Certificate of Appropriateness
BAR # 25-0078
Downtown Mall – 4th St. E & 2nd St. W.
Owner: City of Charlottesville
Applicant: Riaan Anthony, Director, Parks &
Rec Project: Repairs to Mall vehicular crossings
at 4th Street East and 2nd Street West

Mr. Anthony,

The CoA for the above referenced project was approved by the City of Charlottesville Board of Architectural Review on May 20, 2025. The following action was taken:

> Motion by Mr. Zehmer:
>
> Having considered the standards set forth within the City Code, including the ADC District Design Guidelines, I move to find the proposed Repairs to Mall vehicular crossings at 4th Street East and 2nd Street West satisfy the BAR's criteria and are compatible with the Downtown Mall and this ADC District, and that the BAR approves the application as submitted with the following conditions:
>
> - The soldier course border should continue up to the tactile strip [band] but not across the vehicular lane.
> - The BAR recommends there should be a landscape architect involved who is qualified to advise on historic landscapes.
> - The BAR would like to be included in material and color selection and be provided a workmanship mock-up to review.
>
> The motion was seconded by Ms. Tabony and the vote was 7-0.

For specifics of the discussion, the meeting video is on-line at:
https://youtu.be/8lmrC2b24tA?list=PLSKqYabjF44UhoEZrMWdDF9znV1CnlNUV

Per the provisions of City Code, this CoA is valid for 18 months from the date of BAR approval; upon written request and for reasonable cause, the director of NDS or the BAR may extend that period by one year; and this CoA does not, in and of itself, authorize any work or activity that requires a building permit or compliance with other provisions of the City Code.

If you have any questions, please contact me or Jeff Werner (wernerjb@charlottesville.gov).

Sincerely,
Kate

Kate Richardson
Historic Preservation & Design Planner II
Neighborhood Development Services
City of Charlottesville
434.970.3515 | richardsonka@charlottesville.gov

City of Charlottesville
Board of Architectural Review
Staff Report
May 20, 2025

Certificate of Appropriateness Application
BAR # 25-0078
Downtown Mall – 4th St. E & 2nd St. W.
Owner: City of Charlottesville
Applicant: Riaan Anthony, Director, Parks & Rec
Project: Repairs to Mall vehicular crossings at 4th Street East and 2nd Street West

Background

The Downtown Pedestrian Mall was designed by Lawrence Halprin Associates from 1973-76. The first five blocks of East Main Street were pedestrianized in 1976. In 1980 the mall was extended by two blocks on West Main Street. The west end (at the Omni) was completed in 1985. The east end completed in 2006 with construction of the Transit Center, Freedom of Expression wall, and the Amphitheater.

Wallace, Roberts and Todd, LLC (WRT) prepared a Downtown Mall Schematic Design Report in Spring 2004, revised in May 2005, as part of a coordinated series of projects downtown. The report recognized the success of the 1970's Lawrence Halprin mall design and recommended minimal intervention to repair age-related decline. The report also recommended expanding the perceived width of the mall to include Market and Water Streets, with pedestrian connections to other neighborhoods via West Main, Second, and Fourth Streets.

Prior BAR Reviews

(For brevity, a complete summary has been omitted.)
November 18, 2008 – BAR approved paving design for vehicular crossings at 4th Street East and 2nd Street West. (See summary and image in Appendix.)

Application

- Applicant submittal: Line and Grade Civil Engineering drawings *Downtown Mall Crossing*, dated 4/18/2025, 11 sheets.

CoA request for proposed repairs to the vehicular crossings on the Downtown Mall.

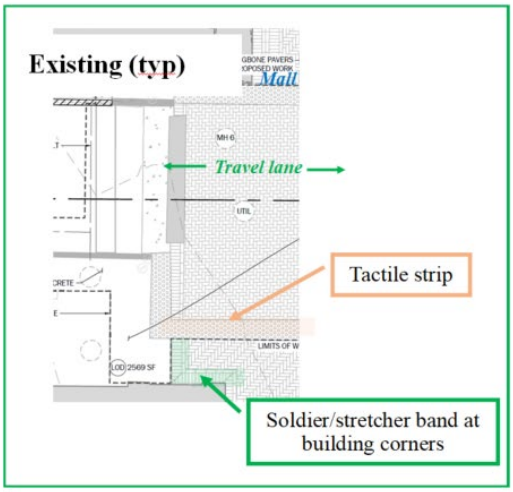
Recommendations and Discussion

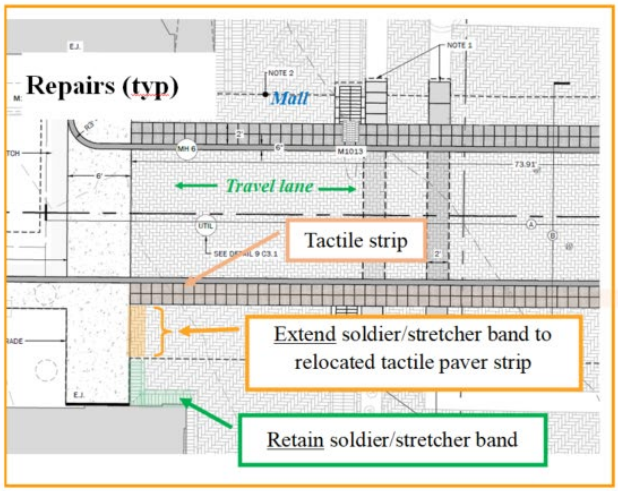
See the Appendix for staff correspondence with the applicant.

Staff recommends approval of the requested CoA with conditions that address the following:

- BAR is satisfied with the material and color selected for the two grey bands.
- Staff expressed to the applicant the brick coursing should be planned so as to not require splits; however, the applicant expressed that some may be necessary. The BAR should discuss what level of precision can reasonably be achieved and what will be acceptable.
- At both crossings, the existing soldier/stretcher courses at the corners must be retained (outside the travel lane).

- Where the tactile pavers are shifted, the soldier/stretcher courses will be extended. [Note: A uniform, integrated brick coursing is ideal for the integrity and durability of the travel lanes. The herringbone pattern will be used throughout, with no solder course band at either end.]





- At the SW corner of the 2nd Street crossing, reinstall the soldier/stretcher course where it had been removed.

Suggested Motion

Approval: Having considered the standards set forth within the City Code, including the ADC District Design Guidelines, I move to find the proposed Repairs to Mall vehicular crossings at 4th Street East and 2nd Street West satisfy the BAR's criteria and are compatible with the Downtown Mall and this ADC District, and that the BAR approves the application [as submitted].

Or, [as submitted with the following conditions: …].

Denial: Having considered the standards set forth within the City Code, including the ADC District Design Guidelines, I move to find the proposed Repairs to Mall vehicular crossings at 4th Street East and 2nd Street West do not satisfy the BAR's criteria and are not compatible with the Downtown Mall and this ADC District, and that for the following reasons the BAR denies the application as submitted: …

Criteria, Standards and Guidelines

Note re: BAR authority: Per Code, the BAR is charged only with the authority to approve or deny a design review CoA, following an evaluation applying the criteria under Code Sec. 34-5.2.7. *Major Historic Review*. The BAR does not evaluate a proposed use. Additionally, per Code Sec. 34-5.2.7.E.2., the issuance of a CoA "cannot, in and of itself, authorize any construction, reconstruction, alteration, repair, demolition, or other improvements or activities requiring a building permit. Where a building permit is required, no activity authorized by a [CoA] is lawful unless conducted in accordance with the required building permit and all applicable building code requirements."

Review Criteria Generally

Per Chapter 34, Div. 5.2.7. C.2:

a. In considering a particular application the BAR will approve the application unless it finds:
    i. That the proposal does not meet specific standards set forth within this Section or applicable provisions of the City's design guidelines; and
    ii. ii. The proposal is incompatible with the historic, cultural or architectural character of the district in which the property is located or the IPP that is the subject of the application.
b. The BAR will approve, approve with conditions, or deny applications for Certificates of Appropriateness in accordance with the provisions of this Section.
c. The BAR, or City Council on appeal, may require conditions of approval as are necessary or desirable to ensure that any new construction or addition is compatible with the scale and character of the Architecture Design Control District, Individually Protected Property, or Historic Conservation District. Prior to attaching conditions to an approval, due consideration will be given to the cost of compliance with the proposed conditions as well as the goals of the Comprehensive Plan. Conditions may require a reduction in height or massing, consistent with the City's design guidelines and subject to the following limitations: [not germane to this request.]

Standards for Review and Decision

Per Chapter 34, Div. 5.2.7. D.1:

a. Review of the proposed construction, reconstruction, alteration or restoration of a building or structure is limited to exterior architectural features, including signs, and the following features and factors:
    i. Whether the material, texture, color, height, scale, mass, and placement of the proposed addition, modification or construction are visually and architecturally compatible with the site and the applicable District;
    ii. The harmony of the proposed change in terms of overall proportion and the size and placement of entrances, windows, awnings, exterior stairs, and signs;

iii. The Secretary of the Interior Standards for Rehabilitation set forth within the Code of Federal Regulations (36 C.F.R. §67.7(b)), as may be relevant;
iv. The effect of the proposed change on the adjacent building or structures;
v. The impact of the proposed change on other protected features on the property, such as gardens, landscaping, fences, walls, and walks;
vi. Whether the proposed method of construction, renovation, or restoration could have an adverse impact on the structure or site, or adjacent buildings or structures;
vii. When reviewing any proposed sign as part of an application under consideration, the standards set forth within Div. 4.11. Signs will be applied; and
viii. Any applicable provisions of the City's design guidelines.

Pertinent Design Review Guidelines for Public Design and Improvements
Chapter 6 Public Improvements
A. Introduction
Public spaces define the spatial organization of the City, forming the basis for social, cultural, and economic interaction. The Downtown Pedestrian Mall is the centerpiece of the community. Charlottesville's historic parks, trails, boulevards, cemeteries, playgrounds, and other open spaces help balance the desired urban density and promote healthy living and quality of life. Public spaces accommodate multiple functions and provide social venues. The historic uses and organization of public spaces represent a timeline of cultural practices and values of the community. Significant features should be identified and respected when changes are proposed. New public spaces and improvements should reflect contemporary design principles and values.

Charlottesville has a rich history of public improvements, which include public buildings, bridges, streetscape landscaping and lighting, street furniture, monuments, public art, fountains, and signage. Many of these improvements have been made within the historic districts, and there will be the opportunity to create additional such amenities in future years. All changes or improvements require BAR review and approval, and should be compatible with the general architectural features and character of an area or district. Repairs and maintenance should match original materials and design, and should be accomplished in a historically appropriate manner.

All public improvements should reflect the quality and attention to detail and craftsmanship of the overall historic districts' character.

B. Plazas, Parks & Open Spaces
1. Maintain existing spaces and important site features for continued public use consistent with the original design intent.
2. Maintain significant elements in a historic landscape: grave markers, structures, landforms, landscaping, circulation patterns, boundaries, and site walls.
3. Design new spaces to reinforce streetscape and pedestrian goals for the district. These areas offer the opportunity to provide visual focal points and public gathering spaces for the districts.
4. New landscaping should be historically and regionally appropriate, indigenous when possible, and scaled for the proposed location and intended use.
5. Exterior furniture and site accessories should be compatible with the overall character of the park or open space.
6. Repairs and maintenance work should match original materials and design, and should be accomplished in a historically appropriate manner.

7. Avoid demolishing historic buildings to create open spaces and parks.

Appendix

BAR Meeting Minutes November 2008
Excerpts re: Downtown Mall, Vehicular crossings design

- Ms. Scala gave the staff report. The design intention of the vehicular crossing was approved, but not the level of detail. The design now includes tactile strips in the runnel; the strips would be in a V shape so as not to disrupt the work of the runnels. The applicant had provided three new alternate designs.
- Mr. Joseph Schinstock, of MMM, explained the design was an attempt to be sensitive to the Mall being included on the National Register and to serviceability issues.

