APPLICATION FOR A SPECIAL USE PERMIT

CITY OF NEWPORT, RI
ZONING BOARD OF REVIEW

ZBR March-9

$200.-
RECEIVED
FEB 24 2020
CK# 2517

DATE: February 22, 2020

Board members:

The undersigned hereby petitions the Zoning Board of Review for a special use permit in the application of the provisions or regulations of the Zoning Ordinance affecting the following described premises in the manner and on the grounds hereinafter set forth.

Location of premises

Street & No: 0 Lee's Wharf a/k/a 5 Howard Wharf

Tax Assessor's Plat 32 Lot 314

Petitioner Information

Applicant Howard Wharf, LP Address c/o David P Martland

Owner Howard Wharf, LP Address 1100 Aquidneck Avenue

Lessee _____ Address Middletown, RI 02842

Property Characteristics

Dimensions of lot-frontage 313.24 depth 100' area 32,069 sq. ft.

Zoning District in which premises is located Waterfront Business

How long have you owned above premises? 6 months

Are there buildings on the premises at present? Yes

Total square footage of the footprint of existing buildings 900 sq ft

Total square footage of the footprint of proposed buildings 12,827 sq ft

Present use of premises Commerical off street parking facility

All of the following information and questions must be filled in and answered completely.

Proposed use of premises 21 unit inn with associated restuarant and meeting space (transient guest facility)

Give extent of proposed alterations Applicant is proposing to construct a 21 unit inn with associated accessory uses including a resturant, meeting space and parking. The building will have a total footprint of 12,827 sq ft. The structure will be elevated because of the flood plain. The project will provide for public access to the harbor walk.

Zoning Characteristics Matrix

	Existing	Required/Allowed	Proposed
Lot Size (sq. ft.)	32,069 sq ft	5,000 sq ft	32,069 sq ft
Lot Coverage	3%	40%	40%
Dwelling Units	n/a	n/a	n/a
Parking (# of spaces)	97	50	50
Front Setback	100'	0'	12'
Side Setbacks	0'	5'	41.3' & 101.2'
Rear Setback	0'	5'	5'
Height	9'	47'	47'

What provisions of the Comprehensive Land Use Plan are the applicable to this project?

See attached exhibit A

The Zoning Boards Role

Special use permits shall be granted only where the zoning board of review finds that the proposed use or the proposed extension or alteration of an existing use is in accord with the public convenience and welfare, after taking into account, where appropriate:

1. The nature of the proposed site, including its size and shape and the proposed size, shape and arrangement of the structure;
2. The resulting traffic patterns and adequacy of proposed off-street parking and loading;
3. The nature of the surrounding area and the extent to which the proposed use or feature will be in harmony with the surrounding area;
4. The proximity of dwellings, churches, schools, public buildings and other places of public gathering;
5. The fire hazard resulting from the nature of the proposed buildings and uses and the proximity of existing buildings and uses;
6. All standards contained in this zoning code;
7. The comprehensive plan for the city.

The burden of proof in a special-use permit application is on the applicant. This means that if the applicant fails to present adequate competent evidence to prove the applicable standard for issuing a special-use permit has been met, the board must deny the application.

By signing below, I hereby attest that the information provided is accurate and truthful. I also attest that I have read the section entitled "The Zoning Board's Role".

Howard Wharf, LP

Applicant's Signature

Howard Wharf LP

Owner's Signature

(401) 849-6200

Telephone Number

(401) 849-6200

Telephone Number

Email address dmartland@silvalawgroup.com

Be sure all required drawings are attached to this application at the time of the submittal.

EXHIBIT A

Provisions of the Comprehensive Land Use Plan Applicable to the Project

Land Use

Goal LU-1: To provide a balance City consisting of residential, commercial, and employment uses consistent with the character, environmental resources and vision of the community.

Policy LU-1.3: The City shall work with state regional agencies and private property owners to maintain viable maritime uses and public access within the city's harbor area, while also supporting uses necessary to accommodate tourism.

Policy LU-1.4: The City shall maintain design standards to protect historic structures, maintain heritage of the community, and maintain views and access to the harbor and waterfront areas.

Policy LU-1.6: The City shall encourage upgrading, beautification, revitalization and environmentally appropriate reuse of existing commercial areas.

Economic Development

Goal ED-1: To develop a robust and diverse economy, providing suitable employment opportunities for residents, and a stable tax base.

Policy ED-1.1: The City shall support key economic drivers while also seeking to attract and grow its technology sector and businesses that represent new and innovative concepts and technologies.

Policy ED-1.5: The City shall build upon thriving sectors to develop a more substantial year-round tourism economy.

Goal ED-3: To provide efficient and effective government services to encourage economic development.

Transportation

Goal T-5: To provide sufficient and suitably located parking, designed to eliminate, mitigate or reduce impacts.

Open Space & Recreation

Goal OSR-3: To protect and enhance public access to shoreline and waterfront areas.

Policy OSR-3.1: The City shall enhance and protect public access to the shoreline and waterfront areas through recreational sites, public rights-of-way, and access easements.

City of Newport
Department of Zoning and Inspections
43 Broadway, Newport, RI 02840

RECEIVED
FEB 25 2020

Application Fee: $ 750.00

Development Plan Review Application

Instructions

Development Plan review is required for qualifying projects, as described in Chapter 17.88 of the City of Newport Code of Ordinances. The Applicant shall submit one digital and six (6) full-size paper copies of all required documents, as described in Section 17.88.040. Each applicant will be required to meet with the Department of Utilities prior to submittal of an application to determine submittal requirements to satisfy subsection 17.88.040(T). The City has standards which must be adhered to for stormwater control, in addition to state regulations. The City requires all stormwater to be treated on site, including on redeveloped land. This may reduce the developable area of your land. Substantial new construction will require the submittal of architectural plans and elevations.

The application shall not be processed until it is determined that all required documents have been submitted and all required fees have been paid. Development Plan Review is a prerequisite for a Building Permit. Construction shall be completed in accordance with the approved Development Plan Review. It is strongly suggested that all applicants request informal preliminary review to the City Planner prior to submittal of an application, let alone the commencement of serious design work by consultants.

Basic Information

Subject Property Address on file with City Engineer: 5 Howard Wharf (0 Lee's Wharf)
(# Street)

Tax Assessor's Plat and Lot: 32 , 314
(Plat, Lot)

Property Owner's Contact Information

Howard Wharf, LP
Name

1100 Aquidneck Avenue, Middletown, RI
Mailing Address

dmartland@silvalawgroup.com
Email

401-849-6200
Phone

Applicant's Contact Information (only complete if different)

Name

Mailing Address

Email

Phone

Property owner's signature authorizing submission of this application and certifying under possible penalty of perjury under the laws of this jurisdiction that the preceding information is true and correct.

Signature of Property Owner

Please provide contact information for any attorneys and/or design consultants retained. For properties with two owners, complete two forms. For developments on multiple properties, complete one form for each property owner.

24 LEES WHARF PLANNING/ ZONING SET
07/08/2020

HERK WORKS
ARCHITECTURE
401.662.7875
DAN@HERK-WORKS.COM

HERK WORKS
ARCHITECTURE

24 LEES WHARF
NEWPORT RI 02840

REVISIONS:

No.	Description	Date

NOT FOR CONSTRUCTION

TITLE: COVER

DATE: 7/04/2020

JOB NO.: 1964

DRAWING NO.:

0

1 1ST FLOOR PLAN
3/16" = 1'-0"

HERK WORKS
ARCHITECTURE

24 LEES WHARF
NEWPORT RI 02840

REVISIONS:

No.	Description	Date

NOT FOR CONSTRUCTION

TITLE: 1ST FLOOR PLAN

DATE: 7/04/2020

JOB NO.: 1964

DRAWING NO.:

A101

1 2ND FLOOR PLAN
3/16" = 1'-0"

HERK WORKS
ARCHITECTURE

24 LEES WHARF
NEWPORT RI 02840

REVISIONS:

No.	Description	Date

NOT FOR CONSTRUCTION

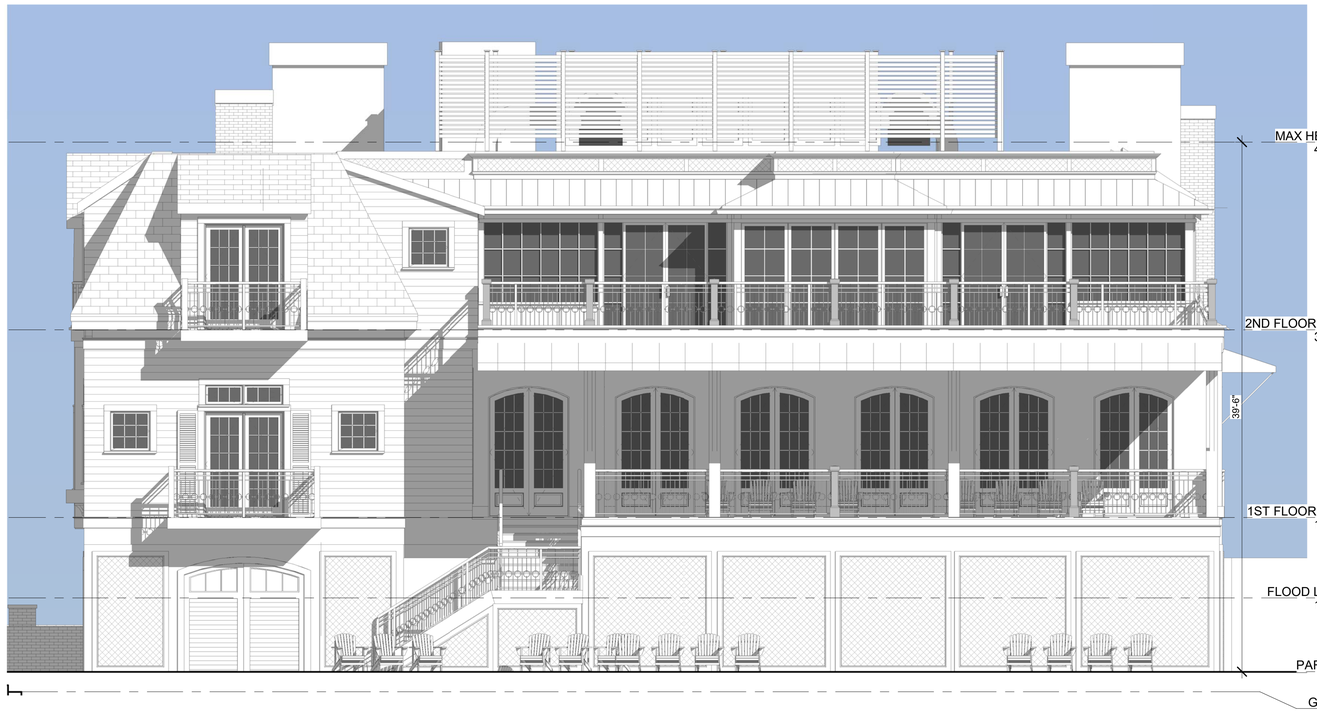
TITLE: 2ND FLOOR PLAN

DATE: 7/04/2020

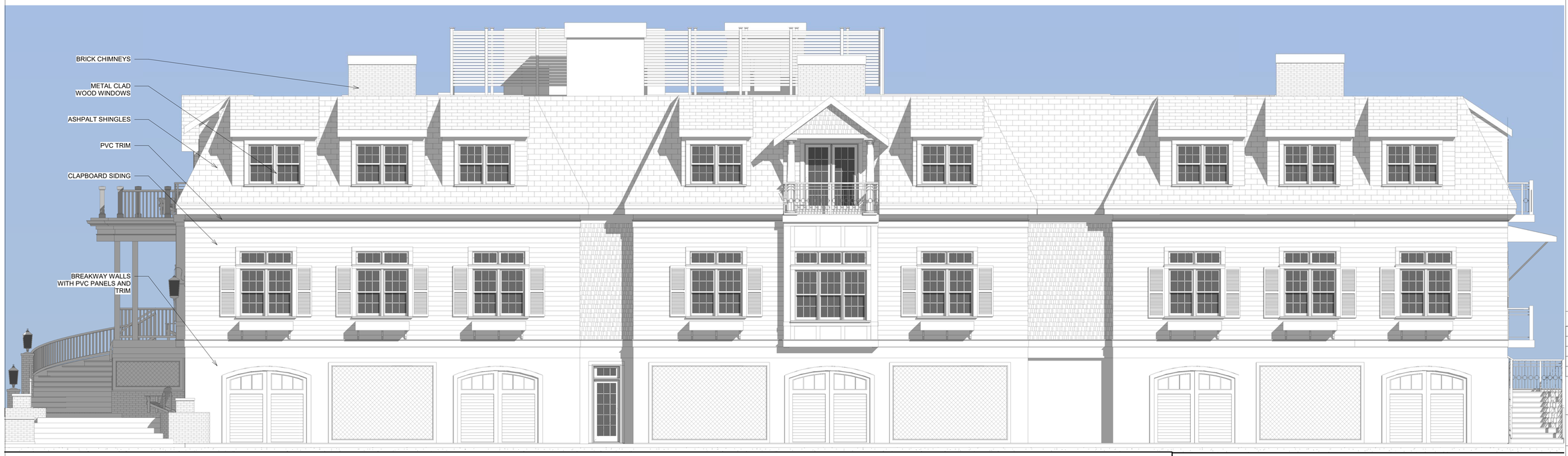
JOB NO.: 1964

DRAWING NO.:

A102



1 WEST ELEVATION PROPOSED
3/16" = 1'-0"



3 NORTH ELEVATION PROPOSED
3/16" = 1'-0"

HERK WORKS
ARCHITECTURE

24 LEES WHARF
NEWPORT RI 02840

REVISIONS:

No.	Description	Date

NOT FOR CONSTRUCTION

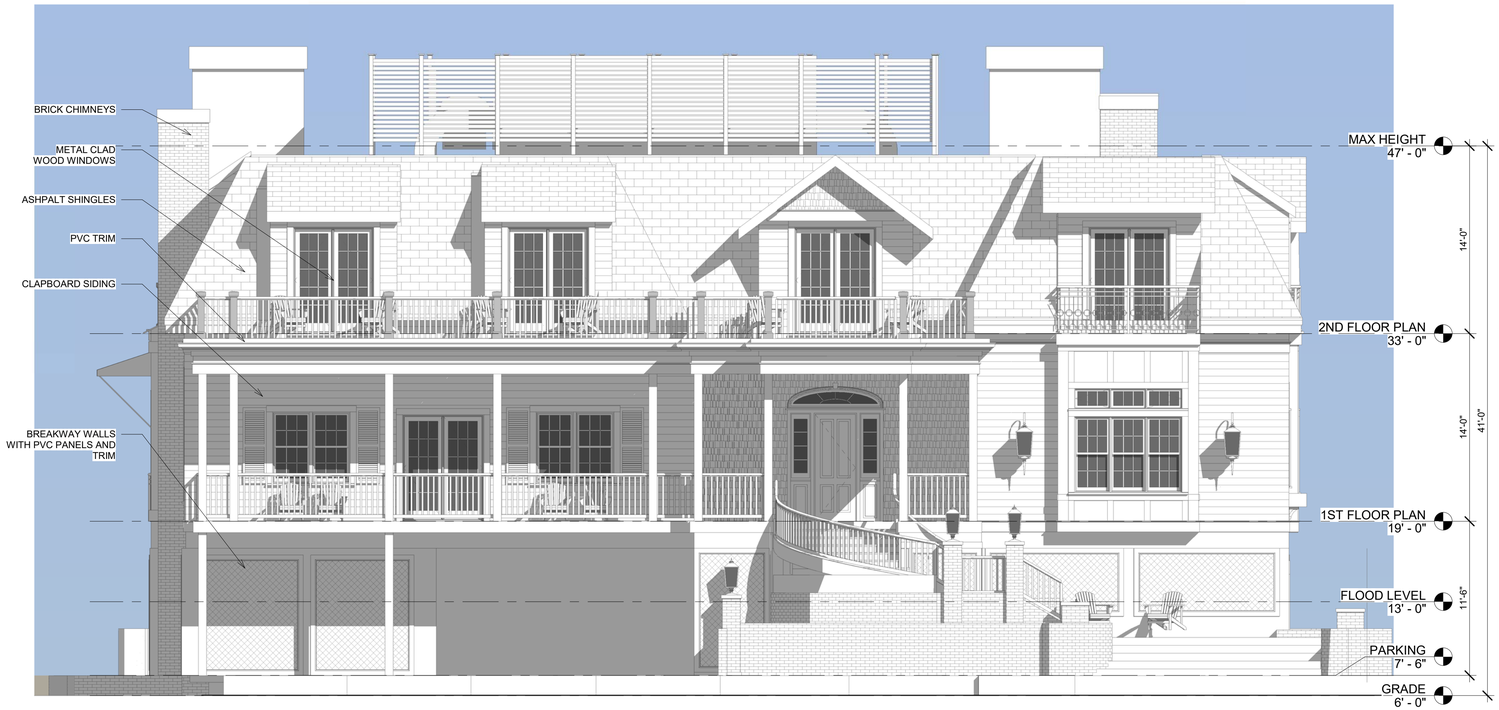
TITLE: EXTERIOR ELEVATIONS

DATE: 7/04/2020

JOB NO.: 1964

DRAWING NO.:

A201



2 EAST ELEVATION PROPOSED
3/16" = 1'-0"

1 SOUTH ELEVATION PROPOSED
3/16" = 1'-0"

HERK WORKS
ARCHITECTURE

24 LEES WHARF
NEWPORT RI 02840

REVISIONS:		
No.	Description	Date

NOT FOR CONSTRUCTION

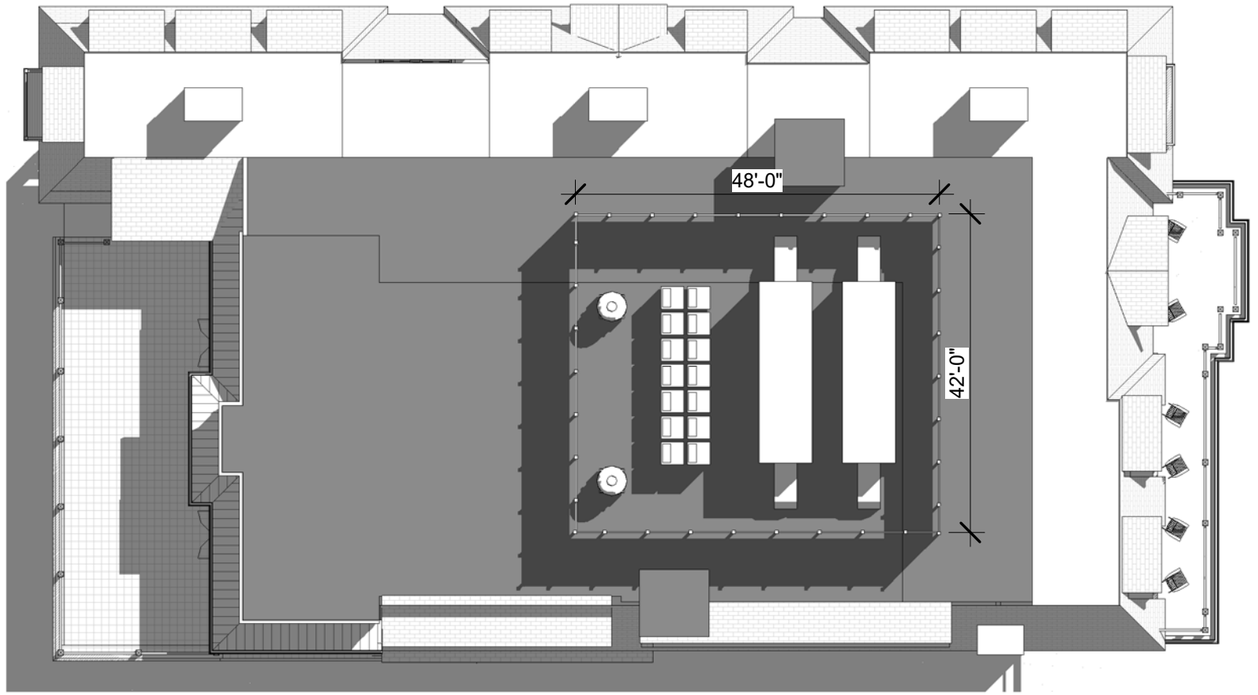
TITLE: EXTERIOR ELEVATIONS

DATE: 7/04/2020

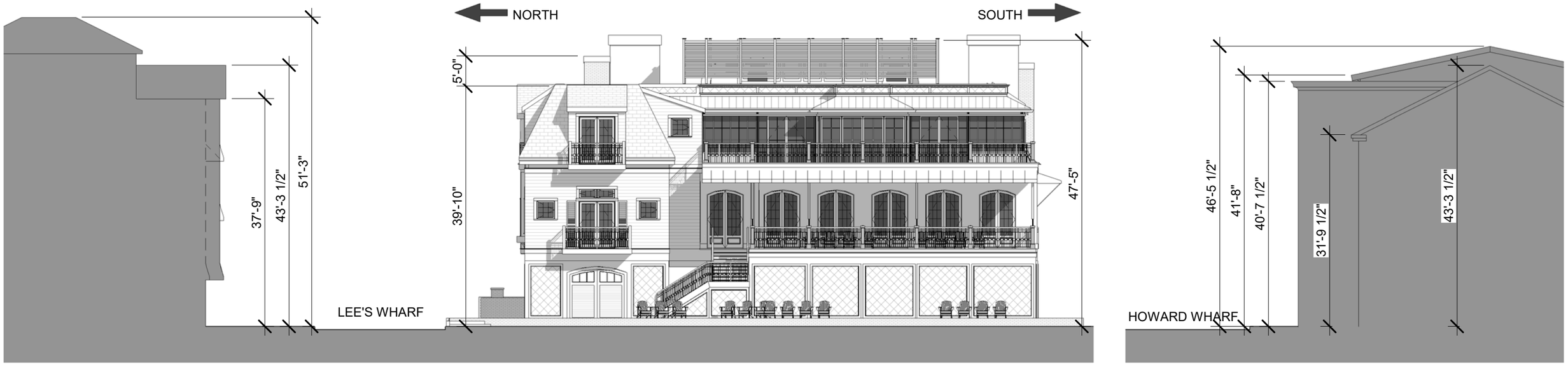
JOB NO.: 1964

DRAWING NO.:

A202



2 ROOF PLAN
1" = 20'-0"



1 SITE SECTION - VIEW FROM HARBOR
1/16" = 1'-0"

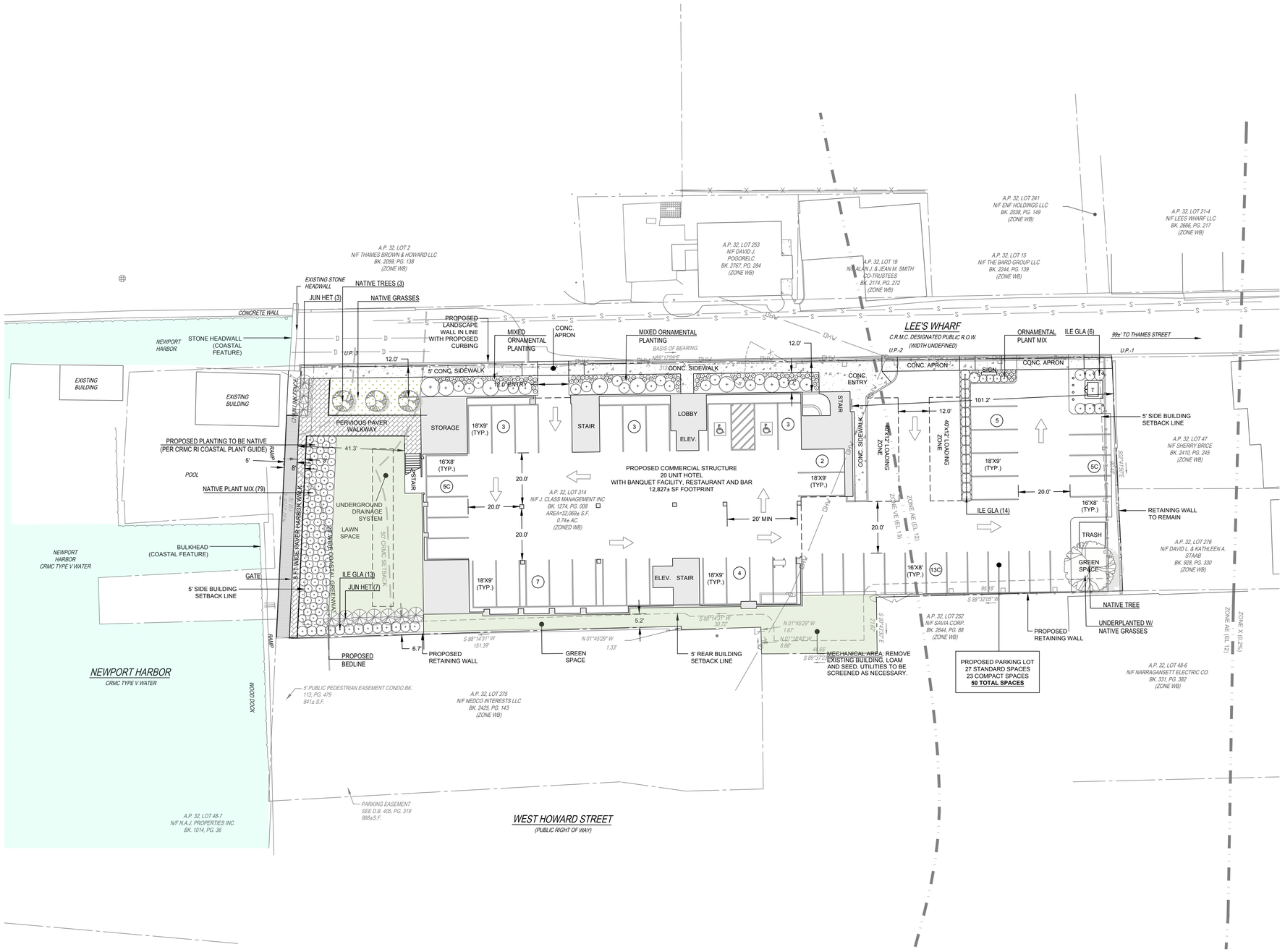
HERK WORKS
ARCHITECTURE
401. 662. 7875 Dan@Herk-works.com

24 LEES WHARF
NEWPORT RI 02840

SITE SECTION & ROOF PLAN

7/8/2020 9:21:51 AM

A400



PLANTING NOTES

1. LANDSCAPE CONTRACTOR SHALL VISIT SITE PRIOR TO SUBMITTING BID TO BECOME COMPLETELY FAMILIAR WITH SITE CONDITIONS.
2. NO PLANTING WILL BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
3. CONTRACTOR TO VERIFY ALL UTILITIES ON PROPERTY AND TO PROTECT ALL UTILITIES DURING EXCAVATION.
4. IF THERE IS A DISCREPANCY BETWEEN THE NUMBER OF PLANTS SHOWN ON THE PLAN AND THE NUMBER OF PLANTS SHOWN IN THE PLANT LIST, THE NUMBER OF PLANTS SHOWN ON THE LIST WILL TAKE PRECEDENCE.
5. ALL CONTAINER MATERIAL TO BE GROWN IN CONTAINER A MINIMUM OF SIX MONTHS.
6. ALL MATERIAL SHALL COMPLY WITH THE LATEST EDITION OF THE AMERICAN STANDARD FOR NURSERY STOCK, ACCORDING TO THE AMERICAN ASSOCIATION OF NURSERYMEN.
7. CONTRACTOR SHALL REPAIR ALL DAMAGE TO PROPERTY FROM PLANTING OPERATIONS AT NO COST TO THE OWNER.
8. CONTRACTOR SHALL GUARANTEE NEW PLANT MATERIAL THROUGH ONE CALENDAR YEAR FROM TIME OF PROVISIONAL ACCEPTANCE.
9. ALL PROPOSED PLANTS SHALL BE LOCATED CAREFULLY AS SHOWN ON THE PLANS AND THE PLACEMENT SHALL BE APPROVED BY THE LANDSCAPE ARCHITECT BEFORE THE INSTALLATION.
10. ALL DISTURBED AREAS NOT TO BE PAVED OR PLANTED SHALL BE LOAMED AND SEEDED AS SHOWN. SEE SPECIFICATIONS FOR SOIL PREPARATION AND SEED MIX.
11. TWO INCH (2") DEEP, FINELY SHREDDED BARK MULCH WILL BE INSTALLED AROUND ALL TREES AND SHRUBS THAT ARE ISOLATED FROM GROUNDCOVER AREAS AND GENERAL SHRUB MASSES.
12. ALL PLANT MATERIAL SHALL BE INSPECTED BY THE LANDSCAPE ARCHITECT ON SITE PRIOR TO INSTALLATION. THE LANDSCAPE ARCHITECT WILL TAG ALL TREES AT THE NURSERY AND INSPECT THEM AFTER DELIVERY TO THE SITE. SEE SPECIFICATIONS FOR TAGGING, INSPECTION, AND ACCEPTANCE OF PLANT MATERIAL.
13. LANDSCAPE ARCHITECT SHALL CONFIRM PLANT LIST AND APPROVE SUBSTITUTIONS OF PLANT VARIETIES PRIOR TO ORDERING OF MATERIAL.
14. SOIL MIX: 1/3 PEAT MOSS, 1/3 SCREENED LOAM, 1/3 DEHYDRATED MANURE.
15. THE OWNER RESERVES THE RIGHT TO SUBSTITUTE PLANT SELECTIONS WITH PLANTS OF SIMILAR CHARACTERISTICS IF THE SPECIFIED PLANTS ARE NOT AVAILABLE IN ACCEPTABLE QUANTITIES OR CONDITIONS.

PLANTING LEGEND

	BOTANICAL NAME	COMMON NAME
PROPOSED NATIVE TREES (SIZE TO BE MINIMUM 1.5/2" CALIPER B&B)		
	AMELANCHIER SPP.	SHADBUSH
	MAGNOLIA VIRGINIANA	SWEETBAY MAGNOLIA
PROPOSED EVERGREENS		
	JUNIPERUS CHIN. 'HETZII COLUMNARIS'	HETZ COLUMNAR JUNIPER
COASTAL GREENWAY		
PROPOSED NATIVE SHRUBS		
	CLETHRA ALNIFOLIA	SWEET PEPPERBUSH
	ILEX GLABRA 'SHAMROCK'	INKBERRY
	ILEX VERTICILLATA 'WINTER RED'	WINTERBERRY
	ROSA VIRGINIANA	VIRGINIA ROSE
	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY
	VIBURNUM DENTATUM 'BLUE MUFFIN'	ARROWWOOD VIBURNUM
PROPOSED HERBACEOUS LAYER		
	ARCTOSTAPHYLOS UVA-URSI	BEARBERRY
	OSMUNDA CINNAMOMEA SMILAX SPP.	CINNAMON FERN
	PANICUM VIRGATUM	SWITCHGRASS
	THELYPTERIS NOVEBORACENSIS	NEW YORK FERN
	ARCTOSTAPHYLOS UVA-URSI	BEARBERRY
	SCHIZACHYRIUM SCOPARIUM	LITTLE BLUESTEM
PROPOSED ORNAMENTAL MIX		
	HYDRANGEAS	
	GRASSES	
	PERENNIALS	
LAWN		

0 20 40 100 N

GENERAL NOTES

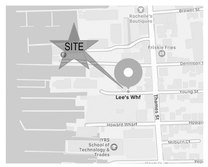
1. THE CONTRACTOR SHALL VERIFY ALL EXISTING CONDITIONS AND UTILITIES AND REPORT ANY DISCREPANCIES TO THE LANDSCAPE ARCHITECT.
2. IT IS THE CONTRACTORS RESPONSIBILITY TO VERIFY THE LOCATION OF ALL UTILITIES BY NOTIFYING DIG-SAFE AT 1-800-322-4844 AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION.
3. THE CONTRACTOR SHALL CONDUCT PRELIMINARY INVESTIGATIONS INCLUDING ALL NECESSARY EXCAVATION TO DETERMINE IF THE WORK CAN BE DONE AS SHOWN ON THE PLANS. CHANGES MAY BE MADE AS REQUIRED BY FIELD CONDITIONS AND AS DIRECTED BY THE LANDSCAPE ARCHITECT.
4. ALL EXISTING UTILITIES MAY NOT BE SHOWN ON THE DRAWING. THE CONTRACTOR SHALL ASSUME RESPONSIBILITY FOR DETERMINING THE EXACT LOCATION, SIZE, AND TYPE OF ALL UNDERGROUND UTILITIES AND FOR PROTECTING ALL LINES DURING CONSTRUCTION.
5. ALL WORK SHALL COMPLY WITH ALL APPLICABLE STATE AND LOCAL REGULATIONS.

verde

VERDE DESIGN + HORTICULTURE
89 DR MARCUS WHEATLAND BLVD
NEWPORT RI 02840

O. 401 619-0562
verdegardenri@gmail.com

ENGINEER
NORTHEAST ENGINEERS & CONSULTANTS, INC.
55 JOHN CLARKE ROAD
MIDDLETOWN RI
401 849 0810



LOCUS MAP

LEE'S WHARF HOTEL

LEE'S WHARF
NEWPORT, RI

REGISTERED LANDSCAPE ARCHITECT
PAMELA S. ROGERS
NO. 602
PROFESSIONAL LANDSCAPE ARCHITECT

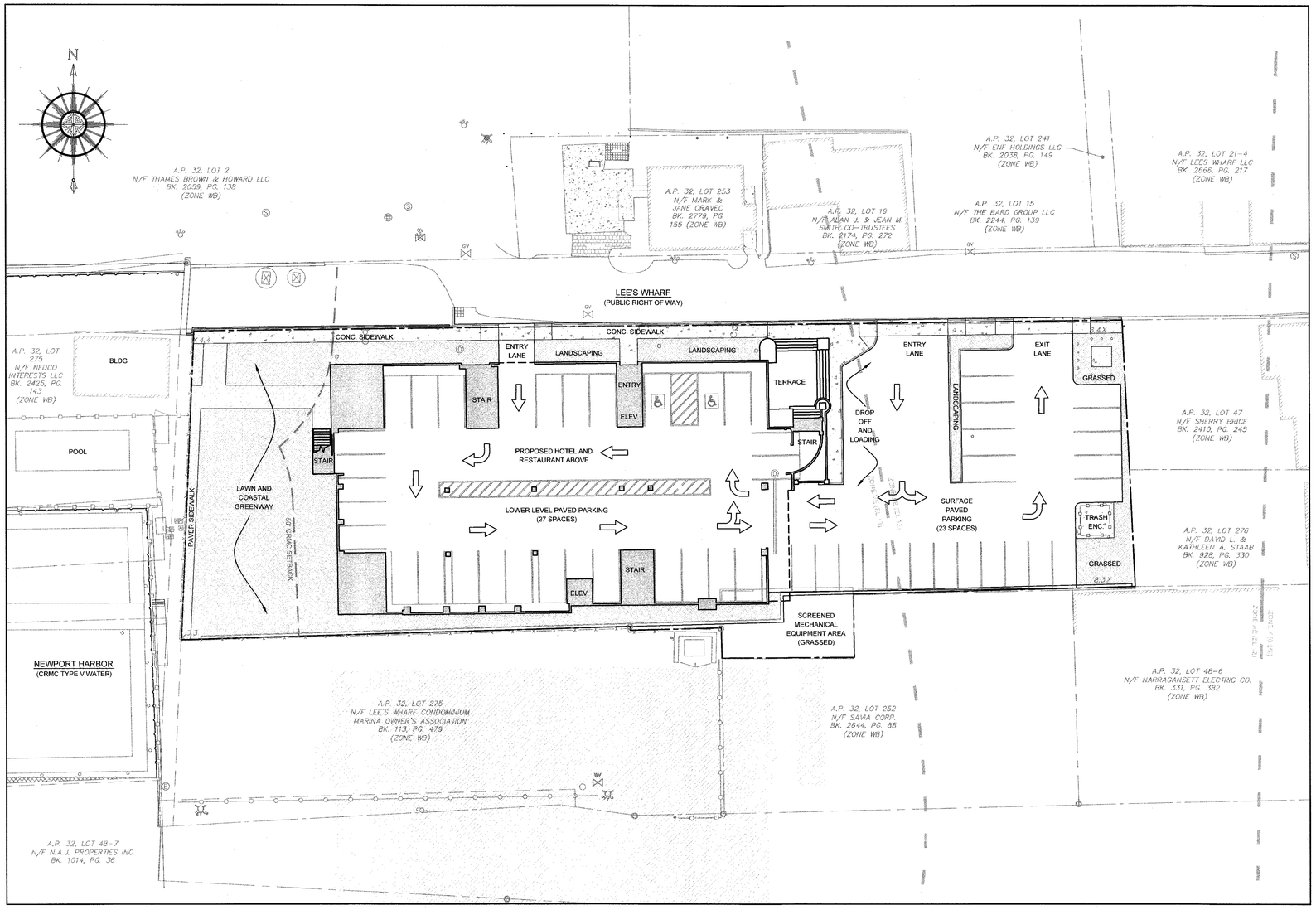
PROJECT NUMBER:	20.011
DRAWN BY:	KD
CHECKED BY:	PR
SCALE:	1"=20'-0"
DATE:	02.21.2020

LANDSCAPE PLAN

L1.0

MANCHESTER HOUSE

PROPOSED HOTEL AND RESTAURANT
ASSESSOR'S PLAT 32 LOT 314
24 LEE'S WHARF / 5 HOWARD WHARF
NEWPORT, RHODE ISLAND



SITE PLAN

SCALE = 1"=20'

CIVIL ENGINEER: NORTHEAST ENGINEERS & CONSULTANTS, INC.

