City of Fairfax

KIA OURISMAN FAIRFAX

#10601 AND 10641 FAIRFAX BOULEVARD, 10595 WARWICK AVENUE, 3700 FARR AVENUE

SPECIAL USE PERMIT / SPECIAL EXCEPTION

NOTES

1. OWNERS: MGB PROPERTIES, LLC AND KBL, LC
2. APPLICANT: OURISMAN FAIRFAX BOULEVARD, INC.
3. THE PROPERTY SHOWN HEREON IS IDENTIFIED BY THE CITY OF FAIRFAX, VIRGINIA, AS PARCEL ID NUMBER 57-2-02-078, 57-2-02-079, 57-2-02-081 AND 57-2-02-082 AND IS ZONED CR, COMMERCIAL RETAIL.
4. THE APPLICANT PROPOSES TO DEVELOP THE PROPERTY WITH VEHICLE SALES AND SERVICE ESTABLISHMENT, WHICH REQUIRES SPECIAL USE PERMITS AND SPECIAL EXCEPTIONS LISTED ON THIS SHEET.
5. THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED SHOW ONLY THOSE IMPROVEMENTS THAT ARE OBSERVABLE AND CAN BE LOCATED USING NORMAL SURVEY METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS AND EXISTING RECORDS. THERE IS NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED.
6. TOTAL AREA OF THE PROPERTY IS 81,322 SQUARE FEET OR 1.87 ACRES.
7. THIS TOPOGRAPHIC SURVEY IS BASED ON A CURRENT FIELD SURVEY BY THIS FIRM.
8. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR THE CITY OF FAIRFAX, VIRGINIA, COMMUNITY-PANEL NUMBER 5155240002D, REVISED JUNE 2, 2006, SHOWS THIS PROPERTY TO LIE IN ZONE X "AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN."
9. THE PROPERTY IS SERVED BY PUBLIC SEWER AND WATER.

LAND USE APPLICATIONS

1. SPECIAL USE APPLICATION FOR VEHICLE SALES AND LEASING, WHICH IS A SPECIAL USE IN THE CR ZONE.
2. SPECIAL USE APPLICATION FOR ADDITIONAL VEHICLE SERVICE (INCLUDING EV) IN ADDITION TO EXISTING VEHICLE REPAIR ON THE CR ZONE.
3. BOARD OF ARCHITECTURAL REVIEW AND RECOMMENDATION OF APPROVAL TO CITY COUNCIL. CITY COUNCIL WILL ULTIMATELY ISSUE CERTIFICATE OF APPROPRIATENESS.

SPECIAL EXCEPTIONS REQUESTED

1. SPECIAL EXCEPTION FOR WAIVER OF 4.2.4 TO LOCATE PARKING IN FRONT/SIDE YARD AS SPECIFIED IN SECTION 1.5.12, FOR 10601 AND 10641 FAIRFAX BOULEVARD, AND 3700 FARR AVENUE.
2. SPECIAL EXCEPTION FOR MODIFICATION OF SECTION 3.5.3.I.8 500 FT SEPARATION BETWEEN VEHICLE SALES FACILITIES.
3. SPECIAL EXCEPTION FOR WAIVER OF SECTION 4.5.6.B.2 TO PERMIT STREET TREES ALONG FAIRFAX BOULEVARD TO BE LOCATED MORE THAN 15 FT FROM BACK OF CURB.
4. SPECIAL EXCEPTION FOR WAIVER OF SECTION 4.4.4.B.1.b OF THE SIDEWALK REQUIREMENT ALONG FARR AVENUE TO ALLOW CANOPY TREES TO REMAIN. RIGHT-OF-WAY DEDICATION HAS BEEN PROVIDED ALONG FARR AVENUE TO NOT PRECLUDE A SIDEWALK IN THE FUTURE.

EXISTING LEGAL NON-CONFORMITIES

1. ALL EXISTING BUILDINGS ON SITE DO NOT MEET SETBACK REQUIREMENTS TODAY AND/OR WILL NOT MEET SETBACK REQUIREMENTS FOLLOWING CITY ACQUISITION OF LAND FOR PLANNED ROAD IMPROVEMENTS.
2. EXISTING BUILDINGS ON SITE DO NOT MEET ANGLE OF BULK PLANE REQUIREMENTS TODAY AND/OR WILL NOT MEET ANGLE OF BULK PLANE REQUIREMENTS FOLLOWING CITY ACQUISITION OF LAND FOR PLANNED ROAD IMPROVEMENTS.

PROPERTY OWNER SIGNATURES

MGB PROPERTIES, LLC

BY: M. GARDNER BRITT, JR.

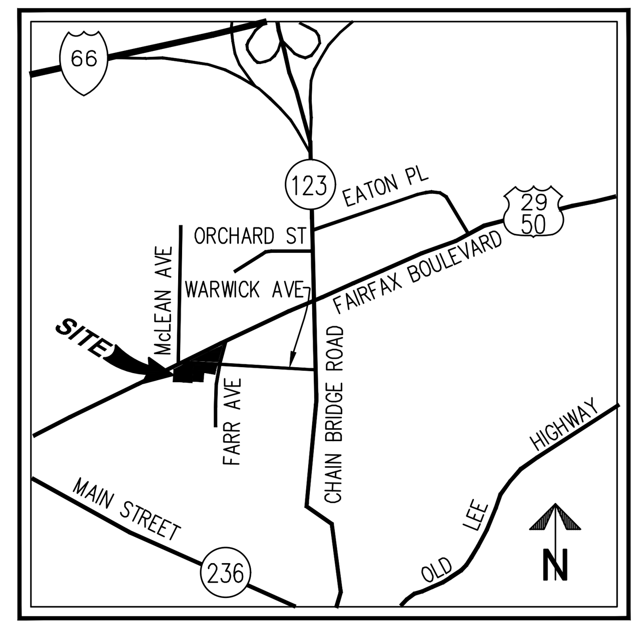
KBL, LC

Katherine B. Koch

BY: KATHERINE KOCH

VICINITY MAP

SCALE: 1"=2000'



PARCEL SUMMARY

(PRE-DEDICATION OF R.O.W.)

PARCEL	SQUARE FOOTAGE	ACRES
57-2-02-078	18,614	0.43
57-2-02-079	10,392	0.24
57-2-02-081	19,285	0.44
57-2-02-082	33,031	0.76
TOTAL	81,322	1.87

PROPOSED FARR AVE. RIGHT OF WAY
DEDICATION = 649 SF OR 0.149 ACRES
(SEE SHEET P-0301 FOR DETAILS AND LOCATION)

SERVICE BUILDING COMPLIANCE SUMMARY

SERVICE BUILDING

	EXISTING GSF	PROPOSED GSF	DIFFERENCE
REPAIR SERVICE BAYS	3,825	4,774	949
FOOTPRINT	7,431	10,109	2,678
BUILDING (LL&UL)	7,431	12,843	5,412

NOTE: THE SERVICE REPAIR IS INCREASING BY 949 SF WHICH IS A 24.8% INCREASE AND IS UNDER THE 25% EXPANSION PERMITTED FOR AN EXISTING NONCONFORMING USE.

OUTFALL ANALYSIS NARRATIVE

SEE SHEET P-0501 FOR ADDITIONAL INFORMATION.

1. THE EXISTING SITE DRAINS TO THE EXISTING STORM SEWER SYSTEM IN MCLEAN AVENUE, FAIRFAX BOULEVARD, AND WARWICK AVENUE. THE RECEIVING STORM SEWER SYSTEM FLOWS EAST IN WARWICK AVENUE, THEN NORTH TO FAIRFAX BOULEVARD, AND CONTINUES NORTHEAST IN FAIRFAX BOULEVARD BEFORE DISCHARGING INTO THE LARGE EXISTING CULVERT RUNNING PARALLEL TO FAIRFAX BOULEVARD NEAR THE INTERSECTION WITH EATON PLACE. FROM THAT POINT, THE LARGE STORM CULVERT EXTENDS NORTHEAST AND DISCHARGES INTO THE NORTH FORK OF ACCOTINK CREEK.
2. AFTER THE PROPOSED REDEVELOPMENT, SITE RUNOFF WILL CONTINUE TO DRAIN IN THE SAME DIRECTION. RUNOFF WILL CONTINUE TO BE DISCHARGED INTO THE SAME INLETS AND STORM SEWER SYSTEM. RUNOFF FROM THE PROPOSED BUILDING ROOF AS WELL AS SOME OF THE SITE SURFACE AREA WILL BE DIRECTED TO PROPOSED STORMWATER MANAGEMENT FACILITIES ON SITE. STORMWATER RELEASED FROM THIS FACILITY WILL BE PIPED TO AN EXISTING STORM SEWER THAT CONVEYS RUNOFF TO THE EXISTING STORM SEWER SYSTEM DESCRIBED ABOVE. THIS SYSTEM WILL REDUCE SITE PEAK RUNOFF RATES FOR THE 2 AND 10-YEAR STORMS TO BELOW PRE-DEVELOPMENT LEVELS AND WILL OTHERWISE BE DESIGNED TO COMPLY WITH APPLICABLE PROVISIONS OF THE CITY'S STORMWATER MANAGEMENT ORDINANCE.
3. BASED ON A PRELIMINARY REVIEW OF THE OUTFALL PATH DESCRIBED ABOVE, IT IS THE EXPECTATION OF THE SUBMITTING ENGINEER THAT THE OUTFALL WILL DETERMINED TO BE ADEQUATE WITHIN THE LIMITS OF ANALYSIS. FINAL DETERMINATION OF ADEQUACY AND FINAL STORMWATER MANAGEMENT DESIGN WILL BE PROVIDED AT TIME OF SITE PLAN.

STORMWATER MANAGEMENT AND BEST MANAGEMENT PRACTICES NARRATIVES

SEE SHEET P-0501 FOR ADDITIONAL INFORMATION.

1. THE EXISTING SITE CURRENTLY SERVES AS A EXISTING VEHICLE SALES AND SERVICE FACILITY, AND A PORTION OF THE SITE AT THE INTERSECTION OF FAIRFAX BOULEVARD AND MCLEAN AVENUE RECENTLY SERVED AS A FINANCIAL INSTITUTION. THE EXISTING SITE HAS NO STORMWATER MANAGEMENT OR WATER QUALITY FACILITIES. THE PROPOSED REDEVELOPMENT PROJECT WILL PRESERVE AND MODIFY THE EXISTING VEHICLE SERVICE BUILDING, CONSTRUCT A NEW VEHICLE SALES BUILDING, DEMOLISH THE EXISTING USED CAR SALES BUILDING, AND REMOVE AND RECONSTRUCT ALL EXISTING SITE IMPROVEMENTS TO CREATE A CONSOLIDATED VEHICLE SALES AND SERVICE FACILITY ACROSS MULTIPLE PARCELS. THIS WILL RESULT IN A NET DECREASE IN OVERALL IMPERVIOUS AREA. THE STORMWATER MANAGEMENT NECESSARY TO PREVENT AN INCREASE IN PEAK RUNOFF RATES FOR THE 2 AND 10-YEAR STORMS WILL BE ACCOMPLISHED WITH UNDERGROUND DETENTION FACILITIES TO BE LOCATED BETWEEN BUILDINGS. THE STORMWATER MANAGEMENT SYSTEM WILL DISCHARGE INTO THE EXISITNG STORM SEWER SYSTEM AS DESCRIBED IN THE OUTFALL NARRATIVE ABOVE. FINAL DESIGN TO BE DETERMINED AT TIME OF SITE PLAN.
2. BMP WILL BE PROVIDED IN ACCORDANCE WITH THE VIRGINIA RUNOFF REDUCTION METHOD THROUGH THE USE OF UNDERGROUND MANUFACTURED BMP FACILITIES TO BE DESIGNED AT TIME OF SITE PLAN.
3. THIS STORMWATER MANAGEMENT ANALYSIS IS PRELIMINARY AND SUBJECT TO CHANGE WITH FINAL ENGINEERING AT TIME OF SITE PLAN.

ZONING TABULATION

EXISTING ZONE: CR, COMMERCIAL RETAIL

SITE AREA: 81,322 SF OR 1.87 AC

	PERMITTED	PROVIDED
MAXIMUM DENSITY	20 DU/AC	N/A
MINIMUM LOT AREA	20,000 SF	81,322 SF
MINIMUM LOT WIDTH	N/A	N/A
MAXIMUM BUILDING HEIGHT	60 FT/5 STORIES	±31.5 FT/2 STORIES, ±26 FT/2 STORIES
BUILD-TO LINE	N/A	N/A
MAXIMUM BUILDING COVERAGE	60%	±29%
MAXIMUM LOT COVERAGE	85%	±72%
MINIMUM YARD REQUIREMENTS		
FRONT	20 FT MIN, 93 FT MAX	±20 FT
SIDE (ADJACENT TO RESIDENTIAL)	25 FT	±1 FT*
SIDE (NOT ADJACENT TO RESIDENTIAL)	0-10 FT	0-10 FT
REAR (ADJACENT TO RESIDENTIAL)	25 FT	±23 FT*
REAR (NOT ADJACENT TO RESIDENTIAL)	0-10 FT	0-10 FT
BULK PLANE REQUIREMENTS		
FRONT	N/A	N/A
SIDE (ADJACENT TO RESIDENTIAL)	45°	<45°*
REAR (ADJACENT TO RESIDENTIAL)	45°	<45°*
MAXIMUM FLOOR AREA	N/A	N/A

* SEE EXISTING LEGAL NON-CONFORMITIES, THIS SHEET.

PARKING /LOADING TABULATIONS

PARKING REQUIRED:

5,500 SF NEW CAR SALES AREA
5,500 SF @ 1 SP/500 SF = 11 SPACES
17 SERVICE BAYS
17 @ 2 SP/BAY = 34 SPACES

TOTAL PARKING REQUIRED: 45 SPACES

TOTAL PARKING PROVIDED: 61 SPACES (INCL. 4 HC)

BICYCLE PARKING
REQUIRED: 2 (1-40 REQD. SPACES)
PROVIDED: 2 (1 RACK)

LOADING REQUIRED:
LOADING REQUIRED = 1 SPACE (10,000 - 49,999 SF COMM. USE)

LOADING PROVIDED:
1 LOADING SPACE

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P-0303 PRELIMINARY UTILITY AND GRADING PLAN
P-0304 PRELIMINARY UTILITY UNDERGROUNDING PLAN
P-0401 CONCEPTUAL LANDSCAPE PLAN AND TABULATIONS
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WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners
Landscape Architects • Arborists
207 PARK AVENUE
FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301
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DATE: 1/18/23; REV. 06/30/23, 10/31/23, 08/08/24, 11/15/24
SCALE: AS NOTED
DRAWN: MM
CHECKED: AV

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	DATE	APPROVED	DATE

COVER SHEET

SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

NOTES:

1. THE PROPERTIES SHOWN HEREON ARE DESIGNATED BY THE CITY OF FAIRFAX, VIRGINIA, AS PARCEL IDENTIFICATION NUMBERS 57-2-02-078, 57-2-02-079, 57-2-02-081, AND 57-2-02-082, ALL ZONED CR PER THE CITY OF FAIRFAX ZONING MAP.

2. THE PROPERTIES ARE NOW AS FOLLOWS:
   - PID 87-2-02-078, 079, & 081: BEING THE RESIDUE OF LOTS 14, 15, 24, 25, 36, AND 37, RUST'S SUBDIVISION OF THE B.F.A. MYERS FARM AS RECORDED IN DEED BOOK C-9 AT PAGE 100 IS NOW IN THE NAME OF KBL, L.C., AS RECORDED IN DEED BOOK 10998 AT PAGE 746
   - PID 57-2-02-082: BEING THE RESIDUE OF LOTS 22 AND 23, RUST'S SUBDIVISION OF THE B.F.A. MYERS FARM AS RECORDED IN DEED BOOK C-9 AT PAGE 100 IS NOW IN THE NAME OF MGB PROPERTIES II, LLC, AS RECORDED IN DEED BOOK 16570 AT PAGE 259

   ALL AMONG THE LAND RECORDS OF FAIRFAX COUNTY, VIRGINIA

3. THIS PLAN AND THE SURVEY UPON WHICH IT IS BASED SHOWS ONLY THOSE IMPROVEMENTS THAT ARE OBSERVABLE AND CAN BE LOCATED USING NORMAL SURVEY METHODS. THE UNDERGROUND UTILITIES SHOWN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION, MISS UTILITY MARKINGS AND EXISTING RECORDS. THERE ARE NO GUARANTEES, EITHER EXPRESS OR IMPLIED, THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED, OR THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED. THE UNDERGROUND UTILITIES HAVE NOT BEEN PHYSICALLY LOCATED. WATER AND GAS LINE SIZES ARE FROM RECORD INFORMATION. THE DEPICTION OF OVERHEAD WIRES SHOWN HEREON REPRESENT THE PRESENCE OF OVERHEAD UTILITIES BUT DOES NOT REFLECT ACTUAL WIRE LOCATIONS OR SERVICES THAT MAY EXIST BETWEEN INDIVIDUAL POLES OR STRUCTURES.

4. TOTAL AREA OF THE PROPERTIES IS 81,322 SQUARE FEET OR 1.8669 ACRES. (PREVIOUS AREA 92,718 SQUARE FEET/2.1285 ACRES PRIOR TO R.O.W. DEDICATION)

5. THIS PLAN IS BASED ON A CURRENT FIELD SURVEY BY THIS FIRM.

6. THE FEDERAL EMERGENCY MANAGEMENT AGENCY'S FLOOD INSURANCE RATE MAP FOR FAIRFAX COUNTY, VIRGINIA, MAP NUMBER 5155240002D, EFFECTIVE DATE JUNE 2, 2006, DESIGNATES THE PROPERTY AS BEING IN ZONE X, AREAS DETERMINED TO BE OUTSIDE THE 0.2% ANNUAL CHANCE FLOODPLAIN.

7. EASEMENTS, CONDITIONS, COVENANTS AND RESTRICTIONS, SHOWN AND/OR NOTED, ARE PER THE TITLE REPORT ISSUED BY WALKER TITLE, LLC, CASE NUMBER A2101659 DATED DECEMBER 13, 2021 (AS TO PARCELS 57-2-02-078, 57-2-02-79 AND 57-2-02-081 ONLY).

8. THE SITE SHOWN HEREON IS REFERENCED TO THE NATIONAL GEODETIC VERTICAL DATUM OF 1929 AS COMPUTED FROM A FIELD RUN VERTICAL CONTROL SURVEY AND IS REFERENCED TO THE VIRGINIA COORDINATE SYSTEM OF 1983, [NAD 83(2011) (EPOCH:2010.0000)] AS COMPUTED FROM A FIELD RUN BOUNDARY AND HORIZONTAL CONTROL SURVEY THAT TIES THIS SUBDIVISION BOUNDARY AND THE BENCHMARK(S) SHOWN TO NOAA/NGS MONUMENT PID NUMBER DH7960 LOYB; LOYOLA B COOP CORS ARP. THE COMBINED FACTOR APPLIED TO THE FIELD DISTANCES TO DERIVE THE REFERENCED COORDINATES IS 0.99994441. THE FOOT DEFINITION USED FOR CONVERSION OF THE MONUMENT COORDINATES AND IN THE PERFORMANCE OF THIS SURVEY IS THE U.S. SURVEY FOOT. CONTOUR INTERVAL IS TWO FEET.

9. THIS SURVEY WAS COMPLETED UNDER THE DIRECT AND RESPONSIBLE CHARGE OF, DAVID N. ISHERWOOD, L.S., FROM AN ACTUAL [X] GROUND OR [ ] AIRBORNE SURVEY MADE UNDER MY SUPERVISION; THAT THE IMAGERY AND/OR ORIGINAL DATA WAS OBTAINED ON JULY 13, 2022 AND MAY 10, 2023; AND THAT THIS PLAT, MAP, OR DIGITAL GEOSPATIAL DATA INCLUDING METADATA MEETS MINIMUM ACCURACY STANDARDS UNLESS OTHERWISE NOTED.

10. EXISTING PARKING LOT STRIPING SHOWN ON THESE PLANS REFLECTS CONDITIONS OBSERVED DURING A FIELD SURVEY CONDUCTED BY THIS FIRM. THERE ARE EXISTING UNSTRIPED PAVED AREAS WITHIN PARCEL 57-2-02-078 WHERE VEHICLES ARE PARKED, WHICH HAVE BEEN APPROXIMATED FROM AERIAL IMAGERY AS DEPICTED ON THIS SHEET.

SANITARY SEWER AS-BUILT

SMH 880	
MANHOLE TOP =	382.03
8"INV IN (SOUTH)=	375.49
8"INV OUT (SMH 889)=	375.42
SMH 889	
MANHOLE TOP =	379.78
8"INV IN (S.WEST)=	373.14
8"INV OUT (SMH 879)=	373.06
SMH 879	
MANHOLE TOP =	379.85
8"INV IN (SMH 880)=	373.03
8"INV IN (SMH 889)=	372.95
8"INV OUT (N.EAST)=	372.94
SMH 1918	
MANHOLE TOP =	385.42
8"INV IN (SOUTH)=	378.82
8"INV OUT (SMH 1987)=	378.64
SMH 2867	
MANHOLE TOP =	373.10
8"INV IN (N.EAST)=	365.90
8"INV OUT (SMH 1897)=	365.83
SMH 1897	
MANHOLE TOP =	376.97
8"INV IN (SMH 1918)=	369.97
UP ON WALL	
8"INV IN (WEST)=	365.42
8"INV IN (SMH 2867)=	365.32
8"INV OUT (EAST)=	365.12

PIPE SIZES ARE PER RECORD INFORMATION

STORM SEWER AS-BUILT

SD 2050	
CURB INLET TOP =	380.08
15"RCP OUT (SD 428)=	377.84
SD 2051	
GRATE TOP =	378.78
15"CMP OUT (SD 428)=	377.48
SD 428	
MANHOLE TOP =	379.64
15"RCP IN (SD 2050)=	376.70
15"CMP IN (SD 2051)=	376.54
15"RCP OUT (SD 3310)=	376.34
SD 3310	
CURB INLET TOP =	379.69
15"RCP IN (SD 428)=	375.49
15"CPP OUT (EAST)=	375.34
SD 3313	
MANHOLE TOP =	375.50
12"RCP IN (SOUTH)=	372.80
15"RCP OUT (SD 3314)=	370.80
SD 3314	
MANHOLE TOP =	370.49
15"RCP IN (SD 3313)=	367.71
15"RCP OUT (SD 1097)=	365.49
SD 1097	
CURB INLET TOP =	370.59
15"RCP IN (SD 3314)=	365.24
30"RCP IN (WEST)=	363.46
30"RCP OUT (NORTH)=	363.44
SD 2960	
CURB INLET TOP =	363.30
15"RCP OUT (EAST)=	357.20

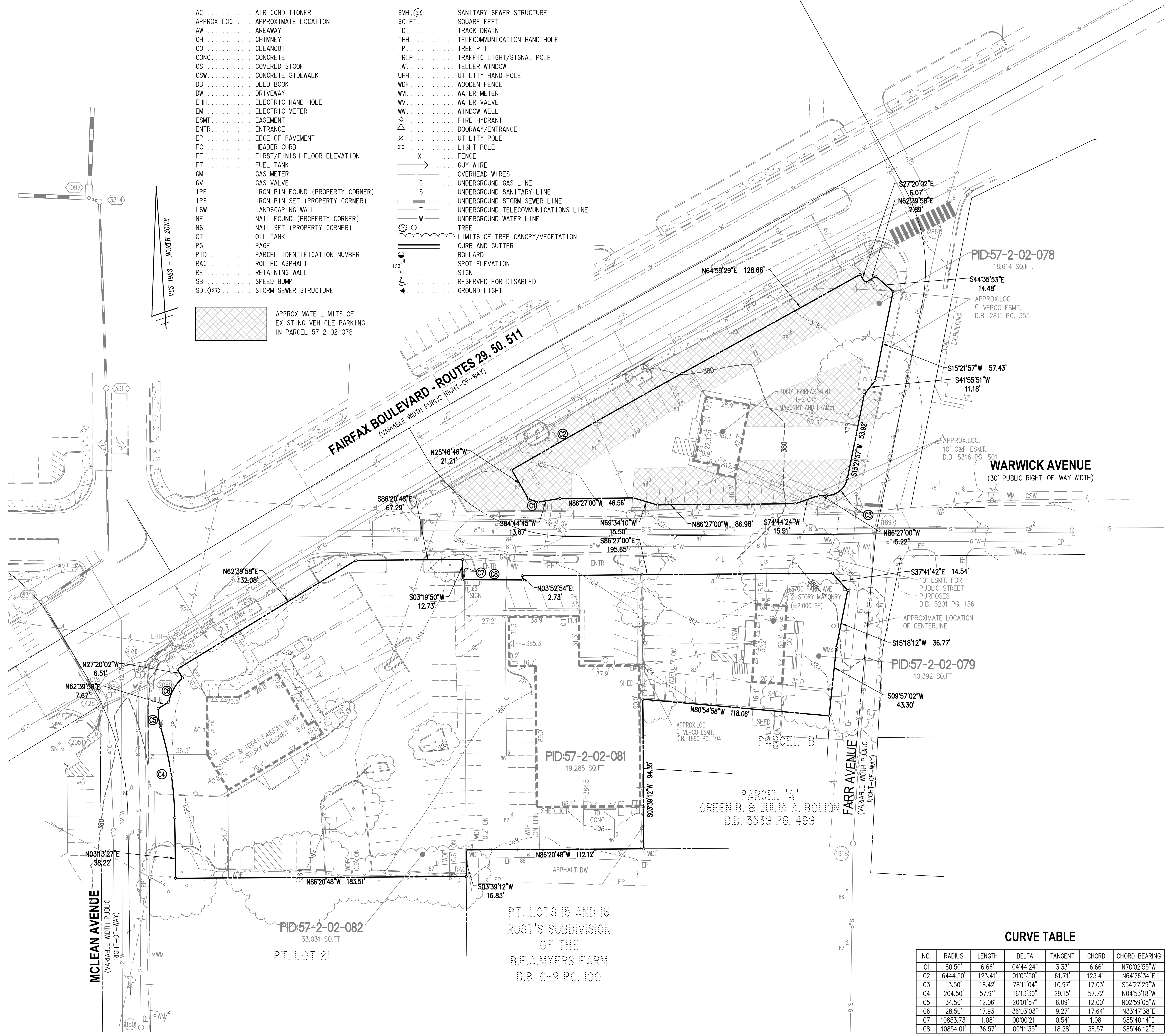
GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

