



DEPARTMENT OF
**PLANNING AND
DEVELOPMENT
REVIEW**

Commission of Architectural Review
Certificate of Appropriateness Application
900 E. Broad Street, Room 510
Richmond, VA 23219
804-646-6569

Property (location of work)

Property Address: 2516 E Leight St Current **Zoning**: R-63
Historic District: Church Hill North

Application is submitted for: (check one)

- Alteration**
- Demolition**
- New Construction**

Project Description (attach additional sheets if needed):

Renovation of existing independent living apartments for seniors, 62 units.

Applicant/Contact Person: Jason Iannotti

Company: Bruno Clay Management
Mailing Address: 440 Maple Ave East, Suite 203
City: Vienna State: VA Zip Code: 22180
Telephone: (703) 887-1170
Email: jiannotti@brunoclay.com
Billing Contact? Yes Applicant Type (owner, architect, etc.): Agent

Property Owner: Bowler Housing L.P

If Business Entity, name and title of authorized signee: David White
Mailing Address: PO BOX 5127
City: Richmond State: VA Zip Code: 23220
Telephone: (804) 833-5963
Email: DWhite@swa-co.com
Billing Contact? No
****Owner must sign at the bottom of this page****

Acknowledgement of Responsibility

Compliance: If granted, you agree to comply with all conditions of the certificate of appropriateness (COA). Revisions to approved work require staff review and may require a new application and approval from the Commission of Architectural Review (CAR). Failure to comply with the conditions of the COA may result in project delays or legal action. The COA is valid for one (1) year and may be extended for an additional year, upon written request and payment of associated fee.

Requirements: A complete application includes all applicable information requested on checklists available on the CAR website to provide a complete and accurate description of existing and proposed conditions, as well as payments of the application fee. Applications proposing major new construction, including additions, should meet with staff to review the application and requirements prior to submitting. Owner contact information and signature is required. Late or incomplete applications will not be considered.

Zoning Requirements: Prior to Commission review, it is the responsibility of the applicant to determine if zoning approval is required. Application materials should be prepared in compliance with zoning.

Property Owner Signature:  Date: 11/14/2024

Certificate of Appropriateness Application Instructions

Staff Contact: (804)-646-6569 | alex.dandridge@rva.gov

Before You Submit

In advance of the application deadline, please contact staff to discuss your project, application requirements, and if necessary, to make an appointment to meet with staff for a project consultation. The CAR website has additional project guidance and required checklists: www.rva.gov/planning-development-review/commission-architectural-review.

Application deadlines are firm. All materials must be submitted by the deadline to be considered at the following Commission meeting. Designs must be final at the time of application; revisions will not be accepted after the deadline. Incomplete and/or late applications will not be placed on that month's agenda.

Submission Requirements

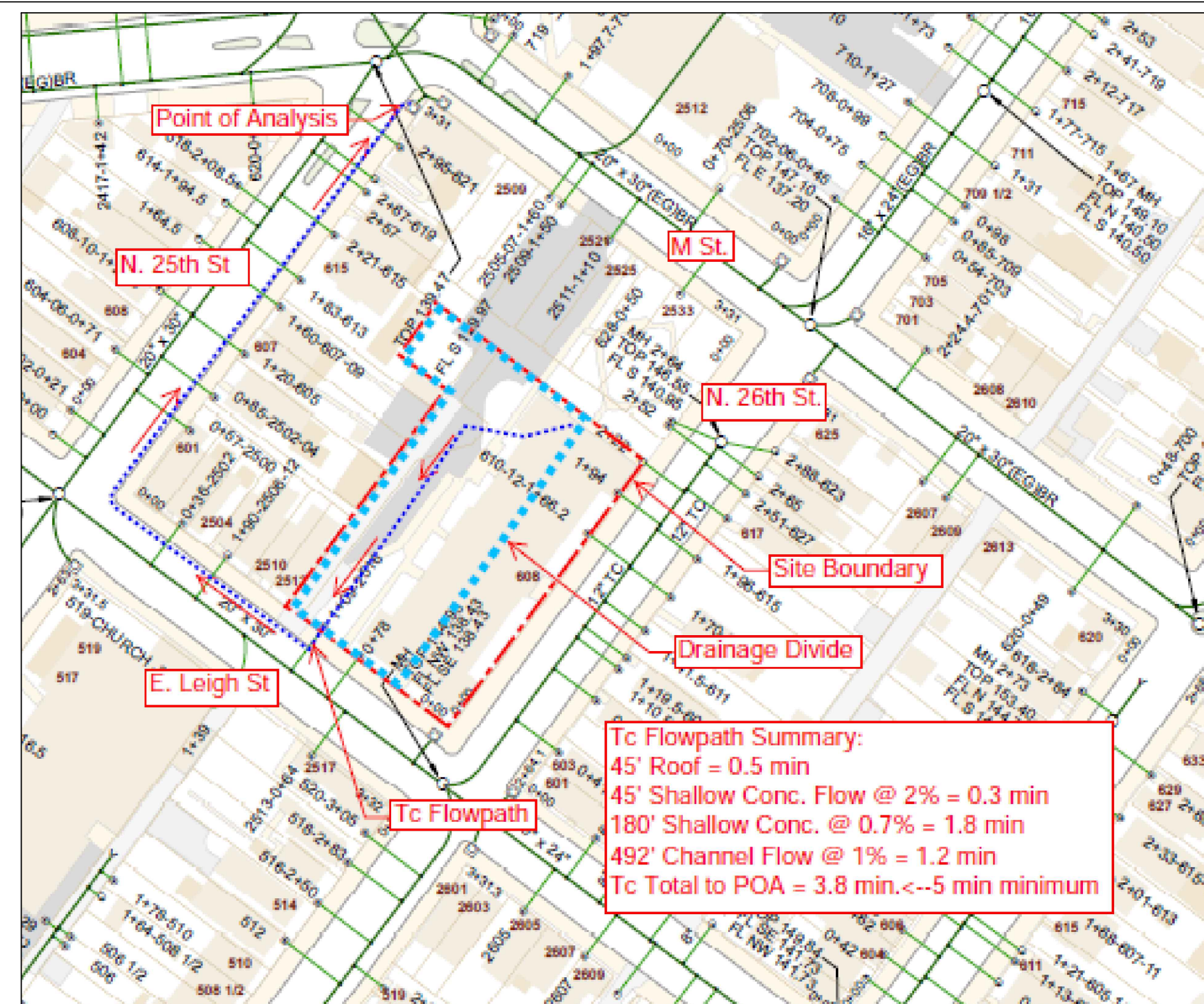
Please submit applications to staff via email with the project address in the subject line. Submit the following items via email to staff:

- One (1) signed and completed application (PDF) – property owner signature required.
- Supporting documentation, as indicated on the [checklist](#), which can be found under the 'Application Information' tab on the website.
- Payment of application fee, if required. Payment of the fee must be received before the application will be scheduled. An invoice will be sent via the City's Online Permit Portal. Please see [fee schedule](#) available on the CAR website for additional information.

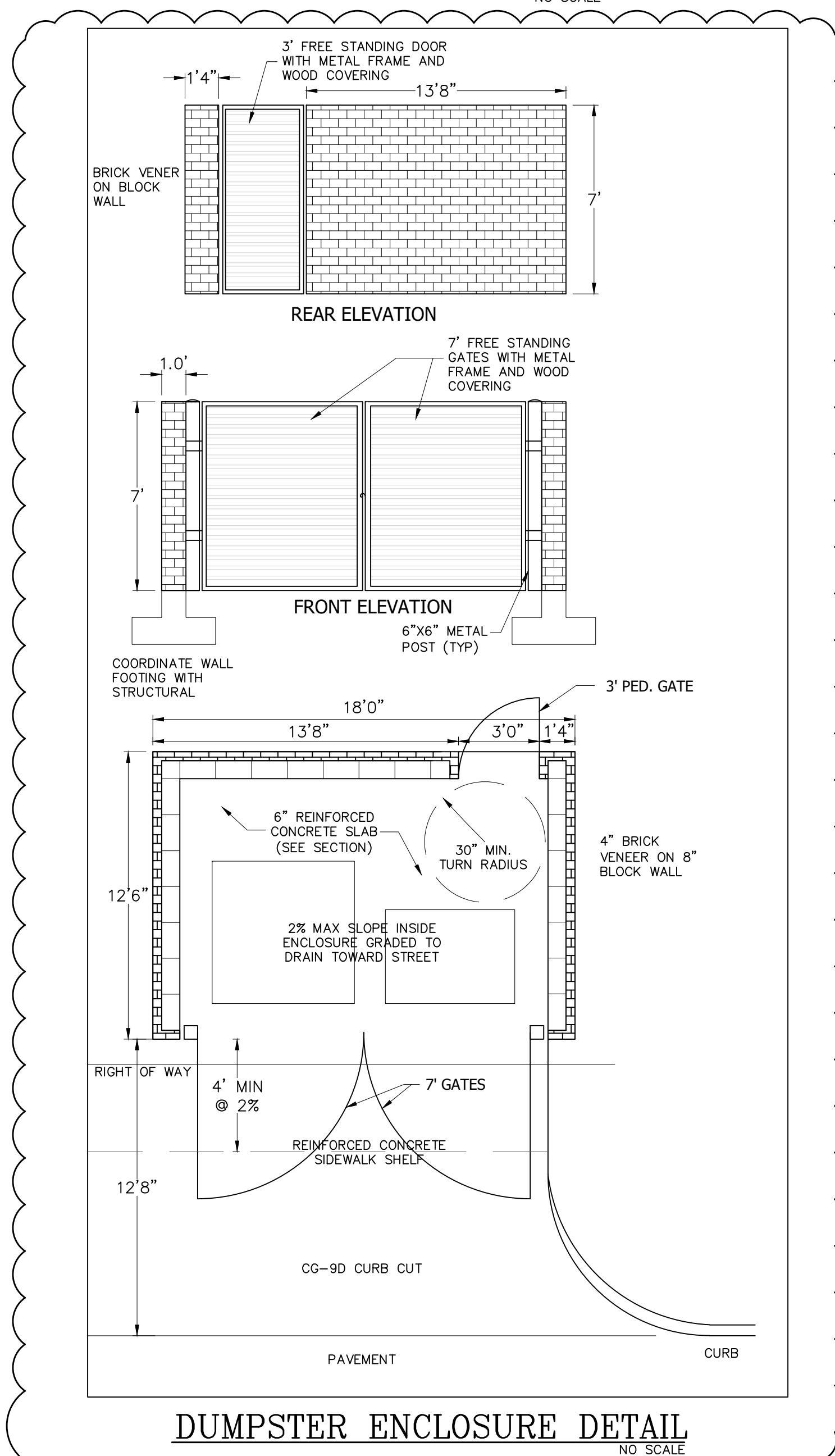
A complete application includes a signed application form, legible plans, drawings, elevations, material specifications, and payment of the required fee as described in the City Code of Ordinances Sec. 30-930.6(b). The Commission will not accept new materials, revisions, or redesigns at the meeting. Deferral until the following month's meeting may be necessary in such cases to allow for adequate review by staff, Commissioners, and public notice, if required.

Meeting Information and Application Due Dates

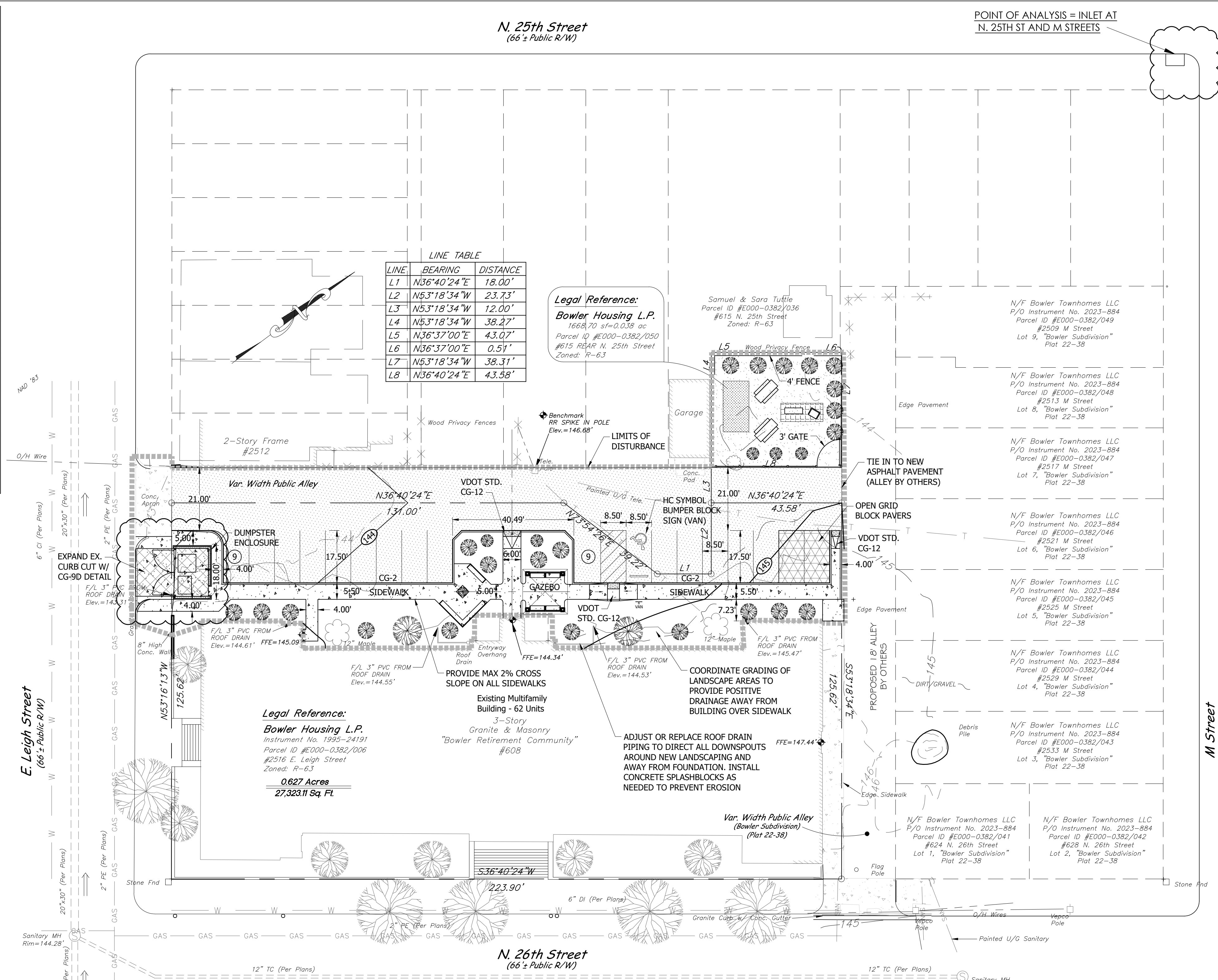
- The Commission meets on the fourth Tuesday of each month, except for December when it meets on the third Tuesday.
- Application hearings start at 4:00pm. Meetings are held in person at City Hall in the 5th floor conference room. Participation via Microsoft Teams is available. It is strongly recommended that at least one person, either the owner or applicant, attend the meeting in person.
- All applications are due at 12 noon the Friday after the monthly CAR meeting, except in December, when applications are due the following Monday. For a list of meeting dates and submission deadline dates for each meeting please visit www.rva.gov/planning-development-review/commission-architectural-review or contact staff.
- Revisions to applications that have been deferred or conceptually reviewed at a CAR meeting can be submitted nine (9) business days after that meeting in order to be reviewed at the following meeting. Please contact staff to confirm this date.
- New construction will be required to go through a conceptual review. The conceptual review is non-binding.
- Applicants are encouraged to reach out to any relevant civic associations and immediate neighbors for new construction or large-scale projects prior to submitting to the Commission of Architectural Review.



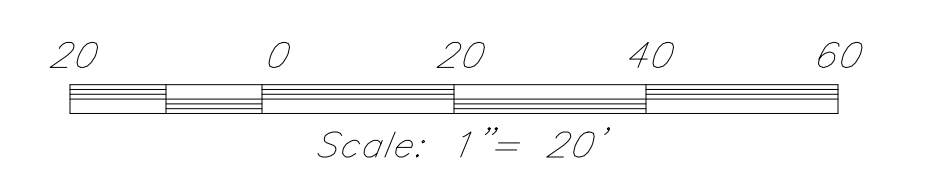
Tc FLOWPATH DETAIL
NO SCALE



DUMPSTER ENCLOSURE DETAIL
NO SCALE



- General Notes**
- This survey plot represents a current and accurate field transit survey of the premises shown hereon. Date of last physical survey: March 13, 2024.
 - This survey was made without the benefit of a Title Report and therefore there may be encumbrances affecting the Subject Property not shown hereon.
 - The subject property is not located in a Special Flood Hazard Area, but is located in Zone (X) Area of Minimal Flood Hazard, as determined by National Flood Insurance Program, Federal Emergency Management Agency, Department of Housing and Urban Development Map No. 510129-0041-E effective date July 16, 2014.
 - Horizontal datum based upon NAD '83 & Vertical datum upon NAVD '88 (City Benchmark #234 Converted from NAVD '29).



THIS SITE DOES NOT LIE WITHIN A CHESAPEAKE BAY RMA OR RPA. THIS SITE LIES WITHIN THE CITY'S COMBINED SEWER SYSTEM (CSS)

- DPW PERMIT NOTES:**
- OBTAIN A WORK-IN-STREETS PERMIT PRIOR TO EXCAVATION AND/OR OTHER WORK WITHIN THE CITY RIGHT OF WAY.
 - CUTS WITHIN THE CITY STREETS SHALL BE RESTORED ACCORDING TO THE REQUIREMENTS OF THE CITY'S EXCAVATION AND RESTORATION MANUAL.
 - IF ENCOUNTERED, SALVAGE ALL GRANITE CURBING REMOVED AND RETURN TO CITY. GRANITE NOSES AT CG-12'S SHALL REMAIN IN PLACE.
 - COORDINATE SIGNAGE (IF REQUIRED) INSTALLATION WITH CITY OF RICHMOND DPW SIGN SHOP
 - COORDINATE INSTALLATION OF CG-9D ENTRANCES (IF REQUIRED) WITH THE GRADING.

