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Civil Engineering - Surveying - Land Planning
Transportation - Environmental
Right of Way Services

VDOT
TOWN OF VIENNA

TOWN OF VIENNA

7/20/2021

PROJECT MANAGER: *Michael Gallagher, P.E.* - Town of Vienna, (703) 255-6389
SURVEYED BY: *Rinker Design Associates, P.C.* (703) 368-7373
DESIGN SUPERVISED BY: *Adam D. Welschenbach, P.E.* - Rinker Design Associates, P.C. (703) 368-7373
DESIGNED BY: *Adam Welschenbach, P.E.* - Rinker Design Associates, P.C. (703) 368-7373

SHEET INDEX

- SHEET NO. 1 Cover Sheet
- SHEET NO. 2 General Notes
- SHEET NO. 3 Traffic Signal Plan
- SHEET NO. 4 Traffic Signal Plan - Sign Details

THIS PROJECT WAS DEVELOPED UTILIZING THE DEPARTMENT'S ENGINEERING DESIGN PACKAGE (GEOPAK).
GEOPAK Computer Identification No. N/A



COMMONWEALTH OF VIRGINIA

Town of Vienna - Department of Public Works

PLAN AND PROFILE OF PROPOSED
TRAFFIC SIGNAL RECONSTRUCTION
MAPLE AVENUE AND PARK STREET
TRAFFIC SIGNAL RECONSTRUCTION

FHWA 534 DATA - 43124
UPC: 109297

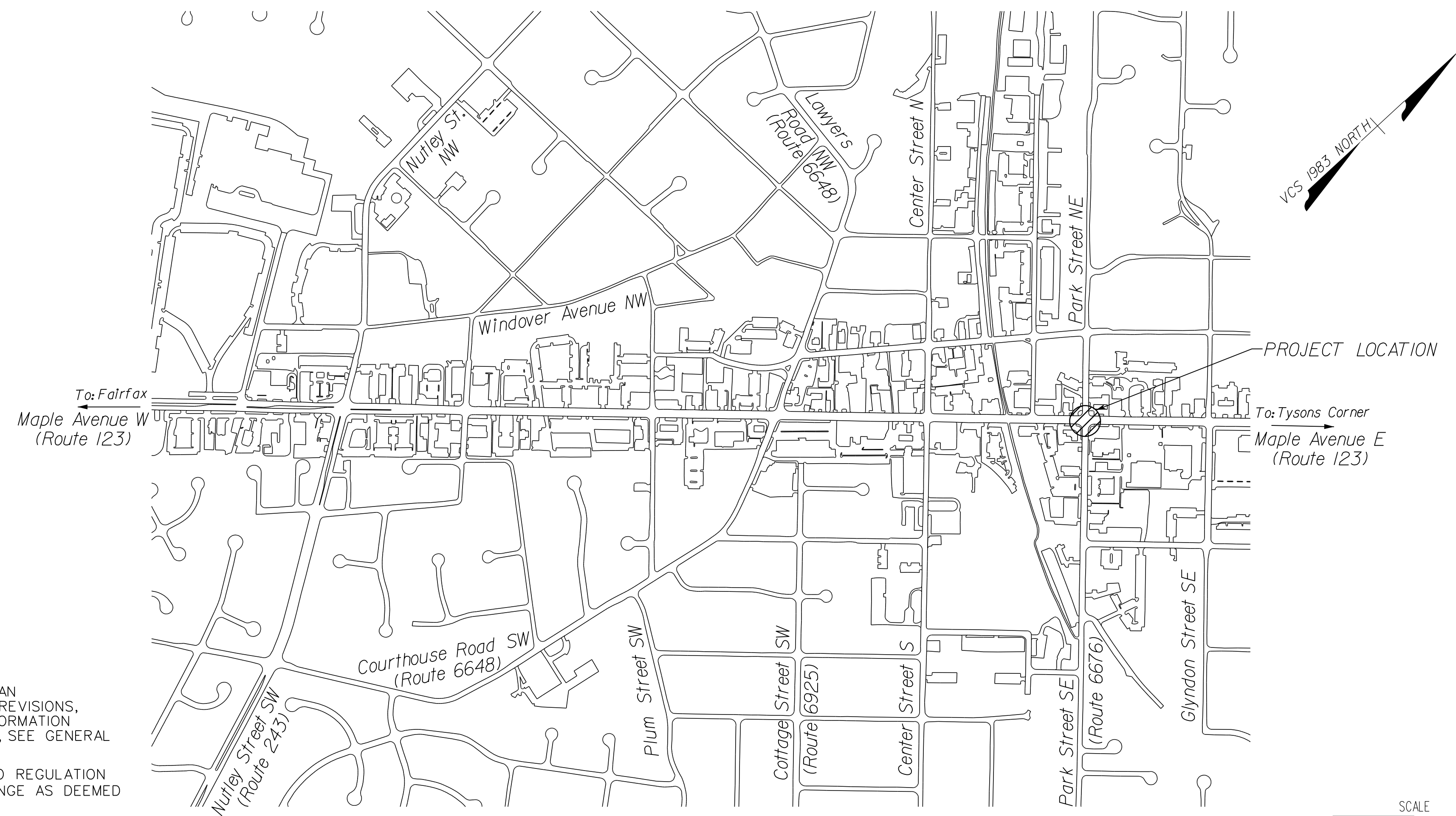
STATE	FEDERAL AID PROJECT	ROUTE	STATE PROJECT	SHEET NO.
VA.	NHPP-5A01(781) NHPP-5A01(923) NHPP-5B01(190) See Tabulation Below	123	(NFO) 0123-153-201	1

