November 24, 2025

Samantha Collins
Conservation Commission - Chair
City of Portsmouth
1 Junkins Avenue
Portsmouth, NH 03801

RE: Hang10 Portsmouth, NH - Conservation Commission Application

Project narrative

The proposed development at 2299 Lafayette Road, Portsmouth, NH 03801, is planned as a Hang10 Car Wash. Hang10 provides a range of services through monthly membership tiers as well as single-wash options to accommodate varying customer preferences. Following their wash, customers will have access to complimentary high-powered vacuum stations. Members at the Big Kahuna level receive additional perks, such as a premium wash and access to the Hang10 Dog Wash, a self-contained wash station equipped with soap, conditioner, and a dryer for convenient pet cleaning.

This site is an excellent fit for Hang10's express-wash model, supported by demographic and pro forma analysis. Hang10 is headquartered in Seabrook, NH, and the company's founder is a New Hampshire native.

In addition to the fully enclosed car wash, the site includes parking spaces with vacuum stations, vacuum enclosures, employee parking, and a dumpster.

Wetland and Wetland Buffer Impact

The Hang10 has been thoughtfully designed to account for the 100-year wetland setback. However, due to site constraints, pervious pavement, retaining wall and the basin wetland encroach within the 100-year setback. Three variances have been granted by the BOA in order to impact the 100-year setback as minimally as possible. No negative implications for the wetland are anticipated due to the Hang10 Car wash development.

Wetland Impact Numbers

Temporary Impact (Tree Clearing, Grading, Landscaping) = 9,670 SF
Permanent Impact (Pervious Pavement, Retaining Wall, Wetland Basin) = 5,600 SF

Thank you for considering this project. Please let us know if you have any questions.

Respectfully,

Paige Weidner, PE
Project Manager
4445 Lake Forest Drive, Suite 275
Cincinnati, OH 45242
O 937.648.3213
paige.weidner@cesoinc.com

City of Portsmouth, New Hampshire

Wetland Conditional Use Permit Application Checklist

This wetland conditional use permit application checklist is a tool designed to assist the applicant in the planning process and for preparing the application for Conservation Commission and Planning Board review. The checklist is required to be uploaded as part of your wetland conditional use permit application to ensure a full and complete application is submitted to the Planning and Sustainability Department and to the online portal. A pre-application conference with a member of the Planning and Sustainability Department is encouraged as additional project information may be required depending on the size and scope of the project. The applicant is cautioned that this checklist is only a guide and is not intended to be a complete list of all wetland conditional use permit requirements. Please refer to Article 10 of the City of Portsmouth Zoning Ordinance for full details.

Applicant Responsibilities: Applicable fees are due upon application submittal to the Planning Board (no fees are required for Conservation Commission submission). The application will be reviewed by Planning and Sustainability Department staff to determine completeness. Incomplete applications which do not provide required information for the evaluation of the proposed site development shall not be provided review by the Conservation Commission or Planning Board.

Name of Applicant: Hang10 - Portsmouth, NH Date Submitted: 11/13/25

Application # (in City's online permitting): LU-25-141

Site Address: 2299 Lafayette Rd Portsmouth, NH 03801 Map: _____ Lot: _____

☑	Required Items for Submittal	Item Location (e.g. Page or Plan Sheet/Note #)
✔	Complete application form submitted via the City's web-based permitting program	
✔	All application documents, plans, supporting documentation, this checklist and other materials uploaded to the application form in OpenGov in digital **Portable Document Format (PDF)**. One hard copy of all plans and materials shall be submitted to the Planning and Sustainability Department by the published deadline.	

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
✔	Basic property and wetland resource information. **(10.1017.21)**	
✔	Additional information required for projects proposing greater than 250 square feet of permanent or temporary impacts. **(10.1017.22)**	
✔	Demonstrate impacts as they relate to the criteria for approval set forth in Section 10.1017.50 (or Section 10.1017.60 in the case of utility installation in a right-of-way). **(10.1017.23)**	
☐	Balance impervious surface impacts with removal and/or wetland buffer enhancement plan. **(10.1017.24)**	NA

☑	Required Items for Submittal	Item Location (e.g. Page/line or Plan Sheet/Note #)
☐	Wetland buffer enhancement plan. **(10.1017.25)**	NA
☐	Living shoreline strategy provided for tidal wetland and/or tidal buffer impacts. **(10.1017.26)**	
✔	Stormwater management must be in accordance with Best Management Practices including but not limited to: *1. New Hampshire Stormwater Manual, NHDES, current version.* *2. Best Management Practices to Control Non-point Source Pollution: A Guide for Citizens and City Officials, NHDES, January 2004.* **(10.1018.10)**	
✔	Vegetated Buffer Strip slope of greater than or equal to 10%. **(10.1018.22)**	
✔	Removal or cutting of vegetation, use of fertilizers, pesticides and herbicides. **(10.1018.23/10.1018.24/10.1018.25)**	
✔	All new pavement within a wetland buffer shall be porous pavement. **(10.1018.31)**	
✔	An application that proposes porous pavement in a wetland buffer shall include a pavement maintenance plan. **(10.1018.32)**	
✔	Permanent wetland boundary markers shall be shown on the plan submitted with an application for a conditional use permit and shall be installed during project construction. **(10.1018.40)**	
☑	**Requested Items for Submittal**	**Item Location (e.g. Page or Plan Sheet/Note #)**
✔	A narrative/letter addressed to the Conservation Commission Chair (if recommended to Planning Board then an additional narrative addressed to the Planning Board Chair at that time) describing the project and any proposed wetland and/or wetland buffer impacts. Please visit the WCUP instruction page for further application instructions.	
☐	If New Hampshire Department of Environmental Services (NHDES) Standard Dredge and Fill Permit is required for this work, please provide this permit application at the same time as your submission for a Wetland Conditional Use Permit.	NA

Applicant's Signature: _____ **Date:** 11/24/25

CITY OF PORTSMOUTH, ROCKINGHAM COUNTY, NH

SITE PLAN

FOR

HANG 10 CAR WASH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

OWNER:
HANG10 CAR WASH
1380 SOLDIERS FIELD ROAD
BOSTON, MA 02135
CONTACT: STEVE LUKIN

ARCHITECT:
CESO, INC.
175 MONTROSE WEST AVENUE SUITE 400
AKRON, OH 44321
PHONE: (330) 665-0660
CONTACT: ANDY ARDITO

ENGINEER:
CESO, INC.
4445 LAKE FOREST DRIVE
CINCINNATI, OH 45242
PHONE: (937) 648-3213
CONTACT: PAIGE WEIDNER

GOVERNING AGENCIES AND UTILITY COMPANIES:

SEWER:
CITY OF PORTSMOUTH WATER & WASTEWATER
680 PEVERLY HILL RD
PORTSMOUTH, NH 03801
PHONE: (603) 427-1530

GAS SERVICE:
UNITIL - NORTHERN UTILITIES -NH
PHONE: (603) 294-5177

WATER:
CITY OF PORTSMOUTH WATER DIVISION
680 PEVERLY HILL RD
PORTSMOUTH, NH 03801
PHONE: (603) 610-7237

COMMUNICATIONS:
CONSOLIDATED COMMUNICATIONS
PHONE (207) 852-8315

STORMWATER:
CITY OF PORTSMOUTH STORMWATER
680 PEVERLY HILL RD
PORTSMOUTH, NH 03801
PHONE: (603) 427-1530

ELECTRIC:
EVERSOURCE - ELECTRIC
PHONE: (800) 340-9822

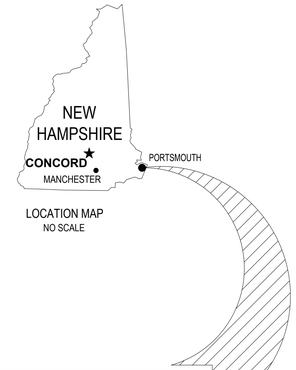
ZONING:
CITY OF PORTSMOUTH ZONING ENFORCEMENT
1 JUNKINS AVE.
PORTSMOUTH, NH 03801
CONTACT: PETER BRITZ
PHONE: (603) 610-7279

PROPERTY DATA:

PARCEL OWNER:	RYE PORT PROPERTIES LLC	
PARCEL ID:	0272-0004-000	
ADDRESS:	2299 LAFAYETTE RD PORTSMOUTH, NH 03801	
PROPERTY AREA:	1.83 AC	
ZONING:	G1 - GATEWAY CORRIDOR	
PROPOSED USE:	HANG10 CAR WASH	
	REQUIRED	PROPOSED
BUILDING SETBACKS		
FRONTAGE ALONG STREET:	100'	125'
SIDE:	10'	61'
REAR:	10'	144'
SIGN SETBACKS:	10'	11'
MAXIMUM BUILDING HEIGHT:	20'	
BUILDING AREA:	N/A	4,499 SF
PARKING:		
TOTAL PARKING SPACES:	14	30
ADA PARKING SPACES:	1	2
(DEFINED AS 1 PER 25 REGULAR PARKING)		

PARCEL IS ENTIRELY LOCATED WITHIN "ZONE X" AS INDICATED BY THE FLOOD INSURANCE RATE MAP (FIRM) COMMUNITY PANEL NUMBER 33015C0270F, EFFECTIVE DATE: 01/29/2021; PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AGENCY.

Sheet List Table



LOCATION MAP
NO SCALE

VICINITY MAP
NO SCALE

BENCHMARKS

	ELEVATION*	DESCRIPTION
BM #1	70.39'	SET RAILROAD SPIKE IN BASE OF POWER POLE
BM #2	69.48'	SET CHISELED "X" IN CONCRETE

* VERTICAL DATUM: NAVD88 IN US FEET

SURVEY PROVIDED BY:
BLEW ASSOCIATES
3825 SHILOH DRIVE
FAYETTEVILLE AR 72703
PHONE: 479.443.4506
DATED: 08/22/2025

CESO PROVIDES NO GUARANTEE TO THE ACCURACY OF THE SURVEY PROVIDED BY BLEW ASSOCIATES. CONTRACTOR TO VERIFY EXISTING CONDITIONS PRIOR TO BID AND CONSTRUCTION.

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: NEW HAMPSHIRE UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH
2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	NOT TO SCALE
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
TITLE SHEET

C1.0

C:\DC\ACCDocs\CESO\Hang10 Portsmouth NH\Project Files_CESO\03-CIVIL\PLAN\PLOT\766656_C1.0_Cover_Sheet.dwg - 11/24/2025 - Marvin Maldonado

GENERAL NOTES

DEMOLITION NOTES

1. THE CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL PERMITS REQUIRED FOR DEMOLITION AND DISPOSAL. THE DEMOLITION, REMOVAL, AND DISPOSAL IS TO BE APPROVED BY ALL GOVERNING AUTHORITIES, OF ALL FACILITIES SUCH AS: STRUCTURES, PADS, WALLS, FLUMES, FOUNDATIONS, PARKING, DRIVES, DRAINAGE, STRUCTURES, UTILITIES, WELLS, ETC., SUCH THAT THE IMPROVEMENTS SHOWN ON THE REMAINING PLANS CAN BE CONSTRUCTED. ALL FACILITIES TO BE REMOVED SHALL BE UNDERCUT TO SUITABLE MATERIAL AND BROUGHT TO GRADE WITH SUITABLE COMPACTED FILL MATERIAL AS SPECIFIED BY A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER. IF UNDOCUMENTED FACILITIES ARE FOUND ON SITE, CONTRACTOR SHALL CONTACT THE OWNER AND UTILITY COMPANY PRIOR TO REMOVAL. ALL FACILITIES SHALL BE PLUGGED, ABANDONED, OR REMOVED PER STATE AND LOCAL REQUIREMENTS.
2. FEDERAL, STATE AND LOCAL CODE REQUIREMENTS SHALL GOVERN THE DISPOSAL OF DEBRIS INCLUDING ANY POTENTIALLY HAZARDOUS AND TOXIC MATERIALS. ALL MATERIALS AND STRUCTURES DESIGNATED AS "TO BE REMOVED" SHALL BE DISPOSED OF OFF SITE AND AT THE COST OF THE CONTRACTOR.
3. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING JOB SITE SAFETY PER OSHA REQUIREMENTS AT ALL TIMES.
4. PRIOR TO DEMOLITION, IT IS THE CONTRACTOR'S RESPONSIBILITY TO CALL THE STATE 811 AND NOTIFY ALL UTILITY COMPANIES TO SCHEDULE UTILITY SERVICE REMOVAL AND/OR ABANDONMENT. ALL UTILITIES SHALL BE REMOVED/RELOCATED PER THE SPECIFICATIONS OF THE UTILITY COMPANIES. THE CONTRACTOR IS RESPONSIBLE TO PAY ALL FEES AND CHARGES ASSOCIATED WITH THIS WORK
5. CONTRACTOR SHALL MAINTAIN ALL UTILITY SERVICES TO INHABITED BUILDINGS ON SITE AND ADJACENT PROPERTIES AT ALL TIMES. INTERRUPTIONS SHALL BE APPROVED BY THE OWNERS OF THE BUILDINGS/PROPERTIES.
6. THE LOCATIONS OF ALL EXISTING UTILITIES SHOWN ON THIS PLAN HAVE BEEN DETERMINED FROM THE BEST INFORMATION AVAILABLE AND ARE GIVEN FOR THE CONVENIENCE OF THE CONTRACTOR. THE ENGINEER ASSUMES NO RESPONSIBILITY FOR THEIR ACCURACY. PRIOR TO THE START OF ANY DEMOLITION ACTIVITY, THE CONTRACTOR SHALL NOTIFY THE UTILITY COMPANIES FOR ONSITE LOCATIONS OF EXISTING UTILITIES. IF THE LOCATION OR ELEVATION OF THE EXISTING UTILITIES ARE FOUND TO BE DIFFERENT FROM THE PLANS, CONTRACTOR SHALL CONTACT THE ENGINEER IMMEDIATELY.
7. CONTRACTOR SHALL PROTECT EXISTING SITE FEATURES TO REMAIN INSIDE AND OUTSIDE CONSTRUCTION LIMITS. CONTRACTOR IS RESPONSIBLE TO DOCUMENT ALL EXISTING DAMAGES AND NOTIFY THE CITY/COUNTY PRIOR TO CONSTRUCTION START. ANY EXISTING SITE FEATURE TO REMAIN THAT IS DAMAGED DURING CONSTRUCTION, SUCH AS, BUT NOT LIMITED TO, DRAINAGE, UTILITIES, PAVEMENT, CURB, ETC. SHALL BE REPAIRED TO A CONDITION THAT IS EQUAL TO, OR BETTER THAN, THE EXISTING CONDITIONS. PRIOR TO BEING DAMAGED, THE CONTRACTOR IS RESPONSIBLE FOR REPAIRING ANY DAMAGE TO THE SATISFACTION OF THE OWNER AT NO ADDITIONAL COST.
8. CONTINUOUS ACCESS SHALL BE MAINTAINED TO THE SURROUNDING PROPERTIES AT ALL TIMES DURING DEMOLITION OF THE EXISTING FACILITIES.
9. THE CONTRACTOR IS RESPONSIBLE FOR PROVIDING TRAFFIC CONTROL. ALL TRAFFIC CONTROL MEASURES SHALL BE IN ACCORDANCE WITH STATE DEPARTMENT OF TRANSPORTATION REGULATIONS AND LOCAL REGULATIONS.
10. THE CONTRACTOR IS RESPONSIBLE FOR PLACING AND MAINTAINING CONSTRUCTION FENCE, SIGNS, ETC. TO WARN AND KEEP UNAUTHORIZED PEOPLE OFF SITE FOR THE DURATION OF THE PROJECT.
11. PRIOR TO DEMOLITION, ALL EROSION CONTROL DEVICES ARE TO BE INSTALLED PER THE GOVERNING AGENCIES GUIDELINES AND STANDARDS. DUST CONTROL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.
12. SAWCUT LINE PROVIDED IS FOR REFERENCE ONLY. CONTRACTOR WILL BE RESPONSIBLE FOR DETERMINING THE EXTENT OF THE SAWCUT THAT WILL BE REQUIRED AS WELL AS PAVEMENT REPAIRS TO INSTALL UTILITY TRENCHING. IF ANY DAMAGE OCCURS ON ANY OF THE SURROUNDING PAVEMENT, ETC. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ITS REMOVAL AND REPAIR. THE CONTRACTOR IS RESPONSIBLE FOR REMOVING THAT WHICH IS NECESSARY TO COMPLETE THE INTENT OF THE PROPOSED IMPROVEMENTS. SAWCUT EXISTING PAVEMENT TO FULL DEPTH, USING CARE TO CUT NEAT, STRAIGHT LINES. CUT AT EXISTING JOINTS WHERE POSSIBLE.
13. THE CONTRACTOR SHALL MAINTAIN A WELL-DRAINED SITE, FREE OF STANDING WATER DURING CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR TEMPORARY DRAINAGE MEASURES DURING CONSTRUCTION.
14. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO STUDY THE PLANS AND VISIT THE SITE TO DETERMINE THE ITEMS THAT MUST BE REMOVED TO COMPLY WITH THE SITE DEVELOPMENT PLANS. NO EXTRA FEE WILL BE PAID FOR THE REMOVAL OF ANY ITEM NOT LISTED THAT IS VISIBLE UPON A SITE VISIT. THE DEMOLITION PLAN IS INTENDED TO PRESENT THE SCOPE OF THE DEMOLITION, AND DOES NOT GUARANTEE THAT ALL ITEMS ARE ADDRESSED.
15. THE CONTRACTOR SHALL OBTAIN ALL PERMITS FOR ALL SITE DEVELOPMENT WORK, PAY ALL FEES FOR PERMITS AND CHECK ALL GOVERNING AUTHORITIES' SPECIFICATIONS FOR BUT NOT LIMITED TO, GUTTERS, SIDEWALKS, POLES, AND OTHER STRUCTURES, INCLUDING THE REMOVAL OR RELOCATION OF EXISTING UTILITIES OR OTHER PHYSICAL OBJECTS SHOWN ON PLANS OR NOTED OTHERWISE.
16. THE CONTRACTOR SHALL CREATE AND IMPLEMENT AN EROSION AND SEDIMENTATION CONTROL PLAN FOR ALL SITE CONSTRUCTION ACTIVITIES ASSOCIATED WITH THE PROJECT. THE PLAN MUST CONFORM TO THE EROSION AND SEDIMENTATION REQUIREMENTS OF THE CONSTRUCTION GENERAL PERMIT OR LOCAL STANDARDS AND CODES, WHICHEVER IS MORE STRINGENT.
17. ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.

SITE NOTES

1. ALL WORK AND MATERIALS SHALL COMPLY WITH ALL CITY/COUNTY REGULATIONS AND CODES AND O.S.H.A. STANDARDS.
2. ALL MATERIAL NOTED ON DRAWINGS WILL BE SUPPLIED BY THE CONTRACTOR UNLESS OTHERWISE NOTED.
3. CONTRACTOR SHALL REFER TO THE ARCHITECTURAL PLANS TO COORDINATE ACCESS POINTS AND ELEVATIONS. REFER TO ARCHITECTURAL PLANS. FOR EXACT LOCATIONS AND DIMENSIONS OF DOORS, ENTRY RAMP, AND CANOPY.
4. ALL COSTS FOR INSPECTIONS AND/OR TESTS SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR UNLESS NOTED OTHERWISE.
5. ACCESSIBILITY STANDARDS SHALL BE IN ACCORDANCE WITH FEDERAL AND LOCAL REQUIREMENTS FOR HANDICAP ACCESSIBILITY, INCLUDING BUT NOT LIMITED TO THE AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES. ADA PARKING STALLS SHALL MEET ADA GRADE GUIDELINES. CONTRACTOR SHALL FIELD VERIFY EXISTING GRADES AT ACCESS POINTS, ACCESSIBLE ROUTES, AND EXISTING PARKING TO REMAIN TO DETERMINE COMPLIANCE WITH STANDARDS.
6. ALL ADA ACCESSIBLE ROUTES, WITHIN THE PUBLIC RIGHT-OF-WAY, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE "PUBLIC RIGHTS-OF-WAY ACCESSIBILITY GUIDELINES" AND ANY APPLICABLE LOCAL OR STATE REQUIREMENTS. THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
7. ALL ADA ACCESSIBLE ROUTES, INCLUDING SIGNAGE AND STRIPING WITHIN THE PROJECT LIMITS, SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE CURRENT EDITION OF THE "ADA STANDARDS FOR ACCESSIBLE DESIGN" AND ANY LOCAL OR STATE REQUIREMENTS. THE MORE STRINGENT REQUIREMENT SHALL GOVERN.
8. ALL DISTURBED AREAS ARE TO RECEIVE 6" OF TOPSOIL, SEED, MULCH AND WATER UNTIL A HEALTHY STAND OF GRASS IS ESTABLISHED.
9. ALL DIMENSIONS AND RADII ARE TO THE FACE OF THE CURB OR EDGE OF PAVEMENT, AS APPLICABLE, UNLESS OTHERWISE NOTED.
10. ALL CURB RADII ARE 5 FEET UNLESS OTHERWISE NOTED.
11. PROVIDE SIGNAGE AND STRIPING AS SHOWN. ALL SIGNAGE AND PAVEMENT MARKINGS SHALL COMPLY WITH THE GOVERNING MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (M.U.T.C.D.). PAVEMENT MARKINGS ON ASPHALT SHALL BE WHITE. PAVEMENT MARKINGS ON CONCRETE SHALL BE YELLOW.
12. REFER TO ARCHITECTURAL PLANS FOR PROPOSED BUILDING SIGNAGE.
13. REFER TO MECHANICAL PLANS FOR EQUIPMENT LAYOUT.
14. REFER TO ELECTRICAL PLANS FOR ELECTRICAL WORK.
15. REFER TO GEOTECHNICAL ENGINEERING REPORT BY GILES ENGINEERING ASSOCIATES, INC. FOR SITE WORK PREPARATION/RECOMMENDATIONS AND PAVEMENT SECTIONS.
16. REFER TO ORIGINAL SURVEY PROVIDED BY BLEW INC.
17. ALL LIGHT POLES TO BE LOCATED 3' FROM THE BACK OF CURB, AS MEASURED FROM THE FACE OF POLE FOUNDATION, UNLESS OTHERWISE DENOTED ON PLANS.

GRADING NOTES

1. THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON RECORDS OF THE VARIOUS UTILITY COMPANIES, AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO ACCOMODATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. THE TOPOGRAPHIC SURVEY WAS PERFORMED BY A REGISTERED LAND SURVEYOR. IF CONTRACTOR DOES NOT ACCEPT EXISTING TOPOGRAPHY AS SHOWN ON THE PLANS, WITHOUT EXCEPTION, HE SHALL HAVE MADE, AT HIS EXPENSE, A TOPOGRAPHIC SURVEY BY A REGISTERED LAND SURVEYOR AND SUBMIT IT TO THE OWNER FOR REVIEW.
3. CONSTRUCTION SHALL COMPLY WITH ALL APPLICABLE GOVERNING CODES AND BE CONSTRUCTED TO SAME.
4. THE CONTRACTOR SHALL ADHERE TO ALL TERMS & CONDITIONS AS OUTLINED IN THE EPA OR APPLICABLE STATE GENERAL N.P.D.E.S. PERMIT FOR STORM WATER DISCHARGE ASSOCIATED WITH CONSTRUCTION ACTIVITIES.
5. EXISTING AND PROPOSED GRADE CONTOUR INTERVALS ARE SHOWN AT 1 FOOT INTERVALS.
6. ALL SPOT ELEVATIONS REFER TO FINISHED PAVEMENT ELEVATIONS UNLESS OTHERWISE NOTED.
7. ALL ADA ACCESSIBLE PARKING SPACES AND LOADING AREAS SHALL BE GRADED WITH A 2.0% MAXIMUM SLOPE IN ALL DIRECTIONS. ALL ADA ACCESSIBLE ROUTES SHALL BE GRADED WITH A 2.0% MAXIMUM CROSS SLOPE AND 5.0% MAXIMUM RUNNING SLOPE.
8. MAINTAIN EXISTING DRAINAGE PATTERN THROUGHOUT THE SITE, EXCEPT WITHIN THE LIMITS OF DISTURBANCE (LOD).
9. COORDINATE GRADES AT BUILDING ENTRIES WITH ARCHITECTURAL PLANS.
10. EXISTING DRAINAGE STRUCTURES SHALL BE INSPECTED AND REPAIRED AS NEEDED, AND EXISTING PIPES ARE TO BE CLEANED TO REMOVE ALL SILT AND DEBRIS AFTER CONSTRUCTION IS COMPLETE.
11. IF ANY EXISTING STRUCTURES TO REMAIN ARE DAMAGED DURING CONSTRUCTION IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO REPAIR AND/OR REPLACE THE EXISTING STRUCTURE AS NECESSARY TO RETURN IT TO A CONDITION EQUAL TO OR BETTER THAN IT'S CONDITION PRIOR TO DAMAGE.
12. CONTRACTOR SHALL ASSURE POSITIVE DRAINAGE AWAY FROM BUILDING AND WITHIN PAVED AREAS.
13. ALL TOPSOIL MUST BE REMOVED BEFORE FILL MATERIAL IS PLACED.
14. ALL WET, OR OTHERWISE UNSUITABLE SOILS MUST BE STABILIZED. THIS MAY BE ACCOMPLISHED BY DRYING, REMOVAL & REPLACEMENT, REMOVAL & DRYING & RECOMPACTION, OR SOIL TREATMENT (LIME/CEMENT) UNDER THE SUPERVISION OF A QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER.
15. ALL UNSURFACED AREAS, DISTURBED BY GRADING, OPERATION SHALL RECEIVE 6" OF TOPSOIL. CONTRACTOR SHALL APPLY STABILIZATION FABRIC TO ALL SLOPES GREATER THAN 3H:1V AND SEED WITH LOW MAINTENANCE GRASS SEED MIX. CONTRACTOR SHALL SEED DISTURBED AREAS IN ACCORDANCE WITH SPECIFICATIONS UNTIL A HEALTHY STAND OF GRASS IS OBTAINED. ALL EXPOSED SURFACE AREAS SHALL BE STABILIZED PER THE SWPPP AND LANDSCAPE REQUIREMENTS AS PART OF THIS PLAN SET.
16. ALL STORM PIPE ENTERING STRUCTURES SHALL BE GROUTED TO ASSURE CONNECTION AT STRUCTURE IS SOIL TIGHT.
17. ALL STORM STRUCTURES SHALL HAVE A SMOOTH UNIFORM POURED MORTAR INVERT FROM INVERT IN TO INVERT OUT.
18. STORM PIPE SHALL BE AS FOLLOWS UNLESS OTHERWISE NOTED:

MATERIAL	TYPE	PIPE SPEC	JOINT SPEC	INSTALLATION	ACCEPTABLE AREAS OF USE
HIGH DENSITY POLY-ETHYLENE (HDPE)	SMOOTH-WALLED CORRUGATED ADS-N12 OR EQUAL	AASHTO M294 (TYPE S)	ASTM F477	ASTM D2321	ON SITE, 12" TO 60" DIA.
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321	ON SITE, 4" TO 10"

19. ALL STORM SEWER STRUCTURE GRATES AND FRAMES WITHIN PAVEMENT SHALL BE HEAVY DUTY.
20. ALL STORM DRAINAGE SHALL BE PERFORMED IN ACCORDANCE WITH ALL LOCAL COUNTY AND NEW HAMPSHIRE DOT STANDARDS.
21. ALL DOWNSPOUT DRAIN LINES OR ROOF LEADERS SHALL HAVE A 1.0% MINIMUM SLOPE, UNLESS OTHERWISE NOTED. CONNECT ALL DOWNSPOUTS AND ROOF LEADERS TO THE STORM SEWER SYSTEM. REFER TO ARCHITECTURAL PLANS FOR DOWNSPOUT AND ROOF LEADER LOCATIONS. PROVIDE POSITIVE DRAINAGE AND PAVEMENT REPAIR AS NEEDED.
22. ROOF DRAINS, FOUNDATION DRAINS, AND OTHER CLEAN WATER CONNECTIONS TO THE SANITARY SEWER SYSTEM ARE PROHIBITED.
23. THE STORM SEWER GRADE WILL BE SUCH THAT A MINIMUM COVER IS MAINTAINED TO WITHSTAND AASHTO HS-25 LOADING ON THE PIPE. PROVIDE MINIMUM 2.0 FEET OF COVER FOR ALL STORM SEWERS UNLESS OTHERWISE NOTED.
24. WHEN A SANITARY SEWER MAIN LIES ABOVE A STORM SEWER, OR WITHIN 18 INCHES BELOW, THE SANITARY SEWER WILL HAVE AN IMPERVIOUS ENCASEMENT OR BE CONSTRUCTED OF STRUCTURAL SEWER PIPE FOR A MINIMUM OF 10 FEET ON EACH SIDE OF WHERE THE STORM SEWER CROSSES.
25. IF EXISTING FIELD TILES ARE ENCOUNTERED DURING CONSTRUCTION THEY SHALL BE REPAIRED AND/OR TIED INTO A STORM SEWER SYSTEM AS NEEDED TO MAINTAIN POSITIVE DRAINAGE.

UTILITY NOTES

1. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HOURS BEFORE ANY EXCAVATION TO REQUEST EXACT FIELD LOCATION OF UTILITIES. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLANS.
2. CONTRACTOR SHALL COMPLY TO THE FULLEST EXTENT WITH THE LATEST STANDARDS OF O.S.H.A. DIRECTIVES OR ANY OTHER AGENCY HAVING JURISDICTION FOR EXCAVATION AND TRENCHING PROCEDURES. THE CONTRACTOR SHALL USE SUPPORT SYSTEMS, SLOPING, BENCHING, AND OTHER MEANS OF PROTECTION. THIS TO INCLUDE BUT NOT LIMITED FOR ACCESS AND EGRESS FROM ALL EXCAVATION AND TRENCHING. CONTRACTOR IS RESPONSIBLE TO COMPLY WITH PERFORMANCE CRITERIA FOR O.S.H.A.
3. CONTRACTOR IS RESPONSIBLE FOR REPAIRS OF DAMAGE TO ANY EXISTING UTILITY DURING CONSTRUCTION AT NO COST TO THE OWNER.
4. ALL FILL MATERIAL IS TO BE IN PLACE AND COMPACTED BEFORE INSTALLATION OF PROPOSED UTILITIES.
5. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
6. CONTRACTOR SHALL NOTIFY THE UTILITY AUTHORITY'S INSPECTORS 72 HOURS BEFORE CONNECTING TO ANY EXISTING LINE.
7. WATER AND SANITARY UTILITIES SHALL HAVE TEN (10') FEET OF HORIZONTAL CLEARANCE WHEN PARALLEL OR 18" VERTICAL CLEARANCE WHEN CROSSING. ALL CLEARANCE DISTANCES SHALL BE MEASURE FROM OUTSIDE EDGE OF PIPE TO OUTSIDE EDGE OF PIPE. THE CROSSING SHALL BE ARRANGED SO THAT THE SANITARY SEWER JOINTS WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE WATER LINE JOINTS.
8. IF A WATER LINE PASSES UNDER THE SANITARY SEWER LINE, THE SEWER LINE SHOULD BE CONSTRUCTED OF A WATERTIGHT MATERIAL APPROVED BY THE REGULATORY AGENCY FOR USE IN WATER MAIN CONSTRUCTION AND SHALL EXTEND TEN (10') FEET ON BOTH SIDES OF THE CROSSING, AS MEASURED PERPENDICULAR TO THE WATER LINES. ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.
9. UNDERGROUND LINES SHALL BE INSTALLED, INSPECTED AND APPROVED BEFORE BACKFILLING.
10. CONTRACTOR SHALL COORDINATE WITH ALL UTILITY COMPANIES FOR INSTALLATION REQUIREMENTS AND SPECIFICATIONS. THE CONTRACTOR SHALL CONDUCT ALL REQUIRED TESTS TO THE SATISFACTION OF THE RESPECTIVE UTILITY REGULATIONS AND THE OWNER'S INSPECTION AUTHORITIES.
11. UTILITY TRENCHES WITHIN PAVED AREAS TO BE BACKFILLED PER UTILITY TRENCH DETAIL PROVIDED WITHIN THE CONSTRUCTION DETAILS SHEET.
12. ALL WATER LINE WORK SHALL BE PERFORMED IN ACCORDANCE WITH CITY OF PORTSMOUTH CONSTRUCTION STANDARDS AND STATE REGULATIONS.
13. INSTALL ALL WATER LINES WITH A MINIMUM COVER OF 4'.
14. ON-SITE WATER LINE MATERIAL SHALL BE AS FOLLOWS:

MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
COPPER 1"-3"	TYPE "K"	ASTM B88	AWWA C800	AWWA C800	DOMESTIC WATERLINES 1"-3"

15. ON-SITE SANITARY SEWER LINE MATERIAL SHALL BE AS FOLLOWS:

MATERIAL	PRESSURE RATING	PIPE SPEC	FITTINGS	INSTALLATION	ACCEPTABLE AREAS OF USE
POLY VINYL CHLORIDE (PVC)	SDR 35	ASTM D3034	ASTM D3212	ASTM D2321 WITH TYPE 1 BEDDING	ON SITE, 6" TO 8" DIA., LESS THAN 8.5' OF COVER

16. REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING UTILITY CONNECTION LOCATIONS, SERVICE SIZES TO BE DETERMINED BY ARCHITECT.
17. CLEAN OUTS AND CURB BOXES WITHIN THE PAVED AREAS MUST HAVE TRAFFIC LOADING FRAMES AND COVERS.

EXISTING FEATURES LEGEND

APPLIES TO ALL CIVIL SHEETS

- R/W — RIGHT OF WAY
- PARCEL LINE
- PROPERTY BOUNDARY
- EASEMENT
- CURB
- EDGE OF PAVEMENT
- EDGE OF WALK
- PAVEMENT MARKINGS
- G — GAS LINE
- W — WATER LINE
- UGE — UNDERGROUND ELECTRIC
- UGT — UNDERGROUND TELE
- OHL — OVERHEAD LIGHTING
- STM — STORM SEWER
- SAN — SANITARY SEWER
- 100 — MAJOR CONTOURS
- 102 — MINOR CONTOURS

- WATER METER
- WATER VALVE
- POWER/TELE POLE
- POWER POLE
- AIR CONDITIONER
- ELECTRIC BOX
- LIGHT POLE
- GAS VALVE
- GAS METER
- STORM CATCH BASIN
- STORM INLET BASIN
- STORM MANHOLE
- STORM CLEANOUT
- SANITARY MANHOLE
- SANITARY CLEANOUT
- TRAFFIC MANHOLE
- SIGN
- TELEPHONE POLE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH

PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	NOT TO SCALE
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
GENERAL NOTES

C1.1

ALTA/NSPS LAND TITLE SURVEY

2299 LAFAYETTE ROAD,
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

SITE INFORMATION

N/F: RYE PORT PROPERTIES LLC
2299 LAFAYETTE RD, PORTSMOUTH, NH 03870
APN: 0272-0004-0000
79,998 ± SQUARE FEET, OR 1.837 ± ACRES

TITLE COMMITMENT INFORMATION

AWAITING TITLE COMMITMENT

SCHEDULE A DESCRIPTION

AWAITING TITLE COMMITMENT

NOTES CORRESPONDING TO SCHEDULE B

AWAITING TITLE COMMITMENT

REFERENCE DOCUMENTS

1. WARRANTY DEED, RECORDED AS BOOK 5083, PAGE 763 ON JANUARY 15, 2010, ROCKINGHAM COUNTY REGISTRY OF DEEDS.
2. SUBDIVISION PLAT, RECORDED AS PLAN D-33166 ON OCTOBER 24, 2005, PORTSMOUTH TOWN CLERK RECORDS.
3. TITLE INSURANCE PLAN, RECORDED AS PLAN D-20705 ON NOVEMBER 7, 1990, PORTSMOUTH TOWN CLERK RECORDS.
4. ASBUILT SITE PLAN, RECORDED AS PLAN D-15321 ON AUGUST 8, 1986, PORTSMOUTH TOWN CLERK RECORDS.

PARKING INFORMATION

REGULAR= 40
HANDICAP= 2
TOTAL= 42

FLOOD ZONE INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 33015C0270F, WHICH BEARS AN EFFECTIVE DATE OF 01/29/2021 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONE "X" - AREA OF MINIMAL FLOOD HAZARD, USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE "X" IS THE AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD AND PROTECTED BY LEVEE FROM 100-YEAR FLOOD.

BASIS OF BEARING

THE BASIS OF BEARING OF THIS SURVEY IS GRID NORTH BASED ON THE NORTHEAST LINE OF THE SUBJECT PROPERTY. THE BEARING IS DENOTED AS S33°10'12"E PER GPS COORDINATE OBSERVATIONS NEW HAMPSHIRE STATE PLANE NAD83.
LATITUDE = 43°02'03.4920"
LONGITUDE = -70°46'49.2583"
CONVERGENCE ANGLE = 00°36'17.57"

SIGNIFICANT OBSERVATIONS

AWAITING TITLE COMMITMENT

UTILITY INFORMATION

THE UTILITIES SHOWN ON THIS DRAWING HEREON HAVE BEEN LOCATED BY FIELD MEASUREMENTS, UTILITY MAP DRAWINGS, NEW HAMPSHIRE 811 DIG UTILITY LOCATE REQUEST, AND PRIVATE UTILITY LOCATE CONTRACTED BY BLEW AND ASSOCIATES. BLEW AND ASSOCIATES MAKES NO WARRANTY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION. TICKET NUMBER: 20253216635

COMPANY:	CONTACT:
COMCAST - NH	(317) 810-8269
CONSOLIDATED COMMUNICATIONS	(207) 852-8315 x1
EVERSOURCE - ELECTRIC	(207) 852-8315 x1
PORTSMOUTH DPW	(603) 427-1530
UNITIL - NORTHERN UTILITIES - NH - GAS	(603) 294-5177

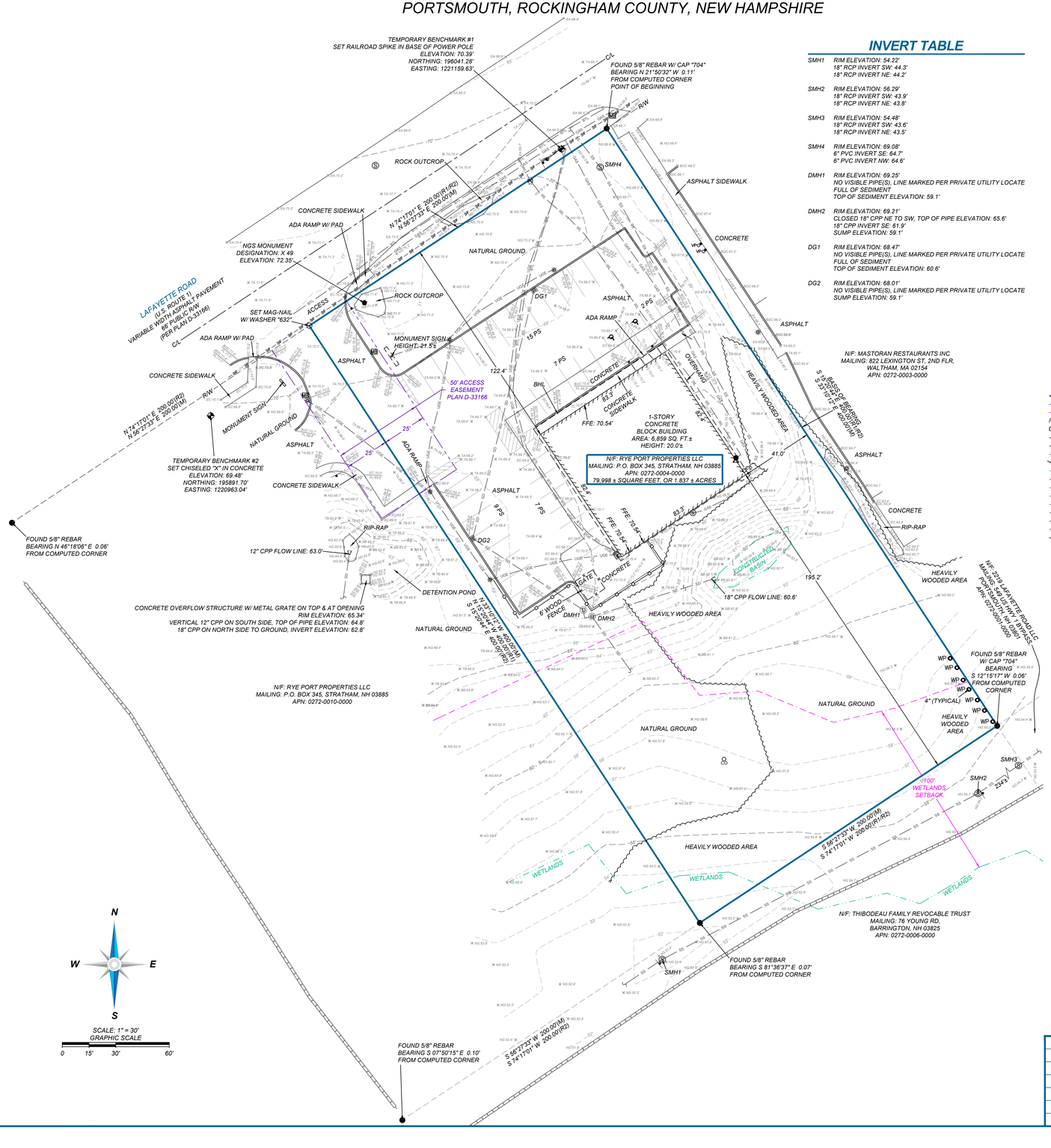
PRIVATE UTILITY LOCATE NOTES:
1. UNKNOWN WATERLINE PIPE TYPE/SIZE, NO GIS MAP PROVIDED TO SURVEYOR.

ZONING INFORMATION

PROPERTY IS CURRENTLY ZONED: ***AWAITING ZONING REPORT***

OBSERVED USE: COMMERCIAL; *USE PERMITTED BY ZONE: _____YES, or _____NO*

ITEM	REQUIRED	OBSERVED
MIN. SETBACKS FRONT		122.4'
MIN. SETBACKS SIDE		41.0'
MIN. SETBACKS REAR		195.2'
MAX. BUILDING HEIGHT		20.0'
MIN. LOT AREA		79,998 SQ. FT.
MIN. LOT WIDTH		200.00'
MAX. BLDG COVERAGE		8.6%±
PARKING REGULAR		40
PARKING HANDICAP		2
PARKING TOTAL		42



INVERT TABLE

SMH1 *RIM ELEVATION: 54.22'*
18" RCP INVERT SW: 44.3'
18" RCP INVERT NE: 44.2'

SMH2 *RIM ELEVATION: 56.29'*
18" RCP INVERT SW: 43.9'
18" RCP INVERT NE: 43.8'

SMH3 *RIM ELEVATION: 54.48'*
18" RCP INVERT SW: 43.6'
18" RCP INVERT NE: 43.5'

SMH4 *RIM ELEVATION: 69.08'*
6" PVC INVERT SE: 64.7'
6" PVC INVERT NW: 64.6'

DMH1 *RIM ELEVATION: 69.25'*
NO VISIBLE PIPE(S), LINE MARKED PER PRIVATE UTILITY LOCATE
FULL OF SEDIMENT
TOP OF SEDIMENT ELEVATION: 59.1'

DMH2 *RIM ELEVATION: 69.21'*
CLOSED 18" CPP NE TO SW, TOP OF PIPE ELEVATION: 65.6'
18" CPP INVERT SE: 61.9'
SUMP ELEVATION: 59.1'

DG1 *RIM ELEVATION: 68.47'*
NO VISIBLE PIPE(S), LINE MARKED PER PRIVATE UTILITY LOCATE
FULL OF SEDIMENT
TOP OF SEDIMENT ELEVATION: 60.6'

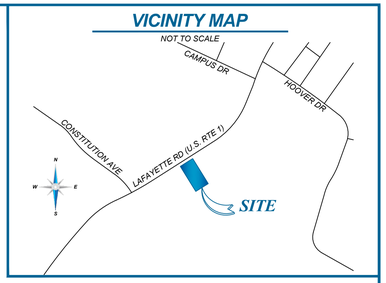
DG2 *RIM ELEVATION: 68.01'*
NO VISIBLE PIPE(S), LINE MARKED PER PRIVATE UTILITY LOCATE
SUMP ELEVATION: 59.1'

LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- SET MONUMENT AS NOTED
- FOUND NGS MONUMENT
- SET TEMPORARY BENCHMARK
- HANDICAP PARKING
- POWER POLE
- LIGHT POLE
- GUY ANCHOR
- ELECTRIC METER
- WATER SPIGOT
- WATER VALVE
- GAS METER
- FUEL STATION TANK VENT PIPE
- SANITARY MANHOLE (SMH#)
- CLEANOUT
- STORM MANHOLE
- DRAIN GRATE (DG#)
- STORM CULVERT PIPE
- SIGN
- BOLLARD
- MAILBOX
- WOOD POST
- *BHL* BUILDING HEIGHT LOCATION
- *FFE* FINISHED FLOOR ELEVATION
- *PS* PARKING SPACE(S)
- *(M)* MEASURED/CALCULATED DIMENSION
- *(R1)* RECORD DIMENSION PER BK. 5083, PG. 764
- *(R2)* RECORD DIMENSION PER PLAN D-33166
- *CPP* CORRUGATED PLASTIC PIPE
- *PVC* POLYVINYL CHLORIDE PIPE
- *RCP* REINFORCED CONCRETE PIPE
- *BB* BOTTOM OF BANK
- *BOC* BACK OF CURB
- *EA* EDGE OF ASPHALT
- *EC* EDGE OF CONCRETE
- *FL* FLOW LINE
- *NG* NATURAL GROUND
- *TA* TOP OF ASPHALT
- *TB* TOP OF BANK
- *TC* TOP OF CONCRETE
- BOUNDARY LINE
- EASEMENT LINE
- SETBACK LINE
- RIGHT-OF-WAY LINE
- CENTERLINE OF RIGHT-OF-WAY
- FENCE LINE
- METAL GUARDRAIL
- ROCK WALL
- TREE CANOPY
- LIMITS OF WETLANDS
- OVERHEAD POWER LINE
- UNDERGROUND ELECTRIC LINE
- UNDERGROUND TELEPHONE LINE
- UNDERGROUND WATER LINE
- UNDERGROUND GAS LINE
- SANITARY SEWER LINE
- STORM SEWER LINE
- NOT TO SCALE

VICINITY MAP

NOT TO SCALE



GENERAL NOTES

1. *SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY.*
2. *DIMENSIONS ON THIS PLAT ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF. UNLESS OTHERWISE NOTED. MONUMENTS WERE FOUND AT POINTS WHERE INDICATED.*
3. *IN REGARD TO ALTA/NSPS TABLE A ITEM 16, THERE WAS NO OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR ADDITIONS EXCEPT AS SHOWN HEREON.*
4. *IN REGARD TO ALTA/NSPS TABLE A ITEM 17, THERE WERE NO KNOWN PROPOSED CHANGES IN RIGHT OF WAY LINES, RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS EXCEPT AS SHOWN HEREON.*
5. *AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.*
6. *AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A CEMETERY, ISOLATED GRAVE SITE OR BURIAL GROUNDS.*
7. *COMPLETED FIELD WORK WAS AUGUST 15, 2025.*
8. *THE DISTANCES SHOWN HEREON ARE UNITS OF GROUND MEASUREMENT.*
9. *THE NEAREST INTERSECTING STREET IS THE INTERSECTION OF LAFAYETTE ROAD AND CONSTITUTION AVENUE, WHICH IS APPROXIMATELY 755' FROM THE NORTHWEST CORNER OF THE SUBJECT PROPERTY.*
10. *THE SUBJECT PROPERTY HAS DIRECT & INDIRECT ACCESS TO LAFAYETTE ROAD, BEING A PUBLICLY DEDICATED RIGHT-OF-WAY, AS SHOWN PER PLAN D-33166.*
11. *EXCEPT AS SPECIFICALLY STATED OR SHOWN ON THIS PLAT, THIS SURVEY DOES NOT PURPORT TO REFLECT ANY OF THE FOLLOWING WHICH MAY BE APPLICABLE TO THE SUBJECT PROPERTY: EASEMENTS, OTHER THAN POSSIBLE EASEMENTS WHICH WERE VISIBLE AT THE TIME OF SURVEY; RESTRICTIVE COVENANTS; SUBDIVISION RESTRICTIONS OR OTHER LAND USE REGULATIONS; AND ANY OTHER FACTS WHICH AN ACCURATE TITLE SEARCH MAY DISCLOSE.*
12. *NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED NEW HAMPSHIRE ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY ("THE SUBJECT PROPERTY"). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B-II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT THE LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.*
13. *NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM THE CITY OF PORTSMOUTH GIS.*
14. *THE SUBJECT PROPERTY SHOWN HEREON FORMS A MATHEMATICALLY CLOSED FIGURE AND IS CONTIGUOUS WITH THE ADJOINING PUBLIC RIGHT-OF-WAY AND/OR ADJOINING PARCELS WITH NO GAPS OR OVERLAPS.*
15. *IN REGARD TO ALTA/NSPS TABLE A ITEM 10, NO VISIBLE DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES WERE OBSERVED AT THE TIME THE FIELD SURVEY WAS PERFORMED, NOR WERE ANY DESIGNATED BY THE CLIENT.*
16. *ELEVATIONS ESTABLISHED WITH GPS OBSERVATIONS UTILIZING THE NATIONAL GEODETIC SURVEY (NGS) NETWORK WITH ORIGINATING BENCHMARK DESIGNATION: X 49, VERTICAL DATUM BASED UPON NORTH AMERICAN VERTICAL DATUM (NAVD88) IN US SURVEY FEET. CONTOURS SHOWN ARE ONE FOOT INTERVALS.*
PID: OC0281
PUBLISHED ELEVATION: 72.35'
MONUMENT DESCRIPTION: BENCHMARK DISK STAMPED "X 49 1966" SET IN A ROCK OUTCROP
17. *WETLAND LOCATIONS SHOWN HEREON WERE PROVIDED BY BL COMPANIES, A QUALIFIED SPECIALIST.*

SURVEYOR'S CERTIFICATE

TO:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS. JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 6A, 6B, 7B1, 7C, 8, 9, 10, 11B, 13, 14, 16, 17, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 08/15/2025.