STORMWATER RUNOFF NARRATIVE

THERE IS NO CHANGE TO THE SANITARY SEWER FLOW FROM THE SITE.

THE EXISTING SITE IS MOSTLY PAVED WITH RUNOFF FLOWING OVERLAND ALONG THE DRIVE LANE TO E. LEIGH STREET, HEADING NORTH AND THEN EAST TO THE INTERSECTION OF N. 25TH AND "M" STREETS.

THE PROPOSED PARKING LOT IMPROVEMENTS DO NOT MEASURABLY ALTER THE DRAINAGE PATTERN OR TIME OF CONCENTRATION. IN ORDER TO MAINTAIN THE POST DEVELOPMENT RUNOFF RATE TO THE PRE DEVELOPED CONDITIONS, TWO PARKING SPACES WILL BE SURFACED WITH DIAMOND SHAPED OPEN GRID PERMEABLE PAVERS. A REDUCED C FACTOR OF C=0.45 FOR THIS AREA WILL BE USED. SEE CALCULATIONS BELOW:

EXISTING CONDITIONS:	POST DEVELOPMENT CONDITIONS:
DA = 22,290 SF = 0.51 AC	DA = 22,290 SF = 0.51 AC
C: 17,203 SF @ 0.90 (IMPERVIOUS) 5,087 SF @ 0.30 (PERVIOUS)	C: 17,215 SF @ 0.90 (IMPERVIOUS) 297 SF @ 0.45 (OPEN GRID PAVERS) 4,778 SF @ 0.30 (PERVIOUS)
C=0.76 Tc=5 MIN (MINIMUM FOR SMALL DISTURBED AREA) I 10 = 7.07 IN/HR Q 10 = C ^{1.49} A Q 10 PRE = 2.74 CFS	C=0.76 Tc=5 MIN (MINIMUM FOR SMALL DISTURBED AREA) I 10 = 7.07 IN/HR Q 10 = C ^{1.49} A Q 10 POST = 2.74 CFS

GRADIENT
1406 Laburnum Park Boulevard
Richmond, VA 23227
804.399.0500

COMMONWEALTH OF VIRGINIA
CLARENCE J. SMITH
PROFESSIONAL ENGINEER
09.10.2024

REVISIONS

REV. NO.	DATE	DESCRIPTION
1	07.31.24	PER LDIS REVIEW COMMENTS
2	09.02.24	PER LDIS REVIEW COMMENTS
3	09.10.24	DUMPSTER ENCLOSURE DETAIL REVISION

BOWLER SENIOR HOUSING
PARKING LOT IMPROVEMENTS

ISSUED FOR PERMIT / VHDA REVIEW

DATE: 04.02.2024
REV03: 09.10.2024

DIMENSIONAL LAYOUT PLAN

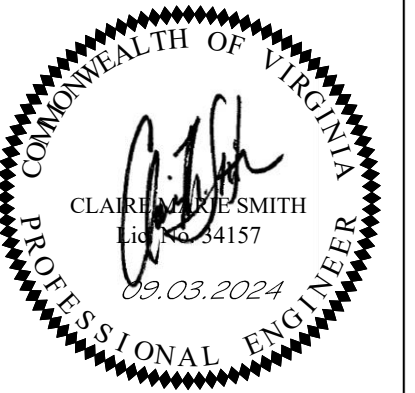
C3.1

Project Number: 2402 © Gradient 2024

Richmond, Virginia
2516 E. Leigh Street

BOWLER SENIOR HOUSING PARKING LOT IMPROVEMENTS

2516 E. LEIGH STREET
CITY OF RICHMOND, VIRGINIA

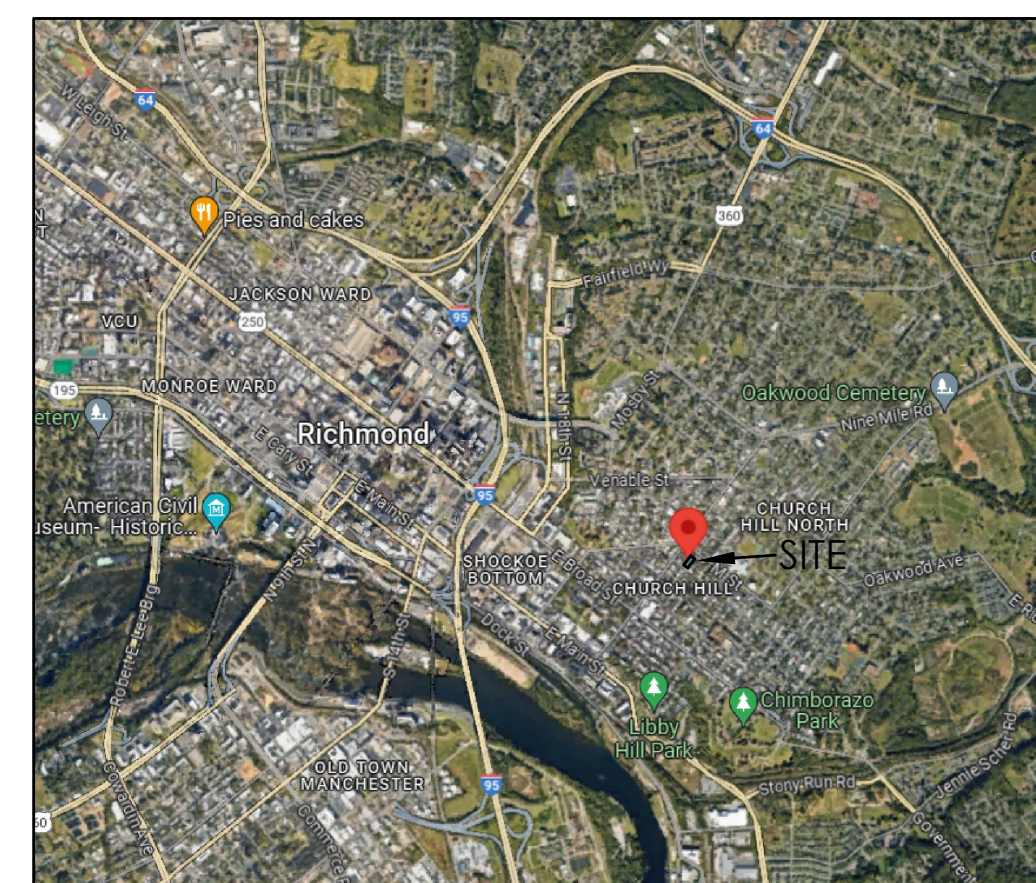


SHEET INDEX

C0.0	Cover Sheet
C0.1	Site Survey
C1.1	Notes & Details
C2.1	Erosion Control Notes and Details
C2.2	Ex. Conditions, Demolition & E&SC Plan
C3.1a	Universal Design Site Plan
C3.1	Site Layout, Grading & Drainage Plan

LEGEND

ROADS	
	EXISTING CULVERT
	CURB
	CURB & GUTTER
STORM SEWER	
	STORM SEWER PIPING
	STORM SEWER INLET & NUMBER
	BENCH MARK
	CLEARING LIMITS/TREELINE
	VDOT STANDARD STOP SIGN
	EXISTING CONTOUR
	PROPOSED CONTOUR
	PROPOSED SPOT ELEVATION
WATER	
	EXISTING WATER LINE
	PROPOSED WATER LINE
	VALVE
	REDUCER
	PLUG
	CROSS
	TEE
	FIRE HYDRANT (COMPLETE)
	W/ 8"x6" TEE, 6" GV & 6" LATERAL
	SINGLE SERVICE CONNECTION
SEWER	
	EXISTING SANITARY SEWER
	PROPOSED PVC SANITARY SEWER
	PROPOSED D. I. SANITARY SEWER
	M.H. NUMBER



VICINITY MAP
SCALE: 1"=2000'(±)

E+S STATISTICS	
EROSION + SEDIMENT CONTROL MEASURES	QUANTITY
CONSTRUCTION ENTRANCE	1 EACH
SILT FENCE	366 L.F.
TREE PROTECTION FENCING	67 L.F.
STORM DRAINAGE ITEMS	QUANTITY
-	- L.F.
LOT STATISTICS	
SQUARE FEET	
TOTAL LOT AREA	27,323 SF
AMOUNT OF IMP. SURFACE AREA	17,217 SF*
AMOUNT OF PER. SURFACE AREA	4,776 SF*
AMOUNT OF OPEN GRID PAVERS	297 SF*
AMOUNT OF LAND DISTURBANCE	15,019 SF=0.34 AC
SEWER DESIGNATION	
MS4	YES X NO
COMBINED SEWER (CSS)	X YES NO
BAY DESIGNATION	
CHESAPEAKE BAY AREA	YES X NO
IF YES	RMA RPA

*AREAS LISTED REPRESENT AREAS WITHIN THE DISTURBED AREA OF THE PARKING LOT THAT DRAINS TOWARD THE POINT OF ANALYSIS.

I, Claire M. Smith, PE, LEED AP certify that the information above is correct.
Signed: Date: July 31, 2024
Preparer's Seal/Stamp

Stormwater Management Facility Data: Bowler Senior Housing														
Stormwater Management Facility Type	Stormwater Management Description	Stormwater Management Facility Structure Number	Location		Acres Treated By Facility			Pollutant Removal, lbs			Runoff captured, acre-foot	HUC (6th order) Of Location Of Facility	Impaired Water Segment To Which Facility Discharges	Ownership Of Facility (Public/Private)
			Latitude	Longitude	Impervious Acres	Pervious Acres	Total Acres	TP	TN	TSS				
Open Grid Block Pavers	Open Grid Block Pavers	BMP	37.5344	-77.4152	0.000	0.007	0.007	-	-	-	0.000	JL01	James River Almond Creek	Private

PROJECT DATA

OWNER/DEVELOPER
BOWLER HOUSING LP
C/O TONEY A WEBB
PO BOX 5127
RICHMOND, VA 23230
CONTACT: TONEY A WEBB

DEVELOPER:
BRUNO CLAY MANAGEMENT, LLC
440 MAPLE AVE, EAST SUITE 203
VIENNA, VA 22180
CONTACT: JASON IANNOTTI
EMAIL: JIANNOTTI@BRUNOCLAY.COM
PHONE: 703-887-1170

ARCHITECT
SWA ARCHITECTS-VA, INC.
1553 E. MAIN STREET
RICHMOND, VA 23219
CONTACT: BEAU WOODRUM
PHONE: 804-237-8254
EMAIL: BWOODRUM@SWA-CO.COM

CIVIL ENGINEER
GRADIENT, PC
1406 LABURNUM PARK BOULEVARD
RICHMOND, VA 23227
CONTACT: CLAIRE SMITH SHIRLEY, PE, LEED AP
PHONE: 804.399.0500
EMAIL: CLAIRE@GRADIENTENVIRONMENT.COM

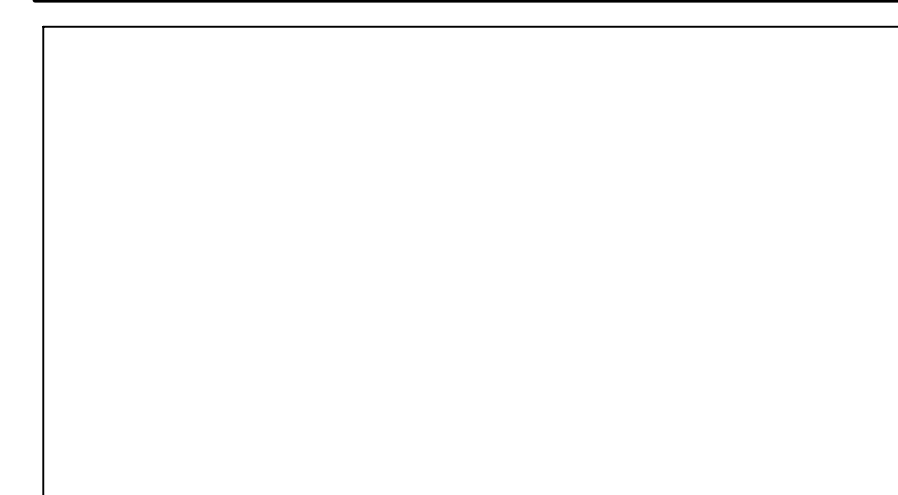
PROJECT NOTES
ZONING: R-63 MULTI-FAMILY RESIDENTIAL
MAP REFERENCE #: E00003820068
PROJECT SUMMARY: RENOVATION
EXISTING USE: INDEPENDENT LIVING APARTMENTS FOR SENIORS
PROPOSED USE: INDEPENDENT LIVING APARTMENTS FOR SENIORS
ACREAGE: 0.34 ACRES
BUILDINGS: 1 EXISTING
PARKING: 9 SPACES

RELATED PERMITS

BUILDING PERMIT	LAND DISTURBANCE PERMIT
MECHANICAL PERMIT	STORM DRAINAGE PERMIT
ELECTRICAL PERMIT	WORK-IN-STREET PERMIT
PLUMBING PERMIT	

NOTE:
THIS SITE DOES NOT LIE WITHIN A CHESAPEAKE BAY RMA OR RPA. THIS SITE LIES WITHIN THE CITY'S COMBINED SEWER SYSTEM (CSS) .

