPLICABLE REGULATIONS AND CODES.

SHEET INDEX	
SHEET TITLE	SHEET NUMBER
COVER SHEET	C-101
GENERAL NOTES	C-102
GENERAL NOTES AND LEGEND	C-103
ZONING COMPLIANCE PLAN	C-104
PROPERTY MAP	C-201
ALTA SURVEY (BY OTHERS)	C-202 - C-203
DEMOLITION PLAN	C-204
SITE PLAN	C-301
FIRE MARSHAL AND TRUCK ACCESS PLAN	C-302
VEHICLE MOVEMENT	C-303
VEHICLE MOVEMENT	C-304
GRADING PLAN	C-401
UTILITY PLAN	C-501
DRY UTILITY PLAN	C-502
EROSION AND SEDIMENT CONTROL PLAN PHASE I	C-601
EROSION AND SEDIMENT CONTROL PLAN PHASE II	C-602
EROSION AND SEDIMENT CONTROL NOTES	C-603
EROSION AND SEDIMENT CONTROL NOTES	C-604
EROSION AND SEDIMENT CONTROL NOTES AND DETAILS	C-605
TREE INVENTORY AND PRESERVATION PLAN	C-701
TREE PRESERVATION DETAILS	C-702
LANDSCAPE PLAN	C-703
LANDSCAPE FYI SHEETS	C-704 - C-705
LANDSCAPE NOTES AND DETAILS	C-706
LIGHTING PLAN (BY OTHERS)	C-707
STORM PROFILES	C-801
STORM COMPUTATIONS	C-802
STORMWATER QUALITY AND COMPLIANCE PLAN	C-901
VRRM SPREADSHEET	C-902
ADEQUATE OUTFALL ANALYSIS	C-903
STORMWATER DETAILS	C-904 - C-905
STORMWATER ROUTINGS	C-906 - C-908
SITE DETAILS	C-1001
SITE DETAILS	C-1002
SITE DETAILS	C-1003
GEOTECHNICAL REQUIREMENTS	C-1101
CORRESPONDENCE	C-1201
TOTAL SHEETS	39

**PROJECT NARRATIVE**

THE SITE PLAN IS FOR A FINANCIAL INSTITUTION PROPOSED ON 315 MAPLE AVENUE IN THE TOWN OF VIENNA, TAX MAP #0382-02-0024. 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**  
SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

**REVISIONS**

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

**811**  
Know what's below.  
Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

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

**PROP. SITE PLAN DOCUMENTS**  
FOR  
CHASE  
PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU  
315 MAPLE AVE E  
TOWN OF VIENNA, VIRGINIA  
TAX MAP #: 0382-02-0024

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

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

SHEET TITLE:  
**COVER SHEET**  
SHEET NUMBER:  
**C-101**  
REVISION 1 - 05/20/2021

Jun 04, 2021 11:03:52 AM C:\DRAWINGS\PLAN SETS\S202089-SSD-1-1-1\LAYOUT-C-101 COVER

GENERAL NOTES

(Rev. 1/2020)

- 1. THESE PLANS ARE SOLELY BASED ON INFORMATION THE OWNER AND OTHERS PROVIDED TO BOHLER ENGINEERING, VIRGINIA, LLC (HEREIN "BOHLER") PRIOR TO THE DATE ON WHICH ENGINEER PREPARED THESE PLANS. THE CONTRACTOR MUST FULLY VERIFY ALL EXISTING CONDITIONS AND IMMEDIATELY NOTIFY BOHLER...
2. THE CONTRACTOR MUST STRICTLY COMPLY WITH THESE NOTES AND ALL SPECIFICATIONS/REPORTS CONTAINED HEREIN...
3. THE CONTRACTOR MUST ENSURE THAT ALL SUBCONTRACTORS FULLY AND COMPLETELY CONFORM TO AND COMPLY WITH THESE REQUIREMENTS...
4. PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, THE CONTRACTOR MUST OBTAIN ALL NECESSARY PERMITS AND APPROVALS...
5. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL...
6. 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...
7. THE 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...
8. THE CONTRACTOR MUST FULLY VERIFY ALL DIMENSIONS AND MEASUREMENTS SHOWN ON THESE PLANS...
9. THE CONTRACTOR MUST ENSURE THAT ALL WORK IS PERFORMED IN ACCORDANCE WITH THESE PLANS, SPECIFICATIONS/REPORTS AND CONDITIONS OF APPROVAL...
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...
11. 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...
12. ENGINEER OF RECORD IS NEITHER LIABLE NOR RESPONSIBLE FOR ANY SUBSURFACE CONDITIONS AND FURTHER, HAS NO LIABILITY FOR ANY HAZARDOUS MATERIALS OR CONTAMINATION ON, ABOVE OR UNDER THE PROPERTY...
13. THE CONTRACTOR IS RESPONSIBLE FOR IDENTIFYING WHEN AND WHERE SHORING IS REQUIRED AND FOR INSTALLING ALL SHORING REQUIRED DURING EXCAVATION...
14. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT STRUCTURES...
15. DEBRIS MUST NOT BE BURIED ON THE SUBJECT SITE...
16. THE CONTRACTOR IS SOLELY RESPONSIBLE TO MAINTAIN RECORDS TO DEMONSTRATE PROPER AND FULLY COMPLIANT DISPOSAL ACTIVITIES...
17. 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...
18. THE CONTRACTOR OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR AND HAVE NO CONTRACTUAL, LEGAL OR OTHER RESPONSIBILITY FOR ANY JOB SITE ACCIDENTS OR INJURIES...
19. THE CONTRACTOR OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR ANY DISCREPANCIES THAT MAY OR COULD AFFECT THE PUBLIC SAFETY, HEALTH OR GENERAL WELFARE...
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...
21. ALL CONTRACTORS MUST CARRY AT LEAST THE MINIMUM AMOUNT OF THE SPECIFIED AND COMMERCIALLY REASONABLE STATUTORY WORKERS' COMPENSATION AND GENERAL LIABILITY INSURANCE...
22. THE ENGINEER OF RECORD AND BOHLER ARE NOT RESPONSIBLE FOR CONSTRUCTION METHODS, MEANS, TECHNIQUES OR PROCEDURES...
23. NEITHER THE PROFESSIONAL ACTIVITIES OF BOHLER, NOR THE PRESENCE OF BOHLER AND/OR ITS PAST, PRESENT AND FUTURE OWNERS, DIRECTORS, PRINCIPALS, MANAGERS, OFFICERS, EMPLOYEES, AFFILIATES, SUBSIDIARIES, AND RELATED ENTITIES...
24. WHEN IT IS CLEARLY AND SPECIFICALLY WITHIN BOHLER'S SCOPE OF SERVICES CONTRACTED WITH THE OWNER/DEVELOPER...
25. IF ANY CONTRACTOR DEVIATES FROM THESE PLANS AND/OR SPECIFICATIONS, INCLUDING THE NOTES CONTAINED HEREIN...

- 26. THE CONTRACTOR IS RESPONSIBLE FOR A MAINTAINING AND PROTECTING THE TRAFFIC CONTROL PLAN AND ELEMENTS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REQUIREMENTS...
27. OWNER MUST MAINTAIN AND PRESERVE ALL PHYSICAL SITE FEATURES AND DESIGN FEATURES DEPICTED ON THE PLANS AND RELATED DOCUMENTS...
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...
29. THE CONTRACTOR MUST STRICTLY COMPLY WITH THE LATEST AND CURRENT OSHA STANDARDS AND REGULATIONS...
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...
31. THE CONTRACTOR IS RESPONSIBLE TO MAINTAIN AN ON-SITE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) IN COMPLIANCE WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) REQUIREMENTS...
32. AS CONTAINED IN THESE DRAWINGS AND ASSOCIATED DOCUMENTS PREPARED BY THE SIGNATORY PROFESSIONAL ENGINEER OF RECORD...

SITE LAYOUT 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...
2. PRIOR TO THE COMMENCEMENT OF GENERAL CONSTRUCTION, THE CONTRACTOR MUST INSTALL SOIL EROSION CONTROL AND ANY STORMWATER POLLUTION PREVENTION PLAN (SWPPP) MEASURES NECESSARY...
3. ALL DIRECTIONAL TRAFFIC SIGNING AND PAVEMENT STRIPING MUST CONFORM TO THE LATEST STANDARDS OF THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD)...
4. THE LOCATIONS OF PROPOSED UTILITY POLES AND TRAFFIC SIGNS SHOWN ON THE PLANS ARE SCHEMATIC AND PRELIMINARY...
5. 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...

GRADING 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...
2. THE CONTRACTOR MUST EXERCISE EXTREME CAUTION WHEN PERFORMING ANY WORK ACTIVITIES ADJACENT TO PAVEMENT STRUCTURES...
3. THE CONTRACTOR IS REQUIRED TO SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES...
4. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVENTORIES...
5. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING AND REPLACING ALL UNSUITABLE MATERIALS WITH SUITABLE MATERIALS AS SPECIFIED IN THE GEOTECHNICAL REPORT...
6. THE CONTRACTOR MUST FULLY VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SERVICES...
7. 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)

- 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.)...
2. THE CONTRACTOR MUST REVIEW ALL DOCUMENTS REFERENCED IN THESE NOTES FOR ACCURACY, COMPLIANCE AND CONSISTENCY WITH INDUSTRIAL GUIDELINES...
3. THE CONTRACTOR MUST EXERCISE APPROPRIATE CARE AND PRECISION IN CONSTRUCTION OF ACCESSIBLE (ADA) COMPONENTS AND ACCESSIBLE ROUTES FOR THE SITE...
4. ACCESSIBLE PARKING SPACES AND ACCESSIBLE SPACES MUST NOT EXCEED 1:50 (2.0%) IN ANY DIRECTION...
5. PATH OF TRAVEL ALONG ACCESSIBLE ROUTE MUST PROVIDE A 36-INCHES MINIMUM WIDTH (48-INCHES PREFERRED)...
6. ACCESSIBLE RAMP'S MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) AND A RISE OF 30-INCHES...
7. ACCESSIBLE CURB RAMP'S MUST NOT EXCEED A SLOPE OF 1:12 (8.3%) WHERE FLARED SIDES ARE PROVIDED...
8. THE CONTRACTOR MUST FULLY VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SERVICES...
9. 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...

DEMOLITION 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...
2. 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...
3. WHEN DEMOLITION-RELATED ACTIVITIES IMPACT ROADWAYS AND/OR ROADWAY RIGHT-OF-WAY...
4. THE DEMOLITION (AND/OR REMOVAL) PLAN IS INTENDED TO PROVIDE GENERAL INFORMATION AND TO IDENTIFY ONLY THE AREAS TO BE REMOVED...
5. THE CONTRACTOR MUST PROVIDE ALL "METHODS AND MEANS" NECESSARY TO PREVENT MOVEMENT, SETTLEMENT, OR COLLAPSE OF EXISTING STRUCTURES...
6. ENGINEER OF RECORD AND/OR BOHLER ARE NOT RESPONSIBLE FOR JOB SITE SAFETY OR SUPERVISION...
7. 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...
8. PRIOR TO THE COMMENCEMENT OF ANY SITE ACTIVITY AND ANY DEMOLITION ACTIVITY...
9. THE CONTRACTOR MUST BECOME FAMILIAR WITH THE APPLICABLE UTILITY SERVICE PROVIDER REQUIREMENTS...
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 WORK...
11. NOTIFY, AT A MINIMUM, THE MUNICIPAL ENGINEER, DESIGN ENGINEER, AND LOCAL SOIL CONSERVATION JURISDICTION...
12. THE CONTRACTOR MUST SECURE ALL NECESSARY AND/OR REQUIRED PERMITS AND APPROVALS FOR ALL OFF-SITE MATERIAL SOURCES AND DISPOSAL FACILITIES...
13. THE CONTRACTOR IS FULLY RESPONSIBLE FOR VERIFYING EXISTING TOPOGRAPHIC INFORMATION AND UTILITY INVENTORIES...
14. THE CONTRACTOR MUST BACKFILL ALL EXCAVATION RESULTING FROM, OR INCIDENTAL TO, DEMOLITION ACTIVITIES...
15. EXPLOSIVES MUST NOT BE USED WITHOUT PRIOR WRITTEN CONSENT FROM BOTH THE OWNER AND ALL APPLICABLE, NECESSARY AND REQUIRED GOVERNMENTAL AUTHORITIES...
16. THE CONTRACTOR MUST FULLY VERIFY THE LOCATION OF ALL EXISTING UTILITIES AND SERVICES...
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...
18. THE CONTRACTOR MUST MAINTAIN A RECORD SET OF PLANS WHICH INDICATES THE LOCATION OF EXISTING UTILITIES...
19. THE CONTRACTOR MUST EMPTY, CLEAN AND REMOVE FROM THE SITE ALL UNDERGROUND STORAGE TANKS...
20. THE CONTRACTOR IS RESPONSIBLE FOR THE INSTALLATION OF LIGHTING FIXTURES AND APPURTENANCES IN ACCORDANCE WITH ALL APPLICABLE BUILDING AND ELECTRICAL CODES...
21. 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...
22. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND/OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED...

LIGHTING 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...
2. THE LIGHTING CONTRACTOR MUST COMPLY WITH ALL APPLICABLE CONTRACTOR REQUIREMENTS INDICATED IN THE PLANS...
3. THE LIGHTING PLAN DEPICTS PROPOSED, SUSTAINED ILLUMINATION LEVELS CALCULATED USING DATA PROVIDED BY THE NOTED MANUFACTURER...
4. THE LIGHTING VALUES AND CALCULATION POINTS DEPICTED ON THIS PLAN ARE ANALYZED ON A HORIZONTAL GEOMETRIC PLANE...
5. THE LUMINAIRES, LAMPS AND LENSES MUST BE REGULARLY INSPECTED/MAINTAINED TO ENSURE THAT THEY FUNCTION PROPERLY...
6. THE LIGHTING PLAN IS INTENDED TO SHOW THE LOCATIONS AND TYPE OF LUMINAIRES, POWER SYSTEM, CONDUITS, WIRING AND OTHER ELECTRICAL COMPONENTS...
7. 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...
8. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT SHIELDING AND/OR ROTATED OPTICS ARE INSTALLED AS INDICATED ON THE PLAN IN ORDER TO ACHIEVE THE LIGHTING LEVELS THE REVIEWING AGENCY APPROVED...

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...
2. EROSION CONTROL MEASURES MUST CONFORM TO THE VIRGINIA GUIDELINES FOR URBAN EROSION AND SEDIMENT CONTROL...
3. THE DISTURBED LAND AREA OF THIS SITE IS APPROXIMATELY 1.07 ACRES...
4. THE FOLLOWING EROSION CONTROL MEASURES ARE PROPOSED FOR THIS CONSTRUCTION:
A. STABILIZED CONSTRUCTION ENTRANCE/EXIT IS TO BE INSTALLED AT THE DESIGNATED LOCATION SHOWN ON THE PLAN...
B. SEDIMENT FENCE - INSTALL SILT FENCE(S) AND/OR SILT SOCK AROUND ALL OF THE DOWNSLOPE PERIMETERS OF THE SITE...
C. INSTALL FILTER FABRIC DROP INLET PROTECTION AROUND EACH DRAINAGE INLET AS DRAINAGE STRUCTURES ARE INSTALLED...
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...
7. THE CONTRACTOR MUST APPLY TEMPORARY SEED AND MULCH TO ALL DISTURBED AREAS...
8. THE CONTRACTOR MUST INSTALL ADDITIONAL EROSION CONTROL MEASURES IF ENGINEER SO REQUIRES...
9. THE CONTRACTOR MUST BE RESPONSIBLE FOR INSPECTING AND MAINTAINING ALL EROSION CONTROL MEASURES ON THE SITE UNTIL PERMANENT PAVING AND TURF/LANDSCAPING IS ESTABLISHED...
10. THE CONTRACTOR MUST CONTINUE TO MAINTAIN ALL EROSION CONTROL MEASURES UNTIL THE COMPLETION OF CONSTRUCTION AND THE ESTABLISHMENT OF VEGETATION...
11. THIS PLAN REPRESENTS THE MINIMUM LEVEL OF IMPLEMENTATION OF TEMPORARY EROSION AND SEDIMENTATION CONTROL FACILITIES...
12. THE CONTRACTOR MUST PROTECT ALL EXISTING TREES AND SHRUBS...
13. THE CONTRACTOR MUST REFER TO THE LANDSCAPE AND/OR DEMOLITION PLANS FOR TREE PROTECTION, FENCE LOCATION 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...
16. 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

(Rev. 1/2020)

- 1. THE GENERAL NOTES MUST BE INCLUDED AS PART OF THIS ENTIRE DOCUMENT PACKAGE AND ARE PART OF THE CONTRACT DOCUMENTS...
2. LOCATIONS OF ALL EXISTING AND PROPOSED SERVICES ARE APPROXIMATE, AND THE CONTRACTOR MUST INDEPENDENTLY VERIFY AND CONFIRM THOSE LOCATIONS AND SERVICES WITH LOCAL UTILITY COMPANIES...
3. 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...
4. THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ALL DAMAGE TO ANY EXISTING UTILITIES WHICH OCCUR DURING CONSTRUCTION...
5. THE CONTRACTOR IS RESPONSIBLE FOR COORDINATING SITE PLAN DOCUMENTS AND ARCHITECTURAL PLANS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS...
6. THE CONTRACTOR IS RESPONSIBLE FOR ENSURING THAT INSTALLATION OF ALL IMPROVEMENTS COMPLIES WITH ALL UTILITY REQUIREMENTS...
7. ALL FILL, COMPACTION, AND BACKFILL MATERIALS REQUIRED FOR UTILITY INSTALLATION MUST BE EXACTLY AS PER THE RECOMMENDATIONS PROVIDED IN THE GEOTECHNICAL REPORT...
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...
9. 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...
10. FINAL LOCATIONS OF PROPOSED UTILITY POLES, AND/OR POLES TO BE RELOCATED ARE AT THE SOLE DISCRETION OF THE CONTRACTOR...
11. WATER SERVICE MATERIALS, BURIAL DEPTH, AND COVER REQUIREMENTS MUST BE SPECIFIED BY THE LOCAL UTILITY COMPANY...
12. THE CONTRACTOR MUST CONTACT THE APPLICABLE MUNICIPALITY TO CONFIRM THE PROPER WATER METER AND VAULT, PRIOR TO COMMENCING CONSTRUCTION...

BOHLER logo and vertical text: SITE CIVIL AND CONSULTING ENGINEERING, PROGRAM MANAGEMENT, LANDSCAPE ARCHITECTURE, SUSTAINABLE DESIGN, PERMITTING SERVICES, TRANSPORTATION SERVICES

REVISIONS

Table with columns: REV, DATE, COMMENT, DRAWN BY, CHECKED BY, DATE

- 1. 05/20/2021 PER REV TOWN COMMENTS SC TD

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NOT APPROVED FOR CONSTRUCTION

Table with project details: PROJECT No., DRAWN BY, CHECKED BY, DATE

PROP. SITE PLAN DOCUMENTS FOR CHASE

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

BOHLER logo and address: 12825 WORLDGATE DR, SUITE 700 HERNDON, VIRGINIA 20170 Phone: (703) 709-9500

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

GENERAL NOTES SHEET NUMBER C-102 SHEET TITLE REVISION 1 - 05/20/2021

**STANDARD DRAWING LEGEND**  
FOR ENTIRE PLAN SET

LIMIT OF WORK ———— LOW ———— LOW ————  
LIMIT OF DISTURBANCE ———— LOD ———— LOD ————

EXISTING NOTE	TYPICAL NOTE TEXT	PROPOSED NOTE									
---	ONSITE PROPERTY LINE / R.O.W. LINE	---									
---	NEIGHBORING PROPERTY LINE / INTERIOR PARCEL LINE	---									
---	EASEMENT LINE	---									
---	SETBACK LINE	---									
<table border="1"> <tr> <td colspan="2">CONCRETE CURB &amp; GUTTER</td> <td>CURB AND GUTTER</td> </tr> <tr> <td colspan="2">---</td> <td>SPILL TRANSITION</td> </tr> <tr> <td colspan="2">---</td> <td>DEPRESSED CURB AND GUTTER</td> </tr> </table>			CONCRETE CURB & GUTTER		CURB AND GUTTER	---		SPILL TRANSITION	---		DEPRESSED CURB AND GUTTER
CONCRETE CURB & GUTTER		CURB AND GUTTER									
---		SPILL TRANSITION									
---		DEPRESSED CURB AND GUTTER									
---	UTILITY POLE WITH LIGHT	---									
---	POLE LIGHT	---									
---	TRAFFIC LIGHT	---									
---	UTILITY POLE	---									
---	TYPICAL LIGHT	---									
---	ACORN LIGHT	---									
---	TYPICAL SIGN	---									
---	PARKING COUNTS	---									
<table border="1"> <tr> <td>---</td> <td>CONTOUR LINE</td> <td>---</td> </tr> <tr> <td>---</td> <td>SPOT ELEVATIONS</td> <td>---</td> </tr> </table>			---	CONTOUR LINE	---	---	SPOT ELEVATIONS	---			
---	CONTOUR LINE	---									
---	SPOT ELEVATIONS	---									
---	SANITARY LABEL	---									
---	STORM LABEL	---									
---	SANITARY SEWER LATERAL	---									
---	UNDERGROUND WATER LINE	---									
---	UNDERGROUND ELECTRIC LINE	---									
---	UNDERGROUND GAS LINE	---									
---	OVERHEAD WIRE	---									
---	UNDERGROUND TELEPHONE LINE	---									
---	UNDERGROUND CABLE LINE	---									
---	STORM SEWER	---									
---	SANITARY SEWER MAIN	---									
---	HYDRANT	---									
---	SANITARY MANHOLE	---									
---	STORM MANHOLE	---									
---	WM WATER METER	---									
---	WV WATER VALVE	---									
---	GAS VALVE	---									
---	GAS METER	---									
---	TYPICAL END SECTION	---									
---	HEADWALL OR ENDWALL	---									
---	GRATE INLET	---									
---	CURB INLET	---									
---	CLEAN OUT	---									
---	ELECTRIC MANHOLE	---									
---	TELEPHONE MANHOLE	---									
---	ELECTRIC BOX	---									
---	ELECTRIC PEDESTAL	---									
---	MONITORING WELL	---									
---	TEST PIT	---									
---	BENCHMARK	---									
---	BORING	---									

**STANDARD ABBREVIATIONS**

FOR ENTIRE PLAN SET	
AC	ACRES
ADA	AMERICANS WITH DISABILITY ACT
ARCH	ARCHITECTURAL
BC	BOTTOM OF CURB
BF	BASEMENT FLOOR
BK	BLOCK
BL	BASELINE
BLDG	BUILDING
BM	BUILDING BENCHMARK
BRL	BUILDING RESTRICTION LINE
CF	CUBIC FEET
CL	CENTERLINE
CMP	CORRUGATED METAL PIPE
CONN	CONNECTION
CONC	CONCRETE
CPP	CORRUGATED PLASTIC PIPE
CY	CUBIC YARDS
DEC	DECORATIVE
DEP	DEPRESSED
DIP	DUCTILE IRON PIPE
DOM	DOMESTIC
ELEC	ELECTRIC
ELEV	ELEVATION
EP	EDGE OF PAVEMENT
ES	EDGE OF SHOULDER
EW	END WALL
EX	EXISTING
FES	FLARED END SECTION
FF	FINISHED FLOOR
FH	FIRE HYDRANT
FG	FINISHED GRADE
G	GRADE
GF	GARAGE FLOOR (AT DOOR)
GH	GRADE HIGHER SIDE OF WALL
GL	GRADE LOWER SIDE OF WALL
GRT	GRATE
GV	GATE VALVE
HDPE	HIGH DENSITY POLYETHYLENE PIPE
HP	HIGH POINT
HOR	HORIZONTAL
HW	HEADWALL
INT	INTERSECTION
INV	INVERT
LF	LINEAR FOOT
LOC	LIMITS OF CLEARING
LOD	LIMITS OF DISTURBANCE
LOS	LINE OF SIGHT
LP	LOW POINT
L/S	LANDSCAPE
MAX	MAXIMUM
MIN	MINIMUM
MH	MANHOLE
MJ	MECHANICAL JOINT
OC	ON CENTER
PA	POINT OF ANALYSIS
PC	POINT CURVATURE
PCCR	POINT OF COMPOUND CURVATURE, CURB RETURN
PI	POINT OF INTERSECTION
POG	POINT OF GRADE
PROP	PROPOSED
PT	POINT OF TANGENCY
PTCR	POINT OF TANGENCY, CURB RETURN
PVC	POLYVINYL CHLORIDE PIPE
PVI	POINT OF VERTICAL INTERSECTION
PVT	POINT OF VERTICAL TANGENCY
R	RADIUS
RCP	REINFORCED CONCRETE PIPE
RET WALL	RETAINING WALL
RAW	RIGHT OF WAY
S	SLOPE
SAN	SANITARY SEWER
SF	SQUARE FEET
STA	STATION
STM	STORM
SW	SIDEWALK
TBR	TO BE REMOVED
TBRL	TO BE RELOCATED
TC	TOP OF CURB
TELE	TELEPHONE
TPF	TREE PROTECTION FENCE
TW	TOP OF WALL
TYP	TYPICAL
UG	UNDERGROUND
UP	UTILITY POLE
W	WIDE
WL	WATER LINE
WM	WATER METER
±	PLUS OR MINUS
°	DEGREE
Ø	DIAMETER
#	NUMBER

REVISED: 10/15/2019

**VDOT GENERAL NOTES**

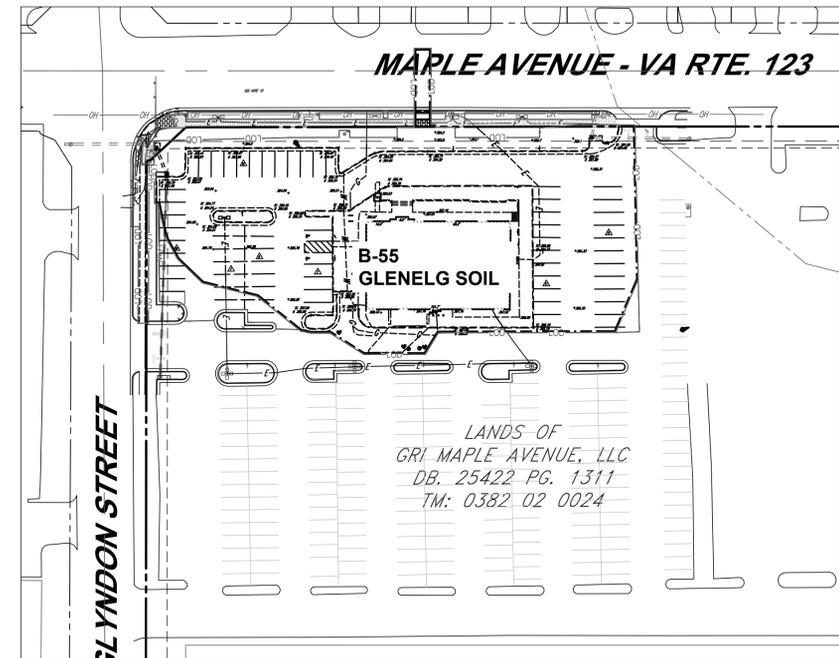
- THESE PLANS WERE PREPARED IN ACCORDANCE WITH THE REQUIREMENTS OF:
  - VDOT SECONDARY STREET ACCEPTANCE REQUIREMENTS (SSAR 24VAC-30-92 EFFECTIVE FEBRUARY 1, 2012 AND VDOT ROAD DESIGN MANUAL APPENDIX B1).
- VDOT APPROVED EXCEPTIONS/WAIVERS (MUST BE INCORPORATED IN THE PLAN):
  - ACCESS MANAGEMENT - DATE OF APPROVAL: N/A
  - SSAR - DATE OF APPROVAL: N/A
  - DESIGN WAIVER - DATE OF APPROVAL: N/A
  - OTHER N/A DATE OF APPROVAL: N/A
- SSAR CONNECTIVITY SUMMARY (PROVIDE A CHECK MARK / WHERE APPLICABLE OR WRITE N/A):
  - CONNECTIONS IN MULTIPLE DIRECTIONS (FIRST CONNECTION MUST BE TO A VDOT MAINTAINED ROAD, THE SECOND CONNECTION MAY EITHER BE TO A VDOT ROAD OR TO A STUB OUT) N/A
  - 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 2,000 VPD MAY BE ACCEPTED INTO THE SECONDARY SYSTEM OF STATE HIGHWAYS IF THE NETWORK ADDITION PROVIDES AN ADDITIONAL EXTERNAL CONNECTION BEYOND THAT REFERENCED ABOVE. N/A
- 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 MOST STRINGENT SHALL GOVERN.
- ALL RIGHT OF WAY DEDICATED TO PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
- ALL UTILITIES, INCLUDING ALL POLES, ARE TO BE RELOCATED AT THE DEVELOPER'S EXPENSE, PRIOR TO CONSTRUCTION.
- 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.
- 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.
- 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 PLACEMENT.
- 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.
- 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.
- A 4" (MIN.) LAYER OF STONE IS REQUIRED BENEATH CURB AND GUTTER (MAY BE SHOWN ON TYPICAL SECTION IN LIEU OF A NOTE).
- 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.
- 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.
- ASPHALT PAVEMENT WIDENING SHALL CONFORM TO VDOT STANDARD WP-2.
- 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.
- THE COUNTY/TOWN SHALL OBTAIN A PERMIT FOR ALL SIDEWALKS/CROSSWALKS WITHIN THE RIGHT OF WAY THAT DO NOT QUALIFY FOR VDOT MAINTENANCE.
- 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.
- STANDARD GUARDRAILS AND/OR HANDRAILS SHALL BE INSTALLED AT HAZARDOUS LOCATIONS AS DESIGNATED DURING FIELD REVIEW BY THE COUNTY/TOWN INSPECTOR OR VDOT.
- 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.
- 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.
- TRAFFIC CONTROL DEVICES OR ADVISORY SIGNS, SUCH AS MUL TWAY 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 RECOMMENDED 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.
- 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.
- 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 AN APPROVED STRIPING PLAN.
- 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.
- 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.

**PROPOSED EASEMENT LEGEND**

---	SIGHT DISTANCE
---	STORM DRAIN
---	SANITARY SEWER
---	WATER
---	PUBLIC ACCESS
---	COMMON SHARED
---	INGRESS-EGRESS
---	PUBLIC UTILITY
---	VARIABLE WIDTH S

**TOWN OF VIENNA GENERAL NOTES**

- A PRE-CONSTRUCTION MEETING MUST BE HELD PRIOR TO THE START OF CONSTRUCTION. CALL 703-255-6384 TO SCHEDULE THE PRE-CONSTRUCTION MEETING.
- ALL CONSTRUCTION GENERATED DEBRIS MUST BE HAULED AWAY BY THE CONTRACTOR OR OWNER.
- 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 703-255-6380 TO COORDINATE HAVING THE TOWN ARBORIST ONSITE DURING ALL TOWN TREE REMOVAL.
- TREE PROTECTION FOR ANY TOWN TREE, AS SHOWN ON PLAN, MUST BE INSTALLED PRIOR TO ANY SITE WORK.
- 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.
- ALL DUMPSTERS/PODS ARE TO BE PLACED ON PRIVATE PROPERTY.
- FRONT ELEVATION CHECKS ARE REQUIRED.
- WALL CHECK SURVEYS ARE REQUIRED AND MUST BE SUBMITTED PRIOR TO CONSTRUCTION ABOVE FOUNDATION CORNERS.
- 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 OCCUPANCY.
- 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.



