RIEMER | BRAUNSTEIN

Robert C. Buckley
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(617) 880-3537 direct
(617) 692-3537 fax

June 13, 2023

VIA HAND DELIVERY

Randolph Town Council
41 South Main Street, 2nd Floor
Randolph, MA 02368

RE: Multiple Parcels on Randolph Road, Randolph, MA

Dear Mr. President and Members of the Town Council:

This office and the undersigned represent Bluewater Property Acquisitions LLC ("Applicant") as it relates to the future development of the properties identified as Randolph Road - Multiple Parcels, Randolph, MA (collectively, the "Property"). The Property consists of approximately 23.4 +/- acres of unimproved land and is situated within the Industrial ("ID") Zoning District. The Applicant is seeking to construct a new building of approximately 120,000 +/- square feet for a warehouse distribution facility with integrated surface parking, site circulation, loading areas, landscaping, retaining walls and stormwater management features (the "Project").

For your consideration, enclosed please find one (1) original and eleven (11) copies of the following materials with a digital copy to be provided separately:

1. Application for Special Permit along with Statement in Support of 24 Hour Operation;

2. Owner Authorization

3. Filing Fee in the amount of $500.00 made payable to the Town of Randolph;

4. Project Site Plans entitled: "Planning Board Submission, Randolph Road, Multiple Parcels" dated May 16, 2023 prepared by DiPrete Engineering (11" x 17"); and

5. Traffic Impact Study, dated December 22, 2022, prepared by McMahon Associates, Inc.

6. Evaluation of Site Sound Emissions, Proposed Warehouse, dated May 12, 2023, prepared by Ostergaard Acoustical Associates.

7. Architectural Plans and Renderings, dated May 16, 2023, prepared by Ford & Associates (11" x 17").

We would respectfully request that this matter be scheduled for consideration on the agenda for the next Town Council hearing on July 10, 2023

If in the interim, you have any questions, please do not hesitate to contact me.

Very truly yours,

Robert C. Buckley

RCB:khh
Enclosure

cc: Connor Downey, Bluewater Property Group (w/encl.)
Alexandra Escamilla, Bluewater Property Group (w/encl.)
Gregg Burnett, DiPrete Engineering (w/encl.)
Kevin Demers, DiPrete Engineering (w/encl.)
Mark Ford, Ford Architects (w/encl.)
Kristine H. Hung, Esquire (w/encl.)

3628938.1

RANDOLPH TOWN COUNCIL

APPLICATION FOR A SPECIAL PERMIT

Project Type	● **24 Hour Operation** ○ **Drive Through Window** ○ **Wireless Communication Facility** ○ **Marijuana Facility** ○ **Other_____**		○ **Adult Entertainment** ○ **Crematorium** ○ **Gravel Removal** ○ **Union Crossing Project**
Type of Request	● **Initial Application**	○ **Renewal**	○ **Modification/Amendment**
Assessor Parcel ID ***map-block-parcel***	See Addendum "A" attached hereto	**Norfolk County Registry of Deeds**	*Book/Page or Cert #* See Addendum "A" attached hereto
Parcel Address	Randolph Road - Multiple Parcels, Randolph, MA		
Zoning District	Industrial	**Size of Parcel**	23.4 +/- acres
Parcel Attributes	● **Wetland** ○ **Flood Plain** ● **Wetland Resource**		
Project Description	See Addendum "B" attached hereto for project narrative		
Other permits or approvals required	● **Conservation** ○ **Licensing Board** ○ **MassDOT** ● **Stormwater** ○ **ZBA**		

Applicant	Bluewater Property Acquisitions LLC		
Contact person	Alexandra Escamilla		
Applicant Status	○ **Owner** ○ **Tenant** ○ **Licensee** ● **Buyer** ○ **Other_____**		
Address	76 8th Avenue, 10th Floor, New York, NY 10011		
Phone	312-415-2450	**Email**	aescamilla@bluewaterpg.com

If property owner is not the Applicant, authorization from the owner is required

Surveyor	DiPrete Engineering		
Contact person	Gregg Burnett, Principal		
Address	105 Eastern Avenue, Suite 200, Dedham, MA 02026		
Phone	508-410-3992	**Email**	gburnett@diprete-eng.com

Engineer	DiPrete Engineering		
Contact person	Greg Burnett, Principal		
Address	105 Eastern Avenue, Suite 200, Dedham, MA 02026		
Phone	508-410-3992	**Email**	gburnett@diprete-eng.com

Property Owner	ML Real Estate Trust LLC and Randolph Road Realty, LLC		
Address	11 Randolph Road, Randolph, MA 02368		
Phone		**Email**	mjl@seaandshorecontrcating.com

For any application for a Special Permit, the applicant shall submit a narrative and additional documentation to support:

- That the proposed use is in harmony with the general purpose and intent of the Town's ordinances;
- That the proposed use is in an appropriate location and is not detrimental to the neighborhood and does not significantly alter the character of the zoning district;
- Adequate and appropriate facilities will be provided for the proper operation of the proposed use;
- That the proposed use would not be detrimental or offensive to the adjoining zoning districts and neighboring properties due to the effects of lighting, odors, smoke, noise, sewage, refuse materials or other visual nuisances;
- That the proposed use would not cause undue traffic congestion in the immediate area;
- Any specific requirements detailed in the Randolph Zoning Ordinances.

I hereby certify, under the pains and penalties of perjury, that the information contained in this application is true, accurate and complete to the best of my knowledge and belief. I agree to abide by the Randolph Zoning Ordinances and complete construction of the project in accordance with said ordinances, rules and any conditions of the Town Council.

DocuSigned by:
Michael Coppola
83F6EA0D052D457...

Applicant Michael W. Coppola

6/9/2023

Date

ADDENDUM "A"

Property Owner:	**Title Reference:**	**Parcel ID**:
ML Real Estate Trust LLC	Certificate of Title #185889 Book 41137, Page 181	17-F-1.01 17-K-2
Randolph Road Realty, LLC	Book 36563, Page 246	17-1-3 17-1-2.192 17-1-4.201 17-H-1.Q 17-H-2.554-5 17-K-1.R 17-J-7.1 17-J-8.225-2 17-L-1.S 17-L-2.695 17-D-5.704-7 34-A-2.713-7 17-J-15.756-7 17-J-14.785 34-A-3.739-7

ADDENDUM "B"

STATEMENT IN SUPPORT OF SPECIAL PERMIT FOR 24 HOUR OPERATION

MULTIPLE PARCELS ON RANDOLPH ROAD, RANDOLPH, MA

Bluewater Property Acquisitions LLC ("Applicant" or "Bluewater") seeks authorization from the Randolph Town Council for a special permit pursuant to Section 200-46(B)(8) of the Town of Randolph Zoning Bylaw ("Zoning Bylaw") for a 24 hour operation at the property located on multiple parcels on Randolph Road, Randolph, MA ("Property"). The Property is located within the Industrial (ID) zoning district and consists of approximately 23.4 +/- acres of unimproved land, all as more particularly shown on the Site Plans entitled: "Planning Board Submission, Randolph Road, Multiple Parcels located in Randolph, Massachusetts" dated May 16, 2023, prepared by DiPrete Engineering ("Site Plans"). There are no additional overlay districts encumbering the Property. Within the Industrial zoning district, the Property may be used, by right, for the purpose of: *"Wholesale, warehousing, distributing, repair, rental and servicing of any commodity, excluding live animals, explosives and storage of flammable liquids and gases, large."* The Property is bounded by Randolph Road and commercial properties to the north and west, wetland resource areas to the east and the Village at Broad Meadow, a residential development, to the south.

Under the site programming, the Applicant seeks to construct a new building of approximately 120,000 square feet for a warehouse distribution facility with integrated surface parking, site circulation, loading areas, landscaping, retaining walls and stormwater management features with access to the Project site via a two-way site driveway off of Randolph Road with 92 parking spaces located at the front of the building, 16 passenger parking spaces, 16 trailer spaces and 22 loading docks located at the rear of the building. The Project has been designed to minimize potential impacts, to be sensitive to abutters, and to meet the economic development goals of the Town within the Industrial District.

Bluewater Property Group is an experienced industrial developer with a long track record of working with communities on the successful redevelopment of warehouses on industrial-zoned sites. Bluewater relies on the public process to address community questions and concerns and takes a long-term ownership view of all projects. Representatives from Bluewater will be available to answer questions, post information, and field concerns throughout the planning and construction process. Bluewater regularly communicates with Town leadership during construction on planned activities through email updates and often works with administrators to post relevant project information online.

Pursuant to the criteria specified in 200-46(A)(1) and (2) and 200-46(b)(8) of the Zoning Bylaw detailing the goals and standards, we would respectfully suggest that the envisioned program fully complies with the prescribed requirements, as follows:

- ***That the proposed use is in harmony with the general purpose and intent of the Town's ordinances:***

The proposed Project is consistent with this goal for the following reasons: (i) the proposed use of the facility as a warehouse is permitted, by right, under the provisions of the Zoning Bylaw; and, (ii) the proposal will result in improved fiscal conditions through increased tax revenues and the creation of new permanent full time and part-time positions. The building has been designed to facilitate sustainable initiatives, such as the roof will be solar ready and there will be four (4) electric vehicle charging stations located in the employee parking area. Building specifications include enhanced waste management reporting and procurement directives aimed at reducing greenhouse gas emissions. Bicycle parking is provided for employees seeking transportation alternatives.

- ***That the proposed use is in an appropriate location and is not detrimental to the neighborhood and does not significantly alter the character of the zoning district.***

The Site is located within the Industrial zoning district which states that the general purpose as set forth in the 2017 Comprehensive Master Plan is to: *"publicize its vacant and underutilized properties for appropriate desired commercial and industrial development"* The Property is presently unimproved and as such, the proposed use and operations are in an appropriate location and will not be detrimental to the neighborhood nor will it significantly alter the character of the zoning district for the following reasons: (i) access to the site is from Randolph Road and the proposed building is set back 434 feet from North Street, (ii) truck access and loading is located at the rear of the building adjacent to existing commercial uses with the building acting as a natural buffer for noise and is screened from the residential abutters, (iii) 35% of the Property will be disturbed as part of the proposed development, while the remaining 65% will be left as untouched woods and Natural Resource Areas, (iv) the Property is easily accessible to various highway interchanges; (v) the proposed use is compatible with abutting commercial operations; and, (vi) the proposed use will aid in the diversification of commercial operations in the Industrial zoning district.

The program design situates the primary employee parking to the front of the building closest to the residential abutters and is adequately screened from such abutters. Van, tractor trailer spaces and loading docks are located at the rear of the building where a sound wall will be constructed to mitigate potential impacts. This commercial vehicle activity orientation and proposed mitigation allows the building and landscaping to serve as buffers to any sound impacts. Enclosed in this application is a full sound study prepared by Ostgaard Acoustical Consultants.

While no specific tenant has been identified, Bluewater anticipates that the building will be occupied by one or more distribution, warehouse, or storage, users consistent with the Industrial

district allowed uses. While these types of warehouses operate 24/7, most of their activity occurs during the daytime hours; nighttime operations are almost exclusively internal to the building generally used to prepare for the next day. Further, shift start and stop times are typically staggered throughout the day and inbound/outbound activities are planned for efficient loading and unloading. And further, that such development will support the Town's economic goals by increasing revenue, creating jobs, and limiting impacts on existing public and educational services.

- ***Adequate and appropriate facilities will be provided for the proper operation of the proposed use.***

The proposed stormwater management system will treat both the quality and the quantity of stormwater discharge from the Property, all of which will be designed utilizing best management practices. The stormwater management proposes a sediment forebay, sand filter and detention basin system for a majority of the development runoff. A proprietary practice (Downstream Defender) is proposed for the entrance driveway runoff. These practices will help to remove 90% total suspended solids (TSS) and 60% total phosphorus (TP) as required per the Randolph Stormwater Rules and Regulations. The Project will not place unreasonable demands on Town services and infrastructure. A stormwater permit application has been filed with the Stormwater Authority of the Town.

Prior to construction Bluewater will file a SWPP consistent with soil erosion and sediment control regulations. During the construction period, linear erosion controls consisting of compost socks and/or silt fence will be provided at all downgradient limits of land disturbance. In addition, temporary diversion conveyance measures are proposed to divert stormwater runoff on disturbed areas to temporary sediment traps to allow for deposition of sediments prior to runoff to adjacent resource areas. Stockpile/staging and concrete washout areas will be incorporated as shown on the Soil Erosion & Sediment Control Plan within the site plan set.

The water service will be extended from the existing main on North Street or Randolph Road as coordinated with the Town DPW. Four (4) fire hydrants will be maintained to support the tenant operations. Fire truck access will be provided around all four sides of the building. The south driveway is intended for emergency access only and signage, striping and collapsible bollards will be provided at either end of this driveway to ensure this drive aisle remains clear.

Utilities will be accessed via North Street or Randolph Road as applicable and shown on the Site Plans. The utilities proposed to service the building include electric, gas, water and sewer. We have confirmed that National Grid has availability to service the electrical power needs of the site and Project. Gas is available and will be provided by Eversource. Final connection to the sewer and water utilities are being coordinated with the Town DPW.

- ***That the proposed use would not be detrimental or offensive to the adjoining zoning districts and neighboring properties due to the effects of lighting, odors, smoke, noise, sewage, refuse materials and other visual nuisances.***

The proposed building is set within a natural barrier of protected resource areas and a canyon-like setting reducing visibility to the public. However, building features have been incorporated to add visual interest while reducing the appearance of bulk or mass, such as varied facades and window treatments, differed colors, well varied rooflines and well-proportioned roof overhangs, and other details intended to establish an appropriately scaled design. Renderings have been filed in conjunction with this application.

A proposed Landscape Plan is set forth in the Site Plans which show landscaped islands within the parking area and plantings around the perimeter of the building. Parking lots, loading areas, dumpsters, shall be screened from view from all public rights of way and all adjacent properties by the use of landscape buffers, berms, natural contours, fences or a combination of all of the above. Low brush areas facing abutting residences will be infilled with additional landscaping for further screening. The site programming complies with the landscape requirements of the Town of Randolph Zoning Bylaws and intends to keep as many existing mature trees as possible. The Project proposes leaving approximately 65% of the site untouched, including all Resource Areas and other wooded areas throughout.

A Photometric Plan showing the light intensity in foot-candles is provided in the Site Plans. The lighting has been designed to minimize glare and preclude light spillover to adjacent properties. Impacts have been minimized to surrounding neighbors as well as onsite wetlands and wildlife through the use of dark sky compliant lighting fixtures, using lights that have a color temperature of not more than 3,000 Kelvin, and the use of back shields.

Solid waste will be privately managed and disposed of through the use of on-site trash compactors located within the loading dock area, all of which will be maintained by the property owner or tenant, and trash will be transported off-site by a licensed hauler. During construction, processing and recycling of construction waste will be managed, and the Applicant will contract with a licensed waste hauler having off-site sorting capabilities. All construction debris will be taken off site by the waste hauler, sorted as either recycled debris or waste debris and sent to the proper recycling center or waste facility. As necessary, construction debris will be covered or wetted to minimize airborne dust particles.

During construction, standard pest control measures will be utilized including setting of traps, inspection of incoming materials, ongoing site clean-up and trash control. Bluewater will engage with a pest control service for regular site maintenance during construction and post completion. Additionally, during construction, Bluewater will employ best practices along with State and locally regulated means and methods for excavation, rock removal, and vertical construction. Abutters will be notified of anticipated construction activities, durations, and hours of operation through electronically posted notices. Bluewater will obtain precondition surveys and comply with all State and local-mandated monitoring requirements. Dust control measures including water tank and sprinklers will be employed during construction to prevent the tracking of materials on public roads and to control air quality during construction.

- ***That the proposed use would not cause undue traffic congestion in the immediate area.***

Consideration has been given by the Applicant relative to the impact of the Project on the corridor and general area to ensure that the Project will not overburden the existing roadway facilities. This will be achieved as a result of proposed tenancy operations and the associated shift scheduling which will minimize trip activity during traditional commuter periods as the facility intends to operate 24 hours per day.

As discussed above, on-site parking for employees will be located at the southern end of the building closest to the residential abutters. Tractor trailer spaces and associated loading docks will be located along the northern end of the building to screen the sound and visual impacts. Planned site ingress will be via a curb cut located on Randolph Road and will allow for all queuing to be on Randolph Road.

The proposed use and operation of the Premises necessitates the creation of dedicated parking areas to service employees as well as van, shipping office parking, and additional areas dedicated to tractor trailer delivery vehicles. A turnaround has been provided to the rear of the building in order to allow truck traffic to remain to the rear of the building as well as reduce the lane width south of the building for the purpose of emergency access only. Sidewalks are proposed to provide safe and convenient access to the main entrance of the building. Bicycle racks and electric vehicle charging stations will also be provided. A traffic report has been filed in conjunction with this application.

- ***Any specific requirements detailed in the Randolph Zoning Ordinances.***

The proposed Project is in harmony with the goals of the Master Plan. The proposed project will aid in the diversification of commercial operations in the Industrial zoning district and yield increases in property assessments that will have a positive annual tax generation for the community as a result of limited impacts on municipal services and infrastructure. While Bluewater has not yet secured a tenant(s) for the Project building, Bluewater estimates, based upon its experience with similarly sized buildings in the northeast, that the construction of a warehouse with office uses is projected to generate approximately between 60 and 70 new jobs in the Town of Randolph including warehouse management positions.

The estimated annual tax revenue from the proposed 120,000 square feet of gross floor area representing the proposed building and land, at Project completion, is projected to be approximately $180,000.00 (rounded) compared to approximately $28,000 generated by the Property in 2022. This number excludes any projected increase in land value.

In addition, it is anticipated that secondary businesses will provide support services to the proposed operation and while those ancillary benefits cannot be quantified, their impacts could create a positive ripple effect of overall economic well-being.

The Project is expected to result in minimal impacts to Town services, including fire, police, water, school systems and other services, and while there will be some temporary construction impacts as with other projects of this nature, the Project is expected to have negligible

environmental impacts, and positive community benefits in the form of additional revenues generated by the new building proposed for the site. As a result, there are no measurable adverse impacts. When compared to other uses otherwise permitted within the Zoning District, the proposed uses are not expected to result in any adverse environmental and community impacts. The Project is proposed to be constructed in accordance with applicable stormwater, DPW, utility, public safety, wetlands and zoning requirements, and as a result, the Project is not expected to result in the creation of significant adverse impacts to the Town.

3593691.2

June 6, 2023

Randolph Town Council
41 Main Street, 2nd Floor
Randolph, MA 02368

RE: Special Permit Application for 24 Hour Operation
Multiple Parcels on Randolph Road, Randolph, MA

Dear Mr. President and Members of Town Council:

I hereby grant Bluewater Property Acquisitions LLC having an address at 76 8th Avenue, 10th Floor, New York, NY 10011, authorization to file a Special Permit Application with the Randolph Town Council for 24 hour operation for a proposed development on multiple parcels on Randolph Road, Randolph, MA owned by ML Real Estate Trust LLC and Randolph Road Realty, LLC.

Thank you and please contact me if you have any questions at the address below:

ML Real Estate Trust and Randolph Road Realty, LLC
11 Randolph Road
Randolph, MA 02368
Email: mjl@seaandshorecontracting.com

Sincerely,

DocuSigned by:
Michael J Lally
53F2BAD8111544F...

Michael J. Lally

3629796.1

McMAHON
TRANSPORTATION ENGINEERS & PLANNERS

Traffic Impact Study

Proposed Industrial Facility

11 Randolph Road
Randolph, Massachusetts

Prepared by
McMahon Associates, Inc.
350 Myles Standish Boulevard Ste 103
Taunton, MA

Prepared for
Bluewater Property Group
December 2022

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INTRODUCTION

McMahon Associates has completed a review of the existing traffic operations and potential traffic impacts associated with the proposed industrial facility (herein referred to as the "Project") to be located at 11 Randolph Road, in the Town of Randolph, Massachusetts. The purpose of this traffic impact study is to evaluate existing and projected traffic operations and safety conditions associated with the Project within the study area.

The assessment documented in this traffic impact study is based on a review of existing traffic volumes and the anticipated traffic generating characteristics of the Project. The study examines existing and projected traffic operations (both with and without the Project) in the vicinity of the Project site. The study area was selected based on a review of the surrounding roadway network and estimated trip generating characteristics of the proposed Project. This study provides an analysis of traffic operations during the weekday morning and weekday afternoon peak hours, when the combination of adjacent roadway volumes and Project trips would be expected to be the greatest.

Project Description

The Project site, depicted in Figure 1, is bounded by Randolph Road and commercial properties to the north, undeveloped land to the east and south, and an existing warehouse to the west. The site is currently undeveloped.

As shown in the proposed Concept Plan prepared by DiPrete Engineering dated August 4, 2022, the Project would include the construction of a 120,000 square foot (sf) industrial building. The proposed site would provide approximately 98 parking spaces and 37 loading spaces. Access to the Project site would be provided via a full-access site driveway on the south side of Randolph Road, approximately 600 feet east of the intersection of North Street at Oak Street/Randolph Road.

McMAHON
a Bowman company

Figure 1
Site Location Map
Proposed Industrial Facility
Randolph, Massachusetts

Study Methodology

This traffic impact study evaluates existing and projected traffic operations within the study area for the weekday morning and weekday afternoon peak hour traffic conditions when the combination of the adjacent roadway volumes and estimated Project trips would be expected to be the greatest.

The study was conducted in three steps. The first step consisted of an inventory of existing traffic conditions within the Project study area. As part of this inventory, traffic data was collected during the weekday morning and weekday afternoon peak periods. A field visit was conducted to document intersection and roadway geometries, posted speed limits, and available sight distance at the site driveway. Crash data for the study area intersections was obtained from the Massachusetts Department of Transportation (MassDOT) to determine if the study area has existing traffic safety deficiencies.

The second step of the study built upon the data collected in the first step to establish the basis for evaluating potential transportation impacts associated with the projected future conditions. During this second step, the projected traffic demands associated with planned future developments that could influence traffic volumes at the study area intersections were assessed. The 2022 Existing traffic volumes were forecasted to the future year 2029 to evaluate the 2029 No Build (without Project) conditions and the 2029 Build (with Project) conditions, consistent with MassDOT traffic study guidelines.

The third step of this study determined if measures were necessary to improve future traffic operations, minimize potential traffic impacts, and provide efficient access to the Project site.

Study Area Intersections

Based on a review of the anticipated traffic generating characteristics of the Project and a review of the adjacent roadways serving the Project site, the following study area intersections were selected for analysis:

- North Street at Oak Street/Randolph Road (unsignalized)
- Randolph Road at Site Driveway (unsignalized)

The traffic impact study presented in this report documents existing and future traffic conditions for the study area intersections noted above.

EXISTING CONDITIONS

An assessment of the potential traffic impacts associated with the Project requires a comprehensive understanding of the existing traffic conditions within the study area. The existing conditions assessment included in this study consists of an inventory of intersection and roadway geometries, an inventory of traffic control devices, the collection of traffic volume data in the study area, and a review of recent crash data. The existing conditions in the vicinity of the Project site are summarized below.

Roadway Network

To assess the existing conditions of the surrounding roadway network, an inventory of the study area intersections and roadway geometries, and existing traffic control was conducted on Tuesday, September 27, 2022. A summary of the existing roadway conditions within the study area is provided below.

North Street

North Street is classified as an urban minor arterial under the Town of Randolph jurisdiction. North Street provides access to residential, industrial, and commercial land extending in the north-south direction from its intersection with South Main Street (Crawford Square) in the south, to the Braintree Town Line in the north, where the road continues as Pond Street. The posted speed limit on North Street in the vicinity of the Project site is 30 miles per hour (mph). North Street includes one 14-foot-wide travel lane in each direction, with shoulders measuring eight-feet in width on both sides of the roadway. A sidewalk measuring six-feet in width is provided along the west side of North Street. There is also a sidewalk provided on the east side of North Street, just north of Randolph Road, to provide access to the Massachusetts Bay Transportation Authority (MBTA) Bus Route 238 (Holbrook/Randolph) stop. A crosswalk marked with a Rapid Rectangular Flashing Beacon (RRFB) is provided across North Street, approximately 100 feet north of the intersection with Oak Street/Randolph Road, connecting the inbound/outbound MBTA bus stops located on either side of the street.

Randolph Road

Randolph Road is a dead-end street that runs in the east-west direction extending approximately 1,000 feet east from its intersection with North Street. Randolph Road is classified as a local roadway under private jurisdiction, providing access to commercial and industrial land uses. Randolph Road is a two-way roadway measuring 30-feet in width with no pavement markings. At the intersection of North Street at Oak Street/Randolph Road, the Randolph Road approach is under stop control. There is no posted speed limit on Randolph Road, therefore it is considered to fall under the Townwide statutory speed limit of 25 mph.

Oak Street

Oak Street is classified as an urban collector under the Town of Randolph jurisdiction and runs in an east-west direction from its intersection with North Main Street (Route 28) in the west to its intersection with North Street in the east. Oak Street provides access to residential properties, providing one 12-foot wide travel lane and a 3-foot wide shoulder in each direction. There is a posted speed limit of 30 mph on Oak Street. Oak Street is under stop control at the unsignalized intersection of North Street at Oak Street/Randolph Road, and there is a crosswalk spanning the Oak Street approach

Public Transportation

The MBTA provides service to the study area via the Bus Route 238 (Holbrook/Randolph). There are two MBTA bus stops located within a five-minute walk of the Project site, with the closet stop being located just north of the study area intersection of North Street at Oak Street/Randolph Road. The Holbrook/Randolph bus line provides connections to the MBTA Red Line and Commuter Rail (Greenbush, Kingston, and Middleborough/Lakeville lines) via Quincy Center.

2022 Existing Traffic Volumes

Turning Movement Count Data

To assess peak hour traffic conditions, manual turning movement counts (TMCs) were conducted at the study area intersection of North Street at Oak Street/Randolph Road during the weekday morning and weekday afternoon peak periods. Counts were conducted on Tuesday, September 13, 2022, during the weekday morning (7:00 AM to 9:00 AM) and weekday afternoon (4:00 PM to 6:00 PM) peak periods. Based on a review of the traffic data, the weekday morning peak hour for the study area intersection occurs between 8:00 AM and 9:00 AM, and the weekday afternoon peak hour occurs between 5:00 PM and 6:00 PM. The results of the turning movement counts are tabulated by 15-minute periods and are provided in Appendix A of this report.

Seasonal Variation

To account for seasonal variation in traffic volumes, the MassDOT 2019 Weekday Seasonal Adjustment Factors were reviewed. Based on the data, traffic volumes collected during the month of September on urban minor arterial and local roadways are greater than traffic volumes for an average month. To present a conservative analysis, the September traffic volumes were not seasonally adjusted downward to reflect and average month. The MassDOT seasonal adjustment data is provided in Appendix B of this report**.**

Automatic Traffic Recorder Data

Automatic Traffic Recorder (ATR) data was collected on Randolph Road, just to the east of North Street. The ATR count was conducted for a 48-hour period from Tuesday, September 13, 2022 through Wednesday, September 14, 2022. The ATR data collected on Randolph Road is summarized in Table 1 below and included in Appendix A.

Table 1: ATR Summary

Roadway	Direction	ADT[1]	HV%[2]	Vehicle Speeds[3]
Randolph Road	Eastbound	140	10.2%	18
	Westbound	140	8.6%	18
	Total	280	9.4%	

1 Average daily traffic volume in vehicles per day (vpd) based on Wedensday, September 14, 2022 data.

2 Percentage of heavy vehicles

3 Based on measured 85th percentile speeds

Based on the results of the ATR count, Randolph Road is shown to carry an average daily traffic (ADT) volume of approximately 280 vehicles per day. Approximately 9.4% of the daily traffic included heavy vehicle traffic. Measured 85th percentile operating speeds on Randolph Road were 18 mph.
The resulting peak hour traffic volumes for the 2022 Existing conditions are depicted in Figures 2 and 3 for the weekday morning and weekday afternoon peak hours, respectively.

