





**Planning Board**  
100 PECK STREET  
SEEKONK, MASSACHUSETTS 02771  
1-508-336-2960

To: The Planning Board  
From: John P. Hansen Jr., AICP, Town Planner  
Date: July 2, 2013

**DEFINITIVE PLAN REVIEW**  
**Country Brook Estates – Plat 15, Lot(s) 302 (882 Arcade Ave.)**

**Summary:** The applicant has submitted an Application for Approval of Definitive Plan for a Conservation Subdivision and requires a special permit for use of the incentive zoning provision.

**Findings of Fact:**

**Existing Conditions**

- Lot 302 ±36.5 acres and is mainly wooded with a small meadow toward the front and wetlands to the rear. The property is in an R-3 Zoning District.

**Proposal:**

- Create 18 new house lots, all >15K sq. ft., on an ±1070' public road ending in a cul-de-sac utilizing affordable housing incentive provision within the Conservation Subdivision Design Bylaw.
- 14 lots allowed as-of-right; 2 additional lots (10% of total lots rounded up) would be deed-restricted as affordable (not grouped together) and 2 more market rate lots (equal to # of affordable lots) would then be added via a density bonus requiring a special permit.
- Percentage of disturbed areas (areas not left in natural state) is 21% (25% max); Open space areas will equal 78%, which is greater than the 40% minimum required. Wetland percentage of open space does not exceed wetland percentage of site.
- Individual septic systems and public water will service the lots.
- Constructed wetlands and a bio-retention pond proposed for the drainage system.
- Open space areas will equal approximately 28 acres.

**Waivers:**

- Section 7.2.4.1 - Length of permanent dead-end streets (900' max. in R-3 district) – 1070' road proposed.

**Recommendations:**

Approval is recommended of the waiver, as it appears necessary to accommodate the affordable units and density bonus, the special permit, as it supports quality housing for

persons of all income levels as stated in the Purpose section of the Zoning Bylaws, and the Definitive Plan as all Subdivision Regulations are met, with the following conditions:

1. Appropriate documentation shall be submitted for the establishment of a homeowner's association, drainage easements, and an open space restriction on the open space land, which shall be delineated by a split rail fence. These documents shall be submitted prior to endorsement and recorded along with the subdivision.
2. The provisions of sections 25.10.1 (affordable unit amounts, size & distribution) and 25.10.1.4 (construction schedule) shall be adhered to.
3. Prior to issuance of a building permit for each lot, the lot owner/developer shall provide the Planning Department with site specific soils data and a roof drainage system design meeting the design requirements shown on the drawings, including the required separation from seasonal high groundwater. Prior to the issuance of certificate of occupancy from the Building Department, a record plan indicating as-built conditions of the roof drainage system design shall also be submitted to the Planning Department.
4. Prior to construction of the subdivision, soils data shall be obtained within the area proposed for the constructed wetland and the bio-retention area to confirm soils and groundwater conditions are suitable for these facilities. The Health Agent shall witness and approve of the soils data.
5. Prior to issuance of a building permit for each lot, the lot owner/developer shall submit a lot site plan and supporting information documenting the following:
  - a. The grading of the lot is consistent with the impervious surface coverage and the drainage patterns depicted on the approved Subdivision Plans.
  - b. The development of the individual lots will implement and maintain erosion and sediment control measures during construction as stipulated on the approved Subdivision Plans. The lot plan should illustrate the placement and details of these measures.
6. Any outstanding issues identified by the Board's consultant, Woodward & Curran, shall be addressed by the applicant.



July 2, 2013

Town of Seekonk  
Conservation Commission and Planning Board  
100 Peck Street  
Seekonk, MA 02771

Re: Peer Review Services for Country Brook Estates – **Letter #2**

Dear Members of the Conservation Commission and Planning Board:

This letter is being transmitted to outline our review of the revised Application submittals for the March 2013 Notice of Intent Application and Definitive Subdivision Plan Application submitted to the Town of Seekonk Conservation Commission (the "Commission") and Town of Seekonk Planning Board (the "Board"), respectively, for the Country Brook Estates project. Application submittals were revised in response to comments and recommendations provided in our original review letter dated May 2, 2013. Woodard & Curran has completed a technical and regulatory review of the proposed Country Brook Estates Subdivision project revised submittals for compliance with general engineering practice and the following:

- Massachusetts Wetlands Regulations 310 CMR 10.00 Wetland Protection Act,
- Massachusetts Stormwater Management Standards (SWMS),
- Town of Seekonk Conservation Commission General Wetlands Protection By-Laws and Regulations,
- Rules and Regulations Governing the Subdivision of Land in Seekonk (Sections V, VII, and VIII), and
- Town of Seekonk Zoning By-Law (Section 25).

#### **DOCUMENTS REVIEWED**

The information reviewed in the preparation of this letter is as follows:

- Response Letter: "Country Brook Estates Subdivision, Arcade Ave, Seekonk, MA, Peer Review Comment Responses" by InSite Engineering Services, LLC., dated October 30, 2012.
- Conservation Narrative: "Country Brook Estates Subdivision, Arcade Ave, Seekonk, MA, Conservation narrative" by InSite Engineering Services, LLC., dated June 10, 2013.
- Drainage Analysis and Stormwater Management System Narrative: Prepared by InSite Engineering Services, LLC., dated June 10, 2013.
- Definitive Subdivision Plan: Entitled "Country Brook Estates in Seekonk, Massachusetts," prepared by InSite Engineering Services, LLC., dated March 26, 2013 and Revised June 7, 2013 (includes 11 sheets).
- WPA Form 3 - Notice of Intent: Prepared by InSite Engineering Services, LLC, Revised June 10, 2013 and transmitted to Woodard & Curran via email dated June 13, 2013.



## FINDINGS & RECOMMENDATIONS

Comments discussed below reference the comments that were initially presented in Woodard & Curran's May 2, 2013 review letter. The following sections provide a summary of the documentation that was reviewed, an outline of our findings and recommendations, and our overall conclusions relative to our review of the revised application submittals.

### Planning Board Review

Woodard & Curran reviewed the revised application for compliance with the performance standards set by the Town of Seekonk Rules and Regulations Governing the Subdivision of Land in Seekonk, Massachusetts (Subdivision Regulations), Sections V, VII, and VIII. The Applicant has adequately addressed Woodard & Curran's comments numbered 1 through 23, with the exception of comment 4, which is discussed below.

The Planning Board should also note that the Applicant has requested a waiver regarding compliance with Section 5.3 of the Subdivision Regulations, which states that Definitive Plans "shall be at a scale of one (1) inch equals forth (40) feet."

4. *Section 5.3.16 - Contents, states "all planned underground utilities, including sewer, drainage, water, gas, electricity, telephone and cable TV" shall be depicted on the site plan including the "size and location of all connections from the street to each lot."*

**The Applicant should depict the proposed electricity, telephone, and cable service size and location for each lot.**

### Conservation Commission Review

Woodard & Curran reviewed the Notice of Intent (NOI) application submittal for completeness, accuracy, and compliance with the performance standards set by the Massachusetts Wetlands Regulations 310 CMR 10.00 Wetland Protection Act (WPA), and the Seekonk General Wetland Protections By-law. We offer the following comments relative the submission of the revised material.

### NOI General Comments

The Applicant has provided a narrative describing the project's conformance to State and Local Performance Standards. Woodard & Curran also recognizes that MassDEP and the Seekonk Conservation Commission have provided clarification to the Applicant indicating "stormwater components such as infiltration basins or constructed wetlands are not considered impacts within the Riverfront buffers". The Applicant has also clarified that the NOI application includes the individual lot development. The Applicant has adequately addressed Woodard & Curran's comments numbered 22 through 28, with the exception of the comments listed below noted in our initial review letter:

26. Section D: The Applicant has not provided documentation to demonstrate that the Resource Area Boundary has been verified. Although the stormwater report does indicate that the Conservation Commission has approved the Resource Area boundaries via an ANRAD, it does not provide a date for when this approval was granted.

**The Applicant should specify the date when the Order of Resource Area Determination was approved.**



27. Section F: The application form does not provide signatures of the Applicant, Representative or Property Owner.

**The Applicant should provide signed copies on the NOI application.**

**Stormwater Review**

Woodard & Curran has reviewed the project for compliance with the Massachusetts Stormwater Management Standards (MassDEP Standards). Volume 2, Chapter 3 of the MassDEP Standards outline specific structural best management practices (BMP's), specifications, and design guidelines that must be utilized for the design of stormwater management systems. We offer the following comments relative to the submission of the revised material.

**Stormwater Drainage Report**

The Applicant has adequately addressed comments 29 through 54, with the exception of the following:

29. Woodard & Curran recommends the Planning Board and/or Conservation Commission address the development of each individual house lot by including a condition in their approval (should the project be approved) that reads as follows:

***Prior to issuance of a building permit for each lot, the lot owner/developer shall submit to the Planning Department a lot site plan and information documenting that the grading of the lot is consistent with the drainage patterns depicted on the approved Subdivision Plans, and that the development of the individual lot will implement and maintain erosion and sediment control measures during construction as stipulated on the approved Definitive Subdivision Plan. The lot plan should illustrate the placement and details of these measures. The impervious areas on each lot should also be consistent with the assumptions used in the stormwater report.***

33. The Applicant indicated soil evaluations were conducted in the area of the infiltration basin; however, this information was not provided. Therefore, Woodard & Curran cannot confirm compliance with Standard 3 of the MA Stormwater Handbook until the required soil evaluations have been conducted at the location of the proposed infiltration areas.

It is also unclear as to the use of 1.39 impervious acres in the Water Quality Volume calculations. The impervious calculation included in the Recharge Volume calculation was 2.19 acres.

**The Applicant should provide the necessary test pit information for the infiltration basins and clarify the amount of impervious area used in the Water Quality Volume and Recharge Volume Calculations.**

34. **The Applicant should provide test pit information in the location of the proposed bio-retention area.**

**Stormwater Standard Compliance**

The proposed stormwater design generally conforms to the MassDEP Stormwater Management Standards (refer to Comments 45 through 54 of our May 2, 2013 review letter), with the exception of Standard 3 (Recharge) and Standard 4 (80% TSS removal). Standard 3 and 4 may be met once the required test pit information is provided by the Applicant, and Woodard & Curran confirms the proposed BMP's are appropriate given the site soil conditions and groundwater elevations at the individual BMP locations.



#### General Engineering Practice

Woodard & Curran reviewed the Application submittals for compliance with general best engineering practices. The Applicant has addressed comments 55 through 57, as outlined in our initial May 2, 2013 review letter. **However, the Conservation Commission and Planning Board should consider the Conditions of Approval recommended in Comment 29 of this letter, which relates to the development of lots 14 thru 16.**

#### Additional Comments

Woodard & Curran provides additional comments that result from our review of the recent Application submittals. These comments should be addressed by the Applicant:

59. The Grading Plan does not depict an elevation 49 contour crossing the proposed road, as provided on the road profile. **The Applicant should revise the Grading Plan.**
60. The "Weir 2" invert in the HydroCAD calculations does not correspond to the elevation provided in the Rectangular Weir Detail (Sheet 10 of the Plan Set). **The Applicant should revise the calculations and/or detail for consistency.**
61. **The Applicant should clarify whether the pipe between CB 1A and CB 1B is necessary.**
62. It appears that the detention pond at the site entrance will surcharge into the pipe system at DMH #1 during large storm events. **The Applicant should confirm that this surcharge will not occur in upstream portions of the system.**
63. In accordance with the Massachusetts Stormwater Handbook, a mounding analysis, which determines the impacts of the proposed stormwater infiltration structures on the groundwater elevation, should be provided. The results of this analysis will confirm the feasibility of the infiltration structure design. **The Applicant should provide groundwater mounding calculations.**



## CONCLUSIONS

In regards to the Planning Board's review of the project, Woodard & Curran found that the proposed project generally conforms to the Zoning By-Laws and Subdivision Regulations.

Regarding the Conservation Commission's review of the project, Woodard & Curran is unable to make a determination as to the project's compliance with the applicable Standards of the Massachusetts Stormwater Management Policy at this time. The items listed below are concerns found in the design documents that should be addressed with additional information from the Applicant:

- A soil evaluation in accordance with the Massachusetts Stormwater Management Standards has not been provided. This evaluation is necessary to confirm the soil classifications and seasonal high groundwater elevation used to design the stormwater management system.
- A mounding analysis to determine the impacts of the proposed stormwater infiltration structures on the groundwater elevation has not been provided. The results of this analysis will confirm the feasibility of the infiltration structure design.
- Conformance with the recharge standard needs to be addressed relative to the amount of impervious area used in the supporting calculations.

We recommend the Applicant address the comments and recommendations noted above before a determination relative to the project's compliance with the applicable Standards of the Massachusetts Stormwater Management Policy be made.

We trust the information contained herein is beneficial to your review of the Application. Please feel free to call the undersigned below if you have any further questions or comments relative to this matter.

Sincerely,  
WOODARD & CURRAN INC.

A handwritten signature in cursive script, appearing to read "Jeffery Stearns".

Jeffery Stearns, P.E.  
Project Manager, Associate

A handwritten signature in cursive script, appearing to read "Bridget Mitchell".

Bridget Mitchell, P.E.  
Project Engineer

# DEFINITIVE SUBDIVISION PLAN

of

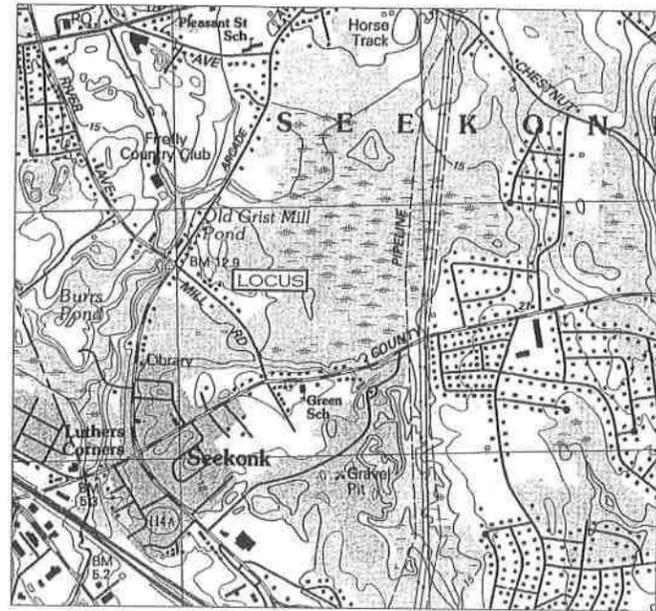
# "COUNTRY BROOK ESTATES"

in

## Seekonk, Massachusetts

DATE: Mar. 26, 2013

REGISTRY USE ONLY



**LOCATION MAP**

NTS

**REQUESTED WAIVERS:**

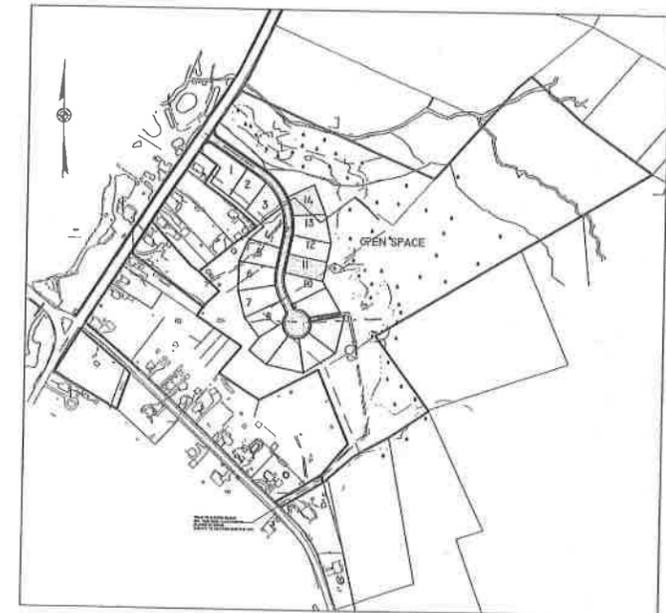
1. SECTION 8.7.1 SIDEWALKS ON BOTH SIDES OF STREET TO SIDEWALK ON ONE SIDE OF STREET

### INDEX OF DRAWINGS

SHEET NUMBER	DESCRIPTION
1	Cover & Index Sheet
2	Existing Conditions Plan
3	Lotting Plan
4	Grading Plan
5 & 6	Plan & Profile S Antonio Drive
7	Site Distance Plan
8	Erosion Control
9	Detail Sheet
10	Detail Sheet
11	Soil Logs

**NOTES:**

1. OWNERS: WATERMELLEN LLC  
25 NELSON AVENUE FAIRHAVEN MA.
2. ASSESSORS DESIGNATION - MAP 15 LOT 302
3. TITLE REFERENCES: DEED BOOK 14440 PAGE 106 AND DEED BOOK 19702 PAGE 248
4. SITE SHOWN IS LOCATED IN ZONING DISTRICT "R-3"  
MIN. AREA = 40,000 S.F.  
FRONTAGE = 200' MIN AT SETBACK  
FRONTAGE = 150' MIN AT STREET LINE  
FRONT YARD = 50'  
REAR YARD = 70'  
SIDE YARD = 35' + 5' FOR EVERY ADDITIONAL STORY
5. WETLANDS DELINEATION BY ECOSYSTEM SOLUTIONS INC. JANUARY 2012.
6. SITE SHOWN IS NOT LOCATED IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 25005C0204F DATED JULY 7, 2009.
7. PLAN REFERENCES BRISTOL COUNTY REGISTRY OF DEEDS NORTHERN DISTRICT:  
BOOK 24 PAGE 13  
BOOK 24 PAGE 32  
BOOK 25 PAGE 56  
BOOK 65 PAGE 49.
8. PLAN REFERENCES TOWN RECORDS:  
1927 LAYOUT OF ARCADE AVENUE  
1931 LAYOUT OF MILL ROAD



**SITE MAP**

NTS

**CERTIFICATIONS**

"I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS." THE CERTIFICATION SHOWN HEREON IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE LAND SHOWN.

\_\_\_\_\_  
PROFESSIONAL LAND SURVEYOR      03-26-2013      DATE

SUBJECT TO A COVENANT DULY EXECUTED DATED THE \_\_\_\_\_ DAY OF \_\_\_\_\_, RUNNING WITH THE LAND, TO BE DULY RECORDED BY OR FOR THE OWNER OF RECORD, THIS PLAN IS SUBJECT TO ALL CONDITIONS OF THE SEEKONK PLANNING BOARD CERTIFICATE OF ACTION DATED \_\_\_\_\_ FILED WITH THE SEEKONK TOWN CLERK ON \_\_\_\_\_ AND HEREWITH RECORDED AS A PART OF THIS PLAN.

I HEREBY CERTIFY THAT THERE HAS BEEN NO APPEAL TAKEN TO THIS PLANNING BOARD ACTION DURING THE 20 DAY STATUTORY APPEAL PERIOD.  
DATE: \_\_\_\_\_ TOWN CLERK, TOWN OF SEEKONK

**SEEKONK PLANNING BOARD**  
APPROVED UNDER SUBDIVISION CONTROL LAW

PRELIM. PLAN FILED _____	CHAIRMAN _____
DEF. PLAN FILED _____	CLERK _____
PUBLIC HEARING _____	
DEF. PLAN APPROVED _____	
DEF. PLAN ENDORSED _____	

REVISION #	DATE	COMMENTS

**COVER SHEET**

**"COUNTRY BROOK ESTATES"**  
882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

PREPARED FOR: **WATERMELLEN LLC**  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103	SCALE: NTS	DRAWN BY: SCA	DATE: MAR. 26, 2013
-----------------	---------------	------------------	------------------------

REVISIONS:

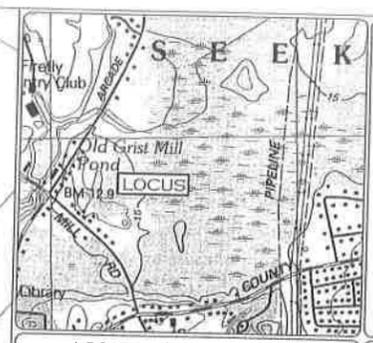
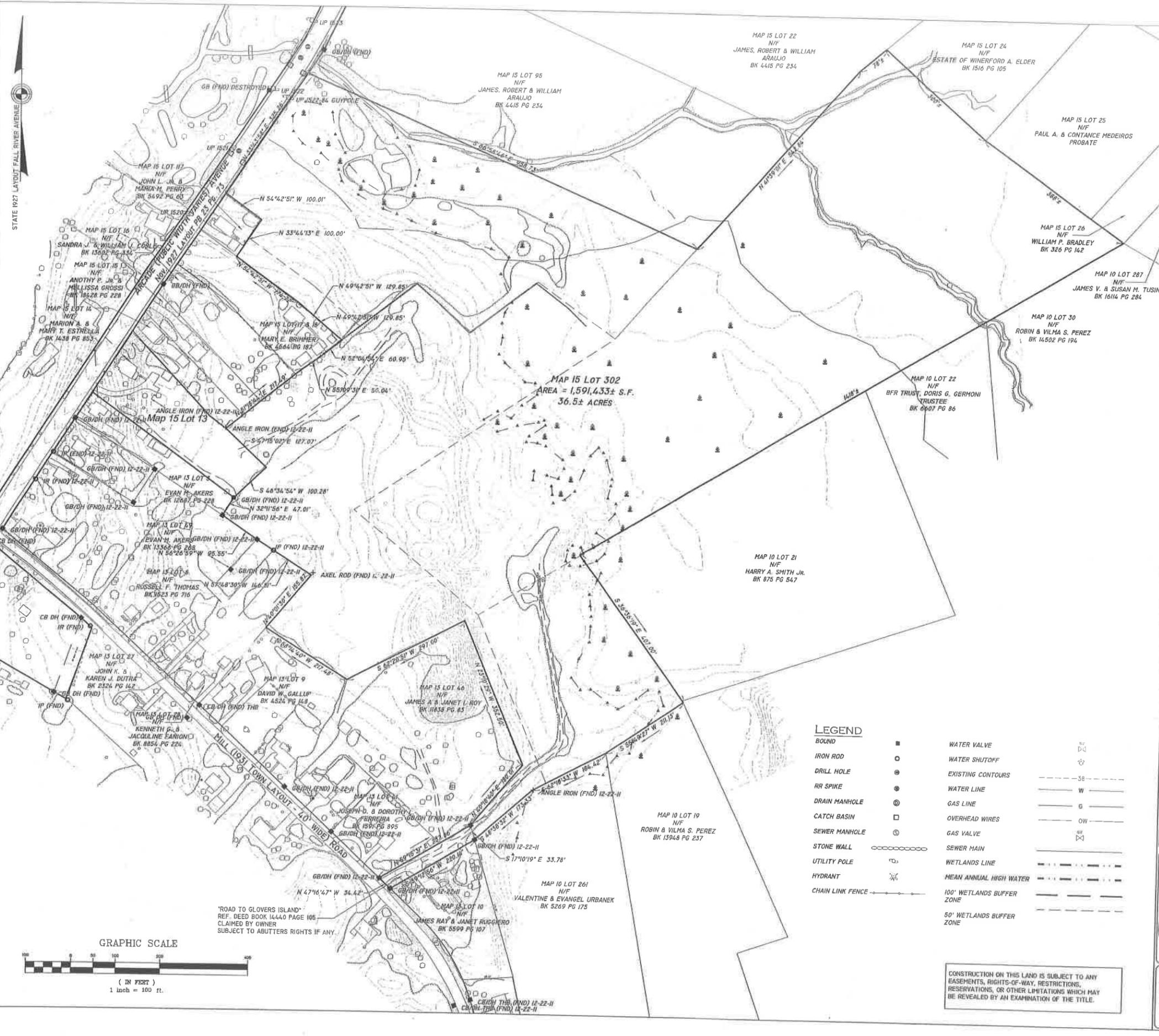


PROFESSIONAL SEAL



PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
INSITE PROFESSIONAL COMPLEX, SUITE 1  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4556

SHEET  
**1**  
OF 11



LOCATION (NOT TO SCALE) MAP  
REGISTRY USE ONLY

- NOTES:**
- OWNERS: WATERMELLEN LLC  
25 NELSON AVENUE FAIRHAVEN MA.
  - ASSESSORS DESIGNATION - MAP 15 LOT 302
  - TITLE REFERENCES: DEED BOOK 14440 PAGE 105 AND DEED BOOK 19702 PAGE 248
  - SITE SHOWN IS LOCATED IN ZONING DISTRICT "R-5"  
MIN. AREA = 40,000 S.F.  
FRONTAGE = 200' MIN AT SETBACK  
FRONTAGE = 150' MIN AT STREET LINE  
FRONT YARD = 50'  
REAR YARD = 70'  
SIDE YARD = 35' + 5' FOR EVERY ADDITIONAL STORY
  - WETLANDS DELINEATION BY ECOSYSTEM SOLUTIONS INC. JANUARY 2012 AND APPROVED BY THE SEEKONK CONSERVATION COMMISSION ON \_\_\_\_\_
  - SITE SHOWN IS NOT LOCATED IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 25005C0204F DATED JULY 7, 2009.
  - PLAN REFERENCES BRISTOL COUNTY REGISTRY OF DEEDS NORTHERN DISTRICT:  
BOOK 24 PAGE 13  
BOOK 24 PAGE 32  
BOOK 25 PAGE 56  
BOOK 65 PAGE 49.
  - PLAN REFERENCES TOWN RECORDS:  
1927 LAYOUT OF ARCADE AVENUE  
1931 LAYOUT OF MILL ROAD
  - REMAINING LAND, OPEN SPACE IS COMPILED FROM A PARTIAL FIELD SURVEY AND PLANS & DEEDS OF RECORD AND IS SUBJECT TO SUCH CHANGES AS AN ACCURATE BOUNDARY SURVEY MAY DISCLOSE.
  - ELEVATIONS BASED ON MAVD 88 DATUM.

"I HEREBY CERTIFY THAT THE PROPERTY LINES SHOWN ON THIS PLAN ARE THE LINES DIVIDING EXISTING OWNERSHIPS, AND THE LINES OF THE STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED, AND THAT NO NEW LINES FOR DIVISION OF OWNERSHIP OR FOR NEW WAYS ARE SHOWN." I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS. THE CERTIFICATION SHOWN HEREON IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE LAND SHOWN.

*[Signature]*  
03-26-2013  
PROFESSIONAL LAND SURVEYOR DATE

SUBJECT TO A COVENANT DULY EXECUTED DATED THE \_\_\_\_\_ DAY OF \_\_\_\_\_ RUNNING WITH THE LAND, TO BE FILED RECORDED BY OR FOR THE OWNER OF RECORD. THIS PLAN IS SUBJECT TO ALL CONDITIONS OF THE SEEKONK PLANNING BOARD CERTIFICATE OF ACTION DATED \_\_\_\_\_ FILED WITH THE SEEKONK TOWN CLERK ON \_\_\_\_\_ AND HEREWITH RECORDED AS A PART OF THIS PLAN.

I HEREBY CERTIFY THAT THERE HAS BEEN NO APPEAL TAKEN TO THIS PLANNING BOARD ACTION DURING THE 20 DAY STATUTORY APPEAL PERIOD.  
DATE: \_\_\_\_\_ TOWN CLERK, TOWN OF SEEKONK

**SEEKONK PLANNING BOARD**  
APPROVED UNDER SUBDIVISION CONTROL LAW

PRELIM. PLAN FILED	_____
DEF. PLAN FILED	_____
PUBLIC HEARING	_____
DEF. PLAN APPROVED	_____
DEF. PLAN ENDORSED	_____

**EXISTING CONDITIONS / BOUNDARY PLAN**

"COUNTRY BROOK ESTATES"  
882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

PREPARED FOR: WATERMELLEN LLC  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103 SCALE: 1" = 100' DRAWN BY: SCA DATE: MAR. 26, 2013  
REVISIONS: \_\_\_\_\_

*[Signature]*  
03-26-2013  
PROFESSIONAL SEAL

PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
INSITE PROFESSIONAL SERVICES, LLC  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4598

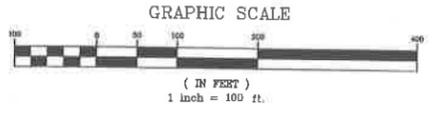
**INSITE**  
Engineering Services, LLC

SHEET 2 OF 11

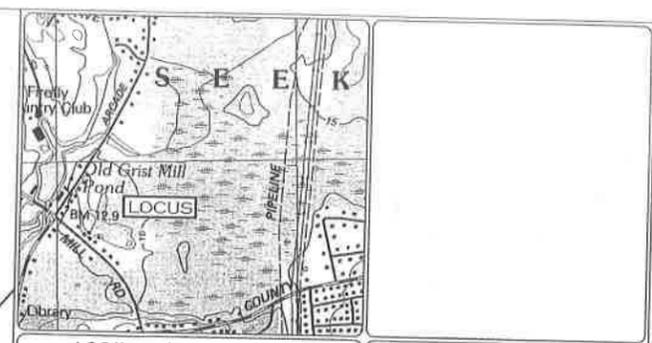
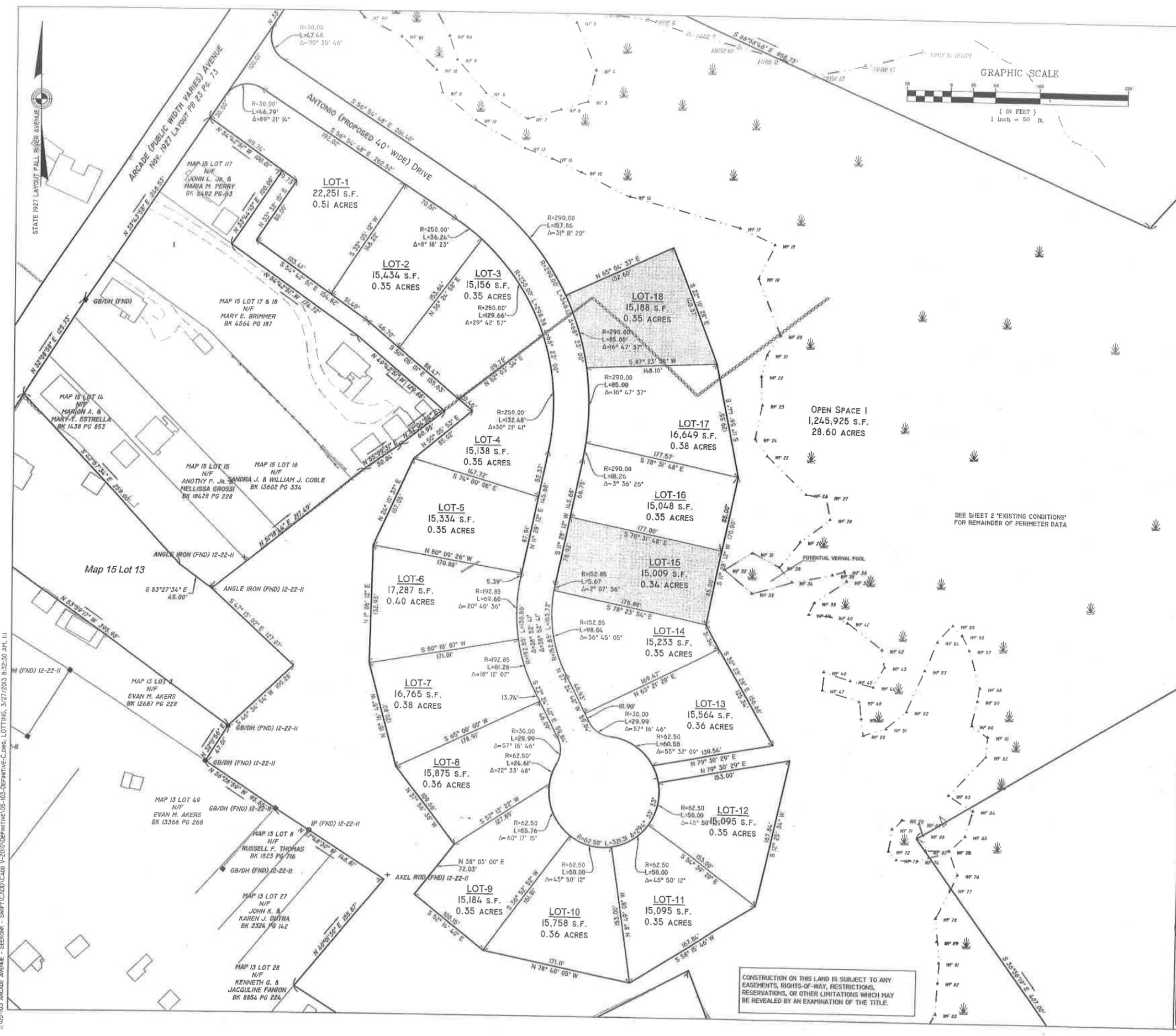
**LEGEND**

BOUND	■	WATER VALVE	WV
IRON ROD	○	WATER SHUTOFF	WS
DRILL HOLE	●	EXISTING CONTOURS	--- 58 ---
RR SPIKE	⊙	WATER LINE	— W —
DRAIN MANHOLE	⊕	GAS LINE	— G —
CATCH BASIN	□	OVERHEAD WIRES	— OW —
SEWER MANHOLE	⊗	GAS VALVE	— GV —
STONE WALL	— — — — —	SEWER MAIN	— SM —
UTILITY POLE	⊕	WETLANDS LINE	— — — — —
HYDRANT	⊕	MEAN ANNUAL HIGH WATER	— — — — —
CHAIN LINK FENCE	— — — — —	100' WETLANDS BUFFER ZONE	— — — — —
		50' WETLANDS BUFFER ZONE	— — — — —

CONSTRUCTION ON THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.



I:\05-103 ARCADE AVENUE - SEEKONK - SWIFT\CADD\CADD V-2010\DEFINITIVE\05-103-DEFINITIVE-C.DWG. EXISTING COND. 3/27/2013 8:32:51 AM, 11



LOCATION (NOT TO SCALE) MAP

**REGISTRY USE ONLY**

**NOTES:**

- OWNERS: WATERMELLEN LLC  
25 NELSON AVENUE FAIRHAVEN MA.
- ASSESSORS DESIGNATION - MAP 15 LOT 302
- TITLE REFERENCES: DEED BOOK 14440 PAGE 105 AND DEED BOOK 19702 PAGE 248
- SITE SHOWN IS LOCATED IN ZONING DISTRICT "R-3"  
MIN. AREA= 40,000 S.F.  
FRONTAGE = 200' MIN AT SETBACK  
FRONTAGE = 150' MIN AT STREET LINE  
FRONT YARD = 50'  
REAR YARD = 70'  
SIDE YARD = 35' + 5' FOR EVERY ADDITIONAL STORY
- WETLANDS DELINEATION BY ECOSYSTEM SOLUTIONS INC. JANUARY 2012.
- SITE SHOWN IS NOT LOCATED IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 25005C0204F DATED JULY 7, 2009.
- PLAN REFERENCES BRISTOL COUNTY REGISTRY OF DEEDS NORTHERN DISTRICT:  
BOOK 24 PAGE 13  
BOOK 24 PAGE 32  
BOOK 25 PAGE 56  
BOOK 65 PAGE 49.
- PLAN REFERENCES TOWN RECORDS:  
1927 LAYOUT OF ARCADE AVENUE  
1931 LAYOUT OF MILL ROAD
- PROPOSED BOUNDS SHOWN AS "d"
- ADDITIONAL 4 LOTS PER ZONING BY-LAW 25.10 DENSITY BONUS OPTION AND APPROVED BY PLANNING BOARD ON FEBRUARY 12, 2013.
- LOTS 15 AND 18 ARE RESERVED AS AFFORDABLE HOUSING LOTS.
- CLUSTER OPEN SPACE CALCULATIONS:  
OPEN SPACE REQUIREMENTS = 40% OF TOTAL PARCEL  
(BASED ON AREA OF REMAINING LAND AFTER ANY LOTS DIVIDED OFF)  
TOTAL PARCEL 1,591,433 S.F. x .40 = 636,573 S.F. MIN. REQUIRED  
PROPOSED OPEN SPACE 1,245,925 S.F. > 636,573 S.F. OK  
1,245,925 S.F. / 1,591,433 S.F. = 78.29% OPEN SPACE
- WETLAND % CALCULATIONS  
TOTAL SITE 1,591,433 - WETLANDS 639,578 = 781,855 S.F. UPLANDS (47.24%)  
REQUIRED OPEN SPACE 636,573 S.F. x 47.24% UPLAND = 300,717 S.F.  
PROPOSED OPEN SPACE 1,245,925 - WETLANDS 839,578 = 406,347 S.F. OPEN UPLAND  
406,347 S.F. OPEN UPLAND > REQUIRED OPEN UPLAND 300,717 OK
- I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS. THE CERTIFICATION SHOWN HEREON IS INTENDED TO MEET REGISTRY OF DEEDS REQUIREMENTS AND IS NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE LAND SHOWN.

03-26-2013  
PROFESSIONAL LAND SURVEYOR DATE

SUBJECT TO A COVENANT DULY EXECUTED DATED THE \_\_\_\_\_ DAY OF \_\_\_\_\_ RUNNING WITH THE LAND, TO BE DULY RECORDED BY OR FOR THE OWNER OF RECORD. THIS PLAN IS SUBJECT TO ALL CONDITIONS OF THE SEEKONK PLANNING BOARD CERTIFICATE OF ACTION DATED \_\_\_\_\_ FILED WITH THE SEEKONK TOWN CLERK ON \_\_\_\_\_ AND HEREWITHTH RECORDED AS A PART OF THIS PLAN.