**SOILS MAP**

**SOIL MAP NOTES:**

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

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SITE CIVIL AND CONSULTING ENGINEERING  
PROGRAM MANAGEMENT  
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PROJECT No.: S202089  
DRAWN BY: SC  
CHECKED BY: CM  
DATE: 06/04/2021  
CAD ID.: SSD-0

**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

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

SHEET TITLE:

**GENERAL NOTES & LEGEND**

SHEET NUMBER:

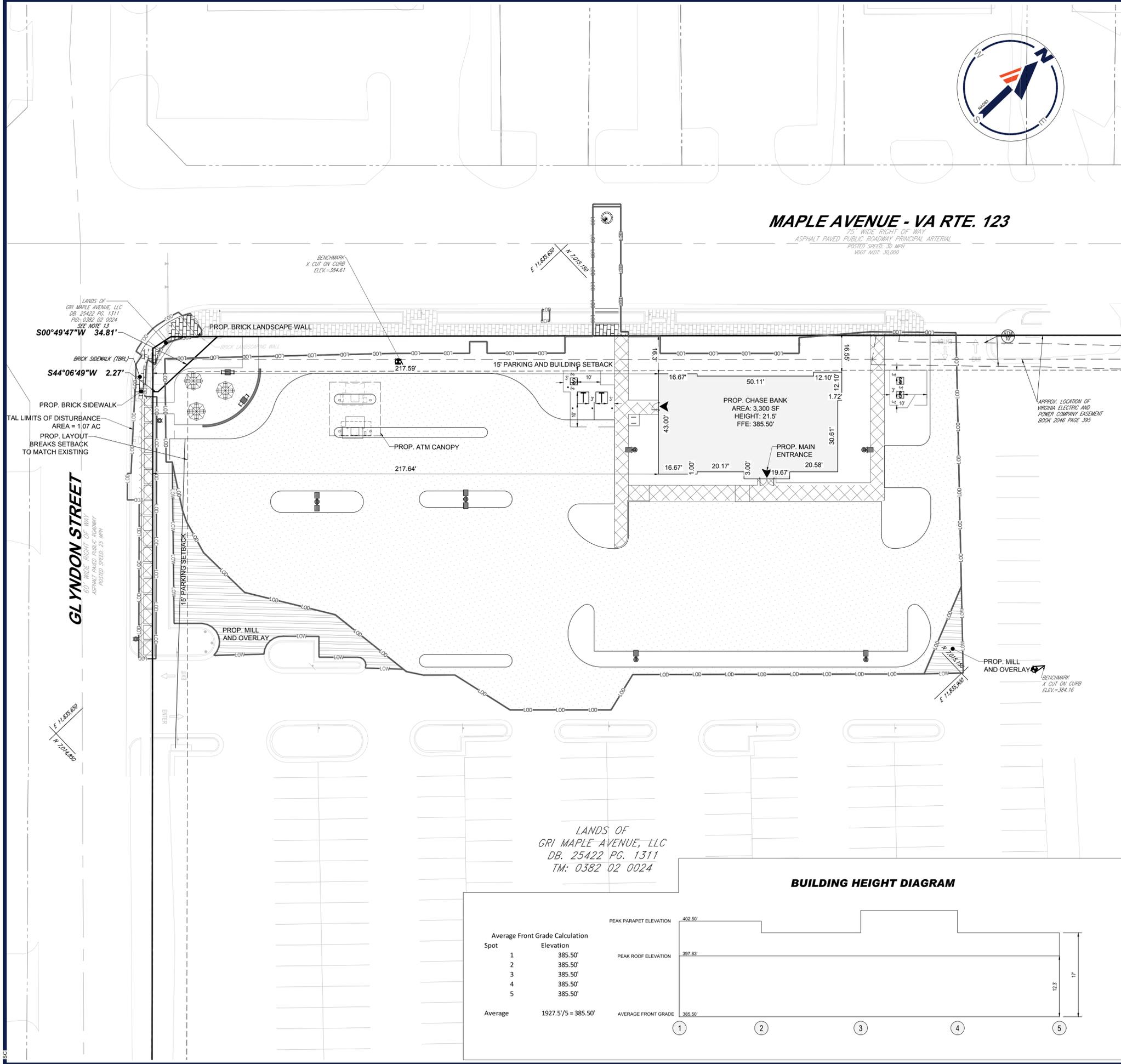
**C-103**

REVISION 1 - 05/20/2021



### MAPLE AVENUE - VA RTE. 123

75' WIDE RIGHT OF WAY  
 ASPHALT PAVED PUBLIC ROADWAY PRINCIPAL ARTERIAL  
 POSTED SPEED: 30 MPH  
 100' A.D.T.: 30,000



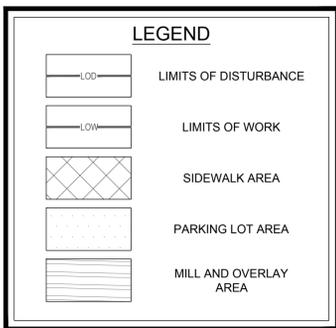
BULK REQUIREMENTS (C-2 ZONING ORDINANCE):	ALLOWED/REQUIRED	PROVIDED
MIN. LOT AREA	1 ACRE MIN	10.43 AC. (EXISTING)
MIN. BUILDING SETBACK		
FRONT SETBACK (MAPLE AVE E)	15' MIN	16.3'
SIDE SETBACK (GLYNDON ST)	15' MIN	217.59'
SIDE SETBACK (NORTHEAST)	8'	493.57'
REAR SETBACK (SOUTHEAST)	25'	511.78'
MIN. PARKING SETBACK (ALL DIMS TO BACK OF CURB)		
FRONT SETBACK (MAPLE AVE E)	15' MIN	15.72'
SIDE SETBACK (GLYNDON ST)	15' MIN	7.24' (EX.)
SIDE SETBACK (NORTHEAST)	8'	441.97'
REAR SETBACK (SOUTHEAST)	8'	409.62'
PARKING REQUIREMENTS		
1 SPACE PER 200 SQUARE FEET OF FLOOR AREA PLUS SUFFICIENT SPACE FOR 10 STACKING SPACES FOR FIRST DRIVE-THROUGH WINDOW AND 5 SPACES FOR EACH ADDITIONAL WINDOW	17 SPACES REQUIRED**	71 SPACES
66 SPACES EXISTING		
ADA PARKING REQUIREMENTS		
1 VAN ADA 6 ADA SPACES	4	4 SPACE (INCLUDES 1 VAN)
MIN. PARKING SPACE DIMENSIONS	9' X 18' MIN	9'10" X 20'
MIN. DRIVE AISLE	23' MIN	23'***
MAX. BUILDING HEIGHT	35' MAX	22'
LOADING SPACE REQUIREMENTS	1 SPACES	1 SPACE

#### SHOPPING CENTER OVERALL PARKING TABULATION:

REQUIRED:		
RETAIL:	104,015 X 1 SP/200 SF	= 520.08 SPACES
RESTAURANT:	48 SEATS X 1 SP/4 SEATS	= 12 SPACES
EXISTING BANK PAD:	2,354 X 1 SP/200 SF	= 11.77 SPACES
PROPOSED BANK PAD:	3,300 X 1 SP/200 SF	= 16.50 SPACES
	10 STACKING	
	<b>TOTAL REQUIRED</b>	<b>= 562 SPACES</b>
PROVIDED:		
EXISTING:	563 SPACES	
ADDED:	5 SPACES	
<b>PROPOSED TOTAL:</b>	<b>568 SPACES</b>	

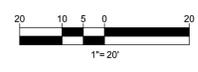
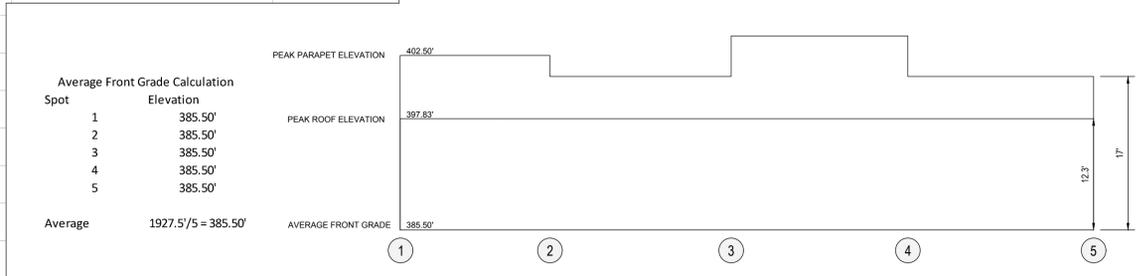
Lot Coverage Calculation

Building Area	3300 sf
Sidewalk Area	1700 sf
Parking Lot	29870 sf
<b>Total</b>	<b>34870 sf</b>
Site Area	45565 sf
<b>Lot Coverage</b>	<b>34870/45565 = 77%</b>



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

#### BUILDING HEIGHT DIAGRAM



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



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PROJECT No.: S202089  
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 DATE: 06/04/2021  
 CAD ID: ZCP-1

**PROP. SITE PLAN DOCUMENTS**  
 FOR  
**CHASE**

PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU  
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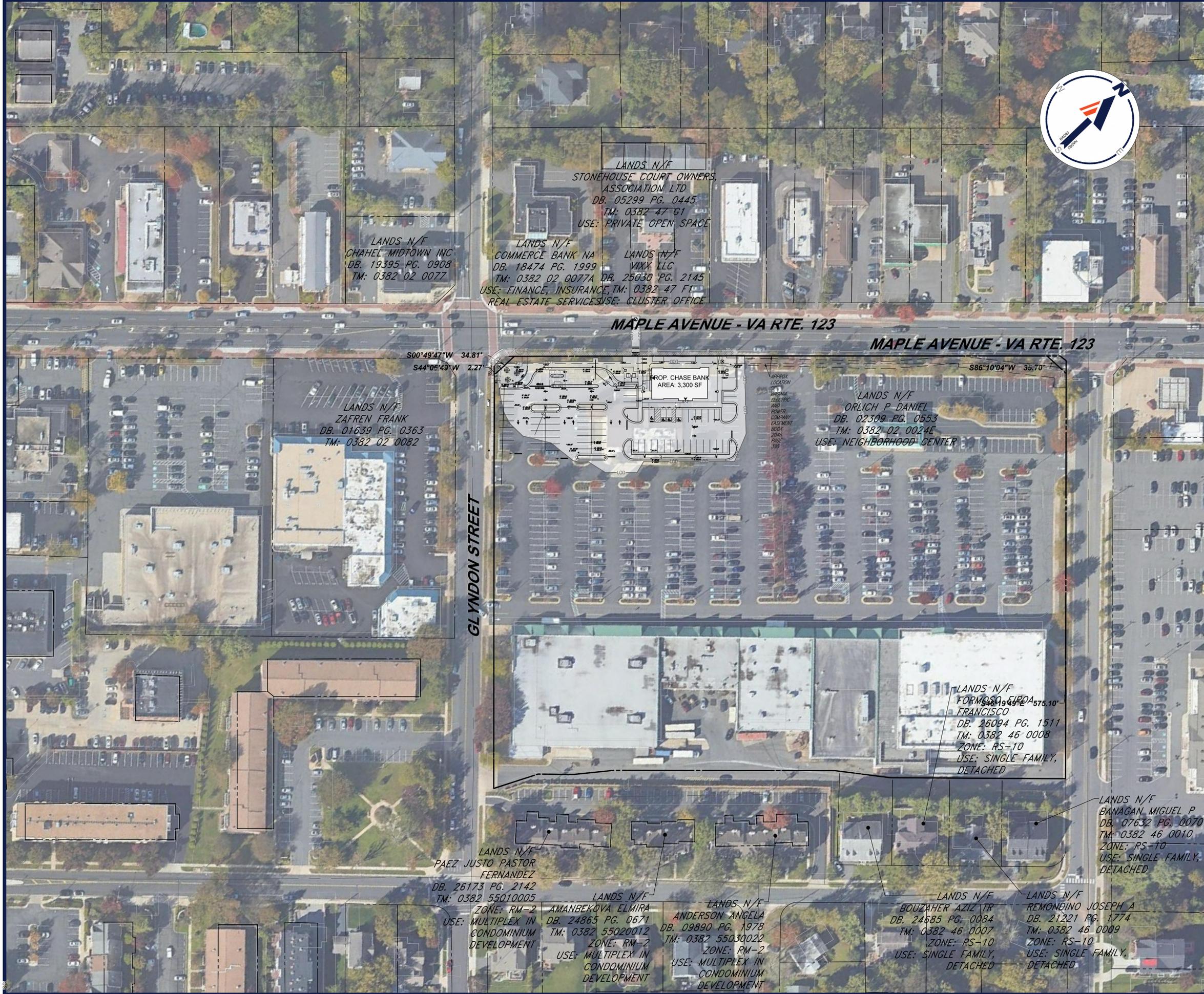
**BOHLER**  
 12825 WORLDGATE DR. SUITE 700  
 HERNDON, VIRGINIA 20170  
 Phone: (703) 709-9500  
 Fax: (703) 709-9501  
 VA@BohlerEng.com



SHEET TITLE:  
**ZONING COMPLIANCE PLAN**

SHEET NUMBER:  
**C-104**

REVISION 1 - 05/20/2021



**BOHLER**  
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 DATE: 06/04/2021  
 CAD ID: SSP-0

**PROP. SITE PLAN DOCUMENTS**  
 FOR

**CHASE**

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

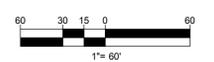
**BOHLER**  
 12825 WORLDGATE DR. SUITE 700  
 HERNDON, VIRGINIA 20170  
 Phone: (703) 709-9500  
 Fax: (703) 709-9501  
 VA@BohlerEng.com

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

SHEET TITLE:  
**PROPERTY MAP**

SHEET NUMBER:  
**C-201**

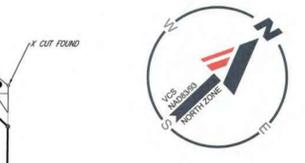
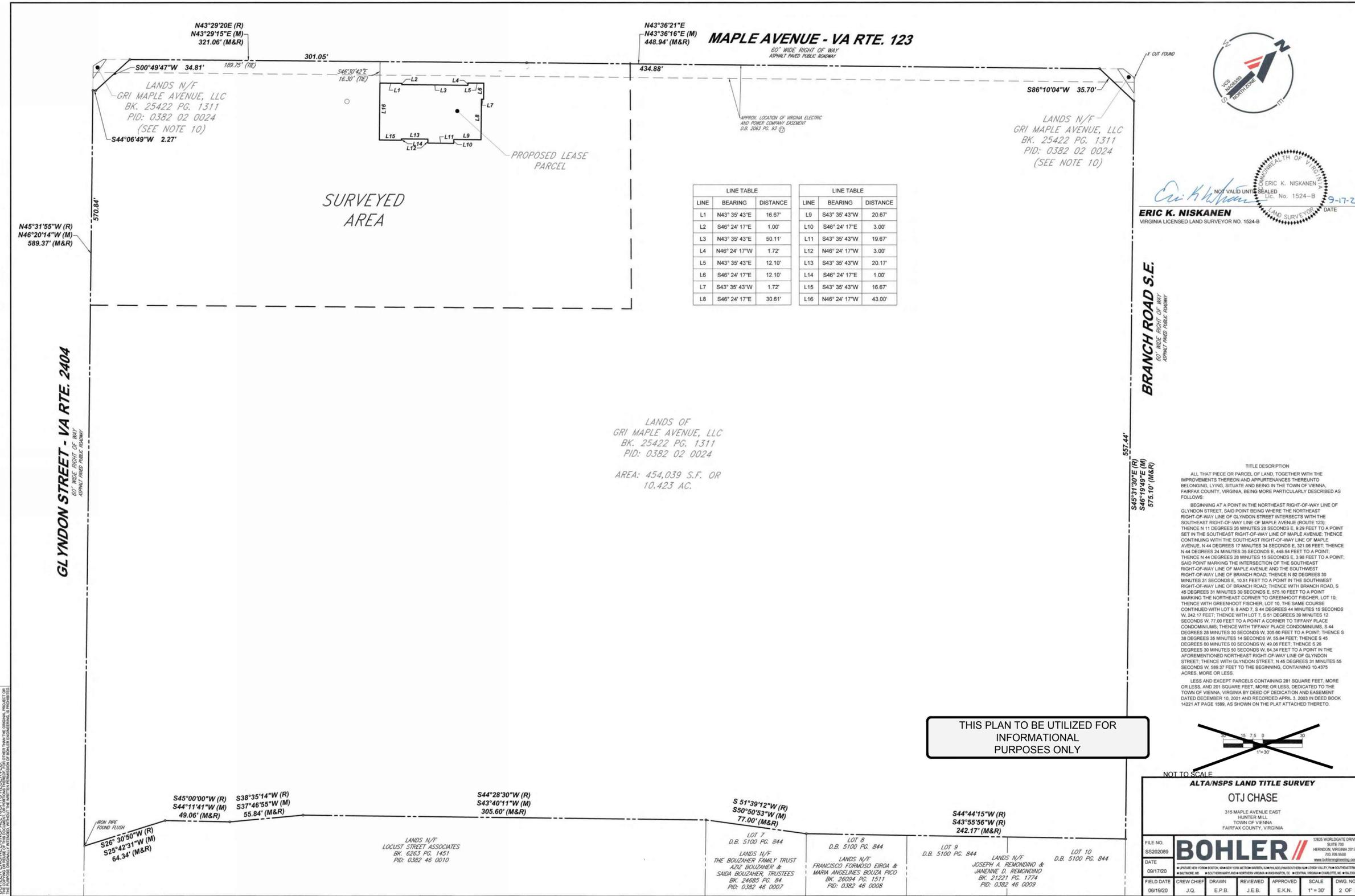
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Jun 04, 2021  
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Jun 04, 2021  
H:\2020\20200809\DRAWINGS\PLAN SETS\202008-SSP-1-ALTA SURVEY

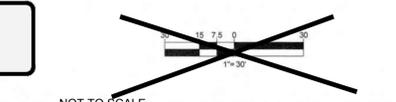


ERIC K. NISKANEN  
LAND SURVEYOR  
DATE: 9-17-20  
L.C. No. 1524-B

**LINE TABLE**

LINE	BEARING	DISTANCE	LINE	BEARING	DISTANCE
L1	N43°35'43"E	16.67'	L9	S43°35'43"W	20.67'
L2	S46°24'17"E	1.00'	L10	S46°24'17"E	3.00'
L3	N43°35'43"E	50.11'	L11	S43°35'43"W	19.67'
L4	N46°24'17"W	1.72'	L12	N46°24'17"W	3.00'
L5	N43°35'43"E	12.10'	L13	S43°35'43"W	20.17'
L6	S46°24'17"E	12.10'	L14	S46°24'17"E	1.00'
L7	S43°35'43"W	1.72'	L15	S43°35'43"W	16.67'
L8	S46°24'17"E	30.61'	L16	N46°24'17"W	43.00'

THIS PLAN TO BE UTILIZED FOR  
INFORMATIONAL  
PURPOSES ONLY



NOT TO SCALE

**ALTA/NSPS LAND TITLE SURVEY**

OTJ CHASE  
315 MAPLE AVENUE EAST  
HUNTER MILL  
TOWN OF VIENNA  
FAIRFAX COUNTY, VIRGINIA

FILE NO. SS2020089  
DATE 09/17/20  
FIELD DATE 09/19/20

1925 WORLDGATE DRIVE, SUITE 700, HERNDON, VIRGINIA 20170  
703.709.9500  
www.bohlereng.com

UPSTATE NEW YORK: BOHLER ENGINEERING, INC. • MICHIGAN: BOHLER ENGINEERING, INC. • ILLINOIS: BOHLER ENGINEERING, INC. • INDIANA: BOHLER ENGINEERING, INC. • OHIO: BOHLER ENGINEERING, INC. • PENNSYLVANIA: BOHLER ENGINEERING, INC. • TEXAS: BOHLER ENGINEERING, INC. • VIRGINIA: BOHLER ENGINEERING, INC. • WISCONSIN: BOHLER ENGINEERING, INC. • WYOMING: BOHLER ENGINEERING, INC.

FIELD DATE	CREW CHIEF	DRAWN	REVIEWED	APPROVED	SCALE	DWG. NO.
09/19/20	J.Q.	E.P.B.	J.E.B.	E.K.N.	1" = 30'	2 OF 2

**BOHLER**

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

**REVISIONS**

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

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PROJECT No.: S202089  
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DATE: 06/04/2021  
CAD ID.: SSP-0

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

**CHASE**

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

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

SHEET TITLE:  
**ALTA SURVEY**

SHEET NUMBER:  
**C-203**

REVISION 1 - 05/20/2021

LANDS N/F  
 COMMERCE BANK NA  
 DB. 18474 PG. 1999  
 TM: 0382 02 0077A  
 USE: FINANCE, INSURANCE,  
 REAL ESTATE SERVICES

LANDS N/F  
 STONEHOUSE COURT OWNERS,  
 ASSOCIATION LTD  
 DB. 05299 PG. 0445  
 TM: 0382 47 G1  
 USE: PRIVATE OPEN SPACE

LANDS N/F  
 VIXX LLC  
 DB. 25030 PG. 2145  
 TM: 0382 47 F1  
 USE: CLUSTER OFFICE

LANDS N/F  
 JDC 328 MAPLE LLC  
 DB. 24848 PG. 1266  
 TM: 0382 07010004  
 USE: PERSONAL SERVICES

LANDS N/F  
 UNITED RENTAL PROPERTIES LLC  
 DB. 26042 PG. 0370  
 TM: 0382 07010011  
 USE: CARRY-OUT W/ SEATING

**MAPLE AVENUE - VA RTE. 123**



**EXISTING CONDITIONS/DEMOLITION NOTES:**

1. THE SURVEYED AREA IS PART OF THE LANDS OF GRI MAPLE AVENUE, LLC AS RECORDED IN DEED BOOK 25422 PAGE 1311, AMONG THE LANDS OF THE TOWN OF VIENNA, FAIRFAX COUNTY, VIRGINIA, AND HAVING A MAP OF 0382 02 0024 PER THE DEPARTMENT OF ASSESSMENTS.
2. NO RESOURCE PROTECTION AREAS, WETLANDS OR FLOOD PLAINS ARE KNOWN TO EXIST ON-SITE. THE PROPERTY IS LOCATED IN OTHER AREAS ZONE X (AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN) PER MAP ENTITLED "FIRM, FLOOD INSURANCE RATE MAP, FAIRFAX COUNTY, VIRGINIA AND INCORPORATED AREAS, PANEL 145 OF 450", MAP NUMBER S1069C0415E, WITH A MAP EFFECTIVE DATE OF SEPTEMBER 17, 2010.
3. SEE COVER SHEET FOR PLAN REFERENCES FOR ALL EXISTING INFORMATION DEPICTED HEREON. EXISTING INFORMATION SHOWN IS BASED ON AN ALTA/NSPS LAND TITLE SURVEY PREPARED BY BOHLER ENTITLED, "ALTA/NSPS LAND TITLE SURVEY, OTJ CHASE, 315 MAPLE AVENUE EAST, HUNTER MILL, OWN OF VIENNA, FAIRFAX COUNTY, VIRGINIA" DATED JULY 16, 2020.
4. ELEVATIONS PROVIDED BY THE SITE SURVEY ARE BASED ON NGVD20 DATUM DETERMINED GPS OBSERVATIONS AND TIED TO THE VDOT BENCHMARK NO. HV8501 WITH PUBLISHED NAVD 88 ELEVATION OF 120.58 FEET.
5. ANY REQUIRED BORROW AND HAUL REQUIRED SHALL BE FROM AN APPROVED LOCATION.
6. REFER TO THE EROSION AND SEDIMENT PLAN FOR THE SEQUENCE OF CONSTRUCTION. SEE SHEET C-601 TO C-602.
7. ALL EXISTING UTILITY INFORMATION NOT SHOWN ON SHEET C-201 HAS BEEN GATHERED BY A COMBINATION OF GIS INFORMATION PROVIDED BY THE TOWN OF VIENNA AND FAIRFAX COUNTY AND/OR FIELD VERIFIED BY THE DESIGNING ENGINEER. CONTRACTOR TO NOTIFY BOHLER IMMEDIATELY IF ANY EXISTING UTILITY INFORMATION SHOWN ON THIS PLAN DOES NOT MATCH CONDITIONS IN FIELD. CONTRACTOR TO NOTIFY BOHLER ENGINEERING IF THERE ARE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND THE ACTUAL FIELD CONDITIONS.
8. NO GROUND WATER WELLS ARE KNOWN TO EXIST ON SITE.
9. LOCATION OF ALL UNDERGROUND UTILITIES ARE APPROXIMATE. SOURCE INFORMATION FROM PLANS AND MARKINGS HAS BEEN COMBINED WITH OBSERVED EVIDENCE OF UTILITIES TO DEVELOP A VIEW OF THOSE UNDERGROUND UTILITIES. HOWEVER, LACKING EXCAVATION, THE EXACT LOCATION OF UNDERGROUND FEATURES CANNOT BE ACCURATELY, COMPLETELY AND RELIABLY DEPICTED. WHERE ADDITIONAL OR MORE DETAILED INFORMATION IS REQUIRED, THE CLIENT IS ADVISED THAT EXCAVATION MAY BE NECESSARY.
10. CONTRACTOR TO VERIFY EXISTING WATER METER PRIOR TO DEMOLITION. 1.5" WATER METER AND 2" WATER SERVICE LINE REQUIRED. IF EXISTING METER IS A 1.5" METER AND EXISTING WATER LINE IS A 2" LINE, WATER LINE TO REMAIN. EXISTING METER TO BE REMOVED AND REPLACED IF IT IS NOT A 1.5" METER.
11. BENCHMARK TO BE RESET TO PROPOSED GRADE.
12. TERMS, PROVISIONS, CONDITIONS AND EASEMENTS SET FORTH IN THAT CERTAIN AGREEMENT BY AND BETWEEN KAUFMANN COMPANY AND VIRGINIA ELECTRIC AND POWER COMPANY, AND RECORDED IN DEED BOOK 2046 AT PAGE 93; DO NOT AFFECT THE LEASE AREA. AFFECT THE SURVEYED AREA AND THE REMAINDER PARCEL. APPROXIMATE EASEMENT LOCATION IS SHOWN.
13. STRUCTURE TO REMAIN, RIM TO BE ADJUSTED AND RESET TO FINISHED GRADE.

**REVISIONS**

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

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

PROJECT No.: S202089  
 DRAWN BY: SC  
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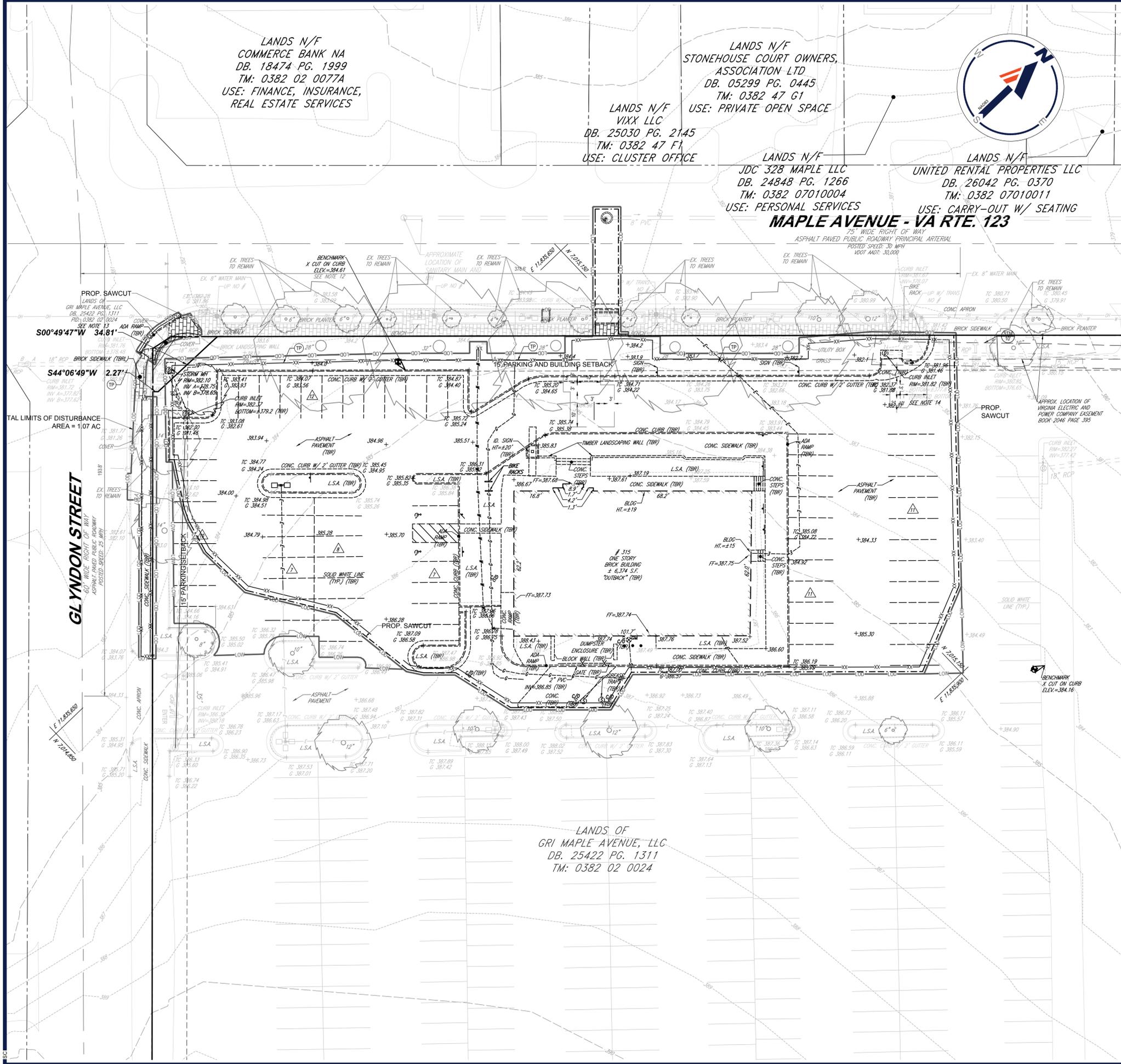
**PROP. SITE PLAN DOCUMENTS**  
 FOR

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

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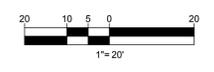
**COMMONWEALTH OF VIRGINIA**  
 TRAVIS W. D'AMICO  
 Lic. No. 048497  
 06/04/2021  
 PROFESSIONAL ENGINEER

SHEET TITLE:  
**DEMOLITION PLAN**  
 SHEET NUMBER:  
**C-204**  
 REVISION 1 - 05/20/2021



**LEGEND**

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



JUN 04, 2021  
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LANDS N/F  
 COMMERCE BANK NA  
 DB. 18474 PG. 1999  
 TM: 0382 02 0077A  
 USE: FINANCE, INSURANCE,  
 REAL ESTATE SERVICES

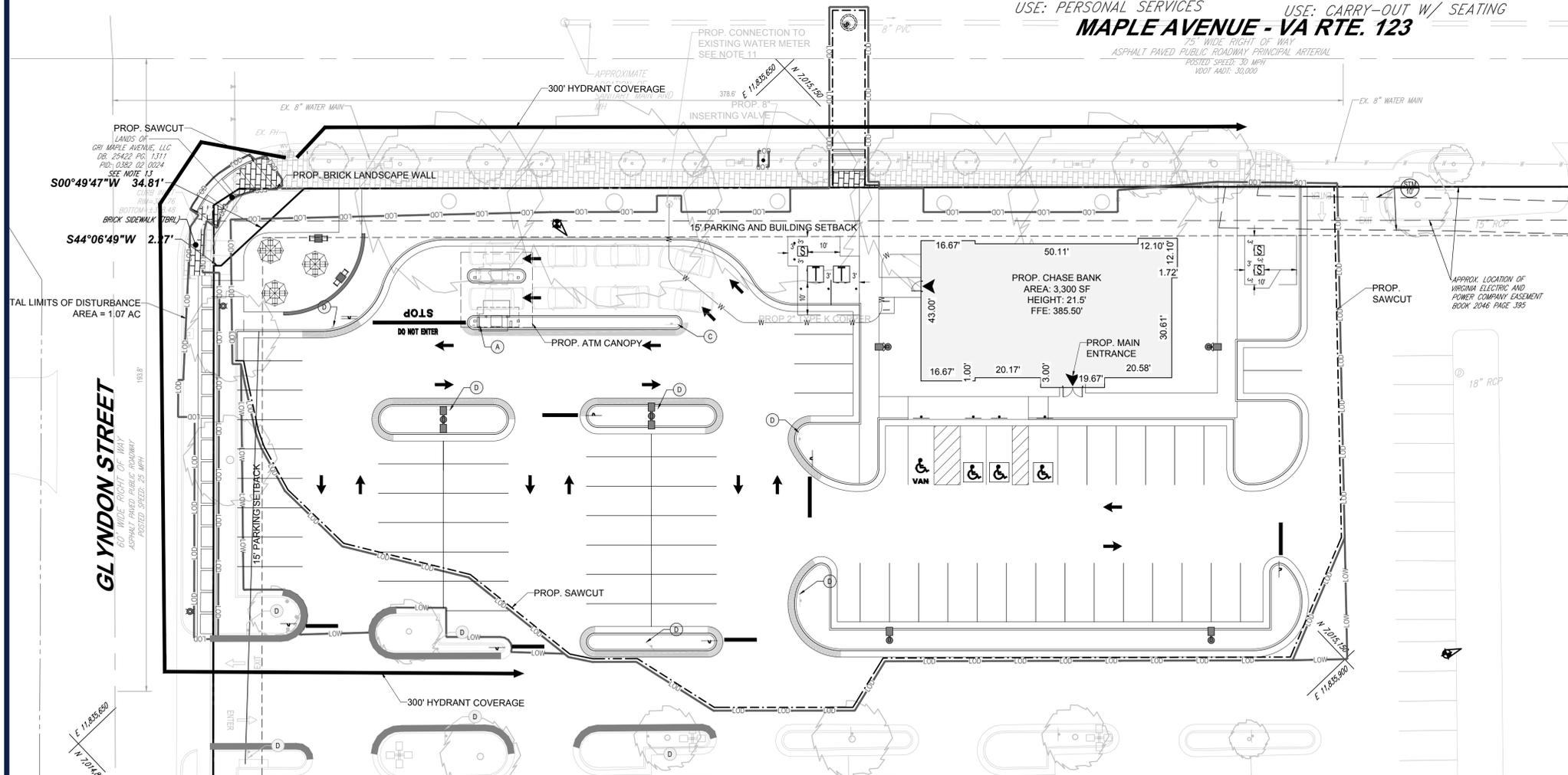
LANDS N/F  
 VIXX LLC  
 DB. 25030 PG. 2145  
 TM: 0382 47 F1  
 USE: CLUSTER OFFICE

LANDS N/F  
 STONEHOUSE COURT OWNERS,  
 ASSOCIATION LTD  
 DB. 05299 PG. 0445  
 TM: 0382 47 G1  
 USE: PRIVATE OPEN SPACE

LANDS N/F  
 JDC 328 MAPLE LLC  
 DB. 24848 PG. 1266  
 TM: 0382 07010004  
 USE: PERSONAL SERVICES

LANDS N/F  
 UNITED RENTAL PROPERTIES LLC  
 DB. 26042 PG. 0370  
 TM: 0382 07010011  
 USE: CARRY-OUT W/ SEATING

**MAPLE AVENUE - VA RTE. 123**



**FAIRFAX COUNTY PUBLIC FACILITIES MANUAL**

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

**I. HYDRANTS**  
 A. Parking is prohibited within 15' of a fire hydrant located along the curb line or edge of any public or private roadway. No special curb marking is required for enforcement.  
 B. Fire hydrants installed in parking lots are to be located within a fire lane. Curb and/or roadway marking is required in accordance with Sections III and IV below. Parking and traffic flow patterns shall be required as follows:

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

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

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

**III. SIGN SPECIFICATIONS**  
 A. Metal construction, 12" X 18"  
 B. Red letters on reflective white background with 3/8" red trim strip around entire outer edge of sign.  
 C. Lettering on sign to be: "NO PARKING OR STANDING FIRE LANE"  
 D. Lettering size to be as follows: "NO PARKING" and "STANDING" is 2". "OR" is 1" "FIRE LANE" is 2 1/2" and the arrow with the solid shaft is 1" x 6" with the solid head 1 1/2" wide and 2" deep.  
 E. Signs are to be mounted 7' from the ground to the bottom of the sign unless otherwise directed by the Office of the Fire Marshal.  
 F. Post for signs, when required, shall be metal and securely mounted, unless written permission for alternatives is obtained prior to installation from the Office of the Fire Marshal. Signs should be spaced as shown on approved plans. In long stretches, the maximum distance between signs is 70'.  
 G. Other special signs may be approved by the Office of the Fire Marshal.

