MCPB
Item No.: 10
Date: 02-18-21

New Ave Bikeway Section A, City of Takoma Park Mandatory Referral, MR2021007

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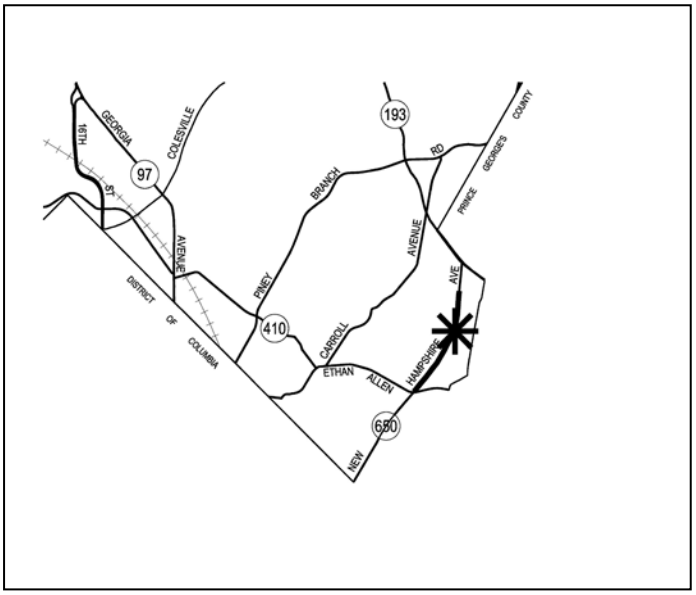
Completed: 02-11-21

Description

Construction of bikeway improvements on the west side of MD 650 between Auburn Avenue and Holton Lane in Takoma Park, Maryland. The project elements are a continuous bikeway within the project limits, micro-bioretention facilities and a small segment of stream restoration (including outfall repairs) to meet stormwater management quality requirements.

- Applicant: City of Takoma Park
- Takoma Park Master Plan (2001), Takoma/Langley Crossroads Sector Plan (2012)



Staff Recommendation: Approval to Transmit Comments

Contents

Summary

The City of Takoma Park is proposing to design and construct bikeway improvements (4,200 feet in total length) along the west side (southbound direction) of MD 650 between Auburn Avenue and Holton Lane in Takoma Park. The project includes the following improvements:

- A 12-foot wide two-way separated bike lanes starting at Holton Lane extending one block to Kingwood Drive,
- One northbound six-foot wide buffered bike lane with southbound bicycle traffic using a sharrow (11 to 12-foot wide travel lane) between Kingwood Drive and Glenside Drive,
- A ten-foot wide sidepath between Glenside Drive and Sligo Creek Parkway,
- An 8 to 10-foot wide sidepath between Sligo Creek Parkway and Auburn Lane,
- A micro-bioretention facilities and a small segment of stream restoration (including outfall repairs) to meet stormwater management quality requirements.

The project location is depicted in Figure 1.

The 60 percent design plan presentation drawings are provided as Attachment A to this report.

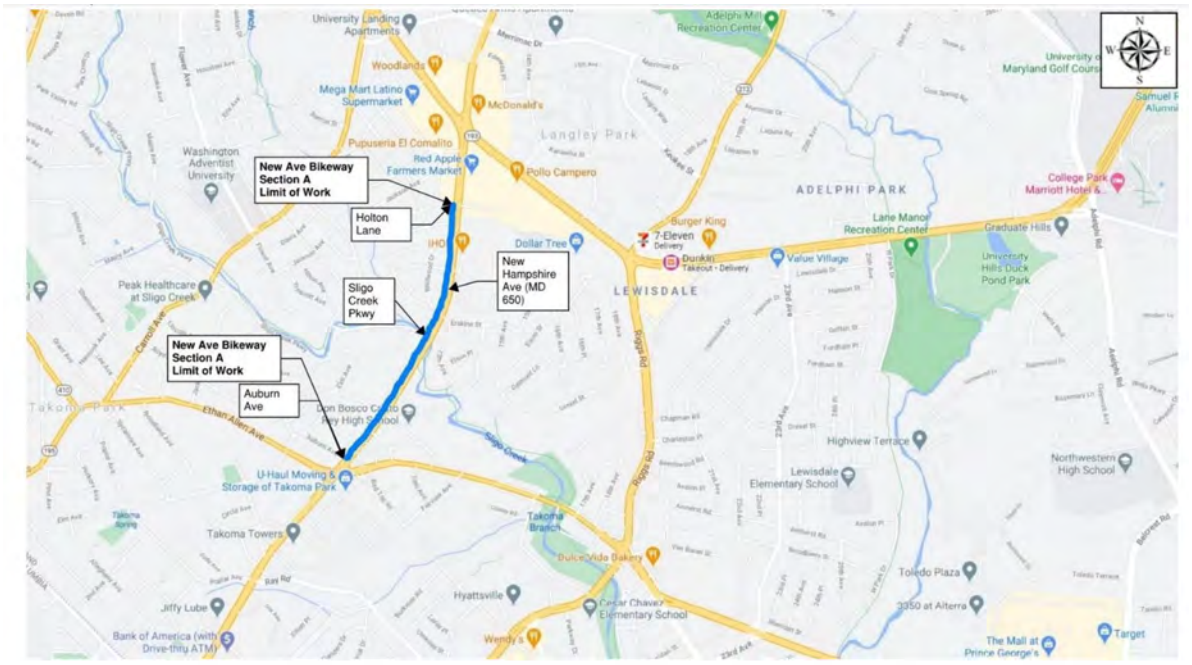


Figure 1: Project Limits and Site Vicinity

Mandatory Referral Review

This proposal for the construction of bikeway improvements is required to undergo the Mandatory Referral review process under the Montgomery County Planning Department's Uniform Standards for Mandatory Referral Review. State law requires all federal, state, and local governments and public utilities to submit proposed projects for a Mandatory Referral review by the Commission. The law requires the Planning Board to review and approve the proposed location, character, grade and extent of any road, park, public way or ground, public (including federal) building or structure, or public utility (whether publicly or privately owned) prior to the project being located, constructed or authorized.

Planning staff acknowledges that the implementation of master plan transportation recommendations is a challenge faced by the applicant in developing design plans to convert desired master plan recommendations into engineering design drawings. The design process brings clarity with considerably more detail than considered during a master plan, and issues such as environmental impacts, historical impacts, and construction costs may introduce new factors that need to be weighed in developing a final design solution. It is hoped that the Mandatory Referral process aids in this process to develop an optimal or at least an improved design solution.

Recommendations

Staff recommends **approval** to transmit the following comments to the Montgomery County Department of Transportation:

Construction plans must be submitted to the M-NCPPC Department of Parks for review as part of the Park Construction Permit process to ensure that all work is performed in accordance with M-NCPPC standard details, specifications, and policies. No work on parkland may occur until an approved Park Construction Permit is issued for the project.

1. If necessary, final easement agreements and any related compensation for the loss of parkland must be agreed to and finalized between the City of Takoma Park and M-NCPPC before the issuance of a Park Construction Permit.

2. The City of Takoma Park will continue to coordinate with M-NCPPC on the design of the bikeway with a focus on safety and minimizing parkland impacts.

3. Mitigation for impacts to Park trees (with a 6" DBH or greater) damaged or removed, shall either be (1) replacement planting on parkland at a rate of one inch to one inch diameter or (2) a monetary per inch caliper basis at the rate of $100/diameter inch, to be paid to Montgomery Parks prior to completion of construction.

4. Sidepath maintenance will be the responsibility of the City of Takoma Park. An Operations and Use agreement will be required before the issuance of the Park Construction Permit.

5. Applicant must submit a Final Forest Conservation Plan to M-NCPPC Staff for review and approval prior to issuance of a Sediment Control Permit.

6. The Final Forest Conservation Plan must be consistent with the final approved Preliminary Forest Conservation Plan.

7. The Applicant must schedule the required site inspections by M-NCPPC Forest Conservation Inspection Staff per Section 22A.00.01.10 of the Forest Conservation Regulations.

8. The limits of disturbance shown on the final Sediment Control Plan must be consistent with the limits of disturbance shown on the Final Forest Conservation Plan.

9. The Applicant must comply with all tree protection and tree save measures shown on the approved Final Forest Conservation Plan. Tree save measures not specified on the Final Forest Conservation Plan may be required by the M-NCPPC forest conservation inspector.

10. The introduction of a separated bike lane directly at the northern limit of this project at Holton Lane is problematic. Bicyclists will have to transition from the existing sidepath/future Section C of the New Ave bikeway and this occurs at an intersection. It would be preferable to start the two-way bikeway a short distance to the north of Holton Lane instead of the current design. This would require that both the separated bike facilities and a sidewalk connection occur between this relocated project work limit and the Holton Lane intersection.

11. At Glenside Drive, the southbound frontage road requires all vehicles to turn right onto Glenside Drive; however, southbound bicyclists who will be using this frontage road will need to connect onto the proposed sidepath located south of Glenside Drive. Staff recommends that increased space within the island on the northwest corner be provided to facilitate this transition.

12. Staff has some sight distance concerns between southbound bicyclists and traffic approaching on Auburn Avenue. The diagonal crossing across Auburn Avenue and sight lines are the major concern here. If the frontage road could be narrowed to 11 or 12 feet from its current 17 feet approaching Auburn Avenue (by prohibiting parking for a short stretch), the 8-foot wide sidepath could be shifted and potentially widened to improve this connection at the southern work limit of Section A.

13. The sidepath design between Sligo Creek Parkway and Larch Avenue is very substandard due to the existing roadway design, limited existing right of way and environmental parkland constraints, and staff recommends that modifications to the current design be considered to improve the effective width of this sidepath. This could include narrowing the buffer from five feet to three feet with the addition of a smooth 42-inch high railing, providing a two-foot buffer between the retaining wall and the sidepath, or modifications to the existing roadway section on MD 650 to provide more space for sidepath widening. This might require purchase of parkland and associated mitigation to provide room for these improvements.

14. The sidepath design between Larch Avenue and Auburn Avenue is substandard due to the lack of existing right of way alone. Staff recommends that modifications to this design including right of way acquisition be considered to provide a consistent 10-foot wide sidepath and wider (six-foot) buffer throughout this section.

Project Description

As a follow-on to a 2012 New Ave feasibility study[1] and bikeway recommendations in the Bicycle Master Plan adopted and approved in 2018, the City of Takoma Park is proposing to design and construct bicycle improvements along MD 650 (New Hampshire Avenue) between Auburn Avenue and Holton Lane. The specific project elements include:

- A 12-foot wide two-way separated bike lanes starting at Holton Lane extending one block to Kingwood Drive,
- One northbound six-foot wide buffered bike lane with southbound bicycle traffic using a sharrow (11 to 12-foot wide travel lane) between Kingwood Drive and Glenside Drive,
- A ten-foot wide sidepath between Glenside Drive and Sligo Creek Parkway,
- An 8 to 10-foot wide sidepath between Sligo Creek Parkway and Auburn Lane, and
- A micro-bioretention facilities and a small segment of stream restoration (including outfall repairs) to meet stormwater management quality requirements.

MD 650 (New Hampshire Avenue) is classified as a Major Highway in the Master Plan of Highways and Transitways (MPOHT).

New Ave Bikeway

The City Takoma Park has embarked on this ambitious project to "creatively redesign the underutilized service lanes on the southbound side on New Hampshire Avenue as a two-directional bikeway, while still providing vehicular access to properties."[2] The location of the planned New Ave Bikeway is shown in Figure 2 by the three sections proposed. Section A is the middle and longest section.

The New Ave Bikeway is currently supported by a Maryland Bikeways grant to develop semi-final (60%) and final design documents. It will provide design and consideration of pavement markings, signage, curb and sidewalk adjustments, vertical barriers between bicyclists and vehicular traffic, and possible elimination of some curbside parking in the service lane. The current stage of this project is the 60% stage. City plans currently envision the completion of the final design stage for Section A in Spring 2022. Section

[1] https://www.thenewave.com/development/planning-vision/feasibility-study

[2] https://takomaparkmd.gov/government/housing-and-community-development/planning-and-community-development/new-ave-bikeway/

B of this bikeway project is expected to undergo semi-final design in Summer/Fall 2021, and will be the next section reviewed through the Mandatory Referral process later this year.

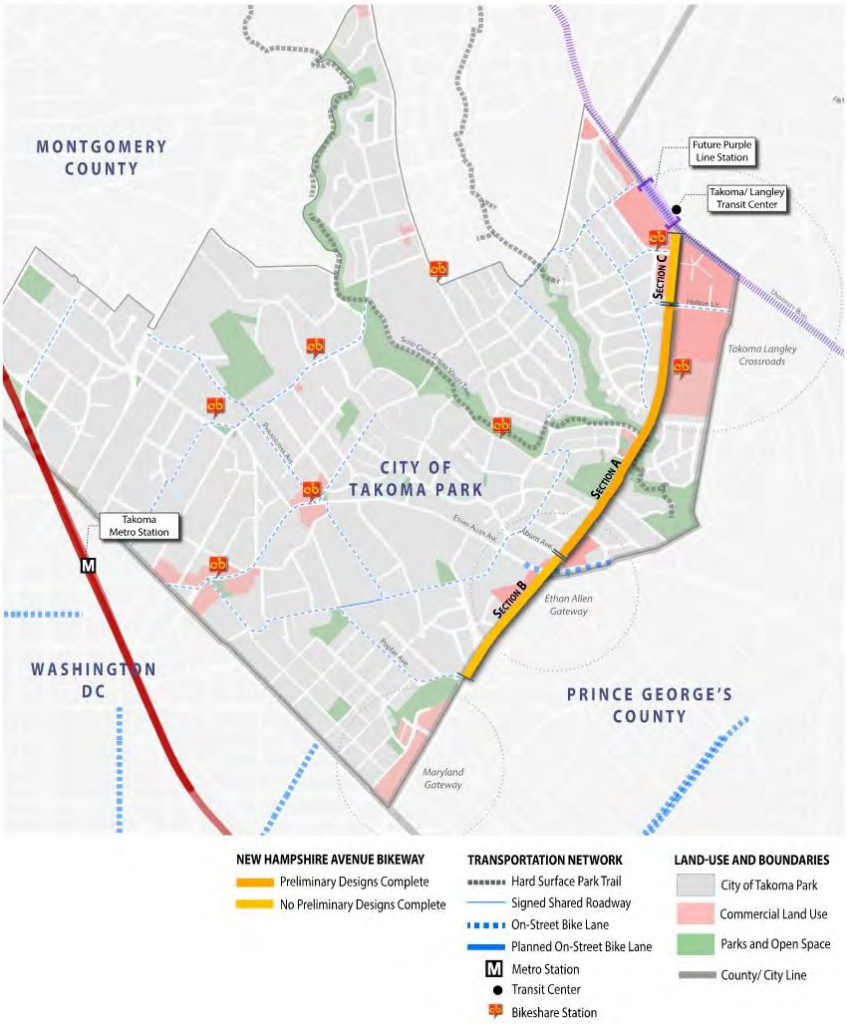


Figure 2: New Ave Bikeway Vision

Proposed Cross Section between Holton Lane and Kingwood Drive

The proposed 12-foot wide two-way separated bike lanes are shown below in cross-section view in Figure 3. This facility will be curbed with one-foot buffers (gutter pan) on each side and two five-foot wide bike lanes.

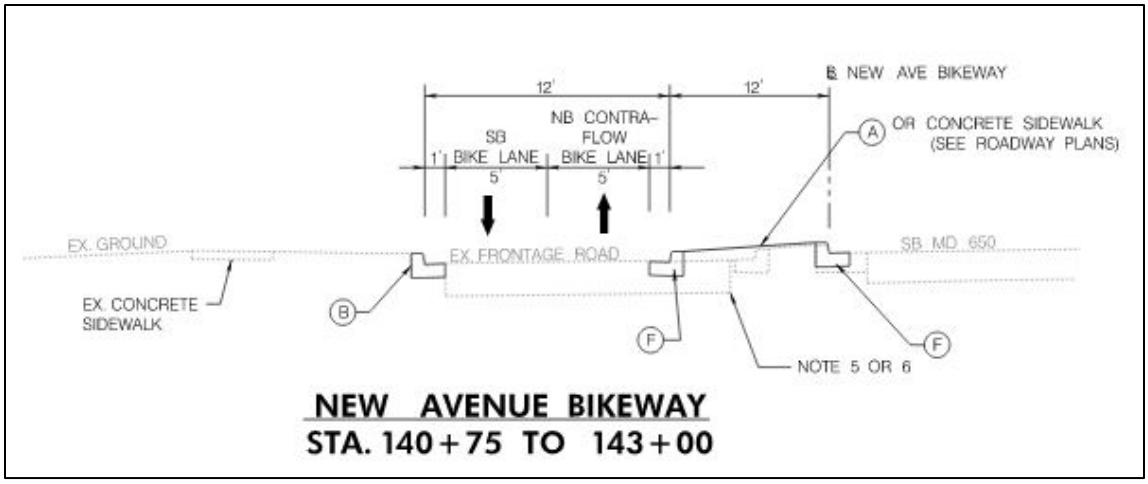


Figure 3: Separated Bike Lanes between Holton Lane and Kingwood Drive – Proposed Cross Section

Proposed Sidewalk Cross Section between Kingwood Drive and Sligo Creek Parkway

For two blocks, a northbound five-foot wide bike lane will be provided (without a buffer) with southbound bicycle travel using a shared use lane (i.e., sharrow). Parking will be provided between Kingwood Drive and Merwood Drive. This cross section is shown in Figure 4.

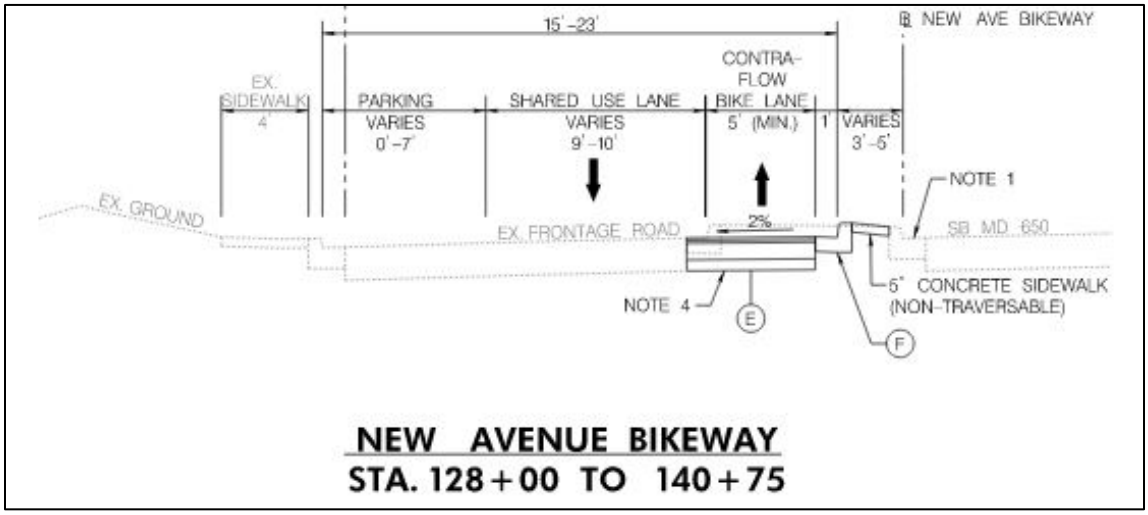


Figure 4: Bike Lane/Sharrow between Kingwood Drive and Sligo Creek Parkway – Proposed Cross Section

Proposed Sidepath Cross Section between Sligo Creek Parkway and Larch Avenue

The proposed 8 to 10-foot wide sidepath cross section to be provided between Sligo Creek Parkway and Larch Avenue is shown in Figure 5. Note that retaining wall structures will be required at three locations.

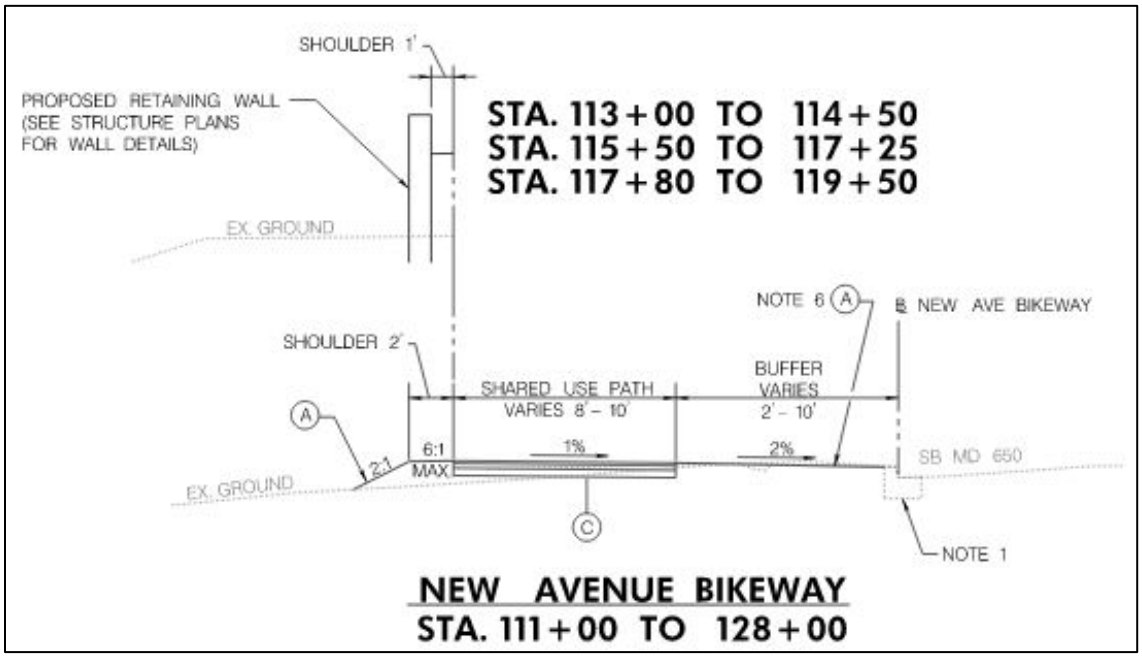


Figure 5: Sidepath Between Sligo Creek Parkway and Larch Avenue – Proposed Cross Section

Proposed Sidepath Cross Section between Larch Avenue and Auburn Avenue

The proposed 8-foot wide sidepath cross section to be provided between Larch Avenue and Auburn Avenue is shown in Figure 6.

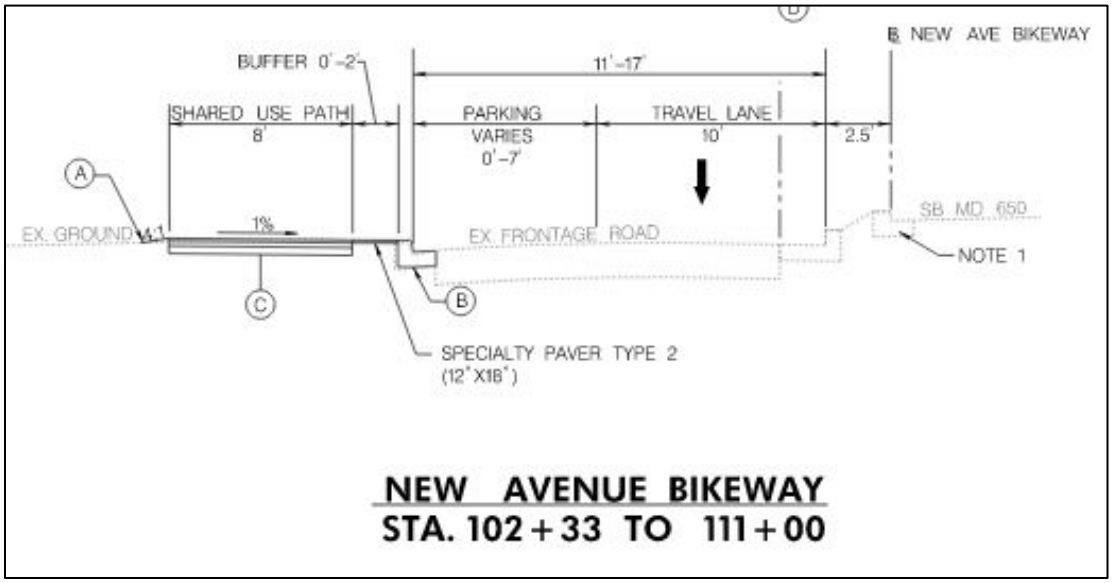


Figure 6: Sidepath Between Larch Avenue and Auburn Avenue – Proposed Cross Section

Proposed Plan View

The proposed roadway plans are provided in Figures 7 through 12. These plans are presented traveling south to north.

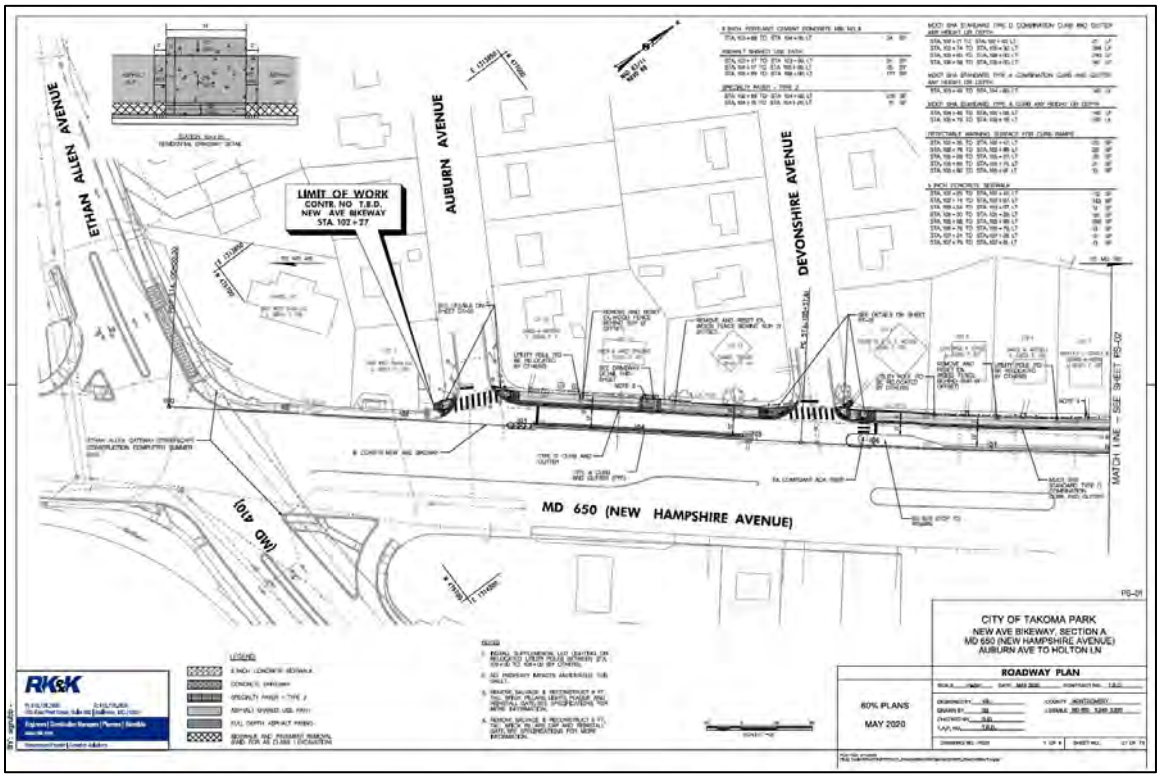


Figure 7: Plan View of Proposed New Avenue Section A Improvements (Part 1)

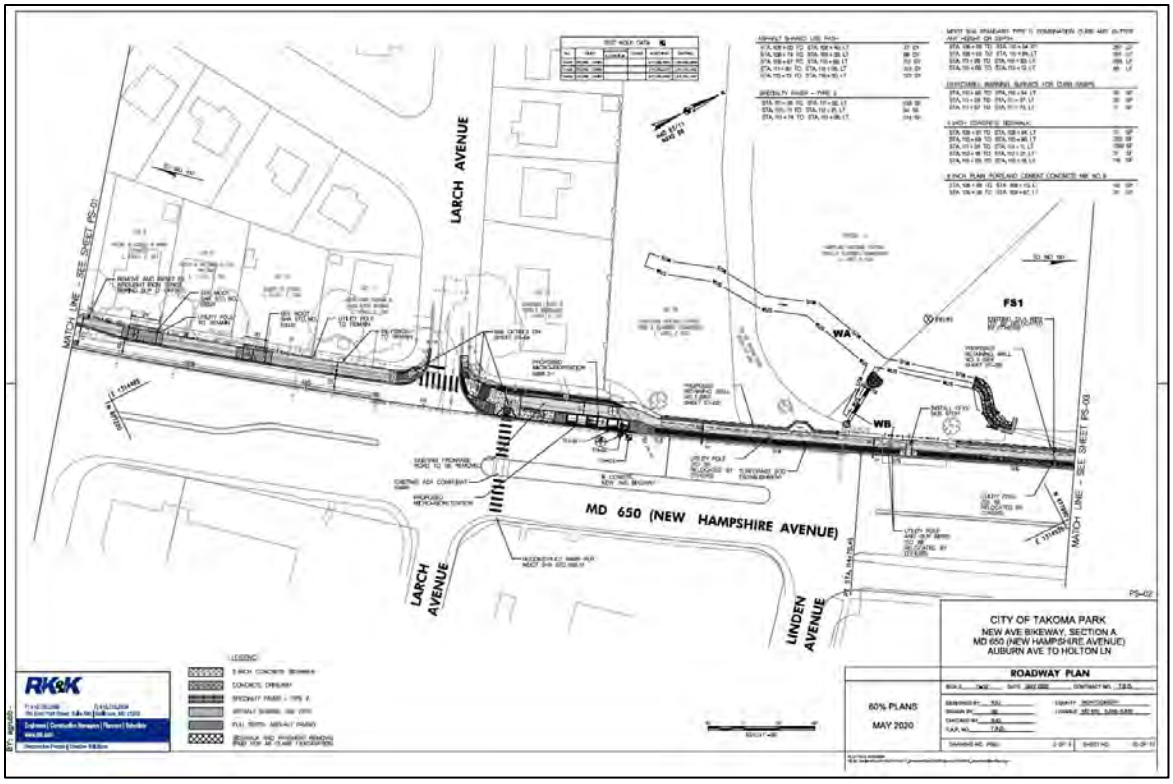


Figure 8: Plan View of Proposed New Avenue Section A Improvements (Part 2)

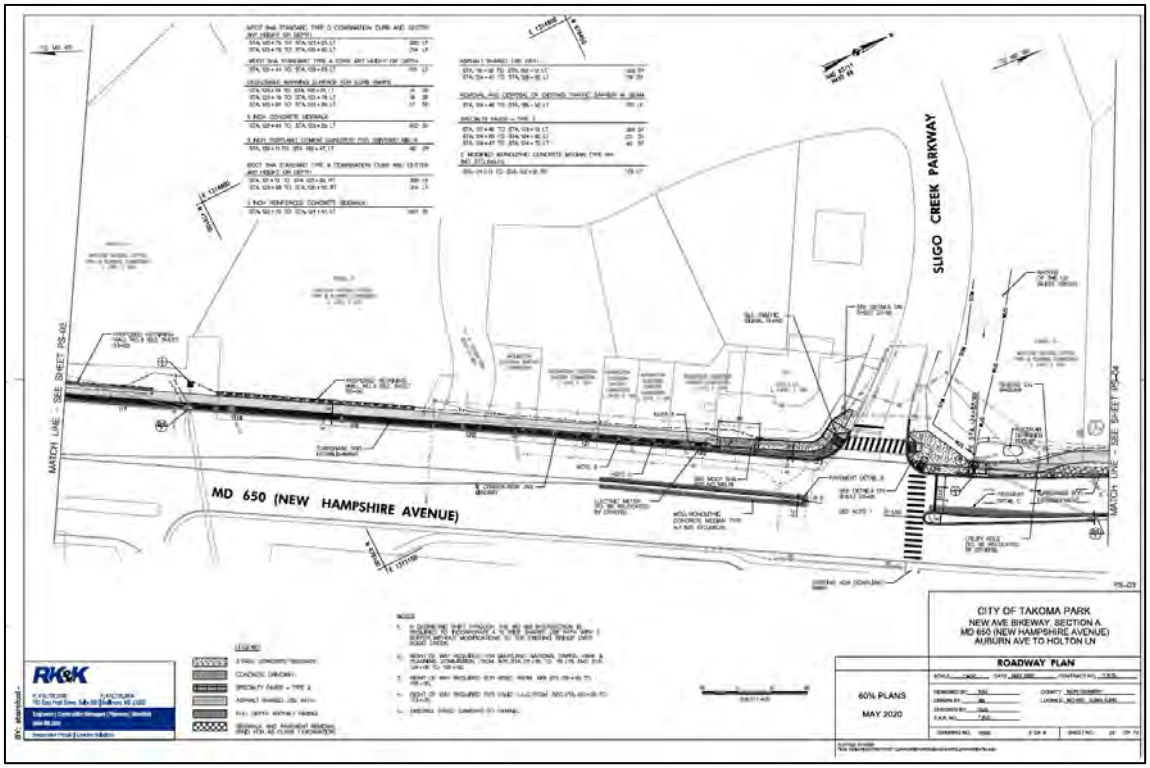


Figure 9: Plan View of Proposed New Avenue Section A Improvements (Part 3)

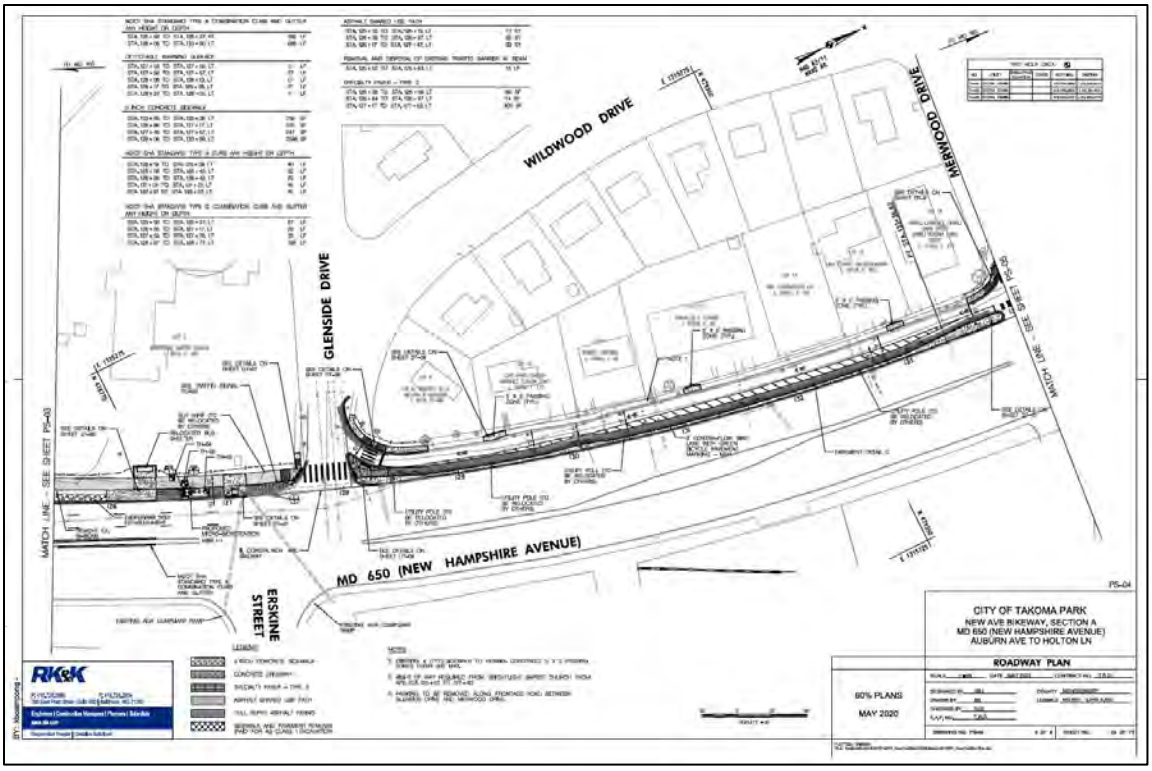


Figure 10: Plan View of Proposed New Avenue Section A Improvements (Part 4)

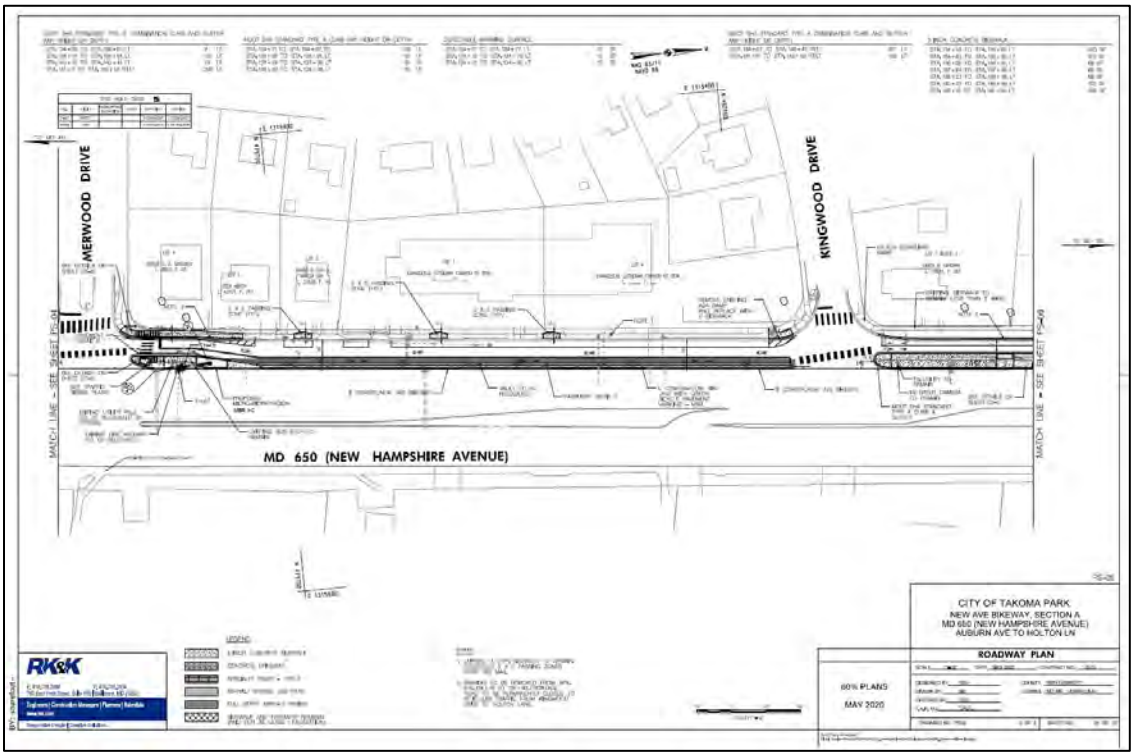


Figure 11: Plan View of Proposed New Avenue Section A Improvements (Part 5)

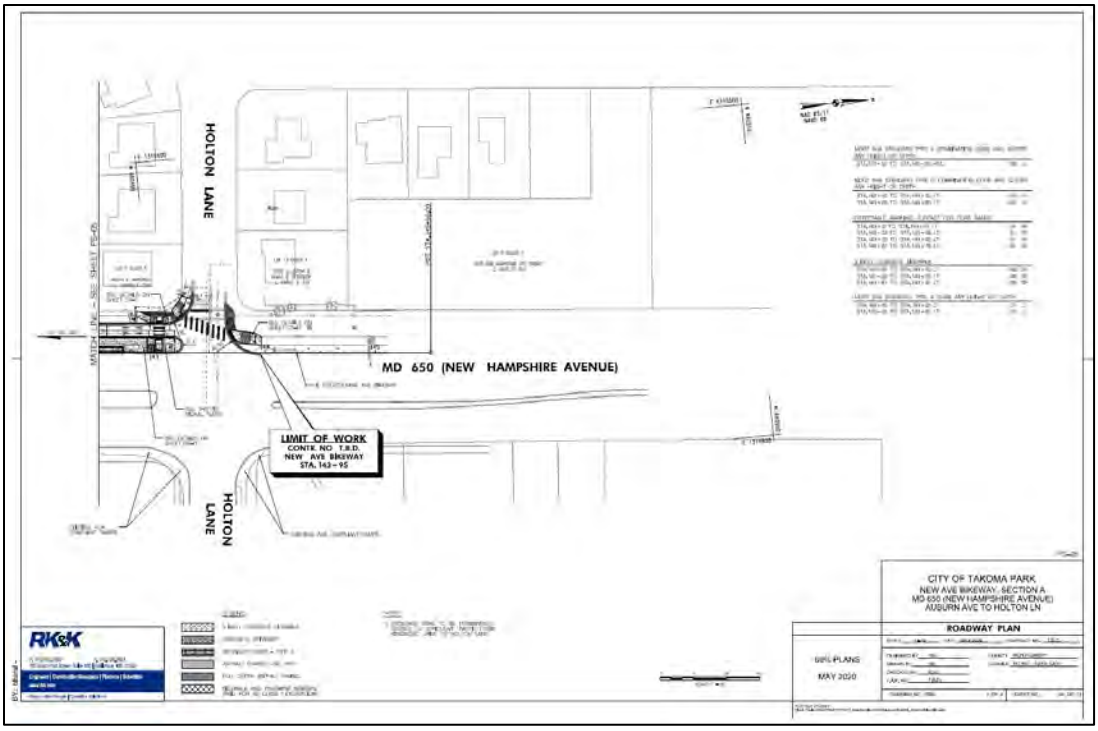


Figure 12: Plan View of Proposed New Avenue Section A Improvements (Part 6)

Transportation Analysis

Intersection Design Issues

Some of the transitions for this bikeway occur at intersections or involve skewed, diagonal crossings. Staff has developed three recommended changes that the applicant should consider to improve the clarity, connectivity and safety of this project:

Project Northern Work Limit at Holton Lane: The introduction of a separated bike lane directly at the northern limit of this project at Holton Lane is problematic, with sidepath users transitioning between facilities and merging/splitting bicyclists and pedestrians in the middle of an intersection. It would be preferable to start the two-way bikeway a short distance to the north of Holton Lane instead of the current design. This would require that the merge/split between the separated bike facilities and sidewalk occur between this relocated project work limit and the Holton Lane intersection. This potential modification is shown in a rough sketch in Figure 13.

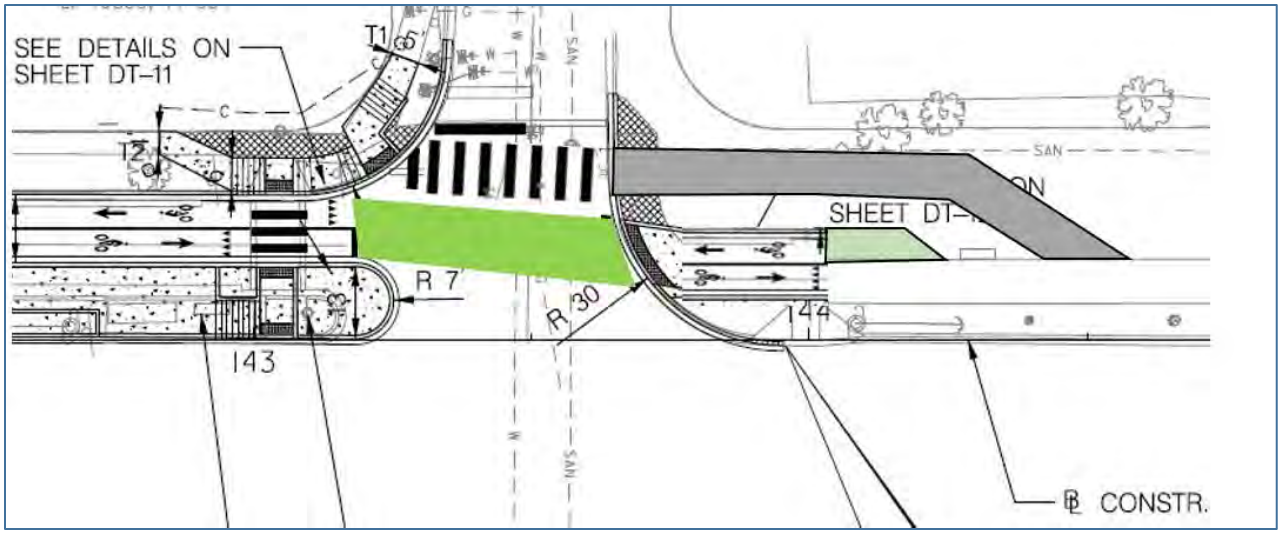


Figure 13: New Ave Bikeway at Holton Lane – Proposed Modifications

Glenside Drive: At Glenside Drive, the southbound frontage road requires all vehicles to turn right onto Glenside Drive; however, southbound bicyclists who will be using this frontage road will need to connect onto the proposed sidepath located south of Glenside Drive. Staff recommendss that increased space within the island be provided to facilitate this transition. A sketch of this improvement is shown in Figure 14.

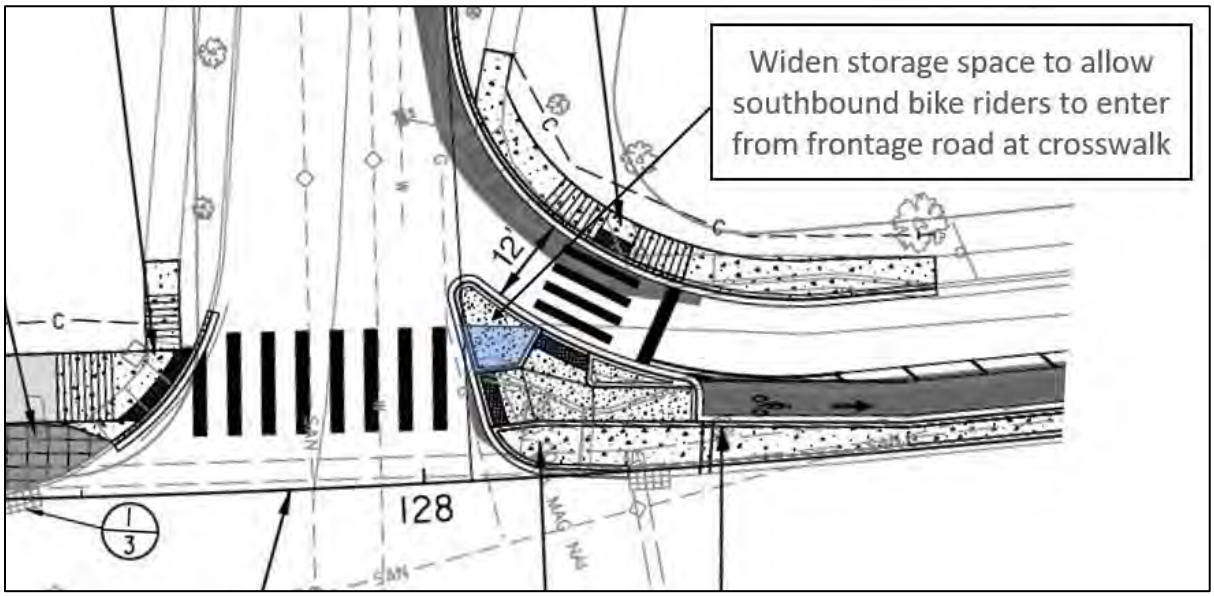


Figure 14: New Ave Bikeway at Glenside Drive – Proposed Modifications

Auburn Avenue: Staff has concerns with the diagonal crossing at the intersection with Auburn Avenue and with the sight lines for vehicles approaching on Auburn Avenue as well as those on the New Hampshire Avenue frontage (service) road that ends at the intersection. If the frontage road could be narrowed to 11 or 12 feet from its current 17 feet approaching Auburn Avenue (by prohibiting parking for a short stretch), the 8-foot wide sidepath could be shifted and potentially widened to improve this connection at the southern work limit of Section A. A sketch of this improvement is shown in Figure 15.

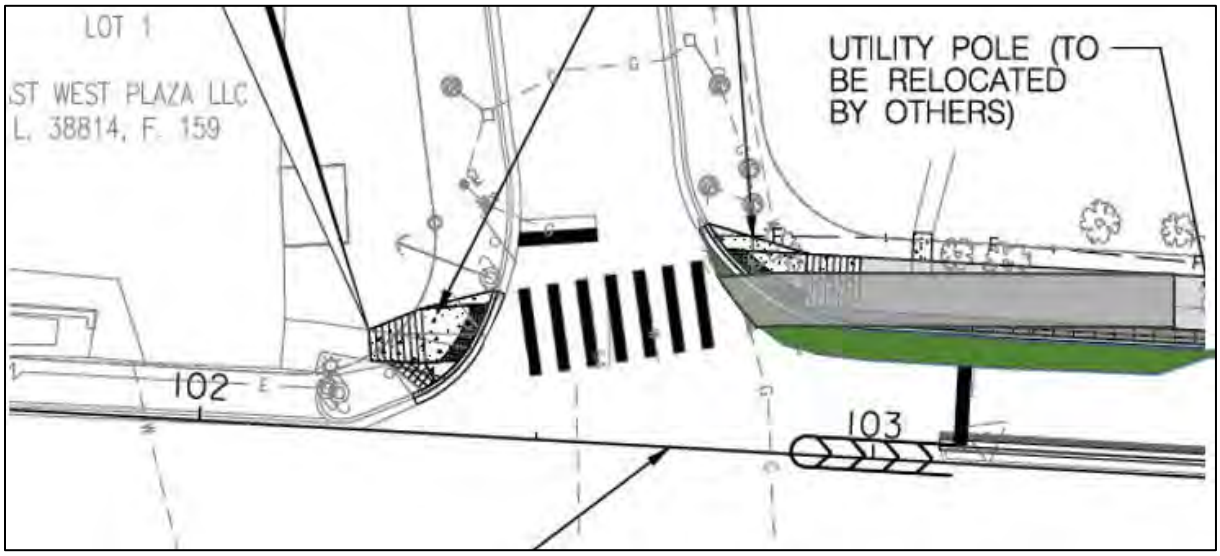


Figure 15: New Ave Bikeway at Auburn Avenue – Proposed Modifications

Design Elements - Transportation

Sidepath Design: In general, the proposed sidepath width ranging from 8 to 10 feet is not consistent with the approved Bicycle Master Plan. Ten foot-wide sidepaths is the current Montgomery County design standard. In the draft Complete Streets Design Guidelines now under review, 11 feet is the preferred sidepath width on facilities similar to MD 650. The sidepaths are also recommended in both the Bicycle Master Plan and the Complete Streets Design Guidelines with adequate 6' minimum buffers to protect pedestrians and bicyclists from motoring traffic. Between Sligo Creek Parkway and Larch Avenue, a five-foot wide buffer is proposed; however, between Larch Avenue and Auburn Avenue, there is limited buffer (zero to two feet) proposed due to Right of Way constraints.

Sidepaths can be 8-feet wide for limited distances in order to avoid environmental impacts and impacts to parkland. There are two roadway sections where there are areas of concern related to minimum design standards. The first section is between Sligo Creek Parkway and Larch Avenue where an 8-foot wide sidepath been designed with three retaining wall sections (with a one-foot offset) and a five-foot wide buffer. While the buffer is close to meeting the typical 6-foot buffer width, the effective width of the sidepath is impacted by the retaining walls to only seven feet clearance, which is very substandard for a sidepath, even for short distances. The second section is between Larch Avenue and Auburn Avenue where an 8 to10-foot wide sidepath is provided with only a two-foot wide buffer (no buffer in some places). The 8-foot wide sidepath section here is provided due to the lack of available right of way.

Separated Bike Lane Design: In general, the default two-way separated bike lane design width in the Complete Streets Design Guidelines is 11 feet, with 8' minimums allowed for short sections. The proposed 12-foot wide two-way separated bike lanes between Holton Lane and Kingwood Drive is consistent with these guidelines.

Master Plan Conformance – Transportation

The 2018 Bicycle Master Plan recommends separated bike lanes (west side) of MD 650 between Holton Lane and Glenside Drive, and a 10-foot wide sidepath between Glenside Drive and Auburn Avenue. It should be noted that within Montgomery County boundaries in the City of Takoma Park, there is also a similar bike plan recommendation on the east side of MD 650.

Historic Resources Analysis

There are no historic resources within the project area.

Environmental Guidelines

A Natural Resources Inventory and Forest Stand Delineation (NRI/FSD) for the Property, # 420201690, was approved by Staff on June 10, 2020. The Property is in the Sligo Creek watershed; Use Class IP waters. Although there are no environmentally sensitive soils, slopes, or wetlands on or affecting the Site, the proposed work does intersect with areas of stream buffer and forest. Out of the 1.76 acres of forest shown on the NRI, 0.60 acres of forest are within the limits of disturbance.

While the Environmental Guidelines are design to protect environmental features by the restriction of development in stream valley buffers, disturbance is allowed for unavoidable road and utility crossings. In this case, the work associated with the disturbance includes a master plan recommended bikeway/shared-use path, micro-bioretention facilities, and stream restoration. Disturbance has been minimized to avoid major tree and environmental impacts and this project will result in an improved stream environment as well as increased pedestrian and bicyclist safety along the roadway. This allows the project to meet the Environmental Guidelines even though disturbance within the stream buffer is required.

Forest Conservation

The proposed project has not been approved for an exception to the Montgomery County Forest Conservation Law, Chapter 22A of the County Code, and is accordingly subject to compliance with Forest Conservation laws and regulations.

The Application is for 2.3 acres of land, including some off-site work. The plans, currently at 65% development, proposes approximately 0.6 acres of forest clearing, 0.5 acres of clearing within the stream buffer, and 0.3 acres of proposed planting within the stream buffer for restoration work. Given the project area and proposed work within an Institutional Development Area (IDA), the Forest Conservation Worksheet results in 0.0-acres of afforestation/reforestation required. As such, this Application meets all applicable requirements of Chapter 22A of the Montgomery County Forest Conservation Law. Staff recommends the Applicant prepare a Tree Save Plan in coordination with an ISA Certified Arborist as plans develop further to allow for tree impacts and/or removals to be appropriately assessed and mitigated for as required.

Parkland Impacts

The proposed sidepath is on or adjacent to M-NCPPC parkland from Larch Avenue north to approximately 175 feet north of Sligo Creek Parkway (Figure 16). At Sligo Creek Parkway, the sidepath will connect to the Sligo Creek trail at the NW corner of the intersection. The parkland unit between Larch Avenue and Sligo Creek Parkway, known as Takoma Park Neighborhood Park (Figures 17 and 18) consists of 6.89 acres and contains a number of natural resources of concern, including a number of large trees, steep slopes, a perennial stream (Larch Tributary), and a stormwater outfall. The sidepath will require the use of retaining walls at several locations on parkland due to the steep slopes, outfall restoration, and stream stabilization in relation to the proposed new headwall where the stream flows under MD 650. The sidepath will cross Sligo Creek on the existing roadway bridge so no additional impacts to Sligo Creek are proposed. The parkland unit impacted north of Sligo Creek Parkway is part of Sligo Creek SVU 1A (Figure 19) which contains 17.79 acres of parkland along Sligo Creek. However, only a small piece of parkland in this location will be impacted by the project. The small area of impact north of Sligo Creek already contains multiple infrastructure assets including a stormwater outfall, telecom equipment, and a WSSC sanitary sewer.

All of the parkland (Figure 1) that will be impacted by the proposed sidepath construction is either within a stream buffer area, on steep slopes, or both within a stream buffer and on steep slopes. These constraints have led to extensive collaboration between M-NCPPC and the City of Takoma Park to provide a safe sidepath while reducing impacts to park resources. The sidepath will increase impervious surface runoff into Sligo Creek, however practical measures are being taken to minimize stormwater impacts and to treat runoff. No historical or recreational resources are proposed to be impacted by this project. The sidepath will be operated and maintained by the City of Takoma Park.

Resource Atlas: Sligo Creek Park at New Hampshire Ave

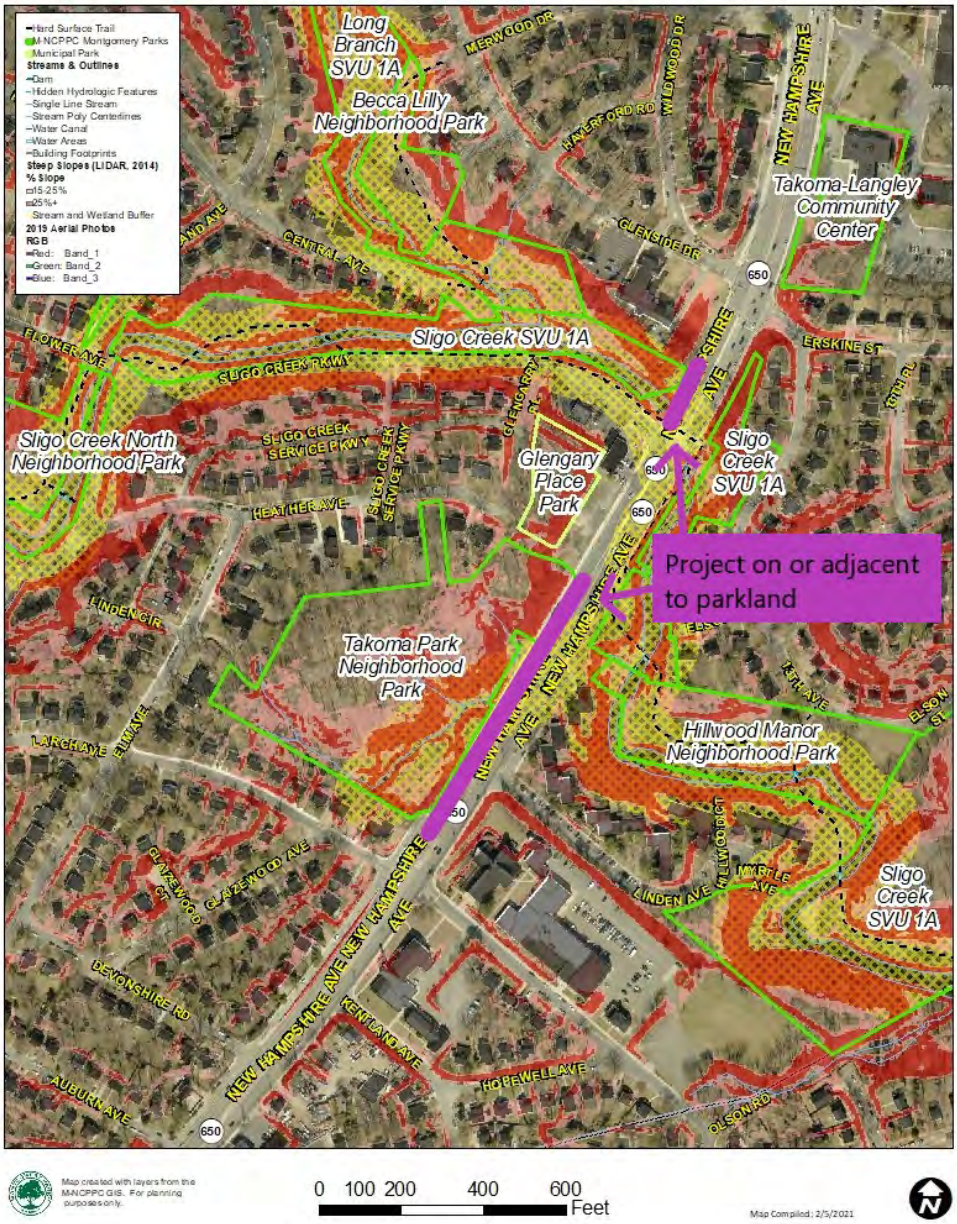


Figure 16: Resource Atlas Map

Figure 17: Southern Portion of Takoma Park NP

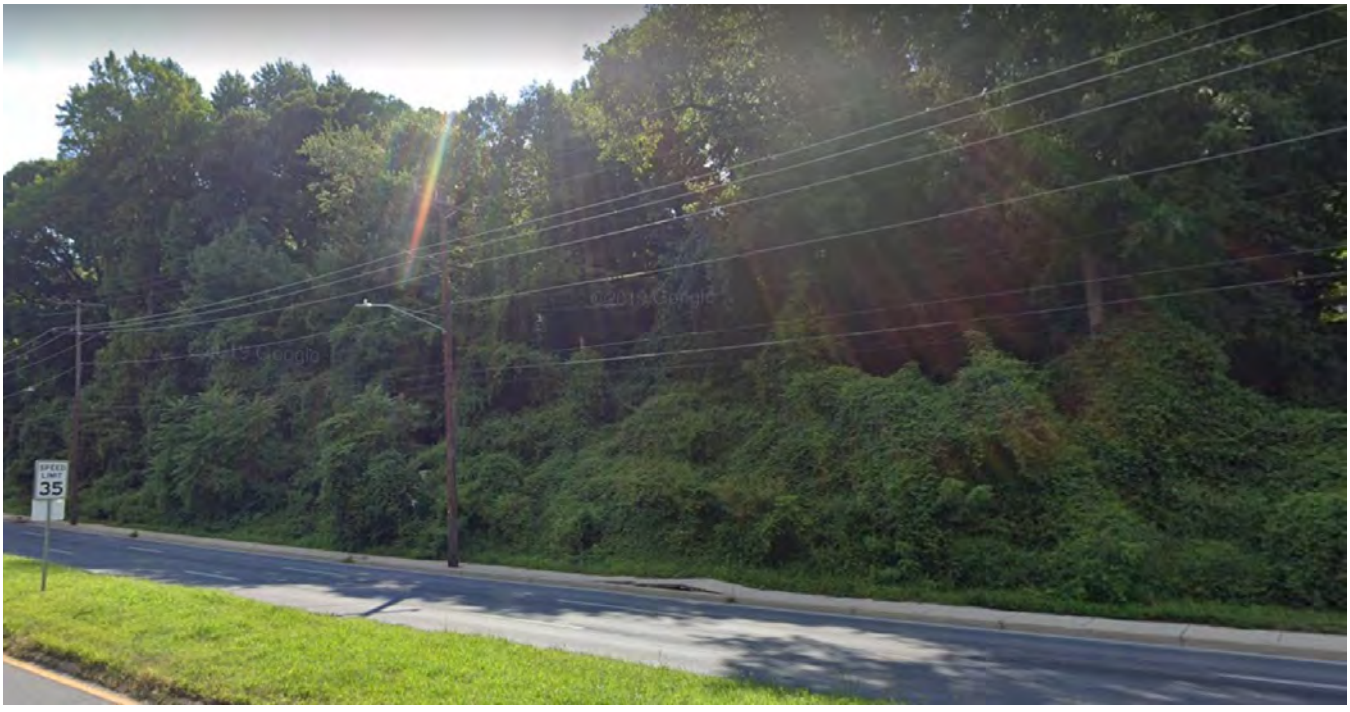


Figure 18: Northern Portion of Takoma Park NP

Figure 19: Sligo SVU 1A

Terrestrial Resource Impacts

The forest stand proposed to be impacted along the edge for the construction of the sidepath does not contain any trails or other recreational amenities. The forest generally consists of a mix of oak, hickory, beech, and tulip poplar. The forest is generally in good condition with canopy closure ranging between 65% to 90% and minimal invasive species within the interior of the stand. However, the edges of the stand are typically in a fair to poor condition with higher levels of non-native invasive species present. The City of Takoma Park and M-NCPPC have worked closely to limit the number of large trees removed for this project; currently the plan proposes the removal of approximately 43 trees along the forest edge. Replanting of trees will occur with non-native invasive plant control to maximize the success of the restoration plantings.

This site is severely constrained by the various steep slopes adjacent to the proposed sidepath. Extensive coordination and design revision have occurred to limit the impacts from the required retaining walls and reduce impacts on the steeper slopes. Efforts to minimize these impacts will continue through the

technical review phase and a focus on enhancing the slopes through the replanting effort will be a high priority. All access routes and approved staging areas on parkland will require the use of Parks Heavy Duty Mulch Access Road detail.

Mitigation for impacts to Park trees (with a 6" DBH or greater) damaged or removed, shall either be (1) replacement planting on parkland at a rate of one inch to one inch diameter or (2) a monetary per inch caliper basis at the rate of $100/diameter inch, to be paid to Montgomery Parks prior to completion of construction. Tree impacts will be determined by an M-NCPPC forester prior to construction based on the Final Design. The Department of Parks will require as much on-site replanting of trees as practicable due to the sensitive ecological context of the site. During Park Construction Permit Review, Parks staff will work with the City of Takoma Park to minimize impacts to parkland to the greatest extent possible and avoid all critical resources identified.

Aquatic Resource Impacts

The Larch Tributary originates from a storm drain system adjacent to Larch Avenue and flows through the forest stand adjacent to MD 650 in Takoma Park Neighborhood Park. The tributary flows in a northeast direction into a culvert under MD 650 and outfalls into Sligo Creek. The headwall at the culvert under MD 650 is proposed for replacement as part of the sidepath construction. The current culvert is routinely clogged, and water is forced to flow onto MD 650 during high flow events. A series of instream structures will be constructed to provide bank protection, grade control, reduce culvert clogging and to increase the stream habitat diversity. Approximately 40 feet upstream of the culvert, a severe bend in the stream results in excessive erosional stress on the outer bend which is the location of a steep forested slope. The City of Takoma Park has agreed to use an imbricated rock wall, soil lifts, or similar techniques to minimize grading at this location.

An existing stormwater outfall (Figure 20) discharges untreated roadway runoff from MD 650 into the Larch Tributary approximately 130 feet upstream of the culvert under MD 650. This outfall is failing, and the channel is severely incised and unstable. The plan proposes to construct a new outfall pipe with a plunge pool at the pipe, a constructed riffle, and a pool at the confluence with the Larch Tributary. This work will provide significant benefits to the aquatic resources at the site.

Figure 20: Degraded Outfall Flowing Into Larch Tributary

Park Construction Permit

The City of Takoma Park will be required to obtain a Park Construction Permit from Montgomery County Department of Parks prior to commencement of any construction activities on parkland. Plans submitted for Park Construction Permit review must include existing topography and utilities and identify and locate all trees (with size and species) larger than 6" DBH and greater within 100 feet of the proposed Limit of Disturbance on park property.

The City of Takoma Park will continue to coordinate with M-NCPPC to finalize details of required parkland mitigation including outfall restoration, stream stabilization, non-native invasive control, and tree plantings.

The final operation and maintenance agreement must be approved by all parties before the issuance of the Park Construction Permit.

Community Outreach and Notification

This application was noticed in accordance with the Uniform Standards for Mandatory Referral Review. Throughout the project design process, proposed concepts were presented to key stakeholders, as well as the community. The applicant has conducted community outreach and a City Council presentation was provided in September 2020.

Conclusion

Based on information provided by the applicant and the analysis contained in this report, staff concludes that the proposed New Avenue Bikeway Section A improvements project can be designed with some modifications to meet Master Plan and relevant design standards as specified in the Recommendations section of this staff report.

Attachments

A. Proposed Project Plans

THE CITY OF TAKOMA PARK

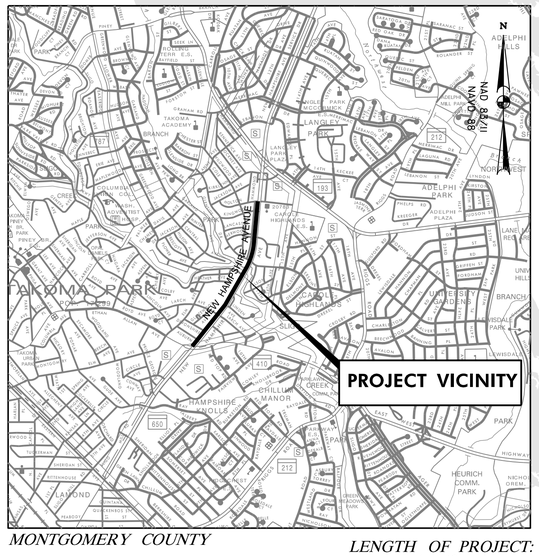
PLANS OF PROPOSED BIKEWAY

SHA TRACKING NO. 19–AP–MO–034–xx

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVENUE TO HOLTON LANE

INDEX OF SHEETS

60% SUBMISSION
MAY 2020



MONTGOMERY COUNTY

LENGTH OF PROJECT:
NEW HAMPSHIRE AVENUE (MD 650) = 0.79 miles

SCALE: 1" = 2000'

2000 0 2000 4000 feet

HORIZONTAL DATUM	NAD 83 /11
VERTICAL DATUM	NAVD 88

AASHTO DESIGN CRITERIA

THIS PROJECT WAS DESIGNED IN ACCORDANCE WITH THE 2018 (7TH EDITION) PUBLICATION OF AASHTO'S "A POLICY ON GEOMETRIC DESIGN OF HIGHWAYS AND STREETS."

STANDARD SPECIFICATIONS BOOK, BOOK OF STANDARDS AND MUTCD

ALL WORK ON THIS PROJECT SHALL CONFORM TO: THE LATEST APPROVED MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION (MDOT SHA) **"STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS"** REVISIONS THEREOF OR ADDITIONS THERETO, AS INDICATED IN THE PROJECT DESCRIPTION OF THE INVITATIONS FOR BIDS BOOK; THE SPECIAL PROVISIONS INCLUDED IN THE INVITATION FOR BIDS BOOK; THE ADMINISTRATION'S **"BOOK OF STANDARDS FOR HIGHWAYS AND INCIDENTAL STRUCTURES"** AND THE LATEST ADOPTED MUTCD.

RIGHT OF WAY

RIGHT OF WAY AND EASEMENT LINES SHOWN ON THESE PLANS ARE FOR ASSISTANCE IN INTERPRETING THE PLANS. THEY ARE NOT OFFICIAL. FOR OFFICIAL FEE RIGHT OF WAY AND EASEMENT INFORMATION, SEE THE APPROPRIATE RIGHT OF WAY PLATS.

UTILITIES

THE LOCATION OF UTILITIES SHOWN ON THE PLANS ARE FOR INFORMATION AND GUIDANCE ONLY. NO GUARANTEE IS MADE OF THE ACCURACY OF SAID LOCATIONS.

COMPLETENESS OF DOCUMENTS

THE CITY OF TAKOMA PARK SHALL ONLY BE RESPONSIBLE FOR THE COMPLETENESS OF DOCUMENTS OBTAINED DIRECTLY FROM THE STATE HIGHWAY ADMINISTRATION'S CASHIER'S OFFICE. FAILURE TO ATTACH ADDENDA MAY CAUSE THE BID TO BE IRREGULAR.

ADA COMPLIANCE

THE DESIGN OF THIS PROJECT HAS INCORPORATED FACILITIES FOR THE ELDERLY AND HANDICAPPED IN COMPLIANCE WITH THE STATE AND FEDERAL LEGISLATION

ENVIRONMENTAL INFORMATION

ALL STORMWATER MANAGEMENT FACILITIES CONSTRUCTED FOR THIS CONTRACT SHALL BE INSPECTED AND MAINTAINED IN ACCORDANCE WITH THE CITY OF TAKOMA PARK MUNICIPAL CODE TITLE 16 (SECTIONS 16.04.210 THROUGH 16.04.260).

SEDIMENT AND EROSION CONTROL REGULATIONS WILL BE STRICTLY ENFORCED DURING CONSTRUCTION.

FOLLOWING INITIAL SOIL DISTURBANCE OR REDISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION SHALL BE COMPLETED WITHIN THREE (3) CALENDER DAYS AS TO THE SURFACE OF ALL PERIMETER CONTROLS, DIKES, SWALES, DITCHES, PERIMETER SLOPES, AND ALL SLOPES GREATER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1), AND SEVEN DAYS (7) AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE.