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SCHEMATIC-
NOT TO SCALE

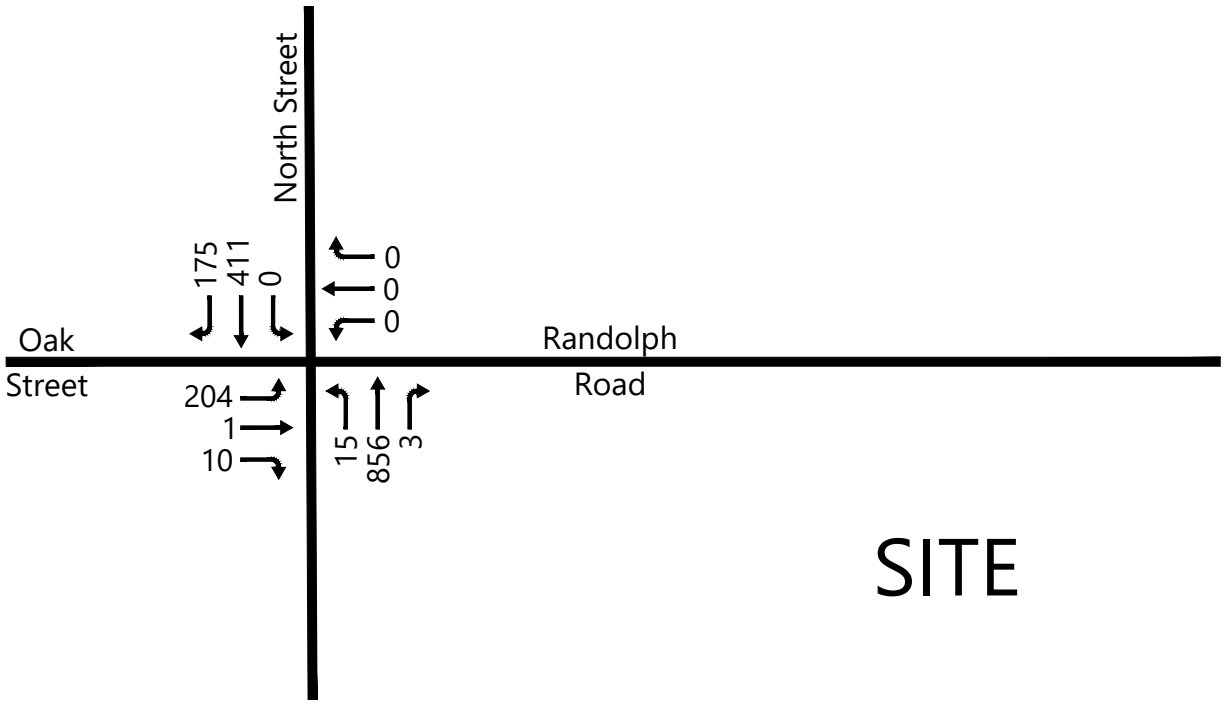
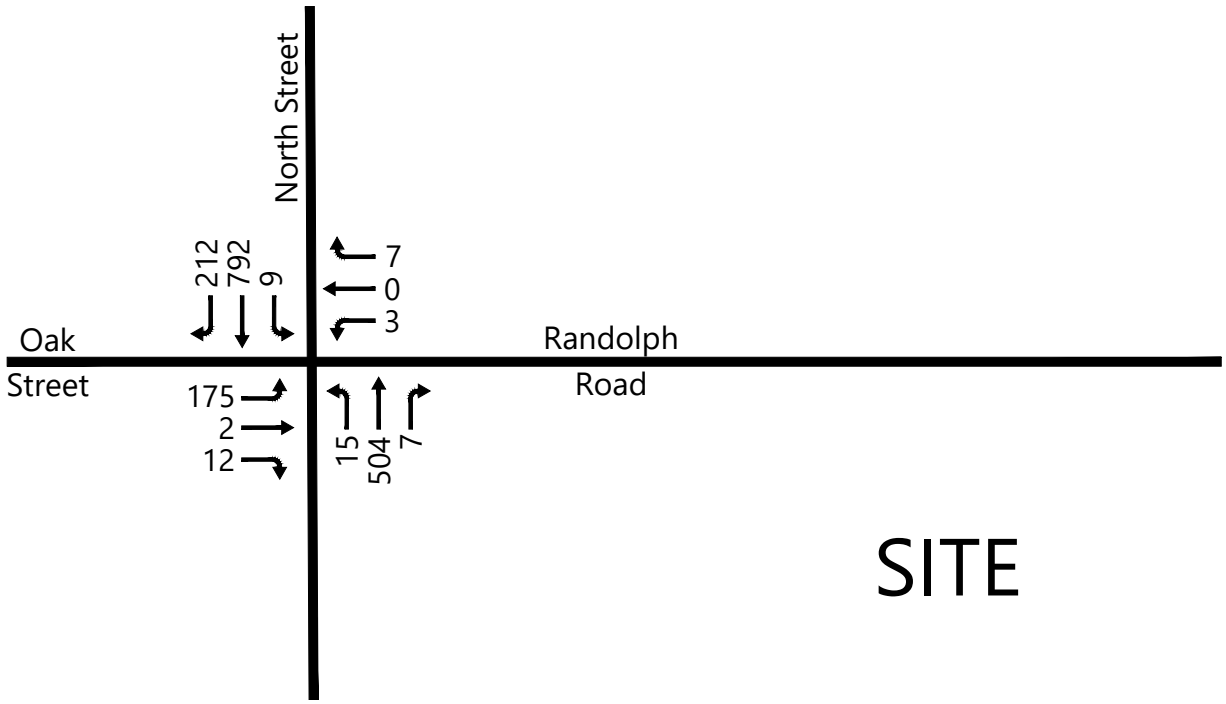


Figure 2
2022 Existing Weekday Morning
Peak Hour Traffic Volumes
Proposed Industrial Facility
Randolph, Massachusetts

McMAHON
a Bowman company

J:\Analysis\Bluewater Property Group\Randolph Warehouse\Traffic\Graphics\Randolph Warehouse_Volume Schematics.dwg 10/21/22

SCHEMATIC-
NOT TO SCALE



McMAHON
a **Bowman** company

Figure 3
2022 Existing Weekday Afternoon
Peak Hour Traffic Volumes
Proposed Industrial Facility
Randolph, Massachusetts

Crash Summary

Crash data for the study area intersections was obtained from MassDOT for the most recent five-year period available. This includes complete yearly crash summaries from 2015 through 2019. A summary of the crash data is provided in Appendix C.

The crash rates at the study intersections were calculated to determine whether the crash frequencies at the study area intersections were unusually high given the travel demand. The intersection crash rate is expressed in crashes per million entering vehicles (MEV). The crash rate for each intersection was then compared to the average rate for signalized and unsignalized intersections statewide and within MassDOT District 6. For unsignalized intersections, the statewide and MassDOT District 6 average crash rate is 0.57 and 0.52 crashes per MEV respectively.

North Street at Oak Street/Randolph Road

The unsignalized intersection of North Street at Oak Street/Randolph Road experienced a total of 17 reported crashes over the five-year period analyzed. The resulting crash rate of approximately 0.48 crashes per MEV is below the statewide and District 6 averages. A total of 10 crashes were angle collisions, three were rear-end collisions, three were sideswipe collisions, and one was a head-on collision. Of the 17 reported crashes, eight crashes resulted in personal injury (complaints of pain) and the remaining nine crashes resulted in property damage only.

Randolph Road at Project Site Driveway

During the five-year period analyzed, there were no reported crashes on Randolph Road in the vicinity of the existing site driveway.

FUTURE CONDITIONS

To determine future traffic demands on the study area roadways and intersections, the 2022 Existing traffic volumes were projected to the future-year 2029, by which time the proposed Project would be anticipated to be built and occupied. Traffic volumes on the study area roadways in 2029 are considered to include all existing traffic, as well as new traffic resulting from general growth in the study area and from other planned development projects, independent of the proposed Project. The potential background traffic growth, unrelated to the proposed Project, was considered in the development of the 2029 No Build (without Project) peak hour traffic volumes. The estimated traffic increases associated with the proposed Project were then added to the 2029 No Build volumes to reflect the 2029 Build (with Project) traffic conditions. A detailed description of the development of the 2029 No Build and 2029 Build traffic volume networks is presented below.

Future Roadway Improvements

Based on coordination with the Town of Randolph, there are no planned roadway improvement projects in the vicinity of the Project site that would be anticipated to impact future traffic volumes or patterns.

Background Traffic Growth

Traffic growth is primarily a function of changes in motor vehicle use and expected land development within the area. To establish the rate at which traffic on the study area roadways can be anticipated to grow during the seven-year forecast period (2022 to 2029), both site-specific traffic growth and planned area developments and were reviewed.

Historic Traffic Growth

Background traffic growth accounts for changes in traffic volumes associated with general changes in population and other developments that are not known at this time. An annual background traffic growth rate of 0.5% per year, compounded annually, was established for the study area in conjunction with the Central Transportation Planning Staff (CTPS) to grow the 2022 traffic volumes to future year 2029.

Site-Specific Growth

Based on coordination with the Town of Randolph Planning Department, no planned developments were identified which would be anticipated to impact traffic volumes within the study area. Developments which may be constructed during the forecast period but that are unknown at this time are considered to be captured in the 0.5% per year historic background growth described above.

2029 No Build Traffic Volumes

The 2022 Existing peak hour traffic volumes were grown by 0.5% per year (compounded annually) over the seven-year study horizon (2022 to 2029) to establish the 2029 base future traffic volumes. The resulting 2029 No Build peak hour traffic volumes are illustrated in Figures 4 and 5 for the weekday morning and weekday afternoon peak hours, respectively. The 2029 No Build traffic volumes are also documented in the traffic projection model presented in Appendix D of this report.

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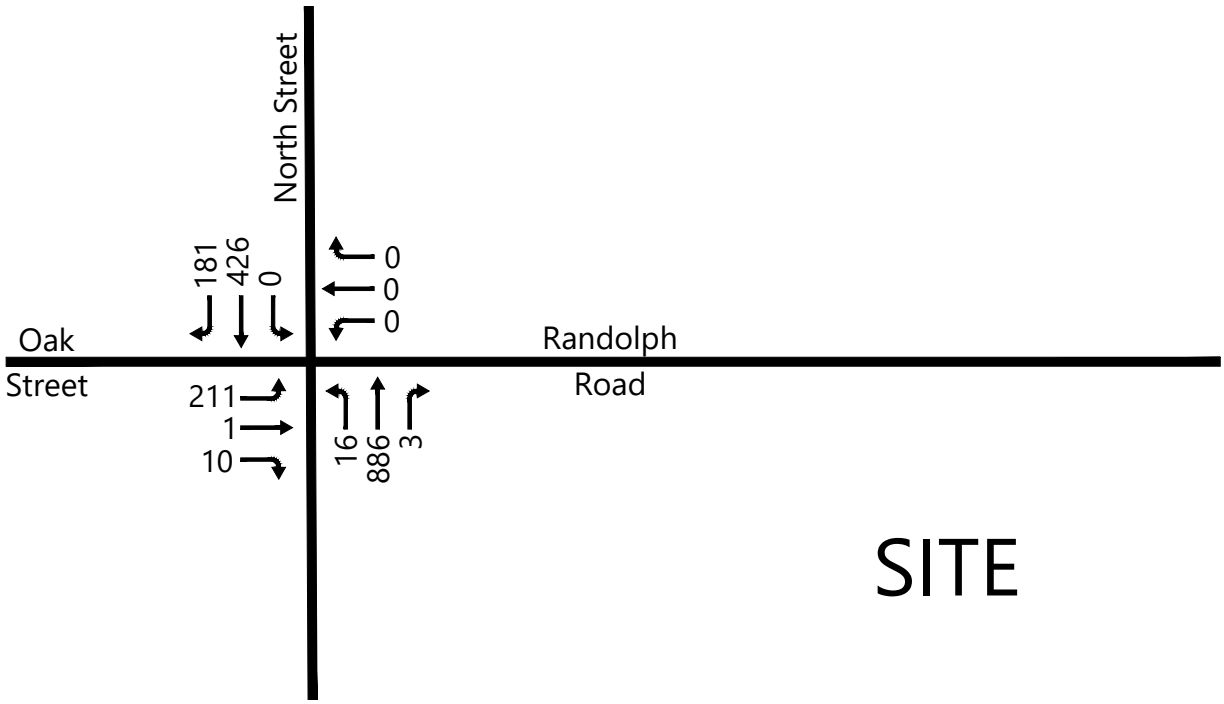

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Figure 4
2029 No Build Weekday Morning
Peak Hour Traffic Volumes
Proposed Industrial Facility
Randolph, Massachusetts

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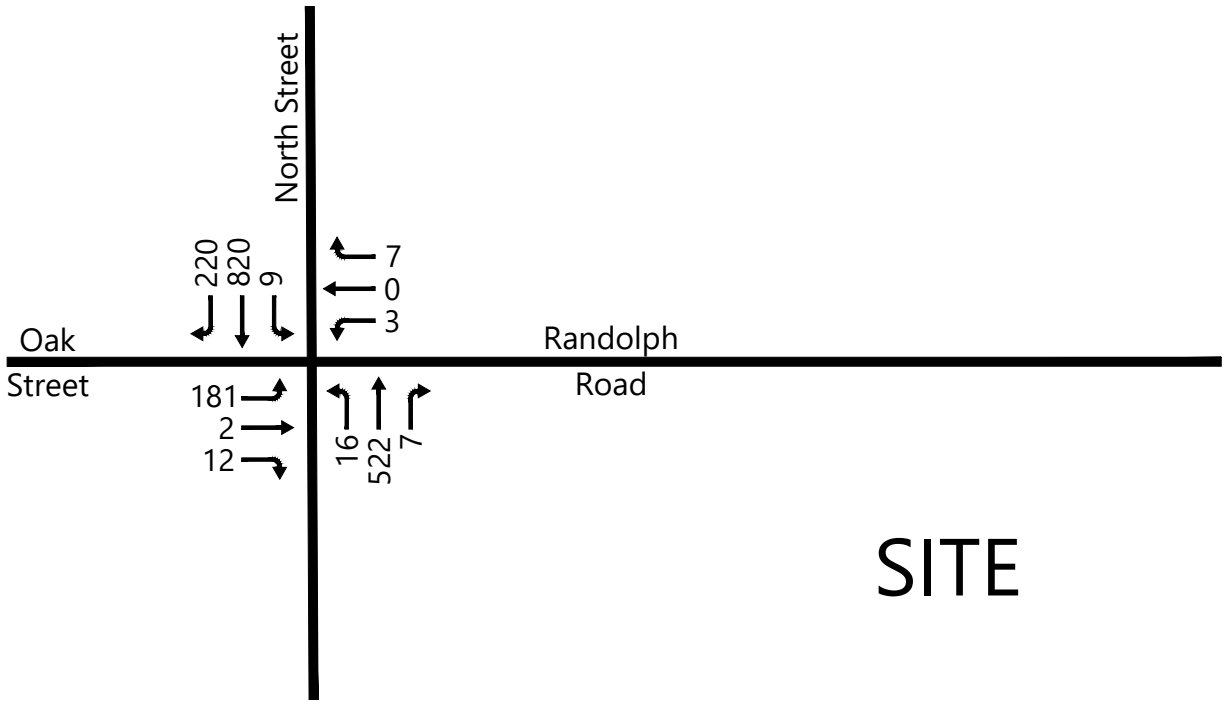

Figure 5
2029 No Build Weekday Afternoon
Peak Hour Traffic Volumes
Proposed Industrial Facility
Randolph, Massachusetts

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Site-Generated Traffic

To estimate the number of vehicle trips associated with the project, the Institute of Transportation Engineers' (ITE) publication, *Trip Generation Manual, 11th Edition,* was referenced. This publication provides traffic generation information for various Land Use Codes (LUCs) compiled from studies conducted by members nationwide. The trip generation estimates for the proposed 120,000 sf industrial facility were developed based on data presented in the Trip Generation Manual for LUC 150 (Warehousing). This reference establishes vehicle trip rates (in this case expressed in trips per square foot) based on actual traffic counts conducted at similar types of existing land uses. The vehicle trips projected to be generated by the development were split into passenger vehicles and trucks based on the heavy vehicle trip generation provided for LUC 150. A summary of the peak hour trip generation estimates for the Project are summarized in Table 2 below.

Table 2: Vehicular Trip Generation

		Weekday AM			Weekday PM			Weekday Daily		
Description	**Size**	**In**	**Out**	**Total**	**In**	**Out**	**Total**	**In**	**Out**	**Total**
Proposed Warehouse Trips[1]	120,000 s.f.	29	9	38	11	29	40	114	114	228
Passenger Vehicles		*28*	*8*	*36*	*9*	*27*	*36*	*78*	*78*	*156*
Trucks[2]		*1*	*1*	*2*	*2*	*2*	*4*	*36*	*36*	*72*

1 ITE Land Use Code 150 (Warehousing), based on 120,000 square feet.

2 ITE Land Use Code 150 (Warehousing) truck generation based on 120,000 square feet.

As shown in Table 2, the proposed Project is estimated to result in approximately 38 new vehicle trips (29 entering vehicles and 9 exiting vehicles) during the weekday morning peak hour, approximately five percent of which are anticipated to be heavy vehicles, and approximately 40 new vehicle trips (11 entering vehicles and 29 exiting vehicles) during the weekday afternoon peak hour, approximately ten percent of which are anticipated to be heavy vehicles. During a typical weekday, the proposed Project is estimated to generate approximately 228 new vehicle trips (114 entering vehicles and 114 exiting vehicles), approximately 32 percent of which are anticipated to be heavy vehicles. As shown in Table 2, a majority of the truck trips to the site would be anticipated to occur outside of the peak hours.

Project Trip Distribution and Assignment

The traffic projected to be generated by the Project was distributed onto the study area roadways and intersections based existing travel patterns of the adjacent roadways, available Journey-to-Work data for the Town of Randolph for employees at the site, and logical travel routes for warehouse deliveries which is presented in the Appendix E. The resulting arrival and departure patterns are presented in Figure 6 and are documented in the traffic projection model located in Appendix D.

The Project-related traffic was then assigned to the surrounding roadway network based on the Project trip distribution patterns presented in Figure 6. The resulting distributed new Project trips are shown in Figures 7 and 8 for the weekday morning and weekday afternoon peak hours, respectively.

2029 Build Traffic Volumes

To establish the 2029 Build peak hour traffic volumes, the distributed Project trips were added to the 2029 No Build peak hour traffic volumes. The resulting 2029 Build weekday morning and weekday afternoon peak hour traffic volumes are presented in Figure 9 and 10, respectively, and are documented in the traffic projection model presented in Appendix D of this report.

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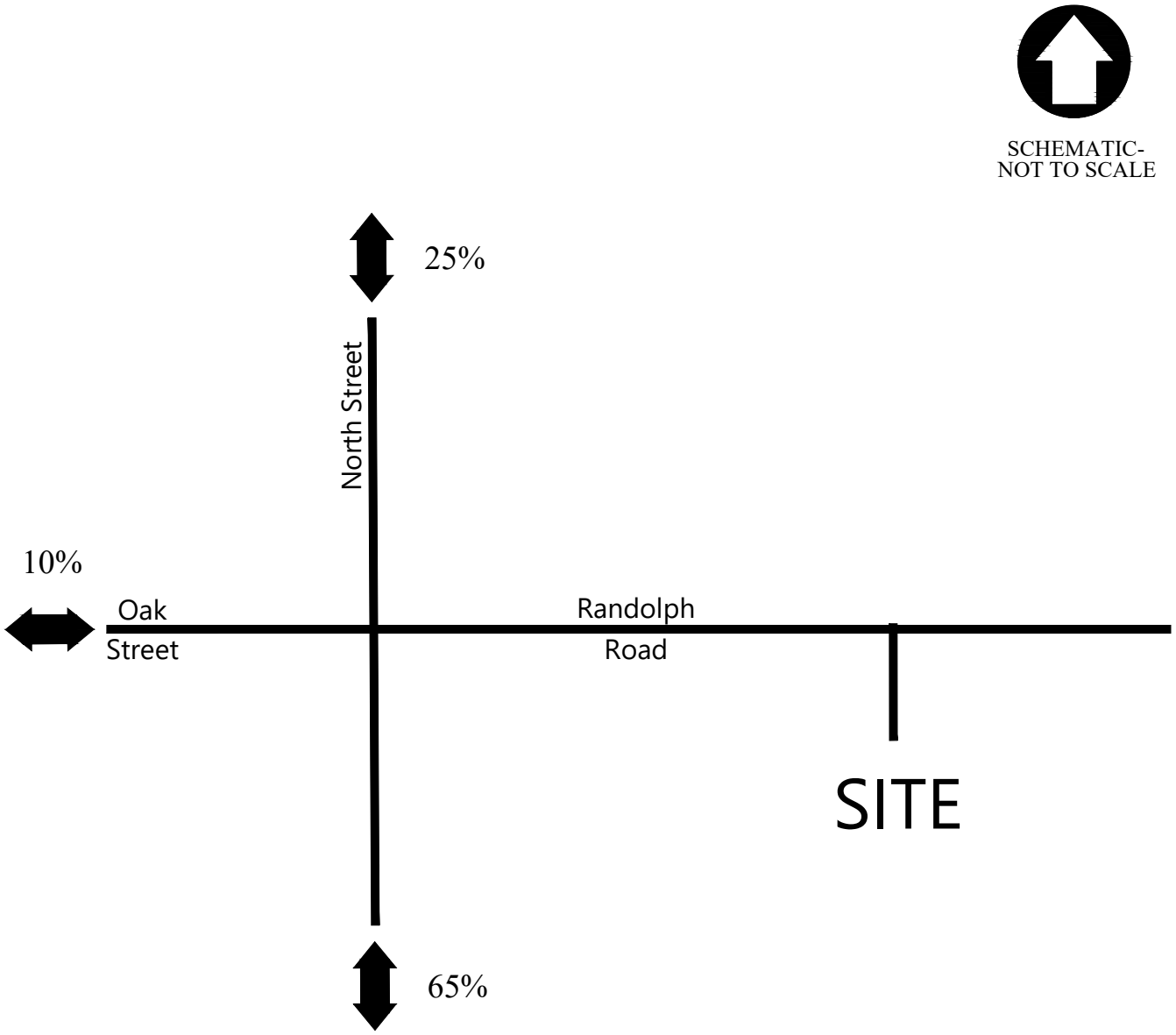

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Figure 6
Direction of Arrivals and Departures
Proposed Industrial Facility
Randolph, Massachusetts

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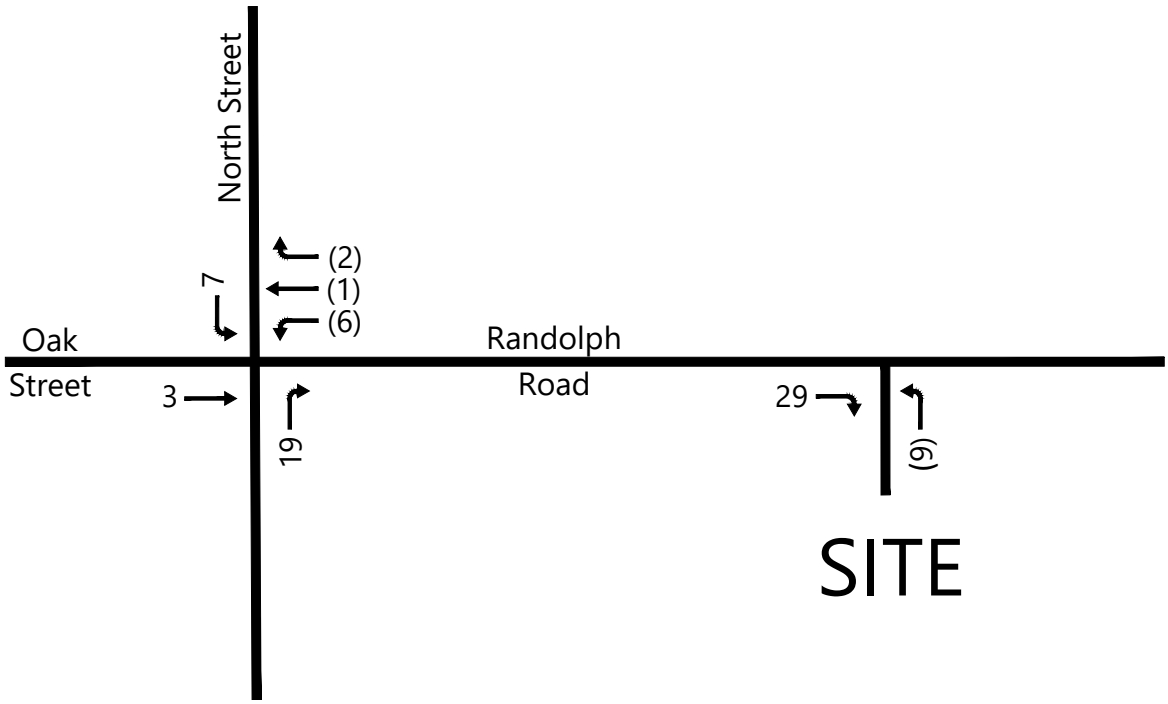

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Figure 7
Weekday Morning Peak Hour
New Project Trips
Proposed Industrial Facility
Randolph, Massachusetts

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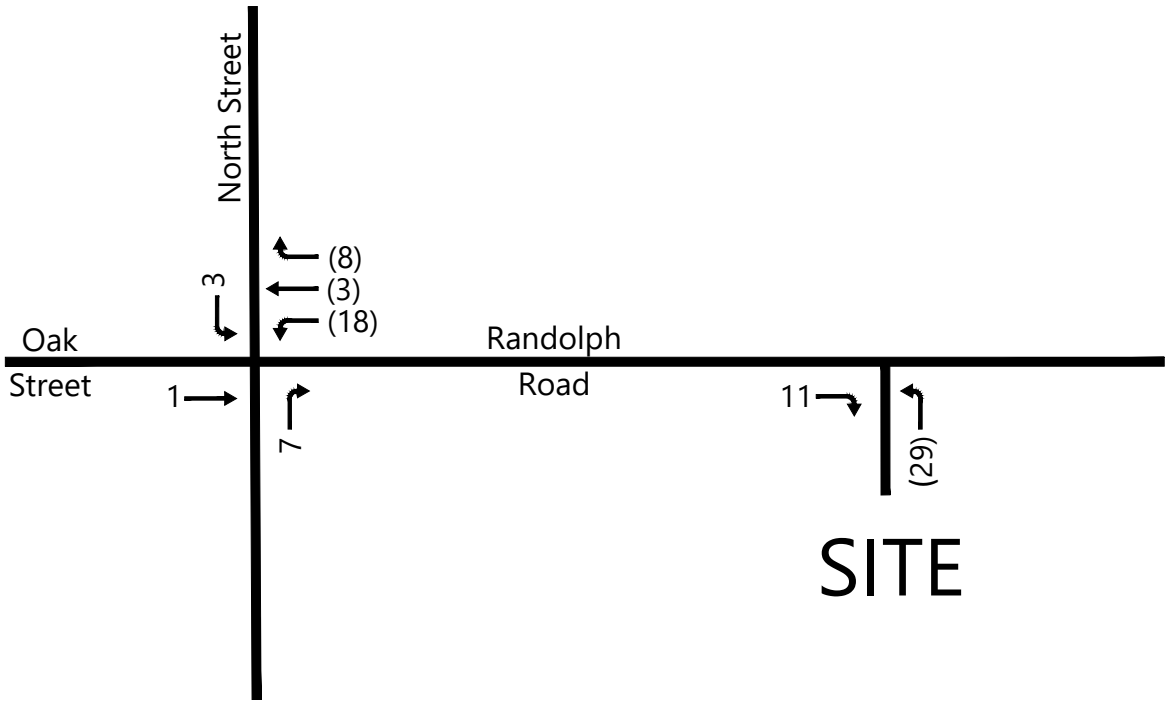

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Figure 8
Weekday Afternoon Peak Hour
New Project Trips
Proposed Industrial Facility
Randolph, Massachusetts

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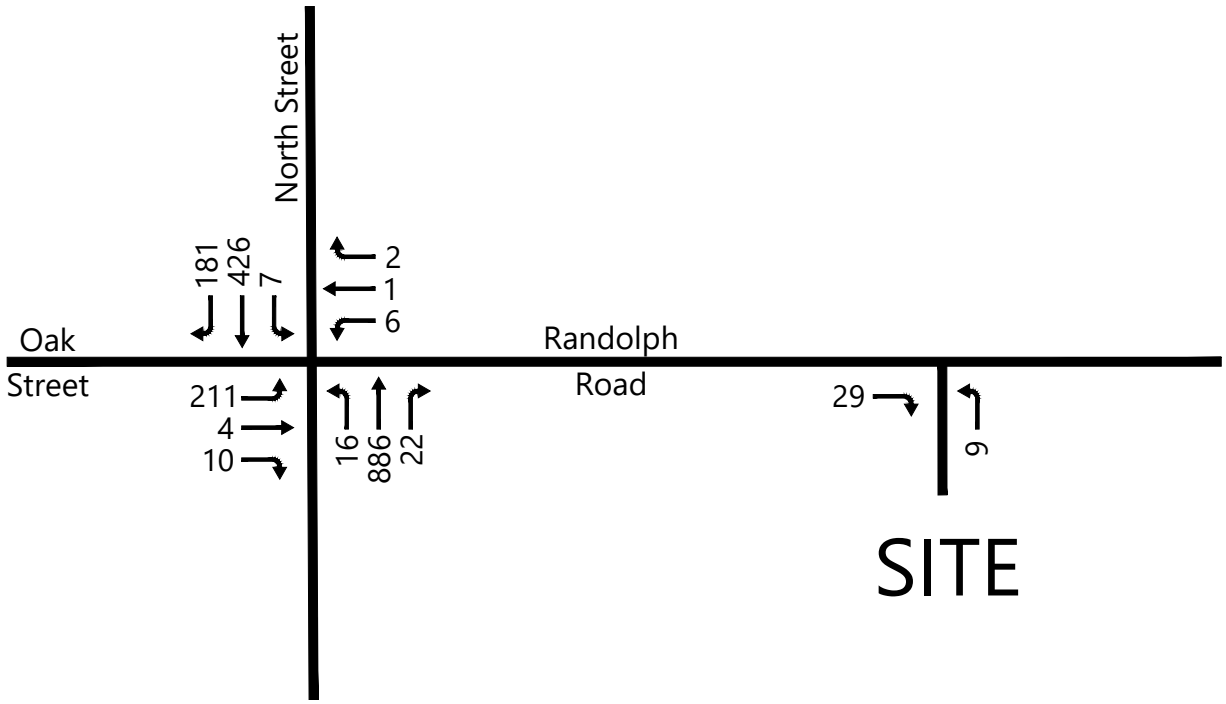

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Figure 9
2029 Build Weekday Morning
Peak Hour Traffic Volumes
Proposed Industrial Facility
Randolph, Massachusetts

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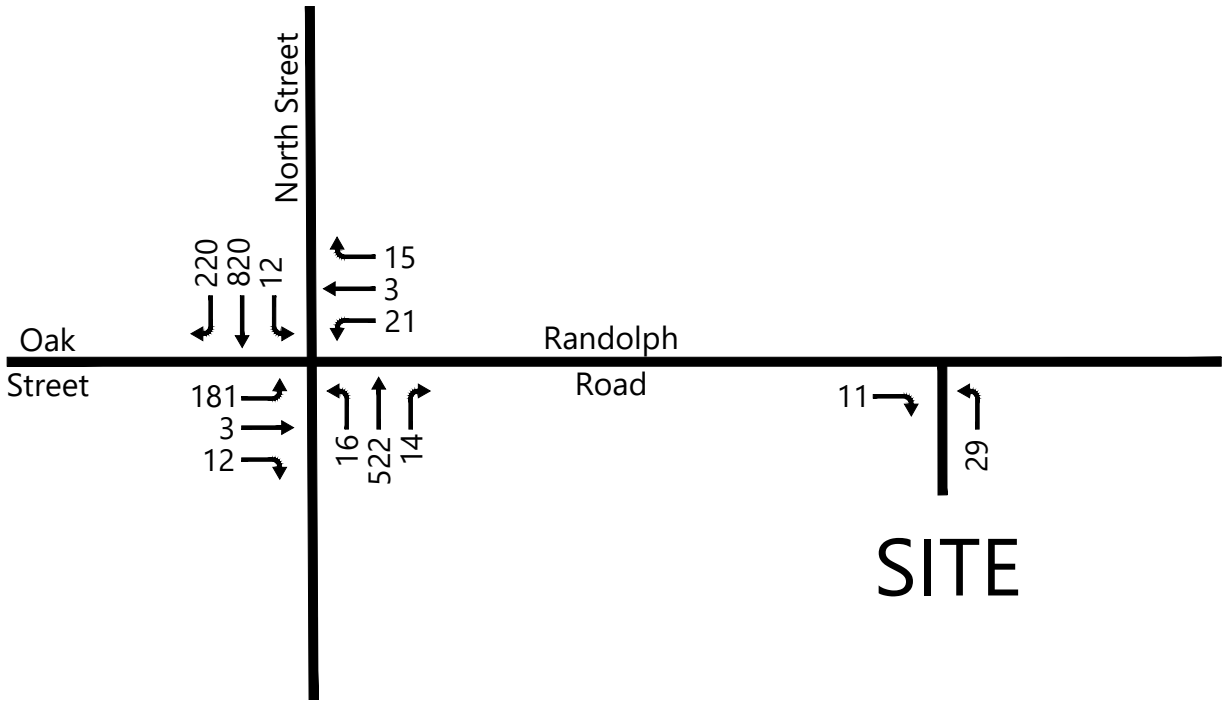

Figure 10
2029 Build Weekday Afternoon
Peak Hour Traffic Volumes
Proposed Industrial Facility
Randolph, Massachusetts

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a Bowman company

TRAFFIC OPERATIONS ANALYSIS

In previous sections of this report, the quantity of traffic at the study area intersections has been discussed. This section describes the overall quality of the traffic flow at the study area intersections during the weekday morning and weekday afternoon peak hours. As a basis for this assessment, intersection capacity analysis was conducted using the Synchro capacity analysis software at the study area intersections under the 2022 Existing, 2029 No Build, and 2029 Build peak hour traffic conditions. The analysis is based on capacity analysis methodologies and procedures contained in the *Highway Capacity Manual, 6th Edition* (HCM), which is summarized in Appendix F. A discussion of the evaluation criteria and a summary of the results of the capacity analyses are presented below.

