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AIRPORT ROAD SHEETZ

FINAL SITE PLAN

COUNTY PLAN NO. SDP-2020-00061

ALBEMARLE COUNTY, VIRGINIA

SCOPE OF WORK:

THE SCOPE OF WORK GENERALLY CONSISTS OF COMBINING THREE PARCELS AT THE INTERSECTION OF S.R. 29 AND AIRPORT ROAD, DEMOLISHING THE EXISTING STRUCTURES, AND GRADING AND PREPARING THE SITE FOR A NEW GAS STATION, CONVENIENCE STORE, CAR WASH, AND ALL ASSOCIATED INFRASTRUCTURE SUPPORTING THIS WORK.

PROJECT SUMMARY

NAME OF PROJECT: AIRPORT ROAD SHEETZ

PROJECT LOCATION: 3510 SEMINOLE TRAIL
ALBEMARLE COUNTY, VIRGINIA

DEVELOPMENT TYPE: BY-RIGHT

APPLICANT/OWNER:
CONTACT: ANDREW BALDWIN
AIRPORT AUTO INVESTMENTS, LLC
ADDRESS: 600 EAST WATER STREET, SUITE H
CHARLOTTESVILLE, VA 22902
PHONE: (434) 422-5050
EMAIL: ANDREW@CORECVILLE.COM

ENGINEER OF RECORD:
CONTACT: LINE AND GRADE CIVIL ENGINEERING
DANIEL C. HYER, PE
ADDRESS: 113 4TH STREET NE, STE 100
CHARLOTTESVILLE, VA 22902
PHONE: 434-262-0169
EMAIL: DHYER@LINE-GRADE.COM

SOURCE OF SURVEY AND TOPOGRAPHY:
SOURCE: ACTUAL GROUND SURVEY (SEE SHEET X1.0 FOR SIGNED SURVEY)
CONTACT: ROUDABUSH, GALE & ASSOCIATES
BRIAN JAMISON, LS
ADDRESS: 914 MONTICELLO ROAD
CHARLOTTESVILLE, VA 22902
PHONE: 434-977-0205
EMAIL: BJAMISON@ROUDABUSH.COM

PARCELS:

TMP 32-38
OWNER: AIRPORT PLAZA, LLC
CONTACT: 5029 STONEY POINT RD
BARBOURSVILLE, VA 22923
PARCEL ID: 03200-00-00-03800
ZONED: C1 COMMERCIAL
OVERLAYS: AIRPORT IMPACT; ENTRANCE CORRIDOR
PROFFERS: VETERINARY OFFICE AND HOSPITAL (ref. SP- 1996-00008 for conditions)
LEGAL AREA: 0.627 AC
27,304 SF

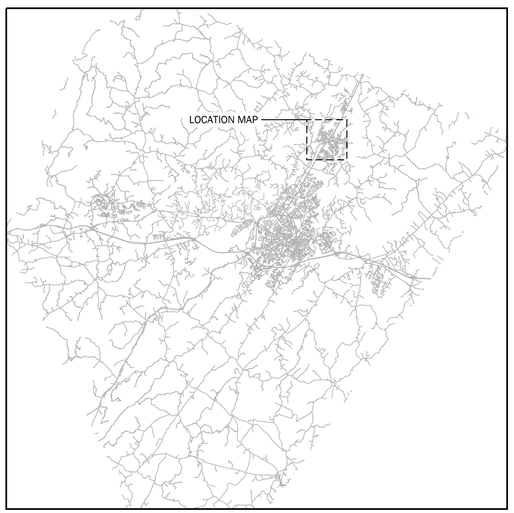
TMP 32-39
OWNER: MARSHALL, WILLIAM SCOTT, IND & AS TRS OF RACHEL K MARSHALL REV TRUST
PARCEL ID: 03200-00-00-03900
ZONED: C1 COMMERCIAL
OVERLAYS: AIRPORT IMPACT; ENRANCE CORRIDOR; MANAGED STEEP SLOPES
LEGAL AREA: 1.666 AC
72,556 SF

TMP 32-39A
OWNER: MARSHALL, WILLIAM SCOTT, IND & AS TRS OF RACHEL K MARSHALL REV TRUST
PARCEL ID: 03200-00-00-03940
ZONED: C1 COMMERCIAL
OVERLAYS: AIRPORT IMPACT; ENTRANCE CORRIDOR
LEGAL AREA: 0.061 AC
2,654 SF

TOTAL LEGAL AREA: 2.353 AC

MAGISTERIAL DISTRICT: RIO

PROPOSED SITE PLAN REQUIREMENTS		ALLOWED OR REQ'D
BUILDING HEIGHT:		
PER 21.4	MAX HEIGHT ALLOWED =	65 FT
	EXISTING BUILDING HEIGHT =	12 FT
	PROPOSED BUILDING HEIGHT =	24.33 FT
SETBACKS:		
Per 4.20	PRIMARY STREET (RTE 29; PRINCIPAL ARTERIAL) MIN FRONT BUILDING SETBACK =	10 FT*
	PRIMARY STREET (RTE 29; PRINCIPAL ARTERIAL) MAX FRONT BUILDING SETBACK =	NONE REQUIRED
	SECONDARY STREET (AIRPORT RD; MINOR ARTERIAL) MIN FRONT BUILDING SETBACK =	10 FT*
	SECONDARY STREET (AIRPORT RD; MINOR ARTERIAL) MAX FRONT BUILDING SETBACK =	NONE REQUIRED
	SIDE AND REAR BUILDING SETBACK (ADJACENT TO COMMERCIAL) =	NONE REQUIRED
	PARKING SETBACK =	10 FT
	**WHEN PUBLIC SIDEWALK IS OUTSIDE RIGHT OF WAY, SETBACK DISTANCE SHALL BE MEASURED FROM BACK OF SIDEWALK.*	
SCREENING:		
	ADJACENT TO COMMERCIAL	NONE REQUIRED
PER 32.7.9.7	SEE LANDSCAPE SHEETS FOR SPECIFIC SITE ELEMENTS TO BE SCREENED FROM PUBLIC STREETS	
BUILDING FOOTPRINTS:		
	EXISTING BUILDINGS	
	AIRPORT PLAZA STORES	5,721 SF
	1 STORY FRAME & CINDERBLOCK	3,513 SF
	2 STORY FRAME	1,394 SF
	1 STORY CINDERBLOCK	794 SF
	METAL CANOPY	190 SF
	FRAME SHED 1	303 SF
	FRAME SHED 2	101 SF
	FRAME SHED 3	282 SF
	EXISTING BUILDINGS TOTAL =	**12,298 SF**
	PROPOSED BUILDINGS	
	PROPOSED CONVENIENCE STORE FOOTPRINT	6,077 SF
	PROPOSED CAR WASH FOOTPRINT	1,024 SF
	PROPOSED FUEL CANOPY FOOTPRINT	4,538 SF
	PROPOSED BUILDINGS TOTAL =	**11,639 SF**
LAND USE:		
PER 22.2.1c	CONVENIENCE STORE =	6,077 SF
	CAR WASH (DRIVE THRU TYPE) =	1,024 SF
	FUEL STATION (CANOPY) =	4,538 SF
PARKING REQUIRED:		
Per 4.12.6	MIXED USES (SEE PARKING TABULATION TABLE ON SHEET C0.2)	
	TOTAL REQUIRED PARKING =	**43 SPACES**
Per ADA Std. 208	**HANDICAP SPACES REQUIRED =**	**2 SPACES**
TREE CANOPY COVER:		
SEE LANDSCAPE PLAN		



VICINITY MAP
SCALE: 1" = 25,000'



LOCATION MAP
SCALE: 1" = 2,000'

VDOT DESIGN CRITERIA:

LAND USE: COMMERCIAL/RETAIL (WITHOUT SEPARATE TRUCK ACCESS)
DESIGN VEHICLE: WB-67 TRUCK
RADIUS: 50'
DESIGN EXCEPTION: AM-E FOR ROUTE 29 ENTRANCE, APPROVED ON: JUNE 18, 2020
(SEE SHEET C0.2 FOR APPROVAL CONDITIONS)
INTERSECTION SIGHT DISTANCE: 530'
SEE SHEET C0.2 FOR TURN LANE WARRANT ANALYSIS AND TRIP GENERATION FIGURES

ADDITIONAL SITE INFORMATION:

DISTURBANCE AREA: 2.59 AC (113,016 SF)
EXISTING IMPERVIOUS AREA: 1.11 AC (48,444 SF)
PROPOSED IMPERVIOUS AREA: 1.60 AC (69,667 SF)
PERCENT INCREASE IN IMPERVIOUS AREA: 43.8%
MISS UTILITY TICKET NO.: B003400793-008
12 DIGIT HUC CODE: 0208-0204-0303 (NORTH FORK RIVANNA RIVER - JACOB'S RUN)
NOTE: THE SUBJECT PROPERTIES ARE ALL WITHIN FEMA ZONE X (AREA OF MINIMAL FLOOD HAZARD) AND ARE NOT WITHIN THE FLOOD HAZARD OVERLAY DISTRICT.

SHEET LIST TABLE

SHEET NUMBER	SHEET TITLE	FSP	WPO/VSMP
C0.0	TITLE SHEET - FSP	●	
C0.0	TITLE SHEET - WPO VSMP		●
C0.1	GENERAL CONSTRUCTION NOTES	●	●
C0.2	ZONING, PARCEL, AND SITE CALCULATIONS	●	●
C1.0	EXISTING CONDITIONS, SOILS MAP, AND DEMOLITION PLAN	●	●
C2.0	EROSION AND SEDIMENT CONTROL NARRATIVE		●
C2.1	EROSION AND SEDIMENT CONTROL PLAN - PHASE 1		●
C2.2	EROSION AND SEDIMENT CONTROL PLAN - PHASE 2		●
C2.3	EROSION AND SEDIMENT CONTROL PLAN - PHASE 3		●
C2.4	EROSION AND SEDIMENT CONTROL DETAILS		●
C2.5	EROSION AND SEDIMENT CONTROL DETAILS		●
C3.0	TRAFFIC PLAN	●	
C3.1	SIGHT DISTANCE	●	
C3.2	TEMPORARY TRAFFIC CONTROL DETAILS	●	
C3.3	TEMPORARY TRAFFIC CONTROL DETAILS	●	
C4.0	SITE PLAN	●	●
C4.1	SITE DETAILS	●	●
C4.2	SITE DETAILS	●	●
C4.3	SITE DETAILS	●	●
C4.4	CARWASH DETAILS	●	
C5.0	GRADING AND DRAINAGE PLAN	●	●
C6.0	UTILITY PLAN	●	●
C6.1	UTILITY PROFILES	●	●
C6.2	UTILITY PROFILES	●	●
C6.3	UTILITY DETAILS	●	●
C6.4	UTILITY DETAILS	●	●
C7.0	PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN		●
C7.1	POST-DEVELOPMENT STORMWATER MANAGEMENT PLAN		●
C7.2	VRRM TABULATIONS		●
C7.3	DRAINAGE MAP		●
C7.4	HYDRAULIC CALCULATIONS		●
C7.5	BMP PLAN AND PROFILE		●
C7.6	BMP DETAILS		●
C7.7	SWM C PLAN AND DETAILS		●
C7.8	STORMTANK DETAILS		●
C8.0	LANDSCAPE LAYOUT AND MATERIALS PLAN	●	●
C8.1	LANDSCAPE PLAN	●	●
C8.2	LANDSCAPE DETAILS	●	●
C9.0	PHOTOMETRY	●	
C9.1	PHOTOMETRIC RENDERINGS	●	
C9.2	LUMINAIRE DETAILS	●	
A1.0	ARCHITECTURAL ELEVATIONS	●	
A1.1	ARCHITECTURAL ELEVATIONS	●	
X1.0	SURVEY	●	●
44	TOTAL SHEETS	28	33

SUBMITTAL LOG

SUBMISSION NO.	DESCRIPTION	RECIPIENT	SUBMITTAL DATE
1	1ST INITIAL SITE PLAN SUBMISSION	ALBEMARLE CO. DEPT. OF COMMUNITY DEVELOPMENT	3/12/2020
2	INITIAL SITE PLAN WITH ARB UPDATES	ALBEMARLE CO. DEPT. OF COMMUNITY DEVELOPMENT	8/20/2020
3	1ST FINAL SITE PLAN SUBMISSION	ALBEMARLE CO. DEPT. OF COMMUNITY DEVELOPMENT	9/9/2020
4	2ND FINAL SITE PLAN SUBMISSION	ALBEMARLE CO. DEPT. OF COMMUNITY DEVELOPMENT	11/23/2020

SIGNATURE PANEL:

	APPROVAL	DATE
DEPARTMENT OF COMMUNITY DEVELOPMENT		
PLANNING & ZONING		
ENGINEERING		
INSPECTIONS		
ARCHITECTURAL REVIEW BOARD		
DEPARTMENT OF FIRE AND RESCUE		
ALBEMARLE COUNTY SERVICE AUTHORITY		
VIRGINIA DEPARTMENT OF TRANSPORTATION		
HEALTH DEPARTMENT		

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

TITLE SHEET

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

THE WORK OF LINE + GRADE

C0.0

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GENERAL CONSTRUCTION NOTES:

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

WORK AREA PROTECTION AND MAINTENANCE:

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

UTILITIES:

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

EARTH WORK AND SITE CONDITIONS:

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

MAINTENANCE OF TRAFFIC:

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

FIRE PREVENTION:

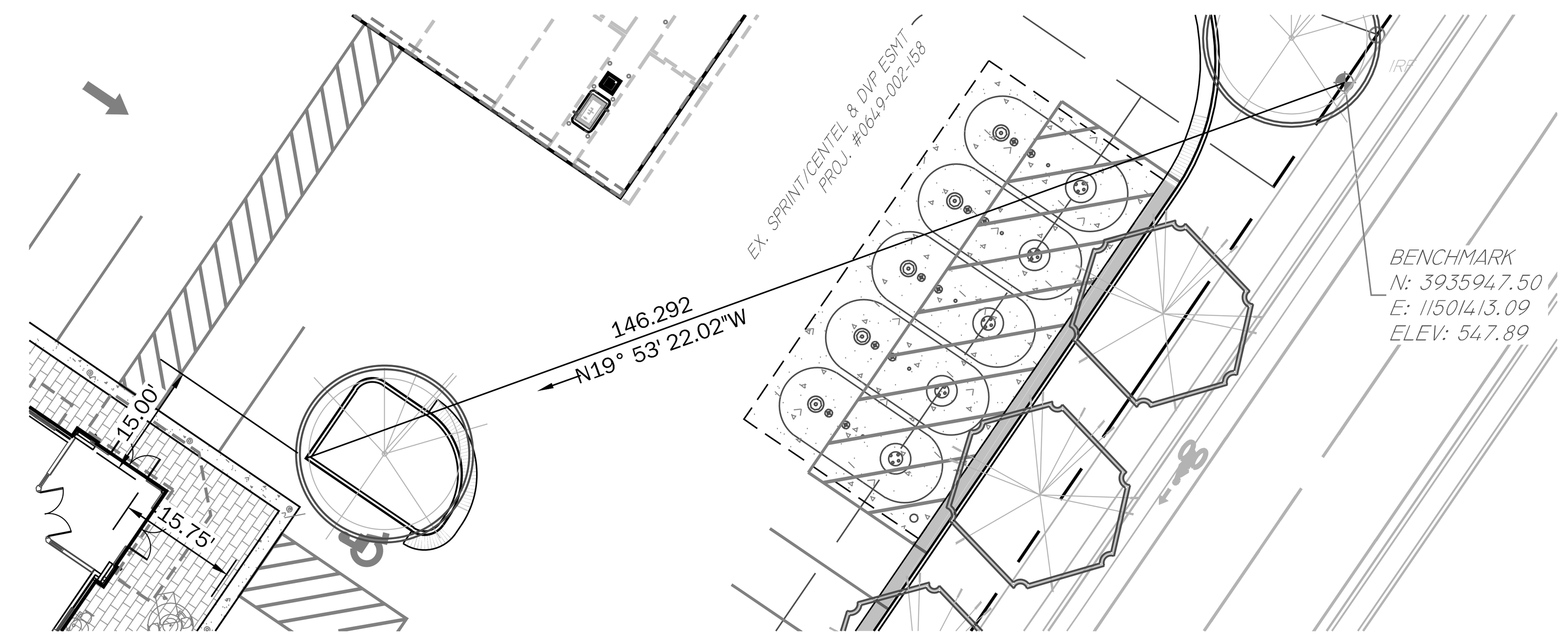
1. SMOKING SHALL ONLY BE ALLOWED IN DESIGNATED SPACES WITH PROPER RECEPTACLES. "NO SMOKING" SIGNS SHALL BE POSTED AT EACH BUILDING SITE AND WITHIN EACH BUILDING DURING CONSTRUCTION PER VIRGINIA STATEWIDE FIRE PREVENTION CODE.
2. OVERHEAD WIRING OR OTHER OVERHEAD OBSTRUCTIONS SHALL NOT BE LOWER THAN 13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

CONCRETE AND ASPHALT:

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

MISCELLANEOUS:

1. ALL ROOF DRAINS SHALL DISCHARGE IN A MANNER NOT TO CAUSE A PUBLIC NUISANCE AND NOT OVER SIDEWALKS.
2. BUILDINGS OR STRUCTURES BUILT BEFORE JANUARY 1, 1985 MUST HAVE AN ASBESTOS SURVEY PERFORMED IN ORDER TO APPLY FOR A DEMOLITION PERMIT. ASBESTOS REMOVAL PERMITS ARE REQUIRED IF POSITIVE FOR SUCH FROM ALBEMARLE COUNTY AND VDOLI. CONTACT VDOLI FOR THEIR ADDITIONAL REQUIREMENTS AND PERMITS FOR DEMOLITION PROJECTS AT 540-562-3580x131.
3. ACCESSIBLE PARKING SPACES, ACCESS AISLES, AND ACCESSIBLE ROUTE SHALL BE INSTALLED IN ACCORDANCE WITH ICC ANSI A117.1-09 AND THE 2015 VIRGINIA CONSTRUCTION CODE.
4. RETAINING WALLS GREATER THAN 3 FEET IN HEIGHT REQUIRE A SEPARATE BUILDING PERMIT. WALLS EXCEEDING 4 FEET IN HEIGHT REQUIRE A STAMPED ENGINEERED DESIGN ALSO. WALLS REQUIRE INSPECTIONS AS OUTLINED IN THE USBC.



1 BENCHMARK TIE-DOWN
1" = 20': 0 20 40

GENERAL SURVEY NOTES:

TOPOGRAPHY SOURCE: ACTUAL GROUND SURVEY (SEE ATTACHED SURVEY)
BASIS OF DATUM: HORIZONTAL: NAD-83 VIRGINIA SOUTH ZONE (GPS DERIVED)
VERTICAL: NAVD-88 (GPS DERIVED)
BENCHMARKS: (SEE IMAGES ABOVE)

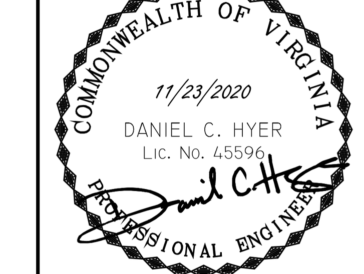
RIVANNA WATER & SEWER AUTHORITY (RWSA) GENERAL WATER & SANITARY SEWER NOTES:

1. ALL MATERIALS AND METHODS OF CONSTRUCTION SHALL COMPLY WITH THE LATEST VERSION OF THE GENERAL WATER AND SEWER DESIGN AND CONSTRUCTION STANDARDS - VERSION 1.0, ADOPTED IN DECEMBER 2015, EXCEPT AS MODIFIED BELOW OR MODIFIED IN SPECIAL NOTES.
2. RWSA SHALL APPROVE ALL CONSTRUCTION MATERIALS AND METHODS OF CONSTRUCTION. A PRECONSTRUCTION CONFERENCE SHALL BE HELD WITH RWSA PRIOR TO THE START OF ANY WORK.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR NOTIFYING MISS UTILITY (1-800-552-7001).
4. RWSA ENGINEER (VICTORIA FORT AT (434) 977-2970 EXT. 205) SHALL BE NOTIFIED THREE BUSINESS DAYS PRIOR TO THE START OF CONSTRUCTION.
5. ALL WORK IS SUBJECT TO INSPECTION BY RWSA STAFF. NO TIE-INS TO THE EXISTING SYSTEM SHALL BE MADE WITHOUT COORDINATION WITH AND THE PRESENCE OF RWSA STAFF. NO WORK SHALL BE CONDUCTED ON RWSA FACILITIES ON WEEKENDS OR HOLIDAYS WITHOUT SPECIAL WRITTEN PERMISSION FROM RWSA.
6. FOR SANITARY SEWER LINE CONSTRUCTION: RWSA MAY REQUIRE BYPASS PUMPING FOR TIE-INS TO THE EXISTING SYSTEM. ALL DOGHOUSE MANHOLES MUST BE PRESSURE-TESTED BEFORE A CONNECTION IS MADE TO THE SYSTEM.
7. THE LOCATION OF EXISTING UTILITIES AS SHOWN ON THE PLANS IS FROM DATA AVAILABLE AT THE TIME OF DESIGN AND IS NOT NECESSARILY COMPLETE OR ACCURATE. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE VERIFICATION OF THE LOCATION, SIZE AND DEPTH OF ALL EXISTING UTILITIES, BOTH SURFACE AND SUBSURFACE. THE CONTRACTOR SHALL IMMEDIATELY NOTIFY THE ENGINEER OF ANY DISCREPANCIES BETWEEN THE PLANS AND FIELD CONDITIONS. THE CONTRACTOR SHALL USE DUE DILIGENCE TO PROTECT ALL UTILITIES AND STRUCTURES FROM DAMAGE AT ALL TIMES, WHETHER SHOWN ON THE PLANS OR NOT. DAMAGE TO ANY EXISTING UTILITIES SHALL BE REPAIRED BY THE CONTRACTOR TO THE ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
8. EROSION AND SEDIMENT CONTROL FACILITIES SHALL NOT BE PERMITTED IN THE RWSA EASEMENT WITHOUT SPECIAL WRITTEN PERMISSION FROM RWSA. NO GRADING SHALL BE PERMITTED IN THE RWSA EASEMENT UNLESS PERMITTED OTHERWISE BY RWSA IN WRITING.
9. NO BLASTING SHALL BE PERMITTED WITHIN 100 FEET OF RWSA FACILITIES WITHOUT WRITTEN PERMISSION AND RWSA APPROVAL OF THE BLASTING PLAN. GROUND MONITORING DURING BLASTING AND A PRE-BLAST SURVEY MAY BE REQUIRED. FOR BLASTING WITHIN 100 FEET OF ANY OPERATIVE RWSA SEWERLINES, BYPASS PUMPING AND/OR PRE- AND POST-CCTV MAY BE REQUIRED. RWSA MAY ALSO REQUIRE CERTIFICATION FROM A LICENSED PROFESSIONAL ENGINEER STATING THAT THE PROPOSED BLASTING WILL NOT DAMAGE ANY RWSA FACILITIES. DAMAGE TO ANY UTILITIES DUE TO BLASTING SHALL BE REPAIRED BY THE CONTRACTOR TO THE ORIGINAL CONDITION AT NO ADDITIONAL COST TO THE OWNER.
10. THE CONTRACTOR SHALL OBSERVE MINIMUM SEPARATION REQUIREMENTS FOR UTILITY CROSSINGS. WHEN A CROSSING IS MADE UNDER AN EXISTING FACILITY, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE EXISTING PIPE. THE AREA OF THE CROSSING SHALL BE BACKFILLED WITH COMPACTED 57 STONE TO THE SPRINGLINE OF THE EXISTING PIPE.
11. NEW WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED, CHLORINATED, FLUSHED AND HAVE WATER SAMPLES APPROVED PRIOR TO MAKING ANY PERMANENT CONNECTION TO THE PUBLIC WATER SYSTEM. APPROVED METHODS OF FILLING AND FLUSHING NEW WATER MAINS WILL BE REQUIRED TO PREVENT ANY CONTAMINATION OF THE PUBLIC WATER SYSTEM.
12. ALL EASEMENTS FOR NEW RWSA FACILITIES SHALL BE RECORDED PRIOR TO PLACING THE NEW FACILITIES INTO SERVICE.
13. NO PERMANENT STRUCTURAL FACILITIES WILL BE PERMITTED IN THE RWSA EASEMENT. THIS INCLUDES BUILDING OVERHANGS, RETAINING WALLS, FOOTERS FOR ANY STRUCTURE, DRAINAGE STRUCTURES, ETC.
14. TREES ARE NOT PERMITTED IN THE RWSA EASEMENT.

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

GENERAL CONSTRUCTION NOTES



APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

THE WORK OF LINE + GRADE

C0.1

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LEGEND

PROPOSED		EXISTING
S	SANITARY CENTERLINE	S
W	WATER CENTERLINE	W
	STORM SEWER	
GAS	GAS LINE	GAS
UGE	UNDERGROUND POWER	UGE
COMM	UNDERGROUND COMMUNICATIONS	COMM
OVHD	OVERHEAD UTILITY	OVHD
382	CONTOUR LINE	382
	CURB/CURB AND GUTTER	
	SPILL CURB WITH TRANSITION AREA	
	PAVEMENT MARKING LINE	
	BUILDING LINE	
	BUILDING OVERHEAD/PROJECTION	
	WALL	
	TREELINE	
	PROPERTY LINE	
	EASEMENT LINE	
	BUILDING SETBACK LINE	
	ROAD CENTERLINE	
	CHANNEL CENTERLINE	
	BERM CENTERLINE	
LOD	LIMITS OF DISTURBANCE	
	DRAINAGE DIVIDE	
	UTILITY POLE	
	ADA ACCESS PATH AND LANDING	
	DETECTABLE WARNING STRIP	
	SIGN	
12 4	PARKING/HANDICAP PARKING COUNTER	26 3
	ENTRYWAY/INGRESS/EGRESS SYMBOL	
	TREE	
	SHRUB	
	CONCRETE	
	BMP	
	RIPRAP	
	MANAGED STEEP SLOPES	

ABBREVIATIONS

AC	ACRES	LP	LOW POINT
ADJ	ADJUST	LVC	LENGTH OF VERTICAL CURVE
APPROX	APPROXIMATE	MAX	MAXIMUM
BC	BACK OF CURB	MIN	MINIMUM
BLDG	BUILDING	ME	MATCH EXISTING
BM	BENCHMARK	NIC	NOT IN CONTRACT
BVCS	BEGIN VERTICAL CURVE STATION	N.T.S.	NOT TO SCALE
BVCE	BEGIN VERTICAL CURVE ELEVATION	OC	ON CENTER
BW	BOTTOM OF WALL	OD	OUTSIDE DIAMETER
CL	CENTERLINE	O/S	OFFSET
CF	CUBIC FEET	PC	POINT OF CURVATURE
CG	CURB AND GUTTER	PCC	POINT OF COMPOUND CURVATURE
CONC	CONCRETE	PI	POINT OF INTERSECTION
D OR Δ	DELTA ANGLE	PRC	POINT OF REVERSE CURVATURE
DIA	DIAMETER	PROP	PROPOSED
EC	EDGE OF CONCRETE	PT	POINT OF TANGENCY
EG	EXISTING GRADE	PVC	POINT OF VERTICAL CURVATURE
EL/ELEV	ELEVATION	PVI	POINT OF VERTICAL INTERSECTION
EP	EDGE OF PAVEMENT	PVT	POINT OF VERTICAL TANGENCY
EVCS	END VERTICAL CURVE STATION	R	RADIUS
EVCE	END VERTICAL CURVE ELEVATION	ROW	RIGHT-OF-WAY
EX	EXISTING	SAN	SANITARY SEWER
FG	FINISHED GRADE	SD	STORM DRAIN
FND	FOUNDATION	SF	SQUARE FEET
GRVL	GRAVEL	SMH	SANITARY MANHOLE
HC	HANDICAP	STA	STATION
HP	HIGH POINT	SW	SIDEWALK
ID	INSIDE DIAMETER	TC	TOP OF CURB
INV	INVERT	TEMP	TEMPORARY
LAT	LATERAL	THT	THROAT
LF	LINEAR FEET	TW	TOP OF WALL
LOD	LIMITS OF DISTURBANCE	TYP	TYPICAL
		WSEL	WATER SURFACE ELEVATION

PARKING TABULATIONS:

PARKING REQUIRED

CODE REF.	USE	REQUIRED RATE	QUANTITY	REQUIRED SPACES
18-4.12.6	RESTAURANT[1]	13 SPACES/1000 SF OF RESTAURANT GFA	1,531	20
	FOOD STORE[2]	1 SPACE/200 SF OF FOOD STORE GFA	4,546	23
			TOTAL REQUIRED:	43
			HANDICAP REQUIRED:	2

INCLUDED AREAS (SEE IMAGE BELOW FOR AREA BREAKDOWNS):

[1] *KITCHEN AREA, SEATING, AND RESTROOMS*

[2] *ALL REMAINING AREAS (SALES FLOOR, VESTIBULES, WALK-IN TAKE-OUT COOLER, CHECK-OUT, ETC.)*

PARKING PROVIDED

CODE REF.	SPACE TYPE	ACTUAL SPACES PROVIDED	CALCULATED SPACES
	STANDARD	44	44
	HANDICAP	2	2
	TOTALS:	46	46

WATER DEMAND CALCULATIONS:

FOR CONVENIENCE STORE:

ESTIMATED DEMAND = 80 *GPM*

BASED ON DEMAND DATA FROM EXISTING SHEETZ STORES

ASSUMED AVAILABLE PRESSURE AT METER = 100 *PSI*

ACTUAL PRESSURE AT MAIN IS ~100 PSI. PRESSURE REDUCING VALVE WILL BE INSTALLED.

PRESSURE ADJUSTMENT FACTOR = 1.34

FROM AWWA TABLE 4-1

CUSTOMER PEAK DEMAND x PRESSURE ADJUSTMENT FACTOR, *GPM* = 107.2

TOTAL WATER DEMAND ESTIMATE - CONVENIENCE STORE

SUM OF FIXTURES, IRRIGATION, AND FIXED DEMAND, *GPM* = 107.2

METER REQUIRED = 2" POSITIVE DISPLACEMENT

FOR CAR WASH:

ESTIMATED DEMAND = 45 *GPM*

BASED ON DEMAND DATA FROM EXISTING SHEETZ CAR WASHES

ASSUMED AVAILABLE PRESSURE AT METER = 100 *PSI*

ACTUAL PRESSURE AT MAIN IS ~100 PSI. PRESSURE REDUCING VALVE WILL BE INSTALLED.

PRESSURE ADJUSTMENT FACTOR = 1.34

FROM AWWA TABLE 4-1

CUSTOMER PEAK DEMAND x PRESSURE ADJUSTMENT FACTOR, *GPM* = 60.3

TOTAL WATER DEMAND ESTIMATE - CAR WASH

SUM OF FIXTURES, IRRIGATION, AND FIXED DEMAND, *GPM* = 60.3

METER REQUIRED = 1 1/2" POSITIVE DISPLACEMENT

FIRE FLOW

TEST INFORMATION		NEEDED FIRE FLOW	
HYDRANT LOCATION	Airport Rd/Rte 29 (HYD#12123)	CONSTRUCTION TYPE/USE	NEEDED FIRE FLOW
HYDRANT ELEVATION	556	IB/BUSINESS	1500 GPM
RESIDUAL PRESSURE	42 PSI	AVAILABLE FIRE FLOW	
STATIC PRESSURE	101 PSI	FLOW AT 20 PSI RESIDUAL PRESSURE (Q_{20})	3,171 GPM
FLOW	2672 GPM		

**IN ACCORDANCE WITH APPX. B OF THE IFC*

UTILITY DEMAND

NOTE: ALL VALUES ARE DETERMINED FROM EMPIRICAL UTILITY DATA FROM EXISTING SHEETZ STORES.

WATER

STORE:
DEMAND = 80 GPM @ 45 PSI MIN. PRESSURE
MIN. SERVICE LINE SIZE = 2"

CAR WASH:
DEMAND = 45 GPM @ 45 PSI MIN. PRESSURE
MIN. SERVICE LINE SIZE = 2"

SEWER

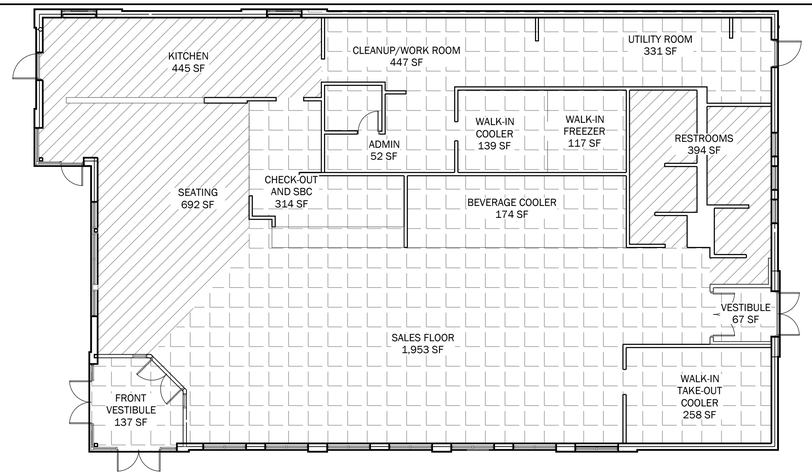
STORE:
AVERAGE FLOW RATE = 3,000 GPD
2 x 6" LATERALS
1 x 4" LATERAL FROM GREASE TRAP

CAR WASH:
AVERAGE FLOW RATE = 4,000 GPD
2 x 3" AND 1 x 4" LATERALS INTO 2 x 1,500 GAL RECLAIM TANKS
1 x 4" LATERAL FROM RECLAMATION TANKS

ELECTRICAL

STORE:
120/208 V, 3 PHASE SERVICE
1200 AMPS

CAR WASH:
120/208 V, 3 PHASE SERVICE
400 AMPS
MIN. 150 KVA TRANSFORMER



FLOOR AREA USE: RESTAURANT = 1,531 SF
(KITCHEN AREA, SEATING, AND RESTROOMS)

FLOOR AREA USE: FOOD STORE = 4,546 SF
ALL REMAINING AREAS (SALES FLOOR, VESTIBULES, COOLERS, CHECK-OUT, ETC.)