OWNERS / DEVELOPERS CERTIFICATION :

I / WE HEREBY CERTIFY THAT ANY CLEARING, GRADING, CONSTRUCTION AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN, AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A MARYLAND DEPARTMENT OF THE ENVIRONMENT APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT. I HEREBY AUTHORIZE THE RIGHT OF ENTRY FOR PERIODIC ON-SITE EVALUATION BY STATE OF MARYLAND, DEPARTMENT OF THE ENVIRONMENT, COMPLIANCE INSPECTORS.

Signature _____ DATE _____

Jamee Ernst — Planner
(301) 891–7213 — City of Takoma Park
Printed Name and Title

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SURVEY BOOK NO.

\\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pGN–T000_NewAveBike.dgn
6262020

ABBREVIATIONS

AASHTO ..... American Association of State Highway Transportation Officials
ADT..... Average Daily Traffic
AHD..... Ahead
APPROX..... Approximate
℄ or ℄L..... Baseline
BK ..... Back ⁄Book
BIT. ..... Bituminous
B.C. ..... Bituminous Concrete
B.M. ..... Bench Mark
BOT. ..... Bottom
C.C. ..... Center of Curve
CAP..... Corrugated Aluminum Pipe
CAPA ..... Corrugated Aluminum Pipe Arch
CATV ..... Cable Television
C.B.R..... California Bearing Ratio
℄ or ℄L..... Centerline
CL. ..... Class
CLF..... Chainlink Fence
CMP..... Corrugated Metal Pipe
C.O. ..... Cleanout
COMB..... Combination
CONC. ..... Concrete
CONSTR. ..... Construction
COR. ..... Corner
CORR. ..... Correction
CPP–S ..... Corrugated Polyethylene Pipe – Type 'S'
CSP ..... Corrugated Steel Pipe – Aluminized Type 2
CSPA ..... Corrugated Steel Pipe Arch – Aluminized Type 2
DC..... Degree of Curve
D.H.V. ..... Design Hourly Volume
D.I. ..... Drop Inlet
DIA. ..... Diameter
D.O..... Double Opening
E ..... East
E ..... Electric
E ..... External Distance
EA ..... Each
EB ..... Eastbound
ELEV ..... Elevation
ES..... End Section
EX or EXIST . Existing
FT ..... Feet
F or FL ..... Flowline
F.B.D. ..... Flat Bottom Ditch
F.H. ..... Fire Hydrant
FWD. ..... Forward
G ..... Gas
G.V. ..... Gas Valve
H.B. ..... Handbox
HDPE ..... High Density Polyetheylene
HDWL. ..... Headwall
HERCP..... Horizontal Ellipitical Reinforced Concrete Pipe
HP..... High Point
IN ..... Inch
I.S.T..... Inlet Sediment Trap
INV..... Invert
J.B. ..... Junction Box
K ..... K Inlet
L ..... Length
LF ..... Linear Feet
L.L. ..... Liquid Limit
LP ..... Low Point
L.P. ..... Light Pole
LT..... Left
MAC..... Macadam
M.C. ..... Moisture Content
MAX. ..... Maximum
M.D.D..... Maximum Dry Content
MOD..... Modified
MIN..... Minimum
N..... North
NB ..... Northbound
NE ..... Northeast
N.P. ..... Non–Plastic
O.C. ..... On Center
OHE ..... Overhead Electric
O.M. ..... Optimum Moisture
PAV'T..... Pavement
PC ..... Point of Curvature
PCC ..... Point of Compound Curvature
P⁄C ..... Point of Crown
P⁄GE ..... Profile Grade Elevation
P.G.E. ..... Profile Ground Elevation
P.G.L. ..... Profile Grade Line
P⁄GL ..... Profile Ground Line
P⁄R ..... Point of Rotation
P.I. ..... Plasticity Index
PI ..... Point of Intersection
POC ..... Point On Curve
POT ..... Point On Tangent
PPWP ..... Polyvinyl Chloride Profile Wall Pipe
PROP ..... Proposed
PRC ..... Point of Reverse Curve
PT ..... Point
PT ..... Point of Tangency
PVC ..... Point of Vertical Curve
PVC ..... Polyvinyl Chloride
PVI ..... Point of Vertical Intersection
PVRC ..... Point of Vertical Reverse Curve
PVT ..... Point of Vertical Tangency
R ..... Radius
R.F. ..... Rock Fragments
RT ..... Right
RW or R⁄W... Right of Way
RCP ..... Reinforced Concrete Pipe
RCPP ..... Reinforced Concrete Pressure Pipe
R.Q.D. ..... Rock Quality Designation
R.M. ..... Rootmat
S ..... South
SAN. ..... Sanitary Sewer
SB or S⁄B ..... Southbound
S.D. ..... Storm Drain
S.D.D. ..... Surface Drain Ditch
S⁄E ..... Super Elevation
SF ..... Silt Fence
SF ..... Square Feet
SHT. ..... Sheet
SPP ..... Structural Steel Plate Pipe
SPPA ..... Structural Steel Plate Pipe Arch
S.P.T. ..... Standard Penetration Testing
SRP..... Steel Spiral Rib Pipe – Aluminized Type 2
SRPA ..... Steel Spiral Rib Pipe Arch – Aluminized Type 2
SSD ..... Stopping Sight Distance
SSF ..... Super Silt Fence
STD. ..... Standard
STA. ..... Station
SO. ..... Single Opening
SY ..... Square Yards
SWM..... Stormwater Management
T ..... Tangent
T ..... Telephone
T.C. ..... Top of Cover
T.G. ..... Top of Grate
T or TL ..... Traverse Line
T.M. ..... Top of Manhole
TRAV. ..... Traverse
TS ..... Temporary Swale
T.S. ..... Top of Slab
T.S. ..... Topsoil
TYP..... Typical
U.D. ..... Under Drain
U.G. ..... Underground
U.P. ..... Utility Pole
USDA ..... United States Department of Agriculture
VCL ..... Vertical Clearance
V.C.L. ..... Vertical Curve Length
W ..... Water
W ..... West
WB ..... Westbound
WB..... Wetland Buffer
W.M. ..... Water Meter
W.S. ..... Wrapped Steel
WUS ..... Waters of the United States
W.V. ..... Water Valve

CONVENTIONAL SIGNS
(SAMPLES)

PROPOSED MEDIAN BARRIER .....
ELECTRICAL HAND BOX – SIGNALS ..... H.B.
FLOW LINE .....
STATE, COUNTY OR CITY LINES .....
PROPOSED TRAFFIC BARRIER .....
EXISTING TRAFFIC BARRIER .....
PROPOSED FENCE LINE .....
EXISTING FENCE LINE .....
RIGHT OF WAY LINE .....
EXISTING ROADWAY .....
RAILROAD .....
BASE LINE OR SURVEY LINE ..... 31 +50 32
FIRE HYDRANT ..... F.H.
HISTORIC BOUNDARY ..... H
WATERS OF THE U.S. .....
WETLAND BOUNDARY .....

PROPOSED PIPE ⁄ CULVERT .....
EXISTING PIPE ⁄ CULVERT .....
EXISTING DROP INLET .....
UTILITY POLE .....
WETLAND .....
WETLAND BUFFER ..... B
WATERS OF THE U.S. ..... WUS
HEDGE ⁄TREE LINE .....
BUSH ⁄TREE .....
CONIFEROUS TREE .....
GROUND ELEVATION ..... DATUM LINE 173.6
GRADE ELEVATION ..... DATUM LINE 20.22

GENERAL NOTES

1. THE EXISTING UTILITIES AND OBSTRUCTIONS SHOWN ON THESE PLANS ARE FROM THE BEST AVAILABLE RECORDS AND SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION. THE CONTRACTOR SHALL NOTIFY ALL UTILITY OWNERS CONCERNED AND MISS UTILITY PRIOR TO CONSTRUCTION ACTIVITIES. THE CONTRACTOR SHALL CALL "MISS UTILITY" AT LEAST 48 HOURS IN ADVANCE OF ANY EXCAVATION WORK AT 1–800–257–7777.
2. THE CONTRACTOR SHALL PROTECT AND NOT INTERRUPT EXISTING UTILITY SERVICES UNLESS OTHERWISE NOTED ON THE PLANS OR AUTHORIZED BY THE ENGINEER. SEE UTILITY STATEMENT.
3. THE CONTRACTOR IS RESPONSIBLE TO ENSURE THAT THE SAFETY OF THE PUBLIC AND ALL WORKERS IS MAINTAINED AT ALL TIMES THROUGHOUT THE TERM OF THE CONTRACT. MOTORISTS SHALL BE GUIDED IN A CLEAR AND POSITIVE MANNER WHILE APPROACHING AND PASSING THROUGH CONSTRUCTION WORK AND EQUIPMENT AREAS.
4. HORIZONTAL CONTROL: THE LOCATION AND ELEVATION OF BENCH MARKS ARE SHOWN ON THE PLANS. ALL ELEVATIONS ARE IN FEET AND ARE BASED ON THE NAVD 88.
5. WHERE REFERENCE IS MADE TO MDSHA STANDARD PLATES IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO HAVE IN HIS POSSESSION THE LATEST UP–TO–DATE STANDARD PLATES AS OF THE DATE OF ADVERTISEMENT OF THESE PLANS. STANDARD PLATES ARE AVAILABLE AT WWW.MARYLANDROADS.COM.
6. THE CONTRACTOR SHALL GRADE FOR POSITIVE DRAINAGE AT ALL ROADWAY INTERSECTIONS, ENTRANCES AND YARDS.
7. REPAIRS TO UTILITIES OR PROPERTY DAMAGE AS A RESULT OF CONTRACTOR'S NEGLIGENCE OR METHOD OF OPERATION SHALL BE MADE AT NO ADDITIONAL COST TO THE CITY, THE ADMINISTRATION OR THE OWNER.
8. PROVIDE 4–INCH FURNISHED TOPSOIL AND TURFGRASS SOD ESTABLISHMENT ON SLOPES UNLESS OTHERWISE NOTED ON THE PLANS.
9. MATERIAL REMOVED DURING CONSTRUCTION SHALL BECOME THE CONTRACTOR'S PROPERTY UNLESS OTHERWISE NOTED ON THE PLANS OR IN THE SPECIAL PROVISIONS.
10. THE CONTRACTOR SHALL RESET ANY SIGN POSTS OR MAIL BOXES TO FACILITATE THE WORK, EXCEPT WHERE SPECIFIED ON THE PLANS OR AS DIRECTED BY THE ENGINEER.
11. FINAL DETERMINATION AS TO THE LOCATION OF EROSION AND SEDIMENT CONTROLS WILL BE AT THE DIRECTION OF THE ENGINEER WHO RESERVES THE RIGHT TO ORDER ADDITIONAL E&S DEVICES.
12. CONSTRUCTION EQUIPMENT SHALL HAVE TREADS/TIRES CLEANED PRIOR TO LEAVING THE LOD. ALL MATERIAL REMOVAL/LOAD OUT SHALL BE LIFTED FROM THE LOD. ALL SEDIMENT SPILLED, DROPPED OR TRACKED ONTO THE ROAD MUST BE REMOVED IMMEDIATELY BY VACUUMING, SCRAPING OR SWEEPING.
13. SEVERAL PROPOSED DRAINAGE STRUCTURES AND PIPES WILL CONNECT TO EXISTING STORM DRAIN STRUCTURES AND PIPES. THE CONTRACTOR SHALL FIELD VERIFY INVERTS PRIOR TO ORDERING, FABRICATING OR CONSTRUCTING PROPOSED STORM DRAIN STRUCTURES.
14. SAW CUTS WILL NOT BE MEASURED BUT WILL BE INCIDENTAL TO OTHER RELATED ITEMS AS SPECIFIED IN THE CONTRACT DOCUMENTS.
15. VERTICAL ADJUSTMENT OF EXISTING UTILITIES SHALL BE INCIDENTAL TO THE 5 INCH CONCRETE SIDEWALK, SPECIALTY PAVERS – TYPE 2 OR ASPHALT SHARED USE PATH PAY ITEMS. SEE SP 603 – SIDEWALKS.

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BY: bbaral -

AB–01

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ABBREVIATIONS, GENERAL NOTES & INDEX

60% PLANS
MAY 2020

SCALE N.T.S. DATE MAY 2020 CONTRACT NO. T.B.D.
DESIGNED BY KBJ
DRAWN BY TJS
CHECKED BY RJG
F.A.P. NO. T.B.D.
COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. AB01 1 OF 1 SHEET NO. 2 OF 73

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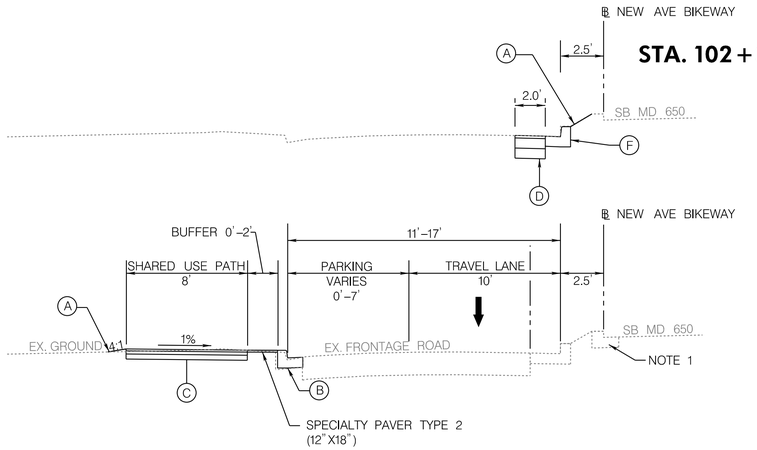
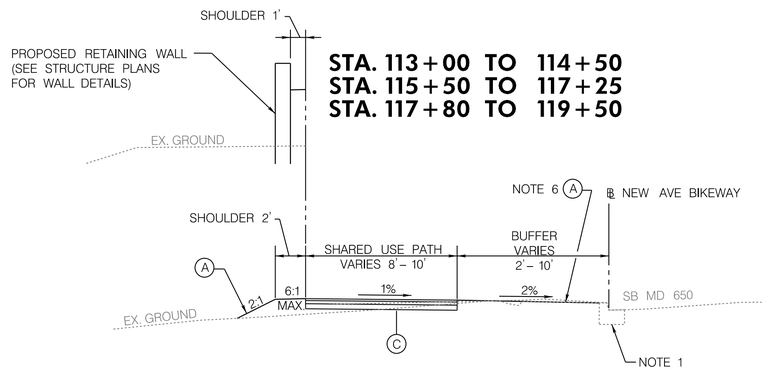


STA. 102+33 TO 104+89

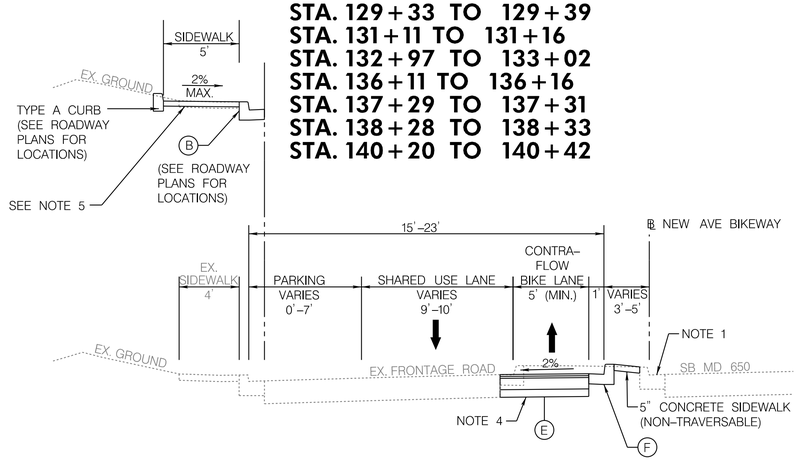
NEW AVENUE BIKEWAY
STA. 102+33 TO 111+00



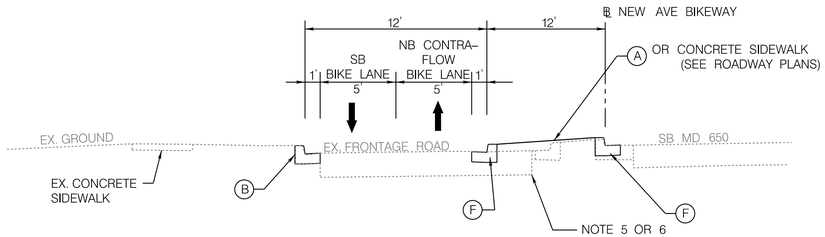
STA. 113+00 TO 114+50
STA. 115+50 TO 117+25
STA. 117+80 TO 119+50

NEW AVENUE BIKEWAY
STA. 111+00 TO 128+00

STA. 128+00 TO 128+70
STA. 129+33 TO 129+39
STA. 131+11 TO 131+16
STA. 132+97 TO 133+02
STA. 136+11 TO 136+16
STA. 137+29 TO 137+31
STA. 138+28 TO 138+33
STA. 140+20 TO 140+42



NEW AVENUE BIKEWAY
STA. 128+00 TO 140+75



NEW AVENUE BIKEWAY
STA. 140+75 TO 143+00

TYPICAL SECTION LEGEND

- (A) 4" FURNISHED TOPSOIL & TURFGRASS SOD ESTABLISHMENT
- (B) MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER
- (C) MDOT SHA STD. NO. 580.08: BIKE PATHS – FLEXIBLE PAVEMENT SECTION
- (D) SEE PAVEMENT DETAIL B, SHEET DT–01
- (E) SEE PAVEMENT DETAIL C, SHEET DT–01
- (F) MDOT SHA TYPE A CURB AND GUTTER

NOTES:

1. EXISTING CURB AND GUTTER TO REMAIN.
2. SAW CUTS ARE INCIDENTAL TO THE EXCAVATION OR PAVING ITEMS.
3. ALL ROADWAY EXCAVATION SHALL BE DEFINED AS CLASS 1 REGARDLESS OF THE WIDTH OF THE EXCAVATION.
4. LIMIT OF CLASS 1 EXCAVATION AND TOP OF SUBGRADE.
5. EXCAVATE TO THE TOP OF EXISTING SUBGRADE. BACKFILL WITH COMMON BORROW TO BOTTOM OF SIDEWALK.
6. EXCAVATE TO THE TOP OF EXISTING SUBGRADE. BACKFILL WITH FURNISHED SUBSOIL TO 4" BELOW PROPOSED GRADE. PLACE 4" FURNISHED TOPSOIL TO PROPOSED GRADE. PROVIDE TURFGRASS SOD ESTABLISHMENT.
7. SEE SIGNING AND PAVEMENT MARKING PLANS FOR BIKE PAVEMENT STRIPING.
8. SEE ROADWAY PLANS AND CURB STAKEOUT DETAILS FOR LIMITS OF MEDIAN RESCONSTRUCTION.

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TS–01

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

TYPICAL SECTIONS

60% PLANS

MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. TS01 1 OF 1 SHEET NO. 3 OF 73

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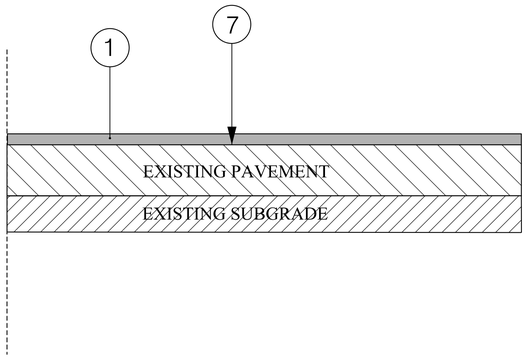
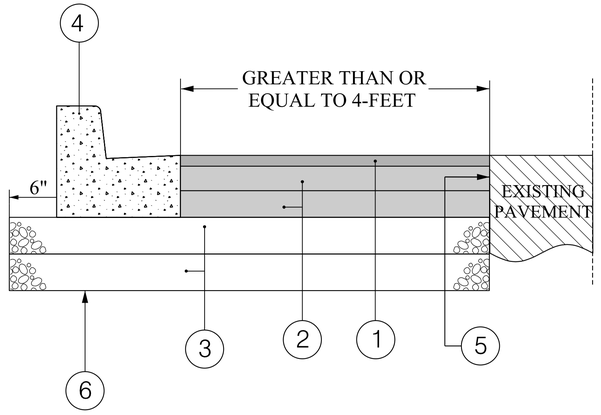


FINE MILLING AND RESURFACING

PAVEMENT DETAIL A



BASE WIDENING

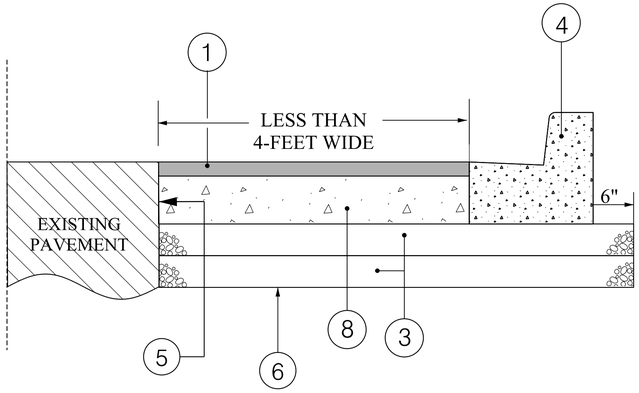
PAVEMENT DETAIL C

PAVEMENT LEGEND

1. 2" SUPERPAVE ASPHALT MIX 9.5 mm FOR SURFACE, HDFV, PG64E–22, LEVEL 2
2. 4" SUPERPAVE ASPHALT MIX 19.0 mm FOR BASE, PG 64S–22, LEVEL 2
3. 6" GRADED AGGREGATE BASE COURSE
4. MDOT SHA STANDARD TYPE A OR D COMBINATION CURB AND GUTTER, OR MONOLITHIC MEDIAN (SEE PLANS)
5. FULL–DEPTH SAW CUT INCIDENTAL TO FULL–DEPTH PATCH, CURB AND GUTTER AND EXCAVATION ITEMS
6. TOP OF SUBGRADE AND LIMIT OF EXCAVATION
7. TOP OF EXISTING PAVEMENT AFTER 2" FINE MILLING
8. 8" PLAIN PORTLAND CEMENT CONCRETE MIX NO. 9

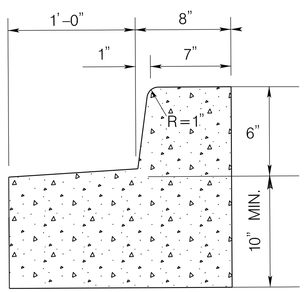
PAVEMENT DETAIL NOTES

1. REMOVE AND DISPOSE OF ALL SOFT AND UNSTABLE MATERIAL PER SECTION 208 OF THE MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS, JULY 2019.
2. IN AREAS WHERE EXISTING PAVEMENT IS BEING REMOVED, THE LIMIT OF EXCAVATION SHALL BE AT THE BOTTOM OF THE BOUND MATERIALS IN THE EXISTING PAVEMENT OR AT THE TOP OF SUBGRADE, WHICHEVER IS LOWER.
3. REFER TO MDOT SHA STD. NO. 580.08 FOR BIKE PATHS – FLEXIBLE PAVEMENT SECTION.
4. REFER TO MDOT SHA STD. NO. 578.01 FOR REPAIRING PAVEMENT OPENINGS WITHIN UTILITY/STORM DRAIN TRENCHES. PAVEMENT REPAIR FOR PIPE INSTALLATION IS INCIDENTAL TO PIPE INSTALLATION.
5. REFER TO MDOT SHA STD. NO. 578.03 FOR PERMANENT PATCHING FOR FLEXIBLE PAVEMENT USING APPROVED ASPHALT MIX.
6. REFER TO MDOT SHA STD. NO. 580.03 FOR NEW CURB AND GUTTER PLACEMENT ALONG EXISTING PAVEMENT.



NARROW BASE WIDENING

PAVEMENT DETAIL B



NOTE:

1. GUTTER PAN IS TO SLOPE ½" PER FOOT AWAY FROM THE FLOW LINE.

SHA TYPE D COMBINATION
CURB AND SPILL GUTTER (MODIFIED)

DETAIL D

PAVEMENT DETAILS SHALL BE REVIEWED BY MDOT SHA. DETAILS WERE DEVELOPED AS A PLACE HOLDER AND NOT BASED ON PAVEMENT BORINGS OR CORE DATA.

DT–01

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PAVEMENT DETAILS

SCALE N.T.S DATE MAY 2020 CONTRACT NO. T.B.D.

60% PLANS

MAY 2020

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT01 1 OF 12

SHEET NO. 4 OF 73

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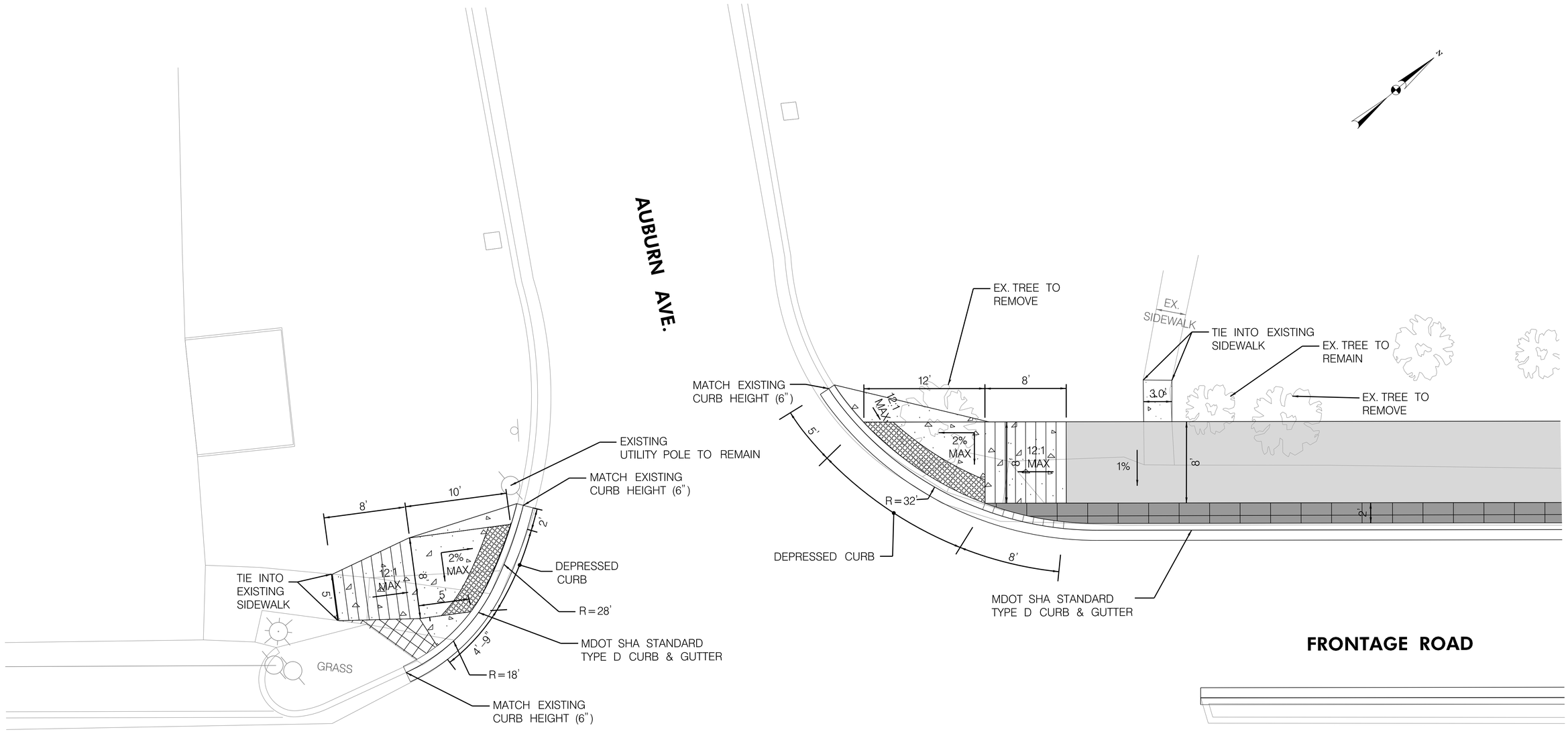

FRONTAGE ROAD

MD 650 SB (NEW HAMPSHIRE AVE.)

ADA DETAIL
STA.102+50,LT

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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BY: bbaral -

DT–02

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS
MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT-02 2 OF 12 SHEET NO. 5 OF 73

PLOTTED: 5/10/2020
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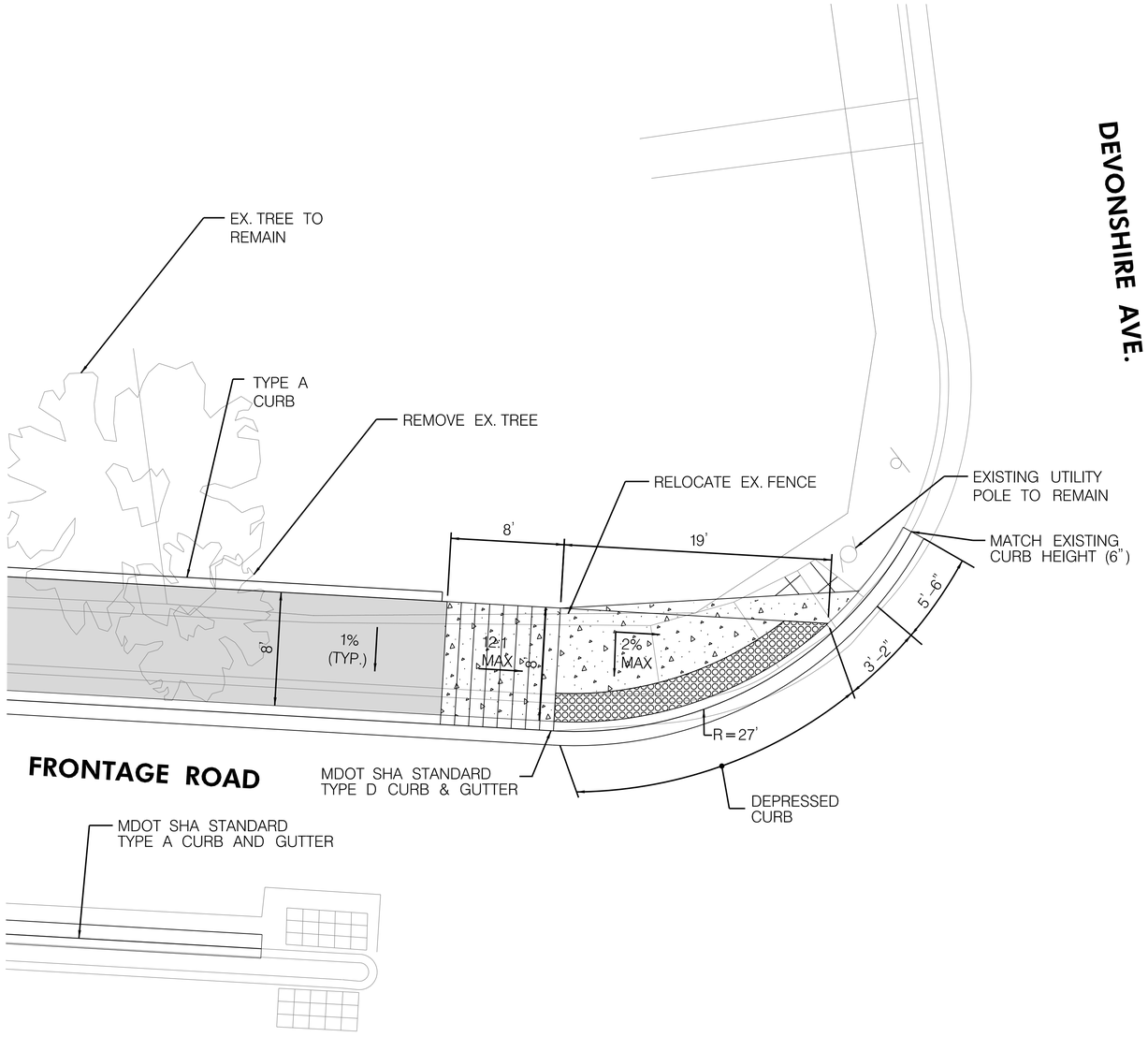
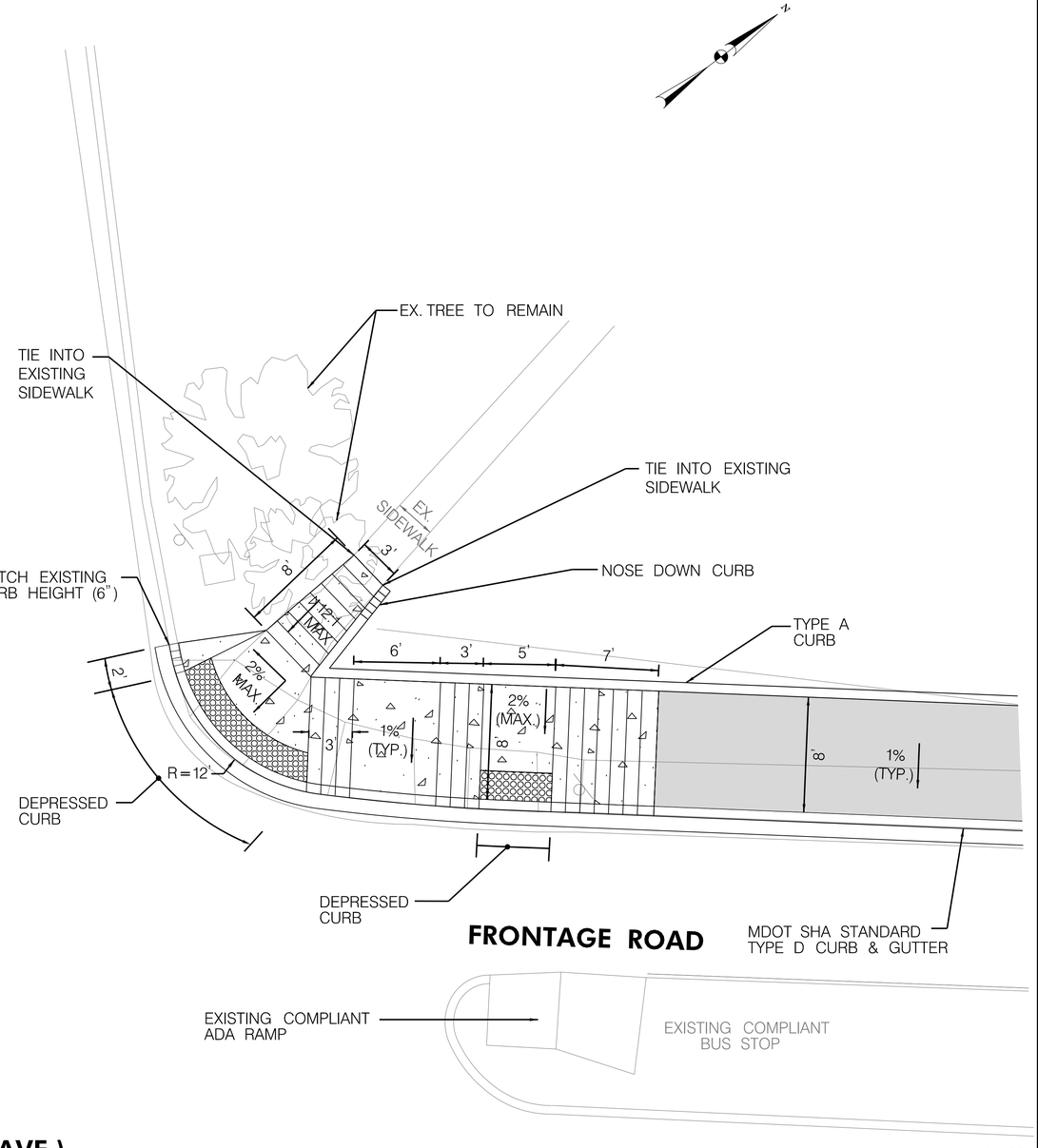


DEVONSHIRE AVE.



MD 650 SB (NEW HAMPSHIRE AVE.)

ADA DETAIL

STA. 105+00,LT

DT-03

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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BY: bbaral -

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS

MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

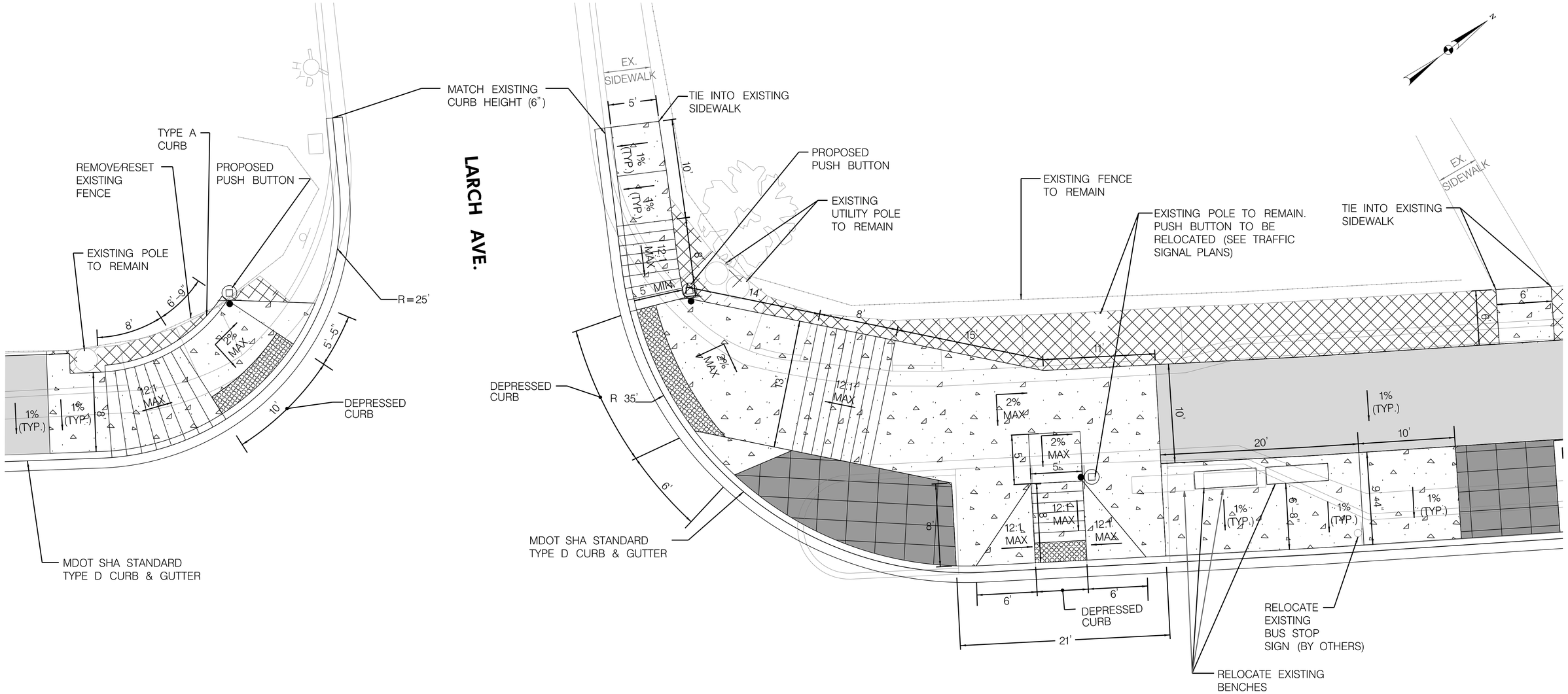
DESIGNED BY KB
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT-03 3 OF 12

SHEET NO. 6 OF 73

PLOTTED: 5/12/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pDT-0003_NewAveBike.dgn



MD 650 SB (NEW HAMPSHIRE AVE.)

ADA AND BUS STOP DETAIL
STA. 111 + 00

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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DT–04

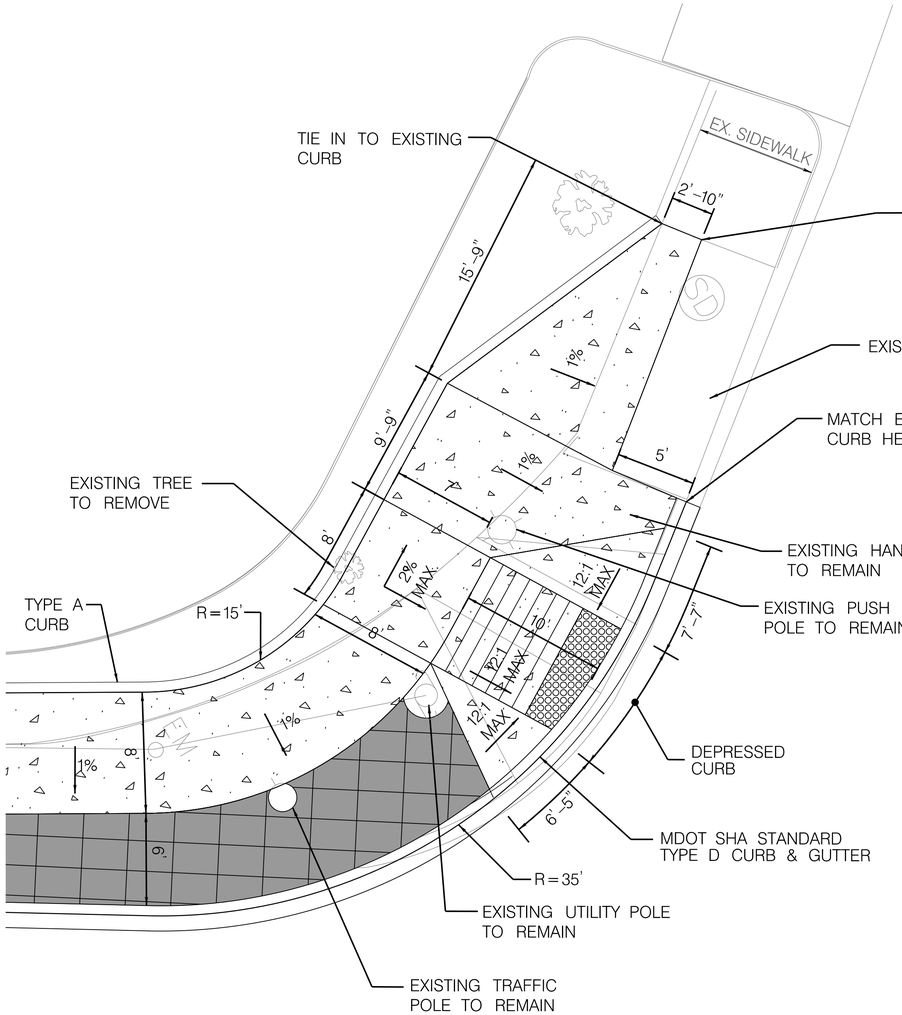
CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

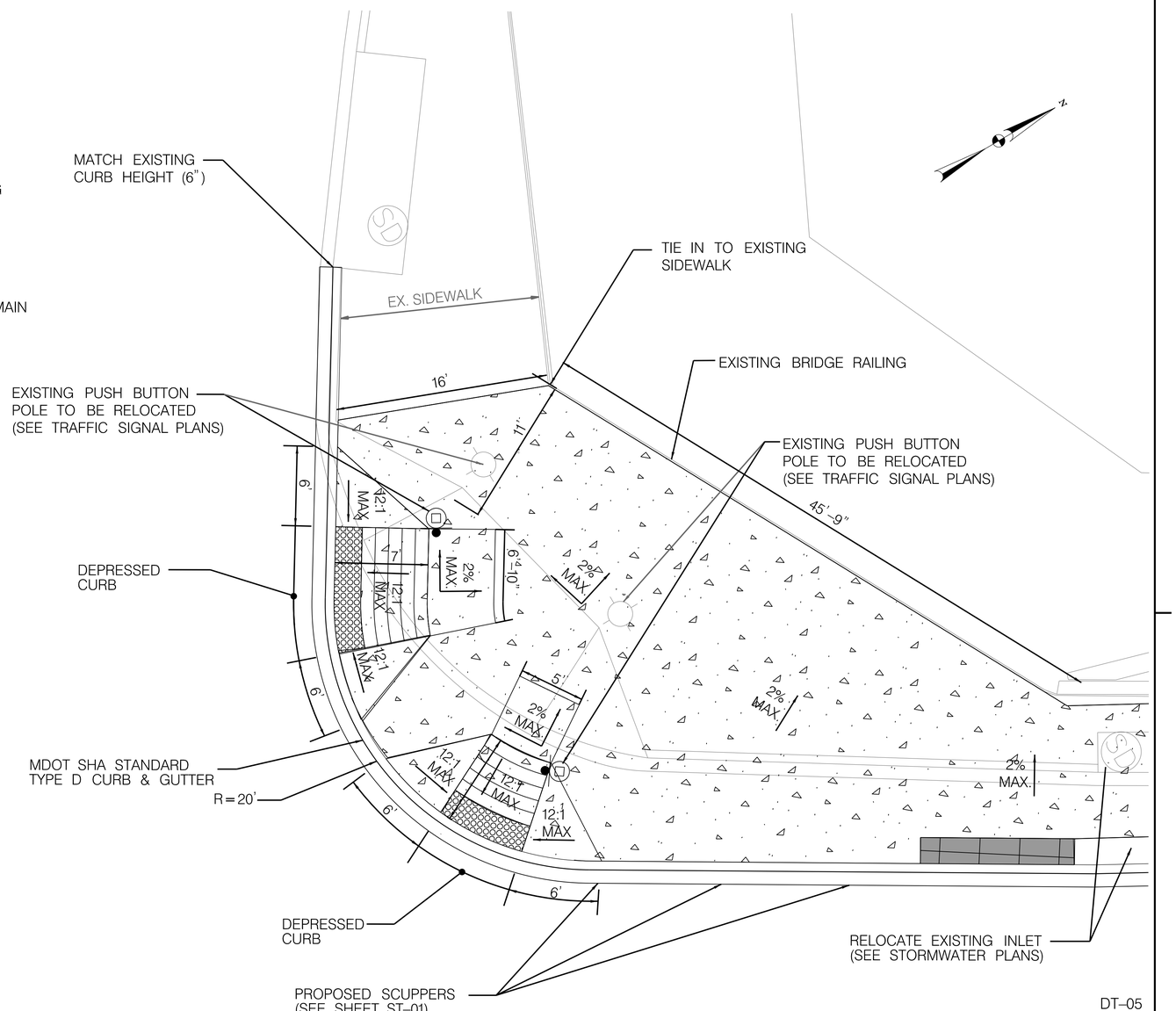
60% PLANS
MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.
DESIGNED BY KB COUNTY MONTGOMERY
DRAWN BY BB LOGMILE MD 650 0.040- 0.830
CHECKED BY RJG
F.A.P. NO. T.B.D.
DRAWING NO. DT-04 4 OF 12 SHEET NO. 7 OF 73

PLOTTED: 5/12/2020
FILE: \\balsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pDT-0004_NewAveBike.dgn



SLIGO CREEK PKWY.



MD 650 SB (NEW HAMPSHIRE AVE.)

ADA RAMP DETAIL
STA. 123+00

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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DT-05

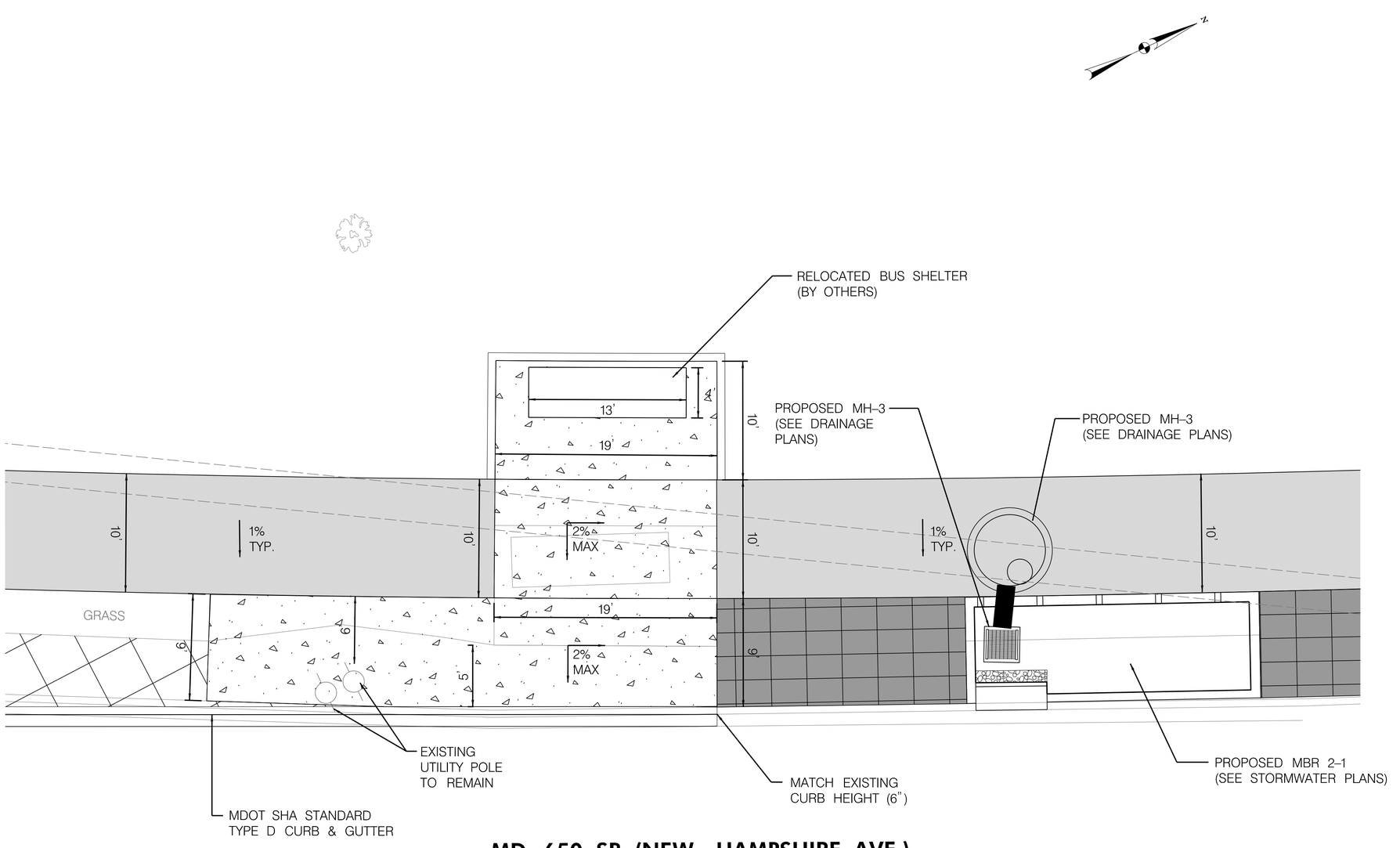
CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS
MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.
DESIGNED BY KB COUNTY MONTGOMERY
DRAWN BY BB LOGMILE MD 650 0.040- 0.830
CHECKED BY RJG
F.A.P. NO. T.B.D.
DRAWING NO. DT-05 5 OF 12 SHEET NO. 8 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pDT-0005_NewAveBike.dgn



MD 650 SB (NEW HAMPSHIRE AVE.)

BUS STOP DETAIL
STA. 126+00

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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DT–06

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS

MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

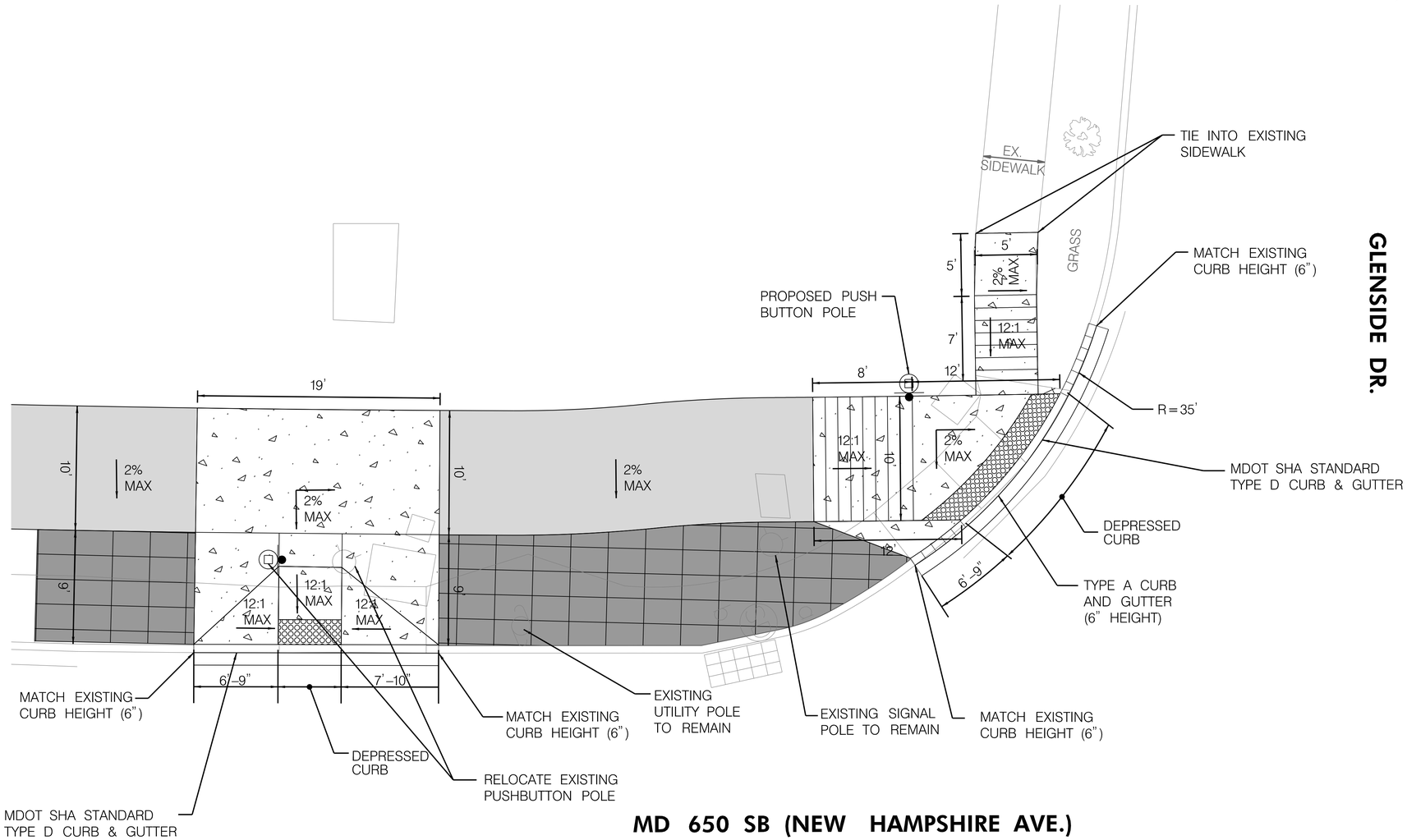
DESIGNED BY KB
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT-06 6 OF 12

SHEET NO. 9 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pDT-0006_NewAveBike.dgn



MD 650 SB (NEW HAMPSHIRE AVE.)

ADA DETAIL
STA. 127 + 00

DT–07

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS

MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

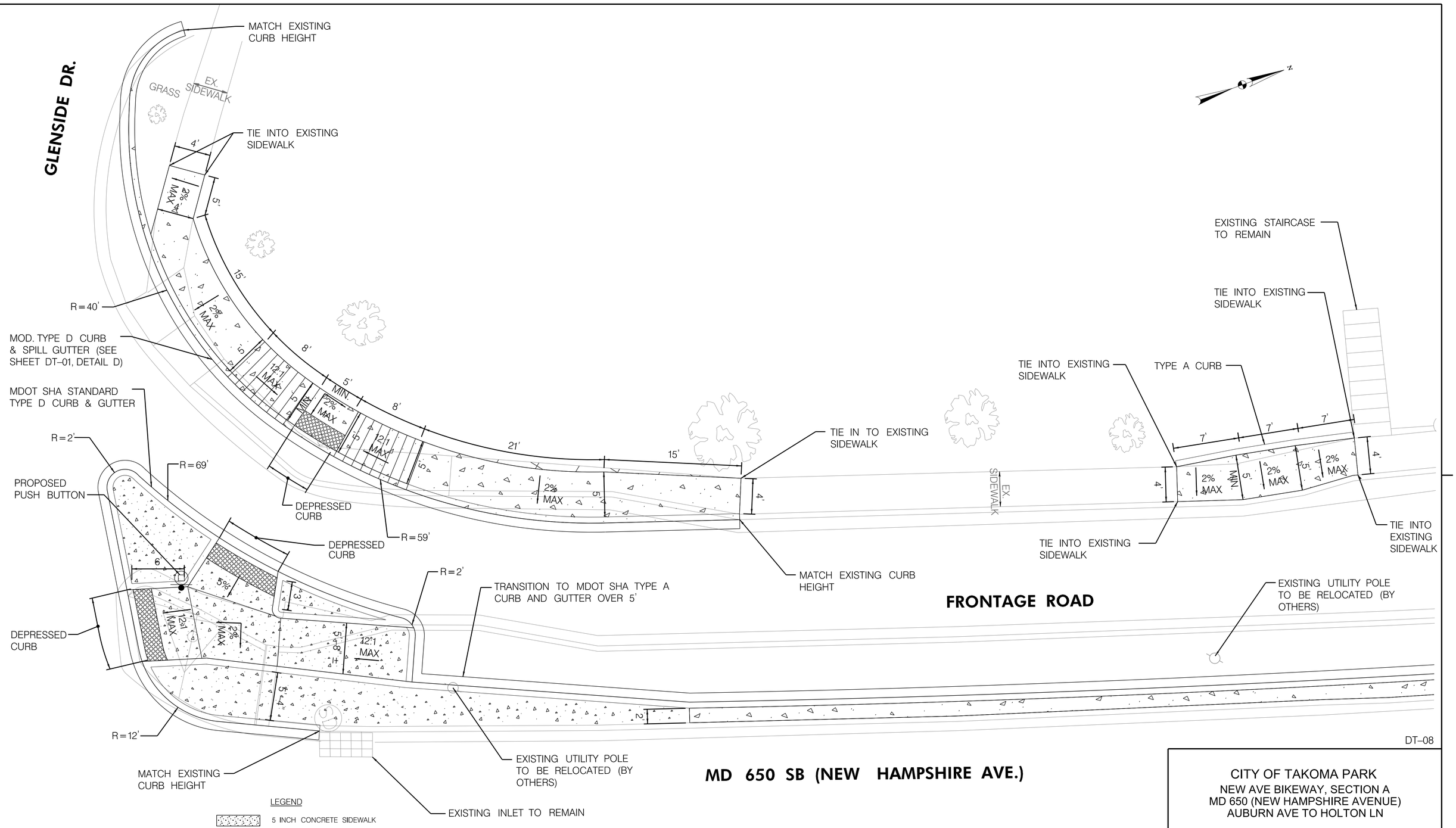
DESIGNED BY KB
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT-07 7 OF 12

SHEET NO. 10 OF 73

PLOTTED: 5/19/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pDT-0007_NewAveBike.dgn



LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

ADA DETAIL
STA. 128 + 50

DT–08

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

60% PLANS

MAY 2020

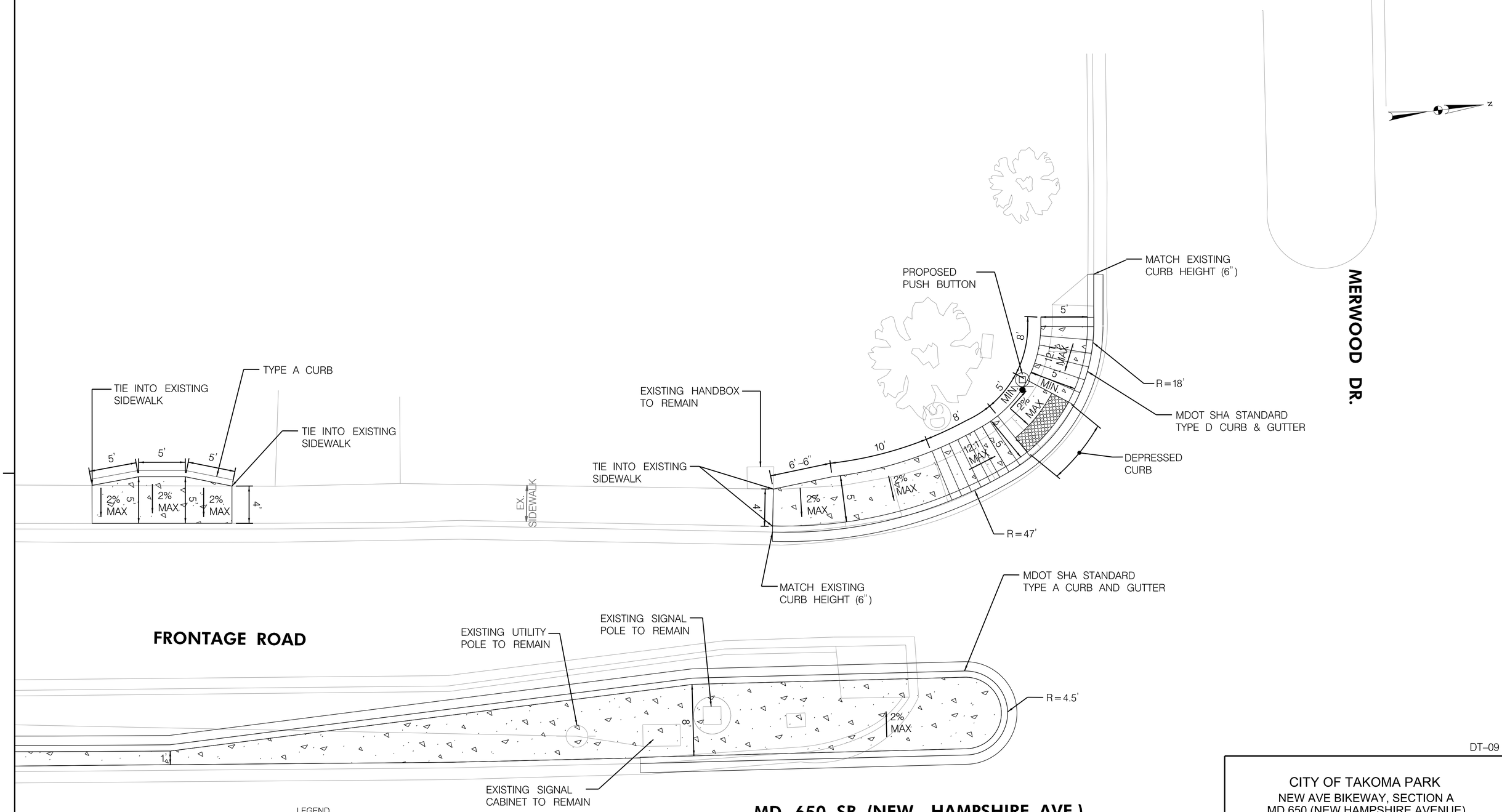
DESIGNED BY KB
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT-08 8 OF 12

SHEET NO. 11 OF 73

PLOTTED: 5/10/2020
FILE: \\baltsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pDT-0008_NewAveBike.dgn



FRONTAGE ROAD

MD 650 SB (NEW HAMPSHIRE AVE.)

ADA DETAIL
STA. 128+50

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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BY: sbarefoot -

DT–09

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS

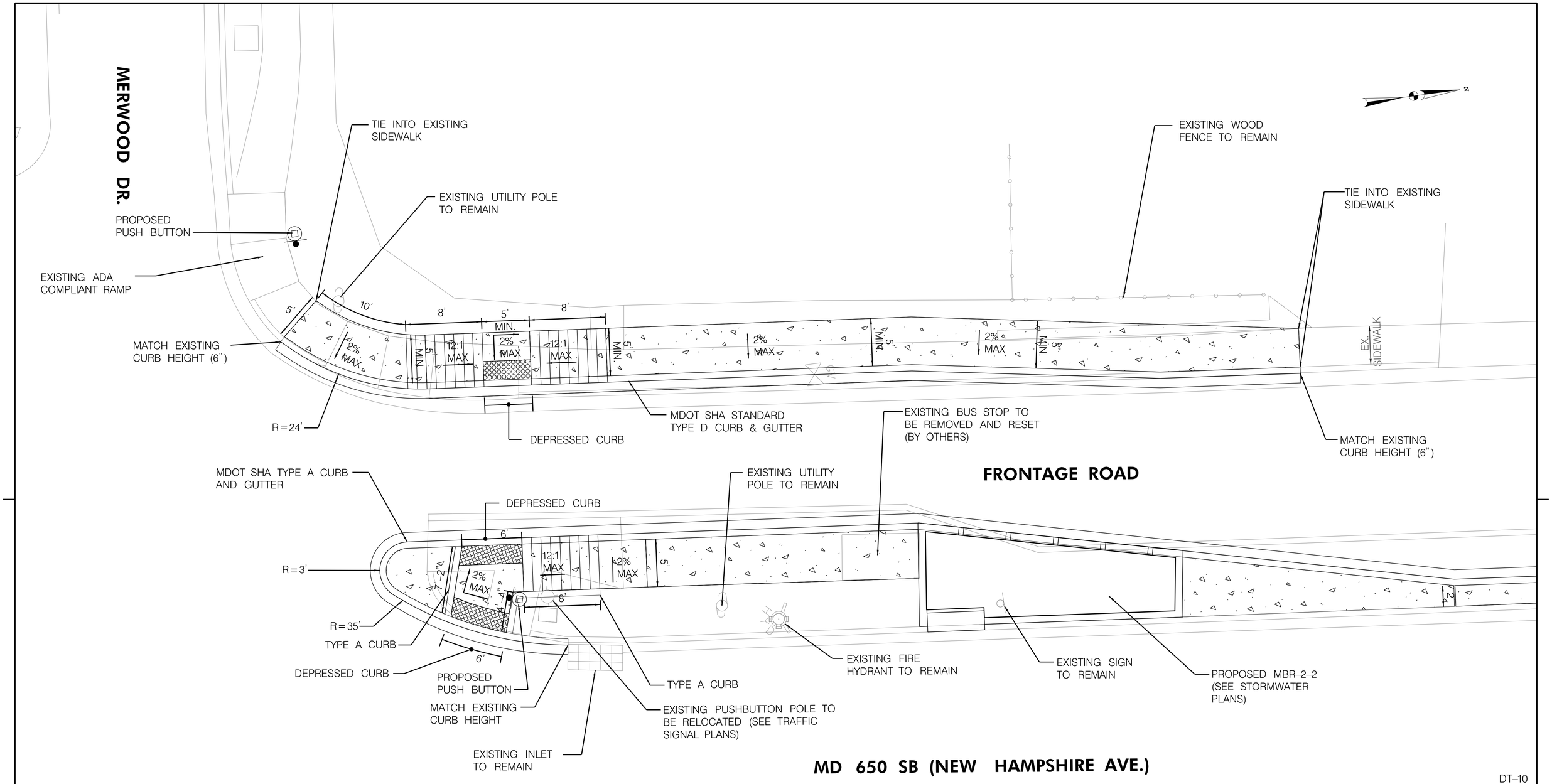
MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB COUNTY MONTGOMERY
DRAWN BY BB LOGMILE MD 650 0.040- 0.830
CHECKED BY RJG
F.A.P. NO. T.B.D.

DRAWING NO. DT-09 9 OF 12 SHEET NO. 12 OF 73

PLOTTED: 5/14/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pDT-0009_NewAveBike.dgn



ADA DETAIL
STA. 134 + 50

DT–10

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS

MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT-10 10 OF 12

SHEET NO. 13 OF 73

PLOTTED: 5/10/2020
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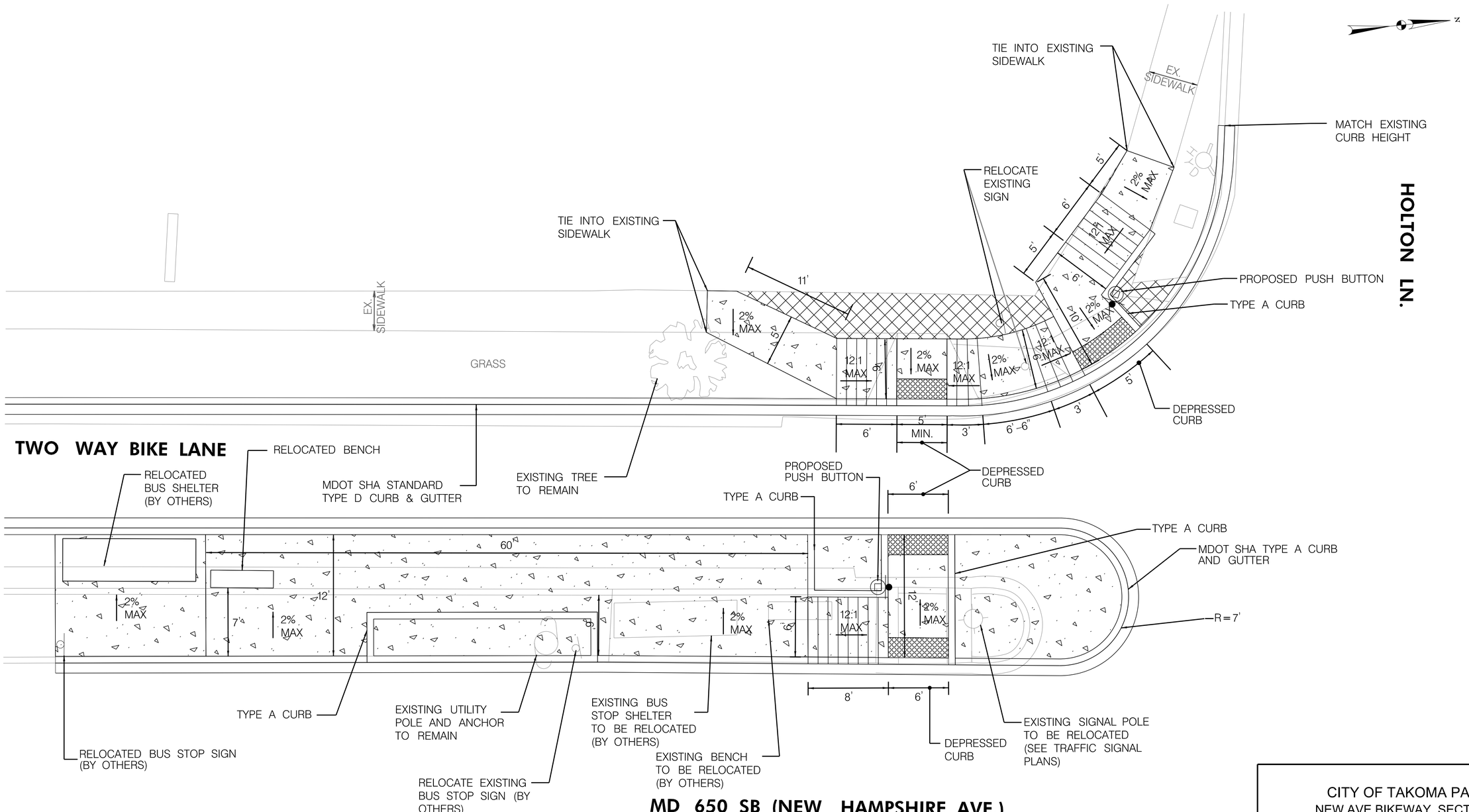

TWO WAY BIKE LANE

MD 650 SB (NEW HAMPSHIRE AVE.)