LEGEND

AC	AIR CONDITIONER
APPROX.LOC	APPROXIMATE LOCATION
AW	AREAWAY
CH	CHIMNEY
CO	CLEANOUT
CONC	CONCRETE
CS	COVERED STOOP
CSW	CONCRETE SIDEWALK
DB	DEED BOOK
DW	DRIVEWAY
EHH	ELECTRIC HAND HOLE
EM	ELECTRIC METER
ESMT	EASEMENT
ENTR	ENTRANCE
EP	EDGE OF PAVEMENT
FC	HEADER CURB
FF	FIRST/FINISH FLOOR ELEVATION
FT	FUEL TANK
GM	GAS METER
GV	GAS VALVE
IPF	IRON PIN FOUND (PROPERTY CORNER)
IPS	IRON PIN SET (PROPERTY CORNER)
LSW	LANDSCAPING WALL
NF	NAIL FOUND (PROPERTY CORNER)
NS	NAIL SET (PROPERTY CORNER)
OT	OIL TANK
PG	PAGE
PID	PARCEL IDENTIFICATION NUMBER
RAC	ROLLED ASPHALT
RET	RETAINING WALL
SB	SPEED BUMP
SD, (123)	STORM SEWER STRUCTURE
SMH, (123)	SANITARY SEWER STRUCTURE
SQ.FT	SQUARE FEET
TD	TRACK DRAIN
THH	TELECOMMUNICATION HAND HOLE
TP	TREE PIT
TRLP	TRAFFIC LIGHT/SIGNAL POLE
TW	TELLER WINDOW
UHH	UTILITY HAND HOLE
WDF	WOODEN FENCE
WM	WATER METER
WV	WATER VALVE
WW	WINDOW WELL
	FIRE HYDRANT
	DOORWAY/ENTRANCE
	UTILITY POLE
	LIGHT POLE
—X—	FENCE
	GUY WIRE
	OVERHEAD WIRES
—G—	UNDERGROUND GAS LINE
—S—	UNDERGROUND SANITARY LINE
	UNDERGROUND STORM SEWER LINE
—T—	UNDERGROUND TELECOMMUNICATIONS LINE
—W—	UNDERGROUND WATER LINE
	TREE
	LIMITS OF TREE CANOPY/VEGETATION
	CURB AND GUTTER
	BOLLARD
123 +4	SPOT ELEVATION
	SIGN
	RESERVED FOR DISABLED
	GROUND LIGHT
	APPROXIMATE LIMITS OF EXISTING VEHICLE PARKING IN PARCEL 57-2-02-078



CURVE TABLE

NO.	RADIUS	LENGTH	DELTA	TANGENT	CHORD	CHORD BEARING
C1	80.50'	6.66'	04°44'24"	3.33'	6.66'	N70°02'55"W
C2	6444.50'	123.41'	01°05'50"	61.71'	123.41'	N64°26'34"E
C3	13.50'	18.42'	78°11'04"	10.97'	17.03'	S54°27'29"W
C4	204.50'	57.91'	16°13'30"	29.15'	57.72'	N04°53'18"W
C5	34.50'	12.06'	20°01'57"	6.09'	12.00'	N02°59'05"W
C6	28.50'	17.93'	36°03'03"	9.27'	17.64'	N33°47'38"E
C7	10853.73'	1.08'	00°00'21"	0.54'	1.08'	S85°40'14"E
C8	10854.01'	36.57'	00°11'35"	18.28'	36.57'	S85°46'12"E

EXISTING CONDITIONS PLAN

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
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Landscape Architects • Arborists
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FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301
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SCALE: 1"=30' | DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24 | DRAWN: MM | CHECKED: AV

SHEET: P-0201

Fairfax Co.	Tree Inventory																			
Tree Survey Information Completed by Walter Phillips, Inc - Michelle Mitchell- ISA MA#-5007A Project# (22-053) 06/07/2023																				
Tree Information								Species and Condition Ratings: Species	Condition					Total Score	Activities					Notes
Tree #	Botanical Name	Common Name	Size DBH (in)	Critical Root Zone (CRZ) Radius (ft)	Native	Invasive	Offsite/ Shared/ ROW	Species Rating % (Average High/Low ISA Mid Atlantic)	Root Flare Rating (0-100%)	Trunk Rating (0-100%)	Branches/Twigs Rating (0-100%)	Canopy/Leaves Rating (0-100%)	Condition Rating Average %	Average Condition and Speceies Rating	Removal	Hand Removal/ Selective Removal	Tree Protection Fence	Root Prune	Root Padding	
101	Quercus alba	white oak	33"	33'	X			88%	30%	70%	40%	60%	50%	69% GOOD						Mulch volcano, concrete pad impacting roots, utility pruning, needs pruning
102	Quercus alba	white oak	30"	30'	X			88%	40%	50%	40%	60%	48%	68% GOOD						Mulch volcano, English ivy on trunk, utlity pruning, needs pruning
103	Quercus alba	white oak	30"	30'	X			88%	50%	50%	40%	40%	45%	66% GOOD	X	X				Growing on slope with ivy, water sprouts, crown dieback, compacted soil
104	Morus alba	white mulberry	12"	12'		X		40%	50%	55%	60%	70%	59%	49% FAIR	X	X				Compacted soil, root flare not visible, leaning, broken branches, needs pruning, some crown die back
105	Lagerstroemia indica	crapemyrtle	10"	10'				78%	40%	50%	50%	70%	53%	65% GOOD	X	X				Mulch volcano, scale infestation trunk and branches, dead branches, needs pruning
106	Lagerstroemia indica	crapemyrtle	10"	10'				78%	60%	50%	50%	60%	55%	66% GOOD	X	X				Girdled roots, compacted soil around root fare, scale infestation on trunk and branches, dead branches, needs pruning
107	Quercus palustris	pin oak	14"	14'	X		SHARED	65%	40%	60%	60%	70%	58%	61% GOOD			X			Compacted spoil, English ivy, poison ivy, minor dead branches
108	Robinia pseudoacacia	black locust	12"	12'	X			55%	40%	50%	50%	70%	53%	54% FAIR			X			Compacted soil, lion tailed pruning,
109	Liquidambar styraciflua	sweet gum	28"	28'	X			65%	50%	60%	78%	70%	65%	65% GOOD	X	X				Majority of roots are girdled, water sprouts, trunk has a minor split, crown unbalanced
110	Pyrus calleryana 'Bradfordi'	'Bradford' pear	14"	14'		X		50%	50%	40%	50%	70%	53%	51% FAIR	X	X				Mulch volcano, compacted soil, water sprouts, dead branches
111	Pyrus calleryana 'Bradfordi'	'Bradford' pear	10"	10'		X		50%	60%	40%	70%	70%	60%	55% FAIR	X	X				Compacted soil, mulch volcano, frost crack on trunk
112	Pyrus calleryana 'Bradfordi'	'Bradford' pear	23"	23'		X		50%	60%	70%	50%	40%	55%	53% FAIR	X	X				Girdled roots, mulch volcano, dead branches, brownspot, rust
113	Pyrus calleryana 'Bradfordi'	'Bradford' pear	10"	10'		X		50%	40%	50%	50%	60%	50%	50% FAIR	X	X				Water sprouts, included bark, dead twigs, codominent leaders, rust
114	Lagerstroemia indica	crapemyrtle	6"	8'				78%	70%	50%	60%	70%	63%	70% GOOD	X	X				Staked with guy wires, dead twigs, multi-leader
115	Pyrus calleryana 'Bradfordi'	'Bradford' pear	14"	14'		X		50%	50%	40%	60%	50%	50%	50% FAIR	X	X				Major girdled roots, compacted soil, codominent leaders, brown spot
116	Lagerstroemia indica	crapemyrtle	6"	8'				78%	40%	40%	40%	60%	45%	61% GOOD	X	X				Water sprouts, girdled roots, scale infestation on branches and trunk, needs pruning
117	Lagerstroemia indica	crapemyrtle	16"	16'				78%	70%	70%	80%	80%	75%	76% GOOD	X	X				Dead twigs, needs pruning
118	Lagerstroemia indica	crapemyrtle	12"	12'				78%	70%	70%	80%	80%	75%	76% GOOD	X	X				Dead twigs, compacted soil
119	Quercus rubra	northern red oak	13"	13'	X			75%	40%	60%	50%	50%	50%	63% GOOD	X	X				Adjacent red oak planted close, dead branches, need pruning
120	Quercus rubra	northern red oak	9"	9'	X			75%	40%	60%	60%	50%	53%	64% GOOD	X	X				Adjacent red oak planted close, dead branches, need pruning
121	Picea abies	Norway spruce	19"	19'		X	OFFSITE	55%	60%	50%	60%	60%	58%	56% FAIR		X				Interior dieback, needs pruning
122	Picea abies	Norway spruce	20"	20'		X	OFFSITE	55%	60%	50%	50%	50%	53%	54% FAIR		X				Dead branches, needs pruning
123	Quercus rubra	northern red oak	12"	12'	X			75%	NA	NA	60%	60%	60%	68% GOOD	X	X				Root flare and trunk unavailable because of neighboring fence, some dead branches, needs pruning
124	Quercus rubra	northern red oak	12"	12'	X			75%	NA	NA	60%	60%	60%	68% GOOD	X	X				Root flare and trunk unavailable because of neighboring fence, some dead branches, needs pruning
125	Robinia pseudoacacia	black locust	31"	31'	X		OFFSITE	55%	NA	NA	60%	50%	55%	55% FAIR			X			Root flare and trunk unavailable because of neighboring fence, dead branches, insect damage
126	Robinia pseudoacacia	black locust	15"	15'	X		OFFSITE	55%	NA	NA	60%	50%	55%	55% FAIR			X			Root flare and trunk unavailable because of neighboring fence, dead branches, cankers visible on trunk above fence line
127	Catalpa speciosa	catalpa	15"	15'	X			45%	60%	60%	40%	50%	53%	49% FAIR	X	X				Compacted and girdled roots, signs of physical damage to roots and trunk, dead branches, needs pruning
128	Quercus rubra	northern red oak	14"	14'	X			75%	40%	50%	60%	60%	53%	64% GOOD	X	X				Compacted roots, small amount of English ivy, dead branches and twigs,
129	Quercus rubra	northern red oak	12"	12'	X		OFFSITE	75%	NA	NA	50%	50%	50%	63% GOOD			X			Root flare not availbe to exampine, dead branches, some crown die back
130	Robinia pseudoacacia	black locust	13"	13'	X		OFFSITE	55%	NA	NA	70%	70%	70%	63% GOOD			X			
131	Quercus rubra	northern red oak	12"	12'	X			75%	40%	40%	50%	50%	45%	60% FAIR			X			Compacted soil, poison ivy, English ivy, dead branches
132	Quercus rubra	northern red oak	22"	0'	X		SHARED	0%					0%	0% DEAD			X			Dead
133	Quercus rubra	northern red oak	14"	14'	X		OFFSITE	75%	NA	50%	50%	60%	53%	64% GOOD			X			Dead branches, compacted soil, limited soil volume, English ivy
134	Quercus rubra	northern red oak	12"	12'			SHARED	75%	40%	50%	60%	60%	53%	64% GOOD			X			

DBH = Diameter at Breast Height (measured 4.5 feet above ground)

CRZ = Critical Root Zone - As determined by the corresponding jurisdiction

CRZ values for trees with multiple stems were calculated based on methods outlined in the 10th edition of the Guide for Plant Appraisal, published by the I.S.A.

Shared trees shall not be removed without written permission from adjacent property owners.

Offsite trees were assesd without trespassing. Measurements are approximate.

TREE CONDITION LEGEND

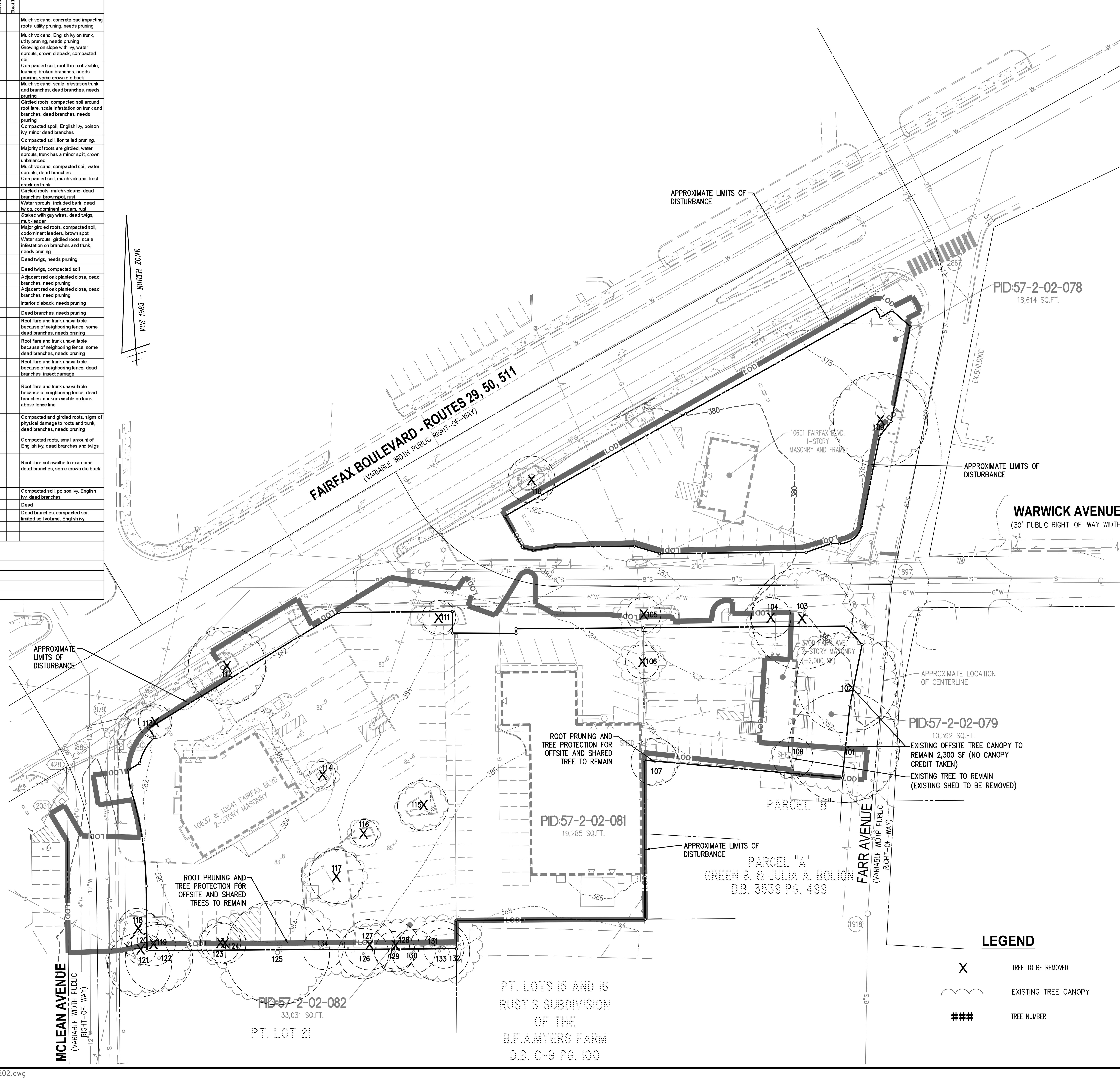
ASSESSMENT OF PLANT CONDITION CONSIDERS HEALTH, STRUCTURE, AND FORM. EACH MAY BE DESCRIBED RATING CATEGORIES THAT CAN BE TRANSLATED INTO A PERCENT RATING PER ISA GUIDE FOR PLANT APPRAISAL, 10TH EDITION

RATING CATEGORY	CONDITION COMPONENSTS: HEALTH	STRUCTURE	FORM	PERCENT RATING
EXCELLENT	HIGH VIGOR AND NEARLY PERFECT HEALTH WITH LITTLE OR NO TWIG DIEBACK, DISCOLORATION OR DEFOLIATION.	NEARLY IDEAL AND FREE OF DEFECTS	NEARLY IDEAL FOR THE SPECIES. GENERALLY SYMMETRIC, CONSISTENT WITH THE INTENDED USE	81% TO 100%
GOOD	VIGOR IS NORMAL FOR THE SPECIES. NO SIGNIFICANT DAMAGE DUE TO DISEASES OR PEST. ANY TWIG DIEBACK, DEFOLIATION, OR DISCOLORATION IS MINOR.	WELL-DEVELOPED STRUCTURE. DEFECTS ARE MINOR AND CAN BE CORRECTED.	MINOR ASYMMETRIES/DEVIATIONS FROM SPECIES NORM. MOSTLY CONSISTENT WITH THE INTENDED USE. FUNCTIONS AND AESTHETICS ARE NOT COMPROMISED	61% TO 80%
FAIR	REDUCED VIGOR. DAMAGE DUE TO INSECTS OR DISEASES MAY BE SIGNIFICANT AND ASSOCIATED WITH DEFOLIATION BUT IS NOT LIKELY TO BE FATAL. TWIG DIEBACK, DEFOLIATION, DISCOLORATION, AND/OR DEAD BRANCHES MAY COMPRISE UP TO 50% OF CROWN.	A SINGLE DEFECT OF A SIGNIFICANT NATURE OR MULTIPLE MODERATE DEFECTS. DEFECTS ARE NOT PRACTICAL TO CORRECT OR REQUIRE MULTIPLE TREATMENTS OVER SEVERAL YEARS.	MAJOR ASYMMETRIES/DEVIATIONS FROM SPECIES NORM. FUNCTION AND/OR AESTHETICS ARE COMPROMISED.	41% TO 60%
VERY POOR	UNHEALTHY AND DECLINING IN APPEARANCE. POOR VIGOR. LOW FOLIAGE DENSITY AND POOR FOLIAGE COLOR ARE PRESENT. POTENTIALLY FATAL PEST INFESTATION. EXTENSIVE TWIG AND/OR BRANCH DIEBACK	WELL-DEVELOPED STRUCTURE. DEFECTS ARE MINOR AND CAN BE CORRECTED.	MINOR ASYMMETRIES/DEVIATIONS FROM SPECIES NORM. MOSTLY CONSISTENT WITH THE INTENDED USE. FUNCTIONS AND AESTHETICS ARE NOT COMPROMISED	61% TO 80%
DEAD				0% TO 5%

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



EXISTING VEGETATION PLAN

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE
REVISION APPROVED BY					

AARON M. VINSON
Lic. No.041851
11/15/24
COMMONWEALTH OF VIRGINIA PROFESSIONAL ENGINEER

WALTER L. PHILLIPS INCORPORATED
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SCALE: 1"=30' DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24 DRAWN: MM CHECKED: AV

LEGEND

BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	C.O.	CLEAN OUT	C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
		TRANSFORMER	
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
		FENCE	
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 264	CONTOURS	260 264
	+264 50	SPOT ELEVATION	+264 50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	

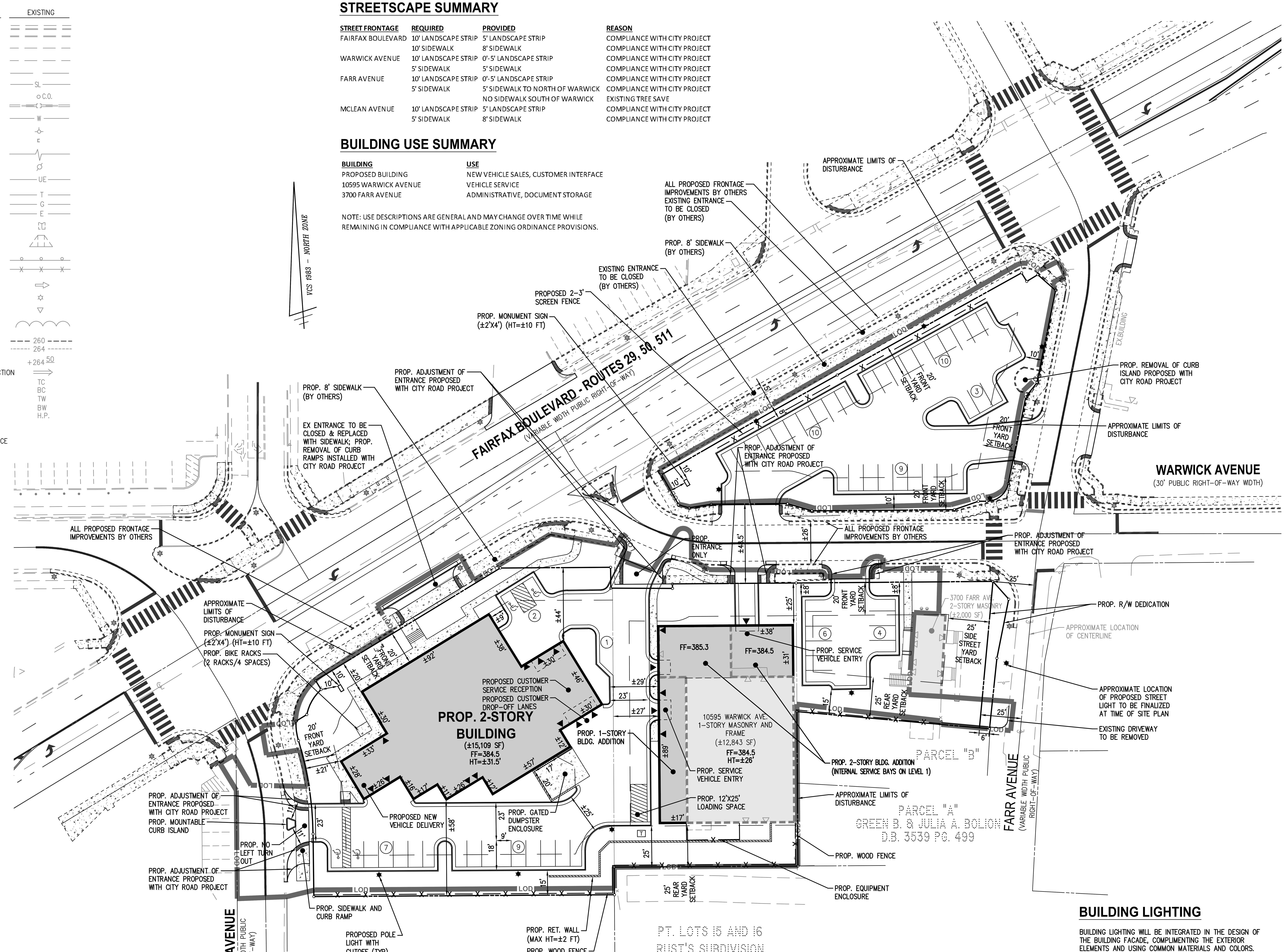
STREETSCAPE SUMMARY

STREET FRONTAGE	REQUIRED	PROVIDED	REASON
FAIRFAX BOULEVARD	10' LANDSCAPE STRIP	5' LANDSCAPE STRIP	COMPLIANCE WITH CITY PROJECT
	10' SIDEWALK	8' SIDEWALK	COMPLIANCE WITH CITY PROJECT
WARWICK AVENUE	10' LANDSCAPE STRIP	0'-5' LANDSCAPE STRIP	COMPLIANCE WITH CITY PROJECT
	5' SIDEWALK	5' SIDEWALK	COMPLIANCE WITH CITY PROJECT
FARR AVENUE	10' LANDSCAPE STRIP	0'-5' LANDSCAPE STRIP	COMPLIANCE WITH CITY PROJECT
	5' SIDEWALK	5' SIDEWALK TO NORTH OF WARWICK	COMPLIANCE WITH CITY PROJECT
		NO SIDEWALK SOUTH OF WARWICK	EXISTING TREE SAVE
MCLEAN AVENUE	10' LANDSCAPE STRIP	5' LANDSCAPE STRIP	COMPLIANCE WITH CITY PROJECT
	5' SIDEWALK	8' SIDEWALK	COMPLIANCE WITH CITY PROJECT

BUILDING USE SUMMARY

BUILDING	USE
PROPOSED BUILDING	NEW VEHICLE SALES, CUSTOMER INTERFACE
10595 WARWICK AVENUE	VEHICLE SERVICE
3700 FARR AVENUE	ADMINISTRATIVE, DOCUMENT STORAGE

NOTE: USE DESCRIPTIONS ARE GENERAL AND MAY CHANGE OVER TIME WHILE REMAINING IN COMPLIANCE WITH APPLICABLE ZONING ORDINANCE PROVISIONS.



GRAPHIC SCALE

(IN FEET)
1 inch = 30 ft.

SAMPLE RETAINING WALL IMAGE

SAMPLE FENCE IMAGE

STREETLIGHTS

EXCEPT AS SHOWN HEREON, ALL STREETLIGHTS ARE ASSUMED TO BE INSTALLED BY OTHERS AS PART OF THE CITY'S ROAD IMPROVEMENT PROJECT.

* PROPOSED STREETLIGHT (THIS APPLICATION)
* PROPOSED STREETLIGHT (CITY PROJECT)

ON SITE UTILITIES

ALL PROPOSED UTILITIES TO BE INSTALLED ON SITE SHALL BE PLACED UNDERGROUND AT APPLICANTS EXPENSE.

SITE LIGHTING

SITE LIGHTING WILL BE DESIGNED AS AN INTEGRAL ELEMENT OF THE PROJECT AND WILL UTILIZE FULL CUTOFF LED FIXTURES ORIENTATED TO MINIMIZE LIGHT LEAKAGE. ALL SITE LIGHTING FIXTURES WILL COMPLY WITH APPLICABLE CODES, AND FIXTURES WITHIN 50 FEET OF A RESIDENTIAL PROPERTY BOUNDARY WILL NOT EXCEED 15 FEET IN HEIGHT.

BUILDING LIGHTING

BUILDING LIGHTING WILL BE INTEGRATED IN THE DESIGN OF THE BUILDING FACADE, COMPLIMENTING THE EXTERIOR ELEMENTS AND USING COMMON MATERIALS AND COLORS. EXTERIOR BUILDING FIXTURES FOR SECURITY AND REQUIRED BY CODE ALONG WITH ACCENT LIGHTING WILL UTILIZE SHIELDED LED FIXTURES, MOUNTED TO MINIMIZE LIGHT SPILLAGE.