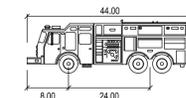
**IV. CURB DESIGNATION**  
 A. All curbs or paved spaces designated as fire lanes shall be indicated by yellow paint as approved by the Office of the Fire Marshal. In areas without curbing, a 6" wide yellow stripe shall be applied to the edge of the pavement. Paint shall be highway traffic grade.  
 NOTE: Fire lane markings, types of signs, locations, etc. shall be subject to the approval by Office of the Fire Marshal.

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

**LEGEND**

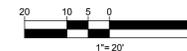
- EXISTING FIRE LANE STRIPING
- PROPOSED FIRE LANE STRIPING
- 300' HOSE COVERAGE

**TRUCK PROFILES**



Pumper Fire Truck

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



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 SUSTAINABLE DESIGN  
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**REVISIONS**

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1	05/20/2021	REV PER TOWN COMMENTS	SC	TD

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**PROP. SITE PLAN DOCUMENTS**  
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 315 MAPLE AVE E  
 TOWN OF VIENNA, VIRGINIA  
 TAX MAP # 0382-02-0024

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 12825 WORLDGATE DR. SUITE 700  
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 VA@BohlerEng.com

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

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

SHEET NUMBER:  
**C-302**

REVISION 1 - 05/20/2021

LANDS N/F  
 COMMERCE BANK NA  
 DB. 18474 PG. 1999  
 TM: 0382 02 0077A  
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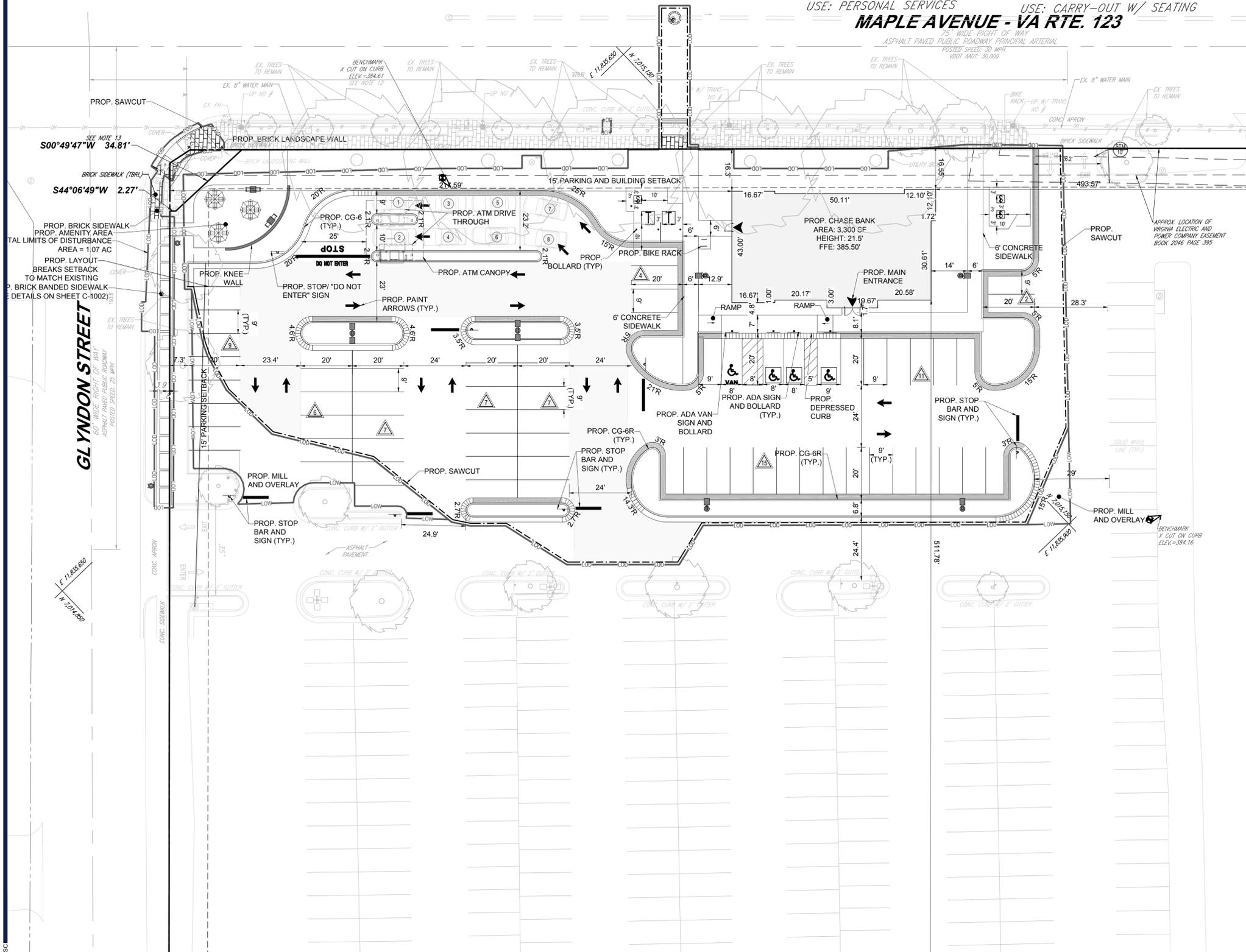
LANDS N/F  
 VIXX LLC  
 DB. 25030 PG. 2145  
 TM: 0382 47 F1  
 USE: CLUSTER OFFICE

LANDS N/F  
 STONEHOUSE COURT OWNERS,  
 ASSOCIATION LTD  
 DB. 05299 PG. 0445  
 TM: 0382 47 G1  
 USE: PRIVATE OPEN SPACE

LANDS N/F  
 JDC 328 MAPLE LLC  
 DB. 24848 PG. 1266  
 TM: 0382 07010004  
 USE: PERSONAL SERVICES

LANDS N/F  
 UNITED RENTAL PROPERTIES LLC  
 DB. 26042 PG. 0370  
 TM: 0382 07010011  
 USE: CARRY-OUT W/ SEATING

**MAPLE AVENUE - VA RTE. 123**



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 TAX MAP #: 0382-02-0024

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 TRAVIS W. D'AMICO  
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 06/04/2021  
 PROFESSIONAL ENGINEER

SHEET TITLE:  
**VEHICLE MOVEMENT**  
 SHEET NUMBER:  
**C-303**  
 REVISION 1 - 05/20/2021

Jun 04, 2021  
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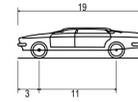
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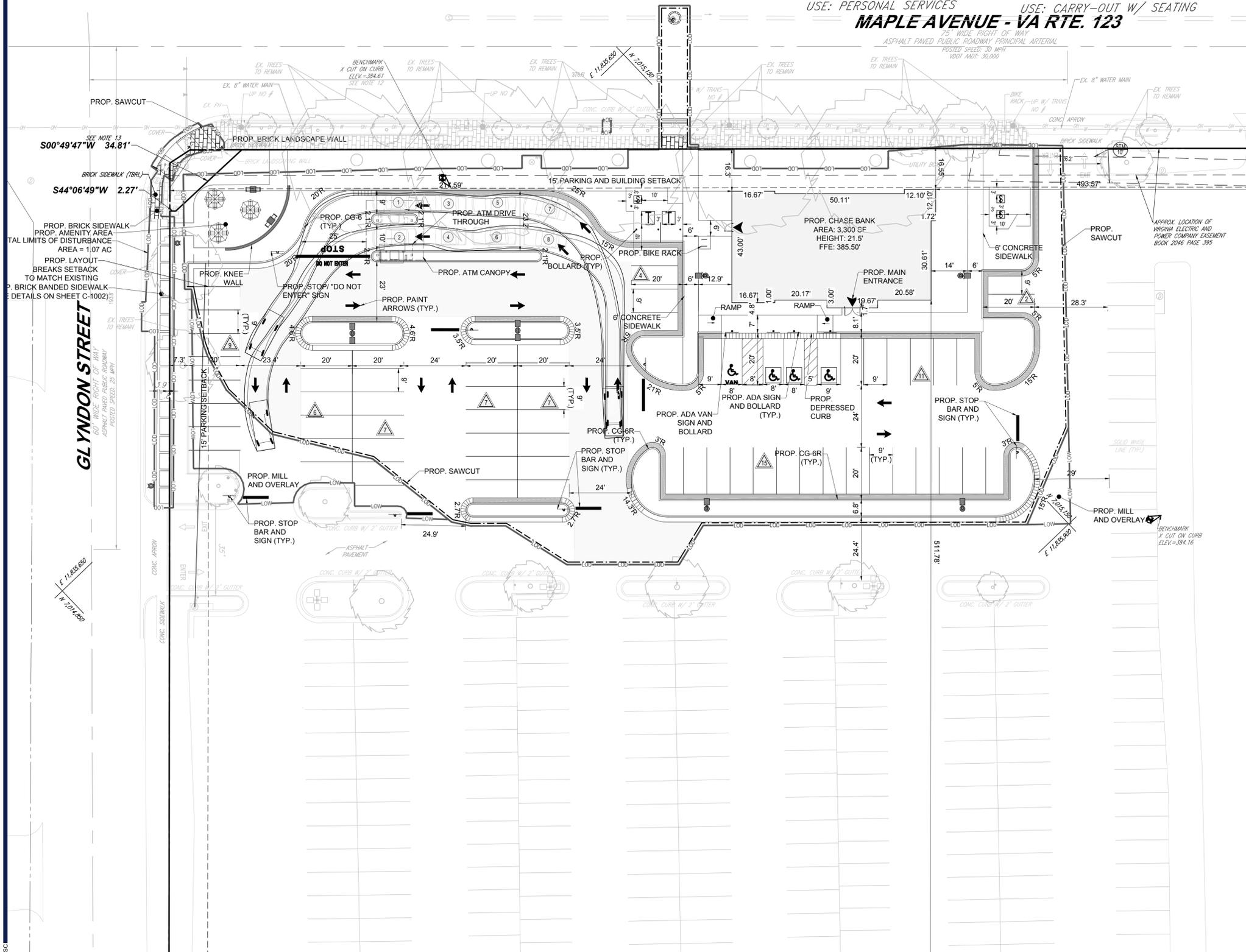
LANDS N/F  
 UNITED RENTAL PROPERTIES LLC  
 DB. 26042 PG. 0370  
 TM: 0382 07010011  
 USE: CARRY-OUT W/ SEATING

**MAPLE AVENUE - VA RTE. 123**



P - Passenger Car  
 Overall Length 19.000ft  
 Overall Width 3.000ft  
 Overall Body Height 11.115ft  
 Min Body Ground Clearance 6.000ft  
 Track Width 4.00s  
 Lock-to-lock time 31.60°  
 Max Steering Angle (Virtual)

19.000ft  
 7.000ft  
 4.300ft  
 1.115ft  
 6.000ft  
 4.00s  
 31.60°



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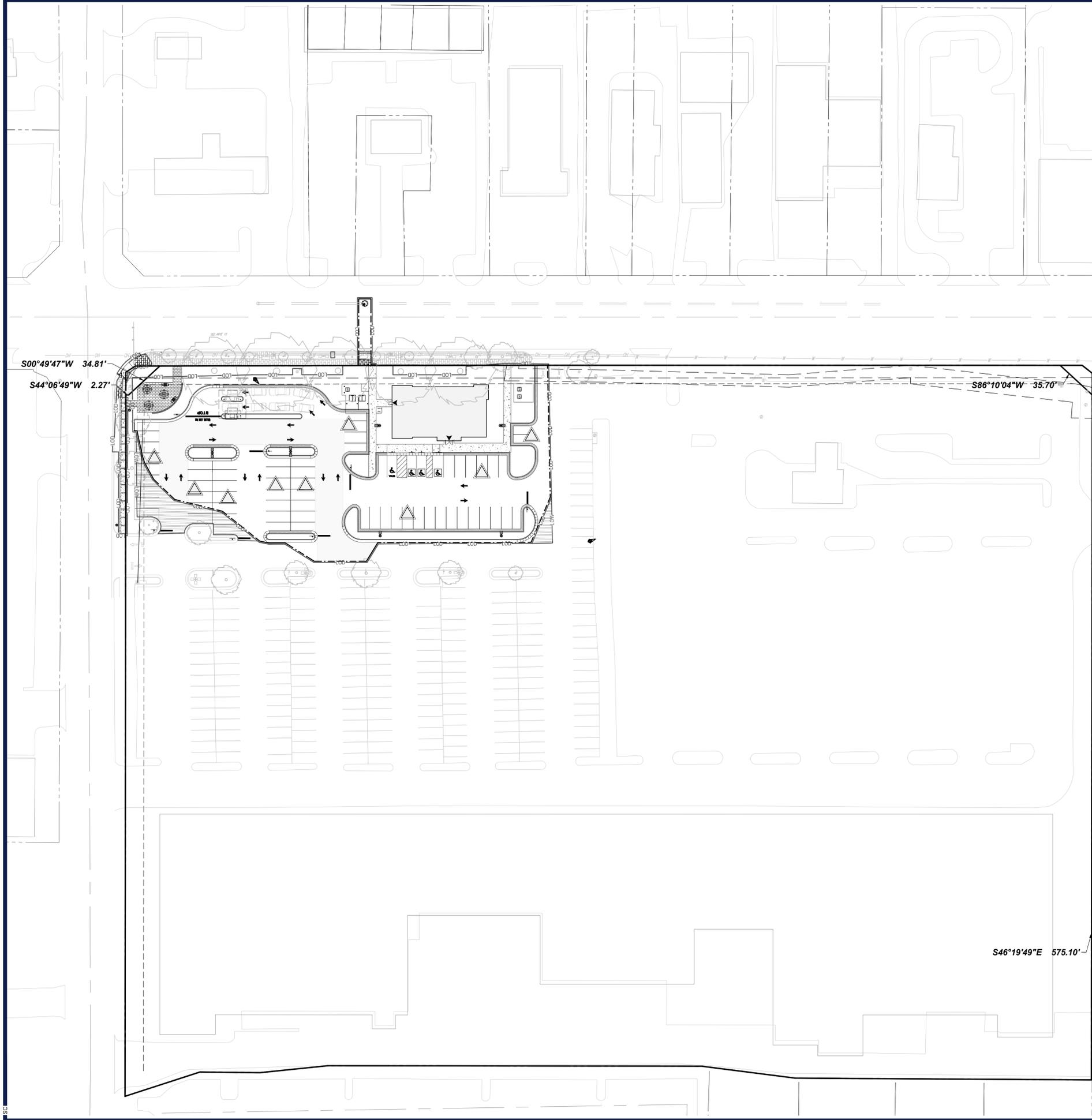
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SHEET TITLE:  
**VEHICLE MOVEMENT**  
 SHEET NUMBER:  
**C-304**  
 REVISION 1 - 05/20/2021



Jun 04, 2021  
 H:\2020\202089\DRAWINGS\PLAN SETS\S202089-SSP-1-VA-VEHICLE MOVEMENT



**SITE PLAN NOTES:**

1. CONTRACTOR IS RESPONSIBLE FOR REVIEWING THESE PLANS VERSUS FINAL ARCHITECTURE AND CONTACTING BOHLER ENGINEERING WITH ANY DISCREPANCIES NOTED PRIOR TO COMMENCING CONSTRUCTION.
2. CONTRACTOR SHALL NOTIFY BOHLER ENGINEERING IF THERE ARE ANY DISCREPANCIES BETWEEN THE CONSTRUCTION PLANS AND THE ACTUAL FIELD CONDITIONS.
3. MAINTENANCE AND UPKEEP OF THE AMENITIES PROPOSED WITH THIS SITE PLAN WITHIN THE LEASE LIMITS SUCH AS LANDSCAPING, SHALL BE THE RESPONSIBILITY OF CHASE BANK.
4. TRASH AND RECYCLING IS TO BE SCREENED VIA A COMBINATION OF LANDSCAPING PROVIDED. SEE LANDSCAPE PLAN SHEET C-700.
5. SEPARATE PERMITS REQUIRED FOR ALL SITE SIGNAGE, PRIOR TO INSTALLATION.
6. AADT COUNTS PER VDOT ONLINE RESOURCES.

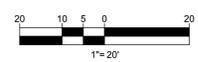
**LEGEND**

- LIMITS OF DISTURBANCE
- LIMITS OF WORK
- PROP. SAWCUT
- PROP. STANDARD CONCRETE - 4" (3500 PSI)
- PROP. HEAVY DUTY CONCRETE - 6" (4000 PSI)
- PROP. HEAVY DUTY ASPHALT
- PROP. STANDARD ASPHALT
- CATCH CURB/CG-6
- SPILL CURB/CG-6
- TRANSITION CURB/CG-6
- DEPRESSED CURB
- BRICK SIDEWALK (TO MATCH MAPLE AVE. SIDEWALK)
- MILL AND OVERLAY

**LIGHTING LEGEND**

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

SEE DETAIL SHEET FOR LIGHT FIXTURE AND POLE SPECIFICATIONS



**REVISIONS**

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



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

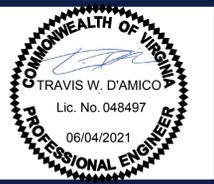
PROJECT:  
**PROP. SITE PLAN DOCUMENTS**  
FOR



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



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



SHEET TITLE:

**SITE PLAN**

SHEET NUMBER:

**C-301**

REVISION 1 - 05/20/2021

LANDS N/F  
 COMMERCE BANK NA  
 DB. 18474 PG. 1999  
 TM: 0382 02 0077A  
 USE: FINANCE, INSURANCE,  
 REAL ESTATE SERVICES

LANDS N/F  
 STONEHOUSE COURT OWNERS,  
 ASSOCIATION LTD  
 DB. 05299 PG. 0445  
 TM: 0382 47 G1  
 USE: PRIVATE OPEN SPACE

LANDS N/F  
 VIXX LLC  
 DB. 25030 PG. 2145  
 TM: 0382 47 F1  
 USE: CLUSTER OFFICE

LANDS N/F  
 JDC 328 MAPLE LLC  
 DB. 24848 PG. 1266  
 TM: 0382 07010004  
 USE: PERSONAL SERVICES

LANDS N/F  
 UNITED RENTAL PROPERTIES LLC  
 DB. 26042 PG. 0370  
 TM: 0382 07010011  
 USE: CARRY-OUT W/ SEATING

**MAPLE AVENUE - VA RTE. 123**

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



**GRADING NOTES:**

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

**LEGEND**

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

**REVISIONS**

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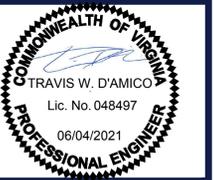
**PROP. SITE PLAN DOCUMENTS**  
 FOR



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



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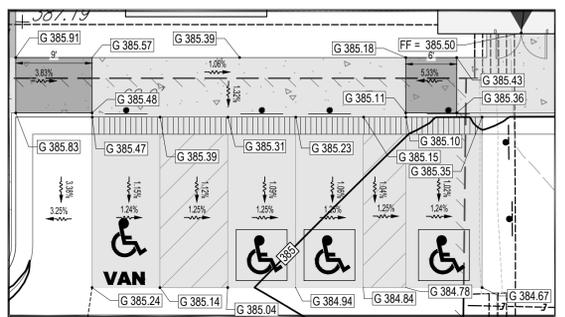
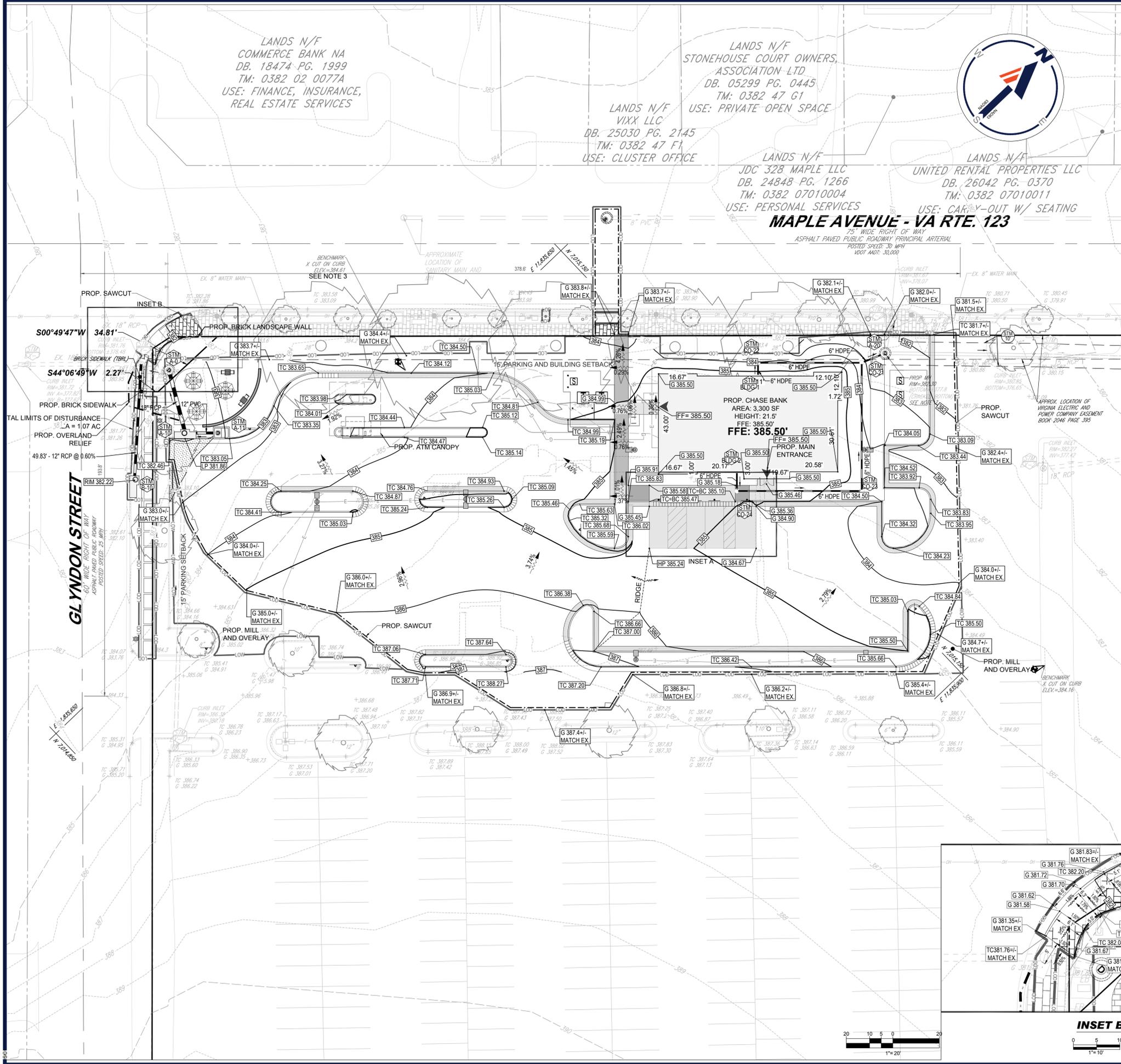
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**GRADING PLAN**

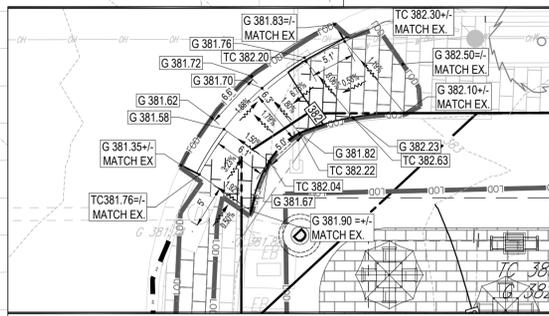
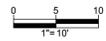
SHEET NUMBER:

**C-401**

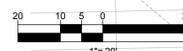
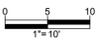
REVISION 1 - 05/20/2021



**INSET A**



**INSET B**



LANDS N/F  
COMMERCE BANK NA  
DB. 18474 PG. 1999  
TM: 0382 02 0077A  
USE: FINANCE, INSURANCE,  
REAL ESTATE SERVICES

LANDS N/F  
VIXX LLC  
DB. 25030 PG. 2145  
TM: 0382 47 F1  
USE: CLUSTER OFFICE

LANDS N/F  
STONEHOUSE COURT OWNERS,  
ASSOCIATION LTD  
DB. 05299 PG. 0445  
TM: 0382 47 G1  
USE: PRIVATE OPEN SPACE

LANDS N/F  
JDC 328 MAPLE LLC  
DB. 24848 PG. 1266  
TM: 0382 07010004  
USE: PERSONAL SERVICES

LANDS N/F  
UNITED RENTAL PROPERTIES LLC  
DB. 26042 PG. 0370  
TM: 0382 07010011  
USE: CARRY-OUT W/ SEATING



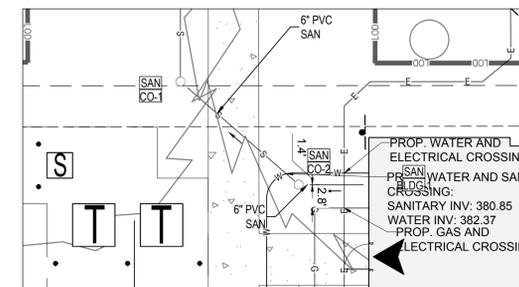
SANITARY PIPE SCHEDULE							
FROM	FROM INV	TO	TO INV	PIPE LENGTH	SLOPE (%)	DIAMETER (IN.)	MATERIAL
BLDG-1	380.97	CO-2	380.88	8.28'	1.11%	6"	PVC
CO-2	380.88	CO-1	380.65	18.46'	1.25%	6"	PVC
CO-1	380.65	EX-SAN	379.78	60.22'	1.44%	6"	PVC

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

**UTILITY PLAN NOTES:**

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

MATCHLINE THIS SHEET



**INSET A**  
0 5 10  
1"=10'

0 5 10 20  
1"=20'

**MAPLE AVENUE - VA RTE. 123**

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

**SANITARY SEWER NOTES**

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

MATCHLINE THIS SHEET

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

**REVISIONS**

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CAD ID: UTP-0

PROJECT:

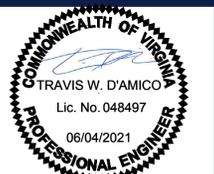
**PROP. SITE PLAN DOCUMENTS**  
FOR



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



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



SHEET TITLE:

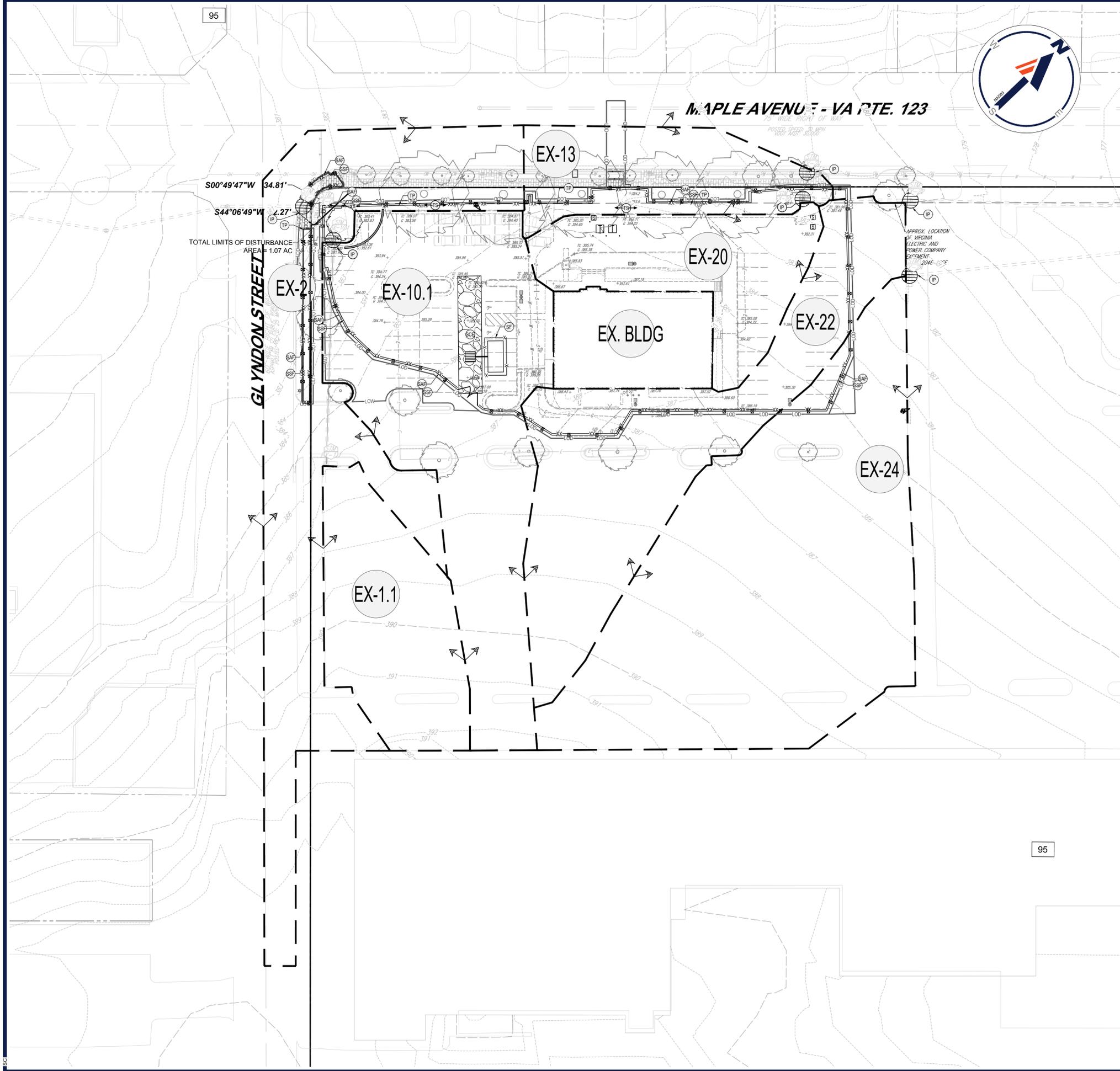
**UTILITY PLAN**

SHEET NUMBER:

**C-501**

REVISION 1 - 05/20/2021





**VIRGINIA UNIFORM CODING SYSTEM**

FOR EROSION AND SEDIMENT CONTROL PRACTICES

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

**SEQUENCE OF CONSTRUCTION PHASE I**

- CONTRACTOR SHALL NOT COMMENCE ANY LAND DISTURBING ACTIVITIES PRIOR TO OBTAINING A LAND DISTURBING PERMIT, NOTIFYING SITE INSPECTOR AND HAVING A PRE-CONSTRUCTION MEETING.
- CONTRACTOR SHALL CONTACT JURISDICTION AT LEAST 48 HOURS PRIOR TO COMMENCING CONSTRUCTION.
- AREAS WHICH ARE TO BE DISTURBED SHALL BE CLEARLY MARKED ON THE FIELD.
- INSTALL CONSTRUCTION ENTRANCE. ALL HARD SURFACE ROADS SHALL BE CLEANED AT THE END OF THE DAY AND SOURCE OF WATER SHALL BE ESTABLISHED ON SITE. EXISTING ACCESS ENTRANCES SHALL BE CLOSED DURING ALL CONSTRUCTION ACTIVITIES.
- INSTALL PERIMETER CONTROLS SUCH AS SUPER SILT FENCE, SAFETY FENCE, AND INLET PROTECTION.
- COMMENCE SITE CLEARING ONCE EROSION AND SEDIMENT CONTROL MEASURES ARE IN PLACE. APPLY TEMPORARY STABILIZATION TO ALL DISTURBED AREAS IN ACCORDANCE WITH THE APPLICABLE MINIMUM STANDARDS FOUND IN 9VAC25-840-40.
- EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE INSPECTED AND REPAIRED AT THE END OF EACH DAY.
- CONTRACTOR TO ENSURE THAT THE COUNTY EROSION AND SEDIMENT CONTROL INSPECTOR HAS VERIFIED ALL PHASE I E&S MEASURES ARE CORRECTLY INSTALLED AND PHASE I WORK IS COMPLETED PRIOR TO THE START OF PHASE II.

