

Notice of Intent Application

“The Regency at Lynnfield” Senior Housing Development



December 1, 2023

Subject Property

1301 Main Street
Map 13, Parcel 1000
Lynnfield, Massachusetts

Owner

Richard Luff, Trustee
Sagamore Spring Realty Trust
1282 Main Street
Lynnfield, MA 01940

Applicant

Toll Bros., Inc.
116 Flanders Road, Suite 1200
Westborough, MA 01581

Design Team

LEC Environmental Consultants, Inc.
The Morin Cameron Group, Inc.
ESE Consultants, Inc.

December 1, 2023

Email (ecademartori@town.lynnfield.ma.us)

Lynnfield Conservation Commission
 Temporary Office Location
 590 Main Street
 Lynnfield, MA 01940

Re: Notice of Intent Application
The Regency at Lynnfield Senior Housing Development
1301 Main Street (Map 13, Parcel 1000)
Lynnfield, Massachusetts

[LEC File #: TBI\21-566.02]

Dear Members of the Conservation Commission:

On behalf of the Applicant, Toll Bros., Inc., LEC Environmental Consultants, Inc., (LEC) is filing this Notice of Intent (NOI) Application under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40, the *Act*) and its implementing *Regulations* (310 CMR 10.00, the *Act Regulations*), and the *Lynnfield Wetlands Protection Bylaw* (Chapter 240, the *Bylaw*) and its *Conservation Commission Regulations* (Chapter 320, the *Bylaw Regulations*) to construct *The Regency at Lynnfield Senior Housing Development* (*The Regency*), a 66-unit, development. *The Regency* includes 66 single-family detached residential buildings; a club house with swimming pool, patio, and associated parking; six private drives; stormwater management system including nine bioretention areas; an on-site private septic system; connection to public water supply; and associated infrastructure. To the extent practical, the community is consolidated within upland portions of the site. However, the project requires work in the Buffer Zone, and two wetland/intermittent stream crossings to access the northern portion of the Project Site.

One check made payable to the Town of Lynnfield in the amount of Three Thousand Two Hundred Eighty-Seven Dollars and Fifty Cents (\$3,287.50) for the Town portion of the *Act* filing fee is enclosed. A check payable to the Commonwealth of Massachusetts in the amount of Three Thousand Two Hundred Sixty-Two Dollars and Fifty Cents (\$3,262.50) has been sent to the DEP Lockbox with a copy of the Wetland Fee Transmittal Form. A check for the newspaper legal advertisement payable to *The Lynnfield Villager* for Fifty Dollars (\$50.00) also is included.

Thank you for your consideration of this NOI Application. We look forward to discussing this project with the Commission and the Planning Board during the December 20, 2023 joint Public Hearing. If you have any questions, we can be contacted in our Wakefield office at 781-245-2500 or at dwells@leceenvironmental.com or amarton@leceenvironmental.com.

Sincerely,

LEC Environmental Consultants, Inc.


Daniel L. Wells
 Senior Wildlife/Wetland Scientist



Ann M. Marton, President
 Director of Ecological Services

cc: DEP Northeast Region; Peabody Conservation Commission; Sagamore Spring Realty Trust; Toll Bros., Inc.; Morin-Cameron Group, Inc.

LEC Environmental Consultants, Inc.**www.leceenvironmental.com**

12 Resnik Road
 Suite 1
 Plymouth, MA 02360
 508.746.9491

380 Lowell Street
 Suite 101
 Wakefield, MA 01880
 781.245.2500

100 Grove Street
 Suite 302
 Worcester, MA 01605
 508.753.3077

P.O. Box 590
 Rindge, NH 03461
 603.899.6726

680 Warren Avenue
 Suite 3
 East Providence, RI 02914
 401.685.3109

PLYMOUTH, MA

WAKEFIELD, MA

WORCESTER, MA

RINDGE, NH

EAST PROVIDENCE, RI

Notice of Intent Application

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Order of Resource Area Delineation issued on October 3, 2023

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Site Photos

Appendix D

Reduced Size 11x17

Site Development Plans for The Regency at Lynnfield Senior Housing Development, prepared by The Morin-Cameron Group, Inc., dated November 30, 2023.

Full Size 24x36

Overall Grading and Drainage Plan
prepared by The Morin-Cameron Group, Inc.
dated November 30, 2023

Attachments

Site Development Plans for The Regency at Lynnfield Senior Housing Development, prepared by The Morin-Cameron Group, Inc., dated November 30, 2023.

Technical Narrative & Stormwater Report

The Regency at Lynnfield Senior Housing Development

prepared by The Morin-Cameron Group, Inc., dated November 30, 2023



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 3 – Notice of Intent

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40
and the *Boxford Wetlands Protection Bylaw* (Chapter 192)

Provided by MassDEP:

MassDEP File Number

Document Transaction Number

Lynnfield

City/Town

Important:

When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

A. General Information

1. Project Location (**Note:** electronic filers will click on button to locate project site):

<u>1301 Main Street</u>	<u>Lynnfield</u>	<u>01940</u>
a. Street Address	b. City/Town	c. Zip Code
Latitude and Longitude:	<u>42.56030</u>	<u>-71.03826</u>
	d. Latitude	e. Longitude
<u>13</u>	<u>1000</u>	
f. Assessors Map/Plat Number	g. Parcel /Lot Number	

2. Applicant:

<u>Ted</u>	<u>Merchant</u>	
a. First Name	b. Last Name	
<u>Toll Bros., Inc.</u>		
c. Organization		
<u>116 Flanders Road, Suite 1200</u>		
d. Street Address		
<u>Westborough</u>	<u>MA</u>	<u>01581</u>
e. City/Town	f. State	g. Zip Code
<u>508-366-1440</u>	<u>tmerchant@tollbrothers.com</u>	
h. Phone Number	i. Fax Number	j. Email Address

3. Property owner (required if different from applicant): Check if more than one owner

<u>Richard Luff, Trustee</u>		
a. First Name	b. Last Name	
<u>Sagamore Spring Realty Trust</u>		
c. Organization		
<u>1282 Main Street</u>		
d. Street Address		
<u>Lynnfield</u>	<u>MA</u>	<u>01940</u>
e. City/Town	f. State	g. Zip Code
<u>603-817-0138</u>	<u>rluff@sagamoregolf.com</u>	
h. Phone Number	i. Fax Number	j. Email address

4. Representative (if any):

<u>Dan</u>	<u>Wells</u>	
a. First Name	b. Last Name	
<u>LEC Environmental Consultants, Inc.</u>		
c. Company		
<u>380 Lowell Street, Suite 101</u>		
d. Street Address		
<u>Wakefield</u>	<u>MA</u>	<u>01880</u>
e. City/Town	f. State	g. Zip Code
<u>781-245-2500</u>	<u>dwells@lecenvironmental.com</u>	
h. Phone Number	i. Fax Number	j. Email address

5. Total WPA Fee Paid (from NOI Wetland Fee Transmittal Form):

<u>\$6,550.00</u>	<u>\$3,262.50</u>	<u>\$3,287.50</u>
a. Total Act Fee Paid	b. State Fee Paid	c. City/Town Act Fee Paid



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

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City/Town

A. General Information (continued)

6. General Project Description:

Construction of a 66-unit single family detached, senior housing development; a club house with swimming pool, patio, and associated parking; six private drives; stormwater management system including nine bioretention areas; an on-site private septic system; connection to public water supply; and associated infrastructure.

7a. Project Type Checklist: (Limited Project Types see Section A. 7b.)

- 1. Single Family Home
- 2. Residential
- 3. Commercial/Industrial
- 4. Dock/Pier
- 5. Utilities
- 6. Coastal engineering Structure
- 7. Agriculture (e.g., cranberries, forestry)
- 8. Transportation
- 9. Other

7b. Is any portion of the proposed activity eligible to be treated as a limited project (including Ecological Restoration Limited Project) subject to 310 CMR 10.24 (coastal) or 310 CMR 10.53 (inland)?

- 1. Yes No If yes, describe which limited project applies to this project. (See 310 CMR 10.24 and 10.53 for a complete list and description of limited project types)

If the proposed activity is eligible to be treated as an Ecological Restoration Limited Project (310 CMR10.24(8), 310 CMR 10.53(4)), complete and attach Appendix A: Ecological Restoration Limited Project Checklist and Signed Certification.

8. Property recorded at the Registry of Deeds for:

Essex	
a. County	b. Certificate # (if registered land)
1374	43
c. Book	d. Page Number

B. Buffer Zone & Resource Area Impacts (temporary & permanent)

- 1. Buffer Zone Only – Check if the project is located only in the Buffer Zone of a Bordering Vegetated Wetland, Inland Bank, or Coastal Resource Area.
- 2. Inland Resource Areas (see 310 CMR 10.54-10.58; if not applicable, go to Section B.3, Coastal Resource Areas).

Check all that apply below. Attach narrative and any supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.



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B. Buffer Zone & Resource Area Impacts (temporary & permanent) (cont'd)

Check all that apply below. Attach narrative and supporting documentation describing how the project will meet all performance standards for each of the resource areas altered, including standards requiring consideration of alternative project design or location.

Online Users:
 Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

<u>Resource Area</u>	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
a. <input type="checkbox"/> Designated Port Areas	Indicate size under Land Under the Ocean, below	
b. <input type="checkbox"/> Land Under the Ocean	_____	
	1. square feet	

	2. cubic yards dredged	
c. <input type="checkbox"/> Barrier Beach	Indicate size under Coastal Beaches and/or Coastal Dunes below	
d. <input type="checkbox"/> Coastal Beaches	_____	_____
	1. square feet	2. cubic yards beach nourishment
e. <input type="checkbox"/> Coastal Dunes	_____	_____
	1. square feet	2. cubic yards dune nourishment
	<u>Size of Proposed Alteration</u>	<u>Proposed Replacement (if any)</u>
f. <input type="checkbox"/> Coastal Banks	_____	
	1. linear feet	
g. <input type="checkbox"/> Rocky Intertidal Shores	_____	
	1. square feet	
h. <input type="checkbox"/> Salt Marshes	_____	_____
	1. square feet	2. sq ft restoration, rehab., creation
i. <input type="checkbox"/> Land Under Salt Ponds	_____	
	1. square feet	

	2. cubic yards dredged	
j. <input type="checkbox"/> Land Containing Shellfish	_____	
	1. square feet	
k. <input type="checkbox"/> Fish Runs	Indicate size under Coastal Banks, inland Bank, Land Under the Ocean, and/or inland Land Under Waterbodies and Waterways, above	

	1. cubic yards dredged	
l. <input type="checkbox"/> Land Subject to Coastal Storm Flowage	_____	
	1. square feet	
4. <input type="checkbox"/> Restoration/Enhancement	If the project is for the purpose of restoring or enhancing a wetland resource area in addition to the square footage that has been entered in Section B.2.b or B.3.h above, please enter the additional amount here.	
	_____	_____
	a. square feet of BVW	b. square feet of Salt Marsh
5. <input checked="" type="checkbox"/> Project Involves Stream Crossings		
	2	0
	_____	_____
	a. number of new stream crossings	b. number of replacement stream crossings



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C. Other Applicable Standards and Requirements

This is a proposal for an Ecological Restoration Limited Project. Skip Section C and complete Appendix A: Ecological Restoration Limited Project Checklists – Required Actions (310 CMR 10.11).

Streamlined Massachusetts Endangered Species Act/Wetlands Protection Act Review

1. Is any portion of the proposed project located in **Estimated Habitat of Rare Wildlife** as indicated on the most recent Estimated Habitat Map of State-Listed Rare Wetland Wildlife published by the Natural Heritage and Endangered Species Program (NHESP)? To view habitat maps, see the *Massachusetts Natural Heritage Atlas* or go to http://maps.massgis.state.ma.us/PRI_EST_HAB/viewer.htm.

a. Yes No **If yes, include proof of mailing or hand delivery of NOI to:**

**Natural Heritage and Endangered Species Program
Division of Fisheries and Wildlife
1 Rabbit Hill Road
Westborough, MA 01581**

2021 _____
b. Date of map

If yes, the project is also subject to Massachusetts Endangered Species Act (MESA) review (321 CMR 10.18). To qualify for a streamlined, 30-day, MESA/Wetlands Protection Act review, please complete Section C.1.c, and include requested materials with this Notice of Intent (NOI); OR complete Section C.2.f, if applicable. *If MESA supplemental information is not included with the NOI, by completing Section 1 of this form, the NHESP will require a separate MESA filing which may take up to 90 days to review (unless noted exceptions in Section 2 apply, see below).*

c. Submit Supplemental Information for Endangered Species Review*

- 1. Percentage/acreage of property to be altered:
 - (a) within wetland Resource Area _____ percentage/acreage
 - (b) outside Resource Area _____ percentage/acreage

2. Assessor's Map or right-of-way plan of site

2. Project plans for entire project site, including wetland resource areas and areas outside of wetlands jurisdiction, showing existing and proposed conditions, existing and proposed tree/vegetation clearing line, and clearly demarcated limits of work **

- (a) Project description (including description of impacts outside of wetland resource area & buffer zone)
- (b) Photographs representative of the site

* Some projects **not** in Estimated Habitat may be located in Priority Habitat, and require NHESP review (see <https://www.mass.gov/endangered-species-act-mesa-regulatory-review>).

Priority Habitat includes habitat for state-listed plants and strictly upland species not protected by the Wetlands Protection Act.

** MESA projects may not be segmented (321 CMR 10.16). The applicant must disclose full development plans even if such plans are not required as part of the Notice of Intent process.



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C. Other Applicable Standards and Requirements (cont'd)

- (c) MESA filing fee (fee information available at <https://www.mass.gov/how-to/how-to-file-for-a-mesa-project-review>).

Make check payable to "Commonwealth of Massachusetts - NHESP" and **mail to NHESP** at above address

Projects altering 10 or more acres of land, also submit:

- (d) Vegetation cover type map of site

- (e) Project plans showing Priority & Estimated Habitat boundaries

- (f) OR Check One of the Following

1. Project is exempt from MESA review.
Attach applicant letter indicating which MESA exemption applies. (See 321 CMR 10.14, <https://www.mass.gov/service-details/exemptions-from-review-for-projectsactivities-in-priority-habitat>; the NOI must still be sent to NHESP if the project is within estimated habitat pursuant to 310 CMR 10.37 and 10.59.)

2. Separate MESA review ongoing. a. NHESP Tracking # _____ b. Date submitted to NHESP _____

3. Separate MESA review completed.
Include copy of NHESP "no Take" determination or valid Conservation & Management Permit with approved plan.

3. For coastal projects only, is any portion of the proposed project located below the mean high water line or in a fish run?

- a. Not applicable – project is in inland resource area only b. Yes No

If yes, include proof of mailing, hand delivery, or electronic delivery of NOI to either:

South Shore - Cohasset to Rhode Island border, and
the Cape & Islands:

Division of Marine Fisheries -
Southeast Marine Fisheries Station
Attn: Environmental Reviewer
836 South Rodney French Blvd.
New Bedford, MA 02744
Email: dmf.envreview-south@mass.gov

North Shore - Hull to New Hampshire border:

Division of Marine Fisheries -
North Shore Office
Attn: Environmental Reviewer
30 Emerson Avenue
Gloucester, MA 01930
Email: dmf.envreview-north@mass.gov

Also if yes, the project may require a Chapter 91 license. For coastal towns in the Northeast Region, please contact MassDEP's Boston Office. For coastal towns in the Southeast Region, please contact MassDEP's Southeast Regional Office.

- c. Is this an aquaculture project? d. Yes No

If yes, include a copy of the Division of Marine Fisheries Certification Letter (M.G.L. c. 130, § 57).



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C. Other Applicable Standards and Requirements (cont'd)

Online Users:

Include your document transaction number (provided on your receipt page) with all supplementary information you submit to the Department.

4. Is any portion of the proposed project within an Area of Critical Environmental Concern (ACEC)?
- a. Yes No If yes, provide name of ACEC (see instructions to WPA Form 3 or MassDEP Website for ACEC locations). **Note:** electronic filers click on Website.
- b. ACEC
5. Is any portion of the proposed project within an area designated as an Outstanding Resource Water (ORW) as designated in the Massachusetts Surface Water Quality Standards, 314 CMR 4.00?
- a. Yes No
6. Is any portion of the site subject to a Wetlands Restriction Order under the Inland Wetlands Restriction Act (M.G.L. c. 131, § 40A) or the Coastal Wetlands Restriction Act (M.G.L. c. 130, § 105)?
- a. Yes No
7. Is this project subject to provisions of the MassDEP Stormwater Management Standards?
- a. Yes. Attach a copy of the Stormwater Report as required by the Stormwater Management Standards per 310 CMR 10.05(6)(k)-(q) and check if:
1. Applying for Low Impact Development (LID) site design credits (as described in Stormwater Management Handbook Vol. 2, Chapter 3)
 2. A portion of the site constitutes redevelopment
 3. Proprietary BMPs are included in the Stormwater Management System.
- b. No. Check why the project is exempt:
1. Single-family house
 2. Emergency road repair
 3. Underground utility project.

D. Additional Information

- This is a proposal for an Ecological Restoration Limited Project. Skip Section D and complete Appendix A: Ecological Restoration Notice of Intent – Minimum Required Documents (310 CMR 10.12).

Applicants must include the following with this Notice of Intent (NOI). See instructions for details.

Online Users: Attach the document transaction number (provided on your receipt page) for any of the following information you submit to the Department.

1. USGS or other map of the area (along with a narrative description, if necessary) containing sufficient information for the Conservation Commission and the Department to locate the site. (Electronic filers may omit this item.)
2. Plans identifying the location of proposed activities (including activities proposed to serve as a Bordering Vegetated Wetland [BVW] replication area or other mitigating measure) relative to the boundaries of each affected resource area.



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Bureau of Resource Protection - Wetlands

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D. Additional Information (cont'd)

3. Identify the method for BVW and other resource area boundary delineations (MassDEP BVW Field Data Form(s), Determination of Applicability, Order of Resource Area Delineation, etc.), and attach documentation of the methodology.

4. List the titles and dates for all plans and other materials submitted with this NOI.

Site Development Plans for the Regency at Lynnfield Senior Housing Development

a. Plan Title

Morin-Cameron Group, Inc.

Scott P. Cameron, P.E.

b. Prepared By

c. Signed and Stamped by

November 30, 2023

1"=40'

d. Final Revision Date

e. Scale

Technical Narrative and Stormwater Report

11/30/23

f. Additional Plan or Document Title

g. Date

5. If there is more than one property owner, please attach a list of these property owners not listed on this form.

6. Attach proof of mailing for Natural Heritage and Endangered Species Program, if needed.

7. Attach proof of mailing for Massachusetts Division of Marine Fisheries, if needed.

8. Attach NOI Wetland Fee Transmittal Form

9. Attach Stormwater Report, if needed.

E. Fees

1. Fee Exempt: No filing fee shall be assessed for projects of any city, town, county, or district of the Commonwealth, federally recognized Indian tribe housing authority, municipal housing authority, or the Massachusetts Bay Transportation Authority.

Applicants must submit the following information (in addition to pages 1 and 2 of the NOI Wetland Fee Transmittal Form) to confirm fee payment:

00398664

11/17/2023

2. Municipal Check Number

3. Check date

00398665

11/17/2023

4. State Check Number

5. Check date

Toll Bros., Inc.

6. Payor name on check: First Name

7. Payor name on check: Last Name



**Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands**

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City/Town	

F. Signatures and Submittal Requirements

I hereby certify under the penalties of perjury that the foregoing Notice of Intent and accompanying plans, documents, and supporting data are true and complete to the best of my knowledge. I understand that the Conservation Commission will place notification of this Notice in a local newspaper at the expense of the applicant in accordance with the wetlands regulations, 310 CMR 10.05(5)(a).

I further certify under penalties of perjury that all abutters were notified of this application, pursuant to the requirements of M.G.L. c. 131, § 40. Notice must be made by Certificate of Mailing or in writing by hand delivery or certified mail (return receipt requested) to all abutters within 100 feet of the property line of the project location.

<p><small>DocuSigned by:</small> <i>Ted Merchant</i> <small>844A927C720A444</small></p>	Ted Merchant, Toll Bros., Inc.	11-29-2023
		2. Date
<p><small>DocuSigned by:</small> <i>Richard Luff</i> <small>8A9F091821CA478...</small></p>	ty Owner: Richard Luff, Trustee, Sagamore Spring Realty Trust	11-29-2023
		4. Date
<p><small>DocuSigned by:</small> <i>Dan Wells</i> <small>E50A8C0CDA82499...</small></p>	Sentative: Dan Wells, LEC Environmental Consultants, Inc.	11-29-2023
		6. Date

For Conservation Commission:

Two copies of the completed Notice of Intent (Form 3), including supporting plans and documents, two copies of the NOI Wetland Fee Transmittal Form, and the city/town fee payment, to the Conservation Commission by certified mail or hand delivery.

For MassDEP:

One copy of the completed Notice of Intent (Form 3), including supporting plans and documents, one copy of the NOI Wetland Fee Transmittal Form, and a **copy** of the state fee payment to the MassDEP Regional Office (see Instructions) by certified mail or hand delivery.

Other:

If the applicant has checked the "yes" box in any part of Section C, Item 3, above, refer to that section and the Instructions for additional submittal requirements.

The original and copies must be sent simultaneously. Failure by the applicant to send copies in a timely manner may result in dismissal of the Notice of Intent.



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Important: When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



A. Applicant Information

1. Location of Project:

1301 Main Street	Lynnfield
a. Street Address	b. City/Town
00398665	\$3,262.50
c. Check number	d. Fee amount

2. Applicant Mailing Address:

Ted	Merchant	
a. First Name	b. Last Name	
Toll Bros, Inc.		
c. Organization		
116 Flanders Road, Suite 1200		
d. Mailing Address		
Westborough	MA	01581
e. City/Town	f. State	g. Zip Code
508-366-1440	tmerchant@tollbrothers.com	
h. Phone Number	i. Fax Number	j. Email Address

3. Property Owner (if different):

Richard Luff, Trustee		
a. First Name	b. Last Name	
Sagamore Spring Realty Trust		
c. Organization		
1282 Main Street		
d. Mailing Address		
Lynnfield	MA	01940
e. City/Town	f. State	g. Zip Code
603-817-0138	rluff@sagamoregolf.com	
h. Phone Number	i. Fax Number	j. Email Address

B. Fees

Fee should be calculated using the following process & worksheet. **Please see Instructions before filling out worksheet.**

Step 1/Type of Activity: Describe each type of activity that will occur in wetland resource area and buffer zone.

Step 2/Number of Activities: Identify the number of each type of activity.

Step 3/Individual Activity Fee: Identify each activity fee from the six project categories listed in the instructions.

Step 4/Subtotal Activity Fee: Multiply the number of activities (identified in Step 2) times the fee per category (identified in Step 3) to reach a subtotal fee amount. Note: If any of these activities are in a Riverfront Area in addition to another Resource Area or the Buffer Zone, the fee per activity should be multiplied by 1.5 and then added to the subtotal amount.

Step 5/Total Project Fee: Determine the total project fee by adding the subtotal amounts from Step 4.

Step 6/Fee Payments: To calculate the state share of the fee, divide the total fee in half and subtract \$12.50. To calculate the city/town share of the fee, divide the total fee in half and add \$12.50.

To calculate filing fees, refer to the category fee list and examples in the instructions for filling out WPA Form 3 (Notice of Intent).



Massachusetts Department of Environmental Protection
 Bureau of Resource Protection - Wetlands
NOI Wetland Fee Transmittal Form
 Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

B. Fees (continued)

Step 1/Type of Activity	Step 2/Number of Activities	Step 3/Individual Activity Fee	Step 4/Subtotal Activity Fee
Category 2a: single family house	11	\$500.00	\$5,500.00
Category 3b: clubhouse building	1	\$1,050.00	\$1,050.00
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
_____	_____	_____	_____
Step 5/Total Project Fee:			\$6,550.00
Step 6/Fee Payments:			
Total Project Fee:			<u>\$6,550.00</u>
			a. Total Fee from Step 5
State share of filing Fee:			<u>\$3,262.50</u>
			b. 1/2 Total Fee less \$12.50
City/Town share of filing Fee:			<u>\$3,287.50</u>
			c. 1/2 Total Fee plus \$12.50

C. Submittal Requirements

- a.) Complete pages 1 and 2 and send with a check or money order for the state share of the fee, payable to the Commonwealth of Massachusetts.

Department of Environmental Protection
 Box 4062
 Boston, MA 02211

- b.) **To the Conservation Commission:** Send the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and the city/town fee payment.

To MassDEP Regional Office (see Instructions): Send a copy of the Notice of Intent or Abbreviated Notice of Intent; a **copy** of this form; and a **copy** of the state fee payment. (E-filers of Notices of Intent may submit these electronically.)

AFFIDAVIT OF SERVICE

Under the
Massachusetts Wetlands Protection Act (M.G.L. c. 131, s. 40),
its implementing *Regulations* (310 CMR 10.00),
and the
Lynnfield Wetlands Protection Bylaw (Chapter 240)
and its implementing *Conservation Commission Regulations* (Chapter 320)

I, Sharon A. Sullivan, on behalf of Toll Bros., Inc., hereby certify under the pains and penalties of perjury that on December 4, 2023, I gave notification to abutters in compliance with the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40), its implementing *Regulations* (310 CMR 10.00), and the *Lynnfield Wetlands Protection Bylaw* (Chapter 240) in connection with the following matter:

A Notice of Intent filed under the *Massachusetts Wetlands Protection Act* and the *Lynnfield Wetlands Protection Bylaw* by LEC Environmental Consultants, Inc., on behalf of the Applicant, Toll Bros., Inc., with the Town of Lynnfield Conservation Commission on December 1, 2023 for property located at 1301 Main Street (Map 13, Parcel 1000) in Lynnfield, Massachusetts.

The form of notification, and a list of the abutters to whom it was given and their addresses, are attached to this Affidavit of Service.



Sharon A. Sullivan
Permitting Technician

12/4/2023

Date

December 4, 2023

CERTIFIED MAIL

«Name»

«Name2»

«Address»

«City», «State» «Zip»

Re: Notice of Intent Application
1301 Main Street
Map 13, Parcel 1000
Lynnfield, Massachusetts

[LEC File #: TBI\21-566.02]

Dear Abutter:

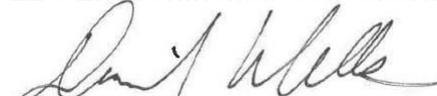
On behalf of the Applicant, Toll Bros., Inc., LEC Environmental Consultants, Inc., (LEC) has filed a *Notice of Intent (NOI) Application* with the Lynnfield Conservation Commission to construct a 66-unit senior housing development; a club house with swimming pool, patio, and associated parking; private drives; stormwater management; connection to public water supply; and associated appurtenances. The *NOI Application* has been completed in accordance with the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40, the *Act*) and its implementing Regulations (310 CMR 10.00, the *Act Regulations*), and the *Lynnfield Wetlands Protection Bylaw* (Chapter 240, the *Bylaw*) and its *Conservation Commission Regulations* (Chapter 320, the *Bylaw Regulations*).

The *NOI Application* and accompanying site plans are available for review by the public at the Temporary Town Hall Offices at 590 Main Street, Monday through Thursday, 9:00 a.m. – 4:00 p.m., or by contacting the Lynnfield Conservation Commission. Further information regarding this application will be published at least five (5) days in advance in *The Lynnfield Villager*. Notice of the Public Hearing will also be posted at the Lynnfield Town Hall at least 48 hours in advance.

A Conservation Commission Public Hearing will be held on December 20, 2023 at 7:00 p.m. at the Merritt Center, 600 Market Street, in accordance with the provisions of the *Act* and its implementing *Regulations*, and the *Bylaw* and the *Bylaw Regulations*. Please check the Town's website for any updated information on the meeting.

Please do not hesitate to review the materials and/or attend the public hearing should you have questions or concerns about the proposed project.

Sincerely,

LEC Environmental Consultants, Inc.


Daniel L. Wells

Senior Wildlife/Wetland Scientist

LEC Environmental Consultants, Inc.**www.lecenvironmental.com**

12 Resnik Road
 Suite 1
 Plymouth, MA 02360
 508.746.9491

380 Lowell Street
 Suite 101
 Wakefield, MA 01880
 781.245.2500

100 Grove Street
 Suite 302
 Worcester, MA 01605
 508.753.3077

P.O. Box 590
 Rindge, NH 03461
 603.899.6726

680 Warren Avenue
 Suite 3
 East Providence, RI 02914
 401.685.3109

PLYMOUTH, MA

WAKEFIELD, MA

WORCESTER, MA

RINDGE, NH

EAST PROVIDENCE, RI

Notice to Abutters

Massachusetts Wetlands Protection Act

Notice of Intent (NOI) and/or Abbreviated Notice of Resource Area Delineation (ANRAD) Filings

As required by M.G.L. c 131, s. 40 (“The Massachusetts Wetlands Protection Act”), an **APPLICANT** shall provide notification to all abutters and any property owner within 100 feet of the property line of the land where the activity is proposed, including if separated from that land by a public or private street.

The following applicant has filed a Notice of Intent with the Lynnfield Conservation Commission. A public hearing will be held as stated below.

<u>Toll Bros., Inc.</u> NAME OF APPLICANT	<u>116 Flanders Road, Suite 1200</u> <u>Westborough, MA 01581</u> ADDRESS OF APPLICANT
<u>1301 Main Street</u> PROJECT ADDRESS	ASSESSOR’S MAP# <u>13</u> PARCEL# <u>1000</u>

PROJECT DESCRIPTION: Construct a senior housing development including 66 single-family detached residential units; a club house with swimming pool, patio, and associated parking; private drives; stormwater management system; connection to public water supply; and associated appurtenances.

December 20, 2023 - 7:00 p.m.
DATE AND TIME OF PUBLIC HEARING AT MERRITT CENTER, 600 MARKET STREET.
(Subject to change. Please check website for updated information.)

The public hearing is advertised in *The Lynnfield Villager*.

Copies of the Notice of Intent and plans may be examined in the Conservation Commission Office located at the Temporary Town Hall Offices at 590 Main Street on Mondays-Thursday from 9:00 AM - 4:00 PM; however, an appointment made in advance is encouraged. Please call Emilie Cademartori, Director of Planning & Conservation at (781) 334-9495 to make an appointment or for any other questions.



TOWN OF LYNNFIELD

ASSESORS OFFICE

55 Summer Street, Lynnfield, MA 01940

Phone: 774-334-9050

REQUEST FOR CERTIFIED ABUTTERS LIST

****CERTIFIED LIST WILL BE PROVIDED WITHIN TEN WORKING DAYS ****

PROPERTY LOCATION: 1301 Main Street

ASSESSORS MAP#: 0013 LOT #: 1000

FEE: \$5.00 for first five pages, \$1.00 after each consecutive page.

TYPE OF LIST REQUESTED:

CONSERVATION COMISSION

Within 100 ft.

BOARD OF APPEALS

Within 300 ft.

PLANNING BOARD

Within 300 ft.

BOARD OF HEALTH

Immediate abutter and directly across the street

REQUESTED BY: Sharon Sullivan DATE: 11/22/2023

LEC Environmental Consultants, Inc.

PHONE NUMBER: (781) 245-2500 EMAIL: ssullivan@lecenvironmental.com

-----Assessors Use Only-----

CERTIFIED BY: Theresa C. Galasso DATE: 11/29/23

OF PAGES: _____ DATE PAID: _____



100 feet Abutters List Report

Lynnfield, MA
November 29, 2023

Subject Property:

Abutters:

Parcel Number: 0008-0000-2083 CAMA Number: 0008-0000-2083 Property Address: 1370 MAIN ST	Mailing Address: PHILLIPS TINA R 1370 MAIN ST LYNNFIELD, MA 01940
Parcel Number: 0008-0000-2087 CAMA Number: 0008-0000-2087 Property Address: 1364 MAIN ST	Mailing Address: MAIN STREET REALTY TRUST VARGA JOSEPH TR 1364 MAIN ST LYNNFIELD, MA 01940
Parcel Number: 0008-0000-2186 CAMA Number: 0008-0000-2186 Property Address: 1381 MAIN ST	Mailing Address: RICCIO JESSICA H, J/T/R/S RICCIO JILLIAN K, J/T/R/S 1381 MAIN STREET LYNNFIELD, MA 01940
Parcel Number: 0008-0000-2715 CAMA Number: 0008-0000-2715 Property Address: 1350 MAIN ST	Mailing Address: BROWN GERALD T/E BROWN BETSY T T/E 1350 MAIN STREET LYNNFIELD, MA 01940
Parcel Number: 0008-0000-2824 CAMA Number: 0008-0000-2824 Property Address: 1377 MAIN ST	Mailing Address: SULLIVAN CAITLIN PORTE, T/E SULLIVAN TREVOR BENJAMIN, T/E 1377 MAIN STREET LYNNFIELD, MA 01940
Parcel Number: 0009-0000-1546 CAMA Number: 0009-0000-1546 Property Address: 1 FRIENDSHIP LN	Mailing Address: TISHLER BRIAN, T/E GARNETTE RUPERTHA H, T/E 1 FRIENDSHIP LN LYNNFIELD, MA 01940
Parcel Number: 0009-0000-1582 CAMA Number: 0009-0000-1582 Property Address: 3 FRIENDSHIP LN	Mailing Address: RILEY FAMILY REAL ESTATE TRUST RILEY JAMES E, TR 3 FRIENDSHIP LN LYNNFIELD, MA 01940
Parcel Number: 0009-0000-1619 CAMA Number: 0009-0000-1619 Property Address: 4 FRIENDSHIP LN	Mailing Address: MATTUCHIO PATRICIA J MATTUCHIO FRANK 4 FRIENDSHIP LN LYNNFIELD, MA 01940
Parcel Number: 0012-0000-0466 CAMA Number: 0012-0000-0466 Property Address: 1282 MAIN ST	Mailing Address: SAGAMORE SPRING REALTY TRUST LUFF, LUFF & THOMPSON TRUST 1282 MAIN ST LYNNFIELD, MA 01940
Parcel Number: 0013-0000-0855 CAMA Number: 0013-0000-0855 Property Address: 1287 MAIN ST	Mailing Address: SAGAMORE SPRING R E TR LUFF LUFF & THOMPSON TRS 1282 MAIN ST LYNNFIELD, MA 01940



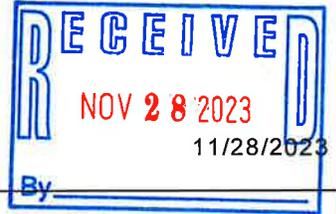
www.cai-tech.com

Data shown on this report is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this report.



City of Peabody

CERTIFICATION OF ABUTTERS



PROPERTY OWNER: Sagamore Spring RE Trust

PROPERTY LOCATION: Sagamore Spring Golf Course/1301 Main Street-LYNNFIELD - See attached map

MAP: N/A LOT: N/A

REQUESTED BY: Sharon Sullivan PHONE: (781) 245-2500

- Chapter 138, Section 15A – direct abutters & churches, synagogues, hospitals, & schools within 500'
- Chapter 40A, Section 11 – abutter to abutter within 300'
 Special Permit Variance Entertainment License Site Plan Review
- Chapter 41, Section 81T – Notice of Submission of Plan – direct abutters
- Chapter 32, City of Peabody Code – Wetlands & Rivers Protection Regulations – abutter to abutter within 300'
- Chapter 131, Section 40 – Notice of Intent – all abutters within 100'
- 700 CMR 3.06, State Permits for billboard signs – Notification within 500'

Please allow up to 5 business days for the completion of your request.

Sagamore Spring Golf Course, Lynnfield

003-001

003-002

003-003

007-080

007-081

007-082

007-083

007-084

007-085

Teresa Rade
Lesen George
Susan E. Carmellis 11/30/2023 *lg*

BOARD OF ASSESSORS
 CITY OF PEABODY
 CERTIFIED

Property ID	Owner	Owner 2	Owner Address	Owner Address 2
003-001	GIOVANNIELLO PATRICIA J & VANESSA		68 CATHERINE DR	PEABODY, MA 01960
003-002	SIMBECK NICOLE M & GORDON ERIK J		70 CATHERINE DR	PEABODY, MA 01960
003-003	JORGENSON ADAM M		72 CATHERINE DR	PEABODY, MA 01960
007-080	O'SHEA KEVIN J & NOREEN A		56 CATHERINE DR	PEABODY, MA 01960
007-081	WONG RICKY K Y & LILLIAN TRS	RICKY K Y WONG REVOCABLE TRUST	58 CATHERINE DR	PEABODY, MA 01960
007-082	MCNINE WILLIAM A & LISA A		60 CATHERINE DR	PEABODY, MA 01960
007-083	SINEWITZ BARRY C & DONNA S TRS	SINEWITZ FAMILY REALTY TRUST	62 CATHERINE DR	PEABODY, MA 01960
007-084	GILARDI DEBRA		64 CATHERINE DR	PEABODY, MA 01960
007-085	MEHILLI TEUTA & ARTUR	QOSHI VIOLA	66 CATHERINE DR	PEABODY, MA 01960

*Teresa Rade
Loren George
Susan E. Armelino*

11/30/2023



Notice of Intent Application

The Regency at Lynnfield Senior Housing Development

1301 Main Street

Assessor's Map 13, Parcel 1000

Lynnfield, Massachusetts

December 1, 2023

1. Introduction

On behalf of the Applicant, Toll Bros., Inc., LEC Environmental Consultants, Inc., (LEC) is filing this Notice of Intent (NOI) Application under the *Massachusetts Wetlands Protection Act* (M.G.L. c. 131, s. 40, the *Act*) and its implementing *Regulations* (310 CMR 10.00, the *Act Regulations*), and the *Lynnfield Wetlands Protection Bylaw* (Chapter 240, the *Bylaw*) and its *Conservation Commission Regulations* (Chapter 320, the *Bylaw Regulations*) for *The Regency at Lynnfield Senior Housing Development*, a 66-unit, development.