SITE/CIVIL
LAND PLANNING
WATERFRONT
SURVEYING
GEOTECHNICAL
ENVIRONMENTAL
TRANSPORTATION
STRUCTURAL
MATERIALS TESTING

A KNOWLEDGE CORPORATION

6 VALLEY ROAD MIDDLETOWN RI 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

ENGINEER CERTIFICATION

OWNER:

HOWARD WHARF, LP
c/o SILVA, THOMAS, MARTLAND & OFFENBERG, LTD
1100 AQUIDNECK AVENUE
MIDDLETOWN, RI 02842

LANDSCAPE ARCHITECT:

VERDE DESIGN & HORTICULTURE
89 DR. MARCUS WHEATLAND BLVD
NEWPORT, RI 02840

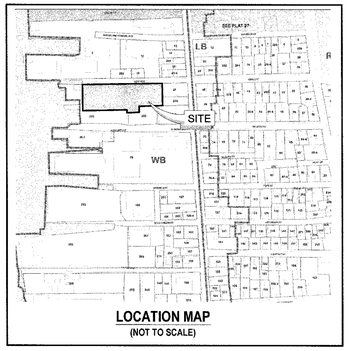
JULY 6, 2020 PERMIT SET

PLAN INDEX

SITE/CIVIL ENGINEERING PLANS

PLANS BY OTHERS

STATE MAP
(NOT TO SCALE)



LOCATION MAP
(NOT TO SCALE)

SUBMISSION AND REVISION SUMMARY

AGENCY OR REVISION	DATE:	COMMENTS:
CITY OF NEWPORT	FEB 24, 2020	DEVELOPMENT PLAN REVIEW
CITY OF NEWPORT	MAR 19, 2020	DEVELOPMENT PLAN REVIEW
CITY OF NEWPORT	MAY 6, 2020	DEVELOPMENT PLAN REVIEW
CITY OF NEWPORT	MAY 19, 2020	DEVELOPMENT PLAN REVIEW
CITY OF NEWPORT	JULY 6, 2020	DEVELOPMENT PLAN REVIEW

GENERAL NOTES

1. EXISTING CONDITIONS ARE THE RESULT OF A FIELD SURVEY BY NORTHEAST ENGINEERS & CONSULTANTS, INC. IN JULY 2019.
2. VERTICAL DATUM NAVD88. CONVERSION TO MEAN SEA LEVEL: [MSL = NAVD88 - 0.30]
3. SUBJECT PROPERTY IS ZONED WB (WATERFRONT BUSINESS). ABUTTING PROPERTIES ARE ALSO ZONED WB.
4. NORTH ARROW BASED ON RTK/GNSS OBSERVATION.
5. SOIL EVALUATION PERFORMED BY A LICENSED CLASS IV EVALUATOR ON DECEMBER 27, 2019. SOIL INFORMATION SHOWN WAS TAKEN FROM THE USDA NATURAL RESOURCES CONSERVATION SERVICE SOIL SURVEY. THE PREDOMINATE SOIL TYPE PRESENT ON SITE IS Ur (URBAN LAND).
6. PROPERTY IS LOCATED WITH IN A FEMA ZONE "VE" (EL. 13) AND ZONE "AE" (EL 12) PER FEMA FIRM 44005C0177J, MAP EFFECTIVE SEPTEMBER 4, 2013.
7. THE CONTRACTOR SHALL VERIFY THE PROPOSED LAYOUT AND DETAILS WITH THEIR RELATIONSHIP TO THE EXISTING SITE SURVEY. CONTRACTOR SHALL ALSO VERIFY ALL DIMENSIONS, SITE CONDITIONS AND MATERIAL SPECIFICATIONS AND SHALL NOTIFY THE OWNER AND ENGINEER OF ANY ERRORS, OMISSIONS OR DISCREPANCIES BEFORE COMMENCING WORK.
8. THE UNDERGROUND UTILITIES KNOWN TO EXIST BY THE ENGINEER FROM HIS SEARCH OF RECORDS ARE INDICATED ON THE PLANS. CONTRACTOR SHALL VERIFY THE LOCATIONS AND DEPTHS OF THE FACILITIES AND EXERCISE PROPER CARE IN EXCAVATING IN THE AREA. ALL DAMAGED PORTIONS SHALL BE REPLACED IN ACCORDANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AFFECTED UTILITY COMPANY AND SHALL BE THE CONTRACTOR'S RESPONSIBILITY. PERSONAL INJURY RESULTING FROM CONTACT WITH EXISTING UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY. WHEREVER CONNECTION OF NEW UTILITIES TO EXISTING UTILITIES ARE SHOWN ON THE PLANS, THE CONTRACTOR SHALL EXPOSE THE EXISTING LINES AT THE PROPOSED CONNECTIONS TO VERIFY THEIR LOCATIONS AND DEPTHS PRIOR TO EXCAVATION FOR NEW LINES. (PLEASE CALL DIG SAFE PRIOR TO CONSTRUCTION AT 1-888-DIG-SAFE AND ALL LOCAL UTILITY COMPANIES.)
9. THE CONTRACTOR SHALL NOTIFY ALL AGENCIES TO VERIFY THE ACTUAL LOCATIONS OF ALL UTILITIES IN THE PROJECT AREA PRIOR TO EXCAVATING.
10. THE CONTRACTOR SHALL RESTORE TO THEIR ORIGINAL CONDITION OR BETTER, ALL IMPROVEMENTS DAMAGED AS A RESULT OF THE CONSTRUCTION, INCLUDING PAVEMENTS, EMBANKMENTS, CURBS, SIGNS, LANDSCAPING, STRUCTURES, UTILITIES, WALLS, FENCES, ETC. UNLESS PROVIDED FOR SPECIFICALLY IN THE PROPOSAL.
11. CONTRACTOR SHALL EXERCISE EXTREME CAUTION TO PRESERVE STREET MONUMENTS.
12. STREET MONUMENTS THAT ARE DISTURBED SHALL BE RESTORED UNDER THE LICENSED LAND SURVEYOR'S DIRECTION. ANY NEW DATA SUCH AS ELEVATIONS SHALL BE CERTIFIED BY THE SURVEYOR, AND SUBMITTED TO THE CITY OF NEWPORT.
13. DEVIATIONS OR CHANGES FROM THESE PLANS WILL NOT BE ALLOWED UNLESS APPROVED BY THE PROJECT ENGINEER, APPROPRIATE AGENCY AND OWNER.
14. RELOCATION OF ANY UTILITIES SHALL BE AT THE OWNERS EXPENSE AND BE COMPLETED WITH THE UTILITY WORK. THE OWNER SHALL BE NOTIFIED AS TO THE RELOCATION REQUIRED PRIOR TO THE START OF CONSTRUCTION.
15. AN APPROVED SET OF PLANS AND ALL APPLICABLE PERMITS MUST BE AVAILABLE AT THE CONSTRUCTION SITE AT ALL TIMES.
16. CONTRACTOR AGREES THAT HE/SHE SHALL ASSUME SOLE AND COMPLETE RESPONSIBILITY FOR JOB SITE CONDITIONS DURING THE COURSE OF THE CONSTRUCTION OF THIS PROJECT, INCLUDING SAFETY OF ALL PERSONS AND PROPERTY; THAT THIS REQUIREMENT SHALL APPLY CONTINUOUSLY AND NOT TO BE LIMITED TO NORMAL WORKING HOURS; AND THAT THE CONTRACTOR SHALL DEFEND, INDEMNIFY AND HOLD THE OWNER AND THE ENGINEERS HARMLESS FROM ANY AND ALL LIABILITY, REAL AND ALLEGED, IN CONNECTION WITH THE PERFORMANCE OF WORK ON THIS PROJECT, EXCEPTING FOR LIABILITY ARISING FROM "THE SOLE NEGLIGENCE OF THE OWNER OR PROJECT ENGINEER."
17. ALL TRAFFIC CONTROL SHALL CONFORM TO THE MANUAL FOR UNIFORM TRAFFIC CONTROL DEVICES LATEST EDITION INCLUDING ALL REVISIONS.
18. THE PROPOSED DEVELOPMENT DOES NOT LIE IN ANY OF THE FOLLOWING AREAS:

    - NATURAL HERITAGE AREAS (RIDEM)
    - GROUNDWATER AQUIFERS, STATE DESIGNATED "GROUNDWATER RESERVOIRS", RECHARGE AREAS, OR WELLHEAD PROTECTION AREAS

19. PROJECT REQUIRES APPROVAL BY THE COASTAL RESOURCES MANAGEMENT COUNCIL.
20. TOTAL PROJECT DISTURBANCE IS LESS THAN ONE (1) ACRE OF LAND. REVIEW BY RIDEM RIPDES IS NOT REQUIRED.

GRADING NOTES

1. ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SURFACE WATERS FROM DAMAGING THE CUT FACE OF AN EXCAVATION OR THE SLOPED SURFACES OF A FILL. FURTHERMORE, ADEQUATE PROVISIONS SHALL BE MADE TO PREVENT SEDIMENT RUNOFF FROM LEAVING THE SITE.
2. ALL GRADED AREAS SHALL BE SODDED OR PLANTED IMMEDIATELY AFTER THE GRUBBING WORK HAS BEEN COMPLETED.
3. THE CITY SHALL BE INFORMED OF THE LOCATION OF THE DISPOSAL SITE, IF ANY, FOR THE PROJECT.
4. NO GRADING WORK SHALL BE DONE ON SATURDAYS, SUNDAYS AND HOLIDAYS AT ANY TIME WITHOUT PRIOR NOTICE TO THE MUNICIPALITIES, PROVIDED SUCH GRADING WORK IS ALSO IN CONFORMANCE WITH THE COMMUNITY NOISE CONTROL STANDARDS.
5. THE LIMITS OF DISTURBANCE SHALL BE FLAGGED BEFORE THE COMMENCEMENT OF THE GRADING WORK.
6. ALL GRADING OPERATIONS SHALL BE PERFORMED IN CONFORMANCE WITH THE APPLICABLE PROVISIONS OF THE DEPARTMENT OF ENVIRONMENTAL MANAGEMENT AND THE MUNICIPALITY.
7. WHERE APPLICABLE AND FEASIBLE THE MEASURES TO CONTROL EROSION AND OTHER POLLUTANTS SHALL BE IN PLACE BEFORE GRADING WORK IS INITIATED.
8. TEMPORARY EROSION CONTROLS SHALL NOT BE REMOVED BEFORE PERMANENT EROSION CONTROLS ARE IN-PLACE AND ESTABLISHED.
9. IF THE GRADING WORK INVOLVES CONTAMINATED SOIL, THEN ALL GRADING WORK SHALL BE DONE IN CONFORMANCE WITH APPLICABLE STATE AND FEDERAL REQUIREMENTS.
10. NONCOMPLIANCE TO ANY OF THE ABOVE REQUIREMENTS SHALL MEAN IMMEDIATE SUSPENSION OF ALL WORK, AND REMEDIAL WORK SHALL COMMENCE IMMEDIATELY. ALL COSTS INCURRED SHALL BE BILLED TO THE VIOLATOR. FURTHERMORE, VIOLATORS SHALL BE SUBJECTED TO ADMINISTRATIVE, CIVIL AND/OR CRIMINAL PENALTIES.

UTILITY NOTES

1. THE LOCATION OF PROPOSED ELECTRICAL CONNECTION TO THE EXISTING OVERHEAD SERVICE ALONG LEE'S WHARF IS PRELIMINARY. THE LOCATION OF UNDERGROUND CONDUIT FROM THE OVERHEAD LINES ALONG LEE'S WHARF TO STRUCTURES LOCATED TO THE SOUTH OF THE PROPERTY IS LIKEWISE PRELIMINARY. FINAL DESIGN OF THE ELECTRICAL SERVICES IS SUBJECT TO DESIGN REVIEW AND APPROVAL OF NATIONAL GRID.
2. THE PROPOSED WATER SERVICE REQUIRES THE REVIEW AND APPROVAL OF THE NEWPORT WATER DEPARTMENT.
3. NEW ELECTRIC, TELEPHONE AND CABLE SERVICES SHALL BE INSTALLED UNDERGROUND.
4. THE PROPOSED SEWER SERVICE SUBJECT TO REVIEW AND APPROVAL BY THE NEWPORT DEPARTMENT OF UTILITIES. IF IT IS DETERMINED THAT THE EXISTING SEWER PUMP STATION DOES NOT HAVE THE CAPACITY TO CONVEY WASTEWATER FROM THE SITE, A NEW PRIVATE PUMP STATION WILL BE REQUIRED.
5. THE CONTRACTOR SHALL BE SOLELY RESPONSIBLE FOR ALL ASSUMPTIONS, DEDUCTIONS, OR CONCLUSIONS HE/SHE MAY MAKE OR DERIVE FROM THE SUBSURFACE INFORMATION OR DATA FURNISHED ON THE PLANS. THE CONTRACTOR MUST SATISFY HIMSELF/HERSELF THROUGH HIS/HER OWN INVESTIGATIONS AS TO WHAT SUBSURFACE CONDITIONS ARE TO BE ENCOUNTERED.
6. IF THE CONTRACTOR ELECTS NOT TO EXPOSE AND VERIFY ALL EXISTING UNDERGROUND UTILITIES AND STRUCTURES AT CROSSINGS PRIOR TO PIPELINE EXCAVATION, HE/SHE FORFEITS HIS/HER RIGHTS FOR ANY CLAIMS FOR COMPENSATION CAUSED BY ANY CONFLICTS WITH EXISTING UTILITIES AND STRUCTURES.
7. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROPER DISPOSAL OF ALL EFFLUENT ASSOCIATED WITH THE CONSTRUCTION ACTIVITY AND THE DISINFECTION AND HYDROTESTING OPERATIONS TO SAFEGUARD PUBLIC HEALTH AND SAFETY IN ACCORDANCE WITH APPLICABLE DEPARTMENT OF HEALTH REQUIREMENTS. ALL PERMITS AND LICENSES FOR CONSTRUCTION WATER DISPOSAL, INCLUDING ALL APPLICATIONS, CHARGES, FEES, AND TAXES, ARE THE RESPONSIBILITY OF THE CONTRACTOR.

DRAINAGE NOTES

1. ALL DRAIN PIPES ON SITE SHALL BE ADS-N12 TYPE IB OR SCH40 PVC UNLESS OTHERWISE NOTED ON THESE PLANS.
2. ALL DRAIN BASINS SHALL BE NYLOPLAST ADS DRAIN BASINS AS INDICATED ON THE DETAIL SHEETS UNLESS OTHERWISE NOTED ON THESE PLANS.
3. HOTEL AND RESTAURANT ROOFTOP SHALL BE DIRECTLY CONNECTED INTO THE PROPOSED DRAINAGE PIPING SYSTEM AS SHOWN ON THE PLANS

PUBLIC HEALTH SAFETY AND CONVENIENCE NOTES

1. CONTRACTOR SHALL OBSERVE AND COMPLY WITH ALL FEDERAL, STATE, AND LOCAL LAWS REQUIRED FOR THE PROTECTION OF PUBLIC HEALTH, SAFETY AND ENVIRONMENTAL QUALITY.
2. THE CONTRACTOR AT HIS/HER EXPENSE, SHALL KEEP THE PROJECT AREA AND SURROUNDING AREA FREE FROM RUBBISH, DUST, NOISE, EROSION, ETC. THE WORK SHALL BE DONE IN CONFORMANCE WITH THE AIR AND WATER POLLUTION CONTROL STANDARDS AND REGULATIONS OF ALL APPLICABLE FEDERAL, STATE AND LOCAL AGENCIES..
3. NO CONTRACTOR SHALL PERFORM ANY CONSTRUCTION OPERATION SO AS TO CAUSE FALLING ROCKS, SILT OR DEBRIS IN ANY FORM TO FALL, SLIDE OR FLOW ONTO ADJOINING PROPERTIES, STREETS OR NATURAL WATERCOURSES. SHOULD SUCH VIOLATIONS OCCUR, THE CONTRACTOR MAY BE CITED AND THE CONTRACTOR SHALL IMMEDIATELY MAKE ALL REMEDIAL ACTIONS AS NECESSARY.
4. THE CONTRACTOR SHALL PROVIDE, INSTALL AND MAINTAIN ALL NECESSARY SIGNS, LIGHTS, FLARES, BARRICADES, MARKERS, CONES, AND OTHER PROTECTIVE FACILITIES AND SHALL TAKE ALL NECESSARY PRECAUTIONS FOR THE PROTECTION, CONVENIENCE AND SAFETY OF THE PUBLIC.

SOIL EROSION AND SEDIMENT CONTROL NOTES

1. CONSTRUCTION SEQUENCE:

A. DO NOT BEGIN CONSTRUCTION UNTIL ALL LOCAL, STATE, AND FEDERAL PERMITS HAVE BEEN APPLIED FOR AND RECEIVED.
B. ALL CONSTRUCTION VEHICLES SHALL ENTER AND LEAVE THE SITE VIA A PAVED ACCESS POINT. SHOULD THIS NO LONGER BE POSSIBLE AT ANY POINT DURING CONSTRUCTION, THE CONTRACTOR SHALL CONSTRUCT A SUPPLEMENTAL STABILIZED CONSTRUCTION ENTRANCE CONFORMING TO THE DETAIL PROVIDED.
C. INSTALL SILT FENCES, SILT SACKS, AND/OR FILTER SOCKS AS INDICATED ON THE DRAWINGS TO CONTROL EROSION AND PREVENT SEDIMENT CONTAMINATION OF DOWNSTREAM AREAS PRIOR TO ANY EARTH MOVING ACTIVITIES.
D. CONTRACTOR TO LOCATE ANY EXISTING SEWER AND WATER SERVICES TO EXISTING STRUCTURES. SERVICES SHALL BE DISCONNECTED AND MARKED IN THE FIELD FOR LATER USE OR REMOVAL.
E. DEMOLISH EXISTING STRUCTURE, WALLS, AND EXISTING PAVEMENT WITH THE EXCEPTION OF THE PAVED CONSTRUCTION ENTRANCE. REMOVE AND DISPOSE OF ALL MATERIAL AT A LICENSED OFF-SITE FACILITY.
F. RELOCATE UTILITY POLES IN COORDINATION WITH NATIONAL GRID.
G. ROUGH GRADE SITE AND LOWER LEVEL PER GRADING PLAN.
H. BEGIN CONSTRUCTION OF STRUCTURE.
I. CONSTRUCT PERIMETER RETAINING WALLS.
J. EXCAVATE FOR AND INSTALL DRAINAGE SYSTEM AND CONVEYANCE.
K. FINAL GRADE SITE AND INSTALL BINDER PAVEMENT COURSE. SET CURBING PER DETAIL PROVIDED.
L. REMOVE CONSTRUCTION SEDIMENTS FROM DRAINAGE SYSTEM.
M. INSTALL SUBSURFACE UTILITIES.
N. ENSURE THAT ROOFTOP DRAINAGE SYSTEMS FUNCTIONS AS NOTED.
O. TOP PAVEMENT COURSE AND MAINTAIN SITE IN ACCORDANCE WITH THE MAINTENANCE NOTES.

2. EARTHWORK NOTES:

A. DURING CONSTRUCTION AND THEREAFTER, EROSION CONTROL MEASURES ARE TO BE IMPLEMENTED AS NOTED. ONLY THE SMALLEST PRACTICAL AREA OF LAND SHOULD BE EXPOSED AT ANY ONE TIME DURING DEVELOPMENT. WHEN LAND IS EXPOSED DURING DEVELOPMENT, THE EXPOSURE SHOULD BE KEPT TO THE SHORTEST PRACTICAL PERIOD OF TIME.
B. AREA OF PROPOSED DRAINAGE SYSTEM SHALL NOT BE USED FOR STOCKPILES OR STORAGE OF MATERIALS OR EQUIPMENT.
C. ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY AND WHICH WILL BE REGRADED LATER DURING CONSTRUCTION SHALL BE STABILIZED WITHIN FOURTEEN DAYS IN ACCORDANCE WITH TEMPORARY MEASURES IN THE VEGETATIVE PRACTICE NOTES.
D. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED, AND STRIPPED OF TOP SOIL TO REMOVE VEGETATION, ROOTS, AND ANY OTHER OBJECTIONABLE MATERIAL.
E. ALL FILL SHALL BE COMPACTED TO 95% MAX. DENSITY TO REDUCE EROSION, SLIPPAGE, SETTLEMENT SUBSIDENCE, OR OTHER RELATED PROBLEMS.
F. FILL INTENDED TO SUPPORT BUILDING STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL CODES AND SPECIFICATIONS.
G. ALL FILL SHALL BE PLACED AND COMPACTED TO 95% MAX. DENSITY IN LAYERS NOT TO EXCEED 12" IN THICKNESS FILLS.
H. FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS, AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY FILLS.
I. FROZEN, SOFT, MUCKY, OR HIGHLY COMPRESSIBLE MATERIAL SHALL NOT BE INCORPORATED INTO FILLS.
J. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION SUBGRADE.
K. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE BROUGHT TO THE ATTENTION OF THE DESIGN ENGINEER.
L. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 14 DAYS OF FINISH GRADING IN ACCORDANCE WITH THE VEGETATIVE PRACTICE NOTES.
M. REMOVE TEMPORARY EROSION CONTROL MEASURES ONCE UPSLOPE AREAS HAVE BEEN PERMANENTLY STABILIZED AND VEGETATED AREAS HAVE RECEIVED TWO MOWINGS.

3. VEGETATIVE PRACTICE:

PERMANENT MEASURES:

A. SLOPES SHALL NOT BE STEEPER THAN 1 VERTICAL TO 3 HORIZONTAL UNLESS OTHERWISE SPECIFIED.
B. LOAM AND SEED REQUIREMENTS ARE SPECIFIED IN RIDOT L.01 & L.02.
C. A MINIMUM OF 4 INCHES OF LOAM SHALL BE INSTALLED. THE LOAM SHALL BE GRADED TO A SMOOTH CONDITION AND STONES AND OTHER OBJECTS LARGER THAN 2 INCHES SHALL BE REMOVED.

TEMPORARY MEASURES (FOR TEMPORARY PROTECTION OF DISTURBED AREAS)

D. LIMESTONE AND FERTILIZER SHALL BE APPLIED AT THE FOLLOWING RATE:
   LIMESTONE: 3 TONS/ACRE
   FERTILIZER: (10-10-10): 600 LBS/ACRE
E. SEED SHALL BE APPLIED AT THE FOLLOWING RATE:
   WINTER RYE: 100 LB/ACRE
F. STRAW MULCH SHALL BE APPLIED AT THE RATE OF 1.5 TONS/ACRE.

4. MAINTENANCE

DURING THE PERIOD OF CONSTRUCTION AND/OR UNTIL LONG TERM VEGETATION IS ESTABLISHED, THE EROSION CONTROL MEASURES SHALL BE INSPECTED.

A. AT A MINIMUM THE SILT FENCING, STRAW BALES AND FILTER SOCK BARRIERS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. SEDIMENT TRAPPED BEHIND THE BARRIERS SHALL BE EXCAVATED WHEN IT REACHES A DEPTH OF 6" AND REGRADED ON THE SITE.
B. EROSION CONTROL BLANKETS SHALL BE INSPECTED ON A WEEKLY BASIS.
C. SILT SACKS SHALL BE INSPECTED AND REPAIRED ONCE A WEEK AND / OR IMMEDIATELY FOLLOWING A SIGNIFICANT RAINFALL OR SNOWMELT. DURING HEAVY RAIN EVENT, IT MAY BE NECESSARY TO TEMPORARILY REMOVE SACKS IN ORDER TO PREVENT FLOODING. SEDIMENT TRAPPED WITHIN SACKS SHALL BE DISPOSED OF OFF SITE AT A LICENSED FACILITY OR REGRADED ON THE SITE.
D. STONE RIPRAP SHALL BE INSPECTED MONTHLY FOR EXCESSIVE ACCUMULATION OF SEDIMENT. IT MAY BE NECESSARY TO REMOVE STONES, EXCAVATE SEDIMENT, AND REPLACE STONES.
E. IF INSTALLED, THE STABILIZED CONSTRUCTION ENTRANCE SHALL BE REMOVED PRIOR TO PAVING. DURING CONSTRUCTION THE ENTRANCE SHALL BE INSPECTED WEEKLY, AND RE-ESTABLISHED AS NECESSARY.
F. SEEDED AREAS WILL BE FERTILIZED AND RESEEDED AS NECESSARY TO INSURE ESTABLISHMENT OF A VEGETATIVE GROWTH THAT MEETS THE APPROVAL OF THE CITY ENGINEER.

STORMWATER MAINTENANCE NOTES

1. UNDERGROUND SAND FILTER MAINTENANCE:

1.1. GRASSES SHALL BE PLANTED OVER SYSTEM TO STABILIZE THE GROUND AND PREVENT EROSION.

1.2. THE FILTER SHOULD BE INSPECTED FOLLOWING AT LEAST THE FIRST TWO PRECIPITATION EVENTS OF AT LEAST 1.0 INCH TO ENSURE THAT THE SYSTEM IS FUNCTIONING PROPERLY. THEREAFTER, THE FILTER SHOULD BE INSPECTED AT LEAST ANNUALLY AND AFTER STORM EVENTS OF GREATER THAN OR EQUAL THE 1-YEAR, 24-HOUR TYPE III PRECIPITATION EVENT (2.8 INCHES). SHOULD THE AVERAGE DEPTH OF SEDIMENT EXCEED 1 INCH AT THE BOTTOM OF THE CHAMBERS, THE SEDIMENT SHALL BE REMOVED AND DISPOSED OF IN A MANNER CONSTANT WITH THE MANDATES OF THE RIDEM. THE PRESENCE OF EXCESSIVE SEDIMENTS MAY INDICATE A FAILURE IN THE ROOF LEADER SYSTEM OR THE MANIFOLD PIPING. OWNER SHOULD CONSULT A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE CAUSE OF THE FAILURE AND THE BEST COURSE OF ACTION TO CORRECT THE ISSUE.

1.3. THE FOLLOWING SHALL ALSO BE COMPLETED WHEN NECESSARY:
1.3.1. SILT/SEDIMENT SHOULD BE REMOVED FROM THE CHAMBERS ANNUALLY, WHEN ACCUMULATION EXCEEDS 1 INCH, OR WHEN THE FILTERING CAPACITY DIMINISHES SUBSTANTIALLY. IF STANDING WATER IS OBSERVED MORE THAN 48 HOURS AFTER A STORM EVENT, THEN THE SYSTEM MUST BE EXCAVATED AND THE TOP 6 INCHES OF SAND SHOULD BE REMOVED AND REPLACED. IF DISCOLORED OR CONTAMINATED MATERIAL IS FOUND BELOW THIS REMOVED SURFACE THEN THAT MATERIAL SHOULD ALSO BE REMOVED AND REPLACED UNTIL ALL CONTAMINATED SAND HAS BEEN REMOVED FROM THE FILTER MEDIA. THE SAND SHOULD BE DISPOSED OF IN ACCORDANCE WITH ALL APPLICABLE REGULATIONS. THE CHAMBERS SHALL BE RE-INSTALLED ACCORDING TO THE ORIGINAL DESIGN PLANS.

2. CONVEYANCE STRUCTURE MAINTENANCE:

2.1. ALL INLET / OUTFLOW PIPES ARE TO BE INSPECTED AT LEAST THREE TIMES IN THE FIRST SIX MONTHS OF OPERATION. EVIDENCE OF CLOGGING, OR RAPID RELEASE OF FLOW SHALL BE REPORTED TO THE PROJECT ENGINEER AND REMEDIED IMMEDIATELY.

2.2. CONVEYANCE STRUCTURES SHOULD BE INSPECTED QUARTERLY. ANY STRUCTURAL FAULTS SHOULD BE REPAIRED AS NECESSARY FOR PROPER FUNCTION OF THE STRUCTURE. CATCH BASIN SUMPS SHALL BE VACUUMED OUT ANNUALLY OR EACH TIME 50% OF THE AVAILABLE STORAGE HAS BEEN DEPLETED.

2.3. ROOF RUNOFF STRUCTURES SUCH AS GUTTERS AND DOWNSPOUTS SHOULD BE CLEAN AND FREE OF OBSTRUCTIONS THAT REDUCE FLOW. A REGISTERED PROFESSIONAL ENGINEER SHOULD BE CONSULTED IF NECESSARY TO DETERMINE WHETHER A STRUCTURE HAS BEEN COMPROMISED.

2.4. SEDIMENTS SHALL REMOVED FROM STRUCTURES ON A BIANNUAL BASIS.

3. THE PARKING LOT IS TO BE SWEPT USING A VACUUM TRUCK TWICE A YEAR.
4. UPON COMPLETION OF THE CONSTRUCTION, MAINTENANCE OF THE STORMWATER SYSTEM SHALL BECOME THE RESPONSIBILITY OF THE OWNER. REFER TO THE STORMWATER OPERATIONS AND MAINTENANCE DOCUMENT.
5. MAINTENANCE OF THE STORMWATER SYSTEM DURING CONSTRUCTION OF THE PROJECT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR.

ABBREVIATIONS

AC	ASPHALT PAVEMENT
ADJ	ADJACENT
AP	ASSESSOR'S PLAT
ACCESS	ACCESSIBLE
ARCH	ARCHITECT
BC	BOTTOM OF CURB
BH	BORING HOLE
BIT	BITUMINOUS
BOW	BOTTOM OF WALL
CLR	CLEARANCE
CMP	CORRUGATED METAL PIPE
CMU	CONCRETE MASONRY UNIT
CONC	CONCRETE
CONN	CONNECT
COTG	CLEAN OUT TO GRADE
CF	CUBIC FOOT
DEMO	DEMOLISH
DI	DRAIN INLET
DIA	DIAMETER
DMH	DRAIN MANHOLE
dp	DROP PIPE
DS	DOWN SPOUT
DWG	DRAWING
E	ELECTRIC
ELEV/EL	ELEVATION
EMH	ELECTRIC MANHOLE
EOP	EDGE OF PAVEMENT
EQ	EQUAL
EXIST	EXISTING
EXP	EXPANSION
FFE	FINISH FLOOR ELEVATION
FG	FINISHED GRADE
FH	FIRE HYDRANT
FT	FEET
G	GAS
GAL	GALLON
GV	GATE VALVE
INV	INVERT
JT	JOINT
L	LENGTH
LAND	LANDSCAPE
NTS	NOT TO SCALE
MAX	MAXIMUM
MECH	MECHANICAL
MIN	MINIMUM
PAV'T	PAVEMENT
PVC	POLYVYNILCHLORIDE
R	RADIUS
RC	REINFORCED CONCRETE
RECONN	RECONNECT
RIHB	RHODE ISLAND HIGHWAY BOUND
RIDOT	RHODE ISLAND DEPARTMENT OF TRANSPORTATION
ROW	RIGHT OF WAY
S	SLOPE, SEWER
SF	SQUARE FEET
SHT	SHEET
SMH	SEWER MANHOLE
STA	STATION
STRUCT	STRUCTURAL
TC	TOP OF CURB
TOP	TOP OF SURFACE
TOW	TOP OF WALL
UGT	UNDERGROUND TELEPHONE
TYP	TYPICAL
W	WATER
W	WITH
WWM	WELDED WIRE MESH

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No.	Revision	Date	App.
1	REVISED DRAINAGE	19MAR20	

Designed By: | Drawn by: JJR | Checked by: GES
Scale: N/A | Date: 21FEB20

Project Title:

MANCHESTER HOUSE
A.P. 32, LOT 314
24 LEES WHARF
NEWPORT, RHODE ISLAND

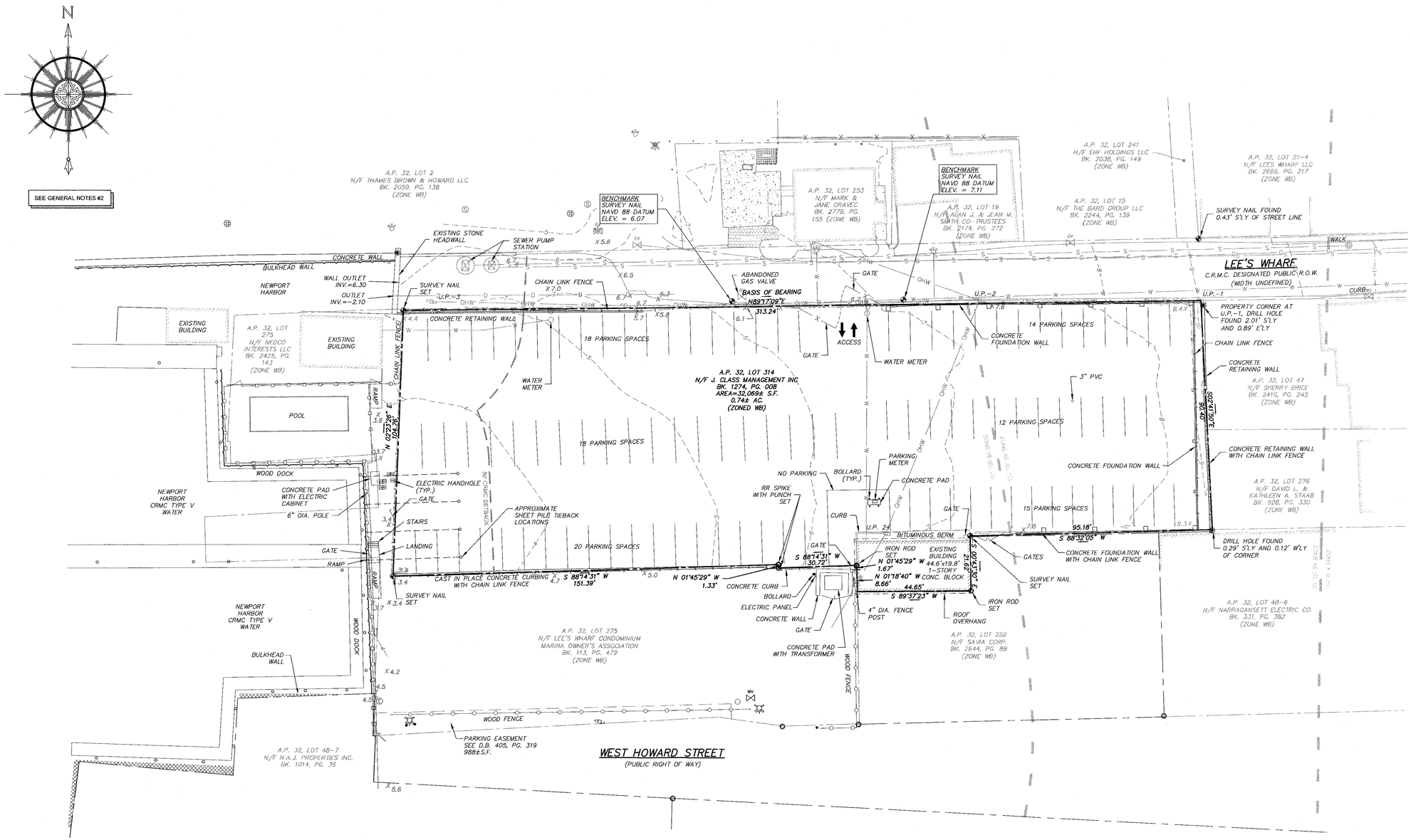
Client/Owner:
HOWARD WHARF, LP
c/o SILVA, THOMAS, MARTLAND & OFFENBERG
1100 AQUIDNECK AVE., MIDDLETOWN, RI 02842

Issued for:
PERMITTING

Drawing Title:
PROJECT NOTES

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL
1.7.21

Drawing Number: C-2
Sheet 2 of 10
Project Number: 19107.0
Survey Index: 14 - 32 - 314



LEGEND:

- PROPERTY LINE
- ABUTTER'S PROPERTY LINE
- TOPOGRAPHIC CONTOUR
- FEMA FLOOD ZONE BOUNDARY
- CHAIN LINK FENCE
- WOOD FENCE
- OVERHEAD WIRE
- GAS LINE
- SEWER LINE
- WATER LINE
- UTILITY POLE
- HYDRANT
- WATER GATE
- WATER SHUTOFF
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- GAS GATE
- IRON ROD/RAILROAD SPIKE
- SURVEY NAIL
- DRILL HOLE
- SPOT ELEVATION

GENERAL NOTES:

1. EXISTING CONDITIONS ARE THE RESULT OF A FIELD SURVEY BY NORTHEAST ENGINEERS & CONSULTANTS, INC. IN JULY 2019.
2. NORTH ARROW BASED ON RTK/GNSS OBSERVATION.
3. BASE OF ELEVATIONS IS NAVD88. CONVERSION TO MEAN SEA LEVEL: [MSL = NAVD88 - 0.30]
4. ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING PLANS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM ALL AVAILABLE INFORMATION. (PLEASE CONTACT DIGSAFE PRIOR TO CONSTRUCTION AT 1-888-344-7233, AND/OR ALL LOCAL UTILITY COMPANIES).
5. REFER TO SHEET C-2 FOR COMPLETE PROJECT NOTES.

GRAPHIC SCALE

20 0 10 20 40 80

(in feet)

1 INCH = 20 FEET

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No.	Revision	Date	App.
1	REVISED DRAINAGE	19MAR20	

Designed By:	Drawn by: JJR	Checked by:	GES
Scale: 1"=20'	Date:		21FEB20

Project Title:

MANCHESTER HOUSE
A.P. 32, LOT 314
LEES WHARF
NEWPORT, RHODE ISLAND

Client/Owner:

HOWARD WHARF LP
c/o SILVA, THOMAS, MARTLAND & OFFENBERG
1100 AQUIDNECK AVENUE, MIDDLETOWN, RI 02842

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EXISTING CONDITIONS PLAN

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

Drawing Number: C-3

Sheet 3 of 10

Project Number: 19107.0

Survey Index: 14 - 32 - 314

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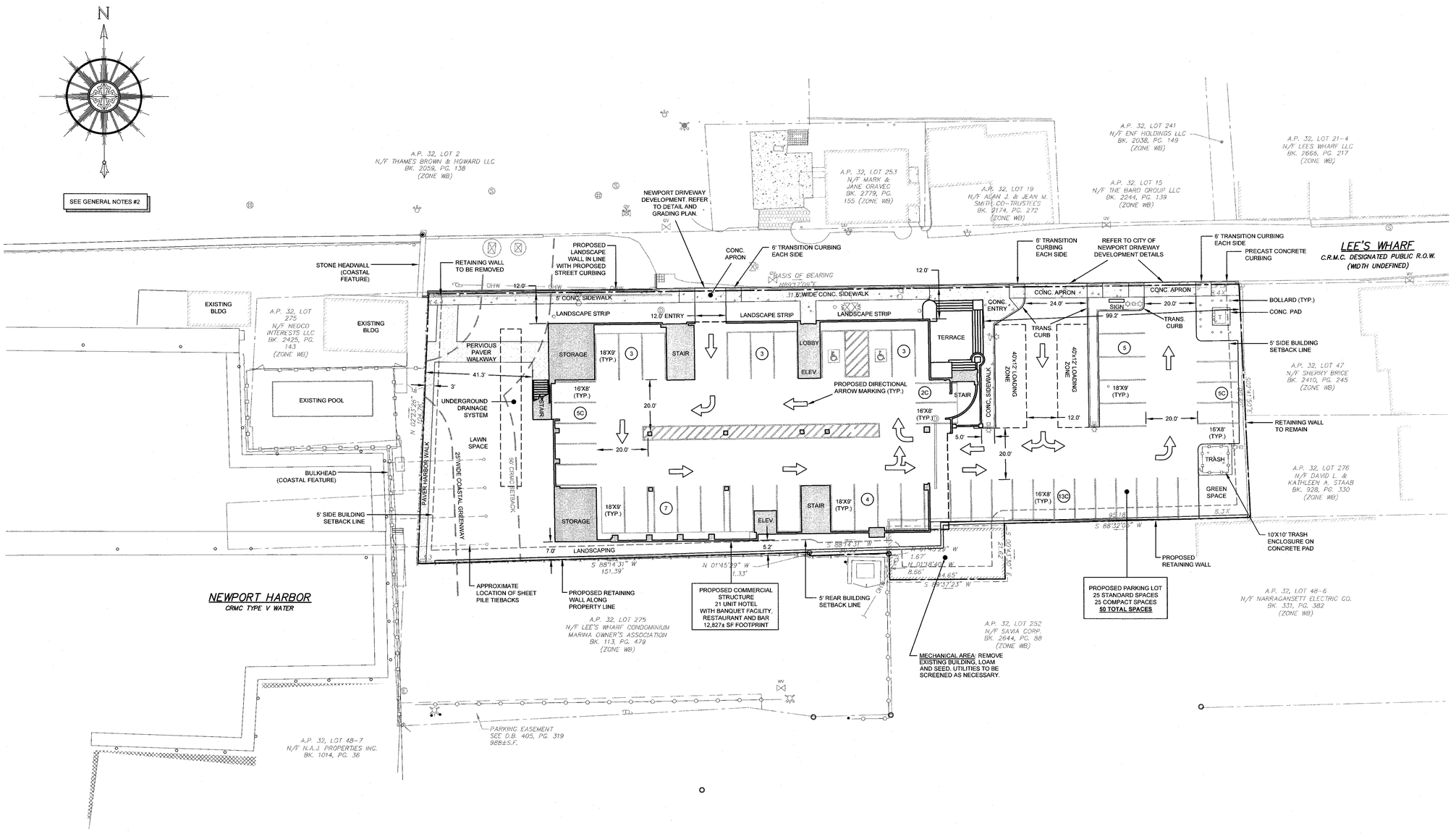

ZONING DATA: WB (WATERFRONT BUSINESS

	REQUIRED	PROPOSED
MINIMUM LOT AREA:	5,000 SF	32,069 SF
MINIMUM LOT WIDTH:	50 FT	313.24 FT
BUILDING SETBACKS:		
FRONT	0 FT	12.0 FT
SIDE	5 FT	41.3 / 101.2 FT
REAR	5 FT	5.0 FT
MAXIMUM BUILDING HEIGHT:	47 FT*	47 FT
MAXIMUM LOT COVERAGE:	40%	40%

* MAX BUILDING HEIGHT = FLOOD ELEVATION + 5 FT FREEBOARD
- AVG. EX. GRADE + MAX HEIGHT PER ZONING

= 13 FT + 5 FT - 6 FT + 35 FT = 47 FT

LEGEND:

- PROPERTY LINE
- ABUTTER'S PROPERTY LINE
- WOOD FENCE
- OHW — OVERHEAD WIRE
- UTILITY POLE
- HYDRANT
- WV — WATER GATE
- WATER SHUTOFF
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- GAS GATE

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5. REFER TO SHEET C-2 FOR COMPLETE PROJECT NOTES.