CITY APPROVALS



REVISIONS

REV. NO.	DATE	DESCRIPTION
1	07.31.24	PER LDIS REVIEW COMMENTS
2	09.02.24	PER LDIS REVIEW COMMENTS

BOWLER SENIOR HOUSING
PARKING LOT IMPROVEMENTS

Richmond, Virginia

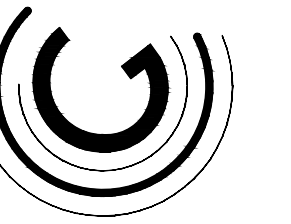
2516 E. Leigh Street

ISSUED FOR PERMIT / VHDA REVIEW

DATE: 04.02.2024
REV01: 07.31.2024

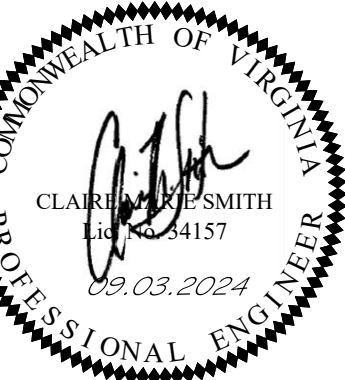
COVER SHEET

C0.0



GRADIENT

1406 Laburnum Park Boulevard
Richmond, VA 23227
804.399.0500



REV. NO.	DATE	DESCRIPTION
1	07.31.24	PER LDIS REVIEW COMMENTS
2	09.02.24	PER LDIS REVIEW COMMENTS

ISSUED FOR PERMIT / VMDA REVIEW

BOWLER SENIOR HOUSING PARKING LOT IMPROVEMENTS

Richmond, Virginia

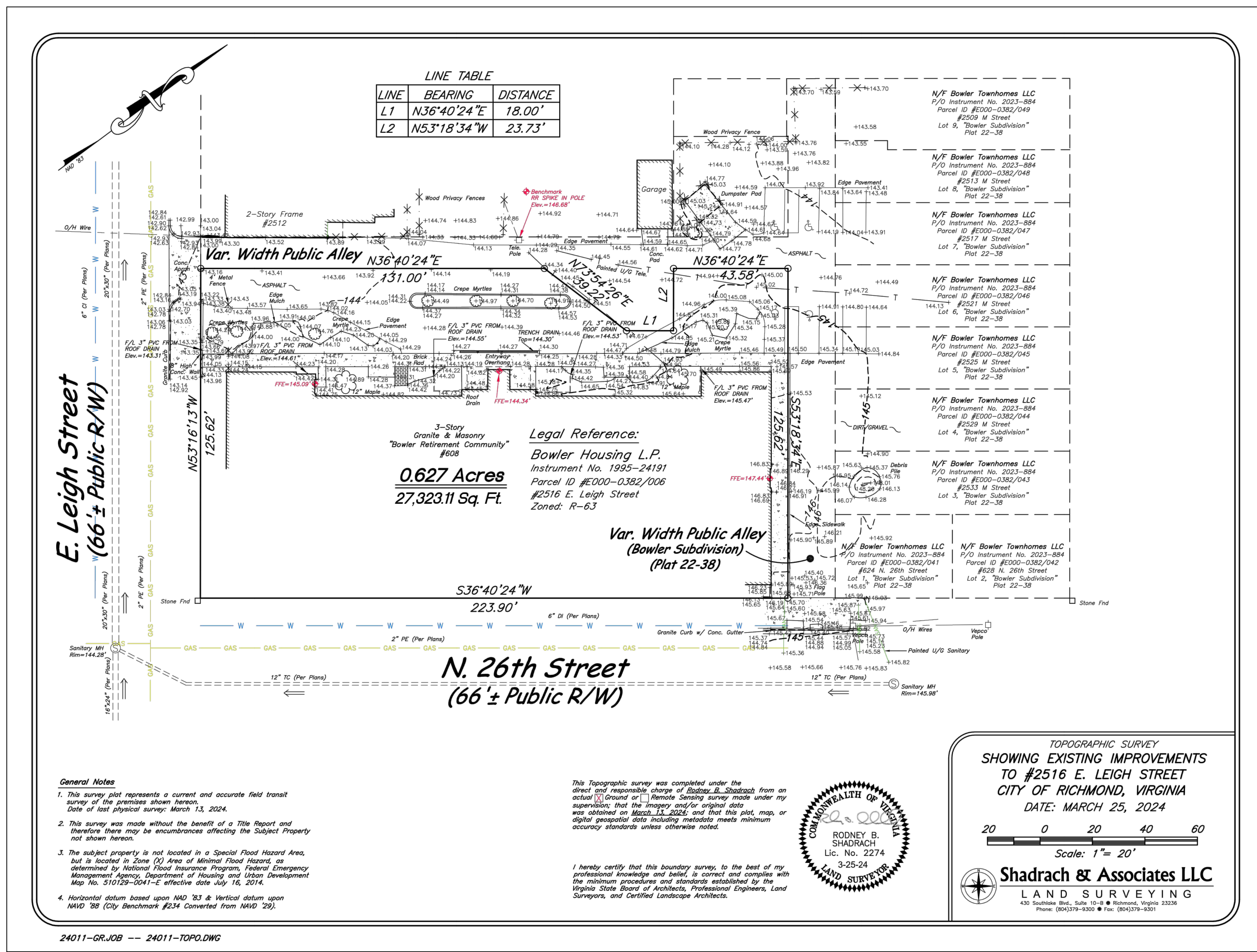
2516 E. Leigh Street

DATE: 04.02.2024
REV01: 07.31.2024

SITE SURVEY

C0.1

Project Number: 2402 © Gradient 2024



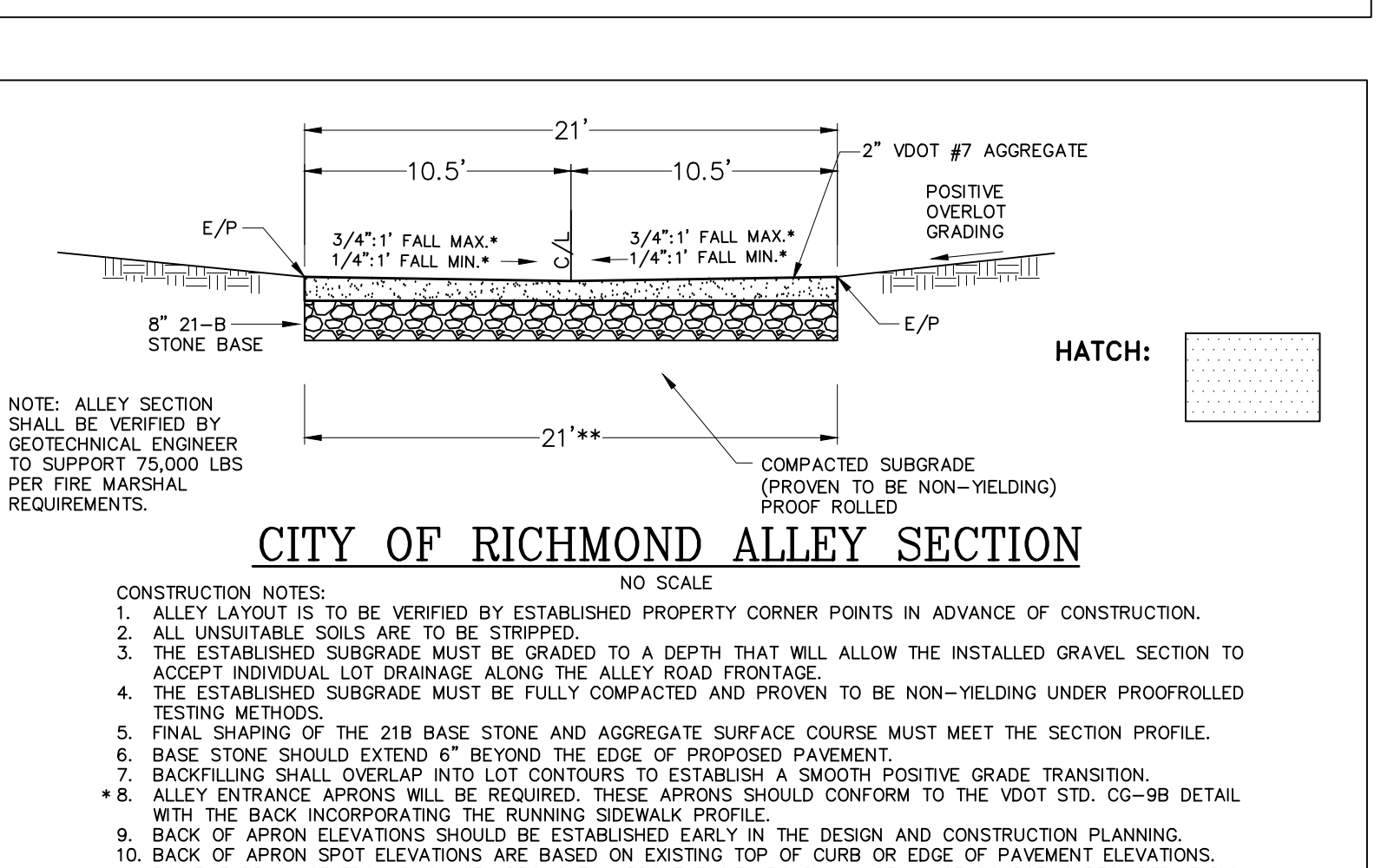
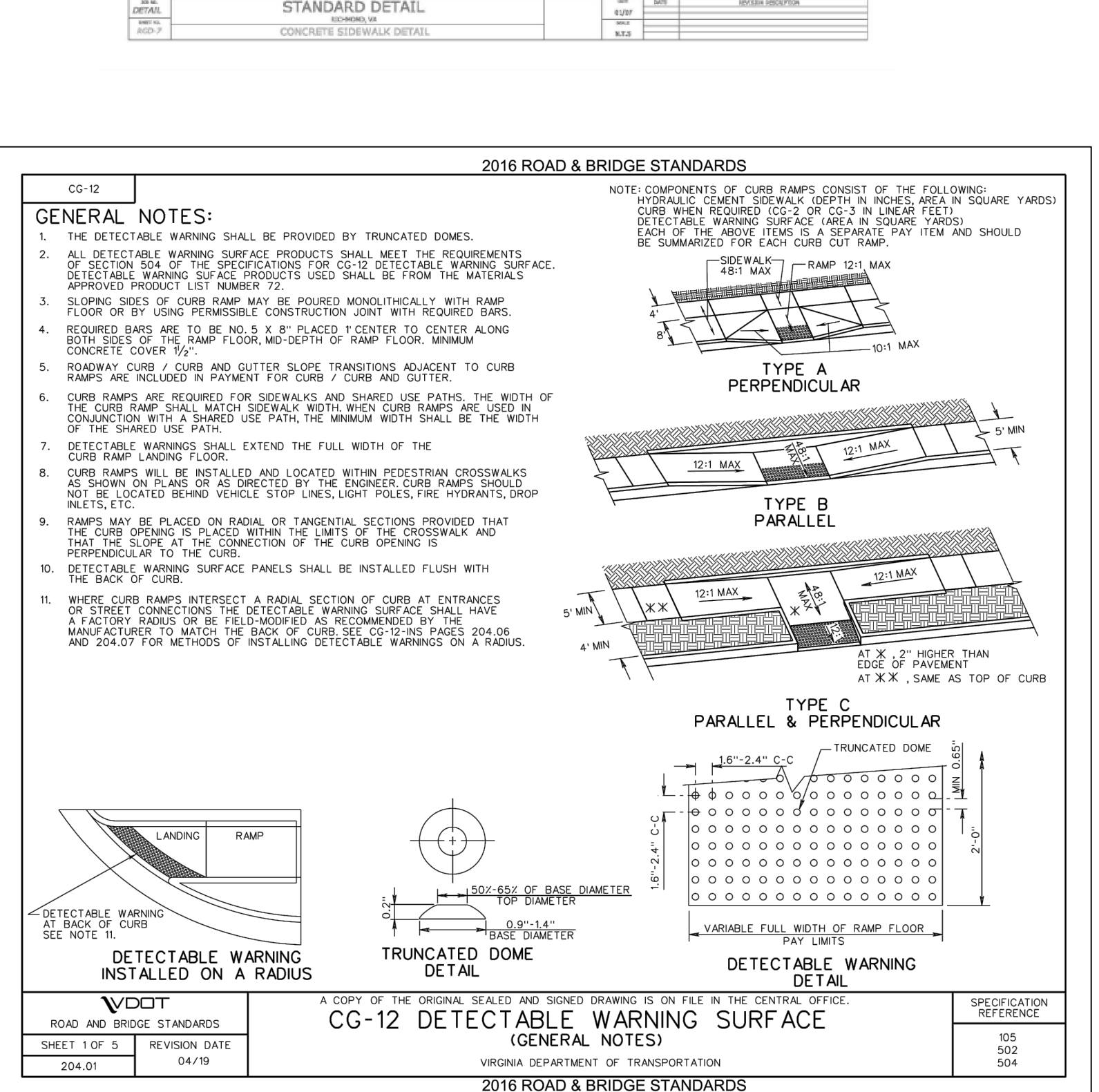
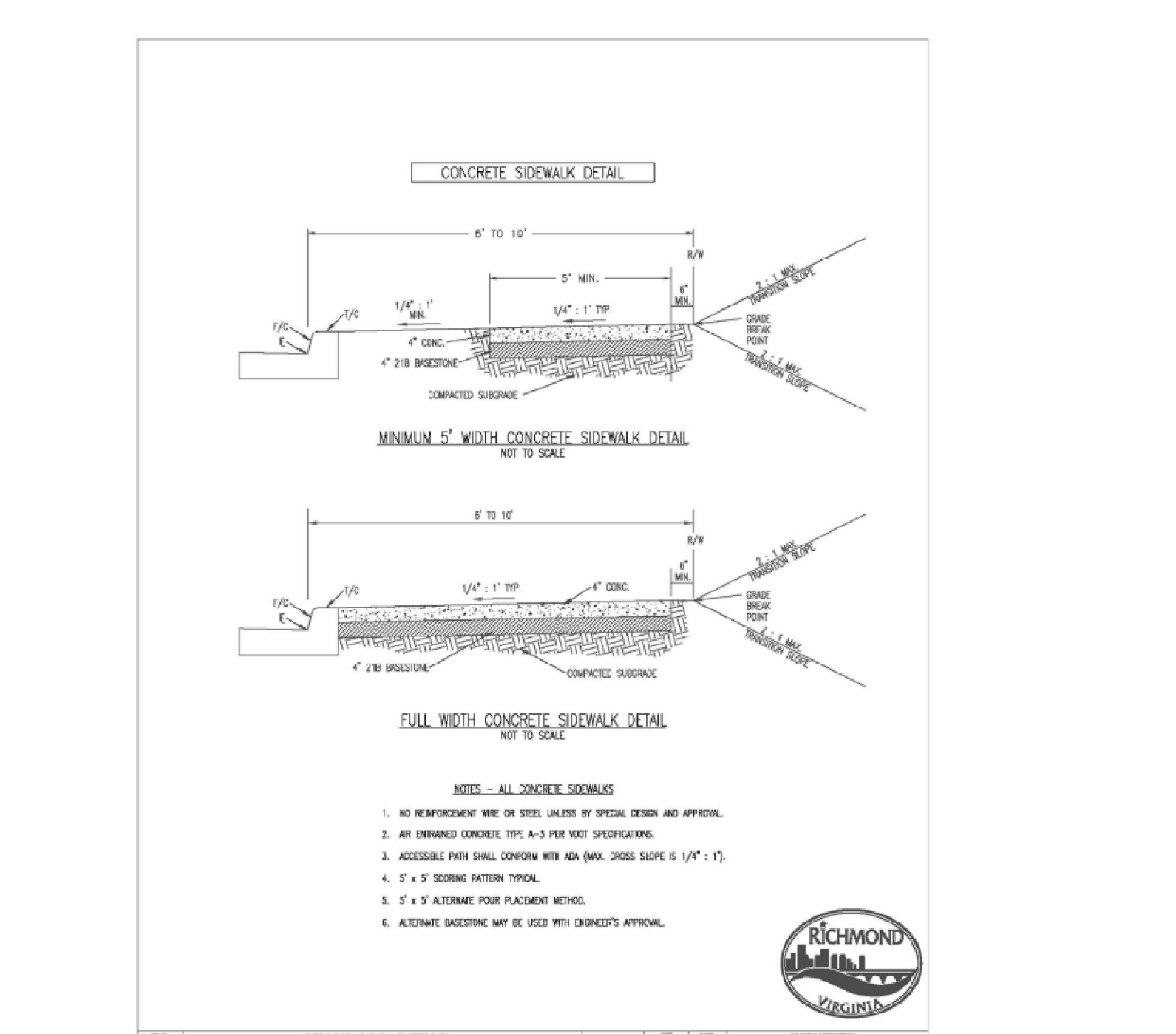
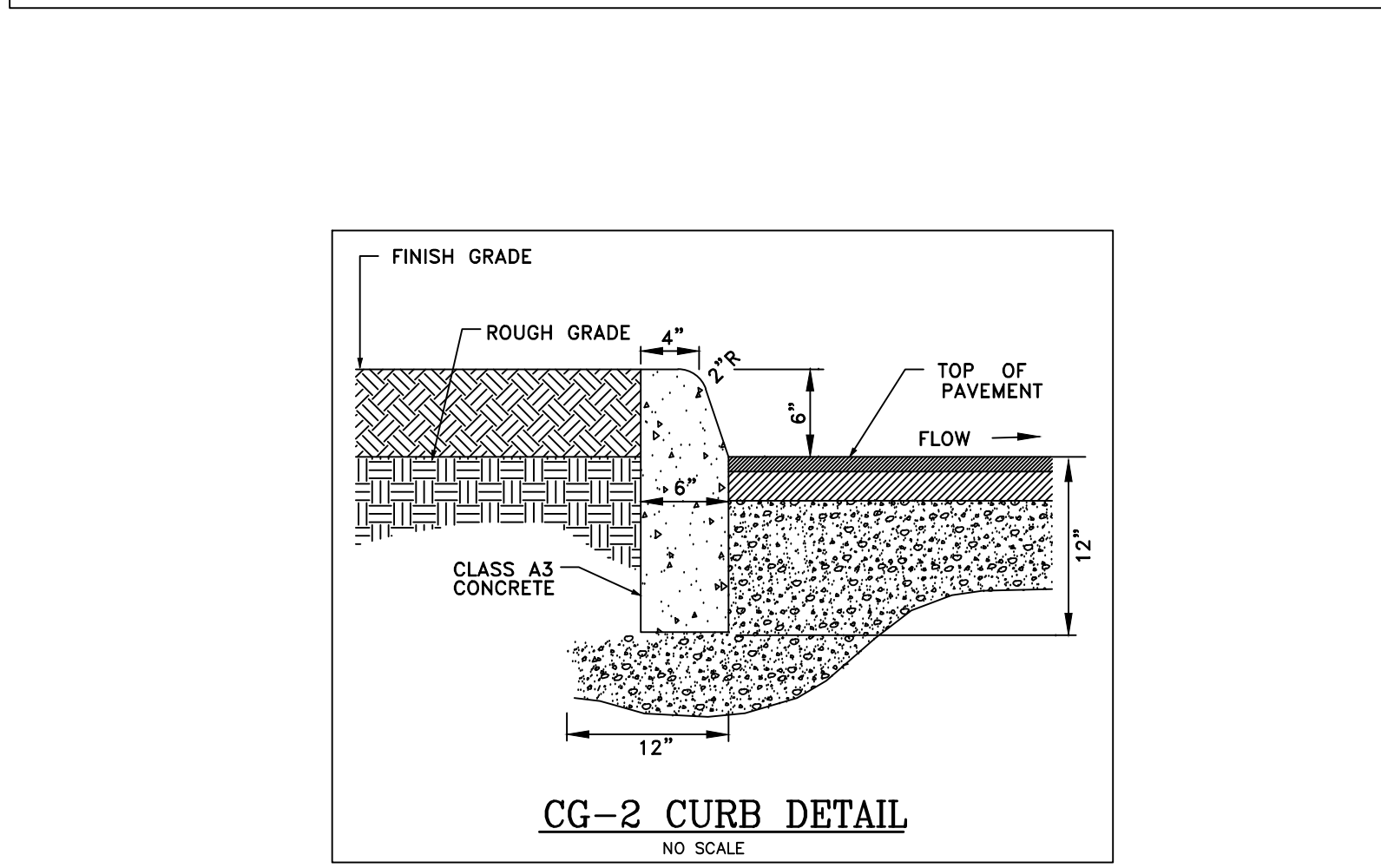
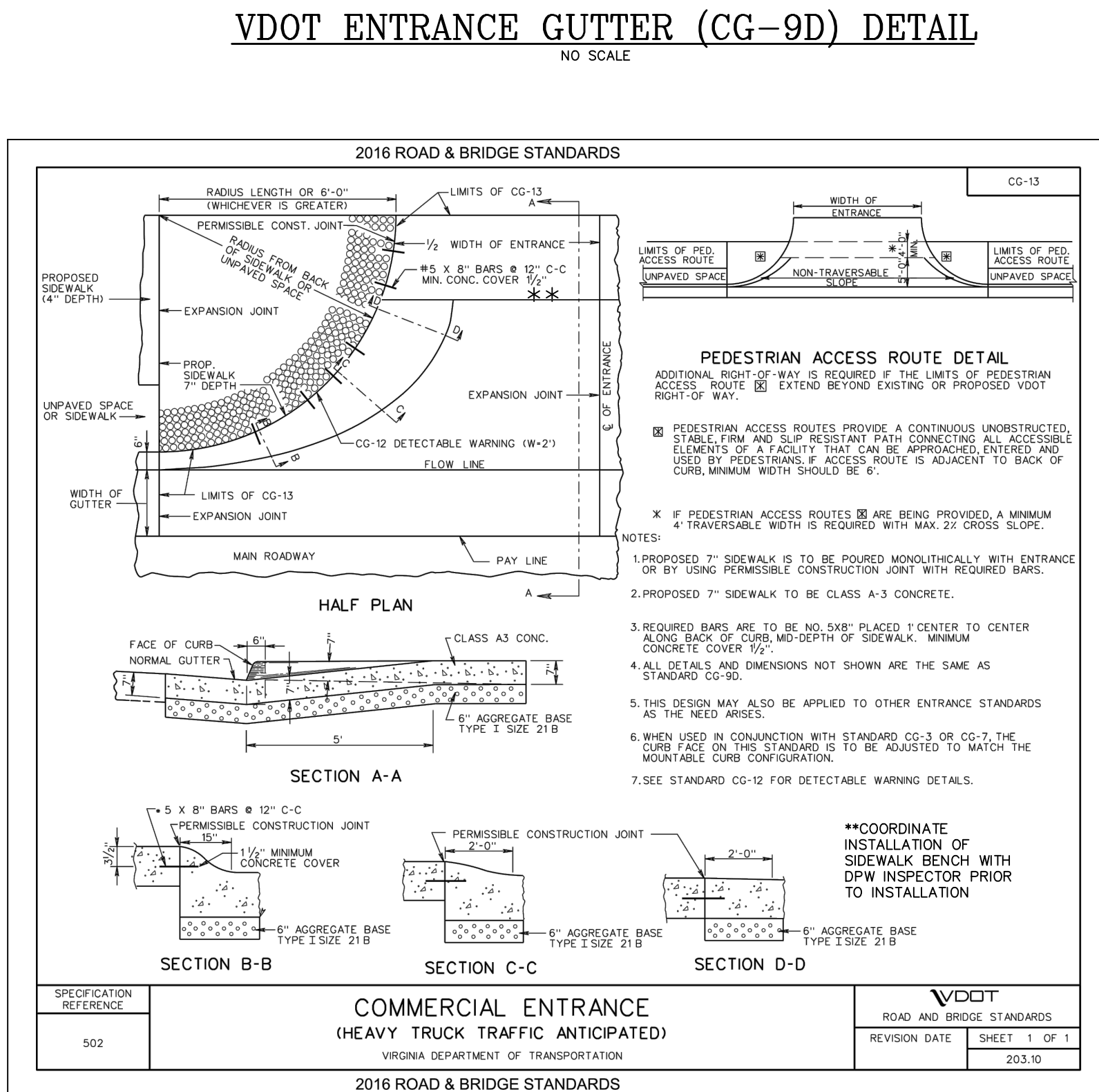
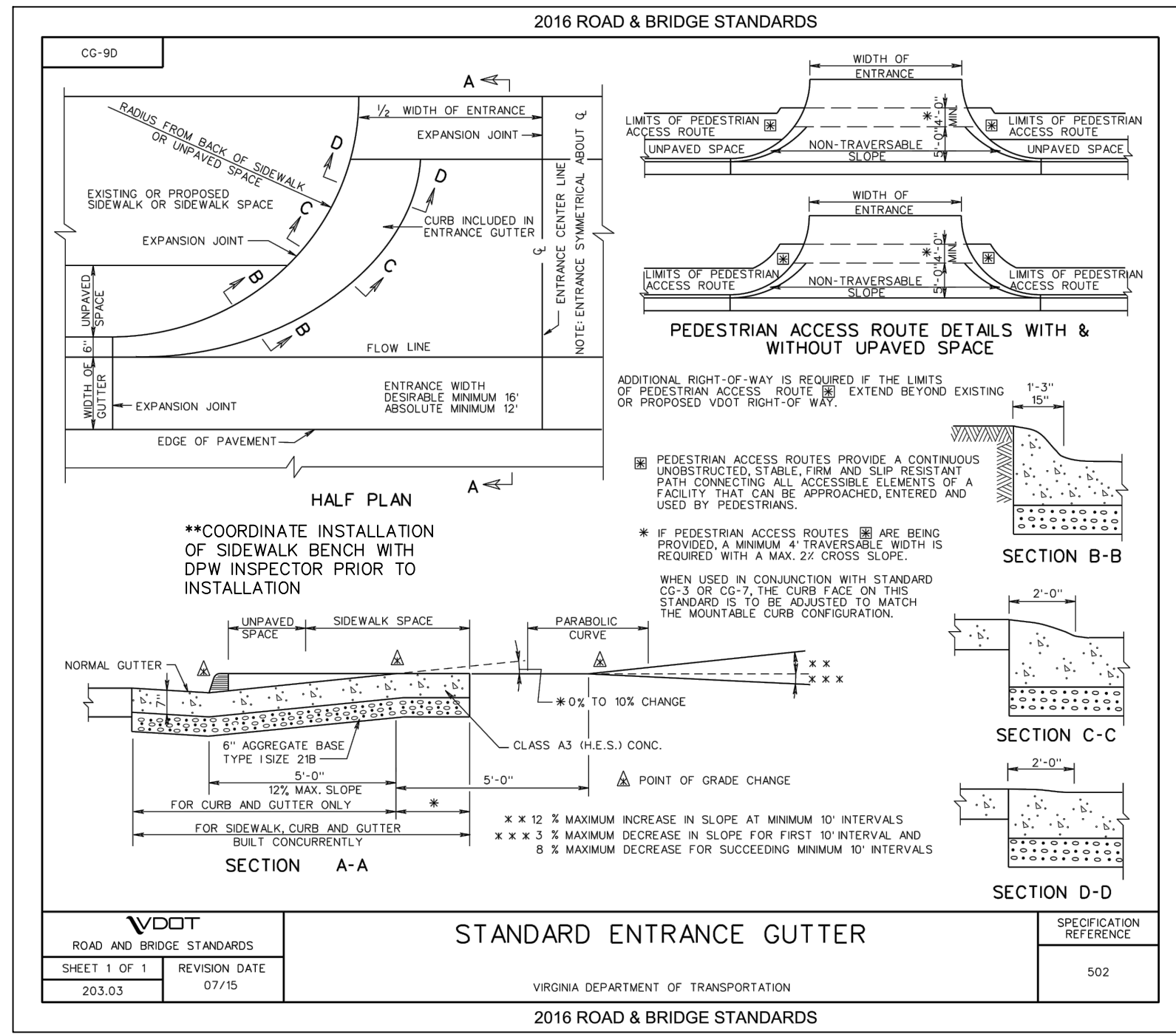
24011-GR.JOB -- 24011-TOPO.DWG

