## TOWN OF WEYMOUTH BOARD OF ZONING APPEALS APPLICATION

TO BE COMPLETED BY STAFF	
Case Number: 3322	tamp 🔀
Submittal Accepted: Date	
Determined to be complete and may now be filed with Town Clerk:  Signature of Principal Planner or Di	irector
PROPERTY INFORMATION - TO BE COMPLETED BY APPLICANT	~ P4
PROJECT / PROPERTY STREET ADDRESS: 84-94 Broad Reach	
Assessor's Map Sheet, Block, & Lot: Map 3, Block 1, Lot 1	<b>三</b> 高名
Zoning District: Residence 4 (R-4)  Overlay District: None	
OWNER OF RECORD (S) (print&sign): East Bay at Weymouthport Corporation (The owner of record is the person or entity who owns title to the property as of today's date)	RES
Address of owner of record: 325 Wood Road, Suite 202, Braintree, MA 02026	-=
Norfolk County Registry of Deeds Book and Page No. Book 7043, Page 530	(*)
Or registered in Land Registration Office under Certificate No.	
NAM E OF APPLICANT (S) (print&sign): DAI Property Management Company, Inc.	
Applicant's Address: 325 Wood Road, Suite 202, Braintree, MA 02184	11-1-
Contact Information: Email_jiantosca@daiproperties.netPhone (781) 848-37	78
Check if you are an: owner(s) X lessee(s) optionee (s)	
NAME & AFFILIATION OF REPRESENTATIVE: Frank Marinelli, Esq.	
Address: 439 Washington St, Braintree, MA 02184	
Contact Information: Email_fmarinellilaw@aol.comPhone_(781) 849-0400	)
NAME OF ENGINEER AND / OR ARCHITECT: Gabe Crocker, P.E., CHA Consulting, Ir	1C.
Prior to submitting your application you must review this entire package and the Board Regulations outlining the Board's policies and procedures. Your signature signifies that you have required material and you will be expected to adhere to them.	ules and
I (we) hereby certify that I (we) have read the Board of Zoning Appeals Rules and Regulations the statements within my (our) application are true and accurate to the best of my (our) knowledge	and that
Applicant / Petitioner - Date (sign & print)	1

NATU	RE OF	REQU	EST				
Applic	cation	is for:_	X	Special Permit	Variance	Amendment	Other:
is soug The deve	ght):   propo  elopm	osed n ent wi	nulti-f II con	amily project me sist of 50 resider	ets the intent o	f §120-19. Th um units per §	nance from which relief e proposed 120-21.1 and at exceeds 19.
This n	nay be	amende	ed by i		ding staff during th	ne application rev	te package is submitted. view process after having
A 2 No. 20 A 2 1 A 2 1 A 2 2		the second second	111 111 1111 1111	TION AND NARRAT ard of Appeals Applic	医乳腺素 医乳腺素 医水黄色 化硫化二基 医二氯二基 化二氯化二甲二氯化二甲二甲二甲二甲二甲二甲二甲二甲二甲甲甲甲甲甲甲甲甲甲甲甲甲	tional sheets as ı	necessary.
1.				oresently located on otage of each use):	the property (use	as much detail	as possible including all
	Ref	er to a	ıttach	ed Narrative/Cov	er letter prepa	red by CHA da	ated January 9, 2017.
2.	The possi		nt see	ks to (describe wh	at you want to d	o on the proper	ty in as much detail as
	Re	fer to a	attach	ned Narrative/Co	ver letter prepa	red by CHA d	ated January 9, 2017.
3.				nitted by the Town o ng Ordinance which			der Article (insert Article, operty).
***	R	efer to	atta	ched Narrative/C	over letter prep	pared by CHA	dated January 9, 2017.
4.	Comr	nission'	? If so		dates of previou		om any Town Board or k and page numbers or
	F	Refer to	o atta	ched Narrative/C	Cover letter prep	pared by CHA	dated January 9, 2017.
5.	Any o	ther add	ditiona	l information as rele	vant to the Variand	ce or Special Per	mit:

### ZONING COMPUTATION WORKSHEET

(To be attached with all Board of Zoning Appeals Applications)

The Zoning Computation Worksheet must be completed by the Applicant / Petitioner. All information should be measured and calculated in accordance with the Weymouth Zoning Ordinance (Section 120-51 Table 1 "Schedule District Regulations" and other applicable sections of the Zoning Ordinance). The information should be based on engineer/surveyor/architectural prepared plans and or calculations. Further guidance can also be provided by the Board's step-by-step application instructions and by contacting the Planning or Building Department while completing this section.

Data	Required	Existing	Proposed
Use		Essex Building	Seascape at Weymouth
Lot Area / Size (Sq. Ft.)	15,000 SF (min)	656,426 SF	656,426 SF
Dwelling Units		72	50
Frontage (ft.)	40 FT	272.2 FT	272.2 FT
Lot Width (ft.)	120 FT	>120 FT	>120 FT
Front Yard Setback (ft.)	55 FT (Note 1)	56.3 FT	472.5 FT
Front Yard Setback (ft.)  - corner lots			
Side Yard Setback (ft.)	26 FT (Note 2)	64 FT/24.3 FT	254.5 FT
Side Yard Setback (ft.)			
Rear Yard Setback (ft.)	40 FT (Note 3)	89.8 FT	126.8 FT
Height (ft.) & # of Stories	80 FT, 6 Stories	80 FT, 6 Stories	70 FT, 6 Stories
Lot Coverage		11.7%	14.1%
Off-Street Parking Spaces	2 spaces/unit	137 (2 H.C.)	109 (5 H.C.)
Off-Street Loading Spaces		1	1
Parking Setback			
Accessory Structure Setback	5 FT	24.3 FT	328.6 FT
Landscaping	15%	88.3%	74.2%
Floor Area Ratio	0.30	0.183	0.117 (0.30 Total)
Signage			
Other:			

Note 1: Minimum Front Yard Depth is 40 FT plus 6 FT for each story over Third Floor = 55.0 FT

Note 2: Minimum Side Yard is 20 FT plu 2' for each story over third floor = 26 FT.

Note 3: Minimum Rear Yard is 30 FT or 1/2 Building Height, whichever is greater = 40 FT.

## SPECIAL PERMIT APPLICATION

To be completed for Special Permit Applications only.

#### SPECIAL PERMIT FINDINGS OF FACT

In the spaces below explain how the adverse effects of the proposal will not outweigh its beneficial impacts to the Town with respect to each of the following considerations per Article XXV, Section 120-122 of the Zoning Ordinance. The Special Permit Granting Authority may approve any such application for a special permit *only* if it finds that, in its judgment, all of the following conditions are met. (Attach additional supporting documentation as necessary).

1. Is the specific site an appropriate location for such a use? Please explain.

The proposed use and structure are consistent with the abutting properties. Broad Reach consists of multi-family, high-rise residential condominium buildings.

2. Will the proposed use / structure be detrimental or adversely affect the character of the neighborhood or town? Please explain.

Seascape at Weymouth has been thoughtfully designed by Sheskey Architects and is intended to be aesthetically pleasing from the outside and functional and impressive for its residents on the inside. On the outside, there are staggered facades, creating architectural interest. Thus, the use and proposed development will be a great addition to Weymouth.

3. Is there potential for nuisance or serious hazard to vehicles or pedestrians? Please explain.

The proposed structure is at the end of an existing roadway that already services multi-family high-rise residential development. Only 50 units are proposed which only yields one vehicle trip every two minutes during peak hour. As such, the project does not create nuisance nor serious hazards to vehicles.

4. Will adequate and appropriate facilities, utilities and other public services be provided for the proper operation of the proposed use? Please explain.

The project is designed to provide appropriate facilities and utilities for the use. Utility service stubs were previously planned for and installed within Broad Reach.

5. Will the public convenience and welfare be substantially serviced with this proposal? Please explain.

Seascape at Weymouth will bring a net positive revenue to the Town of approximately \$292,500 and is only expected to generate 0 to 4 school aged children per year.



January 9, 2017

Mr. Richard M. McLeod Chairman Board of Zoning Appeals Town of Weymouth 75 Middle Street Weymouth, MA 02189

RE:

SEASCAPE AT WEYMOUTH – SPECIAL PERMIT APPLICATION Proposed 50 Unit Residential Condominium 84-94 Broad Reach

Weymouth, Massachusetts

Dear Chairman McLeod and Members of the Board of Appeals;

On behalf of the Applicant, DAI Property Management Inc. (DAI) and Owner, Eastbay At Weymouthport Corporation (Eastbay), enclosed is a Special Permit Application (with Site Plan Review) for review by the Weymouth Board of Appeals for a proposed 50-unit residential condominium project, "Seascape at Weymouth", located at 84-94 Broad Reach in Weymouth, MA.