I HEREBY CERTIFY THAT THERE HAS BEEN NO APPEAL TAKEN TO THIS PLANNING BOARD ACTION DURING THE 20 DAY STATUTORY APPEAL PERIOD.  
DATE: \_\_\_\_\_ TOWN CLERK, TOWN OF SEEKONK

**SEEKONK PLANNING BOARD**  
APPROVED UNDER SUBDIVISION CONTROL LAW

PRELIM. PLAN FILED \_\_\_\_\_  
DEF. PLAN FILED \_\_\_\_\_  
PUBLIC HEARING \_\_\_\_\_  
DEF. PLAN APPROVED \_\_\_\_\_  
DEF. PLAN ENDORSED \_\_\_\_\_

**LOTING PLAN**

"COUNTRY BROOK ESTATES"  
882 ARCADE AVENUE, SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

PREPARED FOR: WATERMELLEN LLC  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103 SCALE: 1"=50' DRAWN BY: SCA DATE: MAR. 26, 2013  
REVISED: \_\_\_\_\_

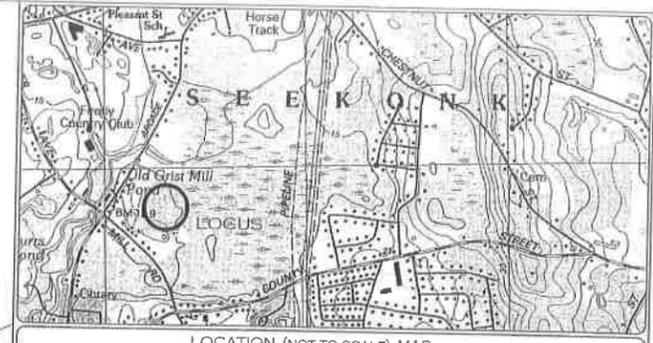
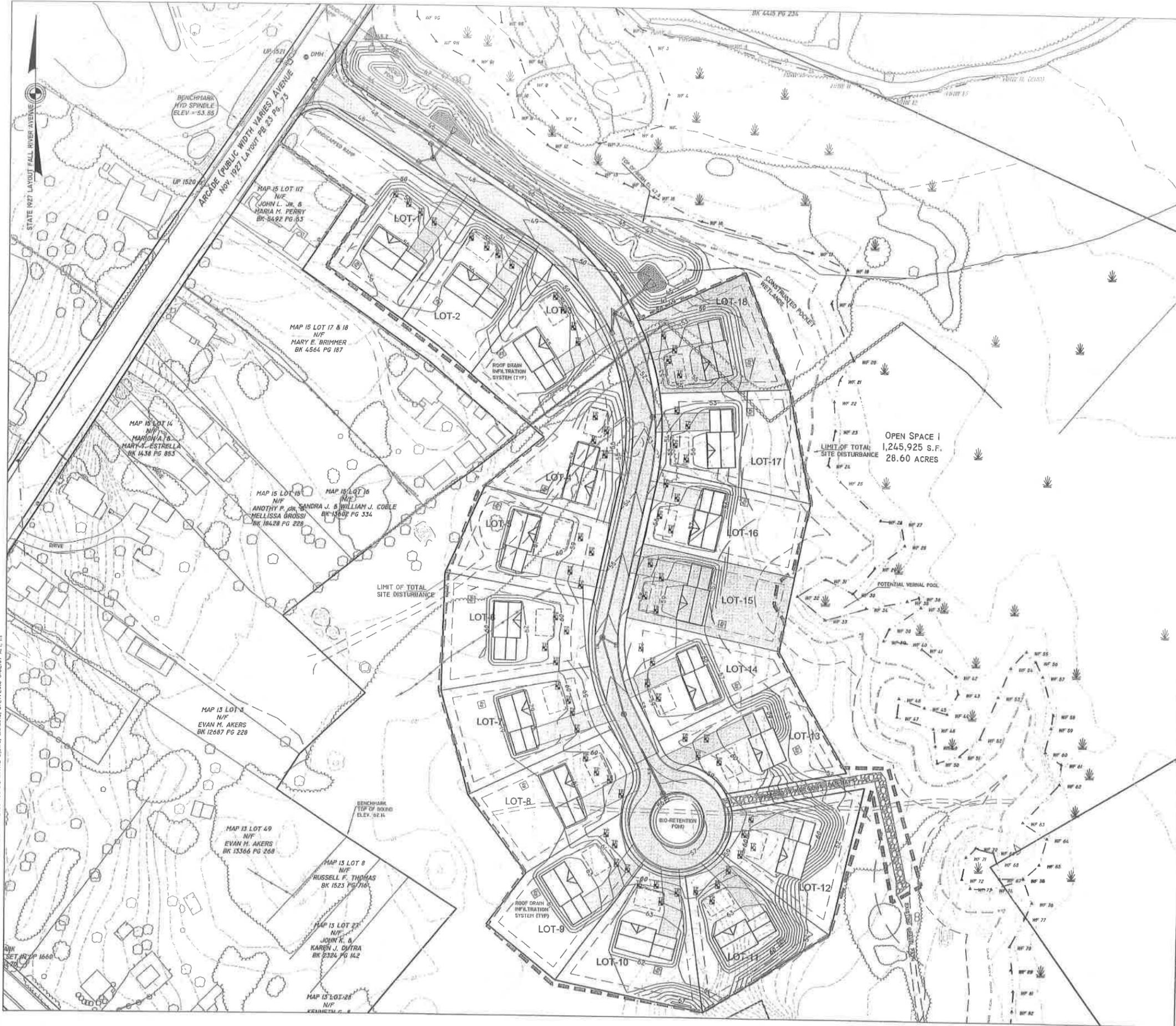
PROFESSIONAL SEAL

INSITE Engineering Services, LLC  
PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
INSITE PROFESSIONAL COMPLEX, SUITE 1  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4556

SHEET 3 OF 11

1:05-103 ARCADE AVENUE - SEEKONK - SWIFT/CADD/CADD 11-2010/DEFINITIVE 105-103-DEFINITIVE C.O.S.G. LOTTING, 3/27/2013 8:32:30 AM, 1:1

CONSTRUCTION ON THIS LAND IS SUBJECT TO ANY EASEMENTS, RIGHTS-OF-WAY, RESTRICTIONS, RESERVATIONS, OR OTHER LIMITATIONS WHICH MAY BE REVEALED BY AN EXAMINATION OF THE TITLE.



**NOTES:**

- OWNERS: WATERMELLEN LLC  
25 NELSON AVENUE FAIRHAVEN MA.
- ASSESSORS DESIGNATION - MAP 15 LOT 302
- TITLE REFERENCES: DEED BOOK 14440 PAGE 105 AND DEED BOOK 19702 PAGE 248
- SITE SHOWN IS LOCATED IN ZONING DISTRICT "R-3"  
MIN. AREA= 40,000 S.F.  
FRONTAGE = 200' MIN AT SETBACK  
FRONTAGE = 150' MIN AT STREET LINE  
FRONT YARD = 50'  
REAR YARD = 70'  
SIDE YARD = 35' + 5' FOR EVERY ADDITIONAL STORY
- WETLANDS DELINEATION BY ECOSYSTEM SOLUTIONS INC. JANUARY 2012.
- SITE SHOWN IS NOT LOCATED IN A FLOOD HAZARD ZONE AS SHOWN ON FIRM PANEL 2500SC0204F DATED JULY 7, 2009.
- PLAN REFERENCES BRISTOL COUNTY REGISTRY OF DEEDS NORTHERN DISTRICT:  
BOOK 24 PAGE 13  
BOOK 24 PAGE 32  
BOOK 25 PAGE 56  
BOOK 65 PAGE 49.
- PLAN REFERENCES TOWN RECORDS:  
1927 LAYOUT OF ARCADE AVENUE  
1951 LAYOUT OF MILL ROAD
- DISTURBANCE CALCULATION (25% OF THE TOTAL TRACT)  
TOTAL AREA OF PARCEL= 1,591,433± S.F.  
TOTAL ALLOWABLE DISTURBANCE 1,591,433 x .25 (25%) = 397,858± S.F.  
PROPOSED DISTURBANCE = 347,043± S.F. / 1,591,433± = 21.81%  
PROPOSED 21.81% < ALLOWABLE 25.00% OK

**LEGEND**

BOUND	□	WATER VALVE	⊕
IRON ROD	○	WATER SHUTOFF	⊙
DRILL HOLE	⊙	EXISTING CONTOURS	--- 30 ---
RR SPIKE	⊙	WATER LINE	— W —
DRAIN MANHOLE	⊕	GAS LINE	— G —
CATCH BASIN	□	OVERHEAD WIRES	— OW —
STONE WALL	⊕	GAS VALVE	⊕
UTILITY POLE	⊕	PROPOSED ROOF DRAIN SYSTEM, 4x4x4 DRYWELL WITH 2' STONE AROUND	⊕
HYDRANT	⊕		

**GRAPHIC SCALE**

( IN FEET )  
1 inch = 60 ft.

**GRADING PLAN**

**"COUNTRY BROOK ESTATES"**  
882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

PREPARED FOR: **WATERMELLEN LLC**  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103	SCALE: 1" = 50'	DRAWN BY: SCA	DATE: MAR. 26, 2013
-----------------	--------------------	------------------	------------------------

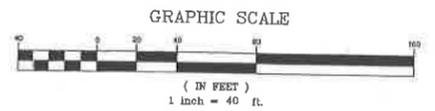
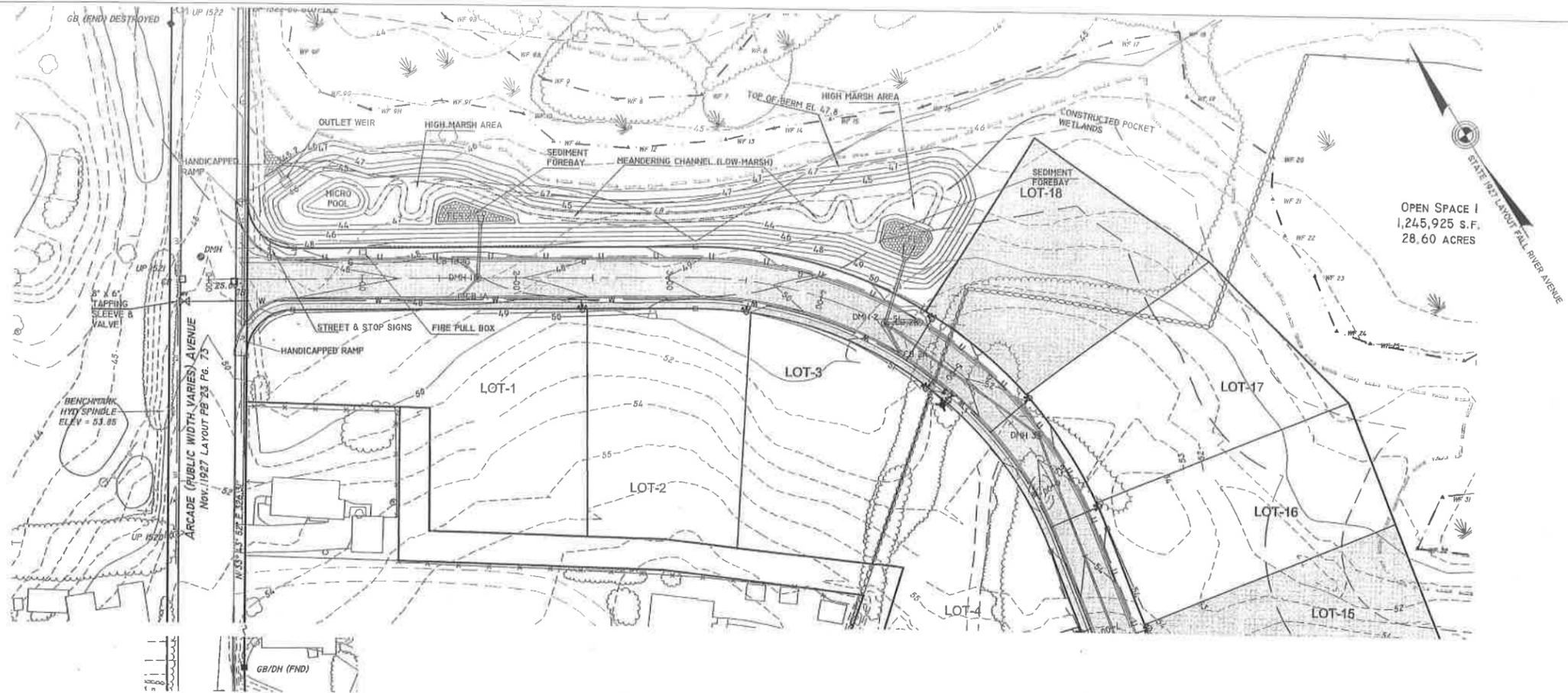
REVISED:

**INSITE**  
Engineering Services, LLC

PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
INSITE PROFESSIONAL COMPLEX, SUITE 1  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4558

**SHEET 4 OF 11**

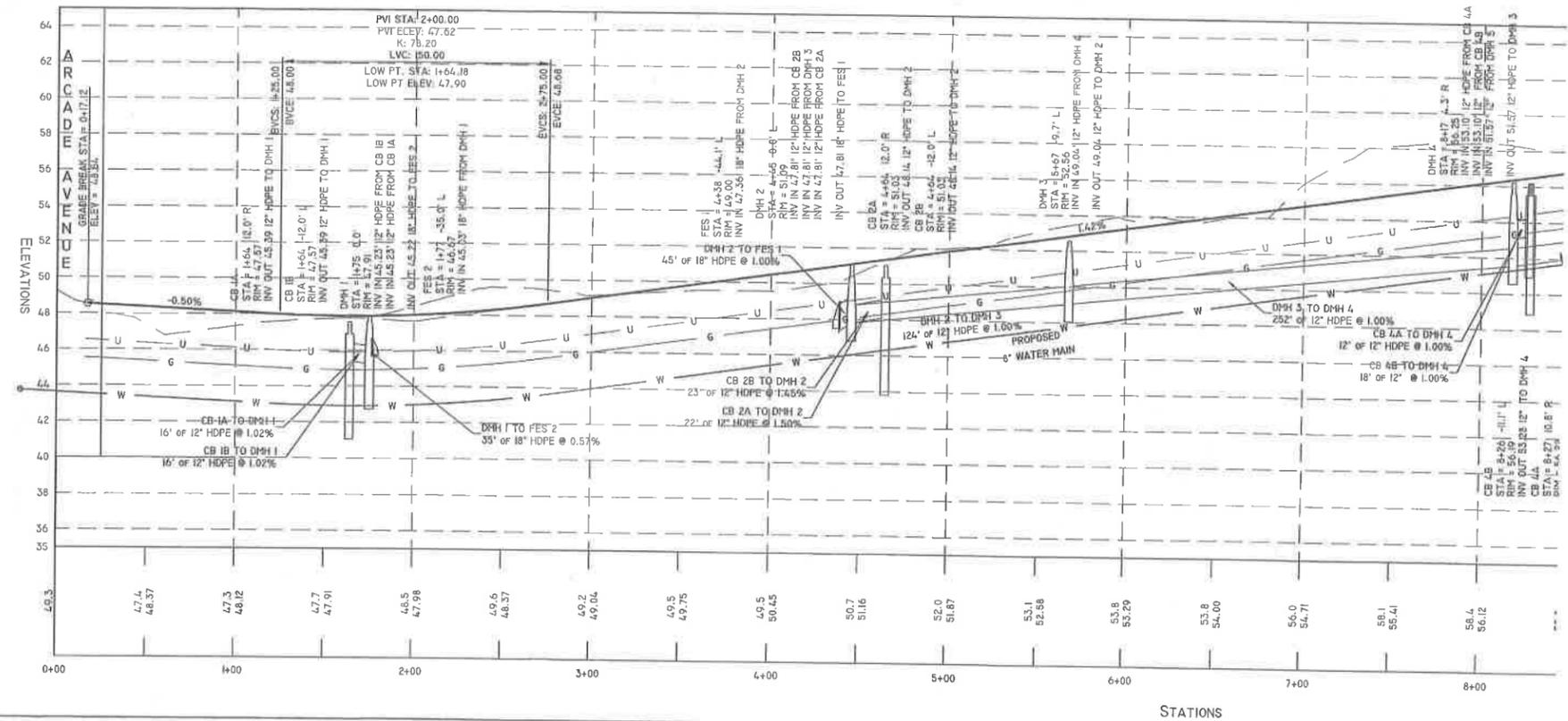
I:\05-103 ARCADE AVENUE - SEEKONK - SWIFT\CADD\CADD V-2010\DEFINITIVE\05-103-DEFINITIVE-C.DWG, GRADING, 3/27/2013 8:52:07 AM, 11



**LEGEND**

BOUND	□	WATER VALVE	⊕
IRON ROD	○	WATER SHUTOFF	⊙
DRILL HOLE	●	EXISTING CONTOURS	- - - -
RR SPIKE	⊙	WATER LINE	W
DRAIN MANHOLE	⊕	GAS LINE	G
CATCH BASIN	□	OVERHEAD WIRES	OW
SEWER MANHOLE	⊕	GAS VALVE	⊕
STONE WALL	⊖	SEWER MAIN	---
UTILITY POLE	⊕	WETLANDS LINE	- - - -
HYDRANT	⊕	MEAN ANNUAL HIGH WATER	- - - -
CHAIN LINK FENCE	⊕	100' WETLANDS BUFFER ZONE	- - - -
		50' WETLANDS BUFFER ZONE	- - - -

**ANTONIO DRIVE PROFILE**  
 SCALES: HORIZONTAL 1" = 40'  
 VERTICAL 1" = 4'



**PLAN & PROFILE ANTONIO DRIVE**

"COUNTRY BROOK ESTATES"  
 882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
 ASSESSORS MAP 15 LOT 302

PREPARED FOR: WATERMELLEN LLC  
 25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103 SCALE: AS-NOTED DRAWN BY: SCA DATE: MAR. 26, 2013

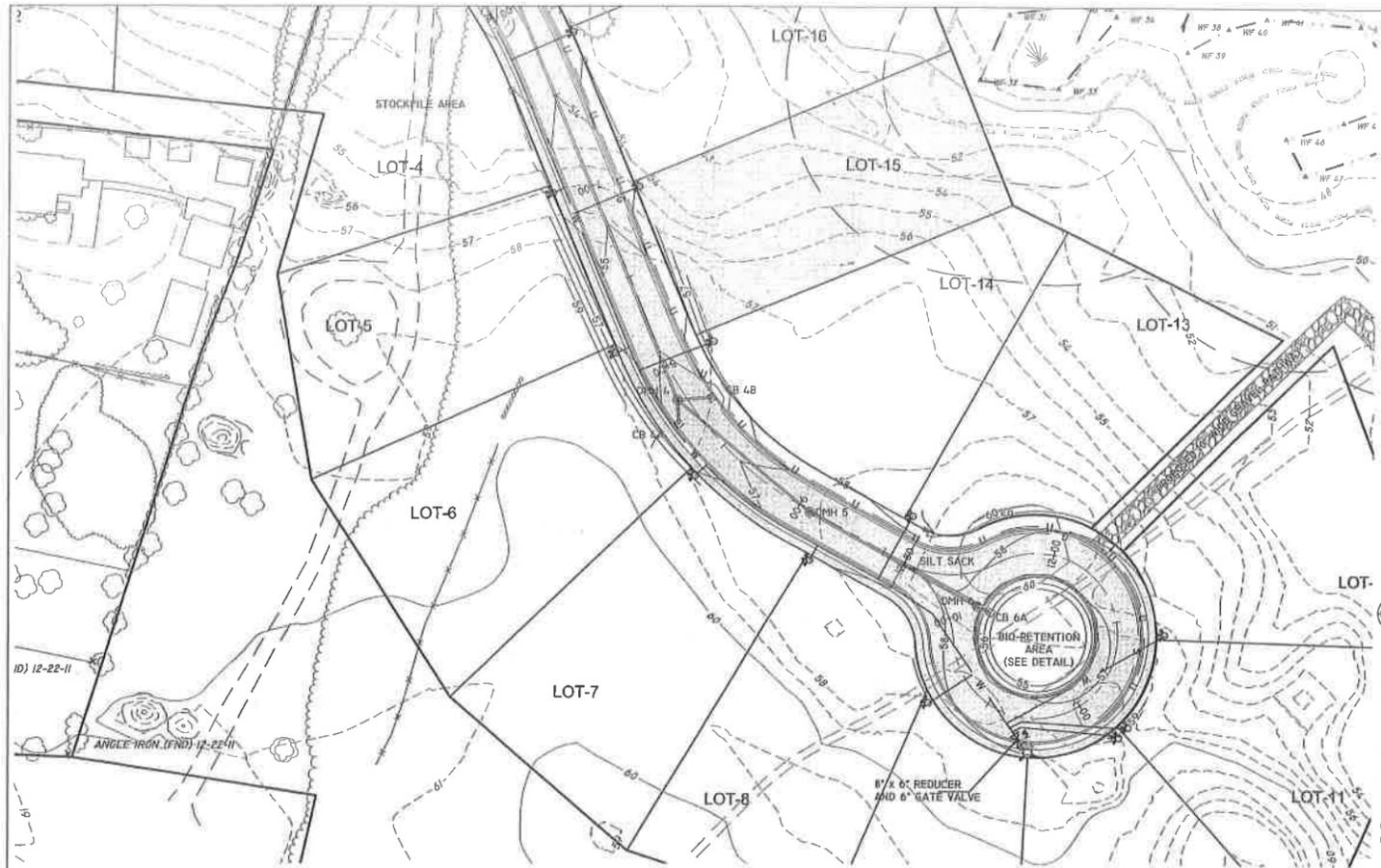
PROFESSIONAL SEAL

PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
 INSITE PROFESSIONAL COMPLEX, SUITE 1  
 1539 FALL RIVER AVENUE  
 SEEKONK, MA 02771  
 PHONE: (508) 336-4500  
 FAX: (508) 336-4556

**INSITE**  
 Engineering Services, LLC

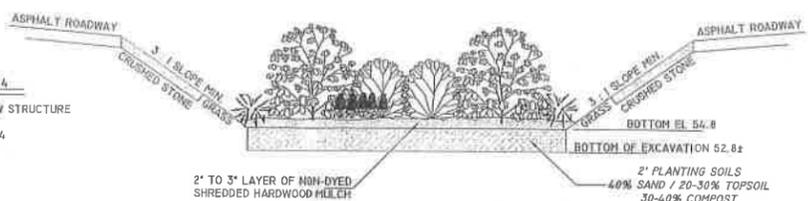
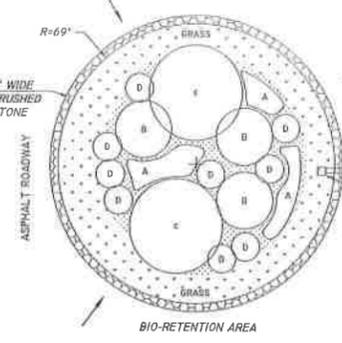
SHEET 5 OF 11

I:\05-103 ARCADE AVENUE - SEEKONK - SWIFT\CADD\CADD 1\2010\DEFINITIVE\05-103-DEFINITIVE-C.DWG, PLAN-PRO-1, 3/27/2013 8:31:34 AM, 11



**PLANT LISTING**

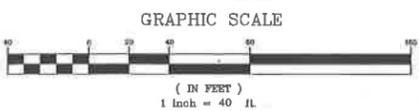
LETTER	SPECIES	COMMON NAME
A	IRIS VERSICOLOR	BLUE FLAG IRIS
B	COMPANIA PERSEGRINA	SWEET FERN
C	MYRELLA (MYRICA) PENSYLVANICA	BAYBERRY
D	ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED



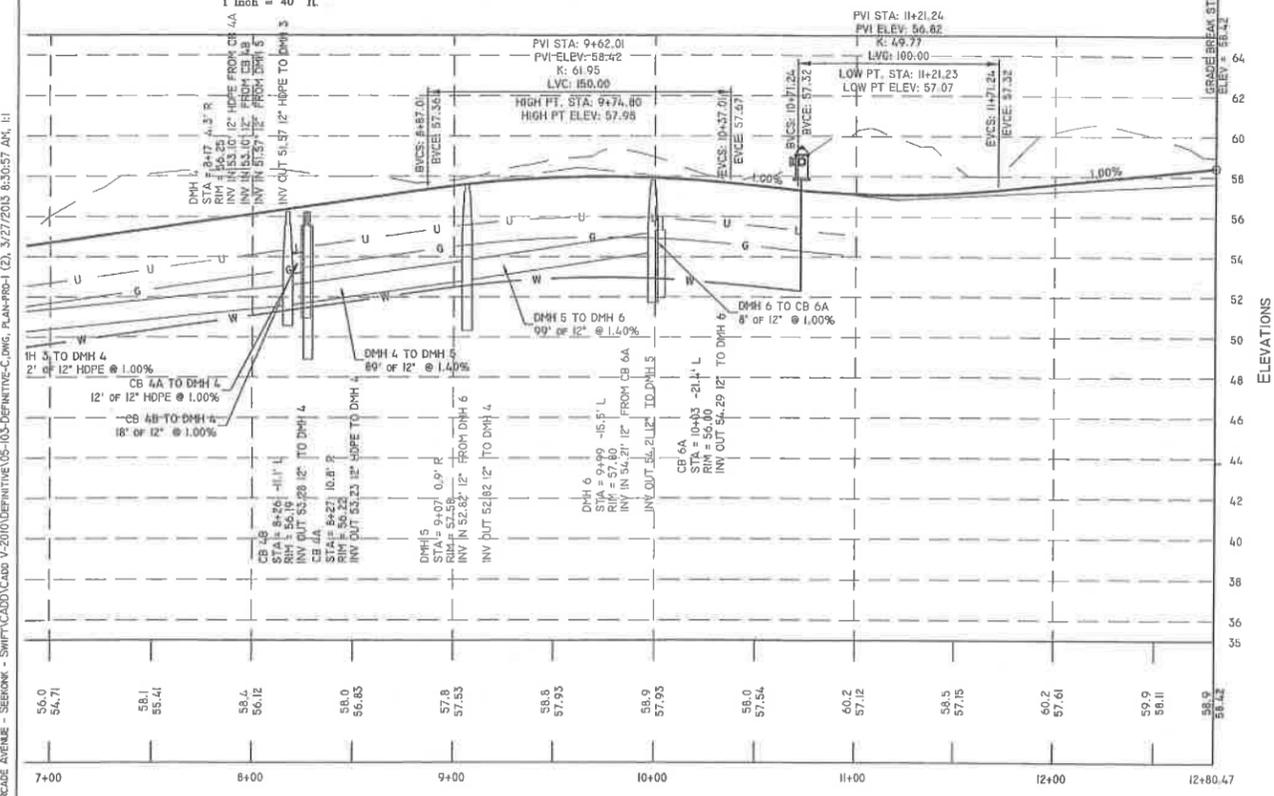
PLAN VIEW

SECTION VIEW

BIO-RETENTION CONSTRUCTION & PLANTING DETAIL  
NOT TO SCALE



ANTONIO DRIVE PROFILE  
SCALES: HORIZONTAL 1" = 40'  
VERTICAL 1" = 4'



**LEGEND**

BOUND	□	WATER VALVE	W
IRON ROD	○	WATER SHUTOFF	WS
DRILL HOLE	●	EXISTING CONTOURS	---CB---
RR SPIKE	⊙	WATER LINE	—W—
DRAIN MANHOLE	⊕	GAS LINE	—G—
CATCH BASIN	□	OVERHEAD WIRES	—OW—
SEWER MANHOLE	⊙	GAS VALVE	GV
STONE WALL	⊖	SEWER MAIN	—SM—
UTILITY POLE	⊙	WETLANDS LINE	—WTL—
HYDRANT	⊕	MEAN ANNUAL HIGH WATER	—MAHW—
CHAIN LINK FENCE	—	100' WETLANDS BUFFER ZONE	—WBZ—
		50' WETLANDS BUFFER ZONE	—WBZ—

**PLAN & PROFILE ANTONIO DRIVE**

"COUNTRY BROOK ESTATES"  
882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

PREPARED FOR: **WATERMELLEN LLC**  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103 SCALE: AS NOTED DRAWN BY: SCA DATE: MAR. 26, 2013

PROFESSIONAL SEAL

PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
**INSITE** Engineering Services, LLC  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4588

SHEET 6 OF 11

I:\05-103 ARCADE AVENUE - SEEKONK - SWIFT\CADD\CADD V-2010\DEFINITIVE\05-103-DEFINITIVE-C.DWG, PLAN-PRO-1 (2), 3/27/2013 8:30:57 AM, I.I.

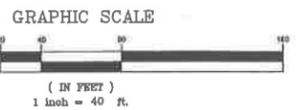
I:\05-103 ARCADE AVENUE - SEEKONK - SWIFT\CADD\CADD V-2010\DEP\WITHE\05-103-DEP\WITHE-C.DWG, SITE DISTANCE, 3/27/2013 8:30:28 AM, LI



STATE 1927 LAYOUT FALL RIVER AVENUE

**LEGEND**

BOUND	□	WATER VALVE	⊠
IRON ROD	○	WATER SHUTOFF	⊕
DRILL HOLE	●	EXISTING CONTOURS	- - - - -
RR SPIKE	⦿	WATER LINE	— W —
DRAIN MANHOLE	⊙	GAS LINE	— G —
CATCH BASIN	□	OVERHEAD WIRES	— OW —
SEWER MANHOLE	⊙	GAS VALVE	⊠
STONE WALL	⊘	SEWER MAIN	— S —
UTILITY POLE	⊕	WETLANDS LINE	- - - - -
HYDRANT	⊕	MEAN ANNUAL HIGH WATER	- - - - -
CHAIN LINK FENCE	⊘	100' WETLANDS BUFFER ZONE	- - - - -
		50' WETLANDS BUFFER ZONE	- - - - -



**SITE DISTANCE PLAN**

**"COUNTRY BROOK ESTATES"**  
882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

PREPARED FOR: **WATERMELLEN LLC**  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103	SCALE: AS NOTED	DRAWN BY: SCA	DATE: MAR. 26, 2013
-----------------	--------------------	------------------	------------------------

REVISED:

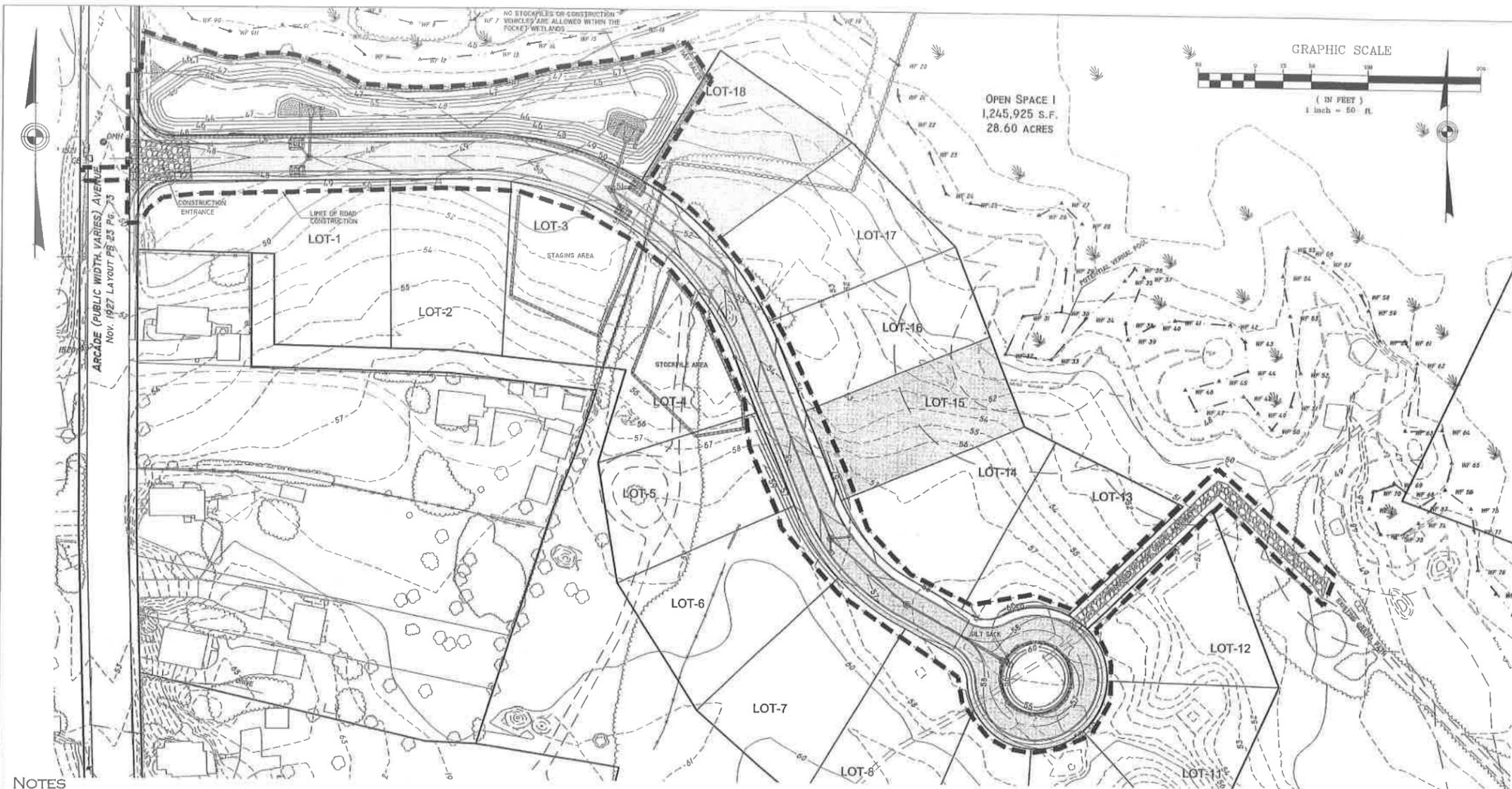
---

**PROFESSIONAL SEAL**

**INSITE**  
Engineering Services, LLC

PROFESSIONAL ENGINEERS  
AND LAND SURVEYORS  
INSITE PROFESSIONAL COMPLEX, SUITE 1  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4558

**SHEET**  
**7**  
**OF 11**



- ### EROSION & SEDIMENT CONTROL NOTES:
- EROSION AND SEDIMENT CONTROL MEASURES WILL BE INSTALLED PRIOR TO THE START OF CONSTRUCTION. GRAVEL CONSTRUCTION ENTRANCE WILL BE INSTALLED BEFORE CONSTRUCTION TRAFFIC INTO AND OUT OF PROJECT AREA BEGINS. STABILIZATION OF ALL DEGRADED AND SOIL STOCKPILE AREAS WILL BE INITIATED AND MAINTAINED DURING ALL PHASES OF CONSTRUCTION.
  - ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE TOWN OF SEEKONK REGULATIONS. ALL EROSION CONTROL MEASURES ARE TO BE MAINTAINED AND UPGRADED AS REQUIRED TO ACHIEVE PROPER SEDIMENT CONTROL DURING CONSTRUCTION.
  - ADDITIONAL CONTROL MEASURES WILL BE INSTALLED DURING CONSTRUCTION PERIOD, IF DEEMED NECESSARY BY THE ENGINEER OR TOWN AGENCIES.
  - EACH HOUSE LOT SHALL BE REQUIRED TO MAINTAIN EROSION AND SEDIMENT CONTROLS DURING HOUSE CONSTRUCTION. ADDITIONAL MEASURES WILL BE REQUIRED TO PREVENT SEDIMENT DISCHARGE INTO THE STREET, INFILTRATION PONDS AND CATCH BASINS FROM THE INDIVIDUAL DEVELOPMENT OF EACH LOT.
  - SEEDING MIXTURE FOR FINISHED GRASSED AREAS WILL BE AS FOLLOWS:  
 KENTUCKY BLUE GRASS = 45  
 CREEPING RED FESCUE = 45  
 PERENNIAL RYE GRASS = 10  
 SEED TO BE APPLIED AT A RATE OF 4 LBS / 1000 S.F. FERTILIZER SHALL BE APPLIED AT A RATE OF 2 LBS / 1000 S.F. PLANTING SEASON SHALL BE APRIL 1 TO OCTOBER 15. AFTER OCTOBER 15 AREAS NOT SEEDING SHALL BE STABILIZED WITH HAY BALE CHECK, FILTER FABRIC OR WOODEN MULCH AS REQUIRED TO CONTROL EROSION.
  - AREAS LEFT BARE BEFORE FINISH GRADING AND SEEDING IS ACHIEVED, SHALL RECEIVE A TEMPORARY SEEDING OF PERENNIAL RYE GRASS APPLIED TO A RATE OF 2 LBS / 1000 S.F. AT A DEPTH OF 1/2". LIMESTONE (EQUIVALENT TO BE 50% CALCIUM PLUS MAGNESIUM OXIDE) SHALL BE APPLIED AS SEEDING PREPARATION AT A RATE OF 90 LBS / 1000 S.F. WHERE GRASS PREDOMINATES, FERTILIZE ACCORDING TO A SOIL TEST AT A MINIMUM APPLICATION RATE OF 1 LB OF NITROGEN PER 1000 S.F. AREAS TO BE LEFT BARE BEFORE FINISH GRADING AND SEEDING OUTSIDE OF PLANTING SEASONS SHALL RECEIVE AN AIR-DRYED WOOD CHIP MULCH, FREE OF COURSE MATTER, TREATED WITH 12 LBS NITROGEN PER TON, APPLIED AT A RATE OF 185-275 LBS / 1000 S.F.
  - CONTRACTOR SHALL BE ASSIGNED THE RESPONSIBILITY FOR IMPLEMENTING THIS EROSION AND SEDIMENT CONTROL PLAN. THIS RESPONSIBILITY INCLUDES THE INSTALLATION AND MAINTENANCE OF CONTROL MEASURES, INFORMING ALL PARTIES ENGAGED ON THE CONSTRUCTION SITE OF THE REQUIREMENTS AND OBJECTIVES OF THE PLAN, AND NOTIFY THE PROPER TOWN AGENCY OF ANY TRANSFER OF THIS RESPONSIBILITY. THE OWNER SHALL BE RESPONSIBLE FOR CONVEYING A COPY OF THE EROSION AND SEDIMENT CONTROL PLAN IF THE TITLE TO THE LAND IS TRANSFERRED.
  - THE CONTRACTOR SHALL REQUEST THE SEEKONK CONSERVATION COMMISSION AGENT TO INSPECT AND APPROVE THE INSTALLATION OF ALL EROSION CONTROL MEASURES PRIOR TO THE START OF CONSTRUCTION. PERIODIC INSPECTIONS OF EROSION CONTROL MEASURES MAY BE PERFORMED BY THE AGENT, THE CONTRACTOR SHALL REPAIR, UPGRADE OR REPAIR ANY MEASURES THE AGENT MAY FEEL ARE IN NEED OF SUCH.
  - STOCKPILES OF SOIL SHALL BE SURROUNDED BY A SEDIMENT BARRIER. SOIL STOCKPILES TO BE LEFT BARE FOR MORE THAN FIFTEEN (15) DAYS SHALL BE STABILIZED WITH TEMPORARY VEGETATION OR MULCH, IF STOCKPILES ARE TO REMAIN FOR MORE THAN SIXTY (60) DAYS, FILTER FABRIC SHALL BE USED IN PLACE OF HAY BALES. SIDE SLOPES SHALL NOT EXCEED 2:1. STOCKPILES SHALL BE LOCATED AT LEAST 100' FROM REGULATED WETLAND RESOURCE AREAS.
  - THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST AND WIND EROSION THROUGHOUT THE LIFE OF HIS CONTRACT. DUST CONTROL SHALL INCLUDE BUT NOT LIMITED TO SPRINKLING WATER ON EXPOSED SOILS AND HAUL ROADS. CONTRACTOR SHALL CONTROL DUST TO PREVENT A HAZARD TO TRAFFIC ON ADJACENT ROADWAYS.
  - SEDIMENT SHALL BE REMOVED ONCE THE VOLUME REACHES 1/2 TO 2/3 THE HEIGHT OF THE SILT FENCE OR HAY BALE.
  - ALL STOCKPILES SHALL BE SURROUNDED BY SEDIMENT CONTROLS AND SHALL BE LOCATED AT LEAST 100 FEET FROM REGULATED WETLAND RESOURCE AREAS.
  - DISTURBED AREAS REMAINING IDLE FOR MORE THAN 14 DAYS SHALL BE STABILIZED.
  - ALL FACILITIES USED AS TEMPORARY MEASURES SHALL BE CLEANED PRIOR TO BEING PUT INTO FINAL OPERATION.