DATE OF PLAT OR MAP: 08/22/2025

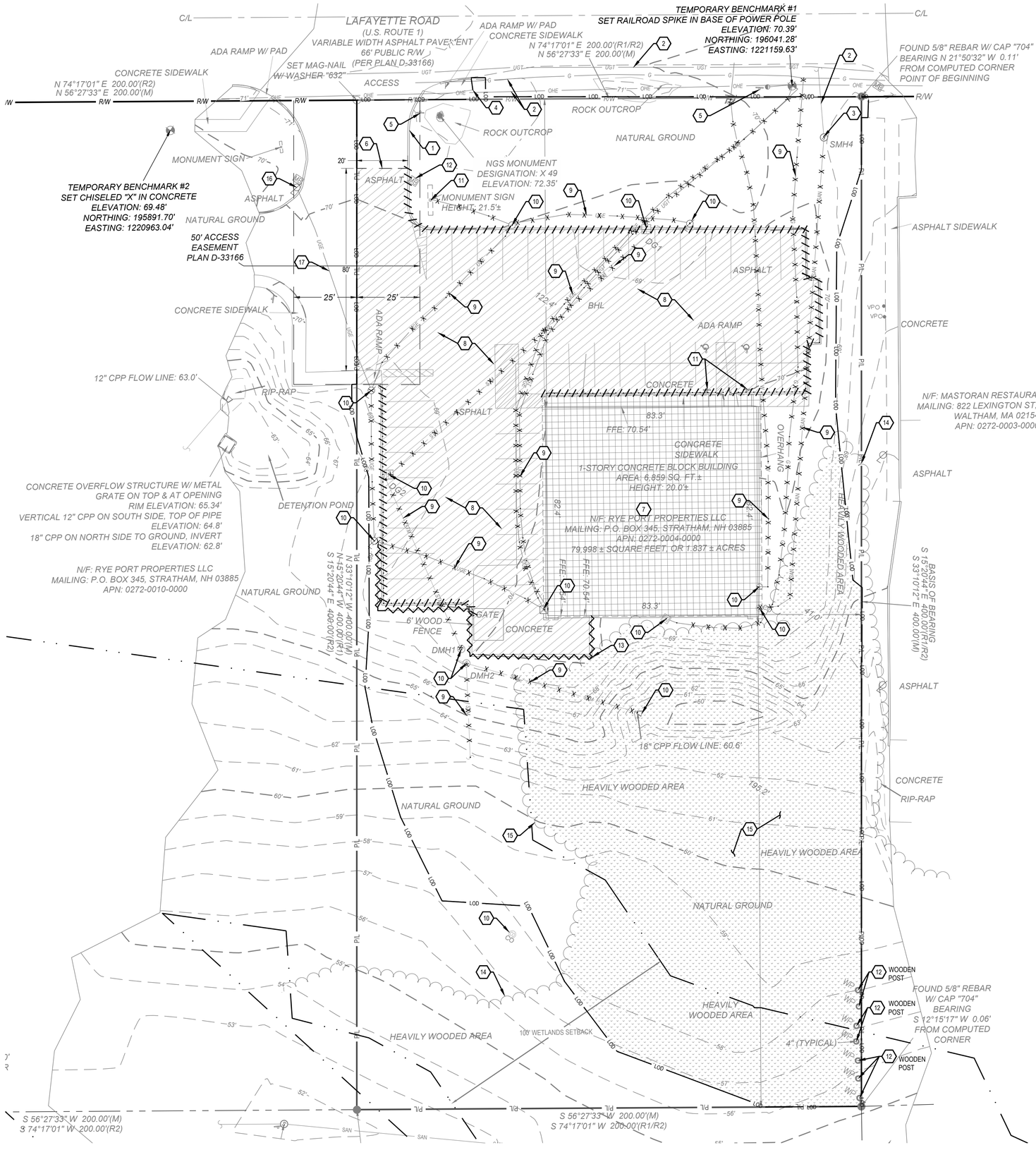
PRELIMINARY

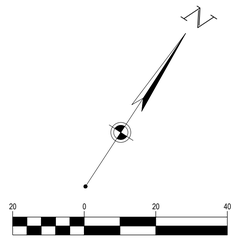
HOLLAND E. SHAW
PROFESSIONAL LAND SURVEYOR NO. 632
STATE OF NEW HAMPSHIRE
NEW HAMPSHIRE C.O.A. 00545

DATE	REVISION HISTORY	BY
09/10/25	WETLANDS DELINEATION	AJK
09/24/25	CLIENT COMMENTS	KLR

BLEW
Surveying | Engineering | Environmental
3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL: SURVEY@BLEWINC.COM
OFFICE: 479.443.4506 FAX: 479.582.1883
WWW.BLEWINC.COM

SURVEYOR JOB NUMBER:	SURVEY DRAWN BY:
25-6116	AJK - 08/22/2025
SURVEY REVIEWED BY:	**SHEET:**
KLR	1 OF 1





DEMOLITION LEGEND

EXISTING

REFER TO C1.0 FOR EXISTING FEATURES LEGEND

PROPOSED

- SITE CLEARING LIMITS
- REMOVE EXISTING BUILDING
- REMOVE EXISTING ASPHALT PAVEMENT (OR AS NOTED ON THE PLANS)
- SAWCUT LINE
- UTILITY LINE TO BE REMOVED / RELOCATED
- LOD — LIMITS OF DISTURBANCE
- REMOVE EXISTING CURB & GUTTER
- REMOVE EXISTING FENCE

CONTRACTOR NOTE:

1. CONTRACTOR SHALL VERIFY ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES PRIOR TO CONSTRUCTION.
2. REFER TO ALTA FOR EXISTING EASEMENTS. REFER TO UTILITY PLAN FOR EXISTING EASEMENTS PROJECTED ONTO THE PROPOSED SITE.

CODED NOTES:

1. PROTECT EXISTING CURB.
2. PROTECT EXISTING UTILITY LINE. CONTRACTOR SHALL PROTECT IN PLACE.
3. PROTECT EXISTING UTILITY STRUCTURE. CONTRACTOR SHALL PROTECT IN PLACE.
4. PROTECT EXISTING SIDEWALK.
5. PROTECT EXISTING SIGN.
6. SAW-CUT SIDEWALK, CURB OR PAVEMENT TO FULL DEPTH.
7. REMOVE AND LEGALLY DISPOSE OF EXISTING BUILDING AND ALL FEATURES WITHIN 5' OF EXTERIOR WALL, INCLUDING BUT NOT LIMITED TO FLOOR SURFACES, FOUNDATIONS, CONTENTS, EQUIPMENT, SUBSURFACE PIPING, AND ASSOCIATED MATERIALS.
8. REMOVE EXISTING PAVEMENT.
9. REMOVE EXISTING UTILITY LINE. CONTRACTOR SHALL COORDINATE W / UTILITY COMPANY.
10. REMOVE EXISTING UTILITY STRUCTURE. CONTRACTOR SHALL COORDINATE WITH UTILITY COMPANY.
11. REMOVE EXISTING SIGN AND BASE INCLUDING ANY UTILITY SERVICES. CONTRACTOR TO COORDINATE SERVICE REMOVAL WITH UTILITY COMPANY.
12. REMOVE EXISTING SITE FIXTURE.
13. REMOVE EXISTING FENCE.
14. PROTECT EXISTING TREE LINE TO REMAIN.
15. TREE CLEARING LIMITS
16. EXISTING LIGHT POLE TO BE REPLACED.
17. EXISTING ELECTRIC LINE TO BE ABANDONED.

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: NEW HAMPSHIRE UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

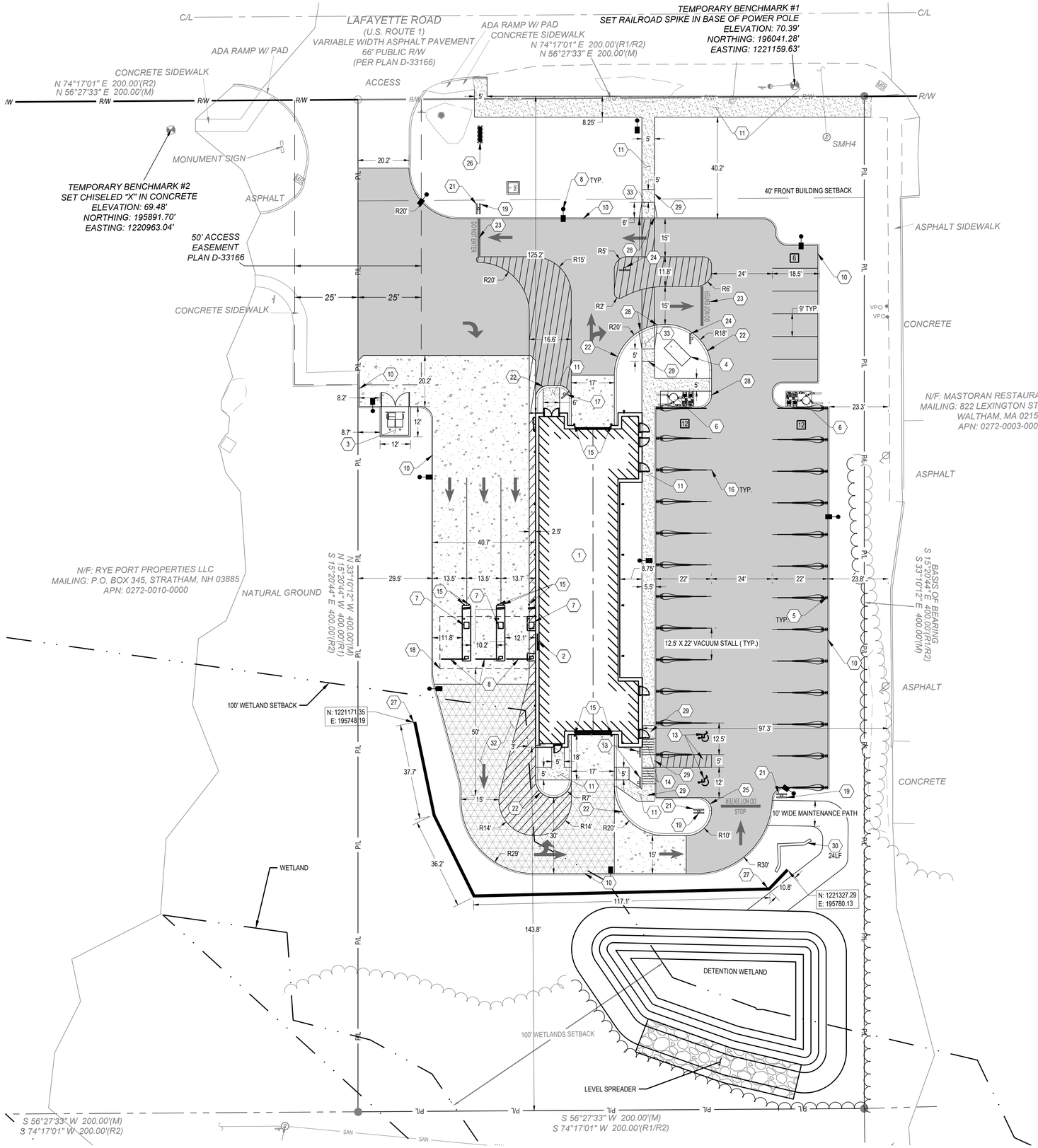
ID	Description	Date

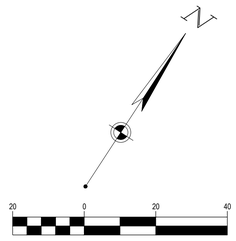
Project Number:	766656
Scale:	1" = 20'
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:

EX CONDITIONS & DEMO PLAN

C2.0





SITE LEGEND

EXISTING

REFER TO C1.0 FOR EXISTING FEATURES LEGEND

PROPOSED

- PROPOSED ASPHALT PAVEMENT (SEE DETAIL ON SHEET C7.0)
- PROPOSED CONCRETE PAVEMENT (SEE DETAIL ON SHEET C7.0)
- PROPOSED CONCRETE SIDEWALK
- PERVIOUS CONCRETE PAVEMENT PER ACI SPEC. 522.1-20 (SPECIFICATION FOR CONSTRUCTION OF PERVIOUS CONCRETE PAVEMENT)
- BUILDING
- RETAINING WALL
- CONCRETE CURB
- EDGE OF PAVEMENT / WALK
- PAVEMENT TRANSITION
- 7 — PARKING SPACE COUNT
- SIGN

CODED NOTES:

1. PROPOSED 5370 SF CAR WASH BUILDING. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
2. PROPOSED BUILDING SLIDING DOOR.
3. PROPOSED TRASH ENCLOSURE PER LOCAL REQUIREMENTS. SEE ARCHITECTURAL PLAN FOR DETAILS.
4. PROPOSED HANG 10 THEMED PARKED VAN ON CONCRETE PAD.
5. PROPOSED VACUUMS. REFER TO MEP PLANS FOR DETAILS.
6. PROPOSED VACUUM MOTOR/EQUIPMENT ENCLOSURE. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
7. PROPOSED PAY STATION. REFER TO MEP PLANS FOR DETAILS.
8. PROPOSED BARRIER GATE. REFER TO MEP PLANS FOR DETAILS.
9. PROPOSED LIGHT POLE. REFER TO CONSTRUCTION DETAILS ON SHEETC8.0.
10. PROPOSED 6" STRAIGHT CURB. REFER TO CONSTRUCTION DETAILS ON SHEET C7.0.
11. PROPOSED CONCRETE SIDEWALK. SIDEWALK IN RIGHT-OF-WAY SHALL BE CONSTRUCTED BY CITY REQUIREMENTS.
12. PROPOSED INTEGRAL CONCRETE CURB AND SIDEWALK. REFER TO CONSTRUCTION DETAILS ON SHEET C7.0.
13. CONTRACTOR TO CONSTRUCT ADA PARKING SPACE PER DETAIL ON SHEET C7.0 AND ACCORDING TO ALL LOCAL, STATE AND FEDERAL REGULATIONS.
14. ADA ACCESSIBLE RAMP TYPE 1. REFER TO CONSTRUCTION DETAILS ON SHEET C7.0.
15. PROPOSED 6" CONCRETE BOLLARD. REFER TO CONSTRUCTION DETAILS ON SHEET C7.0.
16. PROPOSED PARKING LOT PAVEMENT MARKINGS.
17. PROPOSED STOP/GO SIGNAGE.
18. PROPOSED OVERHEAD CANOPY. REFER TO ARCHITECTURAL PLANS FOR DETAILS.
19. PROPOSED STOP SIGN.
20. PROPOSED STOP BAR AND 'STOP' PAVEMENT MARKINGS.
21. PROPOSED DO NOT ENTER SIGN.
22. PROPOSED ROLLED CURB. REFER TO CONSTRUCTION DETAILS ON SHEET C7.0.
23. PROPOSED "DO NOT ENTER" PAVEMENT MARKINGS.
24. PROPOSED PORTABLE STOP SIGN.
25. PROPOSED CURB TRANSITION. REFER TO CONSTRUCTION DETAILS ON SHEET C7.0
26. PROPOSED CAR WASH MONUMENT SIGN.
27. PROPOSED RETAINING WALL. TO BE DESIGNED BY REDI ROCK.
28. PROPOSED CURB TAPER. REFER TO DETAIL ON SHEET C7.0
29. PROPOSED 5'X5' LANDING.
30. PROPOSED 4' SEGMENTAL BLOCK WALL. WALL TO BE ALAN BLOCK (OR APPROVED ALTERNATE). SEE DETAIL ON SHEET C7.0.
31. PROPOSED CURB TO TIE INTO EXISTING SIDEWALK CURB. MATCH EXISTING ELEVATIONS.
32. PROPOSED PERVIOUS CONCRETE. REFER TO CONCRETE DETAIL ON SHEET C7.0, TO BE INSTALLED PER ACI SPEC 522.1-20.
33. ADA ACCESSIBLE RAMP TYPE 2. REFER TO CONSTRUCTION DETAILS ON SHEET C7.0.

SITE DATA SUMMARY:	
PARCEL SIZE	1.84 ACRES/ 80,150 SF
ZONING	G1 – GATEWAY CORRIDOR
BUILDING	4,683 SF
LOT COVERAGE:	6.2% (4,951 SF/80,150 SF)
PERVIOUS COVER:	44.2% (35,437 SF)
IMPERVIOUS COVER:	55.8% (44,713 SF)
FRONT SETBACK:	125' (100' REQUIRED)
SIDE SETBACKS:	61' (10' REQUIRED)
REAR SETBACK:	144' (10' REQUIRED)

PARKING TABLE	
	SPACES
REQUIRED	14 (1 ACCESSIBLE PARKING SPACE) (2+(4,683/400)) = 14
PROPOSED	30 (1 ACCESSIBLE SPACE)

811 DigSafe MA-ME-NH-RI-VT

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: NEW HAMPSHIRE UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

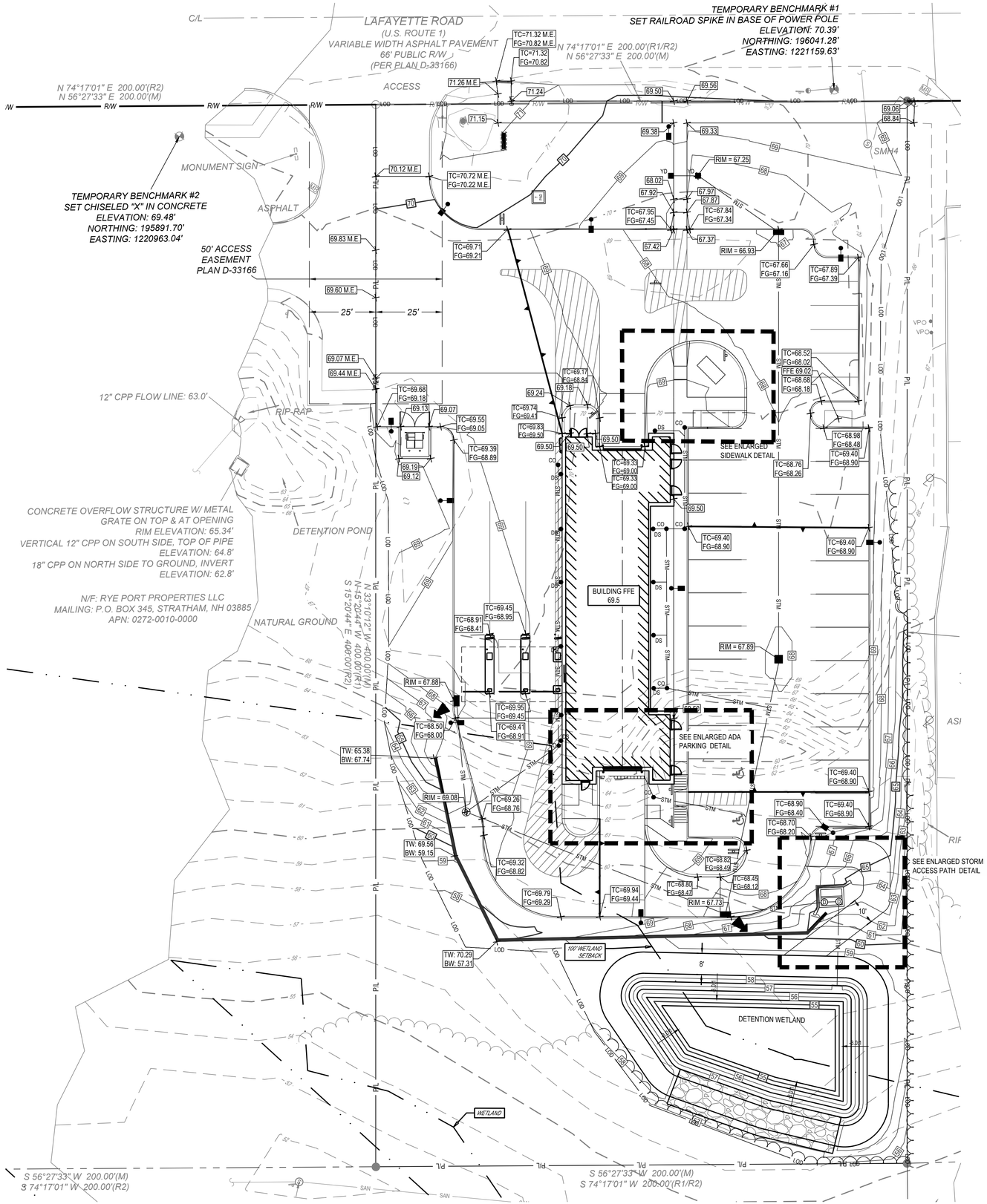
ID	Description	Date

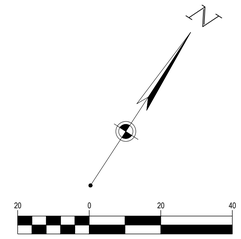
Project Number:	766656
Scale:	1" = 20'
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
SITE PLAN

C3.0

C:\DOCACCDocs\CESO\Hang10 Portsmouth NH\Project Files_CESO\03-CIVIL\PLAN\PLOT\766656_C3.0_Site_Plan.dwg - 11/24/2025 - Marvin Maldonado





GRADING LEGEND

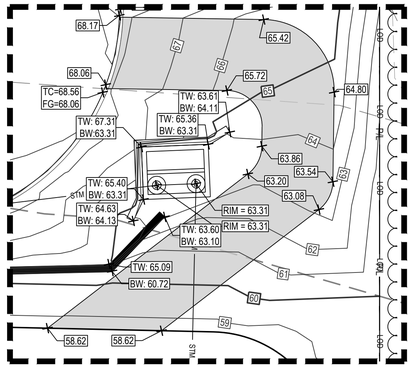
EXISTING

- MAJOR CONTOUR
- MINOR CONTOUR

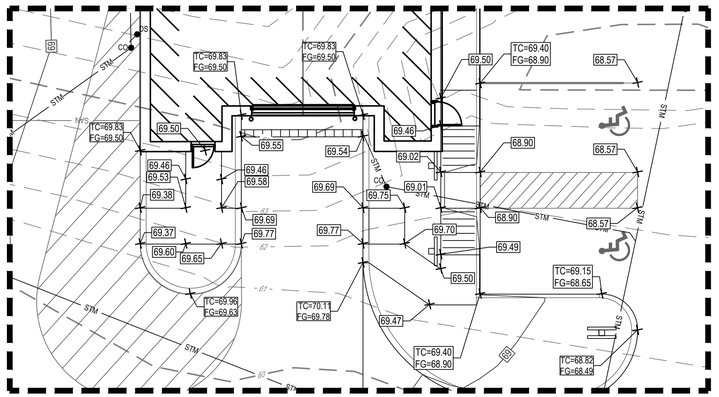
REFER TO C1.0 FOR EXISTING FEATURES LEGEND

PROPOSED

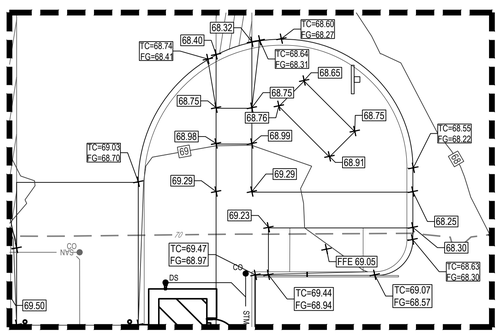
- BUILDING
- PAVEMENT TRANSITION
- MAJOR CONTOUR
- MINOR CONTOUR
- GRADE BREAK
- STORM STRUCTURE I.D.
- CATCH BASIN
- STORM SEWER MANHOLE
- CURB INLET
- CLEANOUT
- HEADWALL
- TRENCH DRAIN
- AREA DRAIN
- DOWNSPOUT
- FINISHED GRADE ELEVATION
- RIM ELEVATION
- TOP OF CURB ELEVATION / FINISHED GRADE ELEVATION
- BC — BACK OF CURB ELEVATION
- M.E. — MATCH EXISTING ELEVATION
- TW — TOP OF WALL ELEVATION
- BW — BOTTOM OF WALL ELEVATION
- FLOOD ROUTE



ENLARGED PLAN: STORM ACCESS PATH
SCALE 1" = 10'



ENLARGED PLAN: ADA PARKING DETAIL
SCALE 1" = 10'



ENLARGED PLAN: SIDEWALK DETAIL
SCALE 1" = 10'

BENCHMARKS

	ELEVATION*	DESCRIPTION
BM #1	70.39'	SET RAILROAD SPIKE IN BASE OF POWER POLE
BM #2	69.48'	SET CHISELED "X" IN CONCRETE

* VERTICAL DATUM: NAVD88 IN US FEET

811 DigSafe MA-ME-NH-RI-VT

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: NEW HAMPSHIRE UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

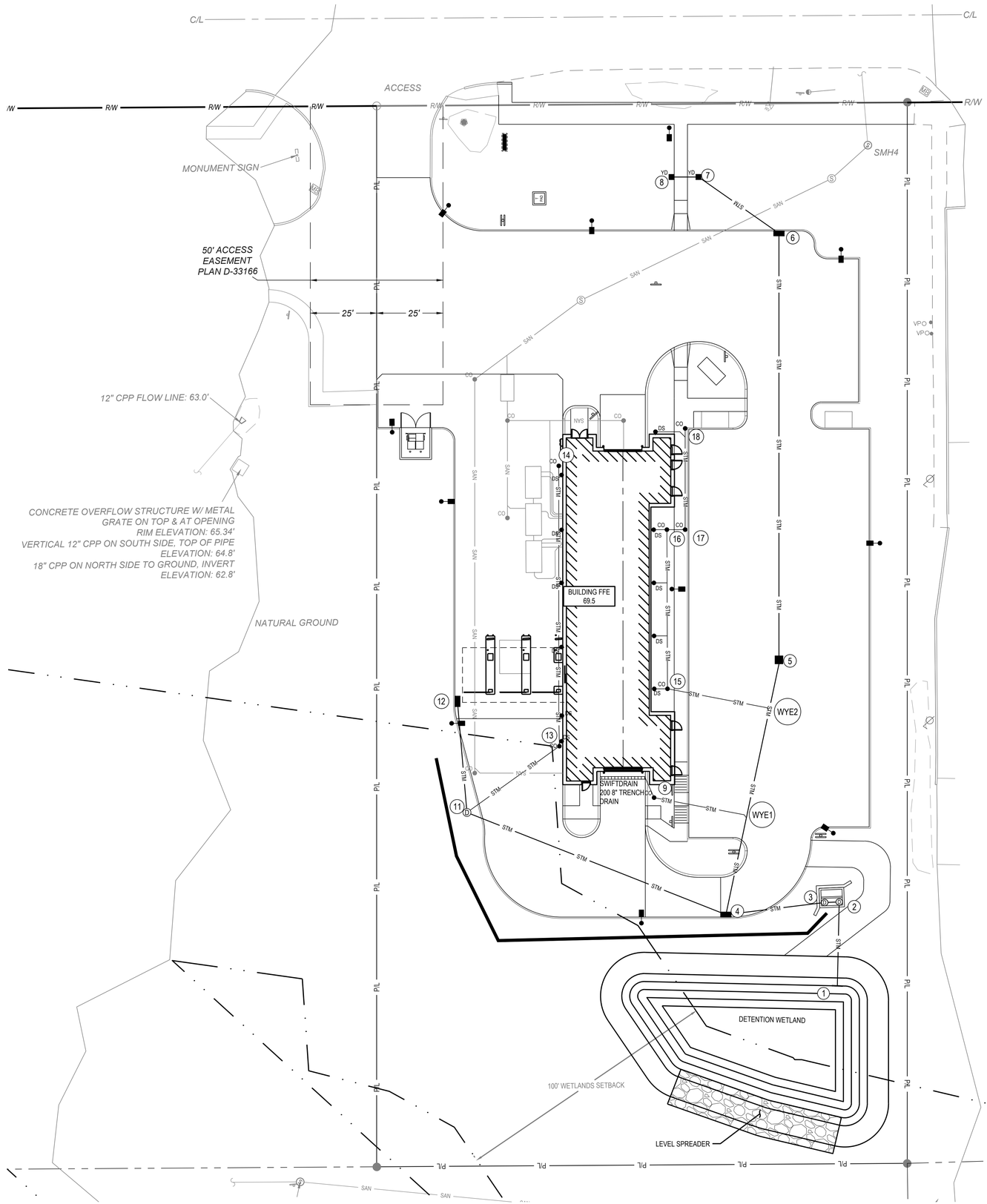
Revisions / Submissions

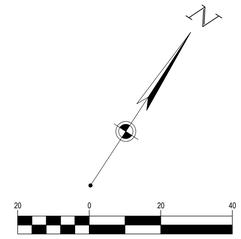
ID	Description	Date

Project Number:	766656
Scale:	1" = 20'
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
GRADING PLAN

C4.0





GRADING LEGEND

EXISTING

- MAJOR CONTOUR
- MINOR CONTOUR

REFER TO C1.0 FOR EXISTING FEATURES LEGEND

PROPOSED

- BUILDING
- STORM STRUCTURE I.D.
- CATCH BASIN
- STORM SEWER MANHOLE
- CURB INLET
- CLEANOUT
- HEADWALL
- TRENCH DRAIN
- AREA DRAIN
- DOWNSPOUT

STORM SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	GRATE	INVERT
WYE2	WYE CONNECTION #2	68.17	63.08 (12") N 63.08 (6") W 63.08 (12") S
WYE1	WYE CONNECTION #1	68.57	62.67 (12") N 62.67 (12") W 62.67 (12") S
1	HEADWALL WITH DISSIPATOR	58.53	56.50 (18") NW
2	CONTECH JELLYFISH FILTER	63.31	56.65 (18") SE
3	CONTECH JELLYFISH FILTER	63.31	57.15 (18") SW
4	CATCH BASIN	67.79	62.28 (12") N 61.45 (12") W 58.00 (18") NE
5	CATCH BASIN	67.89	63.27 (12") NW 63.27 (12") S
6	CATCH BASIN	67.33	64.80 (12") W 64.08 (12") SE
7	YARD INLET	67.25	65.17 (6") SW 65.17 (12") E
8	YARD DRAIN	68.34	65.27 (6") NE
9	CLEANOUT	67.10	63.25 (6") NW 63.25 (12") E
10	TRENCH DRAIN	66.37	65.33 (6") SW 63.33 (6") SE
10.1	TRENCH DRAIN	66.54	65.50 (6") NE
11	48" MANHOLE	69.08	62.51 (6") N 62.51 (12") NW 62.51 (12") E
12	CATCH BASIN	67.88	63.35 (12") SE
13	CLEANOUT	69.45	63.80 (6") NW 63.80 (6") S
14	CLEANOUT	69.44	67.50 (6") SE
15	CLEANOUT	69.50	66.45 (6") NW 66.45 (6") E
16	CLEANOUT	69.50	67.05 (6") NE 67.05 (6") SE
17	CLEANOUT	69.42	67.12 (6") NW 67.12 (6") SW
18	CLEANOUT	69.41	67.50 (6") SE

STORM SEWER PIPE TABLE

PIPE NAME	DIAMETER	LENGTH	SLOPE
1-2	18"	35'	0.44%
2-11	12"	105'	1.01%
3-4	18"	38'	2.25%
4-WYE1	12"	39'	1.00%
5-6	12"	162'	0.50%
5-WYE2	12"	19'	1.00%
6-7	12"	36'	1.00%
7-CULVERT	6"	10'	1.00%
8-9	6"	8'	1.01%
9-10	6"	17'	1.00%
11-12	12"	42'	2.00%
11-13	6"	43'	3.00%
13-14	6"	106'	3.50%
15-16	6"	60'	1.00%
16-17	6"	7'	1.00%
17-18	6"	38'	1.00%
WYE1-8	12"	36'	1.62%
WYE1-WYE2	12"	41'	1.00%
WYE2-15	6"	39'	8.65%

BENCHMARKS

	ELEVATION*	DESCRIPTION
BM #1	70.39'	SET RAILROAD SPIKE IN BASE OF POWER POLE
BM #2	69.48'	SET CHISELED "X" IN CONCRETE

* VERTICAL DATUM: NAVD88 IN US FEET

811 DigSafe MA-ME-NH-RI-VT

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: NEW HAMPSHIRE UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

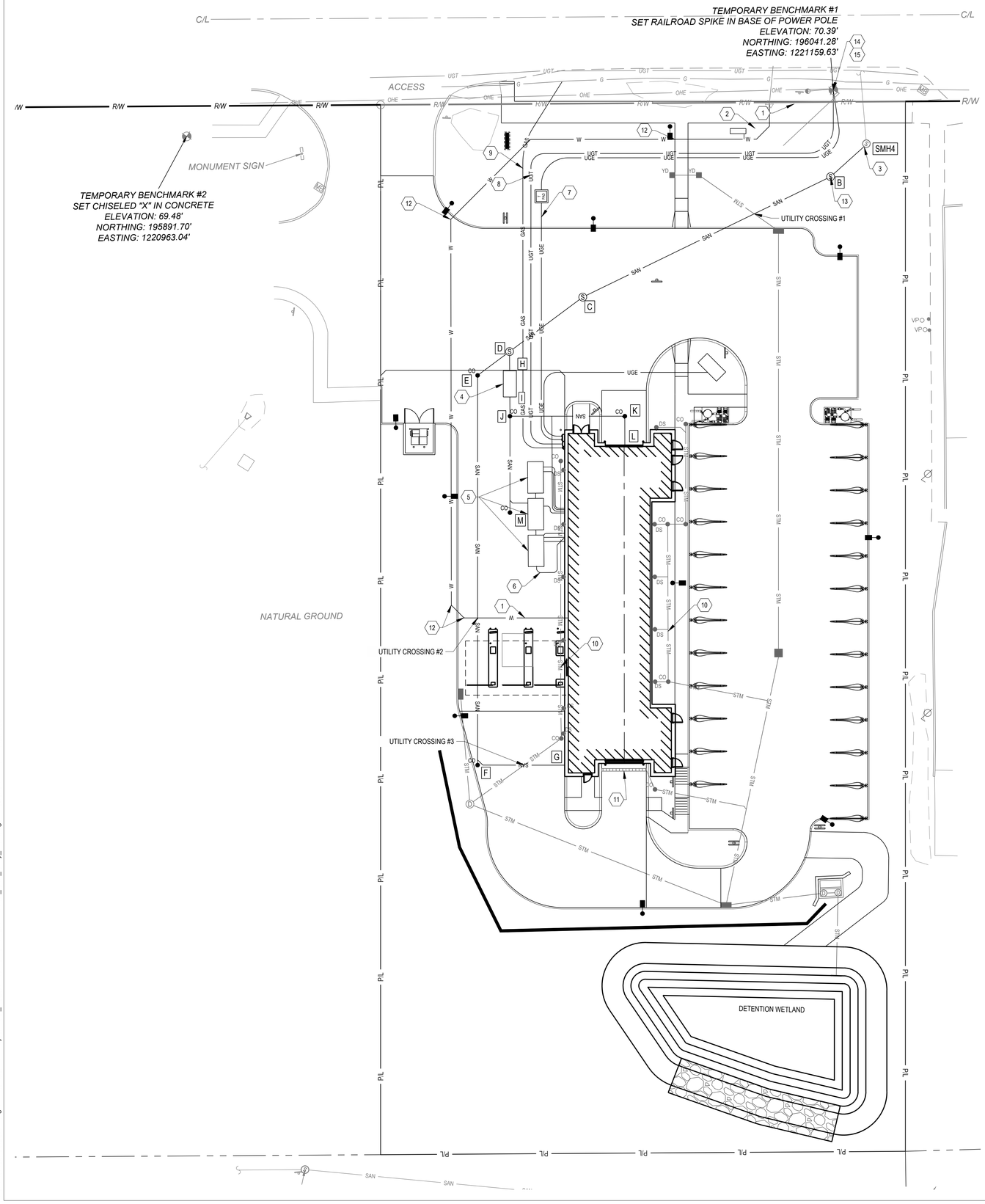
Revisions / Submissions

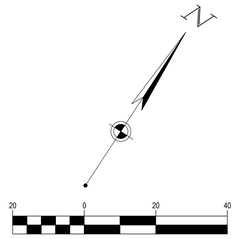
ID	Description	Date

Project Number:	766656
Scale:	1" = 20'
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
DRAINAGE PLAN

C4.1





GRAPHIC SCALE (IN FEET)
1 in. = 20 ft.

UTILITY LEGEND

EXISTING

REFER TO C1.0 FOR EXISTING FEATURES LEGEND

PROPOSED

- BUILDING
- SEE ENLARGED PLAN, THIS SHEET
- STORM SEWER LINE
- DS — STORM DOWNSPOUT LINE
- SAN — SANITARY SEWER LINE
- W — DOMESTIC WATER LINE
- G — GAS SERVICE LINE
- UGE — UNDERGROUND ELECTRIC LINE
- UGT — UNDERGROUND TELEPHONE LINE
- CATCH BASIN
- STORM SEWER MANHOLE
- SANITARY SEWER MANHOLE
- CURB INLET
- CO — CLEANOUT
- HEADWALL
- TRENCH DRAIN
- YD — AREA DRAIN
- DS — DOWNSPOUT
- ELECTRICAL TRANSFORMER PAD
- FIRE HYDRANT
- WATER VALVE
- WATER SERVICE METER
- GAS METER
- A — SANITARY STRUCTURE I.D.
- 1 — STORM STRUCTURE I.D.

SANITARY SEWER PIPE TABLE

PIPE NAME	DIAMETER	LENGTH	SLOPE
B-C	6"	105'	-1.00%%
C-D	6"	35'	-1.00%%
D-E	6"	15'	-1.00%%
D-H	6"	7'	1.00%%
E-F	6"	148'	-1.00%%
EXA-B	6"	19'	-1.42%%
F-G	6"	33'	-1.00%%
H-I	6"	10'	2.50%%
I-J	6"	7'	0.99%%
J-K	6"	44'	1.00%%
J-M	6"	37'	1.00%%
K-L	6"	11'	1.00%%

SANITARY SEWER STRUCTURE SCHEDULE

NO.	STRUCTURE	RIM	INVERT
B	48" MH	68.37	65.01 (6") N 62.13 (6") SW
C	48" MH	68.82	63.18 (6") NE 63.18 (6") S
D	48" MH	69.20	63.53 (6") N 64.55 (6") SE 63.53 (6") S
E	6" CO	69.09	63.68 (6") N 63.68 (6") SE
F	6" CO	68.45	65.17 (6") NW 65.17 (6") NE
G	BUILDING INVERT		65.50 (6") SW
H	GREASE TRAP OUT	65.17	64.63 (6") SE 64.63 (6") NW
I	GREASE TRAP IN	65.42	64.88 (6") SE 64.88 (6") NW
J	6" CO	69.22	64.95 (6") NE 64.95 (6") SE 64.95 (6") NW
K	6" CO	68.85	65.39 (6") SE 65.39 (6") SW
L	BUILDING INVERT		65.50 (6") NW
M	6" CO	69.05	65.32 (6") NW
SMH4	48" MH	69.17	64.75 (6") S

UTILITY CROSSING SCHEDULE

NO.	UTILITY	ELEVATIONS	DIFF.
1	STORM SEWER (INVERT)	64.75'	2.3'
	SANITARY SEWER (CROWN)	62.42'	
2	2" WATER LINE (INVERT)	65.12	1.50'
	SANITARY SEWER (CROWN)	63.62	
3	SANITARY SEWER (INVERT)	65.34	1.56'
	STORM SEWER (CROWN)	63.78	

CONTRACTOR NOTE:

1. CONTRACTOR SHALL VERIFY ALL LOCATIONS AND DEPTHS OF EXISTING UTILITIES.

CODED NOTES:

1. CONTRACTOR SHALL FURNISH AND INSTALL 2" DOMESTIC WATER LINE FROM NEW 2" WATER METER TO BUILDING. LOCAL JURISDICTION SHALL INSTALL NEW 2" WATER METER.
2. PROPOSED IRRIGATION SERVICE, METER, AND BACKFLOW ASSEMBLY PER LOCAL JURISDICTION REQUIREMENTS.
3. CONNECT 6" SDR-35 PVC SANITARY SERVICE (MINIMUM 1.00% SLOPE) TO EXISTING SANITARY MANHOLE PER LOCAL STANDARDS. CONTRACTOR SHALL FIELD LOCATE AND VERIFY EXISTING SANITARY MAIN & MANHOLE PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO CIVIL ENGINEER. CONTRACTOR SHALL PROVIDE ALL NECESSARY FITTINGS FOR FINAL CONNECTION. CONTRACTOR SHALL USE KORN'SEAL FLEXIBLE BOOT CONNECTOR OR APPROVED EQUAL.
4. PROPOSED OIL / WATER SEPARATOR. SEE SHEET C7.2 FOR DETAILS.
5. PROPOSED 2,000 GALLON RECLAIM TANK. REFER TO MEP PLANS FOR DETAILS.
6. PROPOSED RECLAIM TANK SERVICE LINE. REFER TO MEP PLANS FOR DETAILS.
7. PROPOSED UNDERGROUND ELECTRIC SERVICE LINE. CONTRACTOR TO COORDINATE WITH SERVICE PROVIDER AND MEP PLANS FOR CONNECTION.
8. PROPOSED UNDERGROUND TELEPHONE / COMMUNICATION SERVICE LINE. CONTRACTOR SHALL VERIFY EXACT ROUTING AND TERMINATION REQUIREMENTS WITH SERVICE PROVIDER PRIOR TO STARTING WORK. CONTRACTOR SHALL COORDINATE WITH OTHER UTILITIES AND UTILIZE SHARED TRENCHING IF PERMITTED.
9. PROPOSED GAS SERVICE LINE AND CONNECTION TO GAS MAIN. LOCAL GAS COMPANY SHALL FURNISH AND INSTALL GAS LINE FROM METER TO NEW TAP. THE CONTRACTOR SHALL INSTALL THE GAS LINE FROM THE METER TO THE BUILDING PER THE BUILDING DRAWINGS. CONTRACTOR SHALL FIELD LOCATE AND VERIFY EXISTING GAS MAIN PRIOR TO CONSTRUCTION AND REPORT ANY DISCREPANCIES TO ENGINEER.
10. PROPOSED 6" PVC STORM LINE FROM DOWNSPOUTS (MIN. SLOPE 1.00%) REFER TO ARCHITECTURAL PLAN FOR EXACT BUILDING DOWNSPOUT LOCATIONS.
11. PROPOSED SWIFTDRAIN 200 8" WIDE FIBER CONCRETE TRENCH DRAIN WITH HD GRATE. SEE DETAILS ON SHEET C7.2.
12. PROPOSED 6" 45 DEGREE BEND.
13. PROPOSED SANITARY MANHOLE WITH PUMP.
14. PROPOSED POINT OF CONNECTION FOR TELEPHONE SERVICE. (CONTRACTOR TO COORDINATE WITH TELEPHONE PROVIDER).
15. PROPOSED POINT OF CONNECTION FOR ELECTRICAL SERVICE. (CONTRACTOR TO COORDINATE WITH ELECTRICAL PROVIDER).

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: NEW HAMPSHIRE UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH
2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

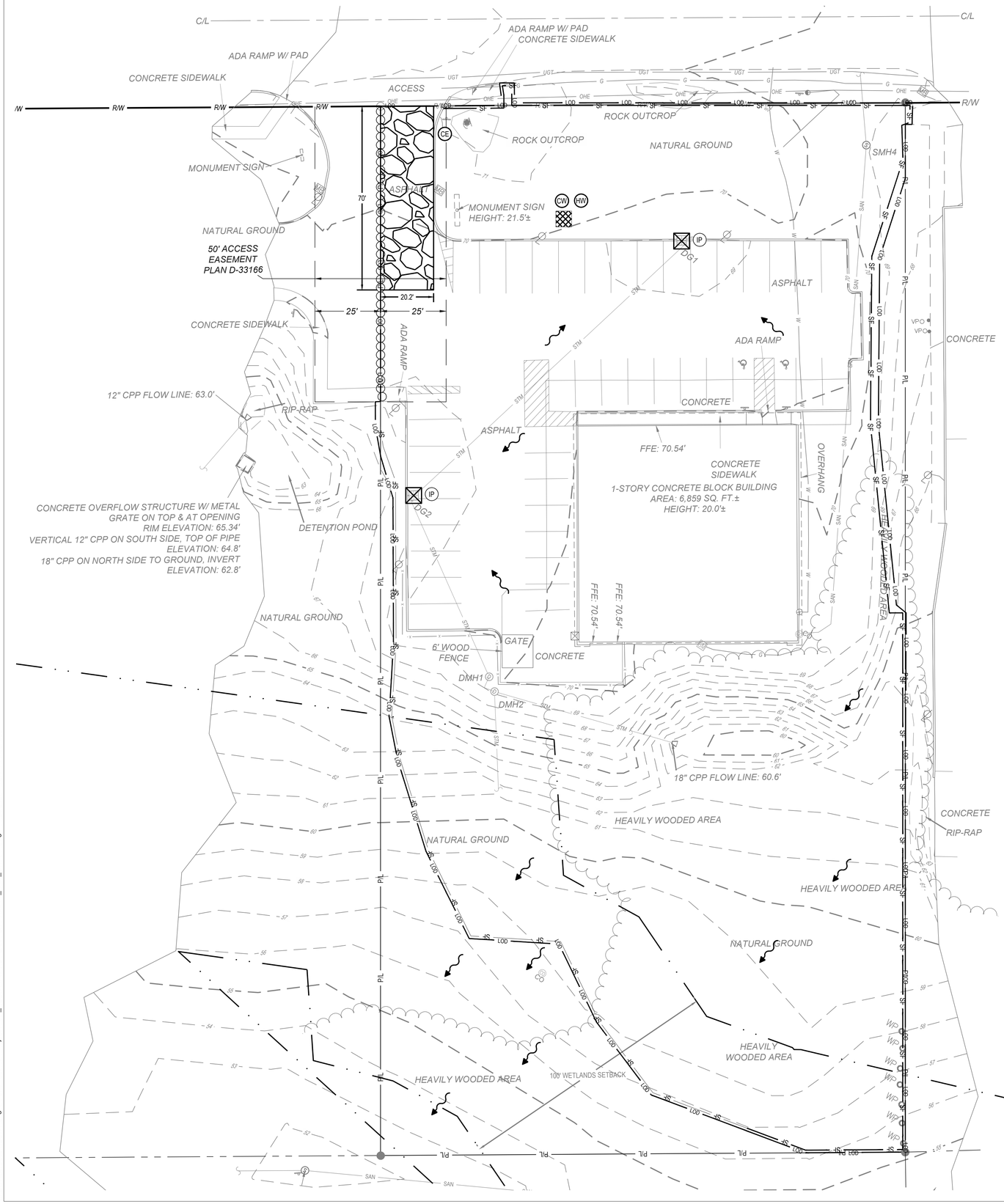
Revisions / Submissions

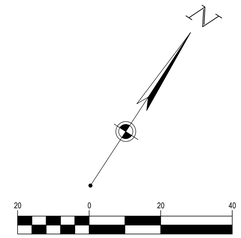
ID	Description	Date

Project Number:	766656
Scale:	1" = 20'
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
UTILITY PLAN

C5.0





SWPPP LEGEND

EXISTING

- 101 — MAJOR CONTOUR
- 102 — MINOR CONTOUR

REFER TO C1.0 FOR EXISTING FEATURES LEGEND

PROPOSED

- 960 — MAJOR CONTOUR
- 962 — MINOR CONTOUR
- PAVEMENT/WALK
- STM — STORM SEWER
- SF — SILT FENCE
- COMPOST SOCK
- LOD — LIMITS OF DISTURBANCE
- FLOW LINE
- STABILIZED CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT / STORAGE AREA
- BASIN SEDIMENT FILTER
- CATCH BASIN
- D — STORM SEWER MANHOLE
- CURB INLET
- CO — CLEANOUT
- HEADWALL
- TRENCH DRAIN
- YD — AREA DRAIN
- DS — DOWNSPOUT
- CE — STABILIZED CONSTRUCTION ENTRANCE
- CW — CONCRETE WASHOUT AREA
- IP — INLET PROTECTION
- TS — TEMPORARY SEEDING
- PS — PERMANENT SOD
- HZ — STORAGE AREA FOR FUEL / TRASH / HAZARDOUS MATERIALS

OWNER:
HANG10 CAR WASH
1380 SOLDIERS FIELD ROAD
BOSTON, MA 02135
CONTACT: STEVE LUKIN

ENGINEER:
CESO, INC.
4445 LAKE FOREST DRIVE
CINCINNATI, OH 45242
PHONE: (937) 435-8584
CONTACT: PAIGE WEIDNER
EMAIL: PAIGE.WEIDNER@CESOINC.COM

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PROJECT NARRATIVE:

THE PROPOSED PROJECT IS THE CONSTRUCTION OF A RESTAURANT / CONVENIENCE STORE WITH FUELING STATION. THE SUBJECT PARCEL IS 1.83 ACRES. THE TOTAL DISTURBED AREA IS 1.53 ACRES.

EXISTING RUNOFF CONDITIONS: DRAINS TO BASIN SOUTH OF EXISTING BUILDING AND DOWN THE SOUTH SIDE OF PACEL

PROPOSED RUNOFF CONDITIONS: DRAINS TO PROPOSED BASIN SOUTH OF PROPOSED BUILDING.

ON-SITE SOILS:	PIPESTONE SAND, 0 TO 5%	17.8%
	URBAN LAND	82.2%
HYDROLOGIC SOIL GROUPS:	314A - HSG A/D	
	699 - N/A	

SEQUENCE OF CONSTRUCTION

UNLESS NOTED OTHERWISE, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL MEASURES IN STRICT ACCORDANCE WITH THE SWPPP THROUGHOUT THE DURATION OF THE PROJECT.

1. ENSURE NOTICE OF INTENT (N.O.I.) IS FILED, KEEP A COPY OF THE PERMIT ONSITE. NOTIFY ALL APPROPRIATE PARTIES, INCLUDING THE CITY OF PORTSMOUTH ENGINEER, BEFORE WORK IS TO BEGIN.
2. INSTALL TEMPORARY EROSION CONTROL MEASURES INCLUDING CONSTRUCTION ENTRANCE, FILTER SOCKS, SILT FENCE, SEDIMENT TRAPS, ETC. AS DEPICTED IN THIS PLAN.
3. INSPECTION OF EROSION CONTROL MEASURES AS OUTLINED IN NOTES. REPAIRS AND / OR REPLACEMENTS SHALL BE MADE NECESSARY.
4. BEGIN SITE DEMOLITION / CLEARING.
5. BEGIN ROUGH GRADING. PROVIDE TEMPORARY SEEDING OF DISTURBED AREAS WHICH ARE INACTIVE.
6. INSTALL REMAINING E&S CONTROLS.
7. STORM SEWER AND UNDERGROUND UTILITY CONSTRUCTION.
8. BUILDING PAD.
9. CURB CONSTRUCTION.
10. FINE GRADING AND PAVEMENT SUB-GRADE PREPARATION
11. ASPHALT PAVING AND REMAINING CONCRETE FLATWORK.
12. FINAL SEEDING AND STABILIZATION.

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

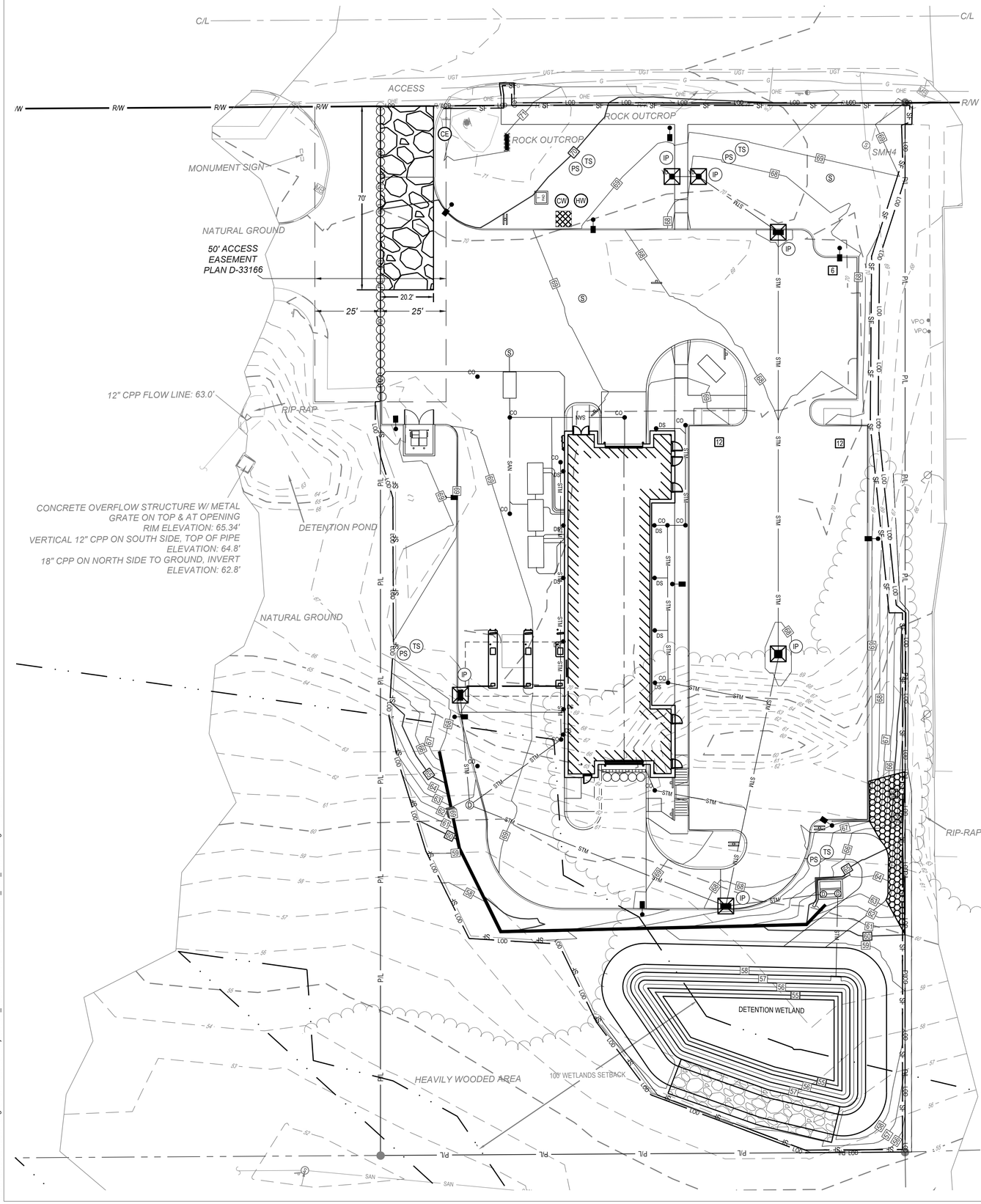
Revisions / Submissions

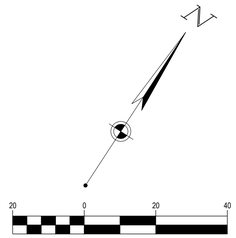
ID	Description	Date

Project Number:	766656
Scale:	1" = 20'
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
SWPPP PHASE I

C6.0





GRAPHIC SCALE (IN FEET)
1 in. = 20 ft.

