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VICINITY MAP

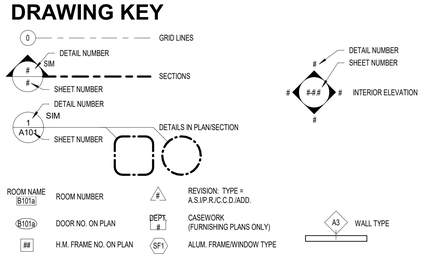
ABBREVIATIONS

Above finished floor	AFF	Footing	FTG	Project	PROJ
Acoustic	ACST	Foundation	FDN	Property	PROP
Acoustic Panel Ceiling	APC	Furnish(ed), furniture	FURN	Public Address	PA
Addendum	ADD	Furring	FURR	Quality control	QC
Alternate	ALT	Gage (gauge)	GA	Quality	QUAL
Aluminum	AL	Galvanize(d)	GALV	Quantity	QTY
Angle	L	Galvanized Iron	GALVI	Quarry Tile	QT
Approximate	APPROX	Glazed Wall Tile	GWT	Radius	RAD
Architecture, architectural	ARCH	Grab Bar	GB	Rain Leader	RL
Asbestos	ASB	Grade	GR	Received	RCVD
Asphalt	ASPH	Gravel	GVL	Receptacle	RCPT
Assistant	ASST	Gypsum Wallboard	GWB	Receptionist	RECPT
Association	ASSN	Gypsum	GYP	Recess(ed)	REC
Automatic	AUTO	Handicapped	HC	Refer, reference	REF
Average	AVG	Hardware	HDW	Refrigerate, refrigerator	REFR
Base plate	BP	Heating ventilating and air conditioning	HVAC	Reinforce	REINF
Basement	BSMT			Reinforced concrete	RC
Beam	BM	Height	HGT	Remove	RMV
Bearing	BRG	High-Point	HPT	Repair	RPR
Bedroom	BR	High Performance	HP	Required	REQD
Benchmark	BM	High Performance Coating	HPC	Revise, revision	REV
Board	BD	Hollow Metal	HM	Right hand	RH
Boiler	BLR	Horizontal	HORIZ	Road	RD
Bottom	BOT	Include(d), inclusive	INCL	Roof Drain	RD
Brick	BRK	Incorporated	INC	Roof	RF
Building line	BL	Information	INFO	Roofing	RFG
Building	BLDG	Inside diameter	ID	Room	RM
Built-up-roof	BUR	Install(ed), installation	INSTL	Rubber tile floor	RTF
Cabinet	CAB	Insulation	INSUL	Rubber	RBR
Carpet	CPT	Interior	INT	Schedule	SCHED
Catalog	CAT	Janitor	JAN	Schematic	SCHEM
Ceiling height	CH	Joint	JT	Section	SECT
Ceiling	CLG	Joist	J, JIST	Service	SVCE
Center	CTR	Junction box	JB	"Sheet, sheeting"	SHT
Centerline	CL	Knock down	KD	Shower	SH
Ceramic Tile	CT	Laboratory	LAB	Siding	SDG
Ceramic	CER	Lavatory	LAV	Similar	SIM
Chalkboard	CB	Left Hand	LH	Slope	SL
Clear	CLR	Left	L	Solid Core Wood Door	SCWD
Closet	CLO	Length	LG	Sound-transmission class	STC
Coated	CTD	Level	LVL	South	S
Cold rolled	CR	Light	LT	Speaker	SPKR
Column	COL	Machine	MACH	Specification	SPEC
Company	CO	Maintenance	MAINT	Sprinkler	SPR
Composition	COMP	Manager	MGR	Square	SQ
Concrete Masonry Unit	CMU	Manual	MNL	Stainless steel	SS
Concrete	CONC	Manufacturing	MFG	Standard	STD
Construction joint	CJ	Markerboard	MB	Standpipe	SP
Construction	CONSTR	Masonry opening	MO	Steel	STL
"Continue, Continuous"	CONT	Masonry	MSNRY	Storage	STOR
Corridor	CORR	Master bedroom	MBR	Structural Glazed Facing Tile	SGFT
Countersink	CSK	Material	MATL	Structural, structure	STRUCT
Cubic	CU	Maximum	MAX	Substitute	SUBST
Curve(d)	CRV	Mechanical	MECH	Surface	SURF
Dampproofing	DP	Membrane	MEMB	Suspend(ed)	SUSP
Degree	DEG	Men	M	Switch	SW
Department(al)	DEPT	Metal	MET, MTL	Symmetrical	SYM
Detail	DET	Mezzanine	MEZZ	System	SYS
Diagonal	DIAG	Minimum	MIN	Tackboard	TB
Diameter	DIA	Mirror	MIR	Tackstrip	TS
Dimension	DIM	Miscellaneous	MISC	Telephone	TEL
Dishwasher	DW	Mounted	MTD	Television	TV
Dispenser	DISP	Mounting	MTG	Temporary	TEMP
Door	DR	Necessary	NEC	Terrazzo	TER
Double	DBL	Noise-reduction coefficient	NRC	Thick	THK
Double-hung	DH	Nominal	NOM	Through	THRU
Down	DN	Non Combustible	NC, NONCOM	Toilet	T
Downspout	DS	North	N	Tongue and groove	T&G
Drain	DR	Not in Contract	NIC	Top and bottom	T&B
Drawing	DWG	Not to scale	NTS	Top chord	TC
Each	EA	Not available	NA	Top of Masonry Parapet	TMP
East	E	Number	NO	Top of Bearing	TOFB
Electric Water Cooler	EWC	Office	OFF	Top of Steel	T.O.S.
"Electric, electrical"	ELEC	On center	OC	Topping	TOPG
Elevation	EL	Opening	OPNG	Total	TOT
Elevator	ELEV	Opposite	OPP	Transformer	XFMR
Engineer	ENGR	Outside diameter	OD	Transom	TR
Entrance	ENTR	Overall	OA	Transparent	TRANS
Equal	EQ	Overhead	OVHD	Tread	TRD
Equipment	EQUIP	Page	P	Threshold	THRESH
Exhaust	EXH	Painted	PTD	Typical	TYP
Existing	EXIST	Pair	PR	Underground	UG
Expansion joint	EXP JT	Panel	PNL	Underwriters Laboratories	UL
Exposed	EXP	Partition	PTN	Unfinished	UNF
Exterior	EXT	Percent	PCT	Unit Ventilator	UV
Fabricate	FAB	Perforate(d)	PERF	Unless Otherwise Noted	UON
Face of Stud	F. OF S.	Permanent	PERM	Urinal	UR
Fan Coil Unit	FCU	Perpendicular	PERP	US Gypsum Company	USG
Fiberglass-reinforced plastics	FRP	Piece	PC	Vertical	VERT
Finish	FIN	Plastic Laminate	PLAM	Vestibule	VEST, V
Finished Floor	FF	Plastic Laminate	PLAS.LAM	Vinyl Reducing Strip	VRS
Fire Extinguisher	FE	Plate	PL	Vinyl Composite Tile	VCT
Fire Extinguisher & Cabinet	FEC	Plumbing	PLMB	Vinyl asbestos tile	VAT
Fire Retardant Treated	FRT	Plywood	PLYWD	Wardrobe	WARD
Fireproof	FPRF	Point	PT	Water closet	WC
Fixture	FXTR	Polyvinyl chloride	PVC	Waterproof	WP
Flange	FLG	Precast	PRCST	Weight	WT
Flashing	FL	Prefabricated	PREFAB	Welded	WLD
Floor	FL	Preliminary	PRELIM	Welded Wire Mesh	WWM
Floor drain	FD	Preparation, prepare	PREP	With	W/
Flooring	FLG	Program	PRGM	Without	W/O
Fluorescent	FLUOR	Projection Screen	PS	Women	W
				Wood	WD
				Wrought Iron	WI

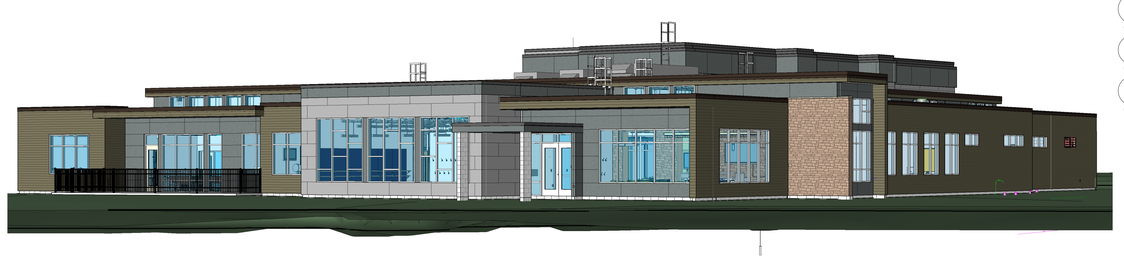
SYMBOLS OF MATERIALS

- EARTH
- GRAVEL
- CONCRETE
- CONCRETE MASONRY UNITS
- SOLID CONCRETE MASONRY UNITS
- BRICK
- WOOD-FINISHED
- WOOD ROUGH
- PLYWOOD
- STEEL - LARGE SCALE
- ALL METALS - SMALL SCALE
- CAST STONE
- GLASS - LARGE SCALE
- BATT INSULATION
- RIGID INSULATION
- CERAMIC TILE
- CARPET
- GYPSUM BOARD
- ACOUSTIC TILE

DRAWING KEY



ASHBURN SENIOR CENTER
ASHBURN, VIRGINIA



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03.05.19

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GRIMM AND PARKER

GP #21652

TITLE SHEET
ASHBURN SENIOR CENTER
ASHBURN, VIRGINIA

DATE	DESCRIPTION
4/9/2019	Addendum 2

TS001
03.05.19
BID DOCUMENTS

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ASHBURN SENIOR CENTER

SITE PLAN
STPL-2018-0039
LW ID#20180088

LOUDOUN COUNTY, VIRGINIA

BROAD RUN ELECTION DISTRICT

TAX MAP /62/I17/////D/ & /62/I17/////C/
PARCEL 059481300 & 059232763
PARCEL ID: 059-48-1300-000 & 059-29-2763-000

NOTICE REQUIRED

CONTRACTORS SHALL NOTIFY OPERATORS WHO MAINTAIN UNDERGROUND UTILITY LINES IN THE AREA OF PROPOSED EXCAVATION AND OR BLASTING AT LEAST TWO (2) WORKING DAYS, BUT NOT MORE THAN TEN (10) WORKING DAYS PRIOR TO COMMENCEMENT OF EXCAVATION OR DEMOLITION. NAMES AND TELEPHONE NUMBERS OF POSSIBLE OPERATORS OF UNDERGROUND UTILITY LINES APPEAR BELOW. THESE NUMBERS SHALL ALSO BE USED TO SERVE IN AN EMERGENCY CONDITION.

Washington Gas Light Co.	
Dominion Virginia Power	
Loudoun Water	*MISS UTILITY*
Columbia Gas of VA	*1-800-552-7001*
NOVEC Power Co.	
A. T. & T. Co.	
Verizon Communications	
Loudoun Water Operations and Maintenance:	*571-291-7878*

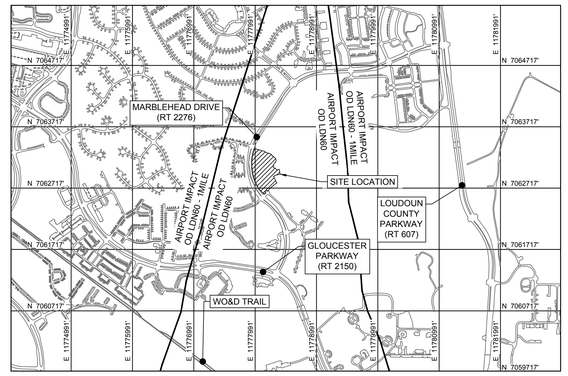
NON -EMERGENCY

Fire and Rescue / Police: (703) 777-0637

Emergency Call: 911

STAKEOUT NOTE

PROPOSED ENTRANCES FROM STATE MAINTAINED ROADS WILL BE STAKED BY A LICENSED SURVEYOR REGISTERED IN THE COMMONWEALTH OF VIRGINIA. THE DIRECTOR MAY REQUEST FIELD ASSISTANCE TO IDENTIFY SPECIFIC AREAS OF PROPOSED DEVELOPMENT AS RELATED TO EXISTING SITE CONDITIONS. PLEASE CONTACT TIMMONS GROUP AT 20110 ASHBROOK PLACE SUITE 100, ASHBURN, VA 20147. PHONE (703) 726-1342



SITE LOCATION

VICINITY MAP

SCALE 1"=1,000'

0 1,000' 2,000'

THE BOUNDARY DATA HEREON IS TAKEN FROM SURVEY PERFOMED BY TIMMONS GROUP AND SHAPE FILES TAKEN FROM LOUDOUN COUNTY GIS.

DATUM ESTABLISHED BY RTK-LEICA SMARTNET STATION GR10 (RTCM-0591). TOPOGRAPHY IS BASED UPON HORIZONTAL DATUM NAD 83, VA NORTH STATE PLAN GRID(4501)(U.S. SURVEY FEET.) AND NAVD 88 VERTICAL DATUM.

MARCH 5, 2019

REVISIONS

DATE	DESCRIPTION
04/09/19	BID SET - ADDENDUM #2

LOUDOUN WATER PROJECT ID #20180088

DATE	LOUDOUN WATER REVISIONS

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OWNER/APPLICANT
LOUDOUN COUNTY DEPARTMENT OF TRANSPORTATION AND CAPITAL INFRASTRUCTURE
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LEESBURG VA 20177
CONTACT PERSON: JOE KROBOTH, DIRECTOR

LOUDOUN COUNTY
DESIGNATED PLANS EXAMINER

_____ DATE

APPROVAL BLOCK

LAND DEVELOPMENT APPLICATION NUMBER: STPL-2018-0039

DIRECTOR OF BUILDING & DEVELOPMENT DATE

APPROVAL OF THE PLAN IS NOT A COMMITMENT TO PROVIDE PUBLIC SANITARY SEWER OR WATER. ISSUANCE OF LOCATION PERMITS SHALL BE SUBJECT TO THE AVAILABILITY OF WATER AND SANITARY SEWER CONNECTIONS.

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C7.14A	CONSTRUCTED WETLANDS 100-YEAR COMPUTATIONS
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C7.16	UNDERGROUND FACILITY DETAILS
C7.17	UNDERGROUND FACILITY DETAILS
C7.18	UNDERGROUND FACILITY DETAILS
C7.19	UNDERGROUND FACILITY DETAILS
C7.20	UNDERGROUND FACILITY DETAILS
C7.21	UNDERGROUND FACILITY DETAILS
C7.22	CONSTRUCTED WETLANDS PLAN
C7.23	CONSTRUCTED WETLANDS PROFILE AND DETAILS
C7.24	CONSTRUCTED WETLANDS MAINTENANCE
C7.25	ADEQUATE OUTFALL COMPUTATIONS
C7.26	ADEQUATE OUTFALL COMPUTATIONS
C7.27	ADEQUATE OUTFALL COMPUTATIONS
E1.0	LIGHTING PLAN
E1.1	PHOTOMETRIC PLAN
L1.0	LANDSCAPE PLAN
L1.1	LANDSCAPE NOTES AND DETAILS
L1.2	LANDSCAPE NOTES AND DETAILS
L1.3	TREE CONSERVATION NARRATIVE
L1.4	TREE CONSERVATION NARRATIVE
L1.5	LANDSCAPE REQUIREMENTS EXHIBIT
L2.0	ENCHANCED LANDSCAPE PLAN
L2.1	ENCHANCED LANDSCAPE PLAN NOTES

TOTAL SHEETS.....77

COMMONWEALTH OF VIRGINIA
LUKE T. FETCHO
Lic No. 048424
3/5/2019
PROFESSIONAL ENGINEER

TG #38948

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Ashburn, VA 20147
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YOUR VISION ACHIEVED THROUGH OURS.
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Tysons, VA 22182
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PROJECT CODE:
260-18161

COVER SHEET
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C0.0
3.5.19
Bid Set

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NOTES:

1. THE PROPERTY DELINEATED HEREON IS LOCATED ON BROAD RUN TAX RECORDS LISTED BELOW:

MCPI	TAX MAP	INSTRUMENT NUMBER	OWNER	ACREAGE
059481300000	/62/117/////D/	201412050068764	LOUDOUN COUNTY BOARD OF SUPERVISORS	5.214

*0.24 AC WERE TRANSFERRED FROM PIN# 059-29-2763 TO PIN #059-48-1300 WITH BLAD-2018-0033.

*0.03 AC TO BE DEDICATED AND RECORDED FOR PUBLIC STREET PURPOSES WITH THIS APPLICATION (SEE ON SITE EASEMENT PLAT).

2. THIS SITE PLAN PROPOSES THE CONSTRUCTION OF A COMMUNITY CENTER (SENIOR CENTER), PURSUANT TO REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE SECTION 3-504(D).

3. THE PROPERTY IS ZONED PD-H6, BEING ADMINISTERED AS R-8, IS SUBJECT TO THE REVISED 1993 ZONING ORDINANCE, AND NOT SUBJECT TO THE COUNTY'S USE VALUE ASSESSMENT. PREVIOUSLY APPROVED LAND DEVELOPMENT APPLICATIONS AFFECTING THE PROPERTY ARE AS FOLLOWS:

   ZCPA-2005-0006 (APPROVED 05/15/07)
   ZMAP-2005-0023 (APPROVED 05/15/07)
   SBPL-2007-0015 (APPROVED 09/17/08)
   CPAP 2012-0071 (APPROVED 03/12/13)
   STPL-2013-0027 (APPROVED 12/05/13)
   SPRD-2013-0043 (APPROVED 12/05/14)
   SPEX-2017-0031 (APPROVED 12/12/18)
   ZMOD-2017-0027 (APPROVED 12/12/18)
   BLAD-2018-0033 (APPROVED 03/14/19)
   ZCOR-2018-0162 (APPROVED 08/21/18)

4. THIS PUBLIC USE PARCEL WAS DEEDED TO LOUDOUN COUNTY BOARD OF SUPERVISORS AS A PROFFER CONDITION ASSOCIATED WITH ZMAP 2005-0023 AND ZCPA 2005-0006.

5. THE TRANSFER OF LAND OWNERSHIP OCCURRED NOVEMBER 4, 2014, BY INSTRUMENT 20141205-0068764.

6. THE PARCELS ARE FURTHER IDENTIFIED AS ASHBURN VILLAGE LANDBAY 1, SECTION 40, PHASE 1B, PARCEL D (PIN #059-48-1300) AND ASHBURN VILLAGE, SECTION 40, LAND BAY 1, PHASE 1B (ASHBURN VILLAGE) OPEN SPACE PARCEL C (PIN #059-29-2763) .

7. BOUNDARY AND TOPOGRAPHIC INFORMATION BASED ON SURVEY BY TIMMONS GROUP. TOPOGRAPHIC SURVEY IS BASED ON AN ACTUAL GROUND SURVEY PREPARED BY TIMMONS GROUP. ORIGINAL DATA WAS OBTAINED ON THE FOLLOWING DATES: OCTOBER 07, 2016 & NOVEMBER, 2016 . DATUM ESTABLISHED BY RTK-LEICA SMARTNET STATION GR10 (RTCM-0591). TOPOGRAPHY IS BASED UPON HORIZONTAL DATUM NAD 83, VA NORTH STATE PLAN GRID(4501)(U.S. SURVEY FEET.) AND NAVD 88 VERTICAL DATUM. THERE ARE NO MODERATELY STEEP SLOPES OR VERY STEEP SLOPES ON THE SUBJECT PROPERTY BASED ON PROVIDED TOPOGRAPHY.

8. EXISTING UTILITIES HAVE BEEN FIELD LOCATED IN THE IMMEDIATE AREA OF THE PROPOSED SENIOR CENTER PROJECT. OTHER UTILITIES ARE SHOWN FOR REFERENCE ONLY PER RECORD PLAN BY OTHERS.

9. TELEPHONE, ELECTRIC, CABLE AND OTHER UTILITIES WILL BE EXTENDED TO THE SITE AND SHALL BE INSTALLED UNDERGROUND.

10. SERVICING UTILITY COMPANIES INCLUDE:

WATER & SEWER:	LOUDOUN WATER
NATURAL GAS:	WASHINGTON GAS
ELECTRIC:	DOMINION POWER
TELEPHONE:	VERIZON

11. SOILS INFORMATION SHOWN HEREON IS TAKEN FROM DIGITAL MAPS PROVIDED BY LOUDOUN COUNTY GIS.

12. THERE ARE NO EXISTING WELLS, DRAINFIELDS AND POLLUTION SOURCES PER LOUDOUN COUNTY GIS.

13. PUBLIC WATER AND SEWER SERVICE WILL BE REQUESTED FROM LOUDOUN WATER TO SERVE THE SENIOR CENTER SITE. THE SENIOR CENTER BUILDING WILL BE SPRINKLERED. FIRE HYDRANTS WILL BE PROVIDED IN ACCORDANCE WITH LATEST LOUDOUN COUNTY FACILITIES STANDARDS MANUAL.

14. TO THE BEST OF OUR KNOWLEDGE THERE ARE NO TOXIC MATERIALS OR AUTOMOBILE FUEL FOUND OR PROPOSED TO BE STORED ON THIS SITE. THE PROPERTY CONTAINS NO KNOWN HAZARDOUS OR TOXIC SUBSTANCES AS SET FORTH IN THE TITLE 40, CODE OF FEDERAL REGULATIONS PARTS 116.4, 302.4, AND 355 OR IN VIRGINIA DEPARTMENT OF WASTE MANAGEMENT REGULATIONS.

15. THERE ARE NO KNOWN FEDERAL OR STATE PERMITS OR CONDITIONS THAT LIMIT DEVELOPMENT OF THE PROPERTY. THERE IS NO FLOODPLAIN ON THE PROPERTY THAT IS THE SUBJECT OF THIS APPLICATION. THE CURRENT FLOOD INSURANCE RATE MAP (FIRM) OF LOUDOUN COUNTY COMMUNITY PANEL NUMBER FOR THE PROPERTY THAT IS THE SUBJECT OF THIS APPLICATION IS 51107C0265E (REVISED 02/17/2017).

16. THE PROPERTY IS LOCATED WITHIN THE LDN 60 BUFFER CONTOUR LIMITS OF THE AIRPORT IMPACT OVERLAY DISTRICTS AS DEFINED BY SECTION 4-1404.B OF THE "REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE." PER LOUDOUN COUNTY GIS, THE PROPERTY DOES NOT LIE WITHIN THE AG DISTRICT, THE MOUNTAINSIDE DEVELOPMENT OVERLAY DISTRICT (MDOD), THE HISTORIC DISTRICT, THE QUARRY NOTIFICATION OVERLAY DISTRICT (QN), THE RESERVOIR PROTECTION AREA, THE ROUTE 28 DISTRICTS, OR THE VILLAGE CONSERVATION OVERLAY DISTRICT.

17. A PRELIMINARY JURISDICTIONAL DETERMINATION FOR WETLANDS AND WATERS OF THE U.S. WAS PERFORMED ON JUNE 14, 2017 BY TIMMONS GROUP AND CONSIST OF 0.10 ACRES OF PALUSTRINE EMERGENT WETLAND (PEM). THE PRELIMINARY JURISDICTIONAL FINDINGS WERE CONFIRMED BY THE ARMY CORPS OF ENGINEERS (NAO-2017-01144) ON AUGUST 22, 2017. ALL APPLICABLE STATE AND FEDERAL PERMITS SHALL BE OBTAINED PRIOR TO DISTURBANCES WITHIN JURISDICTIONAL WATERS AND WETLANDS.

18. THE PROPERTY CONTAINS NO KNOWN GRAVES, OBJECT, OR STRUCTURES MARKING BURIAL PLACES AS DETERMINED BY VISUAL INSPECTION.

19. AS PER VIRGINIA DEPARTMENT OF CONSERVATION AND RECREATION MAP TITLED "GENERAL LOCATION AREAS OF NATURAL HERITAGE RESOURCES" SHOWS NO FEDERAL OR STATE THREATENED OR ENDANGERED SPECIES.

20. PER STPL-2013-0027 - A PHASE 1 ARCHEOLOGICAL STUDY WAS CONDUCTED ON THE PROPOSED SITE FROM SEPTEMBER TO OCTOBER 2004 BY CULTURAL RESOURCES, INC. THE PHASE 1 CULTURAL RESOURCE SURVEY RESULTED IN THE IDENTIFICATION OF TWO ISOLATED ARCHEOLOGICAL FINDS (0564-IF1 & 0564-IF2) AND NO ARCHITECTURAL STRUCTURES OR ARCHAEOLOGICAL SITES. THE ISOLATED ARCHEOLOGICAL FINDS ARE SINGLE EPISODES OF SIMPLE LOSS OR DISCARD, WHICH HAVE LOW POTENTIAL OF POSSESSING INTERPRETABLE AND ARCHAEOLOGICAL RESOURCES AND BY DEFINITION ARE NOT CONSIDERED ELIGIBLE FOR LISTING IN THE NATIONAL REGISTER OF HISTORIC PLACES.

21. PROPERTY WILL BE PRIMARILY SERVED BY KINCORA FIRE AND RESCUE AS FIRST RESPONSE.

22. EROSION AND SEDIMENT CONTROL WILL CONFORM TO ALL APPLICABLE LOCAL, COUNTY AND STATE STANDARDS AND THE VIRGINIA EROSION AND SEDIMENT CONTROL HANDBOOK.

23. THE PROPOSED USE WILL MEET THE NOISE STANDARD REGULATIONS STATED IN SECTION 5-1507, AND LIGHT AND GLARE REGULATIONS STATED IN SECTION 5-1504. ALL LIGHTS WILL BE FULLY SHIELDED AND DIRECTED DOWNWARD TO REDUCE GLARE AND PROTECT THE NIGHT SKY.

24. SIGNAGE WILL BE PROVIDED IN ACCORDANCE WITH THE PROVISIONS OF THE "REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE."

25. THE PROPOSED USE WILL MEET THE PARKING AND LOADING REQUIREMENTS OF SECTION 5-1100 OF THE "REVISED 1993 LOUDOUN COUNTY ZONING ORDINANCE."

26. A TREE SURVEY FOR THE SITE AREA WAS CONDUCTED ON 7/3/17 AND 4/18/18 BY TIMMONS GROUP FOR PURPOSES OF PREPARING A TREE CONSERVATION AREA AS WELL AS TO UTILIZE THE EXISTING VEGETATION WITHIN THE TREE CONSERVATION AREA TO MEET THE BUFFER REQUIREMENTS ALONG THIS BOUNDARY.

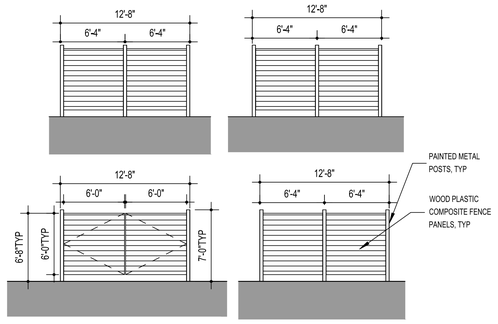
   26.1. ON JANUARY 22, 2019 THE LOUDOUN COUNTY URBAN FORESTER (JOHN ZUIKER) REVIEWED THE EXISTING VEGETATION WITHIN THE PROPOSED TREE CONSERVATION AREA AND HAS DETERMINED THAT THE EXISTING TREES MEET THE ZONING ORDINANCE BUFFER REQUIREMENTS AND NO SUPPLEMENTAL PLANTINGS ARE REQUIRED.

ZONING TABULATIONS (PIN# 059-48-1300)

TOTAL PROPERTY AREA:	5.214 AC
CURRENT ZONE:	PD-H6, ADMINISTERED AS R-8
PROPOSED USE:	SENIOR CENTER
BUILDING SIZE:	±16,866 GSF

SITE TABULATIONS (PIN# 059-48-1300)

	REQUIRED	PROPOSED
1. LOT SIZE:	NO MINIMUM	5.214 ACRES (227,125 SF)
2. MINIMUM LOT WIDTH:	40 FT MINIMUM	277 FT
3. MINIMUM YARDS:	NO REQUIREMENT	FRONT: 25 FT SIDE: 25 FT REAR: 25 FT
4. MAXIMUM LOT COVERAGE:	NO REQUIREMENT	50% (MAX)
5. MAXIMUM BUILDING HEIGHT:	35 FT	35 FT (MAX)
7. FAR	NO REQUIREMENT	0.20 (MAX)
8. BUILDING SETBACKS	ARTERIAL ROW: 100 FT MAJOR COLLECTOR ROW: 75 FT ANY OTHER ROW: 25 FT	ARTERIAL ROW: N/A MAJOR COLLECTOR ROW: N/A ANY OTHER ROW: 25 FT



DUMPSTER ENCLOSURE DETAIL
N.T.S

GENERAL CONSTRUCTION NOTES:

ALL CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE STANDARDS SET FORTH IN THE LATEST VERSION OF THE VIRGINIA STORM WATER MANAGEMENT HANDBOOK, VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE STANDARDS, LOUDOUN COUNTY FACILITIES STANDARDS MANUAL, AND LOUDOUN WATER ENGINEERING DESIGN MANUAL (UTILITIES).

1. THE SITE CONTRACTOR IS RESPONSIBLE FOR MAINTAINING (ON-SITE) AND REFERENCING DETAIL MANUALS FOR THE ABOVE LISTED AGENCIES. THE CONTRACTOR SHALL NOTIFY THE CIVIL ENGINEER PRIOR TO CONSTRUCTION IF CONFLICTS OR DISCREPANCIES ARISE BETWEEN THE APPROVED CDs AND AGENCY DETAILS AND MANUALS.
2. ALL FILL, BASE AND SUBBASE MATERIAL SHALL BE COMPACTED TO 95% OF THEORETICAL MAXIMUM DENSITY AS DETERMINED BY AASHTO T-99 METHOD A WITHIN PLUS OR MINUS 2% OF OPTIMUM MOISTURE FOR THE FULL WIDTH OF ANY DEDICATED RIGHT-OF-WAY.
3. SIDEWALKS AND TRAILS SHALL BE CONSTRUCTED ON A SUBGRADE COMPACTED TO 95% DENSITY AT OPTIMUM MOISTURE CONTENT (AASHTO T-99).
4. CALL "MISS UTILITY" 48 HOURS PRIOR TO THE START OF EXCAVATION. VERIFY LOCATION AND ELEVATION OF ALL UNDERGROUND UTILITIES IN AREA OF CONSTRUCTION PRIOR TO STARTING WORK. CONTACT THE ENGINEER IMMEDIATELY IF LOCATION OR ELEVATION IS DIFFERENT FROM THAT INDICATED. IF THERE APPEARS TO BE A CONFLICT, AND UPON DISCOVERY OF ANY UTILITY NOT INDICATED, CALL "MISS UTILITY" AT 1-800-257-7777 (TOLL FREE).
5. ACQUIRE ANY AND ALL NECESSARY CONSTRUCTION PERMITS REQUIRED TO COMPLETE THE SITE WORK AND FURNISH COPIES TO THE OWNER. ANY WORK DONE WITHIN THE VDOT RIGHT-OF-WAY REQUIRES A VDOT PERMIT.
6. ALL DIMENSIONS ARE TO FACE OF CURB UNLESS OTHERWISE NOTED.
7. ALL WORK SHALL BE SUBJECT TO INSPECTION BY DESIGNATED LOUDOUN COUNTY AND VDOT STAFF. NOTIFY THE CHIEF INSPECTOR 48 HOURS PRIOR TO START OF WORK.
8. REFER TO ARCHITECTURAL / ELECTRICAL DRAWINGS FOR ROUTING OF UNDERGROUND WIRING FOR SITE LIGHTING.
9. REFER TO ARCHITECTURAL DRAWINGS FOR ADDITIONAL DIMENSIONS AND SCORING PATTERNS OF WALKWAYS AND PATIO AREAS.
10. IN ACCORDANCE WITH HANDICAP ACCESSIBILITY REQUIREMENTS, COMPLY WITH THE 2010 EDITION ADA-AG CODES AND REQUIREMENTS FOR ACCESSIBILITY FOR DISABLED PERSONS.
11. DRAIN ALL DISTURBED AREAS TO APPROVED SEDIMENT CONTROL MEASURES AT ALL TIMES DURING LAND DISTURBING ACTIVITIES AND DURING SITE DEVELOPMENT UNTIL FINAL STABILIZATION IS ACHIEVED.
12. ALL PIPE LENGTHS ARE MEASURED FROM CENTER OF STRUCTURES.
13. BURNING OF CONSTRUCTION OR DEMOLITION MATERIALS IS NOT PERMITTED ON SITE.
14. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER OF COMPLYING WITH OTHER APPLICABLE LOCAL, STATE AND FEDERAL REQUIREMENTS.
15. ALL TEST PITS SHALL BE PERFORMED 10 DAYS PRIOR TO CONSTRUCTION AND ANY DISCREPANCY IN THE RESULTS FORWARDED TO THE ENGINEER FOR A REDESIGN. SUCH REDESIGNS ARE SUBJECT TO OWNER APPROVAL.
16. ALL UTILITIES MUST BE UNDERGROUND.
17. CONTROLLED FILLS:
    A. CONTROLLED COMPACTION SHALL OCCUR IN ALL FILL SECTIONS FOR PAVEMENTS, TRENCHES FOR UTILITIES, AND IN ANY AREA DESIGNATED ON THE DRAWINGS.
    B. CONTROLLED FILLS MUST BE COMPACTED TO 95% DENSITY AS DETERMINED BY METHODS AS PER STANDARD PROCTOR AASHTO-T99 OR ASTM-D698. DENSITY MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER.
    C. CONTROLLED FILLS SHALL BE COMPACTED IN EIGHT (8) INCH LIFTS (LOOSE THICKNESS) TO THE SPECIFIED DENSITY. BEGINNING FROM THE EXISTING GROUND SURFACE. UNLESS OTHERWISE APPROVED IN WRITING BY A QUALIFIED SOILS ENGINEER.
    D. THE SURFACE AREA DIRECTLY BENEATH AREAS TO RECEIVE CONTROLLED FILLS OF LESS THAN FIVE (5) FEET IS TO BE DENUDED OF ALL VEGETATION AND SCARIFIED AND COMPACTED TO A DEPTH OF SIX (6) INCHES TO THE SAME DENSITY AS THE CONTROLLED FILL TO BE PLACED THEREON.