Level-of-Service Criteria

Average total vehicle delay is reported as level-of-service (LOS) on a scale of A to F. LOS A represents delays of 10 seconds or less and LOS F represents delays in excess of 50 seconds and 80 seconds for unsignalized and signalized movements, respectively. A more detailed description of the LOS criteria is provided in Appendix F.

Field Calibration

To confirm that the existing field conditions are consistent with the Synchro capacity analysis software, a field delay study and gap acceptance study was conducted at the intersection of North Street at Oak Street/Randolph Road on Tuesday, September 27, 2022 during the weekday afternoon peak hour (5:00 PM to 6:00 PM).

Delay Study

The delay study included measuring the number of vehicles at the stop controlled eastbound approach on Oak Street at the intersection of North Street at Oak Street/Randolph Road every 15 seconds.

During the weekday afternoon peak hour, the average delay per vehicle on Oak Street was calculated to be approximately 72.5 seconds. The delay study data is provided in Appendix G.

Gap Acceptance Study

The gap acceptance study was conducted to measure the shortest gaps that drivers turning onto North Street from both Oak Street and Randolph Road are willing to accept. These gaps were compared to the default values used in the HCM. During the study period, vehicles turning onto North Street from Oak Street were shown to accept gaps as small as 4.7 seconds, and vehicles turning onto North Street from Randolph Road were shown to accept gaps as small as 6.3 seconds.

To better estimate vehicle operations at the intersection of North Street at Oak Street/Randolph Road, the Synchro capacity analysis at this intersection was calibrated with a critical gap of 4.7 seconds for eastbound vehicles on Oak Street and 6.3 seconds for westbound vehicles on Randolph Road. The gap acceptance field study results are provided in Appendix H.

The calibrated capacity analysis results using the critical gaps are consistent with the measured field delay at the unsignalized intersection of North Street at Oak Street/Randolph Road.

Capacity Analysis Results

Intersection capacity analyses was conducted using Synchro capacity analysis software for the study area intersections to evaluate the 2022 Existing, 2029 No Build, and 2029 Build traffic conditions during the weekday morning and weekday afternoon peak hours. As mentioned previously, the peak hour traffic volumes utilized as part of this analysis are provided in the traffic projection model, attached in Appendix D of this report.

The detailed Synchro capacity analysis worksheets for the 2022 Existing, 2029 No Build, and 2029 Build traffic conditions are presented in Appendix I, Appendix J, and Appendix K, respectively. The capacity analysis results for the unsignalized study area intersections are presented in Table 3 for the weekday morning and weekday afternoon peak hour. The results of the specific capacity analysis at the study area intersections are discussed below. A detailed summary of the capacity analysis results is provided in Appendix L.

Table 3: Unsignalized Capacity Analysis Results

			2022 Existing				2029 No Build				2029 Build			
Intersection	Movement	Peak Period	LOS[1]	Delay[2]	V/C[3]	95th% Queue[4]	LOS	Delay	V/C	95th% Queue	LOS	Delay	V/C	95th% Queue
Oak Street/Randolph Road	EB LTR	AM	F	96.7	0.99	240	F	126.2	1.08	280	F	156.8	1.17	315
at North Street		PM	F	77.6	0.90	188	F	100.5	0.98	220	F	129.1	1.07	250
	WB LTR	AM	A	0.0	0.00	0	A	0.0	0.00	0	E	37.4	0.08	8
		PM	C	20.7	0.05	5	C	21.8	0.05	5	E	43.6	0.34	35
	NB LTR	AM	A	0.2	0.02	3	A	0.2	0.02	3	A	0.2	0.02	3
		PM	A	0.3	0.03	3	A	0.3	0.03	3	A	0.3	0.03	3
	SB LTR	AM	A	0.0	0.00	0	A	0.0	0.00	0	A	0.1	0.01	0
		PM	A	0.1	0.01	0	A	0.1	0.01	0	A	0.1	0.01	0
Site Driveway	NB LR	AM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	A	8.6	0.01	0
at Randolph Road		PM	n/a	n/a	n/a	n/a	n/a	n/a	n/a	n/a	A	8.7	0.03	3

1 Level-of-Service
2 Average vehicle delay in seconds
3 Volume-to-capacity ratio
4 95th percentile queue in feet
n/a Not applicable

The Oak Street eastbound approach operating at LOS F is an existing condition, and the Project is not anticipated to add any traffic to the critical eastbound left-turn movement. The projected increase of the Oak Street eastbound approach volume from 222 vehicles in the 2029 No Build condition to 225 vehicles in the 2029 Build condition during weekday morning peak hour represents a 1.3% percent increase as a result of the Project. Similarly, the projected increase of the Oak Street eastbound approach volume from 195 vehicles in the 2029 No Build condition to 196 vehicles in the 2029 Build condition during weekday afternoon peak hour represents a 0.5% percent as a result of the Project.

The Randolph Road westbound approach, which serves vehicles exiting the proposed site, is shown to operate with a volume-to-capacity ratio of 0.34 or better under 2029 Build conditions, which indicates the critical movement is anticipated to operate under capacity.

The Site Driveway on Randolph Road is anticipated to operate at LOS A during both peak hours analyzed under the 2029 Build conditions.

Site Access and Circulation

Access to the Project site would be provided via a full-access site driveway on Randolph Road approximately 600 feet east of the intersection of North Street at Oak Street/Randolph Road. A total of 98 passenger vehicle parking spaces are proposed to be located on the southwest site of the site, and 37 truck loading docks would be provided on the northeast side of the site. Two-way circulation would be provided throughout the site

Sight Distance

A field review of the available sight distance was conducted at the proposed site driveway location on Randolph Road and at the westbound Randolph Road approach to the intersection of North Street at Oak Street/Randolph Road. The American Association of State Highway and Transportation Officials (AASHTO) publication, *A Policy on Geometric Design, 2018 Edition*, defines minimum and recommended sight distances at intersections.

The minimum sight distance is based on the required stopping sight distance (SSD) for vehicles traveling along the main road. The recommended sight distance allows vehicles to enter the main street traffic flow without requiring the mainline traffic to slow to less than 70% of their speed and is referred to as intersection sight distance (ISD). According to AASHTO, "If the available sight distance for an entering or crossing vehicle is at least equal to the appropriate stopping sight distance for the major road, then drivers have sufficient time to anticipate and avoid collisions."

A speed study was conducted on North Street on Tuesday, September 27, 2022 from 3:15 PM to 3:45 PM to assess vehicle speeds along North Street adjacent to the Project site. Vehicle speeds collected indicate that the 85th percentile speeds on North Street are 41 mph in the northbound direction and 37 mph in the southbound direction. The posted speed limit on this portion of North Street is 30 mph. Speed data collected by the ATR on Randolph Road indicates that the 85th percentile speeds are 18 mph in both the eastbound and westbound directions, which is lower than the 25 mph speed limit. The speed data is provided in Appendix M.

Table 4 summarizes the sight distance at the proposed site driveway and the westbound Randolph Road approach to the intersection of North Street at Oak Street/Randolph Road. To present a conservative approach, the 25-mph speed limit on Randolph Road was applied as the measured 85th percentile speeds were lower, and the operating speeds were used along North Street since the speeds were higher than the posted speed limit.

Table 4: Sight Distance Requirements

Intersection	Looking	Speed Limit (mph)	85th % Speed (mph)	SSD[1] Required (ft)	ISD[2] Recommended (ft)	Sight Distance Measured (ft)
Randolph Road at North Street	Left (South)	30	41	315	395	>600
	Right (North)	30	37	270	410	490
Site Driveway at Randolph Road[(3)]	Left (West)	25	18	155	240	600

1 Stopping sight distance (see AASHTO equations 3-2 and 3-3) for the 85th percentile speed.
2 Intersection sight distance (see AASHTO equations 9-1 and 9-2) for the 85th percentile speed.
3 Sight distance is based on the 25 mph speed limit (since speed limit is higher than 85th percentile speed) and extends to adjacent intersection.

As shown in Table 4, the available sight distances for vehicles on Randolph Road at the North Street at Oak Street/Randolph Road intersection exceed the minimum SSD requirements and ISD recommendations for the 85th percentile speeds on North Street. Similarly, looking left from the proposed site driveway on Randolph Road, there is a clear line of sight to the intersection with North Street, which exceeds the required SSD and recommended ISD. Overall, based on this review, the location of the Project site driveways would allow for safe and efficient access to and from the site.

CONCLUSION

The proposed Project, located at 11 Randolph Road in Randolph, Massachusetts, includes the construction of a 120,000 sf industrial facility with approximately 98 parking spaces and 37 loading spaces. Site access and egress would be provided via a full access site driveway on Randolph Road, approximately 600 feet east of North Street.

Based on data published by ITE, the proposed Project is estimated to result in approximately 38 new vehicle trips (29 entering vehicles and 9 exiting vehicles) during the weekday morning peak hour and approximately 40 new vehicle trips (11 entering vehicles and 29 exiting vehicles) during the weekday afternoon peak hour. The proposed Project would result in a total of approximately 228 vehicle trips (114 entering and 114 exiting) during the weekday with a majority of the truck trips to the site anticipated to occur outside of the peak hours.

The AASHTO minimum stopping sight distance and recommended intersection sight distance are exceeded at the Randolph Road approach to the intersection of North Street at Oak Street/Randolph and the proposed site driveway approach at Randolph Road. Based on the review of available sight distances, the proposed Project allows for safe and efficient access to and from the Project site.

The Oak Street eastbound approach operates at LOS F under existing conditions, and the Project is not anticipated to add any traffic to the critical left-turn movement. The projected increase of the Oak Street eastbound volume from 222 vehicles in the 2029 No Build condition to 225 vehicles in the 2029 Build condition during weekday morning peak hour represents only an 1.3% percent increase in approach volumes. Similarly, the projected increase of Oak Street eastbound volume from 195 vehicles in the 2029 No Build condition to 196 vehicles in the 2029 Build condition during weekday afternoon peak hour represents only an 0.5% percent increase in approach volumes.

The Randolph Road westbound approach, which serves vehicles exiting the proposed site, is shown to operate with a volume-to-capacity ratio of 0.34 or better under 2029 Build conditions, which indicates the critical movement is anticipated to operate under capacity. Overall, the Project would have limited impacts to the unsignalized intersection of North Street at Oak Street/Randolph Road within the study area during the weekday morning and weekday afternoon peak hours.

Based on the evaluation documented within this traffic impact study, the proposed industrial facility is not shown to have a significant impact on the overall traffic operations or safety of the study area roadways and intersections.

OSTERGAARD ACOUSTICAL ASSOCIATES

EVALUATION OF SITE SOUND EMISSIONS

PROPOSED WAREHOUSE
Randolph, MA

Prepared for: **Bluewater Property Group**

Prepared by: **John T. Baldassano, Jr.**
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Reviewed by: **Benjamin C. Mueller, P.E.**
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Date: **12 May 2023**

OAA File: **4667A**

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INTRODUCTION

Ostergaard Acoustical Associates (OAA) was asked to assist with evaluation of potential sound emissions from a speculative warehouse to be located on multiple parcels off of Randolph Road in the Town of Randolph, Norfolk County, Massachusetts. The site is currently undeveloped and will be developed to accommodate a 24-hour operation warehouse building. The vicinity of the site is mixed-use in nature, commercial uses and undeveloped land are to the north and east, respectively, and residential receptors are to the south and west. This report addresses the onsite noise radiated off-site to nearby potentially noise-sensitive receptors.

The purpose of this sound study is to analyze future site sound emissions for comparison with applicable State and local noise code limits and to evaluate compatibility of the proposed use with the surroundings. Such ordinances regulate site sound relative to existing ambient sound levels in order to minimize the potential acoustical impact of new noise sources. The site will contribute steady sound from rooftop HVAC equipment. The site will also produce intermittent sound from truck and car[1] movements.

Since future tenants are not known, the extent of heavy trucking activity was conservatively estimated, assuming the potential for nighttime activity. Traditional use of such buildings will primarily see activity during daytime hours; nighttime activity, if any, is expected to be lower in quantity and sporadic. Nevertheless, potential nighttime operations are of most interest since residential receptors are potentially more sensitive during this period.

Work by OAA was overseen by Benjamin C. Mueller, P.E., with assistance from OAA Staff. The representative at Bluewater Property Group coordinating the project is Alexandra Escamilla.

SITE AND VICINITY

Figure 1 is an aerial image obtained from Google Earth outlining the site in red. Figure 1 also shows ambient survey locations, which are discussed in a subsequent section.

[1] Note that throughout this report, the term "car" collectively refers to personal passenger vehicles including automobiles, vans, pick-ups, or SUVs. The term "truck" refers to heavy trucks such as over-the-road or line-haul trucks.

The site is located southwest of the Richardi Reservoir, at the terminus of Randolph Road in the Town of Randolph, Norfolk County, Massachusetts. The developed portion of the site is along Randolph Road and comprises a gym and construction equipment storage. The surrounding area is mixed-use in nature. The site and properties north and east of the site are in the Industrial District. Specifically, to the north is a large self-storage facility; wooded land and an extension of the reservoir abut the site to the east. An active adult condo community is immediately south of the project in the Residential Multi-Family 55+ District. Further south, beyond the condo community, are more industrial uses including a large Stacy's Pita Chip manufacturing facility, which utilizes heavy trucks. Lastly, single-family residences front on North Street to the west in the Residential Single-Family High-Density District. Nearby residences to the south and west are of most concern acoustically given their potential noise sensitivity and proximity to the site.

Plans call for the developed areas of the site to remain; deeper into the site will accommodate the construction of an approximately 120,000 ft^2 building to be located in the western portion of the irregularly shaped parcel. Access will be provided via Randolph Road for all vehicles, and the onsite driveway will circle the building. The road on the eastern side of the building is for emergency access use only. Heavy truck docks are located along the northeast façade of the building, with ancillary trailer parking areas provided outboard of the docks. Personnel vehicles have dedicated parking areas along the southwest side of the building. The site layout is acoustically beneficial as the truck yard is located away from residences and shielded by the building.

Specific traffic counts depend on the end user tenant. While the extent of onsite traffic and the hours of operation are unknown, the sound study has followed the same conservative assumptions made in the traffic study. A review of the traffic study and discussion with the traffic engineer indicates that 72 truck trips are expected daily at this site. This equates to 36 trucks daily, or about 1.5 trucks per hour if they were equally distributed. Professional experience, and information from the Institute of Transportation Engineers (ITE), indicates that while typical warehouses operate 24/7, the majority of their activity occurs during the daytime hours; nighttime operations are generally used to prepare for the next day. The ITE trip generation manual shows that for Land Use Code 150: Warehouse, approximately 87% of all truck traffic occurs during the daytime hours. For this site, this means around 5 trucks are expected across the nighttime hours. While low in volume, the focus of this study is to analyze this potential nighttime activity as this is generally when residential receptors are most sensitive.

Figure 1 — Google Earth image showing the proposed warehouse site and vicinity in Randolph, MA. The site property line is approximated in red.

REGULATIONS/GOALS

When developing a site of this type, it is appropriate to consider how sound from the facility will likely be received, especially by potentially noise-sensitive receptors. Sound produced by a typical warehouse is characterized by car and truck parking lot activity, such as idling and vehicle movement, as well as steady HVAC equipment. The noise from these sources was evaluated and compared to applicable noise code limits as well as acoustical goals based on professional experience. As a general practice, when motor vehicles are onsite, they are considered part of a site's sound emissions; when vehicles are on public roads, they are not.

State, county, and local noise codes were reviewed. The State of Massachusetts code, Division of Air Quality Control Policy 90-001, requires sound emissions to not exceed background ambient sound levels at the nearest residence by 10 dB(A). The background sound level is defined as the level present 90% of the time during a measurement period when equipment is in operation. In addition, sound from the site is not to produce a "pure tone" condition where once octave band sound pressure level exceeds adjacent bands by 3 dB or more. The Town of Randolph's noise ordinance is found in Chapter 141 *Unreasonable Noise*. This ordinance prohibits the creation of unreasonable noise, which is defined as noise in excess of 50 dB(A) during the nighttime hours from 2300 and 0700 hours and 70 dB(A) during the complementary daytime hours. In the absence of an applicable noise level standard, unreasonable noise is also defined as "any noise plainly audible at a distance of three hundred (300) feet or, in the case of loud amplification devices or similar equipment, noise plainly audible at a distance of one hundred (100) feet from its source by a person of normal hearing". Lastly, there are no Norfolk County noise codes that could be found.

A discussion of relevant codes is warranted. The Randolph noise ordinance provides fixed noise limits. OAA agrees with the nighttime noise limit of 50 dB(A) as being appropriate for protecting residential receptors. Of note is that New Jersey also uses 50 dB(A) for their nighttime noise limit; similarly, Connecticut uses 51 dB(A) for their nighttime code limit. When 50 dB(A) occurs at a residential window, an open window will provide 10 dB of attenuation and result in a bedroom sound level of 40 dB(A); a closed window provides even more attenuation. Having intermittent maximum bedroom sound levels below 40 dB(A) minimizes disruption of sleep according to studies by the World Health Organization. Chapter 141 does not clearly indicate where the code limit should be applied, nor does it provide any adjustments for type of receiver. Some interpretation is therefore necessary. OAA generally selects the façade of dwellings to evaluate nighttime sound emissions and an area of outdoor repose (such as a deck, patio, pool, or other similar area) where an affected party would exist to evaluate daytime sound emissions.

Lastly, while the local code discusses audibility, OAA recommends relying on tangible metrics, such as the 50 dB(A) nighttime limit, to provide a clear and scientifically backed direction for noise evaluation and enforcement.

The Massachusetts noise code takes the approach to compare new sound to existing, which is appropriate for minimizing the acoustical impact of new noise sources. The local nighttime noise code limit of 50 dB(A) would essentially assume a background sound level of 40 dB(A), which is typical for a rural suburb area. The State code is traditionally applied to stationary noise sources. The code language unfortunately does not specify a measurement period or provide details on how to address the inherent variability of ambient sound; background sound levels are themselves dynamic and constantly changing in the area. The State code is more complicated to evaluate and enforce given this variability. While there is little question that the State noise code regulates stationary noise sources, it is less clear on whether it includes mobile noise sources; motor vehicles can travel off-site and produce variable sound themselves.

OAA finds in practice that receptors are more tolerant of short duration excursions than a steady sound of the same magnitude. In other words, the public would be less tolerant of a steady sound that was 10 dB higher than existing sound levels than for an occasional intermittent one. OAA agrees with allowing intermittent site sounds to approach 10 dB higher than existing sounds in the area provided they are in line with other maximum sound levels that might occur. Steady HVAC sound on the other hand, should generally be well below applicable maximum code limits and more aligned with existing ambient background sound levels in the area to minimize the potential for any acoustical impact.

Given all of this, OAA finds the Randolph nighttime code limit of 50 dB(A) appropriate to protect nearby residential receptors. On-site truck activity in the dock area should strive to meet this recognizing that typical traffic passby sound levels are expected to routinely exceed 60 dB(A) along the North Street corridor. To ensure that steady HVAC sound has no negative impact, a project noise goal of 45 dB(A) is recommended for these sources. Meeting these sound level limits will ensure that the intent of the local code is met and will minimize the potential for complaints. Using nighttime noise code limits as a project goal will also ensure compliance during the daytime hours, where the code limit is 70 dB(A).

Based on experience, OAA believes that local noise ordinances would prevail over State codes. However, OAA is currently in the process of surveying ambient sound levels for comparison of sound emissions to State criteria; results are expected to align with local code limits.

EXPECTED SOUND EMISSIONS

Acoustical modelling software, specifically CadnaA, was used to create and analyze site sound emissions for the site. The model takes into account relevant parameters between the noise source and receptor positions of interest to predict how sound will propagate. In addition to distance attenuation, the model accounts for the effects of terrain, various types of ground cover, shielding by structures, and reflections from buildings. In all models the buildings are white, elevation contour lines are teal, and the site property line is outlined in red. North is pointing up in all Figures. All models include a proposed 10-foot tall sound barrier, shown in light blue, designed to reduce off-site sound emissions from the truck court area. Elevation changes exterior to the site were obtained from MassGIS and incorporated into the model. Model results show only the sound emissions of the site, which are directly comparable to the project noise goal and code limits; ambient sound is not included in the model. The numbers around the perimeter each figure represent the scale in feet.

To evaluate nighttime site conditions, it is logical to apply noise code limits at the area of repose of sleeping residences. For this reason, site sound emissions were scrutinized at the upper-story façade of residential dwellings, where complaints are most likely to occur. Evaluation of daytime noise code limits would occur at ear height at vantage points on the receiver's property where repose would occur, for example a patio, porch, or other usable area of a yard. This study focuses on the nighttime noise code as it is the most stringent metric to meet.

The acoustical model shows the results graphically as A-weighted sound level contours, in 1 dB increments, and tabulates the summed A-weighted sound levels at six discrete locations, labeled Locations A through F, typifying nearby residential receptors of interest. Sound level contours are at ear height, 5 feet above grade. All discrete Locations are at the façade of nearby residences. All Locations are at a height of 15 feet above grade, representing a second story receptor.

Rooftop HVAC Sound

Rooftop HVAC equipment produces noise that is nominally steady in nature, and hence will not vary significantly over time. Information from the project team indicates that four HVAC units will serve this building. Each unit is based on an AAON 25,000 cfm gas unit, with a case-radiated sound power level of 90 dB(A) per manufacturer's sound data. The noise from the four rooftop units was included in the HVAC sound model. Rooftop units are shown as blue +'s and were placed 4 feet above the rooftop. Figure 2 shows the results of HVAC sound emissions graphically and tabulates the summed A-weighted sound levels of all equipment operating simultaneously at their maximum sound level at the nearby receptor locations of concern.

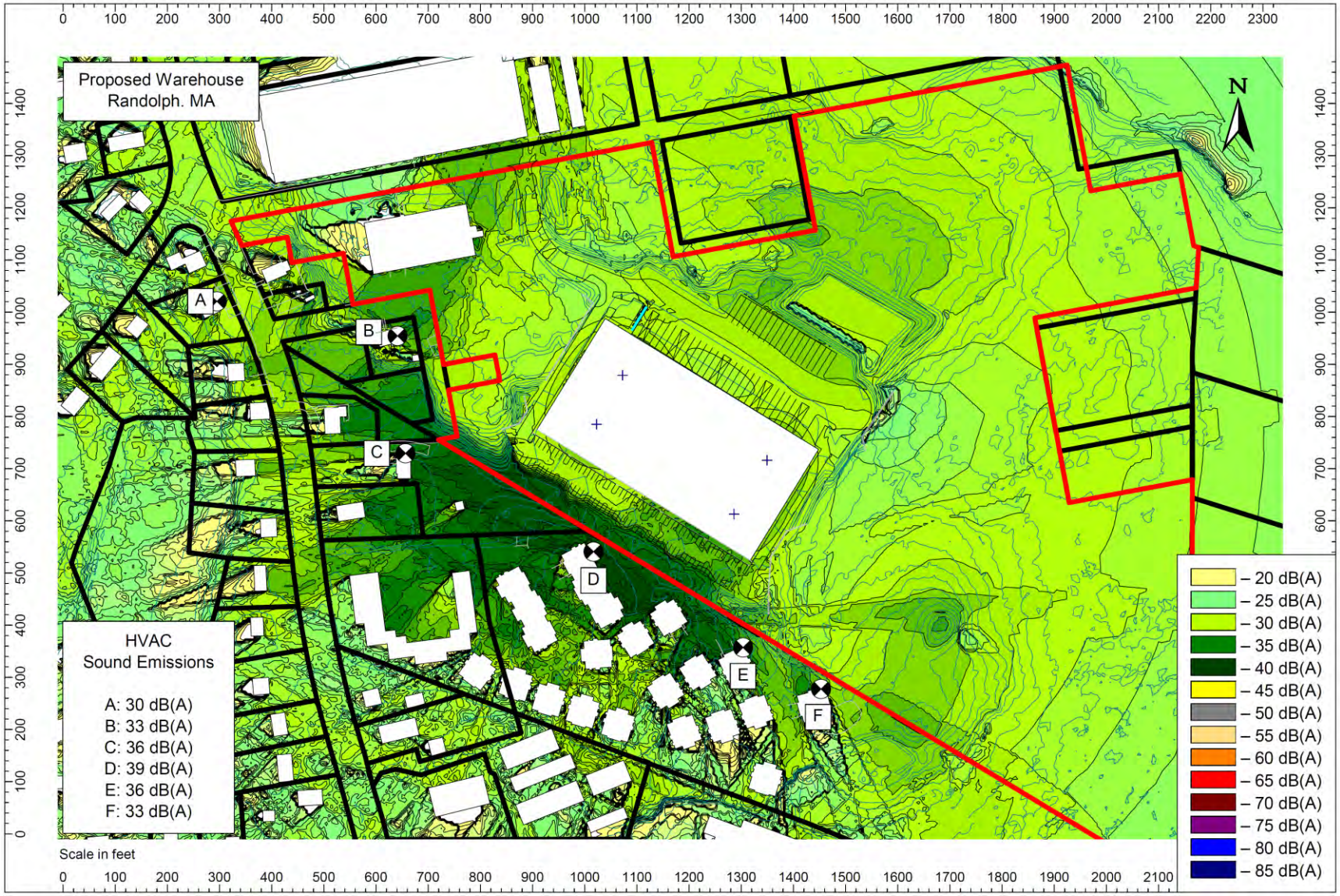


Figure 2 — Maximum A-weighted sound emission contours, 5 feet above grade, from all rooftop HVAC equipment operating. Rooftop equipment shown as blue +'s. Buildings shown in white; site property line outlined in red. A-weighted sound emissions tabulated at 15 feet above grade for all Locations.

This analysis shows that there is little concern about HVAC sound. The results show that with all rooftop units operating, HVAC sound levels at off-site residential receptors are in the 30-to-39 dB(A) range. HVAC sound is sufficiently controlled via distance and roof shielding effects so that this noise is well below the 45 dB(A) project limit by a wide margin. Levels of this magnitude comply with the local daytime and nighttime noise limit by even wider margins. Note that for these model results to be realized, acoustical performance of HVAC equipment must be aligned with what was modelled.

Heavy Truck Activity

OAA has had the opportunity to visit various warehouse facilities and industrial parks over the years to survey and document the sounds of truck activity. The warehouse will have over-the-road line-haul trucks and potentially have terminal tractors (yard tractors) active on site. From an acoustical aspect, terminal tractors and line-haul trucks are acoustically equivalent.

Truck noise in a typical dock area can routinely produce maximum sound levels of 79 dB(A) when measured at a distance of 50 feet from the source. This sound level was determined by looking at a wide variety of truck activity, such as truck movement, air brakes, back-up alarms, and coupling/decoupling, and distilling it to a single conservative maximum level and spectrum for use in acoustical studies such as this. A driving truck exhibits slightly lower maximum sound levels of 74 dB(A) when measured 50 feet from the source. The height of a truck source for all truck activity is modelled at a conservative height of 8 feet above grade. OAA has found that using these maximum sound levels at this height ensures a conservative approach to evaluating truck sound within the truck court. When specific individual activities are modelled at their actual height and sound level, results are typically lower in level than predicted below. For example, many of the high sound level activities, such as back-up alarms and air brakes, occur at a height of 4 feet above grade, not 8 feet. This is a critical detail when evaluating the effectiveness of a sound barrier or berm and when considering intervening topography. It is also important to recognize that all truck noise is dynamic in nature. Maximum sound levels only occur for a short duration and are not representative of the constant sound level produced by on-site trucks.

While there will certainly be multiple trucks onsite at any given time, it is generally appropriate to evaluate maximum sound from an individual truck. Several factors support this. Because maximum levels are dynamic and short in duration, it is unlikely that multiple truck sound level maximums will occur at exactly the same time and location. In addition, safe practices restrict more than one truck from operating in proximity to each other in the same vicinity. Hence, off-

site maximum sound levels will be driven by individual truck sources. In the unlikely event that two truck sources would contribute the same level in the same location at the exact same time, maximum emissions would only be 3 dB higher due to the logarithmic nature of sound pressure level addition. The above rationale is echoed by ITE data which shows that at most, the site expects 1 or 2 trucks in a given nighttime hour. For comparison, ITE data show that 8 trucks would come and go during the busiest daytime hour period. Even with this higher volume the likelihood of multiple maximum sound levels happening at the same time is extremely small.

Maximum sound levels from dock activity were modelled at various on-site locations. Of most concern are activities that occur at the easternmost and westernmost docks as these are closest to off-site receptors. Truck sources were placed in truck court areas at locations where sound emissions were worst-case. Truck yard activity noise sources are shown as white "+"s. HVAC noise sources from Figure 2 were also included in the model to represent worst-case condition.

Figure 3 shows truck yard activity in the westernmost dock. Maximum off-site emissions are 44 dB(A) due to the proposed wing wall that screens sound in this direction. Levels of this magnitude fully comply with local noise code limits. The handful events that might occur in a given hour is expected to be far lower than sound produced by intermittent local traffic travelling along North Street. This applies during both the daytime as well as nighttime hours.

Figure 4 shows a similar condition when there is truck yard activity in the easternmost dock. The truck source was placed in the middle of the truck court to account for use of either the easternmost dock or the easternmost trailer parking. Results show that maximum off-site emissions are 50 dB(A) at Location F. Results at all other locations are 41 dB(A) or below. Results comply with the local noise code limit. The few occurrences of this magnitude that might occur during the night are not expected to generate any noise complaints or have any negative acoustical impact on the surrounding residential receptors. During the daytime, this activity is expected to be difficult to distinguish from other noise sources in the area.