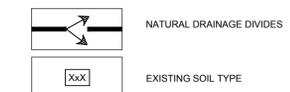
**EROSION AND SEDIMENT CONTROL NOTES:**

- PRIOR TO PERMANENT SEEDING & STABILIZATION, CONTRACTOR SHALL CONSULT WITH THE COUNTY E&S INSPECTOR IN ORDER TO SUBSTITUTE ANY INVASIVE SPECIES OF SEED WITH SPECIES WHICH ARE NATIVE TO THE REGION.
- GUTTER BUDDY'S WILL BE USED AS INLET PROTECTION FOR ALL INLETS LOCATED WITHIN THE VDOT RIGHT OF WAY. SEE SHEET C-605 FOR DETAIL.
- THE SUPER SILT FENCE SHALL SERVE AS TREE PROTECTION FENCE WITH BILINGUAL TREE PROTECTION SIGN MOUNTED TO THE FACE EVERY 50'. THE INSTALLATION OF TREE PROTECTION FENCING, INCLUDING SUPER SILT FENCE, SHALL BE INSTALLED UNDER THE SUPERVISION OF THE PROJECT ARBORIST, WHO SHALL BE A CERTIFIED ARBORIST OR REGISTERED CONSULTING ARBORIST.
- SAFETY FENCE AND SUPER SILT FENCE SHOWN OFFSET FROM THE LOD FOR CLARITY PURPOSES ONLY, PERIMETER CONTROLS TO BE PLACED ALONG LOD DURING CONSTRUCTION.
- CONTRACTOR TO COORDINATE WITH UTILITY COMPANIES OR UTILIZE APPROVED TEST PIT INFORMATION BEFORE EXCAVATING OVER EXISTING UTILITIES.
- NO AREA SHALL BE LEFT DENUDED FOR ANY PERIOD LONGER THAN 7 DAYS.
- NO UNPROTECTED, DISTURBED AREA SHALL DRAIN TO ROADWAY PAVEMENTS SUCH THAT THE SUBBASE, BASE, OR WEARING SURFACE ARE CONTAMINATED BY SILT TRAPPED AT LOW POINTS OR INLETS.
- THE GRADING/EXCAVATION CONTRACTOR FOR THE SUBJECT SITE IS REQUIRED TO NOTIFY, IN WRITING, THE ASSIGNED SITE INSPECTOR REGARDING ANY EXCESS MATERIAL PROPOSED TO BE HAILED OFFSITE PRIOR TO HAULING. THE NOTIFICATION MUST INDICATE THE QUANTITY OF MATERIAL TO BE MOVED OFFSITE, IDENTIFICATION OF THE RECEIVING SITE WHERE THE EXCESS WILL BE TAKEN, AND ALL INFORMATION NECESSARY TO SHOW THAT SUCH RECEIVING SITE HAS BEEN PROPERLY PERMITTED AND HAS E&S CONTROLS INSTALLED.
- CONTRACTOR TO COORDINATE INSTALLATION OF SANITARY CONNECTION TO MAIN LOCATED ON MAPLE AVENUE.

**PHASE I DRAINAGE DIVIDES MATRIX**

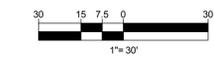
Structure	Drainage Area (AC)	Runoff Coeff. (C)
EX-24	0.96	0.90
EX-22	0.54	0.90
EX-20	0.25	0.90
EX-13	0.23	0.80
EX-10.1	0.68	0.85
EX-2	0.67	0.85
EX-1.1	0.28	0.90
EX. BLDG	0.15	0.90

**LEGEND**



**SOILS TABLE**

SYMBOL	SOIL NAME
95	URBAN LAND



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

**REVISIONS**

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

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

**PROP. SITE PLAN DOCUMENTS**  
 FOR

**CHASE**

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

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

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

SHEET TITLE  
**EROSION AND SEDIMENT CONTROL PLAN PHASE I**  
 SHEET NUMBER  
**C-601**  
 REVISION 1 - 05/20/2021

Jun 04, 2021 11:03:52 AM C:\DRAWINGS\PLAN SETS\S202089\OAP-1\---LAYOUT-C-601 - E&S PHASE I



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 DENUDED FOR LONGER THAN 30 DAYS. PERMANENT STABILIZATION SHALL BE APPLIED TO AREAS THAT ARE TO BE LEFT DORMANT FOR MORE THAN ONE YEAR.
2. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES. THE APPLICANT IS RESPONSIBLE FOR THE TEMPORARY PROTECTION AND PERMANENT STABILIZATION OF ALL SOIL STOCKPILES ON SITE AS WELL AS BORROW AREAS AND SOIL INTENTIONALLY TRANSPORTED FROM THE PROJECT SITE.
3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED. PERMANENT VEGETATION SHALL NOT BE CONSIDERED ESTABLISHED UNTIL A GROUND COVER IS ACHIEVED THAT, IS UNIFORM, 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.
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. CALCULATIONS BASED 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.
9. WHENEVER WATER SEEP FROM A SLOPE FACE, ADEQUATE DRAINAGE OR OTHER PROTECTION SHALL BE PROVIDED.
10. ALL STORM SEWER INLETS THAT ARE MADE OPERABLE DURING CONSTRUCTION SHALL BE PROTECTED SO THAT SEDIMENT-LADEN WATER CANNOT ENTER THE CONVEYANCE SYSTEM WITHOUT FIRST BEING FILTERED OR OTHERWISE TREATED TO REMOVE SEDIMENT.
11. BEFORE NEWLY CONSTRUCTED STORMWATER CONVEYANCE CHANNELS OR PIPES ARE MADE OPERATIONAL, ADEQUATE OUTLET PROTECTION AND ANY REQUIRED TEMPORARY OR PERMANENT CHANNEL LINING SHALL BE INSTALLED IN BOTH THE CONVEYANCE CHANNEL AND 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.
B. EXCAVATED MATERIAL SHALL BE PLACED ON THE UPHILL SIDE OF TRENCHES.
C. EFFLUENT FROM DEWATERING OPERATIONS SHALL BE FILTERED OR PASSED THROUGH AN APPROVED SEDIMENT TRAPPING DEVICE, OR BOTH, AND DISCHARGED IN A MANNER THAT DOES NOT ADVERSELY AFFECT FLOWING STREAMS OR OFF-SITE PROPERTY.
D. MATERIAL USED FOR BACKFILLING TRENCHES SHALL BE PROPERLY COMPACTED IN ORDER TO MINIMIZE EROSION AND PROMOTE STABILIZATION.
E. RESTABILIZATION SHALL BE ACCOMPLISHED IN ACCORDANCE WITH THESE REGULATIONS.
F. APPLICABLE SAFETY REGULATION SHALL BE COMPILED WITH.
17. WHEN CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICLE TIRE TRACKS ON 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 AGENCY. TRAPPED SEDIMENT AND THE DISTURBED SOIL AREAS RESULTING FROM THE DISPOSITION OF TEMPORARY MEASURES SHALL BE PERMANENTLY STABILIZED TO PREVENT FURTHER EROSION AND SEDIMENTATION.
19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM THE DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE DUE TO INCREASES IN VOLUME, VELOCITY AND PEAK FLOW RATE OF STORMWATER RUNOFF FOR THE STATED FREQUENCY STORM OF 24-HOUR DURATION IN ACCORDANCE WITH THE FOLLOWING STANDARDS AND CRITERIA:
A. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL 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 QUESTION; OR
(2) (A) NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP CHANNEL BANKS NOR CAUSE EROSION OF CHANNEL BED OR BANKS; AND (B) ALL PREVIOUSLY CONSTRUCTED MAN-MADE CHANNELS SHALL BE ANALYZED BY THE USE OF A TEN-YEAR STORM TO VERIFY THAT STORMWATER WILL NOT OVERTOP ITS BANKS AND 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 OUTFALLS INTO A MAN-MADE CHANNEL; OR
(4) PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH IS SATISFACTORY TO THE PLAN-APPROVING AUTHORITY TO PREVENT DOWNSTREAM EROSION.
D. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS.
E. ALL HYDROLOGIC ANALYSES SHALL BE BASED ON THE EXISTING WATERSHED CHARACTERISTICS AND THE ULTIMATE DEVELOPMENT OF THE SUBJECT PROJECT.
F. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION HE SHALL OBTAIN APPROVAL FROM THE 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 MAINTENANCE.
G. OUTFALL FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL, AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFALL OF ALL DETENTION FACILITIES AS NECESSARY TO PROVIDE A STABILIZED TRANSITION FROM THE FACILITY TO THE RECEIVING CHANNEL.
H. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE.
I. INCREASED 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. 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
CONSTRUCTION ENTRANCES SHALL BE PROVIDED TO REDUCE THE AMOUNT OF MUD TRANSPORTED ONTO PAVED PUBLIC ROADS BY MOTOR VEHICLES OR RUNOFF.
3. SILT FENCE/SUPER SILT FENCE BARRIER - 3.05
SILT FENCE/SUPER SILT FENCE SEDIMENT BARRIERS WILL BE INSTALLED DOWN SLOPE OF AREAS WITH MINIMAL GRADES TO FILTER SEDIMENT-LADEN RUNOFF FROM SHEET FLOW.
4. STORM DRAIN INLET PROTECTION - 3.07/EC-3 LINING (GUTTER BUDDY)
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 - 3.39
DUST CONTROL SHALL BE PROVIDED TO PREVENT SURFACE AND AIR MOVEMENT OF DUST FROM EXPOSED SOIL SURFACES AND REDUCE THE PRESENCE OF AIRBORNE SUBSTANCES WHICH MAY PRESENT AIR HAZARDS, TRAFFIC SAFETY PROBLEMS OR HARMFUL ANIMAL OR PLANT LIFE.
VIII. MAINTENANCE PROGRAM:
1. SILT FENCE SHALL BE INSPECTED AT THE END OF EACH DAY AND AFTER EACH RAINFALL. ANY REQUIRED REPAIRS OR REPLACEMENTS SHALL BE DONE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE REMOVED BY HAND AFTER EACH RAINFALL AND AT ANY TIME DEPOSITS REACH HALF THE HEIGHT OF THE BARRIER.
2. INLET PROTECTIONS SHALL BE INSPECTED AT THE END OF EACH DAY AND AFTER EACH RAINFALL. ANY REQUIRED REPAIRS SHALL BE DONE IMMEDIATELY.
3. ALL 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 AN INCREASE IN POST-DEVELOPMENT RUNOFF. THE MAJORITY OF THE RUNOFF WILL BE CAPTURED IN CURB INLETS WITHIN THE EXISTING SITE AND ROUTED THROUGH A SERIES OF EXISTING STORM PIPES TO THE EXISTING STORM SYSTEM.
XI. CALCULATIONS:
1. NO TEMPORARY SEDIMENT BASINS, DIVERSIONS, CHANNELS, ETC., ARE APPLICABLE FOR THE PROPOSED SITE. A MINIMAL INCREASE OF RUNOFF FROM THE PRE-DEVELOPED TO POST-DEVELOPED RATES (0.01 CFS) IS THE RESULT OF PROPOSED WORK WITH THIS PLAN.
2. A STORMWATER BMP IS NOT REQUIRED FOR THIS SITE. OFF-SITE NUTRIENT CREDITS WILL BE PURCHASED FOR THIS PROJECT.

XII. GENERAL LAND CONSERVATION NOTES:

- 1. NO DISTURBED AREA WHICH IS NOT ACTIVELY BEING WORKED SHALL REMAIN 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 GRADING.
3. ALL STORM AND SANITARY SEWER LINES NOT IN STREETS SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL. NO MORE THAN 500 FEET SHALL BE OPEN AT ANY ONE TIME.
4. ELECTRIC POWER, TELEPHONE AND GAS SUPPLY TRENCHES SHALL BE COMPACTED, SEEDED AND MULCHED WITHIN 14 DAYS AFTER BACKFILL.
5. ALL TEMPORARY EARTH BERMS, DIVERSIONS AND SEDIMENT CONTROL DAMS SHALL BE SEEDED AND MULCHED FOR TEMPORARY VEGETATIVE COVER IMMEDIATELY (AS SOON AS POSSIBLE BUT NO LATER THAN 48 HOURS) AFTER COMPLETION OF GRADING. STRAW OR HAY MULCH IS REQUIRED. ALL SOIL STOCKPILES SHALL BE SEEDED AND MULCHED WITHIN 14 DAYS AFTER GRADING.
6. DURING CONSTRUCTION, ALL STORM SEWER INLETS SHALL BE PROTECTED BY SEDIMENT TRAPS, MAINTAINED AND MODIFIED DURING CONSTRUCTION PROGRESS AS REQUIRED.
7. ANY DISTURBED AREA NOT COVERED BY § 11-0406.1 AND NOT PAVED, SODDED OR BUILT UPON BY NOV. 1, OR DISTURBED AFTER THAT DATE, SHALL BE MULCHED IMMEDIATELY WITH HAY OR STRAW MULCH AT THE RATE OF 2 TONS/ACRE AND OVER-SEEDED BY APRIL 15.
8. AT THE COMPLETION OF ANY PROJECT CONSTRUCTION AND PRIOR TO BOND RELEASE, ALL TEMPORARY SEDIMENT CONTROLS SHALL BE REMOVED AND ALL DENUDED AREAS SHALL BE STABILIZED.

XIII. OTHER IMPORTANT NOTES:

- 1. ALL AREAS TO BE PAVED MAY BE STABILIZED BY INSTALLATION BY BASE AND SUBBASE MATERIALS INSTEAD OF TEMPORARY VEGETATION COVER.
2. THE CONTRACTOR SHALL PROVIDE ADEQUATE MEANS OF CLEANING MUD FROM TRUCKS AND/OR OTHER EQUIPMENT PRIOR TO ENTERING THE PUBLIC RIGHT-OF-WAY. IT IS THE CONTRACTOR'S RESPONSIBILITY TO CLEAR THE STREETS AND TAKE WHATEVER MEASURES NECESSARY TO ENSURE THAT THE STREETS ARE MAINTAINED IN A CLEAN AND DUST-FREE CONDITION AT ALL TIMES.
3. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO PERFORM THE WORK IN SUCH A MANNER AS TO PREVENT THE WASHING OF ANY TOPSOIL OR DEBRIS INTO ADJACENT PROPERTIES.
4. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE AND MAINTAIN A WATER TRUCK ON SITE AT ALL TIMES FOR THE PURPOSE OF WASHING CONSTRUCTION VEHICLES AT THE STONE CONSTRUCTION ENTRANCE PRIOR TO THEIR ENTERING THE RIGHT-OF-WAY. SEDIMENT LADEN RUNOFF SHALL BE DIRECTED AWAY FROM THE RIGHT-OF-WAY AND TOWARDS AN EROSION AND SEDIMENT CONTROL DEVICE PRIOR TO DISCHARGE INTO THE PUBLIC STORM SYSTEM.
5. BORROW OR HAUL (IF REQUIRED) SHALL BE FROM AN APPROVED OFFSITE LOCATION. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL RELATED PERMITS.
6. IF GROUNDWATER IS ENCOUNTERED DURING CONSTRUCTION, GROUNDWATER AND SOIL SHALL BE DISPOSED OF IN A MANNER WHICH DOES NOT SPILL ONTO EXISTING PAVEMENT AND CLOG EXISTING INLETS.
7. SOIL STOCKPILE IS NOT ANTICIPATED FOR THIS PROJECT. EXCESS SPOIL WILL BE HAULED FROM THE SITE.

XIV. LTI 05-15 COMPLIANCE (POTENTIAL FOR INCREASED RUNOFF DURING CONSTRUCTION)

- 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 0.80 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 VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK AND VIRGINIA REGULATIONS 4VAC50-30 EROSION AND SEDIMENT CONTROL REGULATIONS.
ES-2 THE PLAN APPROVING AUTHORITY MUST BE NOTIFIED ONE WEEK PRIOR TO THE PRE-CONSTRUCTION CONFERENCE, ONE WEEK PRIOR TO THE COMMENCEMENT OF LAND DISTURBING ACTIVITY, AND ONE WEEK PRIOR TO THE FINAL INSPECTION.
ES-3 ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING AND GRADING.
ES-4 A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLANS SHALL BE MAINTAINED ON THE SITE AT ALL TIMES.
ES-5 PRIOR TO COMMENCING LAND DISTURBING ACTIVITIES IN AREAS OTHER THAN INDICATED ON THESE PLANS (INCLUDING BUT NOT LIMITED, OFFSITE BORROW OR WASTE AREAS), THE CONTRACTOR SHALL SUBMIT A SUPPLEMENTARY EROSION CONTROL PLAN TO THE OWNER FOR REVIEW AND APPROVAL BY THE PLAN APPROVING AUTHORITY.
ES-6 THE CONTRACTOR IS RESPONSIBLE FOR INSTALLATION OF ANY ADDITIONAL EROSION CONTROL MEASURES AS NECESSARY TO PREVENT EROSION AND SEDIMENTATION AS DETERMINED BY THE PLAN APPROVING AUTHORITY.
ES-7 ALL DISTURBED AREAS ARE TO DRAIN TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
ES-8 DURING DEWATERING OPERATIONS, WATER WILL BE PUMPED INTO AN APPROVED FILTERING DEVICE.
ES-9 THE CONTRACTOR SHALL INSPECT ALL EROSION CONTROL MEASURES PERIODICALLY AND AFTER EACH RUNOFF-PRODUCING RAINFALL EVENT. ANY NECESSARY REPAIRS OR CLEANUP TO MAINTAIN THE EFFECTIVENESS OF THE EROSION CONTROL DEVICES SHALL BE MADE IMMEDIATELY.

BOHLER logo and contact information: BOHLER SITE CIVIL AND CONSULTING ENGINEERING PROGRAM MANAGEMENT LANDSCAPE ARCHITECTURE SUSTAINABLE DESIGN PERMITTING SERVICES TRANSPORTATION SERVICES

REVISIONS table with columns: REV, DATE, COMMENT, PER REV TOWN COMMENTS, SC, TD

811 logo and text: Know what's below. Call before you dig. ALWAYS CALL 811. It's fast. It's free. It's the law.

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PROJECT information table: PROJECT No., DRAWN BY, CHECKED BY, DATE, CAD ID, CHECKER, SCALE

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

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

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

SHEET TITLE: EROSION AND SEDIMENT CONTROL NOTES

SHEET NUMBER: C-603

REVISION 1 - 05/20/2021





# MAPLE AVENUE - VA RTE. 123

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

GLYNDON STREET  
ASPHALT PAVED PUBLIC ROADWAY  
POSTED SPEED: 25 MPH

## 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.
5. 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.
6. 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.
8. 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.
9. 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

- EXISTING DRIP LINE TO BE REMOVED
- EXISTING DRIP LINE TO REMAIN
- CRITICAL ROOT ZONE (CRZ)
- LIMITS OF DISTURBANCE
- SUPER SILT FENCE
- TREE PROTECTION FENCE
- CONSTRUCTION FENCE
- TREE PRESERVATION SIGNS SPACED 50' APART
- EXISTING TREE TO BE REMOVED
- EXISTING TREE TO REMAIN



OTJ Chase Bank 315 Maple Ave E, Town of Vienna  
Tree Condition Analysis Performed by Nicholas Georgas, ISA Certified Arborist MA-5061A on 08/12/2020

#	COMMON NAME	BOTANICAL NAME	CONDITION RATING	CIRCUMFERENCE	DIAMETER (DBH)	DIAMETER (DBH)	CRITICAL ROOT ZONE (CRZ)	REMOVE	NATIVE	COMMENTS	TREE PROTECTION FENCE	MULCH	FERTILIZE	CROWN PRUNING	REMOVE VINES	WATER DURING CONSTRUCTION	HAND REMOVE
			%	INCHES	INCHES	FEET	FEET										
1362	Japanese Zelkova	Zelkova serrata	85%	27.00"	8.60"	0.72'	13'			Crown dieback							
1363	Bradford Pear	Pyrus calleryana	70%	26.06"	8.30"	0.69'	13'			Low branching angle, Major lichen growth							
1364	Little-leaf Linden	Tilia cordata	65%	62.80"	20.00"	1.67'	30'		X	Minor Dieback, Low branching angle, Major lichen growth							
1365	Little-leaf Linden	Tilia cordata	75%	45.84"	14.60"	1.22'	22'		X	Low branching angle, Minor lichen growth							
1366	Hornbeam	Carpinus betulus 'Fastigiata'	90%	37.37"	11.90"	0.99'	18'		X	Low branching angle							
1367	Trident Maple	Acer buergerianum	85%	25.43"	8.10"	0.68'	13'										
1368	Trident Maple	Acer buergerianum	80%	18.84"	6.00"	0.50'	9'										
1369	Acer rubrum	Red Maple	70%	54.64"	17.40"	1.45'	27'		X	Cutback, Dieback, Lichen growth							
1370	Trident Maple	Acer buergerianum	80%	27.95"	8.90"	0.74'	14'										
1371	Trident Maple	Acer buergerianum	75%	18.53"	5.90"	0.49'	9'			Thin crown, Trunk scar							
1372	Acer rubrum	Red Maple	70%	87.92"	28.00"	2.33'	42'		X	Dieback, Codominant leader, Lichen growth							
1373	Trident Maple	Acer buergerianum	75%	23.24"	7.40"	0.62'	12'			Codominant leader							
1374	Trident Maple	Acer buergerianum	80%	19.15"	6.10"	0.51'	10'										
1375	Acer rubrum	Red Maple	70%	56.52"	18.00"	1.50'	27'		X	Cutback, Dieback, Lichen growth							
1376	Trident Maple	Acer buergerianum	70%	20.72"	6.60"	0.55'	10'			Major lichen growth, Possible chlorosis, Dieback							
1377	Trident Maple	Acer buergerianum	60%	17.90"	5.70"	0.48'	9'			Trunk scar, Lichen growth, Thin crown, Dieback							
1378	Acer rubrum	Red Maple	65%	69.08"	22.00"	1.83'	33'		X	Codominant leader, Major dieback, Cutback, Lichen growth							
1379	Trident Maple	Acer buergerianum	65%	12.87"	4.10"	0.34'	7'			Trunk scar, Lichen growth, Dieback							
1380	Acer rubrum	Red Maple	70%	57.78"	18.40"	1.53'	28'		X	Major lichen growth, Cut back							
1381	Trident Maple	Acer buergerianum	75%	21.04"	6.70"	0.56'	11'			Trunk scar, Lichen growth							
1382	Trident Maple	Acer buergerianum	85%	28.89"	9.20"	0.77'	14'										
1383	Acer rubrum	Red Maple	75%	26.38"	8.40"	0.70'	13'		X	Codominant leader, Lichen growth							
1384	Trident Maple	Acer buergerianum	80%	21.35"	6.80"	0.57'	11'			Trunk scar							
1385	Acer rubrum	Red Maple	75%	23.24"	7.40"	0.62'	12'		X	Lichen growth, Dieback							
1386	Japanese Zelkova	Zelkova serrata	75%	29.52"	9.40"	0.78'	15'			Lichen growth, Minor dieback, Weak branching angle							
1387	Japanese Zelkova	Zelkova serrata	80%	22.29"	7.10"	0.59'	11'			Lichen growth, Weak branching angle							
1388	Japanese Zelkova	Zelkova serrata	90%	34.85"	11.10"	0.93'	17'			Weak branching angle							
1389	Japanese Zelkova	Zelkova serrata	70%	21.04"	6.70"	0.56'	11'			Trunk scar, Weak branching angle, Die back							
1390	Pin Oak	Quercus palustris	90%	43.65"	13.90"	1.16'	21'		X	Limbed up							
1391	Little-leaf Linden	Tilia cordata	70%	63.11"	20.10"	1.68'	31'		X	Codominant leader, Lichen, Low branching angle							

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PROGRAM MANAGEMENT  
LANDSCAPE ARCHITECTURE  
SUSTAINABLE DESIGN  
PERMITTING SERVICES  
TRANSPORTATION SERVICES

### REVISIONS

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

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

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

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

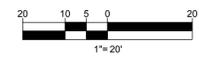
BOHLER  
12825 WORLDGATE DR. SUITE 700  
HERNDON, VIRGINIA 20170  
Phone: (703) 709-9500  
Fax: (703) 709-9501  
VA@BohlerEng.com



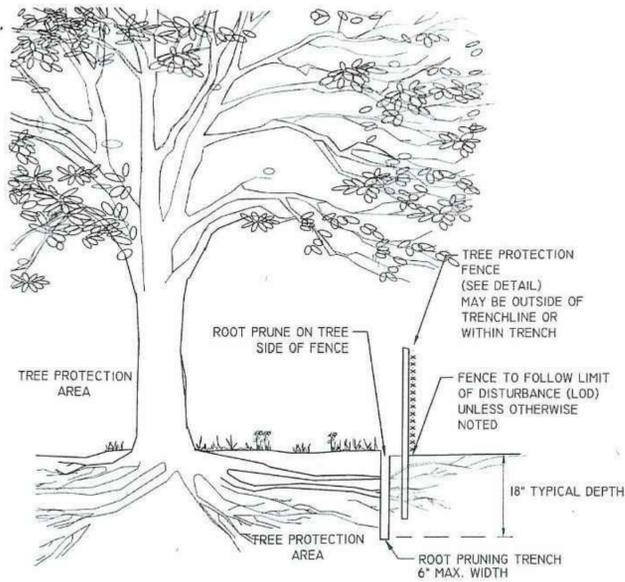
SHEET TITLE:  
**TREE INVENTORY AND PRESERVATION PLAN**

SHEET NUMBER:  
**C-701**

REVISION 1 - 05/20/2021



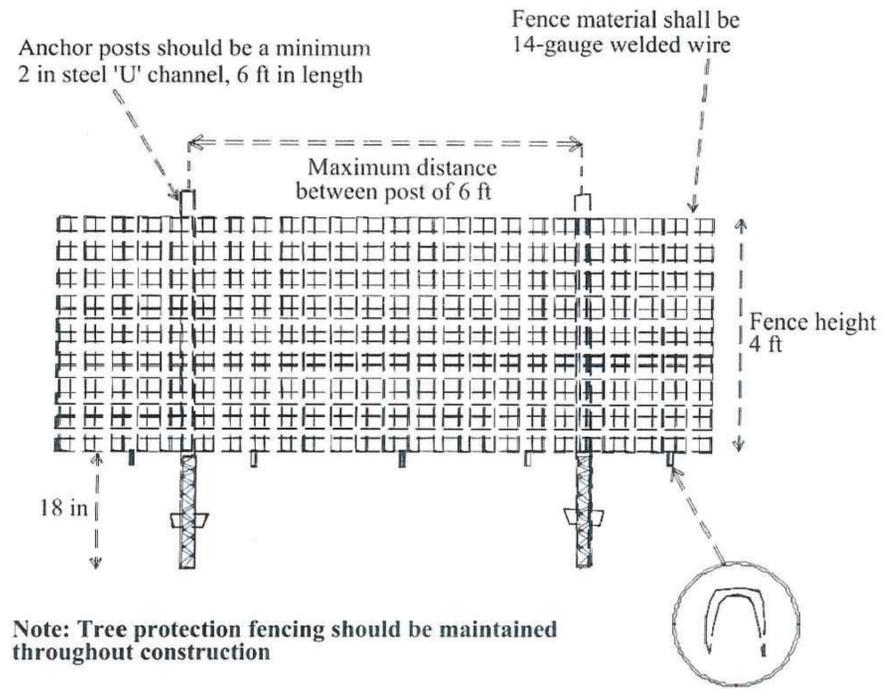
Jun 04, 2021 11:03:52 AM C:\DRAWINGS\PLAN SETS\S202089\LSP-1-KAYOUT-C-701 - TREE INVENTORY PLAN



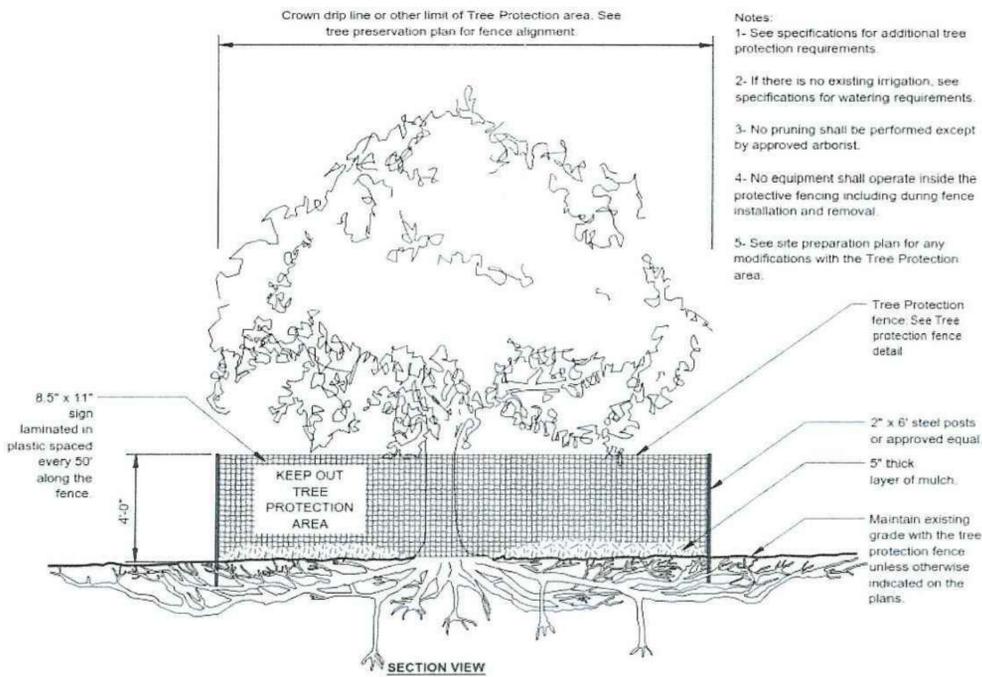
- NOTES
1. ROOT PRUNING SHALL BE DONE WITH A TRENCHER OR VIBRATORY PLOW TO A DEPTH OF 18". ROOTS OVER 1.5" IN DIAMETER SHALL HAVE A CLEAN CUT MADE BY A CLEAN SAW ON THE SURFACE OF THE ROOT, WHICH IS STILL ATTACHED TO THE TREE. DO NOT PAINT THE CUT ROOT END. IF EXCAVATION IS FOR INSTALLATION OF UNDERGROUND 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.
  3. 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.
  5. ROOT PRUNING WORK WILL NOT BE DONE WHEN MORE THAN THE TOP 1 INCH OF SOIL IS FROZEN. ROOT PRUNING WILL NOT BE UNDERTAKEN WHEN THE SOIL IS WET AND CONDITIONS ARE MUDDY.