FUNCTIONAL CLASSIFICATION AND TRAFFIC DATA	
NHS - URBAN OTHER PRINCIPAL ARTERIAL (GS-5) - DIVIDED/ROLLING	Rte. 123- 30 MPH (Posted Speed)
	Fr: Plantation Pkwy To: Draper Drive
ADT **	31,000 (2019)
ADT **	N/A
D (%) (design hour)	2,945 (2019)
T (%) (design hour)	65%
V (MPH)	1.0%
	30 MPH (Posted/Design Speed)

CONVENTIONAL SIGNS

STATE LINE	---
COUNTY LINE	---
CITY, TOWN OR VILLAGE	---
RIGHT OF WAY LINE	---
FENCE LINE	---
UNFENCED PROPERTY LINE	---
FENCED PROPERTY LINE	---
WATER LINE	---
SANITARY SEWER LINE	---
GAS LINE	---
ELECTRIC UNDERGROUND CABLE	---
TRAVELED WAY	---
GUARD RAIL	---
RETAINING WALL	---
RAILROADS	---
BASE OR SURVEY LINE	---

LEVEE OR EMBANKMENT	---
BRIDGES	---
CULVERTS	---
DROP INLET	---
POWER POLES	---
TELEPHONE OR TELEGRAPH POLES	---
TELEPHONE OR TELEGRAPH LINES	---
HEDGE	---
TREES	---
HEAVY WOODS	---
GROUND ELEVATION	---
GRADE ELEVATION	---



THE COMPLETE ELECTRONIC PDF VERSION OF THE PLAN ASSEMBLY AS AWARDED, INCLUDING ALL SUBSEQUENT REVISIONS, WILL BE THE OFFICIAL CONSTRUCTION PLANS. FOR INFORMATION RELATIVE TO ELECTRONIC FILES AND LAYERED PLANS, SEE GENERAL NOTES.

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE DEPARTMENT.

THIS PROJECT IS TO BE CONSTRUCTED IN ACCORDANCE WITH THE DEPARTMENT'S:

- 2020 ROAD AND BRIDGE SPECIFICATIONS,
 - 2016 ROAD AND BRIDGE STANDARDS,
 - 2009 MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD),
 - 2011 VIRGINIA SUPPLEMENT TO THE MUTCD,
 - 2011 VIRGINIA WORK AREA PROTECTION MANUAL including Revision 2 (September 1, 2019).
- AND AS AMENDED BY CONTRACT PROVISIONS AND THE COMPLETE ELECTRONIC .PDF VERSION OF THE PLAN ASSEMBLY.

ALL CURVES ARE TO BE SUPERELEVATED, TRANSITIONED AND WIDENED IN ACCORDANCE WITH STANDARD IC-5.11U/5.11ULS, EXCEPT WHERE OTHERWISE NOTED.

THE ORIGINAL APPROVED TITLE SHEET(S), INCLUDING ORIGINAL SIGNATURES, IS FILED IN THE VDOT CENTRAL OFFICE PLAN LIBRARY. ANY MISUSE OF ELECTRONIC FILES, INCLUDING SCANNED SIGNATURES, IS ILLEGAL AND ENFORCED TO THE FULL EXTENT OF THE LAW.

POPULATION 15,687 (2010 CENSUS)

STATE PROJECT NO.	SECTION	FEDERAL AID PROJECT NO.	TYPE CODE	PPMS NO.	LENGTH INCLUDING BRIDGE(S)		LENGTH EXCLUDING BRIDGE(S)		TYPE PROJECT	DESCRIPTION
					FEET	MILES	FEET	MILES		
0123-153-201	PE-101	NHPP-5A01(781)	PENG	109297	-	-	N/A	N/A	Prelim. Eng.	Signal Modification Project
	RW-201	NHPP-5A01(923)	ROWA	109297	-	-	N/A	N/A	Right of Way	
	C-501	NHPP-5B01(190)	Y031	109297	-	-	N/A	N/A	Construction	

NOTE: PROJECT LENGTH BASED ON CONSTRUCTION BASELINE

TIER 1 PROJECT	
LOCALLY ADMINISTERED PROJECTS	
TOWN OF VIENNA, VA NAME OF LOCALITY	
MICHAEL GALLAGHER RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION	
DATE	TITLE OF POSITION
MICHAEL GALLAGHER RECOMMENDED FOR APPROVAL FOR CONSTRUCTION	
DATE	TITLE OF POSITION
RECOMMENDED FOR APPROVAL FOR RIGHT OF WAY ACQUISITION	
DATE	DISTRICT PLANNING AND INVESTMENT MANAGER
DATE	DISTRICT PROJECT DEVELOPMENT ENGINEER
APPROVED FOR RIGHT OF WAY ACQUISITION	
DATE	DISTRICT ADMINISTRATOR
RECOMMENDED FOR APPROVAL FOR CONSTRUCTION	
DATE	DISTRICT PLANNING AND INVESTMENT MANAGER
DATE	DISTRICT PROJECT DEVELOPMENT ENGINEER
APPROVED FOR CONSTRUCTION	
DATE	DISTRICT ADMINISTRATOR

