



February 8, 2023

Town of Lakeville Zoning Board of Appeals  
c/o Marc Resnick, Town Planner  
Town of Lakeville  
346 Bedford Street  
Lakeville, Massachusetts 02347

Via: Email to [mresnick@lakevillema.org](mailto:mresnick@lakevillema.org)

Reference: Chapter 40B Comprehensive Permit Application  
North Bedford Crossing  
109 Bedford Street  
Lakeville, Massachusetts  
B+T Project No. 3420.01

Dear Mr. Resnick and Members of the Zoning Board of Appeals:

Beals and Thomas, Inc. (B+T) is pleased to assist the Town of Lakeville Zoning Board of Appeals (the Board) with the peer review of the proposed Chapter 40B Comprehensive Permit Application for North Bedford Crossing (the Project). We understand that North Bedford Crossing, LLC (the Applicant) proposes to develop a 12-lot residential subdivision, comprised of 12 three-bedroom homes at 109 Bedford Street (the Site). The Project also consists of associated site improvements including, landscaping, utility connections, and a stormwater management system (the Project).

As directed by the Board, our review has focused on site layout/constructability considerations and stormwater management. Evaluation of other items, such as landscaping, pedestrian and vehicular access, waiver requests, etc. have not been thoroughly considered.

We received the following documentation, which served as the basis of our review:

- *Comprehensive Permit Site Plan, "North Bedford Crossing" 109 Bedford Street, Lakeville, Massachusetts*, dated November 22, 2022, prepared by Zenith Consulting Engineering, LLC (ZCE) (9 sheets)
- *Stormwater Management Report, Residential Development, "North Bedford Crossing" 109 Bedford Street, Lakeville, Massachusetts*, November 22, 2022, prepared by ZCE (105 pages)

---

Civil Engineering ▪ Land Surveying ▪ Landscape Architecture ▪ Land Use Permitting ▪ Environmental Planning ▪ Wetland Science

Corporate Office  
144 Turnpike Road  
Southborough, MA 01772

T 508.366.0560 | [www.bealsandthomas.com](http://www.bealsandthomas.com) | F 508.366.4391

Regional Office  
32 Court Street  
Plymouth, MA 02360

Town of Lakeville Zoning Board of Appeals  
c/o Marc Resnick, Town Planner  
February 8, 2023  
Page 2

We have reviewed the documentation submitted by the Applicant with respect to the requirements of the Town of Lakeville Rules and Regulations of the Planning Board Governing the Subdivision of Land (the Regulations); the Town of Lakeville Zoning By-law (the By-law); the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Regulations and Handbook (the Handbook); and generally accepted engineering practice.

### **Project Summary**

The Site is located in the Residential Zoning District and is identified as Assessor's Parcel ID #025-003-051. The Site is approximately  $\pm 5.5$ -acres in area, with frontage on Bedford Street (Route 18). The Site is within a Zone II for a drinking water supply well. The Site is currently developed with a single-family home with an accessory building (garage), both designated to be razed. The balance of the Site is largely wooded with a wetland resource area that encumbers the extreme western portion of the Site. The Site is surrounded by abutting residential uses. The Site topography is relatively flat, sloping toward the rear of the property and the wetland resource area.

The Applicant proposes to construct a 12-lot residential subdivision comprised of three-bedroom homes. Two additional open space parcels are also proposed that will be the site of the stormwater basin and unbuildable land associated with the wetlands to the west and a small open parcel adjacent to Bedford Street. The Project consists of associated site improvements including, landscaping, utility connections, and a stormwater management system. The Project is proposed to be served by municipal water available from Bedford Street. Wastewater management is proposed via individual septic systems on each lot. The Project proposes a stormwater management system comprised of a surface stormwater infiltration basin with a sediment forebay.



*Google Earth aerial image of site and surroundings.*

**Site Visit:**

We conducted a reconnaissance visit on February 7, 2023 to familiarize ourselves with the Site and adjacent area, and to evaluate the existing conditions relative to the proposed development. Photographs are included herein to illustrate conditions at the Site and to provide context for our comments.



*Proposed subdivision roadway location at Bedford Street; characterization of existing home*



*Bedford Street at proposed subdivision roadway location viewed to the north*



*Bedford Street at proposed subdivision roadway location viewed to the south*



*Characterization of existing on-site vegetation*



*Characterization of on-site wetland resource areas to the west*



*Characterization of property line fence encumbrance to the south*



*Characterization of property line driveway encumbrance to the south*

### **General Comments**

1. The Applicant does not appear to have submitted any formal waiver requests from the Regulations or By-law. Understanding the Project is a 40B Comprehensive Permit Application and the applicability of the local requirements can be waived by the Board, the requirements of the underlying zoning relative to lot size, setbacks, right-of-way width, etc. are not being met as proposed. We recommend that the Applicant confirm which waivers from the local regulations are being sought for the benefit and consideration of the Board.
2. It is unclear if the Project will remain as private property or if the intent is for “Maple Lane” to be a future accepted public way. It is also unclear whom will control/own the open space parcels. Assuming the property is to remain private, we recommend that as a potential condition of approval the Applicant document accommodations for typical services (trash and snow removal, etc.) to the satisfaction of the Board. We acknowledge the snow storage areas proposed by the Applicant. We recommend that storing snow off the western end of the roadway (and toward the adjacent stormwater basin) be prohibited as a potential condition of approval.
3. As depicted on the existing conditions plan, an existing gravel drive and fences of the abutting property at #113 Bedford Street encumbers the southern property line. #113 Bedford Street’s overhead electric service (and poles) and natural gas service are also over the property line. Proposed grading in this area will potentially impact future use of this access drive and will require the fence to be removed. We request that the Applicant clarify what arrangements are being made with the abutting property owner to facilitate the Project as proposed including maintaining utility service.

4. The length of the proposed roadway exceeds the maximum of 750' as prescribed by Section IV.5.a of the Regulations. The Applicant has proposed a paved hammer head style turnaround located 750' from Bedford Street, though the roadway continues for an overall length of over 900'. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. We defer to Lakeville Fire Department personnel regarding the ultimate review and approval the adequacy of the emergency access provided by the hammer head.
5. The proposed roadway is designed to be superelevated without a crown, shedding all stormwater runoff to the south. Catch basins and Cape Cod style curb are only proposed on the southern side of the road, not in accordance with Section IV.7.a Regulations which require the referenced infrastructure to be on both sides of a typical subdivision roadway. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval.
6. The Project is proposed without sidewalks. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval.
7. The design of the water distribution network is unclear. The size and material of the proposed water main appears to be undefined. An analysis of the available capacity of the existing water main in Bedford Street has not been provided. We defer the adequacy of the water main design to Department of Public Works personnel.
8. The Project is proposed to be served by on-site septic systems for wastewater collection. As noted herein, the lot sizes do not conform to the underlying zoning. The underlying zoning would allow three buildable lots and not the 12 lots proposed by the Applicant. Therefore, a higher density of septic systems on lots smaller than required is proposed. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval and defer ultimate review and approval of individual lot septic system designs to the Board of Health review process. We recommend that the Applicant demonstrate to the satisfaction of the Board that conceptually the Site can support the density and quantity of septic systems proposed.
9. A single fire hydrant is proposed at the end of the subdivision roadway, approximately 900' from Bedford Street. Typical hydrant spacing is half of that length. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. We defer ultimate review and approval of the adequacy of the proposed hydrant spacing to Lakeville Fire Department personnel.

10. The Applicant has not depicted a corridor or layout for private electrical and telecommunication services. Understanding these services will need to be coordinated with the specific utility providers, we request that the Applicant provide and depict a proposed corridor for the referenced utilities.
11. Monumentation to define lotting and property line limits does not appear to be included in the submission. We recommend that as a potential condition of approval that the Board consider that the Applicant provide typical monumentation.
12. The Applicant is proposing individual light posts on all lots and not typical streetlights. We note the proposed deviation from the Regulations for the benefit of the Board when considering potential conditions of approval. The light pole on Lot 10 is located within the proposed driveway; the Applicant should revise the plan to relocate the light pole.
13. Outside of the Comprehensive Permit review process, the Project will be subject to Conservation Commission review and will need to submit a Notice of Intent (NOI). Wetland flags have either deteriorated or were observed to be missing. We recommend that the wetland line be reestablished in the field for the NOI review process.
14. Route 18 (Bedford Street) appears to be under MassDOT jurisdiction. We request, to the satisfaction of the Board, that the Applicant provide an update on the required MassDOT permitting process.
15. Existing overhead utility service exists on the southbound side of Bedford Street with existing poles and guy wires on the Site. We recommend that notations be added to the plans to protect and maintain this existing infrastructure throughout the duration of construction.
16. The Project will require the demolition of multiple on-site structures and the decommissioning on an existing septic system. We recommend, as a potential condition of approval, that the proper abatement, demolition and decommissioning of the existing on-site infrastructure be executed as part of the 40B Comprehensive Permit process.
17. The Applicant has not proposed deciduous trees every 40' on each side of the subdivision road as required by Section IV.K.1 of the Regulations. The proposed plan does include a single row of plantings consisting of deciduous trees as well as small shrubs, and a 40' long section of 6' high privacy fence along the southern edge of the property, presumably to screen the development from the abutting property. We recommend that the proposed plantings be revised to include a variety of large evergreen trees and shrubs, supplemented with fencing where necessary to provide the intended screening.



18. The Typical Unit Landscaping Detail appears to be rather sparse. We recommend additional plantings be included in the plan to provide separation/screening between lots and plantings between the roadway and houses to provide visual interest along the northern side of the road.

### **Stormwater Management Comments**

19. Standard 2 of the Handbook requires documentation that post-construction runoff rates match or be less than pre-construction runoff rates. The Drainage Summary table provided is inconsistent with the modeling provided. We request that the Applicant revise the documentation accordingly for clarity of the Administrative Record.
20. Standard 3 of the Handbook requires documentation that infiltrative best management practices (BMPs) completely dewater within 72 hours. Though the Applicant indicates that the referenced analysis has been provided on the MassDEP Stormwater Report Checklist, the calculation does not appear to have been provided. We request that the Applicant provide the referenced calculation.
21. Standard 4 of the Handbook requires documentation relative to the water quality volume required and provided in the proposed design. We request that the Applicant provide the required calculations.
22. Standard 6 of the Handbook stipulates that specific design consideration be addressed when in the presence of a critical area; in the case of this Project the Zone II well protection zone. The plans indicate that the Project is not in the Zone II; however, the stormwater report indicates that it is. We request that the Applicant clarify this discrepancy. The Handbook requires that prior to infiltration, 44% of the total suspended solids (TSS) needs to be treated and removed. As proposed, it appears the sediment forebay will allow for infiltration prior to this requirement being met. We request that the Applicant clarify and document compliance with Standard 6 of the Handbook.
23. Standard 8 of the Handbook stipulates requirements for construction period controls and the submission of a Stormwater Pollution Prevention Plan (SWPPP). We note that a SWPPP or draft SWPPP has not been provided by the Applicant. We recommend that the submission of a SWPPP prior to construction be considered as a potential condition of approval.

24. Standard 10 of the Handbook requires that an executed Illicit Discharge Statement be provided for the Project. We acknowledge the Illicit Discharge Statement provided by the Applicant; however, we note it is not signed. We recommend that a fully executed Illicit Discharge Statement be submitted prior to construction, be considered as a potential condition of approval.
25. The hydrologic modeling provided by the Applicant is unclear. We note the following:
  - a. The infiltration rate used for the stormwater basin is inconsistent with the assumed soil type. A hydrologic soil group (HSG) "A" infiltration rate is used when the Site is assumed to be comprised of mostly HSG B soils. We request that the Applicant clarify the infiltration rate used.
  - b. In the pre-construction modeling, the curve number (CN) used for "grass good" is inconsistent with the assumed soil type. We request that the Applicant clarify the CN used.
  - c. In the post-construction modeling, a ground cover type of "woods fair" is used when the same ground cover type is not assumed within the pre-construction ground covers. We request that the Applicant clarify the ground cover types used in the post-construction analysis.
26. The source of the storm event assumptions do not appear to have been provided by the Applicant. We recommend that the analysis be conducted using the NOAA Atlas 14 rainfall data.
27. We acknowledge the pipe design calculations provided by the Applicant. In multiple instances, the velocity of discharge being reported is greater than the theoretical pipe flowing full velocity. We request the Applicant clarify the referenced condition and revise the calculations as may be applicable.
28. The depiction of the outlet control structure from the stormwater basin is unclear. The invert elevation of the 24" discharge pipe is reported to be 6" below the weir elevation though the weir elevation is shown to be at an elevation above the crown of the pipe. We request that the Applicant clarify the design intent of this proposed infrastructure.

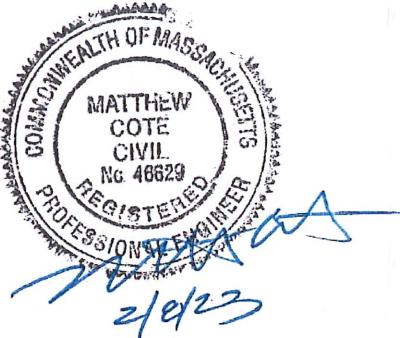
Town of Lakeville Zoning Board of Appeals  
c/o Marc Resnick, Town Planner  
February 8, 2023  
Page 11

B+T will be available to attend the next Board public hearing, upon request, to present the results of our review and be available for discussion regarding the comments listed herein.

We thank you for the opportunity to assist the Town of Lakeville with the review of this Project. Should you have any questions, please do not hesitate to contact our office.

Very truly yours,

BEALS AND THOMAS, INC.



Matthew Cote, PE, SITES AP, ENV SP  
Senior Civil Engineer

David J. LaPointe, RLA, LEED AP, CPSI  
Principal



3 Main Street Lakeville, MA 02347  
(508) 947-4208 - [www.zcellc.com](http://www.zcellc.com)

- Civil Engineering
- Septic Design (Title 5)
- Septic Inspections (Title 5)
- Commercial and Industrial Site Plans
- Chapter 91 Permitting

February 27, 2023

Town of Lakeville, Zoning Board of Appeals  
c/o Marc Resnick, Town Planner  
Town of Lakeville  
346 Bedford Street  
Lakeville, MA 02347

RE: Chapter 40B Comprehensive Permit Application  
North Bedford Crossing  
109 Bedford Street  
Lakeville, Massachusetts  
B+ T Review Letter

Dear Mr. Resnick and Member of the Zoning Board of Appeals:

This letter is written to respond to comments on the subject project which were included in a review letter dated February 8, 2023 issued by the Board's review engineer, Beals + Thomas (B+T). The responses below, **in bold**, correspond to the numbered comments pertaining to each issue.

#### General Comments

1. The Applicant does not appear to have submitted any formal waiver requests from the Regulations or By-law. Understanding the Project is a 40B Comprehensive Permit Application and the applicability of the local requirements can be waived by the Board, the requirements of the underlying zoning relative to lot size, setbacks, right-of-way width, etc. are not being met as proposed. We recommend that the Applicant confirm which waivers from the local regulations are being sought for the benefit and consideration of the Board. **Response: A Waiver Request list has been submitted to the Zoning Board.**
2. It is unclear if the Project will remain as private property or if the intent is for "Maple Lane" to be a future accepted public way. It is also unclear whom will control/own the open space parcels. Assuming the property is to remain private, we recommend that as a potential condition of approval the Applicant document accommodations for typical services (trash and snow removal, etc.) to the satisfaction of the Board. We acknowledge the snow storage areas proposed by the Applicant. We recommend that storing snow off the western end of the roadway (and toward the adjacent stormwater basin) be prohibited as a potential condition of approval. **Response: Maple Lane will remain a privately owned and maintained way. Notations have been added to the plans to identify as such.**
3. As depicted on the existing conditions plan, an existing gravel drive and fences of the abutting property at #113 Bedford Street encumbers the southern property line. #113 Bedford Street's overhead electric service (and poles) and natural gas service are also over the property line. Proposed grading in this area will potentially impact future use of this access drive and will require the fence to be removed. We

request that the Applicant clarify what arrangements are being made with the abutting property owner to facilitate the Project as proposed including maintaining utility service. **Response: The grading of the roadway has been revised to not impact the current driveway and utilities at #113 Bedford Street. Additionally, easements have been added for the benefit of the abutter at #113 Bedford Street to allow their continued use in their current locations.**

4. The length of the proposed roadway exceeds the maximum of 750' as prescribed by Section IV.5.a of the Regulations. The Applicant has proposed a paved hammer head style turnaround located 750' from Bedford Street, though the roadway continues for an overall length of over 900'. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. We defer to Lakeville Fire Department personnel regarding the ultimate review and approval the adequacy of the emergency access provided by the hammer head. **Response: A Waiver Request list has been submitted to the Zoning Board and includes a request to waive this requirement.**
5. The proposed roadway is designed to be superelevated without a crown, shedding all stormwater runoff to the south. Catch basins and Cape Cod style curb are only proposed on the southern side of the road, not in accordance with Section IV.7.a Regulations which require the referenced infrastructure to be on both sides of a typical subdivision roadway. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. **Response: A Waiver Request list has been submitted to the Zoning Board and include a request to waive this requirement.**
6. The Project is proposed without sidewalks. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. **Response A Waiver Request list has been submitted to the Zoning Board and includes a request to waive this requirement.**
7. The design of the water distribution network is unclear. The size and material of the proposed water main appears to be undefined. An analysis of the available capacity of the existing water main in Bedford Street has not been provided. We defer the adequacy of the water main design to Department of Public Works personnel. **Response: The preliminary size and type of water infrastructure has been added to the plans. Final size and type shall be determined by the DPW/Water Department after flow testing has been completed.**
8. The Project is proposed to be served by on-site septic systems for wastewater collection. As noted herein, the lot sizes do not conform to the underlying zoning. The underlying zoning would allow three buildable lots and not the 12 lots proposed by the Applicant. Therefore, a higher density of septic systems on lots smaller than required is proposed. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval and defer ultimate review and approval of individual lot septic system designs to the Board of Health review process. We recommend that the Applicant demonstrate to the satisfaction of the Board that conceptually the Site can support the density and quantity of septic systems proposed. **Response: Test pits were performed in the general vicinity of the proposed septic systems on each lot. The sizing of each conceptual septic system is based on test pit data of the nearest test pit on each lot. ZCE acknowledges that each lot will need additional test pits performed prior to final septic system designs in conformance with Title V and Board of Health regulations.**
9. A single fire hydrant is proposed at the end of the subdivision roadway, approximately 900' from Bedford Street. Typical hydrant spacing is half of that length. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. We defer ultimate review and approval of the adequacy of the proposed hydrant spacing to Lakeville Fire Department personnel.

**Response: There is an existing hydrant located at the entrance of the proposed road. Per Lakeville Fire Department comments, the proposed hydrant has been moved to station 7+00 on the revised plans.**

10. The Applicant has not depicted a corridor or layout for private electrical and telecommunication services. Understanding these services will need to be coordinated with the specific utility providers, we request that the Applicant provide and depict a proposed corridor for the referenced utilities. **Response: A conceptual layout for electrical and telecommunications conduits has been added to sheet G of the plans as requested. Final locations and routing of these services and any associated easements shall be determined by the utility companies.**
11. Monumentation to define lotting and property line limits does not appear to be included in the submission. We recommend that as a potential condition of approval that the Board consider that the Applicant provide typical monumentation. **Response: Proposed Monument locations have been added to Sheet R of the plans.**
12. The Applicant is proposing individual light posts on all lots and not typical streetlights. We note the proposed deviation from the Regulations for the benefit of the Board when considering potential conditions of approval. The light pole on Lot 10 is located within the proposed driveway; the Applicant should revise the plan to relocate the light pole. **Response: The light fixture locations have been revised as noted.**
13. Outside of the Comprehensive Permit review process, the Project will be subject to Conservation Commission review and will need to submit a Notice of Intent (NOI). Wetland flags have either deteriorated or were observed to be missing. We recommend that the wetland line be reestablished in the field for the NOI review process. **Response: Noted, the flags will be re-hung prior to the submittal of the Notice-of-Intent filing as required.**
14. Route 18 (Bedford Street) appears to be under MassDOT jurisdiction. We request, to the satisfaction of the Board, that the Applicant provide an update on the required MassDOT permitting process. **Response: The Project entrance will require a curb cut/access permit through MassDOT. All materials and dimensions of the work within the State Highway Layout shall conform to MassDOT standards. MassDOT will not review projects until all local approvals have been obtained.**
15. Existing overhead utility service exists on the southbound side of Bedford Street with existing poles and guy wires on the Site. We recommend that notations be added to the plans to protect and maintain this existing infrastructure throughout the duration of construction. **Response: A note to protect the existing utility infrastructure has been added to Sheet G of the revised plans.**
16. The Project will require the demolition of multiple on-site structures and the decommissioning on an existing septic system. We recommend, as a potential condition of approval, that the proper abatement, demolition and decommissioning of the existing on-site infrastructure be executed as part of the 40B Comprehensive Permit process. **Response: Noted, existing septic system and structures shall be decommissioned and/or demolished according to all applicable state and local regulations and/or requirements.**
17. The Applicant has not proposed deciduous trees every 40' on each side of the subdivision road as required by Section IV.K.1 of the Regulations. The proposed plan does include a single row of plantings consisting of deciduous trees as well as small shrubs, and a 40' long section of 6' high privacy fence along the southern edge of the property, presumably to screen the development from the abutting property. We recommend that the proposed plantings be revised to include a variety of large evergreen trees and shrubs, supplemented with fencing where necessary to provide the intended screening. **Response: A Waiver Request list has been submitted to the Zoning Board and includes a request to waive this**

requirement.