ADA AND BUS STOP DETAIL
STA. 143+00

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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BY: bbaral -

DT-11

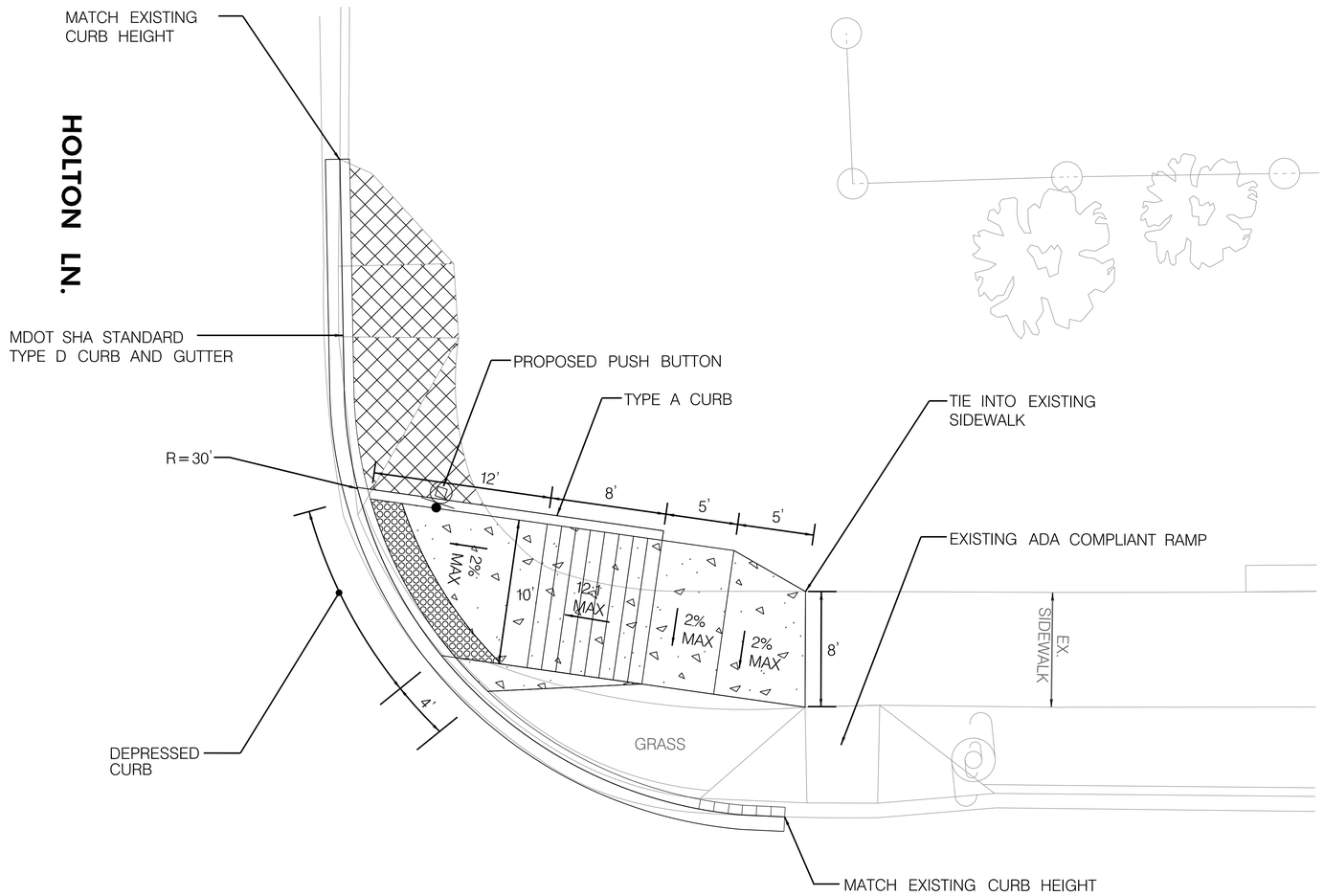
CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS
MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.
DESIGNED BY KB COUNTY MONTGOMERY
DRAWN BY BB LOGMILE MD 650 0.040- 0.830
CHECKED BY RJG
F.A.P. NO. T.B.D.
DRAWING NO. DT-11 11 OF 12 SHEET NO. 14 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pDT-00011_NewAveBike.dgn



MD 650 SB (NEW HAMPSHIRE AVE.)

ADA DETAIL
STA. 143+75

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- DETECTABLE WARNING SURFACE
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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BY: bbaral -

DT–12

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ADA DETAILS

60% PLANS

MAY 2020

SCALE 1"=5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DT-12 12 OF 12 SHEET NO. 15 OF 73

PLOTTED: 5/10/2020
FILE: \\baltsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pDT-00012_NewAveBike.dgn

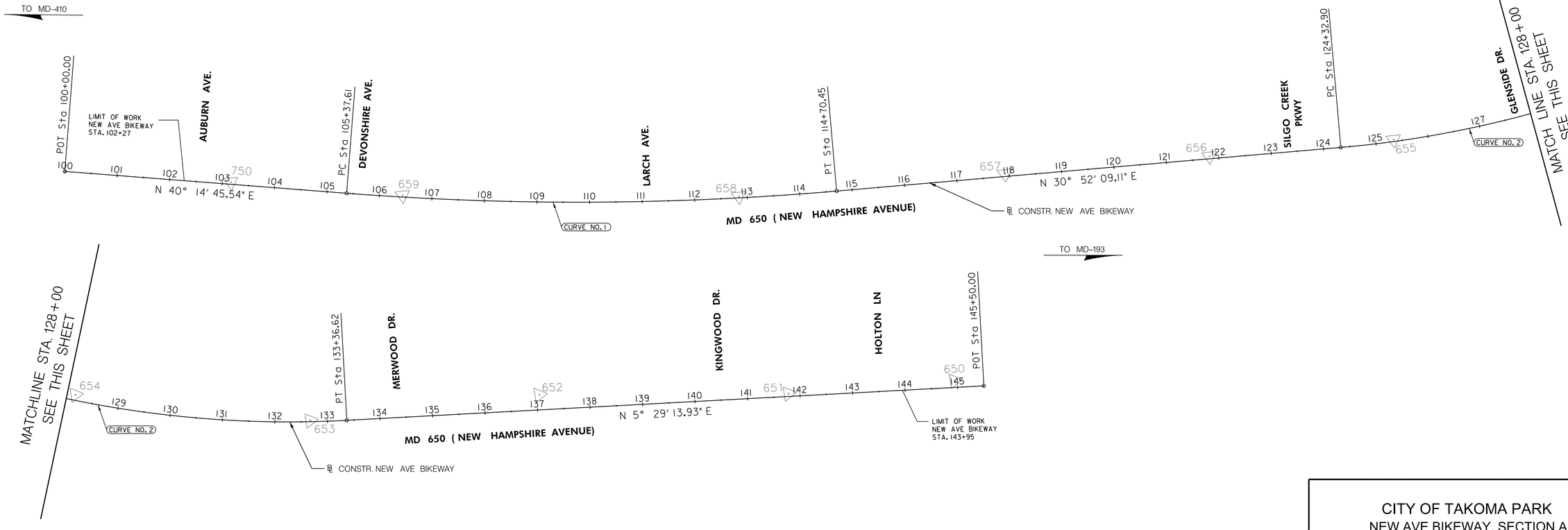
CURVE DATA						
CURVE NO.	△	Dc	R	T	L	E
1	9°22'36.43''	1°00'18.68''	5,700.00'	467.46'	932.84'	19.14'
2	25°22'55.18''	2°48'31.02''	2,040.00'	459.40'	903.72'	51.09'

BASELINE CONTROL COORDINATES ℄ CONSTR. MD 650		
	NORTH	EAST
POT STA. 100+00.00	476,595.2050	1,313,917.8136
PC STA. 105+37.61	477,005.5529	1,314,265.1494
PI STA. 110+05.07	477,362.3568	1,314,567.1633
PT STA. 114+70.45	477,763.5993	1,314,807.0091
PC STA. 124+32.90	478,589.7066	1,315,300.8211
PI STA. 128+92.29	478,984.0258	1,315,536.5285
PT STA. 133+36.62	479,441.3177	1,315,580.4576
POT STA. 145+50.00	480,649.1413	1,315,696.4855

TRAVERSE POINTS				
POINT NO.	NORTH	EAST	ELEVATION	PLAN SHEET NO.
650	480,595.8800	1,315,678.6100	216.12	PS-06
651	480,279.9300	1,315,655.5800	203.72	PS-05
652	479,810.8489	1,315,587.0849	170.19	PS-05
653	479,372.8572	1,315,570.4879	146.13	PS-04
654	478,938.3286	1,315,455.4728	121.00	PS-04
655	478,680.1722	1,315,347.7532	106.75	PS-03
656	478,377.5379	1, 315,168.4333	103.94	PS-03
657	478,042.5756	1,314,967.8564	110.09	PS-03
658	477,607.2029	1,314,706.7244	144.10	PS-02
659	477,089.7324	1,314,330.8027	178.33	PS-01
750	476,839.6600	1,314,119.2900	185.45	PS-01

NOTES:
1. TOPOGRAPHIC SURVEY AND BOUNDARY LINE ESTABLISHMENT WAS PREPARED BY CAPITOL DEVELOPMENT DESIGN, INC. IN DECEMBER 2016 WITH SUPPLEMENTAL TOPOGRAPHIC SURVEY IN NOVEMEBR 2018.

NAD 83/11
NAVD 88



GS-01

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

BASELINE GEOMETRY & SURVEY CONTROL

60% PLANS

MAY 2020

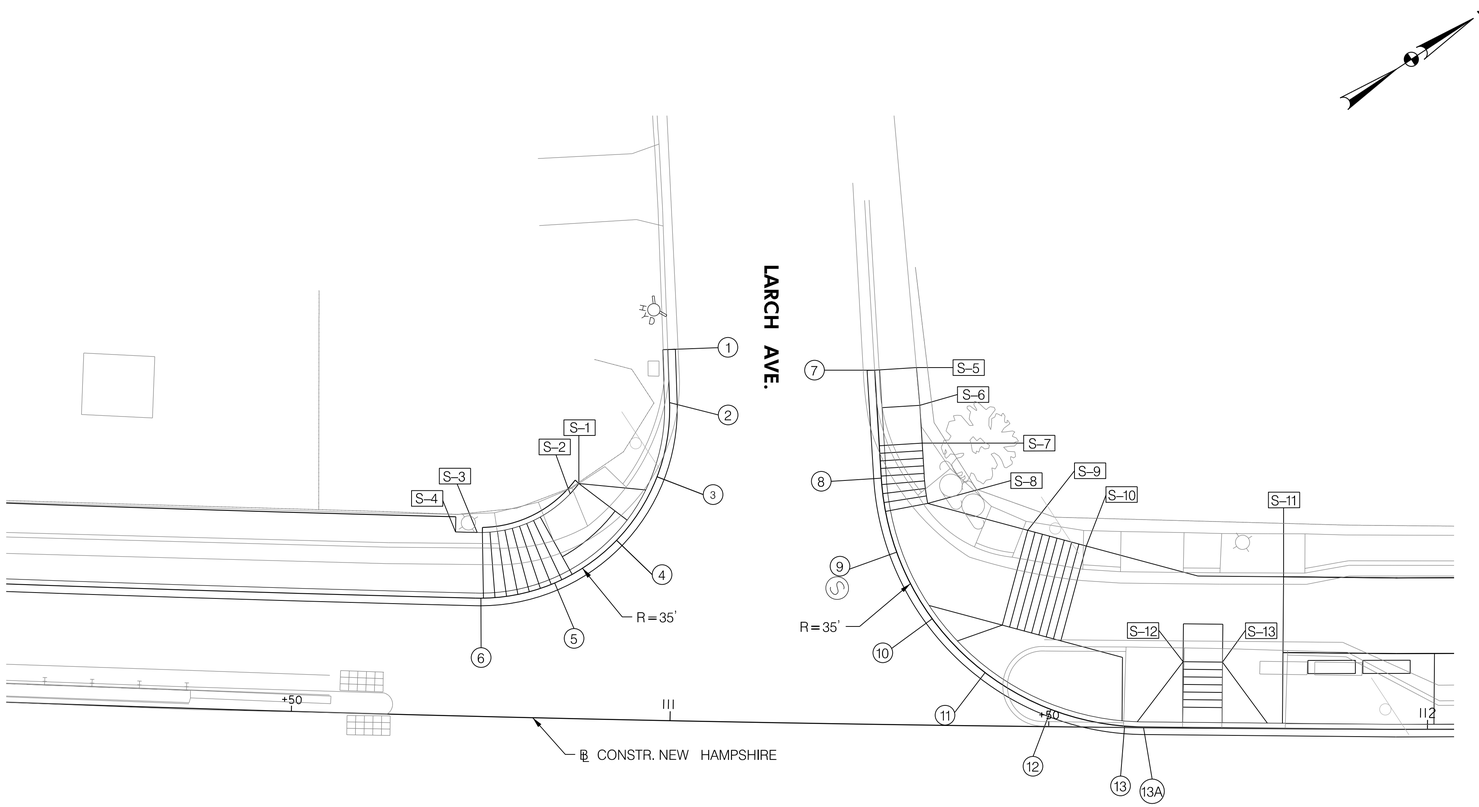
SCALE 1"=100' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. GS01 1 OF 5 SHEET NO. 16 OF 73

PLOTTED: 5/14/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pGS-0001_NewAveBike-Plan.dgn



MD 650 NB (NEW HAMPSHIRE AVE.)

INTERSECTION STAKEOUT CHART

POINT NO.	STATION AND OFFSET	EDGE OF ROAD	BOTTOM OF CURB	COORDINATES NORTHING	COORDINATES EASTING
1	110+98.71, 48.98' LT			477478.78	1314565.70
2	110+99.09, 41.98' LT			477475.11	1314571.67
3	110+97.62, 32.15' LT			477468.33	1314578.93
4	110+92.44, 23.67' LT			477459.27	1314582.98
5	110+84.36, 17.85' LT			477449.33	1314583.18
6	110+74.65, 15.61' LT			477440.11	1314579.50
7	111+26.30, 46.75' LT			477500.07	1314583.02
8	111+27.40, 32.50' LT			477492.94	1314595.40
9	111+29.59, 22.78' LT			477489.26	1314604.66
10	111+34.42, 14.05' LT			477488.33	1314614.58
11	111+41.51, 7.03' LT			477490.23	1314624.37
12	111+50.28, 2.28' LT			477494.82	1314633.21
13	111+60.02, 0.18' LT			477501.71	1314640.41
13A	111+62.51, 0.09' LT			477503.72	1314641.87

SIDEWALK STAKEOUT CHART

POINT NO.	STATION AND OFFSET	COORDINATES NORTHING	COORDINATES EASTING
S-1	110+87.27, 31.04' LT	477459.23	1314573.99
S-2	110+86.14, 29.65' LT	477457.52	1314574.49
S-3	110+73.94, 24.27' LT	477444.48	1314571.99
S-4	110+68.79, 25.57' LT	477442.13	1314570.35
S-5	111+31.85, 47.17' LT	477504.85	1314585.77
S-6	111+32.38, 42.19' LT	477502.49	1314590.18
S-7	111+32.76, 37.21' LT	477499.99	1314594.51
S-8	111+33.60, 29.26' LT	477496.21	1314601.55
S-9	111+46.92, 25.89' LT	477505.28	1314611.79
S-10	111+54.71, 23.90' LT	477510.59	1314617.78
S-11	111+80.88, 20.05' LT	477530.08	1314635.52
S-12	111+67.67, 8.75' LT	477512.84	1314637.57
S-13	111+72.88, 8.74' LT	477517.15	1314640.47

NOTES:

1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.
2. RADII REFERENCE THE FACE OF PROPOSED CURB.
3. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

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BY: bbaral -

GS-02

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

INTERSECTION STAKEOUT DETAIL

60% PLANS

MAY 2020

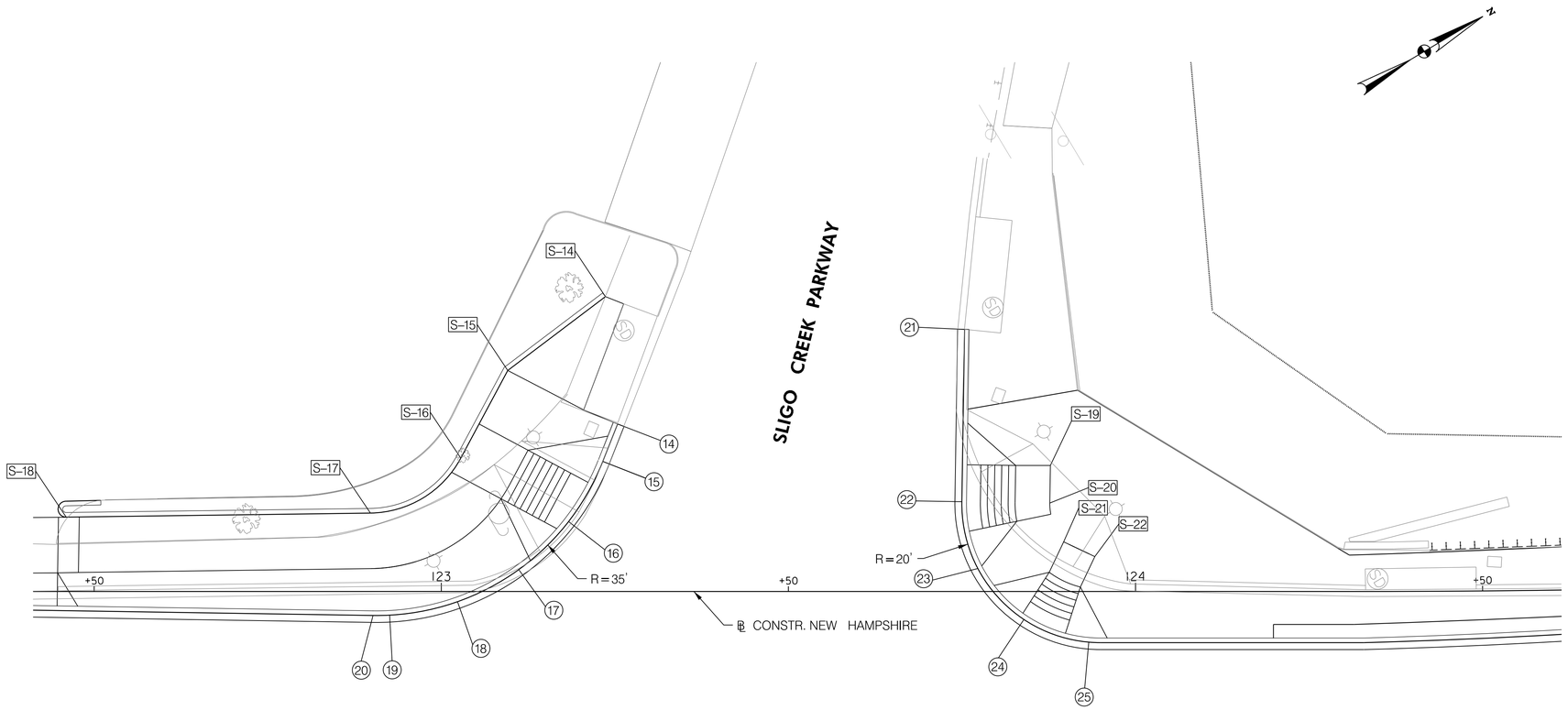
SCALE 1"=10' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB
DRAWN BY KB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. GS-02 2 OF 5 SHEET NO. 17 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pGS-0002_NewAveBike.dgn



INTERSECTION STAKEOUT CHART

POINT NO.	STATION AND OFFSET	EDGE OF ROAD	BOTTOM OF CURB	COORDINATES	
				NORTHING	EASTING
14	123+23.65, 24.13' LT			478517.73	1315208.31
15	123+23.26, 18.73' LT			478505.21	1315228.49
16	123+18.33, 10.07' LT			478496.54	1315233.40
17	123+11.16, 3.15' LT			478486.83	1315235.66
18	123+02.33, 1.47' LT			478476.88	1315235.10
19	123+82.74, 18.15' LT			478555.96	1315259.51
20	122+90.17, 3.47' LT			478465.42	1315230.57
21	123+75.37, 37.76' LT			478559.70	1315238.90
22	123+74.99, 12.93' LT			478546.63	1315260.01
23	123+77.29, 3.31' LT			478543.67	1315269.45
24	123+83.92, 4.04' LT			478545.59	1315279.16
25	123+93.26, 7.31' LT			478551.93	1315286.75

SIDEWALK STAKEOUT CHART

POINT NO.	STATION AND OFFSET	COORDINATES	
		NORTHING	EASTING
S-14	123+23.65, 42.48' LT	478517.73	1315208.31
S-15	123+09.57, 31.83' LT	478500.18	1315210.22
S-16	123+02.81, 19.20' LT	478487.90	1315217.59
S-17	122+89.79, 11.29' LT	478472.66	1315217.70
S-18	122+45.96, 10.71' LT	478434.75	1315195.72
S-19	123+87.74, 18.15' LT	478560.25	1315262.07
S-20	123+87.65, 12.73' LT	478557.40	1315266.68
S-21	123+89.65, 7.14' LT	478556.25	1315272.50
S-22	123+94.14, 5.02' LT	478559.01	1315276.62

MD 650 NB (NEW HAMPSHIRE AVE.)

NOTE:

SUPPLEMENTARY TOPO SURVEY IS REQUIRED ALONG THE NORTHBOUND SIDE OF THE MD 650 MEDIAN TO COMPLETE THE DESIGN /STAKEOUT.

NOTES:

1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.
2. RADII REFERENCE THE FACE OF PROPOSED CURB.
3. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

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BY: bbaral -

GS-03

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

INTERSECTION STAKEOUT DETAIL

60% PLANS

MAY 2020

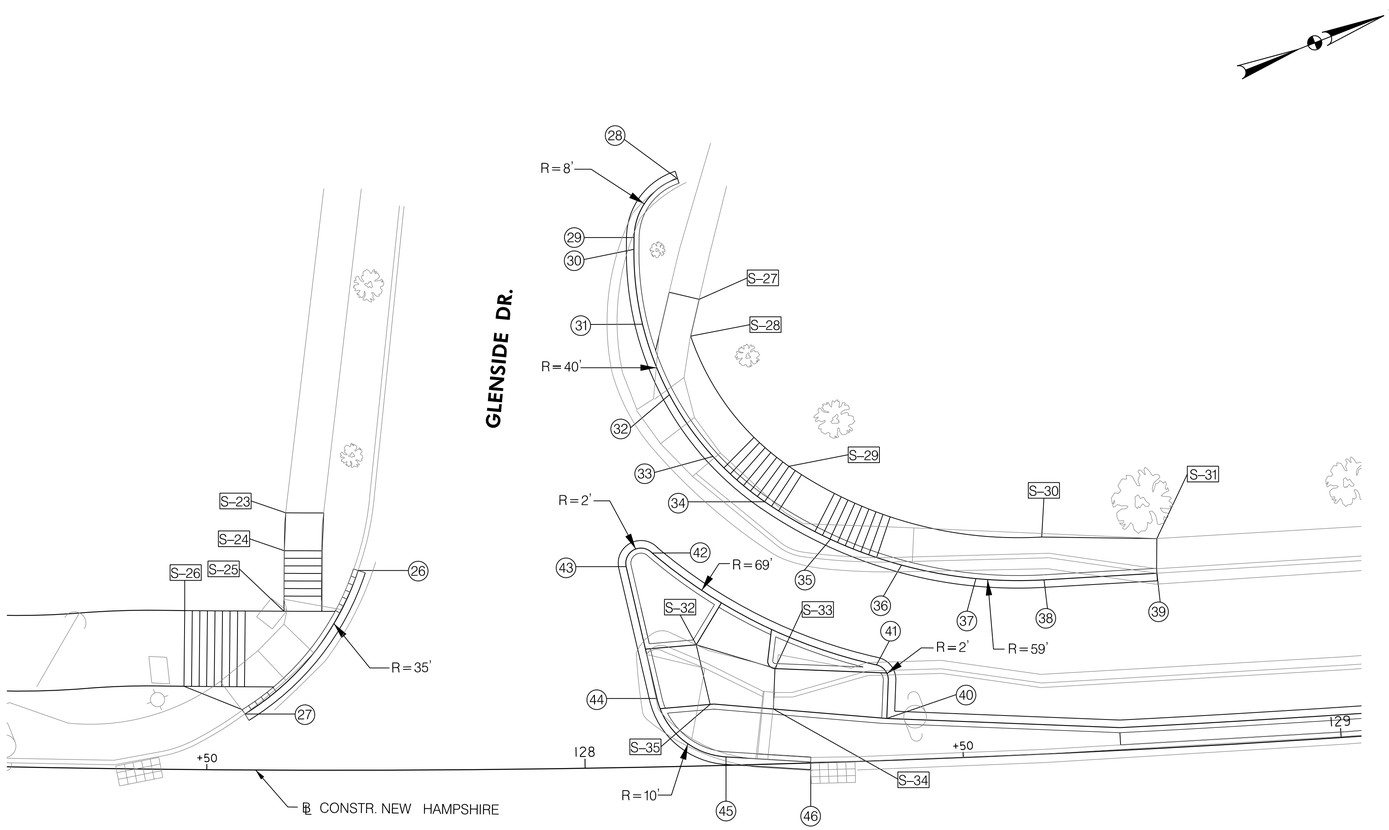
SCALE 1"=10' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB
DRAWN BY KB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. GS-03 3 OF 5 SHEET NO. 18 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pGS-0003_NewAveBike.dgn



MD 650 NB (NEW HAMPSHIRE AVE.)

INTERSECTION STAKEOUT CHART

POINT NO.	STATION AND OFFSET	EDGE OF ROAD	BOTTOM OF CURB	COORDINATES NORTHING	COORDINATES EASTING
26	127+70.04, 26.39' LT			478901.67	1315424.58
27	127+55.00, 7.40' LT			478880.80	1315436.74
28	128+14.00, 77.68' LT			478959.91	1315391.83
29	128+07.87, 70.00' LT			478951.71	1315397.00
30	128+07.82, 68.45' LT			478951.12	1315398.43
31	128+24.78, 34.65' LT			478955.03	1315435.86
32	128+61.76, 22.99' LT			478985.57	1315458.93
33	128+76.85, 23.11' LT			478999.75	1315463.58
34	128+08.78, 58.52' LT			478948.55	1315408.07
35	128+33.40, 29.47' LT			478961.27	1315443.60
36	128+42.79, 25.73' LT			478968.75	1315450.22
37	128+42.79, 25.73' LT			478977.24	1315455.47
38	128+42.79, 25.73' LT			478985.55	1315458.92
39	128+76.85, 23.11' LT			478985.55	1315463.58
40	128+40.08, 5.55' LT			478959.52	1315468.36
41	128+38.96, 12.66' LT			478960.84	1315461.28
42	128+09.44, 28.27' LT			478938.66	1315436.66
43	128+05.93, 26.54' LT			478934.81	1315437.08
44	128+09.68, 9.04' LT			478932.21	1315454.79
45	128+18.65, 1.12' LT			478937.89	1315465.30
46	128+29.82, 0.12' LT			478948.05	1315470.04

SIDEWALK STAKEOUT CHART

POINT NO.	STATION AND OFFSET	COORDINATES NORTHING	COORDINATES EASTING
S-23	127+60.32, 34.00' LT	478895.55	1315413.99
S-24	127+60.14, 29.00' LT	478893.54	1315418.57
S-25	127+60.13, 21.00' LT	478890.57	1315426.00
S-26	127+46.87, 21.00' LT	478878.40	1315421.12
S-27	128+16.57, 61.65' LT	478956.73	1315407.74
S-28	128+15.29, 56.81' LT	478953.89	1315411.86
S-29	128+28.12, 39.27' LT	478959.69	1315432.62
S-30	128+61.69, 28.66' LT	478987.34	1315453.55
S-31	128+77.09, 27.69' LT	479001.43	1315459.31
S-32	128+15.06, 16.02' LT	478939.64	1315450.08
S-33	128+25.46, 12.60' LT	478948.18	1315456.82
S-34	128+25.09, 7.27' LT	478946.03	1315461.71
S-35	128+16.72, 8.10' LT	478938.47	1315458.08

NOTES:

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2. RADII REFERENCE THE FACE OF PROPOSED CURB.
3. SEE ADA DETAILS FOR PEDESTRIAN RAMP DESIGN.

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GS-04

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

INTERSECTION STAKEOUT DETAIL

60% PLANS

MAY 2020

SCALE 1"=10' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB COUNTY MONTGOMERY
DRAWN BY KB LOGMILE MD 650 0.040- 0.830
CHECKED BY RJG
F.A.P. NO. T.B.D.

DRAWING NO. GS-04 4 OF 5 SHEET NO. 19 OF 73

PLOTTED: 5/8/2020
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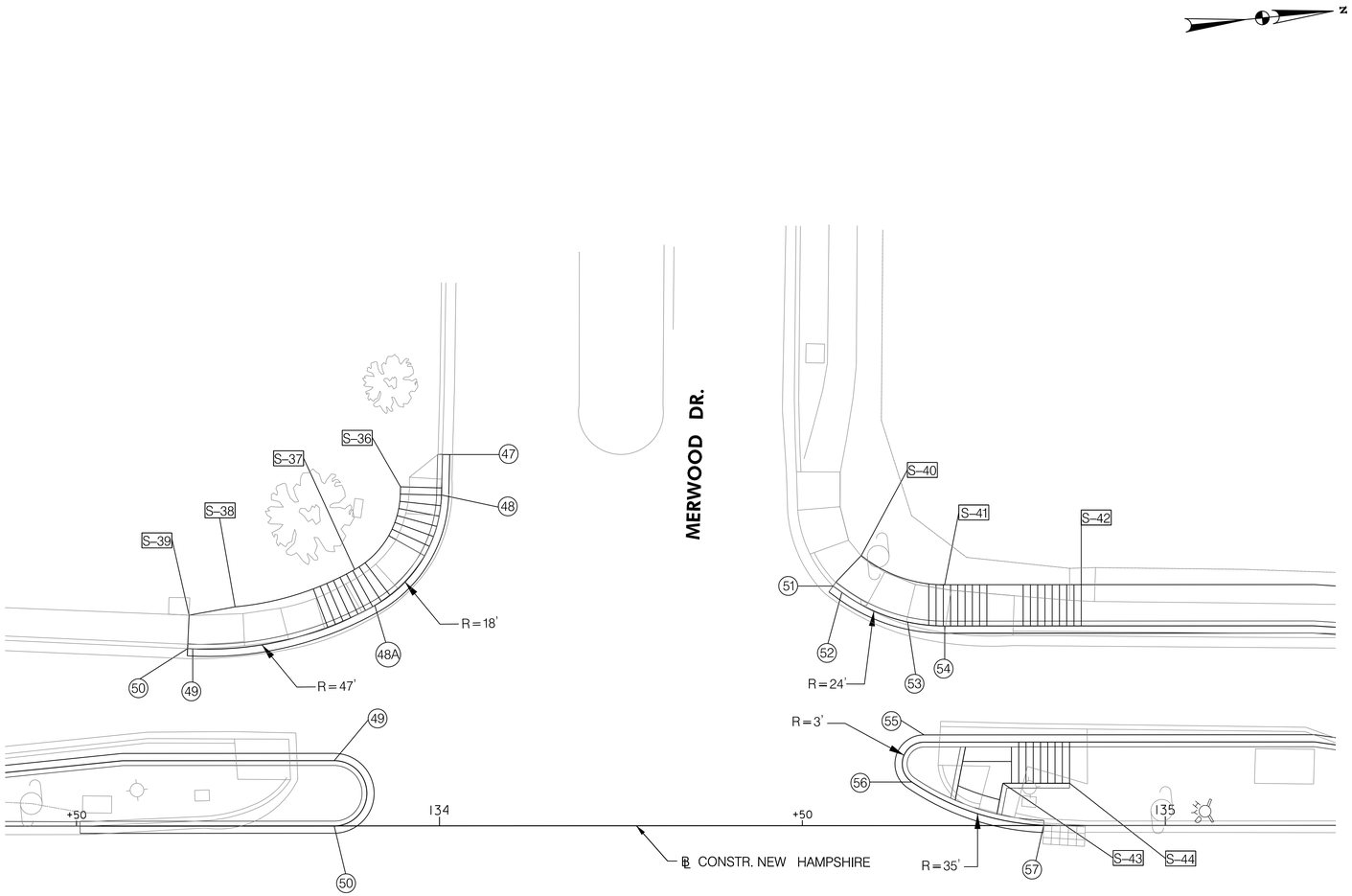

MD 650 NB (NEW HAMPSHIRE AVE.)

INTERSECTION STAKEOUT CHART

POINT NO.	STATION AND OFFSET	EDGE OF ROAD	BOTTOM OF CURB	COORDINATES	
				NORTHING	EASTING
47	134+00.45, 51.15' LT			479509.75	1315535.65
48	134+00.30, 45.57' LT			479509.07	1315541.18
48A	133+91.12, 30.37' LT			479498.47	1315555.44
49	133+66.03, 24.40' LT			479472.93	1315558.98
50	133+65.31, 24.44' LT			479472.22	1315558.88
51	134+54.25, 33.01' LT			479561.57	1315558.85
52	134+55.46, 32.13' LT			479562.68	1315559.84
53	134+64.51, 28.05' LT			479571.31	1315564.76
54	134+69.62, 27.50' LT			479576.34	1315565.80
55	134+66.77, 12.5' LT			479572.07	1315580.46
56	134+65.09, 6.01' LT			479569.77	1315586.76
57	134+83.25, 0.04' LT			479587.29	1315594.44

SIDEWALK STAKEOUT CHART

POINT NO.	STATION AND OFFSET	COORDINATES	
		NORTHING	EASTING
S-36	133+94.66, 46.71' LT	479503.56	1315539.51
S-37	133+88.34, 35.31' LT	479496.18	1315550.25
S-38	133+71.86, 30.19' LT	479479.28	1315553.77
S-39	133+65.52, 29.03' LT	479472.87	1315554.32
S-40	134+58.13, 37.19' LT	479565.83	1315555.06
S-41	134+69.62, 33.17' LT	479576.88	1315560.16
S-42	134+88.43, 33.17' LT	479595.61	1315561.96
S-43	134+77.63, 5.83' LT	479582.24	1315588.14
S-44	134+86.81, 5.83' LT	479591.38	1315589.02

NOTES:

1. STAKEOUT POINT NUMBERS REFERENCE THE FACE OF PROPOSED CURB OR THE BACK OF PROPOSED SIDEWALK.
2. RADII REFERENCE THE FACE OF PROPOSED CURB.
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GS-05

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

REVISIONS

60% PLANS

MAY 2020

INTERSECTION STAKEOUT DETAIL

SCALE 1"=10' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KB
DRAWN BY KB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. GS-05 5 OF 5 SHEET NO. 20 OF 73

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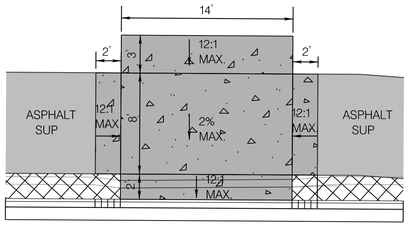

STATION 104+05
RESIDENTIAL DRIVEWAY DETAIL

8 INCH PORTLAND CEMENT CONCRETE MIX NO. 9		
STA. 103+99 TO STA 104+16, LT	24	SY

ASPHALT SHARED USE PATH		
STA. 102+97 TO STA 103+99, LT	91	SY
STA. 104+17 TO STA 105+00, LT	75	SY
STA. 105+99 TO STA 108+00, LT	177	SY

SPECIALTY PAVER – TYPE 2		
STA. 102+89 TO STA 104+02, LT	218	SF
STA. 104+15 TO STA 104+20, LT	11	SF

MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH		
STA. 102+21 TO STA. 102+43, LT	21	LF
STA. 102+74 TO STA. 105+30, LT	284	LF
STA. 105+65 TO STA. 108+00, LT	240	LF
STA. 106+59 TO STA. 108+00, LT	141	LF

MDOT SHA STANDARD TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH		
STA. 103+49 TO STA. 104+89, LT	140	LF

MDOT SHA STANDARD TYPE A CURB ANY HEIGHT OR DEPTH		
STA. 104+49 TO STA. 105+08, LT	140	LF
STA. 105+76 TO STA. 106+76, LT	310	LF

DETECTABLE WARNING SURFACE FOR CURB RAMPS		
STA. 102+35 TO STA. 102+42, LT	20	SF
STA. 102+76 TO STA. 102+89, LT	26	SF
STA. 105+08 TO STA. 105+27, LT	39	SF
STA. 105+66 TO STA. 105+75, LT	21	SF
STA. 105+86 TO STA. 105+91, LT	10	SF

5 INCH CONCRETE SIDEWALK		
STA. 102+25 TO STA. 102+42, LT	112	SF
STA. 102+74 TO STA. 102+97, LT	143	SF
STA. 103+04 TO STA. 103+07, LT	12	SF
STA. 105+00 TO STA. 105+29, LT	191	SF
STA. 105+66 TO STA. 105+99, LT	280	SF
STA. 106+76 TO STA. 106+79, LT	13	SF
STA. 107+24 TO STA. 107+28, LT	16	SF
STA. 107+78 TO STA. 107+81, LT	13	SF

ETHAN ALLEN AVENUE
AUBURN AVENUE
DEVONSHIRE AVENUE
E 1313850
N 477000
NAD 83/11
NAVD 88
LIMIT OF WORK
CONTR. NO T.B.D.
NEW AVE BIKEWAY
STA. 102+27
TO MD 410
E 1313850
N 476700
POT STA. 100+00.00
PARCEL 173
EAST WEST PLAZA LLC
L. 38814, F. 159
SEE DETAILS ON SHEET DT-02
LOT 1
EAST WEST PLAZA LLC
L. 38814, F. 159
LOT 10
JAMES A. MIZGERD
L. 39849, F. 4
UTILITY POLE (TO BE RELOCATED BY OTHERS)
REMOVE AND RESET EX. WOOD FENCE BEHIND SUP (3' OFFSET)
LOT 11
DREW & JANET SPALDING
L. 51122, F. 401
SEE DRIVEWAY DETAIL THIS SHEET
NOTE 3
REMOVE AND RESET EX. WOOD FENCE BEHIND SUP (3' OFFSET)
LOT 12
SAMUEL TESFAYE
L. 35197, F. 537
PC STA. 105+37.61
SEE DETAILS ON SHEET DT-03
LOT 4
STEVEN W. & M. C. MCCRAE
L. 16288, F. 180
LOT 5
CONSTANCE A. STREET
L. 30265, F. 631
LOT 6
JANICE M. MITCHELL
L. 33602, F. 105
LOT 7
ANNELIES C. ECHOLS & GEORGE A. DETOR
L. 42321, F. 320
TO MD 193
REMOVE AND RESET EX. WOOD FENCE BEHIND SUP (3' OFFSET)
UTILITY POLE (TO BE RELOCATED BY OTHERS)
UTILITY POLE (TO BE RELOCATED BY OTHERS)
NOTE 4
MATCH LINE – SEE SHEET PS-02
EX. ROW
100 101 102 103 104 105 106 107
8' 2' 17' 8' 17' 11' 8' 17'
ETHAN ALLEN GATEWAY STREETSCAPE CONSTRUCTION COMPLETED SUMMER 2019
Ø CONSTR. NEW AVE BIKEWAY
TYPE D CURB AND GUTTER
TYPE A CURB AND GUTTER (TYP.)
EX. COMPLIANT ADA RAMP
MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER
EX. BUS STOP TO REMAIN
MD 650 (NEW HAMPSHIRE AVENUE)
(MD 410)
N 476700
E 1314200

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

NOTES

1. INSTALL SUPPLEMENTAL LED LIGHTING ON RELOCATED UTILITY POLES BETWEEN STA. 103+00 TO 108+00 (BY OTHERS).
2. NO PROPERTY IMPACTS ANTICIPATED THIS SHEET.
3. REMOVE, SALVAGE & RECONSTRUCT 8 FT. TALL BRICK PILLARS, LIGHTS, PLAQUE AND REINSTALL GATE. SEE SPECIFICATIONS FOR MORE INFORMATION.
4. REMOVE, SALVAGE & RECONSTRUCT 5 FT. TALL BRICK PILLARS, CAP AND REINSTALL GATE. SEE SPECIFICATIONS FOR MORE INFORMATION.

30' 0 30' 60'
SCALE: 1" = 30'

PS-01

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BY: agrubb -

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ROADWAY PLAN

60% PLANS
MAY 2020

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.
DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.
COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. PS01 1 OF 6 SHEET NO. 21 OF 73

PLOTTED: 5/15/2020
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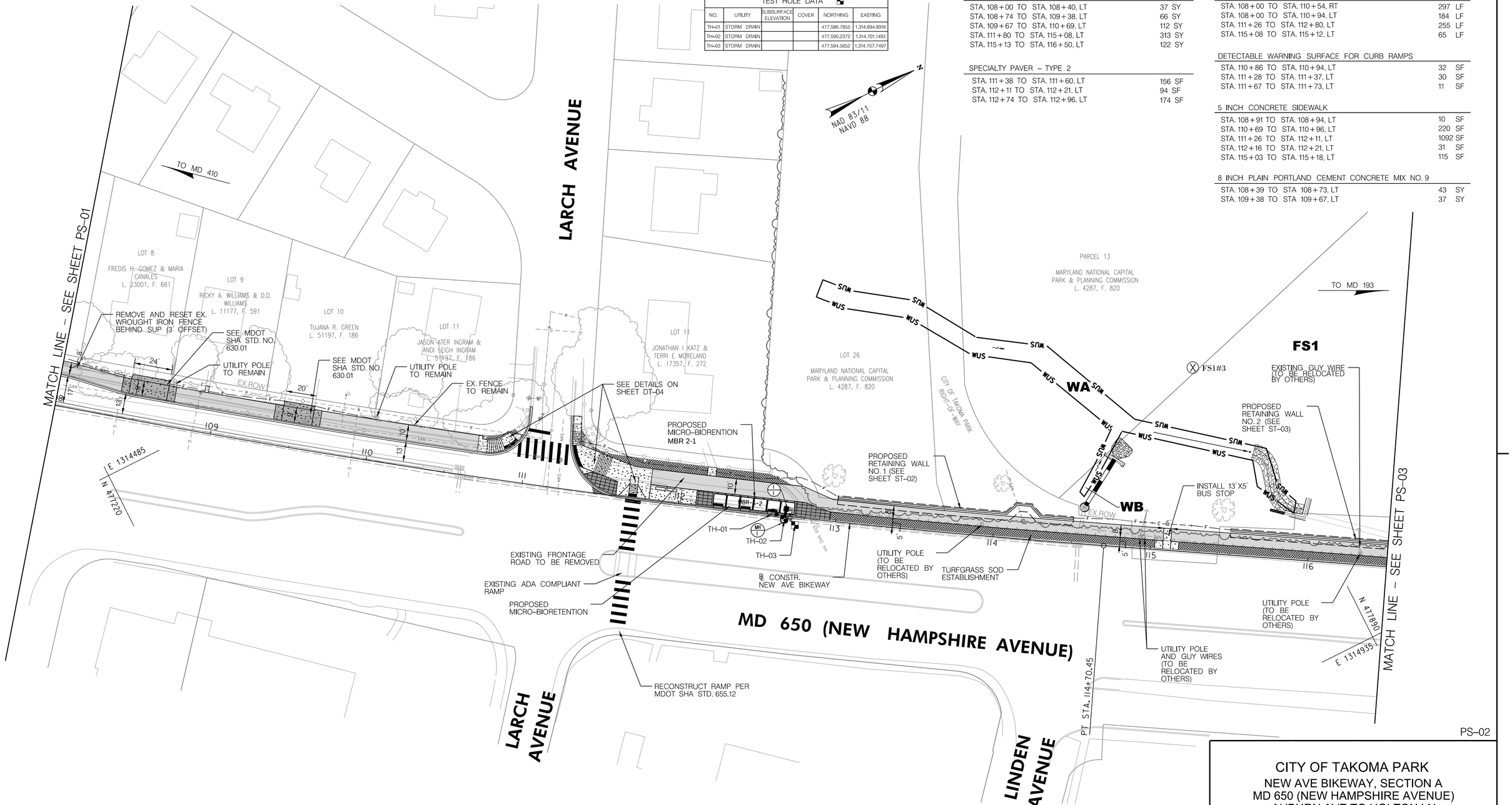

ASPHALT SHARED USE PATH

STA. 108+00 TO STA. 108+40, LT	37 SY
STA. 108+74 TO STA. 109+38, LT	66 SY
STA. 109+67 TO STA. 110+69, LT	112 SY
STA. 111+80 TO STA. 115+08, LT	313 SY
STA. 115+13 TO STA. 116+50, LT	122 SY

SPECIALTY PAVER – TYPE 2

STA. 111+38 TO STA. 111+60, LT	156 SF
STA. 112+11 TO STA. 112+21, LT	94 SF
STA. 112+74 TO STA. 112+96, LT	174 SF

MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH

STA. 108+00 TO STA. 110+54, RT	297 LF
STA. 108+00 TO STA. 110+94, LT	184 LF
STA. 111+26 TO STA. 112+80, LT	255 LF
STA. 115+08 TO STA. 115+12, LT	65 LF

DETECTABLE WARNING SURFACE FOR CURB RAMPS

STA. 110+86 TO STA. 110+94, LT	32 SF
STA. 111+28 TO STA. 111+37, LT	30 SF
STA. 111+67 TO STA. 111+73, LT	11 SF

5 INCH CONCRETE SIDEWALK

STA. 108+91 TO STA. 108+94, LT	10 SF
STA. 110+69 TO STA. 110+96, LT	220 SF
STA. 111+26 TO STA. 112+11, LT	1092 SF
STA. 112+16 TO STA. 112+21, LT	31 SF
STA. 115+03 TO STA. 115+18, LT	115 SF

8 INCH PLAIN PORTLAND CEMENT CONCRETE MIX NO. 9

STA. 108+39 TO STA 108+73, LT	43 SY
STA. 109+38 TO STA 109+67, LT	37 SY

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

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BY: agrubb -

PS-02

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ROADWAY PLAN

60% PLANS
MAY 2020

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. PS02 2 OF 6 SHEET NO. 22 OF 73

PLOTTED: 5/15/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pHD-0002_NewAveBike-Plan.dgn

MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	
STA. 120+75 TO STA. 123+25, LT	323 LF
STA. 123+75 TO STA. 125+50, LT	214 LF

MDOT SHA STANDARD TYPE A CURB ANY HEIGHT OR DEPTH	
STA. 122+44 TO STA. 123+23, LT	101 LF

DETECTABLE WARNING SURFACE FOR CURB RAMPS	
STA. 123+13 TO STA. 123+21, LT	21 SF
STA. 123+76 TO STA. 123+78, LT	19 SF
STA. 123+84 TO STA. 123+89, LT	17 SF

5 INCH CONCRETE SIDEWALK	
STA. 122+44 TO STA. 123+25, LT	922 SF

8 INCH PORTLAND CEMENT CONCRETE FOR DRIVEWAY, MIX 9	
STA. 122+11 TO STA 122+47, LT	48 SY

MDOT SHA STANDARD TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH	
STA. 121+13 TO STA. 122+90, RT	359 LF
STA. 123+93 TO STA. 125+50, RT	314 LF

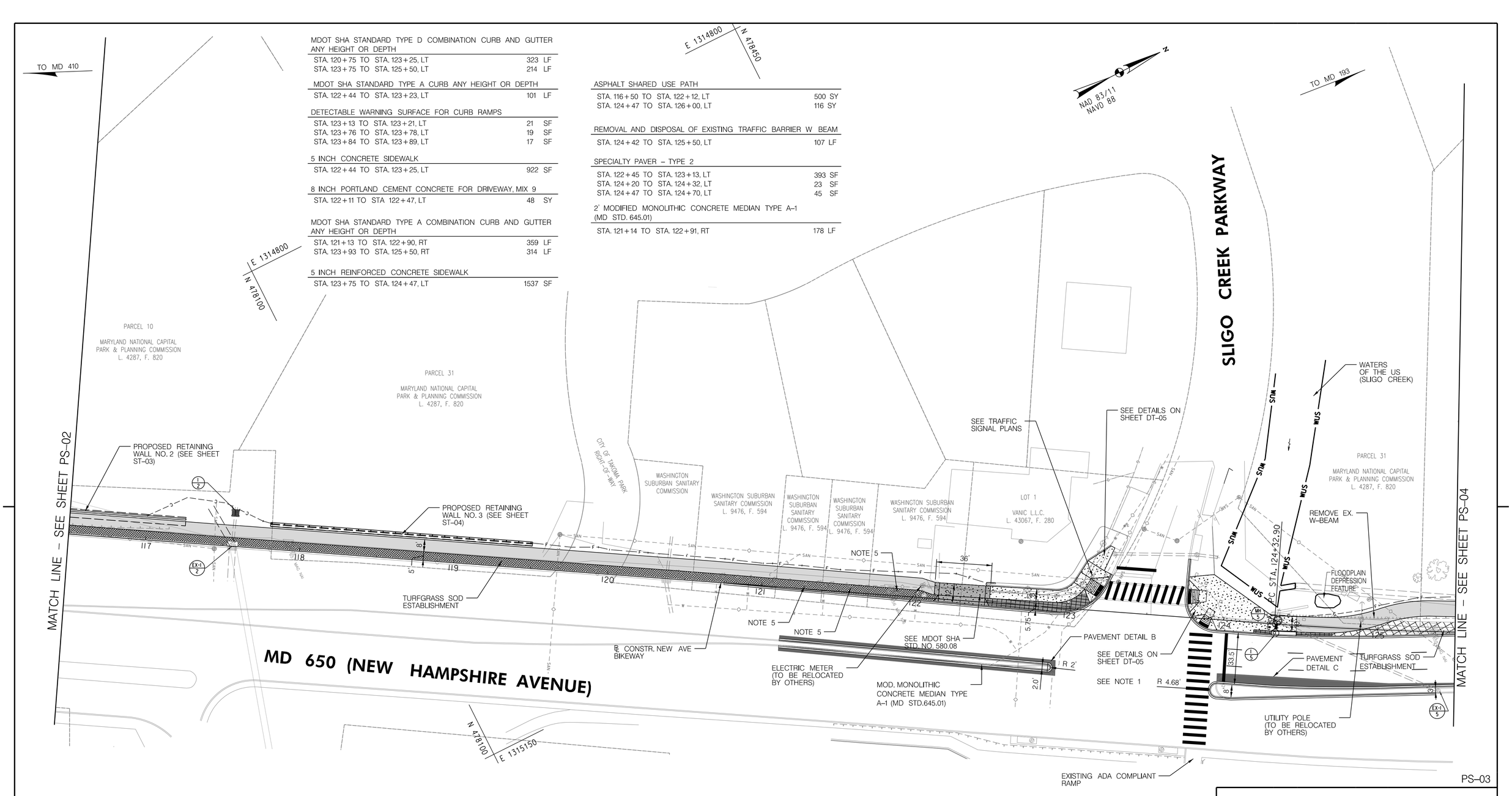
5 INCH REINFORCED CONCRETE SIDEWALK	
STA. 123+75 TO STA. 124+47, LT	1537 SF

ASPHALT SHARED USE PATH	
STA. 116+50 TO STA. 122+12, LT	500 SY
STA. 124+47 TO STA. 126+00, LT	116 SY

REMOVAL AND DISPOSAL OF EXISTING TRAFFIC BARRIER W BEAM	
STA. 124+42 TO STA. 125+50, LT	107 LF

SPECIALTY PAVER – TYPE 2	
STA. 122+45 TO STA. 123+13, LT	393 SF
STA. 124+20 TO STA. 124+32, LT	23 SF
STA. 124+47 TO STA. 124+70, LT	45 SF

2' MODIFIED MONOLITHIC CONCRETE MEDIAN TYPE A–1 (MD STD. 645.01)	
STA. 121+14 TO STA. 122+91, RT	178 LF



NOTES

1. A GEOMETRIC SHIFT THROUGH THE MD 650 INTERSECTION IS REQUIRED TO INCORPORATE A 10' WIDE SHARED USE PATH WITH 2' BUFFER, WITHOUT MODIFICATIONS TO THE EXISTING BRIDGE OVER SLIGO CREEK.
2. RIGHT OF WAY REQUIRED FOR MARYLAND NATIONAL CAPITAL PARK & PLANNING COMMISSION FROM APX. STA. 117+80 TO 119+75 AND STA. 124+00 TO 125+50.
3. RIGHT OF WAY REQUIRED FOR WSSC FROM APX. STA. 120+00 TO 122+25.
4. RIGHT OF WAY REQUIRED FOR VANIC L.L.C. FROM APX. STA. 122+25 TO 123+25.
5. EXISTING SPEED CAMERAS TO REMAIN.

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

30' 0 30' 60'
SCALE: 1" = 30'

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BY: sbarefoot -

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ROADWAY PLAN

60% PLANS

MAY 2020

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. PS03 3 OF 6 SHEET NO. 23 OF 73

PLOTTED: 5/14/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pHD-0003_NewAveBike-Plan.dgn

MDOT SHA STANDARD TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH

STA. 125+50 TO STA. 126+37, RT	168	LF
STA. 128+05 TO STA. 133+90, LT	688	LF

DETECTABLE WARNING SURFACE

STA. 127+03 TO STA. 127+09, LT	11	LF
STA. 127+56 TO STA. 127+67, LT	27	LF
STA. 128+08 TO STA. 128+13, LT	17	LF
STA. 128+17 TO STA. 128+25, LT	17	LF
STA. 128+27 TO STA. 128+33, LT	11	LF

5 INCH CONCRETE SIDEWALK

STA. 125+95 TO STA. 126+38, LT	756	SF
STA. 126+96 TO STA. 127+17, LT	370	SF
STA. 127+46 TO STA. 127+67, LT	247	SF
STA. 128+06 TO STA. 133+99, LT	2596	SF

MDOT SHA STANDARD TYPE A CURB ANY HEIGHT OR DEPTH

STA. 126+19 TO STA. 126+39, LT	40	LF
STA. 128+08 TO STA. 128+40, LT	62	LF
STA. 128+26 TO STA. 128+46, LT	20	LF
STA. 131+05 TO STA. 131+21, LT	16	LF
STA. 132+91 TO STA. 133+07, LT	16	LF

MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH

STA. 125+50 TO STA. 126+37, LT	87	LF
STA. 126+96 TO STA. 127+17, LT	20	LF
STA. 127+55 TO STA. 127+70, LT	25	LF
STA. 128+07 TO STA. 128+77, LT	108	LF

ASPHALT SHARED USE PATH

STA. 125+50 TO STA. 126+19, LT	77	SY
STA. 126+38 TO STA. 126+97, LT	65	SY
STA. 126+17 TO STA. 127+47, LT	33	SY

REMOVAL AND DISPOSAL OF EXISTING TRAFFIC BARRIER W BEAM

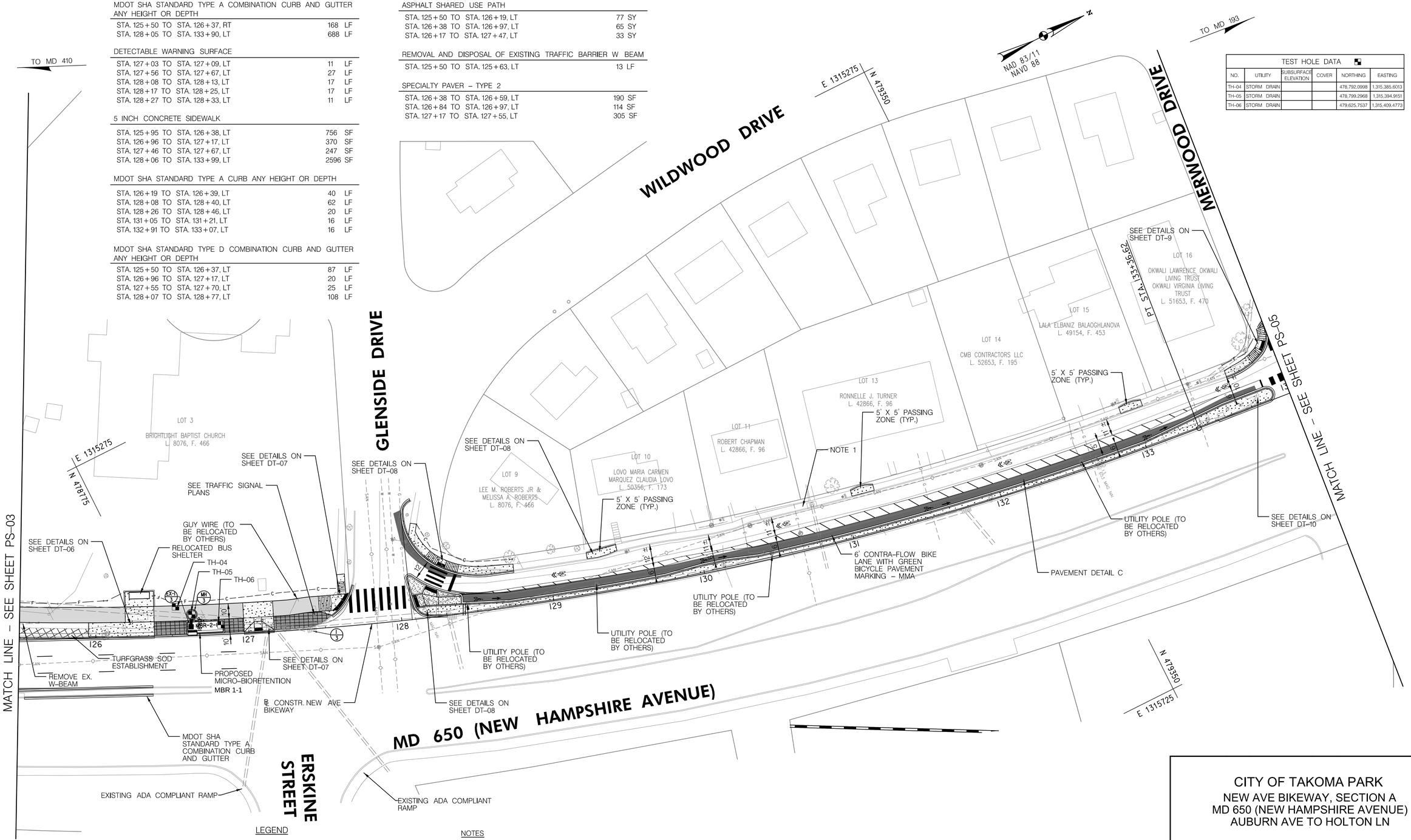
STA. 125+50 TO STA. 125+63, LT	13	LF

SPECIALTY PAVER – TYPE 2

STA. 126+38 TO STA. 126+59, LT	190	SF
STA. 126+84 TO STA. 126+97, LT	114	SF
STA. 127+17 TO STA. 127+55, LT	305	SF

TEST HOLE DATA

NO.	UTILITY	SUBSURFACE ELEVATION	COVER	NORTHING	EASTING
TH-04	STORM DRAIN			478,792.0998	1,315,385.6013
TH-05	STORM DRAIN			478,799.2968	1,315,394.9151
TH-06	STORM DRAIN			479,625.7537	1,315,409.4773



LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

NOTES

1. EXISTING 4' (TYP.) SIDEWALK TO REMAIN. CONSTRUCT 5' X 5' PASSING ZONES EVERY 200' MAX.
2. RIGHT OF WAY REQUIRED FROM BRIGHTLIGHT BAPTIST CHURCH FROM APX. STA. 125+50 TO 127+60.
3. PARKING TO BE REMOVED ALONG FRONTAGE ROAD BETWEEN GLENSIDE DRIVE AND MERWOOD DRIVE.

30' 0 30' 60'
SCALE: 1" = 30'

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PS-04

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ROADWAY PLAN

60% PLANS
MAY 2020

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. PS-04 4 OF 6
SHEET NO. 24 OF 73

PLOTTED: 10/9/2020
FILE: \\baltserv06\v2016\2016\16217_NewAveBike\CADD\plans\pHD-0004_NewAveBike-Plan.dgn

MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH

STA. 134+00 TO STA. 134+01, LT	9	LF
STA. 134+54 TO STA. 135+61, LT	110	LF
STA. 140+20 TO STA. 140+41, LT	24	LF
STA. 141+11 TO STA. 142+50, RT/LT	200	LF

MDOT SHA STANDARD TYPE A CURB ANY HEIGHT OR DEPTH

STA. 134+71 TO STA. 134+87, RT	28	LF
STA. 136+06 TO STA. 136+21, LT	16	LF
STA. 137+24 TO STA. 137+39, LT	16	LF
STA. 138+22 TO STA. 138+38, LT	16	LF

DETECTABLE WARNING SURFACE

STA. 134+71 TO STA. 134+77, LT	12	SF
STA. 134+72 TO STA. 134+79, LT	13	SF
STA. 134+75 TO STA. 134+80, LT	10	SF

NAD 83/11
NAVD 88

MDOT SHA STANDARD TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH

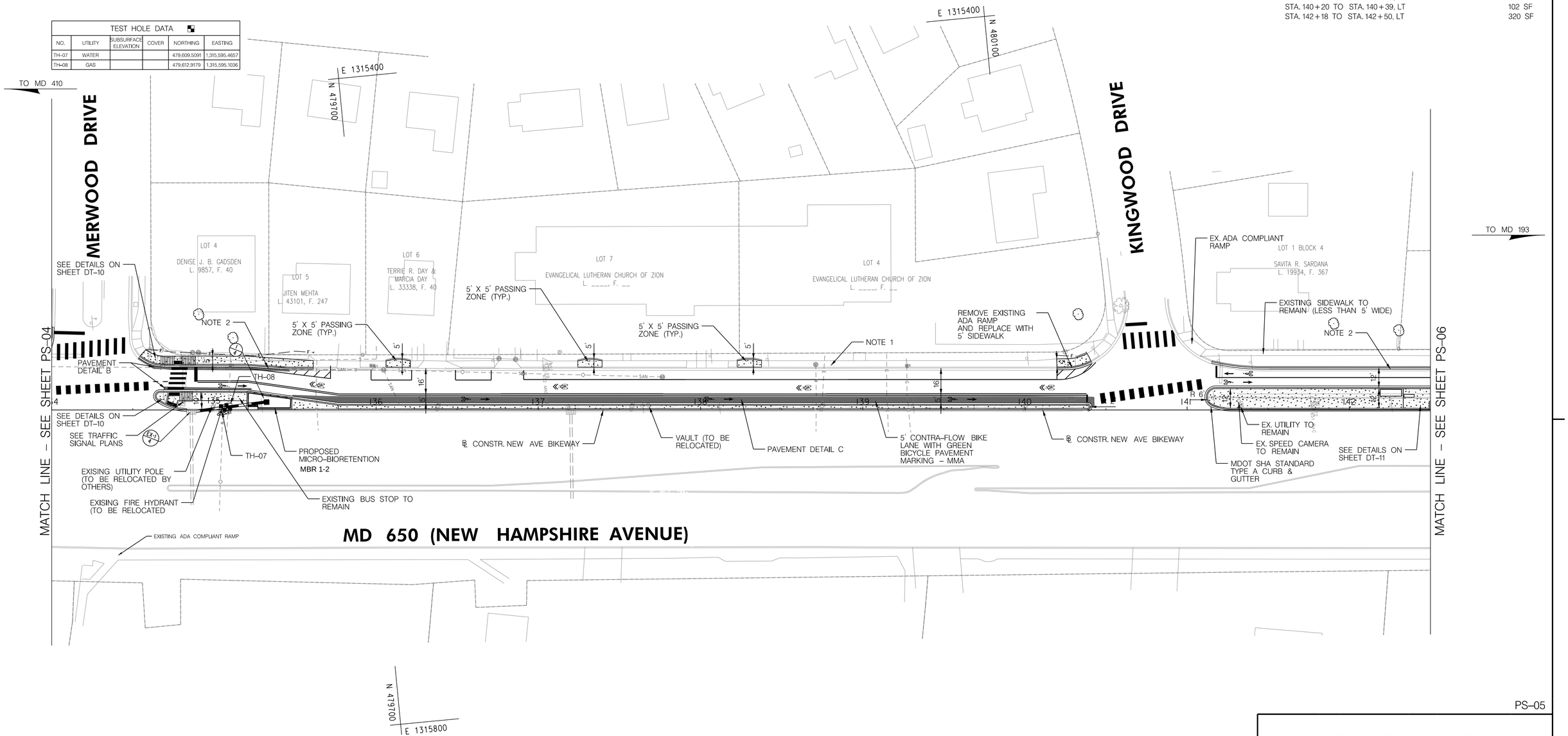
STA. 134+63 TO STA. 140+41, RT/LT	611	LF
STA. 141+15 TO STA. 142+50, RT/LT	135	LF

5 INCH CONCRETE SIDEWALK

STA. 134+58 TO STA. 135+61, LT	523 SF
STA. 134+65 TO STA. 134+92, LT	315 SF
STA. 136+06 TO STA. 136+21, LT	69 SF
STA. 137+24 TO STA. 137+39, LT	69 SF
STA. 138+23 TO STA. 138+38, LT	69 SF
STA. 140+20 TO STA. 140+39, LT	102 SF
STA. 142+18 TO STA. 142+50, LT	320 SF

TEST HOLE DATA

NO.	UTILITY	SUBSURFACE ELEVATION	COVER	NORTHING	EASTING
TH-07	WATER			479,609.5091	1,315,595.4657
TH-08	GAS			479,612.9179	1,315,595.1036



LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

NOTES

1. EXISTING 4' (TYP.) SIDEWALK TO REMAIN. CONSTRUCT 5' X 5' PASSING ZONES EVERY 200' MAX.
2. PARKING TO BE REMOVED FROM APX. STA. 134+50 TO 135+90. FRONTAGE ROAD TO BE PERMANENTLY CLOSED TO VEHICULAR TRAFFIC FROM KINGWOOD DRIVE TO HOLTON LANE.

30' 0 30' 60'
SCALE: 1" = 30'

PS-05

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ROADWAY PLAN

60% PLANS

MAY 2020

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. PS05 5 OF 6 SHEET NO. 25 OF 73

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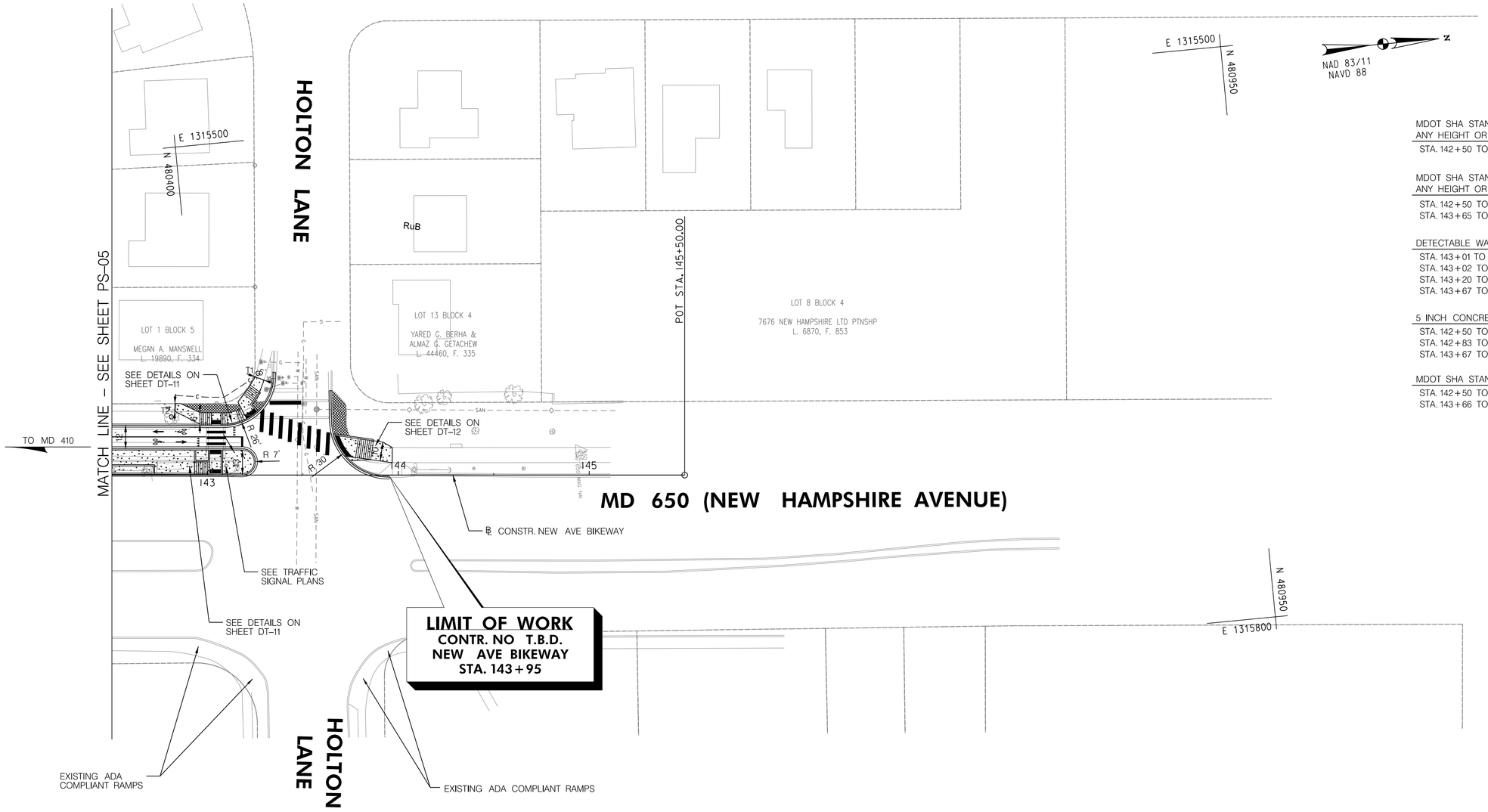
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pHD-0005_NewAveBike-Plan.dgn
BY: sbarefoot -



MDOT SHA STANDARD TYPE A COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH

STA. 142+50 TO STA. 143+26, RT/LT	162	LF

MDOT SHA STANDARD TYPE D COMBINATION CURB AND GUTTER ANY HEIGHT OR DEPTH

STA. 142+50 TO STA. 143+35, LT	103	LF
STA. 143+65 TO STA. 143+95, LT	65	LF

DETECTABLE WARNING SURFACE FOR CURB RAMPS

STA. 143+01 TO STA. 143+07, LT	24	SF
STA. 143+02 TO STA. 143+08, LT	10	SF
STA. 143+20 TO STA. 143+26, LT	13	SF
STA. 143+67 TO STA. 143+76, LT	26	SF

5 INCH CONCRETE SIDEWALK

STA. 142+50 TO STA. 143+30, LT	852	SF
STA. 142+83 TO STA. 143+25, LT	345	SF
STA. 143+67 TO STA. 143+97, LT	287	SF

MDOT SHA STANDARD TYPE A CURB ANY HEIGHT OR DEPTH

STA. 142+50 TO STA. 143+25, LT	27	LF
STA. 143+66 TO STA. 143+87, LT	22	LF

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- SPECIALTY PAVER – TYPE 2
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)

NOTES

1. FRONTAGE ROAD TO BE PERMANENTLY CLOSED TO VEHICULAR TRAFFIC FROM KINGWOOD DRIVE TO HOLTON LANE

30' 0 30' 60'
SCALE: 1" = 30'

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PS–06

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

ROADWAY PLAN

60% PLANS

MAY 2020

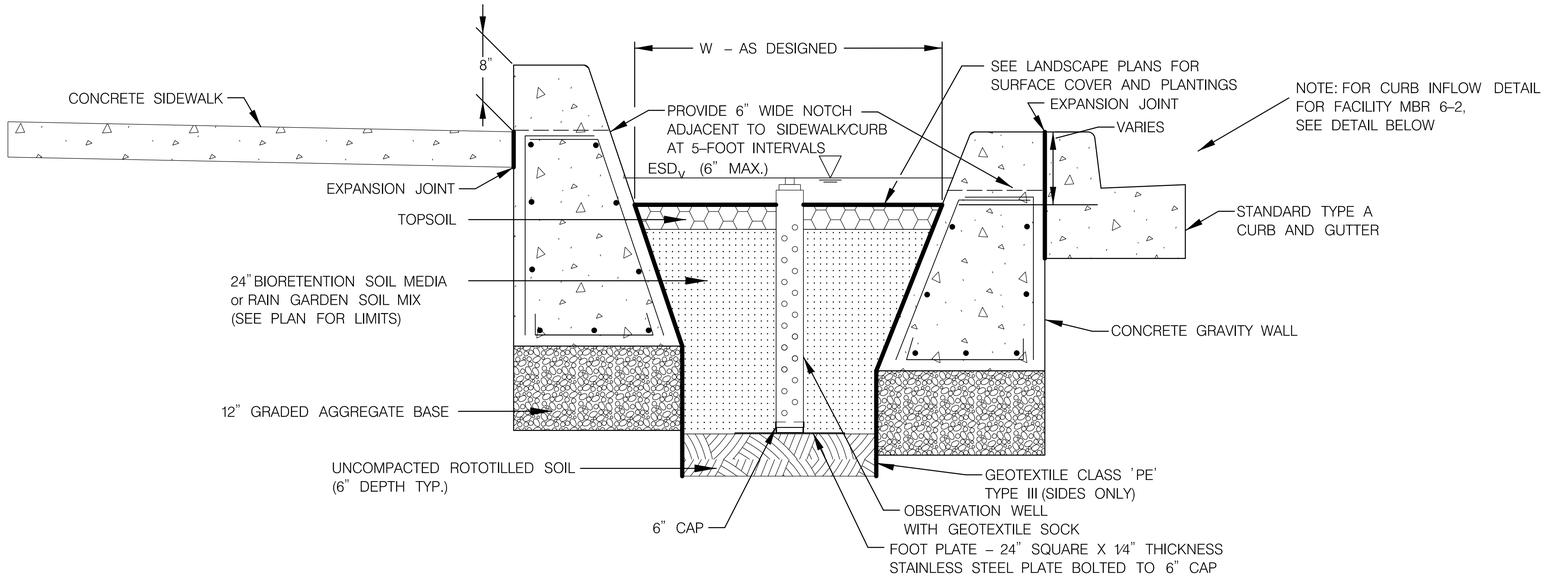
SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY KBJ
DRAWN BY BB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

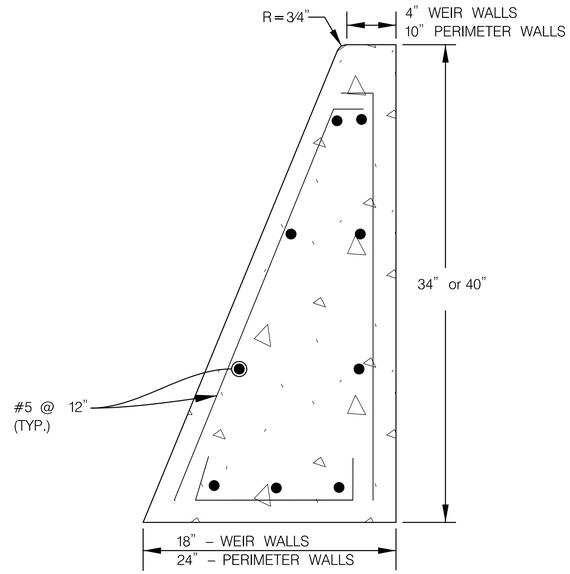
DRAWING NO. PS06 6 OF 6 SHEET NO. 26 OF 73

PLOTTED: 5/12/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pHD-0006_NewAveBike-Plan.dgn



MICRO–BIORETENTION SECTION

NOT TO SCALE



CONCRETE GRAVITY WALL

NOT TO SCALE

GENERAL NOTES:

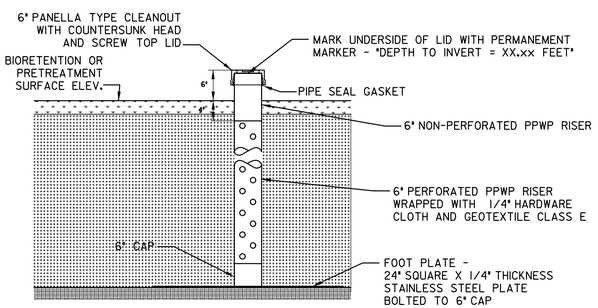
1. ALL STRUCTURE CONCRETE SHALL BE fc = 4,000 PSI.