CONSTRUCTION NOTES

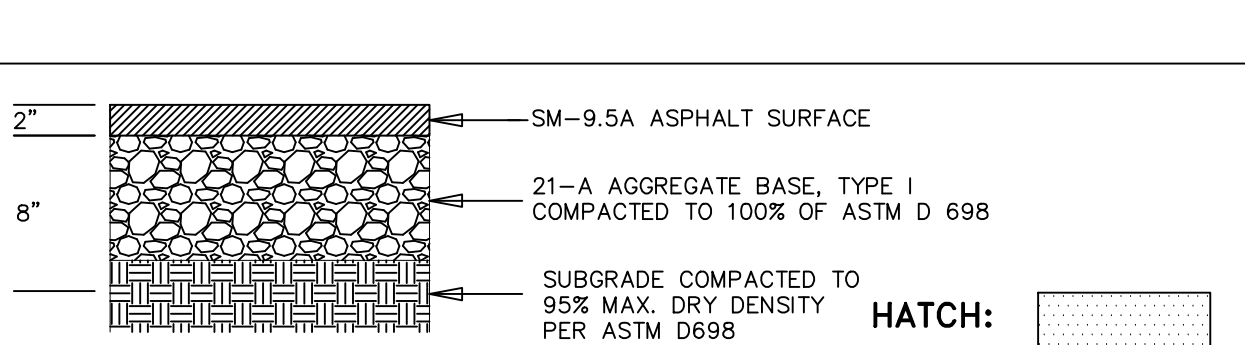
- ALL CONSTRUCTION AND MATERIALS SHALL CONFORM WITH THE CURRENT STANDARDS AND SPECIFICATIONS OF THE VIRGINIA DEPARTMENT OF TRANSPORTATION.
- ALL STORM SEWER SHALL BE ASTM C-76, CLASS III EXCEPT AS NOTED.
- ALL DRAINAGE STRUCTURES SHALL BE EITHER PRECAST OR CAST-IN-PLACE CONCRETE.
- THE CONTRACTOR SHALL NOTIFY THE DEPARTMENT OF PUBLIC UTILITIES PRIOR TO MAKING ANY ADJUSTMENTS TO THE WATER OR SEWERAGE SYSTEMS.
- THE CONTRACTOR SHALL NOTIFY RICHMOND PUBLIC WORKS AT LEAST 24 HOURS PRIOR TO STARTING WORK ON THE PROJECT.
- A DI ON GRADE SHALL BE POURED WITH THE THROAT ON THE SAME GRADE AS THE ADJOINING CURB AND GUTTER.
- THE PAVEMENT DESIGN IS SUBJECT TO CHANGE DUE TO SOIL CONDITION AT THE TIME OF CONSTRUCTION, AS DETERMINED BY THE ENGINEER.
- ALL DIMENSIONS ARE TO FACE OF CURB OR BUILDING.
- ANY DIMENSION THAT DOES NOT SCALE AS NOTED MUST BE CONFIRMED WITH THE DESIGN ENGINEER.
- ALL CURB RADII ARE 5.0' UNLESS NOTED OTHERWISE.
- TRAFFIC PAINT SHALL BE WHITE ON ASPHALT, YELLOW ON PAVERS AND 'ADA' BLUE ON HANDICAPPED SPACES. PARKING STRIPES SHALL BE 4" WIDE. STOP BARS SHALL BE 24" WIDE AND BE PLACED 10' FROM RIGHT OF WAY PER CURRENT VDOT STANDARDS.
- STOP SIGNS AND HANDICAP PARKING SIGNS SHALL CONFORM TO THE "MANUAL OF UNIFORM TRAFFIC CODE DEVICES" AND THE VIRGINIA SUPPLEMENT.
- CONTRACTOR SHALL ACQUIRE ANY AND ALL NECESSARY CONSTRUCTION PERMITS.
- ALL CONSTRUCTION MATERIALS AND WORKMANSHIP MUST CONFORM TO THE FOLLOWING STANDARDS AND SPECIFICATIONS:
VIRGINIA DEPARTMENT OF TRANSPORTATION
RICHMOND DEPARTMENT OF PUBLIC UTILITIES
RICHMOND DEPARTMENT OF COMMUNITY DEVELOPMENT
ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH VDOT STANDARDS.
- ELECTRIC POWER, TELEPHONE POWER, AND GAS SUPPLY TRENCHES ARE TO BE COMPACTED, MULCHED AND SEEDED WITHIN 15 DAYS AFTER BACKFILL.
- VIRGINIA LAW REQUIRES THE CONTRACTOR TO NOTIFY MISS UTILITY AT 1-800-552-7001 AT LEAST 48 HOURS PRIOR TO ANY LAND DISTURBANCE. THIS PLAN DOES NOT GUARANTEE THE EXISTENCE OR LOCATION OF UNDERGROUND UTILITIES. THE UNDERGROUND UTILITIES SHOWN HEREON WERE ESTABLISHED USING ABOVE GROUND STRUCTURES (VALVES, METERS, MANHOLES, ETC.) AND AVAILABLE UTILITY MAPS. PRIOR TO ANY EXCAVATION OR CONSTRUCTION, THE CONTRACTOR SHALL UNCOVER ALL UTILITIES WHICH ARE SHOWN ON THE PLANS OR WHICH HAVE BEEN MARKED BY MISS UTILITY AS BEING IN THE AREA OF EXCAVATION OR CONSTRUCTION. THE CONTRACTOR SHALL TAKE VERTICAL AND HORIZONTAL MEASUREMENTS ADEQUATE TO DETERMINE IF ANY CONFLICT WILL OCCUR. IF ANY POTENTIAL CONFLICT IS FOUND, THE CONTRACTOR SHALL NOTIFY THE SITE ENGINEER PRIOR TO BEGINNING ANY EXCAVATION OR CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND REINSTALLING AT HIS EXPENSE ANY UTILITY WHICH MUST BE RELOCATED BECAUSE OF A CONFLICT WHICH WAS NOT REPORTED TO THE SITE ENGINEER PRIOR TO THE BEGINNING OF ANY EXCAVATION OR CONSTRUCTION.
- ALL WORK SHALL BE DONE IN ACCORDANCE WITH THE PLANS AND SPECIFICATIONS. ANY WORK OR MATERIAL NOT IN CONFORMANCE WITH THESE DOCUMENTS IS SUBJECT TO REMOVAL AND REPLACEMENT AT THE CONTRACTOR'S EXPENSE.
- ANY QUANTITIES PROVIDED ON THE PLANS ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR VERIFYING THE QUANTITIES AND SUBMITTING HIS BID ACCORDINGLY.
- ALL EXISTING UTILITIES, SERVICE POLES AND CONNECTIONS SHALL BE PROTECTED AT THE CONTRACTOR'S EXPENSE. IF DAMAGE IS CAUSED BY CONSTRUCTION TO ANY EXISTING UTILITY, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR OR RESTORATION OF SAME.
- CONTRACTOR SHALL PRESERVE ALL CORNERSTONES, IRON PINS, CONCRETE MONUMENTS OR ANY OTHER TYPE OF MONUMENTATION. THE CONTRACTOR SHALL ALSO PROVIDE A REGISTERED SURVEYOR TO RESTORE ANY/ALL MONUMENTATION SHOULD THAT MONUMENTATION BECOME DAMAGED OR DESTROYED.
- ROOF DRAINS, FOUNDATION DRAINS AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED, EXCEPT IN THE INSTANCE OF EXISTING COMBINED SEWER.
- ALL EQUIPMENT AND MATERIALS DESIGNATED FOR REMOVAL SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS NOTED ON THE PLANS.

SITE CONSTRUCTION NOTES

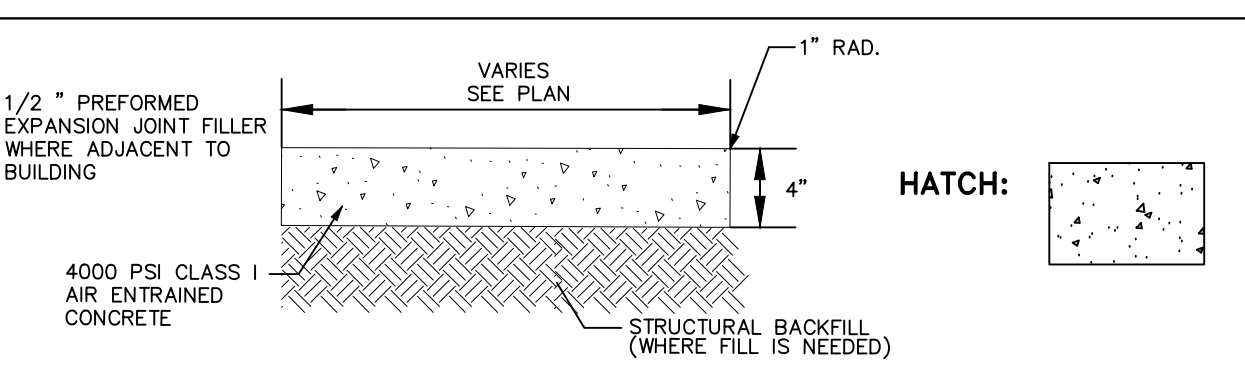
- ALL EXISTING SITE FEATURES AND UNDERGROUND UTILITIES ILLUSTRATED ARE AS LOCATED BY SHADRACH & ASSOCIATES, LLC FROM SITE SURVEY AND CITY OF RICHMOND UTILITY MAPPING.
- CONTRACTOR SHALL CONTACT "MISS UTILITY" 48 HOURS PRIOR TO THE START OF ANY WORK. VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES IN THE AREA OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ARCHITECT IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT INDICATED IF THERE APPEARS TO BE A CONFLICT, AND/OR UPON DISCOVERY OF ANY UTILITY NOT INDICATED. TO LOCATE UTILITIES, CALL "MISS UTILITY" OF CENTRAL VIRGINIA 1-800-552-7001.
- ACQUIRE ANY AND ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO COMPLETE THE SITEWORK AND FURNISH COPIES TO THE OWNER.
- ALL WORK SHALL BE SUBJECT TO INSPECTION BY DESIGNATED OFFICIALS. NOTIFY THE CHIEF INSPECTOR 48 HOURS PRIOR TO START OF WORK.
- PROTECT ALL EXISTING SITE FEATURES AT ALL TIMES DURING CONSTRUCTION. DAMAGE TO ANY ITEM NOT LISTED FOR REMOVAL OR RELOCATION ON THE DEMOLITION PLAN SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL CHARGE TO THE OWNER. IF THERE ARE EXISTING SITE FEATURES IN CONFLICT WITH THE PROPOSED WORK NOT IDENTIFIED TO BE RELOCATED OR REMOVED, NOTIFY THE ARCHITECT IMMEDIATELY FOR CLARIFICATION.