VDOT STANDARD CONSTRUCTION NOTES

1. METHODS AND MATERIALS USED SHALL CONFORM TO CURRENT COUNTY AND VDOT STANDARDS AND SPECIFICATIONS.
2. ALL UTILITIES, INCLUDING ALL POLES, ARE TO BE RELOCATED AT THE CONTACTOR'S EXPENSE. COORDINATION IS THE RESPONSIBILITY OF THE CONTRACTOR.
3. OPEN CUTTING OF PAVED OR SURFACE TREATED VDOT ROADS IS NOT PERMITTED. ALL UTILITIES WHICH WILL BE PLACED UNDER EXISTING STREETS ARE TO BE BORED OR JACKED. ANY EXCEPTIONS, DUE TO EXTENUATING CIRCUMSTANCES, ARE TO BE ADDRESSED AT THE PERMIT STAGE AND APPROVED BY THE OWNER.
4. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGE TO EXISTING ROADS AND UTILITIES WHICH OCCUR AS A RESULT OF PROJECT CONSTRUCTION WITHIN OR CONTIGUOUS TO THE EXISTING RIGHT OF WAY.
5. A SMOOTHING GRADE SHALL BE MAINTAINED FROM THE CENTERLINE OF THE EXISTING ROAD TO THE CURB AND GUTTER, TO PRECLUDE THE FORMING OF FALSE GUTTERS AND/OR THE PONDING OF ANY WATER ON THE ROADWAY.
6. STANDARD GUARDRAIL AND HANDRAIL SHALL BE INSTALLED AT THOSE LOCATIONS AS DESIGNATED DURING FINAL FIELD INSPECTIONS BY LOUDOUN COUNTY OR VDOT.
7. THE CONTRACTOR IS RESPONSIBLE FOR ALL TRAFFIC CONTROL. THE CONTRACTOR SHALL SUBMIT A SIGNING, STRIPING AND/OR SIGNALIZATION PLAN TO THE VDOT LAND DEVELOPMENT SECTION A MINIMUM OF THIRTY DAYS PRIOR TO PERMIT APPLICATION. THE DEVELOPER SHALL NOT COMMENCE CONSTRUCTION OF ANY PAVEMENT COURSE WITHOUT AN APPROVED STRIPING PLAN.
8. CBR TEST SHALL BE PERFORMED PRIOR TO DETERMINATION OF FINAL SUBGRADE ELEVATION. SUB-BASE DEPTH IS BASED ON A CBR VALUE OF FOUR (4), WHICH MAY BE REVISED ONCE SOIL TESTS OF SUBGRADE ARE PERFORMED. SOILS TEST OF SUBGRADE MUST BE SUBMITTED FOR ACTUAL DETERMINATION OF REQUIRED SUBBASE THICKNESS PRIOR TO CONSTRUCTION. ALL SUBGRADE TO BE COMPACTED TO 95% DENSITY AT 2% OF OPTIMUM MOISTURE CONTENT PER AASHTO-T99 METHOD. FINAL PAVEMENT DESIGN BASED ON THE ACTUAL CBR VALUES SHALL BE SUBMITTED TO THE ENGINEER FOR APPROVAL PRIOR TO INSTILLATION.
9. A 4" (MIN.) LAYER OF STONE IS REQUIRED BENEATH CURB AND GUTTER.
10. ADDITIONAL DITCH LININGS OR SILTATION AND EROSION CONTROL MEASURES SHALL BE PROVIDED, AT THE OWNER'S EXPENSE, AS DETERMINED NECESSARY BY VDOT AND/OR DCR DURING FIELD REVIEW.
11. OVERLAY OF EXISTING PAVEMENT SHALL BE MINIMUM OF 1.5" DEPTH; ANY COSTS ASSOCIATED WITH PAVEMENT OVERLAY, OR THE MILLING OF EXISTING PAVEMENT TO OBTAIN REQUIRED DEPTH, SHALL BE ASSUMED BY THE CONTRACTOR.
12. OWNER IS RESPONSIBLE FOR DESIGN AND CONSTRUCTION OF ANY TRAFFIC SIGNAL INSTALLATION OR MODIFICATION WHICH WILL BE NECESSARY AS A RESULT OF DEVELOPMENT OF THIS SITE.
13. ALL RIGHT OF WAY DEDICATED TO PUBLIC USE SHALL BE CLEAR AND UNENCUMBERED.
14. THE CONTRACTOR SHALL OBTAIN A PERMIT FOR ALL SIDEWALKS WITHIN THE RIGHT OF WAY THAT DO NOT QUALIFY FOR VDOT MAINTENANCE.
15. TRAFFIC CONTROL DEVICES OR ADVISORY SIGNS, SUCH AS MULTIWAY STOPS, SPEED LIMITS, DEAF CHILD, CHILDREN AT PLAY, ETC., SHALL NOT BE INSTALLED UNLESS SPECIFICALLY SHOWN ON THESE PLANS OR A VDOT APPROVED REVISION. SHOULD UNAPPROVED SIGNS BE NOTED AT THE TIME OF VDOT INSPECTION, THE ROAD ACCEPTANCE PROCESS SHALL BE TERMINATED IMMEDIATELY AND NOT RECOMMENDED UNTIL A DETERMINATION IS MADE REGARDING THE APPROVAL OF ANY ADDITIONAL SIGNS. IMMEDIATE REMOVAL OF SUCH SIGNS SHALL NOT NEGATE FOR THE SUBMISSION OF A REVISION.
16. LANDSCAPING AND IRRIGATION SYSTEMS SHALL NOT BE INSTALLED WITHIN THE PUBLIC RIGHT OF WAY EXCEPT AS SHOWN ON THESE PLANS OR A VDOT APPROVED REVISION.
17. THE APPROVAL OF THESE PLANS SHALL IN NO WAY RELIEVE THE OWNER OF COMPLYING WITH OTHER APPLICABLE LOCAL STATE AND FEDERAL REQUIREMENTS.

Matthew J. Strickler
Secretary of Natural Resources

Clyde E. Cristman
Director

COMMONWEALTH of VIRGINIA
DEPARTMENT OF CONSERVATION AND RECREATION

Rochelle Altholz
Interim Director of Administration and Finance

Russell W. Baxter
Deputy Director of Dam Safety & Floodplain Management and Land Conservation

Thomas L. Smith
Deputy Director of Operations

August 27, 2018

Casey Kight
Timmons Group
20110 Ashbrook Place, Suite 100
Ashburn, VA 20147

Re: Ashburn Senior Center

Dear Ms. Kight:

The Department of Conservation and Recreation's Division of Natural Heritage (DCR) has searched its Biotics Data System for occurrences of natural heritage resources from the area outlined on the submitted map. Natural heritage resources are defined as the habitat of rare, threatened, or endangered plant and animal species, unique or exemplary natural communities, and significant geologic formations.

Biotics documents the presence of natural heritage resources within two miles of the project area. However, due to the scope of the activity and the distance to the resources, we do not anticipate that this project will adversely impact these natural heritage resources.

There are no State Natural Area Preserves under DCR's jurisdiction in the project vicinity.

Under a Memorandum of Agreement established between the Virginia Department of Agriculture and Consumer Services (VDACS) and the DCR, DCR represents VDACS in comments regarding potential impacts on state-listed threatened and endangered plant and insect species. The current activity will not affect any documented state-listed plants or insects.

New and updated information is continually added to Biotics. Please re-submit a completed order form and project map for an update on this natural heritage information if the scope of the project changes and/or six months has passed before it is utilized.

A fee of $90.00 has been assessed for the service of providing this information. Please find attached an invoice for that amount. Please return one copy of the invoice along with your remittance made payable to the Treasurer of Virginia, DCR Finance, 600 East Main Street, 24th Floor, Richmond, VA 23219. Payment is due within thirty days of the invoice date. Late payment may result in the suspension of project review/ service for future projects.

The Virginia Department of Game and Inland Fisheries (VDGIF) maintains a database of wildlife locations, including threatened and endangered species, trout streams, and anadromous fish waters that may contain information not documented in this letter. Their database may be accessed from http://vafwis.org/fwis/ or contact Ernie Aschenbach@dgif.virginia.gov.

600 East Main Street, 24th Floor | Richmond, Virginia 23219 | 804-786-6124

State Parks • Soil and Water Conservation • Outdoor Recreation Planning
Natural Heritage • Dam Safety and Floodplain Management • Land Conservation

Should you have any questions or concerns, feel free to contact me at 804-371-2708. Thank you for the opportunity to comment on this project.

Sincerely,

S. René Hypes
Project Review Coordinator

Loudoun County, Virginia
www.loudoun.gov/
Department of Building and Development
1 Harrison Street, S.E., P.O. Box 7000, Mailstop 60A, Leesburg, VA 20177-7000
(703) 777-0220
FAX Numbers: Permits (703) 771-5522 Engineering (703) 777-0065
Zoning & Administration (703) 771-5515

April 1, 2019

Mr. Luke Fetcho, P.E.
Timmons
20110 Ashbrook Place, Suite 100
Ashburn, VA 20147

Re: Ashburn Senior Center (STPL-2018-0039)
Facilities Standards Manual (FSM) Waiver Request
WAIV-2019-0008

Dear Mr. Fetcho:

This letter is in response to your request to waive the minimum standards related to stormwater management for the above-referenced project, which is associated with the parcel identified by PIN 059-48-1300. Specifically, FSM 5-220.B.9 establishes a minimum slope of 0.5% for each segment of storm sewer lines. On the subject site plan, the proposed slope of the constricted wetlands drawdown pipe is less than the required 0.5% minimum slope.

In support of your request, you explain that the slope is limited by vertical site design constraints related to the elevation of the existing stormwater conveyance systems upstream and downstream of the proposed constricted wetlands. In order to increase the slope to the minimum required 0.5%, the drawdown pipe would need to be extended over 200 feet downstream, requiring extensive offsite disturbance within close proximity to the rear yards of existing residences.

We note that the drawdown pipe will operate under pressure flow conditions, with a minimal flow over a 24-hour period. Moreover, to facilitate maintenance of the system, cleanouts and trash racks have been provided for the drawdown pipe.

In addition, we note that the design has been coordinated with the Department of General Services staff who will be responsible for maintenance of the system.

Therefore, in consideration of the above, your request is hereby granted and the waiver **approved.**

This determination applies solely to the referenced property and is not binding upon the County, myself as Director, or any other official with respect to any other property. No person may rely upon this determination with respect to any property other than the referenced property.

WAIV-2019-0008 Ashburn Senior Center
April1, 2019
Page 2 of 2

Please be advised that any applicant who is aggrieved by an interpretation or decision made by the Director in the administration of the standards and requirements contained in the FSM may, within five (5) working days of receiving written notice of such decision or interpretation appeal said decision strictly in accordance with Section 1-200.D of the FSM.

Should you have any questions or require additional information, please contact Ryan Sauder at (703) 737-8209 or by email at ryan.sauder@loudoun.gov.

Sincerely,

Michael Seigfried
Director

jc

Cc: Bijan Parsi, Project Manager
James Edmonds, VSMP Administrator for Building and Development
Ryan Sauder, VSMP Team Leader for Building and Development
Chris Stone, Department of General Services

2

COMMONWEALTH OF VIRGINIA
LUKE T. FETCHO
Lic No. 048424
3/5/2019
PROFESSIONAL ENGINEER

TG #38948

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GP #____

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G+P
GRIMM AND PARKER

PROJECT CODE:
260-18161

GENERAL NOTES AND DETAILS
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C1.0
3.5.19
Bid Set
2

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STORM SEWER CONSTRUCTION NOTES

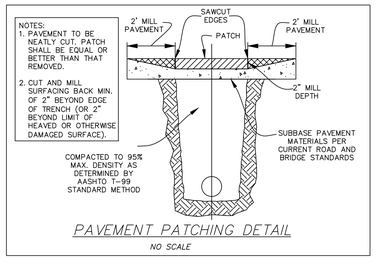
1. ALL CONSTRUCTION AND MATERIALS SHALL CONFORM WHERE APPLICABLE TO THE CURRENT VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.
2. ALL CONCRETE SHALL BE CLASS A3 IF CAST IN PLACE, CLASS A4 IF PRECAST.
3. MANHOLES AND DROP INLETS SHALL BE CONSTRUCTED FROM INVERT TO TOP AS FOLLOWS:
   A. MANHOLES TO EIGHT FEET DEEP.
      - BLOCK CONSTRUCTION - MINIMUM EIGHT INCH WALLS.
      - POURED IN PLACE CONCRETE - MINIMUM EIGHT INCH WALLS AND NONREINFORCED.
      - PRECAST - MINIMUM EIGHT INCH WALLS IN CONJUNCTION WITH PRECAST THROAT AND PRECAST BASE SLAB.
      - PRECAST.
   B. MANHOLES OVER EIGHT FEET DEEP.
      - PRECAST.
      - POURED IN PLACE REINFORCED CONCRETE.
      - SPECIAL DESIGN, I.E., BENDS, PRECAST TEES, PRECAST BOXES, WYES.
4. DROP INLETS AND CURB INLETS SHALL HAVE STEPS. THE MAXIMUM DIMENSION FROM FINISH GRADE TO THE FIRST STEP IN THE INLET SHALL NOT EXCEED THREE FEET.
5. UNLESS STATED ON THE APPROVED PLANS, SYMMETRICAL CHANNELS SHALL BE PERFORMED IN THE INVERT OF ALL STRUCTURES ACCORDING TO VDOT STANDARDS IS-1 TO PREVENT STANDING OR PONDING OF WATER.
6. IF BLOCK CONSTRUCTION IS USED, THE INSIDE AND OUTSIDE WALLS, AS THEY ARE LAID, SHALL BE PLASTERED WITH MORTAR A MINIMUM OF 1/2" THICK.
7. ALL PRECAST DROP INLETS, CURB INLETS AND MANHOLES SHALL CONFORM TO ASTM C-478.
8. VDOT INLETS, WHERE PIPE SIZE IS LARGER THAN 48 INCHES I.D., REQUIRE A SPECIAL DESIGN. IN CASE OF SPECIAL DESIGN INLETS THAT DEVIATE FROM THE STANDARD, THE PRECAST MANUFACTURER OR DESIGN ENGINEER MUST SUBMIT FIVE COPIES OF DETAIL DRAWINGS TO VDOT FOR PROPER APPROVAL.
9. THE OPENING IN PRECAST STORM SEWER STRUCTURES FOR ALL SIZE PIPE SHALL BE A MINIMUM OF FOUR INCHES AND A MAXIMUM OF SIX INCHES LARGER THAN THE OUTSIDE DIAMETER OF THE PIPE.
10. THE "H" DIMENSIONS SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS WILL BE MEASURED FROM THE INVERT OF OUTFALL PIPE TO THE TOP OF THE STRUCTURE.
11. TWO (2) INCH DEEP HOLES SHALL BE PROVIDED IN ENDWALL WHERE DIRECTED BY THE INSPECTOR.
12. ALL PIPES ARE MEASURED FROM CENTER OF STRUCTURE TO CENTER OF STRUCTURE.
13. ALL FILL BENEATH SEWER PIPES AND WATERLINES IS TO BE CONTROLLED FILL OR BETTER. CONTROLLED FILLS MUST BE COMPACTED TO 100% DENSITY AS DETERMINED BY AASHTO T99 OR ASTM d-698. DENSITY MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER. CONTROLLED FILLS SHALL BE COMPACTED IN EIGHT-INCH LIFTS (LOOSE THICKNESS) TO THE SPECIFIED DENSITY, BEGINNING FROM THE EXISTING GROUND SURFACE, UNLESS OTHERWISE APPROVED IN WRITING BY A QUALIFIED SOILS ENGINEER.
14. ALL FILL BENEATH MANHOLES IS TO BE SELECT FILL. SELECT FILL MATERIAL SHALL CONSIST OF #67 OR #78 STONE AND MUST BE COMPACTED TO 100% DENSITY AS DETERMINED BY AASHTO T99 OR ASTM d-698. DENSITY MUST BE VERIFIED BY A QUALIFIED SOILS ENGINEER. SELECT FILLS SHALL BE COMPACTED IN EIGHT-INCH LIFTS (LOOSE THICKNESS) TO THE SPECIFIED DENSITY, BEGINNING FROM THE EXISTING GROUND SURFACE, UNLESS OTHERWISE APPROVED IN WRITING BY A QUALIFIED SOILS ENGINEER.

ROOF DRAIN NOTES:

1. ALL INDIVIDUAL BUILDING DOWNSPOUTS, FOUNDATION DRAINS, AND RETAINING WALL DRAINAGE ARE TO BE TIED INTO THE ROOF DRAIN COLLECTOR SYSTEM OR DIRECTLY INTO THE STORM SEWER SYSTEM OR AT A FACE OF CURB.
2. THE ROOF DRAIN COLLECTOR SYSTEM SHALL BE SMOOTH-LINED, CORRUGATED POLYETHYLENE PIPE (HANCOR HI-Q OR APPROVED EQUAL) LAID AT A MINIMUM SLOPE OF 1.04%.
3. PIPES CONNECTING TO INDIVIDUAL DOWNSPOUTS SHALL BE 6". ALL OTHER DRAIN PIPES SHALL BE SIZED AS INDICATED.
4. CLEANOUTS SHALL BE PROVIDED AS SHOWN ON THE PLANS AND AS REQUIRED BY THE LOCAL BUILDING CODE. CLEANOUTS SHALL BE PLACED AFTER EACH DOWNSPOUT CONNECTION.
5. CONNECTIONS INTO CONCRETE PIPES SHALL BE MADE WITH "INSERTA TEE" TYPE CONNECTORS.
6. CONTRACTOR SHALL MAKE PROVISIONS TO MAINTAIN ADEQUATE OUTFALL FOR EXISTING ROOF DRAINS DURING CONSTRUCTION.

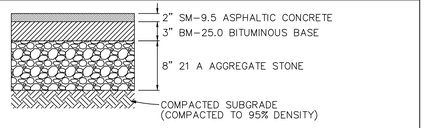
MATERIAL NOTES:

1. CORRUGATED PLASTIC PIPE (SMOOTH-BORED) FOR ROOF DRAINS SHALL BE ASTM F 405 OR AASHTO M 252 FOR 10" AND SMALLER, AND RCP FOR 12" AND LARGER. REFER TO VDOT STD. PB-1 FOR BEDDING DETAILS FOR CORRUGATED PLASTIC PIPE.
2. ALL CONCRETE PIPE SHALL BE CLASS III. REFER TO VDOT SPECIFICATIONS. REFER TO VDOT STD. PB-1 FOR BEDDING DETAILS.
3. ALL PVC PLASTIC SANITARY SEWER PIPE SHALL BE AWWA C-900/905, DR-25.
4. ALL WATERLINES LARGER THAN 4" SHALL BE DIP CLASS 52.
5. ALL WATER SERVICE PIPE LESS THAN 4" FOR CONNECTION FROM THE MAIN TO THE METER SHALL BE TYPE "K" COOPER.
6. ALL MANHOLES SHALL BE OF WATER TIGHT CONSTRUCTION AND TESTED IN PLACE PER VIRGINIA WATERWORKS REGULATIONS 12 VAC 5-590-1150. 132C, PAGE 146, DATED NOVEMBER 15, 1995.

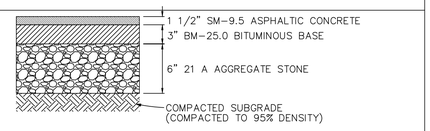


PAVEMENT PATCHING DETAIL
NO SCALE

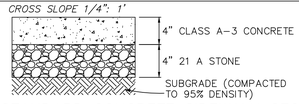
ONSITE PAVEMENT SECTIONS



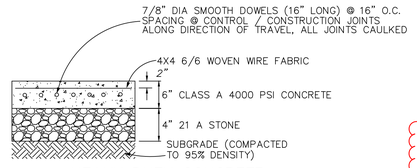
HEAVY DUTY ASPHALT PAVEMENT SECTION (DRIVE AISLES AND ACCESS ROADS)
NO SCALE
SEE LOUDOUN COUNTY GENERAL NOTE #1 (ON COVER SHEET) & VDOT NOTES



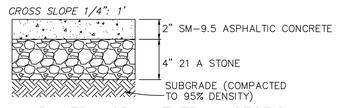
LIGHT DUTY ASPHALT PAVEMENT SECTION (PARKING SPACES)
NO SCALE
SEE LOUDOUN COUNTY GENERAL NOTE #1 (ON COVER SHEET) & VDOT NOTES



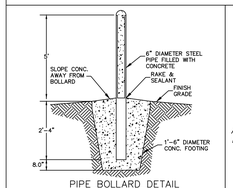
STANDARD CONCRETE SIDEWALK SECTION
NO SCALE
SIDEWALK SHALL BE CONSTRUCTED TO MINIMUM VDOT STANDARDS



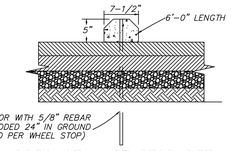
HEAVY DUTY CONCRETE
NO SCALE
SEE LOUDOUN COUNTY GENERAL NOTE #1 (ON COVER SHEET) & VDOT NOTES



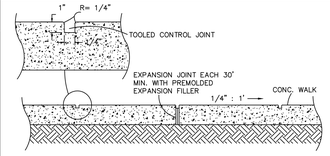
PAVED ASPHALT TRAIL SECTION
NO SCALE
TRAIL SHALL BE CONSTRUCTED TO MINIMUM VDOT STANDARDS



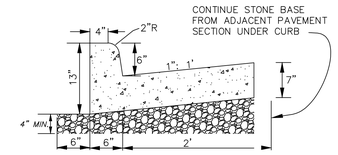
PIPE BOLLARD DETAIL
NO SCALE
(SEE PLAN SHEET FOR LOCATIONS)



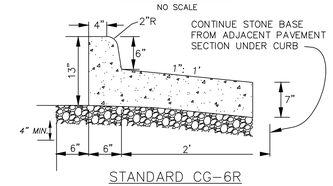
PRECAST WHEELSTOP DETAIL
NO SCALE



SIDEWALK AND CONTROL JOINT
NO SCALE
NOTES:
1. REFER TO ARCHITECTURAL DRAWINGS FOR SIDEWALK SCORING PATTERN.

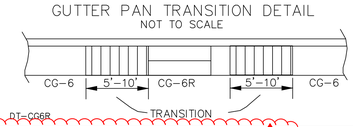


STANDARD VDOT CG-6 CURB & GUTTER
NO SCALE



STANDARD CG-6R CURB & GUTTER
(NOT TO BE USED IN VDOT R/W)
NO SCALE

GUTTER PAN TRANSITION DETAIL
NOT TO SCALE



PARKING TABULATIONS

USE: COMMUNITY CENTER (PUBLIC ASSEMBLY)

REQUIRED (PER REVISED 1993 ZONING ORDINANCE)	PROPOSED
REGULAR: 0.25 SPACES PER OCCUPANT, PLUS ONE SPACE PER EMPLOYEE (0.25 * 556 OCCUPANTS) + (1 * 10 EMPLOYEES) = 149 SPACES MIN	REGULAR: 141 OPEN SPACES, 6 HANDICAP SPACES, 2 VAN ACCESSIBLE
	HANDICAP SPACES: 149 TOTAL SPACES PROVIDED
LOADING: PER 100,000 SF BUILDING = 1 SPACE	LOADING: PER 100,000 SF BUILDING = 1 SPACE

2

SIGNAGE NOTES

1. ALL PROPOSED SIGNING AND PAVEMENT MARKING SHALL BE IN ACCORDANCE WITH THE MOST CURRENT EDITION OF EACH OF THE FOLLOWING AND ANY REVISION THERETO:

A. MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

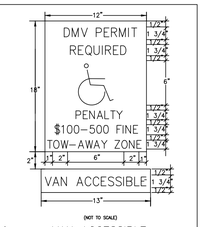
B. THE VIRGINIA SUPPLEMENT TO THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES.

C. THE VIRGINIA DEPARTMENT OF TRANSPORTATION ROAD AND BRIDGE SPECIFICATIONS.

D. THE LOUDOUN COUNTY FACILITIES STANDARDS MANUAL.

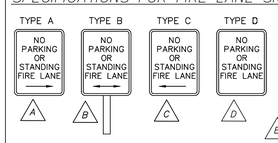
2. PROPOSED SIGN LOCATIONS ARE APPROXIMATE AND SHALL BE MODIFIED IN THE FIELD TO AVOID CONFLICT WITH UNDERGROUND UTILITIES OR OTHER OBSTRUCTIONS, AND TO COMPLY WITH STANDARDS REFERENCED IN NOTE 1 ABOVE.

3. ALL SIGNS, PAVEMENT MARKINGS AND TRAFFIC FLOW ARROWS ARE TO BE FURNISHED AND INSTALLED BY THE CONTRACTOR. ALL SIGNS SHALL BE FURNISHED AND INSTALLED ON P/T WOODEN 4"X4" POSTS BY THE CONTRACTOR.

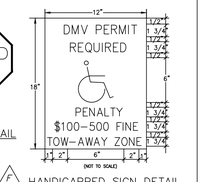


G VAN ACCESSIBLE HANDICAPPED SIGN DETAIL

SPECIFICATIONS FOR FIRE LANE SIGNS



R1-1
36"x36"
E SIGN DETAIL



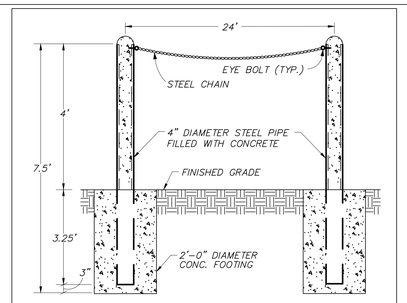
F HANDICAPPED SIGN DETAIL

SPECIFICATIONS (SECTION 486.02(b) OF THE CODIFIED ORDINANCES)

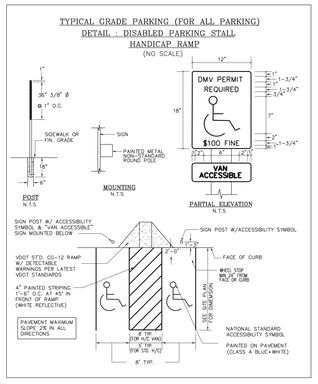
1. EACH SUCH SIGN SHALL BE OF METAL CONSTRUCTION, WITH DIMENSIONS OF AT LEAST TWELVE BY EIGHTEEN INCHES.
2. EACH SUCH SIGN SHALL SHOW RED LETTERS ON A WHITE BACKGROUND, WITH A THREE-EIGHTHS INCH RED TRIM STRIP AROUND THE ENTIRE OUTER EDGE OF THE SIGN, THE LETTERING TO BE "NO PARKING OR STANDING" IN AT LEAST TWO-INCH HIGH LETTERS AND "FIRE LANE" IN AT LEAST TWO AND ONE-HALF INCH HIGH LETTERS AND CONTAINING RED ARROWS ON SUCH SIGNS TO POINT TO AND INDICATE THE FIRE LANE AREA.
3. POSTS FOR SUCH SIGNS, WHERE REQUIRED BY THE FIRE MARSHALL, SHALL BE SECURELY MOUNTED.
4. (INTENTIONALLY OMITTED)
5. EACH SIGN SHALL BE MOUNTED SEVEN FEET FROM GRADE LEVEL TO THE BOTTOM OF THE SIGN AND MUST BE WITHIN SEVEN FEET OF THE PARKING CURB OR CURB LINE.

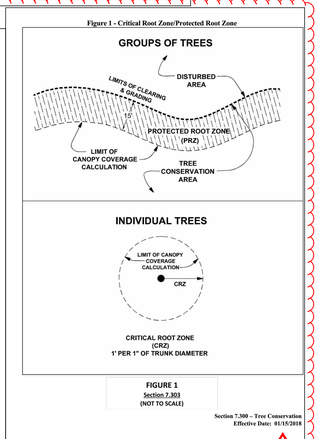
•FIRE LANE SIGNS WITHOUT DIRECTIONAL ARROWS ARE NOT ACCEPTABLE

H FDC SIGN DETAIL



BOLLARDS & CHAIN DETAIL
NO SCALE





2

COMMONWEALTH OF VIRGINIA
LUKE T. FETCHO
Lic No. 048424
3/5/2019
PROFESSIONAL ENGINEER

TG #38948

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GP #____

GRIMM AND PARKER
8609 Westwood Center Drive
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Tel: 703.903.9100
www.grimmandparker.com

PROJECT CODE: 260-18161

GENERAL NOTES AND DETAILS
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C1.1
3.5.19
Bid Set
2

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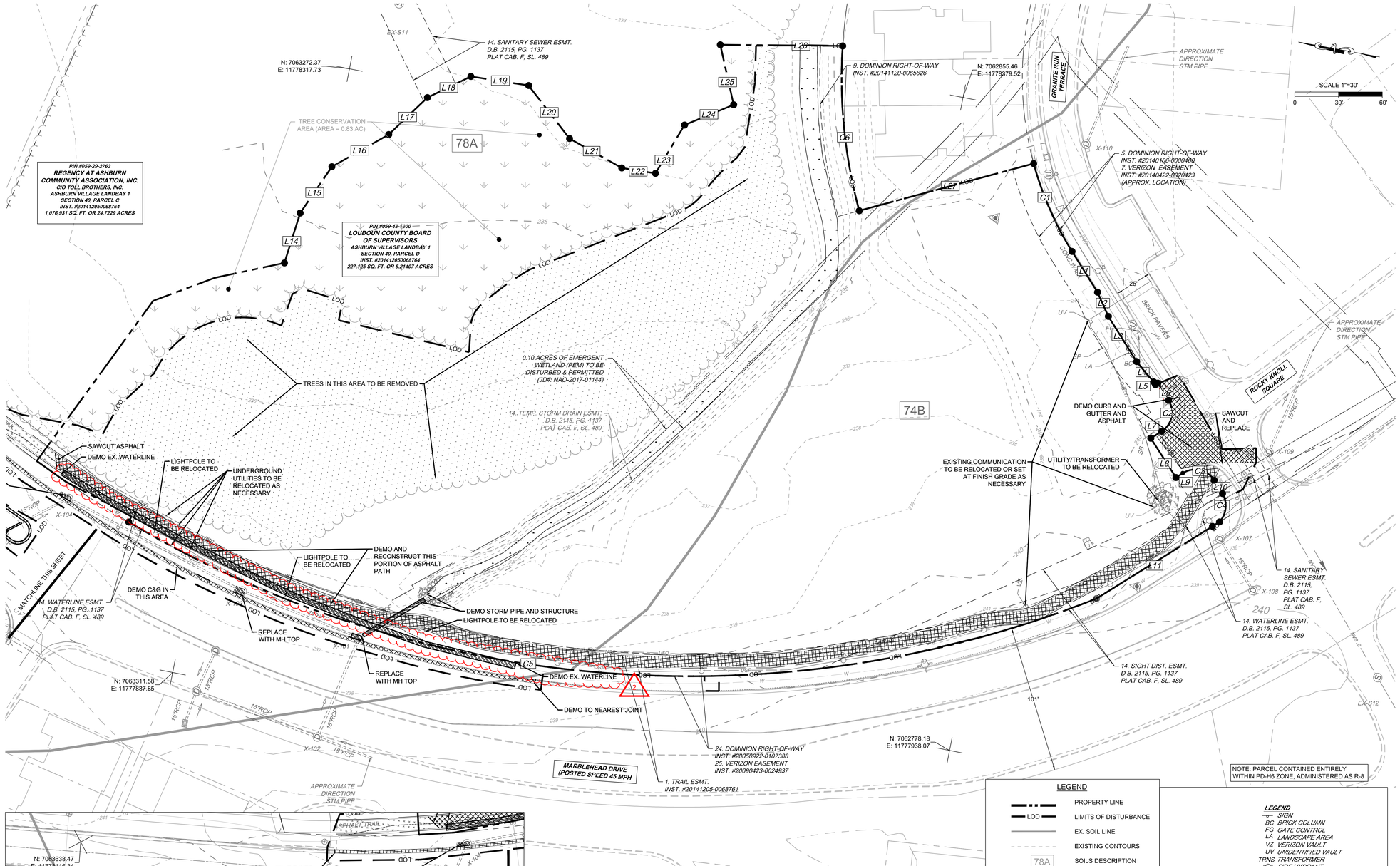

LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- EX. SOIL LINE
- EXISTING CONTOURS
- 78A SOILS DESCRIPTION
- SHARED USE PATH
- EXISTING WETLANDS
- EXISTING CONCRETE, ASPHALT AND BASE TO BE DEMOLISHED
- EXISTING TREES TO BE DEMOLISHED
- EXISTING UTILITIES TO BE REMOVED, RELOCATED OR REPLACED

LEGEND

- SIGN
- BC BRICK COLUMN
- FG GATE CONTROL
- LA LANDSCAPE AREA
- VZ VERIZON VAULT
- UV UNIDENTIFIED VAULT
- TRNS TRANSFORMER
- FIRE HYDRANT
- WATER VALVE
- DECIDUOUS TREE
- STORM DRAIN MANHOLE
- SANITARY SEWER MANHOLE
- UNIDENTIFIED UTILITY MANHOLE
- LAMP
- ELEC.BOX
- UTILITY VAULT
- IRON ROD SET
- DRILL HOLE SET
- HEADER CURB
- CURB AND GUTTER
- EDGE OF PAVEMENT
- TREE LINE
- UFO UNDERGROUND FIBER OPTIC LINE
- UGP UNDERGROUND POWER LINE
- W UNDERGROUND WATERLINE

THIS TOPOGRAPHIC SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF JEFFREY A. SMERALDO FROM AN ACTUAL GROUND SURVEY MADE UNDER MY SUPERVISION; THAT THE ORIGINAL DATA WAS OBTAINED ON THE FOLLOWING DATE: OCTOBER 07, 2016. THIS PLAT, MAP AND DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

HORIZONTAL DATUM: NAD83
VERTICAL DATUM: NAVD88

DATUM ESTABLISHED BY RTK-LEICA SMARTNET STATION GR10 (RTCM-0591)
SUBSURFACE UTILITIES WERE LOCATED ON MARCH 30, 2018 BY THIS FIRM
TOPOGRAPHICAL FIELDWORK COMPLETED OCTOBER 31, 2016 AND REVISED MARCH 30, 2018.