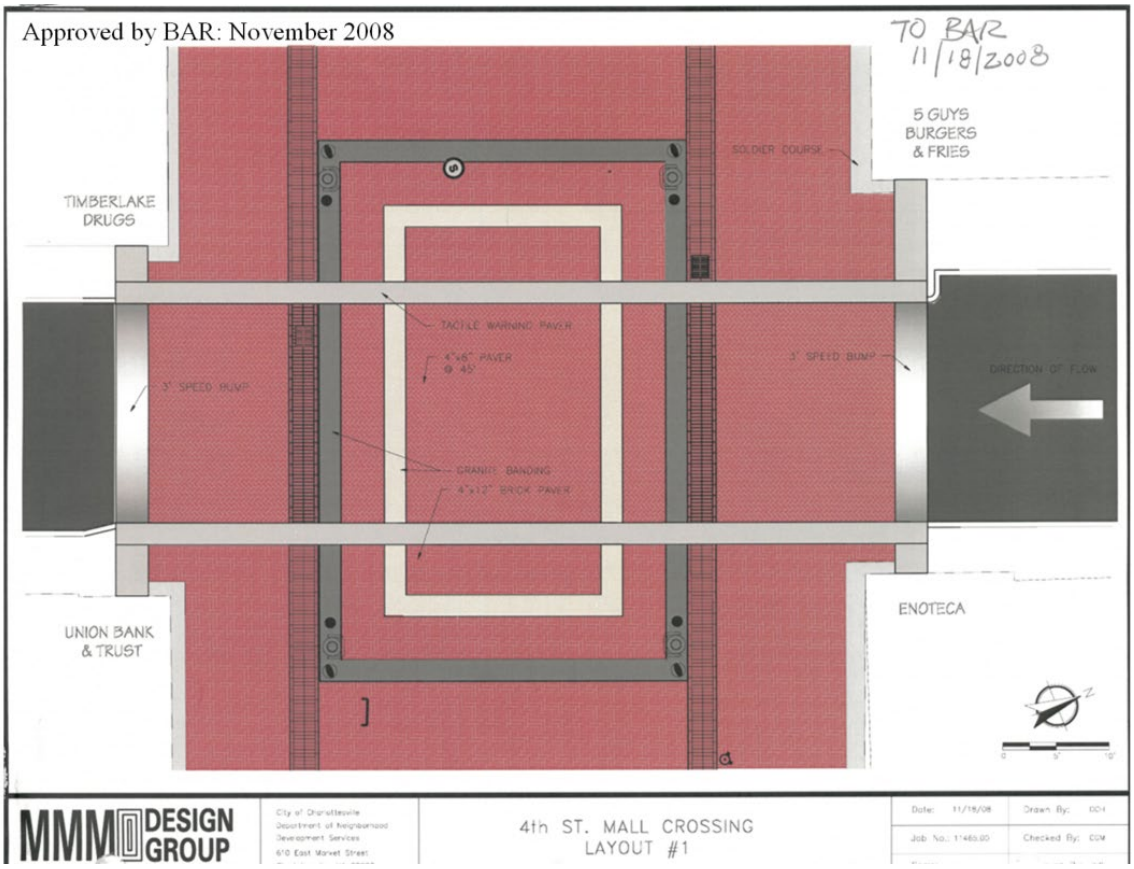
Questions From The Board:

- Mr. Knight wanted to know if there were any ADA requirements that a tactile warning strip must be a straight line. Mr. Schinstock stated there were allowances for interruptions.

Comments From The Board:

- Mr. Knight appreciated the extra effort that had gone into this. He thought it might make more sense to continue the standard orientation of the brick even within the crossings.
- Mr. Osteen stated he did not like the cruciform design and would like to see a scheme that did not include that.
- Ms. Schoenthal expressed a preference for proposals one and two.
- Mr. Hogg expressed a preference for proposal one due to its simplicity.
- Mr. Wolf agreed there was a strong argument for the simplicity of proposal one; it helped avoid the feeling of the traffic bifurcating the Mall.
- Mr. Knight was bothered by the tactile interruption in proposal one. He expressed a preference for proposal three.

  Mr. Hogg, having considered the standards set forth within the City Code including City Design Guidelines for Public Improvements, moved to find that the proposed Vehicular Crossing Design, specifically identified as Fourth Street Mall Crossing Layout Number 1 satisfies the BAR's criteria and is compatible with this property and other properties in this district, and that the BAR approves the application as submitted. Ms. Schoenthal seconded the motion. The motion passed, 8-1; Mr. Knight voted against.



From the November 2008 staff report

In response to staff questions, MMM said they feel that they should not interrupt the tactile strip at the runnels because the visually impaired utilize the runnels to traverse the mall and they do not want them to "miss" the tactile strip. They will not cause problems to the stormwater flow because they will be placed in the same V shape as the runnels allowing the stormwater to pass. However, MMM would have concerns with their ability to convey stormwater across the intersections or to the inlets if we were to interrupt the runnel across the roadway.

The tactile strips must run uninterrupted to the sidewalks to provide a continuous warning from the curbs on the side streets.

The width of the tactile spacing is not set, it is an attempt to provide tactile paving near the face of sidewalk while keeping the line of pavers perpendicular to the Mall.

There are two conditions and the crossing at 2nd will be slightly different then the crossing at 4th because of the locations and widths of the sidewalks and the angles at which the streets cross. However, the widths of the two crossings are the same, 4th appears wider because the area is more open.

Based on these answers and BAR comments, staff has also prepared an "Alternate 4." To show that the pedestrian mall is the primary use that is being interrupted by a vehicular crossing, the

inner granite banding and the cruciform have been maintained. However, the outer granite band has been eliminated in the roadway. To address the issue of the inner granite band being partially obscured by the tactile strip, the four corners have been adjusted with granite placed outside the tactile strips. This alters the proportion of the design slightly. The orientation of the 4x 8 bricks inside the inner banding needs to be determined.

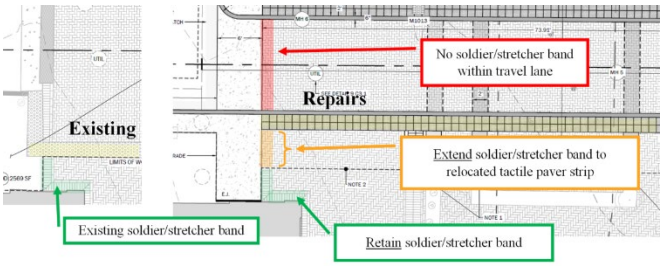
Staff correspondence with applicant, May 12 – 15, 2025

Monday, May 12, 2025 5:33 PM
Riaan: See attached re: the only questions I have.

1) At both crossings there are brick bands at the perimeter of a soldier course with a single stretcher.
    a. Outside the new travel lanes (where the tactile pavers are moved in), I expect the BAR will want the soldier/stretcher courses installed to continue the existing; not repaired with the herringbone pattern. This includes repairing the bands on 2nd Street (at the building corners on the SW and NW) where it appears they were previously removed.
    b. Inside the new travel lanes (between the tactile pavers) at the transition to concrete, is there a reason the two ends will be herringbone, not the band of soldier/stretcher courses?
2) The gray bands within the new travel lanes. Conform these will align with the corresponding granite bands and be coursed out to use only full and half bricks, no splits. For the grey brick bands, I agree that uniformity in size is critical, so it makes sense to use brick and not change to another material, but be prepared for the BAR to ask if they can be granite, whether large pavers or cut to brick size to maintain coursing. You also mentioned the color. Not sure where the BAR will fall on that, whether they will want a "match" or something "similar." Be prepared to explain the options available, and anticipate they might OK the design, but still want to approve the color
3) Runnels within the new travel lanes. They were continued through the lane in the design approved for the 2008 re-bricking. I suspect it will be a toss-up whether to include them in this work—even if the stretcher/double-solder/stretcher bands are laid flush with the adjacent bricks, and not tilted for drainage. Be prepared to discuss the what ifs.

May 14, 2025 (with May 15 staff reply)
Jeff - Please see answers below.
1A: soldier course could be added anywhere outside of the vehicular zone. However, these would need to be constructed of non-reused brick. The salvaged brick does not bond well with mortar (having been reused many times) so the soldier course would not match the remainder of the soldier courses, it would be from new brick.

> JW 5/15: I know Daniel mentioned this, but bricks are reused all the time, so I'm not convinced extending and reinstalling the soldier/stretcher bands would require new brick.
> 1) The existing soldier/stretcher courses at the corners must be retained (outside the travel lane).
> 2) Where the tactile pavers are shifted, the soldier/stretcher courses will be extended.
> 3) At the SW corner of the 2nd Street crossing, reinstall the soldier/stretcher course where it had been removed.



1B: it is not advisable to put soldier course brick in the vehicular travel way. Refer to Line and Grade's forensic Memo from 2022.

JW 5/15: I concur.

2: Correct. The gray brick will align with the granite. That said, our survey seemed to indicate that some of these installations are not "square" leading to a slight slant across the crossing. It is not easy to confirm this but our intention for the installed material is that it would be an extension of the granite bandings (on either side) and that full/half brick will be used as you say.

JW 5/15: I suspect the solution will require accepting some slight misalignment of the brick bands and the granite pavers. That would be my preference to splits. It would be helpful for the design team to explain to the BAR the level of precision that can reasonably be achieved.

3: It is not advisable to put the runnels across the crossings. It was also not advisable in 2008, however it was done due to influence or BAR and UVA experts on Halperin. If runnels are

installed across the vehicular crossing it is not a matter of "if they break" but when they break. Therefore, it is our recommendation to not continue the runnels across the vehicular crossing.

> JW 5/15: I concur they should be excluded. It makes sense mechanically and, if nothing else, we have already altered these crossing, with that work demonstrating that, if necessary at a later date, the original pattern/design can easily be reintroduced.

Reiterating the 2022 Forensic Memo - The crossings themselves experience an abundance of applied forces due to vehicle braking. The start and stop to allow pedestrians to cross imparts significant loads into the brick paving system. As such, it is recommended that all paving in the crossing be herringbone in an effort to establish a long-standing and durable paved surface.

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS
CHARLOTTESVILLE CITY, VIRGINIA

PROJECT SUMMARY

NAME OF PROJECT: DOWNTOWN MALL CROSSINGS

PROJECT ADDRESS: 4TH STREET EAST AND 2ND STREET WEST VEHICULAR CROSSINGS OF THE DOWNTOWN MALL.