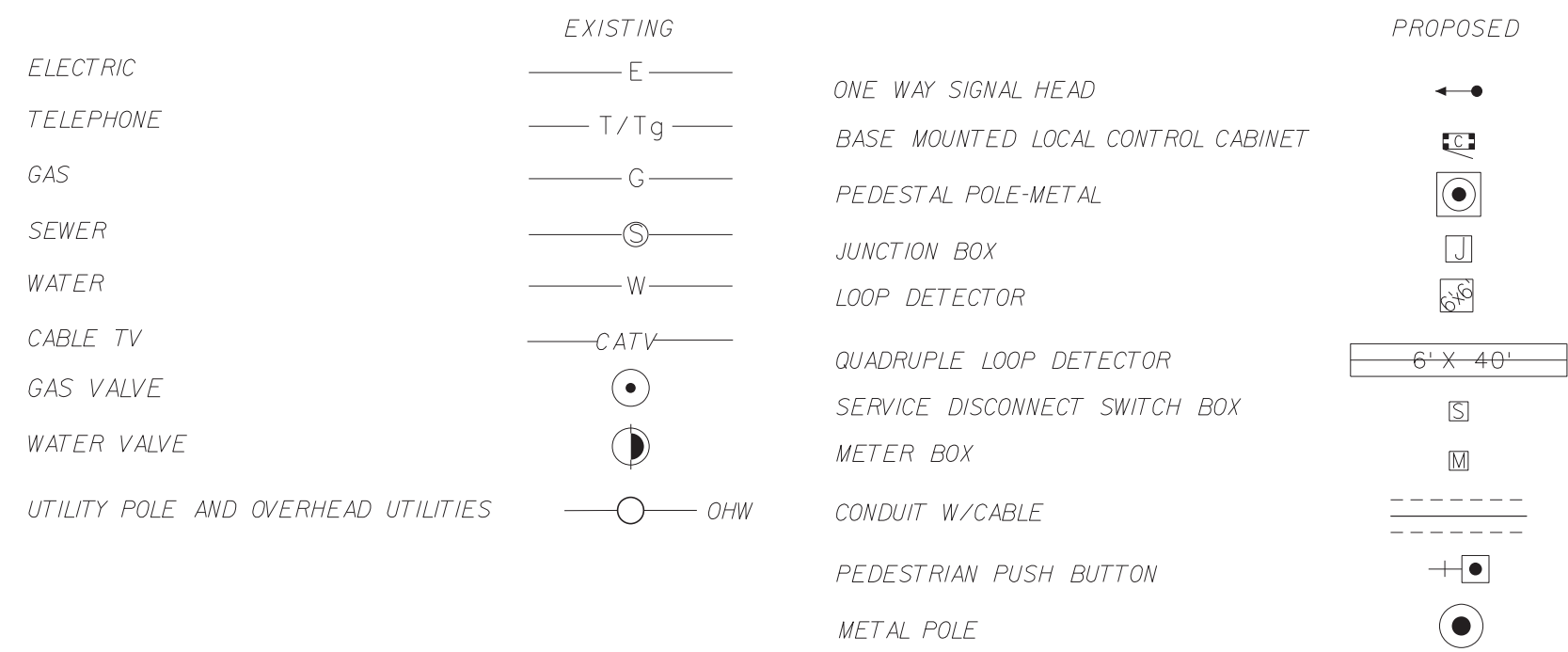
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PROJECT 123-153-201	SHEET NO. 1
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Proposed Signal Modification General Notes