COMMONWEALTH OF VIRGINIA
LUKE T. FETCHO
Lic No. 048424
3/5/2019
PROFESSIONAL ENGINEER

TG #38948

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G+P GRIMM AND PARKER

PROJECT CODE: 260-18161

EXISTING CONDITIONS AND DEMOLITION PLAN

ASHBURN SENIOR CENTER

LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

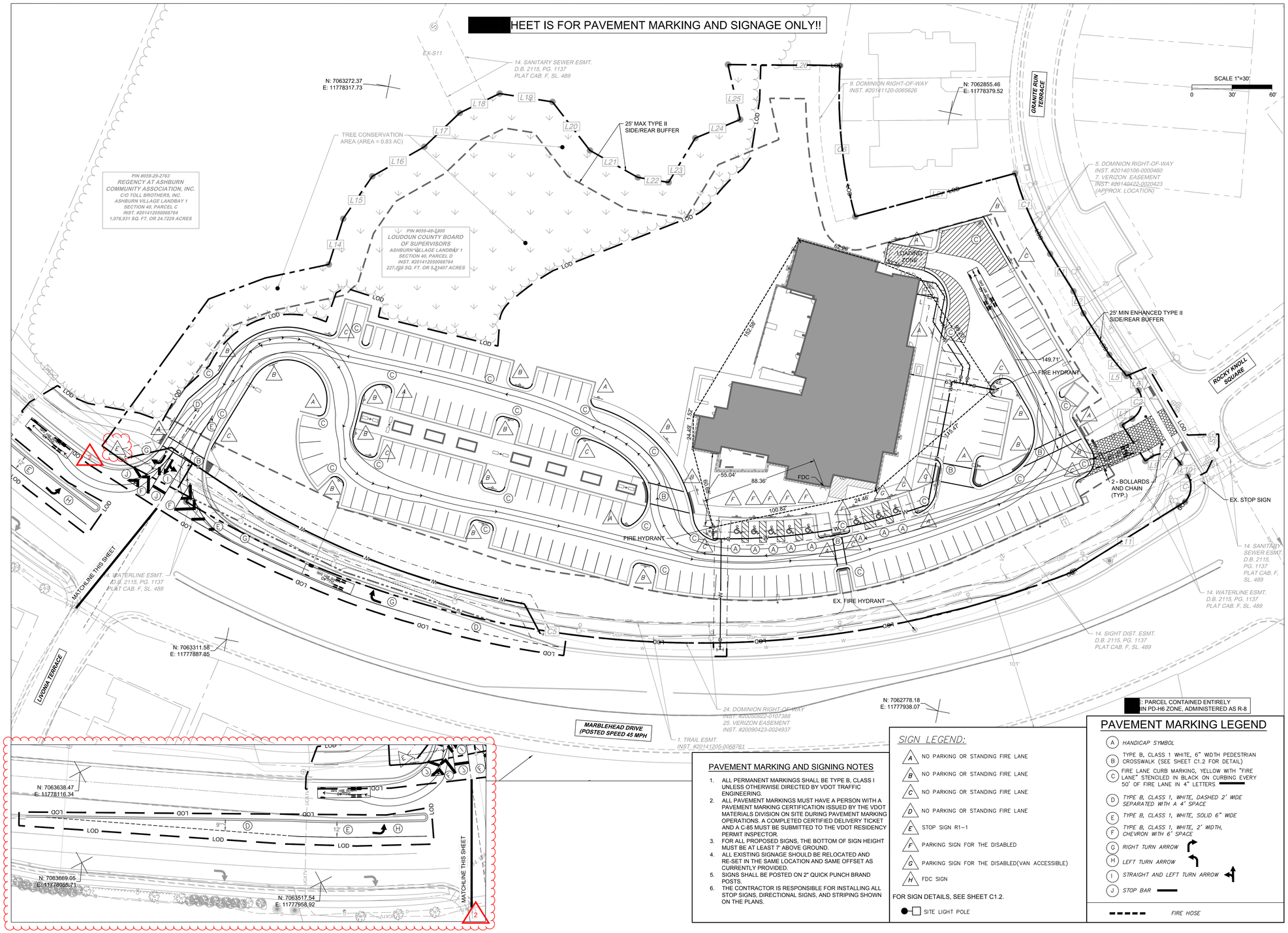
DATE	DESCRIPTION
4/9/19	ADD #2

C2.1

3.5.19
Bid Set
2

GRIMM AND PARKER, P.C. 2014

[redacted]HEET IS FOR PAVEMENT MARKING AND SIGNAGE ONLY!!



[redacted] PARCEL CONTAINED ENTIRELY IN PD-H6 ZONE, ADMINISTERED AS R-8

PAVEMENT MARKING AND SIGNING NOTES

1. ALL PERMANENT MARKINGS SHALL BE TYPE B, CLASS I UNLESS OTHERWISE DIRECTED BY VDOT TRAFFIC ENGINEERING.
2. ALL PAVEMENT MARKINGS MUST HAVE A PERSON WITH A PAVEMENT MARKING CERTIFICATION ISSUED BY THE VDOT MATERIALS DIVISION ON SITE DURING PAVEMENT MARKING OPERATIONS. A COMPLETED CERTIFIED DELIVERY TICKET AND A C-85 MUST BE SUBMITTED TO THE VDOT RESIDENCY PERMIT INSPECTOR.
3. FOR ALL PROPOSED SIGNS, THE BOTTOM OF SIGN HEIGHT MUST BE AT LEAST 7' ABOVE GROUND.
4. ALL EXISTING SIGNAGE SHOULD BE RELOCATED AND RE-SET IN THE SAME LOCATION AND SAME OFFSET AS CURRENTLY PROVIDED.
5. SIGNS SHALL BE POSTED ON 2" QUICK PUNCH BRAND POSTS.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL STOP SIGNS, DIRECTIONAL SIGNS, AND STRIPING SHOWN ON THE PLANS.

SIGN LEGEND:

- A — NO PARKING OR STANDING FIRE LANE
- B — NO PARKING OR STANDING FIRE LANE
- C — NO PARKING OR STANDING FIRE LANE
- D — NO PARKING OR STANDING FIRE LANE
- E — STOP SIGN R1-1
- F — PARKING SIGN FOR THE DISABLED
- G — PARKING SIGN FOR THE DISABLED(VAN ACCESSIBLE)
- H — FDC SIGN

FOR SIGN DETAILS, SEE SHEET C1.2.

SITE LIGHT POLE

PAVEMENT MARKING LEGEND

- (A) HANDICAP SYMBOL
- (B) TYPE B, CLASS 1 WHITE, 6" WIDTH PEDESTRIAN CROSSWALK (SEE SHEET C1.2 FOR DETAIL)
- (C) FIRE LANE CURB MARKING, YELLOW WITH "FIRE LANE" STENCILED IN BLACK ON CURBING EVERY 50' OF FIRE LANE IN 4" LETTERS
- (D) TYPE B, CLASS 1, WHITE, DASHED 2' WIDE SEPARATED WITH A 4' SPACE
- (E) TYPE B, CLASS 1, WHITE, SOLID 6" WIDE
- (F) TYPE B, CLASS 1, WHITE, 2' WIDTH, CHEVRON WITH 6' SPACE
- (G) RIGHT TURN ARROW
- (H) LEFT TURN ARROW
- (I) STRAIGHT AND LEFT TURN ARROW
- (J) STOP BAR

FIRE HOSE

COMMONWEALTH OF VIRGINIA
LUKE T. FETCHO
Lic No. 048424
3/5/2019
PROFESSIONAL ENGINEER

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[redacted]w.grimmandparker.com

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PROJECT CODE:
260-18161

FIRE LANE & SITE SIGNAGE AND PAVEMENT MARKING PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C4.1
3.5.19
Bid Set 2

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MARBLEHEAD DRIVE TRANSPORTATION MANAGEMENT PLAN

GENERAL:

1. THIS PROJECT IS CLASSIFIED AS TYPE A.
2. THE TOTAL LENGTH OF THE PROJECT IS ABOUT 650' AND WILL BE CONSTRUCTED IN TWO PHASES.
3. THE PURPOSE OF THIS PROJECT IS TO REMOVE ADD A NORTHBOUND RIGHT TURN LANE FROM MARBLEHEAD DRIVE AND CONSTRUCT A SOUTHBOUND LEFT TURN LANE AND RECONSTRUCT THE EXISTING ISLAND AND TO PROVIDE ACCESS INTO THE ASHBURN SENIOR CENTER SITE.
4. THE TRAFFIC CONTROL MEASURES DISCUSSED BELOW WILL PERTAIN TO ISLAND RECONSTRUCTION.
5. TRAFFIC ALONG THESE ROADS CONSISTS OF COMMUTERS, LOCAL RESIDENTS, AND TRUCKS.
6. THE EXISTING SPEED LIMIT ALONG ENTERPRISE STREET IS 45 MPH. ALL EXISTING SPEED LIMITS WILL BE MAINTAINED DURING ALL PHASES OF CONSTRUCTION.

TEMPORARY TRAFFIC CONTROL (TTC) / MAINTENANCE OF TRAFFIC (MOT):

1. LANE CLOSURES AND FLAGGING OPERATIONS ARE ANTICIPATED FOR THIS PROJECT AND WILL BE IN ACCORDANCE WITH THE VIRGINIA WORK AREA PROTECTION MANUAL, 2011 EDITION. THE FOLLOWING TEMPORARY TRAFFIC MEASURES MAY BE USED:
   - **1.1. NORTHBOUND RIGHT TURN LANE INSTALLATION:** SHOULDER OPERATION WITH MINOR ENCROACHMENT (FIGURE TTC-5.1).
   - **1.2. SOUTHBOUND LEFT TURN LANE INSTALLATION:** INSIDE LANE CLOSURE OPERATION ON A FOUR-LANE ROADWAY (FIGURE TTC-17.1).
   - **1.3. CROSSWALK INSTALLATION:** SHORT DURATION OPERATION ON A MULTI-LANE ROADWAY (FIGURE TTC-15.1)
2. AS NOTED ABOVE, DIFFERENT TTC MEASURES MAY BE EMPLOYED DEPENDING ON THE WORK BEING PERFORMED. LANE CLOSURES SHALL BE MINIMIZED ALONG ENTERPRISE STREET.
3. NEGATIVE IMPACTS TO THE TRAVELING PUBLIC SHALL BE MINIMIZED IN EVERY WAY POSSIBLE. AS SUCH, DURING PEAK TIMES AND HOLIDAYS, ONE LANE OF TRAFFIC SHALL BE MAINTAINED IN BOTH DIRECTIONS. SEE THE "GENERAL NOTES" PORTION OF THIS PLAN SHEET FOR MORE INFORMATION.
4. ACCESS TO ADJACENT PROPERTIES SHALL BE MAINTAINED AT ALL TIMES.

PUBLIC COMMUNICATION PLAN:

1. IF ANY MAJOR TRAFFIC CHANGES ARE TO TAKE PLACE (LANE CLOSURES, ETC.), THE PROJECT ADMINISTRATOR SHALL ENSURE THAT THE LOCAL NEWSPAPERS AND RADIO STATIONS ARE INFORMED 72 HOURS IN ADVANCE OF THE CHANGE.
2. PORTABLE CHANGEABLE MESSAGE BOARDS (PCMBS) SHALL BE USED TO NOTIFY THE TRAVELING PUBLIC OF ANY SUCH MAJOR TRAFFIC CHANGES 72 HOURS IN ADVANCE OF THE CHANGE.
3. CONTRACTOR TO COORDINATE WITH THE STERLING COMMUNITY CENTER AUTHORITIES ABOUT PHASED CONSTRUCTION, STAFF RELOCATION, ETC.

TRANSPORTATION OPERATION PLAN:

1. THE PROJECT PERSONNEL SHALL NOTIFY THE "NORTHERN REGION OPERATION TRAFFIC OPERATIONS CENTER" (NROTOC) WHEN A LANE CLOSURE IS IMPLEMENTED, AND AGAIN WHEN IT IS REMOVED.
2. IN CASE OF EMERGENCY, CALL 911.
3. THE FOLLOWING IS A LIST OF LOCAL NON-EMERGENCY NUMBERS:
   FIRE: 703-777-0333
   COUNTY POLICE: 703-777-0407
   STATE POLICE: 804-674-2000
   PROJECT PERSONNEL:
   COUNTY CONTACT: NOVA DISTRICT VDOT, (703) 877-3450
   ENGINEER CONTACT: LUKE FETCHO, TIMMONS GROUP: 703-554-6712
4. ANY TRAFFIC INCIDENT THAT OCCURS DURING THE LIFE OF THIS PROJECT WILL BE DISCUSSED BY THE CONTRACTOR, VDOT PERSONNEL, AND THE COUNTY PROJECT PERSONNEL TO DETERMINE WHETHER ANY CHANGES NEED TO BE MADE TO THE TRAFFIC CONTROL ON THE PROJECT.

2

PEDESTRIAN MANAGEMENT:

1. PEDESTRIAN WALKWAYS SHALL BE CLOSED AS NECESSARY TO ENSURE A SAFE ENVIRONMENT FOR PEDESTRIANS DURING CONSTRUCTION. CLOSED WALKWAYS SHALL BE MARKED WITH SIGNS AND OPTIC-ORANGE SAFETY FENCE (AS NECESSARY)

GENERAL NOTES:

1. ANY REQUIRED LANE CLOSURES MUST BE APPROVED IN ADVANCE BY THE VDOT NORTHERN VIRGINIA DISTRICT OFFICE. (703-877-3450)
2. WORK HOURS WITHIN THE VDOT RIGHT-OF-WAY SHALL BE LIMITED TO THE HOURS OF 9:30 AM TO 3:00 PM MONDAY-THRUSDAY AND 9:30 AM TO 2:00 PM ON FRIDAYS, UNLESS OTHERWISE DIRECTED BY VDOT.
3. TRAFFIC SHALL NOT BE STOPPED FOR LONGER THAN FIVE MINUTES AT ANY TIME UNLESS OTHERWISE APPROVED BY THE TRANSPORTATION DEPT.
4. ALL AREAS EXCAVATED DEEPER THAN 2' BELOW EXISTING PAVEMENT SURFACE AND WITHIN THE CLEAR ZONE, AT THE CONCLUSION OF EACH WORKDAY, SHALL BE BACK FILLED TO FORM AN APPROXIMATE 6:1 WEDGE AGAINST THE PAVEMENT SURFACE FOR THE SAFETY AND PROTECTION OF VEHICULAR TRAFFIC. ALL COST PLACING, MAINTAINING AND REMOVING THE 6:1 WEDGE SHALL BE INCLUDED IN THE PRICE BID FOR OTHER ITEMS IN THE CONTRACT AND NO ADDITIONAL COMPENSATION WILL BE ALLOWED.
5. LANE CLOSURES WILL NOT BE PERMITTED ON HOLIDAYS OR WEEKENDS UNLESS OTHERWISE APPROVED IN ADVANCE BY THE TRANSPORTATION DEPARTMENT.
6. ANY CONTRACT ITEM(S) NOT SPECIFICALLY NOTED IN THE MAINTENANCE OF TRAFFIC MAY BE SCHEDULED FOR CONSTRUCTION AT THE CONTRACTOR'S OPTION, AS APPROVED BY THE ENGINEER AND VDOT.
7. ACCESS TO ADJACENT PROPERTIES AND CONNECTING STREETS SHALL BE MAINTAINED AT ALL TIMES DURING CONSTRUCTION.
8. THE FINAL SURFACE COURSE IS NOT TO BE PLACED UNTIL SUCH TIME THAT PERMANENT PAVEMENT MARKINGS CAN BE PLACED.
9. ALL TRAFFIC CONTROL SHALL BE SET UP AND SPACED ACCORDING TO THE VIRGINIA WORK AREA PROTECTION MANUAL, 2011 EDITION.
10. CONTRACTOR SHALL PROVIDE ADDITIONAL TRAFFIC CONTROL AS DIRECTED BY THE VIRGINIA DEPARTMENT OF TRANSPORTATION SHOULD FIELD CONDITIONS WARRANT.
11. CONTRACTOR MAY REDUCE LANE WIDTHS TO 10' DURING CONSTRUCTION. ANY TEMPORARY PAVEMENT MARKINGS THAT ARE REQUIRED ARE THE RESPONSIBILITY OF THE CONTRACTOR.
12. CONTRACTOR IS RESPONSIBLE FOR PLACEMENT AND MAINTENANCE OF ALL TEMPORARY PAVEMENT MARKINGS THAT ARE REQUIRED OR IMPLIED IN THE TTC DIAGRAMS. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING ALL TRAFFIC CNTROL DEVICES, SIGNAGE, EQUIPMENT, PERSONNEL, INCLUDING CERTIFIED TRAFFIC ONTROL PERSONNEL, ETC. TO CONTROL TRAFFIC DURING CONSTRUCTION WITHIN VDOT MAINTAINED RIGHT-OF-WAY. ALL TRAFFIC CONTROL SHALL BE IN STRICT ACCORDANCE WITH THE STANDARDS, GUIDELINES, POLICIES, AND OBJECTIVES OF THE LATEST EDITION OF THE VIRGINIA WORK AREA PROTECTION MANUAL, MANUAL FOR UNIFORM TRAFFIC CONTROL EVICES (MUTCD), AND ALL VDOT PERMITS.
13. AT NO TIME SHALL CONSTRUCTION TAKE PLACE ON BOTH THE RIGHT AND LEFT SIDES OF VEHICLES UNLESS SPECIFIED BY VDOT AND THE ENGINEER.
14. FOR ANY NOTES OR FIGURES REFERENCED ON TTC DIAGRAMS AT RIGHT THAT ARE NOT AVAILABLE IN THESE PLANS, PLEASE REFER TO THE 2011 EDITION OF THE WORK AREA PROTECTION MANUAL.
15. EMERGENCY VEHICLES, BUS, AND ALL MAIL ROUTES SHALL BE MAINTAINED AT ALL TIMES.
16. ALL CONSTRUCTION MATERIALS AND EQUIPMENT SHALL BE STORED OFF-SITE AND OUTSIDE OF CLEAR ZONE/SIGHT DISTANCE RESTRICTIVE AREAS.
17. WHEN A SIDE ROAD, ON-RAMP, OR COMMERCIAL ENTRANCE INTERSECTS ROAD WITHIN THE TEMPORARY WORK ZONE, ADDITIONAL TRAFFIC CONTROL DEVICES AND SIGNAGE SHALL BE PLACED AS NEEDED BY THE CONTRACTOR.

SEQUENCE OF CONSTRUCTION

PHASE 1:

CONSTRUCTION CONSISTS OF A NORTHBOUND RIGHT TURN LANE ALONG MARBLEHEAD DRIVE, IN CONJUNCTION WITH REMOVAL OF THE EXISTING CURB AND GUTTER. DURING THIS PHASE, CONSTRUCTION SHALL TAKE PLACE FROM THE INTERSECTION OF MARBLEHEAD DRIVE AND GRANITE RUN TERRACE NORTHBOUND TO THE INTERSECTION OF MARBLEHEAD DRIVE AND LIVONIA TERRACE. WORK SHALL TAKE PLACE BEHIND THE EXISTING CURB AND GUTTER TO THE EXTENT PRACTICAL. CONSTRUCTION VEHICLES TO ENTER AND EXIST SITE FROM THE STABILIZED CONSTRUCTION ENTRANCE AT THE ASHBURN SENIOR CENTER PROJECT SITE ENTRANCE.

TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH TTC 5.1 DURING THIS PHASE OF CONSTRUCTION, AS PRESCRIBED IN THE GENERAL NOTES, TTC/MOT NOTES, AND THROUGH THE USE OF GROUP II CHANNELIZING DEVICES AND PROPER SIGNAGE. IN ADDITION, ADVANCED WARNING SIGNS SHALL BE PLACED ALONG THE NORTHBOUND AND SOUTHBOUND APPROACH OF MARBLEHEAD DRIVE. WHEN LANE CLOSURES ARE REQUIRED, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH TTC 67.0. SEE SHEET C4.2A FOR PLACEMENT OF GROUP II CHANNELIZING DEVICES AND PROPER SIGNAGE.

PHASE 2:

CONSTRUCTION CONSISTS OF A SOUTHBOUND LEFT TURN LANE ALONG MARBLEHEAD DRIVE, IN CONJUNCTION WITH REMOVAL AND RECONSTRUCTION OF THE EXISTING MEDIAN ISLAND. DURING THIS PHASE, CONSTRUCTION SHALL TAKE PLACE FROM THE INTERSECTION OF MARBLEHEAD DRIVE AND WESTERN GALES BOULEVARD SOUTHBOUND TO THE INTERSECTION OF MARBLEHEAD DRIVE AND LIVONIA TERRACE. WORK SHALL TAKE PLACE BEHIND THE EXISTING CURB AND GUTTER TO THE EXTENT PRACTICAL. CONSTRUCTION VEHICLES TO ENTER AND EXIST SITE FROM THE STABILIZED CONSTRUCTION ENTRANCE AT THE ASHBURN SENIOR CENTER PROJECT SITE ENTRANCE.

TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH TTC 17.1 DURING THIS PHASE OF CONSTRUCTION, AS PRESCRIBED IN THE GENERAL NOTES, TTC/MOT NOTES, AND THROUGH THE USE OF GROUP II CHANNELIZING DEVICES AND PROPER SIGNAGE. IN ADDITION, ADVANCED WARNING SIGNS SHALL BE PLACED ALONG THE NORTHBOUND AND SOUTHBOUND APPROACH OF MARBLEHEAD DRIVE. WHEN LANE CLOSURES ARE REQUIRED, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH TTC 67.0. SEE SHEET C4.2B FOR PLACEMENT OF GROUP II CHANNELIZING DEVICES AND PROPER SIGNAGE.

PHASE 3:

CONSTRUCTION CONSISTS OF THE INSTALLATION OF TWO CG-12S AND CROSSWALK STRIPING ACROSS MARBLEHEAD DRIVE AT WESTERN GALES BOULEVARD. DURING THIS PHASE, CONSTRUCTION SHALL TAKE PLACE AT THE INTERSECTION OF MARBLEHEAD DRIVE AND WESTERN GALES BOULEVARD.

SEE SHEET C4.2 FOR PLACEMENT OF GROUP II CHANNELIZING DEVICES AND PROPER SIGNAGE. DURING NON-WORKING HOURS, TRAFFIC IS TO BE MAINTAINED IN ACCORDANCE WITH TTC 15.1, AS PRESCRIBED IN THE GENERAL NOTES, TTC/MOT NOTES, AND THROUGH THE USE OF GROUP II CHANNELIZING DEVICES AND PROPER SIGNAGE. WHEN LANE CLOSURES ARE REQUIRED, TRAFFIC SHALL BE MAINTAINED IN ACCORDANCE WITH TTC 67.0 AND FLAGGERS SHALL BE UTILIZED.

BRIDGET PASSARELLI
ADVANCED WORK ZONE TRAFFIC
CONTROL VERIFICATION #020717009

2

TEMPORARY TRAFFIC CONTROL MEASURES TO BE EMPLOYED FOR CROSSWALK INSTALLATION AT WESTERN GALES BOULEVARD AND MARBLEHEAD DRIVE AND WHEN OTHERWISE NECESSARY

Page 6H-14 April 2015

Typical Traffic Control
Stationary Operation on a Shoulder
(Figure TTC-4.1)
NOTES

Standard

1. **For long-term stationary work (more than 3 days) on divided highways having a median wider than 8', sign assemblies on both sides of the roadway shall be required as shown (ROAD WORK AHEAD (W20-1), RIGHT SHOULDER CLOSED AHEAD (W21-5bR), RIGHT SHOULDER CLOSED (W21-5aR)), even though only one shoulder is being closed. For operations less than 3 days in duration, sign assemblies will only be required on the side where the shoulder is being closed and a RIGHT SHOULDER CLOSED (W21-5aR) sign shall be added to that side.**

Guidance

2. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*

Option:

3. The SHOULDER WORK (W21-5) sign on an intersecting roadway may be omitted where drivers emerging from that roadway will encounter another advance warning sign prior to this activity area.
4. For short duration operations of 60 minutes or less, all signs and channelizing devices may be eliminated if a vehicle with activated high-intensity amber rotating, flashing, or oscillating lights is used.

Standard:

5. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or oscillating, lights.**
6. **Taper length (L) and channelizing device spacing shall be at the following:**

Taper Length (L)

Speed Limit (mph)	Lane Width (Feet) 9	10	11	12
25	95	105	115	125
30	135	150	165	180
35	185	205	225	245
40	240	270	295	320
45	405	450	495	540
50	450	500	550	600
55	495	550	605	660
60	540	600	660	720
65	585	650	715	780
70	630	700	770	840
Minimum taper lengths for Limited Access highways shall be 1000 feet.				
Shoulder Taper = ⅓ L Minimum				

Channelizing Device Spacing

Location	Speed Limit (mph) 0 - 35	36 +
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	80'	120'

* Spacing may be increased to this distance, but shall not exceed one access per ¼ mile.

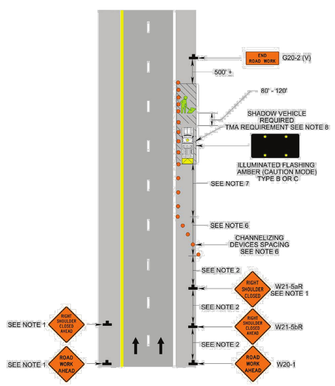
On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

7. **The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
8. **A truck-mounted attenuator (TMA) shall be used on the shadow vehicle on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph for operations with a duration greater than 60 minutes.**
9. **When a side road intersects the highway within the temporary traffic control zone, additional traffic control devices shall be placed as needed.**

1: Revision 1 – 4/1/2015

April 2015 Page 6H-15

Stationary Operation on a Shoulder
(Figure TTC-4.1)



2

COMMONWEALTH OF VIRGINIA
LUKE T. FETCHO
Lic No. 048424
3/5/2019
PROFESSIONAL ENGINEER

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PROJECT CODE:
260-18161

MAINTENANCE OF TRAFFIC PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C4.2
3.5.19
Bid Set

2

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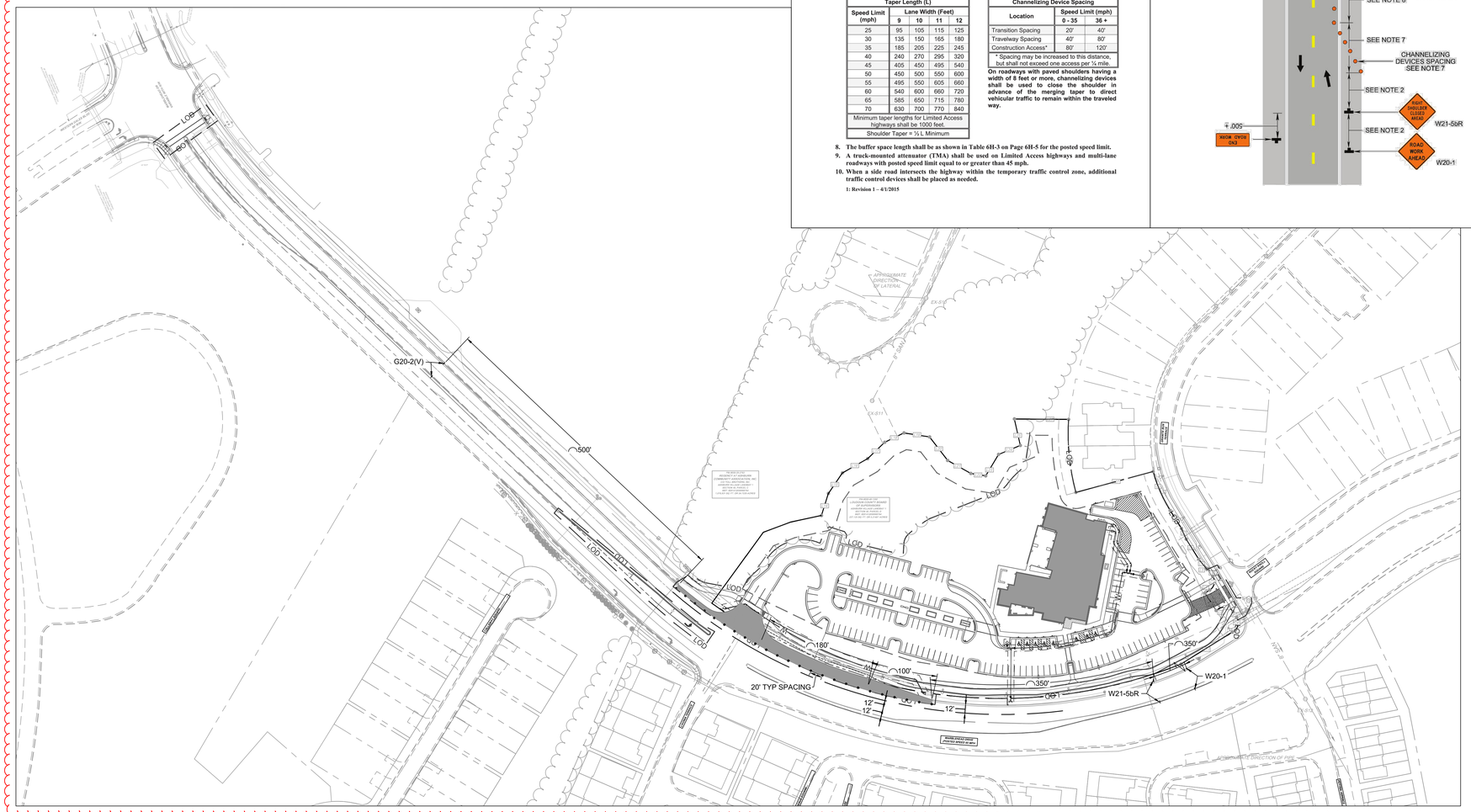
MAINTENANCE OF TRAFFIC PLAN

SCALE 1"=80'

0 80' 160'



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MAINTENANCE OF TRAFFIC PLAN

TEMPORARY TRAFFIC CONTROL MEASURES TO BE EMPLOYED FOR SOUTHBOUND LEFT TURN LANE INSTALLATION WITH ISLAND RECONSTRUCTION AND WHEN OTHERWISE NECESSARY

Typical Traffic Control
Inside Lane Closure Operation on a Four-Lane Roadway
(Figure TTC-17.1)
NOTES

Standard:

1. **On divided highways having a median wider than 8', right and left sign assemblies shall be required.**

Guidance:

2. *Sign spacing should be 1300'-1500' for Limited Access highways. For all other roadways, the sign spacing should be 500'-800' where the posted speed limit is greater than 45 mph, and 350'-500' where the posted speed limit is 45 mph or less.*
3. *Care should be exercised when establishing the limits of the work zone to insure maximum possible sight distance in advance of the transition, based on the posted speed limit and at least equal to or greater than the values in Table 6H-3. For Limited Access highways a minimum of 1000' is desired.*
4. *All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.*

Standard:

5. **Taper length (L) and channelizing device spacing shall be:**

Taper Length (L)				
Speed Limit (mph)	Lane Width (Feet)			
	9	10	11	12
25	95	105	115	125
30	135	150	165	180
35	185	205	225	245
40	240	270	295	320
45	405	450	495	540
50	450	500	550	600
55	495	550	605	660
60	540	600	660	720
65	585	650	715	780
70	630	700	770	840
Minimum taper lengths for Limited Access highways shall be 1000 feet.				
Shoulder Taper = ⅓ L Minimum				

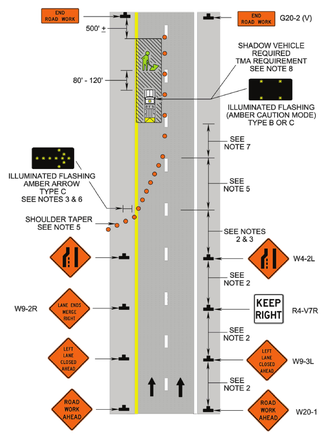
Channelizing Device Spacing		
Location	Speed Limit (mph)	
	0 - 35	36 +
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	80'	120'
* Spacing may be increased to this distance, but shall not exceed one access per ½ mile.		