GRAPHIC SCALE

20 0 10 20 40 60

(in feet)

1 INCH = 20 FEET

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No.	Revision	Date	App.
5	REVISED BUILDING	06JUL20	
4	REVISED STAIR LOCATION	28MAY20	
3	REVISED DRAINAGE	24APR20	
2	MISC REVISIONS	31MAR20	
1	REVISED DRAINAGE	19MAR20	

Designed By: | Drawn by: JJR | Checked by: GES

Scale: 1"=20' | Date: 24FEB20

Project Title:

MANCHESTER HOUSE
A.P. 32, LOT 314
24 LEES WHARF
NEWPORT, RHODE ISLAND

Client/Owner:

HOWARD WHARF, LP
66 OCEAN AVENUE
NEWPORT, RI 02840

Issued for:

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Drawing Title:

PROPOSED LAYOUT PLAN

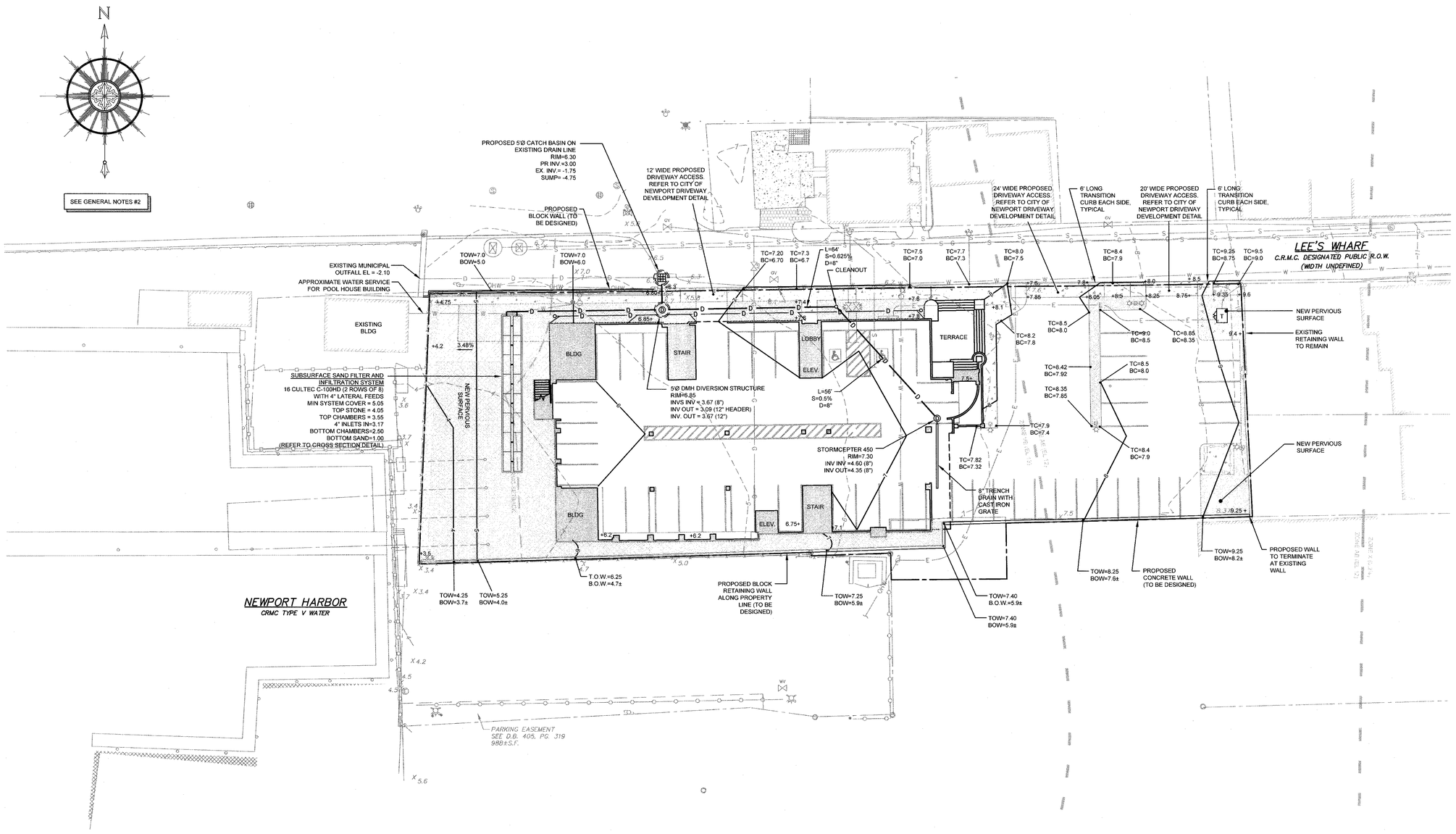
JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

Drawing Number: C-4

Sheet 4 of 10

Project Number: 19107.0

Survey Index: 14 - 32 - 314



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No.	Revision	Date	App.
4	REVISED BUILDING	06JUL20	
3	REVISED GRADING AND DRAINAGE	28MAY20	
2	REVISED DRAINAGE	24APR20	
1	REVISED DRAINAGE	19MAR20	

Designed By:	Drawn by: JJR	Checked by:	GES
Scale:	1"=20'	Date:	21FEB20

Project Title:

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A.P. 32, LOT 314
24 LEES WHARF
NEWPORT, RHODE ISLAND

Client/Owner:

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c/o SILVA, THOMAS, MARTLAND & OFFENBERG
1100 AQUIDNECK AVE., MIDDLETOWN, RI 02842

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GRADING AND DRAINAGE PLAN

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

Drawing Number: C-5

Sheet 5 of 10

Project Number: 19107.0

Survey Index: 14 - 32 - 314

LEGEND:

- PROPERTY LINE
- ABUTTER'S PROPERTY LINE
- TOPOGRAPHIC CONTOUR
- FEMA FLOOD ZONE BOUNDAI
- WOOD FENCE
- OHW — OVERHEAD WIRE
- G — GAS LINE
- S — SEWER LINE
- W — WATER LINE
- UTILITY POLE
- HYDRANT
- WV — WATER GATE
- WATER SHUTOFF
- CATCH BASIN
- DRAIN MANHOLE
- SEWER MANHOLE
- GAS GATE
- 5 — PROPOSED CONTOUR
- +7.0 PROPOSED SPOT ELEVATION
- D — PROPOSED DRAIN LINE

GENERAL NOTES:

1. EXISTING CONDITIONS ARE THE RESULT OF A FIELD SURVEY BY NORTHEAST ENGINEERS & CONSULTANTS, INC. IN JULY 2019.
2. NORTH ARROW BASED ON RTK/GNSS OBSERVATION.
3. BASE OF ELEVATIONS: NAVD88. CONVERSION TO MEAN SEA LEVEL: [MSL = NAVD88 - 0.30]
4. ALL UNDERGROUND UTILITIES SHOWN ON THIS PLAN HAVE BEEN LOCATED FROM FIELD SURVEY INFORMATION AND EXISTING PLANS. THE SURVEYOR MAKES NO GUARANTEE THAT THE UNDERGROUND UTILITIES SHOWN COMPRISE ALL SUCH UTILITIES IN THE AREA, EITHER IN SERVICE OR ABANDONED. THE SURVEYOR DOES NOT WARRANT THAT THE UNDERGROUND UTILITIES SHOWN ARE IN THE EXACT LOCATION INDICATED ALTHOUGH THEY ARE LOCATED AS ACCURATELY AS POSSIBLE FROM ALL AVAILABLE INFORMATION. (PLEASE CONTACT DIGSAFE PRIOR TO CONSTRUCTION AT 1-888-344-7233, AND/OR ALL LOCAL UTILITY COMPANIES).
5. REFER TO SHEET C-2 FOR COMPLETE PROJECT NOTES.

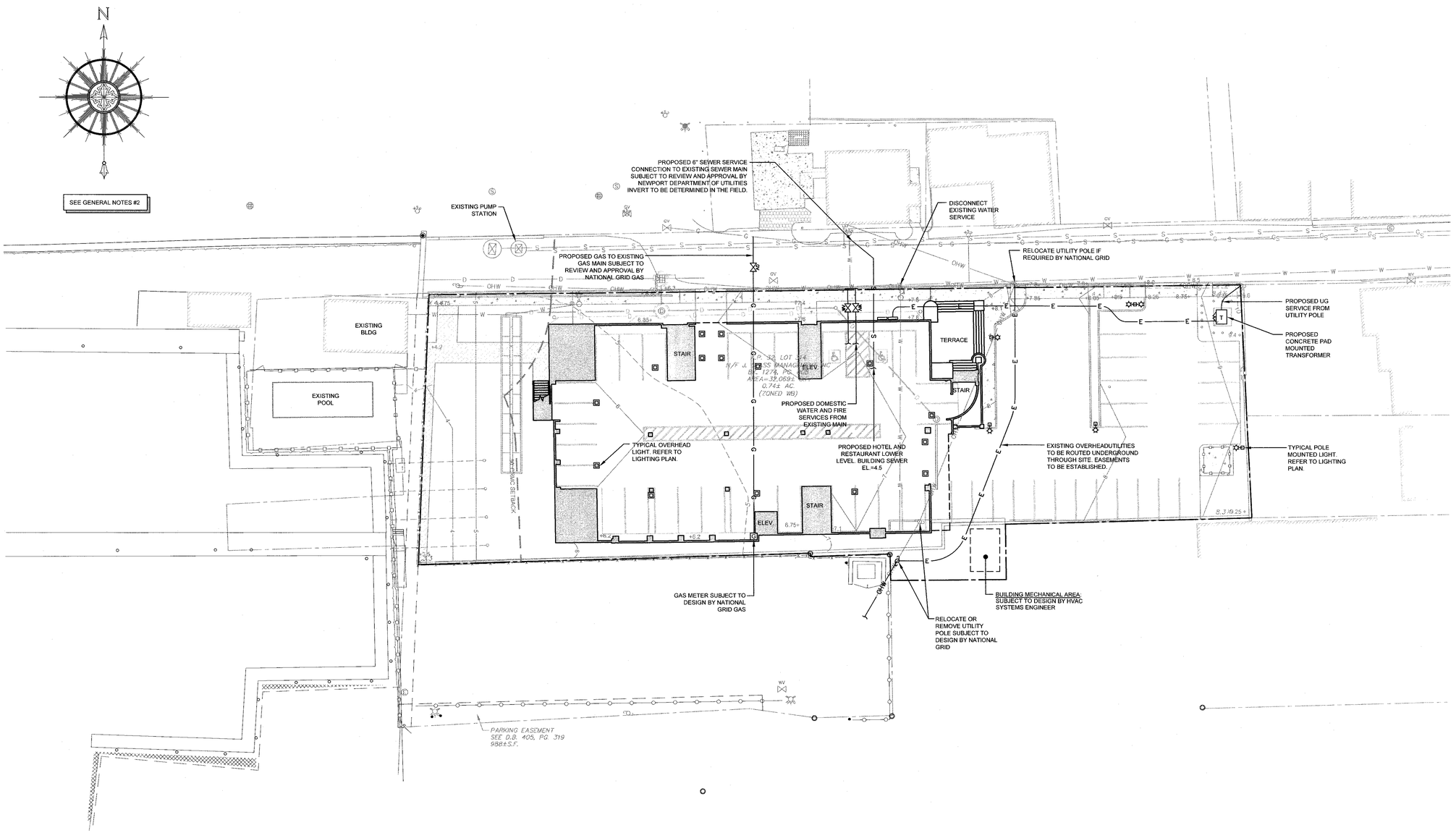
GRAPHIC SCALE

20 0 10 20 40 80

(in feet)

1 INCH = 20 FEET

P:\Projects\2019\19107 Cushing\Drawings\Current\PERMITTING\19107_GR.dwg



LEGEND:

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- SEWER MANHOLE
- GV — GAS GATE
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- +7.0 — PROPOSED SPOT ELEVATION
- PROPOSED DRAIN LINE
- E — PROPOSED UG ELEC CONDUIT
- OHW — PROPOSED OVERHEAD WIRE
- S — PROPOSED SEWER CONNECTION
- W — PROPOSED WATER SERVICES

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NORTHEAST ENGINEERS & CONSULTANTS, INC.

A KNOWLEDGE CORPORATION®

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM

SITE/CIVIL
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TRANSPORTATION
STRUCTURAL

No.	Revision	Date	App.
3	REVISED BUILDING	06JUL20	
2	ADD EXISTING WATER SERVICE	19MAY20	
1	REVISED DRAINAGE	19MAR20	

Designed By:	Drawn by: JJR	Checked by:	GES
Scale: 1"=20'	Date:	21FEB20	

Project Title:

MANCHESTER HOUSE
A.P. 32, LOT 314
24 LEES WHARF
NEWPORT, RHODE ISLAND

Client/Owner:

HOWARD WHARF, LP
c/o SILVA, THOMAS, MARTLAND & OFFENBERG
1100 AQUIDNECK AVE., MIDDLETOWN, RI 02842

Issued for:

PERMITTING

Drawing Title:

PROPOSED UTILITY PLAN

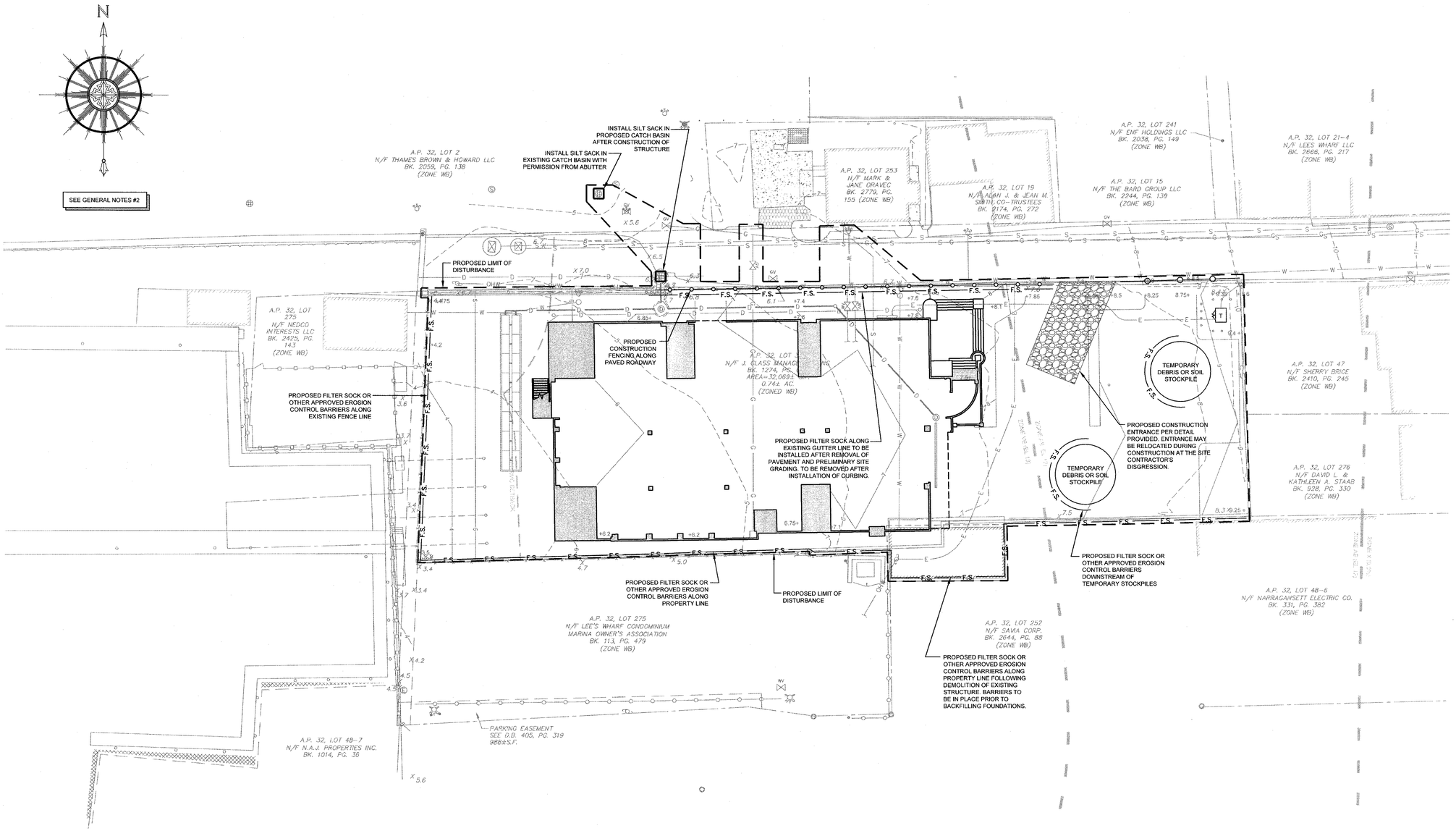
JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

Drawing Number: C-6

Sheet 6 of 10

Project Number: 19107.0

Survey Index: 14 - 32 - 314



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- F.S. — PROPOSED EROSION CONTROL BARRIER
- PROPOSED LIMIT OF DISTURBANCE
- PROPOSED CONSTRUCTION FENCING

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No.	Revision	Date	App.
3	REVISED BUILDING	06JUL20	
2	REVISED DRAINAGE	19MAY20	
1	REVISED DRAINAGE	19MAR20	

Designed By: | Drawn by: JJR | Checked by: GES

Scale: 1"=20' | Date: 21FEB20

Project Title:

MANCHESTER HOUSE
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Client/Owner:

HOWARD WHARF, LP
c/o SILVA, THOMAS, MARTLAND & OFFENBERG
1100 AQUIDNECK AVE., MIDDLETOWN, RI 02842

Issued for:

PERMITTING

Drawing Title:

SOIL EROSION AND SEDIMENT CONTROL PLAN

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

Drawing Number: C-7

Sheet 7 of 10

Project Number: 19107.0

Survey Index: 14 - 32 - 314

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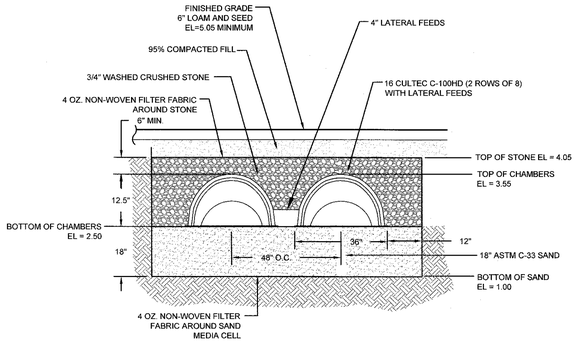
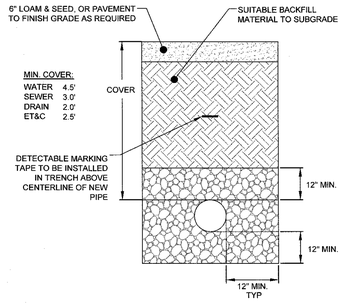


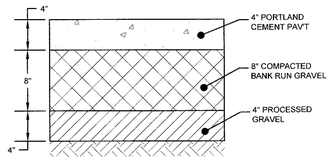
SUBSURFACE SAND FILTER SECTION
SCALE: NOT TO SCALE



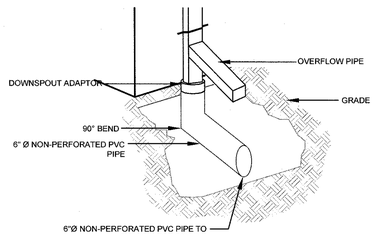
UTILITY TRENCH DETAIL
SCALE:NOT TO SCALE

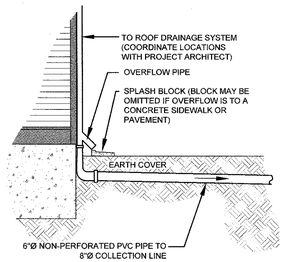
NOTES:

1. UNSUITABLE MATERIAL SHALL BE EXCAVATED TO A MINIMUM DEPTH OF 12-INCHES BELOW THE DESIGN INVERT ELEVATION.
2. TRENCH PROTECTION SHALL BE REQUIRED IN ACCORDANCE WITH OSHA REGULATIONS, AND AS OTHERWISE REQUIRED TO PROTECT UTILITIES, ROADWAYS, AND ADJACENT STRUCTURES.
3. SEWER AND DRAIN PIPES SHALL BE LAID BEGINNING AT THE DOWNSTREAM END OF THE PIPE LINE.
4. ALL PVC SEWER PIPES SHALL BE IPEX RING-TITE SDR 35, OR SIMILAR APPROVED.
5. ALL DRAIN PIPES SHALL BE ADS N-12 TYPE IB (SOILTIGHT) UNLESS OTHERWISE INDICATED.
6. ALL SEWER PIPE AND GASKETS SHALL CONFORM TO ASTM 3034 AND ASTM F679.
7. BACKFILL MATERIAL SHALL BE PLACED IN LAYERS NOT TO EXCEED 12" IN HEIGHT WHEN INSTALLED UNDER LANDSCAPED AREAS ONLY. INSTALLATIONS UNDER PAVEMENT REQUIRE BACKFILL MATERIAL TO BE PLACED IN LAYERS NOT TO EXCEED 6" IN HEIGHT. THESE LAYERS SHALL BE COMPACTED TO 95% MAXIMUM DENSITY (AASHTO T180). SUITABLE BACKFILL SHALL BE FREE OF LOAM, CLAY, ORGANIC MATTER AND PARTICLES LARGER THAN 2 INCHES IN DIAMETER.
8. SEWER AND DRAINAGE PIPE TRENCHES SHALL BE BEDDED WITH CRUSHED STONE OR SCREENED GRAVEL, THESE MATERIALS MUST CONFORM TO RIDOT STANDARD M.01.09 TYPE II MATERIAL.
9. WATER PIPE TRENCHES MUST BE BEDDED WITH SAND CONTAINING NO PARTICLES LARGER THAT 3/8". THIS MATERIAL MUST CONFORM TO AASHTO M6 REQUIREMENTS.
10. UTILITY INSTALLATIONS SHALL CONFORM TO ALL REQUIREMENTS OF THE CITY OF NEWPORT DEPARTMENT OF UTILITIES AND NEWPORT WATER RULES AND REGULATIONS.
11. WHEN TRENCH EXCAVATION IS ADJACENT TO OR UNDER EXISTING STRUCTURES OR FACILITIES, THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROPERLY SHEETING AND BRACING THE EXCAVATION AND STABILIZING THE EXISTING GROUND TO RENDER IT SAFE AND SECURE FROM POSSIBLE SLIDES, CAVE-INS AND SETTLEMENT AND FOR PROPERLY SUPPORTING EXISTING STRUCTURES AND FACILITIES WITH BEAMS, STRUTS OR UNDERPINNING TO FULLY PROTECT THEM FROM DAMAGE.

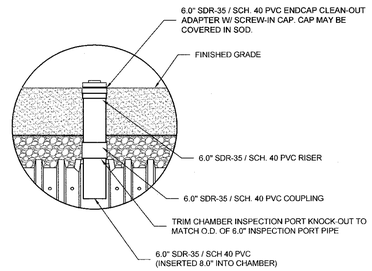


TYPICAL CONCRETE WALKWAY
SCALE: NOT TO SCALE

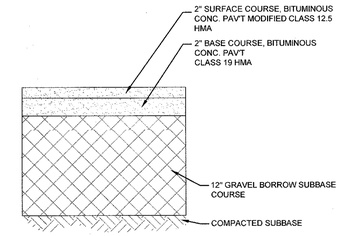




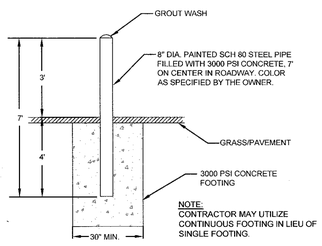
BUILDING ROOF DOWNSPOUT DETAILS
SCALE: NOT TO SCALE



INSPECTION PORT (UNPAVED APPLICATION)
SCALE: NOT TO SCALE



TYPICAL PARKING LOT BITUMINOUS PAVEMENT SECTION
SCALE: NOT TO SCALE



PROTECTION BOLLARD
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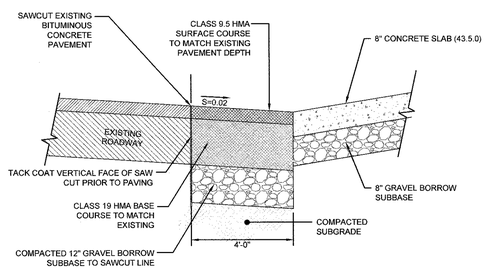
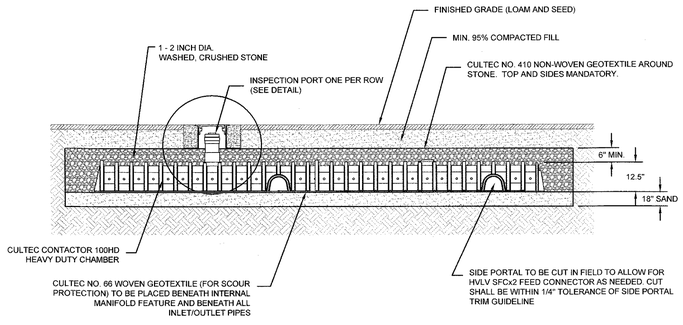


ENTRANCE SAWCUT AND MATCH DETAIL
SCALE: NOT TO SCALE



CULTEC 100HD INFILTRATING SAND FILTER PROFILE
SCALE: NOT TO SCALE

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No.	Revision	Date	App.
2	REVISED DRAINAGE	18MAY20	
1	REVISED DRAINAGE	19MAR20	

Designed By:	Drawn by: JJR	Checked by:	GES
Scale: AS SHOWN	Date:		21FEB20

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Issued for:

PERMITTING

Drawing Title:

DETAIL SHEET 1

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

Drawing Number: C-8
Sheet 8 of 10
Project Number: 19107.0
Survey Index: 14 - 32 - 314

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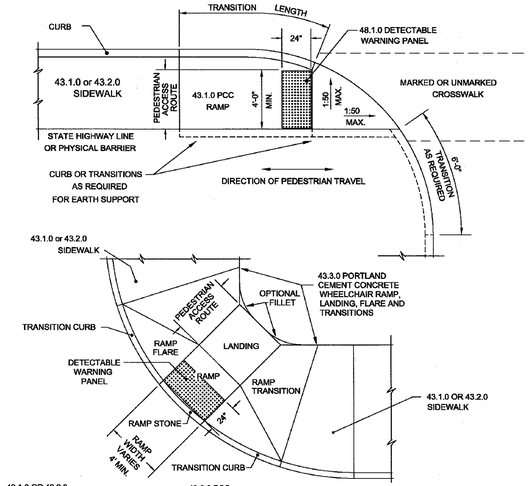
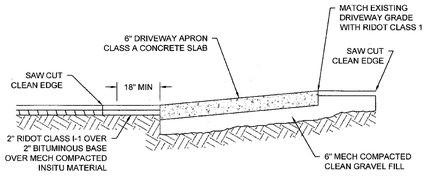


NOTES

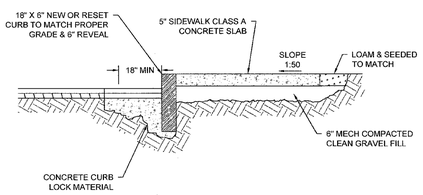
1. DETECTABLE WARNING PANEL SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE RHODE ISLAND STANDARD SPECIFICATIONS; PANEL TO MATCH RAMP WIDTH.

ADA RAMP AND DETECTABLE WARNING PANEL PLACEMENT

SCALE: NOT TO SCALE



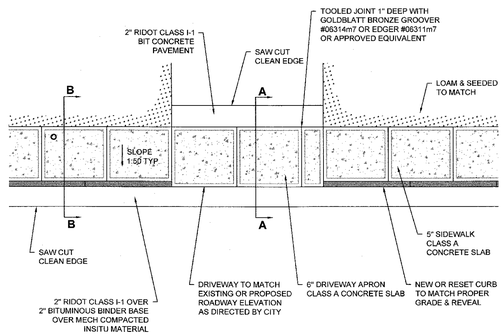
CONCRETE DRIVEWAY APRON A-A



CONCRETE SIDEWALK B-B

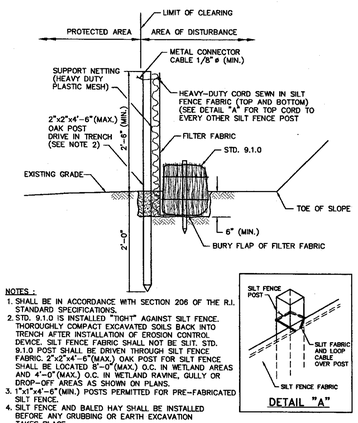
CONCRETE SIDEWALK CROSS SECTION DETAIL

SCALE: 1"=2'



CONCRETE SIDEWALK AND DRIVEWAY DEVELOPMENT

SCALE: 1"=5'

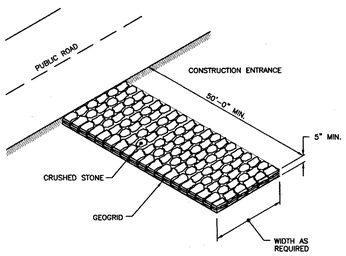


NOTES :

1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
2. STD. 9.1.0 IS INSTALLED "TIGHT" AGAINST SILT FENCE. THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO TRENCH AFTER INSTALLATION OF EROSION CONTROL DEVICE. SILT FENCE FABRIC SHALL NOT BE SLIT. STD. 9.1.0 POST SHALL BE DRIVEN THROUGH SILT FENCE FABRIC. 2"x2"x4'-6"(MAX.) OAK POST FOR SILT FENCE SHALL BE LOCATED 8'-0"(MAX.) O.C. IN WETLAND AREAS AND 4'-0"(MAX.) O.C. IN WETLAND RAWINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
3. 1"x1"x4'-5"(MIN.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
4. SILT FENCE AND BALED HAY SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

BALED HAY EROSION CHECK AND SILT FENCE COMBINED (RIDOT 9.3.0)

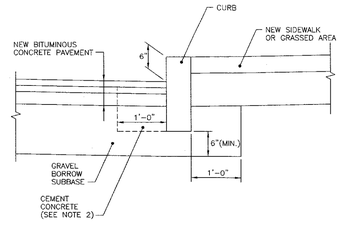
SCALE: NOT TO SCALE



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

STONE CONSTRUCTION ACCESS (RIDOT 9.9.0)

SCALE: NOT TO SCALE

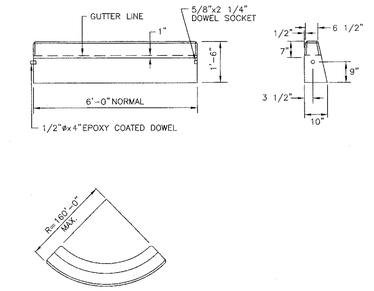


NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

CURB SETTING DETAIL (RIDOT STD 7.6.0)

SCALE: NOT TO SCALE



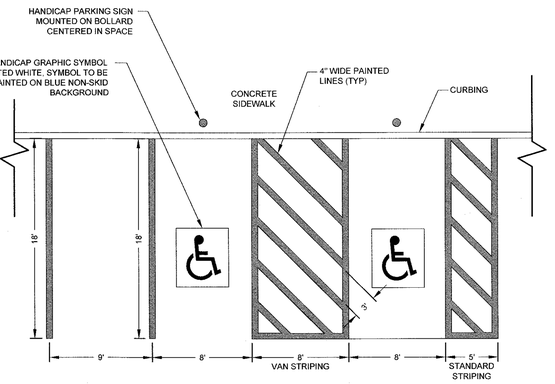
CIRCULAR CURB

NOTES:

1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0"RADIUS.
5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

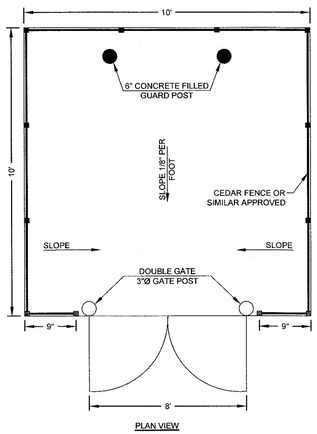
PRECAST CONCRETE CURB (RIDOT STD 7.1.0)

SCALE: NOT TO SCALE

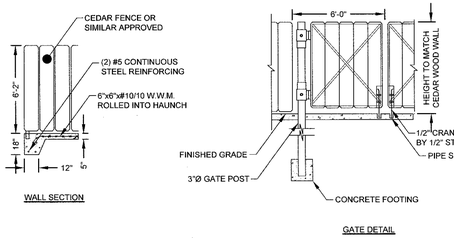


PARKING STALL STRIPING

SCALE: NOT TO SCALE

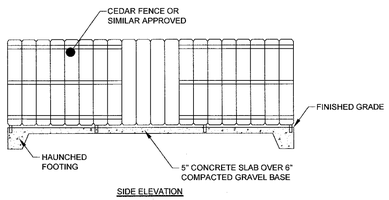


PLAN VIEW



WALL SECTION

GATE DETAIL



SIDE ELEVATION

TYPICAL TRASH ENCLOSURE

ARCHITECT MAY PROVIDE ALTERNATE DESIGN

SCALE: NOT TO SCALE

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No.	Revision	Date	App.
1	REVISED DRAINAGE	19MAR20	

Designed By:	Drawn by: JJR	Checked by:	GES
Scale: AS SHOWN	Date:		21FEB20

Project Title:

MANCHESTER HOUSE

A.P. 32, LOT 314
24 LEES WHARF
NEWPORT, RHODE ISLAND

Client/Owner:

HOWARD WHARF, LP
c/o SILVA, THOMAS, MARTLAND & OFFENBERG
1100 AQUIDNECK AVE., MIDDLETOWN, RI 02842

Issued for:

PERMITTING

Drawing Title:

DETAIL SHEET 2

JEREMY J. ROSA
No. 9826
REGISTERED PROFESSIONAL ENGINEER
CIVIL

Drawing Number: C-9

Sheet 9 of 10

Project Number: 19107.0

Survey Index: 14 - 32 - 314

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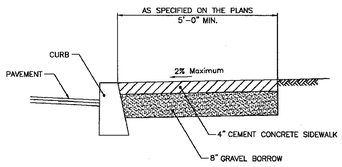
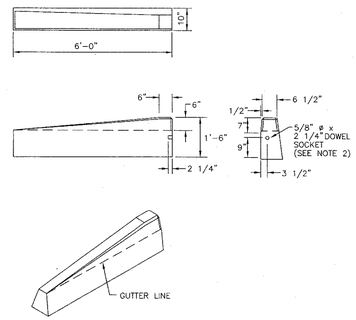


NOTES
1. SHALL BE IN ACCORDANCE WITH SECTION 905 OF THE R.I. STANDARD SPECIFICATIONS.
2. FOR CURB SETTING DETAIL REFERENCE STD. 7.6.0.

CEMENT CONCRETE SIDEWALK (RIDOT 43.1.0)
SCALE: NOT TO SCALE



NOTES:
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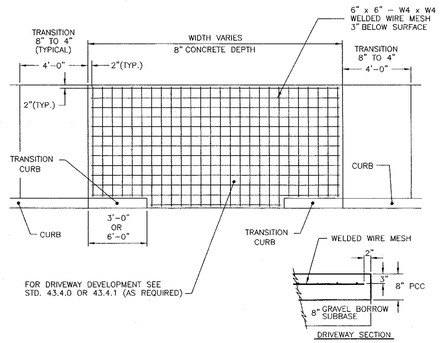
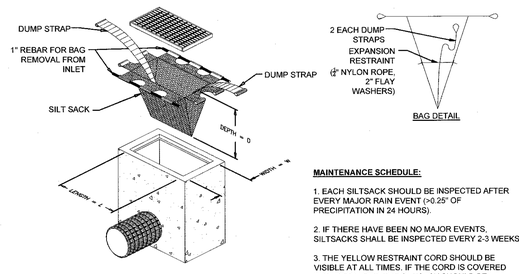
2. DRAWING SHOWS TRANSITION CURB FOR ONE DIRECTION. FOR OTHER DIRECTION USE OPPOSITE HAND AND INCLUDE A 1/2" ø x 4" EPOXY COATED DOWEL.
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

6' PRECAST CONCRETE TRANSITION CURB (RIDOT 7.1.2)
SCALE: NOT TO SCALE



NOTE: SHALL BE IN CONFORMANCE WITH SECTION 905 OF THE RI STANDARD SPECIFICATIONS.

CEMENT CONCRETE DRIVEWAY (RIDOT 43.5.0)
SCALE: NOT TO SCALE



MAINTENANCE SCHEDULE:

1. EACH SILTSACK SHOULD BE INSPECTED AFTER EVERY MAJOR RAIN EVENT (>0.25" OF PRECIPITATION IN 24 HOURS).

2. IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACKS SHALL BE INSPECTED EVERY 2-3 WEEKS.

3. THE YELLOW RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF THE CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

SILT SACK DETAIL
SCALE: NOT TO SCALE

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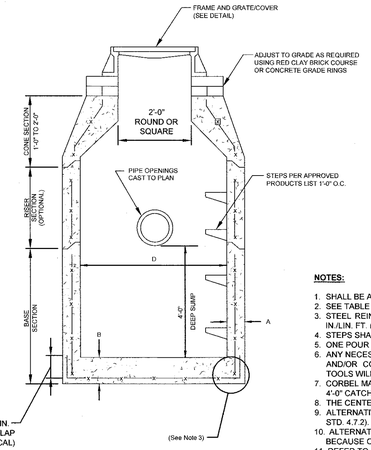


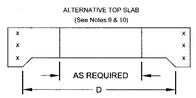


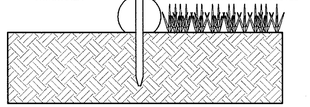
TABLE 1			
CATCH BASIN DIAMETER (D)	A	B	CIRCUMFFRENTIAL STEEL REINFORCEMENT REQUIRED*
4'-0"	5"	6"	0.12 SQ. IN./LIN. FT.
5'-0"	6"	7"	0.15 SQ. IN./LIN. FT.
6'-0"	7"	8"	0.18 SQ. IN./LIN. FT.
8'-0"	9"	8"	REFER TO MANUFACTURER

* FOR LONGITUDINAL (VERTICAL STANDING) REINFORCEMENT REFER TO ASTM C478, ITEM 8.1.2

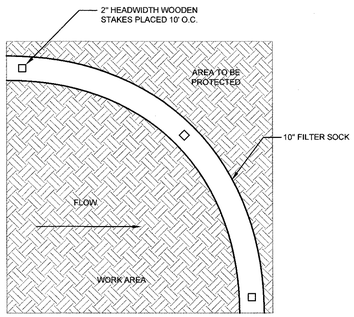
NOTES:

1. SHALL BE ACCORDANCE WITH SECTION 702 OF THE R.I. STANDARD SPECIFICATION.
2. SEE TABLE 1 FOR STEEL REINFORCEMENT REQUIREMENTS.
3. STEEL REINFORCEMENT FOR BASE SECTION BOTTOM SHALL BE A MINIMUM OF 0.12 SQ. IN./LIN. FT. (BOTH WAYS).
4. STEPS SHALL CONFORM TO STD. 5.3.0 AND SHALL BE INSTALLED AT THE CASTING PLANT.
5. ONE POUR MONOLITHIC BASE SECTION.
6. ANY NECESSARY ADJUSTMENTS DURING CONSTRUCTION WILL BE DONE BY SAW-CUTTING AND/OR CORING ONLY. NO JACKHAMMERS, HAMMERS AND CHISELS OR PNEUMATIC TOOLS WILL BE ALLOWED.
7. CORBEL MADE OF RED CLAY BRICK WILL BE PERMITTED FOR THE "CONE SECTION" OF THE 4'-0" CATCH BASIN ONLY.
8. THE CENTERLINE OF THE OPENING MUST BE WITHIN 2'-0" FROM THE STEPS.
9. ALTERNATIVE TOP SLAB IS STEEL REINFORCED TO MEET OR EXCEED H-25 LOADING (SEE STD. 4.7.2).
10. ALTERNATIVE TOP SLAB IS ONLY FOR USE WHEN REDUCING SECTION DOES NOT FIT BECAUSE OF STRUCTURE DEPTH.
11. REFER TO STD. 5.2.0 FOR MAXIMUM PIPE SIZES.