These results show that anticipated for worst-case modelling condition, maximum site sound levels will comply with the 50 dB(A) nighttime code limit and, by default, the 70 dB(A) daytime code limit. This is achieved via site layout, distance, and the proposed sound barrier. Lastly, the low truck trip generation counts expected at this site ensures that these maximum sound level events will be kept to a minimum and not regularly occur. No negative acoustical impact is expected from site operations.

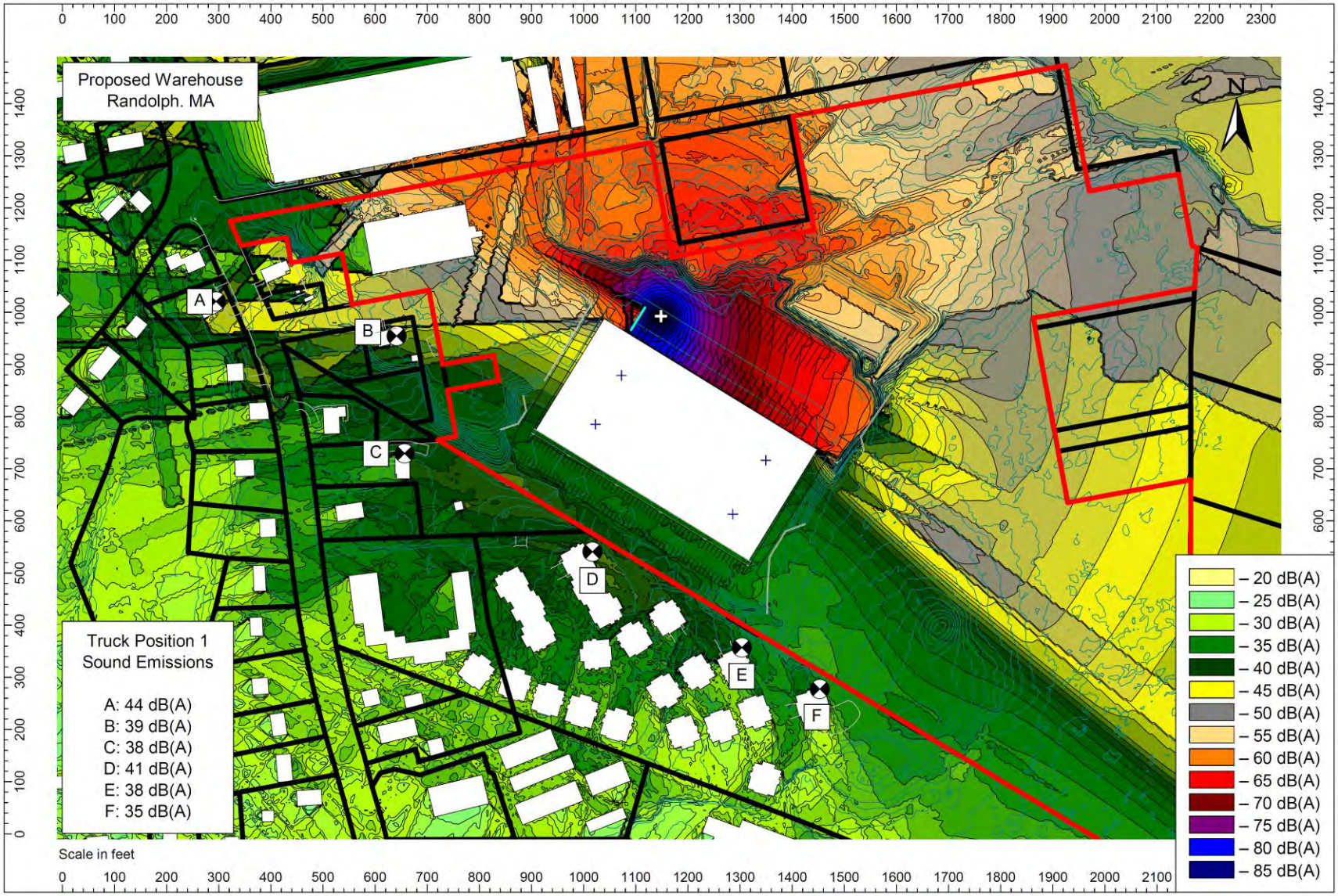


Figure 3 — A-weighted sound level contours, 5 feet above grade, expected for a truck contributing yard activity at Truck Position 1, shown with a white +. Rooftop equipment shown as blue +'s. Buildings shown in white; site property line outlined in red. A-weighted sound emissions tabulated at 15 feet above grade for all Locations.

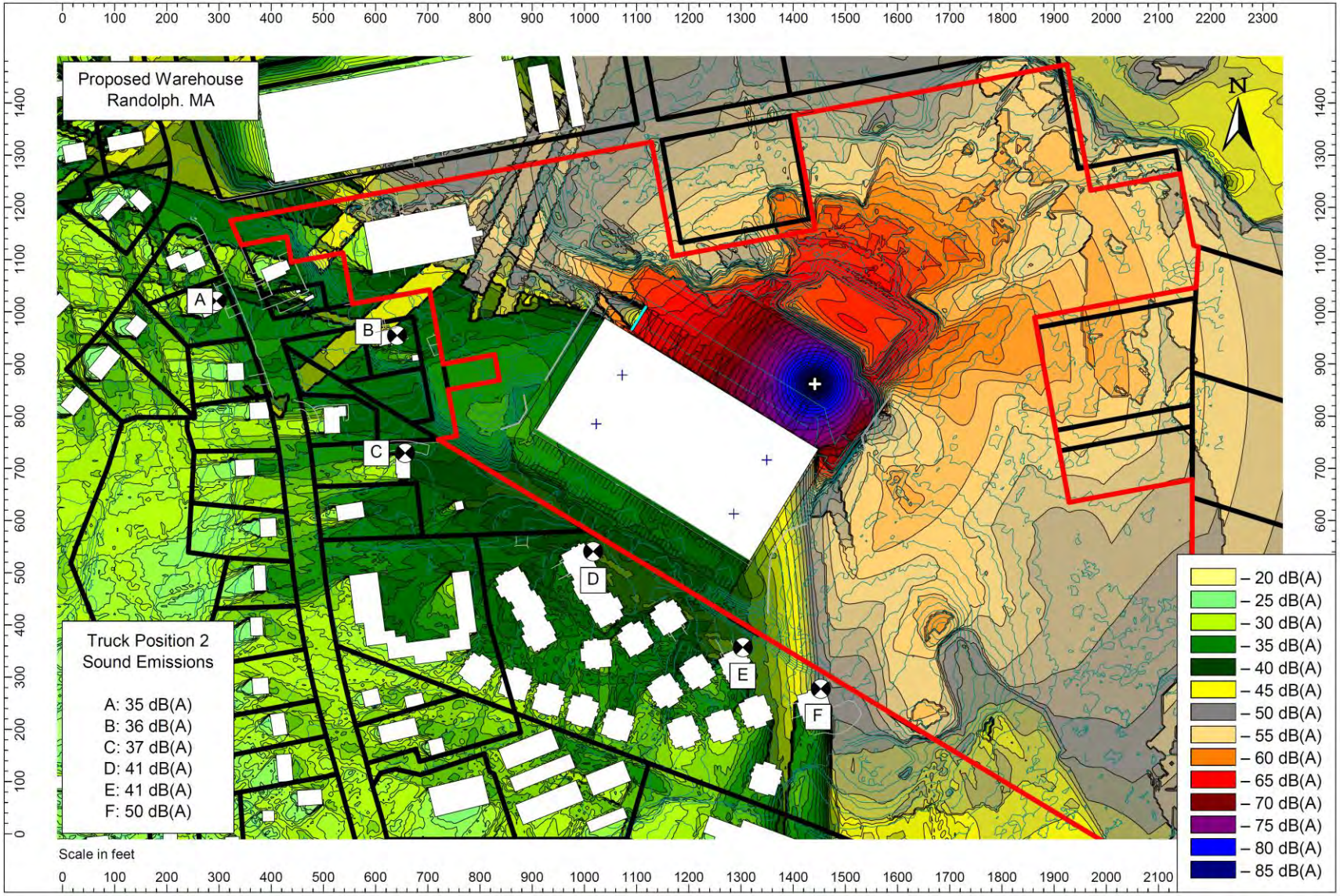


Figure 4 — A-weighted sound level contours, 5 feet above grade, expected for a truck contributing yard activity at Truck Position 2, shown with a white +. Rooftop equipment shown as blue +'s. Buildings shown in white; site property line outlined in red. A-weighted sound emissions tabulated at 15 feet above grade for all Locations.

CONCLUSION

A warehouse is planned in an industrial district in Randolph, MA. Despite having similar uses in the area, there are residential receptors bordering the site to the south and west. Non-noise-sensitive commercial uses border the site to the north and undeveloped land abuts the site to the east. An acoustical evaluation was carried out to ensure that site sound emissions meet the intent of the local noise code and minimize the potential for noise complaints. More stringent project goals were established for steady sound producing HVAC equipment. Meeting these local code limits and recommended project goals will ensure there is no negative acoustical impact at potentially noise sensitive receptors. While local noise code is expected to prevail, an ambient sound survey is currently being conducted to also ensure that the State noise code limits are also met.

Based on results of analyses, steady HVAC site noise is expected to fall well below project noise goals and have an even greater margin of compliance with the allowable nighttime noise code limit of 50 dB(A). HVAC sound is expected to blend in with existing sounds in the area and be difficult to discern from off-site vantage points. Proposed HVAC equipment arrangements can proceed; however, keep in mind that any modification to the arrangement may affect site sound emissions. Similarly, heavy truck activity in the truck court was shown to fully comply with local noise code limits with the inclusion of a 10-foot-tall sound barrier. The sound barrier will block line-of-sight of intermittent dock activity to residences to the west and minimize potential impacts. A sound barrier is not needed to the south as there is sufficient distance and screening provided by the building.

The site layout represents good acoustical planning, which will put the site in the best position to be a good neighbor. No negative acoustical impact is anticipated from 24-hour site operations, and results support that site sound will comply with the daytime and nighttime noise code limits and not generate noise complaints from the surrounding area.

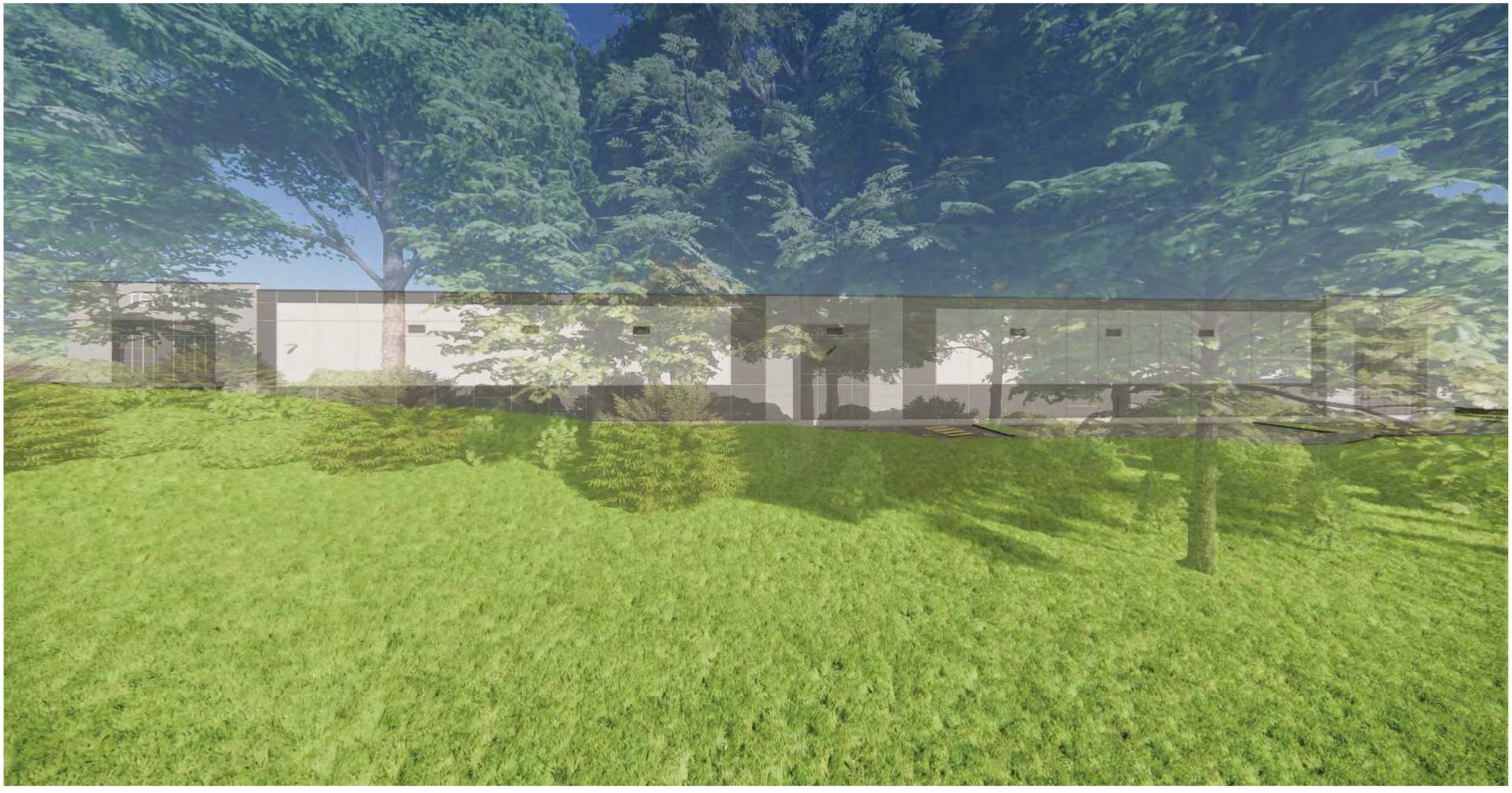
VIEW OF NORTHWEST ENTRY AT DRIVE AISLE

VIEW OF SOUTHEAST CORNER AT RETAINING WALL

VIEW OF WEST SITE FROM ADJACENT PROPERTY / SITE BOUNDARY ALONG NORTH STREET - FULL VEGETATION GROWTH

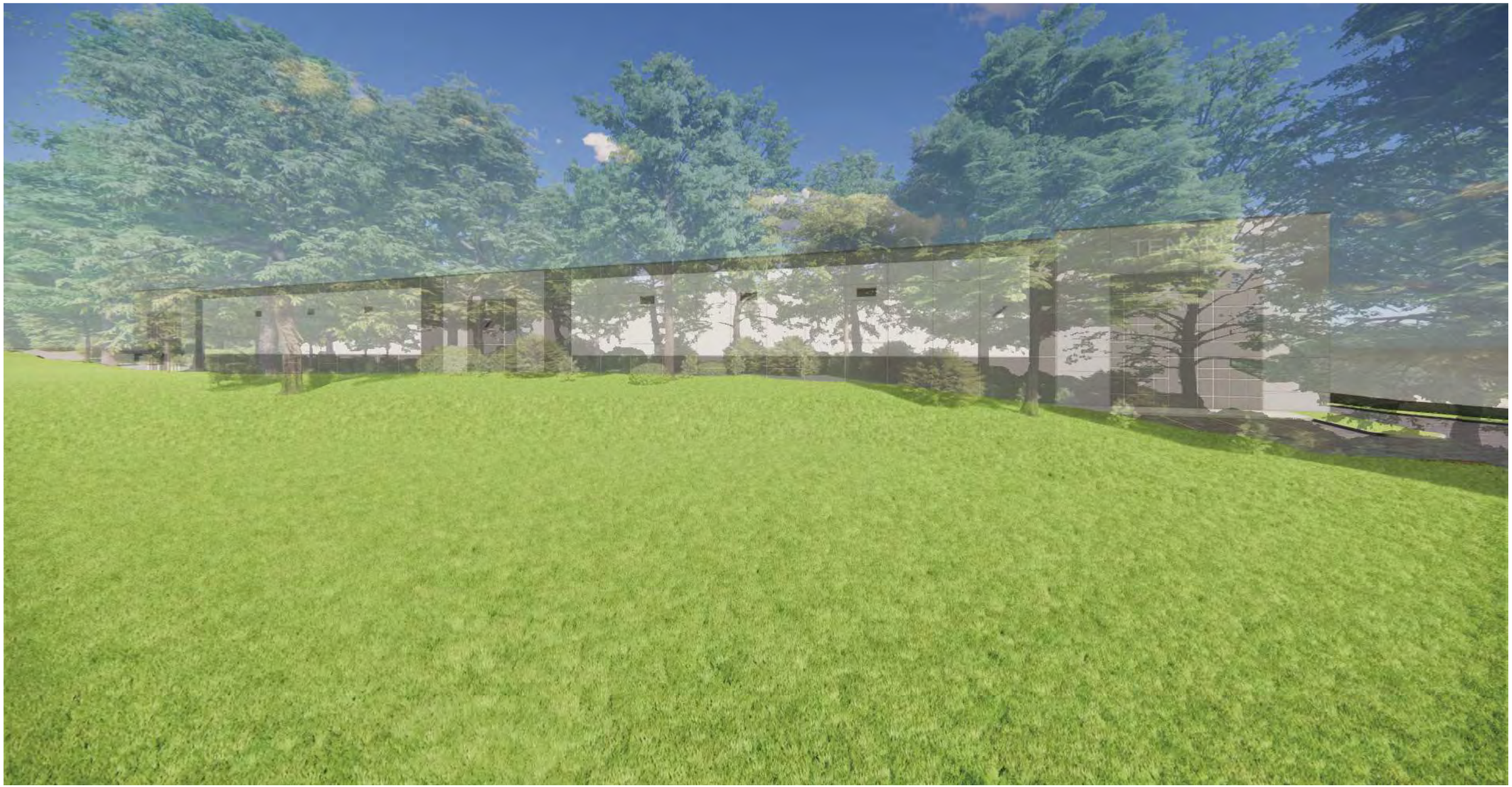
VIEW OF WEST SITE FROM ADJACENT PROPERTY / SITE BOUNDARY ALONG NORTH STREET - WITH VEGETATION TRANSPARENCY FOR CLARITY

VIEW OF SOUTH SITE FROM ADJACENT PROPERTY / SITE BOUNDARY - FULL VEGETATION GROWTH



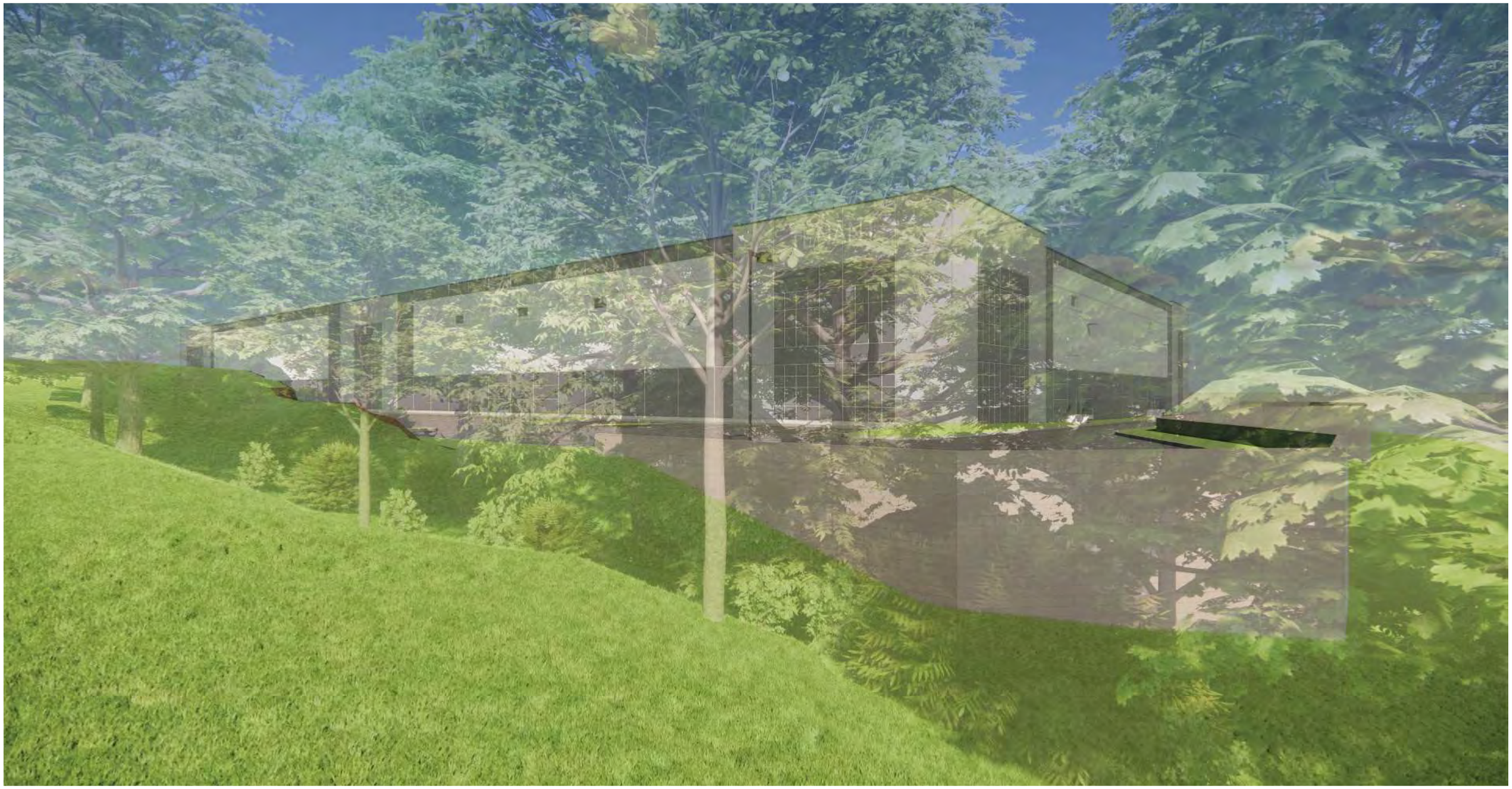
VIEW OF SOUTH SITE FROM ADJACENT PROPERTY / SITE BOUNDARY - WITH VEGETATION TRANSPARENCY FOR CLARITY

VIEW OF SOUTH SITE FROM ADJACENT PROPERTY / SITE BOUNDARY - FULL VEGETATION GROWTH



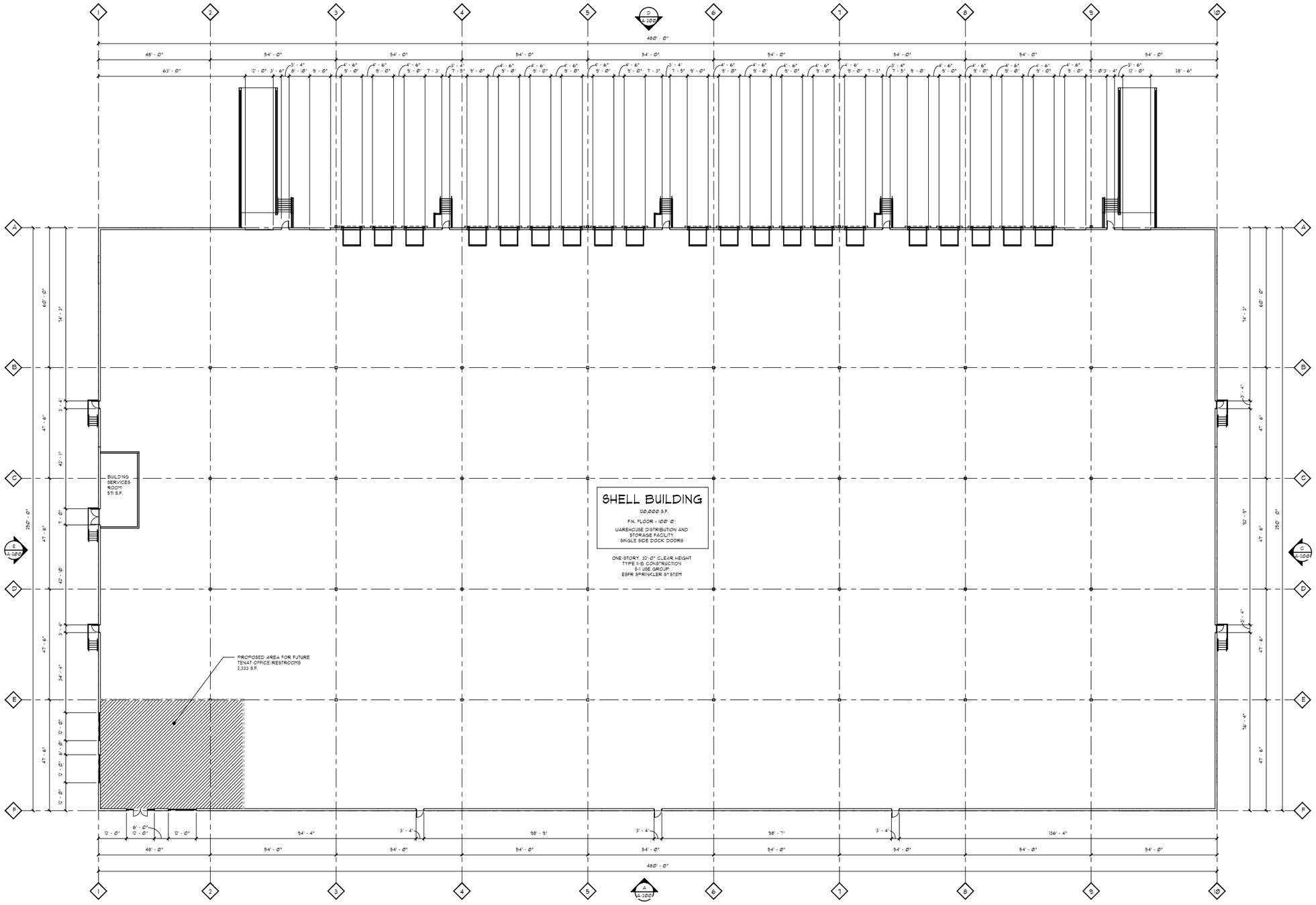
VIEW OF SOUTH SITE FROM ADJACENT PROPERTY / SITE BOUNDARY - WITH VEGETATION TRANSPARENCY FOR CLARITY

VIEW OF SOUTHEAST SITE FROM ADJACENT PROPERTY / SITE BOUNDARY - FULL VEGETATION GROWTH



VIEW OF SOUTHEAST SITE FROM ADJACENT PROPERTY / SITE BOUNDARY - WITH VEGETATION TRANSPARENCY FOR CLARITY

SITE AERIAL VIEW



A OVERALL BUILDING FLOOR PLAN

SCALE: 1/16" = 1'-0"

GRAPHIC SCALE 0 16 32 64

PROJECT NORTH

FORD & ASSOCIATES

1500 West First Avenue
Columbus, Ohio 43212
P: 614.488.6252
F: 614.488.9963

ARCHITECTS

Randolph Road - Speculative Warehouse

Multiple Parcels on Randolph Road
Randolph, MA 02368

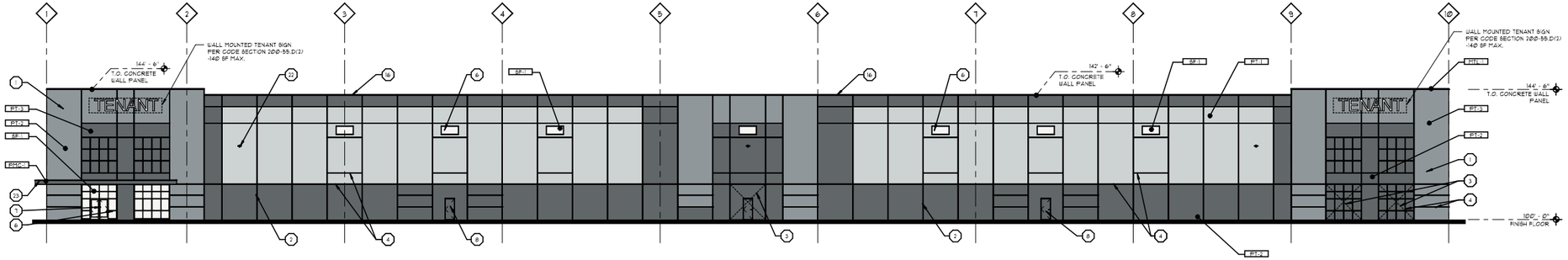
For Bluewater Property Group LLC
76 8th Avenue 10th Floor NY, NY 10011

ISSUE	REVISION	DATE
PLANNING BOARD SUBMISSION		MAY 16, 2023

OVERALL BUILDING FLOOR PLAN

FAA #22111.000

A-100



A OVERALL SOUTH BUILDING ELEVATION

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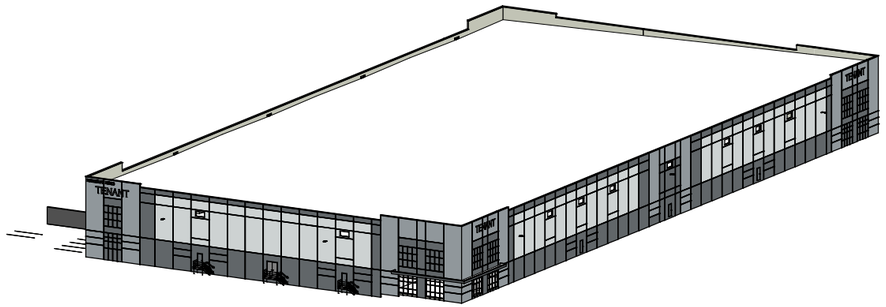
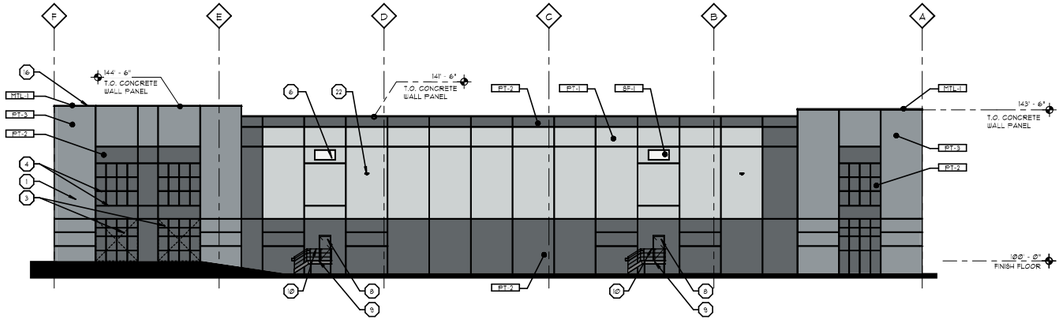


B BUILDING PERSPECTIVE - SOUTHWEST CORNER

SCALE:



C OVERALL EAST BUILDING ELEVATION

SCALE: 1/16" = 1'-0"