### NOTES

- #### CONSTRUCTION PROCEDURES AND SEQUENCING
- THE ENGINEER SHALL HAVE THE SOLE RESPONSIBILITY FOR THE DESIGN IMPLEMENTATION. HE SHALL BE RESPONSIBLE FOR ENSURING THAT ALL CONTRACTORS AND SUBCONTRACTORS ARE AWARE OF THE PROVISIONS ON THE PLANS.
- THE CONTRACTOR SHALL ORGANIZE SITE CONSTRUCTION IN A MANNER WHICH WILL ENSURE THE IMMEDIATE STABILIZATION OF SURFACES. PERIMETER CONTROLS EQUAL APPROVED PROJECT LIMITS.
- PRIOR TO ANY CONSTRUCTION ON SITE, THE CONTRACTOR SHALL SETUP PRE-CONSTRUCTION MEETING WITH OWNER, ENGINEER, SEEKONK CON. COM., PLANNING AND DFW PERSONAL.
- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, A LINE OF STAKED HAY BALES AND SILT FENCE AND OR HAYBALES, WILL BE PLACED AT ALL CONSTRUCTION TOE OF SLOPES IN THE AREA OF ROADWAY, PONDS, LANDSCAPED AREAS, AND ALONG PERIMETER OF PROJECT LIMIT OF DISTURBANCE WHERE INDICATED ON PROJECT PLANS.
- RESERVE EROSION CONTROL DEVICES SHALL BE STOCKPILED ON SITE IN THE EVENT OF EMERGENCIES AND SHALL BE LOCATED 100' FROM REGULATED WETLAND RESOURCE AREAS.
- THE CONTRACTOR SHALL MAKE ALL NECESSARY PROVISIONS FOR THE PROPER STORAGE AND/OR REMOVAL OF DEBRIS ON SITE TO AVOID UNNECESSARY ACCUMULATION ON SITE.
- THE INFILTRATION POND SHALL BE CONSTRUCTED PRIOR TO COMMENCEMENT OF EARTHWORK ACTIVITIES. THE POND CAN BE UTILIZED FOR DE-WATERING, IF POND IS USED TO DEWATER DISCHARGE PIPES MUST ENTER THROUGH HAY BALE CONTAINMENT PRIOR TO ENTERING POND.
- DRAINAGE STRUCTURES SHALL BE CONSTRUCTED FROM DOWNSTREAM UP AND CONSTRUCTION SHALL INCLUDE THE PLACEMENT OF STONE AT THE FLARED PIPE ENDS AND OUTLET STRUCTURE INLETS AND OUTLETS AS SHOWN ON PROJECT PLANS.
- IN STREAM CONTROLS SUCH AS HAY BALE CHECK DAMS SHALL BE ESTABLISHED PRIOR TO CONSTRUCTION.
- TO PROTECT THE INFILTRATION SURFACES (BENEATH AND ADJACENT TO THE RECHARGE SYSTEMS) FROM DEGRADATION BY CONSTRUCTION ACTIVITIES INCLUDE:
- PROVIDE DEEP ROTOTILLING OF VAIN FLOOR IMMEDIATELY PRIOR TO SEEDING WITH NO SUBSEQUENT TRAFFICKING ON SURFACE.
  - PREVENTION OF CONTAMINATION OF THE EXPOSED SUBGRADE BY CONSTRUCTION VEHICLES.
  - PREVENTION OF EXCESSIVE COMPACTION BY CONSTRUCTION VEHICLES.
  - PREVENTION OF THE DISCHARGE OF WATER FROM CONSTRUCTION DEWATERING ACTIVITIES INTO THESE FACILITIES.
  - PREVENTION OF DISCHARGE OF STORMWATER INTO THESE FACILITIES UNTIL THE CONTRIBUTING AREAS ARE STABILIZED, UNLESS SPECIFIC MEASURES ARE PROVIDED FOR PROTECTING AND RESTORING THE INFILTRATION SURFACE.

- #### CONSTRUCTION INSPECTION
- THE ENGINEER SHALL BE CALLED ON SITE DURING THE CONSTRUCTION OF THE INFILTRATION BASIN.
- THE ENGINEER SHALL BE ON SITE DURING THE CONSTRUCTION AND LAYOUT OF ALL OUTLET STRUCTURES.
- THE ENGINEER SHALL PERFORM FREQUENT INSPECTION OF THE STORMWATER SYSTEM DURING CONSTRUCTION, WITH CLEANING AND MAINTENANCE AS WARRANTED. DURING ACTIVE CONSTRUCTION PERIODS, WEEKLY INSPECTION IS REQUIRED.
- IF CONSTRUCTION IS SUSPENDED (E.G., OVER THE WINTER), THEN MONTHLY INSPECTIONS ARE REQUIRED. IN ADDITION, THE SYSTEM SHOULD BE CHECKED AFTER ANY SIGNIFICANT RAINFALL, TO INSURE IT IS FUNCTIONING CORRECTLY AND TO MONITOR SEDIMENT ACCUMULATION FROM THE DISTURBED AREAS OF THE SITE.
- #### CLEARING
- CONSIDERATION SHALL BE GIVEN TO PRESERVING SPECIMEN TREES. THE ENGINEER SHALL BE CONTACTED TO REVIEW DESIGN IMPACTS AND APPROVE METHOD OF TREE PRESERVATION.
- BRUSH AND BRANCHES SHALL BE CHIPPED TO BE UTILIZED FOR WOOD MULCH WHERE FEASIBLE.
- #### GRADING AND STRIPPING
- SUITABLE TOPSOIL SHALL BE STRIPPED FROM THE AREAS TO BE GRADED AND STOCKPILED FOR SUBSEQUENT USE AND/OR FOR LANDSCAPE PURPOSES.
- #### ROUGH GRADING
- DURING GRADING, THE POTENTIAL FOR EROSION IS HIGH. DURING GRADING OPERATIONS, DISTURBED SLOPES WILL BE MULCHED AND VEGETATION ESTABLISHED TO PREVENT SEDIMENT EROSION TO THE SATISFACTION OF THE ENGINEER.

- #### MATERIAL VOLUME ESTIMATES
- LOAM WILL BE STRIPPED AND STOCKPILED ON SITE  
 ROAD GRAVEL = 14.00 YARDS ±  
 PEASTONE = 20 YARDS ±  
 SAND (UTILITY BEDDING) = 140 YARDS ±

### OPERATION & MAINTENANCE PLAN

- THIS PLAN SHOULD BE USED IN CONJUNCTION WITH SEPARATE OPERATIONS AND MAINTENANCE PLAN DOCUMENT FOR COUNTRY BROOK ESTATES JANUARY 4, 2013.
- THIS PLAN SHOULD BE USED IN CONJUNCTION WITH SEPARATE STORMWATER POLLUTION PREVENTION PLAN DOCUMENT FOR COUNTRY BROOK ESTATES DATED JANUARY 4, 2013. THE MAINTENANCE AND UPKEEP ON THE ROADWAY WILL INCLUDE THE FOLLOWING ELEMENTS:
- CONSTRUCTION VEHICLES SHALL BE LIMITED TO ONE ACCESS POINT ON ARCADE AVENUE WHERE A CRUSHED-STONE CONSTRUCTION PAD ENTRANCE SHALL BE INSTALLED IN THE AREA OF THE PERMANENT ROADWAY TO ENSURE THAT MUD AND DEBRIS ARE NOT TRACKED ONTO THE ROADWAY. IF MUD IS INADVERTENTLY TRACKED ONTO THE ROAD, IT SHOULD BE REMOVED PROMPTLY.
- GENERAL MAINTENANCE OF EROSION CONTROL ELEMENTS INCLUDING REGRADING, RE-VEGETATION, REPLACING RIP RAP, ETC., ON AN AS NEEDED BASIS.
- THE BASE OF THE POND SHALL BE MONITORED FOR APPROPRIATE GROWTH. WOODY GROWTH SHALL BE CLEARED AS PART OF THE SEMI ANNUAL MAINTENANCE PROGRAM.
- ALL STORMWATER MANAGEMENT SYSTEMS MUST HAVE AN OPERATION AND MAINTENANCE PLAN TO ENSURE THAT SYSTEMS FUNCTION AS DESIGNED.
- ORGANIC FERTILIZERS SHALL BE USED WITHIN 100' OF THE REGULATED WETLAND RESOURCE AREAS.
- ALL MAINTENANCE BYPRODUCTS INCLUDING GRASS, BRUSH, SEDIMENTATION, ETC. SHALL BE REMOVED AND DISPOSED OF PROPERLY. NO MATERIALS SHALL BE DUMPED WITHIN 25' OF THE WETLAND EDGE.
- THE OWNER WILL BE RESPONSIBLE FOR THE OPERATION AND MAINTENANCE OF THE STORMWATER MANAGEMENT SYSTEM AND ALL OF ITS APPURTENANCES. THE FOLLOWING MAINTENANCE PROGRAM SHALL BE IMPLEMENTED:
- DEEP SUMP CATCH BASINS
    - AT A MINIMUM, DEEP SUMPS SHALL BE CLEANED FOUR (4) TIMES PER YEAR, PREFERABLY MONTHLY FOR MAXIMUM EFFICIENCY.
    - ALL SEDIMENTS SHALL BE HANDLED PROPERLY AND DISPOSED IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
  - BIO-RETENTION AREAS
    - BIO-RETENTION POND SHALL BE INSPECTED AT LEAST EVERY SIX MONTHS AND AFTER EVERY MAJOR STORM. INSPECTIONS CONDUCTED BEFORE AND AFTER A STORM EVENT WILL HELP DETERMINE IF THE INFILTRATION AREAS ARE WORKING AS DESIGNED.
    - SILT/SEDIMENT SHALL BE REMOVED FROM THE FILTER BED WHEN THE ACCUMULATED DEPTH EXCEEDS ONE INCH. WHEN THE FILTERING CAPACITY OF THE FILTER DIMINISHES SUBSTANTIALLY, THE TOP FEW INCHES OF DISCOLORED MATERIAL SHALL BE REMOVED AND SHALL BE REPLACED WITH FRESH

- #### MATERIAL
- ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY.
  - TRASH AND OTHER DEBRIS SHOULD BE REMOVED MONTHLY.
  - ALL PLANTINGS SHALL BE PRUNED 1 TO 2 TIMES PER YEAR. ALL CLIPPINGS AND DEAD VEGETATION SHALL BE REMOVED ONCE A YEAR.
  - SEDIMENTS SHOULD BE REMOVED FROM THE SEDIMENTATION BASINS AS NECESSARY, OR WHEN IT ACCUMULATED TO A DEPTH OF MORE THAN 1'. ALL SEDIMENTS SHALL BE HANDLED PROPERLY AND DISPOSED IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.
- #### C. POCKET WETLAND WITH SEDIMENT FOREBAY
- POCKET WETLANDS SHALL BE INSPECTED AT LEAST TWICE A YEAR DURING THE GROWING AND NON-GROWING SEASONS. INSPECTIONS CONDUCTED BEFORE AND AFTER A STORM EVENT WILL HELP DETERMINE IF THE WETLANDS ARE HEALTHY. DURING INSPECTIONS RECORD AND MAP THE FOLLOWING:
    - TYPES AND DISTRIBUTION OF DOMINANT WETLAND PLANTS;
    - PRESENCE AND DISTRIBUTION OF PLANTED WETLAND SPECIES;
    - PRESENCE AND DISTRIBUTION OF INVASIVE WETLAND SPECIES;
    - INDICATIONS OF OTHER SPECIES REPLACING THE PLANTED SPECIES;
    - PERCENTAGE OF STANDING WATER THAT IS UNVEGETATED
    - MAXIMUM ELEVATION AND VEG-ETATIVE CONDITION IN THIS ZONE
    - STABILITY OF THE ORIGINAL DEPTH ZONES AND MICRO-TOPOGRAPHIC FEATURES
 THE CORRECTIVE ACTIONS FOR THE WETLAND MAINTENANCE PROVISIONS ABOVE ARE DICTATED IN THE OPERATIONS AND MAINTENANCE PLAN.
  - DURING INSPECTIONS THE DEPTH OF SEDIMENT ACCUMULATION IN THE FOREBAY SHALL BE MEASURED AND THE OUTLET STRUCTURE SHOULD BE CHECKED FOR EVIDENCE OF CLOGGING. THE EMBANKMENT SHALL BE VISUALLY INSPECTED FOR EROSION, CRACKING, AND TREE GROWTH. THE INLET AND OUTLET STRUCTURES SHALL BE INSPECTED FOR SEDIMENT ACCUMULATION AND CHANNEL EROSION CONTROL MEASURES.
  - ANY NECESSARY REPAIRS SHOULD BE MADE IMMEDIATELY.
  - THE POCKET WETLAND SIDE SLOPES AND EMBANKMENT SHOULD BE MOWED TWICE A YEAR. ALL CLIPPINGS SHALL BE REMOVED AND DISPOSED. TRASH AND OTHER DEBRIS SHOULD BE REMOVED AT THIS TIME.
  - SEDIMENTS SHOULD BE REMOVED FROM THE FOREBAYS AND BASINS AS NECESSARY, AND AT LEAST ONCE EVERY FOUR (4) YEARS OR WHEN ACCUMULATED DEPTH REACHES SIX INCHES (6"). ALL SEDIMENTS SHALL BE HANDLED PROPERLY AND DISPOSED IN COMPLIANCE WITH LOCAL, STATE, AND FEDERAL REGULATIONS.

### EROSION & SEDIMENT CONTROL PLAN

PROFESSIONAL SEAL

"COUNTRY BROOK ESTATES"

882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771

ASSESSORS MAP 15 LOT 302

PREPARED FOR: WATERMELLEN LLC

25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103	SCALE: 1" = 50'	DRAWN BY: SCA	DATE: MAR. 26, 2013
REVISED:			

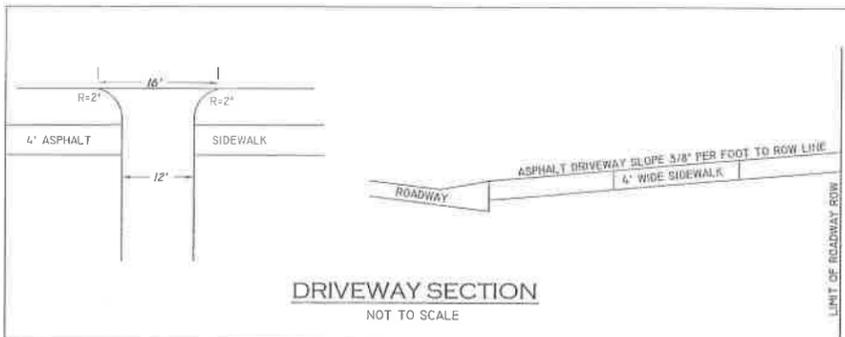
INSITE  
Engineering Services, LLC

PROFESSIONAL ENGINEERS  
AND LAND SURVEYORS

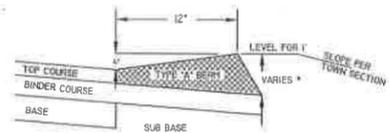
INSITE PROFESSIONAL COMPLEX, SUITE 1  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4556

SHEET  
**8**  
OF 11

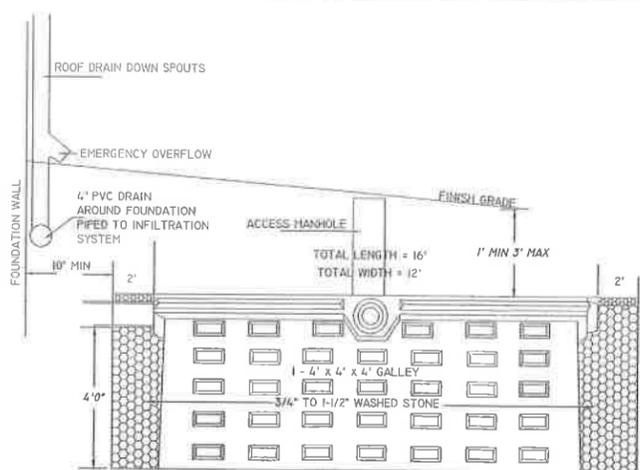
I:\05-103 ARCADE AVENUE - SEEKONK - SWIFT\CADD\CADD V-2010\DEFINITIVE\05-103-DEFINITIVE-C.DWG; EROSION, 3/27/2013 8:50:08 AM, E1



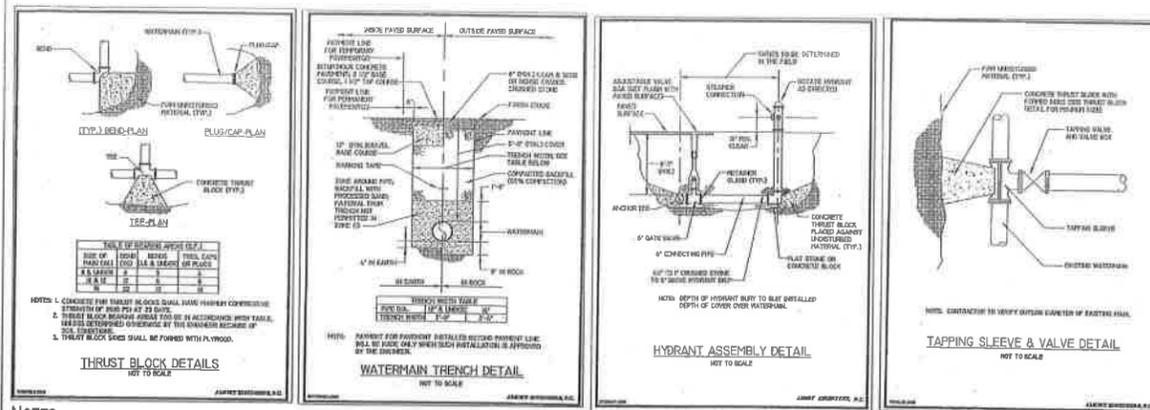
**DRIVEWAY SECTION**  
NOT TO SCALE



**BITUMINOUS CONCRETE BERM - TYPE "A"**  
NOT TO SCALE

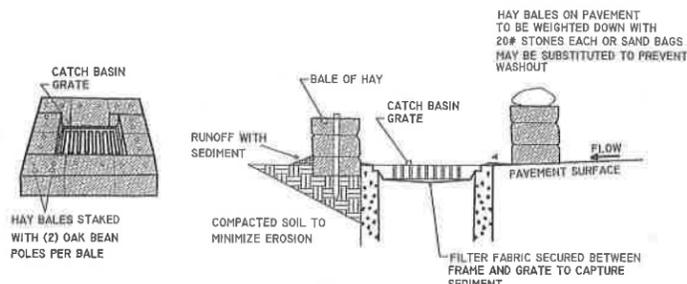


**ROOF INFILTRATION SYSTEM DETAIL**  
NOT TO SCALE

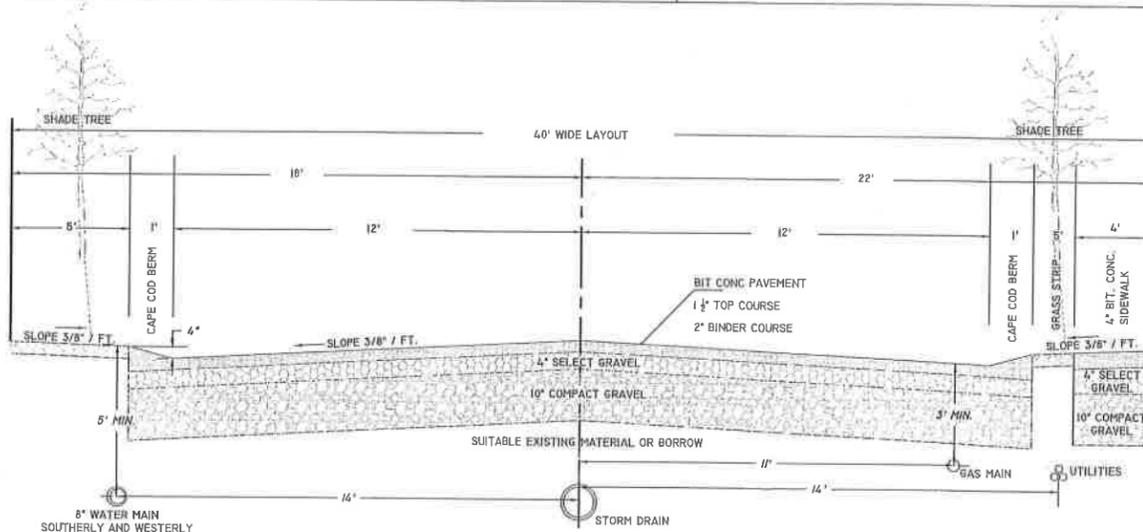


**NOTES**  
THE FOLLOWING CONSTRUCTION PROCEDURE SHOULD BE UTILIZED:  
A) INSTALL 8-INCH X 8-INCH TS & V  
B) INSTALL WM AND APPURTENANCES ALONG LEAVITT ST, SCHOOL AND ORCHARD ESTATES, INSTALL THE 6-INCH GV AT THE 6-INCH CONNECTION POINT.  
C) INSTALL TESTING CORPORATIONS AT THE END OF ORCHARD ESTATES AND AT THE 6-INCH CONNECTION POINT.  
D) FILL MAIN FROM TS VALVE AND RUN TO 6-INCH CONNECTION POINT AND END OF ORCHARD ESTATES.  
E) PERFORM AND PASS ALL PRESSURE TESTS AND BACTERIOLOGICAL TESTING REQUIREMENTS.  
F) CONNECT THE NEW MAIN TO THE EXISTING 6-INCH MAIN, REMOVE EXISTING 6-INCH GV FROM SERVICE. CONNECT WITH SOLID SLEEVE.

**SEEKONK WATER DEPARTMENT DETAILS**  
NOT TO SCALE

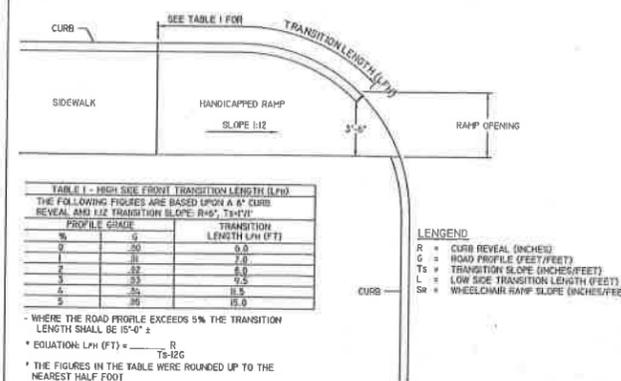


**CATCH BASIN INLET PROTECTION**  
NOT TO SCALE



**NOTES**  
1. ASPHALT TO BE CLASS I, BITUMINOUS CONCRETE PAVEMENT, TYPE I-H  
2. GRAVEL SUB-BASE CONFORMING TO MDPW SPECIFICATION M1.03.0 TYPE "B", MAXIMUM STONE SIZE 3". SHALL BE INSTALLED IN 6" MAXIMUM LIFTS, COMPACTED TO 95% MAX DRY DENSITY IN ACCORDANCE WITH AASHTO TEST DESIGNATION T99  
3. SIDESLOPES OUTSIDE LAYOUT TO BE 3:1 IN BOTH CUT & FILL SECTIONS  
4. SHADE TREES TO BE PROVIDED PER SECTION 8.12 OF THE SEEKONK SUBDIVISION CONTROL LAW. TREE PLANTING TO BE AT 40' INTERVALS ALONG BOTH SIDES AND STAGGERED OFF PAVEMENT  
5. TREE TYPES TO BE "LINDEN" AND "LONDON PLANETREE"

**TYPICAL ROADWAY CROSS-SECTION**  
NOT TO SCALE

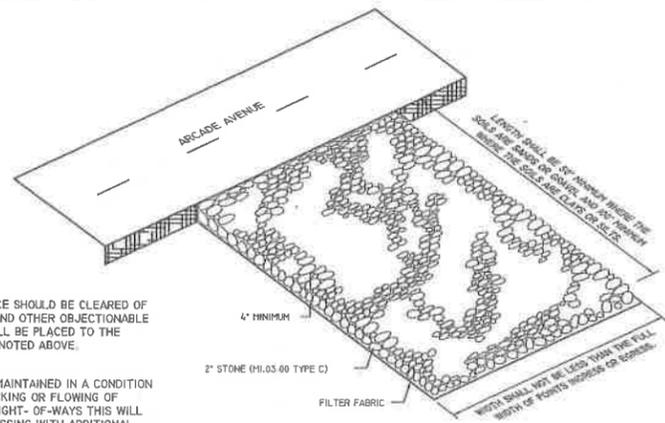


**TABLE 1 - HIGH SIDE FRONT TRANSITION LENGTH (LPH)**  
THE FOLLOWING FIGURES ARE BASED UPON A 4" CURB REVEAL AND 1/2" TRANSITION SLOPE: R=5', T=4"

PROFILE GRADE	TRANSITION LENGTH (LPH (FT))
0	0.0
1	2.0
2	4.0
3	6.0
4	8.0
5	10.0

WHERE THE ROAD PROFILE EXCEEDS 5% THE TRANSITION LENGTH SHALL BE 10'-0"  
\* EQUATION: LPH (FT) =  $\frac{R}{T+126}$   
\* THE FIGURES IN THE TABLE WERE ROUNDED UP TO THE NEAREST HALF FOOT

**HANDICAPPED RAMP DETAIL**  
NOT TO SCALE

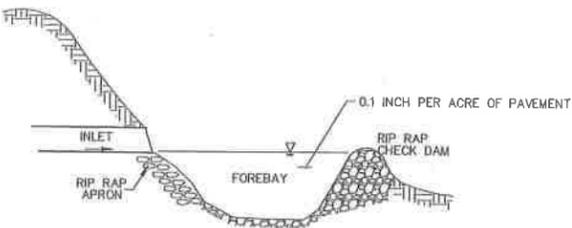


**INSTALLATION**  
THE AREA OF THE ENTRANCE SHOULD BE CLEARED OF ALL VEGETATION, ROOTS, AND OTHER OBJECTIONABLE MATERIAL. THE STONE SHALL BE PLACED TO THE SPECIFIED DIMENSIONS, AS NOTED ABOVE.

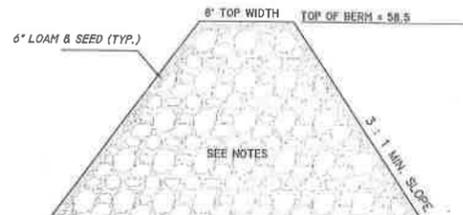
**MAINTENANCE**  
THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENTS ONTO PUBLIC RIGHT-OF-WAYS THIS WILL REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE, OR ADDITIONAL LENGTH, AS CONDITIONS DEMAND, AND REPAIR, AND / OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAYS MUST BE REMOVED IMMEDIATELY.

**LOCATION**  
SEE OVERALL SHEET FOR LOCATION OF CONSTRUCTION ENTRANCE.

**CONSTRUCTION ENTRANCE DETAIL**  
NOT TO SCALE



**SEDIMENT FOREBAY - SECTION**  
NOT TO SCALE



**NOTES**  
1. FREE OF LARGE ROCKS, ROOTS, LIMBS AND OTHER DELETERIOUS MATERIALS WHICH WOULD ADVERSELY AFFECT THE DESIGN INTEGRITY OF THE LINER  
2. CLASSIFIED UNDER THE UNIFIED SOIL CLASSIFICATION SYSTEM AS CL, CH OR SC  
3. MINIMUM 16% PASSING THE NO. 200 SIEVE  
4. HAVE A PLASTICITY INDEX (PI) GREATER THAN OR EQUAL TO 15  
5. SHALL MEET STATE REGULATIONS FOR DAM SAFETY (502 CMR 10.00)

**TYPICAL DIKE SECTION DETAIL**  
NOT TO SCALE

**DETAIL SHEET**

**"COUNTRY BROOK ESTATES"**  
882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

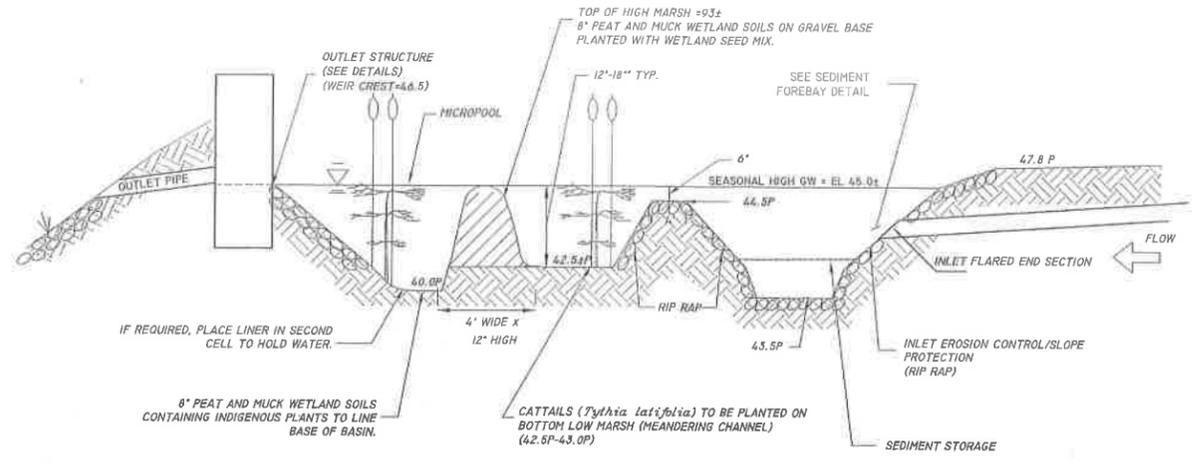
PREPARED FOR: **WATERMELLEN LLC**  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103 SCALE: NTS DRAWN BY: SCA DATE: MAR. 26, 2013

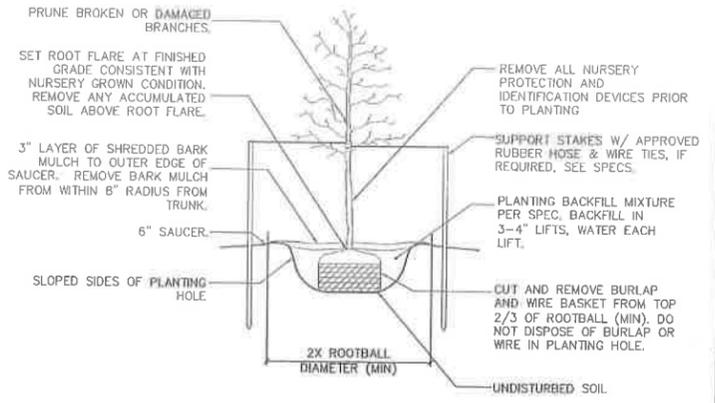
REVISED:

**INSITE** Engineering Services, LLC  
PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
INSITE PROFESSIONAL COMPLEX, SUITE 1  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4558

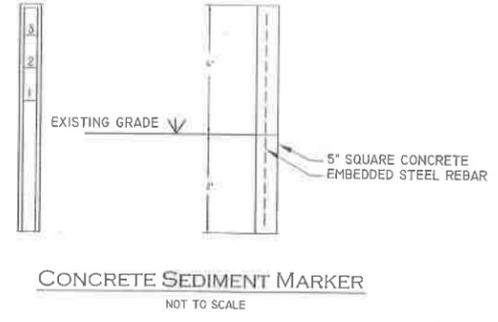
**SHEET 9 OF 11**



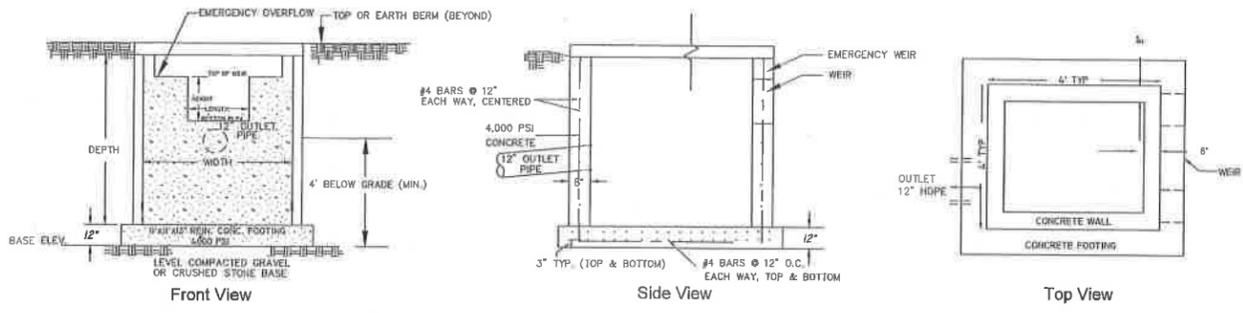
**CONSTRUCTED (POCKET) WETLAND SECTION**  
NOT TO SCALE



**TREE PLANTING DETAIL**  
NOT TO SCALE



**CONCRETE SEDIMENT MARKER**  
NOT TO SCALE



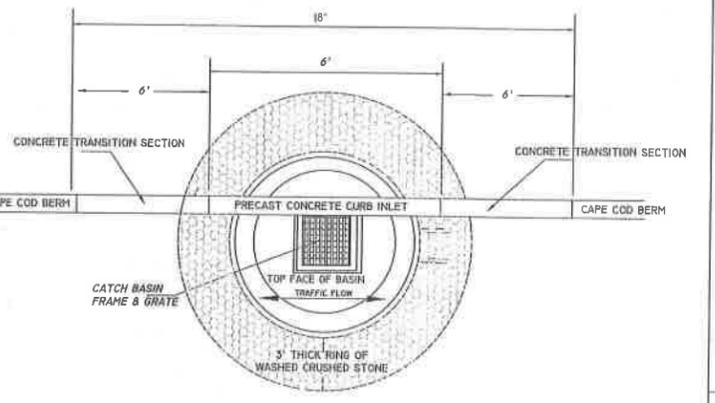
WEIR DISCHARGE DATA

RECTANG. WEIR	BOTTOM EL.	2 YEAR STORM EL.	10 YEAR STORM EL.	100 YEAR STORM EL.	INV. 12\"/>
1	45.7	45.70	46.05	46.78	45.50

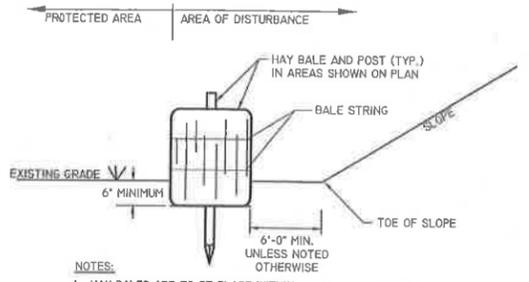
WEIR CONSTRUCTION DATA

RECTANG. WEIR	BASE ELEVATION	TOP OF WEIR	HEIGHT (FT.)	LENGTH (FT.)	DEPTH (FT.)	WIDTH (FT.)	BOTTOM ELEVATION
1	41.0	47.7	1.0	2.0	2.0	4.0	45.7

**RECTANGULAR WEIR DETAIL**  
NOT TO SCALE

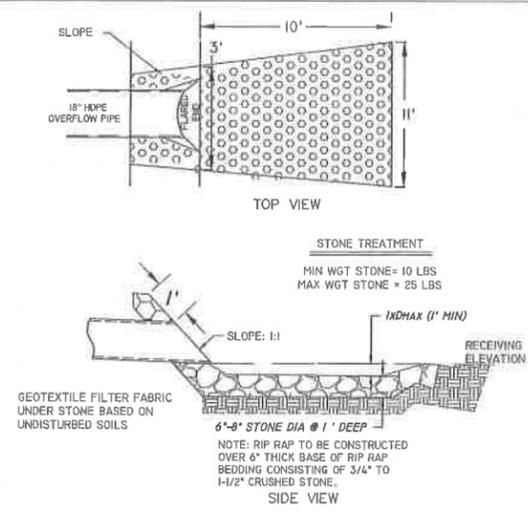


**TOP VIEW - CATCH BASIN**  
NOT TO SCALE

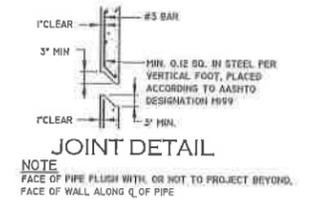


- NOTES:
- HAY BALES ARE TO BE PLACED WITHIN A 6" MINIMUM TRENCH.
  - THOROUGHLY COMPACT EXCAVATED SOILS BACK INTO THE TRENCH AFTER INSTALLATION OF EROSION CONTROL DEVICES.
  - HAY BALES ARE TO BE TIGHTLY PLACED END TO END ALONG THE LIMITS OF PROTECTION AREA.
  - EACH BALE TO BE SECURELY STAKED INTO THE GROUND WITH (2) 1"x12" OAK BEAN POLES.
  - BALE STRING SHALL BE LAID PARALLEL TO THE GROUND SURFACE.
  - CONTRACTOR IS RESPONSIBLE TO MAINTAIN INTEGRITY OF HAY BALE LINE FOR DURATION OF CONSTRUCTION.
  - EROSION CONTROLS TO REMAIN UNTIL SOIL CONDITIONS STABILIZE.
  - LOOSE HAY TO BE SPREAD ON AREAS OF EXPOSED LOAM & SEED UNTIL GERMINATION AND STABILIZATION OCCURS.

