TOWN OF KITTERY

200 Rogers Road, Kittery, ME 03904
Telephone: (207) 475-1323 | Fax: (207) 439-6806
Visit us: www.kitteryme.gov/planning-board

Planning Board Meeting
February 8, 2023

ITEM 1—90 US Route 1—Major Site Plan — Preliminary Review
Action: accept site plan as complete. Schedule site walk/public hearing. Geoff Aleva, on behalf of owner/applicants 90 US Route 1 LLC, requests approval to develop a hotel with 62 rooms and associated parking and utilities on the property of 90 US Route 1, Tax Map 14, Lot 2, in the Bypass-Old Post Road Commercial (C-3) Zone.

PROCESS SUMMARY

REQ'D	ACTION	COMMENTS	STATUS
NO	Sketch Plan Acceptance/Approval	8/10/23	Accepted
YES	Planning board determination of completeness	Scheduled for 2/8/24	Pending
NO	Site Visit	Optional for planning board, required for planning staff	TBD
YES	Public Hearing	Required for Preliminary Site Plan or Subdivision Approval	TBD
YES	Preliminary Plan Approval		TBD
YES	Final Plan Review and Decision		TBD
Applicant: Prior to the signing of the approved Plan any **Conditions of Approval related to the Findings of Fact along with waivers and variances (by the BOA) must be placed on the Final Plan and, when applicable, recorded at the York County Registry of Deeds. PLACE THE MAP AND LOT NUMBER IN 1/4" HIGH LETTERS AT LOWER RIGHT BORDER OF ALL PLAN SHEETS.**			

OTHER POTENTIAL PERMITS AND REQUIREMENTS

- Approval from DOT regarding revised driveway placements
- State Fire Marshal NFPA #13 fire protection system approval.
- DEP stormwater permit by rule
- Driveway entrance permit with public works
- Sign permitting through Code Enforcement

PROJECT INTRODUCTION

This is the first preliminary review for a new 62-room hotel on the property of 90 US Route 1. Previously the site of the now demolished Little Guest House Motel, the lot currently contains a parking area with driveways providing access to the Route 1 Bypass, as well as existing woodland on the eastern portion of the lot. The lot abuts various commercial properties across the Route 1 right-of-way. From the site, Old Post Road leads to Legion Pond southward and commercial businesses along the Kittery Traffic Circle northward.

The applicant proposes developing the property into a 3-story hotel with 62 rooms and associated parking and utilities. Access would be provided through a new single driveway along the Route 1 Bypass, and a driveway along Old Post Road would be designated for emergency vehicles only. The plan proposes to add a sidewalk along the entire frontage of Old Post Road and to maintain the existing treeline to the greatest extent possible.

The applicant has provided the submission requirements for a preliminary site plan. **Staff advise determining application completeness and scheduling a public hearing.**

WAIVERS REQUESTED

1. Utility lines aboveground: utilities are required to be built underground in the C-3 zone, although the planning board has the authority to allow alternatives to this. There are three above ground electric utility poles current on the site. The applicant plans to remove 2 of them and relocate one closer to Old Post Road. Underground utilities will be connected from the single remaining utility pole. The applicant states one pole is required to route CMP power lines to the property.
2. Parking dimension modifications: the applicant is requesting to reduce the length of some of their parking spaces, to allow more room for landscaping in the parking lot. The applicant will specify the number of spaces needing this waiver in a future rendition of the plan.
    a. During the sketch review, the planning board requested more landscaping in the parking lot, and indicated they would entertain a reduction in the size of parking spaces to facilitate this.

STAFF COMMENTS

Listed below are additional comments provided by staff in addition to general review of standards:

1. The Kittery Water District has identified Route 1 as a priority area to upgrade the size of the current water main. The Water District and applicant have been collaborating regarding a cost-sharing agreement to upgrade the portion of the road along 90 Route 1. Staff suggest a condition of approval tying certificate of occupancy to the completion of said water main expansion.
2. The driveway onto Old Post Road will be for service vehicles only and will have signage stating all other traffic is prohibited. The applicant originally intended to install a gate along this driveway with a locked box containing keys for emergency vehicles to use. However, fire staff believe the option proposed now is safer, as the installation of a gate creates a potential impediment even with key access proposed.
3. The applicant is proposing sidewalks along the frontage of Old Post Road, and not the Route 1 Bypass. Public Works would rather have the applicant provide pedestrian access along Old Post Road to avoid confusion regarding maintenance responsibilities, as Route 1 is a state road and not the authority of the Town.
    a. The landscaping plan shows sidewalks on the Route 1 ROW, rather than the Old Post Road ROW. This should be corrected in future renditions of the plan.
    b. As proposed, the sidewalk will be at a different elevation from the 3 catch basins along the Old Post ROW, which creates a tripping hazard. Public Works is requesting

the applicant integrate curb inlets into the sidewalk. Otherwise, they would likely require installations such as new lids or guard railings to ensure public safety.

4. Fire staff requested that any trees planted along the perimeter of the building be ornamental. They are worried that if the planted trees grow too large, it could impede fire truck access in the future.
5. The engineer peer review found the current photometric plan caused glare beyond the property line on Old Post Road and the Route 1 Bypass site entrance. Future renditions of the lighting plan should remove this glare, or the applicant should request a waiver.
6. A fire truck turning movement plan will be needed as part of final review.
7. The architectural plan stated 62 rooms while the site plan says 63 rooms. The architecture plan should be amended to have the correct number.
8. The traffic study proposes to clear shrubbery to the left of the entrance onto Route 1 bypass to improve sight lines.
9. No high-crash areas have been identified in the immediate vicinity of the project. The nearest known high-crash area is the Kittery Traffic Circle on the northeast end of Old Post Road, approximately 1,500 feet from the property.
10. The traffic study shows a calculated peak hours of less than 100, meaning a Traffic Movement Permit is not required by the MDOT.

PROJECT ANALYSIS

Staff reviewed the application and provided materials and have provided their determination on the requirements and standards below. All requirements that have not been met or require further discussion are highlighted.

Code Ref.	§16.4 Land Use Zone Standards	
	Standard	Determination
§16.4.21.B/C.	Permitted/Special Exception Uses	The proposed use is permitted
§16.4.21.E.(2).(a).	Lot size: 40,000 sq ft. minimum	It appears the standard is satisfied.
§16.4.21.E.(2).(b).	Street frontage: no requirements in C-3 Zone	It appears the standard is satisfied.
§16.4.21.E.(2).(c).	Front setback: this lot has two "front yards:" • 15 ft **maximum** along Route 1 Bypass 15 ft **minimum** along Old Post Road	It appears both standards are satisfied.
§16.4.21.E.(2).(d).	Rear and side setbacks: 10 ft minimum. NOTE: side yard setback if 15 ft minimums where property abuts residential structures	It appears the standard is satisfied.
§16.4.21.E.(2).(e).	Building height: 40 ft maximum NOTE: structures along Old Post Road may not exceed 25 ft building heights within a 30 ft setback from Old Post Road	It appears both standards are satisfied.

§16.4.21.E.(2).(f).	Imperious surface: 70% maximum for currently developed lots	It appears the standard is satisfied. The box for impervious surface calculations has two different numbers for the total impervious surface area. 43,552 is the correct number for total area; the line saying "total impervious surface area: 43,490" should be removed.
§16.4.21.E.(2).(m)..	Underground utilities required	The applicant is requesting a modification to allow one utility pole to remain, explained above. Otherwise, the standard appears met.
§16.4.21.E.(3).(a).	Parking standards: • parking areas must be visually screened when abutting residential properties. • Parking spaces must have a dimension of 19' x 9'	The applicant is proposing plantings along the parking lot in conjunction with existing vegetation that will remain. The applicant is requesting a waiver for the parking spaces not meeting the dimensional requirement. Otherwise, the standard appears to be satisfied.
§16.4.21.E.(3).(b).	Loading docks and overhead doors must be located on the side of rear of the building with visual screening from view from adjacent residential properties.	All loading docks and overhead doors appear to be screened by landscaping on the side of the building. The standard appears to be satisfied.
§16.4.21.E.(3).(c).[2].	Landscaping improvements include: • A minimum 15 ft vegetated landscape planter strips between the lot and adjacent rights-of-way. • One street tree for every 50 feet of street frontage	The standard appears to be met along the Old Post ROW. The applicant will need to seek a waiver for a portion of the Route 1 Bypass not meeting the 15 foot minimum or revise the plan.

§16.4.21.E.(3).(d).	Traffic circulation standards: sidewalks are required internally and along the entire portion of the lot facing Old Post Road.	The standard appears to be satisfied.
§16.4.21.E.(3).(e).	Open Space standards: 20% minimum. Designated open space areas must be notated on the plan	The standard appears to be satisfied. Staff suggest the applicant designate the existing tree line areas as open space blocks in future renditions of the plan.
Code Ref.	§16.5 Performance Standards	
	Standard	Determination
§16.5.10	Essential Services	Wastewater and Water District staff have both confirmed sufficient capacity for the entire proposed development. An emergency service driveway will be installed along Old Post Road, with signage indicating it is not to be used for public traffic. The applicant will work out the details of the water main expansion described above before final plan approval.
§16.5.25	Sprinkler Systems are required in all hotels and buildings of three or more stories.	Sprinkler systems must meet NFPA standards for the entire structure, including the attached hotel canopy.
§16.5.27	Street Standards: sidewalks are required along the entire ROW for Old Post Road	The plan proposes sidewalks connecting the hotel to Old Post Road.

§16.7.11.F.(e).	Minimum parking spaces is determined by: • 62 spaces for 62 rooms • 2 spaces for 193 sq ft of meeting area • Total: 64 spaces required.	With 66 spaces proposed, the plan appears to exceed minimum requirements. The plan appears to meet ADA space requirements
§13.1.6.5/§13.1.6.6	Sewer impact fees and special sewer entrance fees	A rough estimate of the sewer cost will be calculated by staff as part of the preliminary site plan process.
Code Ref.	§16.7.10 Preliminary Site Plan Requirements	
	Standard	Determination
§16.7.10.C.(4).(a-i).	• Paper plan sheets no smaller than 11" x 17" • Scale of drawing no greater than 1 inch = 30 feet • Code block in right-hand corner • Standard boundary survey of existing conditions • Compass with arrow pointing true north • Locus map of property • Vicinity map and aerial photograph • Surveyed acreage of parcel(s), rights-of-way, wetlands, and amount of street frontage • Names and addresses of owners of record abutting property	Provided
§16.7.10.C.(4).(j).	Existing conditions survey including all identified structures, natural resources, rights-of-way, and utilities located on and within 100 feet of the property.	Provided

§16.7.10.C.(4).(k).	• Proposed development area including: • Location and detail of proposed structures and signs • Proposed utilities including power, water, and sewer. • Sewage facilities type and placement. • Domestic water source • Lot lines, rights-of-way, and street alignments • Road and other paved area plans • Existing and proposed setbacks • Storage areas for waste or hazardous materials • Topographic contours of existing contours and finished grade elevations • Locations and dimensions of artificial features such as pedestrian ways, sidewalks, curb cuts, driveways, fences, retaining walls,	Provided
§16.7.10.C.(4).(l).	Natural features or site elements to be preserved.	Provided
§16.7.10.C.(4).(m).	Identified property encumbrances.	Provided
§16.7.10.C.(4).(n).	Kittery Water District approval letter.	Provided
§16.7.10.C.(4).(o).	Erosion and sedimentation control plan.	Provided
§16.7.10.C.(4).(p).	Stormwater management plan and drainage analysis.	Provided
§16.7.10.C.(4).(q).	Soil survey.	Provided
§16.7.10.C.(4).(r).	Vehicular traffic report.	Provided
§16.7.10.C.(4).(s).	Traffic impact analysis.	Provided
§16.7.10.C.(4).(t).	Test pit analysis.	Not applicable
§16.7.10.C.(4).(u).	Approval letter from Town sewage.	Provided
§16.7.10.C.(4).(v).	Evaluation of development by Technical Review Committee department heads.	Provided
§16.7.10.C.(4).(w).	Additional submissions as required.	None identified at this time

DISCUSSION, NEXT STEPS, AND RECOMMENDATIONS

The purpose of the first meeting of a preliminary site plan is to determine the completeness of the application, provide specific feedback to the applicant, and determine whether the plan is ready to schedule a public hearing. The outstanding issues that have been identified are able to be modified at later iterations of the preliminary site plan. Staff believe the application meets all submission

requirements for initial acceptance and suggest the planning board entertain the proposed waivers.

RECOMMENDED MOTIONS

Below are recommended motions for the Board's use and consideration:

Motion to accept the application as complete

Move to accept the preliminary site plan by Geoff Aleva, on behalf of owner/applicants 90 US Route 1 LLC

Motion to schedule a site walk

Move to visit the site of the preliminary site plan by Geoff Aleva, on behalf of owner/applicants 90 US Route 1 LLC

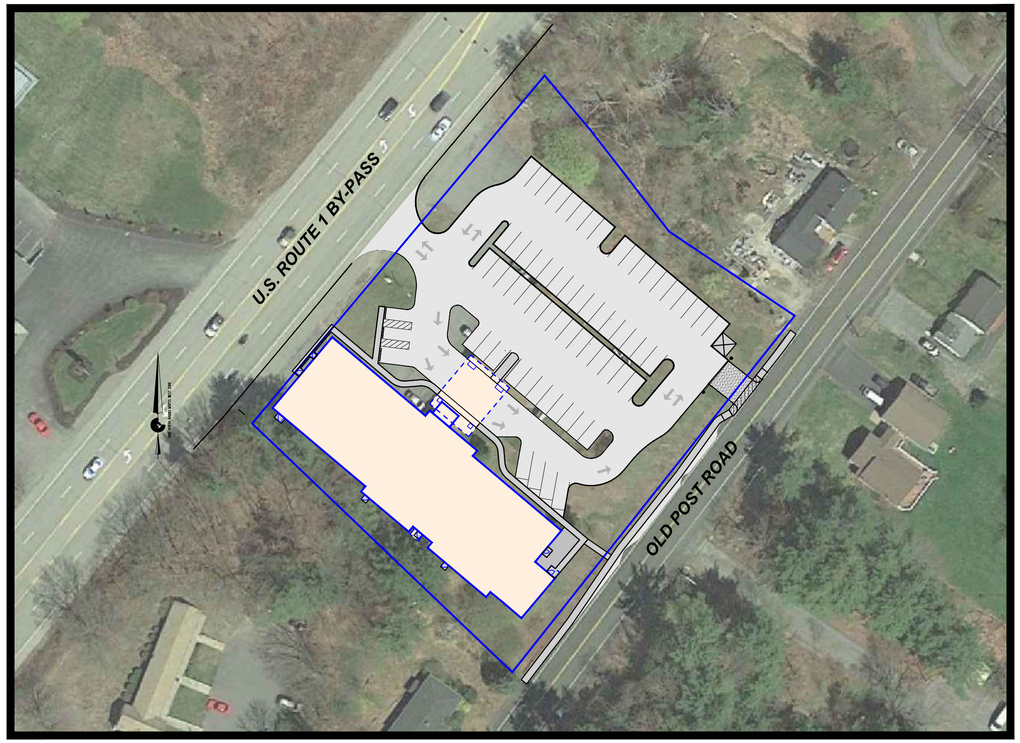
Motion to schedule a public hearing

Move to schedule a public hearing for the preliminary site plan by Geoff Aleva, on behalf of owner/applicants 90 US Route 1 LLC

REDEVELOPMENT PLAN OF LAND OF 90 US ROUTE 1, LLC

(MAP 14, LOT 2)
KITTERY, MAINE

PREPARED FOR:
90 US ROUTE 1, LLC
PO BOX 630
KITTERY, ME 03904



PROPOSED LAYOUT
SCALE: 1"=50'

HOTEL ARCHITECT: SILVESTRI ARCHITECTS, PC
1321 MILLERSPORT HWY
AMHERST, NY 14221

LANDSCAPE ARCHITECT: SCOTT STRYNAR #3148
LANDSCAPE ARCHITECT, LLC
98 MEEHAN LANE
NORTH BERWICK, ME 03906

OWNER: 90 US ROUTE 1, LLC
PO BOX 630
KITTERY, ME 03904

CIVIL ENGINEER: CIVIL CONSULTANTS
P.O. BOX 100
293 MAIN STREET
SOUTH BERWICK, ME 03908

PLAN INDEX:

EC1	BOUNDARY/EXISTING CONDITIONS PLAN
L1	PROPOSED SITE PLAN
L2	CONSTRUCTION DETAILS
L3	CONSTRUCTION DETAILS
L4	NOTES
LP1	LANDSCAPING PLAN
LL1	SITE LIGHTING PLAN
LL2	SITE LIGHTING DETAILS
A-201-202	ARCHITECTURAL ELEVATION PLANS
A-101-103	ARCHITECTURAL FLOOR PLANS

STATE OF MAINE
GEOFFREY R. ALLEN
No. 9679
REGISTERED PROFESSIONAL ENGINEER
1/9/2024

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Engineers
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Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

NO.	REVISIONS	INT.	DATE

RECORD OWNER: 90 US ROUTE 1 LLC
ADDRESS: PO BOX 630 KITTERY, ME 03904

REDEVELOPMENT PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR: 90 US ROUTE 1 LLC
CLIENT ADDRESS: PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: 06/23/2023
DRAWN BY: JAA/DRC
CHECKED BY: GRA
APPROVED BY:

PROPOSED
SITE PLAN

PROJECT NO: 21-323.00

L1

SHEET: 1 OF 4

COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd
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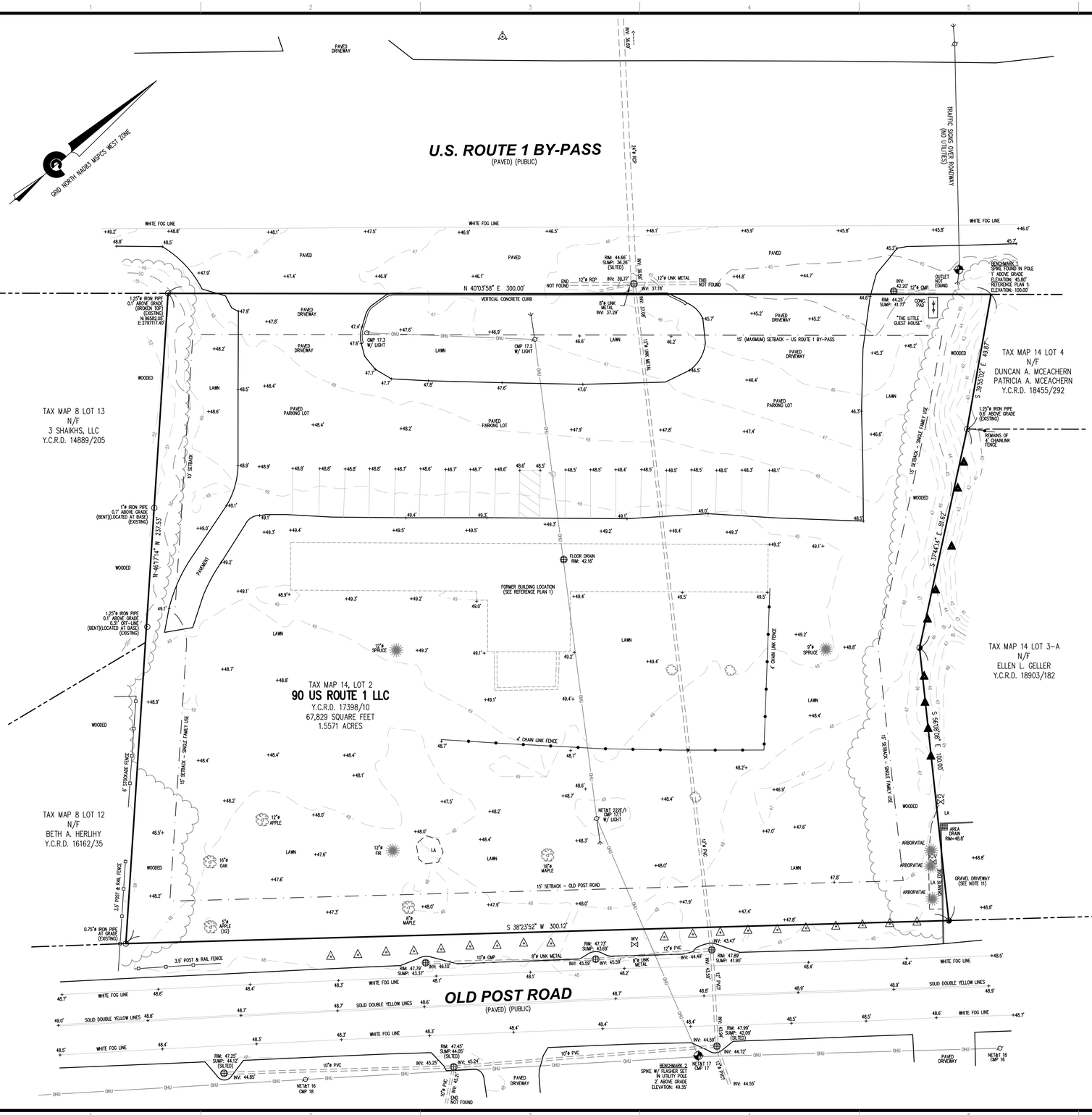


ZONING REGULATIONS:

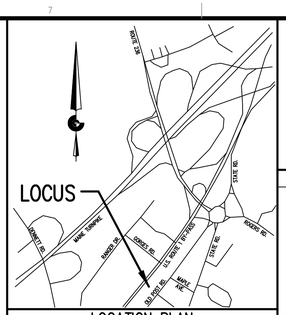
ZONING INFORMATION PER THE TOWN OF KITTERY ZONING ORDINANCE
LAST REVISED OCTOBER 24, 2022 – E-CODE ONLINE APRIL 11, 2023

COMMERCIAL 3 – BYPASS/OLD POST RD COMMERCIAL ZONE (C-3)

MINIMUM LOT SIZE:	40,000 SQUARE FEET
MINIMUM STREET FRONTAGE:	NO MINIMUM (MUST CONFORM WITH 16.5.14)
MINIMUM FRONT SETBACK:	15 FEET (OLD POST ROAD)
MAXIMUM FRONT SETBACK:	15 FEET (ROUTE 1 BY-PASS)
MINIMUM SIDE SETBACK:	10 FEET (15 FEET ABUTTING A SINGLE FAMILY USE)
MINIMUM REAR SETBACK:	10 FEET (15 FEET ABUTTING A SINGLE FAMILY USE)
MAXIMUM BUILDING HEIGHT:	40 FEET
MAXIMUM IMPERVIOUS SURFACE:	70%* (SEE 16.4.21.E.2.F)

*FOR CURRENTLY DEVELOPED LOTS WITH A PROPOSED NON-RESIDENTIAL REDEVELOPMENT (SEE 16.4.21.E.2.F)

FOR COMPLETE ZONING INFORMATION REFER TO THE TOWN OF KITTERY ZONING ORDINANCE



LOCATION PLAN
(NOT TO SCALE)

NOTES:

1. PLANIMETRIC DETAIL DEPICTED HEREON IS THE RESULT OF AN ON-THE-GROUND FIELD SURVEY BY CIVIL CONSULTANTS CONDUCTED ON APRIL 6-7, 2023.
2. NORTH AS DEPICTED HEREON IS REFERENCED TO GRID NORTH, NAD83, MAINE STATE PLANE COORDINATE SYSTEM, WEST ZONE. COORDINATE VALUES AND ORIENTATION ARE DERIVED FROM A GPS SURVEY COMPUTED UTILIZING THE NGS OPUS ON-LINE PROCESSING SERVICE. REFERENCE FRAME IS NAD83 (2011) EPOCH 2010.0000. THE SURVEY IS TIED TO CORS STATIONS GUNSTOCKMRNH2008 CORS ARP (P776), GORHAM CORS ARP (MEGO) AND NHDOT CONCORD CORS ARP (NHCO). DISTANCES DEPICTED HEREON ARE GRID. TO CONVERT GRID DISTANCES TO GROUND DISTANCES, MULTIPLY THE GRID DISTANCE BY 1.00000329 (AVERAGE COMBINED SCALE FACTOR FOR THE SITE).
3. ELEVATIONS DEPICTED HEREON ARE REFERENCED TO NAVD88, DERIVED FROM THE ABOVE REFERENCED GPS SURVEY. **[TO CONVERT NAVD88 ELEVATIONS TO NGVD29 ELEVATIONS ADD 0.76'].**
4. THE 1-FOOT CONTOUR INTERVAL TOPOGRAPHIC INFORMATION ON THE SUBJECT PROPERTY IS BASED ON THE ABOVE-REFERENCED, ON-THE-GROUND FIELD SURVEY.
5. RECORD OWNER: 90 US ROUTE 1 LLC
6. ASSESSOR'S INFORMATION: TOWN OF KITTERY ASSESSOR'S MAP 14, LOT 2
7. DEED REFERENCE: Y.C.R.D. 17938/10
8. THE LOCUS PARCEL IS LOCATED IN "ZONE C" ON THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF KITTERY, MAINE, YORK COUNTY, COMMUNITY PANEL NUMBER 230171 0007 C, EFFECTIVE DATE JULY 5, 1984. ZONE C IS DEFINED AS "AREAS OF MINIMAL FLOODING".
9. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS NEED TO CONTACT DIGSAFE AND FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
10. THE PERIMETER BOUNDARY DEPICTED HEREON IS BASED ON REFERENCE PLAN 1 AND FIELD LOCATION OF MONUMENTS SHOWN ON REFERENCE PLAN 1. DEED RESEARCH HAS BEEN LIMITED TO THE TIME PERIOD BETWEEN 2019 AND PRESENT. CIVIL CONSULTANTS HAS NOT PERFORMED A COMPLETE INDEPENDENT BOUNDARY RETRACEMENT SURVEY.
11. A PORTION OF A LANDSCAPED AREA AND GRAVEL DRIVEWAY ENCROACH ONTO THE LOCUS PARCEL AT THE SOUTHEASTERLY CORNER.

REFERENCE PLAN:

1. "EXISTING CONDITIONS PLAN FOR PROPERTY AT 90 U.S. ROUTE 1 BY-PASS, KITTERY, YORK COUNTY, MAINE, OWNED BY 90 U.S. ROUTE 1, LLC", PREPARED BY NORTH EASTERLY SURVEYING, INC., DATED JULY 11, 2019, LAST REVISED OCTOBER 8, 2019, NOT RECORDED, EASTERLY SURVEYING PROJECT NO: 19654.

LEGEND:

ø	DIAMETER
18828/758	DEED BOOK/PAGE NUMBER
INV.	INVERT
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE
HDPE	HIGH DENSITY POLYETHYLENE
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
LA	LANDSCAPED AREA
N/F	NOW OR FORMERLY
Y.C.R.D.	YORK COUNTY REGISTRY OF DEEDS
UNK	UNKNOWN
(2X)	MULTIPLE TREES OF SIMILAR TYPE
	4' WOOD FENCE POST
	STEEL FENCE POST (VARIABLE HEIGHT)
	IRRIGATION CONTROL VALVE
	WATER GATE VALVE
	FIRE HYDRANT
	SEWER MANHOLE
	CATCH BASIN
	GUY WIRE
	UTILITY POLE
OHU	OVERHEAD UTILITIES
	CHAIN LINK FENCE (AS NOTED)
	WOOD FENCE (AS NOTED)
	SIGN (AS NOTED)
	HANDICAPPED PARKING
	DECIDUOUS TREE (AS NOTED)
	CONIFEROUS TREE (AS NOTED)
	BUSH
	EXISTING IRON PIPE (AS NOTED)
	5/8" REBAR W/CAP "CIVIL CONSULT PLS 2362" TO BE SET
	SURVEY BENCHMARK (AS NOTED)
	APPROXIMATE ADJOINING PARCEL BOUNDARY LINE
	LOCUS PARCEL PROPERTY LINE
N:96582.05' E:2797117.40'	STATE PLANE COORDINATES

CERTIFICATION:

THIS SURVEY WAS PERFORMED UNDER MY DIRECT SUPERVISION IN ACCORDANCE WITH THE STANDARDS OF PRACTICE ESTABLISHED BY THE MAINE BOARD OF LICENSURE FOR PROFESSIONAL LAND SURVEYORS (02-360 CMR CHAPTER 90, PART I & PART II – SEE NOTES HEREON FOR EXCEPTIONS, IF ANY).

APRIL 25, 2023

MICHAEL P. PEVERETT
MAINE PROFESSIONAL LAND SURVEYOR #2362
CIVIL CONSULTANTS
SOUTH BERWICK, MAINE 03908
207-384-2550

TAX MAP 14, LOT 2

STATE OF MAINE
MICHAEL P. PEVERETT
2362
PROFESSIONAL LAND SURVEYOR

© CIVIL CONSULTANTS
CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

NO.	REVISIONS	INT.	DATE

RECORD OWNER:
90 US ROUTE 1 LLC

ADDRESS:
PO BOX 630
KITTERY, ME 03904

UPDATED BOUNDARY & EXISTING CONDITIONS PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR: 90 US ROUTE 1 LLC
CLIENT ADDRESS: PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: APRIL 25, 2023
DRAWN BY: AHP/MPP
CHECKED BY: CHM
APPROVED BY: MPP

BOUNDARY/EXISTING CONDITIONS PLAN

PROJECT NO: 2132300

EC1

SHEET: 1 OF 1

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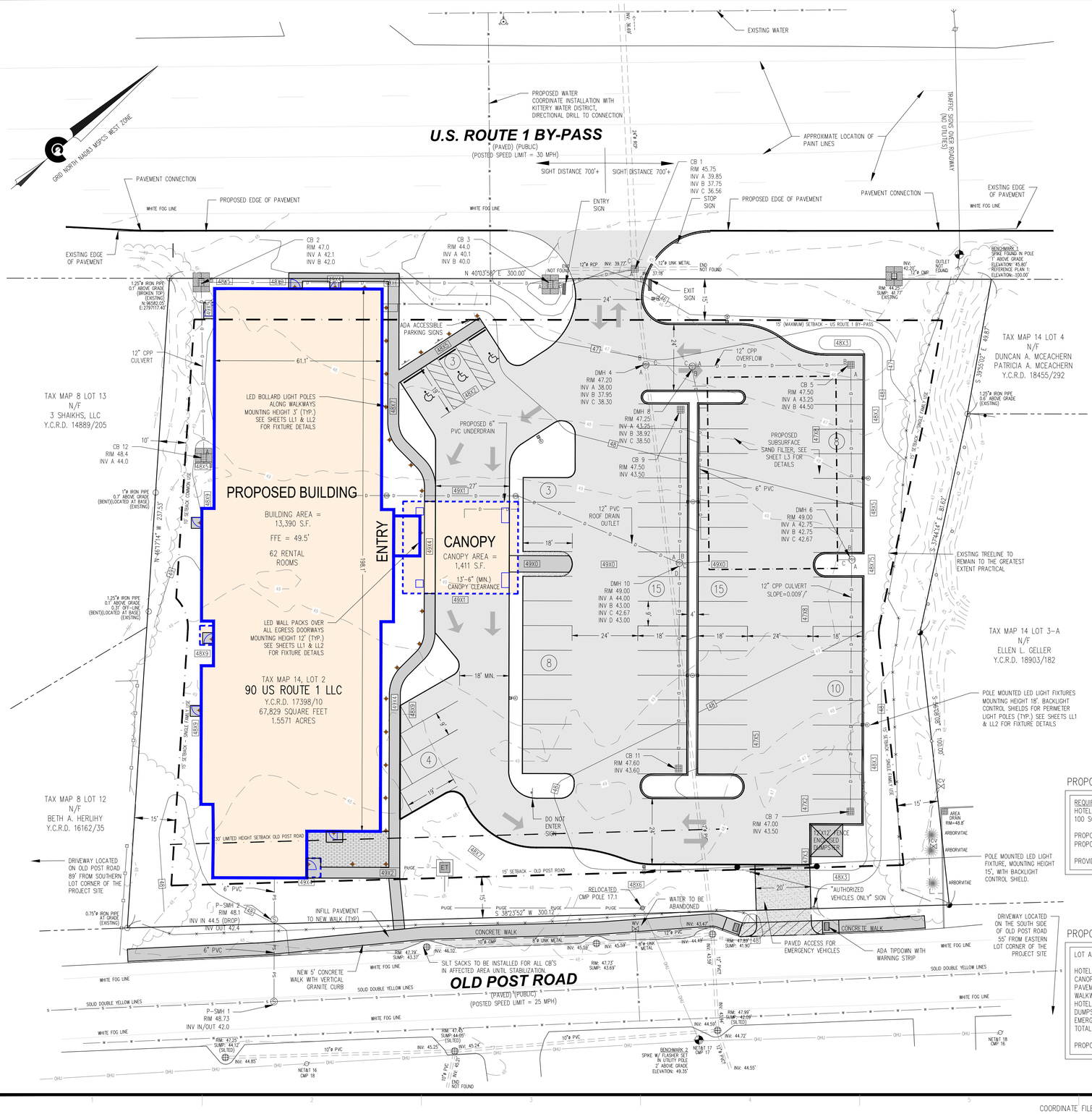

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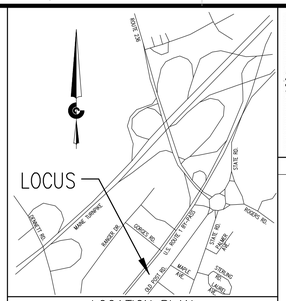

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6. ASSESSOR'S INFORMATION: TOWN OF KITTERY ASSESSOR'S MAP 14, LOT 2
7. DEED REFERENCE: Y.C.R.D. 17938/10
8. THE LOCUS PARCEL IS LOCATED IN "ZONE C" ON THE NATIONAL FLOOD INSURANCE PROGRAM, FLOOD INSURANCE RATE MAP (FIRM) FOR THE TOWN OF KITTERY, MAINE, YORK COUNTY, COMMUNITY PANEL NUMBER 230171 0007 C, EFFECTIVE DATE JULY 5, 1984. ZONE C IS DEFINED AS "AREAS OF MINIMAL FLOODING".
9. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS NEED TO CONTACT DIGSAFE AND FIELD VERIFY ALL EXISTING UTILITIES PRIOR TO CONSTRUCTION.
10. THE PERIMETER BOUNDARY DEPICTED HEREON IS BASED ON REFERENCE PLAN 1 AND FIELD LOCATION OF MONUMENTS SHOWN ON REFERENCE PLAN 1. DEED RESEARCH HAS BEEN LIMITED TO THE TIME PERIOD BETWEEN 2019 AND PRESENT. CIVIL CONSULTANTS HAS NOT PERFORMED A COMPLETE INDEPENDENT BOUNDARY RETRACEMENT SURVEY.
11. A PORTION OF A LANDSCAPED AREA AND GRAVEL DRIVEWAY ENCROACH ONTO THE LOCUS PARCEL AT THE SOUTHEASTERLY CORNER.

REFERENCE PLAN:

1. "EXISTING CONDITIONS PLAN FOR PROPERTY AT 90 U.S. ROUTE 1 BY-PASS, KITTERY, YORK COUNTY, MAINE, OWNED BY 90 U.S. ROUTE 1, LLC", PREPARED BY NORTH EASTERLY SURVEYING, INC., DATED JULY 11, 2019, LAST REVISED OCTOBER 8, 2019, NOT RECORDED, EASTERLY SURVEYING PROJECT NO: 19654.

SCOPE OF WORK:

THE INTENT OF THE PROJECT IS TO CREATE A 3-STORY HOLIDAY INN EXPRESS HOTEL CONTAINING 62 ROOMS AND AN ENTRY CANOPY. THE PARKING LOT WILL BE REVISED TO PROVIDE 66 PARKING SPACES, INCLUDING 3 ADA ACCESSIBLE PARKING SPACES. THE DRIVEWAY ACCESS FROM ROUTE 1 BY-PASS WILL BE REVISED TO PROVIDE A SINGLE TWO-WAY ACCESS LOCATED BETWEEN THE TWO EXISTING ENTRANCES WHICH ARE INTENDED TO BE REMOVED. THE ENTIRE LOT AREA IS TO BE DISTURBED BY THE PROPOSED REDEVELOPMENT.

PROPOSED PARKING SPACES

REQUIRED:
HOTEL: 1 SPACE PER RENTAL ROOM PLUS 1 SPACE FOR EACH 100 SQUARE FEET OF MEETING ROOM

PROPOSED RENTAL ROOMS	=	62
PROPOSED MEETING ROOM (193 SF)	=	2
		64

PROVIDED: 66 SPACES > 64

PROPOSED COVERAGE INFO

LOT AREA	67,829	SF
HOTEL BUILDING	13,390	SF
CANOPY	1,411	SF
PAVEMENT	26,650	SF
WALKWAYS	1,277	SF
HOTEL PATIO AREA	351	SF
DUMPSTER PAD	144	SF
EMERGENCY ACCESS	329	SF
TOTAL IMPERVIOUS AREA	43,490	SF
PROPOSED LOT COVERAGE	43,552/67,829 = 64.2% < 70%	

LEGEND:

ø	DIAMETER
18828/758	DEED BOOK/PAGE NUMBER
INV.	INVERT
RCP	REINFORCED CONCRETE PIPE
PVC	POLYVINYL CHLORIDE
HDPE	HIGH DENSITY POLYETHYLENE
CMP	CORRUGATED METAL PIPE
CONC.	CONCRETE
LA	LANDSCAPED AREA
N/F	NOW OR FORMERLY
Y.C.R.D.	YORK COUNTY REGISTRY OF DEEDS
UNK	UNKNOWN
(2X)	MULTIPLE TREES OF SIMILAR TYPE
	4' WOOD FENCE POST
	STEEL FENCE POST (VARIABLE HEIGHT)
IV	IRRIGATION CONTROL VALVE
WV	WATER GATE VALVE
	FIRE HYDRANT
S	SEWER MANHOLE
	CATCH BASIN
	GUY WIRE
	UTILITY POLE
OHU	OVERHEAD UTILITIES
	CHAIN LINK FENCE (AS NOTED)
	WOOD FENCE (AS NOTED)
	SIGN (AS NOTED)
	HANDICAPPED PARKING
	DECIDUOUS TREE (AS NOTED)
	CONIFEROUS TREE (AS NOTED)
	BUSH
	EXISTING IRON PIPE (AS NOTED)
	5/8" REBAR W/CAP "CIVIL CONSULT PLS 2362" TO BE SET
	SURVEY BENCHMARK (AS NOTED)
	APPROXIMATE ADJOINING PARCEL BOUNDARY LINE
	LOCUS PARCEL PROPERTY LINE
N:96582.05' E:2797117.40'	STATE PLANE COORDINATES

STATE OF MAINE
GEOFFREY R. ALLEN
No. 9679
REGISTERED PROFESSIONAL ENGINEER
1/9/2024

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CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

NO.	REVISIONS	INT.	DATE

RECORD OWNER:
90 US ROUTE 1 LLC

ADDRESS:
PO BOX 630
KITTERY, ME 03904

REDEVELOPMENT PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR:
90 US ROUTE 1 LLC
CLIENT ADDRESS:
PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: 06/23/2023
DRAWN BY: JAA/DRC
CHECKED BY: GRA
APPROVED BY:

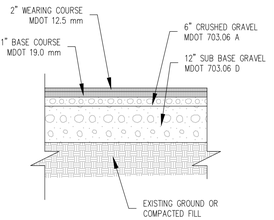
PROPOSED SITE PLAN

PROJECT NO: 21-323.00

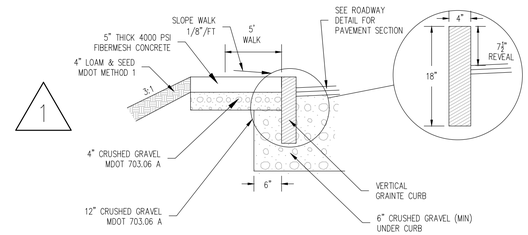
L1

SHEET: 1 OF 4

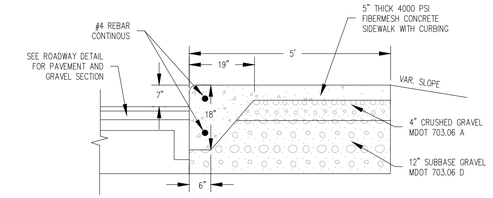
COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd
CADD FILE: J:\AAA\2021\2132300\CARLSON\ENGR\2132300-ST.DWG



TYPICAL PAVEMENT SECTION
NOT TO SCALE



VERTICAL GRANITE CURB WITH SIDEWALK DETAIL
NOT TO SCALE



CONCRETE CURB DETAIL
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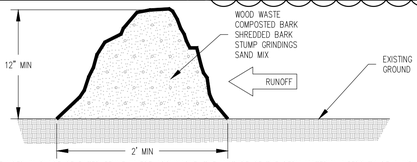
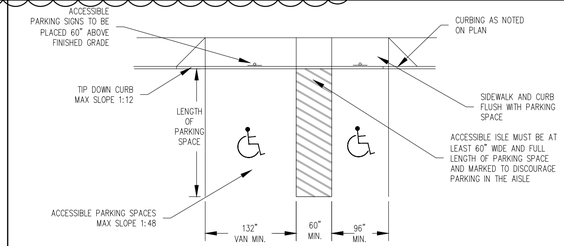


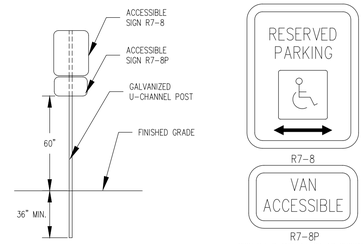
NOTES:
1. THIS BERM MAY BE USED IN PLACE OF FILTER FENCE WHERE APPLICABLE. THE MIXTURE OF THE BERM MATERIAL NEEDS TO BE A WELL-GRADE BLEND OF ORGANIC & MINERAL SUBSTANCE CONFORMING TO THE FOLLOWING STANDARDS:
   ORGANIC MATTER CONTENT: BETWEEN 80% AND 100%
   MOISTURE CONTENT: 30%-60%
   PH: BETWEEN 5.0 AND 8.0
   PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 5" SCREEN AND A MINIMUM OF 70% MAXIMUM OF 85% PASSING A 0.75" SCREEN. LARGE PORTION OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE MIX
2. THE BERM SHALL BE PLACED ALONG A RELATIVELY LEVEL CONTOUR WHEREVER POSSIBLE. THE EXISTING SURFACE MUST BE SCOURED AND THE MIXTURE KEYED IN LIKE ANY OTHER SEDIMENT CONTROL MEASURE.