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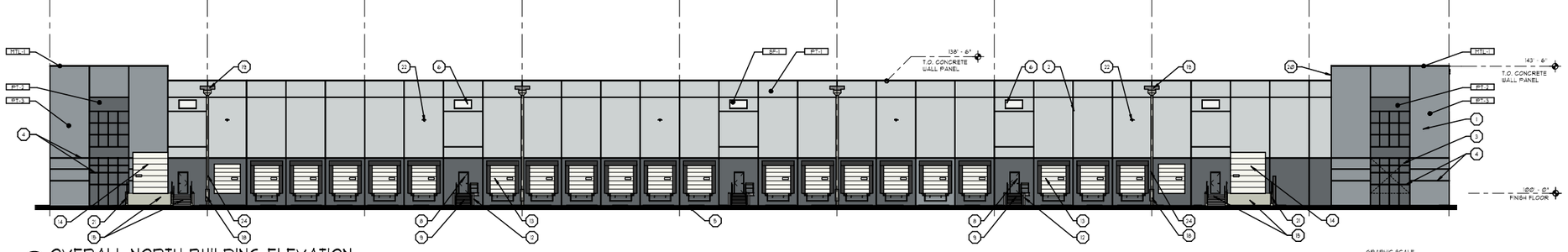
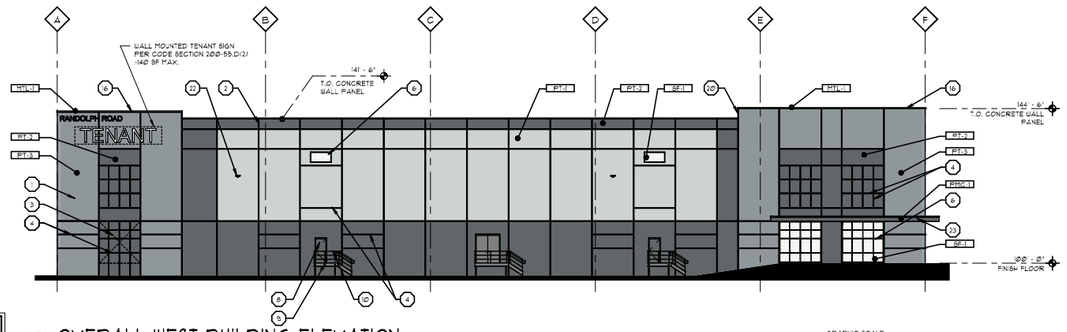


D OVERALL NORTH BUILDING ELEVATION

SCALE: 1/16" = 1'-0"

GRAPHIC SCALE 0 16 32 64



E OVERALL WEST BUILDING ELEVATION

SCALE: 1/16" = 1'-0"

GRAPHIC SCALE 0 16 32 64

ELEVATION CODED NOTES

1. PRECAST CONCRETE WALL PANELS.
2. PANEL JOINT WITH SEALANT.
3. KNOCK-OUT PANEL FOR FUTURE WINDOW / DOCK DOOR & LEVELER. SHOWN DASHED (TYP.)
4. PRECAST PANEL REVEAL.
5. CONCRETE DOCK PAD (SEE CIVIL SHEETS FOR PROFILE & SLOPE)
6. PREFINISHED ALUMINUM STOREFRONT SYSTEM WITH 1" INSULATED LOW-E GLAZING.
7. ALUMINUM STOREFRONT ENTRANCE DOOR(S) WITH 1" INSULATED LOW-E GLAZING.
8. INSULATED HOLLOW METAL SERVICE DOOR & FRAME. PAINT SEMI-GLOSS. GROUT FRAME SOLID.
9. EXTERIOR GALVANIZED METAL STAIR WITH 1 1/2" DIA. GUARDRAIL & 1 1/4" DIA. HANDRAIL. PROVIDE (2) 6" DIA. BOLLARDS AT DOCK SIDE LANDING.
10. 2" DIA. GALVANIZED METAL GUARDRAIL AT 42" A.F.F. WITH INTERMEDIATE RAIL AT 21" A.F.F. AND POSTS AT 6'-0" O.C. MAX.
11. 1 1/4" DIA. EXTERIOR GALVANIZED HANDRAIL.
12. 6" DIA. CONCRETE-FILLED STEEL BOLLARD/GUARDRAIL. PAINT "SAFETY YELLOW".
13. 9'-0" x 10'-0" MANUALLY OPERATED INSULATED OVERHEAD SECTIONAL DOCK DOOR.
14. 12'-0" x 14'-0" MOTORIZED INSULATED OVERHEAD SECTIONAL DRIVE-THRU DOOR. PROVIDE (4) 6" DIA. BOLLARDS (TYP.).
15. CONCRETE RAMP & STAIR WITH GALVANIZED METAL GUARDRAIL AT DRIVE-THRU OVERHEAD DOORS. (SEE CIVIL SHEETS)
16. PREFINISHED METAL COPING (24 GA.) OR FASCIA EDGE FLASHING (24 GA.). LINE OF ROOF BEYOND.
17. LINE OF ROOF BEYOND.
18. GALVANIZED STEEL PLATE DOWNSPOUT GUARD. SECURE TO WALL WITH (3) 1/2" DIA. EXPANSION ANCHORS.
19. 3'-0" W. x 4" H. THRU WALL SCUPPER OPENING w/ 5'-0" W. x 1'-0" H. OVERFLOW OPENING w/ PREFINISHED METAL SCUPPER SLEEVE.
20. PARAPET STEP. CONTINUE COPING ON VERTICAL FACE OF WALL PANEL. TYPICAL
21. CAST-IN-PLACE CONCRETE RETAINING WALL. (SEE CIVIL SHEETS)
22. WALL MOUNTED LIGHT FIXTURE. (SEE CIVIL SHEETS)
23. PRE-ENGINEERED ARCHITECTURAL METAL CANOPY SYSTEM.
24. METAL (22 GA.) DOWNSPOUT w/ METAL ANCHOR STRAPS @ 8'-0" O.C. MAX. CONNECT TO STORM SYSTEM BELOW GRADE. PROVIDE CLEAN OUT ACCESS COVER AS REQUIRED. (SEE CIVIL SHEETS)

MATERIAL FINISH KEY

MARK	MANUFACTURER	DESCRIPTION	REMARKS
PAINT			
PT-1	SHERWIN WILLIAMS	TEXTURED ACRYLIC COATING TO MATCH COLOR SW 6232 "MISTY"	EXTERIOR FIELD COLOR (SEE SPECIFICATIONS)
PT-2	SHERWIN WILLIAMS	TEXTURED ACRYLIC COATING TO MATCH COLOR SW 7015 "UNDER GRAY"	EXTERIOR FIELD COLOR, HOLLOW METAL DOORS AND FRAMES (SEE SPECIFICATIONS)
PT-3	SHERWIN WILLIAMS	TEXTURED ACRYLIC COATING TO MATCH COLOR SW 6234 "STEELY GRAY"	EXTERIOR FIELD COLOR (SEE SPECIFICATIONS)
PRE-ENGINEERED METAL CANOPY			
PMC-1	MAPES OR EQUAL	MATCH COLOR SW 7015 "UNDER GRAY"	(SEE SPECIFICATIONS)
PREFINISHED METAL			
MTL-1	DMI	DOWNSPOUTS, GUTTERS, METAL COPINGS AND FLASHINGS	FINISH - "DOVE GRAY"
STOREFRONT/WINDOW SYSTEM			
SF-1	KAWNEER	PREFINISHED ALUMINUM STOREFRONT SYSTEM - TRIFAB VG 451-1	FINISH - CLEAR ANNODIZED

FORD & ASSOCIATES
1500 West First Avenue
Columbus, Ohio 43212
P: 614.488.6252
F: 614.488.9963
ARCHITECTS

Randolph Road - Speculative Warehouse

Multiple Parcels on Randolph Road
Randolph, MA 02368

For
Bluewater Property Group LLC
76 8th Avenue 10th Floor NY, NY 10011

ISSUE	REVISION	DATE
PLANNING BOARD SUBMISSION		MAY 16, 2023

OVERALL BUILDING ELEVATIONS

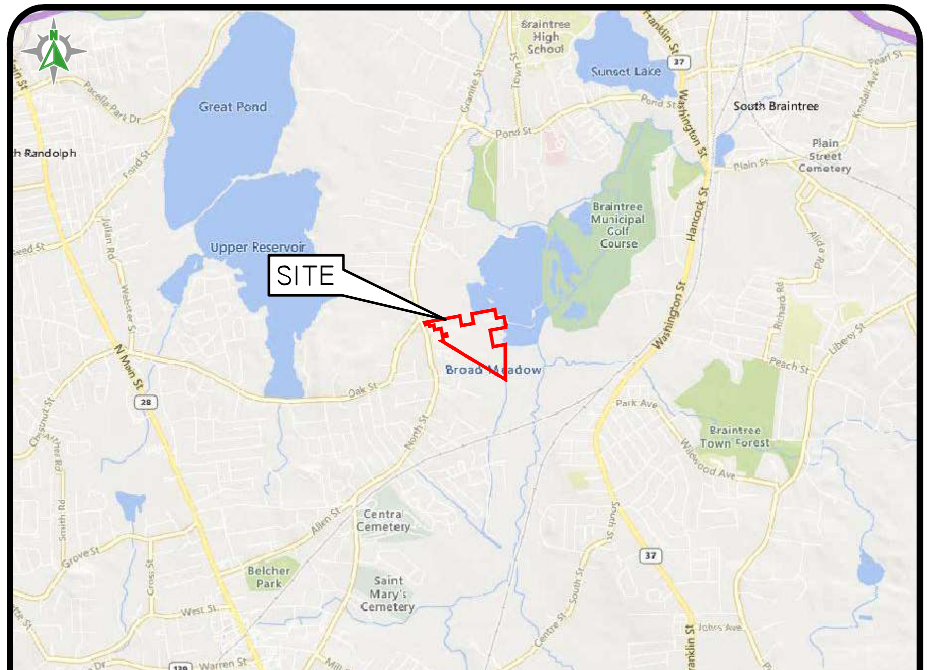
FAA #22111.000

A-200

PLANNING BOARD SUBMISSION

RANDOLPH ROAD

MULTIPLE PARCELS
LOCATED IN
RANDOLPH, MASSACHUSETTS



LOCATION MAP NOT TO SCALE

SHEET LIST TABLE

1 COVER SHEET
2 AERIAL HALF-MILE RADIUS & USGS MAP
3 NOTES AND LEGEND
4 APPROVAL NOT REQUIRED SUBDIVISION
5 SOIL EROSION & SEDIMENT CONTROL PLAN
6 OVERALL SITE PLAN
7 SITE LAYOUT PLAN
8 TRUCK TURN PLAN
9 GRADING PLAN
10 DRAINAGE PLAN
11 UTILITIES PLAN
12 POND DETAILS
13 SESC DETAIL SHEET
14 DETAIL SHEET-1
15 DETAIL SHEET-2
16 LANDSCAPE PLAN
17 LANDSCAPE NOTES & DETAILS

OTHER SHEETS

SHEET 1 OF 2 LIGHTING LAYOUT (RAB)
SHEET 2 OF 2 LIGHTING LAYOUT (RAB)

SWPPP / O&M
THE STORMWATER POLLUTION PREVENT PLAN (SWPPP) AND STORMWATER OPERATION AND MAINTENANCE PLAN (O&M) ARE REQUIRED DOCUMENTS WITH THIS PLAN SET AND MUST BE MAINTAINED BY THE CONTRACTOR AND OWNER ON SITE.

DiPrete Engineering
Boston • Providence • Newport

NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

DRAWN BY: B.A.W. DESIGN BY: K.J.D.

COVER SHEET
RANDOLPH ROAD, MULTIPLE PARCELS
WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

SHEET 1 OF 17

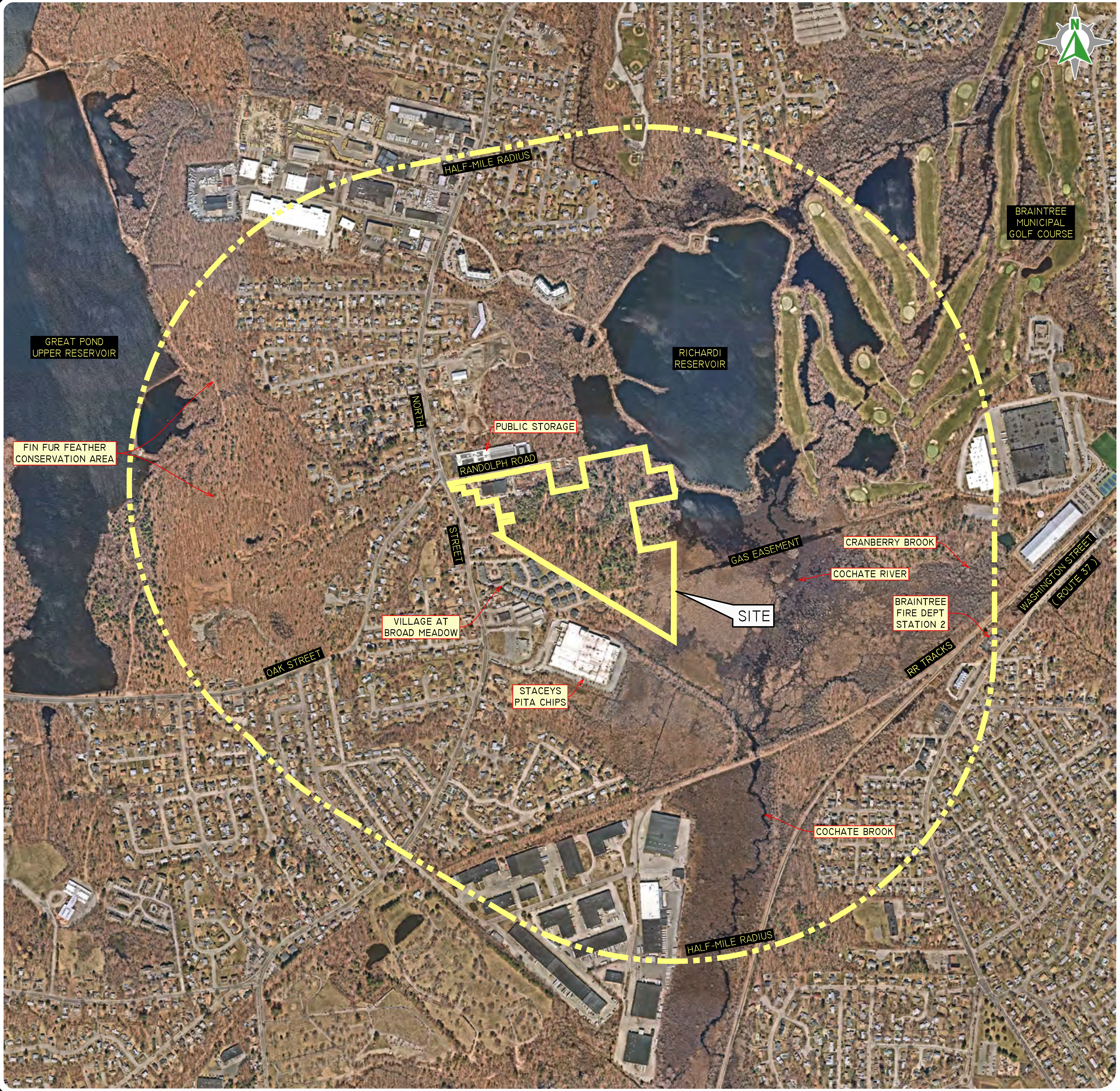
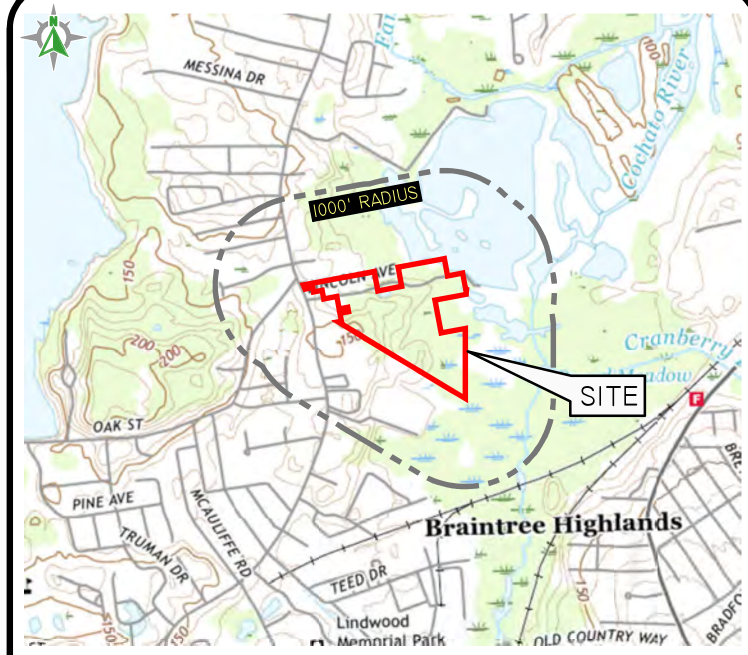


PHOTO OBTAINED FROM NEARMAP.
DATE OF PHOTOGRAPHY 04-02-2023.

SCALE: 1"=400'
0 200' 400' 800'



USGS MAP SCALE: 1"=1000'

DiPrete Engineering
105 Eastern Avenue Suite 200 Dedham, MA 02026
tel 781-326-0021 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

COMMONWEALTH OF MASSACHUSETTS
BRANDON D. CARR
CIVIL
No. 51472
REGISTERED PROFESSIONAL ENGINEER
5/16/2023

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES. SEE 'UTILITY NOTE' ON SHEET 3.

NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

DRAWN BY: B.A.W. DESIGN BY: K.J.D.

AERIAL HALF-MILE RADIUS & USGS MAP

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

GENERAL NOTES:

1. THE PARCELS ARE LOCATED IN THE TOWN OF RANDOLPH , NORFOLK COUNTY, MASSACHUSETTS HAVING THE PARCEL ID 17-F-1.01, 17-K-2, 17-I-3, 17-I-2.192, 17-I-4.201, 17-H-1.Q, 17-H-2.554-5, 17-K-1.R, 17-J-7.1, 17-J-8.225-2, 17-L-1.S, 17-L-2.695, 17-D-5.704-7, 34-A-2.713-7, 17-J-15.756-7, 17-J-14.785, 34-A-3.739-7.
2. THE OWNER OF:

   PARCEL ID: 17-F-1.01, 17-K-2 PER LAND COURT CERTIFICATE NO. 185889 IS:

   ML REAL ESTATE TRUST LLC
   11 RANDOLPH ROAD
   RANDOLPH, MA 02368

   PARCEL ID: 17-I-3, 17-I-2.192, 17-I-4.201, 17-H-1.Q, 17-H-2.554-5, 17-K-1.R, 17-J-7.1, 17-J-8.225-2, 17-L-1.S, 17-L-2.695, 17-D-5.704-7, 34-A-2.713-7, 17-J-15.756-7, 17-J-14.785, 34-A-3.739-7
   PER DEED BOOK 36563, PAGE 246 IS:

   RANDOLPH ROAD REALTY LLC.
   11 RANDOLPH ROAD
   RANDOLPH, MA 02368
3. THIS SITE IS LOCATED IN FEMA FLOOD ZONE X, X (SHADED), AND AE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 25021C0217E, MAP REVISED JULY 17, 2012. THIS DESIGNATION MAY CHANGE BASED UPON REVIEW BY A FLOOD ZONE SPECIALIST OR BY THE RESULTS OF A COMPREHENSIVE FLOOD STUDY.
4. THERE WERE NO CEMETERIES, GRAVE SITES AND OR BURIAL GROUNDS OBSERVED WITHIN THE LIMITS OF THE SURVEY.
5. FIELD SURVEY PERFORMED BY DIPRETE ENGINEERING ON AUGUST 18, 2022 AND FEBRUARY 7 & 16, 2023. THIS PLAN REFLECTS ON THE GROUND CONDITIONS AS OF THESE DATES.
6. WETLAND LOCATIONS SHOWN BASED ON FIELD SURVEY BY DIPRETE ENGINEERING. WETLAND FLAGS WERE DELINEATED BY LEC ENVIRONMENTAL CONSULTANTS.

   ▲ WFA1 — WETLAND FLAG LOCATION BASED ON PLAN TITLED " EXISTING CONDITIONS" PREPARED FOR ML REAL ESTATE TRUST, PREPARED BY SLB GROUP, LLC, DATED OCTOBER 14, 2015 & REVISED NOVEMBER 17, 2015.

   ▲ A80 — WETLAND FLAG LOCATION BASED ON AN ON THE GROUND FIELD SURVEY PERFORMED BY DIPRETE ENGINEERING ON SEPTEMBER 19, 2022. ADDITIONAL FLAGS AA1 - AA6, A1 - A11, A58 - A79, AND A90 - A92 WERE LOCATED ON FEBRUARY 16, 2023.
7. THE SITE IS WITHIN A WATER RESOURCE PROTECTION AREA (ZONE A AND ZONE B).
8. TO THE BEST OF OUR KNOWLEDGE, THERE ARE NO ESTIMATED PRIORITY HABITATS, OR PRIORITY HABITAT AREAS ONSITE. THIS WAS DETERMINED BY LEC ENVIRONMENTAL CONSULTANTS, INC.
9. ALL TOPOGRAPHY SHOWN ON THIS SURVEY IS BASED ON LIDAR DATA FLOWN & COMPILED BY BLUE-SKY, NORTH ADAMS, MA. THE CONTOUR INTERVAL IS 2 FEET. NINETY PERCENT OF THE TOPOGRAPHY AS DEPICTED IS ACCURATE TO WITHIN HALF THE CONTOUR INTERVAL, AND THE REMAINING TEN PERCENT IS ACCURATE TO WITHIN ONE FULL CONTOUR INTERVAL.
10. ALL WORK PERFORMED HEREIN IS TO BE GOVERNED BY CURRENT EDITIONS OF THE MASSDOT HIGHWAY DIVISION CONSTRUCTION STANDARD DETAILS, TOWN OF RANDOLPH STANDARD SPECIFICATIONS AND DETAILS AND SPECIFICATIONS INCLUDED AS PART OF THE DRAWINGS. IN AREAS OF CONFLICT BETWEEN THE DIFFERENT SPECIFICATIONS, THE DESIGN PLANS AND PROJECT SPECIFICATIONS WILL TAKE PRECEDENCE OVER THE GENERAL SPECIFICATIONS AND THE DESIGN ENGINEER WILL INTERPRET THE CONSTRUCTION REQUIREMENT. THE CONTRACTOR IS ADVISED TO SUBMIT A REQUEST FOR INFORMATION (RFI) FOR ANY AREAS OF CONFLICT BEFORE COMMITTING TO CONSTRUCTION.
11. THE FOLLOWING DOCUMENTS ARE CONSIDERED PART OF THE PROJECT PLANS AND THE CONTRACTOR/OWNER MUST MAINTAIN THESE DOCUMENTS AS PART OF A FULL PLAN SET:
    - STORMWATER POLLUTION PREVENTION PLAN (SWPPP). THE SWPPP CONTAINS THE FOLLOWING:
      - EROSION CONTROL MEASURES
      - SHORT TERM MAINTENANCE
      - ESTABLISHMENT OF VEGETATIVE COVER
      - CONSTRUCTION POLLUTION PREVENTION
      - SEQUENCE OF CONSTRUCTION
    - OPERATION AND MAINTENANCE PLAN (O&M). THE O&M CONTAINS:
      - LONG TERM MAINTENANCE
      - LONG TERM POLLUTION PREVENTION

9. THIS PLAN SET REFERENCES MASSDOT HIGHWAY DIVISION STANDARD DETAILS (DESIGNATED AS MASSDOT STD XXX.X.X). MASSDOT STANDARD DETAILS ARE AVAILABLE FROM MASSDOT AND ONLINE AT HTTPS://WWW.MASS.GOV/LISTS/CONSTRUCTION-DETAILS
10. THE SITE IS TO BE SERVICED BY PUBLIC WATER AND PUBLIC SEWER.
11. THE DRAINAGE SYSTEM IS DESIGNED TO MEET THE TOWN OF RANDOLPH SUBDIVISION AND LAND DEVELOPMENT REGULATIONS WITH THE USE OF CATCH BASINS, CULVERTS, AND STORMWATER SAND FILTERS & PONDS. THE STORMWATER MANAGEMENT SYSTEM MEETS THE MassDEP BEST MANAGEMENT PRACTICES.
12. THE SITE IS PROPOSED TO BE BUILT IN ONE PHASE.
13. SOIL EVALUATIONS WERE COMPLETED BY SANBORN, HEAD & ASSOCIATES, INC., DURING SEPTEMBER AND OCTOBER OF 2022.
14. ANY PROPRIETARY PRODUCTS REFERENCED IN THIS PLAN SET ARE REPRESENTATIVE OF THE MINIMUM DESIGN REQUIREMENTS FOR THE PURPOSE THEY PROPOSE TO SERVE. ALTERNATIVES TO ANY PROPRIETARY PRODUCT MAY BE SUBMITTED TO THE ENGINEER OF RECORD FOR CONSIDERATION, WHICH MUST BE ACCOMPANIED BY APPROPRIATE SPECIFICATION SHEETS/DESIGN CALCULATIONS THAT DEMONSTRATE THE ALTERNATIVE(S) MEET THE MINIMUM DESIGN PARAMETERS OF THE PRODUCT SHOWN ON THE PLANS. NO ALTERNATIVES MAY BE USED WITHOUT THE WRITTEN APPROVAL OF THE ENGINEER OF RECORD.
15. THIS PLAN SET MAY REFERENCE AND/OR INCLUDE REPRODUCTIONS OF PROPRIETARY PRODUCTS/ DETAILS BY OTHERS, AND/OR THEIR ASSOCIATED SPECIFICATIONS. ANY REFERENCED OR REPRODUCED PROPRIETARY PRODUCT OR DETAIL BY OTHERS THAT IS SHOWN ON DIPRETE PLANS IS STRICTLY FOR INFORMATION/SPECIFICATION PURPOSES ONLY. DIPRETE ENGINEERING DOES NOT WARRANT ANY PROPRIETARY PRODUCTS, DETAILS BY OTHERS OR THEIR RESPECTIVE DESIGNS. IF A DIPRETE ENGINEERING PLAN INCLUDES A PROPRIETARY PRODUCT/DETAIL BY OTHERS (EITHER EXPLICITLY OR IMPLIED) AND IS STAMPED BY A REGISTERED PROFESSIONAL ENGINEER AND/OR REGISTERED LANDSCAPE ARCHITECT OF DIPRETE ENGINEERING, SAID STAMP DOES NOT EXTEND TO ANY PORTION OF THE PROPRIETARY PRODUCT/DETAIL BY OTHERS OR ITS DESIGN.
16. ADDITIONAL TEST HOLES MAY BE REQUIRED PRIOR TO THE START OF CONSTRUCTION.

SOIL INFORMATION:

(REFERENCE: USDA NATURAL RESOURCES CONSERVATION SERVICE)
SOIL NAME DESCRIPTION

SOIL CODE	SOIL DESCRIPTION	HSG
1	WATER	---
5	SACO SILT LOAM, FREQUENTLY PONDED, 0 TO 1 PERCENT SLOPES, FREQUENTLY FLOOD	B/D
31A	WALPOLE SANDY LOAM, 0 TO 3 PERCENT SLOPES	B/D
103C	CHARLTON-HOLLIS-ROCK OUTCROP COMPLEX, 8 TO 15 PERCENT SLOPES	B : D : D
255C	WINDSOR LOAMY SAND, 8 TO 15 PERCENT SLOPES	A
256A	DEERFIELD LOAMY FINE SAND, 0 TO 3 PERCENT SLOPES	A
256B	DEERFIELD LOAMY FINE SAND, 3 TO 8 PERCENT SLOPES	A
422B	CANTON FINE SANDY LOAM, 0 TO 8 PERCENT SLOPES, EXTREMELY STONY	B
600	PITS, SAND AND GRAVEL	---
602	URBAN LAND, 0 TO 15 PERCENT SLOPES	---
626B	MERRIMAC-URBAN LAND COMPLEX, 0 TO 8 PERCENT SLOPES	A
653	UDORTHENTS, SANDY	A
655	UDORTHENTS, WET SUBSTRATUM	---

SOIL EROSION AND SEDIMENTATION CONTROL NOTES:

1. THE CONTRACTOR IS RESPONSIBLE FOR ALL SOIL EROSION AND SEDIMENT CONTROL ON SITE WHICH MUST BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE APPLICABLE REGULATIONS AND AUTHORITY HAVING JURISDICTION. THE CONTRACTOR IS TO NOTIFY THE DESIGN ENGINEER, THE DIRECTOR OF PUBLIC WORKS, THE TOWN ENGINEER, AND THE CONSERVATION COMMISSION AT LEAST 48 HOURS PRIOR TO THE START OF CONSTRUCTION.
2. ALL EROSION CONTROL INCLUDING (BUT NOT LIMITED TO) TEMPORARY SWALES, TEMPORARY SEDIMENT TRAPS, TEMPORARY SEDIMENTATION PONDS, ETC. MUST BE INSTALLED PER THE LATEST EDITION OF THE MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS (MESCG) AND THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP). NOTE THE SOIL EROSION AND SEDIMENT CONTROL SHOWN ON THESE PLANS ARE THE MINIMUM QUANTITY/TYPE OF EROSION CONTROL DEVICES AND MATERIALS DEEMED REQUIRED BY DIPRETE ENGINEERING TO MEET THE OBJECTIVES OF THE MESCG, BUT IS CONSIDERED A GUIDE ONLY. ADDITIONAL MEASURES/ALTERNATE CONFIGURATIONS MAY BE REQUIRED IN ORDER TO MEET THE MESCG BASED ON FACTORS INCLUDING (BUT NOT LIMITED TO) SITE PARAMETERS, WEATHER, INSPECTIONS AND UNIQUE FEATURES. THE SWPPP WILL CONTINUE TO EVOLVE THROUGHOUT CONSTRUCTION/PHASES. PURSUANT TO NOTE 1 ABOVE, SWPPP REMAINS THE RESPONSIBILITY OF THE CONTRACTOR UNTIL THE SITE IS FULLY STABILIZED AND/OR SWPPP RESPONSIBILITIES ARE ASSUMED BY THE OWNER IN WRITING.
3. TEMPORARY SWALES MUST BE USED TO CONTROL RUNOFF DURING CONSTRUCTION OF THE PROPOSED SITE WORK. TEMPORARY SWALES MUST BE VEGETATED AFTER CONSTRUCTION. EROSION CONTROL MATS MUST BE INSTALLED, IF NECESSARY, TO PREVENT EROSION AND SUPPORT VEGETATION. AFTER CONSTRUCTION IS COMPLETE AND TRIBUTARY AREAS TO THE SWALES HAVE BEEN STABILIZED, THE TEMPORARY SWALES MUST BE CLEARED AND FINAL DESIGN, INCLUDING INSTALLATION OF THE GRASS SWALES, TO BE PER THE DESIGN PLANS.
4. ONCE THE SEDIMENT TRAPS ARE NO LONGER REQUIRED AND ALL TRIBUTARY AREAS HAVE BEEN STABILIZED, THE TEMPORARY SEDIMENT TRAPS MUST BE CLEANED AND BROUGHT TO FINAL DESIGN GRADES.
5. INLET PROTECTION MUST BE INSTALLED ON ALL CATCH BASINS ONCE CONSTRUCTED.
6. FOR SEQUENCE OF CONSTRUCTION, PROJECT PHASING AND CONSTRUCTION PHASING, SEE SWPPP PLAN.
7. CONTRACTOR MAY MODIFY SEQUENCE OF CONSTRUCTION WITH APPROVAL FROM DESIGN ENGINEER AND OWNER.
8. IF CONCRETE TRUCKS ARE WASHED OUT ON SITE, ALL WASHOUT MUST BE PERFORMED IN THE DESIGNATED CONCRETE WASHOUT AREA.