1 SHEETZ CONVENIENCE STORE FLOOR AREA USES

EXISTING ITE TRIP GENERATION						WEEKDAY TRAFFIC						
						VEHICLES	PEAK HOUR	PM PEAK HOUR				
Use Description	ITE CODE	UNITS	TRIPS/UNIT	QTY OF UNITS	TRIP REDUCTION*	PER DAY	FACTOR	% IN	% OUT	IN	OUT	TOTAL TRIPS
ANIMAL HOSPITAL/VETERINARY CLINIC	640	1,000 SF	-	2.24	-	-	4.72	-	-	6	5	11
HARDWARE/PAINT STORE	816	1,000 SF	51.29	1.14	60%	23	4.84	47%	53%	1	1	2
VARIETY STORE	814	1,000 SF	-	1.08	60%	-	6.82	-	-	2	1	3
SINGLE TENANT OFFICE	715	1,000 SF	11.57	1.01	-	12	1.74	15%	85%	0	2	2
SINGLE FAMILY HOMES	210	1 Dwelling Units	9.57	1	-	10	1.00	63%	37%	1	0	1
					SITE TOTALS =	45				10	9	19

**Note: all land uses in the 800 and 900 series are entitled to a passby trip reduction of 60% if less than 50,000 SF or a 40% reduction if greater than or equal to 50,000 SF.*

PROPOSED ITE TRIP GENERATION						WEEKDAY TRAFFIC						
						VEHICLES	PEAK HOUR	PM PEAK HOUR				
Use Description	ITE CODE	UNITS	TRIPS/UNIT	QTY OF UNITS	TRIP REDUCTION*	PER DAY	FACTOR	% IN	% OUT	IN	OUT	TOTAL TRIPS
CONVENIENCE MARKET W/ GAS PUMPS	853	1,000 SF	845.60	2.43	60%	821	50.92	50%	50%	25	24	49
FAST FOOD W/ DRIVE THRU	934	1,000 SF	496.12	1.39	60%	276	33.84	52%	48%	10	9	19
AUTOMATED CAR WASH	948	1,000 SF	-	1.02	60%	-	14.12	-	-	3	3	6
					SITE TOTALS =	1,097				38	36	74

**Note: all land uses in the 800 and 900 series are entitled to a passby trip reduction of 60% if less than 50,000 SF or a 40% reduction if greater than or equal to 50,000 SF.*

EXISTING ITE TRIP GENERATION (for TMP 32-38A, utilizing shared entrance)						WEEKDAY TRAFFIC						
						VEHICLES	PEAK HOUR	PM PEAK HOUR				
Use Description	ITE CODE	UNITS	TRIPS/UNIT	QTY OF UNITS	TRIP REDUCTION*	PER DAY	FACTOR	% IN	% OUT	IN	OUT	TOTAL TRIPS
Building Materials/Lumber	812	1,000 SF	45.16	2.00	60%	36	4.49	47%	53%	2	2	4
Hair Salon	918	1,000 SF	-	4	60%	-	1.93	-	-	2	1	3
					SITE TOTALS =	36				4	3	7

**Note: all land uses in the 800 and 900 series are entitled to a passby trip reduction of 60% if less than 50,000 SF or a 40% reduction if greater than or equal to 50,000 SF.*

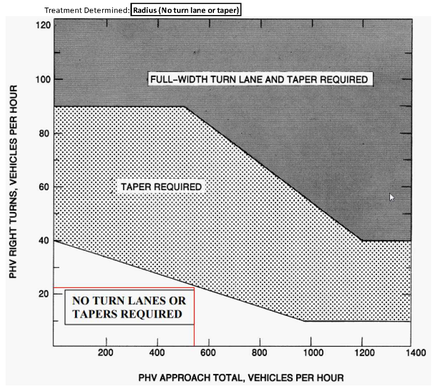
RIGHT TURN LANE WARRANT ANALYSIS

Location: Route 649 Entrance
Roadway Classification: 4-lane roadway — *Use Fig. 3-27, RDM Appx. F*
PHV into proposed site: 38 VPH — *From ITE Trip Generation*
PHV Right Turns into entrance: 22 VPH — *50% trips IN from US 29, 100% trips IN from VA 649*

Approach Daily Volume: 8700 AADT — *published by VDOT, 2019*
K Factor: 0.0873
Directional Factor: 0.5632
Total Approach PHV (Current): 428 VPH — *ADT x K x D*

Design life: 20 Years
Percent Growth: 1.2%
Total Approach PHV (Design): 539 VPH — *Based on 2018 to 2019 data; Current PHV x (1 + % Growth) ^ Design Life*

Treatment Determined: Radius (No turn lane or taper)



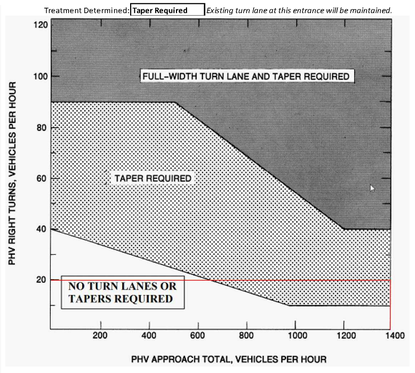
RIGHT TURN LANE WARRANT ANALYSIS

Location: US 29 Entrance
Roadway Classification: 4-lane roadway — *Use Fig. 3-27, RDM Appx. F*
PHV into proposed site: 38 VPH — *From ITE Trip Generation*
PHV Right Turns into entrance: 20 VPH — *50% trips IN from US 29, plus 100% trips IN for parcel 32-38A (shared entrance)*

Approach Daily Volume: 39000 AADT — *published by VDOT, 2019*
K Factor: 0.0968
Directional Factor: 0.5314
Total Approach PHV (Current): 2006 VPH — *ADT x K x D*

Design life: 20 Years
Percent Growth: 1.2%
Total Approach PHV (Design): 2526 VPH — *Based on 2018 to 2019 data; Current PHV x (1 + % Growth) ^ Design Life*

Treatment Determined: Taper Required — *Existing turn lane at this entrance will be maintained.*



FOR VDOT USE ONLY

Recommendation on Exception Request: Approve ✓ Deny ☐ **Date:** 5/28/20

Area Land Use Engineer or: _____ **Name** Adam J. Moore, P.E.

Remarks:

I recommend approval of this exception based on the following factors:
1. The entrance location's distance from the signal is maximized and limited by property boundaries.
2. The entrance location is an existing condition and would remain if exception is denied as it is a shared commercial entrance.
3. The existing right turn lane has acceptable storage length prior to the entrance.
4. The site plan (though not yet approved) will improve the geometry of the entrance from the existing condition.

Exception Request Action: Approved ✓ Denied ☐ **Date:** 6/18/20

District Administrator or Designee: _____
Name (and position if Designee)

Remarks: Approved per attached e-mail from John Lynch, P.E.

District Staff: Please email copy to Bradley.Shelton@VDOT.Virginia.gov

2 AM-E REQUEST APPROVAL CONDITIONS

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AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

ZONING, PARCEL, AND SITE CALCULATIONS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

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DEMOLITION NOTES:

1. CONTRACTOR SHALL CALL MISS UTILITY AND A PRIVATE UTILITY MARKER BEFORE STARTING WORK
2. CONTRACTOR SHALL COMPLETELY REMOVE UTILITIES CALLED TO BE REMOVED OR DEMOLISHED.
3. ALL UTILITIES CALLED TO BE ABANDONED SHALL BE CAPPED AND ABANDONED IN ACCORDANCE WITH ALL APPLICABLE CODES AND REGULATIONS.
4. DAMAGED SITE ELEMENTS NOT CALLED OUT FOR DEMOLITION OR ABANDONMENT SHALL BE REPLACED OR COMPLETELY REPAIRED AT THE CONTRACTOR'S SOLE EXPENSE.

2 ENTRANCE INSET
1" = 20': 0 20 40

1 EXISTING CONDITIONS AND DEMOLITION PLAN
1" = 20': 0 20 40

PROTECT EXISTING LANDSCAPE
REMOVE ALL ONSITE GRAVEL (TYP)
ALL TREES AND VEGETATION WITHIN LIMITS OF DISTURBANCE TO BE REMOVED (TYP)
DEMOLISH ENTRANCE AND SIDEWALK AS REQUIRED TO INSTALL PROPOSED ENTRANCE AND SIDEWALKS
TEMPORARILY RELOCATE SIGN OUT OF LOD
REMOVE MAILBOXES
ABANDON EXISTING SPRINT/CENTEL ESMT
REMOVE EXISTING CULVERT
EXISTING EMERGENCY SPILLWAY FOR VDOT DRAINAGE BASIN
SOIL LABEL (TYP)
PROP. TEMPORARY CONSTRUCTION EASEMENT AREA
COMPLETELY ERADICATE STRIPING WITHIN TEMPORARY CONSTRUCTION EASEMENT AND RESTRIPE PER PROPOSED PLAN
REMOVE UNDERGROUND UTILITY
REMOVE EX. PAVEMENT
REMOVE MAILBOXES AND SIGN
ABANDON INTERNAL PROPERTY BOUNDARY
REMOVE ALL ONSITE GRAVEL (TYP)
DISCONNECT ELECTRICAL SERVICE AND REMOVE OVERHEAD POLES (TYP)
DEMOLISH EXISTING UNDERGROUND COMM. LINE
DEMOLISH ELECTRIC PANEL
DEMOLISH ENTRANCE AS REQUIRED TO INSTALL PROPOSED ENTRANCE. SEE SHEET C3.0 FOR TEMPORARY TRAFFIC CONTROLS
DEMOLISH EX. ASPHALT AS REQUIRED TO INSTALL PROPOSED CG-6. SEE SHEET C3.0 FOR TEMPORARY TRAFFIC CONTROLS
PROTECT POWER POLE AND DRY UTILITIES
REMOVE OVERHEAD WIRES
ADJUST HIGHWAY SIGN TO FINISHED GRADE
PROTECT EXISTING WALL
PLAN INSET - SEE VIEW 2 THIS SHEET

TMP 32-39B COMMONWEALTH OF VIRGINIA DEPARTMENT OF TRANSPORTATION D.B.4574, P.676 LWPB.XIV P.200-207 HWPB.XIV P.151-158 ZONED: CI COMMERCIAL PRESENT USE: DETENTION POND

TMP 32-38A N/F JOSEPH H. JR OR JUNE K. TERRY D.B.4574, P.676 D.B.629 P.104 (PLAT) ZONED: CI COMMERCIAL PRESENT USE: COMMERCIAL

TMP 32-38 N/F AIRPORT PLAZA LLC D.B.4621 P.319 D.B.629 P.104(PLAT) 0.629 AC (SURVEY) ZONED: CI COMMERCIAL PRESENT USE: COMMERCIAL

TMP 32-39A N/F WILLIAM SCOTT MARSHALL, TRUSTEE OF THE FAMILY TRUST OF THE WILLIAM A. MARSHALL JR. REVOCABLE TRUS D.B.4464 P.203, D.B.1639 506(PLAT)

TMP 32-40 AIRPORT AUTO INVESTMENTS, LLC D.B.5189 P.548 D.B.3503 P.180-187(PLAT) D.B.3192 P.264 D.B.2717 P.317 D.B.2284 P.385 HWPB.XVI P.151-158 HWPB.XIV P.200-207 D.B.715 P.634(PLAT) ZONED: HIGHWAY COMMERCIAL (HC) PRESENT USE: COMMERCIAL

STATE ROUTE 649 (AIRPORT RD) APPROX. ROW WIDTH: 90' 8,600 ADT

STATE ROUTE 29 APPROX. ROW WIDTH: 160' 39,000 ADT H.W.P.B. XVI PP. 151 -158 H.W.P.B. XIV PP.200 -207

BENCHMARK N: 3935947.50 E: 1150114.09 ELEV: 547.89

DEMOLITION LEGEND:

- DEMOLISH EXISTING STRUCTURE
- DEMOLISH EXISTING PAVEMENT
- DEMOLISH EXISTING GRAVEL
- REMOVE EXISTING TREE
- 27C / 27B SOIL LINES AND LABELS

SOIL LEGEND

MAP UNIT SYMBOL	MAP UNIT NAME	HYDROLOGIC SOIL GROUP
21B	CULPEPER FINE SANDY LOAM, 2-7% SLOPES	B
27B	ELIOAK LOAM, 2-7% SLOPES	B
88	UDORTHENTS, LOAMY, 2-25% SLOPES	D

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FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

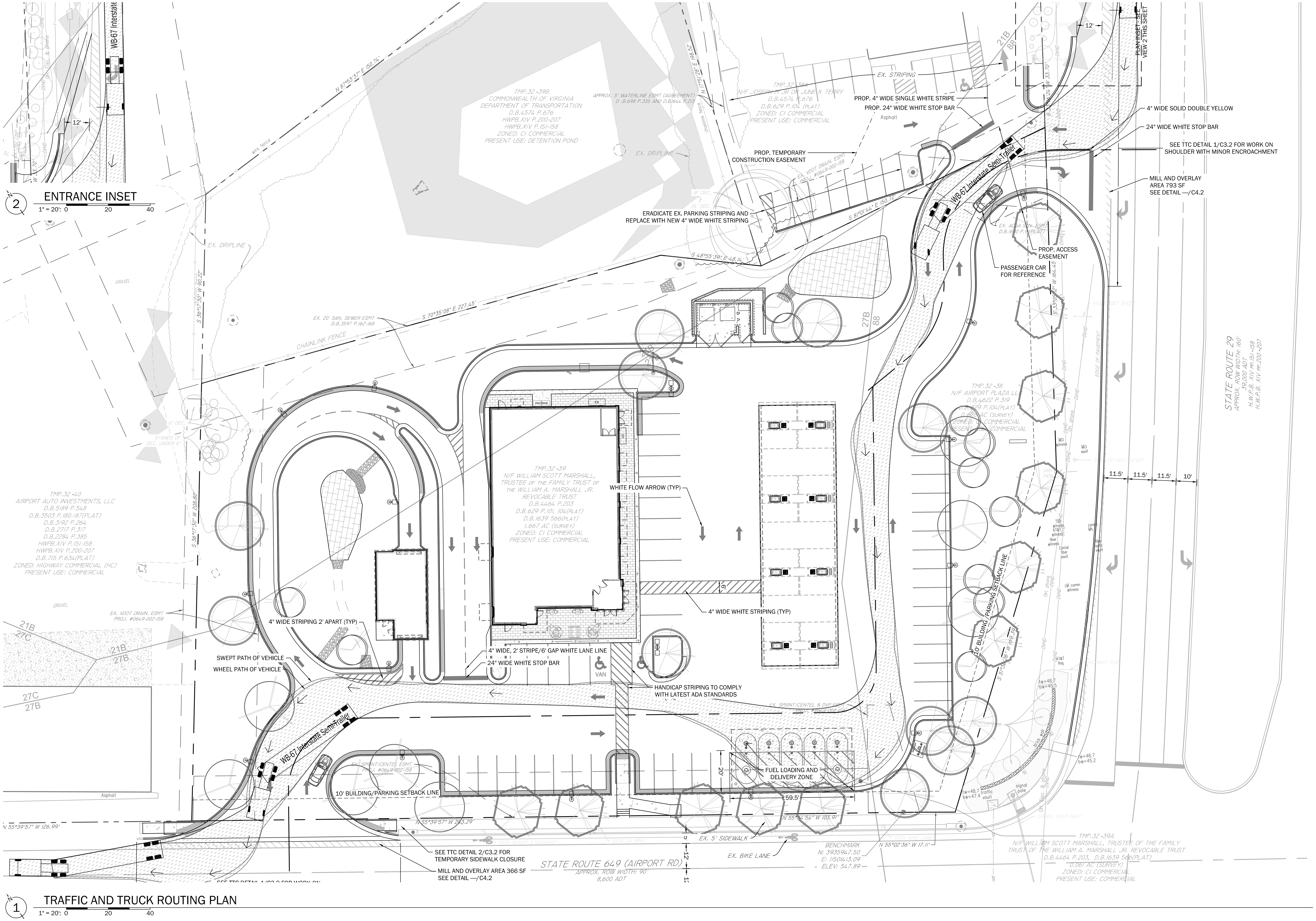
EXISTING CONDITIONS, SOILS MAP, AND DEMOLITION PLAN

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11/23/2020
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ALBEMARLE COUNTY, VIRGINIA

TRAFFIC PLAN

COMMONWEALTH OF VIRGINIA
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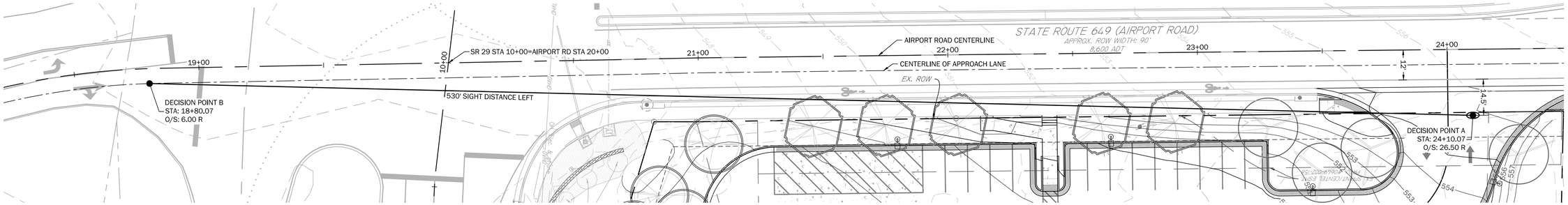
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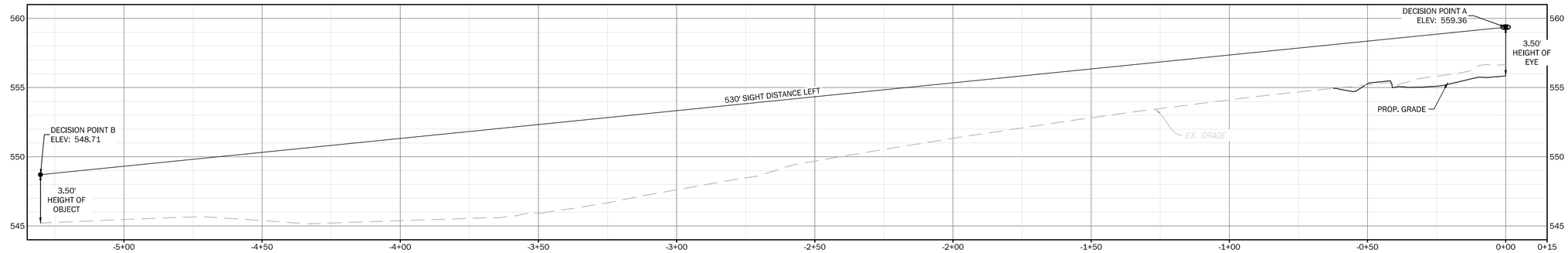
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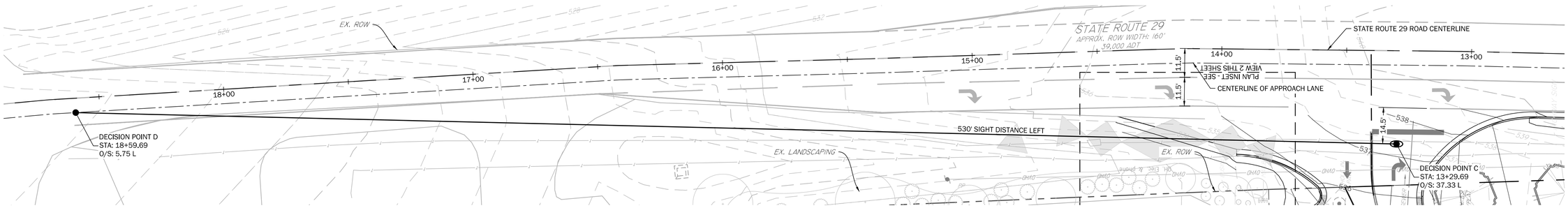
1 AIRPORT ROAD INTERSECTION SIGHT DISTANCE

1" = 20': 0 20 40



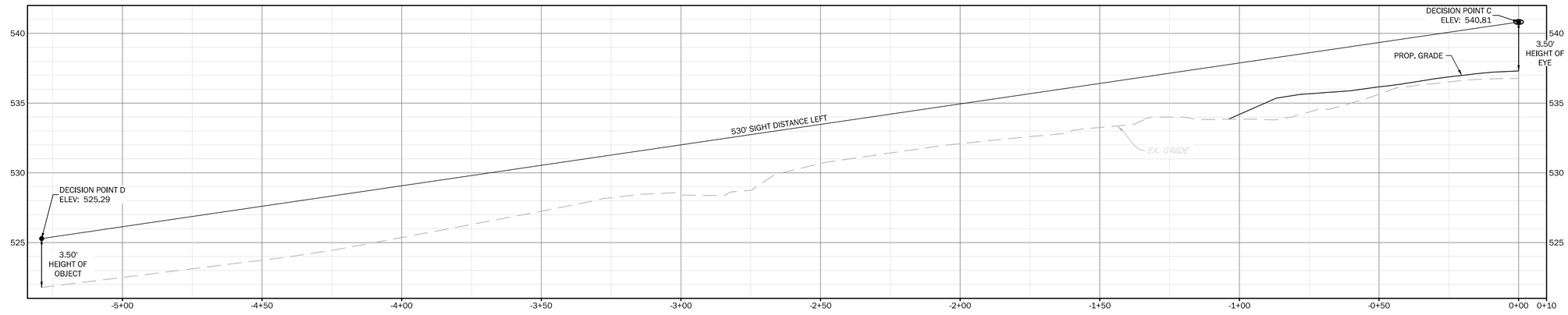
2 AIRPORT ROAD INTERSECTION SIGHT DISTANCE PROFILE

H: 1" = 20': 0 20 40
V: 1" = 4': 0 4 8



3 STATE ROUTE 29 INTERSECTION SIGHT DISTANCE

1" = 20': 0 20 40



4 STATE ROUTE 29 INTERSECTION SIGHT DISTANCE PROFILE

H: 1" = 20': 0 20 40
V: 1" = 4': 0 4 8

NOTES:

1. LANDSCAPING PLANTS AND TREES ADJACENT TO THE SIGHT DISTANCE TRIANGLE WILL NEED TO BE MAINTAINED IN AREA BETWEEN 2 AND 7 FEET ABOVE GROUND AS A CLEAR ZONE TO PRESERVE SIGHT LINES AND ACCOMMODATE PEDESTRIANS.

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AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

SIGHT DISTANCE

COMMONWEALTH OF VIRGINIA
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C3.1

Typical Traffic Control
Shoulder Operation with Minor Encroachment
(Figure TTC-5.1)
NOTES

Standard

1. **For required sign assemblies for multi-lane roadways see Note 1, TTC-4.**

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. *When work takes up part of a lane on a high volume roadway; vehicular traffic volumes, vehicle mix, speed and capacity should be analyzed to determine whether the affected lane should be closed. Unless the lane encroachment analysis permits a remaining lane width of 10 feet, the lane should be closed. If the closure operation is on a Limited Access highway, the minimum lane width is 11 feet.*

Option:

4. The ROAD WORK AHEAD (W20-1) 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.

Standard:

5. **A shadow vehicle with either an arrow board operating in the caution mode, or at least one high-intensity amber rotating, flashing, or[1] oscillating light shall be parked 80' - 120' in advance of the first work crew.**
6. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights. Vehicle hazard warning signals can be used to supplement high-intensity amber rotating, flashing, or[1] oscillating lights.**
7. **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 = ½ L Minimum				

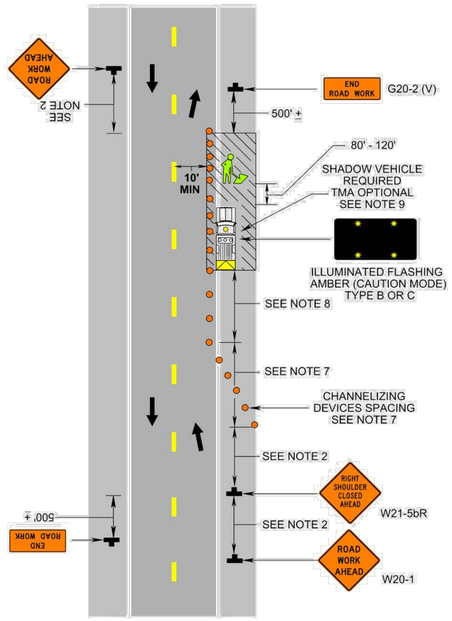
Channelizing Device Spacing		
Location	Speed Limit (mph)	
	0 - 35	36 +
Transition Spacing	20'	40'
Travelway Spacing	40'	80'
Construction Access*	80'	120'
* Spacing may be increased to this distance, but shall not exceed one access per ¼ mile.		

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.

8. **The buffer space length shall be as shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
9. **A truck-mounted attenuator (TMA) shall be used on Limited Access highways and multi-lane roadways with posted speed limit equal to or greater than 45 mph.**
10. **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

Shoulder Operation with Minor Encroachment
(Figure TTC-5.1)



1 TTC 5.1

Typical Traffic Control
Sidewalk Closure and Bypass Sidewalk Operation
(Figure TTC-35.1)
NOTES

Standard:

1. **When crosswalks or other pedestrian facilities are closed or relocated, temporary facilities shall be detectable and shall include accessibility features consistent with the features present in the existing pedestrian facility.**

Guidance:

2. *Where high speeds are anticipated, a temporary traffic barrier and, if necessary, a crash cushion should be used to separate the temporary sidewalks from vehicular traffic.*
3. *Audible information devices should be considered where midblock closings and changed crosswalk areas cause inadequate communication to be provided to pedestrians who have visual disabilities.*
4. *Temporary markings should be considered for operations exceeding three days in duration.*

Option:

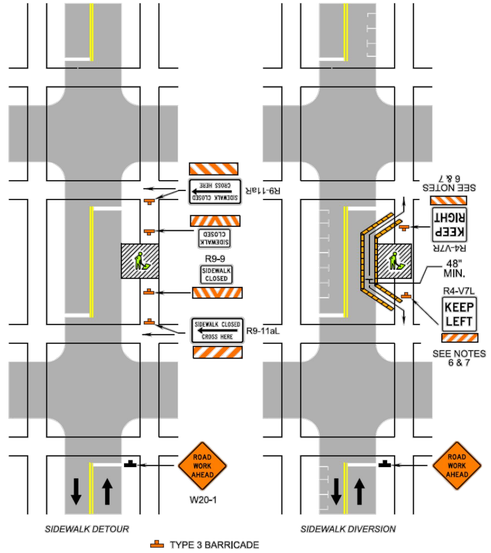
5. Only the TTC devices related to pedestrians are shown. Other devices, such as lane closure signing or ROAD NARROWS (W5-1) signs, may be used to control vehicular traffic.
6. For nighttime closures, Type A Flashing warning lights may be used on barricades that support signs and close sidewalks.
7. Signs, such as KEEP RIGHT (R4-V7R) and KEEP LEFT (R4-V7L), may be placed along a temporary sidewalk to guide or direct pedestrians.

Standard:

8. **All sidewalk closures shall be closed with Type 3 Barricades. The SIDEWALK CLOSED (R9-9) sign and the SIDEWALK CROSS HERE (R9-11) sign shall be installed above the Type 3 barricade. The KEEP RIGHT sign can cover the top rail of the Type 3 Barricade.[2]**

2: Revision 2 – 9/1/2019

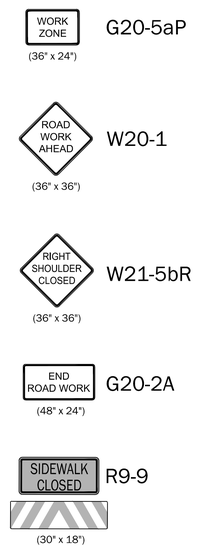
Sidewalk Closure and Bypass Sidewalk Operation
(Figure TTC-35.1)



2: Revision 2 – 9/1/2019

2 TTC 35.0

TEMPORARY TRAFFIC CONTROL SIGN LEGEND



3 SIGN LEGEND

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AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

TEMPORARY TRAFFIC CONTROL DETAILS

COMMONWEALTH OF VIRGINIA
11/23/2020
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Typical Traffic Control
Shoulder Closure with Barrier Operation
(Figure TTC-6.2)
NOTES

Guidance:

1. *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.*

Standard:

2. **On divided highways having a median wider than 8', right and left sign assemblies shall be required.**
3. **Group 2 Channelizing device spacing shall be at the following:**

Group 2 Channelizing Device Spacing									
Location Spacing	Speed Limit (mph)		Location Spacing	Speed Limit (mph)		Location Spacing	Speed Limit (mph)	
	0 -35	36 +		0 -35	36 +		0 -35	36 +
Transition	20'	40'	Travelway	40'	80'	*Construction Access	80'	120'
*Construction access spacing may be increased to this distance, but shall not exceed one access per ¼ mile.								

4. **The minimum length for a shoulder taper shall be 360[1] on Limited Access highways, and ⅔ L for all other roadways (see Note 7 of TTC-5 for values of L).**
5. **When the barrier transition slope is on a horizontal alignment, the total offset shall be prorated around the curve in lieu of a straight-line slope.**
6. **End treatment of a barrier in order of preference:**
   a. **Where guardrail exists, attach to barrier with appropriate fixed object attachment.**
   b. **Where cut slope exists, bury barrier into cut slope and provide for drainage as needed.**
   c. **Extend end of barrier until it is beyond the established clear zone (see Figure 2 on Page A-4 in Appendix A for clear zone values).**
   d. **When barrier end is inside the established clear zone, attenuator service Type I or Type II shall be used. Contact L&D Standards/Special Design Section for approved attenuators.**
7. **Barrier panels 8 inches in width and 12 inches in height shall be placed on top of the concrete barrier and spaced on 40' centers along the transition or taper sections and spaced on 80' centers along the parallel or tangent sections. Reflectorized surface shall be fluorescent orange prismatic lens sheeting. The light at the beginning of the barrier run and at the breakpoint where the barrier becomes parallel to the roadway shall be a Type B flashing light. Barrier delineators shall be installed along the traffic side of the concrete barriers. Barrier delinators shall be spaced on 20' centers along the transition or taper sections and spaced on 80' centers[2] in-between the barrier panels approximately 24 inches up from the roadway surface.**

Option:

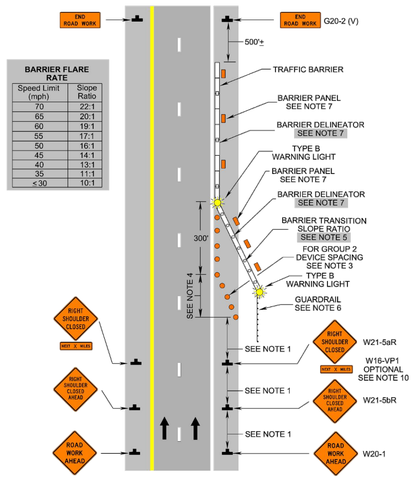
8. The barrier shown in this typical application is an example of one method that may be used to close a shoulder of a long-term project.
9. The RIGHT SHOULDER CLOSED (W21-5aR) sign may be eliminated from all roadways except Limited Access highways.

Guidance:

10. *If drivers cannot see a pull-off area beyond the closed shoulder, information regarding the length of the shoulder closure shall be provided in feet or miles, as appropriate.*
11. *An emergency pull-off area should be provided per Section 6G.18 and Temporary Traffic Control Figure TTC-8.*

1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Shoulder Closure with Barrier Operation
(Figure TTC-6.2)



2: Revision 2 – 9/1/2019

1 TTC 6.2

Typical Traffic Control
Signing for Project Limits
(Figure TTC-53.0)
NOTES

Support:

1. This layout depicts signing requirements for notifying motorist when they are entering and exiting a potential construction/maintenance area with a duration equal to or greater than 60 days.

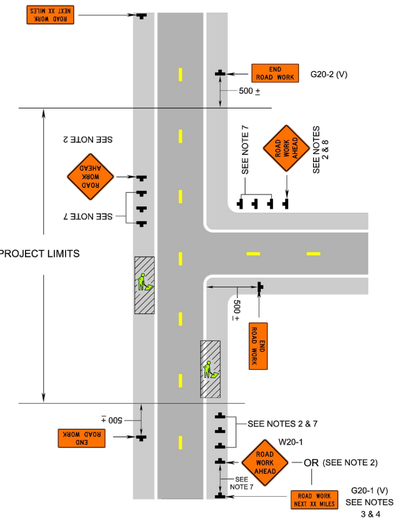
Standard:

2. **The ROAD WORK AHEAD (W20-1) sign or the ROAD WORK NEXT XX MILES (G20-1 (V)) sign shall be placed far enough in advance of the project limits so that other warning signs in a series may be adequately placed prior to the condition they are warning about.**
3. **The ROAD WORK NEXT XX MILES sign shall be used for projects with activity areas greater than 2 miles in length, or when multiple work activities (such as pavement patching, guardrail installations, shoulder restoration, etc.) occur along a highway.**
4. **The distance displayed on the ROAD WORK NEXT XX MILES sign shall be stated to the nearest whole mile from the point of installation to the END ROAD WORK (G20-2 (V)) sign.**
5. **On divided highways having a median wider than 8', right and left sign assemblies shall be required.**

Guidance:

6. *For projects with activity areas 2 miles or less in length, the ROAD WORK AHEAD sign should be the first sign motorist encounter.*
7. *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.*
8. *All connections within the project limits should be identified with signs indicating to motorist they are entering or exiting a potential construction/maintenance area.*

Signing for Project Limits
(Figure TTC-53.0)



3 TTC 53.0

Typical Traffic Control
Outside Lane Closure Operation on a Four-Lane Roadway
(Figure TTC-16.2)
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. *When closing a lane, a PCMS should be used in advance of the first warning sign if all of the left side signs cannot be installed.*[2]
4. *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.*
5. *All vehicles, equipment, workers, and their activities should be restricted to one side of the pavement.*

Standard:

6. **Taper length (L) and channelizing device spacing shall be at the following:**

Taper Length L										
Speed Limit (mph)	Lane Width (Feet)				Remarks	Speed Limit (mph)	Lane Width (Feet)				Remarks
	9	10	11	12			9	10	11	12	
25	95	105	115	125	L=S²W/60	50	450	500	550	600	L=SW
30	135	150	165	180	L=S²W/60	55	495	550	605	660	L= SW
35	185	205	225	245	L=S²W/60	60	540	600	660	720	L=SW
40	240	270	295	320	L=S²W/60	65	585	650	715	780	L=SW
45	405	450	495	540	L=SW	70	630	700	770	840	L=SW
Limited Access highways shall use a 1000' merging taper regardless of the posted speed.											
Shifting Tapers see Table 6H-2.[3]						Shoulder Taper = ⅓ L Minimum					

7. **Channelizing device spacing shall be at the following:**

Channelizing Device Spacing								
Location Spacing	Speed Limit (mph)		Location Spacing	Speed Limit (mph)		Location Spacing	Speed Limit (mph)	
	0 -35	36 +		0 -35	36 +		0 -35	36 +
Transition	20'	40'	Travelway	40'	80'	* Construction Access	80'	120'
*Construction access spacing may be increased to this distance, but shall not exceed one access per ¼ mile.								