The Regency includes 66 single-family detached residential buildings; a club house with swimming pool, patio, and associated parking; six private drives; stormwater management system including nine bioretention areas; on-site private septic system; connection to public water supply; and associated infrastructure. The property is situated entirely within the Elderly Housing Zoning District which was adopted at the November 2022 Lynnfield Town Meeting. To the extent practical, the community is consolidated within upland portions of the site. However, the project requires work in the Buffer Zone, and two wetland/intermittent stream crossings to access the northern portion of the Project Site.

Proposed construction activities and mitigation measures have been designed to avoid, minimize, and mitigate potential impacts to Wetland Resource Areas while providing wetland replication/restoration for the two wetland/stream crossings. Details of the proposed construction activities and mitigating measures described herein are shown on the attached plans entitled *Site Development Plans for The Regency at Lynnfield Senior Housing Development (Site Plans)* and *Technical Narrative & Stormwater Report, The Regency at Lynnfield Senior Housing Development (Narrative Report)*, both dated November 30, 2023 and prepared by The Morin-Cameron Group, Inc. (MCG).

In addition to the filing of this NOI Application, *The Regency* is undergoing review by the Town of Lynnfield Planning Board for issuance of a Special Permit and Site Plan Approval. The Conservation Commission and Planning Board will hold a joint Public Hearing on December 20, 2023. The Project also will require local approval of the on-site wastewater disposal system from the Lynnfield Board of Health.

2. General Site Description

The 36.09-acre site is located north and northeast of the Sagamore Spring Golf Club, west of the Peabody/Lynnfield municipal boundary, south of Friendship Lane, and east of Main Street, within the northeastern portion of Lynnfield (Appendix A, Figures 1 and 2). Residential development and single-family dwellings associated with Catherine Drive in Peabody, and Friendship Lane and Main Street in Lynnfield are located east, north, and northwest of the site, respectively. The green for Hole #15 and the tee for Hole #16 are located to the west (across Main Street) while portions of the driving range, portions of Hole #1, the green for Hole #2, and the tee for Hole #3 are located to the south. The northern portion of the site is undeveloped and wooded, containing forested uplands and wetlands. Forested wetlands occur within the northern portion of the site and extend off-site onto the adjacent property, while one isolated wetland occurs within the northwestern portion of the site. The property slopes from a high elevation of 208 feet near the Peabody municipal boundary to a low elevation of 89 feet at Main Street.

Wills Brook flows south of the site through the southeastern portion of the golf course and beneath Main Street. East of Main Street and south of a Pond, the Brook is depicted as intermittent on the USGS map (Appendix A, Figure 1). The stream is then depicted again as perennial as it flows westerly from the Pond and under Main Street. Riverfront Area associated with Wills Brook does not extend into the project site.

Vegetation within the undeveloped forested uplands in the northern portions of the property includes a canopy dominated by white pine (*Pinus strobus*) and red oak (*Quercus rubra*), with scattered clusters of ironwood (*Carpinus caroliniana*), and basswood (*Tilia americana*), with individuals of eastern cottonwood (*Populus deltoides*), American elm (*Ulmus americana*), white ash (*Fraxinus americana*), chestnut oak (*Quercus montana*), sassafras (*Sassafras albidum*), red maple (*Acer rubrum*), and black cherry (*Prunus serotina*). The understory contains clusters of saplings from the canopy, multiflora rose (*Rosa multiflora*), burning bush (*Euonymus alatus*), barberry (*Barberis thunbergii*), Japanese knotweed (*Reynoutria japonica*), and sweet pepperbush (*Clethra alnifolia*) with individuals of huckleberry (*Gaylussacia* sp.), and honeysuckle (*Lonicera* sp.). The groundcover is dominated by patches of goldenrod (*Solidago* sp.), Virginia creeper (*Parthenocissus quinquefolia*), bracken fern (*Pteridium aquilinum*), partridge berry (*Mitchella repens*), lowbush blueberry (*Vaccinium angustifolium*), hairy bittercress

(*Cardamine hirsuta*), and common greenbrier (*Smilax rotundifolia*), with scattered clusters of poison ivy (*Toxicodendron radicans*), miscellaneous sedges (*Carex* spp.), and seedlings from the canopy. Entanglements of oriental bittersweet (*Celastrus orbiculatus*) and grape vine (*Vitis* sp.) are present in portions of the forested uplands.

LEC inspected soil conditions throughout the uplands adjacent to the BVW boundary and observed a range of soil conditions. As a representative example, LEC observed a 9-inch thick, fine sandy loam topsoil (A horizon) with a soil matrix color of 10YR 2/2. The A horizon is underlain by a 6-inch thick weathered, fine sandy loam subsoil (B_{w1} horizon) with a soil matrix color of 10YR 4/4. The subsoil is underlain by a 5+ inch thick fine sandy loam subsoil (B_{w2} horizon) with a soil matrix color of 10YR 4/6. Generally, no redoximorphic features or other indicators of hydrology were observed within the upland soil profile; however, if observed, these features were too deep within the soil column or within a relatively high-chroma soil matrix - rendering the observed soils within the uplands ‘non-hydric’ according to the *Field Indicators for Identifying Hydric Soils in New England* (Version 4, June 2020, the *Field Indicators Guide*).

2.1 **Natural Heritage and Endangered Species Program Designation**

According to the 15th edition of the *Massachusetts Natural Heritage Atlas* (effective August 1, 2021) published by the Natural Heritage & Endangered Species Program (NHESP) and the MassGIS data layer, no areas of Estimated Habitat of Rare Wildlife or Priority Habitat of Rare Species exist on the site. No mapped Certified Vernal Pools (CVP) or Potential Vernal Pools (PVP) occur within proximity of the site (Appendix A, Figure 2).

2.2 **FEMA Floodplain Designation**

According to the July 3, 2012 *Federal Emergency Management Agency (FEMA) Flood Insurance Rate Map (FIRM)* for Essex County, Massachusetts (Community Panel Number: 25009C0391F), the entire property is located within Zone X [unshaded] - *Areas determined to be outside of the 0.2% annual chance floodplain*, therefore, no portions of the site are located within the floodplain (Appendix A, Figure 3).

3. Wetland Resource Areas

Wetland Resource Areas associated with the site include BVW, IVW, and Bank to intermittent stream. The Commission issued an *Order of Resource Area Delineation* (ORAD) confirming the resource area boundaries on October 3, 2023, under DEP File #: 209-0672 (Appendix B). Below is a brief summary of these Wetland Resource Areas as they relate to the Proposed Project.

3.1 Bordering Vegetated Wetlands

According to the *Act Regulations* [310 CMR 10.55(2)(a)], Bordering Vegetated Wetlands (BVW) are *freshwater wetlands which border on creeks, rivers, streams, ponds, and lakes where the soils are saturated and/or inundated such that they support a predominance of wetland indicator plants*. BVW is not defined in the *Bylaw* or *Bylaw Regulations*, so the aforementioned definition prevails.

Vegetated wetlands jurisdictional as BVW under the *Act* and the *Bylaw* occur adjacent to an intermittent stream system within the northern portion of the site (A- and F-series), and west of Main Street (G-series).

Series A, F, and G are part of a contiguous forested wetland system characterized by undulating topography. The E-series BVW is connected to a mostly offsite wetland system to the north.

Vegetation within the forested wetland includes a moderately dense canopy dominated by red maple, and American elm, with clusters of white oak (*Quercus alba*), yellow birch (*Betula alleghaniensis*), ironwood, and ash, with individuals of black birch (*Betula lenta*), northern red oak, and chestnut oak. The understory is dominated by sweet pepperbush (*Clethra alnifolia*), and spicebush (*Lindera benzoin*) in the central and eastern portions of the site, while the understory in the western portion of the BVW is dominated by sapling red maple. Clusters of highbush blueberry (*Vaccinium corymbosum*), individuals of glossy buckthorn (*Frangula alnus*), and maple leaf viburnum (*Viburnum acerifolium*) are present throughout the wetland. The groundcover is dominated by cinnamon fern (*Osmundastrum cinnamomeum*), wood fern (*Dryopteris* sp.), jewelweed (*Impatiens capensis*), and New York fern (*Thelypteris noveboracensis*) with clusters of solomon’s seal (*Polygonatum* sp.), sensitive fern (*Onoclea sensibilis*), aster (*Asteraceae* sp.), skunk cabbage (*Symplocarpus foetidus*), wrinkle leaf goldenrod (*Solidago rugosa*), various

grasses (*Poaceae* spp), poison ivy, and huckleberry (*Gaylussacia* sp.). Greenbrier, oriental bittersweet, and poison ivy vines are present throughout the BVW.

LEC inspected soil conditions within the wetland and generally observed an 8-inch thick, organic topsoil (O horizon), with a soil matrix color of 10YR 2/1. The topsoil is underlain by a 10+-inch thick, fine sandy loam depleted subsoil (B_g horizon) with a soil matrix color of 10YR 4/2. Organic streaking and redox concentrations of 10YR 5/4 were observed throughout the subsoil horizon. This soil profile is considered hydric according to the *Field Indicators for Identifying Hydric Soils in New England* (Version 4, June 2020, the *Field Indicators Guide*), as it meets the indicator A11: Depleted Below Dark Surface.

Approximately, 3,368 square feet (SF) of BVW (3,145± SF permanent; 598± SF temporary) will be impacted for the two proposed wetland/stream crossings.

3.2 **Isolated Vegetated Wetlands (IVW)**

According to the *Bylaw* [Section 240-8], Resource Area- *Includes any freshwater wetlands; marshes; wet meadows; bogs; swamps; vernal pools; banks; reservoirs; lakes; ponds of defined size; rivers; streams; creeks; beaches; estuaries; lands under water bodies; lands subject to flooding or inundation by groundwater or surface water; lands subject to flooding; and lands abutting any of the aforesaid resource areas.*

According to Section 240-2, *Said Resource areas shall be protected whether or not they border surface waters.*

The B-series IVW is located in the golf driving range in the western portion of the site, south of the forested wetland, and is characterized as a scrub-shrub and wet meadow wetland. The IVW occurs within a slight topographic depression on the edge of the golf course driving range. Vegetation is dominated by wrinkle leaf goldenrod, sedge (*Carex* sp.), and New York fern, with patches of milkweed (*Asclepias* sp.), and various grasses. Entanglements of bittersweet occur in select areas. The IVW contains a soil profile similar to the forested wetland described above.

There are no proposed alterations to the IVW.

3.3 **Intermittent Stream**

The current USGS map does not show any perennial or intermittent streams located within the northern portions of the site; however, LEC delineated two separate stream

systems that originate from a culvert west of Catherine Drive in Peabody that flow westerly down the sloped hillside toward Main Street. According to the *Act Regulations* [310 CMR 10.58(2)(a)(1)(b and c)], b. *A river or stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size greater than or equal to one square mile, is perennial. c. A stream shown as intermittent or not shown on the current USGS map or more recent map provided by the Department, that has a watershed size less than one square mile, is intermittent unless: i. The stream has a watershed size of at least ½ (0.50) square mile and has a predicted flow rate greater than or equal to 0.01 cubic feet per second at the 99% flow duration using the USGS Stream Stats method. The issuing authority shall find such streams to be perennial...*

To confirm the intermittent status of observed onsite streams, LEC utilized the USGS Water Resources Web Application StreamStats, to calculate the contributing watershed area and 99% flow duration from a point located west of Main Street. The StreamStats analysis calculated a 0.05 square mile watershed with an “undefined” 99% flow duration which does not meet the criteria for a perennial stream status. As such, LEC confirmed the intermittent status of the two streams in the northern portions of the property, as confirmed by the Commission in the ORAD. LEC delineated the Bank in select portions of these two streams, represented by the J1 through J23, K1 through K22, and I1 through I6 series, as described below.

3.4 **Bank to Intermittent Stream**

Bank is defined at 310 CMR 10.54(2)(a) as *the portion of land surface which normally abuts and confines a water body. The upper boundary of a bank is the first observable break in the slope or the mean annual flood level, whichever is lower. The lower boundary of a bank is the mean annual low flow level.*

According to *the Bylaw* [Section 240-8], *Bank Includes the land area which normally abuts and confines a water body; the lower boundary being the mean annual low flow level, and the upper boundary being the first observable break in the slope or the mean annual flood level, whichever is higher.*

As stated above, the A-series BVW includes sections of the Bank boundary associated with the northern intermittent stream. The western section of the stream adjacent to Main Street flows in a westerly direction beneath Main Street via a 30-inch reinforced concrete pipe. The stream in this section is situated at the bottom of a steep embankment with

channel depths measuring 4 to 24 inches. The Bank substrate is comprised of sand, gravel, and stones.

The J1 through J23, K1 through K22, and I1 through I6 Bank boundaries are associated with two separate on-site intermittent streams as described above, where Bank boundaries were delineated separately from the upgradient BVW boundary.

The J series Bank channel (northerly of the two intermittent streams) measures roughly 3 to 11 feet in width and is contained within 1-to-2-foot-high embankments. LEC observed water flowing in a westerly direction, along with stain lines, scour, directionally matted vegetation, and wrack deposition.

The K-series Bank channel (the southerly of the two streams) varies in width from approximately 3 to 9 feet. No flow was observed within the K-series at the time of delineation or during multiple additional site inspections. This stream appears only to flow following significant storm events or during the winter and spring when groundwater levels are high and/or the water levels in the immediately upgradient wetland system are at their annual maximum. The I-series designates a small “island” within the southerly stream crossing that contains a mature red maple tree surrounded by rocks and wetland ferns. The I-series was not confirmed as part of the ORAD, but was added after the final stream crossing locations were determined and more closely examined. The average stream channel width in the vicinity of the southern crossing measures roughly 1-2 feet and is contained within short (less than one foot high) Banks. The vegetated channel substrate contains mucky organic soils and leaf detritus.

Approximately 105± linear feet (LF) of stream Bank to the northern J Series crossing and 242 LF of stream Bank (114± LF of stream Bank plus 23 LF interior island) to the southern K Series southern crossing; will be impacted for construction of the wetland/stream crossings.

3.5 **Buffer Zone Resource Area (Bylaw Only)**

According to the *Bylaw*, §240-8, the term “Resource Area” *Includes any freshwater wetlands; marshes; wet meadows; bogs; swamps; vernal pools; banks; reservoirs; lakes; ponds of defined size; rivers; streams; creeks; beaches; estuaries; lands under water bodies; lands subject to flooding or inundation by groundwater or surface water; lands subject to flooding; and lands abutting any of the aforesaid resource areas.*

The 100-foot Buffer Zone therefore extends from the BVW and IVW flags (all Bank flags are interior to BVW). The Buffer Zone within the project area is comprised of portions of the existing golf course driving range and undeveloped forested upland habitat as described above.

4. **Proposed Project**

As noted in the Introduction, *The Regency* includes 66 single-family detached residential buildings; a club house with swimming pool, patio, and associated parking; six private drives; stormwater management system including nine bioretention areas; an on-site private septic system; connection to public water supply; and associated infrastructure. To the extent practical, the community is consolidated within the upland portions of the site. However, the project requires two wetland/intermittent stream crossings for roadway, utility, and emergency access to the northern portion of the Project Site (*Site Plans*).

Of the 36.1-acre project site, 22.7 acres (62.8%) will be disturbed for development of homes, septic system, and stormwater management, leaving 13.4± acres of forested land untouched as passive open space.

4.1 **Dwellings, Amenities & Landscaping**

The Regency consists of 66 age-restricted single-family detached housing units. Homes will range in size from 1,880± to 2,800± SF of livable area. Each residence will contain a 2-car garage and provide adequate parking for 2 cars within the driveway. All dwelling driveways slope toward the private drive system to capture stormwater runoff from all paved areas in the closed drainage system. Of the 66 residential buildings, 11 have some portion within the outer limits of the 100-foot Buffer Zone. In addition, portions of the club house and pool complex near the entrance off Main Street are located within the Buffer Zone. Native or naturalized landscaping plantings will be installed at the project entrance, the club house and pool, along the private drives, and at each residential building as depicted on the Landscape Plans as part of the *Plan Set*.

4.2 **Site Access and Internal Roadway Design**

The Regency is proposed as a privately-owned community with a private main entrance off Main Street and a gated emergency access drive off Friendship Lane. The community

includes six private drives to provide access throughout the Project Site. “Road A” is the primary access drive off Main Street and is 715 feet long. Road B is 425 feet long and connects Road A to Road A2 with a cul-de-sac turnaround at the northerly end. Road A2 extends from Friendship Lane to a cul-de-sac turnaround and is 1,863 feet long. Road C is 409 feet long and extends from Road A2 to a cul-de-sac turnaround. The total length of new private roadway is 3,412 linear feet. The maximum road slope is 7.9% on Road A; however, most of the roads are designed to be less than 6% slope.

Cobble curbing, lawn grass, and a sidewalk along one side of the drives will flank the roadway pavement for much of the community, while modular block retaining walls and guard rails will be installed at the wetland/stream crossings. Roadway plans and profiles are included in the *Site Plans*.

Emergency access will be accommodated through the extension of Road A2 to Friendship Lane. This will provide vehicular access and extension of the public water supply main up to Friendship Lane. The extension to Friendship Lane requires construction of two wetland/stream crossings. To minimize the area of impact to the wetland, the Road will be retained with modular walls instead of a gradual shoulder slope. The streams will be spanned with a 15’ wide, four-sided (4) box culvert meeting the *Massachusetts River and Stream Crossing Standards*.

Installation of the new box culverts will maintain the existing upgradient topographic elevations to preserve the hydrologic gradient and the hydrology of the wetland system. The two 15-foot wide culverts will allow for wildlife passage by providing greater than 1.2 times the existing Bankfull width, and exceeding the minimum openness ratio (height and width vs. area) as required in the *Massachusetts River and Stream Crossing Standards*. The footprint of BVW impacts to construct the two crossings have been minimized to the greatest extent practicable through the use of modular retaining walls on each side of the drive. BVW impacts total 3,368± SF (3,145± SF permanent, 598± SF temporary). BVW impacts will be mitigated by creating a 3,611± SF Wetland Replication Area and restoring temporary impacts in place.

4.3

Utilities and Infrastructure (Sewer, Water & Electric)

The Project includes a connection to the Town of Lynnfield Center Water District water supply system. Toll will extend the existing water main under Main Street to the site entrance, then northward up to Friendship Lane, and then looped southward through the golf course through existing easements and roadways, ultimately to Lowell Street.

Permitting for the water line installation in Main Street within the Buffer Zone and Riverfront Area is exempt under the Act Regulations at 310 CMR 10.02(2)(b)1. i.. However, the *Bylaw* and *Bylaw Regulations* do not afford such exemptions. Therefore, a separate NOI Application will be filed under the *Bylaw* only for this waterline installation.

A private on-site wastewater disposal system is located in the southwestern portion of the Project Site, in a portion of the former driving range, designed in compliance with Title V (310 CMR 15.00) and the Lynnfield Board of Health Regulations. The wastewater will be collected in a sanitary sewer system to a series of septic tanks and a pump. The pump will distribute wastewater to an innovative technology known as a Presby Wastewater Treatment System, which will provide enhanced treatment of the wastewater from the project.

Electric service will be provided by Reading Municipal Light Department (“RMLD”). Cable, fiber optic, and other communications services will be coordinated with the individual utility providers. Natural gas is not available in Main Street; therefore, natural gas will not be provided to the project. Propane will be offered as an option to homebuyers.

5. Mitigation Measures

The project has been designed with mitigation measures to ensure compliance with the applicable Wetland Resource Area performance standards and protection of the interests of the *Act* and *Bylaw* during and after construction. The mitigation measures include perimeter erosion and sedimentation control, a stormwater management system, and Wetland Restoration/Replication for disturbances to BVW and Bank at the stream crossings.

5.1 Erosion and Sedimentation Prevention

Toll proposes to implement a comprehensive erosion and sedimentation control program to protect the Wetland Resource Areas from sedimentation throughout construction activities. Siltation barriers composed of silt fence with compost filter tube will be installed along the limit of work in all areas near wetland resource areas, as depicted and detailed on the *Site Plans*. These siltation barriers will demarcate the limit of work and provide additional assurance that construction equipment will not enter protected areas

during construction. All barriers will remain in place until disturbed areas are stabilized by vegetation and the Conservation Agent has authorized removal. Additional erosion control measures include a stabilized construction entrance, temporary settling basins, temporary and permanent sediment traps, silt sack inlet protection, dust control, and spill prevention as detailed on the *Site Plans*.

The project will comply with all applicable federal, state, and local regulations and the conditions of all permits obtained for the Project. A Stormwater Pollution Prevention Plan (SWPPP) will be developed in accordance with the Construction General Permit, and a Notice of Intent for Stormwater Discharges Associated with Construction Activities will be submitted to the EPA and the Lynnfield Conservation Commission prior to the start of construction. During construction, the contractor will be required to comply with the NPDES General Permit and the SWPPP for the Project.

5.2

Stormwater Management

The Stormwater Management System for the proposed project has been designed to include structural Best Management Practices (BMPs) in order to comply with the DEP’s Stormwater Management Guidance and Performance Standards at 310 CMR 10.05(6)(k). All stormwater runoff from the site will pass through a treatment train consisting of catch basins with hooded outlets and 4’ sumps, hydrodynamic treatment and/or sediment forebays, and infiltration basins. All outlets from the retention basins have been designed to minimize the velocity of stormwater as it passes through a stabilized rip-rap apron. The bottom of the basins will be seeded with Ernst Basin Floor Low Maintenance Meadow (ERNMX-126) with the side slopes seeded with Ernst Low-Growing Wildflower & Grass Mix (ERNMX-156) to ensure a deeper root base and further prevention against erosion while also providing a diversity wildlife habitat. These measures will ensure no erosion occurs in or around the wetlands.

MCG has prepared the attached *Narrative Report* which includes a Project description, the DEP Checklist for Stormwater Report, and Compliance with DEP’s Stormwater Management Standards. A Construction Period Pollution Prevention and Erosion and Sedimentation Control Plan is also contained in the *Narrative Report*. As noted above, erosion control measures have been designed and will be installed prior to the start of construction activities. Lastly, a Post Construction Operation and Maintenance Plan (O&M Plan) for Stormwater Management System has been developed by MCG that

details who will be responsible for inspection and maintenance of the drainage facilities and the frequency and scope of inspections.

5.3

Wetland Replication & Buffer Zone Meadow Seed Mix

Included in the *Site Plans* is the Proposed Wetland Crossing Plan (Sheets W-1 and W-2) that detail the areas of BVW and Bank alteration associated with the private drive crossings.

The proposed wetland/stream crossings associated with private drive “A2” will require 3,145± SF of permanent and 598± SF of temporary impacts to BVW. The 598± SF of temporary BVW impacts occur at the base of the modular retaining walls and culverts located on either side of the drive and will be restored in place following wall installation. To mitigate for permanent impacts, a 3,611± SF Wetland Replication Area will be created downstream, but adjacent to the same wetland system as the impacted BVW at a 1.15:1 ratio of mitigation to permanent impact. The Wetland Replication Area will be created by clearing non-native existing vegetation, retaining existing native wetland vegetation, excavating to appropriate sub-grades, backfilling with organic-rich topsoil as may be required, and planting the area with additional native wetland indicator species and a wetland seed mix. All of this work will be supervised by a Wetland Scientist experienced in Wetland Replication. Post-construction monitoring and reporting by a Wetland Scientist will document the progress toward achieving compliance with the BVW Performance Standards, including a 75% survival of woody species and 75% coverage by wetland indicator species after two growing seasons.

To off-set required grading within the Buffer Zone to BVW and provide erosion and sediment control and habitat diversification, 5.7± acres of the Buffer Zone will be stabilized by seeding with Ernst Low-Growing Wildflower & Grass Mix (see plan sheet LS-5). After the first year of growth, the meadow should be mowed annually in late fall after the flowers have bloomed.

6.**Performance Standards**

The *Act* and its implementing *Regulations* set forth specific performance standards for work within BVW and Bank. The *Bylaw* and *Bylaw Regulations* do not contain additional performance standards for BVW replication. The pertinent performance

standards for work within the aforementioned Wetland Resource Areas and an explanation of the Project’s compliance with these standards follows:

6.1

Bordering Vegetated Wetlands

As noted above in Section 4.2, the proposed road crossings will result in permanent (3,145± SF) and temporary (598± SF) alteration of BVW. As mitigation, the project includes 3,611± square feet of wetland replication and 598± SF of in-kind wetland restoration. The Wetland Replication Areas have been designed in accordance with the performance standards for BVW at 310 CMR 10.55 (4)(b)(1)-(7), as follows.

(1) The surface of the replacement area to be created (“the replacement area”) shall be equal to that of the area that will be lost (“the lost area”):

The proposed BVW alteration totals 3,368± SF of temporary and permanent BVW impacts, with wetland replication measuring 3,611± SF and in-kind wetland restoration measuring 223± SF.

(2) Ground water and surface elevation of the replacement area shall be approximately equal to that of the lost area:

The proposed wetland replication area is located downstream of proposed impact, but within part of the same overall wetland system contained within the Project Site. Successful establishment of the appropriate surficial wetland hydrology is proposed by reducing existing surficial elevations, and intercepting ground water from within the adjacent wetlands. This will be accomplished by reducing elevations within the replacement area by up to 2± feet as the grades vary across the wetland replication area.

(3) The overall horizontal configuration and location of the replacement area with respect to the bank shall be similar to that of the lost area:

The wetland replacement area is proposed within a similar horizontal configuration and location with respect to Bank such that it will re-create a BVW similar to the impacted area.

(4) The replacement area shall have an unrestricted hydraulic connection to the same water body or waterway associated with the lost area:

The proposed wetland replication area will have an unrestricted hydraulic connection to the same intermittent stream system as the impacted BVW and Bank.

(5) *The replacement area shall be located within the same general area of the water body or reach of the waterway as the lost area:*

See above response.

(6) *At least 75% of the surface of the replacement area shall be reestablished with indigenous wetland plant species within two growing seasons, and prior to said vegetative re-establishment any exposed soil in the replacement area shall be temporarily stabilized to prevent erosion in accordance with standard U.S. Soil Conservation Service methods:*

The Wetland Replication Area will be planted with a variety of native wetland indicator species and a wetland seed mix to ensure establishment of a wetland plant community (see plan sheet W-3). The success of the proposed wetland replacement activities will be monitored spring and fall for two years by a Wetland Scientist to ensure that at least 75% of the replacement area has been re-established with indigenous wetland plant species.

(7) *The replacement area shall be provided in a manner which is consistent with all other General Performance Standards for each resource area in Part III of 310 CMR 10.00:*

Creation of the wetland replacement area will occur in the Buffer Zone and complies with all other General Performance Standards for resource areas located on the site.

6.2

Bank

The proposed wetland crossings will impact 242± LF of Bank associated with two separate intermittent streams. As described above in Section 4.2 and depicted on plan Sheets W-1 and W-2, the intermittent stream crossings associated with private drive “A2” consist of four-sided box culverts backfilled and restored with a natural streambed substrate. The proposed box culverts will span the stream in accordance with the Stream Crossing Standards as further described below.

The project complies with the performance standards at 310 CMR 10.54 (4)(a) as follows:

(a) *Any proposed work on a Bank shall not impair the following:*

(1) *The physical stability of Bank;*

The impacted Bank associated with the stream crossings will be restored with stockpiled naturally occurring stream materials, thereby preserving the physical stability of the Bank.

(2) *the water carrying capacity of the existing channel within the Bank;*

The water carrying capacity of the Banks will not be affected since both stream crossings will measure more than 1.2 times the Bankfull width (see Section 6.3 below). Additionally, installation of the new box culverts will maintain the existing upgradient topographic elevations to preserve the hydrologic gradient and the hydrology of the wetland system.

(3) *groundwater and surface water quality;*

Proper construction methodologies will be employed during construction to protect groundwater and surface water quality.

(4) *the capacity of the Bank to provide breeding habitat, escape cover and food for fisheries;*

The intermittent streams where Bank alteration is proposed do not provide habitat for fisheries.

(5) *the capacity of Bank to provide important wildlife habitat functions;*

See standard (6) below.

(6) *Work on a stream crossing shall be presumed to meet the performance standard set forth in 310 CMR 10.54(4)(a) provided the work is performed in compliance with the Massachusetts Stream Crossing Standards by consisting of a span or embedded culvert in which, at a minimum, the bottom of a span structure or the upper surface of an embedded culvert is above the elevation of the top of the bank, and the structure spans the channel width by a minimum of 1.2 times the bankfull width. This presumption is rebuttable and may be overcome by the submittal of credible evidence from a competent source. Notwithstanding the requirement of 310 CMR 10.54(4)(a)5., the impact on bank caused by the installation of a stream crossing is exempt from the requirement to perform a habitat evaluation in accordance with the procedures contained in 310 CMR 10.60.*

In accordance with the above, the two stream crossings meet the performance standards for Bank by complying with the Stream Crossing Standards (described below in Section 6.3). Therefore, a wildlife habitat evaluation was not required.

(b) Does not apply.

(c) *No project may be permitted which will have any adverse effect on specified habitat sites of rare vertebrate or invertebrate species, as identified under procedures established under 310 CMR 10.59.*

Not applicable.

6.3

Stream Crossing Standards

The two wetland/stream crossings have been designed in accordance with the *Massachusetts River and Stream Crossing Standards* (the “*Stream Crossing Standards*”). Compliance with the “General” Standards is described below:

General Standards

1. *Spans (bridges, 3-sided box culverts, open-bottom culverts or arches) that preserve the natural stream channel are strongly preferred.*
2. *If a culvert, then it should be embedded:*
 - *a minimum of 2 feet for all culverts,*
 - *a minimum of 2 feet and at least 25 percent for round pipe culverts*
 - *When embedment material includes elements > 15 inches in diameter, embedment depths should be at least twice the D84 (particle width larger than 84 % of particles) of the embedment material*
3. *Spans channel width (a minimum of 1.2 times the bankfull width)*
4. *Natural bottom substrate within the structure*
5. *Designed with appropriate bed forms and streambed characteristics so that water depths and velocities are comparable to those found in the natural channel at a variety of flows*
6. *Openness > 0.82 feet (0.25 meters)*
7. *Banks should be present on each side of the stream matching the horizontal profile of the existing stream and banks*

See *Plan Set* Sheets W-1 and W-2 for details of the two wetland/stream crossing locations. “Crossing #1” is the southerly (Sheet W-1), while “Crossing #2” (Sheet W-2)

is the northerly of the two. Both crossings will consist of 15-foot-wide box culverts with natural substrate bottoms, embedded a minimum of two feet.

At Crossing #1, the average existing bankfull width (BFW) is 10.25 feet, therefore, the Standards require a minimum BFW of 1.2 times, or 12.30 feet. The proposed culvert will be 15.0 feet, in compliance with the 1.2x BFW requirement.

At Crossing #2, the average existing BFW is 10.40 feet, therefore, the Standards require a minimum BFW of 1.2 times, or 12.48 feet. The proposed culvert will be 15.0 feet, in compliance with the 1.2x BFW requirement.

The Openness Ratio (OR) is calculated as the cross-sectional area of the structure divided by the crossing length. For the General Standard, the OR must be greater than 0.82 feet. Crossing #1 has an OR of 1.05, and Crossing #2 has an OR of 1.31, both exceeding the minimum General Standard.

6.4 **Buffer Zone (Bylaw Only)**

Section 240-6 of the bylaw authorizes the Commission to establish performance standards for protection of areas within 200 feet of rivers and 100 feet of ponds, lakes, vernal pools (whether certified or not), isolated wetlands and other "resource areas," as defined in § 240-8 of the bylaw (hereinafter "resource areas"). Performance standards, under § 240-6 of the bylaw, may include "strips of continuous, undisturbed vegetative cover within the two-hundred-foot or one-hundred-foot area, or other form of work limit or setback to buildings, roads, landscaping and other features. . . The specific size of each type of protected area may be established by regulations of the Commission."

6.4.1 **0-25 Foot No-Disturb Zone**

According to Section 320-2.A of the Bylaw Regulations, There shall be a no-disturb zone with a minimum depth of 100 feet measured horizontally from the border of any vernal pool and 25 feet measured horizontally from the border of any other resource area (the "no-disturb zone"). Vegetation in the no-disturb zone shall not be cut or trimmed in any manner...

No work is proposed within the No-Disturb Zone, except for the alterations necessary for the two stream crossings.

6.4.2

50 Foot No-Build Zone

According to Section 320-2.A of the *Bylaw Regulations*, *There shall be a no-build zone with a minimum depth of 100 feet measured horizontally from the border of any vernal pool and 50 feet measured horizontally from the border of any other resource area (the "no-build zone"). Except for wetlands crossings specifically permitted by the Commission and except as otherwise specifically provided in these regulations or pursuant to a variance as set forth below, prohibited activities within the no-build zone include, but are not limited to, construction of any structure, installation of any impervious surface, and any work requiring a building permit. Fences, swing sets and similar play structures may be permitted within the no-build zone (but not within the no-disturb zone) with the approval of the Commission. Without limiting the generality of the foregoing, there shall be no buildings, houses, garages, sheds, dumpsters, decks, porches, additions, tennis courts, swimming pools, retaining walls, septic systems, leaching fields, above- or belowground tanks, generators, air-conditioning equipment or asphalt surfaces within the no-build zone. The Commission, in its sole discretion, may require a no-build zone of greater depth than the above-described minimums where there are site-specific conditions that, if altered, would be likely to result in degradation of a resource area.*

The project has been designed in compliance with the No-Build Zone requirements, except for the required retaining walls associated with the two stream crossings.

7.

Summary

LEC is filing this Notice of Intent Application on behalf of Toll Bros., Inc. for construction of *The Regency at Lynnfield Senior Housing Development* in accordance with the *Act*, the *Act Regulations*, the *Bylaw*, and the *Bylaw Regulations*.

The Regency includes 66 age-restricted single-family detached residential buildings; a club house with swimming pool and associated parking; six private drives and an emergency access drive; stormwater management system; and on-site private septic system; public water supply; and associated infrastructure. To the extent practical, the community is consolidated within the upland portions of the site. However, the project requires two crossings of an existing wetland/intermittent stream for roadway, utility, and emergency access to the northern portions of the Project Site. BVW restoration/replication and meadow seeding within the Buffer Zone are proposed to off-set impacts.

Lynnfield Wetlands Protection Bylaw (Chapter 240). The *Conservation Commission Regulations* (Chapter 320)

Massachusetts Department of Environmental Protection, Division of Wetlands and Waterways 1995. *Massachusetts Handbook for Delineation of Bordering Vegetated Wetlands* (Second Edition, September 2022).

Massachusetts Natural Heritage and Endangered Species Program Atlas of Estimated Habitat of State-listed Rare Wetlands Wildlife. Natural Heritage & Endangered Species Program, Massachusetts Division of Fisheries & Wildlife, Route 135, Westborough, MA 01581, www.state.ma.us/dfwele/dfw. August 2017.

Massachusetts Wetlands Protection Act (M.G.L. c. 131, §. 40), www.state.ma.us/dep
Massachusetts Wetlands Protection Act Regulations (310 CMR 10.00 & 310 CMR 10.58 (2) (a) 1.d.), www.state.ma.us/dep

National Flood Insurance Program, Federal Emergency Management Agency Flood Insurance Rate Map, Essex County, Massachusetts. July 3, 2012 (Community Panel Number 25009C0391F).

New England Hydric Soils Technical Committee, *Field Indicators for Identifying Hydric Soils in New England*, Version 4, June 2020.