**ROOT PRUNING SECTION**

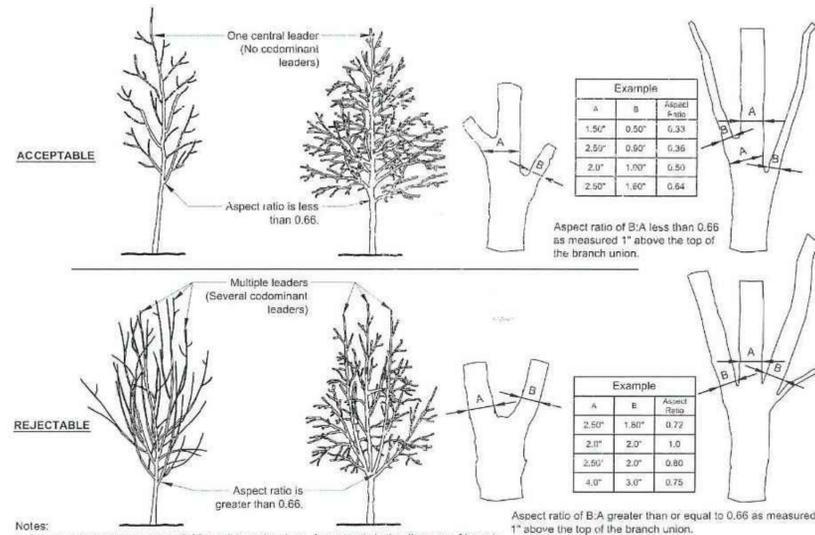
NOT TO SCALE



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



- Notes:
- 1- See specifications for additional tree protection requirements.
  - 2- If there is no existing irrigation, see specifications for watering requirements.
  - 3- No pruning shall be performed except by approved arborist.
  - 4- No equipment shall operate inside the protective fencing including during fence installation and removal.
  - 5- See site preparation plan for any modifications with the Tree Protection area.



- Notes:
- 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.

**(P-X) CROWN OBSERVATIONS - HIGH BRANCHED**

URBAN TREE FOUNDATION © 2014  
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**(S-X) TREE PROTECTION**

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**REVISIONS**

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1	05/20/2021	REV PER TOWN COMMENTS	SC	TD

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



SHEET TITLE:  
**TREE PRESERVATION DETAILS**

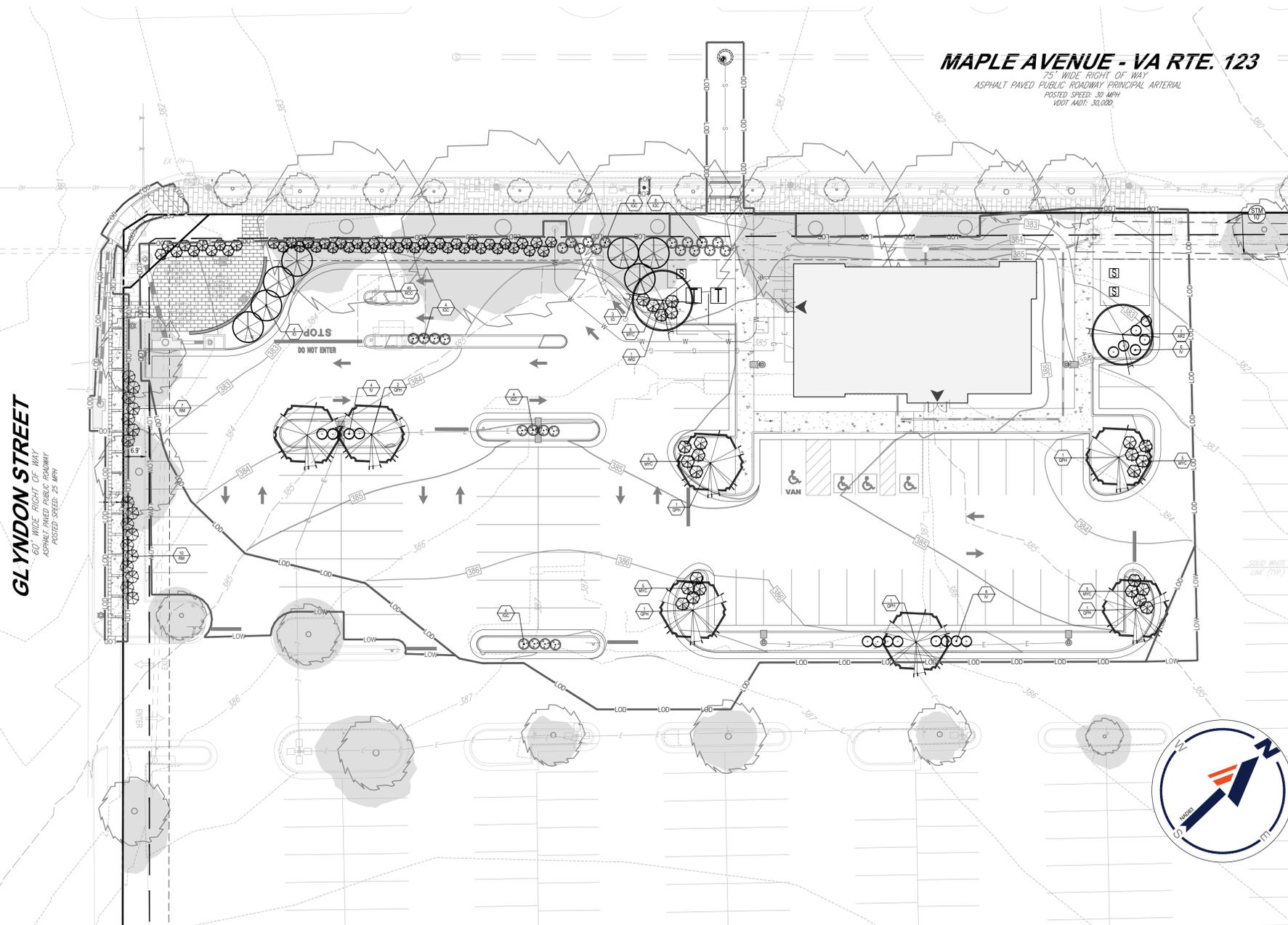
SHEET NUMBER:  
**C-702**

REVISION 1 - 05/20/2021

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

**MAPLE AVENUE - VA RTE. 123**

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



**PLANTING NOTES**

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

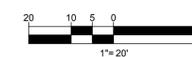
**HATCH LEGEND**

 EXISTING TREE CANOPY TO BE PRESERVED

TOWN OF VIENNA COMPLIANCE CHART			
SECTION	REQUIREMENTS	CALCULATIONS (REQUIRED/PROPOSED)	COMPLIANCE
18-95.12.A INTERIOR LANDSCAPING	<p><b>INTERIOR PARKING LOT LANDSCAPING</b></p> <p>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.</p> <p>CANOPY OR SHADE TREES SHALL BE DISTRIBUTED THROUGHOUT THE PARKING LOT FOR THE PURPOSE OF HEAT ABATEMENT. NO PARKING SPACE SHALL BE SEPARATED FROM THE TRUNK OF A SHADE OR CANOPY TREE BY MORE THAN 70 FEET.</p> <p>A RATIO OF ONE TREE PER EIGHT PARKING SPACES SHALL BE PROVIDED.</p> <p>EACH LANDSCAPING ISLAND SHALL CONTAIN AT LEAST FOUR SHRUBS, PLANTED IN ACCORDANCE WITH THESE STANDARDS.</p>	<p><b>INTERIOR PARKING LOT LANDSCAPING</b></p> <p>REQUIRED:</p> <ul style="list-style-type: none"> <li>PLANTING ISLANDS AT THE END OF EVERY ROW</li> <li>PARKING SPACE NO MORE THAN 70' FROM A TREE</li> <li>72 PARKING SPACES PROPOSED</li> <li>1 TREE FOR EVERY 8 SPACES</li> <li>72 SPACES X (1/8) = 9 TREES REQUIRED</li> <li>4 SHRUBS PER LANDSCAPE ISLAND</li> </ul> <p>PROPOSED:</p> <ul style="list-style-type: none"> <li>INTERIOR PLANTING ISLANDS HAVE BEEN PROVIDED AT THE END OF EVERY ROW</li> <li>NO PARKING SPACE IS GREATER THAN 70' FROM AN INTERIOR PARKING LOT TREE</li> <li>9 TREES PROVIDED</li> <li>4 SHRUBS PER LANDSCAPE ISLAND</li> </ul>	COMPLIES
18-95.12.B PERIMETER LANDSCAPING STANDARDS	<p><b>PERIMETER PARKING LOT LANDSCAPING</b></p> <p>THE MINIMUM WIDTH OF A PERIMETER LANDSCAPE STRIP SERVING A PARKING LOT SHALL BE EIGHT FEET</p> <p>EVERGREEN SHRUBS SHALL BE USED TO FORM THE CONTINUOUS VISUAL SCREEN IN THE PERIMETER LANDSCAPE STRIP.</p> <p>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.</p> <p>AT LEAST 25 PERCENT OF THE REQUIRED TREES AND SHRUBS SHALL PROVIDE A SEASONAL COLOR WITH EVERGREEN AND FLOWERING TREES.</p>	<p><b>(A) NORTHWEST PROPERTY LINE (MAPLE AVENUE - VA RTE 123)</b></p> <p>REQUIRED:</p> <ul style="list-style-type: none"> <li>8' LANDSCAPE STRIP</li> <li>10 AGGREGATE CALIPER INCHES (ACI) PER 100 LF</li> </ul> <p>336 LF X (10/100) = 34 ACI</p> <p>CONTINUOUS ROW OF EVERGREEN SHRUBS</p> <p>PROPOSED:</p> <ul style="list-style-type: none"> <li>8' LANDSCAPE STRIP</li> <li>EXISTING TREES (1369, 1372, 1375, 1378, 1380) PROVIDE 103.80" ACI</li> <li>CONTINUOUS ROW OF EVERGREEN SHRUBS</li> </ul> <p><b>(B) SOUTHWEST PROPERTY LINE (GLYDON STREET)</b></p> <p>REQUIRED:</p> <ul style="list-style-type: none"> <li>8' LANDSCAPE STRIP</li> <li>10 AGGREGATE CALIPER INCHES (ACI) PER 100 LF</li> </ul> <p>3376 LF X (10/100) = 14 ACI</p> <p>CONTINUOUS ROW OF EVERGREEN SHRUBS</p> <p>PROPOSED:</p> <ul style="list-style-type: none"> <li>8' LANDSCAPE STRIP (EXISTING)</li> <li>EXISTING TREES (1363, 1364, 1365, 1366) PROVIDE 54.80" ACI</li> <li>CONTINUOUS ROW OF EVERGREEN SHRUBS</li> </ul>	COMPLIES
17-15.1. PLANTING AND REPLACEMENT OF TREES	<p><b>20 YEAR CANOPY CALCULATIONS</b></p> <p>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:</p> <ol style="list-style-type: none"> <li>20 PERCENT TREE CANOPY IN THE RS-16, RS-12.5 AND RS-10 ZONES.</li> <li>15 PERCENT IN THE RM-2 AND RTH ZONES.</li> <li>10 PERCENT TREE CANOPY IN THE T, C-1, C-1A, C-2, CMP AND CM ZONES</li> </ol>	<p><b>20 YEAR CANOPY CALCULATIONS</b></p> <p>GROSS SITE AREA: 10.43 AC OR 454,658 SF</p> <p>CANOPY COVERAGE REQUIRED ZONE C-2 (10%) 1.04 AC OR 45,646 SF</p> <p>NET EXISTING TREE CANOPY 29,807 SF</p> <p>NET EXISTING TREE CANOPY PROVIDED WITH "GIANT FOOD STORE #659 MAPLE AVENUE EAST MAPLE AVENUE SHOPPING CENTER" APPROVED AUG 13, 2003 43,351 SF</p> <p>PROPOSED LANDSCAPING WITH THIS PLAN 4,100 SF</p> <p>TOTAL CANOPY PROVIDED 47,451 SF (10.44%) CANOPY PROVIDED</p>	COMPLIES

**LANDSCAPE SCHEDULE**

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL. / HT.	CONT.	CROWN COVERAGE ALLOWANCE (CCA)	TOTAL (CCA)
<b>SHADE TREES</b>							
AR2	2	ACER RUBRUM	RED MAPLE	210" CAL / 15-12	B-B	300	600
QPH	7	QUERCUS PHellos	WILLOW OAK	210" CAL / 15-12	B-B	300	2,100
	9					TOTAL	2,700
<b>EVERGREEN TREES</b>							
ID	7	ILEX OPACA	AMERICAN HOLLY	8" HT.	B-B	200	1400
	7					TOTAL	1400
<b>DECIDUOUS SHRUBS</b>							
IV	18	ITEA VIRGINICA 'HENRY'S GARNET'	GARNET SWEETSPIRE	24-30" HT. & SPREAD	HS CAN	NA	NA
	18						
<b>EVERGREEN SHRUBS</b>							
IGC	26	ILEX GLABRA COMPACTA	DWARF INBERRY HOLLY	24-30" HT. & SPREAD	HS CAN	NA	NA
MYC	25	MYRTICA CERIFERA 'DONS DWARF'	DWARF WAX MYRTLE	4-5" HT. & SPREAD	B-B	NA	NA
ROC	45	RHOXODENDRON CATAMBENSE 'CHANDICE'	CHANDICE RHOXODENDRON	24-30" HT. & SPREAD	B-B	NA	NA
RM	17	RHOXODENDRON VARIETAL 'ROSEBAY'	ROSEBAY RHOXODENDRON	45" HT. & SPREAD	B-B	NA	NA
	113						



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

SHEET TITLE:

**LANDSCAPE PLAN**

SHEET NUMBER:

**C-703**

REVISION 1 - 05/20/2021

**PLANTING NOTES:**

**1. MATERIAL STANDARDS:**

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

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

**2. LIST OF PLANT MATERIAL:**

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

**3. PLANT BED PREPARATION:**

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

**4. SOIL MIX:**

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

**5. PLANTING:**

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

ALL TREES SHALL BE PLANTED VERTICALLY AND BACKFILL COMPACTED WITH WATER AND RODDING TO REMOVE ALL VOIDS AND TO SEAT ROOT BALL. SEE TREE PLANTING DETAILS. TREES TRANSPANTED 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 TRANSPANTED 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 PERFORMED ONLY IF NOTED AS REQUIRED ON THE PLANS. IF REQUIRED, THE STAKES AND GUYS ARE TO BE REMOVED WITH THE FIRST YEAR'S PLANTING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ANY DAMAGE DONE TO THE TREE DUE TO IMPROPER USE OF STAKING AND GUYING TECHNIQUES. IF THE OWNER FINDS IMPROPER APPLICATION OF THE STAKING AND GUYING AND IS DETRIMENTAL TO THE TREE, THE OWNER MAY REQUEST COMPENSATION FROM THE CONTRACTOR.

**7. MULCH:**

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

**8. NO BARE SPOTS:**

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

**9. MAINTENANCE:**

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

**10. SCHEDULE AND APPROVALS:**

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

**11. GUARANTEE:**

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

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

**LANDSCAPE SCHEDULE**

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

TOTAL COVERAGE: 15,842 SF

- 2 FG = 354 SF

- 1 GT = 314 SF

- 2 QA = 508 SF

- 5 TOTAL TREES = 1,176 SF

**TREE CANOPY COMPUTATIONS:**

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

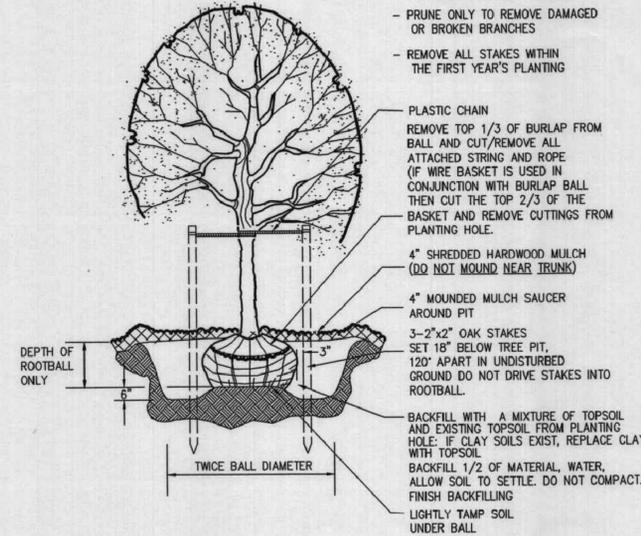
TOTAL TREE CANOPY LOST FROM TREES TO BE REMOVED = 2,012 SF  
 TOTAL TREE CANOPY GAINED FROM PROPOSED TREES = 4,100 SF  
 NET GAIN IN TREE CANOPY = 2,088 SF

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.

**NOTES:**

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



**DECIDUOUS TREE PLANTING**  
NOT TO SCALE

**NOTE:**

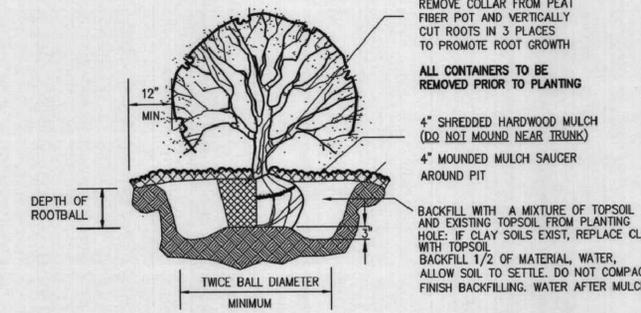
12" MIN. MULCH LINE PAST CANOPY OF SHRUB AT TIME OF FINAL INSPECTION  
 SHRUB SHALL BEAR SAME RELATION TO FINISH GRADE AS IT DID TO ITS NURSERY FIELD GROWTH GRADE.

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

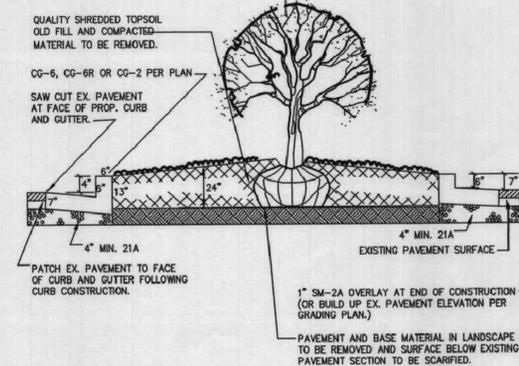
ALL CONTAINERS TO BE REMOVED PRIOR TO PLANTING

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

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



**SHRUB PLANTING**  
NOT TO SCALE



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

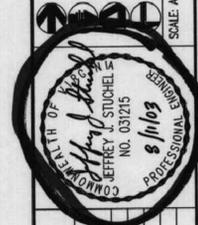
**LANDSCAPE ISLAND PLACEMENT DETAIL**  
NOT TO SCALE

THIS PLAN TO BE UTILIZED FOR INFORMATIONAL PURPOSES ONLY

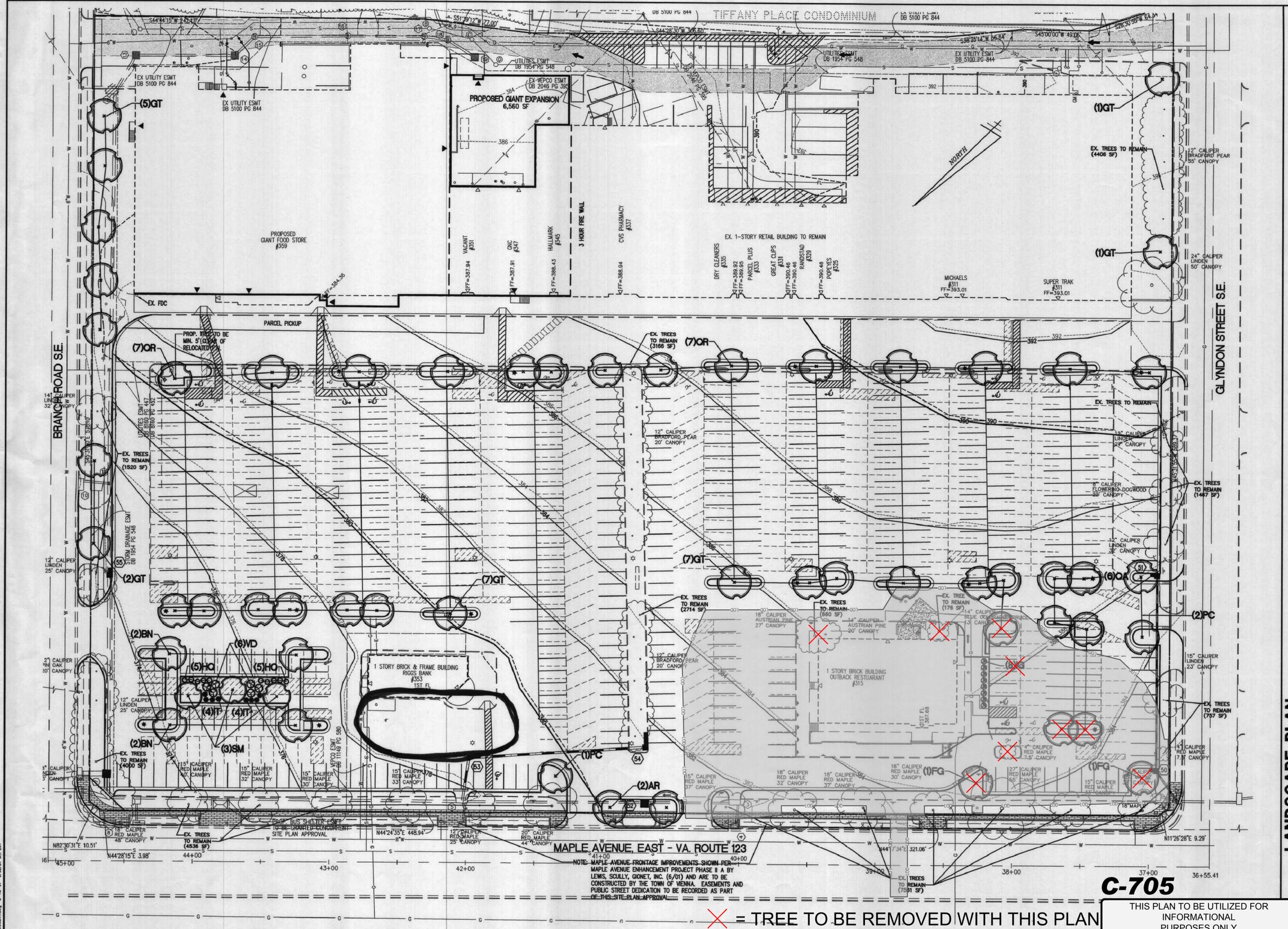
**C-704**

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

**WALTER L. PHILLIPS**  
 INCORPORATED  
 CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS  
 207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046  
 (703) 532-0163 FAX (703) 532-0164  
 WWW.WLPHINC.COM  
 DRAWN: SQUJMK  
 DATE: 8-15-03/11/03



DATE	APPROVED BY	REVISION



MAPLE AVENUE EAST - VA ROUTE 123

NOTE: MAPLE AVENUE FRONTAGE IMPROVEMENTS SHOWN PER MAPLE AVENUE ENHANCEMENT PROJECT PHASE II A BY LEWIS, SCULLY, GONET, INC. (6/01) AND ARE TO BE CONSTRUCTED BY THE TOWN OF VIENNA. EASEMENTS AND PUBLIC STREET DEDICATION TO BE RECORDED AS PART OF THIS SITE PLAN APPROVAL.

X = TREE TO BE REMOVED WITH THIS PLAN

C-705

THIS PLAN TO BE UTILIZED FOR INFORMATIONAL PURPOSES ONLY

**LANDSCAPE PLAN**  
**MAPLE AVENUE SHOPPING CENTER**  
 359 MAPLE AVENUE, EAST  
 TOWN OF VIENNA  
 FAIRFAX COUNTY, VIRGINIA

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED
1	ARCH. COORDINATION	5/20/03		
2	PLANNING/STAFF REVIEW	5/03/03		
3	PARKING/STAFF REVIEW	5/11/03		

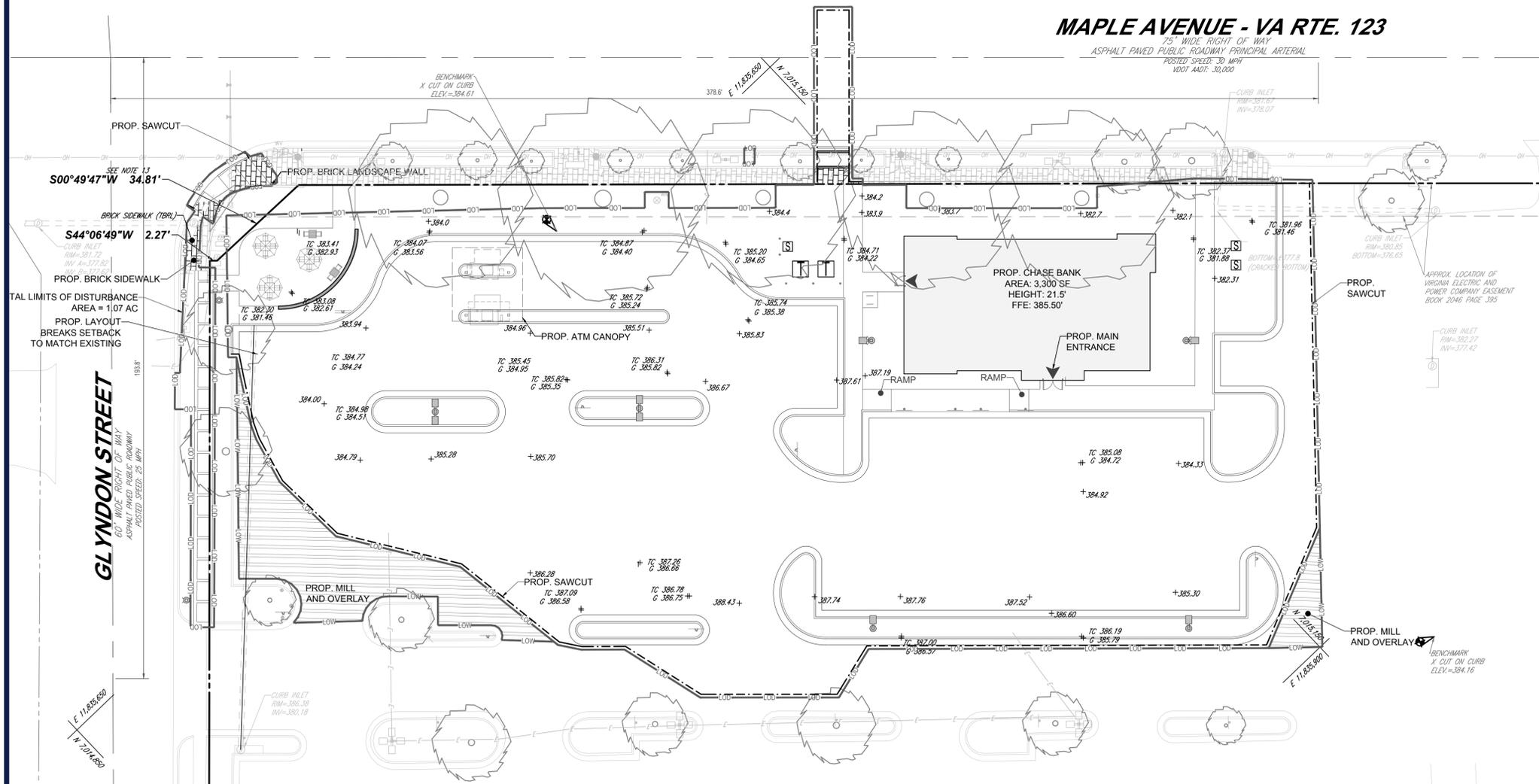


**WALTER L. PHILLIPS**  
 INCORPORATED  
 CIVIL ENGINEERS LAND SURVEYORS PLANNERS LANDSCAPE ARCHITECTS  
 207 PARK AVENUE FALLS CHURCH, VIRGINIA 22046  
 (703) 552-6163 FAX (703) 553-1301  
 WWW.WLPINC.COM

DATE: 8-15-01  
 SCALE: 1"=30'



**MAPLE AVENUE - VA RTE. 123**  
 75' WIDE RIGHT OF WAY  
 ASPHALT PAVED PUBLIC ROADWAY PRINCIPAL ARTERIAL  
 POSTED SPEED: 30 MPH  
 VDOT AADT: 30,000



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

**REVISIONS**

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

**811**  
 Know what's below.  
 Call before you dig.  
 ALWAYS CALL 811  
 It's fast. It's free. It's the law.

**NOT APPROVED FOR CONSTRUCTION**

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

**PROP. SITE PLAN DOCUMENTS**  
 FOR

**CHASE**

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

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

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

SHEET TITLE:  
**LIGHTING PLAN**

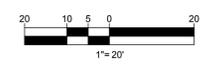
SHEET NUMBER:  
**C-707**

REVISION 1 - 05/20/2021

**LIGHTING LEGEND**

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

SEE DETAIL SHEET FOR LIGHT FIXTURE AND POLE SPECIFICATIONS



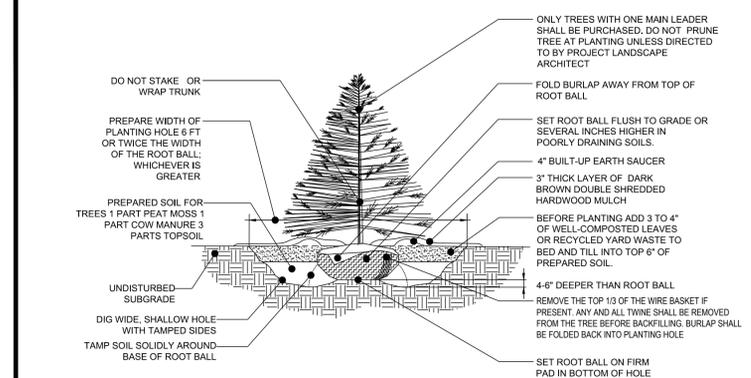
JUN 04, 2021  
 H:\2020\202089\DRAWINGS\PLAN SETS\S202089-LGP-1-X-LAYOUT-C-707-LIGHTING PLAN

# LANDSCAPE SPECIFICATIONS

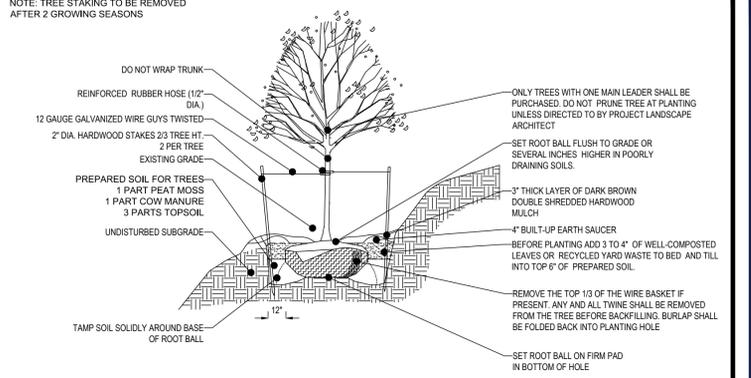
- SCOPE OF WORK:** THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.
- MATERIALS**
  - GENERAL** - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.
  - 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.
  - 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.
    - LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED
    - SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS.
    - SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.
  - MULCH** - THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED DARK 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.
  - FERTILIZER**
    - 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.
    - 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.
  - PLANT MATERIAL**
    - 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 ASSOCIATION.
    - IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
    - 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.
    - TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1/4", WHICH HAVE NOT BEEN COMPLETELY CALLED, SHALL BE REJECTED. PLANTS SHALL BE MONITORED ON A WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
    - 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.
    - 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.
    - SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
    - TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.
- GENERAL WORK PROCEDURES**
  - 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.
  - 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.
- SITE PREPARATIONS**
  - 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.
  - 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.
  - 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.
- TREE PROTECTION**
  - CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. 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 EQUIV., 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.
  - 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.
  - AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.
- SOIL MODIFICATIONS**
  - 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.
  - LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.
  - 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.
    - 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.
    - 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. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
    - MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.
- FINISHED GRADING**
  - 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 SITE.
  - 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 THICKNESS (1").
  - ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS SPECIFIED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.
  - 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.
- TOPSOILING**
  - 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.
  - 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 SECTION ABOVE.
  - 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 FILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA).
    - 20 POUNDS GROW POWER OR APPROVED EQUAL
    - 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP
  - THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

- PLANTING**
  - INSOFARE 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.
  - 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.
  - 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.
  - 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.
  - 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.
  - 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:
    - PLANTS: MARCH 15 TO DECEMBER 15
    - LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1
  - 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.
  - FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPORT 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 SEASON:
 

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELFUERIERA	QUERCUS VARIETIES
LIQUIDAMBAR STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT  
**EVERGREEN TREE PLANTING DETAIL**  
NOT TO SCALE



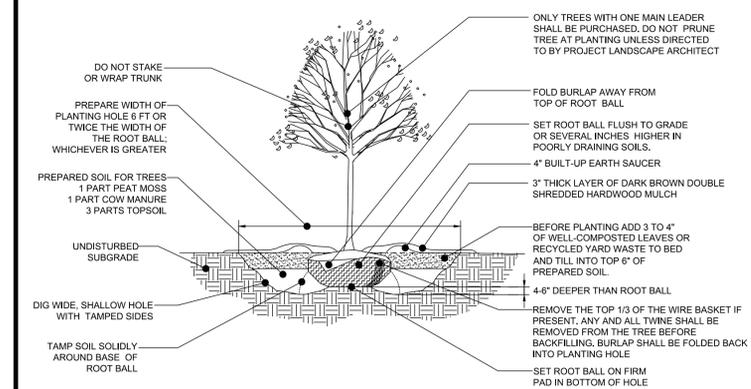
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**TREE PLANTING ON SLOPE DETAIL**  
NOT TO SCALE

## SEEDING SPECIFICATIONS

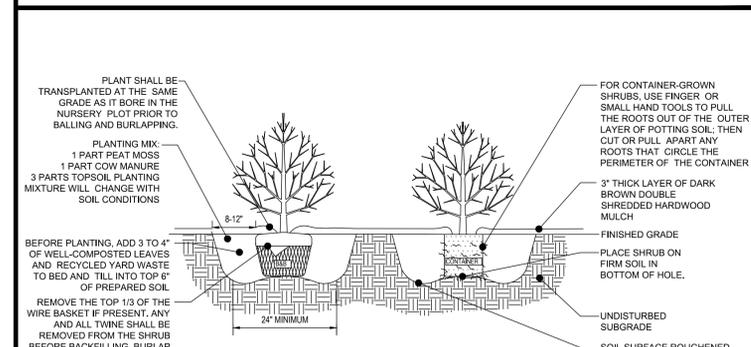
- MATERIAL:**
  - SEED MIXTURE MUST BE COMPRISED OF THE FOLLOWING VARIETIES AND AT THE SPECIFIED COMPOSITION:
    - 80% - TURF TYPE TALL FESCUE SEED
    - 10% - KENTUCKY BLUEGRASS SEED
    - 10% - ANNUAL RYE GRASS SEED
  - INSTALLATION RATES:
    - SEED: LAWN SEED SHOULD BE APPLIED AT A RATE OF 7 LBS/1,000 SF
    - LINE: AGRICULTURAL OR PELLETED LINE SHOULD BE APPLIED AT SPECIFIED RATE ACCORDING TO SOIL ANALYSIS OR 2,000 LBS PER ACRE (4 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 ACRE (8.8 LBS/1,000 SF)
    - 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 80 LBS PER ACRE IN AREAS OF ACIDIC SOILS TO ASSURE GERMINATION AND INITIAL ESTABLISHMENT.
    - MULCH: WHEAT, OAT, OR BARLEY STRAW MULCH SHALL BE APPLIED AT A RATE OF 80 LBS PER 1,000 SF. DO NOT INSTALL MULCH SO THICK THAT IT COMPLETELY COVERS THE GROUND. TOPSOIL SHOULD BE VISIBLE THROUGH THE STRAW LAYER.
- EXECUTION AND PREPARATION:**
  - 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 PELLETED LIME SHOULD BE ADDED DURING THE GROUND PREPARATION STAGE AT THE RATE RECOMMENDED ACCORDING TO SOIL ANALYSIS.
  - 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.
  - AREAS TO BE PLANTED SHOULD BE ROLLED WITH A CULI-PACKER, TURF ROLLER, OR SIMILAR DEVICE TO FIRM THE SEEDBED. THIS PROCESS HELPS ACHIEVE THE DESIRED FIRMNESS. SOIL SHOULD BE FIRMED TO 85% OF COMPACTION.
- INSTALLATION:**
  - STRICTLY COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
  - EQUIPMENT USED TO SPREAD SEED SHOULD HAVE SUFFICIENT CAPACITY TO HOLD AND AGITATE SEED EVENLY IN A CYCLONE OR DROP PATTERN. HYDROSEEDING MAY ALSO BE PERFORMED WITH THE ENGINEER/ARCHITECT'S APPROVAL.
  - SEED MAY NEED TO BE APPLIED AT A HALF RATE IN ALTERNATING DIRECTIONS TO ENSURE AN EVEN COVERAGE OF SEED.
  - 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 APPLIED AT A RATE OF 2.5 GALLONS PER ACRE OR NEUTRA LIME DRY AT A RATE OF 80 LBS PER ACRE. FERTILIZER SHOULD BE SPREAD EVENLY OVER THE SEEDING AREAS AT THE RECOMMENDED RATE DETERMINED BY THE INITIAL SOIL ANALYSIS. IF NO SOIL ANALYSIS IS AVAILABLE EVENLY APPLY 12-20-12 STARTER FERTILIZER AT A RATE OF 250 LBS PER ACRE (8.8 LBS/1,000 SQUARE FEET).
  - 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 ESTABLISHMENT. (FOLLOW REC PRODUCT MANUFACTURER RECOMMENDATIONS.)
- MAINTENANCE**
  - FREQUENT LIGHT IRRIGATION WILL NEED TO BE APPLIED TO SEEDING 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.
  - REPAIR ALL SEED WASHINGS AND EROSION.