DEVELOPMENT TYPE: MAINTENANCE AND REPAIR PLANS

PROJECT NARRATIVE: **DEVELOPING CONSTRUCTION DOCCUMENTS FOR REPAIRS AT EACH VEHICULAR CROSSIN**

PLANNING HISTORY: **2008 RENNOVATIONS**

ENGINEER OF RECORD:

CONTACT: LINE AND GRADE CIVIL ENGINEERING
DANIEL HYER, PE
ADDRESS: 222 WEST SOUTH STREET
CHARLOTTESVILLE, VA 22902
PHONE: 434-962-2430
EMAIL: DHYER@LINE-GRADE.COM

DESIGN INFORMATION:

CLASSIFICATIONS:
DESIGN SPEED: 5 MPH
ADDITIONAL INFORMATION:
DISTURBANCE AREA: 5,012 SF
PROPOSED IMPERVIOUS AREA: 0
MISS UTILITY TICKET NO.: --
12 DIGIT HUC CODE: --

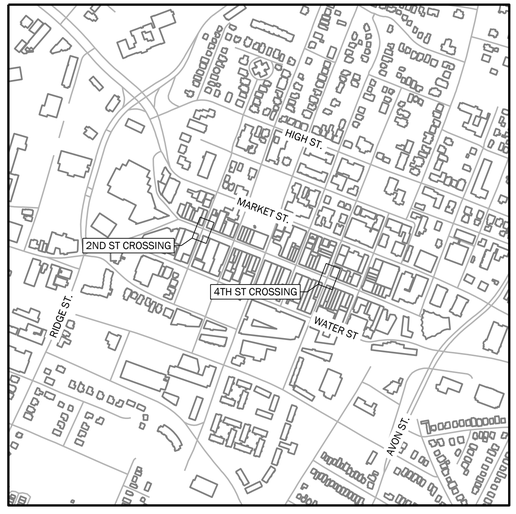
UTILITY OWNERS:

COMM.:	TING, VERIZON, AND COMCAST
GAS:	CITY OF CHARLOTTESVILLE
WATER:	CITY OF CHARLOTTESVILLE
STORM SEWER:	CITY OF CHARLOTTESVILLE
SANITARY SEWER:	CITY OF CHARLOTTESVILLE

Sheet List Table

SHEET NUMBER	SHEET TITLE
C0.0	Title Sheet
C0.1	General Notes and Legend
C0.2	Product and Material Specifications
C1.0	Preservation and Demolition Plan Second Street
C1.1	Rehabilitation Plan Second Street
C1.2	Grading Plan Second Street
C2.0	Preservation and Demolition Plan Fourth Street
C2.1	Rehabilitation Plan Fourth Street
C2.2	Grading Plan Fourth Street
C3.0	Rehabilitation Plan Details
C3.1	Rehabilitation Plan Details
11	TOTAL SHEETS

VICINITY MAP
SCALE: 1" = 4,000'



LOCATION MAP
SCALE: 1" = 500'

TITLE SHEET

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS
CHARLOTTESVILLE CITY, VIRGINIA

COMMONWEALTH OF VIRGINIA
04/18/2025
DANIEL C. HYER
Lic. No. 45591
PROFESSIONAL ENGINEER

SUBMISSIONS/REVISIONS
1 - 04/18/2025

LINE AND GRADE
Civil Engineering

C0.0

L+G PROJECT NUMBER: 2205001

GENERAL CONSTRUCTION NOTES:

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

WORK AREA PROTECTION AND MAINTENANCE:

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

UTILITIES:

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

EARTH WORK AND SITE CONDITIONS:

1. EXCEPT AS OTHERWISE SHOWN ON THE PLANS, ALL CUTS AND FILLS SHALL BE NO GREATER THAN 3:1.
2. UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIFICATIONS, ALL FILL MATERIALS SHALL BE COMPACTED TO 95% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99 METHOD A, WITHIN PLUS OR MINUS 2% OF OPTIMUM MOISTURE, FOR THE FULL WIDTH AND THE DEPTH OF THE FILL.
3. THE CONTRACTOR SHALL ADD, CHANGE, OR RELOCATE EROSION AND SEDIMENT CONTROLS AT THE DIRECTION OF THE CITY OF CHARLOTTESVILLE E&S INSPECTOR TO THEIR SATISFACTION AT NO ADDITIONAL COST TO THE OWNER.
4. ALL GRADING AND IMPROVEMENTS TO BE CONFINED TO THE PROJECT AREA UNLESS OTHERWISE INDICATED.
5. PROPOSED GRADES SHALL BE FIELD ADJUSTED TO CONFORM TO THE INTENT OF THE TYPICAL SECTIONS. A SMOOTH GRADE SHALL BE MAINTAINED FROM THE BASELINE TO THE PROPOSED EDGE OF PAVEMENT OR FACE OF CURB TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR PONDING OF WATER ON ALL PAVED SURFACES.
6. CONTRACTOR SHALL MAINTAIN A SMOOTH GRADE TO THE PROPOSED EDGE OF PAVEMENT OR FACE OF CURB TO PROVIDE POSITIVE DRAINGE ON ALL PAVED SURFACES. ANY AREAS WHERE WATER IS IMPOUNDED SHALL BE CORRECTED BY CONTRACTOR AT NO ADDITIONAL COST. POSITIVE DRAINAGE OF ALL ROADWAY AREAS TO THE STORM DRAIN INLETS OR OTHER ACCEPTABLE DRAINAGE CHANNELS AS NOTED ON THE PLANS IS REQUIRED.
7. CONTRACTOR SHALL MAINTAIN EXISTING STREAMS, DITCHES, DRAINAGE STRUCTURES, CULVERT AND FLOWS AT ALL TIMES DURING THE WORK. CONTRACTOR SHALL PAY FOR ALL PERSONAL INJURY AND PROPERTY DAMAGE WHICH MAY OCCUR AS A RESULT OF FAILING TO MAINTAIN ADEQUATE DRAINAGE.
8. ALL PIPES, DI'S AND OTHER STRUCTURES SHALL BE INSPECTED BY THE ENGINEER BEFORE BEING BACKFILLED OR BURIED. THE ENGINEER MAY REQUIRE CONTRACTOR, AT NO ADDITIONAL COST, TO UNCOVER AND RE-COVER SUCH STRUCTURES IF THE HAVE BEEN BACKFILLED OR BURIED WITHOUT SUCH INSPECTION.
9. ALL STORM CHANNELS, DRAINS, AND SEWER SYSTEMS SHALL BE CLEANED UPON COMPLETION OF THE PROPOSED WORK. SEDIMENT, CHEMICALS, AND/OR DEBRIS REMOVED FROM THESE SYSTEMS SHALL BE REMOVED AND DISPOSED OF PROPERLY.

MAINTENANCE OF TRAFFIC:

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

FIRE PREVENTION:

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

CONCRETE AND ASPHALT:

1. ALL MATERIAL INSIDE FORMS SHALL BE CLEAN AND FREE OF ALL ROCKS AND OTHER LOOSE DEBRIS. SUB-BASE MATERIAL SHALL BE COMPACTED BY MECHANICAL MEANS.
2. CONCRETE SHALL NOT BE PLACED UNLESS THE AIR TEMPERATURE IS AT LEAST 40 DEGREES FAHRENHEIT (F) IN THE SHADE AND RISING.
3. CONCRETE SHALL NOT BE PLACED UNTIL STEEL DOWELS HAVE BEEN INSTALLED IN EXISTING CONCRETE IN ACCORDANCE WITH CITY OF CHARLOTTESVILLE STANDARDS.
4. 1/2 " PREMOLDED EXPANSION JOINT MATERIAL SHALL BE PLACED AT A MAXIMUM OF 30' INTERVALS ON NEW SIDEWALK, CURB, CURB & GUTTER, AT EACH END OF DRIVEWAY ENTRANCES, AT EACH END OF HANDICAP RAMPS, SOME POINT ON ENTRANCE WALKS AND STEPS ADJUSTMENTS, AND ALONG BUILDINGS AND WALLS WHERE NEW CONCRETE SIDEWALKS ARE PLACED AGAINST THEM.
5. ALL EXISTING CURBS, CURB & GUTTER, SIDEWALK AND STEPS TO BE REMOVED SHALL BE TAKEN OUT TO THE NEAREST JOINT. DEMOLITION AND DISPOSAL COST TO BE INCLUDED IN OTHER UNIT BID ITEMS. NO SEPARATE PAYMENT WILL BE MADE FOR THIS WORK.
6. EXISTING ASPHALT CONCRETE PAVEMENT SHALL BE SAW CUT AND REMOVED AS PER THE SPECIFICATIONS. REMOVAL SHALL BE DONE IN SUCH A MANNER AS TO NOT TEAR, BULGE OR DISPLACE ADJACENT PAVEMENT. EDGES SHALL BE CLEAN AND VERTICAL, ALL CUTS SHALL BE PARALLEL OR PERPENDICULAR TO THE DIRECTION OF TRAFFIC.
7. DISPOSAL OF ALL EXCESS AND DEMOLITION MATERIAL IS THE RESPONSIBILITY OF THE CONTRACTOR.

GENERAL SURVEY NOTES:

TOPOGRAPHY SOURCE: ACTUAL GROUND SURVEY
BASIS OF DATUM: HORIZONTAL: NAD-83 VIRGINIA SOUTH ZONE (GPS DERIVED)
VERTICAL: NAVD-88 (GPS DERIVED)
SURVEYOR OF RECORD: LINCOLN SURVEYING
CHRIS KEAN
CHRIS.KEAN@LINCOLNSURVEYING.COM

GENERAL NOTES AND LEGEND

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS
CHARLOTTESVILLE CITY, VIRGINIA

COMMONWEALTH OF VIRGINIA
04/18/2025
DANIEL C. HYER
LIC. NO. 45596
PROFESSIONAL ENGINEER

SUBMISSIONS/REVISIONS
1: 04/18/2025

LINE AND GRADE
Civil Engineering

C0.1

L+G PROJECT NUMBER: 2205001

Project Specifications

PART 1 - GENERAL

1.1 PRE-INSTALLATION MEETING

A. A pre-installation conference/meeting shall be held prior to the installation of/any all materials to confirm intention and clarity of the design intent.

B. Pre-Installation meetings shall be held on the project site.

1.2 ACTION SUBMITTALS

A. Product Data: For all materials installed. Including:

1. Pavers.
2. Sand Setting materials.
3. Mortar and grout materials.
4. Edge restraints.
5. Concrete Curbs (mix design and reinforcement)

B. Sieve Analyses: For aggregate setting-bed materials, according to ASTM C 136.

C. Samples for Verification: For full-size units of each type of unit paver indicated. Assemble no fewer than five Samples of each type of unit on suitable backing and with suitable jointing. Include Samples of the Following

1. 2:1 Herringbone Brick (All colors)
2. 3:1 Herringbone Brick
3. Tactile warning pavers
4. Salvaged Granite from existing conditions
5. Steel Angle Edge Restraints

1.3 Information Submittals

A. Adhesion and Compatibility Test Reports: From latex-additive manufacturer for mortar and grout containing latex additives.

B. Material Certificates: For unit pavers. Include statements of material properties indicating compliance with requirements, including compliance with standards. Provide for each type and size of unit.

C. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, for unit pavers, indicating compliance with requirements.

1. For solid interlocking paving units, include test data for freezing and thawing according to ASTM C 67.

1.4 QUALITY ASSURANCE

A. Mockups: Build mockups to verify selections made under Sample submittals, to demonstrate aesthetic effects, and to set quality standards for materials and execution.

1. Subject to compliance with requirements, approved mockups may become part of the completed Work if undisturbed at time of Substantial Completion.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Store pavers on elevated platforms in a dry location. If units are not stored in an enclosed location, cover tops and sides of stacks with waterproof sheeting, securely tied.

B. Store cementitious materials on elevated platforms, under cover, and in a dry location. Do not use cementitious materials that have become damp.

C. Store aggregates where grading and other required characteristics can be maintained and contamination avoided.

D. Store liquids in tightly closed containers protected from freezing.

E. Salvaged Materials shall be removed with care, stacked and stored in accordance with written instructions from this specification.

F. Store asphalt cement and other bituminous materials in tightly closed containers.

1.6 FIELD CONDITIONS

A. Cold-Weather Protection: Do not use frozen materials or materials mixed or coated with ice or frost. Do not build on frozen subgrade or setting beds. Remove and replace unit paver work damaged by frost or freezing.

B. Weather Limitations for Mortar and Grout:

1. Cold-Weather Requirements: Comply with cold-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6.
2. Hot-Weather Requirements: Comply with hot-weather construction requirements contained in TMS 602/ACI 530.1/ASCE 6. Provide artificial shade and windbreaks and use cooled materials as required. Do not apply mortar to substrates with temperatures of 100 deg F (38 deg C) and higher.

a. When ambient temperature exceeds 100 deg F (38 deg C), or when wind velocity exceeds 8 mph (13 km/h) and ambient temperature exceeds 90 deg F (32 deg C), set pavers within 1 minute of spreading setting-bed mortar.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Source Limitations: Obtain each type of unit paver, joint material, and setting material from single source with resources to provide materials and products of consistent quality in appearance and physical properties.

2.2 BRICK PAVERS

A. Regional Materials: Brick pavers shall be manufactured within 500 miles (800 km) of Project site from materials that have been extracted, harvested, or recovered, as well as manufactured, within 500 miles (800 km) of Project site.

B. Brick Pavers: Heavy vehicular paving brick; ASTM C 1272, **Type R, Application PX** Provide brick without frogs or cores in surfaces exposed to view in the completed Work.