FILTER BERM DETAIL
NOT TO SCALE



ACCESSIBILE VAN & CAR PARKING DETAIL
NOT TO SCALE

NOTES:
1. ALL SIGNAGE SHALL BE TO THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) STANDARDS AND MDOT STANDARDS.
2. SIGN, HARDWARE, AND INSTALLATION TO CONFORM TO MDOT STANDARD SPECIFICATIONS, SECTION 719 – SIGNING MATERIAL.
3. THE CONTRACTOR SHALL PROVIDE SHOP DRAWINGS/ CATALOGUE CUTS TO THE ENGINEER FOR REVIEW AND APPROVAL PRIOR TO ERECTING SIGNS.



SIGN R7-8 AND R7-8P AS SHOWN IN THE MUTCD. INSTALLATION WILL BE IN ACCORDANCE WITH THE MUTCD AND MDOT STANDARD SPECIFICATIONS SECTION 719 – SIGNING MATERIAL.

ACCESSIBLE VAN SIGN & SIGN POST
NOT TO SCALE

EROSION AND SEDIMENT CONTROL PRACTICES

1. NO SOIL SHALL BE DISTURBED DURING THE PERIOD OF MARCH 1 THROUGH APRIL 15, NOR DURING ANY OTHER PERIOD WHEN SOILS ARE SATURATED DUE TO RAIN OR SNOW MELT.
2. DISTURBED SOILS SHALL BE STABILIZED WITHIN ONE (1) WEEK FROM THE TIME IT WAS LAST ACTIVELY WORKED USING TEMPORARY OR PERMANENT MEASURES SUCH AS PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKET, OR OTHER COMPARABLE MEASURES.
3. HAY OR STRAW MULCH SHALL BE APPLIED AT A RATE OF AT LEAST ONE (1) BALE PER 500 SQUARE FEET (1–2 TONS PER ACRE).
4. IF MULCH IS LIKELY TO BE REMOVED DUE TO TO STEEP SLOPES OR WIND, IT SHALL BE ANCHORED WITH NETTING, PEG OR TWINE, OR OTHER SUITABLE METHOD AND SHALL BE MAINTAINED UNTIL A CATCH OF VEGETATION IS ESTABLISHED OVER THE ENTIRE DISTURBED AREA.
5. IN ADDITION TO PLACEMENT OF RIPRAP, MULCH OR EROSION CONTROL BLANKETS, ADDITIONAL STEPS SHALL BE TAKEN WHERE NECESSARY IN ORDER TO PREVENT SEDIMENTATION OF THE WATER. EVIDENCE OF SEDIMENTATION INCLUDES VISIBLE GULLY EROSION, DISCOLORATION OF WATER BY SUSPENDED PARTICLES AND SLUMPING OF BANKS, SILT FENCES, STAKED HAY BALES AND OTHER SEDIMENTATION CONTROL MEASURES, WHERE PLANNED FOR, SHALL BE IN PLACE PRIOR TO COMMENCEMENT OF WORK, BUT SHALL ALSO BE INSTALLED WHEREVER NECESSARY DUE TO SEDIMENTATION.
6. MULCH OR OTHER TEMPORARY MEASURES SHALL BE MAINTAINED UNTIL THE SITE IS PERMANENTLY STABILIZED WITH VEGETATION OR OTHER PERMANENT CONTROL MEASURES AFTER WHICH TEMPORARY MEASURES WILL BE REMOVED.
7. PERMANENT RE-VEGETATION OF ALL DISTURBED AREAS, USING NATIVE PLANT MATERIAL WHEN POSSIBLE, SHALL OCCUR WITHIN 30 DAYS FROM THE TIME THE AREAS WERE LAST ACTIVELY WORKED, OR FOR FALL AND WINTER ACTIVITIES, BY JUNE 15, EXCEPT WHERE PRECLUDED BY THE TYPE OF ACTIVITY (E.G. RIRRAP, ROAD SURFACES, ETC.). THE VEGETATIVE COVER SHALL BE MAINTAINED.
8. DISPOSAL OF COLLECTED DEBRIS MUST BE IN CONFORMANCE WITH MAINE SOLID WASTE LAW, TITLE 38 MRSA SECTION 1301 ET. SEQ.
9. LIME AND FERTILIZER APPLICATION RATES SHALL NOT EXCEED THE FOLLOWING:

   GROUND LIMESTONE: 3 TONS/ACRE (130 LBS./1000 S.F.)
   FERTILIZER, 10–10–10 OR EQUIVALENT: 600 LBS./ACRE (14 LBS./1000 S.F.)

FERTILIZER SHALL NOT BE APPLIED BEFORE START OF THE GROWING SEASON NOR AFTER SEPTEMBER 30. FERTILIZED AREAS SHALL BE MULCHED TO REDUCE OFF-SITE TRANSPORT OF NUTRIENTS UNTIL USED BY VEGETATIVE GROWTH.

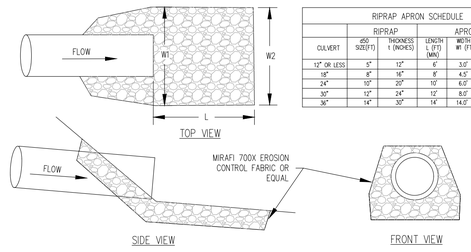
SEEDING MIXTURE AND SCHEDULE:

SPREAD TOPSOIL UNIFORMLY 6" DEEP OVER AREAS TO BE RECLAIMED. THE FOLLOWING SEED MIXTURE SHALL BE USED:

LAWNS:

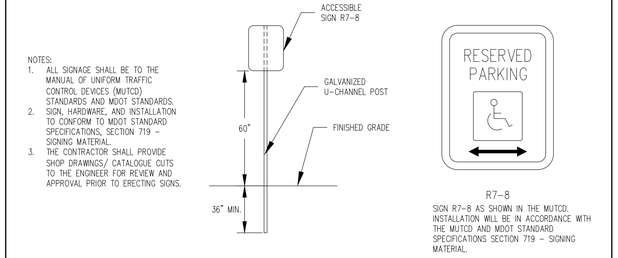
KENTUCKY BLUEGRASS	1.60 LBS./1000 S.F.
PERENNIAL RYE GRASS	0.40 LBS./1000 S.F.
TOTAL	2.00 LBS./1000 S.F.

APPLY LIME AND FERTILIZER AS SPECIFIED UNDER THE EROSION AND SEDIMENTATION CONTROL NOTES. WORK INTO THE TOP (4) INCHES OF SOIL PRIOR TO SEEDING. AFTER SEEDING, APPLY MULCH HAY AS SPECIFIED. ON FLAT AREAS AND NOT EXPOSED TO WIND, THE MULCH WILL BE ANCHORED BY WETTING DOWN. IN OTHER AREAS, JUTE NETTING SHALL BE USED FOR ANCHORAGE. THE ABOVE SEEDING SCHEDULE IS APPLICABLE IF SEEDING DURING THE GROWING SEASON (APRIL 15 TO JUNE 15 AND AUGUST 30 TO SEPTEMBER 30). BETWEEN JUNE 15 AND AUGUST 30, SEEDING WILL BE DELAYED UNTIL AUGUST 30. IF SOIL IS DISTURBED BETWEEN OCTOBER 1 AND NOVEMBER 1, DELAY SEEDING UNTIL NOVEMBER 1. AFTER NOVEMBER 1 AND BEFORE A SNOW COVER FORMS, THE SAME PROCEDURE WILL BE FOLLOWED EXCEPT THE SEED RATE WILL BE DOUBLED. AFTER SNOW COVER AND BEFORE APRIL 15, SEEDING WILL BE DELAYED UNTIL APRIL 15. HAY MULCH WILL BE APPLIED AT A RATE OF 150 LBS./1000 SQUARE FEET. THIS WILL BE ANCHORED BY NON-ASPHALTIC TACKIFIER SPRAYED ON LAWNS AND JUTE NETTING IN DRAINAGE WAYS AND OTHER AREAS.



RIPRAP APRON SCHEDULE					
	RIPRAP		APRON		
CULVERT	d50 SIZE(FT)	THICKNESS T. (INCHES)	LENGTH L (FT) (MIN)	WIDTH W1 (FT)	WIDTH W2 (FT)
12" OR LESS	5"	12"	6'	3.0'	7'
18"	8"	16"	8'	4.5'	9.5'
24"	10"	20"	10'	6.0'	14'
30"	12"	24"	12'	8.0'	14.5'
36"	14"	30"	14'	14.0'	17'

RIPRAP APRON PIPE OUTLET DETAIL
NOT TO SCALE



NOTES:
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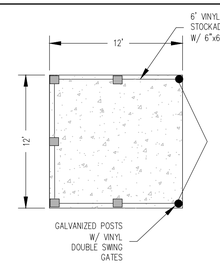
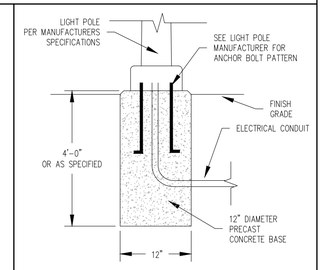
SIGN R7-8 AS SHOWN IN THE MUTCD. INSTALLATION WILL BE IN ACCORDANCE WITH THE MUTCD AND MDOT STANDARD SPECIFICATIONS SECTION 719 – SIGNING MATERIAL.

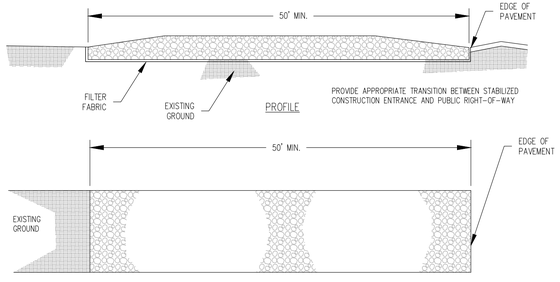
ACCESSIBLE SIGN & SIGN POST
NOT TO SCALE



DUMPSTER ENCLOSURE DETAIL
NOT TO SCALE



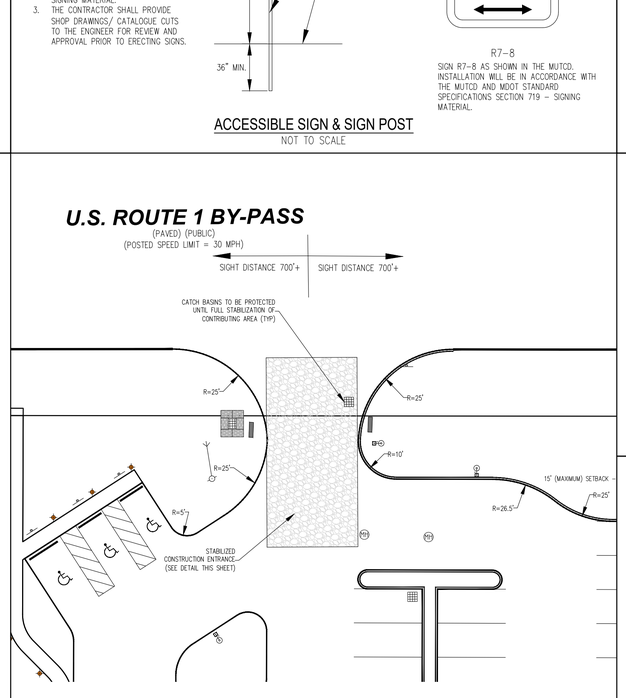
TYPICAL LIGHT POLE BASE
NOT TO SCALE



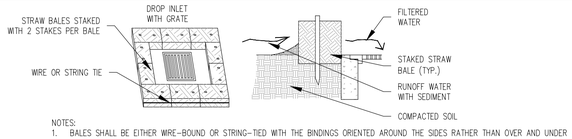
CONSTRUCTION SPECIFICATIONS

1. STONE SIZE – AASHTO DESIGNATION M43, SIZE NO 2 (2-1/2" TO 1-1/2"). USE CRUSHED STONE.
2. LENGTH – AS EFFECTIVE, BUT NOT LESS THAT 50 FEET.
3. THICKNESS – NOT LESS THAN EIGHT (8) INCHES.
4. WIDTH – NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
5. WASHING – WHEN NECESSARY, WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY. WHEN WASHING IS REQUIRED IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING ANY STORM DRAIN, DITCH, OR WATER COURSE THROUGH USE OF SAND BAGS, GRAVEL, BOARDS, OR OTHER APPROVED METHODS.
6. MAINTENANCE – THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED, ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

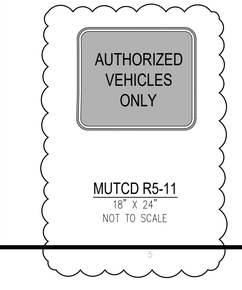


STABILIZED CONSTRUCTION ENTRANCE PLAN
SCALE: 1" = 20'



NOTES:
1. BALES SHALL BE EITHER WIRE-BOUND OR STRING-TIED WITH THE BINDINGS ORIENTED AROUND THE SIDES RATHER THAN OVER AND UNDER THE BALES
2. BALES SHALL BE PLACED LENGTHWISE IN A SINGLE ROW SURROUNDING THE INLET, WITH THE ENDS OF ADJACENT BALES PRESSED TOGETHER.
3. THE FILTER BARRIER SHALL BE ENTRENCHED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED AROUND THE INLET THE WIDTH OF A BALE TO A MINIMUM DEPTH OF 4 INCHES. AFTER THE BALES ARE STAKED, THE EXCAVATED SOIL SHALL BE BACKFILLED AND COMPACTED AGAINST THE BARRIER.
4. EACH BALE SHALL BE SECURELY ANCHORED AND HELD IN PLACE BY AT LEAST TWO STAKES OR REBARS DRIVEN THROUGH THE BALE.
5. LOOSE STRAW SHALL BE WEDGED BETWEEN BALES TO PREVENT WATER FROM ENTERING BETWEEN BALES.

CATCH BASIN HAY BALE BARRIER
NOT TO SCALE

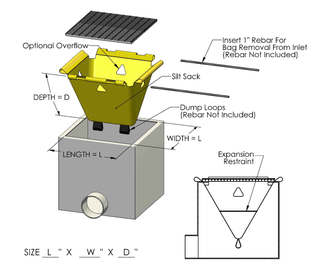


MUTCD R5-11
18" X 24"
NOT TO SCALE

MUTCD R1-1
NOT TO SCALE

MUTCD R5-1
NOT TO SCALE

Silt Sack - Type A



SILT SACK
NOT TO SCALE

ACF ENVIRONMENTAL
2831 Cardwell Road
Richmond, VA 23234
WWW.ACFENVIRONMENTAL.COM

TAX MAP 14 LOT 2

STATE OF MAINE
GEOFFREY R. ALLEN
No. 9679
LICENSED PROFESSIONAL ENGINEER
1/5/2024

CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

NO.	REVISIONS	INT.	DATE
1.	REVISED PER TOWN COMMENTS	N.R	12/15/23

RECORD OWNER:
90 US ROUTE 1 LLC

ADDRESS:
PO BOX 630
KITTERY, ME 03904

REDEVELOPMENT PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR:
CLIENT ADDRESS:
90 US ROUTE 1 LLC
PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: 06/23/2023
DRAWN BY: JAA/DRC
CHECKED BY: GRA
APPROVED BY:

CONSTRUCTION DETAILS

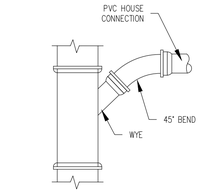
PROJECT NO: 2132300

L2

SHEET: 2 OF 4

COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd

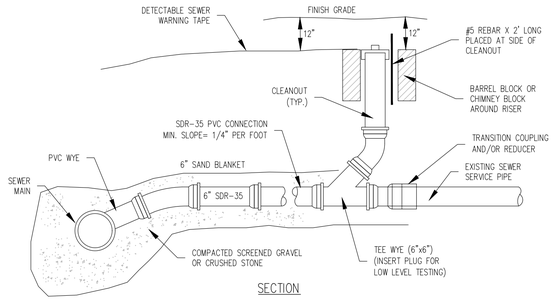
CADD FILE: J:\AAA\2021\2132300\CARLSON\ENGR\2132300-ST.DWG



PLAN

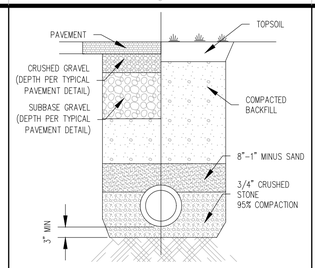
SERVICE CONNECTION NOTES:

1. SEE DETAILS FOR SERVICE CONNECTION REQUIREMENTS.
2. SERVICE CONNECTION SHALL BE INSTALLED BELOW WATER MAIN WHERE POSSIBLE.
3. CLEANOUTS SHALL BE INSTALLED AT EACH SERVICE CONNECTION.
4. REBAR SHALL BE PLACED AT SIDE OF CLEANOUT.
5. CLEANOUT SHALL BE USED TO PLUG AND TEST ALL NEW LATERALS WITH MINIMAL INTERRUPTION TO OPERATION OF HOMEOWNER SANITARY SYSTEM.
6. CLEANOUT RISER PIPE AND FITTINGS SHALL BE INCIDENTAL AND SHALL NOT BE CONSIDERED FOR PAYMENT.
7. CLEANOUTS SHALL BE PLACED EVERY 75 FEET AND AT BENDS IN PIPING.

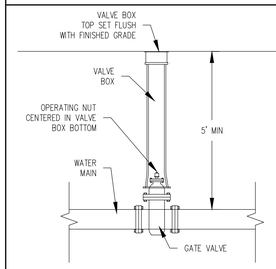


SECTION

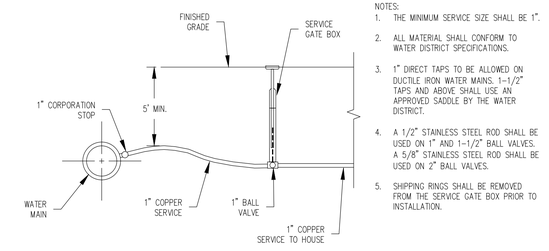
SERVICE CONNECTION DETAIL
NOT TO SCALE



SEWER LINE TRENCH DETAIL
NOT TO SCALE

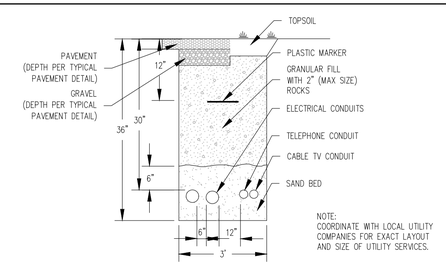


GATE VALVE DETAIL
NOT TO SCALE



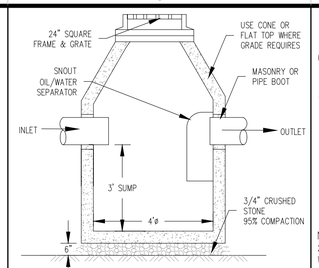
NOTES:
1. THE MINIMUM SERVICE SIZE SHALL BE 1".
2. ALL MATERIAL SHALL CONFORM TO WATER DISTRICT SPECIFICATIONS.
3. 1" DIRECT TAPS TO BE ALLOWED ON DUCTILE IRON WATER MAINS. 1-1/2" TAPS AND ABOVE SHALL USE AN APPROVED SADDLE BY THE WATER DISTRICT.
4. A 1/2" STAINLESS STEEL ROD SHALL BE USED ON 1" AND 1-1/2" BALL VALVES. A 5/8" STAINLESS STEEL ROD SHALL BE USED ON 2" BALL VALVES.
5. SHIPPING RINGS SHALL BE REMOVED FROM THE SERVICE GATE BOX PRIOR TO INSTALLATION.

TYPICAL WATER SERVICE CONNECTION DETAIL
NOT TO SCALE

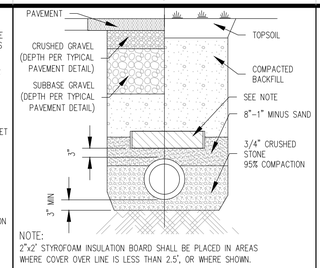


NOTE: COORDINATE WITH LOCAL UTILITY COMPANIES FOR EXACT LAYOUT AND SIZE OF UTILITY SERVICES.

ELECTRIC & TELEPHONE TRENCH DETAIL
NOT TO SCALE

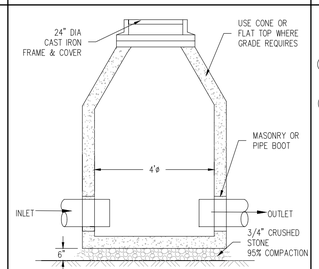


CATCH BASIN WITH SNOUT
NOT TO SCALE

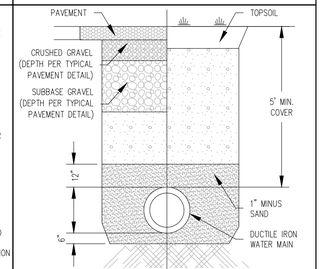


NOTE: 2"x2' STYROFOAM INSULATION BOARD SHALL BE PLACED IN AREAS WHERE COVER OVER LINE IS LESS THAN 2.5', OR WHERE SHOWN.

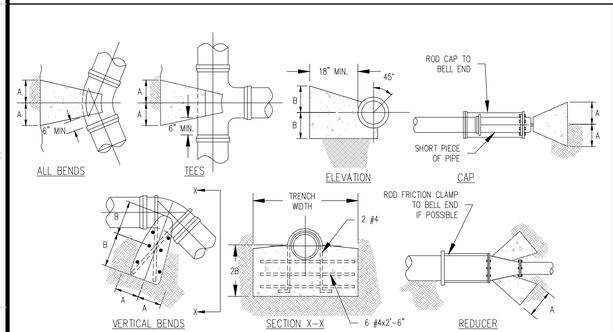
DRAINLINE TRENCH DETAIL
NOT TO SCALE



DRAIN MANHOLE
NOT TO SCALE



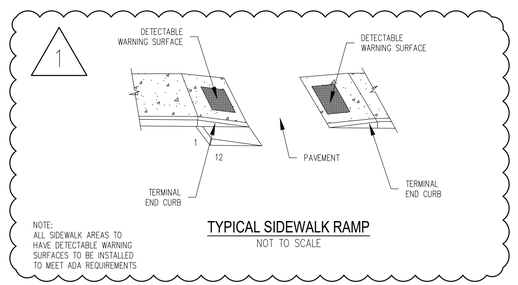
WATER LINE TRENCH DETAIL
NOT TO SCALE



PIPE SIZE	90° BEND		45° BEND		22-1/2° BEND		11-1/4° BEND		TEE		VERTICAL BEND (DOWN)		PLUG		REDUCER	
	A	B	A	B	A	B	A	B	A	B	A	B	A	B	A	B
4"	15"	12"	12"	9"	9"	6"	6"	6"	12"	12"	12"	12"	12"	12"	12"	12"
6"	15"	12"	12"	9"	9"	6"	6"	6"	12"	12"	12"	12"	12"	12"	12"	12"
8"	20"	15"	14"	12"	9"	9"	9"	6"	18"	12"	18"	12"	14"	14"	18"	12"
10"	21"	21"	18"	15"	15"	9"	9"	9"	20"	18"	20"	18"	16"	16"	20"	18"
12"	27"	24"	23"	15"	15"	12"	12"	9"	25"	18"	25"	18"	18"	18"	25"	18"
16"	37"	30"	30"	21"	21"	15"	13"	12"	32"	24"	32"	24"	22"	22"	32"	24"

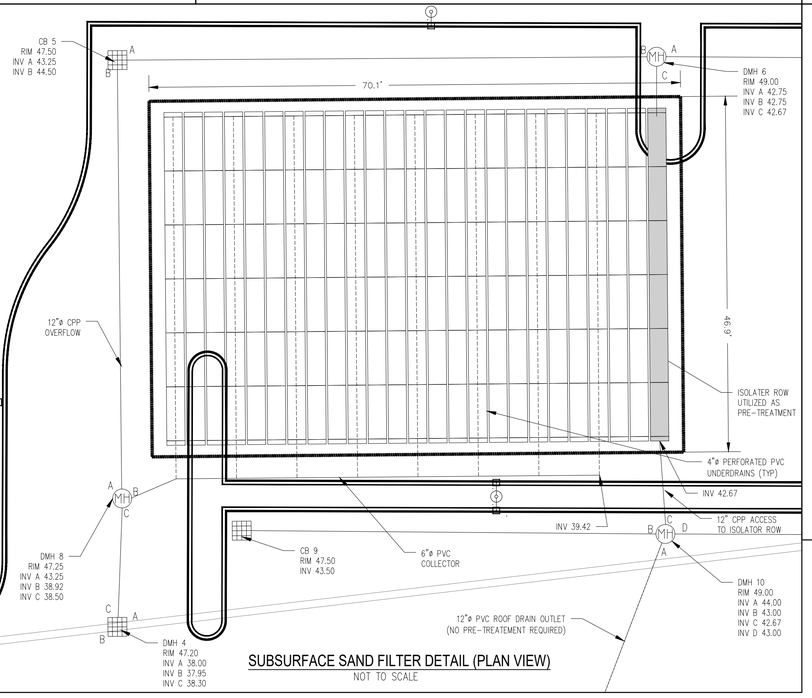
NOTES:
1. THRUST BLOCK SIZES SHOWN ARE BASED ON A SOIL BEARING CAPACITY OF 2000 PSF AND TEST PRESSURES OF 180 PSI.
2. ALL BENDS, TEES, WYES, HYRANTS AND DEAD ENDS SHALL BE BRACED WITH CONCRETE THRUST BLOCKS.
3. RODDING MAY BE REQUIRED.

THRUST BLOCK DETAIL
NOT TO SCALE

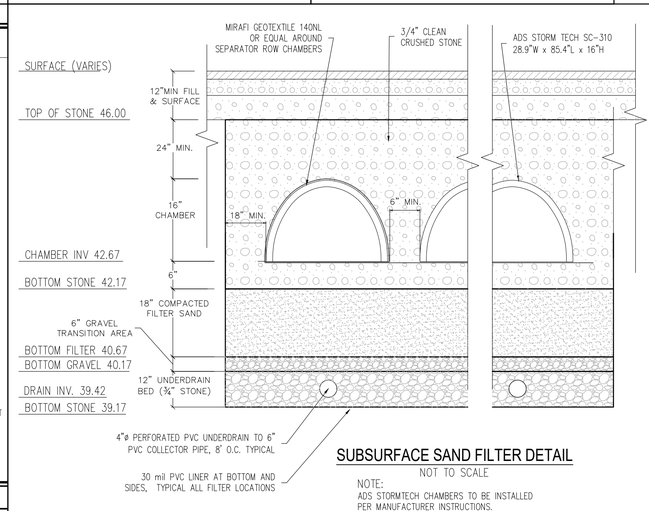


NOTE: ALL SIDEWALK AREAS TO HAVE DETECTABLE WARNING SURFACES TO BE INSTALLED TO MEET ADA REQUIREMENTS

TYPICAL SIDEWALK RAMP
NOT TO SCALE



SUBSURFACE SAND FILTER DETAIL (PLAN VIEW)
NOT TO SCALE



SUBSURFACE SAND FILTER DETAIL
NOT TO SCALE

NOTE: ADS STORMTECH CHAMBERS TO BE INSTALLED PER MANUFACTURER INSTRUCTIONS.

TAX MAP 14 LOT 2

COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd

CADD FILE: J:\AAA\2021\2132300\CARLSON\ENGR\2132300-ST.DWG

STATE OF MAINE
GEOFFREY R. ALLEN
No. 9679
LICENSED PROFESSIONAL ENGINEER
10/2024

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Maine
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207-384-2550
www.civcon.com

NO.	REVISIONS	INT.	DATE
1	REVISED PER TOWN COMMENTS	N.R.	12/15/23

RECORD OWNER:
90 US ROUTE 1 LLC

ADDRESS:
PO BOX 630
KITTERY, ME 03904

REDEVELOPMENT PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR:
CLIENT ADDRESS:
90 US ROUTE 1 LLC
PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: 06/23/2023
DRAWN BY: JAA/DRC
CHECKED BY: GRA
APPROVED BY:

CONSTRUCTION DETAILS

PROJECT NO: 2132300

L3

SHEET: 3 OF 4

STORMWATER MAINTENANCE PROCEDURES DURING CONSTRUCTION

THE FOLLOWING PROCEDURES WILL BE FOLLOWED FOR MAINTENANCE OF THE STORMWATER MANAGEMENT FACILITIES AND EROSION & SEDIMENTATION CONTROL (ESC) MEASURES AT THIS SITE. NOTE: FOR THE PURPOSES OF THESE PROCEDURES, A SIGNIFICANT RAINFALL IS 1/2" IN A 24 HOUR PERIOD.

CONSTRUCTION INSPECTIONS WILL BE PERFORMED AT LEAST ONCE A WEEK AS WELL AS BEFORE, AND WITHIN 24 HOURS AFTER A STORM EVENT.

IF INSPECTIONS IDENTIFY AREAS IN NEED OF REPAIR, THOSE REPAIRS SHALL BE STARTED BY THE END OF THE NEXT WORK DAY AND COMPLETED WITHIN SEVEN DAYS (OR BEFORE THE NEXT STORM EVENT).

ALL CONSTRUCTION INSPECTIONS SHALL BE CONDUCTED BY SOMEONE WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT.

THE SCOPE OF CONSTRUCTION INSPECTIONS INCLUDES THE EROSION CONTROL MEASURES AS WELL AS DISTURBED AREAS, MATERIAL STORAGE AREAS, AND LOCATIONS WHERE VEHICLES ENTER AND EXIT THE SITE (STABILIZED CONSTRUCTION ENTRANCE).

THE CONTRACTOR WILL BE RESPONSIBLE FOR INSPECTION AND MAINTENANCE OF ALL STORMWATER AND ESC MEASURES UNTIL FINAL STABILIZATION OF THE SITE IS ACHIEVED. UPON STABILIZATION, THE DEVELOPER (CURRENT PERMIT HOLDER) WILL BE RESPONSIBLE FOR LONG-TERM INSPECTION AND MAINTENANCE OF STORMWATER MANAGEMENT AND EROSION CONTROL MEASURES.

MAINTENANCE LOG

THE RESPONSIBLE PARTY SHALL ESTABLISH A MAINTENANCE LOG/PLAN FOR USE IN RECORDING MAINTENANCE ACTIVITIES. AS A MINIMUM, THE LOG SHALL INCLUDE THE DATE(S) OF ACTIVITIES, WHO PERFORMED THE DUTIES, WHAT WAS DONE (I.E. LOOKED AT DETENTION BERMS, CLEANED DROP INLETS, ETC.), THE RESULTS OF THE ACTIVITY (I.E. ALL STRUCTURES WERE IN GOOD SHAPE, OR, POND #44 NEEDS TO BE REPAIRED). IF ANY ITEM NEEDS TO BE REPAIRED, A FOLLOW-UP ENTRY SHALL SHOW THE DATE THAT REPAIRS WERE COMPLETED.

CONSTRUCTION INSPECTION AND CORRECTIVE ACTION DOCUMENTATION RECORDS WILL BE MAINTAINED BY THE CONTRACTOR FOR A MINIMUM OF THREE YEARS AND PROVIDED TO THE DEVELOPER.

LAND GRADING AND SLOPE STABILIZATION

ALL SLOPES SHOULD BE CHECKED PERIODICALLY TO SEE THAT VEGETATION IS IN GOOD CONDITION. ANY RILLS OR DAMAGE FROM EROSION AND ANIMAL BURROWING SHOULD BE REPAIRED IMMEDIATELY TO AVOID FURTHER DAMAGE. IF SEEPS DEVELOP ON THE SLOPES, THE AREA SHOULD BE EVALUATED TO DETERMINE IF THE SEEP WILL CAUSE AN UNSTABLE CONDITION. SUBSURFACE DRAINS OR GRAVEL MULCHING MAY BE REQUIRED TO SOLVE SEEP PROBLEMS. DIVERSIONS, BERMS, AND WATERWAYS IN THE LAND GRADING AREA SHOULD BE CHECKED TO SEE THAT THEY ARE FUNCTIONING PROPERLY. PROBLEMS FOUND DURING THE INSPECTIONS SHOULD BE REPAIRED. SLOPES AND ASSOCIATED PRACTICES UTILIZING VEGETATION SHOULD BE LIMED AND FERTILIZED AS NECESSARY TO KEEP THE VEGETATION HEALTHY. ENCROACHMENT OF UNDESIRABLE VEGETATION SUCH AS WEEDS AND WOODY GROWTH THAT IS NOT PLANNED SHOULD BE CONTROLLED TO AVOID PROBLEMS OF BANK STABILITY IN THE FUTURE.

a. EROSION CONTROL MULCH (ECM) WILL BE USED TO STABILIZE SLOPES LESS STEEP THAN 3:1 UNTIL THEY ARE VEGETATED;
b. ECM SHALL NOT BE USED AS THE SOLE MEASURE FOR SLOPES STEEPER THAN 8% OR WHERE THERE IS RUNNING WATER;
c. EROSION CONTROL BLANKETS SHALL BE USED TO STABILIZE SLOPES BETWEEN 3:1 AND 2:1; AND
d. SLOPES STEEPER THAN 1.5:1 ARE PROHIBITED;

ROCK RIPRAP (INITIAL & LONG TERM)

ROCK RIPRAP SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM TO DETERMINE IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED. WOODY VEGETATION SHOULD BE REMOVED FROM THE ROCK RIPRAP ANNUALLY. IF THE RIPRAP IS ON A CHANNEL BANK, THE STREAM SHOULD BE KEPT CLEAR OF OBSTRUCTIONS. IF DAMAGE HAS OCCURED, REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE RIPRAP.

STORM DRAIN INLET PROTECTION

ALL STRUCTURES SHALL BE INSPECTED AFTER SIGNIFICANT RAIN EVENTS AND REPAIRED AS NEEDED.

SEDIMENT SHALL BE REMOVED AND THE STORM DRAIN SEDIMENT BARRIER RESTORED TO ITS ORIGINAL DIMENSIONS WHEN THE SEDIMENT HAS ACCUMULATED TO 1/2 THE DESIGN DEPTH OF THE TRAP. REMOVED SEDIMENT SHALL BE DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.

STRUCTURES SHALL BE REMOVED AND THE AREA STABILIZED WHEN THE REMAINING DRAINAGE AREA HAS BEEN PROPERLY STABILIZED.

ALL CATCH BASINS AND STORM DRAIN INLETS SHALL BE CLEANED AT THE END OF CONSTRUCTION AND AFTER THE SITE HAS BEEN FULLY STABILIZED.

STRAW OR HAY BALE BARRIER, SILT FENCE AND FILTER BERM

HAY BALE BARRIERS, SILT FENCES AND FILTER BERMS SHALL BE INSPECTED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OF THE EDGES OF THE BARRIER, THE FLOW CURRENTLY REACHING THE BARRIER SHALL BE INTERCEPTED WITH ADDITIONAL EROSION CONTROL MATERIALS OR SEDIMENTATION BASINS TO PREVENT SEDIMENTS FROM LEAVING THE SITE.

SHOULD THE FABRIC ON A SILT FENCE OR FILTER BARRIER DECOMPOSE OR BECOME INEFFECTIVE PRIOR TO THE END OF THE EXPECTED USABLE LIFE AND THE BARRIER IS STILL NECESSARY, THE FABRIC SHALL BE REPLACED.

SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THE DEPOSITS REACH APPROXIMATELY ONE-HALF OF THE HEIGHT OF THE BARRIER.

FILTER BERMS SHOULD BE RESHAPED AS NEEDED.

SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED SHOULD BE DRESSED TO CONFORM TO THE EXISTING GRADE, PREPARED AND SEEDED.

OUTLET PROTECTION

OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT TO AVOID ADDITIONAL DAMAGE TO THE OUTLET PROTECTION APRON.

TEMPORARY CHECK DAMS

REGULAR INSPECTIONS MUST BE MADE TO ENSURE THAT THE CENTER OF THE CHECK DAM IS LOWER THAN THE EDGES. EROSION CAUSED BY HIGH FLOWS AROUND THE EDGES OF THE CHECK DAM MUST BE CORRECTED. IF EVIDENCE OF SILTATION IN THE WATER IS APPARENT DOWNSTREAM OF THE CHECK DAM, THE CHECK DAM MUST BE INSPECTED AND ADJUSTED.

CHECK DAMS MUST BE CHECKED FOR SEDIMENT ACCUMULATION AFTER EACH SIGNIFICANT RAINFALL. SEDIMENT MUST BE REMOVED WHEN IT REACHES ONE HALF THE ORIGINAL HEIGHT OF BEFORE.

IF IT POSSIBLE, LEAVE THE CHECK DAM IN PLACE PERMANENTLY. IN TEMPORARY DITCHES AND SWALES, CHECK DAMS MUST BE REMOVED WHEN A PERMANENT LINING HAS BEEN ESTABLISHED. IF A CHECK DAM MUST BE REMOVED FROM A GRASS LINED DITCH, WAIT UNTIL THE GRASS HAS MATURED TO PROTECT THE DITCH OR SWALE. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED REMOVAL.

STABILIZED CONSTRUCTION ENTRANCE (ANTI-TRACKING PAD)

EXITS SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. WHEN THE CONTROL PAD BECOMES INEFFECTIVE, THE STONE SHALL BE REMOVED ALONG WITH THE COLLECTED SOIL MATERIAL AND REDISTRIBUTED ON SITE IN A STABLE MANNER AND THE ENTRANCE RECONSTRUCTED. THE CONTRACTOR SHALL SWEEP OR WASH PAVEMENT AT EXITS, WHICH HAVE EXPERIENCED MUD-TRACKING ONTO THE PAVEMENT OR TRAVELED WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE, WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES OR WATERWAYS.

CULVERTS

CULVERTS MUST BE MAINTAINED BY KEEPING INLETS, TRASH GUARDS, AND COLLECTION BOXES AND STRUCTURES CLEAN AND FREE OF MATERIALS THAT CAN REDUCE THE FLOW. ALL LEAKS SHALL BE REPAIRED TO ENSURE PROPER FUNCTIONING OF THE CULVERT. ANIMAL GUARDS MUST BE INSPECTED AND MAINTAINED IN PROPER WORKING ORDER.

DROP IN CATCH BASIN SILT SACK

EACH SILT SACK SHOULD BE INSPECTED AT REGULAR INTERVALS AND AFTER EACH MAJOR STORM EVENT FOLLOWED BY THE REMOVAL OF ALL ACCUMULATED SEDIMENT AND DEBRIS IN THE VICINITY OF THE UNIT. AFTER EACH STORM EVENT LOOK INTO THE SILT SACK(S). IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, SIMPLY LIFT THE UNIT USING LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS, REPLACE ABSORBENT PILLOW WHEN NEAR SATURATION.

OVERWINTER CONSTRUCTION

MAINE EROSION AND SEDIMENT CONTROL BMP (3/2003 REV 2016)

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD.

WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBBASE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. A COVER OF EROSION CONTROL MIX PERFORMS THE BEST.

ANY ADDED MEASURES, WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION, MUST BE BE INSTALLED. THESE MAY BE DEPENDENT UPON SITE AND WEATHER CONDITIONS AND THE ACTUAL SITE SIZE. TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION, CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED.

1. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCE, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH AN EROSION CONTROL COVER.

DURING WINTER CONSTRUCTION, A DOUBLE ROW OF SEDIMENT BARRIERS (I.E. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

2. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS MAY CONSIST OF EROSION CONTROL MIX BERMS OR ANY OTHER RECOGNIZED SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.

3. MULCHING

ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75 LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. EROSION CONTROL MIX MUST BE APPLIED WITH A MINIMUM 4 INCH THICKNESS.

MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE INCH DEPTH OR LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED OR ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH. BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER MULCH NETTING, ASPHALT EMULSION CHEMICAL, TRACKING OR WOOD CELLULOSE FIBER. THE COVER WILL BE CONSIDERED SUFFICIENT WHEN THE GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL EXPOSED SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORKDAY.