Included in the package are the following items for the Board's Consideration:

- Board of Zoning Appeals Application (18 copies)
- Site Development Plans prepared by CHA and Ryan Associates dated 1/9/17 (18 copies)
- Architectural Floor Plans and Elevations prepared by Sheskey Architects dated 1/9/17 (18 copies)
- Architectural Rendering prepared by Sheskey Architects dated 1/9/17 (18 copies)
- Stormwater Report prepared by CHA dated 1/9/17 (2 copies)
- FEMA Response to LOMA dated 12/5/16 (2 copies)
- Transportation Impact Assessment prepared by Vanasse & Associates (VAI) dated May 2016 (2 copies)
- Fiscal Impact Analysis prepared by Connery Associates dated June 12, 2016 (2 copies)

The proposed project is sited on an existing 15.07 acre parcel of land at the end of Broad Reach on Weymouth Neck. The parcel is zoned Residence-4 (R-4) which allows for multi-family development with a maximum Floor Area Ratio of 0.3. The parcel is bounded by Webb State Park to the north, the Weymouth Back River to the east and south, the Dover Condominium and Weymouthport Condominiums to the West. An existing 72-unit residential condominium building currently exists on the property, which will remain, and is often referred to as the "Essex Building". The property is accessed via an existing driveway connection off of the end of Broad Reach, a private street owned in fee by the Eastbay At Weymouthport Corporation, the owner of the subject property.

Seascape at Weymouth, a 50-unit, six story, residential condominium, is intended to be both aesthetically pleasing from the outside and both functional and impressive for its residents on the inside. On the exterior, there are staggered facades, creating architectural interest. There is generous low level landscaping around the building including a patio area and screening of seven 4-stall garages, leaving mostly natural open space and grasslands surrounding the building. The stepped footprint has brick rising upward toward the center of the main facades and terminating at the fourth floor, giving way to light colored siding extending up to the parapet, and including sloped roof elements.

Seascape at Weymouth will be the final phase of development on Weymouth Neck that will complement a community that began in the 1970's with The Weymouthport Condominium and in the 1980's with The Eastbay Condominium. The Developer has located the building to have minimal impact to the site and the surrounding community. A significant majority of the waterfront site will remain open.

Seascape at Weymouth requires a Special Permit from the Board of Appeals since the project includes more than 19 residential units, which is the threshold at which a Special Permit is required. The development of fifty (50) high-end condominium residences complies with all dimensional criteria within the R-4 Zone and has been sited to be entirely outside of all environmental resource areas and buffers zones. No waivers or variances are being sought accordingly. The building is proposed to be 70 feet in height, which is 10 feet below the maximum allowable height of 80 feet. It also greatly exceeds the minimum front, side and rear setbacks from the property lines and complies with design dimensional criteria for driveways, drive aisles, parking stalls, etc.

This proposed building utilizes the balance of the remaining allowable Floor Area for the property. The available Floor Area remaining for development was calculated as follows:

- Total Land Area (Above Mean High Water) = 656,426 square feet
- Subtract 110,420 square feet to satisfy Restrictive Covenant to the benefit of the Dover Condominium
- Resultant Land Area Attributable to Floor Area Ratio = 546,006 square feet
- Total Allowable Floor Area = 546,006 sf x 0.3 Max FAR = 163,801.8 square feet
- Then subtract the Floor Area already utilized by the "Essex" Building of 99,846 square feet
- This results in 63,955.8 square feet of available Floor Area for the proposed building.
- The proposed Seascape at Weymouth will utilize the 63,955.8 square feet of Floor Area, effectively using up the remaining Floor Area.

The first floor of the building will include 22 covered parking spaces along with a central lobby and "club room", which connects to the outside patio area. The patio will feature seating and lounging areas with a fire pit and grills for resident use. The 50 residences will be located on the 2<sup>nd</sup> through 6<sup>th</sup> floors. Seven (7) single story four unit free standing garages will be located along the north and east sides of the building which will provide an additional 28 covered parking spaces. An additional 59 exterior parking spaces are incorporated, providing a total of 109 parking spaces for the project. The 109 spaces meets the requirement of 2 spaces per unit as well as provides 9 additional spaces that can accommodate visitors.

The incorporation of the boulevard driveway which culminates in a circular round-a-bout in front of the new building, provides an aesthetically pleasing destination and design feature in front of the building. It also provides for a functional turn-around for vehicles. A looped one-way drive aisle around the building has also been incorporated to allow for residents, emergency vehicles and larger trucks (i.e. moving or delivery trucks) to access the loading area at the back side of the building. Sidewalks have been

incorporated to circulate pedestrians through the property and to connect out to the existing sidewalk within Broad Reach. Seascape Residents can also access Webb State Park via an existing gated pedestrian connection behind the Essex Building.

Some site preparation work is proposed to be performed on the south side of the proposed driveway to provide for a soil management area which will be the destination of impacted soils excavated below the 3 foot "clean cap". Once the soil management areas is constructed, the area will be replanted with meadow grasses to match the surrounding grassed open space, as shown on the Landscape Plans. The balance of the property is proposed to remain as open space.

The property was historically utilized as a Fertilizer Plant and was the subject of a significant soil remediation project performed by Conoco-Phillips in the mid 2000's. That clean-up concluded with a 2008 Class A-3 Response Action Outcome with Activity and Use Limitation (AUL) which concluded that a condition of no significant risk to health, safety, public welfare or the environment exists for any foreseeable period of time subject to compliance with the AUL.

The AUL established that the activities and uses which are <u>consistent</u> with the AUL include multifamily residential development which does not involve disturbance of soil beneath a depth of three feet; however the AUL does allow subsurface excavation below a depth of three feet if done in accordance with applicable environmental health and safety regulations and provided that a Health and Safety Plan and a Soil Management Plan are prepared and monitored by the a Massachusetts Licensed Site Professional ("LSP") and thereby maintain a condition of no significant risk. Also, since the project anticipates relocating approximately 1,600 cubic yards of impacted soils, a Phase IV Remedy Implementation Plan (RIP) is required to be submitted to Massachusetts Department of Environmental Protection (MADEP). To comply with this requirement the Applicant has engaged William Hoyerman, a Licensed Site Professional with Civil and Environmental Consultants, Inc. (CEC) to prepare the Health and Safety Plan and Soil Management Plan. CEC is completing those documents as well as an Air Monitoring Program and plans to provide you and the Board of Health Agent with a copy of those documents by Friday, January 13, 2017.

The property is not located within any estimated habitat of rare wildlife or priority habitats of rare species. According to the FEMA Flood maps (Community Panel No. 25021C0093E – 07/17/12), the proposed project was shown to be within some isolated areas of flooding denoted Zone AE (EI 10) (See Section III – Figure 3). However, a detailed survey of the property has been completed, the results of which conclude the isolated areas shown on the FEMA map are incorrect and the project is located entirely outside of the 100 year FEMA Floodplain. The Applicant has received the Letter of Map Amendment (LOMA) back from FEMA, which removes the isolated areas of flooding as denoted by Zone AE (EL. 10).

Below is a description of the stormwater and utility systems that serve the project:

<u>Stormwater</u> - The project has been designed in accordance with the Stormwater Management Handbook prepared by Massachusetts Department of Environmental Protection. The project results in no adverse impact to surrounding properties or the receiving waters including the Weymouth Back River. Additional detail on how the system meets the Stormwater Management Standards is presented in the Stormwater Report, attached to this application.

<u>Sewer</u> - The Weymouth Department of Public Works operates and maintains the municipal sanitary sewer system. The Weymouth sewer system discharges to the Massachusetts Water Resource (MWRA) system and is treated at the MWRA treatment facility on Deer Island. The

closest sewer manhole is located just east of the Essex Building in Broad Reach. An 8" sewer stub beyond the manhole is located to the south side of Broad Reach as shown on the plans. The project proposes to extend the 8" sewer line into the site via the installation of approximately 275 feet of 8" PVC sewer pipe and two new sewer manholes. The proposed project includes a total of 86 bedrooms. The sewer flow is determined by utilizing the Massachusetts Department of Environmental Protection Title 5 regulations at a rate of 110 gpd per bedroom. The development is anticipated to generate at 9,460 gpd, based on Title 5 flow rates.

<u>Water (Domestic and Fire Supply)</u> - The Town of Weymouth also operates and maintains the potable water system. Town plans identify a 12" ductile iron water main exists within Broad Reach extending beyond the Essex Building. A fire hydrant is located approximately 400 feet from the point of connection. The water flow is determined by use of the Massachusetts Department of Environmental Protection sewer flow estimates using 110 gpd per bedroom. Thus, the estimated water usage is anticipated to be 9,460 gpd. A pump for fire protection will be provided to enhance the pressure from the distribution system. A fire hydrant will be provided within 50-feet of the fire dept. connection, the final location of which will be coordinated with the Weymouth Fire Department.

<u>Natural Gas</u> - National Grid operates and maintains the gas utility located in Broad Reach. The project will require an extension of the existing gas main which is located just east of the Essex Building, within Broad Reach. It is anticipated that the existing infrastructure can support the proposed development. The Applicant will continue working with National Grid as they finalize their extension design, the routing of which along Broad Reach will be dictated by their Engineering Department.