NOISE MITIGATION

THE DESIGN OF BOTH THE NEW SALES BUILDING AND RENOVATION/ADDITION OF THE SERVICE BUILDING HAVE INTEGRATED NOISE MITIGATION MEASURES IN THE FOLLOWING WAYS:
- ORIENTATION OF SERVICE AREA DOORS AWAY FROM RESIDENTIAL AREAS
- MINIMUM 10 FOOT SETBACK OF RTUs FROM EDGE OF ROOF PARAPETS
- INTEGRATION OF LANDSCAPE BUFFER ALONG PROPERTY LINES WHERE POSSIBLE

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DATE: 1/18/23; REV. 06/30/23, 10/31/23, 08/08/24, 11/15/24
SCALE: 1"=30'
DRAWN: MM
CHECKED: AV

AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

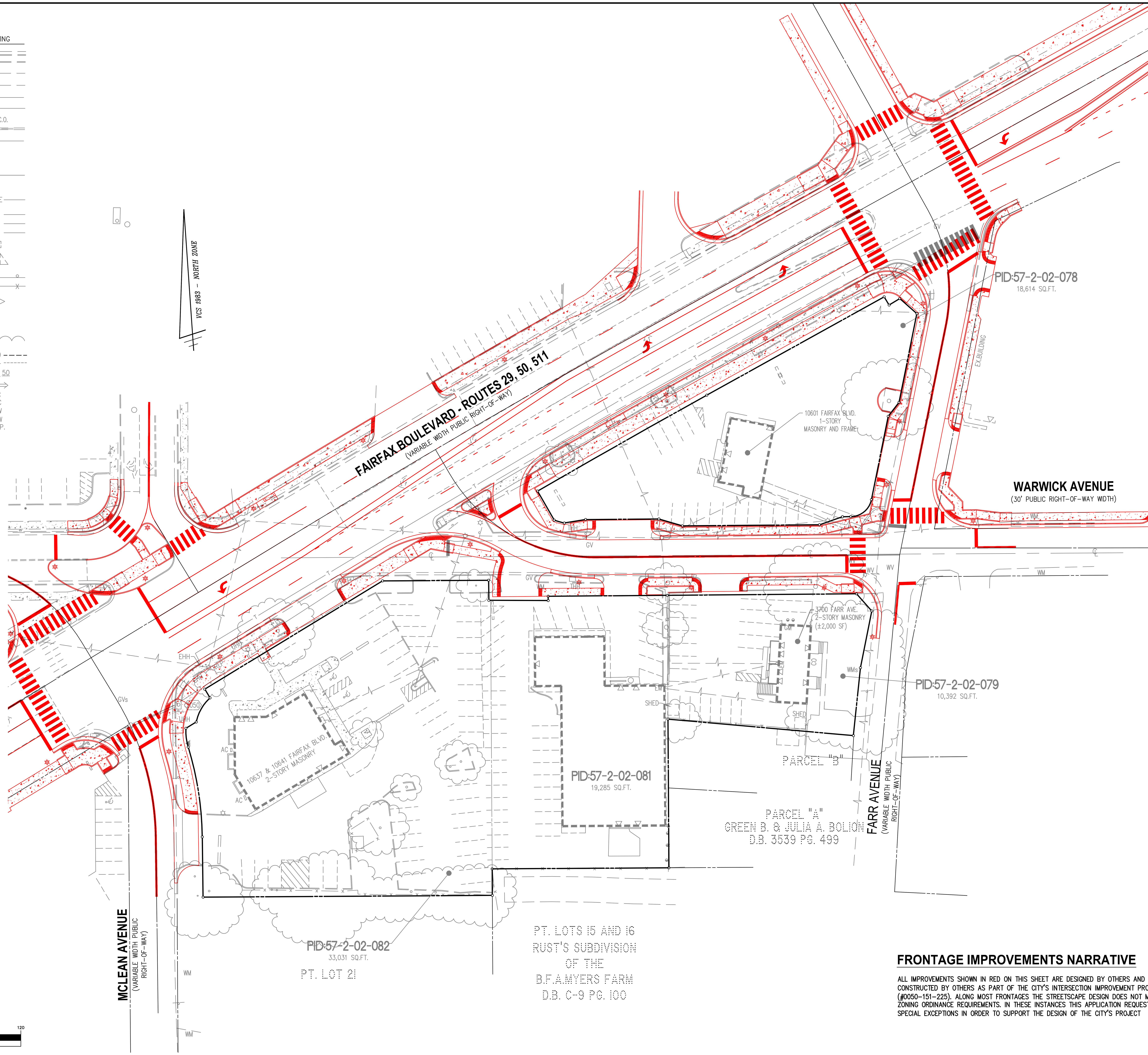
SPECIAL USE PERMIT PLAN

SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

SHEET: P-0301

LEGEND

BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	C.O.	CLEAN OUT	C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
		TRANSFORMER	
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
		FENCE	
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 264	CONTOURS	260 264
	+264 50	SPOT ELEVATION	+264 50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

FRONTAGE IMPROVEMENTS NARRATIVE

ALL IMPROVEMENTS SHOWN IN RED ON THIS SHEET ARE DESIGNED BY OTHERS AND WILL BE CONSTRUCTED BY OTHERS AS PART OF THE CITY'S INTERSECTION IMPROVEMENT PROJECT (#0050-151-225). ALONG MOST FRONTAGES THE STREETSCAPE DESIGN DOES NOT MEET ZONING ORDINANCE REQUIREMENTS. IN THESE INSTANCES THIS APPLICATION REQUESTS SPECIAL EXCEPTIONS IN ORDER TO SUPPORT THE DESIGN OF THE CITY'S PROJECT

CITY ROAD AND STREETSCAPE IMPROVEMENTS

SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

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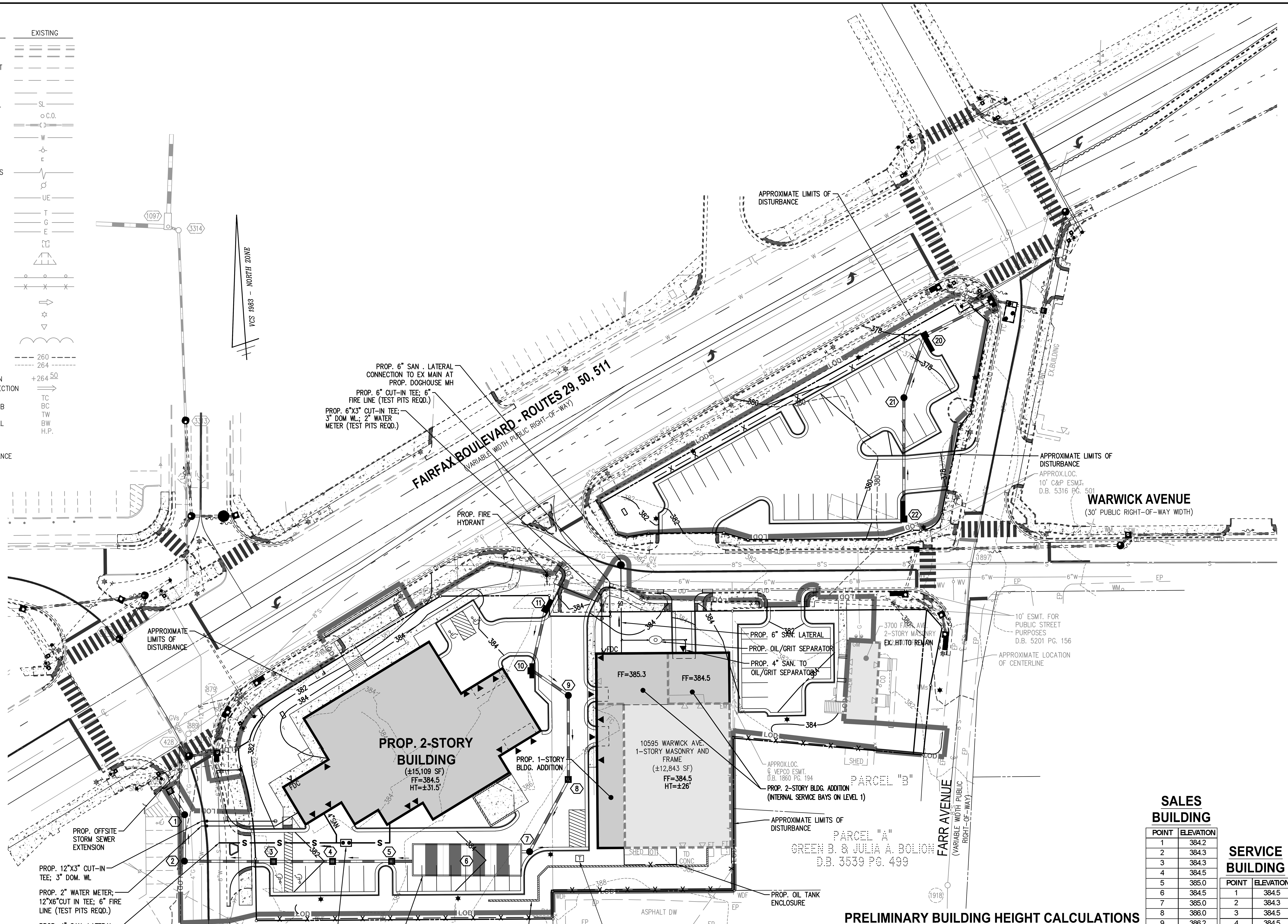
PROFESSIONAL ENGINEER

DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
SCALE: 1"=30'
DRAWN: MM
CHECKED: AV

SHEET: P-0302

LEGEND

BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	C.O.	CLEAN OUT	C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
		TRANSFORMER	
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
		FENCE	
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 / 264	CONTOURS	260 / 264
	+264.50	SPOT ELEVATION	+264.50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	



NOTES

1. THE PROPOSED UTILITIES AND GRADING SHOWN ON THIS PLAN ARE PRELIMINARY AND SUBJECT TO ADJUSTMENT AT TIME OF FINAL ENGINEERING AND SITE PLAN.

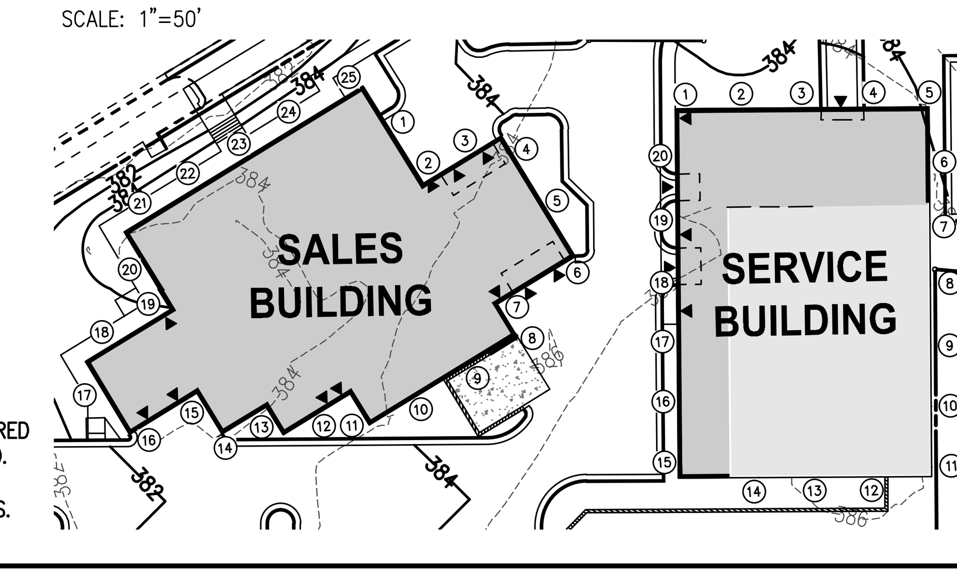
GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PRELIMINARY BUILDING HEIGHT CALCULATIONS

SCALE: 1"=50'



NOTE: PRELIMINARY BUILDING HEIGHT COMPUTATIONS PROVIDED FOR THE PROPOSED BUILDINGS ON SITE, MEASURED FROM AVERAGE GRADE PLANE PER Z.O. SECTION 1.5.11. CR ZONE MAXIMUM PERMITTED HEIGHT IS 60 FT/5 STORIES.

SALES BUILDING

POINT	ELEVATION
1	384.2
2	384.3
3	384.3
4	384.5
5	385.0
6	384.5
7	385.0
8	386.0
9	386.2
10	384.5
11	384.3
12	384.3
13	383.0
14	383.0
15	382.5
16	382.3
17	382.7
18	383.5
19	384.0
20	384.2
21	384.2
22	384.2
23	384.2
24	384.2
25	384.2
AVG	384.1

SERVICE BUILDING

POINT	ELEVATION
1	384.5
2	384.3
3	384.5
4	384.5
5	384.0
6	384.0
7	384.0
8	384.5
9	385.0
10	385.5
11	386.0
12	386.9
13	386.4
14	385.9
15	385.5
16	385.4
17	385.2
18	385.0
19	385.0
20	385.0
AVG	385.1

PRELIMINARY UTILITY AND GRADING PLAN

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

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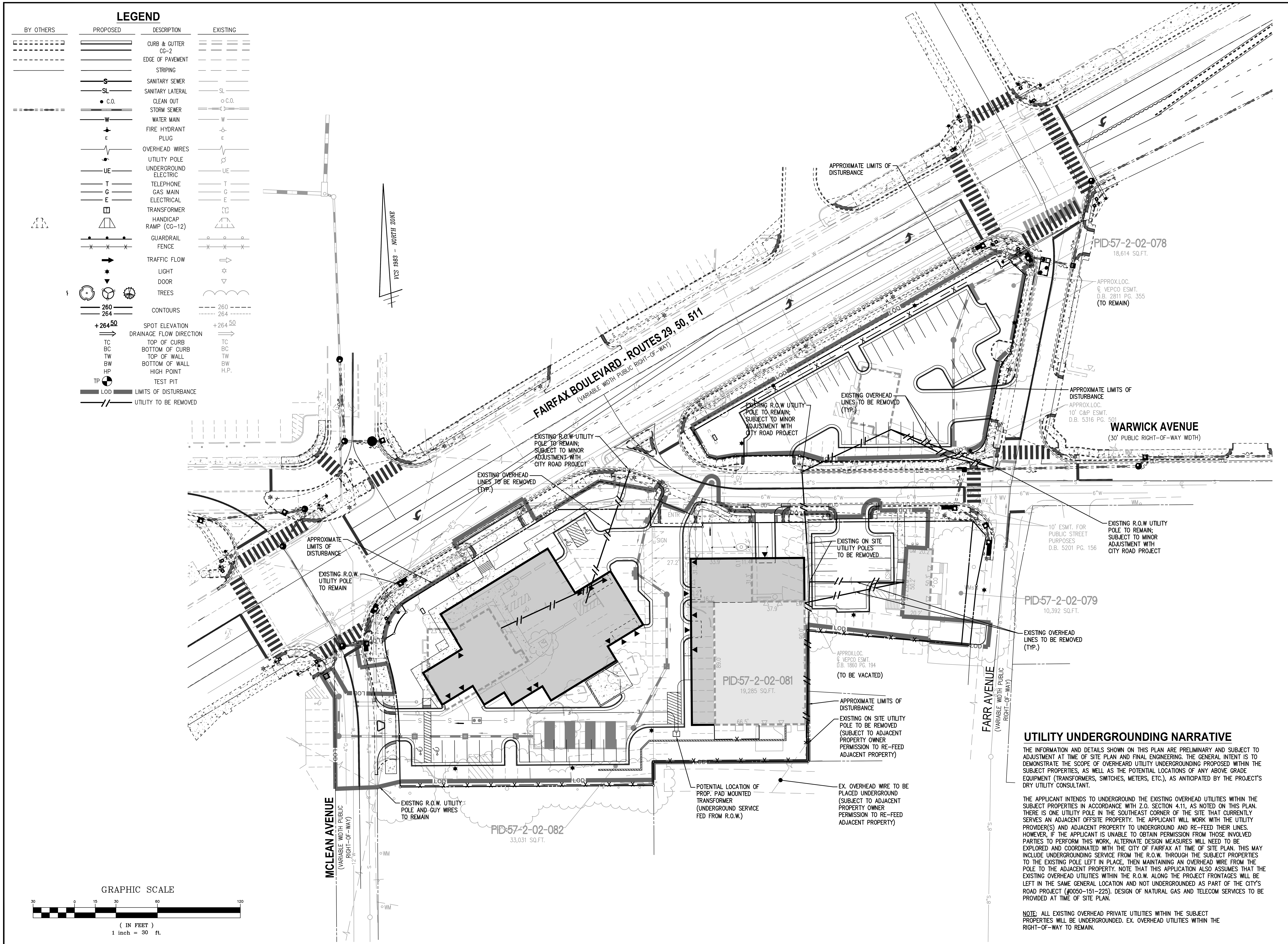
SCALE: 1"=30'
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
DRAWN: MM
CHECKED: AV

File No. FO-16 Tax Map No. 57-02 Job No. 22-053 Cadd Dwg. File: Q:\sdskproj\22053\dwg\planning\SUP\22053P-0303.dwg

SHEET: P-0303



UTILITY UNDERGROUNDING NARRATIVE

THE INFORMATION AND DETAILS SHOWN ON THIS PLAN ARE PRELIMINARY AND SUBJECT TO ADJUSTMENT AT TIME OF SITE PLAN AND FINAL ENGINEERING. THE GENERAL INTENT IS TO DEMONSTRATE THE SCOPE OF OVERHEARD UTILITY UNDERGROUNDING PROPOSED WITHIN THE SUBJECT PROPERTIES, AS WELL AS THE POTENTIAL LOCATIONS OF ANY ABOVE GRADE EQUIPMENT (TRANSFORMERS, SWITCHES, METERS, ETC.), AS ANTICIPATED BY THE PROJECT'S DRY UTILITY CONSULTANT.

THE APPLICANT INTENDS TO UNDERGROUND THE EXISTING OVERHEAD UTILITIES WITHIN THE SUBJECT PROPERTIES IN ACCORDANCE WITH Z.O. SECTION 4.11, AS NOTED ON THIS PLAN. THERE IS ONE UTILITY POLE IN THE SOUTHEAST CORNER OF THE SITE THAT CURRENTLY SERVES AN ADJACENT OFFSITE PROPERTY. THE APPLICANT WILL WORK WITH THE UTILITY PROVIDER(S) AND ADJACENT PROPERTY TO UNDERGROUND AND RE-FEED THEIR LINES. HOWEVER, IF THE APPLICANT IS UNABLE TO OBTAIN PERMISSION FROM THOSE INVOLVED PARTIES TO PERFORM THIS WORK, ALTERNATE DESIGN MEASURES WILL NEED TO BE EXPLORED AND COORDINATED WITH THE CITY OF FAIRFAX AT TIME OF SITE PLAN. THIS MAY INCLUDE UNDERGROUNDING SERVICE FROM THE R.O.W. THROUGH THE SUBJECT PROPERTIES TO THE EXISTING POLE LEFT IN PLACE, THEN MAINTAINING AN OVERHEAD WIRE FROM THE POLE TO THE ADJACENT PROPERTY. NOTE THAT THIS APPLICATION ALSO ASSUMES THAT THE EXISTING OVERHEAD UTILITIES WITHIN THE R.O.W. ALONG THE PROJECT FRONTAGES WILL BE LEFT IN THE SAME GENERAL LOCATION AND NOT UNDERGROUNDED AS PART OF THE CITY'S ROAD PROJECT (#0050-151-225). DESIGN OF NATURAL GAS AND TELECOM SERVICES TO BE PROVIDED AT TIME OF SITE PLAN.

NOTE: ALL EXISTING OVERHEAD PRIVATE UTILITIES WITHIN THE SUBJECT PROPERTIES WILL BE UNDERGROUNDED. EX. OVERHEAD UTILITIES WITHIN THE RIGHT-OF-WAY TO REMAIN.

PRELIMINARY UTILITY UNDERGROUNDING PLAN

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

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www.WLPINC.com

SCALE: 1"=30'
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
DRAWN: MM
CHECKED: AV

SHEET: P-0304

LEGEND

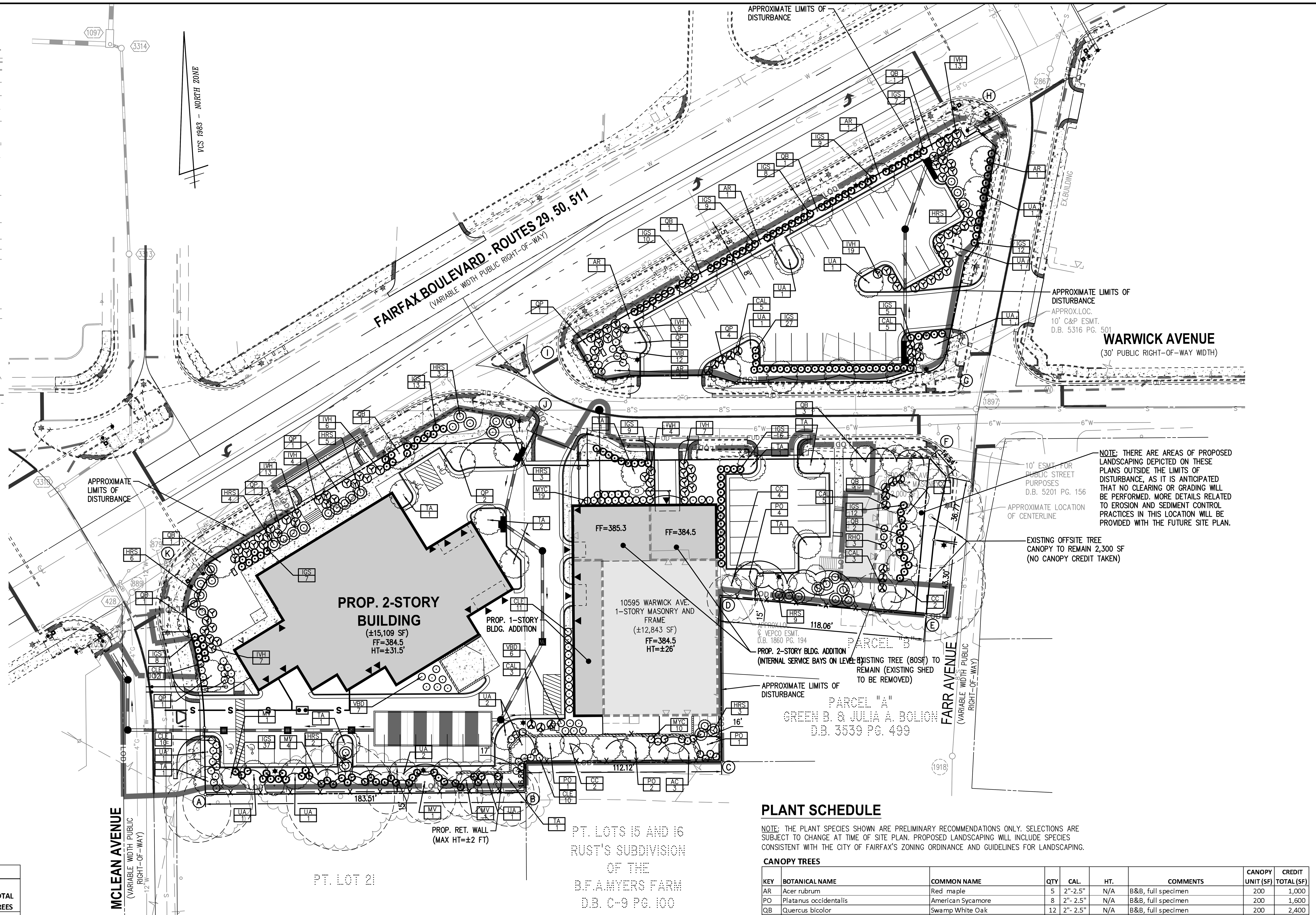
BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	C.O.	CLEAN OUT	C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
		TRANSFORMER	
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
		FENCE	
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 / 264	CONTOURS	260 / 264
	+264 50	SPOT ELEVATION	+264 50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	

LANDSCAPE LEGEND

PROPOSED DECIDUOUS TREES

PROPOSED FLOWERING TREES

PROPOSED SHRUBS



TREE CANOPY CALCULATIONS

			SQFT
SITE AREA			81,322.00
PECENT REQUIRED FOR ZONE CR			10%
TREE COVER REQUIRED			**8,132.20**
#	TYPE OF TREE	COVER SQFT (EA)	TOTAL
60	CANOPY TREES	200	12,000
22	UNDERSTORY TREES	100	2,200
TOTAL TREE COVERAGE PROVIDED			**14,200**

STREET TREE CALCULATIONS

BOUNDARY	LENGTH	REQUIRED CANOPY TREES PER 40'	TREES REQUIRED	TREES PROPOSED	TREES EXISTING	TOTAL TREES
E TO F	89.8	1	2	2	0	2
F TO J	248.68	1	6	6	0	6
J TO K	205.88	1	5	5	0	5
K TO A	133.79	1	3	3	0	3
G TO H	155.4	1	4	4	0	4
H TO I	266.03	1	7	7	0	7
I TO G	211.30	1	5	5	0	5

TRANSITIONAL YARDS CALCULATIONS

						REQUIRED LANDSCAPING PER 100'			TOTAL REQUIRED LANDSCAPING			PROVIDED LANDSCAPING			
BOUNDARY	ZONE TYPE	LENGTH	MINIMUM YARD WIDTH	PROPOSED YARD WIDTH	TY TYPE	CANOPY TREES	UNDERSTORY TREES	SHRUBS	CANOPY TREES	UNDERSTORY TREES	SHRUBS	PROPOSED CANOPY TREES	EXISTING CANOPY TREES	UNDERSTORY TREES	SHRUBS
A TO B	RM	183.51	15'	15'	TY3	4	4	4	7	7	7	8	0	8	49
B TO C	RM	128.95	15'	12'-15'	TY3	4	4	4	5	5	5	5	0	5	26
C TO D	RM	94.35	15'	±2'	TY3	4	4	4	4	4	4	0	0	0	3
D TO E	RM	118.06	15'	15'	TY3	4	4	4	5	5	5	4	1	5	9
E TO F	RM	94.61	15'	15'	TY3	4	4	4	4	4	4	4	0	4	24

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

PLANT SCHEDULE

NOTE: THE PLANT SPECIES SHOWN ARE PRELIMINARY RECOMMENDATIONS ONLY. SELECTIONS ARE SUBJECT TO CHANGE AT TIME OF SITE PLAN. PROPOSED LANDSCAPING WILL INCLUDE SPECIES CONSISTENT WITH THE CITY OF FAIRFAX'S ZONING ORDINANCE AND GUIDELINES FOR LANDSCAPING.