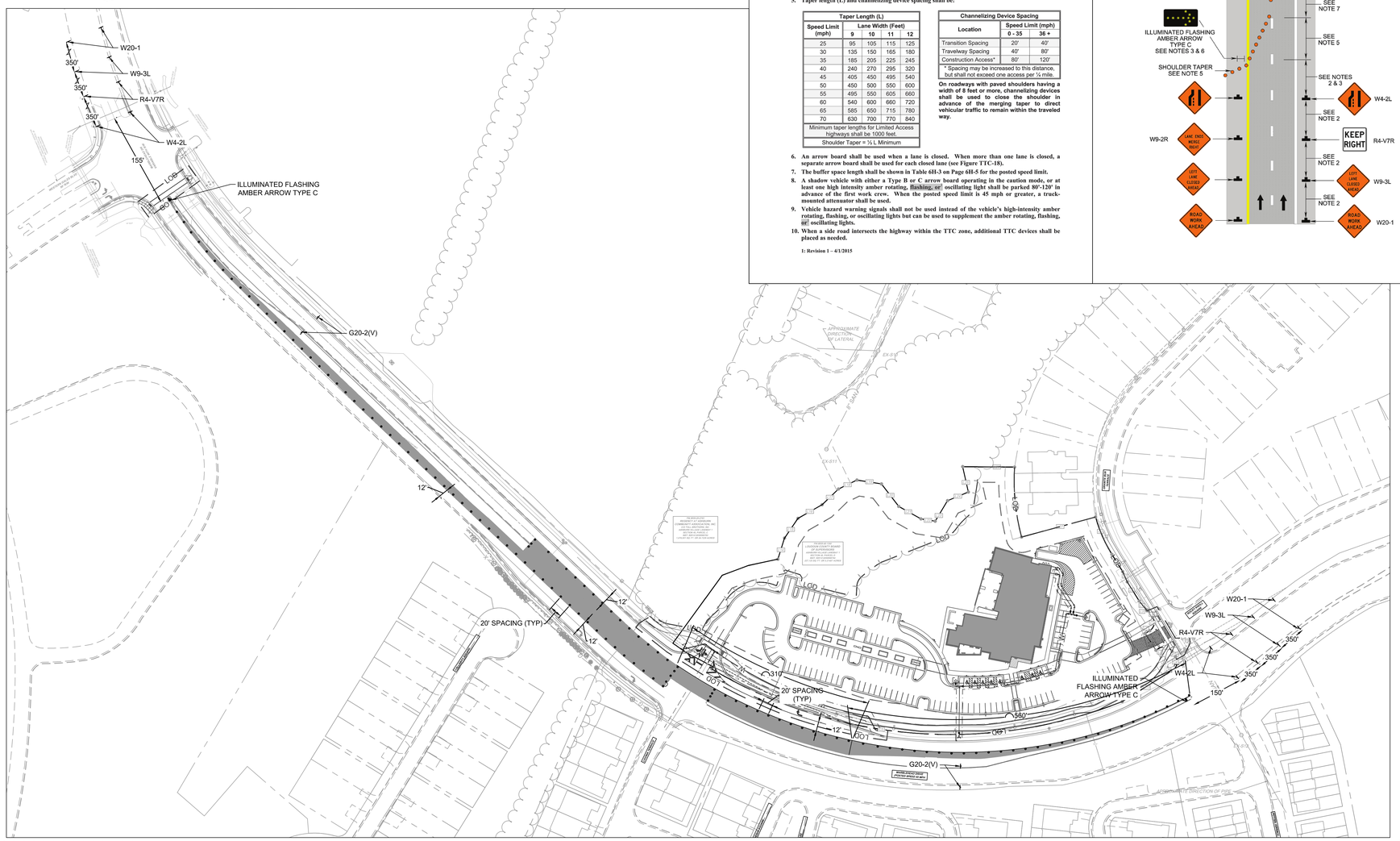
On roadways with paved shoulders having a width of 8 feet or more, channelizing devices shall be used to close the shoulder in advance of the merging taper to direct vehicular traffic to remain within the traveled way.

6. **An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane (see Figure TTC-18).**
7. **The buffer space length shall be shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
8. **A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or oscillating light shall be parked 80'-120' in advance of the first work crew. When the posted speed limit is 45 mph or greater, a truck-mounted attenuator shall be used.**
9. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or oscillating lights but can be used to supplement the amber rotating, flashing, or oscillating lights.**
10. **When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.**

1: Revision 1 – 4/1/2015

Inside Lane Closure Operation on a Four-Lane Roadway
(Figure TTC-17.1)





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PROJECT CODE:
260-18161

MAINTENANCE OF TRAFFIC PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C4.2B
3.5.19
Bid Set
2

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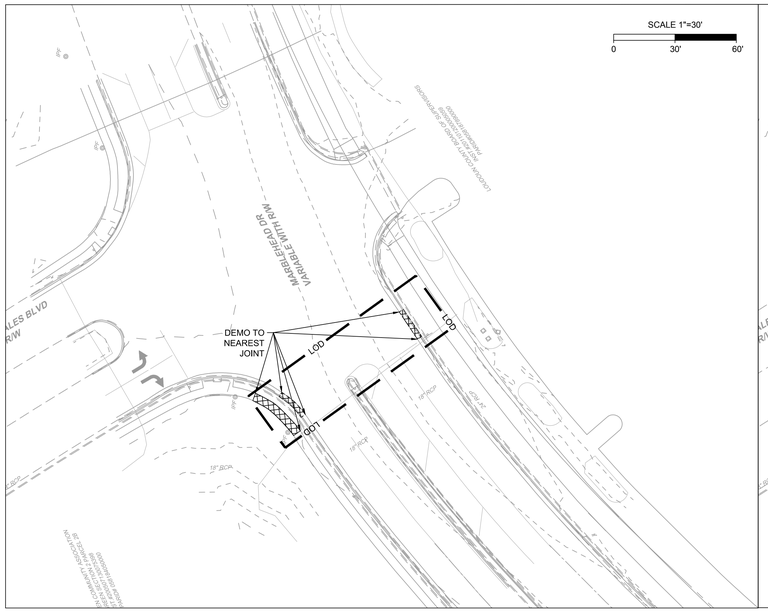
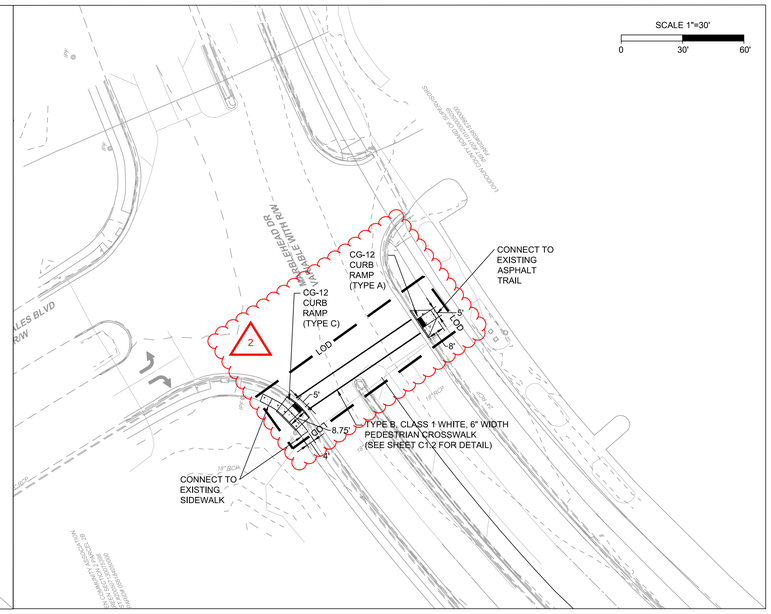


EXISTING CONDITIONS PLAN



SITE LAYOUT PLAN

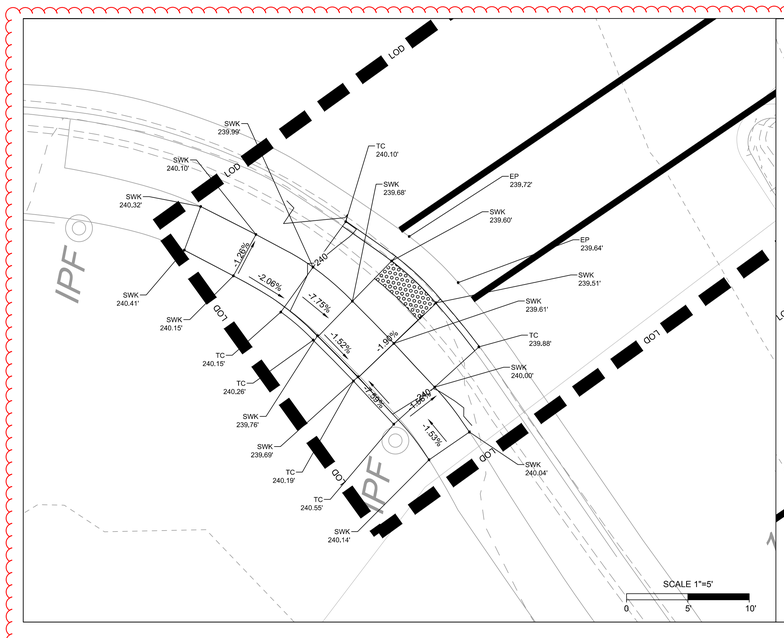
LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- PROPOSED TREE LINE
- BUILDING SETBACK/YARD
- EXISTING CONTOUR
- PROPOSED CONTOUR

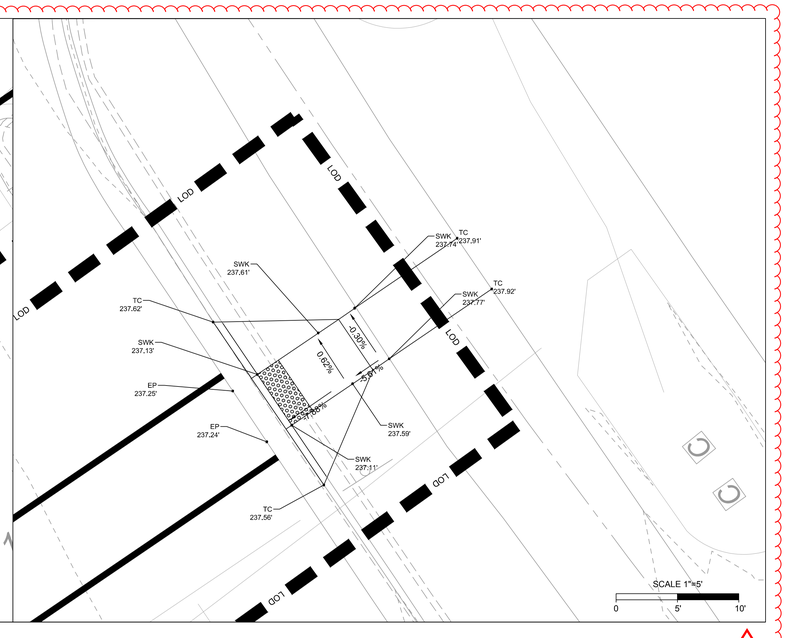
HATCH LEGEND

- SIDEWALK (REF SHEET C1.1 FOR SECTION)
- EXISTING CONCRETE, ASPHALT AND BASE TO BE DEMOLISHED

INSET
FOR OVERALL LOCATION, SEE SHEET C2.0



GRADING PLAN - WESTERN RAMP



GRADING PLAN - EASTERN RAMP

2

COMMONWEALTH OF VIRGINIA
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3/5/2019
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PROJECT CODE:
260-18161

WESTERN GAILES BLVD
PEDESTRIAN CROSSING
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C4.5

3.5.19
Bid Set

2

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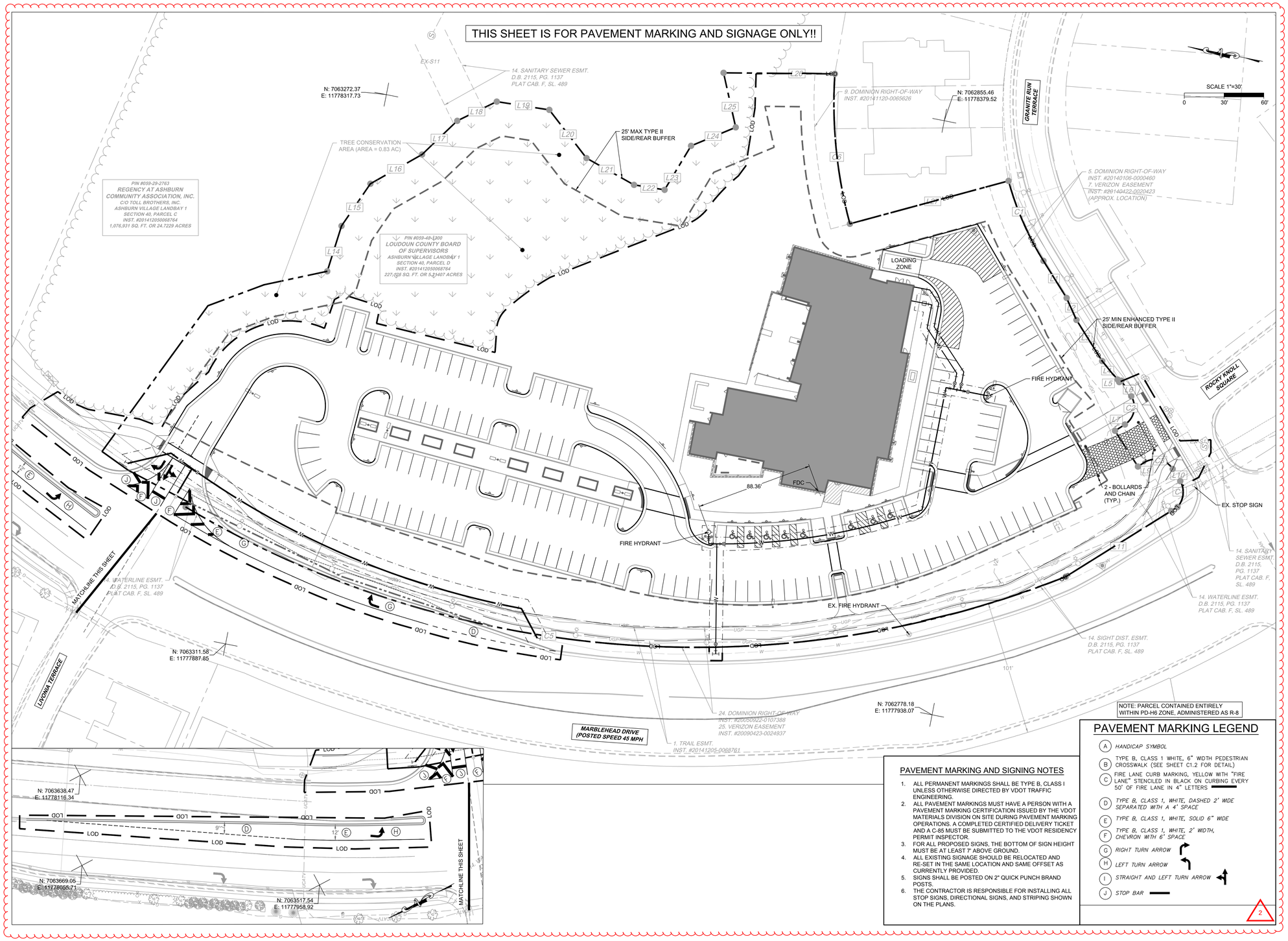
THIS SHEET IS FOR PAVEMENT MARKING AND SIGNAGE ONLY!!



NOTE: PARCEL CONTAINED ENTIRELY WITHIN PD-H6 ZONE, ADMINISTERED AS R-8

PAVEMENT MARKING AND SIGNING NOTES

1. ALL PERMANENT MARKINGS SHALL BE TYPE B, CLASS I UNLESS OTHERWISE DIRECTED BY VDOT TRAFFIC ENGINEERING.
2. ALL PAVEMENT MARKINGS MUST HAVE A PERSON WITH A PAVEMENT MARKING CERTIFICATION ISSUED BY THE VDOT MATERIALS DIVISION ON SITE DURING PAVEMENT MARKING OPERATIONS. A COMPLETED CERTIFIED DELIVERY TICKET AND A C-85 MUST BE SUBMITTED TO THE VDOT RESIDENCY PERMIT INSPECTOR.
3. FOR ALL PROPOSED SIGNS, THE BOTTOM OF SIGN HEIGHT MUST BE AT LEAST 7' ABOVE GROUND.
4. ALL EXISTING SIGNAGE SHOULD BE RELOCATED AND RE-SET IN THE SAME LOCATION AND SAME OFFSET AS CURRENTLY PROVIDED.
5. SIGNS SHALL BE POSTED ON 2" QUICK PUNCH BRAND POSTS.
6. THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING ALL STOP SIGNS, DIRECTIONAL SIGNS, AND STRIPING SHOWN ON THE PLANS.

PAVEMENT MARKING LEGEND

- (A) *HANDICAP SYMBOL*
- (B) TYPE B, CLASS 1 WHITE, 6" WIDTH PEDESTRIAN CROSSWALK (SEE SHEET C1.2 FOR DETAIL)
- (C) FIRE LANE CURB MARKING, YELLOW WITH "FIRE LANE" STENCILED IN BLACK ON CURBING EVERY 50' OF FIRE LANE IN 4" LETTERS
- (D) *TYPE B, CLASS 1, WHITE, DASHED 2' WIDE SEPARATED WITH A 4' SPACE*
- (E) *TYPE B, CLASS 1, WHITE, SOLID 6" WIDE*
- (F) *TYPE B, CLASS 1, WHITE, 2' WIDTH, CHEVRON WITH 6' SPACE*
- (G) *RIGHT TURN ARROW*
- (H) *LEFT TURN ARROW*
- (I) *STRAIGHT AND LEFT TURN ARROW*
- (J) *STOP BAR*

2

COMMONWEALTH OF VIRGINIA
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PROJECT CODE: 260-18161

OFFSITE FIRE LANE & SITE SIGNAGE AND PAVEMENT MARKING PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C4.6
3.5.19
Bid Set
2

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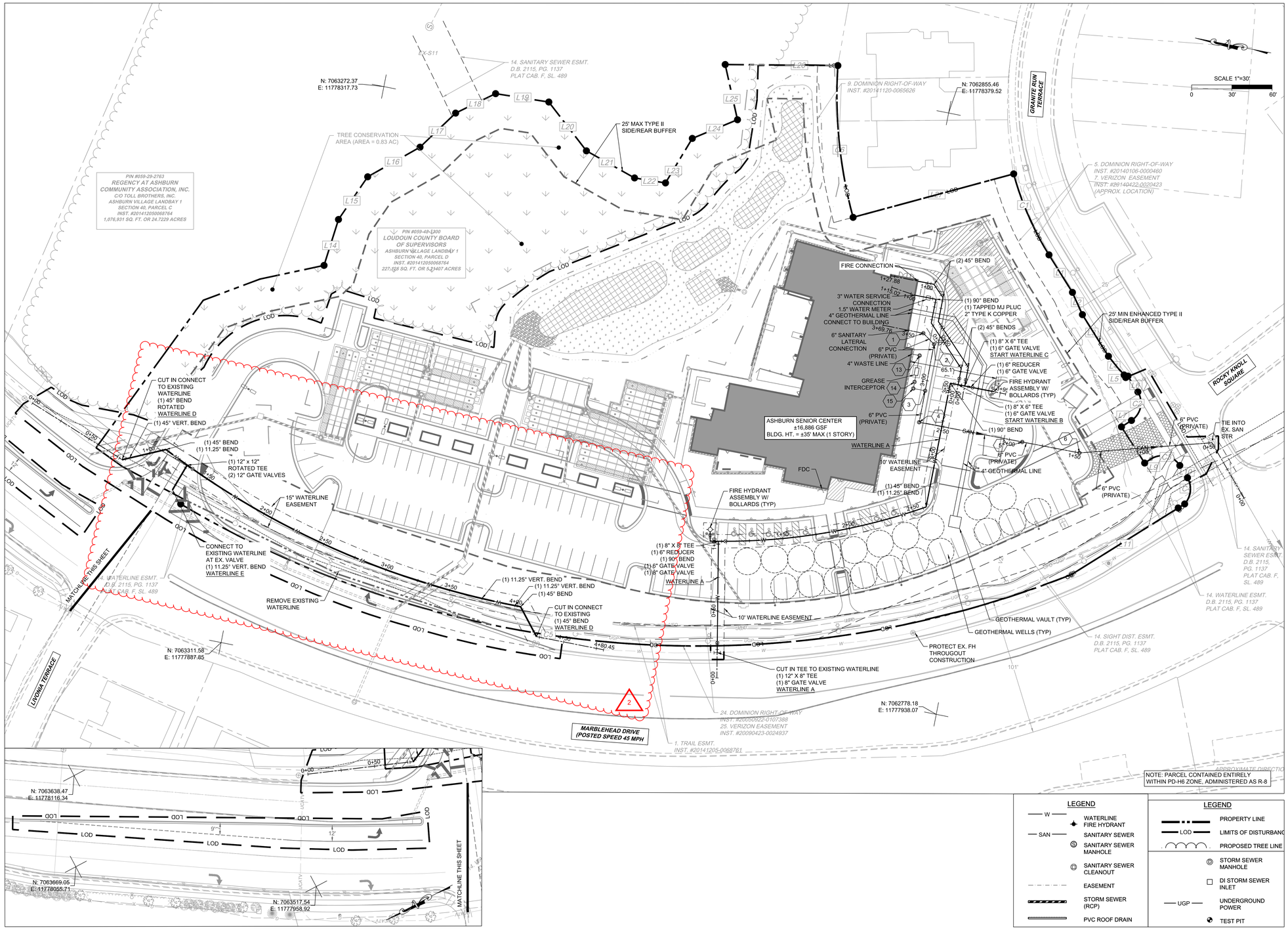

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3/5/2019
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UTILITY PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C5.0
3.5.19
Bid Set
2

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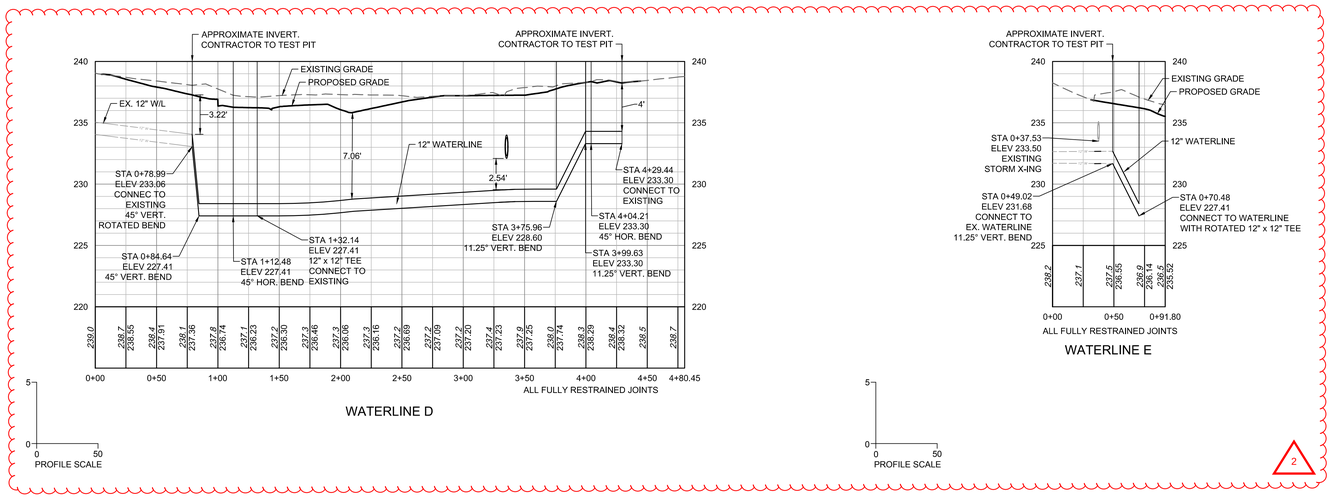

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UTILITY PROFILES
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C5.1A

3.5.19
Bid Set
2

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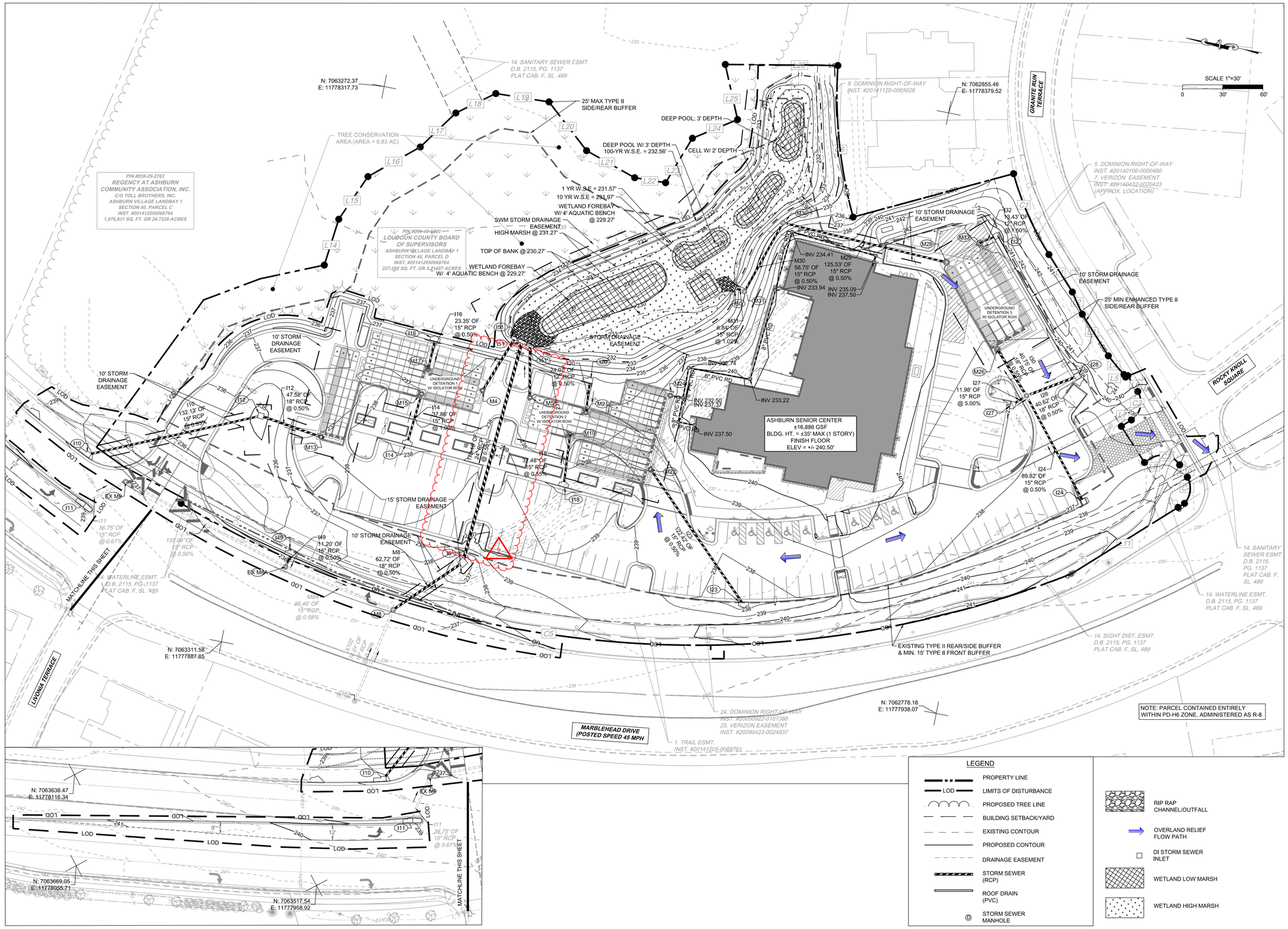

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GRADING PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C6.0
3.5.19
Bid Set
2

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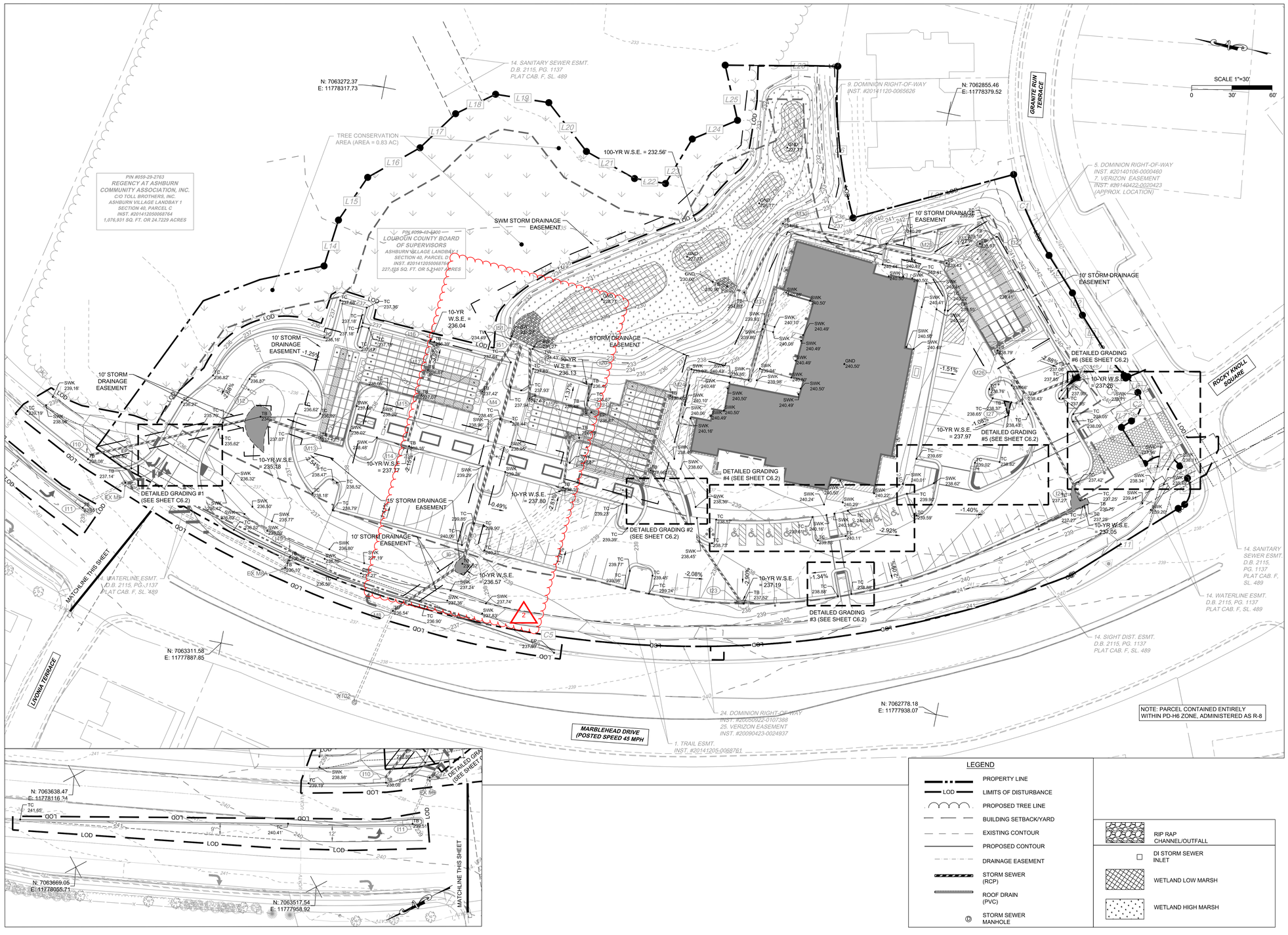

LEGEND

- PROPERTY LINE
- LIMITS OF DISTURBANCE
- PROPOSED TREE LINE
- BUILDING SETBACK/YARD
- EXISTING CONTOUR
- PROPOSED CONTOUR
- DRAINAGE EASEMENT
- STORM SEWER (RCP)
- ROOF DRAIN (PVC)
- STORM SEWER MANHOLE
- RIP RAP CHANNEL/OUTFALL
- DI STORM SEWER INLET
- WETLAND LOW MARSH
- WETLAND HIGH MARSH

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3/5/2019
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PROJECT CODE:
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SPOT GRADING PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C6.1
3.5.19
Bid Set
2

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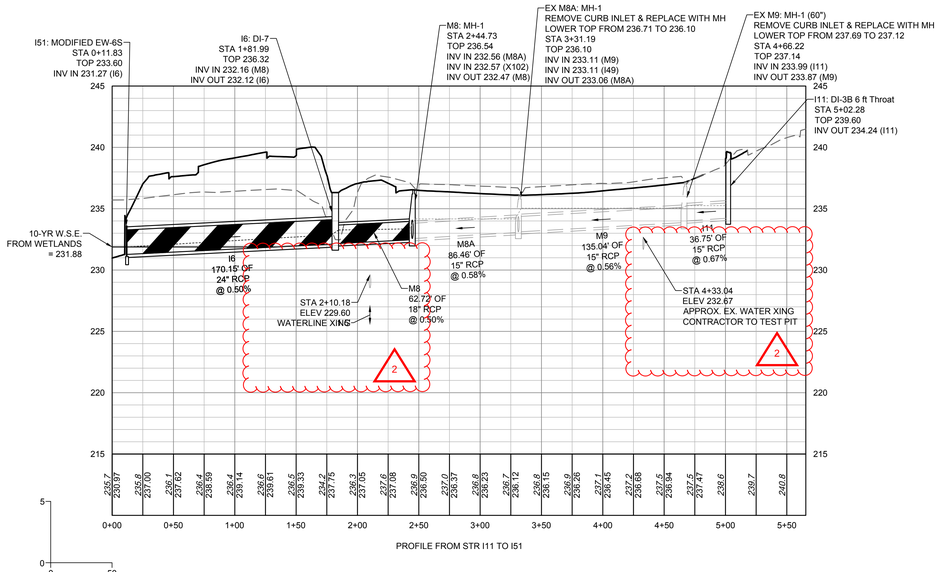

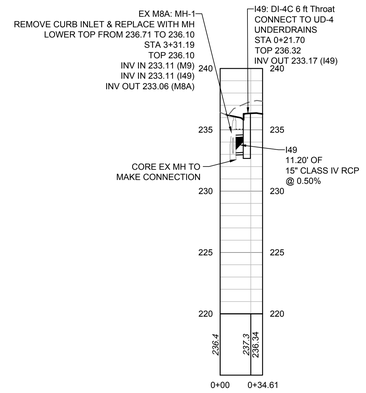

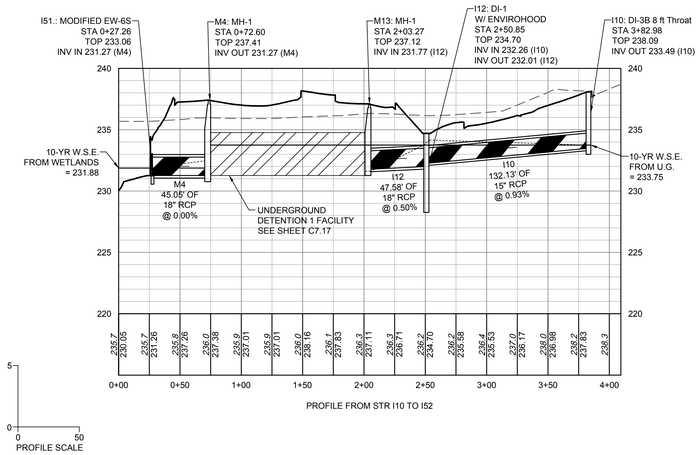

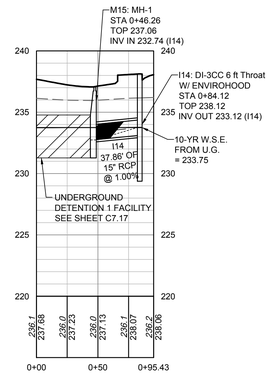

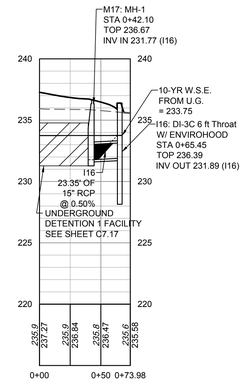

ALL RCP TO BE CLASS III UNLESS OTHERWISE NOTED.