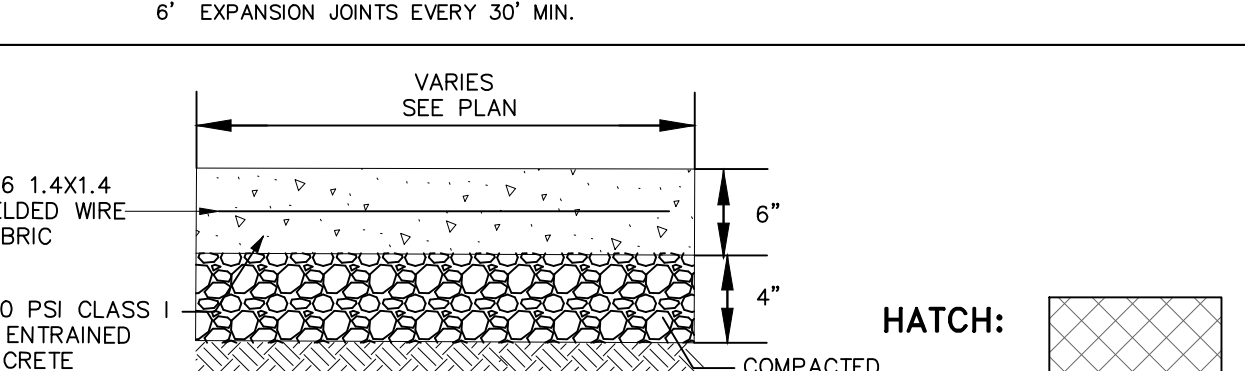
PAVEMENT SECTION LEGEND



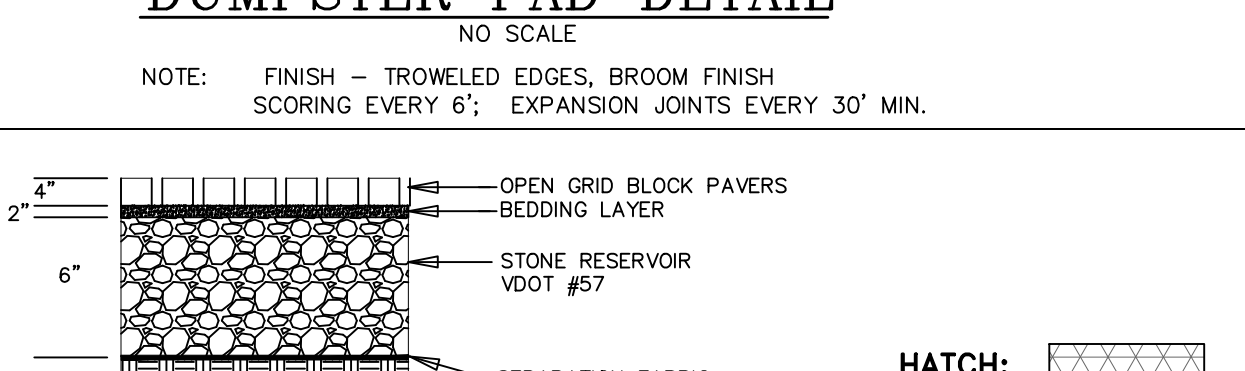
ASPHALT PAVEMENT SECTION



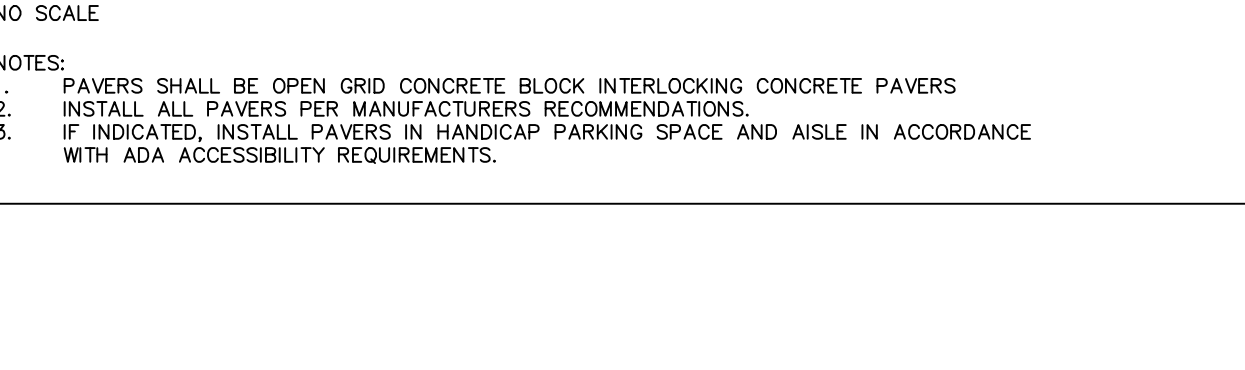
ON-SITE SIDEWALK DETAIL



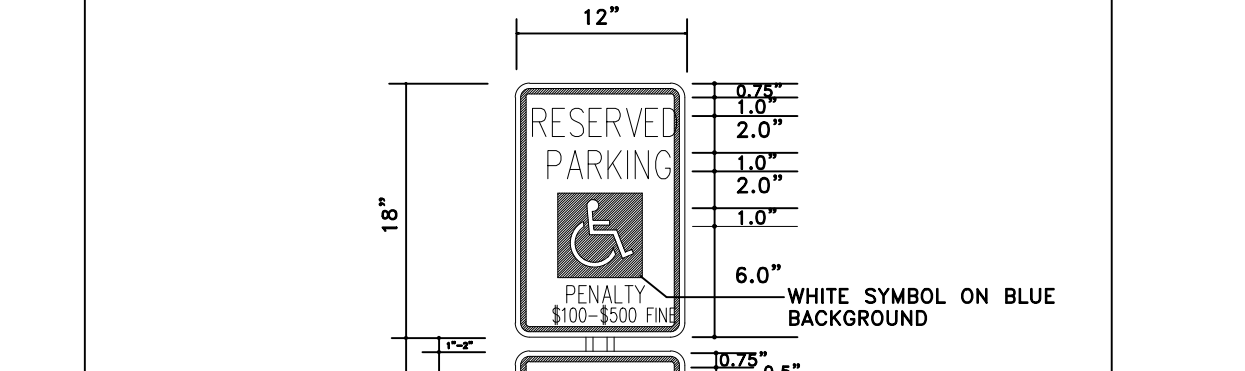
DUMPSTER PAD DETAIL



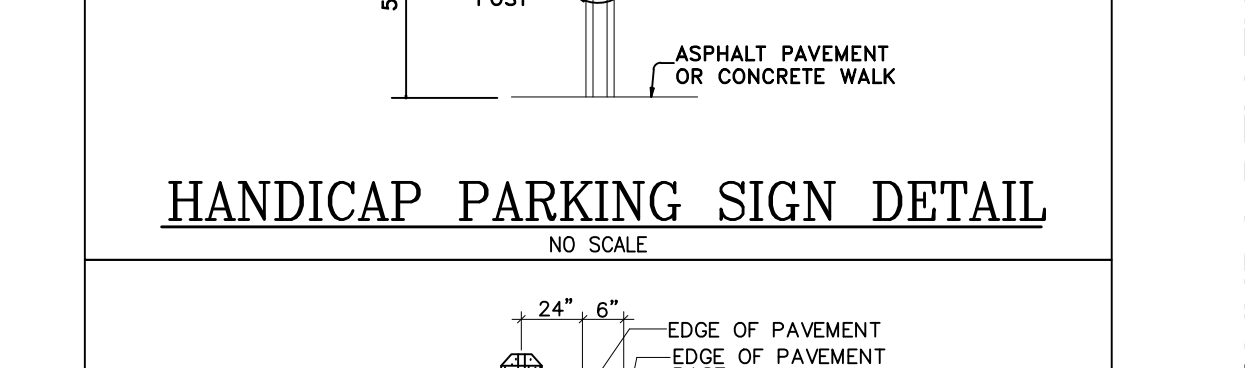
OPEN GRID BLOCK PAVERS SECTION



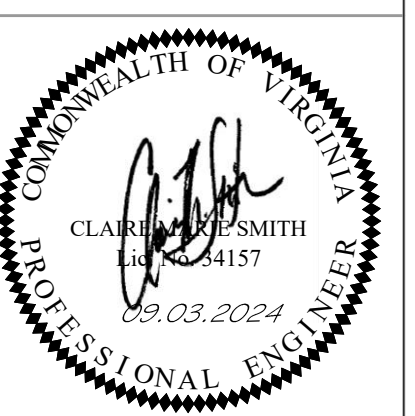
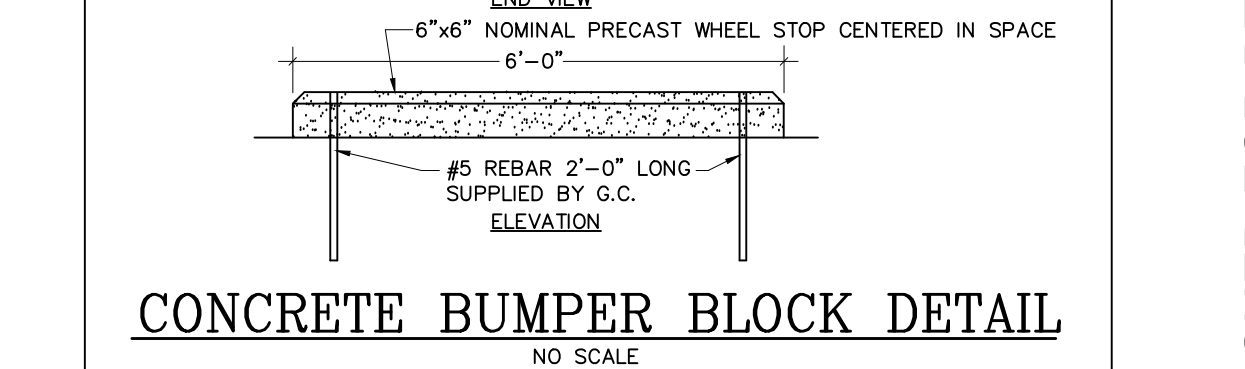
HANDICAP PARKING SIGN DETAIL



CITY OF RICHMOND ALLEY SECTION



CONCRETE BUMPER BLOCK DETAIL



REV NO.	DATE	DESCRIPTION
1	07.31.24	PER LDIS REVIEW COMMENTS
2	09.02.24	PER LDIS REVIEW COMMENTS

ISSUED FOR PERMIT / VHDA REVIEW

BOWLER SENIOR HOUSING PARKING LOT IMPROVEMENTS

2516 E. Leigh Street

DATE: 04.02.2024
REV01: 07.31.2024

NOTES & DETAILS

C1.1

VIRGINIA E+SCH 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... 2. DURING CONSTRUCTION, SOIL STOCKPILES AND BORROW AREAS SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT TRAPPING MEASURES... 3. A PERMANENT VEGETATIVE COVER SHALL BE ESTABLISHED ON DENUDED AREAS NOT OTHERWISE PERMANENTLY STABILIZED... 4. SEDIMENT BASINS AND TRAPS, PERIMETER DIKES, SEDIMENT BARRIERS AND OTHER MEASURES INTENDED TO TRAP SEDIMENT SHALL BE CONSTRUCTED AS A FIRST STEP IN ANY LAND-DISTURBING ACTIVITY... 5. SEDIMENT MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION... 6. SEDIMENT TRAPS AND SEDIMENT BASINS SHALL BE DESIGNED AND CONSTRUCTED BASED UPON THE TOTAL DRAINAGE AREA TO BE SERVED BY THE TRAP OR BASIN... 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 SEEPS 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... 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 WATERCOURSE 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 SHALL 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... 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... 17. WHERE CONSTRUCTION VEHICLE ACCESS ROUTES INTERSECT PAVED OR PUBLIC ROADS, PROVISIONS SHALL BE MADE TO MINIMIZE THE TRANSPORT OF SEDIMENT BY VEHICULAR TRACKING ONTO THE PAVED SURFACE... 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... 19. PROPERTIES AND WATERWAYS DOWNSTREAM FROM DEVELOPMENT SITES SHALL BE PROTECTED FROM SEDIMENT DEPOSITION, EROSION AND DAMAGE... 20. CONCENTRATED STORMWATER RUNOFF LEAVING A DEVELOPMENT SITE SHALL BE DISCHARGED DIRECTLY INTO AN ADEQUATE NATURAL OR MAN-MADE CHANNEL, PIPE OR STORM SEWER SYSTEM... 21. ADEQUACY OF ALL CHANNELS AND PIPES SHALL BE VERIFIED IN THE FOLLOWING MANNER: a. 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... b. NATURAL CHANNELS SHALL BE ANALYZED BY THE USE OF A TWO-YEAR STORM TO VERIFY THAT STORMWATER CHANNEL BANKS WILL NOT CAUSE EROSION OF CHANNEL BED OR BANKS... c. 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... d. 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... 22. IMPROVE THE CHANNELS 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... 23. IMPROVE THE PIPE OR PIPE SYSTEM TO A CONDITION WHERE THE TEN-YEAR STORM IS CONTAINED WITHIN THE APPURTENANCES... 24. 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... 25. PROVIDE A COMBINATION OF CHANNEL IMPROVEMENT, STORMWATER DETENTION OR OTHER MEASURES WHICH ARE SATISFACTORY TO THE PLAN-APPROVING AUTHORITY... 26. THE APPLICANT SHALL PROVIDE EVIDENCE OF PERMISSION TO MAKE THE IMPROVEMENTS... 27. IF THE APPLICANT CHOOSES AN OPTION THAT INCLUDES STORMWATER DETENTION, HE SHALL OBTAIN APPROVAL FROM THE LOCALITY OF THE PLAN OR MAINTENANCE OF THE DETENTION FACILITIES... 28. OUTFLOW FROM A DETENTION FACILITY SHALL BE DISCHARGED TO A RECEIVING CHANNEL AND ENERGY DISSIPATORS SHALL BE PLACED AT THE OUTFLOW OF ALL DETENTION FACILITIES... 29. ALL ON-SITE CHANNELS MUST BE VERIFIED TO BE ADEQUATE... 30. IN APPLYING THESE STORMWATER MANAGEMENT CRITERIA, INDIVIDUAL LOTS OR PARCELS IN A RESIDENTIAL, COMMERCIAL OR INDUSTRIAL DEVELOPMENT SHALL NOT BE CONSIDERED TO BE SEPARATE DEVELOPMENT PROJECTS... 31. ALL MEASURES DESIGNED 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 WATERWAYS... 32. ANY PLAN APPROVED PRIOR TO JULY 1, 2014, THAT PROVIDES FOR STORMWATER MANAGEMENT THAT ADDRESSES ANY FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS FOR NATURAL OR MAN-MADE CHANNELS... 33. FOR PLANS APPROVED ON AND AFTER JULY 1, 2014, THE FLOW RATE CAPACITY AND VELOCITY REQUIREMENTS OF § 82-1-44.15:22 A OF THE ACT AND THIS SUBSECTION SHALL BE SATISFIED BY COMPLIANCE WITH WATER QUANTITY REQUIREMENTS IN THE STORMWATER MANAGEMENT ACT... 34. AND ATTENDANT REGULATIONS, UNLESS SUCH LAND-DISTURBING ACTIVITIES (I) ARE IN ACCORDANCE WITH PROVISIONS FOR TIME LIMITS ON APPLICABILITY OF APPROVED DESIGN CRITERIA... 35. COMPLIANCE WITH THE WATER QUANTITY MINIMUM STANDARDS SET OUT IN § 82-1-44.15:22 A OF THE ACT AND THIS SUBSECTION SHALL BE DEEMED TO SATISFY THE REQUIREMENTS OF THIS SUBDIVISION 19.

GENERAL EROSION AND SEDIMENT CONTROL NOTES

- (FROM CHAPTER 6 OF THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK)
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 § 82-1-44.15:22-24.
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 FINAL INSPECTION.
ES-3: ALL EROSION AND SEDIMENT CONTROL MEASURES ARE TO BE PLACED PRIOR TO OR AS THE FIRST STEP IN CLEARING.
ES-4: A COPY OF THE APPROVED EROSION AND SEDIMENT CONTROL PLAN 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 TO, OFF-SITE 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 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 TIME 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.

CITY OF RICHMOND STANDARD E+S CONTROL NOTES

- 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... 2. EXCESS EXCAVATION DISPOSED OF OFF THE SITE SHALL BE DISPOSED OF IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK... 3. EROSION AND SEDIMENT CONTROLS SHALL BE INSTALLED IN ACCORDANCE WITH VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK... 4. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED SO THAT THE SEDIMENT CARRYING RUNOFF FROM THE SITE WILL NOT ENTER STORM DRAINAGE FACILITIES... 5. EROSION AND SEDIMENT CONTROLS SHALL BE MAINTAINED UNTIL THE DISTURBED AREA IS STABILIZED... 6. PROPERTIES ADJOINING THE SITE SHALL BE KEPT CLEAN OF MUD OR SILT CARRIED FROM THE SITE... 7. THE DISPOSAL OF WASTE MATERIALS REMOVED FROM EROSION AND SEDIMENT CONTROL FACILITIES AND THE DISPOSAL OF THESE FACILITIES SHALL BE IN ACCORDANCE WITH THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK... 8. STABILIZATION MEASURES SHALL BE APPLIED TO EARTHEN STRUCTURES SUCH AS DAMS, DIKES AND DIVERSIONS IMMEDIATELY AFTER INSTALLATION... 9. DURING CONSTRUCTION OF THE PROJECT, SOIL STOCKPILES SHALL BE STABILIZED OR PROTECTED WITH SEDIMENT-TRAPPING MEASURES... 10. INCREASED RUNOFF FROM THE SITE WILL BE ATTENUATED BY INSTALLING PERMEABLE OPEN GRID PAVERS FOR TWO SPACES WITHIN THE PROPOSED PARKING LOT... 11. THE DISTURBED AREA OF THE SITE WILL BE LESS THAN ONE ACRE, THEREFORE VSPM/RSPM PERMITTING NOT IS REQUIRED.