2. REINFORCING STEEL SHALL CONFORM TO ASTM A 615, GRADE 60 (fy = 60.0 KSI). MINIMUM COVER FOR ANY BAR SHALL BE 2 INCHES UNLESS OTHERWISE NOTED, WITH THE EXCEPTION OF BARS AT THE BOTTOM AND SIDE OF ALL FOOTINGS WHICH SHALL HAVE 3 INCHES MINIMUM COVER. ALL BAR LAP SPLICES SHALL BE 9 INCHES UNLESS OTHERWISE NOTED.

3. EXPANSION JOINTS SHALL BE 1/2" PREFORMED NON–EXTRUDING JOINT FILLER AND CONFORM TO AASHTO M 153.

4. ALL FACILITIES ARE LOCATED IN WELL–DRAINING SOILS, PER USDA WEB SOIL SURVEY. NO UNDERDRAINS ARE PROPOSED, PENDING FURTHER TESTING RESULTS.

OBSERVATION WELL DETAIL



NOT TO SCALE

SW–D1

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STORMWATER MANAGEMENT DETAILS

60% PLANS

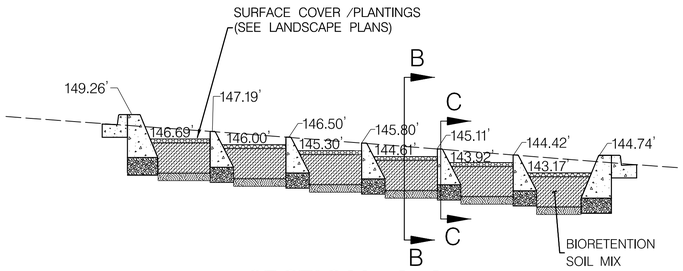
MAY 2020

SCALE NTS DATE MAY 2020 CONTRACT NO. T.B.D.

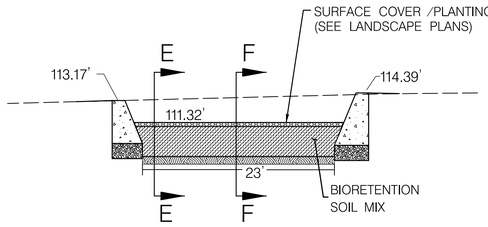
DESIGNED BY AGB COUNTY MONTGOMERY
DRAWN BY DEA LOGMILE MD 650 0.040- 0.830
CHECKED BY SBP
F.A.P. NO. T.B.D.

DRAWING NO. SW-D1 OF D2 1 OF 5 SHEET NO. 27 OF 73

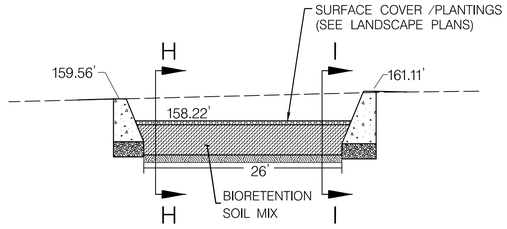
PLOTTED: Thursday, May 07, 2020 AT 02:55 PM
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSW-D001_NewAveBike.dgn



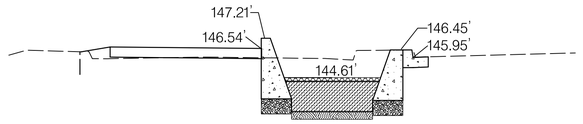
SECTION A–A



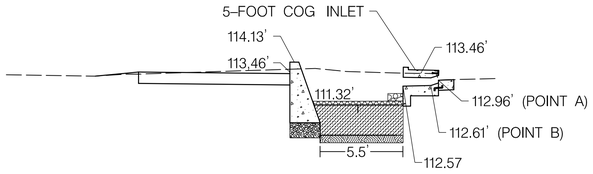
SECTION D–D



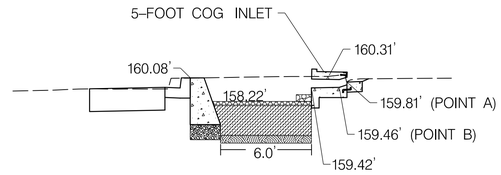
SECTION G–G



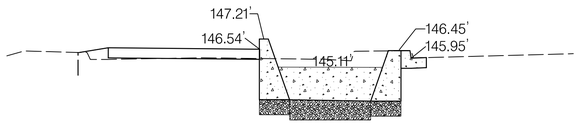
SECTION B–B
(STA. 112 + 50)



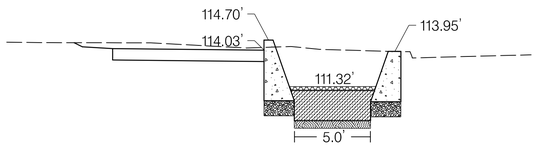
SECTION E–E
(STA. 126 + 63 AT INLET)



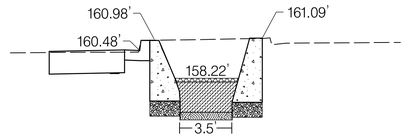
SECTION H–H
(STA. 135 + 24 AT INLET)



SECTION C–C
(STA. 112 + 56)



SECTION F–F
(STA. 126 + 75)



SECTION I–I
(STA. 135 + 40)

MBR 2–1
(STA. 112 + 21 – 112 + 73, LT)

MBR 1–1
(STA. 126 + 59 – 126 + 84, LT)

MBR 1–2
(STA. 135 + 20 – 138 + 48, LT)

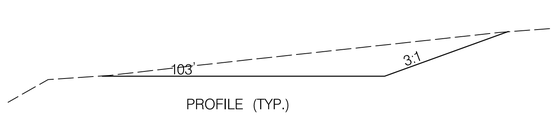
NOTES:

1. SEE SHEET SW–01 – SW–03 FOR SWM PLAN AND SW–D1 FOR DETAILS.

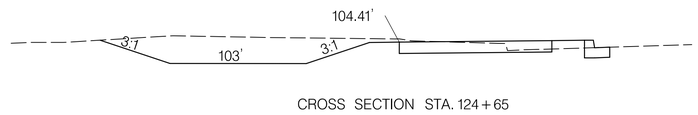
LEGEND

- SURFACE COVER /PLANTINGS (SEE LANDSCAPE PLANS)
- BIORETENTION SOIL MIX
- ROTOTILLED SUBGRADE
- GRADED AGGREGATE BASE

FLOODPLAIN DEPRESSION
(STA. 124 + 58 – 124 + 74, LT)



PROFILE (TYP.)



CROSS SECTION STA. 124 + 65

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BY: abarrett -

SW–D2

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STORMWATER MANAGEMENT DETAILS

SCALE NTS DATE MAY 2020 CONTRACT NO. T.B.D.

60% PLANS

MAY 2020

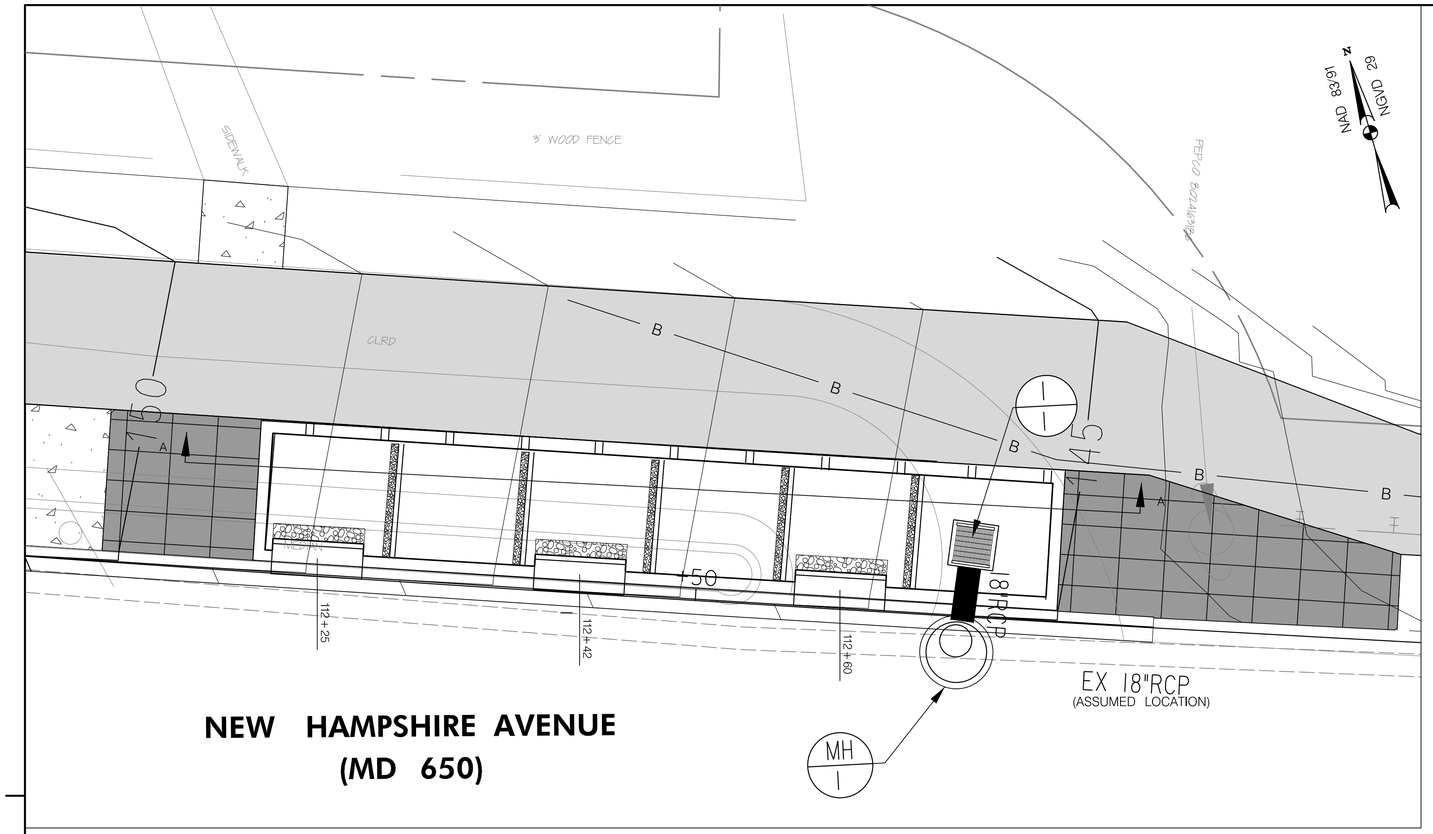
DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. SW-D2 OF D2 2 OF 5

SHEET NO. 28 OF 73

PLOTTED: Wednesday, October 21, 2020 AT 04:53 PM
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSW-D002_NewAveBike.dgn



NEW HAMPSHIRE AVENUE
(MD 650)

MBR-2-1

OPEN BACK INLET ELEVATION TABLE

STATION	GUTTER PAN	TOP OF INLET	POINT A (2)	POINT B (2)
112+25	148.43	148.93	148.58	148.54
112+42	147.06	147.56	147.21	147.17
112+60	145.62	146.12	145.77	145.73

LEGEND

- FULL DEPTH PAVEMENT
- CONCRETE SIDEWALK
- CONCRETE ENTRANCE

NOTE:
1. SEE SHEETS SW–D1 AND SW–D2 FOR SECTION DETAILS
2. SEE SHEET SW–D2 FOR LOCATION OF POINTS A AND B

STORMWATER MANAGEMENT AS-BUILT CERTIFICATION

I hereby certify that the stormwater management facility (facilities) shown on the plans and individually identified below has (have) been constructed in accordance with the plans included under the Maryland Department of the Environment Approval, Number __ - SF -___ except as noted in green on the "AS BUILT" drawings. Furthermore, the green-noted exceptions do not adversely affect the design and/or the intended performance of the facility (facilities).

Facility Identification (Identify Each Facility Individually by BMP Number)

Name (Printed) | Signature

Maryland Registration Number | Date

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction

NOTE: AS-BUILT CHECKLISTS CONTAINED IN THE CONTRACT DRAWINGS SHALL BE COMPLETED BY THE AS-BUILT INSPECTOR AND SUBMITTED TO THE SHA ALONG WITH THIS CERTIFICATION.

As-Built Inspection Tabulations/Checklist for BMP Number:

Accepted by City of Takoma Park:

Name _____ Date _____

MICROBIORETENTION TABULATIONS

ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	N/A				
Forebay Volume	N/A				
Filter Bed Area (L x W)	8.25x7.7 (x6)				
Filter Bed Surface Elevation	SEE SHEET SW–D2				
Filter Inlet Pipe Size	3 5' COG OPENINGS				
Filter Inlet Pipe Elevation	SEE TABLE THIS SHEET				
Filter Inlet Pipe Invert	SEE TABLE THIS SHEET				
Outlet Pipe Size	18 INCHES				
Outlet Pipe Elevation	140'				
Observation well installed according to plans	N/A				

As-Built Inspection Tabulations/Checklist for BMP Number:

Accepted by City of Takoma Park:

Name _____ Date _____

MIRCOBIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DATE
Excavated to proper size and location			
Underdrain system and/ or observation well installed according to plans			
Placement of geotextiles and filter fabric according to plans			
Placement of gravel diaphragm			
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan			
Composition of Filter Media			

AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10
The As-Built Inspector is to verify the construction activities while activity is performed as listed above.
Revised February 2011

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SW–01

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STORMWATER MANAGEMENT PLAN

60% PLANS
MAY 2020

SCALE 1" = 5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB COUNTY MONTGOMERY
DRAWN BY DEA LOGMILE MD 650 0.040- 0.830
CHECKED BY SBP
F.A.P. NO. T.B.D.

DRAWING NO. SW-01 OF 03 3 OF 5 SHEET NO. 29 OF 73

PLOTTED: Thursday, May 07, 2020 AT 03:50 PM
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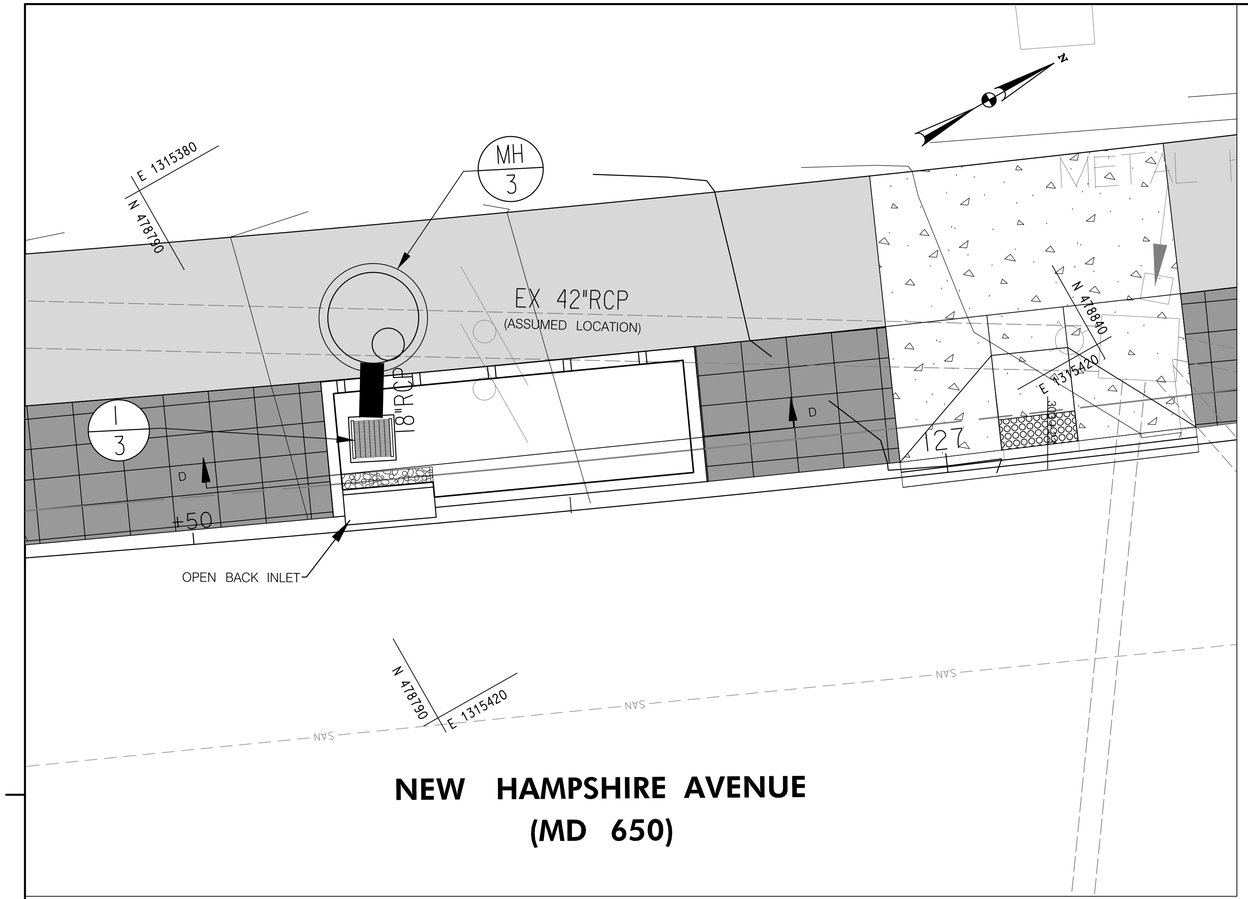

NEW HAMPSHIRE AVENUE
(MD 650)

MBR-1-1

LEGEND

- FULL DEPTH PAVEMENT
- CONCRETE SIDEWALK
- CONCRETE ENTRANCE

NOTES:

1. SEE SW–D1 AND SW–D2 FOR SECTION DETAILS.

STORMWATER MANAGEMENT AS-BUILT CERTIFICATION

I hereby certify that the stormwater management facility (facilities) shown on the plans and individually identified below has (have) been constructed in accordance with the plans included under the Maryland Department of the Environment Approval, Number __ - SF -___ except as noted in green on the "AS BUILT" drawings. Furthermore, the green-noted exceptions do not adversely affect the design and/or the intended performance of the facility (facilities).

Facility Identification (Identify Each Facility Individually by BMP Number)

Name (Printed) | Signature

Maryland Registration Number | Date

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction

NOTE: AS-BUILT CHECKLISTS CONTAINED IN THE CONTRACT DRAWINGS SHALL BE COMPLETED BY THE AS-BUILT INSPECTOR AND SUBMITTED TO THE SHA ALONG WITH THIS CERTIFICATION.

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As-Built Inspection Tabulations/Checklist for BMP Number:

Accepted by City of Takoma Park:

Name _____ Date _____

MICROBIORETENTION TABULATIONS

ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	N/A				
Forebay Volume	N/A				
Filter Bed Area (L x W)	23x7.5				
Filter Bed Surface Elevation	111.32'				
Filter Inlet Pipe Size	5' COG OPENING				
Filter Inlet Pipe Elevation	VARIES				
Filter Inlet Pipe Invert	112.70				
Outlet Pipe Size	18 INCHES				
Outlet Pipe Elevation	108.00				
Observation well installed according to plans	N/A				

As-Built Inspection Tabulations/Checklist for BMP Number:

Accepted by City of Takoma Park:

Name _____ Date _____

MIRCOBIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DATE
Excavated to proper size and location			
Underdrain system and/ or observation well installed according to plans			
Placement of geotextiles and filter fabric according to plans			
Placement of gravel diaphragm			
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan			
Composition of Filter Media			

AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10
The As-Built Inspector is to verify the construction activities while activity is performed as listed above.
Revised February 2011

SW–02

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STORMWATER MANAGEMENT PLAN

60% PLANS
MAY 2020

SCALE 1" = 5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB COUNTY MONTGOMERY
DRAWN BY DEA LOGMILE MD 650 0.040- 0.830
CHECKED BY SBP
F.A.P. NO. T.B.D.

DRAWING NO. SW-02 OF 03 4 OF 5 SHEET NO. 30 OF 73

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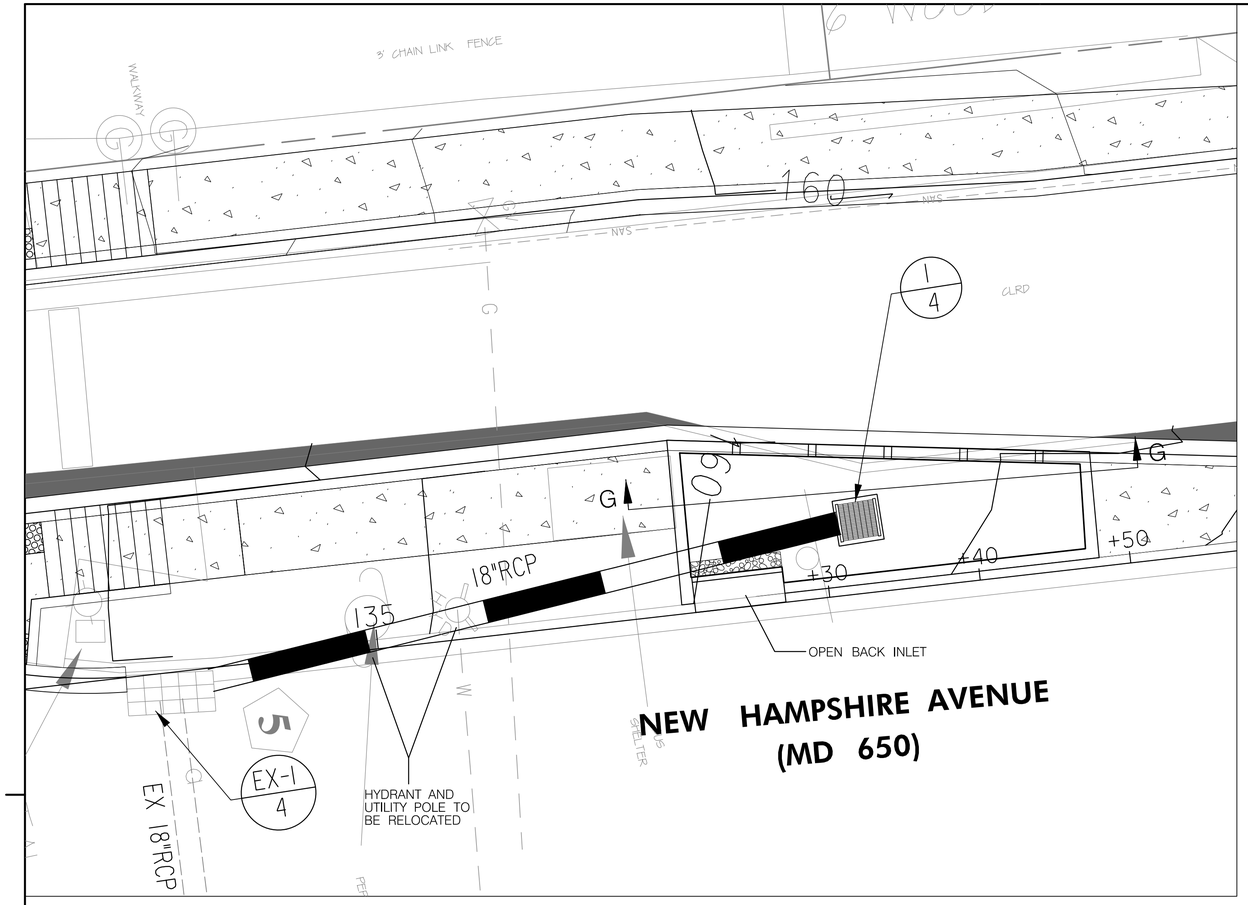

MBR-1-2

LEGEND

- FULL DEPTH PAVEMENT
- CONCRETE SIDEWALK
- CONCRETE ENTRANCE

NOTES:

1. SEE SW–D1 AND SW–D2 FOR SECTION DETAILS.

STORMWATER MANAGEMENT AS-BUILT CERTIFICATION

I hereby certify that the stormwater management facility (facilities) shown on the plans and individually identified below has (have) been constructed in accordance with the plans included under the Maryland Department of the Environment Approval, Number __ - SF -___ except as noted in green on the "AS BUILT" drawings. Furthermore, the green-noted exceptions do not adversely affect the design and/or the intended performance of the facility (facilities).

Facility Identification (Identify Each Facility Individually by BMP Number)

Name (Printed) | Signature

Maryland Registration Number | Date

"Certify" means to state or declare a professional opinion based on sufficient and appropriate onsite inspections and material tests conducted during construction

NOTE: AS-BUILT CHECKLISTS CONTAINED IN THE CONTRACT DRAWINGS SHALL BE COMPLETED BY THE AS-BUILT INSPECTOR AND SUBMITTED TO THE SHA ALONG WITH THIS CERTIFICATION.

As-Built Inspection Tabulations/Checklist for BMP Number:

Accepted by City of Takoma Park:

Name _____ Date _____

MICROBIORETENTION TABULATIONS

ACTIVITY	DESIGNED	AS-BUILT	DIFFERENCE	INSPECTOR INITIALS	ACCEPTANCE DATE
As-Built Survey	N/A				
Forebay Area	N/A				
Forebay Volume	N/A				
Filter Bed Area (L x W)	26x7.25				
Filter Bed Surface Elevation	158.22'				
Filter Inlet Pipe Size	5' COG OPENING				
Filter Inlet Pipe Elevation	VARIES				
Filter Inlet Pipe Invert	159.81				
Outlet Pipe Size	18 INCHES				
Outlet Pipe Elevation	155.20				
Observation well installed according to plans	N/A				

As-Built Inspection Tabulations/Checklist for BMP Number:

Accepted by City of Takoma Park:

Name _____ Date _____

MIRCOBIORETENTION CONSTRUCTION CHECKLIST

ACTIVITY	ON SITE INSPECTION DATE	INSPECTOR INITIALS	ACCEPTANCE DATE
Excavated to proper size and location			
Underdrain system and/ or observation well installed according to plans			
Placement of geotextiles and filter fabric according to plans			
Placement of gravel diaphragm			
Appurtenant conveyance systems (diversion structures, pre-filters, filters, inlet, outlets, orifices and flow distribution structures) installed according to plan			
Composition of Filter Media			

AB Inspector required to perform inspection on site for these steps as required by COMAR 26.17.02.10
The As-Built Inspector is to verify the construction activities while activity is performed as listed above.
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SW–03

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STORMWATER MANAGEMENT PLAN

60% PLANS
MAY 2020

SCALE 1" = 5' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB COUNTY MONTGOMERY
DRAWN BY DEA LOGMILE MD 650 0.040- 0.830
CHECKED BY SBP
F.A.P. NO. T.B.D.

DRAWING NO. SW-03 OF 03 5 OF 5 SHEET NO. 31 OF 73

PLOTTED: Thursday, May 07, 2020 AT 03:55 PM
FILE: \\balsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pSW-P003_NewAveBike.dgn

STRUCTURAL GENERAL NOTES

SPECIFICATIONS:

MDOT SHA STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS

AASHTO LRFD BRIDGE DESIGN SPECIFICATIONS, 2017.

CONCRETE DESIGN: LRFD, f'c = 3.0 KSI FOR ELEMENTS USING MIX NO. 3 AND f'c = 4.0 KSI FOR ELEMENTS USING MIX NO. 6.

REINFORCING STEEL DESIGN: fy = 60.0 KSI.

CONCRETE:

ALL STEM, FOOTING, PILE ENCASEMENT, LEVELING PAD AND COPING CONCRETE SHALL BE MIX. NO. 3 (3500 PSI)

PRESTRESSED CONCRETE:

ALL PRESTRESSED CONCRETE FOR LAGGING SHALL BE MIX NO. 6 (4500 PSI).

FENCING:

POSTS AND RAILS SHALL CONFORM TO ASTM F-1083, SCHEDULE 80. FABRIC SHALL BE 6 GAUGE, 2" PVC COATED MESH CONFORMING TO 914.01.

ALL POSTS, BRACES, FITTINGS AND HARDWARE SHALL BE PVC COATED. COATED SHALL CONFORM TO 914.03 EXCEPT THAT NUTS, BOLTS AND WASHERS SHALL ALSO BE PVC COATED AND TOUCHED UP AFTER INSTALLATION.

ALL PLATES SHALL BE STEEL CONFORMING TO ASTM A 709 GRADE 36.

ANCHOR STUDS OR ANCHOR BOLTS SHALL CONFORM TO ASTM A 276, TYPE 430 OR TYPE 304 STAINLESS STEEL ANNEALED, HOT-FINISHED, ULTIMATE STRENGTH 70000 PSI MIN., 20% MIN. ELONGATION. THREADS MAY BE ROLLED OR CUT.

EPOXY GROUT FOR ANCHOR STUDS IN CORED HOLES SHALL CONFORM TO 902.11(d).

PVC COLOR FOR ALL ELEMENTS OF FENCE SHALL BE BLACK UNLESS OTHERWISE NOTED.

REINFORCING STEEL:

REINFORCING STEEL SHALL CONFORM TO A 615, GRADE 60. ALL SPLICES, NOT SHOWN, SHALL BE LAPPED AS PER BAR LAP CHARTS. MINIMUM COVER FOR ANY BAR SHALL BE 2" UNLESS OTERWISE NOTED, WITH THE EXCEPTION OF BARS AT THE BOTTOM AND SIDES OF ALL FOOTINGS WHICH SHALL HAVE 3" MINIMUM COVER

ONLY GRADE 60 CAN BE USED.

STRUCTURAL STEEL:

NEW STRUCTURAL STEEL SHALL CONFORM TO A 709, GRADE 50. INCLUDING THE ADDITIONAL REQUIREMENTS FOR CHARPY V-NOTCH TESTING OF M 270, FOR PRIMARY LOAD CARRYING MEMBERS. REFER TO SECTION 909.01.

DESIGN PARAMETERS:

EARTH PRESSURE CALCULATED BASED ON COULOMB THEORY.

ANGLE OF INTERNAL FRICTION:
30 DEGREES FOR GOOD AND POOR SOILS (AND ALL WALLS ON PILE FOOTINGS)

FOUNDATION PREPERATION:

IF UNSUITABLE FOUNDATION MATERIAL IS ENCOUNTERED AT THE PROPOSED FOUNDATION BEARING ELEVATION, IT SHALL BE UNDERCUT A MINIMUM OF 2 FEET AND REPLACED WITH GAB.

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ST-01

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

GENERAL NOTES

60% PLANS

MAY 2020

SCALE N.T.S. DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AR/ TAD
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COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. ST-01 1 OF 5 SHEET NO. 32 OF 73

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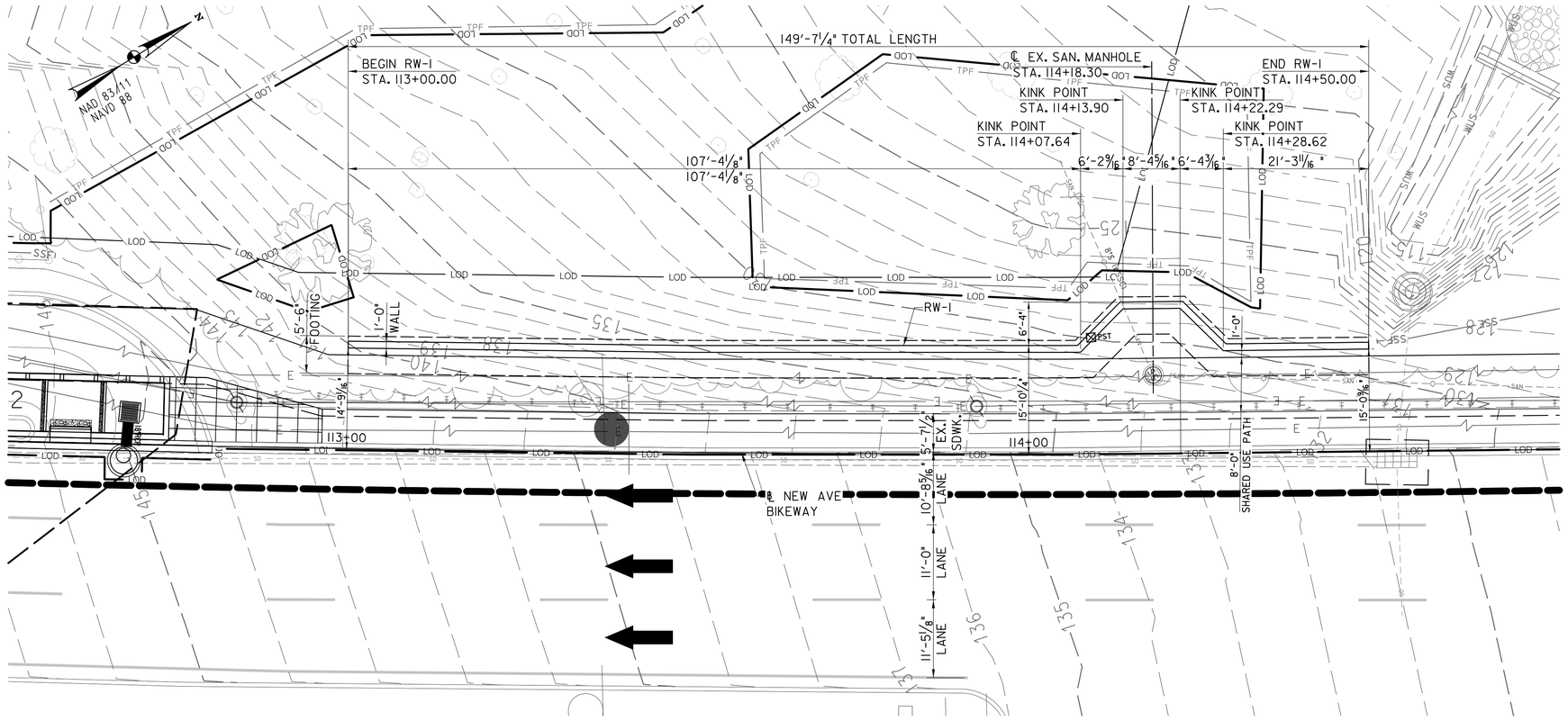
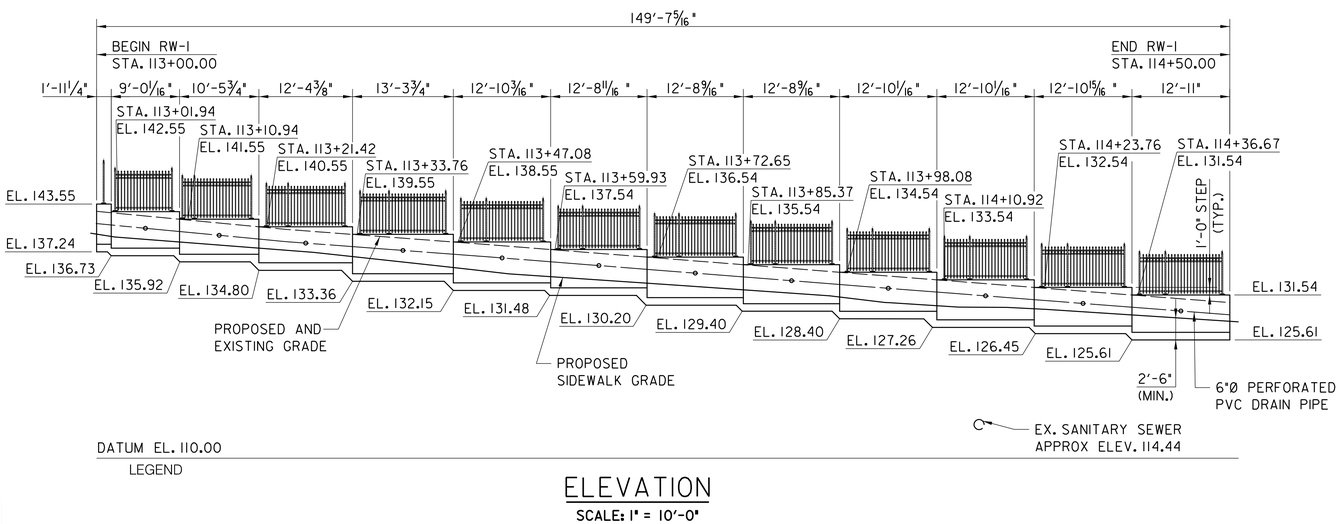


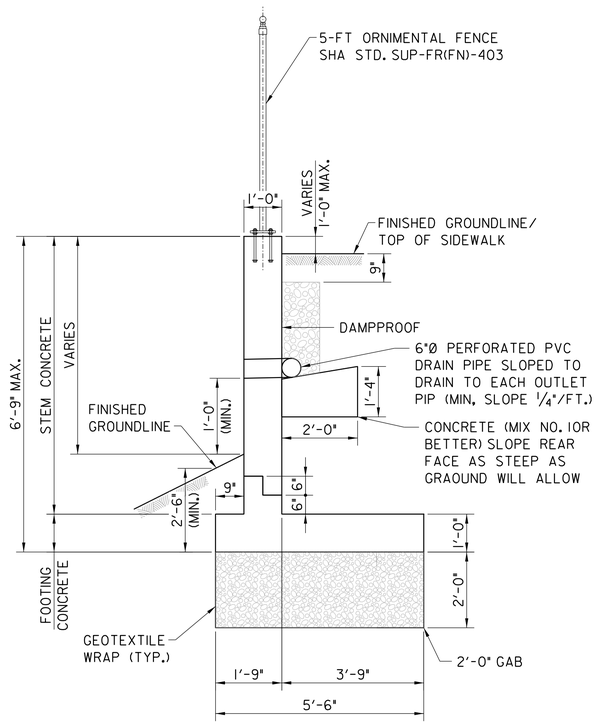
PLAN

SCALE: 1" = 10'-0"



ELEVATION

SCALE: 1" = 10'-0"



TYPICAL SECTION

SCALE: 1/2" = 1'-0"

10' 0 10' 20'
SCALE: 1" = 10'

ST-02

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PLAN AND ELEVATION RW-1

SCALE AS SHOWN DATE MAY 2020 CONTRACT NO. T.B.D.

60% PLANS

MAY 2020

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COUNTY MONTGOMERY
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DRAWING NO. ST-02 2 OF 5

SHEET NO. 33 OF 73

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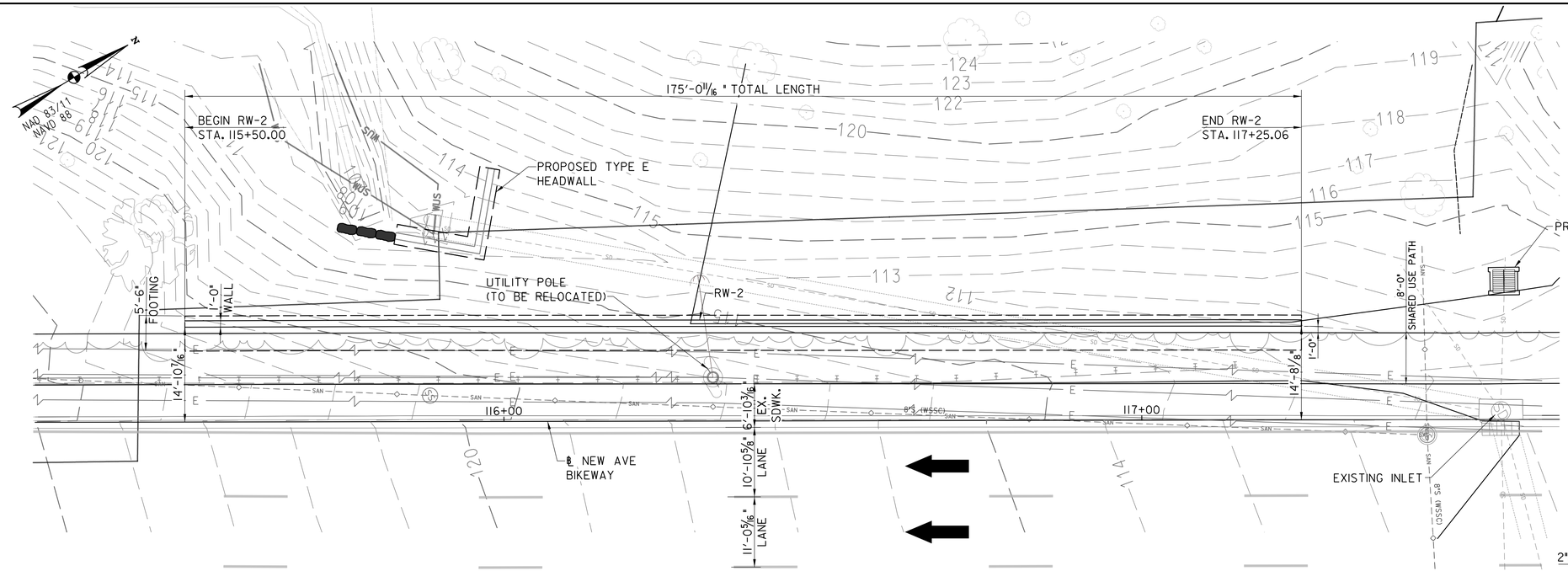
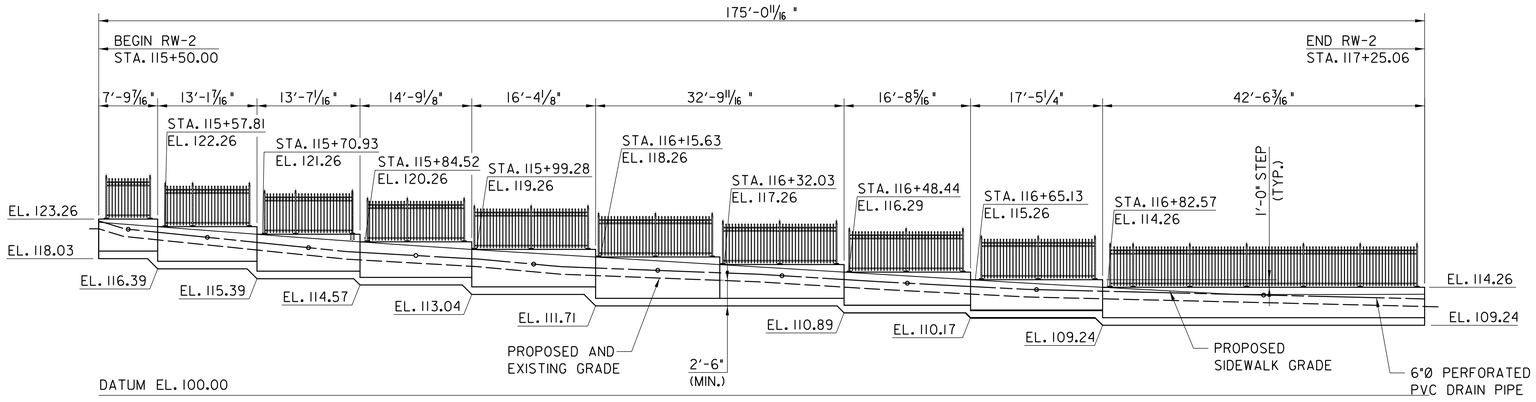


PLAN

SCALE: 1" = 10'-0"



ELEVATION

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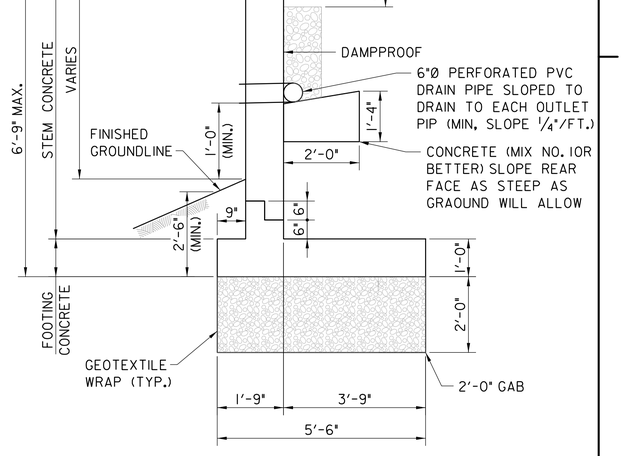

TYPICAL SECTION

SCALE: 1/2" = 1'-0"

ST-03

LEGEND

10' 0 10' 20'

SCALE: 1" = 10'

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CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PLAN AND ELEVATION RW-2

60% PLANS

MAY 2020

SCALE AS SHOWN DATE MAY 2020 CONTRACT NO. T.B.D.

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COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. ST-03 3 OF 5 SHEET NO. 34 OF 73

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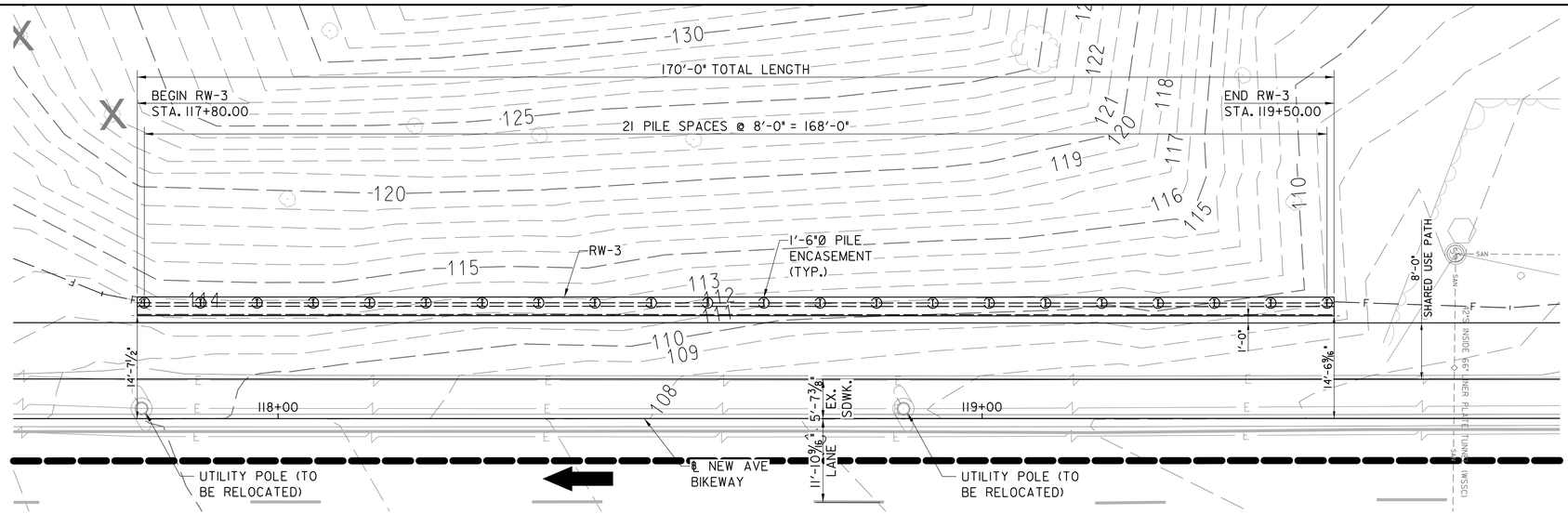

PLAN

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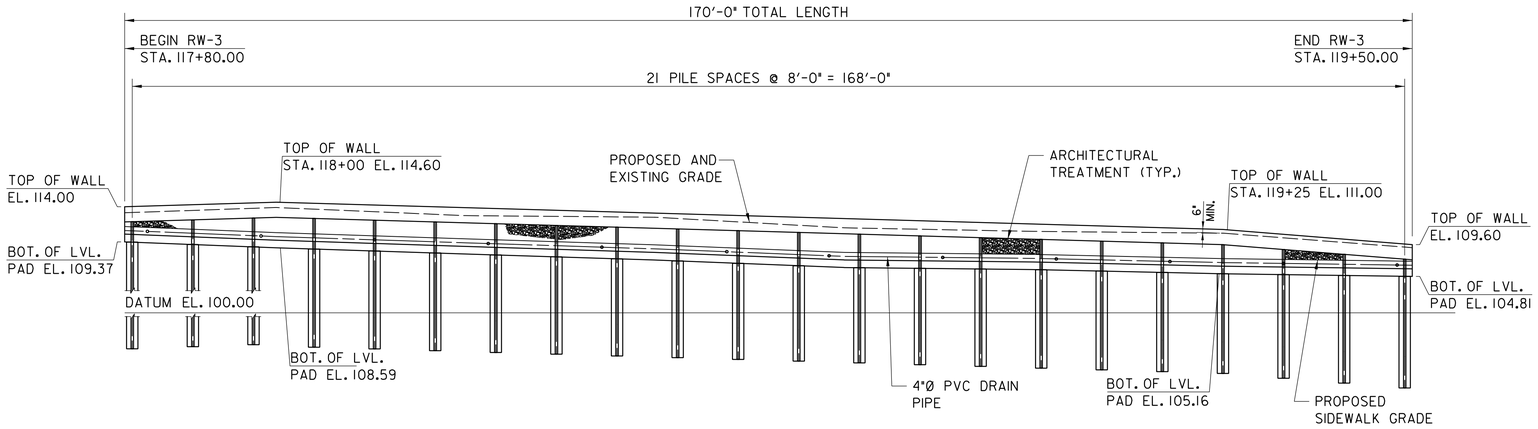

ELEVATION

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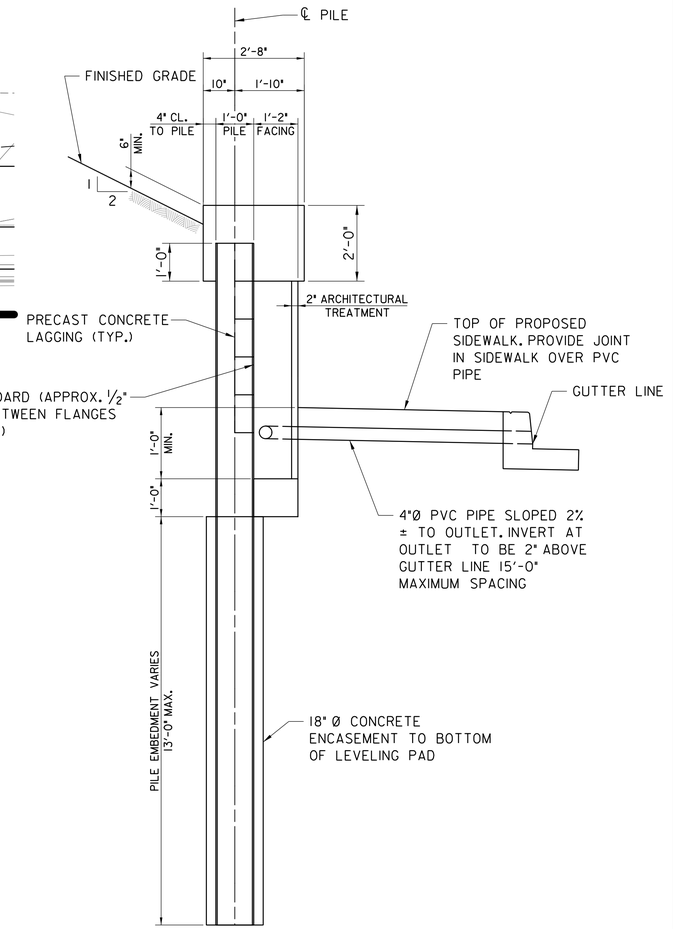

TYPICAL SECTION

SCALE: ½" = 1'-0"

LEGEND

10' 0 10' 20'

SCALE: 1" = 10'

ST-04

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CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PLAN AND ELEVATION RW-3

SCALE AS SHOWN DATE MAY 2020 CONTRACT NO. T.B.D.

60% PLANS

MAY 2020

DESIGNED BY AR/ TAD
DRAWN BY TR
CHECKED BY PCB
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. ST-04 4 OF 5 SHEET NO. 35 OF 73

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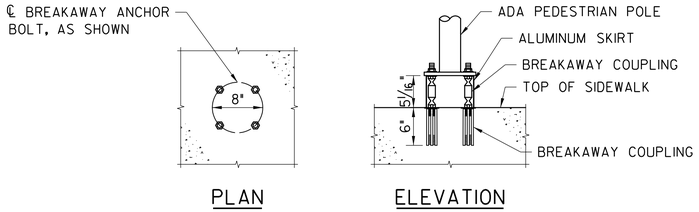
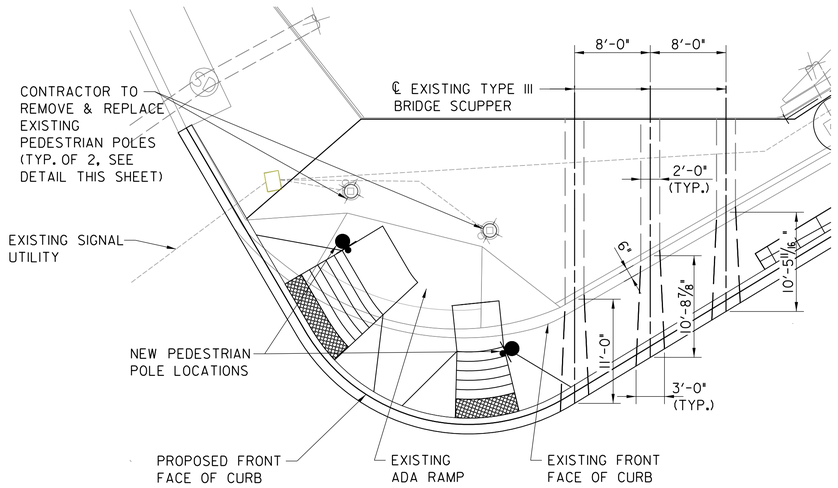


PLAN ELEVATION

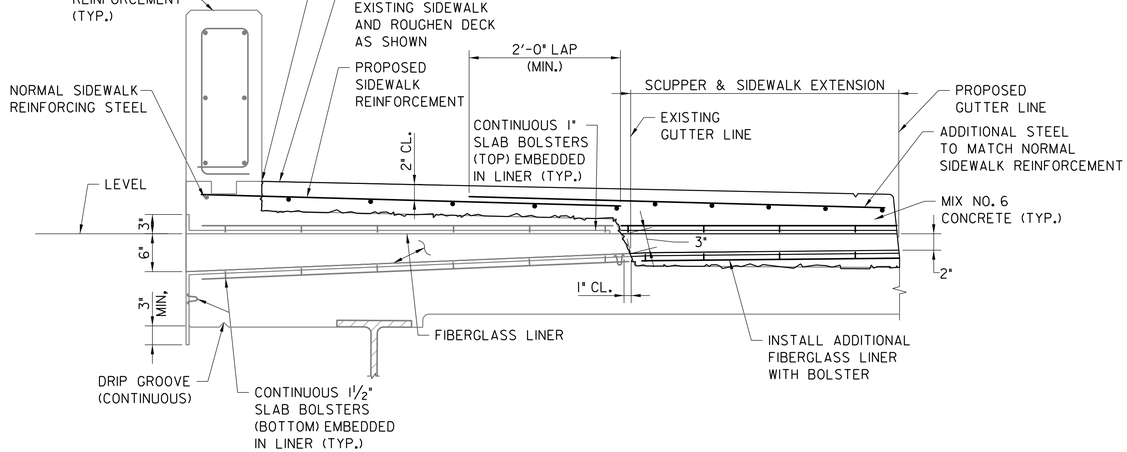
EXISTING & PROPOSED PEDESTRIAN POLE

SCALE: 1" = 1'-0"



PLAN - SCUPPER EXTENSION

SCALE: 1/8" = 1'-0"



SECTION - SCUPPER EXTENSION

SCALE: 1" = 1'-0"

ST-05

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

MISCELLANEOUS DETAILS

60% PLANS

MAY 2020

SCALE AS SHOWN DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AR/ TAD
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CHECKED BY PCB
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. ST-05 5 OF 5 SHEET NO. 36 OF 73

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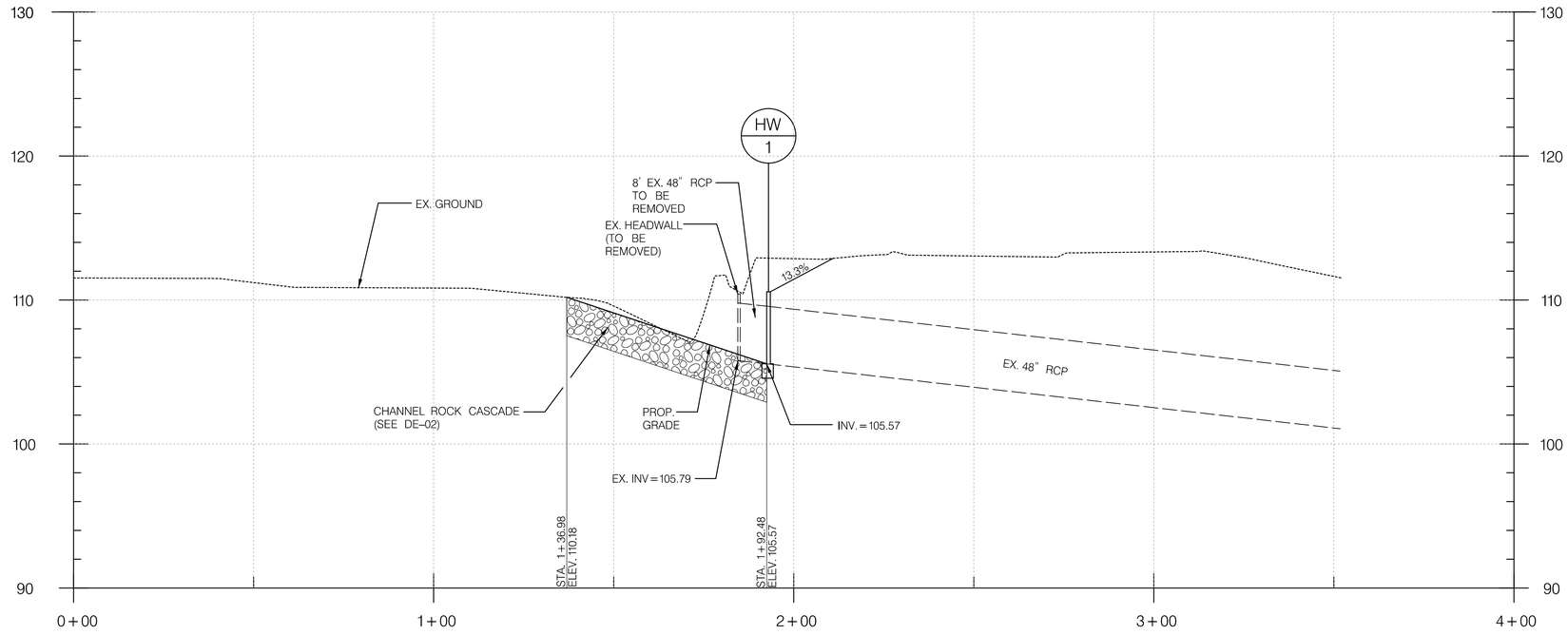
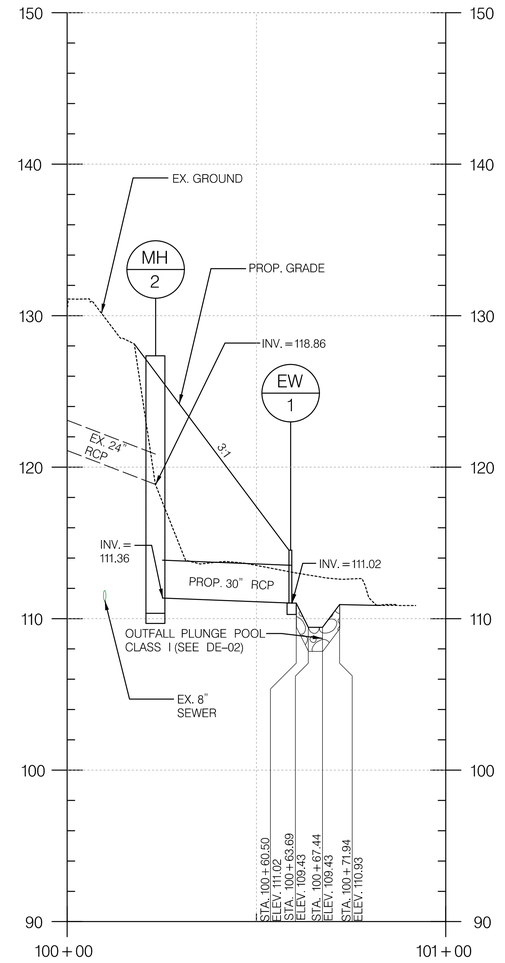


NEW AVE BIKEWAY CHANNEL PROFILE
MD 650 (NEW HAMPSHIRE AVENUE)

SCALE: 1" = 20' HORZ.
1" = 5' VERT.



NEW AVE BIKEWAY OUTFALL PROFILE
MD 650 (NEW HAMPSHIRE AVENUE)

SCALE: 1" = 20' HORZ.
1" = 5' VERT.

STRUCTURE TABLE

ID	TYPE	SIZE	TOP ELEVATION	INVERT ELEVATION	ADDITIONAL DEPTH	CENTROID LOCATION
MH-2	MDSHA PRECAST MANHOLE - MD 384.03	60"	127.35	110.35	11'	477763.6700 N, 1314779.8152 E
EW-1	MDSHA TYPE C ENDWALL - MD 354.01	30"	114.52	111.02	N/A	477793.8736 N, 1314761.3573 E
HW-1	MDSHA TYPE E ENDWALL - MD 356.01	48"	110.57	105.57	N/A	477884.6783 N, 1314843.7179 E

20' 0 20' 40'
HORIZONTAL SCALE: 1" = 20'

5' 0 5' 10'
VERTICAL SCALE: 1" = 5'

LEGEND

EXISTING GROUND

PROPOSED GROUND

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DE-01

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STREAM & OUTFALL IMPROVEMENT DETAILS

60% PLANS

MAY 2020

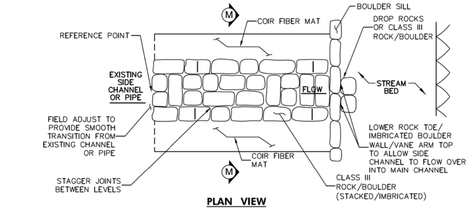
SCALE AS SHOWN DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY JM / ES
DRAWN BY JB
CHECKED BY DA / JC
F.A.P. NO. T.B.D.

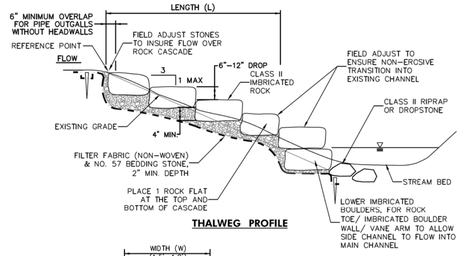
COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DE-01 1 OF 2 SHEET NO. 37 OF 73

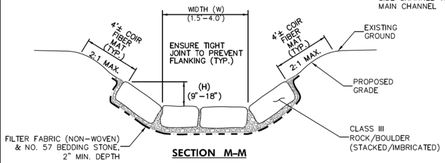
PLOTTED: 5/1/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\Stream Restoration\Plans\Details\pDT-0001_NewAveBike.dgn



PLAN VIEW



THALWEG PROFILE



SECTION M-M

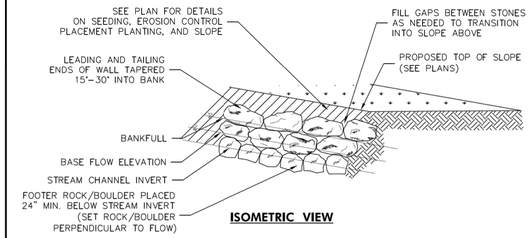
SIDE CHANNEL ROCK CASCADE TABLE										
STR. #	STA.	OFFSET	TOP ELEV.	L	H	W	D	ROCK MIN. DIMENSIONS		
								LENGTH (L)	HEIGHT (H)	WIDTH (W)
	1+36.98	N/A	110.18	55.5'	18"	4'	18"			

SIDE CHANNEL ROCK CASCADE

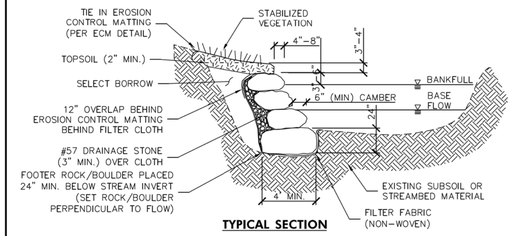
The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No. 612
MAY 2015

P:\standards\WRE\MNCPPC\Stream Details\612-Side Channel Rock Cascade Detail.dgn



ISOMETRIC VIEW



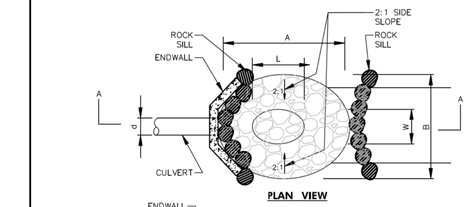
TYPICAL SECTION

IMPRICATED RIPRAP WALL (SHEET 1 OF 2)

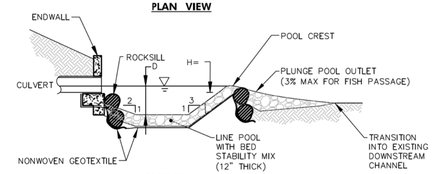
The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No. 614.1
MAY 2015

P:\standards\WRE\MNCPPC\Stream Details\614-Imbricated Riprap Wall Detail (2shts).dgn



PLAN VIEW



SECTION A-A

PLUNGE POOL SIZING CHART							
SIZE VARIABLE:	d	A	B	L	W	D	H
DESCRIPTION:	CULVERT WIDTH	POOL TOP LENGTH	POOL TOP WIDTH	POOL BOTTOM LENGTH	POOL BOTTOM WIDTH	POOL DEPTH	POOL CREST HEIGHT (ABOVE CULVERT INVERT)
SIZING GUIDE:	30"	11.4'	12.5'	3.75'	5'	1.5'	0'

CONSTRUCTION SPECIFICATIONS

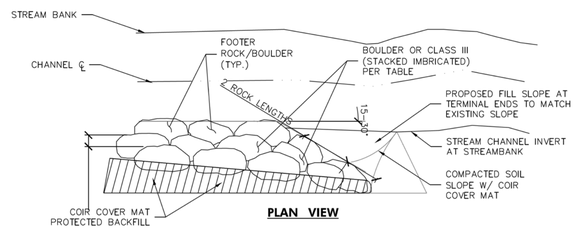
1. FIELD ADJUST PLUNGE POOL DIMENSIONS WITH COORDINATION WITH PARKS TO MINIMIZE NATURAL RESOURCE IMPACTS.
2. ADJUST THE PLUNGE POOL OUTLET TO ENSURE STABLE TRANSITION AND FISH PASSAGE THROUGH EXISTING CHANNEL.
3. STONE SHOULD NOT EXTEND ABOVE MORE THAN 2/3 CULVERT HEIGHT.
4. ALL STONE ABOVE BACKFILL ELEVATION SHALL BE BACKFILLED WITH TOP SOIL AND VEGETATED.