PRECAST ROUND CATCH BASIN & DRAIN MANHOLE (RIDOT 4.4.0)
SCALE: NOT TO SCALE

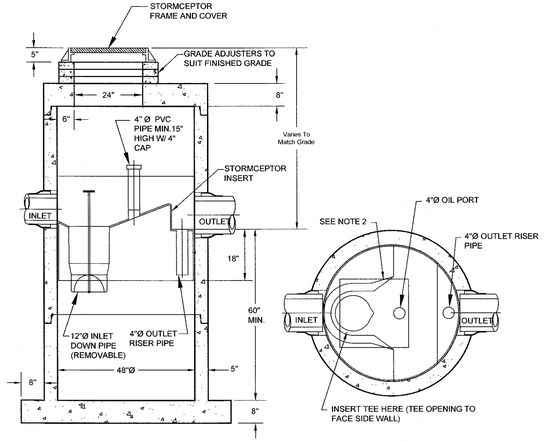


SECTION VIEW



TOP VIEW

10" FILTER SOCK DETAIL
SCALE: NOT TO SCALE



SECTION THRU CHAMBER **PLAN VIEW**

NOTES:

1. THE USE OF FLEXIBLE CONNECTION IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.

2. THE COVER SHOULD BE POSITIONED OVER THE INLET DROP PIPE AND THE OIL PORT.

3. THE STORMCEPTOR SYSTEM IS PROTECTED BY ONE OR MORE OF THE FOLLOWING U.S. PATENTS: #4985148, #5498331, #5725760, #5753115, #5849181, #6068765, #6371690.

STC 450i PRECAST CONCRETE STORMCEPTER (450 U.S. GALLON CAPACITY)
SCALE: NOT TO SCALE

No.	Revision	Date	App.
2	REVISED DRAINAGE	06MAY20	
1	REVISED DRAINAGE	19MAR20	

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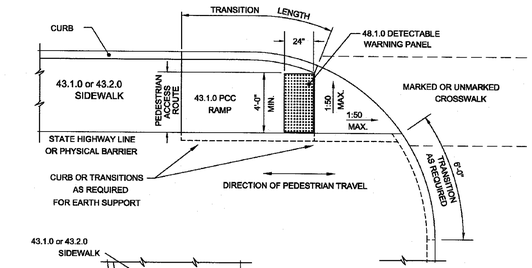
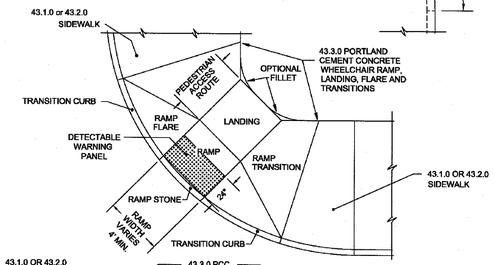
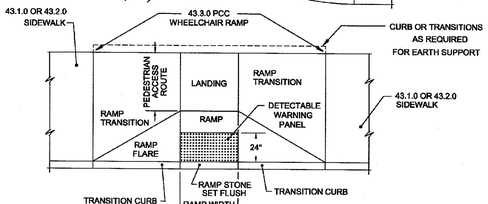




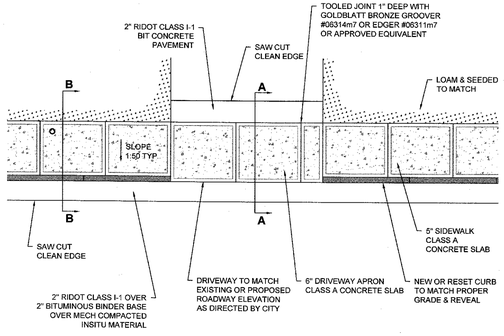


NOTES

1. DETECTABLE WARNING PANEL SHALL BE IN ACCORDANCE WITH SECTION 942 OF THE RHODE ISLAND STANDARD SPECIFICATIONS; PANEL TO MATCH RAMP WIDTH.

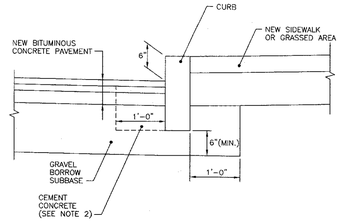
ADA RAMP AND DETECTABLE WARNING PANEL PLACEMENT

SCALE: NOT TO SCALE



CONCRETE SIDEWALK AND DRIVEWAY DEVELOPMENT

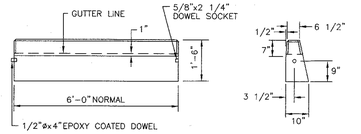
SCALE: 1"=5'

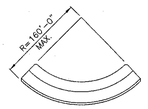


NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. CEMENT CONCRETE SHALL BE USED ONLY WHEN THE CURB IS SET AFTER THE BASE AND/OR BINDER COURSES ARE IN PLACE, OTHERWISE THE CEMENT CONCRETE WILL BE ELIMINATED AND THE GRAVEL BROUGHT UP TO BOTTOM OF THE BASE COURSE.

CURB SETTING DETAIL (RIDOT STD 7.6.0)

SCALE: NOT TO SCALE



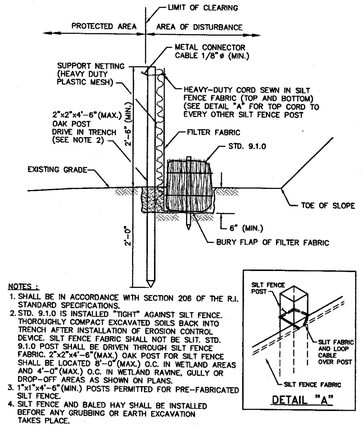


CIRCULAR CURB

NOTES:
1. SHALL BE IN ACCORDANCE WITH SECTION 906 OF THE R.I. STANDARD SPECIFICATIONS.
2. MINIMUM LENGTH OF STRAIGHT OR CIRCULAR FILLER PIECES TO BE 3'-0".
3. EXPOSED SURFACES TO HAVE A SPONGE FLOAT FINISH.
4. CIRCULAR CURB IS REQUIRED ON CURVES WITH RADII OF 160'-0" OR LESS. STRAIGHT CURB TO BE USED ON CURVES OF MORE THAN 160'-0" RADIUS.
5. EXPOSED EDGES TO HAVE A 3/4" CHAMFER.

PRECAST CONCRETE CURB (RIDOT STD 7.1.0)

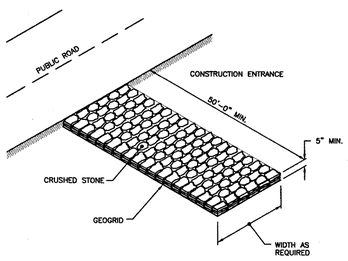
SCALE: NOT TO SCALE



NOTES :
1. SHALL BE IN ACCORDANCE WITH SECTION 206 OF THE R.I. STANDARD SPECIFICATIONS.
2. STD. 9.1.0 IS INSTALLED "TIGHT" AGAINST SILT FENCE. THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO TRENCH AFTER INSTALLATION OF EROSION CONTROL DEVICE. SILT FENCE FABRIC SHALL NOT BE SLIT. STD. 9.1.0 POST SHALL BE DRIVEN THROUGH SILT FENCE FABRIC. 2"x2"x4'-6"(MAX.) OAK POST FOR SILT FENCE SHALL BE LOCATED 8'-0"(MAX.) O.C. IN WETLAND AREAS AND 4'-0"(MAX.) O.C. IN WETLAND RAVINE, GULLY OR DROP-OFF AREAS AS SHOWN ON PLANS.
3. 1"x1"x4'-6"(MIN.) POSTS PERMITTED FOR PRE-FABRICATED SILT FENCE.
4. SILT FENCE AND BALED HAY SHALL BE INSTALLED BEFORE ANY GRUBBING OR EARTH EXCAVATION TAKES PLACE.

BALED HAY EROSION CHECK AND SILT FENCE COMBINED (RIDOT 9.3.0)

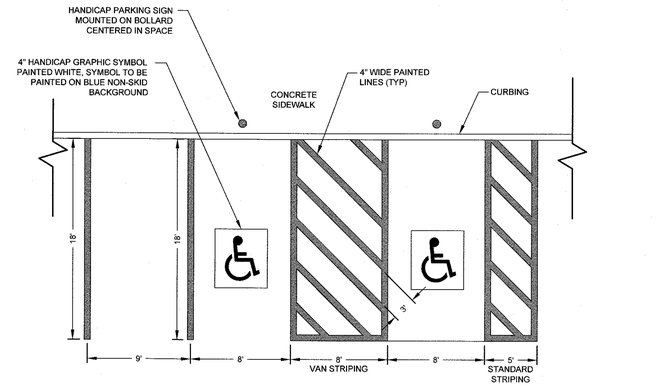
SCALE: NOT TO SCALE



NOTE:
SHALL BE IN ACCORDANCE WITH SECTION 211 OF THE R.I. STANDARD SPECIFICATIONS.

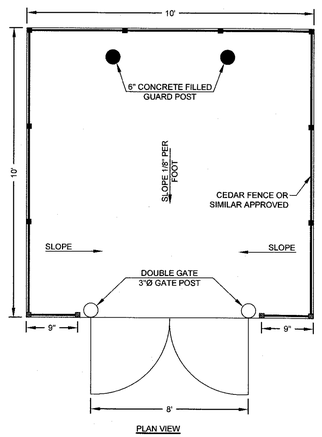
STONE CONSTRUCTION ACCESS (RIDOT 9.9.0)

SCALE: NOT TO SCALE



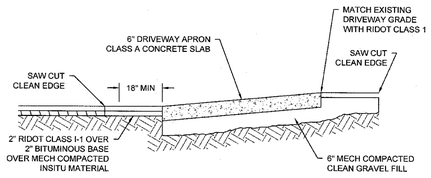
PARKING STALL STRIPING

SCALE: NOT TO SCALE

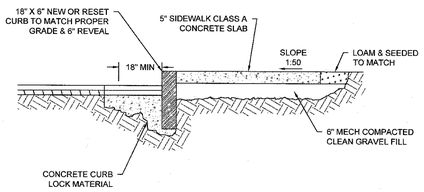


TYPICAL TRASH ENCLOSURE

ARCHITECT MAY PROVIDE ALTERNATE DESIGN
SCALE: NOT TO SCALE



CONCRETE DRIVEWAY APRON A-A



CONCRETE SIDEWALK B-B

CONCRETE SIDEWALK CROSS SECTION DETAIL

SCALE: 1"=2'

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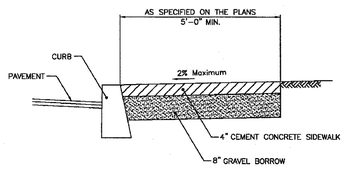

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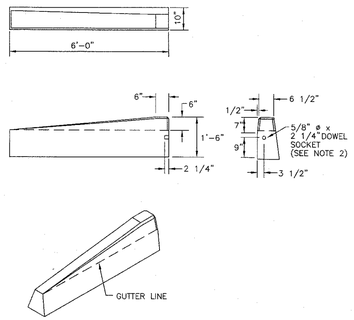

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6' PRECAST CONCRETE TRANSITION CURB (RIDOT 7.1.2)
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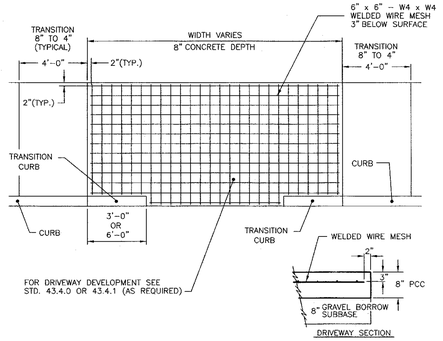

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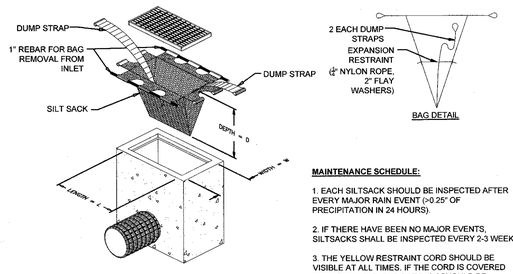

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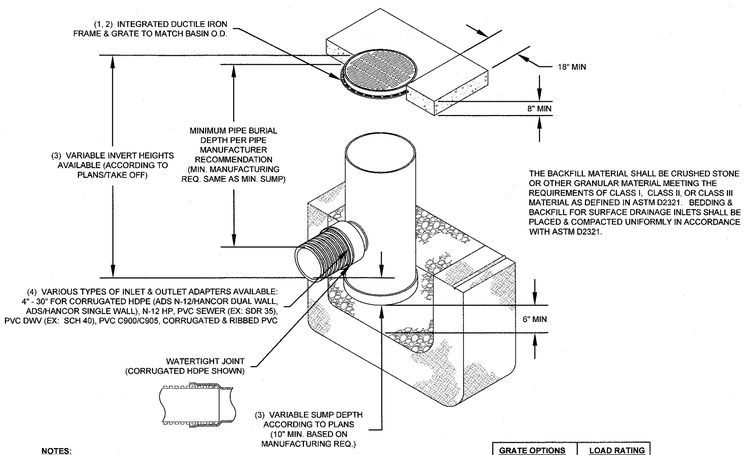

NOTES:

1. GRATES/SOLID COVER SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
2. FRAMES SHALL BE DUCTILE IRON PER ASTM A536 GRADE 70-50-05.
3. DRAIN BASIN TO BE CUSTOM MANUFACTURED ACCORDING TO PLAN DETAILS. RISERS ARE NEEDED FOR BASINS OVER 84" DUE TO SHIPPING RESTRICTIONS.
4. DRAINAGE CONNECTION STUB JOINT TIGHTNESS SHALL CONFORM TO ASTM D3212 FOR CORRUGATED HDPE (ADS N-12/HANCOR DUAL WALL), N-12 HP, & PVC SEWER (4" - 24").

GRATE OPTIONS	LOAD RATING
PEDESTRIAN	H-20
STANDARD	H-20
SOLID COVER	H-20
DOME	N/A

24" ADS DRAIN BASIN DETAIL (W/ CONCRETE SURROUND)
SCALE: NOT TO SCALE

SECTION VIEW

TOP VIEW

10" FILTER SOCK DETAIL
SCALE: NOT TO SCALE

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February 12, 2020

Mr. Howard Cushing
44 Ocean Partners, LLC
66 Ocean Avenue
Newport, RI 02840

Re: Proposed Land Development Project
Lee's Wharf Hotel
Newport, Rhode Island

Dear Mr. Cushing:

BETA Group, Inc., in accordance with our scope of services, has completed a traffic safety assessment to determine if a proposed small boutique hotel, proposed at the westerly terminus of Lee's Wharf, has adequate and safe access to the immediate local servicing roadways in Newport, Rhode Island. The property is located on the southerly side of Lee's Wharf, opposite The Brown & Howard Wharf Residences. This study was completed for submission to the City as part of the local review process and provides a summary of existing roadway conditions and an estimate of future traffic conditions if the project was to be approved and constructed.

The subject property is defined by Assessor's Plat 32, lot 314 which contains approximately 0.74 acres of fully developed land that includes one building and a paved public parking lot containing approximately 95 spaces. Based upon our discussions and a review of the site development plan prepared by Northeast Engineers & Consultants, Inc., it is our understanding that the existing building will be razed to and the site parking reconfigured to allow construction of single building to accommodate a small hotel with 21 rooms and ancillary amenities including a restaurant and a meeting room. Access to the hotel will be provided from two driveways on Lee's Wharf in addition to a loading zone/valet area along the property frontage at the main building entrance on Lee's Wharf. Figure 1 on the following page depicts the general vicinity of the project in the City of Newport. The following is a summary of our investigation of the potential impacts and recommendations to provide safe and adequate access to the subject property.

Traffic Safety Analysis

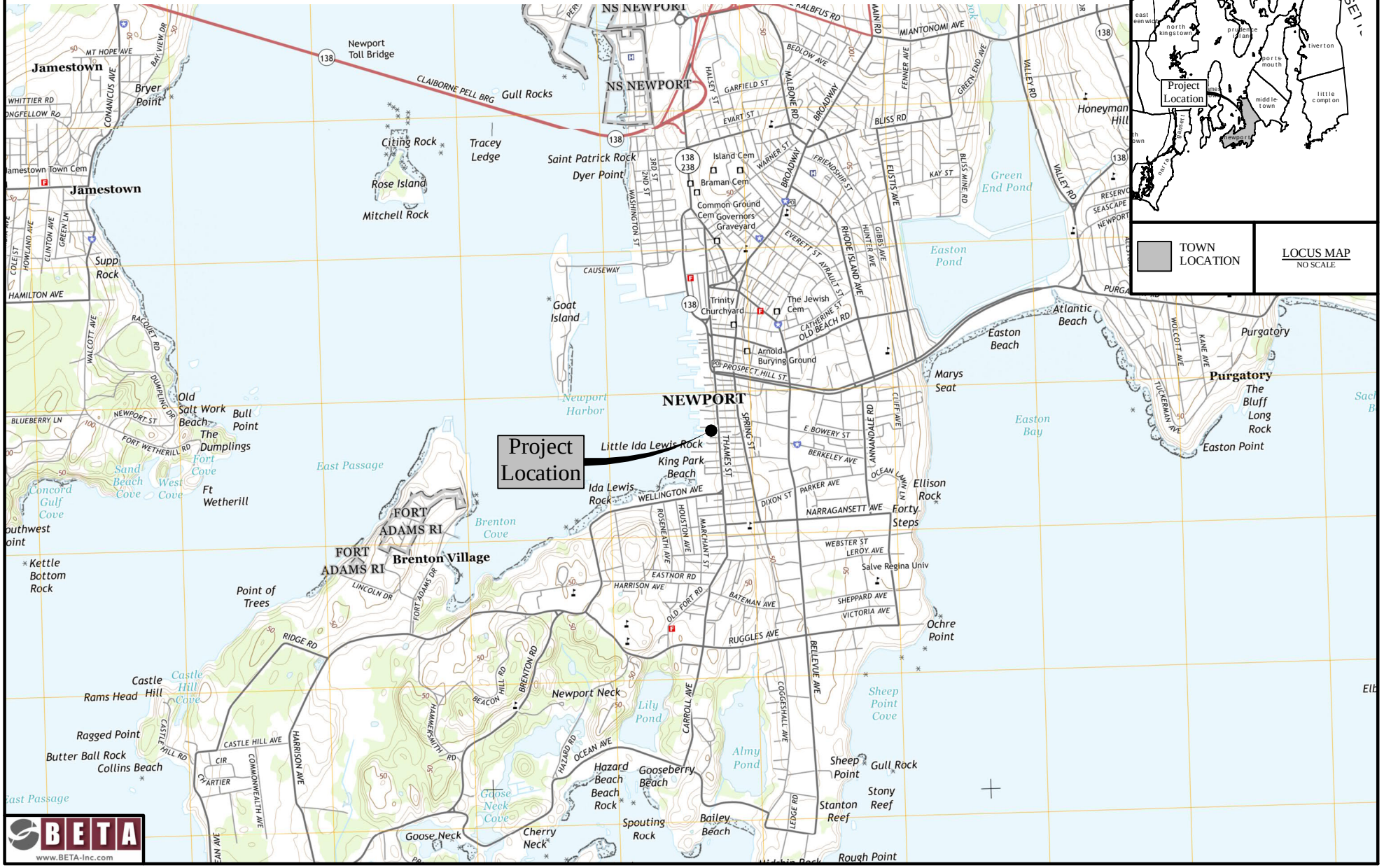
Project Approach

The objective of this study is to define existing, and potential future operational and/or safety concerns along the servicing roadways to the proposed hotel. A review of the existing roadway features was completed to determine if any potential safety deficiencies presently warrant mitigation. In addition to the existing conditions analysis, the study also included the assessment of potential impacts resulting from the proposed site access on Lee's Wharf, and the resultant vehicular and pedestrian traffic entering and exiting the new hotel property.

Lee's Wharf Hotel

NEWPORT, RHODE ISLAND

Figure 1 - Project Vicinity Map



The study focused on the evaluation of the safety of the proposed site access and general operations of the servicing roadways as this small-scale hotel is estimated to generate a minor volume of daily traffic with only 14 AM and 16 PM trips during the daily peak hours. This should be a reduction in traffic to and from the site on a daily basis during the peak seasonal conditions in Newport, knowing the property currently is a parking lot containing over 90 parking spaces for use by the general public. The study focused on these safety issues relative to vehicular and pedestrian access and made recommendations for improvements, if determined necessary, based upon the findings of the data collection and analysis phases of the study.

In order to complete our analysis, the following scope of work was conducted for the project:

- An inventory of the physical roadway characteristics of Lee's Wharf including roadway alignment, pavement width, signage and traffic control to determine the adequacy of the existing roadway geometric features relating to access, safety, and operations.

- Field investigations including evaluation of sight distances along Lee's Wharf in the vicinity of the proposed site access driveway intersection.

- Accident data obtained from the City of Newport Police Department was reviewed to determine if there are any safety concerns relative to the frequency, severity or pattern of crashes in the project area.

- A Site Plan for the proposed development project prepared by Northeast Engineers & Consultants, Inc. was reviewed to define future roadway conditions at the access driveway intersection to the site.

- Analysis of the data collected, evaluation of the proposed design, and development of recommendations to provide a safe and adequate access to the new hotel.

Project Area

As previously noted, the proposed commercial redevelopment project will be situated on a parcel of land along the southerly side of Lee's Wharf just west of Thames Street. The site currently has a single small building and a paved and marked public parking lot containing 96 parking spaces. The existing building will be razed to accommodate a 2-story hotel building with 21 rooms and associated parking. Access/egress to the hotel will be provided from an enter-only driveway on the westerly side of the property and an exit-only driveway on the easterly side of the property including a loading zone/valet area along the site frontage on Lee's Wharf.

The property is within the Southern Thames Historic District that includes the southern portions of Newport's waterfront. Land use in the immediate area can be defined as predominantly commercial along Thames Street with high density residential properties off intersecting side streets. Along the waterfront on the westerly side of Thames Street there are numerous marinas, hotels, restaurants, condominiums, and retail shops. Further north along America's Cup Boulevard is what's considered the "downtown" area of the City, and includes hotels, retail shops, restaurants, and marinas. Further south

Lee's Wharf Hotel

NEWPORT, RHODE ISLAND

Figure 2 - Project Area Map

BETA
www.BETA-Inc.com

are high density residential properties including the Ocean Drive Historic District along Ocean Avenue. To the east along Memorial Boulevard is a mixture of high density residential and commercial properties including Easton's Beach, The Tennis Hall of Fame and Newport Mansions along Bellevue Avenue.

Thames Street will serve as the primary access route to the new hotel with Lee's Wharf providing immediate local access. Based upon the good operating characteristics of Thames Street in the immediate area, and the minor amount of additional peak hour traffic generated by the small-scale hotel, a study impact area was defined for this project. The limits of our analysis focused on Lee's Wharf from Thames Street west to the terminus of Lee's Wharf. Refer to Figure 2 on the following page depicting the subject property and the general project area.

Roadways

Lee's Wharf

Lee's Wharf is a short 300 foot long roadway extending between Thames Street to the east to a dead end at the waterfront to the west. The roadway is variable in width approximately 20-22 feet wide with no markings delineating travel lanes or shoulder areas. Due to the roadway width in the vicinity of Thames Street between two commercial buildings immediately abutting the back of sidewalk, it is recommened that a double yellow center line (50' long) be provided on the Lee's Wharf approach to the intersection. This marking will help to emphasize the two-way traffic flow and to allow vehicles exiting Lee's Wharf onto Thames Street to align properly at the Stop bar and not hinder right turning traffic into Lee's Wharf.

The pavement is in good condition as it was recently repaved. Narrow cement concrete sidewalks extend from Thames Street on both sides of Lee's Wharf for only approximately 60-65 feet forcing pedestrians to walk within the roadway for access to the waterfront. It is recommended that a sidewalk be extended where practicle along one side of the road to better accommodate pedestrian traffic which is prevalent in this area during the summer period. There was no observed posted speed limit in the project area and therefore was assumed to be 15 mph due to the nature of the area. Cobra head lighting is provided sporadically on utility poles along the southerly side of the roadway for night-time visibility.

Intersections

Thames Street at Lee's Wharf/Young Street

Thames Street is a minor arterial road that runs one-way southbound and one-way northbound from the America's Cup Boulevard intersection. Buildings along the southerly section of Thames Street are situated densely at the back of sidewalks typical of historical urban conditions. Lee's Wharf and Young

Street intersect Thames Street to form an unsignalized, 4-way junction with Stop control on the minor Lee's Wharf eastbound and Young Street westbound approaches. Stop signs and stop bars are provided on both Stop controlled approaches. All apporaches to the intersection provide a single all-purpose lane including the Thames Street one-way southbound movement.

Sidewalks with curb ramps, though not ADA-compliant, are provided at the intersection with multiple materials (brick, cement concrete). Lighting on a utility pole is provided for nighttime illumination of the intersection. The above photograph depicts the physical charateristics of Thames Street looking north from the Lee's Wharf junction.

Safety Analysis

The geometry of Lee's Wharf in the project area was investigated to determine if there are any limiting factors affecting safety. These limiting factors would potentially include horizontal or vertical alignment changes or roadside obstructions that limit sight distances for vehicles traveling along the road or entering the road from a side street or driveway location. In this instance, the sight distance standard is necessary to permit turning vehicles to safely enter and exit the proposed site access driveways, as well as vehicles turning from Lee's Wharf onto Thames Street.

The horizontal and vertical alignment of Lee's Wharf in the project area can be described as generally straight and level. These physical features of Lee's Wharf provide sight distances of greater than 150 feet to the east and west of the site exit-only driveway intersection. These values are in excess of AASHTO's recommended minimum sight distance of 80 feet based on observed speeds of between 10-15 mph along this short section of local street. No parking is permitted along the road and there are no existing or proposed obstructions along the property frontage that would limit available sight distances as defined.

Also, as noted earlier, there is no sidewalk beyond the immediate Thames Street intersection forcing pedestrians to walk in the street. Though low speed, it is recommended that due to the potential volume of pedestrians that will utilize this roadway between Thames Street and the waterfront, the existing sidewalk should be extended along the property frontage for improved pedestrian access to and from the site. The property owner has proposed this extension as part of the hotel development plan.

The horizontal and vertical alignment of Thames Street in the project area can be described as generally level and straight. The physical features of Thames Street provide sight distances of greater than 300 feet to the north of the Lee's Wharf intersection. These values are in excess of AASHTO's recommended minimum sight distance of 80 feet based on observed speeds of between 10-15 mph. The on-street parking that is permitted along this section of Thames Street is situated along the easterly curbline and does not hinder or restrict sight lines for vehicles exiting Lee's Wharf. As noted, the buildings along Thames Street are situated at the back of sidewalk forcing drivers exiting the side street to position themselves on the approach to see beyond the

building corner to the north. This can be seen in the adjacent photograph from a vehicle pulling out of Lee's Wharf to turn right along the one-way street and the adequate sight distance available to the north where conflicting vehicles can see one another.

Also, as part of our analysis, a review of accident statistics was completed. Data was reviewed from the City of Newport Police Department for the latest full three-year period (2017-2019) to determine if any location in the immediate vicinity of the development experienced a high frequency or pattern of accidents. Only one crash occurred, with no injuries, in the project area over the three-year study period. The accident involved a hit and run with an unattended parked car on Lee's Wharf.

Based upon the historical accident data obtained from the local police, and a review of existing roadway geometry, physical features, and proposed development plan, it does not appear that any significant physical safety deficiencies presently exist on Lee's Wharf requiring mitigation in the project area.

Trip Generation and Analysis

To understand the potential traffic impact of the proposed development, an estimate of anticipated traffic to be generated by the proposed land use has been calculated for reference. As previously discussed, the development proposal consists of razing an existing building and reconfiguring the existing parking lot to allow construction of a two-story building to accommodate a 21-room hotel with associated parking. Access and egress to the site will be provided from an enter-only driveway, an exit-only driveway and a loading zone/valet area along the property frontage of Lee's Wharf. Figure 3 on the following page depicts the site layout and access plan, provided by Northeast Engineers & Consultants, Inc.

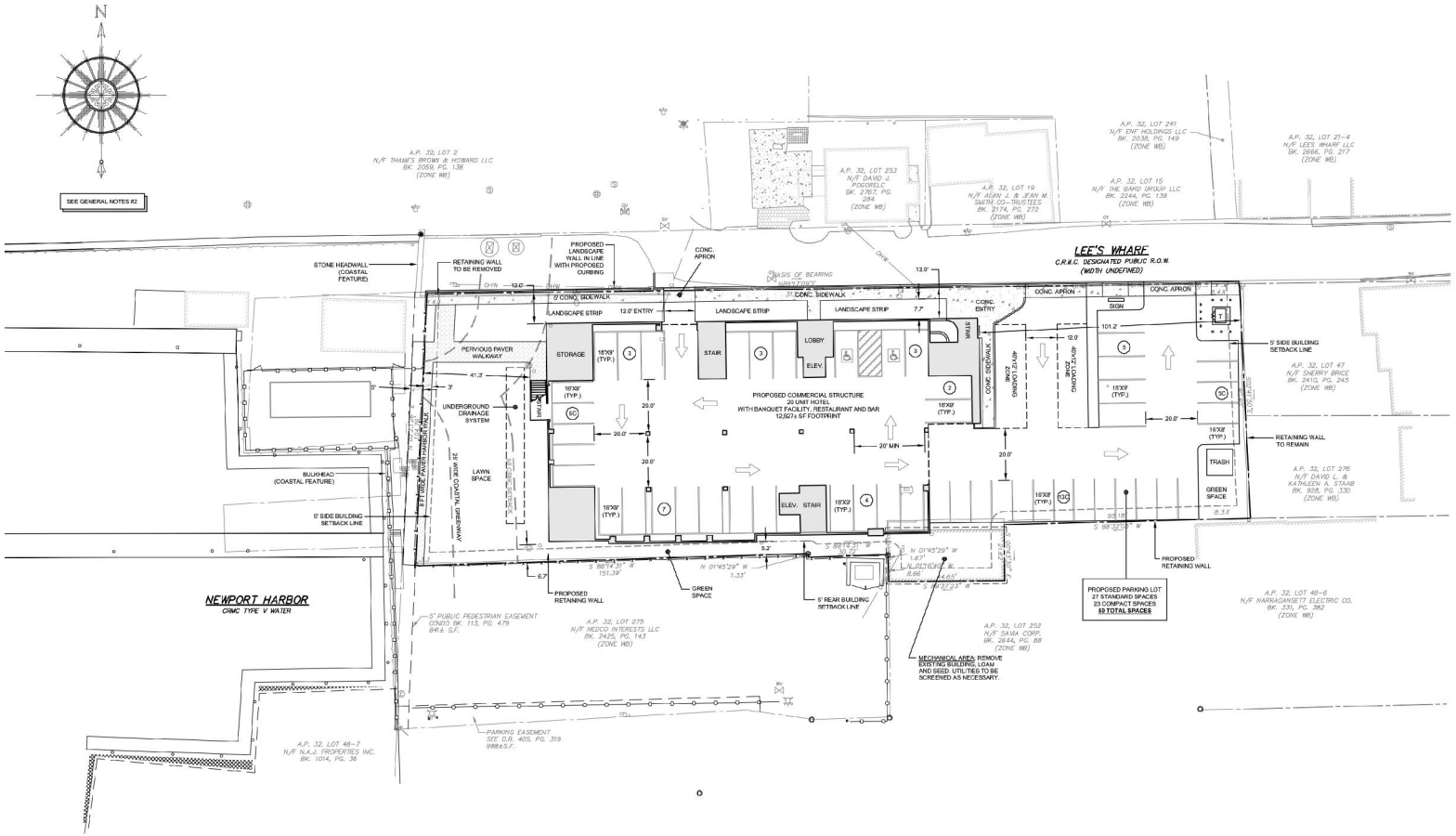
For this site, projected traffic volumes for the proposed project were based on use of trip generation factors. These factors are taken from the "Trip Generation" manual, an informational report published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. The data provided in the ITE report are based on extensive traffic studies for various types of land uses (residential, commercial, industrial, etc.). This data has been found to be very reliable and provides a sound basis for estimating future trips to new development projects.

For the proposed hotel project, Land Use Code 310 Hotel was reviewed for applicability in developing an estimate of site related vehicles trips. Table 1 summarizes the peak hour site trips for the proposed development that have been estimated utilizing the land use code data available from the ITE manual. The appropriate worksheets from the manual are included in the Attachment, along with the trip estimate calculations.

Lee's Wharf Hotel

NEWPORT, RHODE ISLAND

Figure 3 - Site Layout



Site Plan provided by Northeast Engineers & Consultants, Inc.

TABLE 1 – Trip Generation Estimate

	Description	Enter	Exit	Total
AM Peak Hour				
ITE Land Use Code 310	Hotel	8	6	14
PM Peak Hour				
ITE Land Use Code 310	Hotel	7	9	16

Based upon the low volume of daily and peak hour site trips (less than 14 vehicles and 16 vehicles entering/exiting the site during the morning and afternoon peak periods, respectively), resulting from the proposed small scale development, coupled with the very low volume of traffic serviced along Lee's Wharf, there should be no discernable impacts to traffic operations along Lee's Wharf or Thames Street in the immediate project area. It is anticipated that typically only one vehicle would be queued on the site driveway to exit the property or on Lee's Wharf waiting to turn right onto Thames Street, resulting in efficient operations and adequate and safe access to the new hotel. During the daily peak hours, the servicing roadways will operate efficiently as they do today, with no congestion anticipated at the site access driveway or Thames Street intersection.

In addition, it is important to note that the proposed hotel is anticipated to yield improved operations along Lee's Wharf with less traffic and managed parking for hotel guests. The existing site operations is first come first serve public parking for over 90 parking spaces which turns over several times a day. This existing condition yields a higher traffic demand on the roadway for drivers parking or looking for available parking in the area.

Conclusions and Recommendations

In summary, the study has shown that the proposed development project access and circulation plan has been designed to maintain a desirable level of traffic safety and efficiency on the servicing roadway system in the project area. Based upon our analysis of the existing roadway conditions on Lee's Wharf, there appear to be no traffic safety or operational issues that require mitigation other than the recommended sidewalk extension and the addition of double yellow pavement markings on the Lee's Wharf approach to the intersection with Thames Street to delineate travel paths.

In addition, the small-scale hotel will add a minor volume of traffic during the daily peak hours as indicated. These new vehicles will not change or negatively affect the good operating conditions that presently exist along Lee's Wharf. Therefore, based upon the data collection and analysis completed for this project, it can be concluded that the project will not have a detrimental impact on traffic safety and operations of the servicing roadways, and that adequate and safe access will be available at the

proposed site access driveway intersections with Lee's Wharf. We trust that this letter sufficiently addresses the requirements of the City to obtain your access approval. If you should have any questions, please do not hesitate to contact our office.

Very truly yours,
BETA Group, Inc.

Paul J. Bannon
Associate

ATTACHMENTS

A. Traffic Crash Data

B. Trip Generation

ATTACHMENT A – Traffic Crash Data

January 2017 through December 2019

Lee's Wharf – Thames Street to Dead End

Lee's Wharf

		2017	2018	2019	Total	Percent
Collision Type						
	Rear End	0	0	0	**0**	0%
	Angle	0	0	0	**0**	0%
	Head-On	0	0	0	**0**	0%
	Pedestrian	0	0	0	**0**	0%
	Sideswipe, Same Direction	0	0	0	**0**	0%
	Sideswipe, Opposite Direction	0	0	0	**0**	0%
	Collision with Object	0	0	0	**0**	0%
	Other	0	0	0	**0**	0%
	Unknown	0	1	0	**1**	100%
Accident Severity						
	Property	0	1	0	**1**	100%
	Injury	0	0	0	**0**	0%
Light Condition						
	Daylight	0	0	0	**0**	0%
	Dawn	0	0	0	**0**	0%
	Dusk	0	0	0	**0**	0%
	Dark - Lighted	0	1	0	**1**	100%
	Dark - Not Lighted	0	0	0	**0**	0%
	Dark - Unknown Lighting	0	0	0	**0**	0%
Road Condition						
	Dry	0	1	0	**1**	100%
	Wet	0	0	0	**0**	0%
	Snow	0	0	0	**0**	0%
	Other	0	0	0	**0**	0%
	Unknown	0	0	0	**0**	0%
Hour of Day						
	6:00 AM - 9:00 AM	0	0	0	**0**	0%
	9:00 AM - 3:00 PM	0	0	0	**0**	0%
	3:00 PM - 6:00 PM	0	1	0	**1**	100%
	6:00 PM - 6:00 AM	0	0	0	**0**	0%
	Total Accidents:	**0**	**1**	**0**	**1**	

STATE OF RHODE ISLAND UNIFORM CRASH REPORT

Reporting Agency Name	Report Number	Crash Date	Crash Time	Walk In Report	Parking Lot
Newport	18-21803-AC	08/19/2018	1630	☒	☒

City or Town Name	Street or Highway		Exit #	# of Lanes	Posted Speed Limit
NEWPORT	LEES WHF	☐ On Ramp ☐ Off Ramp			☒ N/A ☐ Unk

Nearest Intersection Street	Direction From Nearest Intersection to Crash Site	Distance From Nearest Inter.	Latitude	Longitude
PRIVATE PROPERTY	☐ At Inter. ☐ North ☐ South ☐ East ☐ West	☐ Feet ☐ Miles	+041.480000	-071.310000

Unit ID	Driver's Last Name	First Name	M.I.	DOB
1				

Address	City

State	Zip	Home Phone	Cell Phone	Work Phone

Driver's License #	☐ CDL	Lic. State

M/V Violation	M/V Violation	M/V Violation	M/V Violation

Driver & Owner are Same	Owner's Last Name	First Name	M.I.
☐		DAVID	

Address	City
	HOPKINTON

State	Zip	Home Phone	Cell Phone	Work Phone
RI	02833			

Insurance Company Name	Insurance Policy Number
OLD DOMINION ☐ No Ins.	

Hit And Run: ☐ Yes, M/V & Driver left Scene ☐ Yes, Driver left Scene ☒ No ☐ Unk

Registration #	☐ Not Reg.	State	Yr Reg.	VIN
		RI	2020	

Veh Yr.	Make	Model	Color	Plate Type
2014	TOYOTA	COROLLA	WHITE	PC

Veh Travel Direction: ☐ Northbound ☐ Southbound ☐ Eastbound ☐ Westbound ☒ Not on Roadway ☐ Unk

Vehicle Towed?	Towing Company Name	Haz Mat Placard?
☐ Yes ☒ No		☐ Yes ☒ No

Unit ID	Driver's Last Name	First Name	M.I.	DOB
2				

Address	City

State	Zip	Home Phone	Cell Phone	Work Phone

Driver's License #	☐ CDL	Lic. State

M/V Violation	M/V Violation	M/V Violation	M/V Violation

Driver & Owner are Same	Owner's Last Name	First Name	M.I.
☐			

Address	City

State	Zip	Home Phone	Cell Phone	Work Phone

Insurance Company Name	Insurance Policy Number
☐ No Ins.	