SWPPP LEGEND

EXISTING

- 101 — MAJOR CONTOUR
- 102 — MINOR CONTOUR

REFER TO C1.0 FOR EXISTING FEATURES LEGEND

PROPOSED

- 901 — MAJOR CONTOUR
- 902 — MINOR CONTOUR
- PAVEMENT/WALK
- STM — STORM SEWER
- SF — SILT FENCE
- COMPOST SOCK
- LOD — LIMITS OF DISTURBANCE
- PERMANENT EROSION CONTROL BLANKET ON ALL SLOPES STEEPER THAN 3:1
- STABILIZED CONSTRUCTION ENTRANCE
- CONCRETE WASHOUT / STORAGE AREA
- BASIN SEDIMENT FILTER
- CATCH BASIN
- D — STORM SEWER MANHOLE
- CURB INLET
- CO — CLEANOUT
- HEADWALL
- TRENCH DRAIN
- YD — AREA DRAIN
- DS — DOWNSPOUT
- CE — STABILIZED CONSTRUCTION ENTRANCE
- CW — CONCRETE WASHOUT AREA
- IP — INLET PROTECTION
- TS — TEMPORARY SEEDING
- PS — PERMANENT SOD
- HZ — STORAGE AREA FOR FUEL / TRASH / HAZARDOUS MATERIALS

OWNER:
HANG10 CAR WASH
1380 SOLDIERS FIELD ROAD
BOSTON, MA 02135
CONTACT: STEVE LUKIN

ENGINEER:
CESO, INC.
4445 LAKE FOREST DRIVE
CINCINNATI, OH 45242
PHONE: (937) 435-8584
CONTACT: PAIGE WEIDNER
EMAIL: PAIGE.WEIDNER@CESOINC.COM

STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PROJECT NARRATIVE:

THE PROPOSED PROJECT IS THE CONSTRUCTION OF A RESTAURANT / CONVENIENCE STORE WITH FUELING STATION. THE SUBJECT PARCEL IS 1.83 ACRES. THE TOTAL DISTURBED AREA IS 1.53 ACRES.

EXISTING RUNOFF CONDITIONS: DRAINS TO BASIN SOUTH OF EXISTING BUILDING AND DOWN THE SOUTH SIDE OF PACEL

PROPOSED RUNOFF CONDITIONS: DRAINS TO PROPOSED BASIN SOUTH OF PROPOSED BUILDING.

ON-SITE SOILS:	PIPESTONE SAND, 0 TO 5%	17.8%
	URBAN LAND	82.2%
HYDROLOGIC SOIL GROUPS:	314A - HSG A/D	
	699 - N/A	

SEQUENCE OF CONSTRUCTION

UNLESS NOTED OTHERWISE, THE GENERAL CONTRACTOR IS RESPONSIBLE FOR MAINTAINING ALL EROSION AND SEDIMENT CONTROL MEASURES IN STRICT ACCORDANCE WITH THE SWPPP THROUGHOUT THE DURATION OF THE PROJECT.

1. ENSURE NOTICE OF INTENT (N.O.I.) IS FILED, KEEP A COPY OF THE PERMIT ONSITE. NOTIFY ALL APPROPRIATE PARTIES, INCLUDING THE CITY OF PORTSMOUTH ENGINEER, BEFORE WORK IS TO BEGIN.
2. INSTALL TEMPORARY EROSION CONTROL MEASURES INCLUDING CONSTRUCTION ENTRANCE, FILTER SOCKS, SILT FENCE, SEDIMENT TRAPS, ETC. AS DEPICTED IN THIS PLAN.
3. INSPECTION OF EROSION CONTROL MEASURES AS OUTLINED IN NOTES. REPAIRS AND / OR REPLACEMENTS SHALL BE MADE NECESSARY.
4. BEGIN SITE DEMOLITION / CLEARING.
5. BEGIN ROUGH GRADING. PROVIDE TEMPORARY SEEDING OF DISTURBED AREAS WHICH ARE INACTIVE.
6. INSTALL REMAINING E&S CONTROLS.
7. STORM SEWER AND UNDERGROUND UTILITY CONSTRUCTION.
8. BUILDING PAD.
9. CURB CONSTRUCTION.
10. FINE GRADING AND PAVEMENT SUB-GRADE PREPARATION
11. ASPHALT PAVING AND REMAINING CONCRETE FLATWORK.
12. FINAL SEEDING AND STABILIZATION.

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	1" = 20'
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
SWPPP PHASE II

C6.1

SWPPP GENERAL NOTES

1. ALL EROSION AND SEDIMENTATION CONTROL SHALL BE PERFORMED ACCORDING TO: SWPPP AND DETAIL PLANS; ACCORDING TO THE LATEST STATE EPA AUTHORIZATION FOR CONSTRUCTION ACTIVITY UNDER THE "NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM" (NPDES); ANY AND ALL REQUIRED PERMITS, REPORTS, AND RELATED DOCUMENTS. ALL CONTRACTORS AND SUBCONTRACTORS MUST BECOME FAMILIAR WITH ALL OF THE ABOVE.

2. CONTRACTOR SHALL IMPLEMENT BEST MANAGEMENT PRACTICES (BMPS) AS REQUIRED BY THE SWPPP. ADDITIONAL BEST MANAGEMENT PRACTICES SHALL BE IMPLEMENTED AS DICTATED BY CONDITIONS AND GRADE CHANGES TO THE SITE AT NO ADDITIONAL COST TO OWNER THROUGHOUT ALL PHASES OF CONSTRUCTION.

3. CONTRACTOR SHALL MINIMIZE CLEARING AND DISTURBANCE TO THE ENVIRONMENT TO THE MAXIMUM EXTENT POSSIBLE OR AS REQUIRED BY THE GENERAL PERMIT.

4. SEDIMENT STRUCTURE AND PERIMETER SEDIMENT BARRIERS SHALL BE IMPLEMENTED AS THE FIRST STEP OF GRADING WITHIN SEVEN (7) DAYS FROM THE START OF CLEARING AND GRUBBING, AND SHALL CONTINUE TO FUNCTION UNTIL THE SLOPE DEVELOPMENT AREA IS RESTABILIZED.

5. PERMANENT SOIL STABILIZATION OF DISTURBED AREAS BY MEANS OF VEGETATION, LANDSCAPE TYPE MULCHING, MATTING, SOD, RIP RAP, AND OTHER APPROVED LANDSCAPING TECHNIQUES TO BE APPLIED AS FOLLOWS:
   - WITHIN SEVEN (7) DAYS OF ANY AREA THAT WILL BE DORMANT FOR ONE (1) YEAR OR MORE.
   - WITHIN TWO (2) DAYS OF ANY AREA WITHIN 50 FEET OF A STREAM AT FINAL GRADE.
   - WITHIN SEVEN (7) DAYS FOR ANY OTHER AREA AT FINAL GRADE.

6. TEMPORARY SOIL STABILIZATION OF DISTURBED AREAS BY MEANS OF TEMPORARY VEGETATION, MULCHING, GEOTEXTILES, SOD, PRESERVATION OF EXISTING VEGETATION, AND OTHER APPROVED TECHNIQUES TO BE APPLIED AS FOLLOWS:
   - WITHIN TWO (2) DAYS OF ANY AREA WITHIN 50 FEET OF A STREAM NOT AT FINAL GRADE.
   - WITHIN SEVEN (7) DAYS OF ANY AREA THAT WILL BE DORMANT FOR MORE THAN TWENTY ONE (21) DAYS, BUT LESS THAN ONE (1) YEAR.
   - PRIOR TO THE ONSET OF WINTER WEATHER FOR AREAS THAT WILL BE IDLE OVER WINTER.

7. TEMPORARY SEEDING, MULCHING, AND FERTILIZER SPECIFICATIONS:

   SEEDING: ANNUAL RYEGRASS AT 2.02 POUNDS PER 1,000 S.F.

   MULCHING: STRAW MATERIAL SHALL BE UNROTTED SMALL GRAIN STRAW APPLIED AT A RATE OF TWO (2) TON/ACRE, OR 80-100 POUNDS PER 1,000 S.F. MULCH MATERIALS SHALL BE RELATIVELY FREE OF ALL KINDS OF WEEDS AND SHALL BE FREE OF PROHIBITIVE NOXIOUS WEEDS. MULCH SHALL BE SPREAD UNIFORMLY BY HAND OR MECHANICAL MEANS. FROM NOVEMBER 01 THRU MARCH 15 INCREASE THE RATE OF STRAW MULCH TO THREE (3) TON/ACRE.

   FERTILIZER: APPLY FERTILIZER AT HALF THE RATE OF PERMANENT APPLICATION AND AS PER ODOT SPECIFICATIONS. IF PROJECT CONDITIONS PREVENT FERTILIZING THE SOIL, THEN THIS ITEM MAY BE WAIVED.

8. SLOPES SHALL BE LEFT IN A ROUGHENED CONDITION DURING THE GRADING PHASE TO REDUCE RUNOFF VELOCITIES AND EROSION. ALL SLOPES 3:1 OR GREATER THAN 3:1 SHALL BE FERTILIZED, SEEDED, AND CURLEX BLANKETS BY AMERICAN EXCELSIOR COMPANY, NORTH AMERICAN GREEN, INC. OR AN APPROVED EQUAL AS SPECIFIED IN THE PLANS SHALL BE INSTALLED ON THE SLOPES.

9. NO SOLID (OTHER THAN SEDIMENT) OR LIQUID WASTE, INCLUDING BUILDING MATERIALS, SHALL BE DISCHARGED IN STORM WATER RUNOFF. ALL NON-SEDIMENT POLLUTANTS MUST BE DISPOSED OF IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES. WASH OUT OF CEMENT TRUCKS SHOULD OCCUR IN DESIGNATED PIT OR DIKED AREAS, WHERE WASHINGS CAN BE REMOVED AND PROPERLY DISPOSED OFF-SITE WHEN THEY HARDEN. STORAGE TANKS SHOULD ALSO BE LOCATED IN PIT OR DIKED AREAS. IN ADDITION, SUFFICIENT OIL AND GREASE ABSORBING MATERIALS AND FLOTATION BOOMS TO CLEAN AND CONTAIN FUEL AND CHEMICAL SPILLS MUST BE KEPT ON SITE.

10. IF THE ACTION OF VEHICLES TRAVELING OVER THE STABILIZED CONSTRUCTION EXIT DOES NOT SUFFICIENTLY REMOVE MOST OF THE DIRT AND MUD, THEN THE TIRES MUST BE WASHED BEFORE VEHICLES ENTER A PUBLIC ROAD. PROVISIONS MUST BE MADE TO INTERCEPT THE WATER AND TRAP THE SEDIMENT BEFORE IT IS CARRIED OFF THE SITE.

11. RUBBISH, TRASH, GARBAGE, LITTER, OR OTHER SUCH MATERIALS SHALL BE DISPOSED INTO SEALED CONTAINERS. MATERIALS SHALL BE PREVENTED FROM LEAVING THE SITE THROUGH THE ACTION OF WIND OR STORM WATER DISCHARGE INTO DRAINAGE DITCHES OR WATERS OF THE STATE.

12. DUST CONTROL USING APPROVED MATERIALS MUST BE PERFORMED AT ALL TIMES. THE USE OF MOTOR OILS AND OTHER PETROLEUM BASED OR TOXIC LIQUIDS FOR DUST SUPPRESSION IS PROHIBITED.

13. ON-SITE AND OFF-SITE STOCKPILE AND BORROW AREAS SHALL BE PROTECTED FROM EROSION AND SEDIMENTATION BY THE USE OF BEST MANAGEMENT PRACTICES. THESE AREAS MUST BE SHOWN IN THE SITE MAP AND PERMITTED IN ACCORDANCE WITH GENERAL PERMIT REQUIREMENTS. AT A MINIMUM SILT FENCE TO BE PLACED AT PERIMETER OF STOCKPILE AREA TO PREVENT SOIL FROM LEAVING THE STOCKPILE AREA.

14. ALL MATERIALS SPILLED, DROPPED, WASHED, OR TRACKED ONTO THE ROADWAYS OR INTO THE STORM SEWERS MUST BE REMOVED IMMEDIATELY.

15. ALL CONSTRUCTION SHALL BE STABILIZED AT THE END OF EACH DAY; THIS INCLUDES BACKFILLING OF TRENCHES FOR UTILITY CONSTRUCTION AND PLACEMENT OF GRAVEL OR ASPHALT FOR ROAD CONSTRUCTION.

16. THE LAST LAYER OF SOIL, INCLUDING TOP SOIL SHOULD BE COMPACTED TO 80% - 85% OF THE MAXIMUM STANDARD PROCTOR DENSITY, IN AREAS OUTSIDE THE PARKING LOT THAT WILL RECEIVE VEGETATION. THIS IS PARTICULARLY IMPORTANT IN CUT SLOPE AND EMBANKMENT AREAS. IN PAVEMENT AND ISLAND AREAS, IT IS RECOMMENDED THAT THE SOIL BE COMPACTED TO 98% AND 95% OF THE MAXIMUM STANDARD PROCTOR DENSITY RESPECTIVELY; THE LAST COMPACTED LAYER MAY BE SCARIFIED TO IMPROVE THE SOIL GROWTH CHARACTERISTICS.

17. ALL DEWATERING ACTIVITIES SUCH AS PUMPING DOWN OF FLOODED FOUNDATION AND UTILITY TRENCHES MUST PASS THROUGH THE RETROFITTED DETENTION BASIN OR A SEDIMENT CONTROL PRACTICE PRIOR TO LEAVING THE SITE.

18. SILT FENCE AND OTHER PERIMETER EROSION CONTROL MEASURES SHOWN OFF LIMITS OF DISTURBANCE FOR CLARITY PURPOSES ONLY. CONTRACTOR TO ENSURE PERIMETER EROSION CONTROL MEASURES ARE PLACED AT THE LIMITS OF DISTURBANCE. ANY DISCREPANCIES SHOULD BE BROUGHT TO THE ENGINEER PRIOR TO PLACEMENT OF ANY EROSION CONTROL MEASURES.

SWPPP MAINTENANCE NOTES

1. ALL CONTROL MEASURES STATED IN THE SWPPP SHALL BE MAINTAINED IN FULLY FUNCTIONAL CONDITION UNTIL TEMPORARY OR PERMANENT STABILIZATION OF THE SITE IS ACHIEVED. ALL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE INSPECTED BY A QUALIFIED PERSON IN ACCORDANCE TO THE CONTRACT DOCUMENTS OR THE APPLICABLE PERMIT, WHICHEVER IS MORE STRINGENT, AND REPAIRED ACCORDING TO THE FOLLOWING:

2. INLET PROTECTION DEVICES AND CONTROLS SHALL BE REPAIRED OR REPLACED WHEN THEY SHOW SIGNS OF UNDERMINING AND OR DETERIORATION. INLET PROTECTION DEVICES SHOULD BE ROUTINELY CLEANED AND MAINTAINED.

3. ALL SEEDED AREAS SHALL BE CHECKED REGULARLY TO ENSURE THAT A GOOD STANDING OF GRASS IS MAINTAINED. AREAS SHOULD BE FERTILIZED, WATERED, AND RESEEDED AS NEEDED.

4. MINIMIZE OFF-SITE SEDIMENT TRACKING OF VEHICLES BY THE USE OF STONE MATERIAL IN ALL CONSTRUCTION ENTRANCES, ALONG WITH REGULARLY SCHEDULED SWEEPING/GOOD HOUSEKEEPING. STABILIZED CONSTRUCTION ENTRANCES TO BE PROPERLY MAINTAINED BY GENERAL CONTRACTOR AND IN GOOD WORKING ORDER AT ALL TIMES; THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE STONE AS CONDITIONS DEMAND.

5. THE TEMPORARY PARKING AND STORAGE AREA SHALL BE KEPT IN GOOD CONDITION (SUITABLE FOR PARKING AND STORAGE) BY GENERAL CONTRACTOR. THIS MAY REQUIRE PERIODIC TOP DRESSING OF THE TEMPORARY PARKING AS CONDITIONS DEMAND.

6. CONTRACTORS AND SUBCONTRACTORS WILL BE RESPONSIBLE FOR REMOVING ALL SEDIMENT FROM THE SITE, AND STORM SEWER SYSTEMS. SEDIMENT DEPOSITION DURING SITE STABILIZATION MUST ALSO BE REMOVED.

7. STONE CONSTRUCTION EXIT TO BE MAINTAINED BY GENERAL CONTRACTOR UNTIL SITE HAS BEEN PAVED OR IS NO LONGER REQUIRED.
8. ALL CATCH BASIN GRATES ARE TO BE PROTECTED WITH INLET BAGS AFTER THEY ARE INSTALLED. THEY SHOULD BE ROUTINELY CLEANED AND MAINTAINED.

9. CONTAINERS SHALL BE AVAILABLE FOR DISPOSAL OF DEBRIS, TRASH, HAZARDOUS OR PETROLEUM WASTES. ALL CONTAINERS MUST BE COVERED AND LEAK-PROOF. ALL WASTE MATERIAL SHALL BE DISPOSED OF AT FACILITIES APPROVED FOR THE PERTINENT MATERIAL

10. BRICKS, HARDENING CONCRETE AND SOIL WASTE SHALL BE FREE FROM CONTAMINATION WHICH MAY LEACH CONSTITUENTS TO WATERS OF THE STATE.

11. CLEAN CONSTRUCTION WASTES THAT WILL BE DISPOSED INTO THE PROPERTY SHALL BE SUBJECT TO ANY LOCAL PROHIBITIONS FROM THIS TYPE OF DISPOSAL.

12. ALL CONSTRUCTION AND DEMOLITION DEBRIS (C&DD) WASTE SHALL BE DISPOSED OF IN AN OHIO EPA APPROVED C&DD LANDFILL AS REQUIRED BY OHIO REVISED CODE 3714. CONSTRUCTION DEBRIS MAY BE DISPOSED OF ON-SITE, BUT DEMOLITION DEBRIS MUST BE DISPOSED IN AN OHIO EPA APPROVED LANDFILL. ALSO, MATERIALS WHICH CONTAIN ASBESTOS MUST COMPLY WITH AIR POLLUTION REGULATIONS (SEE OHIO ADMINISTRATIVE CODE 3745-20).

13. AREA SHALL BE DESIGNATED BY CONTRACTOR AND SHOWN ON SWPPP MAP FOR MIXING OR STORAGE OF COMPOUNDS SUCH AS FERTILIZERS, LIME ASPHALT, OR CONCRETE, THESE DESIGNATED AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS, OR OTHER STORMWATER DRAINAGE AREA.

14. EQUIPMENT FUELING & MAINTENANCE SHALL BE IN DESIGNATED AREAS ONLY.

15. A SPILL PREVENTION CONTROL AND COUNTERMEASURE (SPCC) PLAN MUST BE DEVELOPED FOR SITES WITH ONE ABOVE-GROUND STORAGE TANK OF 660 GALLONS OR MORE, TOTAL ABOVE-GROUND STORAGE OF 1,330 GALLONS OR BELOW-GROUND STORAGE OF 4,200 GALLONS OF FUEL.

16. ALL DESIGNATED CONCRETE WASHOUT AREAS SHALL BE LOCATED AWAY FROM WATERCOURSES, DRAINAGE DITCHES, FIELD DRAINS OR OTHER STORMWATER DRAINAGE AREAS.

17. ALL CONTAMINATED SOIL MUST BE TREATED AND/OR DISPOSED IN AN OHIO EPA APPROVED SOLID WASTE MANAGEMENT FACILITY OR HAZARDOUS WASTE TREATMENT, STORAGE OR DISPOSAL FACILITIES.

18. THE CONTRACTOR SHALL CONTACT THE STATE EPA, THE LOCAL FIRE DEPARTMENT AND THE LOCAL EMERGENCY PLANNING COMMITTEE IN THE EVENT OF A PETROLEUM SPILL (>25 GALLONS) OR THE PRESENCE OF SHEEN.

19. OPEN BURNING IS NOT PERMITTED ON THE SITE.

20. CONTRACTOR TO ENSURE STREETS SHALL BE CLEARED OF DEBRIS FROM SITE AND SWEPT CLEAN ON AN AS NEEDED BASIS.

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH

PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

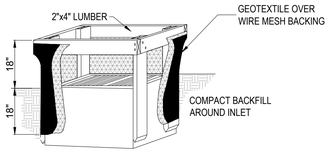
Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	NOT TO SCALE
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
SWPPP NOTES

C6.2



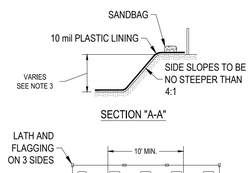
SECTION

NOTES:

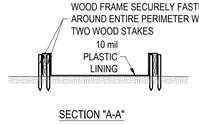
1. INLET PROTECTION SHALL BE CONSTRUCTED EITHER BEFORE UPSLOPE LAND DISTURBANCE BEGINS OR BEFORE THE INLET BECOMES FUNCTIONAL.
2. THE EARTH AROUND THE INLET SHALL BE EXCAVATED COMPLETELY TO A DEPTH AT LEAST 18 INCHES.
3. THE WOODEN FRAME SHALL BE CONSTRUCTED OF 2-INCH BY 4-INCH CONSTRUCTION GRADE LUMBER. THE 2-INCH BY 4-INCH POSTS SHALL BE DRIVEN 18" INTO THE GROUND AT FOUR CORNERS OF THE INLET AND THE TOP PORTION OF 2-INCH BY 4-INCH FRAME ASSEMBLED USING THE OVERLAP JOINT SHOWN. THE TOP OF THE FRAME SHALL BE AT LEAST 6 INCHES BELOW ADJACENT ROADS IF PONDED WATER WILL POSE A SAFETY HAZARD TO TRAFFIC.
4. WIRE MESH SHALL BE OF SUFFICIENT STRENGTH TO SUPPORT FABRIC WITH WATER FULLY IMPOUNDED AGAINST IT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY TO THE FRAME.
5. GEOTEXTILE MATERIAL SHALL HAVE AN EQUIVALENT OPENING SIZE OF 20-40 SIEVE AND BE RESISTANT TO SUNLIGHT. IT SHALL BE STRETCHED TIGHTLY AROUND THE FRAME AND FASTENED SECURELY. IT SHALL EXTEND FROM THE TOP OF THE FRAME TO 18 INCHES BELOW THE INLET NOTCH ELEVATION. THE GEOTEXTILE SHALL OVERLAP ACROSS ONE SIDE OF THE INLET SO THE ENDS OF THE CLOTH ARE NOT FASTENED TO THE SAME POST.
6. BACKFILL SHALL BE PLACED AROUND THE INLET IN COMPACTED 6 INCH LAYERS UNTIL THE EARTH IS EVEN WITH NOTCH ELEVATION ON ENDS AND TOP ELEVATION ON SIDES.
7. A COMPACTED EARTH DIKE OR CHECK DAM SHALL BE CONSTRUCTED IN THE DITCH LINE BELOW THE INLET IF THE INLET IS NOT IN A DEPRESSION. THE TOP OF THE DIKE SHALL BE AT LEAST 6 INCHES HIGHER THAN THE TOP OF THE FRAME.

AREA INLET PROTECTION

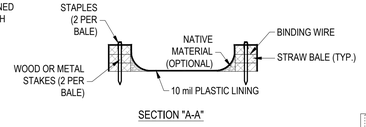
NTS



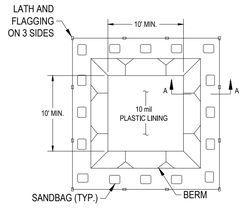
SECTION "A-A"



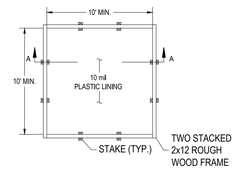
SECTION "A-A"



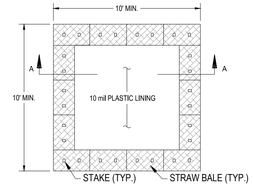
SECTION "A-A"



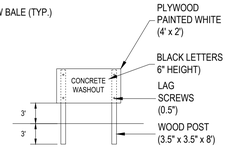
BELOW GRADE



ABOVE GRADE WITH WOOD PLANKS



ABOVE GRADE W/ HAYBALES



CONCRETE WASHOUT SIGN DETAIL

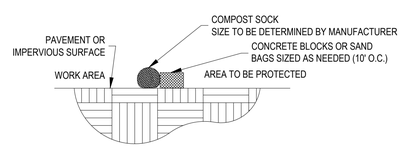
STAPLE DETAIL

NOTES:

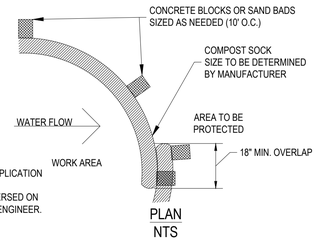
1. ACTUAL LAYOUT DETERMINED IN THE FIELD.
2. THE CONCRETE WASHOUT SIGN SHALL BE INSTALLED WITHIN 30' OF THE TEMPORARY CONCRETE WASHOUT FACILITY.
3. THE WASHOUT MUST HAVE SUFFICIENT VOLUME TO CONTAIN ALL LIQUID AND CONCRETE WASTE GENERATED BY WASHOUT OPERATIONS INCLUDING BUT NOT LIMITED TO OPERATIONS ASSOCIATED WITH GROUT AND MORTAR.

CONCRETE WASHOUT

NTS



SECTION
NTS



PLAN
NTS

NOTES:

1. ALL MATERIAL TO MEET SPECIFICATIONS.
2. FILTER MEDIA TO MEET APPLICATION REQUIREMENTS.
3. FILTER MEDIA TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER.

COMPOST SOCK ON PAVEMENT

NTS

PLAN VIEW

PROFILE

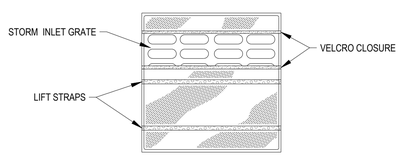
NOTES:

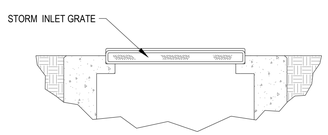
1. STONE SIZE - (1.5-2.5 INCH) STONE SHALL BE USED, OR RECYCLED CONCRETE EQUIVALENT.
2. LENGTH - THE CONSTRUCTION ENTRANCE SHALL BE AS LONG AS REQUIRED TO STABILIZE HIGH TRAFFIC AREAS BUT NOT LESS THAN 70 FT. (EXCEPTION: APPLY 30 FT. MINIMUM TO SINGLE RESIDENCE LOTS.
3. THICKNESS - THE STONE LAYER SHALL BE AT LEAST 6 INCHES THICK FOR LIGHT DUTY ENTRANCES OR AT LEAST 10 INCHES FOR HEAVY DUTY USE.
4. WIDTH - THE ENTRANCE SHALL E AT LEAST 14 FEET WIDE, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.
5. GEOTEXTILE - A GEOTEXTILE SHALL BE LAID OVER THE ENTIRE AREA PRIOR TO PLACING STONE, IT SHALL BE COMPOSED OF STRONG ROT-PROOF POLYMERIC FIBERS AND MEET THE FOLLOWING SPECIFICATIONS:
6. TIMING - THE CONSTRUCTION ENTRANCE SHALL BE INSTALLED AS SOON AS IS PRACTICAL BEFORE MAJOR GRADING ACTIVITIES.
7. CULVERT - A PIPE OR CULVERT SHALL BE CONSTRUCTED UNDER THE ENTRANCE IF NEEDED TO PREVENT SURFACE WATER FROM FLOWING ACROSS THE ENTRANCE OR TO PREVENT RUNOFF FROM BEING DIRECTED OUT ONTO PAVED SURFACES.
8. WATER BAR - A WATER BAR SHALL BE CONSTRUCTED AS PART OF THE CONSTRUCTION ENTRANCE IF NEEDED TO PREVENT SURFACE RUNOFF FROM FLOWING THE LENGTH OF THE CONSTRUCTION ENTRANCE AND OUT ONTO PAVED SURFACES.
9. MAINTENANCE - TOP DRESSING OF ADDITIONAL STONE SHALL BE APPLIED AS CONDITIONS DEMAND. MUD SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC ROADS, ORA ANY SURFACE WHERE RUNOFF IS NOT CHECKED BY SEDIMENT CONTROLS, SHALL BE REMOVED IMMEDIATELY, REMOVAL SHALL BE ACCOMPLISHED BY SCRAPING OR SWEEPING.
10. CONSTRUCTION ENTRANCES SHALL NOT BE RELIED UPON TO REMOVE MUD FROM VEHICLES AND PREVENT OFF-SITE TRACKING. VEHICLES THAT ENTER AND LEAVE THE CONSTRUCTION-SITE SHALL BE RESTRICTED FROM MUDDY AREAS.
11. REMOVAL - THE ENTRANCE SHALL REMAIN IN PLACE UNTIL THE DISTURBED AREA IS STABILIZED OR REPLACED WITH A PERMANENT ROADWAY OR ENTRANCE.

STABILIZED CONSTRUCTION ENTRANCE

NTS

GEOTEXTILE SPECIFICATION FOR CONSTRUCTION ENTRANCE	
MINIMUM TENSILE STRENGTH	200 lbs.
MINIMUM PUNCTURE STRENGTH	80 psi.
MINIMUM TEAR STRENGTH	50 lbs.
MINIMUM BURST STRENGTH	320 psi.
MINIMUM ELONGATION	20%
EQUIVALENT OPENING SIZE	EOS < 0.6 mm.
PERMITTIVITY	1x10-3 cm/sec.



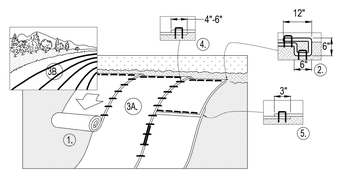


NOTE:

INLET PROTECTION SHALL BE DANDY BAG OR APPROVED OTHER.

INLET PROTECTION

NTS



NOTES:

1. PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED.
2. BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP BY 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH AS SHOWN IN DETAIL 2. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
3. ROLL THE BLANKETS (A.) DOWN OR (B.) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS PER MANUFACTURES RECOMMENDATION.
4. THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH MINIMUM 6" OVERLAP. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
5. CONSECUTIVE BLANKETS SPLICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
6. PLACE STAPLES/STAKES PER MANUFACTURER'S RECOMMENDATION FOR THE APPROPRIATE SLOPE BEING APPLIED.

EROSION CONTROL BLANKET

NTS

NOTES:

1. SILT FENCE SHALL BE CONSTRUCTED BEFORE UPSLOPE LAND DISTURBANCE BEGINS.
2. ALL SILT FENCE SHALL BE PLACED AS CLOSE TO THE CONTOUR AS POSSIBLE SO THAT WATER WILL NOT CONCENTRATE AT LOW POINTS IN THE FENCE AND SO THAT SMALL SWALES OR DEPRESSIONS WHICH MAY CARRY SMALL CONCENTRATED FLOWS TO THE SILT FENCE ARE DISSIPATED ALONG ITS LENGTH.
3. TO PREVENT WATER PONDED BY THE SILT FENCE FROM FLOWING AROUND THE ENDS, EACH END SHALL BE CONSTRUCTED UPSLOPE SO THAT THE ENDS ARE AT A HIGHER ELEVATION.
4. WHERE POSSIBLE, SILT FENCE SHALL BE PLACED ON THE FLATTEST AREA AVAILABLE.
5. WHERE POSSIBLE, VEGETATION SHALL BE PRESERVED FOR 5 FT. (OR AS MUCH AS POSSIBLE) UPSLOPE FROM THE SILT FENCE. IF VEGETATION IS REMOVED, IT SHALL BE ESTABLISHED WITHIN 7 DAYS FROM THE INSTALLATION OF THE SILT FENCE.
6. THE HEIGHT OF THE SILT FENCE SHALL BE A MINIMUM OF 16 IN. ABOVE THE ORIGINAL GROUND SURFACE.
7. THE SILT FENCE SHALL BE PLACED IN A TRENCH CUT A MINIMUM F 6 IN. DEEP. THE TRENCH SHALL BE CUT WITH A TRENCHER, CABLE LAYING MACHINE, OR OTHER SUITABLE DEVICES WHICH WILL ENSURE ADEQUATE UNIFORM TRENCH DEPTH.
8. THE SILT FENCE SHALL BE PLACED WITH THE STAKES ON THE DOWNSLOPE SIDE OF THE GEOTEXTILE AND SO THAT THE 8 INCHES OF CLOTH ARE BELOW THE GROUND SURFACE. EXCESS MATERIAL SHALL LAY ON THE BOTTOM OF THE 6 IN. DEEP TRENCH. THE TRENCH SHALL BE BACKFILLED AND COMPACTED.
9. SEAMS BETWEEN SECTIONS OF SILT FENCE SHALL BE OVERLAPPED WITH THE END STAKES OF EACH SECTION WRAPPED TOGETHER BEFORE DRIVING INTO THE GROUND.
10. MAINTENANCE - SILT FENCE SHALL ALLOW RUNOFF TO PASS ONLY AS DIFFUSE FLOW THROUGH THE GEOTEXTILE. IF RUNOFF OVERTOPS SILT FENCE, FLOWS UNDER OR AROUND THE ENDS, OR IN ANY OTHER WAY BECOMES A CONCENTRATED FLOW, ONLY OF THE FOLLOWING SHALL BE PERFORMED, AS APPROPRIATE:
    1) THE LAYOUT OF THE SILT FENCE SHALL BE CHANGED,
    2) ACCUMULATED SEDIMENT SHALL BE REMOVED, OR
    3) OTHER PRACTICES SHALL BE INSTALLED.

MAXIMIZE DISTANCE FROM THE TOE OF SLOPE, LEAVE AT LEAST 5' DISTANCE.

SILT FENCE

NTS

SPECIFICATIONS FOR SILT FENCE

FABRIC PROPERTIES	VALUES	TEST METHODS
GRAB TENSILE STRENGTH	90 LB. MINIMUM	ASTM D-1682
MULEN BURST STRENGTH	190 PSI MINIMUM	ASTM D-3786
SLURRY FLOW RATE	0.3 GAL/MIN/FT. MAX.	
EQUIVALENT OPENING SIZE	40-80	US STD. SIEVE CW 02215
ULTRAVIOLET RADIATION STABILITY	90% MINIMUM	ASTM - G 26

CRITERIA FOR SILT FENCE MATERIALS

1. FENCE POSTS - THE LENGTH SHALL BE A MINIMUM OF 32 INCHES LONG. WOOD POSTS WILL BE 2 IN. X 2 IN. HARDWOOD OF SOUND QUALITY. THE MAXIMUM SPACING BETWEEN POSTS SHALL BE 10 FT.
2. SILT FENCE FABRIC (SEE CHART BELOW)

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH

PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

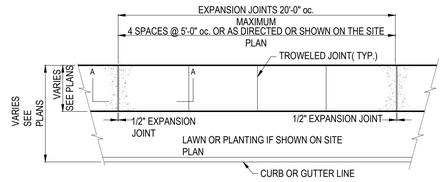
Revisions / Submissions

ID	Description	Date

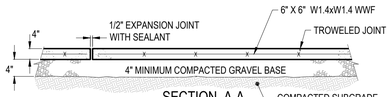
Project Number:	766656
Scale:	NOT TO SCALE
Drawn By:	VMO
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
SWPPP DETAILS

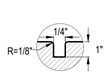
C6.3



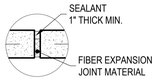
PLAN VIEW



SECTION A-A



TROWELED JOINT



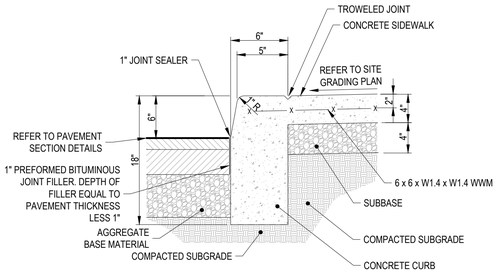
EXPANSION JOINT

NOTES:

1. ALL CONCRETE CURBS AND SIDEWALKS TO BE 4000 P.S.I. CONCRETE.
2. SIDEWALK TO BE SLOPED 2% MAX. AWAY FROM BUILDING.
3. ALL SIDEWALKS SHALL BE BROOM FINISHED.

CONCRETE SIDEWALK

NTS

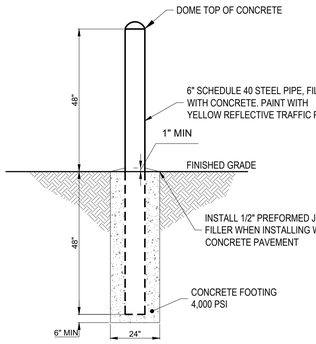


NOTES:

1. ALL CONCRETE CURBS AND SIDEWALK TO BE 4,000 P.S.I. CONCRETE AT 28 DAYS.
2. TRANSVERSE EXPANSION JOINTS, 1/2" WIDE, SHALL BE INSTALLED IN THE CURB 20'-0" APART MAXIMUM. SPACING SHALL MATCH SIDEWALK.
3. EXPANSION JOINTS SHALL BE FILLED WITH 1/2" PREFORMED JOINT FILLER, RECESSED 1/4" FROM TOP AND FACE OF CURB.
4. MAXIMUM HEIGHT OF CURB TO PAVING IS 6".

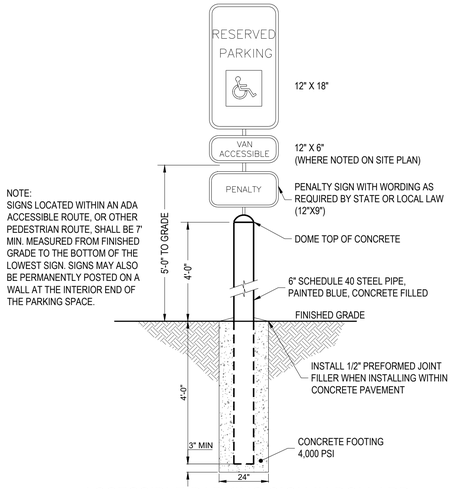
CONCRETE CURB W/ SIDEWALK

NTS



BOLLARD

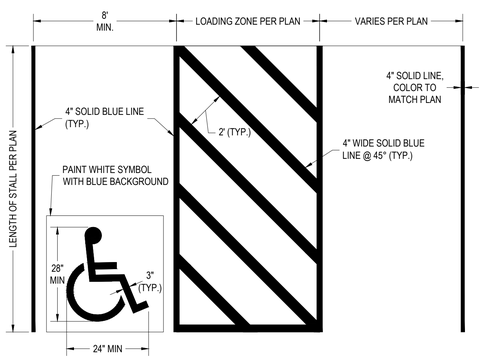
NTS



NOTE:
SIGNS LOCATED WITHIN AN ADA ACCESSIBLE ROUTE, OR OTHER PEDESTRIAN ROUTE, SHALL BE 7' MIN. MEASURED FROM FINISHED GRADE TO THE BOTTOM OF THE LOWEST SIGN. SIGNS MAY ALSO BE PERMANENTLY POSTED ON A WALL AT THE INTERIOR END OF THE PARKING SPACE.

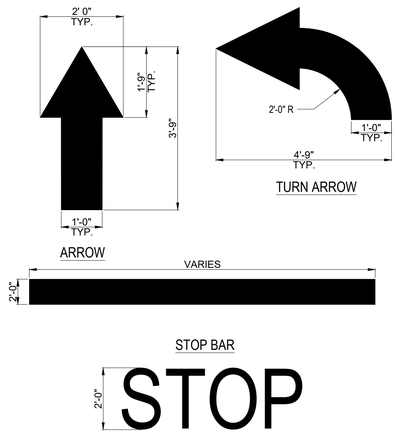
ACCESSIBLE PARKING SIGN IN BOLLARD

NTS



ACCESSIBLE PARKING SPACE STRIPING

NTS



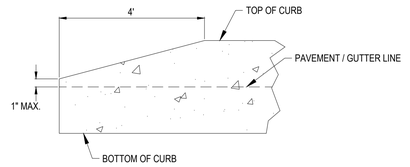
ARROW

TURN ARROW

STOP BAR

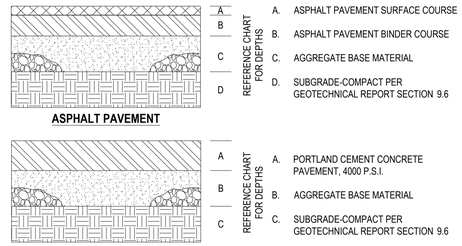
PAVEMENT MARKINGS

NTS



CURB TAPER

NTS



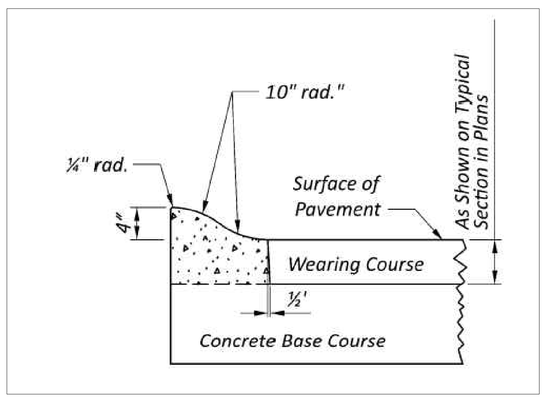
ASPHALT PAVEMENT

CONCRETE PAVEMENT

PAVEMENT LAYER DEPTHS					
	ASPHALT			CONCRETE	
	A	B	C	A	B
STANDARD DUTY	1"	2.5"	6"	6"	4"
HEAVY DUTY	1"	3"	8"	x	x

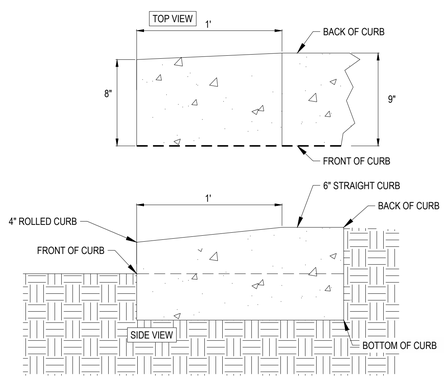
PAVEMENT SECTIONS

NTS



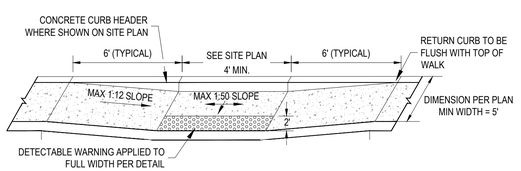
ROLLED CURB

NTS



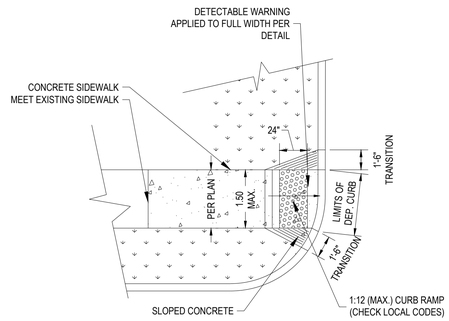
CURB TRANSITION

NTS



ACCESSIBLE CURB RAMP (TYPE I)

NTS



ACCESSIBLE CURB RAMP (TYPE II)

NTS

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH

PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

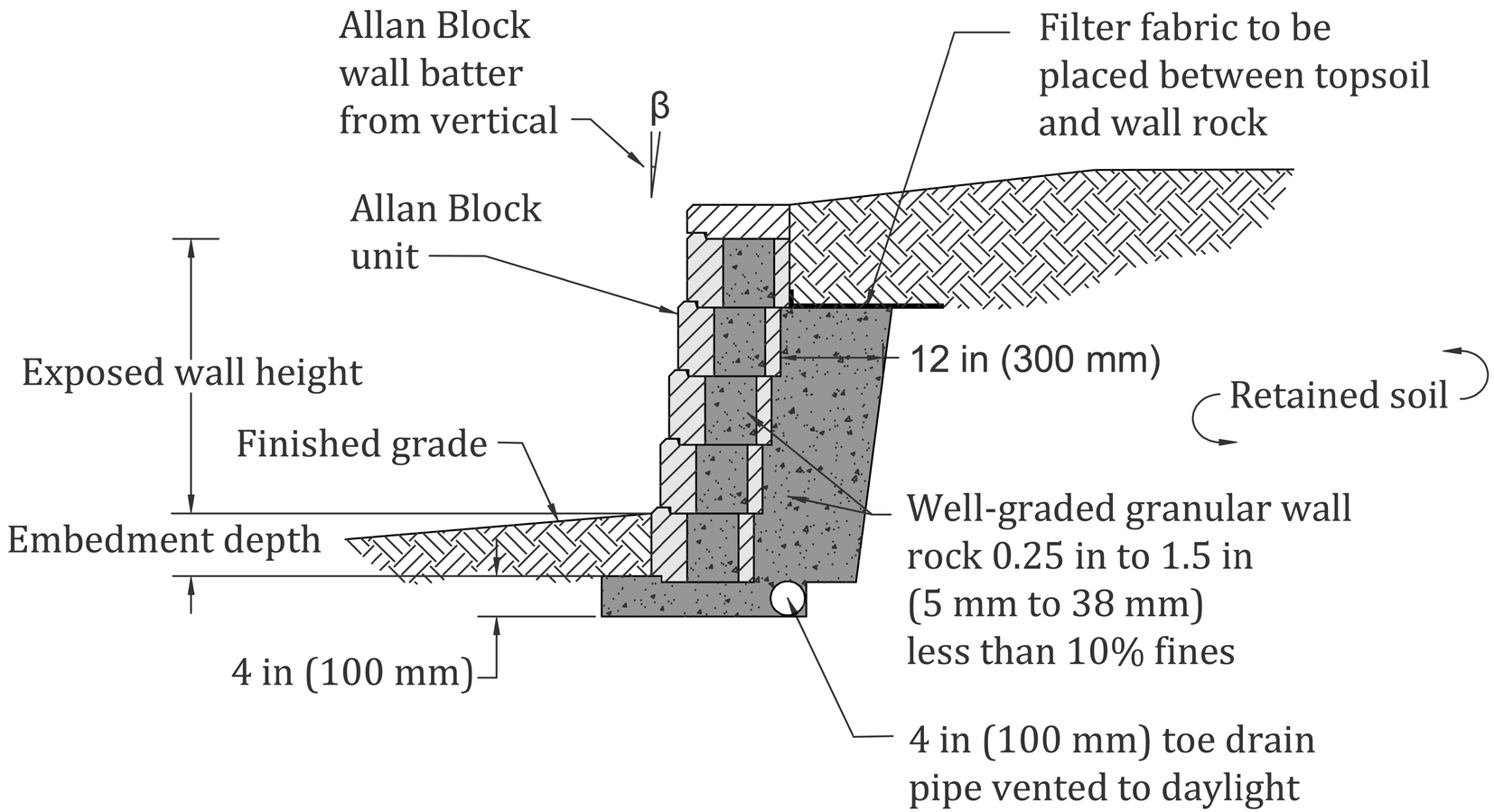
Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	[SCALE]
Drawn By:	[DRAWN]
Checked By:	[CHECKED]
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
CONSTRUCTION DETAILS

C7.0



Designed By:	Title: AB-01 TYPICAL GRAVITY WALL	Date:
Checked By:	The purpose of this drawing is for preliminary design only. This should not be used for final design or construction without the certification of a professional engineer registered in the state in which the wall will be built. The accuracy and use of details contained in this document are the sole responsibility of the user. The user must verify each detail for accuracy as they pertain to their particular project.	Project No:
Scale: Not to Scale		Drawing No:

ALLAN BLOCK
allanblock.com

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH
2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

ID	Description	Date

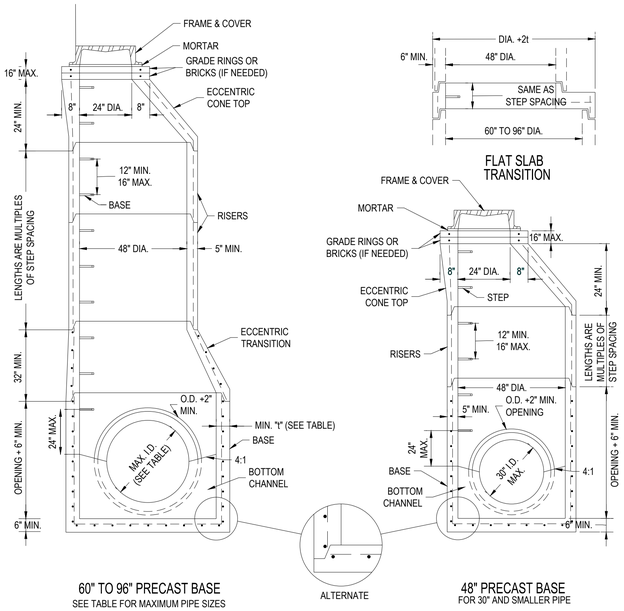
Project Number:	766656
Scale:	[SCALE]
Drawn By:	[DRAWN]
Checked By:	[CHECKED]
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
CONSTRUCTION DETAILS

C7.1

NOTES:

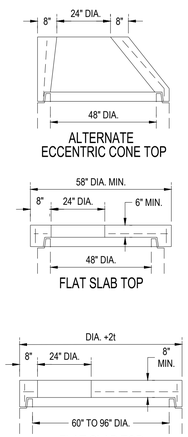
1. SECTIONS OF THE PRECAST MANHOLE SHALL BE CAST AND ASSEMBLED WITH EITHER ALL TONGUE OR ALL GROOVE ENDS UP. LIFT HOLES MAY BE PROVIDED IN EACH SECTION FOR HANDLING.
2. TOP AND TRANSITION (OR REDUCER) SECTIONS MAY BE EITHER ECCENTRIC CONE, CONCENTRIC CONE, OR FLAT SLAB.
3. BASES FOR MANHOLES ARE SHOWN WITH MONOLITHIC FLOOR AND RISER WHICH MAY BE CAST IN ONE OR TWO OPERATIONS. A PERMISSIBLE ALTERNATE IS TO CAST AND SHIP THE FLOOR AND BARREL SEPARATELY. OPENINGS FOR INLET AND OUTLET PIPE SHALL BE PROVIDED EITHER WHEN THE UNIT IS CAST OR LATER, TO MEET PROJECT REQUIREMENTS. BOTTOM CHANNELS MAY BE FORMED OF CONCRETE PRECAST IN THE BASE OR BY FIELD CONSTRUCTION. BASES MAY ALSO BE POURED IN PLACE. ALL INLETS AND OUTLETS ARE TO BE IDENTIFIED.
4. OPENINGS IN RISER SECTIONS FOR 18" AND SMALLER INLET PIPES SHALL BE PREFABRICATED. FLEXIBLE CONNECTIONS SHALL BE PROVIDED FOR SANITARY AND COMBINED SEWERS.
5. JOINT SEAL BETWEEN PRECAST MANHOLE SECTIONS AND PIPES SHALL BE RESILIENT AND FLEXIBLE GASKET JOINTS PER ASTM C-923 OR LATEST EDITION.
6. 0-RING JOINT, BETWEEN MANHOLE SECTIONS SHALL BE FLEXIBLE BUTYL RUBBER SEAL PER ASTM C-990.
7. PRECAST MANHOLE SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478. CONCRETE SHALL BE 4000 PSI.
8. SEAL LIFT HOLES WITH NON-SHRINK GROUT.
9. FRAME AND COVER:
   - 9.1. FRAME WITH SOLID COVER USE EAST JORDAN 1710A, WITH APPROPRIATE LETTERING OR APPROVED OTHER
   - 9.2. FRAME WITH GRATE USE EAST JORDAN 1710M OR APPROVED OTHER.



60" TO 96" PRECAST BASE
SEE TABLE FOR MAXIMUM PIPE SIZES

48" PRECAST BASE
FOR 30" AND SMALLER PIPE

FLAT SLAB TRANSITION



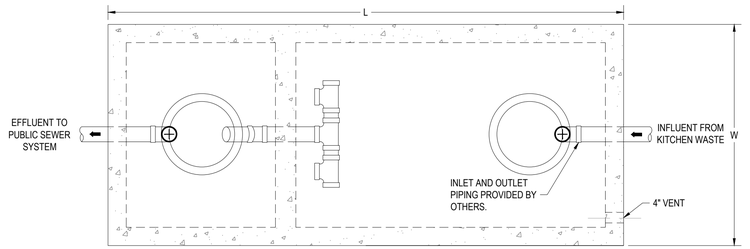
ALTERNATE
ECCENTRIC CONE TOP

FLAT SLAB TOP

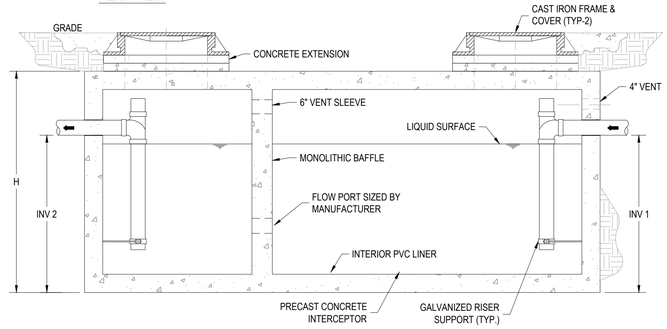
FLAT SLAB TOP

BASE I.D.	MIN. "t"	MAX. PIPE SIZE
60"	5"	36"
72"	6"	48"
84"	7"	54"
90"	7 1/2"	60"
96"	8"	66"

PRECAST CONCRETE MANHOLE
NTS



PLAN VIEW



PROFILE VIEW

SPECIFICATIONS:

1. CONCRETE: CLASS I/II CONCRETE WITH DESIGN STRENGTH OF 4500 PSI AT 28 DAYS. UNIT IS OF MONOLITHIC CONSTRUCTION AT FLOOR, FIRST STAGE OF WALL AND BAFFLE WITH SECTIONAL RISER TO REQUIRED DEPTH. (MONOLITHIC BAFFLE REQUIRED, SLIDE-IN TYPE IS NOT ACCEPTABLE)
2. REINFORCEMENT: GRADE 60 REINFORCED WITH STEEL REBAR CONFORMING TO ASTM A615 ON REQUIRED CENTERS OR EQUAL.
3. C.I. CASTINGS: MANHOLE FRAMES, COVERS, OR GRATES ARE MANUFACTURED OF GREY CAST IRON CONFORMING TO ASTM A48-76 CLASS 30. MANHOLE SHALL BE NOMINAL 24 INCH DIAMETER AND BE TRAFFIC DUTY RATED.
4. CONTRACTOR SHALL OBTAIN APPROVAL OF SHOP DRAWINGS FROM LOCAL OFFICIAL PRIOR TO ORDERING GREASE TRAP. SHOP DRAWINGS SHALL INCLUDE CAPACITY, DESIGN, AND MATERIAL OF GREASE TRAP.