DEMOLITION NOTES:

1. CONTRACTOR MUST NOTIFY "DIG SAFE" AT 811 (OR 1-888-344-7233) A MINIMUM OF 72 HOURS BEFORE EXCAVATING.
2. CONTRACTOR MUST OBTAIN ALL FEDERAL, STATE, AND MUNICIPAL APPROVALS PRIOR TO THE START OF CONSTRUCTION.
3. CONTRACTOR MUST PERFORM DAILY SWEEPING AT CONSTRUCTION ENTRANCE DURING DEMOLITION AND CONSTRUCTION TO MINIMIZE SEDIMENTS ON EXTERNAL STREETS.
4. ANY EXISTING BUILDING(S) AND PROPERTY PROPOSED TO REMAIN THAT ARE DAMAGED BY THE CONTRACTOR MUST BE REPAIRED BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. CONTRACTOR IS RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS INDICATED ON THE PLANS UNLESS SPECIFIED OTHERWISE HERE IN. R&D MATERIALS MUST INCLUDE BUT ARE NOT LIMITED TO PAVEMENT, GRAVEL, CATCH BASINS, MANHOLES, GRATES/FRAMES/COVERS, AND ANY EXCESS SOIL THAT IS NOT INCORPORATED INTO THE WORK.
6. IN ADDITION TO THOSE AREAS SPECIFICALLY DESIGNATED ON THE PLANS, ALL DISTURBED AREAS, INCLUDING THE CONTRACTOR'S STOCKPILE AND STAGING AREAS WITHIN THE LIMIT OF WORK, MUST BE RESTORED TO MATCH THE DESIGN PLANS.
7. CONTRACTOR MUST DOCUMENT LOCATION OF ALL SUBSURFACE UTILITIES REMAINING IN PLACE AFTER DEMOLITION (ACTIVE AND INACTIVE/ABANDONED). LOCATION MUST BE DOCUMENTED BY FIELD SURVEY OR SWING TIES. COPIES OF LOCATION DOCUMENTATION MUST BE PROVIDED TO THE OWNER FOLLOWING COMPLETION OF DEMOLITION AND PRIOR TO START OF NEW CONSTRUCTION. A MARKER MUST BE INSTALLED TO FINISH GROUND AT ALL INSTALLED CAPS/PLUGS. THE MARKER CAN BE A POST IN CONSTRUCTION AREAS OR PAINTED ON A PERMANENT SURFACE.
8. ACTIVE UTILITY LINES AND STRUCTURES NOT SPECIFICALLY NOTED ON PLANS, BUT WHICH ARE ENCOUNTERED TO BE IN CONFLICT WITH THE PROPOSED WORK, MUST BE EXTENDED, PROTECTED, OR REWORKED BY THE CONTRACTOR AS DIRECTED OR REQUIRED BY THE UTILITY ENTITY OR OWNER UNLESS OTHERWISE NOTED.
9. CONTRACTOR MUST COORDINATE THE CUTTING AND CAPPING OF ALL UTILITIES WITH THE OWNER, THE MUNICIPALITY, AND ALL APPLICABLE UTILITY ENTITIES HAVING JURISDICTION.
10. INACTIVE SUBSURFACE UTILITIES NOT IN CONFLICT WITH THE PROPOSED WORK AREA MAY BE ABANDONED IN PLACE WITH WRITTEN PERMISSION FROM THE OWNER.

TRAFFIC NOTES:

1. ALL TRAFFIC CONTROL MUST CONFORM TO THE FEDERAL HIGHWAY ADMINISTRATION (FHWA) MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) CURRENT EDITION.
2. DURING CONSTRUCTION, TRAFFIC CONES MUST BE USED FOR SEPARATION OF ACTIVE TRAFFIC FROM WORK ZONE PER MUTCD REQUIREMENTS.
3. DURING CONSTRUCTION FLAGGERS MUST BE EMPLOYED TO ENSURE SAFETY FOR INTERACTION OF CONSTRUCTION VEHICLES AND ACTIVE TRAFFIC.
4. ALL SIGNS, FLAGGERS, TRAFFIC CONTROL DEVICES, AND TEMPORARY TRAFFIC ZONE ACTIVITIES MUST MEET THE REQUIREMENTS OF THE MANUAL ON UNIFORM TRAFFIC (MUTCD) LATEST EDITION AND SUBSEQUENT ADDENDA.
5. TEMPORARY CONSTRUCTION SIGNS MUST BE MOUNTED ON MASSDOT APPROVED SUPPORTS AND MUST BE REMOVED OR COVERED WHEN NOT APPLICABLE.

AS-BUILT NOTES:

ALL COMPONENTS OF THE DRAINAGE, SEWER, AND WATER SYSTEMS MUST BE MUST BE FIELD LOCATED PRIOR TO COVERING. NOTIFY SURVEYOR A MINIMUM OF SEVENTY-TWO (72) HOURS IN ADVANCE OF NEED FOR FIELD LOCATION OF IMPROVEMENTS. SURVEYOR MUST PROVIDE OWNER AND CONTRACTOR WITH WRITTEN NOTICE OF COMPLETION OF FIELD WORK PRIOR TO CONTRACTOR COVERING IMPROVEMENTS. OWNER/DIPRETE WILL NOT ACCEPT FIELD MEASUREMENTS FROM THE SITE CONTRACTOR.

LAYOUT AND MATERIALS:

1. DIMENSIONS ARE FROM THE FACE OF CURB, FACE OF BUILDING, FACE OF WALL, AND CENTER LINE OF PAVEMENT MARKINGS, UNLESS OTHERWISE NOTED.
2. CURBING MUST BE PRECAST CONCRETE, OR AS LABELED ON THE PLANS.
3. SIDEWALK MUST BE CONCRETE, EXPOSED AGGREGATE CONCRETE, STAMPED CONCRETE OR BITUMINOUS OR AS LABELED ON THE PLANS.
4. IT IS THE CONTRACTOR'S RESPONSIBILITY TO MEET ALL SIGNAGE AND PAVEMENT MARKING REQUIREMENTS OF THE MUTCD AND AUTHORITIES HAVING JURISDICTION, REGARDLESS OF ITEMS SHOWN (OR NOT SHOWN) ON THIS PLAN SET. THIS INCLUDES (BUT MAY NOT BE LIMITED TO) SIGN TYPE, NUMBER OF SIGNS, POLE/ MOUNTING TYPE, PAVEMENT MARKING LOCATIONS/ TYPE/ WIDTH, MATERIALS, INSTALLATION METHODS, AND ANY ADDITIONAL SIGNS AND/OR MARKINGS THAT MAY BE REQUIRED. THE CONTRACTOR MUST NOTIFY DESIGN ENGINEER OF ANY MODIFICATIONS OR DISCREPANCIES PRIOR TO ORDERING OR INSTALLING SIGNAGE/ PAVEMENT MARKINGS.
5. SYMBOLS AND LEGENDS OF PROJECT FEATURES ARE GRAPHIC REPRESENTATIONS AND ARE NOT NECESSARILY SCALED TO THEIR ACTUAL DIMENSIONS OR LOCATIONS ON THE DRAWINGS. THE CONTRACTOR MUST REFER TO THE DETAIL SHEET DIMENSIONS, MANUFACTURERS' LITERATURE, SHOP DRAWINGS AND FIELD MEASUREMENTS OF SUPPLIED PRODUCTS FOR LAYOUT OF THE PROJECT FEATURES.
6. SEE ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS AND DETAILS PERTAINING TO THE BUILDING, INCLUDING SIDEWALKS, RAMPS, BUILDING ENTRANCES, STAIRWAYS, UTILITY PENETRATIONS, CONCRETE DOOR PADS, COMPACTOR PAD, LOADING DOCKS, BOLLARDS, ETC.
7. CONTROL POINTS, PROPOSED BOUNDS, AND ANY EXISTING PROPERTY LINE MONUMENTATION DISTURBED DURING CONSTRUCTION MUST BE SET OR RESET BY A PROFESSIONAL LICENSED SURVEYOR.
8. CONTRACTOR MUST NOT RELY SOLELY ON ELECTRONIC VERSIONS OF PLANS, SPECIFICATIONS, AND DATA FILES THAT ARE OBTAINED FROM THE DESIGNERS. CONTRACTOR MUST VERIFY LOCATION OF PROJECT FEATURES IN ACCORDANCE WITH THE STAMPED PAPER COPIES OF THE PLANS AND SPECIFICATIONS THAT ARE SUPPLIED AS PART OF THE CONTRACT DOCUMENTS.
9. ALL GUARDRAIL ONSITE MUST BE STEEL BACKED TIMBER GUARDRAIL WITH STEEL POSTS, IN CONFORMANCE WITH SECTION 5.4.1.7 OF THE AASHTO ROADSIDE DESIGN GUIDE. ALTERNATIVE GUARDRAILS WILL BE CONSIDERED BY THE DESIGN ENGINEER IF THEY ARE DOT APPROVED EQUAL AND ACCEPTABLE TO THE OWNER. ALTERNATIVES MUST BE APPROVED IN WRITING BY THE OWNER AND DESIGN ENGINEER PRIOR TO CONSTRUCTION. GUARDRAIL IS REQUIRED AT ALL ROADWAYS/PARKING LOTS/PAVED TRAFFIC AREAS ADJACENT TO SLOPES WITH A HEIGHT GREATER THAN SIX FEET AT A 3:1 SLOPE, AND ALL SLOPES WITH A HEIGHT GREATER THAN THREE FEET AT A 2:1 SLOPE, AND ALL RETAINING WALLS GREATER THAN TWO FEET IN HEIGHT. THE CONTRACTOR IS RESPONSIBLE TO MEET ANY AND ALL GUARDRAIL PROVISIONS THAT MAY BE REQUIRED BY THE AHJ.
10. INFRARED TREATMENT OF PAVEMENT IS REQUIRED AT ALL CURB CUTS, ANY DISTURBED PAVEMENT ON ROADWAYS AND WHERE ANY NEW PAVEMENT MEETS EXISTING PAVEMENT.
11. ALL EXISTING PAVEMENT MARKING REMOVED AS INCIDENTAL DURING CONSTRUCTION MUST BE REPLACED IN-KIND FOLLOWING COMPLETION OF CONSTRUCTION UNLESS OTHERWISE NOTED.

GRADING, DRAINAGE, AND UTILITY NOTES:

1. CONSTRUCTION TO COMMENCE WINTER 2023 OR UPON RECEIPT OF ALL NECESSARY APPROVALS.
2. THE CONTRACTOR MUST COORDINATE WITH ALL OF THE APPROPRIATE UTILITY COMPANIES FOR AGREEMENTS TO SERVICE THE PROPOSED BUILDING. THIS MUST BE DONE PRIOR TO CONSTRUCTION. NO REPRESENTATIONS ARE MADE BY DIPRETE ENGINEERING THAT UTILITY SERVICE IS AVAILABLE.
3. THE CONTRACTOR IS RESPONSIBLE FOR DETERMINING FINISH GRADING AND DRAINAGE AROUND THE BUILDING TO ENSURE SURFACE WATER AND/OR GROUNDWATER ARE DIRECTED AWAY FROM THE STRUCTURE.
4. PRIOR TO START OF CONSTRUCTION, CONTRACTOR MUST VERIFY EXISTING PAVEMENT ELEVATIONS AT INTERFACE WITH PROPOSED PAVEMENTS, AND EXISTING GROUND ELEVATIONS ADJACENT TO DRAINAGE OUTLETS TO ASSURE PROPER TRANSITIONS BETWEEN EXISTING AND PROPOSED FACILITIES. CONTRACTOR MUST NOTIFY DESIGN ENGINEER OF ANY DISCREPANCIES PRIOR TO CONSTRUCTION.
5. ALL PROPOSED UNDERGROUND UTILITIES SERVING THE SITE AND BUILDINGS MUST BE COORDINATED WITH OWNER, ARCHITECT, AND ENGINEER PRIOR TO INSTALLATION.
6. ALL RETAINING WALLS AND STEEP SLOPES ARE SUBJECT TO FINAL STRUCTURAL DESIGN. DIPRETE ENGINEERING IS NOT PROVIDING THE STRUCTURAL DESIGN OF THESE ITEMS. ALL WALLS AND STEEP SLOPES MUST BE DESIGNED AND BUILT UNDER THE DIRECTION OF A MASSACHUSETTS LICENSED PROFESSIONAL ENGINEER SUITABLY QUALIFIED IN GEOTECHNICAL ENGINEERING AND CERTIFIED TO THE OWNER PRIOR TO THE COMPLETION OF THE PROJECT. SHOP DRAWINGS MUST BE SUBMITTED PRIOR TO CONSTRUCTION. FINAL STRUCTURAL DESIGN MUST INCORPORATE THE INTENT OF THE GRADING SHOWN ON THESE PLANS AND ALL WORK MUST BE WITHIN THE LIMIT OF DISTURBANCE SHOWN ON THE PLANS.
7. ALL CUT AND FILL WORK MUST BE DONE UNDER THE DIRECTION OF A PROFESSIONAL GEOTECHNICAL ENGINEER, WITH TESTING AND CERTIFICATION PROVIDED TO THE APPLICANT AT THE COMPLETION OF THE PROJECT. DIPRETE ENGINEERING IS NOT PROVIDING THE FILL SPECIFICATION, GEOTECHNICAL ENGINEERING, STRUCTURAL ENGINEERING SERVICES, OR SUPERVISION AS PART OF THESE DRAWINGS.
8. MATERIAL STOCKPILES MUST NOT BE LOCATED IN THE RIGHT-OF-WAY, AND TRENCHES MUST NOT BE LEFT OPEN OVERNIGHT.
9. ALL LOAM IN DISTURBED AREAS MUST BE STOCKPILED FOR FUTURE USE. ALL EXCESS SOIL, TREES, ROCKS, BOULDERS, AND OTHER REFUSE, MUST BE DISCARDED OFF SITE IN ACCORDANCE WITH ALL FEDERAL, STATE AND LOCAL REGULATIONS. STUMPS MUST BE GROUND ON SITE OR REMOVED.
10. THE SITE WILL HAVE 6" CONCRETE CURBING. SITE GRADING SHOWN ON THE PLANS DO NOT NECESSARILY REFLECT THE APPROPRIATE CURBING REVEAL. CONTRACTOR MUST INSTALL CURBING WITH APPROPRIATE REVEAL UNLESS OTHERWISE NOTED.
11. NO STUMP DUMPS ARE ALLOWED ON SITE.
12. ALL DRAINAGE OUTFALLS ARE DESIGNED TO BE INSTALLED AT EXISTING GROUND ELEVATION. CONTRACTOR MUST IMMEDIATELY NOTIFY DIPRETE ENGINEERING OF ANY DISCREPANCIES WHERE EXISTING GROUND IS HIGHER THAN OUTFALL DESIGN ELEVATION. ANY RESOLUTION OF DISCREPANCIES BY THE CONTRACTOR, UNLESS AUTHORIZED IN WRITING IN ADVANCE BY THE OWNER AND DIPRETE ENGINEERING, IS DONE AT THE CONTRACTOR'S RISK.
13. CONTRACTOR MUST PROVIDE SAW CUTTING AND FULL DEPTH PAVEMENT RESTORATION IN AREAS WHERE PAVEMENT AND/OR SIDEWALK IS REMOVED FOR UTILITY INSTALLATION.
14. IF ROADWAY SURFACE PAVEMENT COURSE IS NOT TO BE INSTALLED FOR 12 MONTHS OR MORE AFTER INSTALLATION OF DRAINAGE STRUCTURES, ALL CATCH BASIN RIMS MUST BE SET AT BINDER GRADE AND RAISED TO FINAL PAVEMENT GRADE PRIOR TO PLACEMENT OF SURFACE COURSE.
15. ALL RESIDENTIAL BUILDING SLABS (BASEMENT AND/OR SLAB ON GRADE), REGARDLESS OF FINISH FLOOR ELEVATIONS SHOWN ON PLANS, MUST HAVE A MINIMUM OF 12" OF SEPARATION TO THE SEASONAL HIGH GROUNDWATER TABLE.
16. CONTRACTOR MUST HOLD/ SUPPORT/ RESTORE ALL EXISTING UTILITY COMPONENTS INCLUDING (BUT NOT LIMITED TO) POLES, MAST ARMS AND ABOVEGROUND OBJECTS AS NECESSARY DURING THE PROPOSED WORKS AND ELECTRICAL INSTALLATION. CONTRACTOR MUST COORDINATE SAID WORKS WITH ALL ASSOCIATED UTILITY OWNERS ACCORDINGLY. ANY EXISTING ITEMS DAMAGED OR REMOVED AS INCIDENTAL DURING UTILITY CONNECTION/ ELECTRICAL INSTALLATION INCLUDING (BUT NOT LIMITED TO) CURB IN THE ROW MUST BE REPLACED IN KIND FOLLOWING COMPLETION OF WORKS.

DRAINAGE

ALL DRAINAGE PIPING MUST BE HIGH-DENSITY POLYETHYLENE (HDPE), OR EQUAL, WITH WATERTIGHT JOINTS WHERE INSTALLED WITHIN THE SEASONAL HIGH GROUNDWATER, UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS ALL DRAINAGE STRUCTURES MUST BE WATERTIGHT. ALL STORMWATER PIPE WITHIN THE STATE'S RIGHT OF WAY MUST BE REINFORCED CONCRETE PIPE (RCP).

DRAINAGE STRUCTURES MUST BE AS FOLLOWS (UNLESS OTHERWISE NOTED ON PLANS):
- CATCH BASINS (CB): MASSDOT STD. 201.4.0 OR APPROVED EQUAL
- FLAT TOP CATCH BASINS (CB FLAT TOP): SCITUATE COMPANIES 4' DIA CATCH BASIN SRP-CB4 (ALTERNATE FLAT TOP AASHTO HS-20), 4' DIA LOW PROFILE FLAT TOP SRP-DFT4 OR APPROVED EQUAL. SEE PLANS FOR ALTERNATE STRUCTURE DIAMETERS WHERE REQUIRED.
- FLAT TOP DOUBLE CATCH BASINS (DCB FLAT TOP): SCITUATE COMPANIES 4' DIA DOUBLE CATCH BASIN DWG SRP-CB4 OR APPROVED EQUAL. SEE PLANS FOR ALTERNATE STRUCTURE DIAMETERS WHERE REQUIRED.
- CATCH BASIN FRAMES: MASSDOT STD. 201.6.0 OR APPROVED EQUAL
- GUTTER INLET (GI): MASSDOT STD. 204.2.0 OR APPROVED EQUAL
- DRAINAGE MANHOLES (DMH): MASSDOT STD. 202.4.0 OR APPROVED EQUAL
- ALL BYPASS MANHOLES/STRUCTURES WITH INTERNAL WEIR TO BE MASSDOT STD 202.4.0 WITH FLAT TOP OR APPROVED EQUAL
- DRAINAGE MANHOLE FRAMES AND COVERS: MASSDOT STD. 202.6.0 OR APPROVED EQUAL
- NYLOPLAST DRAIN BASIN (DB) WITH CAP STYLE REDUCER 12"x12" SQUARE GRATE OR APPROVED EQUAL
- DOWNSTREAM DEFENDERS (DD) BY HYDRO INTERNATIONAL OR APPROVED EQUAL HTTPS://WWW.HYDRO-INT.COM/EN/RESOURCES/DOWNSTREAM-DEFENDER-PDF-OR-DWG-DRAWINGS
- ALL CATCH BASINS WITHIN PARKING LOT MUST CONTAIN HOODS, AND INCLUDE 4' SUMP.
- ALL MANHOLES MUST SUPPORT AASHTO HS20-44 LOADING.
- ALL STRUCTURES LABELED 'PD' ARE PROPRIETARY STORMWATER DEVICES.
- ALL OUTLET CONTROL STRUCTURES (OCS) AND DRAINAGE MANHOLES WITH INTERNAL WEIRS MUST USE FLAT TOP STRUCTURE COVER.
- FOR ALL OTHER DRAINAGE STRUCTURES: IT IS THE CONTRACTORS RESPONSIBILITY TO DETERMINE THE APPROPRIATE STRUCTURE TOP REQUIRED (E.G. CONE TOP, FLAT TOP ETC) TO MEET THE DESIGN PARAMETERS AS SHOWN ON THESE PLANS, INCLUDING (BUT NOT LIMITED TO) THE RELATIONSHIP BETWEEN FINISH SURFACE ELEVATION/ DEPTH TO PIPE INVERTS AND MEETING MANUFACTURER/ AHJ REQUIREMENTS & SPECIFICATIONS.

DRAINAGE CONNECTIONS FROM ALL YARD DRAINS (YD), AREA DRAINS (AD), TRENCH DRAINS (TD), FRENCH DRAINS (FD), WALL DRAINS (WD), AND DOWNSPOUTS (DS) ARE SHOWN FOR SCHEMATIC PURPOSES ONLY. THE LEVEL OF DETAIL SHOWN DOES NOT INCLUDE ALL JOINTS THAT MAY BE REQUIRED FOR CONSTRUCTION. ALL FITTINGS AND PIPE SLOPES TO TIE INTO MAIN TRUNK LINE MUST BE FIELD FIT BY CONTRACTOR.

SANITARY SEWER

ALL SANITARY SEWER PIPING TO BE SDR 35 UNLESS NOTED OTHERWISE ON THE PLANS OR IN THE SPECIFICATIONS. ALL SEWER IMPROVEMENTS MUST COMPLY WITH THE TOWN OF RANDOLPH WATER & SEWER AUTHORITY, MWRA AND ANY APPLICABLE AUTHORITY HAVING JURISDICTION, INCLUDING (BUT NOT LIMITED TO) MATERIALS, DIMENSIONS AND ACCESS COVERS. CONTRACTOR MUST SUBMIT SHOP DRAWINGS FOR APPROVAL BY ENGINEER OF RECORD PRIOR TO CONSTRUCTION. ALL FITTINGS, STRUCTURE SEALS AND CONNECTIONS AT OR BELOW FLOODWATER ELEVATION MUST BE WATERTIGHT. ALL ACCESS OPENINGS AT OR BELOW FLOODWATER ELEVATION MUST BE BOLT DOWN.
ALL PIPES FROM BUILDING TO GREASE TRAP/INTERCEPTOR AND FROM GREASE TRAP/INTERCEPTOR TO THE NEXT STRUCTURE MUST BE CAST IRON AND IN ACCORDANCE WITH 284CMR.

WATER

ALL WATER LINES MUST BE CEMENT LINED DUCTILE IRON PIPE (CLDIP). ALL WATER MAIN IMPROVEMENTS MUST COMPLY WITH THE TOWN OF RANDOLPH WATER & SEWER AUTHORITY AND ANY APPLICABLE AUTHORITY HAVING JURISDICTION, INCLUDING (BUT NOT LIMITED TO) MATERIALS, DIMENSIONS AND ACCESS COVERS. CONTRACTOR TO PROVIDE SHOP DRAWINGS AND SUBMITTALS TO THE ENGINEER OF RECORD FOR APPROVAL FOR ALL WATER IMPROVEMENTS AND APPURTENANCES INCLUDING BUT NOT LIMITED TO PIPES, VALVES, FITTINGS, HEAT ENCLOSURES, AND BACKFLOWS. ALL ACCESS OPENINGS AT OR BELOW FLOODWATER ELEVATION ARE TO BE BOLT DOWN.

IN THE CASE OF ANY NEW HYDRANT INSTALLED IN OR NEXT TO AN EXISTING SIDEWALK, THE CONTRACTOR MUST INCREASE THE WIDTH OF THE SIDEWALK, AS NECESSARY, TO MAINTAIN A MINIMUM OF 3'-0" CLEAR WIDTH FROM THE OUTERMOST COMPONENTS OF THE HYDRANT TO THE EDGE OF THE SIDEWALK. THE 3'-0" SIDEWALK WIDTH IS REQUIRED ONLY ON ONE SIDE OF THE HYDRANT TO PROVIDE A CLEAR PATH ON THE SIDEWALK.

ELECTRIC/TELECOM/GAS

PROPOSED GAS, ELECTRIC, CABLE AND DATA UTILITIES ARE SHOWN SCHEMATICALLY AND ARE PROPOSED TO BE UNDERGROUND. OWNER AND CONTRACTOR MUST COORDINATE FINAL DESIGN WITH APPROPRIATE UTILITY COMPANIES. ALL WORK MUST BE IN ACCORDANCE WITH EACH UTILITY COMPANY'S STANDARDS AND DETAILS, AS WELL AS LOCAL AND FEDERAL REGULATIONS. THIS INCLUDES BUT IS NOT LIMITED TO POLES, TRANSFORMERS, PULL BOXES, CONCRETE PADS, CONCRETE ENCASEMENTS AND CONDUITS. CONNECTION POINTS FOR ELECTRIC AND TELECOM UTILITIES, AT THE EXISTING INFRASTRUCTURE, ARE CURRENTLY SHOWN AS UNDERGROUND UTILITIES. THESE UTILITIES MAY BE UNDERGROUND OR OVERHEAD AND MUST BE COORDINATED WITH NATIONAL GRID/APPROPRIATE UTILITY AUTHORITY PRIOR TO CONSTRUCTION. ALL ACCESS OPENINGS AT OR BELOW FLOODWATER ELEVATION MUST BE BOLTED DOWN WHERE APPLICABLE.

SITE LIGHTING

SITE LIGHTING (TEMPORARY AND PERMANENT) MUST BE DIRECTED AWAY FROM AND SHIELDED FROM ENVIRONMENTALLY SENSITIVE AREAS AND ABUTTING LANDS. EXACT LOCATIONS OF LIGHT POLE MUST BE COORDINATED WITH OTHER UTILITIES AND MUST BE LOCATED WITHIN THE STREET RIGHTS OF WAY. FINAL LIGHTING AND CONDUIT LOCATIONS BY OTHERS.

UTILITY PLAN REFERENCES:

SEWER INFORMATION OBTAINED ON THE GROUND BY DIPRETE ENGINEERING. (SEE GENERAL NOTES FOR DATE OF FIELD SURVEY)

DRAINAGE INFORMATION OBTAINED ON THE GROUND BY DIPRETE ENGINEERING. (SEE GENERAL NOTES FOR DATE OF FIELD SURVEY)

ABBREVIATIONS LEGEND

ADA	AMERICANS WITH DISABILITY ACT	N/F	NOW OR FORMERLY
AHJ	AUTHORITY HAVING JURISDICTION	OHW	OVERHEAD WIRE
AKA	ALSO KNOWN AS	PE	POLYETHYLENE
AP	ASSESSOR'S PLAT	℘	PROPERTY LINE
ARCH	ARCHITECT	PR	PROPOSED
BC	BOTTOM OF CURB	PVC	POLYVINYL CHLORIDE
BT	BOTTOM OF TESTHOLE	R	RADIUS
BIT	BITUMINOUS (BERM)	R&D	REMOVE AND DISPOSE
BIO	BIORETENTION	RCP	REINFORCED CONCRETE PIPE
BS	BASEMENT SLAB ELEVATION	RL	ROOF LEADER
BW	FINISHED GRADE AT BOTTOM OF WALL	ROW	RIGHT-OF-WAY
CB	CATCH BASIN	S	SLOPE
(C)	CALCULATED	SD	SUBDRAIN
℄	CENTERLINE	SED	SEDIMENT FOREBAY
(CA)	CHORD ANGLE	SF	SQUARE FOOT
CLDIP	CONCRETE LINED DUCTILE IRON PIPE	SFL	STATE FREEWAY LINE
CO	CLEAN OUT	SFM	SEWER FORCE MAIN
CONC	CONCRETE	SG	SLAB ON GRADE ELEVATION
(D)	DEED	SHL	STATE HIGHWAY LINE
DCB	DOUBLE CATCH BASIN	SMH	SEWER MANHOLE
DI	DROP INLET	SNDF	SAND FILTER
DMH	DRAINAGE MANHOLE	SS	SIDE SLOPE
DP	DETENTION POND	STA	STATION
ELEV	ELEVATION	TC	TOP OF CURB
EOP	EDGE OF PAVEMENT	TD	TRENCH DRAIN
ESC	EROSION AND SEDIMENT CONTROL	TF	TOP OF FOUNDATION
EX	EXISTING	TRANS	TRANSITION
FES	FLARED END SECTION	TW	TOP OF WALL (FINISHED GRADE AT TOP OF WALL)
FFE	FINISH FLOOR ELEVATION	TYP	TYPICAL
GS	GARAGE SLAB ELEVATION	UDS	UNDERGROUND DETENTION SYSTEM
GWT	GROUND WATER TABLE	UIS	UNDERGROUND INFILTRATION SYSTEM
HW	HEADWALL	UP	UTILITY POLE
HC	HIGH CAPACITY CATCH BASIN GRATE	WO	WALKOUT ELEVATION
HDPE	HIGH DENSITY POLYETHYLENE	WQ	WATER QUALITY
ID	INLINE DRAIN		
INV	INVERT		
IP	INFILTRATION POND		
LARCH	LANDSCAPE ARCHITECT		
LF	LINEAR FEET		
LOD	LIMIT OF DISTURBANCE		
LP	LIGHT POLE		
(M)	MEASURED		
MEP	MECHANICAL/ELECTRICAL/ PLUMBING ENGINEER		

SITE CALLOUTS LEGEND

(4DY)	4" EPOXY RESIN PAVEMENT MARKINGS- DOUBLE YELLOW
(4W)	4" PAINTED WHITE MARKINGS
(4W45)	4" WHITE STRIPING 2' ON CENTER AT 45°
(6WS)	6" WHITE EPOXY RESIN PAVEMENT MARKINGS-SKIP PATTERN
(6W)	6" WHITE EPOXY RESIN PAVEMENT MARKINGS
(12W)	STOP LINE (REFERENCE MUTCD SECTION 3B.16)
(ADAS)	ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA AND MUTCD REGULATIONS AND REQUIREMENTS.
(ADAR)	ADA CURB RAMP MUST COMPLY WITH ALL ADA REGULATIONS AND REQUIREMENTS.
(ADAV)	VAN ADA SPACE PAVEMENT MARKINGS MUST COMPLY WITH ALL ADA AND MUTCD REGULATIONS AND REQUIREMENTS.
(CURB)	PRECAST CONCRETE CURB
(CWK)	CROSSWALK PAVEMENT MARKINGS. SOLID 2' WHITE LINES SPACED 4' OC (REFERENCE MUTCD SECTION 3B.18)
(MONO)	MONOLITHIC CURB AND SIDEWALK (SEE DETAIL SHEET 14)
(YL)	YIELD LINE (REFERENCE MUTCD SECTION 3B.16)

EXISTING LEGEND

(AS SHOWN ON PROPOSED PLANS)
NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

PROPOSED LEGEND

NOT ALL ITEMS SHOWN WILL APPEAR ON PLANS

NOTE: THIS PLAN SET MUST BE REPRODUCED IN COLOR

UTILITY NOTE:

ALL EXISTING UTILITIES DEPICTED ARE SHOWN ACCORDANCE WITH UTILITY QUALITY LEVEL C AS DEFINED IN CI/ASCE STANDARD 38-02 *(STANDARD GUIDELINES FOR THE COLLECTION AND DEPICTION OF EXISTING SUBSURFACE UTILITY DATA)*, LATEST REVISION.