## TENANT MAINTENANCE RESPONSIBILITIES

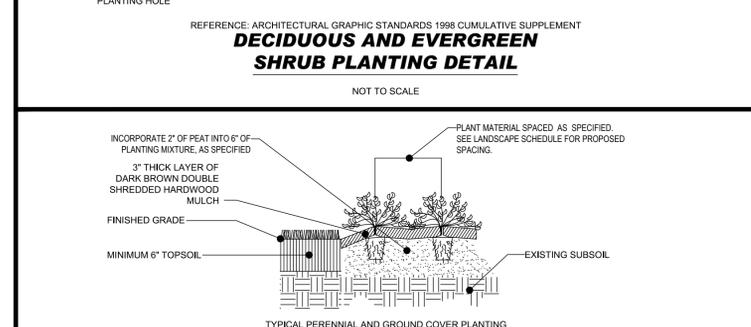
- UPON OWNERS (OR OWNER CONTRACTORS) COMPLETION OF LANDSCAPING WORK, CHASE BANK IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING WITHIN THE LEASE LIMITS, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPE AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:
- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO 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 TRAVEL.
  - 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 SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.
  - 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 OTHER HAZARDS.
- THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.



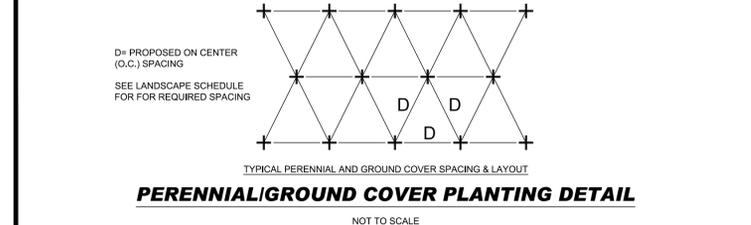
REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT  
**DECIDUOUS TREE PLANTING DETAIL**  
NOT TO SCALE



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT  
**SHRUB PLANTING DETAIL**  
NOT TO SCALE



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT  
**PERENNIAL/GROUND COVER PLANTING DETAIL**  
NOT TO SCALE



REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT  
**PERENNIAL/GROUND COVER PLANTING DETAIL**  
NOT TO SCALE

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

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

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PROJECT No.:	S202098
DRAWN BY:	SC
CHECKED BY:	CM
DATE:	06/04/2021
CAD ID:	SSD-0

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

CHASE

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

BOHLER  
18225 WORLDGATE DR. SUITE 700  
HERNDON, VIRGINIA 20170  
Phone: (703) 709-9500  
Fax: (703) 709-9501  
VA@BohlerEng.com

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

SHEET TITLE:  
**LANDSCAPE DETAILS**  
SHEET NUMBER:  
**C-706**

REVISION 1 - 05/20/2021

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



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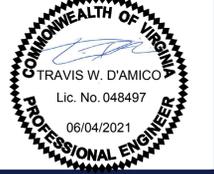
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 DRAWN BY: SC  
 CHECKED BY: CM  
 DATE: 06/04/2021  
 CAD ID: PFD-0

**PROP. SITE PLAN DOCUMENTS**

**CHASE**

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

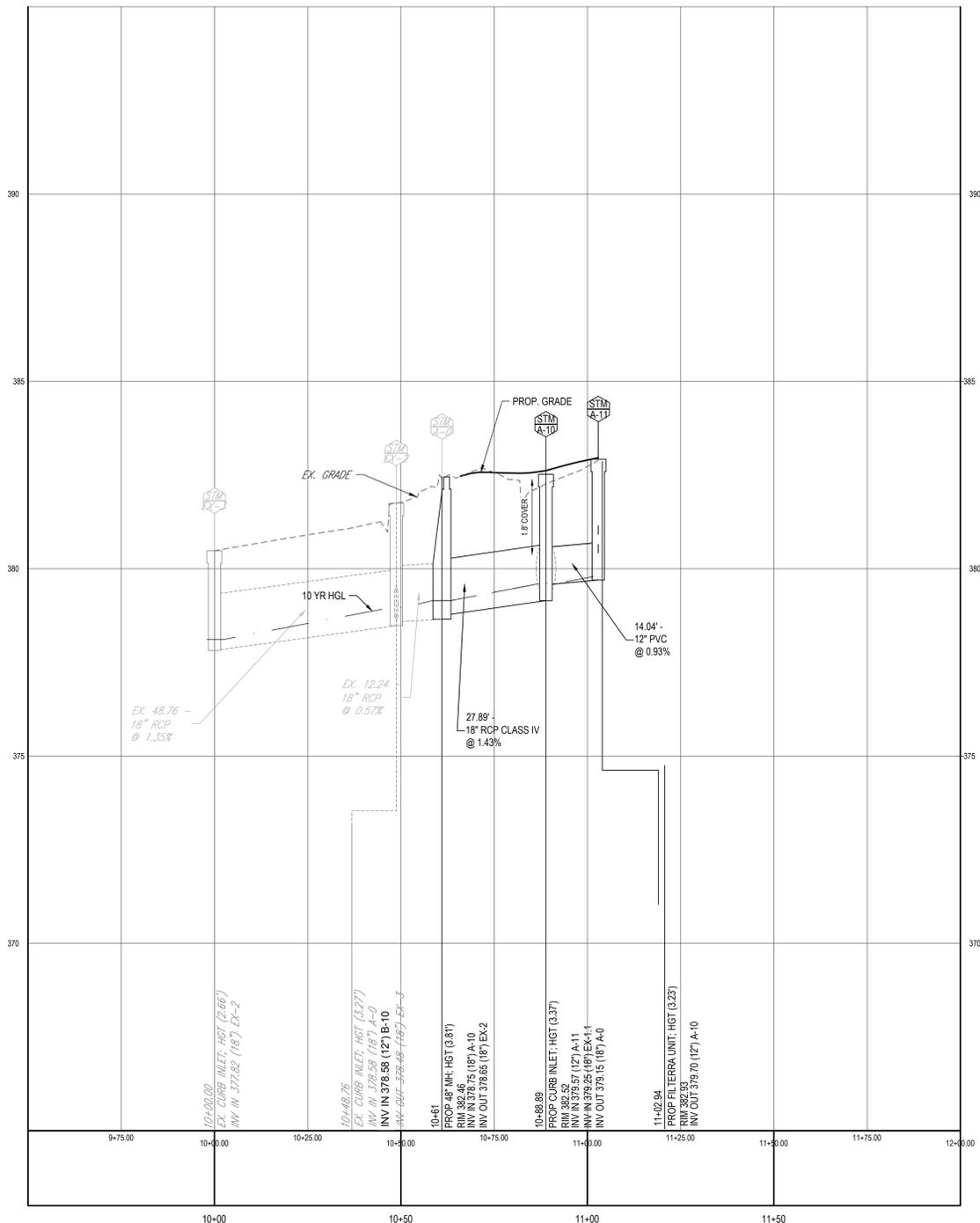
**BOHLER**  
 12825 WORLDGATE DR. SUITE 700  
 HERNDON, VIRGINIA 20170  
 Phone: (703) 709-9500  
 Fax: (703) 709-9501  
 VA@BohlerEng.com



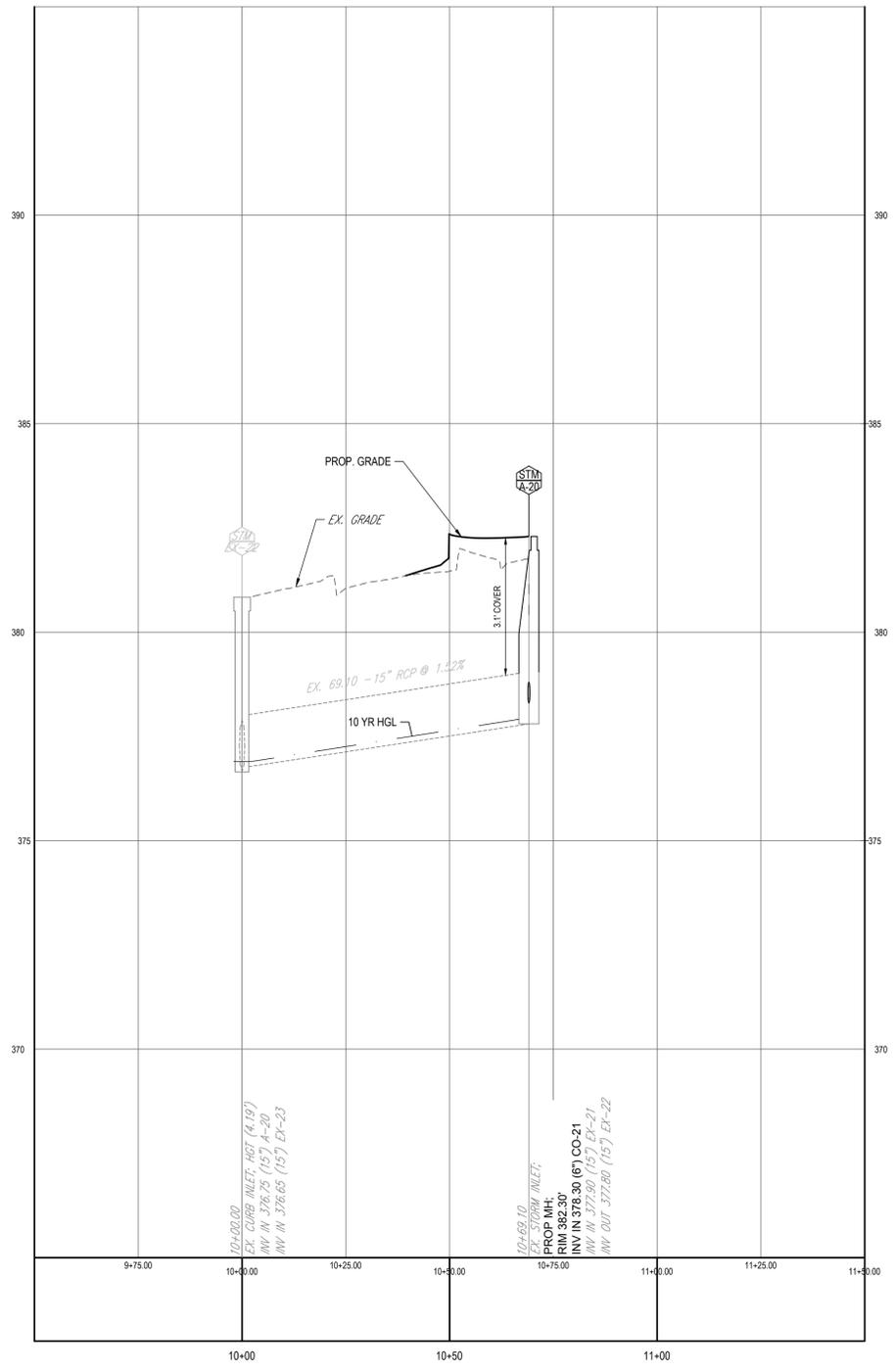
SHEET TITLE:  
**STORM PROFILES**

SHEET NUMBER:  
**C-801**

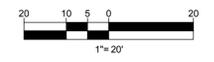
REVISION 1 - 05/20/2021



**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



10 YEAR STORM COMPUTATIONS

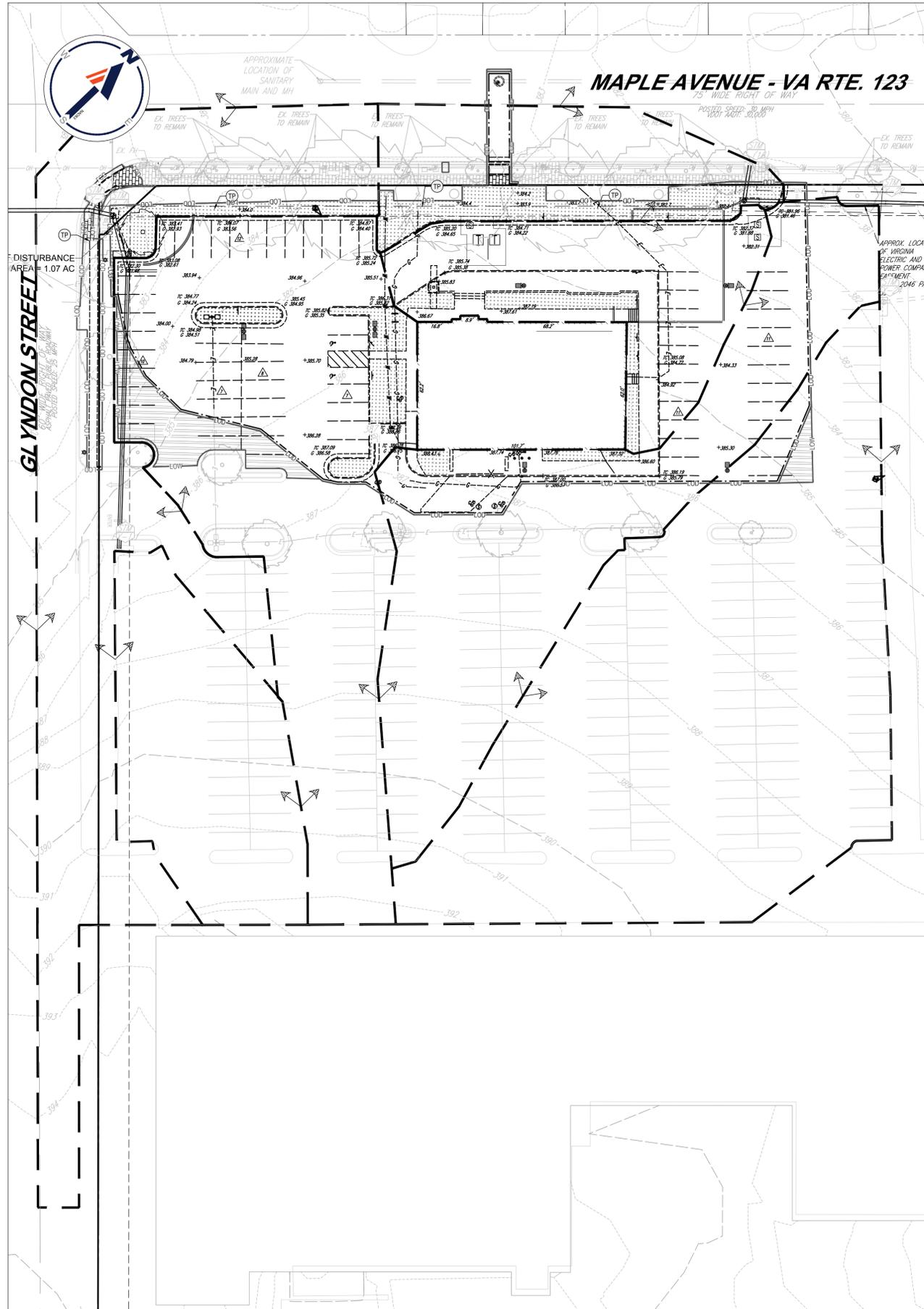
From Point	To Point	Drain Area (acres)	Runoff Coeff. C	CA		Inlet Time (min)	Rainfall Intensity (in/hr)	Q			Invert Elev.		Length (ft)	Slope (%)	Dia. (in)	n	Capacity (cfs)	Velocity (fps)	Flow Time		Q/Vfull	V/Vfull	Vfull	Remarks
				Incr.	Σ			Incr.	Known (cfs)	Σ (cfs)	Upper (ft)	Lower (ft)							Incr.	Σ (min)				
A-11	A-10	0.49	0.90	0.44	0.44	5.00	6.77	2.98	--	2.98	379.70	379.57	14.04	0.93%	12	0.011	4.06	5.61	0.04	5.04	0.73	1.08	5.17	
A-10	A-0	0.47	0.90	0.42	1.11	5.61	6.61	2.78	--	7.34	379.15	378.75	27.89	1.43%	18	0.013	12.61	7.37	0.06	5.67	0.58	1.03	7.14	
A-0	EX-2	--	--	--	1.11	5.67	6.59	--	--	7.32	378.65	378.58	12.24	0.57%	18	0.013	7.97	5.10	0.04	5.71	0.92	1.13	4.51	
EX-2	EX-3	0.26	0.85	0.22	1.69	5.71	6.58	1.45	--	11.13	378.48	377.82	48.76	1.35%	18	0.013	12.25	7.84	0.10	5.81	0.91	1.13	6.93	
EX-3	EX-4	--	--	--	1.69	5.81	6.56	--	--	11.08	377.62	374.94	79.14	3.39%	18	0.013	19.38	11.32	0.12	5.93	0.57	1.03	10.97	
EX-4	EX-5	--	--	--	1.69	5.93	6.52	--	--	11.03	374.84	370.44	151.44	2.91%	18	0.013	17.95	10.63	0.24	6.17	0.61	1.05	10.16	
EX-5	EX-6	--	--	--	1.69	6.17	6.46	--	--	10.92	370.34	370.11	37.00	0.62%	24	0.013	17.88	5.95	0.10	6.27	0.61	1.05	5.69	
EX-6	EX-7	5.45	0.75	4.09	5.78	14.56	4.69	19.19	--	27.12	370.01	369.68	20.35	1.62%	24	0.013	28.89	10.44	0.03	14.59	0.94	1.14	9.19	
EX-7	EX-8	--	--	--	5.78	14.59	4.69	--	--	27.10	369.58	365.34	284.31	1.60%	24	0.013	28.73	10.38	0.42	15.01	0.94	1.14	9.14	
EX-8	EX-9	--	--	--	5.78	15.01	4.62	--	--	26.70	365.24	362.35	173.47	1.67%	30	0.013	53.08	10.81	0.27	15.28	0.50	1.00	10.81	
EX-9	EX-10	--	--	--	5.78	15.28	4.59	--	--	26.56	362.25	362.12	10.10	1.29%	30	0.013	46.66	9.81	0.02	15.30	0.57	1.03	9.51	
EX-10	EX-11	33.50	0.75	25.13	30.91	19.23	4.24	106.46	--	130.95	362.02	353.38	502.76	1.72%	48	0.013	188.81	16.11	0.52	19.75	0.69	1.07	15.03	
EX-11	EW-1	14.14	0.75	10.61	41.52	29.78	3.28	34.80	--	136.18	353.28	348.00	265.55	1.99%	48	0.013	203.09	17.13	0.26	30.04	0.67	1.06	16.16	
B-10	EX-2	0.42	0.85	0.36	0.36	5.00	6.77	2.44	--	2.44	378.88	378.58	49.83	0.60%	12	0.013	2.77	3.97	0.21	5.21	0.88	1.13	3.53	
EX-1.1	A-10	0.28	0.90	0.25	0.25	5.00	6.77	1.69	--	1.69	380.18	379.25	134.96	0.69%	18	0.013	8.74	3.70	0.61	5.61	0.19	0.75	4.95	
EX-21	A-20	0.27	0.90	0.24	0.24	5.00	6.77	1.62	--	1.62	378.07	377.90	17.19	0.99%	15	0.013	6.44	4.36	0.07	5.07	0.25	0.83	5.25	
A-20	EX-22	--	--	--	0.24	5.07	6.75	--	0.46	2.08	377.80	376.75	69.10	1.52%	15	0.013	7.98	5.40	0.21	5.28	0.26	0.83	6.51	
EX-22	EX-23	0.32	0.90	0.29	0.53	5.28	6.70	1.94	--	4.01	376.65	373.57	130.00	2.37%	15	0.013	9.97	7.67	0.28	5.56	0.40	0.94	8.12	
EX-24	EX-25	1.15	0.85	0.98	0.98	5.00	6.77	6.83	--	6.83	377.42	374.47	131.60	2.24%	18	0.013	15.77	8.42	0.26	5.26	0.42	0.94	8.92	
EX-25	EX-26	--	--	--	0.98	5.26	6.70	--	--	6.57	374.37	373.57	33.33	2.40%	18	0.013	16.32	8.72	0.06	5.32	0.40	0.94	9.23	
EX-26	EX-27	--	--	--	1.51	5.56	6.62	--	--	10.46	373.47	369.45	118.71	3.39%	18	0.013	19.38	11.14	0.16	5.74	0.54	1.02	10.97	
EX-27	EX-28	--	--	--	1.51	5.74	6.57	--	--	10.39	369.35	368.35	123.12	0.81%	24	0.013	20.44	6.51	0.32	6.06	0.51	1.00	6.51	
EX-28	EX-29	--	--	--	1.51	6.06	6.49	--	--	10.26	368.25	368.10	21.46	0.70%	30	0.013	34.38	5.99	0.06	6.12	0.30	0.86	7.00	
EX-29	EX-30	--	--	--	1.51	6.12	6.47	--	--	10.24	368.00	367.92	10.90	0.73%	30	0.013	35.23	6.14	0.03	6.15	0.29	0.86	7.18	
EX-30	EX-31	4.03	0.85	3.43	4.94	6.20	6.45	22.13	--	32.33	367.44	366.04	45.62	3.07%	30	0.013	72.05	14.15	0.05	6.25	0.45	0.96	14.68	
EX-31	EX-32	--	--	--	4.94	6.25	6.44	--	--	32.27	365.94	365.46	34.78	1.38%	36	0.013	78.57	10.49	0.06	6.31	0.41	0.94	11.11	
EX-32	EX-33	--	--	--	4.94	6.31	6.42	--	--	32.20	365.36	363.38	145.62	1.36%	36	0.013	77.98	10.41	0.23	6.54	0.41	0.94	11.03	
EX-33	EX-34	--	--	--	4.94	6.54	6.36	--	--	31.90	363.28	362.18	76.58	1.44%	36	0.013	80.15	10.48	0.12	6.66	0.40	0.92	11.34	
EX-34	EX-35	6.67	0.85	5.67	6.66	6.33	35.90	--	--	67.64	362.08	360.37	103.81	1.65%	36	0.013	85.83	13.41	0.13	6.79	0.79	1.10	12.14	
EX-35	EW-2	--	--	--	10.61	6.79	6.30	--	--	67.28	360.27	359.80	28.83	1.63%	36	0.013	85.39	13.34	0.04	6.83	0.79	1.10	12.08	

DOWNSTREAM PIPE INFORMATION USED FOR OUTFALL ANALYSIS PURPOSES ONLY. THESE STRUCTURES ARE EXISTING AND NO PROPOSED WORK WITH THIS PLAN WILL AFFECT INVERTS, RIM ELEVATIONS, PIPE SIZES, AND/OR DRAINAGE AREAS OF THESE STRUCTURES. THIS INFORMATION IS GATHERED FROM A COMBINATION OF TOWN OF VIENNA GIS, FAIRFAX COUNTY GIS, FAIRFAX COUNTY JADE MAPS, FAIRFAX STORMNET MAPPER, AND ENGINEER FIELD VERIFICATION. THIS PIPE INFORMATION WAS NOT VERIFIED BY THE FIELD SURVEY REFERENCED IN THIS PLAN.

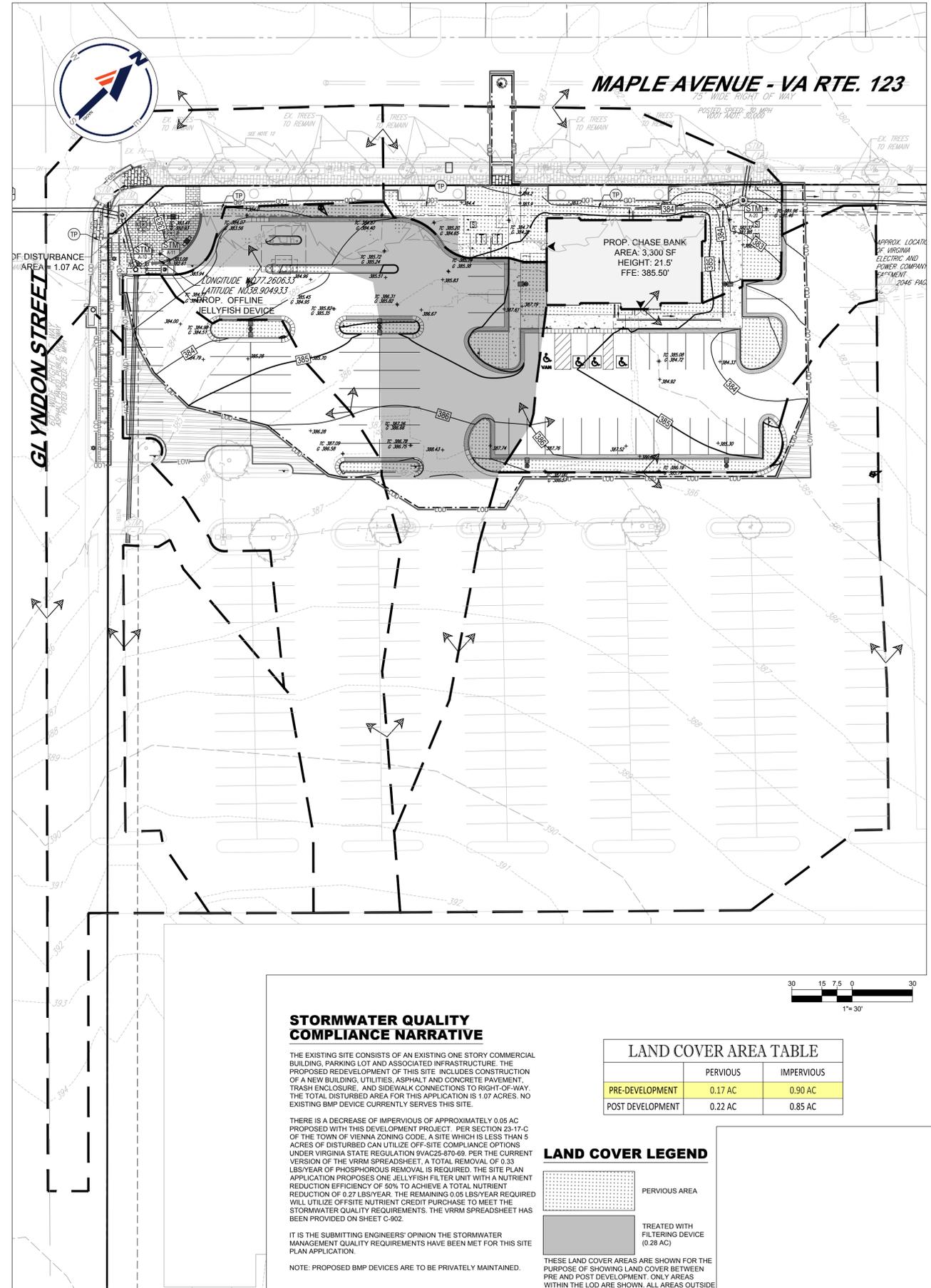
10 YEAR HGL COMPUTATIONS

Structure No.	Outlet WSE	Do (in)	Go	Lo	Sfo (%)	Hf	JUNCTION LOSS													Final H	Inlet WSE	Top / Throat Elev.	Inlet Shaping	Pre-Cast Structure	Junction Loss Reduction	Remarks			
							Vo	Ho	Qi	Vi	Qi - Vi	V1^2/2g	Hi	Angle	K	Hd	Ht	1.3 Ht	0.5 Ht										
EX-11	351.20	48	136.16	265.55	0.90%	2.39	17.13	1.14	130.95	16.11	2109.21	4.03	1.41	--	--	0.00	2.55	3.32	1.66	4.05	355.25	358.70	Yes	--	Yes				
EX-10	355.25	48	130.95	502.76	0.83%	6.77	16.11	1.01	26.56	9.81	260.54	1.50	0.52	76	0.64	0.96	2.49	3.23	1.62	8.39	363.64	365.83	Yes	--	Yes				
EX-9	363.64	30	26.56	10.10	0.42%	0.04	9.81	0.37	26.70	10.81	288.74	1.82	0.64	--	--	0.00	1.01	--	0.50	5.55	364.18	365.46	Yes	--	Yes				
EX-8	364.18	30	26.70	173.47	0.42%	1.06	10.81	0.45	27.10	10.38	281.29	1.67	0.59	13	0.09	0.15	1.19	--	0.59	1.65	365.83	367.96	Yes	--	Yes				
EX-7	365.83	24	27.10	264.31	1.44%	3.79	10.38	0.42	27.12	10.44	283.02	1.69	0.59	7	0.05	0.08	1.09	--	0.54	4.34	370.17	373.44	Yes	--	Yes				
EX-6	370.17	24	27.12	20.35	1.44%	0.29	10.44	0.42	10.92	5.95	65.02	0.55	0.19	86	0.68	0.38	0.99	1.29	0.65	0.94	371.11	373.18	Yes	--	Yes				
EX-5	371.11	24	10.92	37.00	0.23%	0.09	5.95	0.14	11.03	10.63	117.21	1.75	0.61	57	0.53	0.92	1.68	--	0.84	0.92	372.03	374.34	Yes	--	Yes				
EX-4	372.03	18	11.03	151.44	1.10%	2.81	10.63	0.44	11.08	11.32	125.42	1.99	0.70	20	0.16	0.32	1.45	--	0.73	3.53	375.57	378.88	Yes	--	Yes				
EX-3	375.57	18	11.08	79.14	1.11%	2.05	11.32	0.50	11.13	7.84	87.29	0.96	0.33	20	0.16	0.15	0.99	--	0.49	2.55	378.11	381.22	Yes	--	Yes				
EX-2	378.11	18	11.13	48.76	1.12%	0.55	7.84	0.24	7.32	5.10	37.32	0.40	0.14	11	0.07	0.03	0.41	--	0.20	0.75	378.87	381.26	Yes	--	Yes				
A-0	378.87	18	7.32	12.24	0.49%	0.06	5.10	0.10	7.34	7.37	54.07	0.84	0.30	12	0.08	0.07	0.46	--	0.23	0.29	379.16	382.45	Yes	Yes	Yes				
A-10	379.16	18	7.34	27.89	0.49%	0.14	7.37	0.21	2.98	5.61	16.71	0.49	0.17	62	0.56	0.27	0.66	0.65	0.43	0.56	379.72	381.76	Yes	Yes	Yes				
A-11	379.72	12	2.98	14.04	0.50%	0.07	5.61	0.12	--	--	--	--	--	--	--	--	--	--	--	0.12	0.16	0.08	0.15	379.87	382.36	Yes	Yes	Yes	
EX-1.1	379.72	18	1.69	134.96	0.03%	0.46	3.70	0.05	--	--	--	--	--	--	--	--	--	--	--	0.05	0.07	0.03	0.50	380.21	385.88	Yes	--	Yes	
B-10	378.87	12	2.44	49.83	0.47%	0.23	3.97	0.06	--	--	--	--	--	--	--	--	--	--	--	0.06	0.08	0.04	0.27	379.14	381.72	Yes	Yes	Yes	
EX-35	362.20	36	67.28	28.83	1.02%	0.29	13.34	0.69	67.64	13.41	906.78	2.79	0.98	--	--	0.00	1.67	--	0.83	1.13	363.33	366.14	Yes	--	Yes				
EX-34	363.33	36	67.64	103.81	1.03%	1.07	13.41	0.70	31.90	10.48	334.23	1.71	0.60	--	--	0.00	1.30	1.68	0.84	1.91	365.24	366.41	Yes	--	Yes				
EX-33	365.24	36	31.90	76.58	0.23%	0.18	10.48	0.43	32.20	10.41	335.35	1.69	0.59	--	--	0.00	1.02	--	0.51	0.68	365.92	368.00	Yes	--	Yes				
EX-32	365.92	36	32.20	145.62	0.23%	0.34	10.41	0.42	32.27	10.49	338.59	1.71	0.60	--	--	0.00	1.02	--	0.51	0.85	366.77	370.28	Yes	--	Yes				
EX-31	366.77	36	32.27	34.78	0.23%	0.08	10.49	0.43	32.33	14.15	457.44	3.11	1.09	--	--	0.00	1.52	--	0.76	0.84	367.61	370.81	Yes	--	Yes				
EX-30	367.61	30	32.33	45.62	0.62%	0.28	14.15	0.78	10.22	7.34	75.04	0.84	0.29	--	--	0.00	1.07	1.39											

**PRE DEVELOPMENT**



**POST DEVELOPMENT**



**STORMWATER QUALITY COMPLIANCE NARRATIVE**

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

THERE IS A DECREASE OF IMPERVIOUS OF APPROXIMATELY 0.05 AC PROPOSED WITH THIS DEVELOPMENT PROJECT. PER SECTION 23-17-C OF THE TOWN OF VIENNA ZONING CODE, A SITE WHICH IS LESS THAN 5 ACRES OF DISTURBED CAN UTILIZE OFF-SITE COMPLIANCE OPTIONS UNDER VIRGINIA STATE REGULATION 9VAC25-870-89. PER THE CURRENT VERSION OF THE VRRM SPREADSHEET, A TOTAL REMOVAL OF 0.33 LBS/YEAR OF PHOSPHOROUS REMOVAL IS REQUIRED. THE SITE PLAN APPLICATION PROPOSES ONE JELLYFISH FILTER UNIT WITH A NUTRIENT REDUCTION EFFICIENCY OF 50% TO ACHIEVE A TOTAL NUTRIENT REDUCTION OF 0.27 LBS/YEAR. THE REMAINING 0.05 LBS/YEAR REQUIRED WILL UTILIZE OFF-SITE NUTRIENT CREDIT PURCHASE TO MEET THE STORMWATER QUALITY REQUIREMENTS. THE VRRM SPREADSHEET HAS BEEN PROVIDED ON SHEET C-902.