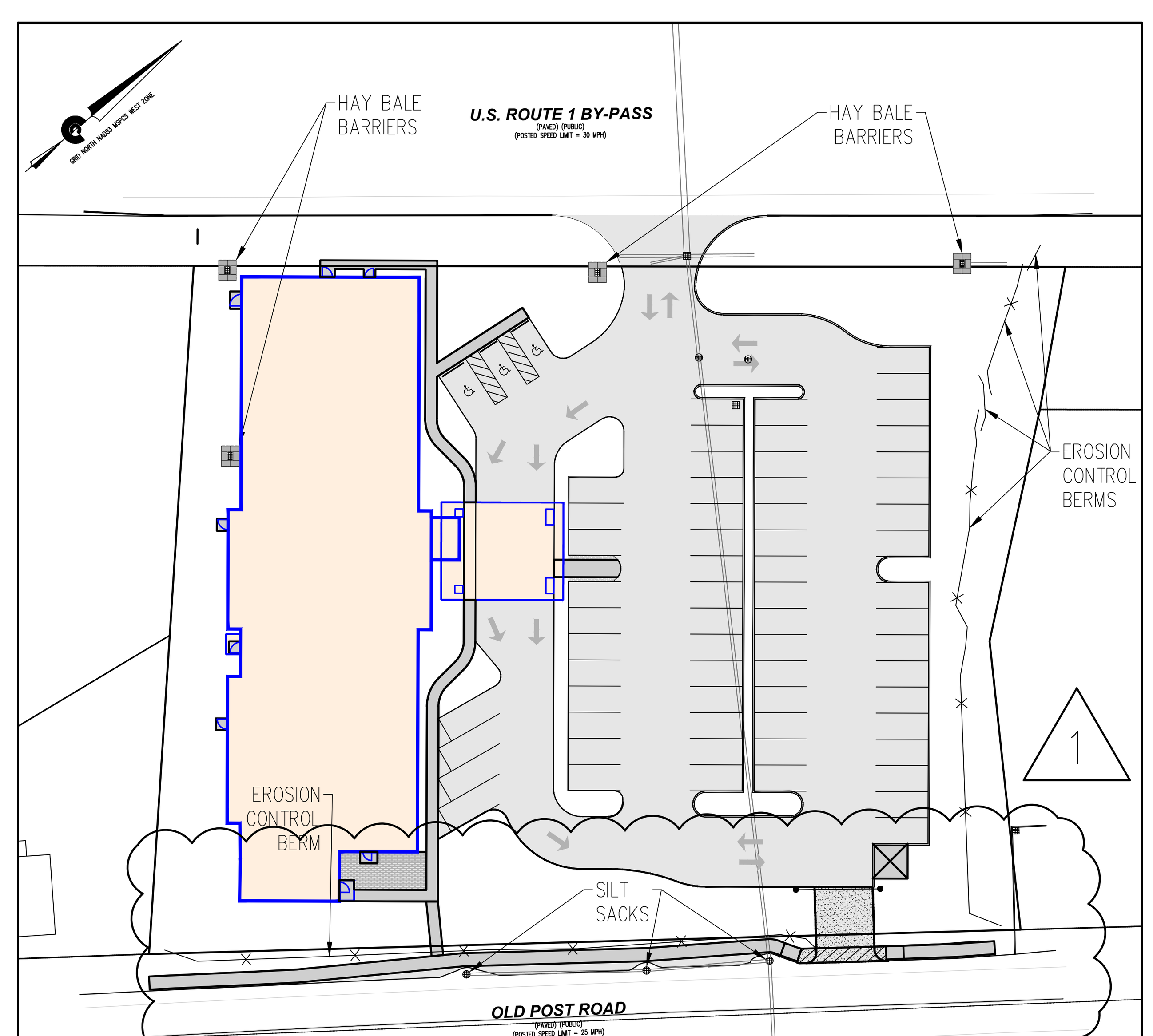
4. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR WITH A FOUR-INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND REESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH MULCH) WITHIN 100 FEET FROM ANY NATURAL RESOURCES. STORMWATER SHALL BE PREVENTED FROM RUNNING ONTO STOCKPILES.

5. SEEDING

BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. IF THE DATE IS NOVEMBER 1ST AND THE EXPOSED AREA HAS BEEN LOAMED, FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TIMES HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.

DORMANT SEEDING MAY BE SELECTED TO BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND EROSION CONTROL BLANKETS. IF DORMANT SEEDING IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4' OF LOAM AND SEED AT AN APPLICATION RATE OF 5LBS/1,000 S.F. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75% CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH. IF DORMANT SEEDING IS NOT USED FOR THE SITE, ALL DISTURBED AREAS SHALL BE REVEGETATED IN THE SPRING.



EROSION CONTROL PLAN

1"=50'

OVERWINTER STABILIZATION

MAINE EROSION AND SEDIMENT CONTROL BMP (3/2003 REV 2016)

1. STABILIZATION OF DITCHES AND CHANNELS

ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED BY SEPTEMBER 1. IF A DITCH OR CHANNEL IS NOT GRASS-LINED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER MUST BE TAKEN.

SOD LINING: A DITCH OR CHANNEL MUST BE LINED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES: PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD AT THE BASE OF THE DITCH WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD FROM SLOUGHING DURING FLOW CONDITIONS.

STONE LINING: A DITCH OR CHANNEL MUST BE LINED WITH STONE RIPRAP BY NOVEMBER 15. A REGISTERED PROFESSIONAL ENGINEER MUST DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.

2. STABILIZATION OF DISTURBED SLOPES

ALL STONE-COVERED SLOPES MUST BE CONSTRUCTED AND STABILIZED BY NOVEMBER 15. ALL SLOPES TO BE VEGETATED MUST BE SEEDED AND MULCHED BY SEPTEMBER 1. THE DEPARTMENT WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% TO BE A SLOPE. IF A SLOPE TO BE VEGETATED IS NOT STABILIZED BY SEPTEMBER 1, THEN ONE OF THE FOLLOWING ACTIONS MUST BE TAKEN TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

TEMPORARY VEGETATION AND EROSION CONTROL MATS: BY OCTOBER 1, THE DISTURBED SLOPE MUST BE SEEDED WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET FOLLOWED BY INSTALLATION OF EROSION CONTROL MATS OR ANCHORED MULCH OVER THE SEEDING. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR FAILS TO COVER AT LEAST 75% OF THE SLOPE BY NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF EROSION CONTROL MIX OR STONE RIPRAP AS DESCRIBED IN THE FOLLOWING STANDARDS.

SOD: THE DISTURBED SLOPE MUST BE STABILIZED WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

EROSION CONTROL MIX: EROSION CONTROL MIX MUST BE PROPERLY INSTALLED BY NOVEMBER 15. THE CONTRACTOR WILL NOT USE EROSION CONTROL MIX TO STABILIZE SLOPES HAVING GRADES GREATER THAT 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

STONE RIPRAP: PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE DEVELOPMENT'S OWNER WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY ON THE SLOPE AND TO DESIGN A FILTER LAYER TO BE INSTALLED BENEATH THE RIPRAP.

3. STABILIZATION OF DISTURBED SOILS

TEMPORARY VEGETATION: BY OCTOBER 1, SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3-LBS PER 1,000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75-LBS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN MULCH THE AREA FOR OVERWINTER PROTECTION AS FOLLOWS.

MULCH: BY NOVEMBER 15, MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150-LBS PER 1,000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. IMMEDIATELY AFTER APPLYING THE MULCH, ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

MAINTENANCE

MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, THE SITE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY AND OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL IN THE SPRING INSPECT AND REPAIR ANY DAMAGES AND/OR BARE SPOTS. AN ESTABLISHED VEGETATIVE COVER MEANS A MINIMUM OF 85% TO 90% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

STABILIZATION SCHEDULE BEFORE WINTER

SEPTEMBER 15 ALL DISTURBED AREAS MUST BE SEEDED AND MULCHED. ALL SLOPES MUST BE STABILIZED. SEEDED AND MULCHED. ALL GRASS-LINED DITCHES AND CHANNELS MUST BE STABILIZED WITH MULCH OR AN EROSION CONTROL BLANKET.

OCTOBER 1 IF THE SLOPE IS STABILIZED WITH AN EROSION CONTROL BLANKET AND SEEDED. ALL DISTURBED AREAS TO BE PROTECTED WITH ANNUAL GRASS MUST BE SEEDED AT A SEEDING RATE OF 3-LBS PER 1,000 SQUARE FEET AND MULCHED.

NOVEMBER 15 ALL STONE-LINED DITCHES AND CHANNELS MUST BE CONSTRUCTED AND STABILIZED. SLOPES THAT ARE COVERED WITH RIPRAP MUST BE CONSTRUCTED BY THIS DATE.

DECEMBER 1 ALL DISTURBED AREAS WHERE GROWTH OF VEGETATION FAILS TO BE AT LEAST THREE INCHES TALL OR AT LEAST 75% OF THE DISTURBED SOIL IS COVERED VEGETATION, MUST BE PROTECTED FOR OVER-WINTER.
NOTE: THE DATES GIVEN ARE FOR PROJECTS IN SOUTH-CENTRAL MAINE.

PERMANENT STABILIZATION

90% COVERAGE OF SEEDED AREAS IS THE STANDARD FOR "STABILIZED".

HOUSEKEEPING NOTES
*PER ME DEP CHAPTER 500 – APPENDIX 'C'

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, SUMPS, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE ADEQUATE PRE-TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDED AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

6. AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

(a) DISCHARGES FROM FIREFIGHTING ACTIVITY;
(b) FIRE HYDRANT FLUSHINGS;
(c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
(d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
(e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
(f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED;
(g) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
(h) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
(i) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
(j) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5));
(k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
(l) LANDSCAPE IRRIGATION.

7. UNAUTHORIZED NON-STORMWATER DISCHARGES THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

(a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
(b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
(c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
(d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

TAX MAP 14 LOT 2

STATE OF MAINE
GEOFFREY R. ALEVA
No. 9679
LICENSED
PROFESSIONAL ENGINEER
1/5/2024

CIVIL CONSULTANTS
Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

NO.	REVISIONS	INT.	DATE
1	REVISED PER TOWN COMMENTS	NJR	12/15/23

RECORD OWNER:
90 US ROUTE 1 LLC

ADDRESS:
PO BOX 630
KITTERY, ME 03904

REDEVELOPMENT PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR: 90 US ROUTE 1 LLC
CLIENT ADDRESS: PO BOX 630, KITTERY, ME 03904

AS NOTED
0' X"

DATE: 06/23/2023
DRAWN BY: JAA/DRC
CHECKED BY: GRA
APPROVED BY:

NOTES

PROJECT NO: 2132300

L4

SHEET: 4 OF 4

COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd

CADD FILE: J:\AAA\2021\2132300\CARLSON\ENGR\2132300-ST.DWG

PLANT LIST

QTY	NAME	LATIN	SIZE
9	OCTOBER GLORY MAPLE	ACER RUBRUIM 'OCTOBER GLORY'	2.5-3" CAL.
8	GREEN MOUNTAIN SUGAR MAPLE	ACER SACC. 'GREEN MOUNTAIN	2.5-3" CAL.
7	GREEN ASH	FRAXINUS PENNSYLVANICA	2.5-3" CAL.
15	HERITAGE RIVERS BIRCH (MULTI-STEM)	BETUAL NIGRA	10-12 FT HT.
15	WHITE SPRUCE	PICEA ABIES	7-8 FT HT.
13	AUSTRIAN PINE	PINUS NIGRA	7-8 FT HT.
4	DWARF FAT ALBERT BLUE SPRUCE	PICEA PUNGENS 'FAT ALBERT'	6-7 FT HT.
21	DARK AMERICAN ARBORVITAE	THUJA OCCIDENTALIS	6-7 FT HT.
10	RED SPRITE WINTERBERRY	ILEX VERTICILLATA 'RED SPRITE' (FEMALE)	3-3.5 FT HT.
2	JIM DANDY WINTERBERRY	ILEX VERTICILLATA 'JIM DANDY' (MALE)	3-3.5 FT HT.
39	ENDLESS SUMMER HYDRANGEA	HYDRANGEA 'ENDLESS SUMMER'	5 GAL.
43	REED GRASS 'KARL FOERSTER'	MISCANTHUS SINENSIS 'KARL FOERSTER'	5 GAL.
103	DWARF FOUNTAIN GRASS 'HAMELN'	PENNISETUM ALOPECUROIDES	3 GAL.
300	LIRIOPE (GROUNDCOVER @ 24" O.C.)	LIROPE SPICATA	1 GAL
1050	HAYSCENTED FERN	DENNSTAEDTIA PUNCTILOBULA	SOD SF
17,000	LAWN	SEED TO LAWN	SF

PLANT SYMBOL LEGEND

CT–CANOPY TREE (MAPLE & ASH)

OT–ORNAMENTAL TREE (MULTI-STEM BIRCH)

ET–EVERGREEN TREE (SPRUCE, PINE & ARBORVITAE)

SH–SHRUB (WINTERBERRY & HYDRANGEA)

GR–GRASEES (LARGE & SMALL)

PLANTING NOTES:

1. THE LANDSCAPE CONTRACTOR SHALL SUPPLY ALL PLANTS IN QUANTITIES SUFFICIENT TO COMPLETE THE WORK SHOWN ON THE PLAN.

2. ANY SUBSTITUTION OF SPECIFIED PLANTS SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT. ONLY NATIVE SPECIES AND/OR VARIETIES WILL BE ACCEPTABLE.

3. ALL TREE, SHRUB, VINE, AND PLANT BED (GROUNDCOVERS, PERENNIALS, BULBS, ETC.) LOCATIONS SHALL BE STAKED OR MARKED BY CONTRACTOR AND THEN APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD PRIOR TO PLANTING. CONTRACTOR MUST GIVE A MINIMUM 3 DAY NOTICE BETWEEN STAKING AND PLANTING.

4. CHALK MARK NORTH AT TREE BASE PRIOR TO DIGGING AT NURSERY. REPLANT ON SITE WITH SAME NORTH ORIENTATION FOR ALL TREES.

5. ALL PLANTS INSTALLED SHALL MEET THE SPECIFICATIONS OF THE AMERICAN STANDARD FOR NURSERY STOCK (LATEST ADDITION) AS SET FORTH BY THE AMERICAN NURSERY AND LANDSCAPE ASSOCIATION.

6. ALL PLANTS SHALL BE DELIVERED TO THE SITE FOR REVIEW BY THE LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.

7. THE LANDSCAPE CONTRACTOR IS ADVISED OF THE EXISTENCE OF UNDERGROUND UTILITIES, THE LOCATION OF WHICH SHALL BE VERIFIED BY THE CONTRACTOR PRIOR TO ANY EXCAVATION OPERATIONS. SHOULD THE LOCATION OF PROPOSED PLANTINGS CONFLICT WITH ANY OF SAID UTILITIES, ADJUST PLANT LOCATIONS ACCORDINGLY AFTER CONSULTATION WITH THE LANDSCAPE ARCHITECT.

8. PLANTING TREES AND SHRUBS: EXCAVATE PLANTING PITS WITH SLOPING SIDES, AND WITH BOTTOM OF EXCAVATION RAISED IN CENTER FOR DRAINAGE. LOOSEN HARD SUBSOIL IN BOTTOM OF EXCAVATION, AND LOOSEN SOIL ON SIDES OF SLOPES. SET PLANTS IN CENTER OF PIT WITH TOP OF BALL RAISED SLIGHTLY ABOVE FINISH GRADES. PLACE A SETTING LAYER OF COMPACTED PLANTING MIX. REMOVE BURLAP AND WIRE BASKETS FROM TOP OF BALLS. ON SIDES, FOLD BACK WIRE AND REMOVE UPPER PORTIONS OF BURLAP. DO NOT USE PLANT IF ROOT BALL IS CRACKED OR BROKEN. IF CONTAINER, REMOVE CONTAINER AND SCOUR PERIMETER SOIL AND ROOTS. PLACE PLANTING MIX AROUND BALL/CONTAINER IN LAYERS, TAMPING TO ELIMINATE VOIDS AND AIR POCKETS. DO NOT COVER TOP OF ROOT BALL. PRUNE, THIN, AND SHAPE AFTER PLANTING.

9. MULCH PLANTING BEDS AND TREE PITS WITH 3" FINELY SHREDDED AND AGED BARK MULCH OR AS SPECIFIED ON THE PLAN.

10. ALL DISTURBED LAWN AREAS TO BE LOAMED AND SODDED AS NECESSARY AT NO ADDITIONAL COST TO OWNER(S).

11. GRADES SHOWN REPRESENT PROPOSED GRADES PER CONTRACT. CONTRACTOR TO VERIFY GRADES AS NEEDED.

12. PLANT MATERIALS SHALL BE GUARANTEED FOR ONE (1) YEAR AFTER PLANTING. ANY DEAD, UNSIGHTLY, OR UNHEALTHY PLANTS SHALL BE REPLACED IN KIND AT NO COST TO THE OWNER(S).

13. THE CONTRACTOR SHALL REPLACE OR REPAIR TO ORIGINAL CONDITION ANY AND ALL UTILITIES, PAVING, CURBING, ETC., DAMAGED AS A RESULT OF THEIR OPERATIONS AT NO ADDITIONAL COST TO THE OWNER(S).

14. A PRE-CONSTRUCTION MEETING SHALL BE HELD PRIOR TO LANDSCAPE CONTRACTOR BEGINNING CONSTRUCTION OR ORDERING PLANT MATERIALS.

15. PLANTING PLAN IS DIAGRAMMATIC IN NATURE. FINAL PLACEMENT OF PLANTS TO BE APPROVED BY THE LANDSCAPE ARCHITECT IN THE FIELD.

SEEDING NOTES:

1. THE FOLLOWING GENERAL PRACTICES SHALL BE USED TO ESTABLISH LAWNS. FOR MORE DETAILED SPECIFIC REQUIREMENTS, REFER TO PROJECT MANUAL AND WRITTEN EROSION AND SEDIMENTATION CONTROL PLAN:

2. ALL DISTURBED AREAS ON-SITE NOT COVERED BY BUILDINGS OR PAVED AREAS SHALL RECEIVE A MINIMUM OF 4" OF LOAM AND SOD, UNLESS DETAILED OR SPECIFIED ELSEWHERE.

3. ALL FINAL SEEDING SHALL BE COMPLETED WITHIN SEVEN (7) DAYS FOLLOWING THE FINAL GRADING.

4. FOR LAWN CONSTRUCTION SPECIFICATIONS, SOIL AMENDMENTS, SEED MIX AND APPLICATION RATES, REFER TO THE PROJECT MANUAL AND THE "EROSION AND SEDIMENTATION CONTROL PLAN.

5. ALL AREAS SHALL BE MULCHED IMMEDIATELY AFTER SEEDING. MULCHING SHALL BE MONITORED. IF MULCHING PROVES TO BE INEFFECTIVE, THEN NETTING AND MATTING SHALL BE USED IN ITS PLACE.

6. CONSTRUCTION SHALL BE PLANNED TO ELIMINATE THE NEED FOR SEEDING BETWEEN OCTOBER 1 AND APRIL 15. DORMANT SEEDING SHALL NOT BE USED UNLESS APPROVED BY OWNER'S REPRESENTATIVE.

7. SHOULD DORMANT SEEDING BE NECESSARY, THE SPECIFIED SEED APPLICATION RATE SHALL BE DOUBLED.

8. FOR LATE SEEDING OR DORMANT SEEDING, ALL FERTILIZING, SEEDING, AND MULCHING SHALL BE DONE ON THE SAME DAY IMMEDIATELY AFTER THE LOAM IS SPREAD. FINAL GRADING SHALL BE LIMITED TO AREAS WHICH CAN BE COMPLETED AND SEEDED THE SAME DAY.

12-1-23
SCOTT M. STRYNAR
No. 3148
STATE OF MAINE
CERTIFIED LANDSCAPE ARCHITECT

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www.scottstrynarla.com

NO.	REVISIONS	INT.	DATE.

RECORD OWNER:
90 US ROUTE 1 LLC

ADDRESS:
PO BOX 630
KITTERY, ME 03904

UPDATED BOUNDARY & EXISTING CONDITIONS PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR:
90 US ROUTE 1 LLC
CLIENT ADDRESS:
PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: 06/23/2023
DRAWN BY: SS
CHECKED BY: SS
APPROVED BY:

LANDSCAPE PLAN

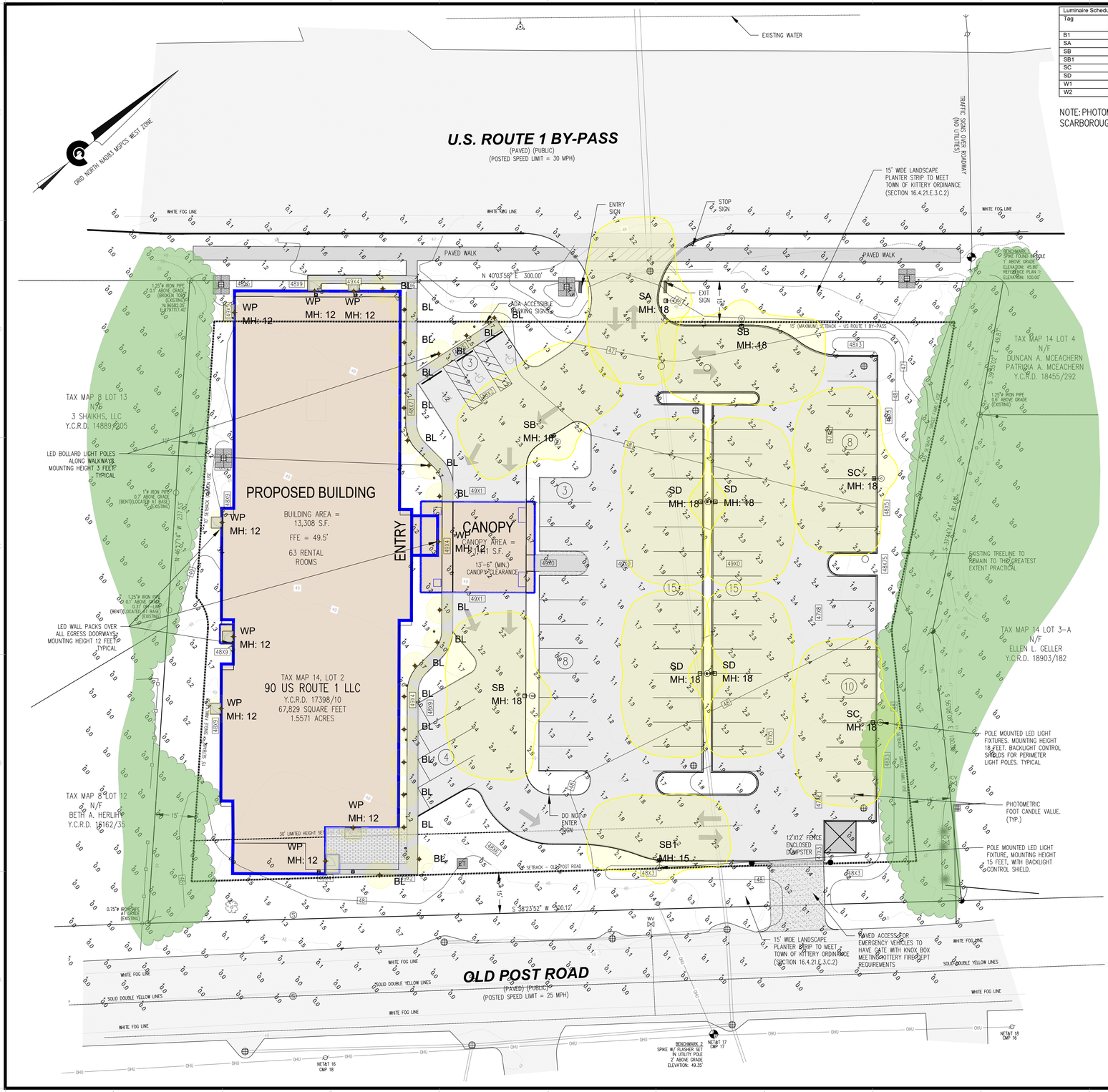
PROJECT NO: 21-323.00

LP1

SHEET: 1 OF 3

COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd

CADD FILE: F:\PROJECTS\182-90 US RTE ONE KITTERY\CAD\182-BASE 12-1-23 .DWG



Luminaire Schedule						
Tag	Qty	Watts	Lumens	LLF	Description	Mounting Height
B1	11	24.2	816	0.900	VRB2-20L3K	3.5
SA	2	83.6	9214	0.900	VP-1-36L-85-3K7-3	18
SB	2	83.6	8085	0.900	VP-1-36L-85-3K7-4W	18
SB1	1	83.6	8085	0.900	VP-1-36L-85-3K7-4W	15
SC	2	85	7343	0.900	VP-ST-1-36L-85-3K7-4W-BC	18
SD	2	56.8	5944	0.900	TWIN - VP-1-36L-55-3K7-4W	18
W1	4	14.9	1805	0.900	GEO1-24L-15-3K7-3-UNV-DBT	12
W2	4	16.4	1581	0.900	CUSO-AC	9

NOTE: PHOTOMETRIC CALCULATIONS PREPARED BY SWANEY LIGHTING ASSOCIATES, SCARBOROUGH, MAINE

LIGHT SYMBOLS

SB MH: 18 — AREA LIGHT POLE: BEACON VIPER, LED, COLOR TEMP 3K FIXTURE HEIGHT: 18 FT MOUNT: POLE ARM FINISH: BRONZE

SB1 MH: 15 — AREA LIGHT POLE: BEACON VIPER, LED, COLOR TEMP 3K FIXTURE HEIGHT: 15 FT MOUNT: POLE ARM FINISH: BRONZE

BL MH: 3 — BOLLARD: KIM LIGHTING, LED, COLOR TEMP 3K FIXTURE HEIGHT: 3 FT MOUNT: GROUND FINISH BRONZE

WP MH: 12 — WALL PACK: BEACON LIGHTING LED COLOR TEMP 3K FIXTURE HEIGHT: 12 FT MOUNT: WALL FINISH: BRONZE

CERTIFIED LANDSCAPE ARCHITECT
12-1-23
SCOTT M. STRYNAR
No. 3148
STATE OF MAINE

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UPDATED BOUNDARY & EXISTING CONDITIONS PLAN OF LAND OF

90 US ROUTE 1 LLC

90 U.S. ROUTE 1 BY-PASS

KITTERY - YORK COUNTY, MAINE

PREPARED FOR: 90 US ROUTE 1 LLC
CLIENT ADDRESS: PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: 06/23/2023
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CHECKED BY: SS
APPROVED BY:

SITE LIGHTING PLAN

PROJECT NO: 21-323.00

LL1

SHEET: 1 OF 3

COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd

CADD FILE: F:\PROJECTS\182-90 US RTE ONE KITTERY\CAD\182-BASE 12-1-23 .DWG

BEACON
design . performance . technology

VIPER Area/Site
VIPER LUMINAIRE

DATE: | LOCATION: MAINE
TYPE: | PROJECT: 90 US ROUTE 1 BY-PASS
CATALOG #:

MICROSTRIKE | STRIKE OPTICS

FEATURES
- Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots
- Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction
- Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G
- Control options including photo control, occupancy sensing, NX Lighting Controls™, wiSCAPE and 7-Pin with networked controls
- New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail
- Field interchangeable mounting provides additional flexibility after the fixture has shipped

cULus IP65 | BUY AMERICAN SOLUTIONS See Certification Specifications | DLC LISTED | DLC LISTED PREMIUM

10-DAY QUICK SHIP PROGRAM QS10

CONTROL TECHNOLOGY
NX LIGHTING CONTROLS | wiSCAPE

SPECIFICATIONS

CONSTRUCTION
- Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface
- Corrosion resistant, die-cast aluminum housing with 1000 hour powder coat paint finish
- External hardware is corrosion resistant

OPTICS
- ~~Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications and come standard with mid-power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2~~
- Strike Optics (36, 72, 108, or 162 LED counts) provide best in class distributions and maximum pole spacing in new applications with high powered LEDs. Strike optics are held in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3
- Both optics maximize target zone illumination with minimal losses at the house-side, reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole
- One-piece silicone gasket ensures a weatherproof seal
- Zero up-light at 0 degrees of tilt
- Field rotatable optics

INSTALLATION
- Mounting patterns for each arm can be found on page 11
- Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles
- All mounting hardware included

INSTALLATION (CONTINUED)
- Knuckle arm fitter option available for 2-3/8" OD tenon
- For products with EPA less than 1 mounted to a pole greater that 20ft, a vibration damper is recommended

ELECTRICAL
- Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz
- Ambient operating temperature -40°C to 40°C
- Drivers have greater than 90% power factor and less than 20% THD
- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- Field replaceable surge protection device provides 20kA protection meeting ANSI/ IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is compromised
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options cannot be combined

CONTROLS
- Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming control
- Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application
- 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)

CONTROLS (CONTINUED)
- 0-10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard
- NX Lighting Controls™ available with in fixture wireless control module, features dimming and occupancy sensor
- wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin configuration

CERTIFICATIONS
- DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations listed in this document are DLC® qualified. Refer to http://www.designlights.org for the most up-to-date list.
- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations and 40°C ambient temperatures
- 1.5 G rated for ANSI C136.31 high vibration applications
- Fixture is IP65 rated
- Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt
- This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 04/23/2020.

WARRANTY
- 5 year warranty

KEY DATA	
Lumen Range	5,000–80,000
Wattage Range	36–600
Efficacy Range (LPW)	92–155
Weight lbs. (kg)	13.7-30.9 (6.2-13.9)

BEACON design . performance . technology
VIPER Area/Site
VIPER LUMINAIRE
DATE: | LOCATION: MAINE
TYPE: | PROJECT: 90 US ROUTE 1 BY-PASS
CATALOG #:

STRIKE OPTIC – ORDERING GUIDE
Example: VP–ST–1–36L-39–3K7–2–UNV–A–BLT

CATALOG #

Series	Optic Platform	Size
VP Viper	ST Strike	1 Size 1
		2 Size 2
		3 Size 3
		4 Size 4

Light Engine	
36L-39[8]	5500 lumens
36L-55[8]	7500 lumens
36L-85	10000 lumens
36L-105	12500 lumens
36L-120	14000 lumens
72L-115	15000 lumens
72L-145	18000 lumens
72L-180	21000 lumens
72L-210	24000 lumens
72L-240	27000 lumens
108L-215[8]	27000 lumens
108L-250	30000 lumens
108L-280	33000 lumens
108L-325	36000 lumens
108L-365	40000 lumens
162L-320	40000 lumens
162L-365[10]	44000 lumens
162L-405	48000 lumens
162L-445	52000 lumens
162L-485	55000 lumens
162L-545[8]	60000 lumens
CLO	Custom Lumen Output[1]

CCT/CRI	
AM	monochromatic amber, 595nm
27K8	2700K, 80 CRI
3K7	3000K, 70 CRI
3K8	3000K, 80 CRI
3K9	3000K, 90 CRI
35K8	3500K, 80 CRI
4K7	4000K, 70 CRI
4K8	4000K, 80 CRI
4K9	4000K, 90 CRI
5K7	5000K, 70 CRI
5K8	5000K, 80 CRI

Distribution	
FR	Auto Front Row
2	Type 2
3	Type 3
4F	Type 4 Forward
4W	Type 4 Wide
5QN	Type 5 Square Narrow
5QW	Type 5 Square Wide
5QM	Type 5 Square Medium
5W	Type 5 Wide (Round)
5RW	Type 5 Rectangular
C	Corner Optic
TC	Tennis Court Optic

Optic Rotation	
BLANK	No Rotation
L	Optic rotation left
R	Optic rotation right

Voltage	
UNV	120-277V
120	120V
208	208V
240	240V
277	277V
347	347V
480	480V

Mounting	
A	Arm mount for square pole/flat surface
A_	Arm mount for round pole[3]
ASQU	Universal arm mount for square pole
A_U	Universal arm mount for round pole[3]
AAU	Adjustable arm for pole mounting (universal drill pattern)
AA_U	Adjustable arm mount for round pole[3]
ADU	Decorative upswept Arm (universal drill pattern)
AD_U	Decorative upswept arm mount for round pole[3]
MAF	Mast arm fitter for 2-3/8" OD horizontal arm
K	Knuckle
T	Trunnion
WB	Wall Bracket, horizontal tenon with MAF
WM	Wall mount bracket with decorative upswept arm
WA	Wall mount bracket with adjustable arm

Color	
BLT	Black Matte Textured
BLS	Black Gloss Smooth
DBT	Dark Bronze Matte Textured
DBS	Dark Bronze Gloss Smooth
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Gloss Textured
PSS	Platinum Silver Smooth
WHT	White Matte Textured
WHS	White Gloss Smooth
VGT	Verde Green Textured
Color Option	
CC	Custom Color

Options	
F	Fusing
E	Battery Backup[1,2,7,8,9]
2PF	Dual Power Feed
2DR	Dual Driver
TE	Tooless Entry
BC	Backlight Control
TB	Terminal Block

Network Control Options	
NXWS16F	NX Networked Wireless Enabled Integral NXSMP2-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[1,3,4]
NXWS40F	NX Networked Wireless Enabled Integral NXSMP2-HMO PIR Occupancy Sensor with Automatic Dimming Photocell and Bluetooth Programming[1,3,4]
NXW	NX Networked Wireless Radio Module NXRM2 and Bluetooth Programming, without Sensor[3,4]
WIR	wiSCAPE® In-Fixture Module[3,4]
WIRSC	wiSCAPE® Module and Occupancy Sensor[3,4]
Stand Alone Sensors	
BTS-14F	Bluetooth® Programmable, BTSMP-LMO PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens[11]
BTS-40F	Bluetooth® Programmable, BTSMP-HMO PIR Occupancy Sensor with Automatic Dimming® Photocell and 360° Lens[11]
BTSO-12F	Bluetooth® Programmable, BTSMP-OMNI-O PIR Occupancy Sensor with Automatic Dimming Photocell and 360° Lens[11]
7PR	7-Pin Receptacle[4]
7PR-SC	7-Pin Receptacle with shorting cap[4]
3PR	3-Pin twist lock[4]
3PR-SC	3-Pin receptacle with shorting cap[4]
3PR-TL	3-Pin PCR with photocontrol[4]
Programmed Controls	
SCP-_F	Sensor Control Programmable, 8F or 40F[12]
ADD	AutoDim Timer Based Dimming[4]
ADT	AutoDim Time of Day Dimming[4]
Photocontrols	
PC	Button Photocontrol[4,7]

1 – Items with a grey background can be done as a custom order. Contact brand representative for more information
2 – Battery temperature rating -20C to 55C
3 – Replace "_" with "3" for 3.5"-4.13" OD pole, "4" for 4.18"-5.25" OD pole, "5" for 5.5"-6.5" OD pole
4 – Networked Controls cannot be combined with other control options
5 – Not available with 2PF option
6 – Not available with 480V
7 – Not available with 347 or 480V
8 – Not available with Dual Driver option
9 – Only available in Size 1 housing, up to 105 Watts
10 – Some voltage restrictions may apply when combined with controls
11 – BTS and BTSO are only available on Size 3 and Size 4
12 – At least one SCPREMOTE required to program SCP motion sensor. Must select 8ft or 40ft.

POLE MOUNTED LED AREA LIGHT

BEACON
design . performance . technology

GEOPAK Series 2
SIZE 2 - TRP2/QSP2/RDI2

DATE: | LOCATION: MAINE
TYPE: | PROJECT: 90 US ROUTE 1 BY-PASS
CATALOG #:

FEATURES
- Mid sized architectural wallpacks in three stylish shapes
- Capable of replacing up to 400w HID luminaires
- Type I, II, III and IV distributions for a wide variety of applications
- Integral battery backup options
- Control capabilities offer additional energy savings options
- Zero uplight distributions

UL CERTIFIED | BUY AMERICAN SOLUTIONS See Certification Specifications

SPECIFICATIONS

CONSTRUCTION
- Die-cast aluminum housing and door
- Seven powder coat standard finishes, plus custom color options

OPTICS
- LEDs deliver up to 10,800 lumens
- Up to 146 lumens per watt
- Different lenses offer a variety of distribution patterns - Type I, II, III and IV (Forward throw)
- 3000K - 70 CRI, 4000K - 70 CRI and 5000K - 70 CRI, CCT nominal

INSTALLATION
- Quick-mount adapter with gasket seal provides easy installation to wall or to recessed junction box (4" square junction box). Fixture attaches by two Allen-head hidden fasteners for tamper resistance
- Black box accessory available for surface conduit application

ELECTRICAL
- Optional Dual Drivers & Dual Power Feeds for 50, 70 and 90 watt versions
- 120-277, 347 and 480 voltage, 50/60Hz
- Power factor ≥ 90%
- THD (Total Harmonic Distortion) <20%
- Ambient operating temperature -40°C to 40°C
- 20kA surge protection (series); Automatically takes fixture off-line when device is consumed

ELECTRICAL (CONTINUED)
- Integral Battery Backup provides emergency lighting for the required 90 minute path of egress
- Includes a long-life Lithium Iron Phosphate battery with optional battery heater for cold temperature application
- Utilizes 4 LEDs in emergency mode with 657 lumens. Each of the 4 LEDs in emergency are designed to function independently in the unlikely event of a single LED malfunction
- Independent dedicated driver and LED array for battery/emergency mode operation

CONTROLS
- Drivers are 0-10V dimming standard
- Universal button photocontrol for dusk to dawn energy savings
- Photocell and occupancy sensor options available for complete on/off and dimming control
- Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options can not be included in one same fixture.

CERTIFICATIONS
- IP65 rated housing
- Zero uplight (U0), dark sky, neighbor friendly
- Drivers IP66 and RoHS compliant
- This product qualifies as both (i) a "domestic construction material" per FAR §52.225-9 Buy American-Construction Materials and a "(COTS) item" per FAR §2.101 and (ii) a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective 06/03/2020.

WARRANTY
- 5 year limited warranty

KEY DATA	
Lumen Range	3,200-11,000
Wattage Range	28–87
Efficacy Range (LPW)	112–146
Weights lbs. (kg)	16–18 (7.3–8.2)

BEACON design . performance . technology
GEOPAK Series 2
SIZE 2 - TRP2/QSP2/RDI2
DATE: | LOCATION: MAINE
TYPE: | PROJECT: 90 US ROUTE 1 BY-PASS
CATALOG #:

ORDERING GUIDE
Example: TRP2-24L30-3K7-2-UNV-DBT

CATALOG #

ORDERING INFORMATION

Series	
TRP2	Trapezoid
RDI2	Radius
QSP2	Qtr-sphere

# LEDs - Wattage	
24L-30	24 LEDs, 30 watts
24L-50	24 LEDs, 50 watts
24L-70	24 LEDs, 70 watts
24L-90	24 LEDs, 90 watts
32L-70	32 LEDs, 70 watts
32L-90	32 LEDs, 90 watts

CCT/CRI	
3K7	3000K, 70 CRI
3K8	3000K, 80 CRI
4K7	4000K, 70 CRI
4K8	4000K, 80 CRI
5K7	5000K, 70 CRI

Distribution	
1	TYPE I
2	TYPE II
3	TYPE III
4	TYPE IV

Voltage	
UNV	120-277V
120	120V
208	208V
240	240V
277	277V
UHV[1]	347/480V
347[1]	347V
480[1]	480V

Secondary Mounting	
BLANK	Downlight Only

Color	
BLT	Black Matte Textured
BLS	Black Gloss Smooth
DBT	Dark Bronze Matte Textured
DBS	Dark Bronze Gloss Smooth
GTT	Graphite Matte Textured
LGS	Light Grey Gloss Smooth
PSS	Platinum Silver Smooth
WHT	White Matte Textured
WHS	White Gloss Smooth
VGT	Verde Green Textured
Color Option	
CC	Custom Color

Control Options Network	
PC	Button Photocontrol
SCP[3,4]	Programmable occupancy sensor, factory default is 10% light output
SCO[3]	Sensor Control, On/Off
Spec SCP/SCO & SWPM Mount Height	
-8F	Up to 8ft mount height
-20F	Up to 20ft mount height

Options	
SF[2]	Single fuse & fuse holder
DF[2]	Double fuse & fuse holder
E[2,6]	Battery pack (0°C)
EH[2,6]	Battery pack (-30°C) with heater
2DR[5]	Dual Drivers
2PF[5,6]	Dual power feeds
CS	Comfort shield

Notes:
1 70 & 90 watt versions only
2 Must specify voltage (120 or 277V for E & EH)
3 PCU option not applicable, included in sensor
4 Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings
5 Not available with 30w version
6 Battery option not compatible with 2 power feeds

ACCESSORIES (ORDERED SEPARATELY)

Catalog Number	Description
☐ SCP-REMOTE*	Remote control for SCP option. Order at least one per
☐ BB-GEO-XX	Back box with 4-1/2" threaded conduit holes, specify finish by replacing "XX" with finish selection, eg. Dark Bronze "DB"

Notes:
* Must order minimum of one remote control to program dimming settings, 0-10V fully adjustable dimming with automatic daylight calibration and different time delay settings.