SIZING SCHEDULE**

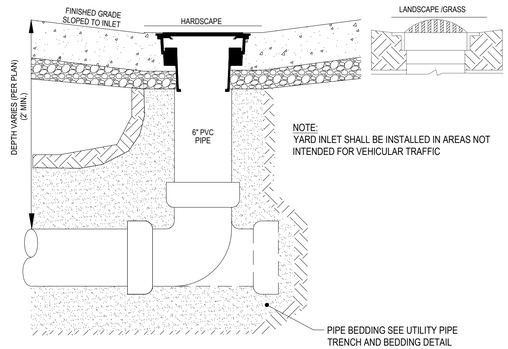
CAPACITY (USGal)	GREASE CAP. (LBS)	EMPTY WT (LBS)	LENGTH, L	WIDTH, W	HEIGHT, H	INV 1*	INV 2*
500	1,200	9,500	7'-10"	4'-4"	4'-6"	3'-3"	3'-0"
750	1,700	9,900	7'-10"	4'-4"	6'-0"	4'-5"	4'-2"
1,000	2,300	13,350	8'-8"	5'-0"	6'-0"	4'-9"	4'-6"
1,250	2,900	14,650	9'-2"	5'-8"	6'-0"	4'-9"	4'-6"
1,500	3,500	16,050	9'-2"	5'-8"	7'-0"	5'-9"	5'-6"
2,000	4,600	21,250	9'-0"	6'-0"	8'-0"	6'-9"	6'-6"
2,500	5,700	27,050	13'-0"	7'-0"	7'-0"	5'-9"	5'-6"
3,000	6,900	33,150	13'-0"	7'-0"	8'-0"	6'-9"	6'-6"
3,500	8,000	38,550	13'-0"	7'-0"	8'-6"	7'-3"	7'-0"
4,000	9,300	38,100	16'-0"	8'-6"	7'-0"	5'-9"	5'-6"

*INVERT MEASUREMENTS ARE FROM BOTTOM OF BASE.
**THE CAPACITIES AND DIMENSIONS INDICATED IN THE THE TABLE ARE APPROXIMATIONS AND THE CONTRACTOR SHALL OBTAIN EXACT CAPACITIES AND DIMENSIONS FROM THE MANUFACTURER.

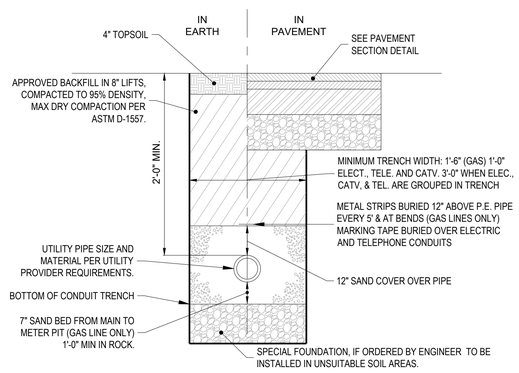
OIL / WATER SEPARATOR
NTS

GRATE SPECIFICATION

HARDSCAPE	LANDSCAPE/GRASS
ZURN 154-CAST IRON DECK DRAIN W/ HEEL PROOF GRATE (OR APPROVED EQUAL)	EAST JORDAN 6104 (OR APPROVED EQUAL)



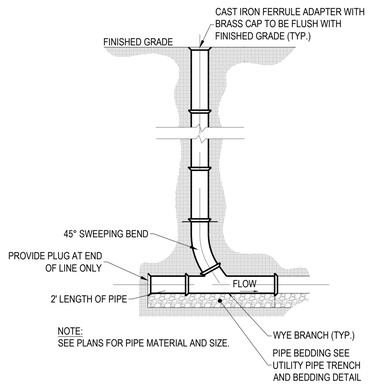
YARD INLET
NTS



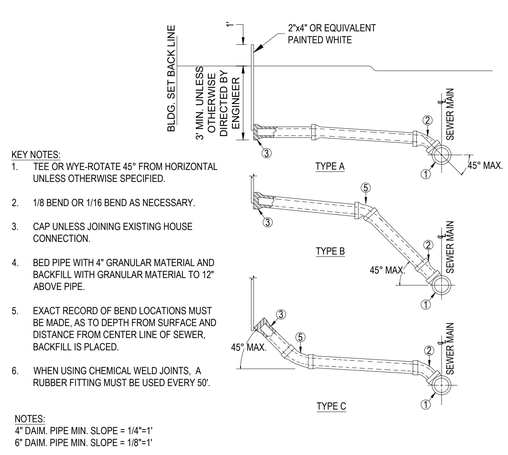
NOTES:

1. CONTRACTOR TO VERIFY SPECIFIC REQUIREMENTS WITH UTILITY PROVIDERS PRIOR TO BEGINNING CONSTRUCTION.

DRY UTILITY TRENCH
NTS



CLEAN OUT
NTS



KEY NOTES:

1. TEE OR WYE-ROTATE 45° FROM HORIZONTAL UNLESS OTHERWISE SPECIFIED.
2. 1/8 BEND OR 1/16 BEND AS NECESSARY.
3. CAP UNLESS JOINING EXISTING HOUSE CONNECTION.
4. BED PIPE WITH 4" GRANULAR MATERIAL AND BACKFILL WITH GRANULAR MATERIAL TO 12" ABOVE PIPE.
5. EXACT RECORD OF BEND LOCATIONS MUST BE MADE, AS TO DEPTH FROM SURFACE AND DISTANCE FROM CENTER LINE OF SEWER, BACKFILL IS PLACED.
6. WHEN USING CHEMICAL WELD JOINTS, A RUBBER FITTING MUST BE USED EVERY 50'.

NOTES:
4" DIAM. PIPE MIN. SLOPE = 1/4"=1'
6" DIAM. PIPE MIN. SLOPE = 1/8"=1'

SANITARY LATERAL CONNECTIONS
NTS

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH

PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	[SCALE]
Drawn By:	[DRAWN]
Checked By:	[CHECKED]
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
UTILITY DETAILS

C7.2

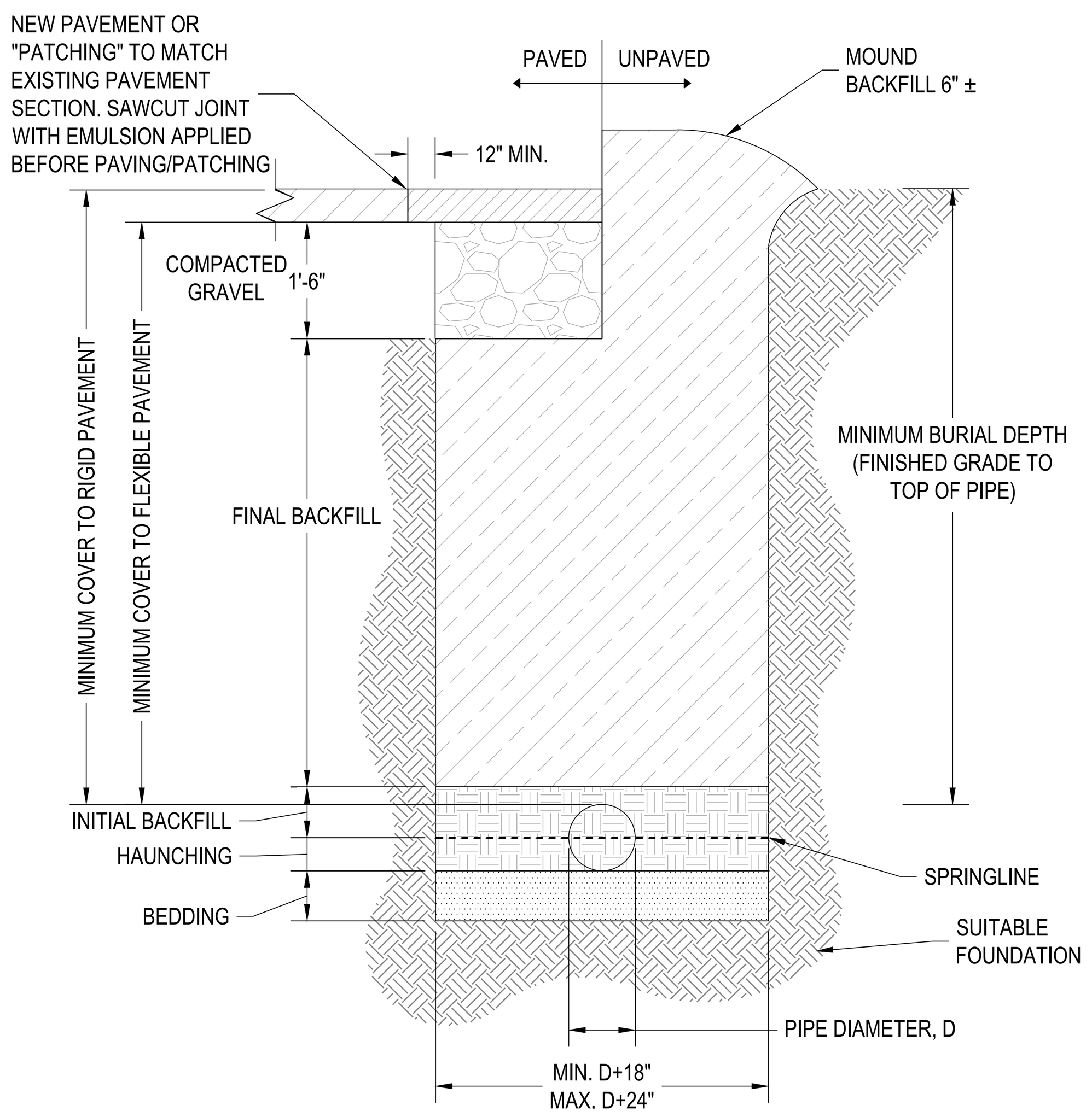


TABLE 1: BACKFILL AND EMBEDMENT MATERIALS

SOIL CLASSIFICATIONS (AS DEFINED IN ASTM D2487 AND D2321)	
CLASS I	CRUSHED ROCK ANGULAR (CLEAN).
CLASS II	GRAVEL AND/OR SANDS, WITH LITTLE OR NO FINES.
CLASS III	SAND/SILT AND SAND/CLAY MIXTURES.
CLASS IV	INORGANIC CLAYS
CLASS V	ORGANIC SILTS, CLAYS, AND PEATS.
SOIL CLASSIFICATIONS (AS DEFINED IN ASCE 15-98)	
CATEGORY I	GRAVELLY SAND
CATEGORY II	SANDY SILT
CATEGORY III	SILTY CLAY

NOTES:

1. IN THE CASE OF TRENCH BOTTOM BEING UNSTABLE, THE CONTRACTOR SHALL REPLACE FOUNDATION WITH SUITABLE MATERIAL AS SPECIFIED BY GEOTECHNICAL ENGINEER.
2. COMPACTION PERCENTAGES SPECIFIED REFER TO STANDARD PROCTOR PERCENT COMPACTION.
3. CONTRACTOR TO MANDATE DEWATERING IN TRENCHES DURING CONSTRUCTION.
4. TRENCHING OPERATIONS SHALL CONFORM TO ALL OSHA REQUIREMENTS.
5. FOR HDPE AND PVC WATERLINES AND LONG SEWER LATERALS, INSTALL METALLIC LOCATOR TAPE 12" (MIN) AND 18" (MAX) BELOW FINISHED SUBGRADE ELEVATION. INSTALL TRACER WIRE LOCATED AT THE TOP OF THE PIPE WITHIN THE INITIAL BACKFILL.

PVC PIPE

ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS I-V*
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (12" COMMON)** CLASS I, II, AND III*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III COMPACTED*
BEDDING	DEPTH = 4-6" CLASS I, II, AND III COMPACTED*

NOTE: HAUNCHING ZONE MUST BE COMPACTED PRIOR TO PLACEMENT AND COMPACTION OF INITIAL AND FINAL BACKFILLS TO PREVENT PIPE DEFLECTION.

HDPE PIPE

ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	MINIMUM COVER UNPAVED AREAS = 12" MINIMUM COVER PAVED AREAS (D <=48") = 12"**,*** MINIMUM COVER PAVED AREAS (D>48") = 24"**,*** CLASS I AND II (COMPACTED 90% SPD) AND CLASS III (COMPACTED 95% SPD)*
INITIAL BACKFILL	MINIMUM DEPTH = D/2 (CAN EXTEND TO THE CROWN OF THE PIPE)** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*
BEDDING	DEPTH (D <= 24") = 4"** DEPTH (D > 24") = 6"** CLASS I, II, AND III (TYPE IV CAN BE USED WITH THE APPROVAL OF GEOTECHNICAL ENGINEER)*

NOTE: THE MIDDLE ⅓ BENEATH THE PIPE INVERT IN THE BEDDING ZONE SHALL BE LOOSELY PLACED

RC PIPE

ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CATEGORY I, II, III*
INITIAL BACKFILL	DEPTH = D/2** CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*
HAUNCHING	DEPTH = D/2** CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*
BEDDING	MINIMUM DEPTH = D/24 (NOT LESS THAN 3")** IF ROCK FOUNDATION, MINIMUM DEPTH = D/12 (NOT LESS THAN 6")** CATEGORY I (85-95% COMPACTION), CATEGORY II (90-95% COMPACTION), OR CATEGORY III (85-95% COMPACTION)*

NOTE: FOR ELLIPTICAL AND ARCH PIPE, D SHALL REPRESENT HORIZONTAL SPAN OF PIPE.

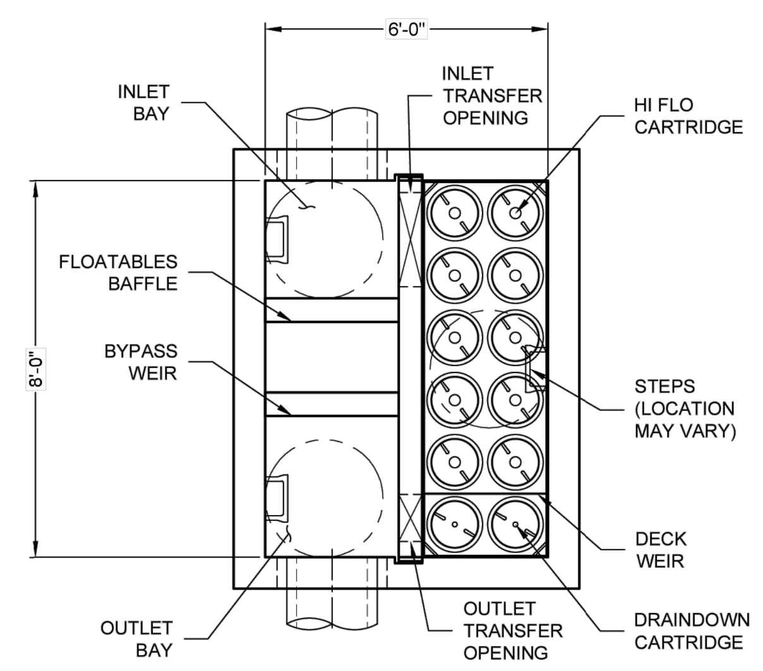
DI PIPE

ZONE	DEPTH / SOIL MATERIAL
FINAL BACKFILL	CLASS I-V*
INITIAL BACKFILL	DEPTH = D/2** CLASS I, II, AND III (APPROX. 90% STANDARD PROCTOR PER AASHTO T-99)*
HAUNCHING	DEPTH = D/2** CLASS I, II, AND III*
BEDDING	MINIMUM DEPTH = 4" CLASS I, II, AND III*

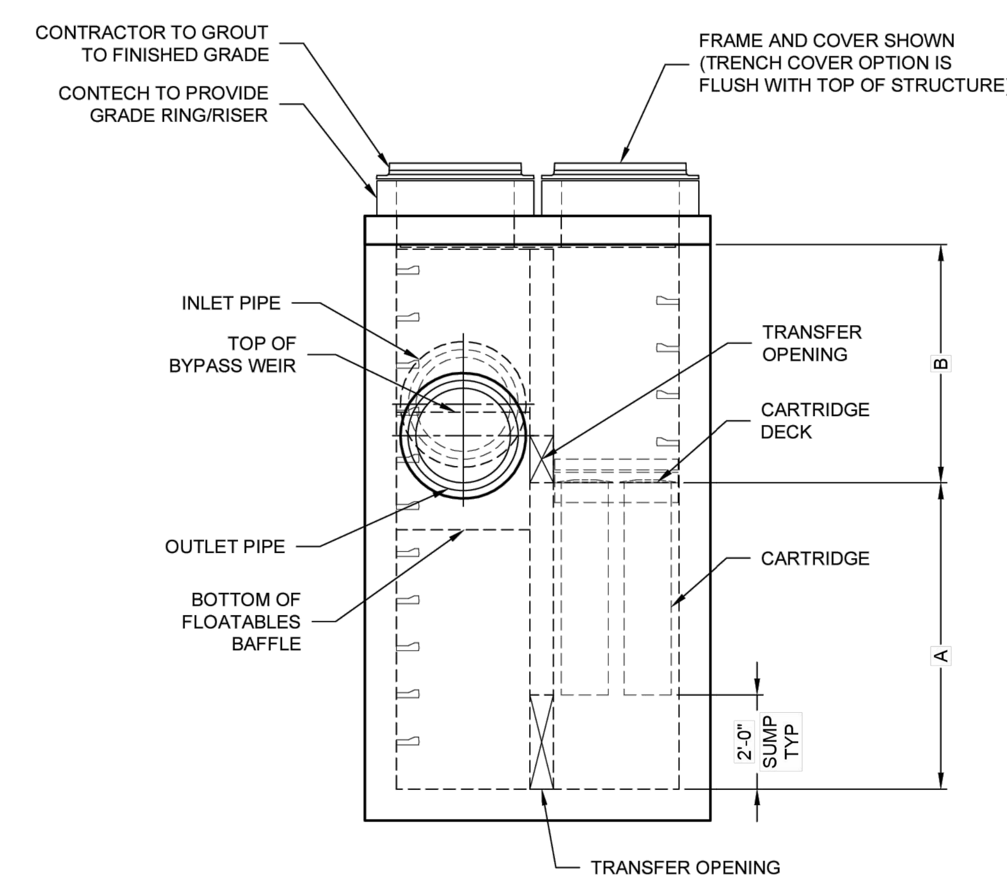
*SEE TABLE 1 FOR SPECIFICATIONS ON SOIL MATERIALS
** D = PIPE DIAMETER
*** MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

UTILITY PIPE TRENCH AND BEDDING

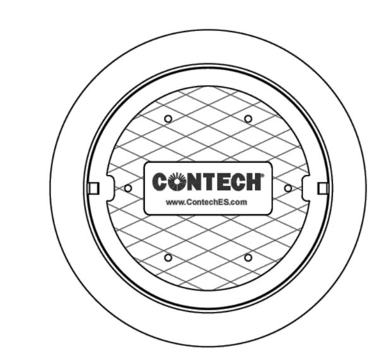
NTS



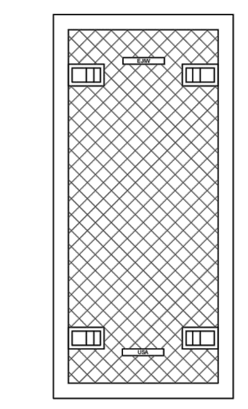
PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)



ELEVATION VIEW



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



24" TRENCH COVER
(LENGTH VARIES)
N.T.S.

JELLYFISH DESIGN NOTES

JELLYFISH TREATMENT CAPACITY IS A FUNCTION OF THE CARTRIDGE LENGTH AND THE NUMBER OF CARTRIDGES. THE STANDARD PEAK DIVERSION STYLE WITH PRECAST TOP SLAB IS SHOWN. ALTERNATE OFFLINE VAULT AND/OR SHALLOW ORIENTATIONS ARE AVAILABLE. PEAK CONVEYANCE CAPACITY TO BE DETERMINED BY ENGINEER OF RECORD

CARTRIDGE SELECTION

CARTRIDGE LENGTH	54"	40"	27"	15"
OUTLET INVERT TO STRUCTURE INVERT (A)	6'-6"	5'-4"	4'-3"	3'-3"
FLOW RATE HI-FLO / DRAINDOWN (CFS) (PER CART)	0.178 / 0.089	0.133 / 0.067	0.089 / 0.045	0.049 / 0.025
MAX. TREATMENT (CFS)	1.96	1.47	0.98	0.54
DECK TO INSIDE TOP (MIN) (B)	5.00	4.00	4.00	4.00

SITE SPECIFIC DATA REQUIREMENTS

STRUCTURE ID	*
WATER QUALITY FLOW RATE (cfs)	*
PEAK FLOW RATE (cfs)	*
RETURN PERIOD OF PEAK FLOW (yrs)	*
# OF CARTRIDGES REQUIRED (HF / DD)	*
CARTRIDGE LENGTH	*

PIPE DATA:	I.E.	MAT'L	DIA	SLOPE %	HGL
INLET #1	*	*	*	*	*
INLET #2	*	*	*	*	*
OUTLET	*	*	*	*	*

SEE GENERAL NOTES 6-7 FOR INLET AND OUTLET HYDRAULIC AND SIZING REQUIREMENTS.

RIM ELEVATION	*

ANTI-FLOTATION BALLAST	WIDTH	HEIGHT
	*	*

NOTES/SPECIAL REQUIREMENTS:

* PER ENGINEER OF RECORD

GENERAL NOTES:
1. CONTECH TO PROVIDE ALL MATERIALS UNLESS NOTED OTHERWISE.
2. FOR SITE SPECIFIC DRAWINGS WITH DETAILED STRUCTURE DIMENSIONS AND WEIGHT, PLEASE CONTACT YOUR CONTECH ENGINEERED SOLUTIONS REPRESENTATIVE. www.ContechES.com
3. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
4. STRUCTURE SHALL MEET AASHTO HS-20 OR PER APPROVING JURISDICTION REQUIREMENTS, WHICHEVER IS MORE STRINGENT, ASSUMING EARTH COVER OF 0' - 10', AND GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
5. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-857, ASTM C-918, AND AASHTO LOAD FACTOR DESIGN METHOD.
6. OUTLET PIPE INVERT IS EQUAL TO THE CARTRIDGE DECK ELEVATION.
7. THE OUTLET PIPE DIAMETER FOR NEW INSTALLATIONS IS RECOMMENDED TO BE ONE PIPE SIZE LARGER THAN THE INLET PIPE AT EQUAL OR GREATER SLOPE.
8. NO PRODUCT SUBSTITUTIONS SHALL BE ACCEPTED UNLESS SUBMITTED 10 DAYS PRIOR TO PROJECT BID DATE, OR AS DIRECTED BY THE ENGINEER OF RECORD.

INSTALLATION NOTES
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE.
C. CONTRACTOR WILL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT).
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION.

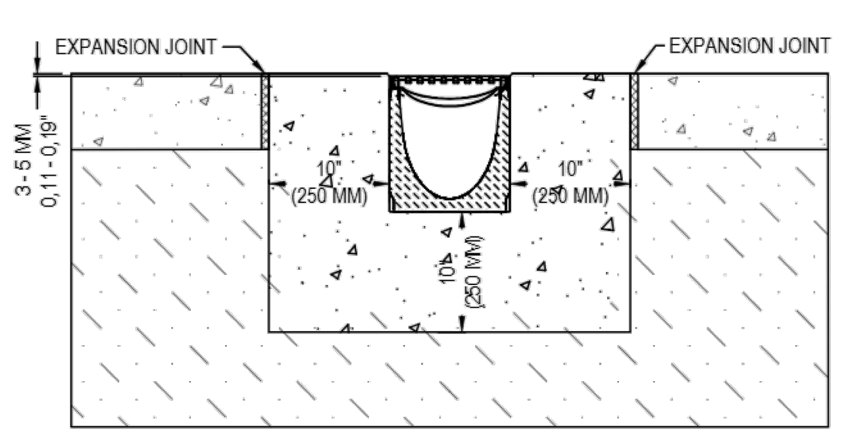
Jellyfish® Filter

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

JELLYFISH JFPD0806
STANDARD DETAIL
PEAK DIVERSION CONFIGURATION

200 Series Installation Detail

ASTM LOAD Class E Concrete Encasement



SECTION

SPECIFICATIONS
FILCOTEN PRO-V NW200 - LOAD CLASS E
GENERAL
THE SURFACE DRAINAGE SYSTEM SHALL BE FILCOTEN FIBER COMPOSITE NW100 CHANNEL SYSTEM WITH CONCRETED EDGE MADE OF GALVANIZED STEEL RAILS AS MANUFACTURED BY BG GRASPOINTNER, INC AND DISTRIBUTED BY HYDRO BG USA INC., A WHOLLY OWNED SUBSIDIARY.
MATERIALS
CHANNELS SHALL BE MANUFACTURED FROM FILCOTEN FIBER COMPOSITE WITH CONCRETED EDGE GALVANIZED STEEL RAIL. MINIMUM PROPERTIES OF FILCOTEN FIBER COMPOSITE WILL BE AS FOLLOW

COMPRESSIVE STRENGTH:	11,700 PSI
FLEXURAL STRENGTH:	1,700 PSI
FREE OF RELEASE AGENTS:	YES
WATER ABSORPTION SUFFICIENT FOR ADHESION WITH CONCRETE SURFACES:	YES
NON FLAMMABLE:	YES
U/V RESISTANT:	YES
RECYCLABLE 100%:	YES
DILUTE ACID AND ALKALI RESISTANT:	YES
FROST THAW SALT TESTED AS PER EN1433 WITH A TEST TEMPERATURE UP TO -40°C (-40°F):	YES
MATERIAL FREE OF VOC, BIOCIDES, HEAVY METALS:	YES

THE SYSTEM SHALL BE 8" (200MM) NOMINAL INTERNAL WIDTH WITH 10.43" UP TO 14.37" (265MM UP TO 365MM), OVERALL WIDTH AND A BUILD-IN SLOPE OF 0.5% AND STEPPED SLOPE SYSTEM. ALL CHANNELS ARE EQUIPPED WITH INTERLOCKING CONNECTION MALE/FEMALE AND SEALANT JOINT.

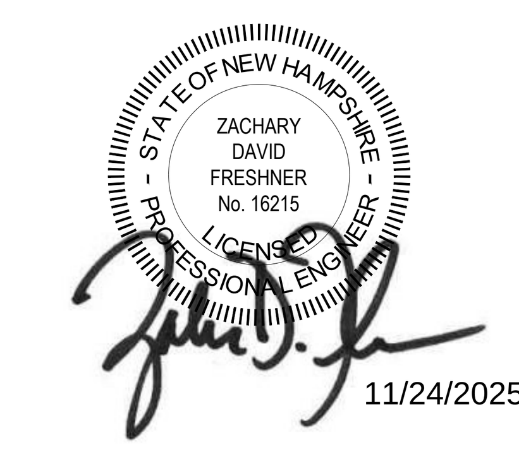
CHANNEL SHALL WITHSTAND LOADING TO PROPER LOAD CLASS AS OUTLINED BY EN 1433. GRATE TYPE SHALL BE APPROPRIATE TO MEET THE SYSTEM LOAD CLASS SPECIFIED AND INTENDED APPLICATION. GRATES SHALL BE SECURED USING 4-POINT BOLTING LOCKING SYSTEM. CHANNEL AND GRATE SHALL BE CERTIFIED TO MEET THE SPECIFIED EN 1433 LOAD CLASS. THE SYSTEM SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S INSTRUCTIONS AND RECOMMENDATIONS.

NOTES:

1. INSTALLATION TO BE COMPLETED IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
2. DO NOT SCALE DRAWING.
3. THIS DRAWING IS INTENDED FOR USE BY ARCHITECTS, ENGINEERS, CONTRACTORS, CONSULTANTS AND DESIGN PROFESSIONALS FOR PLANNING PURPOSES ONLY.
4. ALL INFORMATION CONTAINED HEREIN WAS CURRENT AT THE TIME OF DEVELOPMENT BUT MUST BE REVIEWED AND APPROVED BY THE PRODUCT MANUFACTURER TO BE CONSIDERED ACCURATE.

200 Series
FILCOTEN PRO V 200 GALVANIZED STEEL RAIL CLASS E CONCRETE PAVEMENT

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826



HANG10 CAR WASH
PORTSMOUTH, NH
2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

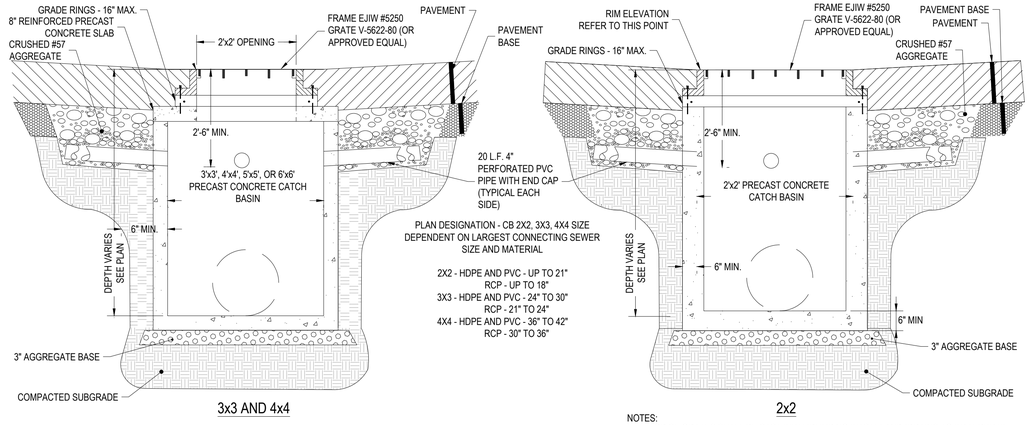
Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	[SCALE]
Drawn By:	[DRAWN]
Checked By:	[CHECKED]
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

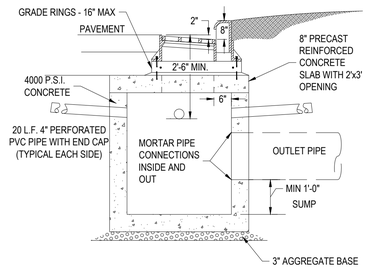
Drawing Title:
UTILITY DETAILS

C7.3

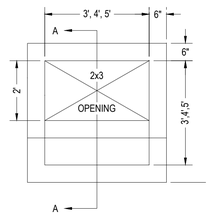


NOTES:
1. TOP OF GRATES SHALL BE CAST WITH "DUMP NO WASTE" AND "DRAINS TO WATERWAY". JOINTS BETWEEN SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-990 OR LATEST EDITION. PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS TO ASTM C-478. CONCRETE SHALL BE 4000 PSI.
2. ADJUSTMENT TO GRADES TO BE PRECAST GRADE RINGS. CASTINGS TO BE MORTARED WITH TYPE "M" MASONRY MORTAR.

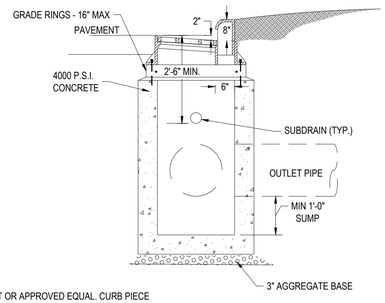
PRECAST CATCH BASIN
NTS



3x3 AND 4x4 - SECTION A-A
TOP VIEW - CASTING REMOVED



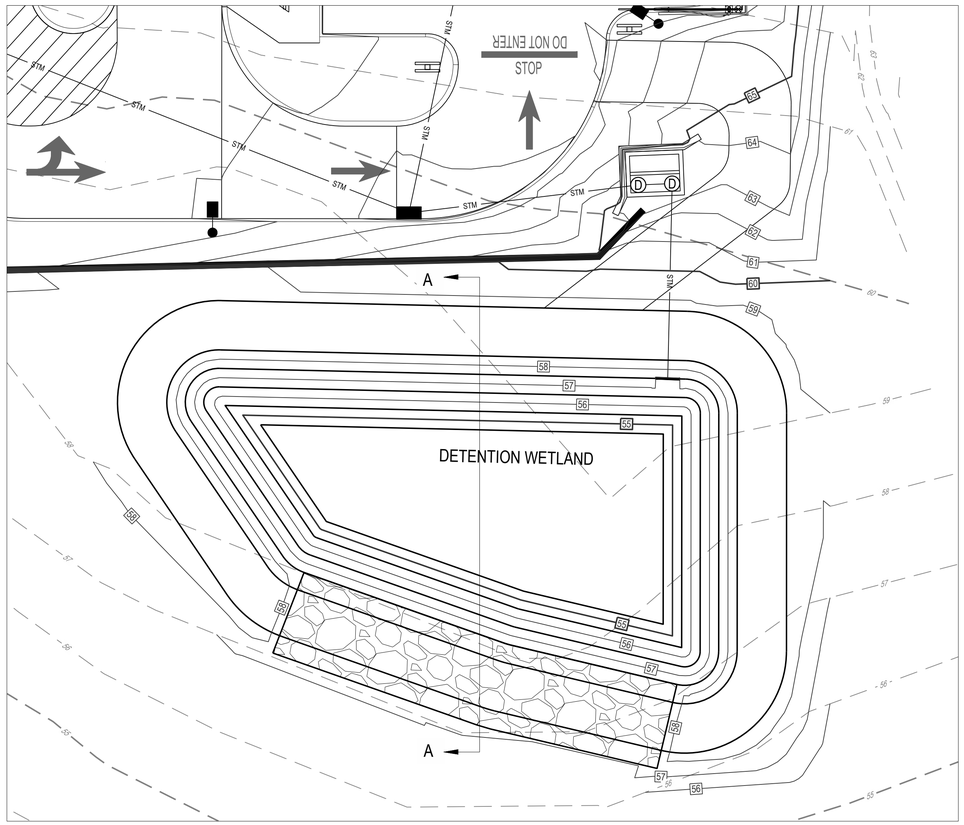
TOP VIEW
CASTING REMOVED



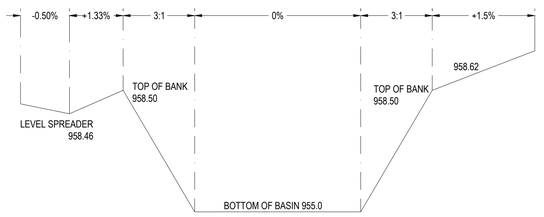
2x3 - SECTION A-A
TOP VIEW - CASTING REMOVED

NOTES:
1. FRAME AND GRATE ASSEMBLY SHALL BE EAST JORDAN 5352M, 7080Z, 7080T OR APPROVED EQUAL. CURB PIECE SHALL BE CAST WITH "DUMP NO WASTE" AND "DRAINS TO WATERWAY".
2. JOINT SEALS BETWEEN PRECAST SECTIONS SHALL BE RESILIENT AND FLEXIBLE GASKET JOINTS PER ASTM C-990.
3. PRECAST SECTIONS SHALL CONFORM TO THE REQUIREMENTS OF ASTM C-478. CONCRETE SHALL BE 4000 PSI.
4. ADJUSTMENTS TO GRADES TO BE PRECAST GRADE RINGS. CASTINGS TO BE MORTARED WITH TYPE "M" MASONRY MORTAR.

PRECAST CURB INLET
NTS



DETENTION BASIN
NTS



SECTION A-A
NTS

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH

PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

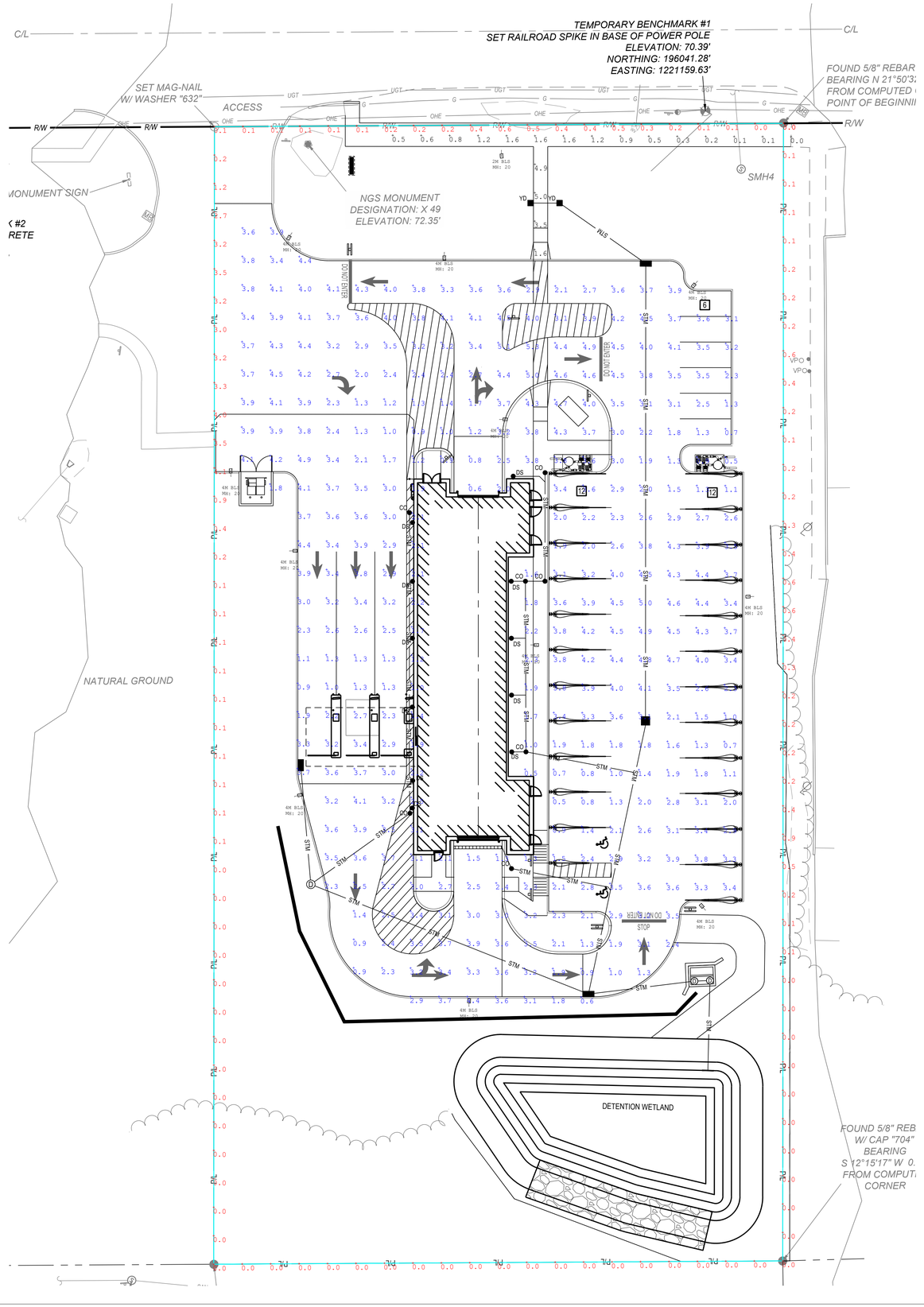
Revisions / Submissions

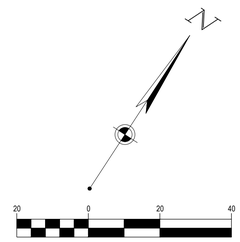
ID	Description	Date

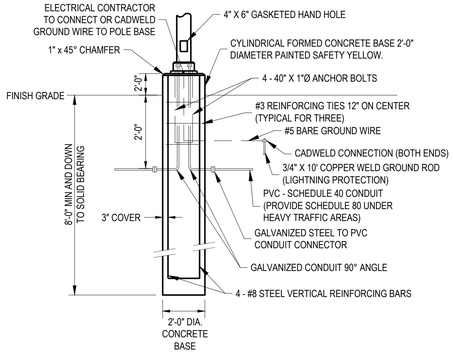
Project Number:	766656
Scale:	[SCALE]
Drawn By:	[DRAWN]
Checked By:	[CHECKED]
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
UTILITY DETAILS

C7.4







LIGHT POLE BASE

NTS

OSQ Series

OSQ™ LED Area/Flood Luminaire featuring Cree TrueWhite® Technology – Medium & Large

Rev. Date: V4 07/18/2022

Product Description

The OSQ™ Area/Flood luminaire blends extreme optical control, advanced thermal management and modern, clean 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 6L lumen package is a suitable upgrade for HID applications up to 250 Watt, and the 11L lumen package is a suitable upgrade for HID applications up to 400 Watt. The 22L lumen package is a suitable upgrade for HID applications up to 750 Watts, and the 30L lumen package is a suitable upgrade for HID applications up to 1000 Watts.

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

Performance Summary

- Utilizes Cree TrueWhite® Technology on 5000K Luminaires
- NanoOptic® Precision Delivery Grid™ optic
- Assembled in the USA by Cree Lighting from US and imported parts
- **Initial Delivered Lumens:** 4,000 - 30,000
- **Efficacy:** Up to 173 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 for PML sensor; up to 5 years for Synapse® accessories; 1 year on luminaire accessories

*See http://creelighting.com/warranty for warranty terms. For Synapse accessories, consult Synapse spec sheets for details on warranty terms.

Ordering Information

Fully assembled luminaire is composed of two components that must be ordered separately:
Example: **Mount:** OSQ-ML-B-AA-BK + **Luminaire:** OSQM-B-4L-30K7-2M-UL-NM-BK

Mount (Luminaire must be ordered separately)*

OSQ-

OSQ-ML-B-AA Adjustable Arm
OSQ-ML-B-DA Direct Arm
OSQ-ML-B-TSP Transportation Mount (stainless steel; do not specify color)
OSQ-ML-B-TM Trunnion Mount

Color Options: **SV** Silver **BZ** Bronze **BK** Black **WH** White

*Reference EPA and pole configuration suitability data beginning on page 10

Luminaire (Mount must be ordered separately)

OSQ **B**

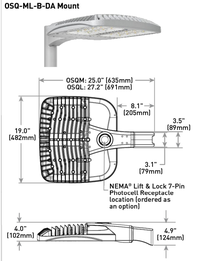
Family	Size	Series	Lumen Package*	CCT/CRI	Optic	Voltage	Mount	Color Options	Controls**	Options
OSQ	M Medium L Large	B	**Medium** **4L** 4,000 Lumens **6L** 6,000 Lumens **7L** 9,000 Lumens **11L** 11,000 Lumens **16L** 16,000 Lumens **Large** **22L** 22,000 Lumens **30L** 30,000 Lumens	**30K7** 3000K 70 CRI **40K7** 4000K, 70 CRI **50K9** 5000K 90 CRI **57K7** 5700K, 70 CRI	**Asymmetric** **2M*** Type II Medium **3M*** Type III Medium **4M*** Type IV Medium **Symmetric** **5H** Type V Medium Type V **5N** Narrow **5S** Type V Square **5W** Narrow Flood **33** NEMA® 3x3 **44** NEMA® 4x4 **55** NEMA® 5x5 **66** NEMA® 6x6 **77** NEMA® 7x5	**UL** Universal 120-277V **UH** Universal 347-480V - Not available with 4L or 6L lumen packages	**NM** No Mount - Must specify mount from table above - Mount ships separately	**BK** Black **BZ** Bronze **SV** Silver **WH** White	**PML Programmable Multi-Level, up to 40' Mounting Height** - Refer to PML spec sheet for details - Intended for downlight applications at 0°-15° **PML2 Programmable Multi-Level, 10-30' Mounting Height** - Refer to PML spec sheet for details - Intended for downlight applications at 0°-15° **DY/DB/DT/DU/DS/DJ/DJ2/DJ1** **Field Adjustable Output** Must select DY, DB, DT, DU, DS, DJ, DJ2, or DJ1 - Offers full range adjustability - Refer to pages 12-18 for power and lumen values - Not available with PML or PML2 options **XB/XT/XA/XU/XJ/XJ2/XJ1** **Locked Lumen Output** Must select add XB, XT, XA, XU, XJ, XJ2, or XJ1 - Not available with 22L or 30L lumen packages - XJ or XJ1 not available with 4L lumen package - Not available with PML or PML2 options - Lumen output is permanently locked to the setting selected - Refer to pages 12-18 for power and lumen values	**20KV** **20kV/10kA Surge Suppression** - Replaces standard 10kV/5kA surge protection **F** **Fuse** - Compatible with 120V, 277V or 347V (phase to neutral) - Consult factory if fusing is required for 208V, 240V or 480V (phase to phase) - Refer to PML spec sheet for availability with PML options - When code dictates fusing, use time delay fuse **R** **NEMA® Lift & Lock 7-Pin Photocell Receptacle** - 7-pin receptacle per ANSI C136.41 - Intended for downlight applications with maximum 45° tilt - Factory connected 0-10V dim leads - 18" (457mm) seven-conductor cord exits luminaire - Requires photocell or shorting cap by others **RL** **Rotate Left** - LED and optic are rotated to the left - Refer to RR/RL configuration diagram on page 19 for optic directionality - Not for use with symmetric optics **RR** **Rotate Right** - LED and optic are rotated to the right - Refer to RR/RL configuration diagram on page 19 for optic directionality - Not for use with symmetric optics

* Lumen Package codes identify approximate light output only. Actual lumen output levels vary by CCT and optic selection. Refer to Initial Delivered Lumen tables for specific lumen values
* Available with Backlight Shield when ordered with field-installed accessory (see table on page 2)
** Luminaire comes standard with 0-10V dimming

US: creelighting.com (800) 236-6800
Canada: creelighting-canada.com (800) 473-1234

CREE LIGHTING

OSQ-ML-B-DA Mount



Luminaire	Weight
OSQM	28.9 lbs. (13.1kg)
OSQL	32.4 lbs. (14.7kg)

Note: Refer to page 11 for fixture mounting drill pattern. For additional mounts, refer to drawings beginning on page 19

Luminaire Schedule									
Symbol	Qty	Label	Arrangement	Description	Tag	LLF	Luminaire Lumens	Luminaire Watts	Total Watts
	11	4M BLS	SINGLE	OSQ-ML-B-DA + OSQM-B-16L-40K7-4M BLS (Back Light Shield)-UL-NM-BK-PML-208V		1.000	12330	104	1144
	1	2M BLS	SINGLE	OSQ-ML-B-DA + OSQM-B-16L-40K7-2M BLS (Back Light Shield)-UL-NM-BK-PML-208V		1.000	12330	104	104

Calculation Summary							
Label	CalcType	Units	Avg	Max	Min	Avg/Min	Max/Min
BOUNDARY	Illuminance	Fc	0.42	4.1	0.0	N.A.	N.A.
PAVEMENT AREA	Illuminance	Fc	2.91	5.3	0.5	5.82	10.60
SIDEWALK	Illuminance	Fc	1.38	5.0	0.0	N.A.	N.A.

811 DigSafe MA-ME-NH-RI-VT

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: NEW HAMPSHIRE UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4826

STATE OF NEW HAMPSHIRE
ZACHARY DAVID FRESHNER
No. 16215
LICENSED PROFESSIONAL ENGINEER
11/24/2025

HANG10 CAR WASH
PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

ID	Description	Date

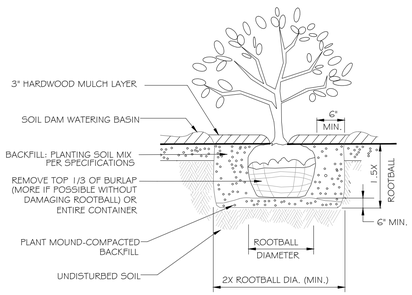
Project Number:	766656
Scale:	SEE SHEET
Drawn By:	MM
Checked By:	CG
Date:	11/24/2025
Issue:	NOT FOR CONSTRUCTION

Drawing Title:
PHOTOMETRIC PLAN

C8.0

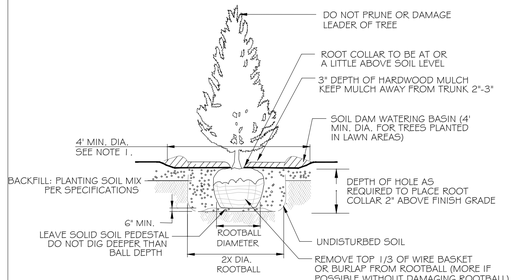
C:\DC\ACCDocs\CESO\Hang10 Portsmouth NH\Project Files_CESO\03-CIVIL\PLAN\PLOT\766656_C8.0_Photometric Plan.dwg - 11/24/2025 - Marvin Maldonado

PLANT INSTALLATION DETAILS



SHRUB PLANTING DETAIL

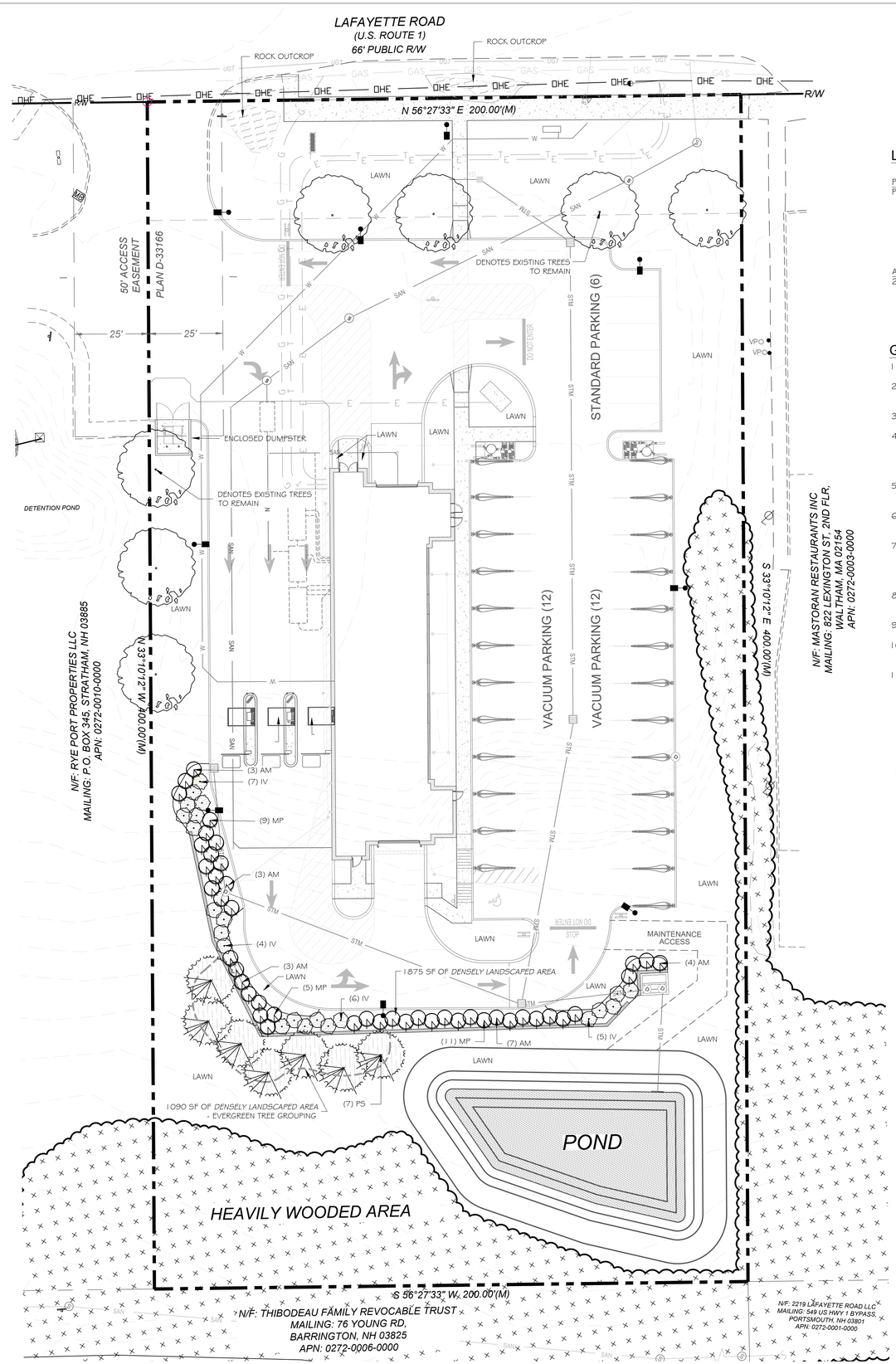
NTS



NOTES:
1. INDIVIDUAL TREES IN LAWN AREAS SHALL RECEIVE A 3-4' MINIMUM DIAMETER MULCHED CIRCLE.
2. STAKE AND WRAP ONLY IF NECESSARY AND REMOVE AS SOON AS ROOTS ARE ESTABLISHED (USUALLY ONE YEAR).