EROSION AND SEDIMENT CONTROL MAINTENANCE

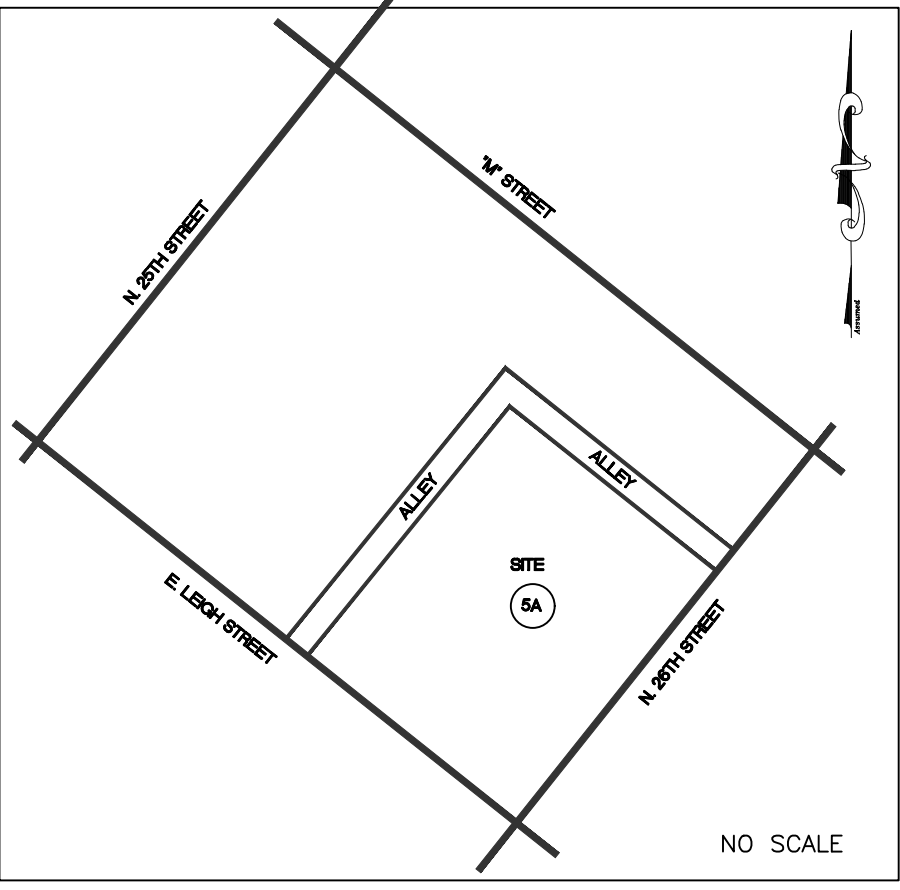
ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CHECKED DAILY AND AFTER EACH RUNOFF PRODUCING RAINFALL EVENT BY THE REGISTERED LAND DISTURBER (RLD) LISTED ON THE PERMIT FOR THIS PROJECT. ANY NECESSARY REPAIRS OR REPLACEMENTS SHALL BE MADE BY THE CONTRACTOR IMMEDIATELY. ALL SEDIMENT REMOVED FROM EROSION CONTROL PRACTICES SHALL BE DISPOSED OF IN AN AREA PROTECTED FROM EROSION. THE FOLLOWING ITEMS SHALL BE CHECKED IN PARTICULAR:

- 3.02 CONSTRUCTION ENTRANCE
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOW OF MUD ONTO PUBLIC RIGHTS-OF-WAY... 2. INSTALL CONSTRUCTION ENTRANCE, TREE PROTECTION FENCING AND SILT FENCING AS THE FIRST MEASURES OF CONSTRUCTION OPERATIONS... 3. BEGIN SITE DEMOLITION ONCE EROSION CONTROL MEASURES ARE IN PLACE... 4. BEGIN SITE GRADING OPERATIONS... 5. BRING THE SITE TO SUB-GRADE ELEVATIONS AND PROVIDE SMOOTH GRADES... 6. INSTALL PAVING, CURBING, SIDEWALKS, SITE FENCING, AND SIGNAGE ETC... 7. INSTALL VEGETATION AND GROUND COVER IN LANDSCAPED AREAS... 8. AS THE SITE REACHES FINAL GRADE IN UNPAVED AREAS, INSTALL TOPSOIL, SEEDING OR SOD, AND MULCHING AS SOON AS POSSIBLE... 9. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL THERE IS NO LONGER A THREAT TO TRANSPORT SOIL FROM THE CONSTRUCTION SITE... 10. REMOVE EROSION CONTROL MATERIALS ONLY AFTER OBTAINING APPROVAL FROM THE CITY E&S INSPECTOR... 3.05 SILT FENCE
1. SILT FENCES SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL... 2. CLOSE ATTENTION SHALL BE PAID TO THE REPAIR OF DAMAGED SILT FENCE RESULTING FROM END RUNS AND UNDERCUTTING... 3. SHOULD THE FABRIC ON A SILT FENCE DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER STILL BE NECESSARY, THE FABRIC SHALL BE REPLACED PROMPTLY... 4. SEDIMENT DEPOSITS SHOULD BE REMOVED AFTER EACH STORM EVENT... 5. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE IS NO LONGER REQUIRED SHALL BE DRESSED TO CONFORM WITH THE EXISTING GRADE, PREPARED AND SEEDS... 3.38 TREE PRESERVATION AND PROTECTION
1. THE TREE PROTECTION FENCING SHALL BE INSPECTED WEEKLY TO ENSURE IT IS STANDING FIRMLY AND PROVIDING PROTECTION TO DAMAGE FROM CONSTRUCTION EQUIPMENT... 2. IF TREE PROTECTION FENCING IS KNOCKED DOWN IT SHALL BE REPAIRED/REPLACED IMMEDIATELY... 3. ANY DAMAGE TO TREES SHALL BE TREATED IN ACCORDANCE WITH VAESCH CHAPTER 3.38... 4. TREE PROTECTION FENCING SHALL REMAIN IN PLACE UNTIL DAMAGE TO VEGETATION IS NO LONGER A THREAT.

EROSION AND SEDIMENT CONTROL NARRATIVE

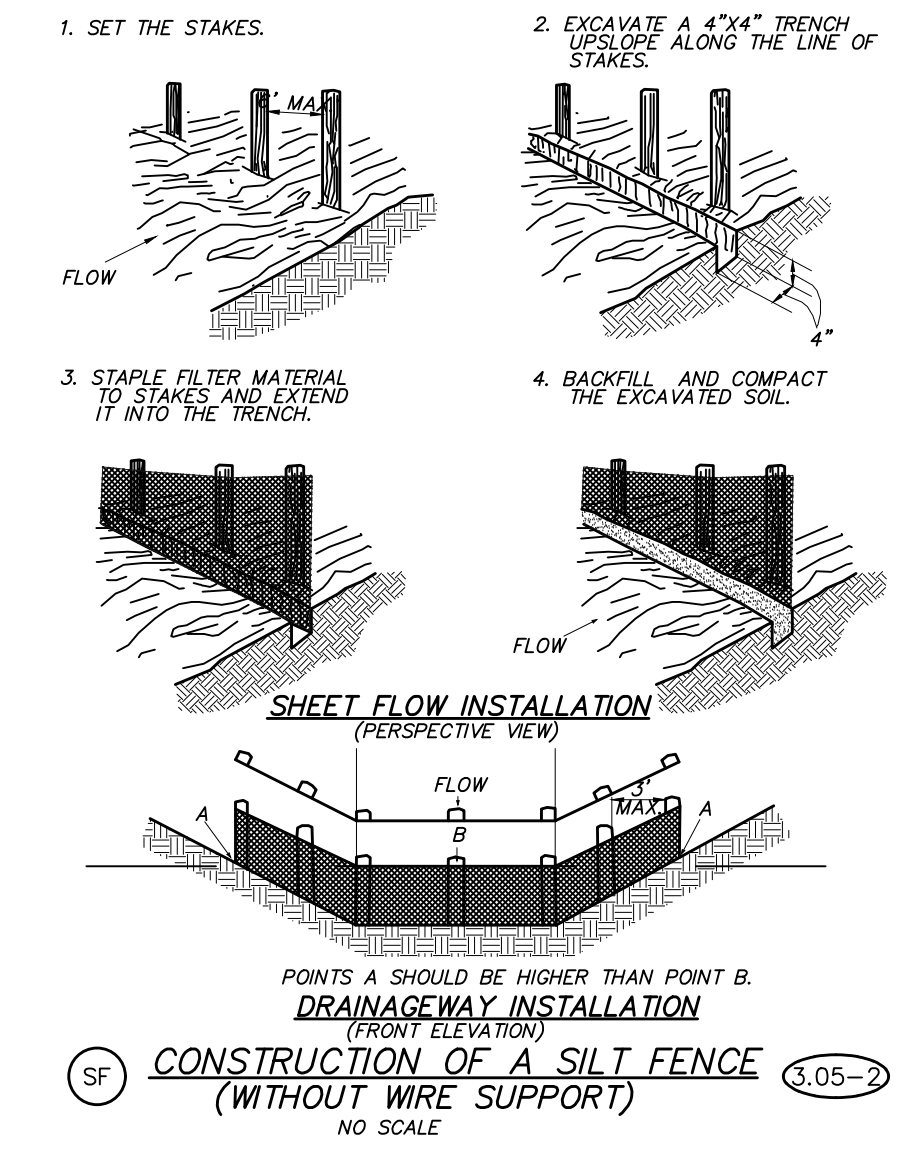
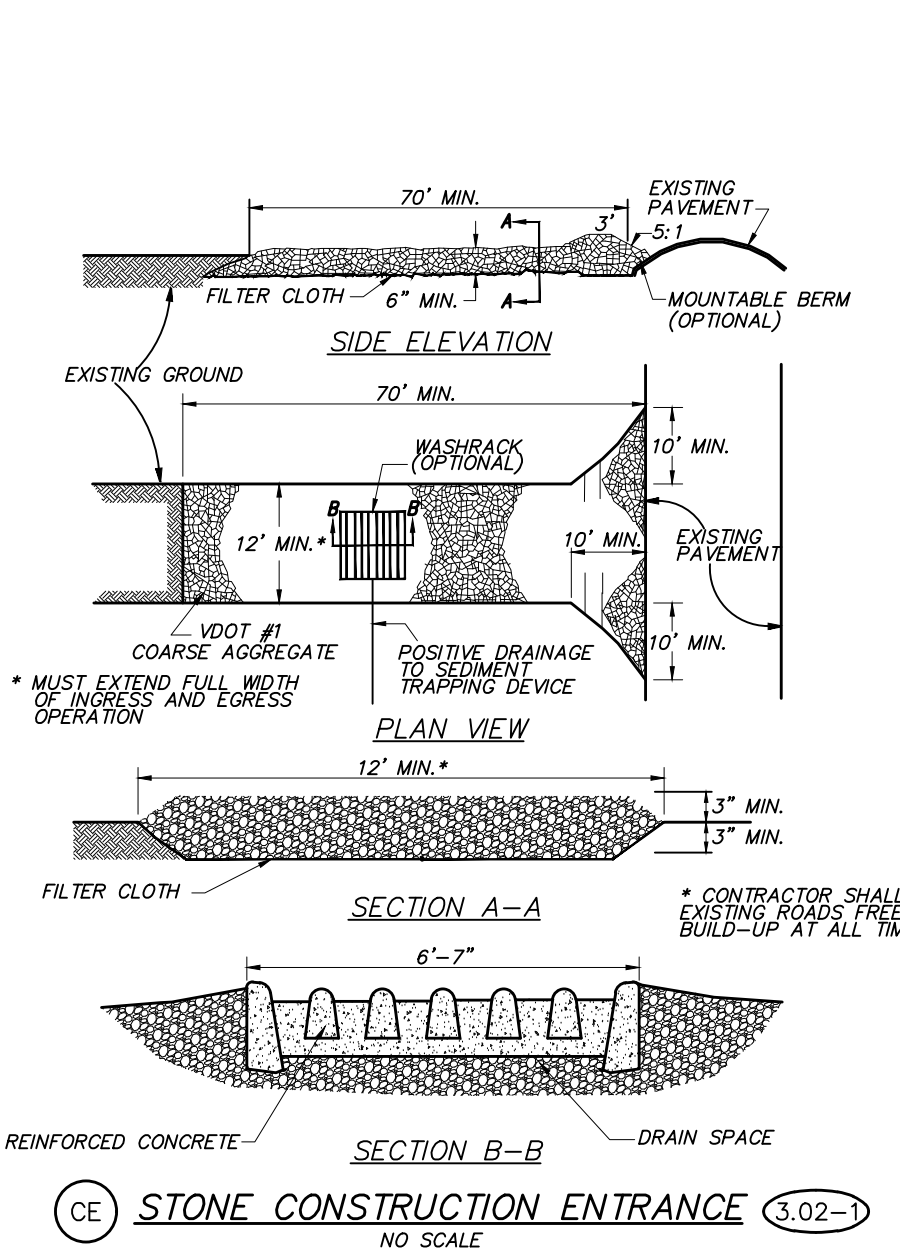
- A. PROJECT DESCRIPTION: THIS PROJECT REQUIRES SITE DEMOLITION, GRADING AND PAVING APPROPRIATE FOR THE IMPROVEMENTS TO THE EXISTING PARKING AND LANDSCAPING AREAS AND ACCESS TO THE EXISTING BUILDING... B. EXISTING SITE CONDITIONS: THE EXISTING SITE IS DEVELOPED WITH AN EXISTING SENIOR HOUSING BUILDING AND ASSOCIATED PARKING LOT... C. ADJACENT AREAS: THE ADJACENT PARCELS ARE GENERALLY RESIDENTIAL IN NATURE... D. OFF-SITE AREAS: THIS PROJECT WILL NOT ADVERSELY IMPACT OFF SITE AREAS... E. SOILS: ACCORDING TO USDA SOIL SURVEY SOIL IN THE AREA OF THE PROPOSED CONSTRUCTION IS 5A ATLEE URBAN LAND COMPLEX... F. CRITICAL AREAS: THERE DO NOT APPEAR TO BE ANY CRITICAL EROSION AREAS ON THE SITE... G. EROSION & SEDIMENT CONTROL MEASURES: CONSTRUCTION ENTRANCE - 3.02: TEMPORARY CONSTRUCTION ENTRANCE SHALL BE MAINTAINED AT THE LOCATION(S) INDICATED ON THE PLANS... SILT FENCE BARRIER - 3.05: SILT FENCE SEDIMENT BARRIERS SHALL BE PROVIDED DOWNSLOPE OF AREAS WITH MINIMAL GRADES... STORM DRAIN INLET PROTECTION - 3.02: INLET PROTECTION SHALL BE INSTALLED ON CURB AND DROP INLETS... H. PERMANENT STABILIZATION: AREAS NOT PAVED OR LANDSCAPED WILL BE OR SEEDS AND/OR MULCHED... I. STORMWATER RUN-OFF CONSIDERATIONS: THIS SITE LIES WITHIN THE CITY'S COMBINED SEWER SERVICE AREA... J. CALCULATIONS: WATER QUANTITY: THE POINT OF ANALYSIS IS THE LOCATION WHERE THE DRAINAGE AREA ENTERS THE CITY STORM SEWER SYSTEM... INCREASED RUNOFF FROM THE SITE WILL BE ATTENUATED BY INSTALLING PERMEABLE OPEN GRID PAVERS FOR TWO SPACES WITHIN THE PROPOSED PARKING LOT.

SOILS MAP + DATA



MAP UNIT LEGEND

Table with 4 columns: MAP UNIT SYMBOL, MAP UNIT NAME, EROSION AND SEDIMENT CONTROL LEGEND, and QUANTITY. Includes entries for CONSTRUCTION ENTRANCE (1 EA), SILT FENCE (367 LF), and TREE PROTECTION FENCING (67 LF).



CONSTRUCTION SEQUENCE

- PHASE I: 1. THE OWNER SHALL GIVE THE INSPECTOR 48 HOURS NOTIFICATION TO SCHEDULE AN ON-SITE PRE-CONSTRUCTION MEETING... 2. INSTALL CONSTRUCTION ENTRANCE, TREE PROTECTION FENCING AND SILT FENCING AS THE FIRST MEASURES OF CONSTRUCTION OPERATIONS... 3. BEGIN SITE DEMOLITION ONCE EROSION CONTROL MEASURES ARE IN PLACE... 4. BEGIN SITE GRADING OPERATIONS... 5. BRING THE SITE TO SUB-GRADE ELEVATIONS AND PROVIDE SMOOTH GRADES... PHASE II: 6. INSTALL PAVING, CURBING, SIDEWALKS, SITE FENCING, AND SIGNAGE ETC... 7. INSTALL VEGETATION AND GROUND COVER IN LANDSCAPED AREAS... 8. AS THE SITE REACHES FINAL GRADE IN UNPAVED AREAS, INSTALL TOPSOIL, SEEDING OR SOD, AND MULCHING AS SOON AS POSSIBLE... 9. THE CONSTRUCTION ENTRANCE SHALL BE MAINTAINED UNTIL THERE IS NO LONGER A THREAT TO TRANSPORT SOIL FROM THE CONSTRUCTION SITE... 10. REMOVE EROSION CONTROL MATERIALS ONLY AFTER OBTAINING APPROVAL FROM THE CITY E&S INSPECTOR.

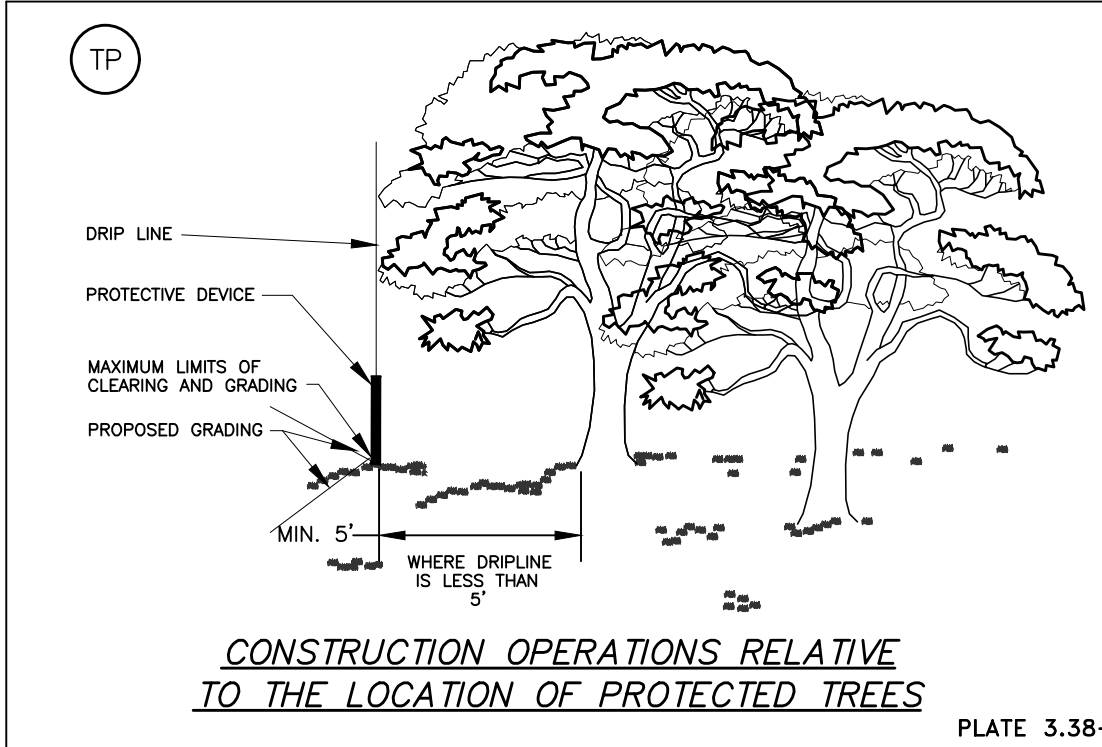


TABLE 3.31-B (REVISED JUNE 2003) TEMPORARY SEEDING SPECIFICATIONS QUICK REFERENCE FOR ALL REGIONS. Table with columns: APPLICATION DATES, SPECIES, APPLICATION RATES. Lists seeding requirements for Sept 1-Feb 15, Feb 16-Apr 30, and May 1-Aug 31.