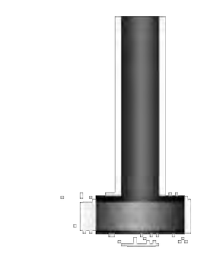
LED WALL PACK

architectural area lighting

RSA-A Series
ROUND STRAIGHT ALUMINUM POLE

DATE: | LOCATION: MAINE
TYPE: | PROJECT: 90 US ROUTE 1 BY-PASS
CATALOG #:

AAL Poles



SPECIFICATIONS

APPLICATIONS
- Lighting installations for side and top mounting of luminaires with effective projected area (EPA) not exceeding maximum allowable loading of the specified pole in its installed geographic location

CONSTRUCTION
- SHAFT: One-piece straight aluminum with round cross section; Extruded shafts of 6061-T6 aluminum in 1/8", 3/16", or 1/4" thickness. Base plate of 356 cast aluminum.
- BOLT COVERS: Four (4) individual bolt covers provided, painted to match pole and base finish.
- POLE CAP: Pole shaft supplied with removable cover when applicable; Tenon and post-top configurations also available
- HAND HOLE: Rectangular 3x5 aluminum hand hole frame (2.38" x 4.38" opening); Mounting provisions for grounding lug located behind gasketed cover
- ANCHOR BOLTS: Four galvanized anchor bolts provided per pole with minimum yield of 55,000 psi (ASTM F1554). Galvanized hardware with two washers and two nuts per bolt for levelingwarnings

FINISH
- Durable thermoset polyester powder coat paint finish with nominal 3.0 mil thickness
- Powder paint finish coat available in multiple standard colors; Custom colors available; RAL number preferable

ORDERING GUIDE
Example: PR4-4R12-125-PCR-GFI-SBC-PTF-BLT

CATALOG #

POLE

RSA-A | | | | | BLT |

Seiries	Pole	Shaft	Thickness	Mounting	Finish	VM2
RSA-A Round Straight Aluminum Pole	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	Reference page 2 Ordering matrix	TA Tenon (2.375" OD)	BLS Black Gloss Smooth	GFI 20 Amp GFCI Receptacle and Cover
				TB Tenon (2.875" OD)	BLT Black Matte Textured	EHH Extra Handhole
				OT Open Top (includes pole cap)	DBS Dark Bronze Gloss Smooth	C05 .5" Coupling
					DBT Dark Bronze Matte Textured	C07 .75" Coupling
					GTT Graphite Matte Textured	C20 2" Coupling
					LGS Light Grey Gloss Smooth	VM2 2nd mode vibration damper
					LGT Light Grey Matte Textured	LAB Less Anchor Bolts
					PSS Platinum Silver Gloss Smooth	UL UL Certified
					VGT Verde Green Matte Textured	
					WHS White Gloss Smooth	
					WHT White Matte Textured	
					Color Option	
					CC[1] Custom Color	

Accessories	
VM2SXX	2nd mode vibration damper, ordered separately

RSA-A-12-40-C (14FT) @ 4" ROUND
RSA-A-18-40-C (18FT @ 4" ROUND

MOUNTING ORIENTATION ○← Denotes handhole location
1 2 2L 3T 3Y 4

Notes:
1 Consult factory for custom color, marine and corrosive finish

architectural area lighting
RSA-A Series
ROUND STRAIGHT ALUMINUM POLE

DATE: | LOCATION: MAINE
TYPE: | PROJECT: 424 POST ROAD, WELLS MAINE
CATALOG #:

PRODUCTS EXCEPTIONS & DETAILS

ORDERING MATRIX

Catalog Number	Height Feet	Height Meters	Nominal Shaft Dimensions	Wall Thickness	Bolt Circle (suggested)	Bolt Circle (range)	Base Plate Diameter	Anchor bolt size	Bolt Projection	Pole weight
RSA-A-10-40-A	10	3.0	4" round	0.125	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	27
RSA-A-12-40-A	12	3.7	4" round	0.125	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	31
RSA-A-14-40-A	14	4.3	4" round	0.125	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	36
RSA-A-16-40-A	16	4.9	4" round	0.125	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	40
RSA-A-18-40-A	18	5.5	4" round	0.125	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	45
RSA-A-20-40-A	20	6.1	4" round	0.125	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	50
RSA-A-10-40-B	10	3.0	4" round	0.188	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	38
RSA-A-12-40-B	12	3.7	4" round	0.188	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	44
RSA-A-14-40-B	14	4.3	4" round	0.188	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	51
RSA-A-16-40-B	16	4.9	4" round	0.188	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	58
RSA-A-18-40-B	18	5.5	4" round	0.188	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	65
RSA-A-20-40-B	20	6.1	4" round	0.188	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	71
RSA-A-10-40-C	12	3.7	4" round	0.25	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	57
RSA-A-12-40-C	14	4.3	4" round	0.25	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	66
RSA-A-14-40-C	16	4.9	4" round	0.25	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	75
RSA-A-16-40-C	18	5.5	4" round	0.25	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	83
RSA-A-18-40-C	20	6.1	4" round	0.25	6.75"	4.77"	9.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	92
RSA-A-12-50-B	12	3.7	5" round	0.188	7.75"	5.48"	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	56
RSA-A-14-50-B	14	4.3	5" round	0.188	7.75"	5.48"	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	64
RSA-A-16-50-B	16	4.9	5" round	0.188	7.75"	5.48"	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	73
RSA-A-18-50-B	18	5.5	5" round	0.188	7.75"	5.48"	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	81
RSA-A-20-50-B	20	6.1	5" round	0.188	7.75"	5.48"	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	90
RSA-A-25-50-B	25	7.6	5" round	0.188	7.75"	5.48"	10.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	111
RSA-A-16-60-A	16	4.9	6" round	0.125	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	60
RSA-A-18-60-A	18	5.5	6" round	0.125	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	67
RSA-A-20-60-A	20	6.1	6" round	0.125	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	74
RSA-A-25-60-A	25	7.6	6" round	0.125	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	91
RSA-A-16-60-C	16	5.5	6" round	0.25	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	127
RSA-A-18-60-C	18	6.1	6" round	0.25	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	140
RSA-A-20-60-C	20	7.6	6" round	0.25	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	174
RSA-A-25-60-C	25	9.1	6" round	0.25	8.75"	6.19"	11.62" Dia x 1.88" Thk	3/4" x 30" x 3"	2.75"	208

MOUNTING ORIENTATION
1 2 2L 3T 3Y 4 ○← Denotes handhole location

POSTS FOR POLE MOUNTED AREA LIGHTS

KIM LIGHTING®

VRB1 LED Round Bollard
SINGLE FUNCTION, VANDAL-RESISTANT, ALUMINUM SHAFT

Type:
Job:
Catalog number:

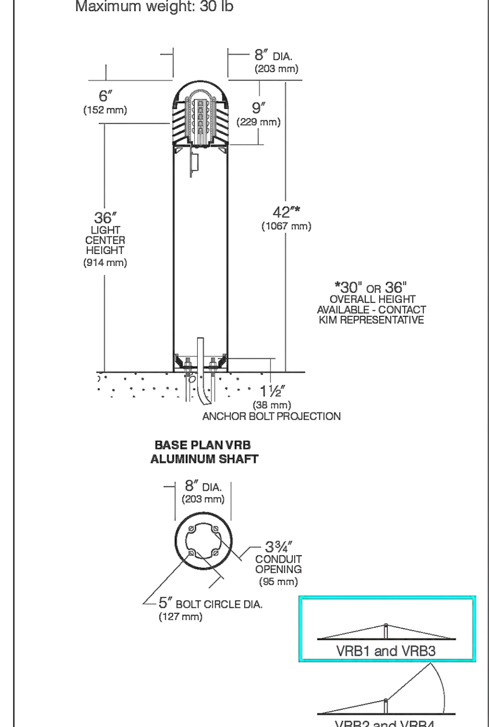
VRB1 / Electrical Module / Luminaire Finish (includes top cap and shaft) / Option — See page 2
Fixture

Approvals:

Date:
Page: 1 of 4

Specifications
VRB-LED Models
10 - 20 Diodes

VRB1- Single Function Luminaire (Aluminum Shaft)
Maximum weight: 30 lb

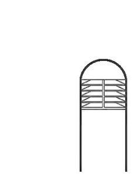


Domed Top Cap: One-piece die-cast aluminum secured to louvers by concealed allen screws in keyhole slots. For relamping access, allen screws shall not require complete removal.
Louvers: Aluminum die-cast with vertical support ribs at 90° intervals. Horizontal louver blades shall have a 13/4" depth, a 65° upward pitch and provide light source cutoff above horizontal. Louver assembly shall be secured to shaft by four internal tie rods.
Lamp Enclosure: One-piece tempered molded glass with internal flutes and full gasketing at bottom edge.
Fixture Head: Allows flow-through ventilation around and above the lamp enclosure.
Shaft: One-piece extruded aluminum, .125" wall thickness with a heavy cast aluminum twist-lock anchor base concealed within the shaft. Concealed set screws shall lock shaft onto the cast anchor base.
Electronic Module: All electrical components are either UL or ETL recognized, mounted on a single plate and factory prewired with quick disconnect plugs. Driver is rated for -40°F starting and has a 0-10V dimming interface for multi-level illumination options.
Optical Module: Each LED equipped with a directional optic for maximum beam angle projecting through louver stack spacings. LED boards to be mounted to an anodized inter-locking heat sink extrusion. (Type I) two 5-LED boards for a total of 10-LED. (Type III) three 5-LED boards for a total of 15-LED. (Type V) four 5-LED boards for a total of 20-LED. Available in 580nm Amber, 3000K, 4000K and 5000K color temperatures.
Anchor Bolts: Four 3/8" x 10" + 2" zinc plated L-hooks, each with two nuts, washers and a rigid pressed board template.
Finish: Each luminaire receives a fade and abrasion resistant, electrostatically applied, thermally cured, triglycidal isocyanurate (TGIC) polyester powdercoat finish.
Listed to: UL 1598 Standard for Luminaires - UL 8750 Standard for Safety for Light Emitting Diode (LED) Equipment for use in Lighting Products and CSA C22.2#250.0 Luminaires. RoHS compliant. Meets Buy American provisions within ARRA.

CAUTION: Fixtures must be grounded in accordance with national, state and/or local electrical codes. Failure to do so may result in serious personal injury.

KIM LIGHTING RESERVES THE RIGHT TO CHANGE SPECIFICATIONS WITHOUT NOTICE

KIM LIGHTING®
VRB1 LED Round Bollard
SINGLE FUNCTION, VANDAL-RESISTANT, ALUMINUM SHAFT



Standard and Optional Features

Fixture
Cat. No. **VRB1** Single Function, Aluminum Shaft, Domed Top

Electrical Module
LED = Light Emitting Diode

Cat. Nos. for LED Electrical Modules available:

xL — **Source:**
- **10L**= 10 LED (IES Type I)
- **15L**= 15 LED (IES Type III)
- **20L**= 20 LED (IES Type V)

xK — **Color Temperature:**
- 2K = 590nm - Amber
- 3K = 3000K
- 4K = 4000K
- 5K = 5000K

UV — **Voltage:**
- **UV** Universal Voltage shall range from 120V-277V

Finish
TGIC thermoset polyester powder coat paint applied over a titanated zirconium conversion coating on fixture and shaft.

Cat. No.:	Color:
BLS	Black Gloss Smooth
BLT	Black Matte Textured
DBS	Dark Bronze Gloss Smooth
DBT	Dark Bronze Matte Textured
GTT	Graphic Matte Textured
LGS	Light Grey Gloss Smooth
LGT	Light Grey Matte Textured
PSS	Platinum Silver Gloss Smooth
VGT	Verde Green Matte Textured
WHS	White Gloss Smooth
WHT	White Matte Textured
CC[1]	Custom Color

NOTE: Black and Dark Bronze colors will produce slightly less louver brightness than Light Gray or White.

[1]Custom colors subject to additional charges, minimum quantities and extended lead times. Consult representative. Custom color description:________

LED BOLLARD

LICENSED LANDSCAPE ARCHITECT
12-1-23
SCOTT M. STRYNAR
NO. 3148
STATE OF MAINE

Scott Strynar
Landscape Architect, LLC.
98 Meehan Lane
North Berwick, ME 03906
(t) 207-957-4441

Registered Landscape Architect
Maine, New Hampshire & Mass.
www.scottstrynarla.com

NO.	REVISIONS	INT.	DATE

RECORD OWNER:
90 US ROUTE 1 LLC

ADDRESS:
PO BOX 630
KITTERY, ME 03904

UPDATED BOUNDARY & EXISTING CONDITIONS PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

PREPARED FOR: 90 US ROUTE 1 LLC
CLIENT ADDRESS: PO BOX 630, KITTERY, ME 03904

1" = 20'
0' 20'

DATE: 06/23/2023
DRAWN BY: SS
CHECKED BY: SS
APPROVED BY:

LIGHTING DETAILS

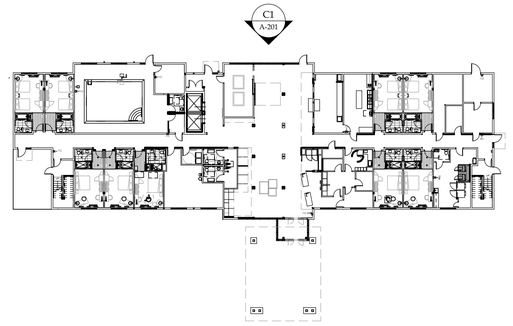
PROJECT NO: 21-323.00

LL2

SHEET: 1 OF 3

TAX MAP 14, LOT 2

COORDINATE FILE: J:\AAA\2021\2132300\CARLSON\SURVEY\POINTS\2132300-MESPCS-NAD83W.crd
CADD FILE: F:\PROJECTS\182-90 US RTE ONE KITTERY\CAD\182-BASE 12-1-23 .DWG



E5 KEY PLAN
SCALE: NTS

C1 SOUTHWEST ELEVATION
SCALE: 1/8" = 1'-0"

A1 NORTHEAST ELEVATION
SCALE: 1/8" = 1'-0"

Holiday Inn Express

INNCODE: PWMKT

90 Rte 1 Bypass
Kittery, ME

ISSUE:

SA PROJECT TEAM:
PRINCIPAL P.Silvestri
PROJ. ARCH. _____
DRAFTER _____
JOB CAPT. S. Henry
INTERIORS _____

SEAL:

TITLE:

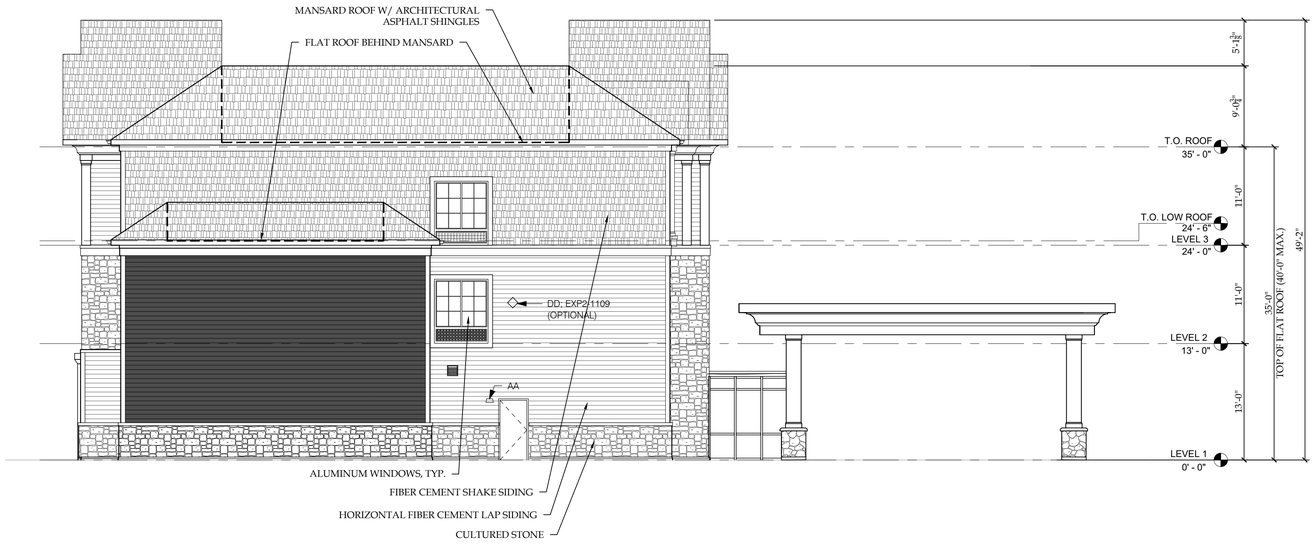
EXTERIOR ELEVATIONS

SILVESTRI
ARCHITECTS · PC
1321 MILLERSPORT HWY PH. 716.691.0900
AMHERST, NY 14221 FAX 716.691.4773

SA JOB #: 22070.01

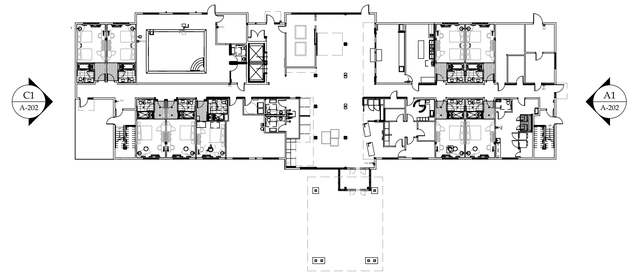
DATE: 11-30-23

DRAWING #: A-201



C1 EAST ELEVATION
SCALE: 1/8" = 1'-0"

A1 WEST ELEVATION
SCALE: 1/8" = 1'-0"



E5 KEY PLAN
SCALE: NTS

NOTICE

This document, the property of, prepared and issued by the architect, is submitted for the specific project namely _____ and the recipient by accepting this document assumes custody and agrees that this document will not be copied or reproduced in part or in whole, and any special features peculiar to this design shall not be incorporated in any other project, unless prior agreement has been obtained in writing.These documents will be returned immediately upon completion of the project or upon the request of the architect.
This document is the exclusive property of the architect, no rights to ownership are transferable, or shall be lost by the filing of this document with any and all public authorities for the purpose of compliance with Codes and or Ordinances, i.e. Building Permit, etc.

Holiday Inn Express

INNCODE: PWMKT

90 Rte 1 Bypass
Kittery, ME

ISSUE:

SA PROJECT TEAM: PRINCIPAL P.Silvestri
PROJ. ARCH. _____ DRAFTER _____
JOB CAPT. S. Henry INTERIORS _____

SEAL:

TITLE:

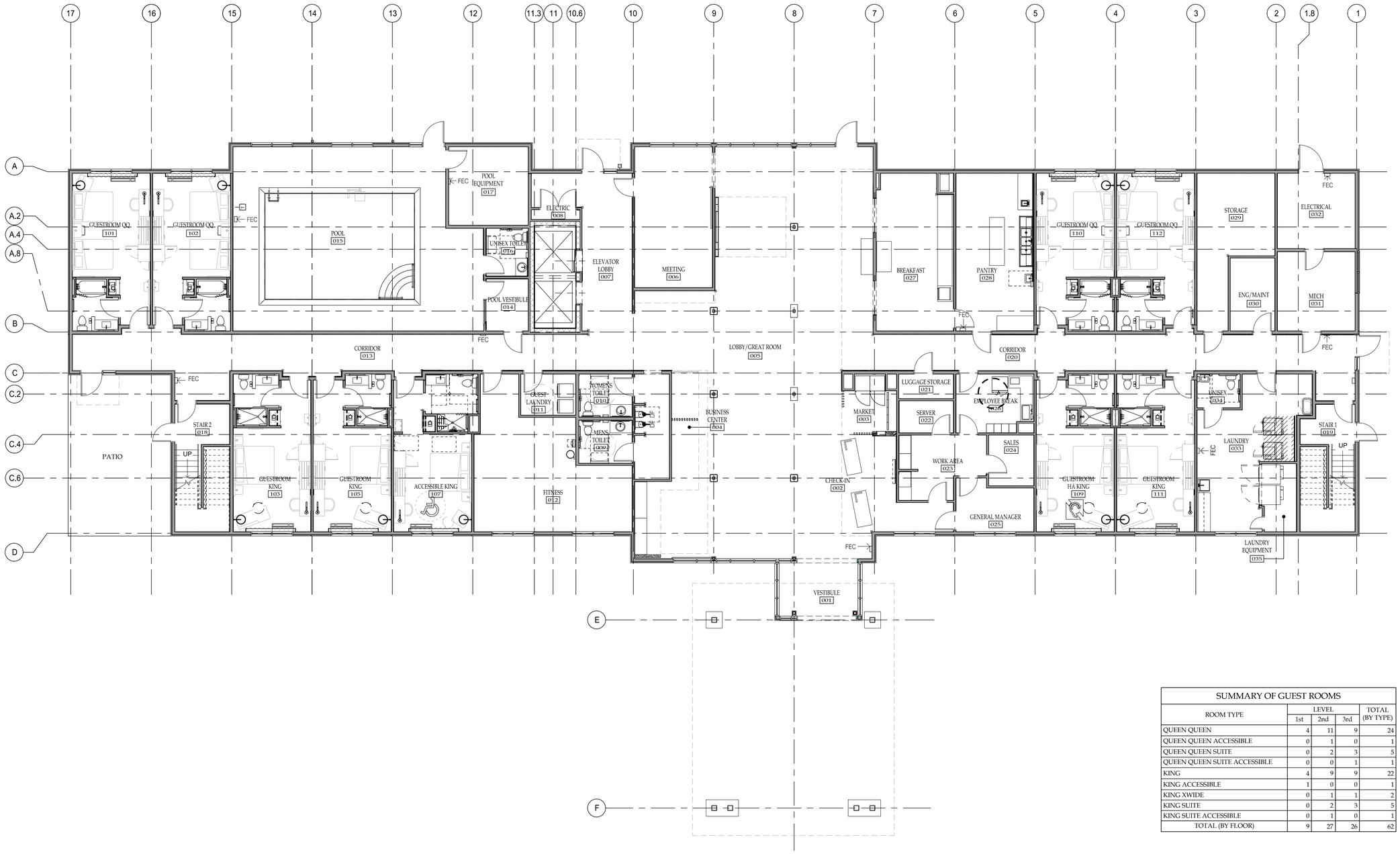
EXTERIOR ELEVATIONS

SILVESTRI
ARCHITECTS • PC
1321 MILLERSPORT HWY PH. 716.691.0900
AMHERST, NY 14221 FAX 716.691.4773

SA JOB #: 22070.01

DATE: 11-30-23

DRAWING #: A-202



SUMMARY OF GUEST ROOMS				
ROOM TYPE	LEVEL			TOTAL (BY TYPE)
	1st	2nd	3rd	
QUEEN QUEEN	4	11	9	24
QUEEN QUEEN ACCESSIBLE	0	1	0	1
QUEEN QUEEN SUITE	0	2	3	5
QUEEN QUEEN SUITE ACCESSIBLE	0	0	1	1
KING	4	9	9	22
KING ACCESSIBLE	1	0	0	1
KING XWIDE	0	1	1	2
KING SUITE	0	2	3	5
KING SUITE ACCESSIBLE	0	1	0	1
TOTAL (BY FLOOR)	9	27	26	62

A1 FIRST FLOOR PLAN
SCALE: 1/8" = 1'-0"

Holiday Inn Express

INNCODE: PWMKT

90 Rte 1 Bypass
Kittery, ME

ISSUE:

SA PROJECT TEAM: PRINCIPAL P.Silvestri
PROJ. ARCH. _____ DRAFTER _____
JOB CAPT. S. Henry INTERIORS _____

SEAL:

TITLE:

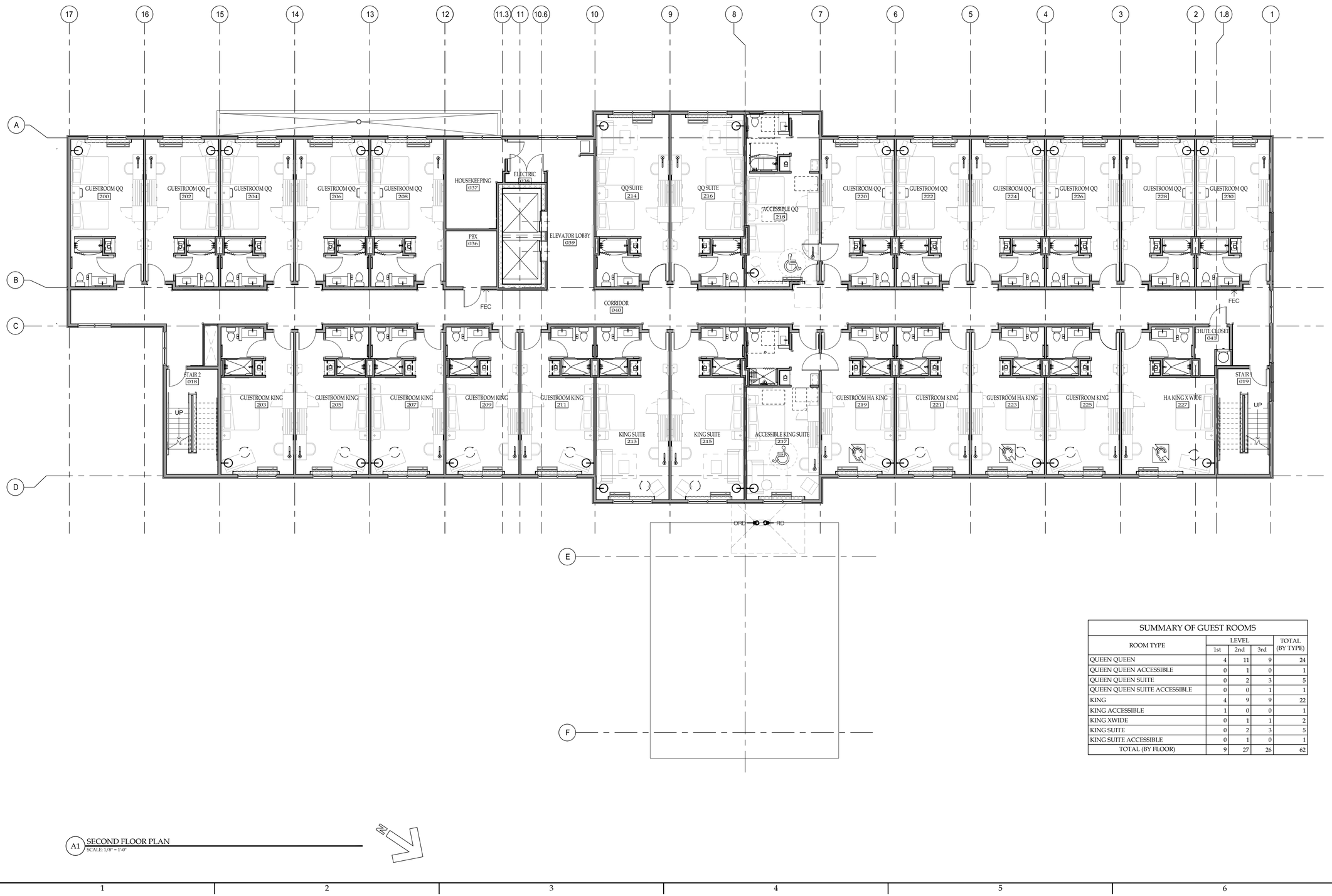
FIRST FLOOR PLAN

SILVESTRI ARCHITECTS · PC
1321 MILLERSPORT HWY PH. 716.691.0900
AMHERST, NY 14221 FAX 716.691.4773

SA JOB #: 22070.01

DATE: 11-30-23

DRAWING #: A-101



SUMMARY OF GUEST ROOMS				
ROOM TYPE	LEVEL			TOTAL (BY TYPE)
	1st	2nd	3rd	
QUEEN QUEEN	4	11	9	24
QUEEN QUEEN ACCESSIBLE	0	1	0	1
QUEEN QUEEN SUITE	0	2	3	5
QUEEN QUEEN SUITE ACCESSIBLE	0	0	1	1
KING	4	9	9	22
KING ACCESSIBLE	1	0	0	1
KING XWIDE	0	1	1	2
KING SUITE	0	2	3	5
KING SUITE ACCESSIBLE	0	1	0	1
TOTAL (BY FLOOR)	9	27	26	62

A1 SECOND FLOOR PLAN
SCALE: 1/8" = 1'-0"

Holiday Inn Express

INNCODE: PWMKT

90 Rte 1 Bypass
Kittery, ME

ISSUE:

SA PROJECT TEAM: PRINCIPAL P.Silvestri
PROJ. ARCH. _____ DRAFTER _____
JOB CAPT. S. Henry INTERIORS _____

SEAL:

TITLE:

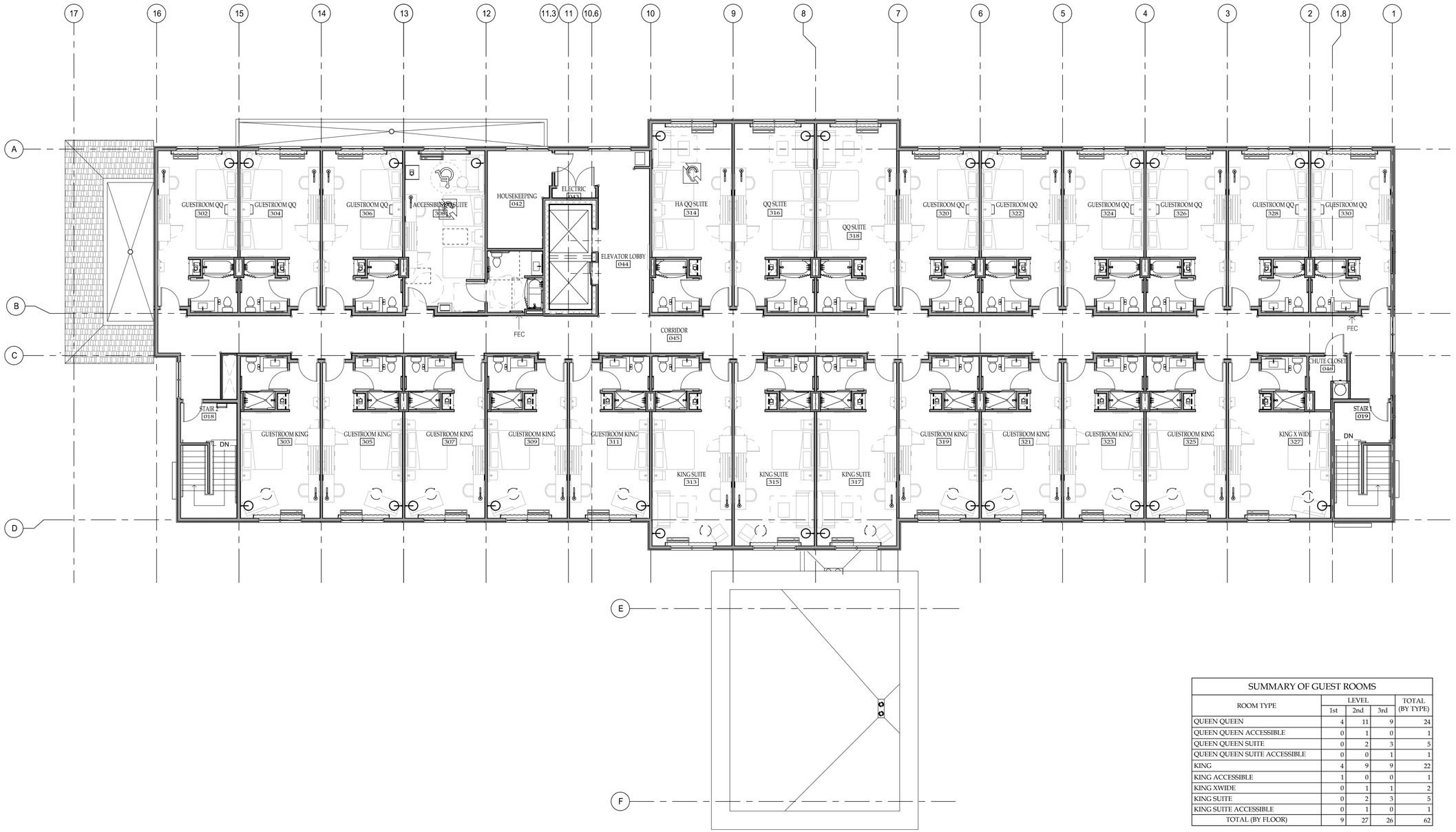
SECOND FLOOR PLAN

SILVESTRI ARCHITECTS • PC
1321 MILLERSPORT HWY PH. 716.691.0900
AMHERST, NY 14221 FAX 716.691.4773

SA JOB #: 22070.01

DATE: 11-30-23

DRAWING #: A-102



SUMMARY OF GUEST ROOMS				
ROOM TYPE	LEVEL			TOTAL (BY TYPE)
	1st	2nd	3rd	
QUEEN QUEEN	4	11	9	24
QUEEN QUEEN ACCESSIBLE	0	1	0	1
QUEEN QUEEN SUITE	0	2	3	5
QUEEN QUEEN SUITE ACCESSIBLE	0	0	1	1
KING	4	9	9	22
KING ACCESSIBLE	1	0	0	1
KING XWIDE	0	1	1	2
KING SUITE	0	2	3	5
KING SUITE ACCESSIBLE	0	1	0	1
TOTAL (BY FLOOR)	9	27	26	62

A1 THIRD FLOOR PLAN
SCALE: 1/8" = 1'-0"

Holiday Inn Express

INNCODE: PWMKT

90 Rte 1 Bypass
Kittery, ME

ISSUE:

SA PROJECT TEAM: PRINCIPAL P.Silvestri
PROJ. ARCH. _____ DRAFTER _____
JOB CAPT. S. Henry INTERIORS _____

SEAL:

TITLE:

THIRD FLOOR PLAN

SILVESTRI
ARCHITECTS · PC
1321 MILLERSPORT HWY PH. 716.691.0900
AMHERST, NY 14221 FAX 716.691.4773

SA JOB #: 22070.01

DATE: 11-30-23

DRAWING #: A-103

CIVIL CONSULTANTS MEMORANDUM

TO: **Town of Kittery Planning Department**

FROM: **Geoffrey R. Aleva, PE**

SUBJECT: **Project Narrative**

DATE: **01/05/2024**

PROJECT: **21-323.00 – 90 US ROUTE 1 BYPASS**

90 US Route 1, LLC is proposing to redevelop the 1.56-acre lot located in the C-3 zone at 90 US Route 1 Bypass, known as Map 14, Lot 2 on the Town of Kittery tax map system. The intent of the project is to construct a new 3 story, Holiday Inn Express hotel. The project will require a Major Site Plan review as it will result in the construction of over 5,000 SF of gross nonresidential floor area.

The lot was previously home to The Little Guest House, a 10-unit motel which has since been demolished. There is an existing parking lot with two entrances from the Route 1 Bypass. Most of the non-developed areas of the site contain grass, with the eastern portion of the lot containing woodland.

The proposed development will create a 3-story Holiday Inn Express hotel containing 62 rooms. The site will provide 66 parking spaces, including 3 ADA accessible parking spaces. The driveway access from Route 1 Bypass will be revised to provide a single two-way access between the two existing entrances which are intended to be removed. A paved access way to Old Post Road for emergency and authorized vehicles only is proposed at the rear of the lot. Civil Consultants has been working with MDOT regarding the driveway access revisions.

ZONING INFORMATION

The project is intending to construct a 3-story hotel to be used as a Holiday Inn Express Hotel with 62 units. The lot is in the Commercial 3 (C-3) zone. A hotel is an allowable use per section 16.4.21.B.9 of the Kittery Land Use Zone Regulations.

Per the C-3 zone requirements, the new building will be located to meet the 15 ft maximum front setback and the 10 ft side setbacks from non-residential uses and 15 ft side setbacks from residential uses. The rear property line abuts Old Post Rd, which requires a 15 ft setback. The proposed development meets the zoning requirements for frontage, setback and lot coverage. Additional information is provided on the attached site plans.

There are no wetlands on the property. There are also no known easements on the site.

Per Section 16.4.20.E.m of the Kittery Ordinance, underground utilities are required. The site is already serviced by year-round municipal sewer and water from Old Post Rd, and the new hotel will update these services. Electricity is currently provided to the site along Old Post Rd through a series of three utility poles on site (CMP 17.1, 17.2 & 17.3). The proposed development will remove poles 17.2 and 17.3 entirely and relocate pole 17.1 closer to Old Post Rd. Underground electric will then be connected to the new hotel from relocated pole 17.1.

Section 16.7.11.F.4.d of the Kittery Ordinance requires 1 parking space for each rental unit, plus 1 space for each 100 square feet of meeting room. For a 62-unit hotel with a 193 SF meeting room, the required number of parking spaces is 64. The proposed number of parking spaces is 66, including 3 ADA accessible parking spaces.

The site will be designed to meet the landscaping requirements of the Kittery Land Use Regulations. A detailed landscape plan has been provided.

A lighting plan will be presented with the application as the project moves forward. The lighting will indicate downlit fixtures that comply with dark sky requirements.

Section 16.4.21.E.2.f.3 of the Kittery Ordinance defines the 70% maximum impervious surface ratio for lots in the C-3 zone for new nonresidential structures. The additional criterion of this section requires all stormwater to be managed on-site utilizing low-impact design (LID) and best management practice (BMP) systems based on MDEP's Maine Stormwater Best Management Practices, Volume I through III. A detailed report and maintenance plan has been prepared and submitted with the submission.

CONCLUSION:

It is our opinion that this project meets the requirements and intent of the Kittery Land Use Ordinance. The applicant looks forward to presenting the project at the next available meeting.

CIVIL CONSULTANTS
P.O. Box 100 South Berwick, Maine 03908 207-384-2550

CIVIL CONSULTANTS MEMORANDUM

TO: Town of Kittery Planning Department

FROM: Geoffrey R. Aleva, P.E.

DATE: 01/05/2024

SUBJECT: Article 16.7.10.C(4) Preliminary Plan Review

PROJECT: 21-323.00 – 90 U.S. Route 1 Bypass – Tax Map 14, Lot 2
Holiday Inn Express – Hotel Redevelopment

Following is a memo with descriptions of how the submission requirements for preliminary site plan review have been met as outlined in the Town of Kittery Zoning Ordinance Article 16.7.10.C Preliminary Plan Review.