IN-STREAM CULVERT OUTFALL PLUNGE POOL

The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No. 629
MAY 2015

P:\standards\WRE\MNCPPC\Stream Details\629-In-Stream Culvert Outfall Detail.dgn



PLAN VIEW

IMBRICATED RIPRAP WALL (IRR) TABLE										
STR. #	STA.	OFFSET	TOP ELEV.	BOTTOM ELEV.	TOP ROCKS MIN. DIMENSIONS			FOOTER ROCK MIN. DIMENSIONS		
					LENGTH (L)	HEIGHT (H)	WIDTH (W)	LENGTH (L)	HEIGHT (H)	WIDTH (W)
	1+73.90	N/A	110.57	VARIES	24"-36"	16"-20"	18"-24"	24"-30"	24"-30"	36"-48"

IMPRICATED RIPRAP WALL (SHEET 2 OF 2)

The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No. 614.2
MAY 2015

P:\standards\WRE\MNCPPC\Stream Details\614-Imbricated Riprap Wall Detail (2sht).dgn

DE-02

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STREAM & OUTFALL IMPROVEMENT DETAILS

60% PLANS
MAY 2020

SCALE NOT TO SCALE DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY JM / ES
DRAWN BY JB
CHECKED BY DA / JC
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. DE-02 2 OF 2 SHEET NO. 38 OF 73

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Engineers | Construction Managers | Planners | Scientists
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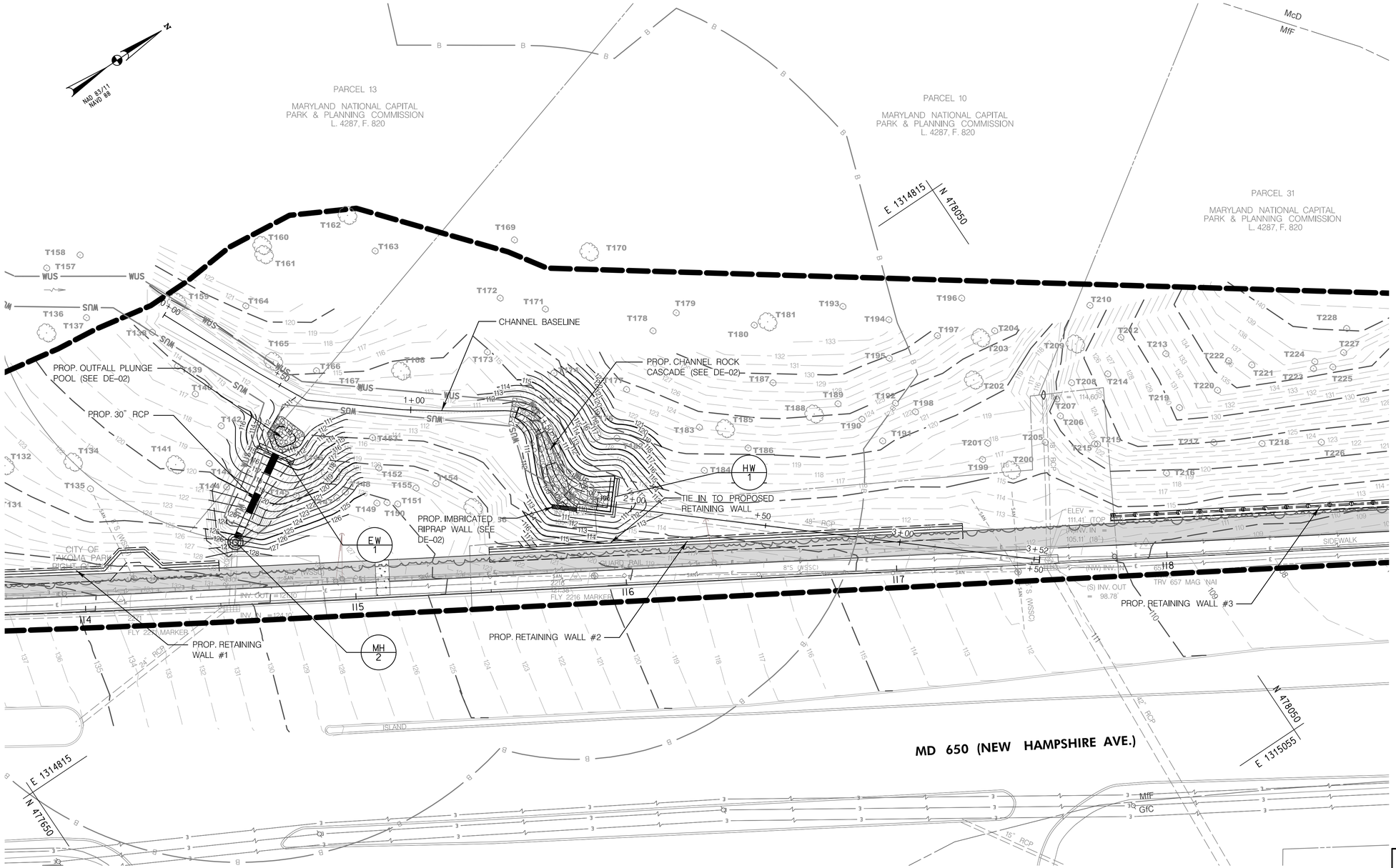
Responsive People | Creative Solutions

BY: jbach -

PLOTTED: 5/1/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\Stream Restoration\Plans\Details\pDT-0002_NewAveBike.dgn



SR-01

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

STREAM & OUTFALL IMPROVEMENT PLAN

SCALE 1"=20' DATE MAY 2020 CONTRACT NO. T.B.D.

60% PLANS

MAY 2020

DESIGNED BY JM / ES
DRAWN BY JB
CHECKED BY DA / JC
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. SR-01 1 OF 1 SHEET NO. 39 OF 73

20' 0 20' 40'
SCALE: 1" = 20'

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www.rkk.com
Responsive People | Creative Solutions

BY: jbach -

PLOTTED: 5/7/2020
FILE: \\balsrv08\v2016\2016\16217_NewAveBike\CADD\Stream Restoration\Plans\Plans\pSR-0001_NewAveBike-Plan.dgn

STANDARD EROSION AND SEDIMENT CONTROL NOTES

1. THE PERMITTEE SHALL NOTIFY THE DEPARTMENT OF PERMITTING SERVICES (DPS) FORTY EIGHT (48) HOURS BEFORE COMMENCING ANY LAND DISTURBING ACTIVITY AND, UNLESS WAIVED BY THE DEPARTMENT, SHALL BE REQUIRED TO HOLD A PRE-CONSTRUCTION MEETING BETWEEN THEM OR THEIR REPRESENTATIVE, THEIR ENGINEER AND AN AUTHORIZED REPRESENTATIVE OF THE DEPARTMENT.

2. THE PERMITTEE MUST OBTAIN INSPECTION AND APPROVAL BY DPS AT THE FOLLOWING POINTS:
   2.1. AT THE REQUIRED PRE-CONSTRUCTION MEETING.
   2.2. FOLLOWING INSTALLATION OF SEDIMENT CONTROL MEASURES AND PRIOR TO ANY OTHER LAND DISTURBING ACTIVITY.
   2.3. DURING THE INSTALLATION OF A SEDIMENT BASIN OR STORMWATER MANAGEMENT STRUCTURE AT THE REQUIRED INSPECTION POINTS (SEE INSPECTION CHECKLIST ON PLAN). NOTIFICATION PRIOR TO COMMENCING CONSTRUCTION IS MANDATORY.
   2.4. PRIOR TO REMOVAL OR MODIFICATION OF ANY SEDIMENT CONTROL STRUCTURE(S).
   2.5. PRIOR TO FINAL ACCEPTANCE.

3. THE PERMITTEE SHALL CONSTRUCT ALL EROSION AND SEDIMENT CONTROL MEASURES PER THE APPROVED PLAN AND CONSTRUCTION SEQUENCE, SHALL HAVE THEM INSPECTED AND APPROVED BY THE DEPARTMENT PRIOR TO BEGINNING ANY OTHER LAND DISTURBANCES, SHALL ENSURE THAT ALL RUNOFF FROM DISTURBED AREAS IS DIRECTED TO THE SEDIMENT CONTROL DEVICES, AND SHALL NOT REMOVE ANY EROSION OR SEDIMENT CONTROL MEASURE WITHOUT PRIOR PERMISSION FROM THE DEPARTMENT.

4. THE PERMITTEE SHALL PROTECT ALL POINTS OF CONSTRUCTION INGRESS AND EGRESS TO PREVENT THE DEPOSITION OF MATERIALS ONTO TRAVERSED PUBLIC THOROUGHFARE(S). ALL MATERIALS DEPOSITED ONTO PUBLIC THOROUGHFARE(S) SHALL BE REMOVED IMMEDIATELY.

5. THE PERMITTEE SHALL INSPECT PERIODICALLY AND MAINTAIN CONTINUOUSLY IN EFFECTIVE OPERATING CONDITION, ALL EROSION AND SEDIMENT CONTROL MEASURES UNTIL SUCH TIME AS THEY ARE REMOVED WITH PRIOR PERMISSION FROM THE DEPARTMENT. THE PERMITTEE IS RESPONSIBLE FOR IMMEDIATELY REPAIRING OR REPLACING ANY SEDIMENT CONTROL MEASURES WHICH HAVE BEEN DAMAGED OR REMOVED BY THE PERMITTEE OR ANY OTHER PERSON.

6. FOLLOWING INITIAL SOIL DISTURBANCE OR RE-DISTURBANCE, PERMANENT OR TEMPORARY STABILIZATION MUST BE COMPLETED WITHIN:
   6.1. THREE (3) CALENDAR DAYS AS TO THE SURFACE OF ALL PERIMETER DIKES, SWALES, DITCHES, PERIMETER SLOPES AND ALL SLOPES STEEPER THAN 3 HORIZONTAL TO 1 VERTICAL (3:1); AND
   6.2. SEVEN (7) CALENDAR DAYS AS TO ALL OTHER DISTURBED OR GRADED AREAS ON THE PROJECT SITE NOT UNDER ACTIVE GRADING.

   ALL OTHER DISTURBED AREA OUTSIDE OF THE PERIMETER SEDIMENT CONTROL SYSTEM MUST BE MINIMIZED AND STABILIZED IMMEDIATELY. MAINTENANCE MUST BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION.

7. THE PERMITTEE SHALL APPLY SOD, SEED, AND ANCHORED STRAW MULCH, OR OTHER APPROVED STABILIZATION MEASURES TO ALL DISTURBED AREAS WITHIN SEVEN (7) CALENDAR DAYS AFTER STRIPPING AND GRADING ACTIVITIES HAVE CEASED ON THAT AREA. MAINTENANCE SHALL BE PERFORMED AS NECESSARY TO ENSURE CONTINUED STABILIZATION. ACTIVE CONSTRUCTION AREAS SUCH AS BORROW OR STOCKPILE AREAS, ROADWAY IMPROVEMENTS, AND AREAS WITHIN FIFTY (50) FEET OF A BUILDING UNDER CONSTRUCTION MAY BE EXEMPT FROM THIS REQUIREMENT, PROVIDED THAT EROSION AND SEDIMENT CONTROL MEASURES ARE INSTALLED AND MAINTAINED TO PROTECT THOSE AREAS.

8. PRIOR TO REMOVAL OF SEDIMENT CONTROL MEASURES, THE PERMITEE SHALL STABILIZE ALL CONTRIBUTORY DISTURBED AREAS WITH REQUIRED SOIL AMENDMENTS AND TOPSOIL, USING SOD OR AN APPROVED PERMANENT SEED MIXTURE AND AN APPROVED ANCHORED MULCH. WOOD FIBER MULCH MAY ONLY BE USED IN SEEDING SEASON WHEN THE SLOPE DOES NOT EXCEED 10% AND GRADING HAS BEEN DONE TO PROMOTE SHEET FLOW DRAINAGE. AREAS BROUGHT TO FINISHED GRADE DURING THE SEEDING SEASON SHALL BE PERMANENTLY STABILIZED WITHIN SEVEN (7) CALENDAR DAYS OF ESTABLISHMENT. WHEN PROPERTY IS BROUGHT TO FINISHED GRADE DURING THE MONTHS OF NOVEMBER THROUGH FEBRUARY, AND PERMANENT STABILIZATION IS FOUND TO BE IMPRACTICAL, AN APPROVED TEMPORARY SEED AND STRAW ANCHORED MULCH SHALL BE APPLIED TO DISTURBED AREAS. THE FINAL PERMANENT STABILIZATION OF SUCH PROPERTY SHALL BE COMPLETED PRIOR TO THE FOLLOWING APRIL 15.

9. THE SITE PERMIT, WORK, MATERIALS, APPROVED SC/SM PLANS, AND TEST REPORTS SHALL BE AVAILABLE AT THE SITE FOR INSPECTION BY DULY AUTHORIZED OFFICIALS OF MONTGOMERY COUNTY.

10. SURFACE DRAINAGE FLOWS OVER UNSTABILIZED CUT AND FILL SLOPES SHALL BE CONTROLLED BY EITHER PREVENTING DRAINAGE FLOWS FROM TRAVERSING THE SLOPES OR BY INSTALLING MECHANICAL DEVICES TO LOWER THE WATER DOWN SLOPE WITHOUT CAUSING EROSION. DIKES SHALL BE INSTALLED AND MAINTAINED AT THE TOP OF CUT OR FILL SLOPES UNTIL THE SLOPE AND DRAINAGE AREA TO IT ARE FULLY STABILIZED, AT WHICH TIME THEY MUST BE REMOVED AND FINAL GRADING DONE TO PROMOTE SHEET FLOW DRAINAGE. MECHANICAL DEVICES MUST BE PROVIDED AT POINTS OF CONCENTRATED FLOW WHERE EROSION IS LIKELY TO OCCUR.

11. PERMANENT SWALES OR OTHER POINTS OF CONCENTRATED WATER FLOW SHALL BE STABILIZED WITHIN THREE (3) CALENDAR DAYS OF ESTABLISHMENT WITH SOD OR SEED WITH AN APPROVED EROSION CONTROL MATTING OR BY OTHER APPROVED STABILIZATION MEASURES.

12. SEDIMENT CONTROL DEVICES SHALL BE REMOVED, WITH PERMISSION OF THE DEPARTMENT, WITHIN THIRTY (30) CALENDAR DAYS FOLLOWING ESTABLISHMENT OF PERMANENT STABILIZATION IN ALL CONTRIBUTORY DRAINAGE AREAS. STORMWATER MANAGEMENT STRUCTURES USED TEMPORARILY FOR SEDIMENT CONTROL SHALL BE CONVERTED TO THE PERMANENT CONFIGURATION WITHIN THIS TIME PERIOD AS WELL.

13. NO PERMANENT CUT OF FILL SLOPE WITH A GRADIENT STEEPER THAN 3:1 WILL BE PERMITTED IN LAWN MAINTENANCE AREAS OR ON RESIDENTIAL LOTS. A SLOPE GRADIENT OF 2:1 WILL BE PERMITTED IN NON-MAINTENANCE AREAS PROVIDED THAT THOSE AREAS ARE INDICATED ON THE EROSION AND SEDIMENT CONTROL PLAN WITH A LOW-MAINTENANCE GROUND COVER SPECIFIED FOR PERMANENT STABILIZATION. SLOPE GRADIENT STEEPER THAN 2:1 WILL NOT BE PERMITTED WITH VEGETATIVE STABILIZATION.

14. THE PERMITTEE SHALL INSTALL A SPLASHBLOCK AT THE BOTTOM OF EACH DOWNSPOUT UNLESS THE DOWNSPOUT IS CONNECTED BY A DRAIN LINE TO AN ACCEPTABLE OUTLET.

15. FOR FINISHED GRADING, THE PERMITTEE SHALL PROVIDE ADEQUATE GRADIENTS SO AS TO PREVENT WATER FROM STANDING ON THE SURFACE OF LAWNS MORE THAN TWENTY-FOUR (24) HOURS AFTER THEN END OF A RAINFALL, EXCEPT IN DESIGNATED DRAINAGE COURSES AND SWALE FLOW AREAS, WHICH MAY DRAIN AS LONG AS FORTY-EIGHT (48) HOURS AFTER THE END OF A RAINFALL.

16. SEDIMENT TRAPS OR BASINS ARE NOT PERMITTED WITHIN 20 FEET OF A BUILDING WHICH IS EXISTING OR UNDER CONSTRUCTION. NO BUILDING MAY BE CONSTRUCTED WITHIN 20 FEET OF A SEDIMENT TRAP OR BASIN.

17. ALL INLETS IN NON-SUMP AREAS SHALL HAVE ASPHALT BERMS INSTALLED AT THE TIME OF BASE PAVING ESTABLISHMENT.

18. THE SEDIMENT CONTROL INSPECTOR HAS THE OPTION OF REQUIRING ADDITIONAL SEDIMENT CONTROL MEASURES, AS DEEMED NECESSARY.

19. ALL TRAP ELEVATIONS ARE RELATIVE TO THE OUTLET ELEVATION, WHICH MUST BE ON EXISTING UNDISTURBED GROUND.

20. VEGETATIVE STABILIZATION SHALL BE PERFORMED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL.

21. SEDIMENT TRAP(S)/BASIN(S) SHALL BE CLEANED OUT AND RESTORED TO THE ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO THE POINT OF ONE-HALF (1/2) THE WET STORAGE DEPTH OF THE TRAP/BASIN (1/4 THE WET STORAGE DEPTH FOR ST-III) OR WHEN REQUIRED BY THE SEDIMENT CONTROL INSPECTOR.

22. SEDIMENT REMOVED FROM TRAPS/BASINS SHALL BE PLACED AND STABILIZED IN APPROVED AREAS, BUT NOT WITHIN A 100-YEAR FLOODPLAIN.

23. ALL SEDIMENT BASINS AND TRAPS MUST BE SURROUNDED WITH A WELDED WIRE SAFETY FENCE. THE FENCE MUST BE AT LEAST 42 INCHES HIGH, HAVE POSTS SPACED NO FARTHER APART THAN 8 FEET, HAVE MESH OPENINGS NO GREATER THAN TWO INCHES IN WIDTH AND FOUR INCHES IN HEIGHT, WITH A MINIMUM OF 14 GAUGE WIRE. SAFETY FENCE MUST BE MAINTAINED IN GOOD CONDITION AT ALL TIMES.

24. NO EXCAVATION IN THE AREAS OF EXISTING UTILITIES IS PERMITTED UNLESS THEIR LOCATION HAS BEEN DETERMINED. CALL "MISS UTILITY" AT 1-800-257-7777, 48 HOURS PRIOR TO THE START OF WORK.

25. OFF SITE SPOIL OR BORROW AREAS MUST HAVE PRIOR APPROVAL BY DPS.

26. SEDIMENT TRAP/BASIN DEWATERING FOR CLEANOUT REPAIR MAY ONLY BE DONE WITH THE DPS INSPECTOR'S PERMISSION. THE INSPECTOR MUST APPROVE THE DEWATERING METHOD FOR EACH APPLICATION. THE FOLLOWING METHODS MAY BE CONSIDERED:
   26.1. PUMP DISCHARGE MAY BE DIRECTED TO ANOTHER ON-SITE SEDIMENT TRAP OR BASIN, PROVIDED IT IS OF SUFFICIENT VOLUME AND THE PUMP INTAKE IS FLOATED TO PREVENT AGITATION OR SUCTION OF DEPOSITED SEDIMENTS; OR
   26.2. THE PUMP INTAKE MAY UTILIZE A REMOVABLE PUMPING STATION AND MUST DISCHARGE INTO AN UNDISTURBED AREA THROUGH A NON-EROSIVE OUTLET; OR
   26.3. THE PUMP INTAKE MAY BE FLOATED AND DISCHARGE INTO A DIRT BAG (12 OZ. NON-WOVEN FABRIC), OR APPROVED EQUIVALENT, LOCATED IN AN UNDISTURBED BUFFER AREA.

   REMEMBER: DEWATERING OPERATION AND METHOD MUST HAVE PRIOR APPROVAL BY THE DPS INSPECTOR.

27. THE PERMITTEE MUST NOTIFY THE DEPARTMENT OF ALL UTILITY CONSTRUCTION ACTIVITIES WITHIN THE PERMITTED LIMITS OF DISTURBANCE PRIOR TO THE COMMENCEMENT OF THOSE ACTIVITIES.

28. TOPSOIL MUST BE APPLIED TO ALL PERVIOUS AREA WITHIN THE LIMITS OF DISTURBANCE PRIOR TO PERMANENT STABILIZATION IN ACCORDANCE WITH MDE "STANDARDS AND SPECIFICATIONS FOR SOIL PREPARATION, TOPSOILING, AND SOIL AMENDMENTS."

LIST OF PREDOMINANT SOIL TYPES

SYMBOLS	DESCRIPTION	HSG
Ch	CODORUS-HATSBORO-URBAN LAND COMPLEX, FREQUENTLY FLOODED	D
GfB	GLENELG-WHEATON-URBAN LAND COMPLEX, 0-8% SLOPE	B
GfC	GLENELG-WHEATON-URBAN LAND COMPLEX, 8-15% SLOPE	B
MtF	MANOR-BRINKLOW COMPLEX, 25 TO 65 PERCENT SLOPES, VERY ROCKY	B
RuB	RUSSETT-CHRISTIANA-URBAN LAND COMPLEX, 0 TO 5 PERCENT SLOPE	D
Un	URBAN LAND	D

OWNER'S/DEVELOPER'S CERTIFICATION

I/WE HEREBY CERTIFY THAT ALL CLEARING, GRADING, CONSTRUCTION, AND/OR DEVELOPMENT WILL BE DONE PURSUANT TO THIS PLAN AND THAT ANY RESPONSIBLE PERSONNEL INVOLVED IN THE CONSTRUCTION PROJECT WILL HAVE A CERTIFICATE OF ATTENDANCE AT A DEPARTMENT OF NATURAL RESOURCES APPROVED TRAINING PROGRAM FOR THE CONTROL OF SEDIMENT AND EROSION BEFORE BEGINNING THE PROJECT.

SIGNATURE _____ DATE _____

JAMEE ERNST — PLANNER, CITY OF TAKOMA PARK
(301) 891-7213

PRINTED NAME AND TITLE

DESIGN CERTIFICATION

I HEREBY CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE "2011 MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL," MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICES EXECUTIVE REGULATIONS 5-90, 7-02AM AND 36-90, AND MONTGOMERY COUNTY DEPARTMENT OF PUBLIC WORKS AND TRANSPORTATION "STORM DRAIN DESIGN CRITERIA" DATED AUGUST 1988.

SIGNATURE _____ DATE _____

SEYED SADAAT, P.E. — DIRECTOR, WATER RESOURCES

PRINTED NAME AND TITLE

CERTIFICATION OF THE QUANTITIES

I HEREBY CERTIFY THAT THE ESTIMATED TOTAL AMOUNT OF EXCAVATION AND FILL AS SHOWN ON THESE PLANS HAS BEEN COMPUTED TO 1,800 CUBIC YARDS OF EXCAVATION, 30 CUBIC YARDS OF FILL AND THE TOTAL AREA TO BE DISTURBED AS SHOWN ON THE PLANS HAS BEEN DETERMINED TO BE 64,048 SQUARE FEET.

SIGNATURE _____ DATE _____

SEYED SADAAT, P.E. — DIRECTOR, WATER RESOURCES

PRINTED NAME AND TITLE

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BY: bbaral -

EN-01

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL NOTES

SCALE _____ DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

NO.	REVISION	DATE	BY

DRAWING NO. EN – 01 OF 4

SHEET NO. 40 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pES-N001_NewAveBike.dgn

SEQUENCE OF CONSTRUCTION:

1. PRIOR TO CLEARING TREES, INSTALLING SEDIMENT CONTROL MEASURES, OR GRADING, A PRECONSTRUCTION MEETING MUST BE CONDUCTED ON-SITE WITH THE MONTGOMERY COUNTY DEPARTMENT OF PERMITTING SERVICE (MCDPS) SEDIMENT CONTOL INSPECTOR (240) 777-0311 (48 HOURS NOTICE), THE MNCPPC (MARYLAND NATIONAL CAPITOL PARK AND PLANNING COMMISSION) PLANNING DEPARTMENT, PLANS ENFORCEMENT INSPECTOR (301) 495-4550 (48 HOURS NOTICE), THE OWNERS REPRESENTATIVE, AND THE SITE ENGINEER. IN ORDER FOR THE MEETING TO OCCUR, THE APPLICANT MUST PROVIDE ONE PAPER SET OF APPROVED SEDIMENT CONTROL PLANS AND APPROVED ROADSIDE TREE PROTECTION PLAN TO THE MCDPS SEDIMENT CONTROL INSPECTOR AT THE PRECONSTRUCTION MEETING. IF NO PLANS ARE PROVIDED, THE MEETING SHALL NOT OCCUR AND WILL NEED TO BE RESCHEDULED PRIOR TO COMMENCING ANY WORK.
2. LIMIT OF DISTURBANCE MUST BE FIELD MARKED PRIOR TO CLEARING OF TREES, INSTALLATION OF SEDIMENT CONTROL MEASURES, CONSTRUCTION, OR OTHER LAND DISTURBING ACTIVITIES.
3. NO WORK SHALL BE COMPLETED DURING A RAIN EVENT. NO DISTURBED AREA SHALL BE LEFT UNSTABILIZED OVERNIGHT UNLESS THE RUNOFF IS DIRECTED TO AN APPROVED SEDIMENT CONTROL DEVICE. ALL AREAS DESIGNATED AS SAME DAY SHALL BE STABILIZED AT THE END OF EACH WORK DAY.
4. ROOT PRUNE ALONG LOD AT DIRECTION OF MD LTE AND INSTALL ALL TREE PROTECTION FENCE PRIOR TO ANY WORK BEING PERFORMED.
5. THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MNCPPC INSPECTOR, CERTIFYING THAT THE LIMITS OF DISTURBANCE AND TREE PROTECTION MEASURES ARE CORRECTLY MARKED AND INSTALLED PRIOR TO COMMENCING ANY CLEARING.
6. WITH THE APPROVAL OF THE PROJECT ENGINEER AND THE MCDPC SEDIMENT CONTROL INSPECTOR, STEPS IN EACH STAGE MAY BE ADJUSTED AND/OR BE PERFORMED CONCURRENTLY.
7. THE NEED FOR AND LOCATION OF STABILIZED CONSTRUCTION ENTRANCES SHALL BE DISCUSSED AT THE PRECONSTRUCTION MEETING FOR ALL STAGES.
8. PUMP AROUNDS SHALL BE INSTALLED AND MAINTAINED AS ILLUSTRATED ON THE EROSION AND SEDIMENT CONTROL PLANS.
9. AT ALL TIMES DURING CONSTRUCTION ACTIVITIES, A SANDBAG DIVERSION (SBD) AND DEWATERING SYSTEM WITH FILTER BAG MUST BE PLACED AT THE MOST DOWNSTREAM END OF THE UNSTABILIZED WORK ZONE. SBD'S SHALL BE REMOVED, AND ALL DISTURBED AREAS MUST BE STABILIZED OR COVERED IN SSM DAILY PRIOR TO LEAVING THE SITE.
10. NO WORK IS TO BE DONE WITHIN THE STREAM CLOSURE PERIOD OF MARCH 1 TO JUNE 15, INCLUSIVE.
11. UNLESS NEW, ALL CONSTRUCTION MATS SHALL BE POWER WASHED PRIOR TO BEING BROUGHT ON SITE.
12. RELOCATE UTILITIES AS NEEDED PRIOR TO COMMENCING WORK.

PHASE 1A: AUBURN AVE TO DEVONSHIRE AVE (MD 650 STA. 102+00 105+50)

1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
3. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
4. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

PHASE 1B: DEVONSHIRE AVE TO LARCH AVE (STA. 105+50 111+15)

1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
3. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
4. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

PHASE 2A STREAM AND OUTFALL WORK

2A.1 OUTFALL GRADING AND CONSTRUCTION OF SCOUR HOLE

1. THE CONTRACTOR MAY CHOOSE TO COMPLETE PHASE 3A.1 PRIOR TO, AFTER, OR CONCURRENTLY WITH PHASE 2A.2.
2. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES. INSTALL SEDIMENT CONTROL DEVICES AND TEMPORARY ACCESS ROADS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS USING SAME DAY STABILIZATION.
3. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
4. INSTALL SBD-1, SBD-2, AND PUMP AROUND. INSTALL PIPE SLOPE DRAIN (PSD) AND VELOCITY DISSIPATOR FOR THE STORM DRAIN OUTFALL TO CONVEY BASEFLOW.
5. A REMOVABLE PUMP STATION (RPS) SHALL BE PLACED UPSTREAM OF SBD-2. ANY SEDIMENT LADEN WATER THAT DEPOSITS IN THE WORK AREA SHALL BE PUMPED OVER THE DIVERSION, THROUGH AN MDE APPROVED FILTERING DEVICE, AND DISCHARGED AT A DOWNSTREAM STABLE DISCHARGE POINT. THE RPS SHALL BE USED TO DEWATER THE WORK AREA PRIOR TO THE START OF EXCAVATION.
6. STARTING AT THE UPSTREAM END OF THE OUTFALL CHANNEL AND WORKING DOWNSTREAM, PERFORM PROPOSED GRADING, INSTALL MH-2 AND EW-1, AND CONSTRUCT THE PREFORMED SCOUR HOLE AS SHOWN ON THE PLANS. TEMPORARILY STABILIZE ALL DISTURBED AREAS AS WORK PROGRESSES.
7. AT THE END OF EACH WORK DAY, THE WORK AREA SHALL BE EITHER PERMANENTLY STABILIZED PER THE PLANS OR TEMPORARILY STABILIZED. REMOVE THE SBDs PRIOR TO LEAVING THE SITE OVERNIGHT AND/OR BEFORE RAINFALL EVENTS. UPON ARRIVING ON SITE IN THE MORNING OR AFTER A RAINFALL EVENT, SBDs SHALL BE REPLACED AND PUMP AROUND AND DEWATERING OPERATIONS COMMENCED.
8. FOLLOWING CONSTRUCTION, THE PROPOSED OUTFALL CHANNEL SHALL TIE BACK INTO THE EXISTING STREAM CHANNEL, AND THE WORK AREA SHALL BE PERMANENTLY STABILIZED.
9. CONTACT THE MCDPS INSPECTOR AND, ONCE PHASE 2A.1 IS APPROVED, REMOVE SBD-1, SBD-2, PUMP AROUND, PSD, RPS AND DEWATERING PUMP WITH FILTER BAG. THE SUPER SILT FENCE ALONG BOTH SCES AND ALONG THE ACCESS ROAD CLOSEST TO SCE-1 SHALL REMAIN IN PLACE DURING THE INSTALLATION OF THE NEARBY RETAINING WALL. PROCEED TO PHASE 2A.2.

2A.2 GRADING AND CONSTRUCTION (CHANNEL BASELINE STA. 1+24.50 TO STA. 2+11.84)

1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES. INSTALL SEDIMENT CONTROL DEVICES AND TEMPORARY ACCESS ROADS SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS USING SAME DAY STABILIZATION.
2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
3. INSTALL SBD-3, SBD-4, AND PUMP AROUND.
4. A RPS SHALL BE PLACED UPSTREAM OF SBD-4. ANY SEDIMENT LADEN WATER FROM THE ACTIVE WORK AREA SHALL BE PUMPED OVER THE DIVERSION, THROUGH AN MDE APPROVED FILTERING DEVICE, AND DISCHARGED AT A DOWNSTREAM STABLE DISCHARGE POINT. THE RPS SHALL BE USED TO DEWATER THE WORK AREA PRIOR TO THE START OF EXCAVATION.
5. STARTING AT SBD-3 AND WORKING DOWNSTREAM TO SBD-4, PERFORM PROPOSED GRADING, CONSTRUCT CHANNEL, AND INSTALL RIP RAP PROTECTION, IMBRICATED ROCK WALL, AND HW-1 AS SHOWN ON THE PLANS. AS WORK IS COMPLETED, INCREMENTALLY REMOVE THE ACCESS ROAD AND ASSOCIATED PERIMETER CONTROLS AT THE DOWNSTREAM END OF THE PHASE 2A WORK AREA WITH APPROVAL OF THE MCDPS INSPECTOR. PERMANENTLY STABILIZE DISTURBED AREA AT FINAL GRADE WITH PERMANENT SEEDING. AS GRADING PROGRESSES, CONTRACTOR SHALL CONTINUOUSLY INSTALL ALL CHANNEL AND FLOODPLAIN TREATMENTS SUCH THAT FINAL STABILIZATION CAN OCCUR.
6. AT THE END OF EACH WORK DAY, THE WORK AREA SHALL BE EITHER PERMANENTLY STABILIZED PER THE PLANS OR TEMPORARILY STABILIZED. REMOVE THE SBDs PRIOR TO LEAVING THE SITE OVERNIGHT AND/OR BEFORE RAINFALL EVENTS. UPON ARRIVING ON SITE IN THE MORNING OR AFTER A RAINFALL EVENT, SBDs SHALL BE REPLACED AND PUMP AROUND AND DEWATERING OPERATIONS COMMENCED.
7. CONTACT THE MCDPS INSPECTOR AND, ONCE PHASE 2A.2 IS APPROVED, REMOVE SBD-3, SBD-4, PUMP AROUND, DEWATERING PUMP WITH FILTER BAG, AND RPS. PROCEED TO PHASE 2A.3.

2A.3 MISCELLANEOUS CONSTRUCTION AND VEGETATIVE ESTABLISHMENT

1. ONCE PHASES 2A.1-2A.2 ARE COMPLETE, FROM DOWNSTREAM TO UPSTREAM INCREMENTALLY REMOVE THE REMAINING ACCESS ROAD AND ASSOCIATED PERIMETER CONTROLS WITH APPROVAL OF THE MCDPS INSPECTOR. ONCE FINISHED GRADE IS ACHIEVED AND STABILIZED, DO NOT DRIVE CONSTRUCTION EQUIPMENT THROUGH COMPLETED WORK.
2. PLANT TREES, SHRUBS, AND LIVE STAKES WITHIN SPECIFIED PLANTING WINDOW USING SAME DAY STABILIZATION. NO HEAVY EQUIPMENT SHALL BE USED DURING PLANTING. IF FINAL STABILIZATION OF THE CONSTRUCTED WORK IS DISTURBED, REAPPLY SEED MIX TO ANY DISTURBED AREAS.
3. ONCE ALL DISTURBED AREAS ARE 95% STABILIZED AND WITH THE APPROVAL OF THE MCDPS INSPECTOR, REMOVE ALL REMAINING EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO THE NEXT WORK ZONE.

PHASE 2B: LARCH AVE TO SLIGO CREEK PARKWAY (111+15 123+50)

1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS NOT ALREADY IN PLACE FROM THE PREVIOUS STAGE. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
2. WHERE INLET PROTECTION DRAINAGE AREAS EXCEED THE LIMITS REQUIRED, MEASURES ARE TO BE USED IN CONJUNCTION WITH SAME DAY STABILIZATION TO PREVENT THE PROTECTIONS FROM BEING OVERWHELMED WITH SEDIMENT. WHEN INSTALLING DIVERSION FENCE, GRADE AS NECESSARY TO ENSURE POSITIVE FLOW IS MAINTAINED ALONG THE ENTIRE LENGTH. SECURE DOWNSTREAM END OF DIVERSION FENCE WITH SAND BAGS AND OUTLET THROUGH PIPE SLOPE DRAIN INTO EXISTING GRATE INLET.
3. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
4. DURING A NOAA 3-DAY DRY PERIOD INSTALL INLET 1-2 USING SAME DAY STABILIZATION, CONNECTING TO EXISTING PIPE AND GRADING AS SHOWN ON PLANS TO DIRECT FLOW TO INLET. ONCE INSTALLED, ADD GABION INLET PROTECTION TO INLET.
5. CONSTRUCT STORM DRAIN FROM I-1 TO MH-1 DURING A NOAA 3-DAY DRY PERIOD, AND CONSTRUCT STORMWATER MANAGEMENT FACILITY IN AREA. DO NOT INSTALL MEDIA UNTIL FUTURE STEP. WHEN CONSTRUCTING GRAVITY WALLS AROUND PROPOSED SWM FACILITY, TEMPORARILY BLOCK OPENINGS AT BASE OF WALL AND OPEN-BACK INLETS TO PREVENT WATER FROM ENTERING SWM AREA.
6. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, RETAINING WALL NO. 1, NO. 2 AND NO.3, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. IN AREAS OF PROPOSED RETAINING WALLS, USE PSTs AS NECESSARY TO DEWATER FOOTING FOUNDATIONS DURING CONSTRUCTION. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
7. ONCE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, INSTALL MEDIA IN STORMWATER MANAGEMENT FACLITY MBR-6-2 AND COMPLETE CONSTRUCTION AS SHOWN. ONCE INSTALLED AND STABILIZED, UNBLOCK OPENINGS IN GRAVITY WALLS.
8. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

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BY: adedrickson -

NO.	REVISION	DATE	BY

EN–02

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL NOTES

SCALE ____ DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. EN – 02 OF 4

SHEET NO. 41 OF 73

PLOTTED: Thursday, May 07, 2020 AT 01:35 PM
FILE: \\balsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pES-N002_NewAveBike.dgn

PHASE 3: SLIGO CREEK PARKWAY TO GLENSIDE DRIVE (STA. 123+50 TO STA. 127+75)

1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
3. CONSTRUCT STORM DRAIN FROM I-3 TO MH-3 AND I-5 TO EXISTING OUTFALL DURING A NOAA 3-DAY DRY PERIOD, AND CONSTRUCT STORMWATER MANAGEMENT FACILITY IN AREA OF I-3. DO NOT INSTALL MEDIA UNTI L FUTURE STEP. WHEN CONSTRUCTING GRAVITY WALLS AROUND PROPOSED SWM FACILITY, TEMPORARILY BLOCK OPENINGS AT BASE OF WALL AND OPEN-BACK INLETS TO PREVENT WATER FROM ENTERING SWM AREA. AFTER CONSTRUCTION, ADD INLET PROTECTION TO NEW INLETS AS SHOWN.
4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
5. CONSTRUCT FLOODPLAIN DEPRESSION FOLLOWING DETAIL ON SHEET (SW-D2)
6. ONCE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, INSTALL MEDIA IN STORMWATER MANAGEMENT FACLITY MBR-2-1 AND FINALIZE FACILITY AS SHOWN. ONCE INSTALLED AND STABILIZED, UNBLOCK OPENINGS IN GRAVITY WALLS.
7. ONCE ALL WORK IS COMPLETED, REMOVE DIVERSION FENCE AND CONSTRUCT BUS STOP SHOWN BEHIND DIVERSION FENCE USING SAME DAY STABILIZATION.
8. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

PHASE 4A: GLENSIDE DRIVE TO MERWOOD DRIVE (STA. 127+75 TO STA. 134+25)

1. ALL WORK IN THIS AREA IS TO BE PERFORMED USING SAME DAY STABILIZATION TECHNIQUES. ONLY THE AREA THAT CAN BE STABILIZED WITHIN THE SAME DAY SHALL BE DISTURBED.
2. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
3. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

PHASE 4B: MERWOOD DRIVE TO KINGWOOD DRIVE (STA. 134+25 TO STA. 140+75)

1. CLEAR AND GRUB FOR INSTALLATION OF SEDIMENT CONTROL DEVICES AND INSTALL THOSE DEVICES SHOWN ON THE EROSION AND SEDIMENT CONTROL PLANS. DURING THIS AND SUBSEQUENT STEPS, SAFE PEDESTRIAN ACCESS MUST BE MAINTAINED AT ALL TIMES.
2. ONCE SEDIMENT CONTROL DEVICES ARE INSTALLED, THE PERMITTEE MUST OBTAIN WRITTEN APPROVAL FROM THE MCDPS INSPECTOR BEFORE PROCEEDING WITH ANY ADDITIONAL CLEARING, GRUBBING, OR GRADING.
3. CONSTRUCT STORM DRAIN FROM I-4 TO EX-I-4 DURING A NOAA 3-DAY DRY PERIOD, AND CONSTRUCT STORMWATER MANAGEMENT FACILITY IN AREA. DO NOT INSTALL MEDIA UNTIL FUTURE STEP. WHEN CONSTRUCTING GRAVITY WALLS AROUND PROPOSED SWM FACILITY, TEMPORARILY BLOCK OPENINGS AT BASE OF WALL AND OPEN-BACK INLETS TO PREVENT WATER FROM ENTERING SWM AREA. AFTER CONSTRUCTION, ADD INLET PROTECTION TO EXISTING INLET AS SHOWN.
4. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
5. ONCE ENTIRE CONTRIBUTING DRAINAGE AREA HAS BEEN STABILIZED, INSTALL MEDIA IN STORMWATER MANAGEMENT FACLITY MBR-2-2 AND FINALIZE FACILITY AS SHOWN. ONCE INSTALLED AND STABILIZED, UNBLOCK OPENINGS IN GRAVITY WALLS.
6. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, REMOVE EROSION AND SEDIMENT CONTROLS AND PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

PHASE 5: KINGWOOD DRIVE TO HOLTON LANE (STA. 140+75 TO STA. 143+95)

1. ALL WORK IN THIS AREA IS TO BE PERFORMED USING SAME DAY STABILIZATION TECHNIQUES. ONLY THE AREA THAT CAN BE STABILIZED WITHIN THE SAME DAY SHALL BE DISTURBED.
2. CONSTRUCT SHARED USE PATH, ALL WIDENING WORK, CURB RECONSTRUCTION, LIGHTING AND SIGNING WORK. USE SAME DAY STABILIZATION IN ALL AREAS NOT DRAINING TO AN APPROVED SEDIMENT CONTROL DEVICE, AS SHOWN ON THE PLANS.
3. ONCE ALL WORK IS COMPLETED AND WITH THE APPROVAL OF THE INSPECTOR, PERFORM FINAL STABILIZATION, MOVING ON TO NEXT WORK ZONE.

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BY: adedrickson -

NO.	REVISION	DATE	BY

EN–03

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL NOTES

SCALE ____ DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. EN – 03 OF 5

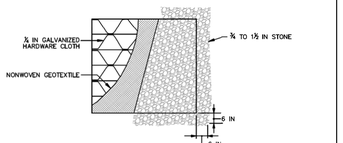
SHEET NO. 42 OF 73

PLOTTED: Thursday, May 07, 2020 AT 04:40 PM
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pES-N003_NewAveBike.dgn

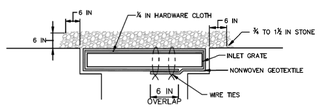
DETAIL E-9-2 AT-GRADE INLET PROTECTION

STANDARD SYMBOL: AGIP

MAXIMUM DRAINAGE AREA = 1 ACRE



PLAN / CUT AWAY VIEW



CROSS SECTION

CONSTRUCTION SPECIFICATIONS

1. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
2. LIFT GRATE AND WRAP WITH NONWOVEN GEOTEXTILE TO COMPLETELY COVER ALL OPENINGS. SECURE WITH WIRE TIES AND SET GRATE BACK IN PLACE.
3. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE 6 INCHES THICK ON THE GRATE.
4. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

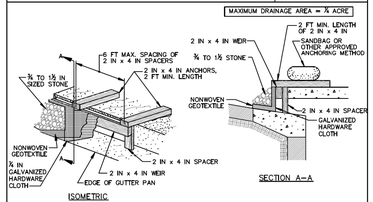
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.26

DETAIL E-9-3 CURB INLET PROTECTION

STANDARD SYMBOL: CIP

MAXIMUM DRAINAGE AREA = ¾ ACRE



ISOMETRIC

SECTION A–A

CONSTRUCTION SPECIFICATIONS

1. USE NOMINAL 2 INCH x 4 INCH LUMBER
2. USE NONWOVEN GEOTEXTILE AS SPECIFIED IN SECTION H-1 MATERIALS.
3. NAIL THE 2x4 WEIR TO 9 INCH LONG VERTICAL SPACERS (MAXIMUM 6 FEET APART).
4. ATTACH A CONTINUOUS PIECE OF ¼ INCH GALVANIZED HARDWARE CLOTH, WITH A MINIMUM WIDTH OF 30 INCHES AND A MINIMUM LENGTH OF 4 FEET LONGER THAN THE THROAT OPENING, TO THE 2x4 WEIR, EXTENDING IT 2 FEET BEYOND THROAT ON EACH SIDE.
5. PLACE A CONTINUOUS PIECE OF NONWOVEN GEOTEXTILE OF THE SAME DIMENSIONS AS THE HARDWARE CLOTH OVER THE HARDWARE CLOTH AND SECURELY ATTACH TO THE 2x4 WEIR.
6. PLACE THE ASSEMBLY AGAINST THE INLET THROAT AND NAIL TO 2x4 ANCHORS (MINIMUM 2 FEET LENGTH). EXTEND THE ANCHORS ACROSS THE INLET TOP AND HOLD IN PLACE BY SANDBAGS OR OTHER APPROVED ANCHORING METHOD.
7. INSTALL END SPACERS A MINIMUM OF 1 FOOT BEYOND THE ENDS OF THE THROAT OPENING.
8. FORM THE HARDWARE CLOTH AND THE GEOTEXTILE TO THE CONCRETE GUTTER AND FACE OF CURB TO SPAN THE INLET OPENING. COVER THE HARDWARE CLOTH AND GEOTEXTILE WITH CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE.
9. AT NON-SUMP LOCATIONS, INSTALL A TEMPORARY SANDBAG OR ASPHALT BERM TO PREVENT INLET BYPASS.
10. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

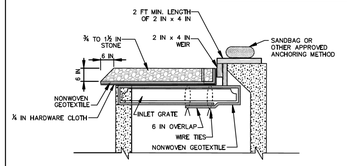
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.27

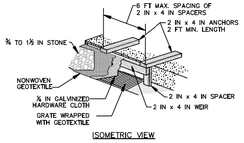
DETAIL E-9-6 COMBINATION INLET PROTECTION

STANDARD SYMBOL: COIP

MAXIMUM DRAINAGE AREA = ¾ ACRE



SECTION



ISOMETRIC VIEW

1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

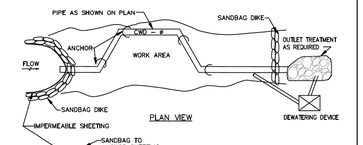
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.30

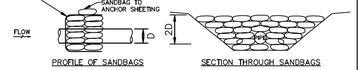
DETAIL C-6 CLEAR WATER DIVERSION PIPE

STANDARD SYMBOL: CWD – 12

DESIGNATION CWD-12 REFERS TO 12 INCH CLEAR WATER DIVERSION.



PLAN VIEW



PROFILE OF SANDBAGS

SECTION THROUGH SANDBAGS

CONSTRUCTION SPECIFICATIONS

1. FLEXIBLE PIPE IS PREFERRED. HOWEVER, CORRUGATED METAL PIPE OR EQUIVALENT PVC PIPE CAN BE USED. MAKE ALL JOINTS WATERTIGHT.
2. FOR SANDBAGS USE MATERIALS THAT ARE RESISTANT TO ULTRA-VIOLENT RADIATION, TEARING, AND PUNCTURE AND WOVEN TIGHTLY ENOUGH TO PREVENT LEAKAGE OF FILL MATERIAL.
3. USE 10 MIL OR THICKER, UV RESISTANT, IMPERMEABLE SHEETING OR OTHER APPROVED MATERIAL THAT IS IMPERMEABLE AND RESISTANT TO PUNTURING AND TEARING.
4. PLACE IMPERMEABLE SHEETING SUCH THAT UPGRADE PORTION OVERLAPS DOWNGRADE PORTION BY A MINIMUM OF 18 INCHES.
5. SET HEIGHT OF SANDBAG DIKE AT TWICE THE PIPE DIAMETER. MAINTAIN HEIGHT ALONG LENGTH OF SANDBAG DIKE. PLACE DOUBLE ROW OF SANDBAGS.
6. AT A MINIMUM, SECURELY ANCHOR DIVERSION PIPE AT EACH DOWNGRADE JOINT.
7. SET OUTLET END OF DIVERSION PIPE LOWER THAN INLET END.
8. PROVIDE OUTLET PROTECTION AS REQUIRED ON APPROVED PLAN.
9. DEWATER WORK AREA USING AN APPROVED EROSION AND SEDIMENT CONTROL PRACTICE AS SPECIFIED ON APPROVED PLAN.
10. KEEP POINT OF DISCHARGE FREE OF EROSION. MAINTAIN WATER TIGHT CONNECTIONS AND POSITIVE DRAINAGE. REPLACE SANDBAGS AND IMPERMEABLE SHEETING IF TORN.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

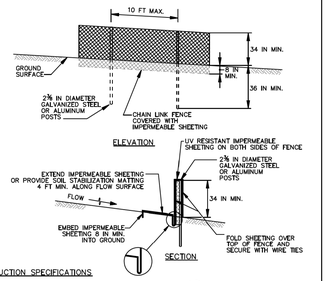
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

C.20

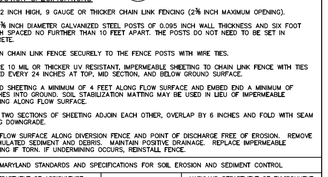
DETAIL C-9 DIVERSION FENCE

STANDARD SYMBOL: DF

MAXIMUM DRAINAGE AREA = 2 ACRES



ELEVATION



SECTION

CONSTRUCTION SPECIFICATIONS

1. USE 42 INCH HIGH, 9 GAUGE OR THICKER CHAIN LINK FENCING (2⅜ INCH MAXIMUM OPENING).
2. USE 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. THE POSTS DO NOT NEED TO BE SET IN CONCRETE.
3. FASTEN CHAIN LINK FENCE SECURELY TO THE FENCE POSTS WITH WIRE TIES.
4. SECURE 10 MIL OR THICKER UV RESISTANT, IMPERMEABLE SHEETING TO CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT TOP, MID SECTION, AND BELOW GROUND SURFACE.
5. EXTEND SHEETING A MINIMUM OF 4 FEET ALONG FLOW SURFACE AND EMBED END A MINIMUM OF 8 INCHES INTO GROUND. SOIL STABILIZATION MATTING MAY BE USED IN LIEU OF IMPERMEABLE SHEETING ALONG FLOW SURFACE.
6. WHEN TWO SECTIONS OF SHEETING ADJOIN EACH OTHER, OVERLAP BY 6 INCHES AND FOLD WITH SEAM FACING DOWNGRADE.
7. KEEP FLOW SURFACE ALONG DIVERSION FENCE AND POINT OF DISCHARGE FREE OF EROSION. REMOVE ACCUMULATED SEDIMENT AND DEBRIS. MAINTAIN POSITIVE DRAINAGE. REPLACE IMPERMEABLE SHEETING IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

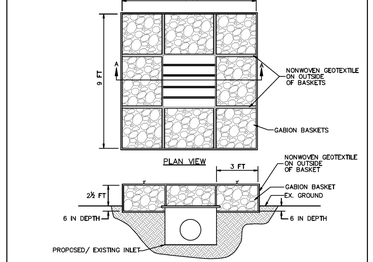
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

C.27

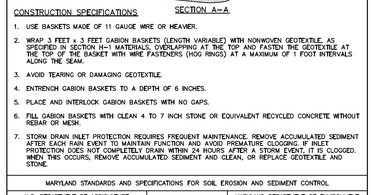
DETAIL E-9-7 GABION INLET PROTECTION

STANDARD SYMBOL: GIP

MAXIMUM DRAINAGE AREA = 1⅞ ACRE



PLAN VIEW



SECTION A–A

CONSTRUCTION SPECIFICATIONS

1. USE BASKETS MADE OF 11 GAUGE WIRE OR HEAVIER.
2. WRAP 3 FEET x 3 FEET GABION BASKETS (LENGTH VARIABLE) WITH NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVERLAPPING AT THE TOP AND FASTEN THE GEOTEXTILE AT THE TOP OF THE BASKET WITH WIRE FASTENERS (HOG RINGS) AT A MAXIMUM OF 1 FOOT INTERVALS ALONG THE SEAM.
3. AVOID TEARING OR DAMAGING GEOTEXTILE.
4. ENTRENCH GABION BASKETS TO A DEPTH OF 6 INCHES.
5. PLACE AND INTERLOCK GABION BASKETS WITH NO GAPS.
6. FILL GABION BASKETS WITH CLEAN 4 TO 7 INCH STONE OR EQUIVALENT RECYCLED CONCRETE WITHOUT REBAR OR MESH.
7. STORM DRAIN INLET PROTECTION REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT AFTER EACH RAIN EVENT TO MAINTAIN FUNCTION AND AVOID PREMATURE CLOGGING. IF INLET PROTECTION DOES NOT COMPLETELY DRAIN WITHIN 24 HOURS AFTER A STORM EVENT, IT IS CLOGGED. WHEN THIS OCCURS, REMOVE ACCUMULATED SEDIMENT AND CLEAN, OR REPLACE GEOTEXTILE AND STONE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

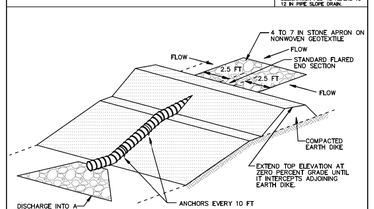
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.32

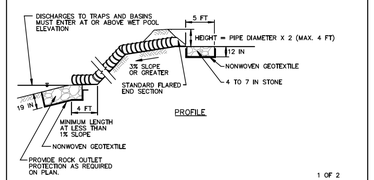
DETAIL D-1 PIPE SLOPE DRAIN

STANDARD SYMBOL: PSD – 12

DESIGNATION PSD-12 REFERS TO 12 IN PIPE SLOPE DRAIN.



ISOMETRIC VIEW



PROFILE

1 OF 2

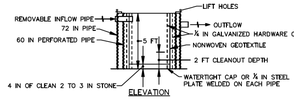
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

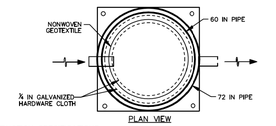
D.3

DETAIL F-3 PORTABLE SEDIMENT TANK

STANDARD SYMBOL: ⊠PST



ELEVATION



PLAN VIEW

CONSTRUCTION SPECIFICATIONS

1. PROVIDE 1 CUBIC FOOT OF STORAGE FOR EACH GALLON PER MINUTE OF PUMP CAPACITY. REQUIRED STORAGE VOLUME MAY BE ATTAINED BY PLACEMENT OF TANKS IN PARALLEL WITH INFLOW EVENLY DISTRIBUTED AMONG TANKS. OVERTOPPING OF TANKS IS NOT PERMITTED.
2. USE 60 INCH CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS, 6 INCHES ON CENTER FOR THE INNER PIPE. LINE PIPE WITH NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, SANDWICHED BETWEEN, AND ATTACHED TO, ¾ INCH HARDWARE CLOTH.
3. OVERLAP GEOTEXTILE 8 INCHES MINIMUM AT VERTICAL SEAM AND AT THE BOTTOM PLATE.
4. ANCHOR GEOTEXTILE AT BOTTOM OF TANK WITH 4 INCHES OF 2 TO 3 INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE.
5. USE 72 INCH CORRUGATED METAL OR PLASTIC OUTER PIPE WITH PERMANENT OUTFLOW PIPE WITH INVERT LOWER THAN INFLOW PIPE
6. INFLOW PIPE MUST DISCHARGE INTO INNER PIPE AND BE REMOVABLE.
7. PLACE TANK ON LEVEL SURFACE AND DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
8. A PORTABLE SEDIMENT TANK REQUIRES FREQUENT MAINTENANCE. REMOVE ACCUMULATED SEDIMENT FROM INNER PIPE WHEN IT REACHES TWO FEET IN DEPTH. IF SYSTEM CLOGS, PULL OUT INNER PIPE, REMOVE ACCUMULATED SEDIMENT, AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

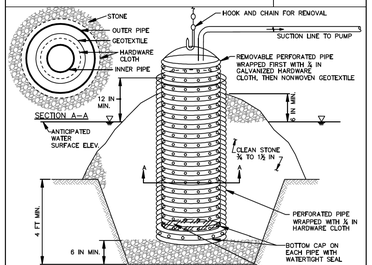
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

F.7

DETAIL F-1 REMOVABLE PUMPING STATION

STANDARD SYMBOL: ⊠RPS



ELEVATION

CONSTRUCTION SPECIFICATIONS

1. USE CORRUGATED METAL OR PLASTIC PIPE WITH 1 INCH DIAMETER PERFORATIONS 6 INCHES ON CENTER.
2. USE A MINIMUM 12 INCH DIAMETER INNER PIPE WITH AN OUTER PIPE A MINIMUM 6 INCHES LARGER IN DIAMETER. BOTTOM OF EACH PIPE MUST BE CAPPED WITH WATERTIGHT SEAL.
3. WRAP EACH PIPE WITH ¾ INCH GALVANIZED HARDWARE CLOTH. ON INNER PIPE WRAP NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H-1 MATERIALS, OVER THE HARDWARE CLOTH.
4. EXCAVATE 8 FEET X 8 FEET X 4 FEET DEEP PIT FOR PIPE PLACEMENT. PLACE CLEAN ¾ TO 1½ INCH STONE OR EQUIVALENT RECYCLED CONCRETE, 6 INCHES IN DEPTH PRIOR TO PIPE PLACEMENT.
5. SET TOP OF INNER AND OUTER PIPES MINIMUM 12 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION (OR RISER CREST ELEVATION WHEN DEWATERING A BASIN).
6. BACKFILL PIT AROUND THE OUTER PIPE WITH ¾ TO 1½ INCH CLEAN STONE OR EQUIVALENT RECYCLED CONCRETE AND EXTEND STONE A MINIMUM OF 6 INCHES ABOVE ANTICIPATED WATER SURFACE ELEVATION.
7. DISCHARGE TO A STABLE AREA AT A NONEROSIVE RATE.
8. A REMOVABLE PUMPING STATION REQUIRES FREQUENT MAINTENANCE. IF SYSTEM CLOGS, PULL OUT INNER PIPE AND REPLACE GEOTEXTILE. KEEP POINT OF DISCHARGE FREE OF EROSION.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

F.3

EN–04

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL DETAILS

SCALE _____ DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. EN – 04 OF 5

SHEET NO. 43 OF 73

NO.	REVISION	DATE	BY

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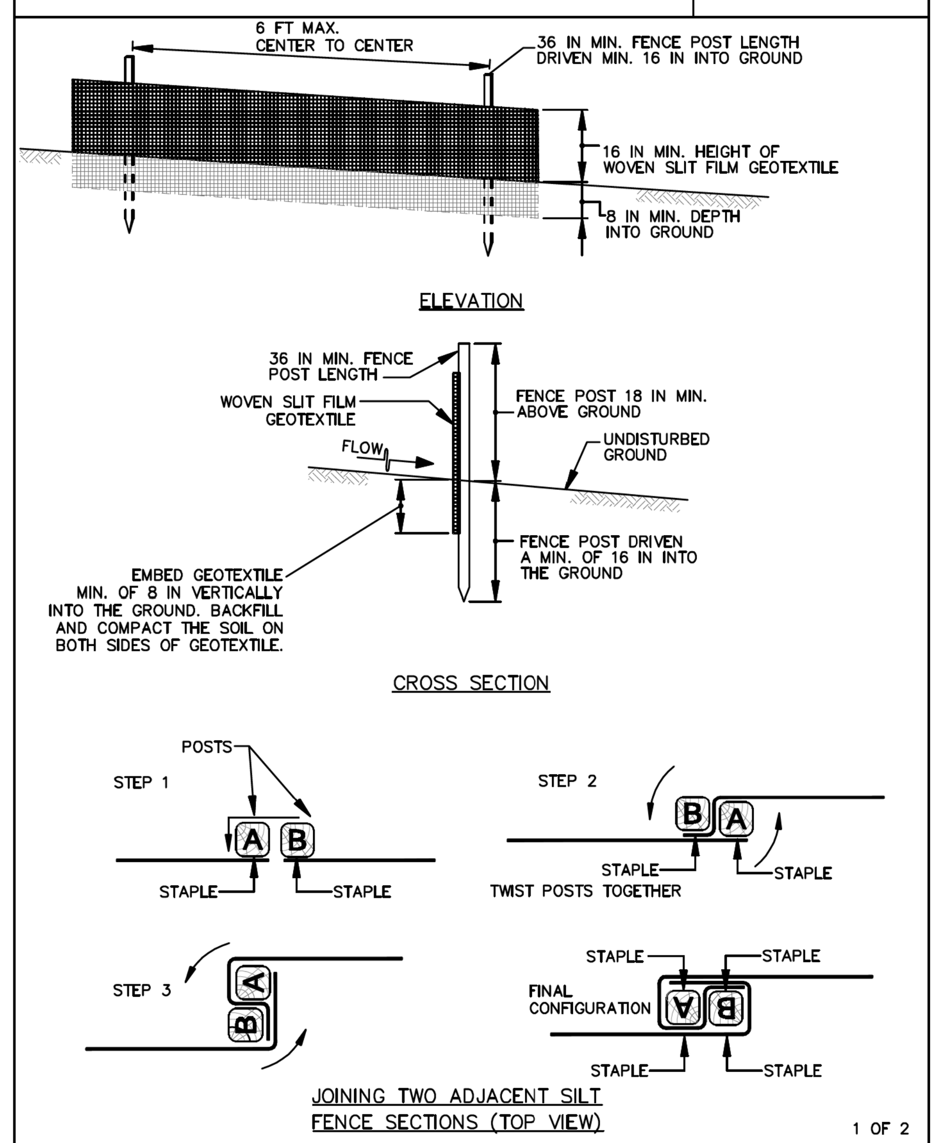
BY: bbaral -

PLOTTED: 5/10/2020
FILE: \\balsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pES-N004_NewAveBike.dgn

DETAIL E-1 SILT FENCE

STANDARD SYMBOL
├──SF──┤



1 OF 2

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.2

DETAIL E-1 SILT FENCE

STANDARD SYMBOL
├──SF──┤

CONSTRUCTION SPECIFICATIONS

1. USE WOOD POSTS 1¾ X 1¾ ± 1/16 INCH (MINIMUM) SQUARE CUT OF SOUND QUALITY HARDWOOD. AS AN ALTERNATIVE TO WOODEN POST USE STANDARD "T" OR "U" SECTION STEEL POSTS WEIGHING NOT LESS THAN 1 POUND PER LINEAR FOOT.
2. USE 36 INCH MINIMUM POSTS DRIVEN 16 INCH MINIMUM INTO GROUND NO MORE THAN 6 FEET APART.
3. USE WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS AND FASTEN GEOTEXTILE SECURELY TO UPSLOPE SIDE OF FENCE POSTS WITH WIRE TIES OR STAPLES AT TOP AND MID–SECTION.
4. PROVIDE MANUFACTURER CERTIFICATION TO THE AUTHORIZED REPRESENTATIVE OF THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT THE GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H–1 MATERIALS.
5. EMBED GEOTEXTILE A MINIMUM OF 8 INCHES VERTICALLY INTO THE GROUND. BACKFILL AND COMPACT THE SOIL ON BOTH SIDES OF FABRIC.
6. WHERE TWO SECTIONS OF GEOTEXTILE ADJOIN: OVERLAP, TWIST, AND STAPLE TO POST IN ACCORDANCE WITH THIS DETAIL.
7. EXTEND BOTH ENDS OF THE SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SILT FENCE.
8. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN SILT FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL FENCE.

2 OF 2

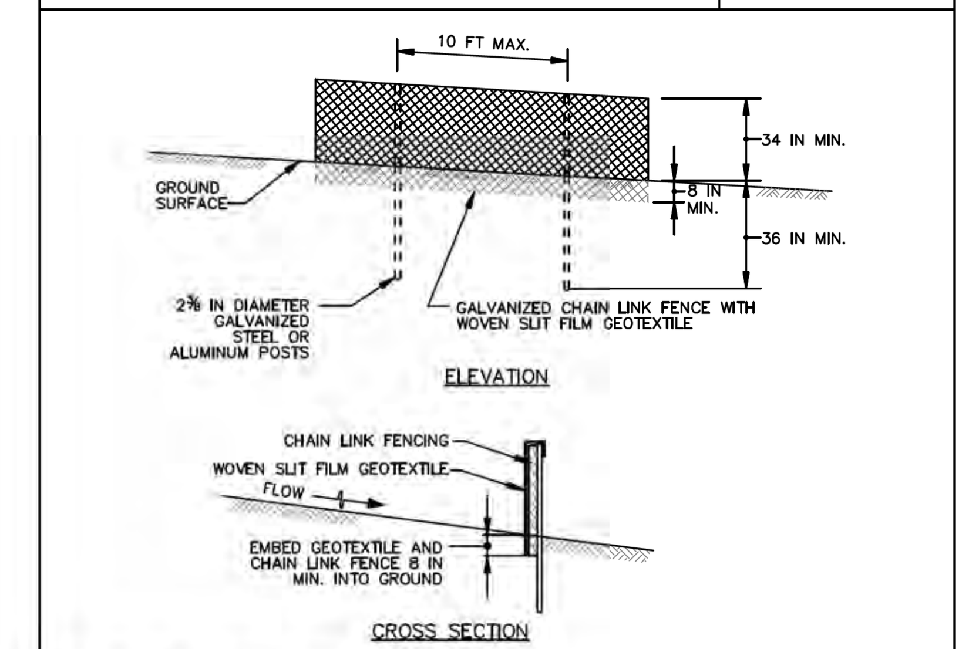
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.3

DETAIL E-3 SUPER SILT FENCE

STANDARD SYMBOL
├──SSF──┤



CONSTRUCTION SPECIFICATIONS

1. INSTALL 2⅜ INCH DIAMETER GALVANIZED STEEL POSTS OF 0.095 INCH WALL THICKNESS AND SIX FOOT LENGTH SPACED NO FURTHER THAN 10 FEET APART. DRIVE THE POSTS A MINIMUM OF 36 INCHES INTO THE GROUND.
2. FASTEN 9 GAUGE OR HEAVIER GALVANIZED CHAIN LINK FENCE (2⅜ INCH MAXIMUM OPENING) 42 INCHES IN HEIGHT SECURELY TO THE FENCE POSTS WITH WIRE TIES OR HUG RINGS.
3. FASTEN WOVEN SLIT FILM GEOTEXTILE AS SPECIFIED IN SECTION H–1 MATERIALS, SECURELY TO THE UPSLOPE SIDE OF CHAIN LINK FENCE WITH TIES SPACED EVERY 24 INCHES AT THE TOP AND MID SECTION. EMBED GEOTEXTILE AND CHAIN LINK FENCE A MINIMUM OF 8 INCHES INTO THE GROUND.
4. WHERE ENDS OF THE GEOTEXTILE COME TOGETHER, THE ENDS SHALL BE OVERLAPPED BY 6 INCHES, FOLDED, AND STAPLED TO PREVENT SEDIMENT BY PASS.
5. EXTEND BOTH ENDS OF THE SUPER SILT FENCE A MINIMUM OF FIVE HORIZONTAL FEET UPSLOPE AT 45 DEGREES TO THE MAIN FENCE ALIGNMENT TO PREVENT RUNOFF FROM GOING AROUND THE ENDS OF THE SUPER SILT FENCE.
6. PROVIDE MANUFACTURER CERTIFICATION TO THE INSPECTION/ENFORCEMENT AUTHORITY SHOWING THAT GEOTEXTILE USED MEETS THE REQUIREMENTS IN SECTION H–1 MATERIALS.
7. REMOVE ACCUMULATED SEDIMENT AND DEBRIS WHEN BULGES DEVELOP IN FENCE OR WHEN SEDIMENT REACHES 25% OF FENCE HEIGHT. REPLACE GEOTEXTILE IF TORN. IF UNDERMINING OCCURS, REINSTALL CHAIN LINK FENCING AND GEOTEXTILE.

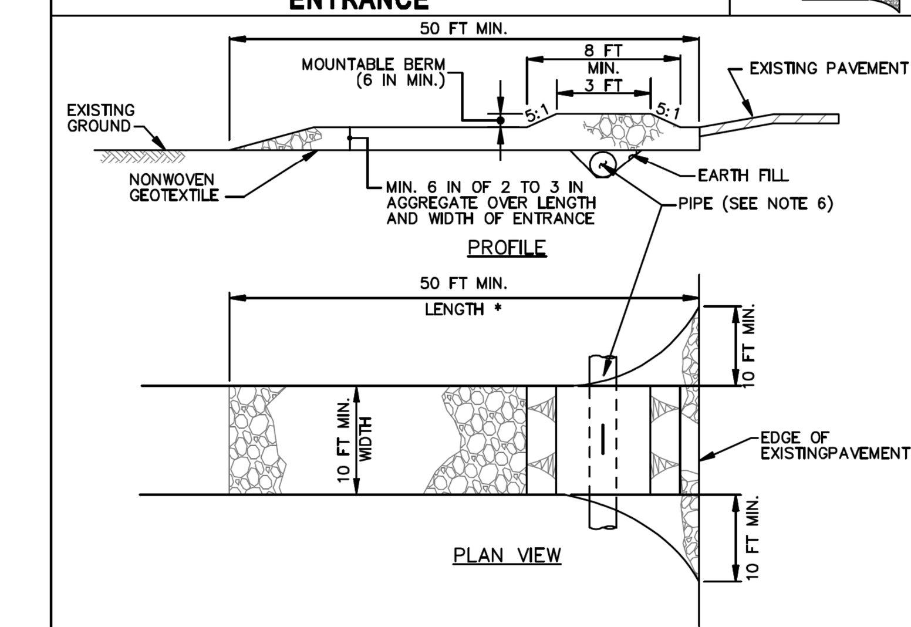
MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

E.7

DETAIL B-1 STABILIZED CONSTRUCTION ENTRANCE

STANDARD SYMBOL
SCE



CONSTRUCTION SPECIFICATIONS

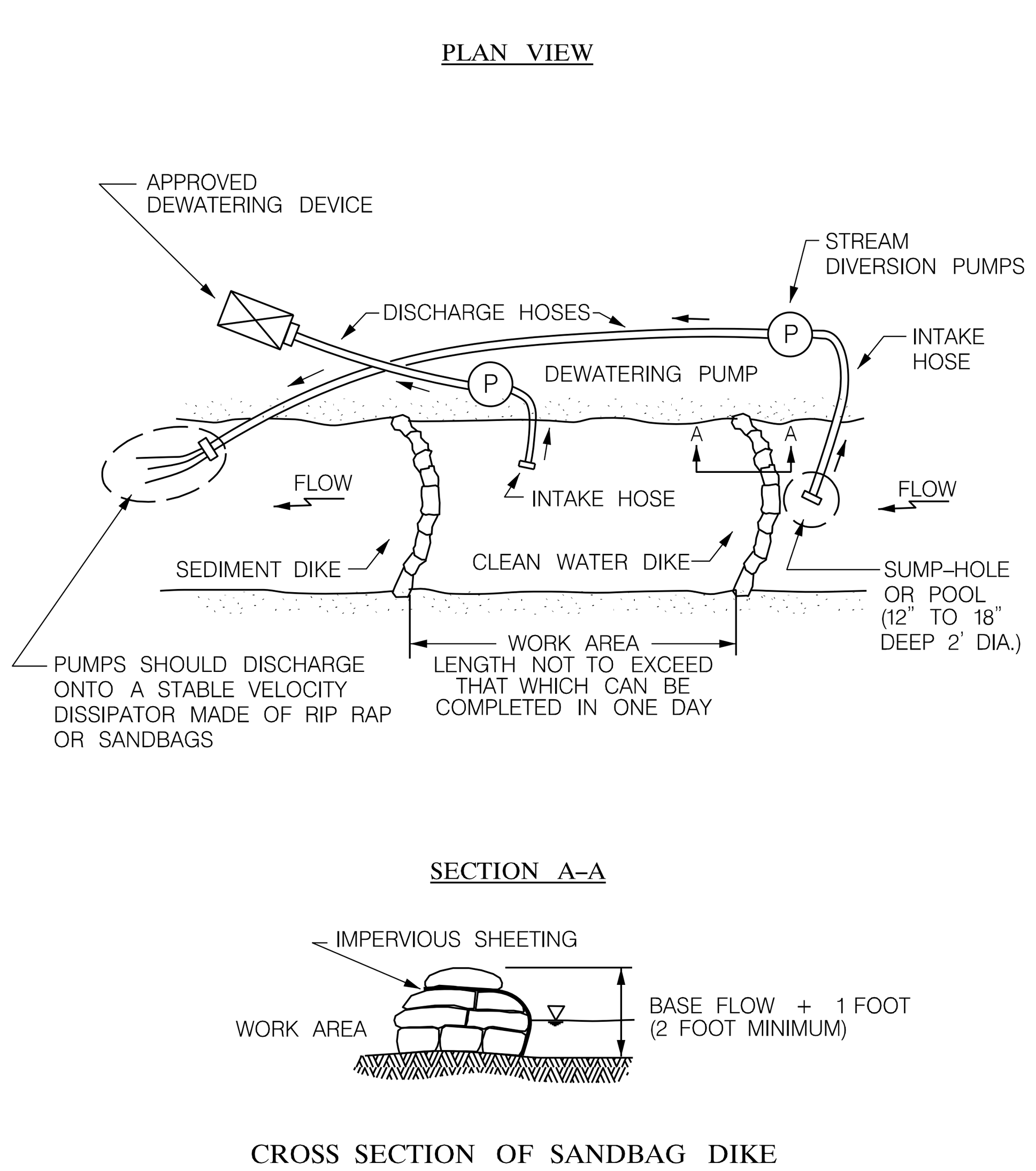
1. PLACE STABILIZED CONSTRUCTION ENTRANCE IN ACCORDANCE WITH THE APPROVED PLAN. VEHICLES MUST TRAVEL OVER THE ENTIRE LENGTH OF THE SCE. USE MINIMUM LENGTH OF 50 FEET (*30 FEET FOR SINGLE RESIDENCE LOT). USE MINIMUM WIDTH OF 10 FEET. FLARE SCE 10 FEET MINIMUM AT THE EXISTING ROAD TO PROVIDE A TURNING RADIUS.
2. PIPE ALL SURFACE WATER FLOWING TO OR DIVERTED TOWARD THE SCE UNDER THE ENTRANCE, MAINTAINING POSITIVE DRAINAGE. PROTECT PIPE INSTALLED THROUGH THE SCE WITH A MOUNTABLE BERM WITH 5:1 SLOPES AND A MINIMUM OF 12 INCHES OF STONE OVER THE PIPE. PROVIDE PIPE AS SPECIFIED ON APPROVED PLAN. WHEN THE SCE IS LOCATED AT A HIGH SPOT AND HAS NO DRAINAGE TO CONVEY, A PIPE IS NOT NECESSARY. A MOUNTABLE BERM IS REQUIRED WHEN SCE IS NOT LOCATED AT A HIGH SPOT.
3. PREPARE SUBGRADE AND PLACE NONWOVEN GEOTEXTILE, AS SPECIFIED IN SECTION H–1 MATERIALS.
4. PLACE CRUSHED AGGREGATE (2 TO 3 INCHES IN SIZE) OR EQUIVALENT RECYCLED CONCRETE (WITHOUT REBAR) AT LEAST 6 INCHES DEEP OVER THE LENGTH AND WIDTH OF THE SCE.
5. MAINTAIN ENTRANCE IN A CONDITION THAT MINIMIZES TRACKING OF SEDIMENT. ADD STONE OR MAKE OTHER REPAIRS AS CONDITIONS DEMAND TO MAINTAIN CLEAN SURFACE, MOUNTABLE BERM, AND SPECIFIED DIMENSIONS. IMMEDIATELY REMOVE STONE AND/OR SEDIMENT SPILLED, DROPPED, OR TRACKED ONTO ADJACENT ROADWAY BY VACUUMING, SCRAPING, AND/OR SWEEPING. WASHING ROADWAY TO REMOVE MUD TRACKED ONTO PAVEMENT IS NOT ACCEPTABLE UNLESS WASH WATER IS DIRECTED TO AN APPROVED SEDIMENT CONTROL PRACTICE.