18. The Typical Unit Landscaping Detail appears to be rather sparse. We recommend additional plantings be included in the plan to provide separation/screening between lots and plantings between the roadway and houses to provide visual interest along the northern side of the road. **Response: Additional plantings have been added to the house landscaping detail as requested.**

#### Stormwater Management Comments

19. Standard 2 of the Handbook requires documentation that post-construction runoff rates match or be less than pre-construction runoff rates. The Drainage Summary table provided is inconsistent with the modeling provided. We request that the Applicant revise the documentation accordingly for clarity of the Administrative Record. **Response: The calculations and table have been modified to depict the correct runoff rates for pre- and post-development conditions.**
20. Standard 3 of the Handbook requires documentation that infiltrative best management practices (BMPs) completely dewater within 72 hours. Though the Applicant indicates that the referenced analysis has been provided on the MassDEP Stormwater Report Checklist, the calculation does not appear to have been provided. We request that the Applicant provide the referenced calculation. **Response: A table taken from the HydroCAD hydrologic model has been added to the report showing the basin fully dewatering withing 72 hours.**
21. Standard 4 of the Handbook requires documentation relative to the water quality volume required and provided in the proposed design. We request that the Applicant provide the required calculations. **Response: Water quality volume calculations have been added to the Drainage Report as requested.**
22. Standard 6 of the Handbook stipulates that specific design consideration be addressed when in the presence of a critical area; in the case of this Project the Zone II well protection zone. The plans indicate that the Project is not in the Zone II; however, the stormwater report indicates that it is. We request that the Applicant clarify this discrepancy. The Handbook requires that prior to infiltration, 44% of the total suspended solids (TSS) needs to be treated and removed. As proposed, it appears the sediment forebay will allow for infiltration prior to this requirement being met. We request that the Applicant clarify and document compliance with Standard 6 of the Handbook. **Response: The project site is not located in a critical area. However, the site does contain soils with rapid infiltration rates, therefore 44% pre-treatment TSS removal is required. A Table has been added to Section 3.4 of the drainage report to demonstrate how this is achieved. Additionally, Section 3.6 of the Report has been revised to indicated that the site is not within a Critical Area.**
23. Standard 8 of the Handbook stipulates requirements for construction period controls and the submission of a Stormwater Pollution Prevention Plan (SWPPP). We note that a SWPPP or draft SWPPP has not been provided by the Applicant. We recommend that the submission of a SWPPP prior to construction be considered as a potential condition of approval. **Response: A SWPPP will be submitted prior to construction as noted above.**
24. Standard 10 of the Handbook requires that an executed Illicit Discharge Statement be provided for the Project. We acknowledge the Illicit Discharge Statement provided by the Applicant; however, we note it is not signed. We recommend that a fully executed Illicit Discharge Statement be submitted prior to construction, be considered as a potential condition of approval. **Response: The Revised drainage report now has a signed Illicit Discharge Statement included.**
25. The hydrologic modeling provided by the Applicant is unclear. We note the following:

- a. The infiltration rate used for the stormwater basin is inconsistent with the assumed soil type. A hydrologic soil group (HSG) "A" infiltration rate is used when the Site is assumed to be comprised of mostly HSG B soils. We request that the Applicant clarify the infiltration rate used. **Response: Soil observation holes in the area of the infiltration basin revealed coarse sandy soils in the underlying soil strata. Generally, HSG designations are based on the upper strata of the soil profile, in that, it describes the surface layer soils' ability to infiltrate runoff waters. The infiltration basin has been designed to remove all soil strata down to the sandy layer to promote the higher infiltration rate.**
  - b. In the pre-construction modeling, the curve number (CN) used for "grass good" is inconsistent with the assumed soil type. We request that the Applicant clarify the CN used. **Response: We are unsure why there was an error with the CN for the pre-development calculation. The CN has been corrected.**
  - c. In the post-construction modeling, a ground cover type of "woods fair" is used when the same ground cover type is not assumed within the pre-construction ground covers. We request that the Applicant clarify the ground cover types used in the post-construction analysis. **Response: We have corrected the post-development ground cover (and CN) for the wooded areas to be in "good" condition as was used in the pre-development condition.**
26. The source of the storm event assumptions do not appear to have been provided by the Applicant. We recommend that the analysis be conducted using the NOAA Atlas 14 rainfall data. **Response: The hydrologic calculations have been revised to reflect the NOAA Atlas 14 rainfall data as recommended.**
27. We acknowledge the pipe design calculations provided by the Applicant. In multiple instances, the velocity of discharge being reported is greater than the theoretical pipe flowing full velocity. We request the Applicant clarify the referenced condition and revise the calculations as may be applicable. **Response: In open channel flow conditions, all pipes flowing between half- and full-depth flow at a velocity greater than the velocity expected when flowing full. The reason for this is that there is more pipe wall friction on the fluid in the pipe-full condition. Please see the attached Hydraulic elements chart.**
28. The depiction of the outlet control structure from the stormwater basin is unclear. The invert elevation of the 24" discharge pipe is reported to be 6" below the weir elevation though the weir elevation is shown to be at an elevation above the crown of the pipe. We request that the Applicant clarify the design intent of this proposed infrastructure. **Response: The detail of the outlet control structure has been modified to better illustrate the design intent of the structure.**

Revised design plans and drainage report reflecting the items detailed in this letter are attached. Should you have any questions, please do not hesitate to contact our office at 508-947-4208.

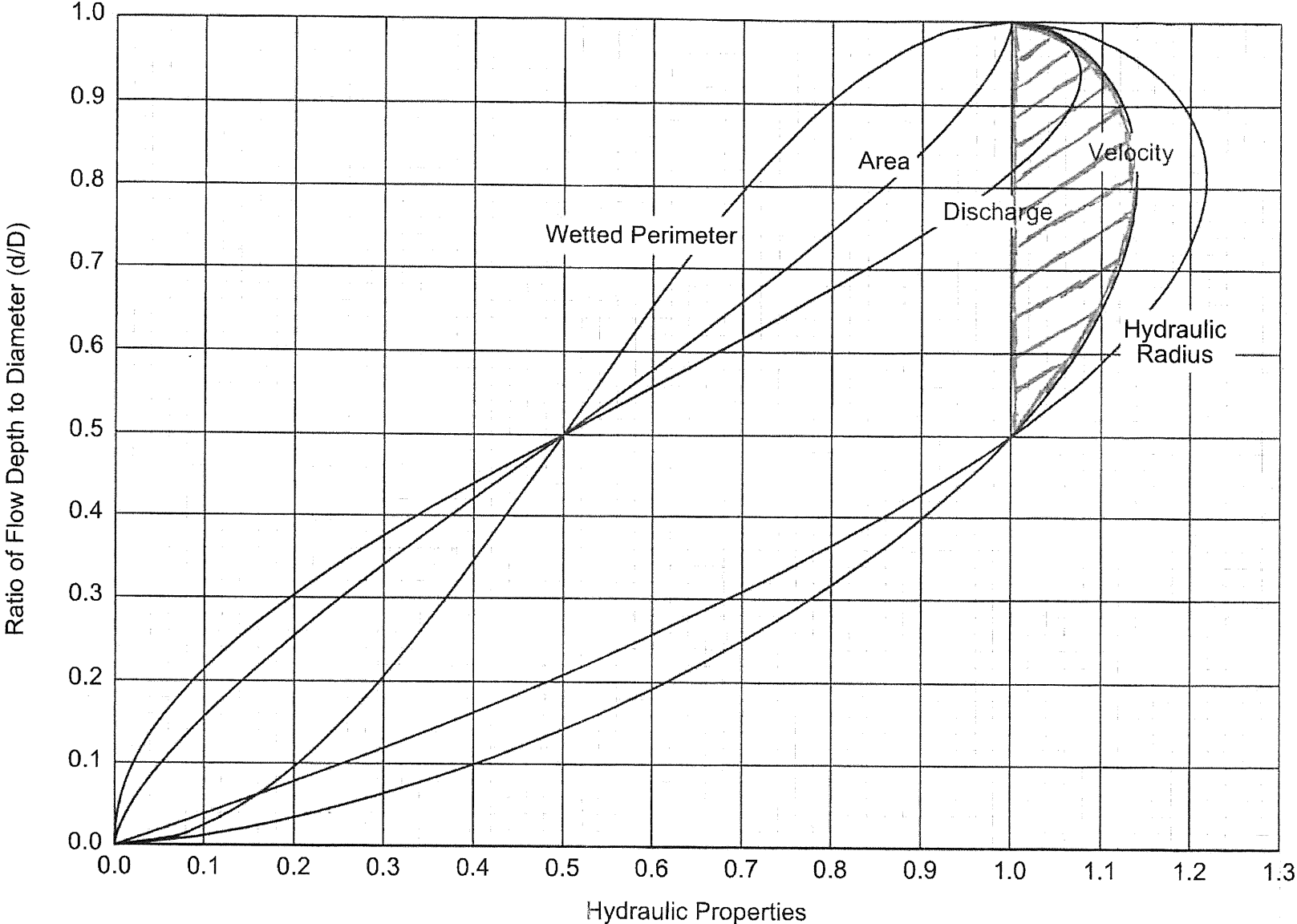
Sincerely,  
Zenith Consulting Engineers, LLC



Rene L. Gagnon, PE  
Senior Engineer



# Hydraulic Elements Graph



**EXHIBIT C**  
**North Bedford Crossing – List of Requested Waivers**  
**Revised March 1, 2023**

TOWN OF LAKEVILLE ZONING BYLAWS 1994 Revision (With Amendments Through May 16, 2022)				
Bylaw	Subject	Requirements	Waiver Request	Board Action (Approved/Denied)
<u>Section 2.0 Definitions</u>				
2.0	Frontage	That portion of a lot which is bounded by the street line or way, the sidelines and the minimum building setback line. The frontage must be suitable for development of an access route or driveway to the building site.	Waive minimum lot width requirement at building setback	
<u>Section 5.0 Intensity Regulations</u>				
5.1	Residential Dimensional Requirements	Min Lot Area 70,000 SF Frontage 175 feet Front Yard Setback 40 feet Side Yard in feet - 20 feet Rear Yard setback- 20 feet Max. Percentage of Land Covered by structures, parking and paved areas – 25%	Waive minimum lot size, frontage, front, side and rear yard setbacks and Max. lot coverages and allow the following:  <u>Lot 1</u> Lot Area – 13,079 square feet Frontage – 142.44 +/- Side Yard setback – 10 feet Rear Yard setback – 18 feet  <u>Lot 2</u> Lot Area – 10,653 square feet Frontage – 82.63 +/- Side Yard setback – 10 feet Rear Yard setback – 12 feet Max Lot Coverage – 30%  <u>Lot 3</u> Lot Area – 11,586 square feet	

TOWN OF LAKEVILLE ZONING BYLAWS 1994 Revision (With Amendments Through May 16, 2022)				
Bylaw	Subject	Requirements	Waiver Request	Board Action (Approved/Denied)
			Frontage – 97.37 +/- Side Yard setback – 10 feet  <u>Lot 4</u> Lot Area – 9,837 square feet Frontage – 63.97 +/- Side Yard setback – 10 feet Max. Lot Coverage – 33% <u>Lot 5</u> Lot Area – 10,024 square feet Frontage – 64.92 +/- Side Yard setback – 10 feet Max. Lot Coverage – 25.5%  <u>Lot 6</u> Lot Area – 9,864 square feet Frontage – 61.51 +/- Side Yard setback – 10 feet  <u>Lot 7</u> Lot Area – 10,046 square feet Frontage – 54.02 +/- Side Yard setback – 10 feet  <u>Lot 8</u> Lot Area – 12,035 square feet Frontage – 156.60 +/- Front Yard – 12 feet Side Yard setback – 10 feet	

TOWN OF LAKEVILLE ZONING BYLAWS 1994 Revision (With Amendments Through May 16, 2022)				
Bylaw	Subject	Requirements	Waiver Request	Board Action (Approved/Denied)
			<p><u>Lot 9</u>            Lot Area – 9,978 square feet            Frontage – 128.41 +/-            Front Yard setback – 12 feet            Max. Lot Coverage – 29%</p> <p><u>Lot 10</u>            Lot Area – 9,446 square feet            Frontage – 27.81 +/-            Side Yard setback – 10 feet            Rear Yard setback – 18 feet            Max. Lot Coverage – 34%</p> <p><u>Lot 11</u>            Lot Area – 11,620 square feet            Side Yard setback – 10 feet            Frontage – 51.00 +/-            Max. Lot Coverage - 30%</p> <p><u>Lot 12</u>            Lot Area – 22,493 square feet            Rear/Side Yard setback – 10 feet</p>	
5.1.2	Front Yard Circle	No dwelling, building or structure having permitted use in any district shall be erected on a lot unless the lot has an area within its bounds which encompasses a front yard circle with a minimum diameter of 160 feet and within which the frontage, or frontage at the required set back must pass.	Waive front yard circle requirement for all lots	

TOWN OF LAKEVILLE ZONING BYLAWS 1994 Revision (With Amendments Through May 16, 2022)				
Bylaw	Subject	Requirements	Waiver Request	Board Action (Approved/Denied)
5.2.2	Footnotes to Intensity Requirements	Any portion of a lot which is less than fifty (50) feet in width or depth when measured from any point on a property sideline to any other point on an opposite sideline shall not be included in the determination of the required minimum area and/or frontage	Waive in its entirety for all lots	
5.2.2.1		any portion of a lot which falls within a wetland as defined by Massachusetts General Laws Chapter 131 Section 40 or any portion of a lot which will be used for drainage structures including detention ponds, retention ponds, forebays, and drainage swales, shall not be included in the determination of the maximum percentage of land covered by structures, parking and paved areas (section 5.1)	Waive in its entirety for all lots	
SECTION 6.7 SITE PLAN REVIEW				
6.7.3	Site Plan Review	Applicants for a building permit for new construction of or for modification or addition to any residential structure which will disturb more than 43,560 square feet of ground shall submit three (3) copies of a site plan as described herein to the Town Clerk for Planning Board approval. Failure of the Planning Board to act within twenty-one (21) days of receipt of a site plan shall be deemed lack of opposition thereto.	Waive in its entirety. Under G.L. c. 40B, the Zoning Board of Appeals acts as the Planning Board. Additionally, the Zoning Board of Appeals will undertake site plan review as the issuing authority for a comprehensive permit.	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**  
 revised through January 26, 2016

Subject		Requirements	Waiver Request	Board Action (Approved/Denied)
<u>Section IV Design and Construction Standards</u>				
A.5	General – Grade Stakes	The context of work required is as shown upon approved plans, and is in compliance with the Standard Cross Section Plans. Stakes shall be set which will indicate the exact amount of cut or fill.	Waive grade stake requirements	
A.6	General – Completion of Construction	As each construction operation is completed, it shall be approved by the proper Town authority prior to starting work on the succeeding operation.	Waive – inspection of the work to be coordinated with the planning department.	
B.1.c	Access to Adjacent Properties	Provision satisfactory to the Planning Board shall be made for the proper projection of streets or for access to adjoining property, whether or not subdivided	Waive in its entirety.	
B.1.d	Reserve Strips	Reserve strips prohibiting access to streets or adjoining property shall not be permitted, except where, in the opinion of the Planning Board, such strips shall be in the public interest.	Waive in its entirety.	
B.2.a	Alignment	Street jogs with centerline offsets of less than one hundred and fifty feet (150') shall be avoided	Waive – Allow a street jog less than 150 feet	
B.2.b	Alignment	The minimum horizontal centerline radii of streets shall be as follows: Minor Streets - One Hundred and Fifty Feet (150')	Waive – Allow the minimum horizontal centerline radii to be less than 150 feet	
B.3.a	Width	The minimum width of any street right-of-way, including dead-end streets, shall be fifty feet (50').	Waive. Allow Street right of way to be 30 feet	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**

revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
B.4.c	Grade	Where changes in grade exceed one percent (1%), vertical curves, as required by the Board will be provided; and where a grade is five percent (5%) or greater within one hundred and fifty feet (150') of the intersection of street right-of-way lines, there shall be provided in a residential subdivision a leveling area of at least seventy-five feet (75') with a maximum grade of three percent (3%), and in all other subdivisions, a leveling area of at least two hundred feet (200'), with a maximum grade of two percent (2%); <b>and at all other intersections there shall be a leveling area of at least fifty feet (50')</b> .	Waive leveling area requirement at intersection of roadway and Bedford Street	
B.5.a	Dead-End-Streets	For the purposes of this section, any proposed street which intersects solely with a dead-end street shall be deemed to be an extension of the dead-end street. Dead-end streets and their extensions, if any, shall not be longer than seven hundred and fifty feet (750').	Waive 750-foot dead end roadway length limitation and allow roadway to be 912.30 feet in length	
B.5.b	Dead-End-Streets	Dead-end streets shall be provided at the closed end with a turn-around having an outside roadway diameter of at least one hundred twenty (120') feet and a property line diameter of at least one hundred forty (140') feet unless otherwise specified by the Planning Board. If the dead-end street is not intended to connect with another street at some future point in time, the Planning Board may, at its option, require a minimum outside roadway diameter of one hundred sixty (160') feet. A property line diameter of one hundred eighty (180') feet and the placement of a circular landscape island with minimum radius of forty (40') feet at the center of the turn-around	Waive requirement of a cul de sac at the end of a dead end way and allow hammer head style turnaround around between lot 8 and lot 9.	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**

revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
B.7.a	Curbs and Berms	<p>Bituminous concrete berms and curbs of six inches (6") in height shall be provided along each side of the roadway where there are sidewalks. All other roadways without sidewalks except where granite curbs shall be provided, shall have eighteen inch (18") flat berm, one (1) layer two and one-half inch (2 and ½") Bituminous concrete:</p> <p>at intersections along the roadway the distance of the arcs of the curves plus a straight section at each end of eight feet (8'). Granite curb shall be type SB sloped edging. (Subsection M9.04) along each edge of a roadway where the grade exceeds five percent (5%).</p> <p>on the inner side of all curves with a radius less than two hundred and fifty feet (250'). The elevation of the curb shall be seven inches (7") higher than the gutter line.</p>	<p>Waive Allow cape cod style berms as per the curb detail as shown on the project plans</p> <p>Waive 7" elevation at gutter line</p>	
B.7.c	Curbs and Berms	The profile of the berm is subject to Planning Board approval.	Waive in its entirety. Under G.L. c. 40B, the Zoning Board of Appeals acts as the Planning Board.	
B.8.a	Sidewalks	Sidewalks shall be constructed within the subdivision.	Waive sidewalk requirement	
B.8.b	Sidewalks	<p>The sidewalks shall extend the full length of the street and shall be of the following widths:</p> <p>Along all Streets Five feet (5') On one side Except around a cul-de-sac a sidewalk need be provided on one (1) side only, the exterior side.</p>	Waive in its entirety	



**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**  
 revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
B.8.c	Sidewalks	Bituminous concrete sidewalks shall have a minimum thickness of two 1.1/2 courses each after compression.	Waive in its entirety	
B.9	Embankments	Outside the right-of-way embankments shall be evenly graded and pitched at a slope of not greater than 3 horizontal to 1 vertical in fill. Where cuts are made in ledge, other slopes may be determined with the approval of the Planning Board. Where terrain necessitates greater slopes, retaining walls, terracing, fencing, or rip-rap may be used either alone or in combination to provide safety and freedom from maintenance, but must be done in accordance with plans filed with and approved by the Planning Board. Whenever embankments are built in such a way as to require approval by the Planning Board, the developer must furnish to the Town duly recorded access easements free of encumbrances for maintenance of the slopes, terraces or retaining walls. All such slopes shall be grassed in accordance with the specifications for the area between the roadway and sidewalk or roadway and boundary of the right-of-way.	Waiver and allow slopes of 2 to 1.	
C.2	Utilities -Installation	<p>Water Facilities-Installation</p> <p>b) Water Supply. Potable water of quality and quantity acceptable to the Board of Health for domestic use, and fire protection water with a minimum open hydrant flow of 500 gallons per minute shall be provided in each subdivision, at minimum residual pressure of 20 pounds per square inch. Water lines shall be at least 6-inch diameter cement-lined cast iron, 150-pound class or equivalent, and shall be furnished with adequate valves and appurtenances to the specifications of the Town. Whenever possible, water pipes shall be extended and connected to form a loop, if need be using easements across lots. Where no municipal water supply is available within a reasonable distance of the subdivision, the Board will not approve a subdivision plan unless adequate groundwater supply is available at the site, in the opinion of the Planning Board acting with the advice of the Board of Health.</p>	Waive – minimum residual pressure requirements	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**  
 revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
C.3		On-site sewage disposal facilities shall be installed and constructed in conformity with the rules, regulations and requirements of the Board of Health. On-site septic tanks and leaching fields may be located in the front side or rear yard of the building(s) served, with the front yard preferred. Due consideration should be given to surface and sub-surface soil conditions, drainage and topography in the location of such on-site facilities, and in no instance can any portion of the sewage disposal facilities be located closer than twenty feet (20') to a property line.	Waive in its entirety and apply Title V requirements	
C.4		Where adjacent property is not subdivided or where all the property of the applicant is not being subdivided at the same time, provision shall be made for the extension of the utility system by continuing the mains the full length of streets and to the exterior limits of the subdivision, at such grade and size which will, in the opinion of the Planning Board, permit their proper extension at a later date.	Waive requirement of extending utilities to exterior limits	
D.2		<p>Procedure. (May be modified by the Planning Board to suit the problems and needs of a particular subdivision.)</p> <p>d) In general, the design of pipes shall be such as to provide for a flow of water at speeds between two (2) and twelve (12) feet per second; the minimum grade shall be not less than 0.4 percent for pipes twelve inches (12") and less in diameter, and 0.25 percent as absolute minimum; the minimum pipe diameter shall be twelve inches (12"), except that ten-inch (10") pipe may be used to connect a single catch basin across the street; catch basins shall have a two-and-one-half-feet (2.5') sump below invert; and all drop manholes or inlets with a drop of six feet (6') or more shall be provided with a splash pad. Catch basins or inlets shall be spaced along both sides of a street at approximately 400 feet intervals, and located at allow points and corner roundings at street junctions.</p>	Allow sumps to be four (4) feet below invert	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**  
 revised through January 26, 2016