NRCS Web Soil Survey. <http://websoilsurvey.nrcs.usda.gov/app/websoilsurvey.aspx>

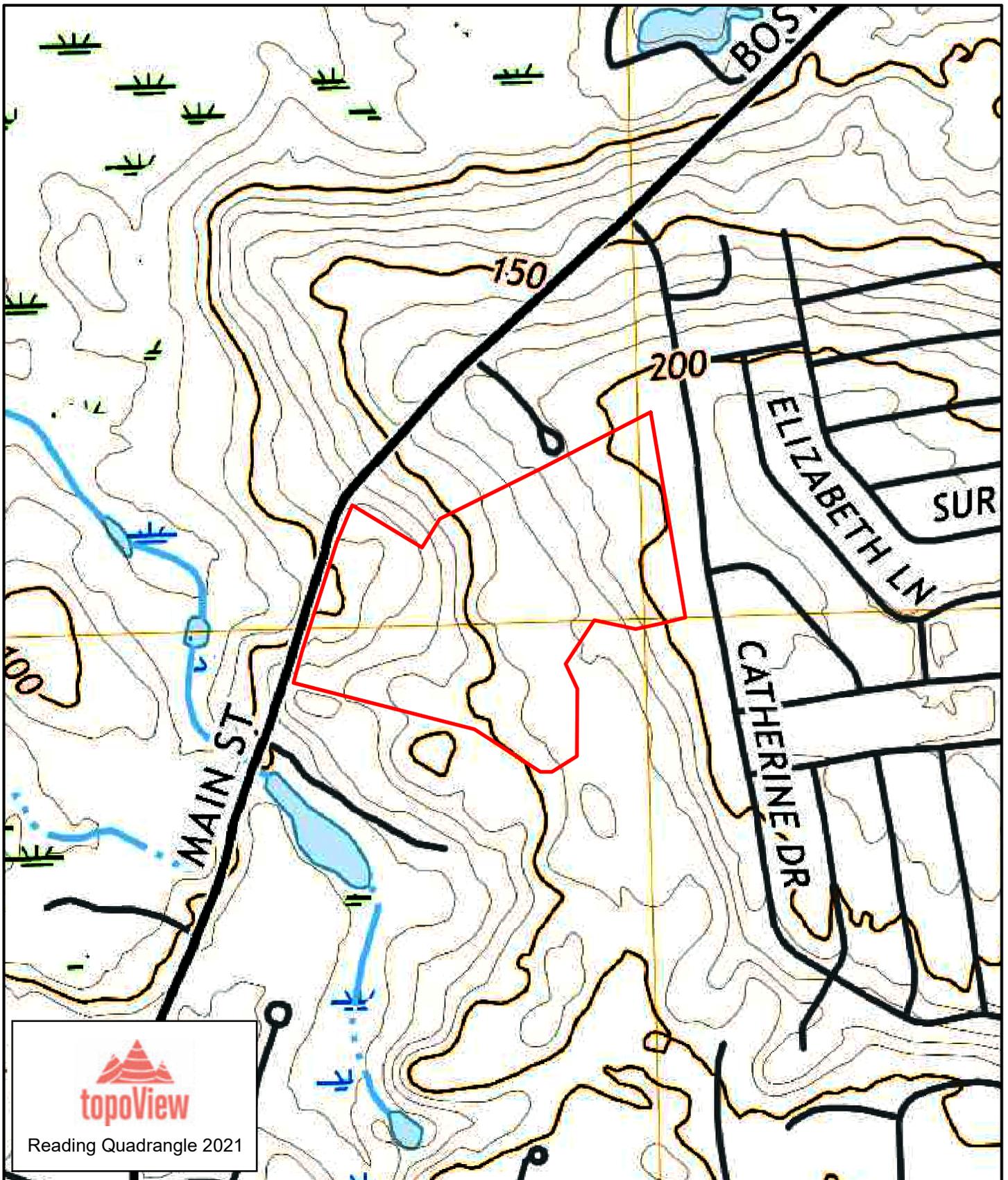
Appendix A

Locus Maps

Figure 1: USGS Topographic Map

Figure 2: Orthophoto Map

Figure 3: FEMA FIRMette



LEC

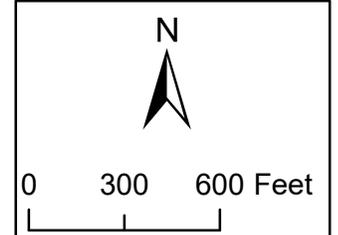
Environmental Consultants, Inc.

Wakefield, MA
781.245.2500

www.lecenvironmental.com

Figure 1: USGS Topographic Map
Sagamore Spring Golf Course
1301 Main Street
Lynnfield, MA

December 1, 2023





Legend

- * NHESP Certified Vernal Pool
- * NHESP Potential Vernal Pool
- NHESP Estimated Habitats of Rare Wildlife (2021)
- ▨ NHESP Priority Habitats of Rare Species (2021)

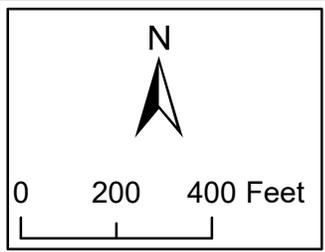


Environmental Consultants, Inc.
 Wakefield, MA
 781.245.2500

www.lecenvironmental.com

Figure 2: Orthophoto & NHESP Map
 Sagamore Spring Golf Course
 1301 Main Street
 Lynnfield, MA

December 1, 2023

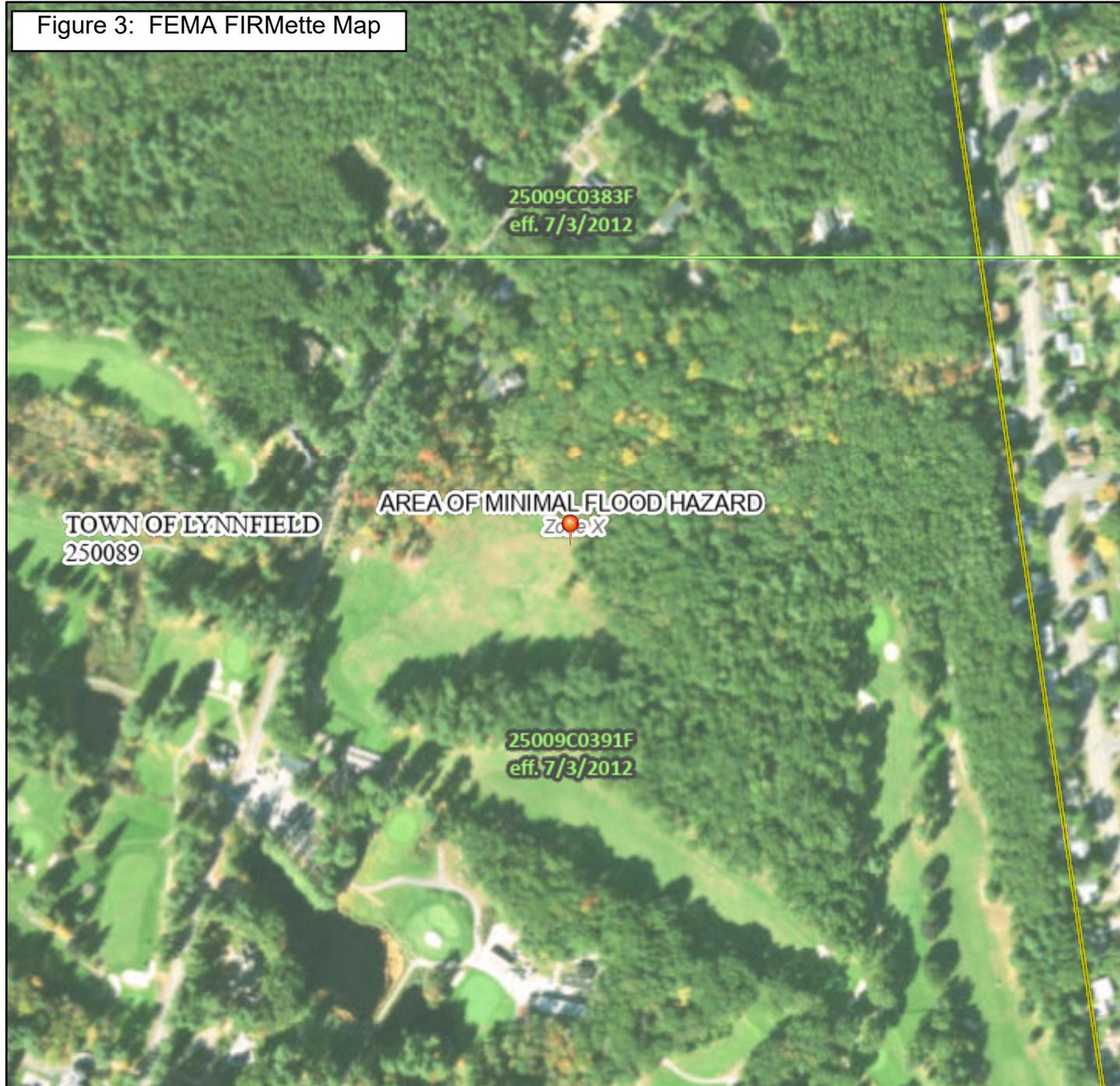


National Flood Hazard Layer FIRMette



71°2'34"W 42°33'51"N

Figure 3: FEMA FIRMette Map



71°1'57"W 42°33'25"N

Basemap Imagery Source: USGS National Map 2023

Legend

SEE FIS REPORT FOR DETAILED LEGEND AND INDEX MAP FOR FIRM PANEL LAYOUT

SPECIAL FLOOD HAZARD AREAS	 Without Base Flood Elevation (BFE) <i>Zone A, V, A99</i>  With BFE or Depth <i>Zone AE, AO, AH, VE, AR</i>  Regulatory Floodway
OTHER AREAS OF FLOOD HAZARD	 0.2% Annual Chance Flood Hazard, Areas of 1% annual chance flood with average depth less than one foot or with drainage areas of less than one square mile <i>Zone X</i>  Future Conditions 1% Annual Chance Flood Hazard <i>Zone X</i>  Area with Reduced Flood Risk due to Levee. See Notes. <i>Zone X</i>  Area with Flood Risk due to Levee <i>Zone D</i>
OTHER AREAS	 NO SCREEN Area of Minimal Flood Hazard <i>Zone X</i>  Effective LOMRs  Area of Undetermined Flood Hazard <i>Zone D</i>
GENERAL STRUCTURES	 Channel, Culvert, or Storm Sewer  Levee, Dike, or Floodwall
OTHER FEATURES	 Cross Sections with 1% Annual Chance Water Surface Elevation  Coastal Transect  Base Flood Elevation Line (BFE)  Limit of Study  Jurisdiction Boundary  Coastal Transect Baseline  Profile Baseline  Hydrographic Feature
MAP PANELS	 Digital Data Available  No Digital Data Available  Unmapped



 The pin displayed on the map is an approximate point selected by the user and does not represent an authoritative property location.

This map complies with FEMA's standards for the use of digital flood maps if it is not void as described below. The basemap shown complies with FEMA's basemap accuracy standards

The flood hazard information is derived directly from the authoritative NFHL web services provided by FEMA. This map was exported on **11/27/2023 at 2:07 PM** and does not reflect changes or amendments subsequent to this date and time. The NFHL and effective information may change or become superseded by new data over time.

This map image is void if the one or more of the following map elements do not appear: basemap imagery, flood zone labels, legend, scale bar, map creation date, community identifiers, FIRM panel number, and FIRM effective date. Map images for unmapped and unmodernized areas cannot be used for regulatory purposes.

Appendix B

Order of Resource Area Delineation issued on October 3, 2023 (DEP File #: 209-0672)

For Registry of Deeds Use Only



SO. ESSEX #280 Bk:41789 Pg:507
10/02/2023 02:42 PM ORDR RAD Pg 1/4
eRecorded



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands
**WPA Form 4B – Order of Resource Area
Delineation**

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

209-0672

MassDEP File Number

eDEP Transaction Number

Lynnfield

City/Town

A. General Information

Important:
When filling out forms on the computer, use only the tab key to move your cursor - do not use the return key.



Note:
Before completing this form consult your local Conservation Commission regarding any municipal bylaw or ordinance.

From: Lynnfield
1. Conservation Commission

2. This Issuance is for (check one):
a. Order of Resource Area Delineation
b. Amended Order of Resource Area Delineation

3. Applicant:
Ted Merchant
a. First Name b. Last Name
Toll Brothers, Inc.
c. Organization
116 Flanders Road, Suite 1200
d. Mailing Address
Westborough MA 01581
e. City/Town f. State g. Zip Code

4. Property Owner (if different from applicant):
Richard Luff, Trustee
a. First Name b. Last Name
Sagamore Spring Realty Trust
c. Organization
1282 Main Street
d. Mailing Address
Lynnfield MA 01940
e. City/Town f. State g. Zip Code

5. Project Location:
1282 & 1287 Main Street Lynnfield 01940
a. Street Address b. City/Town c. Zip Code
12 and 13 466 & 855
d. Assessors Map/Plat Number e. Parcel/Lot Number
Latitude and Longitude 42d56m s -71d03m s
(in degrees, minutes, seconds): f. Latitude g. Longitude
8/31/2023 9/19/2023 9/19/2023
a. Date ANRAD filed b. Date Public Hearing Closed c. Date of Issuance

6. Dates:

Marginal Reference:
Deed, at Book 4078, Page 442



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

WPA Form 4B – Order of Resource Area Delineation

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

Provided by MassDEP:

209-0672

MassDEP File Number

eDEP Transaction Number

Lynnfield

City/Town

B. Order of Delineation (cont.)

3. The boundaries were determined to be inaccurate because:

C. Findings

This Order of Resource Area Delineation determines that the boundaries of those resource areas noted above, have been delineated and approved by the Commission and are binding as to all decisions rendered pursuant to the Massachusetts Wetlands Protection Act (M.G.L. c.131, § 40) and its regulations (310 CMR 10.00). This Order does not, however, determine the boundaries of any resource area or Buffer Zone to any resource area not specifically noted above, regardless of whether such boundaries are contained on the plans attached to this Order or to the Abbreviated Notice of Resource Area Delineation.

This Order must be signed by a majority of the Conservation Commission. The Order must be sent by certified mail (return receipt requested) or hand delivered to the applicant. A copy also must be mailed or hand delivered at the same time to the appropriate DEP Regional Office (see <https://www.mass.gov/service-details/massdep-regional-offices-by-community>).

D. Appeals

The applicant, the owner, any person aggrieved by this Order, any owner of land abutting the land subject to this Order, or any ten residents of the city or town in which such land is located, are hereby notified of their right to request the appropriate DEP Regional Office to issue a Superseding Order of Resource Area Delineation. When requested to issue a Superseding Order of Resource Area Delineation, the Department's review is limited to the objections to the resource area delineation(s) stated in the appeal request. The request must be made by certified mail or hand delivery to the Department, with the appropriate filing fee and a completed Request for Departmental Action Fee Transmittal Form, as provided in 310 CMR 10.03(7) within ten business days from the date of issuance of this Order. A copy of the request shall at the same time be sent by certified mail or hand delivery to the Conservation Commission and to the applicant, if he/she is not the appellant.

Any appellants seeking to appeal the Department's Superseding Order of Resource Area Delineation will be required to demonstrate prior participation in the review of this project. Previous participation in the permit proceeding means the submission of written information to the Conservation Commission prior to the close of the public hearing, requesting a Superseding Order or Determination, or providing written information to the Department prior to issuance of a Superseding Order or Determination.

The request shall state clearly and concisely the objections to the Order which is being appealed and how the Order does not contribute to the protection of the interests identified in the Massachusetts Wetlands Protection Act, (M.G.L. c. 131, § 40) and is inconsistent with the wetlands regulations (310 CMR 10.00). To the extent that the Order is based on a municipal bylaw or ordinance, and not on the Massachusetts Wetlands Protection Act or regulations, the Department of Environmental Protection has no appellate jurisdiction.



Massachusetts Department of Environmental Protection
Bureau of Resource Protection - Wetlands

Provided by MassDEP:
209-0672
MassDEP File Number

**WPA Form 4B – Order of Resource Area
Delineation**

eDEP Transaction Number

Lynnfield

City/Town

Massachusetts Wetlands Protection Act M.G.L. c. 131, §40

E. Signatures

9/19/2023

Date of Issuance

6

1. Number of Signers

Please indicate the number of members who will sign this form.

Lynnfield Conservation Commission

Signatures


Signature of Conservation Commission Member

Donald Gentile

Printed Name

Signature of Conservation Commission Member

Kirk Mansfield

Printed Name


Signature of Conservation Commission Member

Bryce Foote

Printed Name


Signature of Conservation Commission Member

Erin Hohman

Printed Name


Signature of Conservation Commission Member

Angelo Salamone

Printed Name


Signature of Conservation Commission Member

Jared Yagjian

Printed Name

Signature of Conservation Commission Member

Printed Name

Signature of Conservation Commission Member

Printed Name

This Order is valid for three years from the date of issuance.

If this Order constitutes an Amended Order of Resource Area Delineation, this Order does not extend the issuance date of the original Final Order, which expires on _____ unless extended in writing by the issuing authority.

This Order is issued to the applicant and the property owner (if different) as follows:

2. By hand delivery on

a. Date

3. By certified mail, return receipt requested on

a. Date

9/20/23

Appendix C

Site Photos



Photo 1- View of main entrance off Main Street (right-center) facing southwest (driving range visible at left). B-series IVW is just below and right of center.



Photo 2 – View of northeastern portions of driving range, facing west. A-series wetland extends to near edge of clearing in top right of photo.



Photo 3 – View of southeastern portion of driving range, facing west toward range tee area. No wetlands or Buffer Zone are present in this area.



Photo 4 – Existing conditions at wetland Crossing #1, facing upstream (east). Blue pin flags demarcate Bank resource area.



Photo 5 – Existing conditions at wetland Crossing #2, facing upstream (northeast). Blue flags demarcate Bank; orange flags denote BVW.

Appendix D

Reduced Size 11x17

Site Development Plans for The Regency at Lynnfield Senior Housing Development

prepared by The Morin-Cameron Group, Inc.

dated November 30, 2023

Full Size 24x36

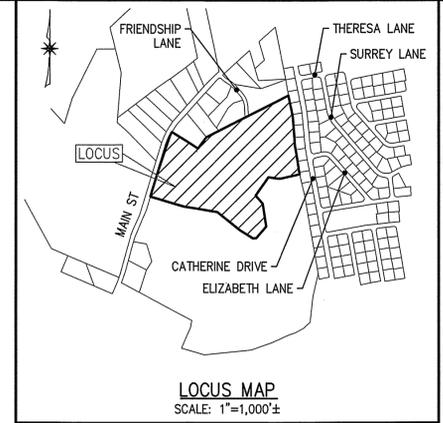
Overall Grading and Drainage Plan

prepared by The Morin-Cameron Group, Inc.

dated November 30, 2023

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT

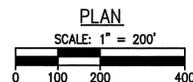
LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
(ASSESSOR'S MAP 13, PARCEL 1000)



The Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS
66 ELM STREET, DANVERS, MASSACHUSETTS 01923
P. 978-777-8586, F. 978-777-8586, WWW.MORINCAMERON.COM

SCHEDULE OF PLAN SET DRAWINGS:

- CS-1 COVER SHEET
- G-1 GENERAL NOTES, LEGEND & ABBREVIATIONS
- EX-1 OVERALL EXISTING CONDITIONS PLAN
- EX-2 EXISTING CONDITIONS PLAN I
- EX-3 EXISTING CONDITIONS PLAN II
- EX-4 EXISTING CONDITIONS PLAN III
- C-1 EROSION CONTROL PLAN I
- C-2 EROSION CONTROL PLAN II
- C-3 EROSION CONTROL PLAN III
- ~~C-4 OVERALL SITE PLAN (OMITTED FROM PLAN SET)~~
- ~~C-5 SITE LAYOUT PLAN I (OMITTED FROM PLAN SET)~~
- ~~C-6 SITE LAYOUT PLAN II (OMITTED FROM PLAN SET)~~
- ~~C-7 SITE LAYOUT PLAN III (OMITTED FROM PLAN SET)~~
- C-8 GRADING AND DRAINAGE PLAN I
- C-9 GRADING AND DRAINAGE PLAN II
- C-10 GRADING AND DRAINAGE PLAN III
- C-11 UTILITY PLAN I
- C-12 UTILITY PLAN II
- C-13 UTILITY PLAN III
- ~~C-14 ROAD A PLAN & PROFILE (OMITTED FROM PLAN SET)~~
- ~~C-15 ROAD B PLAN & PROFILE (OMITTED FROM PLAN SET)~~
- ~~C-16 ROAD A2 PLAN & PROFILE I (OMITTED FROM PLAN SET)~~
- ~~C-17 ROAD A2 PLAN & PROFILE II (OMITTED FROM PLAN SET)~~
- ~~C-18 ROAD C PLAN & PROFILE (OMITTED FROM PLAN SET)~~
- ~~C-19 ROAD D PLAN & PROFILE (OMITTED FROM PLAN SET)~~
- ~~C-20 ROAD E PLAN & PROFILE (OMITTED FROM PLAN SET)~~
- C-21 CONSTRUCTION DETAILS I
- C-22 CONSTRUCTION DETAILS II
- C-23 CONSTRUCTION DETAILS III
- C-24 CONSTRUCTION DETAILS IV
- C-25 CONSTRUCTION DETAILS V
- C-26 CONSTRUCTION DETAILS VI
- ~~C-27 MAIN STREET WATER MAIN EXTENSION PLAN (OMITTED FROM PLAN SET)~~
- ~~C-28 WATER MAIN CROSS COUNTRY CONNECTION PLAN I (OMITTED FROM PLAN SET)~~
- ~~C-29 WATER MAIN CROSS COUNTRY CONNECTION PLAN II (OMITTED FROM PLAN SET)~~
- TP-1 SOIL TEST PIT LOGS I
- TP-2 SOIL TEST PIT LOGS II
- W-1 WETLAND CROSSING PLAN I
- W-2 WETLAND CROSSING PLAN II
- W-3 WETLAND RESTORATION PLAN
- LS-1 LANDSCAPE PLAN I
- LS-2 LANDSCAPE PLAN II
- LS-3 LANDSCAPE PLAN III
- ~~LS-4 PHOTOMETRICS PLAN (OMITTED FROM PLAN SET)~~
- LS-5 LANDSCAPE DETAILS & NOTES I
- LS-6 LANDSCAPE DETAILS & NOTES II
- ~~LS-7 TEMPORARY SIGNAGE PLAN (OMITTED FROM PLAN SET)~~
- LS-8 TREE REMOVAL PLAN I
- LS-9 TREE REMOVAL PLAN II
- LS-10 TREE REMOVAL PLAN III
- LS-11 TREE REMOVAL PLAN IV



GENERAL NOTE:
THESE PLANS ARE PREPARED FOR PERMITTING WITH THE TOWN OF LYNNFIELD. THE PLANS SHALL NOT BE USED FOR CONSTRUCTION OR FOR ANY OTHER PURPOSES WITHOUT WRITTEN PERMISSION FROM THE MORIN-CAMERON GROUP, INC.

FOR PERMITTING PURPOSES ONLY.
NOT RELEASED FOR CONSTRUCTION.

OWNER:
SAGAMORE SPRING REAL ESTATE TRUST
1282 MAIN STREET
LYNNFIELD, MA 01940

APPLICANT:
TOLL BROS., INC.
116 FLANDERS ROAD, SUITE 1200
WESTBOROUGH, MA 01581
PHONE: 581-366-1440

CIVIL ENGINEER:
THE MORIN-CAMERON GROUP, INC.
66 ELM STREET
DANVERS, MA 01923
PHONE: 978-777-8586

SURVEYOR:
ESE CONSULTANTS, INC.
116 FLANDERS ROAD, SUITE 1200
WESTBOROUGH, MA 01581
PHONE: 508-616-8129

ENVIRONMENTAL CONSULTANT:
LEC ENVIRONMENTAL CONSULTANTS, INC.
380 LOWELL STREET
WAKEFIELD, MA 01880
PHONE: 781-245-2500

TRANSPORTATION ENGINEER:
MCMAHON ASSOCIATES
350 MYLES STANDISH BOULEVARD, SUITE 103
TAUNTON, MA 02780
PHONE: 508-823-2245

Toll Brothers
AMERICA'S LUXURY HOME BUILDER

The
Morin-Cameron GROUP, INC.
CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
LAND SURVEYORS | LAND USE PLANNERS

ESE CONSULTANTS
ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL

LEC

MCMAHON
a Bowman company



SURVEY BY: ESE
DRAFTED BY: DP
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: NOVEMBER 30, 2023

NO.	REVISIONS	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
(ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR
TOLL BROS., INC.

COVER SHEET
DRAWING NO. CS-1

GENERAL NOTES:

- 1. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ESTABLISHING AND MAINTAINING ALL CONTROL POINTS AND BENCHMARKS NECESSARY FOR THE WORK. THE INFORMATION DEVELOPED SHALL BE PROVIDED TO THE ENGINEER AND SURVEYOR.
- 2. AFTER CONSTRUCTION, AND DURING THE INITIAL VEGETATION ESTABLISHMENT PERIOD, THE SITE SHOULD BE INSPECTED AS REQUIRED BY THE LYNNFIELD CONSERVATION COMMISSION, PLANNING BOARD AND EPA.
- 3. SUBDRAINS SHALL BE INSTALLED WITHIN ALL CUT AREAS.
- 4. ALL HANDICAP CURB RAMPS, SIDEWALKS AND DRIVEWAY CURB CUTS SHALL COMPLY WITH 521 CMR: MASSACHUSETTS ARCHITECTURAL ACCESS BOARD REGULATIONS. ALL HANDICAP RAMPS SHALL BE CONCRETE (DEPTH OF 6-INCHES) AND HAVE A DETECTABLE WARNING PANEL.
- 5. RETAINING WALLS TO BE DESIGNED AND CERTIFIED BY A MASSACHUSETTS LICENSED STRUCTURAL ENGINEER IF REQUIRED BY THE MASSACHUSETTS BUILDING CODE.

EROSION AND SEDIMENTATION CONTROL:

WIDELY ACCEPTED PRACTICES FOR REDUCING EROSION AND SEDIMENTATION WILL BE EMPLOYED IN THE DEVELOPMENT OF THIS SITE. REFER TO THE STORMWATER POLLUTION PREVENTION PLAN FOR THE PROJECT.

- 1. THE DEVELOPMENT OF THE SITE HAS BEEN PLANNED TO MATCH EXISTING DRAINAGE PATTERNS TO THE EXTENT PRACTICABLE.
- 2. NATURAL WETLANDS WILL BE PRESERVED AND PROTECTED EXCEPT AS DETAILED HEREIN, AND EXISTING VEGETATION WILL BE RETAINED AND PROTECTED TO THE EXTENT POSSIBLE.
- 3. THE CONTRACTOR SHALL MINIMIZE THE AREA OF DISTURBED LAND TO THE EXTENT FEASIBLE AND SHALL HAVE ADEQUATE EQUIPMENT AND LABOR ON SITE THAT IS CAPABLE OF MANAGING THE DISTURBED LAND.
- 4. SEDIMENT CONTROL MEASURES WILL BE APPLIED TO CONTROL ANY SEDIMENTS THAT MAY BE PRODUCED AS A RESULT OF SITE CONSTRUCTION ACTIVITIES. EROSION AND DEPOSITION OF SEDIMENT WILL BE CLOSELY MONITORED DURING CONSTRUCTION.
- 5. TEMPORARY EROSION CONTROL MEASURES WILL INCLUDE, BUT NOT BE LIMITED TO, FILTER FABRIC SILT FENCES, STRAW WADDE BARRIERS, MULCH SOCKS, SEEDING AND MULCHING, SEEDING FILTER STRIPS AND SILT SACKS IN CATCH BASINS (EXISTING AND NEWLY INSTALLED).
- 6. TOPSOIL STRIPPED FROM THE SITE WILL BE STOCKPILED FOR LOAMING AND SEEDING AT LATER CONSTRUCTION STAGES. THE STOCKPILES SHALL BE LOCATED SO AS TO ACT AS TEMPORARY DIVERSIONS, GENERALLY ON AN UPHILL SLOPE.
- 7. SITE DEVELOPMENT WILL NOT COMMENCE UNTIL ALL TEMPORARY EROSION CONTROL MEASURES ARE IN PLACE. THESE MEASURES SHALL BE EMPLOYED UNTIL FINAL PAVING AND ADEQUATE VEGETATION HAS BEEN ESTABLISHED. ADEQUATE VEGETATION IS CONSIDERED TO BE AT LEAST 75% COVERAGE AND 1 MOWING OF GRASS TURF AREAS.
- 8. THE CONSTRUCTION PHASE MUST COMPLY WITH THE ENVIRONMENTAL PROTECTION AGENCY (EPA) NATIONAL POLLUTANT DISCHARGE ELIMINATION SYSTEM PROTOCOLS. A NOTICE OF INTENT SHALL BE SUBMITTED TO THE EPA AT LEAST 2 WEEKS PRIOR TO THE START OF CONSTRUCTION.
- 9. THE OWNER IS RESPONSIBLE FOR CONDUCTING WEEKLY ENVIRONMENTAL MONITORING DURING CONSTRUCTION AND ANY CONDITIONS SET FORTH AS REQUIRED BY THE LYNNFIELD CONSERVATION COMMISSION, PLANNING BOARD AND EPA.
- 10. THE LYNNFIELD CONSERVATION COMMISSION SHALL BE NOTIFIED AT LEAST 48 HOURS PRIOR TO CONSTRUCTION TO INSPECT EROSION CONTROLS TO BE IMPLEMENTED DURING CONSTRUCTION.

GENERAL UTILITY NOTES:

- 1. THE GENERAL CONTRACTOR IS SPECIFICALLY CAUTIONED THAT THE LOCATION AND/OR ELEVATION OF EXISTING UTILITIES AND STRUCTURES AS SHOWN ON THESE PLANS ARE BASED ON RECORDS OF VARIOUS UTILITY COMPANIES AND GOVERNMENT AGENCIES AND WHERE POSSIBLE, MEASUREMENTS TAKEN IN THE FIELD. THIS INFORMATION IS NOT TO BE RELIED UPON AS BEING EXACT OR COMPLETE. THE LOCATION OF ALL UNDERGROUND UTILITIES AND STRUCTURES SHALL BE VERIFIED IN THE FIELD BY THE GENERAL CONTRACTOR PRIOR TO THE START OF CONSTRUCTION. THE GENERAL CONTRACTOR MUST CONTACT THE APPROPRIATE UTILITY COMPANY, ANY GOVERNING PERMITTING AUTHORITY, AND "DIGSAFE" AT LEAST 72 HOURS PRIOR TO ANY EXCAVATION WORK TO REQUEST EXACT FIELD LOCATION OF UTILITIES AND THE ENGINEER SHALL BE NOTIFIED IN WRITING OF ANY UTILITIES INTERFERING WITH THE PROPOSED CONSTRUCTION AND APPROPRIATE REMEDIAL ACTION SHALL BE TAKEN BEFORE PROCEEDING WITH THE WORK. IT SHALL BE THE RESPONSIBILITY OF THE GENERAL CONTRACTOR TO RELOCATE ALL EXISTING UTILITIES WHICH CONFLICT WITH THE PROPOSED IMPROVEMENTS SHOWN ON THE PLAN.
- 2. THE GENERAL CONTRACTOR SHALL COORDINATE WITH THE ELECTRIC, CABLE AND TELEPHONE COMPANIES, GAS PROVIDER AND LYNNFIELD MUNICIPAL UTILITY DEPARTMENTS TO VERIFY THE LOCATION, SIZE AND TYPE OF ALL UTILITIES PRIOR TO CONSTRUCTION.
- 3. THE EXCAVATING OF TRENCHES, THE METHODS AND MATERIALS OF BACKFILLING, AND ALL OTHER MATTERS RELATING TO THE INSTALLATION OF WATER PIPES, SEWER LINES, STORM DRAINS, SUBSURFACE DRAINS, AND ALL OTHER UNDERGROUND UTILITIES SHALL BE CONSISTENT WITH GOOD CONSTRUCTION PRACTICES AND SHALL AT ALL TIMES BE SUBJECT TO THE INSPECTION OF THE APPLICABLE TOWN DEPARTMENTS.
- 4. ALL TRENCHES SHALL BE TAMPED WITH A POWER TAMPER AT INTERVALS NOT GREATER THAN ONE (1) FOOT.
- 5. ALL CONCRETE CASTINGS SHALL BE DESIGNED TO WITHSTAND H-20 LOADING.
- 6. RECORDS OF ALL INSTALLED UNDERGROUND UTILITIES SHALL BE KEPT AND A COPY SHALL BE PROVIDED TO THE ENGINEER AFTER COMPLETION OF WORK.

STORM DRAIN NOTES:

- 1. STORMWATER CONVEYANCE PIPES SHALL BE HDPE (ADS N-12) OR PROJECT CIVIL ENGINEER APPROVED EQUIVALENT UNLESS OTHERWISE NOTED.
- 2. BACKFILL SHALL BE COMPACTED TO 95% MAXIMUM DRY DENSITY BY AASHTO T-1800 METHOD.
- 3. SHEETING, IF USED, SHALL BE REMOVED PRIOR TO BACKFILLING TRENCH.
- 4. UNSUITABLE SOIL BELOW THE INVERT (CLAY, ORGANICS, DEBRIS, ETC) SHALL BE REMOVED AND REPLACED WITH APPROVED MATERIAL AND SHALL NOT BE REUSED AS BACKFILL.
- 5. REPAIR BROKEN OR DAMAGED DRAIN PIPES IN KIND.

PLAN NOTES:

- 1. THE EXISTING CONDITIONS DEPICTED HEREON ARE BASED ON INFORMATION PROVIDED BY ESE CONSULTANTS, INC.
- 2. ABUTTER INFORMATION SHOW HEREON WAS TAKEN FROM THE LYNNFIELD GIS DATABASE.
- 3. THE LIMIT OF WETLANDS WERE DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS, INC. ON JUNE 22, 2023 AND AUGUST 25, 2023 AND LOCATED BY ESE CONSULTANTS, INC.
- 4. THE PROPERTY BOUNDARY IS BASED ON A PLAN ENTITLED "PLAN OF LAND, MAIN STREET LYNNFIELD MASS" PREPARED BY HAYES ENGINEERING, INC., DATED OCTOBER 25, 2021 AND RECORDED AT THE SOUTH ESSEX DISTRICT REGISTRY OF DEEDS IN BOOK 40797, PAGE 69.

WATER SUPPLY NOTE:

THE PROJECT SITE IS SITUATED IN A ZONE II (MASSDEP APPROVED WELLHEAD PROTECTION AREA) BASED ON THE MASSACHUSETTS GIS DATABASE (MASSMAPPER).

CONSTRUCTION SEQUENCE:

THE FOLLOWING OUTLINE PRESENTS KEY CONSTRUCTION ACTIVITIES IN TYPICAL SEQUENCES WHICH ARE GENERALLY ANTICIPATED WITHIN ANY GIVEN PHASE OF THE PROPOSED CONSTRUCTION. SOME OF THESE ACTIVITIES MAY ULTIMATELY OVERLAP AND/OR CHANGE IN SEQUENCE DUE TO CHANGING SITE CONDITIONS, WEATHER AND/OR OTHER UNPREDICTABLE FACTORS.

TO PREVENT EXCESSIVE EROSION AND SILTING, THE FOLLOWING CONSTRUCTION SEQUENCE COUPLED WITH OTHER WIDELY ACCEPTED PRINCIPLES FOR REDUCING EROSION AND SEDIMENTATION SHALL BE IMPLEMENTED IN THE DEVELOPMENT OF THE SITE. STABILIZATION PRACTICES FOR EROSION AND SEDIMENT CONTROL SHALL BE INSTALLED PRIOR TO COMMENCING CONSTRUCTION ACTIVITIES. PLACE EROSION CONTROLS AT LOCATIONS INDICATED ON THE SITE DEVELOPMENT PLANS. IN PREPARING TO REMOVE MATERIALS FROM THE WORK AREA ON THE SITE, CAREFUL CONSIDERATION SHOULD BE MADE TO THE EXTENT OF DISTURBANCE SO AS NOT TO DISTURB MORE OF THE SITE THAN WHAT IS INTENDED TO BE IMMEDIATELY DEVELOPED AND RE-STABILIZED.

LOAM AND TOP SOIL EXCAVATED FROM THE WORK AREA SHALL BE STOCKPILED AT A LOCATION TO BE DETERMINED BY THE SITE CONTRACTOR. IF MATERIALS ARE STOCKPILED ON THE SITE WHERE THEY WILL NOT INTERFERE WITH CONSTRUCTION ACTIVITIES, THEY SHALL BE LOCATED SO AS TO MINIMIZE THE POTENTIAL FOR EROSION INTO EXISTING DRAINAGE INFRASTRUCTURE. STOCKPILES SHALL BE STABILIZED WITH STRAW WADDLES, SILT FENCING OR EQUIVALENT. STOCKPILES LEFT FOR GREATER THAN 14 DAYS SHALL BE SEEDED WITH AN EROSION CONTROL MIX. THERE SHALL BE NO STOCKPILES WITHIN 50' OF A WETLAND.