EVERGREEN TREE PLANTING DETAIL

NTS



LANDSCAPE CODE DATA

PARKING LOT LANDSCAPING:
PARKING LOTS THAT CONTAIN 10 OR MORE SPACES SHALL CONFORM TO THE FOLLOWING:
- PARKING LOTS SHALL CONTAIN AT LEAST ONE TREE FOR EVERY 7 PARKING SPACES.
- NO PARKING SPACE SHALL BE MORE THAN 75 FEET FROM A TREE WITHIN THE LOT, AS MEASURED FROM THE CENTER OF THE TREE TO THE NEAREST LINE DEMARCATING THE SPACE.

NOT APPLICABLE - 6 ONLY PARKING SPACE PROPOSED

ADDITIONAL REQUIREMENT:
2,665 SF OF "DENSELY LANDSCAPED AREA" SHALL BE PROVIDED. 2,965± SF AS PROPOSED

GENERAL LANDSCAPE REQUIREMENTS

1. DIAMETERS OF PLANT MATERIALS AS DRAWN ARE REPRESENTATIVE OF PLANTS AT OR NEAR MATURITY RATHER THAN AT INITIAL PLANTING.
2. THE PLANT LIST IS INTENDED AS A GUIDE FOR THE LANDSCAPE CONTRACTOR. IN THE EVENT OF DISCREPANCY BETWEEN THE NUMBER OF PLANTS ON THE PLANT LIST AND ON THE DRAWING, THE GREATER NUMBER SHALL APPLY.
3. ADJUSTMENTS IN LOCATIONS OF PLANT MATERIALS MAY BE NECESSARY DUE TO NEW OR EXISTING UTILITIES OR SITE OBSTRUCTIONS. ADVISE ARCHITECTS REPRESENTATIVE BEFORE ADJUSTMENTS ARE MADE.
4. TREES AND SHRUBS SHALL BE NURSERY GROWN UNLESS OTHERWISE APPROVED AND BE HEALTHY AND VIGOROUS PLANTS, FREE FROM DEFECTS, DECAY, DISFIGURING ROOTS, SUN SCALD, INJURIES, ABRASIONS OF THE BARK, PLANT DISEASES, INSECT PEST EGGS, BORERS AND ALL FORMS OF INFESTATIONS OR OBJECTIONABLE DISFIGUREMENTS. PLANTS SHALL BE IN ACCORDANCE WITH THE CURRENT AMERICAN ASSOCIATION OF NURSERYMEN'S STANDARDS AND CONFORM IN GENERAL TO REPRESENTATIVE SPECIES.
5. BALLED AND BURLAPPED OR CONTAINER TREES AND SHRUBS SHOULD BE DUG WITH FIRM, NATURAL BALLS OF EARTH OF ADEQUATE SIZE AS SPECIFIED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, "AMERICAN STANDARD FOR NURSERY STOCK" WITH THE BALLS SECURELY WRAPPED.
6. ALL SHRUBS OCCURRING IN CONTINUOUS ROW OR FORMAL ARRANGEMENT SHALL BE OF UNIFORM HEIGHT, SPREAD AND HABIT OF GROWTH. FOR PERENNIAL LOCATIONS, FILL AREA WITH QUANTITY OF PLANTS DESIGNATED; EVENLY SPACED.
7. A MINIMUM OF 4" DEPTH OF TOPSOIL SHALL BE PLACED IN ALL BED AREAS BY LANDSCAPE CONTRACTOR PRIOR TO PLANT INSTALLATION. BACKFILL ALL SHRUBS AND TREES WITH BACKFILL MIX OF ONE PART PEAT TO THREE PARTS TOPSOIL
   A. ROCKHOUND ALL AREAS TO LOOSEN SOIL TO A DEPTH OF 6" AND REMOVE ROCKS AND WEEDS. AFTER TOPSOIL HAS BEEN SPREAD, ROCKHOUND AGAIN TO REMOVE ALL STONES AND LUMPS.
8. MULCH TREES AND SHRUBS WITH MIN. 3" DEPTH OF HARDWOOD MULCH. MULCH SHALL EXTEND IN A CONTINUOUS LAYER WITHIN PLANTING BEDS FROM FACE TO FACE OF SITE STRUCTURES - WALKS, BUILDING OR OTHER PLANT BED LIMITS. KEEP MULCH MIN. 1/2" BELOW TOP OF CURB & ADJACENT PAVED SURFACES.
9. SEED ALL DISTURBED LAWN AREAS WITHIN PROJECT LIMITS. REFER TO CIVIL DRAWINGS FOR REQUIREMENTS AND EXTENT OF WORK AND VERIFY EXTENT WITH ARCHITECT'S REPRESENTATIVE.
10. THE LANDSCAPE CONTRACTOR SHALL MAINTAIN ALL PLANTS AND BEDS FOR A MIN. OF 30 DAYS AFTER ACCEPTANCE OF THE WORK BY THE ARCHITECTS REPRESENTATIVE. THIS INCLUDES REGULAR WATERING, WEEDING AND MOWING.
12. THE LANDSCAPE CONTRACTOR SHALL GUARANTEE ALL PLANT MATERIALS FOR ONE-YEAR FROM DATE AT END OF MAINTENANCE PERIOD. BEFORE END OF WARRANTY PERIOD CONTRACTOR SHALL REPLACE ALL TREES, SHRUBS OR PLANTINGS NOT ALIVE OR IN A HEALTHY GROWING CONDITION.

PLANT MATERIALS LIST

KEY	QTY.	PLANT NAME	MINIMUM INSTALLED SIZE	MATURE HT/ SPREAD
		EVERGREEN TREES		
PS	7	EASTERN WHITE PINE - Pinus strobus*	6' ht. B/B	60' / 30'
		SHRUBS & GRASSES		
AM	20	BLACK CHOKEBERRY - Aronia melanocarpa*	#3 cont.	6' / 6'
IV	22	WINTERBERRY - Ilex verticillata*	#3 cont.	10' / 6'
MP	25	NORTHERN BAYBERRY - Mynca pensylvanica*	#3 cont.	6' / 6'

* DENOTES NATIVE PLANTS FOR NEW HAMPSHIRE, MAINE AND VERMONT.

SITE LANDSCAPE PLAN

SCALE: 1" = 20'

20 0 20 40

GRAPHIC SCALE (IN FEET)

N

811 DigSafe MA ME NH RI VT

SEVENTY-TWO (72) HOURS BEFORE DIGGING IS TO COMMENCE, THE CONTRACTORS SHALL NOTIFY THE FOLLOWING AGENCIES: MASSACHUSETTS UTILITIES PROTECTION SERVICE AT 811 OR 888-344-7233 AND ALL OTHER AGENCIES WHICH MIGHT HAVE UNDERGROUND UTILITIES INVOLVING THIS PROJECT AND ARE NONMEMBERS OF STATE UTILITIES PROTECTION SERVICE

LANDSCAPE DESIGN BY:
YELLOW SPRINGS DESIGN
PO Box 472
YELLOW SPRINGS, OHIO 45387
(O) 937.767.8199 (M) 937.654.8199
ysdesign830@outlook.com

CESO
WWW.CESOINC.COM
3601 Rigby Rd., Suite 300
Miamisburg, OH 45342
Phone: 937.435.8584 Fax: 888.208.4626

Hang10 CAR WASH

HANG10 CAR WASH

PORTSMOUTH, NH

2299 LAFAYETTE RD
PORTSMOUTH, NH 03801

Revisions / Submissions

ID	Description	Date

Project Number:	766656
Scale:	1"=20'
Drawn By:	REB
Checked By:	CG
Date:	XXXX
Issue:	NOT FOR CONSTRUCTION

Drawing Title:

SITE LANDSCAPE PLAN

L-1.0

AGENT FOR OWNER AUTHORIZATION FORM

2299 Lafayette Road, LLC ("**Owner**") hereby certifies that he/she/it is the owner of record title to the property located at 2299 Lafayette Rd, Portsmouth, NH 03801 ("**Property**"). Owner, voluntarily and without duress, appoints CESO, Inc. ("**CESO**"), by and through CESO's employee and representative Paige Weidner, to be the Owner's authorized agent acting on behalf and representing Owner in all matters regarding Property improvements, alterations, projects and work performed thereon or thereto. The authority granted to CESO, as agent for Owner, includes, but is not limited to, (i) submitting applications, forms or other documents, (ii) presenting design work, plans, specifications or other materials, (iii) representing Owner at hearings, tribunals, appeals or meetings, and (iv) otherwise seeking and acquiring approvals, authorizations and permits. The foregoing agency authorization and appointment includes any and all methods of submission, registration and related communication, including, but not limited to, written materials, online materials and verbal communications. The appointment and agency authorizations contained herein shall remain in effect until revoked in writing by the Owner.

The undersigned Owner sets its hand as of the date specified below.

FOR ENTITY OWNER:
Entity Name: 2299 Lafayette Road, LLC
Print Signatory Name: Jason Rice
Print Signatory Title: VP of Development
Signature:
Date: 09/24/25

OR

FOR INDIVIDUAL OWNER:
Print Name: _____
Signature: _____
Date: _____

Ground Lease

This Ground Lease (the "Lease") is made and entered into as of this 18 day of July 2025 (the "Effective Date"), by and between Rye Port Properties, LLC, a New Hampshire limited liability company, having an address of P.O. Box 345, Stratham, New Hampshire 03885 ("Landlord"), and 2299 Lafayette Road, LLC, A Delaware limited liability company, having a New Hampshire address of 199 New Zealand Road, Seabrook, New Hampshire 03874 ("Tenant"). The Landlord and Tenant are sometimes referred to herein as "Party" or collectively as the "Parties".

All Exhibits to this Lease are incorporated herein by this reference.

Witnesseth

In consideration of Ten Dollars ($10.00), other good and valuable consideration, and the mutual covenants contained herein, and intending to be legally bound hereby, Landlord and Tenant hereby agree with each other as follows:

Section 1. Premises.

Landlord hereby leases and lets to Tenant, and Tenant hereby takes and hires from Landlord, upon and subject to the terms, conditions, covenants and provisions of this Lease, all that certain parcel(s) of land, situated at 2299 Lafayette Road in the City of Portsmouth, County of Rockingham, State of New Hampshire, and as more particularly described in the legal description set forth in **Exhibit A** attached hereto, together with any and all appurtenances, rights, privileges and easements benefiting, belonging or pertaining thereto and existing improvements, but specifically excluding any underground storage tanks and any Hazardous Substances (as hereinafter defined) which were released into, became a part of, or were located upon the Premises prior to the Commencement Date (as hereinafter defined) (all the foregoing hereinafter referred to as the "Premises"). The Premises is outlined on **Exhibit A-1** attached hereto. The rights granted to Tenant under this Lease are referred to herein as the "Leasehold Estate." The rights of Landlord in the Premises after giving effect to the Leasehold Estate are referred to herein as the "Reversionary Estate." The "Reversionary Estate" includes all of Landlord's rights pursuant to this Lease.

Section 2. Inspection Period; Permitting Period; Extended Permitting Period(s); Permitting Termination Period; Delivery of Premises and Term.

Subsection 2.1 Inspection Period.

Tenant and its authorized agents and representatives shall have reasonable access to the Premises at all reasonable times during normal business hours (or at such other times as Landlord may approve) to inspect and conduct such tests, investigations and analyses reasonably required by Tenant including but not limited to boundary and topographical surveys, an environmental and geotechnical assessment and studies, a visual site inspection and any other matters and studies it deems necessary, provided that all invasive or intrusive inspections or tests of the physical condition of the Premises shall be subject to Landlord's prior written approval (the "Inspections"). Such entry and Inspections may be conducted during the period

commencing on the Effective Date, which is the date this Lease is executed, and ending three hundred sixty five (365) days later (the "Inspection Period"). The Landlord and Tenant shall confirm the commencement date of the Inspeciton Period and the expiration date of the Inspection Period pursuant to a separate written letter agreement. Tenant shall provide reasonable prior notice to Landlord of its intention, or the intention of its agents or representatives, to enter the Premises. Tenant shall bear the cost of all Inspections. Landlord may elect that Landlord or its representative be present for any inspection, test, investigation or analysis.

In conducting any Inspections, Tenant and its agents and representatives shall: (i) not unreasonably disturb Landlord or interfere with its use of the Premises; (ii) not unreasonably interfere with the operation and maintenance of the Premises; (iii) not damage any part of the Premises or any personal property owned or held by Landlord or any third party; (iv) not injure or otherwise cause bodily harm to Landlord or its managers, members, agents, guests, invitees, contractors or employees; (v) maintain, either directly as Tenant, through its affiliates, or through its vendors, commercial general liability (occurrence) insurance at a limit of liability of $500,000.00 each occurrence and $1,000,000.00 general aggregate covering third-party claims for bodily injury and property damage arising in connection with the presence of Tenant, its agents and representatives on the Premises; (vi) promptly pay when due the costs of all Investigations done with regard to the Premises; (vii) not permit any liens to attach to the Premises by reason of the exercise of its rights hereunder; and (viii) restore the Premises to substantially the same condition that existed prior to Tenant's inspections.

Unless caused by Landlord's negligence or misconduct, Tenant hereby indemnifies and agrees to indemnify, defend and hold Landlord and all of its members, managers, agents, representatives and contractors, harmless from and against any and all liens, claims, causes of action, damages, liabilities and expenses (including reasonable attorneys' fees) arising out of Tenant's inspections or tests permitted hereunder or any violation of the provisions of this Section. Notwithstanding any provision of this Lease, no termination hereof shall terminate Tenant's obligations pursuant to this Section, which obligations shall survive any termination or expiration of this Lease (notwithstanding anything to the contrary contained in any other provision of this Lease). Tenant shall have no liability to Landlord for any loss in value to the Premises resulting from the discovery by Tenant of any condition existing at the Premises and not caused by Tenant's investigation of the Premises or other act of Tenant.

During the Inspection Period, Tenant shall be entitled, for any reason or no reason, in its sole and absolute discretion, to terminate this Lease by giving written notice ("Termination Notice") to be received by Landlord on or before 5:00 PM on the last day of the Inspection Period, whereupon , Tenant shall return or destroy all originals and copies of the Documents and all of the provisions of this Lease (except for those provisions which expressly survive termination of this Lease, the substance of which are hereinafter collectively referred to collectively as the "Surviving Terms") shall terminate. Upon such termination, neither Landlord nor Tenant shall have any further obligation or liability to the other hereunder, except with respect to the Surviving Terms.

At Landlord's prior written request, Tenant shall provide Landlord with copies of the specific due diligence materials produced by Tenant or its agents in connection with its

evaluation of the Premises.

Subsection 2.2 Permitting Period; Extended Permitting Period(s) and Permitting Termination Period.

In addition, notwithstanding anything contained in this Lease to the contrary, the obligations of Tenant hereunder are subject to and conditioned upon the Tenant diligently pursuing and obtaining, at its own costs, any and all necessary licenses, permits, approvals, and other entitlements (the "Permits") that will allow Premises to be used for a newly constructed Hang 10 Car Wash as determined by Tenant in its sole and absolute discretion (the "Permitting Contingency"). Landlord shall assist and reasonably cooperate with Tenant with respect to obtaining such Permits as Tenant reasonably requests including but not limited to executing any required documents in conjunction with securing the Permits.

In the event that the Permitting Contingency is not satisfactory to Tenant in its sole and absolute discretion or the Permits are not obtained, in its sole and absolute discretion, then Tenant shall have the right to terminate this Lease on or before 5:00 PM on the date that is ten (10) days from and after the expiration of the Inspection Period (the "Permitting Period"), whereupon this Lease shall terminate and the Parties shall have no further obligations with respect thereto, except with respect to the Surviving Terms.

Subsection 2.3 Delivery of Premises.

Landlord shall deliver possession of the Premises to Tenant free of all tenants and occupants, and otherwise in its "as is" condition, but all existing buildings shall be broom clean and with all the fittings, fixtures, inventory and other personal property of any previous tenant removed therefrom (the "Delivery Date"). In the event the Delivery Date has not occurred prior to Tenant's receipt of the Permits then all Fixed Rent and other obligations hereunder shall be abated on a day for day basis until the Delivery Date has occurred. The Landlord and Tenant shall confirm the Delivery Date pursuant to a separate written letter agreement.

The term "Building" hereunder shall mean a newly constructed Hang 10 Car Wash facility to be constructed by Tenant as shown on **Exhibit A-1** Upon acceptance of delivery of possession of the Premises and the receipt of the Permits, Tenant may do any demolition which it may desire and shall perform its initial construction, which shall result in the Building with, at Tenant's election, paved parking areas and related improvements, including, without limitation, pylon sign structures and other signs, lighting poles and curbs. In doing Tenant's work, Tenant shall comply with Section 7 hereof.

Subsection 2.4 Term.

(a) The term of this Lease shall commence on the date on which this Lease is fully executed by Landlord and Tenant (the "Commencement Date") and shall expire twenty (20) years from the "Date of Rent Commencement" (as defined in Section 3 below), plus any days necessary to have the term expire at the end of the applicable month, subject to all terms and conditions of this Lease including but limited to Tenant's termination rights under Section 2 (the "Initial Term") (the Initial Term and the Renewal Period (as defined below), as the same may

have been extended pursuant to paragraph (b) below, is also sometimes hereinafter referred to as the "Term").

(b) Tenant may extend the Term of this Lease for three (3) extension periods of ten (10) years each (each, a "Renewal Period"), upon all of the terms set forth in this Lease except for Fixed Rent as set forth in Section 3 below. Tenant may do so only if a Tenant's Default shall not exist under this Lease at the time of any such election, and by giving Landlord notice of each such election ("Extension Notice") not later than twelve (12) months prior to the expiration of the then current Term, as the same may be extended by a Renewal Period. Tenant shall not be entitled to extend the Term of this Lease for any Renewal Period unless Tenant shall have extended the Term of this Lease for the preceding Renewal Period, if any.

Section 3. Rent.

Commencing as of the Date of Rent Commencement, Tenant shall pay to Landlord, at the business address of Landlord specified on Page 1 hereof, or at such other address as Landlord shall have designated, from time to time, by prior notice to Tenant, the "Fixed Rent" set forth below, payable to Landlord no later than the fifth (5th) day of each month in advance, without demand or set-off, except as otherwise expressly provided in this Lease.

Fixed Rent shall accrue sixty (60) days from the Commencement Date subject to all of the other terms of this Lease including but not limited to Section 2.3 ("Date of Rent Commencement"). If the Date of Rent Commencement shall be on any day other than the first day of a calendar month, Fixed Rent and other charges for such month shall be pro-rated on a per diem basis. The Landlord and Tenant agree to execute a written agreement to confirm the Date of Rent Commencement.

PERIOD	**ANNUAL FIXED RENT**	**MONTHLY INSTALLMENTS**
Initial Term		
Lease Years 1-5	$158,667	$13,222.25
Lease Years 6-10	$174,534	$14,544.50
Lease Years 11-15	$191,987	$15,998.92
Lease Years 16-20	$211,185	$17,598.75
Renewal Period		
First (1st) Renewal Period	$232,303.50	$19,358.63
Second (2nd) Renewal Period	$255,533.85	$21,294.49
Third (3rd) Renewal Period	$281,087.24	$23,423.94

Notwithstanding anything contained herein to the contrary, if Tenant terminates this Lease during the Inspection Period, or Permitting Period, then the Lease shall terminate, be null and void and all Fixed Rent and other obligations of Tenant under this Lease shall cease but all previous Fixed Rent payments made to Landlord shall be considered non-refundable at the time of Lease termination.

Section 4. Use of Premises.

The Premises may be used for a newly constructed Hang 10 Car Wash facility, express car wash and/or for any other lawful purposes. Nothing contained in this Lease shall be deemed to impose upon Tenant, either directly, indirectly, constructively or implicitly, an obligation to construct improvements upon the Premises, open for business, or remain open and operating for any period or in accordance with any operating schedule, procedure or method.

Section 5. Taxes and Utility Expenses.

(a) Tenant shall, commencing as of the Date of Rent Commencement and thereafter during the Term of this Lease, as additional rent, pay and discharge punctually, as and when the same shall become due and payable, all taxes, special and general assessments, water rents, rates and charges and sewer rents (hereinafter referred to as "Taxes") and each and every installment thereof which shall or may become due and payable after the Date of Rent Commencement, or liens upon or for or with respect to the Premises or any part thereof, or any buildings, appurtenances or equipment owned by Tenant thereon or therein or any part thereof, together with all interest and penalties thereon (all of which shall also be included in the term "Taxes" as heretofore defined) and all sewer rents and charges for water, steam, heat, gas, hot water, electricity, light and power, and other service or services, furnished to the Premises or the occupants thereof during the Term of this Lease (hereinafter referred to as "Utility Expenses"). Tenant shall be deemed to have complied with the covenants of this paragraph (a) if payment of such Taxes shall have been made either within any period allowed by law or by the governmental authority imposing the same during which payment is permitted without penalty or interest, and Tenant shall produce and exhibit to Landlord satisfactory evidence of such payment, if Landlord shall demand the same in writing. For the first partial tax fiscal year of the Term, to the extent that Landlord has paid Taxes which would otherwise be Tenant's obligation hereunder, then Tenant shall reimburse such amount of Tenant's obligation to Landlord, within thirty (30) days after demand therefor by Landlord, accompanied by copies of receipted bills showing the payment of such Taxes, which shall include a computation of Tenant's Pro Rata Share of the Taxes for the tax fiscal year. Tenant's "Pro Rata Share of the Taxes" shall be the total taxes for the entire tax fiscal year multiplied by a fraction, the numerator of which shall be the number of days in the tax fiscal year subsequent to the Date of Rent Commencement and the denominator of which shall be 365.

(b) Tenant or its designees shall have the right to contest or review all Taxes by legal proceedings, or in such other manner as it may deem suitable (which, if instituted, Tenant or its designees shall conduct promptly at its own cost and expense, and free of any expense to Landlord, and, if necessary, in the name of and with the cooperation of Landlord, and Landlord shall execute all documents necessary to accomplish the foregoing). Notwithstanding the foregoing, Tenant shall promptly pay all Taxes if at any time the Premises or any part thereof

shall then be immediately subject to forfeiture, or if Landlord shall be subject to any criminal liability, arising out of the nonpayment thereof. The legal proceedings referred to in this subparagraph (b) shall include appropriate proceedings and appeals from orders therein and appeals from any judgments, decrees or orders. In the event of any reduction, cancellation or discharge, Tenant shall pay the amount finally levied or assessed against the Premises or adjudicated to be due and payable on any such contested Taxes.

(c) Landlord covenants and agrees that if there shall be any refunds or rebates on account of the Taxes paid by Tenant under the provisions of this Lease, such refund or rebate shall belong to Tenant. Any refunds received by Landlord shall be deemed trust funds and as such are to be received by Landlord in trust and paid to Tenant forthwith. Landlord shall, upon the request of Tenant, sign any receipts which may be necessary to secure the payment of any such refund or rebate, and will pay over to Tenant such refund or rebate as received by Landlord.

Section 6. Improvements, Alterations, Surrender.

(a) (i) Tenant shall have the right, at its own cost and expense, to construct on any part or all of the Premises, at any time and from time to time, such buildings, parking areas, fences, driveways, walks and other similar and dissimilar improvements as Tenant shall from time to time determine, including, without limiting the generality of the foregoing, a Hang 10 Car Wash (express car wash); provided that the same shall be in compliance with all then applicable building codes and ordinances; and Landlord's approval shall not be necessary for any such improvements.

(ii) Without limiting the generality of Tenant's rights under subparagraph (a)(i) above, Tenant also shall have the right to install, maintain and replace in, on or over or in front of the Premises or in any part thereof such signs and advertising matter as may be consistent with any applicable requirements of governmental authorities having jurisdiction, and shall obtain any necessary permits for such purposes. Tenant shall also have the right to install, maintain and replace in the Premises temporary signs, consistent with Tenant's usual practice. As used in this Section 7(a)(ii), the word "sign" shall be construed to include any placard, light or other advertising symbol or object, irrespective of whether same be temporary or permanent.

(iii) Without limiting the generality of Tenant's rights under subparagraph (a)(i) above, Tenant also shall have the right to install, maintain and replace in, on or over or in front of the Premises or in any part thereof such satellite dishes and equipment as may be consistent with any applicable requirements of governmental authorities having jurisdiction, and shall obtain any necessary permits for such purposes.

(iv) Without limiting the generality of Tenant's rights under subparagraph (a)(i) above, Tenant also may, at its option and at its own cost and expense, at any time and from time to time, make such alterations, changes, replacements, improvements and additions in and to the Premises, and the buildings and improvements thereon, as it may deem desirable, including, without limitation, the demolition of any buildings(s) and improvement(s) and/or structure(s) that now or hereafter may be situated or erected on the Premises.

(v) At Tenant's sole cost, Landlord agrees to cooperate with Tenant (including, without limitation, by signing applications) in obtaining any necessary Permits for any work (including, without limitation, sign installation) which Tenant is permitted to perform pursuant to this Lease.

Section 7. Requirements of Public Authority.

(a) During the Term of this Lease, Tenant shall, at its own cost and expense, promptly observe and comply with all laws, ordinances, requirements, orders, directives, rules and regulations of the Federal, State, County and Municipal Governments and of all other governmental authorities affecting the Premises or any part thereof, whether the same are in force at the commencement of the Term of this Lease or may in the future be passed, enacted or directed, and Tenant shall pay all costs, expenses, liabilities, losses, damages, fines, penalties, claims and demands, including reasonable counsel fees, that may in any manner arise out of or be imposed because of the failure of Tenant to comply with the covenants of this Section 7; provided, however, that nothing in this Section 7 shall impose any liability on Tenant in connection with any costs, expenses, liabilities, losses, damages, fines, penalties, claims and demands, including reasonable counsel fees, that may in any manner arise out of or be imposed because of any failure by Landlord to comply with its obligations under this Lease or because of any conditions in existence prior to the Commencement Date.

(b) Tenant shall have the right to contest by appropriate legal proceedings diligently conducted in good faith, in the name of the Tenant or Landlord (if legally required), without cost or expense to Landlord, the validity or application of any law, ordinance, rule, regulation or requirement of the nature referred to in paragraph (a) of this Section 8 and, if by the terms of any such law, ordinance, order, rule, regulation or requirement, compliance therewith may legally be delayed pending the prosecution of any such proceeding, Tenant may delay such compliance therewith until the final determination of such proceeding.

(c) Landlord agrees to execute and deliver any appropriate papers or other instruments which may be necessary or proper to permit Tenant so to contest the validity or application of any such law, ordinance, order, rule, regulation or requirement and to fully cooperate with Tenant in such contest.

Section 8. Covenant Against Liens.

(a) If, because of any act or omission of Tenant, any mechanic's lien or other lien, charge or order for the payment of money shall be filed against Landlord or any portion of the Premises, Tenant shall, at its own cost and expense, cause the same to be discharged of record or bonded within thirty (30) days after notice from Landlord to Tenant of the filing thereof; and Tenant shall indemnify and save harmless Landlord against and from all costs, liabilities, suits, penalties, claims and demands, including reasonable counsel fees, resulting therefrom. Tenant or its designees shall have the right to contest any such liens by legal proceedings, or in such other manner as it may deem suitable (which, if instituted, Tenant or its designees shall conduct promptly at its own cost and expense, and free of any expense to Landlord). Notwithstanding the foregoing, Tenant shall promptly pay and remove all such liens if, at any time, the Premises or

any part thereof shall then be subject to immediate forfeiture as a result of the nonpayment thereof.

(b) If, because of any act or omission of Landlord, any mechanic's lien or other lien, charge or order for the payment of money shall be filed against Tenant or any portion of the Premises, Landlord shall, at its own cost and expense, cause the same to be discharged of record or bonded within thirty (30) days after notice from Tenant to Landlord of the filing thereof; and Landlord shall indemnify and save harmless Tenant against and from all costs, liabilities, suits, penalties, claims and demands, including reasonable counsel fees, resulting therefrom. Landlord or its designees shall have the right to contest any such liens by legal proceedings, or in such other manner as it may deem suitable (which, if instituted, Landlord or its designees shall conduct promptly at its own cost and expense, and free of any expense to Tenant). Notwithstanding the foregoing, Landlord shall promptly pay and remove all such liens if, at any time, the Premises or any part thereof shall then be subject to immediate forfeiture as a result of the nonpayment thereof.

Section 9. Access to Premises.

Landlord or Landlord's agents and designees shall have the right to enter upon the Premises at all reasonable times upon reasonable notice to examine same and to exhibit the Premises to prospective Tenants and prospective tenants, but in the latter case only during the last six (6) months of the Term of this Lease, as the same may have been extended; and provided that no such entry shall unreasonably interfere with the conduct of Tenant's business on the Premises.

Section 10. Assignment, Subletting, Permitted Sublease and Permitted Transfer.

Except in connection with a Permitted Sublease (as defined below) or a Permitted Transfer (as defined below), Tenant shall not assign, transfer, license or sublease (in whole or in part or parts) this Lease or its rights hereunder (in whole or in part or parts) without the prior written consent of Landlord, which consent shall not be unreasonably withheld, conditioned or delayed.

Tenant's right to assign, transfer, license and sublease shall be a continuing right and shall not be exhausted by a single exercise. In the event Tenant desires to assign this Lease or sublet any portion or all of the Premises, Tenant shall notify Landlord in writing of Tenant's intent to so assign this Lease or sublet the Premises and the proposed effective date of such subletting or assignment, and shall request in such notification that Landlord consent thereto (except in the case of a Permitted Sublease or Permitted Transfer where consent is not required). Landlord agrees to respond to Tenant's request for consent within fourteen (14) days following Landlord's receipt of all information reasonably requested by Landlord to evaluate Tenant's request. If Landlord fails to respond by the expiration of such 14-day period, Landlord's consent shall be deemed given. Tenant shall furnish Landlord with any information reasonably requested by Landlord to enable Landlord to determine whether the proposed assignment or subletting complies with the foregoing requirements, including without limitation, financial statements relating to the proposed assignee or subtenant. No subletting or assignment shall in any way

impair the continuing primary liability of Tenant or Guarantor hereunder except as otherwise provided herein.

Notwithstanding the foregoing or any other contrary provision of the Lease, the preceding provisions of this Section 10 shall not apply to a sublet of all or any portion of the Premises to a bona fide franchisee of Hang 10 Car Wash ("Franchisee"), provided, however, that in the case of a sublease (A) Tenant continues to remain primarily liable under this Lease except that Tenant shall be released from further liability if any Franchisee has a net worth comparable to Tenant's net worth at the time of the sublease or if less than two (2) years of the Term of the Lease remains and (B) Guarantor continues to remain liable under this Lease except that the Guarantor shall be released from further liability if a successor guarantor has a net worth reasonably comparable to Guarantor's net worth at the time of the sublease or if less than two (2) years of the Term of the Lease remains. -In order to determine whether the proposed Tenant and Guarantor's net worth are comparable to the net worth of the current Tenant and Guarantor at the time of the sublease, copies of current financial statements for all the parties shall be submitted to Landlord for its review. If Landlord does not object to the proposed subletting within ten (10) days after receipt of the documentation, then Landlord's consent shall be deemed given. The transactions described above for which consent from the Landlord is not required pursuant to this Lease shall be referred to as a "Permitted Sublease".

Notwithstanding the foregoing or any other contrary provision of the Lease, the preceding provisions of this Section 10 shall not apply to an assignment of this Lease to either (i) an entity which is controlled by, is under common control with, or which controls Tenant, or a person or entity holding the ultimate beneficial interest in Tenant (any of the foregoing, an "Affiliate") or (ii) an entity into or with which Tenant is merged or consolidated or which acquires all or substantially all of Tenant's stock or assets (any of the foregoing, a "Successor"), provided, however, that in the case of an assignment such Affiliate or Successor as the case may be, agrees directly with Landlord, by written instrument in form reasonably satisfactory to Landlord, to assume and perform all the obligations of Tenant. The transactions described above for which consent from the Landlord is not required pursuant to this Lease shall be referred to as a "Permitted Transfer." The existing Guarantor shall continue to remain liable under this Lease except that the Guarantor shall be released from further liability if a successor guarantor has a net worth reasonable comparable to Guarantor's net worth at the time of the assignment or if less than two (2) years of the Term of the Lease remains.

Section 11. Mortgaging of Leasehold Estate and Reversionary Estate.

Subsection 11.1 Mortgaging of Leasehold Estate.

Tenant may, without the consent of Landlord, mortgage or otherwise encumber the Leasehold Estate (which mortgage or other encumbrance is hereinafter referred to as the "Leasehold Mortgage"). The mortgagee under the Leasehold Mortgage or the other holders of the indebtedness secured by the Leasehold Mortgage (the "Leasehold Mortgagee") shall notify Landlord (and any Fee Mortgagee, as hereinafter defined), in the manner provided hereunder for the giving of notice, of the execution of such Leasehold Mortgage and the name and place for service of notice upon such Leasehold Mortgagee. Upon such notification of Landlord that

Tenant has entered, or is about to enter, into a Leasehold Mortgage, Landlord hereby agrees for the benefit of such Leasehold Mortgagee, as follows:

(a) Landlord does hereby assent to such Leasehold Mortgage, any assignment of Tenant's rights in and to this Lease in connection with such Leasehold Mortgage, and to any subsequent sale or transfer of the Leasehold Estate as permitted in such Leasehold Mortgage.

(b) Until all obligations of Tenant to Leasehold Mortgagee (the "Loan Obligations") shall have been completely paid and performed, and the Leasehold Mortgage shall have been discharged, Landlord shall not take any action to terminate this Lease or to exercise any other remedy for default in the obligations of Tenant thereunder without first complying with the requirements of this Subsection 11.1.

(c) Until the Loan Obligations shall have been completely paid and performed, and the Leasehold Mortgage shall have been discharged, neither Landlord nor Tenant shall terminate, amend or modify this Lease, or exclude any parcel from this Lease, without Leasehold Mortgagee's prior written consent, which consent shall not be unreasonably withheld.. Any such termination, amendment, modification or exclusion without Leasehold Mortgagee's prior written consent shall not be binding upon Tenant, its successors or assigns.

(d) In the event the ownership of the fee and leasehold interests of the Leasehold become vested in the same person or entity, then as long as the Leasehold Mortgage shall remain outstanding, such occurrence shall not result in a merger of title. Rather, the Lease and the Leasehold Mortgage lien thereon shall remain in full force and effect.

(e) Landlord shall send to Leasehold Mortgagee, in the manner provided in this Lease, a true, correct and complete copy of any notice to Tenant of a default by Tenant under this Lease at the same time as and whenever any such notice of default shall be given by Landlord to Tenant, addressed to Leasehold Mortgagee at the address last furnished to Landlord by such Leasehold Mortgagee. No notice by Landlord shall be deemed to have been given to Tenant unless and until a copy thereof shall have been so given to Leasehold Mortgagee. Tenant irrevocably directs that Landlord accept, and Landlord agrees to accept, performance and compliance by Leasehold Mortgagee of and with any term, covenant, agreement, provision, condition or limitation on Tenant's part to be kept, observed or performed under this Lease with the same force and effect as though kept, observed or performed by Tenant.

(f) Notwithstanding anything provided to the contrary in this Lease, this Lease shall not be terminated because of a default or breach hereunder on the part of Tenant until and unless:

(i) Notice of any such default or breach shall have been delivered to Leasehold Mortgagee in accordance with the provisions of Subsection 11.1(e) above;

(ii) With respect to a default or breach that is curable solely by the payment of money, Leasehold Mortgagee has not cured such default or breach within thirty (30) days following the expiration of any of Tenant's notice and cure period set forth in this Lease; and

(iii) With respect to a default or breach that is not curable solely by the payment of money, Leasehold Mortgagee has not cured such default or breach within sixty (60) days following the expiration of any of Tenant's notice and cure periods set forth in this Lease, or, if such default or breach is curable but cannot be cured within such time period, (aa) Leasehold Mortgagee has not notified Landlord within such time period that it intends to cure such default or breach, (bb) Leasehold Mortgagee has not diligently commenced to cure such default or breach, or (cc) Leasehold Mortgagee does not prosecute such cure to completion.

(iv) Furthermore, notwithstanding anything to the contrary contained herein, if Leasehold Mortgagee determines to foreclose or cause its designee to foreclose the Leasehold Mortgage or to acquire or cause its designee to acquire the Leasehold Estate or to succeed or cause its designee to succeed to Tenant's possessory rights with respect to the Leasehold Estate or to appoint a receiver before it effectuates the cure of any non-monetary breach or default by Tenant hereunder, the cure periods set forth above shall be tolled for any period during which foreclosure proceedings, or legal proceedings to succeed to Tenant's possessory rights, or proceedings to appoint the receiver are conducted, as the case may be. Any such proceedings shall be commenced promptly after the notice of default is delivered to Leasehold Mortgagee and shall be diligently prosecuted. Promptly after Leasehold Mortgagee or a designee of Leasehold Mortgagee acquires the Leasehold Estate pursuant to foreclosure proceedings or otherwise or succeeds to Tenant's possessory rights or promptly after a receiver is appointed, as the case may be, Leasehold Mortgagee or its designee shall cure said breach or default.

(g) Without the written consent of Leasehold Mortgagee, Landlord agrees not to accept a cancellation or voluntary surrender of this Lease at any time while the Leasehold Mortgage shall remain a lien on the Leasehold Estate; and any such attempted cancellation or surrender of this Lease without the written consent of Leasehold Mortgagee shall be null and void and of no force or effect. Landlord and Tenant further agree for the benefit of Leasehold Mortgagee that, so long as any such Leasehold Mortgage shall remain a lien on said Leasehold Estate, Landlord and Tenant will not subordinate this Lease, or any New Lease entered into pursuant to Subsection 11.1(j) below, to any mortgage or deed of trust that may hereafter be placed on Landlord's Reversionary Estate unless the Fee Mortgagee shall have entered into the Subordination and Non-Disturbance Agreement required by Subsection 11.2, or consent to any prepayment of any rent, without securing the prior written consent of such Leasehold Mortgagee.

(h) It is acknowledged that the Leasehold Mortgage may be assigned by Leasehold Mortgagee in accordance with its terms. Notwithstanding anything stated to the contrary in this Lease, the following transfers shall be permitted and shall not require the approval or consent of Landlord:

(i) A transfer of the Leasehold Estate at foreclosure sale under the Leasehold Mortgage, whether pursuant to the power of sale contained therein or a judicial foreclosure decree, or by an assignment in lieu of foreclosure, or

(ii) Any subsequent transfer by Leasehold Mortgagee or its nominee or designee if Leasehold Mortgagee, or such nominee or designee, is the Tenant at such foreclosure sale or under such assignment in lieu of foreclosure.

(iii) Any such transferee shall be liable to perform the obligations of Tenant under this Lease only so long as such transferee holds title to the Leasehold Estate, provided that upon any conveyance of title, such transferee's transferee expressly assumes and agrees to perform all of the obligations under this Lease; provided further, that the liability of any Leasehold Mortgagee that obtains title to the Leasehold Estate shall be limited to Leasehold Mortgagee's interest in the Leasehold Estate.

(i) Intentionally deleted.

(j) If this Lease is terminated because of Tenant's default hereunder or for any other reason or is extinguished for any reason (including, without limitation, rejection of this Lease by a trustee in bankruptcy), then Leasehold Mortgagee may elect to demand a new lease of the Leasehold Estate (the "New Lease") by notice to Landlord within thirty (30) days after such termination. Upon any such election, the following provisions shall apply:

(i) The New Lease shall be for the remainder of the Term of this Lease (including the right to thereafter extend the Term for any then-unexercised Renewal Periods), effective on the date of termination, at the same rent and shall contain the same covenants, agreements, conditions, provisions, restrictions and limitations as were then contained in this Lease. Such New Lease shall be subject to all then-existing subleases demising space within the Premises.

(ii) The New Lease shall be executed by Landlord within thirty (30) days after receipt by Landlord of notice of Leasehold Mortgagee's or such other acquiring person's election to enter into a New Lease.

(iii) Any New Lease and the leasehold estate created thereby shall, subject to the same conditions contained in this Lease, continue to maintain the same priority as this Lease with regard to any Leasehold Mortgage or any other lien, charge or encumbrance affecting the Premises. Concurrently with the execution and delivery of the New Lease, Landlord shall assign to the tenant named therein all of its right, title and interest in and to moneys, if any, then held by or payable to Landlord which Tenant would have been entitled to receive but for the termination of this Lease. No monies under this paragraph shall be paid to the new Tenant if there remains any outstanding monies owed or any other outstanding breach on the original lease.

(iv) If Tenant refuses to surrender possession of the Leasehold Estate, Landlord shall at the request of Leasehold Mortgagee or such other acquiring person, institute and pursue diligently to conclusion the appropriate legal remedy or remedies to oust or remove Tenant and all subtenants actually occupying the Leasehold Estate or any part thereof who are not authorized to remain in possession hereunder. Any such action taken by Landlord at the request of Leasehold Mortgagee or such other acquiring person shall be at Leasehold Mortgagee's or such other acquiring person's sole expense, including, but not limited to reasonable costs and reasonable legal fees.

(k) The provisions of this Subsection 11.1 shall be binding upon and inure to the benefit of Leasehold Mortgagee's successors and assigns. To the extent of any inconsistency between the terms and provisions contained in other sections of this Lease and the terms and

conditions set forth in this Subsection 11.1, the terms and conditions set forth in this Subsection 11.1 shall govern and control.

(l) The terms of this Subsection 11.1, and the rights of Leasehold Mortgagee, and the obligations of Landlord and Tenant arising hereunder shall not be affected, modified or impaired in any manner or to any extent by (a) any renewal, replacement, amendment, extension, substitution, revision, consolidation, modification or termination of any of the Loan Obligations; (b) the validity or enforceability of any document evidencing or securing the Loan Obligations; (c) the release, sale, exchange for surrender, in whole or in part, of any collateral security, now or hereafter existing, for any of the Loan Obligations; (d) any exercise or nonexercise of any right, power or remedy under or in respect of the Loan Obligations; or (e) any waiver, consent, release, indulgence, extension, renewal, modification, delay or other action, inaction or omission in respect of the Loan Obligations, all whether or not Landlord shall have had notice or knowledge of any of the foregoing and whether or not it shall have consented thereto.

(m) Any and all new buildings and improvements constructed and owned by Tenant prior to any termination of this Lease after a Default of Tenant shall automatically pass to, vest in and belong to Leasehold Mortgagee, and shall not become the property of Landlord unless and until the final expiration or sooner termination of this Lease not followed by a New Lease as provided in Subsection 11.1(j).

Subsection 11.2 Mortgaging of Reversionary Estate.

(a) In the event that, at any time prior to the execution of this Lease and the recordation of the Memorandum of Lease in accordance with Section 28 hereof, Landlord has mortgaged or otherwise encumbered the Premises, Landlord shall deliver to Tenant a Subordination and Non-Disturbance Agreement ("Subordination and Non-Disturbance Agreement") containing terms substantially identical to the terms of the document so entitled annexed hereto as **Exhibit B** and incorporated herein by this reference, duly executed by the holder of any such mortgage or encumbrance (the "Fee Mortgagee").

(b) In the event that, at any time after the execution of this Lease and the recordation of the Memorandum of Lease in accordance with Section 28 hereof, Landlord mortgages or otherwise encumbers the Reversionary Estate, Landlord shall be required to deliver to Tenant a Subordination and Non-Disturbance Agreement containing terms substantially identical to the terms of the document so entitled annexed hereto as **Exhibit B** and incorporated herein by this reference, duly executed by the Fee Mortgagee.

Section 12. Landlord's Warranties and Representations.

Landlord represents and warrants to Tenant as follows:

(a) Tenant shall, upon paying the rent reserved hereunder and observing and performing all of the terms, covenants and conditions on Tenant's part to be observed and performed, peaceably and quietly have and hold, the Premises, without hindrance or molestation by any person or persons, subject, however, to the terms of this Lease;

(b) Landlord has full right and authority to enter into this Lease and perform Landlord's obligations under this Lease, and has title to the Premises in fee simple, free and clear of all restrictions, leases, tenancies, and easements except for matters acceptable to Tenant in its sole and absolute discretion as disclosed in Tenant's leasehold title policy from a title company acceptable to Tenant, at normal premium rates; Landlord has not entered into, and the Premises is not subject to, any leases, licenses, possessory rights, options or rights to purchase, lease or occupy or sale contracts or agreements other than this Lease;

(c) Landlord shall at all times comply with all applicable laws, ordinances, rules and regulations governing the division or parcelization of real property for purposes of lease, sale or financing, so that this Lease shall constitute a lawful conveyance to Tenant of a leasehold estate in the Premises;

(d) The Premises is not subject to any existing claim for mechanics' liens, nor are there any third parties in or entitled to possession thereof. Landlord has not granted and during the Term shall not grant to anyone an exclusive right to sell goods or provide services that would limit or interfere with Tenant's right to use the Premises as permitted under this Lease;

(e) Landlord has not received any notice, nor is it aware of any pending action to take by condemnation all or any portion of the Premises;

(f) The Premises has free and full access to and from all adjoining streets, roads and highways as shown on **Exhibit A-1**, and to Landlord's knowledge there is no pending or threatened action which would impair or alter such access;

(g) The Premises has not been classified under any designation authorized by law to obtain a special low ad valorem tax rate or receive either an abatement or deferment of ad valorem taxes which, in such case, will result in additional, catch-up ad valorem taxes in the future in order to recover the amounts previously abated or deferred, nor is the Premises subject to any agreement, contract or commitment regarding valuation and/or minimum valuation;

(h) Landlord has received no notice and is not otherwise aware that either the Premises or its proposed use is, or will be, in violation of any local governmental rule, ordinance, regulation or building code, nor has Landlord received notice of any pending or threatened investigation regarding a possible violation of any of the foregoing;

(i) There is no litigation and no other proceedings are pending or threatened relating to the Premises or their use;

(j) This Lease is and shall be binding upon and enforceable against Landlord in accordance with its terms, and the transaction contemplated hereby will not result in a breach of, or constitute a default or permit acceleration and maturity under any indenture, mortgage, deed of trust, loan agreement or other agreement to which Landlord or the Premises are subject or by which Landlord or the Premises are bound.

(k) Except for a first Fee Mortgage as to which the Subordination and Non-Disturbance Agreement required by Subsection 11.2 has been delivered to Tenant, any lien

now in existence or hereafter placed upon the Premises by Landlord shall be subordinate and junior to this Lease and to all rights of Tenant hereunder. Landlord shall promptly remove any such lien arising as a result of the actions of Landlord.

(l) Landlord has not (i) made a general assignment for the benefit of creditors, (ii) filed any involuntary petition in bankruptcy or suffered the filing of any involuntary petition by Landlord's creditors, (iii) suffered the appointment of a receiver to take possession of all or substantially all of Landlord's assets, (iv) suffered the attachment or other judicial seizure of all, or substantially all, of Landlord's assets, (v) admitted in writing its inability to pay its debts as they come due, or (vi) made an offer of settlement, extension or composition to its creditors generally.

(m) Landlord has received a copy of the AUR and_____ ("Reports"). Landlord acknowledges that the Reports identify certain environmental conditions with respect to the Premises and Landlord accepts responsibility for any and all actions required under Environmental Laws (as defined below) in connection with such conditions (the "Known Conditions").

(n) Except as described in (m) above, (i) no Hazardous Substance (defined below) is located on, in, or under the Premises.

(i) To the best of Landlord's knowledge, at no time has there been a Release (defined below) of any Hazardous Substance in, on, or under the Premises.

(ii) Neither Landlord nor Landlord's Affiliates (defined below), tenants or subtenants have ever used the Premises for the storage, manufacture, disposal, handling, transportation or use of any Hazardous Substance, nor, to the best of Landlord's knowledge, has the Premises ever been used for the storage, manufacture, disposal, handling, transportation or use of any Hazardous Substance.

(iii) There is no, nor, to the best of Landlord's knowledge, has there ever been any investigation, administrative proceeding, litigation, regulatory hearing or other action proposed, threatened or pending, relating to the Premises and/or alleging non-compliance with or the violation of any Environmental Law (defined below).

(iv) Landlord has disclosed to Tenant, or will within the Evaluation Period disclose to Tenant, all assessments, studies, sampling results, evaluations, reports and investigations commissioned by Landlord or within Landlord's possession or control relating to the environmental condition of the Premises and has delivered or will deliver true and correct copies thereof to Tenant.

(v) There are not now and were not at any time during which Landlord or Landlord's Affiliates, tenants or subtenants had any interest in the Premises, nor to the best of Landlord's knowledge, have there ever been, any above-ground or underground storage tanks located in, on or under the Premises. With respect to any storage tanks removed from the Premises before Landlord or Landlord's Affiliates had any interest in the Premises, to the best of Landlord's knowledge, any contaminated soil was removed from the Premises. With respect to

any storage tanks removed from the Premises at a time during which Landlord or Landlord's Affiliates had any interest in the Premises, any contaminated soil was removed from the Premises. Any storage tanks located above or under the Premises have been properly registered with all appropriate regulatory and governmental bodies and are otherwise in compliance with applicable federal, state and local statutes, regulations, ordinances and other regulatory requirements, and Landlord has delivered to Tenant copies of any such tank registrations, quantity (or volume) reconciliation records, tightness test results and cathodic protection test results within Landlord's possession or control.

For purposes of this Lease:

The term "Environmental Law" shall mean any federal, state, county, municipal, local or other statute, ordinance, rule, regulation, permit, judgment, order, writ, decree, award or injunction which relates to or deals with the protection of the environment or wildlife and/or human health and safety, including all regulations promulgated by a regulatory body pursuant to any such statute, ordinance, or regulation, including, the Comprehensive Environmental Response, Compensation and Liability Act of 1980 ("CERCLA"), as amended, 42 U.S.C. §9601 et. seq., the Resource Conservation and Recovery Act ("RCRA"), as amended, 42 U.S.C. §6901, et. seq., the Federal Water Pollution Control Act, as amended, 33 U.S.C. §1251 et. seq., and the Clean Air Act, as amended, 42 U.S.C. §7401 et. seq.

The term "Hazardous Substance" shall mean and refer to asbestos, urea formaldehyde, lead, lead paint, polychlorinated biphenyls, nuclear fuel or materials, radioactive materials, explosives, known carcinogens, petroleum products and by-products (including crude oil or any fraction thereof), and any pollutant, contaminant, chemical, material, substance or waste, defined as hazardous, toxic or dangerous or as a pollutant or a contaminant in, or the use, manufacture, generation, storage, treatment, transportation, release or disposal of which is regulated by any Environmental Law.

The term "Release" shall mean and refer to any spilling, leaking, pumping, pouring, emptying, discharging, injecting, escaping, leaching, dumping or disposing into the environment, including the abandonment or discarding of barrels, drums, containers, tanks, or other receptacles containing or previously containing any Hazardous Substance.

The term "Landlord's Affiliates" shall mean and refer to (i) any spouse, ancestor, descendant or sibling of Landlord; (ii) any corporation in which Landlord is or was an officer, director, or shareholder; (iii) any partnership in which Landlord is or was a partner; (iv) any trust which is or was for the benefit of Landlord or any spouse, ancestor, descendant or sibling of Landlord; (v) any limited liability company ("LLC") in which Landlord is or was a member or manager; (vi) if Landlord is a partnership, any partner of Landlord; (vii) if Landlord is a corporation, any officer, director or controlling shareholder of Landlord; (viii) if Landlord is an LLC, any member or manager of Landlord; and (ix) any other person or entity sharing common ownership with, or having an interest directly or indirectly in, Landlord.

(o) If, prior to the Date of Rent Commencement, any Hazardous Substances are found in or on the Premises, and, as a result thereof, Tenant is interfered with in doing its work in the Premises or from opening for business, then notwithstanding anything to the contrary herein, the

Date of Rent Commencement will be delayed for a number of days equal to the number of days that Tenant is interfered with from opening for business in the Premises, subject to the other provisions of this Lease. If the Date of Rent Commencement shall be so delayed for 6 months, then at any time thereafter until such delay shall cease, Tenant may terminate this Lease upon fifteen (15) days' notice to Landlord.

(p) If, on or after the Date of Rent Commencement, Tenant is interfered with from operating its business as a result of the existence of such Hazardous Substances not caused by Tenant, then Tenant's rent and all other charges due hereunder shall abate, until Tenant is able to resume the operation of its business without such interference, subject to the other provisions of this Lease. If Tenant's rent and other charges shall be so abated for 6 months, then at any time thereafter until such abatement shall cease, Tenant may terminate this Lease upon fifteen (15) days' notice to Landlord.