<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
D.3	Final Approval. Where runoff detention features are required, a proposed development shall in no case receive final approval until the site has been inspected by the Planning Board or the Board's agent, to ensure that detention facilities have been installed as proposed in the Definitive Plan.	Waive in its entirety. Under G.L. c. 40B, the Zoning Board of Appeals acts as the Planning Board.	
D.4	Lot Drainage. Lots shall be prepared and graded in such a manner that development of one shall not cause detrimental drainage on another; if provision is necessary to carry drainage to or across a lot, an easement or drainage right-of-way of a minimum width of twenty feet (20') and proper side slope shall be provided. Storm drainage shall be designed in accord with the specifications of the Board. Where required by the Planning Board or the Board of Health, the applicant shall furnish evidence that adequate provision has been made for the proper drainage of surface and underground waters from any lot or lots. Storm water shall not discharge overland across lot lines. Drainage conveyances and easements shall be provided to convey storm water to the nearest permanent stream or municipal drainage system.	Waive – Allow easement of less than 20 feet	
D.5	<p>Construction. Drainage facilities shall be provided as indicated on the plan and in conformity with the requirements of Sections 200, 220, and 230 of the Standard Specifications.</p> <p>The standard depth of catch basins shall be two and one-half feet (2 and ½') below the invert of the outlet. Manholes shall be constructed to the required depth at each junction point and as shown on the plan. Pipe culvert and pipe drains shall be in conformity with the requirements of Section 230 for installation of pipes.</p> <p>All drain pipes except sub-drains shall be reinforced concrete pipe and shall be installed according to the size as shown on the plans. No backfilling of pipes shall be done until the installation has been inspected by the Planning Board's Agent. All drainage trenches shall be filled with clean gravel borrow in accordance with Section 150.</p>	<p>Waive - Allow four foot sump below invert</p> <p>Waive – allow pipe to be High-density polyethylene (HDPE)</p>	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**

revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
E	Open Space	<p>Before approval of a plan the Planning Board may also, in proper cases, require the plan to show a park or parks, suitably located for playground or recreation purposes or for providing light and air. The park or parks shall not be unreasonable in area in relation to the land being subdivided and to the prospective uses of land. The Planning Board may by appropriate endorsement on the plan, require that no building be erected upon such park or parks without its approval for a period of three (3) years. Pedestrian ways, hike ways, or bridle paths of not less than fifteen feet (15') in width may be requested where deemed desirable to provide circulation or access to schools, playgrounds, parks, shops, transportation, open spaces and/or community facilities. Each area reserved for such purpose shall be of suitable area, dimensions, topography and natural character for the purposes of a park and/or playground. The area or areas shall be so located as to serve adequately all parts of the subdivision as approved by the Planning Board. The Planning Board may require that the area or areas reserved shall be located and laid out so as to be used in conjunction with similar areas of adjoining subdivisions or of probable subdivisions. Unless otherwise specifically approved by the Planning Board, the total amount of area to be reserved for park and/or playground purposes shall be no less than five percent (5%) of the gross area of the subdivision with a minimum of one acre when ten or more lots. Any land so reserved shall be graded to dispose properly of surface water and shall be left in condition for the purpose intended, as required by the Planning Board.</p>	Waive in its entirety	
F.1	Easements	<p>Where utilities cross lots or are centered on rear or side lot lines, easements shall be provided of a width of at least twenty feet (20').</p>	Waive twenty (20) foot easement requirement and allow as shown on plans	
F.4	Easements	<p>General, access, drainage, or utility easements shall not be included in the lot area.</p>	Waive in its entirety	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**  
 revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
H.2	Street Signs and Names	Street names shall be approved by the Planning Board to prevent duplication and to provide names in keeping with the character of the Town.	Waive – Street named to be approved by 911 coordinator	
H.3	Street Signs and Names	From the time of rough grading until such time as each street is accepted by the Town as a public way, the sign posts at the intersection of such street with any other street shall have affixed thereto a sign designating such street as a private way.	Waive	
I.1	Street Lights	Street lights shall be installed to conform to the type and style in general use in the Town of Lakeville unless otherwise specified by the Planning Board.	Waive street lights and allow driveway lanterns at each driveway	
I.2	Street Lights	Street lights shall not be nearer than twenty-five feet (25') from the intersection of two (2) streets, measured from the intersection of the tangents of the intersecting street curb lines; and shall be placed in back of sidewalks wherever possible.	Waive in its entirety	
I.3	Street Lights	Street lights shall be installed in accord with the procedure required by the Board of Selectmen and the applicable utility company.	Waive in its entirety	
J.	Utility Poles	Utility poles, hydrants, and street shade trees shall not be nearer than twenty-five feet (25') from the intersection of two (2) streets, measured from the intersection of the tangents of the intersecting street curb lines; and shall be placed in back of sidewalks wherever possible.	Waive in its entirety	
K.1	Trees	Where reasonable deciduous street trees shall be planted on each side of each street in a subdivision, except where the Definitive Plan showed trees to be retained which are healthy and adequate. Such trees shall be located outside of the right-of-way as shown in the Profile and Standard Cross Sections Schedules A and B, approximately at forty foot (40') intervals, and shall be at least twelve feet (12') in height, two inches (2") in caliper measured four feet (4') about the approved grade, and shall be planted each in at least one-half (½) cubic yard of topsoil unless otherwise required by the Tree Warden.	Waive in its entirety. Allow plantings as shown on plans	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**

revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
K.2	Trees	The developer shall plant other trees as needed to provide at least one (1) area of shade to each lot.	Waive in its entirety. Allow plantings as shown on plans	
K.3	Trees	All deciduous street trees shall be clear of any branches from the approved grade level to a point seven feet (7') above ground level	Waive	
K.5	Trees	No evergreen trees such as pine, fir, spruce or hemlock are to be planted on an easterly or southerly side of a road, street or way.	Waive in its entirety. Allow plantings as shown on plans	
L	Protection of Natural Features	Due regard shall be shown for all natural features, such as large trees, wooded areas, water courses, scenic points, historic spots, and similar community assets, which, if preserved, will add attractiveness and value to the subdivision. Outside of street right-of-ways, no trees over a twenty-four inch (24") caliper measured at four feet (4') above the existing grade shall be removed or have the grade level surrounding the trunk altered by more than six inches (6") without approval of the Planning Board.	Waive in its entirety	
M	Maintenance of Improvements	For the purpose of protecting the safety, convenience and welfare of the Town's inhabitants; for the provision of adequate access to all of the lots in a subdivision by ways that will be safe and convenient for travel; for reducing the danger to life and limb in the operation of motor vehicles; for securing safety in the case of fire, flood, panic and other emergencies; under the authority of Chapter 41, Section 81-M as amended, the applicant or his successor shall provide for the proper maintenance and repair of improvements under this Section of the Rules and Regulations during the construction and for the period of twenty-four (24) months after the completion of the construction of said improvements or until the Town votes to accept such improvements, whichever comes first. Such maintenance shall include snow removal beginning from the time of occupancy of an individual owner or tenant other than the developer.	Waive in its entirety.	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**

revised through January 26, 2016

	<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
N.1	Erosion and Sedimentation	<p>These requirements may be waived. However, in a subdivision with excessive slope or a subdivision which abuts or includes a stream(s), wetlands or pond(s), or where major earth work is anticipated, an erosion and sedimentation analysis shall be presumed necessary unless a waiver is received. Approval of a subdivision plan may be denied until the existing average annual erosion and the expected average annual erosion during and after construction is determined. The developer may be required to submit an erosion and sediment control plan, if based on the analysis of erosion potential the Board determines that sedimentation will have an impact on nearby wetlands, streams, ponds, and other water bodies.</p>	<p>Waive erosion and sedimentation analysis as an erosion and control plans has been submitted</p>	
N.2	Erosion and Sedimentation	<p>Procedure. (May be modified by the Planning Board to suit problems and needs of a particular subdivision.)</p> <p>a) Using the methods described in Guidelines for Soil and Water Conservation in Urbanizing Areas of Massachusetts, Appendix J, published by the Soil Conservation Service, the developer shall use the Universal Soil Loss Equation to estimate the present annual soil loss from the site, as well as the estimated annual soil loss from the site while under construction and after construction is completed.</p> <p>b) The developer shall submit as part of the Definitive Plan a soil erosion and sedimentation control plan, if the Board determines that erosion due to development activity will be excessive or significant to wetlands, streams, ponds, or other water bodies. This plan shall consist of a drawing certified by a registered civil engineer, identifying appropriate control measures and their location. Also, the drawing shall show all natural drainage ways and water bodies in and adjacent to the proposed subdivision. The drawing shall be at a scale of one inch (1") equals forty feet (40'), and show the existing and proposed topography at five-foot (5') contour intervals.</p> <p>c) If erosion and sedimentation control measures are required, they shall be adequate to retain all erosion within the subdivision and away from nearby water systems, both during and after construction. A timetable outlining anticipated construction activity and associated erosion and sedimentation control measures shall be submitted to the Board. All work shall be</p>	<p>Waive in its entirety as an erosion and control plans has been submitted</p>	

**TOWN OF LAKEVILLE ZONING BYLAWS RULES AND REGULATIONS OF THE PLANNING BOARD**  
 revised through January 26, 2016

<u>Subject</u>	<u>Requirements</u>	<u>Waiver Request</u>	<u>Board Action</u> (Approved/Denied)
	subject to periodic inspection by the Board or Board's agents.		
<b>SECTION V – ADMINISTRATION</b>			
D.	<p>Inspection Notices</p> <p>The subdivider shall notify the Highway Surveyor and the Engineer designated by the Board at least 48 hours prior to the time at which each one of the required inspections should take place. The subdivider shall provide safe and convenient access to all parts of work for inspection by the Highway Surveyor and by the Board's engineer, members or agents. No work shall be approved that has been covered before the required inspection.</p> <p>To assure compliance, the following procedure must be followed:</p> <ol style="list-style-type: none"> <li>1. The developer must notify the Highway Surveyor and the engineer designated by the Board in writing of the start of construction.</li> <li>2. The developer must notify the Highway Surveyor and the engineer designated by the Board when underground utilities and drainage are installed in order that inspection may be carried out before any backfilling is done.</li> <li>3. The subgrade must be approved by the Highway Surveyor and the engineer designated by the Board before the application of the gravel base course.</li> <li>4. The gravel base course must be approved by the Highway Surveyor and the engineer designated by the Board before the application of bituminous concrete (street or sidewalk).</li> <li>5. The developer must notify the Highway Surveyor and the engineer designated by the Board at the start of each application of bituminous concrete on the street and sidewalk and of placement of curbing.</li> <li>6. The developer must keep the Highway Surveyor and the engineer designated by the Board informed when materials and other items of work are ready for inspection such as the installation of bounds, loam and seeding, and general cleanup.</li> <li>7. Occupancy permits will not be issued until street signs have been erected.</li> </ol>	<p>Waive in its entirety. Inspection of the project to be coordinated through the planning director or planning department</p>	





March 10, 2023

Town of Lakeville Zoning Board of Appeals  
c/o Marc Resnick, Town Planner  
Town of Lakeville  
346 Bedford Street  
Lakeville, Massachusetts 02347

Via: Email to [mresnick@lakevillema.org](mailto:mresnick@lakevillema.org)

Reference: Supplemental Peer Review  
Chapter 40B Comprehensive Permit Application  
North Bedford Crossing  
109 Bedford Street  
Lakeville, Massachusetts  
B+T Project No. 3420.01

Dear Mr. Resnick and Members of the Zoning Board of Appeals:

Beals and Thomas, Inc. (B+T) is pleased to assist the Town of Lakeville Zoning Board of Appeals (the Board) with the supplemental peer review of the proposed Chapter 40B Comprehensive Permit Application for North Bedford Crossing (the Project). We understand that North Bedford Crossing, LLC (the Applicant) proposes to develop a 12-lot residential subdivision, comprised of 12 three-bedroom homes at 109 Bedford Street (the Site). The Project also consists of associated site improvements including, landscaping, utility connections, and a stormwater management system (the Project).

As directed by the Board, our review has focused on site layout/constructability considerations and stormwater management. Evaluation of other items, such as landscaping, pedestrian and vehicular access, waiver requests, etc. have not been thoroughly considered.

B+T issued a letter to the Board dated February 8, 2023, which presented the results of our site visit and our initial review of the original documentation submitted by the Applicant. As a result of our initial comments the Applicant has submitted the following supplemental documentation as listed herein, which served as the basis of our current review:

- *Chapter 40B Comprehensive Permit Application, North Bedford Crossing, 109 Bedford Street, Lakeville, Massachusetts, B+T Review Letter, dated February 27, 2023, prepared by Zenith Consulting Engineering, LLC (ZCE) (6 pages)*

---

Civil Engineering ▪ Land Surveying ▪ Landscape Architecture ▪ Land Use Permitting ▪ Environmental Planning ▪ Wetland Science

Corporate Office  
144 Turnpike Road  
Southborough, MA 01772

T 508.366.0560 | [www.bealsandthomas.com](http://www.bealsandthomas.com) | F 508.366.4391

Regional Office  
32 Court Street  
Plymouth, MA 02360

- *Comprehensive Permit Site Plan, “North Bedford Crossing” 109 Bedford Street, Lakeville, Massachusetts, dated November 22, 2022, revised through February 27, 2023, prepared by (ZCE) (11 sheets)*
- *Stormwater Management Report, Residential Development, “North Bedford Crossing” 109 Bedford Street, Lakeville, Massachusetts, November 22, 2022, revised through February 27, 2023, prepared by ZCE (105 pages)*
- *North Bedford Crossing – List of Requested Waivers, Revised March 3, 2023 (12 pages)*

We have reviewed the documentation submitted by the Applicant with respect to the requirements of the Town of Lakeville Rules and Regulations of the Planning Board Governing the Subdivision of Land (the Regulations); the Town of Lakeville Zoning By-law (the By-law); the Massachusetts Department of Environmental Protection (MassDEP) Stormwater Regulations and Handbook (the Handbook); and, particularly with respect to our original comments dated February 8, 2023.

#### **Review Format**

In an effort to establish clarity for the Administrative Record, we have included the comments from our initial letter report dated February 8, 2023, followed by the Applicant’s responses in *italicized* font, followed by our current comments in **bold** font to document the status of our original comment.

#### **General Comments**

1. The Applicant does not appear to have submitted any formal waiver requests from the Regulations or By-law. Understanding the Project is a 40B Comprehensive Permit Application and the applicability of the local requirements can be waived by the Board, the requirements of the underlying zoning relative to lot size, setbacks, right-of-way width, etc. are not being met as proposed. We recommend that the Applicant confirm which waivers from the local regulations are being sought for the benefit and consideration of the Board.

*Applicant’s Response: A Waiver Request list has been submitted to the Zoning Board.*

**Current B+T Response: We acknowledge the list of requested waivers provided by the Applicant. As noted herein, specific review of requested waivers was not included our scope of review services, though we do note that the hardship that prevents the Project from complying with the referenced regulations/design standards has not been provided. Accordingly, we defer to the Board on the appropriateness of the waivers being requested in the context of the Project as proposed.**

2. It is unclear if the Project will remain as private property or if the intent is for "Maple Lane" to be a future accepted public way. It is also unclear whom will control/own the open space parcels. Assuming the property is to remain private, we recommend that as a potential condition of approval the Applicant document accommodations for typical services (trash and snow removal, etc.) to the satisfaction of the Board. We acknowledge the snow storage areas proposed by the Applicant. We recommend that storing snow off the western end of the roadway (and toward the adjacent stormwater basin) be prohibited as a potential condition of approval.

*Applicant's Response: Maple Lane will remain a privately owned and maintained way. Notations have been added to the plans to identify as such.*

**Current B+T Response: We acknowledge the response provided by the Applicant. A snow storage area continues to be proposed adjacent to the stormwater basin. As noted previously, we recommend that storing snow off the western end of the roadway (and toward the adjacent stormwater basin) be prohibited as a potential condition of approval.**

3. As depicted on the existing conditions plan, an existing gravel drive and fences of the abutting property at #113 Bedford Street encumbers the southern property line. #113 Bedford Street's overhead electric service (and poles) and natural gas service are also over the property line. Proposed grading in this area will potentially impact future use of this access drive and will require the fence to be removed. We request that the Applicant clarify what arrangements are being made with the abutting property owner to facilitate the Project as proposed including maintaining utility service.

*Applicant's Response: The grading of the roadway has been revised to not impact the current driveway and utilities at #113 Bedford Street. Additionally, easements have been added for the benefit of the abutter at #113 Bedford Street to allow their continued use in their current locations.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

4. The length of the proposed roadway exceeds the maximum of 750' as prescribed by Section IV.5.a of the Regulations. The Applicant has proposed a paved hammer head style turnaround located 750' from Bedford Street, though the roadway continues for an overall length of over 900'. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. We defer to Lakeville Fire Department personnel regarding the ultimate review and approval the adequacy of the emergency access provided by the hammer head.

*Applicant's Response: A Waiver Request list has been submitted to the Zoning Board and includes a request to waive this requirement.*

**Current B+T Response: We continue to defer to Lakeville Fire Department personnel regarding the adequacy of the emergency access provided. Additionally, we further defer to the Board on the appropriateness of the waiver being requested in the context of the Project as proposed.**

5. The proposed roadway is designed to be superelevated without a crown, shedding all stormwater runoff to the south. Catch basins and Cape Cod style curb are only proposed on the southern side of the road, not in accordance with Section IV.7.a Regulations which require the referenced infrastructure to be on both sides of a typical subdivision roadway. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval.

*Applicant's Response: A Waiver Request list has been submitted to the Zoning Board and include a request to waive this requirement.*

**Current B+T Response: We defer to the Board on the appropriateness of the waiver being requested in the context of the Project as proposed.**

6. The Project is proposed without sidewalks. As noted herein, waivers from the typical Regulations have not been identified. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval.

*Applicant's Response: A Waiver Request list has been submitted to the Zoning Board and includes a request to waive this requirement.*

**Current B+T Response: We defer to the Board on the appropriateness of the waiver being requested in the context of the Project as proposed.**

7. The design of the water distribution network is unclear. The size and material of the proposed water main appears to be undefined. An analysis of the available capacity of the existing water main in Bedford Street has not been provided. We defer the adequacy of the water main design to Department of Public Works personnel.

*Applicant's Response: The preliminary size and type of water infrastructure has been added to the plans. Final size and type shall be determined by the DPW/Water Department after flow testing has been completed.*

**Current B+T Response:** We acknowledge the revisions provided by the Applicant. We note for the benefit of the Board that the water distribution network has been cut back to Lot 8 and the hammer head (approximate Sta 7+00) where it had previously extended to the end of proposed subdivision roadway (beyond Sta. 9+00). We concur with the Applicant that final review and approval the water distribution system be coordinated and deferred to Lakeville DPW/Water Department personnel.

8. The Project is proposed to be served by on-site septic systems for wastewater collection. As noted herein, the lot sizes do not conform to the underlying zoning. The underlying zoning would allow three buildable lots and not the 12 lots proposed by the Applicant. Therefore, a higher density of septic systems on lots smaller than required is proposed. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval and defer ultimate review and approval of individual lot septic system designs to the Board of Health review process. We recommend that the Applicant demonstrate to the satisfaction of the Board that conceptually the Site can support the density and quantity of septic systems proposed.

*Applicant's Response:* Test pits were performed in the general vicinity of the proposed septic systems on each lot. The sizing of each conceptual septic system is based on test pit data of the nearest test pit on each lot. ZCE acknowledges that each lot will need additional test pits performed prior to final septic system designs in conformance with Title V and Board of Health regulations.

**Current B+T Response:** We continue to defer to the Board of Health review process.

9. A single fire hydrant is proposed at the end of the subdivision roadway, approximately 900' from Bedford Street. Typical hydrant spacing is half of that length. We note the proposed final condition for the benefit of the Board when considering potential conditions of approval. We defer ultimate review and approval of the adequacy of the proposed hydrant spacing to Lakeville Fire Department personnel.

*Applicant's Response:* There is an existing hydrant located at the entrance of the proposed road. Per Lakeville Fire Department comments, the proposed hydrant has been moved to station 7+00 on the revised plans.

**Current B+T Response:** As noted herein, limiting the water main to Sta. 7+00, when the roadway is over 900-ft long, leaves Lots 9, 10 & 11 with longer than typical water services. Accordingly, we continue to defer to Lakeville Fire Department personnel relative to the hydrant spacing provided, and, in conjunction with Comment #7 contained herein, defer to DPW/Water Department staff relative to the overall length of the water main in the context of the Project as proposed.

10. The Applicant has not depicted a corridor or layout for private electrical and telecommunication services. Understanding these services will need to be coordinated with the specific utility providers, we request that the Applicant provide and depict a proposed corridor for the referenced utilities.

*Applicant's Response: A conceptual layout for electrical and telecommunications conduits has been added to sheet G of the plans as requested. Final locations and routing of these services and any associated easements shall be determined by the utility companies.*

**Current B+T Response: We note that the electrical and telecommunication information has been added to Sheet U, and not Sheet G as indicated. We consider this comment to have been adequately addressed by the Applicant. No further action required.**

11. Monumentation to define lotting and property line limits does not appear to be included in the submission. We recommend that as a potential condition of approval that the Board consider that the Applicant provide typical monumentation.

*Applicant's Response: Proposed Monument locations have been added to Sheet R of the plans.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

12. The Applicant is proposing individual light posts on all lots and not typical streetlights. We note the proposed deviation from the Regulations for the benefit of the Board when considering potential conditions of approval. The light pole on Lot 10 is located within the proposed driveway; the Applicant should revise the plan to relocate the light pole.

*Applicant's Response: The light fixture locations have been revised as noted.*

**Current B+T Response: The light pole location has been revised as indicated by the Applicant. We continue to defer to the Board relative to the adequacy of the proposed lighting methodology that deviates from the Regulations.**

13. Outside of the Comprehensive Permit review process, the Project will be subject to Conservation Commission review and will need to submit a Notice of Intent (NOI). Wetland flags have either deteriorated or were observed to be missing. We recommend that the wetland line be reestablished in the field for the NOI review process.

*Applicant's Response: Noted, the flags will be re-hung prior to the submittal of the Notice-of-Intent filing as required.*

**Current B+T Response: We reiterate the intent of our previous comment.**

14. Route 18 (Bedford Street) appears to be under MassDOT jurisdiction. We request, to the satisfaction of the Board, that the Applicant provide an update on the required MassDOT permitting process.

*Applicant's Response: The Project entrance will require a curb cut/access permit through MassDOT. All materials and dimensions of the work within the State Highway Layout shall conform to MassDOT standards. MassDOT will not review projects until all local approvals have been obtained.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

15. Existing overhead utility service exists on the southbound side of Bedford Street with existing poles and guy wires on the Site. We recommend that notations be added to the plans to protect and maintain this existing infrastructure throughout the duration of construction.

*Applicant's Response: A note to protect the existing utility infrastructure has been added to Sheet G of the revised plans.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

16. The Project will require the demolition of multiple on-site structures and the decommissioning on an existing septic system. We recommend, as a potential condition of approval, that the proper abatement, demolition and decommissioning of the existing on-site infrastructure be executed as part of the 40B Comprehensive Permit process.

*Applicant's Response: Noted, existing septic system and structures shall be decommissioned and/or demolished according to all applicable state and local regulations and/or requirements.*

**Current B+T Response:** We reiterate the intent of our previous comment relative to the potential condition of approval.

17. The Applicant has not proposed deciduous trees every 40' on each side of the subdivision road as required by Section IV.K.1 of the Regulations. The proposed plan does include a single row of plantings consisting of deciduous trees as well as small shrubs, and a 40' long section of 6' high privacy fence along the southern edge of the property, presumably to screen the development from the abutting property. We recommend that the proposed plantings be revised to include a variety of large evergreen trees and shrubs, supplemented with fencing where necessary to provide the intended screening.

*Applicant's Response:* A Waiver Request list has been submitted to the Zoning Board and includes a request to waive this requirement.

**Current B+T Response:** We defer to the Board on the appropriateness of the waiver being requested in the context of the Project as proposed.

18. The Typical Unit Landscaping Detail appears to be rather sparse. We recommend additional plantings be included in the plan to provide separation/screening between lots and plantings between the roadway and houses to provide visual interest along the northern side of the road.

*Applicant's Response:* Additional plantings have been added to the house landscaping detail as requested.

**Current B+T Response:** We acknowledge that additional plantings have been added in front of each unit in the Typical Unit Landscaping Detail; however, we reiterate the intent of our previous comment.

#### **Stormwater Management Comments**

19. Standard 2 of the Handbook requires documentation that post-construction runoff rates match or be less than pre-construction runoff rates. The Drainage Summary table provided is inconsistent with the modeling provided. We request that the Applicant revise the documentation accordingly for clarity of the Administrative Record.

*Applicant's Response:* The calculations and table have been modified to depict the correct runoff rates for pre- and post-development conditions.

**Current B+T Response:** This comment has been adequately addressed by the Applicant. No further action is required.



20. Standard 3 of the Handbook requires documentation that infiltrative best management practices (BMPs) completely dewater within 72 hours. Though the Applicant indicates that the referenced analysis has been provided on the MassDEP Stormwater Report Checklist, the calculation does not appear to have been provided. We request that the Applicant provide the referenced calculation.

*Applicant's Response: A table taken from the HydroCAD hydrologic model has been added to the report showing the basin fully dewatering within 72 hours.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

21. Standard 4 of the Handbook requires documentation relative to the water quality volume required and provided in the proposed design. We request that the Applicant provide the required calculations.

*Applicant's Response: Water quality volume calculations have been added to the Drainage Report as requested.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

22. Standard 6 of the Handbook stipulates that specific design consideration be addressed when in the presence of a critical area; in the case of this Project the Zone II well protection zone. The plans indicate that the Project is not in the Zone II; however, the stormwater report indicates that it is. We request that the Applicant clarify this discrepancy. The Handbook requires that prior to infiltration, 44% of the total suspended solids (TSS) needs to be treated and removed. As proposed, it appears the sediment forebay will allow for infiltration prior to this requirement being met. We request that the Applicant clarify and document compliance with Standard 6 of the Handbook.