REVISED	STATE	ROUTE	TOWN OF VIENNA PROJECT	SHEET NO.
	VA.		0123-153-201	2



- 1 All work shall be in accordance with the current edition of the Manual on Uniform Traffic Control Devices (MUTCD), the current edition of the VDOT Road and Bridge Specifications, the current edition of the VDOT Road and Bridge Standards, and all contract special provisions and specification amendments in effect at the time the signal plan is approved. The Contractor is to also perform all work in accordance with all revisions to the VDOT Road and Bridge Standards, as applicable.
- 2 Ten (10) working days prior to commencing traffic signal work at any location in the Town of Vienna, the Contractor must notify the Town of Vienna Department of Public Works in writing, with the name, daytime phone numbers and emergency phone numbers for the Contractor giving the location of the worksite including street names, route numbers, permit number, type, and details of construction and work schedule.
- 3 Utilities shown on the plans are not guaranteed to be complete or accurate. The Contractor shall be responsible for ensuring that all utilities within the project limits are identified and located before beginning work. The Contractor shall contact Miss Utility of Virginia at 1-800-522-7001 48 hours prior to any construction activities. Contractor shall coordinate with utility companies as to the location of existing and approved plans of future utility lines. Contractor shall also ensure all existing utilities are marked by examining the site for surface evidence of unmarked utilities, and shall dig test holes at utility crossings if it is anticipated that the boring operation will be within two (2) feet for existing utility. Any disruption of any utility service is the sole responsibility of the Contractor.
- 4 Contractor shall not impact existing utilities when installing any component of the proposed signal. Any disruption to any utility service shall be at the expense of the Contractor.
- 5 The Contractor shall perform test pits and exercise care in placement of signal pole foundations to preclude utility conflicts. Pole and controller placements shall be verified by the Town's Engineer 30 days prior to installation. All catalog cuts, pole calculations, foundation shop drawings, etc. must be submitted to and approved by the Town of Vienna prior to construction and ordering of materials. Ten (10) days prior to beginning any signalization work, the Contractor shall contact the Town of Vienna's traffic engineer and provide:
 - A Contractor's name, daytime and emergency phone number, if adjustments in pole locations are required, the Contractor shall notify the Town's Engineer prior to commencing work.
- 6 When any person damages a utility line or protective coating during excavation or demolition, the on-site town, county, or state inspector and the affected utility will be notified immediately.
- 7 The Contractor is responsible for all utility coordination, material, tools, equipment, labor, permits, traffic control, cleanup, and restoration.
- 8 Site preparation and grading shall be incidental to signal installation.
- 9 Maintenance and repair of the traffic signal and any necessary temporary modifications during construction are the sole responsibility of the Contractor until the traffic signal is accepted into the Town's traffic signal system.
- 10 Traffic signal operation shall be maintained at all times. Contractor shall temporarily wire all signals, if necessary, to maintain signalization and detection on all phases for the duration of construction.
- 11 The Contractor shall be responsible for maintaining detection on all approaches of the intersection at all times and throughout all phases of construction.
- 12 The cost of maintenance of traffic on roadways while traffic signal improvements and all improvements associated with this plan are being installed or modified shall be incidental to the project and not paid for as a separate item.
- 13 At the end of each work day, pending final construction and cable installation, conduit caps will be placed on all vacant ducts.
- 14 The Town's Engineer, prior to construction/installation, shall verify location of controller cabinet.
- 15 The Town's Engineer shall provide signal and controller timings to the Contractor.
- 16 The Contractor shall purchase and pick up the controller cabinet for the signal at the Town of Vienna's Northside Property Yard. The existing Controller equipment inside the existing cabinet shall be returned to the Town. Coordination is required with the Town's Engineer for scheduling this task. The Contractor shall furnish and install an approved battery back-up system (Uninterruptible Power Supply/UPS). The UPS assembly (cabinet) shall be Type B and shall mount directly to the controller cabinet. The UPS shall consist of a minimum six-battery system.
- 17 The cost of providing communication to the traffic signal is included in the cost of installing the controller. Contact Town's Engineer for any related communication issues.
- 18 The Contractor shall be responsible for providing and maintaining communication to the controller at all times. The Contractor is responsible for any costs associated with providing communication to the traffic signal. The Contractor shall be responsible for coordinating the location and the installation of the communication circuit conduit(s) to the traffic signal controller cabinet with the Town (for interconnect). The Contractor shall contact the Town 120 days prior to the start of traffic signal construction to coordinate all communication activities.
- 19 The Contractor shall be responsible for providing and maintaining electrical service to the controller at all times. The contractor shall be responsible for coordinating the location and the installation of the electrical service for the traffic signal with the local utility company. The Electrical Service shall be installed in accordance with Dominion Power's specifications with two circuit breakers rated at 60 amps each and shall be an equivalent to a VDOT S'd.SE-5 specification for an underground service lateral. The Contractor is responsible for all costs associated with providing electrical service to the traffic signal. The electrical service shall be metered.
- 20 Controller cabinet foundations shall be VDOT S'd.CF-1 to include two 4" conduits and one spare 3" conduit tied into the VDOT S'd.JB-S3. The controller cabinet foundation shall have a separate 11/4" conduit tied into the service meter equipment.
- 21 The 1" metal conduit that is installed as part of the communication circuit (VDOT S'd.CC-2 for the Controller Cabinet) shall be terminated into a VDOT S'd.JB-S1 junction box adjacent to the controller cabinet foundation. The two-inch conduit from the Verizon connection point to the controller cabinet shall be terminated into this VDOT S'd.JB-S1. The required ground electrode for the communication circuit shall be installed in this VDOT S'd.JB-S1. The cover shall have "COMM" cast in the depression on top as detailed in the Standard VDOT S'd.JB-S1. Pull Rope rated at 1,000 pounds shall be installed in all communication conduits.
- 22 The cost of 1" conduit to VDOT S'd.JB-S1 for system grounding shall be included in the cost of electric service.
- 23 Included in the cost of all conduits shall be the cost of the equipment grounding conductor (#6 AWG EGC).
- 24 Mast arm pole foundations shall be in accordance with VDOT S'd.PF-B. The top of the foundation shall be flush with the surface grade (roadway). Final foundation depth/design shall be furnished by the Contractor and submitted to the Town for approval.
- 25 All signal poles shall be in accordance with Project's specifications for fabrication. All signal poles, mast arms, and foundations shall be designed to accommodate one additional five-section head located four feet from the tip (free end) of the mast arm and an additional MUTCD R10-12 (30' x 36") sign two feet from the tip (free end) of the mast arm. Contractor shall obtain approval from Town for the signal pole locations and height of arms prior to material ordering and installation to ensure standards are met.
- 26 All breakaway poles shall have breakaway fuses.
- 27 Trench excavation shall be in accordance with VDOT S'd.ECH-1.
- 28 For installation of conduits, no open cut will be allowed in the roadway surface. All conduits shall be bored under existing pavement and existing sidewalk unless otherwise allowed by the Town's Engineer.
- 29 (S) denotes cable to be shielded, (M) denotes metal conduit.
- 30 All wires on a plan shall be "stranded".
- 31 6' x 40' lane-centered Video Detection Zones shall be installed as shown on the plans and shall be placed 5' in front of the stop line.
- 32 If applicable, all right turn overlaps shall be wired to the overlap switch position.
- 33 All junction boxes shall be in accordance with VDOT S'd.JB-S2 unless indicated on the plans.
- 34 Junction box covers shall have the letters "TRAF" cast in the top surface depression for all traffic signal related junction boxes containing cable with less than 50 volts. All other junction box covers shall have "ELEC" cast in the top surface depression. Junction boxes for the system communication (Verizon) shall have "COMM" cast into the top surface.
- 35 The Contractor shall label all spare wires in the controller cabinet in accordance with section 700.04(g) of the VDOT Road and Bridge Specifications.
- 36 All traffic signal head sections shall be 12" LED. All signals shall be equipped with retroreflective (high visibility) signal backplates.
- 37 Traffic signal heads sections shall be in accordance with the Town's requirements.
- 38 Hanger assembly brackets for angled traffic signal heads shall be such that backplates can be installed without alteration or modification. Retro-reflective backplates shall be included in the pay item.
- 39 Mast arm signal head mountings shall be in accordance with VDOT S'd.SM-3.
- 40 Dimensions used for locating equipment (such as signal head assemblies, signs, pre-emptor, cameras, etc.) on mast arms are measured to the center of the symbols used to indicate the equipment.
- 41 All unused wires in the signal heads shall be capped individually with crimp type caps.
- 42 New LED traffic signal heads and overhead traffic signal signage shall be covered with a durable non-transparent cover upon installation. The Contractor shall maintain covers until the new traffic signal system is operational and accepted by the Town.
- 43 Signs mounted on mast arms shall be in accordance with VDOT S'd.SMD-2.
- 44 Pedestrian signal head sections shall be in accordance with the Town's requirements.
- 45 Pedestrian signal heads, to be mounted on signal pole shall be installed in accordance with VDOT S'd.SMB-3. The pedestrian signal head shall be mounted such that the lowest point on the VDOT S'd.SMB-3 mounting bracket is not less than 7' or greater than 9' above finished sidewalk/trail elevation.
- 46 Pedestrian pole and foundations shall conform to VDOT S'd.PF-2. The Pedestal Pole (VDOT S'd.PF-2) shall be 12 feet in height.
- 47 All pedestrian push buttons shall be mounted in accordance with VDOT S'd.PA-2. VDOT S'd.PA-2 shall be oriented to face the crosswalk to which it applies and be visible to a pedestrian standing at the beginning of the crosswalk on each corner. All push buttons shall be ADA type and meet Town's requirements. All push buttons shall be accompanied by an ADA-compliant audible device.
- 48 All pedestrian signals shall be in accordance with VDOT S'd.SP-8.
- 49 All existing traffic signal equipment that is removed shall be returned to the Town of Vienna, unless directed by the Town's Engineer. All existing equipment designated by the Town's Engineer not to be returned shall be removed and disposed of at an off-site location approved by the Engineer.
- 50 No traffic signal shall be placed into operation until the location is 100% complete. This includes any necessary pavement marking and signage adjustment shown on the plans. The Contractor shall notify the Town a minimum of 48 hours prior to placing the signal into operation.
- 51 The traffic signal shall not be placed into flashing or full-color operation without the prior notification and approval from the Town's Engineer. Arrangements shall be made by the Town to schedule field personnel providing a minimum of five (5) days advance notice.
- 52 New traffic signal installations shall not be placed into color operation on Mondays, Fridays, or days preceding or following holidays, unless directed by the Town's Engineer.
- 53 The Contractor shall have his or her qualified representative present to monitor traffic flow and adjust timings as necessary through a minimum of two consecutive morning and evening rush hour periods, or as directed by the Town's Engineer.
- 54 The Contractor shall implement all Erosion and Sediment Controls as required by the Town of Vienna and Virginia DCR. The Contractor, if requested by the Town, shall submit a plan to the Town for approval prior to start of project at no additional cost to the project. All items and labor required to implement (install and remove) erosion and sediment control measures shall be incidental to the overall project and not be paid for as a separate item.
- 55 Contractor is responsible for the removal, storage, and (if necessary) replacement of all shrubbery. Restoration of the construction area to original or better condition shall be the responsibility of the Contractor. Contractor is responsible for all compaction of disturbed areas and shall complete work in accordance with the specifications outlined in VDOT's Road and Bridge Specifications (current edition) and all Town of Vienna requirements.
- 56 All furnished mast arm poles and mast arms shall be powder-coated in the color "Charlottesville Green" at no additional cost to the project and in accordance with Town requirements and/or the manufacturer's recommendations. Contractor shall provide a free 1' x 1' material for Town approval prior to ordering any materials, at no additional cost to the project.
- 57 No pavement markings are anticipated to be impacted by this project.