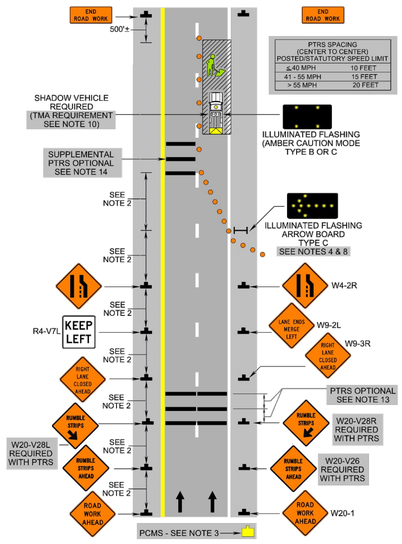
8. **An arrow board shall be used when a lane is closed. When more than one lane is closed, a separate arrow board shall be used for each closed lane (see Figure TTC-18).**
9. **The buffer space length shall be shown in Table 6H-3 on Page 6H-5 for the posted speed limit.**
10. **A shadow vehicle with either a Type B or C arrow board operating in the caution mode, or at least one high intensity amber rotating, flashing, or[1] 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.**
11. **Vehicle hazard warning signals shall not be used instead of the vehicle's high-intensity amber rotating, flashing, or[1] oscillating lights but can be used to supplement the amber rotating, flashing, or[1] oscillating lights.**
12. **When a side road intersects the highway within the TTC zone, additional TTC devices shall be placed as needed.**

Option:[2]

13. PTRS and their supporting signs may be used, see Sections 6F.99 and 6G.25. Long-term transverse rumble strips may be used in long-term situations, see Section 6F.99 and TTC-20.[2]
14. The supplemental PTRS may be eliminated.[2]

1: Revision 1 – 4/1/2015
2: Revision 2 – 9/1/2019

Outside Lane Closure Operation on a Four-Lane Roadway
(Figure TTC-16.2)



2: Revision 2 – 9/1/2019

2 TTC 16.2

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AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

TEMPORARY TRAFFIC CONTROL DETAILS

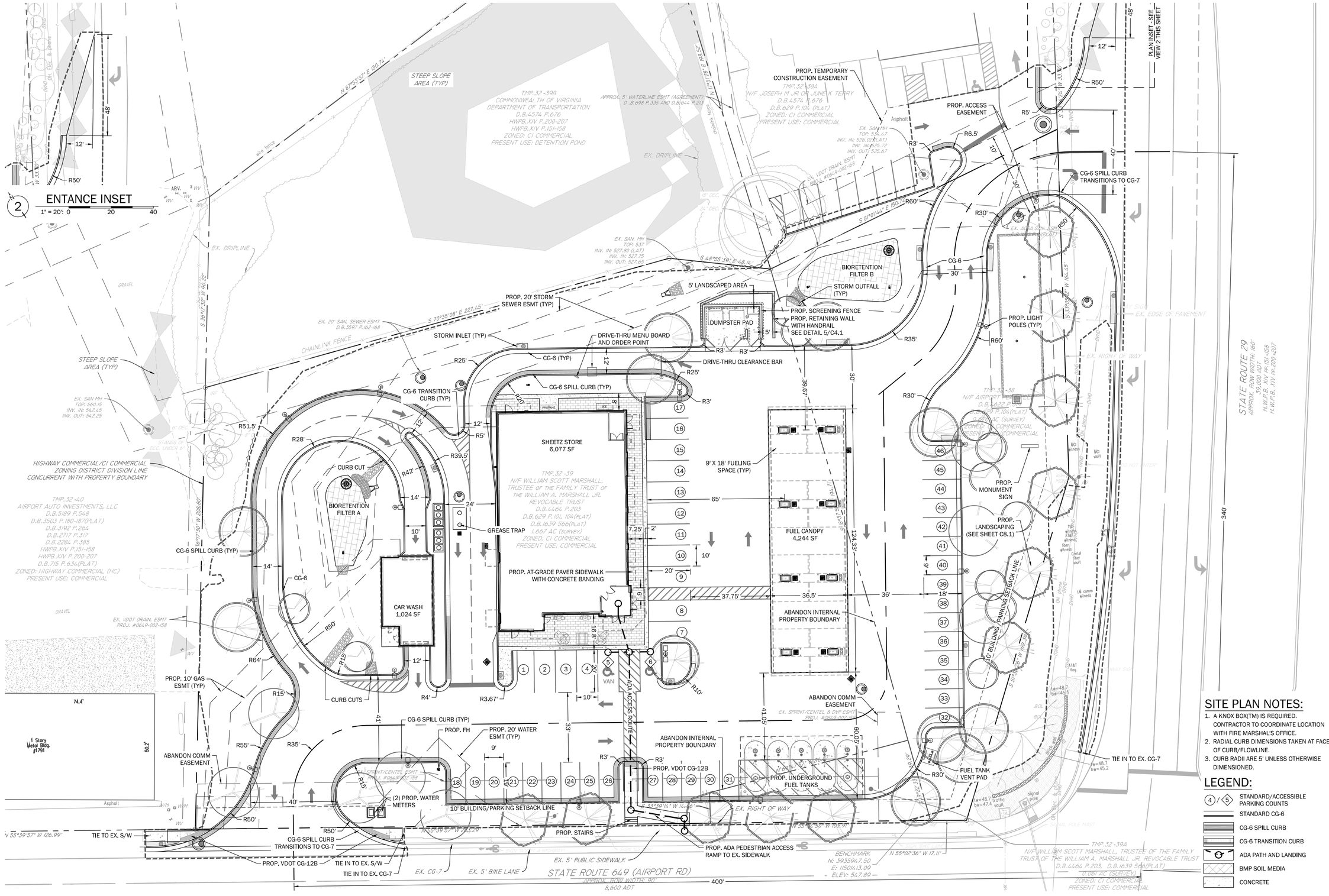
COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

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AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

SITE PLAN

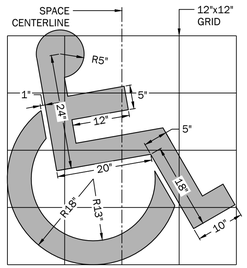
COMMONWEALTH OF VIRGINIA
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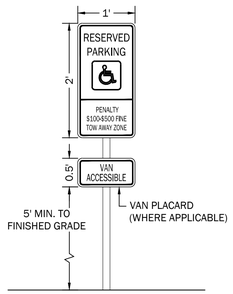
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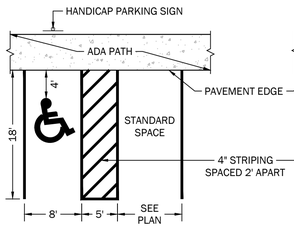
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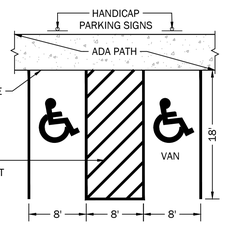
HANDICAP PARKING SYMBOL



HANDICAP PARKING SIGN



SINGLE HANDICAP SPACE

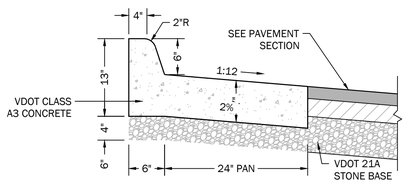


ADJACENT SPACES OR VAN SPACE

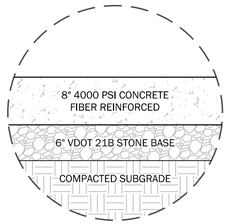
HANDICAP PARKING SPACE NOTES:
1. SPACES SHALL BE COMPLIANT WITH ADAAG 502.6 AND VUSBC 1106.8.
2. ALL HANDICAP PARKING PAVEMENT MARKINGS SHALL BE WHITE IN COLOR.

HANDICAP PARKING SIGN NOTES:
3. SIGN SYMBOL SHALL BE INTERNATIONAL HANDICAP SYMBOL.
4. SIGN MATERIAL TO BE 0.065" ALUMINUM SHEET.
5. VAN PLACARD SHALL ONLY BE INSTALLED WHERE DESIGNATED ON PLANS.

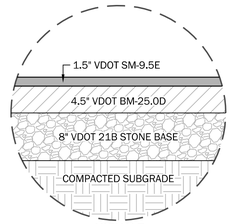
1 HANDICAP PARKING SPACE DETAILS



2 SPILL CURB

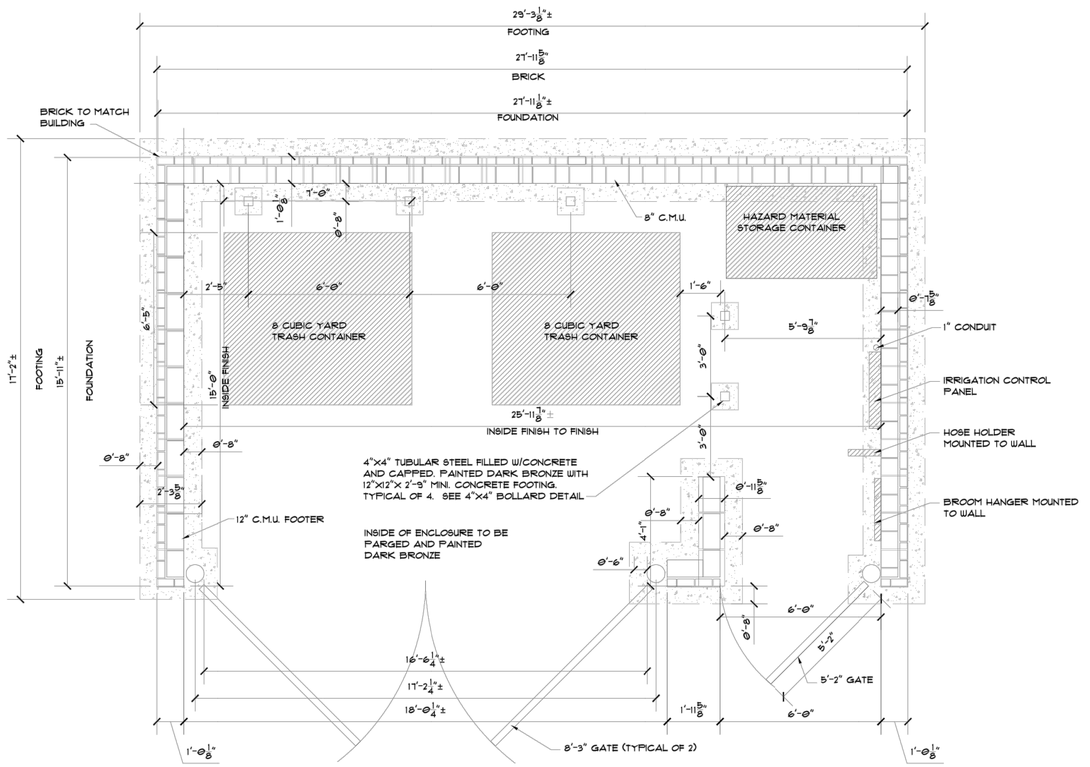


CONCRETE PAVEMENT SECTION

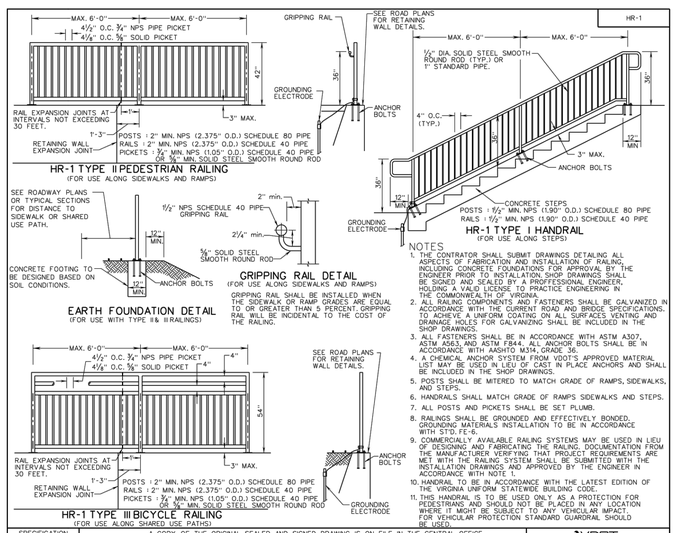


ASPHALT PAVEMENT SECTION

3 PAVEMENT SECTIONS



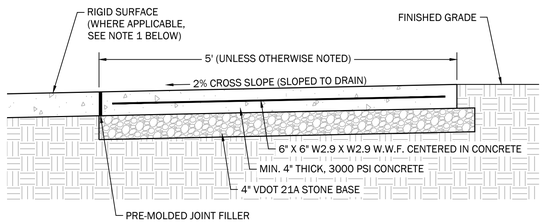
4 DUMPSTER PAD DETAIL



NOTES
1. THE CONTRATOR SHALL SUBMIT DRAWINGS DETAILING ALL ASPECTS OF FABRICATION AND INSTALLATION OF RAILING, INCLUDING CONCRETE FOUNDATIONS FOR APPROVAL BY THE ENGINEER PRIOR TO INSTALLATION. SHOP DRAWINGS SHALL BE SIGNED AND SEALED BY A PROFESSIONAL ENGINEER, HOLDING A VALID LICENSE TO PRACTICE ENGINEERING IN THE COMMONWEALTH OF VIRGINIA.
2. ALL RAILING ASSEMBLY AND FASTENERS SHALL BE GALVANIZED IN ACCORDANCE WITH THE CURRENT ROAD AND BRIDGE SPECIFICATIONS. TO ACHIEVE A UNIFORM COATING ON ALL SURFACES, VENTING AND DRAINAGE HOLES FOR GALVANIZING SHALL BE INCLUDED IN THE SHOP DRAWINGS.
3. ALL FASTENERS SHALL BE IN ACCORDANCE WITH ASTM A307, ASTM A563, AND ASTM F844. ALL ANCHOR BOLTS SHALL BE IN ACCORDANCE WITH AASHTO M314, GRADE 36.
4. A CHEMICAL ANCHOR SYSTEM FROM VDOT'S APPROVED MATERIAL LIST SHALL BE USED IN LIEU OF CAST IN PLACE ANCHORS AND SHALL BE INCLUDED IN THE SHOP DRAWINGS.
5. POSTS SHALL BE MITERED TO MATCH GRADE OF RAMPS, SIDEWALKS, AND STEPS.
6. HANDRAILS SHALL MATCH GRADE OF RAMPS SIDEWALKS AND STEPS.
7. ALL POSTS AND PICKETS SHALL BE SET PLUMB.
8. RAILINGS SHALL BE GROUNDED AND EFFECTIVELY BONDED. GROUNDING MATERIALS INSTALLATION TO BE IN ACCORDANCE WITH STD. EE-6.
9. COMMERCIALLY AVAILABLE RAILING SYSTEMS MAY BE USED IN LIEU OF DESIGNING AND FABRICATING THE RAILING. DOCUMENTATION FROM THE MANUFACTURER VERIFYING THAT PROJECT REQUIREMENTS ARE MET WITH THE RAILING SYSTEM SHALL BE SUBMITTED WITH THE INSTALLATION DRAWINGS AND APPROVED BY THE ENGINEER IN ACCORDANCE WITH NOTE 1.
10. HANDRAIL TO BE IN ACCORDANCE WITH THE LATEST EDITION OF THE VIRGINIA UNIFORM STATEWIDE BUILDING CODE.
11. THIS HANDRAIL IS TO BE USED ONLY AS A PROTECTION FOR PEDESTRIANS AND SHOULD NOT BE PLACED IN ANY LOCATION WHERE IT MIGHT BE SUBJECT TO ANY VEHICULAR IMPACT. FOR VEHICULAR PROTECTION STANDARD GUARDRAIL SHOULD BE USED.

SPECIFICATION REFERENCE	A COPY OF THE ORIGINAL SEALED AND SIGNED DRAWING IS ON FILE IN THE CENTRAL OFFICE.	VDOT ROAD AND BRIDGE STANDARDS
105 238 504	STANDARD HANDRAIL METHOD OF LOCATING AND ERECTING VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE 7/11 SHEET 1 OF 1 601.05

5 HR-1



NOTE:

1. WHERE SIDEWALK ABUTS PAVEMENT, CONCRETE, CURB, BUILDING, OR OTHER HARD SURFACE, CONTRACTOR TO PROVIDE PRE-MOLDED JOINT FILLER AND EXPANSION JOINT AS SHOWN ABOVE.

6 SIDEWALK

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

SITE DETAILS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
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PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

THE WORK OF LINE + GRADE

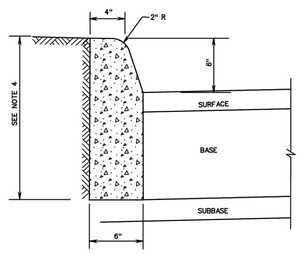
C4.1

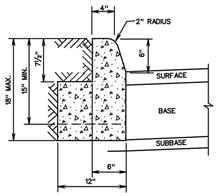
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CG-2

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. CURB HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) WILL BE PAID FOR AS RADIAL CURB.
4. THE DEPTH OF CURB MAY BE REDUCED AS MUCH AS 3" (15" DEPTH) OR INCREASED AS MUCH AS 3" (21" DEPTH) IN ORDER THAT THE BOTTOM OF CURB WILL COINCIDE WITH THE TOP OF A COURSE OF THE PAVEMENT SUBSTRUCTURE. OTHERWISE, THE DEPTH IS TO BE 18" AS SHOWN. NO ADJUSTMENT IN THE PRICE BID IS TO BE MADE FOR A DECREASE OR AN INCREASE IN DEPTH.
5. CG-2 IS TO BE USED ON ROADWAYS MEETING THE REQUIREMENTS FOR CG-6 AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL, IN THE SECTION ON GS URBAN STANDARDS.





ACCEPTABLE ALTERNATIVE IF CURB IS EXTRUDED

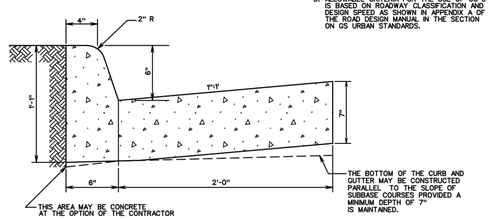
SPECIFICATION REFERENCE	STANDARD 6" CURB	VDOT ROAD AND BRIDGE STANDARDS
105 502	VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE SHEET 1 OF 1 201.01

CG-2

CG-6

NOTES:

1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB & GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES AND TO THE DEPTH OF THE PAVEMENT.
5. ALLOWABLE CRITERIA FOR THE USE OF CG-6 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL IN THE SECTION ON GS URBAN STANDARDS.



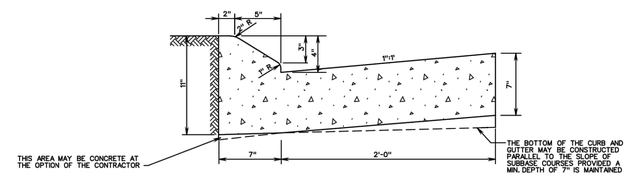
SPECIFICATION REFERENCE	COMBINATION 6" CURB AND GUTTER	VDOT ROAD AND BRIDGE STANDARDS
105 502	VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE SHEET 1 OF 1 201.03

CG-6

CG-7

NOTES:

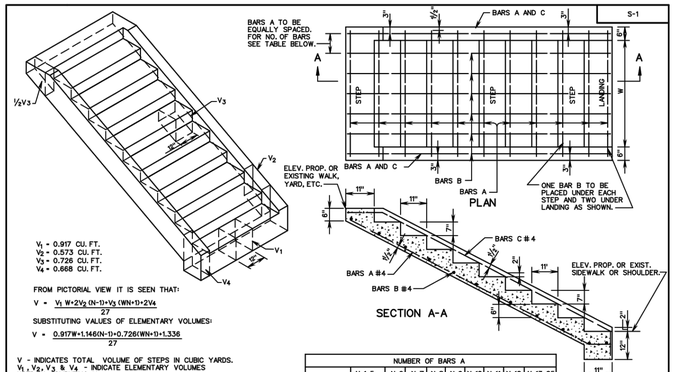
1. THIS ITEM MAY BE PRECAST OR CAST IN PLACE.
2. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST.
3. COMBINATION CURB & GUTTER HAVING A RADIUS OF 300 FEET OR LESS (ALONG FACE OF CURB) SHALL BE PAID FOR AS RADIAL COMBINATION CURB & GUTTER.
4. FOR USE WITH STABILIZED OPEN-GRADED DRAINAGE LAYER, THE BOTTOM OF THE CURB AND GUTTER SHALL BE CONSTRUCTED PARALLEL TO THE SLOPE OF SUBBASE COURSES AND TO THE DEPTH OF THE PAVEMENT.
5. ALLOWABLE CRITERIA FOR THE USE OF CG-7 IS BASED ON ROADWAY CLASSIFICATION AND DESIGN SPEED AS SHOWN IN APPENDIX A OF THE VDOT ROAD DESIGN MANUAL IN THE SECTION ON URBAN GS STANDARDS.
6. WHEN THIS STANDARD IS TO BE TIED INTO EXISTING BARRIER CURB, THE TRANSITION IS TO BE MADE WITHIN 10' OR THE CHANGE IN STANDARDS CAN BE MADE AT REGULAR OPENINGS.
7. WHEN COMBINATION MOUNTABLE CURB AND GUTTER IS USED, THE STANDARD ENTRANCE GUTTERS OR STANDARD CONNECTION FOR STREET INTERSECTIONS ARE TO HAVE THE MOUNTABLE CURB CONFIGURATION INCORPORATED.



VDOT ROAD AND BRIDGE STANDARDS	COMBINATION 4" CURB AND GUTTER	SPECIFICATION REFERENCE
SHEET 1 OF 1 201.04	VIRGINIA DEPARTMENT OF TRANSPORTATION	105 502
REVISION DATE		

CG-7

S-1



V_1 = 0.917 CU. FT.
V_2 = 0.573 CU. FT.
V_3 = 0.726 CU. FT.
V_4 = 0.668 CU. FT.

FROM PICTORIAL VIEW IT IS SEEN THAT:

$$V = \frac{V_1 W + 2V_2 (N-1) + V_3 (WN+1) + 2V_4}{27}$$

SUBSTITUTING VALUES OF ELEMENTARY VOLUMES:

$$V = \frac{0.917W + 1.146(N-1) + 0.726(WN+1) + 1.336}{27}$$

V - INDICATES TOTAL VOLUME OF STEPS IN CUBIC YARDS.
V_1, V_2, V_3 & V_4 - INDICATE ELEMENTARY VOLUMES USED IN COMPUTING V.
W - INDICATES CLEAR WIDTH OF STEPS, IN FEET, BETWEEN SIDEWALLS.
N - INDICATES NUMBER OF STEPS IN INSTALLATION EXCLUSIVE OF LANDING.
L1 - INDICATES LENGTH OF BARS A, IN INCHES. L1 = 13.038N + 8"
L2 - INDICATES LENGTH OF BARS B, IN INCHES. L2 = 12W + 9"
L3 - INDICATES LENGTH OF BARS C, IN INCHES. L3 = 13.038N + 18"

A LANDING IS TO BE PROVIDED WHERE 12 OR MORE STEPS ARE REQUIRED MINIMUM SIZE OF LANDING TO BE W + 1 FOOT X 4 FEET.

THIS ITEM MAY BE PRECAST OR CAST IN PLACE. CONCRETE TO BE CLASS A3 IF CAST IN PLACE, 4000 PSI IF PRECAST. FOR OTHER WIDTHS THE APPROXIMATE SPACING OF BARS A IN INCHES WILL BE EQUAL TO 80÷ N WITH A MINIMUM SPACING OF 6". REINFORCING BARS TO BE USED IN INSTALLATIONS OF 6 OR MORE STEPS. FOR TABULATION OF CONCRETE AND STEEL QUANTITIES SEE SHEET 2.

	NUMBER OF BARS A							
	N=1-5	N=6	N=7	N=8	N=9	N=10	N=11	N=12	N=13-25
W = 3'	NO STEEL	4	5	5	6	6	7	7	8
W = 4'		5	6	7	7	8	8	9	10
W = 5'		6	7	8	9	9	10	11	12

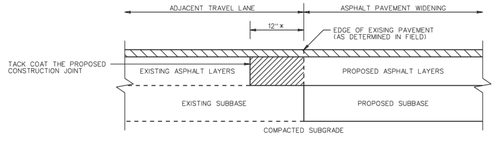
HANDRAIL IS TO BE PROVIDED FOR STEPS HAVING THREE OR MORE RISERS, AND WILL MEET THE FOLLOWING CONDITIONS:

1. ON STEPS LESS THAN 44 INCHES WIDE HAVING BOTH SIDES ENCLOSED, AT LEAST ONE HANDRAIL, PREFERABLY ON THE RIGHT SIDE DESCENDING.
2. ON STEPS LESS THAN 44 INCHES WIDE HAVING ONE SIDE OPEN, ONE HANDRAIL ON EACH SIDE.
3. ON STEPS LESS THAN 44 INCHES WIDE HAVING BOTH SIDES OPEN, ONE HANDRAIL ON EACH SIDE.
4. ON STEPS MORE THAN 44 INCHES WIDE BUT LESS THAN 88 INCHES WIDE, ONE HANDRAIL ON EACH SIDE.
5. ON STEPS 88 OR MORE INCHES WIDE, ONE HANDRAIL ON EACH SIDE, AND ONE INTERMEDIATE HANDRAIL LOCATED APPROXIMATELY MIDWAY OF THE WIDTH.

SPECIFICATION REFERENCE	STANDARD CONCRETE STEPS FOR 1½:1 SLOPE	VDOT ROAD AND BRIDGE STANDARDS
105 504	VIRGINIA DEPARTMENT OF TRANSPORTATION	REVISION DATE SHEET 1 OF 2 601.01

S-1

WP-2



CONSTRUCTION JOINT DETAIL

REMOVE EXISTING ASPHALT LAYERS TO EXISTING SUBBASE AND REPLACE WITH PROPOSED ASPHALT WIDENING LAYERS
PROPOSED MINIMUM 1½ INCH THICK ASPHALT SURFACE COURSE (SEE NOTE 5)
x MINIMUM 12 INCHES, OR GREATER AS NECESSARY TO ABUT THE FULL THICKNESS OF EXISTING ASPHALT LAYERS AS DETERMINED BY CORES (SEE NOTE 3)

NOTES:

1. ASPHALT PAVEMENT WIDENING SHALL HAVE A PAVEMENT DESIGN IN ACCORDANCE WITH CURRENT VDOT PROCEDURES AND BE APPROVED BY THE ENGINEER.
2. THE PAVEMENT DESIGN FOR ASPHALT PAVEMENT WIDENING SHALL MEET OR EXCEED THE DEPTHS AND TYPES OF THE LAYERS OF EXISTING PAVEMENT. SUBSURFACE DRAINAGE OF THE EXISTING AND PROPOSED PAVEMENT SHALL BE ADDRESSED IN THE PAVEMENT DESIGN.
3. A MINIMUM OF THREE CORES SHALL BE TAKEN ALONG THE CENTER OF THE ADJACENT TRAVEL LANE TO DETERMINE THE TYPE AND THICKNESS OF EXISTING PAVEMENT LAYERS. THESE CORES SHALL BE SPACED NO MORE THAN 500 FEET APART.
4. THE ADJACENT TRAVEL LANE SHALL BE MILLED A MINIMUM DEPTH OF 1½ INCHES AND REPLACED WITH AN ASPHALT SURFACE COURSE TO MATCH THE PROPOSED PAVEMENT WIDENING SURFACE COURSE, UNLESS WAIVED BY THE ENGINEER.
5. THE ENGINEER MAY REQUIRE THE MILLING DEPTH OF THE EXISTING PAVEMENT TO BE ADJUSTED TO ACHIEVE AN ACCEPTABLE PAVEMENT CROSS-SLOPE AND EFFECTIVE SURFACE DRAINAGE.
6. EXISTING PAVEMENT MARKINGS AND MARKERS WITHIN THE PROJECT LIMITS SHALL BE RESTORED SUBJECT TO THE APPROVAL OF THE ENGINEER.
7. FINAL TRANSVERSE PAVEMENT TIE-IN SHALL CONFORM TO THE REQUIREMENTS OF SECTION 315 OF THE SPECIFICATIONS EXCEPT THAT ALL JOINTS AT TIE-IN LOCATIONS SHALL BE TESTED USING A 10 FOOT STRAIGHTEDGE IN ACCORDANCE WITH THE REQUIREMENTS OF SECTION 315 OF THE SPECIFICATIONS.

VDOT ROAD AND BRIDGE STANDARDS	ASPHALT PAVEMENT WIDENING FOR WIDENING SUBJECT TO TRAFFIC	SPECIFICATION REFERENCE
SHEET 1 OF 1 303.02	VIRGINIA DEPARTMENT OF TRANSPORTATION	315
REVISION DATE		

WP-2

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

SITE DETAILS

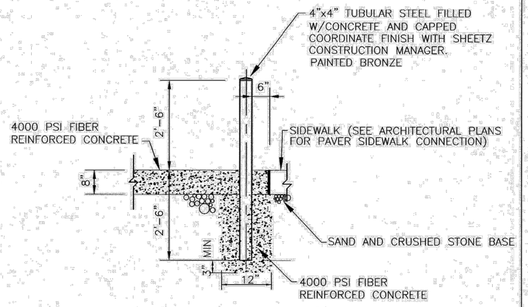
COMMONWEALTH OF VIRGINIA
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SUBMISSION NO.	4
PROJECT	1903600

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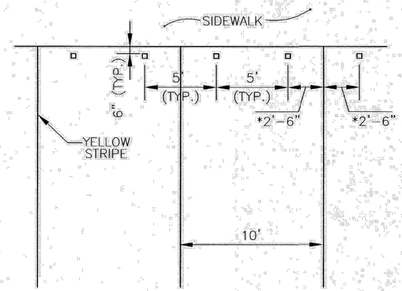
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SECTION · 4"x4" BUMPER POST
SCALE: 1/2"=1'-0"

DETAIL H

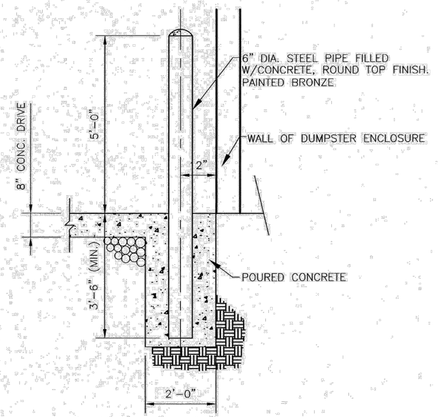


* 2'-3" FOR 9.5' WIDE PARKING SPACE
2'-0" FOR 9.0' WIDE PARKING SPACE

BUMPER POST DETAIL
N.T.S.

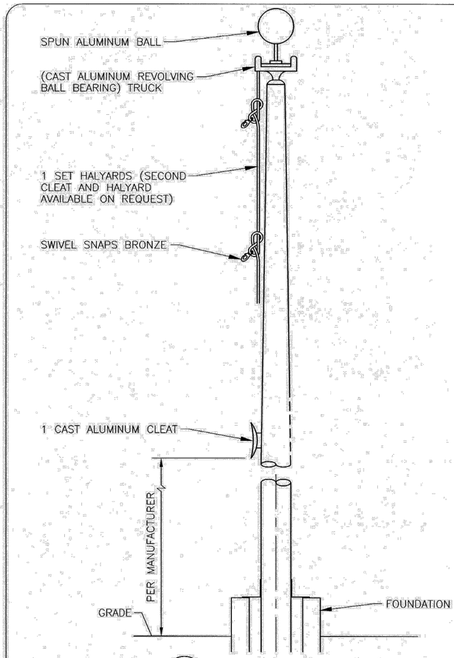
USE THIS DETAIL IF PAVEMENT IS PAVED UP TO TOP OF SIDEWALK

DETAIL G-1



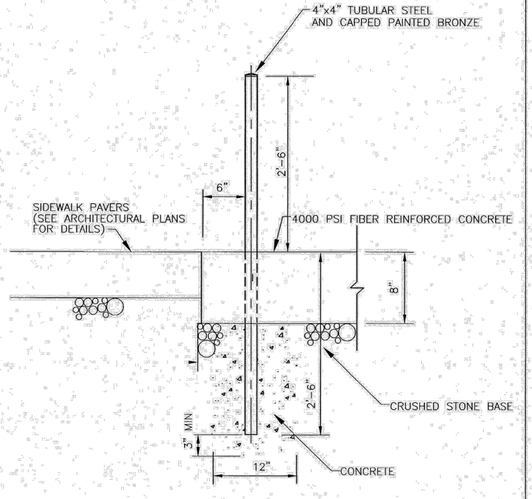
SECTION · 6"ø DUMPSTER BOLLARD
NTS

DETAIL T



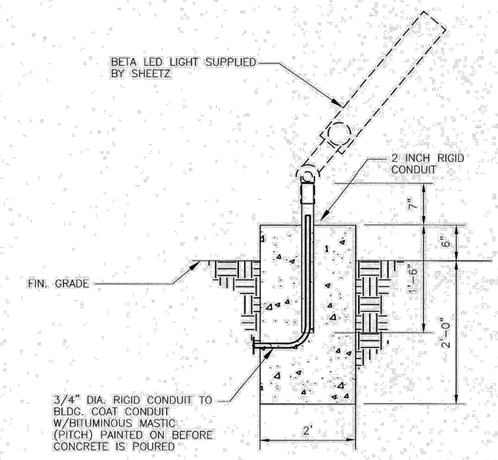
FLAGPOLE DETAIL
NTS

DETAIL K



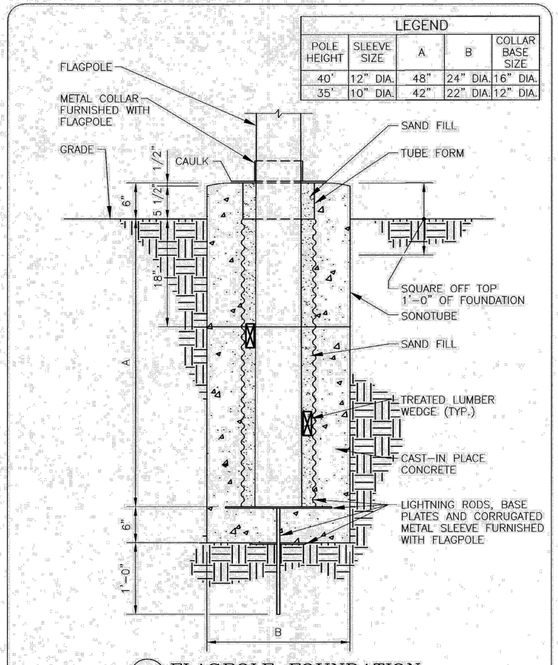
SECTION STOREFRONT FLUSH SIDEWALK/PAVING
NTS

DETAIL A



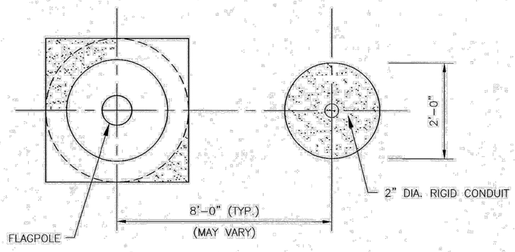
SECTION · FLAGPOLE LIGHT FOUNDATION
NTS

DETAIL MR1



FLAGPOLE FOUNDATION
NTS

DETAIL L



NOTE:
CONTRACTOR/INSTALLER SHALL LOCATE LIGHT FIXTURE SO AS TO SHINE AWAY FROM ADJACENT ROADS AND/OR PROPERTIES

FLAGPOLE & LIGHT FOUNDATION PLAN
NTS

DETAIL N

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

SITE DETAILS

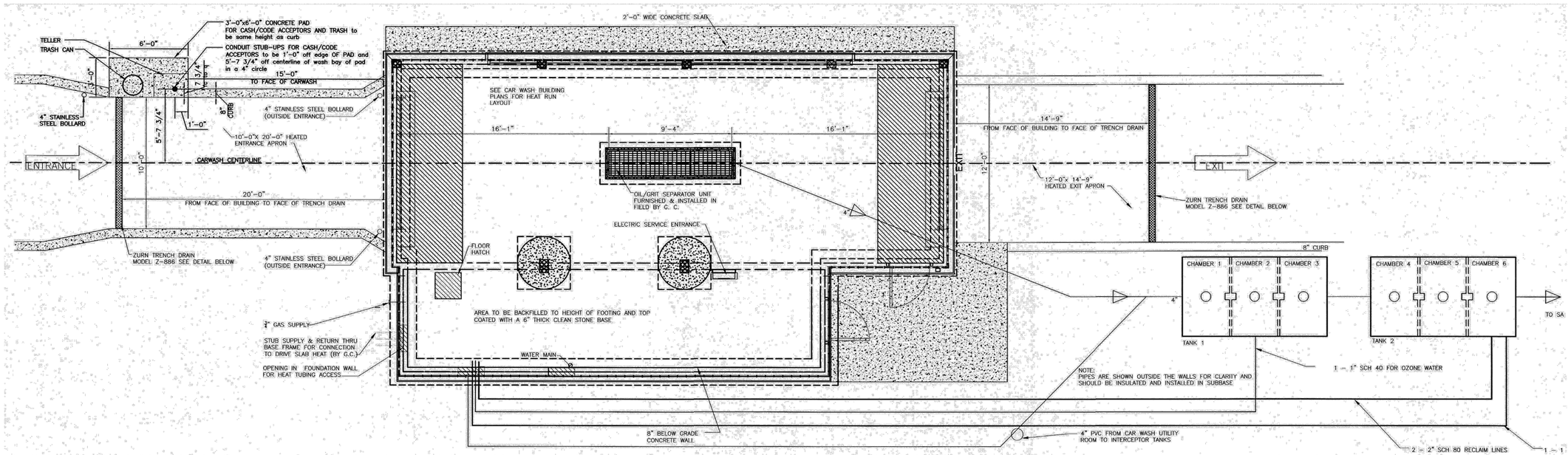
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11/23/2020
DANIEL C. HYER
LIC. NO. 45596
PROFESSIONAL ENGINEER