ALL UNDERGROUND UTILITIES SHOWN ON THESE PLANS WERE PROVIDED BY OTHERS AND ARE APPROXIMATE ONLY. LOCATIONS MUST BE DETERMINED IN THE FIELD BEFORE EXCAVATION, BLASTING, UTILITY INSTALLATION, BACKFILLING, GRADING, PAVEMENT RESTORATION, AND ALL OTHER SITE WORK. ALL UTILITY COMPANIES, PUBLIC AND PRIVATE, MUST BE CONTACTED INCLUDING THOSE IN CONTROL OF UTILITIES NOT SHOWN ON THESE DOCUMENTS. CONTACT DIG SAFE A MINIMUM OF 72 WORKING HOURS PRIOR TO ANY CONSTRUCTION AT 811. DIG SAFE IS RESPONSIBLE FOR CONTACTING MEMBER UTILITY COMPANIES. DIG SAFE MEMBER UTILITY COMPANIES ARE RESPONSIBLE TO MARK ONLY THE FACILITIES THAT THEY OWN OR MAINTAIN. NON DIG SAFE MEMBER COMPANIES ARE NOT NOTIFIED BY DIG SAFE. IT IS THE CONTRACTOR'S RESPONSIBILITY TO INVESTIGATE AND NOTIFY IF ANY PRIVATELY OWNED OR NON DIG SAFE MEMBER UTILITIES ARE IN THE AREA.

PER THE CODE OF FEDERAL REGULATIONS - TITLE 29, PART 1926 IT IS THE SITE CONTRACTOR'S RESPONSIBILITY TO OBTAIN ACCURATE UNDERGROUND UTILITY LINE LOCATIONS FROM THE UTILITY COMPANIES, UTILITY OWNERS AND, OR VIA UNDERGROUND UTILITY LOCATION EQUIPMENT AS NEEDED TO ESTABLISH ACCURATE LOCATIONS PRIOR TO ANY EXCAVATION. THE USE OF PROFESSIONAL UTILITY LOCATING COMPANIES PRIOR TO ANY EXCAVATION IS RECOMMENDED.

DIPRETE ENGINEERING IS NOT A PROFESSIONAL UTILITY LOCATION COMPANY, AND IS NOT RESPONSIBLE FOR UNDERGROUND UTILITIES, DEPICTED OR NOT, EITHER IN SERVICE OR ABANDONED. ANY SIZES, LOCATIONS, EXISTENCE, OR LACK OF EXISTENCE OF UTILITIES SHOWN ON THESE PLANS SHOULD BE CONSIDERED APPROXIMATE UNTIL VERIFIED BY A PROFESSIONAL UTILITY LOCATION COMPANY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED.

PERMIT NOTE:

THE INTENT OF THESE PLANS IS TO PROVIDE A PERMITTING SET TO THE REGULATORY AGENCY SUBMITTED. THESE PLANS CONTAIN THE REQUIRED INFORMATION NECESSARY FOR APPROVAL TO THE SPECIFIC AGENCY SUBMITTED AND MAY NOT HAVE INFORMATION NECESSARY FOR OTHER REGULATORY AGENCIES. THIS SET MUST NOT BE CONSTRUED AS A FULL CONSTRUCTION OR BID SET. ADDITIONAL DETAIL IS REQUIRED FOR CONSTRUCTION AND BID DOCUMENTS, SUCH AS BUT NOT LIMITED TO, FINE GRADING, GRADING BETWEEN THE CONTOUR INTERVAL, ADDITIONAL SURVEY/MAPPING, BUILDING SHAPE/LOCATION, ADA, UTILITY CONNECTIONS, UTILITY CROSSINGS, SURFACE AND GROUND WATER MITIGATION, SOIL STABILITY AND CONSISTENCY, SPECIFIC END USER NEEDS, CONSTRUCTABILITY ISSUES, ETC. ANY USER OF THESE PLANS SHOULD UNDERSTAND THIS LIMITATION.

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Boston • Providence • Newport

BRANDON D. CARR
CIVIL
No. 51472
5/16/2023

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES. SEE 'UTILITY NOTE' ON SHEET 3.

NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

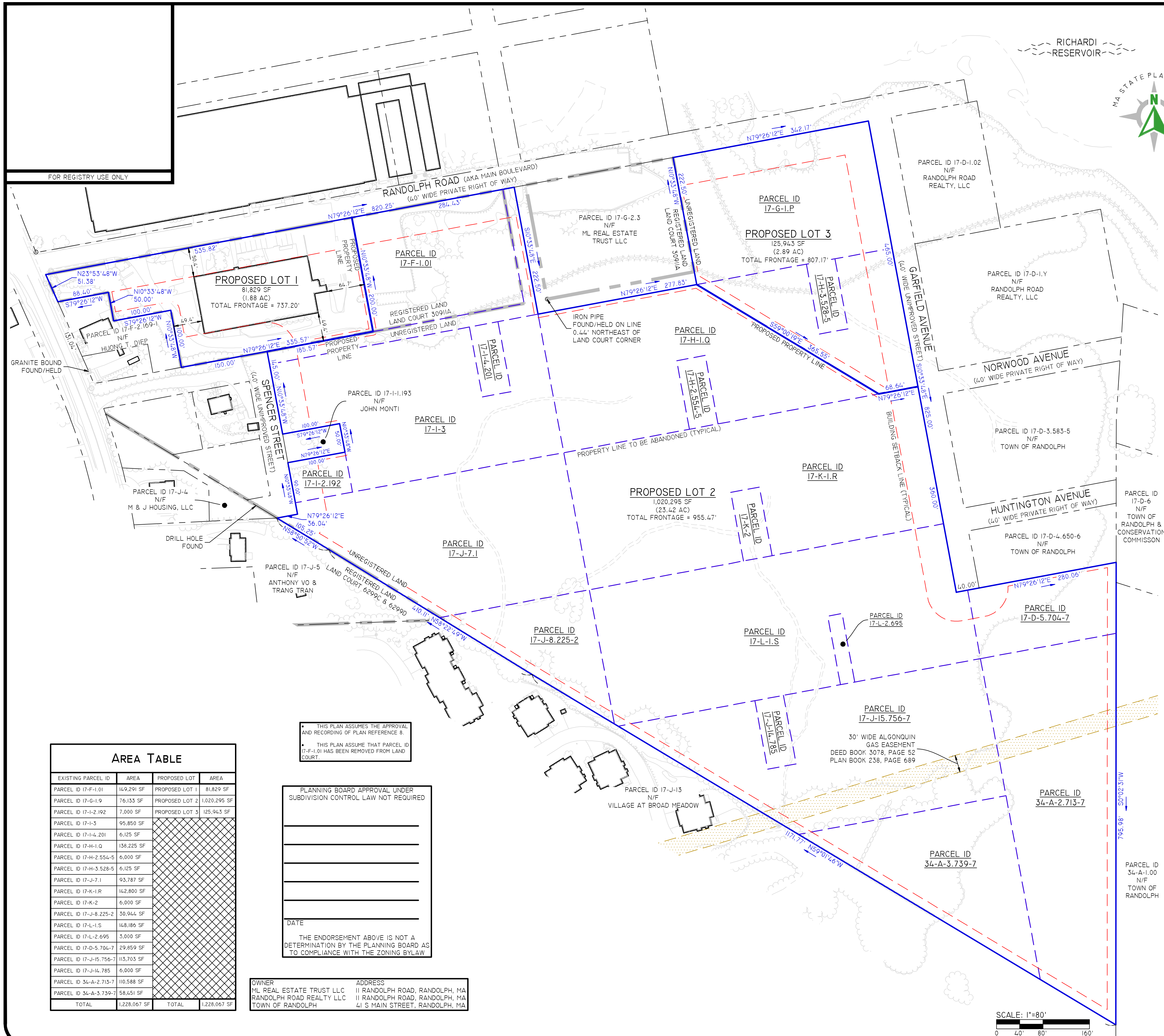
DRAWN BY: B.A.W.
DESIGN BY: K.J.D.

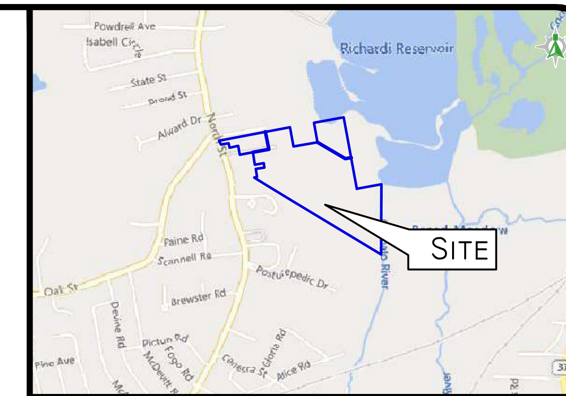
NOTES AND LEGEND

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013





LOCUS MAP SCALE: 1" = 1,000'

LEGEND

WATER LINE	123/1234	DEED BOOK/PAGE		BOLLARD	
SEWER LINE	AP	ASSESSOR'S PLAT		SOIL EVALUATION	
SEWER FORCE MAIN	HC	HANDICAPPED		CATCH BASIN	
GAS LINE	N/F	NOW OR FORMERLY		DOUBLE CATCH BASIN	
ELECTRIC LINE	LC	LANDSCAPING		WATER VALVE	
OVERHEAD WIRES	(R)	RECORD		GAS VALVE	
DRAINAGE LINE	(CA)	CHORD ANGLE	B-1	WETLAND FLAG	
MINOR CONTOUR LINE		NAIL/SPIKE		DRAINAGE MANHOLE	
MAJOR CONTOUR LINE		DRILL HOLE		FLARED END SECTION	
PROPERTY LINE		IRON ROD/PIPE		GUY POLE	
ASSESSORS LINE		BOUND		ELECTRIC MANHOLE	
TREELINE		SIGN POST	UP	UTILITY/POWER POLE	
GUARDRAIL		SEWER MANHOLE		LIGHTPOST	
FENCE		SEWER CLEANOUT		WELL	
RETAINING WALL		HYDRANT		MONITORING WELL	
STONE WALL		IRRIGATION VALVE		BENCH MARK	
		UNKNOWN MANHOLE		TREE	

GENERAL NOTES

1. THE PARCELS ARE LOCATED IN THE TOWN OF RANDOLPH , NORFOLK COUNTY, MASSACHUSETTS HAVING THE PARCEL ID 17-F-1.01, 17-G-1.P, 17-D-3.583-5, 17-D-4.650.6, 17-I-3, 17-I-2.192, 17-I-4.201, 17-H-1.Q, 17-H-2.554-5, 17-H-3.528-5, 17-K-1.R, 17-K-2, 17-J-7.1, 17-J-8.225-2, 17-L-1.S, 17-L-2.695, 17-D-5.704-7, 34-A-2.713-7, 17-J-15.756-7, 17-J-14.785, 34-A-3.739-7.
2. THE OWNER OF:
   - 2.1. PARCEL ID 17-F-1.01 PER LAND COURT CERTIFICATE NO. 185889, DATED DECEMBER 28, 2012 IS ML REAL ESTATE TRUST LLC.
   - 2.2. PARCEL ID 17-G-1.P, 17-I-3, 17-I-2.192, 17-I-4.201, 17-H-1.Q, 17-H-2.554-5, 17-H-3.528-5, 17-K-1.R, 17-K-2, 17-J-7.1, 17-J-8.225-2, 17-L-1.S, 17-L-2.695, 17-D-5.704-7, 34-A-2.713-7, 17-J-15.756-7, 17-J-14.785, 34-A-3.739-7 PER DEED BOOK 36563, PAGE 246, DATED JANUARY 16, 2019, IS RANDOLPH ROAD REALTY, LLC
   - 2.3. PARCEL ID 17-K-2 PER THE TOWN OF RANDOLPH ONLINE GIS IS TOWN OF RANDOLPH.
3. THIS SITE IS LOCATED IN FEMA FLOOD ZONE X, X (SHADED), AND AE. REFERENCE FEMA FLOOD INSURANCE RATE MAP 25021C0217E, MAP REVISED JULY 17, 2012. THIS DESIGNATION MAY CHANGE BASED UPON REVIEW BY A FLOOD ZONE SPECIALIST OR BY THE RESULTS OF A COMPREHENSIVE FLOOD STUDY.
4. THERE WERE NO CEMETERIES, GRAVE SITES AND OR BURIAL GROUNDS OBSERVED WITHIN THE LIMITS OF THE SURVEY.
5. FIELD SURVEY PERFORMED BY DIPRETE ENGINEERING ON AUGUST 18, 2022. THIS PLAN REFLECTS ON THE GROUND CONDITIONS AS OF THAT DATE.

PLAN REFERENCES

1. LAND COURT PLAN 30911A
2. LAND COURT PLAN 6299C.
3. LAND COURT PLAN 6299D.
4. PLAN OF BRAINTREEVILLE MANOR, RANDOLPH, MASS, OWNED AND DEVELOPED BY HUB REALTY COMPANY, INC., SCALE 1"=80', DATED OCTOBER 24, 1925, PLAN BY A.P. TRUFANT, C.E., BROCKTON & WHITMAN, RECORDED IN DEED BOOK 1671, PAGE END.
5. PLAN OF LANDS TO BE TAKEN OR OTHERWISE ACQUIRED FOR WATER SUPPLY IN BRAINTREE & RANDOLPH, SCALE 1"=100', DATED JANUARY 3, 1973, PLAN BY GALE ENGINEERING CO., INC., RECORDED IN PLAN BOOK 238, PAGE 689.
6. CONDOMINIUM SITE PLAN, BUILDING "F", NITS F-1, F-2, F-3, F-4, F-5, F-6, #721 NORTH STREET, RANDOLPH, MA., SCALE 1"=60', DATED MATCH 20, 2018, PLAN BY TURNING POINT SURVEY COMPANY, INC., RECORDED IN PLAN BOOK 669, PAGE 20.
7. ALTA/NSPS LAND TITLE SURVEY, 11 RANDOLPH ROAD, RANDOLPH, MASSACHUSETTS, PREPARED FOR BLUEWATER PROPERTY GROUP, PREPARED BY DIPRETE ENGINEERING, DATED AUGUST 31, 2022, SCALE 1" = 80'.
8. ROAD ABANDONMENT PLAN, 11 RANDOLPH ROAD, RANDOLPH, MASSACHUSETTS, PREPARED FOR: ML REAL ESTATE TRUST, LLC, SCALE 1"=80', DATED JANUARY 17, 2023, PLAN BY DIPRETE ENGINEERING

ZONING NOTES

1. THE PARCEL IS ZONED INDUSTRIAL DISTRICT PER THE ASSESSOR'S ONLINE DATABASE.
2. THE ZONING ORDINANCE CHAPTER 200 LISTS THE DIMENSIONAL REGULATIONS AS FOLLOWS:

MINIMUM LOT AREA:	20,000 SF
MINIMUM FRONTAGE:	75'
MINIMUM DEPTH:	100'
MINIMUM WIDTH:	100'
MINIMUM SETBACK FROM STREET:	50'
MINIMUM FRONT YARD:	50'
MINIMUM SIDE YARD:	6'
MINIMUM REAR YARD:	15'
BUFFER STRIP TO STREET:	20'
BUFFER STRIP TO RESIDENTIAL:	40'
BUFFER STRIP TO COMMERCIAL:	2.5'
MAXIMUM BUILDING HEIGHT:	50'
MAXIMUM STORIES:	4
BUILDING LOT COVERAGE (A):	60%
IMPERVIOUS LOT COVERAGE (B):**	25%
GREEN AREA OPEN SPACE (C):	15%
MAXIMUM COVERAGE (A)+(B):	85%

THE ABOVE NOTES ARE BASED ON INFORMATION FROM THE TOWN OF RANDOLPH ASSESSOR'S ONLINE DATABASE AND THEIR ZONING ORDINANCE ONLY. ANY SPECIAL PERMITS OR VARIANCES SPECIFIC TO THIS SITE ARE NOT TAKEN INTO CONSIDERATION. PLEASE CONTACT THE ZONING DEPARTMENT FOR ANY ADDITIONAL INFORMATION OR FOR A CERTIFICATE OF ZONING.

AREA TABLE

EXISTING PARCEL ID	AREA	PROPOSED LOT	AREA
PARCEL ID 17-F-1.01	149,291 SF	PROPOSED LOT 1	81,829 SF
PARCEL ID 17-G-1.9	76,133 SF	PROPOSED LOT 2	1,020,295 SF
PARCEL ID 17-I-2.192	7,000 SF	PROPOSED LOT 3	125,943 SF
PARCEL ID 17-I-3	95,850 SF		
PARCEL ID 17-I-4.201	6,125 SF		
PARCEL ID 17-H-1.Q	138,225 SF		
PARCEL ID 17-H-2.554-5	6,000 SF		
PARCEL ID 17-H-3.528-5	6,125 SF		
PARCEL ID 17-J-7.1	93,787 SF		
PARCEL ID 17-K-1.R	142,800 SF		
PARCEL ID 17-K-2	6,000 SF		
PARCEL ID 17-J-8.225-2	30,944 SF		
PARCEL ID 17-L-1.S	148,186 SF		
PARCEL ID 17-L-2.695	3,000 SF		
PARCEL ID 17-D-5.704-7	29,859 SF		
PARCEL ID 17-J-15.756-7	113,703 SF		
PARCEL ID 17-J-14.785	6,000 SF		
PARCEL ID 34-A-2.713-7	110,588 SF		
PARCEL ID 34-A-3.739-7	58,451 SF		
TOTAL	1,228,067 SF	TOTAL	1,228,067 SF

- THIS PLAN ASSUMES THE APPROVAL AND RECORDING OF PLAN REFERENCE 8.
- THIS PLAN ASSUME THAT PARCEL ID 17-F-1.01 HAS BEEN REMOVED FROM LAND COURT.

PLANNING BOARD APPROVAL UNDER SUBDIVISION CONTROL LAW NOT REQUIRED

____

DATE

THE ENDORSEMENT ABOVE IS NOT A DETERMINATION BY THE PLANNING BOARD AS TO COMPLIANCE WITH THE ZONING BYLAW

OWNER	ADDRESS
ML REAL ESTATE TRUST LLC	11 RANDOLPH ROAD, RANDOLPH, MA
RANDOLPH ROAD REALTY LLC	11 RANDOLPH ROAD, RANDOLPH, MA
TOWN OF RANDOLPH	41 S MAIN STREET, RANDOLPH, MA

DiPrete Engineering
Two Stafford Court Cranston, RI 02920
tel 401-943-1000 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

DRAFT 5/15/2023

NO.	DATE	DESCRIPTION	APPR	BY
0	5/12/23			

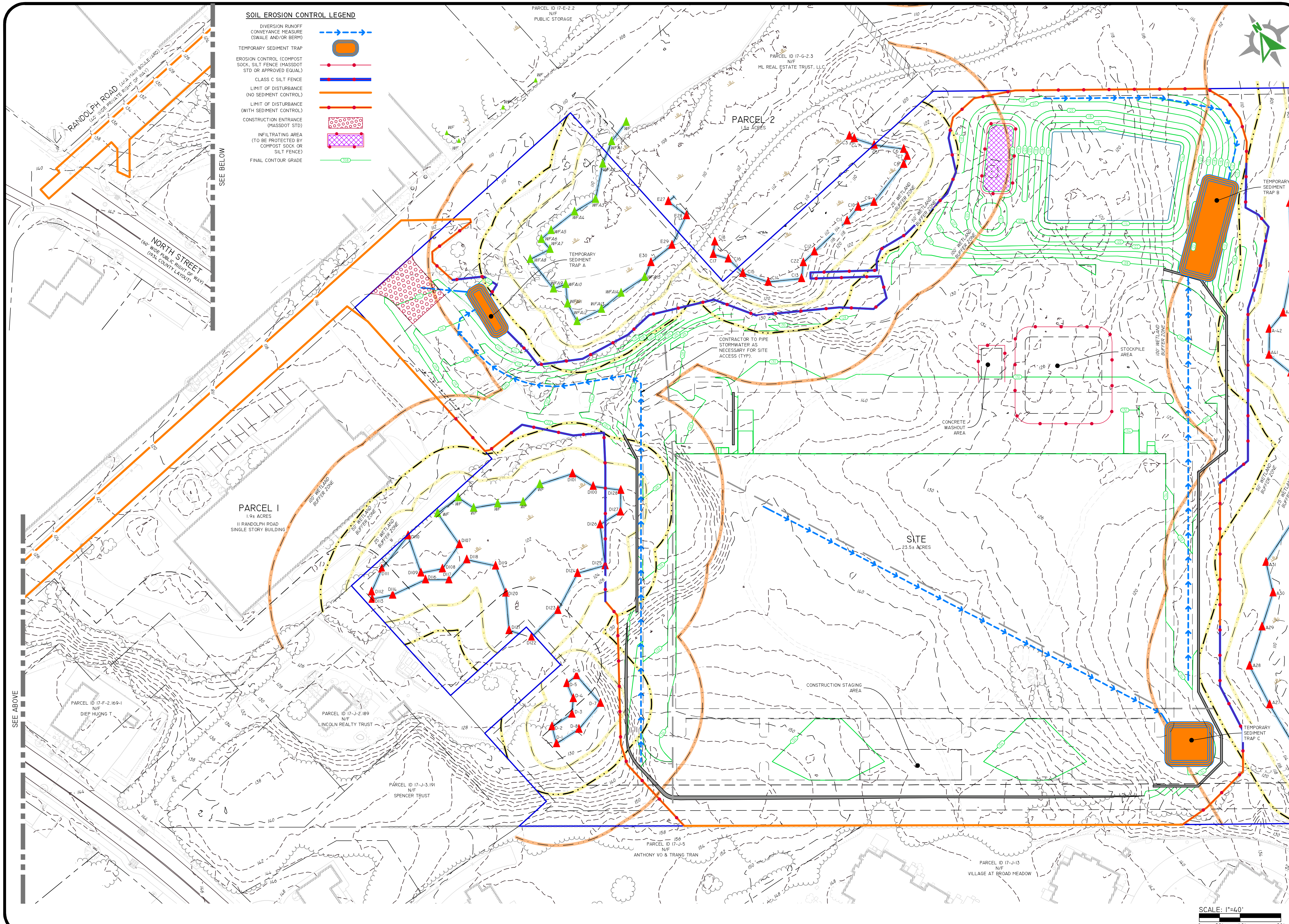
APPROVAL NOT REQUIRED SUBDIVISION

11 RANDOLPH ROAD

RANDOLPH, MASSACHUSETTS

APPLICANT:
BLUEWATER PROPERTY GROUP
205 HUDSON STREET, 8TH FLOOR,
NEW YORK, NEW YORK 10013

SHEET | OF 1



SOIL EROSION CONTROL LEGEND
DIVERSION RUNOFF CONVEYANCE MEASURE (SWALE AND/OR BERM)
TEMPORARY SEDIMENT TRAP
EROSION CONTROL (COMPOST SOCK, SILT FENCE (MASSDOT STD OR APPROVED EQUAL)
CLASS C SILT FENCE
LIMIT OF DISTURBANCE (NO SEDIMENT CONTROL)
LIMIT OF DISTURBANCE (WITH SEDIMENT CONTROL)
CONSTRUCTION ENTRANCE (MASSDOT STD)
INFILTRATING AREA (TO BE PROTECTED BY COMPOST SOCK OR SILT FENCE)
FINAL CONTOUR GRADE
308
SEE BELOW
SEE ABOVE
RANDOLPH ROAD (140' WIDE PRIVATE RIGHT OF WAY)
NORTH STREET (60' WIDE PUBLIC RIGHT OF WAY) (1934 COUNTY LAYOUT)
PARCEL ID 17-E-2.2 N/F PUBLIC STORAGE
PARCEL ID 17-G-2.3 N/F ML REAL ESTATE TRUST, LLC
PARCEL 2 1.9± ACRES
TEMPORARY SEDIMENT TRAP A
TEMPORARY SEDIMENT TRAP B
TEMPORARY SEDIMENT TRAP C
CONTRACTOR TO PIPE STORMWATER AS NECESSARY FOR SITE ACCESS (TYP).
STOCKPILE AREA
CONCRETE WASHOUT AREA
PARCEL 1 1.9± ACRES 11 RANDOLPH ROAD SINGLE STORY BUILDING
SITE 23.5± ACRES
CONSTRUCTION STAGING AREA
100' WETLAND BUFFER ZONE
50' WETLAND BUFFER ZONE
25' WETLAND BUFFER ZONE
PARCEL ID 17-F-2.169-1 N/F DIEP HUONG T
PARCEL ID 17-J-2.189 N/F LINCOLN REALTY TRUST
PARCEL ID 17-J-3.191 N/F SPENCER TRUST
PARCEL ID 17-J-5 N/F ANTHONY VO & TRANG TRAN
PARCEL ID 17-J-13 N/F VILLAGE AT BROAD MEADOW
SCALE: 1"=40'
0 20' 40' 80'

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COMMONWEALTH OF MASSACHUSETTS
BRANDON D. CARR
CIVIL
No. 51472
REGISTERED PROFESSIONAL ENGINEER
5/16/202

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES. SEE 'UTILITY NOTE' ON SHEET 3.

NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

DRAWN BY: B.A.W. DESIGN BY: K.J.D.

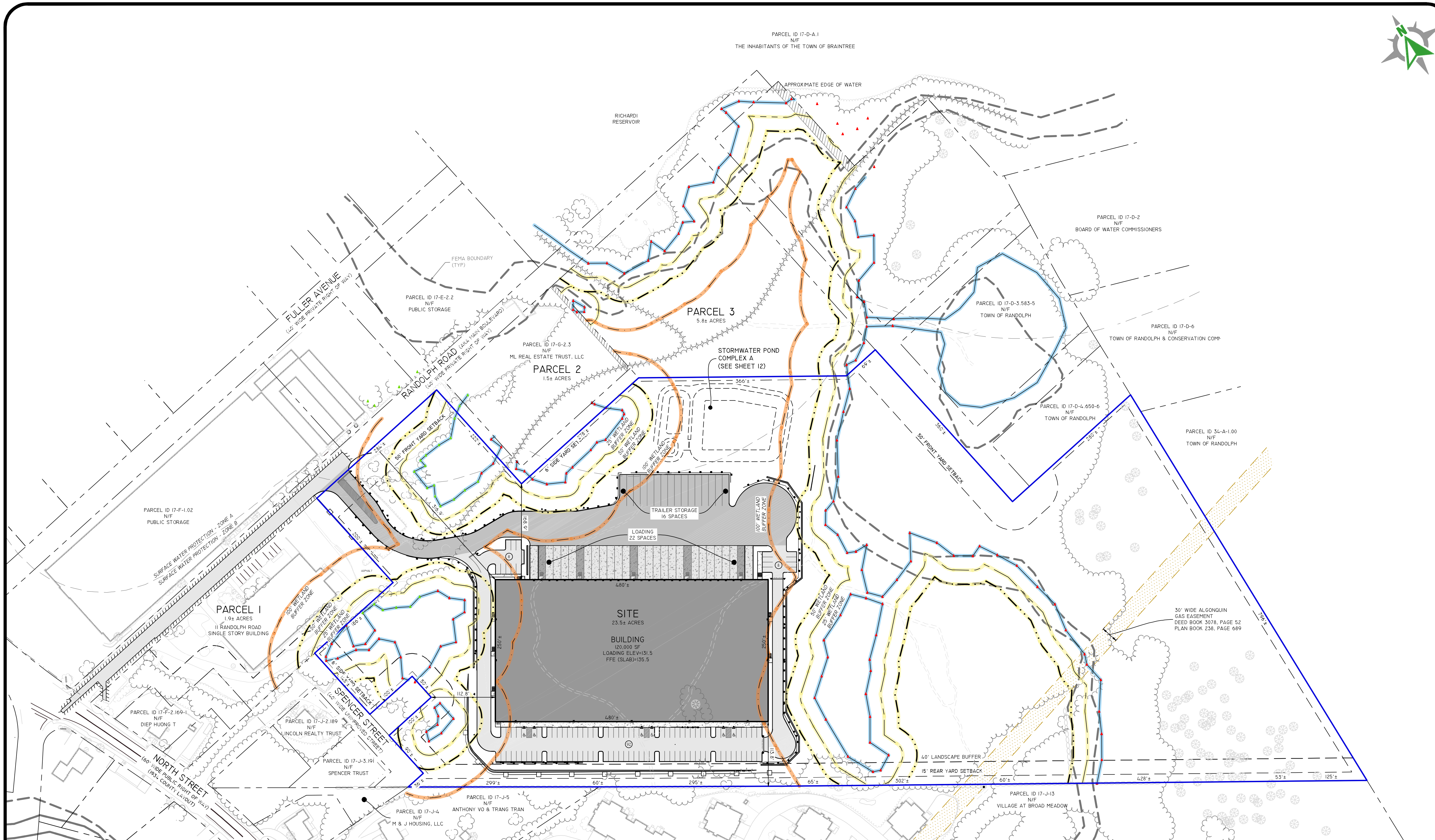
Soil Erosion & Sediment Control Plan

Randolph Road, Multiple Parcels

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

SHEET 5 OF 17



DIMENSIONAL REGULATIONS:

CURRENT ZONING: INDUSTRIAL DISTRICT

	REQUIRED	PROVIDED	COMPLIES
MINIMUM LOT AREA:	20,000 SF	984,456 SF	YES
MINIMUM FRONTAGE:	75'	100'	YES
MINIMUM DEPTH:	100'	>100'	YES
MINIMUM WIDTH:	100'	>100'	YES
MINIMUM SETBACK FROM STREET:	50'	>50'	YES
MINIMUM FRONT YARD:	50'	316.9'	YES
MINIMUM SIDE YARD:	6'	112.8'	YES
MINIMUM REAR YARD:	15'	113.8'	YES
BUFFER STRIP TO STREET:	20'	20'	YES
BUFFER STRIP TO RESIDENTIAL:	40'	40'	YES
BUFFER STRIP TO COMMERCIAL:	2.5'	N/A	N/A
MAXIMUM BUILDING HEIGHT:	50'*	45'	YES
MAXIMUM STORIES:	4	1	YES
BUILDING LOT COVERAGE (A):	60%	12%	YES
IMPERVIOUS LOT COVERAGE (B):**	25%	13%	YES
GREEN AREA OPEN SPACE (C):	15%	75%	YES
MAXIMUM COVERAGE (A)+(B):	85%	25%	YES

*THE HEIGHT OF A STRUCTURE SHALL BE BASED ON THE AVERAGE PRE-EXISTING GRADE WITHIN THE PROPOSED BUILDING FOOTPRINT.