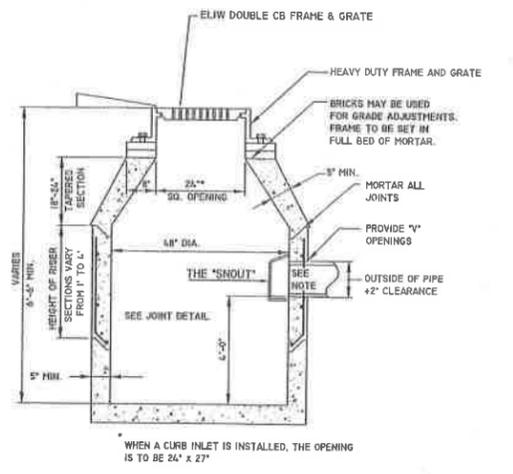
**HAY BALE DETAIL**  
NOT TO SCALE



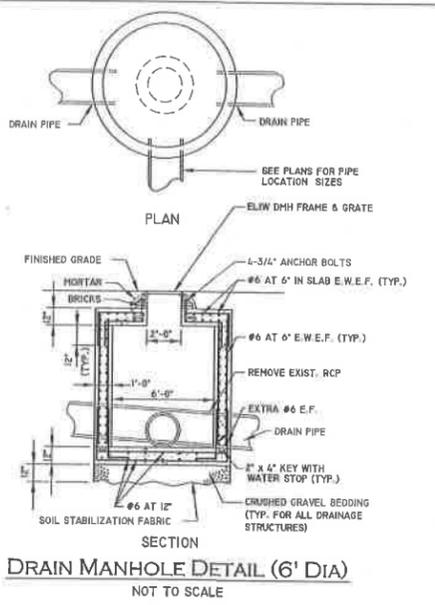
**TYPICAL FLARED END SECTION / RIP RAP DETAIL**  
NOT TO SCALE



**JOINT DETAIL**  
NOTE: FACE OF PIPE FLUSH WITH OR NOT TO PROJECT BEYOND. FACE OF WALL ALONG Q OF PIPE.



**CONCRETE CATCH BASIN**  
NOT TO SCALE



**DRAIN MANHOLE DETAIL (6\"/>**

**DETAIL SHEET**

**"COUNTRY BROOK ESTATES"**  
882 ARCADE AVENUE SEEKONK, MASSACHUSETTS 02771  
ASSESSORS MAP 15 LOT 302

PREPARED FOR: **WATERMELLEN LLC**  
25 NELSON AVENUE FAIRHAVEN MA.

JOB # 05-103    SCALE: NTS    DRAWN BY: SCA    DATE: MAR. 26, 2013

REVISED:

PROFESSIONAL ENGINEERS AND LAND SURVEYORS  
INSITE PROFESSIONAL COMPLEX, SUITE 11  
1539 FALL RIVER AVENUE  
SEEKONK, MA 02771  
PHONE: (508) 336-4500  
FAX: (508) 336-4558

**INSITE**  
Engineering Services, LLC

**SHEET 10 OF 11**

I:\05-103 ARCADE AVENUE - SEEKONK - SWIFT CAD\05-103-DEFINITIVE-C.DWG - DETAIL-2, 3/27/2013 8:29:50 AM, 1:1





**Planning Board**  
100 PECK STREET  
SEEKONK, MASSACHUSETTS 02771  
1-508-336-2960

To: The Planning Board  
From: John P. Hansen Jr., AICP, Town Planner  
Date: June 28, 2013

**SITE PLAN REVIEW**  
**Senior Center – 100 Peck St.**

**Summary:** The applicant has submitted a request for Site Plan Review.

**Findings of Fact:**

Existing Conditions

- Town Hall and Animal Shelter exist on the site.

Proposal:

- Construct a 7023 sf Senior Center with associated parking and drainage facilities.
- **Section 10.6.1 - Parking**-27-45 spaces required and 38 proposed based on 135 seats within meeting rooms. No calculations provided for Town Hall or Animal Shelter; **10.6.2 – Drainage** – Bio-retention pond and infiltration trench proposed. Has not been reviewed by outside consultant; **10.6.3 – Landscaping** – No shading of parking areas proposed (30% required); **10.6.4-** Photometric Plan submitted shows footcandle range of of 0.8-7.0 for parking spaces (2.0 footcandle minimum for commercial use); **10.6.5**-No drive-thru facility proposed; **10.6.6**-No Architectural designs submitted.

Waivers Required:

- Landscaping shading requirement

**Recommendation:**

An attempt at providing shading for parking spaces should be made and the memorial tree planted in memory of a late town employee to the east of the existing Town Hall parking lot should be preserved. A decision should be made by the Board on whether to send the drainage calculations out for review along with a decision on what standard should be used for minimum lighting requirements.

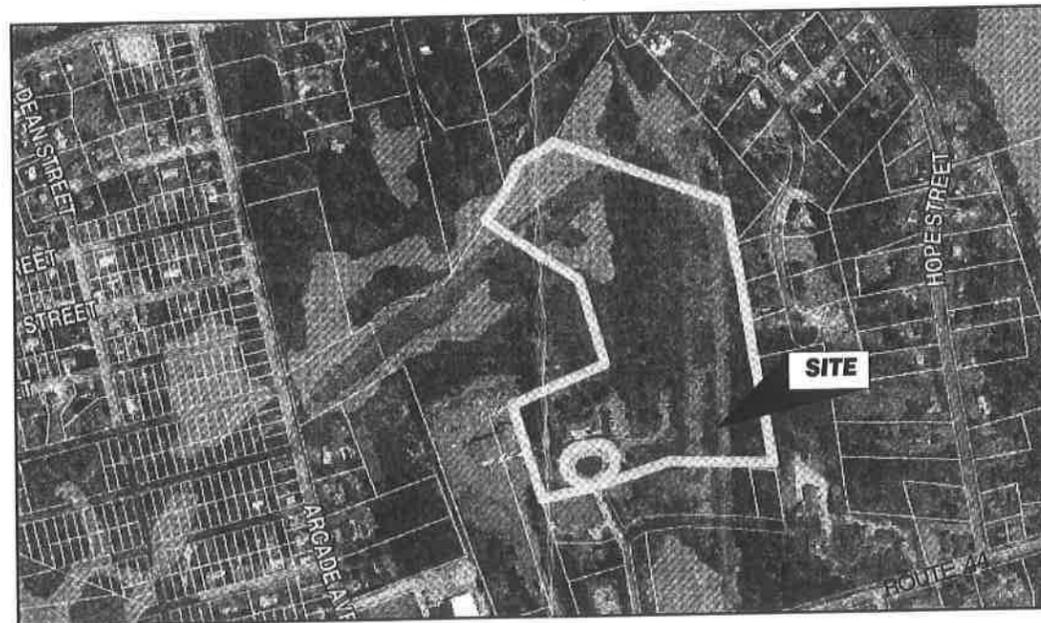
# PROPOSED SENIOR CENTER

## NOTICE OF INTENT(N.O.I.) / SITE PLAN APPROVAL

ASSESSOR'S PLAT 18 BLOCK 0000 LOT 0011.0  
100 PECK STREET  
SEEKONK, MASSACHUSETTS  
JUNE 26, 2013

### SHEET INDEX

SHEET NO.	SHEET TITLE
C - 1.0	COVER SHEET
C - 2.0	GENERAL NOTES & LEGEND
C - 3.0	EXISTING CONDITIONS PLAN
C - 4.0	LAYOUT, MATERIALS & LANDSCAPE PLAN
C - 5.0	GRADING, DRAINAGE & UTILITY PLAN
C - 6.0	SEDIMENTATION & EROSION CONTROL PLAN
C - 7.0	SEPTIC SYSTEM PLAN
C - 8.0	SEPTIC SYSTEM PLAN
C - 9.0	DETAILS
C - 10.0	DETAILS
C - 11.0	DETAILS
C - 12.0	DETAILS
C - 13.0	SEPTIC SYSTEM DETAILS
C - 14.0	SEPTIC SYSTEM DETAILS
LC.1	SITE LIGHTING CALCULATIONS



LOCATION MAP

SCALE: N.T.S.

PLANS PREPARED FOR:  
THE TOWN OF SEEKONK  
100 PECK ST. SEEKONK, MA 02771

PLANS PREPARED BY:

**MBL** LAND DEVELOPMENT & PERMITTING, CORP.  
LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P. 508.297.2746 F. 508.297.2756  
EMAIL: MBLDLP@COMCAST.NET  
WEBSITE: www.MBL.comcastbiz.net

### PROJECT CONTACTS:

#### CIVIL ENGINEER/LAND SURVEYOR

MBL LAND DEVELOPMENT & PERMITTING, CORP.  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P. 508.297.2746  
F. 508.297.2756  
BRIAN M. DUNN, BSCE, M.ASCE  
JAMES E. MILLER, P.E.  
bmdunn@mbll.comcastbiz.net  
website: MBL.comcastbiz.net

#### BUILDING COMMITTEE

DAVE BOWDEN, CHAIRMAN  
ROBERT J. MCLINTOCK, VICE CHAIRMAN  
GAIL ARDITO, Clerk  
MIA ALWEN  
RICHARD PERRY  
JACK VATCHER  
JAN TABOR

#### BOARD OF SELECTMAN

NELSON ALMEIDA, CHAIRMAN  
GARY S. SAGAR, VICE CHAIRMAN  
MICHAEL H. BRADY, CLERK  
DAVID S. PARKER  
ROBERT J. MCLINTOCK

#### Town Administrator

Pamela T. Nolan

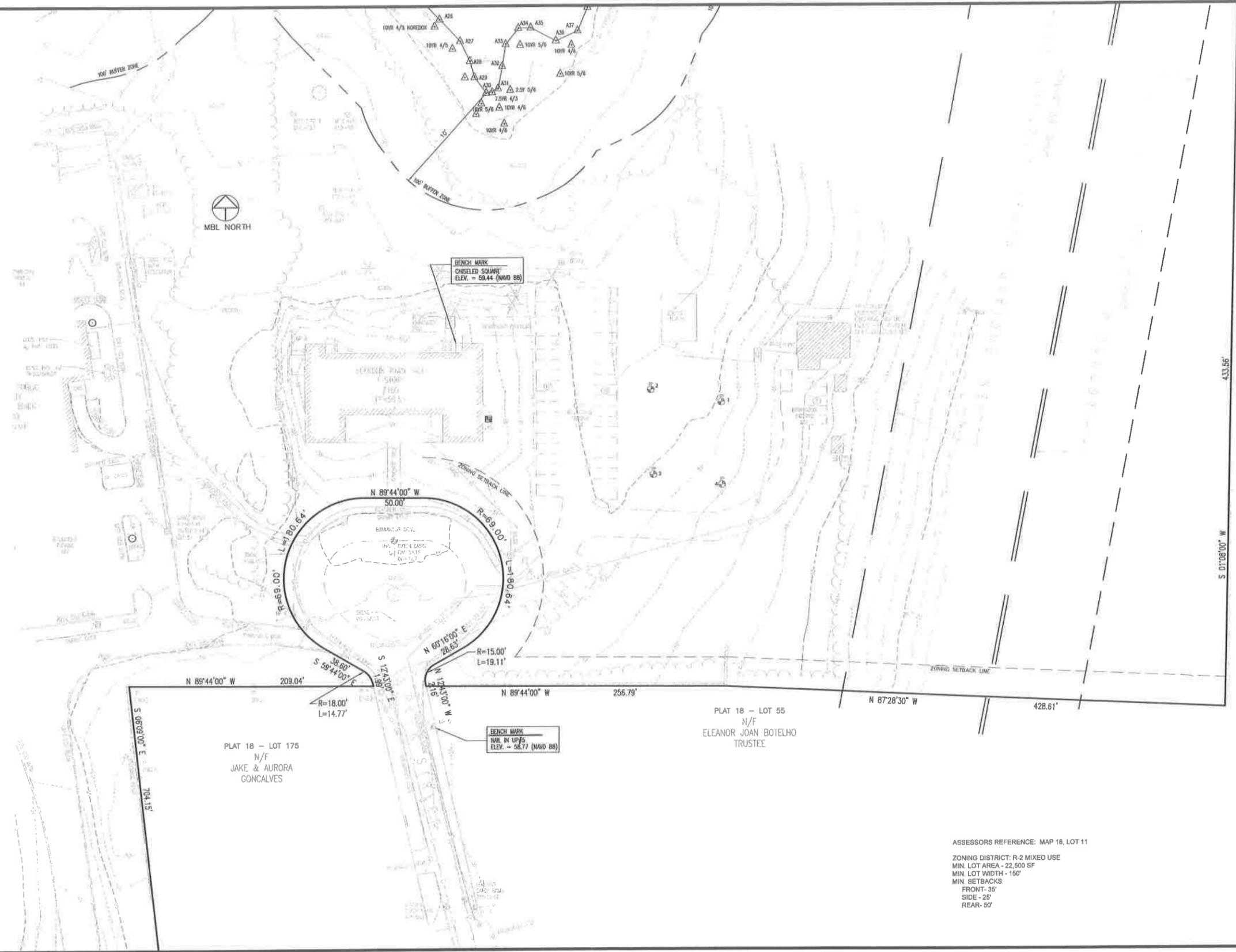
PROJ No: 2011-032  
DATE: June 26, 2013

C-1.0



NOTES

- 1. THE EXISTING CONDITIONS SHOWN ON THIS PLAN ARE TAKEN FROM PLAN AND SURVEY BY CAPUTO & WICK, INC. OCT. 31, 2008.
- 2. PERMISSION TO USE THE SURFACE OF THE N. E. POWER EASEMENT MUST BE OBTAINED FROM THE REAL ESTATE DEPARTMENT OF NATIONAL GRID, 40 SYLVAN RD., WALTHAM, MA 02451-1120
- 3. PREVIOUSLY APPROVED WETLANDS DELINEATION THROUGH THE SEEKONK CONSERVATION COMMISSION UNDER AN ORDER OF CONDITIONS DEP FILE NO. SE 09-673, DATE OF ISSUANCE JAN. 13, 2010.



X:\2011\2011-032\CIVIL\PILOT\2011-032 SR CENTER PLANS 6182013.dwg 6/26/2013 9:13:38 AM EDT  
 LUCS  
 LMS VIEW  
 LMAN  
 CTB

No.	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL



APPLICANT  
TOWN OF SEEKONK  
BUILDING COMMITTEE  
SENIOR CENTER  
SEEKONK MASSACHUSETTS

SCALE:  
HORZ.: 1"=40'  
VERT.:  
DATUM:  
HORZ.:  
VERT.:  
GRAPHIC SCALE

**MBL**  
LAND DEVELOPMENT & PERMITTING, CORP.  
LAND DEVELOPMENT, PLANNING & ENVIRONMENTAL SOLUTIONS  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P. 508.297.2748 F. 508.297.2758  
EMAIL: MBLDLP@COMCAST.NET  
WEB: www.mbl.comcastbiz.net

EXISTING CONDITIONS PLAN  
SEEKONK SENIOR CENTER  
100 PECK STREET  
ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0  
SEEKONK MASSACHUSETTS

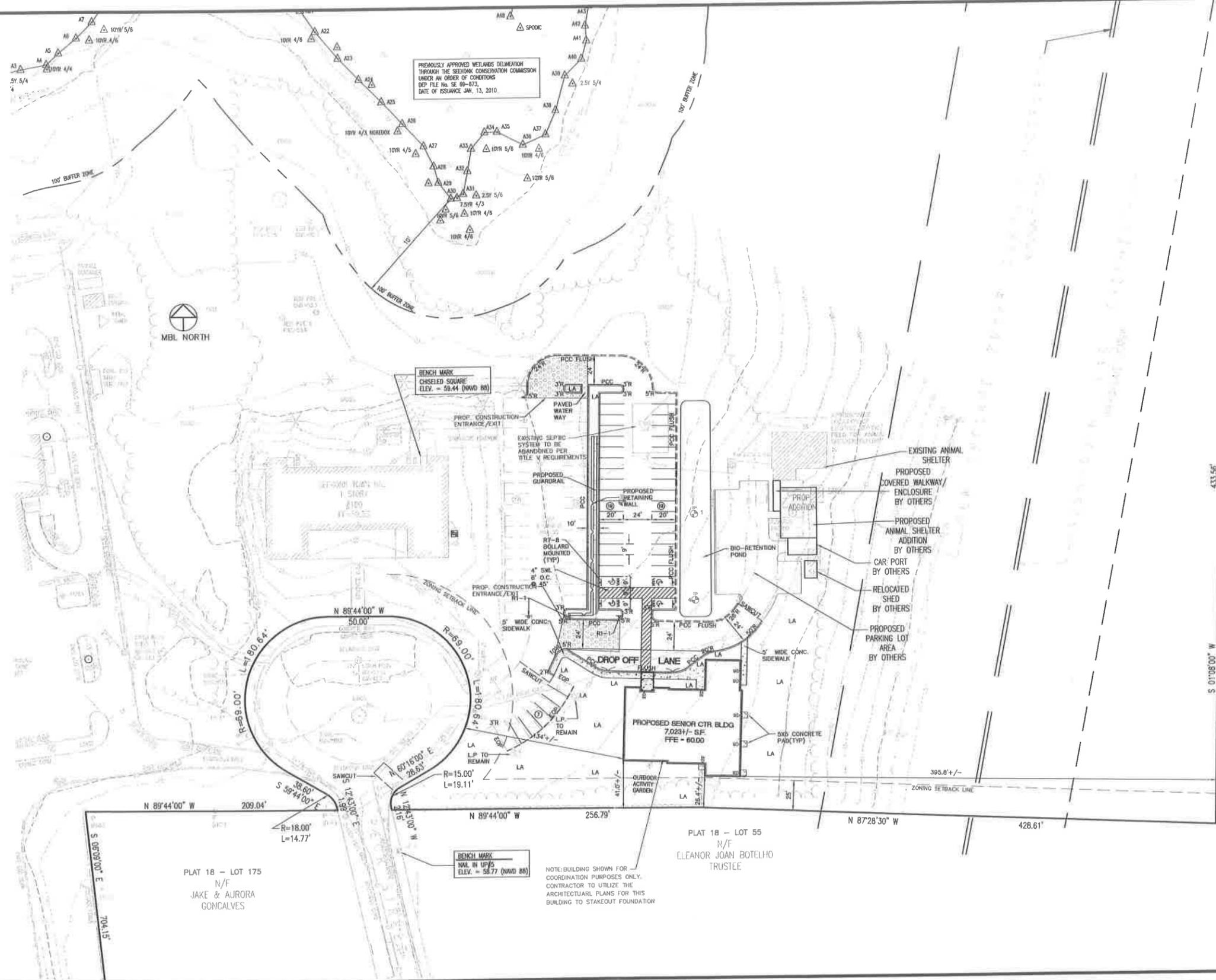
PROJ No.: 2011-032  
DATE: June 26, 2013  
**C-3.0**

NOTES

1. PARKING REQUIREMENTS ARE MIN. 47 AND MAX. 70 SPACES, INCLUDING 4 HANDICAP SPACES. 64 SPACES ARE PROVIDED ON THIS PLAN. THE PARKING WILL BE ADDRESSED DURING SITE PLAN REVIEW BY THE PLANNING BOARD.
2. AN APPROVED SEPTIC SYSTEM PLAN MUST BE OBTAINED FROM THE BOARD OF HEALTH PRIOR TO ISSUANCE OF A BUILDING PERMIT.
3. PERMISSION TO USE THE SURFACE OF THE N. E. POWER EASEMENT MUST BE OBTAINED FROM THE REAL ESTATE DEPARTMENT OF NATIONAL GRID, 40 SYLVAN RD., WALTHAM, MA 02451-1120.

THE FOLLOWING RESTRICTIONS WILL APPLY TO THE EASEMENT DURING CONSTRUCTION:

- A. NO MATERIAL STOCKPILES ARE ALLOWED
- B. NO TRAILERS WILL BE PARKED IN THE EASEMENT
- C. NO LOADING/UNLOADING WITHIN THE EASEMENT
- D. MAINTAIN 15' CLEARANCE AROUND POLES



SIGN SUMMARY		
M.U.T.C.D. NUMBER	SPECIFICATION WIDTH	TEXT
R1-1	24"	24"

UCS  
 IMS VIEW  
 LMAN  
 CTE  
 X:\2011\2011-032\CIVIL\2011-032 SR CENTER PLANS 6182013.dwg 6/25/2013 2:31:35 PM EDT

No.	DATE	DESCRIPTION	BY

PROJ. MANAGER	MBL	SEAL
CHIEF DESIGNER	MBL	
REVIEWED BY:	DATE	

**APPLICANT**  
 TOWN OF SEEKONK  
 BUILDING COMMITTEE  
 SENIOR CENTER  
 SEEKONK MASSACHUSETTS

SCALE:  
 HORZ: 1"=40'  
 VERT:    
 DATUM:    
 HORZ:    
 VERT:    

 GRAPHIC SCALE

MBL

LAND DEVELOPMENT & PERMITTING, CORP.  
 LAND USE DESIGN, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS  
 480 TURNPIKE STREET  
 SOUTH EASTON, MA 02375  
 P. 508.297.2746 F. 508.297.2756  
 EMAIL: MBLDLP@COMCAST.NET  
 WEB: www.mbl.comcastblz.net

LAYOUT, MATERIALS & LANDSCAPE PLAN  
**SEEKONK SENIOR CENTER**  
 100 PECK STREET  
 ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0  
 SEEKONK MASSACHUSETTS

PROJ. No.: 2011-032  
 DATE: June 26, 2013  
C-4.0

PLAT 18 - LOT 20  
1/7  
JEREMY B. JUNGHE  
TRUSTEE

PLAT 18 - LOT 15  
1/7  
JEREMY B. JUNGHE  
TRUSTEE

PLAT 18 - LOT 55  
N/F  
CLEANOR JOAN BOTELHO  
TRUSTEE

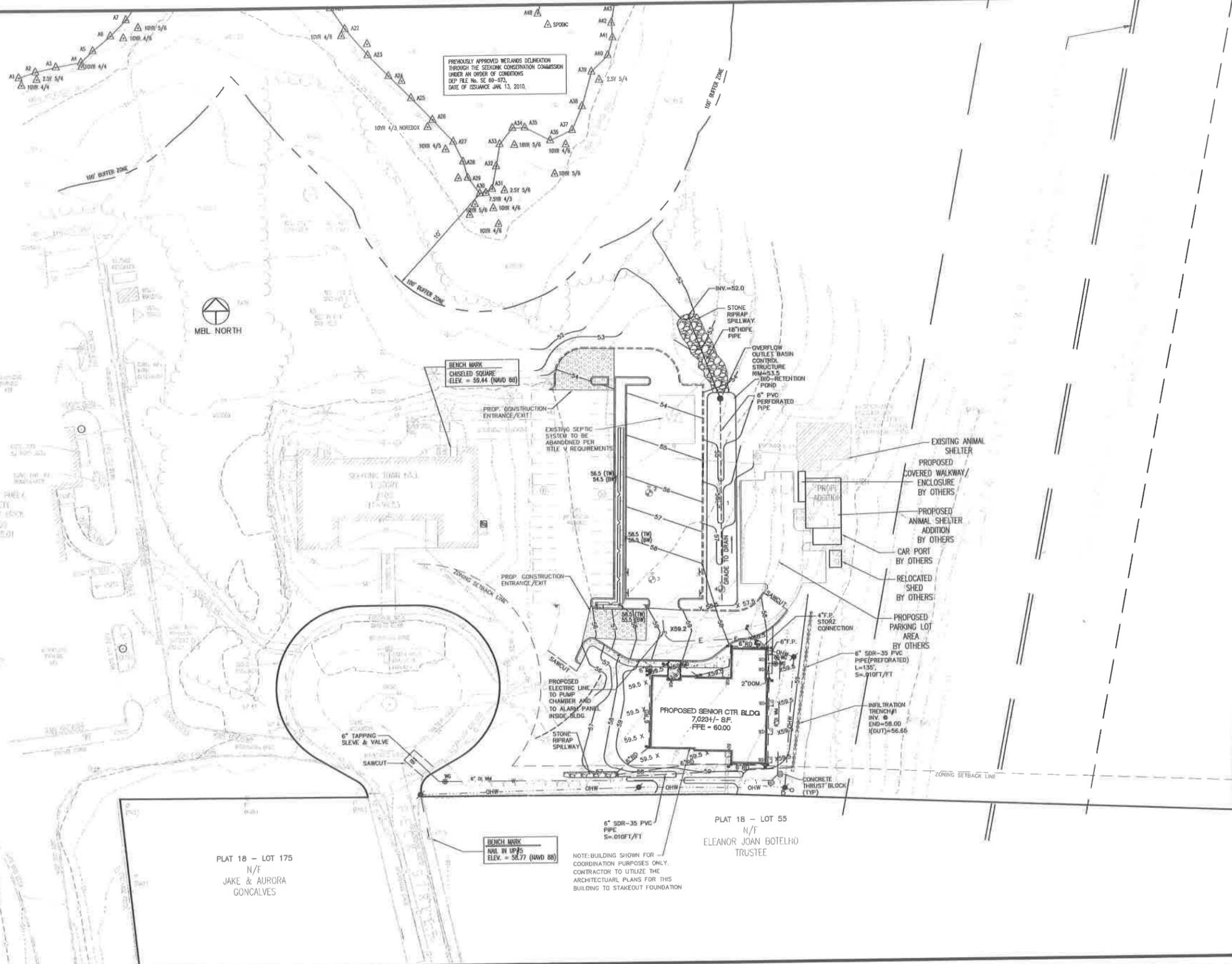
PLAT 18 - LOT 175  
N/F  
JAKE & AURORA  
GONCALVES

NOTES

1. PARKING REQUIREMENTS ARE MIN. 47 AND MAX. 70 SPACES, INCLUDING 4 HANDICAP SPACES. 64 SPACES ARE PROVIDED ON THIS PLAN. THE PARKING WILL BE ADDRESSED DURING SITE PLAN REVIEW BY THE PLANNING BOARD.
2. AN APPROVED SEPTIC SYSTEM PLAN MUST BE OBTAINED FROM THE BOARD OF HEALTH PRIOR TO ISSUANCE OF A BUILDING PERMIT.
3. PERMISSION TO USE THE SURFACE OF THE N. E. POWER EASEMENT MUST BE OBTAINED FROM THE REAL ESTATE DEPARTMENT OF NATIONAL GRID, 40 SYLVAN RD., WALTHAM, MA 02451-1120.

THE FOLLOWING RESTRICTIONS WILL APPLY TO THE EASEMENT DURING CONSTRUCTION:

- A. NO MATERIAL STOCKPILES ARE ALLOWED
- B. NO TRAILERS WILL BE PARKED IN THE EASEMENT
- C. NO LOADING/UNLOADING WITHIN THE EASEMENT
- D. MAINTAIN 15' CLEARANCE AROUND POLES



PLAT 18 -  
JACQUES HENRI

PLAT 18 - LOT 15  
JEFFREY D. JEROME TRUST

x:\2011\2011-032 SR CENTER PLANS 6182013dwg.dwg 6/25/2013 2:31:33 PM EDT

LUCS MS VIEW LMANE CTB

No.	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL



APPLICANT  
TOWN OF SEEKONK  
BUILDING COMMITTEE  
SENIOR CENTER  
SEEKONK MASSACHUSETTS

SCALE:  
HORIZ: 1"=40'  
VERT: 1"=4'  
DATUM:  
HORIZ:  
VERT:  
GRAPHIC SCALE

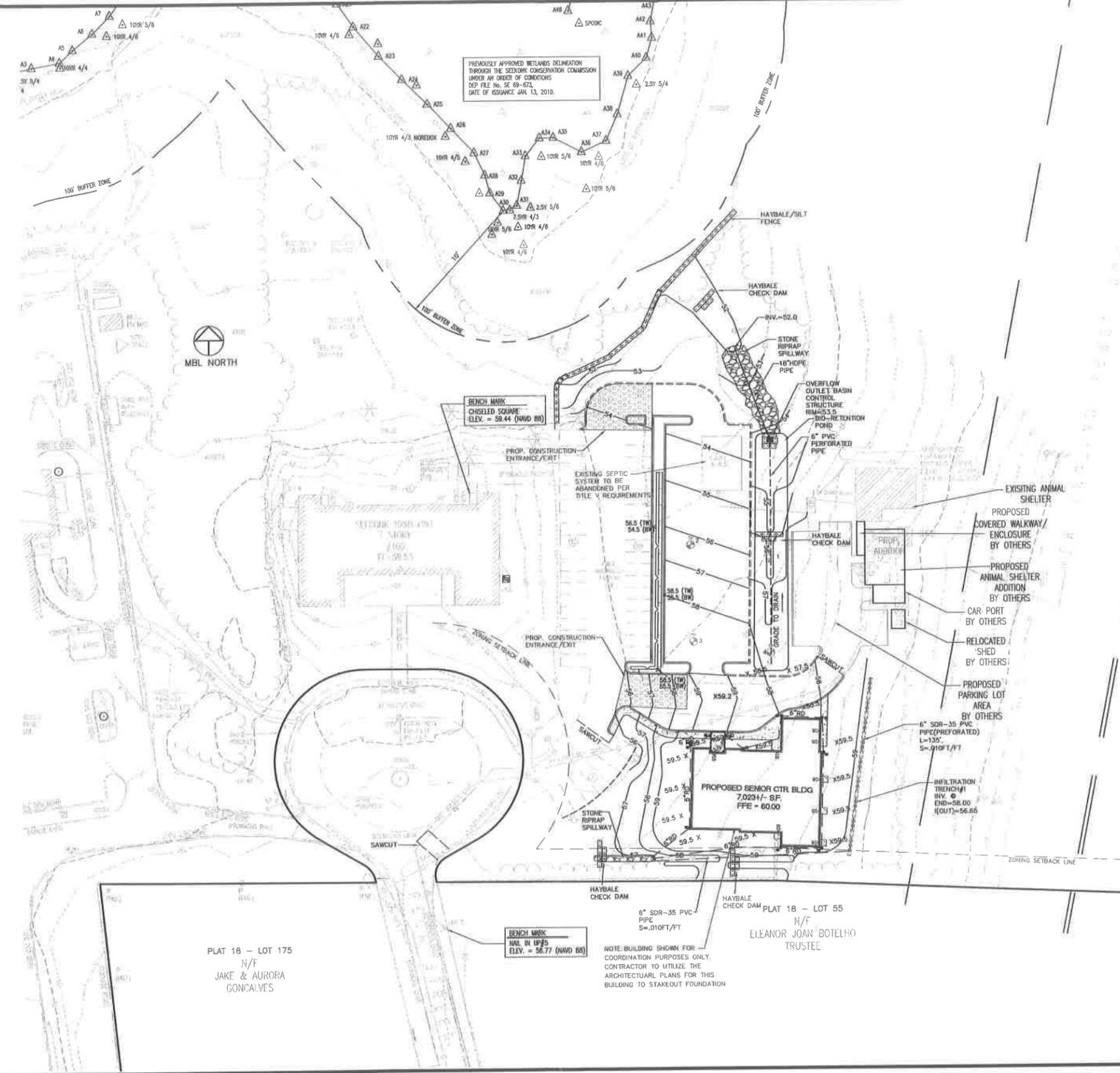
**MBL**  
LAND DEVELOPMENT & PERMITTING, CORP.  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P. 508.297.2746 F. 508.297.2756  
EMAIL: MBLDLP@COMCAST.NET  
WEB: www.mbl.comcastbiz.net

GRADING, DRAINAGE & UTILITY PLAN  
SEEKONK SENIOR CENTER  
100 PECK STREET  
ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0  
SEEKONK MASSACHUSETTS

PROJ No.: 2011-032  
DATE: June 26, 2013  
**C-5.0**

**EROSION CONTROL NOTES (DURING CONSTRUCTION)**

- PRIOR TO THE COMMENCEMENT OF CONSTRUCTION ACTIVITIES, THE CONTRACTOR SHALL INSTALL ALL EROSION AND SEDIMENT CONTROL DEVICES AS SHOWN ON THE PLAN, OR AS DICTATED BY TOWN OF SEEKONK. ALL EROSION CONTROL DEVICES SHALL BE MAINTAINED IN EFFECTIVE CONDITION DURING CONSTRUCTION.
- THE CONTRACTOR IS RESPONSIBLE FOR THE TIMELY INSTALLATION, INSPECTION, MAINTENANCE, AND/OR REPLACEMENT OF ALL TEMPORARY AND PERMANENT EROSION CONTROL DEVICES TO ENSURE PROPER OPERATION THROUGHOUT THE LIFE OF THE PROJECT. THE CONTRACTOR IS RESPONSIBLE FOR MAINTENANCE OF PERMANENT MEASURES UNTIL CONSTRUCTION OF THE PROJECT IS COMPLETED OR UNTIL IT IS ACCEPTED BY THE OWNER. THE OWNER IS RESPONSIBLE THEREAFTER.
- IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO CLEAN ROADS, CONTROL DUST, AND TAKE ALL NECESSARY MEASURES TO ENSURE THAT THE SITE AND ALL ROADS BE MAINTAINED IN A WIND AND DUST-FREE CONDITION AT ALL TIMES THROUGHOUT THE LIFE OF THE CONTRACT. DUST CONTROL SHALL INCLUDE, BUT IS NOT LIMITED TO, WATER, CALCIUM CHLORIDE, AND/OR CRUSHED STONE OR COARSE GRAVEL.
- ALL PROPOSED CONSTRUCTION ENTRANCES SHALL BE CONSTRUCTED AS SHOWN ON THE PLANS AND DETAILS. ALL VEHICLE TRAFFIC ENTERING OR EXITING THE PROJECT SITE SHALL PASS OVER THE CONSTRUCTION ENTRANCES TO REDUCE THE TRACKING OR FLOWING OF SEDIMENT ONTO THE SURROUNDING ROADWAYS.
- THE CONTRACTOR SHALL INSTALL ALL PERIMETER SEDIMENT CONTROL BARRIERS AS SHOWN ON THE SITE DEVELOPMENT PLANS. A SILT FENCE SHALL ALSO BE INSTALLED AROUND ANY SOIL STOCKPILE AREA.
- THE CONTRACTOR SHALL RESTORE DISTURBED AREAS AS CLOSELY AS POSSIBLE. AREAS DAMAGED DURING CONSTRUCTION SHALL BE RESEED, RESEED, OR OTHERWISE RESTORED TO THEIR ORIGINAL STATE. TREES AND OTHER EXISTING VEGETATION SHALL BE RETAINED WHEREVER FEASIBLE.
- TEMPORARY VEGETATIVE COVER SHALL BE APPLIED TO ALL DISTURBED AREAS (INCLUDING SOIL STOCKPILE AREAS) THAT HAVE NOT YET REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED, UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS. THE RECOMMENDED TEMPORARY SEEDING DATES ARE MARCH 1 TO JUNE 15 AND AUGUST 15 TO OCTOBER 1.
- THIS TEMPORARY VEGETATIVE COVER SHALL MEET THE REQUIREMENTS OF SECTION 8B.03(1) OF THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES.
- PERMANENT VEGETATIVE COVER SHALL BE APPLIED TO ALL DISTURBED AREAS THAT HAVE REACHED FINISHED GRADE AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS PERMANENTLY CEASED. THE RECOMMENDED PERMANENT SEEDING DATES ARE APRIL 1 TO JUNE 15 AND AUGUST 15 TO OCTOBER 1.  
 THE SEED MIXTURE USED FOR PERMANENT VEGETATIVE COVER OUTSIDE OF IMPERVIOUS OR LANDSCAPED AREAS SHALL RECEIVE THE SEED MIXTURE SPECIFIED IN SECTION 8B.03(1) OF THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES. IF SOIL IS TO BE USED IN SUCH AREAS, IT SHALL MEET THE REQUIREMENTS OF SECTION 8B.04(2) OF THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES.  
 LIMESTONE SHALL CONSIST OF PULVERIZED LIMESTONE OBTAINED BY CRUSHING OTHER CALCAREOUS OR DOLOMITIC LIMESTONE SO THAT 85% OF THE MATERIAL WILL PASS A NO. 20 SIEVE AND AT LEAST 50% WILL PASS A NO. 100 SIEVE. THE LIMESTONE SHALL HAVE A NEUTRALIZING VALUE SATISFACTORY TO THE ENGINEER, AND SHALL BE ONLY SUCH AS WILL HAVE AND BE MARKED IN ACCORDANCE WITH THOSE REQUIREMENTS OF GENERAL LAWS, AS AMENDED, WHICH RELATE TO COMMERCIAL FERTILIZERS.  
 AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDING SHOULD BE MULCHED IMMEDIATELY FOLLOWING SEEDING IN ADDITION TO AREAS WHICH CANNOT BE SEEDING WITHIN THE RECOMMENDED SEEDING DATES AND ANY SOIL STOCKPILE AREAS. TEMPORARY MULCHING SHOULD BE PERFORMED AS SOON AS POSSIBLE, BUT NOT MORE THAN FOURTEEN (14) DAYS AFTER THE CONSTRUCTION ACTIVITY IN THAT AREA HAS TEMPORARILY CEASED UNLESS THE ACTIVITY IS TO RESUME WITHIN TWENTY-ONE (21) DAYS.
- STRAW OR HAY MULCH, WOOD CHIP MULCH, AND HYDROMULCH ARE RECOMMENDED. THE MATERIALS USED IN MULCHING SHALL CONFORM TO THE REQUIREMENTS LISTED IN SECTION 8B.04(2) OF THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES.
- IF SEEDING CANNOT BE COMPLETED IMMEDIATELY OR WITHIN THE RECOMMENDED SEEDING DATES, USE THE TEMPORARY MULCHING MEASURE TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- ANY EXISTING OR PROPOSED CATCH BASINS THAT MAY BE SUBJECT TO SEDIMENTATION PROCESSES SHALL HAVE SILT BAGS INSTALLED TO PREVENT SEDIMENT FROM ENTERING THE PROPOSED STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED SITE. THE PROPER INLET PROTECTION DEVICES SHALL BE INSTALLED WHERE STORM DRAIN INLETS ARE TO BE MADE OPERATIONAL BEFORE PERMANENT STABILIZATION OF ANY DISTURBED DRAINAGE AREA.
- ALL EROSION AND SEDIMENT CONTROL MEASURES WILL BE CONSTRUCTED IN ACCORDANCE WITH THE MASSACHUSETTS HIGHWAY DEPARTMENT STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES AND VOLUME TWO OF THE MASSACHUSETTS STORM WATER MANAGEMENT HANDBOOK.
- WASTE DISPOSAL: MATERIALS WHICH COULD BE A POTENTIAL SOURCE OF STORM WATER POLLUTION SUCH AS GASOLINE, DIESEL FUEL, HYDRAULIC OIL, ETC., SHALL BE STORED AT THE END OF EACH DAY IN A STORAGE TRAILER OR COVERED LOCATION AND TAKEN OFF-SITE AND PROPERLY DISPOSED OF. ALL TYPES OF WASTE GENERATED AT THIS SITE SHALL BE DISPOSED OF IN A MANNER CONSISTENT WITH STATE LAW AND/OR REGULATIONS.
- GOOD HOUSEKEEPING: THE PROJECT SITE SHALL PROVIDE FOR THE MINIMIZATION OF EXPOSURE OF CONSTRUCTION DEBRIS (INCLUDING, BUT NOT LIMITED TO, INSULATION, WARM, PAINTS AND PAINT CANS, SOLVENTS, WALL BOARD, ETC.) TO PRECIPITATION, BY MEANS OF DISPOSAL AND/OR PROPER SHELTER OR COVER.  
 IN ADDITION, CONSTRUCTION WASTE MUST BE PROPERLY DISPOSED OF IN ORDER TO AVOID EXPOSURE TO PRECIPITATION AT THE END OF EACH WORKING DAY.  
 NO DUST WILL BE ALLOWED ON OR OFF WORK SITE. CONTRACTOR MUST CONDUCT CONTINUOUS EFFORT TO CONTROL DUST. LACK OF DUST CONTROL COULD CAUSE THE PROJECT TO BE STOPPED UNTIL ISSUES ARE RESOLVED.