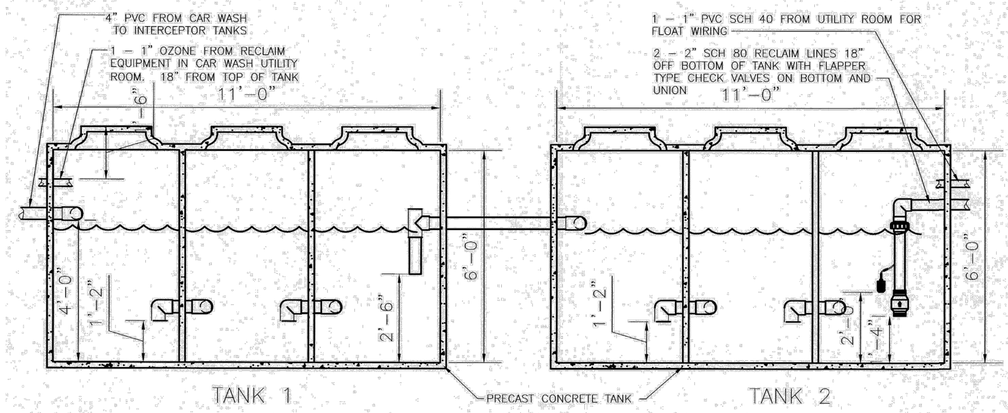
APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

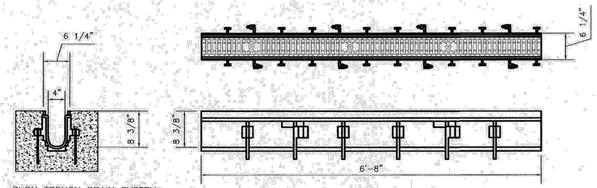
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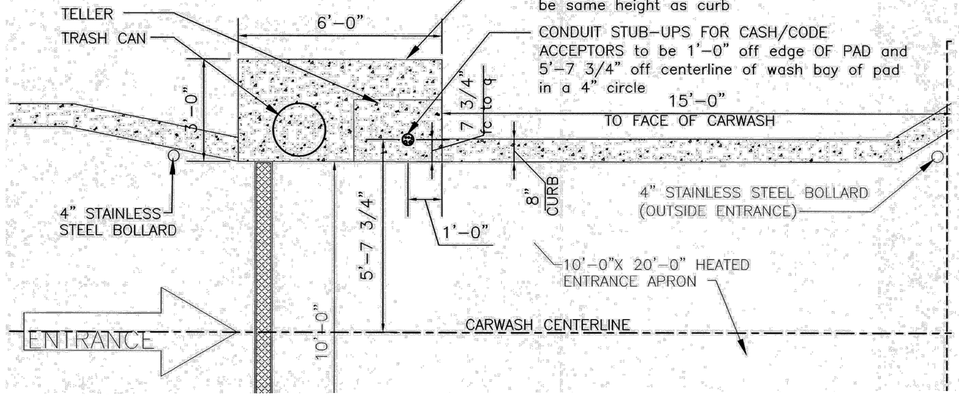
C4.3

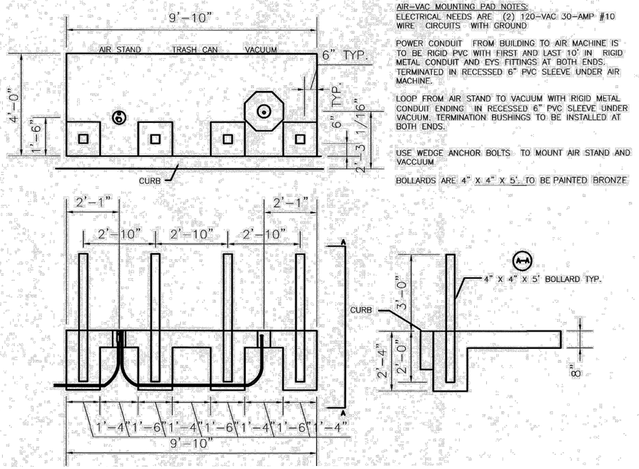
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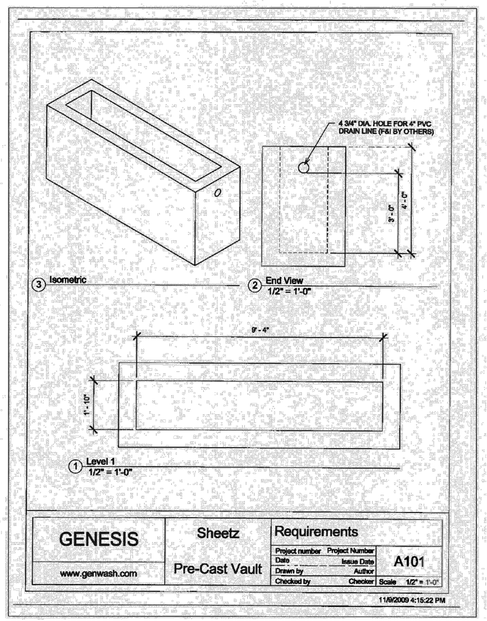
AIR-VAC MOUNTING PAD NOTES:
ELECTRICAL NEEDS ARE: (2) 120-VAC 30-AMP #10 WIRE CIRCUITS WITH GROUND

POWER CONDUIT FROM BUILDING TO AIR MACHINE IS TO BE RIGID PVC WITH FIRST AND LAST 10' IN RIGID METAL CONDUIT AND EYS FITTINGS AT BOTH ENDS. TERMINATED IN RECESSED 6" PVC SLEEVE UNDER AIR MACHINE.

LOOP FROM AIR STAND TO VACUUM WITH RIGID METAL CONDUIT ENDING IN RECESSED 6" PVC SLEEVE UNDER VACUUM. TERMINATION BUSHINGS TO BE INSTALLED AT BOTH ENDS.

USE WEDGE ANCHOR BOLTS TO MOUNT AIR STAND AND VACCUUM

BOLLARDS ARE: 4" X 4" X 5' TO BE PAINTED BRONZE



LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

CARWASH DETAILS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

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ADA ACCESSIBILITY NOTES

1. CONTRACTOR SHALL ENSURE LONGITUDINAL RAMP SLOPES DO NOT EXCEED 1:12. TOTAL RAMP RISE SHALL NOT BE MORE THAN 2.5'.
2. CONTRACTOR SHALL PROVIDE ADA LANDINGS AT ALL LOCATIONS SHOWN ON PLANS AND AT THE TOP AND BOTTOM OF ALL RAMPS.
3. CONTRACTOR SHALL ENSURE THE SLOPE OF ALL ADA LANDINGS DOES NOT EXCEED 2% IN ANY DIRECTION. ADA LANDINGS SHALL BE 5' X 5' MINIMUM DIMENSIONS AND SHALL BE CONSTRUCTED OF A HOMOGENOUS, SLIP RESISTANT SURFACE.
4. CONTRACTOR SHALL ENSURE CROSS SLOPES DO NOT EXCEED 2%.
5. CONTRACTOR SHALL ENSURE NO CHANGES IN LEVEL GREATER THAN ¾" OCCUR. NECESSARY CHANGES IN LEVEL GREATER THAN ¼" SHALL BE BEVELED WITH A SLOPE NOT STEEPER THAN 1:2.
6. CONTRACTOR SHALL ENSURE THE CRITERIA ABOVE ARE MET ALONG THE ENTIRE ADA ACCESS ROUTE SHOWN ON THESE PLANS, AND ANY OTHER SITE AREAS SUBJECT TO ACCESSIBILITY REQUIREMENTS.

SITE GRADING NOTES:

1. CONTRACTOR SHALL MAINTAIN AN ABSOLUTE MINIMUM SLOPE OF 1% ALONG ALL FLOWLINES.
2. CONTRACTOR SHALL MAINTAIN A MINIMUM CROSS SLOPE OF 2% ON SPILL CURB GUTTER PANS.
3. CONTRACTOR SHALL PROVIDE SMOOTH, BLENDED TRANSITIONS BETWEEN SPILL CURB GUTTER PANS AND STANDARD GUTTER PANS AS SHOWN ON PLANS. MINIMUM TRANSITION LENGTH SHALL BE 5', OR AS SHOWN ON PLANS.
4. CONTRACTOR SHALL PROVIDE NOSE-DOWN CURBS ON ALL TERMINATIONS WHERE PROPOSED CURB DOES NOT TIE INTO EXISTING CURB.

LEGEND:

- 4 / 5 — STANDARD/ACCESSIBLE PARKING COUNTS
- STANDARD CG-6
- CG-6 SPILL CURB
- CG-6 TRANSITION CURB
- ADA PATH AND LANDING
- BMP SOIL MEDIA
- CONCRETE

2 ENTRANCE INSET
1" = 20': 0 20 40

1 GRADING AND DRAINAGE PLAN
1" = 20': 0 20 40

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CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

GRADING AND DRAINAGE PLAN

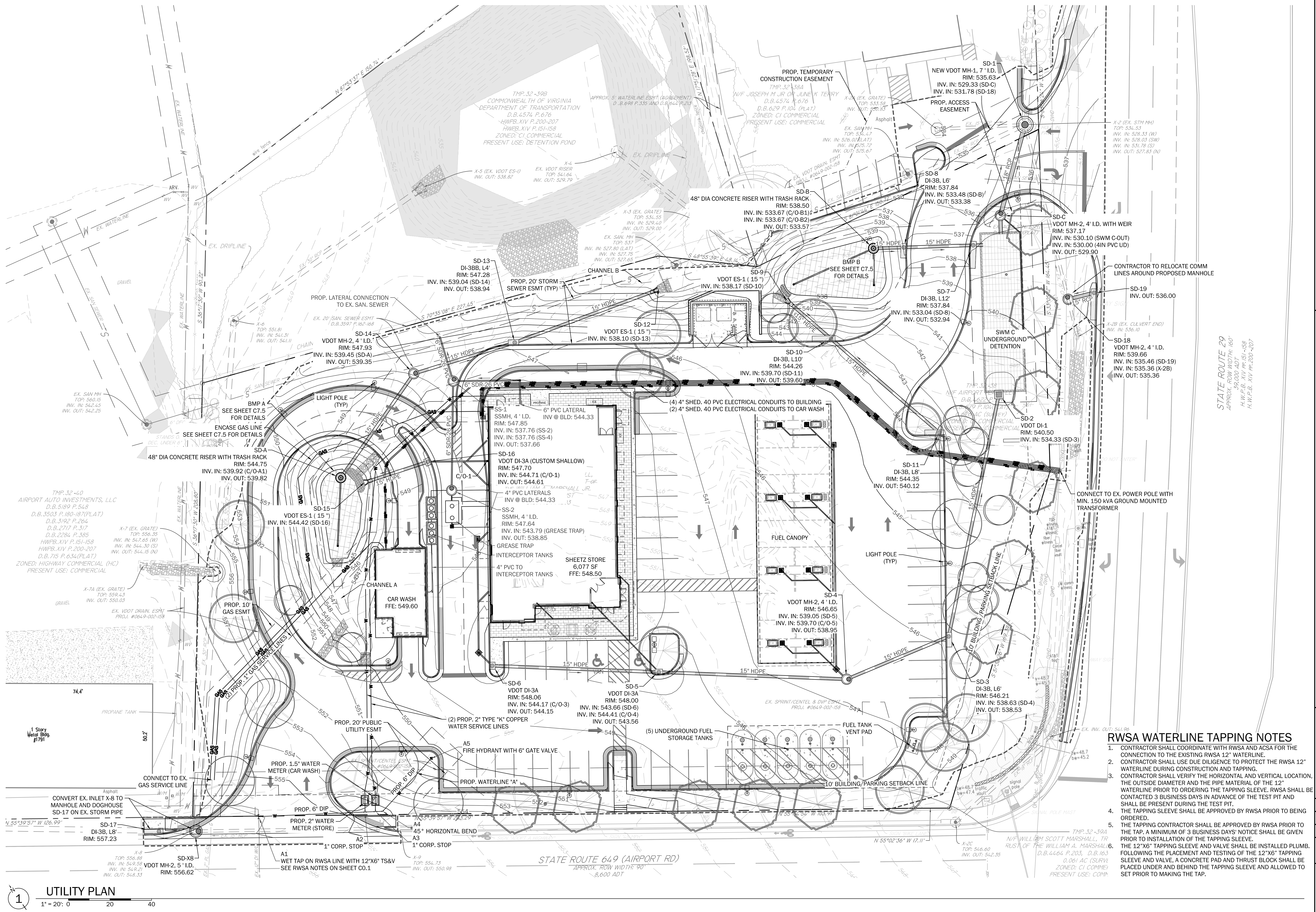
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RWSA WATERLINE TAPPING NOTES

1. CONTRACTOR SHALL COORDINATE WITH RWSA AND ACSA FOR THE CONNECTION TO THE EXISTING RWSA 12" WATERLINE.
2. CONTRACTOR SHALL USE DUE DILIGENCE TO PROTECT THE RWSA 12" WATERLINE DURING CONSTRUCTION AND TAPPING.
3. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION, THE OUTSIDE DIAMETER AND THE PIPE MATERIAL OF THE 12" WATERLINE PRIOR TO ORDERING THE TAPPING SLEEVE. RWSA SHALL BE CONTACTED 3 BUSINESS DAYS IN ADVANCE OF THE TEST PIT AND SHALL BE PRESENT DURING THE TEST PIT.
4. THE TAPPING SLEEVE SHALL BE APPROVED BY RWSA PRIOR TO BEING ORDERED.
5. THE TAPPING CONTRACTOR SHALL BE APPROVED BY RWSA PRIOR TO THE TAP. A MINIMUM OF 3 BUSINESS DAYS' NOTICE SHALL BE GIVEN PRIOR TO INSTALLATION OF THE TAPPING SLEEVE.
6. THE 12"X6" TAPPING SLEEVE AND VALVE SHALL BE INSTALLED PLUMB. FOLLOWING THE PLACEMENT AND TESTING OF THE 12"X6" TAPPING SLEEVE AND VALVE, A CONCRETE PAD AND THRUST BLOCK SHALL BE PLACED UNDER AND BEHIND THE TAPPING SLEEVE AND ALLOWED TO SET PRIOR TO MAKING THE TAP.

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

UTILITY PLAN

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
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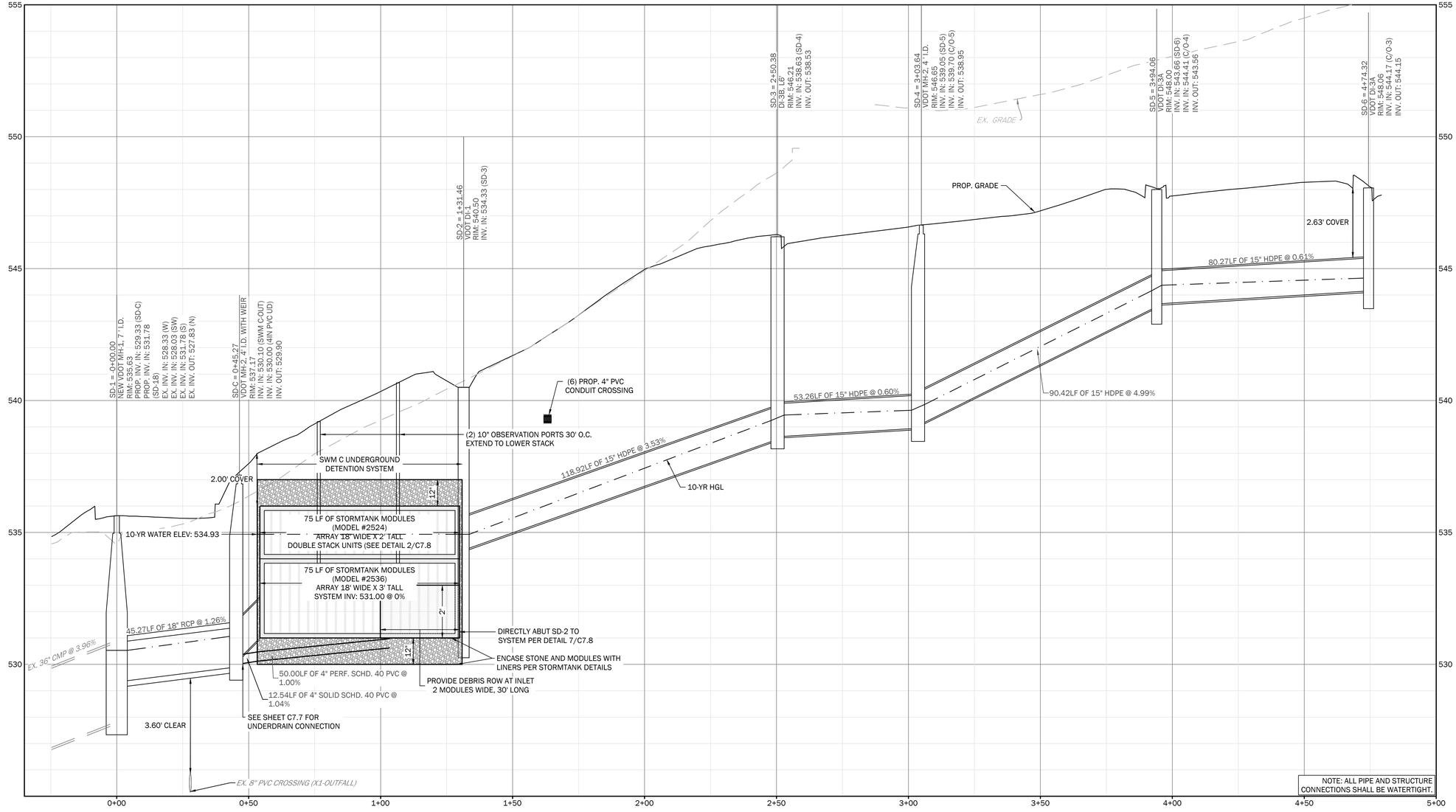
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C6.0

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NOTE:

ALL PROPOSED STORM DRAIN STRUCTURES AND EXISTING INLETS RECEIVING PROPOSED PIPE CONNECTIONS SHALL RECEIVE INLET SHAPING PER VDOT DETAIL 4 ON SHEET C6.4



1 SD-1 TO SD-6

H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

UTILITY PROFILES

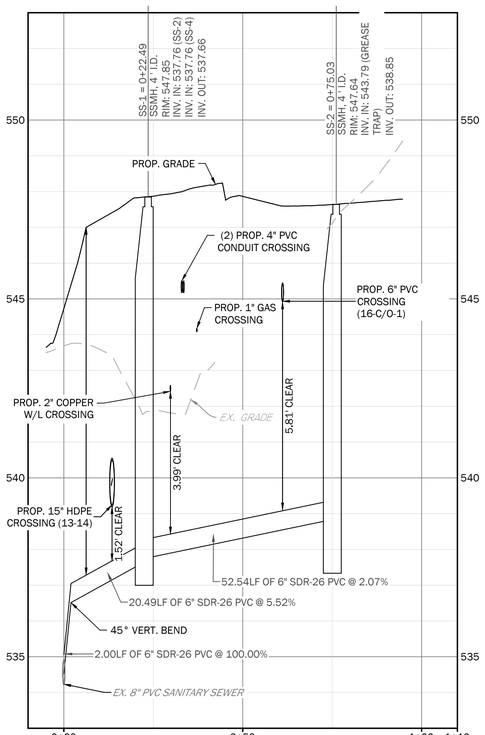
COMMONWEALTH OF VIRGINIA
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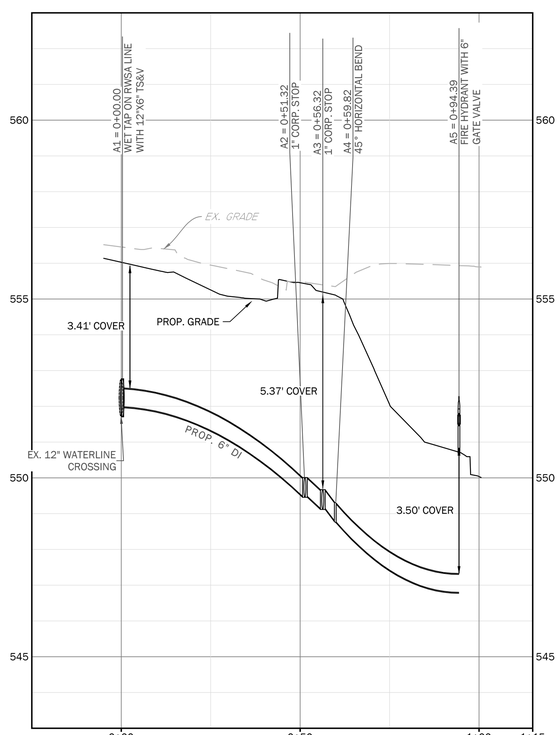
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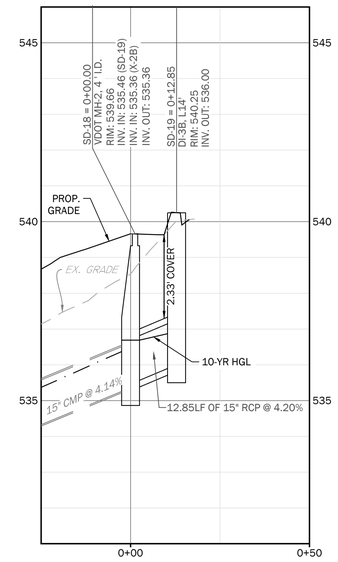
1 PROPOSED SANITARY PROFILE

H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4



2 WATERLINE A PROFILE

H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4



3 SD-18 TO SD-19 PROFILE

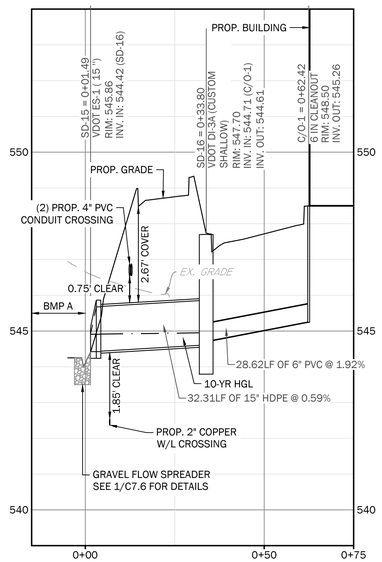
H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4

STORM SEWER NOTES:

1. ALL PROPOSED STORM DRAIN STRUCTURES AND EXISTING INLETS RECEIVING PROPOSED PIPE CONNECTIONS SHALL RECEIVE INLET SHAPING PER VDOT DETAIL 4 ON SHEET C6.4.
2. ALL PIPE AND STRUCTURE CONNECTIONS SHALL BE WATERTIGHT.

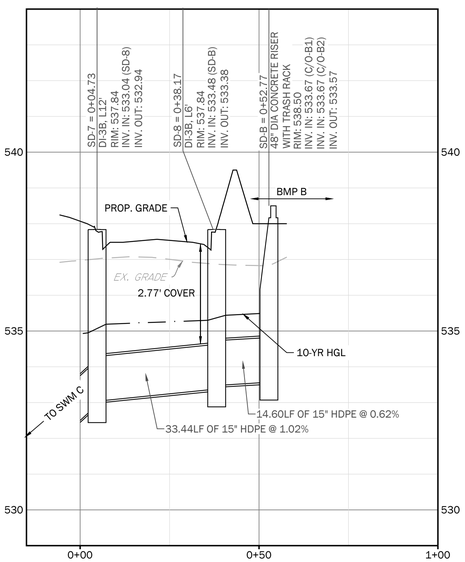
RWSA WATERLINE TAPPING NOTES

1. CONTRACTOR SHALL COORDINATE WITH RWSA AND ACSA FOR THE CONNECTION TO THE EXISTING RWSA 12" WATERLINE.
2. CONTRACTOR SHALL USE DUE DILIGENCE TO PROTECT THE RWSA 12" WATERLINE DURING CONSTRUCTION AND TAPPING.
3. CONTRACTOR SHALL VERIFY THE HORIZONTAL AND VERTICAL LOCATION, THE OUTSIDE DIAMETER AND THE PIPE MATERIAL OF THE 12" WATERLINE PRIOR TO ORDERING THE TAPPING SLEEVE. RWSA SHALL BE CONTACTED 3 BUSINESS DAYS IN ADVANCE OF THE TEST PIT AND SHALL BE PRESENT DURING THE TEST PIT.
4. THE TAPPING SLEEVE SHALL BE APPROVED BY RWSA PRIOR TO BEING ORDERED.
5. THE TAPPING CONTRACTOR SHALL BE APPROVED BY RWSA PRIOR TO THE TAP. A MINIMUM OF 3 BUSINESS DAYS' NOTICE SHALL BE GIVEN PRIOR TO INSTALLATION OF THE TAPPING SLEEVE.
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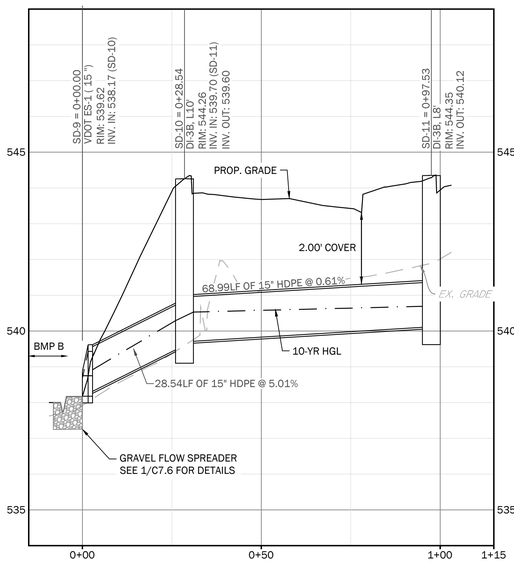
4 SD-15 TO SD-16 PROFILE

H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4



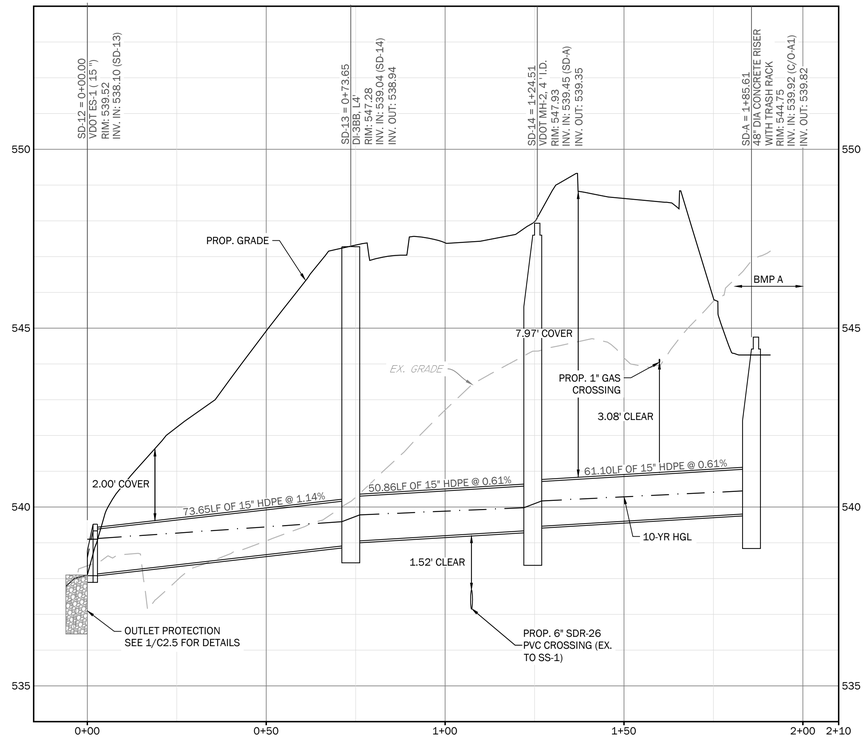
5 SWM C TO SD-B PROFILE

H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4



6 SD-9 TO SD-11 PROFILE

H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4



7 SD-12 TO SD-A PROFILE

H: 1" = 20': 0 20 40
V: 1" = 2': 0 2 4

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

UTILITY PROFILES

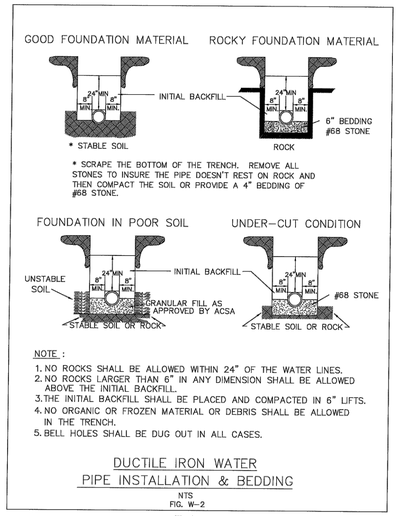
COMMONWEALTH OF VIRGINIA
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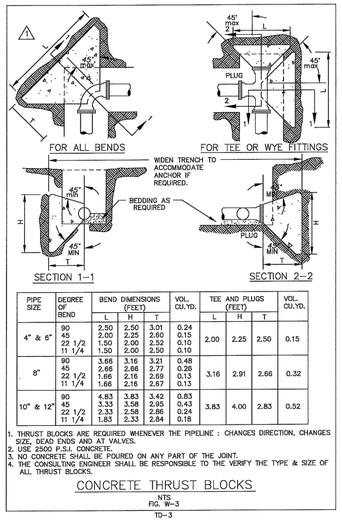
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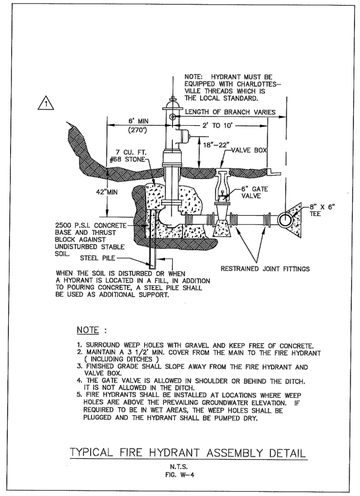
TD-2

1 TD-2 (DUCTILE IRON PIPE INSTALLATION)



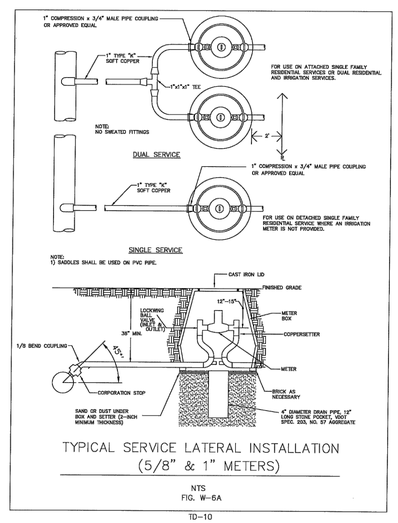
TD-3

2 TD-3 (CONCRETE THRUST BLOCKS)



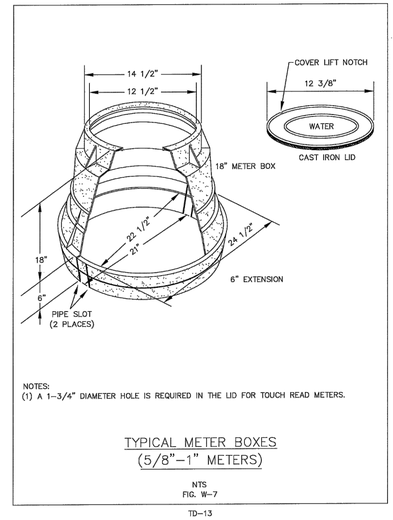
TD-8

3 TD-8 (FIRE HYDRANT ASSEMBLY)



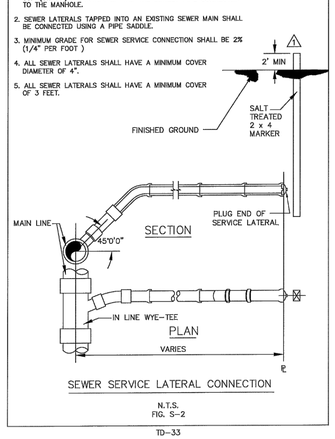
TD-10

4 TD-10 (WATER SERVICE LATERAL)



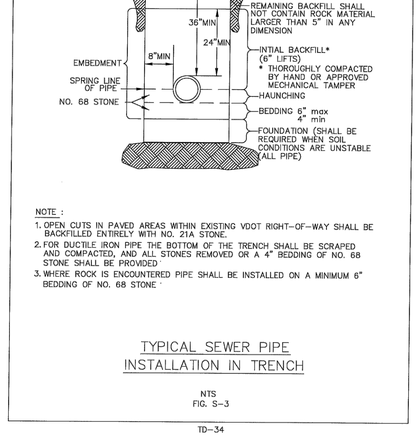
TD-13

5 TD-14 (METER VAULT)



TD-33

6 TD-33 (LATERAL CONNECTION)



TD-34

7 TD-34 (SEWER PIPE TRENCH)

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CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

UTILITY DETAILS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
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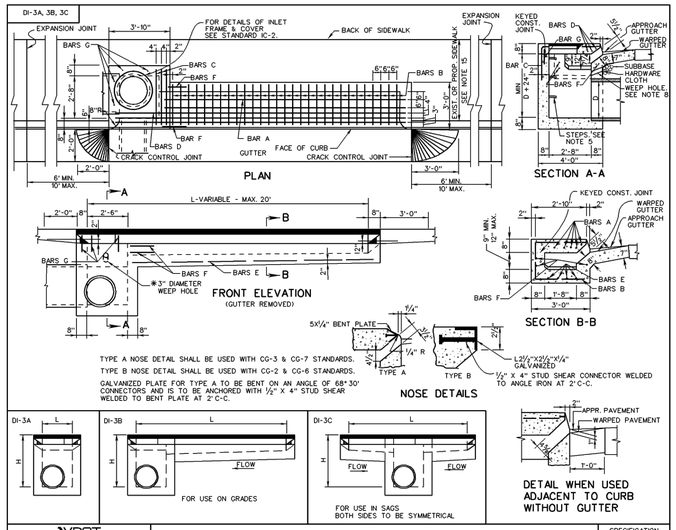
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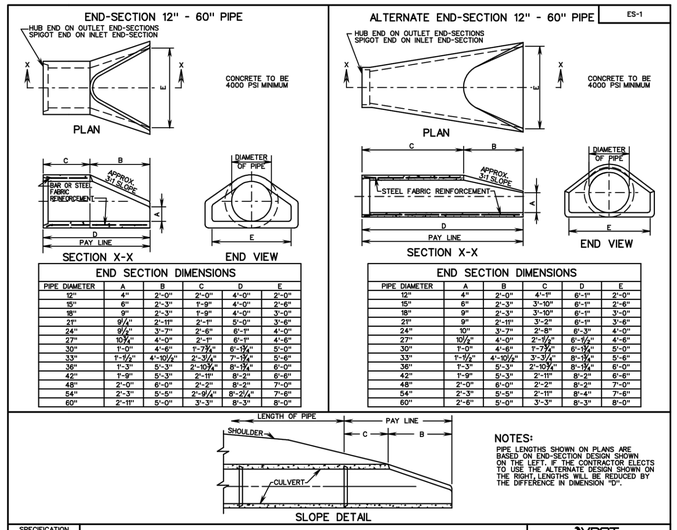
DI-3A, 3B, 3C



VDOT ROAD AND BRIDGE STANDARDS		STANDARD CURB DROP INLET 12" - 30" PIPE: MAXIMUM DEPTH (H) = 8' VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 2	REVISION DATE		233 302
104.09	08/10		

1 DI-3A B C

ES-1



END SECTION DIMENSIONS

PIPE DIAMETER	A	B	C	D	E
12"	4"	2'-0"	2'-0"	4'-0"	2'-0"
15"	6"	2'-3"	1'-9"	4'-0"	2'-6"
18"	9"	2'-3"	1'-9"	4'-0"	3'-0"
21"	9"	2'-11"	2'-1"	5'-0"	3'-6"
24"	10"	3'-7"	2'-8"	6'-1"	4'-0"
27"	10½"	4'-0"	2'-11"	6'-1"	4'-6"
30"	1'-0"	4'-6"	1'-7⅞"	6'-1⅝"	5'-0"
33"	1'-1½"	4'-10½"	2'-3⅛"	7'-1⅜"	5'-6"
36"	1'-3"	5'-3"	2'-10⅜"	8'-3⅛"	6'-0"
42"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"
48"	2'-0"	6'-0"	2'-7"	8'-2"	7'-0"
54"	2'-3"	5'-5"	2'-9¼"	8'-2¼"	7'-6"
60"	2'-6"	5'-0"	3'-3"	8'-3"	8'-0"

END SECTION DIMENSIONS

PIPE DIAMETER	A	B	C	D	E
12"	4"	2'-0"	4'-1"	6'-1"	2'-0"
15"	6"	2'-3"	3'-10"	6'-1"	2'-6"
18"	9"	2'-3"	3'-10"	6'-1"	3'-0"
21"	9"	2'-11"	3'-2"	6'-1"	3'-6"
24"	10"	3'-7"	2'-8"	6'-3"	4'-0"
27"	10½"	4'-0"	2'-11½"	6'-5½"	4'-6"
30"	1'-0"	4'-6"	1'-7⅞"	6'-1⅝"	5'-0"
33"	1'-1½"	4'-10½"	3'-3⅛"	8'-1⅜"	5'-6"
36"	1'-3"	5'-3"	2'-10⅜"	8'-3⅛"	6'-0"
42"	1'-9"	5'-3"	2'-11"	8'-2"	6'-6"
48"	2'-0"	6'-0"	2'-2"	8'-2"	7'-0"
54"	2'-3"	5'-5"	2'-11"	8'-4"	7'-6"
60"	2'-6"	5'-0"	3'-3"	8'-3"	8'-0"

NOTES:
PIPE LENGTHS SHOWN ON PLANS ARE BASED ON END-SECTION DESIGN SHOWN ON THE LEFT. IF THE CONTRACTOR ELECTS TO USE THE ALTERNATE DESIGN SHOWN ON THE RIGHT, LENGTHS WILL BE REDUCED BY THE DIFFERENCE IN DIMENSION "D".