CANOPY TREES

KEY	BOTANICAL NAME	COMMON NAME	QTY	CAL.	HT.	COMMENTS	CANOPY UNIT (SF)	CREDIT TOTAL (SF)
AR	Acer rubrum	Red maple	5	2"-2.5"	N/A	B&B, full specimen	200	1,000
PO	Platanus occidentalis	American Sycamore	8	2"- 2.5"	N/A	B&B, full specimen	200	1,600
QB	Quercus bicolor	Swamp White Oak	12	2"- 2.5"	N/A	B&B, full specimen	200	2,400
QP	Quercus phellos	Willow Oak	11	2"- 2.5"	N/A	B&B, full specimen	200	2,200
TA	Tilia americana	American Linden	10	2"- 2.5"	N/A	B&B, full specimen	200	2,000
UA	Ulmus americana 'Valley Forge'	American Elm 'Valley Forge'	14	2"- 2.5"	N/A	B&B, full specimen	200	2,800
		TOTAL TREES	60					12,000

UNDERSTORY TREES

KEY	BOTANICAL NAME	COMMON NAME	QTY	CAL.	HT.	COMMENTS	CANOPY UNIT (SF)	CREDIT TOTAL (SF)
AC	Amelanchier canadensis	Serviceberry	3	2"-2.5"	N/A	B&B, full specimen	100	300
CC	Carpinus caroliniana	American hornbeam	11	2"-2.5"	N/A	B&B, full specimen	100	1,100
MV	Magnolia virginiana	Sweet Bay Magnolia	8	2"- 2.5"	N/A	B&B, full specimen	100	800
		TOTAL TREES	22					2,200

SHRUBS

KEY	BOTANICAL NAME	COMMON NAME	QTY	HT.	COMMENTS
CAL	Callicarpa americana	American Beautyberry	21	30"	#3 cont, full vigorous, well-rooted &established
CLE	Clethra alnifolia 'Hummingbird'	hummingbird summersweet clethra	43	30"	#3 cont, full vigorous, well-rooted &established
HRS	Hydrangea quercifolia 'Ruby Slippers'	rubby slippers oakleaf hydrangea	39	36"-48"	#3 cont, full vigorous, well-rooted &established
IGS	Ilex glabra 'Shamrock'	Shamrock inkberry	188	30"	#3 cont, full vigorous, well-rooted &established
IVH	Itea virginica 'Henry's Garnet'	Henry's garnet' sweetspire	81	30"	#3 cont, full vigorous, well-rooted &established
MYC	Myrica cerifera	southern bayberry	29	30"	#3 cont, full vigorous, well-rooted &established
RHO	Rhododendron x 'Girard's Purple'	Girard's purple azalea	3	15"-18"	#3 cont, full vigorous, well-rooted &established
VBD	Viburnum dentatum 'Christom' Blue Muffin	Blue Muffin Viburnum	25	30"	#3 cont, full vigorous, well-rooted &established
		TOTAL SHRUBS	429		

CONCEPTUAL LANDSCAPE PLAN AND TABULATIONS

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

WALTER L. PHILLIPS INCORPORATED ESTABLISHED 1945
Engineers • Surveyors • Planners
Landscape Architects • Arborists
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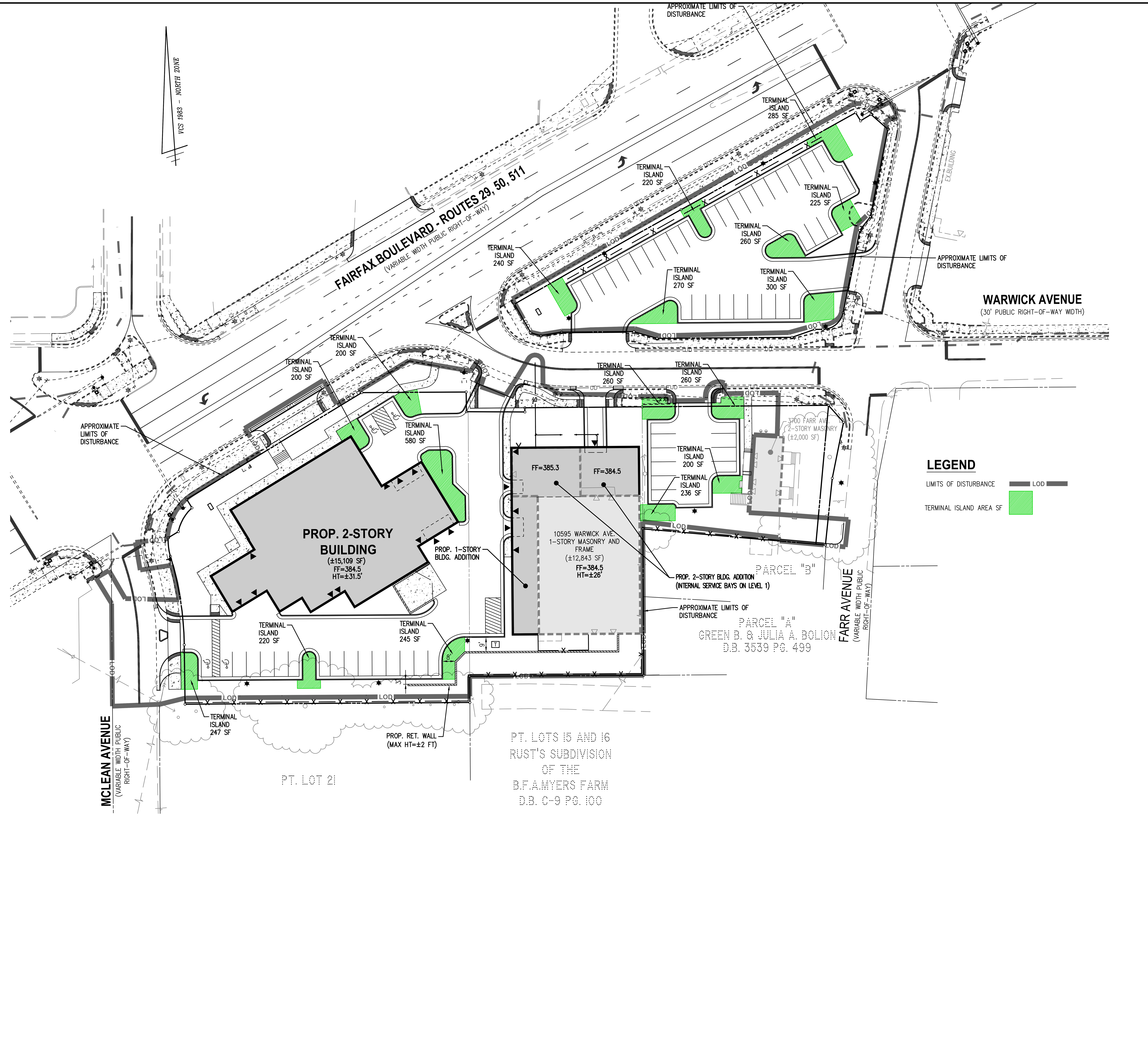

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COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

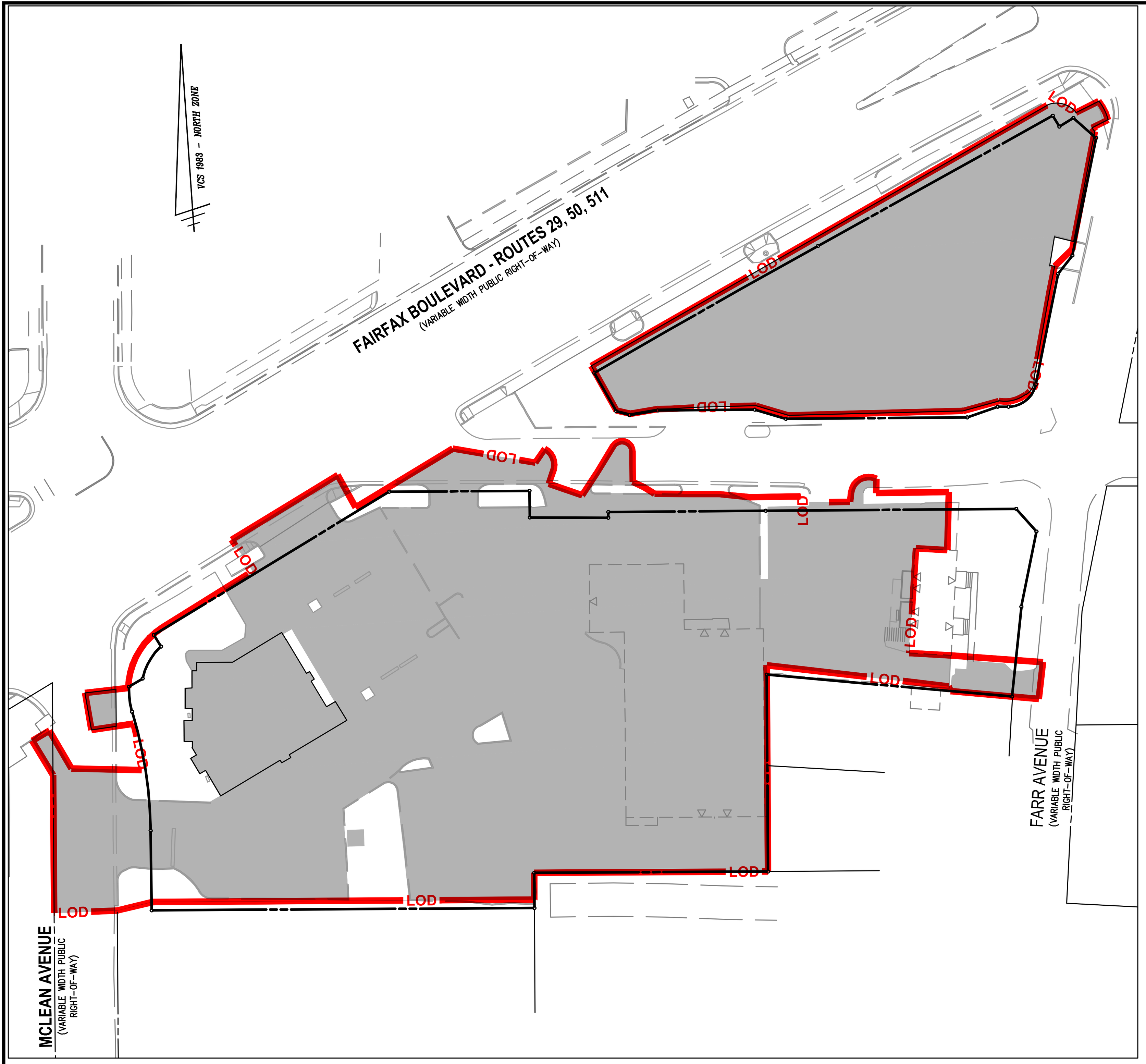
REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

TERMINAL PARKING EXHIBIT
SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

SHEET: P-0402

File No. FO-16 Tax Map No. 57-02 Job No. 22-053 Cadd Dwg. File: Q:\sdskproj\22053\dwg\planning\SUP\22053P-0401.dwg

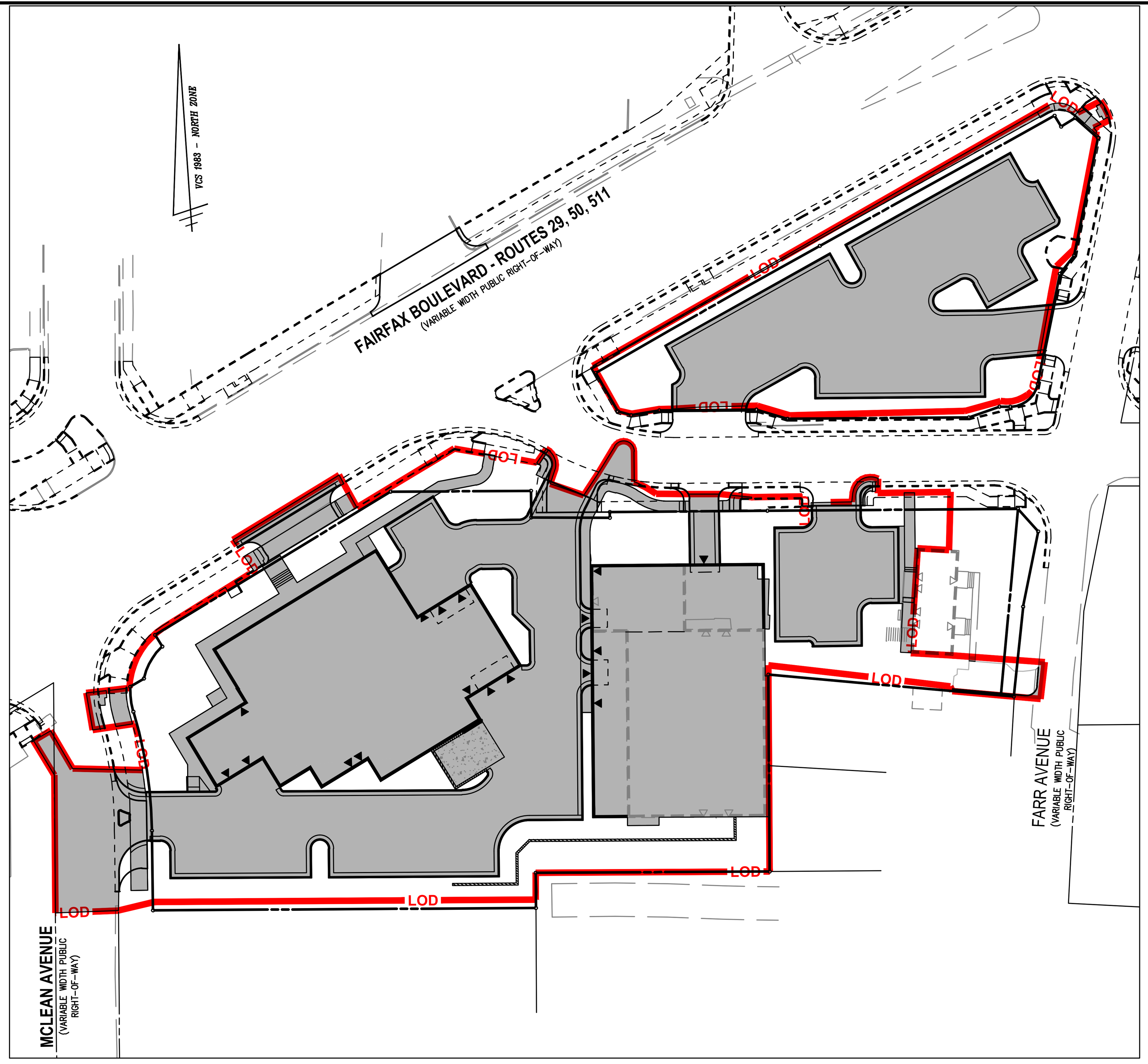


PRE-DEVELOPMENT IMPERVIOUS AREA

SCALE: 1" = 50'

IMPERVIOUS AREA LEGEND

IMPERVIOUS AREA



POST-DEVELOPMENT IMPERVIOUS AREA

SCALE: 1" = 50'

STORMWATER MANAGEMENT COMPUTATIONS

OUTFALL 1

I. PRE-DEVELOPMENT CONDITION (OVERALL)

SITE AREA = 1.97 AC

		HSG D AC	HSG D CN
A.	CONTRIBUTING AREAS:		
	PERVIOUS	0.17	80
	IMPERVIOUS	1.80	98

B. WEIGHTED CN = 96

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF

Q1 = 6.63 CFS (V1 = 14,607 CF)
Q2 = 8.16 CFS
Q10 = 12.84 CFS

II. POST-DEVELOPMENT CONDITION (OVERALL)

SITE AREA = 1.97 AC

		HSG D AC	HSG D CN
A.	CONTRIBUTING AREAS:		
	PERVIOUS	0.57	80
	IMPERVIOUS	1.40	98

B. WEIGHTED CN = 93

C. TIME OF CONCENTRATION = 6 MIN.

D. RUNOFF

Q1 = 6.03 CFS (V1 = 12,688 CF)
Q2 = 7.59 CFS
Q10 = 12.36 CFS

III. STORMWATER MANAGEMENT REQUIREMENT – ALLOWABLE RELEASE FROM DEVELOPMENT

A. $Q1 = \frac{0.8\ (6.63\ CFS \times 14{,}607\ CF)}{12{,}688\ CF} = 6.11\ CFS$

B. Q2 =8.16 CFS

C. Q10 = 12.84 CFS

CHANNEL PROTECTION REQUIREMENT
– ENERGY BALANCE EQUATION PER SECTION 9VAC25-870-66 B.3. (NATURAL CHANNEL WITHIN 100x SITE AREA)

FLOOD PROTECTION
– PREDEVELOPMENT SITE RELEASE FOR 10YR, 24 HR STORM (9VAC25-870-66 D)

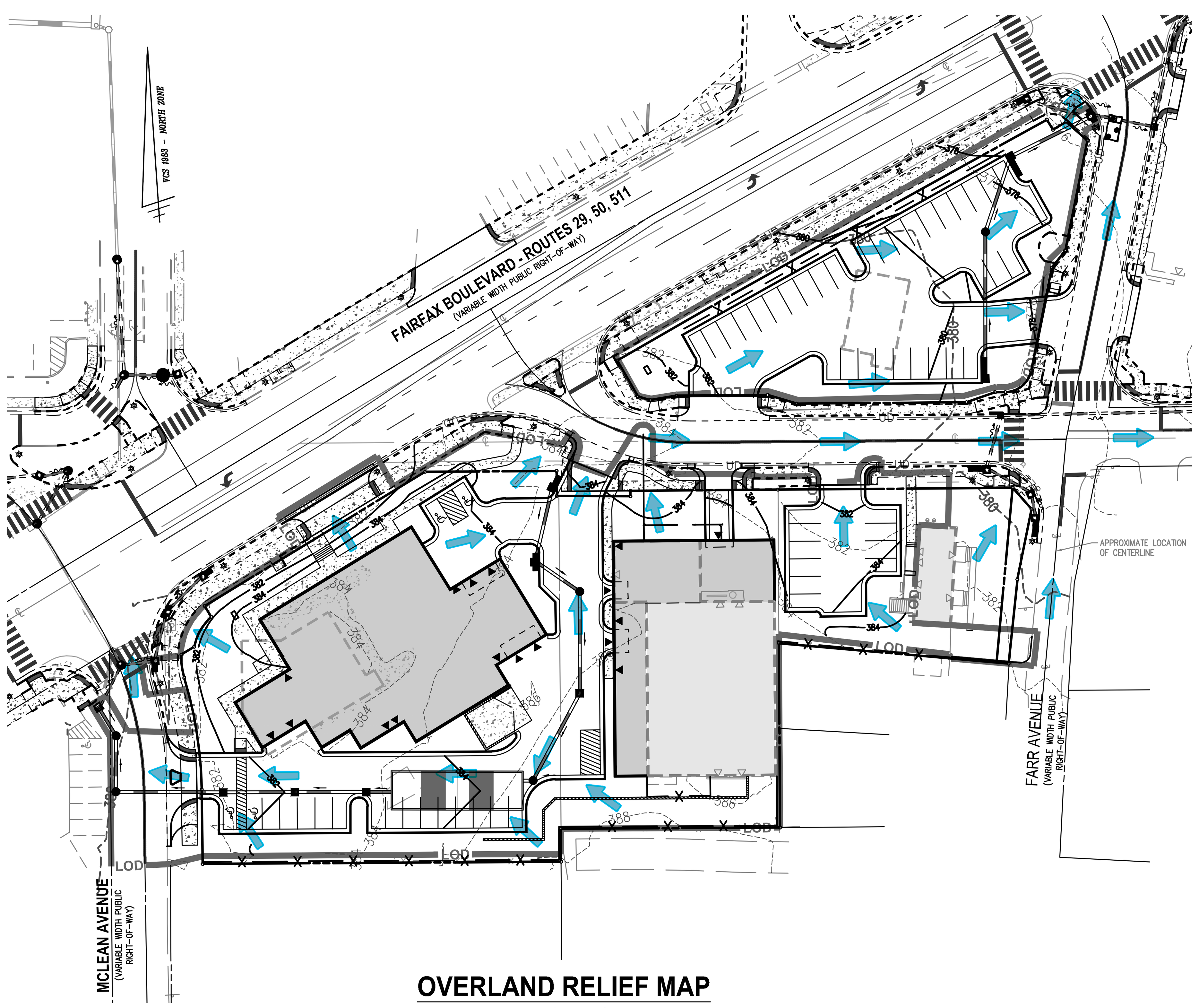
IV. STORMWATER RELEASES FROM SITE

RELEASES FROM SITE
Q1 = 6.03 CFS
Q2 = 7.59 CFS
Q10 = 12.36 CFS

V. COMPLIANCE

DEMONSTRATE THAT RELEASES FROM THE SITE (INCLUDES RELEASES FROM DETENTION AND UNDETAINED RUNOFF FROM THE SITE) DO NOT EXCEED STORMWATER REQUIREMENT OF SECTION VIII.

	TOTAL FROM SITE		ALLOWABLE
Q1 =	6.03 CFS	<	6.11 CFS
Q2 =	7.59 CFS	<	8.16 CFS
Q10 =	12.36 CFS	<	12.84 CFS



OVERLAND RELIEF MAP

SCALE: 1" = 50'

LEGEND

100 YR OVERLAND RELIEF PATH

STORMWATER MANAGEMENT & BEST MANAGEMENT PRACTICES NARRATIVES

1. THE EXISTING SITE CURRENTLY SERVES AS A MOTOR VEHICLE SALES AND SERVICE ESTABLISHMENT AND IT IS HIGHLY IMPERVIOUS. THE EXISTING SITE HAS NO STORMWATER MANAGEMENT OR WATER QUALITY FACILITIES. ALMOST THE ENTIRE PROPERTY WILL BE RECONSTRUCTED WITH THE PROPOSED REDEVELOPMENT PROJECT. THIS WILL RESULT IN A NET DECREASE IN OVERALL IMPERVIOUS AREA.
2. ACCORDING TO CITY CODE, THE STORMWATER QUANTITY REQUIREMENTS ARE AS FOLLOWS:
   2.1. OPERATING UNDER THE ASSUMPTION THAT THE FUTURE DOWNSTREAM STORM SEWER IMPROVEMENTS BY OTHERS ARE NOT YET IN PLACE, THE SITE STORMWATER OUTFALL INCLUDES A NATURAL STREAM THE CHANNEL PROTECTION REQUIREMENT IS TO REDUCE THE SITE RUNOFF FOR A 1-YEAR STORM BY AN AMOUNT DETERMINED USING AN ENERGY BALANCE EQUATION. A TABULATION CAN BE FOUND ON THIS SHEET WHICH SUMMARIZES THE STORMWATER RUNOFF DATA AND ALLOWABLE SITE PEAK RUNOFF RATES. USING THE ENERGY BALANCE EQUATION, THE ALLOWABLE PEAK RUNOFF RATE FOR THE 1-YEAR STORM IS 6.11 CFS. EVEN WITHOUT STORMWATER DETENTION, THE POST-DEVELOPMENT SITE PEAK RUNOFF RATE WILL BE REDUCED TO LESS THAN ALLOWABLE WITH A RATE OF 6.03 CFS DUE TO THE PROPOSED REDUCTION IN SITE IMPERVIOUSNESS.
   2.2. THE FLOOD PROTECTION REQUIREMENT WILL BE MET WITH THE PROPOSED REDUCTION IN THE PEAK RUNOFF RATE FOR THE 10-YEAR STORM, AGAIN DUE TO THE REDUCTION IN IMPERVIOUSNESS.
3. THE STORMWATER QUALITY (BMP) REQUIREMENT HAS BEEN DETERMINED USING THE VIRGINIA RUNOFF REDUCTION METHOD SPREADSHEET ISSUED BY THE VIRGINIA DEQ. A COPY OF THE COMPLETED SPREADSHEET CAN BE FOUND ON SHEET P-0502. THIS SPREADSHEET SHOWS THAT 0.16 POUNDS OF PHOSPHOROUS PER YEAR MUST BE REMOVED FROM THE SITE RUNOFF. THIS REQUIREMENT WILL BE MET THROUGH THE USE OF EITHER ONE HYDRODYNAMIC SEPARATOR (20% FILTERING) OR ONE STORMTECH ISOLATOR ROW PLUS (40% FILTERING), OR SIMILAR, DEPENDING ON THE BMP REQUIREMENTS DETERMINED AT TIME OF SITE PLAN FINAL DECISION. REFER TO SHEET P-0303 FOR A PLAN SHOWING BMP LOCATIONS. REFER TO SHEET P-0503 FOR DETAILS OF THESE PROPOSED WATER QUALITY DEVICES.

100-YEAR OVERLAND RELIEF NARRATIVE

THIS PROJECT CONSISTS OF THE DEVELOPMENT OF A NEW VEHICLE DEALERSHIP AND ASSOCIATED INFRASTRUCTURE. A SYSTEM OF PROPOSED PRIVATE DRIVE AISLES AND PARKING AREAS WILL BE CONSTRUCTED AROUND THE BUILDINGS AT A LOWER ELEVATION THAN THE BUILDING FINISHED FLOORS. IN THE EVENT OF A 100-YEAR STORM, RUNOFF FROM BUILDING ROOFS AND ASPHALT SURFACES MAY BACK-UP AND OUT OF THE PROPOSED ONSITE DRAINAGE STRUCTURES AND FLOW ACROSS THE PARKING AREAS AND DRIVE AISLES TOWARD THE CURB CUTS AND OUT TO THE PUBLIC ROADWAYS SURROUNDING THE SITE. FOR A PORTION OF THE SITE AT THE NORTHEAST CORNER, THE RUNOFF WOULD THEN OVERTOP THE CURBS AND FLOW OVERLAND AS SHEET FLOW DOWNSTREAM TO THE ROADWAYS. APPROXIMATE OVERLAND RELIEF PATHS ARE SHOWN ON THIS SHEET.

OUTFALL ANALYSIS NARRATIVE

THE EXISTING SITE DRAINS NORTH TO EXISTING INLETS IN FAIRFAX BOULEVARD. THE SYSTEM THEN FLOWS NORTH AND NORTHEAST TO THE PROPOSED NORTHFAX WEST DEVELOPMENT (SP #20-00300) BEFORE ULTIMATELY DISCHARGING INTO ACCOTINK CREEK.

AFTER THE PROPOSED REDEVELOPMENT IS COMPLETED, SITE RUNOFF WILL CONTINUE TO DRAIN TO THE EXISTING OUTFALL. RUNOFF FROM THE PROPOSED BUILDING ROOF, AS WELL AS SOME OF THE SITE SURFACE AREA, WILL BE DIRECTED TO A PROPOSED STORMWATER MANAGEMENT FACILITY LOCATED BENEATH THE PROPOSED PARKING AND DRIVE AISLE, SOUTH OF THE PROPOSED BUILDING. STORMWATER RELEASED FROM THIS FACILITY WILL BE PIPED VIA THE PROPOSED STORM SEWER THAT CONVEYS RUNOFF TO THE EXISTING STORM SEWER SYSTEM IN FAIRFAX BOULEVARD.

STORMWATER QUANTITY:
THE EXISTING SITE DRAINS NORTH TO EXISTING INLETS IN FAIRFAX BOULEVARD. THE SYSTEM THEN FLOWS NORTH BEFORE ULTIMATELY DISCHARGING TO THE PROPOSED NORTHFAX WEST DEVELOPMENT (SP #20-00300).

CHANNEL PROTECTION: ADDITIONAL DOWNSTREAM IMPROVEMENTS ARE PROPOSED BY OTHERS TO IMPROVE THE DOWNSTREAM OUTFALL VIA FUTURE STORM SEWER PIPES AND BOX CULVERTS. WITH THE FUTURE IMPROVEMENTS BY OTHERS, THE DISCHARGE OF THE 2-YEAR 24-HOUR STORM FROM THE SITE IS EXPECTED TO BE ABLE TO BE CONVEYED UP TO THE LIMITS OF ANALYSIS WITHOUT CAUSING EROSION, SINCE ALL OF THE PIPES OR CULVERTS WITHIN THE LIMITS OF ANALYSIS ARE CONCRETE OR OTHER NON-ERODIBLE MATERIALS.
AT THIS TIME WE ARE OPERATING UNDER THE ASSUMPTION THAT THE PROPOSED IMPROVEMENTS BY OTHERS ARE NOT YET IN PLACE AND WE WILL REACH THE NATURAL CHANNEL BEFORE THE LIMITS OF ANALYSIS, 100X OUR SITE AREA. WITH THIS ASSUMPTION, THE SITE STORM OUTFALL ULTIMATELY DISCHARGES INTO ACCOTINK CREEK, A NATURAL CHANNEL, WITHIN THE LIMITS OF ANALYSIS. THEREFORE, THE SITE WILL PROVIDE DETENTION TO REDUCE FLOW TO A MAXIMUM FLOW RATE COMPUTED PER THE VA STATE ENERGY BALANCE EQUATION (THIS SHEET).
BASED ON THIS ANALYSIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE CHANNEL PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66).