REMOVAL OF ALL DEBRIS OR MATERIAL FROM THE WORK AREA SHALL BE DISPOSED OF IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS UNDER THE OVERSIGHT OF A LICENSED SITE PROFESSIONAL (LSP).

- 1. PERFORM SURVEY LAYOUT FOR SOIL EROSION AND SEDIMENT CONTROL MEASURES.
- 2. INSTALL STABILIZED CONSTRUCTION ENTRANCE.
- 3. SELECTIVELY REMOVE VEGETATION FOR EROSION CONTROL INSTALLATION.
- 4. INSTALL EROSION CONTROL AND CONSTRUCTION FENCING.
- 5. THE CONTRACTOR SHALL COORDINATE A PRE-CONSTRUCTION MEETING AT LEAST 48 HOURS PRIOR TO ANY CONSTRUCTION ACTIVITY WITH THE OWNER (OWNER'S REPRESENTATIVE), CONSERVATION COMMISSION REPRESENTATIVE, PLANNING DEPARTMENT REPRESENTATIVE AND ANY OTHER INTERESTED TOWN DEPARTMENT REPRESENTATIVES.
- 6. COMMENCE WATER MAIN CONSTRUCTION IN MAIN STREET.
- 7. DEMOLISH AND REMOVE EXISTING SITE FEATURES.
- 8. PREPARE CONSTRUCTION TRAILER AND STAGING LOCATION.
- 9. PREPARE SALES TRAILER LOCATION.
- 10. COMMENCE CONSTRUCTION OF MODEL UNITS.
- 11. CONSTRUCT ENTRANCE FEATURES AND LANDSCAPING.
- 12. CLEAR AND GRUB OTHER AREAS WHERE NECESSARY.
- 13. STRIP AND STOCKPILE TOPSOIL.
- 14. TEMPORARILY STABILIZE TOPSOIL STOCKPILES (SEED AND SILT FENCE AROUND TOE OF SLOPE).
- 15. CONSTRUCT STORMWATER INFILTRATION BASINS AND OUTLET CONTROL STRUCTURES. BASINS TO BE USED AS TEMPORARY SEDIMENT BASINS DURING CONSTRUCTION.
- 16. TEMPORARILY STABILIZE STORMWATER BASINS.
- 17. COMMENCE CROSS COUNTRY WATER MAIN CONSTRUCTION ACROSS SAGAMORE GOLF COURSE
- 18. CONDUCT EARTHWORK CUTS AND FILLS TO BRING ROADS TO SUBGRADE AND LOTS TO PAD GRADE.
- 19. CONSTRUCT WETLAND CROSSING BOX CULVERTS AND RETAINING WALLS.
- 20. CONSTRUCT WETLAND REPLICATION AREA AND RESTORE TEMPORARY WETLAND ALTERATION.
- 21. CONSTRUCT RETAINING WALLS.
- 22. TEMPORARILY STABILIZE PADDED LOT AREAS.
- 23. CONSTRUCT UTILITIES (WATER, SEWER, STORM DRAIN, ETC.).
- 24. CONSTRUCT ROADWAY, PARKING AND SIDEWALK PAVEMENT AREAS THROUGH BINDER COURSE.
- 25. COMMENCE HOUSING CONSTRUCTION (ONGOING AS ROAD CONSTRUCTION ADVANCES).
- 26. PROVIDE SURETY BOND TO TOWN PRIOR TO FIRST CERTIFICATE OF OCCUPANCY.
- 27. CONSTRUCT UNIT-SPECIFIC DRAINAGE COMPONENTS AS HOUSING CONSTRUCTION PROGRESSES.
- 28. FINISH GRADE LOT AREAS.
- 29. PERMANENTLY STABILIZE LOT AREAS WITH SEED AND OTHER LANDSCAPING.
- 30. CONSTRUCT ROADWAY, PARKING AND SIDEWALK PAVEMENT AREAS THROUGH TOP COURSE.
- 31. CLEAN OUT CATCH BASINS AND STORMWATER BASINS.
- 32. CONVERT TEMPORARY SEDIMENT BASINS TO PERMANENT BASIN DESIGN ELEVATIONS (AFTER CONTRIBUTING LOT AREAS ARE STABILIZED AND CATCH BASINS CLEANED).
- 33. PERMANENTLY STABILIZE STORMWATER BASINS.
- 34. REMOVE ALL TEMPORARY SOIL EROSION AND SEDIMENT CONTROL MEASURES UPON PERMANENT SITE STABILIZATION.

DATUM:

ELEVATIONS HEREON REFER TO NORTH AMERICAN VERTICAL DATUM OF 1988.

WATER NOTES:

- 1. WATER LINES WILL HAVE AT LEAST FIVE FEET SIX INCHES (5.5') OF COVER.
- 2. THERE MUST BE AT LEAST SIX (6) INCHES OF CLEARANCE BETWEEN A NEW WATER LINE AND ANY UNDERGROUND ROCK FORMATION.
- 3. ALL MECHANICAL JOINT COMPONENTS WILL BE INSTALLED USING RETAINING GLANDS, SUCH AS, GRIP RING, MEGA LUG OR STAR GRIP. METAL WEDGES MUST BE USED AT ALL BELL JOINTS TO ENSURE CONTINUITY FOR TRACING. ALL FITTINGS (TEES, BENDS, SOLID SLEEVE ETC.) WILL BE ZINC COATED AS WELL FOR PROTECTION PER ISO 8179-2. ZINC RICH PAINT SHALL HAVE A ZINC CONTENT OF AT LEAST 85% BY WEIGHT AND SHALL BE FINISHED WITH AN EXTERIOR BITUMINOUS COATING. A MINIMUM 307SS (STAINLESS STEEL) "T" BOLTS WILL BE USED TO CONNECT ANY APPURTENANCE THAT REQUIRES THE USE OF "T" BOLTS FOR ASSEMBLY.
- 4. ALL WATER VALVE BOX COVERS SHALL BE INSTALLED TO GRADE AND LABELED 'WATER'.
- 5. UPON COMPLETION ALL WATER LINES (MAINS AND SERVICE CONNECTIONS) SHALL CHLORINATED AND PRESSURE TESTED AS REQUIRED AND WITNESSED BY THE LYNNFIELD CENTER WATER DISTRICT REPRESENTATIVE OR DESIGNEE. ALL INSTALLATIONS MUST BE INSPECTED BY THE REPRESENTATIVE OR DESIGNEE. AT LEAST 72 HOURS NOTICE SHALL BE PROVIDED TO THE LYNNFIELD CENTER WATER DISTRICT PRIOR THE INSPECTION.
- 6. ALL WATER VALVES SHALL OPEN "LEFT" (CONFIRM WITH THE LYNNFIELD CENTER WATER DISTRICT).
- 7. ALL HYDRANTS SHALL BE KENNEDY K81D (PAINTED PER TOWN OF LYNNFIELD STANDARDS) AND SHALL OPEN LEFT.
- 8. WATER SERVICE CONNECTIONS SHALL HAVE A MIN. 5.5' OF COVER TO PREVENT FREEZING.
- 9. ALL WATER DISTRIBUTION SYSTEM MAINS SHALL BE 8" CLDI (CLASS 52) OR EQUAL.
- 10. ALL WATER SERVICES SHALL BE 1" HDPE (AS APPROVED BY THE LYNNFIELD CENTER WATER DISTRICT) UNLESS NOTED OTHERWISE. ALL TAPS SHALL BE INSTALLED USING A STAINLESS STEEL TAPPING SLEEVE AND GATE.
- 11. ALL WORK SHALL BE PERFORMED IN COMPLIANCE WITH THE LYNNFIELD CENTER WATER DISTRICT.

SEWER NOTES:

- 1. A MINIMUM OF 10 FEET CLEAR HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN SANITARY SEWER PIPES AND WATER PIPES UNLESS CONDITIONS PREVENT A LATERAL SEPARATION OF 10 FEET, IN WHICH CASE THE CONTRACTOR SHALL CONFORM TO NOTE NO. 3 BELOW.
- 2. ALL GRAVITY SEWER PIPE SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 UNLESS OTHERWISE NOTED.
- 3. WHERE SANITARY SEWERS CROSS WATER SERVICES OR A MINIMUM OF 10 FEET LATERAL SEPARATION CANNOT BE ACHIEVED, THE SEWER SHALL BE LAID AT SUCH AN ELEVATION THAT THE CROWN OF THE SEWER IS AT LEAST 18 INCHES BELOW THE INVERT OF THE WATER PIPE. IF THE ELEVATION OF THE SEWER CANNOT BE VARIED TO MEET THIS REQUIREMENT, THE WATER PIPE SHALL BE RELOCATED TO PROVIDE THIS SEPARATION OR CONSTRUCTED WITH MECHANICAL-JOINT PIPE FOR A DISTANCE OF 10 FEET ON EACH SIDE OF THE SEWER. ONE FULL LENGTH OF WATER PIPE SHALL BE CENTERED OVER THE SEWER SO THAT BOTH JOINTS WILL BE AS FAR FROM THE SEWER AS POSSIBLE. WHENEVER IT IS IMPOSSIBLE TO OBTAIN VERTICAL SEPARATION AS STIPULATED ABOVE, THE WATER PIPE SHALL BE SLEEVED IN PVC FOR A MINIMUM DISTANCE OF 10 FEET FROM THE CROSSING POINT OF THE SEWER PIPE AND SEALED AT EACH END.
- 4. ALL GRAVITY SEWER PIPES SHALL BE POLYVINYL CHLORIDE (PVC) SDR-35 FOR GRAVITY & SCH. 40 FOR FORCE MAINS UNLESS NOTED OTHERWISE. WHEN IT IS IMPOSSIBLE TO OBTAIN HORIZONTAL AND/OR VERTICAL SEPARATION AS STIPULATED ABOVE, BOTH THE WATER MAIN AND SEWER SHALL BE CONSTRUCTED OF MECHANICAL-JOINT CEMENT LINED DUCTILE IRON PIPE OR OTHER EQUIVALENT BASED ON WATER-TIGHTNESS AND STRUCTURAL SOUNDNESS. BOTH PIPES SHALL BE PRESSURE TESTED BY AN APPROVED METHOD TO ASSURE WATER-TIGHTNESS.
- 5. SEWER SYSTEM SHALL COMPLY WITH TR-16 "GUIDES FOR THE DESIGN OF WASTEWATER TREATMENT WORKS" AND 310 CMR 15 "TITLE 5". THE MORE RESTRICTIVE REGULATION SHALL BE HELD IN THE EVENT OF DUPLICATED REGULATIONS.

FLOOD NOTE:

THE PROJECT SITE IS LOCATED WITHIN A ZONE "X" (AREA OF MINIMAL FLOOD HAZARD) AS ILLUSTRATED ON THE FLOOD INSURANCE RATE MAP COMMUNITY PANEL NO. 25009C0391F WHICH HAS AN EFFECTIVE DATE OF JULY 3, 2012.

DEMOLITION NOTES:

- 1. ALL MATERIALS REMOVED FROM THE PREMISES SHALL BE DONE SO IN ACCORDANCE WITH APPLICABLE LOCAL, STATE AND FEDERAL REGULATIONS FOR HAULING AND DISPOSAL.
- 2. COORDINATE ANY UTILITY DISCONNECTIONS WITH APPROPRIATE SERVICE PROVIDERS.
- 3. ALL TREES TO REMAIN SHALL BE PROTECTED FROM CONSTRUCTION ACTIVITIES. AVOID HEAVY MACHINERY WITHIN ROOT BALL AREAS.
- 4. HYDRANT CONNECTIONS FOR WATER USE DURING DEMOLITION SHALL BE COORDINATED WITH THE LYNNFIELD CENTER WATER DISTRICT.
- 5. THE GENERAL CONTRACTOR IS RESPONSIBLE FOR COORDINATING WITH THE ELECTRIC PROVIDER FOR ANY WORK IN THE VICINITY OF OVERHEAD WIRES.

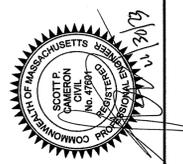
ABBREVIATIONS

AC	ACRES
APPROX	APPROXIMATE
BVW	BORDERING VEGETATED WETLAND
BW	BOTTOM OF WALL ELEVATION
CB	CATCH BASIN
CF	CUBIC FOOT
CLDI	CONCRETE LINED DUCTILE IRON
CMP	CORRUGATED METAL PIPE
CW	CROSSWALK
CY	CUBIC YARD
DIA	DIAMETER
DMH	DRAIN MANHOLE
DYLL	DOUBLE YELLOW LANE LINE
EL/ELEV	ELEVATION
ESHWT	ESTIMATED SEASONAL HIGH WATER TABLE
EXIST	EXISTING
FES	FLARED END SECTION
FT	FEET
HDPE	HIGH DENSITY POLYETHYLENE
HW	HEAD WALL
ID	INNER DIAMETER
INV	INVERT
IWV	ISOLATED VEGETATED WETLAND
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
N/F	NOW OR FORMERLY
OC	ON CENTER
OCS	OUTLET CONTROL STRUCTURE
PROP	PROPOSED
PSI	POUNDS PER SQUARE INCH
PVC	POLYVINYL CHLORIDE
RC	RELATIVE COMPACTION
SF	SQUARE FEET
SL	STOP LINE
SMH	SEWER MANHOLE
SQ	SQUARE
ST	SEPTIC TANK
STA	STATION
TP	TEST PIT
TW	TOP OF WALL ELEVATION
TYP	TYPICAL
VBB	VERTICAL BELGIAN BLOCK CURB
WQU	WATER QUALITY UNIT

LEGEND

	EXISTING	PROPOSED
CONTOURS		
MAJOR	--- -120- ---	--- -110- ---
MINOR	--- -122- ---	--- -108- ---
SPOT GRADES	× 167.2	× 167.2
LIMIT OF BVW/IWV	--- Δ A44 ---	
LIMIT OF 25' NO DISTURB ZONE	---	
LIMIT OF 50' NO BUILD ZONE	---	
LIMIT OF 100' BUFFER ZONE	---	
LIMIT OF 200' RIVERFRONT AREA	---	
CHAIN LINK FENCE	--- x x x ---	
CONSTRUCTION FENCE		--- x x x ---
CONSTRUCTION FENCE/ SILT SOCK COMBINATION		--- x x x ---
EDGE OF GRASS		---
LIMIT OF WORK		---
ORANGE CONSTRUCTION FENCE		---
RETAINING WALL		---
ROOF DRAIN		RD RD
SANITARY SEWER MAIN/SERVICE		S
SANITARY SEWER FORCE MAIN		FM
SILT SOCK		---
SILT FENCE/SILT SOCK COMBINATION		---
STORM SEWER		D
STREAM		---
TREELINE		---
WATER MAIN/SERVICE		W
WOOD GUARDRAIL		---
CATCH BASIN		⊗
DOUBLE GRATED CATCH BASIN		⊗
DRAIN MANHOLE		⊗
HYDRANT		⊗
LIGHT POLE		⊗
OUTLET CONTROL STRUCTURE		⊗
RIP-RAP		⊗
SEWER MANHOLE		⊗
SIGN		⊗
TEST PIT/PERC TEST		⊗
TREE		⊗
UTILITY POLE		⊗
WATER GATE VALVE		⊗
WATER QUALITY UNIT		⊗

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SURVEY BY: ESE
DRAFTED BY: DJP
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: NOVEMBER 30, 2023

NO.	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT LOCATED AT 1301 MAIN STREET LYNNFIELD, MASSACHUSETTS (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000) PREPARED FOR TOLL BROS., INC.

GENERAL NOTES, LEGEND & ABBREVIATIONS
DRAWING NO. G-1



- NOTES:**
1. PLANIMETRIC AND TOPOGRAPHIC FEATURES COMPILED BY ESE CONSULTANTS DATED JUNE 6, 2023.
 2. THE HORIZONTAL DATUM IS ON MASSACHUSETTS STATE PLAN COORDINATE SYSTEM NAD83 (2011).
 3. BASE OF ELEVATIONS ARE REFERENCED TO NAVD83(GEIODID)
 4. THE PROJECT SITE IS LOCATED WITHIN ZONE "X" (AREA OF MINIMAL FLOODING) AS SHOWN ON F.E.M.A. FLOOD INSURANCE RATE MAP FOR THE TOWN OF LYNNFIELD, MASSACHUSETTS, ESSEX COUNTY, COMMUNITY PANEL NO. 25009C0341F, HAVING AN EFFECTIVE DATE ON 7/3/2012.
 5. WETLAND FLAGS WERE DELINEATED ON 6/22/23 AND 8/25/23 BY LEG ENVIRONMENTAL CONSULTANTS, INC.
 6. WETLAND FLAGS WERE LOCATED BY ESE CONSULTANTS, INC.
 7. LOCUS PARCEL IS KNOWN AS "LOT 1" AS SHOWN ON APPROVED AND RECORDED "APPROVAL NOT REQUIRED" PLAN. SEE REF. PLAN #1.

- PLAN REFERENCES:**
1. PLAN OF LAND, MAIN STREET LYNNFIELD MASS, PREPARED BY HAYES ENGINEERING, INC. DATED OCTOBER 25, 2021, RECORDED IN SOUTH ESSEX REGISTRY OF DEEDS, BK. 40747 PG 64.

PARCEL DATA

PORTION OF
MAP 13 LOT 055
N/F
SASAMORE SPRINGS
REAL ESTATE TR.
DEED BK 4070/P. 442
"LOT 1" AREA:
1,567,217 S.F. ± OR
36.043 ACRES

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ENGINEERING • PLANNING • SURVEYING • ENVIRONMENTAL

ESE Consultants, Inc.
116 Flanders Road • Suite 1200 • Westborough, MA 01581
T: 508-616-8729



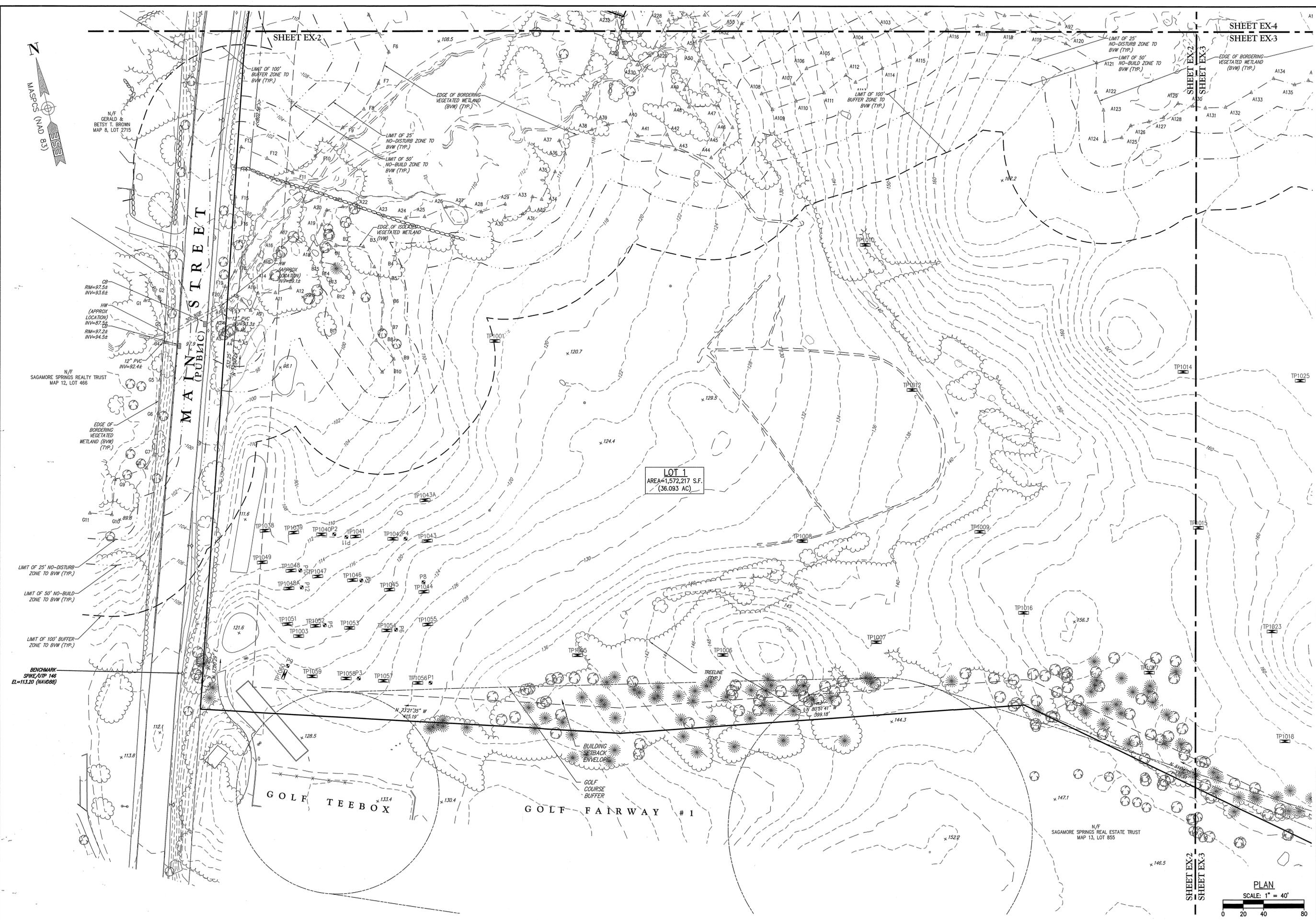
SURVEY BY: ESE
DRAFTED BY: DJP
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: NOVEMBER 30, 2023

NO.	REVISIONS	DESCRIPTION	DATE

**SITE DEVELOPMENT PLANS FOR THE REGENCY AT
LYNNFIELD SENIOR HOUSING DEVELOPMENT**
LOCATED AT
**1501 MAIN STREET
LYNNFIELD, MASSACHUSETTS**
(PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR:
TOLL BROS., INC.

**OVERALL
EXISTING
CONDITIONS PLAN**

DRAWING NO.
EX-1



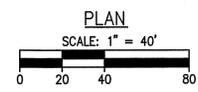
LOT 1
 AREA=1,572,217 S.F.
 (36.093 AC)

GOLF TEE BOX

GOLF COURSE BUFFER

BUILDING TRACK ENVELOPE

TREELINE (TYP.)



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 ESE Consultants, Inc.
 116 Flinders Road • Suite 1200 • Westborough, MA 01581
 T: 508-616-8129

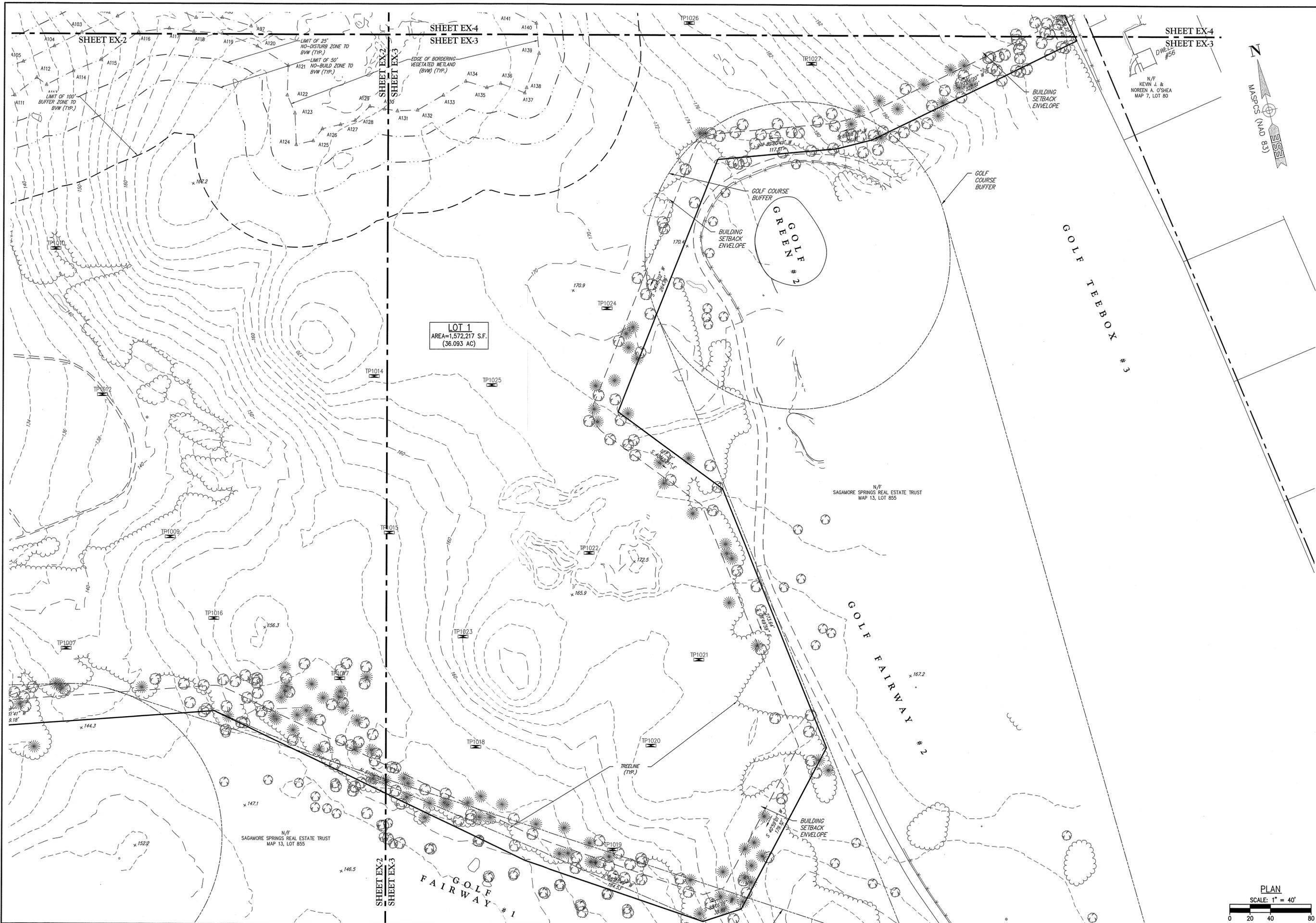


SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

NO.	REVISIONS	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

EXISTING CONDITIONS PLAN 1
 DRAWING NO. **EX-2**



LOT 1
AREA=1,572,217 S.F.
(36.093 AC)

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ESE Consultants, Inc.
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T: 508-616-8129

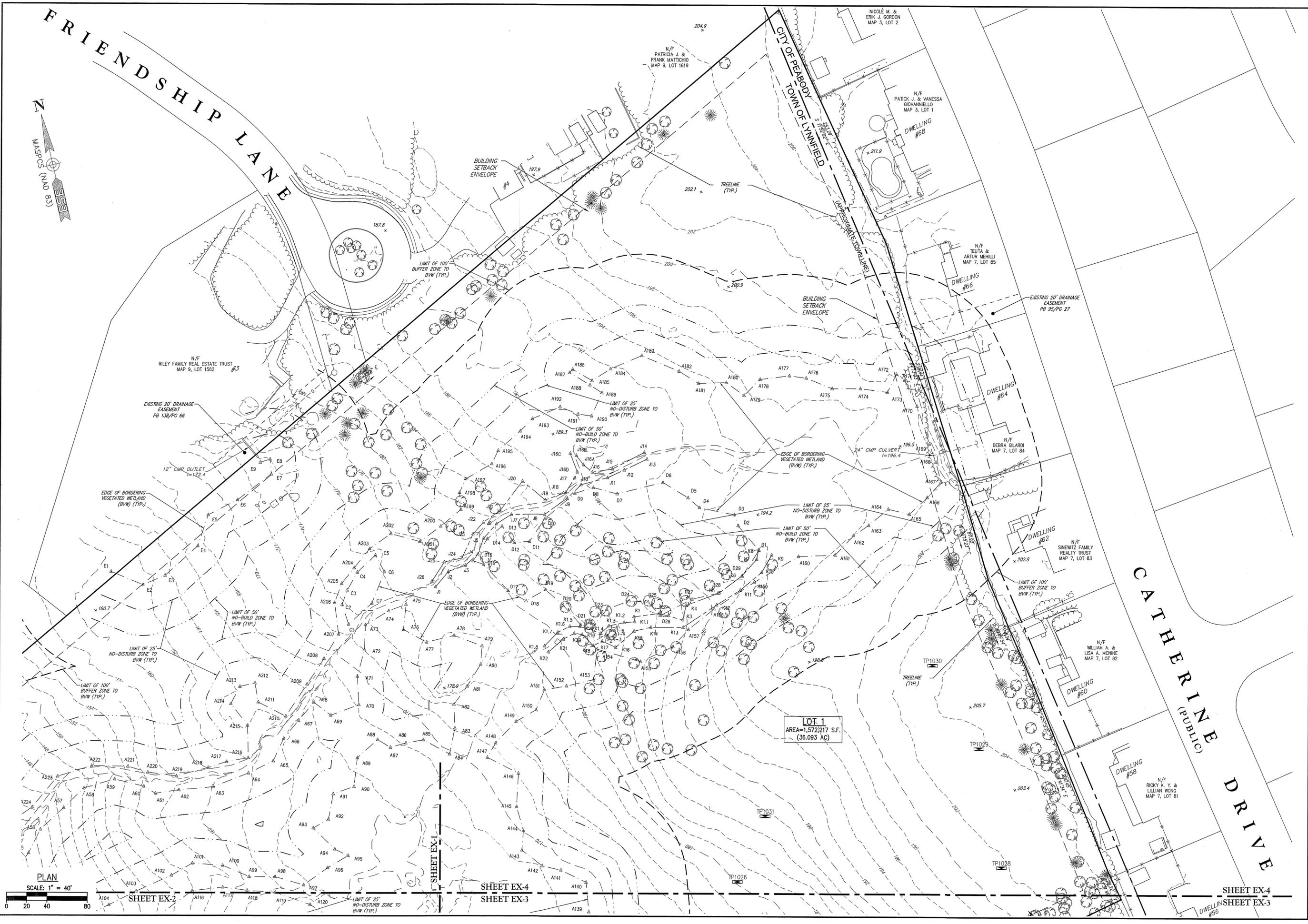


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CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: NOVEMBER 30, 2023

NO.	REVISIONS DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT
LYNNFIELD SENIOR HOUSING DEVELOPMENT
LOCATED AT
1301 MAN STREET
LYNNFIELD, MASSACHUSETTS
(PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR:
TOLL BROS., INC.

EXISTING CONDITIONS
PLAN II
DRAWING NO. EX-3



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 ESE Consultants, Inc.
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SURVEY BY: ESE
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 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

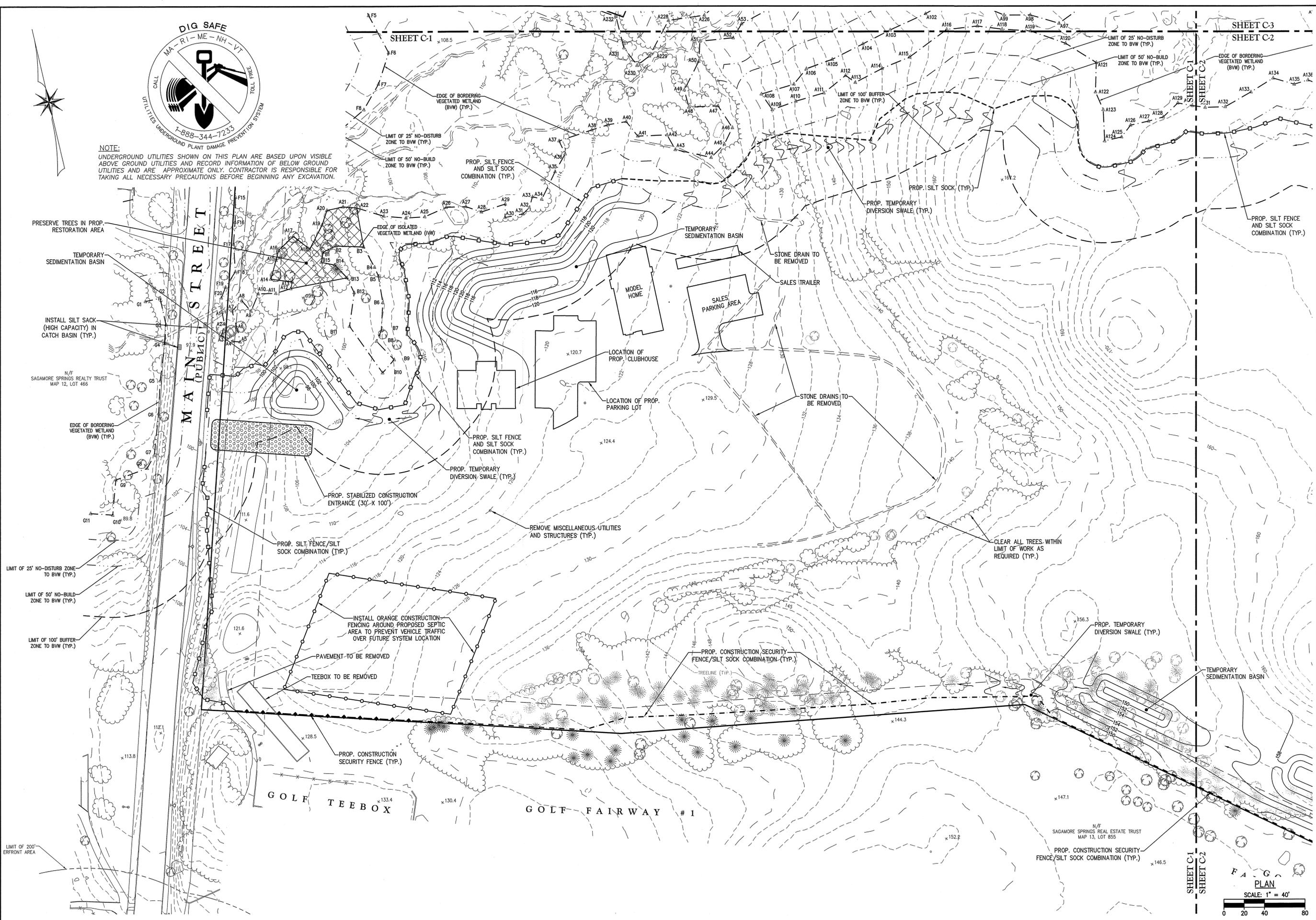
NO.	REVISIONS	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

EXISTING CONDITIONS
 PLAN III
 DRAWING NO. EX-4
 SHEET EX-4
 SHEET EX-3



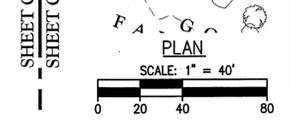
NOTE:
UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON VISIBLE ABOVE GROUND UTILITIES AND RECORD INFORMATION OF BELOW GROUND UTILITIES AND ARE APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL NECESSARY PRECAUTIONS BEFORE BEGINNING ANY EXCAVATION.



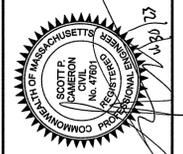
PRESERVE TREES IN PROP. RESTORATION AREA
TEMPORARY SEDIMENTATION BASIN
INSTALL SILT SACK (HIGH CAPACITY) IN CATCH BASIN (TYP.)
N/F SAGAMORE SPRINGS REALTY TRUST MAP 12, LOT 466
EDGE OF BORDERING VEGETATED WETLAND (BWW) (TYP.)

LIMIT OF 25' NO-DISTURB ZONE TO BVW (TYP.)
LIMIT OF 50' NO-BUILD ZONE TO BVW (TYP.)
LIMIT OF 100' BUFFER ZONE TO BVW (TYP.)