Hit And Run: ☒ Yes, M/V & Driver left Scene ☐ Yes, Driver left Scene ☐ No ☐ Unk

Registration #	☐ Not Reg.	State	Yr Reg.	VIN
unknown				

Veh Yr.	Make	Model	Color	Plate Type

Veh Travel Direction: ☐ Northbound ☐ Southbound ☐ Eastbound ☐ Westbound ☐ Not on Roadway ☐ Unk

Vehicle Towed?	Towing Company Name	Haz Mat Placard?
☐ Yes ☒ No		☐ Yes ☒ No

Person Type

1 Driver, 2 Passenger, 3 Pedestrian, 4 Bicyclist, 5 Other Cyclist, 6 Witness, 7 Other Ped. (Wheelchair, Person in Building, Skater, Ped. conveyance, etc.), 8 Occupant of Motor Veh. Not in Transport (Parked, etc.), 9 Occupant of a Non-Motor Veh Transportation Device, 10 Unknown Type of Non-Motorist, 11 Unknown

Unit ID: 1 Unit 1, 2 Unit 2, 3 (etc.) or N/A

Sex: M Male, F Female, U Unk

Seat Position: 13 Other Row (Bus), 14 Unk Row, 15 Other Seat, 16 Unk Seat

Other Location: 17 N/A, 18 Sleeper, 19 Other Enclosed Area, 20 Other Unenclosed Area, 21 Towed Unit, 22 Unk

Air Bag Deployed: 1 N/A, 2 No, 3 Front, 4 Side, 5 Other, 6 Comb, 7 Unk

Ejected: 1 No, 2 Partially, 3 Totally, 4 N/A, 5 Unk

Protection System: 1 N/A, 2 None Used, 3 Shoulder & Lap, 4 Shoulder Only, 5 Lap Only, 6 Type Unk, 7 Child - Forw Facing, 8 Child - Rear Facing, 9 Booster Seat, 10 Child - Unk, 11 Helmet Used, 12 Other, 13 Unk

Injury: 1 Complains of Pain, 2 Non-Incapacitating, 3 Incapacitating, 4 Fatal, 5 No Injury, 6 Unk

Name: Occupants - Witnesses - Pedestrians - Bicyclists	Person Type	Unit ID	Sex	DOB	Seat Pos.	Air Bag Deployed	Ejected	Prot. System	Injury	Trans by Rescue
										☐ Y ☐ N
										☐ Y ☐ N
										☐ Y ☐ N

Non-Vehicle Property Damage ☐ State Property ☐ City/Town Property ☐ Private Property

Owner	Address

Home Phone	Cell Phone	Work Phone	Damage Description

Reporting Officer Name	Reporting Officer Badge Number	Report Date	Prohibit Public Release
RECORDS CLERK MARCIA J STONE	864	08/22/2018	No

Report Number
18-21803-AC

STATE OF RHODE ISLAND UNIFORM CRASH REPORT
CODING GUIDE

Type of Roadway — [1]
1 Two-Way, Not Divided (No Median or Barrier)
2 Two-Way, Not Divided With a Continuous Left Turn Lane
3 Two-Way, Divided, Unprotected (painted >4 feet) Median
4 Two-Way, Divided, Positive Median Barrier
5 One-Way Trafficway
6 Unknown

Road Surface Condition (Prevailing) — [1]
1 Dry
2 Wet
3 Snow
4 Slush
5 Ice/Frost
6 Water (Standing, Moving)
7 Sand
8 Mud, Dirt, Gravel
9 Oil
10 Other
11 Unknown

Light Condition (Prevailing) — [4]
1 Daylight
2 Dawn
3 Dusk
4 Dark - Lighted
5 Dark - Not Lighted
6 Dark - Unknown Lighting
7 Other
8 Unknown

Weather Condition (Prevailing) — [1]
1 Clear
2 Cloudy
3 Fog, Smog, Smoke
4 Rain
5 Sleet, Hail (Freezing Rain or Drizzle)
6 Snow
7 Blowing Snow
8 Severe Crosswinds

Manner of Impact — [13]
1 Not a Collision Between Two Motor Vehicles in Transport
2 Rear End (Front-to-Rear)
3 Head-On (Front-to-Front)
4 Angle (Front-to-Side) Same Direction
5 Angle (Front-to-Side) Opposite Direction
6 Angle (Front-to-Side) Right Angle (Includes Broadside)
7 Angle-direction Not Specified
8 Sideswipe, Same Direction
9 Sideswipe, Opposite Direction
10 Rear-to-Side
11 Rear-to-Rear
12 Other
13 Unknown

School Bus Related Crash?
(Directly Involved Indicates Contact was Made)
☐ Yes, Directly Involved ☒ No
☐ Yes, Indirectly Involved

Traffic Controls — [1]
1 No Controls
2 Person
3 Traffic Control Signal
4 Flashing Traffic Control Sig.
5 School Zone Signs
6 Stop Signs
7 Yield Signs
8 Warning Signs
9 Railway Crossing Device
10 Pavement Markings
11 Other
12 Unknown

Pre-Crash Traffic Controls Malfunctioning, Damaged or Missing?
☐ Yes ☐ No ☒ N/A

Construction Zone Crash?
(Crash Occurs in or Related to Construction, Maintenance, or Utility Work Zone. May Include Vehicles Slowed or Stopped because of Work Zone)
☐ Yes ☒ No

Construction Workers Present?
☐ Yes ☒ No

Contributing Circumstances Environment
1 None
2 Weather Conditions
3 Physical Obstructions
4 Glare
5 Animal(s) in Roadway
6 Other
7 Unknown
1st [1]
2nd
3rd

Contributing Circumstances Road
1 None
2 Road Surface Condition (Wet, Icy, Snow, Slush, etc.)
3 Debris
4 Rut, Holes, Bumps
5 Work Zones (Construction/Maintenance/Utility)
6 Worn, Travel-Polished Surface
7 Obstruction in Roadway
8 Traffic Control Device Inoperative, Missing or Obscured
9 Shoulders (None, Low, Soft, High)
10 Non-Highway Work
11 Other
12 Unknown
1st [1]
2nd
3rd

Unit Types

Vehicle #1 [1] — Vehicle #2 [21]

1 Passenger Car
2 (Sport) Utility Vehicle
3 Passenger Van
4 Cargo Van (10K lbs[4,536 kg] or Less)
5 Pickup
6 Motor Home
7 School Bus
8 Transit Bus
9 Motor Coach
10 Other Bus
11 Motorcycle
12 Moped
13 Low Speed Vehicle
14 Other Light Trucks (10K lbs [4,536 kg] or Less)
15 Tractor Trailer or Combination (More than 10K lbs [4,536 kg])
16 Medium/Heavy Trucks (More than 10K lbs [4,536 kg])
17 Tow Truck
18 Pedestrian
19 Bicyclist
20 Witness
21 Other

Does this Vehicle have Seats to Transport 9 or more people, including the Driver's Seat?
Vehicle #1: ☐ Yes ☒ No — Vehicle #2: ☐ Yes ☐ No

Was this Vehicle in Tow?
Vehicle #1: ☐ Yes ☒ No — Vehicle #2: ☐ Yes ☐ No

Special Function Vehicle

Vehicle #1 [1] — Vehicle #2

1 No Special Function
2 Taxi
3 Vehicle Used as School Bus
4 Vehicle Used as Other Bus
5 Military
6 Police
7 Ambulance
8 Fire Truck
9 Unknown

Report Number
18-21803-AC

STATE OF RHODE ISLAND UNIFORM CRASH REPORT
CODING GUIDE

Police, Ambulance or Fire Truck Responding to a Call?

Vehicle #1: ☐ Yes ☒ No ☐ Unk — Vehicle #2: ☐ Yes ☐ No ☐ Unk

Motor Vehicle Position

2 — Vehicle #1 — Vehicle #2

1 Motor Vehicle on Roadway 2 Motor Vehicle Parked 3 Working Vehicle/Equipment

Extent of Damage

2 — Vehicle #1 — Vehicle #2

1 No Damage Observed 2 Minor damage (less than or equal to $1000) 3 Functional Damage (greater than $1000) 4 Disabling Damage (greater than $1000)

Most Harmful Event

13 — Vehicle #1 — Vehicle #2

Non-Collision:

1 Overturn/Rollover
2 Fire/Explosion
3 Immersion
4 Jackknife
5 Cargo/Equip. Loss or Shift
6 Fell/Jumped from Motor Veh.
7 Thrown or Falling Object
8 Other Non-Collision

Collision with Person, Motor Veh, or Non-fixed Obj:

9 Pedestrian
10 Pedalcycle
11 Railway Vehicle (Train, Engine)
12 Animal
13 Motor Vehicle in Transport
14 Work Zone/Maintenance Equipment
15 Other Non-Fixed Object

Collision with Fixed Object:

16 Impact Attenuator/Crash Cushion
17 Bridge Overhead Structure
18 Bridge Pier or Support
19 Bridge Rail
20 Culvert
21 Curb
22 Ditch
23 Embankment
24 Guardrail Face
25 Guardrail End
26 Jersey/Concrete Traffic Barrier
27 Other Traffic Barrier
28 Tree (Standing)
29 Landscaping
30 Utility Pole (Elec/Tele)/Light Support
31 Highway Lighting/Light Standard
32 Traffic Sign/Support
33 Traffic Signal/Support
34 Traffic Control Box
35 Variable Message Board/Arrow Board
36 Other Post, Pole, or Support
37 Fence
38 Mailbox
39 Other Fixed Obj. (Wall, Building, Tunnel, etc.)

40 Unknown - Most Harmful Event

Vehicle Action Prior

12 — Vehicle #1 — Vehicle #2

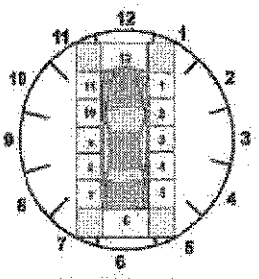
1 Movements Essentially Straight Ahead
2 Backing
3 Changing Lanes
4 Overtaking/Passing
5 Turning Right
6 Turning Left
7 Making U-Turn
8 Leaving Traffic Lane
9 Entering Traffic Lane
10 Slowing
11 Negotiating a Curve
12 Parked
13 Stopped in Traffic
14 Other
15 Unknown

10 — Vehicle #1

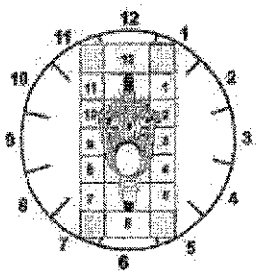
Initial Impact Area
Clock Diagram
Or
13 Top (Roof)
14 Undercarriage
15 Non-Collision
16 Unknown

Most Damaged Area

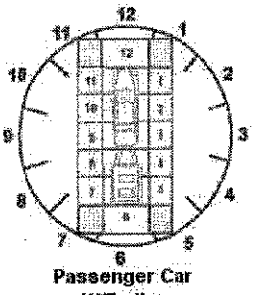
11 — Vehicle #1



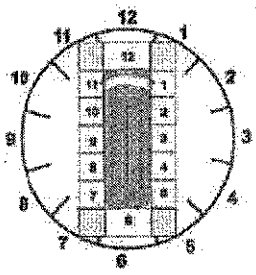
Passenger Car



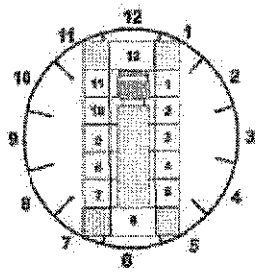
Motorcycle



Passenger Car W/Trailer



Bus



Tractor Trailer

Vehicle #2

Initial Impact Area
Clock Diagram
Or
13 Top (Roof)
14 Undercarriage
15 Non-Collision
16 Unknown

Most Damaged Area

Vehicle #2

Report Number
18-21803-AC

STATE OF RHODE ISLAND UNIFORM CRASH REPORT
CODING GUIDE

Sequence of Events

Vehicle #1 — 1st: 13; 2nd: ; 3rd: ; 4th:

Vehicle #2 — 1st: ; 2nd: ; 3rd: ; 4th:

Non-Collision:

1 Overturn/Rollover
2 Fire/Explosion
3 Immersion
4 Jackknife
5 Cargo/Equipment Loss or Shift
6 Fell/Jumped from Motor Vehicle
7 Thrown or Falling Object
8 Other Non-Collision

Collision with Person, Motor Veh, or Non-fixed Obj:

9 Pedestrian
10 Pedalcycle
11 Railway Vehicle (Train, Engine)
12 Animal
13 Motor Vehicle in Transport
14 Work Zone/Maintenance Equipment
15 Other Non-Fixed Object

Collision with Fixed Object:

16 Impact Attenuator/Crash Cushion
17 Bridge Overhead Structure
18 Bridge Pier or Support
19 Bridge Rail
20 Culvert
21 Curb
22 Ditch
23 Embankment
24 Guardrail Face
25 Guardrail End
26 Jersey/Concrete Traffic Barrier
27 Other Traffic Barrier
28 Tree (Standing)
29 Landscaping
30 Utility Pole (Elec/Tele)/Light Support
31 Highway Lighting/Light Standard
32 Traffic Sign/Support
33 Traffic Signal/Support
34 Traffic Control Box
35 Variable Message Board/Arrow Board
36 Other Post, Pole, or Support
37 Fence
38 Mailbox
39 Other Fixed Obj. (Wall, Building, Tunnel, etc.)

40 Unknown - Sequence of Events

Driver Distracted

Driver Vehicle #1 — Driver Vehicle #2

1 Not Distracted
2 Electronic Communication Devices (Cell Phone, Pager, etc.)
3 Other Electronic Devices (Navigation Device, Palm Pilot, etc.)
4 Other Inside the Vehicle
5 Other Outside the Vehicle
6 Unknown

Physical Condition of Driver

Driver Vehicle #1 — Driver Vehicle #2

1 Apparently Normal
2 Emotional (Depressed, Angry, Disturbed, etc.)
3 Ill (Sick)
4 Fell Asleep, Fainted, Fatigued, etc.
5 Under the Influence of Medications/Drugs/Alcohol
6 Other

Non-Motorist Safety Equipment

Vehicle #1: 1st ; 2nd

Vehicle #2: 1st ; 2nd

1 None
2 Helmet
3 Protective Pads Used (Elbows, Knees, Shins, etc.)
4 Reflective Clothing (Jacket, Backpack, etc.)
5 Lighting
6 Other
7 N/A
8 Unknown

Alcohol and/or Drug Testing

Driver Vehicle #1 Alcohol	Driver Vehicle #1 Drug	Chemical Test	Driver Vehicle #2 Alcohol	Driver Vehicle #2 Drug
☐	☐	None Given	☐	☐
☐	☐	Test Refused	☐	☐
	☐	Unknown if Tested		☐
☐	☐	Blood	☐	☐
☐	☐	Urine	☐	☐
☐	☐	Serum	☐	☐
☐	☐	Other	☐	☐
☐		Breath	☐	

Alcohol Test Result

Driver Vehicle #1		Driver Vehicle #2
	BAC	
☐	Pending	☐
☐	Unknown	☐

Drug Test Result

Driver Vehicle #1		Driver Vehicle #2
☐	Positive	☐
☐	Negative	☐
☐	Awaiting Test Result	☐

Report Number
18-21803-AC

STATE OF RHODE ISLAND UNIFORM CRASH REPORT
Narrative/Diagram Supplemental

Please see the Narrative Supplemental

◯ Indicates North

Crash Diagram (NOT TO SCALE)

NARRATIVE FOR RECORDS CLERK MARCIA J STONE

Ref: 18-21803-AC

Entered: 08/22/2018 @ 1011 Entry ID: 864
Modified: 08/22/2018 @ 1017 Modified ID: 864
Approved: 08/22/2018 @ 1030 Approval ID: 305

08/22/2018 1011 M Stone

Durante came in to file an accident report. Her vehicle was parked on Lee's Wharf on Aug. 19th from 1613 to 1945 hours. When Ms Durante got back to her vehicle, she didn't notice the damage to the left front of her vehicle until the next day.

Ms Durante is hoping that a surveillance camera caught the accident.

APPENDIX B – Trip Generation

ITE Trip Generation Summary

ITE Land Use Code

ITE Land Use Code 310 – Hotel

B

ITE Trip Generation Summary

Trip Generation Summary

Summary;

Description		Enter	Exit	Total
AM Peak Hour				
ITE Land Use Code 310	Hotel	8	6	14
PM Peak Hour				
ITE Land Use Code 310	Hotel	7	9	16

Calculations;

ITE Land Use Code 310 Hotel (21 Occupied Rooms)

Independent Variable (X) = Occupied Rooms X = 21

AM Peak *Directional Distribution: 58% Entering 42% Exiting*

T = 0.62 (X) Enter: 8
T = 0.62 21 Exit: 6
T = 14 Total: 14

PM Peak *Directional Distribution: 49% Entering 51% Exiting*

T = 0.73 (X) Enter: 7
T = 0.73 21 Exit: 9
T = 16 Total: 16

B

ITE Land Use Code

ITE Land Use Code 310 – Hotel

Land Use: 310
Hotel

Description

A hotel is a place of lodging that provides sleeping accommodations and supporting facilities such as restaurants, cocktail lounges, meeting and banquet rooms or convention facilities, limited recreational facilities (pool, fitness room), and/or other retail and service shops. All suites hotel (Land Use 311), business hotel (Land Use 312), motel (Land Use 320), and resort hotel (Land Use 330) are related uses.

Additional Data

Studies of hotel employment density indicate that, on the average, a hotel will employ 0.9 employees per room.[1]

Twenty-five studies provided information on occupancy rates at the time the studies were conducted. The average occupancy rate for these studies was approximately 82 percent.

Some properties contained in this land use provide guest transportation services such as airport shuttles, limousine service, or golf course shuttle service, which may have an impact on the overall trip generation rates.

Time-of-day distribution data for this land use are presented in Appendix A. For the one center city core site with data, the overall highest vehicle volumes during the AM and PM on a weekday were counted between 8:30 and 9:30 a.m. and 3:15 and 4:15 p.m., respectively. On Saturday and Sunday, the peak hours were between 5:00 and 6:00 p.m. and 10:15 and 11:15 a.m., respectively.

The sites were surveyed in the 1980s, the 1990s, the 2000s, and the 2010s in California, District of Columbia, Florida, Georgia, Indiana, Minnesota, New York, Pennsylvania, South Dakota, Texas, Vermont, Virginia, and Washington.

For all lodging uses, it is important to collect data on occupied rooms as well as total rooms in order to accurately predict trip generation characteristics for the site.

Trip generation at a hotel may be related to the presence of supporting facilities such as convention facilities, restaurants, meeting/banquet space, and retail facilities. Future data submissions should specify the presence of these amenities. Reporting the level of activity at the supporting facilities such as full, empty, partially active, number of people attending a meeting/banquet during observation may also be useful in further analysis of this land use.

Source Numbers

170, 260, 262, 277, 280, 301, 306, 357, 422, 507, 577, 728, 867, 872, 925, 951

---

[1] Buttke, Carl H. Unpublished studies of building employment densities, Portland, Oregon.

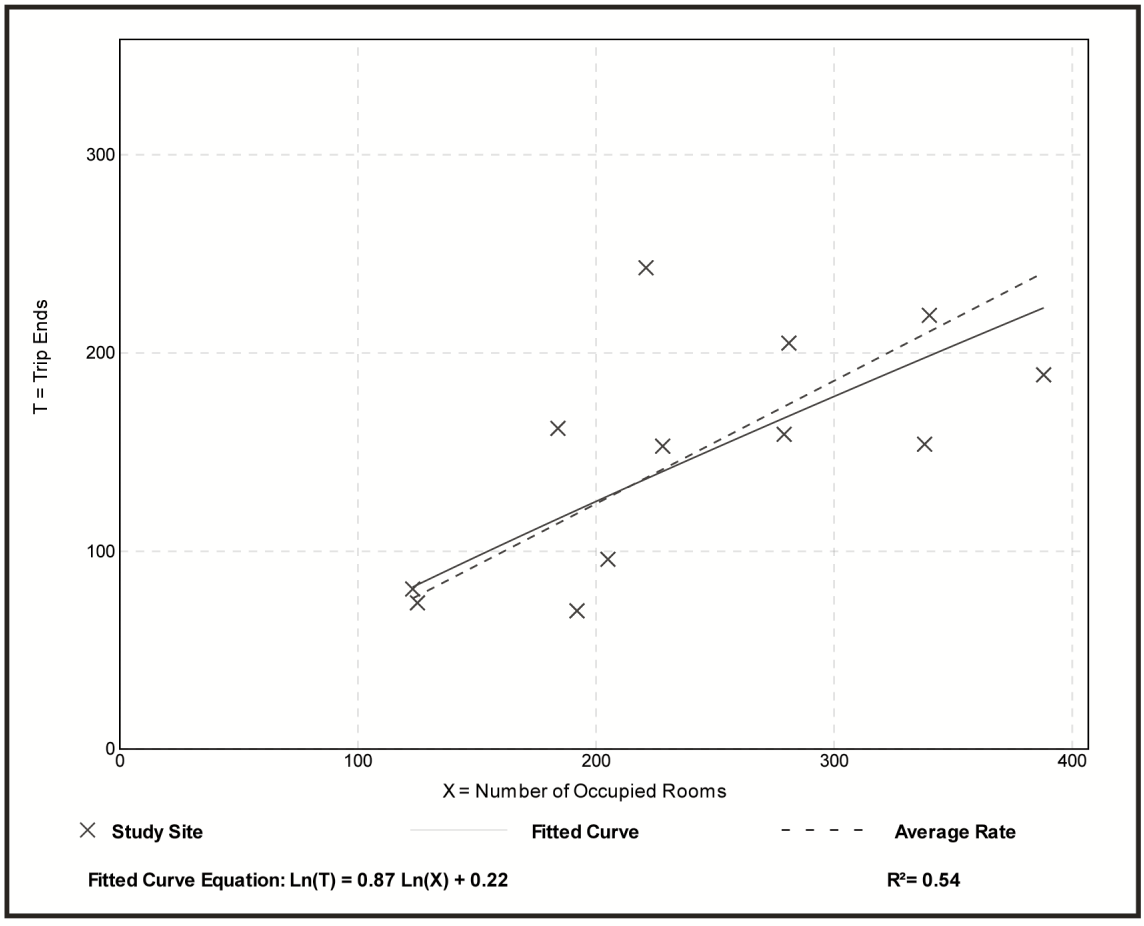
Hotel
(310)

Vehicle Trip Ends vs: **Occupied Rooms**
On a: **Weekday,**
Peak Hour of Adjacent Street Traffic,
One Hour Between 7 and 9 a.m.
Setting/Location: **General Urban/Suburban**
Number of Studies: 12
Avg. Num. of Occupied Rooms: 242
Directional Distribution: 58% entering, 42% exiting

Vehicle Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.62	0.36 - 1.10	0.20

Data Plot and Equation



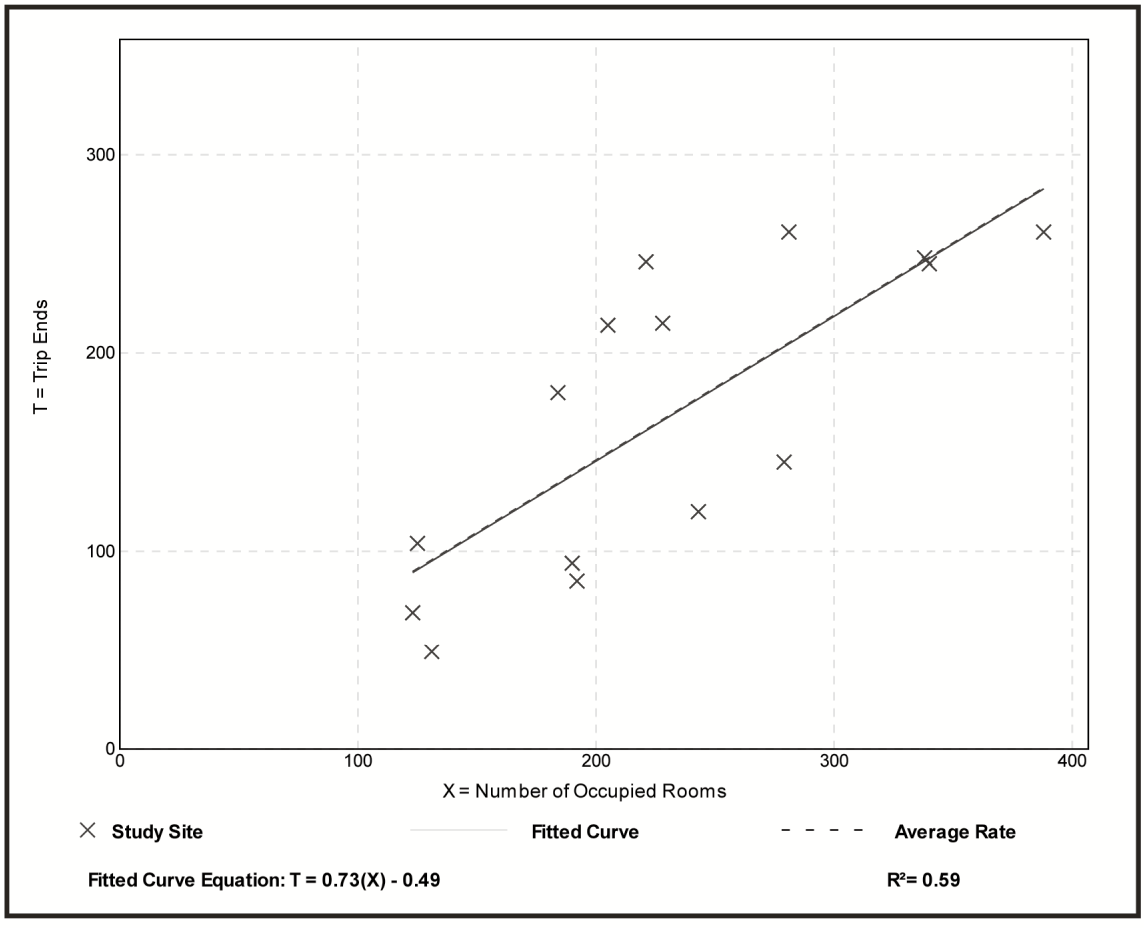
Hotel
(310)

Vehicle Trip Ends vs:	**Occupied Rooms**
On a:	**Weekday,**
	Peak Hour of Adjacent Street Traffic,
	One Hour Between 4 and 6 p.m.
Setting/Location:	**General Urban/Suburban**
Number of Studies:	15
Avg. Num. of Occupied Rooms:	231
Directional Distribution:	49% entering, 51% exiting

Vehicle Trip Generation per Occupied Room

Average Rate	Range of Rates	Standard Deviation
0.73	0.37 - 1.11	0.22

Data Plot and Equation



NORTHEAST ENGINEERS & CONSULTANTS, INC.

Stormwater Runoff Analysis

"Manchester House"
Proposed Hotel and Restaurant
Assessor's Map 32, Lot 314
24 Lee's Wharf
Newport, RI

Prepared For
Howard Wharf, LP
c/o SILVA, THOMAS, MARTLAND
& OFFENBERG, LTD
Middletown, RI 02842

February 2020

6 Valley Road • Middletown, RI 02842 • p. 401.849.0810 • f. 401.846.4169 • northeastengineers.com
Civil • Site • Land Development • Waterfront • Coastal Engineering • Environmental • Geotechnical • Structural • Renewable • Surveying

TABLE OF CONTENTS

1.0 PROJECT NARRATIVE

1.1 SITE INFORMATION

City / Town:	Newport, Rhode Island
Adjacent Roadways:	Lee's Wharf
Lot(s) identification:	A.P. 32 Lot 314
Zoning District:	WB (Waterfront Business)
Current Use:	Parking Lot with small accessory structure
Site Area:	0.74 Acres
FEMA Zone and Map:	Zone "VE (EL13)" and "AE (EL12" (Panel 44005C0177J)

1.2 EXISTING IMPROVEMENTS AND SITE CONDITIONS

The existing property contains a small (880 +/- square feet) single story concrete structure and is otherwise occupied by a large parking lot. This structure is located to the rear of the lot and lies on the property lines of two abutting parcels. The narrow property lies lengthwise having significant frontage along Lee's Wharf. The parking lot is accessible from this roadway via a large gate in the chain link fence which surrounds the property. The site is surrounded by waterfront business structures and other paved parking lots. A narrow strip of property lies between this parcel and Newport Harbor. Overhead utility lines run through the middle of the property from poles along the roadway to structures to the south. Short concrete retaining walls run along portions of the property lines which allow for a somewhat flattened grade across the parking lot. Municipal utilities line along the frontage of the roadway; however, specific utility connections for this property are unknown. There are no private water quality or water retentions systems located on-site.

1.3 PROTECTED FEATURES

The site lies partially within the 50-foot setback from the coastal feature associated with Newport Harbor, although this coastal feature lies within an abutting parcel. Newport Harbor is identified as CRMC Type 5 waters. There are no wetlands or vegetation on the property. The coastal half of the property lies within the 200-foot CRMC jurisdiction line. Any development of this portion of the property would require assent from the CRMC.

1.4 SITE TERRAIN AND SOILS

In general, the site slopes evenly from the northeast corner of the parking lot to the southeast corner of the parking lot with slopes ranging from 1.5% to 2.5%. The soil type on site is Ur (Urban land) as designated by the USDA Natural Resource Conservation Service. This is generally a type C hydrologic soil common to this area of Aquidneck Island. Class IV soil evaluations performed on site revealed only fill material with a 53 to 56-inch water table. This is likely tidally influenced to the proximity of the coastal waters.

1.5 PROPOSED IMPROVEMENTS

The owner intends to demolish the exist structure and remove all other improvements, with the exception of some perimeter retaining walls. A 12,827 square foot hotel and restaurant is to be constructed just outside of the 50-foot CRMC coastal setback. This lot coverage is within the maximum 40% lot coverage allowable by the zoning ordinance. The structure shall be elevated in order to provide separation from the flood elevation, and the lower level is to be used for parking, storage, and other non-residential uses. The upper floors will contain the hotel units and amenities. The area coastal of the structure is to contain a greenway with public access from Lee's Wharf. The remainder of this area shall be planted or lawn green space. The area upland of the hotel shall be used for paved surface parking. A public access sidewalk is to run the length of the frontage of the roadway. The site is to have two paved entry lanes and one paved exit lane. The area of the former structure will be loamed and seeded. Screened pad mounted mechanical equipment will be located in this area. The site will include perimeter green space where possible.

New public and private utility services will be provided for the site. A pad mounted transformer is anticipated to be located at the northeast corner of the property adjacent to the sidewalk. The existing overhead lines which cross the property are expected to be routed underground to maintain service connections to structures to the south. All electrical service work is subject to design and approval by National Grid. Domestic water and fire service stubs shall be tapped from the main in Lee's Wharf with permission from Newport Water. The sewer service will be connected to the existing municipal main in the roadway with permission from Newport Department of Utilities. If it is determined by the DPU that the existing sewer pump station at the end of Lee's Wharf does not have the capacity for the additional flow, a new private pump station will be designed. This pump station will discharge at an existing sewer manhole in Thames Street. Any such sewer connections are subject to design review by the DPU.

In general, the total amount of impervious surfaces across the site will be reduced. Stormwater control for this development includes an underground infiltrating sand filter system for the hotel rooftop. Surface flow from this property will continue to sheet towards the coast, as in the existing conditions.

2.0 PROPOSED ALTERATIONS AND STORMWATER CONSIDERATIONS

2.1 STORMWATER SYSTEM OBJECTIVES

The objectives of the project stormwater system are to accomplish the following:

- **Provide water quality treatment for stormwater runoff in accordance with the Rhode Island Stormwater Design and Installation Standards Manual**
- **Reduce or maintain the peak rate of runoff and total volume to all design points for the 1, 10 and 100-Year Type III 24-hour storm events.**
- **Maintain the overall drainage patterns from the site to the extent practicable.**
- **Reduce peak runoff and stormwater impact to the downstream abutters.**

2.2 REDEVELOPMENT SITE

As the existing site lot coverage consists of more than 40% impervious and more than 10,000 square feet of this impervious surface is to be developed, this project qualifies as a "redevelopment site" per section 3.2.6 of the RISDISM. Per this section of the Manual, only Standards, 2, 3, and 7-11 must be addressed. Specifically, recharge and stormwater quality shall be managed in accordance with one of the following techniques:

- Reduce existing impervious area by at least 50% of the redevelopment area;
- Implement other LID techniques to the maximum extent practicable to provide recharge and water quality management for at least 50% of the redevelopment area;
- Use on-site structural BMPs to provide recharge and water quality management for at least 50% of the redevelopment area; or
- Any combination of these techniques.

2.3 MINIMUM STORMWATER MANAGEMENT STANDARDS

2.3.1 MINIMUM STANDARD 1: LID SITE PLANNING AND DESIGN STRATEGIES

The proposed development utilizes LID designs conforming to the RISDISM. These elements are located immediately downstream of the new improvements and will directly treat the newly generated runoff with minimal interception of clean runoff. This standard is not required for qualifying redevelopment sites per section 3.2.6 of the RISDISM.

2.3.2 MINIMUM STANDARD 2: GROUNDWATER RECHARGE

This majority of this standard shall be met by reducing the area of post construction impervious surfaces via the redevelopment standard. After applying credit for new pervious, a remainder of **2,493** square feet of impervious surfaces requires groundwater recharge. This equates to a total of **52** cubic feet of recharge volume based on the underlying hydrologic soil type. This recharge volume will be addressed by a rooftop infiltration system for the hotel. A minimum of **644** cubic feet of recharge is provided in the storage of the device. Refer to Appendix E for complete calculations.

2.3.3 MINIMUM STANDARD 3: WATER QUALITY

This majority of this standard shall be met by reducing the area of post construction impervious surfaces via the redevelopment standard. After applying redevelopment credit for new pervious surfaces, a remainder of **2,493** square feet of impervious surfaces require water quality treatment. This equates to a total of **208** cubic feet of water quality treatment. This will be addressed by a sub-surface infiltrating sand filter providing treatment for rooftop of the hotel. Based on the sizing of the device, a total of **644** cubic feet of water quality volume is provided. Refer to Appendix E for complete calculations.

2.3.4 MINIMUM STANDARD 4: CONVEYANCE AND NATURAL CHANNEL PROTECTION

This standard is not required for qualifying redevelopment sites per section 3.2.6 of the RISDISM.

2.3.5 MINIMUM STANDARD 5: OVERBANK FLOOD PROTECTION

This standard is not required for qualifying redevelopment sites per section 3.2.6 of the RISDISM.

2.3.6 MINIMUM STANDARD 6: REDEVELOPMENT AND INFILL PROJECTS

As stated in section 2.2 above, this project qualifies as a development project. The site is comprised of **0.74** acres of which **0.74** acres are existing impervious surfaces. This equates to approximately 100%. Only 40% is required to qualify as a redevelopment site.

2.3.7 MINIMUM STANDARD 7: POLLUTION PREVENTION

Source controls and pollution prevention measures will be present during all phases of construction. A separate stormwater pollution prevention plan (Soil Erosion and Sediment Control Narrative) will be prepared and provided upon request.

2.3.8 MINIMUM STANDARD 8: LAND USES WITH HIGHER POTENTIAL POLLUTANT LOADS

The use of this property does not quality as a LUHPPL and does not require any specific source controls, limited BMPs, or and additional state permitting.

2.3.9 MINIMUM STANDARD 9: ILLICIT DISCHARGES

Neither the using use nor any proposed uses will include any discharges considered to be "illicit" per this section of the Manual.

2.3.10 MINIMUM STANDARD 10: SOILS EROSION AND SEDIMENT CONTROL

Soil erosion and sediment control measures will be implemented during all phases of construction. A SESC plan has been provided in the permitting plan set and a separate Soil Erosion and Sediment Control Narrative will be provided upon request.

2.3.11 MINIMUM STANDARD 11: STORMWATER MANAGEMENT OPERATIONS AND MAINTENANCE

An Operations and Maintenance (O&M) Document will be prepared and submitted in addition to this narrative. This document satisfies the minimum requirements of this standard.

2.4 OVERALL STORMWATER DESIGN FUNCTION

The overall design of the stormwater system is to provide reduction in peak rate of runoff, reduction in total volume runoff, and water quality volume through the provision of new pervious surfaces and a subsurface infiltrating sand filter system. The existing drainage patterns across the site will be minimally impacted. There will be no negative impact to the receiving municipal drainage system or to the coastal feature.

3.0 DESIGN MODELING METHODOLOGY

Runoff and routing calculations have been performed for the watershed areas affected by the proposed development under existing and proposed development conditions scenarios. Time of concentration and runoff curve number calculations have been performed using the method described in NRCS Technical Release 55 – Urban Hydrology for Small Watersheds. The TR-20 based HydroCAD modeling software has been utilized to perform the more complex runoff and routing calculations, most of which are beyond the scope of the TR-55 method.

Design rainfall events have been modeled using the Soil Conservation Service (SCS) Type III hydrograph for 24-hour duration storms. The rainfall depth for each return period is taken from the RISDISM. This guidance document splits the state into five regions for rainfall frequency based on county. The project site is located in the **Newport** County region defined in the RISDISM. The rainfall frequency values recommended by RIDEM and used in this drainage analysis are listed in the table below.

Rainfall Frequency Values for **Newport County** Rhode Island with 24-Hour Storm Duration			
RIDEM *Stormwater Design and Installation Standards manual* 3/15			
Frequency	1-Yr	10-Yr	100-Yr
Inches of Rainfall	2.8	4.9	8.6

The existing and proposed conditions runoff calculations were analyzed and the proposed stormwater system was designed to mitigate the peak runoff for the 1, 10, and 100-year 24-hour design storms. The resulting design effectively mitigates and treats runoff from newly developed areas of the site before allowing it to discharge in a non-erosive manner to downstream areas in accordance with the RISDISM.

3.1 ANALYSIS DESIGN POINTS AND OFF-SITE CONTRIBUTIONS

The proposed development contributes stormwater runoff to the following design points. These design points provide a direct comparison for pre-construction and post-construction runoff flows and runoff volumes.

1. Coastal Feature

The following off-site areas contribute surface stormwater runoff to these design points. This runoff either drains through the project area or contributes in some manner which directly affects the design of the stormwater system and has been included in the design calculations. These areas are:

1. None (off-site areas do not impact designed devices and therefore do not need to be modeled).

Watershed maps for both the existing and proposed conditions can be found in Appendix B. These maps demonstrate the areas of the site which contribute to each of the design points and indicate the general pattern of surface or piped runoff flow.

3.2 PROPOSED STRUCTURES

The calculations have been performed assuming maximum allowable lot coverage (40%).

3.3 BASEMENT SUMP PUMP DISCHARGE

No basements are required due to the elevated nature of the structure. No sump pump discharge is anticipated.

4.0 STORMWATER RUNOFF COMPARISONS

Analysis of the existing and proposed runoff during design storms demonstrates that there will no increase in the peak runoff and total volume runoff to the downstream design points as a result of the development.

Comparisons of the runoff at the design points are given below in. The runoff volumes given have been evaluated over a 24-hour period. All of the HydroCAD modeling worksheets are attached in Appendix C and D.

4.1 SUMMARY OF STORMWATER CALCULATIONS

Table 4.1.1 Comparison of Runoff Values at the Design Point (EX vs. PR)
(Coastal Feature)

Storm Return Period	Existing Conditions Peak Runoff (cfs)	Proposed Conditions Peak Runoff (cfs)	Existing Conditions Volume Runoff (af)	Proposed Conditions Volume 24 hr Runoff (af)
1-year	2.07	1.67	0.158	0.116
10-year	3.66	3.33	0.286	0.238
100-year	6.44	6.21	0.513	0.461

5.0 STORMWATER BMPS

5.1 SUBSURFACE SAND FILTER

Description

The subsurface sand filter is designed to capture and temporarily store the water quality storm runoff volume in subsurface HDPE chambers and pass it through a sand media layer. The filtered stormwater is infiltrated into the undisturbed strata below the filter. High flow runoff to the sand filter bypasses the device entirely via surface overflow devices at each roof downspout. The sand filter is not intended to have a permanent pool and should drain within 24 hours.