FLOOD PROTECTION: ADDITIONAL DOWNSTREAM IMPROVEMENTS ARE PROPOSED BY OTHERS TO IMPROVE THE DOWNSTREAM OUTFALL VIA FUTURE STORM SEWER PIPES AND BOX CULVERTS. WITH THE FUTURE IMPROVEMENTS BY OTHERS, THE DISCHARGE OF THE 10-YEAR 24-HOUR STORM FROM THE SITE IS EXPECTED TO BE ABLE TO BE CONFINED WITHIN THE STORMWATER CONVEYANCE SYSTEM UP TO THE LIMITS OF ANALYSIS.
AT THIS TIME WE ARE OPERATING UNDER THE ASSUMPTION THAT THE PROPOSED IMPROVEMENTS BY OTHERS ARE NOT YET IN PLACE AND WE WILL REACH THE NATURAL CHANNEL BEFORE THE LIMITS OF ANALYSIS, 100X OUR SITE AREA. BASED ON PRELIMINARY REVIEW OF THE SITE OUTFALL, IT IS EXPECTED THAT ALL PIPES PROPOSED WITH THIS DEVELOPMENT AND ALL DOWNSTREAM PIPES UP TO ACCOTINK CREEK WILL BE ADEQUATE TO RECEIVE THE 10-YEAR, 24-HOUR STORMWATER DISCHARGE FROM THE SITE. ADDITIONALLY, THE SITE DISCHARGE RATE IS LESS THAN PRE-DEVELOPMENT CONDITIONS (SEE THIS SHEET & P-0503). THEREFORE, DETENTION IS NOT REQUIRED FOR THE PURPOSES OF FLOOD CONTROL. HOWEVER, SUFFICIENT SPACE HAS BEEN RESERVED FOR DETENTION OF THE 10-YEAR STORM TO REDUCE FLOW IN THE EVENT IT IS DETERMINED THAT THE OUTFALL IS INADEQUATE AT THE TIME OF SITE PLAN.

BASED ON THIS, IT IS THE OPINION OF THE SUBMITTING ENGINEER THAT THE SITE COMPLIES WITH THE FLOOD PROTECTION CRITERIA OUTLINED IN THE STATE STORMWATER REGULATIONS (9VAC25-870-66).

NOTES

1. INFORMATION PROVIDED ON THIS SHEET IS PRELIMINARY AND SUBJECT TO CHANGE PENDING FINAL DESIGN.
2. ALTERNATIVE BMPS MAY BE PROVIDED SO LONG AS REQUIREMENTS OF THE DEQ VRRM SPREADSHEET ARE MET.

50 0 25 50 100 200
(IN FEET)
1 INCH = 50'

STORMWATER MANAGEMENT COMPUTATIONS AND NARRATIVES

SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

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Lic. No.041851
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File No. FO-16 Tax Map No. 57-02 Job No. 22-053 Cadd Dwg. File: Q:\sdskproj\22053\dwg\planning\SUP\22053P-0501.dwg

SHEET: P-0501

DEQ Virginia Runoff Reduction Method Re-Development Compliance Spreadsheet - Version 3.0

○ 2011 BMP Standards and Specifications ◉ 2013 Draft BMP Standards and Specifications

Project Name:	Kia Ourisman Fairfax
Date:	6/9/2023
Linear Development Project?	No

CLEAR ALL (Ctrl+Shift+R)

data input cells · constant values · calculation cells · final results

Site Information

Post-Development Project (Treatment Volume and Loads)

Enter Total Disturbed Area *(acres)* → 1.97

Maximum reduction required:	*20%*
The site's net increase in impervious cover (acres) is:	*0*
Post-Development TP Load Reduction for Site (lb/yr):	*0.16*

Check:
BMP Design Specifications List: 2013 Draft Stds & Specs
Linear project? No
Land cover areas entered correctly? ✓
Total disturbed area entered? ✓

Pre-ReDevelopment Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested				0.00	0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.17	0.17
Impervious Cover (acres)				1.80	1.80
					1.97

Post-Development Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals
Forest/Open Space (acres) -- undisturbed, protected forest/open space or reforested				0.00	0.00
Managed Turf (acres) -- disturbed, graded for yards or other turf to be				0.57	0.57
Impervious Cover (acres)				1.40	1.40
Area Check	OK.	OK.	OK.	OK.	1.97

Constants

Annual Rainfall (inches)	43
Target Rainfall Event (inches)	1.00
Total Phosphorus (TP) EMC (mg/L)	0.26
Total Nitrogen (TN) EMC (mg/L)	1.86
Target TP Load (lb/acre/yr)	0.41
Pj (unitless correction factor)	0.90

Runoff Coefficients (Rv)

	A Soils	B Soils	C Soils	D Soils
Forest/Open Space	0.02	0.03	0.04	0.05
Managed Turf	0.15	0.20	0.22	0.25
Impervious Cover	0.95	0.95	0.95	0.95

LAND COVER SUMMARY -- PRE-REDEVELOPMENT

Land Cover Summary-Pre

Pre-ReDevelopment	Listed	Adjusted[1]
Forest/Open Space Cover (acres)	0.00	0.00
Weighted Rv(forest)	0.00	0.00
% Forest	0%	0%
Managed Turf Cover (acres)	0.17	0.17
Weighted Rv(turf)	0.25	0.25
% Managed Turf	9%	9%
Impervious Cover (acres)	1.80	1.80
Rv(impervious)	0.95	0.95
% Impervious	91%	91%
Total Site Area (acres)	**1.97**	**1.97**
Site Rv	**0.89**	**0.89**

Treatment Volume and Nutrient Load

Pre-ReDevelopment Treatment Volume (acre-ft)	0.1460	0.1460
Pre-ReDevelopment Treatment Volume (cubic feet)	6,362	6,362
Pre-ReDevelopment TP Load (lb/yr)	**4.00**	**4.00**
Pre-ReDevelopment TP Load per acre (lb/acre/yr)	2.03	2.03
Baseline TP Load (lb/yr) (0.41 lbs/acre/yr applied to pre-redevelopment area excluding pervious land proposed for new impervious cover)		*0.81*

[1] *Adjusted Land Cover Summary:*
Pre ReDevelopment land cover minus pervious land cover (forest/open space or managed turf) acreage proposed for new impervious cover.

Adjusted total acreage is consistent with Post-ReDevelopment acreage (minus acreage of new impervious cover).

Column I shows load reduction requriement for new impervious cover (based on new development load limit, 0.41 lbs/acre/year).

LAND COVER SUMMARY -- POST DEVELOPMENT

Land Cover Summary-Post (Final)

Post ReDev. & New Impervious	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.57
Weighted Rv (turf)	0.25
% Managed Turf	29%
Impervious Cover (acres)	1.40
Rv(impervious)	0.95
% Impervious	71%
Final Site Area (acres)	**1.97**
Final Post Dev Site Rv	**0.75**

Land Cover Summary-Post

Post-ReDevelopment	
Forest/Open Space Cover (acres)	0.00
Weighted Rv(forest)	0.00
% Forest	0%
Managed Turf Cover (acres)	0.57
Weighted Rv (turf)	0.25
% Managed Turf	29%
ReDev. Impervious Cover (acres)	1.40
Rv(impervious)	0.95
% Impervious	71%
Total ReDev. Site Area (acres)	**1.97**
ReDev Site Rv	**0.75**

Land Cover Summary-Post

Post-Development New Impervious	
New Impervious Cover (acres)	0.00
Rv(impervious)	--

Treatment Volume and Nutrient Load

Final Post-Development Treatment Volume (acre-ft)	0.1227
Final Post-Development Treatment Volume (cubic feet)	5,345
Final Post-Development TP Load (lb/yr)	**3.36**
Final Post-Development TP Load per acre (lb/acre/yr)	1.70

Post-ReDevelopment Treatment Volume (acre-ft)	0.1227
Post-ReDevelopment Treatment Volume (cubic feet)	5,345
Post-ReDevelopment Load (TP) (lb/yr)*	**3.36**
Post-ReDevelopment TP Load per acre (lb/acre/yr)	1.70
Max. Reduction Required (Below Pre-ReDevelopment Load)	20%
TP Load Reduction Required for Redeveloped Area (lb/yr)	**0.16**

Post-Development Treatment Volume (acre-ft)	--
Post-Development Treatment Volume (cubic feet)	--
Post-Development TP Load (lb/yr)	--
TP Load Reduction Required for New Impervious Area (lb/yr)	**0**

Post-Development Requirement for Site Area

TP Load Reduction Required (lb/yr)	0.16

PHOSPHOROUS REDUCTION REQUIRED

Nitrogen Loads (Informational Purposes Only)

Pre-ReDevelopment TN Load (lb/yr)	28.59
Final Post-Development TN Load (Post-ReDevelopment & New Impervious) (lb/yr)	24.03

Drainage Area A

CLEAR BMP AREAS

Drainage Area A Land Cover (acres)

	A Soils	B Soils	C Soils	D Soils	Totals	Land Cover Rv
Forest/Open Space (acres)				0.00	0.00	0.00
Managed Turf (acres)				0.14	0.14	0.25
Impervious Cover (acres)				0.74	0.74	0.95
				Total	0.87	

Total Phosphorus Available for Removal in D.A. A (lb/yr)	1.68
Post Development Treatment Volume in D.A. A (ft^3)	2,669

Stormwater Best Management Practices (RR = Runoff Reduction)

--Select from dropdown lists--

Practice	Runoff Reduction Credit (%)	Managed Turf Credit Area (acres)	Impervious Cover Credit Area (acres)	Volume from Upstream Practice (ft^3)	Runoff Reduction (ft^3)	Remaining Runoff Volume (ft^3)	Total BMP Treatment Volume (ft^3)	Phosphorus Removal Efficiency (%)	Phosphorus Load from Upstream Practices (lb)	Untreated Phosphorus Load to Practice (lb)	Phosphorus Removed By Practice (lb)	Remaining Phosphorus Load (lb)	Downstream Practice to be Employed
14. Manufactured Treatment Devices (no RR)													
14.a. Manufactured Treatment Device-Hydrodynamic	0	0.14	0.74	0	0	2,669	2,669	20	0.00	1.67	0.33	1.34	
14.b. Manufactured Treatment Device-Filtering	0			0	0	0	0	40	0.00	0.00	0.00	0.00	

Nitrogen Removal Efficiency (%)	Nitrogen Load from Upstream Practices (lbs)	Untreated Nitrogen Load to Practice (lbs)	Nitrogen Removed By Practice (lbs)	Remaining Nitrogen Load (lbs)
14. Manufactured BMP (no RR)				
0	0.00	11.98	0.00	11.98
0	0.00	0.00	0.00	0.00

TOTAL IMPERVIOUS COVER TREATED (ac)	0.74	AREA CHECK: OK.
TOTAL MANAGED TURF AREA TREATED (ac)	0.14	AREA CHECK: OK.

TOTAL PHOSPHORUS REMOVAL REQUIRED ON SITE (lb/yr)	0.16
TOTAL PHOSPHORUS AVAILABLE FOR REMOVAL IN D.A. A (lb/yr)	1.68
TOTAL PHOSPHORUS REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.33
TOTAL PHOSPHORUS REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00
TOTAL PHOSPHORUS LOAD REDUCTION ACHIEVED IN D.A. A (lb/yr)	0.33
TOTAL PHOSPHORUS REMAINING AFTER APPLYING BMP LOAD REDUCTIONS IN D.A. A (lb/yr)	1.34

SEE WATER QUALITY COMPLIANCE TAB FOR SITE COMPLIANCE CALCULATIONS

NITROGEN REMOVED WITH RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00
NITROGEN REMOVED WITHOUT RUNOFF REDUCTION PRACTICES IN D.A. A (lb/yr)	0.00
TOTAL NITROGEN REMOVED IN D.A. A (lb/yr)	0.00

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)	0.74	0.00	0.00	0.00	0.00	OK.
IMPERVIOUS COVER TREATED (ac)	0.74	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA (ac)	0.14	0.00	0.00	0.00	0.00	OK.
MANAGED TURF AREA TREATED (ac)	0.14	0.00	0.00	0.00	0.00	OK.
AREA CHECK	OK.	OK.	OK.	OK.	OK.	

Site Treatment Volume (ft^3) 5,345

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)	1.68	0.00	0.00	0.00	0.00	1.68
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.33	0.00	0.00	0.00	0.00	0.33
TP LOAD REMAINING (lb/yr)	1.34	0.00	0.00	0.00	0.00	1.34
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00	0.00	0.00	0.00	0.00	0.00

Total Phosphorus

FINAL POST-DEVELOPMENT TP LOAD (lb/yr)	3.36
TP LOAD REDUCTION REQUIRED (lb/yr)	0.16
TP LOAD REDUCTION ACHIEVED (lb/yr)	0.33
TP LOAD REMAINING (lb/yr):	3.02
REMAINING TP LOAD REDUCTION REQUIRED (lb/yr):	0.00 **

** TARGET TP REDUCTION EXCEEDED BY 0.17 LB/YEAR **

COMPLIANCE VERIFICATION

Total Nitrogen (For Information Purposes)

POST-DEVELOPMENT LOAD (lb/yr)	24.03
NITROGEN LOAD REDUCTION ACHIEVED (lb/yr)	0.00
REMAINING POST-DEVELOPMENT NITROGEN LOAD (lb/yr)	24.03

NOTES

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ESTABLISHED 1945

DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
SCALE: NONE
DRAWN: MM
CHECKED: AV

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No. 041851
11/15/24
PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

BMP SPREADSHEET
SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

SHEET: **P-0502**

PRE-DEVELOPMENT (1-YR)

Hydrograph Report

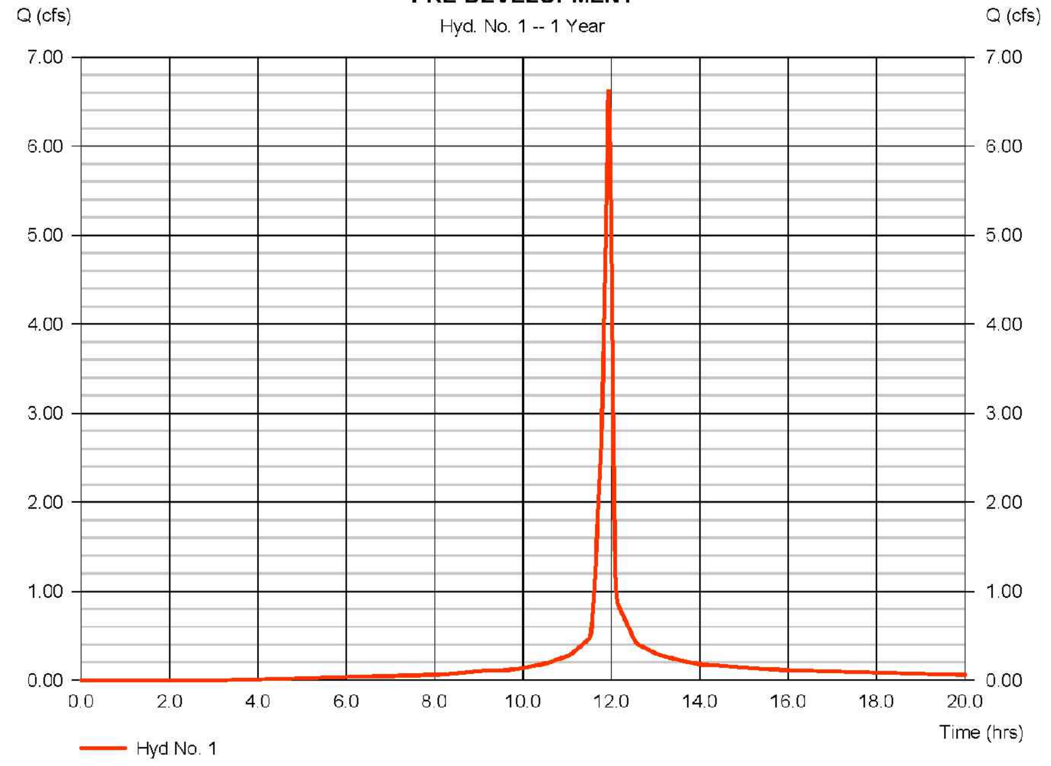
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 — Tuesday, 06 / 13 / 2023

Hyd. No. 1

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 6.633 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 14,607 cuft
Drainage area	= 1.970 ac	Curve number	= 96*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.62 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.800 x 98) + (0.170 x 80)] / 1.970



PRE-DEVELOPMENT (10-YR)

Hydrograph Report

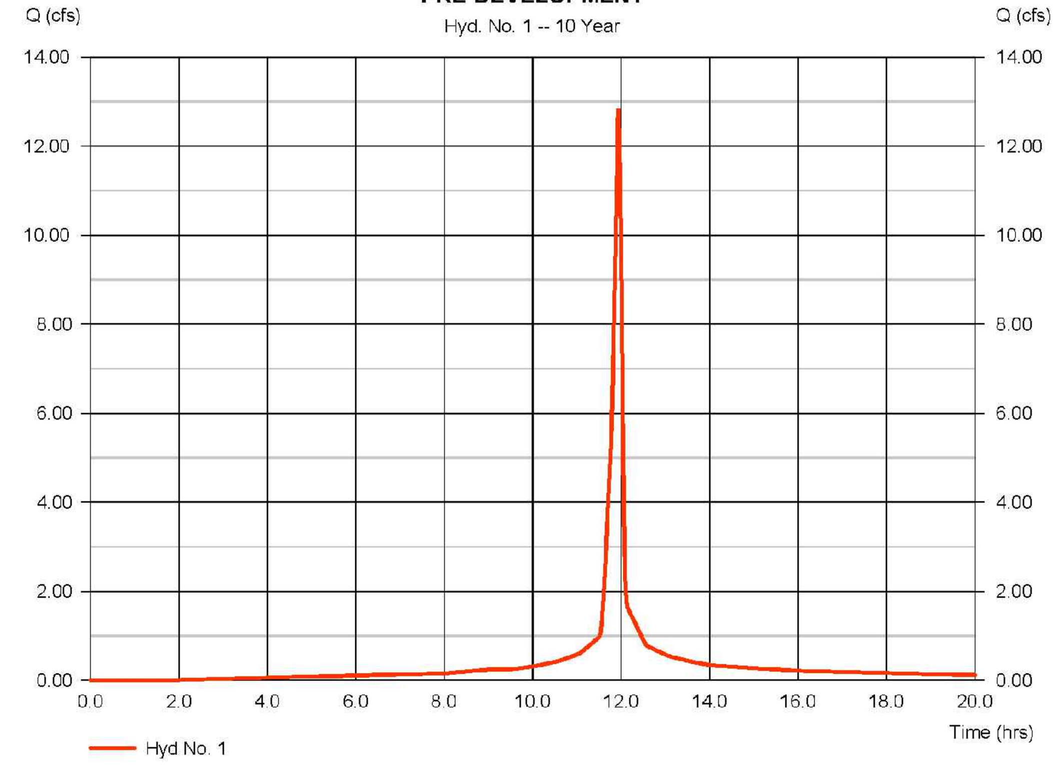
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 — Tuesday, 06 / 13 / 2023

Hyd. No. 1

PRE-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 12.84 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 29,521 cuft
Drainage area	= 1.970 ac	Curve number	= 96*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.87 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.800 x 98) + (0.170 x 80)] / 1.970



POST-DEVELOPMENT (1-YR)

Hydrograph Report

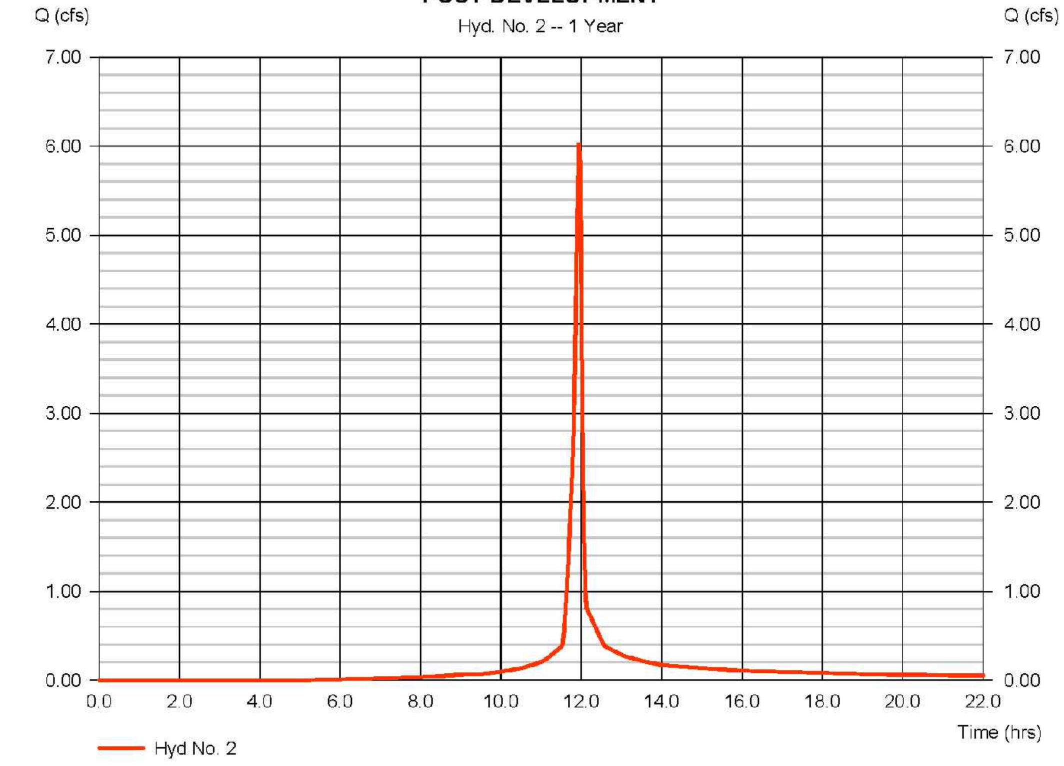
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 — Tuesday, 06 / 13 / 2023

Hyd. No. 2

POST-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 6.031 cfs
Storm frequency	= 1 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 12,688 cuft
Drainage area	= 1.970 ac	Curve number	= 93*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 2.62 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.470 x 98) + (0.500 x 80)] / 1.970



POST-DEVELOPMENT (10-YR)

Hydrograph Report

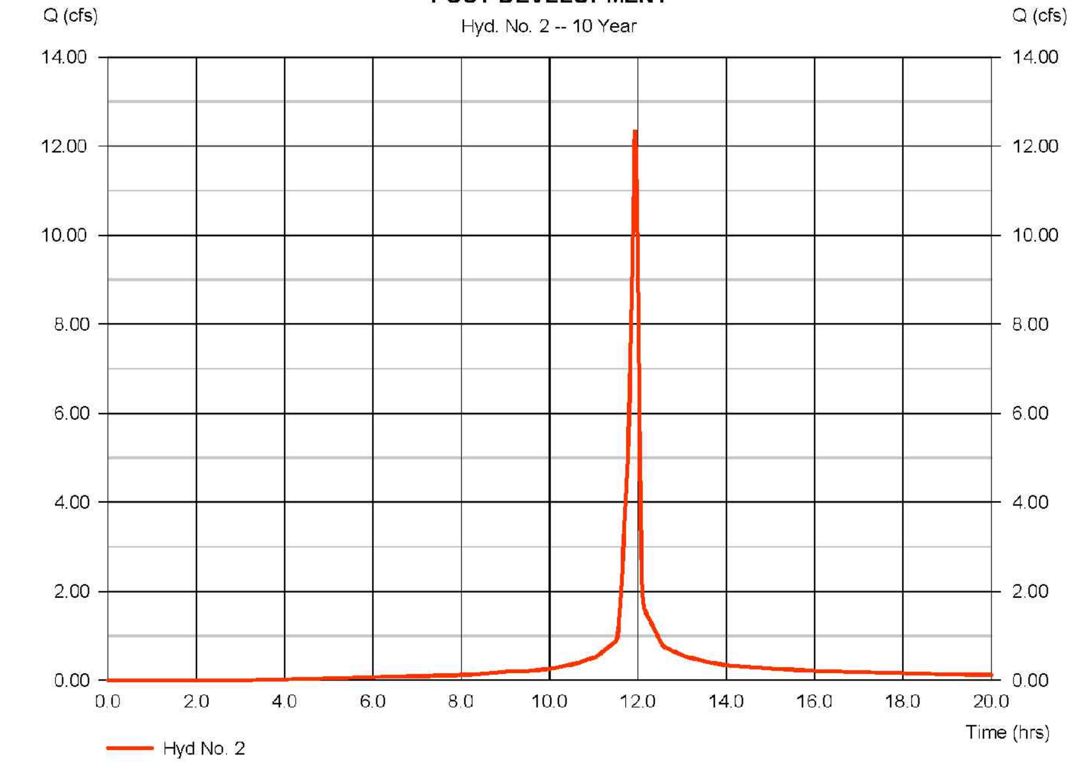
Hydraflow Hydrographs Extension for Autodesk® Civil 3D® by Autodesk, Inc. v2024 — Tuesday, 06 / 13 / 2023

Hyd. No. 2

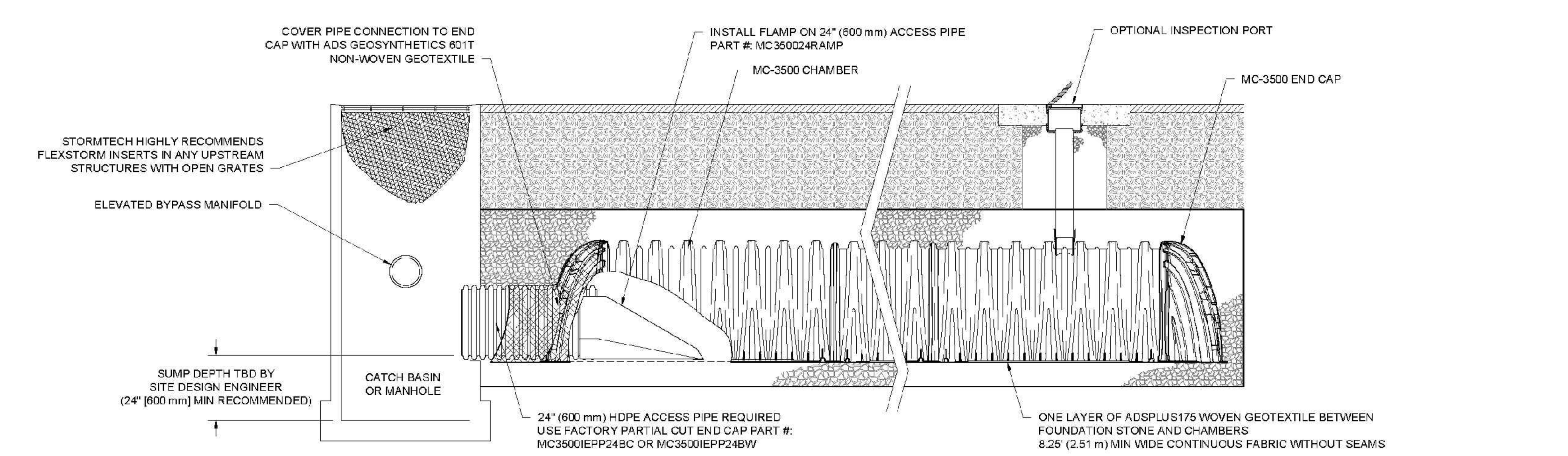
POST-DEVELOPMENT

Hydrograph type	= SCS Runoff	Peak discharge	= 12.36 cfs
Storm frequency	= 10 yrs	Time to peak	= 11.93 hrs
Time interval	= 2 min	Hyd. volume	= 27,288 cuft
Drainage area	= 1.970 ac	Curve number	= 93*
Basin Slope	= 0.0 %	Hydraulic length	= 0 ft
Tc method	= User	Time of conc. (Tc)	= 6.00 min
Total precip.	= 4.87 in	Distribution	= Type II
Storm duration	= 24 hrs	Shape factor	= 484

* Composite (Area/CN) = [(1.470 x 98) + (0.500 x 80)] / 1.970



CONCEPTUAL BMP DETAILS



MC-3500 ISOLATOR ROW PLUS DETAIL
NTS

INSPECTION & MAINTENANCE

STEP 1) INSPECT ISOLATOR ROW PLUS FOR SEDIMENT
- A. INSPECTION PORTS (IF PRESENT)
  - A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN
  - A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED
  - A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE LOG
  - A.4. LOWER A CAMERA INTO ISOLATOR ROW PLUS FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)
  - A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.
- B. ALL ISOLATOR PLUS ROWS
  - B.1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW PLUS
  - B.2. USING A FLASHLIGHT, INSPECT DOWN THE ISOLATOR ROW PLUS THROUGH OUTLET PIPE
    - i) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY
    - ii) FOLLOW OSHA REGULATIONS FOR CONFINED SPACE ENTRY IF ENTERING MANHOLE
  - B.3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

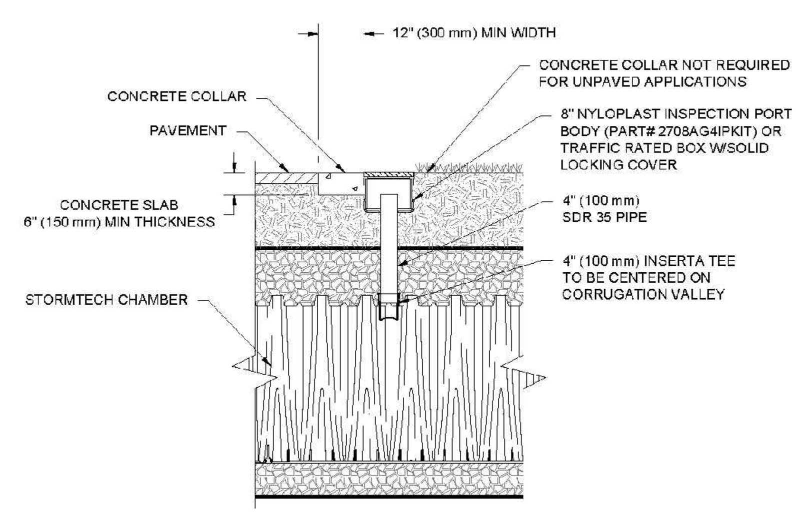
STEP 2) CLEAN OUT ISOLATOR ROW PLUS USING THE JETVAC PROCESS
- A. A FIXED CULVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED
- B. APPLY MULTIPLE PASSES OF JETVAC UNTIL BACKFLUSH WATER IS CLEAN
- C. VACUUM STRUCTURE SUMP AS REQUIRED

STEP 3) REPLACE ALL COVERS, GRATES, FILTERS, AND LIDS; RECORD OBSERVATIONS AND ACTIONS.

STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS.
2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



NOTE:
INSPECTION PORTS MAY BE CONNECTED THROUGH ANY CHAMBER CORRUGATION VALLEY.

4" PVC INSPECTION PORT DETAIL (MC SERIES CHAMBER)
NTS

MC-3500 ISOLATOR ROW PLUS DETAILS

StormTech® Chamber System

4640 TRUEMAN BLVD HILLIARD, OH 43026

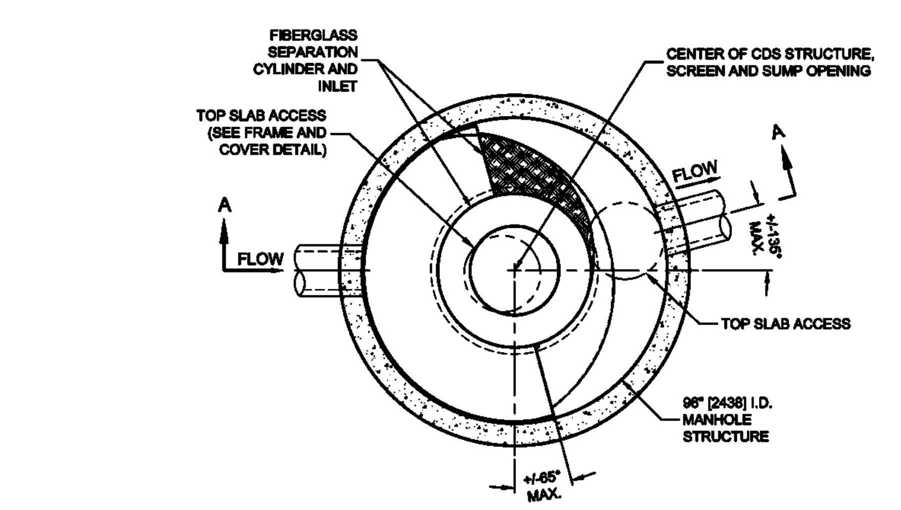
ADS

SHEET 1 OF 1

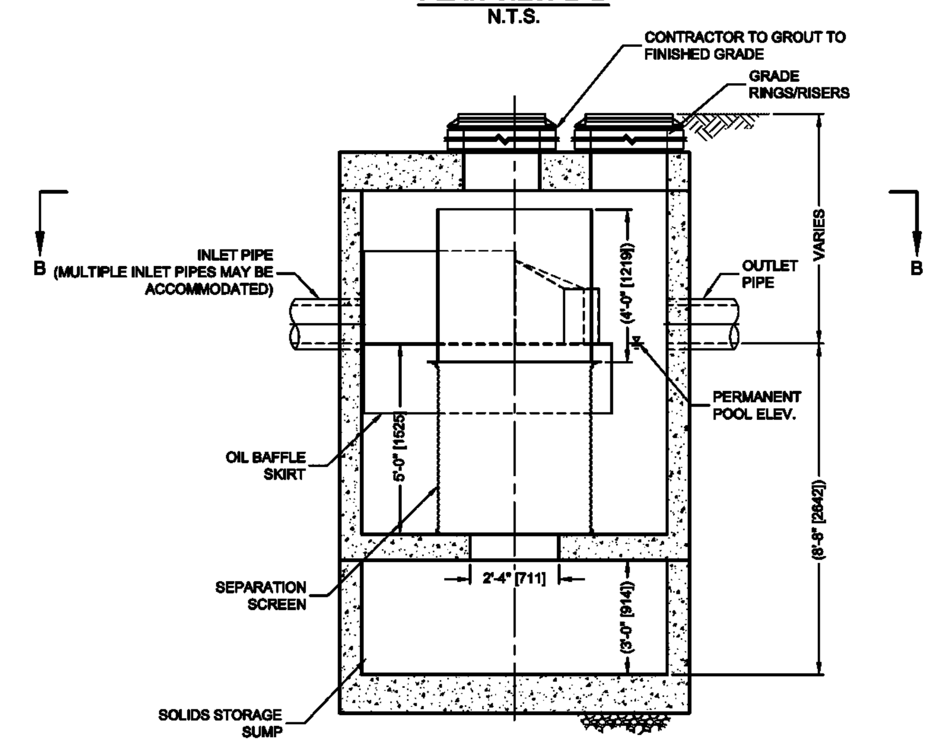
CDS4045-8-C DESIGN NOTES

THE STANDARD CDS4045-8-C CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW. SOME CONFIGURATIONS MAY BE COMBINED TO SUIT SITE REQUIREMENTS.

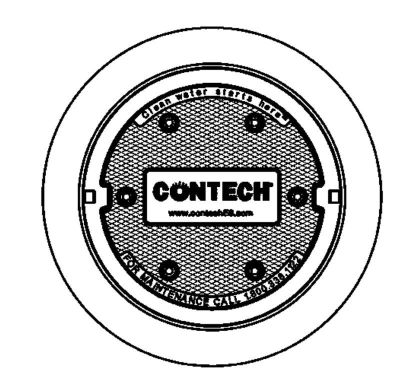
CONFIGURATION DESCRIPTION
GRATED INLET ONLY (NO INLET PIPE)
GRATED INLET WITH INLET PIPE OR PIPES
CURB INLET ONLY (NO INLET PIPE)
CURB INLET WITH INLET PIPE OR PIPES
SEPARATE OIL BAFFLE (SINGLE INLET PIPE REQUIRED FOR THIS CONFIGURATION)
SEDIMENT WEIR FOR NJDEP / NJCAT CONFORMING UNITS



PLAN VIEW B-B
N.T.S.



ELEVATION A-A
N.T.S.



FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID			*
WATER QUALITY FLOW RATE (CFS OR L/s)			*
PEAK FLOW RATE (CFS OR L/s)			*
RETURN PERIOD OF PEAK FLOW (YRS)			*
SCREEN APERTURE (2400 OR 4700)			*
PIPE DATA:	I.E.	MATERIAL	DIAMETER
INLET PIPE 1	*	*	*
INLET PIPE 2	*	*	*
OUTLET PIPE	*	*	*
RIM ELEVATION			*
ANTI-FLOTATION BALLAST		WIDTH	HEIGHT
		*	*
NOTES/SPECIAL REQUIREMENTS:			

* PER ENGINEER OF RECORD

GENERAL NOTES
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. DIMENSIONS MARKED WITH ( ) ARE REFERENCE DIMENSIONS. ACTUAL DIMENSIONS MAY VARY.
3. FOR FABRICATION DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHTS, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS LLC REPRESENTATIVE. www.contechES.com
4. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
5. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
6. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

INSTALLATION NOTES
- A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
- B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
- C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
- D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN.
- E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

CONTECH ENGINEERED SOLUTIONS LLC
www.contechES.com
9025 Centre Pointe Dr., Suite 400, West Chester, OH 45069
800-338-1122 513-645-7000 513-645-7993 FAX

CDS4045-8-C
INLINE CDS
STANDARD DETAIL

NOTES

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DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
SCALE: NONE
DRAWN: MM
CHECKED: AV

AARON M. VINSON Lic. No.041851 11/15/24 PROFESSIONAL ENGINEER

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

HYDROGRAPHS & BMP DETAILS
SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

Fire Lane Marking Requirements

City of Fairfax Fire Marshal's Office

DEFINITIONS

Fire Apparatus Access Road. A road that provides fire apparatus access from a fire station to a facility, building or portion thereof. This is a general term inclusive of all other terms such as *fire lane*, public street, private street, parking lot lane and access roadway. (SFPC)

Fire Lane. A road or other passageway developed to allow the passage of fire apparatus. A fire lane is not necessarily intended for vehicular traffic other than fire apparatus. (SFPC)

SFPC. Virginia Statewide Fire Prevention Code

APPLICABILITY

These requirements apply to new and identified existing roadways. This includes but is not limited to private roadways, driveways, and public streets.

MINIMUM SPECIFICATIONS

Fire lanes shall have a minimum unobstructed width of 20 feet.
Fire lanes shall have a minimum unobstructed vertical clearance of 13 feet 6 inches.

Aerial Fire Apparatus Fire Lane
- Shall have a minimum unobstructed width of 26 feet.
- Shall be located a minimum of 15 feet from the building and positioned along one entire side of the building – as approved by the Fire Marshal.
- Overhead utility lines shall not be located over an Aerial Fire Apparatus Fire Lane or between the lane and the building.

Fire lanes shall be compacted/treated to support emergency vehicles. Compacted/treated to support emergency vehicles shall mean capable of supporting H-20 loading in all weather conditions.

SIGNS

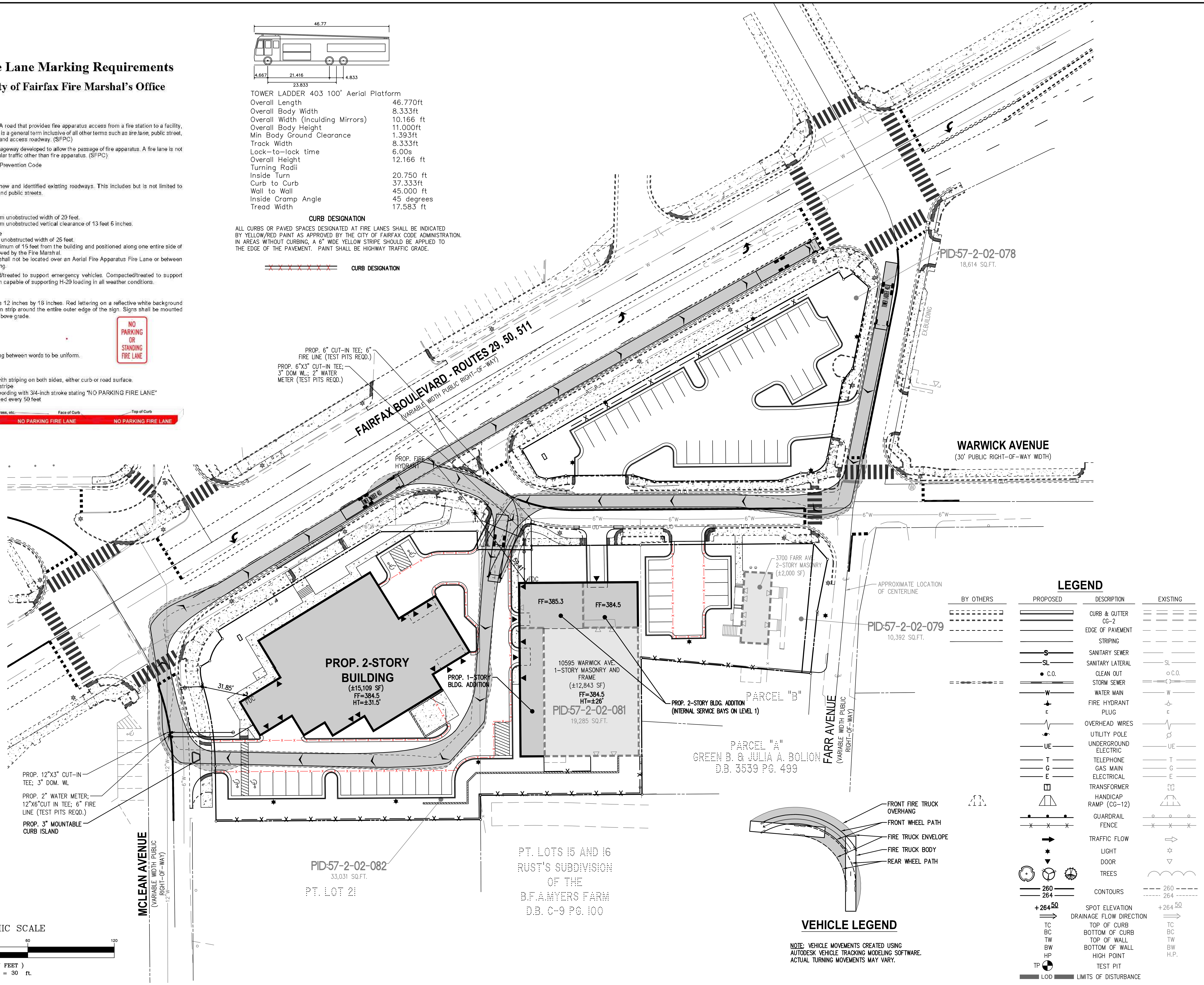
Metal construction, dimensions 12 inches by 18 inches. Red lettering on a reflective white background with three-eighth's inch red trim strip around the entire outer edge of the sign. Signs shall be mounted with the top of the sign 7 feet above grade.
Lettering size:
"NO PARKING" – 2 inches
"OR" – 1 inch
"STANDING" – 2 inches
"FIRE LANE" – 2 ½ inches
Arrows 1-inch solid red. Spacing between words to be uniform.

NO PARKING OR STANDING FIRE LANE

STRIPING

Fire Lanes shall be designed with striping on both sides, either curb or road surface.
- 6-inch red traffic paint stripe
- 4-inch white lettering/wording with 3/4-inch stroke stating "NO PARKING FIRE LANE"
- Lettering/wording spaced every 50 feet

Sidewalk, Grass, etc. — Face of Curb — Top of Curb
NO PARKING FIRE LANE NO PARKING FIRE LANE NO PARKING FIRE LANE



FIRE SERVICE PLAN

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

COMMONWEALTH OF VIRGINIA — AARON M. VINSON Lic. No.041851 11/15/24 — PROFESSIONAL ENGINEER

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SCALE: 1"=30' | DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24 | DRAWN: MM | CHECKED: AV

SHEET: P-0601

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City of Fairfax Fire Marshal's Office

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- Overhead utility lines shall not be located over an Aerial Fire Apparatus Fire Lane or between the lane and the building.

Fire lanes shall be compacted/treated to support emergency vehicles. Compacted/treated to support emergency vehicles shall mean capable of supporting H-20 loading in all weather conditions.

SIGNS

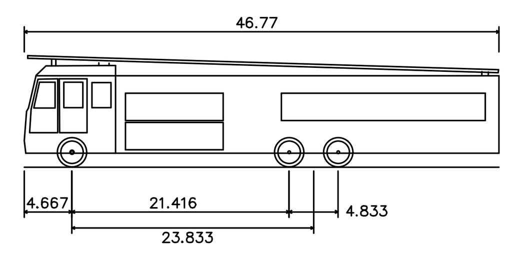
Metal construction, dimensions 12 inches by 18 inches. Red lettering on a reflective white background with three-eighth's inch red trim strip around the entire outer edge of the sign. Signs shall be mounted with the top of the sign 7 feet above grade.
Lettering size:
"NO PARKING" – 2 inches
"OR" – 1 inch
"STANDING" – 2 inches
"FIRE LANE" – 2 ½ inches
Arrows 1-inch solid red. Spacing between words to be uniform.

NO PARKING OR STANDING FIRE LANE

STRIPING

Fire Lanes shall be designed with striping on both sides, either curb or road surface.
- 6-inch red traffic paint stripe
- 4-inch white lettering/wording with 3/4-inch stroke stating "NO PARKING FIRE LANE"
- Lettering/wording spaced every 50 feet

Sidewalk, Grass, etc. — Face of Curb — Top of Curb
NO PARKING FIRE LANE NO PARKING FIRE LANE NO PARKING FIRE LANE



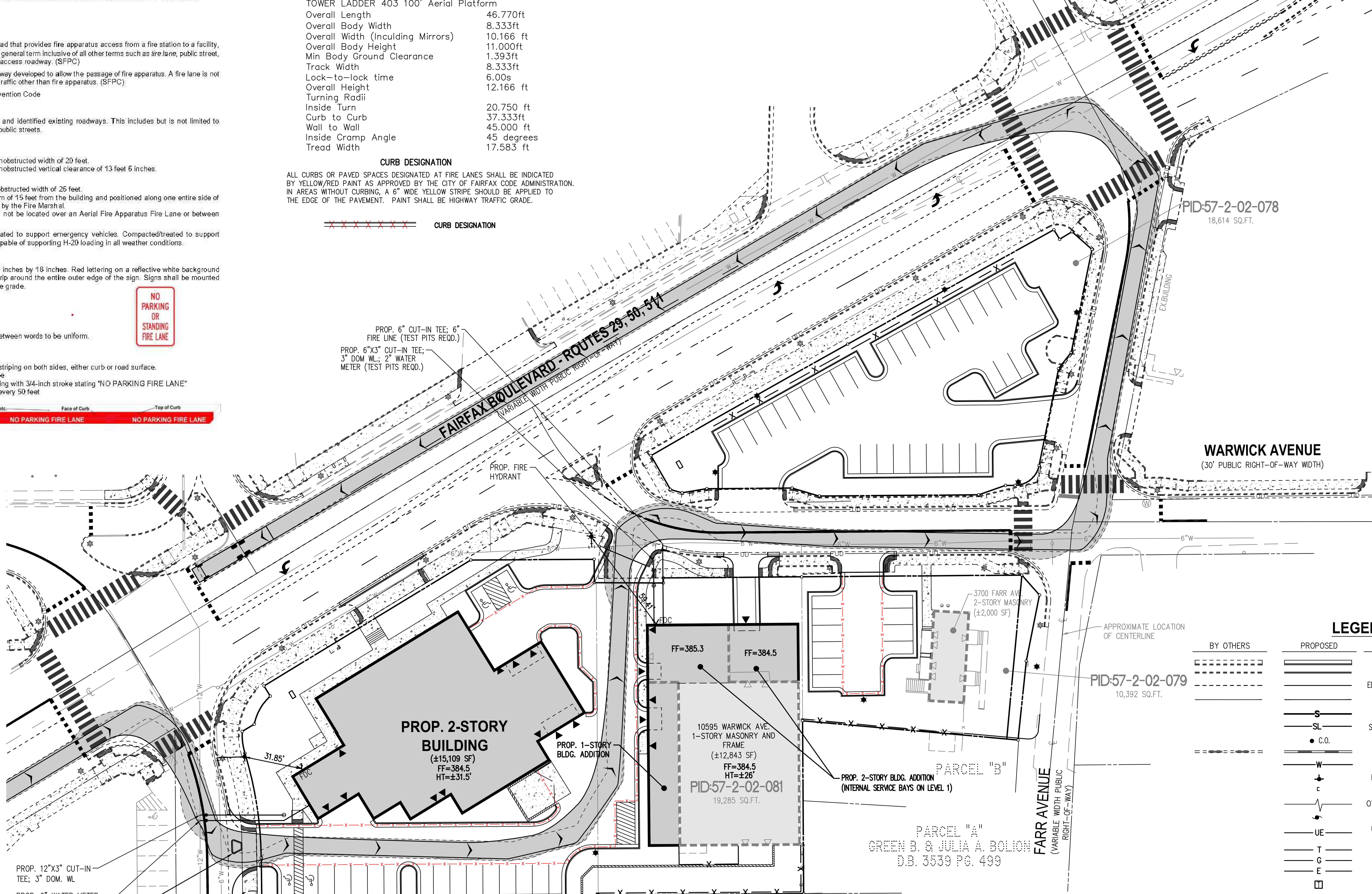
TOWER LADDER 403 100' Aerial Platform

Overall Length	46.770ft
Overall Body Width	8.333ft
Overall Width (Inculding Mirrors)	10.166 ft
Overall Body Height	11.000ft
Min Body Ground Clearance	1.393ft
Track Width	8.333ft
Lock-to-lock time	6.00s
Overall Height	12.166 ft
Turning Radii	
Inside Turn	20.750 ft
Curb to Curb	37.333ft
Wall to Wall	45.000 ft
Inside Cramp Angle	45 degrees
Tread Width	17.583 ft

CURB DESIGNATION

ALL CURBS OR PAVED SPACES DESIGNATED AT FIRE LANES SHALL BE INDICATED BY YELLOW/RED PAINT AS APPROVED BY THE CITY OF FAIRFAX CODE ADMINISTRATION. IN AREAS WITHOUT CURBING, A 6" WIDE YELLOW STRIPE SHOULD BE APPLIED TO THE EDGE OF THE PAVEMENT. PAINT SHALL BE HIGHWAY TRAFFIC GRADE.

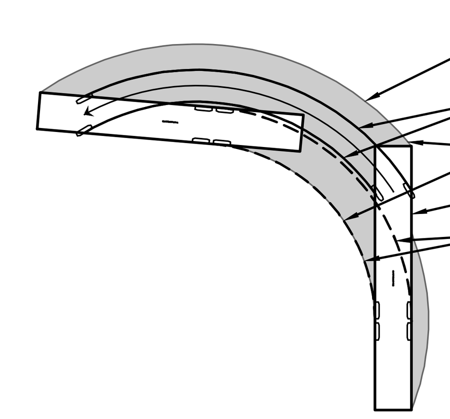
CURB DESIGNATION



GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.



VEHICLE LEGEND

NOTE: VEHICLE MOVEMENTS CREATED USING AUTODESK VEHICLE TRACKING MODELING SOFTWARE. ACTUAL TURNING MOVEMENTS MAY VARY.