MARYLAND STANDARDS AND SPECIFICATIONS FOR SOIL EROSION AND SEDIMENT CONTROL

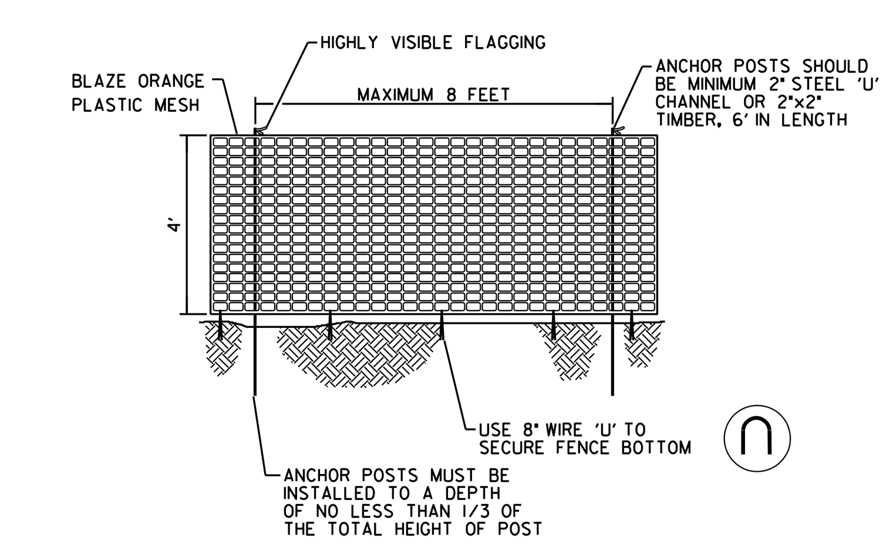
U.S. DEPARTMENT OF AGRICULTURE NATURAL RESOURCES CONSERVATION SERVICE	2011	MARYLAND DEPARTMENT OF ENVIRONMENT WATER MANAGEMENT ADMINISTRATION

B.2

Maryland's Guidelines To Waterway Construction
DETAIL 1.2: PUMP–AROUND PRACTICE



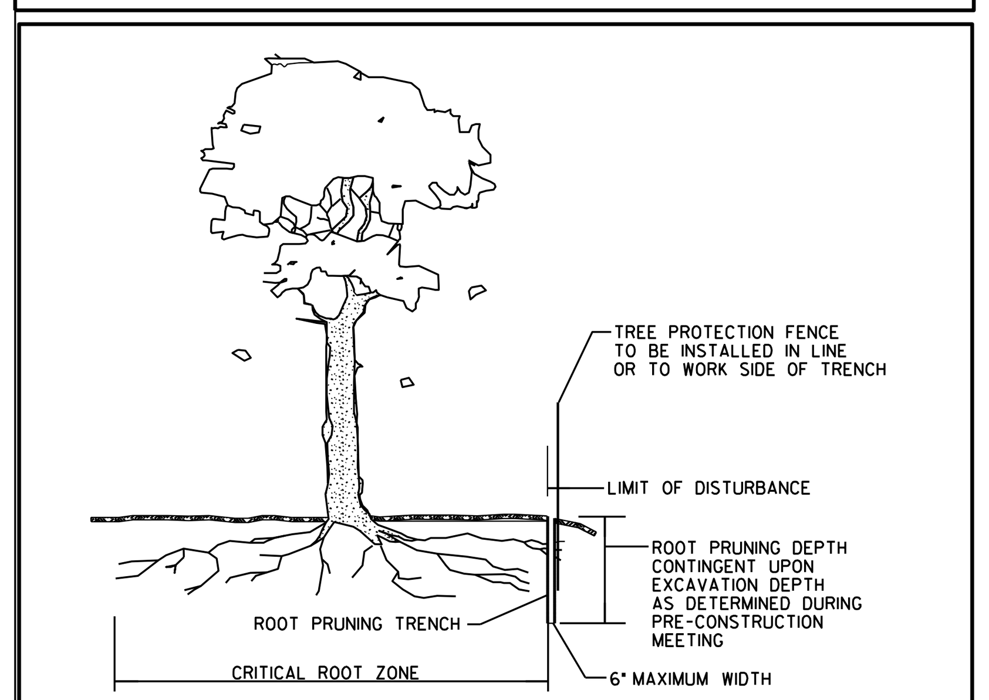
TEMPORARY INSTREAM CONSTRUCTION MEASURES	*REVISED NOVEMBER 2000 PAGE 1.2 – 3*	MARYLAND DEPARTMENT OF THE ENVIRONMENT WATER MANAGEMENT ADMINISTRATION



NOTES:
1. Boundaries of retention area should be staked and flagged prior to installing deviced.
2. Root damage should be avoided.
3. Device should be maintained throughout construction.

TREE PROTECTION FENCE

N.T.S.

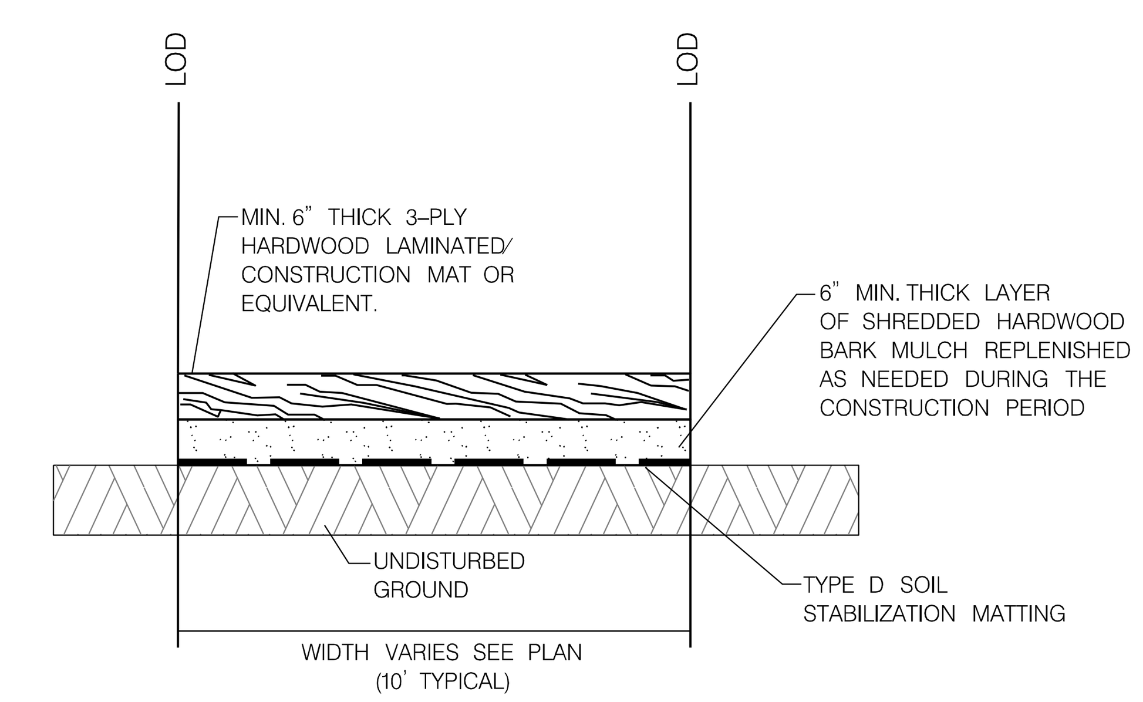


Notes:
1. Retention Areas to be established as part of the forest conservation plan review process.
2. Boundaries of Retention Areas to be staked, flagged and/or fenced prior to trenching.
3. Exact location of trench should be identified.
4. Trench should be immediately backfilled with soil removed or organic soil.
5. Roots should be cleanly cut using vibratory knife or other acceptable equipment.
6. In some instances, it may be beneficial to perform root pruning at the edge of the excavation rather than at the LOD, provided the roots between the excavation edge and the LOD are protected during construction.

ROOT PRUNING DETAIL

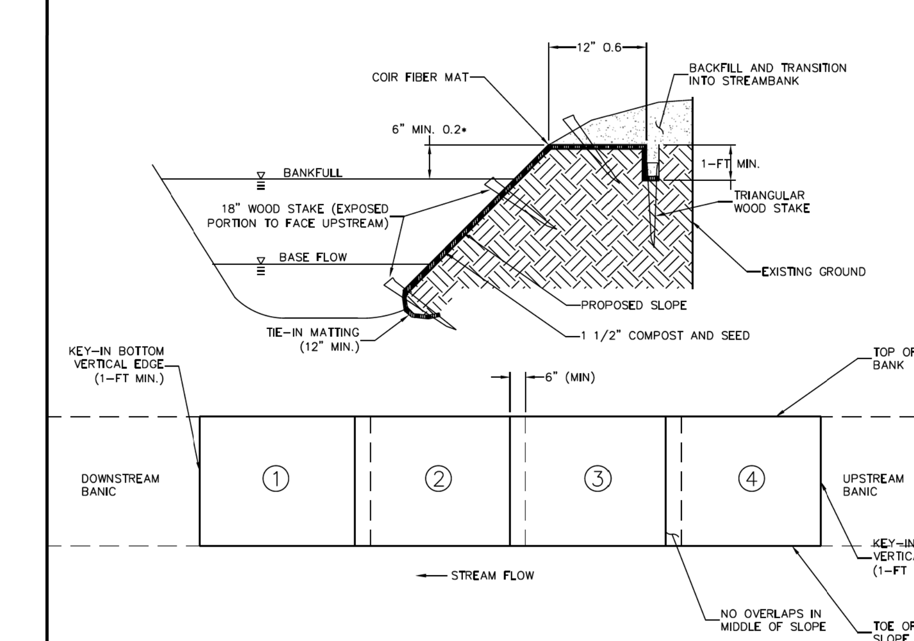
N.T.S.

Source: Adapted from Steve Clark & Associates/ACRT, Inc, and Forest Conservation Manual, 1991



TIMBER MAT CONSTRUCTION ACCESS ROAD

NOT TO SCALE



NOTES:
1. BEGIN AT THE BOTTOM OF THE SLOPE, WORKING FROM DOWNSTREAM UP, AND ANCHOR FIBER MATTING IN A 12" DEEP INITIAL ANCHOR TRENCH WITH WOODEN STAKES. BACKFILL TRENCH AND TAMP EARTH FIRMLY.
3. OVERLAP EDGES OF ADJACENT PARALLEL ROLLS 6" (MIN) AND ANCHOR AT 12" CENTERS WITH THE UPPER ROLL OVERLAPPING THE TOP OF THE LOWER ROLL.
4. WHEN FIBER MAT MUST BE SPLICED, PLACE END OVER END (SHINGLE STYLE IN DIRECTION OF FLOW) WITH 12" OVERLAP AND ANCHOR USING TWO STAGGERED ROWS OF STAPLES AT 6" CENTERS. ADDITIONAL FASTENING MAY BE REQUIRED WHERE MATTING IS CUT TO INSTALL PLANTINGS.
5. LAY FIBER MAT LOOSELY AND ANCHOR SUFFICIENTLY TO MAINTAIN DIRECT CONTACT WITH THE SOIL – DO NOT STRETCH.
6. FOR SLOPES 2:1 AND STEEPER USE A MINIMUM OF (3) 24–INCH WOOD STAKES PER SQUARE YARD AND FOR SLOPES FLATTER THAN 2:1 USE A MINIMUM OF (2) 24–INCH WOOD STAKES PER SQUARE YARD. PROVIDE ADDITIONAL STAKING ALONG CHANNEL BOTTOM WHERE ECM FORMS TOE OF SLOPE.
7. WOOD STAKES SHALL BE ANGLED SUCH THAT EXPOSED PORTION (2"–4") FACES UPSTREAM.
8. ANCHOR, FILL, AND COMPACT END OF FIBER MATTING IN 12"x6" TERMINAL ANCHOR TRENCH (MIRROR IMAGE OF INITIAL TRENCH).
*9. ANCHORING DIMENSIONS TO BE REDUCED IN AREAS OF NATURAL RESOURCES TO BE PROTECTED.
**10. EROSION CONTROL MATTING MAY BE EXTENDED UP STREAM BANK ABOVE BANKFULL AS DIRECTED BY THE M–NCPPC PARKS CONSTRUCTION INSPECTOR.

EROSION CONTROL MATTING DETAIL

The Maryland-National Capital Park and Planning Commission
Montgomery County Department of Parks

Detail No. 623
MAY 2015

EN–05

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL DETAILS

SCALE ______ DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB — COUNTY MONTGOMERY
DRAWN BY DEA — LOGMILE MD 650 0.040- 0.830
CHECKED BY SBP
F.A.P. NO. T.B.D.

DRAWING NO. EN – 05 OF 5 — SHEET NO. 44 OF 73

NO.	REVISION	DATE	BY

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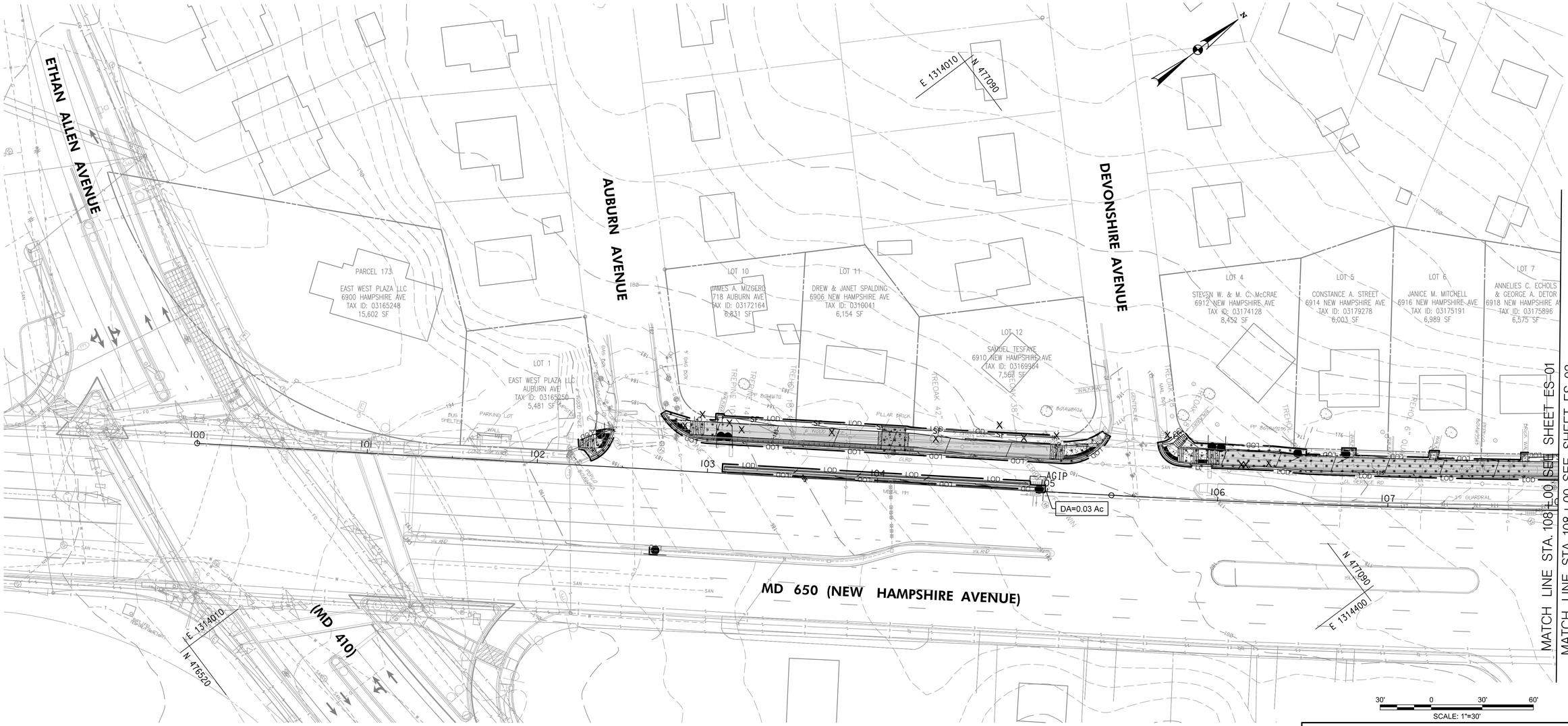
BY: bbaral -

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pES-N005_NewAveBike.dgn



30' 0 30' 60'

SCALE: 1"=30'

ES–01

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)
- SAME DAY STABILIZATION
- SWM FOOTPRINT
- LOD — LIMIT OF DISTURBANCE
- SF — SILT FENCE
- SSF — SUPER SILT FENCE
- DF — DIVERSION FENCE
- SANDBAG DIVERSION
- 100–YEAR FLOODPLAIN
- CIP INLET PROTECTION
- PST PORTABLE SEDIMENT TANK
- TPF — TREE PROTECTION FENCE
- RPS REMOVABLE PUMPING STATION
- SCE STABILIZED CONSTRUCTION ENTRANCE
- P PUMPAROUND PRACTICE
- TEMPORARY ACCESS ROAD

NOTES:

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2. ALL STAGING AND STOCKPILING MUST BE WITHIN THE LOD. SEDIMENT CONTROL FOR THE STAGING STOCKPILE AREA MUST BE PROVIDED IF NEEDED OR AS DIRECTED BY THE SEDIMENT CONTROL INSPECTOR.

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BY: adedrickson -

NO.	REVISION	DATE	BY

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL PLAN

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

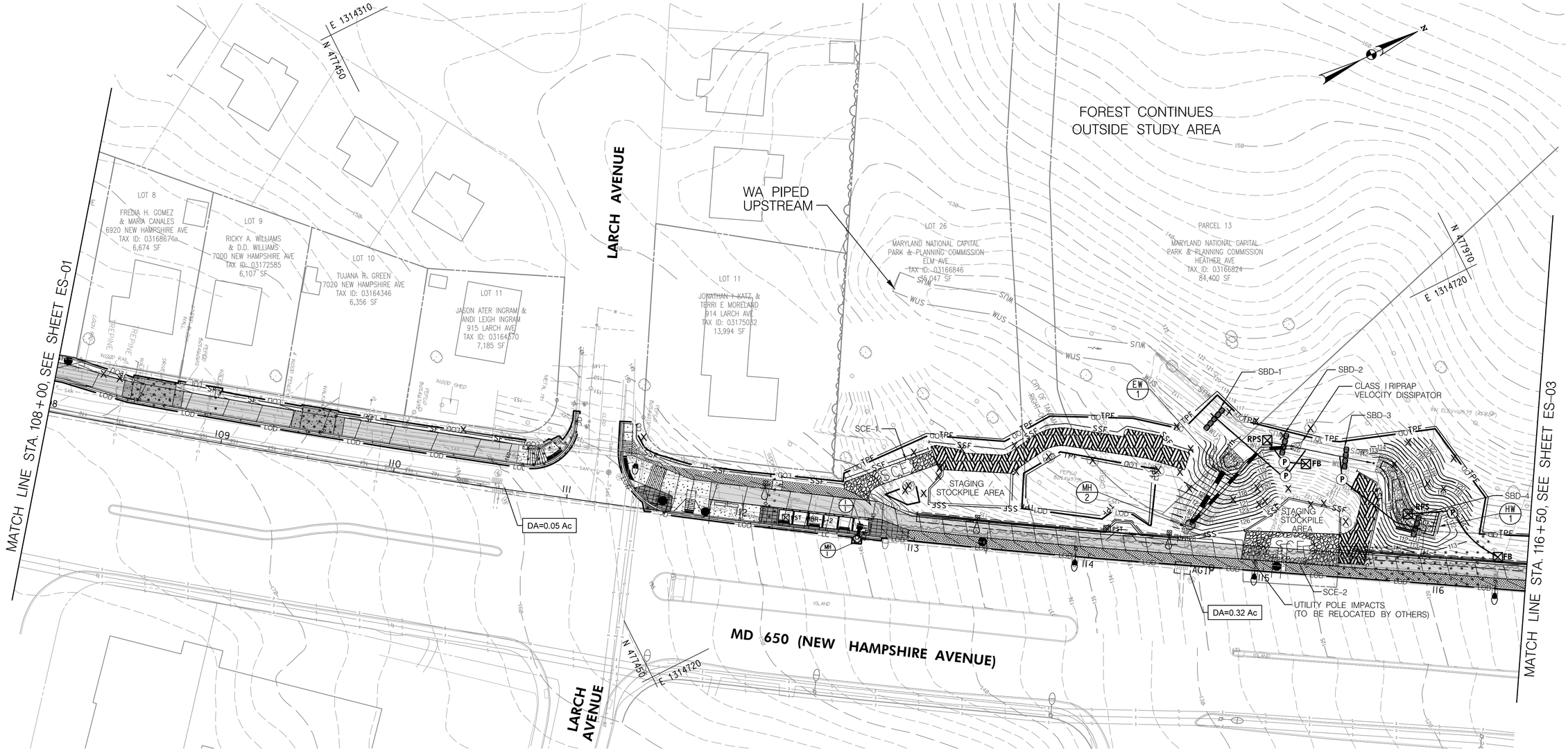
COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. ES – 01 OF 6

SHEET NO. 45 OF 73

PLOTTED: Friday, May 08, 2020 AT 12:18 PM
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pES-001_NewAveBike.dgn



30' 0 30' 60'

SCALE: 1"=30'

ES-02

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)
- SAME DAY STABILIZATION
- SWM FOOTPRINT
- LOD — LIMIT OF DISTURBANCE
- SF — SILT FENCE
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- TPF — TREE PROTECTION FENCE
- RPS — REMOVABLE PUMPING STATION
- SCE — STABILIZED CONSTRUCTION ENTRANCE
- P — PUMPAROUND PRACTICE
- TEMPORARY ACCESS ROAD

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CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL PLAN

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. ES – 02 OF 6

SHEET NO. 46 OF 73

PLOTTED: Friday, May 08, 2020 AT 12:41 PM
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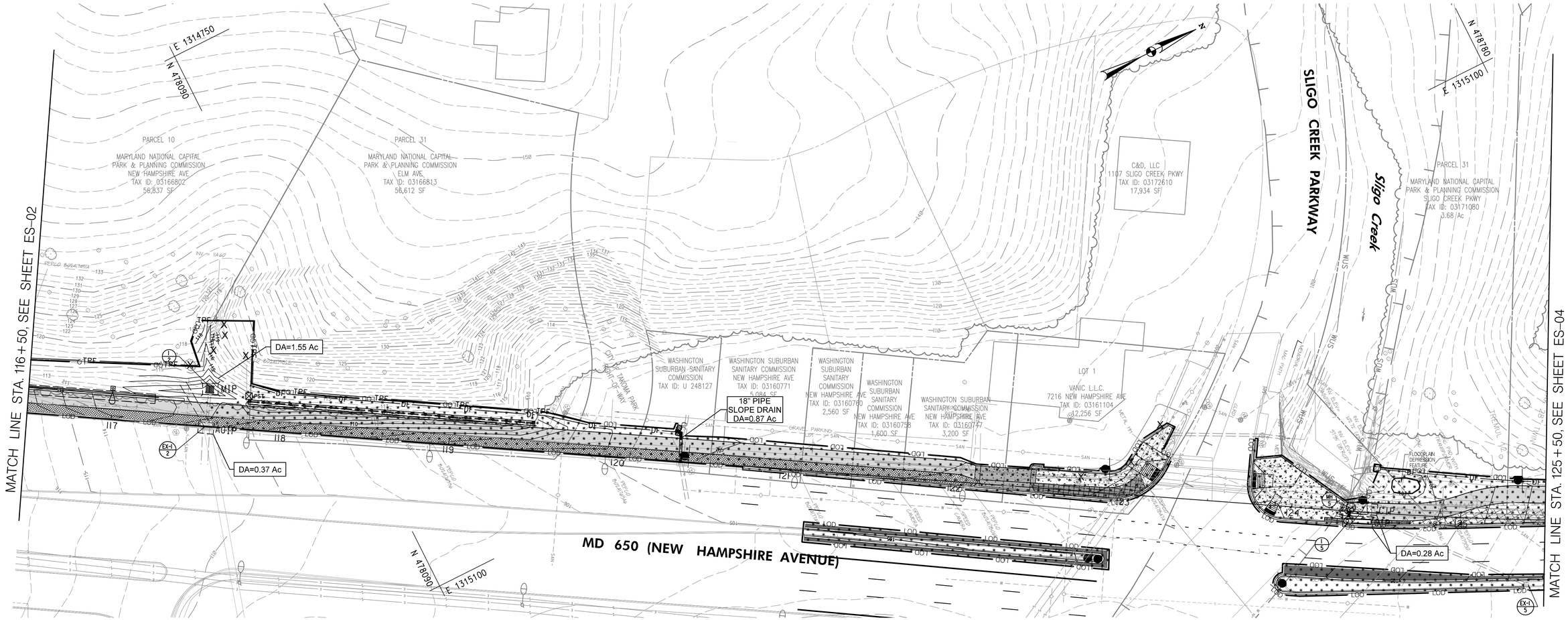

30' 0 30' 60'
SCALE: 1"=30'

ES–03

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)
- SAME DAY STABILIZATION
- SWM FOOTPRINT
- LOD — LIMIT OF DISTURBANCE
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CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL PLAN

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

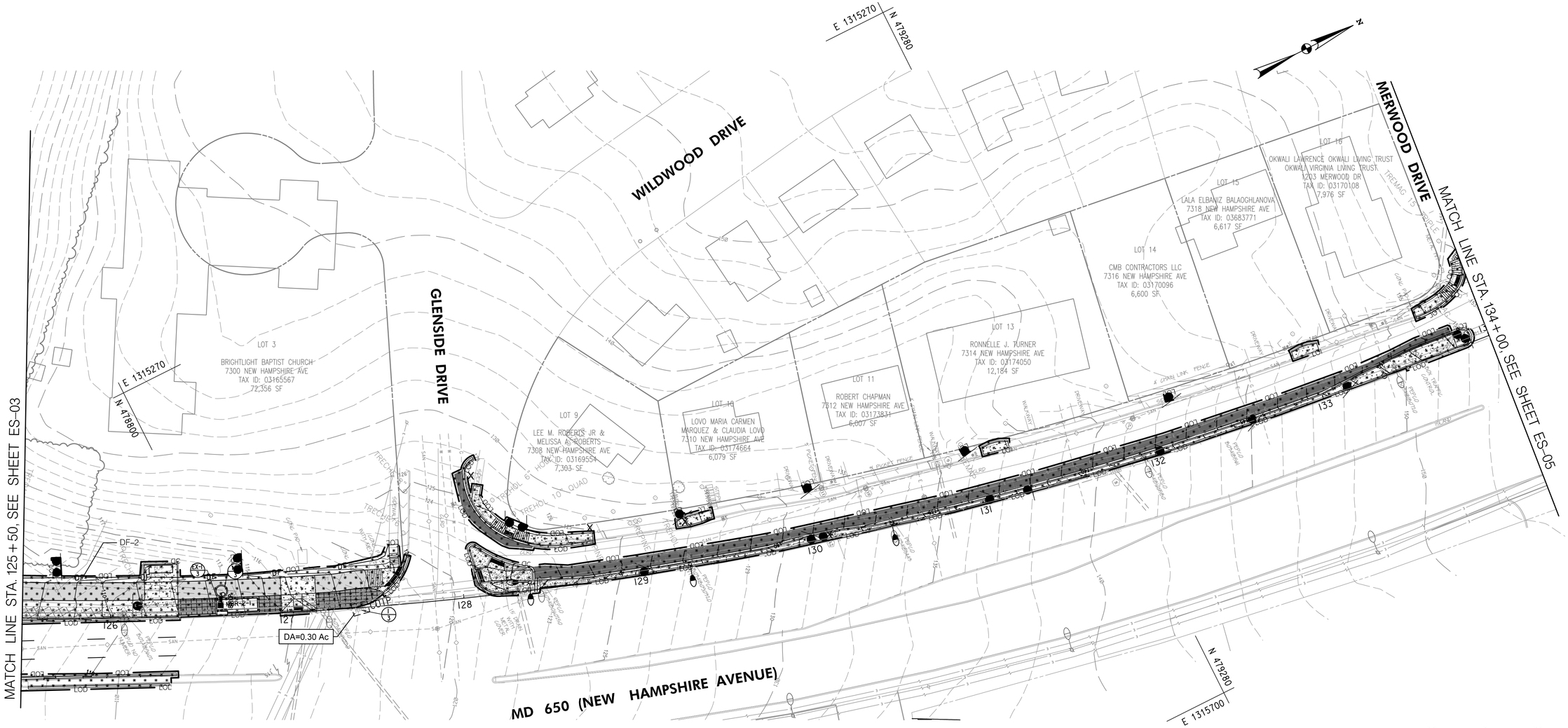
DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. ES – 03 OF 6 SHEET NO. 47 OF 73

PLOTTED: Friday, May 08, 2020 AT 12:43 PM
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pES-003_NewAveBike.dgn



30' 0 30' 60'

SCALE: 1"=30'

ES–04

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)
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CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL PLAN

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

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TAX MAPS JN561 & JN562

DRAWING NO. ES – 04 OF 6

SHEET NO. 48 OF 73

PLOTTED: Friday, May 08, 2020 AT 12:45 PM
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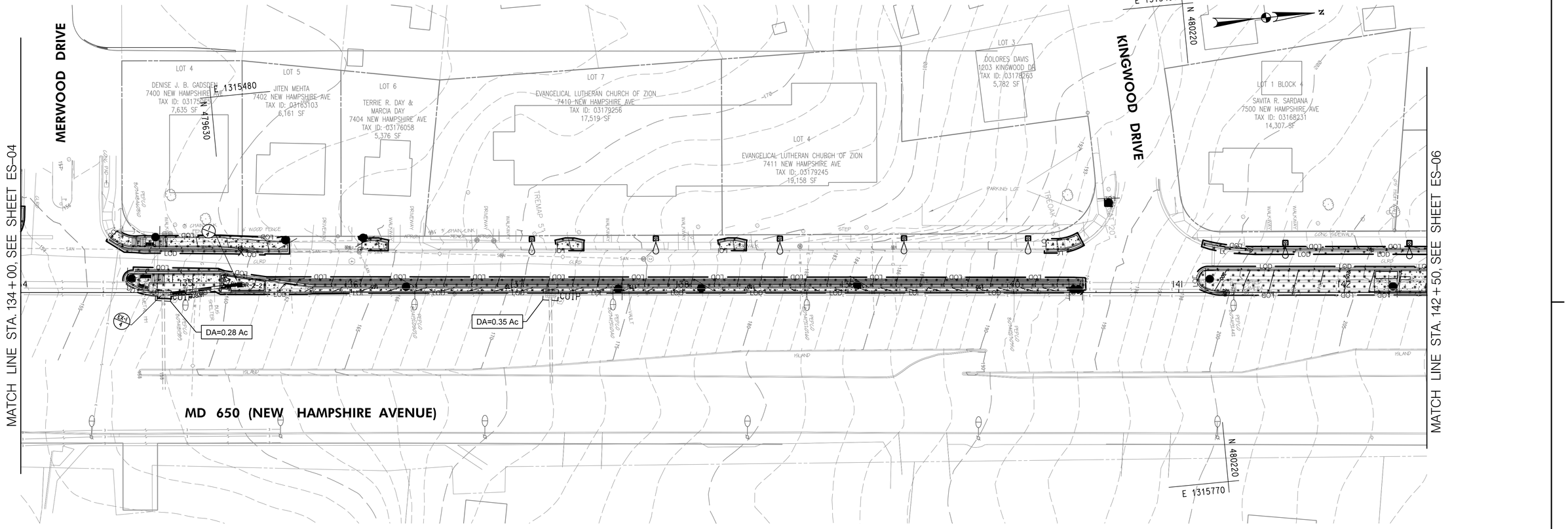

30' 0 30' 60'
SCALE: 1"=30'

ES–05

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)
- SAME DAY STABILIZATION
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- LOD — LIMIT OF DISTURBANCE
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CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL PLAN

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. ES – 05 OF 6

SHEET NO. 49 OF 73

PLOTTED: Friday, May 08, 2020 AT 12:47 PM
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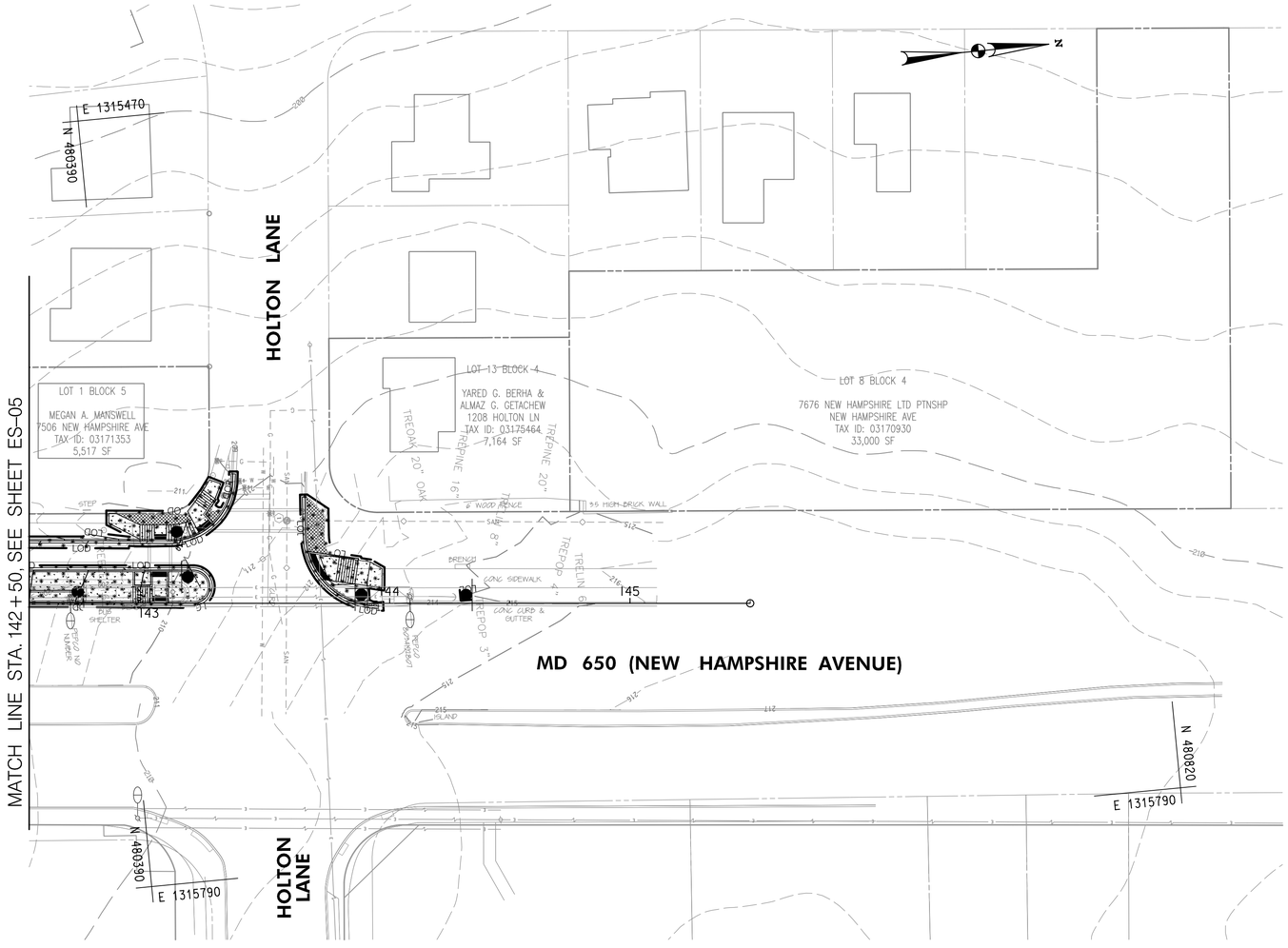

30' 0 30' 60'

SCALE: 1"=30'

ES-06

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL (PAID FOR AS CLASS 1 EXCAVATION)
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NO.	REVISION	DATE	BY

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

EROSION AND SEDIMENT CONTROL PLAN

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY DEA
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830
WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. ES – 06 OF 6 SHEET NO. 50 OF 73

PLOTTED: Friday, May 08, 2020 AT 12:50 PM
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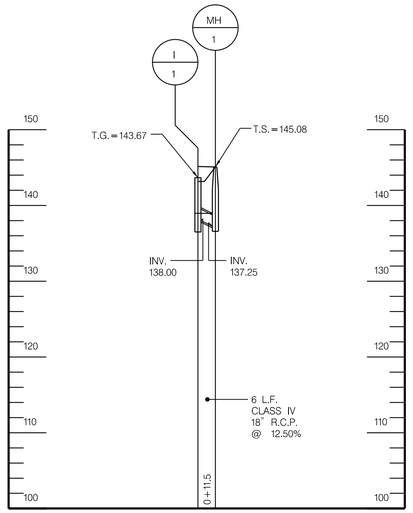
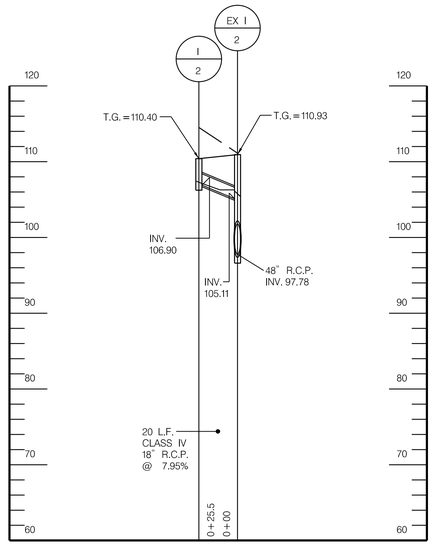


MH-1 to I-1



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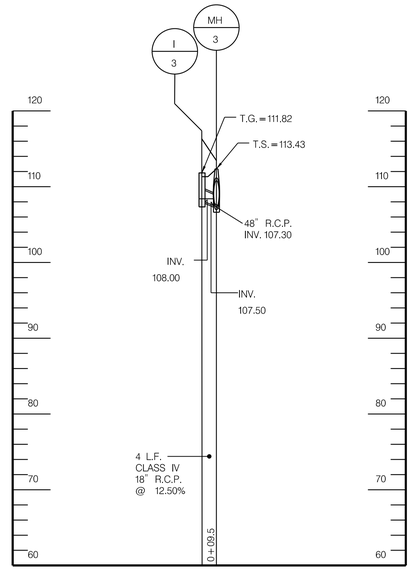

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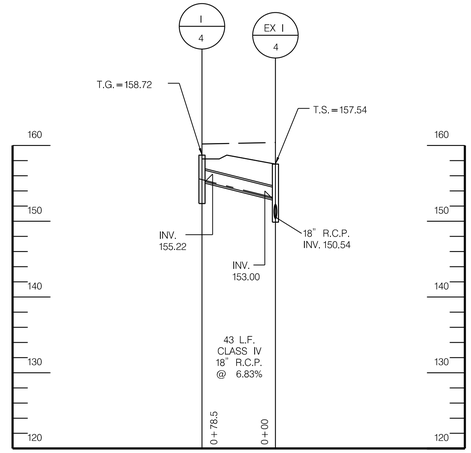
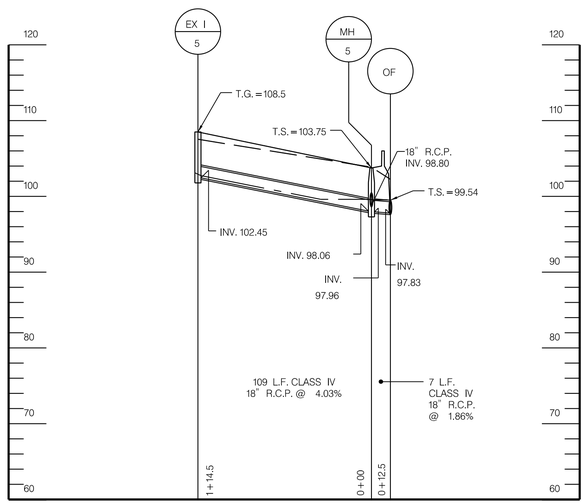
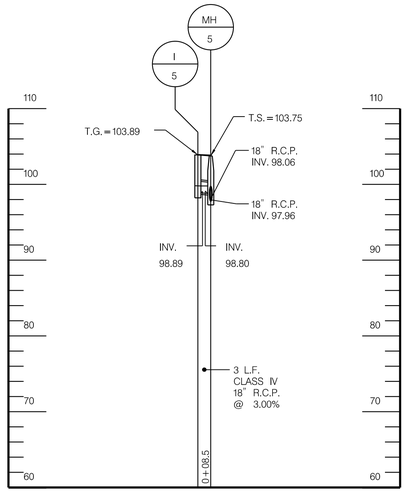


EX I-4 to I-4



OF to EX-I-5



MH-5 to I-5

VERTICAL SCALE: 1" = 10'
HORIZONTAL SCALE: 1" = 50'

STORM DRAIN STRUCTURE SCHEDULE

STRUCTURE NO.	STATION	OFFSET		BASELINE	TYPE	STD. REF.	T.S. OR T.G. ELEV.	INV. IN	INV. OUT
I-1	112+67.5	4.75	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	143.67	-	138.00
MH-1	112+67.5	2.36	RT	mBL	48" DIAMETER PRECAST MANHOLE	MD 384.01	145.08	137.25	-
I-2	117+57	24.78	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	110.40	-	106.90
I-5	124+33	5.81	RT	mBL	PRECAST CIRCULAR 15' COG INLET	MD 374.62	103.89		98.89
MH-5	124+35	2.23	LT	mBL	60" DIAMETER PRECAST MANHOLE	MD 384.03	103.75	98.80, 97.96	-
I-3	126+62	5.94	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	111.82	-	108.00
MH-3	126+62	13.88	LT	mBL	72" DIAMETER PRECAST MANHOLE	MD 384.05	113.43	107.50	-
I-4	135+32	5.98	LT	mBL	STD DOUBLE OPENING TYPE K NON-TRAFFIC	MD 378.03	158.72	-	155.22

STORM DRAIN PIPE SCHEDULE

FROM	TO	SIZE	MATERIAL	LENGTH
I-1	MH-1	18"	R.C.P. CLASS IV	4 L.F.
I-5	MH-5	18"	R.C.P. CLASS IV	3 L.F.
I-3	MH-3	18"	R.C.P. CLASS IV	4 L.F.
I-4	EX-I-4	18"	R.C.P. CLASS IV	43 L.F.

DP-01

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

DRAINAGE PROFILES PLAN

SCALE NTS DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY AGB
DRAWN BY ABD
CHECKED BY SBP
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. DP – 01 OF 01

SHEET NO. 51 OF 73

NO.	REVISION	DATE	BY

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BY: bbaral -

PLOTTED: 5/10/2020
FILE: \\balsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pDP-0000_NewAveBike.dgn

GENERAL NOTES

1. MAINTAIN ACCESS TO ALL ROADWAYS, FRONTAGE ROADS, DRIVEWAY ENTRANCES AND ON-STREET PARKING AT ALL TIMES UNLESS DIRECTED OTHERWISE BY THE ENGINEER. CLOSURE OF DRIVEWAY ENTRANCES, FRONTAGE ROADS AND ON-STREET PARKING MUST BE COORDINATED WITH THE PROPERTY OWNERS THROUGH THE CITY OF TAKOMA PARK AND THE ENGINEER.
2. ALL STANDARD REGULATORY AND WARNING SIGNS USED FOR MAINTENANCE OF TRAFFIC SHALL CONFORM TO THE LATEST VERSION OF FHWA'S "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", AS WELL AS MDOT SHA'S "BOOK OF STANDARDS" AND "SUPPLEMENT TO MUTCD".
3. CONSTRUCTION EQUIPMENT AND MATERIALS SHALL BE STORED OFF THE TRAVEL LANES AND PEDESTRIAN FACILITIES AT ALL TIMES.
4. EXISTING REGULATORY SIGNS IN THE WORK ZONE SHALL BE MAINTAINED AT ALL TIMES AS DIRECTED BY THE ENGINEER. SIGNS THAT ARE NOT APPLICABLE SHALL BE REMOVED OR COMPLETELY COVERED WITH NONTRANSPARENT MATERIAL.
5. REFER TO SP 104 FOR WORK RESTRICTIONS AND TEMPORARY LANE CLOSURE SCHEDULE. WORK IS NOT PERMITTED ON SATURDAYS OR SUNDAYS, WITHOUT ADVANCE NOTICE AND WRITTEN PERMISSION FROM THE CITY OF TAKOMA PARK.
6. WHERE TRAVEL LANES ARE ADJACENT TO THE WORKZONE: MAINTAIN A MINIMUM LANE WIDTH OF 10' ALONG MD 650 (NEW HAMPSHIRE AVE) AND A MINIMUM LANE WIDTH OF 9' ALONG ONE-WAY FRONTAGE ROADS. PARKING LANES SHALL BE MAINTAINED AT A MINIMUM OF 7' WIDE.
7. NOTIFY THE WASHINGTON METROPOLITAN TRANSIT AUTHORITY (WMATA) AND THE PASSENGER FACILITIES MANAGER WITH MONTGOMERY COUNTY RIDE-ON, TWO WEEKS IN ADVANCE OF ANY IMPACTS TO EXISTING BUS STOPS WITHIN THE PROJECT LIMITS.
8. MAINTAIN POSITIVE DRAINAGE ALONG THE ROADWAY SURFACE THROUGHOUT CONSTRUCTION.
9. MISS UTILITY SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO ANY EXCAVATION.
10. THE SEQUENCE OF CONSTRUCTION IS PROVIDED FOR THE CONTRACTOR'S USE AND CONSIDERATION. THE SEQUENCE OF CONSTRUCTION MAY BE MODIFIED BY THE CONTRACTOR WITH PRIOR APPROVAL BY THE CITY OF TAKOMA PARK.
11. COORDINATE CONSTRUCTION ACTIVITIES WITH PEPCO, WHO WILL PERFORM UTILITY POLE RELOCATIONS AND LED LIGHTING MODIFICATIONS TO COBRA HEADS ON EXISTING UTILITY POLES. INSTALLATION OF ORNAMENTAL PATHWAY LIGHTING SHALL BE COMPLETED BY THE CONTRACTOR.

TEMPORARY TRAFFIC CONTROL TYPICAL APPLICATIONS (TTCTA)

THE FOLLOWING TTCTA FROM THE SHA BOOK OF STANDARDS ARE TO BE FOLLOWED AS APPROPRIATE:

MD 104.03-10	-INTER. FAR-LEFT LANE CLOSURE /MULTILANE UNDIV. EQL /LESS THAN 40 MPH
MD 104.03-12	-INTER. FAR-RIGHT LANE CLOSURE /MULTILANE UNDIV. EQL /LESS THAN 40 MPH
MD 104.04-04	-LEFT LANE CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH
MD 104.04-06	-RIGHT LANE CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH
MD 104.04-14	-LEFT-TURN BAY CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40MPH
MD 104.04-16	-INTER. (LEFT LANE, TURN BAY) CLOSURE /DIVIDED UNCON. EQL /LESS THAN 40 MPH
MD 104.06-01 TO MD 104.06-04	-INSTALLING AND REMOVING CLOSURE SETUPS
MD 104.06-09A AND MD 104.06-09C	-PEDESTRIAN AND CURB LANE CONTROL

SEQUENCE OF CONSTRUCTION

PHASE 1 – GENERAL:

1. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
2. SET TEMPORARY TRAFFIC CONTROL DEVICES FOR WORK ALONG FRONTAGE ROAD, INCLUDING IMPLEMENTATION OF PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-02.
3. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
4. WORK SHALL NOT PROCEED AHEAD UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL WORK SHALL BE COMPLETED FOR PHASE 1A BEFORE PROCEEDING TO PHASE 1B.

PHASE 1A – AUBURN AVE. TO DEVONSHIRE AVE. (MD 650 STA. 102+00 TO 105+50):

1. CLOSE FRONTAGE ROAD.
2. CONSTRUCT FRONTAGE ROAD, MEDIAN, CURB & GUTTER AND ASSOCIATED FULL DEPTH PAVEMENT.
3. REMOVE AND RESET FENCES, CONSTRUCT CURB & GUTTER, ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE PEDESTRIAN RAMPS, CONCRETE DRIVEWAY APRONS AND DETECTABLE WARNING SURFACES. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

PHASE 1B – DEVONSHIRE AVE. TO LARCH AVE. (MD 650 STA. 105+50 TO 111+15):

1. CLOSE FRONTAGE ROAD.
2. REMOVE AND RESET FENCES, CONSTRUCT CURB & GUTTER, ASPHALT SHARED USE PATH, CONCRETE PEDESTRIAN RAMPS, CONCRETE DRIVEWAY APRONS AND DETECTABLE WARNING SURFACES.
3. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS (AUBURN AVE. TO LARCH AVE).

PHASE 2 – GENERAL

1. REMOVE PHASE 1B TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
2. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
3. IMPLEMENT PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-02.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.

PHASE 2A – OUTFALL & STREAM WORK (MD 650 APPROX. STA. 114+25 TO STA. 116+25):

1. CLOSE FRONTAGE ROAD NORTH SIDE OF LARCH AVENUE. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.04-06.
2. CONSTRUCT MH-2 AND EW-1, PERFORM STREAM RESTORATION WORK AND CONSTRUCT HW-1 ON M-NCPPC PROPERTY.

PHASE 2B – LARCH AVE. TO SLIGO CREEK PKWY (MD 650 APPROX. STA. 111+15 TO STA. 123+50):

1. SET TEMPORARY TRAFFIC CONTROL DEVICES FOLLOW MD 104.03-10, MD 104.04-06, MD 104.04-04 AND MD 104.04-14. MAINTAIN PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-02.
2. CONSTRUCT CURB & GUTTER, ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, PATHWAY LIGHTING, MBR-6-2, I-1 AND MH-1. RELOCATE BENCHES AT BUS STOP. COORDINATE RELOCATION OF BUS STOP SIGN WITH WMATA AND MONTGOMERY COUNTY RIDE-ON.
3. CONSTRUCT RETAINING WALL NO. 1, NO. 2 AND NO. 3, ASPHALT SHARED USE PATH, CONCRETE BUS STOP PAD, PATHWAY LIGHTING, TURFGRASS SOD ESTABLISHMENT AND I-2 CONNECTION TO EXISTING PIPE.
4. SOUTH LEG OF MD 650 /SLIGO CREEK PARKWAY INTERSECTION: RELOCATE FENCE ON WSSC PROPERTY, CONSTRUCT CURB & GUTTER, PERFORM SOUTHBOUND MD 650 MONOLITHIC MEDIAN RECONSTRUCTION AND LANE SHIFTS EAST. CONSTRUCT ASPHALT SHARED USE PATH, TYPE 2 PAVERS, CONCRETE PEDESTRIAN RAMPS, CONCRETE DRIVEWAY APRON AND DETECTABLE WARNING SURFACES.

PHASE 3– SLIGO CREEK PKWY TO GLENSIDE DR. (MD 650 APPROX. STA. 123+50 TO STA. 127+75):

1. REMOVE PHASE 2B TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
2. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
3. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
4. INSTALL TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.03-10, MD 104.04-06, MD 104.04-04 AND MD 104.04-14.
5. NORTH LEG OF MD 650/SLIGO CREEK PARKWAY INTERSECTION: PERFORM SOUTHBOUND MD 650 MEDIAN RECONSTRUCTION, LANE SHIFTS EAST, CURB AND GUTTER CONSTRUCTION, FULL DEPTH PAVING. TRAFFIC SIGNAL MODIFICATIONS (SLIGO CREEK PKWY), BRIDGE SCUPPER WORK, REINFORCED CONCRETE SIDEWALK RECONSTRUCTION ON BRIDGE DECK, CONCRETE PEDESTRIAN RAMPS AND DETECTABLE WARNING SURFACES.
6. CONSTRUCT ASPHALT SHARED USE PATH, TYPE 2 PAVERS, FLOODPLAIN DEPRESSION, CONCRETE BUS PAD CONSTRUCTION, MBR-2-1, MH-3, CONCRETE PEDESTRIAN RAMPS AND DETECTABLE WARNING SURFACES. COORDINATE RELOCATION OF BUS STOP SIGN AND BUS SHELTER WITH WMATA, MONTGOMERY COUNTY RIDE-ON AND THE CITY OF TAKOMA PARK, RESPECTIVELY. PERFORM TRAFFIC SIGNAL MODIFICATIONS AT GLENSIDE DR.
7. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

SEQUENCE OF CONSTRUCTION (CONTINUED)

PHASE 4 – GENERAL

1. REMOVE PHASE 3 TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
2. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
3. SET TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.04-06. IMPLEMENT PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-2.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
5. WORK SHALL NOT PROCEED AHEAD UNTIL ALL DISTURBED AREAS ARE STABILIZED. ALL WORK SHALL BE COMPLETED FOR PHASE 4A BEFORE PROCEEDING TO PHASE 4B.

PHASE 4A – GLENSIDE DR TO MERWOOD DR (MD 650 STA. 127+75 TO STA. 134+25):

1. CLOSE FRONTAGE ROAD.
2. CONSTRUCT CURB AND GUTTER, CONCRETE SIDEWALK, CONCRETE PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, MEDIAN RECONSTRUCTION AND FULL DEPTH PAVING.
3. PERFORM TRAFFIC SIGNAL MODIFICATIONS AT MERWOOD DR.

PHASE 4B – MERWOOD DR TO KINGWOOD DR (MD 650 STA. 134+25 TO STA. 140+75):

1. CLOSE FRONTAGE ROAD.
2. CONSTRUCT CURB AND GUTTER, CONCRETE SIDEWALK, CONCRETE PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, MBR-2-2, I-4, PIPE CONNECTIONS, PATHWAY LIGHTING, MEDIAN RECONSTRUCTION AND FULL DEPTH PAVING. COORDINATE ANY TEMPORARY CLOSURES OF BUS STOP AT STA. 135+10 WITH WMATA AND MONTGOMERY COUNTY RIDE ON.
3. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS (GLENSIDE DR TO KINGWOOD DR)

PHASE 5 – KINGWOOD DR TO HOLTON LN (MD 650 STA. 140+75 TO STA. 143+95):

1. REMOVE PHASE 4 TEMPORARY TRAFFIC CONTROL DEVICES AND SIGNS THAT ARE NO LONGER NEEDED.
2. PRIOR TO CONSTRUCTION, FIELD MARK THE LIMITS OF DISTURBANCE AND OBTAIN WRITTEN APPROVAL FROM THE CITY OF TAKOMA PARK INSPECTOR.
3. SET TEMPORARY TRAFFIC CONTROL DEVICES FOLLOWING MD 104.04-06. IMPLEMENT PEDESTRIAN DETOURS AS SHOWN ON SHEET MT-2. CLOSE FRONTAGE ROAD.
4. INSTALL EROSION AND SEDIMENT CONTROL DEVICES IN ACCORDANCE WITH THE EROSION AND SEDIMENT CONTROL PLANS.
5. CONSTRUCT CURB AND GUTTER, CONCRETE SIDEWALK, CONCRETE PEDESTRIAN RAMPS, DETECTABLE WARNING SURFACES, MEDIAN RECONSTRUCTION, CONCRETE BUS PAD AND PATHWAY LIGHTING. COORDINATE BUS STOP RELOCATION (SIGN & SHELTER) WITH WMATA, MONTGOMERY COUNTY RIDE ON AND CITY OF TAKOMA PARK.
6. PERFORM TRAFFIC SIGNAL MODIFICATIONS AT HOLTON LN.
7. INSTALL PERMANENT SIGNING & PAVEMENT MARKINGS AS SHOWN ON THE PLANS.

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BY: bbaral -

MT-01

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

REVISIONS

60% PLANS

MAY 2020

MAINTENANCE OF TRAFFIC NARRATIVE

SCALE NTS DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY SAB
DRAWN BY SAB
CHECKED BY RJG
F.A.P. NO. T.B.D.

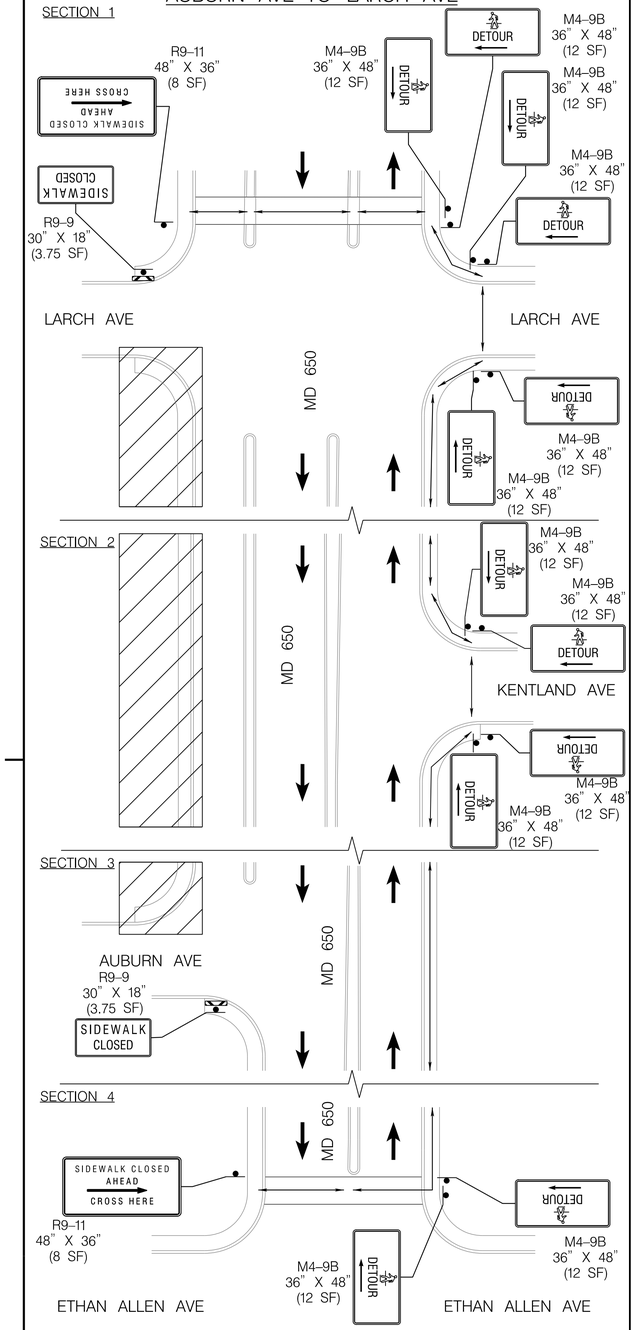
COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. MT01 01 OF 02 SHEET NO. 52 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pMT-0001_NewAveBike.dgn

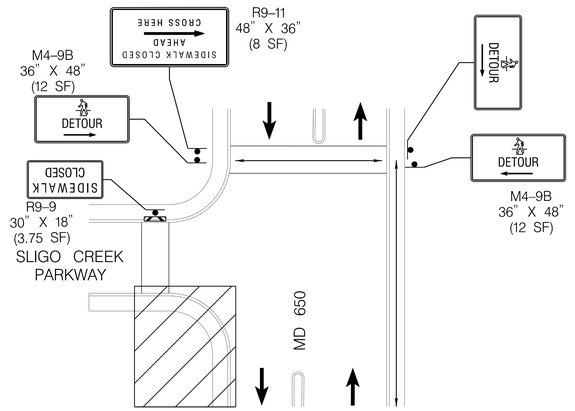
AUBURN AVE TO LARCH AVE

SECTION 1



LARCH AVE TO SLIGO CREEK PARKWAY

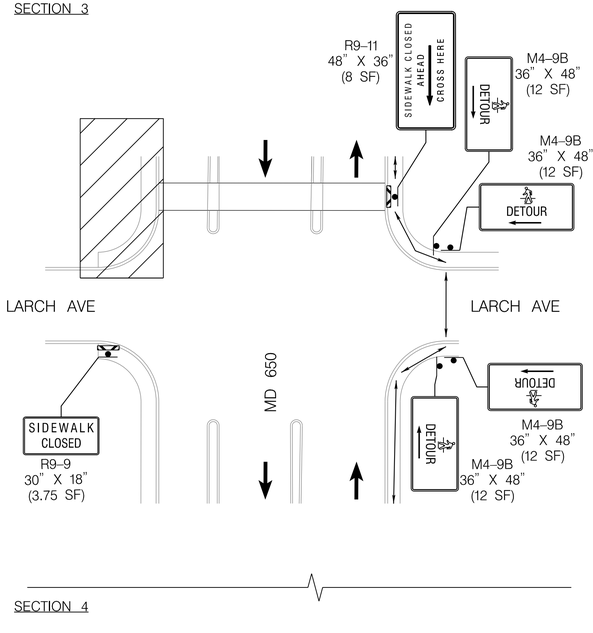
SECTION 1



SECTION 2

IMPLEMENT PEDESTRIAN DETOUR SIGNING FOR LINDEN AVE. FOLLOWING: AUBURN AVE. TO LARCH AVE. – SECTION 2.

SECTION 3



SECTION 4

IMPLEMENT PEDESTRIAN DETOUR SIGNING FOLLOWING: AUBURN AVE. TO LARCH AVE.–SECTION 4.

SLIGO CREEK PARKWAY TO MERWOOD DRIVE

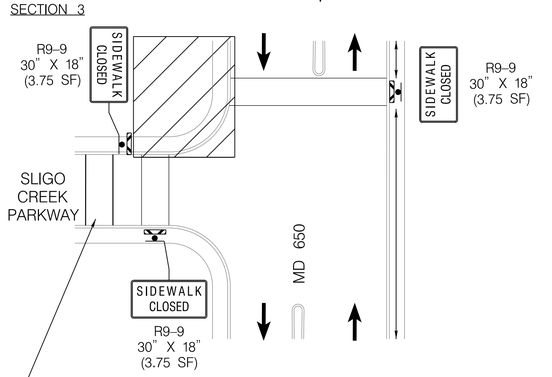
SECTION 1

IMPLEMENT PEDESTRIAN DETOUR SIGNING FOR MERWOOD DRIVE FOLLOWING: AUBURN AVE. TO LARCH AVE. – SECTION 1.

SECTION 2

IMPLEMENT PEDESTRIAN DETOUR SIGNING FOR ERSKINE STREET FOLLOWING: AUBURN AVE. TO LARCH AVE. – SECTION 2. INSTALL R9–9 SIGNAGE AND BARRICADE TO PROHIBIT PEDESTRIAN TRAFFIC ACROSS MD 650.

SECTION 3

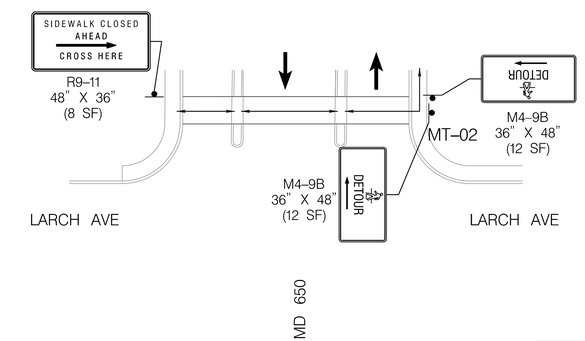


IMPLEMENT TEMPORARY CROSSWALK FOLLOWING MDOT SHA STD. NO. MD 104.06–09C

SECTION 4

IMPLEMENT PEDESTRIAN DETOUR SIGNING FOR LINDEN AVE. FOLLOWING: AUBURN AVE. TO LARCH AVE. – SECTION 2.

SECTION 5



MERWOOD DRIVE TO HOLTON LANE

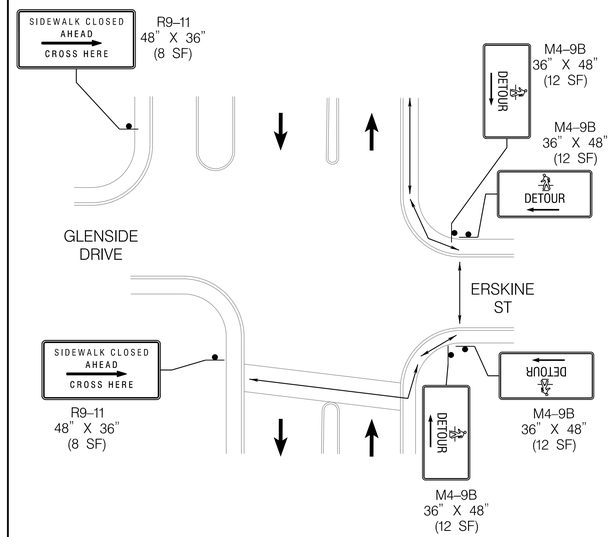
SECTION 1

IMPLEMENT PEDESTRIAN DETOUR SIGNING FOR HOLTON LANE FOLLOWING: AUBURN AVE. TO LARCH AVE. – SECTION 1.

SECTION 2

IMPLEMENT PEDESTRIAN DETOUR SIGNING FOR MERWOOD DR. FOLLOWING: LARCH AVE. TO SLIGO CREEK PARKWAY – SECTION 3.

SECTION 3



MT–02

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LEGEND

- SIGN
- WORK AREA
- DIRECTION OF TRAFFIC
- DETECTABLE BARRICADE
- PEDESTRIAN MOT

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

REVISIONS

60% PLANS

MAY 2020

PEDESTRIAN DETOUR

SCALE 1"=30' DATE MAY 2020 CONTRACT NO. T.B.D.

DESIGNED BY SAB
DRAWN BY SAB
CHECKED BY RJG
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

DRAWING NO. MT02 02 OF 02 SHEET NO. 53 OF 73

PLOTTED: 5/10/2020
FILE: \\balsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pMT-0002_NewAveBike.dgn

BY: bbaral -

MD 650 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTONS AND SIGNS

15 — LARCH AVE R10-3(1) 9"X15"

16 — LARCH AVE R10-3(1) 9"X15"

17 — NEW HAMPSHIRE AVE R10-3(1) 9"X15"

18 — NEW HAMPSHIRE AVE R10-3(1) 9"X15"

EXISTING SIGNS TO REMAIN

19,20 — Larch AVE — D-3(1) 44"X16"

PROPOSED LED SIGNALS

11,12,14 — 16"

EXISTING LED SIGNALS TO REMAIN

1,2,3,4,5 6,7,8,9,10 — R Y G — 12"

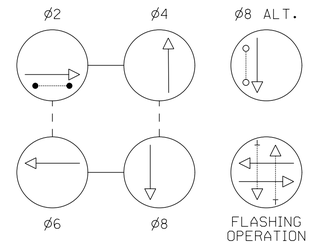
13 — 16"

EXISTING LED SIGNALS TO BE REMOVED

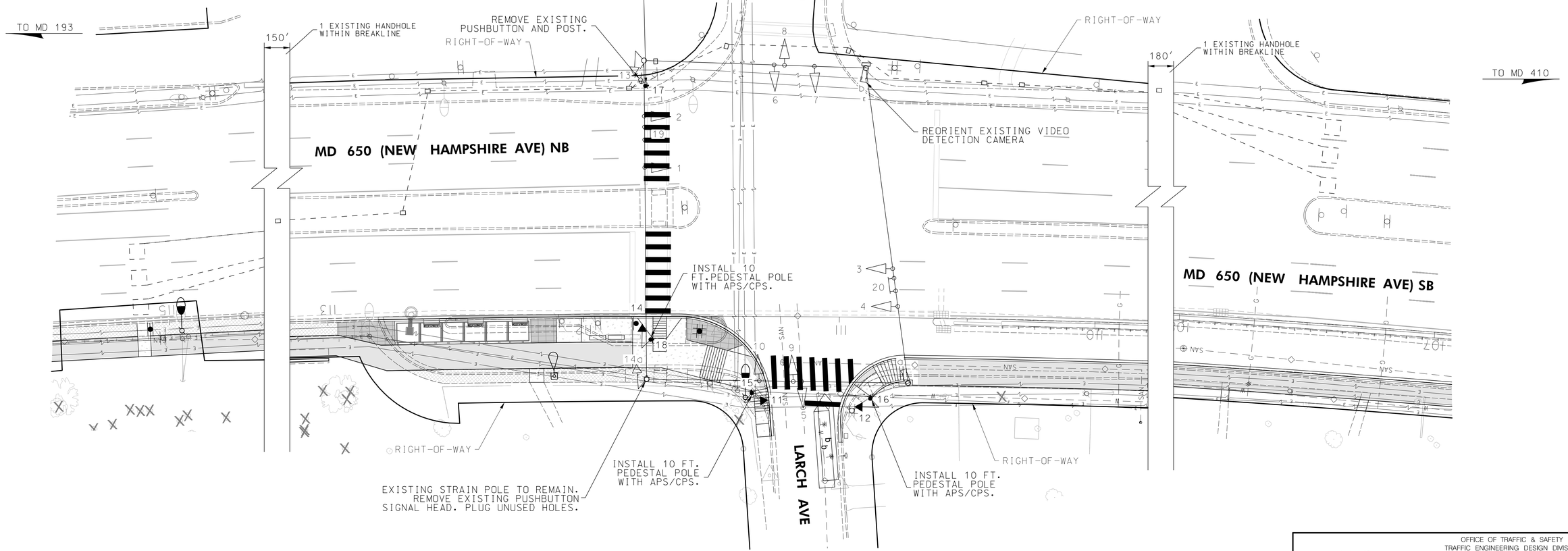
14a — 16"

a,b — EXISTING VIDEO DETECTION TO REMAIN

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD SD STORM DRAIN
G G GAS MAIN
W W WATER MAIN
SAN SAN SEWER MAIN
E E ELECTRIC CABLES
E E AERIAL CABLES
T T TELEPHONE CABLES
FO FO FIBER-OPTIC

BY: WFW

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TEAM LEADER
ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR
ORIGINAL ON FILE

REVISIONS
D INSTALL APS/CPS 05-2020 — SHA NO. . TIMS NO. — SJL WFW
C INSTALL VIDEO DETECTION 09-2013 FOR PHASE 4 AND 8 SHA NO. 2385ST25110 TIMS NO. M262 — JMW
B REPLACE LOOP DETECTORS 08-09-1986 SHA NO. P839501385 — ZPS TH

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

NEW AVE BIKEWAY

MD 650 (NEW HAMPSHIRE AVE) AT LARCH AVE

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE 07-03-1975 CONTRACT NO.