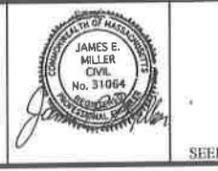


**OPERATION AND MAINTENANCE NOTES**

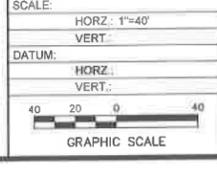
- OVERVIEW: IN ACCORDANCE WITH THE LOCAL, STATE, AND FEDERAL REGULATIONS AND THE APPROVED SITE PLAN FOR THIS PROJECT, THE SUBJECT SITE CONTAINS EROSION CONTROL MEASURES TO COLLECT AND CONVEY STORMWATER, CONTROL EROSION AND SEDIMENT, ATTENUATE PEAK FLOW RATES OF RUNOFF, AND REMOVE STORMWATER POLLUTANTS. SPECIFIC STORMWATER MANAGEMENT PRACTICES FOR THIS PROJECT SHALL INCLUDE DRAINAGE STRUCTURES AND PIPES, SILENT TRAP CATCH BASINS, RIPRAP, AND OUTLET PROTECTION AND MITIGATION SYSTEMS. DURING AND SUBSEQUENT TO CONSTRUCTION, THE FOLLOWING TEMPORARY AND PERMANENT EROSION CONTROL MEASURES WILL BE UTILIZED AND MAINTAINED AS FOLLOWS IN ACCORDANCE WITH MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS:
- PERIMETER SEDIMENT CONTROLS: COMBINED HAYBALE / SILTATION BARRIERS CONSISTING OF A FILTER FABRIC SILT FENCE AND HAY BALES WILL BE ERRECTED IN ADVANCE OF CONSTRUCTION ALONG THE PERIMETER OF THE PROJECT SITE IN LOCATIONS SHOWN ON THE EROSION AND SEDIMENTATION CONTROL PLAN. SUCH BARRIERS SHOULD BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL-PRODUCING RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. SEDIMENT DEPOSITS MUST BE REMOVED WHEN THE LEVEL OF DEPOSITION REACHES APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.
  - CONSTRUCTION ENTRANCE: A TEMPORARY CONSTRUCTION ENTRANCE HAS BEEN PROPOSED AT THE END OF THE ANNUAL SHELLER ACCESS ROADWAY AT THE WEST SIDE OF THE PROJECT. THE ENTRANCE SHOULD BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO THE PAVEMENT OF THE PARKING AREA. THIS MAY REQUIRE PERIODIC TREATMENTS WITH ADDITIONAL STONE.
  - THE ENTRANCE SHOULD BE INSPECTED WEEKLY AND AFTER HEAVY RAINS OR HEAVY USE. MUD AND SOIL PARTICLES WILL EVENTUALLY CLOG THE VEST IN THE GRAVEL AND THE EFFECTIVENESS OF THE GRAVEL PAD. WHEN THIS OCCURS, THE PAD SHOULD BE TOP DRESSED WITH NEW STONE. COMPLETE REPLACEMENT OF THE PAD MAY BE NECESSARY WHEN THE PAD BECOMES COMPLETELY CLOGGED.
  - CATCH BASIN INLET PROTECTION: SILT BAGS HAVE BEEN PROPOSED TO BE INSTALLED IN ALL PROPOSED AND EXISTING CATCH BASINS IN ORDER TO PREVENT SEDIMENT FROM ENTERING THE PROPOSED STORM DRAINAGE SYSTEM PRIOR TO PERMANENT STABILIZATION OF THE DISTURBED SITE. ALL SILT BAGS SHOULD BE INSPECTED AFTER EVERY RAIN STORM AND REPAIRS MADE AS NECESSARY. IN ADDITION TO THE SILT BAGS A FENCE OF HAY BALES SHALL BE INSTALLED AS AN ADDITIONAL FENCE AROUND ALL CATCH BASINS AND SHALL REMAIN IN PLACE UNTIL PAVING OPERATIONS BEGIN. SEDIMENT SHOULD BE DEPOSED OF IN A SEPARATE AREA AND PROTECTED FROM EROSION BY ERECTING STRUCTURAL OR VEGETATIVE BARRIERS. CATCH BASIN INLET PROTECTION SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.
  - DEEP-DUMPY HOOKED CATCH BASINS: ALL CATCH BASINS SHALL BE HOOKED DEEP-DUMPY CATCH BASINS. CATCH BASINS SHALL BE CLEANED AT MINIMUM FOUR TIMES PER YEAR, AND INSPECTED MONTHLY PER VOLUME 1.8 OF THE MASSACHUSETTS STORMWATER TECHNICAL HANDBOOK. CLEANING WILL TAKE PLACE AT THE COMPLETION OF THE CONSTRUCTION IN EARLY SPRING AFTER SANDING OF ROADWAYS HAS CEASED, AND IN THE FALL, THE DISPOSAL OF THE ACCUMULATED SEDIMENT AND HYDROCARBONS MUST BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.
  - CONVEYANCE SYSTEM FLUSHING: UPON THE STABILIZATION OF THE SITE AND PRIOR TO THE COMPLETION OF CONSTRUCTION OR ACCEPTANCE BY THE OWNER, THE CONTRACTOR SHALL INSPECT ALL ON-SITE CATCH BASINS, STORM DRAIN PIPES, WATER QUALITY STRUCTURES, AND THE SOIL SURFACE FACILITIES AND CLEAN AND FLUSH AS NECESSARY. THE DISPOSAL OF THE ACCUMULATED SEDIMENT AND HYDROCARBONS MUST BE IN ACCORDANCE WITH APPLICABLE LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.
  - SUBSURFACE MITIGATION SYSTEM: SUBSURFACE STRUCTURES ARE CONSTRUCTED TO STORE STORMWATER TEMPORARILY AND LET PERMEATE INTO THE UNDERLYING SOILS. THEY CAN BE TO CONTROL THE QUANTITY AS WELL AS QUALITY OF STORMWATER RUNOFF. IF PROPERLY DESIGNED AND CONSTRUCTED, THE STRUCTURES SERVE AS STORAGE CHAMBERS FOR CAPTURED STORMWATER. SUBSURFACE STRUCTURES ARE HIGHLY PRONE TO CLOGGING. PRE-TREATMENT IS ALWAYS REQUIRED FOR THIS SITE.  
 THE FOLLOWING INSPECTION PLAN SHALL BE PERFORMED:  
 1. STRUCTURAL CONTROLS: INSPECT QUARTERLY OR AS NEEDED.  
 2. DISCHARGE POINTS: INSPECT QUARTERLY OR AS NEEDED.  
 3. STORAGE AREAS: INSPECT EVERY QUARTERLY OR AS NEEDED.  
 4. STABILIZATION MEASURES: INSPECT ANNUALLY OR AS NEEDED.
  - CONSTRUCTION INSPECTIONS: CONSTRUCTION INSPECTIONS SHALL BE PERFORMED BY PERSONNEL FROM THE SITE CONTRACTOR AND/OR THE ENGINEER OF RECORD. INSPECTION FORMS SHALL BE EXECUTED FOR EACH CORRESPONDING INSPECTION.  
 THE FOLLOWING INSPECTION PLAN SHALL BE PERFORMED:  
 1. STABILIZATION MEASURES: INSPECT MONTHLY OR AS NEEDED.  
 2. STRUCTURAL CONTROLS: INSPECT EVERY 14 DAYS OR AS NEEDED.  
 3. DISCHARGE POINTS: INSPECT EVERY 14 DAYS OR AS NEEDED.  
 4. CONSTRUCTION ENTRANCES: INSPECT EVERY 14 DAYS OR AS NEEDED.  
 5. STORAGE AREAS: INSPECT EVERY 14 DAYS OR AS NEEDED.  
 6. ALL AREAS OF EROSION AND SEDIMENTATION CONTROL SHALL BE INSPECTED AFTER MAJOR STORM EVENTS.  
 POST-CONSTRUCTION INSPECTIONS: CONSTRUCTION INSPECTIONS SHALL BE PERFORMED BY THE OWNER OR OPERATOR OR THEIR REPRESENTATIVE IN ACCORDANCE WITH THE REGULATIONS OF THE MAJOR STORMWATER REGULATIONS. INSPECTION FORMS SHALL BE EXECUTED FOR EACH CORRESPONDING INSPECTION.  
 THE FOLLOWING INSPECTION PLAN SHALL BE PERFORMED:  
 1. STRUCTURAL CONTROLS: INSPECT QUARTERLY OR AS NEEDED.  
 2. DISCHARGE POINTS: INSPECT QUARTERLY OR AS NEEDED.  
 3. STORAGE AREAS: INSPECT EVERY QUARTERLY OR AS NEEDED.  
 4. STABILIZATION MEASURES: INSPECT ANNUALLY OR AS NEEDED.

No.	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



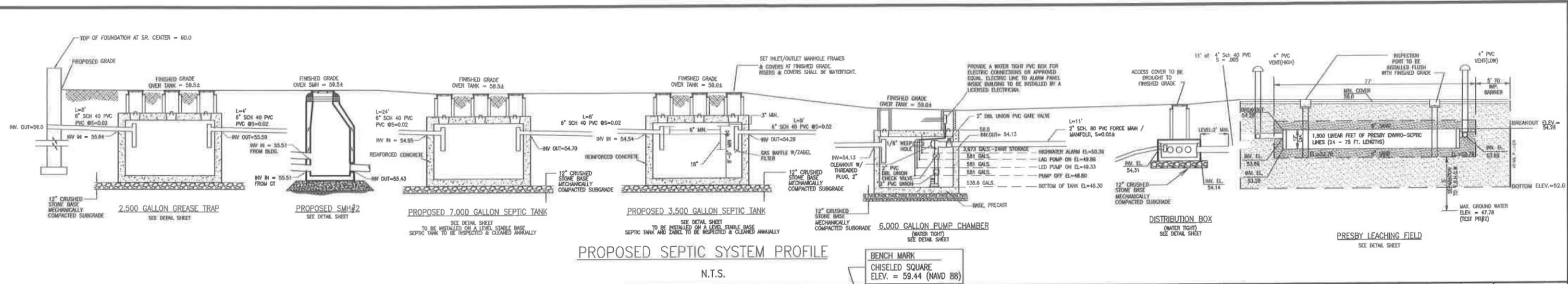
APPLICANT  
**TOWN OF SEEKONK**  
 BUILDING COMMITTEE  
 SENIOR CENTER  
 SEEKONK MASSACHUSETTS



**MBL**  
 LAND DEVELOPMENT & PERMITTING, CORP.  
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL SOLUTIONS  
 480 TURNPIKE STREET  
 SOUTH EASTON, MA 02376  
 P: 508.237.2746 F: 508.237.2758  
 EMAIL: MBLDPO@COMCAST.NET  
 WEB: www.mbl.comcastbiz.net

SEDIMENTATION & EROSION CONTROL PLAN  
**SEEKONK SENIOR CENTER**  
 100 PECK STREET  
 ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0  
 SEEKONK MASSACHUSETTS

PROJ. No.: 2011-032  
 DATE: June 26, 2013  
**C-6.0**



**SEWAGE DISPOSAL SYSTEM NOTES**

**Design Data**

**SR CENTER DESIGN FLOW**

FUNCTION HALL = 135 SEATS x 15 GAL/DAY = 2,025 GPD (INCLUDES LECTURE AREA)

OFFICE SPACE = 2,600 S.F. x (75 GPD)/1,000 S.F. = 195 GPD (TOTAL PER TITLE V = 200 GPD)

NURSE'S OFFICE = 1 @ 250 GPD

TOTAL DESIGN FLOW = 2,475 GPD

**ANIMAL SHELTER DESIGN FLOW**

KENNELS - 16 @ 50 GAL/DAY = 800 GPD

OFFICE & WAITING AREA 1260 S.F. @ 750 GPD/1000 SF = 945 GPD (MAX PER TITLE V = 200 GPD)

TOTAL DESIGN FLOW = 1,000 GPD

**TOTAL DESIGN FLOW OF SR CENTER AND ANIMAL SHELTER = 3,475 GPD**

SEPTIC TANK FOR 48 HR. STORAGE, 3,475 GPD x 20HR = 6,950 GALLONS. USE 7,000 GALLON TANK REQUIRED.

MIN. 7,000 GPD FOR 1ST TANK OR COMP. 3,475 GPD FOR 2ND TANK OR COMP.

COMPARTMENT #2 = 1 DAY x 3,475 GPD USE 3,500 GALLON TANK

USE 2 HEAVY DUTY TANKS

1ST TANK = 2,000 GALLON

2ND TANK = 1,500 GALLON

GREASE TRAP SIZED BASED ON 24 HOUR FLOW FROM FUNCTION HALL SEATING REQUIRED

FLOW = 3,000 GPD. USE 2,500 GALLON GREASE TRAP

LEACHING AREA CLASS 1 SOILS

3,475 GPD @ 0.74 GPD/SF = 4,695.94 SF REQUIRED OR 4,696 SF

**PRESBY GENERAL NOTES:**

- All piping for the presby system shall be 4" diameter Schedule 40 NSF polyvinyl Chloride (PVC) plastic ASTM D2665, with water tight joints. (not applicable to specified Presby piping)
- Design Calculations: System dimensions determined from the Company's Massachusetts Enviro-Septic Wastewater Treatment System Design Reference Guide Table A: Linear Footage w/force rate 1-10 only/feet, 100 G.P.D. requires 50' of pipe table C: length & width, 75' pipe length @ 1.50' OC requires 33' min field width
- The system shall be inspected annually by an operator trained by the Company. Results of the inspections must be submitted to the approving authority.
- The system must be installed by a person trained by the Company.
- Prior to the issuance of a Certificate of Compliance, the System Owner shall record at the appropriate Registry of Deeds a statement disclosing both the existence of an alternative septic system subject to General Use Approval on the property and DEP's approval of the system.
- 3,475gpd/100 gpd/50' = 1,737.5 feet of pipe required At 75' length, 1,737.5' requires 23.18 or 24 lineal width of field with 24 lines @ 1.5' OC = 36' x 1' each side = 36'
- Construct sewage disposal system as designed and in accordance with the State Environmental Code - Title 5 and the Rules and Regulations of the State Board of Health, as applicable to new designs.
- Presby System to be installed in accordance with product design and installation manual, state and local regulations. For product information or the nearest dealer, contact Presby Environmental, Inc., 143 Airport Road, Westfield, NY 03098. Phone 1-800-473-5228. www.presbyenvironmental.com
- Minimum of 6" of medium to coarse sand, with less than 20% passing a #20 sieve, required around circumference of enviro-septic pipes ( See design and installation manual for complete sand and fill specifications ) Contractor must provide "Bill of Lading" to Owner and Local Authority (BOH) concerning sand

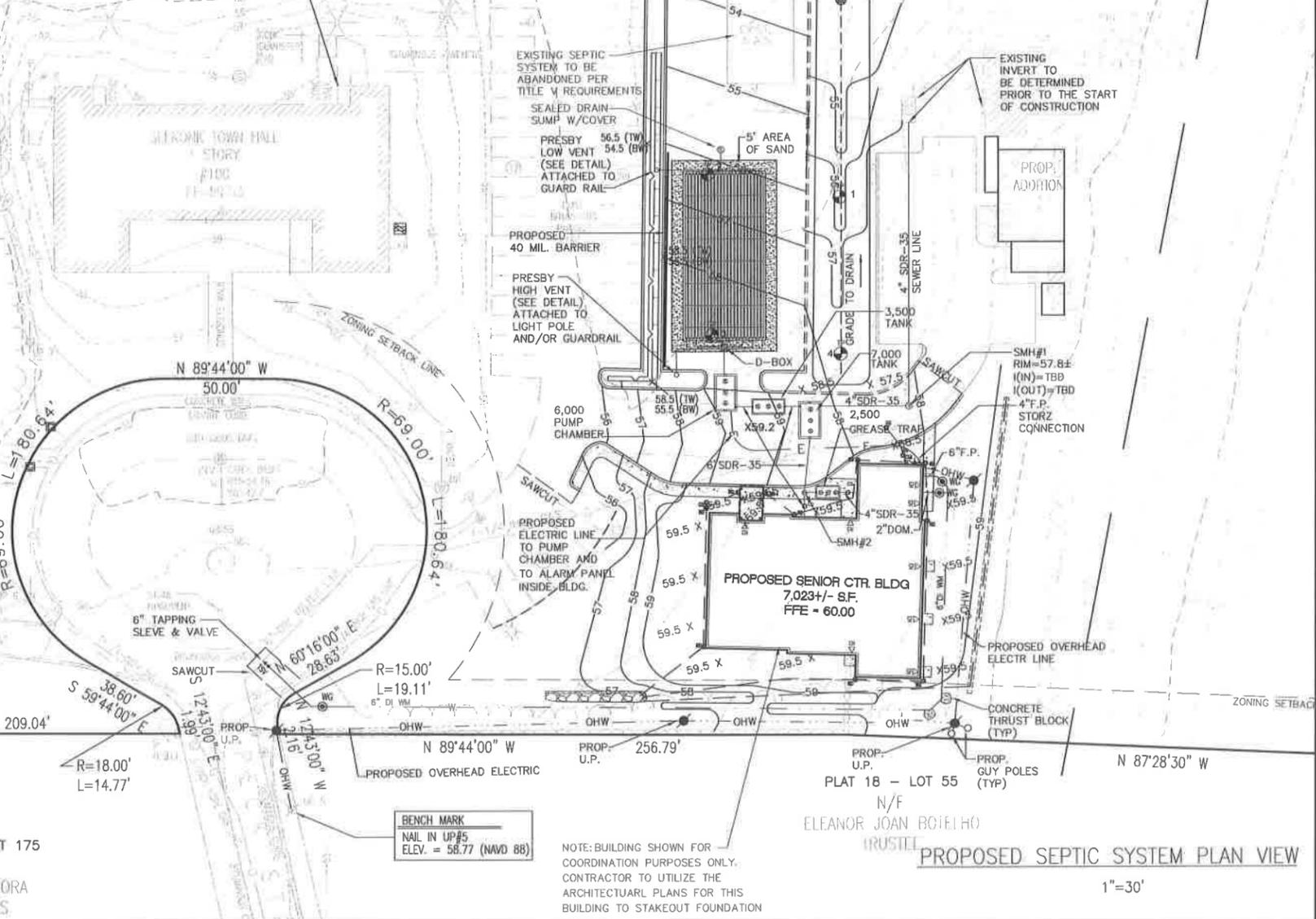
**15.221. GENERAL CONSTRUCTION REQUIREMENTS FOR ALL SYSTEM COMPONENTS**

(1) ALL TANKS, INCLUDING SEPTIC TANKS, DISTRIBUTION BOXES, DOSING CHAMBERS AND GREASE TRAPS SHALL BE EITHER:

(A) WATERPROOF THROUGH MANUFACTURER'S SPECIFICATION AND WARRANTY, OR

(B) MADE WATERPROOF BY MANUFACTURER, EQUIPMENT SUPPLIER OR INSTALLER USING ASPHALT OR SYNTHETIC POLYMER SEALER SPECIFIED BY THE CONCRETE OR SYNTHETIC MATERIAL MANUFACTURER

(5) SHALL BE CAPABLE OF WITHSTANDING VEHICULAR H-20 LOADING.



**NOTES**

- ALL COMPONENTS WILL BE BY CONCRETE PRODUCTS, INC. OR APPROVED EQUAL.
- ALL PIPE WILL BE 4" SCH 40 PVC UNLESS OTHERWISE NOTED
- MATERIALS AND METHODS OF CONSTRUCTION SHALL CONFORM TO THE REQUIREMENTS OF TITLE 5, MASS. ENVIRONMENTAL CODE AND THE REQUIREMENTS OF THE LOCAL BOARD OF HEALTH
- ALL OF THE "A" AND "B" LAYERS SHALL BE REMOVED AS PER 310 OR 15.225 (5) FOR A DISTANCE OF 5' FROM ALL SIDES OF THE PROPOSED LEACHING SYSTEM AND FROM BENEATH THE LEACHING SYSTEM TO AN ELEVATION OF 62.2' OR UNTIL NATURALLY OCCURRING PERVIOUS MATERIAL IS REACHED AS PER 310 CUR. 15.250 AND THE LOCAL B.O.H. OFFICER. AFTER THE EXCAVATION IS COMPLETE, THE AREA WILL BE BACKFILLED TO THE DESIGN ELEVATION AS PER 310 CUR. 15.255 (3) AND THE LOCAL B.O.H. OFFICER.
- ALL UTILITIES SHOWN ARE PLOTTED FROM THE BEST AVAILABLE INFORMATION AND ARE TO BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION.
- THIS PLAN IS DESIGNED TO MAXIMIZE FEASIBLE COMPLIANCE AS PER CUR. 310 15.404 AND 15.406
- ANY CHANGES OR VARIATIONS FROM THIS PLAN MUST BE APPROVED, IN WRITING, PRIOR TO CONSTRUCTION BY BOTH MBL LAND DEVELOPMENT & PERMITTING, CORP. AND THE LOCAL B.O.H.
- ALL COMPONENTS SHALL BE CAPABLE OF SUPPORTING AASHTO HS20-44 LOADS.
- ACCESS SHALL BE PROVIDED BY 24" DIAMETER CAST IRON FRAMES AND GRATES ADJUSTED TO GRADE AS REQUIRED BY BOARD OF HEALTH. RISER AN GRATES TO BE MADE WATER TIGHT. UNUSED PORTS AND COVERS OF SEPTIC TANK TO BE MADE WATER TIGHT PRIOR TO BACK FILLING.

**PRESBY NOTES**

- ALL PIPING SHALL BE 4" DIAMETER SCHEDULE 40 NSF POLYVINYL CHLORIDE (PVC) PLASTIC ASTM D2665, WITH WATER TIGHT JOINTS (NOT APPLICABLE TO SPECIFIED PRESBY PIPING) UNLESS OTHERWISE NOTED.
- THE SYSTEM SHALL BE INSPECTED ANNUALLY BY AN OPERATOR TRAINED BY THE COMPANY. RESULTS OF THE INSPECTIONS MUST BE SUBMITTED TO THE APPROVING AUTHORITY.
- THE SYSTEM MUST BE INSTALLED BY A PERSON TRAINED BY THE COMPANY.
- PRIOR TO THE ISSUANCE OF A CERTIFICATE OF COMPLIANCE, THE SYSTEM OWNER SHALL RECORD AT THE APPROPRIATE REGISTRY OF DEEDS A STATEMENT DISCLOSURING BOTH THE EXISTENCE OF AN ALTERNATIVE SEPTIC SYSTEM SUBJECT TO GENERAL USE APPROVAL ON THE PROPERTY AND DEP'S APPROVAL OF THE SYSTEM.
- 4" DIA. PERFORATED INSPECTION PORT TO BOTTOM OF SYSTEM SAND AND TURBOCAP WITHIN 3" OF FINAL GRADE. WRAP PIPE WITH PERMEABLE GEOTEXTILE FABRIC TO ELIMINATE SAND INFILTRATION.
- ELEVATION OF FOUNDATION OUTLET PIPE SHOULD BE VERIFIED BY THE CONTRACTOR PRIOR TO CONSTRUCTION OF SYSTEM.
- CONSTRUCTION AND MATERIALS OF PUMP CHAMBER SHALL BE IN ACCORDANCE WITH 310 CUR. 15.221 AN 15.226
- PUMP TO BE A GOLDS MODEL MYERS SRM 4/10 HP. OR APPROVED EQUAL.
- PUMP ALARM TO BE LOCATED IN BUILDING WHICH IT SERVES AND BE POWERED BY A CIRCUIT SEPARATE FROM THE CIRCUIT TO THE PUMP.
- PUMP ALARM TO CONSIST OF AN AUDIOTARY AND VISUAL ALARM.
- TO PREVENT DAMAGE FROM FREEZING FORCE MAIN TO MAINTAIN CONSTANT SLOPE BACK TO PUMP CHAMBER.
- 1/4" WEEP HOLE TO BE DRILLED UP GRADIENT OF FORCE MAIN INTO PUMP CHAMBER.
- PUMP CHAMBER SHALL BE A 6,000 GAL. SEPTIC TANK BY OLD CASTLE, INC. OR APPROVED EQUAL.

**SYSTEM COMPONENT MARKING**

Pursuant to Section 15.221 of the revised Title 5 Regulations - All system components shall be marked with magnetic marking tape or a comparable means in order to locate them once buried.

**INSPECTION SCHEDULE**

- Bottom of Hole Inspection.
- System inspection just prior to system backfilling.
- Final grading inspection.

**NOTE:**

For Design Elevations, Pump Chamber Calculations and Test pit information on Septic System Sheet C-8.0

**CERTIFICATION**

THIS SYSTEM WAS DESIGNED BY BRIAN M. DUNN, CERTIFIED PRESBY ENVIRONMENTAL DESIGNERS. CERT. #8861MAES

BRIAN M. DUNN  
CERTIFICATE NO. 8861MAES

No.	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER: MBL  
CHIEF DESIGNER: MBL  
REVIEWED BY: DATE:

SEAL

SEAL

JAMES E. MILLER  
CIVIL  
No. 31084  
EXPIRES 12/31/2014

APPLICANT

TOWN OF SEEKONK  
BUILDING COMMITTEE  
SENIOR CENTER

SEEKONK MASSACHUSETTS

SCALE:

HORIZ: 1"=30'

VERT: 1"=30'

DATUM:

HORIZ: 1985

VERT: 1985

30 15 0 30

GRAPHIC SCALE

**MBL**

LAND DEVELOPMENT & PERMITTING, CORP.  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P. 508.297.2746 F. 508.297.2756  
EMAIL: MBLDP@COMCAST.NET  
WEB: www.mbl.comcastbiz.net

SEPTIC SYSTEM PLAN

SEEKONK SENIOR CENTER  
100 PECK STREET  
ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0

SEEKONK MASSACHUSETTS

PROJ. No. 2011-032  
DATE: June 26, 2013

**C-7.0**

X:\2011\2011-032\CIVIL\LOT-032 SR CENTER PLANS 6182013.dwg 6/26/2013 9:15:37 AM EDT  
 CTD  
 LMAN  
 MBLVIEW  
 LDCS

**OBSERVATION HOLE DATA**

INDICATES SIEVE TEST

TEST PIT # 1 GRD. EL. 54.78 TEST BY: JIM MILLER  
 CW. EL. 47.78 WITNESSED BY: BETH HALLAL  
 DATE: 05-29-11 MOTTUNG. EL. N/A CERTIFIED BY: JIM MILLER

ELEV.	SURFACE DEPTH (ft)	SOIL HORIZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
53.92	0-14	A	SANDY LOAM	10YR 3/4		
52.78	14-24	B	SAND	10YR 4/6		
44.78	24-120	C	SAND	10YR 7/4		

WATER WEeping @ 84"(47.78) PERC RATE <2 MIN/INCH  
 WATER STANDING @ 98"(46.78)

TEST PIT # 2 GRD. EL. 54.20 TEST BY: JIM MILLER  
 CW. EL. 47.28 WITNESSED BY: BETH HALLAL  
 DATE: 05-29-11 MOTTUNG. EL. N/A CERTIFIED BY: JIM MILLER

ELEV.	SURFACE DEPTH (ft)	SOIL HORIZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
53.20	0-12	A	SANDY LOAM	10YR 3/4		
52.20	12-24	B	SAND	10YR 4/6		
44.20	24-120	C	SAND	2.5YR 7/4		

WATER OBSERVED @ 77"(47.78) PERC RATE <2 MIN/INCH

TEST PIT # 3 GRD. EL. 55.10 TEST BY: JIM MILLER  
 CW. EL. 47.48 WITNESSED BY: BETH HALLAL  
 DATE: 05-29-11 MOTTUNG. EL. N/A CERTIFIED BY: JIM MILLER

ELEV.	SURFACE DEPTH (ft)	SOIL HORIZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
54.43	0-8	A	SANDY LOAM	10YR 3/4		
53.35	8-21	B	SAND	10YR 4/6		
44.43	21-120	C	SAND	2.5YR 7/4		

WATER OBSERVED @ 87"(47.48) PERC RATE <2 MIN/INCH

TEST PIT # 4 GRD. EL. 56.90 TEST BY: JIM MILLER  
 CW. EL. 51.56 WITNESSED BY: BETH HALLAL  
 DATE: 05-29-11 MOTTUNG. EL. N/A CERTIFIED BY: JIM MILLER

ELEV.	SURFACE DEPTH (ft)	SOIL HORIZ.	SOIL TEXTURE	SOIL COLOR	SOIL MOTTLING	OTHER
97.83	0-26	A	SANDY LOAM	10YR 3/4		
96.50	26-42	B	SAND	10YR 4/6		
90.00	42-120	C1	SAND	2.5YR 7/4		
90.00	42-120	C2	SAND	2.5YR 7/2		

WATER OBSERVED @ 84"(51.56) PERC RATE <2 MIN/INCH

**Elevation Schedule**

	ELEVATION
TOP OF FOUNDATION - SENIOR CENTER	60.00
SEWER INVERT OUT OF FOUNDATION - SENIOR CENTER	56.00
SEWER INVERT INTO PROP. GREASE TANK	55.84
SEWER INVERT OUT OF PROP. GREASE TANK	55.59
SEWER INVERT INTO PROP. SMH	55.51
SEWER INVERT OUT OF PROP. SMH	55.43
SEWER INVERT INTO PROP. SEPTIC TANK#1	54.95
SEWER INVERT OUT OF PROP. SEPTIC TANK#1	54.70
SEWER INVERT INTO PROP. SEPTIC TANK#2	54.54
SEWER INVERT OUT OF PROP. SEPTIC TANK#2	54.29
SEWER INVERT INTO PUMP CHAMBER	54.13
SEWER INVERT OUT OF PUMP CHAMBER	54.13
SEWER INVERT INTO DIST. BOX	54.31
SEWER INVERT OUT OF DIST. BOX	54.14
SEWER INVERT INTO PRESBY FIELD	53.69
BREAKOUT OUT ELEV (TOP OF PRESBY PIPE)	54.28
BOTTOM OF LEACHING FIELD	52.78
WATER TABLE (TP 2 - WEEPING)	47.78

**Pump Chamber Design Data**

TANK SIZE REQUIRED: 4,853 GALLONS  
 (1,378 + 3,475 GALLONS)  
 TANK SIZE PROVIDED: 6,000 GAL TANK  
 (8' x 16' INSIDE DIMENSIONS; 1,077.2 GALLONS PER FOOT)  
 DESIGN DOSES PER DAY: 3,475 GPD / 6 DOSES  
 579.1 GAL/DOSE  
 NETWORK DRAINBACK VOLUME: 7.21 GALLONS  
 TOTAL DOSE VOLUME: 566.3 GALLONS  
 MINIMUM DRAWDOWN: 6-14 INCHES PER PUMP  
 MANUFACTURER SPECIFICATIONS  
 FREEBOARD: ALLOW 3 INCH MINIMUM  
 TO HIGH WATER ALARM  
 EMERGENCY STORAGE VOLUME: 3,673 GALLONS (3.41 FEET)  
 ABOVE HIGHWATER ALARM  
 REQUIRED STORAGE VOLUME: 3,475 GALLONS (3.22 FEET)  
 TDH = STATIC + FRICTION(H): 6.01 FT. + 0.32 FT. = 6.33 FT.

**Pump and Control Panel Specifications**

PROVIDE AN MYERS DUPLEX PUMP CONTROLLER, 115/230 VOLTS, NEMA 4 ENCLOSURE, ELAPSED TIME METERS (2) AND CYCLE COUNTER (2), OR APPROVED EQUAL. MOUNT CONTROL PANEL INSIDE BUILDING AND EQUIP WITH AUDIO/VISUAL HIGH WATER ALARM HORN AND LIGHT.  
 PROVIDE A DUPLEX SUBMERSIBLE EFFLUENT PUMPING SYSTEM: 2 MYERS PUMPS, MODEL SRM4 SERIES, 4/10 HP, 2" DISCHARGE, 230 VOLT SINGLE-PHASE MOTOR WITH A RATED CAPACITY OF 39.1 GPM AT A TOTAL DYNAMIC HEAD OF 6.33 FEET, OR APPROVED EQUAL.  
 THE ALARM AND PUMP SHALL BE ON SEPARATE DEDICATED ELECTRICAL CIRCUITS.  
 ELECTRICAL PERMITS ARE REQUIRED.  
 ALL WORK SHALL MEET THE STATE ELECTRICAL CODE.  
 CONTRACTOR/INSTALLER SHALL VERIFY PUMPS ARE SIZED PROPERLY BEFORE ORDERING AND INSTALLING.

**Bouyancy Calculations**

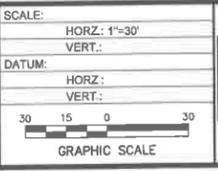
NOTE: ESTIMATED SEASONAL HIGH GROUNDWATER ELEVATION OF 47.78 FEET (WEEPING TEST PIT #2 USED FOR CALCULATIONS).  
 SEPTIC TANK (7,000 GAL) ROTONDO  
 UPLIFT FORCE:  
 TANK BOTTOM EL. = 47.83 ft  
 (47.78 ft - 47.53 ft) (10 ft x 17 ft) (62.4 LB/CF) = 2,652 LB  
 DOWNWARD FORCE:  
 TANK WEIGHT = 66,400 LB  
 SOIL WEIGHT = [(57.00 ft - 54.78 ft) ((10 ft x 17 ft) - 2(3.14)(1)(1))] 100 LB/CF = 37,112 LB  
 TOTAL = 66,400 LB + 37,112 LB = 103,512 LB  
 103,512 > 2,652 LB. OK.  
 SEPTIC TANK (3,500 GAL) ROTONDO  
 UPLIFT FORCE:  
 TANK BOTTOM EL. = 48.04 ft  
 NO BOUYNACY FORCE ACTING UPON TANK - OK  
 PUMP CHAMBER (6,000 GAL)  
 UPLIFT FORCE:  
 TANK BOTTOM EL. = 47.05 ft  
 (47.78 ft - 47.05 ft) (17 ft x 10 ft) (62.4 LB/CF) = 7,744 LB  
 DOWNWARD FORCE:  
 TANK WEIGHT = 63,000 LB  
 SOIL WEIGHT = [(56.00 ft - 55.05 ft) ((10 ft x 17 ft) - 3(3.14)(1)(1))] 100 LB/CF = 15,208 LB  
 TOTAL = 15,208 LB + 63,000 LB = 78,208 LB  
 78,208 > 7,744 LB. OK.