COMMENTS	RESPONSES
16.7.10.C.(4) Plan requirements	
(a) Plan sheets drawn on a reproducible medium and must measure no less than 11 inches by 17 inches and no larger than 24 inches by 36 inches;	*Provided*
(b) With scale of the drawings no greater than one inch equals 30 feet for developments less than 10 acres, and one inch equals 50 feet for all others;	*Provided*
(c) Code block in the lower right-hand corner. The block must contain:	*Provided on all plan sheets*
[1] Name(s) and address(es) of the applicant and owner;	*Provided on all plan sheets*
[2] Name of the project;	*Provided on all plan sheets*
[3] Name and address of the preparer of the plan, with professional seal, if applicable;	*Provided on all plan sheets*
[4] Date of plan preparation/revision, and a unique ID number for the plan and any revisions;	*Provided on all plan sheets*
(d) Standard boundary survey conducted by a surveyor licensed in the State of Maine, in the manner recommended by the State Board of Registration for Land Surveyors;	*Provided on sheet EC1*
(e) An arrow showing true North and the magnetic declination, a graphic scale, and signature blocks for the owner(s) and members of the Planning Board;	*Provided on plans*
(f) Locus map showing the property in relation to surrounding roads, within 2,000 feet of any property line of the development;	*Provided on plans.*
(g) Vicinity map and aerial photograph showing the property in relation to surrounding properties, roads, geographic, natural resource (wetland, etc.), historic	*Provided with application*

P.O. Box 100 South Berwick, Maine 03908 207-384-2550

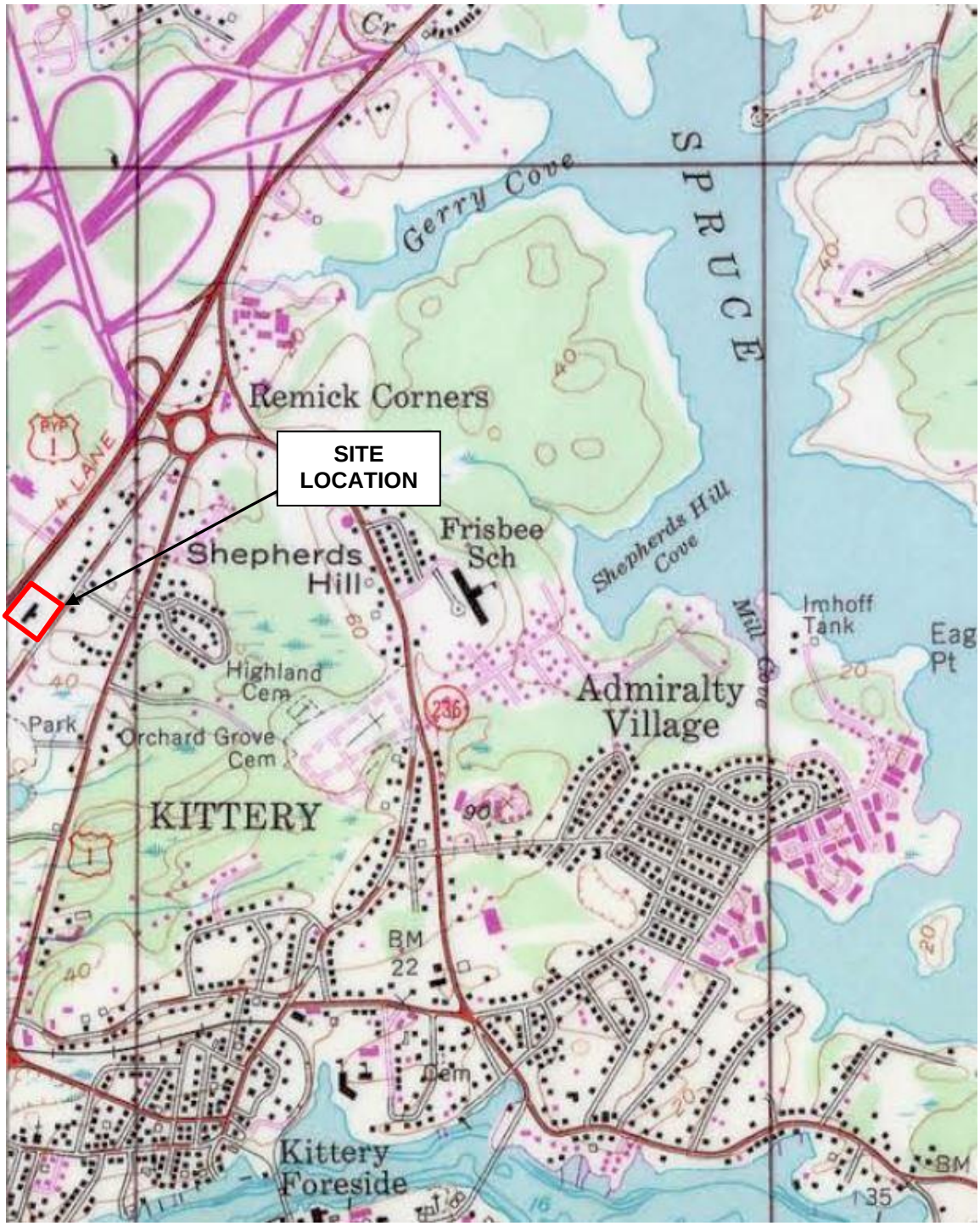
sites, applicable comprehensive plan features such as proposed park locations, land uses, zones, and other features within 500 feet from any boundary of the proposed development;	
(h) Surveyed acreage of the total parcel, of rights-of-way, wetlands, and area to be disturbed and amount of street frontage;	*All provided on plans.*
(i) Names and addresses of all owners of record of property abutting the development, including those across a street;	*Abutters provided on the plans. See the attached abutters list and map.*
(j) Existing development area conditions, including but not limited to:	*Existing Conditions plan provided.*
[1] Location and description of all structures, including signs, existing on the site, together with accesses located within 100 feet of the property line;	*Provided on Existing Conditions Plan*
[2] Essential physical features such as watercourses, wetlands, floodplains, wildlife habitat areas, forest cover, and outcroppings;	*Provided on Existing Conditions Plan*
[3] Utilities existing, including power, water, sewer, holding tanks, bridges, culverts and drainageways;	*Provided on Existing Conditions Plan*
(k) Proposed development area conditions including, but not limited to:	*Proposed Site Plan provided.*
[1] Structures: their location and description, including signs, to be placed on the site, floor plans and elevations of principal structures as well as detail of all structures, showing building materials and colors, and accesses located within 100 feet of the property line;	*Provided on Proposed Site Plan along with attached architectural drawings.*
[2] Utilities proposed including power, water, sewer, holding tanks, bridges, culverts and drainageways;	*Provided on Proposed Site Plan. The new hotel will improve the connections to and continue be serviced by the existing municipal sewer and water connections. Electric connections are to be relocated underground and a subsurface sand filter will be installed to treat runoff.*
[3] Sewage facilities type and placement. Test pit locations, at least two of which must meet the State of Maine Plumbing Code requirements, must be shown;	*Provided on Proposed Site Plan. The site will continue to be serviced by the existing year-round municipal sewer connection.*
[4] Domestic water source;	*N/A*
[5] Parks, open space, or conservation easement locations;	*N/A*
[6] Lot lines, interior and exterior, right-of-way, and street alignments;	*Provided on Proposed Site Plan.*
[7] Road and other paved ways plans, profiles and typical sections including all relevant data;	*Provided on Proposed Site Plan.*
[8] Setbacks existing and proposed;	*Provided on Proposed Site Plan.*

[9] Machinery permanently installed locations likely to cause appreciable noise at the lot lines;	*N/A*
[10] Raw, finished or waste materials to be stored outside the buildings, and any stored material of a toxic or hazardous nature;	*N/A*
[11] Topographic contours of existing contours and finished grade elevations within the development;	*Provided on Proposed Site Plan.*
[12] Pedestrian ways/sidewalks, curbs, driveways, fences, retaining walls and other artificial features locations and dimensions proposed;	*Provided on Proposed Site Plan.*
[13] Temporary marker locations adequate to enable the Planning Board to readily locate and appraise the layout of the development;	*Provided*
[14] Land proposed to be dedicated to public use and the conditions of such dedication;	*N/A*
(l) Natural features or site elements to be preserved. Written submission requirements legal interest documents showing legal interest of the applicant in the property to be developed. Such documents must contain the description upon which the survey was based;	*N/A, the lot is completely developed except for areas of lawn throughout the site and woods along the lot sides that are to remain in order to satisfy impervious lot coverage requirements.*
(m) Property encumbrances currently affecting the property, as well as any proposed encumbrances;	*N/A*
(n) Water district approval letter, if public water is used, indicating there is adequate supply and pressure to be provided to the development;	*Civil Consultants has been in contact with the water district. No approval letter required.*
(o) Erosion and sedimentation control plan prepared by a qualified erosion and sedimentation control professional in accordance with the requirements of § 16.7.11C;	*Provided with plans.*
(p) Stormwater management preliminary plan for stormwater and other surface water drainage prepared by a registered professional engineer including the general location of stormwater and other surface water drainage areas;	*Stormwater management report and plans provided with application.*
(q) Soil survey for York County covering the development. Where the soil survey shows soils with severe restrictions for development, a high intensity Class "A" soil survey must be provided;	*Online soil survey provided with application.*
(r) Vehicular traffic report estimating the amount and type of vehicular traffic that will be generated by the development on a daily basis and for peak hours;	*Provided with application.*
(s) Traffic impact analysis in accordance with § 16.5.27E for developments involving 40 or more parking spaces or which are projected to generate more than 400 vehicle trips per day;	*Provided with application.*
(t) Test pit(s) analysis prepared by a licensed site evaluator when sewage disposal is to be accomplished by subsurface disposal, pits, prepared by a licensed site evaluator;	*N/A, the site will continue to be serviced by municipal sewer.*

(u) Town Sewage Department or community system authority letter, when sewage disposal is to be through a public or community system, approving the connection and its location;	*Civil Consultants has been in contact with the Kittery Sewer Department. No approval letter required.*
(v) Letters of evaluation of the development by the Chief of Police, Fire Chief, Commissioner of Public Works, and, for residential applications, the superintendent of schools, must be collected and provided by the Town Planner;	*Civil Consultants has been in contact with the required departments. No approval letters required.*
(w) Additional submissions as may be required by other sections of this title such as for clustered development, mobile home parks, or junkyards must be provided.	*N/A*
16.7.10.C.(5) Additional requirements. In its consideration of an application/plan, the Planning Board may at any point in the review require the applicant to submit additional materials, studies, analyses, and agreement proposals as it may deem necessary for complete understanding of the application. Such materials may include:	
(a) Traffic impact analysis, for projects that are not otherwise required to submit a traffic impact analysis by submission requirement in Subsection C(4)(s), above.	*Planning Board determination, an assessment of proposed traffic is included with the submission.*
(b) Environmental analysis. An analysis of the effects that the development may have upon surrounding lands and resources, including intensive study of groundwater, ecosystems, or pollution control systems.	*Planning Board determination, no detrimental impacts proposed.*
(c) Hydrologic analysis. An analysis of the effects that the development may have on groundwater must be conducted in accordance with § 16.7.11J. This analysis is always required for mobile home park proposals.	*Planning Board determination, no detrimental impacts proposed.*
16.7.10.C.(6) Additional submittal content required for review of wireless communication services facilities (WCSF).	*N/A*
(a) A visual impact analysis prepared by a landscape architect or other qualified professional acceptable to the Town that quantifies the amount of visual impact on properties located within 500 feet, within 2,500 feet and within two miles of the WCSF. This analysis will include recommendations to mitigate adverse visual impacts on such properties;	*N/A*
(b) An analysis prepared by a qualified professional acceptable to the Town that describes why this site and structure is critical to the operation for which it is proposed. The analysis must address, at a minimum, existing and proposed service area; how this WCSF is integrated with other company operations, particularly other structures in Kittery and surrounding communities; future expansion needs in the area; the effect on company operations if this structure is not constructed in this location;	*N/A*

other sites evaluated for location of this structure and how such sites compare to the proposed site; other options, if any, which could be used to deliver similar services, particularly if the proposed equipment can be co-located (shared use) on an existing structure; and an analysis to the projected life cycle of this structure and location;	
(c) Certification by a structural engineer that construction of the structure satisfies all federal, state and local building code requirements as well as the requirement of maximum permitted co-location at the site as approved by the Planning Board/Town Planner;	*N/A*
(d) A plan note stating the payment of all required performance guarantees as a condition of plan approval;	*N/A*
(e) Payment of the Planning Board application fees;	*N/A*
(f) And all other requirements per this chapter.	*N/A*

J:\aaa\2021\2132300\PLANNING BOARD\PRELIMINARY SITE PLAN\COMPONENTS\20240105-2132300-Preliminary Response Memo (Zoning Ordinance 16.7.10.C(4)).docx



PORTION OF KITTERY QUADRANGLE USGS MAP Maine – New Hampshire 7.5 Minute Series		*PREPARED FOR:*	*90 U.S. Route 1, LLC PO Box 630 Kittery, ME 03904*
JOB NO: 21-323.00	*NTS*	*DATE: November 2023*	

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VICINITY MAP

Kittery, ME

1 inch = 275 Feet

0 275 550 825

November 14, 2023

CAI Technologies
Precision Mapping. Geospatial Solutions.
www.cai-tech.com

Freshwater Forested/Shrub Wetland
Tract Line
Right of Way
Cemetery
Utility
Property Hook
Condo
Property Line
Public Road

Notice of intent to file Preliminary Site Plan Review Application

Please take notice that:

Civil Consultants, P.O. BOX 100, South Berwick, Maine 03908, on behalf of 90 U.S. Route 1, LLC, the owners of the property at 90 U.S. Route 1 Bypass, Kittery, ME 03904, is intending to file a Preliminary Site Plan Review Application through the Major Site Plan Review process with the Town of Kittery, ME on or about December 1, 2023.

This application is to construct a new 3-story Holiday Inn Express Hotel on the existing developed lot of The Little Guest House, a 10-unit motel that has since been demolished at 90 U.S. Route 1 Bypass in Kittery, ME. The new hotel will have 62 hotel rooms with an associated 66 space parking lot (including 3 ADA accessible spaces) and drainage facilities. A single two-way driveway access from U.S. Route 1 Bypass and a gated emergency vehicle access on Old Post Road will be constructed.

As part of the Kittery Preliminary Plan Application process, notice of intent to file an application must be sent to all abutters within 150 ft. A public hearing will be held as part of the site plan review process. Public comment on the application will be accepted during the Planning Board review process.

The application will be filed at the Town of Kittery Planning Office during normal working hours. After submitting, a copy of the application may be found at the municipal offices in Kittery, ME or at the office of Civil Consultants at 293 Main Street in South Berwick, ME.

Please contact Geoff Aleva at Civil Consultants with questions. (207-384-2550) Witten public comments may be sent to the Town of Kittery at 200 Rogers Rd, Kittery, Maine 03904.

150 foot Abutters List Report

Kittery, ME
January 04, 2024

Subject Property:

Parcel Number:	14-2	Mailing Address:	90 US ROUTE 1 LLC 90 US ROUTE 1 LLC
CAMA Number:	14-2		P.O. BOX 630
Property Address:	90 US ROUTE 1 BY-PASS		KITTERY, ME 03904

Abutters:

Parcel Number:	14-18	Mailing Address:	ROWLINSON, JEANETTE A
CAMA Number:	14-18		ROWLINSON, JEANETTE A
Property Address:	112 OLD POST ROAD		112 OLD POST RD
			KITTERY, ME 03904
Parcel Number:	14-19	Mailing Address:	CHAPMAN, DAVID R CHAPMAN, DAVID R
CAMA Number:	14-19		106 OLD POST ROAD
Property Address:	106 OLD POST ROAD		KITTERY, ME 03904-1062
Parcel Number:	14-19A	Mailing Address:	HENSHAW, RICHARD FRANCIS
CAMA Number:	14-19A		HENSHAW, RICHARD FRANCIS
Property Address:	104 OLD POST ROAD		104 OLD POST ROAD
			KITTERY, ME 03904
Parcel Number:	14-3A	Mailing Address:	GELLER, ELLEN L GELLER, ELLEN L
CAMA Number:	14-3A		109 OLD POST ROAD
Property Address:	109 OLD POST ROAD		KITTERY, ME 03904
Parcel Number:	14-4	Mailing Address:	MCEACHERN, DUNCAN A.
CAMA Number:	14-4		MCEACHERN, DUNCAN A.
Property Address:	111 OLD POST ROAD		124 WHIPPLE ROAD
			KITTERY, ME 03904
Parcel Number:	7-26	Mailing Address:	KITTERY MOTOR INN INC KITTERY MOTOR INN INC
CAMA Number:	7-26		85 US ROUTE 1 BY-PASS
Property Address:	85 US ROUTE 1 BY-PASS		KITTERY, ME 03904-9965
Parcel Number:	8-12	Mailing Address:	HERLIHY, BETH A. HERLIHY, BETH A.
CAMA Number:	8-12		103 OLD POST ROAD
Property Address:	103 OLD POST ROAD		KITTERY, ME 03904
Parcel Number:	8-13	Mailing Address:	3 SHAIKHS LLC 3 SHAIKHS LLC
CAMA Number:	8-13		79 OLD POST ROAD
Property Address:	79 OLD POST ROAD		KITTERY, ME 03904-1064
Parcel Number:	8-15	Mailing Address:	J&J'S VILLAS, LLC J&J'S VILLAS, LLC
CAMA Number:	8-15		402 THE HILL, DEER STREET
Property Address:	127 STATE ROAD		PORTSMOUTH, NH 03801
Parcel Number:	8-16	Mailing Address:	GRIFFIN, JOHN P GRIFFIN, JOHN P
CAMA Number:	8-16		100 OLD POST ROAD
Property Address:	100 OLD POST ROAD		KITTERY, ME 03904-1062

150 FOOT ABUTTERS

Kittery, ME

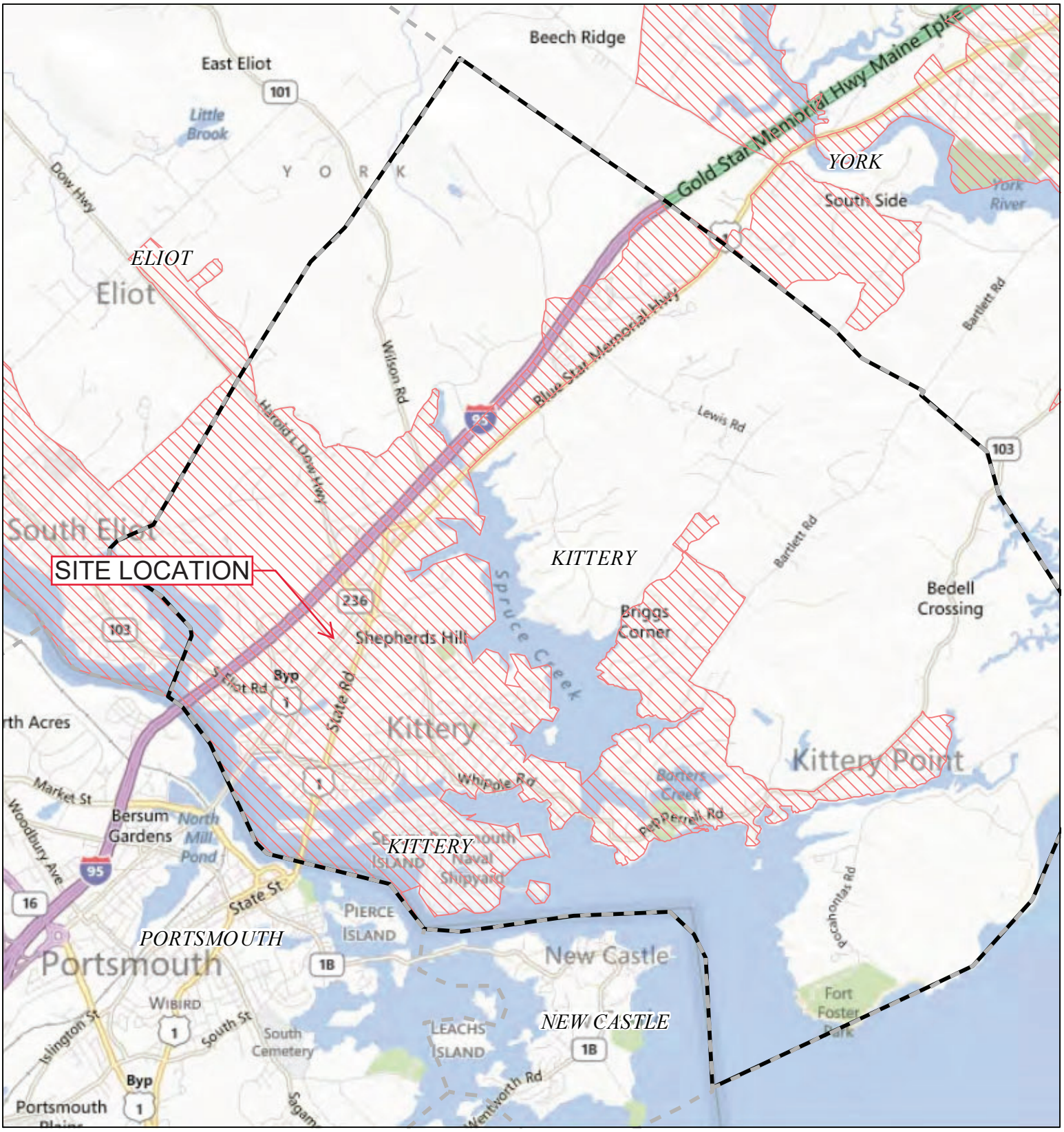
1 inch = 275 Feet

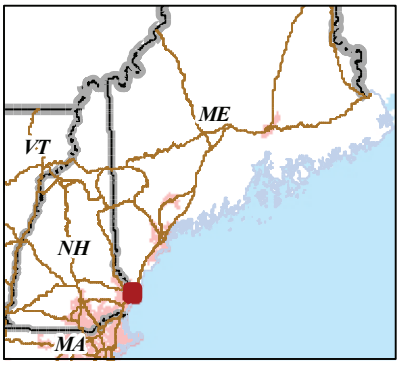
0 275 550 825

January 4, 2024

CAI Technologies
Precision Mapping. Geospatial Solutions.
www.cai-tech.com

Tract Line	Utility	Condo
Right of Way	Property Hook	Property Line
Cemetery	RoadNotPar	Public Road





NPDES Phase II Stormwater Program
Automatically Designated MS4 Areas

Kittery ME

Regulated Area (2000 + 2010 Urbanized Area)

0 1 2 3 Kilometers

0 1 2 3 Miles

Town Population: **9945**

Regulated Population: **7034**

(Populations estimated from 2010 Census)

Urbanized Areas, Town Boundaries:
US Census (2000, 2010)
Base map © 2010 Microsoft Corporation
and its data suppliers

US EPA Region 1 GIS Center Map #8824, 11/19/2012

SITE LOCATION

APPROXIMATE SCALE

400 0 400 FEET

NATIONAL FLOOD INSURANCE PROGRAM

FIRM

FLOOD INSURANCE RATE MAP

TOWN OF
KITTERY, MAINE
YORK COUNTY

PANEL 7 OF 10
(SEE MAP INDEX FOR PANELS NOT PRINTED)

COMMUNITY-PANEL NUMBER
230171 0007 C

EFFECTIVE DATE:
JULY 5, 1984

Federal Emergency Management Agency

ZONE C

ZONE A

ZONE A2
(EL 9)

ROAD

OLD RAILROAD GRADE

VALLES ROAD

BLUE STAR MEMORIAL HIGHWAY

POST ROAD

STATE ROAD

LEGION POND

PAUL STREET

RUDOLPH AVENUE

COOK PARK AVENUE

OLD POST ROAD

STREET

BRIDGE

MAINE AND Mendum Creek

AVENUE

RAILROAD

OLD DENNETT ROAD

EMERY LANE

MAINE TURNPIKE

ELIOT

SOUTH

BAY VIEW LANE

SPINNEY

LODGE ROAD

WALKER LANE

ADAMS LANE

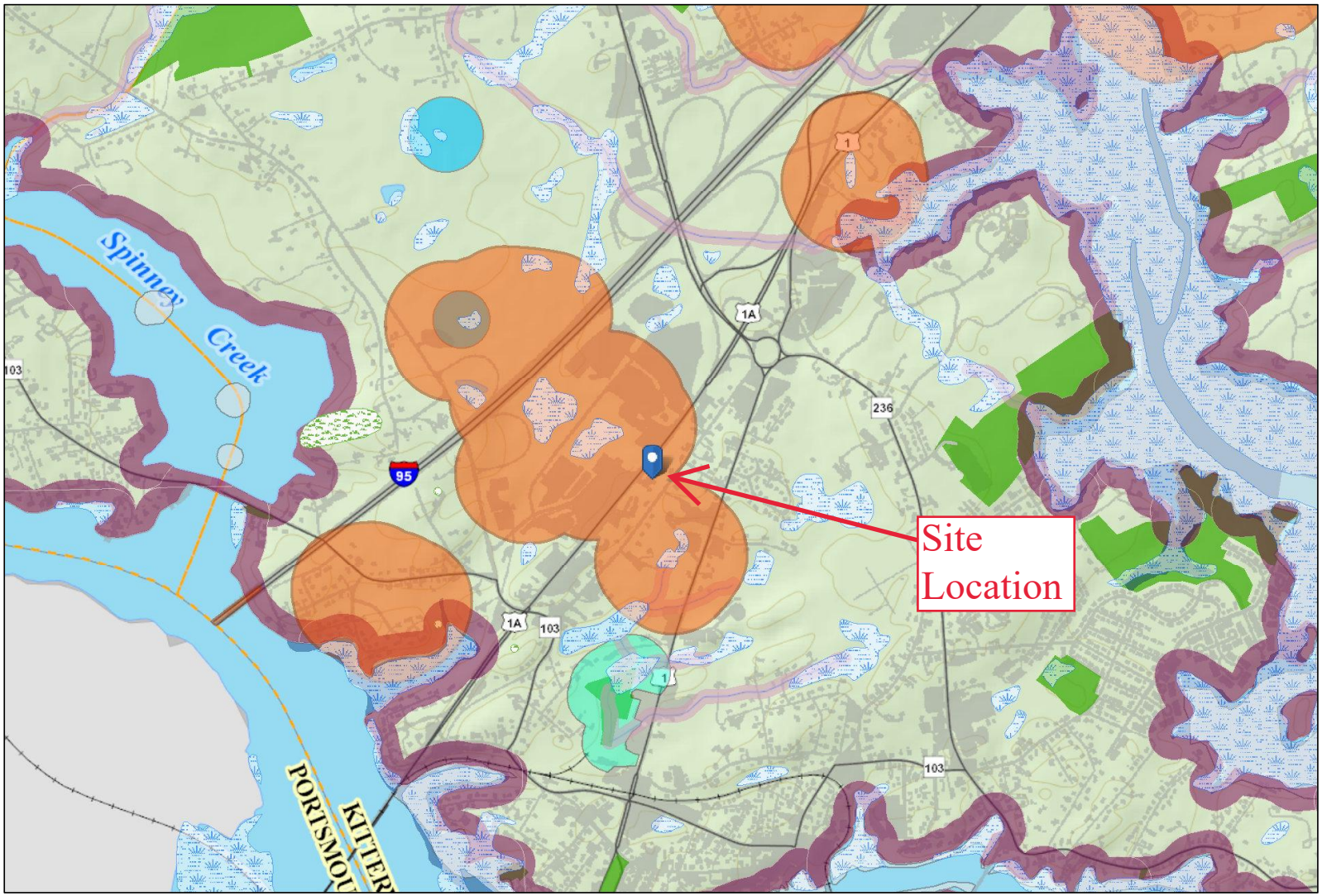
×RM10

95

1

BYP 1

103



BEGINNING WITH HABITAT

Legend

State of Maine

The Nature Conservancy
Protecting nature. Preserving life.

Maine Audubon

Maine Coast Heritage Trust
A Statewide Land Conservation Organization

MaineDOT

0 0.225 0.45 0.9 1.35 mi

N W E S

Supported in part by Maine Outdoor Heritage Fund lottery ticket sales

Map Prepared by Maine Department of Inland Fisheries & Wildlife
November 2023

Supported in part by Loon Conservation Plate funds

Map Scale: 1:1,580 if printed on A landscape (11" x 8.5") sheet.

N

Meters: 0 20 40 80 120

Feet: 0 50 100 200 300

Map projection: Web Mercator Corner coordinates: WGS84 Edge tics: UTM Zone 19N WGS84

MAP LEGEND

Area of Interest (AOI)

Area of Interest (AOI)

Soils

Soil Rating Polygons

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Lines

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Soil Rating Points

A

A/D

B

B/D

C

C/D

D

Not rated or not available

Water Features

Streams and Canals

Transportation

Rails

Interstate Highways

US Routes

Major Roads

Local Roads

Background

Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: York County, Maine
Survey Area Data: Version 21, Aug 30, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
LnB	Lyman loam, 3 to 8 percent slopes, rocky	D	3.1	30.0%
Sc	Scantic silt loam, 0 to 3 percent slopes	D	0.8	8.1%
Ur	Urban land		6.3	61.9%
Totals for Area of Interest			**10.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

DLN: 10019400557[illegible]

NANCY E HAMMOND, REGISTER OF DEEDS
E-RECORDED **Bk 17938 PG 10**
Instr # 2019014785
04/29/2019 09:05:25 AM
Pages 2 YORK CO

WARRANTY DEED

KNOW ALL BY THESE PRESENTS, that **Mohamad Siddick Shaikh and Firoza Shaikh**, a married couple, of 509 Lafayette Road, Hampton, County of Rockingham, State of New Hampshire 03842, for consideration paid grants to **90 US Route 1 LLC**, a Maine limited liability company with a mailing address of P.O. Box 630, Kittery, Maine 03904, with WARRANTY COVENANTS:

Maine R.E. Transfer Tax Paid

A certain lot or parcel of land, with the building thereon, located on the northerly side of Old Post Road, Kittery, County of York and State of Maine, and being more particularly bounded and described as follows:

Beginning at a hub on the Old Part Road at land formerly of James and Avis Tarling; thence running northerly by land of said Tarlings, 235 feet, more or less, to the line of the Super-Highway, so-called, it being the approach to the Interstate Toll Bridge; thence easterly by said Super Highway, 300 feet, more or less, to land of Oscar M. Goodwin; thence southerly by land of said Goodwin, 227 feet, more or less, to said Old Post Road; thence westerly by said Old Post Road, 300 feet, more or less, to place of beginning.

Meaning and intending to convey the same premises conveyed to Mohamad Siddick Shaikh and Firoza Shaikh by Warranty Deed of Bold Faith, LLC dated September 27, 2007 and recorded in the York County Registry of Deeds at Book 15267, Page 255.

Executed this 26th day of April, 2019.

Mohamad Siddick Shaikh

Firoza Shaikh

STATE OF Maine
COUNTY OF York

On this 26h day of April, 2019, before me personally appeared Mohamad Siddick Shaikh and Firoza Shaikh, known to me or satisfactorily proven to be the persons whose names are subscribed to the foregoing instrument and acknowledged the foregoing to be true and correct and that they executed the same as their free act and deed for the purposes herein contained.

Notary Public/Attorney at Law
Commission expiration:

DAVID J. BALLOU
STATE OF
MAINE
BAR NO.
7394
MAINE
ATTORNEY AT LAW

MAINE
Department of the Secretary of State
Bureau of Corporations, Elections and Commissions

Corporate Name Search

Information Summary

Subscriber activity report

This record contains information from the CEC database and is accurate as of: Fri Jan 05 2024 09:45:38. Please print or save for your records.

Legal Name	Charter Number	Filing Type	Status
90 US ROUTE 1 LLC	20193022DC	LIMITED LIABILITY COMPANY	GOOD STANDING

Filing Date	Expiration Date	Jurisdiction
11/30/2018	N/A	MAINE

Other Names **(A=Assumed ; F=Former)**

NONE

Principal Home Office Address

Physical	Mailing

Clerk/Registered Agent

Physical	Mailing
DAVID J. BALLOU 408 US ROUTE ONE 2ND FLOOR YORK, ME 03909	DAVID J. BALLOU 408 US ROUTE ONE 2ND FLOOR YORK, ME 03909

New Search

Click on a link to obtain additional information.

List of Filings	View list of filings	
Obtain additional information:		
Certificate of Existence (Good Standing) (more info)	Short Form without amendments ($30.00)	Long Form with amendments ($30.00)

You will need Adobe Acrobat version 3.0 or higher in order to view PDF files.
If you encounter problems, visit the troubleshooting page.

If you encounter technical difficulties while using these services, please contact the Webmaster. If you are unable to find the information you need through the resources provided on this web site, please contact the Division of Corporations, UCC & Commissions Reporting and Information Section at 207-624-7752 or e-mail.

From: Michael Rogers
To: geoff@civcon.com
Subject: Re: 90 US ROUTE 1 BYPASS - HOTEL PROJECT (2132300)
Date: Wednesday, February 1, 2023 12:42:51 PM
Attachments: Desired water line connection area for 90 US Route 1 bypass.pdf

---

You're welcome Geoff,
To the north side of the property would be better, please see the attached picture.
Thank you.
Mike

Michael S. Rogers, Superintendent
Kittery Water District
17 State Road
Kittery, ME 03904
TEL 207-439-1128
FAX 207-439-8549
CELL 207-451-8316
Email mrogerskwd@gmail.com
(please note, the mikerkwd@comcast.net email address is no longer in use)

On Wed, Feb 1, 2023 at 12:09 PM <geoff@civcon.com> wrote:

> Mike
>
> Thank you for the quick reply. Do you have a preferred location to tie in along the Bypass. Would you prefer the north or south side of the property?
>
> Geoff Aleva
>
> CIVIL CONSULTANTS
>
> ---
>
> **From:** Michael Rogers <mrogerskwd@gmail.com>
> **Sent:** Wednesday, February 1, 2023 11:56 AM
> **To:** geoff@civcon.com
> **Subject:** Re: 90 US ROUTE 1 BYPASS - HOTEL PROJECT (2132300)
>
> Hi Geoff,

I wish that I had a good and economic solution for you. The main on Old Post Road is an old 6" CI pipe with an undocumented flow test of 839 GPM. This would be roughly a 170 foot pipe run from the main on Old Post Road to the back of the existing building. The other option, which I feel is a better option, however far more expensive would be to tap off of the 8" CI main that is on the opposite side of the street on the Rt. 1 bypass. A hydrant flow test back in 2015 revealed 1113 GPM. This is also about a 170 foot pipe run from the existing water main to the front of the existing building. This being said, the 8" main drops down to 6" at the fire hydrant, heading towards the south. The main on the Bypass is definitely the stronger, more reliable main as compared to the main on Old Post Road. A service pipe for your project could be installed via Horizontal Directional Drilling, however a small amount of pavement would still need to be disturbed for a trench box at the existing water main.

Please let me know if you have any questions.

Thank you.

Mike

Michael S. Rogers, Superintendent

Kittery Water District

17 State Road

Kittery, ME 03904

TEL 207-439-1128

FAX 207-439-8549

CELL 207-451-8316

Email mrogerskwd@gmail.com

(please note, the mikerkwd@comcast.net email address is no longer in use)

On Wed, Feb 1, 2023 at 8:30 AM <geoff@civcon.com> wrote:

> Mike
>
> I hope all is well. We are working a redevelopment project at this site. The proposed project is brand hotel with approximately 63 rooms.
>
> I would like to meet and review the water system in the area. This new project will need service for fire and domestic. Based on the sewer flows, the approximate daily water usage will be 6,400 GPD.
>
> I am available at your convenience to meet and discuss the project. Please let me know what works best for you.
>
> Geoff
>
> Geoffrey R. Aleva, PE
>
> President
>
> Structural / Civil Engineer
>
> CIVIL CONSULTANTS
>
> PO Box 100 / 293 Main Street
>
> South Berwick, Maine 03908
>
> ph: 207-384-2550
>
> fx: 207-384-2112

mobile: 603-781-1402

From: Timothy Babkirk
To: Geoff Aleva
Subject: RE: 90 US ROUTE 1 BYPASS - Hotel (2132300)
Date: Tuesday, September 19, 2023 11:36:40 AM
Attachments: image002.png
image003.png
image004.png

Hi Geoff,
Here are the measurements inside those manholes:

Manhole 81 is 9' from rim to bottom of invert.
Manhole 82 is 6' from rim to bottom of invert.

Thank You.

Tim Babkirk
Superintendent
Kittery Sewer department

Phone: 207-439-4646
Email: tbabkirk@kitteryme.org

200 Rogers Road
Kittery, ME 03904

www.kitteryme.gov

From: Geoff Aleva <geoff@civcon.com>
Sent: Wednesday, September 13, 2023 9:40 AM
To: Timothy Babkirk <TBabkirk@kitteryme.org>
Subject: 90 US ROUTE 1 BYPASS - Hotel (2132300)

Tim

We are continuing to work on the site plan for the Hotel at the bypass. Attached is our working

concept site plan. This plan does not have sewer shown yet. We are intending to install a new line leaving the building on the eastern site of the building, to a manhole outside the building and then install a new SMH on the line in Old Post Rd.

Do you have any information on the depth from rim to inverts for the two adjacent manholes. We have rim elevations but did not open the manholes. They are manholes 82 and 81?.

I have an estimate flow of 5,380 GPD. This is based on 80 GPD per room and 15 employees at 12 GPD.

If you want to meet and discuss, let me know what works best for you. Thank you for your time as always.

Geoff

Geoffrey R. Aleva, PE
President
Structural / Civil Engineer
CIVIL CONSULTANTS
PO Box 100 / 293 Main Street
South Berwick, Maine 03908
ph: 207-384-2550
fx: 207-384-2112
mobile: 603-781-1402

Assessment of Traffic Generation

90 U.S. Route 1, LLC is proposing to redevelop the 1.56-acre lot located at 90 U.S. Route 1 Bypass in Kittery, Maine. The redevelopment is situated between U.S. Route 1 and Old Post Road and is shown as Map 14 Lot 2 of the Town of Kittery tax maps. The intent of the redevelopment is to construct a 3-story Holiday Inn Express Hotel containing 62 rental rooms. The redevelopment will also include the construction of a new parking lot in place of the existing parking lot.

The lot was previously home to The Little Guest House, a 10-unit motel building which has since been demolished. There are two existing entrances from Route 1 Bypass that were used to access the motel building and the existing 18 space parking lot. The proposed redevelopment will construct a new parking lot with 66 parking spaces, including 3 ADA accessible parking spaces. The driveway access from Route 1 Bypass will be revised to provide a single two-way access between the locations of the two existing entrances which are intended to be removed. A paved access way (with gate and knox box) to Old Post Road for emergency vehicles is proposed at the rear of the lot.

Part of the Town review process requires an estimate of the average daily traffic projected to be generated by the proposed use. The following information is provided as that estimate (based in the Institute of Traffic Engineer – ITE Trip Generation Manual, 11th Edition):

EXISTING DEVELOPMENT:

10-Unit Motel Building

The existing 10-unit motel building use falls most closely under ITE Land Use category Motel (320). This use provides expected traffic based per room. As noted, there are 10 rooms.

ITE Land Use Code 320 – Motel (10 Rooms)

			Total
Daily Trip Ends Weekday/Room	3.35 ave	(range 1.65-4.38)	**34 Trips**
Peak Hour AM Trip Ends Weekday/Room	0.35 ave	(range 0.08-0.97)	4 Trips
Peak Hour PM Trip Ends Weekday/Room	0.36 ave	(range 0.06-0.83)	4 Trips
Peak Hour AM Generator Trip Ends Weekday/Room	0.40 ave	(range 0.12-0.89)	4 Trips
Peak Hour PM Generator Trip Ends Weekday/Room	0.41 ave	(range 0.17-0.85)	5 Trips

Based upon the above, the highest average day figure would be the Daily Trip Ends Weekday rate of 3.35 trip ends – or – (3.35/Room) x 10 Rooms = 33.5 say ***34 trip ends for the day***

Based upon the above, the highest peak hour figure would be the Peak Hour PM Generator Trip Ends rate of 0.41 trip ends in the peak hour – or – (0.41/Room) x 10 Rooms = 4.1 say ***5 trip ends in the peak hour***

Based on the traffic estimates, the maximum number of daily trips for the existing motel is 34 trips. The number of trips during the peak hour is 5.

PROPOSED DEVELOPMENT:

62-Unit Hotel Building

The hotel use falls most closely under ITE Land Use category Hotel (310). This use provides expected traffic based per room. As noted, there are 62 rooms.

ITE Land Use Code 310 – Hotel (62 Rooms)

			Total
Daily Trip Ends Weekday/Room	7.99 ave	(range 5.31-9.53)	496 Trips
Peak Hour AM Trip Ends Weekday/Room	0.46 ave	(range 0.20-0.84)	29 Trips
Peak Hour PM Trip Ends Weekday/Room	0.59 ave	(range 0.26-1.06)	37 Trips
Peak Hour AM Generator Trip Ends Weekday/Room	0.53 ave	(range 0.25-1.42)	33 Trips
Peak Hour PM Generator Trip Ends Weekday/Room	0.60 ave	(range 0.22-0.97)	38 Trips
Saturday Trip Ends/Room	8.07 ave	(range 6.35-9.79)	**501 Trips**
Peak Hour Generator Trip Ends/Room	0.72 ave	(range 0.49-1.23)	**45 Trips**
Sunday Trip Ends/Room	5.94 ave	(range 4.01-8.48)	369 Trips
Peak Hour Generator Trip Ends/Room	0.57 ave	(range 0.39-0.72)	36 Trips

Based upon the above, the highest average day figure would be the Saturday Trip Ends rate of 8.07 trip ends – or – (8.07/Room) x 62 = 500.34 say ***501 trip ends for the day***

Based upon the above, the highest peak hour figure would be the Saturday Peak Hour Generator Trip Ends rate of 0.72 trip ends in the peak hour – or – (0.72/Room) x 62 = 44.64 say ***45 trip ends in the peak hour***

Based on the traffic estimates, the maximum number of daily trips for the hotel building is 501 trips. The number of trips during the peak hour is 45. Review of MDOT available crash data indicates that this location is not a high crash location.

Conclusion

Section 16.7.10.C.4.s of the Kittery Ordinance requires a traffic impact analysis for site plans involving 40 or more parking spaces or more than 400 vehicle trips per day. The proposed number of parking spaces is 66. Based on this traffic assessment, the maximum number of daily trips is 501.

Given these factors, a traffic impact analysis will be required to determine whether or not the proposed project will adversely impact traffic on the adjacent roadways.

Traffic Assessment

Date: December 18, 2023

To: **Geoffrey R. Aleva, PE, President, Civil Consultants**

From:
Jacob Sirois, E.I.
Engineer 1
Barton & Loguidice, LLC.

John Q. Adams, P.E., PTOE
Associate, Senior Transportation Engineer
Barton & Loguidice, LLC.

Re: **90 U.S. Route 1 Bypass**
Kittery, Maine

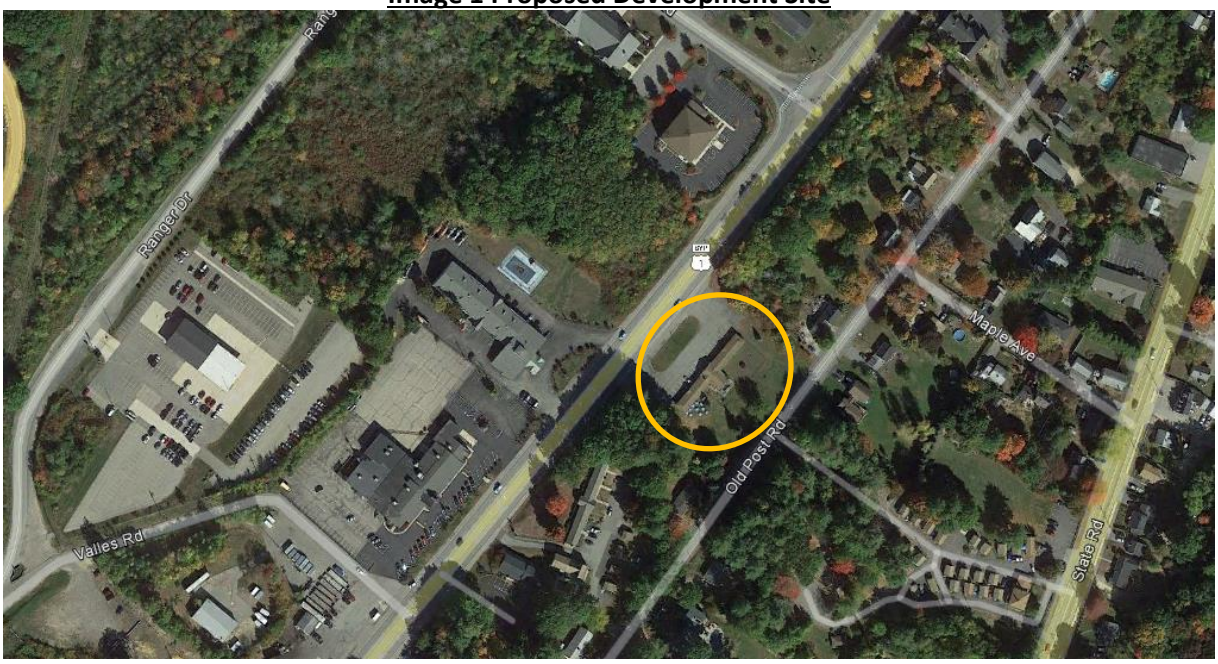
~~~~~~

Introduction

90 U.S. Route 1, LLC is proposing to redevelop the parcel located at 90 U.S. Route 1 Bypass in the Town of Kittery. The property is located between the U.S. Route 1 Bypass and Old Post Road and is shown below in Image 1. The site's prior use consisted of a 10-room motel building, which was recently demolished. Access to the existing motel was provided via two driveway entrances that connect directly to the eastern side of U.S. Route 1. The Site redevelopment project proposes constructing a 62-room hotel building, reconfigures the existing driveway entrances into a single primary entrance on U.S. Route 1 Bypass, and constructing a secondary entrance that connects the site directly to Old Post Road. The primary access will be 24 feet wide and connect the site directly to the eastern side of the U.S. Route 1 Bypass. The secondary entrance will connect the site directly to Old Post Road and be reserved for emergency vehicle use only.

The purpose of this traffic assessment is to evaluate and measure the level of impact on traffic operations and safety resulting from the development of the proposed project. Site generated trip projections are provided for "key" peak hour time periods throughout a typical week; road safety conditions were determined based upon a review of MaineDOT's latest road safety data, and intersection sight distance was field reviewed and measured to ensure safe and acceptable sight distance is provided at the proposed driveway intersections with U.S. Route 1 Bypass and Old Post Road.
~~~~~~

Image 1 Proposed Development Site



Site Trip Generation

Daily and peak hour trip generation was determined for the proposed project based on trip tables presented in the eleventh edition of the Institute of Transportation Engineers (ITE) Trip Generation Manual. The ITE publication provides numerous land use codes (LUC) and the average volume of trips generated by each category.