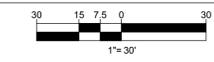
IT IS THE SUBMITTING ENGINEERS' OPINION THE STORMWATER MANAGEMENT QUALITY REQUIREMENTS HAVE BEEN MET FOR THIS SITE PLAN APPLICATION.

NOTE: PROPOSED BMP DEVICES ARE TO BE PRIVATELY MAINTAINED.

LAND COVER AREA TABLE		
	PERVIOUS	IMPERVIOUS
PRE-DEVELOPMENT	0.17 AC	0.90 AC
POST DEVELOPMENT	0.22 AC	0.85 AC

**LAND COVER LEGEND**

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



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

**REVISIONS**

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

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

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



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

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

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

SHEET TITLE:  
**STORMWATER QUALITY AND COMPLIANCE**

SHEET NUMBER:  
**C-901**

REVISION 1 - 05/20/2021

Project Name: Chase Bank Vienna  
 Date: 8/26/2020  
 Linear Development Project? No

CLEAR ALL  
 (Ctrl+Shift+R)

data input cells  
 constant values  
 calculation cells  
 final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area (acres) → 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

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

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed forest/open space					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.17	0.17
Impervious Cover (acres)				0.90	0.90
					1.07

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested					0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.22	0.22
Impervious Cover (acres)				0.85	0.85
Area Check	OK.	OK.	OK.	OK.	1.07

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (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

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre	Listed	Adjusted <sup>1</sup>
Pre-ReDevelopment		
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

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)	Post-ReDevelopment	Post-Development New Impervious
Post ReDev. & New Impervious		
Forest/Open Space Cover (acres)	0.00	
Weighted Rv(forest)	0.00	
% Forest	0%	
Managed Turf Cover (acres)	0.22	
Weighted Rv (turf)	0.25	
% Managed Turf	21%	
Impervious Cover (acres)	0.85	
Rv(impervious)	0.95	
% Impervious	79%	
Final Site Area (acres)	1.07	
Final Post Dev Site Rv	0.81	
ReDev Site Rv	0.81	
New Impervious Cover (acres)		0.00
Rv(impervious)		--

Treatment Volume and Nutrient Load

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	2.05
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	1.91	1.91
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		0.44

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.0719	0.0719	Post-Development Treatment Volume (acre-ft)	--
Final Post-Development Treatment Volume (cubic feet)	3,131	3,131	Post-Development Treatment Volume (cubic feet)	--
Final Post-Development TP Load (lb/yr)	1.97	1.97	Post-Development TP Load (lb/yr)	--
Final Post-Development TP Load per acre (lb/acre/yr)	1.84	1.84	Post-Development TP Load per acre (lb/acre/yr)	
Max. Reduction Required (Below Pre-Development Load)		20%		

TP Load Reduction Required for Redeveloped Area (lb/yr)	0.33	TP Load Reduction Required for New Impervious Area (lb/yr)	0
---	------	--	---

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr) 0.33

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	14.64	Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/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
Total					1.07	

Stormwater Best Management Practices (RR = Runoff Reduction)

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft <sup>3</sup> )	Runoff Reduction (ft <sup>3</sup> )	Remaining Runoff Volume (ft <sup>3</sup> )	Total BMP Treatment Volume (ft <sup>3</sup> )	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	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	

Site Results (Water Quality Compliance)

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 (ft<sup>3</sup>) 3,131

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 <sup>3</sup> )	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 Informational Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	14.07
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	14.07



REVISIONS

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



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

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



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



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

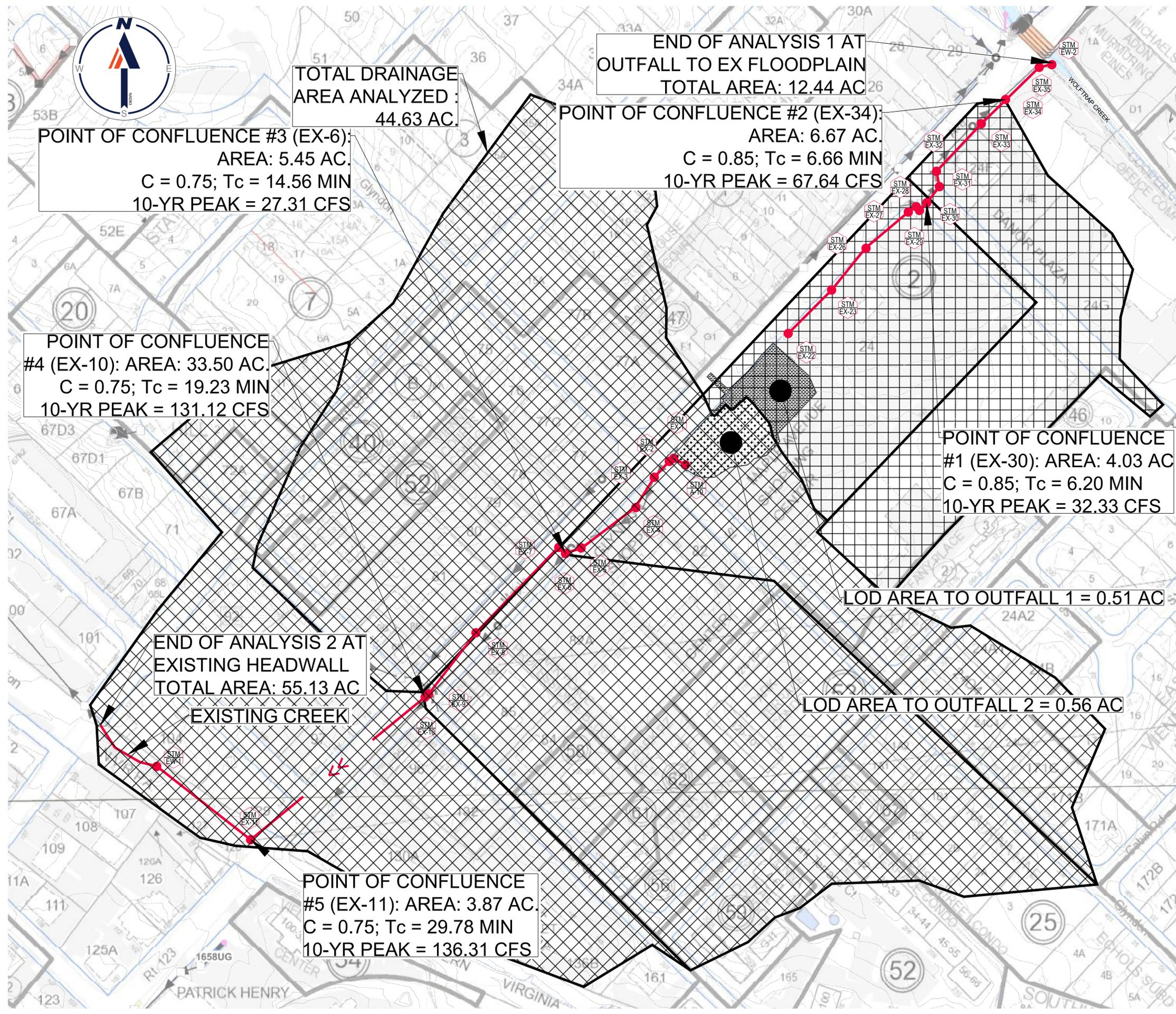


SHEET TITLE:

**VRRM SPREADSHEET**

SHEET NUMBER:  
**C-902**

REVISION 1 - 05/20/2021



**STORMWATER PLAN NOTES:**

THE STORMWATER MAPS, STORM STRUCTURE INFORMATION, AND CONTOURS SHOWN ON THIS PLAN ARE GATHERED FROM TOWN OF VIENNA AND FAIRFAX COUNTY GIS, STORMWATER MANAGEMENT MAPS, AND FAIRFAX COUNTY STORMWATER FIELD MAP. STORM STRUCTURES DOWNSTREAM OF THE PROJECT SITE ARE NOT FIELD VERIFIED BY THE SURVEY REFERENCED IN THIS PLAN SET.

**QUANTITY COMPLIANCE NARRATIVE**

THE EXISTING SITE CONSISTS OF AN EXISTING BUILDING, PARKING, AND ASSOCIATED INFRASTRUCTURE. THE TOTAL LIMITS OF DISTURBANCE (LOD) ASSOCIATED WITH THIS PROJECT IS 1.06 AC. WITHIN THE LOD, THE EXISTING CONDITION CONSISTS OF 0.17 ACRES ARE MANAGED TURF AND 0.89 ACRES IMPERVIOUS SURFACE. THE SITE CURRENTLY OUTFALLS TO TWO SEPARATE STORM SYSTEMS. ONE OUTFALL IS TO THE NORTHEAST AND ONE OUTFALL IS TO THE SOUTHWEST. FOR THE PURPOSES OF THIS PLAN, THE NORTHEASTERN OUTFALL PATH WILL BE REFERRED TO AS "OUTFALL 1" AND THE SOUTHWESTERN OUTFALL WILL BE REFERRED TO AS "OUTFALL 2". BOTH OUTFALLS ARE PIPED DIRECTLY INTO EXISTING STORM DRAINAGE STRUCTURES AT THE LOCATION OF THE PROJECT SITE AND ULTIMATELY OUTFALL INTO EITHER EXISTING STORM DRAINAGE STRUCTURES OR AN EXISTING WATER BODY.

THE PROPOSED SITE CONDITIONS CONSISTS OF CONSTRUCTION OF A PROPOSED BANK BUILDING, ASPHALT AND CONCRETE PAVEMENT, TRASH ENCLOSURE, ATM DRIVE-THRU STATIONS, AND ASSOCIATED UTILITIES AND INFRASTRUCTURE. THERE IS A DECREASE OF APPROXIMATELY 0.05 AC OF IMPERVIOUS AREA WITH THIS APPLICATION. THE PROPOSED DEVELOPMENT WILL UTILIZE THE SAME OUTFALLS AS THE EXISTING DEVELOPMENT AND OUTFALL DIRECTLY INTO AN EXISTING PIPE CONVEYANCE SYSTEM. THE DECREASE IN IMPERVIOUS AREA REDUCES THE PRE TO POST RUNOFF VOLUME AND THE SITE DOES NOT NEGATIVELY EFFECT THE CAPACITY OF THE PIPES DOWNSTREAM TO THE LIMITS OF ANALYSIS.

TO MEET THE CHANNEL PROTECTION REQUIREMENTS PER SECTION 9VAC25-870-66.C.1 THE POST DEVELOPMENT FLOW FOR THE 10 YEAR STORM EVENT IS REQUIRED TO BE LESS THAN THE 2 YEAR PRE DEVELOPMENT FLOW AND THE RUNOFF IS NON ERODIVE. THE RUNOFF FLOWS THROUGH CONCRETE PIPES TO THE LIMITS OF ANALYSIS THUS THE FLOW IS NON ERODIVE. THE DECREASE IN FLOW FROM PRE TO POST DEVELOPMENT FOR THE SITE IS APPROXIMATELY 0.15 CFS FOR THE 2 YEAR STORM. AS SHOWN ON THE HYDROCAD MODEL ON SHEET C-905 THROUGH C-907.

TO MEET THE FLOOD PROTECTION REQUIREMENTS PER SECTION 9VAC25-870-66.C.1 THE POST DEVELOPMENT FLOW FOR THE 10 YEAR STORM EVENT RUNOFF FOR POST DEVELOPMENT MUST BE LESS THAN THE PRE DEVELOPMENT RUNOFF RATE. AS SHOWN BY THE HYDROCAD MODEL ON SHEET C-905 THROUGH C-907, THE RUNOFF FOR THE 10 YEAR STORM EVENT IS REDUCED BY 0.15 CFS. ADDITIONAL STORM COMPUTATIONS FOR THE 10 YEAR STORM EVENT ARE SHOWN ON SHEET C-802.

**ADEQUATE OUTFALL**

THE OUTFALL STUDY AREA CONSISTS OF A TOTAL OF 67.57. OUTFALL 1 HAS A TOTAL CONTRIBUTING AREA OF 12.44 ACRES BEFORE MEETING AN EXISTING MAPPED FLOODPLAIN (WOLFTRAP CREEK) WHICH SATISFIES 9VAC25-870-66.C.3.C OF THE VIRGINIA STORMWATER CODE. OUTFALL 2 HAS A TOTAL CONTRIBUTING AREA OF 55.13 ACRES WHICH IS GREATER THAN 100 TIMES THE CONTRIBUTING AREA TO THIS OUTFALL OF 0.56 ACRES. THIS SATISFIES SECTION 9VAC25-870-66.B.4.A. APPROXIMATE TIME OF CONCENTRATION CALCULATIONS AND C-FACTORS WERE UTILIZED FOR MULTIPLE POINT OF CONFLUENCES ALONG EACH OUTFALL PATH FOR EACH OF THE ANALYZED OUTFALL PATH. SEE SHEET C-802 FOR MORE COMPUTATION INFORMATION.

FOR OUTFALL 1, THE FLOW BEGINS AT THE SUBJECT SITE AND TRAVELS THROUGH A SERIES OF CONCRETE STORM PIPES NORTHEAST TO THE POINT OF CONFLUENCE #1. THE CONTRIBUTING FLOW FROM POINT OF CONFLUENCE #1 IS 32.33 CFS.

FROM POINT OF CONFLUENCE #1, THE FLOW CONTINUES NORTHEAST THROUGH A SERIES OF CONCRETE STORM PIPES UNTIL REACHING POINT OF CONFLUENCE #2 WHICH RESULTS IN A TOTAL OF 67.64 CFS.

AFTER POINT OF CONFLUENCE #2, THE PIPE RUN REACHES THE OUTFALL AND LIMIT OF ANALYSIS 1 AT THE EXISTING FLOODPLAIN.

FOR OUTFALL 2, THE FLOW BEGINS AT THE SUBJECT SITE AND TRAVELS THROUGH A SERIES OF CONCRETE STORM PIPES SOUTHWEST TO THE POINT OF CONFLUENCE #3. THE FLOW AT POINT OF CONFLUENCE #3 IS 27.31 CFS.

FROM POINT OF CONFLUENCE #3, THE FLOW CONTINUES SOUTHWEST THROUGH A SERIES OF CONCRETE STORM PIPES UNTIL REACHING POINT OF CONFLUENCE #4 WHICH RESULTS IN A TOTAL OF 131.12 CFS.

FROM POINT OF CONFLUENCE #4, THE FLOW CONTINUES SOUTHWEST THROUGH A SERIES OF CONCRETE STORM PIPES UNTIL REACHING POINT OF CONFLUENCE #5 WHICH RESULTS IN A TOTAL OF 136.31 CFS.

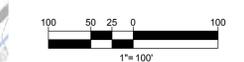
AFTER POINT OF CONFLUENCE #5, THE PIPE RUN CONTINUES NORTHWEST AND BRIEFLY ENTERS AN EXISTING SWALE UNTIL IT ULTIMATELY REACHES THE LIMIT OF ANALYSIS 2 AT AN EXISTING HEADWALL.

PIPE AND INLET COMPUTATIONS FOR THE INFRASTRUCTURE PROPOSED ON THE SUBJECT SITE AND THE LIMITS OF OUTFALL ANALYSIS ARE PROVIDED ON SHEET C-802. AS ALL FLOWS ARE WITHIN THE PIPE CAPACITY THROUGHOUT THE LIMITS OF ANALYSIS, NOW QUANTITY CONTROL IS REQUIRED ON-SITE.

IT IS THE SUBMITTING ENGINEER'S OPINION THAT THE STORMWATER QUANTITY REQUIREMENT ARE MET FOR THIS SITE.

**LEGEND**

-  TOTAL AREA TO END OF ANALYSIS 1: 12.44 AC
-  TOTAL AREA TO END OF ANALYSIS 2: 55.13 AC
-  LOD AREA TO END OF ANALYSIS 1: 0.51 AC
-  LOD AREA TO END OF ANALYSIS 2: 0.56 AC




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

**REVISIONS**

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



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Know what's below.  
Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

**NOT APPROVED FOR CONSTRUCTION**

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

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

**PROP. SITE PLAN DOCUMENTS**  
FOR

**CHASE**

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

**BOHLER**

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



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

SHEET TITLE:  
**ADEQUATE OUTFALL ANALYSIS**

SHEET NUMBER:  
**C-903**

REVISION 1 - 05/20/2021

Jun 04, 2021 11:20:52 AM H:\2020\2020\DRAWINGS\PLAN SETS\202008-SWP-1-LAYOUT C-904 STORMWATER DETAILS

### JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD SURFACE INLET STYLE WITH TRENCH GRATE AND COVER IS SHOWN. ALTERNATE CURB INLET OR PIPE INLET OPTIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD.

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HIGH-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.069	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	0.89	0.67	0.45	0.25
OUTLET INVERT TO RIM (MIN) (B)	3'-4"	3'-4"	3'-4"	3'-4"

**PLAN VIEW**  
(TOP SLAB NOT SHOWN FOR CLARITY)

**ELEVATION VIEW**

**24\"**  
**TRENCH COVER**  
N.T.S.

**24\"**  
**TRENCH GRATE**  
N.T.S.

**SITE SPECIFIC DATA REQUIREMENTS**

STRUCTURE ID	
WATER QUALITY FLOW RATE (cfs)	
PEAK FLOW RATE (cfs)	
RETURN PERIOD OF PEAK FLOW (yrs)	
# OF CARTRIDGES REQUIRED (HF / DD)	
CARTRIDGE LENGTH	

PIPE DATA	I.E.	MATL.	DIA.	SLOPE %	HGL.
INLET #1					
INLET #2					
OUTLET					

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION		
ANTI-FLOTATION BALLAST		
	WIDTH	HEIGHT

NOTES/SPECIAL REQUIREMENTS:  
\* PER ENGINEER OF RECORD

**GENERAL NOTES:**

- CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
- FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. [www.contechES.com](http://www.contechES.com)
- 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.
- STRUCTURE SHALL MEET AASHTO H-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 M316 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
- STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-897, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
- OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
- THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE (WHERE APPLICABLE) AT EQUAL OR GREATER SLOPE.
- NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

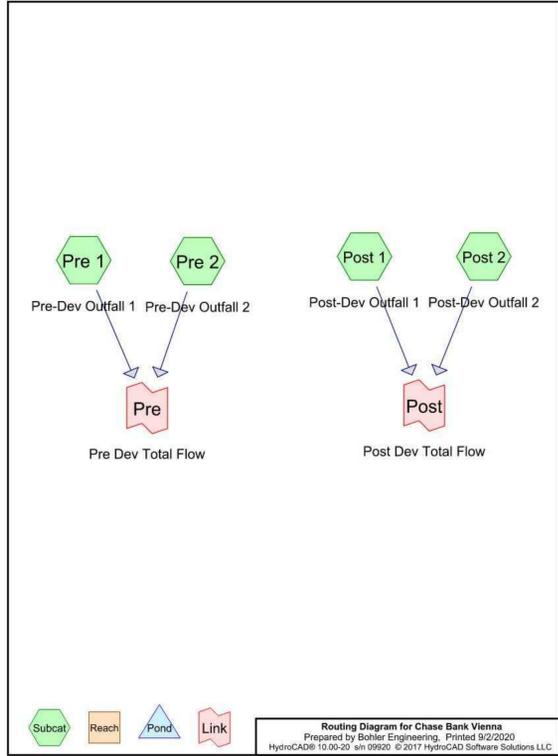
**INSTALLATION NOTES:**

- ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
- CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
- 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.

**Jellyfish® Filter**

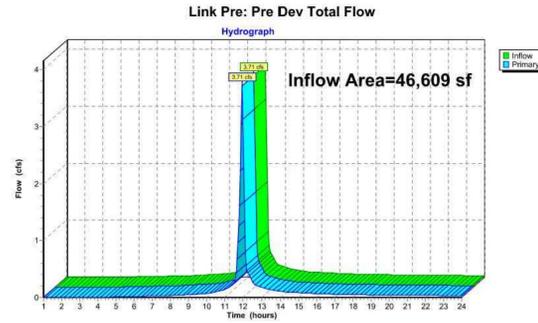
THIS PRODUCT MAY BE PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENT NOS. 8,252,726; 8,274,818; 8,103,180; 8,108,181; 8,108,182; 8,108,183; 8,108,184; 8,108,185; 8,108,186; 8,108,187; 8,108,188; 8,108,189; 8,108,190; 8,108,191; 8,108,192; 8,108,193; 8,108,194; 8,108,195; 8,108,196; 8,108,197; 8,108,198; 8,108,199; 8,108,200; 8,108,201; 8,108,202; 8,108,203; 8,108,204; 8,108,205; 8,108,206; 8,108,207; 8,108,208; 8,108,209; 8,108,210; 8,108,211; 8,108,212; 8,108,213; 8,108,214; 8,108,215; 8,108,216; 8,108,217; 8,108,218; 8,108,219; 8,108,220; 8,108,221; 8,108,222; 8,108,223; 8,108,224; 8,108,225; 8,108,226; 8,108,227; 8,108,228; 8,108,229; 8,108,230; 8,108,231; 8,108,232; 8,108,233; 8,108,234; 8,108,235; 8,108,236; 8,108,237; 8,108,238; 8,108,239; 8,108,240; 8,108,241; 8,108,242; 8,108,243; 8,108,244; 8,108,245; 8,108,246; 8,108,247; 8,108,248; 8,108,249; 8,108,250; 8,108,251; 8,108,252; 8,108,253; 8,108,254; 8,108,255; 8,108,256; 8,108,257; 8,108,258; 8,108,259; 8,108,260; 8,108,261; 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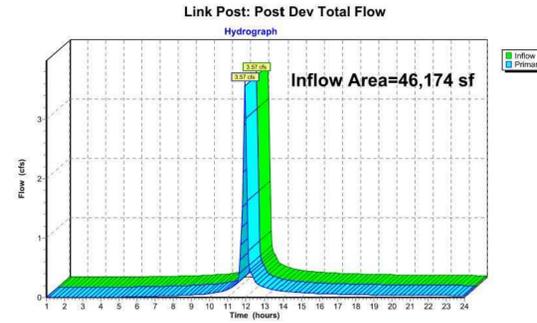
**Chase Bank Vienna** Type II 24-hr 1-Year Rainfall=2.62"  
Prepared by Bohler Engineering Printed 9/2/2020  
HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 7

**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



**Chase Bank Vienna** Type II 24-hr 1-Year Rainfall=2.62"  
Prepared by Bohler Engineering Printed 9/2/2020  
HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 6

**Summary for Link Post: Post Dev Total Flow**  
Inflow Area = 46,174 sf, 79.25% Impervious, Inflow Depth > 1.99" for 1-Year event  
Inflow = 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

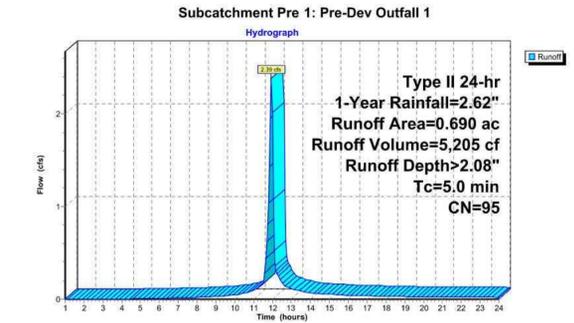


**Chase Bank Vienna** Type II 24-hr 1-Year Rainfall=2.62"  
Prepared by Bohler Engineering Printed 9/2/2020  
HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 4

**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	15.94% Pervious Area
0.580	84.06	84.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User defined

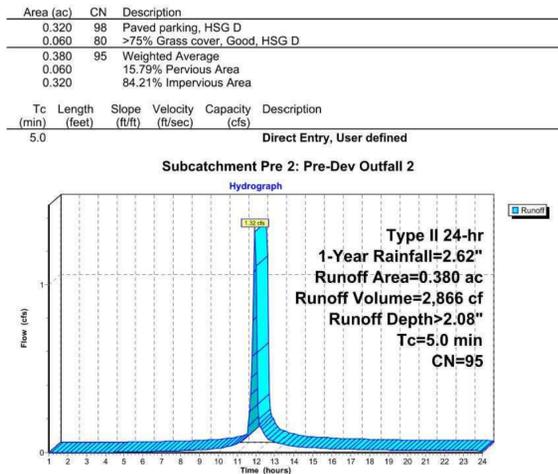


**Chase Bank Vienna** Type II 24-hr 1-Year Rainfall=2.62"  
Prepared by Bohler Engineering Printed 9/2/2020  
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**Summary for Subcatchment Pre 2: Pre-Dev Outfall 2**  
[49] Hint: Tc<2dt may require smaller dt  
Runoff = 1.32 cfs @ 11.95 hrs, Volume= 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"

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	15.79% Pervious Area
0.320	84.21	84.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User defined

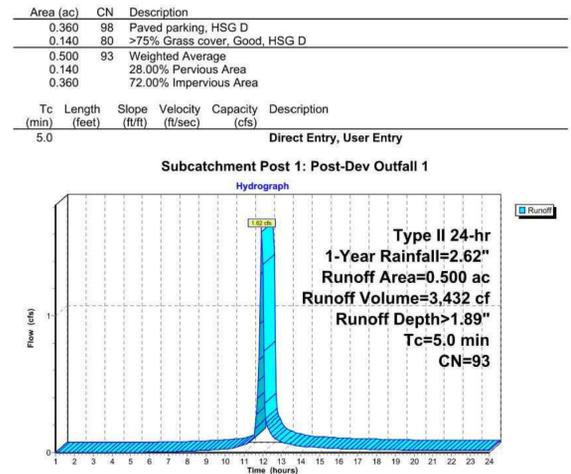


**Chase Bank Vienna** Type II 24-hr 1-Year Rainfall=2.62"  
Prepared by Bohler Engineering Printed 9/2/2020  
HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 2

**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
0.140	28.00	28.00% Pervious Area
0.360	72.00	72.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User Entry

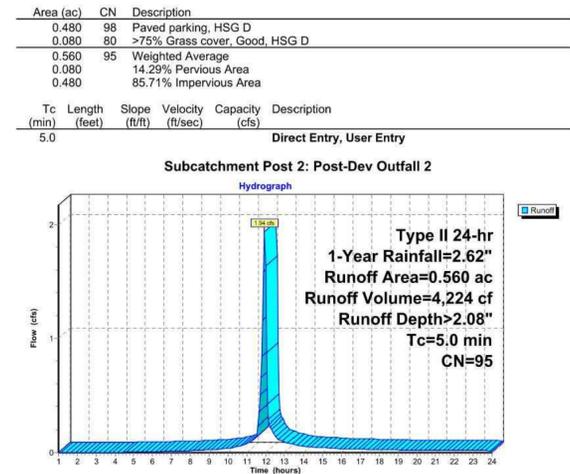


**Chase Bank Vienna** Type II 24-hr 1-Year Rainfall=2.62"  
Prepared by Bohler Engineering Printed 9/2/2020  
HydroCAD® 10.00-20 s/n 09920 © 2017 HydroCAD Software Solutions LLC Page 3

**Summary for Subcatchment Post 2: Post-Dev Outfall 2**  
[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
0.080	14.29	14.29% Pervious Area
0.480	85.71	85.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User Entry



**REVISIONS**

REV	DATE	COMMENT	DRAWN BY
1	05/20/21	REV PER TOWN COMMENTS	SC TD



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PROJECT No.: S202089  
DRAWN BY: SC  
CHECKED BY: CM  
DATE: 06/04/2021  
CAD ID: SWP-1

PROJECT:  
**PROP. SITE PLAN DOCUMENTS**  
FOR  
**CHASE**  
PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU  
315 MAPLE AVE E  
TOWN OF VIENNA, VIRGINIA  
TAX MAP #: 0382-02-0024

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



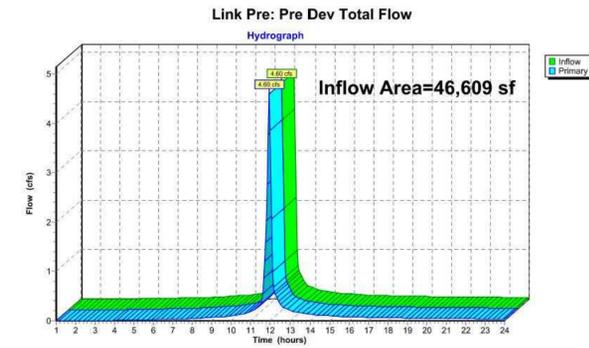
SHEET TITLE:  
**STORMWATER ROUTINGS**  
SHEET NUMBER:  
**C-906**  
REVISION 1 - 05/20/2021