1. Thickness: **2-5/8 inches (67 mm)**
2. Face Size: **3-3/4 by 7-1/2 inches (95 by 190 mm)** and **4 by 12 inches (102 by 305 mm)**]
3. Color: Medium Red, Light Gray and Dark Gray as **selected by Engineer from manufacturer's full range**.

2.3 DETECTABLE WARNING UNIT PAVERS

A. Detectable Warning Concrete Unit Pavers: Solid paving units, made from normal-weight concrete with a compressive strength of not less than 5000 psi (34 MPa) water absorption of not more than 5 percent according to ASTM C 140, and no breakage and not more than 1 percent mass loss when tested for freeze-thaw resistance according to ASTM C 67, with accessible detectable warning truncated domes on exposed surface of units.

1. Shapes and Sizes:

a. Thickness: [**2-1/2 inches (63 mm)**] at field of tile.
b. Face Size: Nominal [**12 by 12 inches**

2. Dome Spacing and Configuration: **2.35-inch (59.7-mm) spacing**] in **square** pattern.
3. Color: **As selected by Architect from manufacturer's full range**]

B. Setting Bed: Comply with requirements of this specification.

C. Mortar Setting Bed:

1. Portland Cement: ASTM C 150/C 150M, Type I or Type II.
2. Sand: ASTM C 33/C 33M.
3. Latex Additive: Manufacturer's standard water emulsion, serving as replacement for part or all of gaging water, of type specifically recommended by latex-additive manufacturer for use with field-mixed portland cement and aggregate mortar bed, and not containing a retarder.
4. Thinset Mortar: Latex-modified portland cement mortar complying with ANSI A118.4.
5. Water: Potable.

2.4 STONE PAVERS

A. Salvaged Granite Pavers: Existing granite pavers, recovered, cleaned and reused.

B. New Granite Pavers: Rectangular paving slabs made from granite complying with ASTM C 615/C 615M.

1. Color and Grain: **Light gray** and **Dark gray** to match existing as approved by engineer.
2. Finish: **Match Existing, as approved by engineer**.

3. Thickness: Not less than **1-5/8 inches (40 mm)**] unless otherwise indicated.
4. Face Size 12 **by 24 inches and 24 by 24 inches, to match existing.**

2.5 CURBS AND EDGE RESTRAINTS

A. Steel Edge Restraints: Manufacturer's standard painted steel edging **3/16 inch (4.8 mm) thick by 3 inches (100 mm) high** with punched holes to receive epoxy anchors.
1. Epoxy Anchors
   a. Thread Rods, and Screws, ASTM F1554, Grade 36 or stainless steel supe 304
   b. Diameter, as shown in drawings.
   c. Embedment depth
      1) Threaded Rods: 4 inches
      2) Screws: 2.25 inches
   d. Adhesive
      1) High-Strength, two component epoxy adhesive approved for cracked and uncracked concrete applications.

B. Cast in Place Concrete Curbs: Made from normal-weight concrete with a compressive strength not less than **4000 psi (34 MPa)**] and water absorption not more than 5 percent, in shapes and sizes indicated in the drawings.
1. Concrete curbs will require No. 4 dowels set in epoxy anchors.

2.6 AGGREGATE SETTING-BED MATERIALS

A. Sand for Leveling Course: Sound, sharp, washed, natural sand or crushed stone complying with gradation requirements in ASTM C 33/C 33M for fine aggregate.

B. Sand for Joints: Fine, sharp, washed, natural sand or crushed stone with 100 percent passing No. 16 (1.18-mm) sieve and no more than 10 percent passing No. 200 (0.075-mm) sieve.

1. Provide sand of color needed to produce required joint color to match existing.

2.7 MORTAR SETTING-BED MATERIALS

A. Regional Materials: Provide aggregate for mortar that has been extracted, harvested, or recovered, as well as manufactured, within 500 miles (800 km) of Project site.

B. Portland Cement: ASTM C 150/C 150M, Type I or Type II.

C. Hydrated Lime: ASTM C 207, Type S.

D. Sand: ASTM C 144.

E. Latex Additive: **Manufacturer's standard** water emulsion, serving as replacement for part or all of gaging water, of type specifically recommended by latex-additive manufacturer for use with field-mixed portland cement and aggregate mortar bed, and not containing a retarder.

F. Thin-Set Mortar for Bond Coat: Latex-portland cement mortar complying with ANSI A118.4.

1. Provide prepackaged, dry-mortar mix containing dry, redispersible, vinyl acetate or acrylic additive to which only water must be added at Project site.
2. Provide prepackaged, dry-mortar mix combined with [**acrylic resin**] [**or**] [**styrene-butadiene-rubber**] liquid-latex additive at Project site.
3. Provide product that is approved by manufacturer for application thickness of [**5/8 inch (16 mm)**] **<Insert value>**.

G. Water: Potable.

H. Reinforcing Wire Fabric: Galvanized, welded wire fabric, 2 by 2 inches (50.8 by 50.8 mm) by 0.062 inch (1.57 mm) in diameter; comply with ASTM A 185/A 185M and ASTM A 82/A 82M except for minimum wire size.

2.8 MORTAR AND GROUT MIXES

A. General: Comply with referenced standards and with manufacturers' written instructions for mix proportions, mixing equipment, mixer speeds, mixing containers, mixing times, and other procedures needed to produce setting-bed and joint materials of uniform quality and with optimal performance characteristics. Discard mortars and grout if they have reached their initial set before being used.

B. Mortar-Bed Bond Coat: Mix neat cement and [**latex additive**] [**water**] to a creamy consistency.

C. Portland Cement-Lime Setting-Bed Mortar: Type M complying with ASTM C 270, Proportion Specification.

D. Latex-Modified, Portland Cement Setting-Bed Mortar: Proportion and mix portland cement, sand, and latex additive for setting bed to comply with written instructions of latex-additive manufacturer and as necessary to produce stiff mixture with a moist surface when bed is ready to receive pavers.

E. Latex-Modified, Portland Cement Bond Coat: Proportion and mix portland cement, aggregate, and liquid latex for bond coat to comply with written instructions of liquid-latex manufacturer.

F. Thinset Mortar Bond Coat: Proportion and mix according to manufacturer's written instructions.

2.9 Cast-in-Place Concrete Paving
1. Shall conform to the current City of Charlottesville Standard

2.10 Asphalt Patching
1. Shall conform to the current City of Charlottesville Standard.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine surfaces indicated to receive unit paving, with Installer present, for compliance with requirements for installation tolerances and other conditions affecting performance.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 PREPARATION

A. Remove substances from concrete substrates that could impair mortar bond, including curing and sealing compounds, form oil, and laitance.

B. Sweep concrete substrates to remove dirt, dust, debris, and loose particles.

3.3 INSTALLATION, GENERAL

A. Do not use unit pavers with chips, cracks, voids, discolorations, or other defects that might be visible or cause staining in finished work.

B. Mix pavers from several pallets or cubes, including salvaged brick, as they are placed, to produce uniform blend of colors and textures.

C. Cut unit pavers with motor-driven masonry saw equipment to provide clean, sharp, unchipped edges. Cut units to provide pattern indicated and to fit adjoining work neatly. Use full units without cutting where possible. Hammer cutting is not acceptable.

D. Handle protective-coated brick pavers to prevent coated surfaces from contacting backs or edges of other units. If, despite these precautions, coating does contact bonding surfaces of brick, remove coating from bonding surfaces before setting brick.

E. Joint Pattern: Herringbone Match and continue existing unit paver joint pattern.

F. Tolerances: Do not exceed 1/32-inch (0.8-mm) unit-to-unit offset from flush (lippage) nor 1/8 inch in 10 feet (3 mm in 3 m) from level, or indicated slope, for finished surface of paving.

G. Tolerances: Do not exceed[**1/16-inch (1.6-mm) unit-to-unit offset from flush (lippage) nor 1/8 inch in 24 inches (3 mm in 600 mm) and**] 1/4 inch in 10 feet (6 mm in 3 m) from level, or indicated slope, for finished surface of paving.

H. Expansion and Control Joints: Provide for sealant-filled joints at locations and of widths indicated. Provide compressible foam filler as backing for sealant-filled joints[**unless otherwise indicated; where unfilled joints are indicated, provide temporary filler until paver installation is complete**]. Install joint filler before setting pavers. Sealant materials and installation are specified in Section 079200 "Joint Sealants."

I. Expansion and Control Joints: Provide cork joint filler at locations and of widths indicated. Install joint filler before setting pavers. Make top of joint filler flush with top of pavers.

J. Provide edge restraints as indicated. Install edge restraints before placing unit pavers.

1. Install edge restraints to comply with manufacturer's written instructions. Install anchors at intervals required to hold edge restraints in place during and after unit paver installation.
2. For metal edge restraints with top edge exposed, drive stakes at least 1 inch (25 mm) below top edge.
3. Install job-built concrete edge restraints to comply with requirements in Section 033000 "Cast-in-Place Concrete."
4. Where pavers set in mortar bed are indicated as edge restraints for pavers set in aggregate setting bed, install pavers set in mortar and allow mortar to cure before placing aggregate setting bed and remainder of pavers. Cut off mortar bed at a steep angle so it will not interfere with aggregate setting bed.
5. Where pavers embedded in concrete are indicated as edge restraints for pavers set in aggregate setting bed, install pavers embedded in concrete and allow concrete to cure before placing aggregate setting bed and remainder of pavers. Hold top of concrete below aggregate setting bed.

K. Provide steps made of pavers as indicated. Install paver steps before installing adjacent pavers.

1. Where pavers set in mortar bed are indicated for steps constructed adjacent to pavers set in aggregate setting bed, install steps and allow mortar to cure before placing aggregate setting bed and remainder of pavers. Cut off mortar bed at a steep angle so it will not interfere with aggregate setting bed.

3.4 AGGREGATE SETTING-BED APPLICATIONS

A. Place leveling course and screed to a thickness of 1 to 1-1/2 inches (25 to 38 mm), taking care that moisture content remains constant and density is loose and uniform until pavers are set and compacted.

B. Treat leveling course with herbicide to inhibit growth of grass and weeds.

C. Set pavers with a minimum joint width of 1/16 inch (1.5 mm) and a maximum of 1/8 inch (3 mm), being careful not to disturb leveling base. If pavers have spacer bars, place pavers hand tight against spacer bars. Use string lines to keep straight lines. Fill gaps between units that exceed [**3/8 inch (10 mm)**] with pieces cut to fit from full-size unit pavers.

1. When installation is performed with mechanical equipment, use only unit pavers with spacer bars on sides of each unit.

D. Vibrate pavers into leveling course with a low-amplitude plate vibrator capable of a 3500- to 5000-lbf (16- to 22-kN) compaction force at 80 to 90 Hz. Use vibrator with neoprene mat on face of plate or other means as needed to prevent cracking and chipping of pavers. Perform at least three passes across paving with vibrator.

1. Compact pavers when there is sufficient surface to accommodate operation of vibrator, leaving at least 36 inches (900 mm) of uncompacted pavers adjacent to temporary edges.
2. Before ending each day's work, compact installed concrete pavers except for 36-inch (900-mm) width of uncompacted pavers adjacent to temporary edges (laying faces).
3. As work progresses to perimeter of installation, compact installed pavers that are adjacent to permanent edges unless they are within 36 inches (90 mm) of laying face.
4. Before ending each day's work and when rain interrupts work, cover pavers that have not been compacted and cover leveling course on which pavers have not been placed with nonstaining plastic sheets to protect them from rain.

E. Spread dry sand and fill joints immediately after vibrating pavers into leveling course. Vibrate pavers and add sand until joints are completely filled, then remove excess sand. Leave a slight surplus of sand on the surface for joint filling.

F. Do not allow traffic on installed pavers until sand has been vibrated into joints.

G. Repeat joint-filling process 30 days later.

3.5 MORTAR SETTING-BED APPLICATIONS

A. Saturate concrete subbase with clean water several hours before placing setting bed. Remove surface water about one hour before placing setting bed.