ALL PIPES TO BE O-RING GASKETED.

COMMONWEALTH OF VIRGINIA
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STORM SEWER PROFILES

ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C6.3
3.5.19
Bid Set
2

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2

Old Dominion
NATURAL RESOURCES, LLC

PO Box 604
Stephens City, Virginia 22655
E: odnr@comcast.net | C: 540-974-0343

Date: April 3, 2019

To: Timmons Group
Patrick Van Nuys, Project Engineer I
20110 Ashbrook Place, Suite 100
Ashburn, VA 20147

From: Old Dominion Natural Resources, LLC
PO Box 604
Stephens City, Virginia 22655

Subject: Potomac Watershed – Nutrient Credit Availability

Project Reference: Ashburn Seniot Center, Loudoun County, VA - 0008 Potomac HUC

This letter is to confirm the availability of 0.35 lbs/yr nutrient credits ("Nutrient Credits") from Old Dominion Natural Resources, LLC's upcoming [pending or approved] Potomac nutrient bank facility for use by permit applicants within the Potomac watershed, to include the subject property HUC#020700008, to compensate for nutrient loadings in excess of state or local regulations, as per Virginia Code § 62.1-44.15:35 and § 62.1-44.19:14 and Virginia Administrative Code 9 VAC 25-820-10 et seq. These Nutrient Credits are generated and managed under the terms of the Banking Instruments known as the Potomac 019 -Windright Run Nutrient Facility Reduction Implementation Plan ("NIRP").

This availability is good for 90 days as of the date of this correspondence.
Please feel free to contact me if you have any questions.

Sincerely,

Jeremy N. Tweedie
OLD DOMINION NATURAL RESOURCES, LLC
C:540-974-0343 | E: odnr@comcast.net

www.ODNRVA.com

Site Results (Water Quality Compliance)

Area Checks	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	AREA CHECK
FOREST/OPEN SPACE (ac)	0.00	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER (ac)	2.69	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	2.69	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	1.91	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	1.91	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 10,802

Runoff Reduction Volume and TP By Drainage Area

	D.A. A	D.A. B	D.A. C	D.A. D	D.A. E	TOTAL
RUNOFF REDUCTION VOLUME ACHIEVED (ft^3)	0	0	0	0	0	0
TP LOAD AVAILABLE FOR REMOVAL (lb/yr)	6.79	0.00	0.00	0.00	0.00	6.79
TP LOAD REDUCTION ACHIEVED (lb/yr)	4.55	0.00	0.00	0.00	0.00	4.55
TP LOAD REMAINING (lb/yr)	2.24	0.00	0.00	0.00	0.00	2.24
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	12.12	0.00	0.00	0.00	0.00	12.12

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	6.79
TP LOAD REDUCTION REQUIRED (lb/yr)	4.90
TP LOAD REDUCTION ACHIEVED (lb/yr)	4.55
TP LOAD REMAINING (lb/yr):	2.24
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.35

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	48.55
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	12.12
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	36.43

Runoff Volume and Curve Number Calculations

Enter design storm rainfall depths (in):

1-year storm	2-year storm	10-year storm
2.53	3.05	4.61

Use NOAA Atlas 14 (http://hdsc.nws.noaa.gov/hdsc/pfds/)

***Notes (see below):**

[1] The curve numbers and runoff volumes computed in this spreadsheet for each drainage area are limited in their applicablity for determining and demonstrating compliance with water quantity requirements. See VRRM User's Guide and Documentation for additional information.

[2] Runoff Volume (RV) for pre- and post-development drainage areas must be in volumetric units (e.g., acre-feet or cubic feet) when using the Energy Balance Equation. Runoff measured in watershed-inches and shown in the spreadsheet as RV(watershed-inch) can only be used in the Energy Balance Equation when the pre- and post-development drainage areas are equal. Otherwise RV(watershed-inch) must be multiplied by the drainage area.

[3] Adjusted CNs are based on runoff reduction volumes as calculated in D.A. tabs. An alternative CN adjustment calculation for Vegetated Roofs is included in BMP specification No. 5.

Drainage Area Curve Numbers and Runoff Depths*

Curve numbers (CN, CNadj) and runoff depths ($RV_{Developed}$) are computed with and without reduction practices.

Drainage Area A		A Soils	B Soils	C Soils	D Soils
Forest/Open Space -- undisturbed, protected forest/open space or reforested land	Area (acres)	0.00	0.00	0.00	0.00
	CN	30	55	70	77
Managed Turf -- disturbed, graded for yards or other turf to be mowed/managed	Area (acres)	0.00	0.00	1.91	0.00
	CN	39	61	74	80
Impervious Cover	Area (acres)	0.00	0.00	2.69	0.00
	CN	98	98	98	98

Total Area (acres):	4.60
Runoff Reduction Volume (ft^3):	0

$CN_{(D.A. A)}$ **88**

	1-year storm	2-year storm	10-year storm
$RV_{Developed}$ *(watershed-inch)* with no Runoff Reduction*	1.41	1.86	3.30
$RV_{Developed}$ *(watershed-inch)* with Runoff Reduction*	1.41	1.86	3.30
Adjusted CN*	88	88	88

**See Notes above*

COMMONWEALTH OF VIRGINIA
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3/5/2019
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DRAINAGE AREA COMPUTATIONS
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C7.2
3.5.19
Bid Set
2

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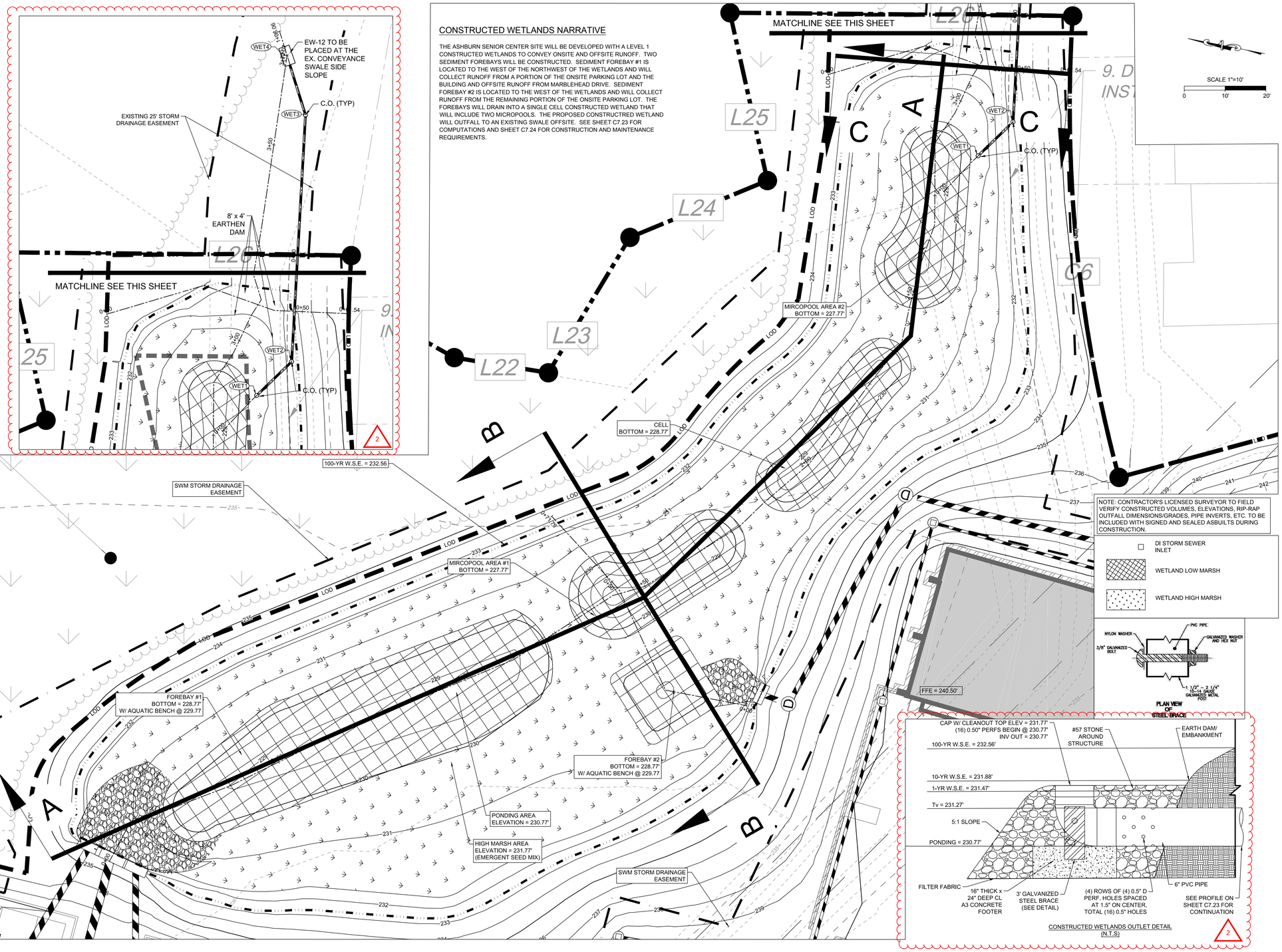
CONSTRUCTED WETLANDS NARRATIVE

THE ASHBURN SENIOR CENTER SITE WILL BE DEVELOPED WITH A LEVEL 1 CONSTRUCTED WETLANDS TO CONVEY ONSITE AND OFFSITE RUNOFF. TWO SEDIMENT FOREBAYS WILL BE CONSTRUCTED. SEDIMENT FOREBAY #1 IS LOCATED TO THE WEST OF THE NORTHWEST OF THE WETLANDS AND WILL COLLECT RUNOFF FROM A PORTION OF THE ONSITE PARKING LOT AND THE BUILDING AND OFFSITE RUNOFF FROM MARBLEHEAD DRIVE. SEDIMENT FOREBAY #2 IS LOCATED TO THE WEST OF THE WETLANDS AND WILL COLLECT RUNOFF FROM THE REMAINING PORTION OF THE ONSITE PARKING LOT. THE FOREBAYS WILL DRAIN INTO A SINGLE CELL CONSTRUCTED WETLAND THAT WILL INCLUDE TWO MICROPOOLS. THE PROPOSED CONSTRUCTRED WETLAND WILL OUTFALL TO AN EXISTING SWALE OFFSITE. SEE SHEET C7.23 FOR COMPUTATIONS AND SHEET C7.24 FOR CONSTRUCTION AND MAINTENANCE REQUIREMENTS.



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CONSTRUCTED WETLANDS PLAN
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C7.22

3.5.19
Bid Set

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Total Wetland Sizing

Rv	0.65	From VRRM
Total Area	200,334.60	Site Area
Tv = Rv*A/12	10,800	CF

Contribuiting Impervious Area	3.64	AC
Forebay Size Required	1320	CF

Forebay #1 Data:

Elevation	Area	Ave. Area	Volume	Accum. Vol	Accum. Vol.
(ft.)	(sq. ft.)	(sq. ft.)	(cu. ft.)	(cu. ft.)	(cu. yds.)
228.77	538.54	0	0	0	0
229.77	1073.94	806	806	806	30
229.77	1894.98	1484	0	806	30
230.77	2576.88	2236	2236	**3042**	113

Contribuiting Impervious Area	0.69	AC
Forebay Size Required	252	CF

Forebay #2 Data:

Elevation	Area	Ave. Area	Volume	Accum. Vol	Accum. Vol.
(ft.)	(sq. ft.)	(sq. ft.)	(cu. ft.)	(cu. ft.)	(cu. yds.)
228.77	4.92	0	0	0	0
229.77	67.59	36	36	36	1
229.77	204.84	136	0	36	1
230.77	414.09	309	309	**346**	13

Cumulative Forebay Volume:	**3388 CF**
15% of Total Tv:	**1620 CF**

Micropool #1 Data:

Elevation	Area	Ave. Area	Volume	Accum. Vol	Accum. Vol.
(ft.)	(sq. ft.)	(sq. ft.)	(cu. ft.)	(cu. ft.)	(cu. yds.)
227.77	13.14	0	0	0	0
228.77	185.12	99	99	99	4
229.77	448.52	317	317	416	15
230.77	768.53	609	609	**1024**	38

Micropool #2 Data:

Elevation	Area	Ave. Area	Volume	Accum. Vol	Accum. Vol.
(ft.)	(sq. ft.)	(sq. ft.)	(cu. ft.)	(cu. ft.)	(cu. yds.)
227.77	13.14	0	0	0	0
228.77	185.12	99	99	99	4
229.77	448.52	317	317	416	15
230.77	768.53	609	609	**1024**	38

CUMULATIVE MICROPOOL VOLUME: **2049 CF**

MICROPOOL DEPTH: **3 FT** > 22"
*Required per Hunt's Eqn

Tv= 10,802 CF
25% OF Tv = 2,701 CF

CUMULATIVE MICROPOOL AND FOREBAY VOLUME:
5,437 CF > 25% OF Tv

TOTAL WETLANDS AREA:	14,871	SF	
PERMENANT PONDING AREA:	4,528	SF	
HIGH MARSH AREA:	10,343	=	**69.55%**
			OF PERM PONDING AREA

Cell Area

Elevation	Area	Ave. Area	Volume	Accum. Vol	Accum. Vol.
(ft.)	(sq. ft.)	(sq. ft.)	(cu. ft.)	(cu. ft.)	(cu. yds.)
228.77	94.86	0	0	0	0
229.77	368.27	232	232	232	9
230.77	698.3	533	533	**765**	28

High Marsh Volume

Elevation	Area	Ave. Area	Volume	Accum. Vol	Accum. Vol.
(ft.)	(sq. ft.)	(sq. ft.)	(cu. ft.)	(cu. ft.)	(cu. yds.)
230.77	4528	0	0	0	0
231.27	14,871	9700	4850	**4850**	180

Total Weltands Volume:

Forebay 1	3,042 CF
Forebay 2	346 CF
Mircropool 1	1,024 CF
Mircopool 2	1,024 CF
Cell	765 CF
High Marsh	4,850 CF
	11,051 CF

Tv Required:	10,802 CF
Tv Provided:	11,051 CF

Contributing Drainage Area

Inlet #	Area	C	I (10YR)	Q	% of volume
I51	2.478	0.9	6.77	15.09845	39.40%
I52 (UG1)	1.41	0.9	6.77	8.59113	22.42%
I53 (UG2)	1.318	0.9	6.77	8.030574	20.95%
I50 (UG3)	1.084	0.9	6.77	6.604812	17.23%

Surface Area of Wetlands	13,591	FT
Total Contributing Area	273,992	FT
% of Wetlands to Contributing Area	4.96%	

Mean Wetland Depth 2 FT

Orifice Size Calculation (method 2, average head)

H_{avg} = (231.27-230.77)/2
H_{avg} = 0.25 ft

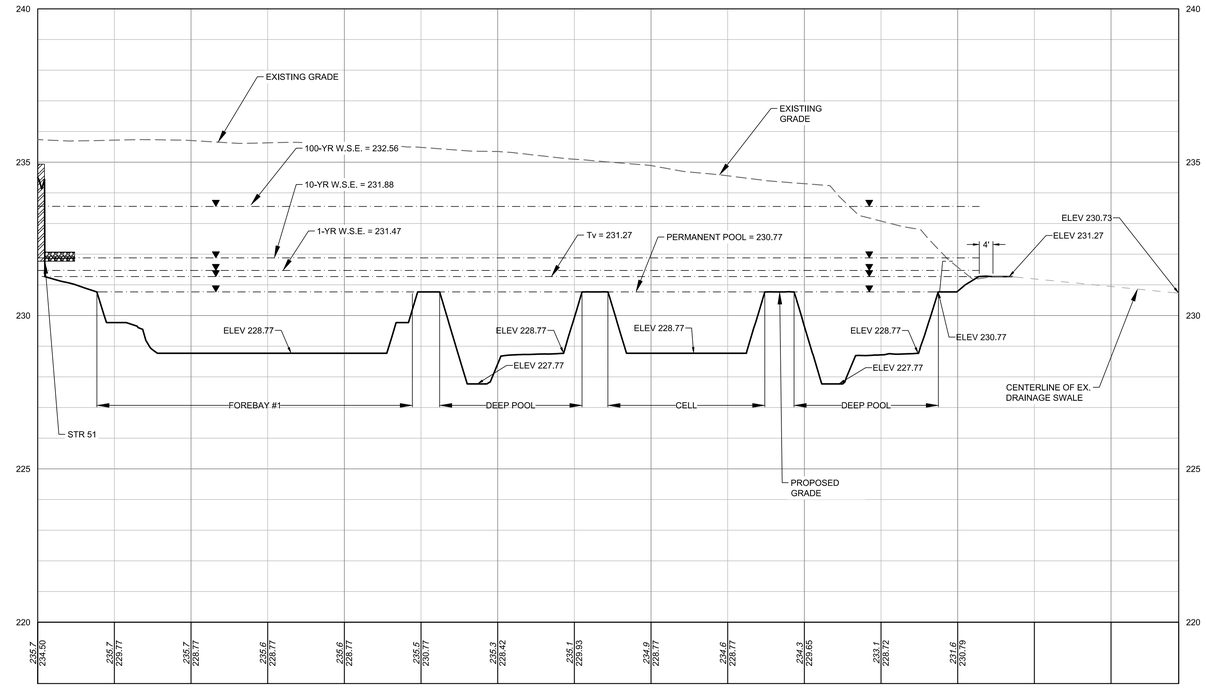
Q_{avg} = (BMP Volume / 24 hr. drawdown) = 4850 c.f. / (25.65hr. * 3600 sec/hr)
Q_{avg} = 0.053 cfs

Q_{avg} = .6 * (A) * sqrt(2*g*Havg)
A = 0.053 / (0.6 * sqrt(64.4 * 0.25))
A = .02 sf
Diameter = sqrt (A / pi)
D = 2 in

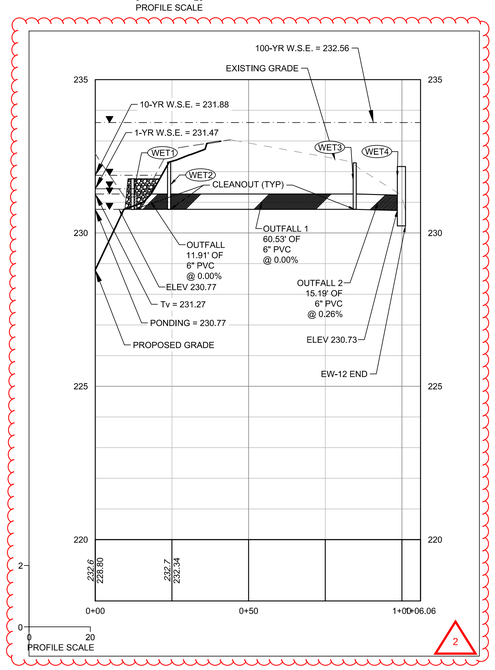
2

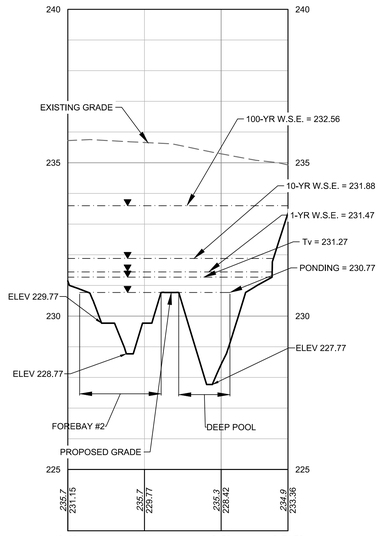
TOTAL WETLANDS VOLUME

Elevation	Area	Ave. Area	Volume	Accum. Vol	Accum. Vol.
(ft.)	(sq. ft.)	(sq. ft.)	(cu. ft.)	(cu. ft.)	(cu. yds.)
226.27	0	0	0	0	0
227.27	26.28	13	13	13	0
228.27	1008.56	517	517	531	20
229.27	2406.84	1708	1708	2238	83
230.27	5226.33	3817	3817	6055	224
231.27	14,871	10049	10049	16104	596

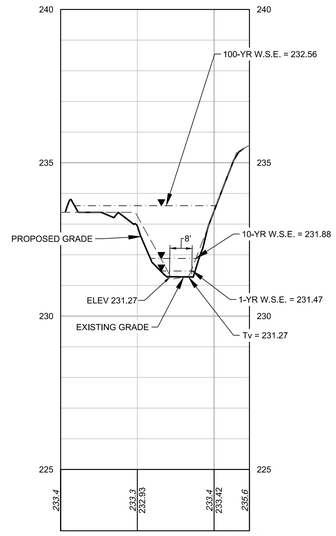


CROSS SECTION A





CROSS SECTION B



CROSS SECTION C

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PROJECT CODE:
260-18161

CONSTRUCTED WETLANDS
PROFILE AND DETAILS
ASHBURN SENIOR CENTER
LOUDOUN COUNTY, VIRGINIA
BROAD RUN ELECTION DISTRICT

DATE	DESCRIPTION
4/9/19	ADD #2

C7.23
3.5.19
Bid Set
2

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7.4. Cold Climate and Winter Performance

Wetland performance decreases when snowmelt runoff delivers high pollutant loads. Shallow constructed wetlands can freeze in the winter, which allows runoff to flow over the ice layer and exit without treatment. Inlet and outlet structures close to the surface may also freeze, further diminishing wetland performance. Salt loadings are higher in cold climates due to winter road maintenance. High chloride inputs have a detrimental effect on native wetland vegetation and can shift the wetland plant composition to more salt-tolerant but less desirable species, such as cattails (Wright *et al*., 2006). Designers should choose salt-tolerant species when crafting their planting plans and consider specifying reduced salt applications in the contributing drainage area, when they actually have control of this. The following design adjustments are recommended for stormwater wetlands installed in higher elevations and colder climates.

- Treat larger runoff volumes in the spring by adopting seasonal operation of the permanent pool (see MSSC, 2005).
- Plant salt-tolerant wetland vegetation.
- Do not submerge inlet pipes and provide a minimum 1% pipe slope to discourage ice formation.
- Locate low flow orifices so they withdraw at least 6 inches below the typical ice layer.
- Angle trash racks to prevent ice formation.
- Over-size the riser and weir structures to avoid ice formation and freezing pipes.
- If road sanding is prevalent in the contributing drainage area, increase the forebay size to accommodate additional sediment loading.

7.5. Linear Highway Sites

Wet swales, linear wetland cells and regenerative conveyance systems are particularly well suited and considered preferred practices to treat runoff within open channels located in the highway right of way.

SECTION 8: CONSTRUCTION

The construction sequence for stormwater wetlands depends on site conditions, design complexity, and the size and configuration of the proposed facility. The following two-stage construction sequence is recommended for installing an on-line wetland facility and establishing vigorous plant cover.

8.1. Stage 1 Construction Sequence: Wetland Facility Construction

Step 1: Stabilize Drainage Area. Stormwater wetlands should only be constructed after the contributing drainage area to the wetland is completely stabilized. If the proposed wetland site will be used as a sediment trap or basin during the construction phase, the construction notes should clearly indicate that the facility will be de-watered, dredged and re-graded to design dimensions after the original site construction is complete.

Step 2: Assemble Construction Materials on-site, make sure they meet design specifications, and prepare any staging areas.

Step 3: Clear and Strip the project area to the desired sub-grade.

Step 4: Install Erosion and Sediment (E&S) Controls prior to construction, including temporary dewatering devices, sediment basins, and stormwater diversion practices. All areas surrounding the wetland that are graded or denuded during construction of the wetland are to be planted with turf grass, native plant materials or other approved methods of soil stabilization. Grass sod is preferred over seed to reduce seed colonization of the wetland. During construction the wetland must be separated from the contributing drainage area so that no sediment flows into the wetland areas. In some cases, a phased or staged E&S Control plan may be necessary to divert flow around the stormwater wetland area until installation and stabilization are complete.

Step 5: Excavate the Core Trench for the Embankment and Install the Spillway Pipe.

Step 6: Install the Riser or Outflow Structure and ensure that the top invert of the overflow weir is constructed level and at the proper design elevation (flashboard risers are strongly recommended by Hunt et al, 2007).

Step 7: Construct the Embankment and any Internal Berms in 8 to 12-inch lifts and compacted with appropriate equipment.

Step 8: Excavate/Grade until the appropriate elevation and desired contours are achieved for the bottom and side slopes of the wetland. This is normally done by "roughing up" the interim elevations with a skid loader or other similar equipment to achieve the desired topography across the wetland. Spot surveys should be made to ensure that the interim elevations are 3 to 6 inches below the final elevations for the wetland.

Step 9: Install Micro-Topographic Features and Soil Amendments within wetland area. Since most stormwater wetlands are excavated to deep sub-soils, they often lack the nutrients and organic matter needed to support vigorous growth of wetland plants. It is therefore essential to add sand, compost, topsoil or wetland mulch to all depth zones in the wetland. The importance of soil amendments in excavated wetlands cannot be over-emphasized; poor survival and future wetland coverage are likely if soil amendments are not added (Bowers, 1992). The planting soil should be a high organic content loam or sandy loam, placed by mechanical methods, and spread by hand. Planting soil depth of should be at least 4 inches for shallow wetlands. No machinery should be allowed to traverse over the planting soil during or after construction. Planting soil should be tamped as directed in the design specifications, but it should not be overly compacted. After the planting soil is placed, it should be saturated and allowed to settle for at least one week prior to installation of plant materials.

Step 10: Construct the Emergency Spillway in cut or structurally stabilized soils.

Step 11: Install Outlet Pipes, including the downstream rip-rap apron protection.

Step 12: Stabilize Exposed Soils with temporary seed mixtures appropriate for a wetland environment. All wetland features above the normal pool elevation should be temporarily stabilized by hydro-seeding or seeding over straw.

8.2. Stage 2 Construction Sequence: Establishing the Wetland Vegetation

Step 13: Finalize the Wetland Landscaping Plan. At this stage the engineer, landscape architect, and wetland expert work jointly to refine the initial wetland landscaping plan *after* the stormwater wetland has been constructed. Several weeks of standing time is needed so that the designer can more precisely predict the following two things:

- Where the inundation zones are located in and around the wetland; and
- Whether the final grade and wetland microtopography will persist over time.

This allows the designer to select appropriate species and additional soil amendments, based on field confirmation of soils properties and the actual depths and inundation frequencies occurring within the wetland.

Step 14: Open Up the Wetland Connection. Once the final grades are attained, the pond and/or contributing drainage area connection should be opened to allow the wetland cell to fill up to the normal pool elevation. Gradually inundate the wetland erosion of unplanted features. Inundation must occur in stages so that deep pool and high marsh plant materials can be placed effectively and safely. Wetland planting areas should be at least partially inundated during planting to promote plant survivability.

Step 15: Measure and Stake Planting Depths at the onset of the planting season. Depths in the wetland should be measured to the nearest inch to confirm the original planting depths of the planting zone. At this time, it may be necessary to modify the plan to reflect altered depths or a change in the availability of wetland plant stock. Surveyed planting zones should be marked on the as-built or design plan, and their locations should also be identified in the field, using stakes or flags.

Step 16: Propagate the Stormwater Wetland. Three techniques are used in combination to propagate the emergent community over the wetland bed:

1. *Initial Planting of Container-Grown Wetland Plant Stock.* The transplanting window extends from early April to mid-June. Planting after these dates is quite chancy, since emergent wetland plants need a full growing season to build the root reserves needed to get through the winter. If at all possible, the plants should be ordered at least 6 months in advance to ensure the availability and on-time delivery of desired species.

2. *Broadcasting Wetland Seed Mixes*. The higher wetland elevations should be established by broadcasting wetland seed mixes to establish diverse emergent wetlands. Seeding of switchgrass or wetland seed mixes as a ground cover is recommended for all zones above 3 inches below the normal pool elevation. Hand broadcasting or hydroseeding can be used to spread seed, depending on the size of the wetland cell.

3. *Allowing "Volunteer Wetland Plants to Establish on Their Own*. The remaining areas of the stormwater wetland will eventually (within 3 to 5 years) be colonized by volunteer species from upstream or the forest buffer.

Step 17: Install Goose Protection to Protect Newly Planted or Newly Growing Vegetation. This is particularly critical for newly established emergents and herbacacious plants, as predation by Canada geese can quickly dessimate wetland vegetation. Goose protection can consist of netting, webbing, or string installed in a criss-cross pattern over the surface area of the wetland, above the level of the emergent plants.

Step 17: Plant the Wetland Fringe and Buffer Area. This zone generally extends from 1 to 3 feet above the normal pool elevation (from the shoreline fringe to about half of the maximum water surface elevation for the 2-year storm). Consequently, plants in this zone are infrequently inundated (5 to 10 times per year), and must be able to tolerate both wet and dry periods.

8.3. Construction Inspection

Construction inspections are critical to ensure that stormwater wetlands are properly constructed and established. Multiple site visits and inspections are recommended during the following stages of the wetland construction process:

- Pre-construction meeting
- Initial site preparation (including installation of project E&S controls)
- Excavation/Grading (e.g., interim/final elevations)
- Wetland installation (e.g., microtopography, soil amendments and staking of planting zones)
- Planting Phase (with an experienced landscape architect or wetland expert)
- Final Inspection (develop a punch list for facility acceptance)

A construction phase inspection checklist for Constructed Wetlands can be accessed at the CWP website at:

http://www.cwp.org/Resource_Library/Controlling_Runoff_and_Discharges/sm.htm
(scroll to Tool6: Plan Review, BMP Construction, and Maintenance Checklists)

SECTION 9: MAINTENANCE

9.1. Maintenance Agreements

Section 4 VAC 50-60-124 of the regulations specifies the circumstances under which a maintenance agreement must be executed between the owner and the local program. This section sets forth inspection requirements, compliance procedures if maintenance is neglected, notification of the local program upon transfer of ownership, and right-of-entry for local program personnel.