SPECIFICATION REFERENCE	FLARED END SECTION 12" - 60" CONCRETE PIPE CULVERTS VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS	
302		REVISION DATE	SHEET 1 OF 1 102.01

2 ES-1

MH-1

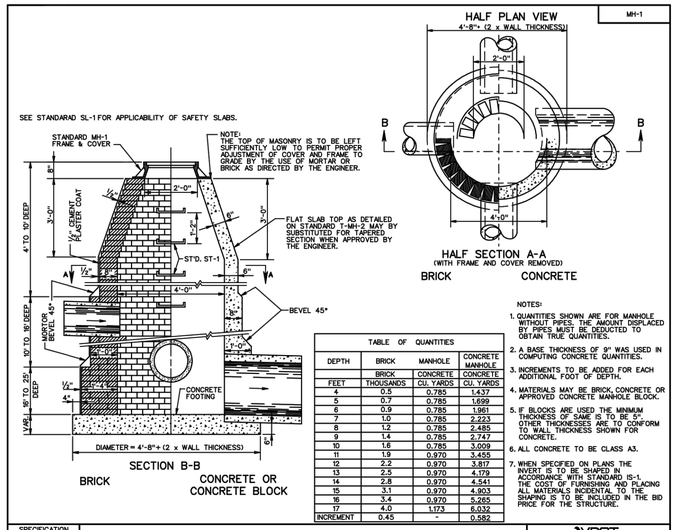


TABLE OF QUANTITIES

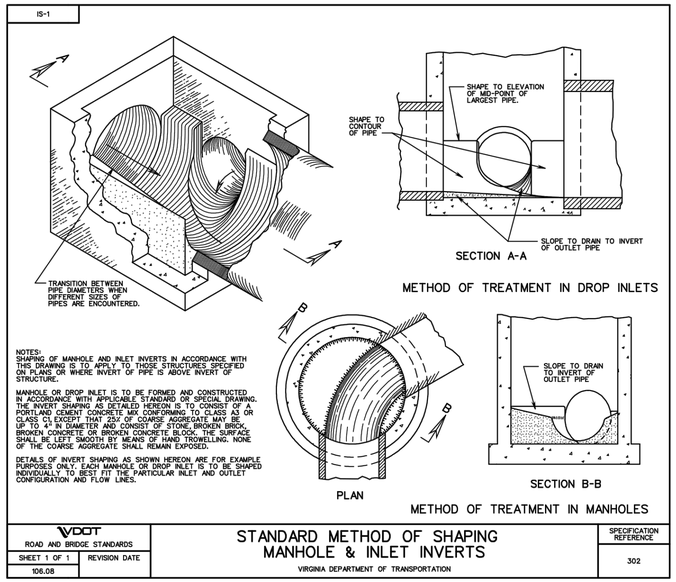
DEPTH	BRICK	MANHOLE	CONCRETE MANHOLE
	BRICK	CONCRETE	CONCRETE
FEET	THOUSANDS	CU. YARDS	CU. YARDS
4	0.5	0.785	1.437
5	0.7	0.785	1.699
6	0.9	0.785	1.961
7	1.0	0.785	2.223
8	1.2	0.785	2.485
9	1.4	0.785	2.747
10	1.6	0.785	3.009
11	1.9	0.970	3.455
12	2.2	0.970	3.817
13	2.5	0.970	4.179
14	2.8	0.970	4.541
15	3.1	0.970	4.903
16	3.4	0.970	5.265
17	4.0	1.173	6.032
INCREMENT	0.45	-	0.582

NOTES:
1. QUANTITIES SHOWN ARE FOR MANHOLE WITHOUT PIPES. THE AMOUNT DISPLACED BY PIPES MUST BE DEDUCTED TO OBTAIN TRUE QUANTITIES.
2. A BASE THICKNESS OF 9" WAS USED IN COMPUTING CONCRETE QUANTITIES.
3. INCREMENTS TO BE ADDED FOR EACH ADDITIONAL FOOT OF DEPTH.
4. MATERIALS MAY BE BRICK, CONCRETE OR APPROVED CONCRETE MANHOLE BLOCK.
5. IF BLOCKS ARE USED THE MINIMUM THICKNESS OF SAME IS TO BE 5" OTHER THICKNESSES ARE TO CONFORM TO WALL THICKNESS SHOWN FOR CONCRETE.
6. ALL CONCRETE TO BE CLASS A3.
7. WHEN SPECIFIED ON PLANS THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.

SPECIFICATION REFERENCE	MANHOLE FOR 12" - 48" PIPE CULVERTS VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS	
302		REVISION DATE	SHEET 1 OF 5 106.01

3 MH-1

IS-1



NOTES:
SHAPING OF MANHOLE AND INLET INVERTS IN ACCORDANCE WITH THIS DRAWING IS TO APPLY TO THOSE STRUCTURES SPECIFIED ON PLANS OR WHERE INVERT OF PIPE IS ABOVE INVERT OF STRUCTURE.

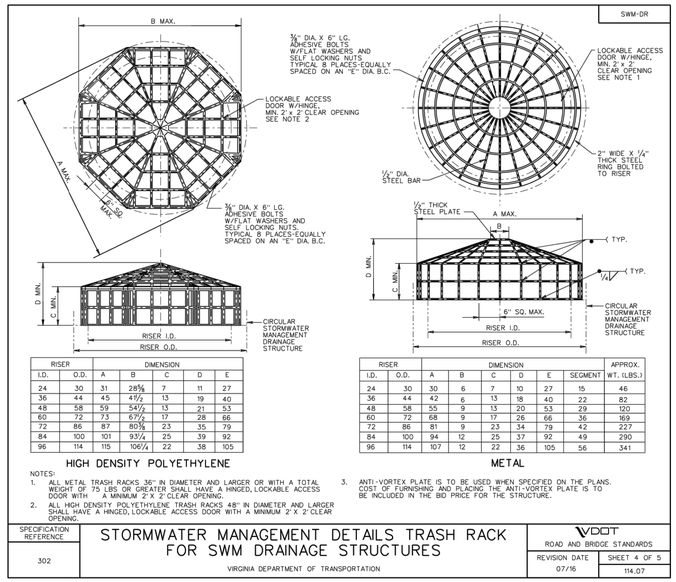
MANHOLE OR DROP INLET IS TO BE FORMED AND CONSTRUCTED IN ACCORDANCE WITH APPLICABLE STANDARD OR SPECIAL DRAWING. THE INVERT SHAPING AS DETAILED HEREON IS TO CONSIST OF A PORTLAND CEMENT CONCRETE MIX CONFORMING TO CLASS A3 OR CLASS C1 EXCEPT THAT 25% OF COARSE AGGREGATE MAY BE UP TO 4" IN DIAMETER AND CONSIST OF STONE, BROKEN BRICK, BROKEN CONCRETE OR BROKEN CONCRETE BLOCK. THE SURFACE SHALL BE LEFT SMOOTH BY MEANS OF HAND TROWELLING. NONE OF THE COARSE AGGREGATE SHALL REMAIN EXPOSED.

DETAILS OF INVERT SHAPING AS SHOWN HEREON ARE FOR EXAMPLE PURPOSES ONLY. EACH MANHOLE OR DROP INLET IS TO BE SHAPED INDIVIDUALLY TO BEST FIT THE PARTICULAR INLET AND OUTLET CONFIGURATION AND FLOW LINES.

VDOT ROAD AND BRIDGE STANDARDS		STANDARD METHOD OF SHAPING MANHOLE & INLET INVERTS VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 1	REVISION DATE		302
108.08			

4 IS-1

SWM-DR



RISER I.D.	RISER O.D.	DIMENSION A	B	C	D	E
24	30	31	28⅝	7	11	27
36	44	45	41½	13	19	40
48	58	59	54½	13	21	53
60	72	73	67⅝	17	28	66
72	86	87	80⅝	23	35	79
84	100	101	93¾	25	39	92
96	114	115	106¾	22	38	105

HIGH DENSITY POLYETHYLENE

RISER I.D.	RISER O.D.	DIMENSION A	B	C	D	E	SEGMENT	APPROX. WT. (LBS.)
24	30	30	6	7	10	27	15	46
36	44	42	6	13	18	40	22	82
48	58	55	9	13	20	53	29	120
60	72	68	9	17	26	66	36	169
72	86	81	9	23	34	79	42	227
84	100	94	12	25	37	92	49	290
96	114	107	12	22	36	105	56	341

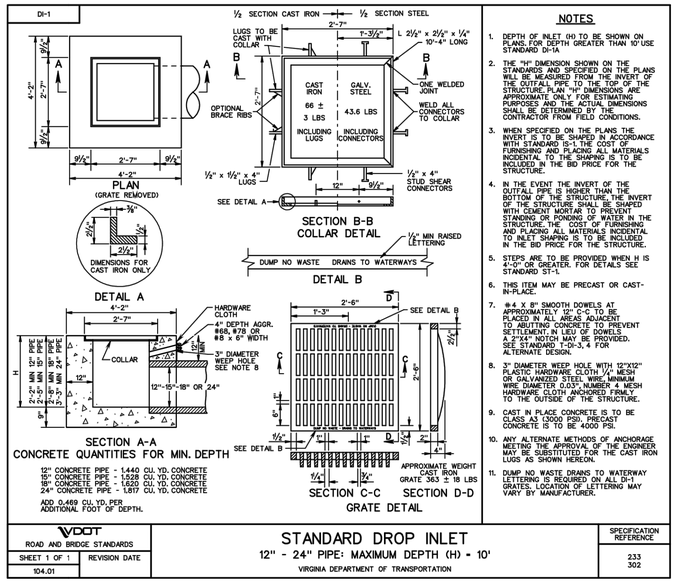
METAL

NOTES:
1. ALL METAL TRASH RACKS 36" IN DIAMETER AND LARGER OR WITH A TOTAL WEIGHT OF 75 LBS OR GREATER SHALL HAVE A HINGED, LOCKABLE ACCESS DOOR WITH A MINIMUM 2' X 2' CLEAR OPENING.
2. ALL HIGH DENSITY POLYETHYLENE TRASH RACKS 48" IN DIAMETER AND LARGER SHALL HAVE A HINGED, LOCKABLE ACCESS DOOR WITH A MINIMUM 2' X 2' CLEAR OPENING.
3. ANTI-VORTEX PLATE IS TO BE USED WHEN SPECIFIED ON THE PLANS. COST OF FURNISHING AND PLACING THE ANTI-VORTEX PLATE IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.

SPECIFICATION REFERENCE	STORMWATER MANAGEMENT DETAILS TRASH RACK FOR SWM DRAINAGE STRUCTURES VIRGINIA DEPARTMENT OF TRANSPORTATION	VDOT ROAD AND BRIDGE STANDARDS	
302		REVISION DATE	SHEET 4 OF 5 114.07
		07/16	

5 SWM-DR

DI-1



NOTES

1. DEPTH OF INLET (H) TO BE SHOWN ON PLANS. FOR DEPTH GREATER THAN 10' USE STANDARD DI-1A
2. THE "H" DIMENSION SHOWN ON THE STANDARDS AND SPECIFIED ON THE PLANS WILL BE MEASURED FROM THE INVERT OF THE OUTFALL PIPE TO THE TOP OF THE STRUCTURE. PLAN "H" DIMENSIONS ARE APPROXIMATE ONLY FOR ESTIMATING PURPOSES AND THE ACTUAL DIMENSIONS SHALL BE DETERMINED BY THE CONTRACTOR FROM FIELD CONDITIONS.
3. WHEN SPECIFIED ON THE PLANS, THE INVERT IS TO BE SHAPED IN ACCORDANCE WITH STANDARD IS-1. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO THE SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
4. IN THE EVENT THE INVERT OF THE OUTFALL PIPE IS HIGHER THAN THE BOTTOM OF THE STRUCTURE, THE INVERT OF THE STRUCTURE SHALL BE SHAPED WITH CEMENT MORTAR TO PREVENT STANDING OR PONDING OF WATER IN THE STRUCTURE. THE COST OF FURNISHING AND PLACING ALL MATERIALS INCIDENTAL TO INLET SHAPING IS TO BE INCLUDED IN THE BID PRICE FOR THE STRUCTURE.
5. STEPS ARE TO BE PROVIDED WHEN H IS 4'-0" OR GREATER. FOR DETAILS SEE STANDARD ST-1.
6. THIS ITEM MAY BE PRECAST OR CAST-IN-PLACE.
7. #4 X 8" SMOOTH DOWELS AT APPROXIMATELY 12" C-C TO BE PLACED IN ALL AREAS ADJACENT TO CAST-IN-PLACE CONCRETE TO PREVENT SETTLEMENT. IN LIEU OF DOWELS A 2"x4" NOTCH MAY BE PROVIDED. SEE STANDARD T-DI-3, 4 FOR ALTERNATE DESIGN.
8. 3" DIAMETER WEEP HOLE WITH 12"X12" PLASTIC HARDWARE CLOTH 1/4" MESH OR GALVANIZED STEEL WIRE, MINIMUM WIRE DIAMETER 0.03", NUMBER 4 MESH HARDWARE CLOTH ANCHORED FIRMLY TO THE OUTSIDE OF THE STRUCTURE.
9. CAST IN PLACE CONCRETE IS TO BE CLASS A3 (3000 PSI). PRECAST CONCRETE IS TO BE 4000 PSI.
10. ANY ALTERNATE METHODS OF ANCHORAGE MEETING THE APPROVAL OF THE ENGINEER MAY BE SUBSTITUTED FOR THE CAST IRON LUGS AS SHOWN HEREON.
11. DUMP NO WASTE DRAINS TO WATERWAY LETTERING IS REQUIRED ON ALL DI-1 GRATES. LOCATION OF LETTERING MAY VARY BY MANUFACTURER.

VDOT ROAD AND BRIDGE STANDARDS		STANDARD DROP INLET 12" - 24" PIPE: MAXIMUM DEPTH (H) = 10' VIRGINIA DEPARTMENT OF TRANSPORTATION	SPECIFICATION REFERENCE
SHEET 1 OF 1	REVISION DATE		233 302
104.01			

6 DI-1

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

UTILITY DETAILS

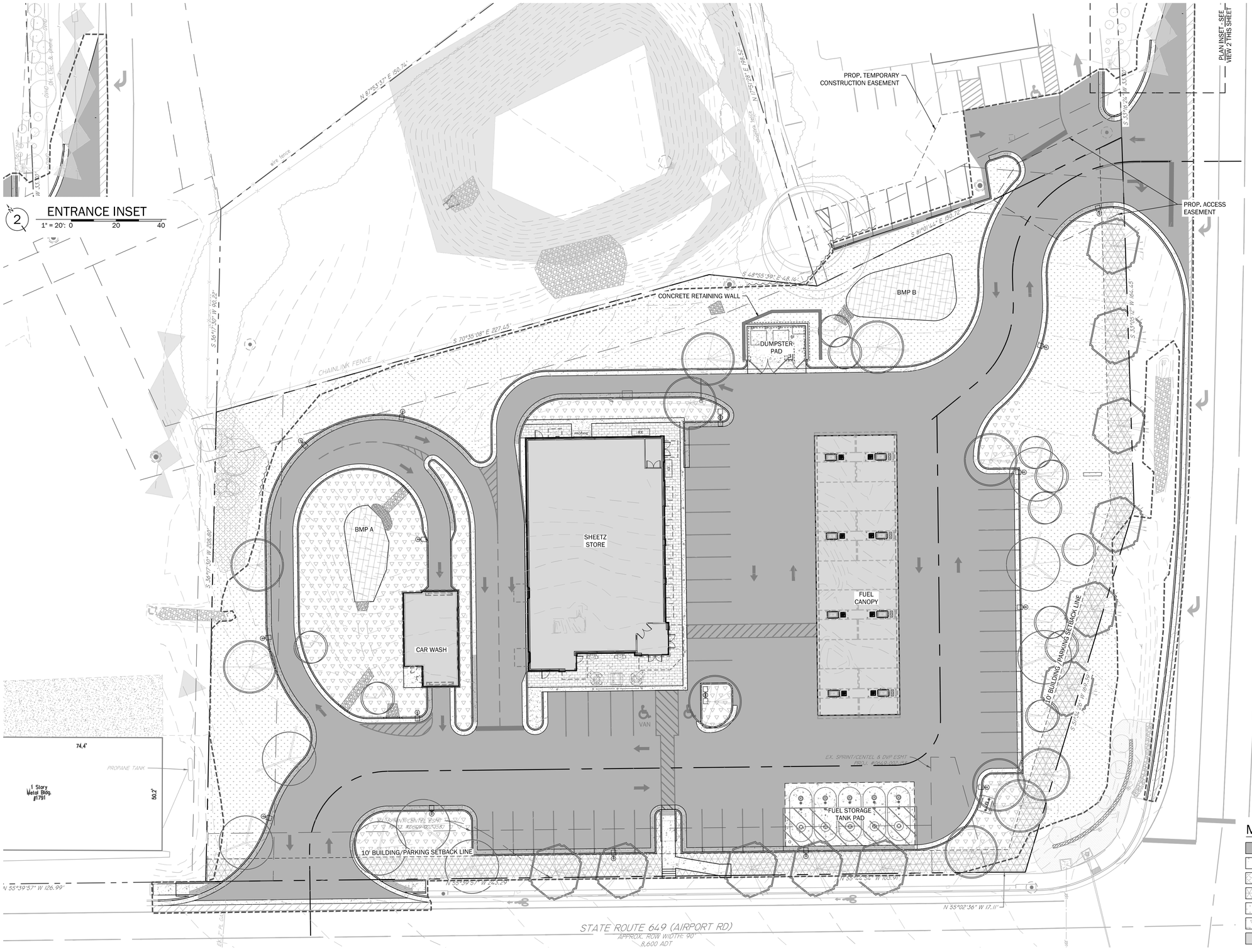
COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
LIC. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

THE WORK OF LINE + GRADE

C6.4

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MATERIALS LEGEND:

- ASPHALT (47,679 SF)
- CONCRETE (11,577 SF)
- PRESERVED LANDSCAPING (1,103 SF)
- STREET TREES PLANTING STRIP (5,915 SF)
- MANAGED TURF (24,171 SF)
- INTERIOR PLANTING AREA (8,283 SF)
- STRUCTURES (11,965 SF)

1 LANDSCAPE LAYOUT AND MATERIALS PLAN
1" = 20': 0 20 40

2 ENTRANCE INSET
1" = 20': 0 20 40

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

LANDSCAPE LAYOUT AND MATERIALS PLAN

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

THE WORK OF LINE + GRADE

C8.0

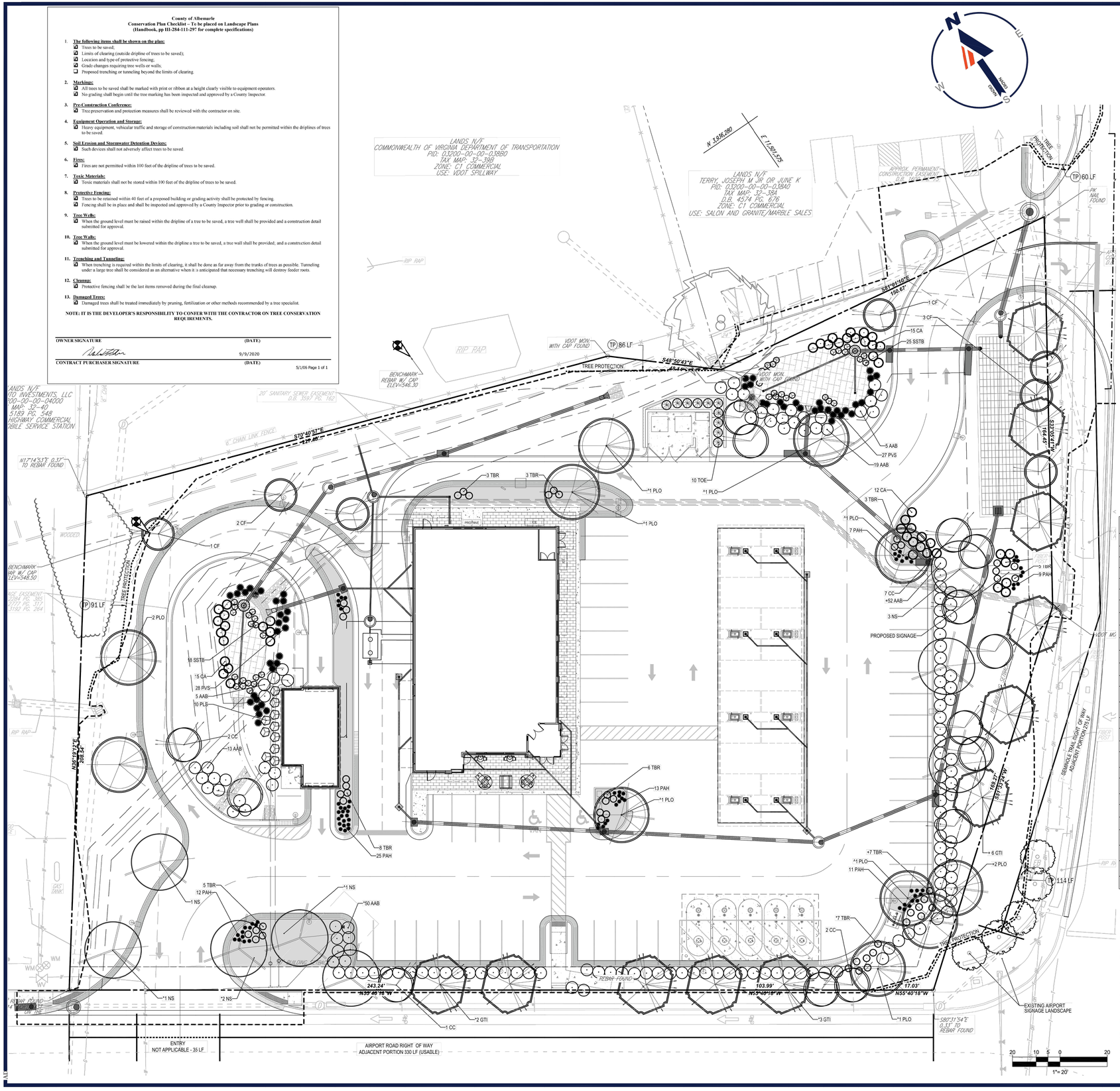
County of Albemarle
Conservation Plan Checklist – To be placed on Landscape Plans
(Handbook, pp III-254-111-297 for complete specifications)

1. **The following items shall be shown on the plan:**
   - ☑ Trees to be saved;
   - ☑ Limits of clearing (outside dripline of trees to be saved);
   - ☑ Locaion and type of protective fencing;
   - ☑ Grade changes requiring tree wells or walls;
   - ☐ Proposed trenching or tunneling beyond the limits of clearing.
2. **Markings:**
   - ☑ All trees to be saved shall be marked with print or ribbon at a height clearly visible to equipment operators.
   - ☑ No grading shall begin until the tree marking has been inspected and approved by a County Inspector.
3. **Pre-Construction Conference:**
   - ☑ Tree preservation and protection measures shall be reviewed with the contractor on site.
4. **Equipment Operation and Storage:**
   - ☑ Heavy equipment, vehicular traffic and storage of construction materials including soil shall not be permitted within the driplines of trees to be saved.
5. **Soil Erosion and Stormwater Detention Devices:**
   - ☑ Such devices shall not adversely affect trees to be saved.
6. **Fires:**
   - ☑ Fires are not permitted within 100 feet of the dripline of trees to be saved.
7. **Toxic Materials:**
   - ☑ Toxic materials shall not be stored within 100 feet of the dripline of trees to be saved.
8. **Protective Fencing:**
   - ☑ Trees to be retained within 40 feet of a proposed building or grading activity shall be protected by fencing.
   - ☑ Fencing shall be in place and shall be inspected and approved by a County Inspector prior to grading or construction.
9. **Tree Wells:**
   - ☑ When the ground level must be raised within the dripline of a tree to be saved, a tree well shall be provided and a construction detail submitted for approval.
10. **Tree Walls:**
    - ☑ When the ground level must be lowered within the dripline a tree to be saved, a tree wall shall be provided, and a construction detail submitted for approval.
11. **Trenching and Tunneling:**
    - ☑ When trenching is required within the limits of clearing, it shall be done as far away from the trunks of trees as possible. Tunneling under a large tree shall be considered as an alternative when it is anticipated that necessary trenching will destroy feeder roots.
12. **Cleanup:**
    - ☑ Protective fencing shall be the last items removed during the final cleanup.
13. **Damaged Trees:**
    - ☑ Damaged trees shall be treated immediately by pruning, fertilization or other methods recommended by a tree specialist.

NOTE: IT IS THE DEVELOPER'S RESPONSIBILITY TO CONFER WITH THE CONTRACTOR ON TREE CONSERVATION REQUIREMENTS.

OWNER SIGNATURE	(DATE)
	9/9/2020
CONTRACT PURCHASER SIGNATURE	**(DATE)**

5/1/06 Page 1 of 1



LANDSCAPE COMPLIANCE CHART

SECTION	REQUIREMENTS	CALCULATIONS	COMPLIANCE
ZONING 32.7.9.5 LANDSCAPING ALONG STREETS ARCH. REVIEW BOARD DESIGN GUIDELINES #32, A) LANDSCAPING	ONE (1) LARGE STREET TREE SHALL BE REQUIRED FOR EVERY FIFTY (50) FEET OF STREET FRONTAGE. SHRUBS ALONG PUBLIC STREETS. WHEN A PARKING AREA IS LOCATED SO THAT THE PARKED CARS WILL BE VISIBLE FROM AN OFF-SITE STREET,...SHRUBS SHALL BE IN A SINGLE ROW PLANTED FIVE FEET ON CENTER. LANDSCAPING ALONG THE FRONTAGE OF ENTRANCE CORRIDOR STREETS SHOULD INCLUDE THE FOLLOWING: LARGE SHADE TREES SHOULD BE PLANTED PARALLEL TO THE ENTRANCE CORRIDOR STREET. SUCH TREES SHOULD BE AT LEAST 3½ INCHES CALIPER (MEASURED 6 INCHES ABOVE THE GROUND) AND SHOULD BE OF A PLANT SPECIES COMMON TO THE AREA. SUCH TREES SHOULD BE LOCATED AT LEAST EVERY 35 FEET ON CENTER.	SEMINOLE TRAIL U.S RTE 29 275 LF STREET FRONTAGE 1/50 X 275 =5.5 LARGE TREES REQUIRED (PER ZONING) 1/35 X 275 =7.8 LARGE TREES REQUIRED (PER ARB) 8 LARGE TREES PROVIDED ADJACENT TO PARKING = 59 SHRUBS PROVIDED "+" INDICATED PLANT MATERIAL UTILIZED TO FULFIL THE REQUIREMENT AIRPORT ROAD U.S RTE 649 330 LF STREET FRONTAGE (USABLE) 1/50 X 330 =6.6 LARGE TREES REQUIRED (PER ZONING) 1/35 X 330 =9.4 LARGE TREES REQUIRED (PER ARB) + 9 LG. TREES PROVIDED + 3 SM. TREES PROVIDED ADJACENT TO PARKING = 57 SHRUBS PROVIDED "*" INDICATED PLANT MATERIAL UTILIZED TO FULFIL THE REQUIREMENT	COMPLIES
ZONING 32.7.9.6 LANDSCAPING WITHIN A PARKING AREA	AN AREA OF AT LEAST (5) PERCENT OF THE PAVED PARKING AND VEHICULAR CIRCULATION AREA SHALL BE LANDSCAPED WITH TREES OR SHRUBS. PLANT MATERIALS MAY BE A MIXTURE OF SHADE TEES AND SHRUBS AND SHALL INCLUDE ONE (1) LARGE SHADE TREE PER TEN (10) PARKING SPACES.	INTERIOR PARKING LOT LANDSCAPING PARKING LOT AREA: 51,763 SF INTERIOR LANDSCAPING (5%): 2,589 SF REQUIRED (5.6%) 2,885 SF PROPOSED INTERIOR PLANTING AREA PARKING LOT LANDSCAPING PROPOSED NUMBER OF PARKING SPACES: 47 (1 CANOPY TREE / 10 PARKING SPACES) REQUIRED CANOPY TREES: 5 PROPOSED CANOPY TREES: 7 "^" INDICATES PLANT MATERIAL UTILIZED TO FULFILL REQUIREMENT	COMPLIES
ZONING 32.7.9.7 SCREENING	FEATURES THAT MAY HAVE NEGATIVE VISUAL IMPACTS . FEATURES THAT MAY HAVE NEGATIVE VISUAL IMPACTS INCLUDING, BUT NOT LIMITED TO, THE FOLLOWING SHALL BE SCREENED FROM ADJACENT RESIDENTIAL AND RURAL AREAS DISTRICTS AND PUBLIC STREETS: (I) LOADING AREAS; (II) REFUSE AREAS	NORTH AND WEST PROPERTY LINE NO SCREENING REQUIRED. SIMILARLY ZONED COMMERCIAL SITES EXIST ADJACENT TO SITE. SITE FEATURES EVERGREEN SCREENING PROPOSED ADJACENT TO REFUSE AREA	COMPLIES
ZONING 32.7.9.8 TREE CANOPY	COMMERCIAL AND INDUSTRIAL USES: IF THE SITE IS TO BE DEVELOPED FOR COMMERCIAL OR INDUSTRIAL USES, THE MINIMUM TREE CANOPY IS TEN (10) PERCENT.	TREE CANOPY CALCULATION GROSS SITE AREA: 102,514 SF TREE CANOPY COVER REQUIRED (10%): 10,252 SF REQUIRED (34%) 23,614 SF PROVIDED TREES IN OFFSITE PLANTING EASEMENTS ARE NOT INCLUDED IN THIS CALCULATION.	COMPLIES

LANDSCAPE SCHEDULE

KEY	QTY.	BOTANICAL NAME	COMMON NAME	CAL. / HT.	CONT.	CANOPY	TOTAL
SHADE TREES							
GTI	11	GLEDITSIA TRIACANTHOS INERMIS	THORNLESS HONEYLOCUST	3 1/2" CAL. / 14-16'	B+B	541 EACH	5941
NS	8	NYSSA SYLVATICA	SOURGUM OR TUPELO	3 1/2" CAL. / 14-16'	B+B	181 EACH	1448
PLO	11	PLATANUS OCCIDENTALIS	AMERICAN SYCAMORE	3 1/2" CAL. / 14-16'	B+B	1475 EACH	16225
SUBTOTAL:	30					TOTAL	23,614
ORNAMENTAL TREES							
CC	11	CERCIS CANADENSIS	REDBUD	2 1/2" CAL. / 8-10'	B+B		
CF	7	CORNUS FLORIDA	DOGWOOD	2 1/2" CAL. / 8-10'	B+B		
SUBTOTAL:	18						
DECIDUOUS SHRUBS							
AAB	144	ARONIA ARBUTIFOLIA 'BRILLIANTISSIMA'	RED CHOKEBERRY	3-4' HT. & SPREAD	#5 CAN		
CA	48	CLETHRA ALNIFOLIA	SUMMERSWEET CLETHRA	3-4' HT. & SPREAD	#5 CAN		
SUBTOTAL:	192						
EVERGREEN TREES AND SHRUBS							
PLS	10	PRUNUS LAUROCERASUS 'SCHIPKAENSIS'	COMMON CHERRYLAUREL	3-4' HT. & SPREAD	#5 CAN		
TBR	47	TAXUS BACCATA 'REPANDENS'	SPREADING ENGLISH YEW	24" HT. & SPREAD	#5 CAN		
TOE	10	THUJA OCCIDENTALIS 'EMERALD GREEN'	EMERALD GREEN ARBORVITAE	5-6' HT	B+B		
SUBTOTAL:	67						
ORNAMENTAL GRASSES							
PAH	77	PENNISETUM ALOPECUROIDES 'HAMELN'	DWARF FOUNTAIN GRASS	1 GAL.	CONT.		
PVS	55	PANICUM VIRGATUM 'SHENANDOAH'	SHENANDOAH SWITCH GRASS	1 GAL.	CONT.		
SSTB	43	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM	1 GAL.	CONT.		
SUBTOTAL:	175						

GENERAL NOTES:

1. THIS PLAN IS TO BE UTILIZED FOR LANDSCAPE PURPOSES ONLY.
2. ALL DISTURBED UNPAVED AREAS, EXCLUDING PLANTING BEDS, ARE TO BE INSTALLED AS SODDED LAWN IN ACCORDANCE WITH LANDSCAPE SPECIFICATION #2.C., UNLESS OTHERWISE STATED ON THIS PLAN.
3. CONTRACTOR TO PROVIDE AN IRRIGATION DESIGN FOR BOTH LAWN AND BED AREAS. DESIGN IS TO BE SUBMITTED TO THE PROJECT LANDSCAPE ARCHITECT FOR REVIEW AND APPROVAL. CONTRACTOR IS ALSO RESPONSIBLE FOR ANY PRESSURE REDUCING DEVICES REQUIRED TO MEET MAXIMUM PRESSURE REQUIREMENT.
4. ALL LANDSCAPE BEDS THAT ARE NOT ASSOCIATED WITH A STORMWATER FACILITY ARE TO BE INSTALLED WITH WEED BARRIER FABRIC (SEE DETAIL).
5. WITHOUT EXCEPTION, WEED BARRIER FABRIC SHALL NOT BE USED AT THE BOTTOM OR SIDE SLOPES OF STORMWATER BMP FACILITIES.
6. SHRUBS PLANTED ALONG HEAD-IN PARKING STALLS SHALL BE INSTALLED TO ALLOW A CLEARANCE OF FIVE FEET FROM FACE OF CURB TO ALLOW FOR BUMPER OVERHANG.
7. WHEN APPLICABLE, CENTER OF PROPOSED ORNAMENTAL OR EVERGREEN TREE SHALL BE OFFSET 6' FROM THE BACK OF RETAINING WALLS (11' FOR SHADE TREES) TO PREVENT WALL FAILURE. FINAL PLANTING LOCATIONS SHALL BE COORDINATED WITH THE WALL DESIGNER.
8. ALL SITE PLANTINGS OF TREES AND SHRUBS SHALL BE ALLOWED TO REACH, AND BE MAINTAINED AT, MATURE HEIGHT; THE TOPPING OF TREES IS PROHIBITED. SHRUBS AND TREES SHALL BE PRUNED MINIMALLY AND ONLY TO SUPPORT THE OVERALL HEALTH OF THE PLANT
9. LANDSCAPING PLANTS AND TREES ADJACENT TO THE SIGHT DISTANCE TRIANGLE WILL NEED TO BE MAINTAINED IN AREA BETWEEN 2 AND 7 FEET ABOVE GROUND AS A CLEAR ZONE TO PRESERVE SIGHT LINES AND ACCOMMODATE PEDESTRIANS
10. ALL SITE PLANTINGS OF TREES AND SHRUBS SHALL BE ALLOWED TO REACH, AND BE MAINTAINED AT, MATURE HEIGHT; THE TOPPING OF TREES IS PROHIBITED. SHRUBS AND TREES SHALL BE PRUNED MINIMALLY AND ONLY TO SUPPORT THE OVERALL HEALTH OF THE PLANT.