The foregoing representations and warranties set forth in this Section 12 are express representations and warranties which Tenant shall be entitled to rely on regardless of any investigation or inquiry made by, or any knowledge of, Tenant. Landlord shall indemnify, protect, defend and hold Tenant forever harmless from and against any and all claims, actions, judgments, liabilities, liens, damages, penalties, fines, costs and expenses, including but not limited to attorneys' fees, costs of defense and expert/consultant fees, and increased costs of construction, asserted against, imposed on, or suffered or incurred by Tenant (or the Premises) directly or indirectly arising out of or in connection with (i) any Hazardous Substances that have been introduced at any time to the Premises by any party other than Tenant (or those acting under Tenant), (ii) any breach of the foregoing representations and warranties, and (iii) the Known Conditions. Consummation of this Lease by Tenant with knowledge of any such breach shall not constitute a waiver or release by Tenant of any claims arising out of or in connection with such breach.

The foregoing representations, warranties and indemnity of Landlord contained in this Section 12 shall survive the expiration or sooner termination of this Lease.

Section 13. Confidentiality.

(a) Landlord covenants and agrees not to disclose to any third party, without Tenant's approval (i) any financial or other material business or legal terms of this Lease, (ii) materials submitted from Tenant designated as confidential, and/or (iii) physical aspects of the design or operation of the Premises identified by Tenant as proprietary; except only to the extent that (A) such information is a matter of public record, (B) such disclosure is made on a comparably confidential basis to Landlord's attorneys, accountants, architects, engineers and/or brokers or an existing or prospective Tenant, mortgagee, on a need to know basis (any of the foregoing, a "Permitted Party"), or (C) disclosure is compelled by law or regulatory or judicial process, in which latter case Landlord shall first notify Tenant in writing and, if requested by Tenant, shall use all commercially reasonable efforts to preserve the confidentiality of the information in question to the greatest possible extent.

(b) Landlord further covenants and agrees that it will not publish or display, nor allow any other person or entity, including a Permitted Party, to publish or display, this Lease in any

medium of mass communication, including, without limitation, the internet, brokerage publications and listing services, newspapers, magazines, journals, radio or television.

(c) The foregoing subsections (a) and (b) shall also be applicable to the Permitted Parties and the members, partners, shareholders, directors, officers, principals, employees, agents and representatives of the Permitted Parties and Landlord (together, "Landlord Parties"). To that end, Landlord agrees to include in its agreements affecting the Premises a provision substantially similar to subsections (a) and (b) above, binding the applicable Landlord Party thereunder to comparable restrictions for Tenant's benefit.

Section 14. Indemnity.

(a) Tenant shall indemnify and save harmless Landlord from and against any and all liability, damage, penalties or judgments, any and all actions, suits, proceedings, claims, demands, assessments, costs and expenses, including, without limitation, legal fees and expenses, incurred in enforcing this indemnity, arising from injury to person or property sustained by anyone in and about the Premises resulting from any act or acts or omission or omissions of Tenant, or Tenant's officers, agents, servants, employees, contractors, or sublessees. Tenant shall, at its own cost and expense, defend any and all suits or actions, just or unjust, which may be brought against Landlord or in which Landlord may be impleaded with others upon any such above-mentioned matter, claim or claims, except as may result from the acts set forth in paragraph (b) of this Section 14, and subject to the provisions of Section 15(e).

(b) Landlord shall indemnify and save harmless Tenant from and against any and all liability, damage, penalties or judgments, any and all actions, suits, proceedings, claims, demands, assessments, costs and expenses, including, without limitation, legal fees and expenses, incurred in enforcing this indemnity, arising from injury to person or property sustained by anyone in and about the Premises resulting from any act or acts or omission or omissions of Landlord, or Landlord's officers, agents, servants, employees, contractors, or lessees. Landlord shall, at its own cost and expense, defend any and all suits or actions, just or unjust, which may be brought against Tenant or in which Tenant may be impleaded with others upon any such above-mentioned matter, claim or claims, except as may result from the acts set forth in paragraph (a) of this Section 14, and subject to the provisions of Section 15(e).

Section 15. Insurance.

(a) Tenant shall provide, at its expense, and keep in force during the Term of this Lease, general liability insurance in an insurance company or companies selected by Tenant, in the amount of at least two million dollars ($2,000,000) per occurrence for bodily injury and for property damage with respect to the Premises. Such policy or policies shall include Landlord as an additional insured. Tenant shall make available to Landlord (which may be accomplished by giving access to an internet web site) evidence of such insurance within thirty (30) days after the Commencement Date and thereafter before the expiration of each such insurance policy.

(b) During the Term of this Lease, Tenant shall keep all buildings and improvements erected or caused to be erected, at any time, by Tenant on the Premises insured for the benefit of Landlord and Tenant and the holder of any Leasehold Mortgage, as their respective interests may

appear, against loss or damage covered by a standard all risk insurance policy, in a minimum amount necessary to avoid the effect of co-insurance provisions of the applicable policies. All proceeds payable at any time and from time to time by any insurance company under such policies shall be payable to such Leasehold Mortgagee, as the Leasehold Mortgage or other loan documents pertaining to the Leasehold Mortgage ("Loan Documents") may provide, or, if none, to Tenant. If any such proceeds are paid to such Leasehold Mortgagee, Tenant shall be entitled to receive the full amount thereof in accordance with the terms of such Leasehold Mortgage or Loan Documents, and Landlord shall not be entitled to, and shall have no interest in, such proceeds or any part thereof. Any proceeds paid directly to Tenant shall be retained by Tenant and Landlord shall not be entitled to, and shall have no interest in, such proceeds or any part thereof. Landlord shall, at Tenant's cost and expense, cooperate fully with Tenant in order to obtain the largest possible recovery and execute any and all consents and other instruments and take all other actions necessary or desirable in order to effectuate the same and to cause such proceeds to be paid as hereinbefore provided, and Landlord shall not carry any insurance concurrent in coverage and contributing in the event of loss with any insurance required to be furnished by Tenant hereunder if the effect of such separate insurance would be to reduce the protection or the payment to be made under Tenant's insurance.

(c) Any insurance required to be provided by Tenant pursuant to this Lease may be provided by blanket insurance covering the Premises and other locations of Tenant and affiliates of Tenant, provided such blanket insurance complies with all of the other requirements of this Lease with respect to the insurance involved and such blanket insurance is acceptable to any Leasehold Mortgagee.

(d) All insurance coverage required to be carried hereunder shall be carried with insurance companies licensed to do business in the state in which the Premises is located; shall be rated in the then-most current Best's Insurance Guide (or any successor thereto) as having a general policyholder rating of A- or better and a financial rating of "VIII" or better; and shall require the insured's insurance carrier to notify the other party hereto at least thirty (30) days prior to any cancellation or material modification of such insurance.

(e) Notwithstanding anything in this Lease to the contrary, Landlord and Tenant each waives any rights of action for negligence against the other party, which may arise during the Term for damage to the Premises or to the property therein, resulting from any fire or other casualty of the kind covered by All-Risk property insurance policies, regardless of whether or not, or in what amounts, such insurance is now, or may hereafter be, carried by the parties. All property insurance policies affecting all of any portion of the Premises shall contain a waiver of subrogation by the insurer confirming that the foregoing waiver by Landlord or Tenant, as applicable, shall not invalidate any such property insurance policy.

Section 16. Condemnation.

(a) If the use, occupancy, or title of the Premises or any part thereof is taken, requisitioned or sold in, by or on account of any actual or threatened eminent domain proceeding or other action by any person having the power of eminent domain (a "Condemnation"), Landlord and Tenant agree that any award or compensation on account thereof will be allocated as follows:

(i) Tenant receives that portion of the award or compensation allocable to its Leasehold Estate, all awards for any improvements located on the Premises, and any award for relocation expenses; and

(ii) Landlord shall be entitled to receive that portion of the award or compensation allocable to its Reversionary Estate, as encumbered by this Lease and subject to Tenant's right to receive that portion of the award as provided in clause (i).

(b) Each of Landlord and Tenant may appear in any such proceeding or action, to negotiate, prosecute and adjust any claim for any award or compensation on account of any Condemnation as it relates to their respective interest in the Premises. All amounts paid in connection with any Condemnation of the Premises shall be applied pursuant to this Section 17, and all such amounts (minus the expense of collecting such amounts as hereinafter provided) are herein called the "Net Proceeds." Landlord and Tenant shall each pay all of its reasonable costs and expenses in connection with each such proceeding, action, negotiation, prosecution and adjustment for which costs and expenses Landlord and Tenant shall be reimbursed out of any award, compensation or insurance payment to which it is entitled. Landlord shall have no interest in any such award, compensation or payment, or any portion thereof, made in respect of Tenant's leasehold estate or the improvements located on the Premises, all of which shall belong to and be paid to Tenant.

(c) If the entire Premises, or the use or possession thereof, is taken by Condemnation, then this Lease shall terminate on the date when possession shall be taken by the condemnor, and rent and all other charges payable hereunder shall be apportioned and paid in full up to that date, and all prepaid unearned rent, and all other charges payable hereunder, shall promptly be repaid by Landlord to Tenant.

(d) If a Condemnation shall affect the entire Building or a portion of the Building, which Tenant reasonably believes shall render the Building unsuitable for Tenant's continued use and occupancy after the restoration thereof, then Tenant may, not later than one hundred fifty (150) days after such occurrence, deliver to Landlord (i) notice of Tenant's intention to terminate this Lease on a business day specified in such notice (the "Lease Termination Date"), which occurs not less than thirty (30) days after the delivery of such notice, and (ii) a certificate of Tenant describing the event giving rise to such termination. This Lease shall terminate on the Lease Termination Date, except with respect to obligations and liabilities of Tenant hereunder, actual or contingent, which have arisen on or prior to the Lease Termination Date, upon payment of all additional rent and other sums then due and payable hereunder to and including the Lease Termination Date.

(e) If, due to a taking, the parking areas of the Premises shall be decreased below twenty (20) parking spaces, Tenant shall notify Landlord thereof. If, within ninety (90) days after Landlord's receipt of such notice, additional parking is not provided by Landlord equal to the number by which it has been decreased below twenty (20) parking spaces, then Tenant may, upon thirty (30) days' notice to Landlord (i) terminate this Lease; or (ii) pay to Landlord Fixed Rent reduced to a level equal to fifty percent (50%) of Fixed Rent due under this Lease. If Tenant shall elect to so pay reduced rent, Tenant shall remain obligated for any other charges due under this Lease. Tenant's Fixed Rent shall be so reduced until such time as said additional

parking is provided by Landlord. The additional parking to be provided by Landlord pursuant to this subsection (e) shall be within the Premises and/or contiguous to the Premises in a location acceptable to Tenant in its sole discretion.

(f) If, due to a taking, there shall be an impediment with respect to any curbcut serving the Premises, which impediment shall materially adversely affect any means of ingress or egress between the Premises and any abutting street, then Tenant shall notify Landlord thereof. If, within ninety (90) days after Landlord's receipt of such notice, such impediment shall not be removed, then Tenant may, upon thirty (30) days' notice to Landlord: (i) terminate this Lease; or (ii) pay to Landlord Fixed Rent reduced to the level of fifty percent (50%) of Fixed Rent due under this Lease. If Tenant shall elect to so pay reduced rent, Tenant shall remain obligated for any other charges due under this Lease. Tenant's Fixed Rent shall be so reduced until such time as said impediment shall be removed.

(g) If Tenant gives notice of its election to terminate this Lease pursuant to this Section 16, and if at the time of such notice, the interest of Tenant under this Lease shall then be encumbered by a Leasehold Mortgage, the holder of such Leasehold Mortgage must consent in writing to the giving of such notice.

(h) If a Condemnation of the Premises or any part thereof shall occur but Tenant does not give notice of its intention to terminate this Lease as provided in this Section 16, then this Lease shall continue in full force and effect. Any Net Proceeds payable with respect to such Condemnation shall be allocated between Landlord and Tenant in accordance with Subsection 16(a) above and, to the extent of the Net Proceeds received by Tenant, Tenant shall promptly repair and restore the Premises to the same condition (as nearly as practicable) as existed immediately before the Condemnation (assuming for this purpose that the Premises were in compliance with the terms of this Lease). In the event of any temporary requisition, this Lease shall remain in full effect and Tenant shall be entitled to receive the Net Proceeds allocable to such temporary requisition; except that such portion of the Net Proceeds allocable to the period after the expiration or termination of the Term of this Lease shall be paid to Landlord.

Section 17. Defaults.

Subsection 17.1 Defaults of Tenant.

(a) Tenant shall be in "Default" if (i) Tenant shall not have paid Fixed Rent or any other amount payable by Tenant pursuant to this Lease within twenty (20) days following Tenant's receipt of written notice from Landlord stating that such payment was not made prior to its due date (a "Monetary Default"); or (ii) Tenant shall not have performed any of the other covenants, terms, conditions or provisions of this Lease within sixty (60) days after Tenant's receipt of written notice specifying such failure; provided, however, that with respect to those failures that cannot with due diligence be cured within such sixty (60) day period, Tenant shall not be deemed to be in default hereunder if Tenant commences to cure such default within such sixty (60) day period and thereafter continues the curing of such default with all due diligence (a "Non-Monetary Default"). If this Lease is assigned by Tenant, the twenty (20) day period for Monetary Defaults shall be extended to thirty (30) days and the sixty (60) day period for

Non-Monetary Defaults shall be extended to sixty five (75) days. Any assignee or lender may cure any default of Tenant hereunder.

(b) If Landlord shall claim that Tenant is in Default, Landlord shall have the right, subject to the provisions of Subsection 11.1, to institute from time to time an action or actions (i) to recover damages (exclusive of consequential or special damages), (ii) for injunctive and/or other equitable relief, or (iii) only in the event of Monetary Default to recover possession of the Premises and terminate this Lease.

Notwithstanding the foregoing, Landlord agrees that Tenant shall have thirty (30) days after commencement by Landlord of any proceedings to file an appropriate pleading in the action initiated by Landlord to contest the claim of Default or to cure such Default; no action shall be taken by Landlord during such thirty (30) day period to regain possession of the Premises from Tenant or to terminate this Lease. If the Default is not cured, Landlord's rights and Tenant's obligations shall be resolved by the final determination made by the court in which Landlord's proceedings were initiated. For the purpose hereof, a "final determination" shall occur where the judgment or order entered can be enforced by execution, issuance of a writ of restitution, judicial sale or specific enforcement and no such judgment or order shall be considered final for purposes hereof during the pendency of a stay of execution in connection with an appeal. Notwithstanding anything herein to the contrary, if there is a Monetary Default which arises out of a dispute as to an amount owed or the amount of an offset, this Lease shall not terminate if Tenant pays to Landlord the amount the court determines to be owed within the period of time permitted by law, or ten (10) days after such determination if no such grace period is permitted.

(c) In the event of any termination of this Lease in accordance with the provisions of paragraph (b) above, Tenant shall pay to Landlord all Fixed Rent, and other sums required to be paid by Tenant to and including the date of such termination, reentry or repossession; and, thereafter, Tenant shall, until the end of what would have been the Term of this Lease in the absence of such termination, reentry or repossession, and whether or not the Premises shall have been relet, be liable to Landlord for, and shall pay to Landlord, as agreed current damages (i) all Fixed Rent and other sums that would be payable under this Lease by Tenant in the absence of such termination, reentry or repossession, less (ii) the net proceeds, if any, of any reletting effected for the account of Tenant, after deducting from such proceeds all of Landlord's expenses in connection with such reletting (including, but not limited to, repossession costs, brokerage commissions, reasonable attorneys fees and expenses, but expressly excluding any alteration costs or expenses of preparation for such reletting). Landlord shall use reasonable efforts to mitigate any such damages owed by Tenant. Tenant shall pay such current damages on the days on which Fixed Rent would be payable under this Lease in the absence of such termination, reentry or repossession, and Landlord shall be entitled to recover the same from Tenant on each such day. Alternatively, at Tenant's option, Tenant shall, whether or not the Premises shall have been relet, be liable to Landlord for, and shall pay to Landlord, as liquidated damages, an amount equal to the excess, if any, of (i) the Fixed Rent required herein during the period from the date of such expiration, termination, reentry or repossession to and including the end of what would have been the Term of this Lease in the absence of such termination, reentry or repossession, discounted at the current Prime Rate over (ii) the then fair market rental value of the Premises for the same period, also discounted at the said Prime Rate. "Prime Rate" shall mean the rate (or the

average of rates, if more than one rate appears) in the b "Money Rate" section of the Wall Street Journal (Eastern Edition).

Subsection 17.2 Defaults of Landlord.

(a) If Landlord shall fail to observe or perform any provision hereof and such failure shall continue for thirty (30) days after notice to Landlord of such failure, then a Default of Landlord shall exist under this Lease, provided, however, that in the case of any such failure which cannot with diligence be cured within such thirty (30) day period, if Landlord shall commence promptly to cure the same and thereafter prosecute the curing thereof with diligence, the time within which such failure may be cured shall be extended for such period as is necessary to complete the curing thereof with diligence.

(b) If a Default of Landlord shall have occurred and be continuing, Tenant may terminate this Lease by giving Landlord notice of Tenant's intention to do so. Upon the fifteenth (15th) day next succeeding the giving of such notice, this Lease and the estate hereby granted shall expire and terminate on such date as fully and completely and with the same effect as if such date were the date herein fixed with the expiration of the Term of this Lease, all rights of Landlord and obligations of Tenant hereunder shall expire and terminate, and Rent shall be apportioned as of such date and Landlord shall promptly refund to Tenant any Rent theretofore paid which is allocable to the period subsequent to such date.

Subsection 17.3 Rights to Cure.

Each party shall have the right, but shall not be required, to pay such sums or do any act which requires the expenditure of monies which may be necessary or appropriate by reason of the Default of the other party to perform any of the provisions of this Lease. In the event of the exercise of any such right by Landlord, Tenant agrees to pay to Landlord forthwith upon demand all such sums, as an additional charge. In the event of the exercise of such right by Tenant, Landlord agrees to pay to Tenant forthwith upon demand all such sums. Alternatively, Tenant may, at its election, and upon notice to Landlord, deduct such sum from the next succeeding payment or payments of Rent, and such deduction shall in no way be considered a failure on the part of Tenant to pay such Rent.

Section 18. Waivers; Remedies.

Failure of Landlord or Tenant to complain of any act or omission on the part of the other party, no matter how long the same may continue, shall not be deemed to be a waiver by said party of any of its rights hereunder. No waiver by Landlord or Tenant at any time, express or implied, of any breach of any provision of this Lease shall be deemed a waiver of a breach of any other provision of this Lease or a consent to any subsequent breach of the same or any other provision. No acceptance by Landlord of any partial payment shall constitute an accord or satisfaction but such payment shall only be deemed a partial payment on account. Notwithstanding any remedies expressly set forth in this Lease (except as expressly set forth herein), all rights and remedies provided for in this Lease or otherwise existing at law or in equity are cumulative, and a party's exercise of any right or remedy under this Lease or under

applicable law is not exclusive and shall not preclude such party from exercising any other right or remedy that may be available to it at law or in equity.

Section 19. Limitation of Liability.

(a) Notwithstanding anything to the contrary herein provided, if Landlord or any successor in interest of Landlord shall be a mortgagee, or if Landlord or any successor in interest of Landlord shall be an individual, joint venture, tenancy in common, firm or partnership, general or limited, it is specifically understood and agreed that there shall be absolutely no personal liability on the part of such mortgagee or such individual or on the part of the members of such firm, partnership or joint venture with respect to any of the terms, covenants and conditions of this Lease, and Tenant shall look solely to the Reversionary Estate for the satisfaction of each and every remedy of Tenant in the event of any breach by Landlord or by such successor in interest of any of the terms, covenants and conditions of this Lease to be performed by Landlord, such exculpation of personal liability to be absolute and without any exception whatsoever.

(b) Notwithstanding anything to the contrary herein provided, if Tenant or any successor in interest of Tenant shall be a mortgagee, or if Tenant or any successor in interest of Tenant shall be an individual, joint venture, tenancy in common, firm or partnership, general or limited, it is specifically understood and agreed that there shall be absolutely no personal liability on the part of such mortgagee or such individual or on the part of the members of such firm, partnership or joint venture with respect to any of the terms, covenants and conditions of this Lease, and Landlord shall look solely to the Leasehold Estate for the satisfaction of each and every remedy of Landlord in the event of any breach by Tenant or by such successor in interest of any of the terms, covenants and conditions of this Lease to be performed by Tenant, such exculpation of personal liability to be absolute and without any exception whatsoever.

(c) The terms "Landlord" and "Tenant" whenever used herein shall mean only the owner at the time of Landlord's or Tenant's interest herein, and upon any sale or assignment of the interest of either Landlord or Tenant, their respective successors in interest and/or assigns shall, during the term of their ownership of their respective estates herein, be deemed to be Landlord or Tenant, as the case may be; provided that in the event of any transfer of title by Landlord of the Premises, any amount then due and payable to Tenant by Landlord (or the then grantor), and any other obligation then to be performed by Landlord (or the then grantor) under this Lease, either shall be paid or performed by Landlord (or the then grantor) or such payment or performance assumed by the transferee.

Section 20. Force Majeure.

In the event that Landlord or Tenant shall be delayed, hindered in or prevented from the performance of any act required hereunder by reason of strikes, lock-outs, labor troubles, inability to procure materials, failure of power, restrictive governmental laws or regulations, riots, insurrection, the act, failure to act or default of the other party, war or other reason beyond their control, then performance of such act shall be excused for the period of the delay and the period for the performance of any such act shall be extended for a period equivalent to the period

of such delay. The provisions of this Section 21 shall not be applicable with respect to payment of money.

Section 21. Notices.

Any notice, communication, request, reply or advice (collectively, "Notice") provided for or permitted by this Lease to be made or accepted by either Party must be in writing. Notice may, unless otherwise provided herein, be given or served by (i) depositing the same in the United States mail, postage paid, certified, and addressed to the party to be notified, with return receipt requested, (ii) by delivering the same to such party, or an agent of such party, in person or by commercial courier, or (iii) by depositing the same into custody of a nationally recognized overnight delivery service such as Federal Express Corporation or Airborne Express or (iv) by email delivery, with a copy of such notice to be delivered by one of the means set forth in (i), (ii) or (iii) above provided that such notice shall be deemed given upon such email transmission. Notice deposited in the United States mail in the manner hereinabove described shall be effective on the third (3rd) business day after such deposit. For the purposes of notice, the addresses of the parties shall, until changed as hereinafter provided, be as follows:

Landlord: Rye Port Properties, LLC
P.O. Box 345,
Stratham, New Hampshire 03885
Attn: Andrea Grenier, Manager
Email: agren79@yahoo.com

With copies to: Russell S. Channen, Esquire
Phillips, Gerstein & Channen, LLP
25 Kenoza Avenue
Haverhill, MA 01830
Email: rchannen@pgclawoffice.com

Tenant: Rhino H10 Property Acquisitions LLC
199 New Zealand Road
Seabrook, New Hampshire 03874
Attn: Jason Rice
Email: jason@h10carwash.com

With copies to: Rubin and Rudman LLP
53 State Street, 15th Floor
Boston, Massachusetts 02109
Attn: David Wittmann, Esq.
Email: dwittmann@rubinrudman.com

The Parties hereto shall have the right from time to time to change their respective addresses, and each shall have the right to specify as its address any other address within the

United States of America by at least five (5) days written notice to the other Party. Notices may be given and received by counsel for each party hereunder.

Section 22. Certificates.

Either Party shall, without charge, at any time and from time to time hereafter, within fifteen (15) business days after written request of the other, certify by written instrument duly executed and acknowledged to any mortgagee or Tenant, or proposed mortgagee or proposed Tenant, or any other person, firm or corporation specified in such request: (a) as to whether this Lease has been supplemented or amended (and, if it shall have been supplemented or amended, specifying the manner in which it has been supplemented or amended); (b) as to whether this Lease is in full force and effect (and, if it is alleged that this Lease is not in full force and effect, specifying the reasons therefor); (c) as to the date to which Fixed Rent has been paid; (d) as to whether any condition exists which constitutes a default hereunder or which, but for the passage of time or the giving of notice or both, would result in a default by Landlord or Tenant hereunder (and, if such condition exists, specifying the nature thereof); (e) as to whether there exist any offsets, counterclaims or defenses thereto on the part of the other party; (f) as to the commencement and expiration dates of the Term of this Lease and the number of outstanding options to extend the Term of this Lease; (g) as to whether or not all work required to be performed by Landlord and/or Tenant with respect to the construction and development of any improvement(s) on the Premises has been performed in accordance with the terms of this Lease; and (h) as to such other matters as reasonably may be requested. Any such certificate may be relied upon by the party requesting it and any other person, firm or corporation to whom the same may be exhibited or delivered, and the contents of such certificate shall be binding on the party executing same.

Section 23. Governing Law.

This Lease and the performance thereof shall be governed, interpreted, construed and regulated by the laws of the State of New Hampshire.

Section 24. Holdover.

If Tenant shall hold the Premises after the expiration of the Term hereof, such holding over shall, in the absence of written agreement on the subject, Tenant shall be deemed to be a tenant at sufferance only at a daily rate of rent equal to one and one-half times the Fixed Rent in effect under this Lease as of the day prior to the date of expiration of this Lease, and such occupancy shall otherwise be on the terms and conditions of this Lease as applicable. Any monies received after the Lease has expired shall not create a new tenancy but shall be considered use and occupancy.

Section 25. Waiver of Landlord's Lien.

Landlord hereby waives any right it may have to distrain trade fixtures, buildings, tenant improvements or any property of Tenant and any landlord's lien or similar lien upon trade fixtures, buildings, tenant improvements or any other property of Tenant, regardless of whether such lien is created otherwise.

Section 26. Waiver of Jury Trial; Waiver of Consequential Damages.

Landlord and Tenant hereby waive trial by jury in any action, proceeding or counterclaim brought by either against the other, upon any mattes whatsoever arising out of or in any way connection with this Lease, Tenant's use or occupancy of the Premises, and/or any claim of injury or damage. Notwithstanding anything to the contrary contained herein, both parties expressly waive any claims, and shall not be awarded any judgment, for consequential, special, punitive or similar-type damages or for lost profits.

Section 27. Severability.

If any term, covenant, condition or provision of this Lease or the application thereof to any person or circumstance shall, at any time or to any extent, be invalid or unenforceable, the remaining terms, covenants, conditions and provisions shall not be affected thereby, and each term, covenant, condition and provision of this Lease shall be valid and be enforced to the fullest extent permitted by law.

Section 28. Memorandum of Lease.

Each party shall at any time, at the request of the other party, promptly execute and deliver duplicate originals of an instrument, in recordable form, which will constitute a Memorandum of Lease, setting forth a description of the Premises, the Term of this Lease and any other portions thereof, excepting the rental provisions, as such other party may request.

Section 29. Interpretation.

Wherever herein the singular number is used, the same shall include the plural, and the masculine gender shall include the feminine and neuter genders, and vice versa, as the context shall require. The section headings used herein are for reference and convenience only, and shall not enter into the interpretation hereof.

Section 30. Entire Agreement; Full Execution; No Offer.

No oral statement or prior written matter shall have any force or effect. Landlord and Tenant agree that neither party is relying on any representations or agreements other than those contained in this Lease. This Lease shall not be modified or canceled except by writing subscribed by all parties. This Lease may be executed in several counterparts, each of which shall be an original, but all of which shall constitute one and the same instrument This Lease shall not be effective, and no leasehold or other agreement shall be deemed or construed to have been created between Landlord and Tenant, until such time as this Lease has been fully executed by both Landlord and Tenant, and fully executed originals have been delivered to each party. Delivery of drafts of this Lease by one party to the other shall in no way constitute the making of an offer to lease, or any other offer, and neither party shall be bound by any terms or provisions sets forth in such drafts, unless and until such time as a written agreement of the parties has been duly executed and delivered by both Landlord and Tenant.

Section 31. Parties.

Except as herein otherwise expressly provided, the covenants, conditions and agreements contained in this Lease shall bind and inure to the benefit of Landlord and Tenant and their respective heirs, successors, administrators and assigns.

Section 32. Brokers' Commissions.

The named brokers are Scott Forte of Century 21 North East, "Landlord's Broker" and John Dennis of Corporate Realty Estate Advisors, "Tenant's Broker" (collectively the "Named Brokers"). Tenant and Landlord represent and warrant to each other that neither has had any negotiations, dealings or conversations with any broker or agent, licensed or otherwise in connection with this Lease, other than the Named Brokers. Landlord and Tenant each covenants to protect, defend, hold harmless and indemnify the other from and against any and all losses, liabilities, damages, costs and expenses (including reasonable legal fees) arising out of or in connection with any other claim by any brokers or agents for brokerage commissions relating to this Lease alleged to be due because of negotiations, dealings or conversations with the indemnifying party. Landlord warrants and agrees that it shall be solely responsible for any and all brokerage commissions owing to Landlord's Broker as a result of the negotiation and execution of this Lease. Tennant's Broker shall be paid by either Tenant or Landlord's Broker. Landlord shall not be responsible for paying Tenant's Broker.

Section 33. Attorneys' Fees.

In the event of any suit, action, or other proceeding at law or in equity (collectively, "action"), by either party hereto against the other, by reason of any matter arising out of this Lease, the prevailing party shall recover, not only its legal costs, but also reasonable attorneys' fees (to be fixed by the Court) for the maintenance or defense of said action, as the case may be.

Section 34. Rent Payments.

If Landlord's interest in this Lease shall pass to another, or if the rent hereunder shall be assigned, or if a party other than Landlord shall become entitled to collect the rent due hereunder, then notice thereof shall be given to Tenant by Landlord in writing, or, if Landlord is an individual and shall have died or become incapacitated, by Landlord's legal representative, accompanied by due proof of the appointment of such legal representative. Until such notice and proof shall be received by Tenant, Tenant may continue to pay the rent due hereunder to the one to whom, and in the manner in which, the last preceding installment of rent hereunder was paid, and each such payment shall fully discharge Tenant.

Tenant shall not be obligated to recognize any agent for the collection of rent or otherwise authorized to act with respect to the Premises until notice of the appointment and the extent of the authority of such agent shall be given to Tenant by the one appointing such agent.

Tenant shall have no obligation to pay rent or any other amount due hereunder until Tenant has received a properly completed and executed Internal Revenue Service form W-9, Request for Taxpayer Identification Number and Certificate or any successor form or any similar

form and/or such other information and/or form from Landlord that is required by the Internal Revenue Service and/or by any other federal, state or local governmental taxing authority having jurisdiction to require the furnishing of any form or information by Landlord from time to time (or other evidence of Landlord's United States Social Security Number or Federal Employee Identification Number reasonably satisfactory to Tenant), in order to allow the requesting party to make a payment under this Lease or any related agreement without any deduction or withholding for or on account of any tax, with any such form or document to be accurate and completed in a manner reasonably satisfactory to such other party and to be executed and to be delivered with any required certification; however, to the extent such failure causes a backup tax withholding obligation to be imposed on Tenant, Tenant may withhold such amounts from any payments due to or for the benefit of Landlord under this Lease. The provisions of this Section shall be enforceable by an action for specific performance or an action for actual damages against any party failing to comply with its obligations thereunder.

Section 35. Notice of Landlord Transfers.

Landlord may freely transfer the Premises and this Lease without the consent of Tenant; however, Landlord shall give Tenant notice of the transfer of its interest in the Premises by delivery of a written notice of transfer to Tenant and a copy of a signed assignment and assumption of Lease between Landlord and Landlord's successor in interest, that the failure to give such notice of transfer shall not be a default by Landlord under this Lease. Until Landlord gives Tenant notice in accordance with the terms of this Lease of a transfer of the Premises by Landlord, Tenant may deal with Landlord as if it continued to be the owner of the Premises. The provisions of this Section 35 shall be enforceable by an action for specific performance or an action for actual damages (but not consequential, exemplary or punitive damages) against any party failing to comply with its obligations hereunder.

Section 36. Interest.

For the purposes of this Lease, "Interest" shall mean the lesser of the Prime Rate plus 4% per annum, or the maximum rate allowed by law. In the event Landlord or Tenant fails to pay any amount when due to the other party within ten (10) days after notice that payment is late, the defaulting party shall pay the non-defaulting party such amount plus Interest accruing from the original date such amount was due until such amount is ultimately paid.

Section 37. Guaranty.

The obligations of Tenant under this Lease shall be guaranteed by Rhino H10 Property Acquisitions, LLC (the "Guarantor") pursuant to the Guaranty attached hereto as **Exhibit D** and incorporated herein by reference.

Section 38. Notice of Activity and Use Restriction.

Reference is hereby made to that certain Notice of Activity and Use Restriction (the "AUR") dated March 1, 2012 and recorded with the Rockingham County, New Hampshire Registry of Deeds at Book 5292, Page 2562. Landlord represents and warrants to Tenant that it is currently in compliance with and not in default of its obligations under the AUR. Landlord

further represents and warrants to Tenant that Tenant's anticipated use of the Premises will not violate the AUR. The Landlord agrees to reasonably cooperate with Tenant's environmental consultant to confirm that the Tenant's anticipated use of the Premise will not violate the AUR and provide any reasonable documentation that Tenant's environmental consultant requests with respect to the AUR.

Section 39. Right of First Refusal.

Landlord hereby grants to Tenant a right to purchase all or any portion of the Premises on the following terms and conditions (the "Right of First Refusal"):

(a) If Landlord should at any time during the Term receive a bona fide offer to purchase all or any portion of the Premises (the "Refusal Offer") from a third party and Landlord desires to accept such offer, Landlord shall deliver to Tenant a notice (the "Acquisition Notice") setting forth the name of the prospective purchaser and the terms and conditions of such Refusal Offer.

(b) Tenant shall have thirty (30) days from receipt of the Acquisition Notice to exercise its Right of First Refusal by delivering notice thereof to Landlord. Delivery of such notice shall obligate Tenant to purchase the Premises (or the applicable portion thereof) on the date which is ninety (90) days after receipt of the Acquisition Notice (or any earlier date requested by Tenant) and on the terms and conditions set forth in the Acquisition Notice. In the event Tenant shall not elect to exercise its Right of First Refusal or fails to timely deliver notice within the thirty (30) day period, Tenant shall conclusively be deemed to have waived its Right of First Refusal as to the transaction described in the Acquisition Notice in question and Landlord may thereupon proceed to sell the Premises (or portion thereof) on the terms and conditions and to the party specified in the Acquisition Notice in question, and in the event the Premises (or portion thereof) is sold as set forth in the Acquisition Notice in question, the Right of First Refusal shall be applicable to any future sales, and this Lease shall remain in full force and effect. Modifications may be made in the offer outlined in the Acquisition Notice without the necessity of resubmitting the offer to Tenant, provided that the purchase price is not reduced, the payment terms are not changed, and provided that the closing date is not extended for a period in excess of one hundred eighty (180) days.

(c) Tenant shall have no right to exercise the Right of First Refusal at any time when a Tenant's Default exists hereunder.

(d) No Refusal Offer shall include any value attributable to buildings or improvements on the Premises paid for by Tenant, nor shall Tenant, as the owner of such buildings and improvements, ever be required to pay for such buildings or improvements in exercising its Right of First Refusal hereunder.

The Parties hereto have set their hands and seals the day and year first above written.

Landlord:

Rye Port Properties, LLC,
a New Hampshire limited liability company

By: Andrea Grenier dotloop verified 07/19/25 12:08 PM EDT W7RJ-IFZT-DHXN-TJ0X

Name: Andrea Grenier
Title: Manager

Tenant:

2299 Lafayette Road, LLC
A Delaware limited liability company

By: Chris Rondeau dotloop verified 07/18/25 4:01 PM EDT U3BL-ZP5B-Q1MR-2D9L

Name: Chris Rondeau
Title: Manager

Legal Description
(to be inserted)

Site Plan
(to be inserted)

EXHIBIT B

Documents

Landlord shall provide copies of any of the items listed below provided they are within Landlord's possession or can be easily obtained by the Landlord.

1. Copies of existing title policies.

2. Copies of ALTA survey.

3. Copies of as-built plans and specifications, ADA compliance studies, architectural plans, soil reports, site plans, engineering, physical condition and PML reports and all site assessments, and asbestos surveys covering the Property for the benefit of Seller.

4. Copy of deed by which the property was conveyed to Seller.

5. Copies of certificates of occupancy, licenses and permits.

6. Copies of property tax bills and assessment notices for the past year.

7. Copies of insurance policies and premiums.

1. Information regarding any pending litigation.

2. Copies of recent or pending tax appeals.

3. Copies of environmental reports.

4. Copies of zoning reports.

EXHIBIT C

THIS SUBORDINATION AND NON-DISTURBANCE AGREEMENT, dated as of _____, 2025 (the "Agreement") is entered into by _____, a _____, with a principal place of business at _____ (the "Fee Mortgagee").

WHEREAS, _____, a _____ ("Landlord") is the owner of certain real property located at _____, as more fully described on **Exhibit A** attached hereto (the "Premises"); and

WHEREAS, Landlord and _____, a _____("Tenant") have entered into a certain Ground Lease, dated as of _____, 200__ (the "Ground Lease") with respect to the Premises and, simultaneously herewith, shall record a Memorandum of Lease with respect thereto; and

WHEREAS, the Fee Mortgagee is the holder of a certain **[**mortgage**][**deed of trust**]**, dated _____**,** 200__ and recorded **[insert place and date of recording and any other identifying information]** ("Fee Mortgage") on the Premises; and

WHEREAS, pursuant to the terms of the Ground Lease, Landlord is required to deliver to Tenant a Subordination and Non-Disturbance Agreement from the holder of any mortgage on Landlord's reversionary fee interest in the Premises;

NOW THEREFORE, for good and valuable consideration, the receipt and sufficiency of which are hereby acknowledged, the undersigned hereby agrees as follows:

1. **Assent to Ground Lease.** Fee Mortgagee hereby acknowledges receipt of a full and complete copy of the Ground Lease and does hereby assent to the Ground Lease and to all of the terms and provisions thereof.

2. **Subordination.** Notwithstanding the priority of recording, the Ground Lease and any renewal, replacement, amendment, extension, substitution or revision thereof shall be, and hereby is, subject and subordinate to the lien of the Fee Mortgage, subject to the further recognition and non-disturbance provisions herein.

3. **Non-Disturbance.** Fee Mortgagee hereby agrees to be bound by all of the terms and conditions of the Ground Lease in the event Fee Mortgagee becomes the owner of Landlord's reversionary fee interest in the Premises by reason of foreclosure, deed in lieu of foreclosure or otherwise. Notwithstanding the subordination provided in Section 2, so long as an Event of Default on Tenant's part (beyond any applicable notice, grace or cure period) does not exist under the Ground Lease, Tenant's possession of the Premises and Tenant's rights and privileges under the Ground Lease, or any extensions or renewals thereof, shall not be diminished or interfered with by Fee Mortgagee, and Tenant's occupancy of the Premises shall not be disturbed by Fee Mortgagee for any reason whatsoever during the term of the Ground

Lease or any such extension or renewal thereof, except as would be permitted for Landlord to do so.

In addition, notwithstanding such subordination, so long as an Event of Default on Tenant's part (beyond any applicable notice, grace or cure period) does not exist under the Ground Lease, Fee Mortgagee will not join Tenant as a party defendant, unless required by law, in any foreclosure action or other proceeding for the purpose of terminating Tenant's interest and estate under the Ground Lease or for any other purpose.

4. **Recognition** If the interests of Landlord in the Premises shall be transferred to and owned by Fee Mortgagee by reason of foreclosure or other proceedings brought by it, or by deed in lieu of foreclosure, or if Fee Mortgagee takes possession of the Premises pursuant to any provisions of the Fee Mortgage, then: (i) Fee Mortgagee and Tenant shall be directly bound to each other under all the terms, covenants and conditions of the Ground Lease for the balance of the term thereof and for any extensions or renewals thereof which may be exercised by Tenant, with the same force and effect as if Fee Mortgagee were Landlord under the Ground Lease; and (ii) Tenant does hereby attorn to Fee Mortgagee as its landlord, said attornment to be effective and self-operative (without the execution of any further instruments), immediately upon Fee Mortgagee succeeding to the interests of Landlord under the Ground Lease; provided, however, regarding items (i) and (ii) above, that Tenant shall have received written notice from Fee Mortgagee that it has succeeded to the interests of Landlord under the Ground Lease. The respective rights and obligations of Tenant and Fee Mortgagee upon such attornment, to the extent of the then-remaining balance of the term of the Ground Lease and any such extensions and renewals, shall be and are the same as now set forth in the Ground Lease from and after Fee Mortgagee's succession to the interests of Landlord under the Ground Lease, and Tenant shall have the same remedies against Fee Mortgagee for the breach of any agreement contained in the Ground Lease that Tenant might have under the Ground Lease against Landlord if Fee Mortgagee had not succeeded to the interest of Landlord.

5. **Payments to Fee Mortgagee**. Tenant shall not be under any obligation to pay rent to Fee Mortgagee until Tenant shall have received written notice from Fee Mortgagee that Fee Mortgagee has succeeded to the interests of Landlord under the Ground Lease or that Fee Mortgagee has exercised its rights under the Fee Mortgage, and directing such payments be made to Fee Mortgagee. Landlord by its execution of this Agreement hereby consents to such direct payments by Tenant to Fee Mortgagee and hereby releases and discharges Tenant of and from all liability to Landlord on account of any such payments. Upon receipt of such notice, Tenant shall make future payments due under the Ground Lease to Fee Mortgagee until notified otherwise in writing in accordance with the terms of the Ground Lease and Tenant shall not be liable to Landlord to account for such payments.

6. **Casualty and Condemnation Proceeds**. Notwithstanding anything to the contrary contained herein, to the extent that the provisions of the Ground Lease are inconsistent with the provisions of the Fee Mortgage with respect to Tenant's entitlement to any condemnation award for a taking of all or part of the Premises, or Tenant's entitlement to any casualty proceeds with respect to a casualty to the Premises (or any building constructed thereon), the provisions of the Ground Lease shall have priority and shall control, and Fee

Mortgagee waives any rights it may have under the Fee Mortgage to receive any condemnation award or casualty insurance proceeds allocated to Tenant under the Ground Lease.

7. **Warranties and Representations**. Fee Mortgagee hereby warrants and represents as follows:

(a) Fee Mortgagee (unless a natural person), is a duly organized, validly existing entity organized and in good standing under the laws of _____ and duly qualified to do business and in good standing under the laws of _____, has all requisite power and authority to conduct its business and to own its property as now conducted or owned and is qualified to do business in all jurisdictions where the nature and extent of its business is such that such qualification is required by law.

(b) This Agreement has been authorized by all requisite entity action and constitutes Fee Mortgagee's legal, valid and binding obligations in accordance with the terms thereof, subject to bankruptcy and insolvency and similar laws of general application affecting the rights and remedies of creditors and with respect to the availability of the remedies of specific enforcement, subject to the discretion of the court before which proceedings therefor may be brought.

(c) The performance by Fee Mortgagee of the obligations of Fee Mortgagee hereunder does not and shall not constitute a violation of any law, order, regulation, contract, organizational document or agreement to which Fee Mortgagee is subject or by which Fee Mortgagee or the property thereof is or may be bound.

(d) The execution of the Ground Lease by Tenant and Landlord constitutes a material economic benefit to Fee Mortgagee.

8. **No Oral Change**. No provision of this Agreement may be changed, waived, discharged or terminated or relieved by telephone or by any other means except by an instrument in writing signed by the party against whom enforcement of the change, waiver or discharge or termination is sought.

9. **Successors and Assigns**. This Agreement shall be binding upon each party hereto and its, his or their respective successors, assigns, heirs and personal representatives; provided, however, that upon satisfaction of Fee Mortgage, this Agreement shall become null and void and be of no further effect.

10. **Partial Invalidity**. Each of the provisions hereof shall be enforceable against the Fee Mortgagee to the fullest extent now or hereafter not prohibited by applicable law. The invalidity or unenforceability of any provision hereof shall not limit the validity or enforceability of each other provision hereof.

11. **Joint and Several**. The obligations of Fee Mortgagee and of its, his, her or their respective successors, assigns, heirs and personal representatives shall be and remain joint and several.

12. **Counterparts**. This Subordination and Non-Disturbance Agreement may be executed in several counterparts, each of which when executed and delivered is an original, but all of which together shall constitute one instrument. In making proof of this agreement, it shall not be necessary to produce or account for more than one such counterpart which is executed by the party against whom enforcement of such agreement is sought.

Witness the execution hereof as an instrument under seal as of the date first set forth above.

WITNESS:

TENANT:

_____

_____

By:_____
Name:_____
Title:_____

FEE MORTGAGEE:

_____

_____

By:_____
Name:_____
Title:_____

LANDLORD:

_____

_____

By:_____
Name:_____
Title:_____

[STATE OF ___________________________]

Then personally appeared before me the above named ___________ _________________________________, the ________________________________ of ____ and acknowledged that such person executed the foregoing instrument as such person's free act and deed and as the free act and deed of ______ ____ for the purposes therein stated and intending to be legally bound thereby.

____
, Notary Public
My commission expires:

[STATE OF ___________________________]

Then personally appeared before me the above named ___________ _________________________________, the ________________________________ of ____ and acknowledged that such person executed the foregoing instrument as such person's free act and deed and as the free act and deed of ______ ____ for the purposes therein stated and intending to be legally bound thereby.

____
, Notary Public
My commission expires:

[STATE OF ___________________________]

Then personally appeared before me the above named ___________ _________________________________, the ________________________________ of ____ and acknowledged that such person executed the foregoing instrument as such person's free act and deed and as the free act and deed of ______ ____ for the purposes therein stated and intending to be legally bound thereby.

____
, Notary Public
My commission expires:

EXHIBIT A

Legal Description

EXHIBIT D

Guaranty

For Value Received, and in consideration for, and as a material inducement to Rye Port Properties, LLC, a New Hampshire limited liability company, having an address of P.O. Box 345, Stratham, New Hampshire 03885 ("Landlord"), entering into the Ground Lease dated July_____, 2025 (the "Lease") with 2299 Lafayette Road, LLC, a Delaware limited liability company, with a New Hampshire address of 199 New Zealand Road, Seabrook, New Hampshire 03874_, having an address of 199 New Zealand Road, Seabrook, New Hampshire 03874 ("Tenant") for that certain property located at 2299 Lafayette Road, Portsmouth, New Hampshire, Rhino H10 Property Acquisitions, LLC, having an address of 199 New Zeland Road, Seabrook, New Hampshire 03874 (the "Guarantor"), unconditionally guarantees to Landlord the full and faithful payment, performance and observance of all the covenants, conditions and agreements therein provided to be performed and observed by Tenant under the Lease (the "Guaranty") subject to the terms and limitations of this Guaranty. This Guaranty shall in no way be terminated, affected or impaired by reason of the granting by the Landlord of any indulgences to Tenant or by reason of the exercise or waiver by the Landlord against Tenant of any of it rights under the Lease or by the relief of the Tenant from any of the Tenant's obligations under said Lease by operation of law or otherwise (including, but without limitation, the rejection of the Lease in connection with proceedings under the bankruptcy laws now or hereafter enacted); and the Guarantor hereby waives any and all surety ship defenses. Insofar as the payment by Tenant of any sums of money to Landlord is involved, this Guaranty is a Guaranty of payment and not of collection, and shall remain in full force and effect until payment in full to Landlord of all sums payable under Lease. Guarantor waives any right to require that resort be had to any security or to any other credit in favor of Tenant.

Notwithstanding the foregoing or any provision of this Guaranty to the contrary, pursuant to a Permitted Sublease or Permitted Transfer in accordance with terms and conditions of the Lease the Guarantor shall be released from any and all liability under this Guaranty..

The Guarantor further agrees that its liability under this Guaranty shall be primary, and that in any right of action which shall accrue to the Landlord under said Lease, the Landlord may, at Landlord's option, proceed against the undersigned and the Tenant, jointly or severally, and may proceed against the undersigned without having commenced any action against or having obtained any judgment against the Tenant. Guarantor does not require any notice of Tenant's nonpayment, nonperformance, or nonobservance of the covenants, terms, and conditions of the Lease. Guarantor hereby expressly waives the right to receive such notice.

It is agreed that the failure of the Landlord to insist in any one or more instances upon a strict performance or observance of any of the terms, provisions or covenants of the foregoing Lease or to exercise any right therein contained shall not be construed or deemed to be a waiver or relinquishment for the future of such term, provision, covenant or right.

The terms and provisions hereof shall inure to the benefit of the successors and assigns of Landlord, as Landlord under the Lease. Guarantor acknowledges that Guarantor has been

represented by counsel and that this Guaranty was available for review and negotiation prior to its execution. Guarantor will pay to Landlord of all Landlord's expenses including, but not limited to, reasonable attorney's fees, incurred in enforcing this Guaranty. This Lease and this Guaranty shall be governed by, interpreted under the laws of, and enforced in the courts of the Commonwealth of Massachusetts.

Capitalized terms used herein and not otherwise defined shall have the meanings defined to them under the Lease.

IN WITNESS WHEREOF, the undersigned Guarantor has duly executed this instrument, this 18 day of July, 2025.

Rhino H10 Property Acquisitions, LLC

By: Chris Rondeau dotloop verified 07/18/25 4:01 PM EDT 5B3N-MNM4-NRIY-4L4Q

Name: Chris Rondeau

Title: Manager

ALTA/NSPS LAND TITLE SURVEY

2299 LAFAYETTE ROAD,
PORTSMOUTH, ROCKINGHAM COUNTY, NEW HAMPSHIRE

SITE INFORMATION

N/F: RYE PORT PROPERTIES LLC
2299 LAFAYETTE RD, PORTSMOUTH, NH 03870
APN: 0272-0004-0000
79,998 ± SQUARE FEET, OR 1.837 ± ACRES

TITLE COMMITMENT INFORMATION

THE PROPERTY HEREON DESCRIBED IS THE SAME AS THE PERTINENT PROPERTY AS DESCRIBED IN FIRST AMERICAN TITLE INSURANCE COMPANY, TITLE COMMITMENT NUMBER: NCS-1279492-BOS1, WITH A COMMITMENT DATE OF OCTOBER 9, 2025 AT 8:00 A.M.

SCHEDULE A DESCRIPTION

2299 Lafayette Road Street, in the City/Town of Portsmouth, County of Rockingham, and State of New Hampshire.

Real property in the City of Portsmouth, County of Rockingham, State of New Hampshire, described as follows:

Tract 1:

A certain tract or parcel of land with the buildings thereon being shown as "Proposed Map 272, Lot 4-1" on a certain plan of land entitled "Subdivision Plat, Primax Properties, LLC, Advance Auto Parts Store, 2299 Lafayette Road, City of Portsmouth, Rockingham County, New Hampshire, recorded in the Rockingham County Registry of Deeds as Plan #D-33166, bounded and described as follows:

Commencing at a point located on the Southerly side of Lafayette Road (Route 1), said point also being the Northeasterly corner of the herein described tract of land, thence running South 15° 20' 44" East a distance of 400.00 feet to a point; thence turning and running South 74° 17' 01" West a distance of 200.00 feet to a point; thence turning and running North 15° 20' 44" West a distance of 400.00 feet to a point; said point also being the Southeasterly side line of said Lafayette Road; thence turning and running North 74° 17' 01" East a distance of 200.00 feet to the point ofbeginning.

Tract 2:

Reciprocal Easement Agreement between Lambert Lake Associates, LLC and Advance Stores Company, Incorporated dated July 11, 2005 and recorded in the Rockingham County Registry of Deeds at Book 4521, Page 1926.