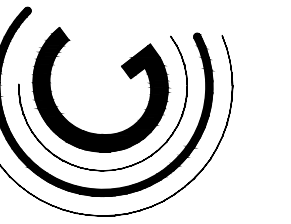
TABLE 3.32-D (REVISED JUNE 2003) PERMANENT SEEDING SPECIFICATIONS FOR ALL Piedmont AREA. Table with columns: LAND USE, SPECIES, APPLICATION PER ACRE. Lists seeding requirements for Minimum Lawn Care, High-Maintenance Lawn, and General Slope.

- NOTES: 1. A SOIL TEST IS NECESSARY TO DETERMINE THE ACTUAL AMOUNT OF LIME REQUIRED TO ADJUST THE SOIL pH OF THE SITE... 2. INCORPORATE THE LIME AND FERTILIZER INTO THE TOP 4-6 INCHES OF THE SOIL BY DISKING OR BY OTHER MEANS... 3. WHEN APPLYING SLOWLY AVAILABLE NITROGEN, USE RATES AVAILABLE IN EROSION & SEDIMENT CONTROL TECHNICAL BULLETIN #4, 2003 NUTRIENT MANAGEMENT FOR DEVELOPMENT SITES.

GRADIENT logo and address: 1406 Laburnum Park Boulevard, Richmond, VA 23227, 804.399.0500. Includes a professional seal for Charles R. Smith, Professional Engineer, No. 03.2024.

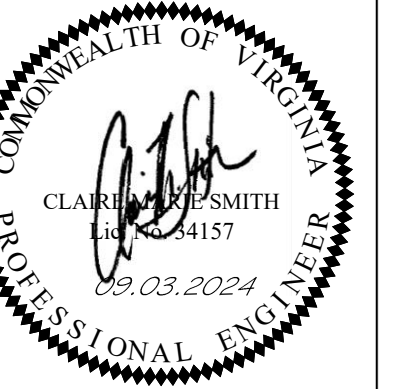
REVISIONS table with columns: REV. NO., DATE, DESCRIPTION, FEELD'S REVIEW COMMENTS. Shows two revisions dated 07/31/24 and 09/02/24.

Vertical text: ISSUED FOR PERMIT / VMDA REVIEW, BOWLER SENIOR HOUSING PARKING LOT IMPROVEMENTS, Richmond, Virginia, 2516 E. Leigh Street, EROSION CONTROL NOTES & DETAILS, C2.1, Project Number: 2402, © Gradient 2024.



GRADIENT

1406 Laburnum Park Boulevard
Richmond, VA 23227
804-399-0500



REV. NO.	DATE	DESCRIPTION
1	07.31.24	PER LDIS REVIEW COMMENTS
2	09.02.24	PER LDIS REVIEW COMMENTS

REVISIONS

BOWLER SENIOR HOUSING PARKING LOT IMPROVEMENTS

Richmond, Virginia

2516 E. Leigh Street

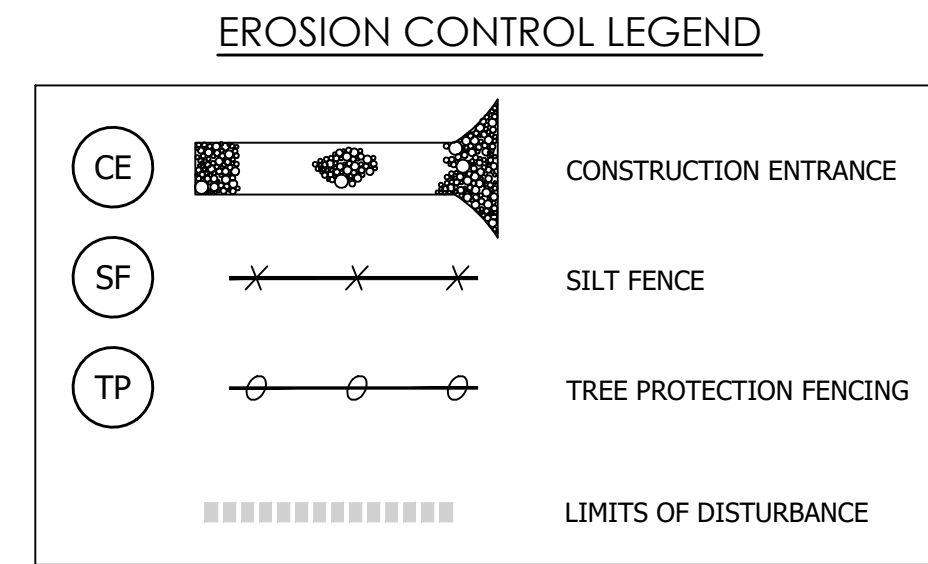
DATE: 04.02.2024
REV01: 07.31.2024

EX. CONDITIONS,
DEMOLITION &
PHASE I EROSION
CONTROL PLAN

C2.2

Project Number: 2402 © Gradient 2024

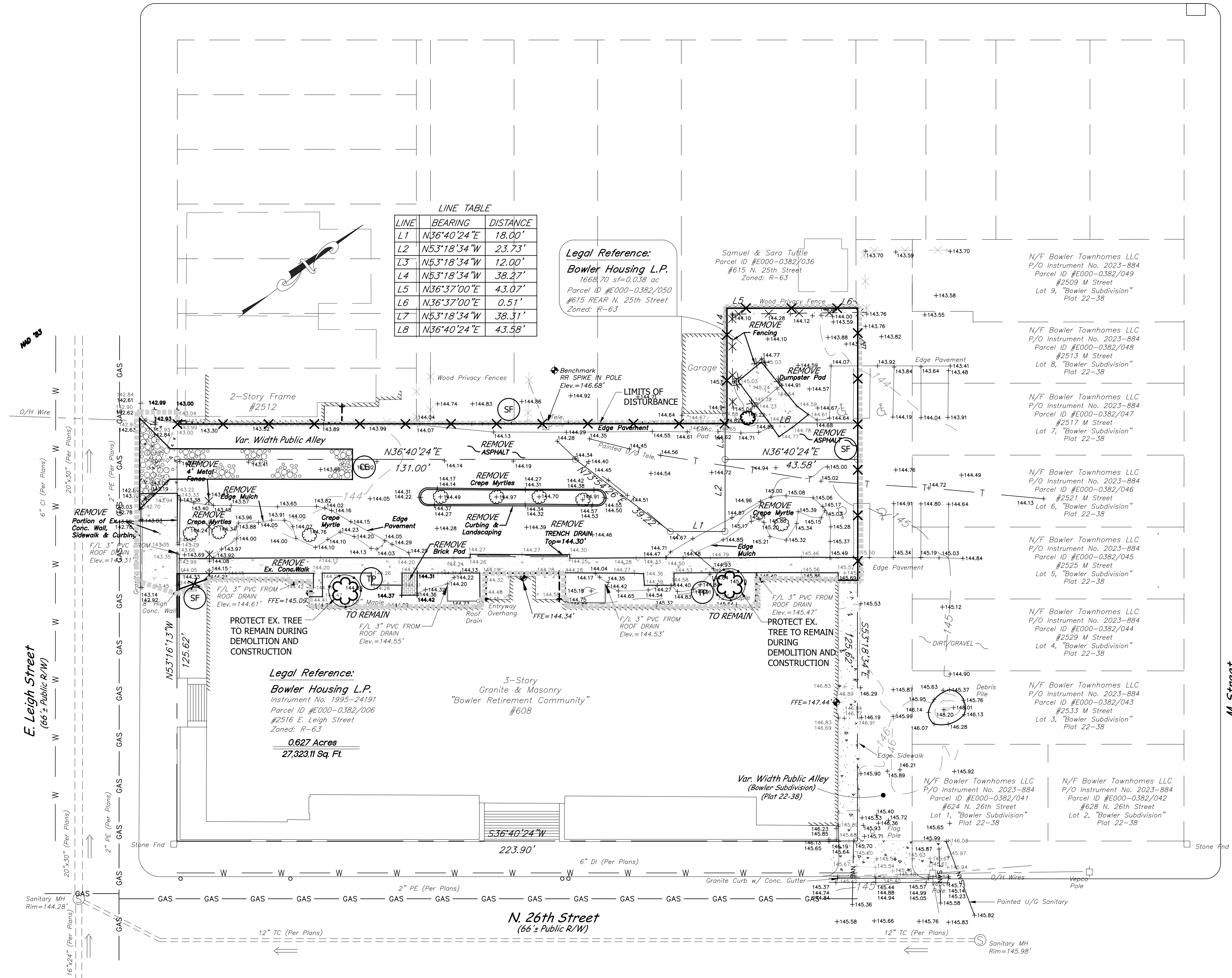
N. 25th Street
(66' ± Public R/W)



LINE TABLE

LINE	BEARING	DISTANCE
L1	N36°40'24"E	18.00'
L2	N53°18'34"W	23.73'
L3	N53°18'34"W	12.00'
L4	N53°18'34"W	38.27'
L5	N36°37'00"E	43.07'
L6	N36°37'00"E	0.51'
L7	N53°18'34"W	38.31'
L8	N36°40'24"E	43.58'

Legal Reference:
Bowler Housing L.P.
1666.70 sf=0.038 ac
Parcel ID #E000-0382/050
#615 REAR N. 25th Street
Zoned: R-63

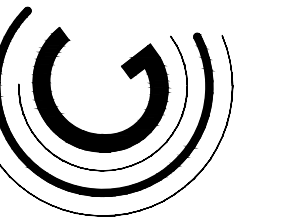


Legal Reference:
Bowler Housing L.P.
Instrument No. 1995-24191
Parcel ID #E000-0382/006
#2516 E. Leigh Street
Zoned: R-63
0.627 Acres
27,323.11 Sq. Ft.

General Notes

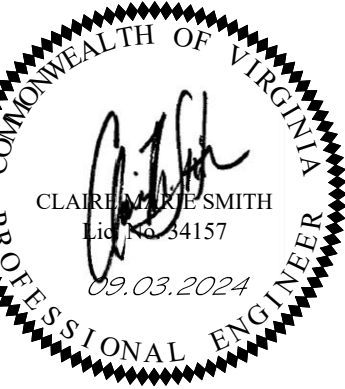
- This survey plat represents a current and accurate field transit survey of the premises shown hereon. Date of last physical survey: March 13, 2024.
- This survey was made without the benefit of a Title Report and therefore there may be encumbrances affecting the Subject Property not shown hereon.
- The subject property is not located in a Special Flood Hazard Area, but is located in Zone (X) Area of Minimal Flood Hazard, as determined by National Flood Insurance Program, Federal Emergency Management Agency, Department of Housing and Urban Development Map No. 510129-0041-E effective date July 16, 2014.
- Horizontal datum based upon NAD '83 & Vertical datum upon NAVD '88 (City Benchmark #234 Converted from NAVD '29).





GRADIENT

1406 Laburnum Park Boulevard
Richmond, VA 23227
804.399.0500



REVISIONS		DESCRIPTION
REV. NO.	DATE	DESCRIPTION
1	07.31.24	PER LDIS REVIEW COMMENTS
2	09.02.24	PER LDIS REVIEW COMMENTS

**BOWLER SENIOR HOUSING
PARKING LOT IMPROVEMENTS**

Richmond, Virginia

ISSUED FOR PERMIT / VHDA REVIEW

2516 E. Leigh Street

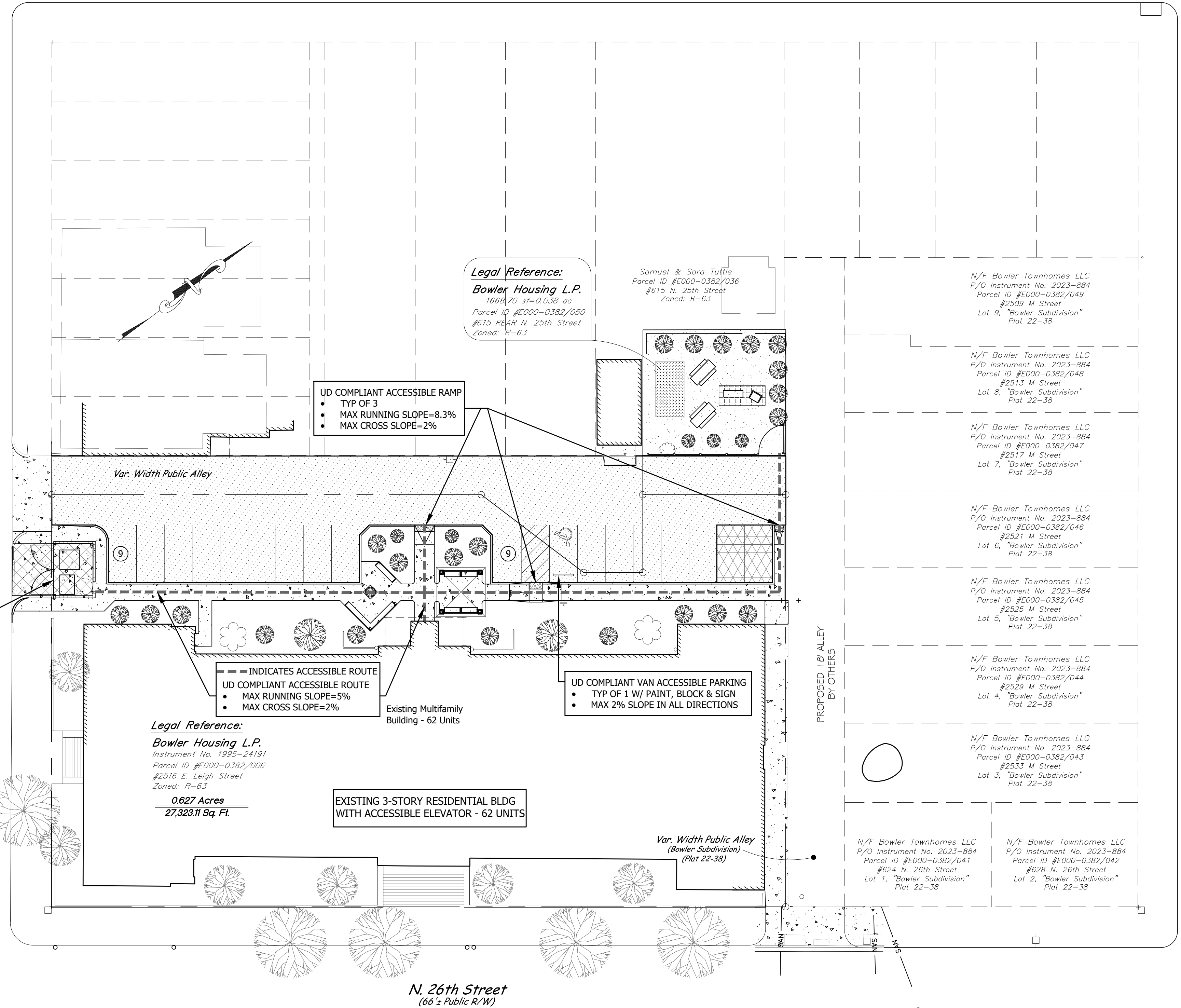
DATE: 04.02.2024
REV01: 07.31.2024

UNIVERSAL DESIGN
SITE PLAN

C3.1a

Project Number: 2402 © Gradient 2024

N. 25th Street
(66' ± Public R/W)



- UNIVERSAL DESIGN GENERAL NOTES:**
- 62 EXISTING APARTMENT UNITS
 - 18 PARKING SPACES TOTAL
 - 1 TYPICAL VAN ACCESSIBLE SPACE (5.6%) GREATER THAN 5% PER UD REQ.
 - MIN WIDTH OF SIDEWALK ADJACENT TO PARKING IS 5' FROM BACK OF CURB
 - ALL OTHER SIDEWALKS MINIMUM 4' WIDTH
 - ALL CURB CUTS ARE UD COMPLIANT
 - ACCESSIBLE ROUTE DOES NOT TRAVEL BEHIND OR THROUGH PARKING SPACES

CONTRACTOR SHALL VERIFY THAT ALL SIDEWALKS DRAIN AWAY FROM THE FACE OF BUILDING AT MAX 2% CROSS SLOPE AND THAT ALL ROUTES TO DUMPSTER AND AMENITY AREAS HAVE ACCESSIBLE SURFACE CONDITIONS AT MAX 2% CROSS SLOPE AND MAX. 5% RUNNING SLOPES

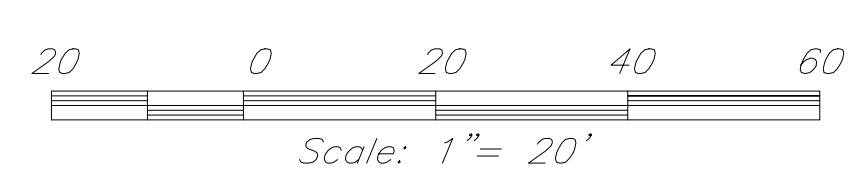
- UD COMPLIANT ACCESSIBLE DUMPSTER**
- MAX 2% SLOPE IN ALL DIRECTIONS
 - 60" DIAMETER TURNING SPACE