*Applicant's Response: The project site is not located in a critical area. However, the site does contain soils with rapid infiltration rates, therefore 44% pre-treatment TSS removal is required. A Table has been added to Section 3.4 of the drainage report to demonstrate how this is achieved. Additionally, Section 3.6 of the Report has been revised to indicate that the site is not within a Critical Area.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

23. Standard 8 of the Handbook stipulates requirements for construction period controls and the submission of a Stormwater Pollution Prevention Plan (SWPPP). We note that a SWPPP or draft SWPPP has not been provided by the Applicant. We recommend that the submission of a SWPPP prior to construction be considered as a potential condition of approval.

*Applicant's Response: A SWPPP will be submitted prior to construction as noted above.*

**Current B+T Response: We reiterate the intent of our previous comment relative to the potential condition of approval.**

24. Standard 10 of the Handbook requires that an executed Illicit Discharge Statement be provided for the Project. We acknowledge the Illicit Discharge Statement provided by the Applicant; however, we note it is not signed. We recommend that a fully executed Illicit Discharge Statement be submitted prior to construction, be considered as a potential condition of approval.

*Applicant's Response: The Revised drainage report now has a signed Illicit Discharge Statement included.*

**Current B+T Response: The provided Illicit Discharge Statement remains unsigned. Accordingly, we reiterate the intent of our previous comment.**

25. The hydrologic modeling provided by the Applicant is unclear. We note the following:
- a. The infiltration rate used for the stormwater basin is inconsistent with the assumed soil type. A hydrologic soil group (HSG) "A" infiltration rate is used when the Site is assumed to be comprised of mostly HSG B soils. We request that the Applicant clarify the infiltration rate used.

*Applicant's Response: Soil observation holes in the area of the infiltration basin revealed coarse sandy soils in the underlying soil strata. Generally, HSG designations are based on the upper strata of the soil profile, in that, it describes the surface layer soils' ability to infiltrate runoff waters. The infiltration basin has been designed to remove all soil strata down to the sandy layer to promote the higher infiltration rate.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

- b. In the pre-construction modeling, the curve number (CN) used for “grass good” is inconsistent with the assumed soil type. We request that the Applicant clarify the CN used.

*Applicant’s Response: We are unsure why there was an error with the CN for the pre-development calculation. The CN has been corrected.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

- c. In the post-construction modeling, a ground cover type of “woods fair” is used when the same ground cover type is not assumed within the pre-construction ground covers. We request that the Applicant clarify the ground cover types used in the post-construction analysis.

*Applicant’s Response: We have corrected the post-development ground cover (and CN) for the wooded areas to be in "good" condition as was used in the pre-development condition.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

26. The source of the storm event assumptions do not appear to have been provided by the Applicant. We recommend that the analysis be conducted using the NOAA Atlas 14 rainfall data.

*Applicant’s Response: The hydrologic calculations have been revised to reflect the NOAA Atlas 14 rainfall data as recommended.*

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

27. We acknowledge the pipe design calculations provided by the Applicant. In multiple instances, the velocity of discharge being reported is greater than the theoretical pipe flowing full velocity. We request the Applicant clarify the referenced condition and revise the calculations as may be applicable.

*Applicant’s Response: In open channel flow conditions, all pipes flowing between half- and full-depth flow at a velocity greater than the velocity expected when flowing full. The reason for this is that there is more pipe wall friction on the fluid in the pipe-full condition. Please see the attached Hydraulic elements chart.*

Town of Lakeville Zoning Board of Appeals  
c/o Marc Resnick, Town Planner  
March 10, 2023  
Page 12

**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

28. The depiction of the outlet control structure from the stormwater basin is unclear. The invert elevation of the 24" discharge pipe is reported to be 6" below the weir elevation though the weir elevation is shown to be at an elevation above the crown of the pipe. We request that the Applicant clarify the design intent of this proposed infrastructure.

*Applicant's Response: The detail of the outlet control structure has been modified to better illustrate the design intent of the structure.*


**Current B+T Response: This comment has been adequately addressed by the Applicant. No further action is required.**

B+T will be available to attend the next Board public hearing on March 30<sup>th</sup>, upon request, to present the results of our review and be available for discussion regarding the comments listed herein.

We thank you for the opportunity to assist the Town of Lakeville with the review of this Project. Should you have any questions, please do not hesitate to contact our office.

Very truly yours,

BEALS AND THOMAS, INC.

  
3/10/23  
Matthew Cote, PE, SITES AP, ENV SP  
Senior Civil Engineer

  
David J. LaPointe, RLA, LEED AP, CPSI  
Principal

MC/djl/aak/342001LT002

# COMPREHENSIVE PERMIT SITE PLAN

## "NORTH BEDFORD CROSSING" 109 BEDFORD STREET LAKEVILLE, MASSACHUSETTS

### SITE NOTES:

- THE SITE IS LISTED ON THE TOWN OF LAKEVILLE ASSESSORS PROPERTY RECORD CARDS AS PARCEL ID 025-003-021.
- PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
- PLYMOUTH COUNTY REGISTRY OF DEEDS:  
DEED REFERENCE BOOK 55084 PAGE 286
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF PLYMOUTH COUNTY, MASSACHUSETTS, MAP NUMBER 2502300314J, MAP REVISED JULY 17, 2012.
- THE SITE IS NOT LOCATED IN A PRIORITY HABITAT AND ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 15TH EDITION EFFECTIVE DATE AUGUST, 2021.
- WETLANDS SHOWN WERE DELINEATED BY BOB GRAY OF SABATA, INC. IN JUNE 2021.
- THE PROJECT IS NOT LOCATED WITHIN AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).
- THE SITE IS NOT LOCATED IN A ZONE II TO A PUBLIC WATER SUPPLY WELL.
- THE SITE IS NOT IN A ZONE A TO A SURFACE WATER SUPPLY AREA.
- THE SITE IS NOT LOCATED IN AN OUTSTANDING RESOURCE WATER AREA (ORWA).

### CONSTRUCTION NOTES:

- A NPDES FILING MUST BE SUBMITTED FOR THIS PROJECT PRIOR TO CONSTRUCTION.
- CONTRACTOR TO VERIFY BENCHMARKS FOR CONSISTENCY PRIOR TO CONSTRUCTION AND SHALL NOTIFY ZENITH CONSULTING ENGINEERS, LLC OF ANY DISCREPANCIES.
- CONTRACTOR SHALL VERIFY WATER TABLE ELEVATIONS AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES FROM THE PLAN.
- IT IS THE CONTRACTORS' RESPONSIBILITY TO CONTACT DIG SAFE (1-888-DIG SAFE) PRIOR TO THE COMMENCEMENT OF WORK AND ALL UNDERGROUND UTILITY COMPANIES TO CONFIRM LOCATIONS AND ELEVATIONS.
- SITE IS TO BE SERVICED BY MUNICIPAL WATER AND ON-SITE SEPTIC SYSTEMS.
- ALL PAVEMENT MARKING AND SIGNAGE SHALL CONFORM TO MUTCD STANDARDS.
- PROPOSED UTILITIES AND CONSTRUCTION METHODS UNDER AREAS SUBJECT TO TRAFFIC LOADING SHALL BE INSTALLED TO WITHSTAND H-20 LOADING TRAFFIC STANDARDS. CONTRACTOR SHALL VERIFY THAT ALL STRUCTURES COMPLY TO THIS STANDARD.
- WHERE ALL CONCRETE STRUCTURES INTERCEPT THE SEASONAL HIGH GROUNDWATER TABLE, THE CONTRACTOR SHALL SEAL THE ENTIRE STRUCTURE WITH WATERPROOF SEALER.
- IF APPLICABLE, ANY RETAINING WALLS SHALL BE DESIGNED BY A MASSACHUSETTS REGISTERED PROFESSIONAL STRUCTURAL ENGINEER.
- ALL WORK SHALL CONFORM TO THE TOWN OF LAKEVILLE RULES AND REGULATIONS AND THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION SPECIFICATIONS FOR HIGHWAY AND BRIDGES, MOST CURRENT VERSION OF PLAN SET.
- THE DEVELOPER MUST NOTIFY THE HIGHWAY SURVEYOR AND THE PLANNING DEPARTMENT IN WRITING OF THE START OF CONSTRUCTION.
- THE DEVELOPER MUST NOTIFY THE HIGHWAY SURVEYOR AND PLANNING DEPARTMENT WHEN UNDERGROUND UTILITIES AND DRAINAGE ARE INSTALLED IN ORDER THAT INSPECTION MAY BE CARRIED OUT BEFORE ANY BACKFILLING IS DONE.
- THE SUBGRADE MUST BE APPROVED BY THE HIGHWAY SURVEYOR AND PLANNING DEPARTMENT BY THE BOARD BEFORE THE APPLICATION OF THE GRAVEL BASE COURSE.
- THE GRAVEL BASE COURSE MUST BE APPROVED BY THE HIGHWAY SURVEYOR AND PLANNING DEPARTMENT BEFORE THE APPLICATION OF BITUMINOUS CONCRETE (STREET OR SIDEWALK).
- THE DEVELOPER MUST NOTIFY THE HIGHWAY SURVEYOR AND THE PLANNING DEPARTMENT AT THE START OF EACH APPLICATION OF BITUMINOUS CONCRETE ON THE STREET AND SIDEWALK AND OF PLACEMENT OF CURBING.
- THE DEVELOPER MUST KEEP THE HIGHWAY SURVEYOR AND PLANNING DEPARTMENT INFORMED WHEN MATERIALS AND OTHER ITEMS OF WORK ARE READY FOR INSPECTION SUCH AS THE INSTALLATION OF BOUNDS, LOGS AND SEEDING, AND GENERAL CLEANUP.
- OCCUPANCY PERMITS WILL NOT BE ISSUED UNTIL STREET SIGNS HAVE BEEN ERRECTED.



**LOCUS PLAN**  
**SCALE: 1"=500'**

**OWNER/APPLICANT**  
**NORTH BEDFORD CROSSING, LLC**  
**1 LAKEVILLE BUSINESS PARK DRIVE SUITE 2A**  
**LAKEVILLE, MA 02347**

RECEIVED  
MAR 3 2023  
BOARD OF APPEALS

### LAKEVILLE ZONING BOARD OF APPEALS

APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

APPROVED: \_\_\_\_\_

ENDORSED: \_\_\_\_\_

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE \_\_\_\_\_

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William J. McGovern* March 2, 2023  
DATE

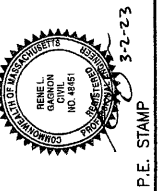


SCHEDULE OF DRAWINGS		
SHEET ID	PLAN TITLE	LATEST REVISION DATE
C	COVER SHEET	2/27/23
X	EXISTING CONDITIONS PLAN	2/27/23
R	LOTTING SHEET	2/27/23
B	PROPOSED BUILDING BOX PLAN	2/27/23
L	LAYOUT PLAN	2/27/23
G	GRADING AND DRAINAGE PLAN	2/27/23
U	UTILITY PLAN	2/27/23
V	LANDSCAPING PLAN	2/27/23
E	EROSION CONTROL PLAN	2/27/23
D1	DETAIL SHEET	2/27/23
D2	DETAIL SHEET	2/27/23

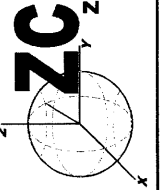
SURVEY COMPANY OF RECORD:  
**ZLS**  
ZENITH LAND SURVEYORS, LLC  
1162 ROCKDALE AVENUE  
NEW BEDFORD, MA 02740  
(508) 995-0100



*William J. McGovern* March 2, 2023



**ZCE**  
ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208



REV.	DATE	DESCRIPTION	BY	APP.
1.	2/27/23	REVIEW ENG. COMMENTS	RLG	JLB

**COVER SHEET**  
PROJECT SITE:  
109 BEDFORD STREET  
LAKEVILLE, MASSACHUSETTS  
CLIENT INFO:  
NORTH BEDFORD CROSSING LLC,  
1 LAKEVILLE BUSINESS PARK DRIVE  
LAKEVILLE, MASSACHUSETTS

LEGEND		
EXISTING	DESCRIPTION	PROPOSED
	BUILDING CONTOUR	
	SPOT GRADE	
	SILT FENCE/SILT SOCK	
	CHAINLINK FENCE	
	STOCKADE FENCE	
	WIRE FENCE	
	SIGN	
	MAILBOX	
	TEST PIT	
	UNKNOWN MANHOLE	
	DRAINAGE PIPE	
	ROOF DRAIN PIPE	
	CATCH BASIN	
	DOUBLE GRATE CATCH BASIN	
	CURB INLET	
	DRAIN MANHOLE	
	FLARED END	
	OVERHEAD WIRES	
	UNDERGROUND ELECTRIC	
	UNDERGROUND TELEPHONE	
	ELECTRIC MANHOLE	
	TELEPHONE MANHOLE	
	HANDHOLE	
	ELECTRIC METER	
	TRANSFORMER	
	UTILITY POLE	
	GUY POLE	
	GUY WIRE	
	LIGHT POLE	
	GRAVITY SEWER MAIN	
	FORCE SEWER MAIN	
	SEWER SERVICE	
	SEWER MANHOLE	
	SEWER VALVE	
	WATER MAIN	
	WATER SERVICE	
	HYDRANT	
	WATER GATE/VALVE	
	WATER SHUTOFF	
	WELL	
	WATER MANHOLE	
	MONITORING WELL	
	TRESTLE	
	STONEWALL	
	WETLAND LINE	
	WETLAND FLAG	
	BENCHMARK	
	4x4 NAIL	
	DRILLHOLE	
	CONCRETE BOUND	
	STONE BOUND	
	IRON PIPE	
	REBAR	

ZONING INFORMATION	
RESIDENTIAL DISTRICT	
LOT AREA	REQUIRED
CONTIGUOUS UPLAND AREA	70,000 S.F.
LOT FRONTAGE	52,500 S.F.
MIN. FRONTYARD SETBACK	175 FEET
MIN. SIDEYARD SETBACK	40 FEET
MIN. REARYARD SETBACK	20 FEET


**SITE NOTES:**

1. THE SITE IS LISTED ON THE TOWN OF LAKEVILLE ASSESSORS PROPERTY RECORD CARDS AS PARCEL ID 025-003-021.
2. PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
3. PLYMOUTH COUNTY REGISTRY OF DEEDS:  
DEED REFERENCE: BOOK 55084 PAGE 286
4. THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF PLYMOUTH COUNTY, MASSACHUSETTS, MAP NUMBER 25023C0314J, MAP REVISED JULY 17, 2012.
5. THE SITE IS NOT LOCATED IN A PRIORITY HABITAT AND ESTIMATED HABITAT AS SHOWN ON THE MASSACHUSETTS NATURAL HERITAGE ATLAS 15TH EDITION EFFECTIVE DATE AUGUST, 2021.
6. WETLANDS SHOWN WERE DELINEATED BY BOB GRAY OF SABATIA, INC. IN JUNE 2021.
7. THE PROJECT IS NOT LOCATED WITHIN AN AREA OF CRITICAL ENVIRONMENTAL CONCERN (ACEC).
8. THE SITE IS NOT LOCATED IN A ZONE II TO A PUBLIC WATER SUPPLY WELL.
9. THE SITE IS NOT IN A ZONE A TO A SURFACE WATER SUPPLY AREA.
10. THE SITE IS NOT LOCATED IN AN OUTSTANDING RESOURCE WATER AREA (ORW).


**BENCHMARK NOTE:**

1. THE CONTRACTOR SHALL CHECK BETWEEN THE BENCHMARKS PROVIDED AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES FOUND PRIOR TO THE START OF CONSTRUCTION.  
BM #1: MAG NAIL IN PAVEMENT, EL.=75.67 (NAVD-88)  
BM #2: MAG NAIL IN PAVEMENT, EL.=76.93 (NAVD-88)

SURVEY COMPANY OF RECORD:



**ZLS**  
ZENITH LAND SURVEYORS, LLC  
1162 ROCKDALE AVENUE  
NEW BEDFORD, MA 02740  
(508) 995-0100



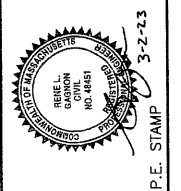
William Joseph McGovern March 2, 2023

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

William Joseph McGovern March 2, 2023 DATE

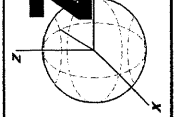
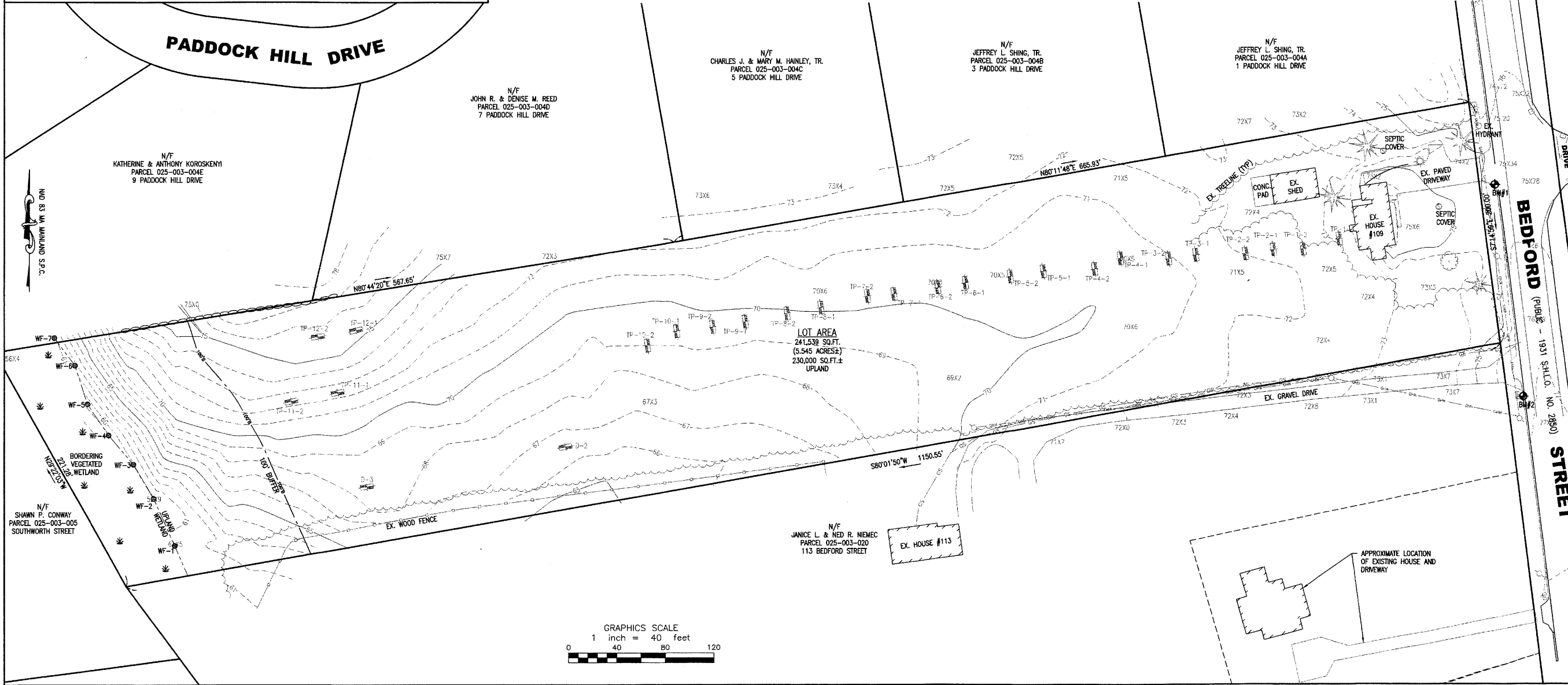


FOR REGISTRY USE ONLY

**LAKEVILLE ZONING BOARD OF APPEALS**  
APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

APPROVED: \_\_\_\_\_  
ENDORSED: \_\_\_\_\_

**ZCE**  
ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208

DATE	REV.	DESCRIPTION	BY	APP.
11/22/2022	1.	2/27/23 REVIEW ENG. COMMENTS	RLG	JLB

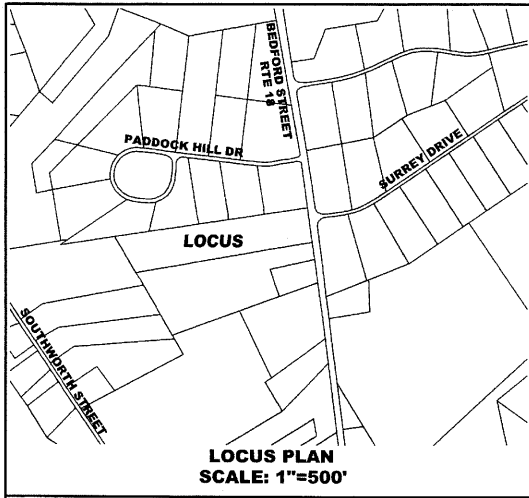
DESIGNED BY:	RLG
CHECKED BY:	RLG
DRAWN BY:	RLG
APPROVED BY:	JLB

DATE:	11/22/2022
PROJECT NUMBER:	0143-13-01
SCALE:	1"=40'
SHEET ID:	X

**EXISTING CONDITIONS PLAN**  
109 BEDFORD STREET  
LAKEVILLE, MASSACHUSETTS  
NORTH BEDFORD CROSSING LLC.  
1 LAKEVILLE BUSINESS PARK DRIVE  
LAKEVILLE, MASSACHUSETTS



**SITE NOTES:**

- THE SITE IS LISTED ON THE TOWN OF LAKEVILLE ASSESSORS PROPERTY RECORD CARDS AS PARCEL ID 025-003-021.
- PROPERTY LINE AND EXISTING CONDITIONS INFORMATION WAS TAKEN FROM A FIELD SURVEY BY ZENITH LAND SURVEYORS, LLC.
- PLYMOUTH COUNTY REGISTRY OF DEEDS.  
DEED REFERENCE: BOOK 55084 PAGE 286
- THE SUBJECT PROPERTY IS LOCATED IN ZONE X, AS SHOWN ON THE FLOOD INSURANCE RATE MAP (F.I.R.M.) OF PLYMOUTH COUNTY, MASSACHUSETTS, MAP NUMBER 2502300314J, MAP REVISED JULY 17, 2012.
- WETLANDS SHOWN WERE DELINEATED BY BOB GRAY OF SABATA, INC. IN JUNE 2021.