The Project is responsible for obtaining the Proposed Permanent Easements as shown on this plan prior to construction (See Sheet 3).

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE TOWN OF VIENNA

Revisions	
Date	Initial

TRAFFIC SIGNAL MODIFICATION **TOWN OF VIENNA MAINTAINED SIGNAL** Maple Avenue East (Rte.123) at Park Street (Rte.6676) General Notes Town of Vienna, Virginia			
SCALE 		DATE: JUNE 2021	
DRAWN: ADW		DESIGNED: ADW	
CHECKED: ADW			
PLAN NO.	PROJECT	FILE NO.	SHEET NO.
	0123-153-201		2



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 Engineering, Surveying, Land Planning, Environmental Services
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 Telephone: (205) 988-7273, Fax: (205) 988-7444
 Turning Challenges into Opportunities

TOWN OF VIENNA

Note: The Contractor shall take possession, maintain and be solely responsible for the costs for any damage done to the traffic signal during construction. The project shall have a qualified crew on-call at all times for any issues that may arise and need to be fixed immediately. No separate payment will be made for providing on-call signal crew.

PROPOSED SIGNAL SIGNS

S-1 36" X 42" R10-VI
 S-2 24" X 30" R10-7
 S-3 9' X 15" R10-36(L)
 S-4 9' X 15" R10-36(R)

S-5 6' X 16" Maple Ave E
 S-6 5' X 16" Park St NE
 S-7 5' X 16" Park St SE

Sigs S-5 and S-7 must be mounted on the mast arm, such that sign starts two feet from vertical shaft of pole. See Sheet 4 for sign details.