<u>Electric</u> - National Grid operates and maintains the electric system located in Broad Reach. It is anticipated that existing infrastructure within Broad Reach is sufficient to support the potential development based on the team's initial coordination with National Grid. The electric infrastructure is primarily underground and extends just beyond the Essex building. The Applicant will continue working with National Grid as they work finalize the design of the electrical service to serve the project.

<u>Telecommunications</u> – Comcast operates and maintains the telephone and cable service within Broad Reach.

Seascape at Weymouth's Transportation Impact Assessment report prepared by Vanasse & Associates (VAI) concludes that the new development will produce only about one additional vehicle every two minutes during peak hours. These statistics provide for objectively minimal traffic impact to the local community.

Seascape at Weymouth's Fiscal Impact Analysis prepared by Connery Associates concludes the assessment at full valuation will produce real estate tax revenue of over \$300,000 per year, plus vehicle excise tax per year, and initial building permit fees of \$125,000 or more to the Town of Weymouth. Net revenue to the Town is over \$250,000 per year at full assessment.

In summary, the Applicant has thoughtfully and carefully designed a very attractive, high-end residential project, which will be a great addition the Town of Weymouth. We appreciate your time and effort in the

review of our submittal and we look forward to meeting with you and the Board as the public hearing process commences.

Should have any questions, please don't hesitate to contact myself or Frank Marinelli (project Counsel) at any time.

Sincerely,

CHA

Gabe Crocker, PE

Associate Vice President



# Site Development Plans for Seascape at Weymouth

Broad Reach, Weymouth, MA

**APPLICANT** 



DAI PROPERTY MANAGEMENT

325 WOOD ROAD, SUITE 202 BRAINTREE, MA 02184

**OWNER** 

EASTBAY AT WEYMOUTHPORT

CORPORATION

325 WOOD ROAD BRAINTREE, MA 02184

**CIVIL ENGINEER:** 



CHA CONSULTING, INC.

101 ACCORD PARK DRIVE NORWELL, MA 02061

ARCHITECT:

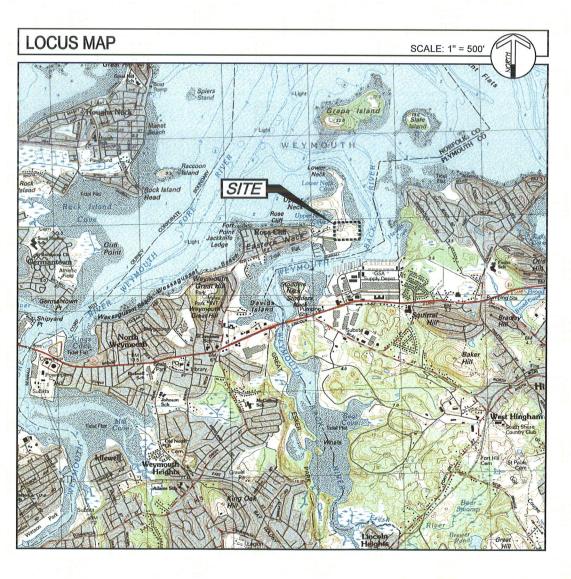
**SHESKEY ARCHITECTS** 

14 FRANKLIN STREET QUINCY, MA 02169

LANDSCAPE ARCHITECT:

RYAN ASSOCIATES

144 MOODY STREET, BUILDING 4 WALTHAM, MA 02454



Sheet No.	Sheet Title
C-001	TITLE SHEET
C-002	NOTES & LEGEND
C-101	OVERALL ZONING PLAN
C-102	ROADWAY PLAN
C-103	SITE PLAN
C-201	GRADING & DRAINAGE PLAN
C-202	GRADING & DRAINAGE PLAN
C-203	GRADING & DRAINAGE PLAN
C-301	EROSION & SEDIMENT CONTROL PLAN
C-302	<b>EROSION &amp; SEDIMENT CONTROL PLAN</b>
C-401	UTILITY PLAN
C-501	DETAILS - 1
C-502	DETAILS - 2
C-503	DETAILS - 3
C-504	DETAILS - 4
C-505	DETAILS - 5
C-506	DETAILS - 6
EC-1	EXISTING CONDITIONS
EC-2	EXISTING CONDITIONS
EC-3	EXISTING CONDITIONS
L-0.0	SITE PLAN OVERVIEW
L-1.0	LAYOUT PLAN - PATIO
L-2.0	MATERIALS PLAN - PATIO
L-3.0	PLANTING PLAN
L-3.1	PLANTING PLAN
L-3.2	PLANTING PLAN
L-3.3	PLANTING PLAN - PATIO
L-4.0	LIGHTING PLAN
L-4.1	LIGHTING PLAN
L-5.0	PLANTING PLAN
L-5.1	DETAILS
L-5.2	DETAILS

CAPA State of the state of the



No. Socrotted Fervision April, By Date
1 DZA Submitted GC JPM 010017

SUITE 202
22/84
WEYMOUTHPORT





Site Development Plans

Seascape at Weymouth

TITLE SHEET

C-001

SUBMISSION DATE: 01 - 09 - 2017

#### SURVEY NOTES:

NI WAS PREPARED IN PART FROM A PLAN ENTITLED, "EXISTING CONDITIONS PLAN 84-94 BROAD REACH WEYMOUTH, MA 02191 NORFOLK COUNTY", AS BY AND A PLAN ENTITLED, "EXISTING CONDITIONS PLAN 84-94 BROAD REACH WEYMOUTH, MA 02191 NORFOLK COUNTY", AS BY A COUNTY AS BY A COUNT

MONITORING WELLS WERE LOCATED ON NOVEMBER 8, 2011.

2. CONTOURS AND ELEVATIONS SHOWN HEREON ARE REFERENCED TO A TOWN OF WEYMOUTH DEPARTMENT OF PUBLIC WORKS PLAN NUMBER 73/612 ENTITLED "SEWER RECORD PLAN BROAD REACH", DATED JULY 26, 1977. THE VERTICAL DATUM OF THIS PLAN IS REPORTED TO BE THE TOWN OF WEYMOUTH DATUM.

THE ELEVATION DEFINING MEAN HIGH WATER HAS BEEN DERIVED FROM A PLAN ENTITLED "WEYMOUTH FORE AND TOWN RIVERS WE'MOUTH, QUINCY AND HULL, M DATED AUGUST 24, 2007 PREPARED BY THE ARMY CORPS OF ENGINEERS AND FROM THE NOAN TIDAL DATUM ESTABLISHED AT STATION ID 844788 SHIPFARD POIN WEYMOUTH, MAID, TOLD, EPOCH BISS 2001 PUBLISHED DATE OF ANDLANG 4, 2004 MEAN HIGH WATER ELEVATION DETEND TO BE 10.99 WEYMOUTH, MAID.

IN THE EVENT THAT BENCHMARKS (TBM'S), ESTABLISHED FOR THIS PROJECT AND PUBLISHED ON THIS SURVEY ARE DESTROYED, NOT RECOVERABLE OR A DISCREPANCY IS FOUND, THE USER SHOULD NOTIFY THIS FIRM IN WRITING PRIOR TO COMMENCING OR CONTINUING ANY WORK.

3. LOCATION OF SUBSURFACE UTILITIES SHOWN HEREON ARE APPROXIMATE AND BASED ON SURFACE OBSERVABLE STRUCTURES, RECORD UTILITY PLANS AND FIELD LOCATED PAINT MARKINGS. ADDITIONAL UTILITIES MAY EXIST THAT ARE NOT SHOWN ON THIS PLAN. SUBSURFACE UTILITY IN PROPARATION IS NOT TO BE USED FOR CONSTRUCTION. PRIOR TO ANY CONSTRUCTION, CONTACT DIG. SAFE (1-88-34-4723) TO FIELD VERIFY LOCATION OF ALL UTILITIES.

4. LOCUS IS PARTIALLY LOCATED IN ZONE VE. AREAS OF 100-YEAR COASTAL FLOOD AND AE ELEVATION 10 ZONE. THIS INFORMATION IS SHOWN ON THE FLOOD INSURANCE RATE MAY GRIMP) PUBLISHED BY THE FEDERAL EMERGENCY MANAGEMENT AUTHORITY (FEMA) FOR THE TOWN OF WEYMOUTH MA. NORFOLK COUN MAP NUMBER 2002/C00595; EFFCUTE DATE JULY 17, 2012.