BOHLER
SITE CIVIL AND CONSULTING ENGINEERING
LAND DEVELOPMENT
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	8/17/2020	COUNTY COMMENTS	AR / RY
2	8/28/2020	COUNTY COMMENTS	AR / RY
3	10/26/2020	COUNTY COMMENTS	AR / .
4	11.23.2020	COUNTY COMMENTS	AR / .

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PROJECT No.: V198402
DRAWN BY: ATR
CHECKED BY: RTY
DATE: 02/14/20
CAD I.D.:

PROJECT:

FINAL SITE PLAN

FOR

SHEETZ

PROPOSED DEVELOPMENT

ROUTE 29 & AIRPORT ROAD
CHARLOTTESVILLE, VA
ALBEMARLE COUNTY, VA

BOHLER
28 BLACKWELL PARK LANE, SUITE 201
WARRENTON, VIRGINIA 20186
Phone: (540) 349-4500
Fax: (540) 349-0321
VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA
C. ADAM T. ROGERS
Lic. No. 0406007810
11-23-2020
LANDSCAPE ARCHITECT

SHEET TITLE:

LANDSCAPE PLAN

SHEET NUMBER:

C8.1

REVISION 4 - 11.23.2020

H:\198\V198402\DRAWINGS\PLAN SET\FINAL LANDSCAPE PLAN\V198402.PLN — ATR — CS: LAND

LANDSCAPE SPECIFICATIONS

1. SCOPE OF WORK:
THE LANDSCAPE CONTRACTOR SHALL BE REQUIRED TO PERFORM ALL CLEARING, FINISHED GRADING, SOIL PREPARATION, PERMANENT SEEDING OR SODDING, PLANTING AND MULCHING INCLUDING ALL LABOR, MATERIALS, TOOLS AND EQUIPMENT NECESSARY FOR THE COMPLETION OF THIS PROJECT, UNLESS OTHERWISE CONTRACTED BY THE GENERAL CONTRACTOR.

2. MATERIALS

A. GENERAL - ALL HARDSCAPE MATERIALS SHALL MEET OR EXCEED SPECIFICATIONS AS OUTLINED IN THE STATE DEPARTMENT OF TRANSPORTATION'S SPECIFICATIONS.

B. TOPSOIL - NATURAL, FRIABLE, LOAMY SILT SOIL HAVING AN ORGANIC CONTENT NOT LESS THAN 5%, A PH RANGE BETWEEN 4.5-7.0. IT SHALL BE FREE OF DEBRIS, ROCKS LARGER THAN ONE INCH (1"), WOOD, ROOTS, VEGETABLE MATTER AND CLAY CLODS.

C. LAWN - ALL DISTURBED AREAS ARE TO BE TREATED WITH A MINIMUM SIX INCH (6") THICK LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, AND SEEDED OR SODDED IN ACCORDANCE WITH THE PERMANENT STABILIZATION METHODS INDICATED WITHIN THE SOIL EROSION AND SEDIMENT CONTROL NOTES.
1.1. LAWN SEED MIXTURE SHALL BE FRESH, CLEAN NEW CROP SEED.
1.2. SOD SHALL BE STRONGLY ROOTED, WEED AND DISEASE/PEST FREE WITH A UNIFORM THICKNESS.
1.3. SOD INSTALLED ON SLOPES GREATER THAN 4:1 SHALL BE PEGGED TO HOLD SOD IN PLACE.

D. MULCH - THE MULCH AROUND THE PERIMETER OF THE BUILDING SHALL BE A 3" LAYER OF DOUBLE SHREDDED BLACK CEDAR MULCH ONLY. ALL OTHER AREAS SHALL BE MULCHED WITH A 3" LAYER OF DOUBLE SHREDDED DARK BROWN HARDWOOD BARK MULCH, UNLESS OTHERWISE STATED ON THE LANDSCAPE PLAN.

E. FERTILIZER
1.1. FERTILIZER SHALL BE DELIVERED TO THE SITE MIXED AS SPECIFIED IN THE ORIGINAL UNOPENED STANDARD BAGS SHOWING WEIGHT, ANALYSIS AND NAME OF MANUFACTURER. FERTILIZER SHALL BE STORED IN A WEATHERPROOF PLACE SO THAT IT CAN BE KEPT DRY PRIOR TO USE.
1.2. FOR THE PURPOSE OF BIDDING, ASSUME THAT FERTILIZER SHALL BE 10% NITROGEN, 6% PHOSPHORUS AND 4% POTASSIUM BY WEIGHT. A FERTILIZER SHOULD NOT BE SELECTED WITHOUT A SOIL TEST PERFORMED BY A CERTIFIED SOIL LABORATORY.

F. PLANT MATERIAL
1.1. ALL PLANTS SHALL IN ALL CASES CONFORM TO THE REQUIREMENTS OF THE "AMERICAN STANDARD FOR NURSERY STOCK" (ANSI Z60.1), LATEST EDITION, AS PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION.
1.2. IN ALL CASES, BOTANICAL NAMES SHALL TAKE PRECEDENCE OVER COMMON NAMES FOR ANY AND ALL PLANT MATERIAL.
1.3. PLANTS SHALL BE LEGIBLY TAGGED WITH THE PROPER NAME AND SIZE. TAGS ARE TO REMAIN ON AT LEAST ONE PLANT OF EACH SPECIES FOR VERIFICATION PURPOSES DURING THE FINAL INSPECTION.
1.4. TREES WITH ABRASION OF THE BARK, SUN SCALDS, DISFIGURATION OR FRESH CUTS OF LIMBS OVER 1¼", WHICH HAVE NOT BEEN COMPLETELY CALLUSED, SHALL BE REJECTED.PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES.
1.5. ALL PLANTS SHALL BE TYPICAL OF THEIR SPECIES OR VARIETY AND SHALL HAVE A NORMAL HABIT OF GROWTH: WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE OF DISEASE, INSECTS, PESTS, EGGS OR LARVAE.
1.6. CALIPER MEASUREMENTS OF NURSERY GROWN TREES SHALL BE TAKEN AT A POINT ON THE TRUNK SIX INCHES (6") ABOVE THE NATURAL GRADE FOR TREES UP TO AND INCLUDING A FOUR INCH (4") CALIPER SIZE. IF THE CALIPER AT SIX INCHES (6") ABOVE THE GROUND EXCEEDS FOUR INCHES (4") IN CALIPER, THE CALIPER SHOULD BE MEASURED AT A POINT 12" ABOVE THE NATURAL GRADE.
1.7. SHRUBS SHALL BE MEASURED TO THE AVERAGE HEIGHT OR SPREAD OF THE SHRUB, AND NOT TO THE LONGEST BRANCH.
1.8. TREES AND SHRUBS SHALL BE HANDLED WITH CARE BY THE ROOT BALL.

3. GENERAL WORK PROCEDURES

A. CONTRACTOR TO UTILIZE WORKMANLIKE INDUSTRY STANDARDS IN PERFORMING ALL LANDSCAPE CONSTRUCTION. THE SITE IS TO BE LEFT IN A CLEAN STATE AT THE END OF EACH WORKDAY. ALL DEBRIS, MATERIALS AND TOOLS SHALL BE PROPERLY STORED, STOCKPILED OR DISPOSED OF.

B. WASTE MATERIALS AND DEBRIS SHALL BE COMPLETELY DISPOSED OF AT THE CONTRACTOR'S EXPENSE. DEBRIS SHALL NOT BE BURIED, INCLUDING ORGANIC MATERIALS, BUT SHALL BE REMOVED COMPLETELY FROM THE SITE.

4. SITE PREPARATIONS

A. BEFORE AND DURING PRELIMINARY GRADING AND FINISHED GRADING, ALL WEEDS AND GRASSES SHALL BE DUG OUT BY THE ROOTS AND DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES OUTLINED HEREIN.

B. ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR SHALL ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH CLEAN, SHARP TOOLS AND TOPSOIL SHALL BE PLACED AROUND THE REMAINDER OF THE ROOTS. EXISTING TREES SHALL BE MONITORED ON A REGULAR BASIS FOR ADDITIONAL ROOT OR BRANCH DAMAGE AS A RESULT OF CONSTRUCTION. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR SHALL WATER EXISTING TREES AS NEEDED TO PREVENT SHOCK OR DECLINE.

C. CONTRACTOR SHALL ARRANGE TO HAVE A UTILITY STAKE-OUT TO LOCATE ALL UNDERGROUND UTILITIES PRIOR TO INSTALLATION OF ANY LANDSCAPE MATERIAL. UTILITY COMPANIES SHALL BE CONTACTED THREE (3) DAYS PRIOR TO THE BEGINNING OF WORK.

5. TREE PROTECTION

A. CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF ALL EXISTING TREES TO REMAIN. A TREE PROTECTION ZONE SHALL BE ESTABLISHED AT THE DRIP LINE OR 15 FEET FROM THE TRUNK OR AT THE LIMIT OF CONSTRUCTION DISTURBANCE, WHICHEVER IS GREATER. LOCAL STANDARDS THAT MAY REQUIRE A MORE STRICT TREE PROTECTION ZONE SHALL BE HONORED.

B. A FORTY-EIGHT INCH (48") HIGH WOODEN SNOW FENCE OR ORANGE COLORED HIGH-DENSITY 'VISI-FENCE', OR APPROVED EQUAL, MOUNTED ON STEEL POSTS SHALL BE PLACED ALONG THE BOUNDARY OF THE TREE PROTECTION ZONE. POSTS SHALL BE LOCATED AT A MAXIMUM OF EIGHT FEET (8') ON CENTER OR AS INDICATED WITHIN THE TREE PROTECTION DETAIL.

C. WHEN THE TREE PROTECTION FENCING HAS BEEN INSTALLED, IT SHALL BE INSPECTED BY THE APPROVING AGENCY PRIOR TO DEMOLITION, GRADING, TREE CLEARING OR ANY OTHER CONSTRUCTION. THE FENCING ALONG THE TREE PROTECTION ZONE SHALL BE REGULARLY INSPECTED BY THE LANDSCAPE CONTRACTOR AND MAINTAINED UNTIL ALL CONSTRUCTION ACTIVITY HAS BEEN COMPLETED.

D. AT NO TIME SHALL MACHINERY, DEBRIS, FALLEN TREES OR OTHER MATERIALS BE PLACED, STOCKPILED OR LEFT STANDING IN THE TREE PROTECTION ZONE.

6. SOIL MODIFICATIONS

A. CONTRACTOR SHALL ATTAIN A SOIL TEST FOR ALL AREAS OF THE SITE PRIOR TO CONDUCTING ANY PLANTING. SOIL TESTS SHALL BE PERFORMED BY A CERTIFIED SOIL LABORATORY.

B. LANDSCAPE CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL. SOIL MODIFICATIONS, AS SPECIFIED HEREIN, MAY NEED TO BE CONDUCTED BY THE LANDSCAPE CONTRACTOR DEPENDING ON SITE CONDITIONS.

C. THE FOLLOWING AMENDMENTS AND QUANTITIES ARE APPROXIMATE AND ARE FOR BIDDING PURPOSES ONLY. COMPOSITION OF AMENDMENTS SHOULD BE REVISED DEPENDING ON THE OUTCOME OF A TOPSOIL ANALYSIS PERFORMED BY A CERTIFIED SOIL LABORATORY.
1.1. TO INCREASE A SANDY SOIL'S ABILITY TO RETAIN WATER AND NUTRIENTS, THOROUGHLY TILL ORGANIC MATTER INTO THE TOP 6-12". USE COMPOSTED BARK, COMPOSTED LEAF MULCH OR PEAT MOSS. ALL PRODUCTS SHOULD BE COMPOSTED TO A DARK COLOR AND BE FREE OF PIECES WITH IDENTIFIABLE LEAF OR WOOD STRUCTURE. AVOID MATERIAL WITH A PH HIGHER THAN 7.5.
1.2. TO INCREASE DRAINAGE, MODIFY HEAVY CLAY OR SILT (MORE THAN 40% CLAY OR SILT) BY ADDING COMPOSTED PINE BARK (UP TO 30% BY VOLUME) AND/OR AGRICULTURAL GYPSUM. COARSE SAND MAY BE USED IF ENOUGH IS ADDED TO BRING THE SAND CONTENT TO MORE THAN 60% OF THE TOTAL MIX. SUBSURFACE DRAINAGE LINES MAY NEED TO BE ADDED TO INCREASE DRAINAGE.
1.3. MODIFY EXTREMELY SANDY SOILS (MORE THAN 85%) BY ADDING ORGANIC MATTER AND/OR DRY, SHREDDED CLAY LOAM UP TO 30% OF THE TOTAL MIX.

7. FINISHED GRADING

A. UNLESS OTHERWISE CONTRACTED, THE LANDSCAPE CONTRACTOR SHALL BE RESPONSIBLE FOR THE INSTALLATION OF TOPSOIL AND THE ESTABLISHMENT OF FINE-GRADING WITHIN THE DISTURBANCE AREA OF THE SITE.

B. LANDSCAPE CONTRACTOR SHALL VERIFY THAT SUBGRADE FOR INSTALLATION OF TOPSOIL HAS BEEN ESTABLISHED. THE SUBGRADE OF THE SITE MUST MEET THE FINISHED GRADE LESS THE REQUIRED TOPSOIL THICKNESS (1"±).

C. ALL LAWN AND PLANTING AREAS SHALL BE GRADED TO A SMOOTH, EVEN AND UNIFORM PLANE WITH NO ABRUPT CHANGE OF SURFACE AS DEPICTED WITHIN THIS SET OF CONSTRUCTION PLANS, UNLESS OTHERWISE DIRECTED BY THE PROJECT ENGINEER OR LANDSCAPE ARCHITECT.

D. ALL PLANTING AREAS SHALL BE GRADED AND MAINTAINED TO ALLOW FREE FLOW OF SURFACE WATER IN AND AROUND THE PLANTING BEDS. STANDING WATER SHALL NOT BE PERMITTED IN PLANTING BEDS.

8. TOPSOILING

A. CONTRACTOR SHALL PROVIDE A SIX INCH (6") THICK MINIMUM LAYER OF TOPSOIL, OR AS DIRECTED BY THE LOCAL ORDINANCE OR CLIENT, IN ALL PLANTING AREAS. TOPSOIL SHOULD BE SPREAD OVER A PREPARED SURFACE IN A UNIFORM LAYER TO ACHIEVE THE DESIRED COMPACTED THICKNESS.

B. ON-SITE TOPSOIL MAY BE USED TO SUPPLEMENT THE TOTAL AMOUNT REQUIRED. TOPSOIL FROM THE SITE MAY BE REJECTED IF IT HAS NOT BEEN PROPERLY REMOVED, STORED AND PROTECTED PRIOR TO CONSTRUCTION.

C. CONTRACTOR SHALL FURNISH TO THE APPROVING AGENCY AN ANALYSIS OF BOTH IMPORTED AND ON-SITE TOPSOIL TO BE UTILIZED IN ALL PLANTING AREAS. THE PH AND NUTRIENT LEVELS MAY NEED TO BE ADJUSTED THROUGH SOIL MODIFICATIONS AS NEEDED TO ACHIEVE THE REQUIRED LEVELS AS SPECIFIED IN THE MATERIALS SECTION ABOVE.

D. ALL PLANTING AND LAWN AREAS ARE TO BE CULTIVATED TO A DEPTH OF SIX INCHES (6"). ALL DEBRIS EXPOSED FROM EXCAVATION AND CULTIVATION SHALL BE DISPOSED OF IN ACCORDANCE WITH GENERAL WORK PROCEDURES SECTION ABOVE. THE FOLLOWING SHALL BE TILLED INTO THE TOP FOUR INCHES (4") IN TWO DIRECTIONS (QUANTITIES BASED ON A 1,000 SQUARE FOOT AREA):
1.1. 20 POUNDS 'GROW POWER' OR APPROVED EQUAL
1.2. 20 POUNDS NITRO-FORM (COURSE) 38-0-0 BLUE CHIP

E. THE SPREADING OF TOPSOIL SHALL NOT BE CONDUCTED UNDER MUDDY OR FROZEN CONDITIONS.

9. PLANTING

A. INSOFAR THAT IT IS FEASIBLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THAT THIS IS NOT POSSIBLE, LANDSCAPE CONTRACTOR SHALL PROTECT UNINSTALLED PLANT MATERIAL. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. PLANTS THAT WILL NOT BE PLANTED FOR A PERIOD OF TIME GREATER THAN THREE DAYS SHALL BE HEALED IN WITH TOPSOIL OR MULCH TO HELP PRESERVE ROOT MOISTURE.

B. PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION.

C. ANY INJURED ROOTS OR BRANCHES SHALL BE PRUNED TO MAKE CLEAN-CUT ENDS PRIOR TO PLANTING UTILIZING CLEAN, SHARP TOOLS. ONLY INJURED OR DISEASED BRANCHING SHALL BE REMOVED.

D. ALL PLANTING CONTAINERS AND NON-BIODEGRADABLE MATERIALS SHALL BE REMOVED FROM ROOT BALLS DURING PLANTING. NATURAL FIBER BURLAP MUST BE CUT FROM AROUND THE TRUNK OF THE TREE AND FOLDED DOWN AGAINST THE ROOT BALL PRIOR TO BACKFILLING.

E. POSITION TREES AND SHRUBS AT THEIR INTENDED LOCATIONS AS PER THE PLANS AND SECURE THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO EXCAVATING PITS, MAKING NECESSARY ADJUSTMENTS AS DIRECTED.

F. PRIOR TO THE ISSUANCE OF ANY CERTIFICATE OF OCCUPANCY, THE PROPOSED LANDSCAPE, AS SHOWN ON THE APPROVED LANDSCAPE PLAN, MUST BE INSTALLED, INSPECTED AND APPROVED BY THE APPROVING AGENCY. THE APPROVING AGENCY SHALL TAKE INTO ACCOUNT SEASONAL CONSIDERATIONS IN THIS REGARD AS FOLLOWS. THE PLANTING OF TREES, SHRUBS, VINES OR GROUND COVER SHALL OCCUR ONLY DURING THE FOLLOWING PLANTING SEASONS:
1.1. PLANTS: MARCH 15 TO DECEMBER 15
1.2. LAWN: MARCH 15 TO JUNE 15 OR SEPT. 1 TO DECEMBER 1

G. PLANTINGS REQUIRED FOR A CERTIFICATE OF OCCUPANCY SHALL BE PROVIDED DURING THE NEXT APPROPRIATE SEASON AT THE MUNICIPALITY'S DISCRETION. CONTRACTOR SHOULD CONTACT APPROVING AGENCY FOR POTENTIAL SUBSTITUTIONS.

H. FURTHERMORE, THE FOLLOWING TREE VARIETIES ARE UNUSUALLY SUSCEPTIBLE TO WINTER DAMAGE. WITH TRANSPLANT SHOCK AND THE SEASONAL LACK OF NITROGEN AVAILABILITY, THE RISK OF PLANT DEATH IS GREATLY INCREASED. IT IS NOT RECOMMENDED THAT THESE SPECIES BE PLANTED DURING THE FALL PLANTING SEASON:

ACER RUBRUM	PLATANUS X ACERIFOLIA
BETULA VARIETIES	POPULOUS VARIETIES
CARPINUS VARIETIES	PRUNUS VARIETIES
CRATAEGUS VARIETIES	PYRUS VARIETIES
KOELREUTERIA	QUERCUS VARIETIES
LIQUIDAMBER STYRACIFLUA	TILIA TOMENTOSA
LIRIODENDRON TULIPIFERA	ZELKOVA VARIETIES

I. PLANTING PITS SHALL BE DUG WITH LEVEL BOTTOMS, WITH THE WIDTH TWICE THE DIAMETER OF ROOT BALL. THE ROOT BALL SHALL REST ON UNDISTURBED GRADE. EACH PLANT PIT SHALL BE BACKFILLED IN LAYERS WITH THE FOLLOWING PREPARED SOIL MIXED THOROUGHLY:
- 1 PART PEAT MOSS
- 1 PART COMPOSTED COW MANURE BY VOLUME
- 3 PARTS TOPSOIL BY VOLUME
- 21 GRAMS 'AGRIFORM' PLANTING TABLETS (OR APPROVED EQUAL) AS FOLLOWS:
  - A) 2 TABLETS PER 1 GALLON PLANT
  - B) 3 TABLETS PER 5 GALLON PLANT
  - C) 4 TABLETS PER 15 GALLON PLANT
  - D) LARGER PLANTS: 2 TABLETS PER ½" CALIPER OF TRUNK

J. FILL PREPARED SOIL AROUND BALL OF PLANT HALF-WAY AND INSERT PLANT TABLETS. COMPLETE BACKFILL AND WATER THOROUGHLY.

K. ALL PLANTS SHALL BE PLANTED SO THAT THE TOP OF THE ROOT BALL, THE POINT AT WHICH THE ROOT FLARE BEGINS, IS SET AT GROUND LEVEL AND IN THE CENTER OF THE PIT. NO SOIL IS TO BE PLACED DIRECTLY ON TOP OF THE ROOT BALL.

L. ALL PROPOSED TREES DIRECTLY ADJACENT TO WALKWAYS OR DRIVEWAYS SHALL BE PRUNED AND MAINTAINED TO A MINIMUM BRANCHING HEIGHT OF 7' FROM GRADE.

M. GROUND COVER AREAS SHALL RECEIVE A ¼" LAYER OF HUMUS RAKED INTO THE TOP 1" OF PREPARED SOIL PRIOR TO PLANTING. ALL GROUND COVER AREAS SHALL BE WEEDED AND TREATED WITH A PRE-EMERGENT CHEMICAL AS PER MANUFACTURER'S RECOMMENDATION.

N. NO PLANT, EXCEPT GROUND COVERS, GRASSES OR VINES, SHALL BE PLANTED LESS THAN TWO FEET (2') FROM EXISTING STRUCTURES AND SIDEWALKS.

O. ALL PLANTING AREAS AND PLANTING PITS SHALL BE MULCHED AS SPECIFIED HEREIN TO FILL THE ENTIRE BED AREA OR SAUCER. NO MULCH IS TO TOUCH THE TRUNK OF THE TREE OR SHRUB.

P. ALL PLANTING AREAS SHALL BE WATERED IMMEDIATELY UPON INSTALLATION IN ACCORDANCE WITH THE WATERING SPECIFICATIONS AS LISTED HEREIN.

10. TRANSPLANTING (WHEN REQUIRED)

A. ALL TRANSPLANTS SHALL BE DUG WITH INTACT ROOT BALLS CAPABLE OF SUSTAINING THE PLANT.

B. IF PLANTS ARE TO BE STOCKPILED BEFORE REPLANTING, THEY SHALL BE HEALED IN WITH MULCH OR SOIL, ADEQUATELY WATERED AND PROTECTED FROM EXTREME HEAT, SUN AND WIND.

C. PLANTS SHALL NOT BE DUG FOR TRANSPLANTING BETWEEN APRIL 10 AND JUNE 30.

D. UPON REPLANTING, BACKFILL SOIL SHALL BE AMENDED WITH FERTILIZER AND ROOT GROWTH HORMONE.

E. TRANSPLANTS SHALL BE GUARANTEED FOR THE LENGTH OF THE GUARANTEE PERIOD SPECIFIED HEREIN.

F. IF TRANSPLANTS DIE, SHRUBS AND TREES LESS THAN SIX INCHES (6") DBH SHALL BE REPLACED IN KIND. TREES GREATER THAN SIX INCHES (6") DBH MAY BE REQUIRED TO BE REPLACED IN ACCORDANCE WITH THE MUNICIPALITY'S TREE REPLACEMENT GUIDELINES.

11. WATERING

A. NEW PLANTINGS OR LAWN AREAS SHALL BE ADEQUATELY IRRIGATED BEGINNING IMMEDIATELY AFTER PLANTING. WATER SHALL BE APPLIED TO EACH TREE AND SHRUB IN SUCH MANNER AS NOT TO DISTURB BACKFILL AND TO THE EXTENT THAT ALL MATERIALS IN THE PLANTING HOLE ARE THOROUGHLY SATURATED. WATERING SHALL CONTINUE AT LEAST UNTIL PLANTS ARE ESTABLISHED.

B. SITE OWNER SHALL PROVIDE WATER IF AVAILABLE ON SITE AT TIME OF PLANTING. IF WATER IS NOT AVAILABLE ON SITE, CONTRACTOR SHALL SUPPLY ALL NECESSARY WATER. THE USE OF WATERING BAGS IS RECOMMENDED FOR ALL NEWLY PLANTED TREES.

C. IF AN IRRIGATION SYSTEM HAS BEEN INSTALLED ON THE SITE, IT SHALL BE USED TO WATER PROPOSED PLANT MATERIAL, BUT ANY FAILURE OF THE SYSTEM DOES NOT ELIMINATE THE CONTRACTOR'S RESPONSIBILITY OF MAINTAINING THE DESIRED MOISTURE LEVEL FOR VIGOROUS, HEALTHY GROWTH.

12. GUARANTEE

A. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANTS FOR A PERIOD OF ONE (1) YEAR FROM APPROVAL OF LANDSCAPE INSTALLATION BY THE APPROVING AGENCY. CONTRACTOR SHALL SUPPLY THE OWNER WITH A MAINTENANCE BOND FOR TEN PERCENT (10%) OF THE VALUE OF THE LANDSCAPE INSTALLATION WHICH WILL BE RELEASED AT THE CONCLUSION OF THE GUARANTEE PERIOD AND WHEN A FINAL INSPECTION HAS BEEN COMPLETED AND APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

B. ANY DEAD OR DYING PLANT MATERIAL SHALL BE REPLACED FOR THE LENGTH OF THE GUARANTEE PERIOD. REPLACEMENT OF PLANT MATERIAL SHALL BE CONDUCTED AT THE FIRST SUCCEEDING PLANTING SEASON. ANY DEBRIS SHALL BE DISPOSED OF OFF-SITE, WITHOUT EXCEPTION.

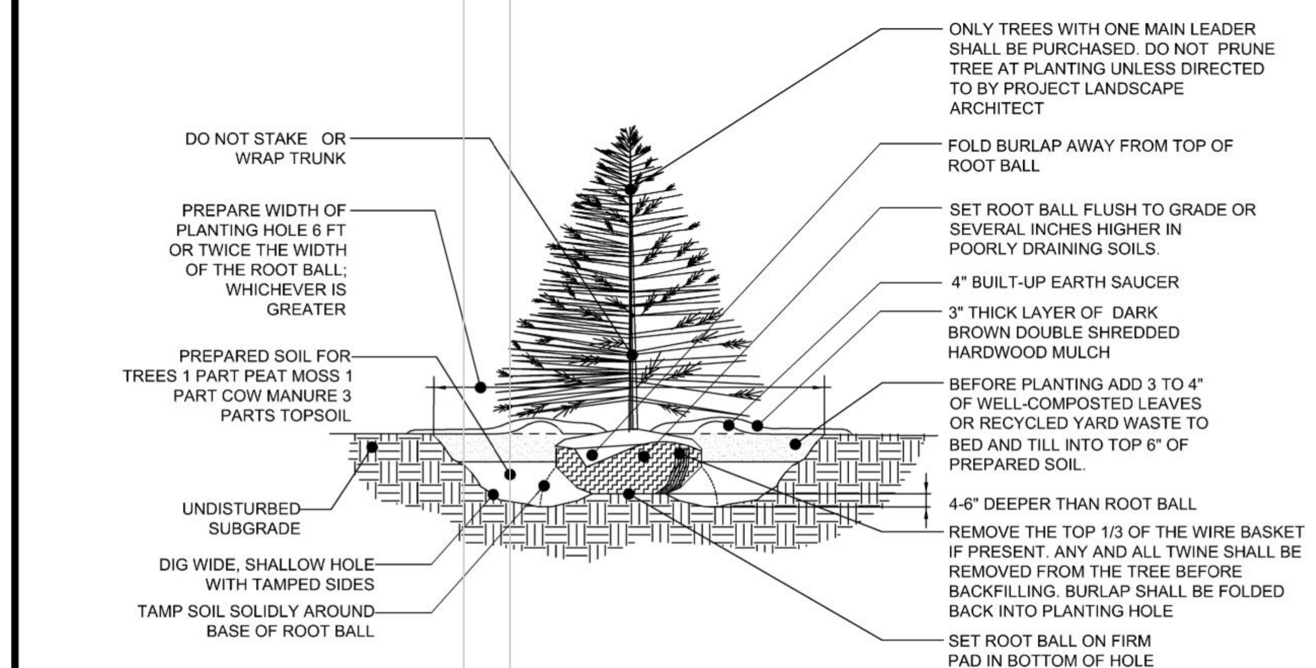
C. TREES AND SHRUBS SHALL BE MAINTAINED BY THE CONTRACTOR DURING CONSTRUCTION AND THROUGHOUT THE 90 DAY MAINTENANCE PERIOD AS SPECIFIED HEREIN. CULTIVATION, WEEDING, WATERING AND THE PREVENTATIVE TREATMENTS SHALL BE PERFORMED AS NECESSARY TO KEEP PLANT MATERIAL IN GOOD CONDITION AND FREE OF INSECTS AND DISEASE.

D. LAWNS SHALL BE MAINTAINED THROUGH WATERING, FERTILIZING, WEEDING, MOWING, TRIMMING AND OTHER OPERATIONS SUCH AS ROLLING, REGARDING AND REPLANTING AS REQUIRED TO ESTABLISH A SMOOTH, ACCEPTABLE LAWN, FREE OF ERODED OR BARE AREAS.

13. CLEANUP

A. UPON THE COMPLETION OF ALL LANDSCAPE INSTALLATION AND BEFORE THE FINAL ACCEPTANCE, THE CONTRACTOR SHALL REMOVE ALL UNUSED MATERIALS, EQUIPMENT AND DEBRIS FROM THE SITE. ALL PAVED AREAS ARE TO BE CLEANED.

B. THE SITE SHALL BE CLEANED AND LEFT IN A NEAT AND ACCEPTABLE CONDITION AS APPROVED BY THE OWNER OR AUTHORIZED REPRESENTATIVE.