PROPOSED SIGNAL HEADS

ALL TRAFFIC SIGNAL HEAD SECTIONS SHALL BE LED

HEADS P2, P4, P6, P8

HEADS 1, 3, 5, 7
 HEADS 2, 4, 6, 8

ALL SIGNALS SHALL BE LED AND BE EQUIPPED WITH RETRO-REFLECTIVE (HIGH VISIBILITY) SIGNAL BACKPLATES

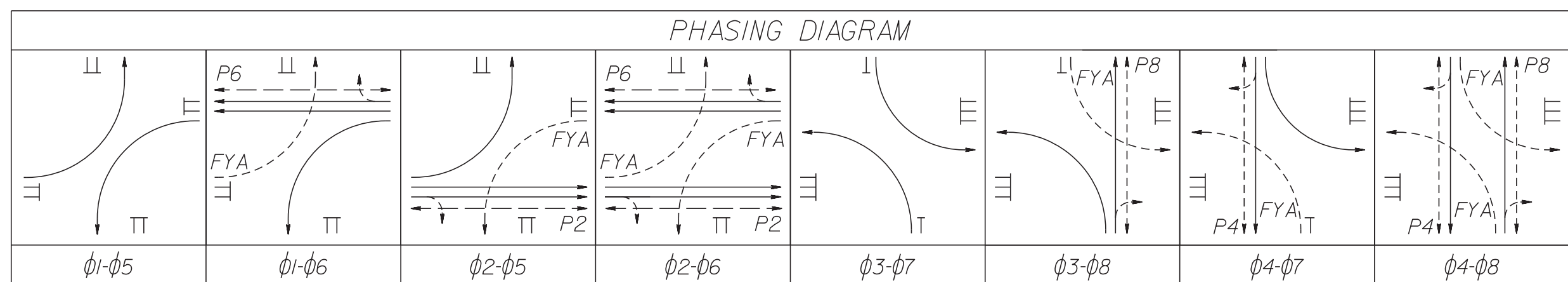
ALL PED. HEADS SHALL BE SP-8 WITH COUNTDOWN LED

Note to Contractor:
 All EXISTING signal equipment at the existing intersection shall be completely removed and the ground shall be restored. Existing conduits shall be completely emptied, abandoned and capped per Town specifications. Existing signal foundations shall be removed up to a depth of 2-feet and the ground shall be restored. Once the need for the existing signal ceases, all equipment shall be removed and/or abandoned per Town specifications. All costs associated with the aforementioned items shall be included as part of the NS REMOVE SIGNAL EQUIPMENT lump-sum quantity.

COLOR SEQUENCE CHART

PHASE	1	2	3	4	5	6	7	8	1-5	1-6	2-5	2-6	3-7	3-8	4-7	4-8	FLASH
SIGNAL	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	R/W	←Y→
1	←G	←G							←G	←G	←G	←G					←Y→
2		←G															←Y→
3			←G	←FY									←G	←G	←FY	←FY	←R
4				←G											←G	←G	←R
5					←G	←FY			←G	←G	←FY						←Y→
6						←G			←G	←G							←Y→
7							←G	←FY					←G	←FY	←FY	←R	←R
8								←G									←R
P2		*WALK									*WALK	*WALK					
P4				*WALK											*WALK	*WALK	
P6					*WALK												
P8						*WALK			*WALK	*WALK	*WALK	*WALK	*WALK	*WALK	*WALK	*WALK	

Note: Blank spaces represent a red display. *Walk indication displayed after pedestrian call is serviced; otherwise "Don't Walk" indication is displayed. The solid red arrow shall occur at the end of the solid yellow arrow for the Flashing Yellow Arrow (FYA) signal. All FYA signals have the red interval. **The Y arrow signal face (second from the top) shall flash during FLASH operation. The FY arrow signal face (third from the top) shall be blank during Flash operation.



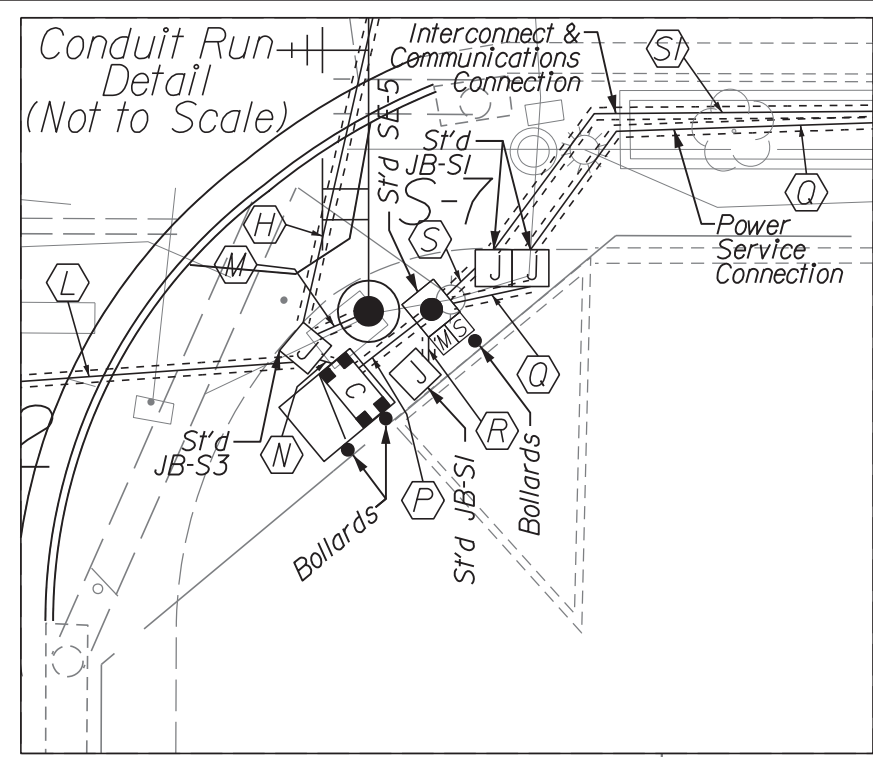
MAST ARM LEGEND

- Prop. Signal Head
- Ex. Signal Head
- 360° Video Detection Camera
- 5.8 GHz Wireless Broadband Radio