NOTES CORRESPONDING TO SCHEDULE B

(8) — *EASEMENT TO NEW HAMPSHIRE ELECTRIC COMPANY AND NEW ENGLAND TELEPHONE AND TELEGRAPH COMPANY, DATED MAY 31, 1957 AND RECORDED JUNE 21, 1957 IN **BOOK 1435, PAGE 269**. (AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)*

(9) — *EASEMENT DEED GRANTED TO THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, DATED JULY 05, 2005 AND RECORDED JULY 29, 2005 IN **BOOK 4521, PAGE 1924**. (AFFECTS, PLOTTED AS SHOWN)*

(10) — *RECIPROCAL EASEMENT AGREEMENT BY AND BETWEEN LAMBERT LAKE ASSOCIATES, LLC AND ADVANCE STORES COMPANY, INCORPORATED, DATED JULY 05, 2005 AND RECORDED JULY 29, 2005 IN **BOOK 4521, PAGE 1926**. (AFFECTS, PLOTTED AS SHOWN)*

(11) — *GROUND LEASE BY AND BETWEEN LAMBERT LAKE ASSOCIATES, LLC, AS LANDLORD, AND ADVANCE STORES COMPANY, INCORPORATED, AS TENANT, NOTICE OF WHICH IS DATED MARCH 21, 2006 AND RECORDED APRIL 04, 2006 IN **BOOK 4637, PAGE 2672**; AS AFFECTED BY WAIVER DATED DECEMBER 17, 2009 AND RECORDED JANUARY 15, 2010 IN **BOOK 5083, PAGE 802**. (AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)*

(12) — *NOTICE OF ACTIVITY AND USE RESTRICTION BY RYE PORT PROPERTIES, LLC, DATED MARCH 01, 2012 AND RECORDED MARCH 01, 2012 IN **BOOK 5292, PAGE 2562**. SEE **PLAN D-37134**.*

NOTE: SEE REQUIREMENTS SECTION HEREOF FOR THE REQUIREMENT THAT THE ABOVE-REFERENCED NOTICE OF ACTIVITY AND USE LIMITATION MUST BE INCORPORATED IN FULL OR BY REFERENCE INTO ALL FUTURE DEEDS, EASEMENTS, MORTGAGES, LEASES, LICENSES, OCCUPANCY AGREEMENTS, OR ANY OTHER INSTRUMENT OF TRANSFER WHEREBY AN INTEREST IN AND/OR A RIGHT TO USE THE LAND OR A PORTION THEREOF IS CONVEYED. (AFFECTS, PLOTTED AS SHOWN)

(13) — *TEMPORARY CONSTRUCTION AND PERMANENT SEWER EASEMENT BY AND BETWEEN RYE PORT PROPERTIES, LLC AND CHARTER FOODS NORTH, LLC, DATED NOVEMBER 19, 2015 AND RECORDED JUNE 08, 2016 IN **BOOK 5721, PAGE 2313**. (AFFECTS, CONTAINS NO PLOTTABLE EASEMENT ITEMS)*

(14) — *ANY AND ALL MATTERS AS SHOWN OR REFERENCED ON A CERTAIN PLAN ENTITLED "SUBDIVISION PLAT FOR PRIMAX PROPERTIES, LLC". DATED DECEMBER 23, 2004 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS **PLAN NO. D-33166**. (AFFECTS, PLOTTED AS SHOWN)*

(15) — *ANY AND ALL MATTERS AS SHOWN OR REFERENCED ON A CERTAIN PLAN ENTITLED "A U.R. PLAN FOR LAMBERT LAKE, LLC, LAND OF RYE PORT PROPERTIES, LLC, TAX MAP 272, LOTS 4 & 10, 2299 LAFAYETTE ROAD, PORTSMOUTH, NEW HAMPSHIRE", DATED APRIL 27, 2010 AND RECORDED IN THE ROCKINGHAM COUNTY REGISTRY OF DEEDS AS **PLAN NO. D-37134**. (AFFECTS, PLOTTED AS SHOWN)*

(16) — *MATTERS SHOWN ON **PLAN NO. D-38998**. (AFFECTS, PLOTTED AS SHOWN)*

PARKING INFORMATION

REGULAR= 40
HANDICAP= 2
TOTAL= 42

FLOOD ZONE INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS PROPERTY IS IN ZONE "X" OF THE FLOOD INSURANCE RATE MAP, COMMUNITY PANEL NO. 33015C0270F, WHICH BEARS AN EFFECTIVE DATE OF 01/29/2021 AND IS NOT IN A SPECIAL FLOOD HAZARD AREA.

ZONE "X" - AREA OF MINIMAL FLOOD HAZARD, USUALLY DEPICTED ON FIRMS AS ABOVE THE 500-YEAR FLOOD LEVEL. ZONE "X" IS THE AREA DETERMINED TO BE OUTSIDE THE 500-YEAR FLOOD AND PROTECTED BY LEVEE FROM 100-YEAR FLOOD.

BASIS OF BEARING

THE BASIS OF BEARING OF THIS SURVEY IS GRID NORTH BASED ON THE NORTHEAST LINE OF THE SUBJECT PROPERTY. THE BEARING IS DENOTED AS S33°10'12"E PER GPS COORDINATE OBSERVATIONS NEW HAMPSHIRE STATE PLANE NAD83.
LATITUDE = 43°02'03.4920"
LONGITUDE = -70°46'49.2583"
CONVERGENCE ANGLE = 00°36'17.57"

SIGNIFICANT OBSERVATIONS

NONE OBSERVED AT THE TIME OF THE ALTA/NSPS SURVEY.

UTILITY INFORMATION

THE UTILITIES SHOWN ON THIS DRAWING HEREON HAVE BEEN LOCATED BY FIELD MEASUREMENTS, UTILITY MAP DRAWINGS, NEW HAMPSHIRE 811 DIG UTILITY LOCATE REQUEST, AND PRIVATE UTILITY LOCATE CONTRACTED BY BLEW AND ASSOCIATES. BLEW AND ASSOCIATES MAKES NO WARRANTY TO THE EXACT LOCATION OF ANY UNDERGROUND UTILITIES SHOWN OR NOT SHOWN ON THIS DRAWING. IT IS THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY ANY AND ALL UTILITIES PRIOR TO CONSTRUCTION. TICKET NUMBER: 20253216635

COMPANY:	*CONTACT:*
COMCAST - NH	*(317) 810-8269*
CONSOLIDATED COMMUNICATIONS	*(207) 852-8315 x1*
EVERSOURCE - ELECTRIC	*(207) 852-8315 x1*
PORTSMOUTH DPW	*(603) 427-1530*
UNITIL - NORTHERN UTILITIES - NH - GAS	*(603) 294-5177*

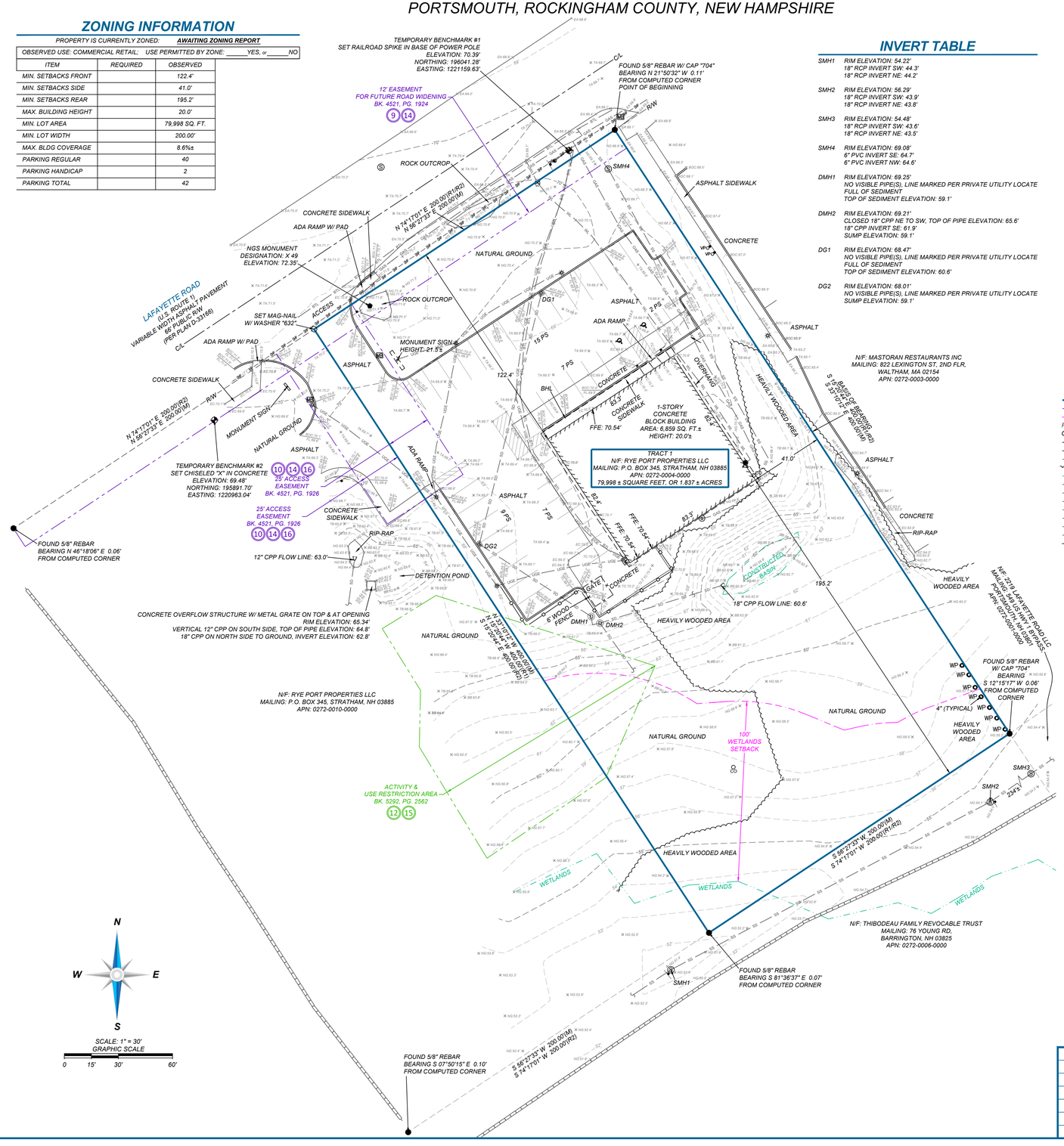
PRIVATE UTILITY LOCATE NOTES:
1. UNKNOWN WATERLINE PIPE TYPE/SIZE, NO GIS MAP PROVIDED TO SURVEYOR.

ZONING INFORMATION

PROPERTY IS CURRENTLY ZONED: ***AWAITING ZONING REPORT***

OBSERVED USE: COMMERCIAL RETAIL; USE PERMITTED BY ZONE: _____YES, or _____NO

ITEM	*REQUIRED*	*OBSERVED*
MIN. SETBACKS FRONT		*122.4'*
MIN. SETBACKS SIDE		*41.0'*
MIN. SETBACKS REAR		*195.2'*
MAX. BUILDING HEIGHT		*20.0'*
MIN. LOT AREA		*79,998 SQ. FT.*
MIN. LOT WIDTH		*200.00'*
MAX. BLDG COVERAGE		*8.6%±*
PARKING REGULAR		*40*
PARKING HANDICAP		*2*
PARKING TOTAL		*42*



INVERT TABLE

SMH1 — *RIM ELEVATION: 54.22'*
18" RCP INVERT SW: 44.3'
18" RCP INVERT NE: 44.2'

SMH2 — *RIM ELEVATION: 56.29'*
18" RCP INVERT SW: 43.9'
18" RCP INVERT NE: 43.8'

SMH3 — *RIM ELEVATION: 54.48'*
18" RCP INVERT SW: 43.6'
18" RCP INVERT NE: 43.5'

SMH4 — *RIM ELEVATION: 69.08'*
6" PVC INVERT SE: 64.7'
6" PVC INVERT NW: 64.6'

DMH1 — *RIM ELEVATION: 69.25'*
NO VISIBLE PIPE(S), LINE MARKED PER PRIVATE UTILITY LOCATE
FULL OF SEDIMENT
TOP OF SEDIMENT ELEVATION: 59.1'

DMH2 — *RIM ELEVATION: 69.21'*
CLOSED 18" CPP NE TO SW, TOP OF PIPE ELEVATION: 65.6'
18" CPP INVERT SE: 61.9'
SUMP ELEVATION: 59.1'

DG1 — *RIM ELEVATION: 68.47'*
NO VISIBLE PIPE(S), LINE MARKED PER PRIVATE UTILITY LOCATE
FULL OF SEDIMENT
TOP OF SEDIMENT ELEVATION: 60.6'

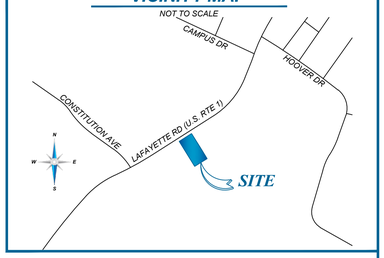
DG2 — *RIM ELEVATION: 68.01'*
NO VISIBLE PIPE(S), LINE MARKED PER PRIVATE UTILITY LOCATE
SUMP ELEVATION: 59.1'

LEGEND & SYMBOLS

- FOUND MONUMENT AS NOTED
- SET MONUMENT AS NOTED
- FOUND NGS MONUMENT
- SET TEMPORARY BENCHMARK
- HANDICAP PARKING
- POWER POLE
- LIGHT POLE
- GUY ANCHOR
- ELECTRIC METER
- WATER SPIGOT
- WATER VALVE
- GAS METER
- FUEL STATION TANK VENT PIPE
- SANITARY MANHOLE (SMH#)
- CLEANOUT
- STORM MANHOLE
- DRAIN GRATE (DG#)
- STORM CULVERT PIPE
- SIGN
- BOLLARD
- MAILBOX
- WOOD POST
- BHL — BUILDING HEIGHT LOCATION
- FFE — FINISHED FLOOR ELEVATION
- PS — PARKING SPACE(S)
- (M) — MEASURED/CALCULATED DIMENSION
- (R1) — RECORD DIMENSION PER BK. 5083, PG. 764
- (R2) — RECORD DIMENSION PER PLAN D-33166
- CPP — CORRUGATED PLASTIC PIPE
- PVC — POLYVINYL CHLORIDE PIPE
- RCP — REINFORCED CONCRETE PIPE
- BB — BOTTOM OF BANK
- BOC — BACK OF CURB
- EA — EDGE OF ASPHALT
- EC — EDGE OF CONCRETE
- FL — FLOW LINE
- NG — NATURAL GROUND
- TA — TOP OF ASPHALT
- TB — TOP OF BANK
- TC — TOP OF CONCRETE
- BOUNDARY LINE
- EASEMENT LINE
- SETBACK LINE
- R/W — RIGHT-OF-WAY LINE
- C/L — CENTERLINE OF RIGHT-OF-WAY
- FENCE LINE
- METAL GUARDRAIL
- ROCK WALL
- TREE CANOPY
- LIMITS OF WETLANDS
- OHP — OVERHEAD POWER LINE
- UGE — UNDERGROUND ELECTRIC LINE
- BTL — UNDERGROUND TELEPHONE LINE
- WL — UNDERGROUND WATER LINE
- GAS — UNDERGROUND GAS LINE
- SS — SANITARY SEWER LINE
- SD — STORM SEWER LINE
- NOT TO SCALE

VICINITY MAP

NOT TO SCALE



GENERAL NOTES

1. *SOME FEATURES SHOWN ON THIS PLAT MAY BE SHOWN OUT OF SCALE FOR CLARITY.*
2. *DIMENSIONS ON THIS PLAT ARE EXPRESSED IN FEET AND DECIMAL PARTS THEREOF UNLESS OTHERWISE NOTED. MONUMENTS WERE FOUND AT POINTS WHERE INDICATED.*
3. *IN REGARD TO ALTA/NSPS TABLE A ITEM 16, THERE WAS NO OBSERVABLE EVIDENCE OF RECENT EARTH MOVING WORK, BUILDING CONSTRUCTION OR ADDITIONS EXCEPT AS SHOWN HEREON.*
4. *IN REGARD TO ALTA/NSPS TABLE A ITEM 17, THERE WERE NO KNOWN PROPOSED CHANGES IN RIGHT OF WAY LINES, RECENT STREET OR SIDEWALK CONSTRUCTION OR REPAIRS EXCEPT AS SHOWN HEREON.*
5. *AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A SOLID WASTE DUMP, SUMP, OR SANITARY LANDFILL.*
6. *AT THE TIME OF THE ALTA/NSPS SURVEY, THERE WAS NO OBSERVABLE EVIDENCE OF SITE USE AS A CEMETERY, ISOLATED GRAVE SITE OR BURIAL GROUNDS.*
7. *COMPLETED FIELD WORK WAS AUGUST 15, 2025.*
8. *THE DISTANCES SHOWN HEREON ARE UNITS OF GROUND MEASUREMENT.*
9. *THE NEAREST INTERSECTING STREET IS THE INTERSECTION OF LAFAYETTE ROAD AND CONSTITUTION AVENUE, WHICH IS APPROXIMATELY 755' FROM THE NORTHWEST CORNER OF THE SUBJECT PROPERTY.*
10. *THE SUBJECT PROPERTY HAS DIRECT & INDIRECT ACCESS TO LAFAYETTE ROAD, BEING A PUBLICLY DEDICATED RIGHT-OF-WAY, AS SHOWN PER PLAN D-33166.*
11. *NO SURVEYOR OR ANY OTHER PERSON OTHER THAN A LICENSED NEW HAMPSHIRE ATTORNEY MAY PROVIDE LEGAL ADVICE CONCERNING THE STATUS OF TITLE TO THE PROPERTY DESCRIBED IN THIS SURVEY ("THE SUBJECT PROPERTY"). THE PURPOSE OF THIS SURVEY, AND THE COMMENTS RELATED TO THE SCHEDULE B-II EXCEPTIONS, IS ONLY TO SHOW THE LOCATION OF BOUNDARIES AND PHYSICAL OBJECTIONS IN RELATION THERETO. TO THE EXTENT THAT THE SURVEY INDICATES THAT THE LEGAL INSTRUMENT "AFFECTS" THE SUBJECT PROPERTY, SUCH STATEMENT IS ONLY INTENDED TO INDICATE THAT PROPERTY BOUNDARIES INCLUDED IN SUCH INSTRUMENT INCLUDE SOME OR ALL OF THE SUBJECT PROPERTY. THE SURVEYOR DOES NOT PURPORT TO DESCRIBE HOW SUCH INSTRUMENT AFFECTS THE SUBJECT PROPERTY OR THE ENFORCEABILITY OR LEGAL CONSEQUENCES OF SUCH INSTRUMENT.*
12. *NAMES AND ADDRESSES OF ADJOINING PROPERTY OWNERS WERE TAKEN FROM THE CITY OF PORTSMOUTH GIS.*
13. *THE SUBJECT PROPERTY SHOWN HEREON FORMS A MATHEMATICALLY CLOSED FIGURE AND IS CONTIGUOUS WITH THE ADJOINING PUBLIC RIGHT-OF-WAY AND/OR ADJOINING PARCELS WITH NO GAPS OR OVERLAPS.*
14. *IN REGARD TO ALTA/NSPS TABLE A ITEM 10, NO VISIBLE DIVISION OR PARTY WALLS WITH RESPECT TO ADJOINING PROPERTIES WERE OBSERVED AT THE TIME THE FIELD SURVEY WAS PERFORMED, NOR WERE ANY DESIGNATED BY THE CLIENT.*
15. *ELEVATIONS ESTABLISHED WITH GPS OBSERVATIONS UTILIZING THE NATIONAL GEODETIC SURVEY (NGS) NETWORK WITH ORIGINATING BENCHMARK DESIGNATION: X 49, VERTICAL DATUM BASED UPON NORTH AMERICAN VERTICAL DATUM (NAVD88) IN US SURVEY FEET. CONTOURS SHOWN ARE ONE FOOT INTERVALS.*
PID: OO0281
PUBLISHED ELEVATION: 72.35'
MONUMENT DESCRIPTION: BENCHMARK DISK STAMPED "X 49 1966" SET IN A ROCK OUTCROP
16. *WETLAND LOCATIONS SHOWN HEREON WERE PROVIDED BY BL COMPANIES, A QUALIFIED SPECIALIST.*

SURVEYOR'S CERTIFICATE

TO: FIRST AMERICAN TITLE INSURANCE COMPANY:

THIS IS TO CERTIFY THAT THIS MAP OR PLAT AND THE SURVEY ON WHICH IT IS BASED WERE MADE IN ACCORDANCE WITH THE 2021 MINIMUM STANDARD DETAIL REQUIREMENTS FOR ALTA/NSPS LAND TITLE SURVEYS, JOINTLY ESTABLISHED AND ADOPTED BY ALTA AND NSPS, AND INCLUDES ITEMS 2, 3, 4, 5, 6A, 6B, 7B1, 7C, 8, 9, 10, 11B, 13, 14, 16, 17, AND 19 OF TABLE A THEREOF. THE FIELD WORK WAS COMPLETED ON 08/15/2025.

DATE OF PLAT OR MAP: 08/22/2025

PRELIMINARY

HOLLAND E. SHAW
PROFESSIONAL LAND SURVEYOR NO. 632
STATE OF NEW HAMPSHIRE
NEW HAMPSHIRE C.O.A. 00545

BLEW

Surveying | Engineering | Environmental

3825 N. SHILOH DRIVE - FAYETTEVILLE, AR 72703
EMAIL: SURVEY@BLEWINC.COM
OFFICE: 479.443.4506 FAX: 479.582.1883
WWW.BLEWINC.COM

DATE	*REVISION HISTORY*	*BY*
09/10/25	*WETLANDS DELINEATION*	*AJK*
09/24/25	*CLIENT COMMENTS*	*KLR*
11/24/25	*TITLE ADDITION*	*AJK*

SURVEYOR JOB NUMBER: *25-6116*	***SURVEY DRAWN BY:*** *AJK - 08/22/2025*
SURVEY REVIEWED BY: *KLR*	***SHEET:*** *1 OF 1*

Architecture
Engineering
Environmental
Land Surveying
BL Companies

An Employee-Owned Company

WETLAND AND WATERCOURSE EVALUATION REPORT

2299 Lafayette Road

2299 Lafayette Road
Portsmouth, Rockingham County, NH
BL Project No: 2502266

Prepared for:

Blew & Associates
3825 N. Shiloh Drive
Fayetteville, AR 72703

Prepared by:

BL Companies
2601 Market Place, Suite 350
Harrisburg, PA 17110
717-651-9850

Date: September 26, 2025

CPSS
Certified Professional
Soil Scientist
SAGAN M. SIMKO
36359

Sagan Simko
Senior Project Scientist II

Wesley Wolf
Senior Project Manager

TABLE OF CONTENTS

APPENDICES

I. INTRODUCTION

A. PROJECT LOCATION AND DESCRIPTION

Blew & Associates is proposing the redevelopment of a 1.81-acre commercial property at 2299 Lafayette Road, Portsmouth, Rockingham County, NH 03801 (see **Appendix A**, **Figure 1** and **Figure 2**).

Blew & Associates ("Client") has contracted BL Companies ("BL") to characterize existing wetlands and watercourses that may be affected by the Project and describe the habitats and major vegetative cover types within the Study Area. BL conducted wetland and watercourse field delineations within a Study Area defined by the Client (see **Appendix A**) on August 27, 2025. Investigations were conducted to identify, and delineate if present, the extent and location of jurisdictional wetlands and "Waters of the U.S." within the Study Area pursuant to the Federal Clean Water Act (Sections 401 and 404), and in New Hampshire, activities in non-tidal wetlands are also regulated under New Hampshire Revised Statutes: Title L - Water Management and Protection; Chapter 482-A - Fill and Dredge in Wetlands. In conjunction with USACE, this program is administered by the New Hampshire Department of Environmental Services (NH DES). Jurisdictional wetlands were defined using the 1987 *U.S. Army Corps of Engineers Wetland Delineation Manual* (Environmental Laboratory 1987) and subsequent guidance documents including the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0)* (US Corps of Engineers, January 2012). Waters of the U.S., which include all streams, adjacent wetlands, and other waterbodies, are defined in 33 CFR 328.3(a). Professional qualifications of the individual(s) involved in the performance of field surveys and preparation of this report are provided in Appendix D.

B. DESCRIPTION OF STUDY AREA

The Study Area is comprised of a developed commercial area, with a building and paved parking areas within its northern portion, and forested and shrubby area within its southern portion. The area surrounding the Study Area consists of commercial buildings located to the northwest, southwest, and northeast, a waterpark to the north, and forested area to the south and southeast. Lafayette Road (Route 1) borders the Study Area to the north.

The Study Area is located within the New England Seaboard Physiographic Section of New Hampshire. This Physiographic Section runs from northern Maine south to eastern Connecticut. The New Hampshire section is comprised of 3 distinct areas; the Merrimack Valley, the Hills and Lakes Region, and the Connecticut River Valley. The Merrimack Valley extends from the Massachusetts border north to central New Hampshire. The Merrimack River runs through this hilly landscape. The soil is fertile and fruits and hay are grown in this region. The valley is also home to New Hampshire's most prominent mill and factory cities and towns.

The Hills and Lakes region wraps around the Merrimack Valley region on the east, the north, and the west; from the border of Maine arcing northwest and then south almost reaching the border of Vermont. This area contains most of New Hampshire's major lakes, including its largest; Lake Winnipesaukee. The Connecticut River Valley extends from north to south along the Connecticut River, New Hampshire's border with Vermont. The lowlands are comprised of fertile farmland and the hills are covered with hardwood forests (NH DES).

II. METHODOLOGY

A. RECORDS RESEARCH

A desktop analysis of the Study Area was conducted prior to performing the field survey and included the entire defined area of investigation as shown on the mapping in Appendix A. Data reviewed included aerial photography, US Geological Survey 7.5-Minute Topographic Quadrangle Maps, US Fish and Wildlife Service (USFWS) National Wetland Inventory Maps (NWI), Flood Insurance Rate Maps (FIRM) provided by the Federal Emergency Management Administration (FEMA), soil information from the United States Department of Agriculture (USDA) Natural Resources Conservation Service (NRCS), and the New Hampshire Department of Environmental Services (NH DES) state-mapped wetlands data. Other sensitive resource data were reviewed as available. This compiled data was used during field investigations and the subsequent report.

B. FIELD INVESTIGATION

A field investigation was conducted to verify records research, identify land use and plant communities within the Study Area, and delineate wetland and watercourse features.

1. WETLAND AND WATERCOURSE DELINEATION

Investigations included the inspection of the Study Area to identify areas that satisfied the three (3) wetland criteria under natural (typical) conditions: a dominance of hydrophytic vegetation, wetland hydrology, and hydric soils, according to the 1987 US Army Corps of Engineers (USACE) manual and 2012 Regional Supplement mentioned above. Failure to confirm all three (3) parameters would result in the finding that the area under evaluation is a non-wetland under typical conditions. Furthermore, waterbodies are identified as features with a defined bed and bank or other geographical feature that appears to hold or convey water at some point throughout the year.

When identified, wetland sampling was conducted along the gradient between wetland and adjacent upland areas to identify the location of the wetland boundary based upon the above criteria. Sample Points (and/or data points) were placed within selected locations of wetland areas to identify important, defining characteristics and to resolve obscure transitions between mixed wetlands and uplands. Visual estimates of percent vegetation cover by species,

indicators of hydrology, and a soil profile were recorded on Wetland Determination Data Forms.

When identified, waterbody data collection included various physical parameters such as height of banks, top of bank to top of bank width, ordinary high water, water depth, presence of aquatic flora and/or fauna, substrate characteristics, and flow regime.

Mapping of any wetland boundaries and watercourse top of bank ("TOB") was supplemented using a Trimble® Global Positioning System (GPS) unit capable of sub-foot accuracy.

2. WETLAND AND WATERCOURSE CLASSIFICATION

Identified wetlands were classified in accordance with the methods of Cowardin *et al*. (1979), which categorizes wetlands based on dominant (>30 percent cover within a single stratum) vegetation: palustrine emergent ("PEM"), palustrine scrub-shrub ("PSS"), palustrine forested ("PFO"), or some combination of these wetland types. Inundated features, such as ponds and lakes, were classified as palustrine unconsolidated bottom ("PUB"). Wetlands were also classified with the Hydrogeomorphic Method (HGM) of wetland classification (Brinson, 1993).

Hydrology was considered present when a minimum of one (1) primary or two (2) secondary indicators were identified. Indicators of wetland hydrology (saturated or inundated soils) along with signs of previous prolonged inundation within the upper 12 inches of the surface were noted at each sample location where observed. Other positive primary indicators of hydrology include high water table, watermarks, sediment deposits, drift deposits, algal mat or crust, iron deposits, inundation visible on aerial imagery, sparsely vegetated concave surface, water-stained leaves, aquatic fauna, marl deposits, hydrogen sulfide odor, oxidized rhizospheres on living roots, presence of reduced iron, recent iron reduction in tilled soils, or thin muck surface. Additionally, secondary indicators of hydrology include surface soil cracks, drainage patterns, moss trim lines, dry-season water table, crayfish burrows, saturation visible on aerial imagery, stunted or stressed plants, geomorphic position, shallow aquitard, and microtopographic relief. A positive FAC-neutral test which was evaluated as a hydrophytic vegetation indicator is also considered a secondary indicator of hydrology.

Dominant species in a stratum (tree, shrub, herbaceous or vine) were determined by visually estimating the percent cover of each species within a plot of an approximately 30-foot (ft.) radius for trees, 15-ft. radius for saplings/shrubs, 5-ft. radius for herbs, and a 30-ft. radius for woody vines. Dominant vegetation was determined by the 50/20 Rule; by establishing the plant species that individually or collectively account for more than 50 percent of the total coverage of vegetation in the stratum, plus any other species that, by itself, accounts for at least 20 percent of the total. Species nomenclature and wetland indicator status follows that of the

USACE National Wetland Plant List (2022, Version 3.6). Hydrophytic species are those wetland plants with an indicator status of OBL (obligate wetland), FACW (facultative wetland), or FAC (facultative). Species listed as FACU (facultative upland) or UPL (upland) are more indicative of upland areas and generally do not occur in wetlands. The hydrophytic vegetation criterion was determined to be present if the following tests were met including the Rapid Test, the Dominance Test or the Prevalence Index. All wetland habitats were classified according to the USFWS, and Classification of Wetlands and Deepwater Habitats of the United States (Cowardin *et al*. 1979).

As outlined in the National Technical Committee for Hydric Soils Version 8.2 (2018), soils were examined and sampled by using a hand auger or sharpshooter shovel to dig to a depth of approximately 16 to 20 inches or to refusal. Soil colors were determined using the 2010 Munsell® Soil Color Chart and taken while moist, or were wetted. Observations of redoximorphic (redox) concentrations, the apparent accumulation of iron (Fe) and manganese (Mn) oxides within the soil profile were noted as appropriate. Redox depletions, bodies of low chroma and value of four (4) or more where Fe-Mn oxides have been stripped were also noted, where observed. These features are usually an indication of periodic, seasonal, or permanent saturated soil conditions (Vepraskas 1994). Observations of hydric soil characteristics were based on the United States Department of Agriculture (USDA) textures, and hydric soil was considered present if one or more of the indicators were identified.

Biophysical elements such as a wetland's landscape position, geology, hydrology, substrate, and vegetation determine the wetland's functions and to what capacity they are performed. Due to the differing biophysical characteristics between on-site wetlands, the functions the wetlands provide and the capacity to perform those functions can vary. To better understand these differences, a description of the assessed wetland functions and values is completed based on the 1999 USACE Highway Methodology Workbook Supplement. This method requires describing each of the wetland communities and indicating the functions and values they provide. Biological, physical, chemical, and anthropogenic variables are all considered in the assessment. Wetland functions are defined as self-sustaining properties of a wetland ecosystem that exist in the absence of society. Wetland values are defined as benefits derived from one or more wetland functions and the physical characteristics that are associated with the wetland.

Field investigations also included the identification of watercourses based on flow regime: perennial (PER), intermittent (INT), or ephemeral (EPH). Perennial watercourses contain base flow supported with ground water throughout the year. Intermittent watercourses are those that contain base flow supported by ground water at least seasonally. Ephemeral waterbodies are primarily supported by precipitation. Watercourses were also classified in accordance with

Cowardin *et al*. (1979). Riverine Systems include all wetlands and deep-water habitats contained within a channel. A channel is defined as "an open conduit either naturally or artificially created which periodically or continuously contains moving water, or which forms a connecting link between two bodies of standing water." There are six (6) subsystems: Tidal, Lower Perennial, Upper Perennial, Intermittent, Unknown Perennial, and Ephemeral. Jurisdiction is ultimately determined through the USACE's Jurisdictional Determination process.

At the state level in New Hampshire, wetlands are regulated by the New Hampshire Department of Environmental Services (NHDES) under the Fill and Dredge in Wetlands Act (RSA 482-A).

III. RESULTS

A. RECORDS RESEARCH

Aerial photography indicates that the Study Area is predominantly comprised of a developed commercial area, with a building and paved parking areas within its northern portion, and forested and shrubby area within its southern portion. The area surrounding the Study Area consists of commercial buildings located to the northwest, southwest, and northeast, a waterpark to the north, and forested area to the south and southeast. Lafayette Road (Route 1) borders the Study Area to the north (see **Appendix A**, **Figure 6**). The USGS Portsmouth, NH 7.5-Minute Topographic Quadrangle (see **Appendix A**, **Figure 2**) and Google Earth indicate the Study Area has an elevation ranging from approximately 50 to 70 feet above mean sea level (AMSL).

According to the NRCS Web Soil Survey, two (2) soil series were identified within the Study Area. **Table 1** includes the soil series and their physical characteristics and limitations. Soils mapping for the Study Area is provided in **Appendix A**, **Figure 3**.

Table 1. Soil Series within the Study Area

Map Unit Symbol	Soil Unit Name	Percent of Study Area (%)	Hydric Soil Components (%)	Drainage Class	Depth to Restrictive Layer (inches)	Depth to Water Table (inches)
314A	Pipestone sand, 0 to 5 percent slopes	17.7	95	Poorly Drained	More than 80 inches	About 6 to 18 inches
699	Urban land	82.3	0	Unranked	Unranked	Unranked

The USFWS NWI mapping does not indicate the presence of NWI-mapped features within the Study Area. An adjacent area of NWI-mapped wetlands is located to the south and consists of

a Palustrine, Forested, Broad-Leaved Deciduous / Scrub-Shrub, Broad-Leaved Deciduous, Seasonally Flooded/Saturated (PFO1/SS1E) feature (see **Appendix A**, **Figure 4**).

According to FEMA mapping, the Study Area is located in an area of minimal flood hazard (Zone X) (Panel 33015C0270F, effective date January 29, 2021) (see **Appendix A**, **Figure 5**).

B. FIELD INVESTIGATION

The Study Area mimicked the results of the desktop analysis and consisted of a developed commercial area, with a building and paved parking areas within its northern portion, and forested and shrubby area within its southern portion. The area surrounding the Study Area consists of commercial buildings located to the northwest, southwest, and northeast, a waterpark to the north, and forested area to the south and southeast. Lafayette Road (Route 1) borders the Study Area to the north.

One (1) Palustrine, Forested / Scrub-Shrub (PFO/PSS) wetland and one (1) Palustrine, Emergent (PEM) wetland consisting of a constructed stormwater basin, were observed to be located within the southwestern and central portions of the Study Area, respectively. Detailed information pertaining to these wetlands is included within the Wetland and Watercourse Delineation Mapping, photographs of the identified features taken to provide visual documentation of the area, and Wetland Determination Data Forms provided in **Appendices A**, **B**, and **C**, respectively.

1. WETLANDS

Two (2) wetland features were observed within the Study Area (see **Appendix A**, **Figure 7**).

Feature Name:	Wetland A (Appendix B - Photo #1 - Sample Point 1 [SP 1])
Cowardin Classification:	PFO/PSS
HGM Code:	DEPRESS (Depressional)
Location:	43.033343, -70.780255
Description:	Wetland A is a PFO/PSS wetland situated within the southwestern portion of the Study Area. Wetland A is a depressional wetland feature that receives hydrology from groundwater, upland sheet flow, and precipitation events.

Feature Name:	Wetland B (Appendix B - Photo #5 - Sample Point 5 [SP 5])
Cowardin Classification:	PEM
HGM Code:	DEPRESS (Depressional)
Location:	43.033438, -70.780225

Description:	Wetland B is a PEM wetland situated within the central portion of the Study Area that consists of a constructed stormwater basin. Wetland B is a depressional wetland feature that receives hydrology from upland sheet flow, and precipitation events.

2. WATERCOURSES

No watercourses were observed within or in close proximity to the Study Area during the time of the site reconnaissance.

IV. SUMMARY

Regulated features comprising of one (1) Palustrine, Forested / Scrub-Shrub (PFO/PSS) wetland and one (1) Palustrine, Emergent (PEM) wetland consisting of a constructed stormwater basin, were observed to be within the southwestern portion and central portion of the Study Area, respectively.

The findings of this investigation represent a study of the proposed project for non-tidal wetlands and watercourses. This type of study depends on the time of year, the conditions at that time of year, site-specific influences (e.g., artificial disturbance), and individual professional judgment. It is, therefore, a professional estimate of the Study Area's wetlands based upon available information and techniques.

The data that is the basis for this report is on file at BL Companies' Meriden, CT office.

Based on the findings of the wetland delineation, BL Companies recommends avoiding impacts to the wetland areas and watercourses delineated on site. If impacts are unavoidable, BL recommends applying for wetland permits through the New Hampshire Department of Environmental Services (NH DES) and the U.S. Army Corps of Engineers, if necessary.

V. REFERENCES

1. 33 United States Code, 2010 Edition. *Navigation and Navigable Waters.*

2. Brinson, M. M. 1993. *A Hydrogeomorphic Classification for Wetlands*. Technical Report WRP-DE-4, U.S. Army Corps of Engineers Engineer Waterways Experiment Station, Vicksburg, MS.

3. Cowardin, L.M., V. Carter, F.C. Golet and E.T. LaRoe, 1979. *Classification of Wetlands and Deepwater Habitats of the United States.* U.S. Department of the Interior, Fish and Wildlife Service. Washington, D.C. FWS/OBS-79/31.

4. Environmental Laboratory, 1987. *Corps of Engineers Wetland Delineation Manual.* Technical Report Y871. US Army Engineer Waterways Experiment Station. Vicksburg, Miss.

5. Google Earth, provider of satellite imagery and geolocation services, www.google.com/earth

6. Munsell Soil Color Charts, Year 2010 Revised Washable Edition.

7. National Technical Committee for Hydric Soils Version 8.2 (2018).

8. U.S Army Corps of Engineers, 2022*. National Wetland Plant List, version 3.6*. http://wetland-plants.usace.army.mil/

9. *New Hampshire Department of Environmental Services*, 2025, www.des.nh.gov/.

10. New Hampshire General Court. *Fill and Dredge in Wetlands Act, RSA 482-A*. https://www.gencourt.state.nh.us/rsa/html/L/482-A/482-A-mrg.htm

11. Munsell Soil Color Charts, Year 2010 Revised Washable Edition.

12. United States Army Corps of Engineers, 1999. Highway Methodology Workbook Supplement.

13. United States Army Corps of Engineers, May 2007. *Jurisdictional Determination Form Instructional Guidebook.*

14. United States Army Corps of Engineers, Wetland Regulatory Assistance Program, January 2012. *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region (Version 2.0).*

15. United States Department of Agriculture, Natural Resources Conservation Service, 2025. Web Soil Survey. http://websoilsurvey.sc.egov.usda.gov/App/WebSoilSurvey.aspx

16. United States Department of Homeland Security, FEMA, Map Service Center, 2025. https://msc.fema.gov/

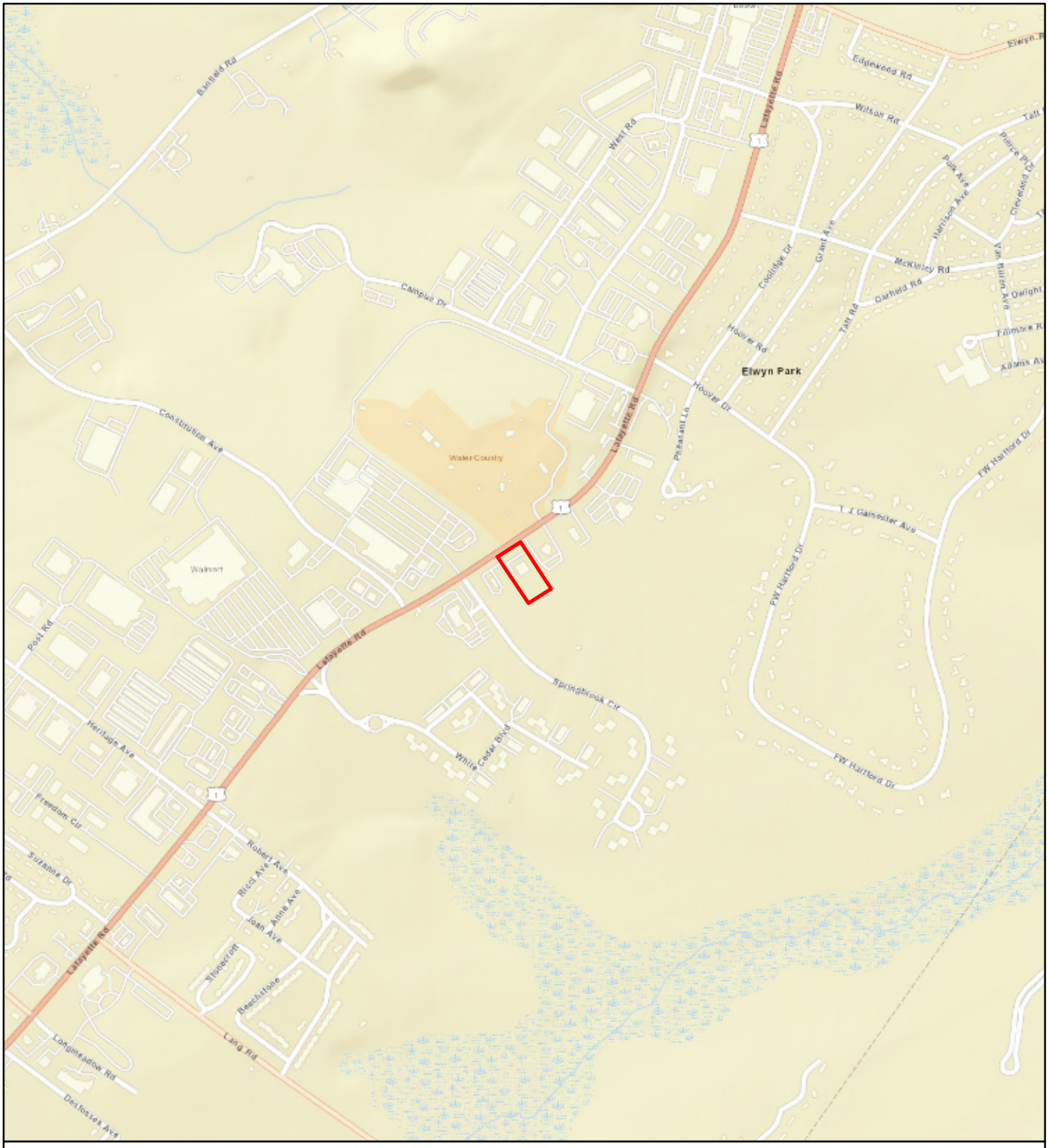
17. United States Department of the Interior, Fish and Wildlife Service National Wetlands Inventory. 2025. Wetlands Mapper. http://www.fws.gov/wetlands/Data/Mapper.html

19. United States Geological Survey, 7.5 Minute Series Topographic Quadrangle of Portsmouth, New Hampshire.

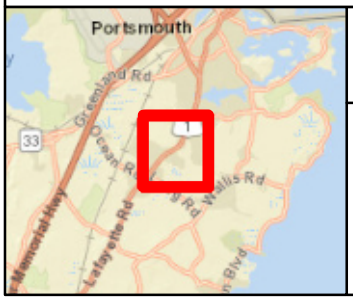
19. Vepraskas MJ. 1994. Redoximorphic Features for Identifying Aquic Conditions. North Carolina Agricultural Research Service. North Carolina State University. Raleigh, North Carolina. Technical Bulletin 301. 33 pp.

APPENDIX A

Wetland and Watercourse Delineation Mapping



2299 LAFAYETTE ROAD WETLAND DELINEATION PROJECT - PROJECT LOCATION MAP



GRAPHIC SCALE
0 500 1,000 1,500 2,000
Feet

Legend

Study Area

2299 Lafayette Road, Portsmouth, NH

DRAWN BY: SMS	PROJECT NO: 2502266
CHECKED BY: WGW	
SCALE: 1:12,000	Figure 1

BL Companies — Architecture Engineering Environmental Land Surveying

355 Research Parkway
Meriden, CT 06450-7100
(203) 630-1406

Document Path: G:\JOBS25\22\2502266\GIS\MXD\1. Project Location Map.mxd

2299 LAFAYETTE ROAD WETLAND DELINEATION PROJECT - USGS TOPOGRAPHIC MAP

GRAPHIC SCALE
0 1,000 2,000 3,000 4,000
Feet

Legend

Study Area

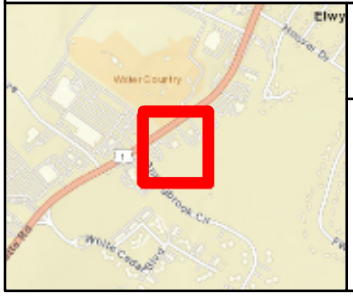
2299 Lafayette Road, Portsmouth, NH

DRAWN BY: SMS	PROJECT NO: 2502266
CHECKED BY: WGW	
SCALE: 1:24,000	Figure 2

BL Companies — Architecture Engineering Environmental Land Surveying
355 Research Parkway
Meriden, CT 06450-7100
(203) 630-1406

Document Path: G:\JOBS25\22\2502266\GIS\MXD\2. USGS Topographic Map.mxd

2299 LAFAYETTE ROAD WETLAND DELINEATION PROJECT - SOILS MAP



GRAPHIC SCALE
0 50 100 150 200
Feet

Legend

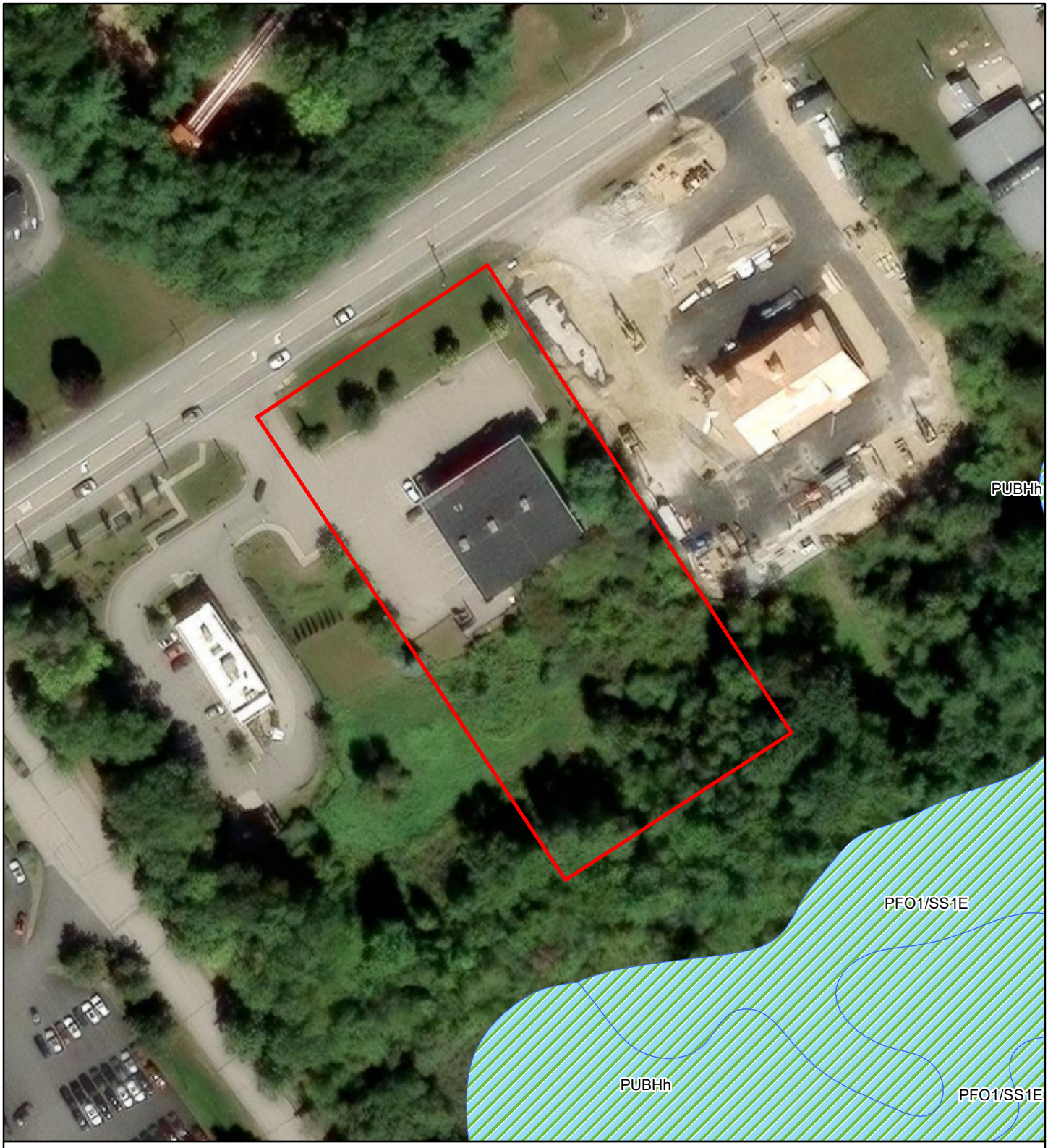
Study Area Soil Type / Boundary

2299 Lafayette Road, Portsmouth, NH

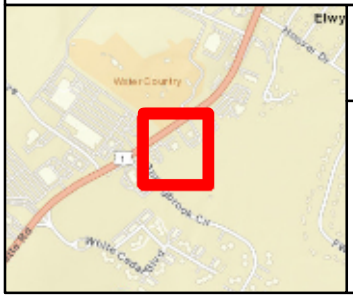
DRAWN BY: SMS	PROJECT NO: 2502266
CHECKED BY: WGW	
SCALE: 1:1,200	Figure 3

BL Companies
Architecture Engineering Environmental Land Surveying
355 Research Parkway
Meriden, CT 06450-7100
(203) 630-1406

Document Path: G:\JOBS25\22\2502266\GIS\MXD\3. Soil Survey Map.mxd



2299 LAFAYETTE ROAD WETLAND DELINEATION PROJECT - NWI MAP



GRAPHIC SCALE
0 50 100 150 200
Feet

Legend

- Study Area
- NWI Wetland

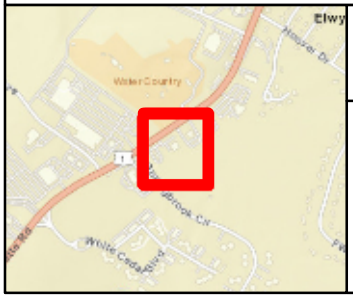
2299 Lafayette Road, Portsmouth, NH

DRAWN BY: SMS	PROJECT NO: 2502266
CHECKED BY: WGW	
SCALE: 1:1,200	Figure 4

BL Companies
Architecture Engineering Environmental Land Surveying
355 Research Parkway
Meriden, CT 06450-7100
(203) 630-1406

Document Path: G:\JOBS25\22\2502266\GIS\MXD\4. NWI Map.mxd

2299 LAFAYETTE ROAD WETLAND DELINEATION PROJECT - FEMA MAP



GRAPHIC SCALE
0 50 100 150 200
Feet

Legend

- Study Area
- A (Special Flood Hazard Area)
- AE (Regulatory Floodway)
- X (0.2% Annual Chance Flood Hazard)
- X (Area of Minimal Flood Hazard)

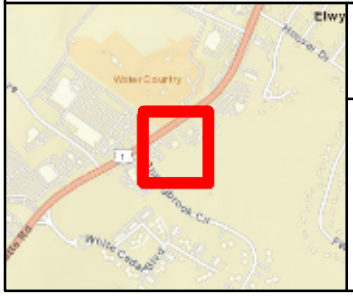
2299 Lafayette Road, Portsmouth, NH

DRAWN BY: SMS	PROJECT NO: 2502266
CHECKED BY: WGW	
SCALE: 1:1,200	Figure 5

BL Companies Architecture Engineering Environmental Land Surveying
355 Research Parkway
Meriden, CT 06450-7100
(203) 630-1406

Document Path: G:\JOBS25\22\2502266\GIS\MXD\5. FEMA Map.mxd

2299 LAFAYETTE ROAD WETLAND DELINEATION PROJECT - AERIAL IMAGERY MAP



GRAPHIC SCALE
0 50 100 150 200
Feet

Legend

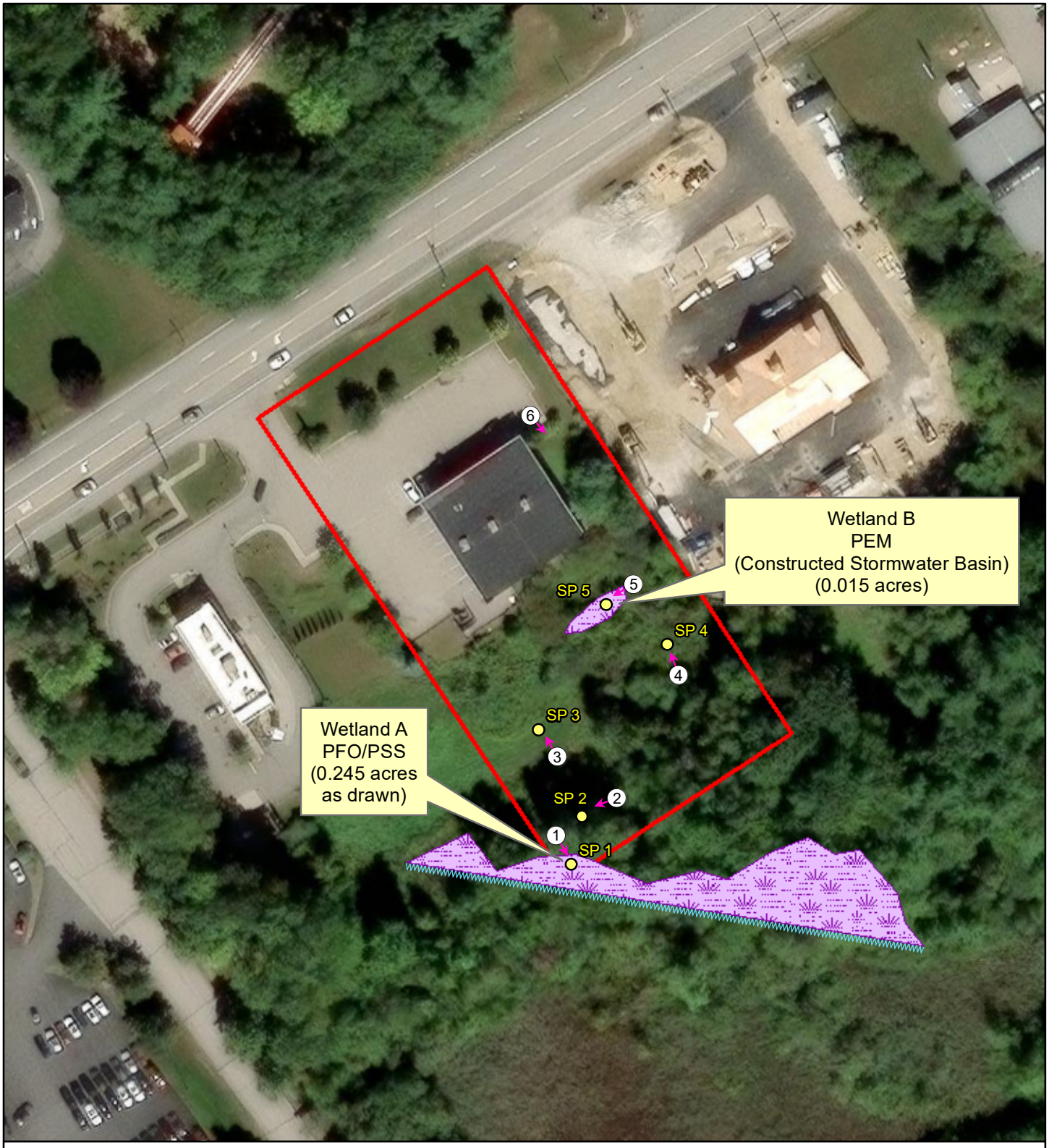
Study Area

2299 Lafayette Road, Portsmouth, NH

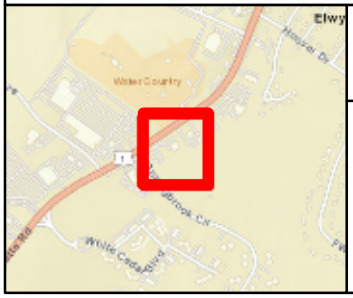
DRAWN BY: SMS	PROJECT NO: 2502266
CHECKED BY: WGW	
SCALE: 1:1,200	Figure 6

BL Companies
Architecture Engineering Environmental Land Surveying
355 Research Parkway
Meriden, CT 06450-7100
(203) 630-1406

Document Path: G:\JOBS25\22\2502266\GIS\MXD\6. Aerial Imagery Map.mxd



2299 LAFAYETTE ROAD WETLAND DELINEATION PROJECT - FIELD DATA LOCATION MAP



GRAPHIC SCALE
0 50 100 150 200
Feet

Legend

- Study Area
- Sample Point (SP)
- Photo Number / Direction
- Delineated Wetlands
- Continuous Feature

2299 Lafayette Road, Portsmouth, NH

DRAWN BY: SMS	PROJECT NO: 2502266
CHECKED BY: WGW	
SCALE: 1:1,200	Figure 7

BL Companies — Architecture Engineering Environmental Land Surveying
355 Research Parkway
Meriden, CT 06450-7100
(203) 630-1406

Document Path: G:\JOBS25\22\2502266\GIS\MXD\7. Field Data Location Map.mxd

APPENDIX B

Color Photographs

BL Companies
Architecture
Engineering
Environmental
Land Surveying

2299 Lafayette Road
Portsmouth, New Hampshire
Photographic Documentation

Photo # 1
Date: August 27, 2025
Direction: Southeast

Description
Southeastern view of Sample Point 1 in a forested wetland area point, Wetland A, located in the southern portion of the Study Area.