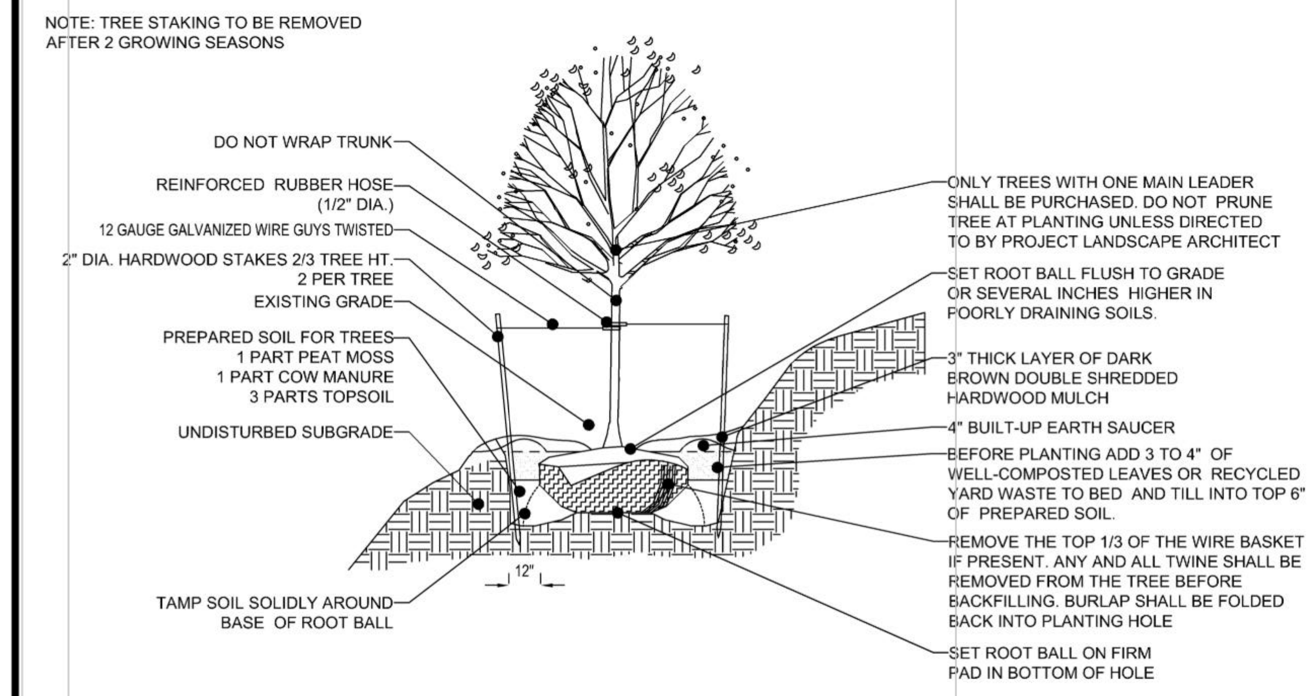


REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

EVERGREEN TREE PLANTING DETAIL

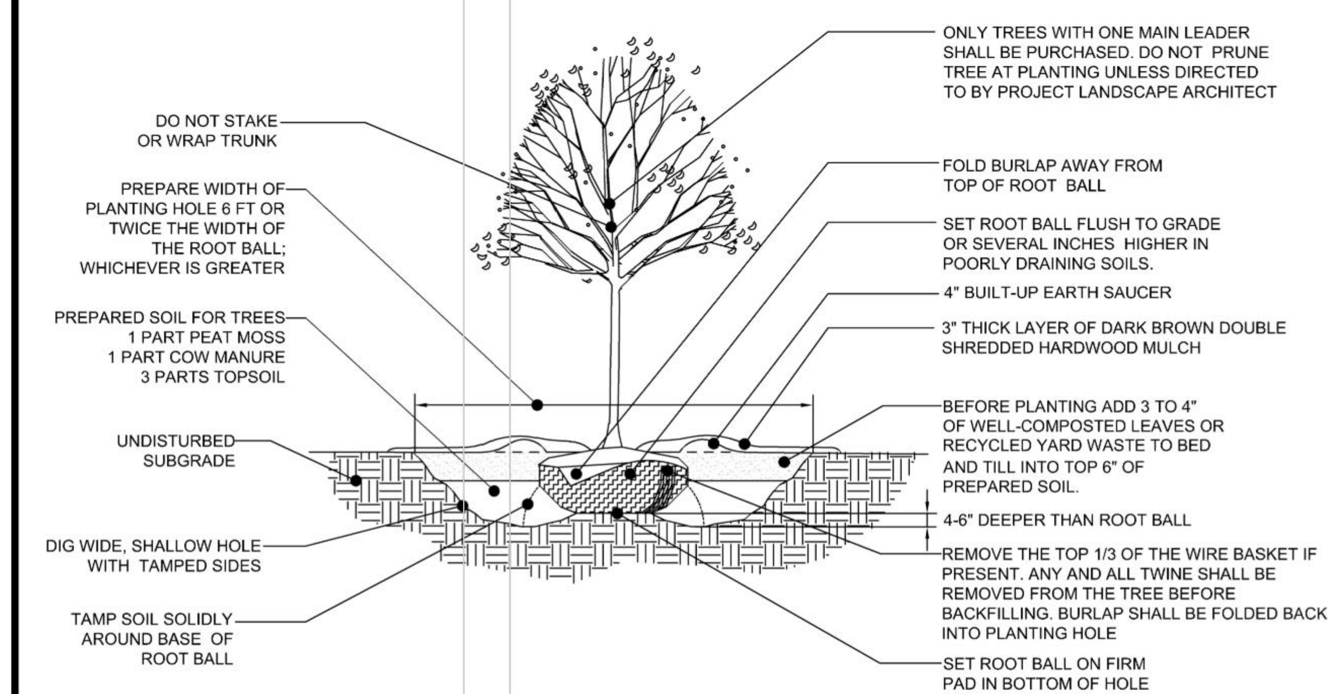
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NOTE: TREE STAKING TO BE REMOVED AFTER 2 GROWING SEASONS



TREE PLANTING ON SLOPE DETAIL

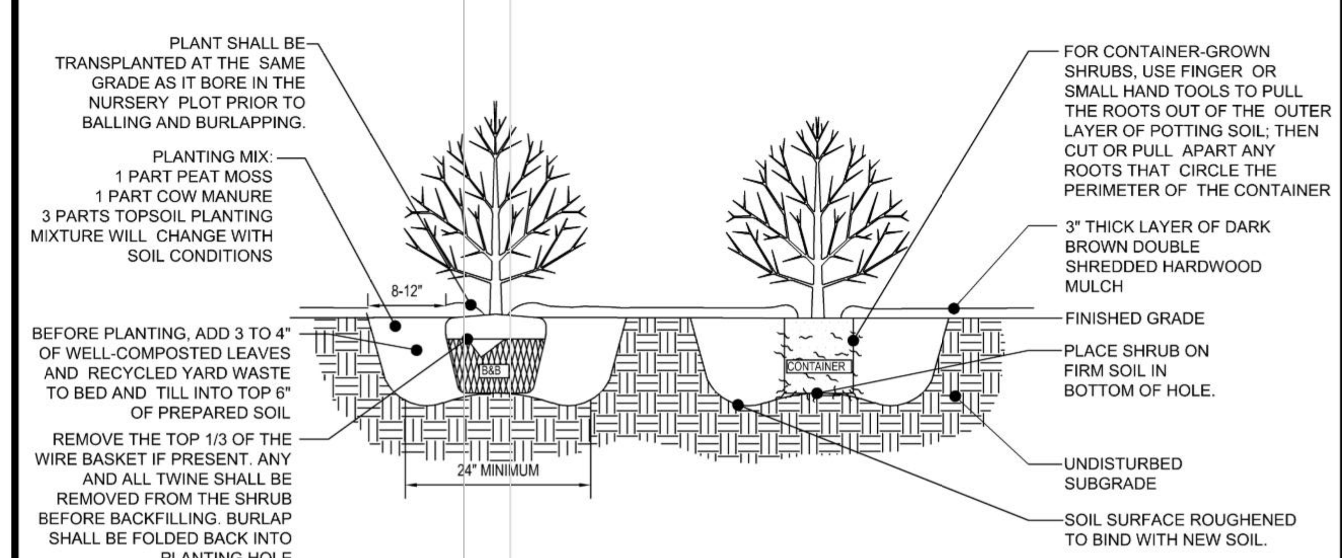
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REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT.

DECIDUOUS TREE PLANTING DETAIL

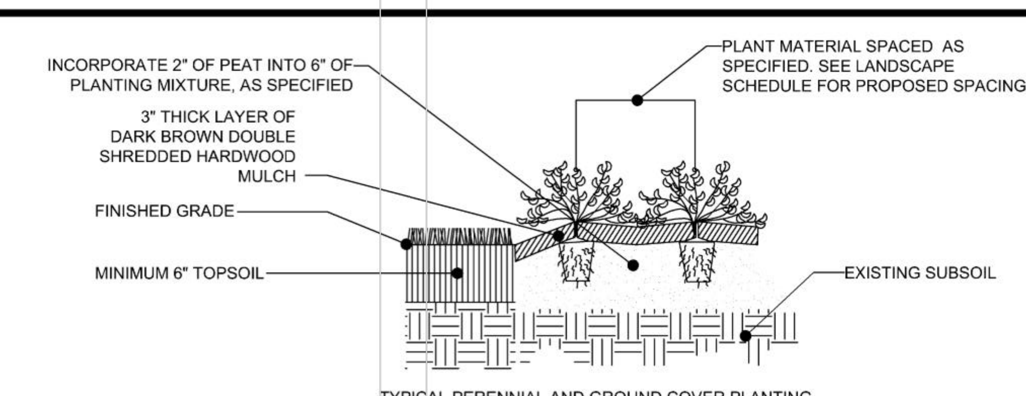
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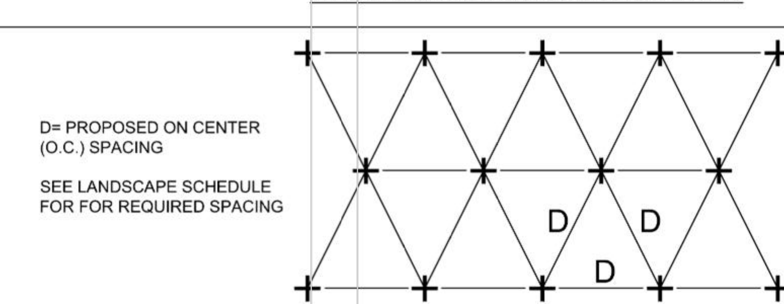
REFERENCE: ARCHITECTURAL GRAPHIC STANDARDS 1998 CUMULATIVE SUPPLEMENT

DECIDUOUS AND EVERGREEN SHRUB PLANTING DETAIL

NOT TO SCALE



TYPICAL PERENNIAL AND GROUND COVER PLANTING



TYPICAL PERENNIAL AND GROUND COVER SPACING & LAYOUT

PERENNIAL/GROUND COVER PLANTING DETAIL

NOT TO SCALE

SEEDING SPECIFICATIONS

1. MATERIAL:

1.1. SEED MIXTURE MUST BE COMPRISED OF THE FOLLOWING VARIETIES AND AT THE SPECIFIED COMPOSITION:
1.1.1. 80% - TURF TYPE TALL FESCUE SEED
1.1.2. 10% - KENTUCKY BLUEGRASS SEED
1.1.3. 10% - ANNUAL RYE GRASS SEED
1.2. INSTALLATION RATES:
1.2.1. SEED: LAWN SEED SHOULD BE APPLIED AT A RATE OF 7 LBS/1,000 SF
1.2.2. LIME: AGRICULTURAL OR PELLETIZED LIME SHOULD BE APPLIED AT SPECIFIED RATE ACCORDING TO SOIL ANALYSIS OR 2,000 LBS PER ACRE (46 LBS/1,000 SF) IF NO SOIL ANALYSIS IS PERFORMED.
1.2.3. FERTILIZER: COMMERCIAL GRADE 12-20-12 SHOULD BE APPLIED AT A RATE OF 250 LBS PER PER ACRE (5.8 LBS/ 1,000 SF)
1.2.4. LIQUID OR DRY LIME: LIQUID LIME SHOULD BE APPLIED AT A RATE OF 2.5 GALLONS PER ACRE OR NEUTRA LIME DRY APPLIED AT A RATE OF 80LBS PER ACRE IN AREAS OF ACIDIC SOILS TO ASSURE GERMINATION AND INITIAL ESTABLISHMENT.
1.2.5. MULCH: WHEAT, OAT, OR BARLEY STRAW MULCH SHALL BE APPLIED AT A RATE OF 80 LBS PER 1,000 SF. DO NOT INSTALL MULCH SO THICK THAT IT COMPLETELY COVERS THE GROUND. TOPSOIL SHOULD BE VISIBLE THROUGH THE STRAW LAYER.

2. EXECUTION AND PREPARATION:

2.1. A SOIL ANALYSIS SHOULD BE PERFORMED TO ASSESS THE FERTILITY NEEDS AND PH OF THE SOIL. ALL INSTALLATION AREAS SHOULD BE PREPARED TO AGRICULTURAL STANDARD RECOMMENDED BY THE DEPARTMENT OF AGRICULTURE WITHIN THE STATE WHERE THE WORK IS BEING PERFORMED. AGRICULTURAL LIME OR PELLETIZED LIME SHOULD BE ADDED DURING THE GROUND PREPARATION STAGE AT THE RATE RECOMMENDED ACCORDING TO SOIL ANALYSIS.
2.2. ALL WEEDS AND UNDESIRABLE PLANTS SHOULD BE REMOVED BEFORE PLANTING BY METHOD OF SPRAYING OR TILLAGE. A NON-SELECTIVE HERBICIDE CAN BE SPRAYED ONE MONTH PRIOR TO PLANTING TO KILL ALL WEEDS AND UNDESIRABLE PLANTS THAT MAY COMPETE WITH THE NEW SEEDLINGS. TILLAGE CAN BE PERFORMED AT LEAST 4 WEEKS PRIOR TO PLANTING AND AGAIN 2 WEEKS AFTER THE INITIAL TILLAGE. THE TILLAGE PROCEDURE CAN BE ADVANTAGEOUS IF LARGE AMOUNTS OF ORGANIC DEBRIS ARE PRESENT ON THE INSTALLATION AREAS.
2.3. PRIOR TO SEEDING, AREA IS TO BE TOPSOILED, FINE GRADED, AND RAKED OF ALL DEBRIS LARGER THAN 2" DIAMETER.
2.4. AREAS TO BE PLANTED SHOULD BE ROLLED WITH A CULTI-PACKER, TURF ROLLER, OR SIMILAR DEVICE TO FIRM THE SEEDBED. THIS PROCESS HELPS ACHIEVE THE DESIRED FIRMNESS. SOIL SHOULD BE FIRMED TO 85% OF COMPACTION.

3. INSTALLATION:

3.1. STRICTLY COMPLY WITH MANUFACTURER'S INSTALLATION INSTRUCTIONS AND RECOMMENDATIONS.
3.2. EQUIPMENT USED TO SPREAD SEED SHOULD HAVE SUFFICIENT CAPACITY TO HOLD AND AGITATE SEED EVENLY IN A CYCLONE OR DROP PATTERN. HYDROSEEDING MAY ALSO BE PERFORMED WITH THE ENGINEER/ARCHITECT'S APPROVAL.
3.3. SEED MAY NEED TO BE APPLIED AT A HALF RATE IN ALTERNATING DIRECTIONS TO ENSURE AN EVEN COVERAGE OF SEED.
3.4. LIQUID LIME OR NEUTRA LIME DRY SHOULD BE TOPICALLY APPLIED TO AREAS WITH ACIDIC SOILS TO ASSIST THE SEED GERMINATION AND VEGETATION GROWTH DURING THE FIRST 90 DAYS. LIQUID LIME SHOULD BE APPLIED AT A RATE OF 2.5 GALLONS PER ACRE OR NEUTRA LIME DRY AT A RATE OF 80LBS PER ACRE.
3.5. FERTILIZER SHOULD BE SPREAD EVENLY OVER THE SEEDED AREAS AT THE RECOMMENDED RATE DETERMINED BY THE INITIAL SOIL ANALYSIS. IF NO SOIL ANALYSIS IS AVAILABLE EVENLY APPLY 12-20-12 STARTER FERTILIZER AT A RATE OF 250LBS PER ACRE (5.8LBS/1000 SQUARE FEET).
3.6. A ROLLED EROSION CONTROL PRODUCT CAN BE APPLIED OVER THE TOP OF SEED IN STEEP SLOPE SITUATIONS TO HELP PREVENT SEED FROM WASHING AND REINFORCE VEGETATION THROUGH ESTABLISHMENT. (FOLLOW REC PRODUCT MANUFACTURER RECOMMENDATIONS.)

4. MAINTENANCE

4.1. FREQUENT LIGHT IRRIGATION WILL NEED TO BE APPLIED TO SEEDED AREAS IF NO NATURAL RAIN EVENTS HAVE OCCURRED WITHIN 2 WEEKS OF SEEDING. AFTER SEED GERMINATION HAS OCCURRED AND PLANTS ARE VISIBLE THE FREQUENCY OF IRRIGATION CAN BE CUT BACK WITH HEAVIER APPLICATION RATES.
4.2. REPAIR ALL SEED WASHINGS AND EROSION.

OWNER MAINTENANCE RESPONSIBILITIES

UPON OWNER'S (OR OWNER CONTRACTOR'S) COMPLETION OF LANDSCAPING WORK, THE OWNER IS FULLY RESPONSIBLE FOR ALL FUTURE MAINTENANCE, CARE, UPKEEP, WATERING, AND TRIMMING OF ALL INSTALLED VEGETATION, PLANTS, TREE, BUSHES, SHRUBS, GRASSES, GRASS, ORNAMENTAL PLANTS AND FLOWERS, FLOWERS, GROUND COVER, AND LANDSCAPING, INCLUDING ALL LANDSCAPE ISLANDS AND AREAS ADJACENT OR PART OF THE LANDSCAPED AREAS. THIS RESPONSIBILITY INCLUDES, BUT IS NOT LIMITED TO, THE FOLLOWING:

- TREES ADJACENT TO WALKWAYS AND AREAS OF PEDESTRIAN TRAFFIC MUST BE MAINTAINED TO ASSURE THAT ANY BRANCHES MUST BE LIMBED UP TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PEDESTRIAN SURFACES) OR PRUNED BACK TO AVOID ANY INTERFERENCE WITH THE TYPICAL PATH OF TRAVEL.
- TREES WITHIN VEHICULAR SIGHT LINES, AS ILLUSTRATED ON THE LANDSCAPE PLAN, ARE TO BE TRIMMED TO A CLEARANCE HEIGHT OF 7 FT. (FROM ALL PAVED, TRAVELED SURFACES), OR AS OTHERWISE INDICATED ON THE PLANS.
- VEGETATIVE GROUND COVER, SHRUBS AND ORNAMENTAL PLANTS AND GRASSES MUST BE TRIMMED SO THAT NO PORTION OF THE PLANT EXCEEDS 30 INCHES ABOVE GRADE (OF ALL PAVED, TRAVEL SURFACES) ALONG AND WITHIN THE SIGHT LINES OF PARKING LOTS AND INGRESS-EGRESS WAYS.
- FALLEN PLANT FLOWERS, FRUIT, SEEDS AND DEBRIS DROPPINGS ARE TO BE REMOVED IMMEDIATELY FROM VEHICULAR AND PEDESTRIAN TRAFFIC AREAS TO PREVENT TRIPPING, SLIPPING OR ANY OTHER HAZARDS.

THESE REQUIREMENTS DO NOT AFFECT THE PLANT LIFE GUARANTEES THE LANDSCAPE CONTRACTOR IS REQUIRED TO PROVIDE.

BOHLER™
SITE CIVIL AND CONSULTING ENGINEERING
LAND SURVEYING
PROGRAM MANAGEMENT
LANDSCAPE ARCHITECTURE
SUSTAINABLE DESIGN
PERMITTING SERVICES
TRANSPORTATION SERVICES

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REVISIONS

REV	DATE	COMMENT	DRAWN BY / CHECKED BY
1	8/17/2020	COUNTY COMMENTS	AR / RY
2	8/28/2020	COUNTY COMMENTS	AR / RY

Know what's below. Call before you dig.
ALWAYS CALL 811
It's fast. It's free. It's the law.

NOT APPROVED FOR CONSTRUCTION

THIS DRAWING IS INTENDED FOR MUNICIPAL AND/OR AGENCY REVIEW AND APPROVAL. IT IS NOT INTENDED AS A CONSTRUCTION DOCUMENT UNLESS INDICATED OTHERWISE.

PROJECT No.:	V198402
DRAWN BY:	ATR
CHECKED BY:	RTY
DATE:	02/14/20
CAD I.D.:	

PROJECT:

FINAL SITE PLAN

FOR

SHEETZ

PROPOSED DEVELOPMENT

ROUTE 29 & AIRPORT ROAD
CHARLOTTESVILLE, VA
ALBEMARLE COUNTY, VA

BOHLER
28 BLACKWELL PARK LANE, SUITE 201
WARRENTON, VIRGINIA 20186
Phone: (540) 349-4500
Fax: (540) 349-0321
VA@BohlerEng.com

COMMONWEALTH OF VIRGINIA
ADAM T. ROGERS
Lic. No. 0406001810
09-09-2020
LANDSCAPE ARCHITECT

SHEET TITLE:

LANDSCAPE DETAILS

SHEET NUMBER:

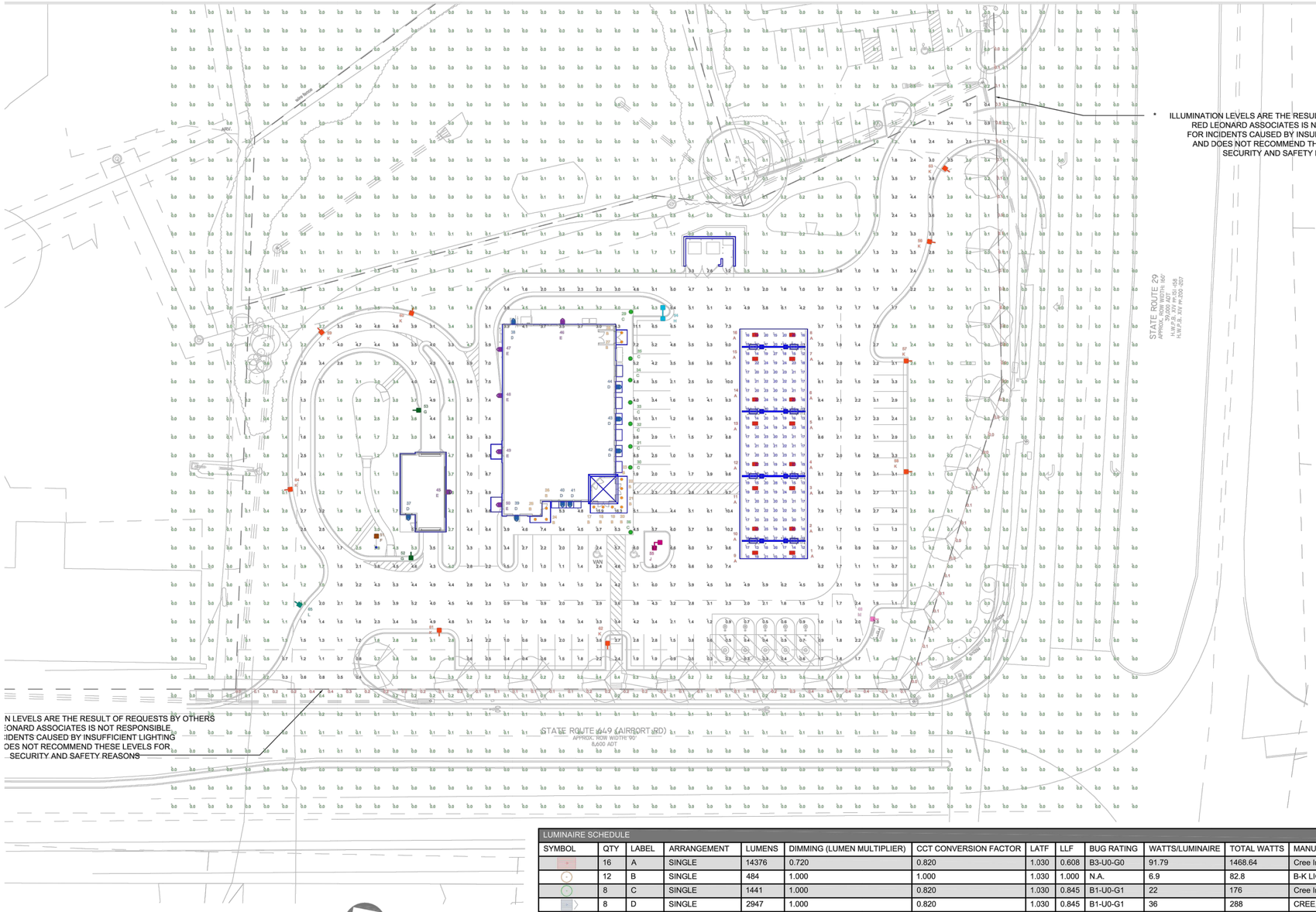
C8.2

REVISION 2 - 8/28/2020

H:\19\V198402\DRAWINGS\PLAN SETS\LANDSCAPE PLAN\V198402LP0----->LAYOUT: C8.2 DETAILS

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red leonard associates
1340 Kemper Meadow Dr. | Cincinnati, OH 45240 | 513-574-9500
www.redleonard.com



* ILLUMINATION LEVELS ARE THE RESULT OF REQUESTS BY OTHERS RED LEONARD ASSOCIATES IS NOT RESPONSIBLE FOR INCIDENTS CAUSED BY INSUFFICIENT LIGHTING AND DOES NOT RECOMMEND THESE LEVELS FOR SECURITY AND SAFETY REASONS

LUMINAIRE LOCATION SUMMARY			
LUM NO.	LABEL	MTG. HT.	TILT
1 - 8	A	17.05	5
9 - 16	A	18.73	5
17 - 28	B	11.33	0
29 - 36	C	3	0
37 - 39	D	9.33	0
40 - 44	D	12	0
45 - 48	E	12	0
49, 50	E	10	0
51	F	1	170
52, 53	G	20	0
54	H	20	0
55	J	20	0
56 - 64	K	20	0
65	L	20	0
66	M	20	0

NOTE:
- ALL AREA LIGHTS ON NEW 17 FT. POLE MOUNTED ON 3 FT. CONCRETE BASE

NOTE REQUIRED BY ARCITECTURAL REVIEW BOARD:
- EACH OUTDOOR LUMINAIRE EQUIPPED WITH A LAMP THAT EXCEEDS 3,000 OR MORE INITIAL LUMENS SHALL BE A FULL CUT-OFF LUMINAIRE AND SHALL BE ARRANGED OR SHIELDED TO REFLECT LIGHT AWAY FROM ADJOINING RESIDENTIAL DISTRICTS AND AWAY FROM ADJACENT ROADS. THE SPILLOVER OF LIGHTING FROM LUMINAIRES ONTO PUBLIC ROADS AND PROPERTY IN RESIDENTIAL OR RURAL AREAS OF ZONING DISTRICTS SHALL NOT EXCEED ONE-HALF FOOTCANDLE.

FOOTCANDLE LEVELS CALCULATED AT GRADE USING INITIAL LUMEN VALUES					
LABEL	AVG	MAX	MIN	AVG/MIN	MAX/MIN
RIGHT OF WAY LINES	0.14	0.5	0.0	N.A.	N.A.
SITE PAVED AREA	3.41	16.3	0.3 *	11.37	54.33
UNDEFINED	0.26	6.3	0.0	N.A.	N.A.
UNDER CANOPY	19.50 *	28	11	1.77	2.55

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THIS SITE IS LOCATED IN A REGION WHERE LIGHTING IS REGULATED BY LOCAL ORDINANCES

OWNER/OWNER'S REPRESENTATIVE TO ADJUST DRIVE CURRENT ON FIXTURES A, L, & M VIA DIAL ACCESSED IN DRIVER ENCLOSURE TO SWITCH POSITION NOTED IN DESCRIPTION COLUMN OF LUMINAIRE SCHEDULE

* ILLUMINATION LEVELS ARE THE RESULT OF REQUESTS BY OTHERS RED LEONARD ASSOCIATES IS NOT RESPONSIBLE FOR INCIDENTS CAUSED BY INSUFFICIENT LIGHTING AND DOES NOT RECOMMEND THESE LEVELS FOR SECURITY AND SAFETY REASONS

LUMINAIRE SCHEDULE													
SYMBOL	QTY	LABEL	ARRANGEMENT	LUMENS	DIMMING (LUMEN MULTIPLIER)	CCT CONVERSION FACTOR	LATF	LLF	BUG RATING	WATTS/LUMINAIRE	TOTAL WATTS	MANUFACTURER	CATALOG LOGIC
	16	A	SINGLE	14376	0.720	0.820	1.030	0.608	B3-U0-G0	91.79	1468.64	Cree Inc	CAN-228-PS-RM-06-E-UL-WH-700-30K (SET TO SWITCH POSITION 3 IN FIELD)
	12	B	SINGLE	484	1.000	1.000	1.030	1.000	N.A.	6.9	82.8	B-K LIGHTING, INC.	BKLT CH-LED-e69-FL-BZP-12 (BY OTHERS, SHOWN FOR CONTRIBUTION)
	8	C	SINGLE	1441	1.000	0.820	1.030	0.845	B1-U0-G1	22	176	Cree Inc	PWY-EDG-3M-P3-02-E-UL-BZ-350-30K
	8	D	SINGLE	2947	1.000	0.820	1.030	0.845	B1-U0-G1	36	288	CREE, INC.	SEC-EDG-3M-WM-02-E-UL-BZ-525-30K
	6	E	SINGLE	5893	1.000	0.820	1.030	0.845	B2-U0-G2	68	408	CREE, INC.	SEC-EDG-3M-WM-04-E-UL-BZ-525-30K
	1	F	SINGLE	9914	1.000	1.000	1.040	1.040	B4-U0-G0	86	86	Cree Inc	OSQ-AABZ w/PGM-1 + OSQ-A-NM-15D-B-30K-UL-BZ
	2	G	SINGLE	10229	1.000	1.000	1.030	1.030	B2-U0-G2	85.67	171.34	Cree Inc	OSQ-DABZ + OSQ-A-NM-4ME-B-30K-UL-BZ
	1	H	BACK-BACK	10229	1.000	1.000	1.030	1.030	B2-U0-G2	85.67	171.34	Cree Inc	OSQ-DABZ + OSQ-A-NM-4ME-B-30K-UL-BZ
	1	J	2 @ 90 DEGREES	10229	1.000	1.000	1.030	1.030	B2-U0-G2	85.67	171.34	Cree Inc	OSQ-DABZ + OSQ-A-NM-4ME-B-30K-UL-BZ
	9	K	SINGLE	8251	1.000	1.000	1.030	1.030	B1-U0-G2	86	774	Cree Inc	OSQ-DABZ + OSQ-A-NM-4ME-B-30K-UL-BZ w_OSQ-BLSMF
	1	L	SINGLE	8251	0.510	1.000	1.030	0.525	B1-U0-G2	45	45	Cree Inc	OSQ-DABZ + OSQ-A-NM-4ME-B-30K-UL-BZ-Q2 w_OSQ-BLSMF
	1	M	SINGLE	8251	0.720	1.000	1.030	0.742	B1-U0-G2	62	62	Cree Inc	OSQ-DABZ + OSQ-A-NM-4ME-B-30K-UL-BZ-Q4 w_OSQ-BLSMF

DESCRIPTION

REVISED PER REVIEW COMMENTS AND UPDATED SITE BASE PLAN

REVISED CANOPY (SLOPED, TALL SIDE TOWARD STORE), REDUCED CANOPY LIGHT LEVELS; ALL LIGHTS 3000 KELVIN.

PERSONS USING THIS PROGRAM ARE ADVISED THAT THIS PROGRAM MAY CONTAIN ERRORS WHICH RED LEONARD ASSOCIATES, INC. OFTEN DISCOVERS WHEN REVIEWING A PROJECT. IN ADDITION, THE USE OF THIS PROGRAM TO AID IN LAYOUT OF LIGHTING AND ESTIMATING MATERIAL QUANTITIES IS NOT INTENDED TO REMOVE THE RESPONSIBILITY OF THE USER TO VERIFY THE COMPLETENESS OF ANY BILL OF MATERIAL AND THAT THE LAYOUT OR USE OF LUMINAIRES IS IN FULL ACCORDANCE WITH ALL LOCAL, STATE, OR FEDERAL CODES, ORDINANCES, OR OTHER REQUIREMENTS, OR THE REQUIREMENTS OF ANY INSURANCE GROUP, ORGANIZATION OR CARRIER REGARDING LUMINAIRES AND THEIR APPLICATION.

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ILLUMINATION RESULTS SHOWN ON THIS LIGHTING APPLICATION ARE BASED ON PROJECT PARAMETERS PROVIDED BY THE MANUFACTURER LISTED. USED IN CONJUNCTION WITH LUMINAIRE TEST PROCEDURES CONDUCTED UNDER LABORATORY CONDITIONS. ACTUAL PROJECT CONDITIONS DIFFERING FROM THOSE SPECIFIED MAY YIELD RESULTS OTHER THAN SHOWN. CUSTOMER IS RESPONSIBLE FOR VERIFYING COMPLIANCE WITH ANY APPLICABLE ELECTRICAL, LIGHTING, OR ENERGY CODE.