SIGNAL POLE & CONTROLLER LEGEND

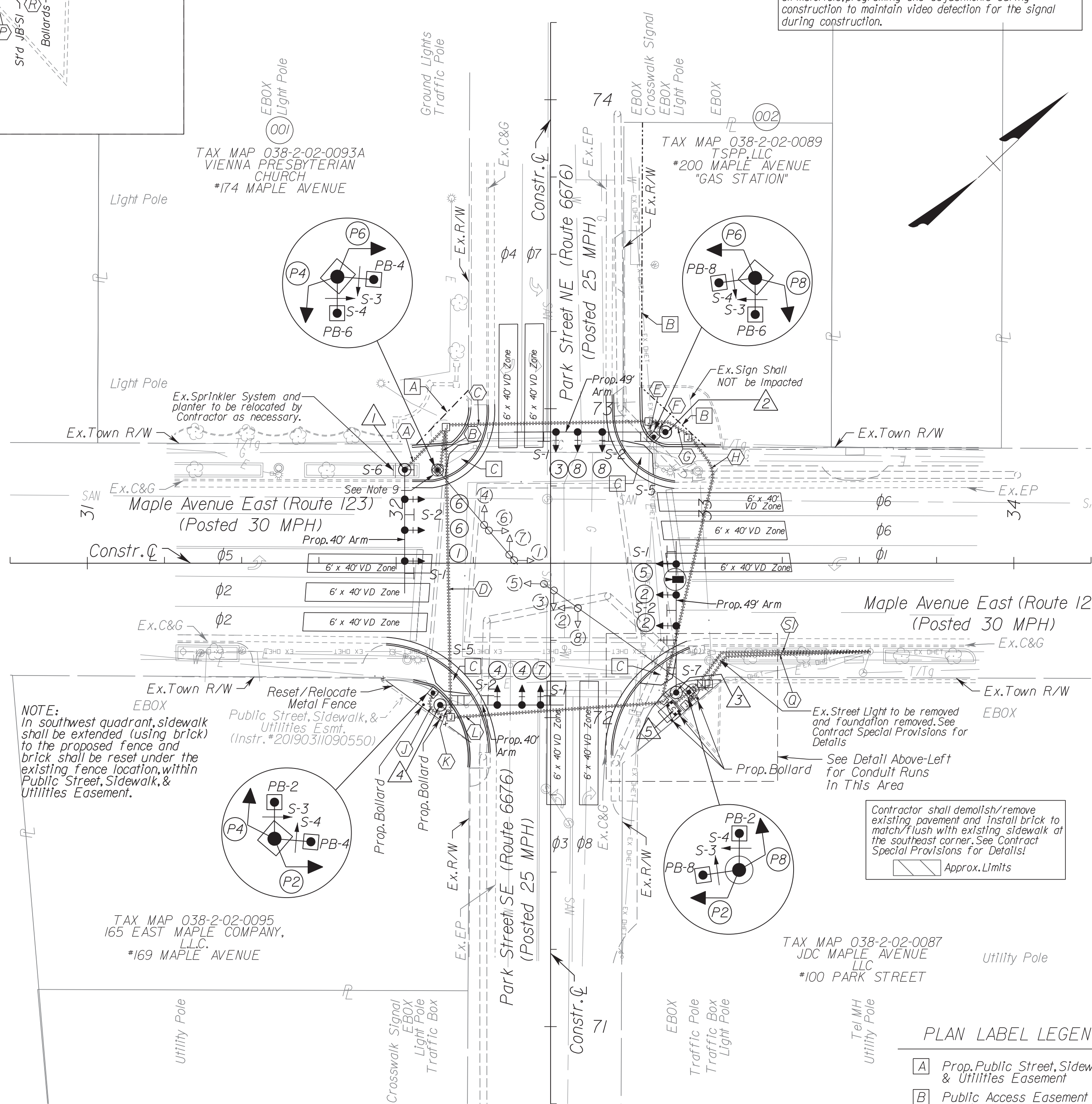
(ALL DIMENSIONS ARE TO CENTER OF POLE)

- STANDARD MAST ARM POLE (MP-3)
30'22" LEFT of Maple Avenue East Constr. Baseline Sta. 32+02.79
40' Arm 27° Angle to Maple Avenue East Constr. Baseline
Signal Placement: 9.5', 19.5', 29.5'
Sign Placement: 0', 14.5', 33.5'
- STANDARD MAST ARM POLE (MP-3)
42'45" LEFT of Maple Avenue East Constr. Baseline Sta. 32+87.18
49' Arm 30° Angle to Maple Avenue East Constr. Baseline
Signal Placement: 20.4', 28.4', 35.4'
Sign Placement: 18.4', 39.4'
- STANDARD MAST ARM POLE (MP-3)
41'87" RIGHT of Maple Avenue East Constr. Baseline Sta. 32+90.68
49' Arm 30° Angle to Maple Avenue East Constr. Baseline
Signal Placement: 21.6', 31.6', 41.6'
Sign Placement: 26.6', 45.6'
360° Video Detection Camera Placement: 36.6'
5.8 GHz Wireless Broadband Radio: 17'
- STANDARD MAST ARM POLE (MP-3)
45'91" RIGHT of Maple Avenue East Constr. Baseline Sta. 32+14.24
40' Arm 0° Angle to Maple Avenue East Constr. Baseline
Signal Placement: 18.5', 26.5', 32.5'
Sign Placement: 15.5', 35.5'
- CONTROLLER CABINET & FOUNDATION (CF-1)
Cabinet door hinge located on left side of pole.
Security lock on controller cabinet
10-Port Managed Field-Ethernet Switch



Note: The existing signal shall remain operational during construction, and contractor shall maintain existing vehicle detection until new vehicle detection devices are installed and functional. When signal construction is complete, all existing signal equipment shall be removed/abandoned per Town specifications.