5. LOCUS IS LOCATED IN RESIDENCE DISTRICT R-4 AS SHOWN ON TOWN OF WEYMOUTH ZONING MAP, LAST UPDATED JULY 9, 2007

6. UNLESS OTHERWISE NOTED, PLAN AND DEED REFERENCES ARE TO THE NORFOLK COUNTY REGISTRY OF DEEDS.

7. PLAN/LAYOUT REFERENCES

BK 323 PG 698 / RK 353 PG 539 / BK 461 PG 831 / BK 555 PG 41 / BK 577 PG 81 / BK 6090 PG 494 BK 58 PG 2781 / BK 70 PG 3393

8. LOCUS PROPERTY IS SUBJECT TO AN ELECTRIC EASEMENT AS DESCRIBED IN DEED BOOK 7487 PAGE 464.

9. SUBJECT TO RESTRICTIVE COVENANTS AS DESCRIBED IN BOOK 23735 PAGE 172

10. CHAPTER 91 LICENSE NO. 3458 & 3482

11. RESOURCE AREAS WERE DELINEATED BY CHA CONSULTING, INC. AND SUBJECT TO AN ORAD ISSUED BY THE WEYMOUTH CONSERVATION COMMISSION DATED AUG. 23, 2013. THE ORAD WAS APPEALED BY AN ABUTTOR AND A SORAD WAS ULTIMATELY ISSUED BY DEP ON NOVEMBER 15, 2013.

#### **GENERAL**

- 1. PROTECTIONS
- A. PROVIDE PROTECTION NECESSARY TO PREVENT DAMAGE TO EXISTING IMPROVEMENTS, TREES OR VEGETATION
- B. PROTECT IMPROVEMENTS ON ADJOINING PROPERTIES AND ON OWNER'S PROPERTY.
- C. RESTORE DAMAGED IMPROVEMENTS TO ORIGINAL CONDITION AS ACCEPTABLE TO PARTIES HAVING JURISDICTION.
- CONDUCT OPERATIONS TO ENSURE MINIMUM INTERFERENCE WITH OPERATIONS, STREETS, WALKS, AND OTHER ADJACENT FACILITIES. DO NOT CLOSE OR OBSTRUCT STREETS, WALKS, OR OTHER OCCUPIED OR USED FACILITIES WITHOUT FERMISSION FROM AUTHORITIES HAWING JURISDICTION, STREETS AND ROADWAYS SHALL BE THOROUGHY. CLEANED ANDORS WEPT ON A DOLY DASIS OR MORE REFECUENTLY AS REQUIRED BY THE GOVERNING AUTHORITY.
- 3. ALL SLOPES, UNLESS OTHERWISE SPECIFIED, SHALL BE LOAMED AND SEEDED FOR STABILIZATION AS SOON AS POSSIBLE TO PREVENT EROSION TOWARD RESOURCE AREAS AND BUFFERS, ABUTTING PROPERTIES, OR PUBLIC WAYS. EROSION CONTROL BLANKETS ARE REQUIRED FOR ALL 2H-IV SLOPES. SLOPES MAY NOT EXCEED
- 4. ANY DEVIATIONS, I.E. FIELD CHANGES' FROM THE DESIGN PLAN(S) MUST BE APPROVED BY THE DESIGN ENGINEER IN WRITING. CONTRACTOR SHOULD BE AWARE THAT LOCAL AND STATE AUTHORITY PRICE TO THE IMPLEMENTATION OF THE FIELD CHANGE." CHA INC. ASSUMES NO LIABILITY OR RESPONSIBILITY FOR WORK ASSOCIATED WITH FIELD CHANGES COMPLETED WITHOUT REGARD TO THE FIELD CHANGE PROCEDURE.
- 5. RELOCATION OF ANY UTILITIES SHALL BE PERFORMED IN ACCORDANCE WITH THE PROVISIONS OF THE APPROPRIATE UTILITY COMPANY AND/OR REGULA
- GOVERNMENT AGENCIES, IN WRITING, OF THE INTENT TO EXCAVATE, BUAST, DEMOLISH, BORE, OR PERFORM OTHER FARTH MOVING OPERATIONS TO LESS THAN 12 HOURS AND NO MORE THAN 30 DAYS PRIOR TO THE COMMENCEMENT OF SUCH WORK (EXCLUSIVE OF SATURDAYS, SUNDAYS, AND LEGAL HOLIDAYS) OR CALL TOIG SAFE' AT 1886 PIGSAFE
- 7. ADDITIONAL BENCHMARKS TO BE SET BY CONTRACTOR PRIOR TO CONSTRUCTION TO ENSURE QUALITY WORKMANSHIP
- 8. ANY STILLING AND/OR DETENTION BASINS SHOULD RECEIVE PERIODIC MAINTENANCE DURING CONSTRUCTION TO REMOVE DEPOSITED SILTS AND DEBRIS TO ENSURE PROPERTY DRAINAGE AND SETTLING OF PARTICULATE MATTER.
- 9. ALL MANHOLE COVERS FOR CROSS-COUNTRY LOCATIONS OR IN PUBLIC GATHERING LOCATIONS SHALL BE FITTED WITH BOLT LOCKS OR EQUIVALENT.
- 10. UNLESS OTHERWISE LABELED, ALL REINFORCED CONCRETE PIPE, RCP, SHALL BE CLASS III; ALL DUCTILE IRON PIPE SHALL BE CEMENT LINED CLASS 52; ALL PVC SEWER SHALL BE SOR 35.
- 11. PERMITS: THE SITE IS SUBJECT TO A SPECIAL PERMIT WITH SITE PLAN REVIEW FROM THE WEYMOUTH ZONING BOARD OF APPEALS. IT IS ALSO SUBJECT TO A INDES CONSTRUCTION OF BEAU, PERMIT TO BE ISSUED PRIOR TO COMMENCEMENT OF WORK. THE PROJECT HAS BEEN DESIGNED TO REMAIN ENTRIELY OUTSIDE OF ALL RESOURCE AREAS, RIPARIAN ZONES AND ASSOCIATED BUFFERS. CONTRACTOR SHALL LIMIT VOKE AREA TO WITHIN TUMIN OF WORK LINE DESIDIERIO BY THOSE PERMITS.
- 12. ANY ALL WORK PERPORMED THAT REQUIRES EXPOSURE OR EXCAVATION NTO SOUS BENEATH THE 5 POOT TELLAN CAPE MUST ANHERE TO MADER REQUIREMENT.

  NACCORDANCE WITH THE CONDITIONS IDENTIFIED IN THE ACTIVITY USES INITIATION (AUL) ASSOCIATION THE PROBLEM. THE CONTROL FOR SHALL HOTHER THE

  LICENSED SITE PROFESSIONAL, LISP, I DAYS IN ADVANCE OF COMMENCIAL EXCAVATION BELOW THE TILE AND CAPE. THE LIST WILL SCHEDULE AN ON-SITE MEETING
  TO REFURE THE SOIL MANAGEMENT PLAN AL HEALTH AS ASSETS IN FLAN WITH CONTRACTOR PRICE TO COMMENCIALITY OF COMMENCIAL THE COM

#### SITE WORK

CAUTION - NOTICE TO CONTRACTOR

THE CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AS SHOWN ON THESE PLANS IS BASED ON DESIGN PLANS AND LIMITED AS BUILT INFORMATION. THE INFORMATION IS NOT TO BE RELIED ON AS BEING EXACT OR COMPLETE. THE CONTRACTOR MUST CALL THE APPROPRIATE UTILITY COMPANIES AT LEAST 72 HONGE (EXCLUSIVE OF SATURDAYS, MOUNDAYS, AND LOCAL HOLDHAYS) PROFILE ONLY EXCLANATION, BENCHION, BORRING, OR OTHER EARTH MOVING OPERATIONS TO REQUEST EXACT FIELD LOCATIONS OF UTILITIES. IT SHALL BET RESPONSIBILITY OF THE CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONTRACTOR TO