B. Apply mortar-bed bond coat over surface of concrete subbase about 15 minutes before placing mortar bed. Do not exceed 1/16-inch (1.6-mm) thickness for bond coat. Limit area of bond coat to avoid its drying out before placing setting bed.

C. Apply mortar bed over bond coat; spread and screed mortar bed to uniform thickness at subgrade elevations required for accurate setting of pavers to finished grades indicated.

D. Place reinforcing wire over concrete subbase, lapped at joints by at least one full mesh and supported so mesh becomes embedded in the middle of mortar bed. Hold edges back from vertical surfaces approximately 1/2 inch (13 mm).

E. Place mortar bed with reinforcing wire fully embedded in middle of mortar bed. Spread and screed mortar bed to uniform thickness at subgrade elevations required for accurate setting of pavers to finished grades indicated.

F. Mix and place only that amount of mortar bed that can be covered with pavers before initial set. Before placing pavers, cut back, bevel edge, and remove and discard setting-bed material that has reached initial set.

G. Wet brick pavers before laying if the initial rate of absorption exceeds 30 g/30 sq. in. (30 g/194 sq. cm) per minute when tested according to ASTM C 67. Allow units to absorb water so they are damp but not wet at time of laying.

H. Place pavers before initial set of cement occurs. Immediately before placing pavers on mortar bed, apply uniform 1/16-inch- (1.5-mm-) thick bond coat to mortar bed or to back of each paver with a flat trowel.

I. Tamp or beat pavers with a wooden block or rubber mallet to obtain full contact with setting bed and to bring finished surfaces within indicated tolerances. Set each paver in a single operation before initial set of mortar; do not return to areas already set or disturb pavers for purposes of realigning finished surfaces or adjusting joints.

J. Grouted Joints: Grout paver joints complying with ANSI A108.10.

K. Grout joints as soon as possible after initial set of setting bed.

1. Force grout into joints, taking care not to smear grout on adjoining surfaces.
2. Clean pavers as grouting progresses by dry brushing or rubbing with dry burlap to remove smears before tooling joints.
3. Tool exposed joints slightly concave when thumbprint hard, using a jointer larger than joint thickness unless otherwise indicated.
4. If tooling squeezes grout from joints, remove excess grout and smears by dry brushing or rubbing with dry burlap and tool joints again to produce a uniform appearance.

L. Cure grout by maintaining in a damp condition for seven days unless otherwise recommended by grout or liquid-latex manufacturer.

3.6 EDGE RESTRAINTS

A. Drill holes using carbide dipped bit per manufacturer recommendations

B. Clean holes with oil free compressed air and wire brush before applying epoxy.

C. Insert anchor while rotating to ensure full epoxy coverage

D. Allow proper cure time before applying load.

3.7 REPAIRING, POINTING, AND CLEANING

A. Remove and replace unit pavers that are loose, chipped, broken, stained, or otherwise damaged or that do not match adjoining units. Provide new units to match adjoining units and install in same manner as original units, with same joint treatment and with no evidence of replacement.

B. Pointing: During tooling of joints, enlarge voids or holes and completely fill with grout. Point joints at sealant joints to provide a neat, uniform appearance, properly prepared for sealant application.

C. Cleaning: Remove excess grout from exposed paver surfaces; wash and scrub clean.

1. Remove temporary protective coating as recommended by coating manufacturer and as acceptable to paver and grout manufacturers.
2. Do not allow protective coating to enter floor drains. Trap, collect, and remove coating material.

PRODUCT AND MATERIAL SPECIFICATIONS

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS
CHARLOTTESVILLE CITY, VIRGINIA

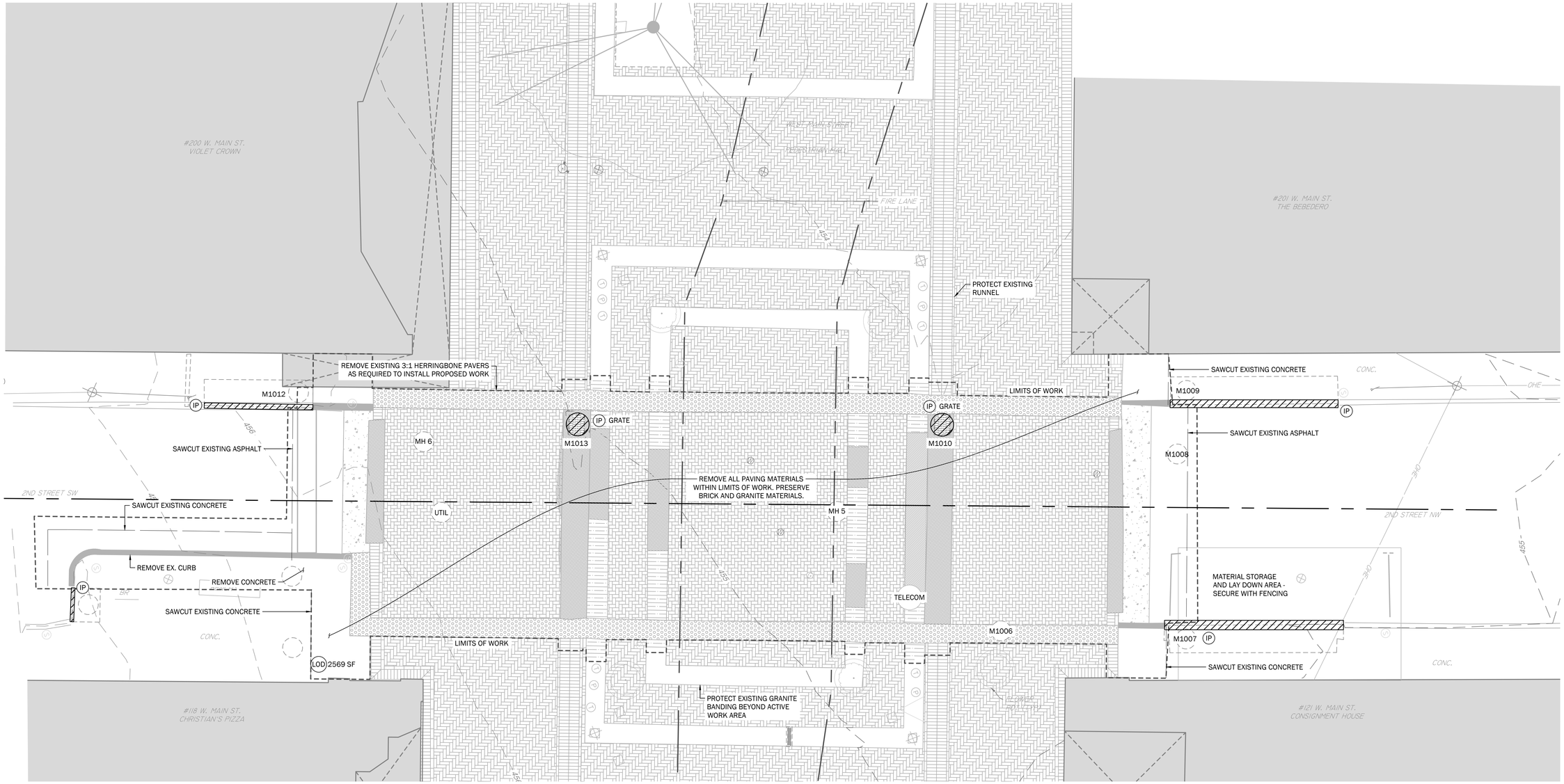
COMMONWEALTH OF VIRGINIA
04/18/2025
DANIEL C. HYER
Lic. No. 45590
PROFESSIONAL ENGINEER

SUBMISSIONS/REVISIONS
1: 04/18/2025

LINE AND GRADE
Civil Engineering

C0.2

L+G PROJECT NUMBER: 2205001



1 SECOND STREET EXISTING CONDITIONS AND DEMOLITION PLAN

1" = 5': 0 5 10

LEGEND

- CONCRETE
- GRANITE
- ASPHALT
- TACTILE WARNING PAVERS
- 2:1 BRICK HERRINGBONE
- CURB DEMOLITION
- SAWCUT
- INLET PROTECTION
- LIMITS OF WORK

SANITARY SEWERS			
MH	RIM	INV. IN	INV. OUT
MH 5	454.52	450.49	449.45
MH 6	455.63	450.98	450.8

STORM SEWERS				
ID	STRUCTURE	RIM	INV. IN	INV. OUT
M1006	MANHOLE	454.58	450.72	450.37
M1007	DRAIN INLET	454.75		450.7
M1008	MANHOLE	454.18	450.3	450.05
M1009	DRAIN INLET	454.47		450.65
M1010	INLET	454.07	449.39	449.11
M1011	DRAIN INLET	456.68		452.67
M1012	DRAIN INLET	456.15		452.29
M1013	INLET	454.93	451.5	450.71

NOTES

1) WORK SHALL BE PHASED SUCH THAT PEDESTRIAN ACCESS ACROSS MALL SHALL BE MAINTAINED AT ALL TIMES.
2) CONTRACTOR SHALL PRESERVE ALL BRICK AND GRANITE PAVING MATERIALS THAT REMAIN IN SERVICEABLE CONDITION. BRICK PAVING UNITS FOUND TO BE UNDAMAGED AND SERVICEABLE ARE TO BE REMOVED, STACKED, AND REUSED.
3) ACTIVE WORK ZONES AND MATERIAL STORAGE AREAS SHALL BE PROTECTED BY A SAFETY FENCE. CITY STAFF SHALL ADVISE AS TO WHAT FENCE TYPE IS PREFERRED.

PRESERVATION AND DEMOLITION PLAN SECOND STREET

DOWNTOWN MALL CROSSING

CONSTRUCTION DOCUMENTS

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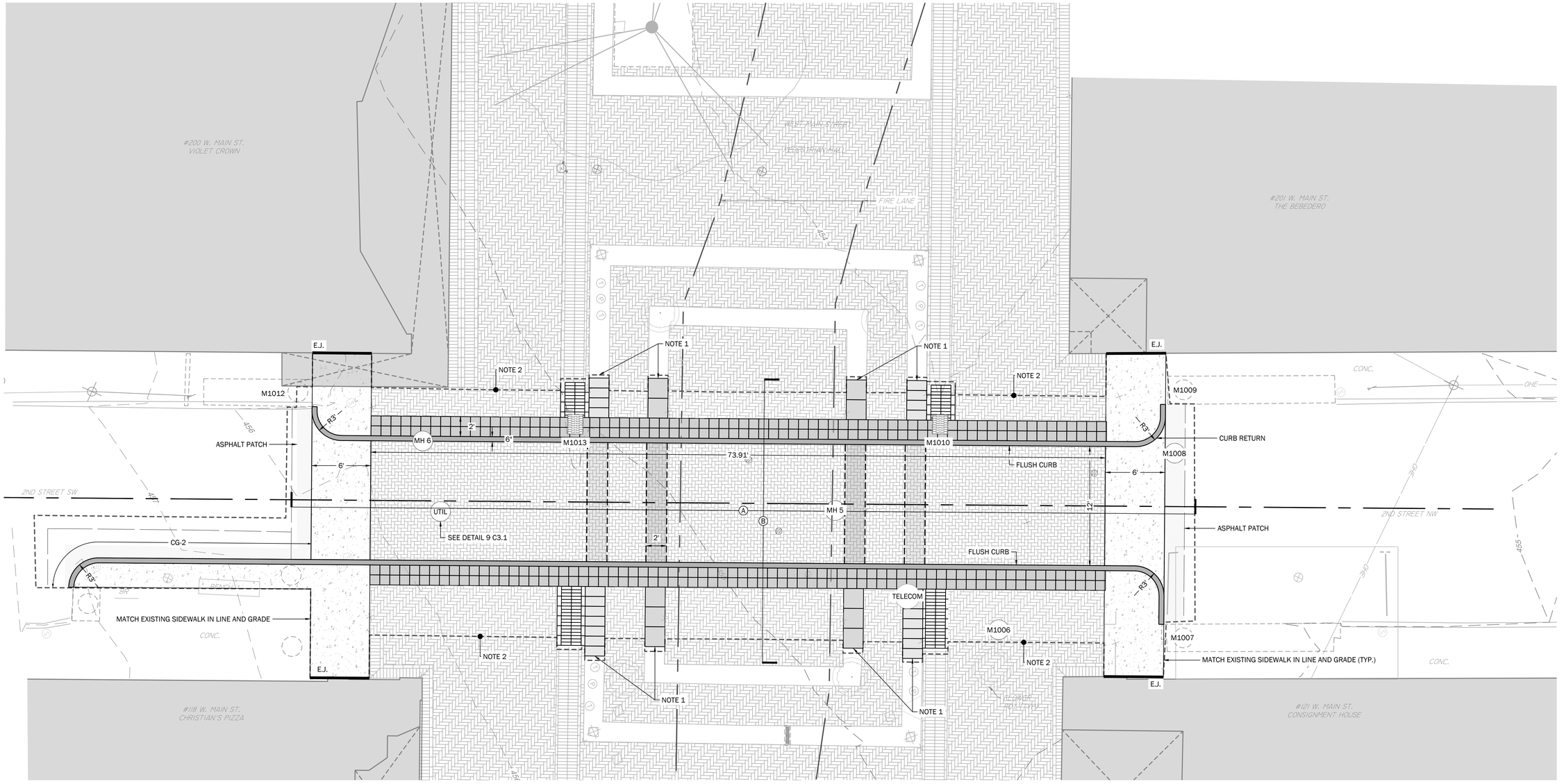
LINE AND GRADE
Civil Engineering