Existing Trip Generation: Since the parcel had an existing on-site use that was active within the past ten years, this traffic assessment assumes a trip credit for peak hour trips produced by the previous existing 10-room motel, consistent with the MaineDOT's procedures. Trip generation estimates for the prior 10-room motel were determined using LUC #320 – Motel, described in the ITE publication as "*a place of lodging that provides sleeping accommodations and provides little or no meeting space and few supporting facilities."* The trip generation calculations for each corresponding peak hour time period are shown below in Table 1:

Table 1 ITE Trip Generation Calculations							
Land Use	**Motel - LUC 320**						
Time Period	**Occupied Rooms**	**Trip Generation Rate Trips/Occ. Room**	**Trips Generated**	**Distribution Entering / Exiting**		**Enter**	**Exit**
Weekday	10	4.37	44	50%	/ 50%	22	22
AM Weekday Peak Hour (Street)	10	0.49	5	36%	/ 64%	2	3
PM Weekday Peak Hour (Street)	10	0.47	5	53%	/ 47%	3	2
AM Weekday Peak Hour (Generator)	10	0.48	5	39%	/ 61%	2	3
PM Weekday Peak Hour (Generator)	10	0.46	5	54%	/ 46%	3	2
Saturday Peak Hour	10	0.96	10	45%	/ 55%	5	5
Sunday Peak Hour	10	0.74	7	53%	/ 47%	4	3

The preceding table shows that while the 10-room motel was active, it was expected to generate 5 trips during the Weekday AM and PM peak hours, 10 trips during the Saturday peak hour, and 7 trips during the Sunday peak hour.

Proposed Trip Generation: Site trip generation estimates for the proposed 62-room hotel were calculated using LUC #310 – Hotel, described in the ITE manual as *"a place of lodging that provides sleeping accommodations and supporting facilities such as a full-service restaurant, cocktail lounge, meeting rooms, banquet room, and convention center facilities."* The trip generation calculations for the proposed development are shown below in Table 2.

Table 2 ITE Trip Generation Calculations							
Land Use	**Hotel - LUC 310**						
Time Period	**Occupied Rooms**	**Trip Generation Rate Trips/Occ. Room**	**Trips Generated**	**Distribution Entering / Exiting**		**Enter**	**Exit**
Weekday	62	12.23	758	50%	/ 50%	379	379
AM Weekday Peak Hour (Street)	62	0.62	38	56%	/ 44%	21	17
PM Weekday Peak Hour (Street)	62	0.73	45	49%	/ 51%	22	23
AM Weekday Peak Hour (Generator)	62	0.65	40	54%	/ 46%	22	18
PM Weekday Peak Hour (Generator)	62	0.73	45	57%	/ 43%	26	19
Saturday Peak Hour	62	0.79	49	45%	/ 55%	22	27
Sunday Peak Hour	62	0.70	43	53%	/ 47%	23	20

Table 2 shows that the proposed development is forecast to generate 38 trips during the AM peak hour of the adjacent (street) and 45 trips during the PM peak hour of the (street). The peak hours of the site (generator) are similar, with the site producing 40 trips in the AM and 45 trips during the PM. On the weekends, the site is expected to generate 49 trips during the Saturday peak hour and 43 trips during the Sunday peak hour. In the following section, we will calculate the number of *"net new"* trips the site will produce.

Net New Trip Generation: The net new trip calculations are provided below in Table 3.

Table 3
Net New Trip Generation Calculations

Land Use	Trip Generation		Net New Trips		
Time Period	**Proposed Hotel**	**Existing Motel**	**Total Trips**	**Enter**	**Exit**
Weekday	758	-44	714	357	357
AM Weekday Peak Hour (Street)	38	-5	33	19	14
PM Weekday Peak Hour (Street)	45	-5	40	19	21
AM Weekday Peak Hour (Generator)	40	-5	35	20	15
PM Weekday Peak Hour (Generator)	45	-5	40	23	17
Saturday Peak Hour	49	-10	39	17	22
Sunday Peak Hour	43	-7	36	19	17

Table 3 shows that when taking into consideration the trips produced by the previous motel, the site is expected to generate 33 "*net*" new trips in the AM peak hour of the adjacent (street) and 40 new trips in the PM peak hour of the street. During the peak hours of the generator, the project is expected to generate 35 "*net*" new trips in the AM and 40 new trips in the PM. The weekend peak hours are expected to be slightly lower, with the site producing 39 new trips during the Saturday peak hour and 36 new trips during the Sunday peak hour. Overall the project will be a low volume trip generator and will be well below the minimum MaineDOT threshold of 100 new peak hour trips ends that would require a Traffic Movement Permit.

Vehicle Sight Distance

The Maine Department of Transportation's Highway Entrance and Driveway Rules require the following sight distances for a non-mobility roadway:

Sight Distance Standards

Speed Limit	Sight Distance
25 mph	**200 feet**
30 mph	250 feet
35 mph	**305 feet**
40 mph	360 feet
45 mph	425 feet
50 mph	495 feet

The section of the U.S. Route 1 Bypass fronting the development site is posted at 35 mph, requiring an unobstructed sightline of 305 feet. The segment of Old Post Road fronting the development is posted at 25 mph, requiring a sight distance measurement of 200 feet.

MaineDOT's Rules and Regulations require sight distance to be measured in accordance with the following procedures: *"Sight distance is measured to and from the point on the centerline of the proposed access that is located 10-feet from the edge of traveled way. The height of the hypothetical person's view is considered to be 3½ feet above the pavement and the height of the object being viewed is considered to be 4¼ feet above the pavement."*

Sight distance measurements were field recorded at the two proposed driveway entrances. Our field measurements indicate that sightlines at both driveways exceed the minimum sight distances.
Looking left at the proposed driveway entrance connecting to the U.S. Route 1 Bypass, we recorded an unobstructed sight distance measurement of over 500 feet. Looking right, a similar measurement in excess of 400 feet was recorded. While the recorded sight distance measurements exceed MaineDOT's sight distance standards; looking left, the sightline can be further increased by clearing the shrubbery and small trees in the quadrant between Route 1 Bypass and the south end of the existing southernmost driveway. Refer to Images Below.

At the proposed secondary emergency vehicle only driveway that connects to Old Post Road, looking left and right, unobstructed sight distance measurements in excess of 350 feet were recorded.

U.S. Route 1 BYP - Looking Left Out of Entrance

U.S. Route 1 BYP - Looking Right Out of Entrance

U.S. Route 1 BYP - Looking Left Suggested Clearing Zone

Old Post Rd - Looking Left Out of Entrance

Old Post Rd - Looking Right Out of Entrance

Existing Road Safety Conditions

The Maine Department of Transportation's (MaineDOT) Accident Records Section has provided the latest three-year (2020 through 2022) crash data for the section of the U.S. Route 1 Bypass between Georges Road and Valles Road, and the section of Old Post Road between Maple Avenue and Dennett Road. Overall, approximately 0.65 miles of roadway was reviewed. MaineDOT's report is presented as follows:

2020 -2022 MaineDOT Crash Data

Location	Total Crashes	Critical Rate Factor
1. Old Post Rd @ Dennett Rd	0	0.00
2. Old Post Rd @ Maple Ave	0	0.00
3. Old Post Rd btw. Maple Ave and Dennett Rd	1	0.26
4. U.S. Route 1 BYP @ Valles Rd	0	0.00
5. U.S. Route 1 BYP @ Gorges Rd	2	0.13
6. U.S. Route 1 BYP btw. Gorges Rd and Valles Rd	0	0.00

The MaineDOT considers any roadway intersection or segment a high crash location if both of the following criteria are met:

- ***8 or more accidents***
- ***A Critical Rate Factor greater than 1.00***

As the data presented in the chart shows, there are no high crash locates within the reviewed study area.

Summary

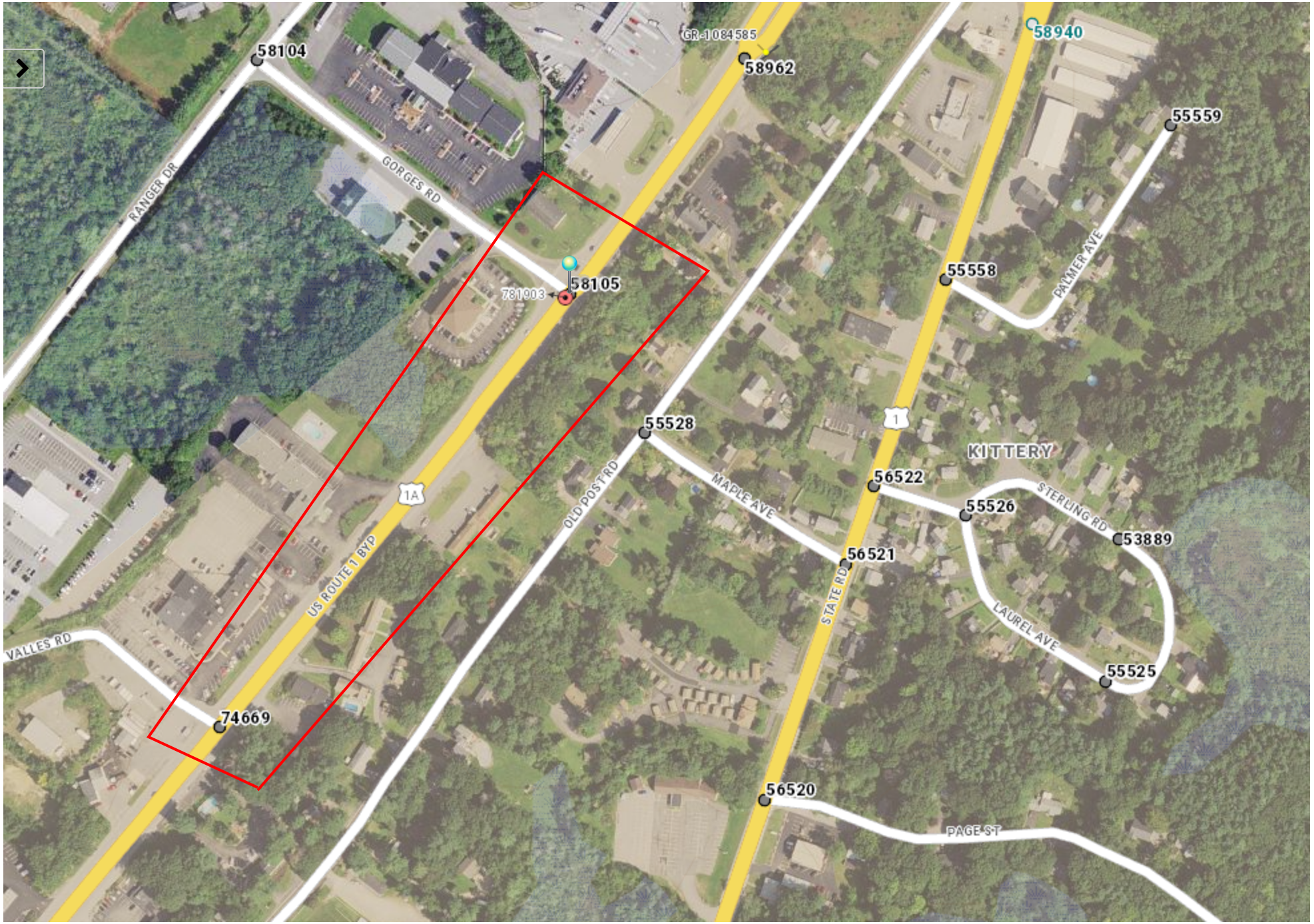
1. The expected trip generation of the proposed development is estimated to be 203 weekday trips, 137 Saturday trips and a slightly lower volume of 116 trips on Sunday. The project generates a total of 15 trips during the weekday AM peak hour and 18 trips during the weekday PM peak hour, and 13 trips during the Saturday peak hour. Overall, the project will be a low volume trip generator and will be well below the minimum MaineDOT threshold of 100 new peak hour trips ends that would require issuance of a Traffic Movement Permit.

2. Vehicle sight distance was field reviewed at the sites proposed driveways on the U.S. Route 1 Bypass and Old Post Road. Our measurements indicate that the existing sight distances is in excess of the requirements based upon the posted speed limits. At the proposed driveway which connects the site to the U.S. Route 1 Bypass, the recorded sight distance measurements exceeds the MaineDOT standards looking left; however, we recommend clearing of existing low level vegetation and small trees located in the quadrant between the U.S. Route 1 Bypass and the south end of the existing property to ensure an unobstructed sightline is provided.

3. A review of MaineDOT crash data available for the latest three-year period (2020 through 2022) for the section of the U.S. Route 1 Bypass between Georges Road and Valles Road, and the section of Old Post Road between Maple Avenue and Dennett Road. Overall, approximately 0.65 miles of roadway was reviewed. Our review indicates there are no high crash locations within the identified study area.

APPENDIX

Appendix A - Maine DOT Crash Data


58104
GR-1084585
58962
58940
55559
RANGER DR
GORGES RD
781903
58105
55558
PALMER AVE
55528
1
KITTERY
OLD POST RD
MAPLE AVE
56522
55526
STERLING RD
53889
1A
US ROUTE 1 BYP
56521
STATE RD
LAUREL AVE
VALLES RD
55525
74669
56520
PAGE ST

Maine Department Of Transportation - Office of Safety, Crash Records Section

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ **Crash Summary I** ☐ **Section Detail** ☑ **Crash Summary II** ☐ **1320 Public** ☐ **1320 Private** ☐ **1320 Summary**

REPORT DESCRIPTION

Kittery
Route 1 from node 58105 to node 74669

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: **0001A**	Start Node: **74669**	Start Offset: **0**	☐ **Exclude First Node**
	End Node: **58105**	End Offset: **0**	☐ **Exclude Last Node**

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
74669	0001A - 0.83	Int of US 1 BYP VALLES RD	2	0	0	0	0	0	0	0.0	3.436	0.00	0.35	0.00
												Statewide Crash Rate:	0.12	
58105	0001A - 1.06	Int of GORGES RD US 1 BYP	9	2	0	0	0	1	1	50.0	4.081	0.16	1.20	0.00
												Statewide Crash Rate:	0.65	
Study Years:	3.00	**NODE TOTALS:**		2	0	0	0	1	1	50.0	7.517	0.09	0.73	0.12

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
58105	74669	5402266	0 - 0.23	0001A - 0.83	0.23	2	0	0	0	0	0	0	0.0	0.00772	0.00	397.62	0.00
Int of GORGES RD	US 1 BYP			US 1A											Statewide Crash Rate: 187.42		
Study Years:	3.00			**Section Totals:**	0.23		0	0	0	0	0	0	0.0	0.00772	0.00	397.62	0.00
				Grand Totals:	0.23		2	0	0	0	1	1	50.0	0.00772	86.41	531.12	0.16

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
58105	74669	5402266	0 - 0.23	0001A - 0.83	0	0	0	0	0	0				
				Totals:	0	0	0	0	0	0				

Crash Summary II - Characteristics

Crashes by Day and Hour

	AM												Hour of Day PM												
Day Of Week	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**12**	**1**	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**9**	**10**	**11**	**Un**	**Tot**
SUNDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUESDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEDNESDAY	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
THURSDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRIDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1
Totals	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	**2**

Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	0	23-Bicyclist	0
2-(Sport) Utility Vehicle	2	24-Witness	0
3-Passenger Van	0	25-Other	0
4-Cargo Van (10K lbs or Less)	0	26-Construction	0
5-Pickup	0	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	**Total**	**3**
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	1		
17-Medium/Heavy Trucks (More than 10,000 lbs)	0		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	1	1	0	0	0	0	2
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	0	0	0	0	0	0	0
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	0	0	0	0	0	0	0
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	1	0	0	0	0	0	1
Failed to Keep in Proper Lane	0	0	0	0	0	0	0
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0
Total	**2**	**1**	**0**	**0**	**0**	**0**	**3**

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	2	1	0	0	0	0	3
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	**2**	**1**	**0**	**0**	**0**	**0**	**3**

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	1	0	0	0	0	1
30-39	0	0	0	0	0	0
40-49	0	0	0	0	0	0
50-59	1	0	0	0	0	1
60-69	0	0	0	0	0	0
70-79	1	0	0	0	0	1
80-Over	0	0	0	0	0	0
Unknown	0	0	0	0	0	0
Total	**3**	**0**	**0**	**0**	**0**	**3**

Crash Summary II - Characteristics

Most Harmful Event

Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	0	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	2
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	**Total**	**3**
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	0		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	1		

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	0	0
C	1	1
PD	1	0
Total	**2**	**1**

Road Character

Road Grade	Total
1-Level	2
2-On Grade	0
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
Total	**2**

Traffic Control Devices

Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	2
2-Traffic Signals (Flashing)	0
3-Advisory/Warning Sign	0
4-Stop Signs - All Approaches	0
5-Stop Signs - Other	0
6-Yield Sign	0
7-Curve Warning Sign	0
8-Officer, Flagman, School Patrol	0
9-School Bus Stop Arm	0
10-School Zone Sign	0
11-R.R. Crossing Device	0
12-No Passing Zone	0
13-None	0
14-Other	0
Total	**2**

Light

Light Condition	Total
1-Daylight	1
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	1
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	0
7-Unknown	0
Total	**2**

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2020	2021	2022	Total
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	0	0	0	0
APRIL	0	1	0	1
MAY	0	0	0	0
JUNE	0	0	0	0
JULY	0	0	0	0
AUGUST	0	0	0	0
SEPTEMBER	0	0	0	0
OCTOBER	0	0	0	0
NOVEMBER	0	0	0	0
DECEMBER	0	0	1	1
Total	**0**	**1**	**1**	**2**

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	**0**	**0**	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	1	0	0	0	0	0	0	0	0	0	0	1
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Cloudy												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	1	0	0	0	0	0	0	0	0	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	**2**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**2**


55528
56522
56521
56520
57249
74669
57248
55537
58961
1362
55399
RANGER DR
MAPLE AVE
VALLES RD
DENNETT RD
US ROUTE 1 BYP
OLD POST RD
STATE RD
KITTERY
1A
1
103
GR-1084432
GR-1084588
GR-1084589
GR-1084431
Legion Pond
VILLAGE GREEN DR

Crash Summary Report

Report Selections and Input Parameters

REPORT SELECTIONS

☑ Crash Summary I ☐ Section Detail ☑ Crash Summary II ☐ 1320 Public ☐ 1320 Private ☐ 1320 Summary

REPORT DESCRIPTION

Kittery
Old Post Rd from node 55528 to node 55399

REPORT PARAMETERS

Year 2020, Start Month 1 through Year 2022 End Month: 12

Route: 3130075	Start Node: 55399	Start Offset: 0	☐ Exclude First Node
	End Node: 55528	End Offset: 0	☐ Exclude Last Node

Crash Summary I

Nodes

Node	Route - MP	Node Description	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual M Ent-Veh	Crash Rate	Critical Rate	CRF
55399	3130075 - 0	Int of DENNETT RD OLD POST RD	2	0	0	0	0	0	0	0.0	1.530	0.00	0.43	0.00
												Statewide Crash Rate:	0.12	
55528	3130075 - 0.42	Int of MAPLE AV OLD POST RD	2	0	0	0	0	0	0	0.0	0.701	0.00	0.53	0.00
												Statewide Crash Rate:	0.13	
Study Years:	3.00	NODE TOTALS:		0	0	0	0	0	0	0.0	2.231	0.00	0.40	0.00

Crash Summary I

Sections

Start Node	End Node	Element	Offset Begin - End	Route - MP	Section Length	U/R	Total Crashes	Injury Crashes K	A	B	C	PD	Percent Injury	Annual HMVM	Crash Rate	Critical Rate	CRF
55528	55399	3944230	0 - 0.42	3130075 - 0	0.42	2	1	0	0	0	0	1	0.0	0.00280	118.95	449.43	0.00
Int of MAPLE AV	OLD POST RD			RD INV 31 30075											Statewide Crash Rate: 156.94		
Study Years: 3.00				Section Totals:	0.42		1	0	0	0	0	1	0.0	0.00280	118.95	449.43	0.26
				Grand Totals:	0.42		1	0	0	0	0	1	0.0	0.00280	118.95	595.56	0.20

Crash Summary

Section Details

Start Node	End Node	Element	Offset Begin - End	Route - MP	Total Crashes	Injury Crashes K	A	B	C	PD	Crash Report	Crash Date	Crash Mile Point	Injury Degree
55528	55399	3944230	0 - 0.42	3130075 - 0	1	0	0	0	0	1	2020-11495	03/11/2020	0.01	PD
				Totals:	1	0	0	0	0	1				

Crash Summary II - Characteristics

Crashes by Day and Hour

	AM												PM												
	Hour of Day																								
Day Of Week	12	1	2	3	4	5	6	7	8	9	10	11	12	1	2	3	4	5	6	7	8	9	10	11	Un	Tot
SUNDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
MONDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
TUESDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WEDNESDAY	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
THURSDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
FRIDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SATURDAY	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Totals	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Vehicle Counts by Type

Unit Type	Total	Unit Type	Total
1-Passenger Car	1	23-Bicyclist	0
2-(Sport) Utility Vehicle	1	24-Witness	0
3-Passenger Van	0	25-Other	0
4-Cargo Van (10K lbs or Less)	0	26-Construction	0
5-Pickup	0	27-Farm Vehicle	0
6-Motor Home	0	28-Horse and Buggy	0
7-School Bus	0	Total	2
8-Transit Bus	0		
9-Motor Coach	0		
10-Other Bus	0		
11-Motorcycle	0		
12-Moped	0		
13-Low Speed Vehicle	0		
14-Autocycle	0		
15-Experimental	0		
16-Other Light Trucks (10,000 lbs or Less)	0		
17-Medium/Heavy Trucks (More than 10,000 lbs)	0		
18-ATV - (4 wheel)	0		
20-ATV - (2 wheel)	0		
21-Snowmobile	0		
22-Pedestrian	0		

Crash Summary II - Characteristics

Crashes by Driver Action at Time of Crash

Driver Action at Time of Crash	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
No Contributing Action	0	0	0	0	0	0	0
Ran Off Roadway	0	0	0	0	0	0	0
Failed to Yield Right-of-Way	0	0	0	0	0	0	0
Ran Red Light	0	0	0	0	0	0	0
Ran Stop Sign	0	0	0	0	0	0	0
Disregarded Other Traffic Sign	0	0	0	0	0	0	0
Disregarded Other Road Markings	0	0	0	0	0	0	0
Exceeded Posted Speed Limit	0	0	0	0	0	0	0
Drove Too Fast For Conditions	0	0	0	0	0	0	0
Improper Turn	0	1	0	0	0	0	1
Improper Backing	0	0	0	0	0	0	0
Improper Passing	0	0	0	0	0	0	0
Wrong Way	0	0	0	0	0	0	0
Followed Too Closely	1	0	0	0	0	0	1
Failed to Keep in Proper Lane	0	0	0	0	0	0	0
Operated Motor Vehicle in Erratic, Reckless, Careless, Negligent or Aggressive Manner	0	0	0	0	0	0	0
Swerved or Avoided Due to Wind, Slippery Surface, Motor Vehicle, Object, Non-Motorist in Roadway	0	0	0	0	0	0	0
Over-Correcting/Over-Steering	0	0	0	0	0	0	0
Other Contributing Action	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0
Total	1	1	0	0	0	0	2

Crashes by Apparent Physical Condition And Driver

Apparent Physical Condition	Dr 1	Dr 2	Dr 3	Dr 4	Dr 5	Other	Total
Apparently Normal	1	1	0	0	0	0	2
Physically Impaired	0	0	0	0	0	0	0
Emotional(Depressed, Angry, Disturbed, etc.)	0	0	0	0	0	0	0
Ill (Sick)	0	0	0	0	0	0	0
Asleep or Fatigued	0	0	0	0	0	0	0
Under the Influence of Medications/Drugs/Alcohol	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0
Total	1	1	0	0	0	0	2

Driver Age by Unit Type

Age	Driver	Bicycle	SnowMobile	Pedestrian	ATV	Total
09-Under	0	0	0	0	0	0
10-14	0	0	0	0	0	0
15-19	0	0	0	0	0	0
20-24	0	0	0	0	0	0
25-29	0	0	0	0	0	0
30-39	0	0	0	0	0	0
40-49	1	0	0	0	0	1
50-59	0	0	0	0	0	0
60-69	0	0	0	0	0	0
70-79	0	0	0	0	0	0
80-Over	1	0	0	0	0	1
Unknown	0	0	0	0	0	0
Total	2	0	0	0	0	2

Crash Summary II - Characteristics

Most Harmful Event

Most Harmful Event	Total	Most Harmful Event	Total
1-Overturn / Rollover	0	38-Other Fixed Object (wall, building, tunnel, etc.)	0
2-Fire / Explosion	0	39-Unknown	0
3-Immersion	0	40-Gate or Cable	0
4-Jackknife	0	41-Pressure Ridge	0
5-Cargo / Equipment Loss Or Shift	0	Total	2
6-Fell / Jumped from Motor Vehicle	0		
7-Thrown or Falling Object	0		
8-Other Non-Collision	0		
9-Pedestrian	0		
10-Pedalcycle	0		
11-Railway Vehicle - Train, Engine	0		
12-Animal	0		
13-Motor Vehicle in Transport	2		
14-Parked Motor Vehicle	0		
15-Struck by Falling, Shifting Cargo or Anything Set in Motion by Motor Vehicle	0		
16-Work Zone / Maintenance Equipment	0		
17-Other Non-Fixed Object	0		
18-Impact Attenuator / Crash Cushion	0		
19-Bridge Overhead Structure	0		
20-Bridge Pier or Support	0		
21-Bridge Rail	0		
22-Cable Barrier	0		
23-Culvert	0		
24-Curb	0		
25-Ditch	0		
26-Embankment	0		
27-Guardrail Face	0		
28-Guardrail End	0		
29-Concrete Traffic Barrier	0		
30-Other Traffic Barrier	0		
31-Tree (Standing)	0		
32-Utility Pole / Light Support	0		
33-Traffic Sign Support	0		
34-Traffic Signal Support	0		
35-Fence	0		
36-Mailbox	0		
37-Other Post, Pole, or Support	0		

Injury Data

Severity Code	Injury Crashes	Number Of Injuries
K	0	0
A	0	0
B	0	0
C	0	0
PD	1	0
Total	1	0

Road Character

Road Grade	Total
1-Level	1
2-On Grade	0
3-Top of Hill	0
4-Bottom of Hill	0
5-Other	0
Total	1

Traffic Control Devices

Traffic Control Device	Total
1-Traffic Signals (Stop & Go)	0
2-Traffic Signals (Flashing)	0
3-Advisory/Warning Sign	0
4-Stop Signs - All Approaches	0
5-Stop Signs - Other	0
6-Yield Sign	0
7-Curve Warning Sign	0
8-Officer, Flagman, School Patrol	0
9-School Bus Stop Arm	0
10-School Zone Sign	0
11-R.R. Crossing Device	0
12-No Passing Zone	0
13-None	1
14-Other	0
Total	1

Light

Light Condition	Total
1-Daylight	1
2-Dawn	0
3-Dusk	0
4-Dark - Lighted	0
5-Dark - Not Lighted	0
6-Dark - Unknown Lighting	0
7-Unknown	0
Total	1

Crash Summary II - Characteristics

Crashes by Year and Month

Month	2020	2021	2022	Total
JANUARY	0	0	0	0
FEBRUARY	0	0	0	0
MARCH	1	0	0	1
APRIL	0	0	0	0
MAY	0	0	0	0
JUNE	0	0	0	0
JULY	0	0	0	0
AUGUST	0	0	0	0
SEPTEMBER	0	0	0	0
OCTOBER	0	0	0	0
NOVEMBER	0	0	0	0
DECEMBER	0	0	0	0
Total	1	0	0	1

Report is limited to the last 10 years of data.

Crash Summary II - Characteristics

Crashes by Crash Type and Type of Location

Crash Type	Straight Road	Curved Road	Three Leg Intersection	Four Leg Intersection	Five or More Leg Intersection	Driveways	Bridges	Interchanges	Other	Parking Lot	Private Way	Cross Over	Railroad Crossing	Traffic Circle-Roundabout	Total
Object in Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rear End - Sideswipe	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Head-on - Sideswipe	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Intersection Movement	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Pedestrians	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Train	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Went Off Road	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
All Other Animal	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bicycle	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Other	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Jackknife	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Rollover	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Fire	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Submersion	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Thrown or Falling Object	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Bear	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Deer	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Moose	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Turkey	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Blowing Sand, Soil, Dirt												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Blowing Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Clear												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	1	0	0	0	0	0	0	0	0	0	0	1
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Cloudy												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

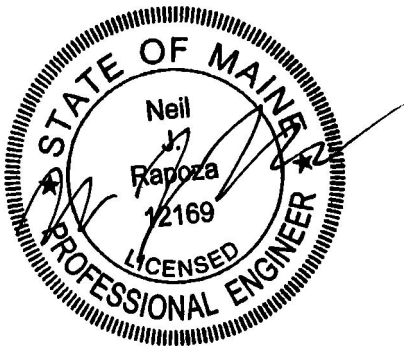
Crashes by Weather, Light Condition and Road Surface

Weather Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Fog, Smog, Smoke												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Other												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Rain												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Severe Crosswinds												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0

Crash Summary II - Characteristics

Crashes by Weather, Light Condition and Road Surface

Weather / Light	Dry	Ice/Frost	Mud, Dirt, Gravel	Oil	Other	Sand	Slush	Snow	Unknown	Water (Standing, Moving)	Wet	Total
Sleet, Hail (Freezing Rain or Drizzle)												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
Snow												
Dark - Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Not Lighted	0	0	0	0	0	0	0	0	0	0	0	0
Dark - Unknown Lighting	0	0	0	0	0	0	0	0	0	0	0	0
Dawn	0	0	0	0	0	0	0	0	0	0	0	0
Daylight	0	0	0	0	0	0	0	0	0	0	0	0
Dusk	0	0	0	0	0	0	0	0	0	0	0	0
Unknown	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL	1	0	0	0	0	0	0	0	0	0	0	1



The seal affixed above applies to this report,
Appendices A through D, and Stormwater Plans D1 & D2.

Stormwater Management Plan

"HOLIDAY INN EXPRESS"
HOTEL REDEVELOPMENT
90 U.S. ROUTE 1 BYPASS, KITTERY, MAINE

Prepared for

90 U.S. Route 1, LLC.
P.O. Box 630
Kittery, ME 03904

December 2023

CIVIL
CONSULTANTS

Engineers

Planners

Surveyors

Stormwater Management Narrative

STORMWATER MANAGEMENT PLAN

"Holiday Inn Express"
90 U.S. Route 1 Bypass
Kittery, Maine

Prepared for:

90 U.S. Route 1, LLC.
P.O. Box 630
Kittery, ME 03904

December 2023

INTRODUCTION:

The proposed site is located at 90 U.S. Route 1 Bypass in Kittery. The project is situated between U.S. Route 1 and Old Post Road and is shown as Lot 2, Map 14 of the Town of Kittery tax maps. 90 U.S. Route 1, LLC intends to redevelop the lot and construct a new 3 story Holiday In Express hotel. The lot was previously home to The Little Guest House, a 10-unit motel which has since been demolished. There is an existing paved parking lot with two entrances from Route 1 Bypass. The site contains pavement, a demolished building and grass, with woodland on the eastern portion of the lot. No wetlands are located on the site.

The proposed hotel will be serviced by a new 66 space paved parking lot with driveway access from Route 1 Bypass, as well as a paved and gated emergency vehicle access off Old Post Road. The existing access drives will be revised to provide a single two-way access between the two existing entrances.

Stormwater treatment and runoff control facilities are proposed to minimize impact to downstream abutters and conveyance systems. The proposed storm water BMP that will be used to treat runoff and limit peak flows will be a subsurface sand filter beneath the northern corner of the proposed parking lot.

DESIGN REQUIREMENTS:

Section 16.4.21.E.2.f.3 of the Kittery Ordinance defines the 70% maximum impervious surface ratio for lots in the C-3 zone for new nonresidential structures. This makes the maximum allowable lot coverage 47,480 sf for the 67,829 lot. The total impervious area from the proposed hotel redevelopment will be 43,552 sf or 64.2%. The additional criterion of section 16.4.21.E.2.f.3 requires all stormwater to be managed on-site utilizing low-impact design (LID) and best management practice (BMP) systems based on MDEP's Maine Stormwater Best Management Practices, Volume I through III. A subsurface sand filter BMP will be installed under the proposed parking lot to improve runoff quality and mitigate impacts of flows from the site.

The 43,552 sf of impervious area created or replaced by the redevelopment is under an acre and does not trip the MDEP Chapter 500 Stormwater Management Rules but is required to meet the basic standards of MDEP Chapter 500 (Stormwater Permit by Rule). This is achieved by submitting the notification form and erosion control plan for review by DEP staff. If found to be appropriate for the Permit by Rule, no additional information is requested. After 14 days, it is taken as "approved" by the DEP.

Refer to the calculations included in this submittal for additional information regarding the BMP sizing.

The analysis for this report includes the 2-, 10-, and 25-year event to predict the downstream effects of the proposed site coverage changes. The 50-year event has

also been evaluated per Maine DOT requirements.

EXISTING DRAINAGE CONDITIONS:

Most of the project site contains grass, with the eastern portion containing woodland. The foundation of the former building is located at the center of the site and a paved parking lot with two access drives is located at the front of the site. A ponding area (OUT 2) consisting of woodland, where runoff from the eastern side of the site and the adjacent lot collects, is located just beyond the eastern lot line of the site. This ponding area is assumed to outlet on the northern side of U.S. Route 1 Bypass via an 8" diameter cast iron culvert that is identified in the Kittery GIS system but could not be identified in the field.

Runoff south of the former building location flows to a set of rear lot catch basins connected in series by existing 10" diameter CMP culverts. These pipes run to a catch basin on the front side of the lot (south side of U.S. Route 1 Bypass) through a 12" diameter PVC culvert. Runoff north of the former building location flows directly to the catch basin at the front of the lot. Approximately two thirds of the site's runoff flows into this catch basin and outlets on the northern side of U.S. Route 1 Bypass through a 24" RCP culvert. Runoff east of the former building location flows directly to a ponding area located just beyond the eastern lot line of the site.

No wetlands are located on the project site.

Soils in the watershed are classified predominantly as hydrologic soil type D (Urban Land, Lyman) as determined by using the Web Soil Survey from the USGS. See sheet D1 for the soil plan and HSG designations.

The project is located in Flood Zone C, which is defined as areas of minimal flooding. See Appendix E for a copy of the applicable FEMA map.

PROPOSED DRAINAGE:

The proposed stormwater management system has been designed to treat the developed and impervious area as well as limit flows off site to levels to the greatest extent practicable.

To treat the runoff from the new paved parking area, a subsurface sand filter system is proposed. The system has been designed per the design guidelines of the Maine Stormwater Best Management Practices Manual, Volume III, chapter 7.3, in accordance with Maine DEP's Chapter 500 Stormwater Management Rules.

See the attached calculations for additional information.

ANALYSIS:

The overall perimeter of the watershed remained the same for both Pre and Post Development.

There were three subcatchments identified for the Pre-Development analysis and seven subcatchments were used to model the site for the Post Development analysis. The additional subcatchments are required to evaluate the flows to proposed BMPs and developed area. The stormwater flows have been analyzed as exiting the site at two locations.

OUT 1 includes the runoff areas north and south of the former building location

which both end up collecting at a single front lot catch basin and outlet on the north side of U.S. Route 1 Bypass by means of a 24" RCP culvert.

OUT 2 includes the runoff area east of the former building location that briefly flows across lawn and then outlets directly to the ponding area beyond the eastern lot line.

For further details regarding subcatchment determination, refer to the project drawings and D1 & D2 included in the appendix of this report.

METHODOLOGY:

All runoff calculations were performed using methods based on USDA–SCS Technical Release No. 20 (also known as TR-20). The 2-, 10-, 25- and 50-year events (Type III rainfall distribution) were used for the site-specific analysis to determine pre- and post-development peak discharge rates and required stormwater treatment & conveyance systems.

Runoff curve numbers (CN) and times of concentration (Tc) were determined by the methods outlined in USDA-SCS Technical Release No. 55 (better known as TR-55). On site watershed areas were determined using one-foot contour data provided by field survey crews and two-foot contours for areas off-site from previously compiled topography plans and LIDAR information.

The detailed analysis for this project was performed by computer utilizing "HYDROCAD" stormwater modeling software. The analysis printouts are attached.

The attached Pre- and Post-Development plans (D1 & D2) show subcatchment boundaries, hydraulic flow lines, existing and proposed roads, and drainage features and facilities. Land cover type boundaries used in the model for on-site areas are also shown on the plan (i.e. tree lines, wetlands, etc).

BMP SIZING:

The proposed subsurface sand filter was sized per the design guidelines of the Maine Stormwater Best Management Practices Manual.

The storm intensities have been obtained from the values published on the Northeast Regional Climate Center by Cornell University.

FLOW RATES:

TWO-YEAR EVENT -

Discharge Point Desig Pre/Post	Peak Runoff(in cfs) Pre	Post	Change (cfs)
OUT 1	4.47	4.22	-0.25
OUT 2	0.75	0.39	-0.36

TEN-YEAR EVENT -

Discharge Point Desig Pre/Post	Peak Runoff(in cfs) Pre	Post	Change (cfs)
OUT 1	7.92	6.79	-1.13
OUT 2	1.47	0.77	-0.70

TWENTY-FIVE-YEAR EVENT -

Discharge Point Desig Pre/Post	Peak Runoff(in cfs) Pre	Post	Change (cfs)
OUT 1	10.67	8.82	-1.85
OUT 2	2.06	1.09	-0.97

FIFTY-YEAR EVENT -

Discharge Point Desig Pre/Post	Peak Runoff(in cfs) Pre	Post	Change (cfs)
OUT 1	13.24	10.72	-2.52
OUT 2	2.62	1.39	-1.23

The analysis reveals that flow to OUT 1 and OUT 2 decreases in the post development conditions for all storms events analyzed.

Please see Appendix D for the stormwater maintenance and inspection plan.

CONCLUSIONS:

The proposed hotel redevelopment will reduce or maintain approximately the same flow rates exiting the site for all evaluated storm events and the storm drainage systems of surrounding lots will not be negatively affected.

Runoff from the parking area has been properly treated through the use of a subsurface sand filter system under the northern corner of the proposed parking lot.

It is our opinion that there will be no adverse downstream impacts as a result of this project and surrounding natural resources have been sufficiently protected by the proposed stormwater management plan.