SURVEY COMPANY OF RECORD:

**ZLS**  
ZENITH LAND SURVEYORS, LLC  
1162 ROCKDALE AVENUE  
NEW BEDFORD, MA 02740  
(508) 995-0100

WILLIAM JOSEPH MCGOVERN  
39692  
PROFESSIONAL SURVEYOR

*William J. McGovern* March 2, 2023

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE \_\_\_\_\_

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William J. McGovern* March 2, 2023  
DATE

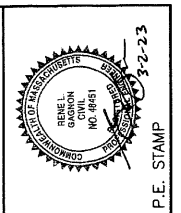
**LAKEVILLE ZONING BOARD OF APPEALS**

APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

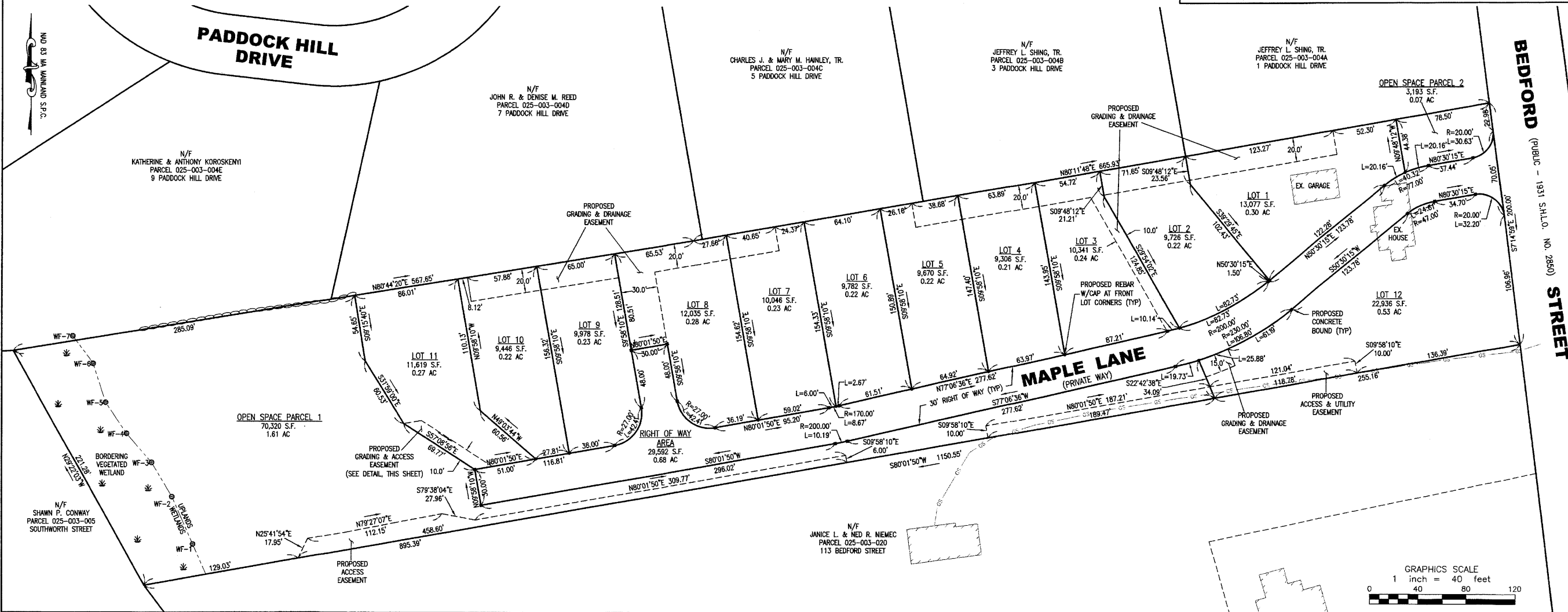
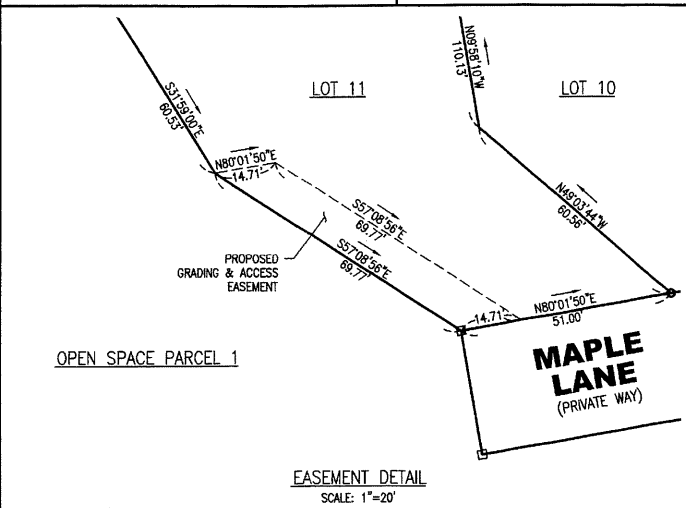
APPROVED: \_\_\_\_\_

ENDORSED: \_\_\_\_\_

FOR REGISTRY USE ONLY



ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208



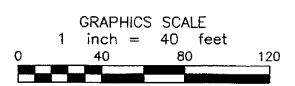
DATE	REV.	DESCRIPTION	BY	APP.
11/22/2022	1	2/27/23 REVIEW ENG. COMMENTS	RLG	JLB

DESIGNED BY:	PROJECT NUMBER:	SCALE:	APPROVED BY:
RLG	0143-13-01	1"=40'	JLB
CHECKED BY:	DATE:		
RWF	11/22/2022		

SHEET NAME:	LOTING SHEET
PROJECT SITE:	109 BEDFORD STREET LAKEVILLE, MASSACHUSETTS
CLIENT INFO:	NORTH BEDFORD CROSSING LLC. 1 LAKEVILLE BUSINESS PARK DRIVE LAKEVILLE, MASSACHUSETTS



SURVEY COMPANY OF RECORD:  
**ZLS**  
 ZENITH LAND SURVEYORS, LLC  
 1162 ROCKDALE AVENUE  
 NEW BEDFORD, MA 02740  
 (508) 995-0100



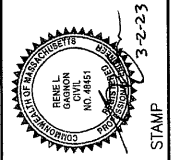
*William J. McGovern* March 2, 2023  
 DATE

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE

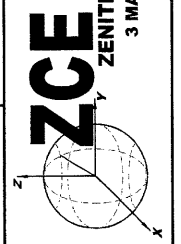
I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William J. McGovern* March 2, 2023  
 DATE



P.E. STAMP

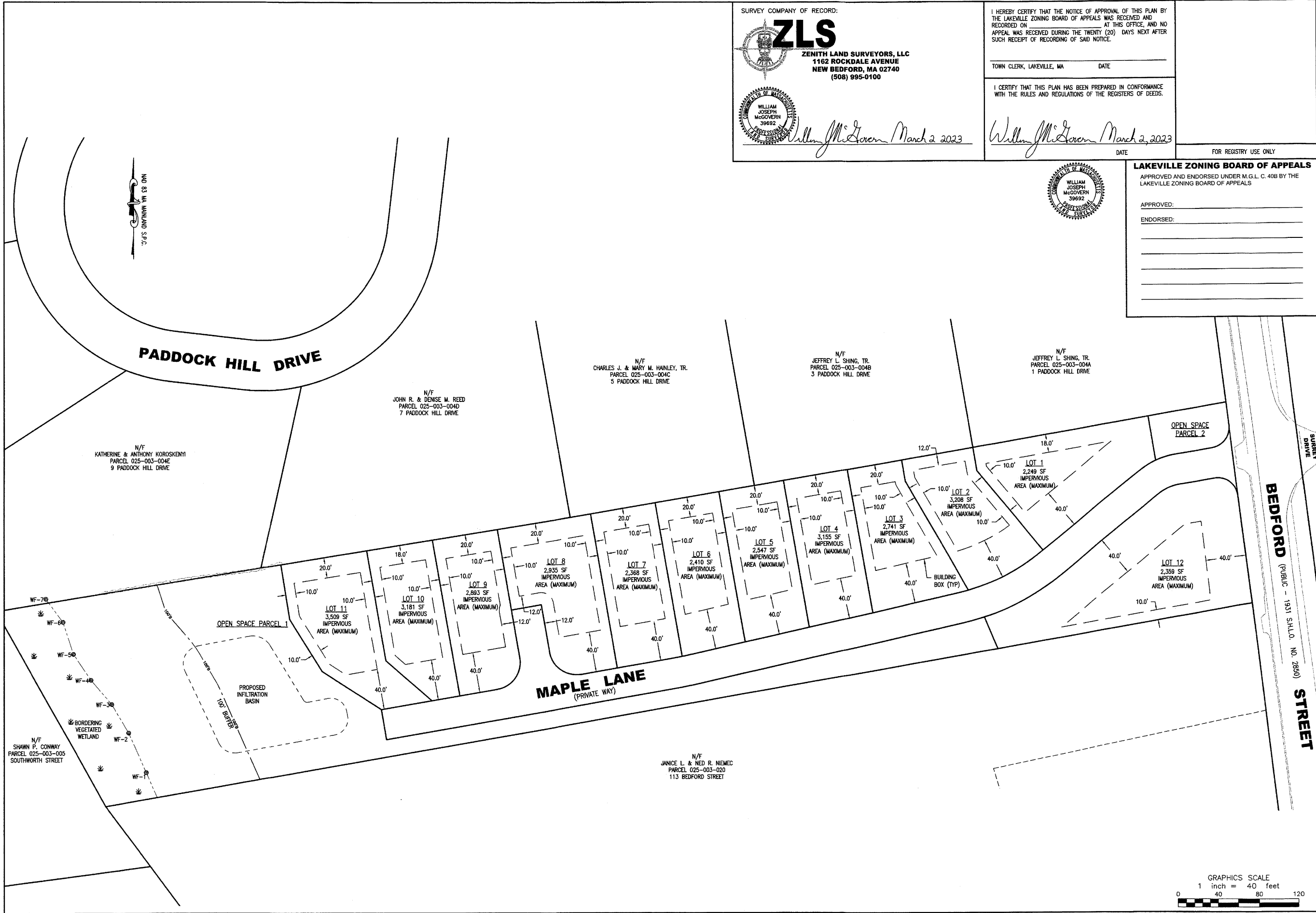
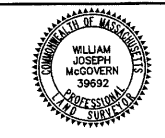
ZENITH CONSULTING ENGINEERS, LLC  
 3 MAIN STREET LAKEVILLE, MA 02347  
 PHONE: (508) 947-4208



**LAKEVILLE ZONING BOARD OF APPEALS**

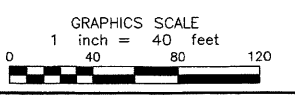
APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

APPROVED: \_\_\_\_\_  
 ENDORSED: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

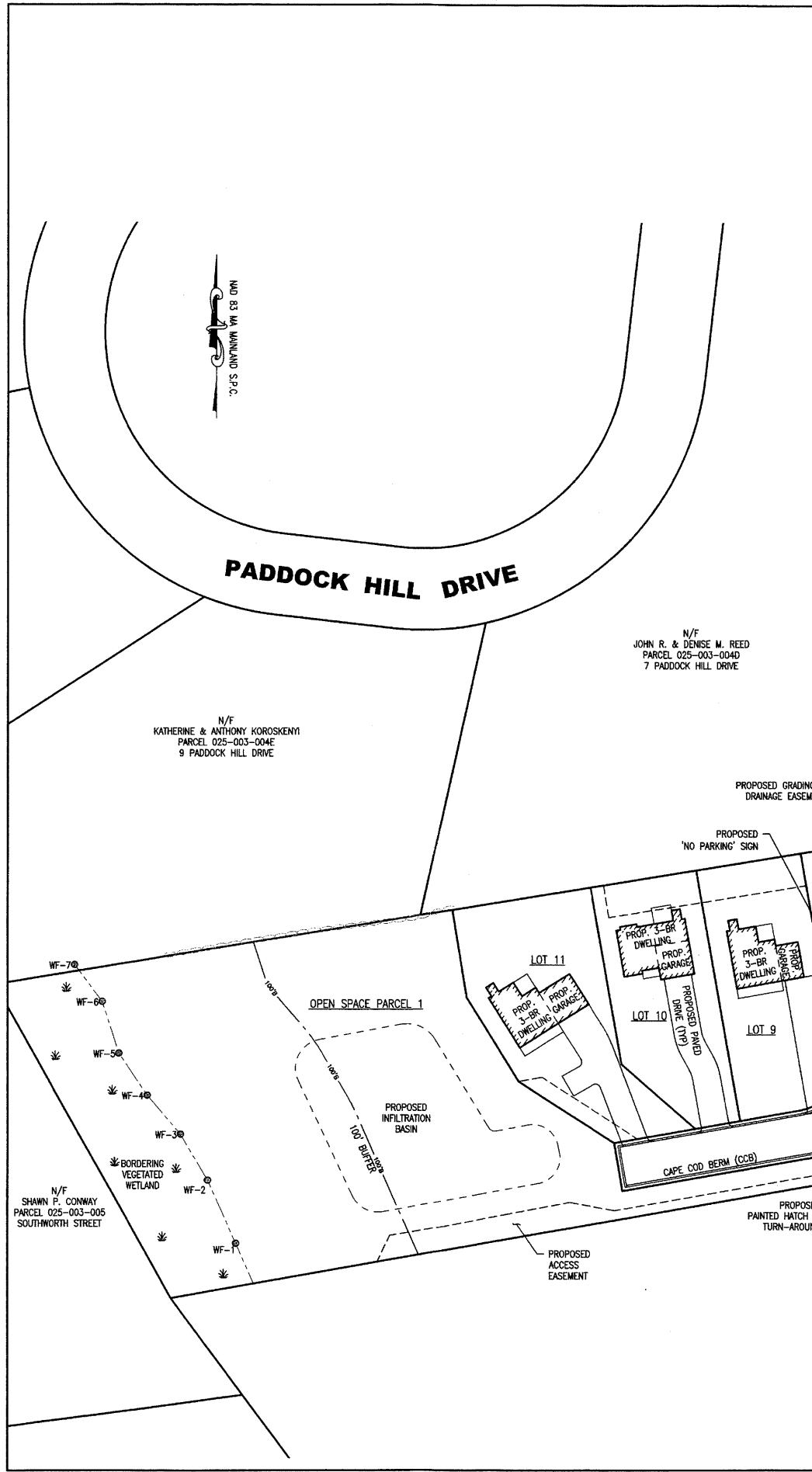


REV.	DATE	DESCRIPTION	BY	APP.
1.	2/27/23	REVIEW ENG. COMMENTS	RLG	JLB

**PROPOSED BUILDING BOX PLAN**  
 109 BEDFORD STREET  
 LAKEVILLE, MASSACHUSETTS  
 NORTH BEDFORD CROSSING LLC.  
 1 LAKEVILLE BUSINESS PARK DRIVE  
 LAKEVILLE, MASSACHUSETTS







**LOT COVERAGE CALCULATION:**  
 TOTAL AREA: 241,539 SF  
 WETLAND AREA: 11,303 SF  
 DRAINAGE AREA: 11,426 SF  
 ADJUSTED AREA: 218,810 SF (AS SHOWN)  
 COVERAGE AREA (ROOFS, DRIVEWAYS, ROAD, WALKWAYS, PORCHES, DECKS, PATIOS): 58,067 SF (AS SHOWN)  
 58,067 / 218,810 = 26.6% LOT COVERAGE

**AREA SUMMARY**  
 TOTAL AREA: 241,539 SF  
 WETLAND AREA: 11,303 SF  
 USABLE OPEN SPACE: 174,911 SF (AS SHOWN)  
 ROOF AREA: 17,434 SF (AS SHOWN)  
 PAVED AREAS (DRIVEWAYS, ROAD, WALKWAYS): 37,891 SF (AS SHOWN)

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE

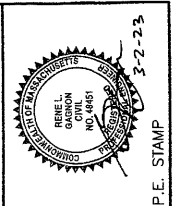
I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William J. McGovern* March 2, 2023 DATE

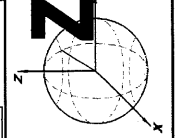


**LAKEVILLE ZONING BOARD OF APPEALS**  
 APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

APPROVED: \_\_\_\_\_  
 ENDORSED: \_\_\_\_\_



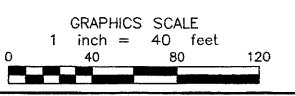
**ZCE**  
 ZENTITH CONSULTING ENGINEERS, LLC  
 3 MAIN STREET LAKEVILLE, MA 02347  
 PHONE: (508) 947-4208



REV.	DATE	DESCRIPTION
1.	2/27/23	REVIEW ENG. COMMENTS

**LAYOUT PLAN**  
 109 BEDFORD STREET  
 LAKEVILLE, MASSACHUSETTS  
 NORTH BEDFORD CROSSING LLC.  
 1 LAKEVILLE BUSINESS PARK DRIVE  
 LAKEVILLE, MASSACHUSETTS

DATE: 11/22/2022  
 PROJECT NUMBER: 0143-13-01  
 SCALE: 1"=40'  
 SHEET ID: L



**BEDFORD STREET** (PUBLIC - 1931 S.H.L.O. NO. 2850)

N/F  
 JANICE L. & NED R. NIEMEC  
 PARCEL 025-003-020  
 113 BEDFORD STREET

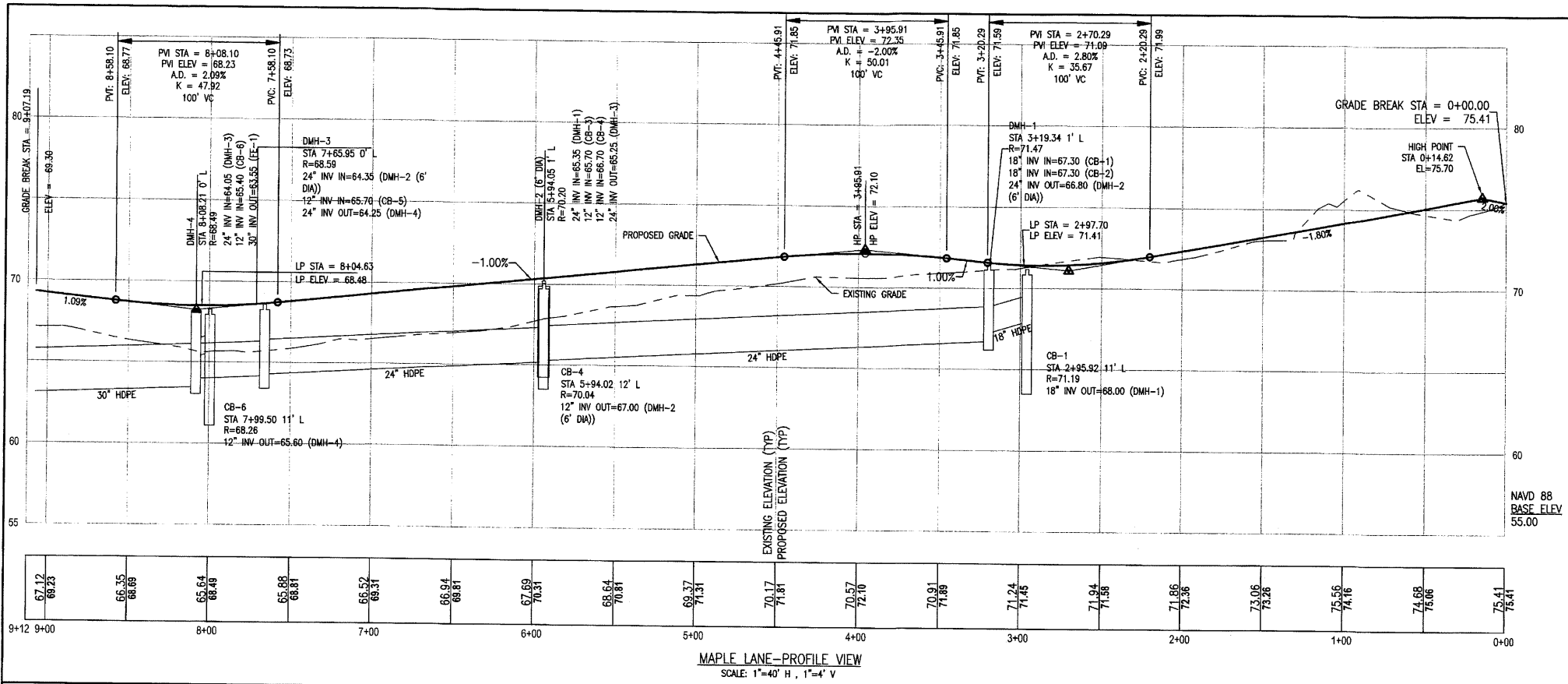
N/F  
 KATHERINE & ANTHONY KOROSKENTY  
 PARCEL 025-003-004E  
 9 PADDOCK HILL DRIVE

N/F  
 JOHN R. & DENISE M. REED  
 PARCEL 025-003-004D  
 7 PADDOCK HILL DRIVE

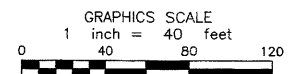
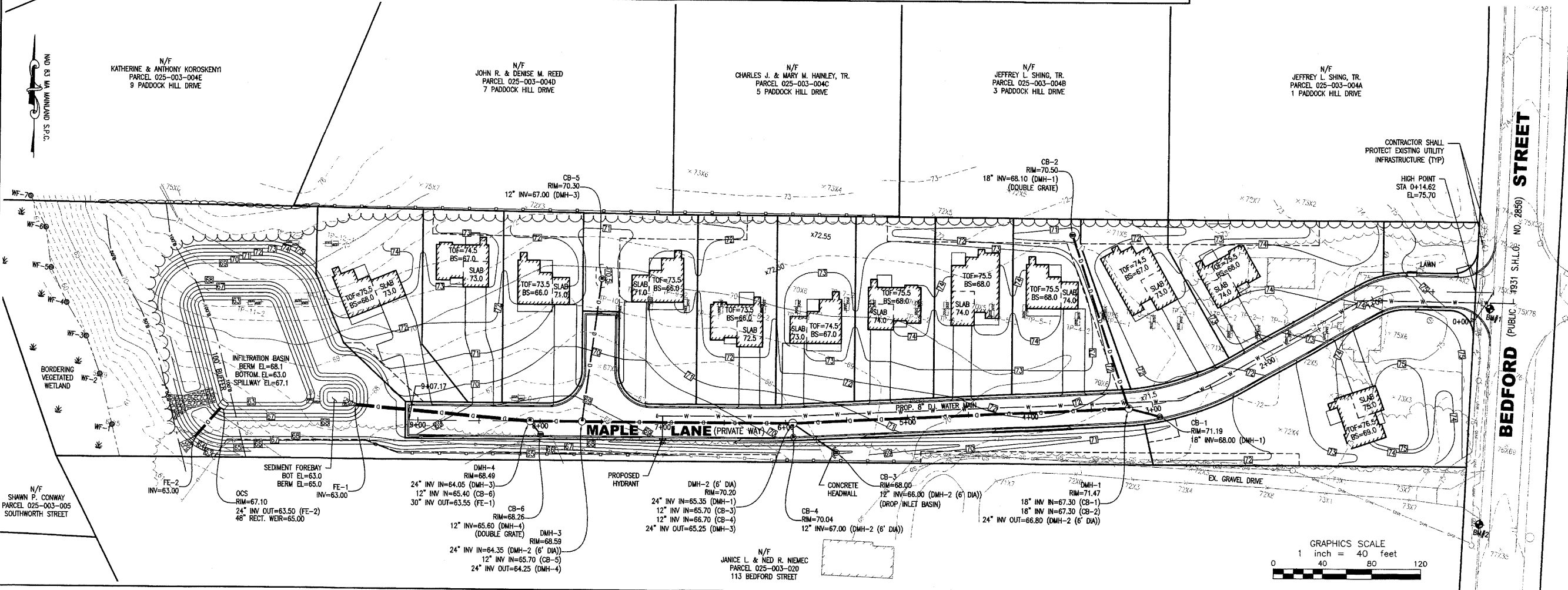
N/F  
 CHARLES J. & MARY M. HAINLEY, TR.  
 PARCEL 025-003-004C  
 5 PADDOCK HILL DRIVE