It is also recommended that the maintenance agreement include a list of qualified contractors that can perform inspection or maintenance services, as well as contact information for owners to get

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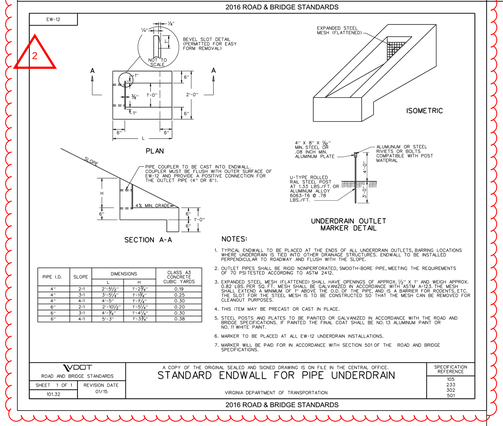

PIPE I.D.	SLOPE	DIMENSIONS L	H	CLASS A3 CONCRETE CUBIC YARDS
4"	2:1	2'-00"	1'-00"	0.10
4"	3:1	2'-00"	1'-00"	0.10
4"	4:1	2'-00"	1'-00"	0.10
6"	2:1	2'-00"	1'-00"	0.20
6"	3:1	4'-00"	1'-00"	0.30
6"	4:1	5'-7"	1'-00"	0.38

NOTES:

1. TYPICAL ENDWALL TO BE PLACED AT THE ENDS OF ALL UNDERDRAIN OUTLETS.BARRING LOCATIONS WHERE UNDERDRAIN IS TIED INTO OTHER DRAINAGE STRUCTURES. ENDWALL TO BE INSTALLED PERPENDICULAR TO ROADWAY AND FLUSH WITH THE SLOPE.
2. OUTLET PIPES SHALL BE RIGID NONPERFORATED, SMOOTH-BORE PIPE,MEETING THE REQUIREMENTS OF 70 PSI TESTED ACCORDING TO ASTM 2412.
3. EXPANDED STEEL MESH (FLATTENED) SHALL HAVE OPENINGS OF APPROX.1½" X 7" AND MESH APPROX. 1/8" THICK. THE MESH SHALL BE FIRMLY ATTACHED TO THE ENDWALL. THE MESH ON THE TOP OF THE WALL SHALL EXTEND A MINIMUM OF 1" ABOVE THE OUTS OF THE PIPE AND IS A BARRIER FOR RODENTS,ETC. ON THE SIDES OF THE STEEL MESH IS TO BE CONSTRUCTED SO THAT THE MESH CAN BE REMOVED FOR THE ADDITION OF FILL.
4. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
5. STEEL POSTS AND BOLTS TO BE PAINTED OR GALVANIZED IN ACCORDANCE WITH THE ROAD AND BRIDGE SPECIFICATIONS. IF PAINTED THE FINAL COAT SHALL BE NO.13 ALUMINUM PAINT OR NO.11 WHITE PAINT.
6. MARKER TO BE PLACED AT ALL EW-12 UNDERDRAIN INSTALLATIONS.
7. MARKER WILL BE PAID FOR IN ACCORDANCE WITH SECTION 501 OF THE ROAD AND BRIDGE SPECIFICATIONS.

VDOT ROAD AND BRIDGE STANDARDS
A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE
STANDARD ENDWALL FOR PIPE UNDERDRAIN
VIRGINIA DEPARTMENT OF TRANSPORTATION
SHEET 1 OF 1 | REVISION DATE 01/15 | 101.32
SPECIFICATION REFERENCE 232 233 302 501

2016 ROAD & BRIDGE STANDARDS

local or state assistance to solve common nuisance problems, such as mosquito control, geese, invasive plants, vegetative management, and beaver removal. The CWP *Pond and Wetland Maintenance Guidebook* (2004) provides some excellent templates of how to respond to these problems.

9.2. First Year Maintenance Operations

Successful establishment of constructed wetland areas requires that the following tasks be undertaken in the first two years:

Initial Inspections. During the first 6 months following construction, the site should be inspected at least twice after storm events that exceed 1/2 inch of rainfall.

Spot Reseeding. Inspectors should look for bare or eroding areas in the contributing drainage area or around the wetland buffer, and make sure they are immediately stabilized with grass cover.

Watering. Trees planted in the buffer and on wetland islands and peninsulas need watering during the first growing season. In general, consider watering every three days for first month, and then weekly during the first growing season (April - October), depending on rainfall.

Reinforcement Plantings. Regardless of the care taken during the initial planting of the wetland and buffer, it is probable that some areas will remain unvegetated and some species will not survive. Poor survival can result from many unforeseen factors, such as predation, poor quality plant stock, water level changes, drought. Thus, it is advisable to budget for an additional round of reinforcement planting after one or two growing seasons. Construction contracts should include a care and replacement warranty extending at least two growing seasons after initial planting, to selectively replant portions of the wetland that fail to fill in or survive.

9.3. Inspections and Ongoing Maintenance

Ideally, maintenance of constructed wetlands should be driven by annual inspections that evaluate the condition and performance of the wetland, including the following:

- Measure sediment accumulation levels in forebays and micropools.
- Monitor the growth and survival of emergent wetlands and tree/shrub species. Record the species and approximate coverage, and note the presence of any invasive plant species.
- Inspect the condition of stormwater inlets to the wetland for material damage, erosion or undercutting.
- Inspect upstream and downstream banks for evidence of sloughing, animal burrows, boggy areas, woody growth or gully erosion that may undermine embankment integrity.
- Inspect the wetland outfall channel for erosion, undercutting, rip-rap displacement, woody growth, etc.
- Inspect the condition of the principal spillway and riser for evidence of spalling, joint failure, leakage, corrosion, etc.

- Inspect the condition of all trash racks, reverse-sloped pipes, and flashboard risers for evidence of clogging, leakage, debris accumulation, etc.
- Inspect maintenance access to ensure it is free of woody vegetation, and check to see whether valves, manholes and locks can be opened or operated.
- Inspect internal and external side slopes of the wetland for evidence of sparse vegetative cover, erosion, or slumping, and make needed repairs immediately.
- Cleanups should be scheduled at least once a year to remove trash, debris and floatables.

Based on inspection results, specific maintenance tasks will be triggered. Example maintenance inspection checklists for Constructed Wetlands can be accessed in Appendix C of Chapter 9 of the *Virginia Stormwater Management Handbook* (2010) or at the CWP website at:

http://www.cwp.org/Resource_Library/Controlling_Runoff_and_Discharges/sm.htm
(scroll to Tool6: Plan Review, BMP Construction, and Maintenance Checklists)

A more detailed maintenance inspection form is also available from Appendix B of CWP's *Stormwater Pond and Wetland Maintenance Guidebook* (2004).

Managing vegetation is an important ongoing maintenance task at every constructed wetland and for each inundation zone. Following the design criteria above should result in a reduced need for regular mowing of the embankment and access roads. Vegetation within the wetland, however, will require some annual maintenance.

9.4. Non-Routine Maintenance

Sediment Removal. Frequent sediment removal from the forebay is essential to maintain the function and performance of a constructed wetland. Maintenance plans should schedule cleanouts approximately every 5 years, or when inspections indicate that 50% of the forebay sediment storage capacity has been filled. The designer should also check to see whether removed sediments can be spoiled on-site or must be hauled away. Sediments excavated from constructed wetlands are not usually considered toxic or hazardous. They can be safely disposed of by either land application or land filling.

Control Invasive Species. Designers should expect significant changes in wetland species composition to occur over time. Inspections should carefully track changes in wetland plant species distribution over time. Invasive plants should be dealt with as soon as they begin to colonize the wetland. As a general rule, control of undesirable invasive species (e.g., cattails and *Phragmites*) should commence when their coverage exceeds more than 15% of a wetland cell area. Although the application of herbicides is not recommended, some types (e.g., Glyphosate) have been used to control cattails with some success. Extended periods of dewatering may also work, since early manual removal provides only short-term relief from invasive species. While it is difficult to exclude invasive species completely from stormwater wetlands, their ability to take over the entire wetland can be reduced if the designer creates a wide range of depth zones and a complex internal structure within the wetland.

Thinning and Harvesting of Woody Growth. Thinning or harvesting of excess forest growth may be periodically needed to guide the forested wetland into a more mature state. Vegetation may need to be harvested periodically if the constructed wetland becomes overgrown. Thinning or harvesting operations should be scheduled to occur approximately 5 and 10 years after the initial wetland construction. Removal of woody species on or near the embankment and maintenance access areas should be conducted every 2 years.

SECTION 10: COMMUNITY & ENVIRONMENTAL CONCERNS

Constructed wetlands can generate the following community and environmental concerns that may need to be addressed during design.

Aesthetics and Habitat. Constructed wetlands can create wildlife habitat and can also become an attractive community feature. Designers should think carefully about how the the wetland plant community will evolve over time, since the future plant community seldom resembles the one initially planted.

Existing Forests. Given the large footprint of a constructed wetland, there is a strong chance that the construction process may result in extensive tree clearing. The designer should preserve mature trees during the facility layout, and he/she may consider creating a wooded wetland (see Cappiella *et al*., 2006b).

Stream Warming Risk. Constructed wetlands have a moderate risk of causing stream warming. If a constructed wetland will discharge to temperature-sensitive waters, the designer should consider using the wooded wetland design to shade the water, and any extended detention storage should be released in less than 12 hours.

Safety Risk. Constructed wetlands are safer than other types of ponds, although forebays and micropools should be designed with aquatic benches to reduce safety risks.

Mosquito Risk. Mosquito control can be a concern for stormwater wetlands if they are under-sized or have a small contributing drainage area. Few mosquito problems are reported for well designed, properly-sized and frequently-maintained constructed wetlands; however, no design can eliminate them completely. Simple precautions can be taken to minimize mosquito breeding habitat within constructed wetlands (e.g., constant inflows, benches that create habitat for natural predators, and constant pool elevations – see Walton 2003 and MSSC, 2005).

SECTION 11: REFERENCES

Cappiella, K., T. Schueler, J. Tasillo and T. Wright. 2005. "Adapting Watershed Tools to Protect Wetlands." *Wetlands and Watersheds Article No. 3.* Center for Watershed Protection. Ellicott City, MD.

Cappiella, K., L. Fraley-McNeal, M. Novotney and T. Schueler. 2008. "The Next Generation of Stormwater Wetlands." *Wetlands and Watersheds Article No. 5.* Center for Watershed Protection. Ellicott City, MD.

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DATE	DESCRIPTION
4/9/19	ADD #2

C7.24
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Bid Set
2

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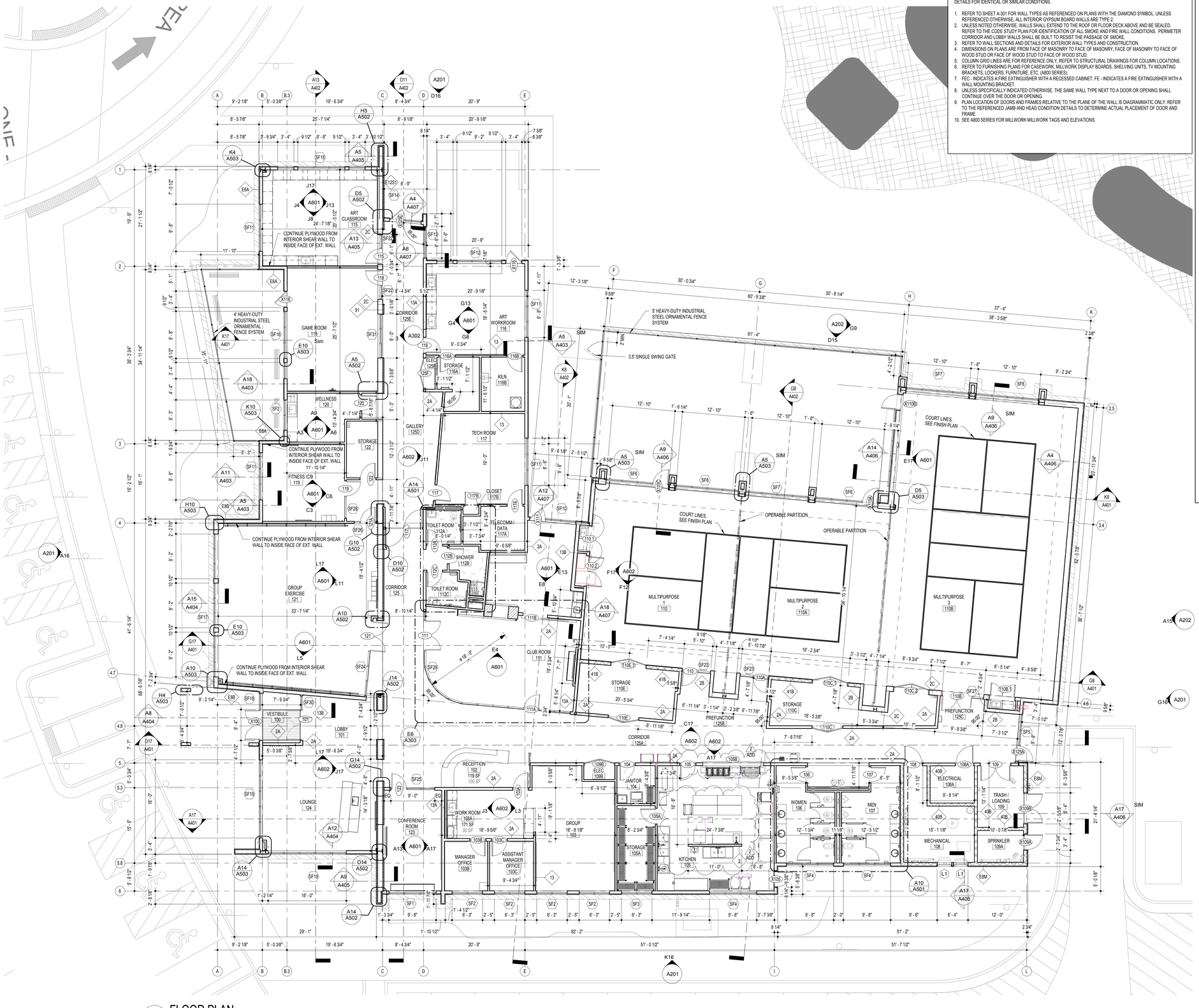

A16 FLOOR PLAN
1/8" = 1'-0"

GENERAL PLAN NOTES

GENERAL NOTE APPLICABLE TO ALL DRAWINGS - ITEMS AND CONDITIONS DETAILED, NOTED OR OTHERWISE IDENTIFIED ON ONE OF THE SECTIONS OR DETAILS ARE APPLICABLE AND BINDING TO ALL OTHER SECTIONS AND DETAILS FOR IDENTICAL OR SIMILAR CONDITIONS.

1. REFER TO SHEET A-301 FOR WALL TYPES AS REFERENCED ON PLANS WITH THE DIAMOND SYMBOL. UNLESS REFERENCED OTHERWISE. ALL INTERIOR GYPSUM BOARD WALLS ARE TYPE 2.
2. UNLESS NOTED OTHERWISE, WALLS SHALL EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED. REFER TO FIRE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS: PERIMETER CORRIDOR AND LOBBY WALLS SHALL BE BUILT TO RESIST THE PASSAGE OF SMOKE.
3. REFER TO WALL SECTIONS AND DETAILS FOR EXTERIOR WALL TYPES AND CONSTRUCTION.
4. DIMENSIONS ON PLANS ARE FROM FACE OF MASONRY TO FACE OF MASONRY, FACE OF MASONRY TO FACE OF WOOD STUD OR FACE OF WOOD STUD TO FACE OF WOOD STUD.
5. COLUMN GRID LINES ARE FOR REFERENCE ONLY, REFER TO STRUCTURAL DRAWINGS FOR COLUMN LOCATIONS.
6. REFER TO FURNISHING PLANS FOR CASEWORK, MILLWORK DISPLAY BOARDS, SHELVING UNITS, TV MOUNTING BRACKETS, LOCKERS, FURNITURE, ETC. (A800 SERIES).
7. FEC - INDICATES A FIRE EXTINGUISHER WITH A RECESSED CABINET. FE - INDICATES A FIRE EXTINGUISHER WITH A WALL MOUNTING BRACKET.
8. UNLESS SPECIFICALLY INDICATED OTHERWISE, THE SAME WALL TYPE NEXT TO A DOOR OR OPENING SHALL CONTINUE OVER THE DOOR OR OPENING.
9. PLAN LOCATION OF DOORS AND FRAMES RELATIVE TO THE PLANE OF THE WALL IS DIAGRAMMATIC ONLY. REFER TO THE REFERENCED JAMB AND HEAD CONDITION DETAILS TO DETERMINE ACTUAL PLACEMENT OF DOOR AND FRAME.
10. SEE A800 SERIES FOR MILLWORK MILLWORK TAGS AND ELEVATIONS.

GENERAL NOTES

GENERAL NOTE APPLICABLE TO ALL DRAWINGS - ITEMS AND CONDITIONS DETAILED, NOTED OR OTHERWISE IDENTIFIED ON ONE OF THE SECTIONS OR DETAILS ARE APPLICABLE AND BINDING TO ALL OTHER SECTIONS AND DETAILS FOR IDENTICAL OR SIMILAR CONDITIONS.

1. ALL CONSTRUCTION AND WORK SHOWN ON THE COMPLETE SET OF DRAWINGS IS ASSUMED TO BE NEW AND FURNISHED AND INSTALLED BY THE CONTRACTOR.
2. IF A CONFLICT EXISTS BETWEEN DRAWINGS (AND/OR SPECIFICATIONS), THE MORE STRINGENT AND MORE COSTLY REQUIREMENT SHALL APPLY. ITEMS SHOWN ON THE DRAWINGS, BUT NOT SPECIFIED, SHALL APPLY AND BE FURNISHED AND INSTALLED BY THE CONTRACTOR. IF AN ITEM IS SHOWN ON THE DRAWINGS, BUT IS NOT INCLUDED IN THE SPECIFICATIONS, PROVIDE ITEM OF A QUALITY LEVEL CONSISTENT WITH THE GENERAL QUALITY LEVEL OF THE CONTRACT REQUIREMENTS. BRING CONFLICTS BETWEEN THE DRAWINGS AND SPECIFICATIONS TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
3. WRITTEN INFORMATION TAKES PRECEDENT OVER DRAWING LINES. BRING CONFLICTS BETWEEN WRITTEN INFORMATION AND DRAWN LINES TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY.
4. IF A CONFLICT EXISTS BETWEEN DRAWINGS OF DIFFERENT SCALES, CONSULT THE ARCHITECT FOR CLARIFICATION.
5. IN THE ABSENCE OF A WRITTEN DIMENSION, OR IN CASE OF DOUBT AS TO THE PROPER MEASUREMENT, CONSULT THE ARCHITECT FOR CLARIFICATION.
6. IF AN AREA OR SPACE IS SHOWN, BUT IS NOT CLEARLY DEFINED OR INDICATED BY NOTES, PROVIDE THE SAME MATERIALS AND FINISHES AS SCHEDULED OR DETAILED FOR AREAS OF SIMILAR USE ELSEWHERE IN THE BUILDING.
7. SECTIONS INDICATED ARE INTENDED TO SHOW THE SPECIFIC CONSTRUCTION WHERE REFERENCED AS WELL AS ESTABLISH THE GENERAL CONSTRUCTION DETAILS FOR SECTIONS THROUGHOUT THE PROJECT WHICH DO NOT HAVE SPECIFIC SECTIONS DRAWN. THE MOST SIMILAR SECTIONS SHALL BE ADAPTED TO ANY SECTIONS NOT DETAILED. ANY SPECIFIC QUESTIONS CONCERNING CONSTRUCTION NOT ADEQUATELY COVERED BY THE ABOVE SHOULD BE DIRECTED TO THE ARCHITECT DURING THE BIDDING.
8. TYPICAL DETAILS THROUGHOUT THE DRAWING SET SHALL APPLY FOR ALL APPLICABLE CONDITIONS EVEN IF NOT SPECIFICALLY SHOWN OR REFERENCED.
9. SEE STRUCTURAL DRAWINGS FOR ACTUAL STRUCTURAL STEEL AND BEARING ELEVATIONS.
10. REFER TO ARCHITECTURAL SITE PLAN FOR THE LAYOUT OF CONCRETE WALKS, MOW STRIPS, PAVING PATTERNS, ETC. IN THE BUILDING VICINITY. REFER TO CIVIL DRAWINGS FOR THE CONTINUATION OF THIS WORK.
11. UNLESS NOTED OTHERWISE, WALLS SHALL EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED IN ACCORDANCE WITH GENERAL PLAN NOTE #2 ON SHEET A/1.1.
12. AT ALL OUTSIDE CORNERS OF INTERIOR CMU WALLS, COLUMN ENCLOSURES, PIPE CHASES OR OTHER WALL PROJECTIONS, PROVIDE MASONRY UNITS AND/OR GLAZED MASONRY UNITS WITH BULLNOSED (ROUNDED) EDGES WITH 1" RADIUS, UNLESS OTHERWISE NOTED OR WHERE SCHEDULED TO RECEIVE CERAMIC TILE. WHERE MASONRY CORNERS ALIGN WITH BULKHEADS, TRANSITION FROM BULLNOSE CORNER UNITS TO SQUARE CORNER UNITS.
13. UNLESS SPECIFICALLY NOTED OTHERWISE, ENCLOSE ALL VERTICAL MECHANICAL PIPES, RAIN LEADERS, ETC. WITH 4" CMU OR GYPSUM BOARD TO MATCH SURROUNDING FINISHES.
14. REFER TO PLANS AND ELEVATIONS FOR LOCATIONS OF CONTROL JOINTS (C.J.) AND EXPANSION JOINTS (E.J.) IN EXTERIOR MASONRY WALLS. IF A CONFLICT EXISTS BETWEEN JOINT LOCATIONS SHOWN ON THE ELEVATIONS AND PLANS, CONSULT THE ARCHITECT FOR CLARIFICATION PRIOR TO CONSTRUCTION. REFER TO FLOOR PLANS FOR LOCATIONS OF CONTROL JOINTS (C.J.) IN INTERIOR MASONRY WALLS.
15. ALL FLASHING BUILT INTO WALLS SHALL BE LAPPED AND SEALED. REFER TO FLASHING DETAILS INDICATED.
16. INCLUDE PROJECTIONS, BEAM ENCLOSURES, RECESSES, BULKHEADS, PILASTERS AND SIMILAR ENCLOSURES AS PART OF WALL AND CEILING FINISHES AS SCHEDULED.
17. ALL APPURTENANCES BUILT INTO OR THROUGH WALLS, INCLUDING DOORS, DUCTS, WINDOWS, LOUVERS, GRILLES, MECHANICAL WORK, ETC. SHALL FIT TIGHT AND BE THOROUGHLY SEALED AROUND PERIMETERS. WORK AT EXTERIOR WALLS SHALL BE FLASHED OR OTHERWISE WATERPROOF SEALED.
18. SEE FURNISHING PLANS (A800 SERIES) FOR CASEWORK, CABINETS, LOCKERS, DISPLAY BOARDS AND CASES AND SIMILAR ITEMS.
19. FIELD CHECK ROUGH AND/OR FINISHED DIMENSIONS FOR ACCURATE FITTING OF CABINETS, COUNTERS, LOCKERS, DOORS, WINDOWS, FIXTURES, SHELVING, GATES AND OTHER INSTALLATIONS PRIOR TO SHOP OR FACTORY FABRICATION. PROVIDE FILLER STRIPS, SCRIBE STRIPS, BASES, CLOSURE FINISHES AND TRIM FOR A COMPLETE INSTALLATION.
20. PROVIDE APPROPRIATE TRANSITION STRIPS AT CHANGES IN FLOOR ELEVATIONS.
21. EACH CONTRACTOR SHALL REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS AND BE RESPONSIBLE FOR WORK PERTAINING TO THEIR PARTICULAR TRADE. ALL CONTRACTORS SHALL COORDINATE THE WORK OF ALL TRADES AND FIELD CHECK AGAINST ANY CONFLICTS BETWEEN DRAWINGS. REPORT CONFLICTS TO THE ARCHITECT FOR CLARIFICATION.
22. REFER TO PLUMBING, HVAC AND ELECTRICAL DRAWINGS FOR LOCATIONS AND DESCRIPTIONS OF ACCESS PANELS, LOUVER OPENINGS, VENTILATORS, GRILLES, VALVE CABINETS, FIRE DAMPERS OR OTHER APPURTENANCES AFFECTING WALLS, CEILINGS OR FLOORS. PROVIDE NECESSARY LINTELS, SUPPORT AND ANCHORAGE. SEE STRUCTURAL NOTES FOR LINTEL REQUIREMENTS.
23. REFER TO MECHANICAL, PLUMBING AND ELECTRICAL DRAWINGS FOR LOCATIONS OF CONCRETE PADS TO BE PROVIDED BELOW OR AROUND EQUIPMENT.
24. INSTALL ELECTRIC SWITCHES, OUTLETS, THERMOSTATS, CONTROLS, CLOCKS, SPEAKERS, FLAGPOLE HOLDERS AND OTHER WALL-MOUNTED ACCESSORIES IN LOCATIONS WHICH ARE UNOBSTRUCTED BY CABINETS, COUNTERS, RACKS, DISPLAY BOARDS, FIXTURES, SHELVING OR OTHER FURNISHINGS OR EQUIPMENT DESIGNATED FOR SPACES SHOWN ON DRAWINGS. THESE DEVICES ARE SHOWN ON THE ARCHITECTURAL DRAWINGS TO ALERT OTHER SUB-CONTRACTORS OF THEIR PRESENCE. COORDINATE INSTALLATION WITH THE ELECTRICAL DRAWINGS. ADVISE THE ARCHITECT OF CONFLICTS IN LOCATION OR TYPES OF DEVICES SHOWN PRIOR TO INSTALLATION. DO NOT INSTALL WALL-MOUNTED ITEMS ON, THROUGH OR INTO ANY EQUIPMENT UNLESS INDICATED.
25. MOUNT ELECTRIC SWITCHES, THERMOSTATS AND OTHER ELECTRONIC CONTROLS LOCATED IN THE SAME VICINITY AT THE SAME HEIGHT ABOVE FINISHED FLOOR IN A UNIFORM, ORDERLY FASHION UNLESS NOTED OTHERWISE.

Scale: 1/8" = 1'-0"
0 4' 8' 16' 24' 32'

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GRIMM AND PARKER

GP #21652

FLOOR PLAN
ASHBURN SENIOR CENTER
ASHBURN, VIRGINIA

DATE	DESCRIPTION
4/9/2019	Addendum 2

A101
03.05.19
BID DOCUMENTS

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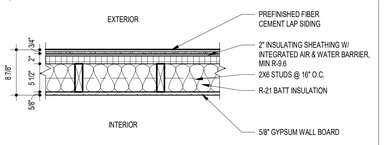
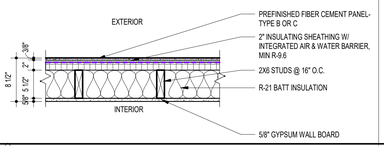
EXTERIOR WALL TYPES

E6A UL LISTING: N/A | FIRE RATING: N/A | STC: --



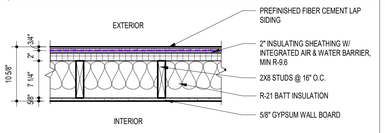
COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
FIBER CEMENT SIDING R-VALUE:	0.15
2" INSULATING SHEATHING R-VALUE:	9.6
WOOD FRAMING: R1.25 x 5.5" = 6.875 x 9.4%	0.65
INSUL. LAYER R-VALUE: R21 x 90.6%	19.03
DRYWALL LAYER R-VALUE	0.56
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	30.84
WALL COMPONENT U-VALUES:	.0324

E6B E6C UL LISTING: N/A | FIRE RATING: N/A | STC: --



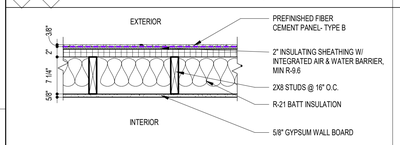
COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
FIBER CEMENT SIDING R-VALUE:	0.15
2" INSULATING SHEATHING R-VALUE:	9.6
WOOD FRAMING: R1.25 x 5.5" = 6.875 x 9.4%	0.65
INSUL. LAYER R-VALUE: R21 x 90.6%	19.03
DRYWALL LAYER R-VALUE	0.56
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	30.84
WALL COMPONENT U-VALUES:	.0324

E8A UL LISTING: N/A | FIRE RATING: N/A | STC: --



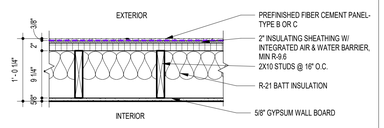
COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
FIBER CEMENT SIDING R-VALUE:	0.15
2" INSULATING SHEATHING R-VALUE:	9.6
WOOD FRAMING: R1.25 x 7.25" = 6.875 x 9.4%	0.85
INSUL. LAYER R-VALUE: R21 x 90.6%	19.03
DRYWALL LAYER R-VALUE	0.56
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	31.04
WALL COMPONENT U-VALUES:	.0322

E8B E8C UL LISTING: N/A | FIRE RATING: N/A | STC: --



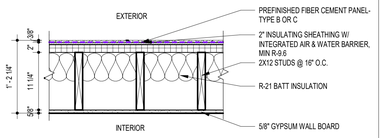
COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
FIBER CEMENT SIDING R-VALUE:	0.15
2" INSULATING SHEATHING R-VALUE:	9.6
WOOD FRAMING: R1.25 x 7.25" = 6.875 x 9.4%	0.85
INSUL. LAYER R-VALUE: R21 x 90.6%	19.03
DRYWALL LAYER R-VALUE	0.56
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	31.04
WALL COMPONENT U-VALUES:	.0322

E10B E10C UL LISTING: N/A | FIRE RATING: N/A | STC: --



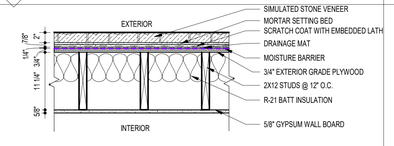
COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
FIBER CEMENT SIDING R-VALUE:	0.15
2" INSULATING SHEATHING R-VALUE:	9.6
WOOD FRAMING: R1.25 x 7.25" = 6.875 x 9.4%	1.09
INSUL. LAYER R-VALUE: R21 x 90.6%	19.03
DRYWALL LAYER R-VALUE	0.56
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	31.27
WALL COMPONENT U-VALUES:	.0320

E12B E12C UL LISTING: N/A | FIRE RATING: N/A | STC: --



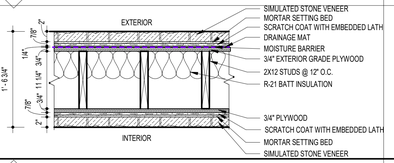
COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
FIBER CEMENT SIDING R-VALUE:	0.15
2" INSULATING SHEATHING R-VALUE:	9.6
WOOD FRAMING: R1.25 x 9.25" = 6.875 x 12.5%	1.76
INSUL. LAYER R-VALUE: R21 x 87.5%	18.38
DRYWALL LAYER R-VALUE	0.56
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	31.29
WALL COMPONENT U-VALUES:	.0320

E12S1 UL LISTING: N/A | FIRE RATING: N/A | STC: --



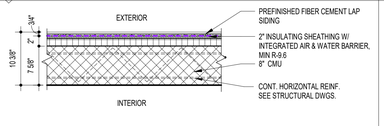
COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
STONE SIDING LAYER R-VALUE:	0.62
MORTAR/SCRATCH COAT R-VALUE:	0.17
3/4" PLYWOOD R-VALUE:	0.94
WOOD FRAMING: R1.25 x 11.25"=14.062x12.5%	1.76
INSUL. LAYER R-VALUE: R21 x 87.5%	18.38
DRYWALL LAYER R-VALUE	0.56
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	23.21
WALL COMPONENT U-VALUES:	.0430

E12S2 UL LISTING: N/A | FIRE RATING: N/A | STC: --



COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
STONE SIDING LAYER R-VALUE:	0.62
MORTAR/SCRATCH COAT R-VALUE:	0.17
3/4" PLYWOOD R-VALUE:	0.94
WOOD FRAMING: R1.25 x 11.25"=14.062x12.5%	1.76
INSUL. LAYER R-VALUE: R21 x 87.5%	18.38
3/4" PLYWOOD R-VALUE:	0.94
MORTAR/SCRATCH COAT R-VALUE:	0.17
STONE SIDING LAYER R-VALUE:	0.62
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	24.44
WALL COMPONENT U-VALUES:	.0409

E8M UL LISTING: N/A | FIRE RATING: N/A | STC: --

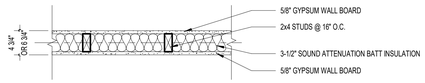


COMPONENT	
EXTERIOR AIR FILM R-VALUE:	0.17
FIBER CEMENT SIDING R-VALUE:	0.15
2" INSULATING SHEATHING R-VALUE:	9.6
8" CMU R-VALUE	1.11
INTERIOR AIR FILM R-VALUE:	0.68
WALL COMPONENT R-VALUE:	11.71
WALL COMPONENT U-VALUES:	.0854

INTERIOR WALL TYPES

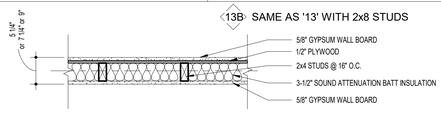
2 UL LISTING: N/A | FIRE RATING: N/A | STC: --

- 2A SAME AS '2' WITH 2x6 STUDS
- 2B SAME AS '2' WITH 2x8 STUDS
- 2C SAME AS '2' WITH 2x12 STUDS



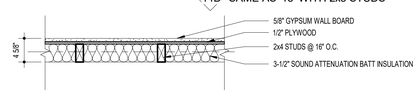
13 UL LISTING: N/A | FIRE RATING: N/A | STC: --

- 13A SAME AS '13' WITH 2x6 STUDS
- 13B SAME AS '13' WITH 2x8 STUDS



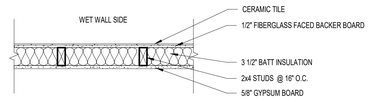
14 UL LISTING: N/A | FIRE RATING: N/A | STC: --

- 14A SAME AS '13' WITH 2x6 STUDS
- 14B SAME AS '13' WITH 2x8 STUDS



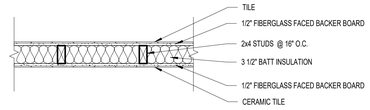
15 UL LISTING: N/A | FIRE RATING: N/A | STC: -

- 15A SAME AS '15' WITH 2x6 STUDS



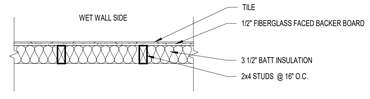
16 UL LISTING: N/A | FIRE RATING: N/A | STC: -