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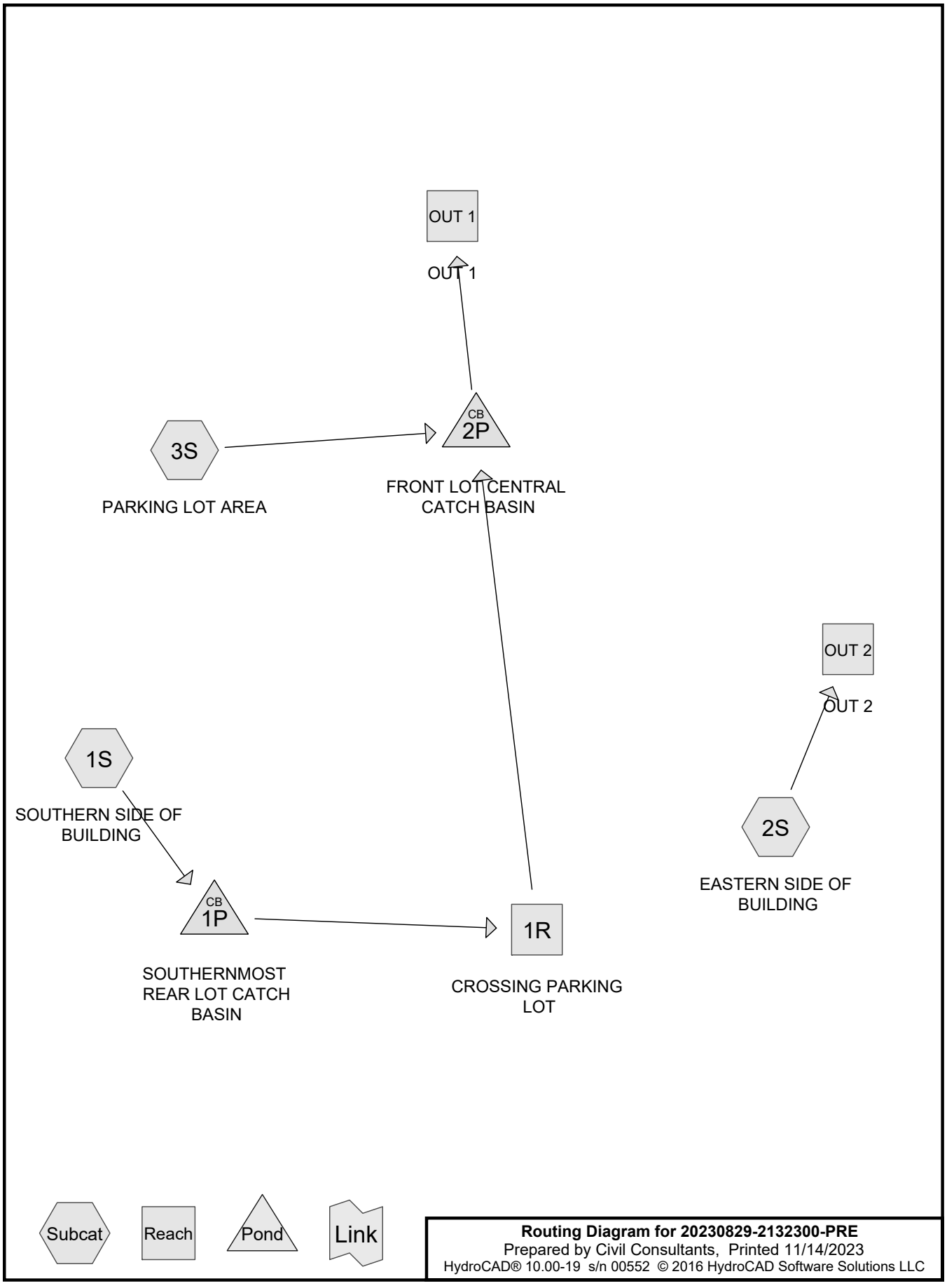
CIVIL
CONSULTANTS

Engineers

Planners

Surveyors

Pre-Development Calculations



Routing Diagram for 20230829-2132300-PRE
Prepared by Civil Consultants, Printed 11/14/2023

Area Listing (all nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.984	80	>75% Grass cover, Good, HSG D (1S, 2S, 3S)
0.019	96	Gravel surface, HSG D (2S)
0.376	98	Paved parking, HSG D (1S, 2S, 3S)
0.566	93	Paved roads w/open ditches, 50% imp, HSG D (1S, 2S, 3S)
0.126	98	Roofs, HSG D (1S, 2S, 3S)
0.600	77	Woods, Good, HSG D (1S, 2S, 3S)
0.071	79	Woods/grass comb., Good, HSG D (1S)
2.742	**85**	**TOTAL AREA**

Soil Listing (all nodes)

Area (acres)	Soil Group	Subcatchment Numbers
0.000	HSG A	
0.000	HSG B	
0.000	HSG C	
2.742	HSG D	1S, 2S, 3S
0.000	Other	
2.742		**TOTAL AREA**

Ground Covers (all nodes)

HSG-A (acres)	HSG-B (acres)	HSG-C (acres)	HSG-D (acres)	Other (acres)	Total (acres)	Ground Cover	Subcatchr Numbers
0.000	0.000	0.000	0.984	0.000	0.984	>75% Grass cover, Good	
0.000	0.000	0.000	0.019	0.000	0.019	Gravel surface	
0.000	0.000	0.000	0.376	0.000	0.376	Paved parking	
0.000	0.000	0.000	0.566	0.000	0.566	Paved roads w/open ditches, 50% imp	
0.000	0.000	0.000	0.126	0.000	0.126	Roofs	
0.000	0.000	0.000	0.600	0.000	0.600	Woods, Good	
0.000	0.000	0.000	0.071	0.000	0.071	Woods/grass comb., Good	
0.000	**0.000**	**0.000**	**2.742**	**0.000**	**2.742**	**TOTAL AREA**	

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: SOUTHERN SIDE OF Runoff Area=0.938 ac 15.19% Impervious Runoff Depth=1.62"
Flow Length=353' Tc=9.3 min CN=83 Runoff=1.58 cfs 0.126 af

Subcatchment 2S: EASTERN SIDE OF Runoff Area=0.538 ac 7.06% Impervious Runoff Depth=1.48"
Flow Length=204' Tc=12.4 min CN=81 Runoff=0.75 cfs 0.066 af

Subcatchment 3S: PARKING LOT AREA Runoff Area=55,166 sf 47.75% Impervious Runoff Depth=2.09"
Flow Length=309' Tc=7.0 min CN=89 Runoff=2.98 cfs 0.221 af

Reach 1R: CROSSING PARKING LOT Avg. Flow Depth=0.31' Max Vel=7.59 fps Inflow=1.58 cfs 0.126 af
12.0" Round Pipe n=0.010 L=242.0' S=0.0264 '/' Capacity=7.53 cfs Outflow=1.58 cfs 0.126 af

Reach OUT 1: OUT 1 Inflow=4.47 cfs 0.347 af
Outflow=4.47 cfs 0.347 af

Reach OUT 2: OUT 2 Inflow=0.75 cfs 0.066 af
Outflow=0.75 cfs 0.066 af

Pond 1P: SOUTHERNMOST REAR LOT CATCH BASIN Peak Elev=46.38' Inflow=1.58 cfs 0.126 af
12.0" Round Culvert n=0.010 L=40.0' S=0.0275 '/' Outflow=1.58 cfs 0.126 af

Pond 2P: FRONT LOT CENTRAL CATCH BASIN Peak Elev=37.82' Inflow=4.47 cfs 0.347 af
24.0" Round Culvert n=0.011 L=103.0' S=-0.0013 '/' Outflow=4.47 cfs 0.347 af

Total Runoff Area = 2.742 ac Runoff Volume = 0.413 af Average Runoff Depth = 1.81"
71.37% Pervious = 1.957 ac 28.63% Impervious = 0.785 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: SOUTHERN SIDE OF Runoff Area=0.938 ac 15.19% Impervious Runoff Depth=3.05"
Flow Length=353' Tc=9.3 min CN=83 Runoff=2.98 cfs 0.238 af

Subcatchment 2S: EASTERN SIDE OF Runoff Area=0.538 ac 7.06% Impervious Runoff Depth=2.86"
Flow Length=204' Tc=12.4 min CN=81 Runoff=1.47 cfs 0.128 af

Subcatchment 3S: PARKING LOT AREA Runoff Area=55,166 sf 47.75% Impervious Runoff Depth=3.64"
Flow Length=309' Tc=7.0 min CN=89 Runoff=5.08 cfs 0.384 af

Reach 1R: CROSSING PARKING LOT Avg. Flow Depth=0.44' Max Vel=9.02 fps Inflow=2.98 cfs 0.238 af
12.0" Round Pipe n=0.010 L=242.0' S=0.0264 '/' Capacity=7.53 cfs Outflow=2.98 cfs 0.238 af

Reach OUT 1: OUT 1 Inflow=7.92 cfs 0.622 af
Outflow=7.92 cfs 0.622 af

Reach OUT 2: OUT 2 Inflow=1.47 cfs 0.128 af
Outflow=1.47 cfs 0.128 af

Pond 1P: SOUTHERNMOST REAR LOT CATCH BASIN Peak Elev=47.09' Inflow=2.98 cfs 0.238 af
12.0" Round Culvert n=0.010 L=40.0' S=0.0275 '/' Outflow=2.98 cfs 0.238 af

Pond 2P: FRONT LOT CENTRAL CATCH BASIN Peak Elev=38.26' Inflow=7.92 cfs 0.622 af
24.0" Round Culvert n=0.011 L=103.0' S=-0.0013 '/' Outflow=7.92 cfs 0.622 af

Total Runoff Area = 2.742 ac Runoff Volume = 0.750 af Average Runoff Depth = 3.28"
71.37% Pervious = 1.957 ac 28.63% Impervious = 0.785 ac

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: SOUTHERN SIDE OF Runoff Area=0.938 ac 15.19% Impervious Runoff Depth=4.25"
Flow Length=353' Tc=9.3 min CN=83 Runoff=4.13 cfs 0.332 af

Subcatchment 2S: EASTERN SIDE OF Runoff Area=0.538 ac 7.06% Impervious Runoff Depth=4.04"
Flow Length=204' Tc=12.4 min CN=81 Runoff=2.06 cfs 0.181 af

Subcatchment 3S: PARKING LOT AREA Runoff Area=55,166 sf 47.75% Impervious Runoff Depth=4.90"
Flow Length=309' Tc=7.0 min CN=89 Runoff=6.74 cfs 0.517 af

Reach 1R: CROSSING PARKING LOT Avg. Flow Depth=0.53' Max Vel=9.80 fps Inflow=4.13 cfs 0.332 af
12.0" Round Pipe n=0.010 L=242.0' S=0.0264 '/' Capacity=7.53 cfs Outflow=4.12 cfs 0.332 af

Reach OUT 1: OUT 1 Inflow=10.67 cfs 0.849 af
Outflow=10.67 cfs 0.849 af

Reach OUT 2: OUT 2 Inflow=2.06 cfs 0.181 af
Outflow=2.06 cfs 0.181 af

Pond 1P: SOUTHERNMOST REAR LOT CATCH BASIN Peak Elev=48.00' Inflow=4.13 cfs 0.332 af
12.0" Round Culvert n=0.010 L=40.0' S=0.0275 '/' Outflow=4.13 cfs 0.332 af

Pond 2P: FRONT LOT CENTRAL CATCH BASIN Peak Elev=38.60' Inflow=10.67 cfs 0.849 af
24.0" Round Culvert n=0.011 L=103.0' S=-0.0013 '/' Outflow=10.67 cfs 0.849 af

Total Runoff Area = 2.742 ac Runoff Volume = 1.030 af Average Runoff Depth = 4.51"
71.37% Pervious = 1.957 ac 28.63% Impervious = 0.785 ac

Summary for Subcatchment 1S: SOUTHERN SIDE OF BUILDING

Runoff = 4.13 cfs @ 12.13 hrs, Volume= 0.332 af, Depth= 4.25"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.063	98	Roofs, HSG D
0.071	79	Woods/grass comb., Good, HSG D
0.504	80	>75% Grass cover, Good, HSG D
0.029	98	Paved parking, HSG D
0.170	77	Woods, Good, HSG D
0.101	93	Paved roads w/open ditches, 50% imp, HSG D
0.938	83	Weighted Average
0.796		84.81% Pervious Area
0.143		15.19% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	38	0.1100	0.13		**Sheet Flow, 1.1** Woods: Light underbrush n= 0.400 P2= 3.19"
0.2	28	0.3500	2.96		**Shallow Concentrated Flow, 1.2** Woodland Kv= 5.0 fps
0.5	43	0.0700	1.32		**Shallow Concentrated Flow, 1.3** Woodland Kv= 5.0 fps
1.5	94	0.0213	1.02		**Shallow Concentrated Flow, 1.4** Short Grass Pasture Kv= 7.0 fps
1.6	90	0.0022	0.97	10.51	**Trap/Vee/Rect Channel Flow, 1.5** Bot.W=3.00' D=0.50' Z= 50.0 & 25.0 '/' Top.W=40.50' n= 0.030 Short grass
0.5	60	0.0085	1.93	1.05	**Pipe Channel, 1.6** 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.025 Corrugated metal
9.3	353	Total			

Summary for Subcatchment 2S: EASTERN SIDE OF BUILDING

Runoff = 2.06 cfs @ 12.17 hrs, Volume= 0.181 af, Depth= 4.04"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.029	98	Roofs, HSG D
0.001	98	Paved parking, HSG D
0.019	96	Gravel surface, HSG D
0.300	80	>75% Grass cover, Good, HSG D
0.173	77	Woods, Good, HSG D
0.016	93	Paved roads w/open ditches, 50% imp, HSG D
0.538	81	Weighted Average
0.500		92.94% Pervious Area
0.038		7.06% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
10.8	50	0.0100	0.08		**Sheet Flow, 2.1** Grass: Dense n= 0.240 P2= 3.19"
0.5	37	0.0270	1.15		**Shallow Concentrated Flow, 2.2** Short Grass Pasture Kv= 7.0 fps
0.6	38	0.0263	1.14		**Shallow Concentrated Flow, 2.3** Short Grass Pasture Kv= 7.0 fps
0.4	31	0.0050	1.46	14.98	**Trap/Vee/Rect Channel Flow, 2.4** Bot.W=3.00' D=0.50' Z= 35.0 '/' Top.W=38.00' n= 0.030 Stream, clean & straight
0.1	42	0.0476	5.05	17.03	**Trap/Vee/Rect Channel Flow, 2.5** Bot.W=3.00' D=0.50' Z= 10.0 & 5.0 '/' Top.W=10.50' n= 0.030 Stream, clean & straight
0.0	6	0.4000	15.03	75.14	**Trap/Vee/Rect Channel Flow, 2.6** Bot.W=5.00' D=0.50' Z= 10.0 '/' Top.W=15.00' n= 0.030 Stream, clean & straight
12.4	204	Total			

Summary for Subcatchment 3S: PARKING LOT AREA

Runoff = 6.74 cfs @ 12.10 hrs, Volume= 0.517 af, Depth= 4.90"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (sf)	CN	Description
15,054	98	Paved parking, HSG D
1,501	98	Roofs, HSG D
7,836	80	>75% Grass cover, Good, HSG D
11,203	77	Woods, Good, HSG D
19,572	93	Paved roads w/open ditches, 50% imp, HSG D
55,166	89	Weighted Average
28,825		52.25% Pervious Area
26,341		47.75% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.1200	0.14		**Sheet Flow, 4.1** Woods: Light underbrush n= 0.400 P2= 3.19"
0.2	38	0.2631	2.56		**Shallow Concentrated Flow, 4.2** Woodland Kv= 5.0 fps
0.2	20	0.1000	1.58		**Shallow Concentrated Flow, 4.3** Woodland Kv= 5.0 fps
0.2	32	0.1016	2.23		**Shallow Concentrated Flow, 4.4** Short Grass Pasture Kv= 7.0 fps
0.4	169	0.0242	7.51	62.89	**Trap/Vee/Rect Channel Flow, 4.5** Bot.W=3.00' D=0.50' Z= 35.0 & 20.0 '/' Top.W=30.50' n= 0.013 Asphalt, smooth
7.0	309	Total			

Summary for Reach 1R: CROSSING PARKING LOT

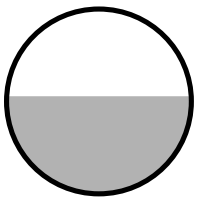
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.938 ac, 15.19% Impervious, Inflow Depth = 4.25" for 25-YR event
Inflow = 4.13 cfs @ 12.13 hrs, Volume= 0.332 af
Outflow = 4.12 cfs @ 12.13 hrs, Volume= 0.332 af, Atten= 0%, Lag= 0.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 9.80 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 3.47 fps, Avg. Travel Time= 1.2 min

Peak Storage= 102 cf @ 12.13 hrs
Average Depth at Peak Storage= 0.53'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 7.53 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 242.0' Slope= 0.0264 '/'
Inlet Invert= 43.47', Outlet Invert= 37.08'



Summary for Reach OUT 1: OUT 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 2.204 ac, 33.90% Impervious, Inflow Depth = 4.62" for 25-YR event
Inflow = 10.67 cfs @ 12.11 hrs, Volume= 0.849 af
Outflow = 10.67 cfs @ 12.11 hrs, Volume= 0.849 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Reach OUT 2: OUT 2

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.538 ac, 7.06% Impervious, Inflow Depth = 4.04" for 25-YR event
Inflow = 2.06 cfs @ 12.17 hrs, Volume= 0.181 af
Outflow = 2.06 cfs @ 12.17 hrs, Volume= 0.181 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Pond 1P: SOUTHERNMOST REAR LOT CATCH BASIN

Inflow Area = 0.938 ac, 15.19% Impervious, Inflow Depth = 4.25" for 25-YR event
Inflow = 4.13 cfs @ 12.13 hrs, Volume= 0.332 af
Outflow = 4.13 cfs @ 12.13 hrs, Volume= 0.332 af, Atten= 0%, Lag= 0.0 min
Primary = 4.13 cfs @ 12.13 hrs, Volume= 0.332 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 48.00' @ 12.13 hrs
Flood Elev= 48.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	45.59'	**12.0" Round Culvert** L= 40.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 45.59' / 44.49' S= 0.0275 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=4.12 cfs @ 12.13 hrs HW=48.00' TW=44.00' (Dynamic Tailwater)
↑**1=Culvert** (Inlet Controls 4.12 cfs @ 5.25 fps)

Summary for Pond 2P: FRONT LOT CENTRAL CATCH BASIN

[62] Hint: Exceeded Reach 1R OUTLET depth by 1.00' @ 12.10 hrs

Inflow Area = 2.204 ac, 33.90% Impervious, Inflow Depth = 4.62" for 25-YR event
Inflow = 10.67 cfs @ 12.11 hrs, Volume= 0.849 af
Outflow = 10.67 cfs @ 12.11 hrs, Volume= 0.849 af, Atten= 0%, Lag= 0.0 min
Primary = 10.67 cfs @ 12.11 hrs, Volume= 0.849 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 38.60' @ 12.11 hrs
Flood Elev= 45.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	36.69'	**24.0" Round Culvert** L= 103.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 36.56' / 36.69' S= -0.0013 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 3.14 sf

Primary OutFlow Max=10.67 cfs @ 12.11 hrs HW=38.60' TW=0.00' (Dynamic Tailwater)
└**1=Culvert** (Barrel Controls 10.67 cfs @ 4.14 fps)

Time span=0.00-48.00 hrs, dt=0.01 hrs, 4801 points x 3
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment 1S: SOUTHERN SIDE OF Runoff Area=0.938 ac 15.19% Impervious Runoff Depth=5.40"
Flow Length=353' Tc=9.3 min CN=83 Runoff=5.19 cfs 0.422 af

Subcatchment 2S: EASTERN SIDE OF Runoff Area=0.538 ac 7.06% Impervious Runoff Depth=5.17"
Flow Length=204' Tc=12.4 min CN=81 Runoff=2.62 cfs 0.232 af

Subcatchment 3S: PARKING LOT AREA Runoff Area=55,166 sf 47.75% Impervious Runoff Depth=6.09"
Flow Length=309' Tc=7.0 min CN=89 Runoff=8.27 cfs 0.643 af

Reach 1R: CROSSING PARKING LOT Avg. Flow Depth=0.61' Max Vel=10.33 fps Inflow=5.19 cfs 0.422 af
12.0" Round Pipe n=0.010 L=242.0' S=0.0264 '/' Capacity=7.53 cfs Outflow=5.19 cfs 0.422 af

Reach OUT 1: OUT 1 Inflow=13.24 cfs 1.064 af
Outflow=13.24 cfs 1.064 af

Reach OUT 2: OUT 2 Inflow=2.62 cfs 0.232 af
Outflow=2.62 cfs 0.232 af

Pond 1P: SOUTHERNMOST REAR LOT CATCH BASIN Peak Elev=49.12' Inflow=5.19 cfs 0.422 af
12.0" Round Culvert n=0.010 L=40.0' S=0.0275 '/' Outflow=5.19 cfs 0.422 af

Pond 2P: FRONT LOT CENTRAL CATCH BASIN Peak Elev=38.94' Inflow=13.24 cfs 1.064 af
24.0" Round Culvert n=0.011 L=103.0' S=-0.0013 '/' Outflow=13.24 cfs 1.064 af

Total Runoff Area = 2.742 ac Runoff Volume = 1.296 af Average Runoff Depth = 5.67"
71.37% Pervious = 1.957 ac 28.63% Impervious = 0.785 ac

CIVIL
CONSULTANTS

Engineers

Planners

Surveyors

Post-Development Calculations

Summary for Subcatchment 10S: SOUTHERN SIDE OF BUILDING

Runoff = 3.01 cfs @ 12.12 hrs, Volume= 0.237 af, Depth= 4.36"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.060	98	Paved parking, HSG D
0.192	80	>75% Grass cover, Good, HSG D
0.170	77	Woods, Good, HSG D
0.071	79	Woods/grass comb., Good, HSG D
0.059	98	Roofs, HSG D
0.101	93	Paved roads w/open ditches, 50% imp, HSG D
0.653	84	Weighted Average
0.484		74.04% Pervious Area
0.169		25.96% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
5.0	38	0.1100	0.13		**Sheet Flow, 10.1** Woods: Light underbrush n= 0.400 P2= 3.19"
0.2	28	0.3500	2.96		**Shallow Concentrated Flow, 10.2** Woodland Kv= 5.0 fps
0.5	43	0.0700	1.32		**Shallow Concentrated Flow, 10.3** Woodland Kv= 5.0 fps
1.3	94	0.0300	1.21		**Shallow Concentrated Flow, 10.4** Short Grass Pasture Kv= 7.0 fps
0.5	30	0.0022	0.97	10.51	**Trap/Vee/Rect Channel Flow, 10.5** Bot.W=3.00' D=0.50' Z= 50.0 & 25.0 '/' Top.W=40.50' n= 0.030 Stream, clean & straight
0.5	100	0.0050	3.21	20.85	**Trap/Vee/Rect Channel Flow, 10.6** Bot.W=0.50' D=0.50' Z= 0.0 & 50.0 '/' Top.W=25.50' n= 0.013 Asphalt, smooth
0.5	60	0.0085	1.93	1.05	**Pipe Channel, 10.7** 10.0" Round Area= 0.5 sf Perim= 2.6' r= 0.21' n= 0.025 Corrugated metal
8.5	393	Total			

Summary for Subcatchment 20S: HOTEL BUILDING

Runoff = 0.97 cfs @ 12.08 hrs, Volume= 0.080 af, Depth= 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.161	98	Roofs, HSG D
0.161		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 20.1**

Summary for Subcatchment 30S: SOUTHEAST SIDE OF PARKINGLOT

Runoff = 2.72 cfs @ 12.08 hrs, Volume= 0.213 af, Depth= 5.58"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.357	98	Paved parking, HSG D
0.023	98	Roofs, HSG D
0.079	80	>75% Grass cover, Good, HSG D
0.459	95	Weighted Average
0.079		17.21% Pervious Area
0.380		82.79% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 30.1**

Summary for Subcatchment 40S: NORTHWEST SIDE OF PARKING LOT

Runoff = 1.79 cfs @ 12.08 hrs, Volume= 0.142 af, Depth= 5.70"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.241	98	Paved parking, HSG D
0.024	98	Roofs, HSG D
0.034	80	>75% Grass cover, Good, HSG D
0.299	96	Weighted Average
0.034		11.37% Pervious Area
0.265		88.63% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 40.1**

Summary for Subcatchment 50S: ALONG EASTERN PROPERTY LINE

Runoff = 1.09 cfs @ 12.10 hrs, Volume= 0.081 af, Depth= 3.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.156	77	Woods, Good, HSG D
0.016	93	Paved roads w/open ditches, 50% imp, HSG D
0.014	96	Gravel surface, HSG D
0.057	80	>75% Grass cover, Good, HSG D
0.005	98	Paved parking, HSG D
0.248	80	Weighted Average
0.235		94.76% Pervious Area
0.013		5.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.2	9	0.0150	0.76		**Sheet Flow, 50.1** Smooth surfaces n= 0.011 P2= 3.19"
6.5	41	0.0244	0.11		**Sheet Flow, 50.2** Grass: Dense n= 0.240 P2= 3.19"
0.3	27	0.0370	1.35		**Shallow Concentrated Flow, 50.3** Short Grass Pasture Kv= 7.0 fps
0.3	62	0.0323	3.72	38.08	**Trap/Vee/Rect Channel Flow, 50.4** Bot.W=3.00' D=0.50' Z= 35.0 '/' Top.W=38.00' n= 0.030 Stream, clean & straight
0.0	6	0.4000	15.03	75.14	**Trap/Vee/Rect Channel Flow, 50.5** Bot.W=5.00' D=0.50' Z= 10.0 '/' Top.W=15.00' n= 0.030 Stream, clean & straight
7.3	145	Total			

Summary for Subcatchment 60S: SOUTHEAST OF BUILDING

Runoff = 4.49 cfs @ 12.10 hrs, Volume= 0.339 af, Depth= 4.57"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.077	98	Paved parking, HSG D
0.228	80	>75% Grass cover, Good, HSG D
0.283	93	Paved roads w/open ditches, 50% imp, HSG D
0.257	77	Woods, Good, HSG D
0.044	98	Roofs, HSG D
0.889	86	Weighted Average
0.626		70.47% Pervious Area
0.262		29.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0	50	0.1200	0.14		**Sheet Flow, 60.1** Woods: Light underbrush n= 0.400 P2= 3.19"
0.2	38	0.2632	2.57		**Shallow Concentrated Flow, 60.2** Woodland Kv= 5.0 fps
0.2	20	0.1000	1.58		**Shallow Concentrated Flow, 60.3** Woodland Kv= 5.0 fps
0.0	24	0.1500	8.72	34.89	**Trap/Vee/Rect Channel Flow, 60.4** Bot.W=3.00' D=0.50' Z= 10.0 '/' Top.W=13.00' n= 0.030 Stream, clean & straight
0.6	215	0.0193	6.30	4.95	**Pipe Channel, 60.5** 12.0" Round Area= 0.8 sf Perim= 3.1' r= 0.25' n= 0.013 Corrugated PE, smooth interior
7.0	347	Total			

Summary for Subcatchment 70S: CANOPY

Runoff = 0.19 cfs @ 12.08 hrs, Volume= 0.016 af, Depth= 5.93"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs
Type III 24-hr 25-YR Rainfall=6.17"

Area (ac)	CN	Description
0.032	98	Roofs, HSG D
0.032		100.00% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					**Direct Entry, 70.1**

Summary for Reach 10R: CROSSING PARKING LOT

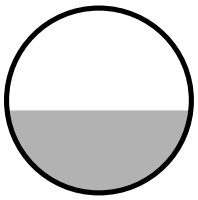
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.653 ac, 25.96% Impervious, Inflow Depth = 4.36" for 25-YR event
Inflow = 3.01 cfs @ 12.12 hrs, Volume= 0.237 af
Outflow = 3.01 cfs @ 12.12 hrs, Volume= 0.237 af, Atten= 0%, Lag= 0.3 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 8.92 fps, Min. Travel Time= 0.4 min
Avg. Velocity = 3.09 fps, Avg. Travel Time= 1.1 min

Peak Storage= 70 cf @ 12.12 hrs
Average Depth at Peak Storage= 0.44'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 7.38 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 208.0' Slope= 0.0254 '/'
Inlet Invert= 43.47', Outlet Invert= 38.19'



Summary for Reach 20R: HOTEL & CANOPY DRAIN

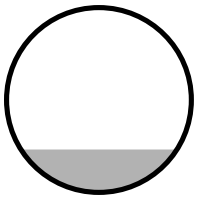
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.193 ac,100.00% Impervious, Inflow Depth = 5.93" for 25-YR event
Inflow = 1.17 cfs @ 12.08 hrs, Volume= 0.095 af
Outflow = 1.17 cfs @ 12.08 hrs, Volume= 0.095 af, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 8.51 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 2.80 fps, Avg. Travel Time= 0.4 min

Peak Storage= 10 cf @ 12.08 hrs
Average Depth at Peak Storage= 0.23'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 9.99 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 73.7' Slope= 0.0465 '/'
Inlet Invert= 46.10', Outlet Invert= 42.67'



Summary for Reach 30R: DRAINAGE MANHOLE

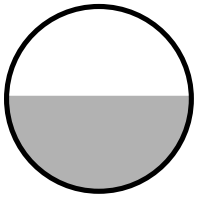
[52] Hint: Inlet/Outlet conditions not evaluated
[62] Hint: Exceeded Reach 10R OUTLET depth by 0.17' @ 13.14 hrs

Inflow Area = 1.604 ac, 62.81% Impervious, Inflow Depth = 5.10" for 25-YR event
Inflow = 4.42 cfs @ 12.13 hrs, Volume= 0.682 af
Outflow = 4.42 cfs @ 12.13 hrs, Volume= 0.682 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Max. Velocity= 10.80 fps, Min. Travel Time= 0.1 min
Avg. Velocity = 3.06 fps, Avg. Travel Time= 0.2 min

Peak Storage= 14 cf @ 12.13 hrs
Average Depth at Peak Storage= 0.52'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 8.37 cfs

12.0" Round Pipe
n= 0.010 PVC, smooth interior
Length= 34.0' Slope= 0.0326 '/'
Inlet Invert= 38.19', Outlet Invert= 37.08'



Summary for Reach OUT 1: OUT 1

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 2.493 ac, 50.94% Impervious, Inflow Depth = 4.91" for 25-YR event
Inflow = 8.82 cfs @ 12.11 hrs, Volume= 1.021 af
Outflow = 8.82 cfs @ 12.11 hrs, Volume= 1.021 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Reach OUT 2: OUT 2

[40] Hint: Not Described (Outflow=Inflow)

Inflow Area = 0.248 ac, 5.24% Impervious, Inflow Depth = 3.93" for 25-YR event
Inflow = 1.09 cfs @ 12.10 hrs, Volume= 0.081 af
Outflow = 1.09 cfs @ 12.10 hrs, Volume= 0.081 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3

Summary for Pond 10P: SOUTHERNMOST REAR LOT CATCH BASIN

Inflow Area = 0.653 ac, 25.96% Impervious, Inflow Depth = 4.36" for 25-YR event
Inflow = 3.01 cfs @ 12.12 hrs, Volume= 0.237 af
Outflow = 3.01 cfs @ 12.12 hrs, Volume= 0.237 af, Atten= 0%, Lag= 0.0 min
Primary = 3.01 cfs @ 12.12 hrs, Volume= 0.237 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 47.11' @ 12.12 hrs
Flood Elev= 48.37'

Device	Routing	Invert	Outlet Devices
#1	Primary	45.59'	**12.0" Round Culvert** L= 40.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 45.59' / 44.49' S= 0.0275 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=3.01 cfs @ 12.12 hrs HW=47.11' TW=43.91' (Dynamic Tailwater)
1=Culvert (Inlet Controls 3.01 cfs @ 3.83 fps)

Summary for Pond 20P: FRONT LOT CENTRAL CATCH BASIN

[62] Hint: Exceeded Reach 30R OUTLET depth by 0.78' @ 12.10 hrs

Inflow Area = 2.493 ac, 50.94% Impervious, Inflow Depth = 4.91" for 25-YR event
Inflow = 8.82 cfs @ 12.11 hrs, Volume= 1.021 af
Outflow = 8.82 cfs @ 12.11 hrs, Volume= 1.021 af, Atten= 0%, Lag= 0.0 min
Primary = 8.82 cfs @ 12.11 hrs, Volume= 1.021 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 38.37' @ 12.11 hrs
Flood Elev= 45.00'

Device	Routing	Invert	Outlet Devices
#1	Primary	36.69'	**24.0" Round Culvert** L= 103.0' RCP, groove end projecting, Ke= 0.200 Inlet / Outlet Invert= 36.56' / 36.69' S= -0.0013 '/' Cc= 0.900 n= 0.011 Concrete pipe, straight & clean, Flow Area= 3.14 sf

Primary OutFlow Max=8.82 cfs @ 12.11 hrs HW=38.37' TW=0.00' (Dynamic Tailwater)
1=Culvert (Barrel Controls 8.82 cfs @ 3.88 fps)

Summary for Pond 30P: CATCH BASIN 7

Inflow Area = 0.459 ac, 82.79% Impervious, Inflow Depth = 5.58" for 25-YR event
Inflow = 2.72 cfs @ 12.08 hrs, Volume= 0.213 af
Outflow = 2.72 cfs @ 12.08 hrs, Volume= 0.213 af, Atten= 0%, Lag= 0.0 min
Primary = 2.72 cfs @ 12.08 hrs, Volume= 0.213 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 44.83' @ 12.08 hrs
Flood Elev= 48.30'

Device	Routing	Invert	Outlet Devices
#1	Primary	43.50'	**12.0" Round Culvert** L= 93.3' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 43.50' / 42.67' S= 0.0089 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=2.72 cfs @ 12.08 hrs HW=44.83' TW=43.02' (Dynamic Tailwater)
1=Culvert (Inlet Controls 2.72 cfs @ 3.46 fps)

Summary for Pond 40P: SUBSURFACE SAND FILTER

[62] Hint: Exceeded Reach 20R OUTLET depth by 1.07' @ 12.45 hrs

Inflow Area = 0.951 ac, 88.12% Impervious, Inflow Depth = 5.69" for 25-YR event
Inflow = 5.68 cfs @ 12.08 hrs, Volume= 0.451 af
Outflow = 1.53 cfs @ 12.43 hrs, Volume= 0.445 af, Atten= 73%, Lag= 20.9 min
Primary = 1.53 cfs @ 12.43 hrs, Volume= 0.445 af
Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.01 hrs / 3
Peak Elev= 43.86' @ 12.43 hrs Surf.Area= 8,231 sf Storage= 5,037 cf
Flood Elev= 47.00' Surf.Area= 10,681 sf Storage= 8,158 cf

Plug-Flow detention time= 48.5 min calculated for 0.445 af (99% of inflow)
Center-of-Mass det. time= 40.1 min (797.6 - 757.5)

Volume	Invert	Avail.Storage	Storage Description
#1A	42.17'	4,259 cf	**71.00'W x 46.92'L x 3.83'H Field A** 12,770 cf Overall - 2,123 cf Embedded = 10,647 cf x 40.0% Voids
#2A	42.67'	2,123 cf	**ADS_StormTech SC-310 +Cap** x 144 Inside #1 Effective Size= 28.9"W x 16.0"H => 2.07 sf x 7.12'L = 14.7 cf Overall Size= 34.0"W x 16.0"H x 7.56'L with 0.44' Overlap 24 Rows of 6 Chambers
#3	40.67'	551 cf	**FILTER SAND (Prismatic)**Listed below (Recalc) 3,675 cf Overall x 15.0% Voids
#4	39.17'	980 cf	**UNDERDRAIN BEDDING (Prismatic)**Listed below (Recalc) 2,450 cf Overall x 40.0% Voids
#5	46.00'	245 cf	**Pave base matl (Prismatic)**Listed below (Recalc) 2,450 cf Overall x 10.0% Voids
		8,158 cf	Total Available Storage

Storage Group A created with Chamber Wizard

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
40.67	2,450	0	0
42.17	2,450	3,675	3,675

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
39.17	2,450	0	0
40.17	2,450	2,450	2,450

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
46.00	2,450	0	0
47.00	2,450	2,450	2,450

Device	Routing	Invert	Outlet Devices
#1	Primary	39.42'	**6.0" Round Culvert** L= 55.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 39.42' / 38.92' S= 0.0091 '/' Cc= 0.900 n= 0.010 PVC, smooth interior, Flow Area= 0.20 sf
#2	Secondary	44.50'	**12.0" Round Culvert** L= 62.0' CPP, projecting, no headwall, Ke= 0.900 Inlet / Outlet Invert= 44.50' / 43.25' S= 0.0202 '/' Cc= 0.900 n= 0.013 Corrugated PE, smooth interior, Flow Area= 0.79 sf

Primary OutFlow Max=1.53 cfs @ 12.43 hrs HW=43.86' TW=38.57' (Dynamic Tailwater)
↑—**1=Culvert** (Inlet Controls 1.53 cfs @ 7.78 fps)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=39.17' TW=38.19' (Dynamic Tailwater)
↑—**2=Culvert** (Controls 0.00 cfs)

CIVIL
CONSULTANTS

Engineers

Planners

Surveyors

APPENDICIES

A – Location & Topographic Plan

B – Soils Information

C – Supplemental Calculations

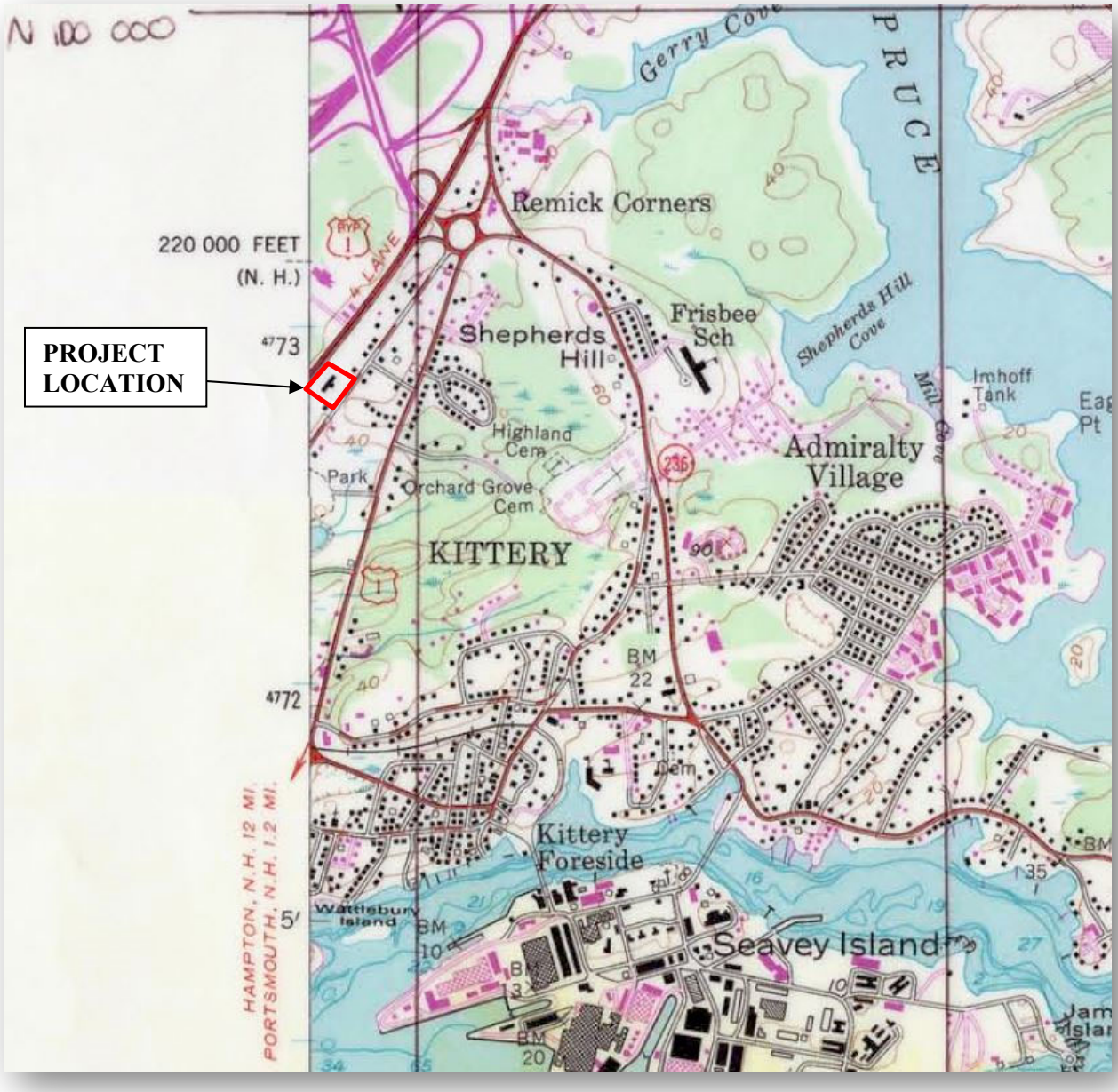
D – Stormwater Maintenance Plan and Inspection Log

E – FIRM Flood Mapping

F – Drainage Plans

APPENDIX A

LOCATION AND TOPOGRAPHIC PLAN



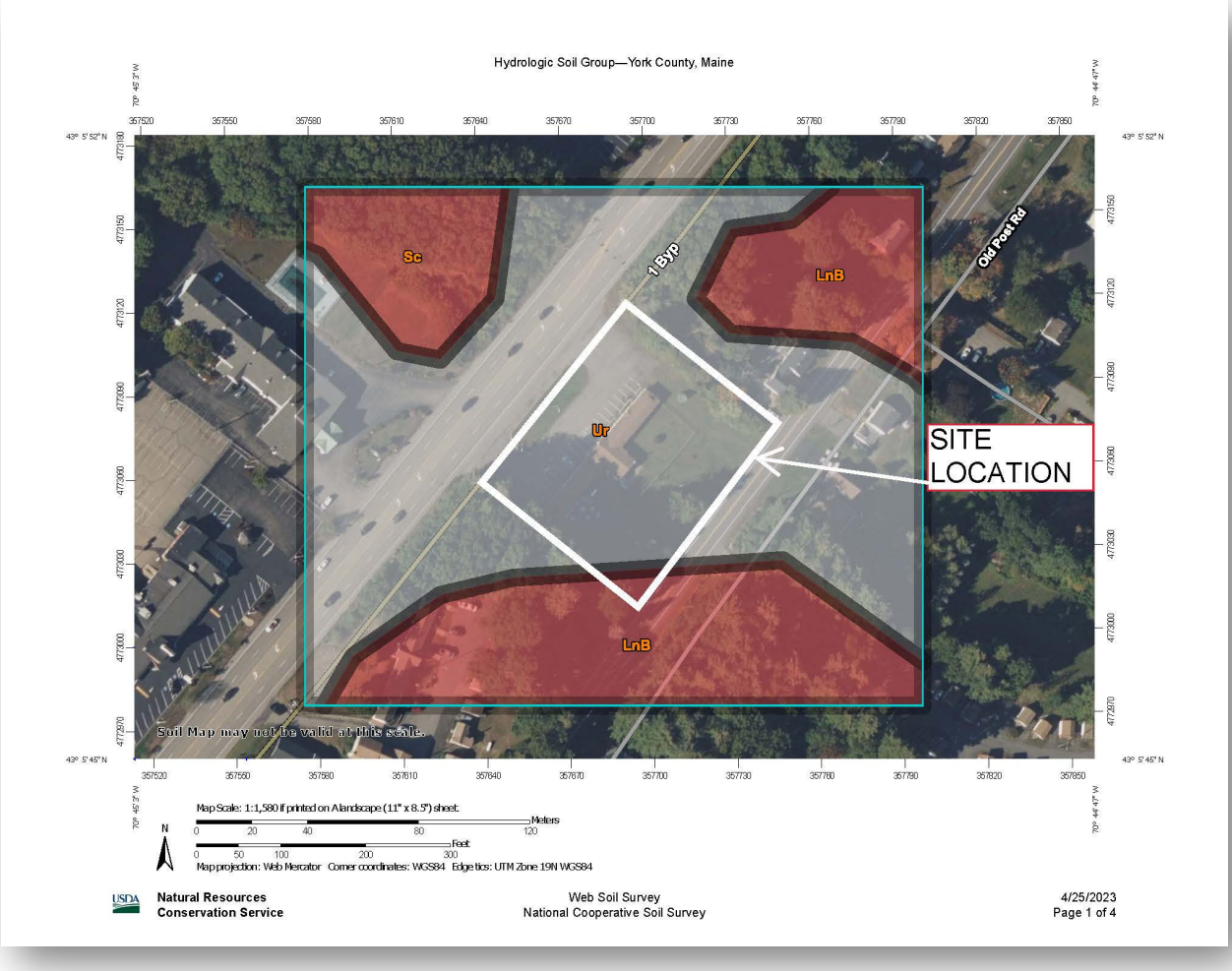
Portion of

U.S.G.S. Map for Kittery Quadrangle
Maine – New Hampshire 7.5 Minute Series
Not To Scale

APPENDIX B

Soil Exploration Results & Medium Intensity Soil Survey Plan

Portions of
USDA Soil Conservation Service – WEB SOIL SURVEY
YORK COUNTY, MAINE



Hydrologic Soil Group—York County, Maine

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils

Soil Rating Polygons
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Lines
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Soil Rating Points
- A
- A/D
- B
- B/D
- C
- C/D
- D
- Not rated or not available

Water Features
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

Background
- Aerial Photography

MAP INFORMATION

The soil surveys that comprise your AOI were mapped at 1:20,000.