**CERTIFICATION**  
 THIS SYSTEM WAS DESIGNED BY BRIAN M. DUNN, CERTIFIED PRESBY ENVIRONMENTAL DESIGNERS. CERT. #8851MAES



PROJ. MANAGER:	MBL	SEAL
CHIEF DESIGNER:	MBL	SEAL
REVIEWED BY:	DATE	

APPLICANT  
 TOWN OF SEEKONK  
 BUILDING COMMITTEE  
 SENIOR CENTER  
 SEEKONK MASSACHUSETTS



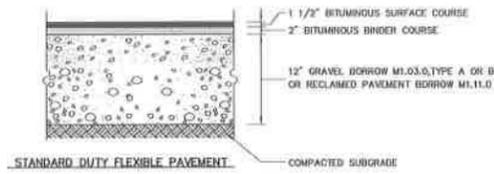
**MBL**  
 LAND DEVELOPMENT & PERMITTING, CORP.  
 LAND DEVELOPMENT, TRANSPORTATION AND ENVIRONMENTAL ARCHITECTURE  
 480 TURNPIKE STREET  
 SOUTH EASTON, MA 02375  
 P 508.297.2748 F 508.297.2756  
 EMAIL: MBLDP@COMCAST.NET  
 WEB: www.mbl.comcastblz.net

SEPTIC SYSTEM PLAN  
 SEEKONK SENIOR CENTER  
 100 PECK STREET  
 ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0  
 SEEKONK MASSACHUSETTS

PROJ. No.: 2011-032  
 DATE: June 26, 2013

C-8.0

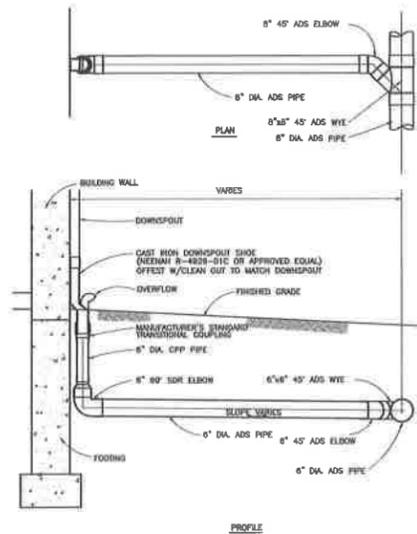
UCS: LMAN: CTE: IMS VIEW: X:\2011\2011-032\CIVIL\2011-032 SR CENTER PLANS 6182013.dwg.dwg 6/26/2013 9:15:37 AM EDT



**COMPOSITION AND COMPACTION ACCEPTANCE TESTS**

- OBTAIN SAMPLES FROM PLANT TO INDICATE CONFORMANCE WITH M3.11.09
- PAVEMENT DENSITY AS OUTLINED IN M3.11.09
- ALL SAMPLES TO BE TAKEN IN ACCORDANCE WITH AASHTO T230
- MATERIALS SHALL MEET OR EXCEED THE REQUIREMENTS SPECIFIED IN SECTION M3.11.00 DIVISION III, MATERIALS AND THE FOLLOWING SUBSECTIONS:  
 MINERAL AGGREGATE: M3.11.04 BITUMINOUS MATERIALS: M3.11.06  
 MINERAL FILLER: M3.11.05 COMPOSITION OF BASE COURSE: M3.11.02
- THE BITUMINOUS CONCRETE BASE COURSE SHALL BE CONSTRUCTED IN ACCORDANCE WITH RELEVANT SECTIONS/PROVISIONS OF SECTION 460 FOR CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1
- CLASS I BITUMINOUS PAVEMENT, TYPE I-1 REQUIRED THE SAME TESTING AS BASE COURSE AND SHALL HAVE A MINIMUM OF 95% COMPACTION, TESTING TO BE COMPLETED BY METHODS OUTLINED IN M3.11.00

**BITUMINOUS CONCRETE PAVEMENT SECTIONS**  
NOT TO SCALE

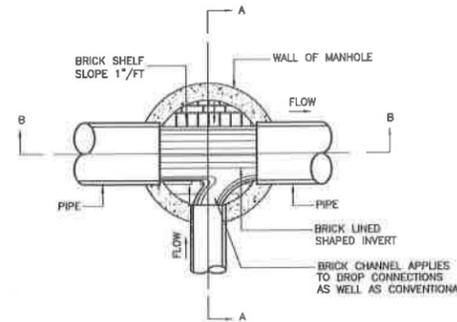


**ROOF DRAIN DETAIL**  
NOT TO SCALE



**DRAIN MANHOLE**  
NOT TO SCALE

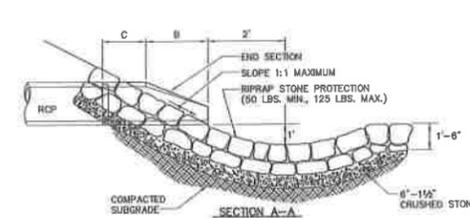
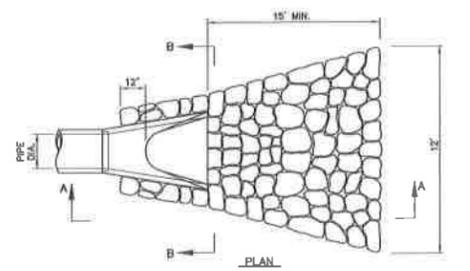
- NOTES:**
- ALL SECTIONS SHALL BE DESIGNED FOR H-20 LOADING.
  - COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12\"/>



**SEWER MH CHANNEL DETAIL**  
NOT TO SCALE

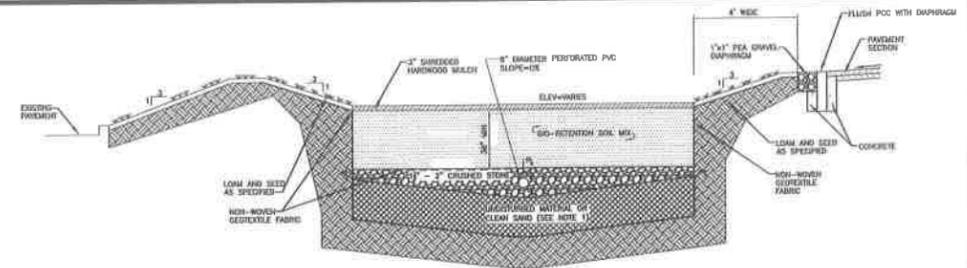
**DIMENSIONAL TABLE**

PIPE DIA.	A	B	C	D	E	R
12"	4"	2'-0"	4'-7 1/2"	2'-0"	2'	9"
15"	6"	2'-3"	3'-10"	2'-8"	2 1/4"	11"
18"	8"	2'-3"	3'-10"	3'-0"	2 1/2"	12"
24"	8 1/2"	3'-7 1/2"	2'-6"	4'-0"	3"	14"
30"	12"	4'-6"	1'-7 3/4"	5'-0"	3 1/2"	15"
36"	15"	5'-3"	2'-10 3/4"	6'-0"	4"	20"
42"	21"	5'-3"	2'-11"	6'-6"	4 1/2"	22"
48"	24"	6'-0"	2'-2"	7'-0"	5"	22"
54"	27"	5'-5"	2'-11"	7'-6"	5 1/2"	24"
60"	30"	5'-0"	3'-3"	8'-0"	6"	24"



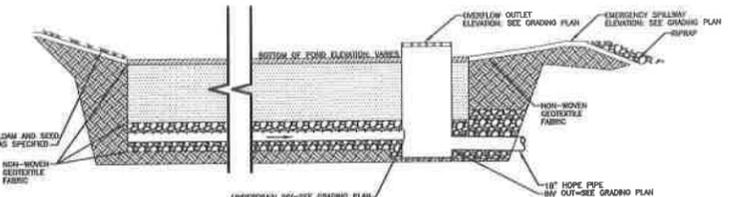
**FLARED END SECTION W/OUTLET PROTECTION**  
NOT TO SCALE

- NOTES:**
- THE FLARED END SECTION PIPE JOINT SHALL BE SIMILAR TO THE MAIN RUN OF PIPE JOINTS.
  - FLARED END SECTIONS SHALL CONFORM AS SHOWN IN THE TABLE OR AS APPROVED BY THE ENGINEER.

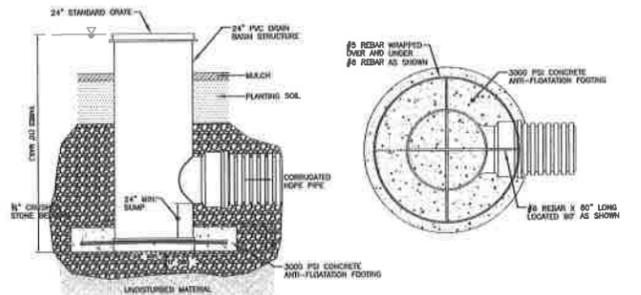


**BIO-RETENTION POND TYPICAL SECTIONS**  
NOT TO SCALE

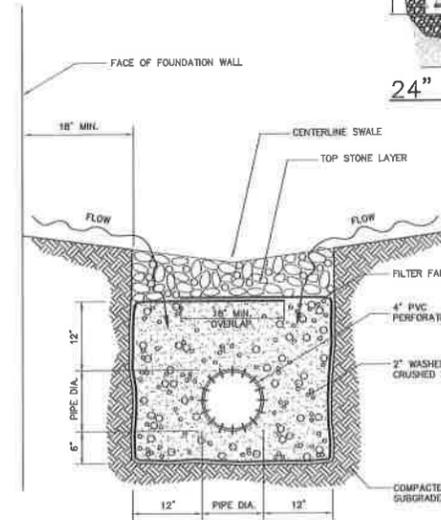
- NOTES:**
- IF UNSUITABLE MATERIAL IS OBSERVED BELOW THE POND SYSTEM AT A MINIMUM IT SHALL BE REMOVED TO A DEPTH OF TWO FEET AND REPLACED WITH CLEAN SAND AND THE DIMENSION SHALL BE NOTED.
  - SOIL WITHIN BIORETENTION AREA TO BE PLACED, DO NOT COMPACT, LIFT TO BE LIGHTLY WATERED TO ENCOURAGE NATURAL COMPACTION
  - ALL STONE MATERIAL SHALL BE DOUBLE WASHED



**BIO-RETENTION POND SECTION AT OUTLET**  
NOT TO SCALE



**24\"/> NYLOPLAST DRAIN BASIN CONTROL STRUCTURE**  
NOT TO SCALE



**INFILTRATION TRENCH DRAIN**  
NOT TO SCALE

UCS: LMAN: CTE: 6/25/2013 2:43:23 PM EDT X:\2011\2011-032\CIVIL\LOT\2011-032 SR CENTER PLANS 6182013.dwg

No.	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE

SEAL

**APPLICANT**  
TOWN OF SEEKONK  
BUILDING COMMITTEE  
SENIOR CENTER

SEEKONK MASSACHUSETTS

SCALE:

HORIZ: N.T.S.  
VERT: \_\_\_\_\_

DATUM:

HORIZ: \_\_\_\_\_  
VERT: \_\_\_\_\_

**MBL**

LAND DEVELOPMENT & PERMITTING CORP.  
LAND REGULATORY, PLANNING AND ENVIRONMENTAL SOLUTIONS  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P 508.297.2746 F 508.297.2756  
EMAIL: MBLDIP@COMCAST.NET  
WEB: www.mbl.comcastbiz.net

**DETAILS**

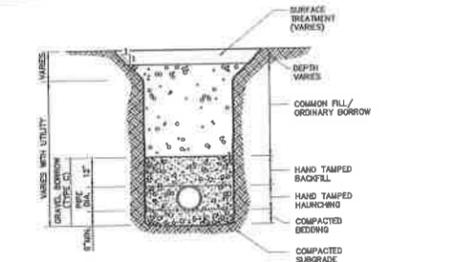
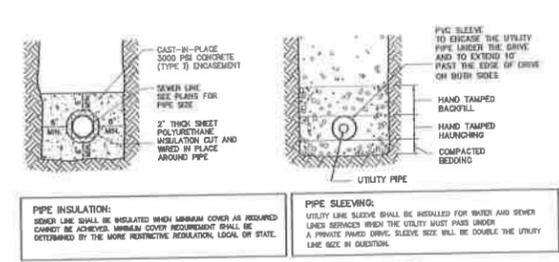
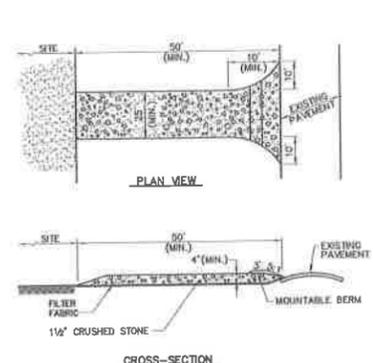
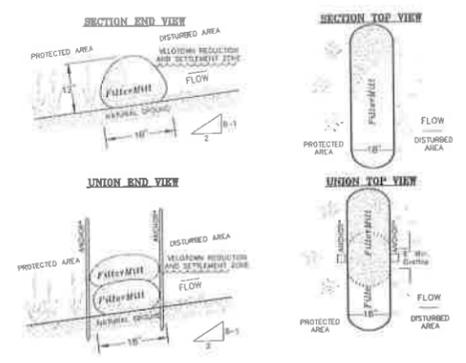
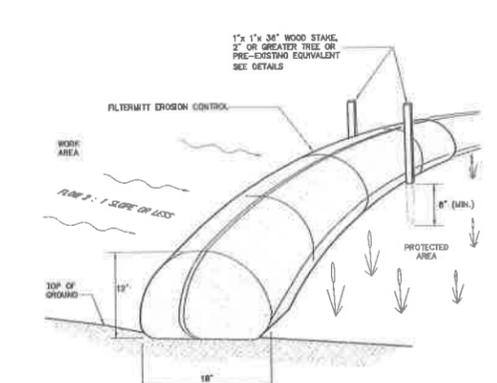
SEEKONK SENIOR CENTER  
100 PECK STREET  
ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0

SEEKONK MASSACHUSETTS

PROJ No.: 2011-032  
DATE: June 26, 2013

**C-9.0**

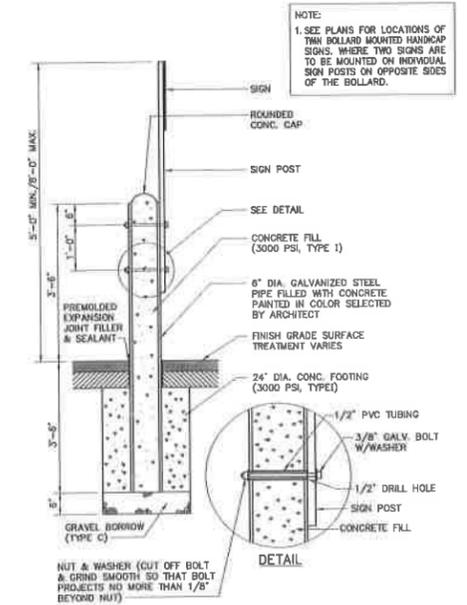




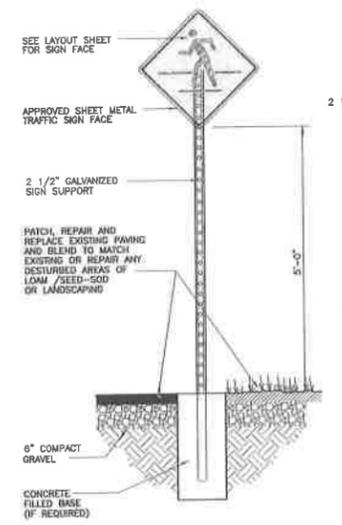
**FILTER MITT EROSION CONTROL DETAIL**  
NOT TO SCALE

**STABILIZED CONSTRUCTION ENTRANCE DETAIL**  
NOT TO SCALE

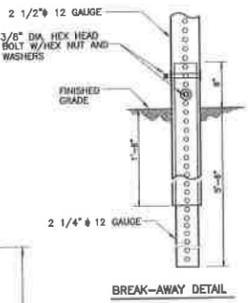
**UTILITY TRENCH DETAIL**  
NOT TO SCALE



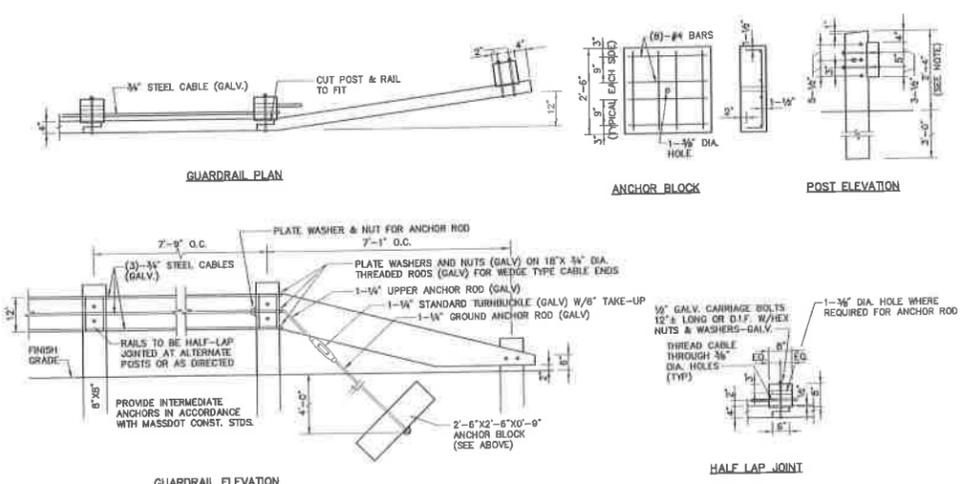
**BOLLARD MOUNTED SIGN DETAIL**  
NOT TO SCALE



**TRAFFIC SIGN POST DETAIL**  
NOT TO SCALE



**SIGN PANEL ATTACHMENT**



**TIMBER GUARDRAIL DETAIL**  
NOT TO SCALE

- WOOD RAILS TO BE LONGLEAF YELLOW PINE OR DOUGLAS FIR—STRUCTURAL GRADE OR BETTER.
- POSTS TO BE DOUGLAS FIR, OR SPRUCE—STRUCTURAL GRADE OR BETTER.
- ALL TIMBERS SHALL BE PRESSURE TREATED.

**FilterMitt COMPONENTS:**  
OUTSIDE CASING: 100% organic heptan.  
FILLER INGREDIENT: FilterMitt which is a blend of coarse and fine compost and "hardwood" wood.  
Particle sizes: 100% passing a 3" screen; 90-100% passing a 1" screen; 70-100% passing a 0.75" screen; 30-70% passing a 0.25" screen.  
Weight: Approx. 850 lbs./cu. yd. (Ave. 30 lbs./ft.<sup>3</sup>)

**FilterMitt INSTALLATION:**  
With the newest technology and equipment, sections can be constructed on site in lengths from 1' to 100'.  
Sections can also be delivered to the site in lengths from 1' to 8'.  
The flexibility of FilterMitt allows it to conform to any contour or terrain while holding a slightly oval shape at 12" high by 18" wide.  
Where section ends meet, there shall be an overlap of 6" or greater. Both ends shall be anchored (look stakes, trees, etc.) to stabilize the union.

**NOTES:**  
1. ENTRANCE WIDTH SHALL BE A TWENTY-FIVE (25) FOOT MINIMUM, BUT NOT LESS THAN THE FULL WIDTH AT POINTS WHERE INGRESS OR EGRESS OCCURS.  
2. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH SHALL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY. BERM SHALL BE PERMITTED.  
PERIODIC INSPECTION AND MAINTENANCE SHALL BE PROVIDED AS NEEDED.

For more information visit:  
[www.greenstac.com](http://www.greenstac.com)  
67 Collins St.  
GreenStac.com, Inc.  
P.O. Box 727  
Westport, MA 02093  
(508) 384-7140

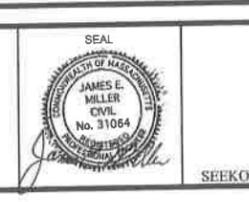
**VARIATION:**  
1"x1/2"x3/8" OAK STAKE OR 2" OR GREATER TREE OR OTHER PRE-EXISTING EQUIVALENTLY ANCHORED OBJECT

2:1 SLOPES OR LESS

C:\CADTEMP\2011-032 SR CENTER PLANS 6182013.dwg\_1\_2\_2516 (2).dwg 6/25/2013 1:38:07 PM EDT

No.	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER:	MBL	SEAL
CHIEF DESIGNER:	MBL	SEAL
REVIEWED BY:	DATE	



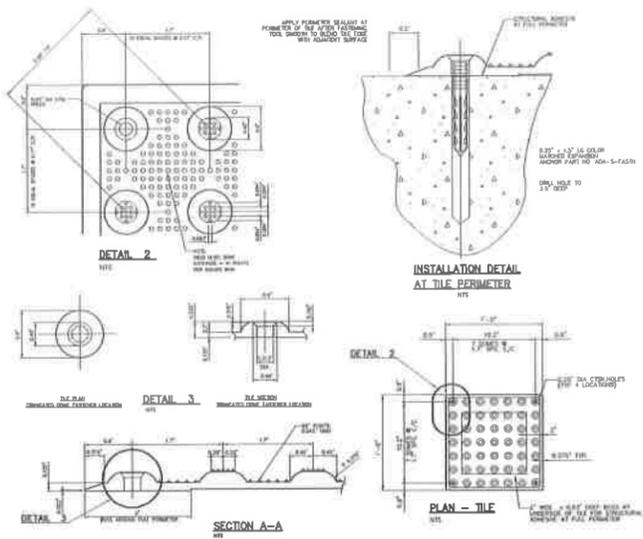
**APPLICANT**  
TOWN OF SEEKONK  
BUILDING COMMITTEE  
SENIOR CENTER  
SEEKONK MASSACHUSETTS

SCALE:	HORZ.: N.T.S.
	VERT.:
DATUM:	HORZ.:
	VERT.:
20 10 0 20 GRAPHIC SCALE	

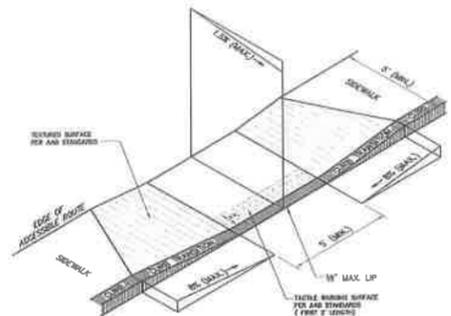
**MBL** LAND DEVELOPMENT & PERMITTING, CORP.  
LAND USE, CONSTRUCTION, TRANSPORTATION AND ENVIRONMENTAL SERVICES  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P: 508.287.2748 F: 508.287.2756  
EMAIL: MBLDLP@COMCAST.NET  
WEB: www.mbl.comcastbiz.net

**DETAILS**  
SEEKONK SENIOR CENTER  
100 PECK STREET  
ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0  
SEEKONK MASSACHUSETTS

PROJ. No.: 2011-032  
DATE: June 25, 2013  
**C-11.0**



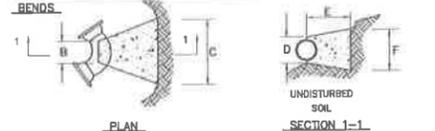
**TACTILE WARNING SURFACE**  
NOT TO SCALE



**ACCESSIBLE CURB RAMP**  
NOT TO SCALE

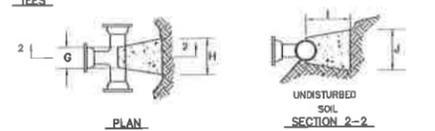
**TABLE OF DIMENSIONS**

BENDS						TEES						
B	C	D	E	F		B	C	D	E	F		
6"	11 1/4"	8"	15"	12"	24"	12"	6"	45"	8"	30"	12"	24"
8"	22 1/2"	19"	19"	13"	6"	60"	8"	30"	12"	24"	14"	27"
8"	11 1/4"	20"	20"	12"	8"	45"	30"	12"	24"	14"	27"	24"
8"	22 1/2"	22"	22"	17"	8"	90"	38"	12"	24"	14"	27"	36"
12"	11 1/4"	30"	30"	18"	12"	45"	40"	12"	24"	14"	27"	40"
12"	22 1/2"	35"	35"	25"	12"	80"	60"	12"	24"	14"	27"	52"



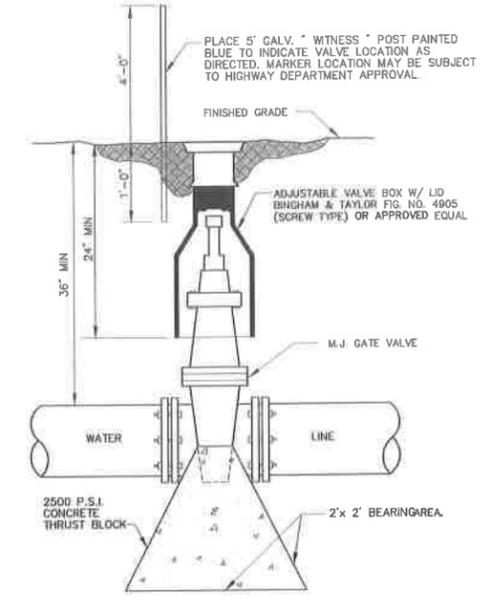
**TABLE OF DIMENSIONS**

TEES						TEES					
G	H	I	J	K		G	H	I	J	K	
8" x 8" x 8"	12"	24"	24"	18"		12" x 12" x 8"	12"	24"	24"	18"	
8" x 8" x 8"	-	-	-	-	24"	12" x 12" x 8"	-	-	-	-	24"
8" x 8" x 8"	-	-	-	-	-	12" x 12" x 12"	-	-	-	-	38"

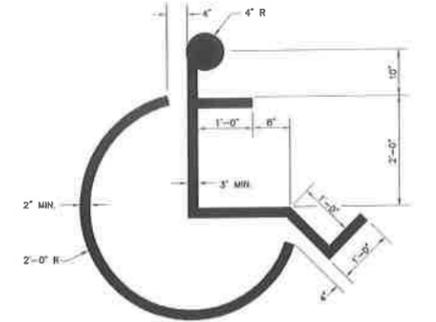


- NOTES:**
1. PROVIDE BLOCKS FOR TAPPING SLEEVES, DEAD ENDS, GATE VALVES, AND VERTICAL BENDS (SAME SIZE AS REQUIRED FOR TEES)
  2. PROVIDE ANCHOR RODS AT VERTICAL BENDS AND GATE VALVES
  3. CONCRETE SHALL NOT BE PLACED AGAINST PIPE BEYOND FITTING

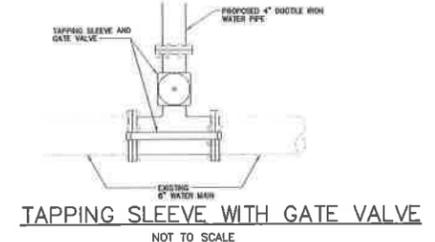
**CONCRETE THRUST BLOCK DETAIL**  
NOT TO SCALE



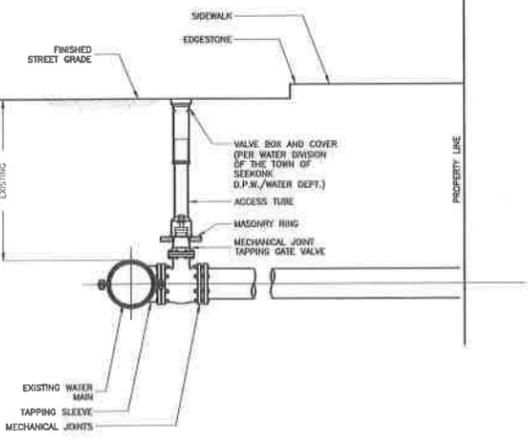
**WATER GATE DETAIL**  
NOT TO SCALE



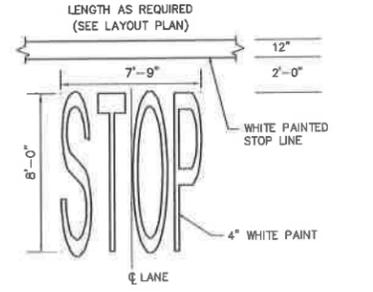
**ACCESSIBLE PARKING STALL SYMBOL**  
NOT TO SCALE



**TAPPING SLEEVE WITH GATE VALVE**  
NOT TO SCALE



**TYPICAL WATER PIPE CONNECTION WITH TAPPING SLEEVE AND GATE VALVE**  
NOT TO SCALE



**PAINTED PAVEMENT MARKING**  
NOT TO SCALE

UCS: LUMIAN: CTB: 6/25/2013 1:38:07 PM EDT  
 C:\CAD\TEMP\2011-032 SR CENTER PLANS 6182013.dwg\_1\_2\_2516 (2).cwg

No.	DATE	DESCRIPTION	BY

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



**APPLICANT**  
**TOWN OF SEEKONK**  
**BUILDING COMMITTEE**  
**SENIOR CENTER**  
 SEEKONK MASSACHUSETTS

SCALE:

HORIZ.:	N.T.S.
VERT.:	
DATUM:	
HORIZ.:	
VERT.:	

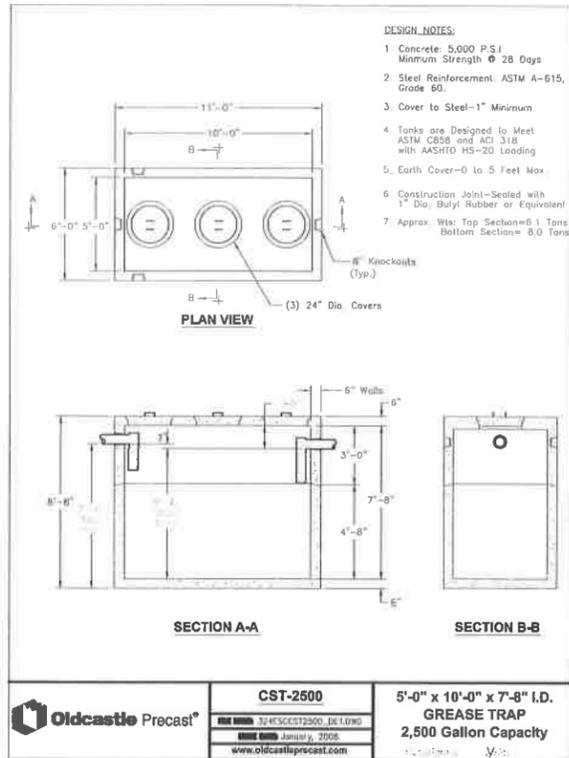
GRAPHIC SCALE

**MBL**

LAND DEVELOPMENT & PERMITTING, CORP.  
 480 TURNPIKE STREET  
 SOUTH EASTON, MA 02375  
 P. 508.297.2746 F. 508.297.2758  
 EMAIL: MBLDP@COMCAST.NET  
 WEB: www.mbl.comcastbiz.net

**DETAILS**  
**SEEKONK SENIOR CENTER**  
**100 PECK STREET**  
**ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0**  
 SEEKONK MASSACHUSETTS