- 16A SAME AS '16' WITH 2x6 STUDS



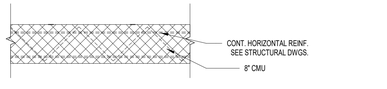
17 UL LISTING: N/A | FIRE RATING: N/A | STC: -

- 17A

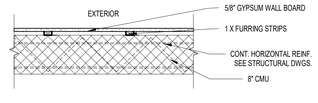


40B UL LISTING: N/A | FIRE RATING: N/A | STC: --

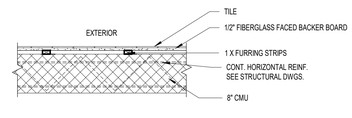
2/ADD



41B UL LISTING: N/A | FIRE RATING: N/A | STC: --



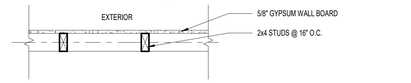
42B UL LISTING: N/A | FIRE RATING: N/A | STC: --



INTERIOR WALL TYPES

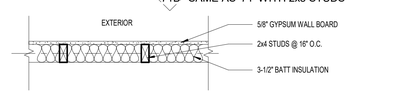
70 UL LISTING: N/A | FIRE RATING: N/A | STC: --

- 70A SAME AS '70' WITH 2x6 STUDS
- 70B SAME AS '70' WITH 2x8 STUDS

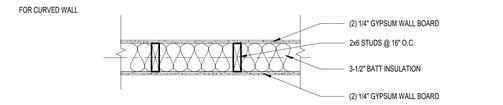


71 UL LISTING: N/A | FIRE RATING: N/A | STC: --

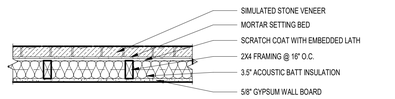
- 71A SAME AS '71' WITH 2x6 STUDS
- 71B SAME AS '71' WITH 2x8 STUDS



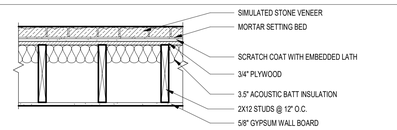
72 UL LISTING: N/A | FIRE RATING: N/A | STC: --



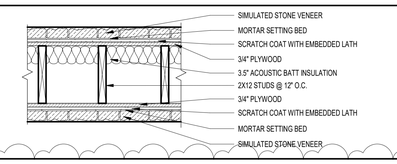
90 UL LISTING: NA | FIRE RATING: NA STC:



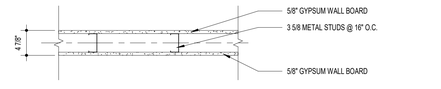
91 UL LISTING: N/A | FIRE RATING: N/A | STC: --



92 UL LISTING: N/A | FIRE RATING: N/A | STC: --

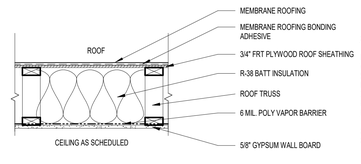


3 UL LISTING: N/A | FIRE RATING: N/A | STC: --



CEILING TYPES

CL1 (AT LOW SLOPE ROOFS - SLOPED TRUSS OR FLAT TRUSS)

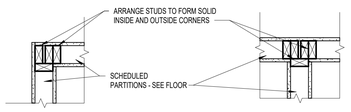


COMPONENT	
INTERIOR CEILING AIR FILM R-VALUE:	0.61
WOOD ROOF TRUSS: R1.25 x 7" = 8.75 x 7%	0.61
5/8" GYPSUM WALL BOARD R-VALUE:	0.56
INSUL. LAYER R-VALUE: R38 x 93%	35.35
3/4" PLYWOOD LAYER R-VALUE:	0.94
ROOF MEMBRANE LAYER R-VALUE:	0.06
EXTERIOR AIR FILM R-VALUE:	0.17
CEILING COMPONENT R-VALUE:	38.3
CEILING COMPONENT U-VALUES:	0.026

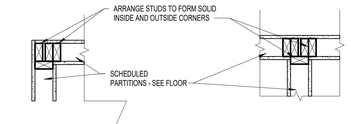
TYPICAL WALL TYPE NOTES

1. CURRENT UL LISTED ASSEMBLIES TO TAKE PRECEDENCE OVER LISTED WALL TYPES WHERE REQUIRED AND/OR NOTED.
2. FOR WALL INTERSECTION DETAILS SEE TYPICAL INTERIOR AND EXTERIOR STUD ARRANGEMENT DETAILS BELOW.
3. SEE CODE STUDY PLANS (A001) FOR LIMITS AND EXTENT OF FIRE RATED WALLS. SEE REFLECTED CEILING PLANS FOR EXTENT OF FIRE RATED CEILINGS.
4. PROVIDE 2x BLOCKING WHERE REQUIRED FOR SHELVING, CABINETRY, MISCELLANEOUS TOILET ACCESSORIES,ETC.
5. ALL STUDS TO BE INSTALLED 16" O.C. UNLESS NOTED OTHERWISE.
6. UNLESS NOTED OTHERWISE, WALLS SHALL EXTEND TO THE ROOF OR FLOOR DECK ABOVE AND BE SEALED IN ACCORDANCE WITH THE WALL TERMINATION DETAILS. REFER TO THE CODE STUDY PLAN FOR IDENTIFICATION OF ALL SMOKE AND FIRE WALL CONDITIONS. PERIMETER CORRIDOR AND LOBBY WALLS SHALL BE BUILT TO RESIST THE PASSAGE OF SMOKE.
7. REFER TO FLOOR PLANS FOR WALL TYPE DESIGNATION.
8. FOR TYPICAL **WOOD** STUD BRIDGING SEE STRUCTURAL DRAWINGS.
9. PROVIDE 3-1/2" SOUND BATT INSULATION AROUND ALL MECHANICAL CLOSETS

TYPICAL INTERIOR STUD ARRANGEMENT DETAILS



TYPICAL EXTERIOR STUD ARRANGEMENT DETAILS



8609 Westwood Center Drive
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GRIMM AND PARKER

GP #21652

WALL PARTITION TYPES
ASHBURN SENIOR CENTER
ASHBURN, VIRGINIA

DATE	DESCRIPTION
4/9/2019	Addendum 2

A301
03.05.19
BID DOCUMENTS

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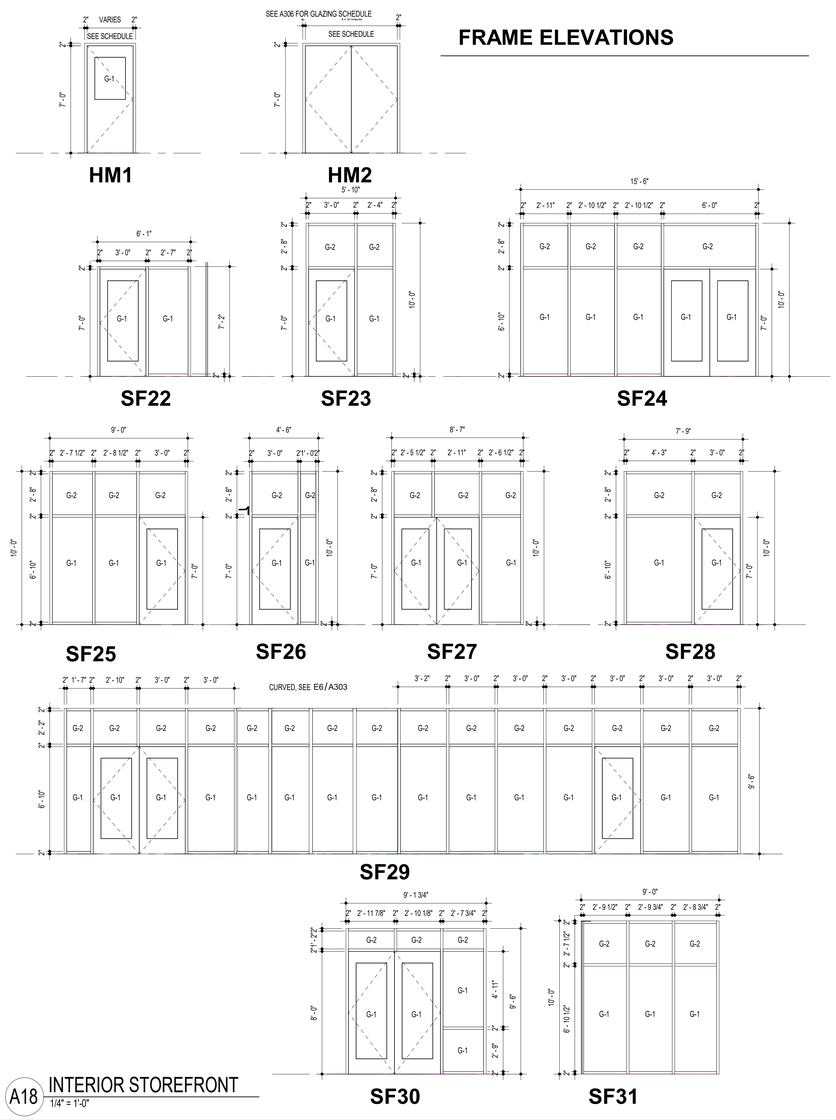
DOOR SCHEDULE

2 ADD

DOOR NO.	Room Name	DOOR NOMINAL SIZE WIDTH	HEIGHT	THK.	TYPE	MAT'L	MAT'L	TYPE	FRAME SECTIONS JAMB	HEAD	SILL	DOOR LABEL FIRE RATING	HARDWARE SET	REMARKS
101	VESTIBULE	6' - 0"	8' - 0"	1 3/4"	FG	ALUM	ALUM	SF30	J2,J3	H2,H3	NONE		422	1, 2, 4
103A	WORK ROOM	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S3		815	
103B	MANAGER OFFICE	3' - 0"	7' - 0"	1 3/4"	HG	SCWD	HM	HM1	J1	H1	S2		510	
103C	ASSISTANT MANAGER OFFICE	3' - 0"	7' - 0"	1 3/4"	HG	SCWD	HM	HM1	J1	H1	S2		510	
104	JANITOR	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S5		810	
105	KITCHEN	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S5		712	
105A	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	NONE		810	
105B	KITCHEN	12' - 0"	5' - 8"										400	COILING COUNTER DOOR
106	WOMEN	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S6		210	1, 4
107	MEN	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S6		210	1, 4
108	MECHANICAL	3' - 6"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S4		810	
108A	ELECTRICAL	3' - 6"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S4		810	
109	TRASH / LOADING	6' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	S4		821	
109B	ELEC	6' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	S4		823	
110	MULTIPURPOSE 1	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF23	J2,J3	H2,H3	S3		440	2
110.1	MULTIPURPOSE 1	5' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	NONE		820	14
110.2	AV CLOSET	6' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	S7		820	
110A	MULTIPURPOSE 2	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF23	J2,J3	H2,H3	S3		440	2
110B	PREFUNCTION	5' - 6 1/2"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF27	J2,J3	H2,H3	S3		440	2
110B.1	MULTIPURPOSE 3	5' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	NONE		820	14
110C	CORRIDOR	6' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	S3		821	22
110C.1	MULTIPURPOSE 2	7' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	NONE		821	
110C.2	MULTIPURPOSE 3	7' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	NONE		821	
110E	STORAGE	6' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	S3		821	
110E.1	STORAGE	7' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	NONE		821	22
111	CLUB ROOM	6' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF29	J2,J3	H2,H3	NONE		441	
111A	CLUB ROOM	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF29	J2,J3	H2,H3	NONE		414	
111B	CLUB ROOM	5' - 0"	8' - 8"	2 1/2"	FG	SCWD	NA	NA	J1	H1	NONE		900	BARN DOOR
412A	TOILET ROOM	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S6		112	9
112B	SHOWER	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S6		112	9
112C	TOILET ROOM	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	S6		112	9
115	ART CLASSROOM	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF22	J2,J3	H2,H3	S3		411	
116	ART WORKROOM	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	HM	HM1	J1	H1	S3		411	
116A	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	SCWD	HM	HM1	J1	H1	NONE		810	
116B	KILN	3' - 0"	7' - 0"	1 3/4"	F	SCWD	HM	HM1	J1	H1	NONE		810	
117	TECH ROOM	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	HM	HM1	J1	H1	S3		411	
117A	TELECOMM / DATA	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	NONE		815	22
117B	CLOSET	2' - 6"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	NONE		810	22
117L	CORRIDOR	7' - 6"	7' - 0"	1 3/4"	NV	HM	HM	HM2	J1	H1	NONE		441	15
118	GAME ROOM	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF22	J2,J3	H2,H3	S3		411	
119	FITNESS	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF28	J2,J3	H2,H3	S3		411	
120	WELLNESS	3' - 0"	7' - 0"	1 3/4"	HG	HM	HM	HM1	J1	H1	S3		510	
121	GROUP EXERCISE	6' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF24	J2,J3	H2,H3	S7		441	2
121A	GROUP EXERCISE	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF26	J2,J3	H2,H3	S7		440	2
122	STORAGE	3' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM1	J1	H1	NONE		810	
123	CONFERENCE ROOM	3' - 0"	7' - 0"	1 3/4"	FG	SCWD	ALUM	SF25	J2,J3	H2,H3	S1		510	
125F	ELEC	6' - 0"	7' - 0"	1 3/4"	F	HM	HM	HM2	J1	H1	S4		823	
X100	VESTIBULE	6' - 0"	8' - 0"	1 3/4"	FG	ALUM	ALUM	SF18	H9/A412 SIM	D9/A412 SIM			442	1, 2, 4
X105	KITCHEN	3' - 0"	7' - 10"	1 3/4"	F	HM	HM	HM1	H9/A412 SIM	D9/A412 SIM			612	1, 7, 8, 22
X109A	SPRINKLER	3' - 0"	7' - 10"	1 3/4"	F	HM	HM	HM1	K18/A412	E18/A412			317	1, 7, 8
X109B	TRASH / LOADING	6' - 0"	7' - 10"	1 3/4"	F	HM	HM	HM2	K18/A412	E18/A412			317	1, 7, 8, 23
X110A	MULTIPURPOSE 2	3' - 0"	8' - 0"	1 3/4"	FG	ALUM	ALUM	SF6	H9/A412 SIM	D9/A412 SIM	S1		413	1, 22, 23
X110B	MULTIPURPOSE 3	3' - 0"	7' - 10"	1 3/4"	F	HM	HM		H9/A412 SIM	D9/A412 SIM	S1		441	1, 2, 23
X110C	MULTIPURPOSE 1	3' - 0"	8' - 0"	1 3/4"	FG	ALUM	ALUM	SF6	H9/A412 SIM	D9/A412 SIM	S1		413	1, 2, 23
X111	CLUB ROOM	3' - 0"	8' - 0"	1 3/4"	FG	ALUM	ALUM	SF10	H9/A412 SIM	D9/A412 SIM	S1		432	1, 2, 7, 22, 23
X116	ART WORKROOM	3' - 0"	8' - 0"	1 3/4"	FG	SCWD	ALUM	SF12	H4/A412 SIM	D4/A412 SIM	S1		416	1, 7, 23
X118	GAME ROOM	3' - 0"	8' - 0"	1 3/4"	FG	SCWD	ALUM	SF16	H9/A412 SIM	D9/A412 SIM	S1		416	1, 7, 23
X125A	CORRIDOR	3' - 0"	8' - 0"	1 3/4"	FG	SCWD	ALUM	SF5	H9/A412 SIM	D9/A412 SIM	S1		432	1, 2, 22, 23
X125E	CORRIDOR	3' - 0"	8' - 0"	1 3/4"	FG	SCWD	ALUM	SF14	H9/A412 SIM	D9/A412 SIM	S1		432	1, 2, 22, 23



A18 INTERIOR STOREFRONT
1/4" = 1'-0"

FRAME ELEVATIONS

TYPICAL DETAILS

DOORS NOT LISTED ON THE SCHEDULE SHALL HAVE THE TYPICAL FINISHES LISTED BELOW:

DOOR:
WIDTH: 3'-0"
HEIGHT: 7'-0"
THICKNESS: 1-3/4"
TYPE: F
MATERIAL: SCWD
DOOR LABEL: NONE

FRAME:
MATERIAL: HM
TYPE: 1
JAMB: J1
HEAD: H1
SILL: NONE

TYPICAL DOOR NOTES

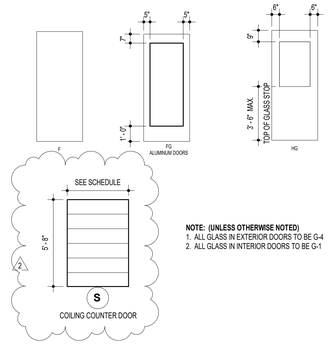
1. COORDINATE AND PROVIDE HARDWARE AS DETAILED IN THE SPECIFICATIONS OR, IF NOT SPECIFIED, PROVIDE HARDWARE (OF EQUAL QUALITY TO THAT SPECIFIED, AND MOST SIMILAR IN FUNCTION TO TYPE OF DOOR) REQUIRED FOR DOORS TO OPERATE AND APPEAR AS INTENDED ON DRAWINGS.
2. PROVIDE BRUSHED STAINLESS STEEL KICK PLATES ON PUSH SIDE OF DOORS WITH PUSH BARS AND/OR CLOSER DEVICES. KICK PLATE SHALL BE INSET 1/2" FROM EACH SIDE OF DOOR, AND MAXIMUM 8" HIGH OR 1/2" BELOW EDGE OF GLASS LIGHT (IF PRESENT).
3. PROVIDE EXPOSED HARDWARE WITH BRUSHED-IN FINISH AND "SILVER" METALLIC IN COLOR (ALUMINUM, CHROME, OR STEEL).
4. WHEN EXPOSED CLEAR FINISHED WOOD DOORS ARE PAIRED, TAKE CARE TO SELECT MATCHING GRAIN TYPE AND COLOR FOR EACH DOOR IN PAIR.
5. IF CONFLICT EXISTS BETWEEN DOOR RATING AS SCHEDULED AND WALL/PARTITION TYPE FIRE RATING AS SHOWN ON PLANS, PROVIDE DOOR(S) WITH THE GREATER FIRE RATING OF THE TWO.
6. VERIFY ALL DIMENSIONS AND CLEARANCES, AND COORDINATE UNDERCUTTING REQUIRED TO CLEAR ADJACENT FLOOR MATERIALS.
7. SEE FRAME ELEVATION SHEETS FOR FRAME TYPES. (BOTH H.M. AND ALUM. STOREFRONT) AND GLASS TYPE KEY.
8. IF A DISCREPANCY EXISTS BETWEEN THE DOOR SCHEDULE REMARKS AND THE HARDWARE SCHEDULE IN THE SPECIFICATIONS, PROVIDE THE HARDWARE NEEDED TO MEET THE MORE STRINGENT OF THE REQUIREMENTS.
9. SEE SPECIFICATIONS FOR SCHEDULED HARDWARE SETS. SEE SPECIFICATIONS FOR HARDWARE SETS INDICATED FOR PACKAGED DOOR SYSTEM.
10. PROVIDE CONTINUOUS WEATHERSTRIPPING AND DOOR BOTTOM SEALS AT EXTERIOR DOORS AS SPECIFIED.

NOTES FOR REMARKS COLUMN

NOTE: NOT ALL NOTES MAY BE USED ON THIS PROJECT. SEE SPECIFICATIONS FOR ADDITIONAL DOOR INFORMATION. REFERENCE SPECIFICATIONS FOR DETAILED HARDWARE REQUIREMENTS.

1. PROVIDE ADA COMPLIANT CLOSER (ONE CLOSER FOR EACH DOOR OF PAIR).
2. PROVIDE PANIC HARDWARE.
3. PROVIDE ALARMED PANIC HARDWARE.
4. PROVIDE ADA AUTOMATIC SWING DOOR OPERATOR WITH PUSH BUTTON CONTROLS AND ASSOCIATED SIGNAGE.
5. PROVIDE DOORS WITH ELECTROMAGNETIC HOLD OPEN DEVICES - CONNECT TO FIRE ALARM SYSTEM TO CLOSE UPON ACTIVATION – SEE ELECTRICAL DRAWINGS.
6. PROVIDE WITH HOLD OPEN FEATURE IN CLOSER.
7. PROVIDE WEATHERSTRIPPING ON ALL SIDES, TOP AND BOTTOM OF DOOR.
8. PROVIDE DOOR WITH INSULATED CORE.
9. PROVIDE HARDWARE WITH PRIVACY SET.
10. PROVIDE FLUSH BOLTS ON INACTIVE LEAF.
11. PROVIDE SOUND SEALS ON TOP AND SIDES WITH DROP SEAL AT DOOR BOTTOM.
12. PROVIDE SOUND RATED DOOR SYSTEM COMPLETE WITH ALL ASSOCIATED HARDWARE - SEE SPECIFICATIONS.
13. PROVIDE WITH PUSH / PULL OPERATION.
14. PROVIDE HARDWARE SO DOORS CAN OPEN 180 DEGREES.
15. DOUBLE EGRESS DOOR.
16. INSULATED COILING DOOR.
17. AUTOMATIC SLIDING DOORS WITH EMERGENCY BREAKOUT FEATURE.
18. DOUBLE ACTING DOOR FUNCTION.
19. PROVIDE PACKAGE DOOR SYSTEM - SEE DIVISION 8 SPECIFICATION SECTION.
20. COILING SECURITY GRILLE.
21. PROVIDE WITH MECHANICAL PUSH BUTTON COMBINATION LOCK.
22. PROVIDE WITH CARD READER AND ASSOCIATED HARDWARE.
23. SECURITY SYSTEM DOOR SWITCH AT HM FRAME - COORDINATE WITH ELECTRICAL.
24. PROVIDE WITH MAGNETIC LOCKS AND OPEN RELEASE BUTTON - CONNECT TO FIRE ALARM SYSTEM TO OPEN UPON ACTIVATION - SEE ELECTRICAL DRAWINGS.

DOOR TYPES

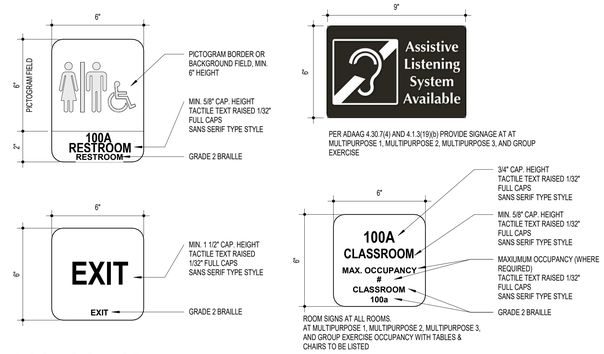


NOTE: (UNLESS OTHERWISE NOTED)
1. ALL GLASS IN EXTERIOR DOORS TO BE G-4
2. ALL GLASS IN INTERIOR DOORS TO BE G-1

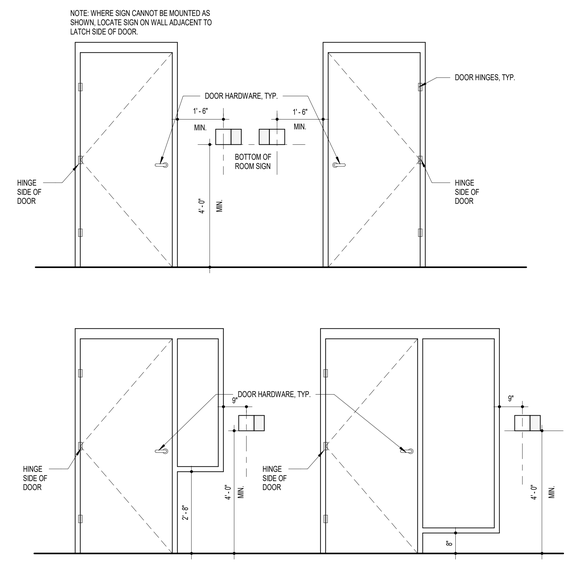
FINISH SCHEDULE

RM. NO.	NAME	FLOOR	BASE	WALLS A	B	C	D	CLG. MATL.	REMARKS
100	VESTIBULE	PT-1 / PT-2	WD	PTD	PTD	PTD	PTD	EXP	1
101	LOBBY	PT-1 / PT-2	WD	PTD	STN	PTD	PTD	APC-1 / PTD	1
102	RECEPTION	PT-1 / PT-2	WD	PTD	PTD / WD	PTD	STN	APC-2 / WS	6 (DESK)
103	GROUP OFFICE	CPT	RST	PTD	PTD	PTD	PTD	APC-1	
103A	WORK ROOM	BBT	RST	PTD	PTD	PTD	PTD	APC-1	
103B	MANAGER OFFICE	CPT	RST	PTD	PTD	PTD	PTD	APC-1	
103C	ASSISTANT MANAGER OFFICE	CPT	RST	PTD	PTD	PTD	PTD	APC-1	
104	JANITOR	QT	QT	PTD	PTD	PTD	PTD	EXP	
105	KITCHEN	QT	QT	PTD	PTD	PTD	PTD	GFC	
105A	STORAGE	QT	QT	PTD	PTD	PTD	PTD	GFC	
106	WOMEN	PT-3	PT-2	PT-1	PT-1	PT-1	PT-1	PTD	
107	MEN	PT-3	PT-2	PT-1	PT-1	PT-1	PT-1	PTD	
108	MECHANICAL	CONC	NONE	PTD CMU	PTD CMU	PTD CMU	PTD CMU	EXP	
108A	ELECTRICAL	CONC	NONE	PTD CMU	PTD CMU	PTD CMU	PTD CMU	EXP	
109	TRASH / LOADING	CONC	RST	PTD	PTD	PTD	PTD	EXP	
109A	SPRINKLER	CONC	NONE	PTD CMU	PTD CMU	PTD CMU	PTD CMU	EXP	
109B	ELEC	CONC	NONE	PTD	PTD	PTD	PTD	EXP	
110	MULTIPURPOSE 1	MP	RST	WC / PTD	WC / PTD	WC / PTD	WC / PTD	APC-1 / PTD	1, 6
110A	MULTIPURPOSE 2	MP	RST	WC / PTD	WC / PTD	WC / PTD	WC / PTD	APC-1 / PTD	1, 6
110B	MULTIPURPOSE 3	MP	RST	WC / PTD	WC / PTD	WC / PTD	WC / PTD	APC-1 / PTD	1, 6
110C	STORAGE	MP	RST	PTD	PTD	PTD	PTD	PTD	1
110E	STORAGE	MP	RST	PTD	PTD	PTD	PTD	PTD	1
110H	AV CLOSET	MP	RST	PTD	PTD	PTD	PTD	EXP	1
111	CLUB ROOM	PT-1	WD	PTD	PTD	PTD	PTD	APC-1 / PTD / WS	1
112A	TOILET ROOM	PT-3	PT-2	PT-1	PT-1	PT-1	PT-1	PTD	
112B	SHOWER	PT-3	PT-2	PT-1	PT-1	PT-1	PT-1	PTD	2
112C	TOILET ROOM	PT-3	PT-2	PT-1	PT-1	PT-1	PT-1	PTD	
115	ART CLASSROOM	BBT	RST	PTD	PTD	PTD	PTD	APC-1	4
116	ART WORKROOM	BBT	RST	PTD	PTD	PTD	PTD	APC-1	4
116A	STORAGE	BBT	RST	PTD	PTD	PTD	PTD	APC-1	1
116B	KILN	BBT	RST	PTD	PTD	PTD	PTD	APC-1	
117	TECH ROOM	BBT	RST	PTD	PTD	PTD	PTD	APC-1	4
117A	TELECOMM / DATA	BBT	RST	PTD	PTD	PTD	PTD	APC-1	
117B	CLOSET	BBT	RST	PTD	PTD	PTD	PTD	APC-1	
118	GAME ROOM	BBT	RST	PTD	PTD	PTD	PTD	APC-1	1
119	FITNESS	RB	RST	PTD	PTD	PTD	PTD	APC-1	1
120	WELLNESS	BBT	RST	PTD	PTD	PTD	PTD	APC-1	
121	GROUP EXERCISE	WD	WD	PTD	PTD	PTD	PTD	APC-1 / PTD	1
122	STORAGE	BBT	RST	PTD	PTD	PTD	PTD	EXP	
123	CONFERENCE ROOM	CPT	WD	PTD	PTD	PTD	STN	PTD / APC-2	5
124	LOUNGE	PT-2	WD	PTD	STN	PTD	PTD	APC-1 / WS	
125	CORRIDOR	PT-1 / PT-2	WD	PTD	PTD	PTD	STN	APC-1 / PTD	1
125A	CORRIDOR	PT-1 / PT-2	WD	PTD	PTD	PTD	PTD	APC-1 / PTD	1, 3
125B	PREFUNCTION	PT-1	WD	PTD	PTD	PTD	PTD	APC-1 / PTD	1
125C	PREFUNCTION	PT-1	WD	PTD	PTD	PTD	PTD	APC-1 / PTD	1
125D	GALLERY	PT-1	WD	PTD	PTD	PTD	PTD	APC-1 / PTD	1
125E	CORRIDOR	PT-1 / PT-2	WD	PTD	PTD	PTD	PTD	APC-1 / PTD	1
125F	ELEC	CONC	NONE	PTD CMU	PTD CMU	PTD CMU	PTD CMU	EXP	

SIGN NOTE:
ROOM SIGNS TO BE PROVIDED AT EVERY DOOR. EXACT ROOM NUMBER TO BE DETERMINED BY OWNER. SIGNS TO BE MOUNTED WITH DOUBLE STICK TAPE AND SILICONE ADHESIVE. SEAL PERIMETER WITH CLEAR SILICONE CAULKING. PROVIDE BLANK SIGN FOR BACK WHERE MOUNTED ON GLASS SIDELITE.



E9 ROOM SIGNAGE
3" = 1'-0"



A9 ROOM SIGNAGE - ELEVATIONS
1/2" = 1'-0"

TYPICAL FINISHES

SPACES NOT LISTED ON THE SCHEDULE SHALL HAVE THE TYPICAL FINISHES LISTED BELOW:

FLOORS: BBT
BASE: RST
WALLS: PTD
CEILING: APC

GYP. BD. ABOVE H.M. FRAMES AS INDICATED ON SECTIONS. DETAILS TO RECEIVE SAME TOP COATS AS ADJACENT WALLS UNLESS OTHERWISE NOTED.

FINISH MATERIALS

FLOORS

BBT BIO-BASED TILE
CONC UNFINISHED CONCRETE SLAB
CPT CARPET TILES
MP RESILIENT MULTI-PURPOSE FLOOR
PT-1 PORCELAIN TILE - 12" X 24" - COLOR 1
PT-2 PORCELAIN TILE - 12" X 24" - COLOR 2
PT-3 PORCELAIN TILE - 6" X 24" - COLOR 2
RB RUBBER SHEET FLOOR COVERING
QT QUARRY TILE
WD WOOD ATHLETIC FLOOR
WM WALK-OFF MAT

BASES

PT-1 PORCELAIN TILE - COLOR 1
PT-2 PORCELAIN TILE - COLOR 2
NONE NO BASE
QT QUARRY TILE
RST RESILIENT BASE
VRB VENTED RUBBER BASE
WD WOOD BASE- STAINED

CEILINGS

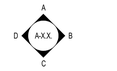
APC-1 ACOUSTIC PANEL CEILING - 2'X2'
APC-2 ACOUSTIC PANEL CEILING - 2'X8'
EXP EXPOSED CONSTRUCTION - PAINTED
GFC GLASS FIBER ARTIFACT CEILING - 2'X2'
PTD PAINTED GYPSUM BOARD
WS WOOD SLAT CEILING

WALLS

STN SIMULATED VENEER STONE
PT-1 PORCELAIN TILE - COLOR 1
PT-2 PORCELAIN TILE - COLOR 2
PTD PAINTED
WC WALL COVERING
PTD CMU PAINTED 4" VENEER CMU

WALL KEY

WALLS ON FINISH SCHEDULE ARE DENOTED THUS:



TYPICAL UNLESS OTHERWISE NOTED.