- A. ENSURE THAT AREAS TO BE FILLED ARE FREE OF STANDING WATER, FROST, FROZEN MATERIAL, TRASH, AND DEBRIS PRIOR TO FILL PLACEME.
- B. PLACE APPROPRIATE FILL MATERIAL AS DESIGNATED BY THE GEOTECHNICAL ENGINEER IN HORIZONTAL LAYERS NOT EXCEEDING EIGHT INCHES (8') IN LOOSE DEPTH AND COMPACT EACH LAYER AT OPTIMUM MOISTURE CONTENT TO THE GREATER OF:
- B.2. 95% OF THE MAXIMUM ORY DENSITY OF THE EMBANKMENT MATERIAL AS DETERMINED BY AASHTO STANDARD METHOD CO.
- 3. FINISH GRADING
- GRADE ALL AREAS WHERE FINISH GRADE ELEVATIONS ARE INDICATED ON DRAWINGS, OTHER THAN PAVED AREAS AND BUILDINGS, INCLUDING EXCAVATED AREAS, FILLED AND TRANSITION AREAS, AND LANDSCAPED AREAS, GRADED AREAS SHALL BE UNFORM AND SMOOTH, FREE FROM DEBMS, OR RIREGULAR SURFACE CHANGES. FINISH DESCRIPTION OF BE WORT STAND 10 FEET AREAS OF BELOW ESTREALISHED SUBGRADE ELEVATIONS, AND ALL GROUND SURFACE SHALL VARY UNFORMLY BETWEEN INDICATED ELEVATIONS. FINISH DITCHES SHALL BE GRADED TO ALLOW FOR PROPER DRAWINGE WITHOUT PONDING AND IN A MANNER THAY FULL MINIMIZE RESIGNOY POTENTIAL.
- GRADE SURFACE TO MATCH ADJACENT GRADES AND TO PROVIDE FLOW TO SURFACE DRAINAGE STRUCTURES, OR GRADE AS DESIGNATED ON THE PLANS AFTER
  FILL PLACEMENT AND COMPACTION.
- 4. THE CONTRACTOR IS RESPONSIBLE FOR GENERAL CLEANUP OF THE PROJECT ON A DAILY BASIS AND AT THE COMPLETION OF THE PROJECT. OPEN TRENCHES, DITCHES, EXCAVATIONS, ETC. SHALL NOT BE PERMITTED TO BE LEFT OPEN OVERNIGHT. CONTRACTOR WILL BACKFILL OR UTILIZE SUITABLE STEEL PLATES FOR THE SECURING OF THE PROJECT SIZE PRIOR TO CESSINS WORK BEACH DAY.
- APPROPRIATE TRAFFIC CONTROL, I.E. SIGNAGE, BARRICADES, AND OTHER MEANS, WILL BE SUPPLIED BY THE CONTRACTOR IN ACCORDANCE WITH ALL FEDERAL STATE AND LOCAL AGENCIES.
- UNDER NO CIRCUMSTANCES MAY ANY UTILITY, STRUCTURE, AND/OR REPAIR BE BACKFILLED UNLESS INSPECTED AND APPROVED BY THE TOWN OFFICIALS AND/OR REPRESENTATIVE, RECEIPT OF APPROVAL TO BACKFILL WILL NOT RELEASE THE CONTRACTOR FROM ANY RESPONSIBILITY OR LIABILITY FOR PERFORMANCE TESTS REQUIRED AS PARTO FT HIS PROJECT.
- PROPER SHORING AND TRENCH BOXES SHALL BE UTILIZED AS REQUIRED BY LOCAL, STATE, AND FEDERAL REGULATORY AGENCIES TO PROVIDE A SAFE WORKING
  ENVIRONMENT. SHORING SHALL BE DESIGNED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF MASSACHUSETTS WITH EXPERIENCE IN SHORING DESIGN
- 8. ALL UTILITIES DISTURBED DURING CONSTRUCTION SHALL BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
- A. ALL WATER PIPING, VALVES, HYDRANTS, AND FITTINGS ETC. TO CONFORM TO LOCAL GUIDELINES OR AS DIRECTED BY THE WATER DEPARTMENT. CONSTRUCTION OF WATER LINE TO CONFORM TO ALL LOCAL AND STATE AGENCIES HAVING JURISDICTION.
- ALL WATER PIPE SHALL BE THICKNESS CLASS 52 DUCTILE IRCN. ALL PIPES AND FITTINGS SHALL HAVE A CEMENT LINING TIME THE THICKNESS SPECIFIED IN AWWA C104 AND SHALL HAVE A BITMINIOUS SEAL COAT APPLIES INSIDE AND OUTSIDE CONFORMING TO AWWA C104, "TYTON" OR MECHANICAL JOINTS ARE PERMITTED UNLESS ON THE PRIMENT PIPETOR".
- C. REFER TO PLUMBING PLANS FOR WATER SERVICE, FIRE PROTECTION, AND SANITARY SEWER CONNECTIONS UNLESS OTHERWISE NOTE!
- 10. CONTRACTOR SHALL OBTAIN APPROVAL FOR ALL TRANSFORMER LOCATIONS FROM THE FIRE DEPARTMENT AND BUILDING INSPECTOR PRIOR TO CONSTRUCTION.

#### **SEWER**

- 1. THESE NOTES ARE INTENDED TO SUPPLEMENT THE LOCAL REQUIREMENTS FOR MATERIALS AND WORKMANSHIP
- 2. WATER AND SEWER MAINS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE LATEST LOCAL AND STATE CODES INCLUDING THE RECOMMENDATIONS OF THE AMERICAN WATER WORKS ASSOCIATION AND THE NEW ROLLAND INTERSTATE WATER POLLUTION CONTROL COMMISSION TECHNICAL REPORT 16. CONSTRUCTION SHALL PROCEED IN A WORKMANILE MAINTER WITH STATE OF THE HEART CONSTRUCTION TECHNICALS.
- THE CONTRACTOR SHALL INSULATE WATER AND SEWER MAINS AS INDICATED ON THE PLANS OR WHEN DESIGN OR CONSTRUCTION ENCUMBRANCES DICTATE ALIGNMENT TO OCCUR ABOVE THE FROST LINE. PROCUREMENT AND INSTALLATION OF PIPE INSULATION SHALL CONFORM TO THE REQUIREMENTS UISTED IN THE LATEST MASS. DOT STANDARD SECRETICATIONS FOR SECTION 301 SIAP AND MATERIAL SPECIFICATION HIS 11.1. THE PIPE INSULATION SHALL BE PRE-MOLDED TYPE CELLULAR GLASS INSULATION WITH ALUMINUM JACKET CONFORMING TO THE LATEST REQUIREMENTS OF ASTMS22 OR APPROVED EQUAL.
- THE CONTRACTOR SHALL FOLLOW ALTERNATE CONSTRUCTION PROCEDURES WHEN DESIGN OR CONSTRUCTION ENCUMBRANCES PREVENT HORIZONTAL SEPARATION OF 10 FEET OR THE ALTERNATE OF 18 INCHES OF VERTICAL SEPARATION DETWEEN WATER AND SEVER MAINS. IN ABEAS WHERE THE ABOVE OFFSETS CANNOT BE MAINTAINED, THE WATER AMAIN SHALL CONSTRUCTED WITH MECHALUR MECHANICAL TYPE ETTIMAS OR A PROVIDE DOLAL FOR A DISTANCE OF 10-FEET ON EITHER SIDE OF THE CROSSING OR LATERAL ENCROACHMENT AND SHALL STRADULE A FULL LENGTH OF CLASS 52 CEMENTED LINED DUCTILE IRON
- 5. THE DEFLECTION IN ALL GRAVITY SEWER PIPE SHALL BE TESTED USING A GO, NO-GO MANDREL TEST TO ENSURE THAT PROPER INSTALLATION HAS OCCURED, TEST SHALL CONFORM WITH PIPE MANUFACTURER'S RECOMMENDATIONS AND SHALL NOT INDICATE MORE THAN 7.5% DEFLECTION, U.O.N.
- 5. ALL TESTING SHALL CONFORM TO SRA AND TOWN ENGINEERING / DPW SPECIFICATIONS.
- 7. EACH SEGMENT OF THE SEWER MAIN INCLUDING MANHOLES SHALL BE LEAK TESTED AND OBSERVED BY A REPRESENTATIVE OF THE TOWN AND/OR ENGINEER IN ACCORDANCE WITH THE FOLLOWING PROCEDURES:

#### EXFILTRATION TEST FOR NEW SEWER MAIN:

- PREPARATION OF TEST. AFTER THE MANHOLE HAD BEEN ASSEMBLED IN PLACE, ALL LIFTING HOLES AND THOSE EXTERIOR JOINTS WITHIN SIX FEET OF THE GROUND SURFACE SHALL BE FILLED AND POINTED WITH AN APPROVED NON-SHRIMING MORTAR. THE TEST SHALL BE MADE PRINT FOR LINION FOR HAD SHORT FOR LAND WITH SHELF AND HE FOR THE SHELF AND HE FOR THE SHELF HAD BEEN ALLOWED TO RISE ABOVE THE BOTTOM OF THE MANHOLE, IT SHALL BE LOWERED FOR THE DURATION OF THE TEST. ALL PIPES AND OTHER OPENINGS INTO THE MANHOLE SHALL BE SHA
- TEST PROCEDURE. THE MANHOLE SHALL THEN BE FILLED WITH WATER TO THE TOP OF THE CONE SECTION. IF THE EXCAVATION HAS NOT BEE AND OBSERVATION INDICATED NO VISIBLE LEAKAGE, THAT IS, NO WATER VISIBLY MOVING DOWN THE SURFACE OF THE MANHOLE, THE MANHOLE. CONSIDERED TO BE SATISFACTORILY WATERTION. IT THE TEST SHALL BE CONTINUED, A PERIOD OF TIME MAY BE PERMITTED, IF THE CONTRACTOR WISHES, TO ALLOW FOR ASSOPPTION.
- AT THE END OF THIS PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE, IF NECESSARY, AND THE MEASURING TIME OF AT LEAST EIGHT HOURS BEGUIN AT THE END OF THE TEST PERIOD, THE MANHOLE SHALL BE REFILLED TO THE TOP OF THE CONE, MEASURING THE OLUMBE OF WATER ADDOED. THIS AMOUNT SHALL BE EXTRAPOLATED TO A 24-HOUR RATE AND THE LEAKAGE DETERMINED ON THE BASIS OF DEPTH. THE LEAKAGE FOR EACH MANHOLE SHALL NOT EXCEED ONE. GALLON PER VERTICAL FOOT FOR A 24-HOUR PERIOD. IF THE TEST FALLS THIS REQUIREMENT, BY THE LEAKAGE DOES NOT EXCEED THREE GALLONS FER VERTICAL FOOT FOR A 24-HOUR PERIOD. IF THE TEST FALLS THIS REQUIREMENT, BY THE LEAKAGE DOES NOT EXCEED THE CONTROL OF THE TOP THE
- BACKFILLING, THE TEST MAY BE CONDUCTED EITHER BEFORE OR AFTER BACKFILLING AROUND THE MANHOLE. HOMEVER, IF THE CONTRACTOR ELECTS TO BACKFILL PRIOR TO TESTING, IT SHALL BE AT HIS OWN RISK AND IT SHALL BE INCLUMENT UPON THE CONTRACTOR TO DETERMINE THE REASON FOR ANY FALLOW OF THE TEST, NO ADJUSTMENT IN THE LEAKAGE ALLOWANCE WILL BE IMADE FOR UNWNOWN CAUSES SUCH AS LEAKING FULLOS, ASSORPTION, ETC., LETTER OF THE TEST AS A RESULT OF LEAKS THE OWN THE FORT OF THROUGH THE CONTROL OF THE CONTR