The stormwater design for this development includes the following subsurface sand filters.

1. Device ID (HydroCAD): (Not modeled)
   Location: Coastal of the Hotel Structure
   Subwatershed treated: N/A (Hotel Roof only)
   Lined or Unlined: Unlined
   Discharge location: Groundwater
   Description: 16 Cultec C-100HD chambers over 24" ASTM C-33 sand

6.0 CONSTRUCTION STORMWATER MAINTENANCE PLAN

During the period of construction and/or until long term vegetation is established, the erosion control measures shall be inspected.

A. Silt fence / straw wattle / filter socks shall be inspected as indicated in the plan details or notes. At a minimum these devices shall be inspected and repaired once a week and/or immediately following a significant rainfall or snowmelt. Sediment trapped behind these barriers shall be excavated when it reaches a depth of 6" and regraded on the site.

B. Any erosion control blankets employed throughout the site shall be inspected on a weekly basis.

C. Any stone construction entrance(s) shall be inspected weekly, and re-established or repaired as necessary. These devices shall be inspected monthly for excessive accumulation of sediment. It may be necessary to remove stones, excavate sediment, and replace stones. If existing paved entrances are utilized to remove construction sediment from vehicle tires, these areas shall be swept on a similar basis. The stabilized construction entrance(s) shall be removed prior to final surfacing.

D. Seeded areas shall be fertilized and reseeded as necessary to ensure establishment of a vegetative growth that meets the approval of reviewing entities.

E. Maintenance of the stormwater system during construction shall be the responsibility of the site contractor. Once construction of the site is complete, maintenance of the system shall be the responsibility of the owner.

7.0 LIMITATIONS AND SPECIAL TERMS AND CONDITIONS

1. NE&C's evaluation was performed in accordance with generally accepted practices of other consultants undertaking similar studies at the same time and in the same geographical area, and NE&C observed the degree of care and skill generally exercised by other consultants under similar circumstances and conditions. No warrantee expressed or implied is made.

2. Any additional research conducted should be reviewed by Northeast Engineers & Consultants, Inc., such that the conclusions presented herein may be modified.

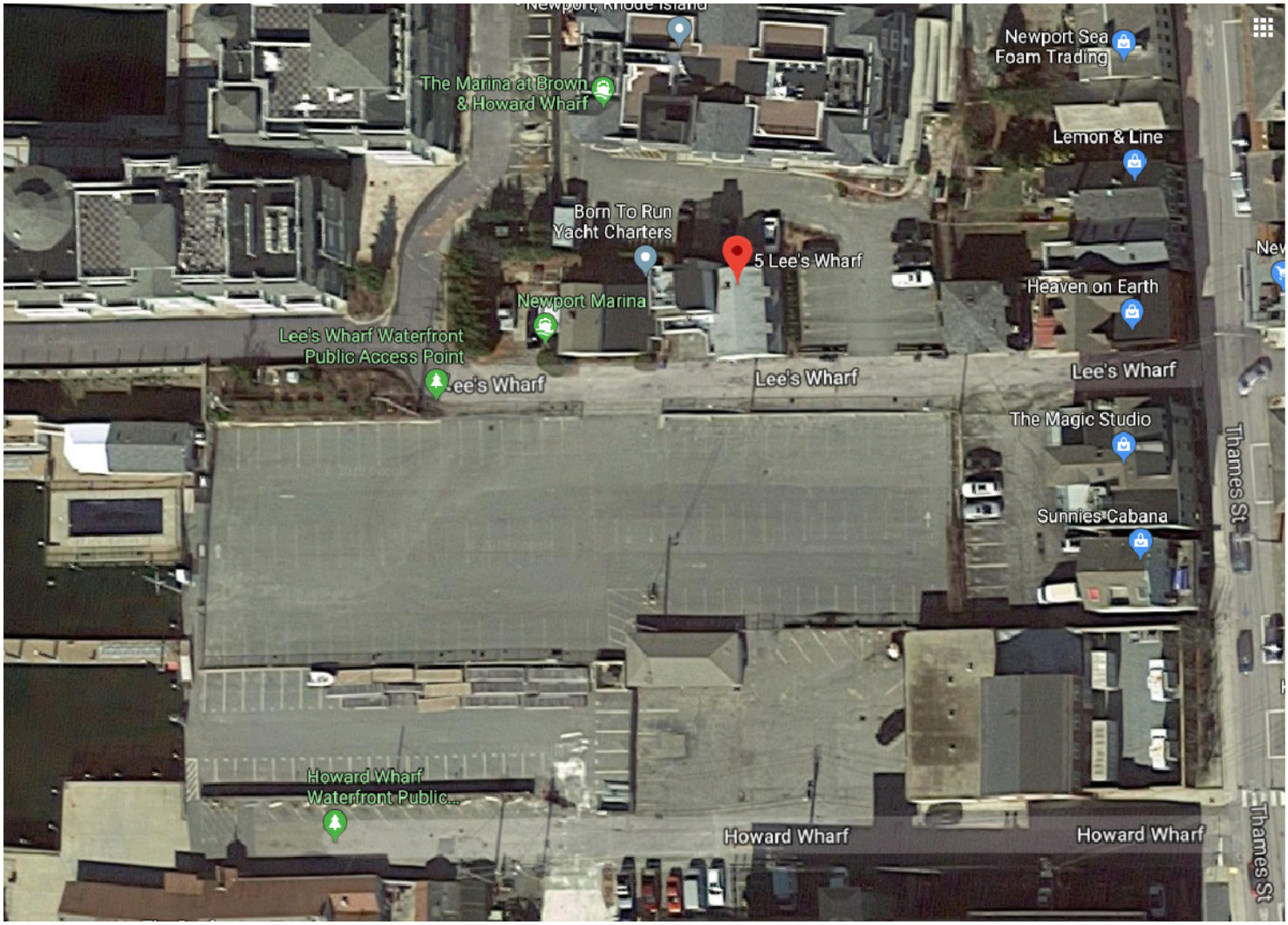
3. All observations documented in this report were performed under the existing conditions at the time of the assessment.

4. This report has been prepared on the behalf of and is for the exclusive use of the Client. This report and findings contained herein shall not, in whole or in part be disseminated or conveyed to any party, nor used by any other party in whole or in part, without the written consent of NE&C.

APPENDIX A FIGURES

Scale: NTS	Date: 13FEB20	Designed By:	Drawn By:	Checked By:
Project Title: MANCHESTER HOUSE 24 LEE'S WHARF, NEWPORT, RI		Drawing Title: LOCUS MAP		
Issued for: PERMITTING		Drawing Number: F-1	Project Number: 19107.0	

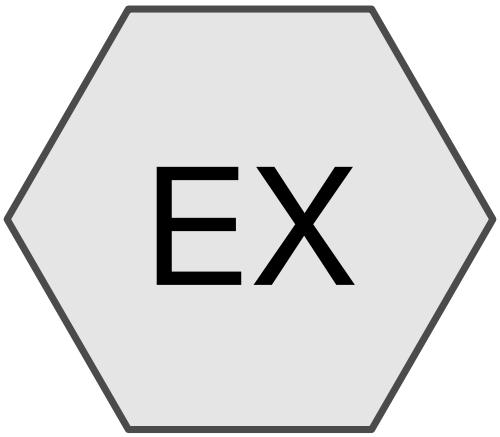
Scale: NTS	Date: 13FEB20	Designed By:	Drawn By:	Checked By:
Project Title: MANCHESTER HOUSE 24 LEE'S WHARF, NEWPORT, RI		Drawing Title: SOILS MAP		
Issued for: PERMITTING		Drawing Number: F-2	Project Number: 19107.0	



Scale: NTS	Date: 13FEB20	Designed By:	Drawn By:	Checked By:
Project Title: MANCHESTER HOUSE 24 LEE'S WHARF, NEWPORT, RI		Drawing Title: AERIAL PHOTOGRAPH		
Issued for: PERMITTING		Drawing Number: F-3	Project Number: 19107.0	

APPENDIX B WATERSHED MAPS

APPENDIX C EXISTING CONDITIONS HYDROCAD



Existing Conditions

Subcat Reach Pond Link

Drainage Diagram for 19107_2020_02_13
Prepared by Northeast Engineers & Consultants, Inc., Printed 2/21/2020

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.736	98	Pavement and Rooftop (EX)
0.736		**TOTAL AREA**

Summary for Subcatchment EX: Existing Conditions

Runoff = 2.07 cfs @ 12.07 hrs, Volume= 0.158 af, Depth> 2.57"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-YEAR Rainfall=2.80"

	Area (sf)	CN	Description
*	32,069	98	Pavement and Rooftop
	32,069		100.00% Impervious Area

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

Summary for Subcatchment EX: Existing Conditions

Runoff = 3.66 cfs @ 12.07 hrs, Volume= 0.286 af, Depth> 4.66"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=4.90"

	Area (sf)	CN	Description
*	32,069	98	Pavement and Rooftop
	32,069		100.00% Impervious Area

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

Summary for Subcatchment EX: Existing Conditions

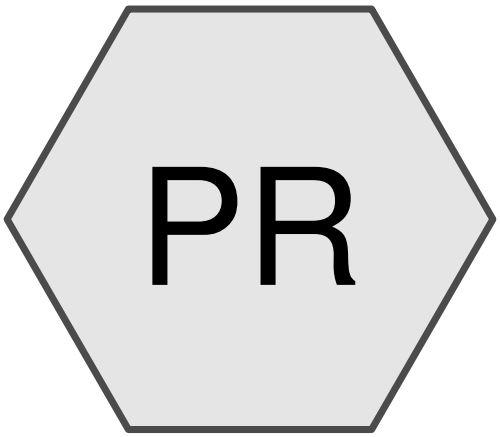
Runoff = 6.44 cfs @ 12.07 hrs, Volume= 0.513 af, Depth> 8.35"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-YEAR Rainfall=8.60"

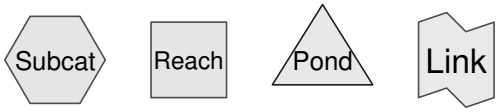
	Area (sf)	CN	Description
*	32,069	98	Pavement and Rooftop
	32,069		100.00% Impervious Area

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

APPENDIX D PROPOSED CONDITIONS HYDROCAD



Proposed Conditions



Drainage Diagram for 19107_2020_02_13
Prepared by Northeast Engineers & Consultants, Inc., Printed 2/21/2020
HydroCAD® 9.00 s/n 04733 © 2009 HydroCAD Software Solutions LLC

Area Listing (selected nodes)

Area (acres)	CN	Description (subcatchment-numbers)
0.207	74	>75% Grass cover, Good, HSG C (PR)
0.294	98	Rootop (PR)
0.234	98	Uncovered Pavement and Concrete (PR)
0.736		**TOTAL AREA**

Summary for Subcatchment PR: Proposed Conditions

Runoff = 1.67 cfs @ 12.07 hrs, Volume= 0.116 af, Depth> 1.88"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 1-YEAR Rainfall=2.80"

	Area (sf)	CN	Description
*	12,827	98	Rootop
	9,028	74	>75% Grass cover, Good, HSG C
*	10,214	98	Uncovered Pavement and Concrete
	32,069	91	Weighted Average
	9,028		28.15% Pervious Area
	23,041		71.85% Impervious Area

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

Summary for Subcatchment PR: Proposed Conditions

Runoff = 3.33 cfs @ 12.07 hrs, Volume= 0.238 af, Depth> 3.88"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 10-YEAR Rainfall=4.90"

	Area (sf)	CN	Description
*	12,827	98	Rootop
	9,028	74	>75% Grass cover, Good, HSG C
*	10,214	98	Uncovered Pavement and Concrete
	32,069	91	Weighted Average
	9,028		28.15% Pervious Area
	23,041		71.85% Impervious Area

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

Summary for Subcatchment PR: Proposed Conditions

Runoff = 6.21 cfs @ 12.07 hrs, Volume= 0.461 af, Depth> 7.51"

Runoff by SCS TR-20 method, UH=SCS, Time Span= 0.00-24.00 hrs, dt= 0.01 hrs
Type III 24-hr 100-YEAR Rainfall=8.60"

	Area (sf)	CN	Description
*	12,827	98	Rootop
	9,028	74	>75% Grass cover, Good, HSG C
*	10,214	98	Uncovered Pavement and Concrete
	32,069	91	Weighted Average
	9,028		28.15% Pervious Area
	23,041		71.85% Impervious Area

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

APPENDIX E SUPPLEMENTARY CALCULATIONS

Northeast Engineers & Consultants, Inc.

Redevelopment Site Calculations (Minimum Standard 6)

Project: 19107: "Manchester House" Hotel and Restaurant, 24 Lee's Wharf, Newport, RI

Water Quality Volume and Recharge Calculations (Reduced Parking):

Disturbed Impevious (DI):

Pavement & Conc.=	10,214			
Building =	12,827			
Other =	0			
Total (DI)=	23,041	sf	**DI =**	23,041 sf

Net Increased Pervious (NIP):

New Grass / Pervious =	9,028	sf	**NIP =**	9,028 sf

Per the RISDISM, water quality on a redevelopment site may be addressed be adding pervious surfaces. New pervious surfaces address the water quality requirement for twice the amount of redeveloped surfaces. The remaining area requiring treatment is determined by the following.

Stormwater Treatment Area (STA) = **(DI X 50%) - (NIP)**

Stormwater Treatment Area (STA) = **23,041 X 50% - 9,028**

Stormwater Treatment Area (STA) = **2,493 sf**

Northeast Engineers & Consultants, Inc.
A Knowledge Corporation®
6 Valley Road, Middletown, RI 02842
www.northeastengineers.com

Unlined Subsurface Sand Filter

Project 19107.0: "Manchester House" Hotel and Restaurant, 24 Lee's Wharf, Newport, RI

Water Quality Volume Calculation (RIDEM Minimum Standard 3):

Pavement =	0		** Area remaining after redevelopment credit*	
Buildings* =	2,493		Min. WQ_R:	534 cf
Impervious Area:	2,493	sf	**WQ_R:**	208 cf
Total Disturbed Area:	32,069	sf	**$WQ_{R75\%}$:**	156 cf

A =	Surface area of filter bed (ft^2)	488	ft^2
d_f =	Filter bed depth (ft)	2	ft
V_R=	media void ratio	33%	

Storage Volume in Media:

488 X 2 X 33% = **322 cf**

Total System Volume Calculation:

Per the RISDISM, the storage volume of the system must accommodate 75% of the WQ volume (including pretreatment). The total provided area is this area, plus the area under the outlet.

V_M =	storage volume in media	322	cf
A =	Surface area of filter bed (ft^2)	488	ft^2
h_o =	storage height below outlet	0.66	ft
V_{FB} =	Volume of pretreatment (if any)	0	cf

Total Storage provided by this BMP:

WQ_V = $V_M + (A \times h_o) + V_{FB}$ = **644** cf

Minimum Area Calculation:

Drain time in an unlined filter is limited by the surrounding soils:

f_c =	design infiltration rate	1.02	in/hr
t_f =	$(d_f \times 12 \text{ in.} / f_c) / 24 \text{ hr}$ =	0.98	days

The minimum area of the filter, according to RISDISM, is calculated using the following equation:

A_R = $(WQ_V) \times (d_f) / [(k) \times (h_f + d_f) \times (t_f)]$

Where,	**WQ_V =**	Total Required Water Quality Volume	208	cf
	d_f =	Filter bed depth (ft)	2	ft
	k =	Coefficient of permeability of filter media (ft/day)	3.5	ft/day
	h_f =	Average height of water above surface of media	0.33	ft
	t_f =	Design filter bed drain time (days)	0.98	

Therefore, the minimum surface areas is:

A_R = 52 sf

A = 488 sf Area is greater and therefore satisfactory.

Northeast Engineers & Consultants, Inc.

Groundwater Recharge Calculations (Minimum Standard 2)

Project: 19107: "Manchester House" Hotel and Restaurant, 24 Lee's Wharf, Newport, RI

Impervious Area*: 2,493 sf

Water Recharge Volume Calculations:

HSG	Recharge Factor (F)
A	0.60
B	0.35
C	0.25
D	0.10

Impervious Area: 2,493 sf **F =** 0.25

$WRec_V$ = (Impervious Area) / 12 X F

$WRec_V$ = **52** cf

Volume of Infiltration for a WQ storm:** **644** **cf**

* Remaining Area not addressed by redevelopment standards

** Total storage of the infiltrating WQ device.

APPENDIX F SOIL EVALUATIONS

STATE OF RHODE ISLAND AND PROVIDENCE PLANTATIONS
Department of Environmental Management
Office of Water Resources
Onsite Wastewater Treatment Systems Program

Site Evaluation Form
Part A – Soil Profile Description Application Number: Drainage Test Holes

Property Owner: 44 Ocean Partners, LLC
Property Location: 5 Lee's Wharf, Newport (A.P. 32, Lot 314)
Date of Test Hole: December 27, 2019
Soil Evaluator: Daniel Welch License Number: D4094
Weather: Overcast, 45°F Shaded: Yes ☐ No ☒ Time: 8:00am

TH 1 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Contr.				
Asphalt	0-4"	a	s	-	-		-		-	-	-	-
HTM	4-56"	c	s	-	-		-		-	-	-	-
C	56-100"	-	-	2.5Y 4/3	10YR 5/8 5Y 5/1		m,2,p m,2,d		sil	0-m	fr	7

TH 2 Horizon	Depth	Horizon Boundaries		Soil Colors		Re-Dox			Texture	Structure	Consistence	Soil Category
		Dist	Topo	Matrix	Re-Dox Features	Ab.	S.	Contr.				
Asphalt	0-4"	a	s	-	-		-		-	-	-	-
HTM	4-96"	-	-	5Y 3/2	-		-		-	-	-	-

TH 1 Soil Class A Total Depth 100" Impervious/Limiting Layer Depth N/R GW Seepage Depth 66" SHWT 56"

TH 2 Soil Class A Total Depth 96" Impervious/Limiting Layer Depth N/R GW Seepage Depth 70" SHWT 53"

Comments: ESHWT measured from existing grade, not original grade.

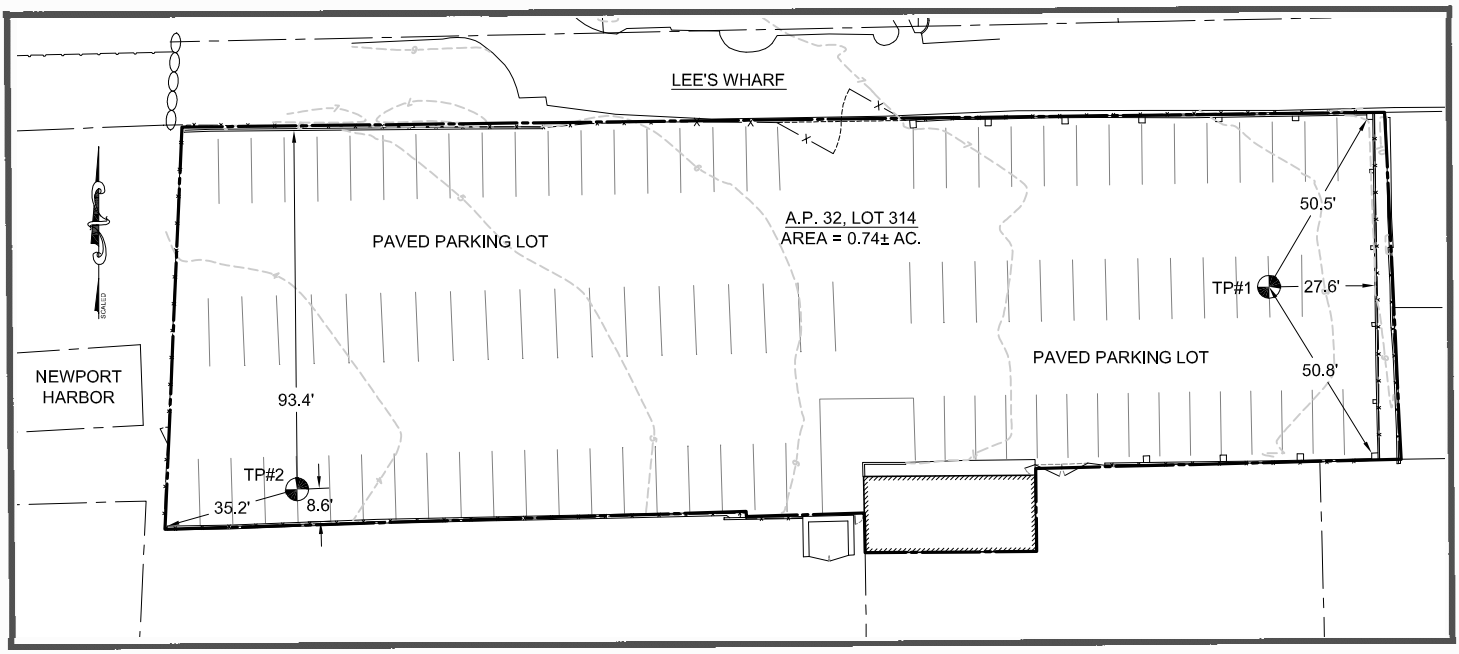
Part B

Site Evaluation – to be completed by Soil Evaluator or Class II or III Designer

Please use the area below to locate:

1. Test holes and bedrock test holes,
2. Approximate direction of due north,
3. Offsets from all test holes to fixed points such as street, utility pole, or other permanent, marked object.*
   ***OFFSETS MUST BE SHOWN**

Key:
- Approximate location of test holes
- Approximate location of bedrock test holes
- x% Estimated gradient and direction of slope
- N Approximate direction of due north



1. Relief and Slope: 0-2%
2. Presence of any watercourse, wetlands or surface water bodies, within 200 feet of test holes? If yes, locate on above sketch. NO ☐ YES ☒
3. Restrictive Layer or Bedrock within 4' below original ground within 25 feet of test hole? Provide all test hole locations & depths above. NO ☒ YES ☐
4. Presence of existing or proposed private drinking water wells within 200 feet of test holes? If yes, locate on above sketch. NO ☒ YES ☐
5. Public drinking water wells within 500 feet of test holes? If yes, locate on above sketch. NO ☒ YES ☐
6. Is site within the watershed of a public drinking water reservoir or other critical area defined in Rule 6.42? NO ☒ YES ☐
7. Has soil been excavated from or fill deposited on site? If yes, locate on above sketch. NO ☐ YES ☒
8. Site's potential for flooding or ponding: NONE ☐ SLIGHT ☐ MODERATE ☐ SEVERE ☒
9. Landscape position: Toeslope
10. Vegetation: Asphalt Parking Lot
11. Indicate approximate location of property lines and roadways.
12. Additional comments, site constraints or additional information regarding site: _____

Certification

The undersigned hereby certifies that all information on this application and accompanying forms, submittals and sketches are true and accurate and that I have been authorized by the owner(s) to conduct these necessary field investigations and submit this request.

Part A prepared by: Daniel Welch (Signature) D4094 (License #) Part B prepared by: Daniel Welch (Signature) D4094 (License #)

DO NOT WRITE IN THIS SPACE

Witnessed Soil Evaluation Decision: Concur ☐ Inconclusive ☐ Disclaim ☐

Unwitnessed Soil Evaluations Decision: Accept ☐ Inconclusive ☐ Disclaim ☐

Wet Season Determination required ☐ **Additional Field Review Required** ☐

Explanation: _____

Signature Authorized Agent _____ Date _____

APPENDIX G RISDISM STORMWATER CHECKLIST (APPENDIX A)

APPENDIX A: STORMWATER MANAGEMENT PLAN CHECKLIST AND LID PLANNING REPORT – STORMWATER DESIGN SUMMARY

PROJECT NAME: "Manchester House"	**(RIDEM USE ONLY)**
TOWN: Newport RI	**STW/WQC File #:**
BRIEF PROJECT DESCRIPTION: Hotel and Restaurant Coastal Development	**Date Received:**

Stormwater Management Plan (SMP) Elements – Minimum Standards

Submit four separately bound documents: Appendix A Checklist; Stormwater Site Planning, Analysis and Design Report with Plan Set/Drawings; Soil Erosion and Sediment Control (SESC) Plan, and Post Construction Operations and Maintenance (O&M) Plan. Please refer to Suggestions to Promote Brevity.

Note: **All stormwater construction projects must submit a Stormwater Management Plan (SMP). However, not every element listed below is required per the RIDEM Stormwater Rules and the RIPDES Construction General Permit (CGP). This checklist will help identify the required elements to be submitted with an Application for Stormwater Construction Permit & Water Quality Certification.**

PART 1. PROJECT AND SITE INFORMATION

PROJECT TYPE (Check all that apply)

☐ Residential	☒ Commercial	☐ Federal	☐ Retrofit	☐ Restoration
☐ Road	☐ Utility	☐ Fill	☐ Dredge	☐ Mine
☐ Other (specify):				

SITE INFORMATION

☒ Vicinity Map

INITIAL DISCHARGE LOCATION(S): The WQv discharges to: (You may choose more than one answer if several discharge points are associated with the project.) See Guidance to identify receiving waters.

☒ **Groundwater**	☐ **Surface Water**	☐ **MS4**
☐ GAA	☐ Isolated Wetland	☐ RIDOT
☐ GA	☒ Named Waterbody	☐ RIDOT Alteration Permit is Approved
☒ GB	☐ Unnamed Waterbody Connected to Named Waterbody	☐ Town
		☐ Other (specify):

ULTIMATE RECEIVING WATERBODY LOCATION(S): Include pertinent information that applies to both WQ_v and flow from larger storm events including overflows. Choose all that apply, and repeat table for each waterbody.

☒ Groundwater or Disconnected Wetland	☐ SRWP		
☒ Waterbody Name: Newport Harbor	☐ Coldwater	☐ Warmwater	☒ Unassessed
☒ Waterbody ID: RI0007030E-01E	☐ 4th order stream of pond 50 acres or more		
☐ TMDL for:	☐ Watershed of flood prone river (e.g., Pocasset River)		
☐ Contributes to a priority outfall listed in the TMDL	☐ Contributes stormwater to a public beach		
☒ 303(d) list – Impairment(s) for: Enterococcus	☐ Contributes to shellfishing grounds		

PROJECT HISTORY		
☐ RIDEM Pre- Application Meeting	Meeting Date:	☐ Minutes Attached
☐ Municipal Master Plan Approval	Approval Date:	☐ Minutes Attached
☐ Subdivision Suitability Required	Approval #:	
☐ Previous Enforcement Action has been taken on the property	Enforcement #:	

FLOODPLAIN & FLOODWAY See Guidance Pertaining to Floodplain and Floodways	
☒ Riverine 100-year floodplain: **FEMA FLOODPLAIN FIRMETTE** has been reviewed and the 100-year floodplain is on site	
☒ Delineated from FEMA Maps	
NOTE: Per Rule 250-RICR-150-10-8-1.1(B)(5)(d)(3), provide volumetric floodplain compensation calculations for cut and fill/displacement calculated by qualified professional	
☐ Calculated by Professional Engineer	
☐ Calculations are provided for cut vs. fill/displacement volumes proposed within the 100-year floodplain	Amount of Fill (CY): Amount of Cut (CY):
☐ Restrictions or modifications are proposed to the flow path or velocities in a floodway	
☐ Floodplain storage capacity is impacted	
☐ Project area is not within 100-year floodplain as defined by RIDEM	

CRMC JURISDICTION
☒ CRMC Assent required
☐ Property subject to a Special Area Management Plan (SAMP). If so, specify which SAMP:
☒ Sea level rise mitigation has been designed into this project

LUHPPL IDENTIFICATION - MINIMUM STANDARD 8:			
1. OFFICE OF WASTE MANAGEMENT (OWM)			
	☐ Known or suspected releases of HAZARDOUS MATERIAL are present at the site (Hazardous Material is defined in Rule 1.4(A)(33) of 250-140-30-1 of the RIDEM Rules and Regulations for Investigation and Remediation of Hazardous Materials (the Remediation Regulations))		**RIDEM CONTACT:**
	☐ Known or suspected releases of PETROLEUM PRODUCT are present at the site (Petroleum Product as defined in Rule 1.5(A)(84) of 250-140-25-1 of the RIDEM Rules and Regulations for Underground Storage Facilities Used for Regulated Substances and Hazardous Materials)		
	☐ This site is identified on the RIDEM Environmental Resources Map as one of the following regulated facilities		**SITE ID#**:
		☐ CERCLIS/Superfund (NPL)	
		☐ State Hazardous Waste Site (SHWS)	
		☐ Environmental Land Usage Restriction (ELUR)	
		☐ Leaking Underground Storage Tank (LUST)	
		☐ Closed Landfill	
Note: If any boxes in 1 above are checked, the applicant must contact the RIDEM OWM Project Manager associated with the Site to determine if subsurface infiltration of stormwater is allowable for the project. Indicate if the infiltration corresponds to "Red," "Yellow" or "Green" as described in Section 3.2.8 of the RISDISM Guidance (Subsurface Contamination Guidance). Also, note and reference approval in PART 3, Minimum Standard 2: Groundwater Recharge/Infiltration**.**			
2. PER MINIMUM STANDARD 8 of RICR 8.14.C.1-6 "LUHPPLS," THE SITE IS/HAS:			
	☐ Industrial Site with RIPDES MSGP, except where No Exposure Certification exists. http://www.dem.ri.gov/programs/water/permits/ripdes/stormwater/status.php		
	☐ Auto Fueling Facility (e.g., gas station)		
	☐ Exterior Vehicles Service, Maintenance, or Equipment Cleaning Area		

	☐ Road Salt Storage and Loading Areas (exposed to rainwater)	
	☐ Outdoor Storage and Loading/Unloading of Hazardous Substances	
3.	**STORMWATER INDUSTRIAL PERMITTING**	
	☐ The site is associated with existing or proposed activities that are considered Land Uses with Higher Potential Pollutant Loads (LUHPPLS) (see RICR 8.14.C)	Activities: Sector:
	☐ Construction is proposed on a site that is subject to THE MULTI-SECTOR GENERAL PERMIT (MSGP) UNDER RULE 31(B)15 OF THE RIPDES REGULATIONS.	MSGP permit #
	☐ Additional stormwater treatment is required by the MSGP Explain:	

REDEVELOPMENT STANDARD – MINIMUM STANDARD 6		
☒ Pre Construction Impervious Area		
	☒ Total Pre-Construction Impervious Area (**TIA**) 32,069 sf	
	☒ Total Site Area (**TSA**) 32,069 sf	
	☒ Jurisdictional Wetlands (**JW**) 0 sf	
	☒ Conservation Land (**CL**) 0 sf	
☒ Calculate the Site Size (defined as contiguous properties under same ownership)		
	☒ Site Size (**SS**) = (**TSA**) – (**JW**) – (**CL**) 32,069	
	☐ (**TIA**) / (**SS**) = 100%	☒ (**TIA**) / (**SS**) >**0.4**?
☒ YES, Redevelopment		

PART 2. LOW IMPACT DEVELOPMENT ASSESSMENT – MINIMUM STANDARD 1

(NOT REQUIRED FOR REDEVELOPMENT OR RETROFITS)

This section may be deleted if not required.

Note: A written description must be provided specifying why each method is not being used or is not applicable at the Site. Appropriate answers may include:

- Town requires … (state the specific local requirement)
- Meets Town's dimensional requirement of …
- Not practical for site because …
- Applying for waiver/variance to achieve this (pending/approved/denied)
- Applying for wavier/variance to seek relief from this (pending/approved/denied)

A) PRESERVATION OF UNDISTURBED AREAS, BUFFERS, AND FLOODPLAINS	**IF NOT IMPLEMENTED, EXPLAIN HERE**
☒ Sensitive resource areas and site constraints are identified (required) ☒ Local development regulations have been reviewed (required) ☒ All vegetated buffers and coastal and freshwater wetlands will be protected during and after construction ☐ Conservation Development or another site design technique has been incorporated to protect open space and pre-development hydrology. **Note:** If Conservation Development has been used, check box and skip to Subpart C ☒ As much natural vegetation and pre-development hydrology as possible has been maintained	

B) LOCATE DEVELOPMENT IN LESS SENSITIVE AREAS AND WORK WITH THE NATURAL LANDSCAPE CONDITIONS, HYDROLOGY, AND SOILS ☒ Development sites and building envelopes have been appropriately distanced from wetlands and waterbodies ☒ Development and stormwater systems have been located in areas with greatest infiltration capacity (e.g., soil groups A and B) ☐ Plans show measures to prevent soil compaction in areas designated as Qualified Pervious Areas (QPA's) ☐ Development sites and building envelopes have been positioned outside of floodplains ☐ Site design positions buildings, roadways and parking areas in a manner that avoids impacts to surface water features ☒ Development sites and building envelopes have been located to minimize impacts to steep slopes (≥15%) ☐ Other (describe):	No QPAs due to soil type. Building design suitable for floodplain. No steep slopes on site.
C) MINIMIZE CLEARING AND GRADING ☒ Site clearing has been restricted to <u>minimum area needed</u> for building footprints, development activities, construction access, and safety. ☒ Site has been designed to position buildings, roadways, and parking areas in a manner that minimizes grading (cut and fill quantities) ☒ Protection for stands of trees and individual trees and their root zones to be preserved has been specified, and such protection extends at least to the tree canopy drip line(s) ☐ Plan notes specify that public trees removed or damaged during construction shall be replaced with equivalent	No existing vegetation. No steep slopes. No clearing required.
D) REDUCE IMPERVIOUS COVER ☐ Reduced roadway widths (≤22 feet for ADT ≤ 400; ≤ 26 feet for ADT 400 - 2,000) ☐ Reduced driveway areas (length minimized via reduced ROW width (≤ 45 ft.) and/or reduced (or absolute minimum) front yard setback; width minimized to ≤ 9 ft. wide one lane; ≤ 18 ft. wide two lanes; shared driveways; pervious surface) ☐ Reduced building footprint: Explain approach: ☐ Reduced sidewalk area (≤ 4 ft. wide; one side of the street; unpaved path; pervious surface) ☐ Reduced cul-de-sacs (radius < 45 ft; vegetated island; alternative turn-around) ☒ Reduced parking lot area: Explain approach ☒ Use of pervious surfaces for driveways, sidewalks, parking areas/overflow parking areas, etc. ☐ Minimized impervious surfaces (project meets or is less than maximum specified by Zoning Ordinance) ☐ Other (describe):	No roadways. Parking under building where possible.
E) DISCONNECT IMPERVIOUS AREA ☐ Impervious surfaces have been disconnected, and runoff has been diverted to QPAs to the maximum extent possible ☐ Residential street edges allow side-of-the-road drainage into vegetated open swales ☐ Parking lot landscaping breaks up impervious expanse AND accepts runoff ☐ Other (describe):	No QPAs on site. Parking lot landscaping provided where possible.
F) MITIGATE RUNOFF AT THE POINT OF GENERATION ☒ Small-scale BMPs have been designated to treat runoff as close as possible to the source	
G) PROVIDE LOW-MAINTENANCE NATIVE VEGETATION ☒ Low-maintenance landscaping has been proposed using native species and cultivars ☐ Plantings of native trees and shrubs in areas previously cleared of native vegetation are shown on site plan	

☐ Lawn areas have been limited/minimized, and yards have been kept undisturbed to the maximum extent practicable on residential lots	
H) RESTORE STREAMS/WETLANDS ☐ Historic drainage patterns have been restored by removing closed drainage systems, daylighting buried streams, and/or restoring degraded stream channels and/or wetlands ☐ Removal of invasive species ☐ Other	

PART 3. SUMMARY OF REMAINING STANDARDS

GROUNDWATER RECHARGE – MINIMUM STANDARD 2		
YES	**NO**	
☒	☐	The project has been designed to meet the groundwater recharge standard.
☐	☐	If "No," the justification for groundwater recharge criterion waiver has been explained in the Narrative (e.g., threat of groundwater contamination or physical limitation), if applicable (see RICR 8.8.D);
☐	☐	Your waiver request has been explained in the Narrative, if applicable.
☐	☒	Is this site identified as a Regulated Facility in Part 1, Minimum Standard 8: LUHPPL Identification?
☐	☐	If "Yes," has approval for infiltration by the Office of Waste Management Site Project Manager, per Part 1, Minimum Standard 8, been requested?

TABLE 2-1: Summary of Recharge (see RISDISM Section 3.3.2)
(Add or Subtract Rows as Necessary)

Design Point	**Impervious Area Treated (sq ft)**	**Total Re_v Required (cu ft)**	**LID Stormwater Credits (see RISDISM Section 4.6.1)** **Portion of Re_v directed to a QPA (cu ft)**	**Recharge Required by Remaining BMPs (cu ft)**	**Recharge Provided by BMPs (cu ft)**
DP-1: Coastal Feature	2,493 *	52	0	52	644
DP-2:					
DP-3:					
DP-4:					
TOTALS:					

Notes:
1. Only BMPs listed in RISDISM Table 3-5 "List of BMPs Acceptable for Recharge" may be used to meet the recharge requirement.
2. Recharge requirement must be satisfied for each waterbody ID.

* After applying redevelopment credit for new pervious surfaces.

☒ Indicate where the pertinent calculations and/or information for the above items are provided (i.e., name of report/document, page numbers, appendices, etc.):

Stormwater Report: Appendix E "Supplementary Calculations"

WATER QUALITY – MINIMUM STANDARD 3		
YES	**NO**	
☒	☐	Does this project meet or exceed the required water quality volume WQv (see RICR 8.9.E-I)?
☒	☐	Is the proposed final impervious cover greater than 20% of the disturbed area (see RICR 8.9.E-I)?
☐	☒	If "Yes," either the Modified Curve Number Method or the Split Pervious/Impervious method in Hydro-CAD was used to calculate WQv; or,
☒	☐	If "Yes," either TR-55 or TR-20 was used to calculate WQv; and,
☐	☐	If "No," the project meets the minimum WQv of 0.2 watershed inches over the entire disturbed area.
☐	☐	Not Applicable
☒	☐	Does this project meet or exceed the ability to treat required water quality flow WQf (see RICR 8.9.I.1-3)?
☐	☒	Does this project propose an increase of impervious cover to a receiving water body with impairments? If "Yes," please indicate below the method that was used to address the water quality requirements of no further degradation to a low-quality water.
☐	☒	RICR 8.36. A Pollutant Loading Analysis is needed and has been completed.
☒	☐	The Water Quality Guidance Document (Water Quality Goals and Pollutant Loading Analysis Guidance for Discharges to Impaired Waters) has been followed as applicable.
☒	☐	BMPs are proposed that are on the approved technology list . If "Yes," please provide all required worksheets from the manufacturer.
☐	☒	Additional pollutant-specific requirements and/or pollutant removal efficiencies are applicable to the site as the result of a TMDL, SAMP, or other watershed-specific requirements. If "Yes," please describe:

TABLE 3-1: Summary of Water Quality (see RICR 8.9)

Design Point and WB ID	**Impervious area treated (sq ft)**	**Total WQ_v Required (cu ft)**	**LID Stormwater Credits** (see RICR 8.18) **WQv directed to a QPA (cu ft)**	**Water Quality Treatment Remaining (cu ft)**	**Water Quality Provided by BMPs (cu ft)**
DP-1: Coastal Feature	2,493 *	208	0	208	644
DP-2:					
DP-3:					
DP-4:					
TOTALS:					

Notes:
1. Only BMPs listed in RICR 8.20 and 8.25 or the Approved Technologies List of BMPs is Acceptable for Water Quality treatment.
2. For each Design Point, the Water Quality Volume Standard must be met for each Waterbody ID.

* After applying redevelopment credit for new pervious surfaces.