Note: Vehicle detection for all approaches shall be maintained through all phases of construction. The Contractor shall provide temporary video detection. The lump-sum unit price for NS DETECTOR TEMPORARY VIDEO DETECTION shall include but not be limited to all labor, all equipment, all cables, all materials, programming and adjustments during construction to maintain video detection for the signal during construction.



CABLE & CONDUIT RUNS (Cont.)

- (R) 1 1" Conduit
1 *6 AWG for System Grounding
 - (S) 1 2" Communication Conduit with 100lb Pull Rope
1 Interconnect Wire
 - (S) 1 2" Communication Conduit with 100lb Pull Rope (BORED)
1 Interconnect Wire
- EGC = Equipment Grounding Conductor

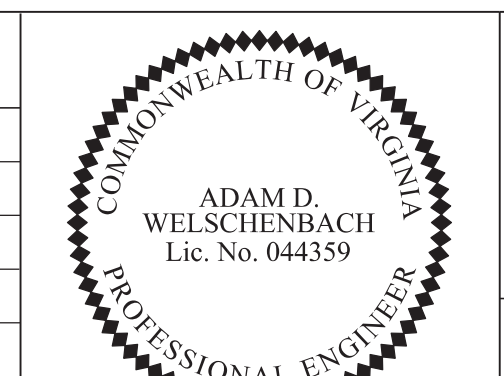
REVISED	STATE	ROUTE	TOWN OF VIENNA PROJECT	SHEET NO
	VA.		0123-153-201	3

CABLE & CONDUIT RUNS

- (A) 1 3" Conduit
1 2" Conduit
1 1" Conduit
2 14/7C for Heads 1,6
1 *6 AWG (EGC)
 - (B) 1 3" Conduit
1 1" Conduit
2 14/2C for Ped Push Button PB-4, PB-6
2 14/7C for Ped Heads P4, P6
1 *6 AWG (EGC)
 - (C) 2 4" Conduit (BORED) [1 Spare]
2 14/2C for Ped Push Button PB-4, PB-6
2 14/7C for Ped Heads P4, P6
2 14/7C for Heads 1,6
2 *6 AWG (EGC) [1 Spare]
 - (D) 2 4" Conduit (BORED) [2 Spare]
2 *6 AWG (EGC) [2 Spare]
 - (E) 1 3" Conduit
1 1" Conduit
2 14/2C for Ped Push Button PB-6, PB-8
2 14/7C for Ped Heads P6, P8
1 *6 AWG (EGC)
 - (F) 1 3" Conduit
1 2" Conduit
1 1" Conduit
2 14/7C for Heads 3,8
1 *6 AWG (EGC)
 - (G) 1 3" Conduit
4 14/2C for Ped Push Button PB-4, PB-6, PB-8
4 14/7C for Ped Heads P4, P6, P8
4 14/7C for Heads 1,3,6,8
1 *6 AWG (EGC)
 - (H) 2 4" Conduit (BORED) [1 Spare]
4 14/2C for Ped Push Button PB-4, PB-6, PB-8
4 14/7C for Ped Heads P4, P6, P8
4 14/7C for Heads 1,3,6,8
2 *6 AWG (EGC) [1 Spare]
 - (J) 1 3" Conduit
1 1" Conduit
2 14/2C for Ped Push Button PB-2, PB-4
2 14/7C for Ped Heads P2, P4
1 *6 AWG (EGC)
 - (K) 1 3" Conduit
1 2" Conduit
1 1" Conduit
2 14/7C for Heads 4,7
1 *6 AWG (EGC)
 - (L) 2 4" Conduit (BORED) [1 Spare]
2 14/2C for Ped Push Button PB-2, PB-4
2 14/7C for Ped Heads P2, P4
2 14/7C for Heads 4,7
2 *6 AWG (EGC) [1 Spare]
 - (M) 1 3" Conduit
1 2" Conduit
1 1" Conduit
2 14/2C for Ped Push Button PB-2, PB-8
2 14/7C for Ped Heads P2, P8
2 14/7C for Heads 2,5
1 VD Camera Cable
1 CAT6 Shielded Outdoor Network Cable
1 *6 AWG (EGC)
 - (N) 2 4" Conduit [1 Spare]
2 14/2C for Ped Push Button PB-2, PB-4, PB-6, PB-8
8 14/7C for Ped Heads P2, P4, P6, P8
8 14/7C for Heads 1,2,3,4,5,6,7,8
1 VD Camera Cable
1 CAT6 Shielded Outdoor Network Cable
2 *6 AWG (EGC)
2 3" Conduit (Spare)
1 *6 AWG (EGC) for Spare
 - (P) 1 1-1/4" Conduit (M)
3 *6 AWG for Electrical Service
 - (Q) 1 1-1/4" Conduit (M) (BORED)
3 *6 AWG for Electrical Service
- Denotes Permanent Easement

Revisions

Date	Initial
3/26/2019	ADW
5/31/2019	ADW



TRAFFIC SIGNAL MODIFICATION
 TOWN OF VIENNA MAINTAINED SIGNAL
 Maple Avenue East (Rte. 123) at Park Street (Rte. 6676)
 Town of Vienna, Virginia

SCALE: 0 25' 50'

DATE: JUNE 2021

DRAWN: ADW	DESIGNED: ADW	CHECKED: ADW
PLAN NO.	PROJECT	FILE NO.
	0123-153-201	
		SHEET NO. 3

DESIGN FEATURES RELATING TO CONSTRUCTION OR TO REGULATION AND CONTROL OF TRAFFIC MAY BE SUBJECT TO CHANGE AS DEEMED NECESSARY BY THE TOWN OF VIENNA

Adam Welschenbach
 2021.06.22
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