DESIGNED BY
DRAWN BY B. TYSON
CHECKED BY
MDE/PRD

COUNTY MONTGOMERY
LOGMILE 15065000.21
TIMS NO.
TOD NO.

TS NO. 813D | DRAWING SG-1 OF 5 | SHEET NO. 54 OF 73

PLOTTED: 5/7/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSG-0001_NewAveBike_Larch.dgn

MD 650 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

EXISTING ACCESSIBLE PEDESTRIAN PUSHBUTTONS AND SIGNS TO BE RELOCATED

14

SLIGO CREEK PKWY
R10-3(1)
9"X15"

17

NEW HAMPSHIRE AVE
R10-3(1)
9"X15"

EXISTING SIGNS TO REMAIN

15

R10-3(1)
9"X15"

17

R10-3(1)
9"X15"

22

R3-5R
30"X36"

21a,21b

D-3(1)
60"X16"
(DUAL FACE)

EXISTING SIGNS TO BE REMOVED

18a

R4-7
24"X30"

20a

M1-5(3)
108"X36"

23a

R3-5L
30"X36"

24a,24b

D-3(1)
60"X16"
(DUAL FACE)

PROPOSED LED SIGNALS

2

12"

3,4,8,9

12"

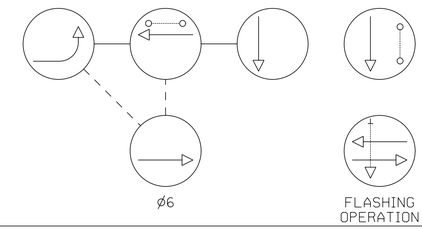
10,13

16"

a,b,c

PROPOSED HD IP-BASED VIDEO DETECTION

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

EXISTING LED SIGNALS TO REMAIN

1

12"

5,6,7

12"

11,12

16"

EXISTING LED SIGNALS TO BE REMOVED

2a

12"

3a,4a,8a,9a

12"

10a,13a

16"

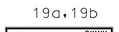
EXISTING VIDEO DETECTION TO BE REMOVED (3 EA)

PROPOSED SIGNS

18

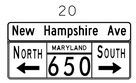
R4-7
24"X30"

19a,19b



D-3(1)
60"X16"
(DUAL FACE)

20



M1-5(4)
108"X48"

23

R5-5L
30"X36"

GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD STORM DRAIN
G GAS MAIN
W WATER MAIN
SAN SEWER MAIN
E ELECTRIC CABLES
E AERIAL CABLES
T TELEPHONE CABLES
FO FIBER-OPTIC

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DIVISION CHIEF
OFFICE DIRECTOR
ORIGINAL ON FILE

REVISIONS
G PARTIAL SIGNAL RECONSTRUCTION SHA NO. , TIMS NO. 05-2020 SJL WFW
F SIGNAL RECONSTRUCT DUE TO DECK REPLACEMENT. CONTRACT NO. MO42351180. TIMS NO. L587 02-2013 BRD NML
E REMOVE TRAFFIC SIGNAL DUE TO BRIDGE DECK REPLACEMENT CONTRACT NO. MO42351180 08-2012 BRD NML

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

NEW AVE BIKEWAY

MD 650 (NEW HAMPSHIRE AVE) AT SLIGO CREEK PKWY

TRAFFIC SIGNAL PLAN

SCALE 1"=20' DATE CONTRACT NO.

DESIGNED BY
DRAWN BY
CHECKED BY
MDE/PRD

COUNTY MONTGOMERY
LOGMILE 15065000.44
TIMS NO.
TOD NO.

TS NO. 373G | DRAWING SG-2 OF 5 | SHEET NO. 55 OF 73

PLOTTED: 5/7/2020
FILE: \\balsvn06\v2016\2016\16217_NewAveBike\CADD\plans\pSG-0002_NewAveBike_Sligo.dgn

MD 650 IS ASSUMED TO RUN
IN A NORTH-SOUTH DIRECTION

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTONS AND SIGNS

16 — GLENSIDE DR R10-3(1) 9"X15"

17 — GLENSIDE DR R10-3(1) 9"X15"

18 — NEW HAMPSHIRE AVE R10-3(1) 9"X15"

19 — NEW HAMPSHIRE AVE R10-3(1) 9"X15"

EXISTING SIGNS TO REMAIN

20 — Erksine Street / Glenside Drive — D-3(1) 70"X32"

21 — Glenside Drive / Erksine Street — D-3(1) 70"X32"

EXISTING SIGNS TO BE REMOVED

18a,19a

EXISTING LED SIGNALS TO BE REMOVED

15a — 16"

EXISTING LED SIGNALS TO REMAIN

1,2,3,4,5,6 7,8,9,10,11 — R Y G — 12"

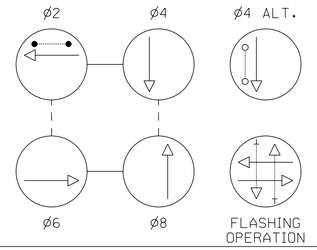
14 — 16"

a,b — EXISTING VIDEO DETECTION TO REMAIN

PROPOSED LED SIGNALS

12,13,15 — 16"

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

PEPCO #802418-9616

TO MD 410

TO MD 193

MD 650 (NEW HAMPSHIRE AVE) SB

MD 650 (NEW HAMPSHIRE AVE) NB

GLENSIDE DR

RIGHT-OF-WAY

INSTALL 10 FT. PEDESTAL POLE WITH APS/CPS.

INSTALL 10 FT. PEDESTAL POLE WITH APS/CPS.

INSTALL 10 FT. PEDESTAL POLE WITH APS/CPS.

USE EXISTING MAST ARM POLE. REMOVE EXISTING PUSHBUTTON AND SIGN. INSTALL APS. PLUG UNUSED HOLES.

ERKSINE ST

GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD — STORM DRAIN
G — GAS MAIN
W — WATER MAIN
SAN — SEWER MAIN
E — ELECTRIC CABLES
E — AERIAL CABLES
T — TELEPHONE CABLES
FO — FIBER-OPTIC

BY: WFW

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ASST. DIV. CHIEF
DIVISION CHIEF
OFFICE DIRECTOR

ORIGINAL ON FILE

REVISIONS

C — INSTALL APS/CPS — 05-2020 — SHA NO. . TIMS NO. — SJL MFW

B — INSTALLATION OF VIDEO DETECTION TIMS NO. K845 — 03-2011 — LM JMC

A — REPAIR DAMAGED VECHICLE LOOP DETECTORS SHA NO. 859-16483 — 10-1993 — DLS RLS RL

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

NEW AVE BIKEWAY

MD 650 (NEW HAMPSHIRE AVE) AT GLENSIDE DR/ERKSINE ST

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' | DATE 10-11-1991 | CONTRACT NO.

DESIGNED BY R.R. ZACHERL | COUNTY MONTGOMERY
DRAWN BY W.J. NIES | LOGMILE 15065000.52
CHECKED BY JAR | TIMS NO.
MDE/PRD | TOD NO.

TS NO. 3195C | DRAWING SG-3 OF 5 | SHEET NO. 56 OF 73

PLOTTED: 5/8/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSG-0003_NewAveBike_Glenside_Erksine.dgn

MD 650 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

PROPOSED ACCESSIBLE PEDESTRIAN PUSHBUTTONS AND SIGNS

16 — NEW HAMPSHIRE AVE R10-3(1) 9"X15"

17 — NEW HAMPSHIRE AVE R10-3(1) 9"X15"

18 — MERWOOD DR R10-3(1) 9"X15"

19 — MERWOOD DR R10-3(1) 9"X15"

EXISTING SIGNS TO BE REMOVED

16a, 17a — R10-3(1) 9"X15"

EXISTING SIGNS TO REMAIN

20a, 21a — Merwood DR — D-3(1) 66"X16" (DUAL FACE)

20b, 21b — Merwood DR — D-3(1) 66"X16" (DUAL FACE)

22a, 22b, 23a, 23b — New Hampshire AVE — D-3(1) 72"X16" (DUAL FACE)

24 — SOUTH MARYLAND 650 — M1-5(6) 30"X48"

25 — NORTH MARYLAND 650 — M1-5(6) 48"X72"

26 — NORTH MARYLAND 650 — M1-5(6) 30"X48"

27 — SOUTH MARYLAND 650 — M1-5(6) 48"X72"

EXISTING LED SIGNALS TO REMAIN

1,2,4,5 — R Y G — 12"

3,6,7 10,11 — R Y G — 12"

8,9 — R Y G — 12"

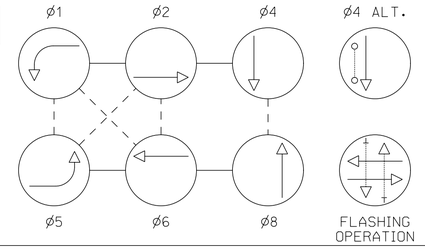
12,13 — 16"

a,b,c,d — EXISTING VIDEO DETECTION TO REMAIN

PROPOSED LED SIGNALS

13,14,15 — 16"

NEMA PHASING



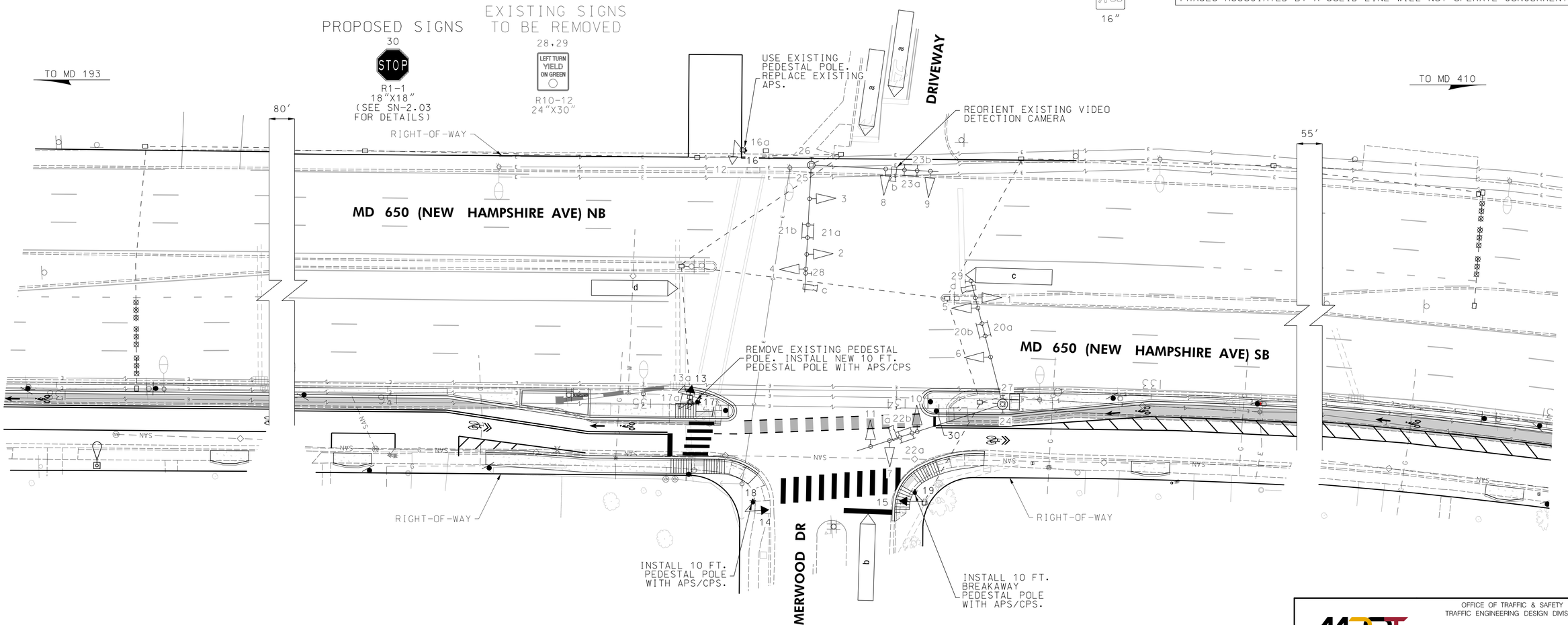
NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.

PROPOSED SIGNS

30 — STOP — R1-1 18"X18" (SEE SN-2.03 FOR DETAILS)

EXISTING SIGNS TO BE REMOVED

28,29 — LEFT TURN YIELD ON GREEN — R10-12 24"X30"



BY: WFW

GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD — STORM DRAIN
G — GAS MAIN
W — WATER MAIN
SAN — SEWER MAIN
E — ELECTRIC CABLES
E — AERIAL CABLES
T — TELEPHONE CABLES
FO — FIBER-OPTIC

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REVISIONS
J — INSTALL APS/CPS — 05-2020 — SHA NO. .TIMS NO. — SJL MFW
I — RECONSTRUCT EXISTING TRAFFIC SIGNAL — 06-04-1999
H — EP LEFT TURNS ADDED — 07-07-1994 — EMM MAR DAB BRK TH — TH

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

NEW AVE BIKEWAY

MD 650 (NEW HAMPSHIRE AVE) AT MERWOOD DR

TRAFFIC SIGNAL PLAN

SCALE 1"=20' DATE _____ CONTRACT NO. _____

DESIGNED BY _____ COUNTY MONTGOMERY
DRAWN BY GORDON LOGMILE _____
CHECKED BY _____ TIMS NO. _____
MDE/PRD _____ TOD NO. _____

TS NO. 292J | DRAWING SG-4 OF 5 | SHEET NO. 57 OF 73

PLOTTED: 5/7/2020
FILE: \\ballsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSG-0004_NewAveBike_Merwood.dgn

EXISTING ACCESSIBLE PEDESTRIAN PUSHBUTTONS AND SIGNS TO BE RELOCATED

MD 650 IS ASSUMED TO RUN IN A NORTH-SOUTH DIRECTION

20 — HOLTON LN, R10-3(1), 9"X15"

23 — HOLTON LN, R10-3(1), 9"X15"

26 — NEW HAMPSHIRE AVE, R10-3(1), 9"X15"

EXISTING SIGNS TO REMAIN

22, 21, 24, 25,27 — R10-3(1), 9"X15"

29 — R3-3b, 30"X30"

34 — R3-5L, 30"X36"

35 — M1-5(6), 30"X48"

36 — M1-5(6), 48"X72"

37 — M1-5(6), 30"X48"

38 — M1-5(6), 48"X72"

28a,28b,30a,30b — D-3(1), 48"X16" (DUAL FACE)

31a,31b,32a,32b — D-3(1), 72"X16" (DUAL FACE)

33 — R10-12 MOD, 30"X36"

EXISTING LED SIGNALS TO REMAIN

1,2,5,6,7 8,9,10,11 — 12"

3,4 — 12"

13,14,16 17,19 — 16"

a,b,c — EXISTING VIDEO DETECTION TO REMAIN

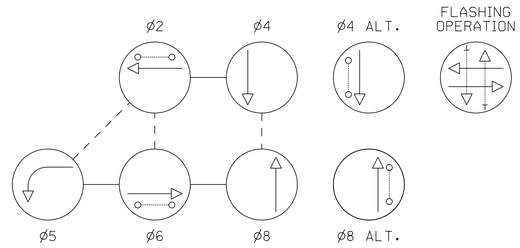
EXISTING LED SIGNALS TO BE RELOCATED

12,15,18 — 16"

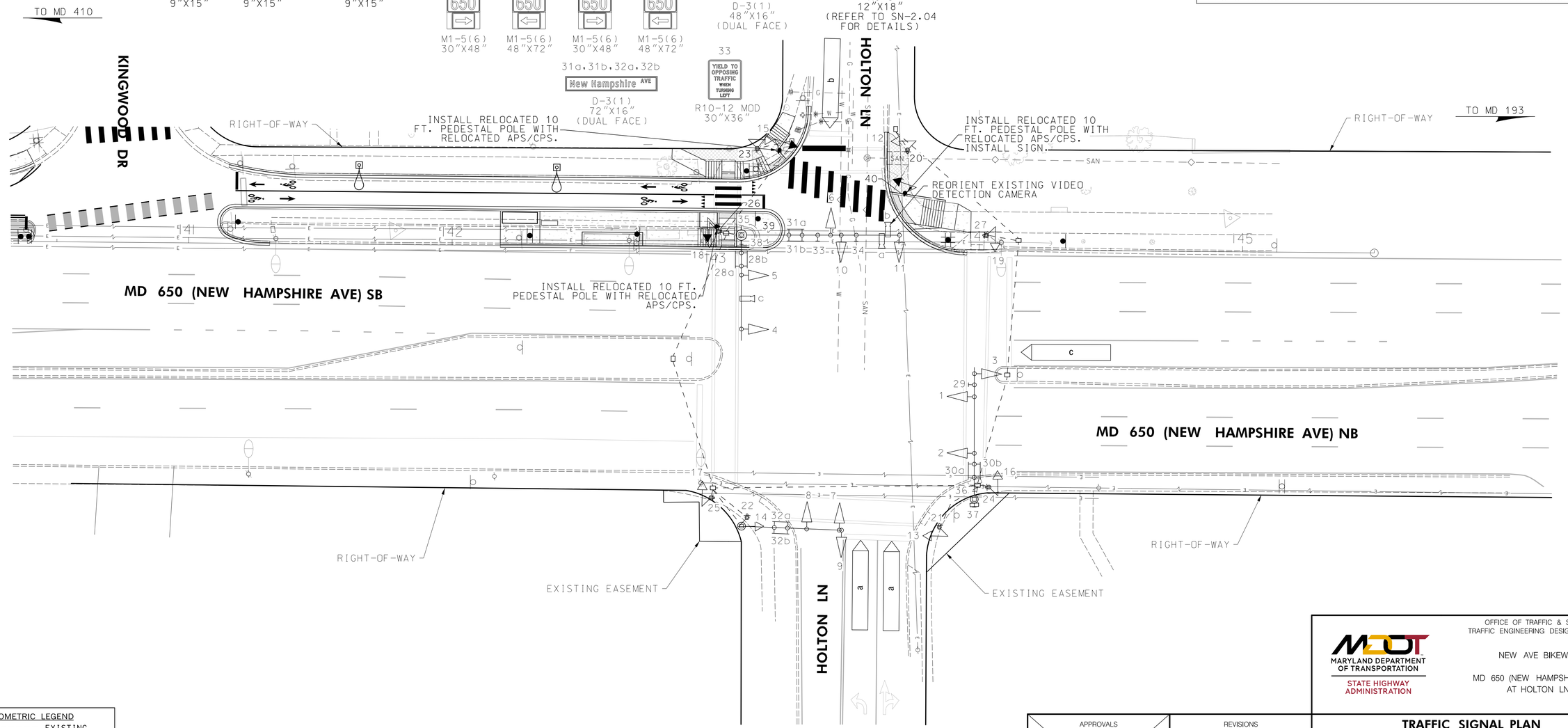
PROPOSED SIGNS

39,40 — R9-5, 12"X18" (REFER TO SN-2.04 FOR DETAILS)

NEMA PHASING



NOTE:
PHASES ASSOCIATED BY A DASHED LINE WILL OPERATE CONCURRENTLY.
PHASES ASSOCIATED BY A SOLID LINE WILL NOT OPERATE CONCURRENTLY.



GEOMETRIC LEGEND
EXISTING
PROPOSED

UTILITY LEGEND
SD STORM DRAIN
G GAS MAIN
W WATER MAIN
SAN SEWER MAIN
E ELECTRIC CABLES
E AERIAL CABLES
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FO FIBER-OPTIC

BY: WFW

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REVISIONS

C	REVISE SIGNAL SIGNING FOR CONTRAFLOW BIKE LANE SHA NO. •TIMS NO.						05-2020
SJL	MFW						
B	INSTALLATION OF VIDEO DETECTION XX656. TIMS NO. L031						04-2011
A	DELETE (PROPOSED) ISLAND. ADD MAST ARM DETECTION AND SIGNALS FOR EB HOLTON LANE						2-16-1994
JRG	DC1	SR	DAZ	ET	BRK	TH	

OFFICE OF TRAFFIC & SAFETY
TRAFFIC ENGINEERING DESIGN DIVISION

MARYLAND DEPARTMENT OF TRANSPORTATION
STATE HIGHWAY ADMINISTRATION

NEW AVE BIKEWAY

MD 650 (NEW HAMPSHIRE AVE) AT HOLTON LN

TRAFFIC SIGNAL PLAN

SCALE 1" = 20' DATE 11-01-1993 CONTRACT NO. P-136-501-385

DESIGNED BY
DRAWN BY J. ALLEN
CHECKED BY R. GORDON
MDE/PRD

COUNTY MONTGOMERY
LOGMILE 15065000.83
TIMS NO.
TOD NO.

TS NO. 3390B | DRAWING SG-5 OF 5 | SHEET NO. 58 OF 73

PLOTTED: 5/7/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSG-0005_NewAveBike_Holton.dgn

SN-1 REV. DATE: FEBRUARY, 2019

CRITERIA

THE CONTRACTOR SHALL BE GOVERNED BY THE STANDARDS AND REQUIREMENTS OF THE FOLLOWING PUBLICATIONS, EXCEPT AS MODIFIED BY THE SPECIAL PROVISIONS OF THIS CONTRACT:

DESIGN

MDOT SHA - "MARYLAND MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", 2011 EDITION AND SUBSEQUENT REVISIONS. (MDMUTCD)

A A S H T O - "HIGHWAY SAFETY DESIGN AND OPERATIONS GUIDE" -1997

A A S H T O - "STANDARD SPECIFICATIONS FOR STRUCTURAL SUPPORTS FOR HIGHWAY SIGNS LUMINAIRES AND TRAFFIC SIGNALS", 2001 EDITION (CATEGORY II FOR ALL OVERHEAD AND CANTILEVER SIGN STRUCTURES).

MATERIALS AND CONSTRUCTION

MDOT SHA - "STANDARD SPECIFICATIONS FOR CONSTRUCTION & MATERIALS", MOST CURRENT EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

MDOT SHA - "BOOK OF STANDARDS FOR HIGHWAY AND INCIDENTAL STRUCTURES", MOST CURRENT EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

DESIGN WIND

100 MPH - WOOD SUPPORTS
10 YEAR RECURRENCE INTERVAL

100 MPH - GROUND MOUNT SIGN STEEL SUPPORTS
10 YEAR RECURRENCE INTERVAL

100 MPH - OVERHEAD AND CANTILEVER STRUCTURES
50 YEAR RECURRENCE INTERVAL

} ALL DISTRICTS

DESIGN STRESS

SOIL BEARING PRESSURE - S = 3,000 P.S.F. (ASSUMED)
SEE MATERIAL & CONSTRUCTION ABOVE AND SPECIAL PROVISIONS FOR DESIGN STRESSES FOR STRUCTURAL STEEL, ALUMINUM, REINFORCING STEEL AND CONCRETE.

CHAMFER

ALL EXPOSED EDGES OF CONCRETE SHALL HAVE A 3/4" X 3/4" CHAMFER.

CLASSIFICATION OF SIGNS

SIGNS ARE DIVIDED INTO TWO (2) GENERAL CATEGORIES.

1. GUIDE SIGNS
   - A) STRUCTURAL TYPES
     - OH - OVERHEAD
     - C - CANTILEVER
     - GM - GROUND MOUNT, BREAKAWAY OR NON-BREAKWAY
     - BM - BRIDGE MOUNTED
   - B) PANELS
     - MATERIAL - EXTRUDED ALUMINUM
     - COPY - DIRECT APPLIED
     - I) HIGH INTENSITY (NEW SIGNS AND REVISIONS TO EXISTING SIGNS)
2. STANDARD SIGNS (REGULATORY, WARNING, ETC.)
   - A) STRUCTURAL TYPES
     - WOOD SUPPORTS
     - SQUARE TUBE
   - B) PANELS
     - MATERIAL - SHEET ALUMINUM
     - COPY - DIRECT APPLIED

IDENTIFICATION OF SIGNS AND PANELS

GUIDE SIGNS

EACH GUIDE SIGN IS IDENTIFIED BY A SIGN NUMBER ON THE PLANS AND IN THE TABULATIONS. (GM-1, GM-2, GM-3, etc)
SIGNS ON STRUCTURES ARE IDENTIFIED WITH A NUMBER AND WHERE VARIATIONS OCCUR, A LOWER CASE LETTER. (OH-1a, OH-1b, OH-1c)

STANDARD SIGNS

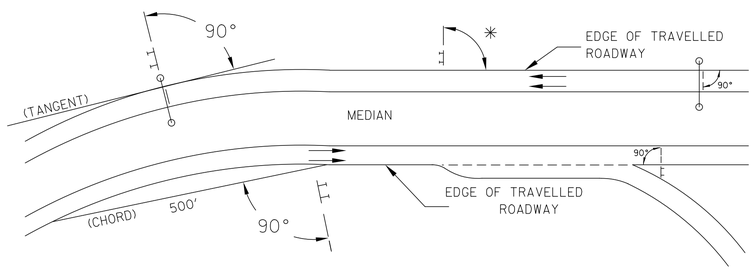
STANDARD SIGNS ARE IDENTIFIED BY PANEL NUMBERS AND ARE CLASSIFIED AS FOLLOWS
- R - REGULATORY
- W - WARNING
- M - ROUTE MARKERS AND ACCESSORIES
- D - DESTINATION AND MILEAGE PANELS
- S - SCHOOL

PANELS SHALL BE DESIGNATED TO AGREE WITH MARYLAND STANDARD SIGN BOOK. EACH STANDARD SIGN IS IDENTIFIED FIRST BY THE SHEET NUMBER, THEN BY THE NUMERICAL ORDER OF THE SIGN AS IT APPEARS ON THE PLAN.
FOR EXAMPLE SHEET SN 2.1-101,102,103, ETC. SHEET SN 2.2-201,202,203,ETC.

PANEL LAYOUT AND ALPHABETS

1. GUIDE SIGN PANEL LAYOUTS ARE BASED ON THE A.A.S.H.T.O. MANUALS NOTED ABOVE.
2. STANDARD SIGN PANEL LAYOUTS ARE BASED ON THE MDMUTCD WITH SPECIFICATIONS DETAILED IN THE MARYLAND STATE HIGHWAY ADMINISTRATION PUBLICATION, "STANDARD SIGN BOOK", AVAILABLE ONLINE AT http://apps.roads.maryland.gov/businesswithsha/bizstdsspecs/desmanualstdpub/publicationsonline/oots/internet_signbook.asp

ORIENTATION OF SIGN FACES



✳ UNDER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 93° AWAY FROM THE ROAD TO AVOID SPECULAR REFLECTION AS INDICATED IN 813.03 OF THE MARYLAND STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS.

OVER 30 FEET FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - 90°

REFLECTORIZATION

BACKGROUNDS, BORDERS, TEXTS AND ALL OTHER ELEMENTS OF SIGN PANELS SHALL BE REFLECTORIZED EXCEPT WHERE NOTED. REFER TO PROJECT REQUIREMENTS FOR MORE DETAIL.

SIGN LOCATIONS

1. GUIDE SIGNS ARE LOCATED ON THE PLANS BY DIMENSION TO SURVEY STATIONS, OR WHEN NECESSARY, TO IDENTIFIABLE PHYSICAL FEATURES.
2. ALL CHANGES IN THE LOCATIONS OF SIGNS AS SHOWN ON THE PLAN SHALL HAVE THE PRIOR APPROVAL OF THE ENGINEER.

EXISTING UTILITIES

THE ENGINEER DOES NOT WARRANT OR GUARANTEE THE ACCURACY OR COMPLETENESS OF UTILITY INFORMATION SHOWN ON THE PLAN. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO LOCATE AND PROTECT ALL EXISTING FACILITIES WHICH MIGHT BE AFFECTED BY THIS WORK OR HIS OPERATION.

ROADSIDE SIGNS

1. VERTICAL ALIGNMENT
   POSITION PANEL SO FACE IS PLUMB.
2. HORIZONTAL ALIGNMENT (SEE DIAGRAM ABOVE)
   - A) ON STRAIGHT ROADWAY SECTIONS, ANGLE OF SIGN FACE TO ROADWAY VARIES WITH DISTANCE FROM TRAVELLED ROADWAY TO NEAR EDGE OF SIGN - SEE DIAGRAM.
   - B) ON THE INSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL MAKES AN ANGLE OF 90° WITH A CHORD BETWEEN A POINT ON NEAR EDGE OF PAVEMENT AT SIGN LOCATION AND A POINT ON EDGE OF PAVEMENT 500' IN ADVANCE OF SIGN.
   - C) ON THE OUTSIDE OF HORIZONTAL CURVES, POSITION SIGN SO FACE OF PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT THE SIGN LOCATION.
   - D) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.

OVERHEAD SIGNS

1. VERTICAL ALIGNMENT
   POSITION PANELS FOR ALL OVERHEAD STRUCTURES SO THAT PANEL FACE IS PLUMB.
2. OVERHEAD SIGN STRUCTURES SHALL NOT BE ERECTED WITHOUT ATTACHING LUMINAIRES, SUPPORTS, AND/OR SIGNS.
3. HORIZONTAL ALIGNMENT
   - A) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE NORMAL EDGE OF ROADWAY, IF ON A STRAIGHT ROADWAY SECTION.
   - B) POSITION ALL OVERHEAD SIGNS SO THAT THE FACE OF THE PANEL IS AT RIGHT ANGLES TO THE TANGENT OF THE CURVE AT SIGN LOCATION, IF ON A HORIZONTAL CURVE.
   - C) POSITIONING OF SIGNS AT GORES AND RAMP SEPARATIONS IS REFERRED TO THE NORMAL EDGE OF THE MAINLINE ROADWAY.
4. VERTICAL CLEARANCE
   - A) OVERHEAD SIGNS SHALL HAVE A MINIMUM VERTICAL CLEARANCE OF 17'-9" FROM ROADWAY TO THE BOTTOM OF LIGHT FIXTURES. ALL LIGHT FIXTURES ARE TO BE AT THE SAME ELEVATION.
   - B) IF THE CONTRACTOR CANNOT OBTAIN 17'-9" (SEE 3A) CLEARANCE, HE IS TO CEASE WORK AND CONTACT THE PROJECT ENGINEER FOR FURTHER INSTRUCTIONS. THE PROJECT ENGINEER MAY CONTACT THE TRAFFIC ENGINEERING DESIGN DIVISION FOR ASSISTANCE.
   - C) ON ALL OVERHEAD SIGNS, THE MINIMUM CLEARANCE TO BOTTOM OF DESIGN SIGN: 20'-9".

PROJECT REQUIREMENTS

ALL NEW SIGNS ON THIS PROJECT SHALL BE FABRICATED FROM SHEETING WHICH MEETS ALL OF THE FOLLOWING REQUIREMENTS, UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER:

1. SHEETING SHALL MEET THE REQUIREMENTS OF SECTIONS 813 AND 950.03 OF MDOT SHA'S STANDARD SPECIFICATIONS FOR CONSTRUCTION AND MATERIALS 2017 EDITION AND SUBSEQUENT REVISIONS AND SUPPLEMENTS.

2. LISTED ON MDOT SHA OFFICE OF TRAFFIC AND SAFETY'S QUALIFIED PRODUCTS LIST (QPL).

PROJECT REQUIREMENTS CONT'D

3. THE FOLLOWING TYPES OF SHEETING SHALL BE USED FOR THE SPECIFIED SIGN CLASSIFICATIONS:

GENERAL NOTE: ALL COLORS SHALL BE RETROREFLECTIVE EXCEPT BLACK. BLACK TEXT, BORDERS, SYMBOLS OR ANY BLACK ELEMENTS OF ANY SIGN SHALL BE NON-REFLECTIVE. THIS APPLIES TO ALL MDOT SHA SIGNS AS SHOWN BELOW.

A) GUIDE, EXIT GORE, GENERAL INFORMATION, AND SERVICE SIGNS - FALL INTO TWO SUB CATEGORIES:

(I). GROUND MOUNTED:
ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9).

(II). OVERHEAD STRUCTURE SIGNS AND OVERHEAD CANTILEVER SIGNS:
ALL RETROREFLECTIVE SHEETING ELEMENTS OF ALL OVERHEAD SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE XI (II). (THIS SECTION DOES NOT APPLY TO OVERHEAD SIGNALIZED INTERSECTION SIGNING; MAST ARM OR SPAN WIRE. FOLLOW THE REQUIREMENTS FOR THE RESPECTIVE SIGN CLASSIFICATION FOR SIGNAL SIGNING.)

B) WARNING SIGNS - RETROREFLECTIVE SHEETING FOR WARNING SIGNS (FLUORESCENT YELLOW AND FLUORESCENT ORANGE) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). REGULATORY MESSAGES WITHIN WARNING SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

C) SCHOOL SIGNS - RETROREFLECTIVE SHEETING FOR SCHOOL SIGNS (FLUORESCENT YELLOW AND FLUORESCENT YELLOW-GREEN) SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). REGULATORY MESSAGES WITHIN SCHOOL SIGNS SHALL FOLLOW THE REQUIREMENTS FOR REGULATORY SIGNS.

D) REGULATORY SIGNS - FALL INTO THREE SUBCATEGORIES:

(I). "RED" REGULATORY SIGNS; (SPECIFICALLY - STOP, YIELD, DO NOT ENTER AND WRONG WAY). ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9).

(II). ALL R7 AND R8 SERIES PARKING RELATED SIGNS AND THEIR SUPPLEMENTAL PANELS, NO TRESPASSING SIGNS, AND SIGNS DIRECTED AT PEDESTRIANS AND BICYCLISTS ONLY. ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET THE REQUIREMENTS FOR ASTM TYPE IV (4).

(III). ALL OTHER REGULATORY SIGNS - ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET ASTM TYPE IV (4) INCLUDING RED ELEMENTS. WARNING MESSAGES WITHIN REGULATORY SIGNS SHALL FOLLOW THE REQUIREMENTS FOR WARNING SIGNS.

E) ROUTE MARKERS (INDEPENDENT USE AND GUIDE SIGN USE)

INDEPENDENT USE: ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET BUT NOT TO EXCEED THE REQUIREMENTS FOR ASTM TYPE IV (4).

GUIDE SIGN USE: WHEN INCORPORATED IN THE BODY OF A GUIDE SIGN, ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET THE SHEETING REQUIREMENTS OF THE GUIDE SIGNS FOR WHICH THEY ARE TO BE APPLIED; GROUND MOUNT ASTM TYPE IX (9) OR OVERHEAD ASTM TYPE XI (II).

F) LOGOS AND / OR GRAPHICS - WITHIN SIGNS SHALL FOLLOW THE REQUIREMENTS FOR THE RESPECTIVE SIGN CLASSIFICATION UNLESS OTHERWISE SPECIFIED IN THE CONTRACT DOCUMENTS, OR AS DIRECTED BY THE ENGINEER.

G) SPECIFIC SERVICE (LOGO) SIGNING - ALL COPY, DIVIDER BORDERS, LOGOS AND ARROWS SHALL BE DEMOUNTABLE ALUMINUM OVERLAYS, .032 MINIMUM TO .063 MAXIMUM. ALL RETROREFLECTIVE SHEETING ELEMENTS OF THESE SIGNS SHALL MEET OR EXCEED THE REQUIREMENTS FOR ASTM TYPE IX (9). DISTANCES ON DIRECTIONAL ARROWS WHEN SPECIFIED SHALL BE BLACK. THE OVERLAYS ARE TO BE APPLIED WITH .125 ALUMINUM POP RIVETS TO THE BODY OF THE MAIN SIGN.

H) CIVIL DEFENSE SIGNS AND OTHER SIGNS - NOT SPECIFICALLY FALLING INTO ONE OF THE CATEGORIES ABOVE, SHALL FOLLOW THE GUIDELINES FOR THE SIGN CLASSIFICATION THAT MOST CLOSELY MATCHES THE COLOR(S) OF THE PROPOSED SIGN.

4. THE FOLLOWING MINIMUM THICKNESS SHALL BE USED FOR THE APPROPRIATE WIDTH OF SHEET ALUMINUM BLANKS:

LONGEST DIMENSION	MINIMUM THICKNESS
UP TO 12"	0.040"
GREATER THAN 12" TO 24"	0.063"
GREATER THAN 24" TO 36"	0.080"
GREATER THAN 36" TO 48"	0.100"
OVER 48"	0.125"

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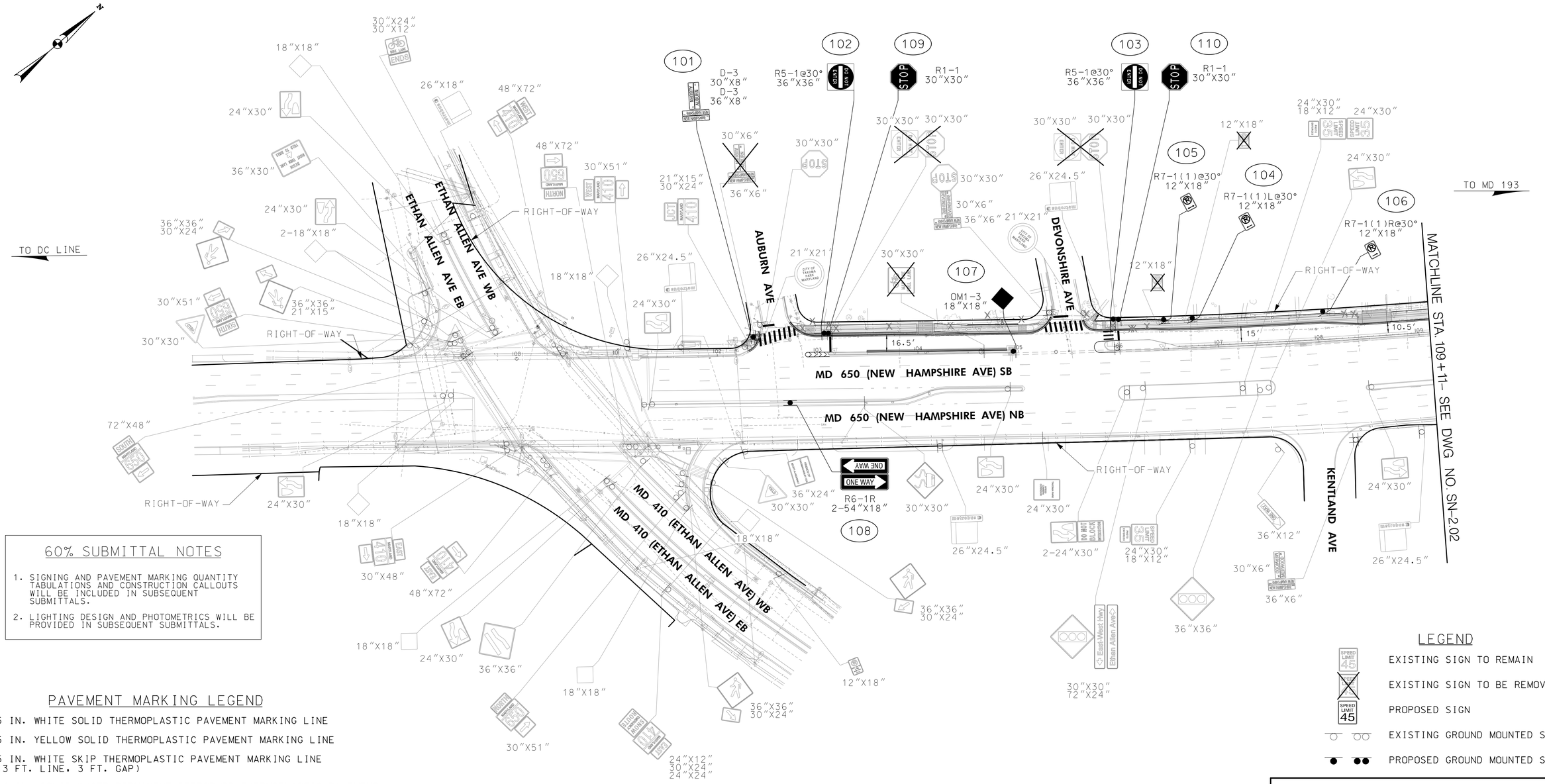
BY: WFW

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

APPROVALS	REVISIONS	GENERAL NOTES AND PROPOSALS
TEAM LEADER	60% PLANS	SCALE NONE DATE MAY 2020 CONTRACT NO. PENDING
ASST. DIV. CHIEF	MAY 2020	DESIGNED BY SJL COUNTY MONTGOMERY
DIVISION CHIEF		DRAWN BY SJL LOGMILE 15065000.05 TO 00.90
OFFICE DIRECTOR		CHECKED BY WFW TIMS NO. PENDING
		F.A.P. NO. SEE TITLE SHEET
		DRAWING NO. SN-1 OF 5 SHEET NO. 59 OF 73

PLOTTED: 5/7/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSN-1001_NewAveBike.dgn



60% SUBMITTAL NOTES

1. SIGNING AND PAVEMENT MARKING QUANTITY TABULATIONS AND CONSTRUCTION CALLOUTS WILL BE INCLUDED IN SUBSEQUENT SUBMITTALS.
2. LIGHTING DESIGN AND PHOTOMETRICS WILL BE PROVIDED IN SUBSEQUENT SUBMITTALS.

PAVEMENT MARKING LEGEND

A. 5 IN. WHITE SOLID THERMOPLASTIC PAVEMENT MARKING LINE

B. 5 IN. YELLOW SOLID THERMOPLASTIC PAVEMENT MARKING LINE

C. 5 IN. WHITE SKIP THERMOPLASTIC PAVEMENT MARKING LINE (3 FT. LINE, 3 FT. GAP)

D. 24 IN. SOLID WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE

E. 16 IN. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE

F. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING SYMBOL

G. GREEN MMA BICYCLE CONFLICT MARKINGS. SEE DETAILS ON SN-2.02

H. REMOVE EXISTING PAVEMENT MARKING LINE, SYMBOL OR ARROW BY HYDROBLASTING

GENERAL NOTES

1. NEW CROSSWALKS, STOP LINES, ARROWS, LETTERS AND SYMBOLS SHALL BE HEAT APPLIED WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKINGS.
2. ALL YELLOW SIGNS SHALL BE FLUORESCENT YELLOW IN COLOR. ALL SCHOOL SIGNS SHALL BE FLUORESCENT YELLOW GREEN IN COLOR.
3. UNDERGROUND UTILITIES SHOWN ON THESE PLANS ARE SCHEMATIC ONLY AND MAY NOT BE COMPLETE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING "MISS UTILITY" PRIOR TO CONSTRUCTION SO THAT ALL UTILITIES MAY BE LOCATED IN THE FIELD. IF THE CONTRACTOR PERCEIVES THAT A CONFLICT BETWEEN THE UTILITIES AND THE SIGNS WILL OCCUR, THE CONTRACTOR SHALL NOTIFY THE ENGINEER IMMEDIATELY SO THAT THE CONFLICT MAY BE RESOLVED.
4. NEW PAVEMENT MARKINGS SHALL TRANSITION TO TIE INTO EXISTING MARKINGS AS DIRECTED BY THE ENGINEER.
6. PROPOSED R4-7 "KEEP RIGHT" SIGNS SHOULD BE LONGITUDINALLY LOCATED 6 FT. TO 10 FT. FROM THE NOSE OF MEDIAN OR ISLAND. OM1-3 OBJECT MARKER SIGNS SHOULD BE LOCATED 2 FT. FROM THE NOSE OF MEDIAN OR ISLAND, PER MDMUTCD FIGURE 2B-10b.
7. RIGHT-OF-WAY SHOWN ON THE PLANS IS APPROXIMATE AND BASED ON THE BEST AVAILABLE INFORMATION.

LEGEND

- EXISTING SIGN TO REMAIN
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN
- EXISTING GROUND MOUNTED SIGN
- PROPOSED GROUND MOUNTED SIGN

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE) AUBURN AVE TO HOLTON LN

REVISIONS

60% PLANS

MAY 2020

SIGNING & PAVEMENT MARKING PLAN

SCALE 1" = 50' DATE MAY 2020 CONTRACT NO. PENDING

DESIGNED BY SJL
DRAWN BY SJL
CHECKED BY WFW
F.A.P. NO. SEE TITLE SHEET

COUNTY MONTGOMERY
LOGMILE 15065000.05 TO 00.90
TIMS NO. PENDING

DRAWING NO. SN-2.01 OF 5

SHEET NO. 60 OF 73

PLOTTED: 5/7/2020
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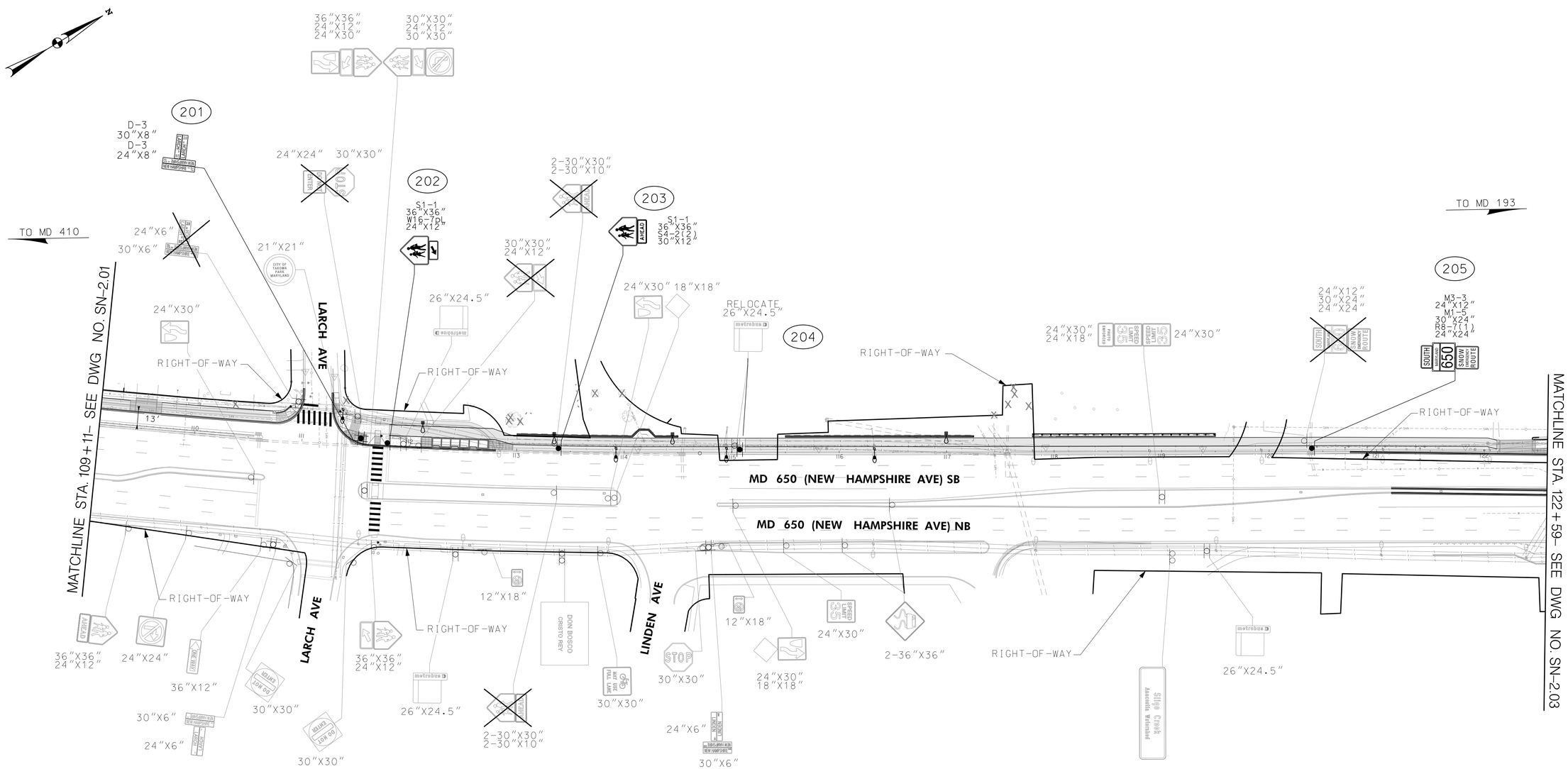


PAVEMENT MARKING LEGEND

A. 5 IN. WHITE SOLID THERMOPLASTIC PAVEMENT MARKING LINE

B. 5 IN. YELLOW SOLID THERMOPLASTIC PAVEMENT MARKING LINE

C. 5 IN. WHITE SKIP THERMOPLASTIC PAVEMENT MARKING LINE (3 FT. LINE, 3 FT. GAP)

D. 24 IN. SOLID WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE

E. 16 IN. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE

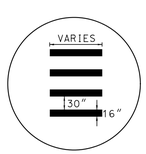
F. WHITE PERMANENT PREFORMED THERMOPLASTIC PAVEMENT MARKING SYMBOL

G. GREEN MMA BICYCLE CONFLICT MARKINGS. SEE DETAILS ON SN-2.02

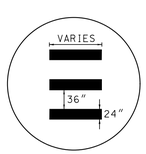
H. REMOVE EXISTING PAVEMENT MARKING LINE, SYMBOL OR ARROW BY HYDROBLASTING

60% SUBMITTAL NOTES

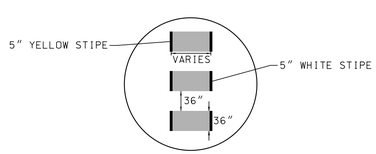
1. SIGNING AND PAVEMENT MARKING QUANTITY TABULATIONS AND CONSTRUCTION CALLOUTS WILL BE INCLUDED IN SUBSEQUENT SUBMITTALS.
2. LIGHTING DESIGN AND PHOTOMETRICS WILL BE PROVIDED IN SUBSEQUENT SUBMITTALS.



SHA CONTINENTAL CROSSWALK DETAIL



SHA CONTINENTAL CROSSWALK DETAIL



GREEN MMA BICYCLE CONFLICT MARKINGS DETAIL

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

REVISIONS

60% PLANS

MAY 2020

SIGNING & PAVEMENT MARKING PLAN

SCALE 1" = 50' DATE MAY 2020 CONTRACT NO. PENDING

DESIGNED BY SJL COUNTY MONTGOMERY

DRAWN BY SJL LOGMILE 15065000.05 TO 00.90

CHECKED BY WFW TIMS NO. PENDING

F.A.P. NO. SEE TITLE SHEET

DRAWING NO. SN-2.02 OF 5 SHEET NO. 61 OF 73

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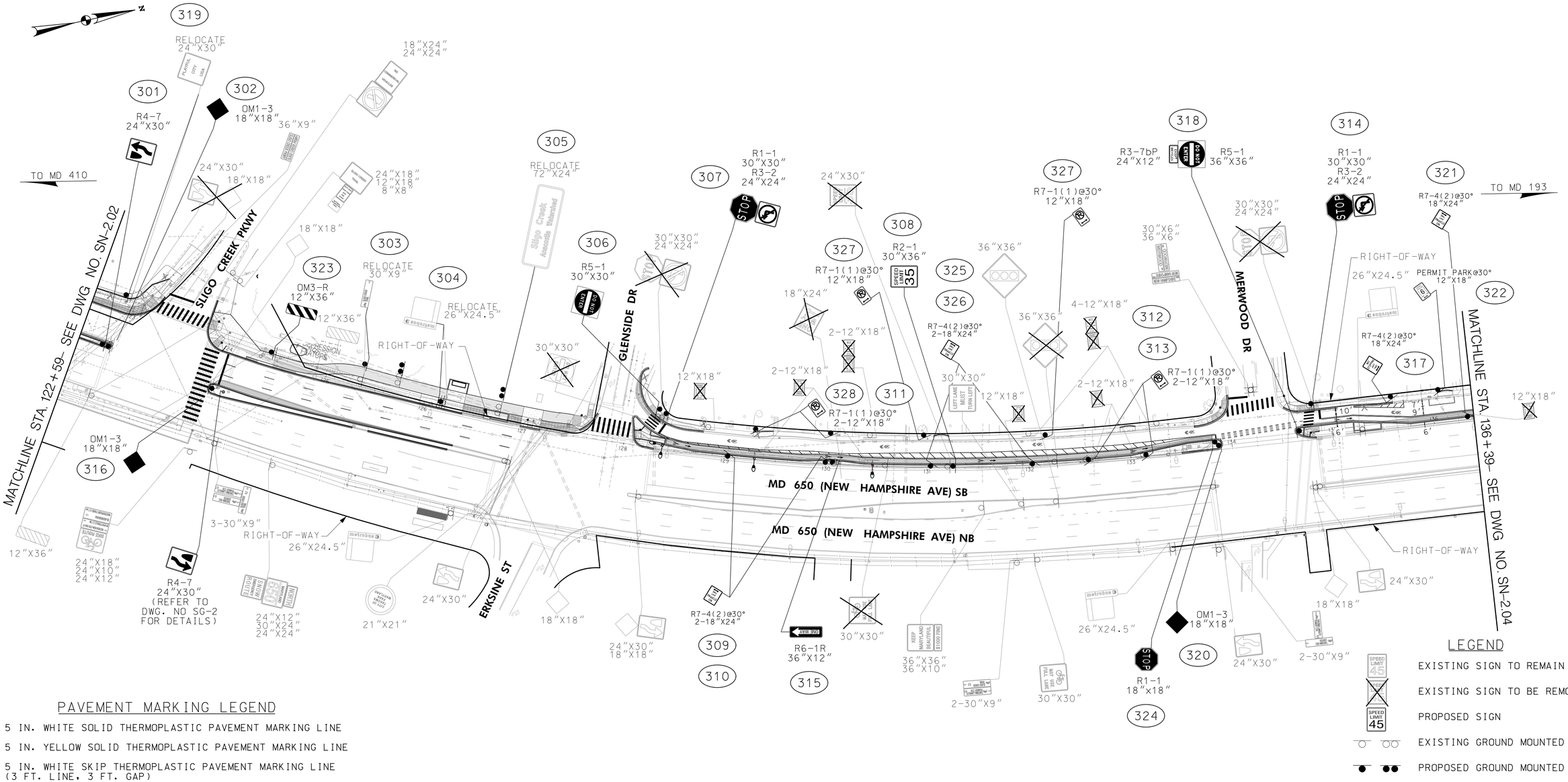

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2. LIGHTING DESIGN AND PHOTOMETRICS WILL BE PROVIDED IN SUBSEQUENT SUBMITTALS.
3. POTENTIAL TRUCK RESTRICTION AND BIKE ROUTE SIGNING ALONG SERVICE DRIVE TO BE COORDINATED WITH MDOT SHA AND TAKOMA PARK.

LEGEND

- EXISTING SIGN TO REMAIN
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN
- EXISTING GROUND MOUNTED SIGN
- PROPOSED GROUND MOUNTED SIGN

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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

REVISIONS

60% PLANS

MAY 2020

SIGNING & PAVEMENT MARKING PLAN

SCALE 1" = 50' DATE MAY 2020 CONTRACT NO. PENDING

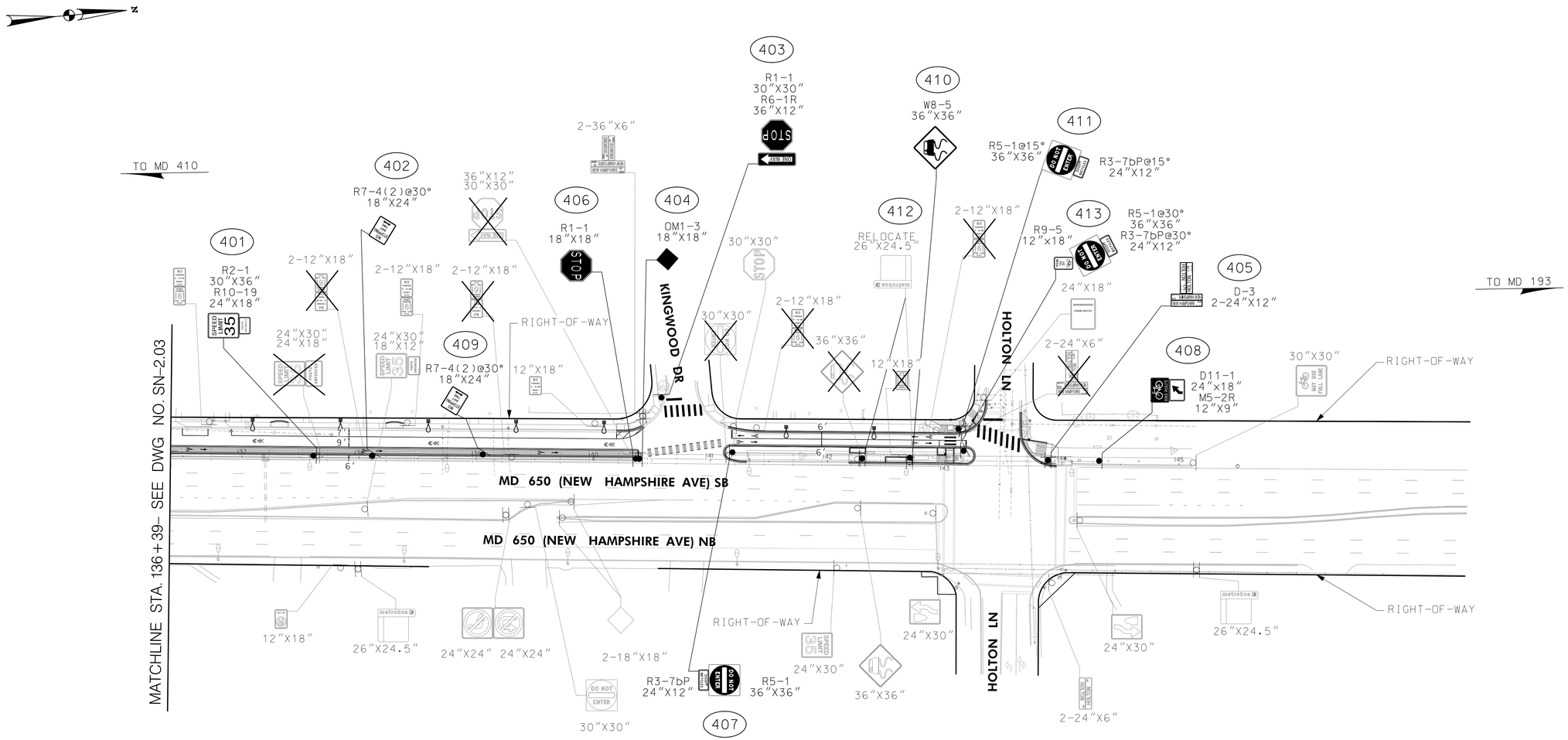
DESIGNED BY SJL
DRAWN BY SJL
CHECKED BY WFW
F.A.P. NO. SEE TITLE SHEET

COUNTY MONTGOMERY
LOGMILE 15065000.05 TO 00.90
TIMS NO. PENDING

DRAWING NO. SN-2.03 OF 5

SHEET NO. 62 OF 73

PLOTTED: 5/7/2020
FILE: \\baltsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSN-2003_NewAveBike.dgn



PAVEMENT MARKING LEGEND

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B. 5 IN. YELLOW SOLID THERMOPLASTIC PAVEMENT MARKING LINE

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G. GREEN MMA BICYCLE CONFLICT MARKINGS. SEE DETAILS ON SN-2.02

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LEGEND

- EXISTING SIGN TO REMAIN
- EXISTING SIGN TO BE REMOVED
- PROPOSED SIGN
- EXISTING GROUND MOUNTED SIGN
- PROPOSED GROUND MOUNTED SIGN

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AUBURN AVE TO HOLTON LN

REVISIONS

60% PLANS

MAY 2020

SIGNING & PAVEMENT MARKING PLAN

SCALE 1" = 50' DATE MAY 2020 CONTRACT NO. PENDING

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F.A.P. NO. SEE TITLE SHEET

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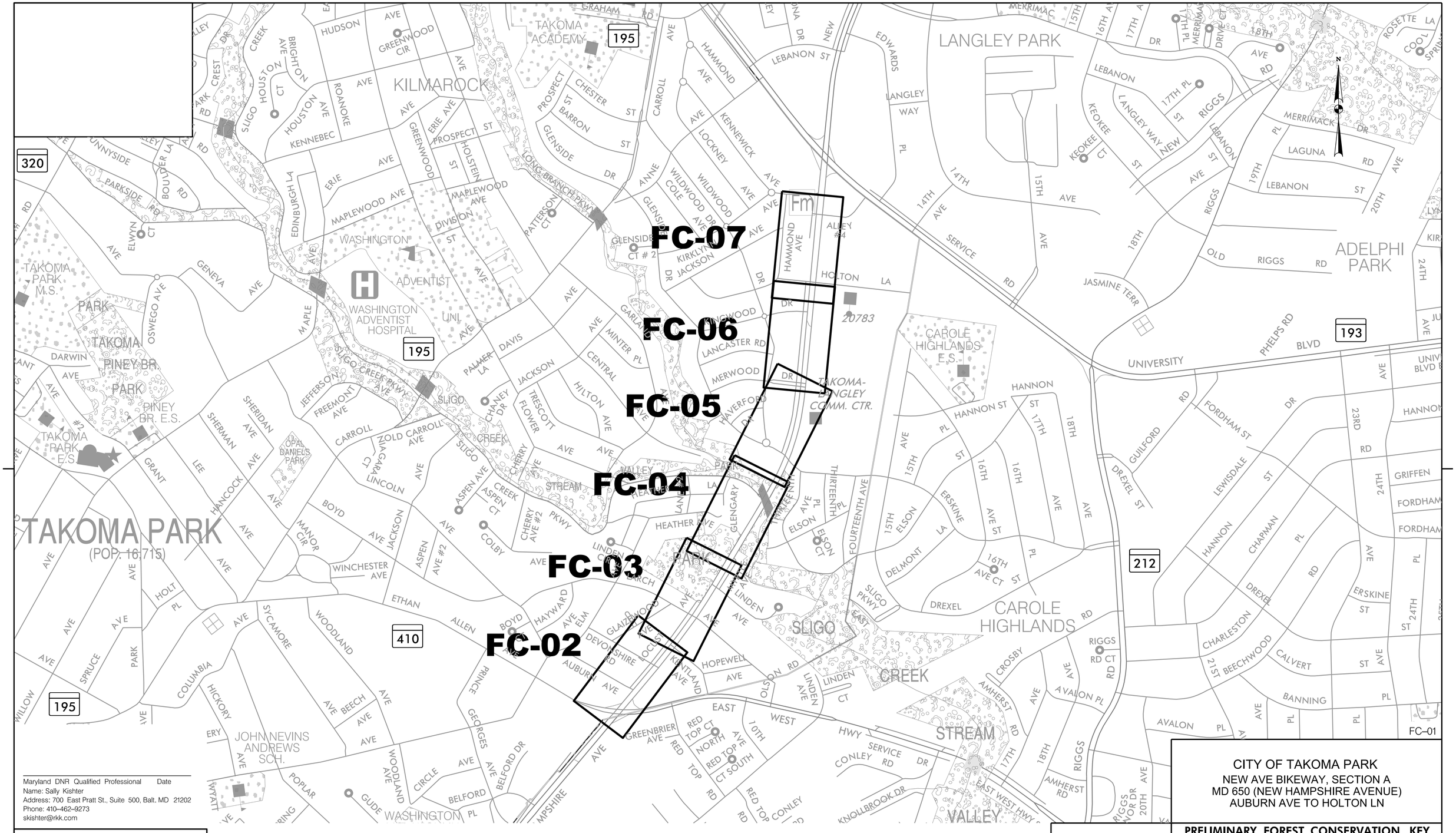
LOGMILE 15065000.05 TO 00.90
TIMS NO. PENDING

DRAWING NO. SN-2.04 OF 5

SHEET NO. 63 OF 73

PLOTTED: 5/7/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pSN-2004_NewAveBike.dgn



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NOTE: SEE DRAWING FC-02 FOR VICINITY MAP.

400' 0 400' 800'
SCALE: 1"=400'

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION KEY

SCALE 1"=400' DATE JUNE 2020 CONTRACT NO. T.B.D.

60% PLANS

MAY 2020

DESIGNED BY SJK
DRAWN BY DEA
CHECKED BY GRO
F.A.P. NO. T.B.D.

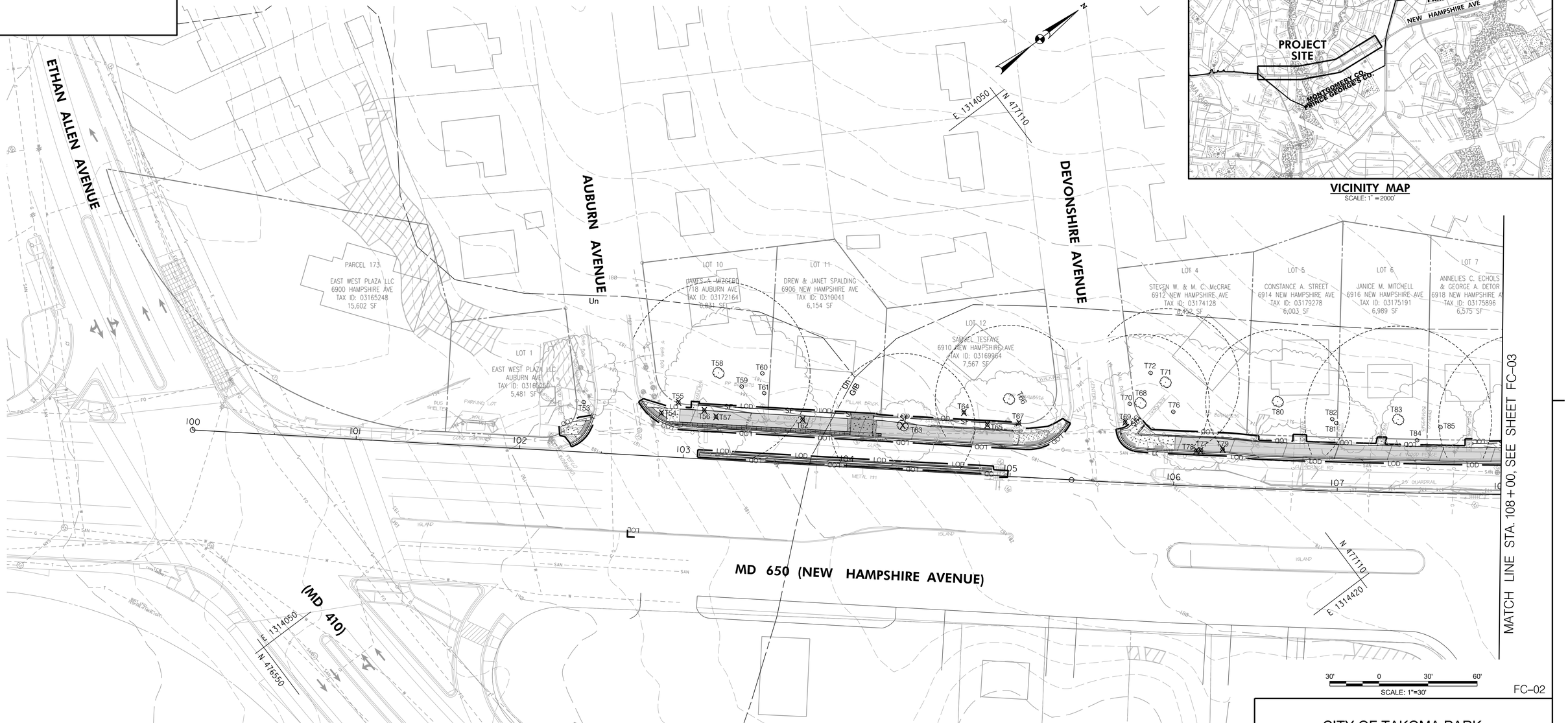
COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 01 OF 11

SHEET NO. 64 OF 73

PLOTTED: 6/24/2020
FILE: \\baltsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pFCP-key_NewAveBike.dgn



VICINITY MAP
SCALE: 1" =2000

30' 0 30' 60'
SCALE: 1"=30'

FC-02

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL
- SLOPES ≥ 25%
- SPECIALTY TYPE 2 – PAVERS
- TEMPORARY ACCESS ROAD

- EXISTING PROPERTY BOUNDARY
- 120 EXISTING SURVEYED CONTOURS
- 120 GIS CONTOURS
- EXISTING FOREST STAND TREELINE
- TREE LINE /CANOPY COVER
- T76 TREES < 24" DBH
- T72 SIGNIFICANT /SPECIMEN TREE (≥ 24" DBH) WITH CRITICAL ROOT ZONE
- TREE TO BE REMOVED

- LOD 60% LIMIT OF DISTURBANCE
- SF SILT FENCE
- SSF SUPER SILT FENCE
- DF DIVERSION FENCE
- TPF TREE PROTECTION FENCE
- 100–YEAR FLOODPLAIN
- B STREAM BUFFER
- CsE / CsF SOILS BOUNDARY
- FS1 FOREST STAND
- WA WATERS FEATURE

- SCE STABILIZED CONSTRUCTION ENTRANCE
- P PUMPAROUND PRACTICE
- SANDBAG DIVERSION
- PST PORTABLE SEDIMENT TANK
- 120 PROPOSED CONTOUR
- PROPOSED CULVERT
- PROPOSED RIPRAP
- SNA / WUS PERENNIAL / INTERMITTENT STREAM

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CITY OF TAKOMA PARK
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MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION PLAN

60% PLANS

MAY 2020

SCALE 1"=30' DATE JUNE 2020 CONTRACT NO. T.B.D.