TYPICAL NOTES

1. REFER TO FLOOR PLANS, REFLECTED CEILING PLAN, INTERIOR ELEVATIONS, SECTIONS, AND DETAILS FOR ADDITIONAL INFORMATION AND EXTENT OF EACH FINISH WHEN MORE THAN ONE FINISH IS INDICATED FOR ANY SPACE.
2. SEE CEILING PLANS FOR HEIGHTS OF CEILINGS AND LOCATIONS AND HEIGHTS OF BULKHEADS, SOFFITS, ETC.
3. PAINT ALL EXPOSED STEEL LADDERS, LINTELS, HUNG PLATES, HAND AND GUARD RAILS, STAIRS AND STRINGERS.
4. PAINT ALL EXPOSED STEEL COLUMNS, TRUSSES, JOISTS, BEAMS, DECK, AND MISCELLANEOUS BRIDGING, ANGLES, PLATES, ETC.
5. INSTALL PORCELAIN TILE BASE FLUSH WITH FLOOR TILE AND FLUSH WITH PORCELAIN WALL TILE.
6. FIELD PAINT ALL EXPOSED, NON-FACTORY FINISHED STRUCTURAL, MECHANICAL, OR ELECTRICAL COMPONENTS.
7. PROVIDE SEALANT AT INTERSECTIONS OF DISSIMILAR MATERIALS, COMPLYING WITH SPECIFICATIONS.
8. REFER TO INTERIOR ELEVATIONS AND SECTIONS FOR ADDITIONAL FINISH INFORMATION. PROVIDE ALL FINISH MATERIALS SHOWN IN PLANS, ELEVATIONS AND SECTIONS AS NOTED OR DEPICTED ON THE DRAWINGS AND SPECIFICATIONS.
9. BRING CONFLICTS TO THE ARCHITECT'S ATTENTION DURING THE BIDDING PERIOD FOR CLARIFICATION.
10. WALL AND CEILING FINISHES SHALL INCLUDE ALL PROJECTIONS, BEAM ENCLOSURES, RECESSES, BULKHEADS, MATERIAL CHANGES, OR OTHER ENCLOSURES.
11. ELECTRICAL OUTLETS, CLOCKS, P.A. SPEAKERS, OR OTHER DEVICES SHOWN ON THE ARCHITECTURAL DRAWINGS SERVE TO CALL ATTENTION TO THE PRESENCE OF SUCH DEVICES. NOT ALL DEVICES MAY BE SHOWN ON ARCHITECTURAL DRAWINGS. CONSULT THE OTHER DRAWINGS FOR FURTHER INFORMATION AND ADVISE ARCHITECT OF ANY CONFLICT OF LOCATION OR TYPE OF DEVICES SHOWN. COORDINATE ALL WORK, FINISHES AND DEVICES.
12. PROVIDE MOISTURE RESISTANT GYPSUM BOARD AT TOILET ROOMS & SERVICE CLOSETS FOR WALLS DESIGNATED AS GYPSUM BOARD WALL TYPES. PROVIDE TILE BACKER BOARD AT WALLS DESIGNATED AS GYPSUM BOARD WALL TYPES WITH TILE FINISH.
13. FIELD PAINT ELECTRICAL PANELS EXCEPT PANELS LOCATED IN ELECTRICAL CLOSETS AND MECHANICAL ROOMS.
14. BRING CONFLICTS BETWEEN THE FINISH SCHEDULE AND MATERIALS SHOWN ON OTHER DRAWINGS (AND/OR SPECIFICATIONS) TO THE ATTENTION OF THE ARCHITECT IMMEDIATELY. IF A CONFLICT EXISTS IN/BETWEEN DRAWINGS (AND/OR SPECIFICATIONS), THE MORE STRINGENT AND MORE COSTLY REQUIREMENT SHALL APPLY.
15. PAINT COLUMN COVERS TO MATCH ADJACENT WALL PATTERN AND COLOR REGARDLESS OF MATERIAL.
16. ALL MS TO BE WALL-TO-WALL UNLESS WIDTH IS NOTED ON FINISH PLAN.

NUMBERED REMARKS

WHEN SHOWN IN THE REMARKS COLUMN OF THE FINISH SCHEDULE:

1. PROVIDE ABUSE RESISTANT GYP BOARD TO 8'-0" AFF.
2. PROVIDE FULL HEIGHT PORCELAIN TILE AT SHOWER WALLS AND AT FLOOR OF SHOWER.
3. FABRIC COVERED ACOUSTIC PANELS (FAP). SEE INTERIOR ELEVATION.
4. ROOM HAS MAGNETIC MARKER SURFACE (MMS). SEE INTERIOR ELEVATIONS FOR HEIGHTS AND EXTENTS.
5. ROOM HAS MAGNETIC DRY ERASE GLASS (MMG). SEE INTERIOR ELEVATION FOR HEIGHTS AND EXTENTS.
6. ROOM HAS WALL COVERING (WC). SEE INTERIOR ELEVATIONS AND MILLWORK DETAILS.

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GRIMM AND PARKER

GP #21652

FINISH & DOOR SCHEDULES
ASHBURN SENIOR CENTER
ASHBURN, VIRGINIA

DATE	DESCRIPTION
4/9/2019	Addendum 2

A302
03.05.19
BID DOCUMENTS

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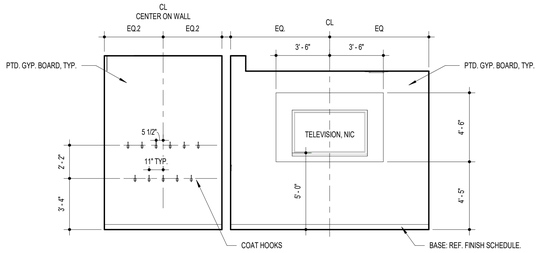
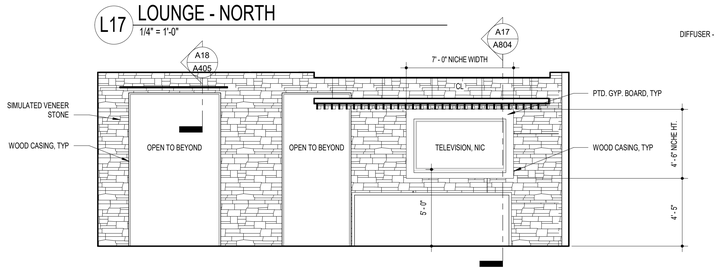
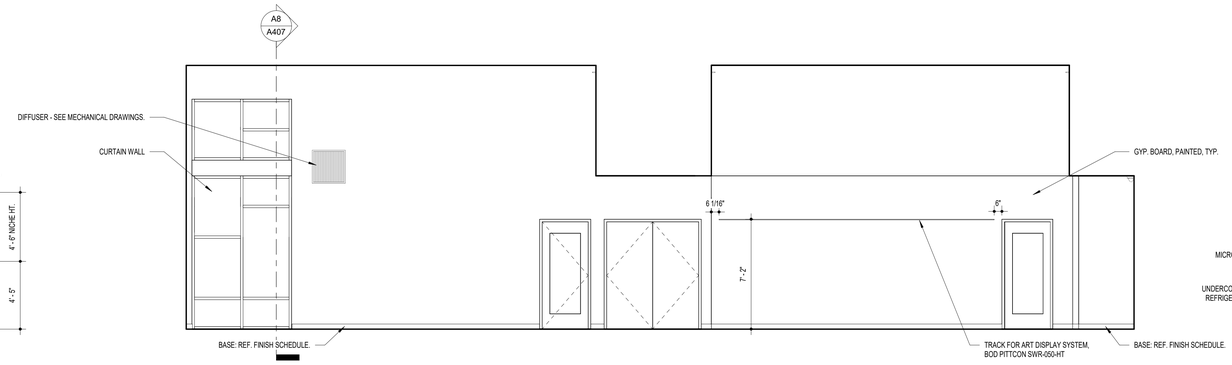


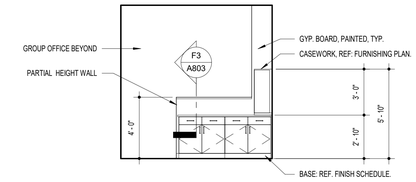
L17 LOUNGE - NORTH
1/4" = 1'-0"



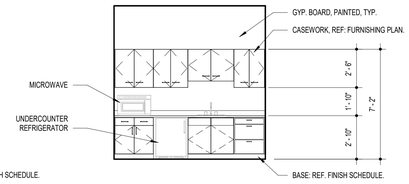
J17 LOUNGE - EAST
1/4" = 1'-0"



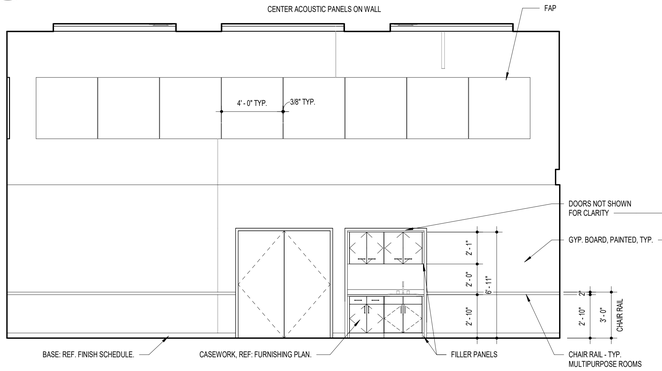
J11 CORRIDOR 125E - EAST
1/4" = 1'-0"



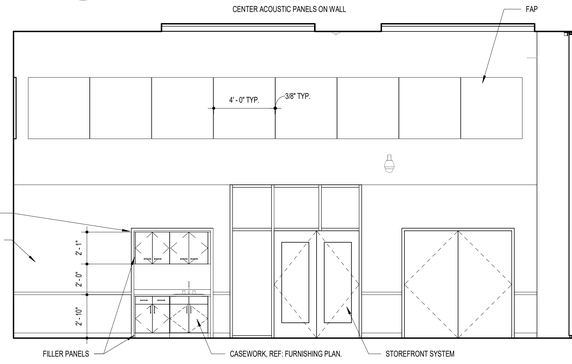
L3 WORKROOM - EAST
1/4" = 1'-0"



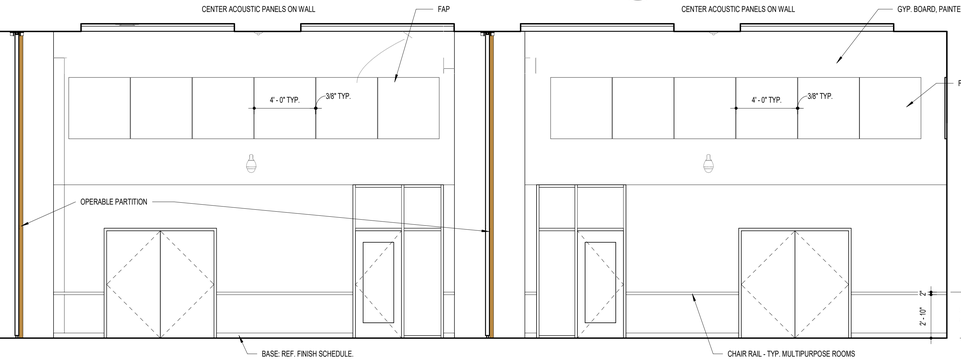
J3 WORKROOM - WEST
1/4" = 1'-0"



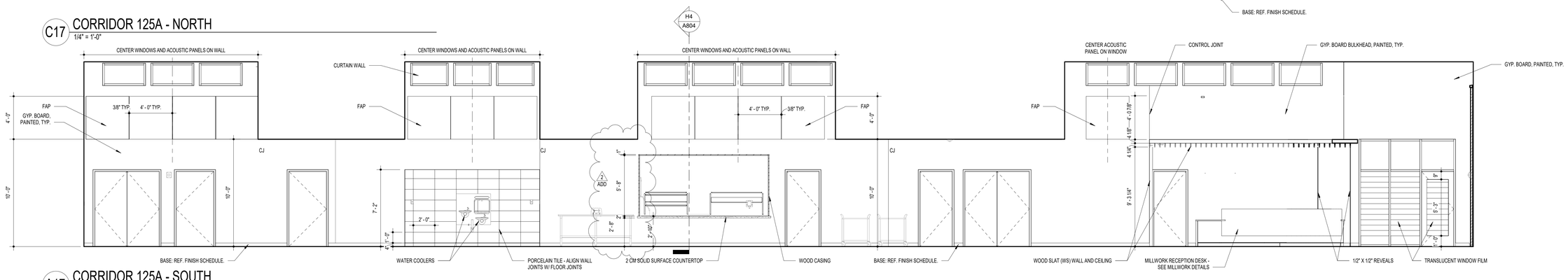
F17 MULTIPURPOSE - WEST
1/4" = 1'-0"



F12 MULTIPURPOSE - SOUTH
1/4" = 1'-0"



C17 CORRIDOR 125A - NORTH
1/4" = 1'-0"



A17 CORRIDOR 125A - SOUTH
1/4" = 1'-0"

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GRIMM AND PARKER

GP #21652

INTERIOR ELEVATIONS
ASHBURN SENIOR CENTER
ASHBURN, VIRGINIA

DATE	DESCRIPTION
4/9/2019	Addendum 2

A602
03.05.19
BID DOCUMENTS

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ROOFTOP UNITS

TAG	SUPPLY FAN CFM	SUPPLY FAN ESP (IN W.G.)	SUPPLY FAN TSP (IN W.G.)	SUPPLY FAN MOTOR (BHP)	SUPPLY FAN MOTOR (HP)	EXHAUST FAN CFM	EXHAUST FAN ESP (IN W.G.)	EXHAUST FAN TSP (IN W.G.)	EXHAUST FAN MOTOR (BHP)	EXHAUST FAN MOTOR (HP)	DEMAND CONTROL VENTILATION MIN/MAX OA (CFM)	ENERGY RECOVERY WHEEL OA / EA AIRFLOW (CFM)	ENERGY RECOVERY WHEEL SUMMER OAT DB/WB (°F)	ENERGY RECOVERY WHEEL SUMMER RAT DB/WB (°F)	ENERGY RECOVERY WHEEL SUMMER LAT DB/WB (°F)	ENERGY RECOVERY WHEEL WINTER OAT DB/WB (°F)	ENERGY RECOVERY WHEEL WINTER RAT DB/WB (°F)	ENERGY RECOVERY WHEEL WINTER LAT DB/WB (°F)	DX COOLING COIL EAT DB/WB (°F)	DX COOLING COIL LAT DB/WB (°F)	DX COOLING COIL TOTAL CAPACITY (MBH)	DX COOLING COIL SENSIBLE CAPACITY (MBH)	DX COOLING COIL EWT (°F)	DX COOLING COIL LWT (°F)	DX COOLING COIL FLUID FLOW (GPM)	DX COOLING COIL WPD (FTH2O)	DX COOLING COIL COMPRESSOR QTY	DX COOLING COIL ROWS	HOT GAS REHEAT LAT DB (°F)	HOT GAS REHEAT ROWS	DX HEATING CAPACITY (MBH)	DX HEATING ΔT (°F)	DX HEATING EWT (°F)	DX HEATING LWT (°F)	DX HEATING FLUID FLOW (GPM)	DX HEATING WPD (FT H2O)	ELECTRIC HEAT kW	ELECTRIC HEAT NUMBER STAGES	ELECTRICAL MCA	ELECTRICAL MFS	ELECTRICAL V/PH/HZ	EER	COP	WEIGHT (LBS)	BASIS OF DESIGN	NOTES
RTU-1	2,700	1.25	3.7	2.52	5	2,300	1	2.2	1.26	2	900/1,800	1,800 / 1,800	95 / 74	75 / 62.7	78.1/64.4	14 / 11.9	70 / 51.7	60.5/46.4	77.1/65	55/54.5	81.2	67.2	85	95	20	16.2	1	6	72	1	60	20.6	45	38.5	18.5	16.2	4.5	1	60.7	70	208/3/60	20	5.86	6,500	PETRA WPPH-7	1-12
RTU-2	3,000	1.5	4.1	3.14	5	2,600	1.25	2.5	1.62	2	900/1,800	1,800 / 1,800	95 / 74	75 / 62.7	78.1/64.4	14 / 11.9	70 / 51.7	60.5/46.4	76.9/63.8	55/54.5	88.5	74.1	85	95	22	16.2	1	6	72	1	65	20	45	38.5	20	16.2	4.5	1	66.1	80	208/3/60	18.4	5.39	6,500	PETRA WPPH-7.5	1-12

NOTES
1. PROVIDE SWSI SUPPLY AND EXHAUST FANS WITH SPRING ISOLATORS AND UNIT MOUNTED VFDS.
2. PROVIDE DIGITAL SCROLL COMPRESSORS ON BOTH CIRCUITS.
3. PROVIDE UV LIGHTS DOWN STREAM OF COIL BANK AND UV RATED WINDOW IN UV SECTION ACCESS DOOR.
4. PROVIDE COMPRESSOR AND WATER COOLED CONDENSER VESTIBULE
5. INCLUDE MARINE LIGHTS AND GFCI RECEPTACLE WITH UNIT MOUNTED TRANSFORMER.
6. PROVIDE OUTSIDE AIR MODULATING DAMPER, HOOD, AND BIRD SCREEN.
7. PROVIDE EXHAUST GRAVITY DAMPER AND LOUVER.
8. 3-STAGE ELECTRIC HEATER MUST INCLUDE SCR CONTROLS ON 1ST STAGE.
9. PROVIDE 2" MERV8 AND 4"MERV13 FILTERS ON SUPPLY AIR STREAM.
10. PROVIDE 2" MERV8 FILTERS ON EXHAUST AIR STREAM.
11. PROVIDE MODULATING RECIRCULATING AND WHEEL BYPASS DAMPERS.
12. UNIT TO HAVE 2" THERMALLY BROKEN CONSTRUCTION.
13. PROVIDE 2-WAY VALVE.

DEDICATED OUTDOOR AIR UNIT

TAG	SUPPLY FAN CFM	SUPPLY FAN ESP (IN W.G.)	SUPPLY FAN TSP (IN W.G.)	SUPPLY FAN MOTOR (BHP)	SUPPLY FAN MOTOR (HP)	EXHAUST FAN CFM	EXHAUST FAN ESP (IN W.G.)	EXHAUST FAN TSP (IN W.G.)	EXHAUST FAN MOTOR (BHP)	EXHAUST FAN MOTOR (HP)	ENERGY RECOVERY WHEEL OA / EA AIRFLOW (CFM)	ENERGY RECOVERY WHEEL SUMMER OAT DB/WB (°F)*	ENERGY RECOVERY WHEEL SUMMER RAT DB/WB (°F)	ENERGY RECOVERY WHEEL SUMMER LAT DB/WB (°F)	ENERGY RECOVERY WHEEL WINTER OAT DB/WB (°F)	ENERGY RECOVERY WHEEL WINTER RAT DB/WB (°F)	ENERGY RECOVERY WHEEL WINTER LAT DB/WB (°F)	PRE-COOL HEAT PIPE LAT DB/WB (°F)	PRE-COOL HEAT PIPE TOTAL CAPACITY (MBH)	DX COOLING COIL EAT DB/WB (°F)	DX COOLING COIL LAT DB/WB (°F)	DX COOLING COIL TOTAL CAPACITY (MBH)	DX COOLING COIL SENSIBLE CAPACITY (MBH)	DX COOLING COIL EWT (°F)	DX COOLING COIL LWT (°F)	DX COOLING COIL FLUID FLOW (GPM)	DX COOLING COIL WPD (FTH2O)	DX COOLING COIL COMPRESSOR QTY	DX COOLING COIL ROWS	REHEAT HEAT PIPE LAT DB/WB (°F)	REHEAT HEAT PIPE TOTAL CAPACITY (MBH)	HOT GAS REHEAT LAT DB (°F)	HOT GAS REHEAT ROWS	DX HEATING CAPACITY (MBH)	DX HEATING ΔT (°F)	DX HEATING EWT (°F)	DX HEATING LWT (°F)	DX HEATING FLUID FLOW (GPM)	DX HEATING WPD (FTH2O)	ELECTRIC HEAT kW	ELECTRIC HEAT NUMBER STAGES	ELECTRICAL MCA	ELECTRICAL MFS	ELECTRICAL V/PH/HZ	EER	COP	WEIGHT (LBS)	BASIS OF DESIGN	NOTES
DOAS-1	3,000	1.5	4.55	3.54	5	3,000	1.5	2.9	2.19	3	3,000 / 3,000	82 / 76.5	75 / 62.7	76.7 / 67.7	14 / 11.9	70 / 51.7	56.5/44.4	70.9 / 66.0	18.8	70.9 / 66.0	57.4 / 56.8	86.6	44.5	85	95	21	16.2	1	4	63.2 / 59	18.8	72	1	65	20	45	38.5	20	16.2	36	3	155	175	208/3/60	24	7	7,200	PETRA WPPH10	1-15

NOTES
1. PROVIDE SWSI SUPPLY AND EXHAUST FANS WITH SPRING ISOLATORS AND UNIT MOUNTED VFDS.
2. PROVIDE DIGITAL SCROLL COMPRESSOR.
3. PROVIDE UV LIGHTS DOWN STREAM OF COIL BANK AND UV RATED WINDOW IN UV SECTION ACCESS DOOR, AND DOOR SWITCH TO TURN OFF UV LIGHT WHEN DOOR IS OPENED.
4. PROVIDE COMPRESSOR AND WATER COOLED CONDENSER VESTIBULE
5. INCLUDE MARINE LIGHTS AND GFCI RECEPTACLE WITH UNIT MOUNTED TRANSFORMER.
6. PROVIDE OUTSIDE AIR MODULATING DAMPER, HOOD, AND BIRD SCREEN.
7. PROVIDE EXHAUST GRAVITY DAMPER AND LOUVER.
8. 3-STAGE ELECTRIC HEATER FOR SCR CONTROLS ON 1ST STAGE.
9. PROVIDE 2" MERV8 AND 4" MERV13 FILTERS ON SUPPLY AIR STREAM.
10. PROVIDE 2" MERV8 FILTERS ON EXHAUST AIR STREAM.
11. PROVIDE MODULATING RECIRCULATING DAMPER.
12. UNIT TO HAVE 2" DOUBLE WALL THERMALLY BROKEN CONSTRUCTION.
13. PROVIDE WRAP AROUND HEAT PIPE.
14. DX COOLING COIL LAT ON SUMMER DESIGN DAY CONDITIONS (95°F DB/74°F WB) TO BE 55.7°F DB / 54.7°F WB.
15. PROVIDE 3-WAY VALVE.

*UNIT SELECTION BASED ON WORST CASE HUMID DAY.

GROUND SOURCE HEAT PUMPS

TAG	SERVES	CONFIGURATION	SUPPLY FAN CFM	SUPPLY FAN MOTOR HP	SUPPLY FAN ESP (IN W.G.)	COOLING EAT DB/WB °F	COOLING LAT DB/WB °F	COOLING EWT (°F)	COOLING LWT (°F)	COOLING FLUID FLOW (GPM)	COOLING NET TOTAL CAPACITY (MBH)	COOLING NET SENSIBLE CAPACITY (MBH)	COOLING HEAT REJECTION (MBH)	COOLING WPD (FT H2O)	COOLING COMPRESSOR QTY	COOLING AIR PD (IN W.G.)	COOLING ROWS	HEATING EAT DB (°F)	HEATING LAT DB (°F)	HEATING EWT (°F)	HEATING LWT (°F)	HEATING FLUID FLOW (GPM)	HEATING TOTAL CAPACITY (MBH)	HEATING HEAT ABSORBTION (MBH)	HEATING WPD (FT H2O)	HEATING AIR PD (IN W.G.)	HOT GAS REHEAT HGR CAPACITY (MBH)	HOT GAS REHEAT HGR LAT (DB °F)	HOT GAS REHEAT HGR LAT (WB °F)	ELECTRICAL FLA	ELECTRICAL MCA	ELECTRICAL MFS	ELECTRICAL V/PH/HZ	EFFICIENCY EER	EFFICIENCY COP	BASIS OF DESIGN	NOTES
GSHP-1	KITCHEN 105	HORIZONTAL	700	0.29	0.65	75/63	55.5/54.9	85	93.8	5	18	16	21.9	9.9	1	0.19	3	70	91	45	40.2	5	17.6	13.2	11.3	0.17	14.4	73.2	61.6	10.2	12.1	15	208-230/1/60	14.5	4	FLORIDA HEAT PUMP EP018	1-6
GSHP-2	OFFICE AREA 103	HORIZONTAL	1,300	1.05	0.75	75/63	57.1/55.3	85	93.1	10	31.8	27.4	40	7.7	1	0.17	3	70	91.9	45	39.8	10	35.4	27	8.8	0.15	25.9	74.4	61.8	14.3	16.8	25	208-230/3/60	12.7	4.1	FLORIDA HEAT PUMP EP036	1-6
GSHP-3	CONFERENCE 123	HORIZONTAL	400	0.1	0.5	75/63	52.5/52.1	85	93.1	4	13.3	10.4	16.1	5.3	1	0.09	3	70	97.2	45	40.6	4	12.8	9.6	6	0.07	9.2	72.4	60	8.4	9.8	15	208-230/1/60	14.9	4	FLORIDA HEAT PUMP EP015	1-6
GSHP-4	LOUNGE/LOBBY 124	HORIZONTAL	1,000	0.54	0.5	75/63	56.6/55.8	85	94.9	6	23.8	22.2	29.3	6.6	1	0.15	3	70	89.3	45	39.6	6	24.2	18.3	7.5	0.16	20.3	73.7	62.2	16.3	19.7	30	208-230/1/60	13.7	4	FLORIDA HEAT PUMP EP024	1-6
GSHP-5	GROUP EXERCISE 121	HORIZONTAL	1,200	0.93	0.5	75/63	56.9/55.2	85	93.1	10	32.1	27.7	40.1	7.7	1	0.17	3	70	92	45	39.8	10	35.2	27	8.8	0.15	25.9	74.2	61.8	20.3	24.3	40	208-230/1/60	13.1	4.2	FLORIDA HEAT PUMP EP036	1-6
GSHP-6	FITNESS 119/WELLNESS 120	HORIZONTAL	600	0.19	0.6	75/63	55.4/54.9	85	93.4	4	13.7	12.3	16.7	5.3	1	0.12	3	70	90.3	45	40.5	4	13.1	9.9	6	0.11	11.0	73.1	61.6	8.4	9.8	15	208-230/1/60	14.3	4	FLORIDA HEAT PUMP EP018	1-6
GSHP-7	GAME 118/ART 115	HORIZONTAL	1,300	1.05	0.75	75/63	57.1/55.3	85	93.1	10	31.8	27.4	40	7.7	1	0.17	3	70	91.9	45	39.8	10	35.4	27	8.8	0.15	25.9	74.4	61.8	14.3	16.8	25	208-230/3/60	12.7	4.1	FLORIDA HEAT PUMP EP036	1-6
GSHP-8	ART WORKROOM 116	HORIZONTAL	1,000	0.54	0.5	75/63	56.6/55.8	85	94.9	6	23.8	22.2	29.3	6.6	1	0.15	3	70	89.3	45	39.6	6	24.2	18.3	7.5	0.16	20.3	73.7	62.2	16.3	19.7	30	208-230/1/60	13.7	4	FLORIDA HEAT PUMP EP024	1-6
GSHP-9	TECH ROOM 117	HORIZONTAL	400	0.1	0.5	75/63	52.5/52.1	85	93.1	4	13.3	10.4	16.1	5.3	1	0.09	3	70	97.2	45	40.6	4	12.8	9.6	6	0.07	9.2	72.4	60	8.4	9.8	15	208-230/1/60	14.9	4	FLORIDA HEAT PUMP EP015	1-6
GSHP-10	CLUB ROOM & ANNEX 111	HORIZONTAL	600	0.19	0.6	75/63	55.4/54.9	85	93.4	4	13.7	12.3	16.7	5.3	1	0.12	3	70	90.3	45	40.5	4	13.1	9.9	6	0.11	11.0	73.1	61.6	8.4	9.8	15	208-230/1/60	14.3	4	FLORIDA HEAT PUMP EP015	1-6
								TOTAL FLOW		63																												

NOTES
1. PROVIDE UNIT WITH ECM MOTORS.
2. PROVIDE MERV 13 FILTERS AND HINGED AND LATCHED FILTER RACK.
3. PROVIDE UNIT WITH DDC CONTROLS.
4. PROVIDE UNIT WITH HOT GAS BYPASS
5. PROVIDE UNIT MOUNTED DICONNECT SWITCH.
6. PROVIDE ALL UNITS WITH 2-WAY CONTROL VALVES.

SPLIT SYSTEM AIR CONDITION UNIT

TAG	SERVICE	INDOOR UNIT FAN NOMINAL CFM	INDOOR UNIT FAN HP	INDOOR UNIT FAN AMPS	INDOOR UNIT FAN V/PH/HZ	INDOOR UNIT COOLING TOTAL (MBH)	INDOOR UNIT COOLING EAT (°F) DB	INDOOR UNIT COOLING EAT (°F) WB	TAG	OUTDOOR UNIT COMPRESSOR QUANTITY	OUTDOOR UNIT COMPRESSOR REFRIGERANT	OUTDOOR UNIT FAN QUANTITY	OUTDOOR UNIT FAN FLA	OUTDOOR UNIT ELECTRICAL MCA	OUTDOOR UNIT ELECTRICAL MOCP	OUTDOOR UNIT ELECTRICAL V/PH/HZ	OUTDOOR UNIT AMBIENT TEMP CLG. (°F)	OUTDOOR UNIT WEIGHT (LBS)	SEER	BASIS OF DESIGN	NOTES
AC-1	TELE/COM	425	0.04	1	208/1/60	24	80	67	CU-1	1	410A	1	1.04	19.5	30	208/1/60	95	209	18	SAMSUNG: INDOOR-AQN24VFUAGM OUTDOOR - AQX24VFUAGM	1, 2, 3

NOTES
1. UNIT SHALL BE PROVIDE WITH SINGLE POINT ELECTRICAL CONNECTION AT THE OUTDOOR UNIT AND PROVIDE POWER TO THE INDOOR UNIT.
2. PROVIDE CONDENSATE PUMP
3. PROVIDE WIRED THERMOSTAT

MAKEUP AIR UNIT

TAG	LOCATION	SERVICE	MINIMUM OUTDOOR AIR CFM	MINIMUM OUTDOOR AIR %	SUPPLY FAN TYPE	SUPPLY FAN ESP (IN WG)	SUPPLY FAN CFM	SUPPLY FAN FAN RPM	SUPPLY FAN BHP	SUPPLY FAN MOTOR HP	SUPPLY FAN MOTOR FLA	SUPPLY FAN MOTOR V/PH/HZ	GAS FURNACE EAT (°F)	GAS FURNACE LAT (°F)	GAS FURNACE MBH OUTPUT	GAS FURNACE MBH INPUT	GAS FURNACE MIN GAS PRESSURE	GAS FURNACE FUEL TYPE	WEIGHT (LBS)	BASIS OF DESIGN	NOTES
MAU-1	ROOF	KITCHEN HOOD MAKE-UP-AIR	1,080	100	G10	1	1,080	831	0.3	0.5	1.9	208/3/60	20	80	80	100	7	NATURAL GAS	851	CAPTIVEAIRE A1-IBT-150-G10	1, 2

NOTES
1. PROVIDE WITH MODULATING GAS BURNER.
2. PROVIDE VFD ON SUPPLY FAN

KITCHEN HOOD SCHEDULE

TAG	LOCATION	BASIS OF DESIGN	LENGTH	MAX COOKING TEMP.	EXHAUST PLENUM TOTAL EXH.CFM	EXHAUST PLENUM HEIGHT	EXHAUST PLENUM DIA	EXHAUST PLENUM CFM	EXHAUST PLENUM S.P.	PERFORATED SUPPLY PLENUM(S) POS	PERFORATED SUPPLY PLENUM(S) LENGTH	PERFORATED SUPPLY PLENUM(S) WIDTH	PERFORATED SUPPLY PLENUM(S) HEIGHT	PERFORATED SUPPLY PLENUM(S) TYPE	RISER(S) WIDTH	RISER(S) LENGTH	RISER(S) CFM	RISER(S) S.P	TOTAL SUPPLY CFM	HOOD CONSTRUCTION	FILTERS BASIS OF DESIGN	FILTERS QTY	FILTERS HEIGHT	FILTERS LENGTH	FILTERS EFFICIENCY @ 9 MICRONS	LIGHTS QTY	LIGHTS TYPE	LIGHTS WIRE GUARD	UTILITY CABINETS LOCATION	UTILITY CABINETS SIZE	UTILITY CABINETS SWITCHES QUANTITY	FIRE SYSTEM PIPING	HOOD HANGING WGHT
KH-1	KITCHEN 105	CAPTIVE AIRE 5430-ND-2-PSP-F	5' 2.00"	600 DEG	1,200	4"	10"	1,200	-0.785	FRONT	64"	16"	6"	MAU	10"	24"	540	0.159"	1,080	304 SS WHERE EXPOSED	CAPTIVE AIRE - CAPTRATE SOLO FILTER	3	20"	16"	93% - SEE FILTER SPEC	3	SCREW IN COMPACT	NO	LEFT	16"x64"x6"	1 LIGHT	YES	463 LBS
														MAU	10"	24"	540	0.159"												1 FAN		

ELECTRIC UNIT HEATERS

TAG	LOCATION	NOMINAL CFM	CAPACITY (Kw)	TYPE	MOTOR HP	MOTOR SPEED (RPM)	AMPS	V/PH/HZ	BASIS OF DESIGN	NOTES
EUH-1	SPRINKLER 109A	350	3	CEILING SUSPENDED	1/100	1600	14.5	208/1/60	BERKO HUHAA320	1
EUH-2	LOADING 109	350	3	CEILING SUSPENDED	1/100	1600	14.5	208/1/60	BERKO HUHAA320	1
EUH-3	MECHANICAL 108	350	3	CEILING SUSPENDED	1/100	1600	24	208/1/60	BERKO HUHAA320	1
EWH-1	CORRIDOR 125E	100	3	WALL RECESSED	1/100	1600	14.4	208/1/60	BERKO FRC4024F	1,2
EWH-2	PRE FUNCTION 125C	100	3	WALL RECESSED	1/100	1600	14.4	208/1/60	BERKO FRC4024F	1,2
CCEH-1	BATHROOM 107	300	4	CEILING RECESSED	1/100	1600	14.2	208/1/60	BERKOFFCH542	1,2
CCEH-2	BATHROOM 106	300	4	CEILING RECESSED	1/100	1600	14.2	208/1/60	BERKOFFCH542	1,2
CCEH-3	VESTIBULE 100	300	4	CEILING RECESSED	1/100	1600	14.2	208/1/60	BERKOFFCH542	1,2

NOTES
1. PROVIDE UNIT MOUNTED THERMOSTAT
2. SEE CONTROL DRAWINGS FOR EMS CONTROL INTERLOCK.

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GP #21652

SCHEDULES - MECHANICAL
ASHBURN SENIOR CENTER
ASHBURN, VIRGINIA

DATE	DESCRIPTION
04/09/19	1 ADDENDUM 2

M-6.0
03.05.19
Bid Set

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