C1.0

LG PROJECT NUMBER 2205001

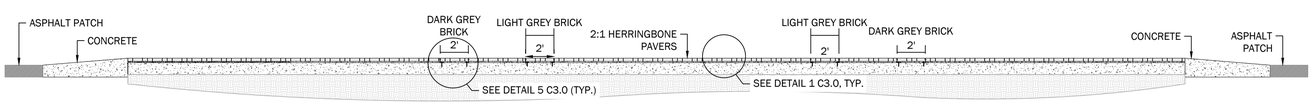


1 SECOND STREET REPAIR PLAN

1" = 5': 0 5 10

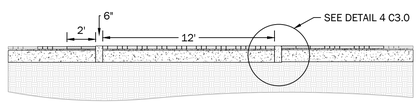
LEGEND

- CONCRETE SEE DETAIL 3 C3.0
- 1X2 GRANITE BANDING SEE DETAIL 14 C3.1
- 2X2 GRANITE BANDING SEE DETAIL 14 C3.1
- TACTILE WARNING PAVERS SEE DETAIL 4 C3.0
- 2:1 BRICK HERRINGBONE SEE DETAIL 1 C3.0
- LIGHT GREY 2:1 BRICK
- DARK GREY 2:1 BRICK
- CONCRETE CURB SEE DETAIL 6 C3.0
- DRAINAGE RUNNEL SEE DETAIL 13 C3.1
- 3:1 HERRINGBONE SEE DETAIL 2 C3.0
- STEEL ANGLE EDGE RESTRAINT SEE DETAIL 5 C3.0



A SECTION A

1" = 5': 0 5 10



B SECTION B

1" = 5': 0 5 10

NOTES

1) MATCH EXISTING GRANITE PAVING. USE SALVAGED GRANITE BANDING.
2) FEATHER BRICK PAVING TO MATCH EXISTING.

REHABILITATION PLAN SECOND STREET

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS
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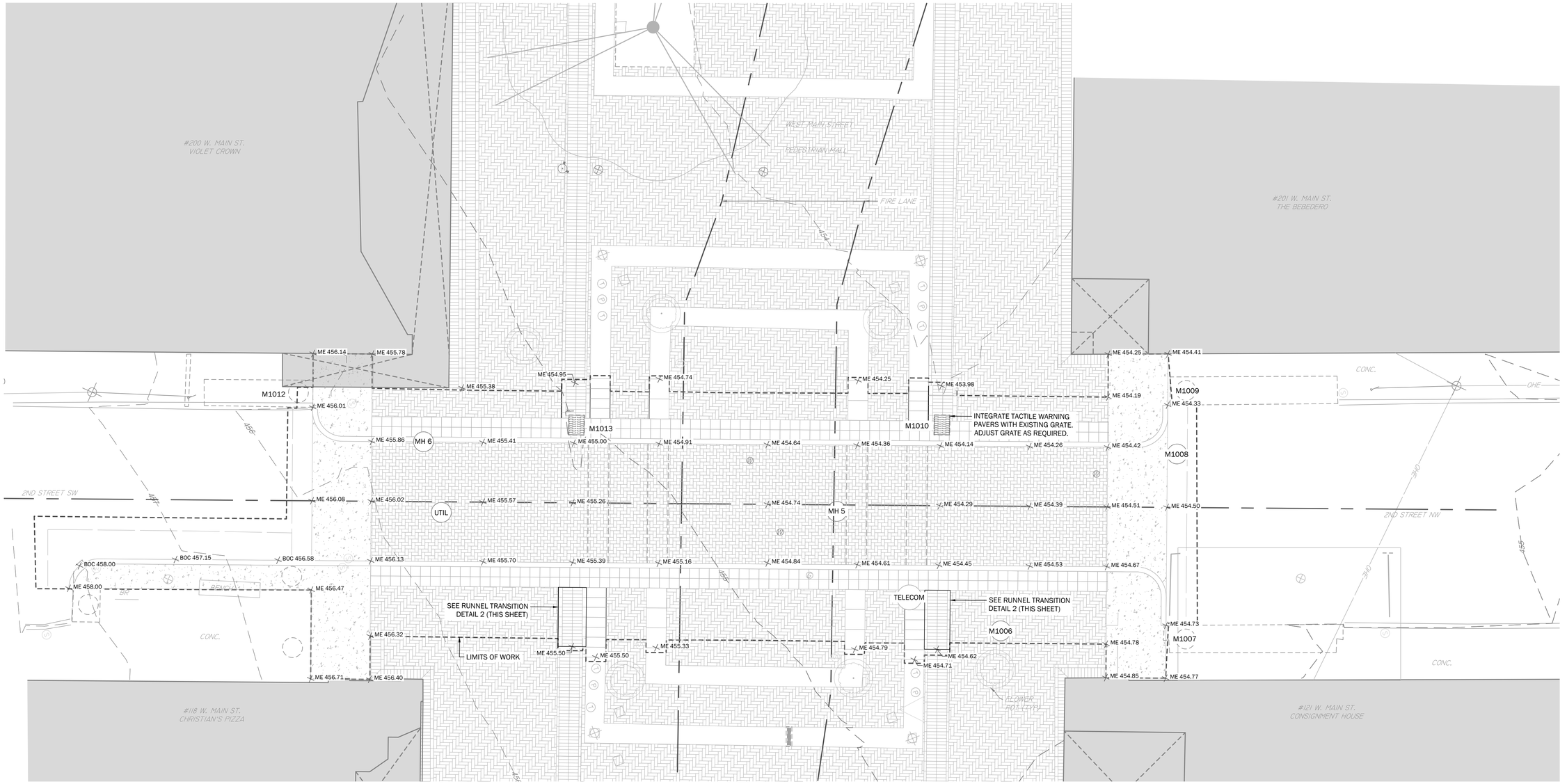
LINE AND GRADE
Civil Engineering

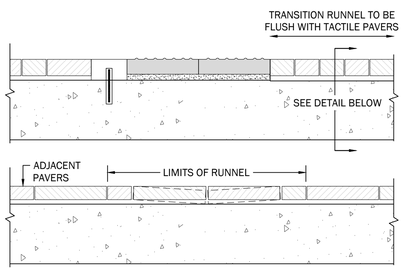
C1.1

L+G PROJECT NUMBER 2205001



1 GRADING PLAN SECOND STREET

1" = 5': 0 5 10



2 RUNNEL TRANSITION DETAIL

1" = 1': 0 1 2

NOTES

1) ALL UTILITY COVER RIMS SHALL SIT FLUSH TO ADJACENT ROAD SURFACES.

GRADING PLAN SECOND STREET

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS

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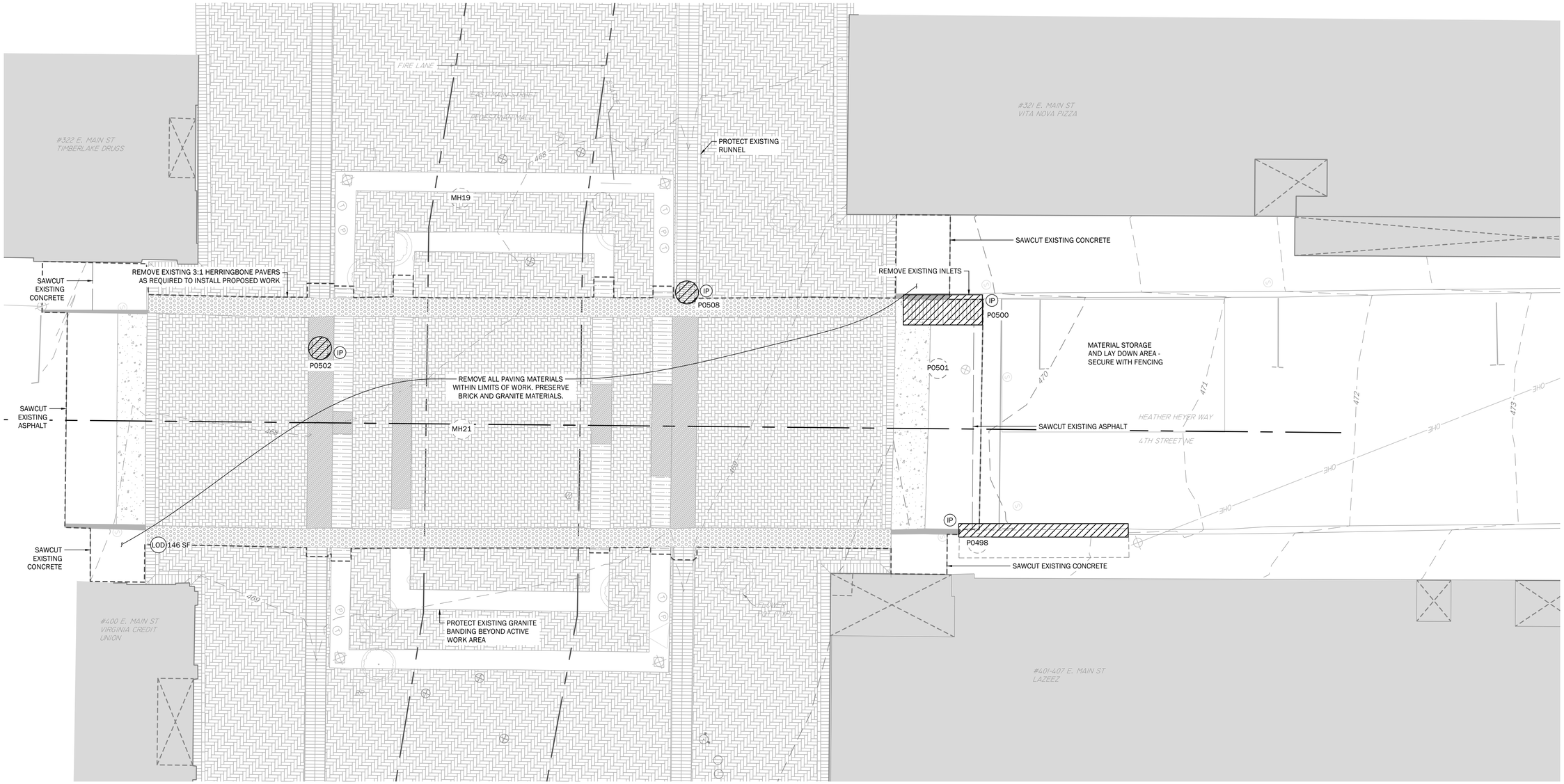
LINE AND GRADE
Civil Engineering