PROJ. No.: 2011-032  
 DATE: June 26, 2013  
**C-12.0**



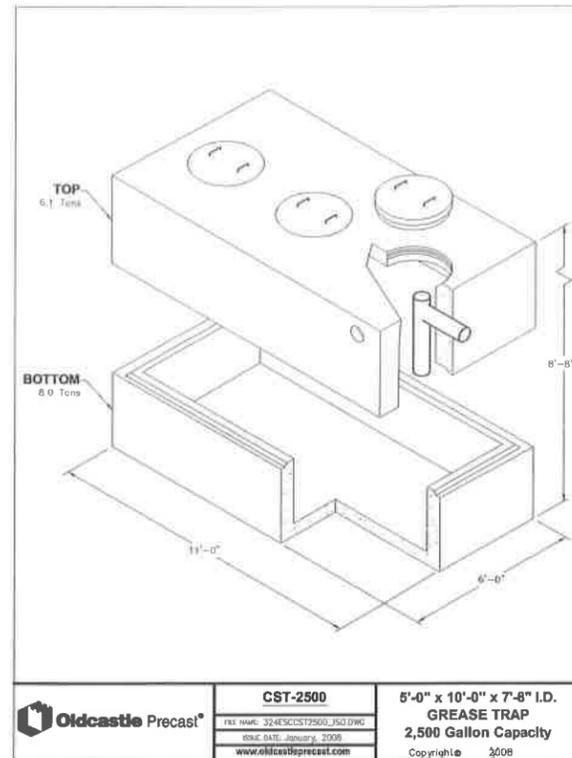
**Oldcastle Precast**

**CST-2500**

5'-0" x 10'-0" x 7'-8" I.D. GREASE TRAP  
2,500 Gallon Capacity

FILE NAME: 324ESCST2500\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008



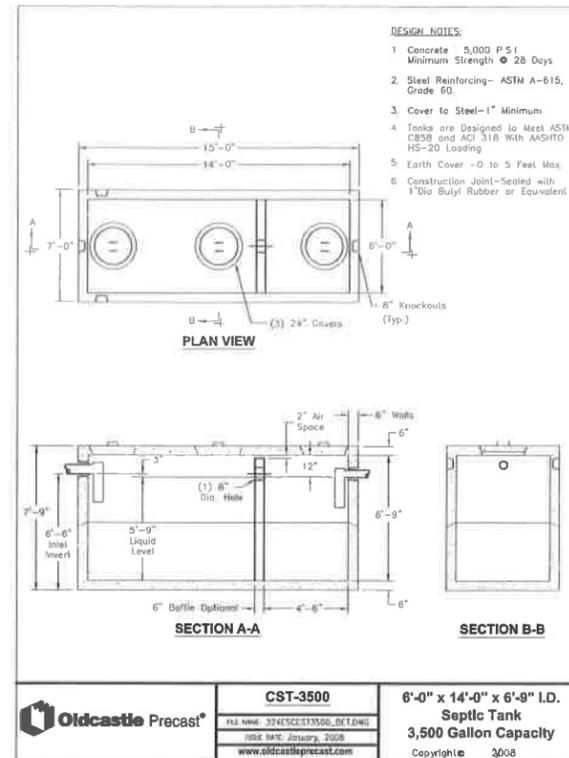
**Oldcastle Precast**

**CST-2500**

5'-0" x 10'-0" x 7'-8" I.D. GREASE TRAP  
2,500 Gallon Capacity

FILE NAME: 324ESCST2500\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008



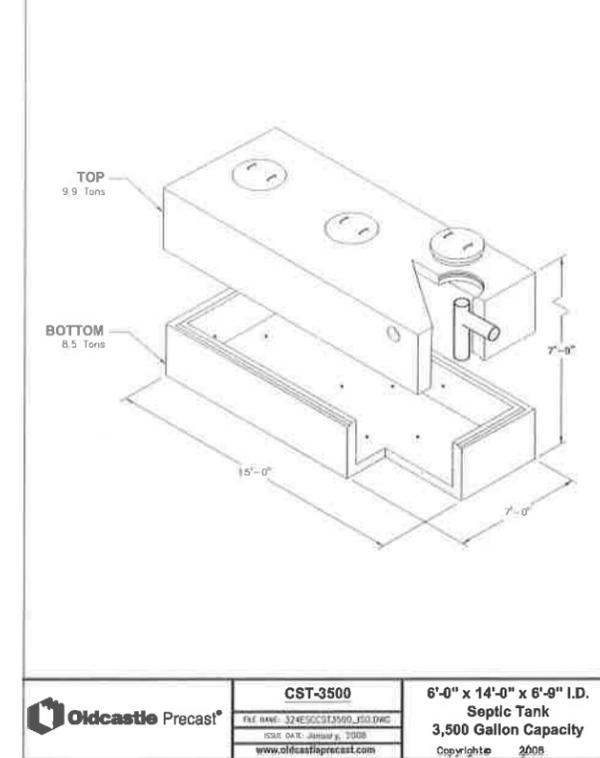
**Oldcastle Precast**

**CST-3500**

6'-0" x 14'-0" x 6'-9" I.D. Septic Tank  
3,500 Gallon Capacity

FILE NAME: 324ESCST3500\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008



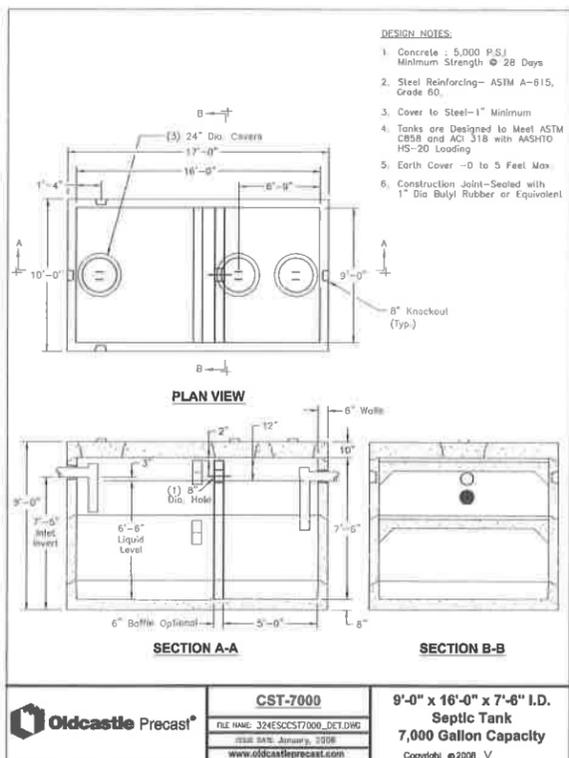
**Oldcastle Precast**

**CST-3500**

6'-0" x 14'-0" x 6'-9" I.D. Septic Tank  
3,500 Gallon Capacity

FILE NAME: 324ESCST3500\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008



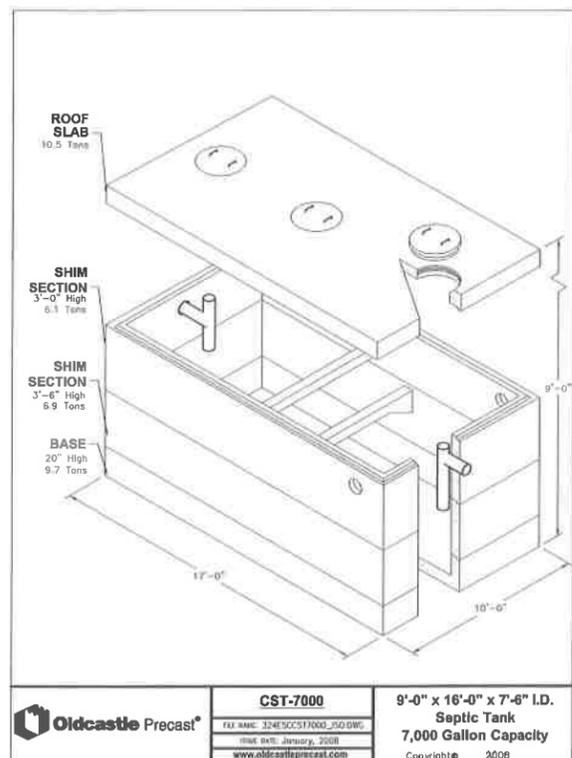
**Oldcastle Precast**

**CST-7000**

9'-0" x 16'-0" x 7'-6" I.D. Septic Tank  
7,000 Gallon Capacity

FILE NAME: 324ESCST7000\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008



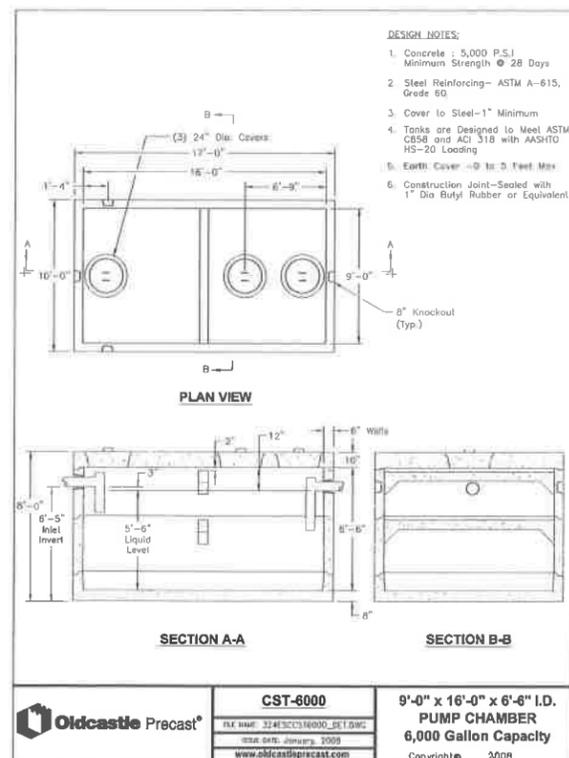
**Oldcastle Precast**

**CST-7000**

9'-0" x 16'-0" x 7'-6" I.D. Septic Tank  
7,000 Gallon Capacity

FILE NAME: 324ESCST7000\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008



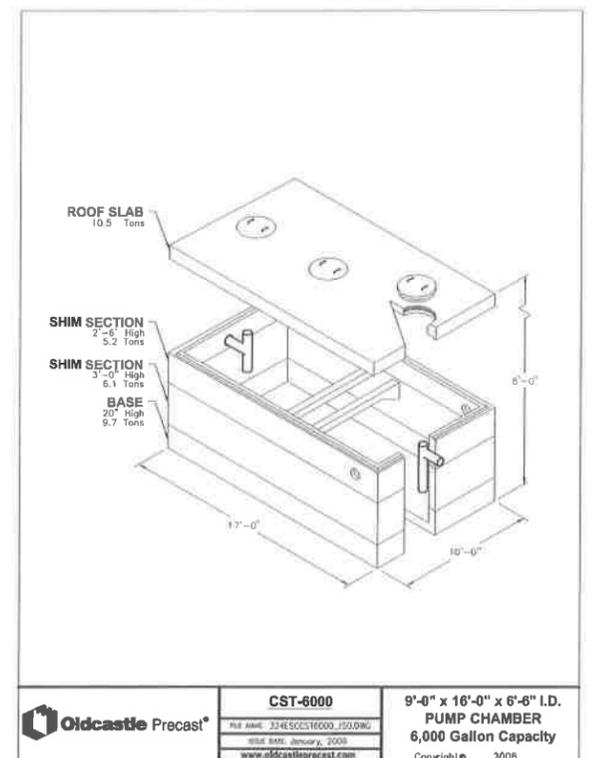
**Oldcastle Precast**

**CST-6000**

9'-0" x 16'-0" x 6'-6" I.D. PUMP CHAMBER  
6,000 Gallon Capacity

FILE NAME: 324ESCST6000\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008



**Oldcastle Precast**

**CST-6000**

9'-0" x 16'-0" x 6'-6" I.D. PUMP CHAMBER  
6,000 Gallon Capacity

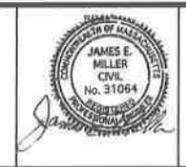
FILE NAME: 324ESCST6000\_DET.DWG  
ISSUE DATE: January, 2008  
www.oldcastleprecast.com

Copyright © 2008

UCS: LMAN: CTR: 6/25/2013 1:38:07 PM EDT

No.	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER:	MBL
CHIEF DESIGNER:	MBL
REVIEWED BY:	DATE



APPLICANT  
TOWN OF SEEKONK  
BUILDING COMMITTEE  
SENIOR CENTER

SEEKONK MASSACHUSETTS

SCALE:	HORIZ: N.T.S.
	VERT: _____
DATUM:	HORIZ: _____
	VERT: _____

GRAPHIC SCALE

MBL

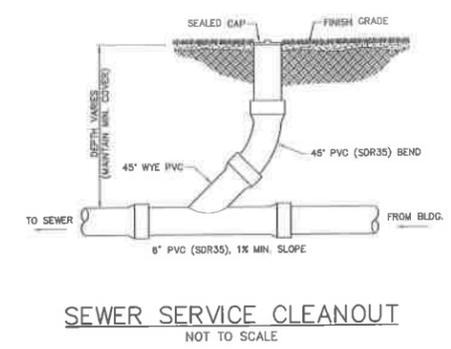
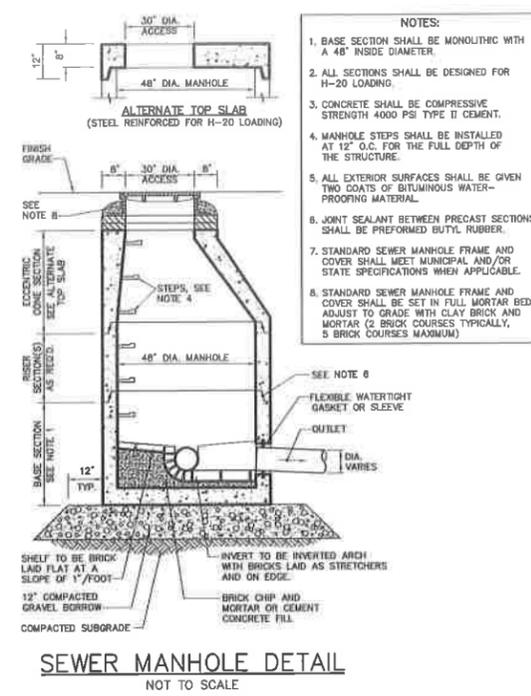
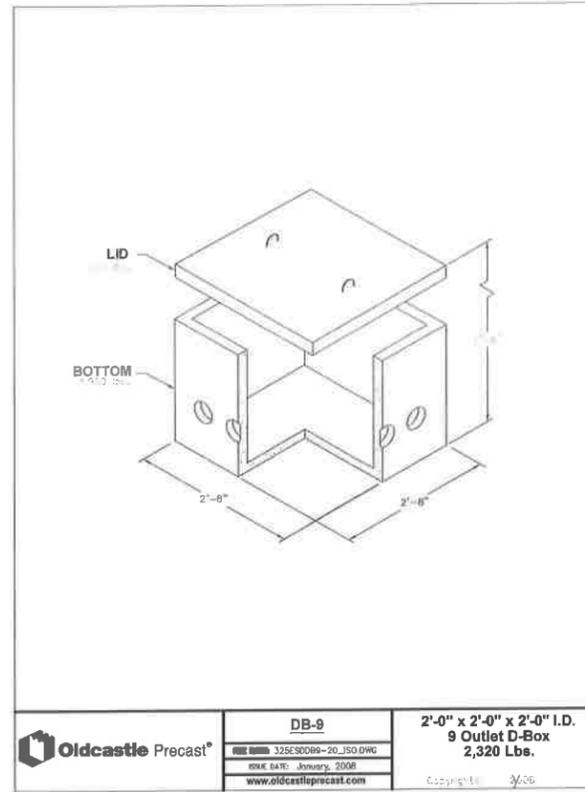
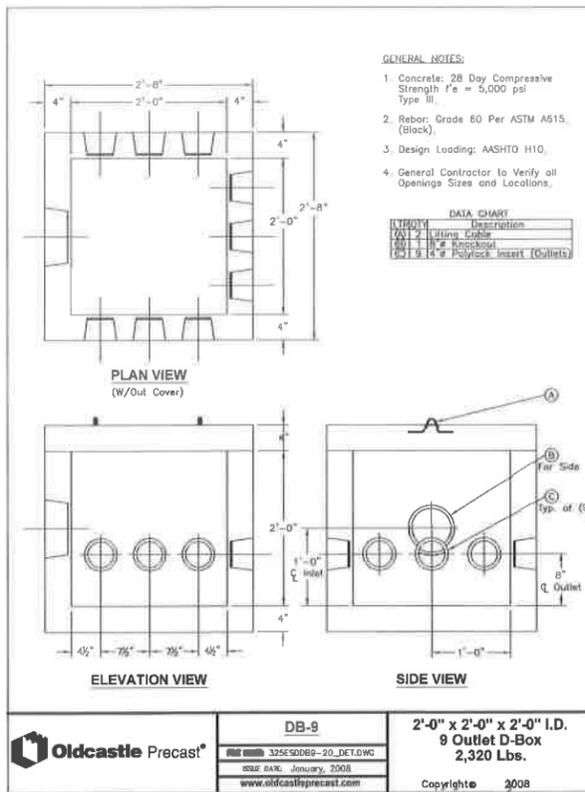
LAND DEVELOPMENT & PERMITTING, CORP.  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P. 508.297.2748 F. 508.297.2758  
EMAIL: MBLDLP@COMCAST.NET  
WEB: www.mbl.comcast.net

SEPTIC SYSTEM DETAILS  
SEEKONK SENIOR CENTER  
100 PECK STREET  
ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0

SEEKONK MASSACHUSETTS

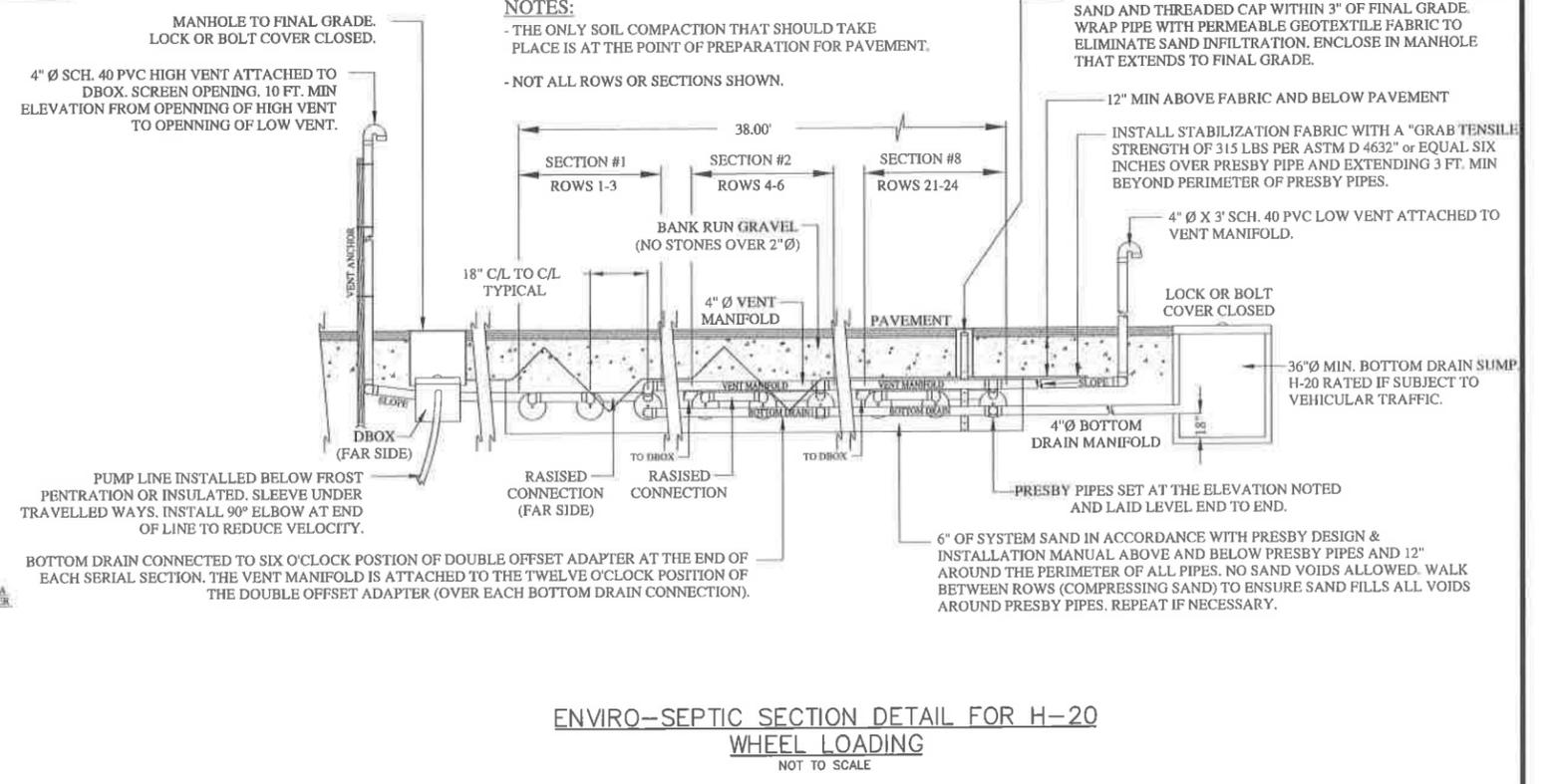
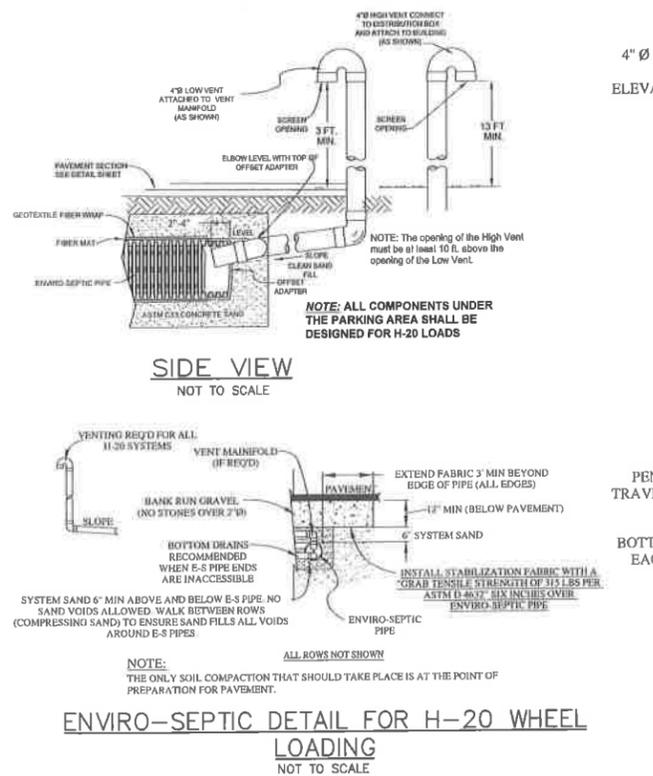
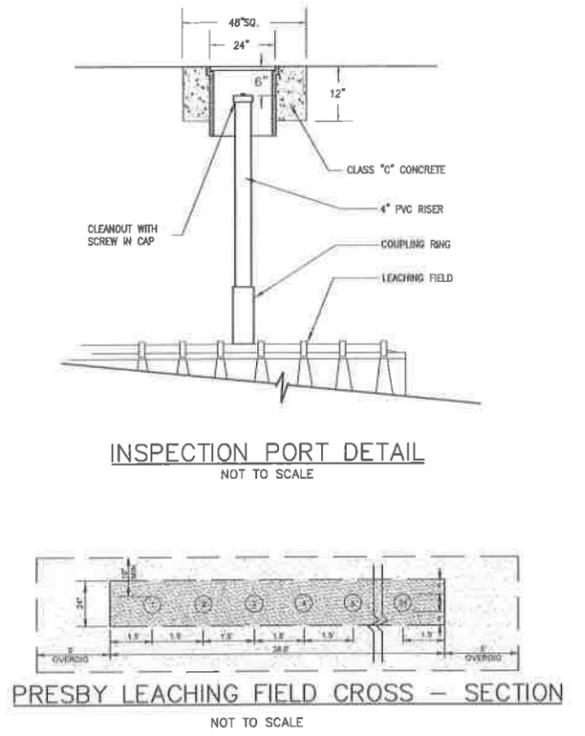
PROJ. No.: 2011-032  
DATE: June 26, 2013

C-13.0



**CERTIFICATION**  
THIS SYSTEM WAS DESIGNED BY BRIAN M. DUNN, CERTIFIED PRESBY ENVIRONMENTAL DESIGNERS. CERT #8851MAES

BRIAN M. DUNN



X:\2011\2011-032\CIVIL\LOT\2011-032 SR CENTER PLANS 6182013.dwg 6/26/2013 9:15:37 AM EDT  
 UCS  
 MS VIEW  
 LMAN  
 CTE

No	DATE	DESCRIPTION	BY
REVISIONS			

PROJ. MANAGER: MBL  
CHIEF DESIGNER: MBL  
REVIEWED BY: DATE

SEAL

APPLICANT  
TOWN OF SEEKONK  
BUILDING COMMITTEE  
SENIOR CENTER

SEEKONK MASSACHUSETTS

SCALE:  
HORIZ: N.T.S.  
VERT:  
DATING:  
HORIZ:  
VERT:

GRAPHIC SCALE

**MBL**

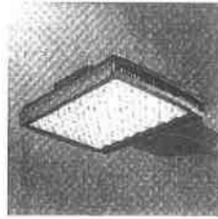
LAND DEVELOPMENT & PERMITTING, CORP.  
LAND DEVELOPMENT, ENGINEERING AND ENVIRONMENTAL ARCHITECTURE  
480 TURNPIKE STREET  
SOUTH EASTON, MA 02375  
P 508 297 2746 F 508 297 2756  
EMAIL: MBLDLP@COMCAST.NET  
WEB: www.mbl.comcastbiz.net

SEPTIC SYSTEM DETAILS  
SEEKONK SENIOR CENTER  
100 PECK STREET  
ASSESSORS PLAT 18 BLOCK 0000 LOT 0011.0

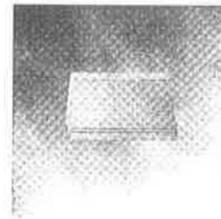
SEEKONK MASSACHUSETTS

PROJ No: 2011-032  
DATE: June 26, 2013

**C-14.0**



**2 TYPE SL1 & SL2**  
LC.1 SCALE: NONE



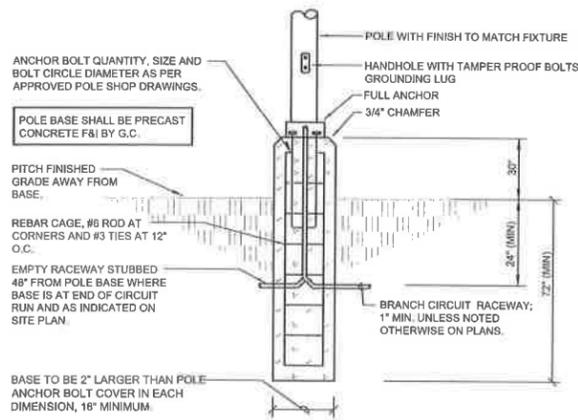
**3 TYPE SL4**  
LC.1 SCALE: NONE

**TYPE SL1 & SL2 FIXTURES**  
DUSK - 8:00PM: 100% LIGHT OUTPUT  
8:00PM - DAWN: 50% LIGHT OUTPUT\*

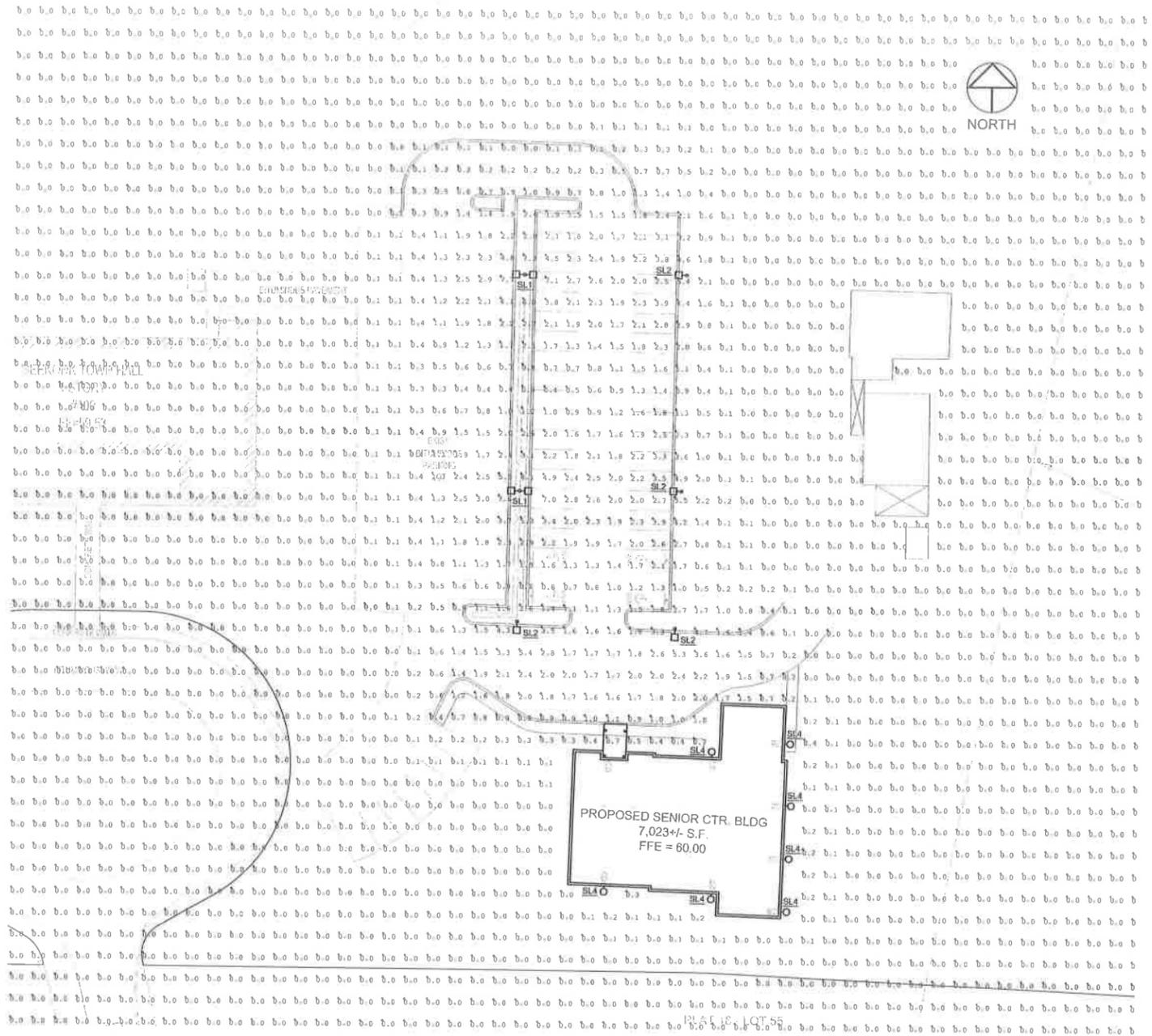
**TYPE SL4 FIXTURES**  
DUSK - DAWN: 100% LIGHT OUTPUT

\* OUTPUT REDUCED VIA B-LEVEL LED DRIVER ON ADJUSTABLE TIME SCHEDULE

**4 PROPOSED TIME SCHEDULES**  
LC.1 SCALE: NONE



**5 TYPE SL1 & SL2 POLE BASE DETAIL**  
LC.1 SCALE: NONE



**1 SITE LIGHTING PLAN - PROPOSED LAYOUT & ILLUMINATION VALUES**  
LC.1 SCALE: 1" = 30'-0"

LIGHTING FIXTURE SCHEDULE										
Symbol	Label	Mounting Height	Lumens	LLF	Description	Watts	Manufacturer	Catalog Number	Lamping	IES Distribution Classification
	SL1	16'-0" A.F.G.	14,358	1.000	Twin Pole Mounted Area	146	McGraw Edison	VTS Series	4000K, LED	Type IV - Full Cutoff (w/ Backlight Control)
	SL2	16'-0" A.F.G.	7,179	1.000	Single Pole Mounted Area	73	McGraw Edison	VTS Series	4000K, LED	Type III - Full Cutoff (w/ Backlight Control)
	SL4	8'-0" A.F.G.	2,209	1.000	Wall Mounted Area	28	Gardco	111 Series	4000K, LED	Type IV - Full Cutoff

**Seekonk Senior Center**

Seekonk, Massachusetts

**Flansburgh Architects**

77 North Washington Street  
Boston, Massachusetts 02114  
617.367.3970 tel  
617.720.7873 fax  
www.falarchitects.com

Architecture  
Master Planning  
Space Planning  
Interior Design



**GARCIA-GALUSKA-DESOUZA**  
CONSULTING ENGINEERS  
201 FRISBEE CENTER ROAD, SUITE 100, WILMINGTON, MA 01897  
603-688-0200 • FAX 603-688-0201 • EMAIL: info@ggdes.com

**SITE LIGHTING CALCULATIONS**

Drawn by: SH Job Number: 1311.00  
Checked by: CD Scale: 1" = 30'-0"  
Plot Date: 06/20/2013 Issue Date: 06/20/2013

**LC.1**



## TOWN OF SEEKONK PUBLIC WORKS DEPARTMENT

---

April 14, 2011

David E. Bowden  
Senior Center Building Committee  
100 Peck Street  
Seekonk, Massachusetts

Re: Traffic Assessment Study  
Proposed Senior Center  
100 Peck Street  
Seekonk, Massachusetts

Dear Mr. Bowden:

As requested, the Town of Seekonk Public Works Department has completed a traffic assessment study to evaluate operational and safety concerns associated with the proposed construction of the Senior Center project along the immediate roadways servicing the site in Seekonk, Massachusetts. Based upon our discussions, site visits and a review of the proposed development plans provided by James Miller, it is our understanding that the current proposal includes the construction of a 9,200 square foot Senior Center.

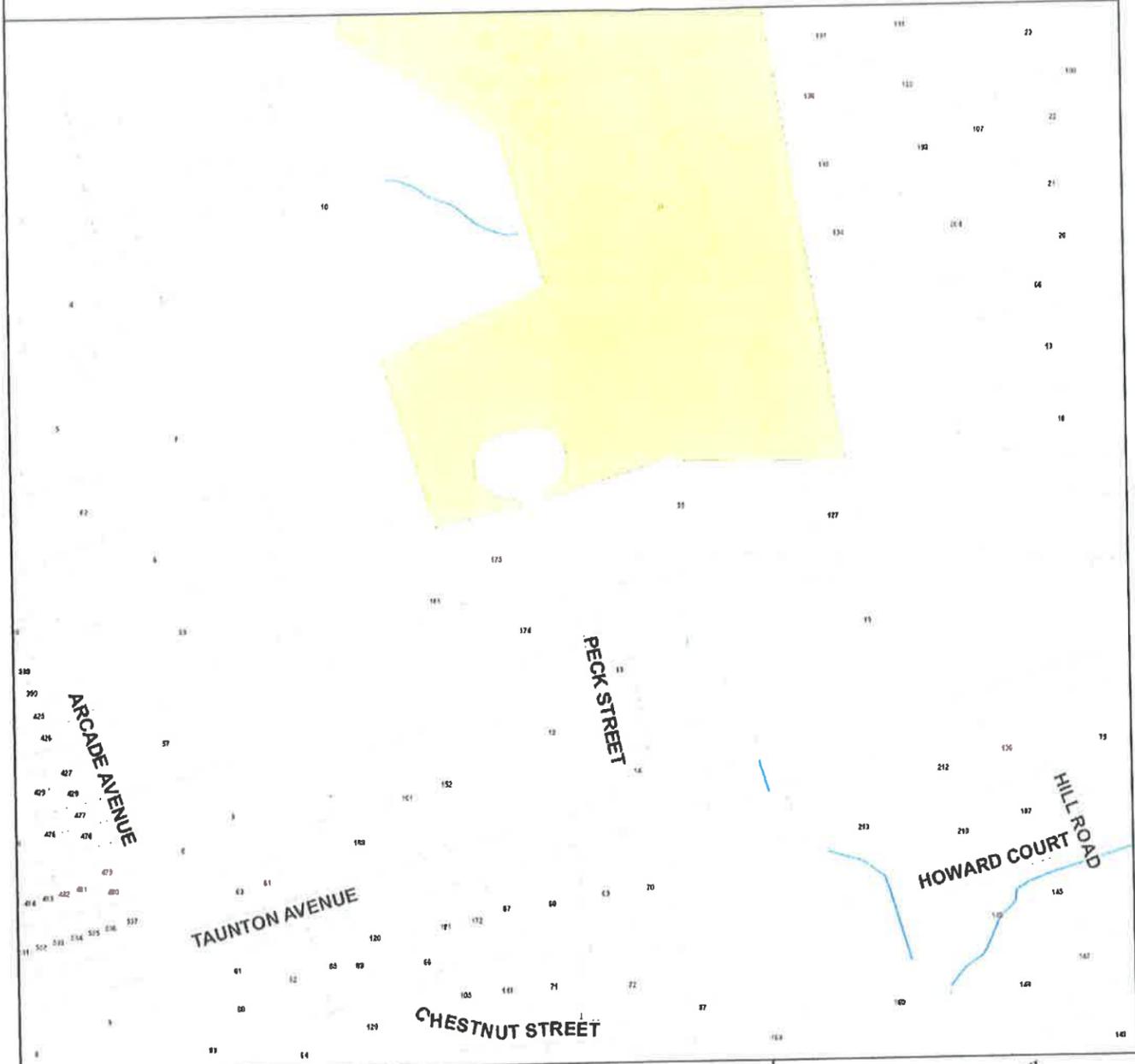
The subject property is located at 100 Peck Street with access provided off the roadway leading to the animal shelter. Figure 1 on the following page depicts the general location of the project. The following is a summary of our investigation of the potential impacts and recommendations to provide safe and efficient access to the proposed development.

### **Traffic Safety Assessment**

#### **Project Approach**

The objective of this study is to define any existing and/or potential, future safety and/or operational concerns along the major servicing roadways to the new development. An analysis of existing roadway conditions was completed to define potential mitigation needed to improve roadway deficiencies that may presently exist. In addition, a site plan for the proposed development was reviewed to define future roadway conditions at the proposed access location. The study also included an estimate of future traffic volumes associated with the proposed development. The study focused on these issues and made recommendations for improvements as necessary, based upon the findings of the data collection and analysis.

Figure 1 - Project Vicinity Map (Senior Center)

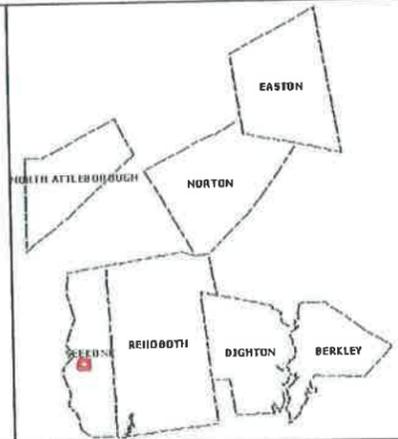


Property ID 018.0-0000-0011.0  
Address 100 PECK ST  
Town SEEKONK  
Owner TOWN OF SEEKONK

Map For Reference Only  
Not a Legal Document

Applied Geographics, Inc. makes no warranties, or promises as to the reliability of the data whatsoever, including fitness for a particular purpose. It should not be construed or utilized as a substitute or replacement for actual fieldwork and verification, including but not limited to, instrument survey, registry of deeds research, and correspondence and coordination with participating municipalities.

Produced by AppGeo



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

- An inventory of the physical roadway characteristics of Taunton Avenue and Peck Street was completed to determine the adequacy of the existing geometric features of the roadway, relating to access safety and operations.
- Field investigations, measurements of free flow traffic speeds and sight distance measurements at the intersection of Taunton Avenue at Peck Street were completed.
- Automatic traffic recorder count data for Taunton Avenue east of Pleasant Street was provided by SRPEDD.
- Accident data for the most recent three year period was requested from the Town of Seekonk Police Department to define potential safety issues in the immediate area.
- Future traffic volumes for the proposed development were estimated.
- A site plan for the proposed development was reviewed to define future roadway conditions at the proposed access location.
- An evaluation of the traffic safety and operational issues for existing and future build conditions was conducted.
- Recommendations to provide safe and efficient access to the proposed development were prepared, where necessary.

### **Project Area**

As noted in the previous section, the proposed development will be situated on a parcel of land on Peck Street. The lot is defined by Assessors Plat 18, Lot 11 and contains approximately 21.7 acres of land. Figure 2 on the following page depicts the project area and the property boundaries of the subject site. The site includes the existing Town Hall and Animal Shelter. Land use along Taunton Avenue in the immediate area can be defined as primarily residential with some commercial.

Taunton Avenue will be the primary access route to the site. The site is accessed via Peck Street in vicinity of the Town Hall along the roadway leading to the animal shelter. Based upon the operating characteristics of these roadways in the immediate area, and the amount of anticipated traffic associated with the development, a study impact area was defined for this project. The limits of our analysis focused on the intersection of Taunton Avenue at Peck Street.

Figure 2 - Site Location Map (Senior Center)

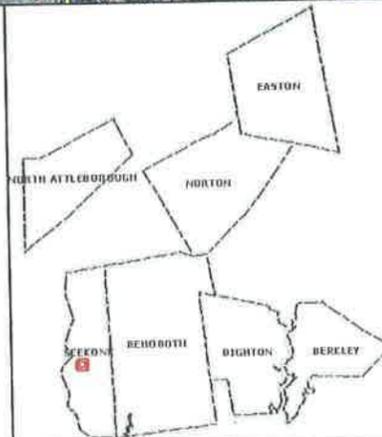


Property ID 018.0-0000-0011.0  
Address 100 PECK ST  
Town SEEKONK  
Owner TOWN OF SEEKONK

Map For Reference Only  
Not a Legal Document

Applied Geographics, Inc. makes no warranties, or promises as to the reliability of the data whatsoever, including fitness for a particular purpose. It should not be construed or utilized as a substitute or replacement for actual fieldwork and verification, including but not limited to, instrument survey, registry of deeds research, and correspondence and coordination with participating municipalities.

Produced by AppGeo



## Roadways

### Taunton Avenue

Taunton Avenue is generally an east/west arterial and is designated as State Route 44. It provides access between East Providence, Rhode Island to the west and the town of Rehoboth to the east. Taunton Avenue is approximately 34-feet wide in the site vicinity with a 12-foot travel lane and a 5-foot shoulder in each direction. The speed limit is posted at 50 mph in vicinity of Peck Street.

Taunton Avenue is in good condition and is clearly delineated with a centerline and shoulder edge lines along both sides of the road. Curbing and sidewalk do not exist in the immediate project area. Utility poles are located along the north side of the road. The adjacent photographs depict the typical characteristics of Taunton Avenue in vicinity of Peck Street. As shown, the horizontal alignment to the east and west is relatively straight.

The intersection of Taunton Avenue at Peck Street is a three-way unsignalized junction. Peck Street is a single lane approach under stop sign control.



Taunton Avenue facing east at Peck Street.



Taunton Avenue facing east at Peck Street.

### Peck Street

Peck Street is approximately 780 feet in length and provides local access to a small office complex, a few residences, the animal shelter and the Town Hall. Peck Street is approximately 22-feet wide with an 11-foot travel lane in each direction.

## **Traffic Volumes**

Existing traffic flow characteristics for this area were developed from a traffic counting program conducted in October 2010 by SRPEDD. An ATR count was conducted along Taunton Avenue east of Pleasant Street. Taunton Avenue was found to have an average weekday volume of approximately 15,000 vehicles. During the morning peak hour Taunton Avenue services approximately 1,078 vehicles (358 EB/720 WB) and during the evening peak hour the road accommodates approximately 1,272 vehicles (654 EB/618 WB).