☒ YES ☐ NO	This project has met the setback requirements for each BMP. If "No," please explain:

☐ Indicate where the pertinent calculations and/or information for the above items are provided (i.e., name of report/document, page numbers, appendices, etc.): **Stormwater Report: Appendix E "Supplementary Calculations"**

CONVEYANCE AND NATURAL CHANNEL PROTECTION (RICR 8.10) – MINIMUM STANDARD 4			
YES	**NO**		
☐	☒	Is this standard waived? If "Yes," please indicate one or more of the reasons below:	
		☒	The project directs discharge to a large river (i.e., 4th-order stream or larger. See RISDISM Appendix I for State-wide list and map of stream orders), bodies of water >50.0 acres in surface area (i.e., lakes, ponds, reservoirs), or tidal waters.
		☒	The project directs is a small facility with impervious cover of less than or equal to 1 acre.
		☐	The project has a post-development peak discharge rate from the facility that is less than 2 cfs for the 1-year, 24-hour Type III design storm event (prior to any attenuation). (Note: LID design strategies can greatly reduce the peak discharge rate).
☐	☒	Conveyance and natural channel protection for the site have been met. If "No,' explain why: **This standard is not required for redevelopment sites in addition to the reasons given above.**	

TABLE 4-1: Summary of Channel Protection Volumes (see RICR 8.10)					
Design Point	**Receiving Water Body Name**	**Coldwater Fishery? (Y/N)**	**Total CPv Required (cu ft)**	**Total CPv Provided (cu ft)**	**Average Release Rate Modeled in the 1-yr storm (cfs)**
DP-1:					
DP-2:					
DP-3:					
DP-4:					
TOTALS:					
Note: The Channel Protection Volume Standard must be met in each waterbody ID.					
☐ YES ☐ NO	The CPv is released at roughly a uniform rate over a 24-hour duration (see examples of sizing calculations in Appendix D of the RISDISM).				
☐ YES ☐ NO	Do additional design restrictions apply resulting from any discharge to cold-water fisheries; If "Yes," please indicate restrictions and solutions below.				
☐ Indicate below where the pertinent calculations and/or information for the above items are provided (i.e., name of report/document, page numbers, appendices, etc.).					

OVERBANK FLOOD PROTECTION (RICR 8.11) AND OTHER POTENTIAL HIGH FLOWS – MINIMUM STANDARD 5			
YES	**NO**		
☐	☒	Is this standard waived? If yes, please indicate one or more of the reasons below:	
		☐	The project directs discharge to a large river (i.e., 4th-order stream or larger. See Appendix I for state-wide list and map of stream orders), bodies of water >50.0 acres in surface area (i.e., lakes, ponds, reservoirs), or tidal waters.
		☐	A Downstream Analysis (see RICR 8.11.D and E) indicates that peak discharge control would not be beneficial or would exacerbate peak flows in a downstream tributary of a particular site (e.g., through coincident peaks).
☐	☒	Does the project flow to an MS4 system or subject to other stormwater requirements? If "Yes," indicate as follows:	
		☐	RIDOT
		☐	Other (specify):
Note: The project could be approved by RIDEM but not meet RIDOT or Town standards. RIDOT's regulations indicate that post-volumes must be **less** than pre-volumes for the 10-yr storm at the design point entering the RIDOT system. If you have not already received approval for the discharge to an MS4, please explain below your strategy to comply with RIDEM and the MS4.			
		Indicate below which model was used for your analysis. ☐ TR-55 ☐ TR-20 ☒ HydroCAD ☐ Bentley/Haestad ☐ Intellisolve ☐ Other (Specify):	
YES	**NO**		
☒	☐	Does the drainage design demonstrate that flows from the 100-year storm event through a BMP will safely manage and convey the 100-year storm? If "No," please explain briefly below and reference where in the application further documentation can be found (i.e., name of report/document, page numbers, appendices, etc.):	
☐	☒	Do off-site areas contribute to the sub-watersheds and design points? If "Yes,"	
☐	☐	Are the areas modeled as "present condition" for both pre- and post-development analysis?	
☐	☐	Are the off-site areas shown on the subwatershed maps?	
☒	☐	Does the drainage design confirm safe passage of the 100-year flow through the site for off-site runoff?	
☐	☒	Is a Downstream Analysis required (see RICR 8.11.E.1)?	
☒	☐	Calculate the following:	
		☒	Area of disturbance within the sub-watershed (areas) 32,069 sq. ft.
		☒	Impervious cover (%) 72%
☐	☒	Is a dam breach analysis required (earthen embankments over six (6) feet in height, or a capacity of 15 acre-feet or more, and contributes to a significant or high hazard dam)?	
☒	☐	Does this project meet the overbank flood protection standard?	

Table 5-1 Hydraulic Analysis Summary								
Subwatershed (Design Point)	**1.2" Peak Flow** (cfs) **		**1-yr Peak Flow** (cfs)		**10-yr Peak Flow** (cfs)		**100-yr Peak Flow** (cfs)	
	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)	Pre (cfs)	Post (cfs)
DP-1: Coast	0.84	0.60	2.07	1.67	3.66	3.33	6.44	6.21
DP-2:								
DP-3:								
DP-4:								
TOTALS:								

** Utilize modified curve number method or split pervious /impervious method in HydroCAD.

Note: The hydraulic analysis must demonstrate no impact to each individual subwatershed DP unless each DP discharges to the same wetland or water resource.

Indicate as follows where the pertinent calculations and/or information for the items above are provided	**Name of report/document, page numbers, appendices, etc.**
Existing conditions analysis for each subwatershed, including curve numbers, times of concentration, runoff rates, volumes, and water surface elevations showing methodologies used and supporting calculations.	**Stormwater Report Appendix C**
Proposed conditions analysis for each subwatershed, including curve numbers, times of concentration, runoff rates, volumes, water surface elevations, and routing showing the methodologies used and supporting calculations.	**Stormwater Report Appendix D**
Final sizing calculations for structural stormwater BMPs, including contributing drainage area, storage, and outlet configuration.	**Stormwater Report Appendix E**
Stage-storage, inflow and outflow hydrographs for storage facilities (e.g., detention, retention, or infiltration facilities).	n/a

Table 5-2 Summary of Best Management Practices											
BMP ID	**DP #**	**BMP Type** (e.g., bioretention, tree filter)	**BMP Functions**					**Bypass Type**	**Horizontal Setback Criteria are met per RICR 8.21.B.10, 8.22.D.11, and 8.35.B.4**		
			Pre-Treatment (Y/N/ NA)	Re_v	WQ_v	CP_v (Y/N/ NA)	Overbank Flood Reduction (Y/N/NA)	External (E) Internal (I) or NA	Yes/ No	Technical Justification (Design Report page number)	Distance Provided
1	1	UG sand filter	n/a	644	644	n/a	n/a	n/a	Y		10 ft
		TOTALS:									

Table 5.3 Summary of Soils to Evaluate Each BMP									
DP #	**BMP ID**	**BMP Type** (e.g., bioretention, tree filter)	**Soils Analysis for Each BMP**						
			Test Pit ID# and Ground Elevation		SHWT Elevation (ft)	Bottom of Practice Elevation* (ft)	Separation Distance Provided (ft)	Hydrologic Soil Group (A, B, C, D)	Exfiltration Rate Applied (in/hr)
			Primary	Secondary					
1	1	UG Sand filter	2	1	0.5	3.5	3	C	1.02
		TOTALS:							

* For underground infiltration systems (UICs) bottom equals bottom of stone, for surface infiltration basins bottom equals bottom of basin, for filters bottom equals interface of storage and top of filter layer

LAND USES WITH HIGHER POTENTIAL POLLUTANTS LOADS (LUHPPLs) – MINIMUM STANDARD 8			
YES	**NO**	**N/A**	
☐	☐	☒	Describe any LUHPPLs identified in Part 1, Minimum Standard 8, Section 2. If not applicable, continue to Minimum Standard 9.
☐	☐	☒	Are these activities already covered under an MSGP? If "No," please explain if you have applied for an MSGP or intend to do so?
☐	☐	☒	List the specific BMPs that are proposed for this project that receive stormwater from LUHPPL drainage areas. These BMP types must be listed in RISDISM Table 3-3, "Acceptable BMPs for Use at LUHPPLs." Please list BMPs:
☐	☐	☒	Additional BMPs, or additional pretreatment BMP's if any, that meet RIPDES MSGP requirements; Please list BMPs:
			Indicate below where the pertinent calculations and/or information for the above items are provided (i.e., name of report/document, page numbers, appendices, etc.).

ILLICIT DISCHARGES – MINIMUM STANDARD 9			
Illicit discharges are defined as unpermitted discharges to Waters of the State that do not consist entirely of stormwater or uncontaminated groundwater, except for certain discharges identified in the RIPDES Phase II Stormwater General Permit.			
YES	**NO**	**N/A**	
☒	☐	☐	Have you checked for illicit discharges?
☐	☒	☐	Have any been found and/or corrected? If "Yes," please identify.
☒	☐	☐	Does your report explain preventative measures that keep non-stormwater discharges out of the Waters of the State (during and after construction)?

SOIL EROSION AND SEDIMENT CONTROL (SESC) – MINIMUM STANDARD 10				
YES	**NO**	**N/A**		
☒	☐	☐	Have you included a Soil Erosion and Sediment Control Plan Set and/or Complete Construction Plan Set?	
☐	☐	☒	Have you provided a **separately-bound** document based upon the SESC Template? If yes, proceed to Minimum Standard 11 (the following items can be assumed to be addressed).	
			If "No," include a document with your submittal that addresses the following elements of an SESC Plan:	
			☐	Soil Erosion and Sediment Control Plan Project Narrative, including a description of how the fifteen (15) Performance Criteria have been met:
			☐	Provide Natural Buffers and Maintain Existing Vegetation
			☐	Minimize Area of Disturbance
			☐	Minimize the Disturbance of Steep Slopes
			☐	Preserve Topsoil
			☐	Stabilize Soils
			☐	Protect Storm Drain Inlets
			☐	Protect Storm Drain Outlets
			☐	Establish Temporary Controls for the Protection of Post-Construction Stormwater Control Measures
			☐	Establish Perimeter Controls and Sediment Barriers
			☐	Divert or Manage Run-On from Up-Gradient Areas
			☐	Properly Design Constructed Stormwater Conveyance Channels
			☐	Retain Sediment On-Site
			☐	Control Temporary Increases in Stormwater Velocity, Volume, and Peak Flows
			☐	Apply Construction Activity Pollution Prevention Control Measures
			☐	Install, Inspect, and Maintain Control Measures and Take Corrective Actions
			☐	Qualified SESC Plan Preparer's Information and Certification
			☐	Operator's Information and Certification; if not known at the time of application, the Operator must certify the SESC Plan upon selection and prior to initiating site activities
			☐	Description of Control Measures, such as Temporary Sediment Trapping and Conveyance Practices, including design calculations and supporting documentation, as required

STORMWATER MANAGEMENT SYSTEM OPERATION, MAINTENANCE, AND POLLUTION PREVENTION PLAN – MINIMUM STANDARDS 7 AND 9		
Operation and Maintenance Section		
YES	**NO**	
☒	☐	Have you minimized all sources of pollutant contact with stormwater runoff, to the maximum extent practicable?
☒	☐	Have you provided a **separately-bound** Operation and Maintenance Plan for the site and for all of the BMPs, and does it address each element of RICR 8.17 and RISDISM Appendix C and E?
☒	☐	Lawn, Garden, and Landscape Management meet the requirements of RISDISM Section G.7? If "No," why not?
☒	☐	Is the property owner or homeowner's association responsible for the stormwater maintenance of all BMP's? If "No," you must provide a legally binding and enforceable maintenance agreement (see RISDISM Appendix E, page 26) that identifies the entity that will be responsible for maintenance of the stormwater. Indicate where this agreement can be found in your report (i.e., name of report/document, page numbers, appendices, etc.).
☐	☒	Do you anticipate that you will need legal agreements related to the stormwater structures? (e.g. off-site easements, deed restrictions, covenants, or ELUR per the Remediation Regulations). If "Yes," have you obtained them? Or please explain your plan to obtain them:

☐	☒	Is stormwater being directed from public areas to private property? If "Yes," note the following: Note: This is not allowed unless a funding mechanism is in place to provide the finances for the long-term maintenance of the BMP and drainage, or a funding mechanism is demonstrated that can guarantee the long-term maintenance of a stormwater BMP by an individual homeowner.
Pollution Prevention Section		
☐	☒	Designated snow stockpile locations?
☐	☒	Trash racks to prevent floatables, trash, and debris from discharging to Waters of the State?
☒	☐	Asphalt-only based sealants?
☐	☒	Pet waste stations? (Note: If a receiving water has a bacterial impairment, and the project involves housing units, then this could be an important part of your pollution prevention plan).
☒	☐	Regular sweeping? Please describe:
☒	☐	De-icing specifications, in accordance with RISDISM Appendix G. (NOTE: If the groundwater is GAA, or this area contributes to a drinking water supply, then this could be an important part of your pollution prevention plan).
☐	☒	A prohibition of phosphate-based fertilizers? (Note: If the site discharges to a phosphorus impaired waterbody, then this could be an important part of your pollution prevention plan).

PART 4. SUBWATERSHED MAPPING AND SITE-PLAN DETAILS

Existing and Proposed Subwatershed Mapping (REQUIRED)			
YES	**NO**		
☒	☐		Existing and proposed drainage area delineations
☒	☐		Locations of all streams and drainage swales
☒	☐		Drainage flow paths, mapped according to the DEM *Guidance for Preparation of Drainage Area Maps* (included in RISDISM Appendix K)
☒	☐		Complete drainage area boundaries; include off-site areas in both mapping and analyses, as applicable
☒	☐		Logs of borings and/or test pit investigations along with supporting soils/geotechnical report
☒	☐		Mapped seasonal high-water-table test pit locations
☒	☐		Mapped locations of the site-specific borings and/or test pits and soils information from the test pits at the locations of the BMPs
☒	☐		Mapped locations of the BMPs, with the BMPs consistently identified on the Site Construction Plans
☒	☐		Mapped bedrock outcrops adjacent to any infiltration BMP
☒	☐		Soils were logged by a:
		☒	DEM-licensed Class IV soil evaluator Name: Daniel Welch D4094
		☐	RI-registered P.E. Name:

Subwatershed and Impervious Area Summary				
Subwatershed (area to each design point)	**First Receiving Water ID or MS4**	**Area Disturbed (units)**	**Existing Impervious (units)**	**Proposed Impervious (units)**
DP-1: Coastal Feature	RI0007030E-01E	32,069 sf	32,069 sf	23,041 sf
DP-2:				
DP-3:				
DP-4:				
TOTALS:				

Site Construction Plans (Indicate that the following applicable specifications are provided)		
YES	**NO**	
☒	☐	Existing and proposed plans (scale not greater than 1" = 40') with North arrow
☒	☐	Existing and proposed site topography (with 1 or 2-foot contours); 10-foot contours accepted for off-site areas
☒	☐	Boundaries of existing predominant vegetation and proposed limits of clearing
☒	☐	Site Location clarification
☒	☐	Location and field-verified boundaries of resource protection areas such as: ▸ freshwater and coastal wetlands, including lakes and ponds ▸ coastal shoreline features Perennial and intermittent streams, in addition to Areas Subject to Storm Flowage (ASSFs)
☒	☐	All required setbacks (e.g., buffers, water-supply wells, septic systems)
☒	☐	Representative cross-section and profile drawings, and notes and details of structural stormwater management practices and conveyances (i.e., storm drains, open channels, swales, etc.), which include: ▸ Location and size of the stormwater treatment practices (type of practice, depth, area). Stormwater treatment practices (BMPs) must have labels that correspond to RISDISM Table 5-2; ▸ Design water surface elevations (applicable storms); ▸ Structural details of outlet structures, embankments, spillways, stilling basins, grade-control structures, conveyance channels, etc.; ▸ Existing and proposed structural elevations (e.g., inverts of pipes, manholes, etc.); ▸ Location of floodplain and, if applicable, floodway limits and relationship of site to upstream and downstream properties or drainage that could be affected by work in the floodplain; ▸ Planting plans for structural stormwater BMPs, including species, size, planting methods, and maintenance requirements of proposed planting
☒	☐	Logs of borings and/or test pit investigations along with supporting soils/geotechnical report and corresponding water tables
☒	☐	Mapping of any OWM-approved remedial actions/systems (including ELURs)
☒	☐	Location of existing and proposed roads, buildings, and other structures including limits of disturbance; ▸ Existing and proposed utilities (e.g., water, sewer, gas, electric) and easements; ▸ Location of existing and proposed conveyance systems, such as grass channels, swales, and storm drains, and location(s) of final discharge point(s) (wetland, waterbody, etc.); ▸ Cross sections of roadways, with edge details such as curbs and sidewalks; ▸ Location and dimensions of channel modifications, such as bridge or culvert crossings
☒	☐	Locations, cross sections, and profiles of all stream or wetland crossings and their method of stabilization

NORTHEAST ENGINEERS & CONSULTANTS, INC.

STORMWATER SYSTEM
OPERATIONS AND MAINTENANCE PLAN

"Manchester House"
Proposed Hotel and Restaurant
Assessor's Map 32, Lot 314
24 Lee's Wharf
Newport, RI

Prepared For
Howard Wharf, LP
c/o SILVA, THOMAS, MARTLAND
& OFFENBERG, LTD
Middletown, RI 02842

February 2020

6 Valley Road ● Middletown, RI 02842 ● p. 401.849.0810 ● f. 401.846.4169 ● northeastengineers.com
Civil ● Site ● Land Development ● Waterfront ● Coastal Engineering ● Environmental ● Geotechnical ● Structural ● Transportation ● Surveying

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APPENDIX B DRAWINGS

1.0 INTRODUCTION

1.1 SITE INFORMATION

City / Town:	Newport, Rhode Island
Adjacent Roadways:	Lee's Wharf
Lot(s) identification:	A.P. 32 Lot 314
Zoning District:	WB (Waterfront Business)
Current Use:	Parking Lot with small accessory structure
Site Area:	0.74 Acres
FEMA Zone and Map:	Zone "VE (EL13)" and "AE (EL12" (Panel 44005C0177J)

1.2 SITE CONDITIONS

The site contains a 12,827 square foot hotel and restaurant constructed just outside of the 50-foot CRMC coastal setback. The structure shall be elevated in order to provide separation from the flood elevation, and the lower level is used for parking, storage, and other non-residential uses. The upper floors contain the hotel units and amenities. The area coastal of the structure contains a greenway with public access from Lee's Wharf. The remainder of this area includes planted or lawn green space. The area upland of the hotel is used for paved surface parking. A public access sidewalk runs the length of the frontage of the roadway. The site has two paved entry lanes and one paved exit lane. Screened and pad mounted mechanical equipment is located to the south in a grassed area. The site includes perimeter green space where possible. The site is served by municipal water and sewer from mains in Lee's Wharf. A pad mounted transformer is located at the northeast corner of the property adjacent to the sidewalk.

Stormwater control for this development includes an underground infiltrating sand filter system for the hotel rooftop. This device overflows at outlets at each roof downspout to paved surfaces. Surface runoff from this property sheet flows towards the coast and into the harbor.

1.3 PROTECTED FEATURES

The site lies partially within the 50-foot setback from the coastal feature associated with Newport Harbor, although this coastal feature lies within an abutting parcel. Newport Harbor is identified as CRMC Type 5 waters. There are no coastal wetlands or wetland vegetation on the property. The coastal half of the property lies within the 200-foot CRMC jurisdiction line. Any development or modification of this portion of the property would require assent from the CRMC.

ADMINISTRATION

1.4 RESPONSIBLE PARTIES

The Owner and party responsible for the operation and maintenance of the Stormwater Management System is:

44 Ocean Partners, LLC
c/o Howard Cushing III
66 Ocean Avenue
Newport, RI 02840

The Owner intends that this Plan shall run with the land and be binding upon the Owner and the Owner's successors and assigns. A copy of this Plan shall be provided to any future property owners. This Section shall be amended as necessary.

Easements across the stormwater system to the City of Newport may be provided upon request; however, the Owner is solely responsible for the operation and maintenance.

1.5 O&M EXPENSES

It is anticipated that the Operation and Maintenance budget will be incorporated into the operating budget of the property. The stormwater facilities will require continual maintenance to operate at peak efficiency. It is anticipated that small equipment and hand labor will typically be required to operate and maintain the system. A vacuum truck will be required for more intensive maintenance. Operation and Maintenance activities and equipment will be funded by the Owner.

1.6 PUBLIC SAFETY FEATURES

Public safety is provided for the proposed stormwater systems. All stormwater systems are located underground.

2.0 GENERAL INSPECTION AND MAINTENANCE

This section contains a general overview of O&M guidelines and documentation procedures. Specific guidance is described in Section 4.0. Appendix A contains applicable Operation, Maintenance and Management Inspection Checklists. Appendix B contains a location map of stormwater features to be maintained and details of the devices which may be referenced during maintenance.

2.1 INSPECTION

All stormwater management facilities shall be periodically inspected by a qualified individual. Inspections shall be conducted by a registered professional engineer where the structural or hydraulic integrity of the system is in question. Inspections shall follow the inspection guidelines found in the checklists included in Appendix A. The minimum inspection schedule is summarized in the following table.

Table 1: Summary of Minimum Inspection Schedule

Item	*Annually*	*After Major Storms*	*Semi-Annually*
UG Sand Filter	✓	✓	
Conveyance (Roof Leaders)	✓	✓	✓
Overall Function	✓	✓	

Note: "Major Storm" refers to a storm with 2.8 inches of rain over a 24-hour period

2.2 MAINTENANCE

Maintenance activities are described in three categories based upon the magnitude and type of the maintenance activities performed. A description of each category follows.

2.2.1 PREVENTATIVE MAINTENANCE

The most effective way to maintain the stormwater system is to prevent the pollutants from entering them in the first place. Common pollutants include sediment, trash and debris, chemicals, runoff from stored materials, and illicit discharges. The Owner shall implement the following measures to address these potential contaminants, which will minimize expenses and time investments in the long term.

- Educate employees of how their actions impact water quality, and how they can help reduce maintenance costs;
- Keep the property free of trash and debris;
- Ensure the proper disposal of hazardous wastes and chemicals;
- Plan landscaping care to minimize the use of fertilizers, herbicides, and pesticides;
- Sweep paved surfaces and dispose of sweepings properly;
- Be aware of automobiles leaking fluids. Use absorbents to soak up drippings – dispose of properly;
- Re-vegetate disturbed and bare areas to maintain vegetative stabilization; and
- Protect landscaping care and other chemicals stored outdoors from stormwater.

2.2.2 ROUTINE AND MINOR MAINTENANCE

Routine maintenance work to be undertaken by the Owner shall include activities normally performed throughout the year, such as:

- Mowing and weed control,
- Trash and debris removal, and
- Cleaning drain basin inlet structures.

Such minor maintenance consists of isolated or small-scale maintenance/operational problems. Most of this work can be completed by a small crew with hand tools, and small equipment.

2.2.3 MAJOR MAINTENANCE

This work consists of more complex maintenance/operational problems and system failures. Some of this work may require consultation with the Design Engineer, CRMC, and/or the City of Newport. This work may also require more specialized maintenance equipment, design/details, surveying, or assistance through private contractors and consultants.

3.0 LAWN, GARDEN, AND LANDSCAPE MANAGEMENT

Grasses require more water and attention than alternative groundcovers, flowers, shrubs, or trees. Alternatives to turf are especially recommended for problem areas such as lawn edges, frost pockets, shady spots, steep slopes, and soggy areas.

3.1 GRASS

Grass seed is available in a wide range of cultivated varieties. The Owner should consult a landscape expert to choose the grass type that matches the site conditions, and is consistent with the property manager's desired level of maintenance.

3.2 MOWING AND MANAGEMENT

To prevent insects and weed problems, property owners should mow high, mow frequently, and keep mower blades sharp. Lawns should not be cut shorter than 2 to 3 inches, because weeds can grow more easily in short grasses. Grass can be cut lower in the spring and fall to stimulate root growth, but not shorter than 1 ½ inches.

3.3 FERTILIZATION

If fertilizing is desired, consider the following points:

- Most lawns require little or no fertilizer to remain healthy. Fertilize no more than twice a year - once in May-June, and once in September-October;
- Fertilizers are rated on their labeling by three numbers (e.g., 10-10-10 or 12-4-8), which refer to their Nitrogen (N) – Phosphorus (P) – Potassium (K) concentrations. Fertilize at a rate of no more than ½ pound of nitrogen per 1000 square feet, which can be determined by dividing 50 by the percentage of nitrogen in the fertilizer;
- Apply fertilizer carefully to avoid spreading on impervious surfaces such as paved walkways, patios, driveways, etc., where the nutrient can be easily washed into storm drains or directly into surface waters;
- To encourage more complete uptake, use slow-release fertilizers that is those that contain 50 percent or more water-insoluble nitrogen (WIN);
- Grass blades retain 30-40 percent of nutrients applied in fertilizers. Reduce fertilizer applications by 30 percent, or eliminate the spring application of fertilizer and leave clippings on the lawn where they will degrade and release stored nutrients back to the soil; and
- Fertilizer should not be applied when rain is expected. Not only does the rain decrease fertilizer effectiveness, it also increases the risk of surface and ground water contamination.

3.4 WEED MANAGEMENT

The property manager must decide how many weeds can be tolerated before action is taken to eradicate them. To the extent practicable, weeds should be dug or pulled out. If patches of weeds are present, they can be covered for a few days with a black plastic sheet. This process kills the weeds while leaving the grass intact. If weeds blanket a large enough area, the patch can be covered with clear plastic for several weeks, effectively "cooking" the weeds and their seeds. The bare area left behind after weeding should be reseeded to prevent weeds from growing back. As a last resort, the property manager may use chemical herbicides to spot treat weeds.

3.5 PEST MANAGEMENT

Effective pest management begins with maintenance of a healthy, vigorous lawn that is naturally disease resistant. The property manager should monitor plants for obvious damage and check for the presence of pest organisms. Learn to distinguish beneficial insects and arachnids, such as green lacewings, ladybugs, and most spiders, from ones that will damage plants.

When damage is detected or when harmful organisms are present, the property manager should determine the level of damage the plant is able to tolerate. No action should be taken if the plant can maintain growth and fertility. If controls are needed, there are a variety of low-impact pest management controls and practices to choose from, including the following:

- Visible insects can be removed by hand (with gloves or tweezers) and placed in soapy water or vegetable oil. Alternatively, insects can be sprayed off a plant with water, or in some cases vacuumed off of larger plants;
- Store-bought traps, such as species- specific, pheromone-based traps or colored sticky cards, can be used;
- Sprinkling the ground surface with abrasive diatomaceous earth can prevent infestations by soft-bodied insects and slugs. Slugs can also be trapped by falling or crawling into small cups set in the ground flush with the surface and filled with beer;
- In cases where microscopic parasites, such as bacteria and fungi, are causing damage to plants, the affected plant material can be removed and disposed of. (Pruning equipment should be disinfected with bleach to prevent spreading the disease organism);
- Small mammals and birds can be excluded using fences, netting, tree trunk guards, and, as a last resort, trapping. (In some areas trapping is illegal. Property owners should check local codes if this type of action is desired); and
- The property manager can encourage/attract beneficial organisms, such as bats, birds, green lacewings, ladybugs, praying mantis, ground beetles, parasitic nematodes, trichogramma wasps, seedhead weevils, and spiders that prey on detrimental pest species. These desirable organisms can be introduced directly or can be attracted to the area by providing food and/or habitat.

If chemical pesticides are used, the property manager should try to select the least toxic, water soluble and volatile pesticides possible. All selected pesticides should be screened for their potential to harm water resources. When possible, pesticides that pose the least risk to human health and the environment should be chosen. A list of popular pesticides, along with their uses, their toxicity to humans and wildlife,

EPA's toxicity rating, and alternatives to the listed chemicals, is available from *The Audubon Guide to Home Pesticides*, (http://www.audubon.org/bird/pesticides/).

3.6 SENSIBLE IRRIGATION

Established lawns need no more than one inch of water per week (including precipitation) to prevent dormancy in dry periods. Watering at this rate should wet soil to approximately 4-6 inches and will encourage analogous root growth. If possible, use timers to water before 9:00 a.m., preferably in the early morning to avoid evaporative loss. Use drought-resistant grasses (see "grass selection" above) and cut grass at 2-3 inches to encourage deeper rooting and heartier lawns.

4.0 STORMWATER BMPS

4.1 SUBSURFACE SAND INFILTRATION SYSTEM

Description

The subsurface sand filter is designed to capture and temporarily store the water quality storm runoff volume in subsurface HDPE chambers and pass it through a sand media layer. The filtered stormwater is infiltrated into the undisturbed strata below the filter. High flow runoff to the sand filter bypasses the device entirely via surface overflow devices at each roof downspout. The sand filter is not intended to have a permanent pool and should drain within 24 hours.

The stormwater design for this development includes the following subsurface sand filters.

1. Device ID: **UG-1**
2. Location: Coastal of the Hotel Structure
3. Subwatershed treated: N/A (Hotel Roof only)
4. Lined or Unlined: Unlined
5. Discharge location: Groundwater
6. Description: 16 Cultec C-100HD chambers over 24" ASTM C-33 sand

Required Maintenance

A subsurface sand filter shall be inspected following at least the first two precipitation events of at least 1.0 inch to ensure that the system is functioning properly. Thereafter, a filter should be inspected at least annually and after storm events of greater than or equal to the 1-year, 24-hour Type III precipitation event (2.8 inches). These maintenance objectives are focused on preserving the hydraulic and removal efficiency and maintaining structural integrity and include the following:

1. Chambers should be inspected for the presence of transported sediments. Should the average depth of sediments exceed 1-inch, all sediments shall be removed using a vacuum truck via the inspection ports. The presence of excessive sediments shall indicate a failure of the system installation. A RI license Professional Engineer shall be consulted to determine a corrective course of action.

The following maintenance tasks shall be completed on an annual basis.

1. Silt/sediment shall be removed from the sand filter bed annually, when accumulation exceeds one inch, or when the filtering capacity of the device diminishes substantially. This material shall be disposed of in accordance with all applicable regulations.

If standing water is observed more than 48 hours after a storm event, the system must be excavated and then the top six (6) inches of sand shall be removed and replaced in kind. If discolored or contaminated material is found below this removed material, then that material shall also be removed and replaced in kind until all contaminated sand has been removed from the filter media. The sand shall be disposed of

in accordance with all applicable regulations. The system shall then be reconstructed according to the original design plans.

4.2 CONVEYANCE STRUCTURES

The conveyance structures such as drain basin inlet structures and roof leaders shall be inspected semi-annually (twice a year). Any structural faults shall be repaired as necessary for proper function. Any roof runoff structures such as downspouts shall be clean and free of obstructions that reduce flow. A registered professional engineer shall be consulted, if necessary, in order to determine whether a structure has been compromised.

All inlet / outflow pipes are to be inspected at least three times in the first six months of operation. Evidence of clogging, or rapid release of flow shall be reported to the project engineer and remedied immediately. Structure sump shall be cleaned semi-annually.

5.0 APPENDICES

APPENDIX A OPERATION AND MAINTENANCE CHECKLISTS

Operation, Maintenance, and Management Inspection Checklist
For Conveyance Structure: _____

To be used in Conjunction with Operation and Maintenance Document

Date of Inspection:

Date of Last Inspection:

Time:

Type of Inspection: □ Semi - Annual □ Other (See 2 below)

Inspector:

General Upkeep:

1. Owner should consult an RI registered professional engineer with questions.
2. Semi-annual inspection shall also be completed three times within six (6) months of construction.
3. Inspection of pipes will require the removal of grates, covers and cleanout caps.

SEMI - ANNUAL MAINTENANCE		
MAINTENANCE ITEM	**ACTION IF DEFICIENT**	**COMMENTS**
Clogging of pipes	Pipes should be cleaned out with a high pressure water jet	
Rapid release of stormwater	Consult a RI registered professional engineer	
Cracked or broken pipes or structures	Repair or replace	
Damaged or missing overflow splash pads	Repair or replace	
Roof downspouts crushed or blocked	Repair or replace	
Sediments exceed 50% of sump	Remove and dispose in accordance with state regulations.	

Operation, Maintenance, and Management Inspection Checklist For Subsurface Sand Filter:_____

To be used in Conjunction with Operation and Maintenance Document

Date of Inspection:

Date of Last Inspection:

Time:

Type of Inspection: □ Annual □ Major Storm □ Biannual □ Other

Inspector:

General Upkeep:

1. None

ANNUAL AND MAJOR STORM MAINTENANCE		
MAINTENANCE ITEM	**ACTION IF DEFICIENT**	**COMMENTS**
Trash and debris in filter	Remove and dispose in accordance withstate regulations.	
Sediments on filter surface exceeds one (1) inch in depth	Remove and dispose in accordance with state regulations.	
Overflow pipes blocked	Remove blockage and inspect for damage to structure.	

OTHER		
MAINTENANCE ITEM	**ACTION IF DEFICIENT**	**COMMENTS**
Water ponds on filter surface for more than 48 hours	The top six (6) inches of sand media shall be excavated and replaced with clean sand. Replace loam layer and re-seed. Discarded material dispose in accordance with state regulations.	

APPENDIX B DRAWINGS

NORTHEAST ENGINEERS
& CONSULTANTS, INC.

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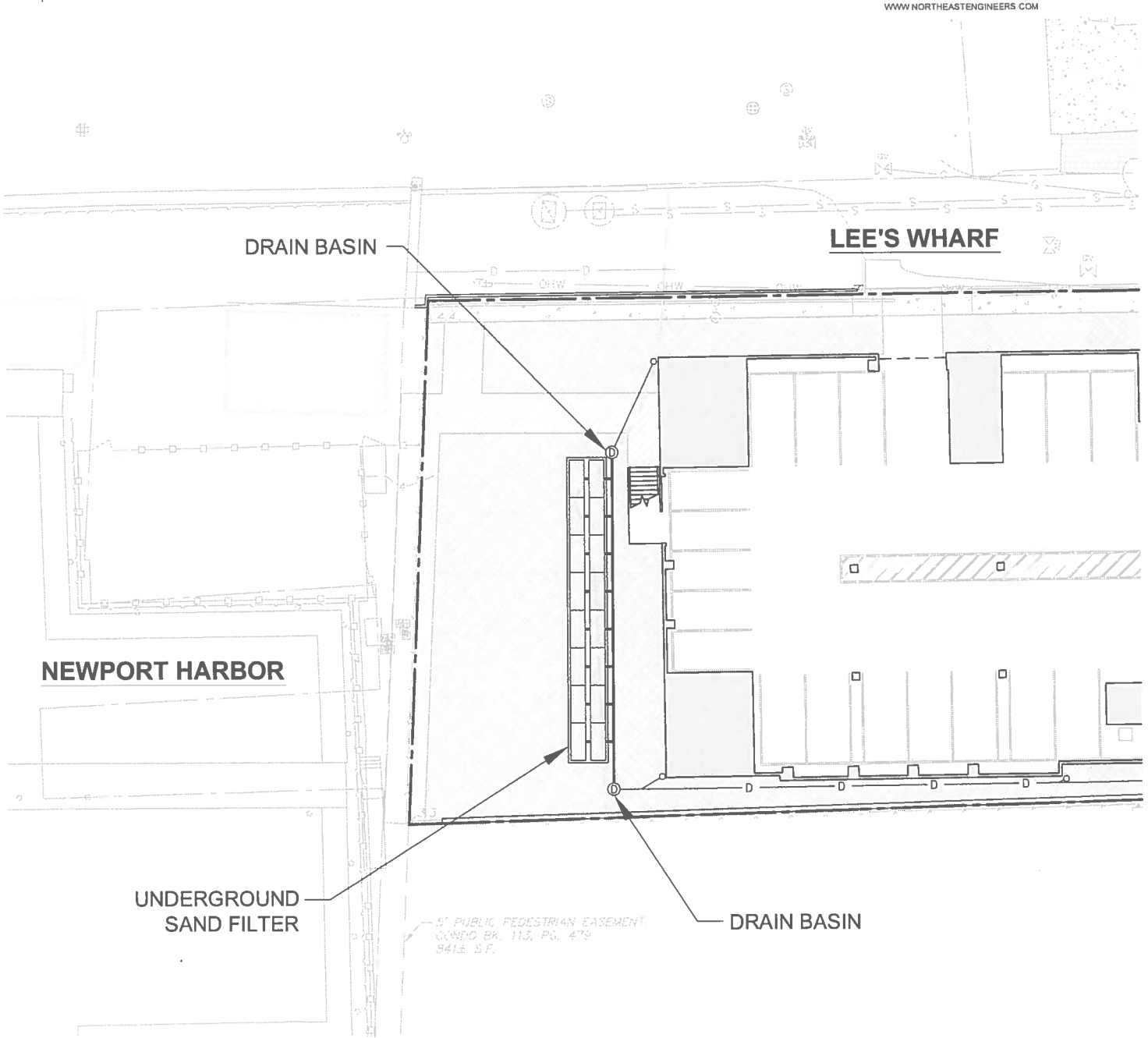
LAND PLANNING
WATERFRONT
SURVEYING
GEOTECHNICAL
ENVIRONMENTAL
TRANSPORTATION
STRUCTURAL
MATERIALS TESTING

A KNOWLEDGE CORPORATION

6 VALLEY ROAD MIDDLETOWN RHODE ISLAND 02842
PHONE (401) 849-0810 FAX (401) 846-4169
WWW.NORTHEASTENGINEERS.COM



Scale: 1"=30'	Date: 20FEB20	Designed By: JJR	Drawn By: JJR	Checked By: GES

Project Title:
MANCHESTER HOUSE
LEE'S WHARF, NEWPORT RI

Drawing Title:
DRAINAGE DEVICE LOCATION MAP

Issued for:
O&M DOCUMENT

Drawing Number:
M-1

Project Number:
19107.0

NORTHEAST ENGINEERS
& CONSULTANTS, INC.

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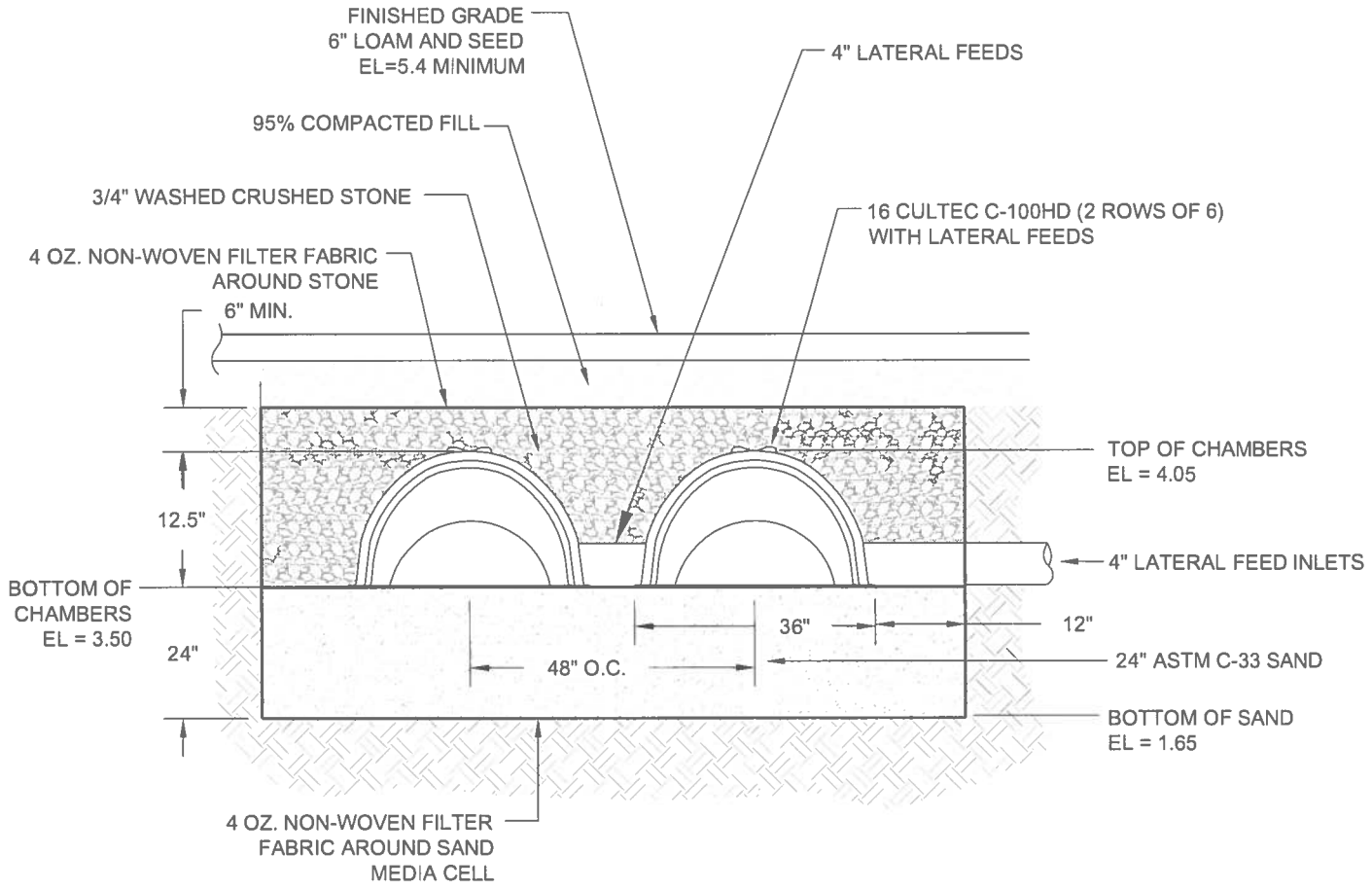


NOTE: THIS SECTION SHOULD BE FOLLOWED FOR ANY MAINTENANCE ACTIVITY THAT INCLUDES THE EXCAVATION OF THE SYSTEM.