#### VACUUM TEST FOR NEW SEWER MAIN:

- THE VACUUM TESTING SYSTEM SHALL BE SUPPLIED BY NPC SYSTEMS, INC. OR EQUIVALENT AS APPROVED BY THE ENGINEER. THE TESTING SHALL BE DONE
  IMMEDIATELY AFTER ASSEMBLY OF THE MANHOLE AND BEFORE BACKFILLING. A 60 LB-FT. TORQUE WEENCH SHALL BE USED TO TIGHTEN EXTERNAL CLAMPS
  THAT SECURE THE TEST COVER TO THE TOP OF THE MANHOLE ALL LIFT HOLES SHALL BE PLUGGED WITH A NON-SHRIKKING MORTAR. THE CONTRACTOR
  SHALL PLUG THE PIPE OPENINGS, TAKING CARE TO SECURELY BRACE THE PLUGS AND THE PIPE TO PREVENT THE PLUGS FROM BEING DRAWN INTO THE
  MANHOLE.
- A VACUUM OF 10 INCHES OF MERCURY, HG (4) PSI), SHALL BE DRAWN AND THE VACUUM PUMP SHUT OFF. THE MANHOLE PASSES THE TEST IF THE VACUUM REMANDS GREATER THAN OR EQUAL TO 9 INCHES HG (4) PSI) FOR A PERIOD GREATER THAN ONE MINUTE FOR MANHOLES 10-15 FEET DEEP, AND ONE MINUTE HIRTY SECONDS FOR MANHOLES 10-15 FEET DEEP.
- IF THE MANHOLE FAILS THE INITIAL TEST, THE CONTRACTOR SHALL LOCATE THE LEAKS AND MAKE PROPER REPAIRS. LEAKS MAY BE FILLED WITH A WET SLURRY OF ACCEPTED QUICK SETTING MATERIAL IF THE MANHOLE FAILS THE VACUUM TEST AGAIN, ADDITIONAL REPAIRS MUST BE MADE, AND THE MANHOLE MUST BE TESTED BY EXPERTATION AS OUTLINED IN PAPAGRAPH 100, APRIED QUALIFY CONTROL

- THE PIPELINES SHALL BE MADE AS NEARLY WATERTIGHT AS PRACTICABLE, AND LEAKAGE TESTS AND MEASUREMENTS SHALL BE MADE AFTER THE PIPELINE HAS BEEN BACKELLED.
- 2. WHERE THE GROUNDWATER LEVEL IS MORE THAN 1 FT ABOVE THE TOP OF THE PIPE AT ITS UPPER END, THE CONTRACTOR SHALL CONDUCT EITHER MIRITRATION TESTS OR LOW PRESSURE AR TESTS.
- 3. WHERE THE GROUNDWATER LEVEL IS LESS THAN 1 FT. ABOVE THE TOP OF THE PIPE AT ITS UPPER END, THE CONTRACTOR SHALL CONDUCT EITHER EXFILTRATION TESTS OR LOW PRESSURE AIR TESTS.
- 4. AT THE TIME OF THE TEST, THE CONTRACTOR SHALL DETERMINE THE GROUNDWATER ELEVATION FROM OBSERVATION WELLS, EXCAVATIONS OR OTHER MEANS, ALL SUBJECT TO REVIEW BY THE ENGINEER.
- FOR MAKING THE LOW PRESSURE AIR TESTS, THE CONTRACTOR SHALL USE EQUIPMENT SPECIFICALLY DESIGNED AND MANUFACTURED FOR THE PURPOSE OF TESTING SEWER PIPELINES USING LOW PRESSURE AIR. THE EQUIPMENT SHALL BE PROVIDED WITH AN AIR REGULATORY VALVE OR AIR SAFETY SO SET THAT THE INTERNAL AIR PRESSURE IN THE PIPELINE CANNOT EXCEED 8 PSIG.
- 6. THE LEAKAGE TEST USING LOW PRESSURE AIR SHALL BE MADE ON EACH MANHOLE-TO-MANHOLE SECTION OF PIPELINE AFTER PLACEMENT OF THE BACKFILL
- PNEUMATIC PLUGS SHALL HAVE A SEALING LENGTH EQUAL TO OR GREATER THAN THE DIAMETER OF THE PIPE TO BE TESTED. PNEUMATIC PLUGS SHALL RESIST INTERNAL TEST PRESSURES WITHOUT REQUIRING EXTERNAL BRACING OR BLOCKING.
- LOW PRESSURE AIR SHALL BE INTRODUCED INTO THE SEALED LINE UNTIL THE INTERNAL AIR PRESSURE REACHES 4 PSIG. GREATER THAN THE MAXIMUM PRESSURE EXERTED BY THE GROUNDWATER THAT MAY BE ABOVE THE INVERT OF THE PREAT THE TIME OF THE TEST, HOWEVER, THE INTERNAL AIR PRESSURE IN THE SEALED LINE SHALL NOT BE ALLOWED TO SECEED 8 PSIG. WHEN THE MAXIMUM PRESSURE EXERTED BY THE GROUNDWATER IS GREATER THAN 4 PSIG., THE CONTRACTOR SHALL CONDUCT ONLY AN INFILTRATION TEST.
- I. AT LEAST TWO MINUTES SHALL BE ALLOWED FOR THE AIR PRESSURE TO STABILIZE IN THE SECTION UNDER TEST. AFTER THE STABILIZATION PERIOD, THE LOW PRESSURE AIR SUPPLY HOSE SHALL BE QUICKLY DISCOMNECTED FROM THE CONTROL PANEL. THE TIME REQUIRED IN MINUTES FOR THE PRESSURE IN THE SECTION MINDER TEST TO DECREASE FROM 3.5 TO 2.5 PIGE (GREATER THAN THE MAXIMUM PRESSURE EXERTED BY GROUNDWATER THAT MAY BE ABOVE THE INVERT OF THE PIPE) SHALL NOT BE LESS THAN THAT SHOWN IN THE FOLLOWING TABLE:

- 14.0 MIN. 10 SEC. 17.0 MIN. 0 SEC.
- 11. FOR MAKING THE INFILTRATION AND EXFILTRATION TESTS, THE CONTRACTOR SHALL FURNISH SUITABLE TEST PLUGS, WATER PUMPS, AND APPURTENANCES, AND ALL LABOR REQUIRED TO PROPERLY CONDUCT THE TESTS ON SECTIONS OF ACCEPTABLE LENGTH.
- 12. FOR MAKING THE INFILTRATION TESTS, UNDERDRAINS, IF USED, SHALL BE PLUGGED AND OTHER GROUNDWATER DRAINAGE SHALL BE STOPPED TO PERMIT THE GROUNDWATER TO RETURN TO ITS NORMAL LEVEL INSOFAR AS PRACTICABLE
- 13. UPON COMPLETION OF A SECTION OF THE SEWER, THE CONTRACTOR SHALL DEWATER IT AND CONDUCT AN EXPLITRATION TEST TO MEASURE THE INPILITRATION FOR AT LEAST 24 HOURS. THE AMOUNT OF INPILITRATION, INCLUDING MANHOLES, TEES, AND CONNECTIONS, SHALL NOT EXCEED 200 GAL, PER INCH CHARKER FER MILE OF SEWER FERS A HOURS.
- 14. FOR MAKING THE EXFILTRATION TESTS, THE SEWERS SHALL BE SUBJECTED TO AN INTERNAL PRESSURE BY PLUGGING THE PIPE AT THE LOWER END AND THEN PILLING THE PIPELINES AND MANHOLES WITH CLEAN WATER TO A HEIGHT OF 2FT ABOVE THE TOP OF THE SEWER AT ITS UPPER END WHERE CONDITIONS BETWEEN MANHOLES, MAY RESULT IN TEST PRESSURES WHICH WOULD CAUSE LEAKAGE AT THE STOPPERS IN BRANCHES, PROVISIONS SHALL BE MADE BY SUITABLE THES, BRACES, AND WEDGES TO SECURE THE STOPPERS AGAINST LEAKAGE RESULTING FROM THE TEST PRESSURE.
- . THE RATE OF LEAKAGE FROM THE SEWERS SHALL BE DETERMINED BY MEASURING THE AMOUNT OF WATER REQUIRED TO MAINTAIN THE LEVEL 2 FT. ABOVE THE TOP OF THE PIPE.
- 17. THE SEWERS SHALL BE TESTED BEFORE ANY CONNECTIONS ARE MADE TO BUILDINGS.
- 18. THE CONTRACTOR SHALL CONSTRUCT WEIRS OR OTHER MEANS OF MEASUREMENTS AS MAY BE REQUIRED.
- 19. SUITABLE BULKHEADS SHALL BE INSTALLED, AS REQUIRED, TO PERMIT THE TEST OF THE SEWER.
- 20. SHOULD THE SECTIONS UNDER TEST FAIL TO MEET THE REQUIREMENTS, THE CONTRACTOR SHALL DO ALL WORK OF LOCATING AND REPAIRING LEAKS AND RETESTING AS THE ENGINEER MAY REQUIRE WITHOUT ADDITIONAL COMPENSATION. 21. IF, IN THE JUDGMENT OF THE ENGINEER, IT IS IMPRACTICABLE TO FOLLOW THE FOREGOING PROCEDURES FOR ANY REASON, ACCEPTABLE MODIFICATIONS IN THE PROCEDURES SHALL BE MADE AS REQUIRED, BUT IN ANY EVENT, THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE ULTIMATE TIGHTNESS OF THE LINE MAYLAN DE

#### WATER TESTING

- 1. REQUIRED TESTS FOR WATERLINES AND FORCE MAINS
- A. PERFORM THE FOLLOWING AFTER THE PIPE HAS BEEN INSTALLED AND PRIOR TO FINAL ACCEPTANCE:
- A.1. PRESSURE TEST. / A.2. LEAKAGE TEST.
- 2. PRESUMPTIVE HYDROSTATIC TESTS MAY BE PERFORMED WHEN THE SYSTEM IS PARTIALLY BACKFILLED TO "CHECK" THE WORK, BUT FINAL ACCEPTANCE SHALL BE BASED ON HYDROSTATIC TESTS PERFORMED ON THE FINISHED SYSTEM AFTER IT IS COMPLETELY BACKFILLED.
- 3. PRESSURE TEST:
- A. TEST PIPING TO 1.5 TIMES THE PIPE WORKING PRESSURE, OR 150 PSI, WHICHEVER IS GREATER. MEASURE TEST PRESSURES AT THE LOWEST POINT IN THE PIPE SECTION AND CORRECT TO THE ELEVATION OF THE GAUGE.
- 8. RELIEVE TRAPPED AIR AT THE SECTION HIGH POINTS THROUGH HYDRANTS, OR TAPS INSTALLED FOR THIS PURPOSE, PROVIDED TEMPORARY INSTALLATIONS ARE REMOVED AND PLUGGED AFTER ACCEPTANCE.
- C. MAINTAIN THE TEST PRESSURE FOR A PERIOD OF TWO (2) HOURS. AT THE END OF THE TEST PERIOD, IF THE TEST PRESSURE REMAINS CONSTAINT, THE PIPE SECTION SHALL HAVE PASSED THE TEST. IF THE PRESSURE HAS PROPRED, IT SHALL BE BOUGHT BACK TO THE TEST PRESSURE BY PURPHERA ANDOWN VOLUME OF WATER (BY SHALL BE RECORDED. IF THE LEAKAGE IS SESSION OF THE MEDIANGE SENDED. THE CONTRACTOR SHALL LOCATE THE LEAK PROPRED THE SECTION OF PIPE WHERE THE LEAK IS OCCURRING TO THE SATISFACTION OF THE ENRINGER, AND RETEST THE PIPE AS SESSIONED AS SECURIORS DROVE.
- 4. LEAKAGE TEST:
- A. CONDUCT THE LEAKAGE TEST CONCURRENTLY WITH THE PRESSURE TEST.
- B. THE MAXIMUM ALLOWED LEAKAGE IS DETERMINED BY THE FOLLOWING FORMULA:
  - L = N X D X P 1/2

    WHERE L = ALLOWABLE LEAKAGE, ÎN GPH ; WHERE N = NO. OF JOINTS IN TEST SECTION
    WHERE D = NOMINAL PIPE DIAMETER, IN INCHES ; WHERE P = AVERAGE TEST PRESSURE, IN PSIG
- ACCEPTANCE SHALL BE DETERMINED ON THE BASIS OF ALLOWABLE LEAKAGE. IF ANY PIPE SECTION DISCLOSES LEAKAGE GREATER THAN THAT SPECIFIED, LOCATE, REPAIR AND RETEST UNTIL THE LEAKAGE IS WITHIN THE LIMITS SPECIFIED.
- 6. MAKE ALL VISIBLE LEAKS TIGHT REGARDLESS OF THE AMOUNT OF LEAKAGE, AND IF THE LINES DO NOT MEET THE ABOVE LEAKAGE TEST, REPAIR AND RETEST AS NECESSARY UNTIL THE LEAKAGE REQUIREMENT IS MET. REPAIR OR REPLACE ALL DEFECTIVE WORK.

#### DISINFECTION OF POTABLE WATER MAINS

- DISINFECT ALL POTABLE WATER MAINS IN ACCORDANCE WITH THE LATEST VERSION OF AWMA C851, EXCEPT THAT THE PLACEMENT OF CHLORINE POWDER OR TABLETS INSIDE THE PIPE DURING INSTALLATION SHALL NOT BE ALLOWED. DISINFECT WATER MAINS AFTER THE PIPING HAS PASSED THE PRESSURE AND LEXAGE TESTING.
- 2. FLUSH THE PIPE WITH WATER AT A MINIMUM VELOCITY OF 2.5 FEET PER SECOND (FPS) TO CLEAR ALL FOREIGN MATERIAL FROM THE PIPE.
- 3. APPLY A CHLORINE SOLUTION WITH A CONCENTRATION BETWEEN 50 PARTS PER MILLION (PPM) AND 100 PPM. THE CHLORINE SOLUTION SHALL REMAIN IN THE EPINO FOR A MINIMUM OF 24 HOURS. THE CONCENTRATION AT THE END OF THIS PERIOD SHALL BE AT LEAST 25 PPM IN ALL SECTIONS OF THE MAIN. REPEAT THE ENTIRE PROCEDURE IF THE RESIDUAL IS ESTIMAL 35 PM.
- A. WHILE THE CHLORINATED WATER IS BEING ADDED, ALL APPURTENANCES (VALVES, HYDRANTS, ETC.) SHALL BE OPERATED SO AS TO COMPLETELY DISINFECT THE NEW WORK
- 8. POSITION VALVES SO THAT THE CHLORINE SOLUTION IN THE SECTION BEING DISINFECTED WILL NOT FLOW INTO WATER MAINS IN ACTIVE SERVICE.
- C. CHLORINE RESIDUAL SAMPLES SHALL BE TAKEN AS DIRECTED BY THE ENGINEER.
- 4. AFTER THE TWENTY FOUR (24) HOUR RETENTION PERIOD, FLUSH THE MAIN UNTIL RESIDUAL TESTING INDICATES THAT THE CHLORINE CONCENTRATION IS APPROXIMATELY THAT OF THE NEIGHBORRING SERVICE AREA.
- A. DISPOSE OF HEAVILY CHILORINATED WATER INTO SANITARY SEWER OR TANK TRUCK
- B. THE OWNER AND THE OWNER OF THE SAINTARY SEWER SYSTEM SHALL BE NOTIFIED A MINIMUM OF TWENTY-FOUR (24) HOURS PRIOR TO THE DISCHARGE OF ANY WATER TO THE SAINTARY SEWER. CONTRACTOR SHALL SUBMIT TO THE ENGINEER WRITTEN CONFIRMATION THAT THE OWNER OF SAINTARY SEWER SYSTEM (THE TOWN), HAS APPROVED THE DISCHARGE OF WATER TO ITS SAINTARY SEWER.
- UNDER NO CIRCUMSTANCES WILL THE EMPTYING OF WATER ONTO ROADWAYS, OR INTO DITCHES, CULVERTS, STREAMS OR WETLANDS BE ALLOWED.
- 5. AFTER DISINFECTION AND FINAL FLUSHINS, AND PRIOR TO PLACING THE LINES IN SERVICE, THE CONTRACTOR SHALL COLLECT BACTERIOLOGICAL SAMPLES (BOTH COLIFORM AND HETEROTROPHIC PLATE COUNT) AND SUBMIT SAMPLES TO AN APPROVED TESTINS LABORATORY. TWO CONSECUTIVE SETS OF SAMPLES SHALL BE TAKEN AT LEAST 24 HOURS APART IN ACCORDANCE WITH AWAYS QUISICIOTION.
- A. THE TESTING LABORATORY PERFORMING THE BACTERIOLOGICAL ANALYSIS SHALL BE ACCEPTABLE TO THE ENGINEER.
- B. SUBMIT THREE (3) COPIES OF THE LABORATORY ANALYSIS TO THE ENGINEER.
- A. SHOULD SAFE RESULTS NOT OCCUR AFTER LABORATORY TESTS, THE CONTRACTOR SHALL, AT HIS EXPENSE, REPEAT THE DISINFECTION PROCEDURE UNTIL SAFE RESULTS
  ARE OBTAINED. THIS INCLUDES A POSITIVE RESULT FOR COLIFORM OR A MEASURED HETEROTROPHIC PLATE COUNT OF GREATER THAN 500 COLONY-FORMING UNITS PER MI 8. CONTRACTOR SHALL PAY FOR ALL TESTING REQUIRED.
- 6. ALL PRECAUTION SHALL BE TAKEN TO MAINTAIN DRY AND SANTARY CONDITIONS AND PREVENT CONTAMINATION OF ANY PIPING. IF, IN THE OPINION OF THE ENGINEER. CONTAMINATION HAS OCCURRED, THE CONTRACTOR SHALL REPEAT THE DISINFECTION PROCEDURE AND TESTING AT HIS COST AND EXPENSE.