LEGEND

BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	C.O.	CLEAN OUT	C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
	T	TRANSFORMER	T
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
		FENCE	
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 264	CONTOURS	260 264
	+264 50	SPOT ELEVATION	+264 50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

WALTER L. PHILLIPS INCORPORATED
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(703) 532-6163 Fax (703) 533-1301
www.WLPINC.com

SCALE: 1"=30'
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
DRAWN: MM
CHECKED: AV

FIRE SERVICE PLAN

SPECIAL USE PERMIT

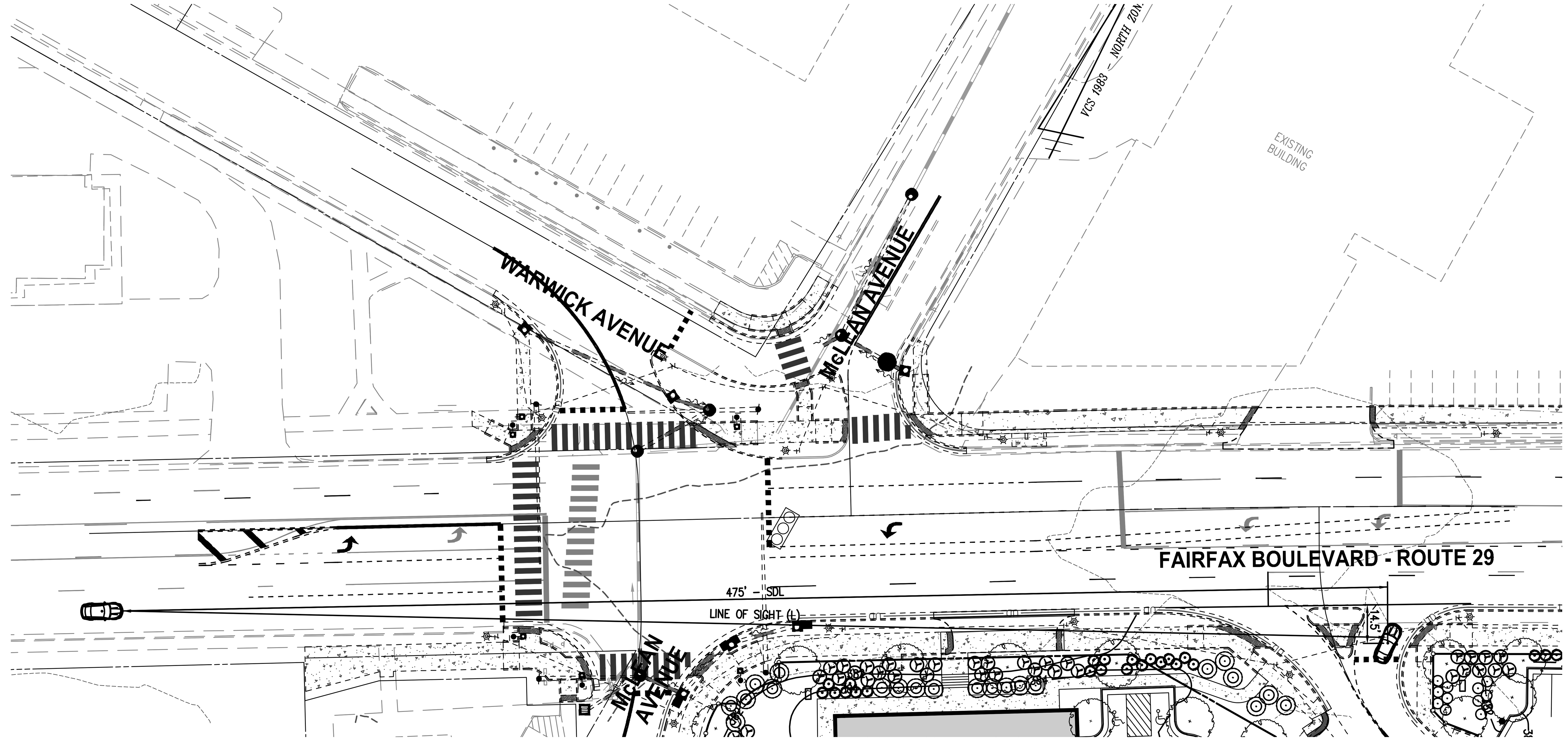
KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

SHEET: P-0602

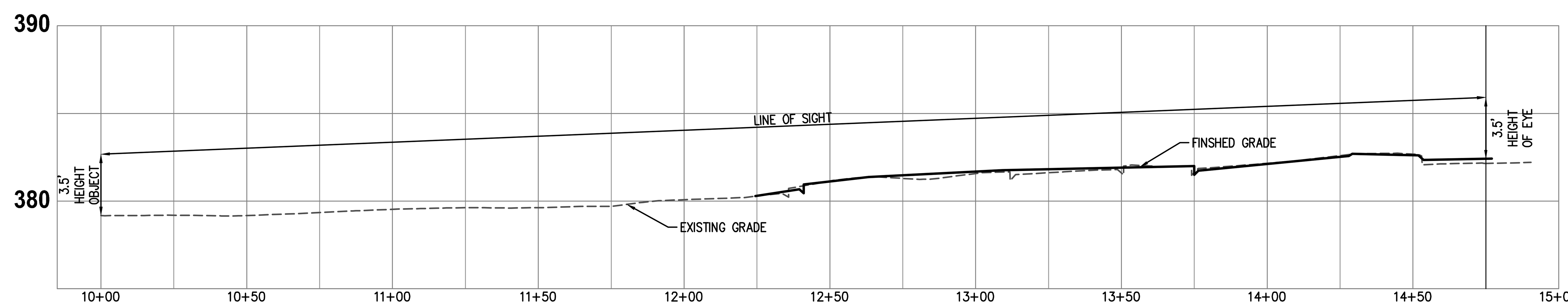
LEGEND

BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	● C.O.	CLEAN OUT	○ C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
		TRANSFORMER	
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
	X	FENCE	X
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 / 264	CONTOURS	260 / 264
	+264 50	SPOT ELEVATION	+264 50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	



SIGHT DISTANCE PLAN - WARWICK AVE

SCALE: 1"=30'



SIGHT DISTANCE PROFILE - WARWICK AVE - FAIRFAX BLVD

RIGHT TURN ONLY
POSTED SPEED LIMIT = 35 MPH
DESIGN SPEED LIMT = 40 MPH
SCALE: 1"=30' (H)
1"=5' (V)

NOTES:

1. EXISTING SITE FEATURES REPRESENTS A COMBINATION OF FIELD SURVEY, CITY OF FAIRFAX GIS INFORMATION, AND RECORD DATA.
2. ADDITIONAL SITE FEATURES, EASEMENT, AND ENCUMBRANCES MAY BE PRESENT ON SITE.
3. THIS PLAN SHOWS FOR COORDINATION PURPOSES, THE PUBLIC RIGHT-OF-WAY INTERSECTION AND STREETSCAPE IMPROVEMENT DESIGNED AND PROVIDED BY OTHERS.
4. INTERSECTION SIGHT DISTANCES PROVIDED ARE SHOWN PER THE RECOMMENDATIONS OF THE AASHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS" FOR A DESIGN OF 40 MPH.
5. THIS SIGHT DISTANCE IS PROVIDED FOR INFORMATION ONLY. THE INTERSECTION OF WARWICK AVENUE AND FAIRFAX BOULEVARD WILL BE DESIGN AND PROVIDED BY OTHERS.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

SIGHT DISTANCE PLAN AND PROFILE

SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX

CITY OF FAIRFAX , VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

AARON M. VINSON
Lic. No.041851
11/15/24
COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

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207 PARK AVENUE
FALLS CHURCH, VIRGINIA 22046
(703) 532-6163 Fax (703) 533-1301
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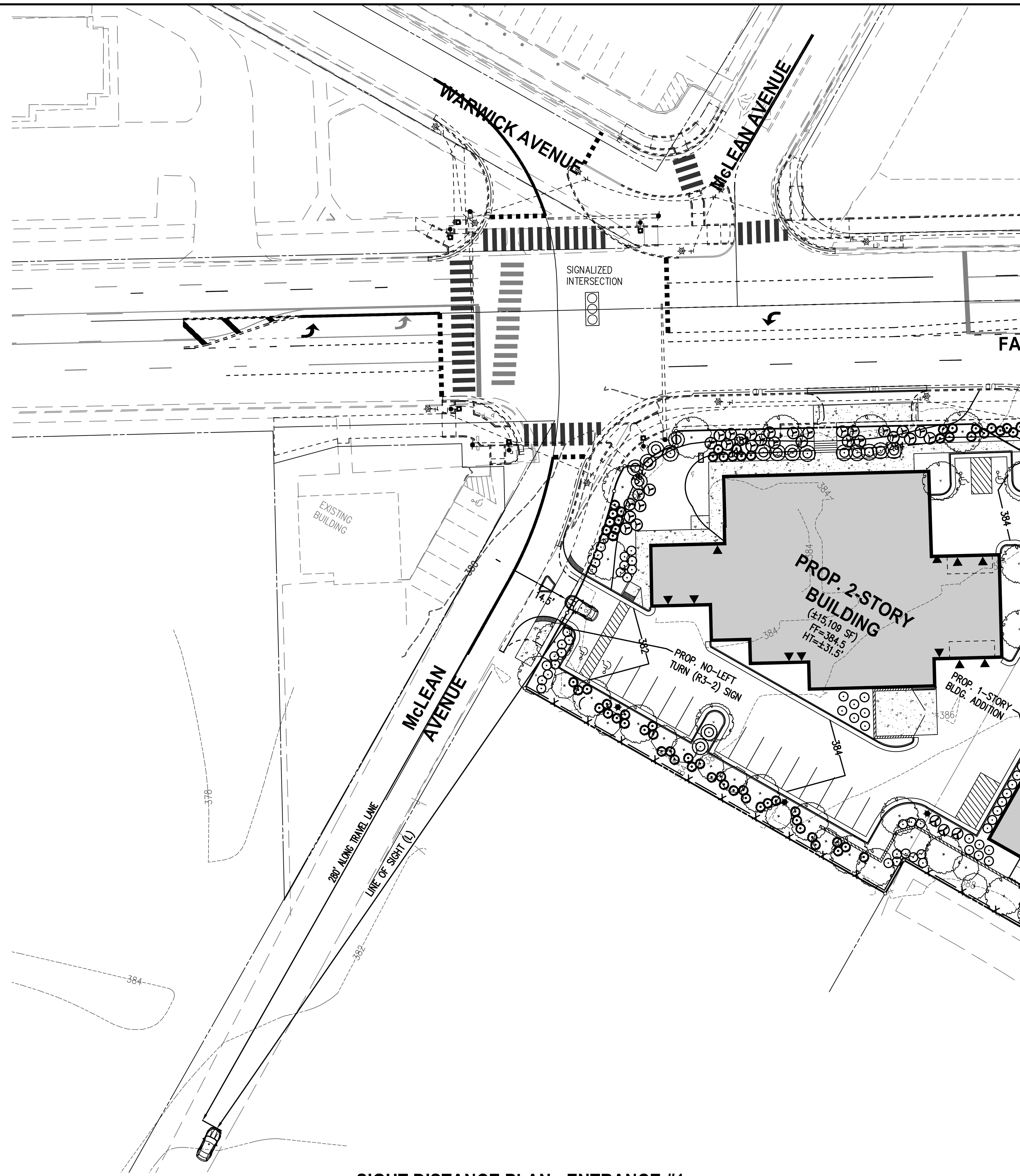
SCALE: HOR. 1" = 30'
VERT. 1" = 5'
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
DRAWN: MM
CHECKED: AV

File No. FO-16 Tax Map No. 57-02 Job No. 22-053 Cadd Dwg. File: Q:\sdskproj\22053\dwg\planning\SUP\22053P-0603.dwg

SHEET: P-0603

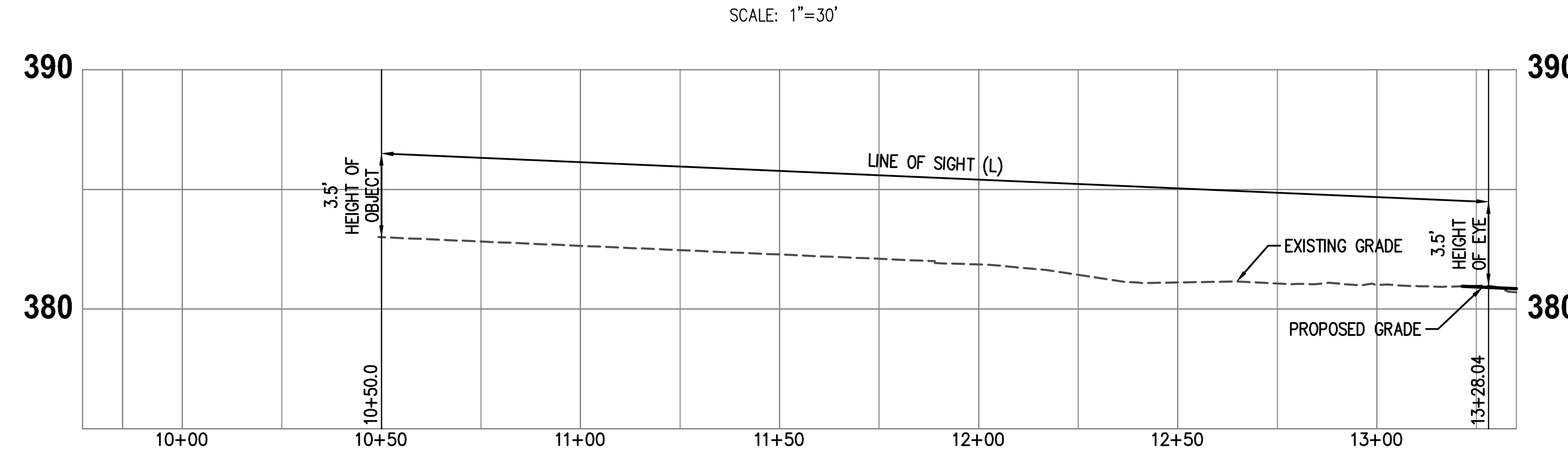
LEGEND

BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	C.O.	CLEAN OUT	C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
		TRANSFORMER	
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
		FENCE	
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 264	CONTOURS	260 264
	+264 50	SPOT ELEVATION	+264 50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	



SIGHT DISTANCE PLAN - ENTRANCE #1

SCALE: 1"=30'



SIGHT DISTANCE PROFILE - ENTRANCE #1

MCLEAN AVENUE
POSTED SPEED LIMIT = 25 MPH
DESIGN SPEED LIMT = 25 MPH
SCALE: 1"=30' (H)
1"=5' (V)

NOTES:

1. EXISTING SITE FEATURES REPRESENTS A COMBINATION OF FIELD SURVEY, CITY OF FAIRFAX GIS INFORMATION, AND RECORD DATA.
2. ADDITIONAL SITE FEATURES, EASEMENT, AND ENCUMBRANCES MAY BE PRESENT ON SITE.
3. THIS PLAN SHOWS FOR COORDINATION PURPOSES, THE PUBLIC RIGHT-OF-WAY INTERSECTION AND STREETSCAPE IMPROVEMENT DESIGNED AND PROVIDED BY OTHERS.
4. INTERSECTION SIGHT DISTANCES PROVIDED ARE SHOWN PER THE RECOMMENDATIONS OF THE AASHTO "A POLICY ON GEOMETRIC DESIGN OF HIGHWAY AND STREETS" FOR A DESIGN OF 25 MPH.
5. LEFT TURNS FROM THE SITE ENTRANCE ONTO MCLEAN AVENUE WILL BE PROHIBITED. SIGNAGE TO BE PROVIDED.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

File No. FO-16 Tax Map No. 57-02 Job No. 22-053 Cadd Dwg. File: Q:\sdskproj\22053\dwg\planning\SUP\22053P-0604.dwg

SIGHT DISTANCE PLAN AND PROFILE

SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

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(703) 532-6163 Fax (703) 533-1301
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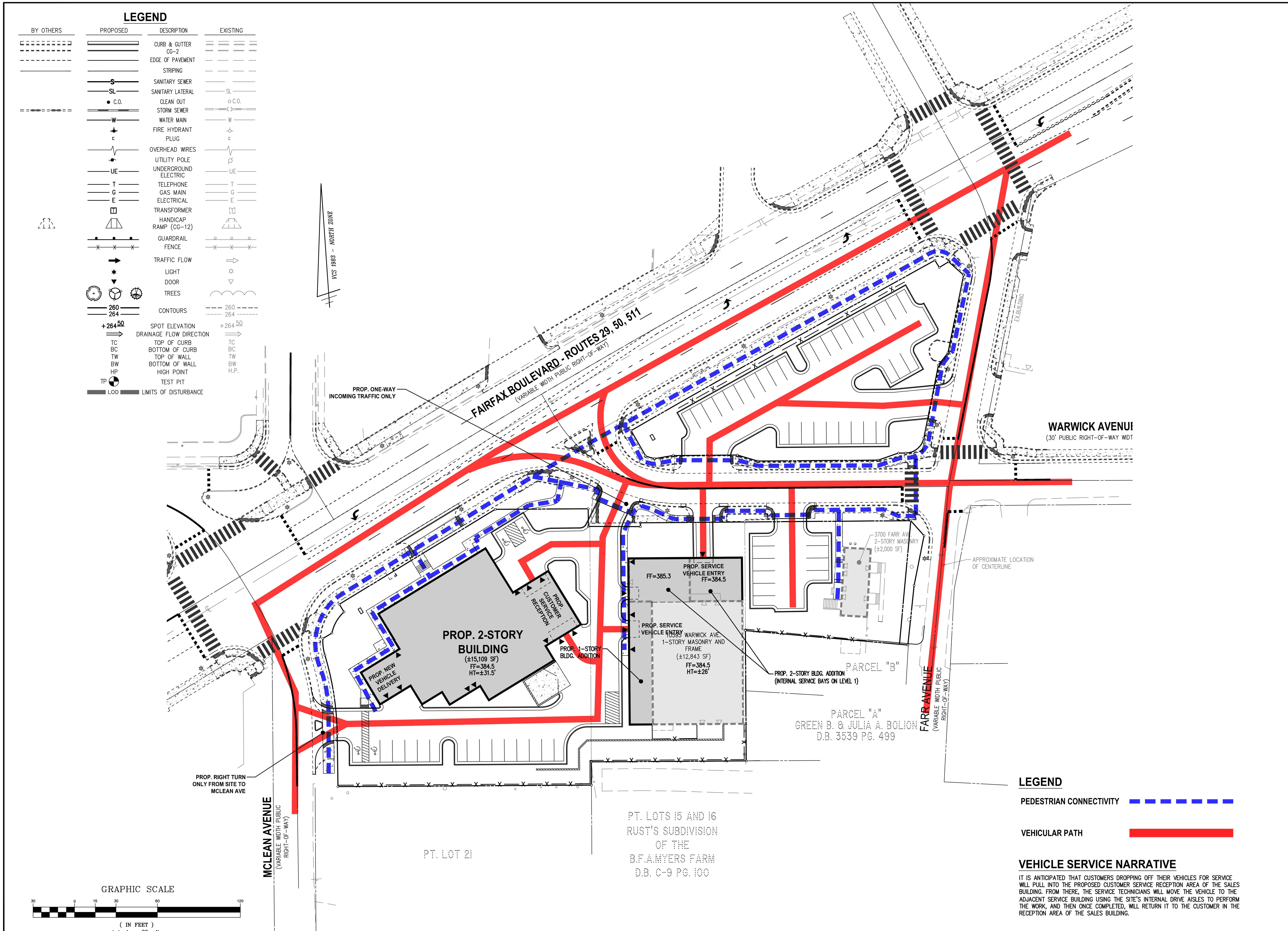
SCALE: HOR. 1" = 30' VERT. 1" = 5'
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
DRAWN: MM
CHECKED: AV

SHEET: P-0604



LEGEND

PEDESTRIAN CONNECTIVITY

VEHICULAR PATH

VEHICLE SERVICE NARRATIVE

IT IS ANTICIPATED THAT CUSTOMERS DROPPING OFF THEIR VEHICLES FOR SERVICE WILL PULL INTO THE PROPOSED CUSTOMER SERVICE RECEPTION AREA OF THE SALES BUILDING. FROM THERE, THE SERVICE TECHNICIANS WILL MOVE THE VEHICLE TO THE ADJACENT SERVICE BUILDING USING THE SITE'S INTERNAL DRIVE AISLES TO PERFORM THE WORK, AND THEN ONCE COMPLETED, WILL RETURN IT TO THE CUSTOMER IN THE RECEPTION AREA OF THE SALES BUILDING.

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(703) 532-6163 Fax (703) 533-1301
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WALTER L. PHILLIPS
INCORPORATED
ESTABLISHED 1945

DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24

SCALE: 1"=30'

DRAWN: MM

CHECKED: AV

AARON M. VINSON Lic. No. 041851 11/15/24

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

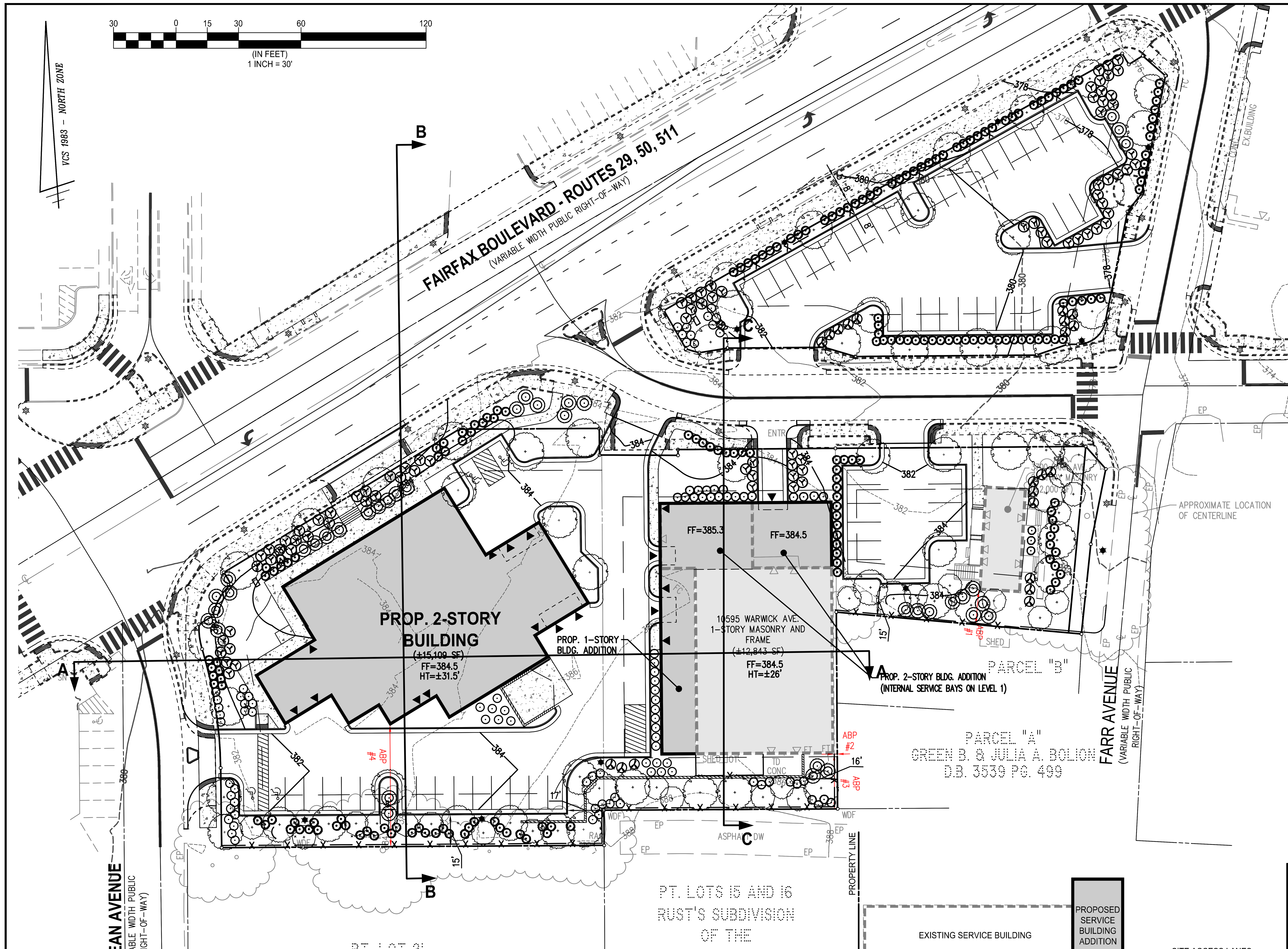
CIRCULATION PLAN

SPECIAL USE PERMIT

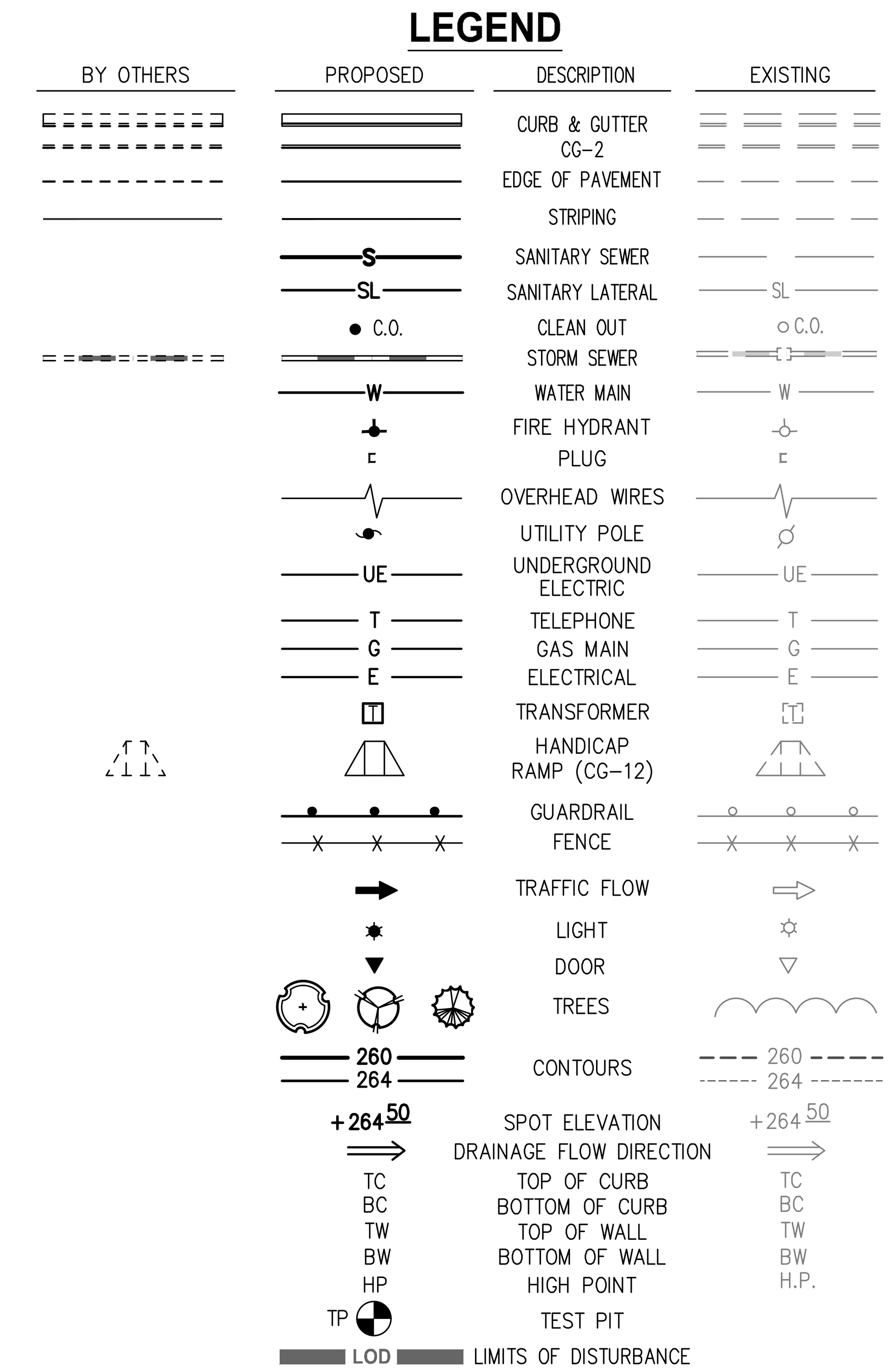
KIA OURISMAN FAIRFAX

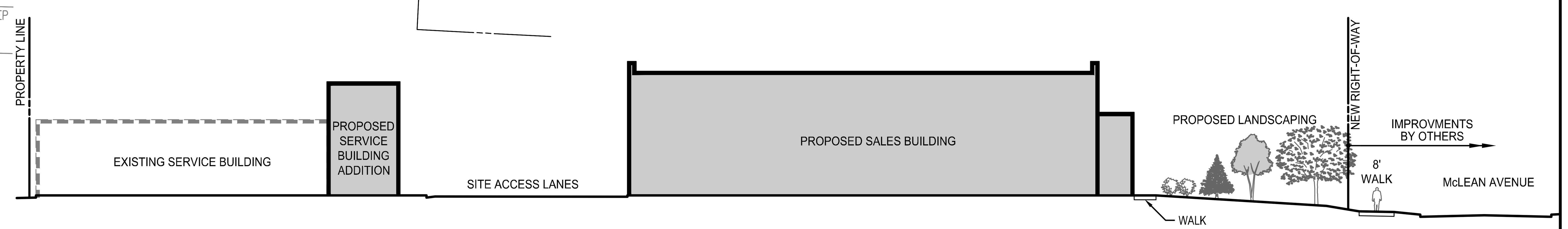
CITY OF FAIRFAX, VIRGINIA

SHEET: P-0605

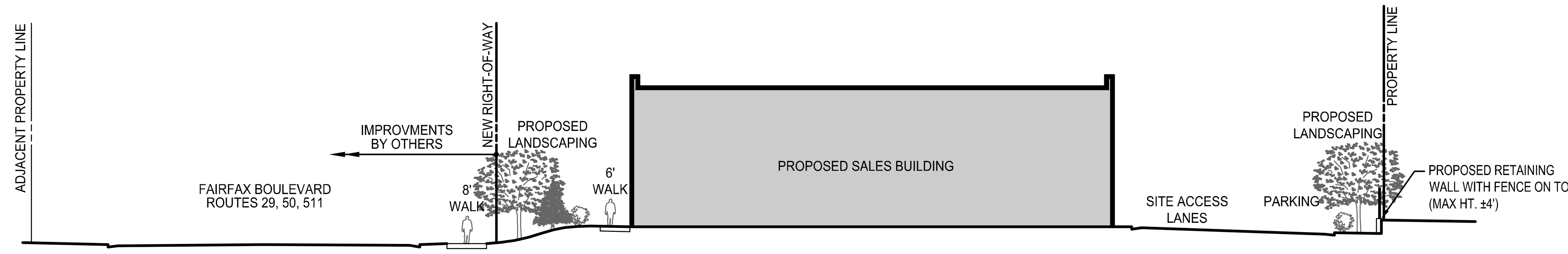


PLAN VIEW
SCALE: 1" = 30'