Warning: Soil Map may not be valid at this scale.

Enlargement of maps beyond the scale of mapping can cause misunderstanding of the detail of mapping and accuracy of soil line placement. The maps do not show the small areas of contrasting soils that could have been shown at a more detailed scale.

Please rely on the bar scale on each map sheet for map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL:
Coordinate System: Web Mercator (EPSG:3857)

Maps from the Web Soil Survey are based on the Web Mercator projection, which preserves direction and shape but distorts distance and area. A projection that preserves area, such as the Albers equal-area conic projection, should be used if more accurate calculations of distance or area are required.

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: York County, Maine
Survey Area Data: Version 21, Aug 30, 2022

Soil map units are labeled (as space allows) for map scales 1:50,000 or larger.

Date(s) aerial images were photographed: Jun 19, 2020—Sep 20, 2020

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

USDA Natural Resources Conservation Service

Web Soil Survey
National Cooperative Soil Survey

4/25/2023
Page 2 of 4

Hydrologic Soil Group

Map unit symbol	Map unit name	Rating	Acres in AOI	Percent of AOI
LnB	Lyman loam, 3 to 8 percent slopes, rocky	D	3.1	30.0%
Sc	Scantic silt loam, 0 to 3 percent slopes	D	0.8	8.1%
Ur	Urban land		6.3	61.9%
Totals for Area of Interest			**10.2**	**100.0%**

Description

Hydrologic soil groups are based on estimates of runoff potential. Soils are assigned to one of four groups according to the rate of water infiltration when the soils are not protected by vegetation, are thoroughly wet, and receive precipitation from long-duration storms.

The soils in the United States are assigned to four groups (A, B, C, and D) and three dual classes (A/D, B/D, and C/D). The groups are defined as follows:

Group A. Soils having a high infiltration rate (low runoff potential) when thoroughly wet. These consist mainly of deep, well drained to excessively drained sands or gravelly sands. These soils have a high rate of water transmission.

Group B. Soils having a moderate infiltration rate when thoroughly wet. These consist chiefly of moderately deep or deep, moderately well drained or well drained soils that have moderately fine texture to moderately coarse texture. These soils have a moderate rate of water transmission.

Group C. Soils having a slow infiltration rate when thoroughly wet. These consist chiefly of soils having a layer that impedes the downward movement of water or soils of moderately fine texture or fine texture. These soils have a slow rate of water transmission.

Group D. Soils having a very slow infiltration rate (high runoff potential) when thoroughly wet. These consist chiefly of clays that have a high shrink-swell potential, soils that have a high water table, soils that have a claypan or clay layer at or near the surface, and soils that are shallow over nearly impervious material. These soils have a very slow rate of water transmission.

If a soil is assigned to a dual hydrologic group (A/D, B/D, or C/D), the first letter is for drained areas and the second is for undrained areas. Only the soils that in their natural condition are in group D are assigned to dual classes.

Rating Options

Aggregation Method: Dominant Condition

Component Percent Cutoff: None Specified

Tie-break Rule: Higher

APPENDIX C

Supplemental Stormwater Calculations

Conveyance Systems. Calculations for sizing on-site conveyance structures, including culverts are included in the HydroCad print outs included in this report. Stabilization calculations are included here. Ditch stabilization is per MDOT Highway design manual. Riprap sizing and erosion control measures are shown and noted on the Site Plans. These plans also show scaled drawings and cross sections of these conveyance systems and associated practices.

Subsurface Sand Filter. A Subsurface Sand Filter is proposed to treat the runoff from the proposed hotel building and parking area and limit flows off site to levels to the greatest extent practicable. The sub surface sand filter will use ADS StormTech SC-310 drainage storage chambers with an isolator row utilized for pre-treatment, 4" perforated PVC underdrains, and a 6" PVC collector pipe. The ADS StormTech chambers are to be installed per manufacturer instructions. The system has been designed per the design guidelines of the Maine Stormwater Best Management Practices Manual, Volume III, chapter 7.3, in accordance with Maine DEP's Chapter 500 Stormwater Management Rules. Sizing for the subsurface sand filter BMP is noted in the HydroCAD report.

Stormwater Maintenance & Inspection Plan

Prepared by: Neil J. Rapoza, PE, CIVIL CONSULTANTS

(November 2023)

During the construction of the 90 U.S. Route 1 Bypass Hotel Redevelopment, maintenance of all erosion, sedimentation, and stormwater flow control structures and devices will be the responsibility of the contractor on site. Upon stabilization of the completed Development, the developer will assume all responsibilities. The developer will be responsible for the required maintenance of the stormwater treatment system.

The developer will be responsible for the maintenance of all erosion, sedimentation, and stormwater flow control structures and devices within the limits of the development and will retain that responsibility until such time as another individual and/or agency (acceptable to the Town) accepts the responsibility. All post-construction inspections shall be conducted by personnel with knowledge of erosion and stormwater control, including the standards and conditions in the permit.

During and after construction all erosion control devices and structures shall be checked monthly and after each "significant rainfall"**. Necessary repairs will be made to correct undermining or deterioration of the devices and/or structures. Sediment in the pretreatment structures will be removed annually or as needed to maintain functionality of the structure.

The developer shall maintain inspection logs as shown below (or similar) of all stormwater and erosion control measures. The log shall reflect the dates of the inspections and describe actions taken (if any) and be kept on file for a minimum of 5 years. This logbook will be made available to the Town upon request.

Where a major storm event is noted in the plan, this is classified as a rainfall exceeding 1.0 inch storm event.

** significant rainfall is ½" in 24 hr

Sweeping

Paved surfaces shall be swept or vacuumed at least annually in the spring to remove all winter sand, and periodically during the year on an as-needed basis to minimize transportation of sediment during rainfall events.

Roadways and Parking Surfaces				
	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
Clear accumulated winter sand in parking lots and along roadways	**X**			
Sweep pavement to remove sediment	**X**			
Grade road shoulders and remove excess sand either manually or by a front-end loader	**X**			
Grade gravel roads and gravel shoulders	**X**			
Clean-out the sediment within water bars or open top culverts	**X**			
Ensure that stormwater is not impeded by accumulations of material or false ditches in the shoulder	**X**			

Catch Basins & Culverts

All catch basins, and any other field inlets throughout the collection system, need to be inspected on a monthly basis to assure that the inlet entry point is clear of debris and will allow the intended water entry. These will be cleared, if necessary on a yearly basis or when sediment reaches two thirds of total volume. Catch basins need to be vacuumed and cleaned of all accumulated sediment. This work must be done by a vacuum truck. The removed material must be disposed of in accordance with the Maine Solid Waste Disposal Rules.

Catch Basins Systems				
	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
Remove and legally dispose of accumulated sediments and debris from the bottom of the basin, inlet grates, inflow channels to the basin, and pipes between basins.	**X**	**X**		
Remove floating debris and floating oils (using oil absorptive pads) from any trap designed for such	**X**	**X**		

Culverts				
	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit	**X**	**X**	**X**	
Repair any erosion damage at the culvert's inlet and outlet	**X**	**X**	**X**	

Vegetated Swales

Erosion: It is important to install erosion and sediment control measures to stabilize this area as soon as possible and to retain any organic matter in the bottom of the trench.

Routine Maintenance and Inspection: The area should be inspected for failures following heavy rainfall and repaired as necessary for newly formed channels or gullies, reseeding or sodding of bare spots, removal of trash, leaves and/or accumulated sediments, the control of woody or other undesirable vegetation, and to check the condition and integrity of any stone dams.

Mowing: Grass should not be trimmed extremely short, as this will reduce the filtering effect of the swale. The cut vegetation should be removed to prevent the decaying organic litter from adding pollutants to the discharge from the swale. The mowed height of the grass should be 2-4 inches taller than the maximum flow depth of the design water quality storm. A minimum mow height of 6 inches is generally recommended.

Fertilization: Routine fertilization and/or use of pesticides is strongly discouraged. If complete reseeding is necessary, half the original recommended rate of fertilizer should be applied with a full rate of reseeding.

Sediment Removal: The level of sediment deposition in the channel should be monitored regularly, and removed from grassed channels before permanent damage is done to the grassed vegetation, or if infiltration times are longer than 12 hours. Sediment should be removed from riprap channels when it reduces the capacity of the channel.

Aeration: The buffer strip may require periodic mechanical aeration to restore infiltration capacity. This aeration must be done during a time when the area can be reseeded and mulched prior to any significant rainfall.

	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
Vegetated Swales				
Grass should not be trimmed extremely short, as this will reduce the filtering effect of the swale (MPCA, 1989). The cut vegetation should be removed to prevent the decaying organic litter from adding pollutants to the discharge from the swale. The mowed height of the grass should be 2-4 inches taller than the maximum flow depth of the design water quality storm. A minimum mow height of 6 inches is generally recommended		**X**		
The area should be inspected for failures following heavy rainfall and repaired as necessary for newly formed channels or gullies, sodding of bare spots, removal of trash, leaves and/or accumulated sediments, the control of woody or other undesirable vegetation, and to check the condition and integrity of the check dams			**X**	
The buffer strip may require periodic mechanical aeration to restore infiltration capacity. This aeration must be done during a time when the area can be reseedinged and mulched prior to any significant rainfall				**X**
The level of sediment deposition in the channel should be monitored regularly, and removed from grassed channels before permanent damage is done to the grassed vegetation, or if infiltration times are longer than 12 hours. Sediment should be removed from riprap channels when it reduces the capacity of the channel				**X**

Vegetated Areas

All areas of maintained lawn are to be inspected regularly for signs of erosions and channelization. Areas where erosion is occurring or areas of sparse growth shall be replanted and stabilized. Channelized flows from the eroded land shall be diverted to buffers or other areas able to withstand the high sediment load in the erosive runoff.

	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
Vegetated Areas				
Inspect all slopes and embankments	**X**		**X**	
Replant bare areas or areas with sparse growth	**X**		**X**	
Armor areas with fill erosions with an appropriate lining or divert the erosive flows to on-site areas able to withstand concentrated flows. Any materials used to armor/stabilize the affected areas shall be submitted to the Town and Engineer for review and approval prior to installation.	**X**		**X**	

Roadway Ditches, Swales and Culverts

Open swales and ditches need to be inspected on a monthly basis or after a major rainfall event to assure that debris or sediments do not reduce the effectiveness of the system. Debris needs to be removed at that time. Any sign of erosion or blockage shall be immediately repaired to assure a vigorous growth of vegetation for the stability of the structure and proper functioning.

Vegetated ditches should be mowed at least monthly during the growing season. Larger brush or trees must not be allowed to become established in the channel. Any areas where the vegetation fails will be subject to erosion and should be repaired and revegetated.

If sediment in culverts or piped drainage systems exceeds 20% of the diameter of the pipe, it should be removed. This may be accomplished by hydraulic flushing or any mechanical means; however, care should be taken to not flush the sediments into the retention/detention pond as it will reduce the pond's capacity and hasten the time when it must be cleaned. All pipes should be inspected on an annual basis.

Stormwater Channels				
	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
Inspect ditches, swales and other open stormwater channels	**X**	**X**	**X**	
Remove any obstructions and accumulated sediments or debris	**X**	**X**		
Control vegetated growth and woody vegetation		**X**		
Repair any erosion of the ditch lining		**X**		
Mow vegetated ditches		**X**		
Remove woody vegetation growing through riprap		**X**		
Repair any slumping side slopes	**X**	**X**		
Replace riprap where underlying filter fabric or underdrain gravel is showing or where stones have dislodge	**X**			**X**

Subsurface Sand Filters

Pre-Treatment Device Inspection: The structures providing the pre-treatment for the filter shall be routinely maintained by an approved operator on a regular schedule as appropriate for a commercial establishment. The soil filter should be inspected after every major storm in the first few months to ensure proper function. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining between 24 and 48 hours.

Sediment Removal: Sediment and debris should be removed from the pre-treatment structure at least annually, or as needed to maintain unimpeded flow to the filter.

Flow Monitoring: Filters shall be monitored to determine the initial drain time of the system. If the system is draining a 1" storm faster than 24 hours, an adjustable orifice may need to be added. If drain time is greater than 48 hours, the system may be receiving unintended flows. For either case, a professional engineer shall review the system and recommend action as appropriate.

Subsurface Filter				
	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
The filter should be inspected after every major storm in the first few months to ensure proper function. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining between 24 and 48 hours	**X**	**X**	**X**	
Sediment and plant debris should be removed from the pre-treatment structure at least annually	**X**		**X**	

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Stormwater Maintenance

90 U.S. Route 1 Bypass Hotel Redevelopment

Maintenance Log

This log is intended to accompany the Stormwater Management Facilities Maintenance Plan for the 90 U.S. Route 1 Bypass Hotel Redevelopment. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Maintenance Plan and as described in the table below. This log shall be kept on file for a minimum of five years and shall be available for review by MDEP. Qualified personnel familiar with drainage systems and soils shall perform all inspections.

<table>
<tr><th>Item</th><th>Maintenance Required & Frequency</th><th>Date Completed</th><th>Maintenance Personnel</th><th>Comments</th></tr>
<tr><td>Sweeping of Drives and Parking Lots</td><td>
<table>
<tr><th></th><th>Spring</th><th>Fall or Yearly</th><th>After a Major Storm</th><th>Every 2– 5 Years</th></tr>
<tr><td>Clear accumulated winter sand in parking lots and along roadways</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Sweep pavement to remove sediment</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Grade road shoulders and remove excess sand either manually or by a front-end loader</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Grade gravel roads and gravel shoulders</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Clean-out the sediment within water bars or open top culverts</td><td>X</td><td></td><td></td><td></td></tr>
<tr><td>Ensure that stormwater is not impeded by accumulations of material or false ditches in the shoulder</td><td>X</td><td></td><td></td><td></td></tr>
</table>
</td><td></td><td></td><td></td></tr>
</table>

Vegetated Swales		Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years			
	Grass should not be trimmed extremely short, as this will reduce the filtering effect of the swale (MPCA, 1989). The cut vegetation should be removed to prevent the decaying organic litter from adding pollutants to the discharge from the swale. The mowed height of the grass should be 2-4 inches taller than the maximum flow depth of the design water quality storm. A minimum mow height of 6 inches is generally recommended		**X**					
	The area should be inspected for failures following heavy rainfall and repaired as necessary for newly formed channels or gullies, sodding of bare spots, removal of trash, leaves and/or accumulated sediments, the control of woody or other undesirable vegetation, and to check the condition and integrity of the check dams			**X**				
	The buffer strip may require periodic mechanical aeration to restore infiltration capacity. This aeration must be done during a time when the area can be reseedinged and mulched prior to any significant rainfall				**X**			
	The level of sediment deposition in the channel should be monitored regularly, and removed from grassed channels before permanent damage is done to the grassed vegetation, or if infiltration times are longer than 12 hours. Sediment should be removed from riprap channels when it reduces the capacity of the channel				**X**			

Item	Maintenance Required & Frequency	Date Completed	Maintenance Personnel	Comments

Catch Basins and Culverts

	Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years
Remove and legally dispose of accumulated sediments and debris from the bottom of the basin, inlet grates, inflow channels to the basin, and pipes between basins.	**X**	**X**		
Remove floating debris and floating oils (using oil absorptive pads) from any trap designed for such	**X**	**X**		
Remove accumulated sediments and debris at the inlet, at the outlet, and within the conduit	**X**	**X**	**X**	
Repair any erosion damage at the culvert's inlet and outlet	**X**	**X**	**X**	

Roadway Ditches, Swales and Culverts

Inspect ditches, swales and other open stormwater channels	**X**	**X**	**X**	
Remove any obstructions and accumulated sediments or debris	**X**	**X**		
Control vegetated growth and woody vegetation		**X**		
Repair any erosion of the ditch lining		**X**		
Mow vegetated ditches		**X**		
Remove woody vegetation growing through riprap		**X**		
Repair any slumping side slopes	**X**	**X**		
Replace riprap where underlying filter fabric or underdrain gravel is showing or where stones have dislodge	**X**			**X**

			Spring	Fall or Yearly	After a Major Storm	Every 2– 5 Years			
Subsurface Sand Filters		The filter should be inspected after every major storm in the first few months to ensure proper function. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining between 24 and 48 hours	**X**	**X**	**X**				
		Sediment and plant debris should be removed from the pre-treatment structure at least annually	**X**		**X**				

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Stormwater Management System

90 U.S. Route 1 Bypass
Hotel Redevelopment

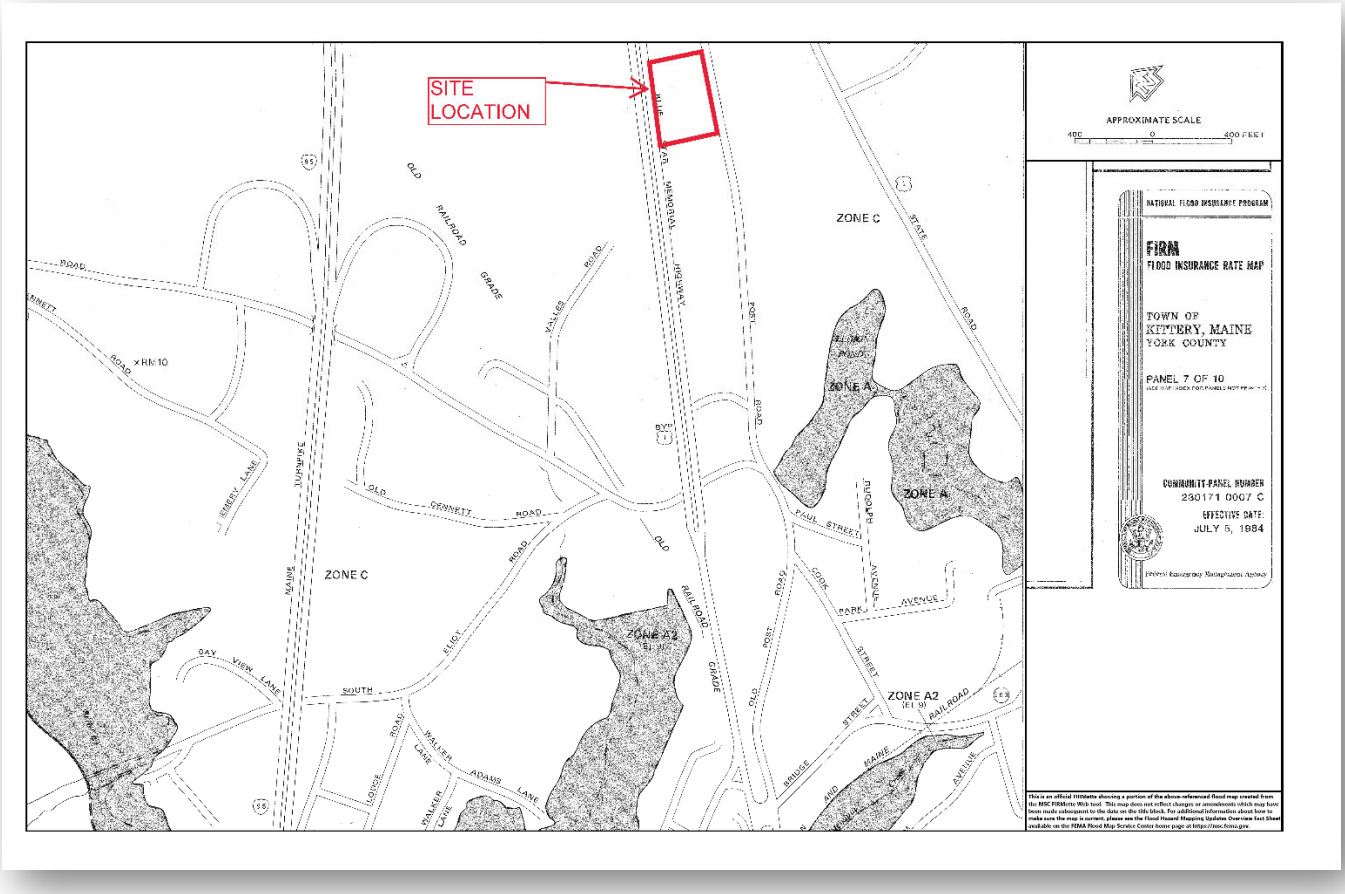
Inspection & Maintenance Checklist

BMP/System Component	Date Inspected	Inspector	Cleaning/Repair Needed *(List Items/Comments)*	Date of Cleaning/Repair	Performed By

CIVIL
CONSULTANTS
P.O. Box 100 South Berwick, Maine 03908 207-384-2550

APPENDIX E

NATIONAL FLOOD INSURANCE RATE MAP- FIRM



Reduced Scale Sketch Reproduced from Portion of

Town of Kittery, ME
Panel 230171 0007 C
(Effective dates: July 5,1984)

CIVIL
CONSULTANTS

Engineers

Planners

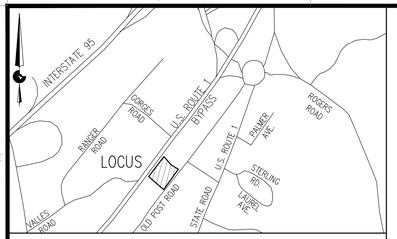
Surveyors

APPENDIX F

All plans at ½ scale 11x17 prints, 22x34 included with application

D1 – Pre-Development Stormwater Management Plan

D2 – Post-Development Stormwater Management Plan



LOCATION PLAN
(NOT TO SCALE)

POND — 4 — POND NUMBER

SUBCATCHMENT — 11 — SUBCATCHMENT NUMBER; 0.56 — SUBCATCHMENT ACREAGE

REACH — 50 — SCS Soils: Ln, Ur; L=50 — HISS Soils:

Tc COMPONENTS — S = Sheet; SC = Shallow Concentrated; C = Channel

ROUTING DIRECTION

SOILS LEGEND

- A Soils: SCS Soils: HISS Soils:
- B Soils: SCS Soils: HISS Soils:
- C Soils: SCS Soils: HISS Soils:
- D Soils: SCS Soils: Ln, Ur HISS Soils:

Subcatchment Boundaries Pre-Development

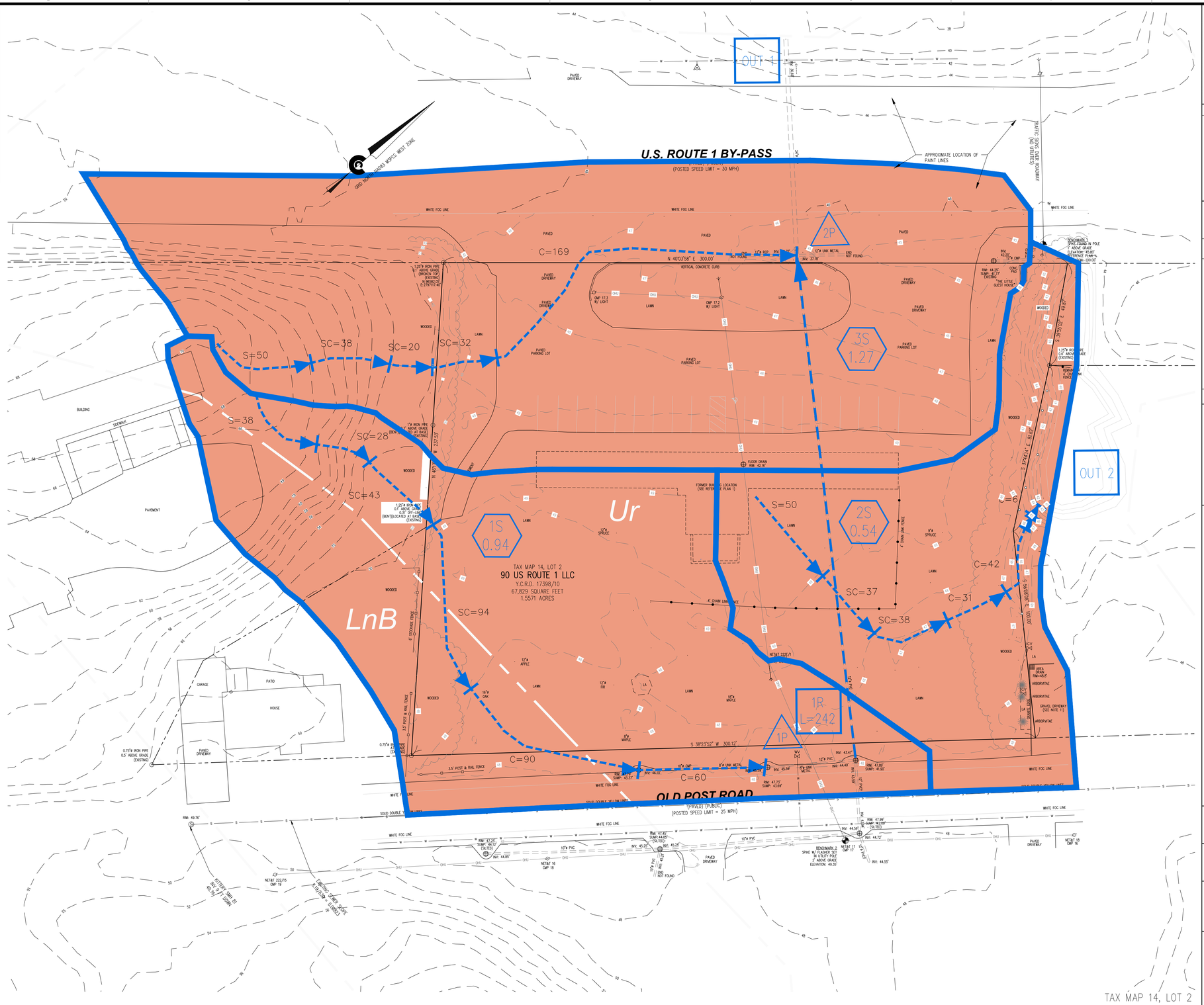
Subcatchment Boundaries Post-Development

SCS Soil Line

High Intensity Soil Line

Tc Flow Path & Direction Pre-Development

Tc Flow Path & Direction Post-Development



STATE OF MAINE
Neil J. Bezanson
12169
LICENSED PROFESSIONAL ENGINEER
© 2023

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Engineers
Planners
Surveyors
P.O. Box 100
South Berwick
Maine
03908
207-384-2550
www.civcon.com

NO.	REVISIONS	INT.	DATE

REDEVELOPMENT PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

CLIENT ADDRESS: SONNY NATARJAN, 8 PEPPERELL WAY, YORK, ME 03909

1"=20'
0' 20'

DATE: 12/15/2023
DRAWN BY: NJR
CHECKED BY:
APPROVED BY:

PRE-DEVELOPMENT STORMWATER MANAGEMENT PLAN

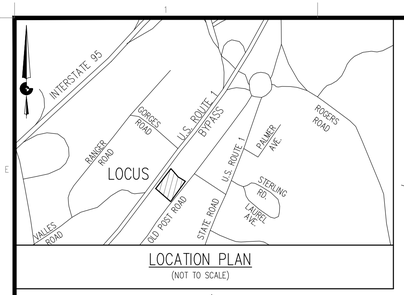
PROJECT NO: 21-323.00

D1

SHEET: 1 OF 1

CADD FILE: J:\aaa\2021\2132300\CARLSON\ENGR\2132300-ST.dwg

PLOT DATE: 12/15/2023



LOCATION PLAN
(NOT TO SCALE)

POND — 4 — POND NUMBER

SUBCATCHMENT — 11 / 0.56 — SUBCATCHMENT NUMBER / SUBCATCHMENT ACREAGE

REACH — 50 / L=50 — REACH NUMBER / REACH LENGTH

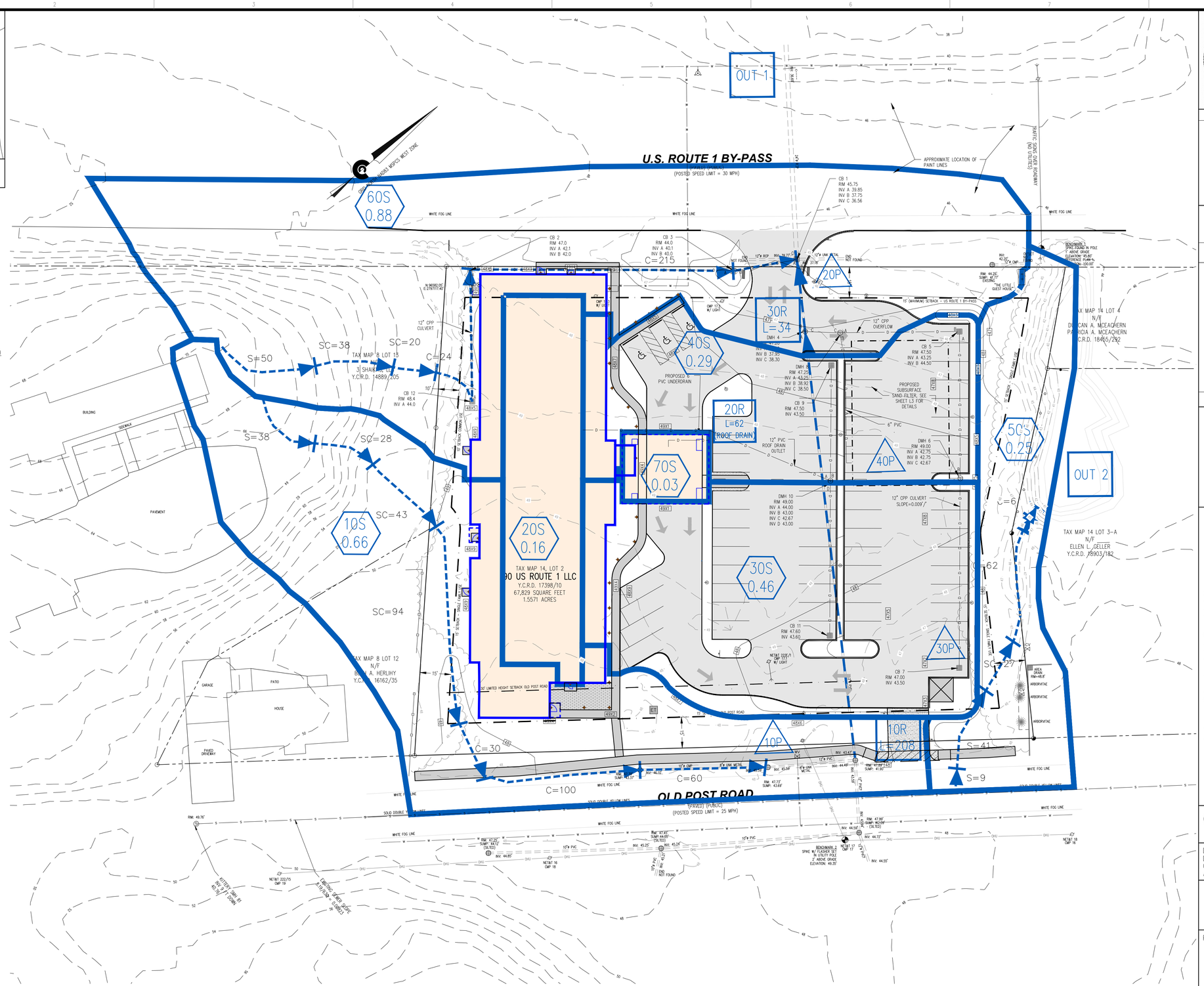
Tc COMPONENTS — S = Sheet, SC = Shallow Concentrated, C = Channel

ROUTING DIRECTION

SOILS LEGEND (SEE SHEET D1 FOR HATCHING)

- A Soils: SCS Soils: HISS Soils:
- B Soils: SCS Soils: HISS Soils:
- C Soils: SCS Soils: HISS Soils:
- D Soils: SCS Soils: Ln, Ur HISS Soils:

- Subcatchment Boundaries Pre-Development
- Subcatchment Boundaries Post-Development
- SCS Soil Line
- High Intensity Soil Line
- Tc Flow Path & Direction Pre-Development
- Tc Flow Path & Direction Post-Development



STATE OF MAINE
Neil J. Rapoza
12169
LICENSED PROFESSIONAL ENGINEER
2023

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Maine
03908
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www.civcon.com

NO.	REVISIONS	INT.	DATE

REDEVELOPMENT PLAN OF LAND OF
90 US ROUTE 1 LLC
90 U.S. ROUTE 1 BY-PASS
KITTERY - YORK COUNTY, MAINE

CLIENT ADDRESS: SONNY NATARJAN, 8 PEPPERELL WAY, YORK, ME 03909

1"=20'
0' 20'

DATE: 12/15/2023
DRAWN BY: NJR
CHECKED BY:
APPROVED BY:

POST-DEVELOPMENT STORMWATER MANAGEMENT PLAN

PROJECT NO: 21-323.00

D2

SHEET: 1 OF 1

CADD FILE: J:\aaa\2021\2132300\CARLSON\ENGR\2132300-ST.dwg

PLOT DATE: 12/15/2023

TOWN OF KITTERY

Office of the Sewer Department

18 Dennett Road, Kittery, ME 03904

Telephone: 207-439-4646 | Fax: 207-439-2799

tbabkirk@kitteryme.org | www.kitteryme.gov

January 10, 2024

Re: Treatment Plant Capacity-Acceptance Letter
90 Route One By-Pass
Kittery, ME 03904

This letter is to confirm the capacity of sanitary sewer discharge for the proposed Project at 90 Route One By-Pass in the Town of Kittery Maine. The sewer system (piping and pumping stations) and the treatment plant will have the capacity and ability to handle the discharge flow requiring treatment and disposal if the project receives all required approvals.

This project must follow all specifications in accordance with design and performance standards set by the Kittery Sewer Department found in Title 13 of the Town Code.

Before the connection to the Kittery Sewer line, you will need to obtain a sewer permit from the Town of Kittery, pay all Impact and Entrance fees, and contact the Sewer Department for an inspection. Before the inspection is completed you will need to submit a rough drawing of the sewer line location on the property.

During the engineering and construction process plans may change, if they do, consideration for acceptance may change. Please notify me of any changes in design or construction.

If you have any questions or concerns, please do not hesitate to reach out to me by phone at 207-439-4646 or by email at tbabkirk@kitteryme.org.

Sincerely,

Timothy Babkirk
Sewer Department Superintendent
Town of Kittery Maine

Notice of intent to file Preliminary Site Plan Review Application

Please take notice that:

Civil Consultants, P.O. BOX 100, South Berwick, Maine 03908, on behalf of 90 U.S. Route 1, LLC, the owners of the property at 90 U.S. Route 1 Bypass, Kittery, ME 03904, is intending to file a Preliminary Site Plan Review Application through the Major Site Plan Review process with the Town of Kittery, ME on or about December 1, 2023.

This application is to construct a new 3-story Holiday Inn Express Hotel on the existing developed lot of The Little Guest House, a 10-unit motel that has since been demolished at 90 U.S. Route 1 Bypass in Kittery, ME. The new hotel will have 62 hotel rooms with an associated 66 space parking lot (including 3 ADA accessible spaces) and drainage facilities. A single two-way driveway access from U.S. Route 1 Bypass and a gated emergency vehicle access on Old Post Road will be constructed.

As part of the Kittery Preliminary Plan Application process, notice of intent to file an application must be sent to all abutters within 150 ft. A public hearing will be held as part of the site plan review process. Public comment on the application will be accepted during the Planning Board review process.

The application will be filed at the Town of Kittery Planning Office during normal working hours. After submitting, a copy of the application may be found at the municipal offices in Kittery, ME or at the office of Civil Consultants at 293 Main Street in South Berwick, ME.

Please contact Geoff Aleva at Civil Consultants with questions. (207-384-2550) Witten public comments may be sent to the Town of Kittery at 200 Rogers Rd, Kittery, Maine 03904.

150 foot Abutters List Report

Kittery, ME
January 04, 2024

Subject Property:

Parcel Number:	14-2	Mailing Address:	90 US ROUTE 1 LLC 90 US ROUTE 1 LLC
CAMA Number:	14-2		P.O. BOX 630
Property Address:	90 US ROUTE 1 BY-PASS		KITTERY, ME 03904

Abutters:

Parcel Number:	14-18	Mailing Address:	ROWLINSON, JEANETTE A
CAMA Number:	14-18		ROWLINSON, JEANETTE A
Property Address:	112 OLD POST ROAD		112 OLD POST RD
			KITTERY, ME 03904
Parcel Number:	14-19	Mailing Address:	CHAPMAN, DAVID R CHAPMAN, DAVID R
CAMA Number:	14-19		106 OLD POST ROAD
Property Address:	106 OLD POST ROAD		KITTERY, ME 03904-1062
Parcel Number:	14-19A	Mailing Address:	HENSHAW, RICHARD FRANCIS
CAMA Number:	14-19A		HENSHAW, RICHARD FRANCIS
Property Address:	104 OLD POST ROAD		104 OLD POST ROAD
			KITTERY, ME 03904
Parcel Number:	14-3A	Mailing Address:	GELLER, ELLEN L GELLER, ELLEN L
CAMA Number:	14-3A		109 OLD POST ROAD
Property Address:	109 OLD POST ROAD		KITTERY, ME 03904
Parcel Number:	14-4	Mailing Address:	MCEACHERN, DUNCAN A.
CAMA Number:	14-4		MCEACHERN, DUNCAN A.
Property Address:	111 OLD POST ROAD		124 WHIPPLE ROAD
			KITTERY, ME 03904
Parcel Number:	7-26	Mailing Address:	KITTERY MOTOR INN INC KITTERY MOTOR INN INC
CAMA Number:	7-26		85 US ROUTE 1 BY-PASS
Property Address:	85 US ROUTE 1 BY-PASS		KITTERY, ME 03904-9965
Parcel Number:	8-12	Mailing Address:	HERLIHY, BETH A. HERLIHY, BETH A.
CAMA Number:	8-12		103 OLD POST ROAD
Property Address:	103 OLD POST ROAD		KITTERY, ME 03904
Parcel Number:	8-13	Mailing Address:	3 SHAIKHS LLC 3 SHAIKHS LLC
CAMA Number:	8-13		79 OLD POST ROAD
Property Address:	79 OLD POST ROAD		KITTERY, ME 03904-1064
Parcel Number:	8-15	Mailing Address:	J&J'S VILLAS, LLC J&J'S VILLAS, LLC
CAMA Number:	8-15		402 THE HILL, DEER STREET
Property Address:	127 STATE ROAD		PORTSMOUTH, NH 03801
Parcel Number:	8-16	Mailing Address:	GRIFFIN, JOHN P GRIFFIN, JOHN P
CAMA Number:	8-16		100 OLD POST ROAD
Property Address:	100 OLD POST ROAD		KITTERY, ME 03904-1062

150 FOOT ABUTTERS

Kittery, ME

1 inch = 275 Feet

0 275 550 825

January 4, 2024

CAI Technologies
Precision Mapping. Geospatial Solutions.
www.cai-tech.com

Tract Line	Utility	Condo
Right of Way	Property Hook	Property Line
Cemetery	RoadNotPar	Public Road