DESIGNED BY SJK
DRAWN BY DEA
CHECKED BY GRO
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 02 OF 11

SHEET NO. 65 OF 73

PLOTTED: 6/24/2020
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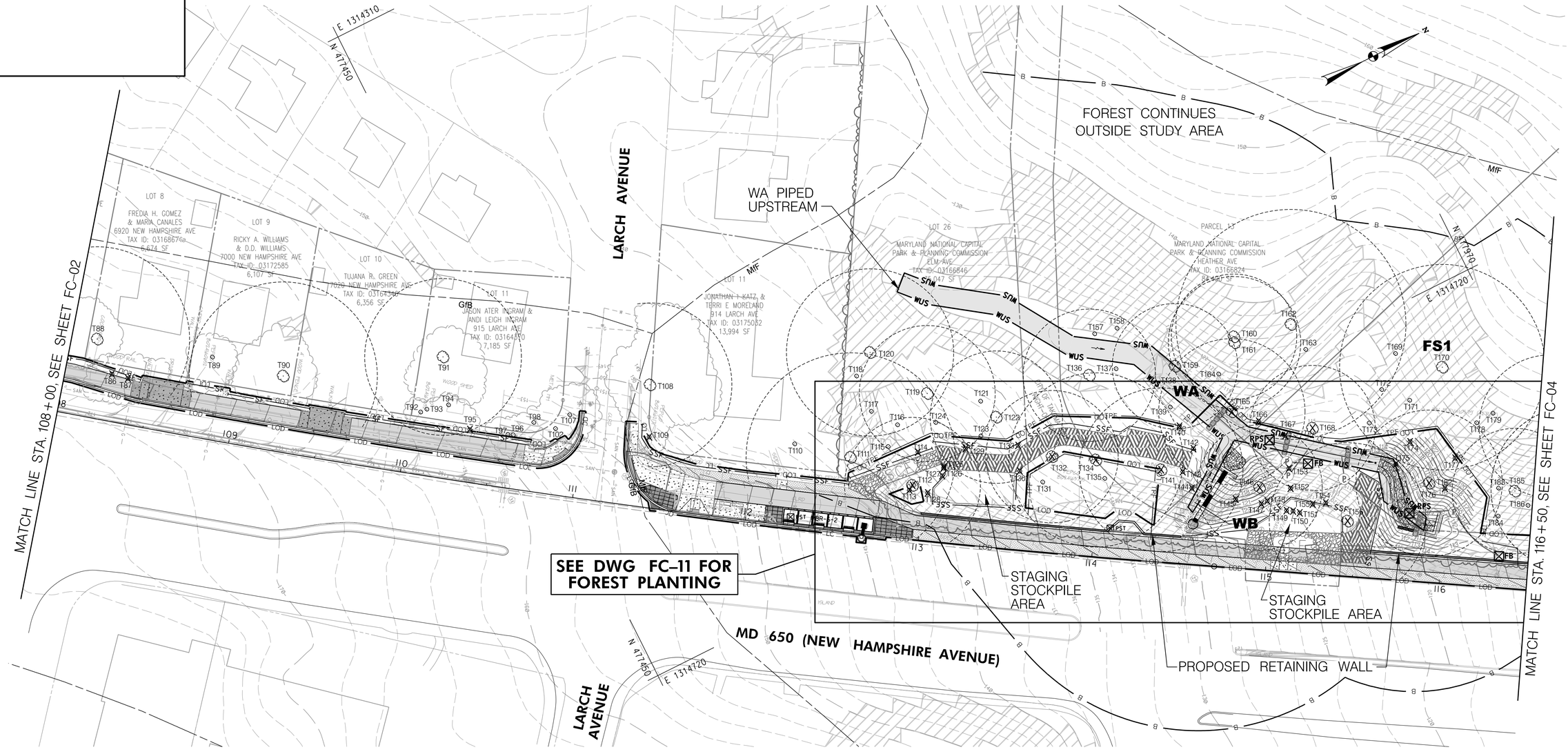

FC-03

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LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL
- SLOPES ≥ 25%
- SPECIALTY TYPE 2 – PAVERS
- TEMPORARY ACCESS ROAD

- EXISTING PROPERTY BOUNDARY
- 120 EXISTING SURVEYED CONTOURS
- 120 GIS CONTOURS
- EXISTING FOREST STAND TREELINE
- TREE LINE /CANOPY COVER
- T76 TREES < 24" DBH
- T72 SIGNIFICANT /SPECIMEN TREE (≥ 24" DBH) WITH CRITICAL ROOT ZONE
- TREE TO BE REMOVED

- LOD 60% LIMIT OF DISTURBANCE
- SF SILT FENCE
- SSF SUPER SILT FENCE
- DF DIVERSION FENCE
- TPF TREE PROTECTION FENCE
- 100-YEAR FLOODPLAIN
- B STREAM BUFFER
- CsE / CsF SOILS BOUNDARY
- FS1 FOREST STAND
- WA WATERS FEATURE

- SCE STABILIZED CONSTRUCTION ENTRANCE
- P PUMPAROUND PRACTICE
- SANDBAG DIVERSION
- PST PORTABLE SEDIMENT TANK
- 120 PROPOSED CONTOUR
- PROPOSED CULVERT
- PROPOSED RIPRAP
- SMA / WUS PERENNIAL / INTERMITTENT STREAM

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION PLAN

60% PLANS

MAY 2020

SCALE 1"=30' DATE JUNE 2020 CONTRACT NO. T.B.D.

DESIGNED BY SJK
DRAWN BY DEA
CHECKED BY GRO
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 03 OF 11

SHEET NO. 66 OF 73

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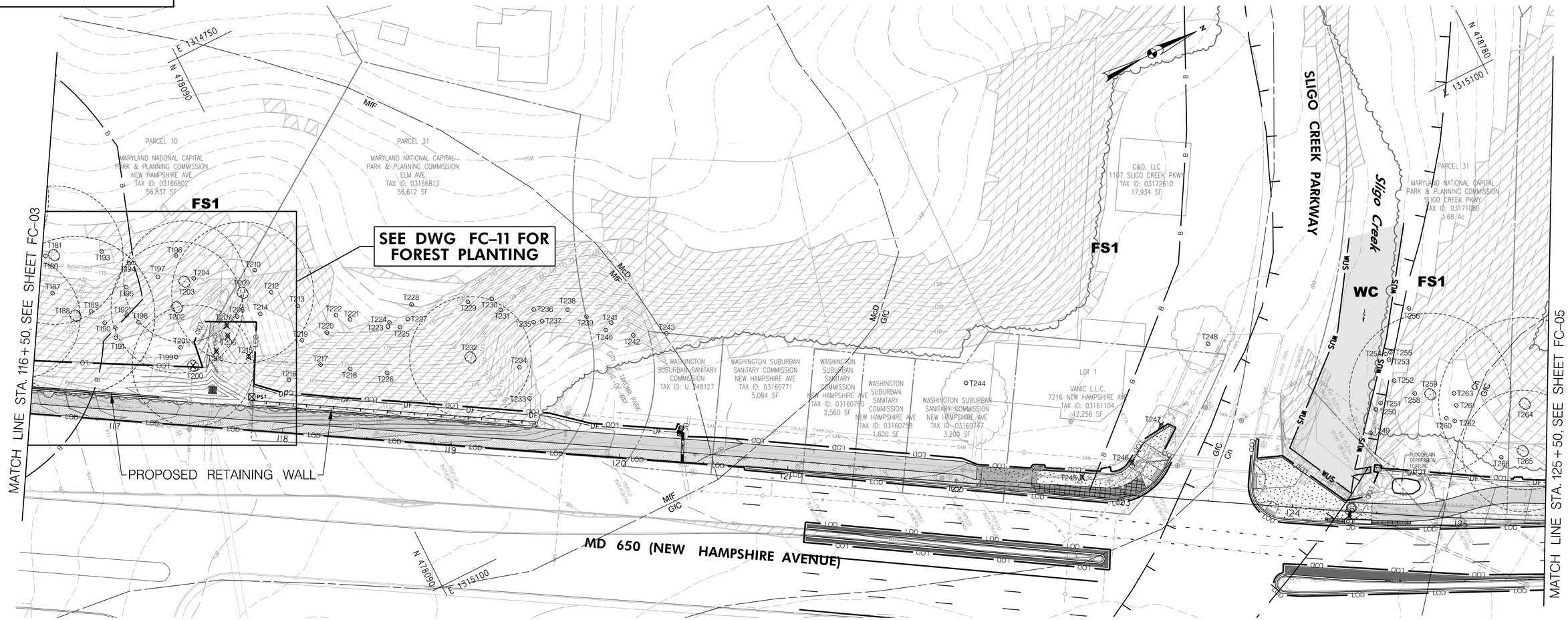

FC–04

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LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL
- SLOPES ≥ 25%
- SPECIALTY TYPE 2 – PAVERS
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- TPF TREE PROTECTION FENCE
- 100–YEAR FLOODPLAIN
- B STREAM BUFFER
- CsE / CsF SOILS BOUNDARY
- **FS1** FOREST STAND
- **WA** WATERS FEATURE

- SCE STABILIZED CONSTRUCTION ENTRANCE
- P PUMPAROUND PRACTICE
- SANDBAG DIVERSION
- PST PORTABLE SEDIMENT TANK
- 120 PROPOSED CONTOUR
- PROPOSED CULVERT
- PROPOSED RIPRAP
- SWM / WUS PERENNIAL / INTERMITTENT STREAM

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION PLAN

60% PLANS

MAY 2020

SCALE 1"=30' DATE JUNE 2020 CONTRACT NO. T.B.D.

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COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

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TAX MAPS JN561 & JN562

DRAWING NO. FC – 04 OF 11 SHEET NO. 67 OF 73

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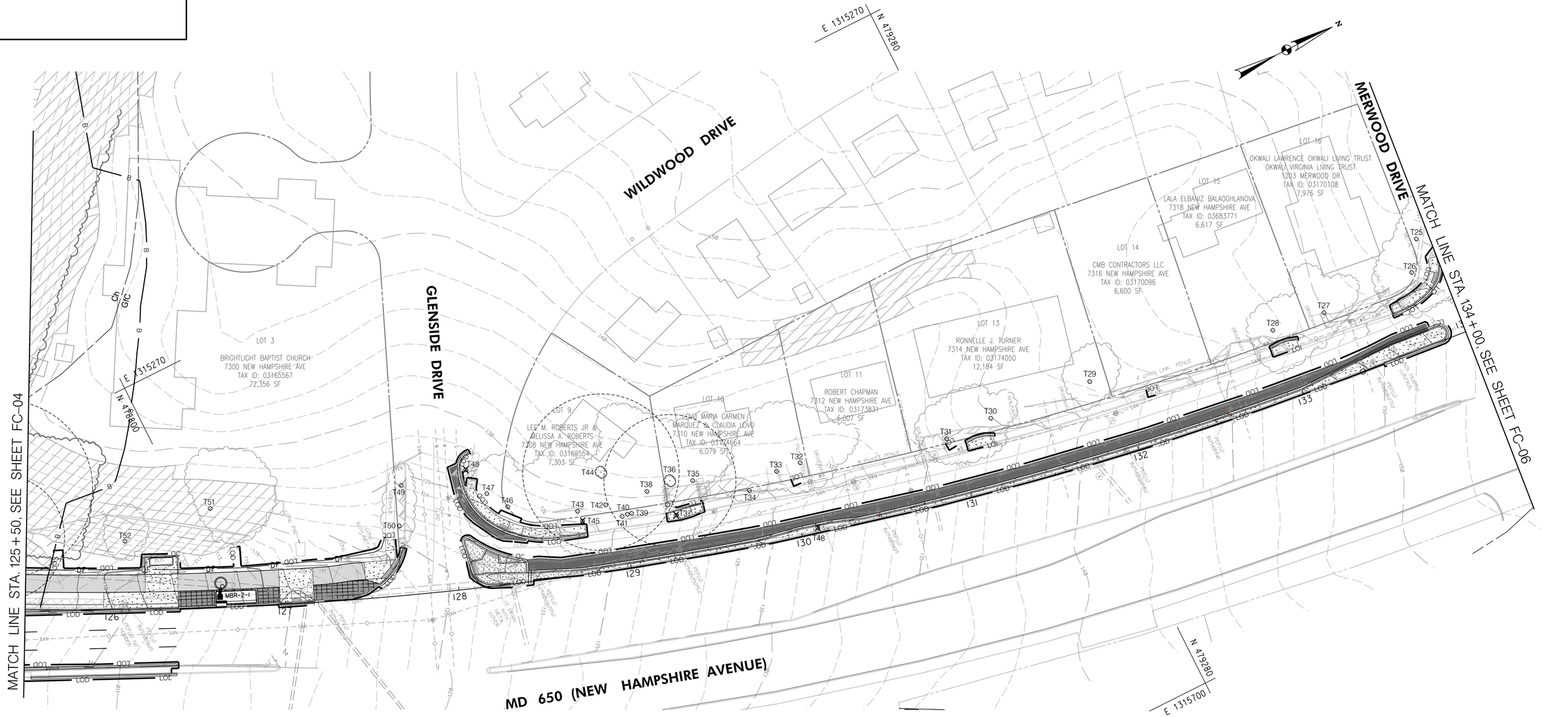

30' 0 30' 60'

SCALE: 1"=30'

FC–05

Maryland DNR Qualified Professional Date
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BY: dadkins -

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL
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- TEMPORARY ACCESS ROAD

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- WA WATERS FEATURE

- SCE STABILIZED CONSTRUCTION ENTRANCE
- P PUMPAROUND PRACTICE
- SANDBAG DIVERSION
- PST PORTABLE SEDIMENT TANK
- 120 PROPOSED CONTOUR
- PROPOSED CULVERT
- PROPOSED RIPRAP
- SAN / WAS PERENNIAL / INTERMITTENT STREAM

CITY OF TAKOMA PARK

NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION PLAN

60% PLANS

MAY 2020

SCALE 1"=30' DATE JUNE 2020 CONTRACT NO. T.B.D.

DESIGNED BY SJK
DRAWN BY DEA
CHECKED BY GRO
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COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 05 OF 11

SHEET NO. 68 OF 73

PLOTTED: 6/24/2020
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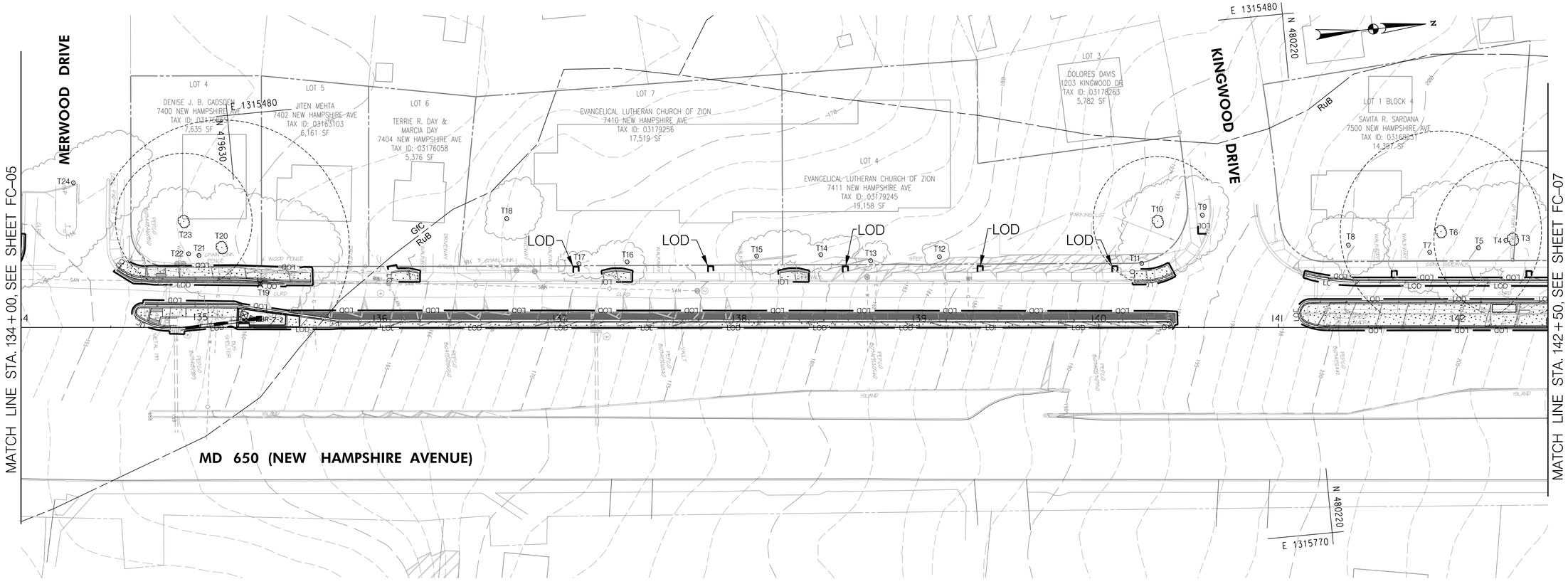

30' 0 30' 60'
SCALE: 1"=30'

FC–06

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BY: dadkins -

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL
- SLOPES ≥ 25%
- SPECIALTY TYPE 2 – PAVERS
- TEMPORARY ACCESS ROAD
- EXISTING PROPERTY BOUNDARY
- 120 EXISTING SURVEYED CONTOURS
- 120 GIS CONTOURS
- EXISTING FOREST STAND TREELINE
- TREE LINE /CANOPY COVER
- T76 TREES < 24" DBH
- T72 SIGNIFICANT /SPECIMEN TREE (≥ 24" DBH) WITH CRITICAL ROOT ZONE
- TREE TO BE REMOVED
- LOD 60% LIMIT OF DISTURBANCE
- SF SILT FENCE
- SSF SUPER SILT FENCE
- DF DIVERSION FENCE
- TPF TREE PROTECTION FENCE
- 100–YEAR FLOODPLAIN
- B STREAM BUFFER
- CsE / CsF SOILS BOUNDARY
- FS1 FOREST STAND
- WA WATERS FEATURE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- P PUMPAROUND PRACTICE
- SANDBAG DIVERSION
- PST PORTABLE SEDIMENT TANK
- 120 PROPOSED CONTOUR
- PROPOSED CULVERT
- PROPOSED RIPRAP
- SMA / WUS PERENNIAL / INTERMITTENT STREAM

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION PLAN

60% PLANS
MAY 2020

SCALE 1"=30' DATE JUNE 2020 CONTRACT NO. T.B.D.

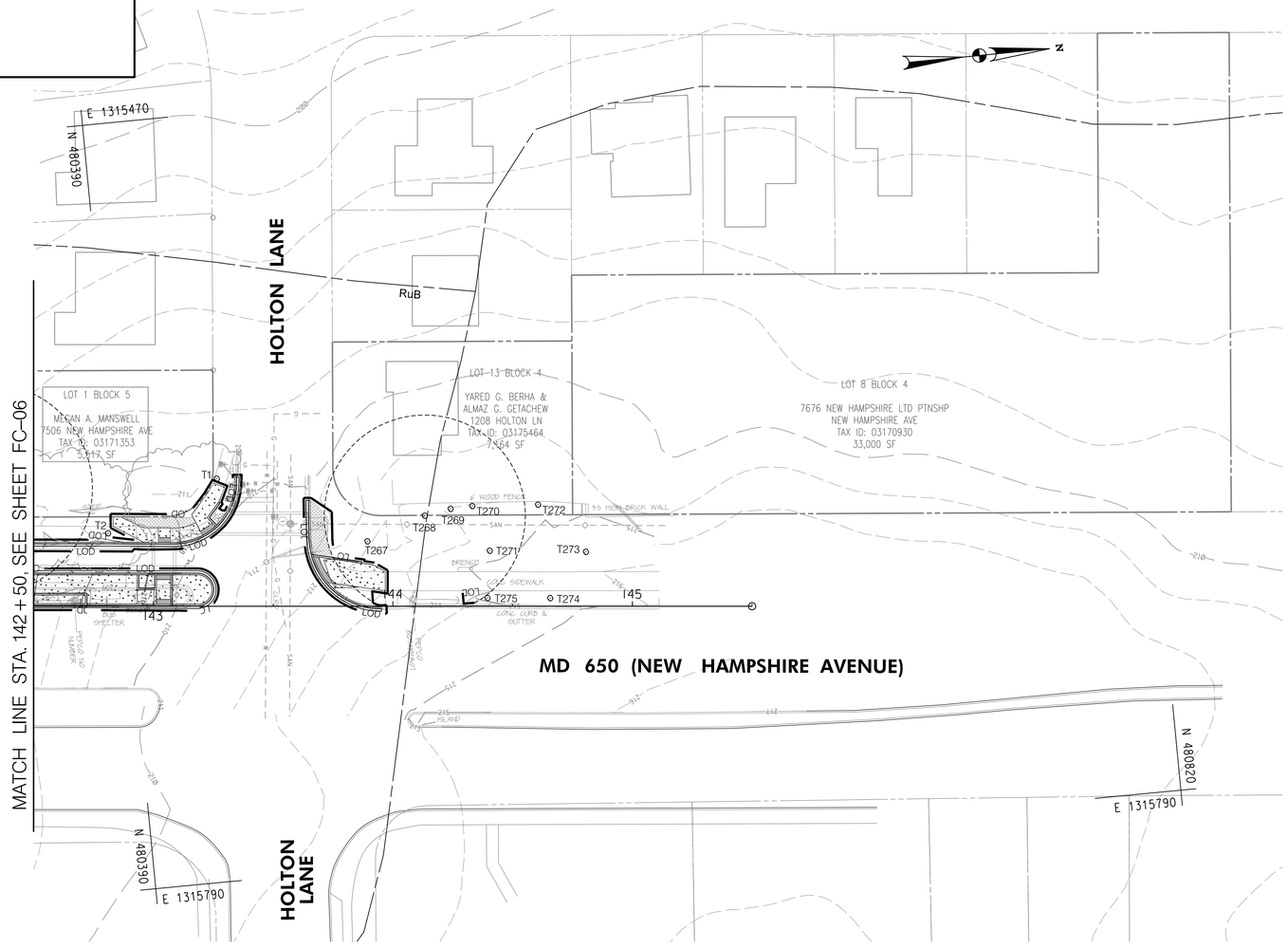
DESIGNED BY SJK
DRAWN BY DEA
CHECKED BY GRO
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 06 OF 11
SHEET NO. 69 OF 73

PLOTTED: 6/24/2020
FILE: \\baltsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pFCP-005_NewAveBike.dgn



SOIL SURVEY					
Map Unit Symbol	**Map Unit Name**	***K-Factor**	****Hydric Rating**	**Hydrologic Soil Group**	**Drainage Class**
Ch	Codorus-Harboro-Urban land complex	-	30	D	Poorly drained
Gfb	Glenelg-Wheaton-Urban land complex, 0 to 8 percent slopes	0.28	0	B	Well drained
GfC	Glenelg-Wheaton-Urban land complex, 8 to 15 percent slopes	0.28	0	B	Well drained
McD	Manor loam, 15 to 25 slopes	0.28	0	B	Well drained
MfF	Manor-Brinklow complex, 25 to 65 percent	0.32	0	B	Well drained
RuB	Russett-Christiana-Urban land complex, 0 to 5 percent slopes	-	0	D	Moderately well drained
Un	Urban land	-	0	D	-

* Erodibility Coefficient - Value assigned to soil types by NRCS. K > 0.35 are considered to be highly erodible.
** Hydric Rating - Value is based on the percentage of hydric soils within the soil type. Non-hydric soils have a value of 0, predominantly non-hydric soils have a value between 0 and 33, partially hydric soils have a value between 33 and 66, predominantly hydric soils have a value between 66 and 99, and hydric soils have a value of 100.

Agricultural Note: None of the soils are listed as Prime Farmland within the study area.

Forest Conservation Data Table

	Number of Acres	
Tract	2.3	LOD of Linear Project
Remaining in Agricultural Use	-	
Road & Utility ROWs[1]	-	
Total Existing Forest	0.6	
Forest Retention	-	
Forest Cleared	0.6	

Land Use & Thresholds[2]

Land Use Category	IDA	ARA, MDR, IDA, HDR, MDP, or CIA.
Conservation Threshold	20%	percent
Afforestation Threshold	15%	percent

	Total Channel Length (ft.)	Average Buffer Width (ft.)[3]
Stream(s)	198	125

Acres of Forest in	Retained	Cleared	Planted
Wetlands		-	
100-Year Floodplain		-	
Stream Buffers		0.5	0.3
Priority Areas		-	-

[1] Only Road or Utility ROWs not to be Improved as part of development application.
[2] Information from FC Land Use Categories & Thresholds document.
[3] Measured from stream edge to buffer edge.

30' 0 30' 60'
SCALE: 1"=30'

FC–07

LEGEND

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DRAWING NO. FC – 07 OF 11 SHEET NO. 70 OF 73

PLOTTED: 6/24/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pFCP-006_NewAveBike.dgn

Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
T1		Japanese zelkova	*Zelkova serrata*	6	Good	Yard tree
T2		Japanese zelkova	*Zelkova serrata*	13	Good	Girdling roots and included bark (IB)
T3		**White oak**	***Quercus alba***	**29**	**Good/Fair**	**Moderate dead branches**
T4		Black gum	*Nyssa sylvatica*	12	Fair	Joins T3 at base, lean, minor dead branches
T5		Southern magnolia	*Magnolia grandiflora*	9	Good/Fair	Splits below BH (4.5'), minor dead branches, IB
T6		**White oak**	***Quercus alba***	**37**	**Good/Fair**	**Minor to moderate dead branches**
T7		Flowering dogwood	*Cornus florida*	10	Poor	Dead leader, decaying trunk, more than 50% dead
T8		American holly	*Ilex opaca*	15	Good	
T9		Northern catalpa	*Catalpa speciosa*	17	Poor	Dead leader, lots of dead branches
T10		**Post oak**	***Quercus stellata***	**24**	**Fair/Poor**	**In parking lot, one sided, moderate to large dead branches**
T11		Willow oak	*Quercus phellos*	9	Good	
T12		White mulberry	*Morus alba*	3	Fair/Poor	Leaf spot, sparse foliage
T13		Roundleaf sweetgum	*Liquidambar styraciflua 'Rotundiloba'*	5	Good	
T14		Roundleaf sweetgum	*Liquidambar styraciflua 'Rotundiloba'*	6	Good	
T15		Crepe-myrtle	*Lagerstroemia*	3	Good	Multistem
T16		Crepe-myrtle	*Lagerstroemia*	3	Good/Fair	Multistem, ~15 feet, split stem
T17		Roundleaf sweetgum	*Liquidambar styraciflua 'Rotundiloba'*	7	Good	Included Bark
T18		Norway spruce	*Picea abies*	17	Good	
T19		Eastern red cedar	*Juniperus virginiana*	4	Fair	One sided, compressed by fence
T20		**Red maple**	***Acer rubrum***	**47**	**Good/Fair**	**Girdling roots, another 22" (splits below 4.5' (BH)), minor English ivy vines,**
T21		Eastern red cedar	*Juniperus virginiana*	3	Fair	Under maple
T22		Southern red oak	*Quercus falcata*	10	Good	Slight lean
T23		**Eastern white pine**	***Pinus strobus***	**25**	**Good**	
T24		Bradford pear	*Pyrus calleryana*	23	Good/Fair	Girdling roots, IB, little decay
T25		Southern magnolia	*Magnolia grandiflora*	18	Good	13, 12" multistem, girdling roots
T26		Southern magnolia	*Magnolia grandiflora*	18	Good/Fair	15, 12" multistem, minor girdling roots, bark damage, a little decay
T27		Willow oak	*Quercus phellos*	4	Good	Splits at ground 4" and 2", 3" Pin oak 2' south by wall
T28		Southern magnolia	*Magnolia grandiflora*	19	Fair	And 18" splits below BH, IB, moderate to dead branches, trunk damage
T29		Chinese magnolia	*Magnolia × soulangeana*	8	Fair	7, 5, 4" multistem below BH, IB, decay, pruned
T30		Flowering dogwood	*Cornus florida*	4	Good	And 3" split below BH, some dead branches
T31		Norway maple	*Acer platanoides*	22	Fair	Girdling roots, IB, minor decay in pruned branch
T32		White mulberry	*Morus alba*	6	Fair	Minor vines going up trunk, splits a feet off ground, IB, leaf spot
T33		White mulberry	*Morus alba*	7	Fair/Poor	4" splits below BH, bark damage, patches of decay, lean
T34		Crepe-myrtle	*Lagerstroemia*	2	Good	Multistem, ~12" high
T35		Winter creeper	*Euonymus kiautschovicus*	4	Good	And 3" splits below BH, twisted trunk, ~10' tall
T36		**River birch**	***Betula nigra***	**25**	**Fair**	**English ivy in lower canopy, minor dead branches**
T37	X	American holly	*Ilex opaca*	11	Fair	Minor trunk damage, some dead branches, lean
T38		American holly	*Ilex opaca*	7	Fair	Minor vines
T39		Loblolly pine	*Pinus taeda*	14	Fair	Vines going up trunk, moderate dead branches, slight lean
T40		White mulberry	*Morus alba*	7	Fair	Discolored bark, lean
T41		American holly	*Ilex opaca*	10	Fair	
T42		Loblolly pine	*Pinus taeda*	11	Fair	Poison ivy (PI), lean, branches coming out in 40 degrees
T43		Loblolly pine	*Pinus taeda*	10	Fair/Poor	Poison ivy, lean, very small crown
T44		**Red oak**	***Quercus rubra***	**30**	**Good/Fair**	**Inside wood fence, moderate dead branches**
T45	X	Loblolly pine	*Pinus taeda*	17	Fair	One sided
T46		American holly	*Ilex opaca*	12	Good	
T47		Ornamental holly	*Ilex sp.*	10	Good	Multistem splits below BH, vines into lower canopy
T48	X	Ornamental cherry	*Prunus sp.*	7	Fair	Pruning, leaf spotting
T49		Ornamental cherry	*Prunus sp.*	8	Fair	Trunk damage, early leaf drop
T50		Ornamental cherry	*Prunus sp.*	8	Fair	Early leaf drop, fungal slime
T51		White mulberry	*Morus alba*	14	Fair	vines in lower canopy, dead branches; mostly dead Ornamental cherry next to T51
T52		Ornamental cherry	*Prunus sp.*	7	Fair	5 and 4" multistem, IB, conks, vines in canopy, minor dead branches
T53		Privet	*Ligustrum sp.*	5	Good	Multistem, ~15' tall
T54	X	Virginia pine	*Pinus virginiana*	13	Fair	Lean, growing into power line
T55		Southern red oak	*Quercus falcata*	5	Good	
T56	X	Loblolly pine	*Pinus taeda*	13	Fair	Bark damage, one sided, in power lines
T57	X	Red oak	*Quercus rubra*	14	Fair	Slight lean, one sided
T58		**Red oak**	***Quercus rubra***	**37**	**Fair**	**Minor vines, slight lean, moderate dead branches**
T59		American holly	*Ilex opaca*	14	Fair	Tip of leader is dead
T60		American holly	*Ilex opaca*	13	Fair	Lean, dead branches
T61		American holly	*Ilex opaca*	10	Good	
T62	X	Common hibiscus	*Hibiscus syriacus*	< 1	Good/Fair	10' shrub, 2-3' inside fence
T63	**X**	**Red oak**	***Quercus rubra***	**29**	**Fair**	**Vines going up trunk, growing into power lines, lean, power line pruned, dead branches**
T64	X	Chestnut oak	*Quercus montana*	23	Fair	In power lines,
T65	X	American beech	*Fagus grandifolia*	15	Fair/Poor	20" mostly dead split below BH, lean, power lined pruned, fungal growth on dead tree
T66		**Chestnut oak**	***Quercus montana***	**30**	**Fair**	**Slight lean, in power lines, one sided, moderate to large dead branches**
T67	X	Slippery elm	*Ulmus rubra*	2	Good	
T68		**Chestnut oak**	***Quercus montana***	**28**	**Fair**	**Power line pruned, minor dead branches**
T69	X	Chestnut oak	*Quercus montana*	19	Fair/Poor	IP, large dead branches, lean, power line pruned
T70		American holly	*Ilex opaca*	8	Good	Start of row of hollies
T71		**White oak**	***Quercus alba***	**30**	**Good**	
T72		White oak	*Quercus alba*	20	Fair	One sided
T73		American holly	*Ilex opaca*	3	Good	
T74		American holly	*Ilex opaca*	7	Good	3-Multistem: 7, 5 & 4"
T75		American holly	*Ilex opaca*	5	Good	2-Multistem: 5 & 4"
T76		American holly	*Ilex opaca*	7	Good	Straight line from T70, row of hollies includes 70 & 73-76
T77	X	American holly	*Ilex opaca*	8	Good	Start of another hedge, multistem 6" and 5"
T78	X	American holly	*Ilex opaca*	7	Good	2-multistem 7 & 5"
T79	X	American holly	*Ilex opaca*	8	Good	7", 6", 5" multistem
T80		**White oak**	***Quercus alba***	**29**	**Fair**	**One sided, by house, minor dead branches**
T81		Blue spruce	*Picea pungens*	9	Good/Fair	
T82		Ornamental holly	*Ilex sp.*	9	Fair	Vines on lower canopy, power line pruned
T83		**Silver maple**	***Acer saccharinum***	**38**	**Fair/Poor**	**Girdling roots, several large dead branches**
T84		Ornamental holly	*Ilex sp.*	5	Fair/Poor	4" multistem, half dead other leader
T85		American holly	*Ilex opaca*	12	Good	
T86	X	Eastern white pine	*Pinus strobus*	11	Fair	Slight lean, power line pruning, leader either died or pruned
T87	X	Eastern white pine	*Pinus strobus*	11	Good/Fair	Slight lean, power line pruned
T88		**Post oak**	***Quercus stellata***	**35**	**Fair**	**Dead large branches, one sided, growing around fence post**
T89		Blue spruce	*Picea pungens*	13	Good/Fair	Vines growing up trunk, minor lean
T90		**Red maple**	***Acer rubrum***	**36**	**Fair/Poor**	**A lot of English ivy, vines up mid canopy, dead branches**
T91		**White oak**	***Quercus alba***	**30**	**Good**	**Vines up trunk**
T92		Ornamental cherry	*Prunus sp.*	2	Good	
T93		Ornamental cherry	*Prunus sp.*	5	Good/Fair	Leaf spot
T94		Arborvitae	*Thuja occidentalis*	2	Good	~10 feet tall
T95	X	Eastern redbud	*Cercis canadensis*	8	Good	
T96		Red oak	*Quercus rubra*	2	Good	
T97		Eastern redbud	*Cercis canadensis*	3	Good	
T98		Ornamental holly	*Ilex sp.*	5	Good	Start of row of hollies, ~20' high
T99		Ornamental holly	*Ilex sp.*	3-5	Good	
T100		Ornamental holly	*Ilex sp.*	3-5	Good	
T101		Ornamental holly	*Ilex sp.*	3-5	Good	
T102		Ornamental holly	*Ilex sp.*	4	Good	Middle of holly row, ~15' high
T103		Ornamental holly	*Ilex sp.*	3-5	Good	
T104		Ornamental holly	*Ilex sp.*	3-5	Good	
T105		Ornamental holly	*Ilex sp.*	3-5	Good	
T106		Ornamental holly	*Ilex sp.*	3-5	Good	
T107		Ornamental holly	*Ilex sp.*	4	Good	End of holly row, whole row 3-5" DBH
T108		**White oak**	***Quercus alba***	**31**	**Good**	**Power line going through it**
T109	X	White oak	*Quercus alba*	21	Fair	Moderate dead branches
T110		Flowering dogwood	*Cornus florida*	7	Fair	Lean, minor dead branches
T111		**White oak**	***Quercus alba***	**40**	**Good**	**A lot of dead vines, some vines left over, healthy canopy**
T112	**X**	**Red oak**	***Quercus rubra***	**26**	**Fair**	**~9" split at base mostly dead, vines to lower canopy, minor lean**
T113	X	Green ash	*Fraxinus pennsylvanica*	7	Fair	Vines in canopy, dead branches
T114	X	Slippery elm	*Ulmus rubra*	6	Fair/Poor	Dead branches, moderate lean
T115		Norway maple	*Acer platanoides*	7	Fair	One sided, minor dead branches
T116		Red maple	*Acer rubrum*	9	Fair	Minor dead branches
T117		Pignut hickory	*Carya glabra*	10	Good/Fair	Lean
T118		White mulberry	*Morus alba*	8	Fair	Lean, moderate dead branches
T119	**X**	**White oak**	***Quercus alba***	**26**	**Good/Fair**	**Moderate dead branches, flag vines**
T120		**White oak**	***Quercus alba***	**32**	**Good/Fair**	**Minor vines**
T121		American beech	*Fagus grandifolia*	9	Good/Fair	6" split below BH, lean
T122		**White oak**	***Quercus alba***	**25**	**Good**	**Twin 24"**
T123		Red maple	*Acer rubrum*	6	Good/Fair	Minor dead branches
T124		American beech	*Fagus grandifolia*	14	Good/Fair	Old lightning damage, trunk/hollow decay
T125	X	Shagbark hickory	*Carya ovata*	8	Fair	Minor dead branches, slight lean
T126	X	Green ash	*Fraxinus pennsylvanica*	7	Fair	Minor dead branches
T127	X	Green ash	*Fraxinus pennsylvanica*	6	Poor	Mostly dead
T128	X	Green ash	*Fraxinus pennsylvanica*	7	Fair/Poor	Vines in canopy, IB
T129	X	White oak	*Quercus alba*	22	Good/Fair	Vines but controlled
T130	X	Red maple	*Acer rubrum*	7	Fair	Lean, some vines in canopy
T131		American beech	*Fagus grandifolia*	6	Fair	Some vines in canopy
T132	**X**	**Pignut hickory**	***Carya glabra***	**25**	**Fair**	**Vines going up trunk, some dead branches**
T133	X	American beech	*Fagus grandifolia*	8	Good	
T134	**X**	**American beech**	***Fagus grandifolia***	**33**	**Good**	**Minor dead branches, some vines**
T135		American beech	*Fagus grandifolia*	7	Good/Fair	Minor vines, slightly one sided
T136		**White oak**	***Quercus alba***	**25**	**Fair**	**Moderate dead branches, skinny crown**
T137		American beech	*Fagus grandifolia*	7	Good	On edge of stream
T138		American beech	*Fagus grandifolia*	6	Good	
T139		Tulip poplar	*Liriodendron tulipifera*	20	Fair	Scant canopy
T140	X	American beech	*Fagus grandifolia*	8	Good	
T141	**X**	**Tulip poplar**	***Liriodendron tulipifera***	**31**	**Fair**	**Moderate dead branches, sparse canopy**
T142	X	Slippery elm	*Ulmus rubra*	7	Fair	Lean, vines

FOR CONTINUATION OF TREE LIST, SEE FC-09

FOREST STAND TABLE

ID	Dominant Species & DBH Size Class	Condition	Retention Value	Description	Acres in LOD
FS1	Mixed Oaks: mostly N. Red & White, 10-18", mid-successional	Good to Fair-Poor along edges	moderate to high (non-edge forest by	~65-90% canopy closure; understory (hickory & beech) & sparse shrub layers; Cover: ~10-35% herb, ~15% downed woody, ~2-20% invasive, low interior vine cover; good forest	0.58

NOTES: 1. There are high levels of invasive vines along FS1 edges, including porcelain berry (roads and clearing by Glenside Dr.)
2. The highest canopy closure and lowest herb & invasive covers listed above are consistent with interior forest plots.
3. FS1 includes stream buffer for Sligo Creek (WC) and unnamed tributaries (WA & WB).

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FC-08

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NEW AVE BIKEWAY, SECTION A
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AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION NOTES

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MAY 2020

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WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 08 OF 11 SHEET NO. 71 OF 73

PLOTTED: 6/24/2020
FILE: \\balsrv06\v2016\2016\16217_NewAveBike\CADD\plans\pFCP-007_NewAveBike.dgn

Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
T143	X	Red maple	*Acer rubrum*	9	Fair/Poor	Small hollow on trunk, dead leader
T144	X	White mulberry	*Morus alba*	6	Fair	Serious lean, dead branches
T145	X	American beech	*Fagus grandifolia*	7	Good	
T146	**X**	**Tulip poplar**	***Liriodendron tulipifera***	**24**	**Fair**	**Poison ivy vines into lower canopy, multileader above BH**
T147	X	American beech	*Fagus grandifolia*	6	Good/Fair	Minor vines
T148	X	Tulip poplar	*Liriodendron tulipifera*	13	Fair	Scant canopy
T149	X	American beech	*Fagus grandifolia*	7	Good/Fair	Little one sided
T150	X	Tulip poplar	*Liriodendron tulipifera*	11	Fair	Skinny
T151	X	Tulip poplar	*Liriodendron tulipifera*	19	Fair	Very scant crown
T152	X	American beech	*Fagus grandifolia*	8	Good	
T153	X	Tulip poplar	*Liriodendron tulipifera*	21	Fair	Very scant crown
T154		American beech	*Fagus grandifolia*	6	Good	
T155	X	Tulip poplar	*Liriodendron tulipifera*	15	Fair	Vines into canopy, lean
T156	**X**	**Tulip poplar**	***Liriodendron tulipifera***	**30**	**Fair**	**Slight lean, multileader above BH, vines, moderate dead branches, scant canopy**
T157	X	Tulip poplar	*Liriodendron tulipifera*	18	Good/Fair	
T158		Sycamore	*Plantanus occidentalis*	22	Good/Fair	Vines going up but controlled
T159		**American beech**	***Fagus grandifolia***	**24**	**Good**	**By stream, leaning, on edge of undercut stream bank**
T160		**American beech**	***Fagus grandifolia***	**24**	**Good/Fair**	**Cavity in base of trunk, but still looks stable**
T161		**American beech**	***Fagus grandifolia***	**25**	**Good**	**Cavity in base of trunk, but still looks stable**
T162		**White oak**	***Quercus alba***	**44**	**Good/Fair**	**Treated vines, moderate dead branches**
T163		American beech	*Fagus grandifolia*	6	Good	
T164		American beech	*Fagus grandifolia*	21	Good	Small cavity but stable
T165	**X**	**American beech**	***Fagus grandifolia***	**28**	**Good/Fair**	**Slight lean, edge of eroding stream**
T166	X	American beech	*Fagus grandifolia*	21	Good/Fair	Growing/ fruiting fungus and insects
T167	X	American beech	*Fagus grandifolia*	9	Good	On edge of stream
T168	**X**	**American beech**	***Fagus grandifolia***	**24**	**Good**	
T169		White oak	*Quercus alba*	19	Fair	Vine going up trunk, little one sided
T170		**Tulip poplar**	***Liriodendron tulipifera***	**39**	**Good**	
T171		American beech	*Fagus grandifolia*	7	Good	
T172		White oak	*Quercus alba*	19	Fair	Poison ivy going up trunk
T173		American beech	*Fagus grandifolia*	20	Good	Splits below BH ~5"
T174	X	American beech	*Fagus grandifolia*	7	Good	
T175	X	American beech	*Fagus grandifolia*	8	Good	
T176	**X**	**White oak**	***Quercus alba***	**28**	**Fair**	**Heavy poison ivy vines to lower canopy**
T177	X	Red maple	*Acer rubrum*	6	Fair	Vines in canopy, moderate dead branches
T178		Tulip poplar	*Liriodendron tulipifera*	11	Good	
T179		Green ash	*Fraxinus pennsylvanica*	8	Good/Fair	Minor dead branches
T180		Green ash	*Fraxinus pennsylvanica*	10	Good/Fair	Minor dead branches, little one sided
T181		**Black oak**	***Quercus velutina***	**27**	**Fair**	**Split leader, IB**
T182	X	Loblolly pine	*Pinus taeda*	14	Fair/Poor	Heavy poison ivy vine going up into lower crown, very scant canopy
T183		Green ash	*Fraxinus pennsylvanica*	7	Fair/Poor	Heavy poison ivy vines into lower canopy, scant crown
T184		Pignut hickory	*Carya glabra*	6	Fair	Polson ivy vines in canopy
T185		**White oak**	***Quercus alba***	**24**	**Fair**	**Vines treated, minor to moderate dead branches**

Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
T186		American beech	*Fagus grandifolia*	17	Good/Fair	
T187		Tulip poplar	*Liriodendron tulipifera*	17	Good/Fair	Minor dead branches
T188		**White oak**	***Quercus alba***	**31**	**Fair**	**Polson ivy vines up to lower canopy, slight lean**
T189		Pignut hickory	*Carya glabra*	6	Fair/Poor	Dead leader, lean, vines
T190		Tulip poplar	*Liriodendron tulipifera*	20	Fair	Scant canopy, minor dead branches
T191		American beech	*Fagus grandifolia*	6	Good	
T192		Tulip poplar	*Liriodendron tulipifera*	22	Fair	Vines but treated, slight lean
T193		American beech	*Fagus grandifolia*	6	Good	Minor vines
T194		Tulip poplar	*Liriodendron tulipifera*	19	Fair	PI to lower canopy
T195		Pignut hickory	*Carya glabra*	6	Good/Fair	PI vines
T196		Tulip poplar	*Liriodendron tulipifera*	22	Good/Fair	Minor dead branches
T197		American beech	*Fagus grandifolia*	6	Good	
T198		Green ash	*Fraxinus pennsylvanica*	6	Fair	Minor dead branches, one sided
T199		Tulip poplar	*Liriodendron tulipifera*	18	Fair	One sided
T200	**X**	**Tulip poplar**	***Liriodendron tulipifera***	**24**	**Fair**	**Vines**
T201		Tulip poplar	*Liriodendron tulipifera*	16	Fair	Minor dead branches, skinny canopy
T202		**American beech**	***Fagus grandifolia***	**26**	**Good**	
T203		**Tulip poplar**	***Liriodendron tulipifera***	**24**	**Fair**	**PI vines**
T204		Tulip poplar	*Liriodendron tulipifera*	9	Fair	PI vines, sparse canopy
T205	X	Pignut hickory	*Carya glabra*	8	Fair	Vines going up lower canopy
T206	X	American beech	*Fagus grandifolia*	6	Good	
T207	X	Sassafras	*Sassafras albidum*	12	Fair	Slight lean, lots of competition
T208		Pignut hickory	*Carya glabra*	6	Good/Fair	Minor dead branches
T209		**White oak**	***Quercus alba***	**28**	**Fair**	**Minor dead branches, one sided**
T210		White oak	*Quercus alba*	17	Fair	Skinny canopy
T211		American beech	*Fagus grandifolia*	7	Good/Fair	Minor dead branches
T212		Pignut hickory	*Carya glabra*	6	Good	
T213		Pignut hickory	*Carya glabra*	11	Fair	Moderate dead branches, one sided
T214		Pignut hickory	*Carya glabra*	10	Fair	Moderate dead branches
T215		Pignut hickory	*Carya glabra*	12	Good	
T216		Green ash	*Fraxinus pennsylvanica*	12	Fair	Vines into canopy
T217		Red maple	*Acer rubrum*	6	Fair	Moderate dead branches
T218		Red maple	*Acer rubrum*	13	Good	Some vines
T219		Green ash	*Fraxinus pennsylvanica*	9	Fair/Poor	Included bark, lots of PI, 7" split below BH
T220		Red oak	*Quercus rubra*	12	Fair	Vines treated, moderate to dead branches
T221		Black oak	*Quercus velutina*	10	Fair	Sparse canopy, one sided
T222		Pignut hickory	*Carya glabra*	9	Fair	Moderate dead branches
T223		Chestnut oak	*Quercus montana*	9	Fair	PI vines going up into lower canopy, sparse canopy, flag near branch
T224		Black gum	*Nyssa sylvatica*	7	Fair	PI vines going up into lower canopy
T225		Pignut hickory	*Carya glabra*	8	Fair	Treated vines, slightly one sided
T226		Slippery elm	*Ulmus rubra*	7	Fair	Minor vines
T227		Bitternut hickory	*Carya cordiformis*	8	Fair	Minor vines traveling up canopy, one sided
T228		Pignut hickory	*Carya glabra*	9	Fair	Vines treated, skinny canopy

Tree No.	Removal	Common Name	Scientific Name	DBH (In.)	Condition	Comments
T229		Black gum	*Nyssa sylvatica*	11	Good/Fair	Sparse canopy, vines treated
T230		Black cherry	*Prunus serotina*	17	Fair/Poor	Very sparse canopy, very small crown
T231		Japanese princess tree	*Paulownia tomentosa*	14	Fair	PI vines, lean, split damage with branch
T232		**Tulip poplar**	***Liriodendron tulipifera***	**24**	**Good**	
T233		Black locust	*Robinia pseudoacacia*	17	Fair	On edge of forest by road, vines
T234		Tulip poplar	*Liriodendron tulipifera*	9	Good	
T235		Sycamore	*Plantanus occidentalis*	13	Fair	Slight lean, vines
T236		Black cherry	*Prunus serotina*	15	Poor	Major lean, dead leader, moderate dead branches
T237		Red oak	*Quercus rubra*	6	Fair	Moderate dead branches
T238		Japanese princess tree	*Paulownia tomentosa*	8	Fair/Poor	Sparse canopy, moderate dead branches, small hollow wound in trunk
T239		Black cherry	*Prunus serotina*	7	Fair	Minor dead branches, one sided, slight lean
T240		White mulberry	*Morus alba*	13	Poor	Fungal growth up trunk, lean
T241		Japanese princess tree	*Paulownia tomentosa*	12	Fair	Lean, vines
T242		White mulberry	*Morus alba*	7	Poor	Serious lean, major vines into canopy, moderate dead branches
T243		Green ash	*Fraxinus pennsylvanica*	18	Poor	Split above BH, moderate dead branches, major vines
T244		Eastern white pine	*Pinus strobus*	18	Fair	Heavy vines, minor dead branches, by food truck and patty wholesale
T245	X	Red maple	*Acer rubrum*	10	Fair/Poor	Dead leader, one third dead
T246	X	Red maple	*Acer rubrum*	4	Good	
T247	X	Red maple	*Acer rubrum*	10	Good	
T248		Red maple	*Acer rubrum*	13	Good	IB, minor bark damage
T249		Sycamore	*Plantanus occidentalis*	6	Good/Fair	Leaf spot, flood debris around base
T250		Green ash	*Fraxinus pennsylvanica*	10	Poor	PI vines up to canopy, major dead branches
T251		Tulip poplar	*Liriodendron tulipifera*	22	Fair	Vines growing up into lower canopy
T252		Tulip poplar	*Liriodendron tulipifera*	6	Fair	One sided
T253		Green ash	*Fraxinus pennsylvanica*	6	Fair/Poor	Lean, moderate dead branches, sparse
T254		White mulberry	*Morus alba*	13	Poor	Large dead branches, vines
T255		White mulberry	*Morus alba*	7	Poor	Mostly dead, vines, lean
T256		Red maple	*Acer rubrum*	13	Fair/Poor	Dead leader, fruiting bodies up trunk, vines
T258		Pignut hickory	*Carya glabra*	12	Good	PI vines into lower canopy
T259		**Red oak**	***Quercus rubra***	**32**	**Good/Fair**	**PI vines, slightly one sided**
T260		Red oak	*Quercus rubra*	18	Fair	Vines treated
T261		White oak	*Quercus alba*	23	Fair	Vines mostly treated, skinny canopy
T262		American holly	*Ilex opaca*	6	Good/Fair	
T263		Pignut hickory	*Carya glabra*	12	Fair	Vines going up into lower canopy
T264		**White oak**	***Quercus alba***	**34**	**Poor**	**Dead leader and shelf fungus, vines into canopy, one third alive**
T265		**Red oak**	***Quercus rubra***	**24**	**Fair**	**Moderate dead branches, lean, vines, split below BH**
T266		White mulberry	*Morus alba*	14	Fair/Poor	Lean, a lot of vines, decay in old branch
T267		Chinese elm	*Ulmus parvifolia*	10	Good	behind sidewalk
T268		**Willow oak**	***Quercus phellos***	**28**	**Good**	**minor dead branches**
T269		White pine	*Pinus strobus*	19	Fair	almost 45 degree lean on oak, minor dead branches, just outside fence
T270		American holly	*Ilex opaca*	5	Good	Multistem below BH, 2-4" & 3",
T271		Chinese elm	*Ulmus parvifolia*	9	Good	
T272		White pine	*Pinus strobus*	23	Fair	Mod.-high dead branches
T273		Chinese elm	*Ulmus parvifolia*	9	Good	
T274		Redbud	*Cercis canadensis*	5	Fair	dead branches, ~3' narrow mostly healed split in lower trunk
T275		Redbud	*Cercis canadensis*	5	Good/Fair	minor dead branches

Significant & Specimen Trees (≥ 24" DBH)

Maryland DNR Qualified Professional Date
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BY: dadkins -

FC-09

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION NOTES

60% PLANS

MAY 2020

SCALE ____ DATE JUNE 2020 CONTRACT NO. T.B.D.

DESIGNED BY SJK
DRAWN BY DEA
CHECKED BY GRO
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 09 OF 11 SHEET NO. 72 OF 73

PLOTTED: 6/24/2020
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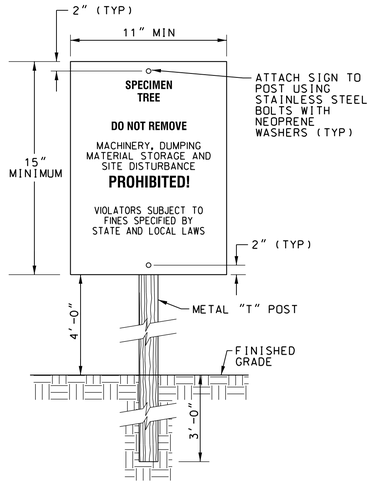
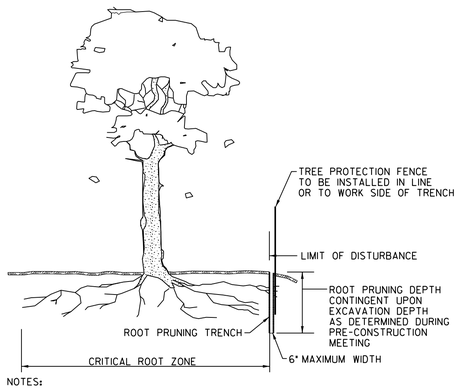


TREE PROTECTION SIGN DETAIL

NOT TO SCALE

Notes:
1. Bottom of signs to be higher than top of tree protection fence.
2. Attachment of signs to tree is prohibited.
3. Attach signs to metal 'T' posts or directly to tree protection fence.

Source: Adapted from Forest Conservation Manual, 1991



NOTES:

1. RETENTION AREAS TO BE ESTABLISHED AS PART OF THE FOREST CONSERVATION PLAN REVIEW PROCESS.
2. BOUNDARIES OF RETENTION AREAS TO BE STAKED, FLAGGED AND/OR FENCED PRIOR TO TRENCHING.
3. EXACT LOCATION OF TRENCH SHOULD BE IDENTIFIED.
4. TRENCH SHOULD BE IMMEDIATELY BACKFILLED WITH SOIL REMOVED OR ORGANIC SOIL.
5. ROOTS SHOULD BE CLEANLY CUT USING VIBRATORY KNIFE OR OTHER ACCEPTABLE EQUIPMENT.
6. IN SOME INSTANCES, IT MAY BE BENEFICIAL TO PERFORM ROOT PRUNING AT THE EDGE OF EXCAVATION RATHER THAN AT THE LOD, PROVIDED THE ROOTS BETWEEN THE EXCAVATON AND THE LOD ARE PROTECTED DURING CONSTRUCTION.

ROOT PRUNING DETAIL

NOT TO SCALE

Source: Adapted from Steve Clark & Associates/ACRT, Inc. and Forest Conservation Manual, 1991

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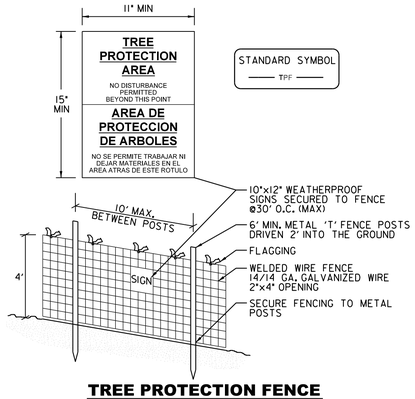

TREE PROTECTION FENCE

NOT TO SCALE

NOTES:

1. PRACTICE MAY BE COMBINED WITH SEDIMENT CONTROL FENCING.
2. LOCATION AND LIMITS OF FENCING SHALL BE COORDINATED IN FIELD WITH MARYLAND LTE.
3. BOUNDARIES OF PROTECTION AREA SHOULD BE STAKED PRIOR TO INSTALLING PROTECTIVE DEVICE.
4. ROOT DAMAGE SHOULD BE AVOIDED.
5. PROTECTIVE SIGNAGE IS REQUIRED.
6. FENCING SHALL BE MAINTAINED THROUGHOUT CONSTRUCTION.

Sequence of Events for Properties Required to Comply With Forest Conservation Plans, Exemptions from Submitting Forest Conservation Plans, and Tree Save Plans

The property owner is responsible for ensuring all tree protection measures are performed in accordance with the approved final forest conservation plan or tree save plan, and as modified in the field by a Planning Department Forest Conservation Inspector. The measures must meet or exceed the most recent standards published by the American National Standards Institute (ANSI A300).

Pre-Construction

1. An on-site pre-construction meeting is required after the limits of disturbance have been staked and flagged and before any land disturbance.

2. The property owner must arrange for the meeting and following people must participate at the pre-construction meeting: the property owner or their representative, construction superintendent, International Society of Arboriculture (ISA) certified arborist/Maryland Licensed Tree Expert (representing owner) that will implement the tree protection measures, The Planning Department Forest Conservation Inspector, and Montgomery County Department of Permitting Services (DPS) Sediment Control Inspector. The purpose of this meeting is to verify the limits of disturbance and discuss specific tree protection and tree care measures shown on the approved plan. No land disturbance shall begin before tree protection and stress-reduction measures have been implemented and approved by the Planning Department's Forest Conservation Inspector.

a. Typical tree protection devices include:
   i. Chain link fence (four feet high)
   ii. Super silt fence with wire strung between the support poles (minimum 4 feet high) with high visibility flagging.
   iii. 14 gauge, 2 inch x 4 inch welded wire fencing supported by steel T-bar posts (minimum 4 feet high) with high visibility flagging.

b. Typical stress reduction measures may include, but are not limited to:
   i. Root pruning with a root cutter or vibratory plow designed for that purpose. Trenchers are not allowed, unless approved by the Forest Conservation Inspector
   ii. Crown Reduction or pruning
   iii. Watering
   iv. Fertilizing
   v. Vertical mulching
   vi. Root aeration systems

Measures not specified on the Tree Save Plan may be required as determined by the Forest Conservation Inspector in coordination with the property owner's arborist.

3. A Maryland Licensed Tree expert must perform, or directly supervise, the implementation of all stress reduction measures. Documentation of the process (including photographs) may be required by the Forest Conservation Inspector, and will be determined at the pre-construction meeting.

4. Temporary tree protection devices must be installed per the approved Forest Conservation Plan, Exemption Plan, or Tree Save Plan and prior to any land disturbance. The Forest Conservation Inspector, in coordination with the DPS Sediment Control Inspector, may make field adjustments to increase the survivability of trees and forest shown as saved on the approved plan.

5. Tree protection fencing must be installed and maintained by the property owner for the duration of construction project and must not be altered without prior approval from the Forest Conservation Inspector. All construction activity within protected tree and forest areas is prohibited. This includes the following activities:
   a. Parking or driving of equipment, machinery or vehicles of any type.
   b. Storage of any construction materials, equipment, stockpiling, fill, debris, etc.
   c. Dumping of any chemicals (i.e., paint thinner), mortar or concrete remainder, trash, garbage, or debris of any kind.
   d. Felling of trees into a protected area.
   e. Trenching or grading for utilities, irrigation, drainage, etc.

6. Forest and tree protection signs must be installed as required by the Forest Conservation Inspector. The signs must be waterproof and wording provided in both English and Spanish. During Construction

7. Periodic inspections will be made by the Forest Conservation Inspector. Corrections and repairs to tree protection devices must be completed within the timeframe given by the Inspector.

8. The property owner must immediately notify the Forest Conservation Inspector of any damage to trees, forests, understory, ground cover, and any other undisturbed areas shown on the approved plan. Remedial actions, and the relative timeframes to restore these areas, will be determined by the Forest Conservation Inspector.

Post-Construction

9. After construction is completed, but before tree protection devices have been removed, the property owner must request a final inspection with the Forest Conservation Inspector. At the final inspection, the Forest Conservation Inspector may require additional corrective measures, which may include:
   a. Removal, and possible replacement, of dead, dying, or hazardous trees
   b. Pruning of dead or declining limbs
   c. Soil aeration
   d. Fertilization
   e. Watering
   f. Wound repair
   g. Clean up of retention areas, including trash removal

10. After the final inspection and completion of all corrective measures the Forest Conservation Inspector will request all temporary tree and forest protection devices be removed from the site. Removal of tree protection devices that also operate for erosion and sediment control must be coordinated with both DPS and the Forest Conservation Inspector and cannot be removed without permission of the Forest Conservation Inspector. No additional grading, sodding, or burial may take place after the tree protection fencing is removed.

11. Long-term protection measures, including permanent signage, must be installed per the approved plan. Installation will occur at the appropriate time during the construction project. Refer to the approved plan drawing for the long-term protection measures to be installed.

FCP NOTES:

1. ALL AREAS OUTSIDE OF THE LOD SHALL BE CONSIDERED FOREST/TREE PRESERVATION AREAS TO BE LEFT UNDISTURBED.
2. NINE SIGNIFICANT (≥ 24" DBH) TREES AND THREE SPECIMEN TREE (≥30" DBH OR 75% OF STATE CHAMPIONS) WILL BE REMOVED. OTHER SIGNIFICANT AND SPECIMEN TREES HAVE SOME CRITICAL ROOT ZONE WITHIN THE LOD AND MAY REQUIRE SUPPLEMENTAL TREE PROTECTION MEASURES. ALL WORK ACTIVITIES NEAR THESE TREES SHALL BE SUPERVISED AND DIRECTED BY A MD LICENSED TREE EXPERT (LTE).
3. THE PROJECT AREA IS LOCATED WITHIN THE SLIGO CREEK WATERSHED WITH A WATERSHED USE CLASS OF I (DNR 02140205021).
4. THE PROJECT IS LOCATED OUTSIDE OF SPECIAL PROTECTION AND PRIMARY MANAGEMENT AREAS.
5. THERE IS NO CURRENT MAPPED FEMA 100-YEAR FLOODPLAIN WITHIN THE STUDY AREA (MONTGOMERY COUNTY FEMA GIS DATA, MAP NO. 24031C0480D, EFFECTIVE DATE 9/29/06) NOR M-NCPPC MAPPED FLOODPLAIN ON MC ATLAS. FEMA 1996 FLOODPLAIN IS SHOWN FOR SLIGO CREEK, SINCE THE LACK OF CURRENT FLOODPLAIN APPEARS TO BE A GAP IN THE LATEST FLOODPLAIN STUDY (CURRENT STUDIES SHOW SLIGO FLOODPLAIN FURTHER UP AND DOWNSTREAM OF THE PROJECT AREA).
6. TWO PERENNIAL AND ONE INTERMITTENT WATERWAYS AND NO WETLANDS WERE FIELD DELINEATED OCTOBER 2018 WITHIN THE STUDY AREA. NWI AND DNR WETLAND INVENTORY MAPPING IDENTIFIED SLIGO CREEK AND NO WETLANDS WITHIN THE STUDY AREA.
7. THE MARYLAND DEPARTMENT OF NATURAL RESOURCES WILDLIFE AND HERITAGE SERVICE (MDNR-WH) DETERMINED THAT THERE ARE NO OFFICIAL STATE OR FEDERAL RECORDS FOR LISTED PLANT OR ANIMAL SPECIES WITHIN THE PROJECT AREA IN THEIR OCTOBER 17, 2019 RESPONSE LETTER. MDNR ENVIRONMENTAL REVIEW PROGRAM (ERP) STATED THAT NO INSTREAM WORK IS PERMITTED FROM MARCH 1ST THROUGH JUNE 15TH OF ANY GIVEN YEAR IN THEIR OCTOBER 21, 2019 RESPONSE. NO RTE SPECIES WERE OBSERVED ON SITE
8. MHT DETERMINED THAT THE PROJECT WOULD HAVE NO ADVERSE EFFECT ON HISTORIC PROPERTIES (OCTOBER 23, 2019 RESPONSE), AND THERE ARE NO HISTORIC RESOURCES OR DISTRICTS WITHIN THE STUDY AREA ON MC ATLAS.
9. FCP PREPARED BY SALLY KISHTER, QUALIFIED PROFESSIONAL. FIELD DATA WAS COLLECTED ON OCTOBER 1, 2018 AND OCTOBER 2, 2018.
10. THERE ARE NO HIGHLY ERODIBLE SOILS IN THE STUDY AREA, AND THEREFORE NO > 15% SLOPES ON ERODIBLE SOILS ARE SHOWN.
11. THE TOTAL LIMITS OF DISTURBANCE (60% LOD, LINEAR PROJECT NET TRACT AREA) IS 2.26 ACRES. THE LOD IS PRIMARILY WITHIN THE EXISTING ROAD RIGHT-OF WAYS (ROW), WITH SOME M-NCPPC PARK AND WSSC PROPERTY.
12. FIELD SURVEY WAS CONDUCTED FOR THE STUDY AREA, AND GIS CONTOURS ARE SHOWN OUTSIDE THE SURVEY.
13. PROPERTY TAX INFORMATION IS SHOWN WITHIN INDIVIDUAL PROPERTY BOUNDARIES ON EACH FCP PLAN SHEET, INCLUDING LOT IF APPLICABLE, OWNER NAME, ADDRESS, TAX ID, AND TRACT SIZE.
14. ON THE FINAL PLANS TPF WILL BE ADDED ALONG THE LOD NEXT TO TREE PRESERVATION AREAS AND PLANTING WILL BE PROVIDED.

FC–10

Maryland DNR Qualified Professional Date
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BY: dadkins -

CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION NOTES

60% PLANS
MAY 2020

SCALE ____ DATE JUNE 2020 CONTRACT NO. T.B.D.

DESIGNED BY SJK
DRAWN BY DEA
CHECKED BY GRO
F.A.P. NO. T.B.D.

COUNTY MONTGOMERY
LOGMILE MD 650 0.040- 0.830

WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 10 OF 11

SHEET NO. 73 OF 73

PLOTTED: 6/24/2020
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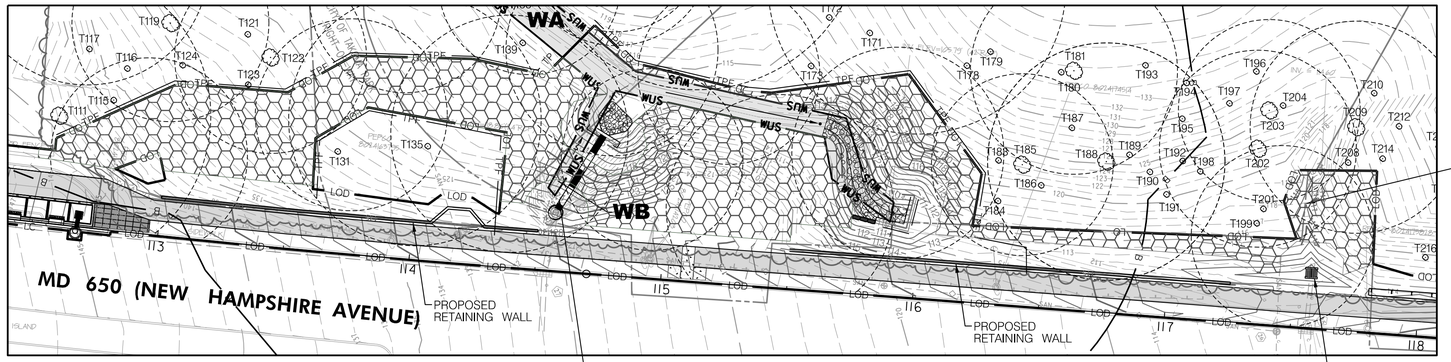

FOREST PLANTING AREA

FOREST PLANTING SCHEDULE							0.33 acres	
Quantity per acre	Frequency (%)	Species Quantity	Vegetation Strata/ Species Name	Common Name	Wetland Indicator Status	Size	Type	Placement
200 trees			TREES					
	25	17	*Quercus rubra*	Northern red oak	FACU	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	25	17	*Quercus alba*	White oak	FACU	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	20	13	*Liriodendron tulipifera*	Tulip poplar	FACU	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	15	10	*Acer rubrum*	Red maple	FAC	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	15	10	*Nyssa sylvatica*	Black gum	FAC	1" Cal.	7 Gal. Cont.	Naturalized @ 15' OC
	100	67	=total					
33 shrubs			SHRUBS					
	60	7	*Virburnum dentatum*	Southern arrowwood	FACU	2' ht.	3 Gal. Cont.	Groups of 3 to 5 @ 6' OC
	40	4	*Amelanchier arborea*	Serviceberry	FAC	2' ht.	3 Gal. Cont.	Groups of 3 to 5 @ 6' OC
	100	11	=total					

MC PARKS REFORESTATION CALCULATION		
	SF	ACRES
FC-03 REFORESTATION AREA:	12,672	0.29
FC-04 REFORESTATION AREA:	1,879	0.04
TOTAL	14,551	0.33
# 1" CAL. TREES PER ACRE	TOTAL TREES PLANTED	TOTAL INCHES PLANTED
200	67	67

TOTAL SEEDING IN FOREST PLANTING AREAS					0.334 acres
Seeding Rate	Frequency (%)	Species Quantity	Common Name	Scientific Name	1616.8 SY
30 lbs/ac.	35	3.51	Little Bluestem	*Schizachyrium scoparium, PA Ecotype*	
	30	3.01	Redtop Panic Grass	*Panicum rigidulum*	
	15	1.50	Indiangrass	*Sorghastrum nutans, PA Ecotype*	
	5	0.50	Big Bluestem	*Andropogon gerardii 'Niagara'*	
	5	0.50	Switchgrass	*Panicum virgatum 'Shelter'*	
	10	1.00	Virginia Wild Rye	*Elymus virginicus*	
	100	10.02	Total lbs Tree/Shrub Area Seed		

NOTE: TEMPORARY ITEMS SUCH AS PAVEMENT REMOVAL, ACCESS ROAD, FENCES, SCE, PUMPAROUND, SANDBAGS, PST, STEEP SLOPES AND TREES TO BE REMOVED ARE NOT SHOWN ON THE PLANTING PLANS.

LEGEND

- 5 INCH CONCRETE SIDEWALK
- CONCRETE DRIVEWAY
- ASPHALT SHARED USE PATH
- FULL DEPTH ASPHALT PAVING
- SIDEWALK AND PAVEMENT REMOVAL
- SLOPES ≥ 25%
- SPECIALTY TYPE 2 – PAVERS
- TEMPORARY ACCESS ROAD
- EXISTING PROPERTY BOUNDARY
- 120 EXISTING SURVEYED CONTOURS
- 120 GIS CONTOURS
- EXISTING FOREST STAND TREELINE
- TREE LINE /CANOPY COVER
- T76 TREES < 24" DBH
- T72 SIGNIFICANT /SPECIMEN TREE (≥ 24" DBH) WITH CRITICAL ROOT ZONE
- TREE TO BE REMOVED
- LOD 60% LIMIT OF DISTURBANCE
- SF SILT FENCE
- SSF SUPER SILT FENCE
- DF DIVERSION FENCE
- TPF TREE PROTECTION FENCE
- 100–YEAR FLOODPLAIN
- B STREAM BUFFER
- CsE / CsF SOILS BOUNDARY
- FS1 FOREST STAND
- WA WATERS FEATURE
- SCE STABILIZED CONSTRUCTION ENTRANCE
- P PUMPAROUND PRACTICE
- SANDBAG DIVERSION
- PST PORTABLE SEDIMENT TANK
- 120 PROPOSED CONTOUR
- PROPOSED CULVERT
- PROPOSED RIPRAP
- SDM / WUS PERENNIAL / INTERMITTENT STREAM

30' 0 30' 60'
SCALE: 1"=30'

FC–11

Maryland DNR Qualified Professional Date
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CITY OF TAKOMA PARK
NEW AVE BIKEWAY, SECTION A
MD 650 (NEW HAMPSHIRE AVENUE)
AUBURN AVE TO HOLTON LN

PRELIMINARY FOREST CONSERVATION PLANTING

60% PLANS
MAY 2020

SCALE 1"=30' DATE JUNE 2020 CONTRACT NO. T.B.D.
DESIGNED BY SJK COUNTY MONTGOMERY
DRAWN BY DEA LOGMILE MD 650 0.040- 0.830
CHECKED BY GRO
F.A.P. NO. T.B.D.
WSSC 208NE01 & 209NE01
TAX MAPS JN561 & JN562

DRAWING NO. FC – 11 OF 11 SHEET NO. 73A OF 73

PLOTTED: 6/24/2020
FILE: \\baltsrv08\v2016\2016\16217_NewAveBike\CADD\plans\pFCP-010_NewAveBike.dgn