N/F  
 JEFFREY L. SHING, TR.  
 PARCEL 025-003-004B  
 3 PADDOCK HILL DRIVE

N/F  
 JEFFREY L. SHING, TR.  
 PARCEL 025-003-004A  
 1 PADDOCK HILL DRIVE



MAPLE LANE - PROFILE VIEW  
SCALE: 1"=40' H, 1"=4' V



I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William J. McGovern* March 2, 2023  
DATE



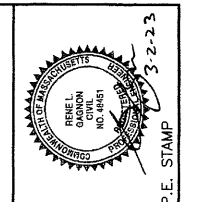
LAKEVILLE ZONING BOARD OF APPEALS

APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

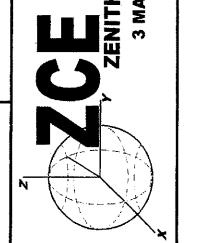
APPROVED: \_\_\_\_\_  
ENDORSED: \_\_\_\_\_

**BENCHMARK NOTE:**

- THE CONTRACTOR SHALL CHECK BETWEEN THE BENCHMARKS PROVIDED AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES FOUND PRIOR TO THE START OF CONSTRUCTION.  
BM #1: MAG NAIL IN PAVEMENT, EL.=75.67 (NAVD-88)  
BM #2: MAG NAIL IN PAVEMENT, EL.=76.93 (NAVD-88)



**ZENITH CONSULTING ENGINEERS, LLC**  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208



DATE	BY	APP.	DESCRIPTION
11/22/2022	RLG	JLB	REVIEW ENG. COMMENTS
2/27/23	RLG	JLB	REVIEW ENG. COMMENTS

DATE	PROJECT NUMBER	SCALE	SHEET ID
11/22/2022	0143-13-01	1"=40'	G

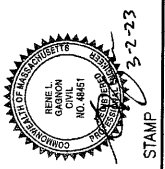
SHEET NAME	PROJECT SITE	CLIENT INFO
GRADING & DRAINAGE PLAN	109 BEDFORD STREET LAKEVILLE, MASSACHUSETTS	NORTH BEDFORD CROSSING LLC, 1 LAKEVILLE BUSINESS PARK DRIVE LAKEVILLE, MASSACHUSETTS

I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William McGovern* March 2, 2023  
DATE



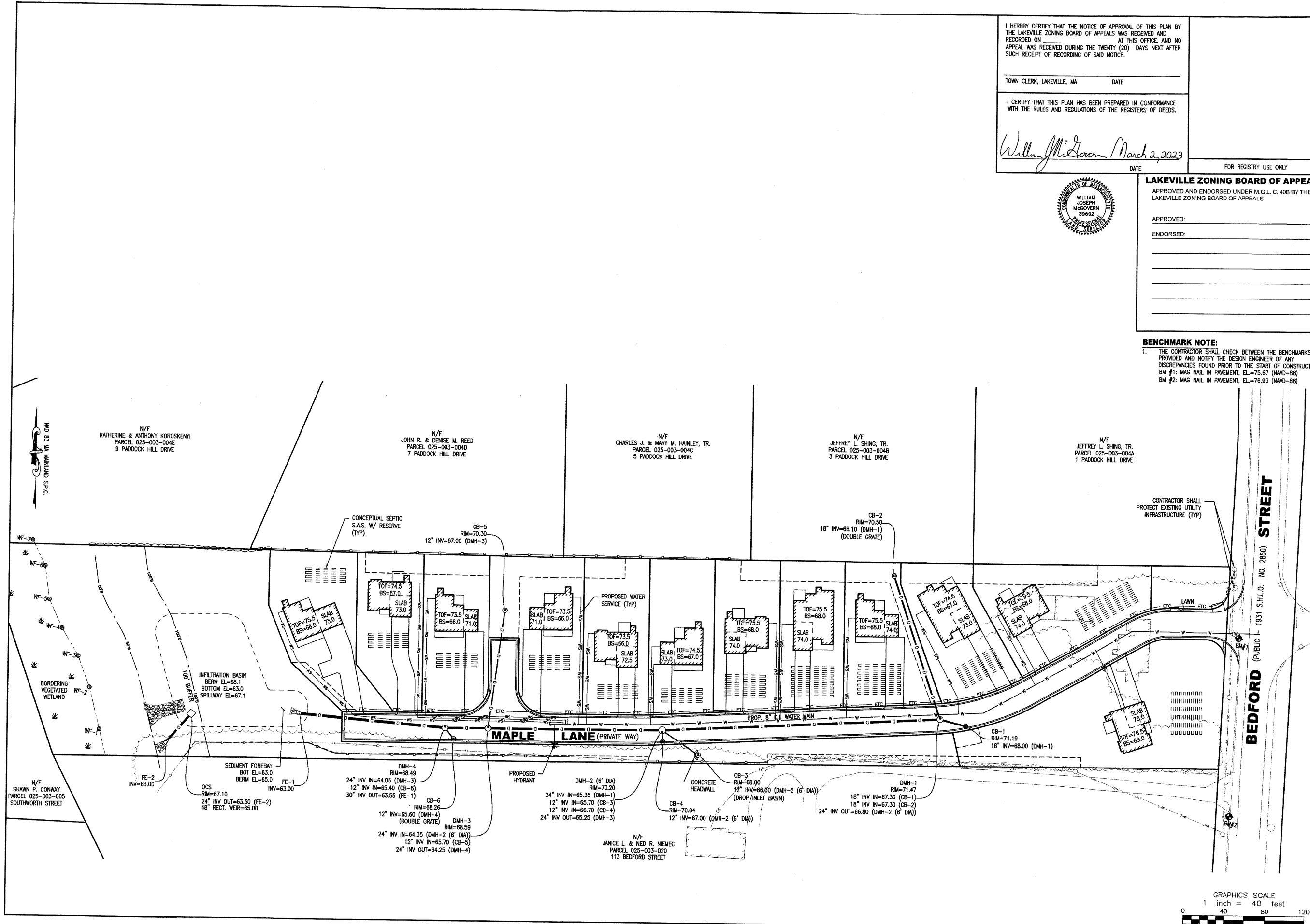
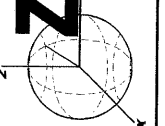
P. E. STAMP  
3-2-23

LAKEVILLE ZONING BOARD OF APPEALS  
APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

APPROVED: \_\_\_\_\_  
ENDORSED: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

**BENCHMARK NOTE:**  
1. THE CONTRACTOR SHALL CHECK BETWEEN THE BENCHMARKS PROVIDED AND NOTIFY THE DESIGN ENGINEER OF ANY DISCREPANCIES FOUND PRIOR TO THE START OF CONSTRUCTION.  
BM #1: MAG NAIL IN PAVEMENT, EL.=75.67 (NAVD-88)  
BM #2: MAG NAIL IN PAVEMENT, EL.=76.93 (NAVD-88)

**ZCE**  
ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208

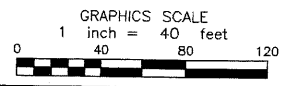


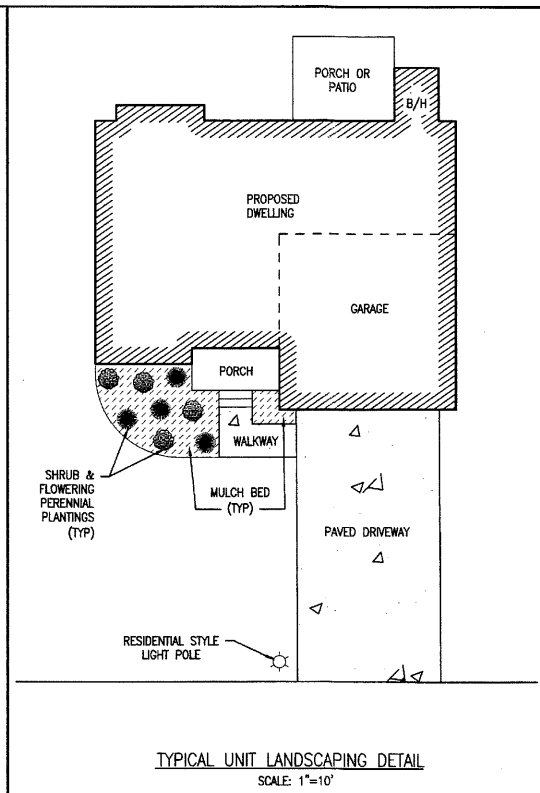
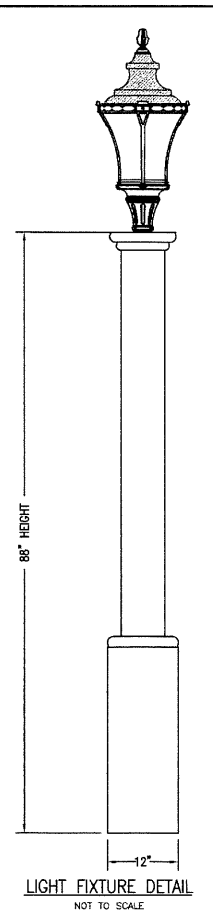
REV.	DATE	DESCRIPTION	BY	APP.
1.	2/27/23	REVIEW ENG. COMMENTS	RLG	JLB

**UTILITY PLAN**  
 109 BEDFORD STREET  
 LAKEVILLE, MASSACHUSETTS  
 NORTH BEDFORD CROSSING LLC,  
 1 LAKEVILLE BUSINESS PARK DRIVE  
 LAKEVILLE, MASSACHUSETTS

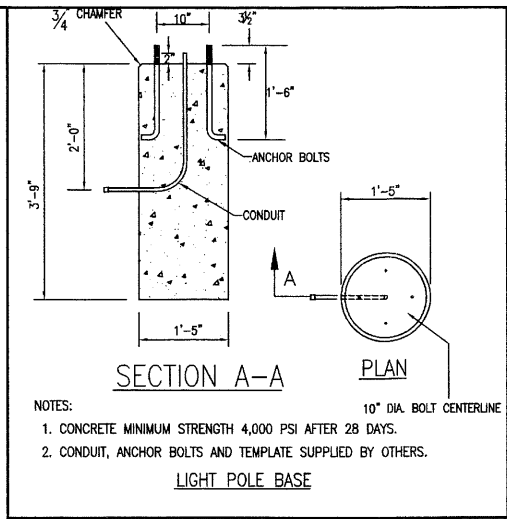
DATE: 11/22/2022  
 PROJECT NUMBER: 0143-13-01  
 SCALE: 1"=40'  
 SHEET ID: U

DRWN BY: RLG  
 DESIGNED BY: RLG  
 CHECKED BY: RNF  
 APPROVED BY: JLB





**\*NOTE:**  
LIGHTING SHALL CONFORM WITH THE TOWN OF LAKEVILLE GENERAL BY-LAW FOR OUTDOOR LIGHTING.

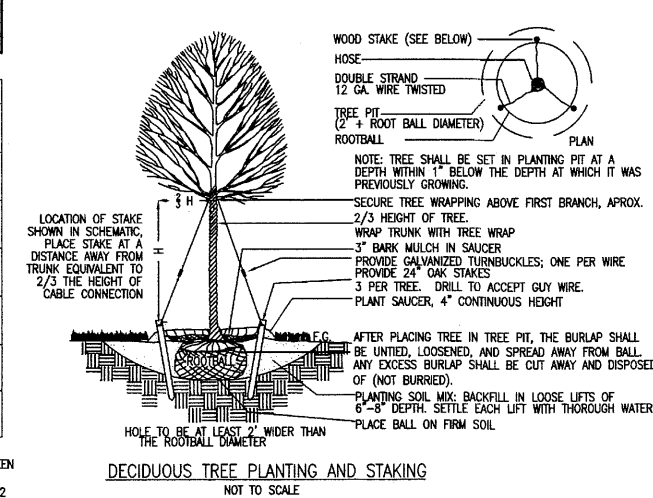
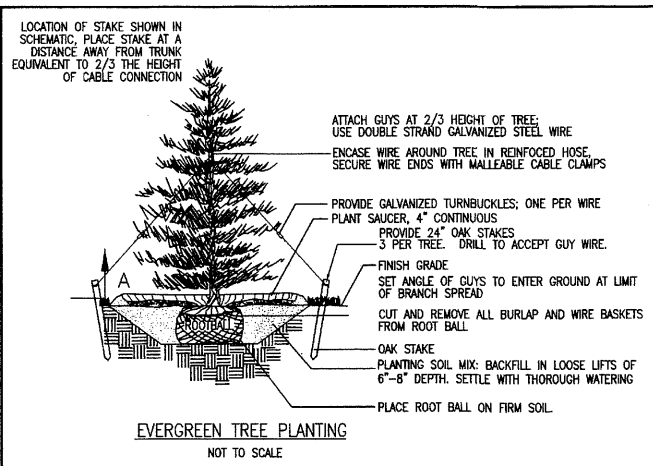


**PLANTING SCHEDULE**

SYMBOL	BOTANICAL NAME	COMMON NAME	SIZE
☀	CORNUS KOUSA	KOUSA DOGWOOD	5' HEIGHT (MIN.)
☀	ACER SACCHARUM	SUGAR MAPLE	2.5" CALIPER (MIN.)
☀	QUERCUS RUBRA	RED OAK	2.5" CALIPER (MIN.)
☀	QUERCUS ALBA	WHITE OAK	2.5" CALIPER (MIN.)
☀	PICEA PUNGENS	BLUE SPRUCE	6' HEIGHT (MIN.)
●	AZALEA "DELAWARE VALLEY"	DELAWARE VALLEY WHITE AZALEA	2' HEIGHT (MIN.)
●	JUNIPERUS PFITZERIANA	PFITZER JUNIPER	18" - 24" HEIGHT (MIN.)

**NOTES:**  
1. CONCRETE MINIMUM STRENGTH 4,000 PSI AFTER 28 DAYS.  
2. CONDUIT, ANCHOR BOLTS AND TEMPLATE SUPPLIED BY OTHERS.

**NOTE:**  
1. THE FOLLOWING TREES MAY BE SUBSTITUTED FOR THE SPECIES LISTED IN THIS SCHEDULE: GREEN ASH, RED SUNSET MAPLE, LINDEN, LONDON PLAN TREE, NORTHERN RED OAK, AND LOCUST.  
2. ALTERNATE SHRUB SPECIES MAY ALSO BE CONSIDERED AS LONG AS THEY ARE A MINIMUM OF 2 FEET IN HEIGHT AND DO NOT OBSTRUCT VEHICLE SITE LINES.

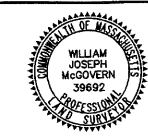


I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE \_\_\_\_\_

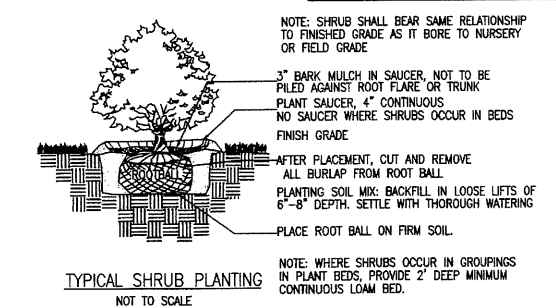
I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William McGovern* March 2, 2023 DATE \_\_\_\_\_

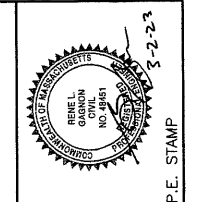
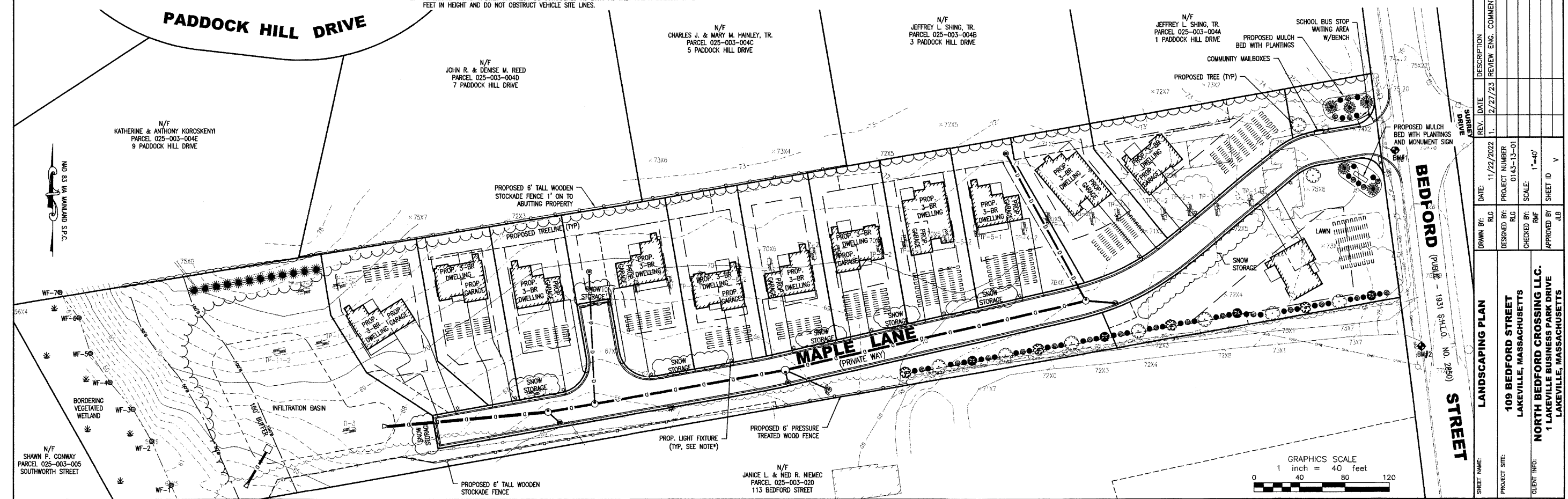


**LAKEVILLE ZONING BOARD OF APPEALS**  
APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS.

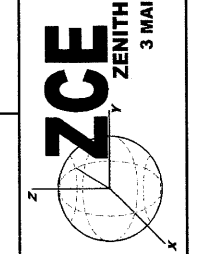
APPROVED: \_\_\_\_\_  
ENDORSED: \_\_\_\_\_



**NOTE:** WHERE SHRUBS OCCUR IN GROUPINGS IN PLANT BEDS, PROVIDE 2" DEEP MINIMUM CONTINUOUS LOAM BED.



**ZCE**  
ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET, LAKEVILLE, MA 02347  
PHONE: (508) 947-4208



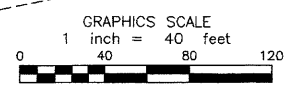
**LANDSCAPING PLAN**

PROJECT SITE: 109 BEDFORD STREET, LAKEVILLE, MASSACHUSETTS  
CLIENT INFO: NORTH BEDFORD CROSSING LLC, 1 LAKEVILLE BUSINESS PARK DRIVE, LAKEVILLE, MASSACHUSETTS

DATE	DESCRIPTION	BY	APP.
11/22/2022	REVIEW ENG. COMMENTS	RLG	JLB
2/27/23	REVIEW ENG. COMMENTS	RLG	JLB

DATE: 11/22/2022  
PROJECT NUMBER: 0143-13-01  
SCALE: 1"=40'  
SHEET ID: V

DRAWN BY: RLG  
DESIGNED BY: RLG  
CHECKED BY: RLF  
APPROVED BY: JLB



**EROSION AND SEDIMENTATION CONTROL NOTES**

THE FOLLOWING MEASURES SHALL BE MAINTAINED THROUGHOUT THE SITE CONSTRUCTION PHASE OF THE PROJECT.

**CATCH BASIN PROTECTION**

PROPOSED CATCH BASINS SHALL BE PROTECTED WITH SILT SACKS PRIOR TO THE COMPLETION OF PAVING. IF EXCESSIVE SILTATION IS DISCOVERED TO BE ENTERING THE CATCH BASIN INLETS, THEN HAY BALES SHALL ALSO BE PLACED AROUND GRATES AND CATCH BASINS WITHIN THE CONSTRUCTION/DEMOLITION AREAS TO ENSURE THAT RUNOFF ENTERING THE CATCH BASIN HAS BEEN FILTERED THROUGH THE BALES PRIOR TO DISCHARGE.

**STABILIZED CONSTRUCTION ENTRANCE**

A TEMPORARY STABILIZED CONSTRUCTION ENTRANCE SHALL BE INSTALLED AT THE LOCATIONS SHOWN ON THE EROSION CONTROL PLAN. THE PURPOSE OF THE CONSTRUCTION ENTRANCE IS TO REMOVE SEDIMENT ATTACHED TO VEHICLE TIRES AND MINIMIZE ITS TRANSPORT AND DEPOSITION ONTO PUBLIC ROAD SURFACES. THE CONSTRUCTION ENTRANCE SHALL BE COMPOSED OF A 6-INCH THICK (MINIMUM) BED OF 2-INCH DIAMETER CRUSHED STONE THAT EXTENDS A MINIMUM OF 50 FEET. THE CONSTRUCTION ENTRANCE SHALL BE A MINIMUM OF 25 FEET WIDE, AND SHALL FLARE TO A MINIMUM WIDTH OF 45 FEET WIDE AT THE JUNCTION WITH THE ROADWAY. THE CRUSHED STONE BED SHALL BE REMOVED AND REPLISHED AS NECESSARY TO MAINTAIN THE PROPER FUNCTION.

**EROSION AND SEDIMENT CONTROL - MAINTENANCE**

THE PROJECT GENERAL CONTRACTOR SHALL HAVE PRIMARY RESPONSIBILITY FOR IMPLEMENTING TEMPORARY AND PERMANENT CONTROLS DESCRIBED IN THE PLAN AND SHALL BE RESPONSIBLE FOR ASSURING CONTRACTOR COMPLIANCE WITH CONTRACT DOCUMENTS INCLUDING ALL EROSION AND SEDIMENT CONTROL MEASURES.

- DAMAGED OR DETERIORATED ITEMS SHALL BE REPAIRED OR REPLACED IMMEDIATELY AFTER IDENTIFICATION.
- THE UNDERSIDE OF HAYBALES SHOULD BE KEPT IN CLOSE CONTACT WITH THE EARTH AND RESET AS NECESSARY.
- SILT SOCKS SHALL BE INSPECTED AFTER EVERY MAJOR RAINFALL RUNOFF EVENT (OVER 1/2" DEPTH OF PRECIPITATION) OR EVERY 14 DAYS, WHICHEVER OCCURS FIRST. ALL DAMAGED OR MISALIGNED FENCES SHALL BE IMMEDIATELY REPAIRED. SILT SHALL BE IMMEDIATELY REMOVED FROM ALL AREAS OF THE SILT FENCE WHEN DEPTH OF ACCUMULATION EXCEEDS 9 INCHES. EACH REPORT SHALL BE DOCUMENTED ON THE FORM ENCLOSED IN APPENDIX E.
- SUMPS SHALL BE INSPECTED AFTER EVERY MAJOR RAINFALL RUNOFF EVENT (OVER 1/2" DEPTH OF PRECIPITATION) OR EVERY 14 DAYS, WHICHEVER OCCURS FIRST. SILT SHALL BE IMMEDIATELY REMOVED FROM ALL SUMPS WHERE THE DEPTH OF ACCUMULATION EXCEEDS 9 INCHES.
- ALL EXPOSED CONSTRUCTION AREAS SHALL BE STABILIZED UPON COMPLETION IN ORDER TO MINIMIZE THE TIME THAT THESE AREAS ARE UNSTABILIZED.