LIMIT OF 200' FRONT AREA



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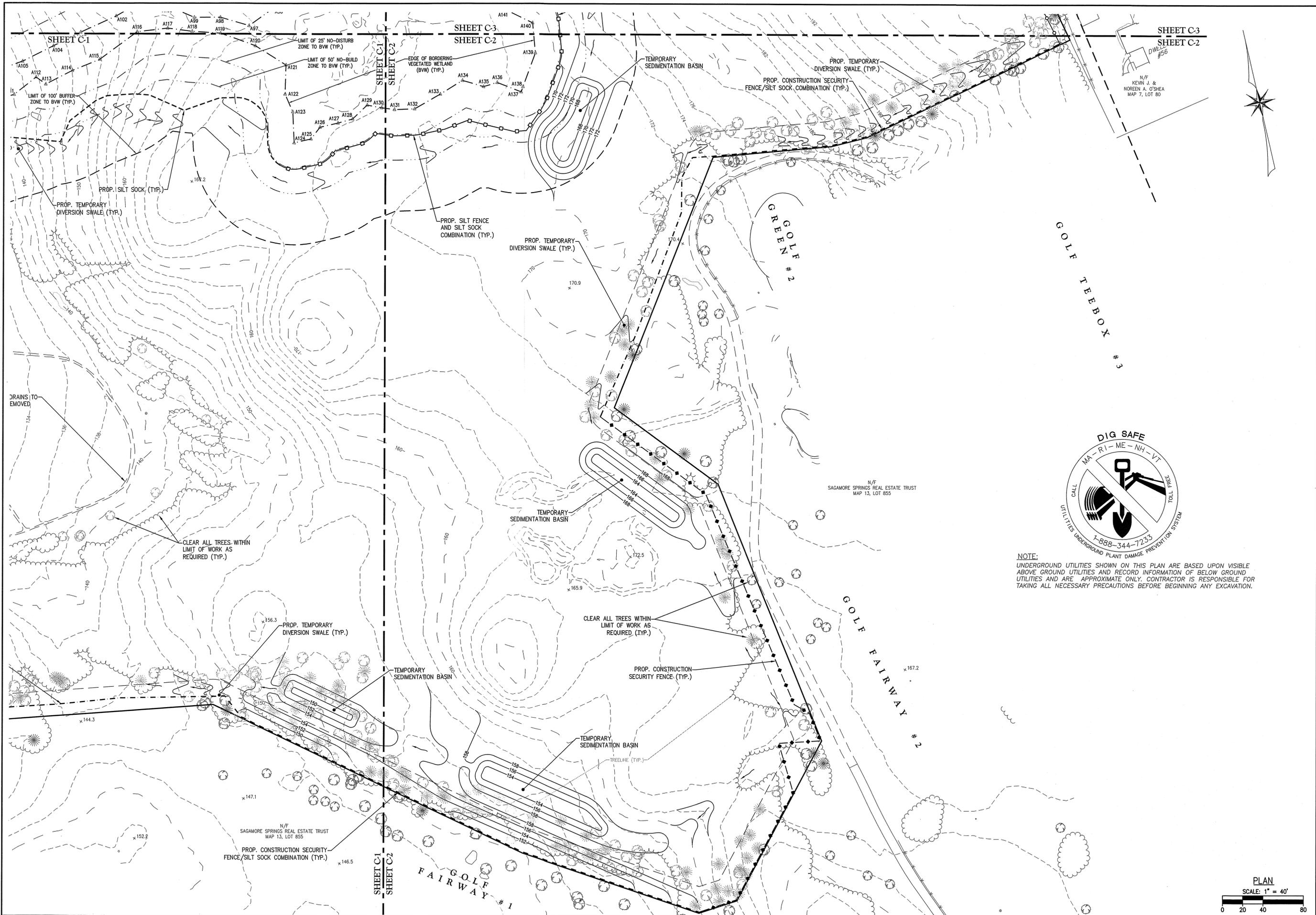


SURVEY BY: ESE
DRAFTED BY: DJP
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: NOVEMBER 30, 2023

NO.	REVISIONS	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
LOCATED AT
1301 MAIN STREET LYNNFIELD, MASSACHUSETTS
(PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR:
TOLL BROS., INC.

EROSION CONTROL PLAN I
DRAWING NO. **C-1**



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 LAND SURVEYORS / LAND USE PLANNERS
 100 WASHINGTON STREET, SUITE 200
 LYNNFIELD, MASSACHUSETTS 01902
 P. 978-777-8565, W. WWW.MORINCAMERON.COM



SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

NO.	DESCRIPTION	DATE

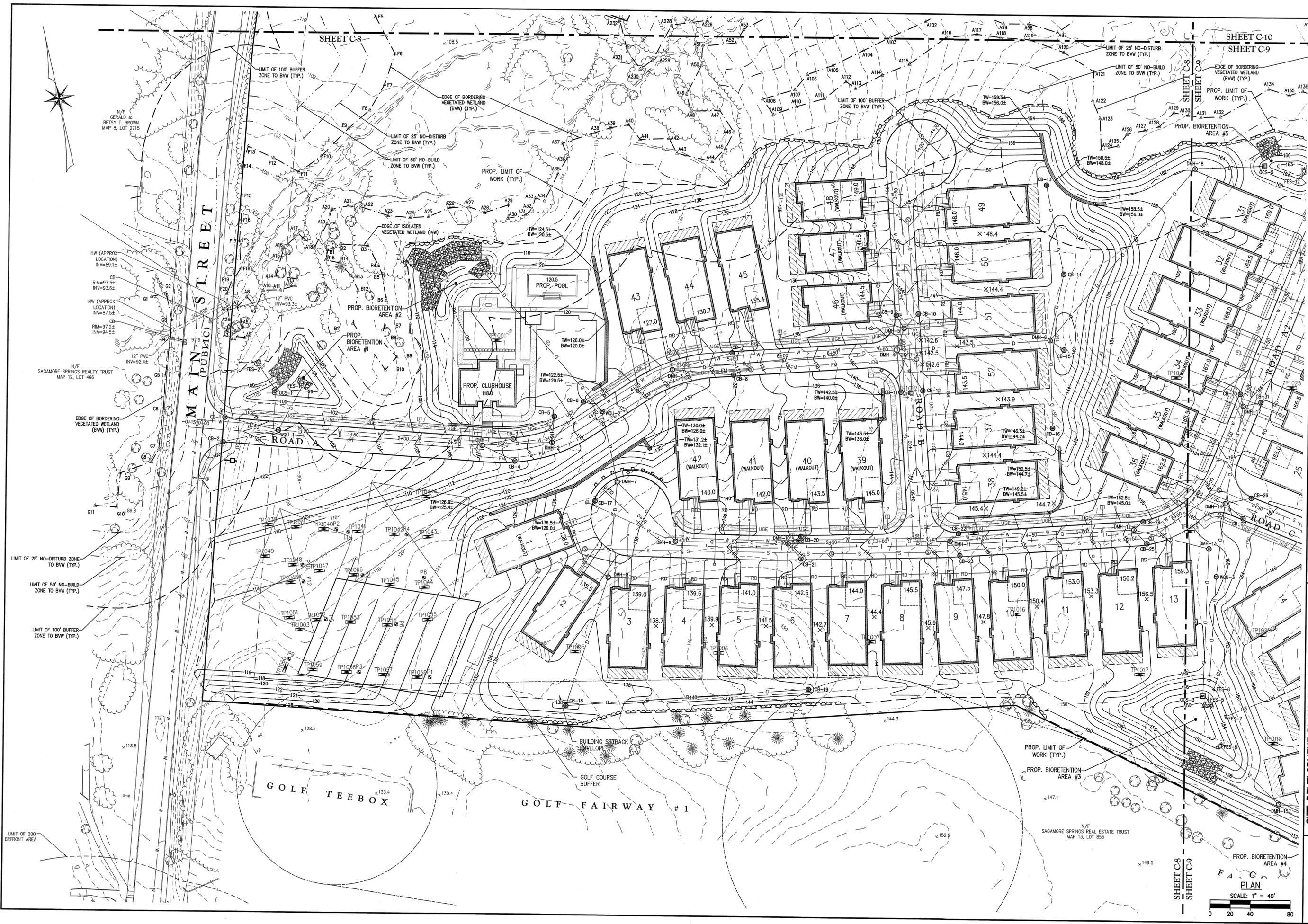
SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

EROSION CONTROL PLAN II
 DRAWING NO. **C-2**



NOTE:
 UNDERGROUND UTILITIES SHOWN ON THIS PLAN ARE BASED UPON VISIBLE ABOVE GROUND UTILITIES AND RECORD INFORMATION OF BELOW GROUND UTILITIES AND ARE APPROXIMATE ONLY. CONTRACTOR IS RESPONSIBLE FOR TAKING ALL NECESSARY PRECAUTIONS BEFORE BEGINNING ANY EXCAVATION.

PLAN
 SCALE: 1" = 40'
 0 20 40 80



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LAND SURVEYORS / LAND USE PLANNERS
100 WASHINGTON STREET, SUITE 200
LYNNFIELD, MASSACHUSETTS 01902
P. 978-777-8888, F. 978-777-8889, E. WWW.MORIN-CAMERON.COM

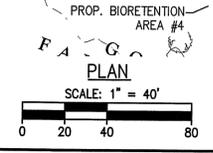


SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
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NO.	REVISIONS	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSessor'S MAP 13, PARCEL 1000)
 PREPARED FOR: **TOLL BROS., INC.**

GRADING & DRAINAGE PLAN I
 DRAWING NO. **C-8**
 PROJ. #4171



SHEET C-8
 SHEET C-9

F A G
 PLAN



N/F GERALD & Betsy T. Brown
 MAP 8, LOT 2715

HW (APPROX LOCATION)
 INV=89.1±
 CB
 RIM=97.5±
 INV=93.6±

HW (APPROX LOCATION)
 INV=87.5±
 CB
 RIM=97.2±
 INV=94.5±

N/F SAGAMORE SPRINGS REALTY TRUST
 MAP 12, LOT 466

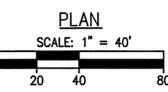
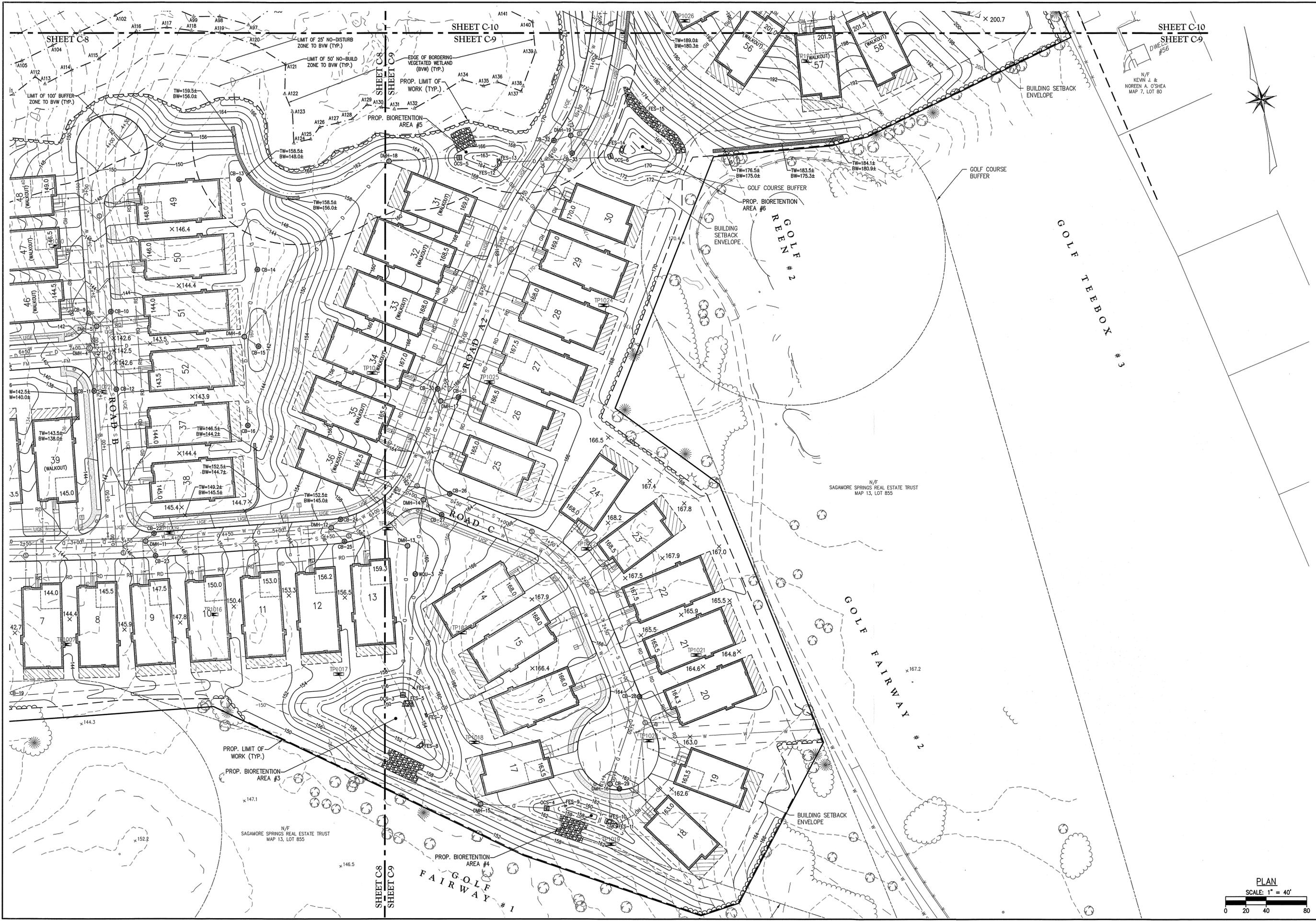
EDGE OF BORDERING VEGETATED WETLAND (B/W) (TYP.)

LIMIT OF 25' NO-DISTURB ZONE TO B/W (TYP.)

LIMIT OF 50' NO-BUILD ZONE TO B/W (TYP.)

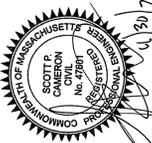
LIMIT OF 100' BUFFER ZONE TO B/W (TYP.)

LIMIT OF 200' ERFROnt AREA





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 LAND SURVEYORS / LAND USE PLANNERS
 66 STATE AVENUE, SUITE 100
 LYNNFIELD, MASSACHUSETTS 01902
 TEL: 978-777-6688, FAX: 978-777-6689



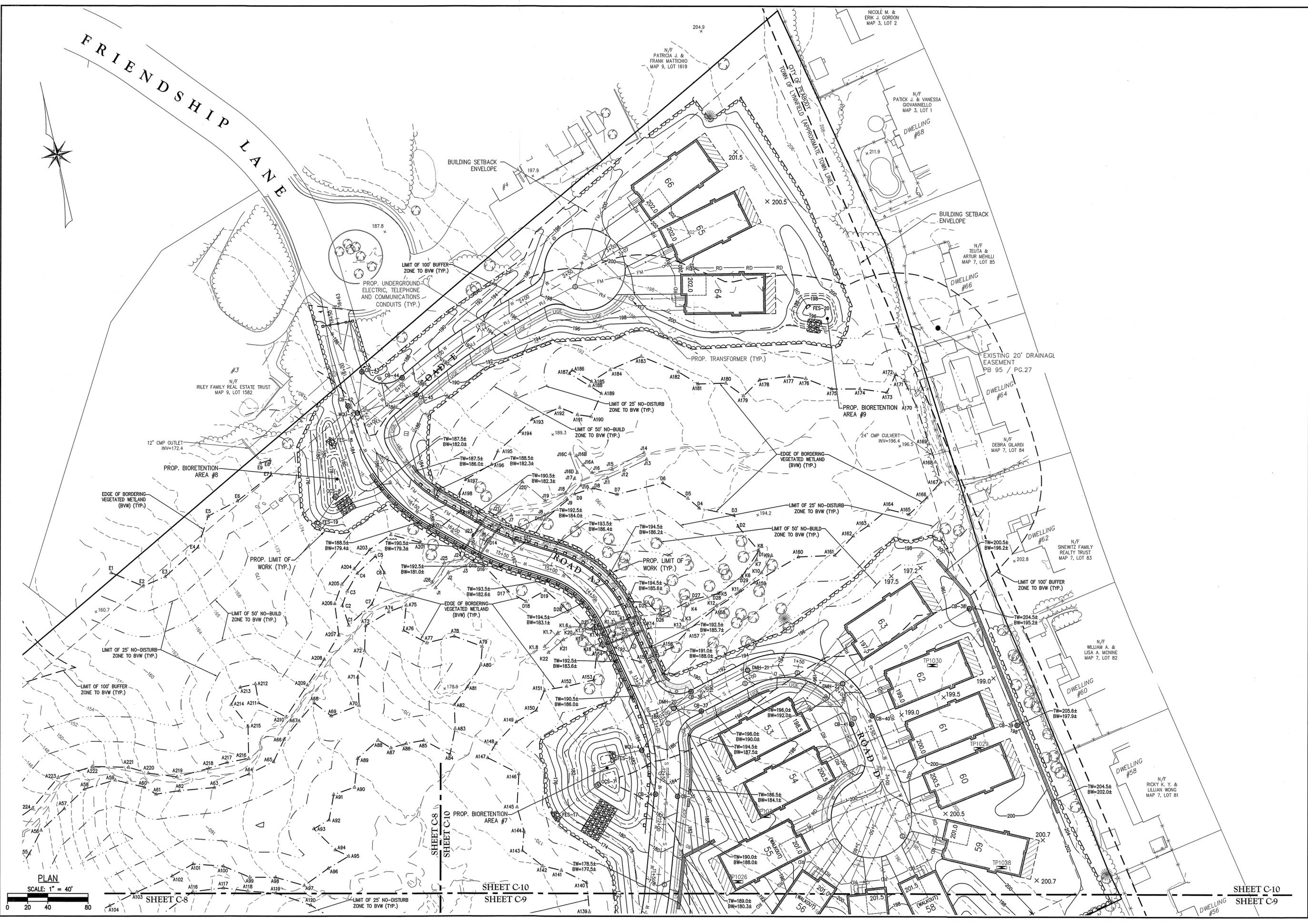
SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
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NO.	REVISIONS	DATE

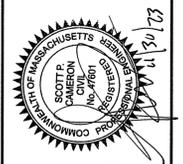
SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

GRADING & DRAINAGE PLAN II
 DRAWING NO. **C-9**

PROJ. #4171



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 LAND SURVEYORS
 16 EDM STREET, DANVERS, MASSACHUSETTS 01923
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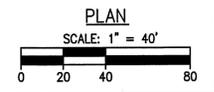


SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

NO.	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

GRADING & DRAINAGE PLAN III
 DRAWING NO. **C-10**



The Morin-Cameron GROUP, INC.
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 LAND SURVEYORS, LAND USE PLANNERS
 108 ELM STREET, DANVERS, MASSACHUSETTS 01923
 P. 978-777-8586, W. WWW.MORINCAMERON.COM

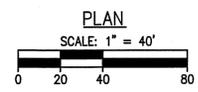
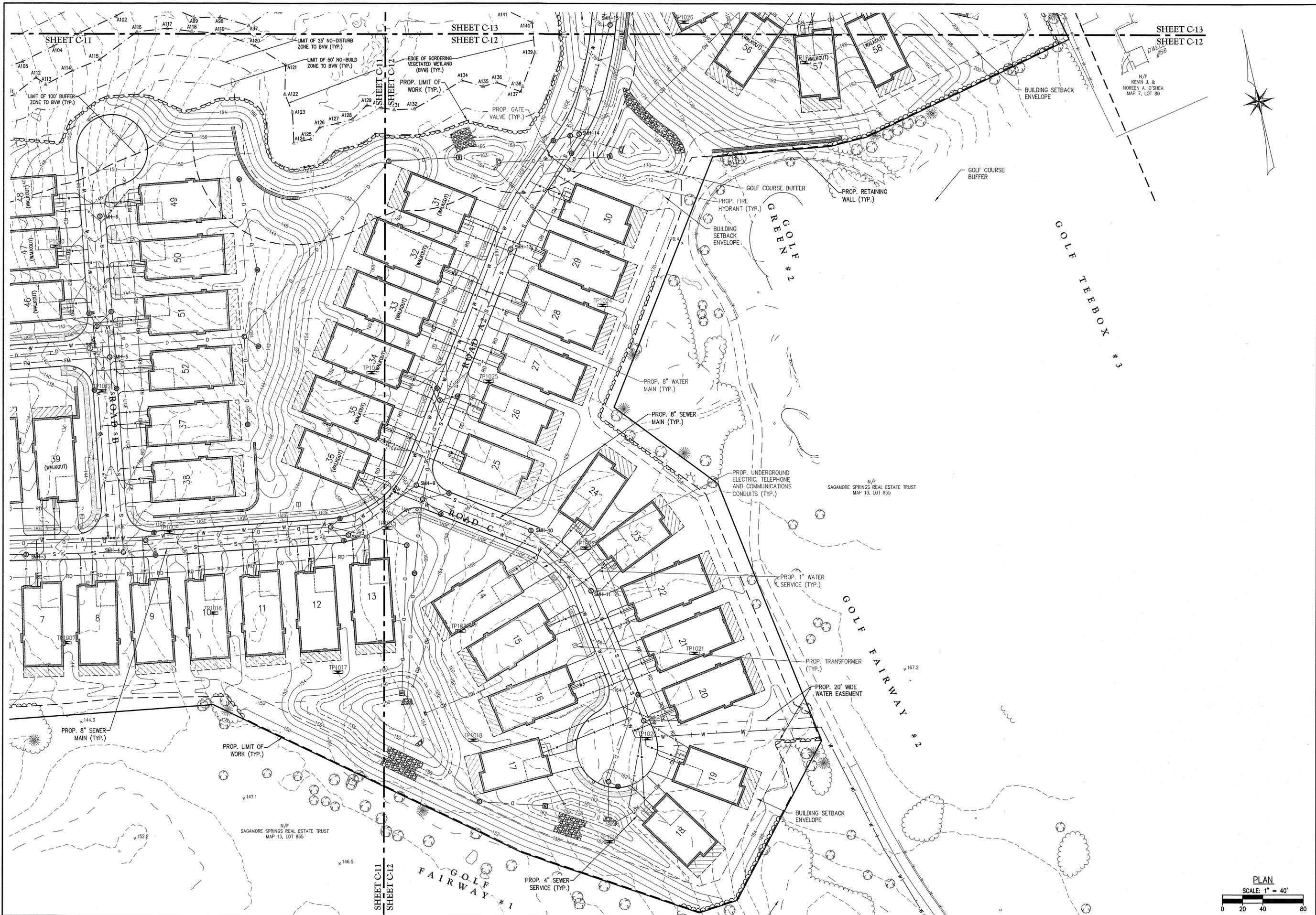


SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
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 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

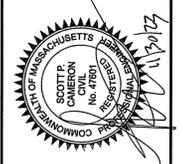
NO.	REVISIONS	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

UTILITY PLAN I
 DRAWING NO. **C-11**



The Morin-Cameron GROUP, INC.
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 LAND SURVEYORS PLANNERS
 96 EDM STREET DANVERS MASSACHUSETTS 01923
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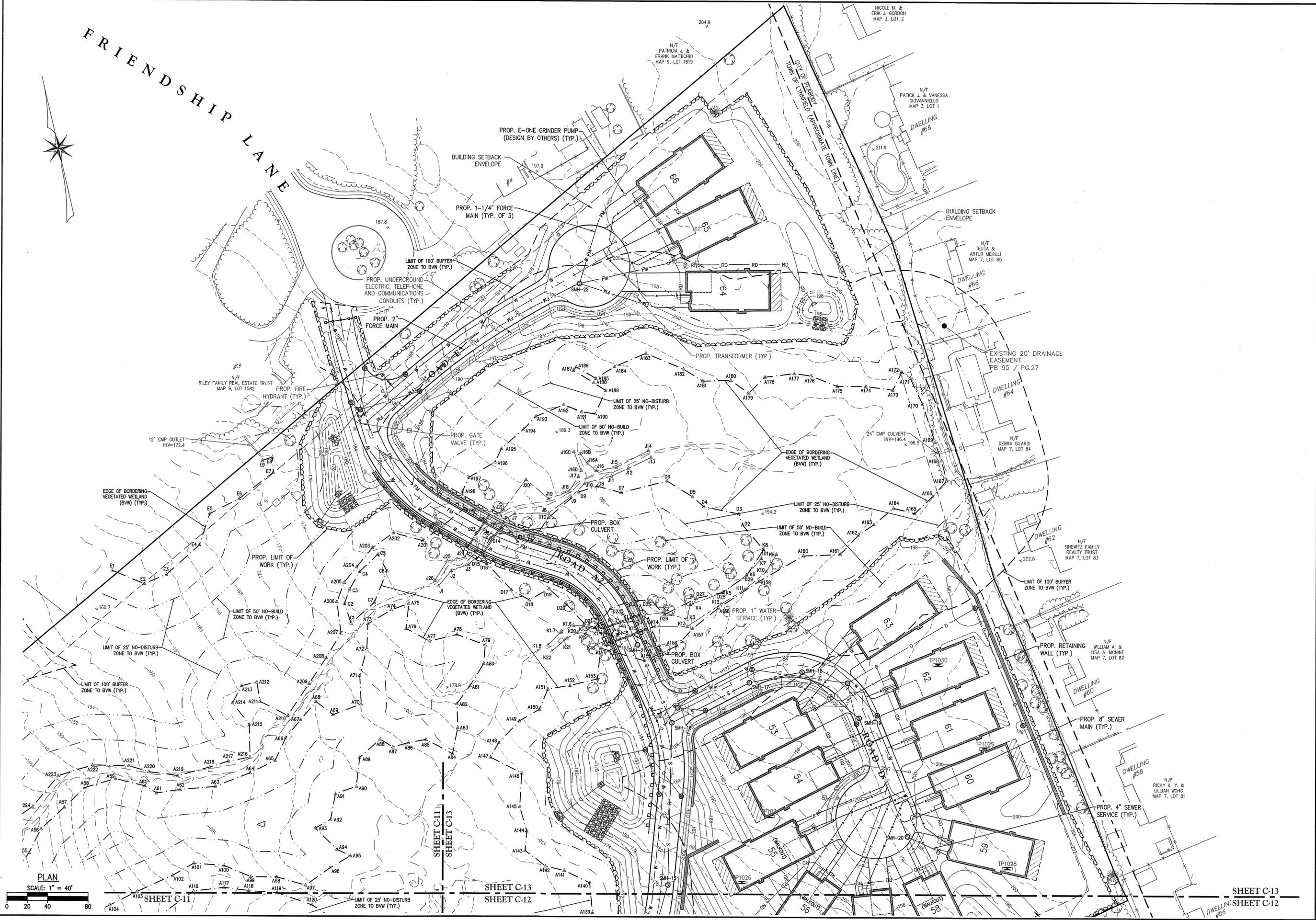
SURVEY BY: ESE
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NO.	REVISIONS DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

UTILITY PLAN II
 DRAWING NO. **C-12**

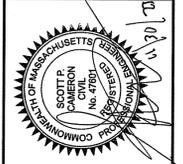
FRIENDSHIP LANE



PLAN
SCALE: 1" = 40'

SHEET C-11 SHEET C-12 SHEET C-13

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 CIVIL ENGINEERS / ENVIRONMENTAL CONSULTANTS
 LAND SURVEYORS / LAND USE PLANNERS
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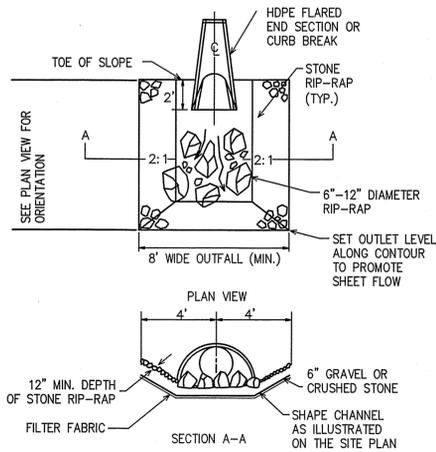


SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 DATE: NOVEMBER 30, 2023

NO.	DESCRIPTION	DATE

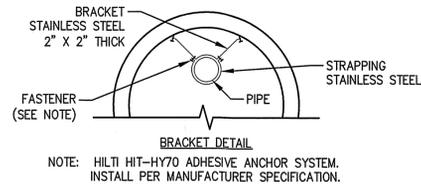
SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR
TOLL BROS., INC.

UTILITY PLAN III
 DRAWING NO. C-13
 PROJ. #4171

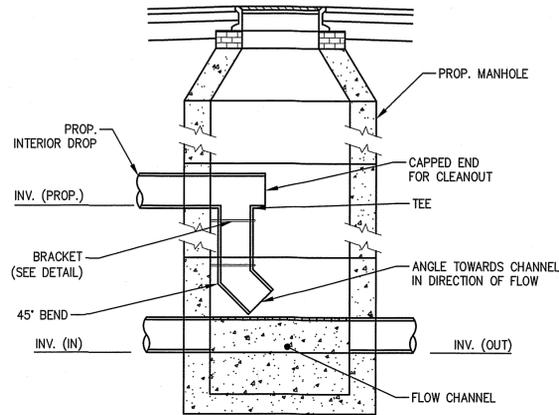


FLARED END SECTION (INLET/OUTLET PROTECTION)
(NOT TO SCALE)

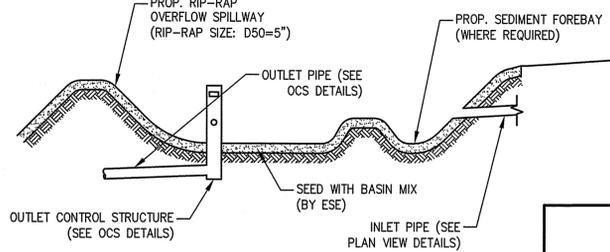
RIP-RAP APRON SIZING					
FES	D50	CLASS	LENGTH (FT)	DEPTH (FT)	WIDTH (FT)
FES-1	10	3	8.0	2.4	10.7
FES-2	5	1	4.0	1.2	5.4
FES-3	5	1	2.0	0.6	2.7
FES-4	14	4	12.0	4.1	16.0
HW-1	5	1	8.0	1.5	10.7
FES-5	10	3	6.0	2.7	8.0
FES-6	5	1	1.3	1.2	1.8
FES-7	5	1	2.0	1.2	2.7
FES-8	10	3	4.0	2.4	5.4
FES-9	5	1	1.3	0.9	1.8
FES-10	5	1	4.0	1.5	5.4
FES-11	10	3	2.7	2.4	3.6
FES-12	5	1	2.0	1.2	2.7
FES-13	5	1	4.0	0.9	5.4
FES-14	5	1	4.0	1.2	5.4
FES-15	6	2	2.7	1.8	3.6
FES-16	10	3	6.0	3.0	8.0
FES-17	10	3	6.0	2.1	8.0
FES-18	5	1	6.0	1.5	8.0
FES-19	5	1	4.0	1.5	5.4
FES-20	5	1	2.7	1.2	3.6



NOTE: HILTI HIT-HY70 ADHESIVE ANCHOR SYSTEM. INSTALL PER MANUFACTURER SPECIFICATION.

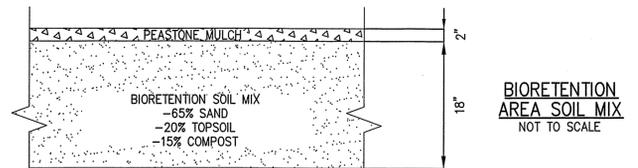


INTERIOR DROP SEWER MANHOLE DETAIL
(NOT TO SCALE)

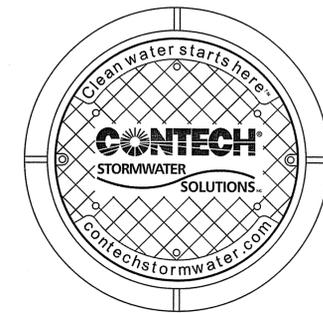


BIORETENTION BASIN NOTES:
 1. BASINS SHALL BE DEMARCATED WITH CONSTRUCTION FENCE PRIOR TO CONSTRUCTION ACTIVITIES AND CARE SHALL BE TAKEN TO AVOID COMPACTION OF THE AREA. THE ROUGH GRADED INFILTRATION BASIN MAY BE USED AS A TEMPORARY SEDIMENTATION BASIN DURING CONSTRUCTION. REMOVE ALL ACCUMULATED SEDIMENT FROM WITHIN BASIN AREA PRIOR TO PLACEMENT OF FINAL LOAM AND SEED. PROTECT WITH EROSION CONTROL METHODS UNTIL STABILIZED.
 2. SEED AREAS WITHIN THE BIORETENTION BASIN WITH BASIN MIX. MAY REQUIRE ADDITIONAL SLOPE STABILIZATION WHILE VEGETATION BECOMES ESTABLISHED TO PREVENT EROSION.
 3. SEE INDIVIDUAL POND PLAN VIEW DETAILS FOR INVERTS AND ELEVATIONS.

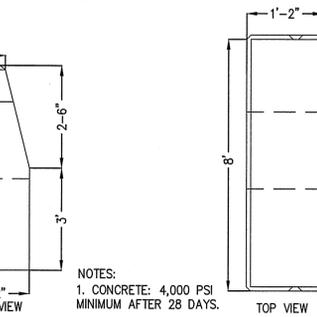
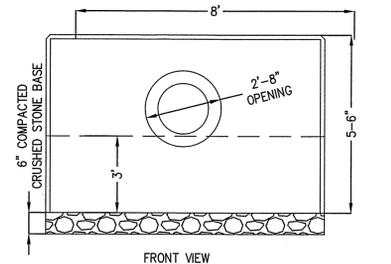
BIORETENTION AREA CROSS SECTION
(NOT TO SCALE)



BIORETENTION AREA SOIL MIX
NOT TO SCALE

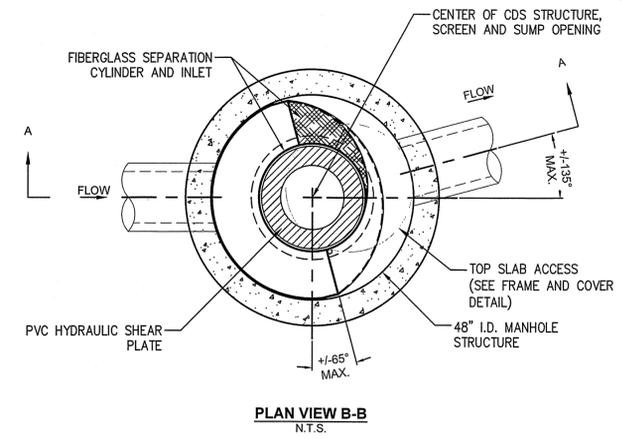


FRAME AND COVER
(DIAMETER VARIES)
N.T.S.

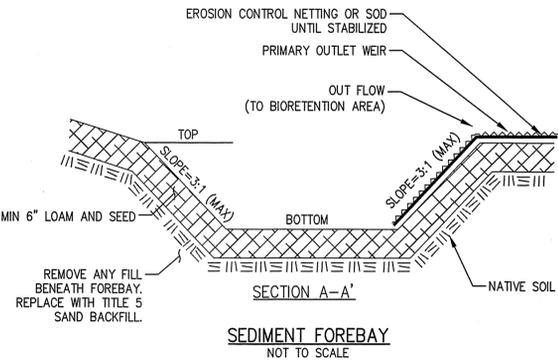


PRECAST CONCRETE HEADWALL
(NOT TO SCALE)

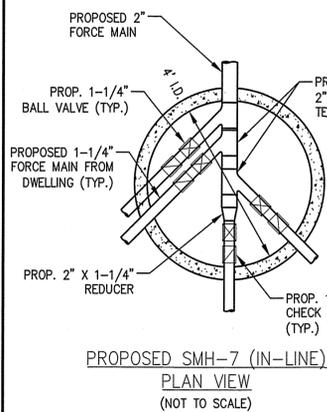
NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.



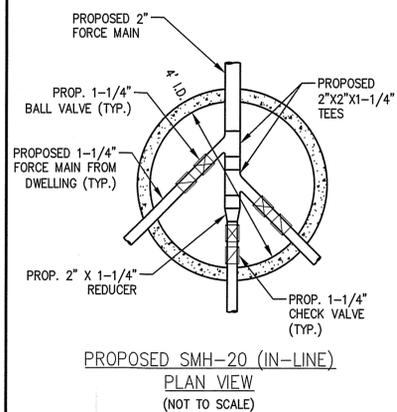
PLAN VIEW B-B
N.T.S.