Scale: NTS	Date: 20FEB20	Designed By: JJR	Drawn By: JJR	Checked By: GES

Project Title:	Drawing Title:	
MANCHESTER HOUSE LEE'S WHARF, NEWPORT RI	SUBSURFACE SAND FILTER CROSS SECTION	
Issued for: O&M DOCUMENT	Drawing Number: M-2	Project Number: 19107.0

IMPROVING COMMUNITIES TOGETHER

July 8, 2020

Mr. Howard Cushing
44 Ocean Partners, LLC
66 Ocean Avenue
Newport, RI 02840

Re: Proposed Land Development Project
Lee's Wharf Hotel
Newport, Rhode Island

Dear Mr. Cushing:

BETA Group, Inc., has prepared this letter to supplement the Traffic Safety Analysis prepared by our office in February, 2020 as part of the Lee's Wharf Hotel development project. A recent Planning Board meeting was held to review the project and several questions on existing and future traffic conditions were raised by the Board. In an effort to address these questions, BETA completed additional review and analysis of available information to help define the future operational conditions of the servicing roadways including Thames Street and Lee's Wharf in the immediate site vicinity.

Based upon the scope of the development project which includes a small 21 room waterfront hotel with low anticipated daily vehicular trip volumes, the initial study focused on the regulatory requirement to demonstrate that a development project has adequate and safe access to a public street for both vehicular and pedestrian traffic. The initial study reviewed the existing physical characteristics of the servicing roadways including roadway widths, horizontal and vertical geometry and regulatory control. The presence of sidewalks, lighting and other features conducive of safe vehicular and pedestrian access were documented. In addition, traffic accident data was obtained from the Newport Police Department to determine if there was a history of a high occurrence or severity of crashes in the project area that warranted mitigation.

The study found that there were no limiting physical conditions on Thames Street or Lee's Wharf that would hinder safe and adequate access for vehicular traffic including site guest, hotel service vehicles or local public safety vehicles. The only concern found in our review of the existing infrastructure was the lack of a full sidewalk along Lee's Wharf from Thames Street to the site to accommodate pedestrian traffic. This condition today for a short distance, forces pedestrians to walk within the roadway proper to travel Lee's Wharf from the rear of the existing buildings fronting Thames Street to the waterfront. This is not an ideal situation in a commercial area with multiple driveways, though travel speeds are very low along the short dead-end street. It was recommended as part of our study, and which was incorporated into the site plan presented to the City, that a sidewalk be installed along the property frontage to allow an enhanced pedestrian environment along Lee's Wharf from Thames Street to the waterfront.

This improvement will be a major pedestrian safety enhancement along Lee's Wharf, as during the summer months the downtown area of Newport, extending from the Visitors Center at the northern limit to the south along America's Cup Avenue, Thames Street and east along Memorial Boulevard, becomes a pedestrian dominated environment. It is a walking and biking commercial district with extensive pedestrian accommodations recently enhanced by the Rhode Island Department of Transportation and

BETA GROUP, INC.
701 George Washington Highway, Lincoln, RI 02865
P: 401.333.2382 | F: 401.333.9225 | W: www.BETA-Inc.com

the City to provide safer access to the local retail shops, restaurants, and activities along the waterfront and immediate adjacent roads extending to Spring Street, Touro Street and Bellevue Avenue within walking distance. Visitors and locals in the downtown area, start at a location whether a home, hotel and other available accommodations, or from parking lots (public or private), to park their vehicle and walk within the downtown area. This is a standard pattern as available parking within the commercial and waterfront district during peak seasonal conditions is limited, filling up early in the morning as businesses open. This results in the desire or need to walk to destinations instead of struggling to find available parking within a short distance to a particular destination or destinations.

Additional extensive pedestrian traffic is also created along the waterfront itself from the numerous marinas and Newport Harbor moorings. The retail shops, restaurants and attractions are patronized by the influx of pedestrian traffic from the waterfront where these accommodations within a half to three quarter mile radius are patronized by pedestrians walking along America's Cup Avenue, Memorial Boulevard, Thames Street or Spring Street visiting multiple establishments as part of a visit or daily activities in the downtown area. Public transportation and private shuttle services are also available to destinations within the downtown and points beyond immediate walking distances, though these services could be enhanced to lessen personal vehicle travel in this area. Both vehicular and marine traffic are modes of transportation to visit the City of Newport but in the downtown waterfront district, pedestrian, bicycle and other transit options as noted dominate the streets, providing a vibrant environment for local businesses.

In an effort to document the vehicular and pedestrian traffic conditions along Thames Street as described and as requested by the Board, BETA obtained record count data available from recent studies completed in this area of the city including record data from the Rhode Island Department of Transportation. The data included daily and peak hour turning movement counts during the summer high traffic conditions along Thames Street.

Traffic Data

The most recent data was obtained in 2017 during the mid and late summer period where both automatic traffic recorder (ATR) and manual turning movement counts (TMC)were completed. This data would represent peak seasonal traffic conditions in the City where the highest levels of traffic experienced over the course of the year occur. The ATR data collected for this section of Thames Street in late August revealed that the roadway services approximately 7,000 vehicles per day during the season peak condition in the city. The morning peak hour volume of 510 vehicles occurs during the late morning from 11:00 to Noon, and during the afternoon approximately 560 vehicles are serviced between 4:30 to 5:30 PM. As summer daily traffic conditions vary in the city depending on weather conditions or events, these values are consistent with July data reviewed from the RIDOT where approximately 600 vehicles per hour during the peak periods turn onto southbound Thames Street from America's Cup Avenue, representing peak yearly traffic conditions along the corridor. During the shoulder seasons and winter periods traffic demands in the City and especially along the waterfront are much lower resulting in less congestion in the downtown area.

In addition to vehicle counts, the turning movement data also collected pedestrian traffic demands which also vary on a daily basis. The pedestrian data found that over the course of a typical summer day pedestrian volumes along the westerly sidewalk of Thames Street vary between 400 and 650 pedestrian per hour between 10:00 AM and 6:00 PM. During this same time period along the eastern sidewalk pedestrian volumes are lower and range between 250 and 350 pedestrians per hour. Based upon this

data it is evident that pedestrian volumes exceed vehicular volumes along this section of Thames Street on an hourly basis during the peak summer period. These pedestrians are traveling along Thames Street to patronize the many retail, restaurant and waterfront businesses, where walking is the dominate mode of transportation to these establishments.

Trip Generation and Analysis

To understand the potential traffic impact of the proposed development, an estimate of anticipated traffic to be generated by the proposed land use was calculated. As previously discussed, the development proposal consists of razing an existing building and reconfiguring the existing parking lot to allow construction of a two-story building to accommodate a small 21-room hotel with associated parking. Access and egress to the site will be provided from an enter-only driveway, an exit-only driveway and a loading zone/valet area along the property frontage of Lee's Wharf.

For this site, projected traffic volumes for the proposed project were based on use of trip generation factors. These factors are taken from the "Trip Generation" manual, an informational report published by the Institute of Transportation Engineers (ITE), a national professional organization for traffic and transportation engineers. For the proposed hotel project, Land Use Code 310 Hotel, which can include site amenities such as a restaurant, exercise room, pool or meeting space for guest was utilized. The original study estimated a low volume of daily and peak hour site trips (less than 14 vehicles and 16 vehicles entering/exiting the site during the morning and afternoon peak periods, respectively).

This estimate does not take into consideration the downtown environment defined previously, where the primary mode of access to the many businesses along the main corridors of Thames Street, America's Cup Avenue and Memorial Boulevard is walking as a result of the enhanced pedestrian accessibility within the waterfront district. It is anticipated that a portion of the hotel guests will walk to and from the site to visit the many businesses and attractions available in this area, lessening the vehicle demands. To support this, the hotel intends to promote the walkability and rideability of the downtown area to its guest with informational brochures, and maps for businesses and attractions, availability of bicycles, and general guidance to its guest on experiencing the City of Newport.

The combination of low hourly vehicle trips to and from the site, with the volume of vehicle traffic on Thames Street as defined, will yield acceptable delays of under 25 seconds to turn right from Lee's Wharf onto Thames Street during the daily afternoon peak hour of traffic. This delay for the side street will also vary with the pedestrian demands along Thames Street which are highly variable. Based on these conditions, it is anticipated that typically only one vehicle would be queued on the site driveway to exit the property or on Lee's Wharf waiting to turn right onto Thames Street, resulting in efficient operations, with no congestion and adequate and safe access to the new hotel property.

In addition, it is important to note that the proposed hotel is anticipated to yield greatly improved operations and safety along Lee's Wharf with less traffic and managed valet parking for hotel guests during peak seasonal demands over current site conditions. The existing site is utilized for parking, and is a first come first serve public parking lot with over 90 parking spaces. During these peak days, the parking lot has the potential of generating approximately 300 vehicle trips, not taking into consideration drivers searching for parking when the lot is full and cannot be accommodated. This existing condition yields a higher traffic demand on the roadway for drivers parking or looking for available parking in the area.

Summary

In summary, the study has shown that the proposed development project access and circulation plan has been designed to maintain a desirable level of traffic safety and efficiency on the servicing roadway system in the project area. Based upon our analysis of the existing roadway conditions on Lee's Wharf, there appear to be no traffic safety or operational issues that require mitigation other than the recommended sidewalk extension to accommodate the pedestrian demands in this area, and the addition of double yellow pavement markings on the Lee's Wharf approach to the intersection with Thames Street to delineate travel paths.

We trust that this letter sufficiently addresses the request for additional traffic information relating the development project. If you should have any questions, please do not hesitate to contact our office.

Very truly yours,
BETA Group, Inc.

Paul J. Bannon
Associate

JAMES A. HOULE & ASSOCIATES
198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

REPORT RELATING TO A PETITON

For

24 Lees Wharf
Newport, RI 02840
Plat 32, lot 314

PREPARED FOR

David Martland, Esquire
Silva Thomas Martland & Offenberg, LTD
1100 Aquidneck Avenue
Middletown, RI 02842

PREPARED BY

James A. Houle
Rhode Island Certified General Appraiser
License #CGA.0A00769
198 Union Street,
Portsmouth, Rhode Island 02871
(401) 662-1543

Report Date
06/01/2020

JAMES A. HOULE & ASSOCIATES
198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

David Martland, Esquire
Silva Thomas Martland & Offenberg, LTD
1100 Aquidneck Avenue
Middletown, RI 02842
01 June 2020

Dear Mr. Martland:

Pursuant to your request, I have reviewed the development plan of Howard Wharf, LP for the re-use of the site at 24 Lees Wharf, Newport, RI. The site is also identified as tax assessor's plat 32, lot 314. It has been most recently used as an open parking lot.

The site contains 32,069 square feet of land, shaped as a regular rectangle, 313.24' x 104.76'. The primary frontage is along Lees Wharf, but there is also frontage on Howard Wharf.

The proposal is to construct a 21 room, boutique hotel, 2 stories on an elevated base, necessitated by the location within a flood hazard zone. Plans, elevations and specifications prepared and submitted separately from Herk Works are included in this report by inference.

The plan has many very positive aspects:

From a design standpoint, the building is reasonably small in scale. When one looks to properties in close proximity, we see the condominiums at Brown and Howard Wharf to the north. These are densely crowded onto the site, with little open space. The three buildings each have three stories and roof decks, a full level plus greater than the subject proposal.

The building directly to the east, at 433 Thames Street, is also a full four stories, as is the IYRS building to the south. These are all much greater in height and massing on site than the proposed subject building.

Thus, we find that the subject will be surrounded with larger buildings. It will be less impactful than its neighbors.

Also, in terms of design, the top level of the building will be within a mansard roof design. This is seen to be much more in harmony with the late 19th century buildings seen in this area.

The building will only have a 40% lot coverage, less than the average in the area.

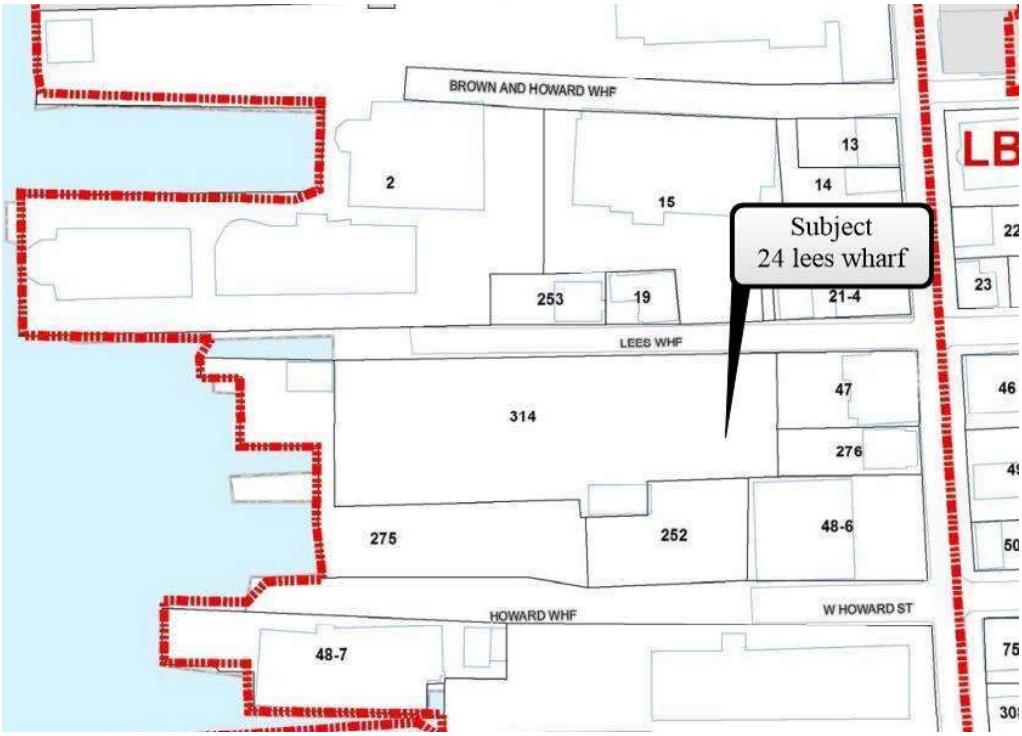
It has sufficient parking on site. Traffic reports show it will reduce traffic at certain points of the day. Because the current use is strictly a parking lot, the numbers of cars using the site on a daily basis currently likely far exceed the number of cars which will be using the property if it is operating as a hotel. Because parking is at such a premium in Newport in general, known/existing parking lots generate perhaps the greatest amount of traffic of any property type.

From the aspect of neighborhood impact, none can be seen. The lot will have sidewalks, providing direct access to the harbor walk. Currently, sidewalks do not exist, so pedestrian traffic will be made safer.

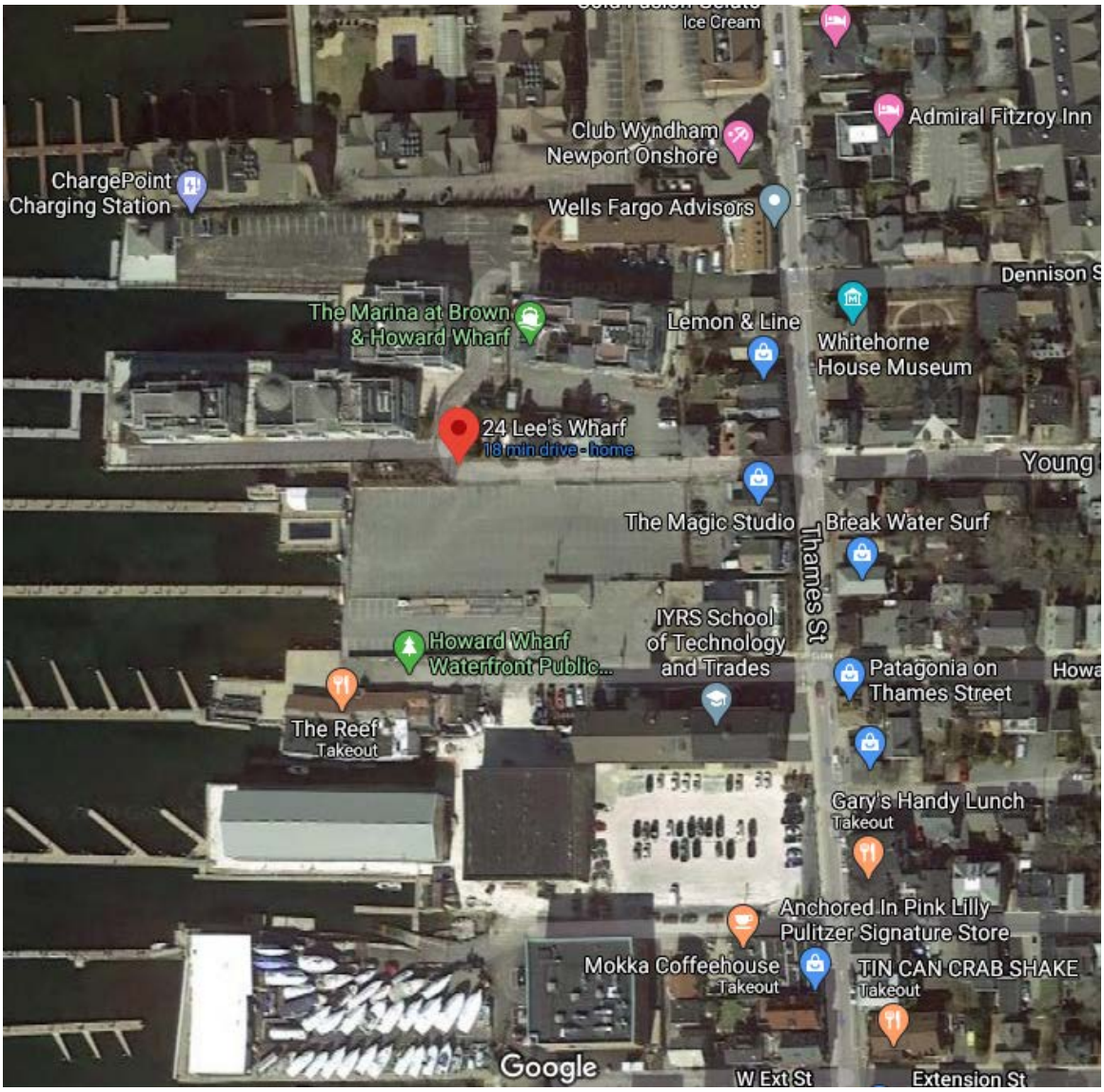
There are only 21 guest rooms, which is very limited, but the hotel will have several spaces for meetings and functions. This appraiser sees a need for a boutique hotel with ample meeting space. There are very limited numbers of such hotels currently in Newport. In addition, there is restaurant space on the upper level, with water views. This would also be a positive addition to the area, as this is a desirable setting.

We can find no features which would be considered negative to the area. No property in the immediate area will be negatively impacted.

The following pages contains plat map of the site, taken from the city database, as well as an aerial photograph of the subject site.



City Plat Map, Subject Lot Noted



Aerial of Subject Lot

Specific to this petition, we review the plan both in the context of the Comprehensive Land Use Plan and its legislative arm, the Newport Zoning Code:

Comprehensive Land Use Plan:

The conformance of this plan to the Comprehensive Land Use Plan is summarized within the factors cited by the Development Plan Review: (within Land Use)

> To ensure that commercial and multifamily development is consistent with the Comprehensive Land Use Plan, the City of Newport has established a detailed development review process. *The purpose of the process* procedure, previously known as site plan review, *is to assure the orderly development of those commercial and multifamily dwelling uses which either by their nature; scale and intensity of use may significantly impact city resources. More specifically, the intent is to minimize traffic hazards and congestion; provide a more healthful and aesthetically pleasing environment; guarantee the adequate provision of water, sewerage, police, fire and other public services, and promote the overall public health, safety, and general welfare of the community and its citizens.*

We find that the proposal is part of an orderly development, satisfying all aspects of the plan review standards. Specifically, we find the proposal satisfies the following goals of land use:

> ***Goal LU-1*** *– To provide a balanced city consisting of residential, commercial and employment uses consistent with the character, environmental resources and vision of the community.*
>
> ***Policy LU-1.3*** *– The City shall work with state* [and] *regional agencies and private property owners to maintain viable maritime uses and public access within the city's harbor area, while also supporting uses necessary to accommodate tourism.*
>
> ***Policy LU-1.4*****:** The City shall maintain design standards to protect historic structures, maintain the heritage of the community, and maintain views and access to the harbor and waterfront areas.
>
> ***Policy LU-1.6*** **–** The City shall encourage upgrading, beautification, revitalization and environmentally appropriate reuse of existing commercial areas.

Further, we read on page 3-6 of the Plan:

> **Current Zoning is a tool used by cities to strategically organize land uses and promote orderly growth in order to accomplish the goals and objectives contained in the Newport Comprehensive Land Use Plan.** *Zoning protects public health and safety, promotes the general welfare and enhances the overall quality of life.* Newport's Zoning Code dates back to the 1920s. To a large extent, current zoning reflects the established use patterns of the city.
>
> Given the community's mature development status, future land use patterns are not predicted to change significantly. However, planning and zoning are dynamic processes. The Planning Board is charged with periodically reviewing the City of Newport Zoning Code and the Newport Comprehensive Land Use Plan to ensure there is consistency between the two and that future development conforms with the both the comprehensive plan and zoning. Newport's future land use policies include the preservation of open spaces, preservation of scale and character of neighborhoods, limiting development so that it is supported by infrastructure and the environment, and the careful reuse of the harbor front. Rhode Island State Law provides a number of zoning tools to assist in achieving these ends.
>
> Further, within the intent of the zoning districts, we read:
>
> **WB Waterfront Business District** The waterfront business district consists of the area adjoining the harbor. ***The intent of this district is to provide for retail and commercial service facilities to meet the needs of both tourists and residents.*** A mix of land uses is encouraged in this area, with access to the water utilized by those activities, which are dependent on such a location for their existence.

It would appear clear that a plan which is fully in conformance with the zoning code satisfies this inter-relationship between the comprehensive plan and the zoning code. Specifically, we see that it is harmony with current land use patterns, it satisfies scale and character of the neighborhood, and will provide a use that by its configuration will satisfy the needs of both tourists and local residents.

Again, quoting from the plan:

.

Hospitality and Visitor Industry
In recent years, Newport has experienced steady growth in all tourism-related services including hotels, restaurants, retail goods, museums, galleries and recreational services.

In 2014, the Arts, Entertainment, Recreation, and Accommodation and Food Services Industry had 2,607 employees in Newport, comprising a total 20.8% of the workforce. The strength of the hospitality and visitor industry has helped fuel the expansion of land development.

This is evident along America's Cup Avenue, Thames Street, and Spring Street, as well as Bowen's and Bannister's wharves, plus the commercial areas of Bellevue Avenue and Memorial Boulevard. **This expansion has significantly boosted the local property tax base and employment opportunities within Newport.**

Downtown meeting-facilities for conference needs are met by the Newport's five major hotels: Viking, Chanler, Marriott, Harbor Hotel, and Hyatt. However, because of space limitations, Newport hotels cannot accommodate both meeting and exhibition spaces for larger groups.

The tourism industry is vital to Newport's economy, with the multiplier effect creating thousands of jobs and generating outside revenue for the community, but Newport's tourism is largely seasonal, peaking in the summer. As a result, the local chamber and Newport County Convention & Visitors Bureau (NCCVB) are working on marketing efforts to increase visitor activity during the winter and "shoulder" seasons. As Newport's tourism industry continues to mature, the net effect has resulted in the reduction of the traditional marine uses on the waterfront, as tourism facilities yield a higher return on property.

The property tax revenue
The Hotel Tax and the Meals and Beverage Tax are two other important sources of revenue for the City of Newport. **These account for approximately 4.5% of the City's total revenue and are collected to help support tourism efforts in the state and help offset any infrastructure costs caused by tourism in Newport.**

The fact that Newport primarily relies on property tax revenues to finance City services and capital improvements poses a question of equity when considering the impact on infrastructure and services due to the large, transient tourist population. As seasonal visitors do not share a proportionate percentage in the costs, they must be borne largely by Newport's property owners.

> ***Policy Goal ED-1*** – To develop a robust and diverse economy, providing suitable employment opportunities for residents, and a stable tax base.
>
> ***Policy ED-1.5*** The City shall build upon thriving sectors to develop of a more substantial year around tourism economy.

Again, all of the statements above dovetail completely with the proposed development at the subject site. The plan will provide access, where none exists, to the harbor walk. Further, it will contribute strongly to the economic base of the city.

> ***Goal OSR-3*** – To protect and enhance public access to the shoreline and waterfront areas.
>
> ***Policy OSR-3.1*** – The City shall enhance and protect public access to the shoreline and waterfront through recreational sites, public rights-of-way, and access easements.

So, from all aspects, the proposed development appears to be exactly described by the comprehensive land use plan. However, we are aware that the proposal will need to satisfy the standards for a special use permit of the zoning code.

> **Special use permit:**
> **17.56.020. - Use regulations.**
>
> B. The following uses require a special use permit from the zoning board of review.
> *8. Transient guest facilities;*
>
> Special use permits shall be granted only where the zoning board of review finds that the proposed use or the proposed extension or alteration of an existing use is in accord with the public convenience and welfare, after taking into account, where appropriate:
>
> A) The nature of the proposed site, including its size and shape and the proposed size, shape and arrangement of the structure;
>
> This has been discussed at the beginning of this report. The proposal takes in all aspects of its site, with new lawn area, sidewalks and harbor walk access. Further, the scale of the building itself is modest, in relation to its neighbors.
>
> B) The resulting traffic patterns and adequacy of proposed off-street parking and loading;
>
> This has also been discussed. It will reduce traffic on this street.
>
> C) The nature of the surrounding area and the extent to which the proposed use or feature will be in harmony with the surrounding area;

The use is very much in harmony with the neighboring uses and the requirements if the code

D) The proximity of dwellings, churches, schools, public buildings and other places of public gathering;

There will be no impact to any of these uses.

E) The fire hazard resulting from the nature of the proposed buildings and uses and the proximity of existing buildings and uses;

There is no noted increase to fire hazard

F) All standards contained in this zoning code;

The use conforms to all use standards and physical standards:

17.56.030. - Dimension requirements.

The minimum lot area shall be five thousand (5,000) square feet.

The minimum lot width shall be fifty (50) feet.

(Ord. 2000-4 (part), 2000: Ord. 65-94 (part), 1994: prior code § 1260.06.113)

17.56.040. - Setback requirements.

The minimum setback requirements are:

Front line, zero (0) feet;
Side line, five (5) feet;
(Ord. 2000-4 (part), 2000: Ord. 65-94 (part), 1994: prior code § 1260.06.114)

17.56.050. - Lot coverage requirements.

The portion of a lot to be covered by buildings shall not exceed forty (40) percent.
(Ord. 2000-4 (part), 2000: Ord. 65-94 (part), 1994: prior code § 1260.06.115)

17.56.060. - Building height requirements.

Building height shall not exceed thirty-five (35) feet in height above average grade, except as otherwise provided in section 17.04.050.
(Ord. 2000-4 (part), 2000: Ord. 65-94 (part), 1994: prior code § 1260.06.116)

G) The comprehensive plan for the city.

The use is very much in harmony with the comprehensive plan. This has been discussed throughout this report.

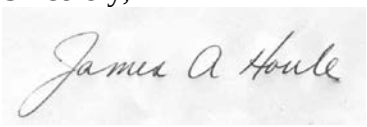
In fact, a review of both the comprehensive plan and the zoning code does not identify any items with which the proposal is in conflict. Further, there is no need for any demolition, a rare occurrence in such a densely developed area.

Conclusions:

After my review of the plan, physical inspection of the subject and the surrounding neighborhood, research in the Town data base, and review of the Comprehensive Land Use Plan and the zoning code, I have formed the opinion that the request meets each and all standards of the Development Plan Review .

Thank you again for allowing me to have been of service.

Sincerely,



James A. Houle
RI Certified General Appraiser/Land Use Expert

JAMES A. HOULE & ASSOCIATES

198 UNION STREET, PORTSMOUTH, RHODE ISLAND 02871 (401-662-1543)

JAMES HOULE & ASSOCIATES
198 Union Street
Portsmouth, Rhode Island 02871

Voice: 401- 662-1543
Email: **houleapprs@gmail.com**
Web: **www.houleapprs.com**

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QUALIFICATIONS OF APPRAISER

JAMES A. HOULE

LICENSING:

Rhode Island Appraisal Certification: #CGA.0A00769
Massachusetts Appraisal Certification: #1000015
Rhode Island Real Estate Broker: # REB.0009805

BUSINESS EXPERIENCE:

James Houle & Associates, Portsmouth, RI Real Estate Appraisal, Consulting & Brokerage Services	1981- Present
Deputy Tax Assessor, City of Newport, RI Appraisal and Mass Assessment Services	1990- 1998
Gold Star Group, Middletown, RI Real Estate Education and Franchise Development	1988-1989
Atlantic Properties, Middletown, RI Principal Broker	1985-1988
L.H. Houle Realty, Stafford Springs, Conn. Consulting Broker	1975-1983
Better Homes Realty, Middletown, RI Principal Broker	1978-1981
Heritage Realty, Newport, RI Associate Broker	1975-1978
Kennan Associates, Cumberland, RI Associate Broker	1973-1975

PROFESSIONAL QUALIFICATIONS AND RELATED BOARDS:
ACTIVE:
Licensed Real Estate Broker, Rhode Island
Certified Real Estate Appraiser, Rhode Island
Certified Real Estate Appraiser, Massachusetts
Approved by State of Rhode Island, Office of Municipal Affairs, to perform city- wide mass appraisals and revaluations, as required by Rhode Island law
Board of Realtors, (Officer of Newport County Board, 1975)

RELATED EDUCATION:

BA, Clark University, Worcester, Mass. 1973

Society of Real Estate Appraisers, course #101 Introduction to Appraisal
Society of Real Estate Appraisers, course #102 Small Income Property Appraisal
R.I. Tax Assessor's Administrative Course
Graduate Realtor Institute, Board of Realtors
Uniform Standards of Professional Practice, University of Rhode Island
Income Approach to Property Valuation, University of Rhode Island
Practical Application of Income Approach to Value, University of Rhode Island

Seminars:
Impact of Environmental Issues in Appraisals, RI Board of Realtors
Rhode Island Tax Law, NLI Institute
Performing an In House Revaluation, International Order of Assessing Officers
Lead Issues in Real Estate, RI Board of Realtors
Tax Issues in Real Estate, RI Board of Realtors
Appraiser as Expert Witness, RI Board of Realtors
Appraising FHA Today, McKissock
Report Writing, MBREA
Oddball Properties, McKissock
Environmental Issues for Appraisers, McKissock
The Cost Approach, McKissock
History of Zoning, Appraisal Institute
Appraisal of Fast Food Facilities, McKissock
Appraisal of Land Subject to Ground Leases, McKissock
Appraisal of Owner Occupied Commercial Facilities, McKissock

Seminars as Approved Instructor:
Real Estate Tax Assessment: How to Judge its Equity
Real Estate Financing: Conventional and Creative

APPRAISAL EXPERIENCE:
Active since 1976, performing appraisals of single and multi family housing and commercial/ industrial properties.
Experience in appraising impacted/ contaminated properties
Experience in appraising specialty/ partial interests
Experience in appraising water related utilities
Accepted as expert in Rhode Island Family Court
Accepted as expert in Rhode Island Superior Court
Accepted as expert in Rhode Island Bankruptcy Court
Accepted as expert before several Rhode Island community Boards of Tax Appeals
Accepted as expert before several Rhode Island Zoning Boards of Appeal

SIGNIFICANT CLIENTS

Ford Motor Company
NYNEX (Bell Atlantic)
National Grid
Stone Bridge Water District, Tiverton, RI
Church Community Housing Corporation, Newport, RI
City of New Shoreham, Rhode Island, Assessor's Office
City of Swampscott, Massachusetts, Assessor's Office
City of Newport, Rhode Island, Assessor's Office
City of Newport, Rhode Island Planning Office
City of Newport, Rhode Island, Public Utilities Department
Twin River Gaming Facility, Lincoln, RI
Appraisal Resource, East Greenwich, RI


COSMETIC
COSMOS
COSMETICS
PARKING
$15


CHANNEL 09
NEWPORT


EITHER SIDE
PUBLIC


NEWPORT MARINA


PARKING


NO PARKING


The Marina at Brown & Howard Wharf
Lemon & Line
Newport Jerky Company
Lee's Wharf Waterfront Public Access Point
Lee's Wharf
The Magic Studio
Young St
Thames St
BROWN AND HOWARD
Newport Marina
Break Water Surf
Howard St
Patagonia on Thames Street
IYRS
Howard Wharf Waterfront Public...
Howard Wharf
IYRS School of Technology and Trades
The Reef
Milburn Ct
Gary's Handy
Spring Wharf Waterfront Public Access Point
Mokka Coffeehouse
Pope St

7,800 SF OF GREEN SPACE ADDED

The Marina at Brown & Howard Wharf
Lemon & Line
Newport Jerky Company
Lee's Wharf Waterfront Public Access Point
Lee's Wharf
The Magic Studio
Young St
Thames St
Break Water Surf
Howard Wharf Waterfront Public...
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Patagonia on Thames Street
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Spring Wharf Waterfront Public Access Point
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Thames St

JUNE PRESENTATION

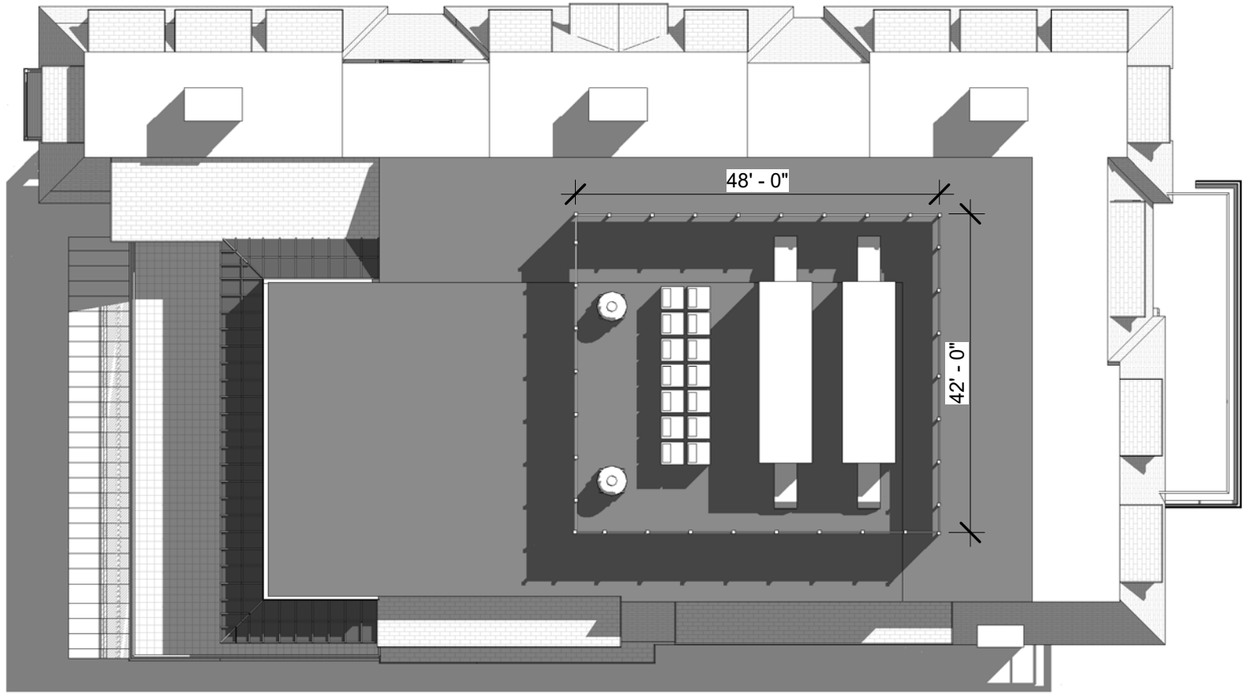
AUGUST PRESENTATION

JUNE PRESENTATION

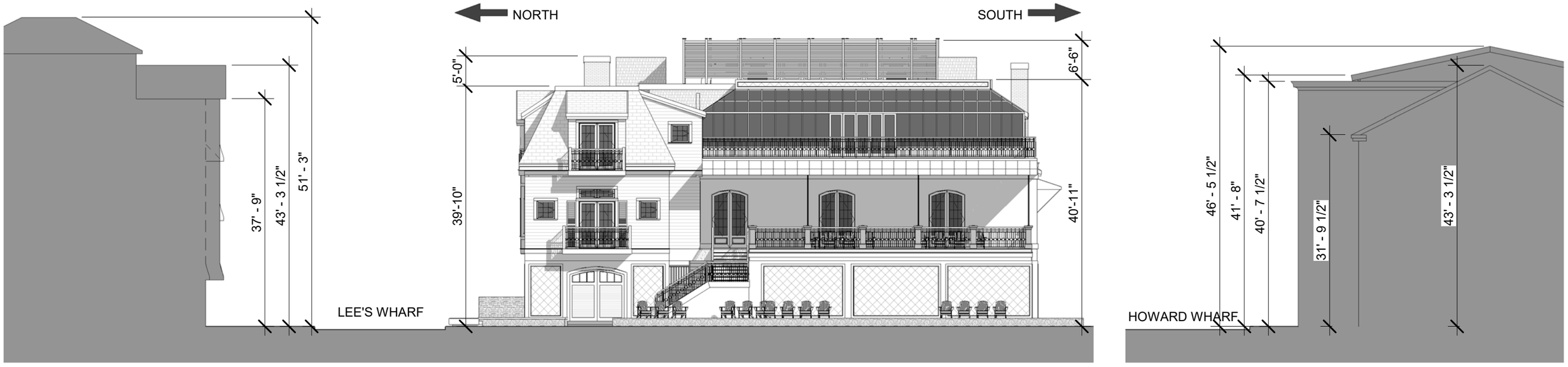
AUGUST PRESENTATION

JUNE PRESENTATION

AUGUST PRESENTATION



2 ROOF PLAN
1" = 20'-0"



1 SITE SECTION - VIEW FROM HARBOR
1/16" = 1'-0"

HERK WORKS
ARCHITECTURE
401. 662. 7875 Dan@Herk-works.com

24 LEES WHARF
NEWPORT RI 02840

SITE SECTION & ROOF PLAN

5/27/2020 8:00:42 PM

A002


NO PARKING


NEWPORT MARINA