## **Safety Analysis**

To determine if there are any limiting factors affecting safety relating to the proposed access to the site, the physical characteristics of Taunton Avenue in the immediate vicinity of Peck Street were investigated. These limiting factors include horizontal or vertical alignment changes or roadside obstructions that restrict sight lines for vehicles traveling along Taunton Avenue. In this application, the sight distance standard is necessary to permit turning vehicles to safely enter and exit Peck Street.

Peck Street is situated along a relatively straight section of Taunton Avenue. The sight distances on Taunton Avenue at Peck Street were found to be in excess of 800 feet to the east and west. The roadway is posted at 50 mph in vicinity of Peck Street. Speeds of 50-55 mph were observed along this section of roadway. The available sight distances exceed the minimum stopping sight distance of 495 feet required according to the industry standard AASHTO criteria for the observed speeds of 55 mph.

Also, as part of this study, a request for accident data at the intersection of Taunton Avenue at Peck Street for the latest three-year period was submitted to the Seekonk Police Department. Table 1 summarizes the accident data received

**TABLE 1**  
**Accident Data Summary**

<b>Location</b>	<b>2008</b>	<b>2009</b>	<b>2010</b>	<b>Total</b>
<b>Taunton Avenue</b>				
@ Peck Street	2	-	1	3

A review of the information found that a total of three crashes occurred at the intersection of Taunton Avenue at Peck Street over this three-year period.

Based upon the preliminary evaluation of the existing roadway geometry and physical features, it does not appear that any significant roadway safety deficiencies exist within the study area.

#### **Trip Generation**

To determine the traffic impact of a proposed development, estimates of anticipated traffic to be generated by a particular land use must be calculated. The present proposal includes the construction of a Senior Center.

For this site, projected traffic volumes for the Senior Center were based on discussions with Mr. Bowden regarding the anticipated use of the site. Based on these discussions, the anticipated traffic associated with the intended uses on an average day will include six new employees and 10-15 patrons during the morning and evening peak hours, for a total of 21 vehicle trips during each of the peak hours. In addition, special events may occur at the Senior Center from time to time. It is anticipated that these events may include up to a maximum of approximately 200 people. It is anticipated that the vehicle trips associated with this number of people equates to approximately 70 vehicle trips during these special events.

## Conclusions and Recommendations

The proposed construction of the Senior Center project has been designed to maintain a desirable level of traffic safety and efficiency on the surrounding roadway system. The intersection of Taunton Avenue at Peck Street was reviewed for safety and found to provide sufficient stopping sight distances for entering and exiting vehicles.

The study has determined that the general daily use of the Senior Center will add a low hourly volume of traffic on Peck Street during the daily peak hours as indicated. These new vehicles will not change or negatively affect the operating conditions that presently exist along Peck Street and at the intersection with Taunton Avenue.

During special events, it is recommended that a police detail be utilized to direct traffic prior to the arrival and again prior to the departure of the event at the intersection of Taunton Avenue at Peck Street.

Therefore, based upon the traffic assessment study conducted for this project, it can be concluded that the project will not have a detrimental impact on traffic safety and operations in the project area. We trust that this letter sufficiently addresses the requirements of the Town of Seekonk Zoning Board to obtain your local design approvals. If you should have any questions, please do not hesitate to contact our office.

Very truly yours,  
Seekonk Public Works Department

David Cabral  
Town Engineer



**Planning Board**  
100 PECK STREET  
SEEKONK, MASSACHUSETTS 02771  
1-508-336-2960

To: The Planning Board  
From: John P. Hansen Jr., AICP, Town Planner  
Date: June 28, 2013

**SITE PLAN REVIEW**  
**Chipolte/Visionworks – 35 Highland Ave.**

**Summary:** The applicant has submitted a request for Site Plan Review.

**Findings of Fact:**

Existing Conditions

- Large retail/restaurant development occupying several buildings

Proposal:

- Construct a 3000 sf Visionworks and 15 associated parking spaces and a 72 seat Chipolte Mexican Grill restaurant with 24 associated parking spaces within parking lot of existing development.
- **Section 10.6.1 - Parking**-8-15 parking spaces required for a 3000 sf commercial establishment less than 20,000 sf and 15-24 parking spaces for a 72 seat restaurant (24-39 parking spaces required/39 new spaces proposed). **10.6.2**-Deep-sump catch basins proposed; **10.6.3**-Greater than 30% shading of parking areas proposed (30% required); **10.6.4**- Photometric Plan submitted showing 2.0 footcandles for all parking spaces (2.0 footcandle minimum); **10.6.5**-No drive-thru facility proposed; **10.6.6**- Architectural designs submitted, which complement existing buildings in the vicinity.

Waivers Required:

- None

**Recommendation:**

It is recommended that an approval of the Site Plan for Ann & Hope Inc., dated of 6/24/13, be given.



**Raposo Engineering Consulting, LLC**

411 Gulf Road West

Dartmouth, MA 02748-1123

Tel: 508-999-4681

E-Mail: [graposo@RaposoEng.com](mailto:graposo@RaposoEng.com)

**COMPUTATIONS**

Project: A&H Plaza, Seekonk, Massachusetts

Calculated By: Gus Raposo Date: June 6, 2013

Title: Trip Generation-Peak Hour Trips

**ANN & HOPE PLAZA**

35 Highland Ave.

Seekonk, Massachusetts

**TRIP GENERATION - PEAK HOUR TRIPS**

**A. PROPOSED:**

Retail: 3,000 S.F.

Restaurant: 2,500 S.F.

**B. PEAK HOUR TRIPS:**

Based on "Zoning By-Laws of the Town of Seekonk Massachusetts", Section 10-Site Plan Review 10.6.1.20 a Traffic Impact Analysis will not be required as the proposed development does not generate 100 or more additional peak hour trips, based on the Institute of Traffic Engineers (ITE) Trip Generation Handbook.

**ENTIRE PLAZA (LOTS "A" and "B") ANALYSIS:**

**Restaurant:**

**PM PEAK:**

2,500 S.F. (26.15/1,000 S.F.)= **65 TRIPS**

See attached ITE TRIP GENERATION WORKSHEET

**Retail:**

**PM PEAK:**

3,000 S.F. (2.71/1,000 S.F.)= **8 TRIPS**

See attached ITE TRIP GENERATION WORKSHEET

**TOTAL NUMBER OF PEAK HOUR TRIPS: (Restaurant+Retail)- 65 Trips+8 Trips= 73 TRIPS**

**CONCLUSION: Total number of Peak Hour Trips (73 TRIPS) is less than 100 Peak hour trips.**



ITE TRIP GENERATION WORKSHEET  
(8th Edition, updated 2008)

LANDUSE: Specialty Retail Center  
LANDUSE CODE: 814

Independent Variable -- 1,000 Sq. Feet Gross Floor Area

JOB NAME:  
JOB NUMBER:

FLOOR AREA (KSF): 3.0

**WEEKDAY**

RATES:	# Studies	R <sup>2</sup>	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	4	0.89	44.32	21.30	64.21	25	15	43	50%	50%
AM PEAK (ADJACENT ST)	--	--	--	--	--	--	--	--	--	--
PM PEAK (ADJACENT ST)	5	0.98	2.71	2.03	5.16	89	15	220	44%	56%

TRIPS:

	DAILY	BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
		133	66	66	168	83	83
AM PEAK (ADJACENT ST)		NA	NA	NA	NA	NA	NA
PM PEAK (ADJACENT ST)		8	4	5	29	13	16

**SATURDAY**

RATES:	# Studies	R <sup>2</sup>	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	3	--	42.04	22.57	54.47	28	17	43	50%	50%
PEAK OF GENERATOR	--	--	--	--	--	--	--	--	--	--

TRIPS:

	DAILY	BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
		126	63	63	NA	NA	NA
PEAK OF GENERATOR		NA	NA	NA	NA	NA	NA

**SUNDAY**

RATES:	# Studies	R <sup>2</sup>	Total Trip Ends			Independent Variable Range			Directional Distribution	
			Average	Low	High	Average	Low	High	Enter	Exit
DAILY	3	--	20.43	6.96	32.82	28	17	43	50%	50%
PEAK OF GENERATOR	--	--	--	--	--	--	--	--	--	--

TRIPS:

	DAILY	BY AVERAGE			BY REGRESSION		
		Total	Enter	Exit	Total	Enter	Exit
		61	31	31	NA	NA	NA
PEAK OF GENERATOR		NA	NA	NA	NA	NA	NA

**Raposo Engineering Consulting, LLC**

411 Gulf Road West  
Dartmouth, MA 02748-1123  
Tel: 508-999-4681  
E-Mail: [graposo@RaposoEng.com](mailto:graposo@RaposoEng.com)

**COMPUTATIONS**

Project: A&H Plaza, Seekonk, Massachusetts  
Calculated By: Gus Raposo Date: June 4, 2013  
Title: PARKING SUMMARY

---

**ANN & HOPE PLAZA**

35 Highland Ave.  
Seekonk, Massachusetts

**PARKING SUMMARY**

**A. EXISTING:**

**LOT "A":**

Home Depot:	135,875 S.F.
Supermarket: Stop & Shop:	80,713 S.F.
Restaurant: Applebee's:	206 Seats
Auto Service: Firestone:	6,600 S.F.

**LOT "B":**

Michael's:	21,700 S.F.
Golfsmith:	23,853 S.F.
Bed Bath & Beyond:	28,555 S.F.
Vacant Retail:	5,344 S.F.
Sleepy's:	7,392 S.F.
PETCO:	15,011 S.F.

**B. PROPOSED:**

Retail: 3,000 S.F.  
Restaurant: 72 Seats (including outdoor seats)

C. **REQUIRED PARKING SPACES:**

Based on "Zoning By-Laws of the Town of Seekonk Massachusetts", Section 10-Site Plan Review 10.6.1.3

Parking Space Schedule the minimum number of parking spaces required is as follows:

**ENTIRE PLAZA (LOTS "A" and "B") ANALYSIS:**

**Existing:**

Home Depot: 135,875 S.F. X (1 space/500 S.F.)= **272 spaces**

Stop & Shop: 80,173 S.F. X (1 space/500 S.F.)= **161 spaces**

Michael's: 21,700 S.F. X (1 space/500 S.F.) = **44 spaces**

Golfsmith: 23,853 S.F. X (1 space/500 S.F.)= **48 spaces**

Bed Bath & Beyond: 28,555 S.F. X (1 space/500 S.F.)= **58 spaces**

Sleepy's: 7,392 S.F. X (1 space/400 S.F.)= **19 spaces**

Vacant Retail: 5,344 S.F. X (1 space/400 S.F.)= **14 spaces**

PETCO: 15,011 S.F. X (1 space/400 S.F.) = **38 spaces**

Firestone (Auto Service): 6,600 x (1/2,000 S.F.)= **4 spaces**

Restaurant (Applebee's): 206 seats (1/5 seats)= **42 spaces**

**Proposed (Used maximum number of spaces):**

Visionworks: 3,000 S.F. X (1 space/200 S.F.)= **15 spaces**

Chipotle Mexican Grill: 72 Seats (1 space/3 seats)= **24 spaces**

**Total Number of Spaces Required:** 272+161+44+48+58+19+14+38+4+42+15+24=**739 spaces**

**LOT "A" Only:**

**Existing:**

Home Depot: 135,875 S.F. X (1 space/500 S.F.)= **272 spaces**

Stop & Shop: 80,173 S.F. X (1 space/500 S.F.)= **161 spaces**

Firestone (Auto Service): 6,600 x (1/2,000 S.F.)= **4 spaces**

Restaurant (Applebee's): 206 seats (1/5 seats)= **42 spaces**

**Total Number of Spaces Required:** 272+161+4+42=**479 spaces**

**LOT "B" Only:**

**Existing:**

Michael's: 21,700 S.F. X (1 space/500 S.F.) = **44 spaces**

Golfsmith: 23,853 S.F. X (1 space/500 S.F.)= **48 spaces**

Bed Bath & Beyond: 28,555 S.F. X (1 space/500 S.F.)= **58 spaces**

Sleepy's: 7,392 S.F. X (1 space/400 SF.)= **19 spaces**

Vacant Retail: 5,344 S.F. X (1 space/400 S.F.)= **14 spaces**

PETCO: 15,011 S.F. X (1 space/400 S.F.) = **38 spaces**

**Proposed (Used maximum number of spaces):**

Visionworks: 3,000 S.F. X (1 space/200 S.F.)= **15 spaces**

Chipotle Mexican Grill: 72 Seats (1 space/3 seats)= **24 spaces**

**Total Number of Spaces Required:** 44+48+58+19+14+38+15+24=**260 spaces**

**D. PROVIDED PARKING SPACES:**

LOT A: 960 Spaces

LOT B: 530 Spaces (After proposed project)

ENTIRE PLAZA (LOTS "A" and "B"):  $(960+530)=$  1,490 spaces

**E. CONCLUSION:**

**ENTIRE PLAZA (LOTS "A" and "B")**

The number of spaces provided (1,490 spaces) is greater the number of spaces required (739 spaces).

**LOT "A" ONLY**

The number of spaces provided (960 spaces) is greater the number of spaces required (479 spaces).

**LOT "B" ONLY**

The number of spaces provided (530 spaces) is greater the number of spaces required (260 spaces).

# ANN & HOPE PLAZA

## VISIONWORKS AND CHIPOTLE MEXICAN GRILL

35 Highland Avenue (Route 6)  
Seekonk, Massachusetts

### INDEX OF DRAWINGS

No.	Drawing Title	Latest Issue
C-1	Legend and General Notes	6/24/2013
C-2	Overall Site Parking Plan	6/24/2013
C-3	Layout and Materials Plan	6/24/2013
C-4	Grading, Drainage and Erosion Control Plan	6/24/2013
C-5	Utility Plan	6/24/2013
C-6	Site Details 1	6/24/2013
C-7	Site Details 2	6/24/2013
L-1	Landscape Plan 1	6/24/2013
L-2	Landscape Plan 2	6/24/2013
SL-1	Site Lighting Plan 1	6/24/2013
<b>Reference Drawings</b>		
S-1	Existing Conditions Plan of Land	5/ /2013
Exh "A"	Property Line Plan (Site Plan Exhibit "A") *	8/1/2002

\* Issued with the permission of Vanasse Hangen Brustlin, Inc. and Eastern Development, LLC.



LOCATION MAP ↑

### PREPARED FOR:

SEEKONK MALL TRUST  
1 Ann & Hope Way  
Cumberland, Rhode Island

### PREPARED BY:

Civil Site Engineering  
Raposo Engineering Consulting, LLC  
411 Gulf Road West  
Dartmouth, Massachusetts  
Phone: 401.529.0403

### Architect and Site Electrical Engineering

Cirees, Inc.  
540 Granite Street, Suite 200  
Braintree, MA 02184  
Phone: 781.849.7561

### Surveyor

Boucher & Heureux, Inc.  
648 American Legion Hwy  
Westport, MA 02790  
Phone: 508.636.5905

### Landscape Architect

Birchwood Design Group  
46 Dike Street  
Providence, Rhode Island  
Phone: 401.383.4950



Assessor's Plat: 8  
Lot: 33

















No.	Revision	Date	Appr.

Designed by AE Drawn by AE Checked by KB  
 CAD checked by Approved by KB  
 Scale As Noted Date June 5, 2013

**ZONING APPROVAL**

Not Approved for Construction  
 Drawing Title

**LANDSCAPE PLAN**

Drawing Number

**L-1**

**GENERAL NOTES:**

- THE CONTRACTOR SHALL PERFORM ALL WORK IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS AND SHALL OBTAIN ANY NECESSARY PERMITS.
- IN ACCORDANCE WITH DIG-SAFE LAW, THE CONTRACTOR SHALL CONTACT DIG SAFE AT (1-888-344-7233 OR 811) PRIOR TO ANY EXCAVATION. THE CONTRACTOR IS RESPONSIBLE FOR ANY/ALL UTILITY DAMAGE AT NOT COST TO THE OWNER.
- ALL EXISTING TREES SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. NO MATERIALS SHALL BE STORED WITHIN THE DRIP LINE OF EXISTING SHRUBS OR TREES. PROTECTIVE MEASURES ARE TO BE PLACED AROUND EACH PLANT OR GROUP OF PLANTS. BARRIERS SHALL BE A MINIMUM OF FOUR FEET (4') HIGH AND SHALL BE A DURABLE MATERIAL.
- ALL PRUNING SHOULD BE HANDLED WITH CARE AND THE CONTRACTOR SHALL FOLLOW ONLY APPROVED METHODS AND TOOLS. THE USE OF AXES AND/OR SPURS IS NOT PERMITTED.
- ALL NOTES AND DIMENSIONS ARE TYPICAL UNLESS INDICATED ON THE PLANS. ALL DIMENSIONS ARE CONSIDERED PARALLEL OR PERPENDICULAR UNLESS INDICATED ON THE PLANS. ANY DISCREPANCIES SHALL BE NOTIFIED TO THE OWNER IMMEDIATELY.
- PLANT MATERIAL TO BE TAGGED BY THE LANDSCAPE ARCHITECT AT THE NURSERY. ALL PLANTS SHALL CONFORM TO THE STANDARDS OF THE AMERICAN ASSOCIATION OF NURSERYMAN STANDARDS FOR NURSERY STOCK, LATEST EDITION, AND ANY AMENDMENTS.
- LOAM MOVED SHALL BE RETAINED AND DISTRIBUTED ON THE SITE IN ACCORDANCE WITH THE PLANS. STOCKPILED LOAM SHALL NOT BE MIXED WITH ANY SUBSOIL OR UNSUITABLE MATERIALS. NEW LOAM IF REQUIRED SHALL BE FERTILE, FRIABLE MEDIUM TEXTURED SANDY LOAM FREE OF STUMPS, STONES, ROOTS AND OTHER MATTER ONE INCH (1") OR GREATER IN DIAMETER. THE PH SHALL BE BETWEEN 5.5 AND 7.5.
- LAWN PREPARATION: ALL DEBRIS AND INORGANIC MATERIAL SHALL BE REMOVED FROM THE SUBGRADE. PRIOR TO THE SPREADING OF ANY LOAM, AREAS SHALL BE RESHAPED AND DRESSED WITH CLEAN LOAM AS REQUIRED TO OBTAIN A SMOOTH SURFACE. SUBGRADE TO BE SCARIFIED AND LOOSEN IN AREAS WHERE COMPACTION HAS OCCURRED. LOAM TO BE SPREAD TO A DEPTH OF SIX INCHES (6"). A STARTER FERTILIZER (10-20-10) AT A RATE OF 20 LBS. PER 1000 SQUARE FEET AND LIME AT A RATE OF 40 LBS. PER 1000 SQUARE FEET. THE LOAM SHALL BE ROLLED TO CREATE A SMOOTH SURFACE.
- SEEDING SHALL TAKE PLACE BETWEEN MARCH 15 AND MAY 31 OR AUGUST 15 AND OCTOBER 15. SEED SHALL BE PURE, LIVE, FRESH SEED FROM COMMERCIAL SOURCES AND LABELED IN ACCORDANCE WITH STATE AND FEDERAL REGULATIONS. THE SEED MIXTURE SHALL BE:
 

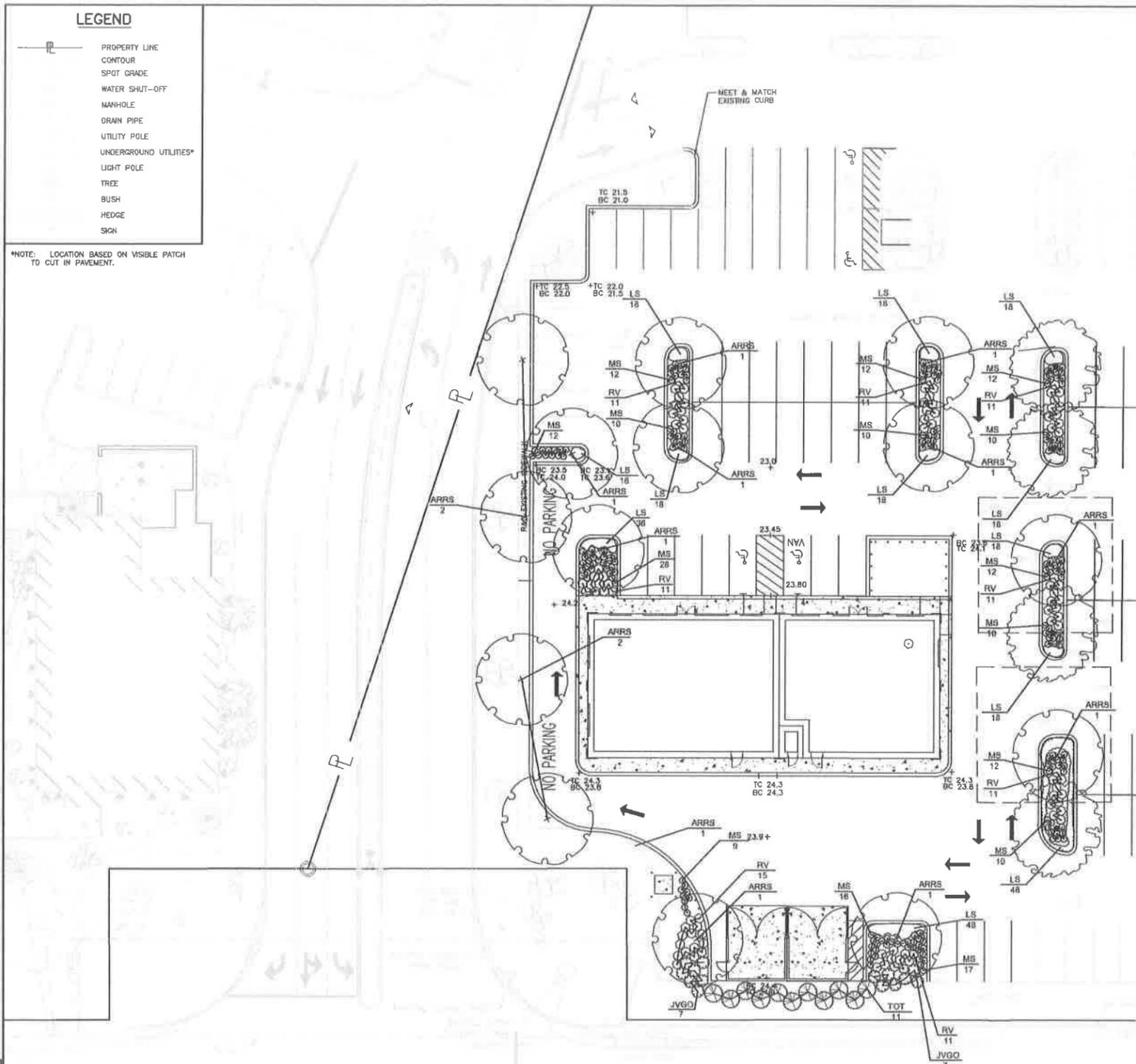
PROPORTION TYPE	WEIGHT
PALMER PERENNIAL RYEGRASS	20.0%
RANGER PERENNIAL RYEGRASS	20.0%
BARON KENTUCKY BLUEGRASS	30.0%
MERION KENTUCKY BLUEGRASS	30.0%

 \*INERT MATERIAL TO BE LESS THAN 2.5% MAX.
- ALL TREES OVER FIVE FEET (5') IN HEIGHT TO BE STAKED WITH A MINIMUM THREE STAKES. CONTRACTOR TO REMOVE AND DISPOSE OF ALL STAKES AT THE END OF THE GUARANTEE PERIOD.
- ALL PLANT MATERIAL TO RECEIVE A MINIMUM OF THREE INCHES (3") OF SHREDDED HARDWOOD MULCH. MULCH TO BE APPLIED WITHIN A MINIMUM OF FORTY-EIGHT (48) HOURS FROM INSTALLATION.
- ANY AREAS DISTURBED DURING CONSTRUCTION SHALL BE RESTORED TO THE ORIGINAL CONDITION AT NOT COST TO THE OWNER PRIOR TO COMPLETION OF THE PROJECT AND APPROVAL OF THE OWNER.
- CONTRACTOR IS RESPONSIBLE FOR CLEAN-UP OF ALL CATCH BASINS, MANHOLES, AND ANY OTHER DRAINAGE FEATURE WHICH HAVE ACCUMULATED SEDIMENTS AS A RESULT OF CONSTRUCTION ACTIVITIES.
- ALL PLANT MATERIAL PROVIDED BY THE CONTRACTOR WILL BE GUARANTEED FOR ONE YEAR FROM FINAL ACCEPTANCE.

**LEGEND**

	PROPERTY LINE
	CONTOUR
	SPOT GRADE
	WATER SHUT-OFF
	MANHOLE
	DRAIN PIPE
	UTILITY POLE
	UNDERGROUND UTILITIES*
	LIGHT POLE
	TREE
	BUSH
	HEDGE
	SIGN

\*NOTE: LOCATION BASED ON VISIBLE PATCH TO CUT IN PAVEMENT.



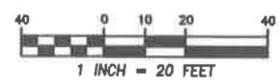
**PLANT LIST THIS SHEET**

KEY	BOTANICAL NAME	COMMON NAME	QTY	SIZE	NOTES
<b>TREES</b>					
ARRS	Acer rubrum 'Red Sunset'	Red Sunset Maple	14	2.5' - 3' Cal.	BAB
TOT	Thuja occidentalis 'Tidwell'	Tidwell Arborvitae	11	5'-6'	BAB
<b>SHRUBS</b>					
JVGQ	Jasminum virginiana 'Grey Owl'	Grey Owl Jasmine	18	30" - 36"	Cont.
RV	Rosa 'Vigorena'	'Vigorena' Rose	93	8"	Cont.
<b>PERENNIALS</b>					
LS	Lilium Spicata	Crushing Lily Turf	252	8"	Cont.
MS	Mentha spicata	Spearmint Grass	192	8"	Cont.

**ZONING REQUIREMENTS**

ZONE: HIGHWAY BUSINESS  
 USES: RETAIL - VISIONWORKS  
 RESTAURANT - CHIPOTLES MEXICAN GRILLE

	REQUIRED	PROPOSED
TOTAL SHADE COVERAGE	2,106 SF	7,325 SF













**Planning Board**  
100 PECK STREET  
SEEKONK, MASSACHUSETTS 02771  
1-508-336-2961

**MEMORANDUM**

To: The Planning Board

From: John P. Hansen Jr., AICP, Town Planner

Date: June 25, 2013

Re: Woo Estates – Bond Reduction

---

The applicant for Woo Estates has requested a bond reduction for said subdivision. The original construction cost estimate was  $\pm$ \$342K and based on the work completed and inspected the surety should be reduced to \$148,962.50. The remaining items mainly consist of the top-course application and street trees.

**Date:** June 25, 2013  
**To:** Planning Board  
**From:** John Hansen, Town Planner  
**Subject:** Surety - Woo Estates

**Length of roadway - approximately 1100 feet**

**Roadway Construction**

Bituminous Concrete Overlay	26' wide	
1-1/2" Type I-1 Base Coat	2.2 Tons @ \$100/ton	\$220.00
1-1/2" Type I-1 Top Coat	294 Tons @ \$100/ton	\$29,400.00
Asphalt Curbing	2300' @ \$7/l.f.	\$16,100.00
	Subtotal:	<b>\$45,720.00</b>

**Landscaping and Grading**

Trees, 2-1/2" caliper	57 @ \$450 each	\$25,650.00
Subgrade, loam & seed	33,000 s.f. @ \$1/s.f.	\$33,000.00
Monuments	16 @ \$300 each	\$4,800.00
	Subtotal:	<b>\$63,450.00</b>

**Misc. Items**

Roadway As-Builts	1 @ \$10,000	\$10,000.00
	Subtotal:	<b>\$10,000.00</b>

---

**SUBTOTAL: \$119,170.00**

Engineering	5%	\$5,959
Contingency	20%	\$23,834

**GRANDTOTAL: \$148,962.50**



**Planning Board**  
100 PECK STREET  
SEEKONK, MASSACHUSETTS 02771  
1-508-336-2960

To: The Planning Board  
From: John P. Hansen Jr., AICP, Town Planner  
Date: July 2, 2013

**APPROVAL NOT REQUIRED REVIEW (ANR)**  
**Ann Jordan – Plat 26, Lot(s) 8 – 696 Read St.**

**Summary:** The applicant has submitted a request for an Endorsement of a Plan Believed Not to Require Approval.

**Findings of Fact:**

Existing Conditions

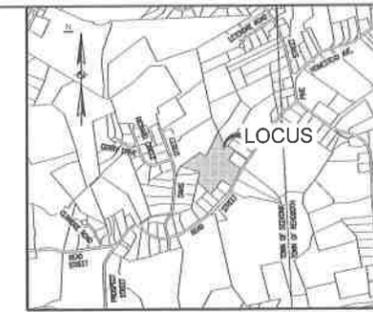
- 21 acre vacant lot zoned R-4.

Proposed Lot Amendments:

- Divide into two lots each with adequate frontage, 215' for lot 1 and 275' for lot 2 (200' minimum) and access to the property on an accepted way (Read St.)

**Recommendation:**

Staff recommends approval of this application as it meets the exemption clause within the definition of a subdivision in the Rules and Regulations Governing the Subdivision of Land for changing the size of lots in such a manner so as to not leave any lot affected without the proper frontage.



**NOTES:**

- 1) THIS PLAN IS THE RESULT OF AN ON-THE-GROUND SURVEY PERFORMED BETWEEN, JUNE 5, 2013 AND JUNE 21, 2013.
- 2) THE SURVEYOR WAS UNABLE TO OBTAIN LAYOUTS OF READ AND WALKER STREET FROM THE TOWN OF SEEKONK.
- 3) THE LOT WIDTH OF LOT 1 IS REDUCED AT THE BUILDING SETBACK LINE IN ACCORDANCE WITH SECTION 6.10 OF THE SEEKONK ZONING BY-LAWS.
- 4) THE SURVEYOR WAS UNABLE TO OBTAIN ANY WRITTEN DESCRIPTION OF A PRIVATE WAY KNOWN AS "JENNIE LANE", REFERRED TO IN DEEDS AND SHOWN ON THE TOWN OF SEEKONK ASSESSORS MAPS. THE SURVEYOR DETERMINED THE LIMITS OF JENNIE LANE BY LOCATING THE CENTER LINE OF THE GRAVEL DRIVE AND OFFSETTING IT 10' NORTHERLY AND 10' SOUTHERLY.
- 5) THE SURVEYOR HAS BEEN TOLD THAT "JENNIE LANE" IS PRESENTLY BEING USED AS ACCESS BY THE OWNER OF MAP 26 LOTS 14 & 15.
- 6) THE PROPERTY LINES SHOWN HEREON ARE BASED ON VARIOUS PLANS OF RECORD, RECORDED AT THE NORTHERN BRISTOL COUNTY REGISTRY OF DEEDS IN TAUNTON AND OTHER UNRECORDED PLANS.

PLAN BOOK 176 PAGE 25  
 PLAN BOOK 231 PAGE 19  
 PLAN BOOK 377 PAGE 15  
 PLAN BOOK 458 PAGE 30  
 PLAN BOOK 459 PAGE 30

PLAN OF LAND IN SEEKONK, MASS. SURVEYED FOR LORENZO G. & JENNIE G. COLALUCA, BY WATERMAN ENGINEERING CO. JAN., 1989. (UNRECORDED)

**PARCEL INFORMATION:**

ASSESSORS MAP 26 - LOT 8  
 OWNER: ANN C. JORDAN  
 696 READ STREET  
 SEEKONK, MA 02771  
 DEED BOOK 2332 PAGE 334

**ZONING INFORMATION:**

ZONE: R-4 / GROUND WATER AQUIFER PROTECTION DISTRICT / WETLANDS FLOODPLAIN PROTECTION DISTRICT  
 LOT WIDTH: 250' (MINIMUM AT THE SETBACK LINE)  
 FRONTAGE: 200' (MINIMUM AT THE STREET LINE)  
 AREA: 62,500 S.F.  
 SETBACKS:  
 FRONT YARD: 50'  
 SIDE YARD: 35' (ADD 5' FOR EACH STORY OVER 1)  
 REAR YARD: 80'

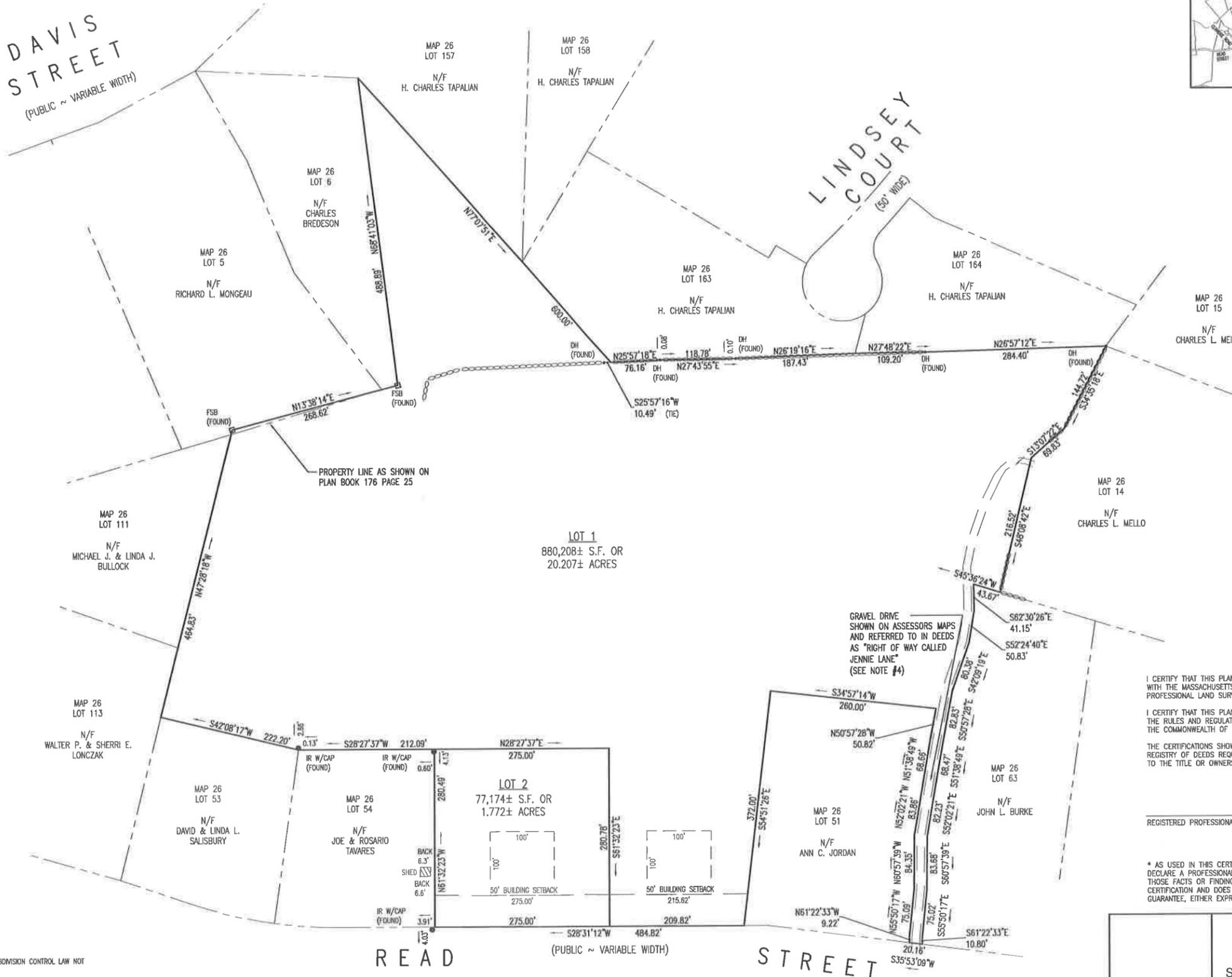
PLANNING BOARD APPROVAL UNDER THE SUBDIVISION CONTROL LAW NOT REQUIRED.

SIGNATURES OF THE PLANNING BOARD DO NOT GUARANTEE THAT ALL OR ANY OF THE LOTS SHOWN ARE BUILDABLE LOTS.

DAVIS STREET  
 (PUBLIC ~ VARIABLE WIDTH)

LINDSEY COURT  
 (50' WIDE)

READ STREET  
 (PUBLIC ~ VARIABLE WIDTH)



I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN ACCORDANCE WITH THE MASSACHUSETTS BOARD OF REGISTRATION OF PROFESSIONAL LAND SURVEYORS STANDARDS.

I CERTIFY THAT THIS PLAN WAS PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS OF THE COMMONWEALTH OF MASSACHUSETTS.

THE CERTIFICATIONS SHOWN HEREON ARE INTENDED TO MEET THE REGISTRY OF DEEDS REQUIREMENTS AND ARE NOT A CERTIFICATION TO THE TITLE OR OWNERSHIP OF THE PROPERTY SHOWN.

REGISTERED PROFESSIONAL LAND SURVEYOR \_\_\_\_\_ DATE \_\_\_\_\_

\* AS USED IN THIS CERTIFICATION, CERTIFY MEANS TO STATE OR DECLARE A PROFESSIONAL OPINION OF THE CONDITIONS REGARDING THOSE FACTS OR FINDINGS WHICH ARE THE SUBJECT OF THE CERTIFICATION AND DOES NOT CONSTITUTE A WARRANTY OR GUARANTEE, EITHER EXPRESSED OR IMPLIED.

PLAN OF LAND  
 PREPARED FOR  
**ANN JORDAN**  
 696 READ STREET  
 SEEKONK, MASSACHUSETTS  
**CAPUTO AND WICK LTD.**  
 1150 PAWTUCKET AVE.  
 RUMFORD, R.I. 02916  
 401-434-8860

DATE  
 JULY 1, 2013  
 SHEET  
 1