C1.2

L+G PROJECT NUMBER: 2205001



1 FOURTH STREET EXISTING CONDITIONS AND DEMOLITION PLAN

1" = 5': 0 5 10

LEGEND

- CONCRETE
- GRANITE
- ASPHALT
- TACTILE WARNING PAVERS
- 2:1 BRICK HERRINGBONE
- CURB DEMOLITION
- SAWCUT
- INLET PROTECTION
- LIMITS OF WORK

SANITARY SEWERS			
MH	RIM	INV. IN	INV. OUT
MH19	467.91		464.3
MH 21	468.25	459.96	459.96
MH20	473.55	478.82	478.72

STORM SEWERS				
ID	STRUCTURE	RIM	INV. IN	INV. OUT
P0498	DRAIN INLET	470.49	464.77	464.46
P0500	INLET	469.24		
P0501	MANHOLE	469.56	464.59	465.39
P0502	INLET	467.58	464.48	463.03
P0508	INLET	468.14	464.01	463.49
P0504	INLET	469.53	466.36	466.36

NOTES

1) WORK SHALL BE PHASED SUCH THAT PEDESTRIAN ACCESS ACROSS MALL SHALL BE MAINTAINED AT ALL TIMES.
2) CONTRACTOR SHALL PRESERVE ALL BRICK AND GRANITE PAVING MATERIALS THAT REMAIN IN SERVICEABLE CONDITION. BRICK PAVING UNITS FOUND TO BE UNDAMAGED AND SERVICEABLE ARE TO BE REMOVED, STACKED, AND REUSED.
3) ACTIVE WORK ZONES AND MATERIAL STORAGE AREAS SHALL BE PROTECTED BY A SAFETY FENCE. CITY STAFF SHALL ADVISE AS TO WHAT FENCE TYPE IS PREFERRED.

PRESERVATION AND DEMOLITION PLAN FOURTH STREET

DOWNTOWN MALL CROSSING

CONSTRUCTION DOCUMENTS

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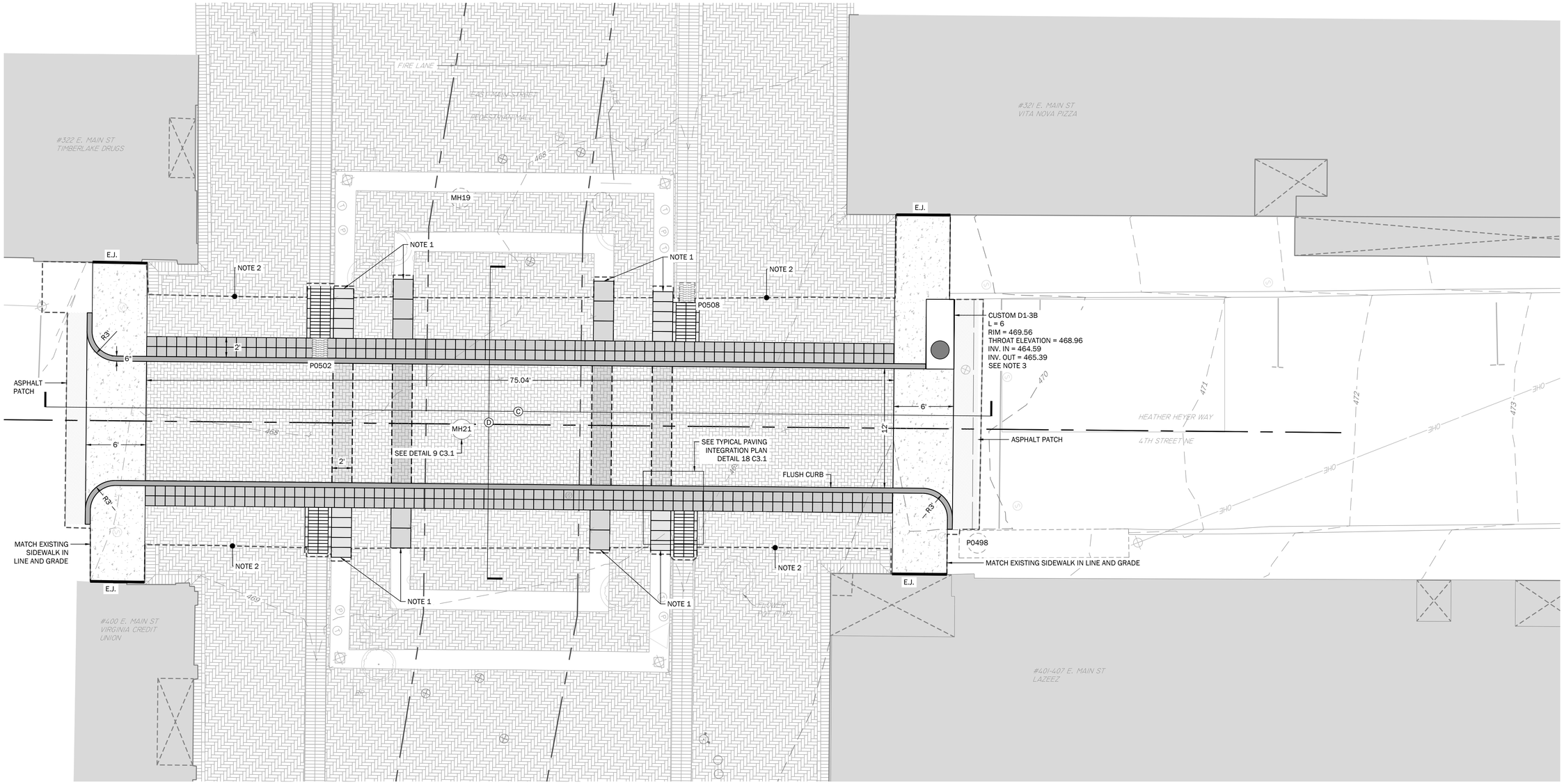
LINE AND GRADE
Civil Engineering

C2.0

L+G PROJECT NUMBER: 2205001

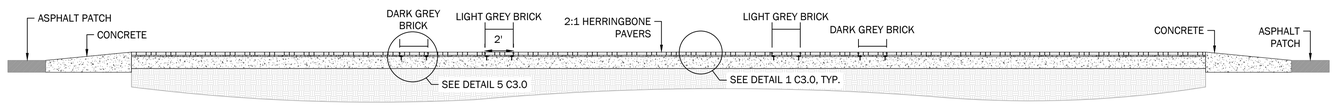


1 FOURTH STREET REPAIR PLAN

1" = 5': 0 5 10

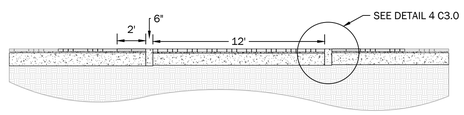
LEGEND

- CONCRETE SEE DETAIL 3 C3.0
- 1X2 GRANITE BANDING SEE DETAIL 14 C3.1
- 2X2 GRANITE BANDING SEE DETAIL 14 C3.1
- TACTILE WARNING PAVERS SEE DETAIL 4 C3.0
- 2:1 BRICK HERRINGBONE SEE DETAIL 1 C3.0
- LIGHT GREY 2:1 BRICK
- DARK GREY 2:1 BRICK
- CONCRETE CURB SEE DETAIL 6 C3.0
- DRAINAGE RUNNEL SEE DETAIL 13 C3.1
- 3:1 HERRINGBONE SEE DETAIL 2 C3.0
- STEEL ANGLE EDGE RESTRAINT SEE DETAIL 5 C3.0



C SECTION C

1" = 5': 0 5 10



D SECTION D

1" = 5': 0 5 10

NOTES

1) MATCH EXISTING GRANITE PAVING. USE SALVAGED GRANITE BANDING.
2) FEATHER BRICK PAVING TO MATCH EXISTING.
3) REFER TO UTILITY EXHIBIT 16 ON SHEET C3.1 TO REVIEW INLET CONNECTION TO EXISTING UTILITIES.

REHABILITATION PLAN FOURTH STREET

DOWNTOWN MALL CROSSING

CONSTRUCTION DOCUMENTS

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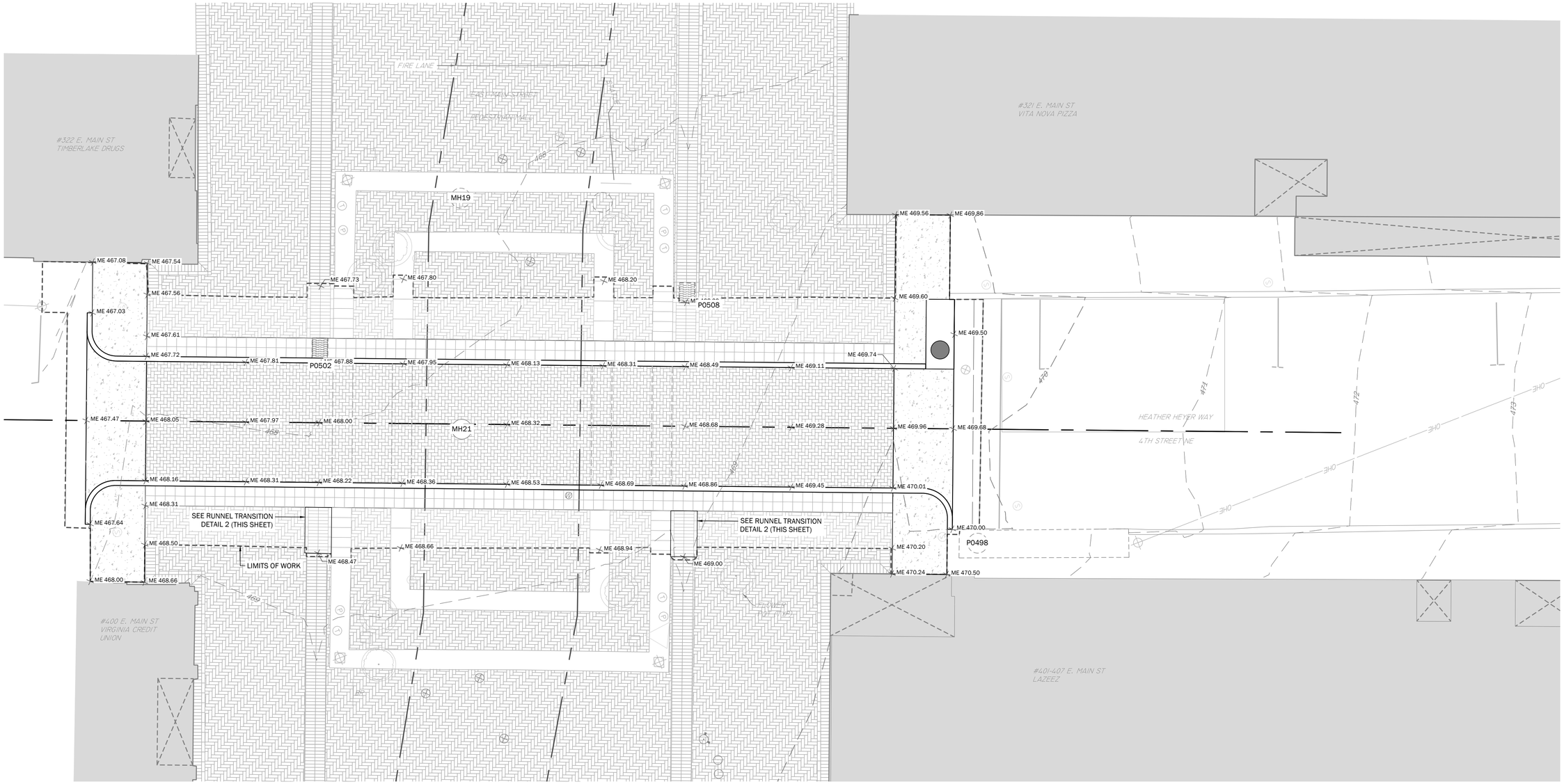
LINE AND GRADE

Civil Engineering

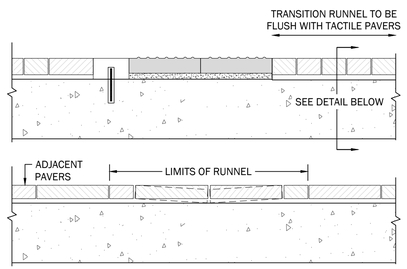
C2.1

LG PROJECT NUMBER 2205001



1 GRADING PLAN FOURTH STREET

1" = 5': 0 5 10



2 RUNNEL TRANSITION DETAIL

1" = 1': 0 1 2

NOTES

1) ALL UTILITY COVER RIMS SHALL SIT FLUSH TO ADJACENT PAVED SURFACE.