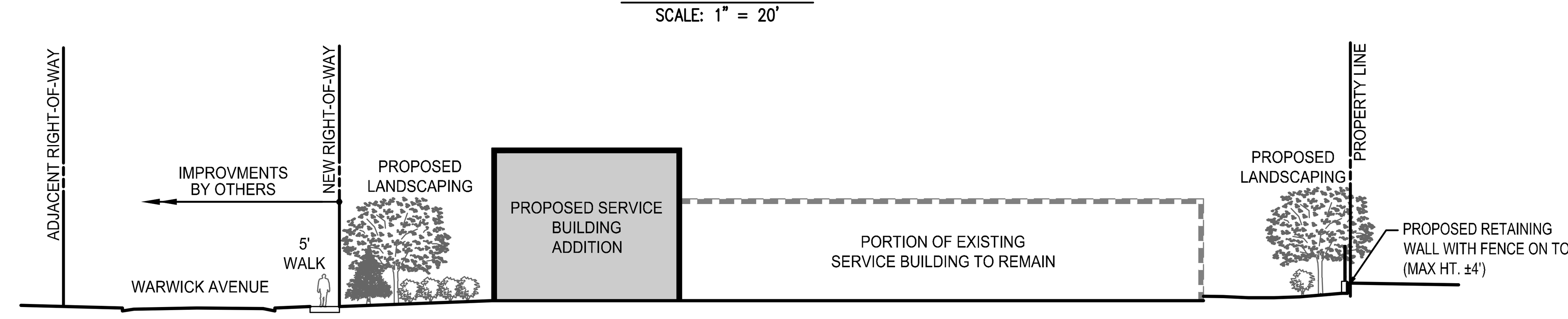




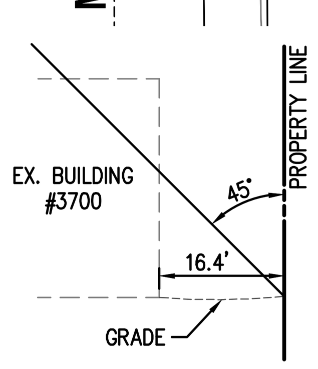
SECTION A-A
SCALE: 1" = 20'



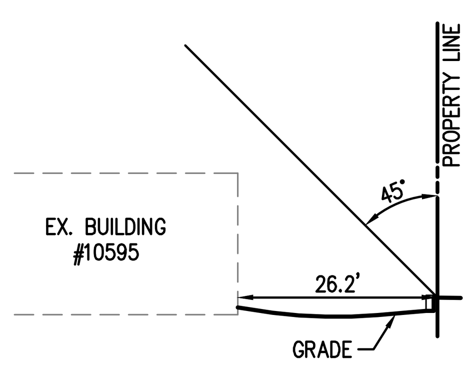
SECTION B-B
SCALE: 1" = 20'



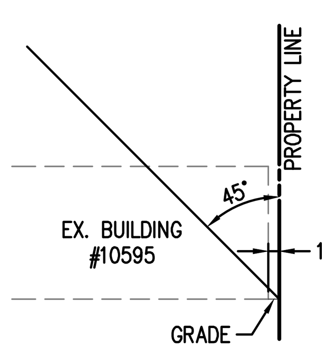
SECTION C-C
SCALE: 1" = 20'



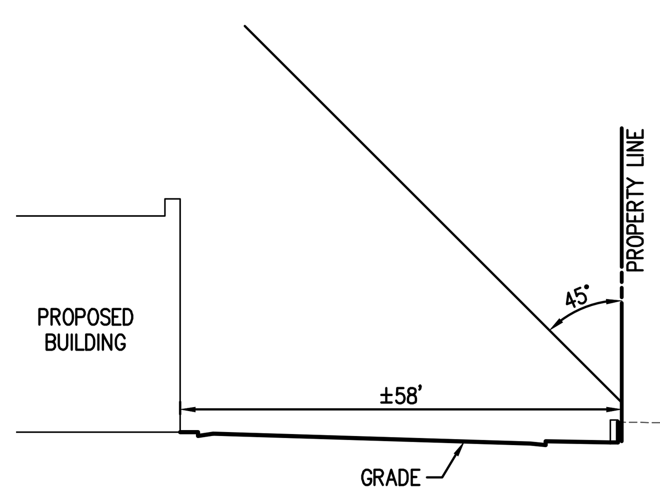
ANGLE OF BULK PLANE "1"
SCALE: 1" = 20'



ANGLE OF BULK PLANE "3"
SCALE: 1" = 20'



ANGLE OF BULK PLANE "2"
SCALE: 1" = 20'



ANGLE OF BULK PLANE "4"
SCALE: 1" = 20'

NOTE: ANGLE OF BULK PLANE SECTIONS "1" AND "2" ARE EXISTING LEGAL NON-CONFORMITIES. SEE COVER SHEET P-0101 FOR MORE INFORMATION.

20 0 10 20 40 80
(IN FEET)
1 INCH = 20'

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

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Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

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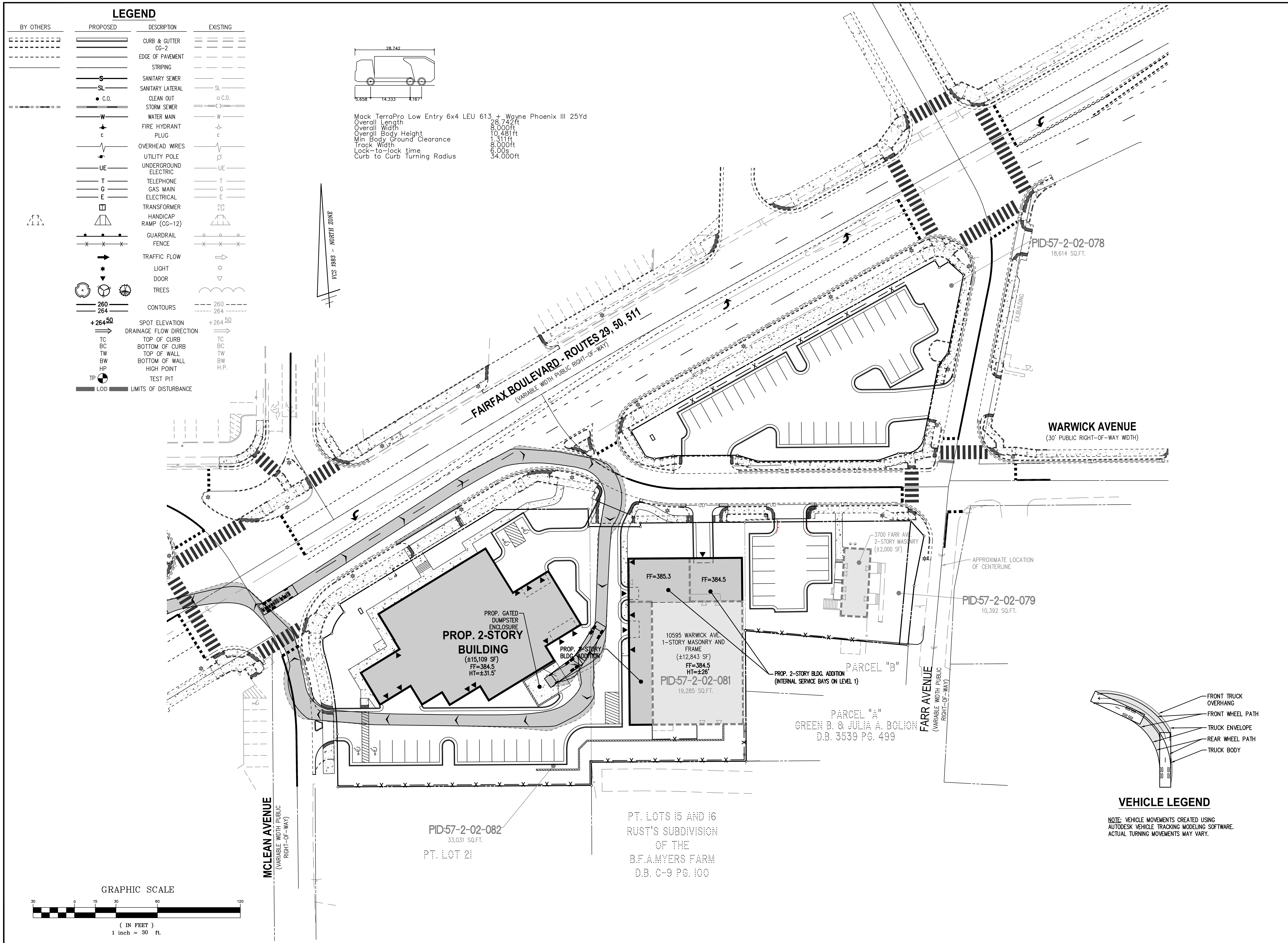
SCALE: AS NOTED
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
DRAWN: MM
CHECKED: AV

SITE SECTIONS
SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA

SHEET: P-0606

File No. FO-16 Tax Map No. 57-02 Job No. 22-053 Cadd Dwg. File: Q:\sdskproj\22053\dwg\planning\SUP\22053P-0606.dwg



File No. FO-16 Tax Map No. 57-02 Job No. 22-053 Cadd Dwg. File: Q:\sdskproj\22053\dwg\planning\SUP\22053P-0607.dwg

GARBAGE TRUCK EXHIBIT

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

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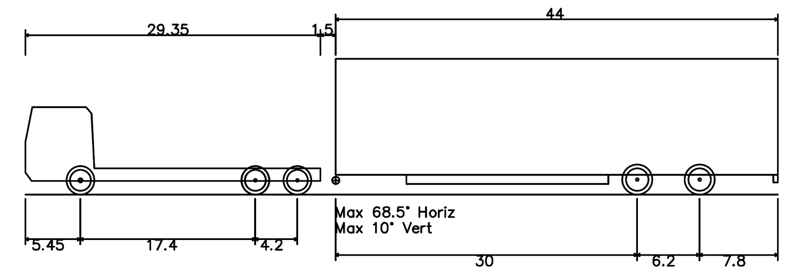
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
SCALE: 1"=30'
DRAWN: MM
CHECKED: AV

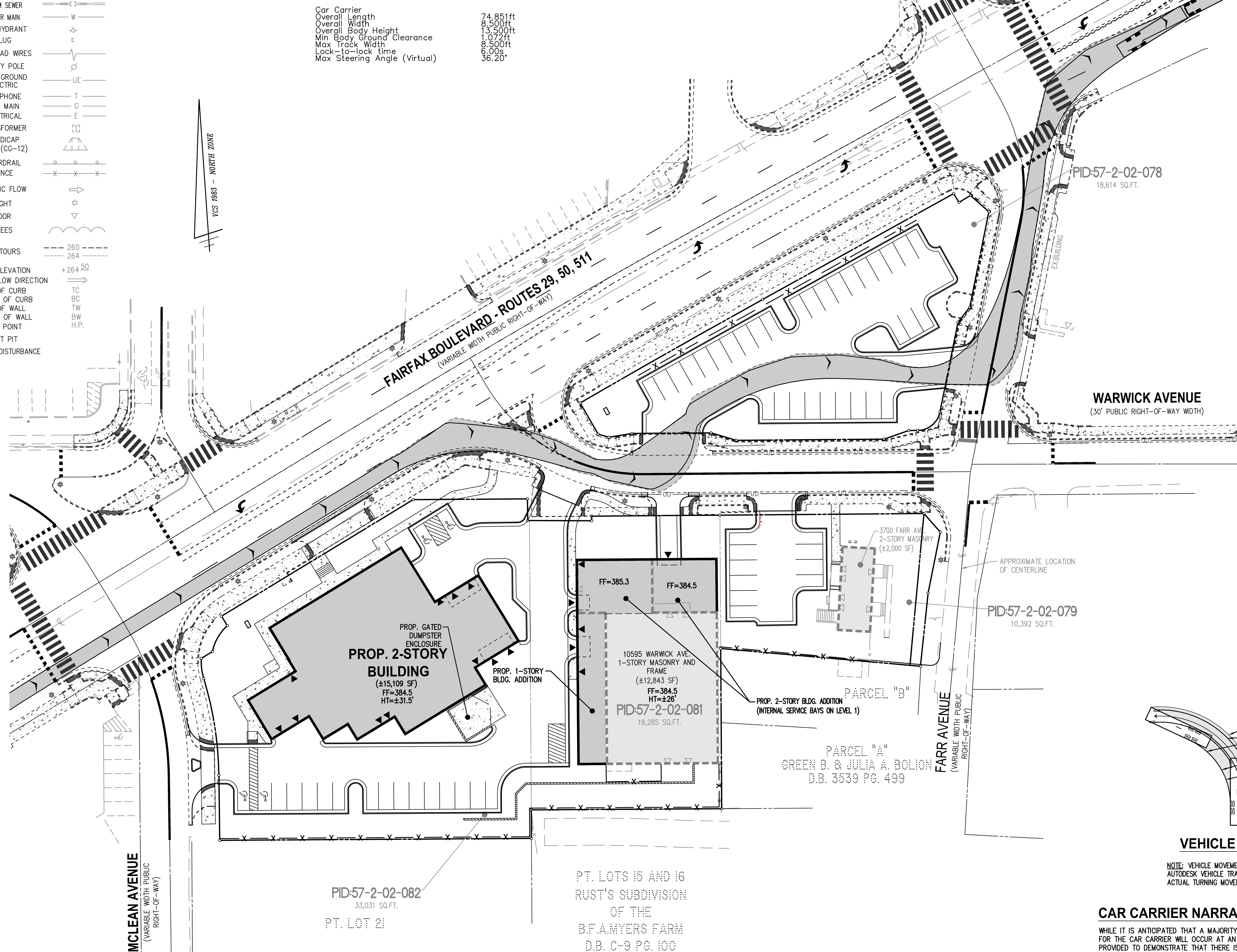
SHEET: P-0607

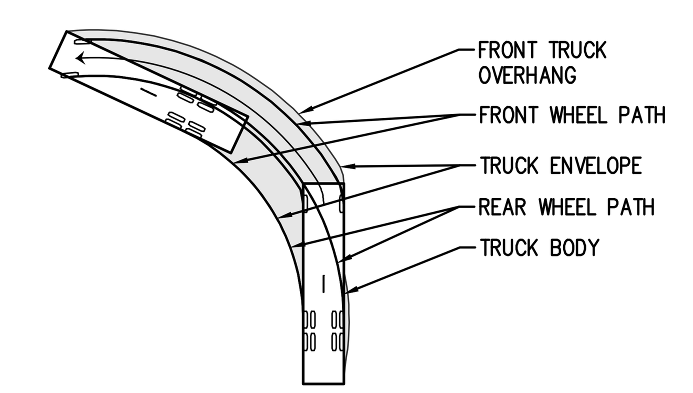
LEGEND

BY OTHERS	PROPOSED	DESCRIPTION	EXISTING
		CURB & GUTTER CG-2	
		EDGE OF PAVEMENT	
		STRIPING	
	S	SANITARY SEWER	
	SL	SANITARY LATERAL	SL
	C.O.	CLEAN OUT	C.O.
		STORM SEWER	
	W	WATER MAIN	W
		FIRE HYDRANT	
		PLUG	
		OVERHEAD WIRES	
		UTILITY POLE	
	UE	UNDERGROUND ELECTRIC	UE
	T	TELEPHONE	T
	G	GAS MAIN	G
	E	ELECTRICAL	E
		TRANSFORMER	
		HANDICAP RAMP (CG-12)	
		GUARDRAIL	
		FENCE	
		TRAFFIC FLOW	
		LIGHT	
		DOOR	
		TREES	
	260 264	CONTOURS	260 264
	+264.50	SPOT ELEVATION	+264.50
		DRAINAGE FLOW DIRECTION	
	TC	TOP OF CURB	TC
	BC	BOTTOM OF CURB	BC
	TW	TOP OF WALL	TW
	BW	BOTTOM OF WALL	BW
	HP	HIGH POINT	H.P.
	TP	TEST PIT	
	LOD	LIMITS OF DISTURBANCE	



Car Carrier	
Overall Length	74.851ft
Overall Width	8.500ft
Overall Body Height	13.500ft
Min Body Ground Clearance	1.072ft
Max Track Width	8.500ft
Lock-to-lock time	6.00s
Max Steering Angle (Virtual)	36.20°





VEHICLE LEGEND

NOTE: VEHICLE MOVEMENTS CREATED USING AUTODESK VEHICLE TRACKING MODELING SOFTWARE. ACTUAL TURNING MOVEMENTS MAY VARY.

CAR CARRIER NARRATIVE

WHILE IT IS ANTICIPATED THAT A MAJORITY OF THE VEHICLE LOADING/UNLOADING FOR THE CAR CARRIER WILL OCCUR AT AN OFFSITE LOCATION, THIS SHEET IS PROVIDED TO DEMONSTRATE THAT THERE IS SUFFICIENT SPACE ON SITE FOR THIS TO OCCUR IF NECESSARY, WITHOUT BLOCKING THE RIGHT-OF-WAY OR PROPOSED FIRE LANES. SHOULD THE CAR CARRIER ACCESS THE SITE, TEMPORARY TRAFFIC CONTROL PRACTICES WILL NEED TO BE IMPLEMENTED BY THE DEALERSHIP TO MITIGATE AGAINST POTENTIAL CONFLICTS WITHIN WARWICK AND FARR AVENUES.

GRAPHIC SCALE

30 0 15 30 60 120

(IN FEET)
1 inch = 30 ft.

CAR CARRIER TRUCK EXHIBIT

SPECIAL USE PERMIT

KIA OURISMAN FAIRFAX

CITY OF FAIRFAX, VIRGINIA

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

REVISION APPROVED BY

AARON M. VINSON
Lic. No.041851
11/15/24
COMMONWEALTH OF VIRGINIA
PROFESSIONAL ENGINEER

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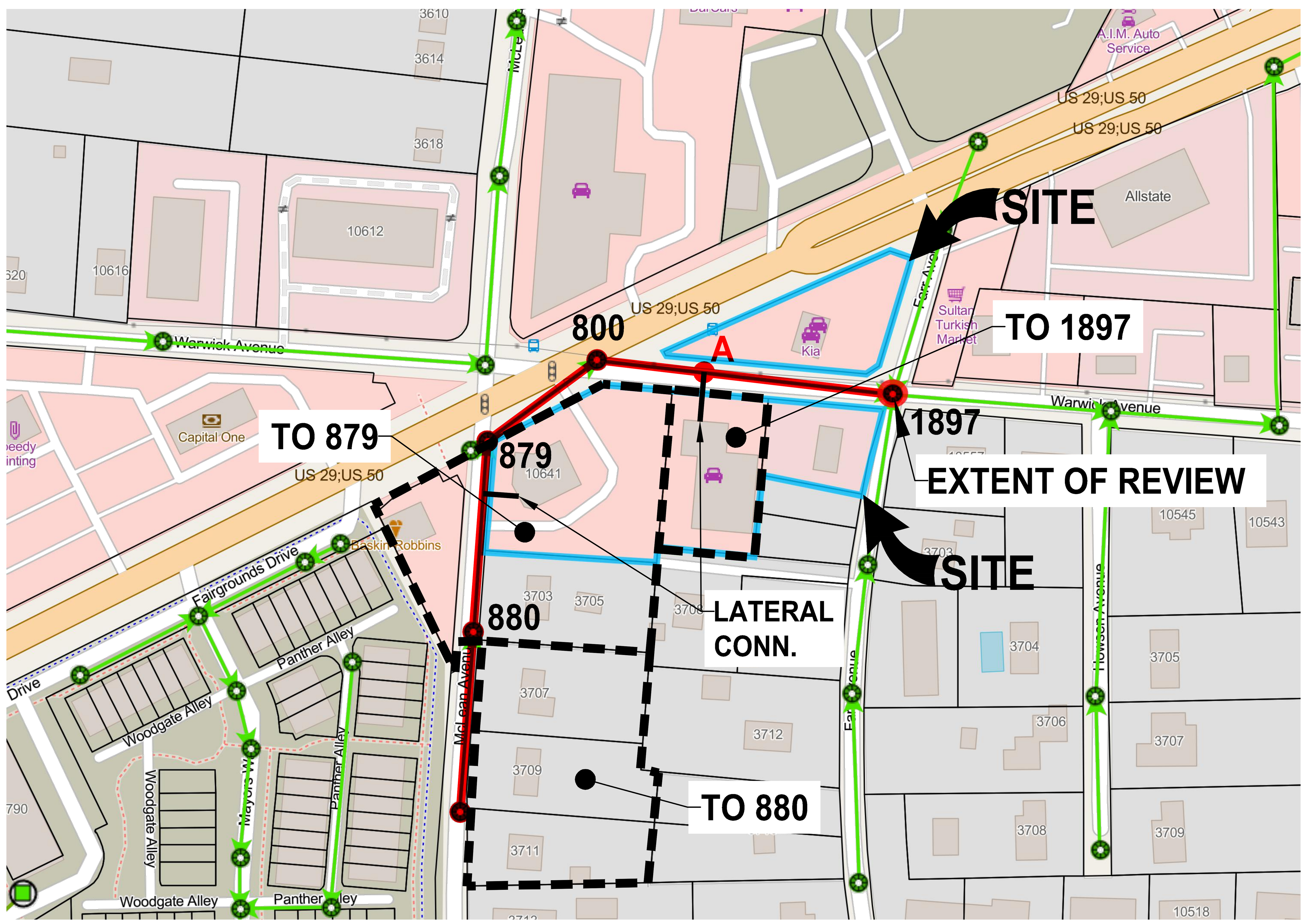
DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
SCALE: 1"=30'
DRAWN: MM
CHECKED: AV

SHEET: P-0608

SANITARY OUTFALL MAP



100 0 50 100 200 400
(IN FEET)
1 INCH = 100'

SANITARY OUTFALL COMPUTATIONS (PROPOSED)

Parcel (ID)*	Status	Type	Units	Loading Rate (gpd)	Count	LOADING - Average GPD	Loading Manhole
57202091	Existing	Dwelling - SF, detached	# Homes	330.00	1	330	880
57202089	Existing	Dwelling - SF, detached	# Homes	330.00	1	330	880
57202088	Existing	Dwelling - SF, detached	# Homes	330.00	1	330	880
57202083	Existing	Mixed Use Retail	Gross ft2	0.77	3,148	2,424	879
57202084	Existing	Dwelling - SF, attached	# Units	280.00	2	560	879
57202082	Proposed	Commerical - General (sqft)	Gross ft2	0.05	10,775	495	879
57202081	Proposed	Commerical - General (sqft)	Gross ft2	0.05	12,842	590	A

UPSTREAM	DOWNSTREAM	PIPESIZE	ASLENGTH	SLOPE (%)	Q (mgd)	Unpeakable Flow (gpd)	Peakable Flow (gpd)	PF	Cumulative Peak Flow	q/Q	PF
880	879	8	222.36	1.07	0.81	-	990	4.00	3,960	0%	818.19
879	800	8	128.32	1.5	0.96	-	4,469	4.00	17,875	2%	214.62
800	A	8	158.93	1.49	0.96	-	4,469	4.00	17,875	2%	213.90
A	1897	8	215.77	1.5	0.96	-	5,058	4.00	20,233	2%	189.60

NOTE: PROPOSED SANITARY OUTFALL COMPUTATIONS INCLUDES FLOWS FOR THE PROPOSED CONDITIONS BIULDING AND DOES NOT INCLUDE THE EXISTING CONDITIONS THAT WILL BE REMOVED AS PART OF THIS APPLICATION.

NOTES

1. CALCULATIONS SHOWN ON THIS PLAN ARE TAKEN FROM THE FAIRFAX COUNTY WPMD HYDRAULIC CALCULATION SPREADSHEET, CURRENT VERSION AS OF THE TIME OF PLAN PREPARATION.

2. STRUCTURE 800 BETWEEN STRUCTURES 879 AND 1897 IS PAVED OVER AND INACCESSIBLE. THE LENGTHS AND SLOPES USED WERE DETERMINED BY INTERPOLATING AN APPROXIMATE LOCATION FROM THE KNOWN INVERTS AND LOCATIONS OF THE EXISTING STRUCTURES ON THE UPSTREAM AND DOWNSTREAM ENDS.

SANITARY SEWER CAPACITY NARRATIVE

AS SHOWN ON THIS SHEET, THE DOWNSTREAM CONVEYANCE SYSTEM SERVING THIS SITE IS ADEQUATE TO CONVEY ESTIMATED SANITARY SEWER FLOWS IN THE SYSTEM UNDER NORMAL PEAKED FLOW CONDITIONS. PEAKING FACTORS (PF) OF THE PIPE SYSTEM WITHIN THE LIMITS OF ANALYSIS ARE WELL OVER 4.0, WHICH IS THE TYPICAL BENCHMARK FOR ADEQUATE CAPACITY DURING PEAK FLOW.

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DATE: 1/18/23; REV. 06/30/23; 10/31/23; 08/08/24; 11/15/24
SCALE: HOR. 1" = 30' VERT. 1" = 5'
DRAWN: MM
CHECKED: AV

COMMONWEALTH OF VIRGINIA
AARON M. VINSON
Lic. No.041851
11/15/24
PROFESSIONAL ENGINEER

REVISION APPROVED BY

NO.	DESCRIPTION	DATE	REV. BY	APPROVED	DATE

SANITARY SEWER OUTFALL ANALYSIS
SPECIAL USE PERMIT
KIA OURISMAN FAIRFAX
CITY OF FAIRFAX, VIRGINIA