## **LEGEND - EXISTING**

	LOCUS PROPERTY LINE	<b>a</b>	ELECTRIC TRANSFORMER
	RIGHT OF WAY LINE	<b>6</b>	ELECTRIC CONDUIT
	ABUTTER LINE	EFF	ELECTRIC HAND HOLE
	LEASE LINE	8	ELECTRIC METER
	MAJOR CONTOUR	ro⊾ UPR	UTILITY POLE W/RISER
	MINOR CONTOUR	<b>-</b>	GUY ANCHOR AND WIRE
OHW	OVERHEAD WIRE	*	LIGHT POLE
oCLF	CHAIN LINK FENCE (CLF)	*	GROUND LIGHT
OWDF	WOODEN FENCE (WDF)	0	MONITORING WELL
	UNDERGROUND WATER LINE	Ö	DECIDUOUS TREE
	UNDERGROUND DRAIN LINE	<b>®</b>	ARBORVITAE TREE
G	UNDERGROUND GAS LINE	-95-	DO NOT ENTER SIGN
Е	UNDERGROUND ELECTRIC LINE	ণ্ড	IRRIGATION CONTROL VALVE
S	UNDERGROUND SEWER LINE	XWALK	PEDESTRIAN CROSSING
	UNDERGROUND TELEPHONE LINE	FFE	FINISH FLOOR ELEVATION
× 31.0	SPOT ELEVATION	EOP	EDGE OF PAVEMENT
□ ств	CATCH BASIN	cc	CONCRETE CURB 6"WIDE TYP.
(f) OMH	DRAIN MANHOLE	GC	GRANITE CURB
⑤ SMH	SEWER MANHOLE	CWK	CONCRETE WALK
(1)	TELEPHONE MANHOLE	CONC	CONCRETE
<b>©</b>	ELECTRIC MANHOLE	CRW	CONCRETE RETAINING WALL
<b>E</b>	GAS METER	HRLM	METAL HANDRAIL
<b>Y</b>	WALL HYDRANT	ROH	ROOF OVERHANG
Ħ	HYDRANT	SYL	SINGLE YELLOW LINE
В	DOWN SPOUT	AG	
₩	GAS GATE		ABOVE GROUND
÷.	WATER GATE	⊕ SBDH/CBDH	STONE BOUND/CONC. BOUND W/DRILL HOLE

#### LEGEND - PROPOSED

585	MAJOR CONTOUR		CATCH BASIN
586	MINOR CONTOUR	0	DRAIN MANHOLE
	DOMESTIC WATER	+++	HYDRANT ASSEMBLY
<i></i>	FIRE PROTECTION	•	LINE VALVE
	UNDERGROUND ELECTRIC	Ø	POST INDICATOR VALVE
	SANITARY SEWER	0	SANITARY MANHOLE
	FORCEMAIN		ELECTRIC MANHOLE
sr	STORM SEWER		
	BIORETENTION LIMIT LINE		
	NATURAL GAS		
	CHAINLINK FENCE		





DAI PROPERTY MANAGEMENT
325 WOOD ROAD, SUITE 202
BRAINTREE, MA 02184
OWNER
EASTBAY AT WEYMOUTHPORT
CORPORATION



Weymouth Development Plans MA at Seascape

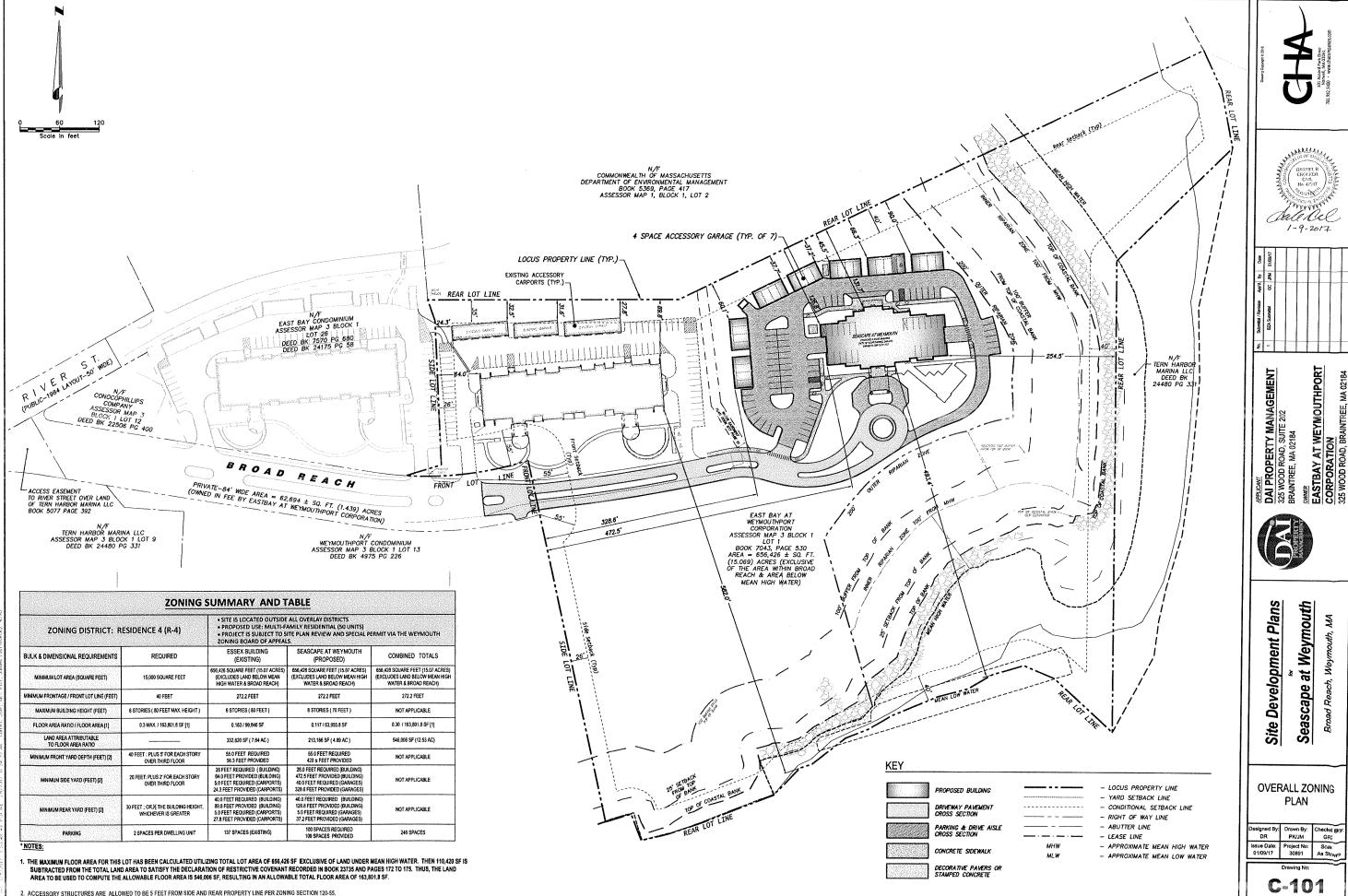
NOTES & LEGEND

ğ

Site

Designed By: Drawn By: Checker JPM Issue Date: Project No: 30891 01/09/17

C-002



C-101

Broad Reach,