SCALE: 1" = 30'
LAYOUT BY: DAR
DWG SIZE: D
DATE: 2/18/20

PROJECT NAME:
SHEETZ
ALBEMARLE, VA
DRAWING NUMBER:
RL-6591-S1-R2

rla

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

PHOTOMETRY

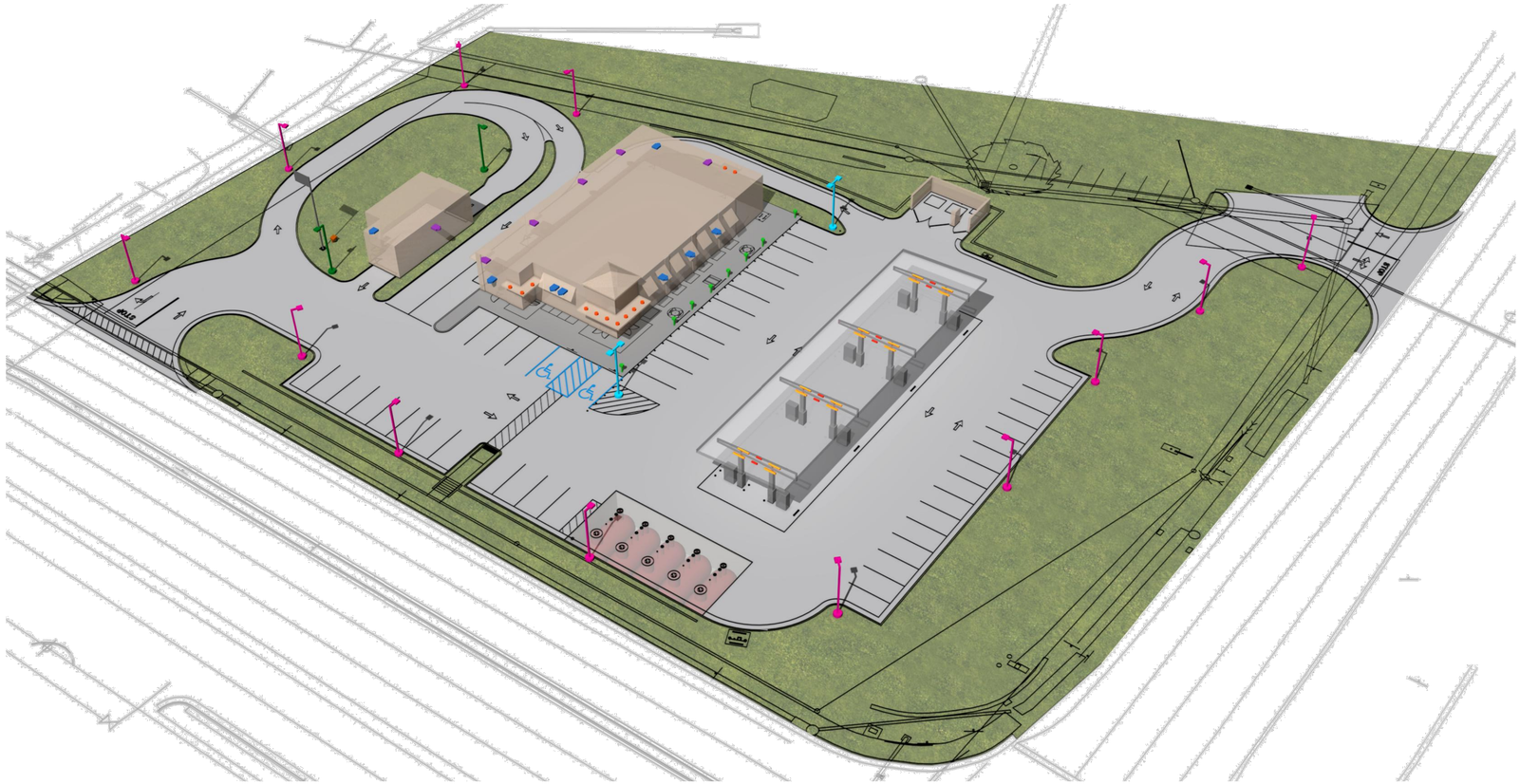
COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

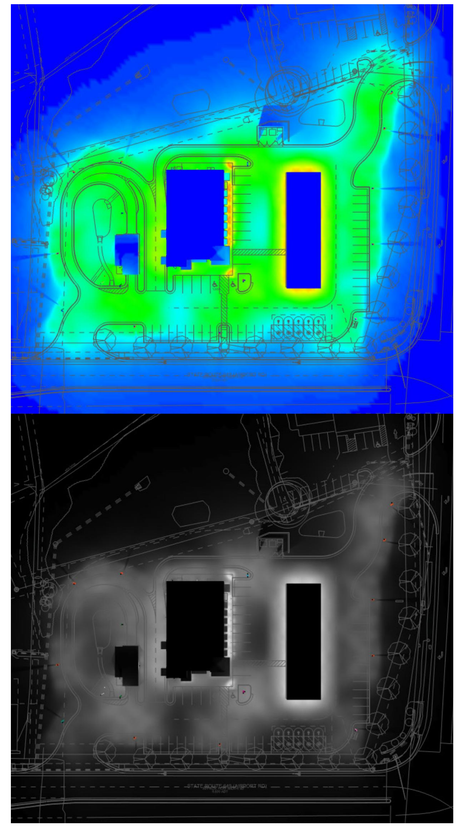
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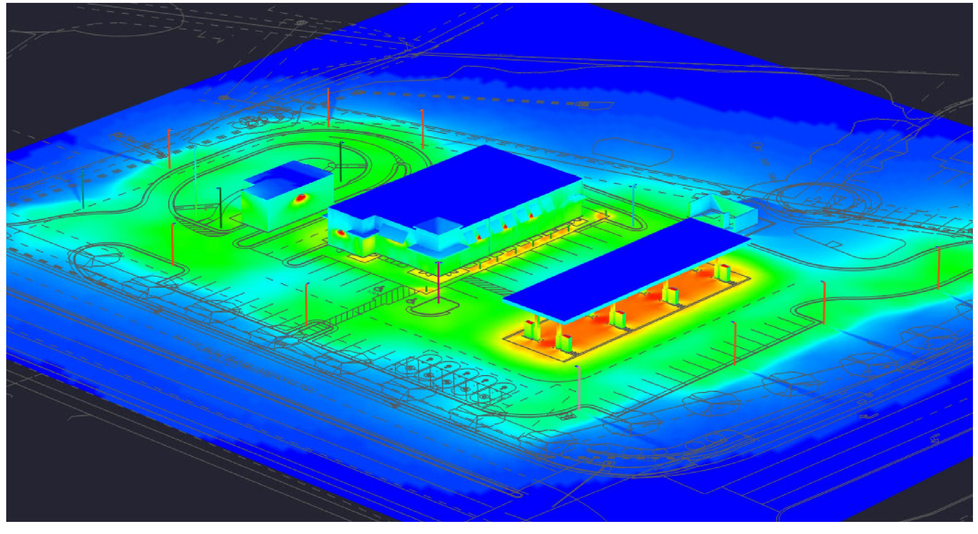
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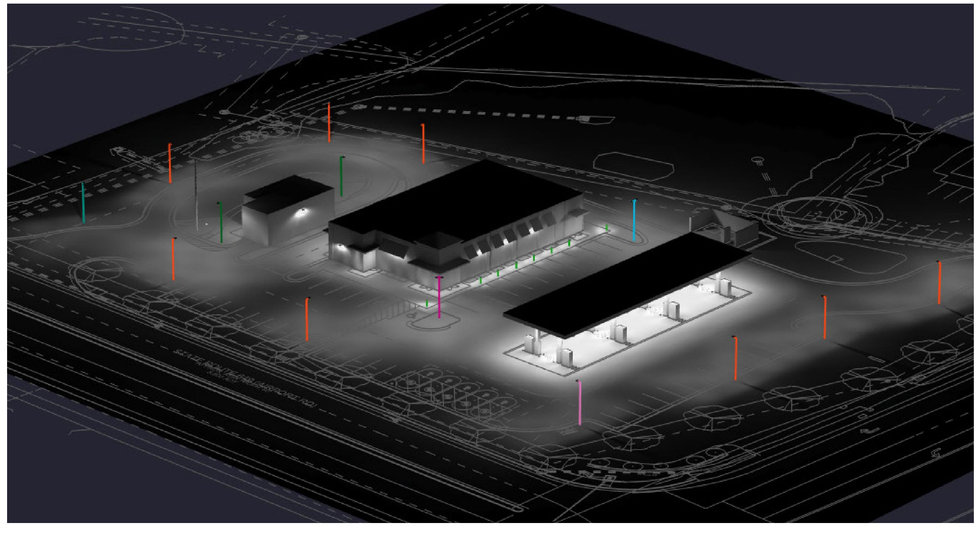
1 ISOMETRIC RENDERING



2 PLAN ILLUMINATION



3 SOUTHEAST ISOMETRIC ILLUMINATION



LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

PHOTOMETRIC RENDERINGS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

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PRODUCT	QTY	LABEL	DESCRIPTION
CANOPY	16	A	CAN-228-PS-RS-06-E-UL-XX-700 (SET TO SWITCH POSITION 3 IN FIELD)

PRODUCT	QTY	LABEL	DESCRIPTION
PATHWAY	8	C	PWY-EDG-3M-P3-02-E-UL-XX-350-57K

PRODUCT	QTY	LABEL	DESCRIPTION
WALL MOUNTED	8	D	SEC-EDG-3M-WM-02-E-UL-XX-525
	6	E	SEC-EDG-3M-WM-04-E-UL-XX-525

PRODUCT	QTY	LABEL	DESCRIPTION
AREA	1	F	OSQ-AAXX W/PGM-1 + OSQ-A-NM-15D-B-57K-UL-XX
	2	G	OSQ-DAXX + OSQ-A-NM-4ME-B-57K-UL-XX
	1	H	OSQ-DAXX + OSQ-A-NM-4ME-B-57K-UL-XX
	1	J	OSQ-DAXX + OSQ-A-NM-4ME-B-57K-UL-XX
	9	K	OSQ-DAXX + OSQ-A-NM-4ME-B-57K-UL-XX W_OSQ-BLSMF
	1	L	OSQ-DAXX + OSQ-A-NM-4ME-B-57K-UL-XX-Q2 W_OSQ-BLSMF
	1	M	OSQ-DAXX + OSQ-A-NM-4ME-B-57K-UL-XX-Q2 W_OSQ-BLSMF

228 Series™

LED Recessed Canopy Luminaire

Product Description

Slim, low profile, easy mounting from below or above the deck. Luminaire sides are rugged cast aluminum with high performance extruded aluminum heat sink specifically designed for LED. Luminaire mounts directly to the canopy deck and is secured in place with compression molded trim frame. Luminaire housing is provided with factory applied foam gasket and provides for a weathertight seal between luminaire housing and canopy deck. Suitable for use in single or double skin canopies with 12" (305mm) or 16" (406mm) module panels. Designed for canopies of 10-22 gauge (maximum 0.365" / 9.68mm thickness).

Applications: Petroleum stations, convenience stores, drive-thru banks and restaurants, retail and grocery

Performance Summary

Patented NanoOptix® Product Technology

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See http://lighting.cree.com/warranty for warranty terms

Accessories

Field-Installed

Upgrade Pole Kit
- 12'-4 1/2" (3759mm) x 6(0mm) steel face plate used when replacing recessed HID luminaires in existing open ceilings
- Includes mounting channels and hardware
- XA-CT20FD5TW = 3G LED
- XA-CT40FD5TW = 3G LED
- XA-CT70FD5TW = 4G LED
- For use with canopies that are greater than 2.5" (64mm) thickness
- XA-CT20FD5TWS = 4G LED
- XA-CT40FD5TWS = 4G LED
- XA-CT70FD5TWS = 4G LED
- For use with shallow canopies that are less than 2.5" (64mm) to height
- **Finish is standard - Metal**
- Metal plate used when replacing surface-mounted HID luminaires. Painted Colorfast DeltaGuard® white. Must be used to address inrush current
- XA-CTPANSURF
- 20' x 24" (609mm x 610mm) steel plate spans two 12" (305mm) bore panels
- XA-CTPANSURF
- 10' x 10" (609mm x 610mm) steel plate spans two 16" (406mm) bore panels

Upgrade Pole Kit – Plastic
- 24.2" x 24.5" (615mm x 622mm) plastic canopy trim plates with and without backer plates. For use when replacing existing HID luminaires with recessed HID luminaires
- XA-CT20BDSTW = 3G LED
- XA-CT40BDSTW = 4G LED
- XA-CT70BDSTW = 4G LED
- Kits without backer plates for use with canopies that have a maximum of 7" (178mm) diameter cut hole
- **Finish is standard - Plastic**
- XA-CT40CDSTW = 4G LED
- XA-CT70CDSTW = 4G LED
- Kits with backer plates for use with 16" (406mm) canopies that have a maximum of 12" (305mm) diameter or 12" x 12" (305mm x 305mm) cut hole
- **Finish is standard - Plastic**
- XA-CDSCSTW
- For successful implementation of the programmable multi-level optics, a minimum of one fixed field remote is required

Ordering Information

Example: 228-LSL-RM-06-E-UL-WH-525

Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options
228-228	3M Type 3 Medium 4L Sparkle Petroleum 5S Petroleum Symmetric	RM Recessed	03 Available with 5L optic only 04 09	E	UL Universal 120-277V MA Multi-Amp 347-480V	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA 700 700mA	DIM 0-10V Dimming - Standard on all luminaires - Refer to Dimming specsheet for details - Can't exceed specified drive current PML Photocell Multi-Level - Refer to PML specsheet for details 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire - Minimum 70 CRI

* 10 LED luminaires with 700mA require marked spacing >8" x 24" or 7" (178mm x 610mm x 700mA); 48" (1,219mm) center-to-center of adjacent luminaires, 24" (610mm) luminaire center to side building inverters; 6" (152mm) top of luminaire to overhead building member

Rev. Date: V5 03/13/2019

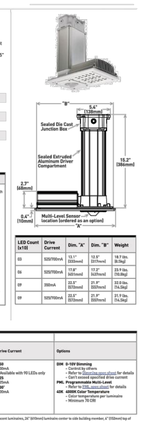
US: lighting.cree.com T (800) 236-4800 F (262) 504-5415

Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507

Electrical Data*

LED Count (x10)	System Watts 120-480V	Total Current (A) 120V	208V	240V	277V	347V	480V
350mA							
09	99	0.85	0.48	0.42	0.38	0.29	0.22
525mA							
03	94	0.45	0.28	0.25	0.23	0.16	0.12
06	99	0.83	0.48	0.42	0.38	0.29	0.22
09	155	1.30	0.76	0.68	0.61	0.45	0.36
700mA							
03	79	0.58	0.35	0.31	0.28	0.21	0.16
06	132	1.11	0.66	0.57	0.50	0.39	0.28
09	201	1.66	0.96	0.84	0.75	0.59	0.44

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/-10%.



228 Series™ Ambient Adjusted Lumen Maintenance*

Ambient	Initial LMF	25K hr Projected* LMF	50K hr Projected* LMF	75K hr Calculated* LMF	100K hr Calculated* LMF
0°C (32°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C (68°F)	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

*Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Projected values are not to exceed the LM-80 extrapolation allowed per TM-21. Calculated values are per TM-21. Please refer to Thermal Data Reference Document for outdoor average nighttime ambient conditions.

In accordance with IESNA TM-21-11, Calculated Values represent interpolated values based on time durations that are within six times (6X) the IESNA LM-80 total test duration (in hours) for the device under testing (DUT) or, the packaged LED chip total test duration.

* Estimated values are calculated and regressed time durations that exceed the six total duration of the LM-80 total test duration (in hours) for the device under testing (DUT) or, the packaged LED chip

CA RESIDENTS WARNING: Cancer and Reproductive Harm – www.p65warnings.ca.gov

Cree Edge™ Series

LED Pathway Luminaire

Product Description

Durable die-cast aluminum luminaire housing mounts directly to 4" (102mm) diameter pole (included) without visible mounting hardware for clean appearance. Pole mounts to rugged die-cast aluminum internal flange secured by three 3/8" - 16x1" anchor bolts with 1-1/4" hook (provided). **Note:** 1/4 Turx 3/8" socket required for head installation. Tay mounted LEDs for superior optical performance and light control.

Applications: Landscape, walk-ways and general site lighting

Performance Summary

Patented NanoOptix® Product Technology

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See http://lighting.cree.com/warranty for warranty terms

Accessories

Field-Installed

Upgrade Kit
- For the replacement of existing bollards with a bolt hole circle of 8.75" (144mm)
- XA-EDPKIT
- XA-EDPKIT2

Ordering Information

Example: PWY-EDG-3M-P3-02-E-UL-SV-350

PWY-EDG			02	E				
Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options
PWY-EDG	3M Type 3 Medium 4L Type 4 Medium 5S Type 5 Short 5M Type 5 Short w/BL5 5W Type 5 Wide 5L Type 5 Wide w/BL5 4M Type 4 Medium w/BL5	P3 12' (3251mm) bollard/pole P5 16' (4877mm) bollard/pole P4 20' (6096mm) bollard/pole P6 24' (7315mm) bollard/pole P8 12' (3251mm) pedestrian	02 04 06 08 10 12	E	UL Universal 120-277V MA Multi-Amp 347-480V (Available with P5, P6, and P8 mounts only) 12 - Available only with 7L option 277 277V - Available only with 7L option	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA 700 700mA - Available with P1, P5, P6, and P8 mounts only	F Fuse - When code dictates fusing, use fine-delay fuse. Available for UL & applications only R Receptacle (Control by photocell - luminaire cannot be controlled remotely) - Available with 12 or 277 voltage only - Refer to PL-Edge Specsheet for details WB Wildlife Backlight - Standard on P6 mounts only - Available as Pre-Mount option, available with P3 and P4 mount PML Photocell Multi-Level base cover 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire

* 347-480V utilizes magnetic step-down transformers For input power for 347-480V, refer to the Electrical Data table

Rev. Date: V4 12/12/2018

US: lighting.cree.com T (800) 236-4800 F (262) 504-5415

Canada: www.cree.com/canada T (800) 473-1234 F (800) 890-7507



Model	Dim. "A"	Weight*
Landscape (P3)	10" (220mm)	10.7 lbs. (5.0kg)
Landscape (P5)	16" (407mm)	13.3 lbs. (6.0kg)
Pathway (P3)	36" (914mm)	17.9 lbs. (8.1kg)
Pathway (P5)	42" (1067mm)	19.4 lbs. (8.8kg)
Pedestrian (P8)	96" (2438mm)	28.4 lbs (12.9kg)

* Add 4.6 lbs. (2.1kg) for 347-480V

Cree Edge® Series

LED Security Wall Pack Luminaire

Rev. Date: V6 09/29/2015

Product Description

The Cree Edge® wall mount luminaire has a slim, low profile design. The luminaire and caps are made from rugged die cast aluminum with integral, weathertight LED driver compartments and high performance aluminum heat sinks specifically designed for LED applications. Housing is rugged aluminum. Includes a lightweight mounting box for installation over standard and mud ring single gang 2-Boxes. Secures to wall with four 3/16" (5mm) screws (by others). Conduit entry from top, bottom, sides, and rear. Allows mounting for uplight or downlight. Designed and approved for easy through-wiring. Includes backplate guard.

Applications: General area and security lighting

Performance Summary

Patented NanoOptix® Product Technology

Assembled in the U.S.A. of U.S. and imported parts

CRI: Minimum 70 CRI

CCT: 4000K (+/- 300K), 5700K (+/- 500K) standard

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish

* See http://lighting.cree.com/warranty for warranty terms

Accessories

Field-Installed

Bird Spikes
BA-SSKIT2PK

Beauty Plate
WM-PLT10** - 10" (255mm) Square
WM-PLT12** - 12" (305mm) Square
* Covers holes left by incumbent wall packs

Hand-Held Remote
BA-SENSREM
For out-of-the-box implementation of the programmable multi-level option, a minimum of one hand-held remote is required

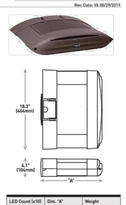
** Must specify color

Ordering Information

Example: SEC-EDG-2M-WM-04-E-UL-SV-700

SEC-EDG				E				
Product	Optic	Mounting	LED Count (x10)	Series	Voltage	Color Options	Drive Current	Options
SEC-EDG	2M Type 2 Medium 3M Type 3 Medium 4M Type 4 Medium 5W Type 5 Wide 5M Type 5 Short w/BL5 4M Type 4 Medium w/BL5 5W Type 5 Wide w/BL5	WM Wall Mount	02 04 06 08 10 12	E	UL Universal 120-277V MA Multi-Amp 347-480V (Available with P5, P6, and P8 mounts only) 12 - Available only with 7L option 277 277V - Available only with 7L option	BK Black BZ Bronze SV Silver WH White	350 350mA 525 525mA 700 700mA - Available with 20-40 LEDs	DIM 0-10V Dimming - Standard on all luminaires - Refer to Dimming specsheet for details - Can't exceed specified drive current PML Photocell Multi-Level - Refer to PML specsheet for details 40K 4000K Color Temperature - Minimum 70 CRI - Color temperature per luminaire

LED Count (x10)	Dim. "A"	Weight
02	9.9" (251mm)	20 lbs. (9.1kg)
04	11.5" (292mm)	22 lbs. (10.0kg)
06	13.1" (333mm)	24 lbs. (11.2kg)
08	15.9" (404mm)	27 lbs. (12.2kg)
10	17.7" (450mm)	31 lbs. (14.1kg)
12	19.5" (496mm)	33 lbs. (14.9kg)



Electrical Data*

LED Count (x10)	System Watts 120-480V	Total Current (A) 120V	208V	240V	277V	347V	480V
350mA							
02	25	0.21	0.13	0.11	0.10	0.08	0.07
04	44	0.36	0.23	0.21	0.20	0.15	0.12
06	64	0.52	0.31	0.28	0.24	0.20	0.15
08	90	0.75	0.44	0.38	0.34	0.26	0.20
10	110	0.92	0.53	0.47	0.41	0.32	0.26
12	130	1.10	0.65	0.56	0.48	0.38	0.28
525mA							
02	37	0.32	0.19	0.17	0.14	0.12	0.10
04	70	0.58	0.34	0.31	0.28	0.22	0.16
06	101	0.86	0.49	0.43	0.38	0.30	0.23
08	133	1.13	0.66	0.58	0.51	0.39	0.28
700mA							
02	50	0.41	0.25	0.22	0.20	0.15	0.12
04	93	0.78	0.46	0.40	0.36	0.27	0.20
06	136	1.14	0.65	0.57	0.50	0.39	0.29

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

Cree Edge* Series Ambient Adjusted Lumen Maintenance*

Ambient	Initial LMF	25K hr Projected* LMF	50K hr Projected* LMF	75K hr Calculated* LMF	100K hr Calculated* LMF
0°C (32°F)	1.04	1.01	0.99	0.98	0.96
10°C (50°F)	1.03	1.00	0.98	0.97	0.95
15°C (59°F)	1.02	0.99	0.97	0.96	0.94
20°C (68°F)	1.01	0.98	0.96	0.95	0.93
25°C (77°F)	1.00	0.97	0.95	0.94	0.92

*Lumen maintenance values at 25°C (77°F) are calculated per TM-21 based on LM-80 data and in-situ luminaire testing. Projected values are not to exceed the LM-80 extrapolation allowed per TM-21. Calculated values are per TM-21. Please refer to Thermal Data Reference Document for outdoor average nighttime ambient conditions.

In accordance with IESNA TM-21-11, Calculated Values represent interpolated values based on time durations that are within six times (6X) the IESNA LM-80 total test duration (in hours) for the device under testing (DUT) or, the packaged LED chip total test duration.

* Estimated values are calculated and regressed time durations that exceed the six total duration of the LM-80 total test duration (in hours) for the device under testing (DUT) or, the packaged LED chip

CA RESIDENTS WARNING: Cancer and Reproductive Harm – www.p65warnings.ca.gov

US: creelighting.com (800) 236-4800
Canada: creelighting-canada.com (800) 473-1234

OSQ Series

OSQ™ LED Area/Flood Luminaire – Medium

Rev. Date: V21 10/23/2019

Product Description

The OSQ™ broadfield soulmate blends extreme optical control, advanced thermal management and modern aesthetics. Built to last, the housing is rugged cast aluminum with an integral, weathertight LED driver compartment. Versatile mounting configurations offer simple installation. Its slim, low-profile design minimizes wind load requirements and blends seamlessly into the site providing even, quality illumination. The 'B' input power designator is a suitable upgrade for HID applications up to 250 Watt, and the 'K' input power designator is a suitable upgrade for HID applications up to 400 Watt.

Applications: Parking lots, walkways, campuses, car dealerships, office complexes, tunnels, underpasses, and internal roadways

Performance Summary

NanoOptix® Precision Delivery Grid™ optic

Assembled in the U.S.A. of U.S. and imported parts

Initial Delivered Lumens: Up to 17,291

Efficacy: Up to 134 LPW

CRI: Minimum 70 CRI (3000K, 4000K & 5700K); 90 CRI (5000K)

CCT: 3000K, 4000K, 5000K, 5700K

Limited Warranty*: 10 years on luminaire/10 years on Colorfast DeltaGuard® finish/5 years on Synapse wireless control accessories/1 year on luminaire accessories

* See http://www.cree-led.com/warranty for warranty terms

Ordering Information

Parts ordered separately is comprised of two components that must be ordered separately: Example: **Mounts: OSQ-A-ADA + Luminaire: OSQ-A-4M-3K40-B-UNV-XX**

OSQ	A	ADA
Product	Version	Mounting
OSQ	A	ADA Adjustable Arm DM Direct Mount RA Tenon Arm SA Square Arm WM Wall Mount

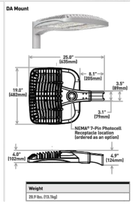
Mount Luminaire must be ordered separately!*

Color Options:	SV Silver BK Black	BZ Bronze WH White

* Refer to the OSQ specsheet for mounting availability by housing size

OSQ	A	NM					
Product	Version	Mounting	Optic	Power Input Designator	CCT	Voltage	Color Options
OSQ	A	NM New Mount	Asymmetric 2M Type 2 Medium 3M Type 3 Medium 4M Type 4 Medium Symmetric 5S Type 5 Short 5M Type 5 Medium 5W Type 5 Wide	B 120V K 277V Z 120V	30K 3000K 40K 4000K 50K 5000K 57K 5700K TO 120	UL Universal 120-277V MA Multi-Amp 347-480V (Available with B & K input Power Designators only)	BK Black BZ Bronze SV Silver WH White

Options	
PML	Programmable Multi-Level, up to 6 of Mounting Height - Standard on all luminaires - Refer to PML specsheet for details - Not available with PML or PML2 options
PML2	Programmable Multi-Level, 15-30' Mounting Height - Refer to PML2 specsheet for details - Intended for applications at 15'-30'
5W/SV/BK/BZ/WH/347	Field Adjustable Output - Must select 5S, 5M, 5L, 5W, 2M, or 3M Optic - Must select 347 voltage - Refer to pages 7-11/12 for power and lumen values - Available with B & K Input Power Designators only - Not available with PML or PML2 options
R	NEMA® 7-Pin Photocell Receptacle - 7-pin receptacle per ANSI C136.41 - Includes shorting cap by others - Not available with other twist-lock receptacle options - Not available with other multi-volt options
RL	Rocker Left - LED and optic are rotated to the left (when facing the front of the luminaire) as shown on page 13 for optic directionality
RR	Rocker Right - LED and optic are rotated to the right - Refer to RR/RL configuration diagram on page 13 for optic directionality



Weight
39.9 lbs. (18.1kg)

* Available with Backlight Shield when ordered with face-mounted accessory (see table above)

Electrical Data*

Input Power Designator	System Watts 120-480V	Total Current (A) 120V	208V	240V	277V	347V	480V
B	94	0.72	0.43	0.37	0.32	0.25	0.19
K	130	1.09	0.65	0.56	0.49	0.38	0.28
Z	59**	0.46	0.26	0.22	0.19	N/A	N/A

* Electrical data at 25°C (77°F). Actual wattage may differ by +/- 10% when operating between 120-277V or 347-480V +/- 10%

** Available with 0-10V wattage only

OSQ Series Ambient Adjusted Lumen Maintenance*

Ambient	Optic	Initial LMF	25K hr Reported* LMF	50K hr Reported* LMF	75K hr Calculated* LMF	100K hr Calculated* LMF
5°C (41°F)	Asymmetric	1.04	1.03	1.01	1.00*	0.99*
	Symmetric	1.05	1.04	1.03	1.02*	1.01*
10°C (50°F)	Asymmetric	1.03	1.01	1.00	0.99*	0.98*
	Symmetric	1.04	1.03	1.02	1.01*	1.00*
15°C (59°F)	Asymmetric	1.02	1.00	0.99	0.98*	0.97*
	Symmetric	1.03	1.02	1.01	1.00*	0.99*
20°C (68°F)	Asymmetric	1.01	0.99	0.98	0.97*	0.96*
	Symmetric	1.01	1.01	1.00	0.99*	0.98*
25°C (77°F)	Asymmetric	1.00	0.98	0.97	0.96*	0.95*
	Symmetric	1.00	0.99	0.98	0.98*	0.97*

*Lumen maintenance values at 25°C (77°F) are calculated per IES TM-21 based on ES LM-80 report data for the LED package and operating conditions. Please refer to the Thermal Data Reference Document for outdoor average nighttime ambient maintenance factors. Please refer to the Thermal Data Reference Document for outdoor average nighttime ambient conditions.

** In accordance with IES TM-21, Reported values represent interpolated values based on time durations that are within six times (6X) the IESNA LM-80 total test duration (in hours).

*** Estimated values are calculated and regressed time durations that exceed the six total duration of the LED

Accessories

Field Installed		
Backlight Shield OSQ-BLSMF - Field installable optics - Black finish - Polished optics	**Hand-Held Remote** BA-SENSREM - For successful implementation of the programmable multi-level option, a minimum of one hand-held remote is required	**Bird Spikes** OSQ-ABSS-BKSSPK

Synapse Wireless Control Accessories	
Tango Lamb Lighting Controller - Includes: - Suitable for 120-277V (UL) voltage only - Requires NEMA/ANSI C136.41 7-Pin Photocell Receptacle - Not for use with PML or R options - Tango Lamb Lighting Controller only, power metering, digital current input, and status monitoring of luminaires	**SimpleSNAP On-Site Controller** - Includes: - Factory-set 120-enabled - Designed for indoor applications **Synapse Wireless Bridge (SNAC Gateway)** BMG-GW - Ordered for SNAC® integration **Outdoor Antennas** (Optional, for increased range, 868 gateways only) - 8 dBi omni antenna, 50' cable and bracket ACT-ANT360 - 12 dBi omni antenna, 30' cable and bracket ACT-ANT1230 - 8 dBi omni antenna, 50' cable and bracket

US: creelighting.com (800) 236-4800
Canada: creelighting-canada.com (800) 473-1234

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SHEETZ

AIRPORT RD & SEMINOLE TRAIL
ALBEMARLE, VA

RL-6591-S1-R1

LINE+GRADE CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

LUMINAIRE DETAILS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED	DCH
SUBMISSION NO.	4
PROJECT	1903600

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C9.2

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1 FRONT ELEVATION
1/4" = 1'-0"



2 LEFT ELEVATION
1/4" = 1'-0"



OUTLINE AREA = 21.65 SQ.FT.
BOX AREA = 25.94 SQ.FT.
TYPICAL OF 3

A WALL MOUNTED "SHEETZ" BUILDING SIGN
1/2" = 1-0"

ROOFTOP MECHANICAL EQUIPMENT SHALL NOT BE VISIBILE FROM THE ENTRANCE CORRIDOR

Convenience Architecture and Design P.C.
351 Sheetz Way, Claysburg, PA 16625

phone (814) 239-6013
email tcolumbu@sheetz.com
web site www.sheetz.com

PROJECT NAME:
NEW SHEETZ STORE

ABLEMARLE COUNTY

INT. OF STATE ROUTE 29
AND AIRPORT ROAD
ABLEMARLE COUNTY
VIRGINIA

OWNER:
SHEETZ, INC.

5700 SIXTH AVE.
ALTOONA, PA 16602

CONSULTANT

PROFESSIONAL

KEYPLAN

MARK	DATE	DESCRIPTION

ISSUE:
PROJECT NO: 172556
AUTHOR BY: JEB, RJK
REVIEW BY: TMC
SHEET TITLE

EXTERIOR ELEVATIONS

A200

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

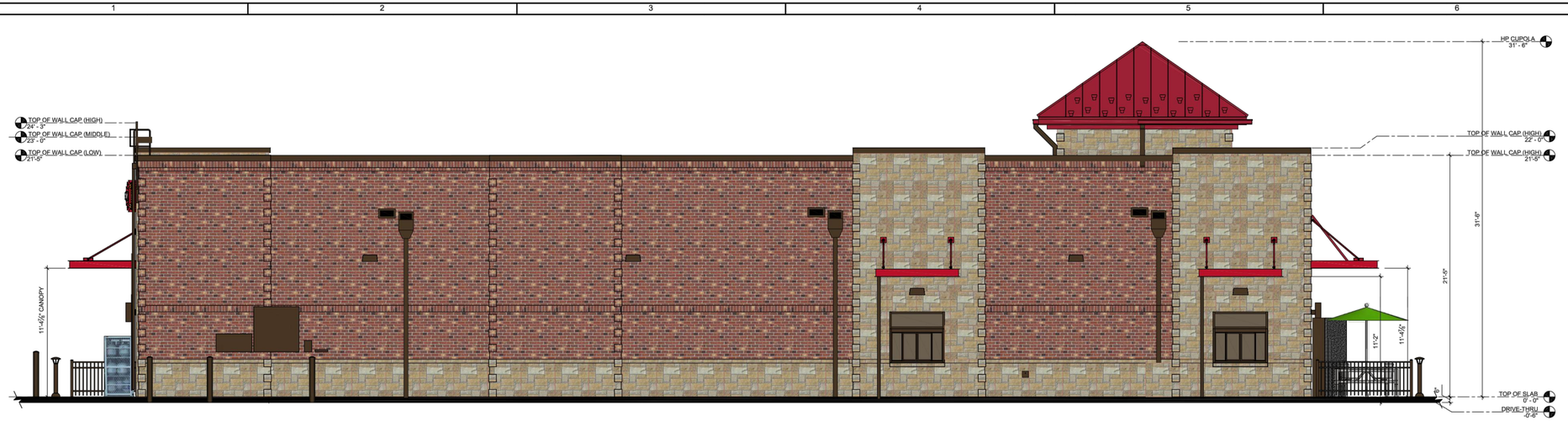
ARCHITECTURAL ELEVATIONS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

APPROVED DCH
SUBMISSION NO. 4
PROJECT 1903600
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A1.0

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3 REAR ELEVATION
1/4" = 1'-0"



4 RIGHT ELEVATION
1/4" = 1'-0"

ROOFTOP MECHANICAL EQUIPMENT SHALL NOT BE VISIBILE FROM THE ENTRANCE CORRIDOR

Convenience Architecture and Design P.C.
351 Sheetz Way, Claysburg, PA 16625

phone (814) 239-6013
email tcolumbu@sheetz.com
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KEYPLAN

MARK	DATE	DESCRIPTION

ISSUE:
PROJECT NO: 172556
AUTHOR BY: JEB, RJK
REVIEW BY: TMC
SHEET TITLE

EXTERIOR ELEVATIONS

A201

LINE + GRADE
CIVIL ENGINEERING

AIRPORT ROAD SHEETZ
FINAL SITE PLAN
ALBEMARLE COUNTY, VIRGINIA

ARCHITECTURAL ELEVATIONS

COMMONWEALTH OF VIRGINIA
11/23/2020
DANIEL C. HYER
Lic. No. 45596
PROFESSIONAL ENGINEER

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SUBMISSION NO. 4
PROJECT 1903600
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A1.1

TOPOGRAPHIC SURVEY
TAX MAP 32
PARCELS 38, 39 AND 39A
ALBEMARLE COUNTY, VIRGINIA

*This Topographic Survey of Tax Map 32 Parcels 38, 39 and 39A was completed under the direct and responsible charge of Brian D. Jamison, Licensed Surveyor No. 3334, from an actual *Ground survey made under my supervision; that the imagery and/or original data was obtained on 11/07/2019, 11/11/2019, 02/07/20 and 02/12/20; and that this plat, map, or digital geospatial data including metadata meets minimum accuracy standards unless otherwise noted.*

NOTES:

1. A Title Report was Provided and used in the preparation of this survey.
2. Miss Utility Ticket No: B003400793-00B
   Ticket No: B003400793 Rev: 00B Taken: 02/03/20 10:17 AM
3. Utilities and Easements other than those shown may exist.

TMP.32-39B
COMMONWEALTH OF VIRGINIA
DEPARTMENT OF TRANSPORTATION
D.B.4574 P.676
HWPB.XIV P.200-207
HWPB.XIV P.151-158

TMP.32-38A
N/F TERRY
D.B.4574 P.676
D.B.629 P.104(plat)

+-Aprox. 5' Waterline Esmt.(Agreement)
D.B.698 P.335 and D.B.644 P.213
"beginning at the water box now located behind that structure existing on the property, and running in a westerly direction to the base of the natural slope and thence proceeding toward the south along the western boundary as near as possible to that boundary without infringing on the natural slope

15'ACSA Waterline Esmt.
(as shown at)
D.B.3503 p.180-187
D.B.525 p.643

TMP.32-40
AIRPORT AUTO INVESTMENTS LLC
D.B.5189 P.548
D.B.4464 P.203
D.B.3503 P.180-187(plat)
D.B.3192 P.264
D.B.2717 P.317
D.B.2284 P.385
H.W.P.B. XIV P.151-158
H.W.P.B. XIV P.200-207
D.B.715 P.634(plat)

TMP.32-39
N/F WILLIAM SCOTT MARSHALL,
TRUSTEE of the FAMILY TRUST
of the
WILLIAM A. MARSHALL JR. REVOCABLE TRUST
D.B.4464 P.203
D.B.3192 P.264
D.B.2717 P.317
D.B.629 P.101, 104(plat)
D.B.2284 P.385
H.W.P.B. XIV P.151-158
H.W.P.B. XIV P.200-207
D.B.1639 P.566(plat)
1.667 Ac.(survey)

NEW PARCEL 'A'
2.353 Ac.(Combined)

TMP.32-39A
N/F WILLIAM SCOTT MARSHALL,
TRUSTEE of the FAMILY TRUST
of the
WILLIAM A. MARSHALL JR. REVOCABLE TRUST
D.B.4464 P.203
D.B.3192 P.264
D.B.2717 P.317
D.B.2284 P.385
H.W.P.B. XIV P.151-158
H.W.P.B. XIV P.200-207
D.B.1639 P.566(plat)
D.B.629 P.101, 104(plat)
0.061 Ac.
(survey)

TMP.32-38
N/F AIRPORT PLAZA LLC
D.B.4622 P.319
D.B.629 P.104(plat)
0.626 AC.(survey)

STATE ROUTE 649(Variable)
H.W.P.B. XIV pp.151-158
H.W.P.B. XIV pp.200-207

STATE ROUTE 29-S.B.L.(Variable)
H.W.P.B. XIV pp.151-158
H.W.P.B. XIV pp.200-207

Benchmark
Iron with
RGA cap
EL= 547.89

Grid North Va. South Zone
State Plane Coordinates

X1.0
SCALE 1" = 20'
SCALE IN FEET

COMMONWEALTH OF VIRGINIA
BRIAN D JAMISON
No. 3334
LAND SURVEYOR

Q:\RGA\TMPROJ\19.0679 ALTA\TOPO_PH-2.pro