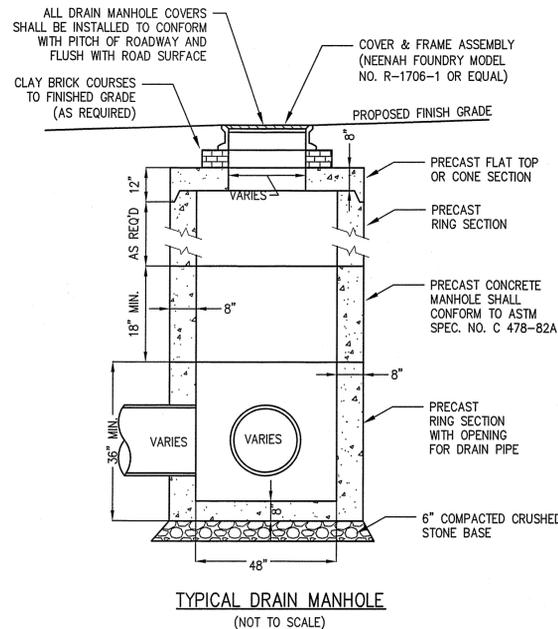
SEDIMENT FOREBAY
NOT TO SCALE



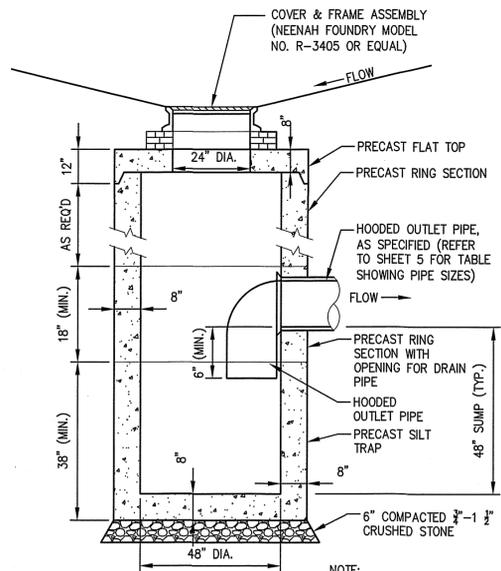
PROPOSED SMH-7 (IN-LINE)
PLAN VIEW
(NOT TO SCALE)



PROPOSED SMH-20 (IN-LINE)
PLAN VIEW
(NOT TO SCALE)

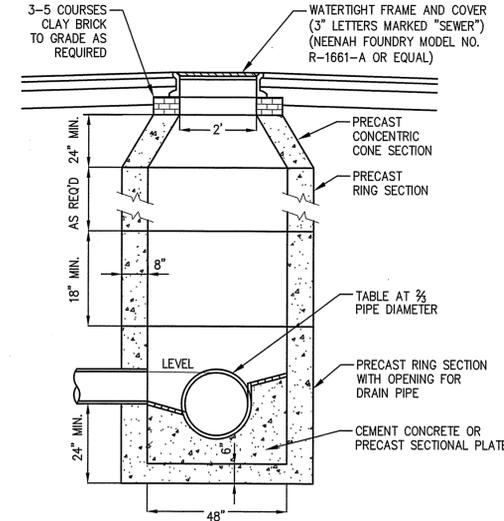


TYPICAL DRAIN MANHOLE
(NOT TO SCALE)



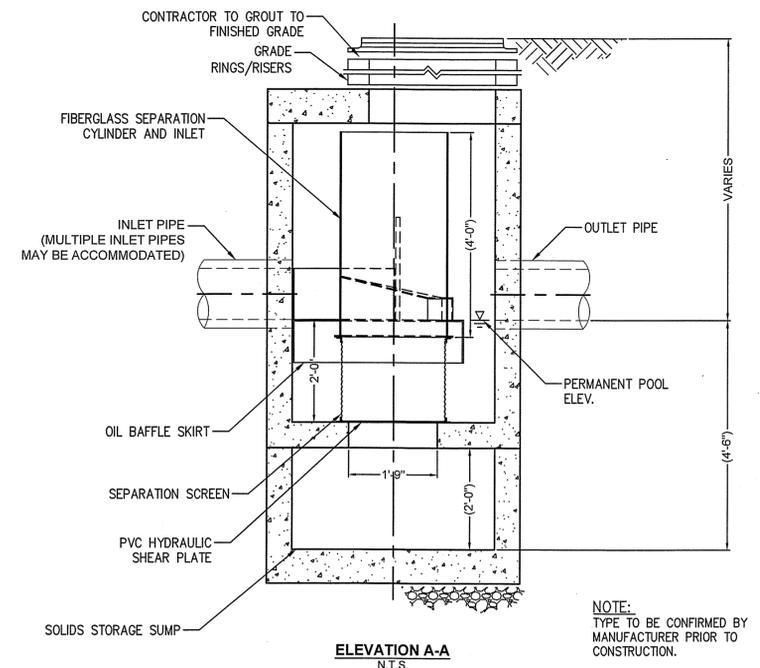
TYPICAL CATCH BASIN
(NOT TO SCALE)

NOTE:
1. 6" FRAME AND COVER FOR DOUBLE GRATED CATCH BASINS SHALL BE NEENAH FOUNDRY MODEL NO. R-3454 OR EQUIVALENT.



TYPICAL SEWER MANHOLE
(NOT TO SCALE)

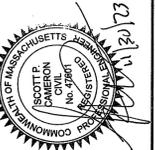
NOTE:
1. OUTLET INVERT IS A MINIMUM 0.08' LOWER THAN INLET INVERT.



ELEVATION A-A
N.T.S.

CONTECH_CDS2015-4-C
WQU-2
(NOT TO SCALE)

NOTE:
TYPE TO BE CONFIRMED BY MANUFACTURER PRIOR TO CONSTRUCTION.

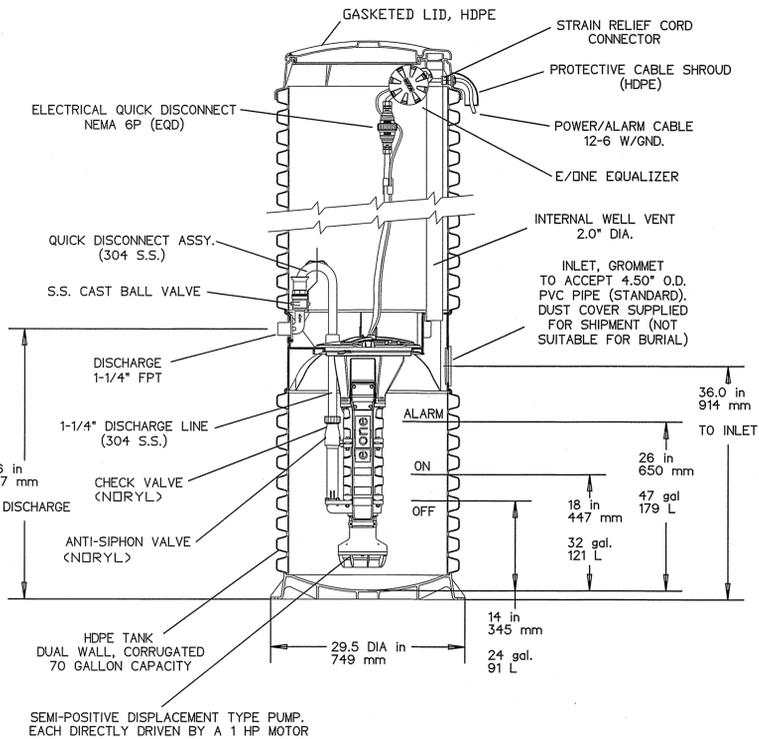


SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

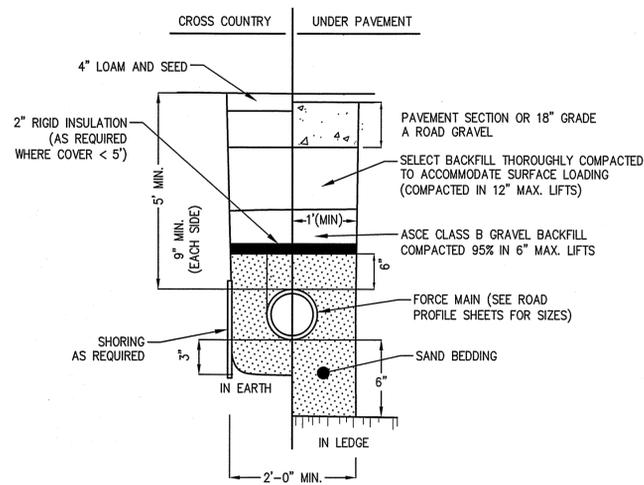
NO.	REVISIONS	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

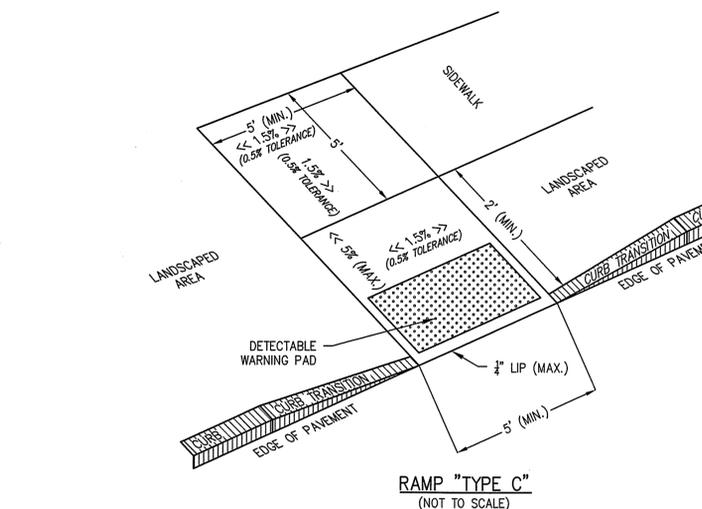
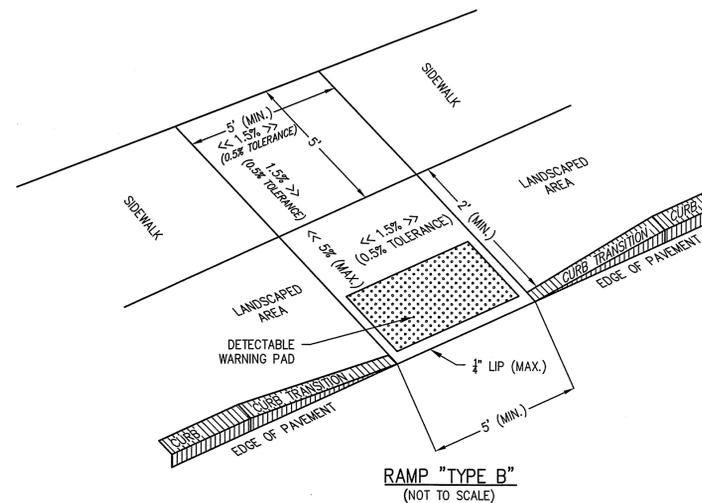
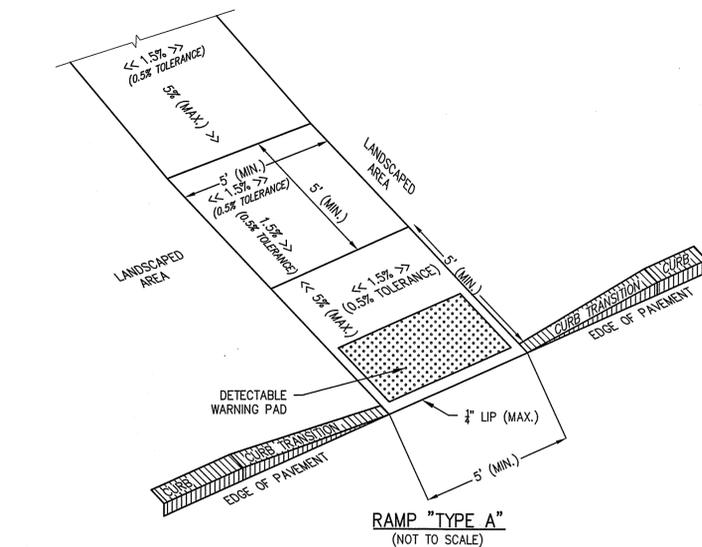
CONSTRUCTION DETAILS III
 DRAWING NO. **C-23**



E-ONE DH071 GRINDER PUMP STATION DETAIL
(NOT TO SCALE)



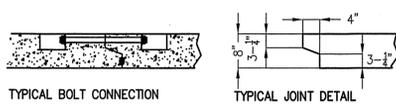
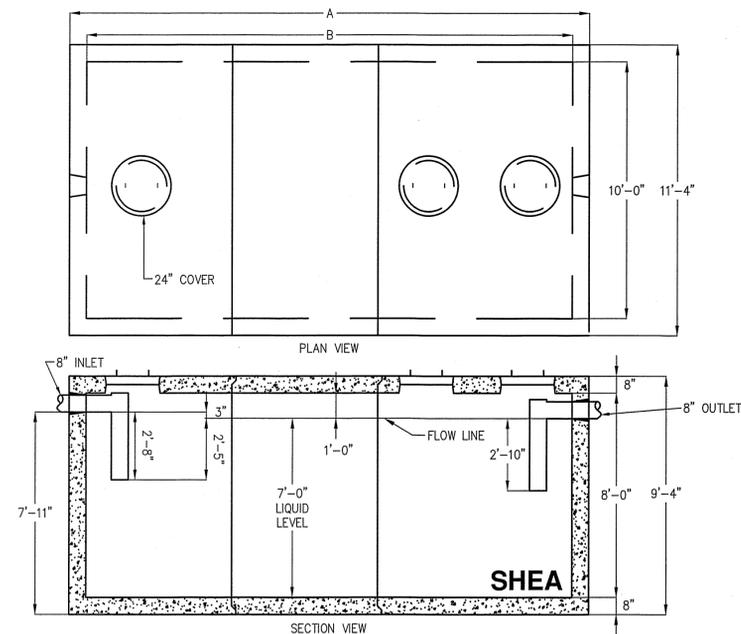
TYPICAL FORCE MAIN TRENCH DETAIL
(NOT TO SCALE)



NOTES:

1. THE MAXIMUM ALLOWABLE SIDEWALK AND CURB RAMP CROSS SLOPES SHALL BE 2.0% (1% MIN.).
2. THE MAXIMUM ALLOWABLE SLOPE OF ACCESSIBLE ROUTE EXCLUDING CURB RAMPS SHALL BE 5%.
3. A MINIMUM OF 3 FEET CLEAR SPACE SHALL BE MAINTAINED AT ANY PERMANENT OBSTACLE IN ACCESSIBLE ROUTE (I.E., HYDRANTS, UTILITY POLES, TREE WELLS, SIGNS, ETC.)
4. CURB TREATMENT VARIES. SEE PLANS FOR CURB TYPE.
5. BASE OF RAMP SHALL BE GRADED TO PREVENT PONDING.
6. SEE TYPICAL SIDEWALK SECTION FOR RAMP CONSTRUCTION.
7. WHERE ACCESSIBLE ROUTES ARE LESS THAN 5' IN WIDTH (EXCLUDING CURBING) A 5' x 5' PASSING AREA SHALL BE PROVIDED AT INTERVALS NOT TO EXCEED 200 FEET.
8. ELIMINATE ALL CURBING AT RAMP (OTHER THAN VERTICAL CURBING, WHICH SHALL BE SET FLUSH) WHERE IT ABUTS ROADWAY OR PARKING.

ACCESSIBLE CURB RAMP DETAILS
(NOT TO SCALE)



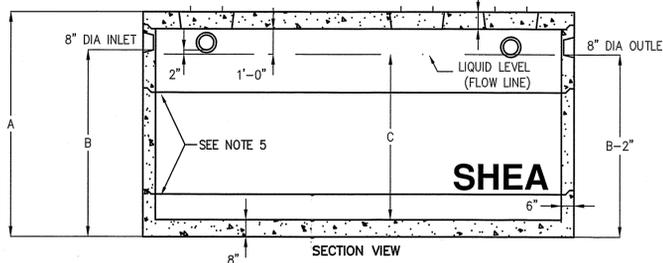
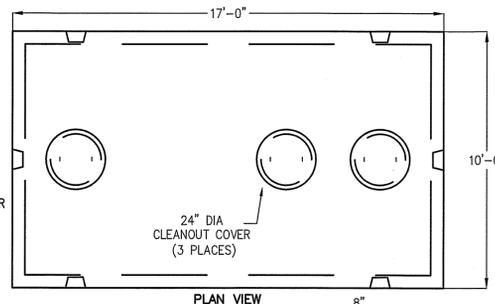
- NOTES:**
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
 2. DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS.
 3. ALL REINFORCEMENT PER ASTM A-615
 4. DESIGNED FOR AASHTO HS-20 LOADING, 2 TO 5 FEET COVER.
 5. TEES AND BAFFLES SOLD SEPARATELY.
 6. TONGUE AND GROOVE JOINT SEALED WITH BUTYL RESIN AND BOLTED WITH 3/4\"/>

GALLONS	A (LENGTH)	B (LENGTH)	WEIGHT
20,000	39'-8"	38'-4"	149,002#

OTHER SIZES AVAILABLE:
545 GALLONS/LF
3867 LBS/LF

20,000 GALLON SEPTIC TANK (TUNNEL TYPE)
(NOT TO SCALE)

- NOTES:**
1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS.
 2. DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS.
 3. ALL REINFORCEMENT PER ASTM C1227.
 4. DESIGNED FOR AASHTO HS-20 LOADING, COVER 1-5 FEET.
 5. TONGUE AND GROOVE JOINT SEALED WITH BUTYL RESIN. INLET HEIGHT MAY INCREASE SLIGHTLY DUE TO THE BUTYL RESIN USED.
 6. TEES AND BAFFLES SOLD SEPARATELY.
 7. SPANNERS USED IN CENTER SECTIONS FOR TANKS GREATER THAN 7000 GALLONS.



GALLONS	A (HEIGHT)	B (INLET)	C (LIQUID)	TOTAL WEIGHT	RISER 1 SIZE	RISER 2 SIZE	RISER 3 SIZE	ITEM NO.
4,000	76"	58"	48"	51,909	48"	0	0	10X17-40
5,000	88"	70"	60"	55,679	30"	30"	0	10X17-50
5,500	92"	74"	64"	56,936	30"	34"	0	10X17-55
6,000	96"	78"	68"	58,193	34"	34"	0	10X17-60
6,500	100"	82"	72"	59,449	30"	42"	0	10X17-65
7,000	106"	88"	78"	61,334	30"	48"	0	10X17-70
7,500	112"	94"	84"	65,586	42"	42" W/SPAN	0	10X17-75
8,000	118"	100"	90"	67,810	42"	48" W/SPAN	0	10X17-80
8,500	124"	106"	96"	69,695	48"	48" W/SPAN	0	10X17-85
9,000	130"	112"	102"	72,932	30"	30" W/SPAN	42" W/SPAN	10X17-90
9,500	136"	118"	108"	75,156	30"	30" W/SPAN	48" W/SPAN	10X17-95
10,000	140"	122"	112"	76,640	30"	34" W/SPAN	48" W/SPAN	10X17-100
10,500	146"	128"	118"	78,635	34"	42" W/SPAN	42" W/SPAN	10X17-105
11,000	152"	134"	124"	80,859	34"	42" W/SPAN	48" W/SPAN	10X17-110
11,500	158"	140"	130"	83,083	34"	48" W/SPAN	48" W/SPAN	10X17-115
12,000	162"	144"	134"	84,341	38"	48" W/SPAN	48" W/SPAN	10X17-120

ITEM SIZE	WEIGHT
8" TOP	16,312#
21" BOTTOM	20,517#
30" RISER	9,425#
30" RIS + SPAN	11,116#
34" RISER	10,682#
34" RIS + SPAN	12,600#
38" RISER	11,940#
38" RIS + SPAN	14,080#
42" RISER	13,195#
42" RIS + SPAN	15,562#
48" RISER	15,080#
48" RIS + SPAN	17,786#

10,000 GALLON SEPTIC TANK
(NOT TO SCALE)

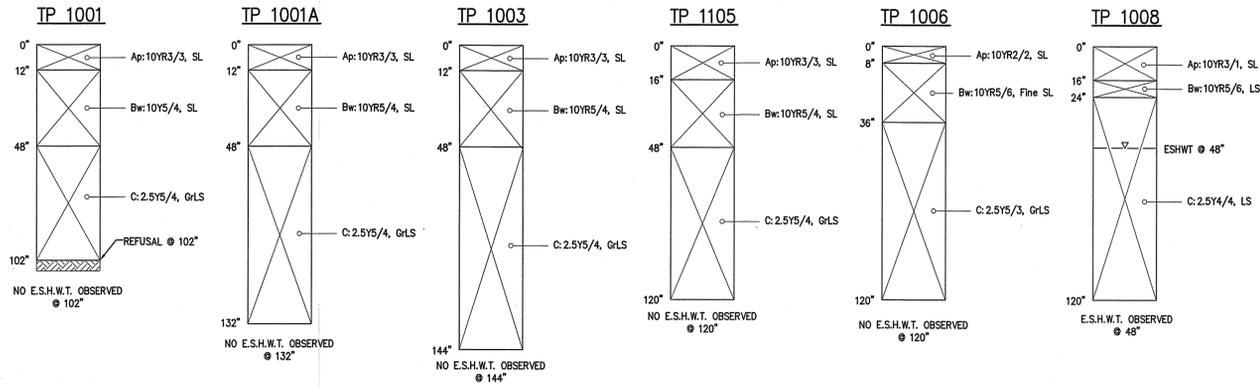


NO.	REVISIONS	DESCRIPTION	DATE

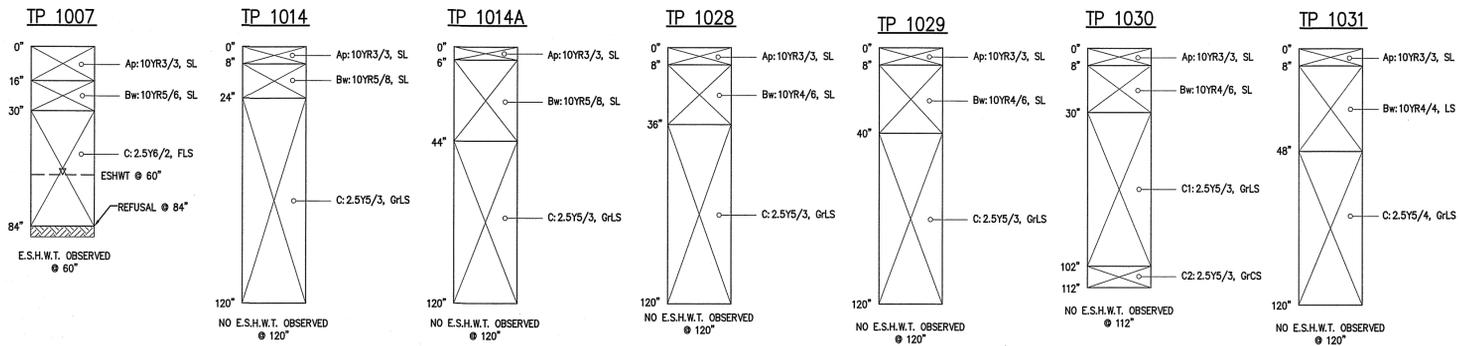
SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
LOCATED AT
1301 MAIN STREET LYNNFIELD, MASSACHUSETTS
(PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR:
TOLL BROS., INC.

CONSTRUCTION DETAILS V
DRAWING NO. **C-26**

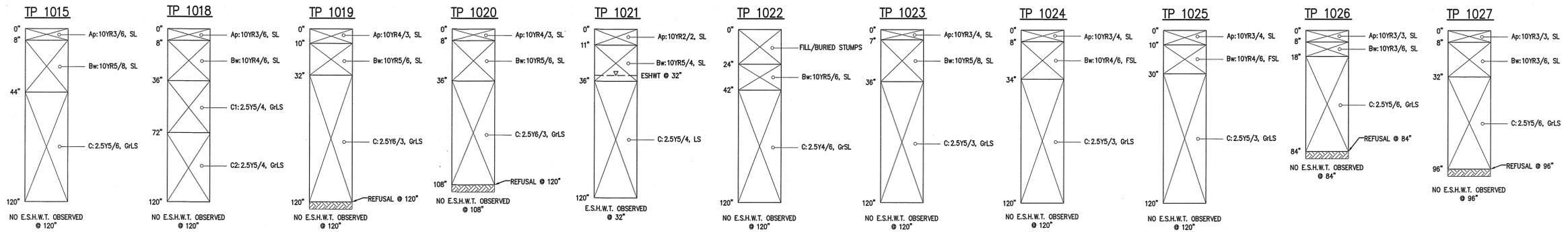
SOIL LOGS
DATE PERFORMED: JULY 11, 2023
PERFORMED BY: ERIC BROWN, SE #14653



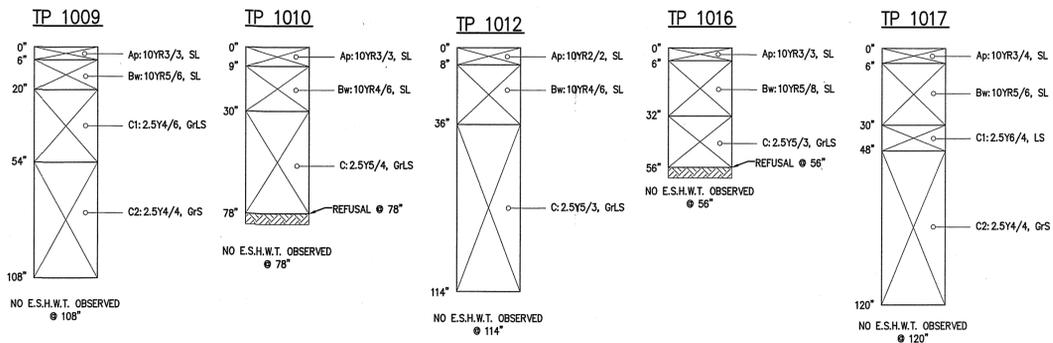
SOIL LOGS
DATE PERFORMED: JULY 12, 2023
PERFORMED BY: ERIC BROWN, SE #14653



SOIL LOGS
DATE PERFORMED: JULY 13, 2023
PERFORMED BY: ERIC BROWN, SE #14653



SOIL LOGS
DATE PERFORMED: JULY 14, 2023
PERFORMED BY: ERIC BROWN, SE #14653

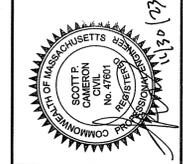


SURVEY BY: ESE
DRAFTED BY: DJP
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: NOVEMBER 30, 2023

NO.	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT
LYNNFIELD SENIOR HOUSING DEVELOPMENT
LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
(PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR:
TOLL BROS., INC.

SOIL TEST
PIT LOGS
DRAWING NO. TP-1



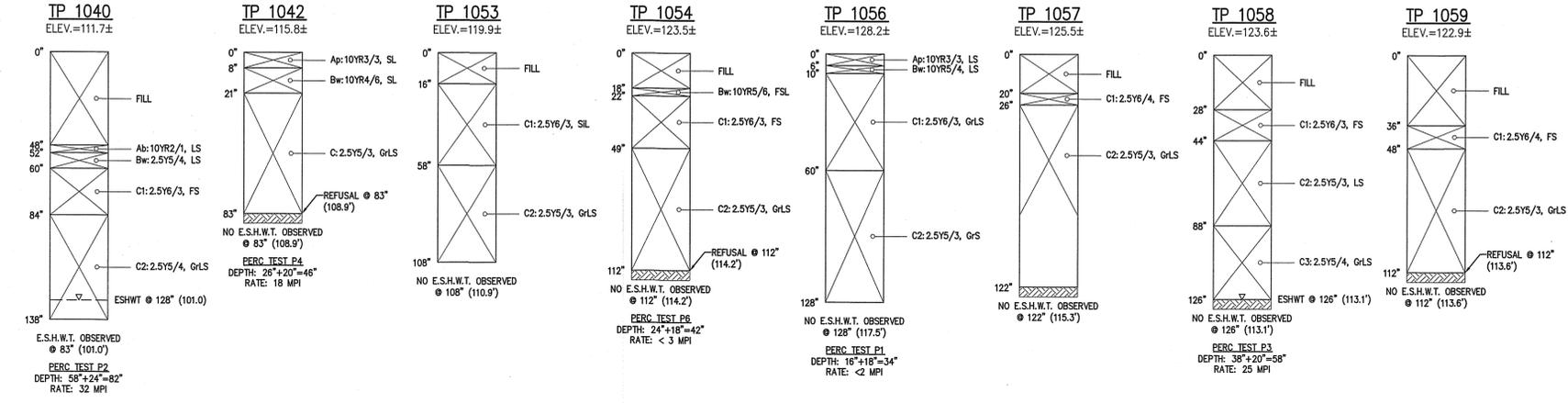
SURVEY BY: ESE
 DRAFTED BY: DP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

NO.	REVISIONS	DESCRIPTION	DATE

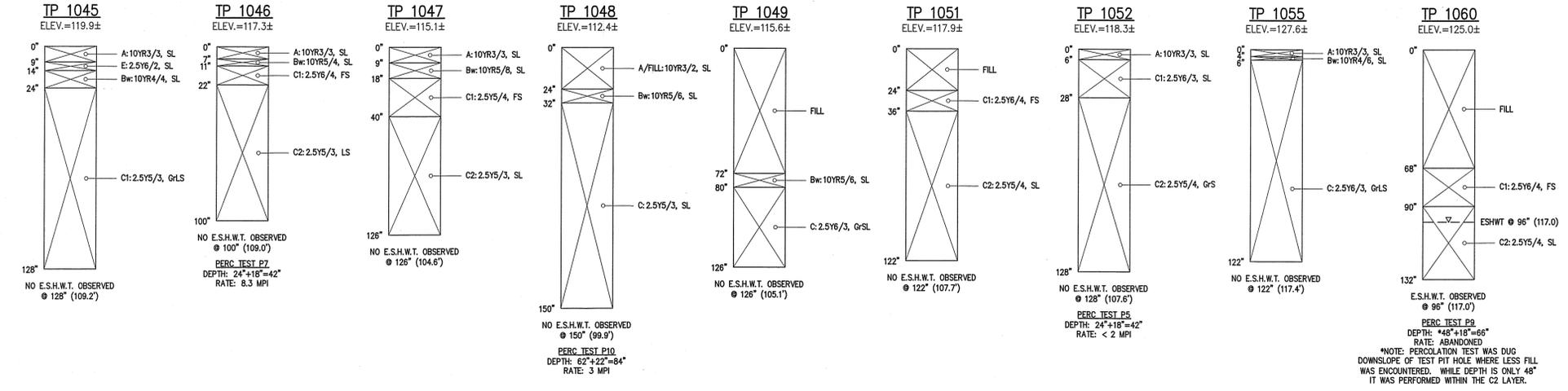
SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

SOIL TEST PIT LOGS II
 DRAWING NO. **TP-2**

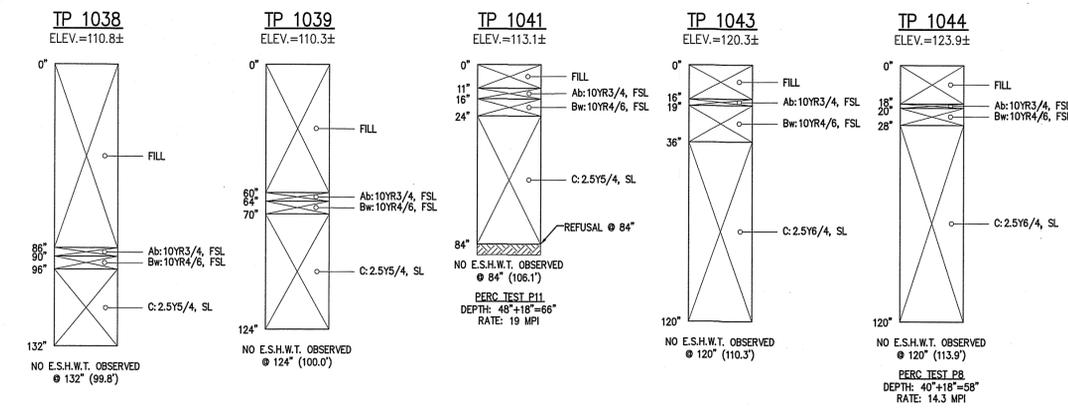
SOIL LOGS
 DATE PERFORMED: OCTOBER 17, 2023
 PERFORMED BY: ERIC BROWN, SE #14653
 WITNESSED BY: LEO CORMIER, LYNNFIELD HEALTH DEPARTMENT AGENT



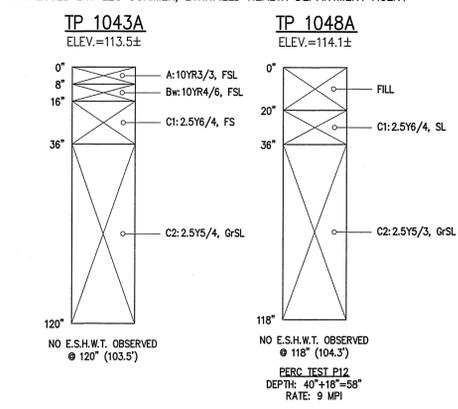
SOIL LOGS
 DATE PERFORMED: NOVEMBER 9, 2023
 PERFORMED BY: ERIC BROWN, SE #14653
 WITNESSED BY: LEO CORMIER, LYNNFIELD HEALTH DEPARTMENT AGENT

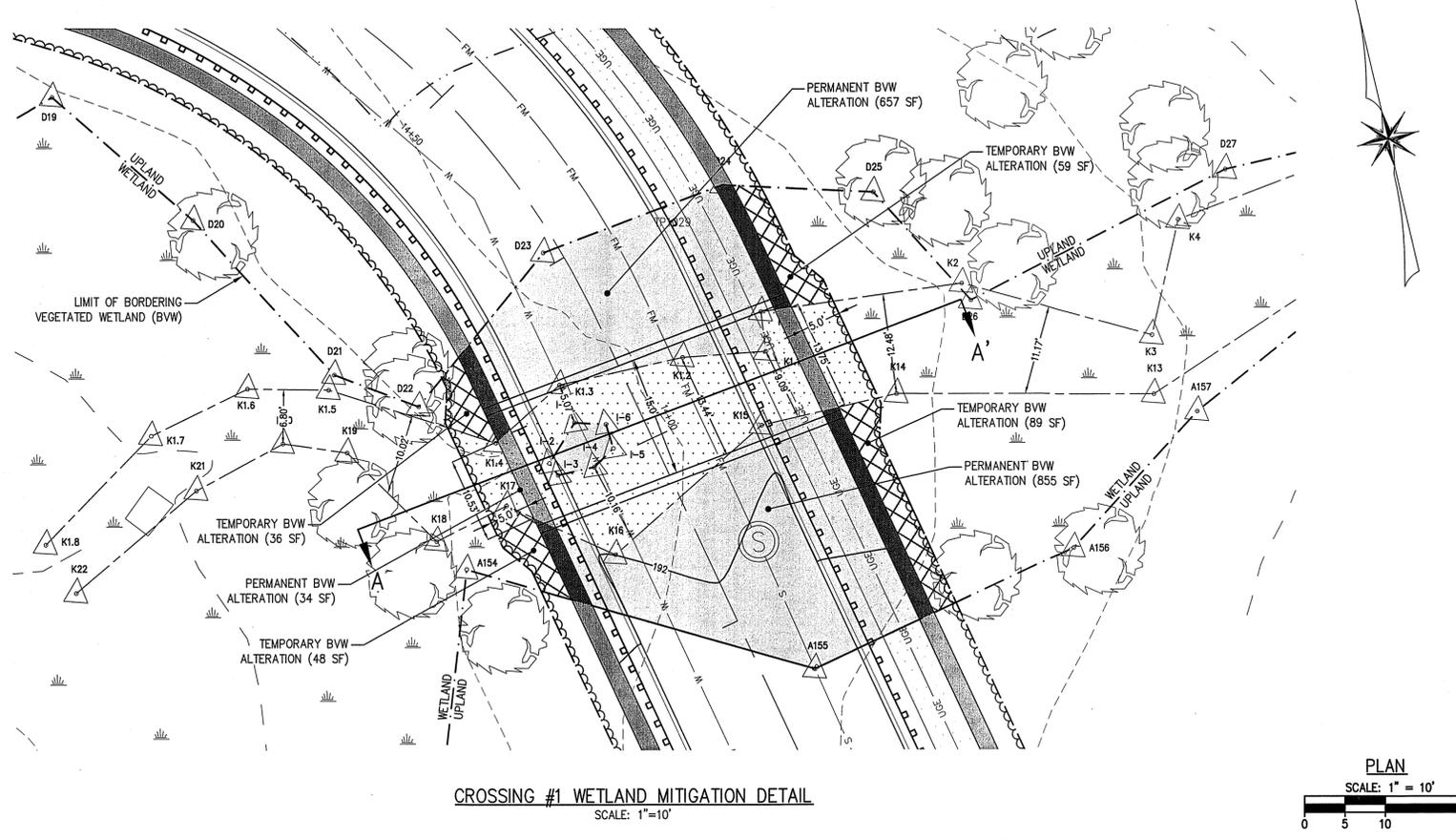
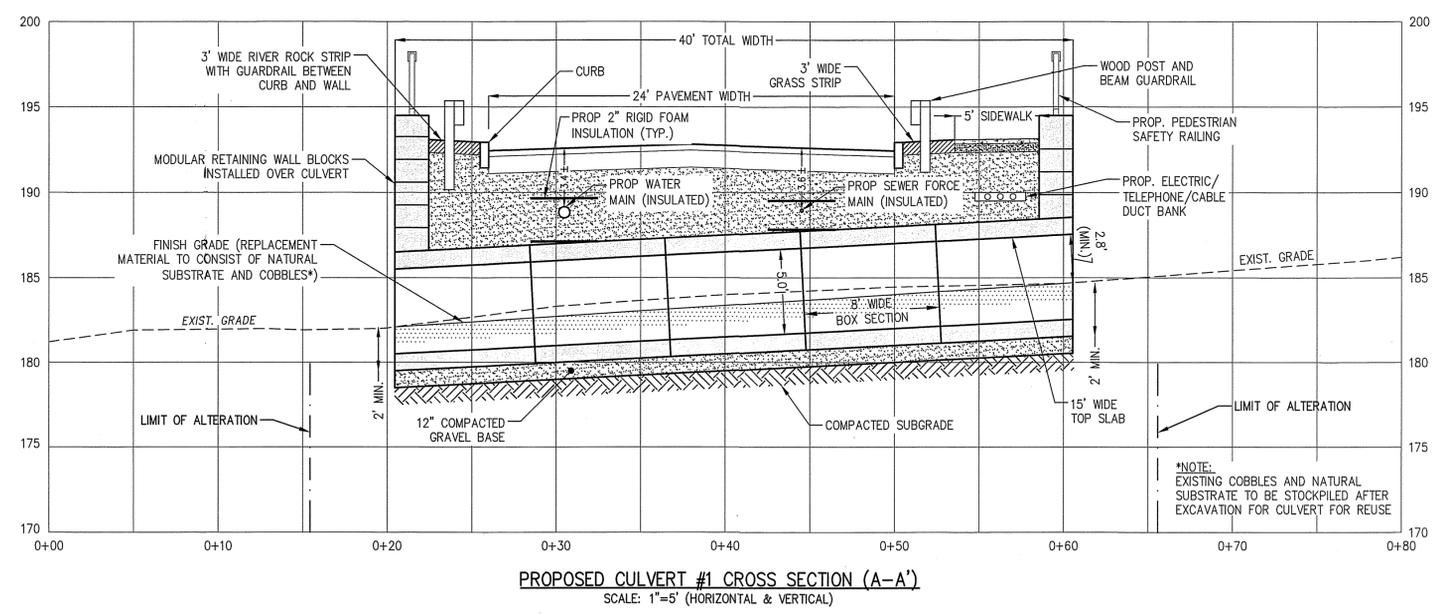
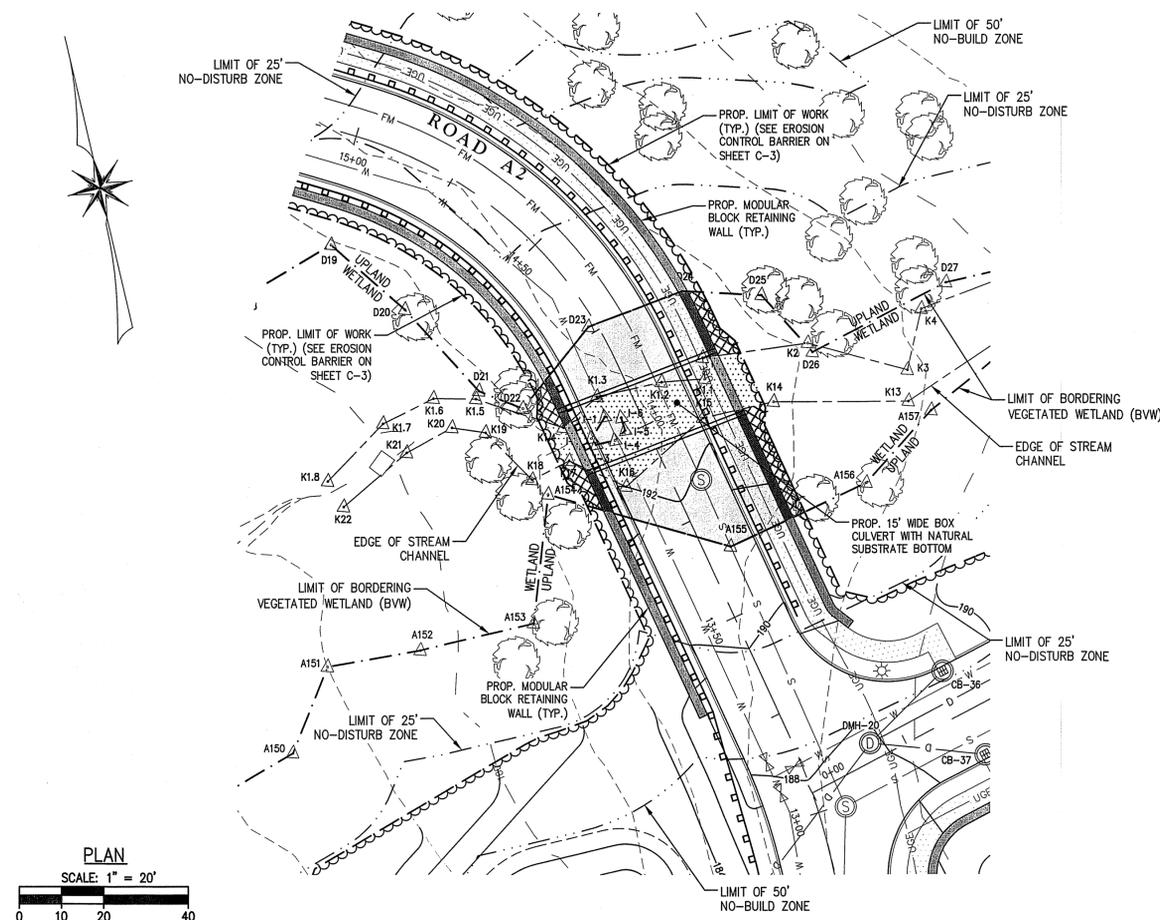