Jun 04, 2021 11:20:52:089/RAWINGS/PLAN SETS/S202089-SWP-1-LAYOUT C-906 STORMWATER ROUTINGS SC

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

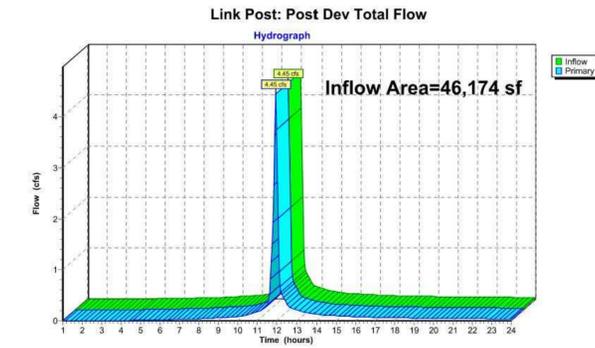
Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs



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



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"

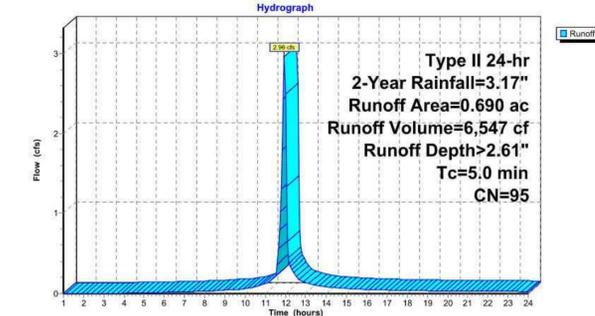
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 2-Year Rainfall=3.17"

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 (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User defined

Subcatchment Pre 1: Pre-Dev Outfall 1



Summary for Subcatchment Pre 2: Pre-Dev Outfall 2

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

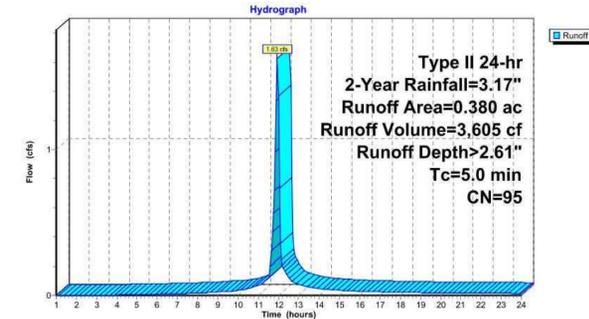
Runoff = 1.63 cfs @ 11.95 hrs, Volume= 3,605 cf, Depth> 2.61"

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 (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User defined

Subcatchment Pre 2: Pre-Dev Outfall 2



Summary for Subcatchment Post 1: Post-Dev Outfall 1

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

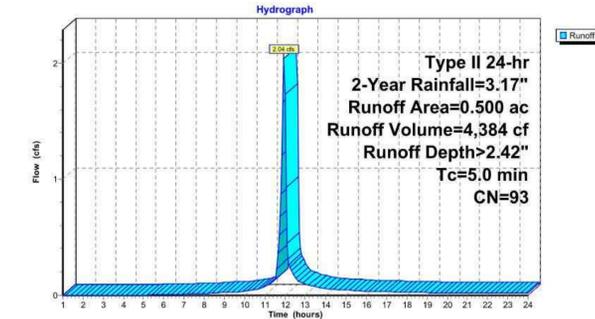
Runoff = 2.04 cfs @ 11.95 hrs, Volume= 4,384 cf, Depth> 2.42"

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 (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User Entry

Subcatchment Post 1: Post-Dev Outfall 1



Summary for Subcatchment Post 2: Post-Dev Outfall 2

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

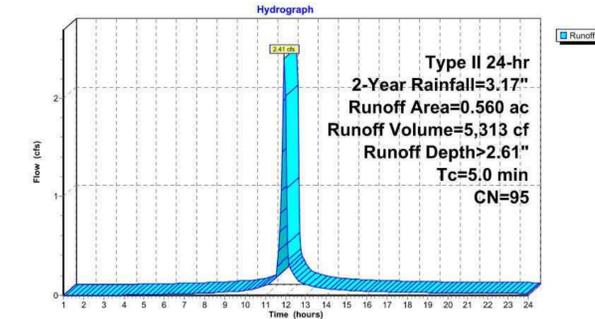
Runoff = 2.41 cfs @ 11.95 hrs, Volume= 5,313 cf, Depth> 2.61"

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 (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User Entry

Subcatchment Post 2: Post-Dev Outfall 2



**REVISIONS**

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



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PROJECT: S202089  
 DRAWN BY: SC  
 CHECKED BY: CM  
 DATE: 06/04/2021  
 CAD ID: SWP-0

**PROP. SITE PLAN DOCUMENTS**

FOR

**CHASE**

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

**BOHLER**

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



SHEET TITLE:  
**STORMWATER ROUTINGS**

SHEET NUMBER:  
**C-907**

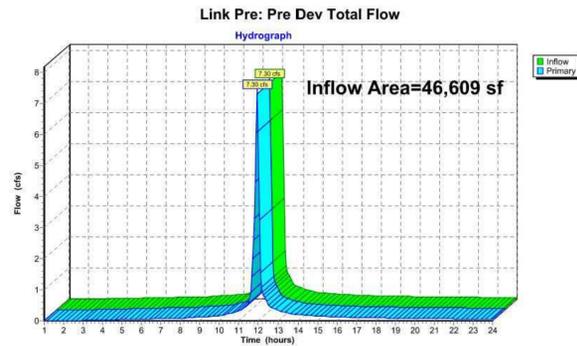
REVISION 1 - 05/20/2021

Jun 04, 2021 11:05:52 AM H:\DRAWINGS\PLAN SETS\S202089-SWP-1-LAYOUT-C-607-STORMWATER-ROUTINGS

Summary for Link Pre: Pre Dev Total Flow

Inflow Area = 46,609 sf, 84.11% Impervious, Inflow Depth > 4.29" for 10-Year event  
 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

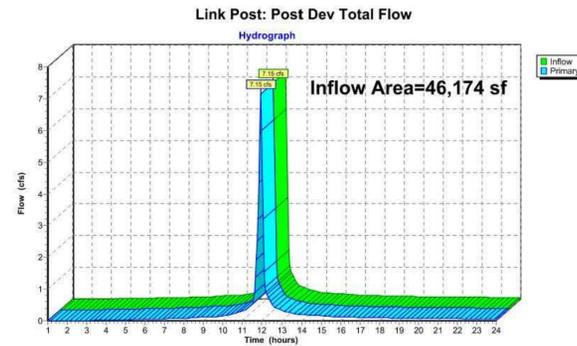
Primary outflow = Inflow, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs



Summary for Link Post: Post Dev Total Flow

Inflow Area = 46,174 sf, 79.25% Impervious, Inflow Depth > 4.18" for 10-Year event  
 Inflow = 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



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"

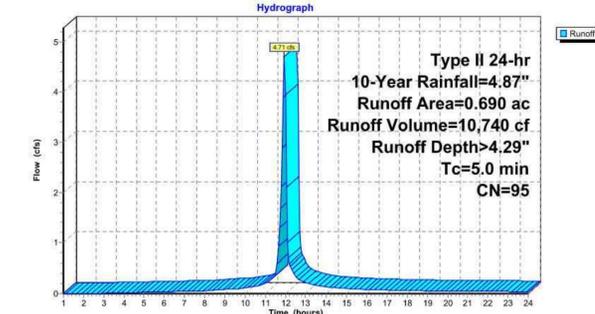
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 1.00-24.00 hrs, dt= 0.05 hrs  
 Type II 24-hr 10-Year Rainfall=4.87"

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
0.110		15.94% Pervious Area
0.580		84.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User defined

Subcatchment Pre 1: Pre-Dev Outfall 1



Summary for Subcatchment Pre 2: Pre-Dev Outfall 2

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

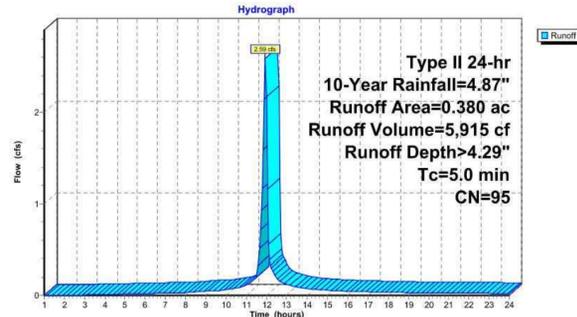
Runoff = 2.59 cfs @ 11.95 hrs, Volume= 5,915 cf, Depth> 4.29"

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
0.060		15.79% Pervious Area
0.320		84.21% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User defined

Subcatchment Pre 2: Pre-Dev Outfall 2



Summary for Subcatchment Post 1: Post-Dev Outfall 1

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

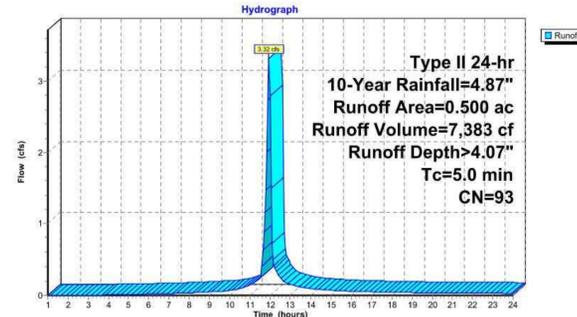
Runoff = 3.32 cfs @ 11.95 hrs, Volume= 7,383 cf, Depth> 4.07"

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
0.140		28.00% Pervious Area
0.360		72.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User Entry

Subcatchment Post 1: Post-Dev Outfall 1



Summary for Subcatchment Post 2: Post-Dev Outfall 2

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

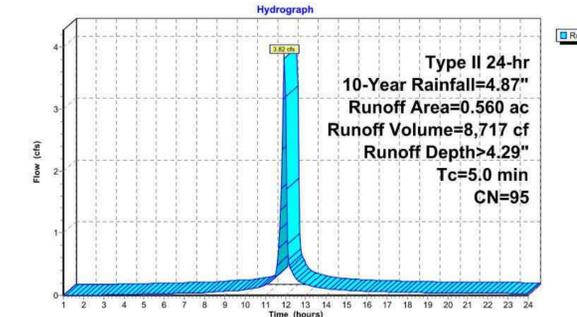
Runoff = 3.82 cfs @ 11.95 hrs, Volume= 8,717 cf, Depth> 4.29"

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
0.480		85.71% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0					Direct Entry, User Entry

Subcatchment Post 2: Post-Dev Outfall 2



**REVISIONS**

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



NOT APPROVED FOR CONSTRUCTION

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

FOR **PROP. SITE PLAN DOCUMENTS**

CHASE

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

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

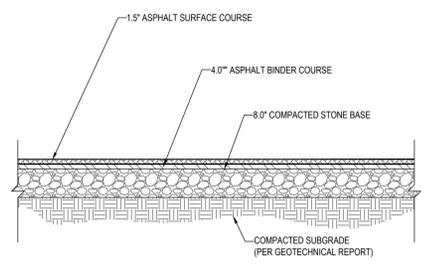


SHEET TITLE:  
**STORMWATER ROUTINGS**

SHEET NUMBER:  
**C-908**

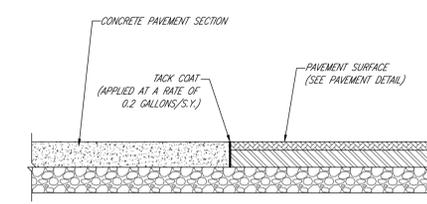
REVISION 1 - 05/20/2021

Jun 04, 2021 H:\2020\2020\DRAWINGS\PLAN SETS\S202089-SWP-1-LAYOUT-C-908 STORMWATER ROUTINGS SC

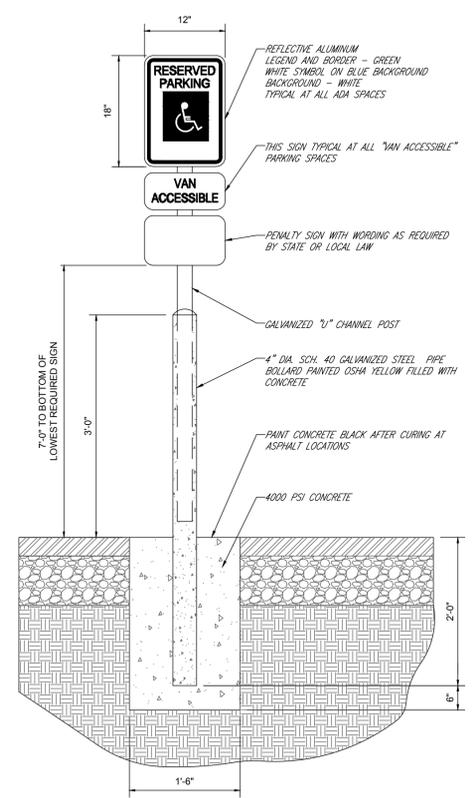


**NOTE:**  
1. SECTION SHOWN IS BASED ON ASSUMED VALUES. FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

**HEAVY DUTY ASPHALT PAVEMENT SECTION**  
NOT TO SCALE

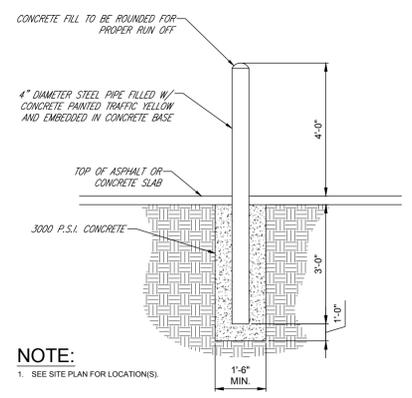


**CONCRETE-TO-ASPHALT DETAIL**  
NOT TO SCALE



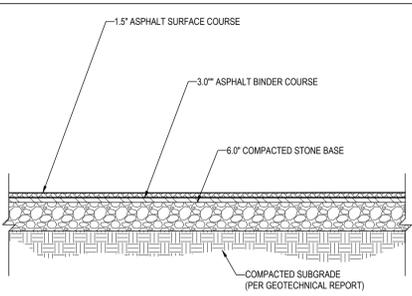
**NOTE:**  
ONE AT EACH ADA SPACE. WHERE ADA SPACES FACE EACH OTHER WITHOUT WALKWAY, THERE SHALL BE ONE POST WITH SIGNS MOUNTED BOTH SIDES

**BOLLARD MOUNTED ADA PARKING SIGN DETAIL**  
NOT TO SCALE



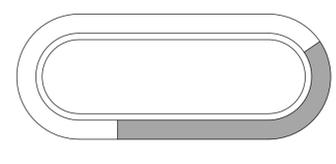
**NOTE:**  
1. SEE SITE PLAN FOR LOCATIONS.

**BOLLARD DETAIL**  
NOT TO SCALE

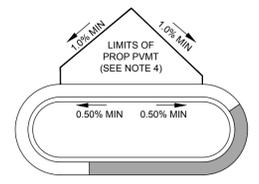


**NOTE:**  
1. SECTION SHOWN IS BASED ON ASSUMED VALUES. FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

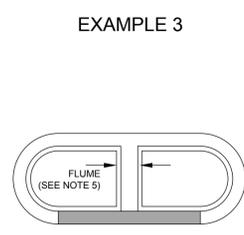
**STANDARD DUTY ASPHALT PAVEMENT SECTION**  
NOT TO SCALE



**EXAMPLE ONE**  
NOT TO SCALE

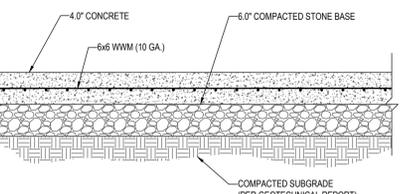


**EXAMPLE TWO**  
NOT TO SCALE



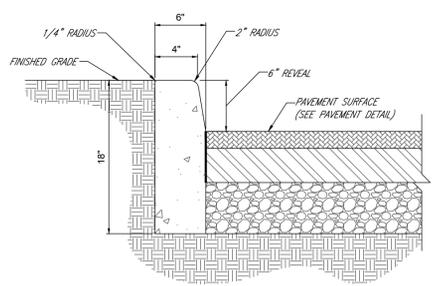
**EXAMPLE THREE**  
NOT TO SCALE

**NOTES:**  
1. CONTRACTOR TO INSTALL CURBS AND GUTTER AT ELEVATION OF EXISTING PAVEMENT (ELEVATION AT EDGE OF GUTTER PAN MATCHES ELEVATION AT EXISTING PAVEMENT, UNLESS PLANS AND/OR SCHEMATICS INDICATE DIFFERENTLY).  
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 TRANSITIONS BETWEEN SPILL AND COLLECTOR SECTIONS.  
3. PLAN INTENT IS TO PROVIDE A MINIMUM SLOPE OF 0.50% ALONG COLLECTOR CURBS. IF FIELD CONDITIONS AND/OR PLAN REPRESENTATION DOES NOT PROVIDE MINIMUM SLOPE REQUIREMENTS, CONTRACTOR IS TO CONTACT ENGINEER PRIOR TO POURING CURBS AND GUTTER. BOHLER SHALL BE HELD HARMLESS FOR ANY CURBS 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 ISLAND PROVIDES 1% PAVEMENT SLOPE, PER PLAN INTENT.  
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%.



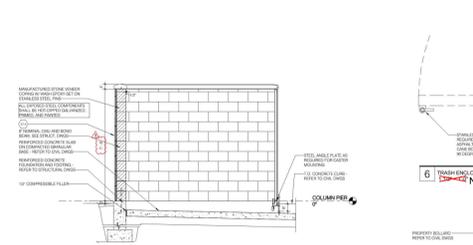
**NOTE:**  
1. SECTION SHOWN IS BASED ON ASSUMED VALUES. FINAL DESIGN TO BE PROVIDED ONCE FINAL CBR'S ARE AVAILABLE ON COMPACTED SUB-BASE.

**HEAVY DUTY CONCRETE SECTION**  
NOT TO SCALE

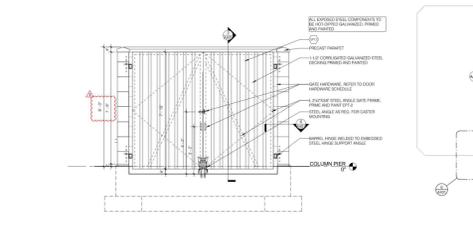


**NOTES:**  
1. EXPANSION JOINTS TO BE INSTALLED AT 20' INTERVALS.  
2. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.  
3. CONCRETE TO BE CLASS A3 IF CAST IN PLACE OR 4000 P.S.I. IF PRECAST.

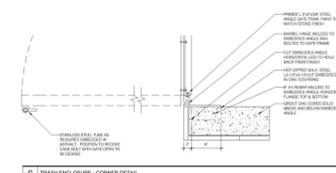
**HEADER CURB DETAIL**  
NOT TO SCALE



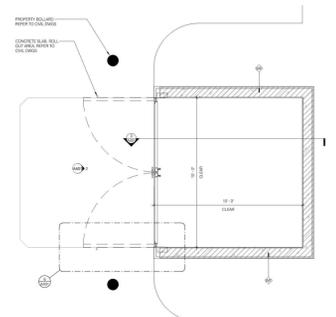
**3 ELEVATION OF TRANSFER ENCLOSURE WEST**  
NOT TO SCALE



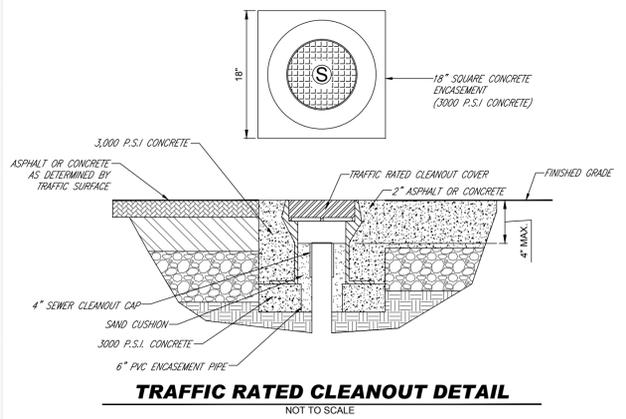
**2 ELEVATION OF TRANSFER ENCLOSURE WEST**  
NOT TO SCALE



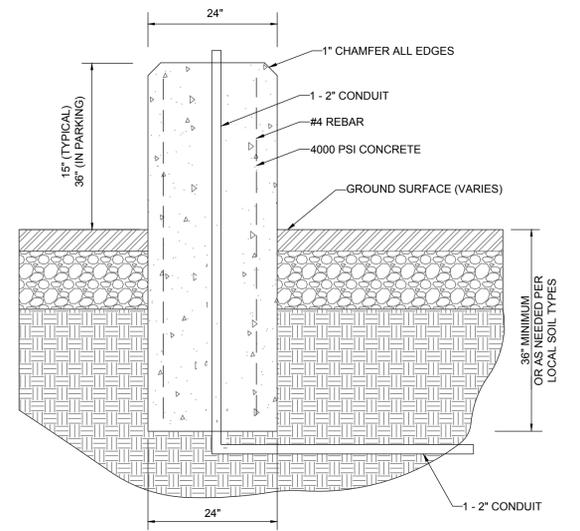
**6 TRANSFER ENCLOSURE - CORNER DETAIL**  
NOT TO SCALE



**1 TRANSFER ENCLOSURE PLAN**  
NOT TO SCALE



**TRAFFIC RATED CLEANOUT DETAIL**  
NOT TO SCALE



**NOTE:**  
THIS DETAIL SERVES AS A GUIDELINE ONLY. STRUCTURAL ENGINEER TO DESIGN AND PROVIDE DOCUMENTATION FOR FINAL LIGHT POLE BASE DESIGN.

**CONCRETE LIGHT POLE BASE**  
NOT TO SCALE

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

**REVISIONS**

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

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Call before you dig.  
ALWAYS CALL 811  
It's fast. It's free. It's the law.

**NOT APPROVED FOR CONSTRUCTION**

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

**PROP. SITE PLAN DOCUMENTS**  
FOR

**CHASE**

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

**BOHLER**

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

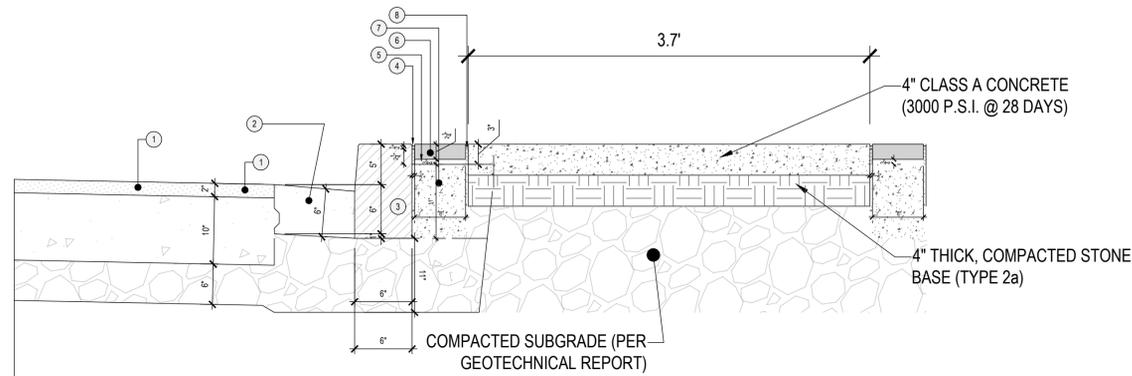
COMMONWEALTH OF VIRGINIA  
TRAVIS W. D'AMICO  
Lic. No. 048497  
06/04/2021  
PROFESSIONAL ENGINEER

SHEET TITLE:  
**SITE DETAILS**

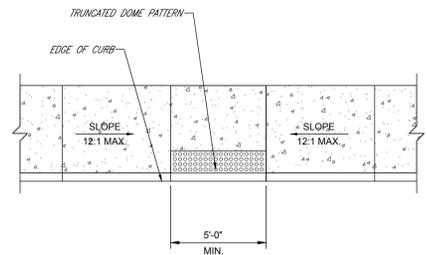
SHEET NUMBER:  
**C-1001**

REVISION 1 - 05/20/2021

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

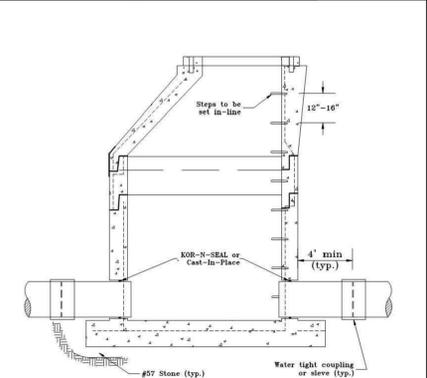


**BRICK BANDED SIDEWALK CROSS-SECTION VIEW**



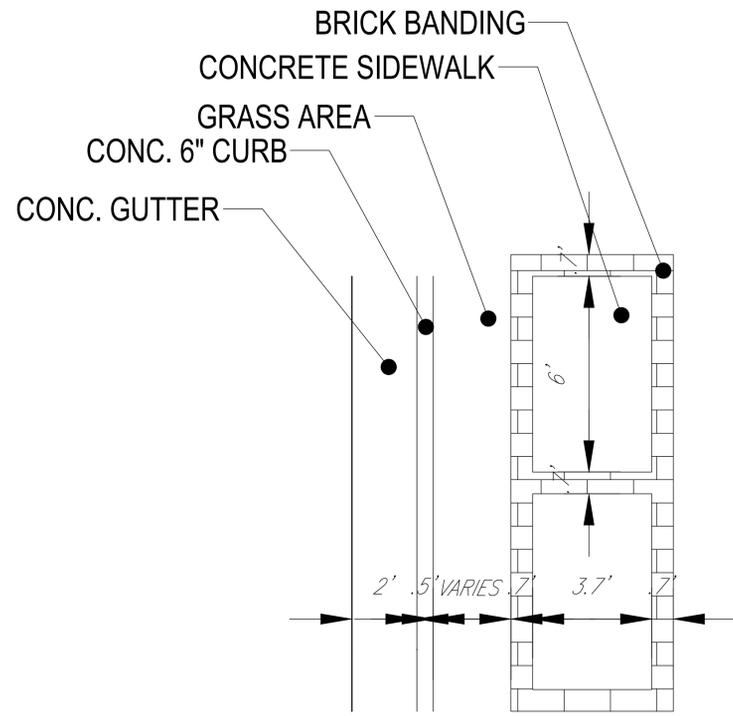
**NOTE:**  
ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA ACCESSIBLE GUIDELINES.

**ADA ACCESSIBLE RAMP DETAIL**  
NOT TO SCALE



**NOTES:**  
1. Contractor must have adequate equipment to pump around existing line while manhole is cut in.  
2. Concrete to be Class A-L.  
3. All reinforcing steel to meet the current requirements of ASTM Spec. A-814.  
4. Manhole sections to meet the current requirements of ASTM Spec. C-478.  
5. Tapered joint with O-Ring Gasket, or single offset joint with rubber gasket, to meet current requirements of ASTM Spec. C-413.  
6. MH sections to be cast in the base a min. of 2 inch.  
7. Joint configuration may be cast bell-up or spigot-up.  
8. Holes in precast units are to be 4 inch min. 8 inch max. larger than the outside dia. of the proposed pipe.  
9. Base section to provide min. 6 inch opening and bottom of bell and spigot joint.

Rev. 10-20	PRECAST CONCRETE CUT-IN MANHOLE NOT TO SCALE	PLATE NO. 5-10
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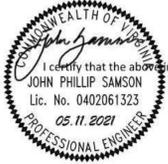


**BRICK BANDED SIDEWALK PLAN VIEW**

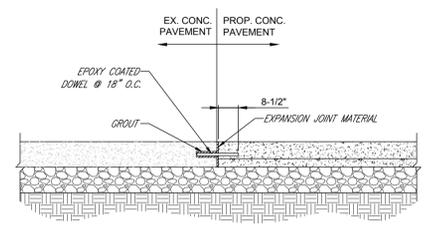
**DEPARTMENT OF PUBLIC UTILITIES  
DOMESTIC WATER METER SIZING FORM**

Project Name: JP Morgan Chase Maple Ave. Bank Branch  
Address: 315 Maple Ave. E  
Vienna, VA 22180  
Type of Occupancy: Mercantile

Fixture	Fixture Value 35 psi	No. of Fixtures	Fixture Value
Bathtub	8	X	=
Bedpan Washers	10	X	=
Combination Sink and Tray	3	X	=
Dental Unit	1	X	=
Dental Lavatory	2	X	=
Drinking Fountain - Cooler	1	X	1
- Public	2	X	=
Kitchen Sink - 1/2" Connection	3	X	=
- 3/4" Connection	7	X	7
Lavatory - 3/8" Connection	2	X	4
- 1/2" Connection	4	X	=
Laundry Tray - 1/2" Connection	3	X	=
- 3/4" Connection	7	X	=
Shower Head (Shower Only)	4	X	=
Service Sink - 1/2" Connection	3	X	=
- 3/4" Connection	7	X	7
Urinal - Pedestal Flush Valve	35	X	=
- Wall Flush Valve	12	X	=
- Trough (2 ft. Unit)	2	X	=
Wash Sink (Each Set of Faucets)	4	X	=
Water Closet - Flush Valve	35	X	=
- Tank Type	3	X	6
Dishwasher - 1/2" Connection	4	X	=
- 3/4" Connection	10	X	=
Washing Machine - 1/2" Connection	5	X	=
- 3/4" Connection	12	X	=
- 1" Connection	25	X	=
Hose Connection (Wash Down) - 1/2"	6	X	=
- 3/4"	10	X	=
Combined Fixture Total			25
Maximum Demand			21.5 GPM
Meter Size			1.5"

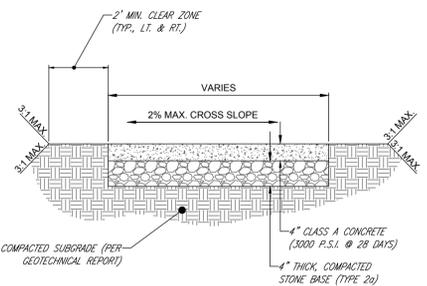


I certify that the above information is true and correct.  
Signature: *John Phillip Samson*



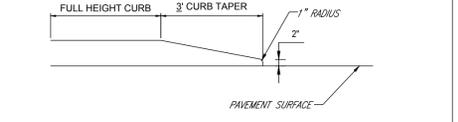
**NOTE:**  
1. CONTRACTOR TO BLOW OUT DUST FROM DRILLED HOLES PRIOR TO APPLYING GROUT.

**CONCRETE DOWELING DETAIL**  
NOT TO SCALE

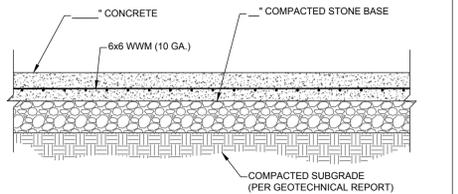


**NOTE:**  
1. EXPANSION JOINTS 12" WIDE PREMOLDED BIT. MATERIAL SHALL BE INSTALLED AT 30' INTERVALS. CRACK CONTROL JOINTS TO BE SPACED AT INTERVALS EQUAL TO SIDEWALK WIDTH.

**CONCRETE SIDEWALK DETAIL**  
NOT TO SCALE

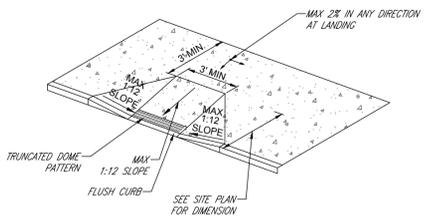


**CURB TAPER DETAIL**  
NOT TO SCALE



**NOTE:**  
1. SECTION SHOWN IS BASED ON AN ANTICIPATED CBR OF \_\_\_\_\_ PER GEOTECHNICAL REPORT PREPARED BY \_\_\_\_\_ 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



**NOTE:**  
1. ADA ACCESSIBLE RAMP CONSTRUCTION SHALL CONFORM TO CURRENT ADA ACCESSIBLE GUIDELINES.

**ADA ACCESSIBLE RAMP DETAIL**  
NOT TO SCALE

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

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

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**NOT APPROVED FOR CONSTRUCTION**

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

**PROP. SITE PLAN DOCUMENTS**  
FOR  
**CHASE**  
PROPOSED FINANCIAL INSTITUTION W/ DRIVE-THRU  
315 MAPLE AVE E  
TOWN OF VIENNA, VIRGINIA  
TAX MAP #: 0382-02-0024

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

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

SHEET TITLE:  
**SITE DETAILS**  
SHEET NUMBER:  
**C-1002**  
REVISION 1 - 05/20/2021