**MATERIALS MANAGEMENT PRACTICES**

THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES TO STORMWATER RUNOFF. THE CONTRACTOR'S SUPERINTENDENT SHALL BE RESPONSIBLE FOR ENSURING THAT THESE PROCEDURES ARE FOLLOWED:

**1. GOOD HOUSEKEEPING**

THE FOLLOWING GOOD HOUSEKEEPING PRACTICES SHALL BE FOLLOWED ON-SITE DURING CONSTRUCTION:

- AN EFFORT SHALL BE MADE TO STORE ONLY ENOUGH PRODUCTS REQUIRED TO DO THE JOB.
- ALL MATERIALS STORED ON-SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER AND, IF POSSIBLE, UNDER A ROOF OR IN A CONTAINMENT AREA. AT A MINIMUM, ALL CONTAINERS SHALL BE STORED WITH THEIR LIDS ON WHEN NOT IN USE. DRIP PANS SHALL BE PROVIDED UNDER ALL DISPENSERS.
- PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS WITH THE ORIGINAL MANUFACTURER'S LABEL IN LEGIBLE CONDITION.
- SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER.
- WHENEVER POSSIBLE, ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING THE CONTAINER.
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED.
- THE CONTRACTOR'S SUPERINTENDENT SHALL BE RESPONSIBLE FOR DAILY INSPECTIONS TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS.

**2. HAZARDOUS SUBSTANCES**

THESE PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS SUBSTANCES. MATERIAL SAFETY DATA SHEETS (MSDS'S) FOR EACH PRODUCT WITH HAZARDOUS PROPERTIES THAT IS USED AT THE PROJECT SHALL BE OBTAINED AND USED FOR THE PROPER MANAGEMENT OF POTENTIAL WASTES THAT MAY RESULT FROM THESE PRODUCTS. AN MSDS

SHALL BE POSTED IN THE IMMEDIATE AREA WHERE SUCH PRODUCT IS STORED AND/OR USED AND ANOTHER COPY OF EACH MSDS SHALL BE MAINTAINED IN THE JOB TRAILER AT THE PROJECT. EACH EMPLOYEE WHO MUST HANDLE A HAZARDOUS SUBSTANCE SHALL BE INSTRUCTED ON THE USE OF MSDS SHEETS AND THE SPECIFIC INFORMATION IN THE APPLICABLE MSDS FOR THE PRODUCT HE/SHE IS USING, PARTICULARLY REGARDING SPILL CONTROL TECHNIQUES.

- PRODUCTS SHALL BE KEPT IN ORIGINAL CONTAINERS WITH THE ORIGINAL LABELS IN LEGIBLE CONDITION.
- ORIGINAL LABELS AND MSDS'S SHALL BE PROCURED AND USED FOR EACH PRODUCT.
- IF SURPLUS PRODUCT MUST BE DISPOSED, MANUFACTURER'S AND LOCAL/STATE/FEDERAL REQUIRED METHODS FOR PROPER DISPOSAL MUST BE FOLLOWED.

**3. HAZARDOUS WASTE**

IT IS IMPERATIVE THAT ALL HAZARDOUS WASTE BE PROPERLY IDENTIFIED AND HANDLED IN ACCORDANCE WITH ALL APPLICABLE HAZARDOUS WASTE STANDARDS, INCLUDING THE STORAGE, TRANSPORT AND DISPOSAL OF THE HAZARDOUS WASTES. THERE ARE SIGNIFICANT PENALTIES FOR THE IMPROPER HANDLING OF HAZARDOUS WASTES. IT IS IMPORTANT THAT THE SITE SUPERINTENDENT SEEKS APPROPRIATE ASSISTANCE IN MAKING THE DETERMINATION OF WHETHER A SUBSTANCE OR MATERIAL IS A HAZARDOUS WASTE. FOR EXAMPLE, HAZARDOUS WASTE MAY INCLUDE CERTAIN HAZARDOUS SUBSTANCES, AS WELL AS PESTICIDES, PAINTS, PAINT SOLVENTS, CLEANING SOLVENTS, PESTICIDES, CONTAMINATED SOILS, AND OTHER MATERIALS, SUBSTANCES OR CHEMICALS THAT HAVE BEEN DISCARDED (OR ARE TO BE DISCARDED) AS BEING OUT-OF-DATE, CONTAMINATED, OR OTHERWISE UNUSABLE, AND CAN INCLUDE THE CONTAINERS FOR THOSE SUBSTANCES; OTHER MATERIALS AND SUBSTANCES CAN ALSO BE OR BECOME HAZARDOUS WASTES, HOWEVER, THE CONTRACTOR'S SUPERINTENDENT IS ALSO RESPONSIBLE FOR ENSURING THAT ALL SITE PERSONNEL ARE INSTRUCTED AS TO THESE HAZARDOUS WASTE REQUIREMENTS AND ALSO THAT THE REQUIREMENTS ARE BEING FOLLOWED.

**PRODUCT SPECIFIC PRACTICES**

THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON THE JOB SITE:

**PETROLEUM PRODUCTS**

ALL ON-SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTATIVE MAINTENANCE TO REDUCE THE CHANCE OF LEAKAGE. PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. PETROLEUM STORAGE TANKS SHALL BE LOCATED AT MINIMUM 100 LINEAR FEET FROM DRAINAGE WAYS, INLETS AND SURFACE WATERS. ANY PETROLEUM STORAGE TANKS STORED ON-SITE SHALL BE LOCATED WITHIN A CONTAINMENT AREA THAT IS DESIGNED WITH AN IMPERVIOUS SURFACE BETWEEN THE TANK AND THE GROUND. THE SECONDARY CONTAINMENT MUST BE DESIGNED TO PROVIDE A CONTAINMENT VOLUME THAT IS EQUAL TO 110% OF THE VOLUME OF THE LARGEST TANK. ANY MOBILE PETROLEUM TANK SHALL BE PARKED IN A VEHICULAR SERVICE AREA SURROUNDED BY A BERM THAT PROVIDES A CONTAINMENT VOLUME THAT IS EQUAL TO 110% OF THE VOLUME OF THE LARGEST TANK. CONTAINMENT MUST PROVIDE SUFFICIENT VOLUME TO CONTAIN EXPECTED PRECIPITATION AND 110% VOLUME OF THE LARGEST TANK. ACCUMULATED RAINWATER OR SPILLS FROM CONTAINMENT AREAS ARE TO BE PROMPTLY PUMPED INTO A CONTAINMENT DEVICE AND DISPOSED PROPERLY BY A LICENSED HAZARDOUS WASTE TRANSPORTER. DRIP PANS SHALL BE PROVIDED FOR ALL DISPENSERS. ANY ASPHALT SUBSTANCES USED ON-SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS. THE LOCATION OF ANY FUEL TANKS AND/OR EQUIPMENT STORAGE AREAS MUST BE IDENTIFIED ON THE EROSION CONTROL PLAN BY THE CONTRACTOR ONCE THE LOCATIONS HAVE BEEN DETERMINED.

**FERTILIZERS**

FERTILIZERS SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS RECOMMENDED BY THE MANUFACTURER. ONCE APPLIED, FERTILIZER SHALL BE WORKED IN THE SOIL TO LIMIT EXPOSURE TO STORMWATER. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.

**CLEANING SOLVENTS**

ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT IN USE. EXCESS SOLVENTS SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM, BUT SHALL BE PROPERLY DISPOSED OF ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND FEDERAL REGULATIONS.

**CONCRETE WASTES**

CONCRETE TRUCKS SHALL BE ALLOWED TO WASH OUT OR DISCHARGE SURPLUS CONCRETE OR DRUM WASH WATER ON THE PROJECT SITE, BUT ONLY IN SPECIFICALLY DESIGNATED DIKED AND IMPERVIOUS WASHOUTS WHICH HAVE BEEN PREPARED TO PREVENT CONTACT BETWEEN THE CONCRETE WASH AND STORMWATER. WASTE GENERATED FROM CONCRETE WASH WATER SHALL NOT BE ALLOWED TO FLOW INTO DRAINAGE WAYS, INLETS, RECEIVING WATERS OR ANY LOCATION OTHER THAN THE DESIGNATED CONCRETE WASHOUT. WASTE CONCRETE MAY BE POURED INTO FORMS TO MAKE RIP-RAP OR OTHER USEFUL CONCRETE PRODUCTS. CONCRETE WASHOUTS SHALL BE LOCATED AT MINIMUM 100 LINEAR FEET FROM DRAINAGE WAYS, INLETS, SURFACE WATERS AND WETLAND RESOURCE AREAS.

THE HARDENED RESIDUE FROM THE CONCRETE WASHOUT DIKED AREAS SHALL BE DISPOSED IN THE SAME MANNER AS OTHER NON-HAZARDOUS CONSTRUCTION WASTE MATERIALS OR MAY BE BROKEN UP AND USED ON SITE AS DEEMED APPROPRIATE BY THE CONTRACTOR. MAINTENANCE OF THE WASHOUT IS TO INCLUDE REMOVAL OF HARDENED CONCRETE. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY AND SHALL BE CLEANED OUT ONCE 75% FULL UNLESS A NEW FACILITY IS CONSTRUCTED. THE CONTRACTOR'S SUPERINTENDENT SHALL BE RESPONSIBLE FOR SEEING THAT THESE PROCEDURES ARE FOLLOWED. SAW-CUT PORTLAND CEMENT CONCRETE (PCC) SLURRY SHALL NOT BE ALLOWED TO ENTER STORM DRAINS OR WATERCOURSES. SAW-CUT

RESIDUE SHOULD NOT BE LEFT ON THE SURFACE OF PAVEMENT OR BE ALLOWED TO FLOW OVER AND OFF PAVEMENT. RESIDUE FROM SAW-CUTTING AND GRINDING SHALL BE COLLECTED BY VACUUM AND DISPOSED OF IN THE CONCRETE WASHOUT FACILITY.

**SOLID AND CONSTRUCTION WASTES**

ALL WASTE MATERIALS SHALL BE COLLECTED AND DISPOSED OF AT AN APPROPRIATE SOLID WASTE DISPOSAL AREA.

**SANITARY WASTES**

A MINIMUM OF ONE PORTABLE SANITARY UNIT SHALL BE PROVIDED FOR EVERY TEN (10) WORKERS ON THE SITE. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONE TIME PER WEEK BY A LICENSED PORTABLE FACILITY PROVIDER IN COMPLETE COMPLIANCE WITH LOCAL AND STATE REGULATIONS.

ALL SANITARY WASTE UNITS SHALL BE LOCATED IN AN AREA WHERE THE LIKELIHOOD OF THE UNIT CONTRIBUTING TO STORMWATER DISCHARGES IS NEGLIGIBLE. ADDITIONAL CONTAINMENT BMPs MUST BE IMPLEMENTED, SUCH AS GRENEL BAGS OR SPECIALLY DESIGNED PLASTIC SKID CONTAINERS AROUND THE BASE, TO PREVENT WASTES FROM CONTRIBUTING TO STORMWATER DISCHARGES.

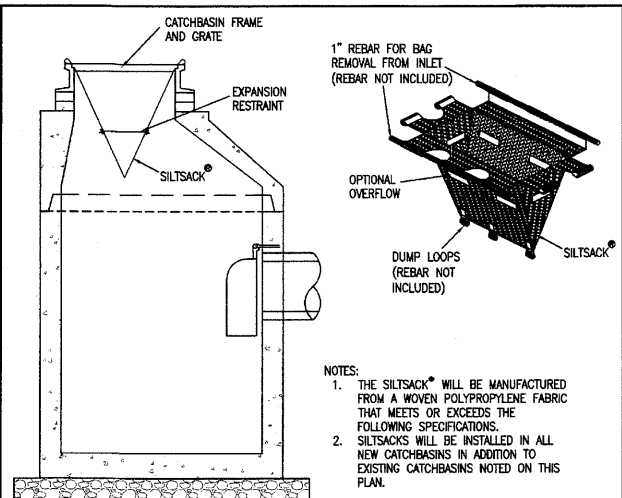
**CONTAMINATED SOILS**

ANY CONTAMINATED SOILS (RESULTING FROM SPILLS OF HAZARDOUS SUBSTANCES OR OIL OR DISCOVERED DURING THE COURSE OF CONSTRUCTION) WHICH MAY RESULT FROM CONSTRUCTION ACTIVITIES SHALL BE CONTAINED AND CLEANED UP IMMEDIATELY IN ACCORDANCE WITH THE PROCEDURES GIVEN IN THE MATERIAL MANAGEMENT PLAN AND IN ACCORDANCE WITH APPLICABLE STATE AND FEDERAL REGULATIONS. CONTAMINATED SOILS NOT RESULTING FROM CONSTRUCTION ACTIVITIES, OR WHICH PRE-EXISTED CONSTRUCTION ACTIVITIES, BUT WHICH ARE DISCOVERED BY VIRTUE OF CONSTRUCTION ACTIVITIES, SHOULD BE REPORTED IN THE SAME MANNER AS SPILLS, BUT WITH SUFFICIENT INFORMATION TO INDICATE THAT THE DISCOVERY OF AN EXISTING CONDITION IS BEING REPORTED. IF THERE IS A RELEASE THAT OCCURS BY VIRTUE OF THE DISCOVERY OF EXISTING CONTAMINATION, THIS SHOULD BE REPORTED AS A SPILL, IF IT OTHERWISE MEETS THE REQUIREMENTS FOR A REPORTABLE SPILL.

**CONSTRUCTION OPERATION AND MAINTENANCE SCHEDULE**

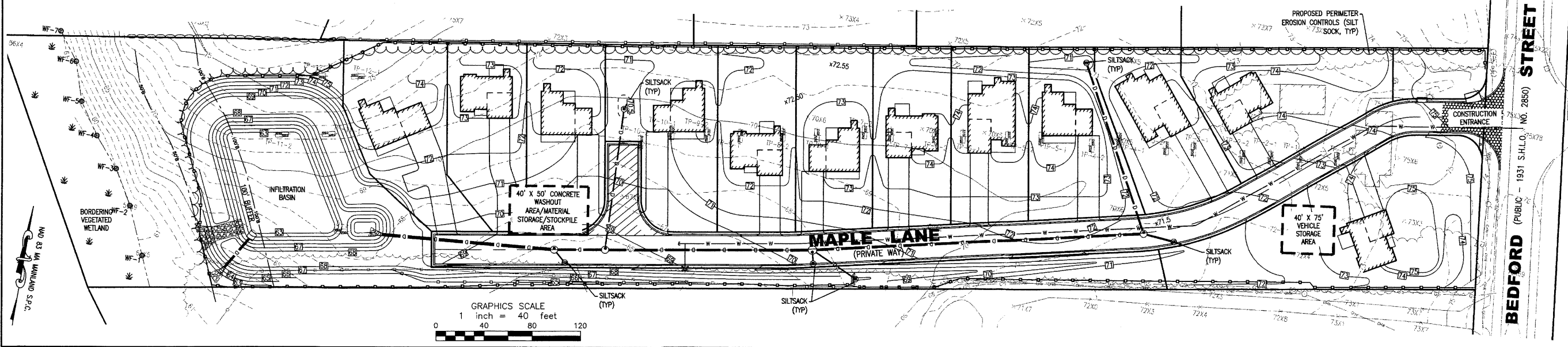
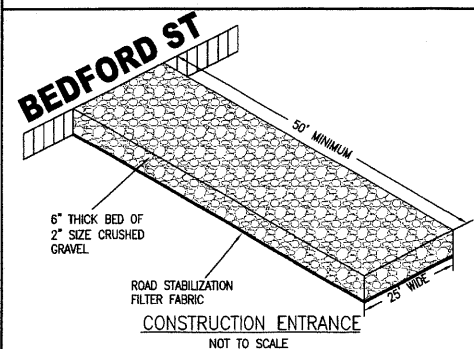
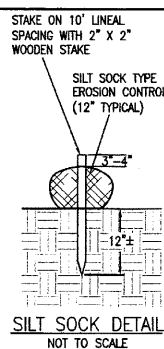
THE OPERATION AND MAINTENANCE (O&M) SCHEDULE DURING THE CONSTRUCTION PHASE IS THE RESPONSIBILITY OF THE DEVELOPER AND/OR SITE CONTRACTOR. THE OUTLINE BELOW SHALL BE ADHERED TO AS CLOSELY AS POSSIBLE TO ENSURE THE PROPER CONSTRUCTION AND FUNCTION OF THE DRAINAGE SYSTEM.

- PRIOR TO CONSTRUCTION, SILT SOCK SHALL BE INSTALLED PER THE APPROVED PLANS. THE SILT SOCK SHALL BE INSPECTED PRIOR TO A LARGE STORM EVENT TO ENSURE THAT THE EROSION CONTROL WILL FUNCTION AS REQUIRED AND FOLLOWING A STORM TO INSPECT FOR DAMAGE TO THE EROSION CONTROL ELEMENTS, ANY DAMAGE OR IMPROPER INSTALLATION THAT IS NOTICED PRIOR TO OR FOLLOWING A STORM EVENT SHALL BE PROMPTLY REPLACED OR REPAIRED IN A SATISFACTORY MANNER SO AS TO PREVENT SEDIMENT FROM BYPASSING THE EROSION CONTROL BARRIER.
- THE LIMIT OF CLEARING SHOWN ON THE APPROVED PLAN SHALL BE STRICTLY ADHERED TO. IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO DETERMINE THE LEVEL OF SAFETY OF STANDING TREES.
- IN CONJUNCTION WITH THE SITE CONSTRUCTION, ALL DRAINAGE STRUCTURES, INCLUDING THE STORMTRAP SYSTEM, SHALL BE CONSTRUCTED AND STABILIZED AS SOON AS POSSIBLE. METHODS OF STABILIZATION INCLUDE, BUT ARE NOT LIMITED TO, HYDROSEED, LOAM AND SEED, STRAW MULCH, EROSION CONTROL BLANKETS, ETC.
- THE CATCH BASINS, DRAINAGE MANHOLES, AND SEDIMENT FOREBAY SHALL BE INSPECTED WEEKLY DURING CONSTRUCTION. ANY SEDIMENT BUILDUP OF EIGHT (8) INCH DEPTH IN EITHER OF THE STRUCTURES SHALL BE PROMPTLY REMOVED BY HAND OR MECHANICAL METHODS AND ALL DEBRIS REMOVED IN ACCORDANCE WITH ALL LOCAL, STATE, AND FEDERAL REGULATIONS.



**SILT SOCK REGULAR FLOW**

PROPERTIES	TEST METHOD	UNITS	TEST RESULTS
GRAB TENSILE	ASTM D-4632	LBS	167.5X300
GRAB ELONGATION	ASTM D-4632	%	10X15
PUNCTURE STRENGTH	ASTM D-4633	LBS.	900
TRAPEZOID TEAR	ASTM D-4335	LBS.	65X90
UV RESISTANCE (6600 HRS)	ASTM D-4355	%	96
AOS	ASTM D-4751	US SIEVE	30
FLOW RATE	ASTM D-4491	GAL./MIN./FT <sup>2</sup>	66
PERMITTIVITY	ASTM D-4491	SEC-1	0.862



I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William McGovern* March 2, 2023 DATE



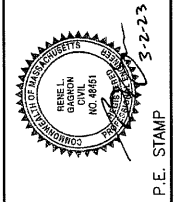
**LAKEVILLE ZONING BOARD OF APPEALS**

APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

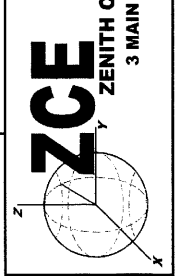
APPROVED: \_\_\_\_\_

ENDORSED: \_\_\_\_\_

FOR REGISTRY USE ONLY



**ZCE** ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208



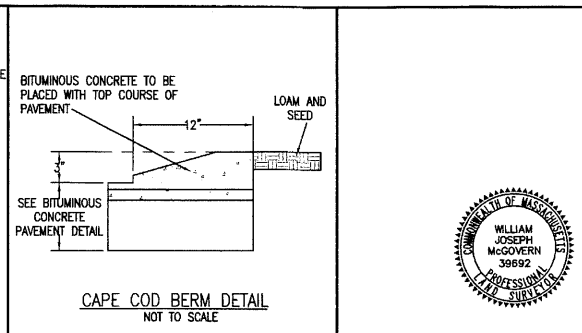
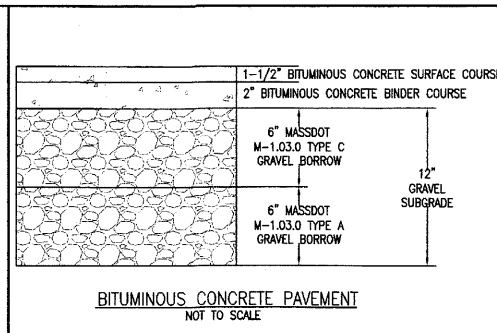
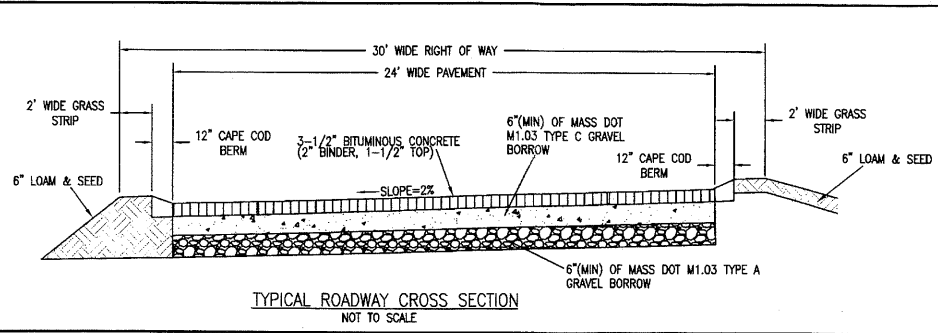
REV.	DATE	DESCRIPTION	BY
1.	2/27/23	REVIEW ENG. COMMENTS	RLG/JLB

DATE: 11/22/2022  
PROJECT NUMBER: 0143-13-01  
SCALE: 1"=40'  
SHEET ID: E

**EROSION CONTROL PLAN**

109 BEDFORD STREET  
LAKEVILLE, MASSACHUSETTS

NORTH BEDFORD CROSSING LLC.  
1 LAKEVILLE BUSINESS PARK DRIVE  
LAKEVILLE, MASSACHUSETTS



I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE \_\_\_\_\_

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William J. McGovern* March 2, 2023  
DATE