SOIL LOGS
 DATE PERFORMED: NOVEMBER 14, 2023
 PERFORMED BY: ERIC BROWN, SE #14653
 WITNESSED BY: LEO CORMIER, LYNNFIELD HEALTH DEPARTMENT AGENT



SOIL LOGS
 DATE PERFORMED: NOVEMBER 17, 2023
 PERFORMED BY: ERIC BROWN, SE #14653
 WITNESSED BY: LEO CORMIER, LYNNFIELD HEALTH DEPARTMENT AGENT





CULVERT OPENNESS RATIO

OPENNESS RATIO = $\frac{\text{CROSS-SECTIONAL AREA}}{\text{CULVERT LENGTH}}$

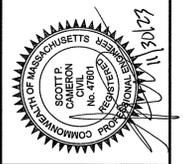
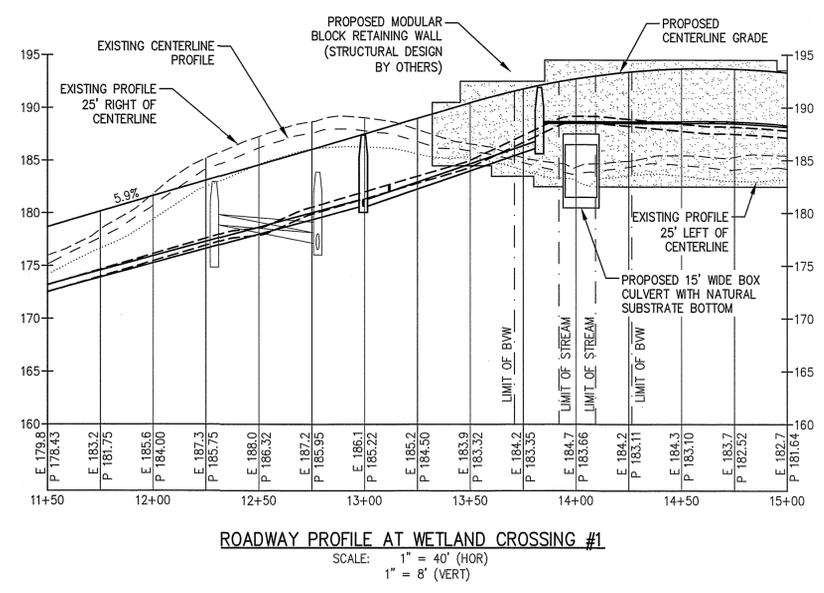
CULVERT WIDTH = 15 FEET
 MIN. VERTICAL CLEARANCE = 2.2 FEET
 CROSS SECTIONAL AREA = 15' X 2.8' = 42 SQ FEET
 OPENNESS RATIO = 42 / 40 = 1.05
 (MINIMUM REQUIRED = 0.82)

BANKFULL WIDTH CALCULATION

EXISTING AVERAGE BANKFULL WIDTH:
 $(6.80' + 10.02' + 10.53' + 5.07' + 10.16' + 13.44' + 9.09' + 13.75' + 12.48' + 11.17') / 10 = 10.25'$

$10.25' \times 1.2 = 12.30'$

$15' > 12.30'$ (OK)

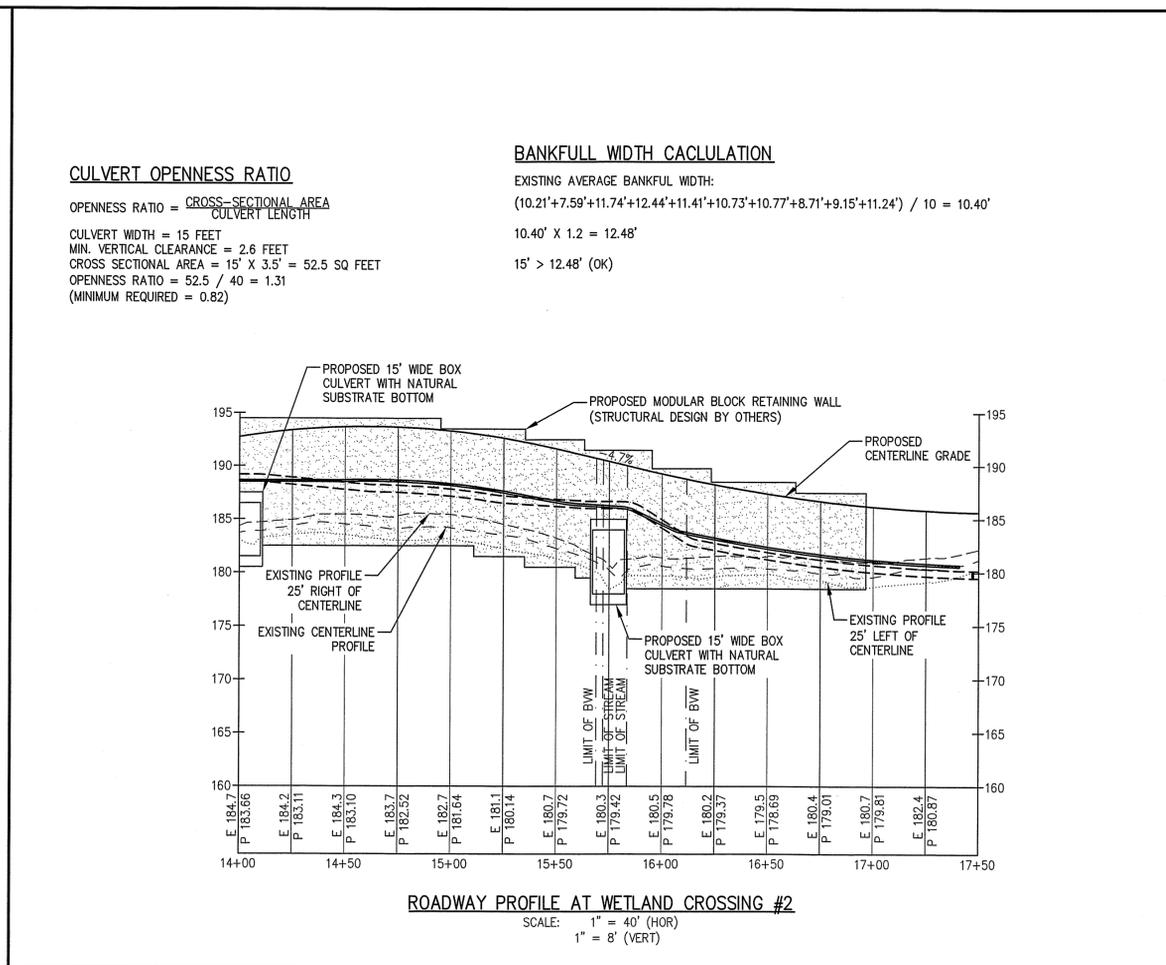
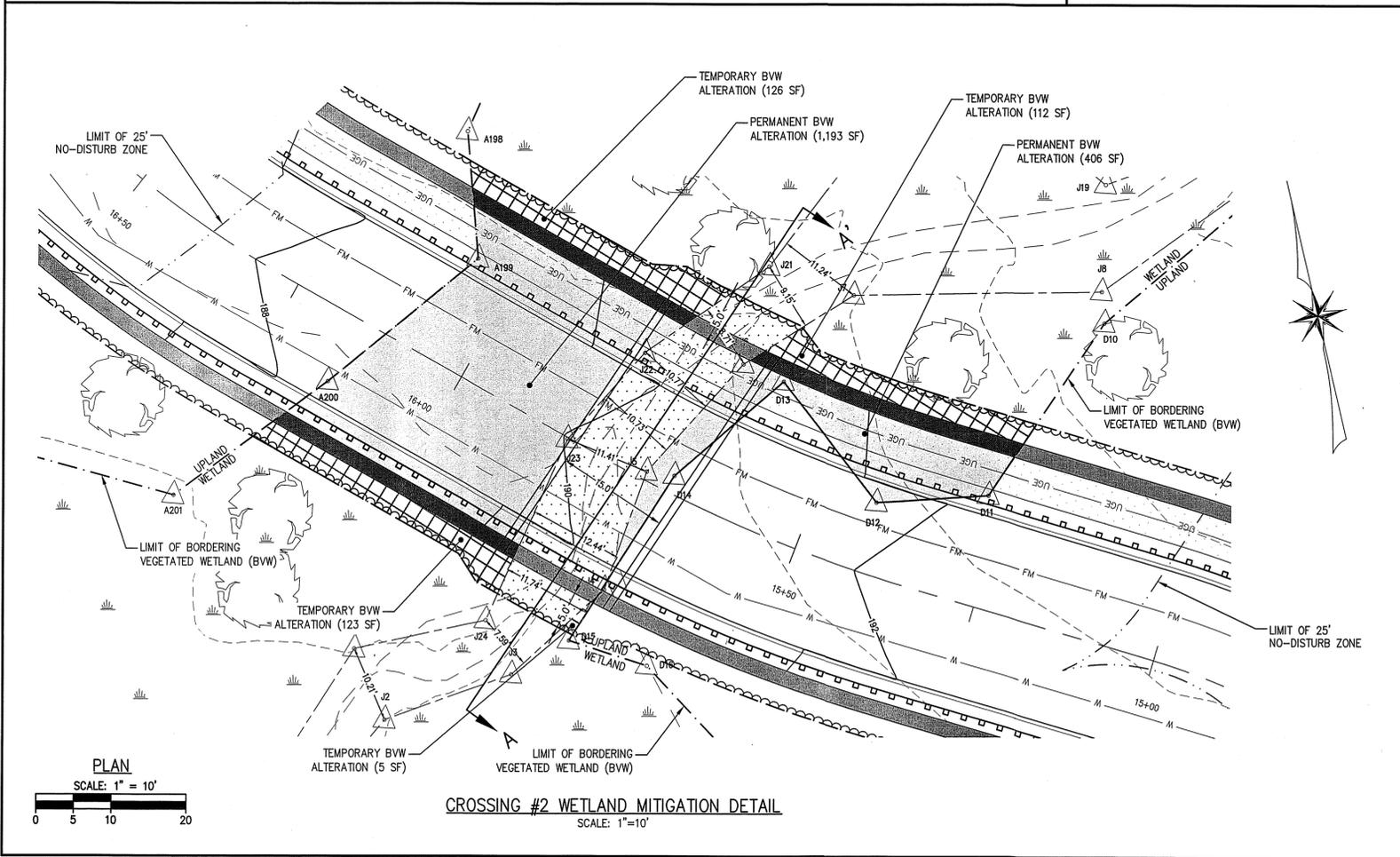
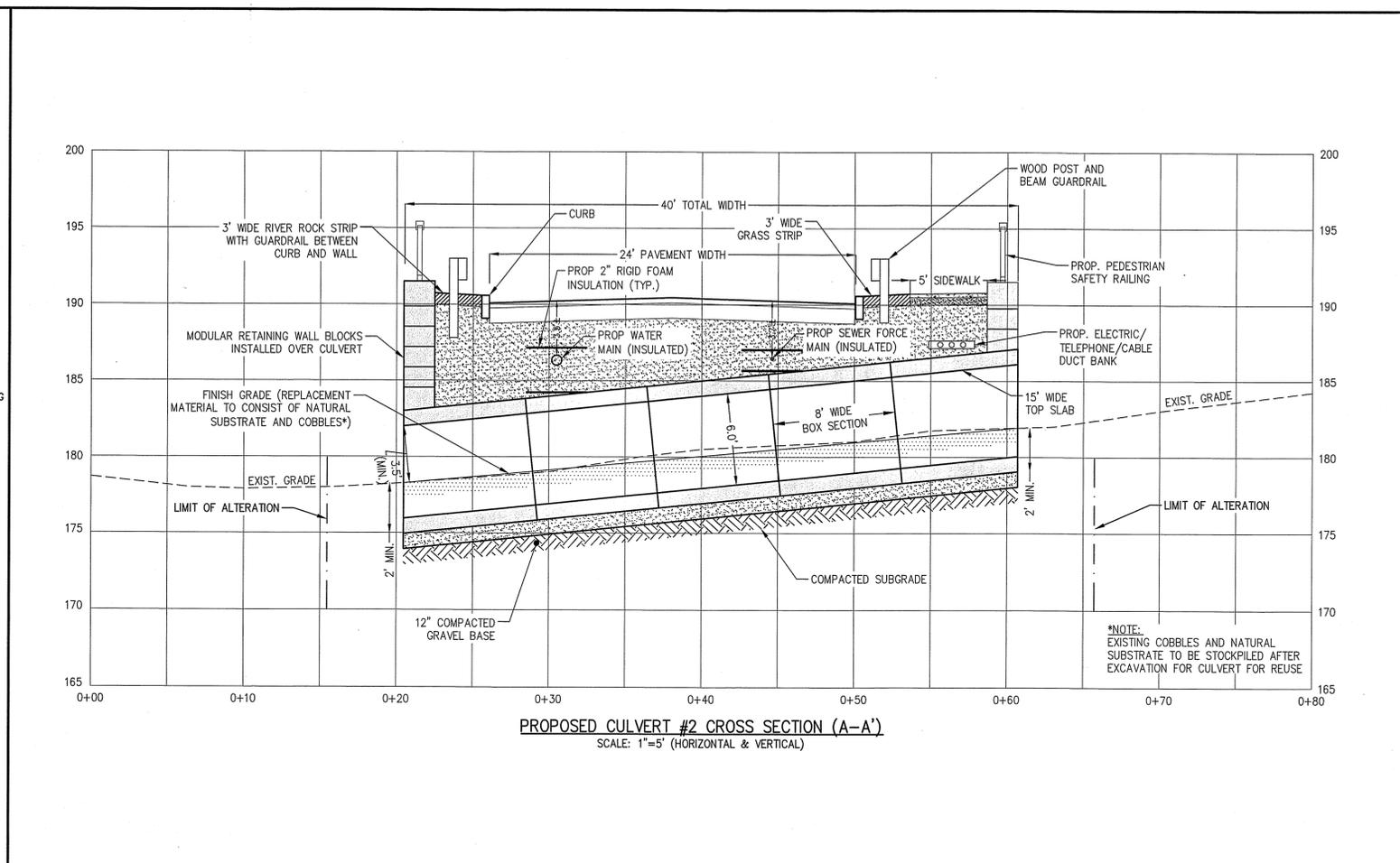
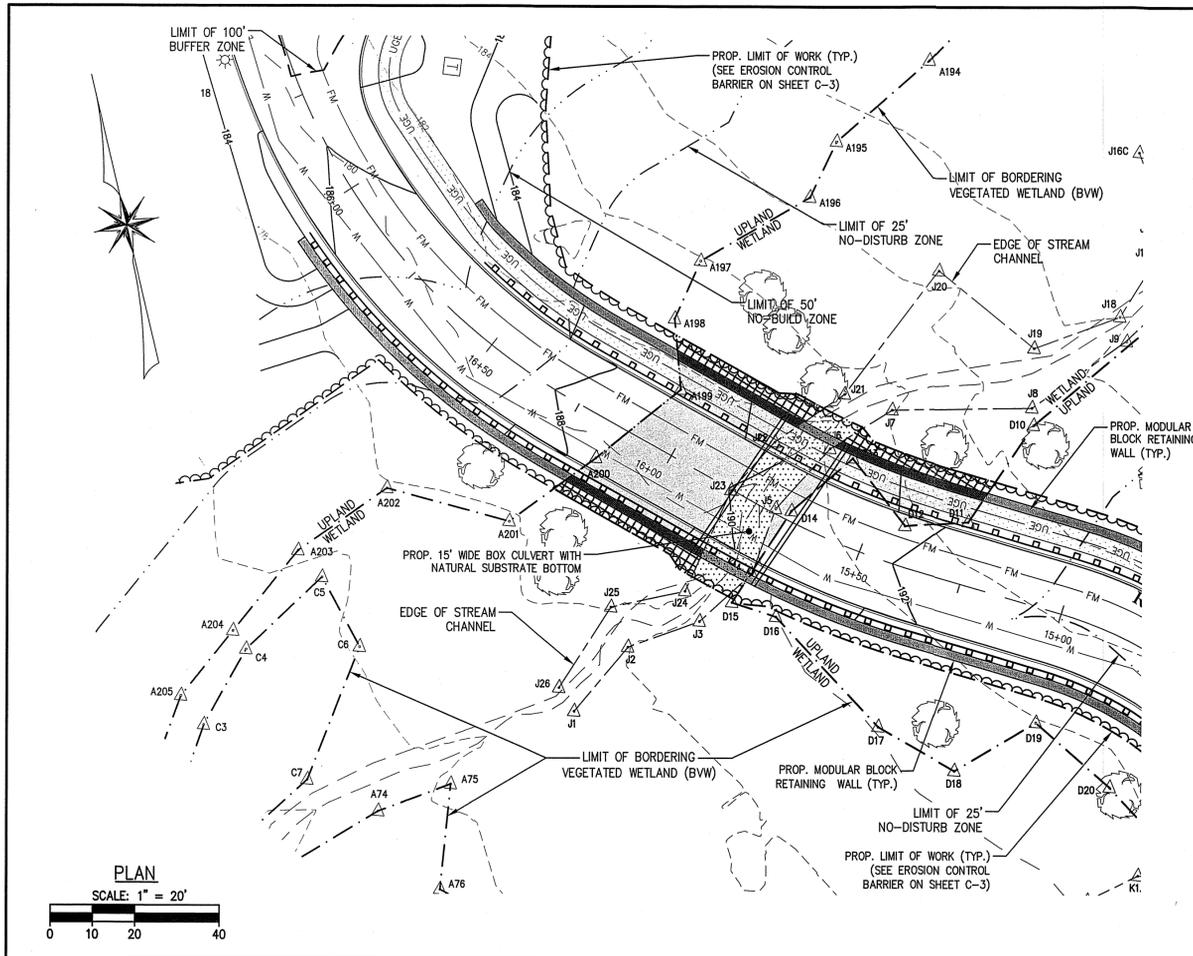


SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

NO.	REVISIONS	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

WETLAND CROSSING PLAN I
 DRAWING NO. **W-1**



CULVERT OPENNESS RATIO
 $OPENNESS RATIO = \frac{CROSS-SECTIONAL AREA}{CULVERT LENGTH}$
 CULVERT WIDTH = 15 FEET
 MIN. VERTICAL CLEARANCE = 2.6 FEET
 CROSS SECTIONAL AREA = 15' X 3.5' = 52.5 SQ FEET
 $OPENNESS RATIO = 52.5 / 40 = 1.31$
 (MINIMUM REQUIRED = 0.82)

BANKFULL WIDTH CALCULATION
 EXISTING AVERAGE BANKFULL WIDTH:
 $(10.21' + 7.59' + 11.74' + 12.44' + 11.41' + 10.73' + 10.77' + 8.71' + 9.15' + 11.24') / 10 = 10.40'$
 $10.40' \times 1.2 = 12.48'$
 $15' > 12.48'$ (OK)

The Morin-Cameron GROUP, INC.
 CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
 LAND SURVEYORS | LAND USE PLANNERS
 66 ELM STREET, DANVERS, MASSACHUSETTS 01923
 P. 978-777-6586, W. WWW.MORIN-CAMERON.COM

REVISIONS

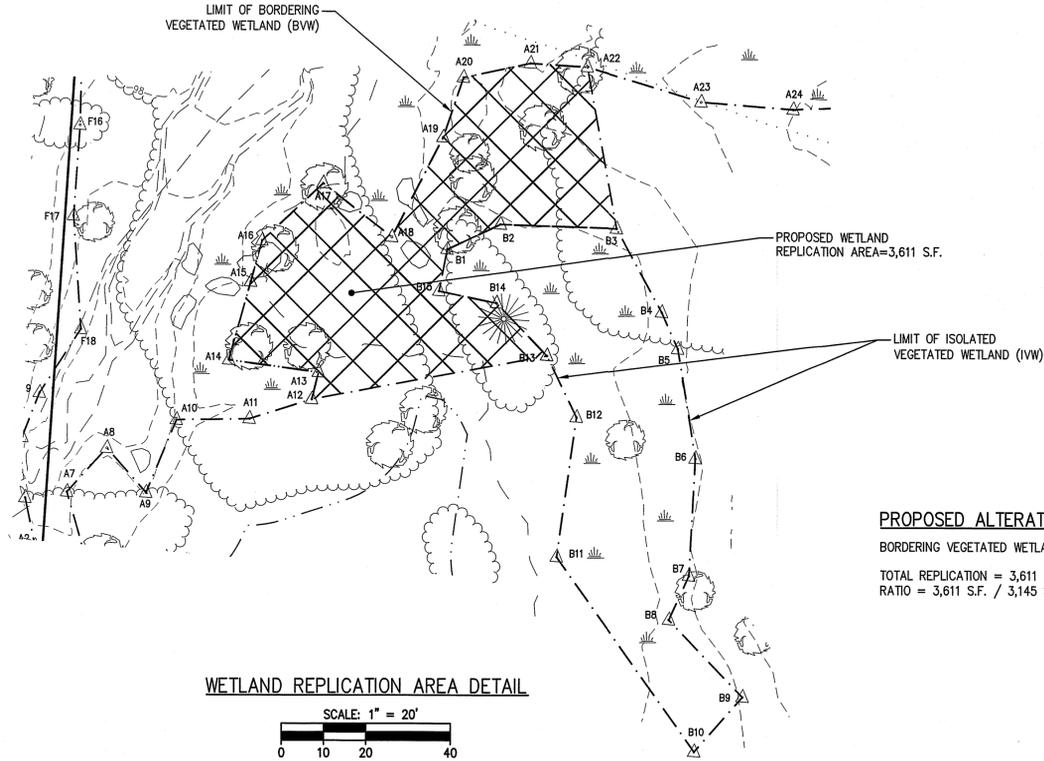
NO.	DESCRIPTION	DATE

SURVEY BY: ESE
DRAFTED BY: DJP
CHECKED BY: SPC
APPROVED BY: SPC
SCALE: AS NOTED
DATE: NOVEMBER 30, 2023

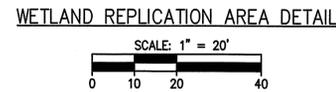
SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

WETLAND CROSSING PLAN II
 DRAWING NO. **W-2**

PROJ. #4171



PROPOSED ALTERATION CALCULATION
 BORDERING VEGETATED WETLAND ALTERATION AREA = 3,145 S.F.
 TOTAL REPLICATION = 3,611 S.F.
 RATIO = 3,611 S.F. / 3,145 S.F. = 1.15



WETLAND REPLICATION:

1. THE LIMITS OF THE 3,611 S.F. WETLAND REPLICATION AREA SHALL BE STAKED IN THE FIELD PRIOR TO CONSTRUCTION AND CERTIFIED TO BE ACCURATELY LOCATED BY A PLS.
2. ALL EXISTING NATIVE TREE AND SHRUBS SHALL REMAIN IN PLACE, TO BE IDENTIFIED BY THE SUPERVISING WETLAND SCIENTIST. SOIL EXCAVATION SHALL BE PERFORMED BY SMALL EQUIPMENT SO AS NOT TO DAMAGE THE ROOT SYSTEMS OF THE NATIVE WOODY SPECIES TO REMAIN.
3. MECHANICAL EQUIPMENT WILL BE USED TO EXCAVATE TO A SUB-GRADE ELEVATION APPROXIMATELY 8-12 INCHES BELOW THE FINAL ELEVATIONS. THE WETLAND SCIENTIST SHALL OVERSEE ESTABLISHMENT OF SUBGRADE AND FINAL GRADE.
4. FOLLOWING EXCAVATION TO SUBGRADE AND INSPECTION BY THE WETLAND SCIENTIST, APPROXIMATELY 8-12 INCHES OF ORGANIC TOP SOIL SHALL BE ESTABLISHED IN THE WETLAND REPLICATION AREA.
5. THE PROPOSED SOIL SHALL BE COMPRISED OF CLEAN LEAF COMPOST AND LOAMY SAND TOPSOIL MIXTURE, AND SHALL HAVE APPROXIMATELY 20% ORGANIC MATTER CONTENT. LARGE FRACTION MATERIAL (E.G. GRAVEL, COBBLE, STONES) WITHIN THE SOIL SHALL NOT EXCEED 10%. THE SOIL SHALL BE INSPECTED BY THE WETLAND SCIENTIST BEFORE PLACEMENT IN THE REPLICATION AREA.
6. FINAL ELEVATIONS SHALL MIMIC EXISTING GRADES WITHIN THE ADJACENT BORDERING VEGETATED WETLAND (BVW) ALONG THE LENGTH OF THE REPLICATION AREA. SURVEY EQUIPMENT SHALL BE FREQUENTLY USED TO ESTABLISH THE FINAL GRADE AS SOIL IS PLACED.
7. COMPACTION OF SOILS WILL BE MINIMIZED VIA SCARIFICATION OF THE SUBSOIL AND TOPSOIL WITH THE TEETH OF THE EXCAVATOR BUCKET AS THE EXCAVATOR WORKS THE LAND FROM THE BVW BOUNDARY LANDWARD TOWARD THE LIMITS OF THE WETLAND REPLICATION AREA.
8. THE NATIVE SEED MIX USED SHALL BE APPROVED BY THE MONITORING WETLAND SCIENTIST PRIOR TO SPREADING THE MIX.
9. THE WETLAND REPLICATION AREA WILL BE MONITORED DURING AND FOLLOWING CONSTRUCTION, INCLUDING THE SPRING AND FALL DURING THE FIRST TWO GROWING SEASONS BY A QUALIFIED WETLAND SCIENTIST. MONITORING REPORTS DESCRIBING THE RELATIVE HEALTH OF THE PLANTINGS WILL BE SUBMITTED TO THE CONSERVATION COMMISSION AT THE END OF EACH GROWING SEASON WITH PHOTOGRAPHIC DOCUMENTATION AND RECOMMENDATIONS FOR SUPPLEMENTAL PLANTINGS, IF NECESSARY. THE MONITORING WILL INCLUDE AN ASSESSMENT OF THE DENSITY OF THE VEGETATION TO ENSURE 75% COVERAGE BY WETLAND INDICATOR PLANTS WITHIN TWO GROWING SEASONS.

GENERAL MITIGATION NOTES:

- ALL PLANTINGS SHALL BE NATIVE VARIETIES WITH NO LANDSCAPE CULTIVARS PROPOSED.
- SPECIFIC PLACEMENT OF SHRUBS AND TREES WITHIN THE PLANTING AREAS SHALL BE DETERMINED IN THE FIELD BY THE WETLAND SCIENTIST.
- THE PROPOSED MITIGATION WORK ACTIVITY SHALL BE MONITORED BY A WETLAND SCIENTIST.
- IF NECESSARY, ANY REQUIRED SUBSTITUTE NATIVE SHRUBS OR TREES SHALL BE REVIEWED BY THE WETLAND SCIENTIST PRIOR TO INSTALLATION. PROPOSED PLANTINGS SHALL BE INSPECTED ON-SITE BY THE WETLAND SCIENTIST PRIOR TO INSTALLATION.
- INSTALLATION OF PLANTINGS SHALL OCCUR IN THE SPRING OR FALL SEASON.
- PREPARATION AND IMPLEMENTATION OF A WATERING SCHEDULE SHALL OCCUR FOR A MINIMUM OF ONE GROWING SEASON TO ENSURE ESTABLISHMENT OF PLANTINGS. THE WATERING SCHEDULE IS DEPENDANT ON RAIN EVENTS AND TIME OF SEASON. A DEEP SOAKING OF PLANTS IS RECOMMENDED THE SAME DAY AS PLANTS ARE INSTALLED. WATERING IS RECOMMENDED IN THE EARLY MORNING HOURS.
- THE SHRUB CLUSTERS AND INDIVIDUAL TREE PLANTINGS SHALL BE EVENLY DISTRIBUTED THROUGHOUT THE PLANTING AREAS. LAYOUT OF PLANTINGS SHALL INVOLVE WETLAND SCIENTIST OVERSIGHT.

BANK/STREAM RESTORATION:

- THE CULVERT AREA REMOVAL AND RESTORATION WORK SHALL BE OVERSEEN BY A WETLAND SCIENTIST.
- TO THE EXTENT PRACTICABLE, EFFORT SHALL BE MADE TO SCHEDULE WORK IN THE STREAM DURING PERIODS OF LOW FLOW, AND WHEN FORECASTED WEATHER CONDITIONS ARE ABSENT OF A SUBSTANTIAL RAIN EVENT (E.G. GREATER THAN 0.50" RAIN EVENT) DURING PLANNED WORK ACTIVITY.
- SHOULD WATER BE FLOWING DURING CULVERT REMOVAL AND STREAM RESTORATION ACTIVITY, A TEMPORARY COFFERDAM (E.G. SANDBAGS) SHALL BE INSTALLED IMMEDIATELY UPGRADIENT OF THE PROPOSED WORK ACTIVITY. CONTAINED WATER WILL BE PUMPED DOWNGRADIENT OF THE WORK ACTIVITY LIMITS BACK INTO THE BORDERING VEGETATED WETLAND (BVW). THE DISCHARGE OF THE PUMPING SHALL NOT BE ALLOWED TO SCOUR.
- ANY NECESSARY DEWATERING WITHIN THE RESTORATION AREA SHALL BE CARRIED OUT USING CONSTRUCTION BEST MANAGEMENT PRACTICES. THE DEWATERING METHOD SHALL BE APPROVED BY THE WETLAND SCIENTIST MONITOR PRIOR TO IMPLEMENTATION.
- THE BOTTOM SUBSTRATE WITHIN THE RESTORED CHANNEL SHALL BE SIMILAR TO THE COMPOSITION OF THE SUBSTRATE IN THE ADJACENT EXISTING STREAM CHANNEL TO THE EXTENT PRACTICABLE. THE PROPOSED STREAM CHANNEL WIDTH AND DEPTH SHALL BE SIMILAR TO THE ADJACENT EXISTING STREAM CHANNEL.

WETLAND RESTORATION:

- FOLLOWING COMPLETION OF THE BLOCK RETAINING WALLS, THE 598 S.F. OF TEMPORARY WETLAND IMPACTS SHALL BE RESTORED WITH A WETLAND RESTORATION SEED MIX.
- PRIOR TO RESTORING EXISTING GRADES, CONSTRUCTION DEBRIS AND GRAVEL SHALL BE REMOVED FROM THE FOOTPRINT OF THE RESTORATION AREA, AND INSPECTED BY THE MONITORING WETLAND SCIENTIST.
- FINAL ELEVATIONS SHALL MIMIC EXISTING GRADES WITHIN THE ADJACENT WETLAND AND ESTABLISHMENT OF FINAL GRADES SHALL BE OVERSEEN BY THE MONITORING WETLAND SCIENTIST.
- THE FOOTPRINT OF RESTORED GRADES SHALL BE INSPECTED BY THE WETLAND SCIENTIST.
- THE NATIVE SEED MIX (SPECIALIZED WETLAND MIX FOR SHADED OBL-FACW AREAS) SHALL BE APPROVED BY THE MONITORING WETLAND SCIENTIST PRIOR TO SPREADING THE MIX.
- THE WETLAND RESTORATION AREA WILL BE MONITORED DURING AND FOLLOWING CONSTRUCTION, INCLUDING IN THE SPRING AND FALL DURING THE FIRST TWO GROWING SEASONS BY A QUALIFIED WETLAND SCIENTIST. MONITORING REPORTS DESCRIBING THE RELATIVE HEALTH OF THE HERBACEOUS GROWTH WILL BE SUBMITTED TO THE CONSERVATION COMMISSION AT THE END OF EACH GROWING SEASON WITH PHOTOGRAPHIC DOCUMENTATION AND RECOMMENDATIONS FOR SUPPLEMENTAL SEEDING, IF NECESSARY. THE MONITORING WILL INCLUDE AN ASSESSMENT OF THE DENSITY OF THE VEGETATION TO ENSURE 75% COVERAGE BY WETLAND INDICATOR PLANTS WITHIN TWO GROWING SEASONS.