GRADING PLAN FOURTH STREET

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS

CHARLOTTESVILLE CITY, VIRGINIA

COMMONWEALTH OF VIRGINIA
04/18/2025
DANIEL C. HYER
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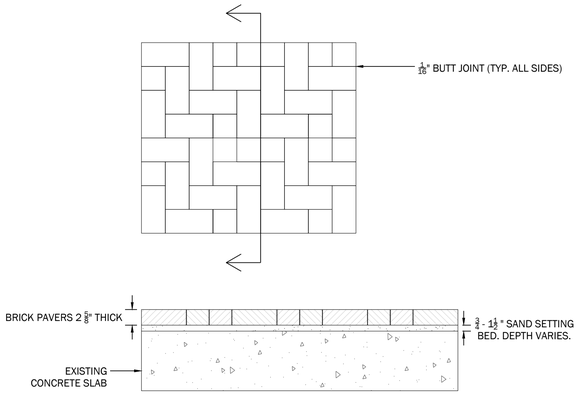
PROFESSIONAL ENGINEER

SUBMISSIONS/REVISIONS
1: 04/18/2025

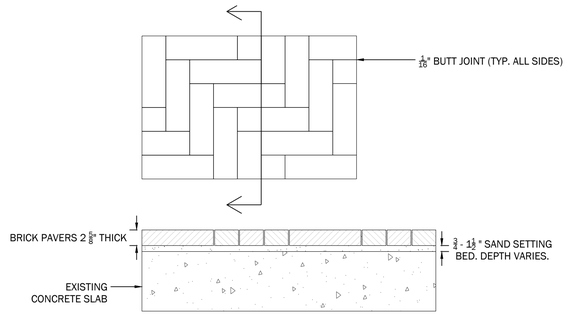
LINE AND GRADE
Civil Engineering

C2.2

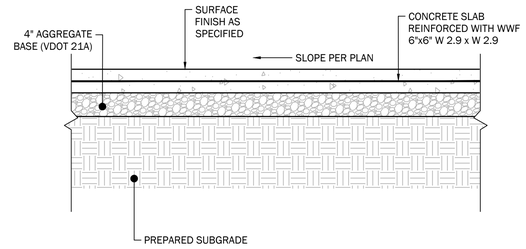
L&G PROJECT NUMBER 2205001



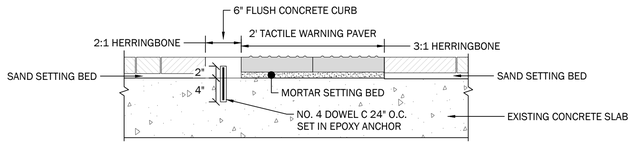
1 TYPICAL BRICK PAVING PATTERN 2:1 HERRINGBONE
1" = 1': 0 1 2



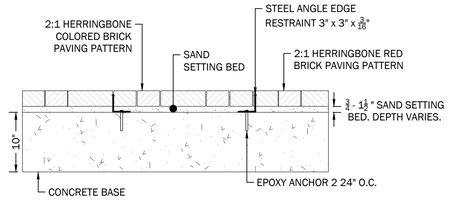
2 TYPICAL BRICK PAVING PATTERN 3:1 HERRINGBONE
1" = 1': 0 1 2



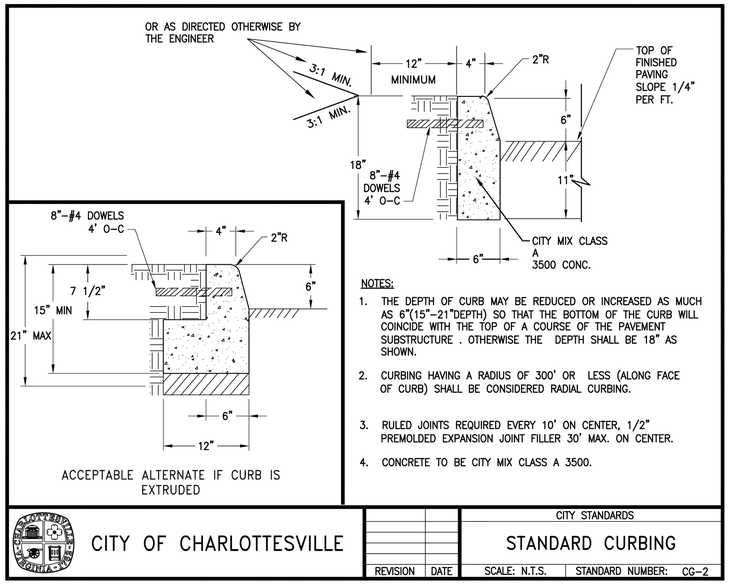
3 TYPICAL CONCRETE PAVING
1" = 1': 0 1 2



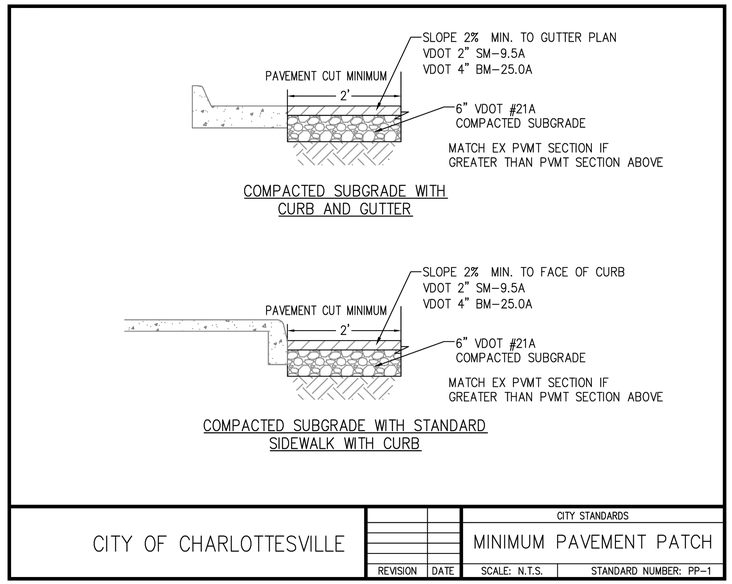
4 TACTILE PAVING
1" = 1': 0 1 2



5 STEEL EDGE RESTRAINT
1" = 1': 0 1 2



6 CG-2



7 PP-1 PAVEMENT PATCH

REHABILITATION PLAN DETAILS

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS
CHARLOTTESVILLE CITY, VIRGINIA

COMMONWEALTH OF VIRGINIA
04/18/2025
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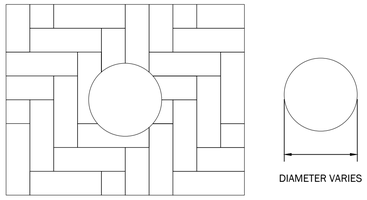
SUBMISSIONS/REVISIONS
1: 04/18/2025

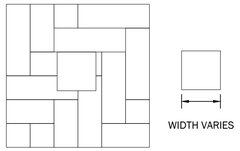
LINE AND GRADE
Civil Engineering

C3.0

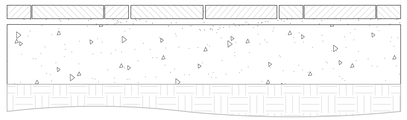
L+G PROJECT NUMBER 2205001



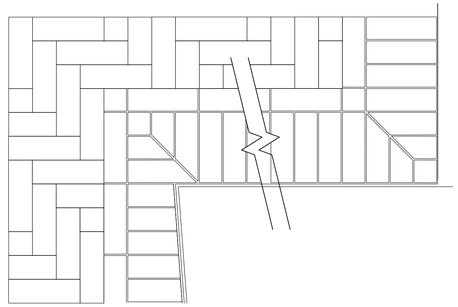
9 BRICK PAVING AT CIRCULAR FEATURE
1" = 1': 0 1 2



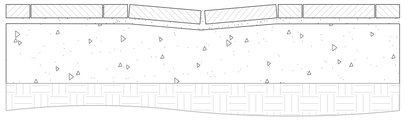
10 BRICK PAVING AT SQUARE FEATURE
1" = 1': 0 1 2



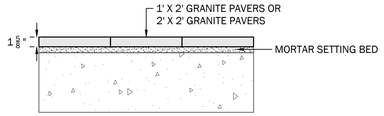
11 BRICK PAVING AT EXISTING BRICK BANDING
1" = 1': 0 1 2



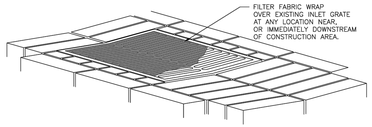
12 BRICK PAVING AT EDGE OF EX. BRICK BANDING RIGHT ANGLE
1" = 1': 0 1 2



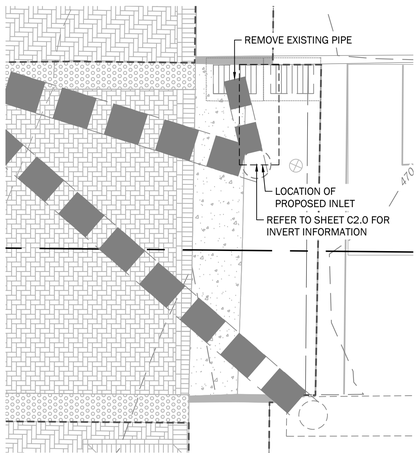
13 BRICK PAVING AT EX DRAINAGE RUNNEL
1" = 1': 0 1 2



14 GRANITE PAVERS
1" = 1': 0 1 2

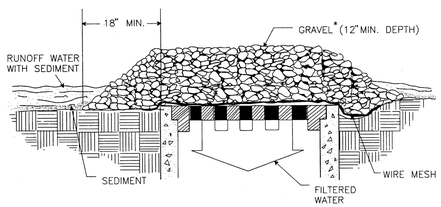


15 TEMPORARY INLET PROTECTION



16 UTILITY EXHIBIT
1" = 20': 0 20 40

GRAVEL AND WIRE MESH DROP INLET SEDIMENT FILTER



SPECIFIC APPLICATION

THIS METHOD OF INLET PROTECTION IS APPLICABLE WHERE HEAVY CONCENTRATED FLOWS ARE EXPECTED, BUT NOT WHERE PONDING AROUND THE STRUCTURE MIGHT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT STRUCTURES AND UNPROTECTED AREAS.

* GRAVEL SHALL BE VDOT #3, #357 OR #5 COARSE AGGREGATE.

Source: Va. DSWC Plate 3.07-2

17 3.07-2 GRATE INLET PROTECTION (GRAVEL)

18 TYPICAL PAVING INTEGRATION PLAN
1" = 1': 0 1 2

REHABILITATION PLAN DETAILS

DOWNTOWN MALL CROSSING
CONSTRUCTION DOCUMENTS
CHARLOTTESVILLE CITY, VIRGINIA

COMMONWEALTH OF VIRGINIA
04/18/2025
DANIEL C. HYER
LIC. NO. 45596
PROFESSIONAL ENGINEER

SUBMISSIONS/REVISIONS
1: 04/18/2025

LINE AND GRADE
Civil Engineering

C3.1

L+G PROJECT NUMBER: 2205001