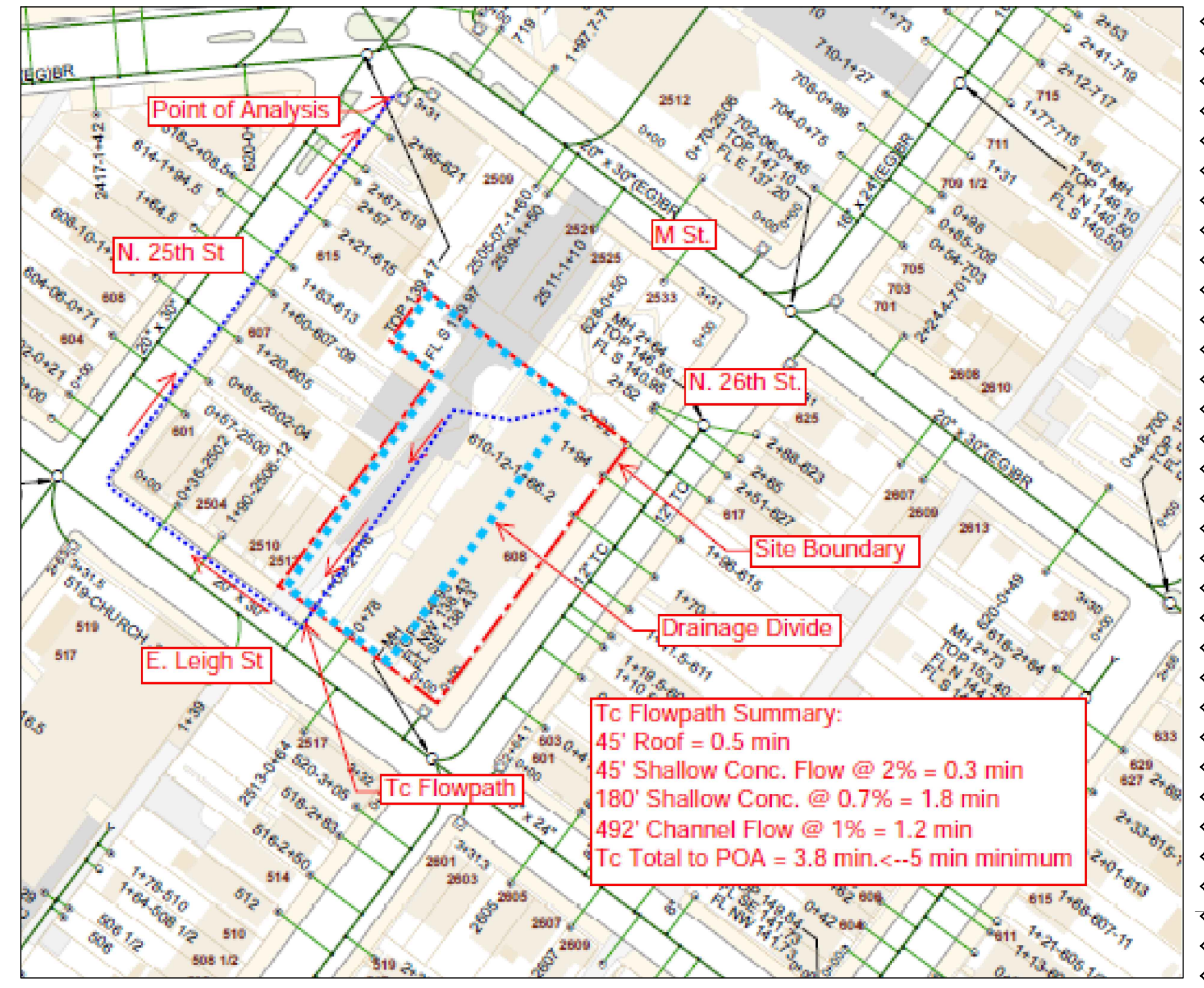
- UD COMPLIANT ACCESSIBLE RAMP**
- TYP OF 3
 - MAX RUNNING SLOPE=8.3%
 - MAX CROSS SLOPE=2%

- UD COMPLIANT ACCESSIBLE ROUTE**
- MAX RUNNING SLOPE=5%
 - MAX CROSS SLOPE=2%

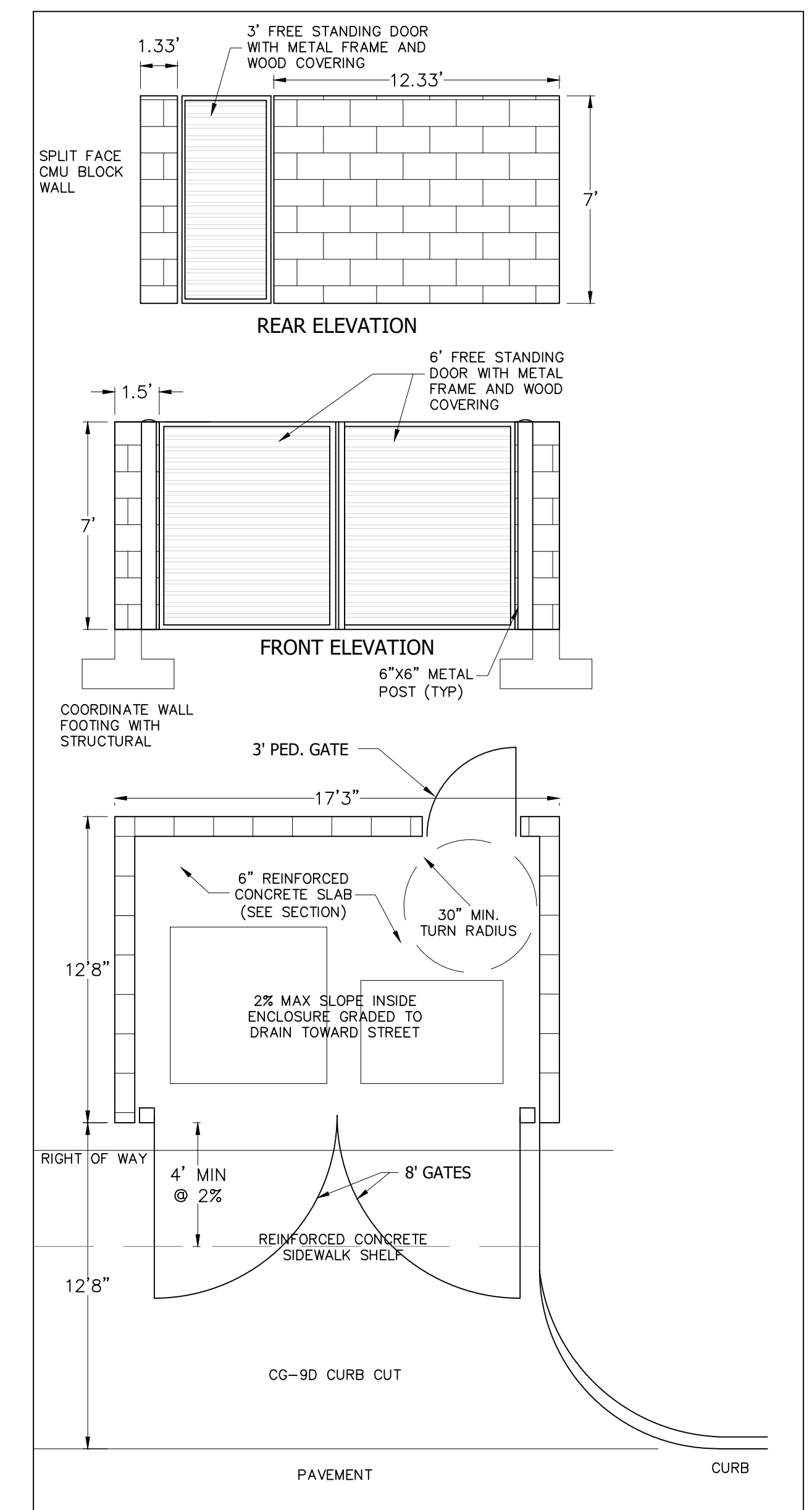
- UD COMPLIANT VAN ACCESSIBLE PARKING**
- TYP OF 1 W/ PAINT, BLOCK & SIGN
 - MAX 2% SLOPE IN ALL DIRECTIONS

- General Notes**
- This survey plat represents a current and accurate field transit survey of the premises shown hereon. Date of last physical survey: March 13, 2024.
 - This survey was made without the benefit of a Title Report and therefore there may be encumbrances affecting the Subject Property not shown hereon.
 - The subject property is not located in a Special Flood Hazard Area, but is located in Zone (X) Area of Minimal Flood Hazard, as determined by National Flood Insurance Program, Federal Emergency Management Agency, Department of Housing and Urban Development Map No. 510129-0041-E effective date July 16, 2014.
 - Horizontal datum based upon NAD '83 & Vertical datum upon NAVD '88 (City Benchmark #234 Converted from NAVD '29).

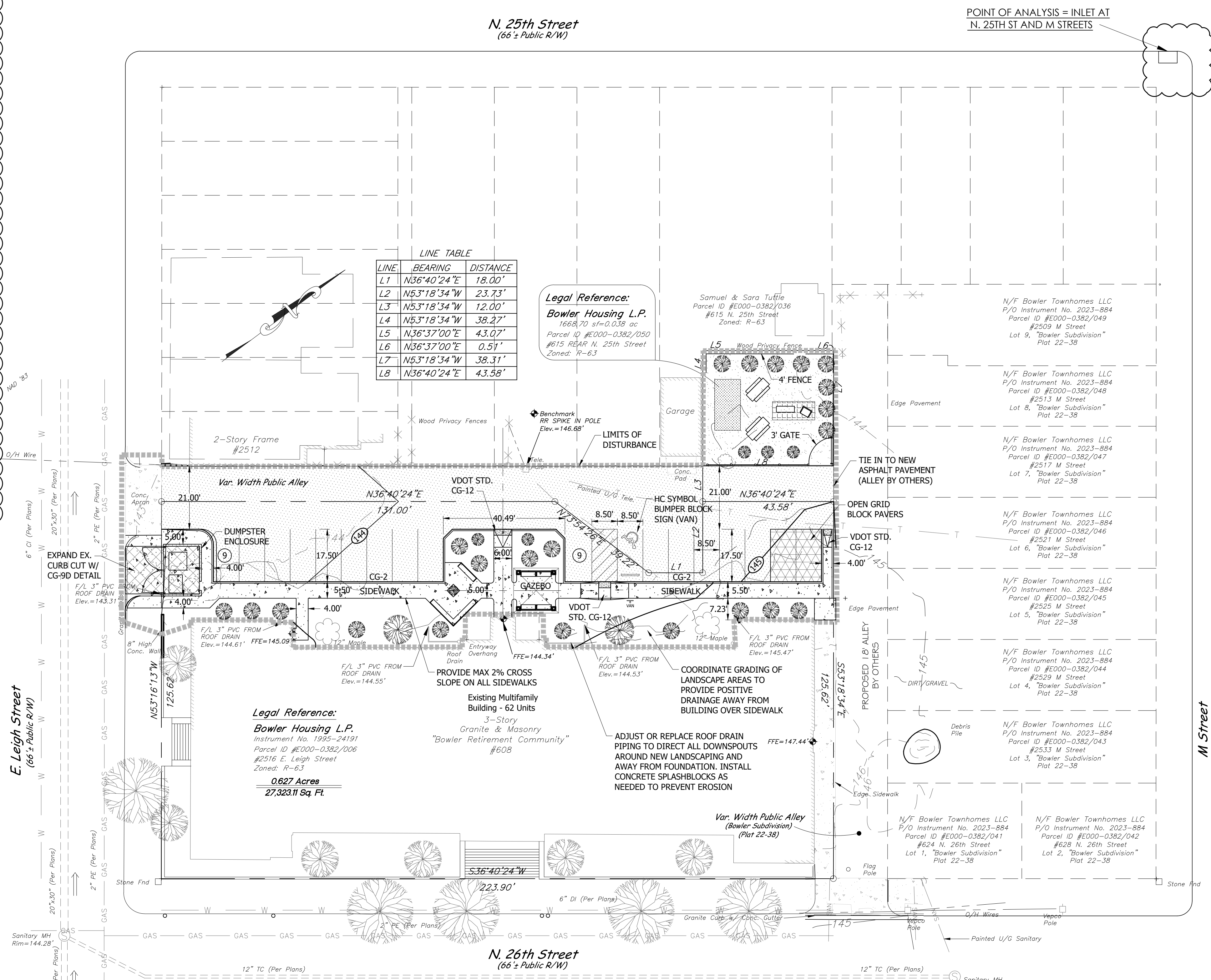




Tc FLOWPATH DETAIL
NO SCALE



DUMPSTER ENCLOSURE DETAIL
NO SCALE



LINE TABLE

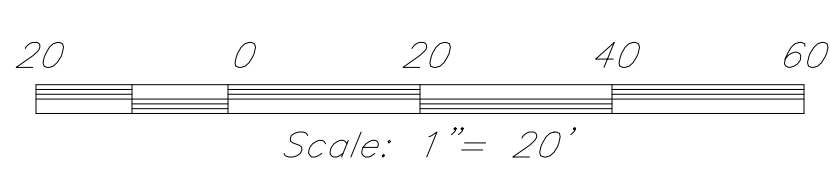
LINE	BEARING	DISTANCE
L1	N36°40'24"E	18.00'
L2	N53°18'34"W	23.73'
L3	N53°18'34"W	12.00'
L4	N53°18'34"W	38.27'
L5	N36°37'00"E	43.07'
L6	N36°37'00"E	0.51'
L7	N53°18'34"W	38.31'
L8	N36°40'24"E	43.58'

Legal Reference:
Bowler Housing L.P.
1668.70 sf=0.038 ac
Parcel ID #E000-0382/050
#615 REAR N. 25th Street
Zoned: R-6.3

Legal Reference:
Bowler Housing L.P.
Instrument No. 1995-24191
Parcel ID #E000-0382/006
#2516 E. Leigh Street
Zoned: R-6.3
0.627 Acres
27,323.11 Sq. Ft.

- General Notes**
- This survey plot represents a current and accurate field transit survey of the premises shown hereon. Date of last physical survey: March 13, 2024.
 - This survey was made without the benefit of a Title Report and therefore there may be encumbrances affecting the Subject Property not shown hereon.
 - The subject property is not located in a Special Flood Hazard Area, but is located in Zone (X) Area of Minimal Flood Hazard, as determined by National Flood Insurance Program, Federal Emergency Management Agency, Department of Housing and Urban Development Map No. 510129-0041-E effective date July 16, 2014.
 - Horizontal datum based upon NAD '83 & Vertical datum upon NAVD '88 (City Benchmark #234 Converted from NAVD '29).

- DPW PERMIT NOTES:**
- OBTAIN A WORK-IN-STREETS PERMIT PRIOR TO EXCAVATION AND/OR OTHER WORK WITHIN THE CITY RIGHT OF WAY.
 - CUTS WITHIN THE CITY STREETS SHALL BE RESTORED ACCORDING TO THE REQUIREMENTS OF THE CITY'S EXCAVATION AND RESTORATION MANUAL.
 - IF ENCOUNTERED, SALVAGE ALL GRANITE CURBING REMOVED AND RETURN TO CITY. GRANITE NOSES AT CG-12'S SHALL REMAIN IN PLACE.
 - COORDINATE SIGNAGE (IF REQUIRED) INSTALLATION WITH CITY OF RICHMOND DPW SIGN SHOP
 - COORDINATE INSTALLATION OF CG-9D ENTRANCES (IF REQUIRED) WITH THE GRADING.



THIS SITE DOES NOT LIE WITHIN A CHESAPEAKE BAY RMA OR RPA. THIS SITE LIES WITHIN THE CITY'S COMBINED SEWER SYSTEM (CSS)

STORMWATER RUNOFF NARRATIVE

THERE IS NO CHANGE TO THE SANITARY SEWER FLOW FROM THE SITE.

THE EXISTING SITE IS MOSTLY PAVED WITH RUNOFF FLOWING OVERLAND ALONG THE DRIVE LANE TO E. LEIGH STREET, HEADING NORTH AND THEN EAST TO THE INTERSECTION OF N. 25TH AND "M" STREETS.

THE PROPOSED PARKING LOT IMPROVEMENTS DO NOT MEASURABLY ALTER THE DRAINAGE PATTERN OR TIME OF CONCENTRATION. IN ORDER TO MAINTAIN THE POST DEVELOPMENT RUNOFF RATE TO THE PRE DEVELOPED CONDITIONS, TWO PARKING SPACES WILL BE SURFACED WITH DIAMOND SHAPED OPEN GRID PERMEABLE PAVERS. A REDUCED C FACTOR OF C=0.45 FOR THIS AREA WILL BE USED. SEE CALCULATIONS BELOW:

EXISTING CONDITIONS:	POST DEVELOPMENT CONDITIONS:
DA = 22,290 SF = 0.51 AC	DA = 22,290 SF = 0.51 AC
C: 17,203 SF @ 0.90 (IMPERVIOUS) 5,087 SF @ 0.30 (PERVIOUS)	C: 17,215 SF @ 0.90 (IMPERVIOUS) 297 SF @ 0.45 (OPEN GRID PAVERS) 4,778 SF @ 0.30 (PERVIOUS)
C=0.76 Tc=5 MIN (MINIMUM FOR SMALL DISTURBED AREA) I 10 = 7.07 IN/HR Q 10 = C ^{1.49} A Q 10 PRE = 2.74 CFS	C=0.76 Tc=5 MIN (MINIMUM FOR SMALL DISTURBED AREA) I 10 = 7.07 IN/HR Q 10 = C ^{1.49} A Q 10 POST = 2.74 CFS

GRADIENT
1406 Laburnum Park Boulevard
Richmond, VA 23227
804.399.0500

COMMONWEALTH OF VIRGINIA
CLARENCE J. SMITH
No. 41157
03.03.2024
PROFESSIONAL ENGINEER

REVISIONS	DESCRIPTION
1	07.31.24 PER LDIS REVIEW COMMENTS
2	09.02.24 PER LDIS REVIEW COMMENTS

ISSUED FOR PERMIT / VHDA REVIEW

BOWLER SENIOR HOUSING
PARKING LOT IMPROVEMENTS

2516 E. Leigh Street
Richmond, Virginia

DATE: 04.02.2024
REV01: 07.31.2024

DIMENSIONAL LAYOUT PLAN

C3.1

Project Number: 2402 © Gradient 2024