WETLAND REPLICATION & WETLAND RESTORATION SEED MIX:

ERNST SEEDS: SPECIALIZED WETLAND MIX FOR SHADED OBL-FACW AREAS

- 32.0% *Carex vulpinoidea*, PA Ecotype (Fox Sedge, PA Ecotype)
- 20.0% *Elymus virginicus*, PA Ecotype (Virginia Wildrye, PA Ecotype)
- 14.0% *Carex lurida*, PA Ecotype (Lurid Sedge, PA Ecotype)
- 6.9% *Carex lupulina*, PA Ecotype (Hop Sedge, PA Ecotype)
- 6.9% *Carex scoparia*, PA Ecotype (Blunt Broom Sedge, PA Ecotype)
- 3.0% *Cinna arundinacea*, PA Ecotype (Wood Reedgrass, PA Ecotype)
- 3.0% *Juncus effusus* (Soft Rush)
- 3.0% *Sparganium americanum* (Eastern Bur Reed)
- 3.0% *Sparganium eurycarpum*, PA Ecotype (Giant Bur Reed, PA Ecotype)
- 3.0% *Verbena hastata*, PA Ecotype (Blue Vervain, PA Ecotype)
- 2.0% *Helianthus scaberrimus*, PA Ecotype (Oxeye Sunflower, PA Ecotype)
- 1.0% *Carex intumescens*, PA Ecotype (Star Sedge, PA Ecotype)
- 0.5% *Scirpus atrovirens*, PA Ecotype (Green Bulrush, PA Ecotype)
- 0.5% *Scirpus cyperinus*, PA Ecotype (Woolgrass, PA Ecotype)
- 0.3% *Vernonia noveboracensis*, PA Ecotype (New York Ironweed, PA Ecotype)
- 0.2% *Carex stricta*, PA Ecotype (Tussock Sedge, PA Ecotype)
- 0.2% *Eupatorium perfoliatum*, PA Ecotype (Boneset, PA Ecotype)
- 0.2% *Lobelia siphilitica*, PA Ecotype (Great Blue Lobelia, PA Ecotype)
- 0.1% *Chelone glabra*, PA Ecotype (Turtlehead, PA Ecotype)
- 0.1% *Eupatorium fistulosum*, PA Ecotype (Joe Pye Weed, PA Ecotype)
- 0.1% *Penthorum sedoides*, PA Ecotype (Ditch Stoncrop, PA Ecotype)

WETLAND REPLICATION PLANT LIST

COMMON NAME	GENUS/SPECIES	SIZE	PLANTING SPECIFICATIONS	NO.
TREES				
RED MAPLE	<i>Acer rubrum</i>	4-6' MIN.	SINGLES, 10-25 FEET O.C.	8
SHRUBS				
HIGHBUSH BLUEBERRY	<i>Vaccinium corymbosum</i>	2-3' MIN.	IN CLUSTERS OF 2-3, SPACED 4-7 FEET O.C.	12
NORTHERN ARROWWOOD	<i>Viburnum denatum</i>	2-3' MIN.	IN CLUSTERS OF 2-3, SPACED 4-7 FEET O.C.	12
WINTERBERRY	<i>Ilex verticillata</i>	2-3' MIN.	IN CLUSTERS OF 2-3, SPACED 4-7 FEET O.C.	*12
SPICEBUSH	<i>Lindera benzoin</i>	2-3' MIN.	IN CLUSTERS OF 2-3, SPACED 4-7 FEET O.C.	12
			TOTAL SHRUBS AND TREES	56
SHRUBS				
SENSITIVE FERN	<i>Onoclea sensibilis</i>	1 gal. pot	RANDOMLY SPACED THROUGHOUT	30

*6 MALE & 6 FEMALE WINTERBERRY

The Morin-Cameron GROUP, INC.
 CIVIL ENGINEERS | ENVIRONMENTAL CONSULTANTS
 LAND SURVEYORS | LAND USE PLANNERS
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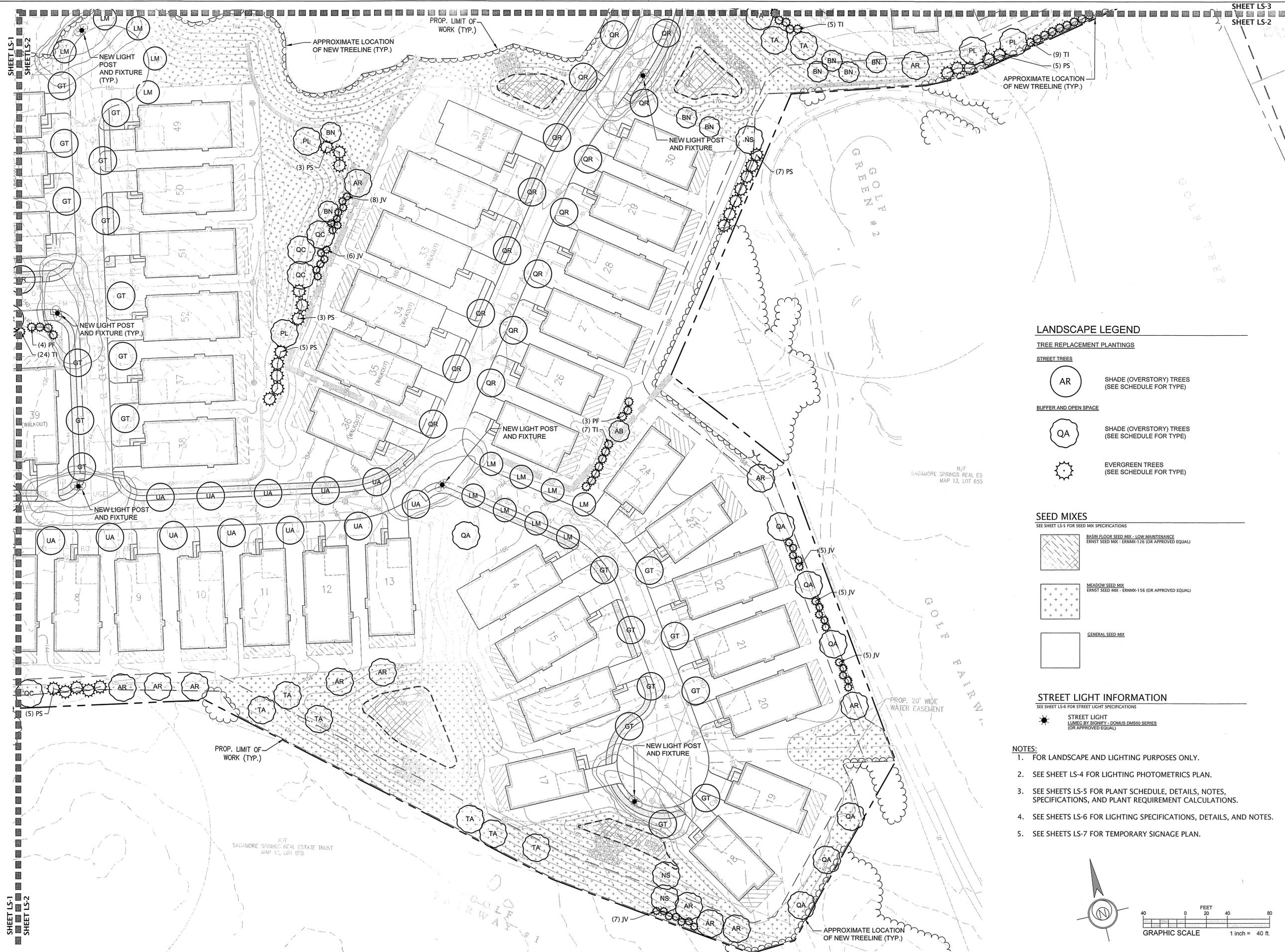


SURVEY BY: ESE
 DRAFTED BY: DCP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023

NO.	DESCRIPTION	DATE

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
 1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
TOLL BROS., INC.

WETLAND RESTORATION PLAN
 DRAWING NO. **W-3**



SHEET LS-1
SHEET LS-2

SHEET LS-1
SHEET LS-2

SHEET LS-3
SHEET LS-2

LANDSCAPE LEGEND

TREE REPLACEMENT PLANTINGS

STREET TREES

AR SHADE (OVERSTORY) TREES
(SEE SCHEDULE FOR TYPE)

BUFFER AND OPEN SPACE

QA SHADE (OVERSTORY) TREES
(SEE SCHEDULE FOR TYPE)

EVERGREEN TREES
(SEE SCHEDULE FOR TYPE)

SEED MIXES

SEE SHEET LS-5 FOR SEED MIX SPECIFICATIONS

BASIN FLOOR SEED MIX - LOW MAINTENANCE
ERNST SEED MIX - ERNMX-126 (OR APPROVED EQUAL)

MEADOW SEED MIX
ERNST SEED MIX - ERNMX-156 (OR APPROVED EQUAL)

GENERAL SEED MIX

STREET LIGHT INFORMATION

SEE SHEET LS-6 FOR STREET LIGHT SPECIFICATIONS

STREET LIGHT
LUMED BY SIGNIFY - DOMUS DMS60 SERIES
(OR APPROVED EQUAL)

- NOTES:**
- FOR LANDSCAPE AND LIGHTING PURPOSES ONLY.
 - SEE SHEET LS-4 FOR LIGHTING PHOTOMETRICS PLAN.
 - SEE SHEETS LS-5 FOR PLANT SCHEDULE, DETAILS, NOTES, SPECIFICATIONS, AND PLANT REQUIREMENT CALCULATIONS.
 - SEE SHEETS LS-6 FOR LIGHTING SPECIFICATIONS, DETAILS, AND NOTES.
 - SEE SHEETS LS-7 FOR TEMPORARY SIGNAGE PLAN.

SITE DEVELOPMENT PLANS FOR THE REGENCY AT
LYNNFIELD SENIOR HOUSING DEVELOPMENT

LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
(PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR
TOLL BROS., INC.

LANDSCAPE
PLAN II

DRAWING NO.
LS-2

REVISIONS	
NO.	DATE

TYPICAL UNIT PLANT SCHEDULE

ORNAMENTAL TREE / UPRIGHT EVERGREEN TREE				
SYMBOL	QUANTITY	SPECIES/COMMON NAME	SIZE	NOTES
		Betula nigra/ River Birch (Multi-trunk)	5'-6" HT	Full Sun/Part Shade
		Carpinus betulus/ European Hornbeam	5'-6" HT	Full Sun/Part Shade
		Cornus X 'Rutgan' / Stellar Pink Dogwood	5'-6" HT	Full Sun/Part Shade
		Juniperus virginiana 'Emerald Sentinel', 'Glauca', or 'Canaertii' / Juniper	5'-6" HT	Full Sun
		Magnolia stellata / 'Royal Star' Magnolia	5'-6" HT	Full Sun
		Picea glauca 'Iseli Fastigiata' / Iseli Fastigiata Blue Spruce	5'-6" HT	Full Sun/Part Shade
		Prunus serrulata 'Kwanzan' / Kwanzan Flowering Cherry	5'-6" HT	Full Sun
		Thuja occidentalis 'Nigra' / Arborvitae	5'-6" HT	Full Sun/Part Shade

LARGE-MEDIUM SHRUB A (EVERGREEN) SELECT ONE SPECIES ONLY PER PLANT GROUPING				
SYMBOL	QUANTITY	SPECIES/COMMON NAME	SIZE	NOTES
		Chamaecyparis pisifera 'Filifera Aurea' / Golden Mop Falsecypress	24" MIN. HT	Full Sun/Part Shade
		Ilex crenata 'Compacta' / Japanese Holly	24" MIN. HT	Full Sun/Part Shade
		Ilex glabra 'Densa' or 'Shamrock' / Inkberry	24" MIN. HT.	Full Sun/Full Shade
		Ilex x 'Mesog' / China Boy & China Girl Holly	24" MIN. HT.	Full Sun/Full Shade
		Leucothoe axillaris/Coastal Leucothoe	24" MIN. HT.	Part Shade/Full Shade
		Pieris japonica 'Brower's Beauty' / Japanese Andromeda	24" MIN. HT.	Part Shade/Full Shade
		Rhododendron x 'PJM' / PJM Rhododendron	24" MIN. HT.	Full Sun/Part Shade

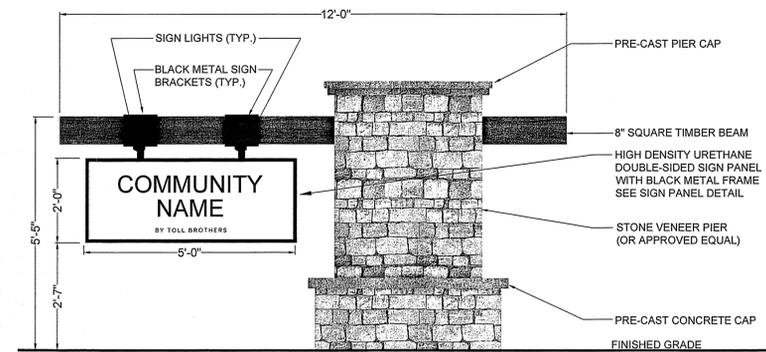
LARGE-MEDIUM SHRUB B (DECIDUOUS) SELECT ONE SPECIES ONLY PER PLANT GROUPING				
SYMBOL	QUANTITY	SPECIES/COMMON NAME	SIZE	NOTES
		Clethra alnifolia 'Ruby Spice' or 'September Beauty' / Summerweet	36" MIN. HT	Part Shade/Full Shade
		Cornus sericea 'Ivory Halo' / Variegated Redtwig Dogwood	36" MIN. HT.	Full Sun/Part Shade
		Hydrangea macrophylla / Bigleaf Hydrangea	36" MIN. HT.	Full Sun/Part Shade
		Hydrangea paniculata / Panicle Hydrangea	36" MIN. HT.	Full Sun/Part Shade
		Physocarpus opulifolius 'Summer Wine' or 'Coppertina' / Ninebark	36" MIN. HT.	Full Sun/Part Shade
		Rosa x 'Radtko' or 'Radcon' / Double or Pink Knock Out Rose	36" MIN. HT.	Full Sun
		Weigela florida 'Wine and Roses' / Wine and Roses Weigela	36" MIN. HT.	Full Sun/Part Shade

SMALL SHRUB C (DECIDUOUS) SELECT ONE SPECIES ONLY PER PLANT GROUPING				
SYMBOL	QUANTITY	SPECIES/COMMON NAME	SIZE	NOTES
		Clethra alnifolia 'Hummingbird' / Hummingbird Summerweet	18" MIN. HT	Full Sun/Part Shade
		Comptonia peregrina / Sweet-fern	18" MIN. HT.	Full Sun/Part Shade
		Cornus sericea 'Kelsey's Dwarf' / Kelsey's Dwarf Red-Osier Dogwood	18" MIN. HT.	Full Sun
		Fothergilla gardenii / Dwarf Fothergilla	18" MIN. HT.	Full Sun/Part Shade
		Itea virginia 'Little Henry' / Dwarf Virginia Sweetspire	18" MIN. HT.	Full Sun/Full Shade
		Rosa x 'Carpet Rose' / Carpet Rose varieties	18" MIN. HT.	Full Sun
		Weigela florida 'My Monet' or 'Midnight Wine' / Dwarf Weigela	18" MIN. HT.	Full Sun/Full Shade

SMALL SHRUB D (EVERGREEN) SELECT ONE SPECIES ONLY PER PLANT GROUPING				
SYMBOL	QUANTITY	SPECIES/COMMON NAME	SIZE	NOTES
		Azalea Encore varieties	18" MIN. HT.	Full Sun/Part Shade
		Ilex crenata 'Hoogendorn' or 'Soft Touch' / Japanese Holly	18" MIN. HT.	Full Sun/Part Shade
		Ilex glabra 'Gem Box' / Gem Box Inkberry	18" MIN. HT.	Full Sun/Full Shade
		Chamaecyparis obtusa 'Nan Lutea' / Dwarf Golden Falsecypress	18" MIN. HT.	Full Sun/Part Shade
		Thuja occidentalis 'Bobozam' / Mr. Bowling Ball Arborvitae	18" MIN. HT.	Full Sun/Part Shade

PERENNIAL/GROUNDCOVER SELECT ONE SPECIES ONLY PER PLANT GROUPING				
SYMBOL	QUANTITY	SPECIES/COMMON NAME	SIZE	NOTES
		Astilbe varieties / Falsepina	1 GAL.	Part Shade/Full Shade
		Coreopsis varieties / Tickseed	1 GAL.	Full Sun
		Hemerocallis varieties / Daylily	1 GAL.	Full Sun
		Hosta varieties / Hosta	1 GAL.	Part Shade/Full Shade
		Liriope muscari 'Big Blue' or 'Variegata' / Liriope	2 QT.	Full Sun/Full Shade
		Nepeta racemosa 'Walkers Low' / Walker's Low Catmint	1 GAL.	Full Sun/Part Shade
		Phlox subulata / Creeping Phlox	1 GAL.	Full Sun/Part Shade
		Rudbeckia fulgida var. fulgida / Black Eyed Susan	1 GAL.	Full Sun
		Sedum 'Varieties' / Stonecrop	1 GAL.	Full Sun
		Tiarella cordifolia / Foamflower	1 GAL.	Full Sun / Part Shade

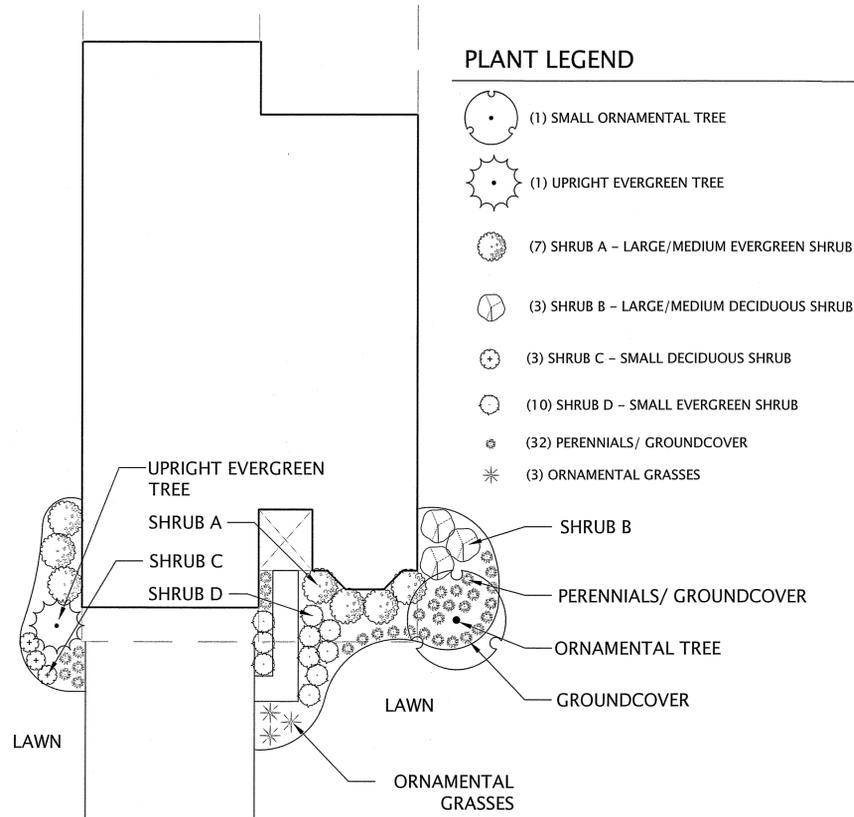
ORNAMENTAL GRASSES SELECT ONE SPECIES ONLY PER PLANT GROUPING				
SYMBOL	QUANTITY	SPECIES/COMMON NAME	SIZE	NOTES
		Festuca glauca 'Elijah Blue' / Blue Fescue	1 GAL.	Full Sun / Part Shade
		Hakonechloa macra 'Aureola' / Hakone Grass	1 GAL.	Full Sun / Part Shade
		Pennisetum alopecuroides 'Hamelii' or 'Cassian' / Dwarf Fountain Grass	1 GAL.	Part Shade/Full Shade
		Schizachyrium scoparium 'Prairie Blues' / Little Bluestem	1 GAL.	Full Sun / Part Shade
		Sporobolus heterolepis / Prairie Dropseed	1 GAL.	Full Sun / Part Shade



ENTRY MONUMENT SIGN

SCALE: 1"=2'

- NOTES:
 1. FOR LANDSCAPE PURPOSES ONLY.
 2. SEE SHEETS LS-1, LS-2, AND LS-3 FOR LANDSCAPE PLANS.

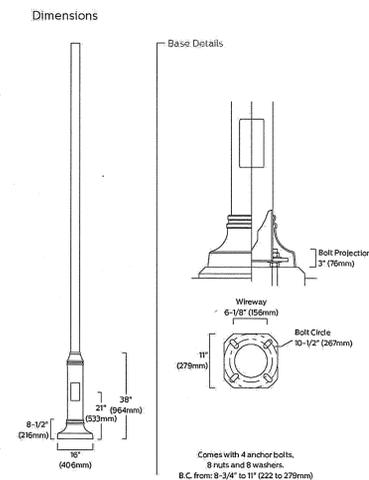


TYPICAL UNIT PLANTING

SCALE: 1"=10'

- TYPICAL UNIT PLANTING NOTES:**
- LAYOUT OF PLANTING BED IS CONCEPTUAL AND MAY VARY DUE TO EXISTING SITE CONDITIONS AND MODEL ELEVATION. SPECIES CHOSEN SHALL CORRELATE WITH EXISTING SITE CONDITIONS OF EACH HOME (IE: SUN/SHADE) TO ENSURE SURVIVABILITY OF PLANT.
 - SHRUBS SHALL BE PLANTED IN GROUPS OF THE SAME SPECIES (3-5 PLANTS) TO MAINTAIN BALANCE THROUGHOUT THE GARDEN.
 - FOUNDATION PLANTS ARE IN ADDITION TO AND ARE TO BE COORDINATED WITH PROPOSED STREET TREES, OPEN SPACE PLANTINGS AND EXISTING VEGETATION TO REMAIN.
 - QUALITY OF PLANT SHALL BE IN ACCORDANCE WITH THE AMERICAN STANDARDS FOR NURSERY STOCK.
 - SUBSTITUTIONS PERMITTED WITH WRITTEN APPROVAL BY ESE LANDSCAPE ARCHITECT AND TOWN REPRESENTATIVE PRIOR TO PLANTING.
 - TYPICAL UNIT PLANT LOCATIONS MAY VARY. TO BE COORDINATED WITH UTILITIES AND SWALES.

Outdoor Poles and Brackets
AM6 - Round Aluminum Bottleneck Pole



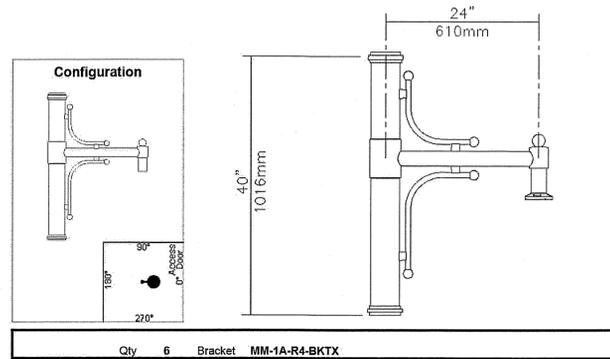
STREET LIGHT POLE (QUANTITY: 13)

NOT TO SCALE

PLANT LEGEND

- (1) SMALL ORNAMENTAL TREE
- (1) UPRIGHT EVERGREEN TREE
- (7) SHRUB A - LARGE/MEDIUM EVERGREEN SHRUB
- (3) SHRUB B - LARGE/MEDIUM DECIDUOUS SHRUB
- (3) SHRUB C - SMALL DECIDUOUS SHRUB
- (10) SHRUB D - SMALL EVERGREEN SHRUB
- (32) PERENNIALS/ GROUNDCOVER
- (3) ORNAMENTAL GRASSES

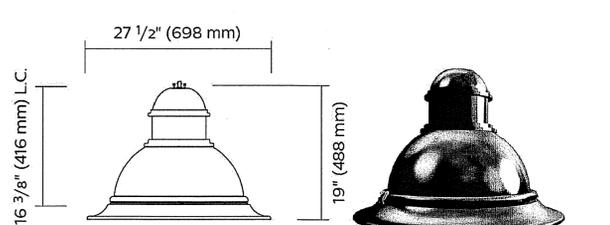
PENN16-86629 (78232)



STREET LIGHT BRACKET (QUANTITY: 13)

NOT TO SCALE

PENN16-86629 (78232)



DMS50 - F optics
Flat lens

Qty 6 Luminaire DMS50-5W32LED4K-R-LE3S-VOLT-BKTX

Description of Components:

- Hood:** A die cast A360.1 aluminum dome complete with a cast-in technical ring with latch and hinge. The mechanism shall offer tool-free access to the inside of the luminaire. An embedded memory-retentive gasket shall ensure weatherproofing.
- Housing:** In a round shape, this housing is made of cast 356 aluminum, c/w a watertight grommet, mechanically assembled to the bracket with four bolts 3/8-16 UNC. This suspension system permits for a full rotation of the luminaire in 90 degree increments.
- Light Engine:** LEDgine composed of 5 main components: Heat Sink / Lens / LED Module / Optical System / Driver Electrical components are RoHS compliant.
- Heat Sink:** Heat Sink: Made of die cast A360 aluminum optimizing the LEDs efficiency and life, complete with a cast in skirt and technical ring. Product does not use any cooling device with moving parts (only passive cooling device)
- Lens:** Made of soda-lime clear tempered glass curved lens, mechanically assembled and sealed onto the lower part of the heat sink.
- LED Module:** LED type Philips Lumileds LUXEON R. Composed of 32 high-performance white LEDs. Color temperature as per ANSI/NEMA bin Neutral White, 4000 Kelvin nominal (3985K +/- 275K or 3710K to 4260K), CRI 70 Min. 75 Typical.
- Optical System:** (LE3S), IES type III (asymmetrical). Composed of high-performance optical grade PMMA acrylic refractor lenses to achieve desired distribution optimized to get maximum spacing, target lumens and a superior lighting uniformity. Optical system is rated IP66. Performance shall be tested per LM-63, LM-79 and TM-15 (IESNA) certifying its photometric performance. Street side indicated.

STREET LIGHT LUMINAIRE (QUANTITY: 13)

NOT TO SCALE

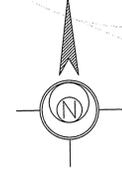
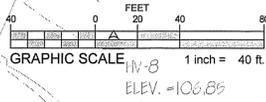
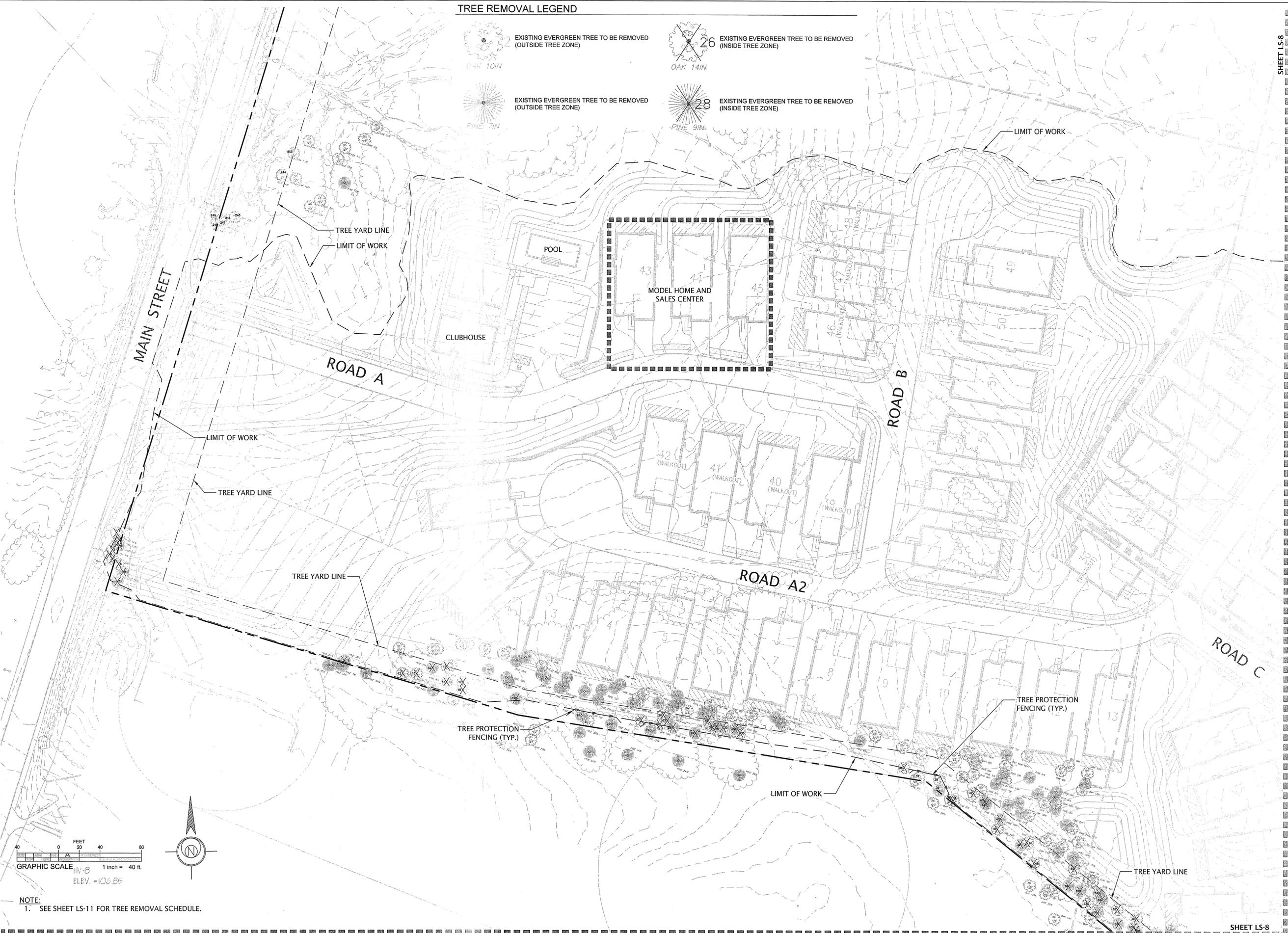
NO.	DESCRIPTION	REVISIONS	
		DATE	

SITE DEVELOPMENT PLANS FOR THE REGENCY AT
 LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT
 1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR:
 TOLL BROS., INC.

LANDSCAPE
 DETAILS &
 NOTES II
 DRAWING NO.
 LS-6

TREE REMOVAL LEGEND

-  EXISTING EVERGREEN TREE TO BE REMOVED (OUTSIDE TREE ZONE)
-  EXISTING EVERGREEN TREE TO BE REMOVED (INSIDE TREE ZONE)
-  EXISTING EVERGREEN TREE TO BE REMOVED (OUTSIDE TREE ZONE)
-  EXISTING EVERGREEN TREE TO BE REMOVED (INSIDE TREE ZONE)



NOTE:
1. SEE SHEET LS-11 FOR TREE REMOVAL SCHEDULE.

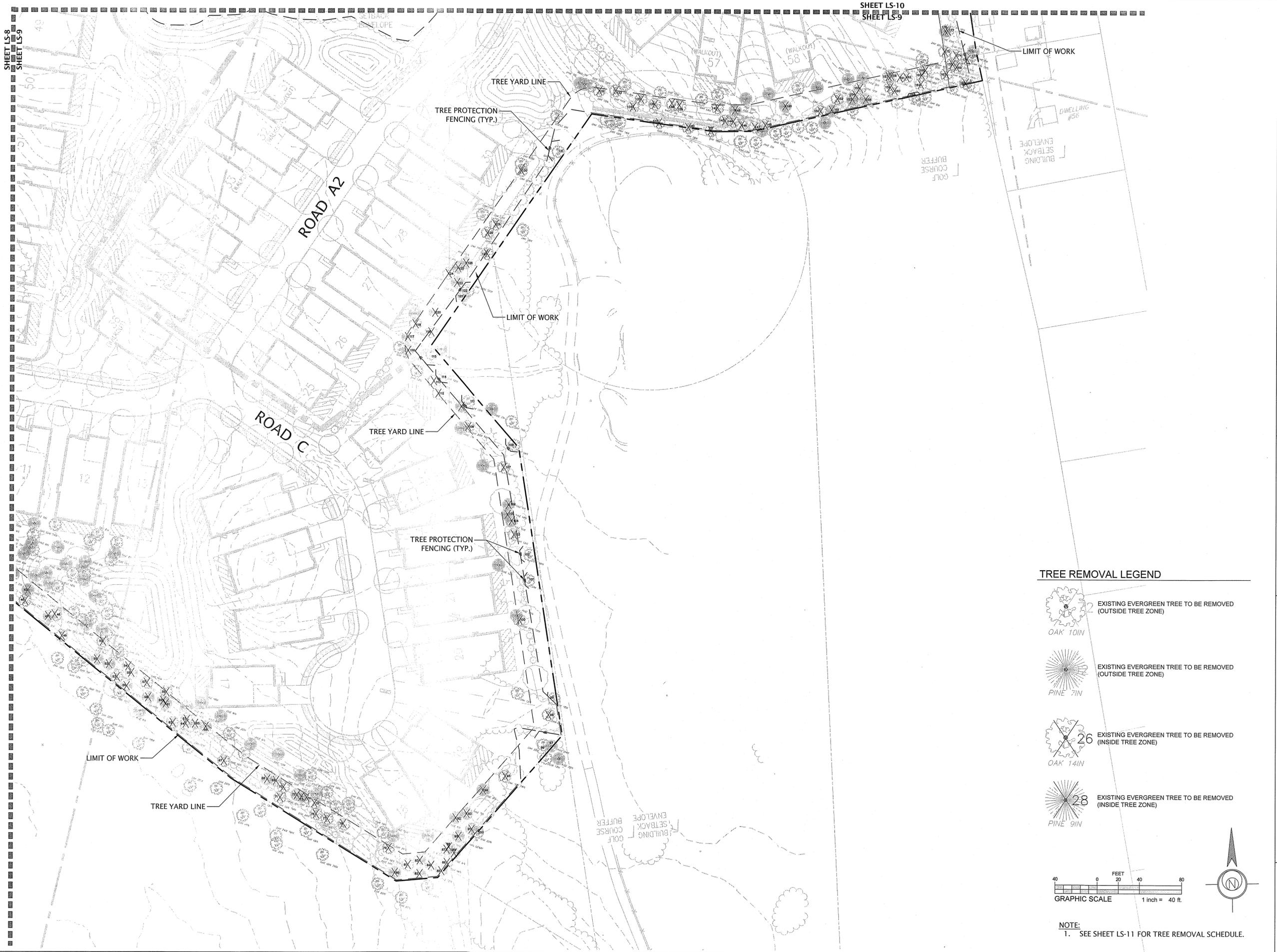
SHEET LS-8
SHEET LS-10

REVISIONS	
NO.	DESCRIPTION

SITE DEVELOPMENT PLANS FOR THE REGENCY AT
LYNNFIELD SENIOR HOUSING DEVELOPMENT
LOCATED AT
1301 MAIN STREET
LYNNFIELD, MASSACHUSETTS
(PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
PREPARED FOR:
TOLL BROS., INC.

TREE REMOVAL
PLAN 1
DRAWING NO. LS-8

SHEET LS-8
SHEET LS-9

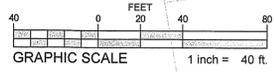


SHEET LS-8
SHEET LS-9

SHEET LS-10
SHEET LS-9

TREE REMOVAL LEGEND

- EXISTING EVERGREEN TREE TO BE REMOVED (OUTSIDE TREE ZONE)
- EXISTING EVERGREEN TREE TO BE REMOVED (OUTSIDE TREE ZONE)
- EXISTING EVERGREEN TREE TO BE REMOVED (INSIDE TREE ZONE)
- EXISTING EVERGREEN TREE TO BE REMOVED (INSIDE TREE ZONE)

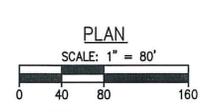


NOTE:
1. SEE SHEET LS-11 FOR TREE REMOVAL SCHEDULE.

REVISIONS	
NO.	DESCRIPTION

SITE DEVELOPMENT PLANS FOR THE REGENCY AT
LYNNFIELD SENIOR HOUSING DEVELOPMENT
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TREE REMOVAL
PLAN II
DRAWING NO.
LS-9



OVERALL GRADING & DRAINAGE PLAN
 DRAWING NO. 1 OF 1

SITE DEVELOPMENT PLANS FOR THE REGENCY AT LYNNFIELD SENIOR HOUSING DEVELOPMENT
 LOCATED AT 1301 MAIN STREET
 LYNNFIELD, MASSACHUSETTS
 (PORTION OF ASSESSOR'S MAP 13, PARCEL 1000)
 PREPARED FOR: TOLL BROS., INC.

NO.	REVISIONS DESCRIPTION	DATE

SURVEY BY: ESE
 DRAFTED BY: DJP
 CHECKED BY: SPC
 APPROVED BY: SPC
 SCALE: AS NOTED
 DATE: NOVEMBER 30, 2023



The Morin-Cameron GROUP, INC.
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