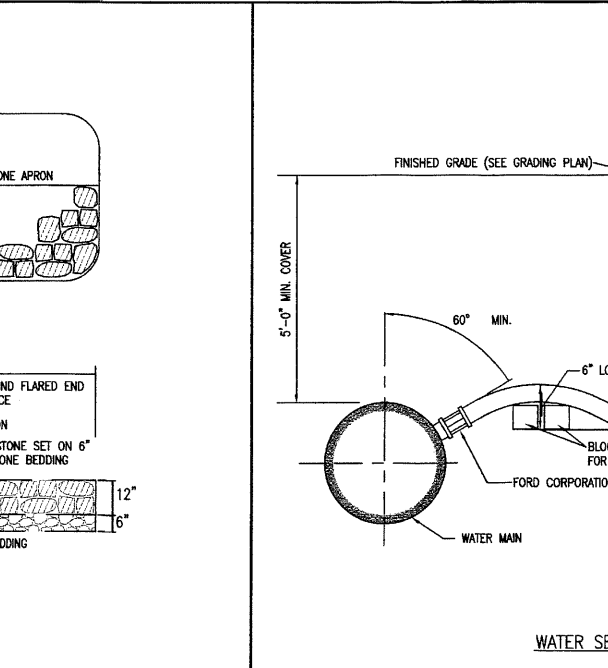
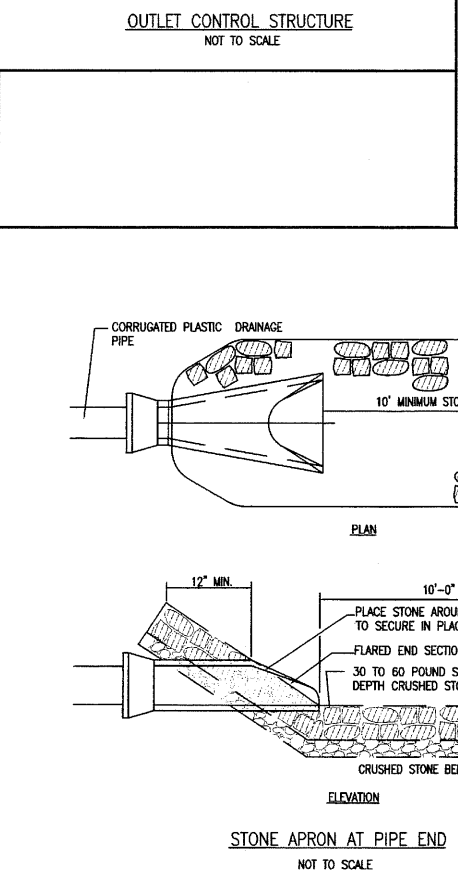
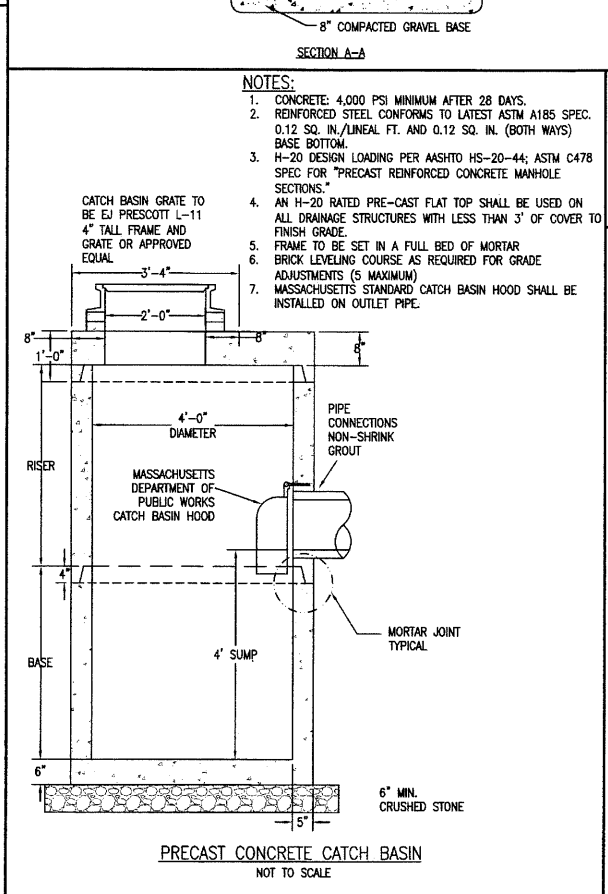
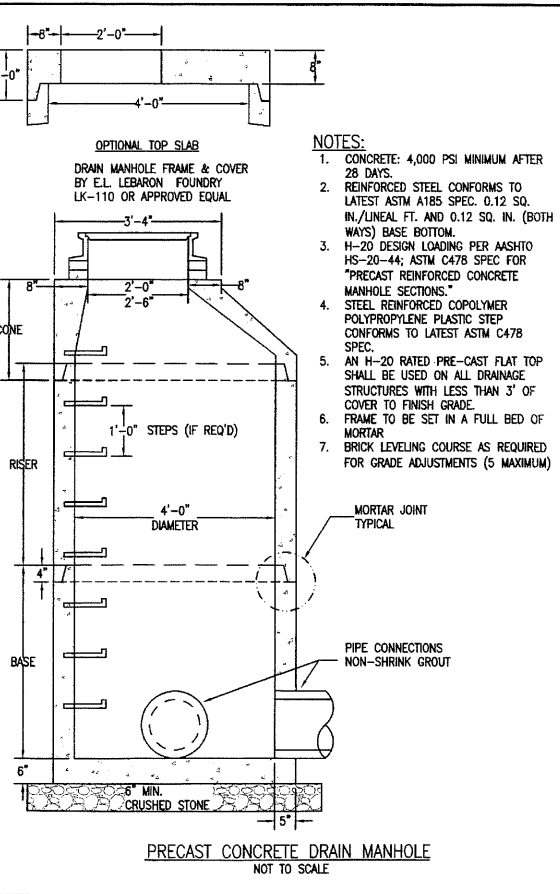
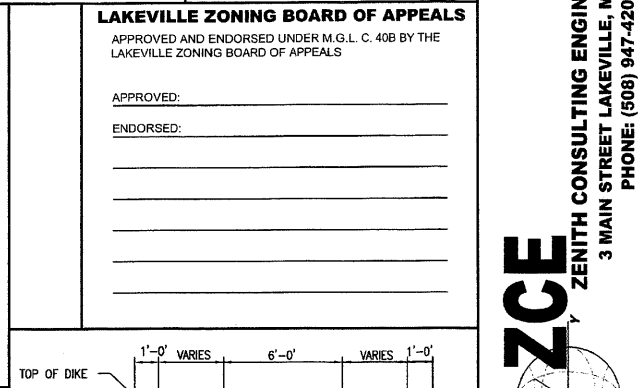
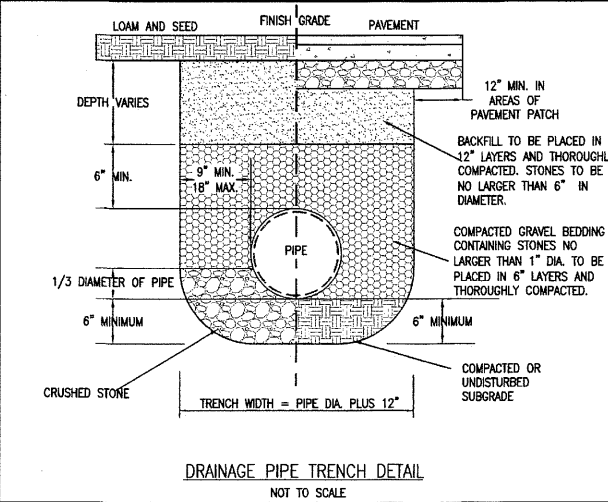
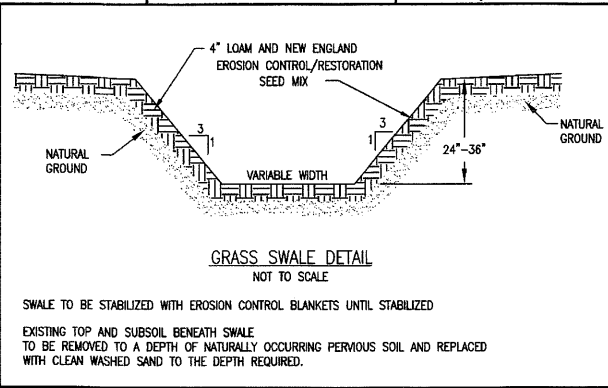
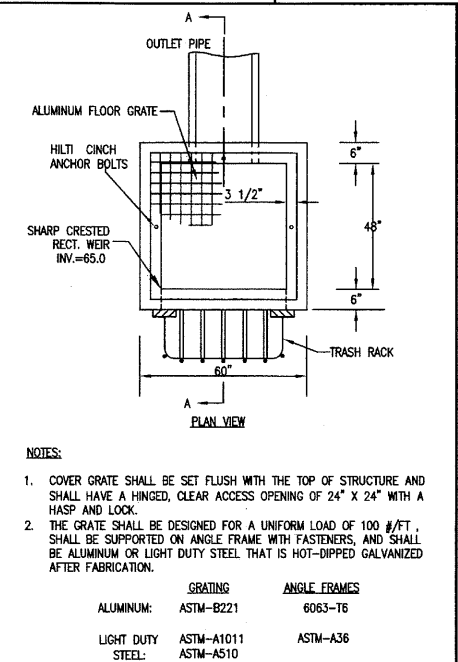
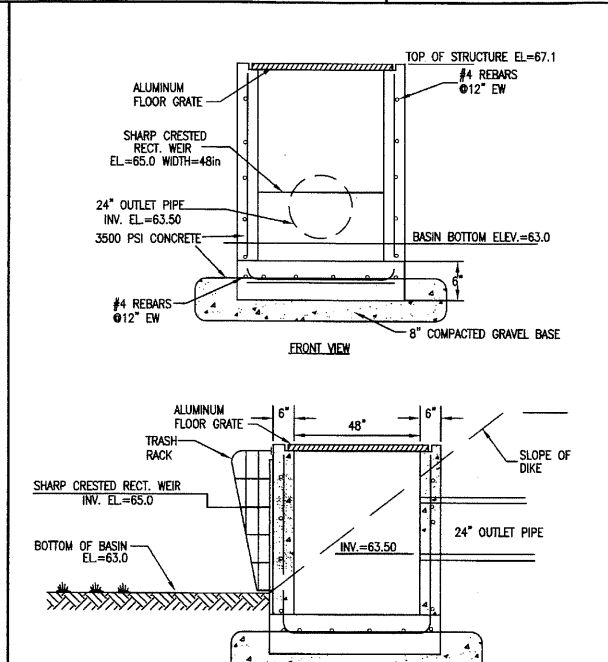
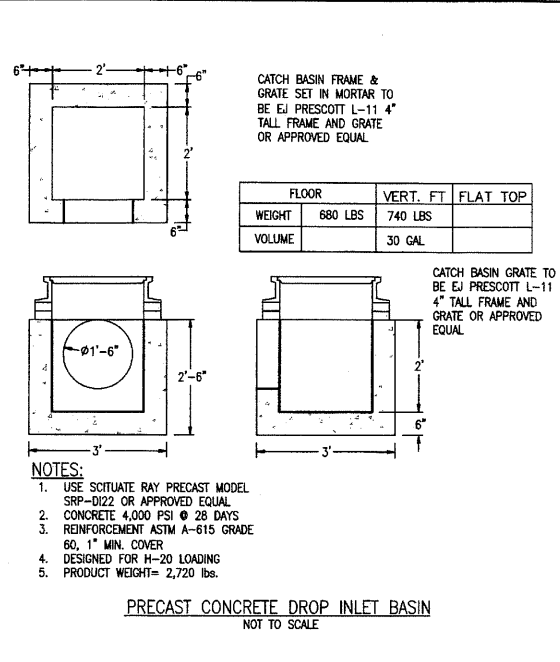
FOR REGISTRY USE ONLY

**LAKEVILLE ZONING BOARD OF APPEALS**  
APPROVED AND ENDORSED UNDER M.G.L.C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

APPROVED: \_\_\_\_\_  
ENDORSED: \_\_\_\_\_

**ZCE**  
ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208

REG. NO. 3-2-2-3  
P.E. STAMP



REV.	DATE	DESCRIPTION	BY	APP.
1.	2/27/23	REVIEW ENG. COMMENTS	RLC	JLB

**DETAIL SHEET**

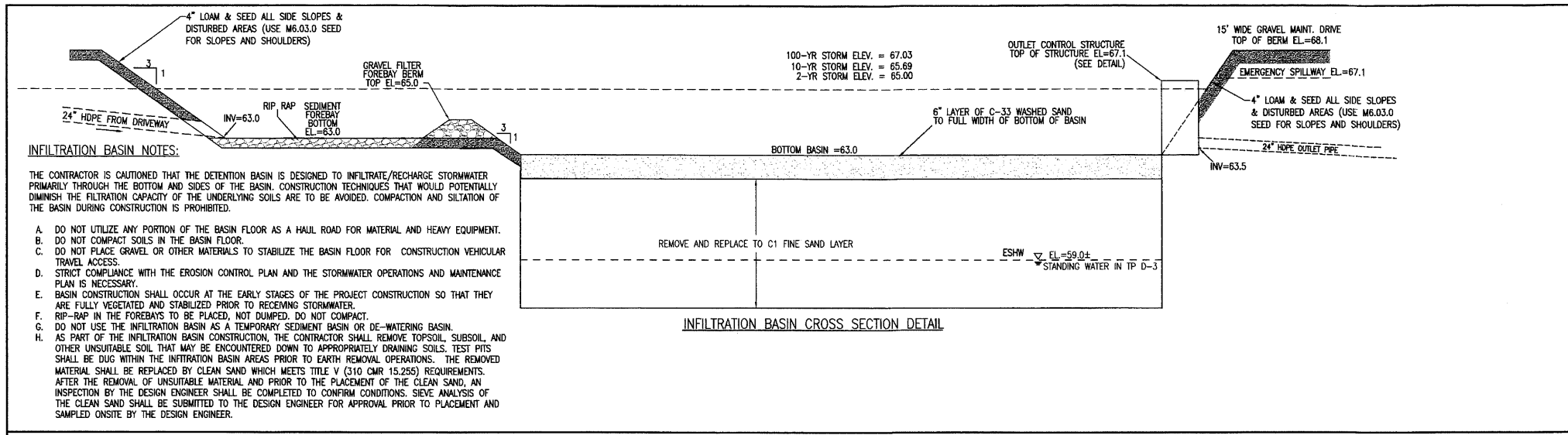
DATE: 11/22/2022  
PROJECT NUMBER: 0143-13-01  
SCALE: NOT TO SCALE  
SHEET ID: D1

DRAWN BY: RLG  
DESIGNED BY: RLG  
CHECKED BY: RNF  
APPROVED BY: JLB

**109 BEDFORD STREET  
LAKEVILLE, MASSACHUSETTS**

**NORTH BEDFORD CROSSING LLC.  
1 LAKEVILLE BUSINESS PARK DRIVE  
LAKEVILLE, MASSACHUSETTS**

NOTE:  
1. ALL WATER SERVICES/MAINS TO BE INSTALLED PER TAUNTON WATER DEPARTMENT REQUIREMENTS  
2. WATER SERVICE SIZES TO BE DETERMINED BY OTHERS



I HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE LAKEVILLE ZONING BOARD OF APPEALS WAS RECEIVED AND RECORDED ON \_\_\_\_\_ AT THIS OFFICE, AND NO APPEAL WAS RECEIVED DURING THE TWENTY (20) DAYS NEXT AFTER SUCH RECEIPT OF RECORDING OF SAID NOTICE.

TOWN CLERK, LAKEVILLE, MA DATE \_\_\_\_\_

I CERTIFY THAT THIS PLAN HAS BEEN PREPARED IN CONFORMANCE WITH THE RULES AND REGULATIONS OF THE REGISTERS OF DEEDS.

*William J. McGovern* March 2, 2023 DATE \_\_\_\_\_

FOR REGISTRY USE ONLY

**LAKEVILLE ZONING BOARD OF APPEALS**

APPROVED AND ENDORSED UNDER M.G.L. C. 40B BY THE LAKEVILLE ZONING BOARD OF APPEALS

APPROVED: \_\_\_\_\_

ENDORSED: \_\_\_\_\_

DATE: \_\_\_\_\_

PH. L. STAMP

**ZCE** ZENITH CONSULTING ENGINEERS, LLC  
3 MAIN STREET LAKEVILLE, MA 02347  
PHONE: (508) 947-4208

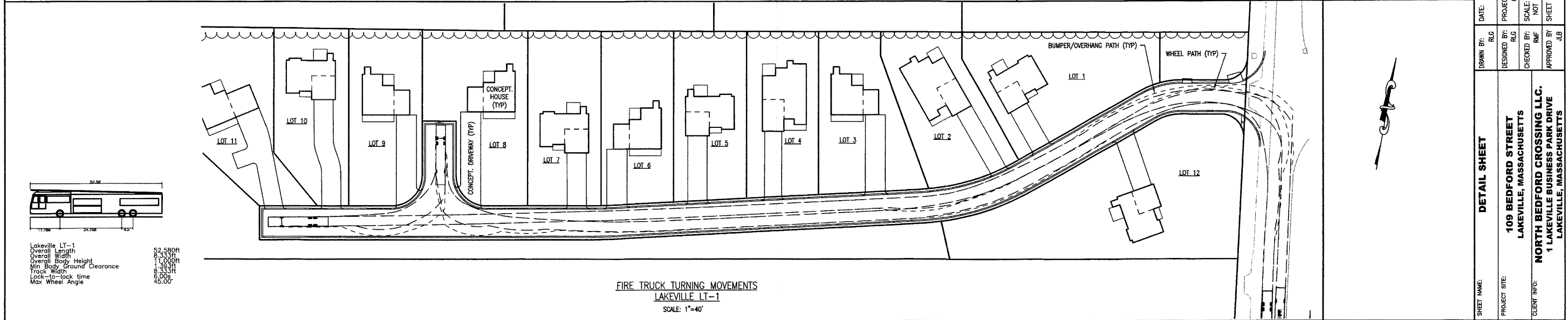
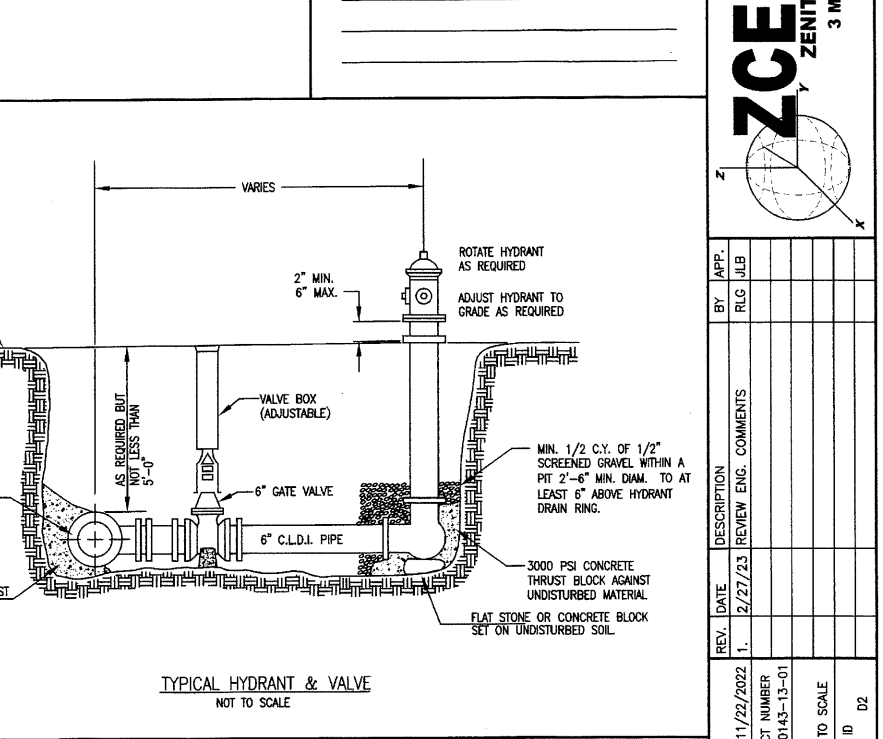
**INFILTRATION BASIN NOTES:**

THE CONTRACTOR IS CAUTIONED THAT THE DETENTION BASIN IS DESIGNED TO INFILTRATE/RECHARGE STORMWATER PRIMARILY THROUGH THE BOTTOM AND SIDES OF THE BASIN. CONSTRUCTION TECHNIQUES THAT WOULD POTENTIALLY DIMINISH THE FILTRATION CAPACITY OF THE UNDERLYING SOILS ARE TO BE AVOIDED. COMPACTION AND SILTATION OF THE BASIN DURING CONSTRUCTION IS PROHIBITED.

**SOIL LOGS:**  
DATE: 7/15/2021 & 7/16/2021  
PERFORMED BY: TOM MORRIS, ZENITH CONSULTING ENG. LLC.  
PERFORMED BY: JIM ROMANO, LAKEVILLE BOARD OF HEALTH

DEPTH (INCHES)	ELEV. DEPTH (FEET)(INCHES)	TP-1-1	TP-1-2	TP-2-1	TP-2-2	TP-3-1	TP-3-2	TP-4-1	TP-4-2	TP-5-1	TP-5-2	TP-6-1	TP-6-2
0	73.0	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2
6	72.5	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4	B LOAMY SAND 10 YR 5/4
24	71.0	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2	C1 FINE SAND 2.5Y 6/2
70	67.2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2	C2 COARSE SAND 2.5Y 5/2
156	60.0	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE

DEPTH (INCHES)	ELEV. DEPTH (FEET)(INCHES)	TP-7-1	TP-7-2	TP-8-1	TP-8-2	TP-9-1	TP-9-2	TP-10-1	TP-10-2	TP-11-1	TP-11-2	TP-12-1	TP-12-2	TP-D-1	TP-D-2	TP-D-3
0	70.2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2	0/A SANDY LOAM 10R 3/2
8	69.5	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4	B SANDY LOAM 10 YR 5/4
26	68.0	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2	C1 FINE LOAMY SAND 2.5Y 6/2
50	66.0	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3	C2 MEDIUM-COARSE SAND 2.5Y 5/3
128	58.5	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE	MOTTLING @ NONE WEEPING @ NONE STANDING @ NONE ESHW EL = NONE



Lakeville LT-1

Overall Length	52.580ft
Overall Width	8.363ft
Overall Body Height	11.000ft
Min. Body Ground Clearance	8.33ft
Track Width	6.000ft
Lock-to-lock time	6.000s
Max. Wheel Angle	45.00°

**DETAIL SHEET**

PROJECT SITE: 109 BEDFORD STREET LAKEVILLE, MASSACHUSETTS

CLIENT INFO: NORTH BEDFORD CROSSING LLC, 1 LAKEVILLE BUSINESS PARK DRIVE LAKEVILLE, MASSACHUSETTS

REV.	DATE	DESCRIPTION	BY	APP.
1.	2/27/23	REVIEW ENG. COMMENTS	RLG	JLB

DATE: 11/22/2022  
PROJECT NUMBER: 0143-13-01  
SCALE: NOT TO SCALE  
SHEET ID: D2

DRAWN BY: RLG  
DESIGNED BY: RLG  
CHECKED BY: RLF  
APPROVED BY: JLB