Photo # 2
Date: August 27, 2025
Direction: Southwest

Description
Southwestern view of Sample Point 2 in a forested upland area, adjacent to Wetland A, located in the southern portion of the Study Area.

BL Companies
Architecture
Engineering
Environmental
Land Surveying

2299 Lafayette Road
Portsmouth, New Hampshire
Photographic Documentation

Photo # 3
Date: August 27, 2025
Direction: Northwest

Description
Northwestern view of Sample Point 3 in an herbaceous upland area located in the southern portion of the Study Area.

Photo # 4
Date: August 27, 2025
Direction: Northwest

Description
Northwestern view of Sample Point 4 in an herbaceous upland area, adjacent to Wetland B, located in the southeastern portion of the Study Area.

Architecture
Engineering
Environmental
Land Surveying
BL Companies

2299 Lafayette Road
Portsmouth, New Hampshire
Photographic Documentation

Photo # 5
Date: August 27, 2025
Direction: Southwest

Description
Southwestern view of Sample Point 5 in an emergent wetland area point, Wetland B, located in the eastern portion of the Study Area. This is a constructed stormwater basin area.

Photo # 6
Date: August 27, 2025
Direction: Southeast

Description
Southeastern view of the northeastern portion of the Study Area.

APPENDIX C

Data Forms

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2502266 - Blew & Associates - Portsmouth, NH City/County: Portsmouth / Rockingham Sampling Date: 2025-08-27

Applicant/Owner: Blew & Associates State: New Hampshire Sampling Point: SP 1

Investigator(s): Sagan M. Simko, CPSS, PWS Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Concave Slope (%): 2

Subregion (LRR or MLRA): R 144A Lat: 43.033343 Long: -70.780255 Datum: NAD83_2011

Soil Map Unit Name: 314A - Pipestone sand, 0 to 5 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** **Yes** ✔ **No** _____
Hydric Soil Present?	Yes ✔	No _____	
Wetland Hydrology Present?	Yes ✔	No _____	If yes, optional Wetland Site ID: Wetland A

Remarks: (Explain alternative procedures here or in a separate report.)

SP 1 is within Wetland A.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 5

Wetland Hydrology Present? **Yes** ✔ **No** _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology is present.

VEGETATION – Use scientific names of plants.

Sampling Point: SP 1

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Acer rubrum	70	✔	FAC
2. Tsuga canadensis	10		FACU
3.			
4.			
5.			
6.			
7.			
	80	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Vaccinium corymbosum	40	✔	FACW
2. Lindera benzoin	30	✔	FACW
3.			
4.			
5.			
6.			
7.			
	70	= Total Cover	
Herb Stratum (Plot size: 5 ft r)			
1. Onoclea sensibilis	60	✔	FACW
2. Matteuccia struthiopteris	30	✔	FAC
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
		= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 5 (A)

Total Number of Dominant Species Across All Strata: 5 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 100.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	130	x 2 =	260
FAC species	100	x 3 =	300
FACU species	10	x 4 =	40
UPL species	0	x 5 =	0
Column Totals:	240 (A)		600 (B)

Prevalence Index = B/A = 2.50

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

✔ 2 - Dominance Test is >50%

✔ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Wetland hydrophytic vegetation is present.

SOIL

Sampling Point: SP 1

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	Matrix %	Redox Features Color (moist)	Redox Features %	Type[1]	Loc[2]	Texture	Remarks
0 - 4	10YR 3/2	100					Sandy Loam	
4 - 18	10YR 6/2	90	10YR 5/4	10	C	M	Loamy Sand	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ✔ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** ✔ **No** _____

Remarks:

Wetland hydric soil is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2502266 - Blew & Associates - Portsmouth, NH City/County: Portsmouth / Rockingham Sampling Date: 2025-08-27

Applicant/Owner: Blew & Associates State: New Hampshire Sampling Point: SP 2

Investigator(s): Sagan M. Simko, CPSS, PWS Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear Slope (%): 2

Subregion (LRR or MLRA): R 144A Lat: 43.033438 Long: -70.780225 Datum: NAD83_2011

Soil Map Unit Name: 314A - Pipestone sand, 0 to 5 percent slopes NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

SP 2 is adjacent to Wetland A.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology is present.

VEGETATION – Use scientific names of plants.

Sampling Point: SP 2

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Robinia pseudoacacia	60	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	60 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Elaeagnus umbellata	15	✔	
2.			
3.			
4.			
5.			
6.			
7.			
	15 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Solidago canadensis	30	✔	FACU
2. Rubus occidentalis	20	✔	
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	50 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	90	x 4 =	360
UPL species	0	x 5 =	0
Column Totals:	90 (A)		360 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** _____ **No** ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No wetland vegetation is present.

SOIL

Sampling Point: SP 2

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 1	10YR 4/3	100					Silt Loam	
1 - 20	7.5YR 5/4	100					Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

No wetland hydric soil is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2502266 - Blew & Associates - Portsmouth, NH City/County: Portsmouth / Rockingham Sampling Date: 2025-08-27

Applicant/Owner: Blew & Associates State: New Hampshire Sampling Point: SP 3

Investigator(s): Sagan M. Simko, CPSS, PWS Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear Slope (%): 3

Subregion (LRR or MLRA): R 144A Lat: 43.03361 Long: -70.780339 Datum: NAD83_2011

Soil Map Unit Name: 699 - Urban land NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	
Wetland Hydrology Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____

Remarks: (Explain alternative procedures here or in a separate report.)

No wetland indicators are present at Sample Point 3.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology is present.

VEGETATION – Use scientific names of plants.

Sampling Point: SP 3

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Rhus typhina	5	✔	
2.			
3.			
4.			
5.			
6.			
7.			
	5 = Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Elaeagnus umbellata	10	✔	
2.			
3.			
4.			
5.			
6.			
7.			
	10 = Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Solidago canadensis	80	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	80 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1. Vitis labrusca	30	✔	FACU
2.			
3.			
4.			
	30 = Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 2 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	110	x 4 =	440
UPL species	0	x 5 =	0
Column Totals:	110 (A)		440 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ___ **No** ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No wetland vegetation is present.

SOIL

Sampling Point: SP 3

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 3	10YR 4/3	100					Silt Loam	
3 - 22	7.5YR 5/3	100						
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

No wetland hydric soil is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2502266 - Blew & Associates - Portsmouth, NH City/County: Portsmouth / Rockingham Sampling Date: 2025-08-27

Applicant/Owner: Blew & Associates State: New Hampshire Sampling Point: SP 4

Investigator(s): Sagan M. Simko, CPSS, PWS Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Hillslope Local relief (concave, convex, none): Linear Slope (%): 3

Subregion (LRR or MLRA): R 144A Lat: 43.033775 Long: -70.779991 Datum: NAD83_2011

Soil Map Unit Name: 699 - Urban land NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil _____, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes _____	No ✔	**Is the Sampled Area within a Wetland?** Yes _____ No ✔
Hydric Soil Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: _____
Wetland Hydrology Present?	Yes _____	No ✔	

Remarks: (Explain alternative procedures here or in a separate report.)

No wetland indicators are present at Sample Point 4.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ___ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ___ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes _____	No ✔	Depth (inches): _____

Wetland Hydrology Present? Yes _____ No ✔

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

No wetland hydrology is present.

VEGETATION – Use scientific names of plants.

Sampling Point: SP 4

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1. Populus tremuloides	40	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
	40	= Total Cover	
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1. Elaeagnus umbellata	5	✔	
2.			
3.			
4.			
5.			
6.			
7.			
	5	= Total Cover	
Herb Stratum (Plot size: 5 ft r)			
1. Solidago canadensis	90	✔	FACU
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	90	= Total Cover	
Woody Vine Stratum (Plot size: 30 ft r)			
1. Lonicera japonica	20	✔	FACU
2.			
3.			
4.			
	20	= Total Cover	

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 3 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	0	x 1 =	0
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	150	x 4 =	600
UPL species	0	x 5 =	0
Column Totals:	150 (A)		600 (B)

Prevalence Index = B/A = 4.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? Yes ___ No ✔

Remarks: (Include photo numbers here or on a separate sheet.)

No wetland vegetation is present.

SOIL

Sampling Point: SP 4

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 1	10YR 4/3	100					Silt Loam	
1 - 20	7.5YR 5/4	100					Sandy Loam	
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

No wetland hydric soil is present.

WETLAND DETERMINATION DATA FORM – Northcentral and Northeast Region

Project/Site: 2502266 - Blew & Associates - Portsmouth, NH City/County: Portsmouth / Rockingham Sampling Date: 2025-08-27

Applicant/Owner: Blew & Associates State: New Hampshire Sampling Point: SP 5

Investigator(s): Sagan M. Simko, CPSS, PWS Section, Township, Range: _____

Landform (hillslope, terrace, etc.): Basin Local relief (concave, convex, none): Concave Slope (%): 1

Subregion (LRR or MLRA): R 144A Lat: 43.033855 Long: -70.780153 Datum: NAD83_2011

Soil Map Unit Name: 699 - Urban land NWI classification: _____

Are climatic / hydrologic conditions on the site typical for this time of year? Yes ✔ No _____ (If no, explain in Remarks.)

Are Vegetation _____, Soil _____, or Hydrology _____ significantly disturbed? Are "Normal Circumstances" present? Yes ✔ No _____

Are Vegetation _____, Soil ✔, or Hydrology _____ naturally problematic? (If needed, explain any answers in Remarks.)

SUMMARY OF FINDINGS – Attach site map showing sampling point locations, transects, important features, etc.

Hydrophytic Vegetation Present?	Yes ✔	No _____	**Is the Sampled Area within a Wetland?** Yes ✔ No _____
Hydric Soil Present?	Yes _____	No ✔	If yes, optional Wetland Site ID: Wetland B
Wetland Hydrology Present?	Yes ✔	No _____	

Remarks: (Explain alternative procedures here or in a separate report.)

SP 5 is within Wetland B, which is a constructed stormwater basin.

HYDROLOGY

Wetland Hydrology Indicators:

Primary Indicators (minimum of one is required; check all that apply)

- ___ Surface Water (A1)
- ___ High Water Table (A2)
- ✔ Saturation (A3)
- ___ Water Marks (B1)
- ___ Sediment Deposits (B2)
- ___ Drift Deposits (B3)
- ___ Algal Mat or Crust (B4)
- ___ Iron Deposits (B5)
- ___ Inundation Visible on Aerial Imagery (B7)
- ___ Sparsely Vegetated Concave Surface (B8)
- ___ Water-Stained Leaves (B9)
- ___ Aquatic Fauna (B13)
- ___ Marl Deposits (B15)
- ___ Hydrogen Sulfide Odor (C1)
- ___ Oxidized Rhizospheres on Living Roots (C3)
- ___ Presence of Reduced Iron (C4)
- ___ Recent Iron Reduction in Tilled Soils (C6)
- ___ Thin Muck Surface (C7)
- ___ Other (Explain in Remarks)

Secondary Indicators (minimum of two required)

- ___ Surface Soil Cracks (B6)
- ___ Drainage Patterns (B10)
- ___ Moss Trim Lines (B16)
- ___ Dry-Season Water Table (C2)
- ___ Crayfish Burrows (C8)
- ___ Saturation Vis ble on Aerial Imagery (C9)
- ___ Stunted or Stressed Plants (D1)
- ___ Geomorphic Position (D2)
- ___ Shallow Aquitard (D3)
- ___ Microtopographic Relief (D4)
- ✔ FAC-Neutral Test (D5)

Field Observations:

Surface Water Present?	Yes _____	No ✔	Depth (inches): _____
Water Table Present?	Yes _____	No ✔	Depth (inches): _____
Saturation Present? (includes capillary fringe)	Yes ✔	No _____	Depth (inches): 3

Wetland Hydrology Present? Yes ✔ No _____

Describe Recorded Data (stream gauge, monitoring well, aerial photos, previous inspections), if available:

Remarks:

Wetland hydrology is present.

VEGETATION – Use scientific names of plants.

Sampling Point: SP 5

Tree Stratum (Plot size: 30 ft r)	Absolute % Cover	Dominant Species?	Indicator Status
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Sapling/Shrub Stratum (Plot size: 15 ft r)			
1.			
2.			
3.			
4.			
5.			
6.			
7.			
	= Total Cover		
Herb Stratum (Plot size: 5 ft r)			
1. Polygonum pensylvanicum	90	✔	
2. Lythrum salicaria	10		OBL
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			
11.			
12.			
	100 = Total Cover		
Woody Vine Stratum (Plot size: 30 ft r)			
1.			
2.			
3.			
4.			
	= Total Cover		

Dominance Test worksheet:

Number of Dominant Species That Are OBL, FACW, or FAC: 0 (A)

Total Number of Dominant Species Across All Strata: 0 (B)

Percent of Dominant Species That Are OBL, FACW, or FAC: 0.00 (A/B)

Prevalence Index worksheet:

Total % Cover of:		Multiply by:	
OBL species	10	x 1 =	10
FACW species	0	x 2 =	0
FAC species	0	x 3 =	0
FACU species	0	x 4 =	0
UPL species	0	x 5 =	0
Column Totals:	10 (A)		10 (B)

Prevalence Index = B/A = 1.00

Hydrophytic Vegetation Indicators:

___ 1 - Rapid Test for Hydrophytic Vegetation

___ 2 - Dominance Test is >50%

___ 3 - Prevalence Index is ≤3.0[1]

___ 4 - Morphological Adaptations[1] (Provide supporting data in Remarks or on a separate sheet)

___ Problematic Hydrophytic Vegetation[1] (Explain)

[1]Indicators of hydric soil and wetland hydrology must be present, unless disturbed or problematic.

Definitions of Vegetation Strata:

Tree – Woody plants 3 in. (7.6 cm) or more in diameter at breast height (DBH), regardless of height.

Sapling/shrub – Woody plants less than 3 in. DBH and greater than or equal to 3.28 ft (1 m) tall.

Herb – All herbaceous (non-woody) plants, regardless of size, and woody plants less than 3.28 ft tall.

Woody vines – All woody vines greater than 3.28 ft in height.

Hydrophytic Vegetation Present? **Yes** ✔ **No** ___

Remarks: (Include photo numbers here or on a separate sheet.)

Wetland hydrophytic vegetation is present.

SOIL

Sampling Point: SP 5

Profile Description: (Describe to the depth needed to document the indicator or confirm the absence of indicators.)

Depth (inches)	Matrix Color (moist)	%	Redox Features Color (moist)	%	Type[1]	Loc[2]	Texture	Remarks
0 - 6								This is a rock-lined stormwater basin; no soil data could be ascertained.
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								
-								

[1]Type: C=Concentration, D=Depletion, RM=Reduced Matrix, MS=Masked Sand Grains. [2]Location: PL=Pore Lining, M=Matrix.

Hydric Soil Indicators:

- ___ Histosol (A1)
- ___ Histic Epipedon (A2)
- ___ Black Histic (A3)
- ___ Hydrogen Sulfide (A4)
- ___ Stratified Layers (A5)
- ___ Depleted Below Dark Surface (A11)
- ___ Thick Dark Surface (A12)
- ___ Sandy Mucky Mineral (S1)
- ___ Sandy Gleyed Matrix (S4)
- ___ Sandy Redox (S5)
- ___ Stripped Matrix (S6)
- ___ Dark Surface (S7) (**LRR R, MLRA 149B**)
- ___ Polyvalue Below Surface (S8) (**LRR R, MLRA 149B**)
- ___ Thin Dark Surface (S9) (**LRR R, MLRA 149B**)
- ___ Loamy Mucky Mineral (F1) (**LRR K, L**)
- ___ Loamy Gleyed Matrix (F2)
- ___ Depleted Matrix (F3)
- ___ Redox Dark Surface (F6)
- ___ Depleted Dark Surface (F7)
- ___ Redox Depressions (F8)

Indicators for Problematic Hydric Soils[3]:

- ___ 2 cm Muck (A10) (**LRR K, L, MLRA 149B**)
- ___ Coast Prairie Redox (A16) (**LRR K, L, R**)
- ___ 5 cm Mucky Peat or Peat (S3) (**LRR K, L, R**)
- ___ Dark Surface (S7) (**LRR K, L**)
- ___ Polyvalue Below Surface (S8) (**LRR K, L**)
- ___ Thin Dark Surface (S9) (**LRR K, L**)
- ___ Iron-Manganese Masses (F12) (**LRR K, L, R**)
- ___ Piedmont Floodplain Soils (F19) (**MLRA 149B**)
- ___ Mesic Spodic (TA6) (**MLRA 144A, 145, 149B**)
- ___ Red Parent Material (F21)
- ___ Very Shallow Dark Surface (TF12)
- ___ Other (Explain in Remarks)

[3]Indicators of hydrophytic vegetation and wetland hydrology must be present, unless disturbed or problematic.

Restrictive Layer (if observed):

Type: _____

Depth (inches): _____

Hydric Soil Present? **Yes** _____ **No** ✔

Remarks:

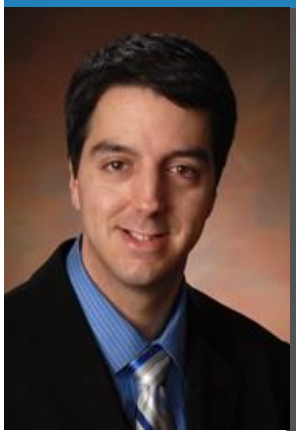
This is a rock-lined stormwater basin.

APPENDIX D

Professional Qualifications

SAGAN SIMKO, CPSS, PWS

RESUME



PROJECT ROLE
Senior Project Scientist II

EDUCATION
Bachelor of Science in Environmental Resource Management, The Pennsylvania State University, 2005
Master of Science in Biology, Bloomsburg University of Pennsylvania, 2015

REGISTRATION
Certified Professional Soil Scientist (CPSS), 2012, #36359
Professional Wetland Scientist (PWS), 2012, #2284
Qualified Hydrologic Professional In-Training (QHP-IT), 2024

PROFESSIONAL MEMBERSHIPS
Soil Science Society of America, Society of Wetland Scientists, The Wildlife Society

SUMMARY OF QUALIFICATIONS

Mr. Simko has approximately 19 years of experience in performing an array of wetland delineations and site assessments. His experience encompasses soil morphological evaluations, infiltration and percolation testing, wetland mitigation design and monitoring, Bog Turtle Phase I and Phase II surveys, as well as threatened and endangered species surveys. In addition, he has completed carbonate geology site evaluations, identification of asbestos-containing material, and underground storage tank removals and investigations. Mr. Simko's computer skills include ArcGIS 10 and Trimble software. As a Senior Project Scientist II at BL Companies, Mr. Simko's responsibilities include wetland investigations, soil investigations, ground water investigations, Bog Turtle Phase I and Phase II surveys, Phase I site assessments, remediation related activities, remediation system monitoring and maintenance, and engineering / environmental compliance inspection.

RELEVANT EXPERIENCE

Wetland/Waterbody Identification and Delineation, Tree Survey, Environmental / Cultural Review, Milton, Florida
Serving as Senior Project Scientist, conducted a wetland delineation survey including functions and values assessment for a property in Milton, FL. Following field delineation efforts, a wetland delineation report was created to give details regarding the field work findings. Additionally, a tree survey was conducted for specific species of concern as dictated by the Santa Rosa County regulations. Other threatened & endangered species as well as a cultural resources review was also conducted for this project.

Fiber Optic Cable Project – I-95 Corridor, Virginia
Served as lead Soil and Wetland Scientist for work with a fiber optic cable design engineer and their client to conduct a desktop environmental analysis and follow up site review for a proposed 140-mile dark fiber optic cable route adjacent to I-95 from just outside of Dulles Airport, VA south to Bristol, VA. The proposed route was predominately located within existing road rights-of-way and is surrounded by moderate-to-dense urban and suburban development. The Project included a field review of regulated waters, wetlands and navigable waterways. Coordinated permitting and clearances with the VA Department of Environmental Quality (VDEQ) and the US Army Corps of Engineers (USACE) to permit a total of 39 critical crossings of regulated watercourses.

Bog Turtle Phase II Surveys – Mid-Atlantic Center for Herpetology & Conservation – Various locations within Eastern Pennsylvania every year since 2019
Served as Survey Volunteer over the course of the past six (6) surveying seasons with the Mid-Atlantic Center for Herpetology & Conservation. Bog Turtle habitat was identified, and species-specific surveying techniques were utilized. Experience assisting with implantation of Passive Integrated Transponders (PIT tags) was also gained. I have located 31 Bog Turtles throughout my surveying career. During these years of Bog Turtle surveys, I have also located several other Threatened, Endangered, or Species of Concern, namely: Spotted Turtles, Box Turtles, and Wood Turtles.

Bog Turtle Phase II Survey, Pennsylvania Natural Diversity Inventory (PNDI) Review, Wetland Delineation, Mountain Village Section II, Audubon Land Development – Longswamp Township, Berks County, Pennsylvania
Served as Senior Project Scientist to perform a Phase II Bog Turtle survey as well as performing other Pennsylvania Natural Diversity Inventory (PNDI) tasks. Also performed a wetland delineation for the site in accordance with the Army Corps of Engineers Wetland Delineation Manual and the appropriate Regional Supplement.

Bog Turtle Phase I Survey, Maryland Department of Natural Resources Review, Proposed Mavis Tire – Rising Sun, Maryland
Served as Senior Project Scientist to perform a Phase I habitat survey for Bog Turtles. Also performed a wetland delineation for the site in accordance with the Army Corps of Engineers Wetland Delineation Manual and the appropriate Regional Supplement.

Bog Turtle Phase I Survey, Pennsylvania Natural Diversity Inventory (PNDI) Review, Wetland Delineation, Amazon.com Services LLC – Quakertown, Pennsylvania
Served as Senior Project Scientist to perform a Phase I habitat survey for Bog Turtles as well as performing other Pennsylvania Natural Diversity Inventory (PNDI) tasks. Also performed a wetland delineation for the site in accordance with the Army Corps of Engineers Wetland Delineation Manual and the appropriate Regional Supplement.

Peer Review, 4-Lot Subdivision Inland Wetland Commission, Stratford, Connecticut
Served as lead Soil and Wetland Scientist in the performance of a peer review of a proposed 4-lot subdivision application submission to the Inland Wetland Commission of Stratford, CT. The peer review required a site visit to verify previous wetland delineations and assistance with the technical review of the submission. Upon completion of review, findings were presented in-person to the Stratford Inland Wetland Commission.

Carter Road Culvert Improvements, Thomaston, Connecticut
Served as Environmental Scientist (Soil/Wetland Scientist) for the delineation of wetlands and preparation of function/value report for the repair and improvements to this deteriorated stone masonry abutment culvert that was impacted by flood events and long-term deterioration.

Consultant Liaison Engineering Services for the State and Federal Local Bridge Program, Connecticut Department of Transportation, Statewide, Connecticut
Served as Senior Project Scientist for several bridge rehabilitation and replacement projects for CTDOT across the state. Responsibilities included performing wetland delineations, function and values assessments, and bat habitat assessments at each bridge location where natural resources were identified as being within the proximity of proposed work. Additional responsibilities included attaining environmental permitting for the CTDEEP and U.S. ACOE, identifying invasive species, and coordination for listed species.

Connecticut Department of Transportation State Project No. 108-189 – Moosup Valley State Park Trail, Plainfield to Sterling, Connecticut
Served as Senior Project Scientist to investigate the presence or absence of vernal pools along the Moosup Valley State Park Trial. Vernal pools were identified utilizing available mapping, aerial photography and field investigation. Evidence of obligate amphibian species presence and breeding was noted in the field via inspection beyond visual and audial, including trapping and dip-netting.

Metro North Milvon Substation – West River Substation Vernal Pool Assessment, Milford to New Haven, Connecticut
Served as Senior Project Scientist to investigate the presence or absence of vernal pools along a portion of the commuter train route. Any vernal pool areas were noted and recorded with GPS coordinates to submeter accuracy. Vernal pools were identified utilizing available mapping, aerial photography and field investigation. Evidence of obligate amphibian species presence and breeding was noted in the field via visual and audial inspection.

Bridge Replacement Group 13E-W, West River Bridge, Rhode Island Department of Transportation, Providence, Rhode Island
Conducted stream and wetland delineations in the vicinity of the West River Bridge in Providence as part of the RIDOT Bridge Replacement project. Additional assessment of the functions and values of the water resources was completed and a habitat of the substrate and surrounding vegetative communities was conducted within the vicinity of the bridge abutments and potential work area. Also served as Senior Project Scientist to investigate the presence or absence of inland wetlands and watercourses in the area of the West River Bridge in Providence, RI. Additionally, substrate observations and analyses of the West River within the area of proposed bridge work to ascertain likelihood of threatened & endangered species presence and/or their habitat.

Route 37 Bridge Rehabilitations and Replacements, Rhode Island Department of Transportation, Warwick and Cranston, Rhode Island

Served as Senior Project Scientist, with responsibilities including wetlands delineation, function and values assessment and close coordination with the bridge designer in order to submit environmental permit documentation on a fast-track basis.

East Bay Bike Path, Barrington River & Warren River Bridges Replacement, Rhode Island Department of Transportation, Barrington and Warren, Rhode Island
Served as Wetland and Soil Scientist, with responsibilities including wetlands delineation, function and values assessment, determination of coastal and freshwater wetland jurisdiction, and close coordination with the bridges designer to submit environmental permit documentation with the greatest efficiency. Also served as Senior Project Scientist to investigate the presence or absence of inland and coastal wetlands, and watercourses in the area of the Barrington Bike Path Bridge #837, over the Barrington River and the Warren Bike Path Bridge #838 over the Palmer River. Additionally, conducted substrate observations and analyses of the Barrington River and Palmer River within the area of proposed bridge piers / supports to ascertain likelihood of shellfish or threatened & endangered species presence and/or their habitat.

Bridge Group 17A, Rhode Island Department of Transportation, Cumberland, Rhode Island
Served as Senior Project Scientist to investigate the presence or absence of inland wetlands and watercourses for the proposed rehabilitation of bridge number 075401 carrying Rt. 114 (Diamond Hill Road) over I-295 in Cumberland, RI, bridge number 075101 carrying Rt. 122 (Mendon Road) over I-295 in Cumberland, RI, and bridge numbers 074601 and 074621 carrying Rt. 7 over I-295 in Smithfield, RI. Additionally, wetland and stream biophysical elements such as landscape position, size, geology, hydrology, substrate, and vegetation were observed to determine the wetland and stream functions and to what capacity they are performed.

American Tower Sites-Various States throughout the Northeast
Conducted NEPA reviews and clearances for cellular communication tower installation sites that include wetland delineations, migratory bird habitat and bat habitat, GIS mapping, and National Historic Preservation Act Section 106 clearances as needed.

PSEG Long Island, Western Nassau Transmission Project, Valley Stream to Garden City, New York
Serves as Construction Field Inspector for a 7.5 mile underground electric transmission line in Nassau County, NY. As Construction Field Inspector I am tasked with day-to-day inspection of the project site with respect to contractor activities constructing, installing, testing and placing in service an underground 138kV circuit.

Amazon.com Services LLC, DEB3 – Delivery Station Buildout, Waterbury, Connecticut
Served as lead Soil Scientist and Wetlands Investigator for a proposed site redevelopment project. Responsibilities included reverification of wetland delineations and coordination with the City Planner for Waterbury, CT in order to move the project through the Inland Wetland Commission application process.

Hope Street Culvert Replacement, City of Stamford, Connecticut
Served as lead Wetland Investigator for an emergency culvert replacement project in the vicinity of Hope Street & Mead Street, Stamford Connecticut.

Avangrid – Wetland Delineations and Vernal Pool Investigation Within Metro North Railroad Corridor, Westport to New Haven, CT
Served as lead Soil and Wetland Scientist and Biologist in the performance of survey work for wetlands and vernal pool areas along the railroad corridor between Westport and New Haven, CT.

Simmonsville Bridge Replacement, Rhode Island Department of Transportation, Johnston, Rhode Island
Served as Senior Project Scientist, with responsibilities including wetlands delineation, function and values assessment, bat habitat assessments, and close coordination with the bridge designer in order to submit environmental permit documentation on a fast-track basis.

Route 37 Bridge Rehabilitations and Replacements, Rhode Island Department of Transportation, Warwick and Cranston, Rhode Island
Served as Senior Project Scientist, with responsibilities including wetlands delineation, function and values assessment and close coordination with the bridge designer in order to submit environmental permit documentation on a fast-track basis.

Southeast Bristol Business Park - Lot 3, Lot 9, Lot 10, Bristol, Connecticut

Serving as Senior Project Scientist, conducted a wetland delineation survey for Lot 3, Lot 9, and Lot 10 of the Southeast Bristol Business Park in August of 2021. Following field delineation efforts, a wetland delineation report was created to give details regarding the field work findings. Additionally, a field site visit meeting with the City of Bristol's Inland Wetlands and Watercourses Commission (IWWC) was performed to present wetland delineation findings to the Commission for their review and subsequent approval. Following the IWWC site meeting and agreement with the wetlands and watercourses delineation work, the City of Bristol's official IWWC wetland mapping was updated from previous delineation work to reflect BL Companies' more inclusive and comprehensive field findings and geographical positioning system (GPS) data collection.

894 Middle Street - Lot 17, Lot 17-3 & Lot 17-4-1, Bristol, Connecticut
Serving as Senior Project Scientist, conducted a wetland delineation survey in October of 2021 on the property located at 894 Middle Street in the City of Bristol, comprised of Lot 17, Lot 17-3 & Lot 17-4-1. Following field delineation efforts, a wetland delineation report was created to give details regarding the field work findings. The field survey revealed several areas of erosional features in and around the wetlands and watercourses on the site, as well as areas of dumping of household refuse and other assorted trash and debris. These findings were brought to the attention of the City of Bristol and a site meeting with the City's Inland Wetlands and Watercourses Commission (IWWC), Wetland Scientist, and City Engineer was performed to present findings.

Wetland/Waterbody Identification and Delineation, Ludlow, Massachusetts
Serving as Senior Project Scientist, conducted a wetland delineation survey including functions and values assessment for a property in Ludlow, MA. Following field delineation efforts, a wetland delineation memo was created to give details regarding the field work findings.

Utility Pipeline Crossing, Brockton, Massachusetts
BL Companies provided the integration of GIS-based, GPS-based, and CAD-based data utilizing ArcMap software to develop a Environmental Plot Plan for the design and permitting of a natural gas utility line over the Salisbury River in Brockton, MA. The scope of services that BL is providing consisted of the following:

- Received and integrated non-BL GIS data, BL survey data, and design-related CAD data into an overall ENV plot plan. This included a multitude of geoprocessing techniques within the ArcMap software.
- Provided E&S design for project on the plan.
- Incorporated local environmental buffer ordinances utilizing geoprocessing techniques.
- Prepared and plotted the data in a visually aesthetic manner for use in the local permitting process.

Utility Line Crossing Evaluation Proposed River Crossing Project-Norwell, Massachusetts
BL's engineering and environmental team conducted an in-depth evaluation of the different river crossing methods for a proposed utility line crossing over a regulated river in Norwell, MA. The methodologies considered impacts regulated features including wetlands, rivers, Riverfront and potential impacts to migratory fish and avian species. Horizontal directional drill, mounting the utility line and impacts to the existing bridge and construction of a stand-alone aerial crossing independent of an existing bridge structure were evaluated. The crossing method has not been finalized and further cost evaluations are being considered by the client.

Williams, Transco Pipeline, Atlantic Sunrise Pipeline Project, Various Counties, Pennsylvania
Serves as Senior Engineering Compliance Inspector within Columbia County, PA. Served as Senior Project Scientist for the completion of soil test pit evaluations and stormwater detention basin infiltration testing for compressor station sites throughout the state.

Kinder Morgan, Utopia Pipeline, Various Counties, Ohio
Serves as Senior Project Scientist for an approximately 225-miles ethane/propane pipeline through northern Ohio. Responsibilities include conducting wetland, soils, and natural resource studies.

Dominion Energy, Atlantic Coast Pipeline, Various Counties, West Virginia & Virginia
Served as an Environmental Scientist and conducted wetland screenings, delineations, permitting, and mitigation design and monitoring for 130 miles of natural gas pipeline projects for the Krause and Wellsboro pipelines.

SWEPI (Shell), Various Counties, Pennsylvania
As an Environmental Scientist, Mr. Simko conducted wetland screenings, delineations, permitting, and mitigation design and monitoring for 130 miles of natural gas pipeline projects for the Krause and Wellsboro pipelines.

Hilcorp & Cabot Natural Gas, Various Natural Gas Well Pads & Pipeline Projects, Various Counties, Pennsylvania
As E&S inspector, Mr. Simko conducted E&S inspections at various natural gas well pads and gathering pipeline projects located in the northern tier and southwestern portions of Pennsylvania. His duties involved preparing inspection reports and photo documentation.

PVR Natural Gas Gathering, Various Natural Gas Well Pads & Pipeline Projects, Susquehanna & Wyoming Counties, Pennsylvania
Served as the Environmental Scientist responsible for wetland screenings and delineations for another company to install a gas pipeline at their facility, as well as various other natural gas pipeline and well pad projects throughout northern Wyoming County and Susquehanna County in Pennsylvania.

Williams (Access) Midstream Company, Various Natural Gas Well Pad Sites, Columbia County, Pennsylvania
Served as the Environmental Scientist responsible for wetland screenings and delineations, as well as threatened and endangered species habitat assessments, for various natural gas well pad sites within Columbia County, Pennsylvania. Services were completed in 2013.

PP&L Susquehanna to Roseland 500 KV Electric Transmission Line, Pennsylvania
Served as the Environmental Scientist responsible for wetland delineations, as well as threatened and endangered species habitat assessments, for a large segment of electric transmission line within Pennsylvania of the PPL Electric Utilities project known as the Susquehanna-Roseland Line. Firm of Record: Woodland Design Associates, Inc., Honesdale, Pennsylvania.

WESLEY G. WOLF, PWS

RESUME

PROJECT ROLE
Senior Project Manager

EDUCATION
Bachelor of Science in Biology, West Chester University, 1992

CERTIFICATIONS / TRAINING
PA Fish & Boat Commission Scientific Collector's Permit
PA DCNR Wild Plant Management Permit
OSHA 40-Hour Hazardous Waste Site Training CFR29 1910.120, 1986
OSHA 8-Hour Refresher Training for Hazardous Waste Sites, 1987-2021
PA DEP Certified Drinking Water Laboratory Director 1996-2007
Pollution Biology, Penn State University, 2002
Environmental Law, Penn State University, 2001
Wetlands Ecology, Penn State University, 2001

SUMMARY OF QUALIFICATIONS

Mr. Wolf specializes in building client trust and enduring relationships within the environmental studies and permitting sections across multiple disciplines of the engineering field. His overall experience is focused on natural resources evaluations to include wetlands and aquatic resources, overseeing groups conducting wetland delineations, permitting, mitigation, and plant and animal surveys. Additional responsibilities include managing large scale projects with multi-disciplined teams to accomplish client permitting and site evaluation goals. Technical background includes experience with studies in terrestrial ecology and botany, environmental compliance monitoring, and construction oversight during and after completion of construction projects.

Mr. Wolf has extensive experience leading teams that interface with the multiple state, local and federal regulatory agencies, including the U.S. Army Corps of Engineers (USACE), state environmental protection departments, the US Environmental Protection Agency (USEPA) Inland Wetland Commissions (IWC) as part of ongoing project coordination for multi-faceted development, energy generation and transmission projects. Team lead and project manager for linear energy siting and routing projects over thousands of acres throughout the northeast down through Florida and into the Midwestern states.

RELEVANT EXPERIENCE

Battery Storage Facility, Holyoke, Massachusetts

Conducted wetland field delineation and completed the wetlands report for inland freshwater wetland located a potential Energy Storage Site in Holyoke, MA. The freshwater wetland buffer was proposed for impacts from the project footprint after consultation with the Holyoke Conservation Commission the client revised the project layout to eliminate buffer impacts. The project included coordination with both the Mass. Department of Environmental Protection (MADEP) and the Holyoke Conservation Commission due to the uncertainty of the jurisdictional limits at the time of application. Review of the MASSMapper revealed that there were no threatened or endangered species or Areas of Special Environmental Concern located in the project area.

Utility Pipeline Crossing, Brockton, Massachusetts

BL Companies provided the integration of GIS-based, GPS-based, and CAD-based data utilizing ArcMap software to develop an Environmental Plot Plan for the design and permitting of a natural gas utility line over the Salisbury River in Brockton, MA. The scope of services that BL is providing consisted of the following:

- Received and integrated non-BL GIS data, BL survey data, and design-related CAD data into an overall Environmental plot plan. This included a multitude of geoprocessing techniques within the ArcMap software.
- Provided E&S design for project on the plan.
- Incorporated local environmental buffer ordinances utilizing geoprocessing techniques.
- Prepared and plotted the data in a visually aesthetic manner for use in the local permitting process.

Utility Line Crossing Evaluation Proposed River Crossing Project, Norwell, Massachusetts

BL's engineering and environmental team conducted an in-depth evaluation of the different river crossing methods for a proposed utility line crossing over a regulated river in Norwell, MA. The methodologies considered impacts regulated features including wetlands, rivers, Riverfront and potential impacts to migratory fish and avian species. Horizontal directional drill, mounting the utility line and impacts to the existing bridge and construction of a stand-alone aerial crossing independent of an

existing bridge structure where evaluated. The crossing method has not been finalized and further cost evaluations are being considered by the client.

Metro North Railroad Catenary Bonnet Replacement Project, Fairfield to Bridgeport, Connecticut
Oversaw and lead natural resources (NR) investigations along the Metro North Railroad as part of electric transmission line support upgrades. NR investigations included vernal pool surveys and identification of obligate species or eggs present in pools as indicator species, inland wetlands delineations and tidal wetlands delineations using both high, high tide lines coupled with vegetative transition demarcations as identified in the field.

Thin Layer Placement Marsh Restoration, Old Lyme, Connecticut
Lead mitigation options discussion, research methodologies and present white paper to the USACE - New England District, the Connecticut Department of Energy and Environmental Protection (CTDEEP) and Office of Environmental Protection within the CTDOT. Prepare research teams to conduct onsite testing, locate potential dredge material sources, interface with multiple state, federal and private entities to corroborate feasibility of restoration design. Coordinate with multiple outside agencies, consultants and stakeholders to identify the appropriate mitigation strategy for coastal, tidal wetlands systems. Present white paper to the USACE and CTDEEP for review and approval to use Thin Layer Placement as an appropriate marsh restoration strategy within a State Park in CT.

Penske East Windsor CT. BL Companies performed a desktop study and a field investigation for federal and state listed species of concern. A review of the U.S. Fish & Wildlife Service's (USFWS) Information for Planning and Conservation (IPaC) and the Connecticut Department of Energy & Environmental Protection's (DEEP) Natural Diversity Database (NDDB) list of threatened, endangered, proposed and candidate species, as well as proposed and final designated critical habitat, that may occur within the Site boundary and/or may be affected by the proposed undertakings at the Site was conducted.

The field investigation consisted of ground reconnaissance of delineated transects throughout the Site as well as a perimeter pedestrian field reconnaissance of the approximately 20.28 acres open farm fields with a small area of trees and shrubs.

Three (3) species were listed by the CT DEEP and consist of:

· Spotted Turtle (*Clemmys guttata*) – Vertebrate – Status: State Special Concern

· Eastern Box Turtle (*Terrapene carolina*) – Vertebrate – Status: State Special Concern

· Hyssop skullcap (*Scutellaria integrifolia*) – Vascular Plan – Status: State Endangered

While some preferred habitat for each of the three (3) listed species was present, especially within the vicinity of an onsite brook, no individuals of any of the listed species were observed during the field reconnaissance. The disturbed and fragmented nature of the habitat on the Site contributes to diminished habitat value for the two (2) turtle species. NDDB required a turtle protection plan to protect the turtle species which may occupy or transverse the site.

Schuylkill Haven Broadband Project, Greater Schuylkill Haven Area, Pennsylvania

Project manager overseeing natural resource teams conducting natural resource identifications and reporting. Provide permitting guidance for PADEP/USACE permitting, conducting a pre-application meeting, and permit review for multiple permit and waivers for encroachments into regulated Scenic Waterways, navigable waters and regulated streams. Permitting included PADEP Chapter 105 waivers, PADEP General Permits, and a Joint PADEP/USACE Permit Application for encroachments over Waters of the United States and/or Waters of the Commonwealth along with completing the Submerged Lands License Agreement with the PADEP. The project entailed acquiring State Historic Preservation Office (SHPO) clearance for cultural resources and Pennsylvania Natural Diversity Index (PNDI) clearance for the project permitting.

Natural Gas Transmission Installation, PGCDCRRP, Maryland
Oversaw and conducted stream and wetlands field surveys, forest stand delineations, cultural resources surveys, mitigation site investigation and permitting assistance through a high-density residential area of Laurel through Waldorf MD of a proposed natural gas transmission line. Interfaced with Maryland Department of the Environment and the Baltimore Districts of the USACE to complete the field review of a jurisdictional determination for the pipeline route.

Natural Gas Transmission Line Replacement, Virginia and Maryland
Oversaw and conducted stream and wetlands field surveys along the VA and MD transmission line segments. Threatened and endangered (T&E) species clearances interfaced with Norfolk and Baltimore Districts of the USACE to document Nationwide Permit (NWP) and State Programmatic General Permit (SPGP) 5 Permit applicability for the projects. In-place state Memorandums of Agreements (MOAs) for ongoing maintenance activities within the transmission line right of way.

Gas Fired Power Generation Plant, Southern Virginia
Lead permitting for natural resources assessments including streams and wetlands, permitting for impact to streams and wetlands and mitigation bank identification and credit secure for wetlands and stream impacts. Oversaw field crews that conducted habitat surveys to provide documentation for clearance of U.S. Fish and Wildlife Service (USFWS) identified T&E species at the location, and successfully permitted roadway impacts to the site.

PHMSA NEPA Categorical Exclusion – Borough of Chambersburg, PA
Project manager for team conducting pipeline assessment and replacements for 15 segments of natural gas pipeline located within the Borough's utility line section. The Borough has been selected to receive Pipeline and Hazardous Materials Safety Lead natural resources team for identification of T&E species reviews and field survey verification, guided and oversaw surveys for small whorled pogonia and northern long-eared bat, USFWS eagle take and monitoring permitting, stream and wetlands surveys utilizing the 1987 USACE Wetlands Delineation Manual and regional supplement for the Atlantic and Gulf Coastal Plain and the Unified Stream Methodology (USM) for the entire 489+ acre parcel. Procured the Jurisdictional Determination (JD) and successful Section 404/401 Virginia Department of Environmental Quality permitting for impacts to streams and wetlands,

Multiple Solar Sites, Connecticut
Oversee and direct natural resources team to conduct wetland delineations, functions and values assessments and habitat surveys for multiple sites located throughout Connecticut. Field delineations are conducted utilizing the US Army Corps of Engineers 1987 Wetland Delineation Manual (Environmental Laboratory, 1987) along with the appropriate Regional Supplements. The CT hydric or poorly drained soils delineation line is included in the final report mapping to align with both state and federal guidance in mapping wetland areas. Interface with various Inland Wetland Commissions within different local jurisdictions.

including mitigation for impacts. Oversight of cultural resources surveys and interactions with the Virginia Department of Historic Resources, which included archeological assessments of historic structures and Phase 1a for locations on-site identified from desktop surveys. Completed and successfully fulfilled requirements for impacts to Resource Protection Areas (RPAs) under the County's Chesapeake Bay Preservation Act, including the Preservation Area Site Assessment (PASA) using the Fairfax method to conduct Perennial Flow Determinations (PFD) and the associated Water Quality Impact Assessment (WQIA) for encroachments into RPAs and mitigation for RPA impacts.

Pipeline Replacement and Relocation Projects, Northwest Pennsylvania
Project manager for multiple pipeline replacement projects within several Exceptional Value (EV) and wild trout streams located adjacent to wetlands. Oversaw and assisted field teams in delineating water resources, collecting Level Two Rapid Assessment (L2RA) data and compilation of the environmental assessment. Managed surveyors conducting rare, threatened or endangered species surveys for endangered plant and reptiles known to occur within the project boundaries. Facilitated, oversaw preparation and final review for submittal of Joint Permit Application (JPA) and associated restoration plan in lieu of mitigation for impacts to water resources on the project. Interfaced with PA Department of Environmental Protection (PADEP) and USACE representatives to conduct a jurisdictional determination (JD) for routes and permit successful JPA or general permit

submittal. The projects' scope also included stream restoration, cultural resources clearances, NPDES permitting, construction monitoring, environmental inspections and post construction monitoring of restored resources and impacted wetlands and streams.

12 Mitigation Sites, Northeast Pennsylvania
Served as project manager on inception to monitoring for 12 mitigation sites located in northeast Pennsylvania. Wetlands mitigation and stream restoration was required for 12 different pipeline projects located in Wyoming and Susquehanna County, PA. Oversaw and conducted site identification, met with landowners and secured approvals from the PADEP and USACE to construct the sites. Installed groundwater monitoring wells, performed initial assessments of the water resources and then designed the mitigation sites for construction. Selected the construction contractor and conducted oversight during construction. Performed post construction monitoring for each of the 12 successful mitigation and stream restoration locations.

Rhode Island Department of Transportation, Bridge Replacement Group 13E-W West River Bridge, Providence, Rhode Island
Environmental Project Manager for the natural resources group that conducted stream and wetland delineations in the vicinity of the West River bridge in Providence as part of the RIDOT Bridge Replacement project. Additional assessment of the functions and values of the water resources was completed and a habitat of the substrate and surrounding vegetative communities was conducted within the vicinity of the bridge abutments and potential work area.

Rhode Island Department of Transportation, Route 37 Bridge Rehabilitations and Replacements, Warwick and Cranston, Rhode Island
Environmental Project Manager of the multi-disciplined team conducting wetlands delineation, function and values assessment and close coordination with the bridge designer in order to submit environmental permit documentation on a fast-track basis.

Barrington & Warren Bike Path Bridges, Barrington and Warren, Rhode Island
Environmental Project Manager of the natural resources team that conducted wetland and stream delineation of the East Bay Bike Path bridges over the Barrington and Palmer Rivers in Barrington and Warren, RI. A regulated watercourse and four (4) coastal wetlands were identified within the project area. An initial assessment of the coastal habitat and substrate was conducted to facilitate information to the NOAA's National Marine Fisheries Service. In addition, the functions and values of the wetlands was assessed, and avoidance and minimization measures considered to reduce impacts to the wetland areas.

Consultant Liaison Engineering Services for the State and Federal Local Bridge Program, Connecticut Department of Transportation, Statewide, Connecticut
Served as Senior Project Scientist for several bridge rehabilitation and replacement projects for CTDOT across the state. Responsibilities included performing wetland delineations, function and values assessments, and bat habitat assessments at each bridge location where natural resources were identified as being within the proximity of proposed work. Additional responsibilities included attaining environmental permitting for the CTDEEP and U.S. ACOE, identifying invasive species, and coordination for listed species.

City of Bristol, Bristol, Connecticut
Coordinate assessment, stream and wetland delineation and develop a site restoration plan for impacted watercourses and wetland features located on a city owned property. The City's IWC had identified several areas of concern on a City owned property that included a soil stock pile of PCB contaminated soils that was being eroded by uncontrolled stormwater discharge from the site. Lead team to conduct an evaluation of remedial alternatives to stabilize the sandy soils on the site, remove sediment from wetlands and proposed a restoration plan for review and approval by the IWC. Restoration is ongoing and expected to be completed in October 2022.

Southeast Bristol Business Park, Bristol, Connecticut
Project Manager for a wetland delineation survey for Lot 3, Lot 9, and Lot 10 of the Southeast Bristol Business Park in August of 2021. The Lots are approximately 12.67 acres in combined size and approximately 16 hours of surveying efforts were performed

at the Lots. Following field delineation efforts, a wetland delineation report was created to give details regarding the field work findings. Additionally, a field site visit meeting with the City of Bristol's Inland Wetlands and Watercourses Commission (IWWC) was performed to present BL Companies' wetland delineation findings to the Commission for their review and subsequent approval. Following the IWWC site meeting and agreement with BL Companies' wetlands and watercourses delineation work, the City of Bristol's official IWWC wetland mapping was updated from previous delineation work to reflect BL Companies' more inclusive and comprehensive field findings and geographical positioning system (GPS) data collection. BL Companies' extensive geographical information system (GIS) knowledge and experience was utilized to present the City of Bristol with mapping and digital data to quickly and easily update their official mapping.

Montgomery County Community College – Blue Bell, Pennsylvania
Project manager overseeing natural resource teams conducting natural resource identifications and reporting for stormwater retrofit, redevelopment of athletic fields and parking lot improvements. Our natural resources team provided wetland delineation utilizing the 1987 US Army Corps of Engineers Manual and associated regional supplements as developed by the 2012 updates. Provide permitting guidance for PADEP/USACE permitting, Complete preliminary threatened and endangered species consultation utilizing the Pennsylvania Natural Diversity Index (PNDI) and the US Fish and Wildlife Services Information for Planning and Conservation (IPaC) as well as coordinating information to the Pennsylvania Museum and Historic Commission (PHMC) utilizing the PA-SHARE website for environmental reviews.