**IMPERVIOUS LOT COVERAGE DOES NOT INCLUDE BUILDINGS

PARKING REGULATIONS:

PARKING USE:	INDUSTRIAL
PARKING REQUIREMENT:	1 SPACE FOR EACH 2 EMPLOYEES, PLUS SPACE FOR EVERY COMPANY VEHICLE, PLUS SPACES FOR CUSTOMERS' VEHICLES AS DETERMINED APPROPRIATE BY THE BUILDING COMMISSIONER OR SITE PLAN ADMINISTRATOR
NUMBER OF EMPLOYEES:	80
REQUIRED PARKING CALCULATIONS:	80 / 2 = 40 SPACES
ADA PARKING REQUIRED:	2 SPACES
ADA PARKING PROVIDED:	6 SPACES
TOTAL PARKING SPACES PROVIDED:	108 PARKING SPACES
TRUCK LOADING SPACES PROVIDED:	22 SPACES
TRAILER STORAGE SPACES PROVIDED:	16 SPACES

DESIGN NOTES:

1. INDUSTRIAL DISTRICTS ABUTTING RESIDENTIAL DISTRICTS OR MULTIFAMILY DISTRICTS.
   - 1.1. IN AN INDUSTRIAL DISTRICT WHERE THE LOT ABUTS OR IS WITHIN FORTY (40) FEET OF THE SIDE OR REAR BOUNDARY LINE OF ANY RESIDENTIAL DISTRICT (INCLUDING ANY RESIDENTIAL DISTRICTS IN ANY ADJACENT MUNICIPALITY) OR MULTIFAMILY DISTRICT, THERE SHALL BE PROVIDED ON ALL PORTIONS OF SAID LOT WITHIN FORTY (40) FEET OF SAID BOUNDARY LINE A BUFFER STRIP, AS FOLLOWS: THE PORTION OF SUCH BUFFER FOR AND MAINTAINED AS A PLANTING AREA FOR LAWNS, TREES, SHRUBS AND OTHER LANDSCAPE MATERIALS TO PROVIDE A PARK LIKE AREA OF SEPARATION BETWEEN DISTRICTS.
   - 1.2. IN THIS BUFFER ZONE, NO BUILDING, STRUCTURE OR PAVEMENT OF ANY NATURE, EXCLUDING NON ACCESSORY SIGNS, MAY BE CONSTRUCTED OR MAINTAINED.
   - 1.3. NO BUILDING, STRUCTURE OR PAVED SPACE ASSOCIATED WITH PARKING MAY BE LOCATED IN THE BUFFER STRIP.
   - 1.4. PLANTINGS IN THE BUFFER STRIP SHALL BE MAINTAINED BY THE OWNER OF THE PROPERTY USED FOR NONRESIDENTIAL PURPOSES.

SCALE: 1"=80'

0 40' 80' 160'

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COMMONWEALTH OF MASSACHUSETTS BRANDON D. CARR CIVIL No. 51472 REGISTERED PROFESSIONAL ENGINEER 5/16/2023

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NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

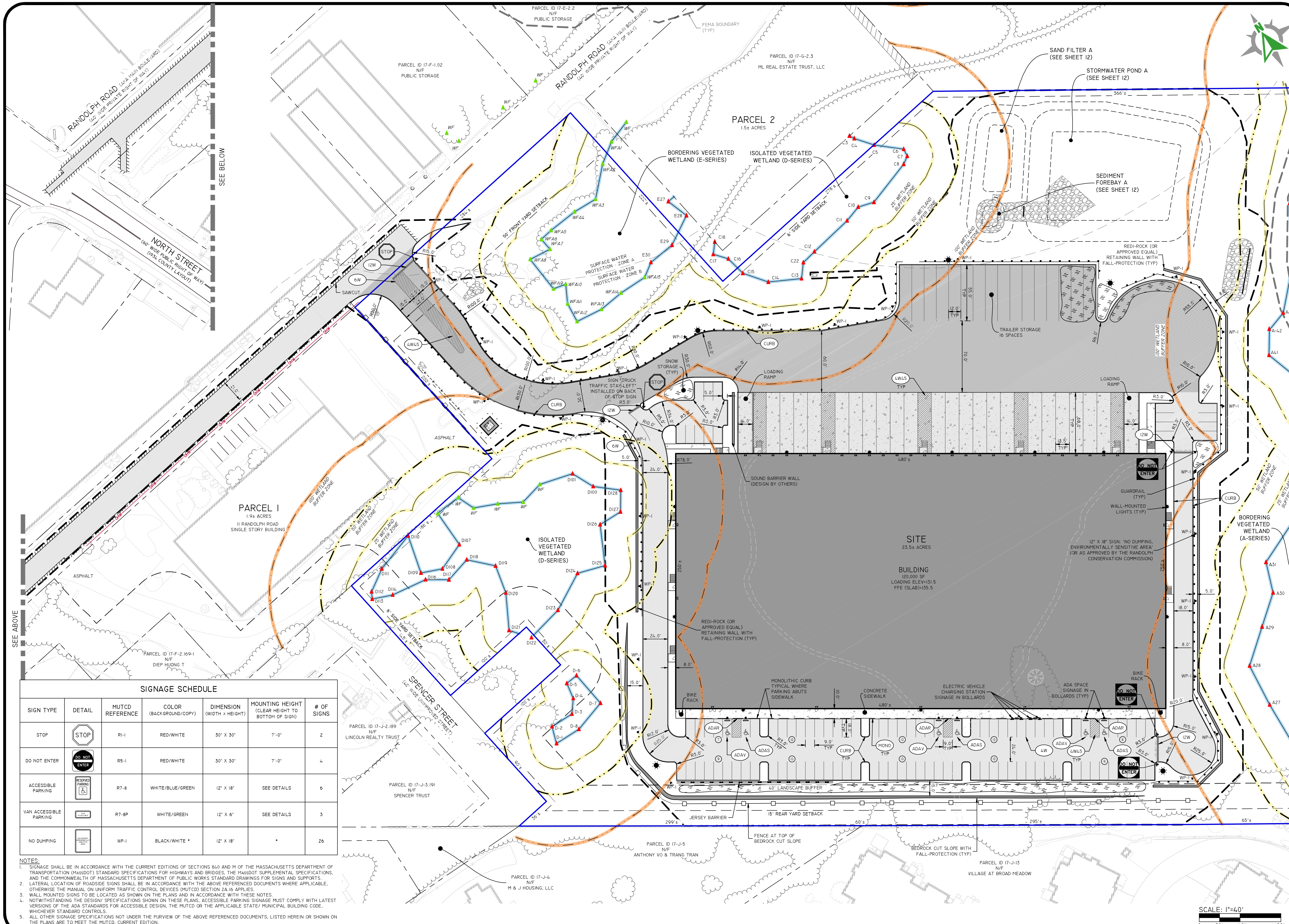
DRAWN BY: B.A.W. DESIGN BY: K.J.D.

OVERALL SITE PLAN

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013



SIGNAGE SCHEDULE

SIGN TYPE	DETAIL	MUTCD REFERENCE	COLOR (BACKGROUND/COPY)	DIMENSION (WIDTH x HEIGHT)	MOUNTING HEIGHT (CLEAR HEIGHT TO BOTTOM OF SIGN)	# OF SIGNS
STOP	STOP	R1-1	RED/WHITE	30" X 30"	7'-0"	2
DO NOT ENTER	DO NOT ENTER	R5-1	RED/WHITE	30" X 30"	7'-0"	4
ACCESSIBLE PARKING	RESERVED PARKING	R7-8	WHITE/BLUE/GREEN	12" X 18"	SEE DETAILS	6
VAN ACCESSIBLE PARKING	VAN ACCESSIBLE	R7-8P	WHITE/GREEN	12" X 6"	SEE DETAILS	3
NO DUMPING	NO DUMPING, ENVIRONMENTALLY SENSITIVE AREA	WP-1	BLACK/WHITE *	12" X 18"	*	26

NOTES:

1. SIGNAGE SHALL BE IN ACCORDANCE WITH THE CURRENT EDITIONS OF SECTIONS 840 AND M OF THE MASSACHUSETTS DEPARTMENT OF TRANSPORTATION (MassDOT) STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, THE MassDOT SUPPLEMENTAL SPECIFICATIONS, AND THE COMMONWEALTH OF MASSACHUSETTS DEPARTMENT OF PUBLIC WORKS STANDARD DRAWINGS FOR SIGNS AND SUPPORTS.
2. LATERAL LOCATION OF ROADSIDE SIGNS SHALL BE IN ACCORDANCE WITH THE ABOVE REFERENCED DOCUMENTS WHERE APPLICABLE, OTHERWISE THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) SECTION 2A.16 APPLIES.
3. WALL MOUNTED SIGNS TO BE LOCATED AS SHOWN ON THE PLANS AND IN ACCORDANCE WITH THESE NOTES.
4. NOTWITHSTANDING THE DESIGN/ SPECIFICATIONS SHOWN ON THESE PLANS, ACCESSIBLE PARKING SIGNAGE MUST COMPLY WITH LATEST VERSIONS OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN, THE MUTCD OR THE APPLICABLE STATE/ MUNICIPAL BUILDING CODE, WHICHEVER STANDARD CONTROLS.
5. ALL OTHER SIGNAGE SPECIFICATIONS NOT UNDER THE PURVIEW OF THE ABOVE REFERENCED DOCUMENTS, LISTED HEREIN OR SHOWN ON THE PLANS ARE TO MEET THE MUTCD, CURRENT EDITION.

* OR AS APPROVED BY THE RANDOLPH CONSERVATION COMMISSION.

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DRAWN BY: B.A.W. DESIGN BY: K.J.D.

SITE LAYOUT & SIGNAGE PLAN

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

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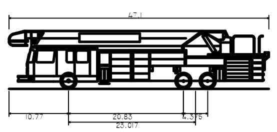
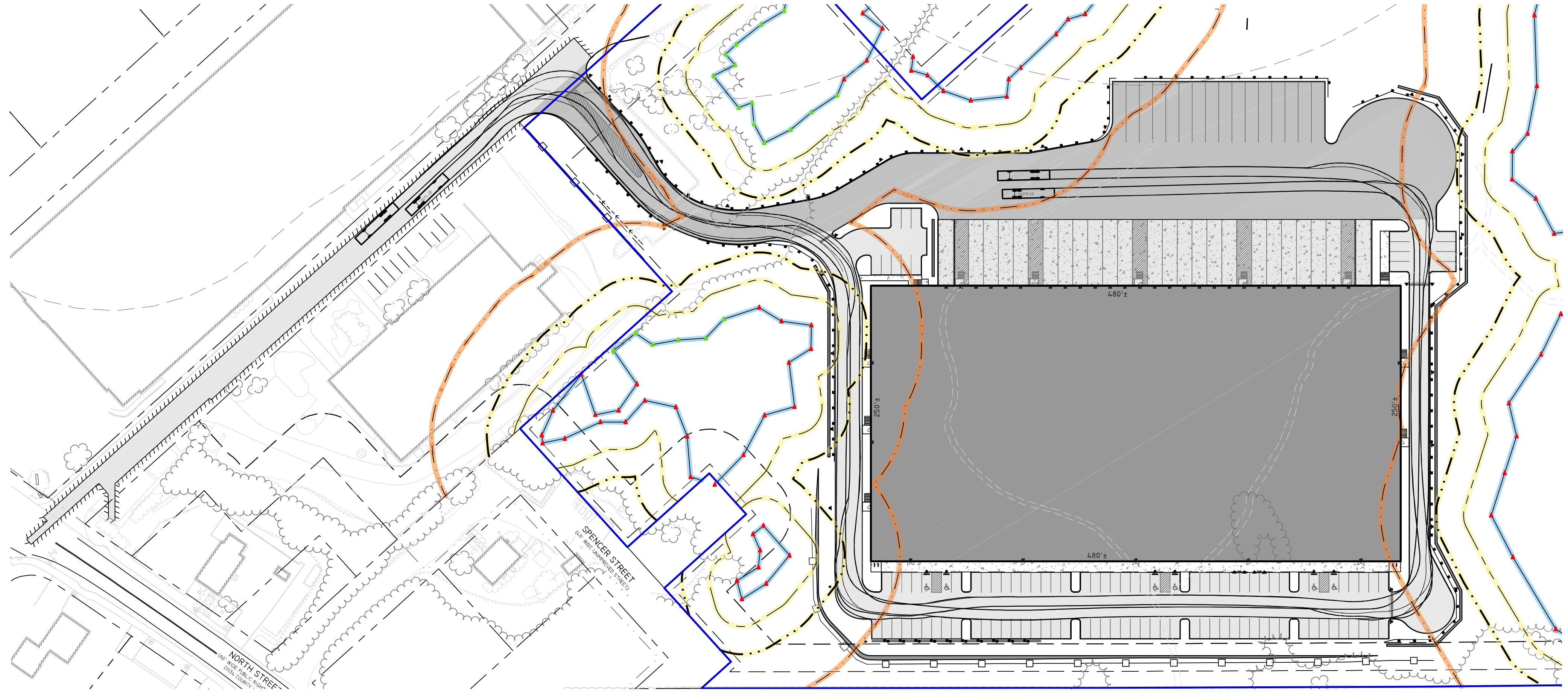
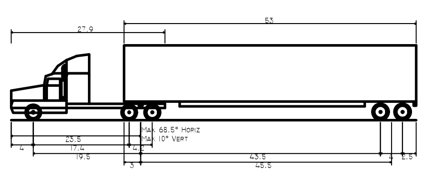


RANDOLPH MA LADDER

OVERALL LENGTH	47.100FT
OVERALL WIDTH	8.333FT
OVERALL BODY HEIGHT	10.490FT
MIN BODY GROUND CLEARANCE	0.920FT
TRACK WIDTH	8.333FT
LOCK-TO-LOCK TIME	6.00S
MAX STEERING ANGLE (VIRTUAL)	35.40°

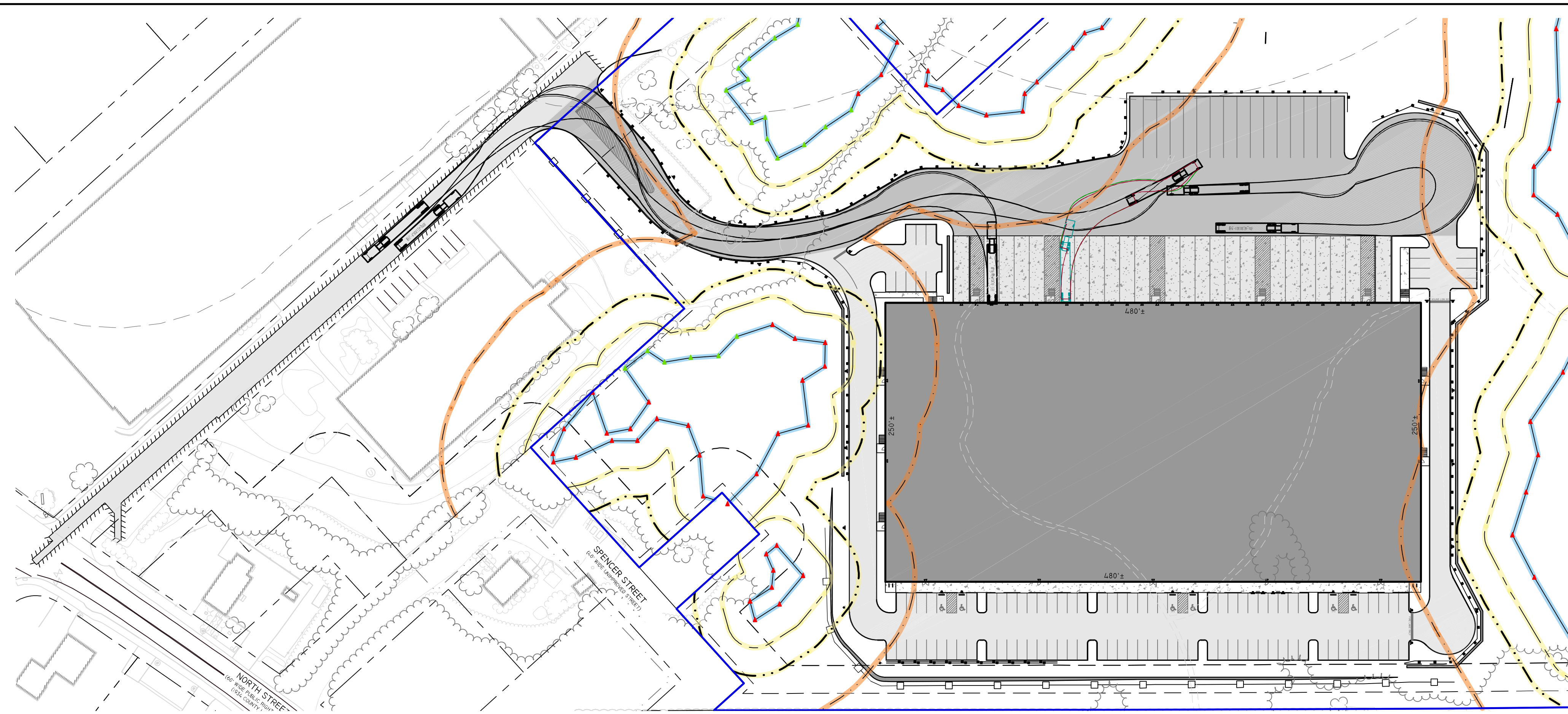


TRUCK TURN EXHIBIT - RANDOLPH FIRE (LADDER) TRUCK



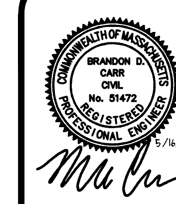
WB-67 - INTERSTATE SEMI-TRAILER

OVERALL LENGTH	73.501FT
OVERALL WIDTH	8.500FT
OVERALL BODY HEIGHT	13.500FT
MIN BODY GROUND CLEARANCE	1.334FT
MAX TRACK WIDTH	8.500FT
LOCK-TO-LOCK TIME	6.00S
MAX STEERING ANGLE (VIRTUAL)	28.40°



TRUCK TURN EXHIBIT - WB-67 TRUCK

SCALE: 1"=60'
0 30' 60' 120'



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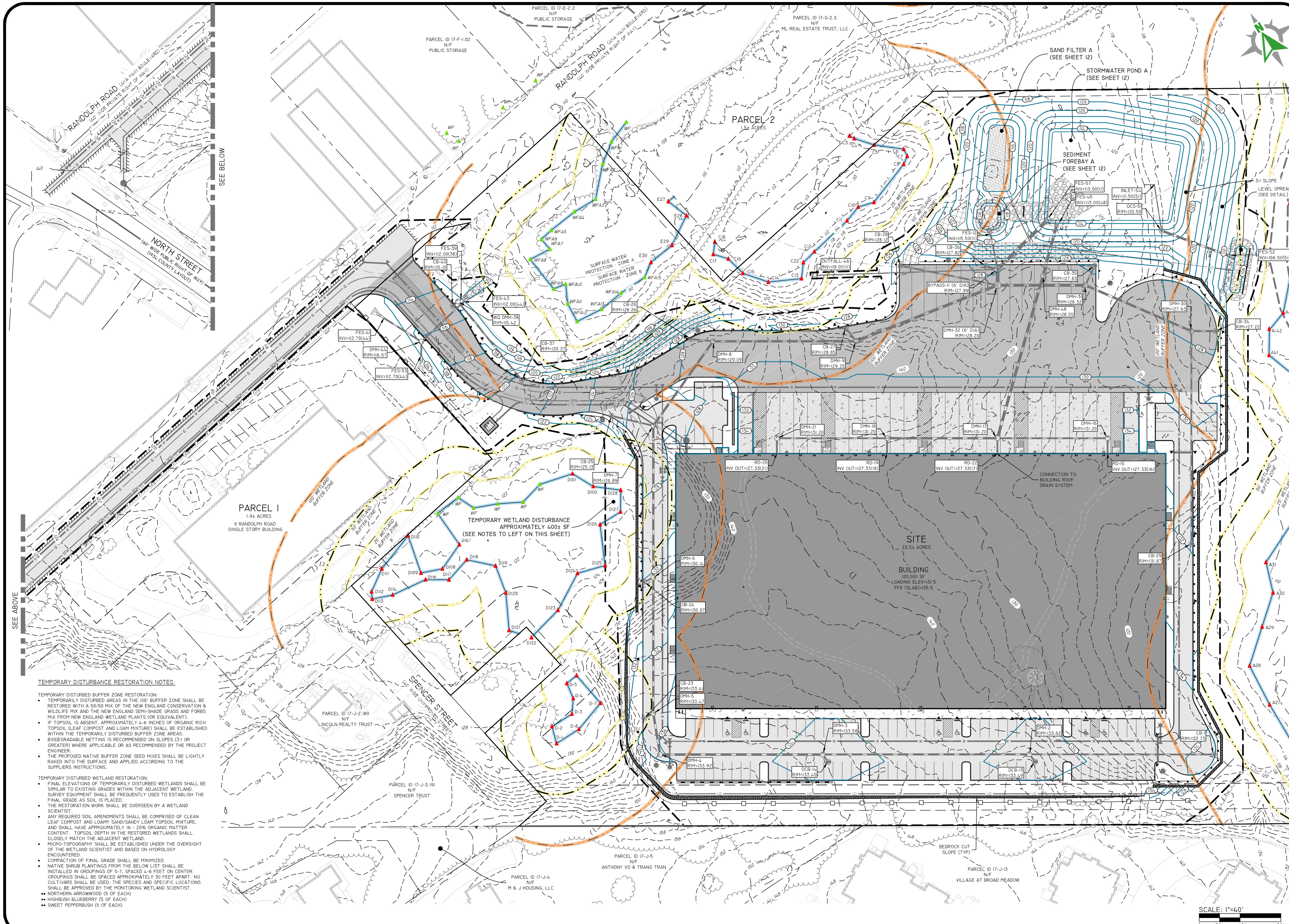
TRUCK TURN PLAN

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

\\DEASTORAGE\F\DEMAIN\PROJECTS\2954-003 RANDOLPH ROAD II\AUTOCAD DRAWINGS\2954-003-SITE.DWG PLOTTED: 5/15/2023



TEMPORARY DISTURBANCE RESTORATION NOTES:

TEMPORARY DISTURBED BUFFER ZONE RESTORATION:

- TEMPORARILY DISTURBED AREAS IN THE 100' BUFFER ZONE SHALL BE RESTORED WITH A 50/50 MIX OF THE NEW ENGLAND CONSERVATION & WILDLIFE MIX AND THE NEW ENGLAND SEMI-SHADE GRASS AND FORBS MIX FROM NEW ENGLAND WETLAND PLANTS (OR EQUIVALENT).
- IF TOPSOIL IS ABSENT, APPROXIMATELY 4-6 INCHES OF ORGANIC RICH TOPSOIL (LEAF COMPOST AND LOAM MIXTURE) SHALL BE ESTABLISHED WITHIN THE TEMPORARILY DISTURBED BUFFER ZONE AREAS.
- BIODEGRADABLE NETTING IS RECOMMENDED ON SLOPES (3:1 OR GREATER) WHERE APPLICABLE OR AS RECOMMENDED BY THE PROJECT ENGINEER.
- THE PROPOSED NATIVE BUFFER ZONE SEED MIXES SHALL BE LIGHTLY RAKED INTO THE SURFACE AND APPLIED ACCORDING TO THE SUPPLIERS INSTRUCTIONS.

TEMPORARY DISTURBED WETLAND RESTORATION:

- FINAL ELEVATIONS OF TEMPORARILY DISTURBED WETLANDS SHALL BE SIMILAR TO EXISTING GRADES WITHIN THE ADJACENT WETLAND. SURVEY EQUIPMENT SHALL BE FREQUENTLY USED TO ESTABLISH THE FINAL GRADE AS SOIL IS PLACED.
- THE RESTORATION WORK SHALL BE OVERSEEN BY A WETLAND SCIENTIST.
- ANY REQUIRED SOIL AMENDMENTS SHALL BE COMPRISED OF CLEAN LEAF COMPOST AND LOAMY SAND/SANDY LOAM TOPSOIL MIXTURE, AND SHALL HAVE APPROXIMATELY 16 - 20% ORGANIC MATTER CONTENT. TOPSOIL DEPTH IN THE RESTORED WETLANDS SHALL CLOSELY MATCH THE ADJACENT WETLAND.
- MICRO-TOPOGRAPHY SHALL BE ESTABLISHED UNDER THE OVERSIGHT OF THE WETLAND SCIENTIST AND BASED ON HYDROLOGY ENCOUNTERED.
- COMPACTION OF FINAL GRADE SHALL BE MINIMIZED.
- NATIVE SHRUB PLANTINGS FROM THE BELOW LIST SHALL BE INSTALLED IN GROUPINGS OF 5-7, SPACED 4-6 FEET ON CENTER. GROUPINGS SHALL BE SPACED APPROXIMATELY 30 FEET APART. NO CULTIVARS SHALL BE USED. THE SPECIES AND SPECIFIC LOCATIONS SHALL BE APPROVED BY THE MONITORING WETLAND SCIENTIST.
  - NORTHERN ARROWWOOD (5 OF EACH)
  - HIGHBUSH BLUEBERRY (5 OF EACH)
  - SWEET PEPPERBUSH (5 OF EACH)

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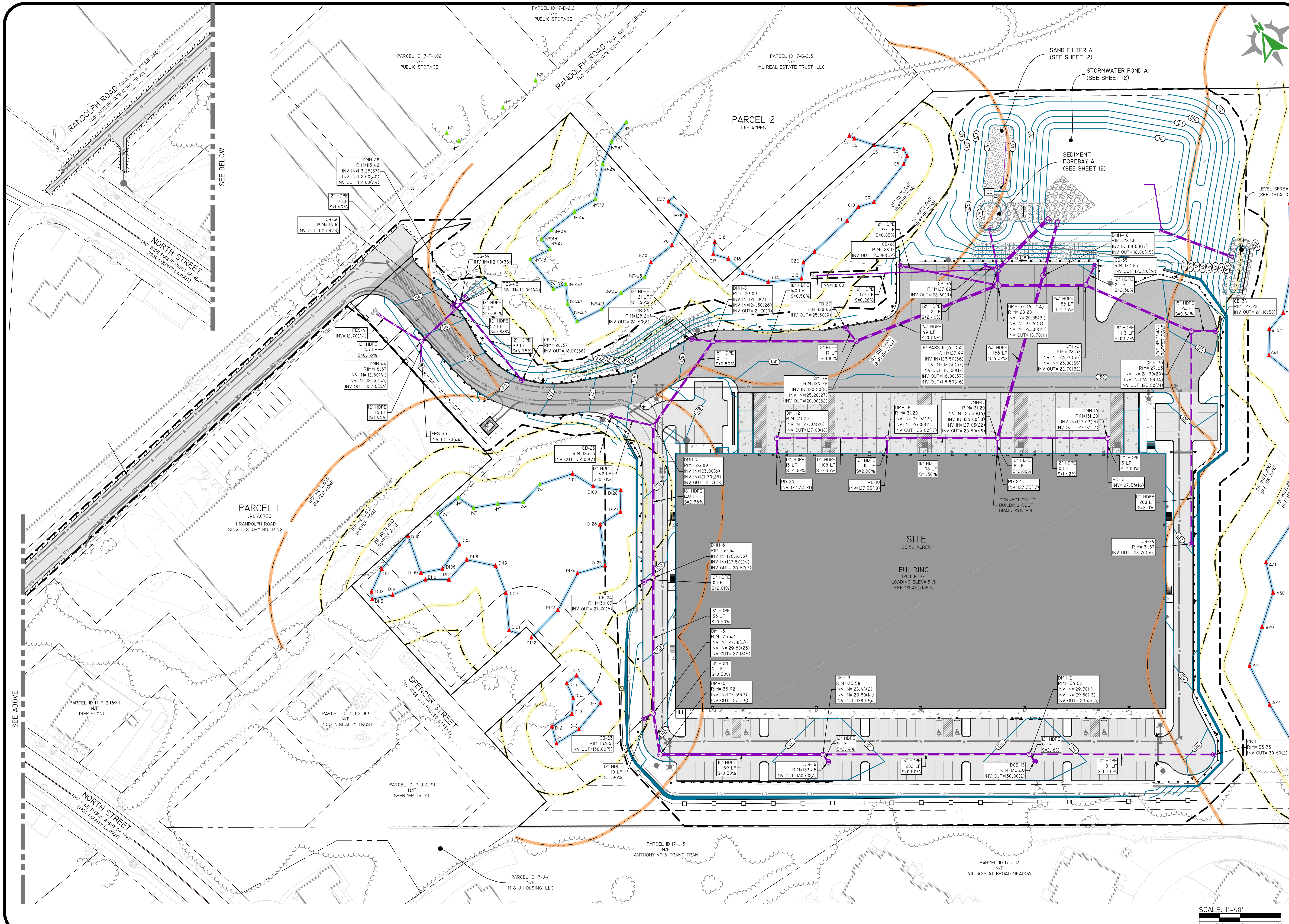
DRAWN BY: B.A.W. DESIGN BY: K.J.D.

GRADING PLAN

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013



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COMMONWEALTH OF MASSACHUSETTS
BRANDON D. CARR
CIVIL
No. 51472
REGISTERED PROFESSIONAL ENGINEER
5/16/202

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DRAWN BY: B.A.W. DESIGN BY: K.J.D.

DRAINAGE PLAN

RANDOLPH ROAD, MULTIPLE PARCELS
WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
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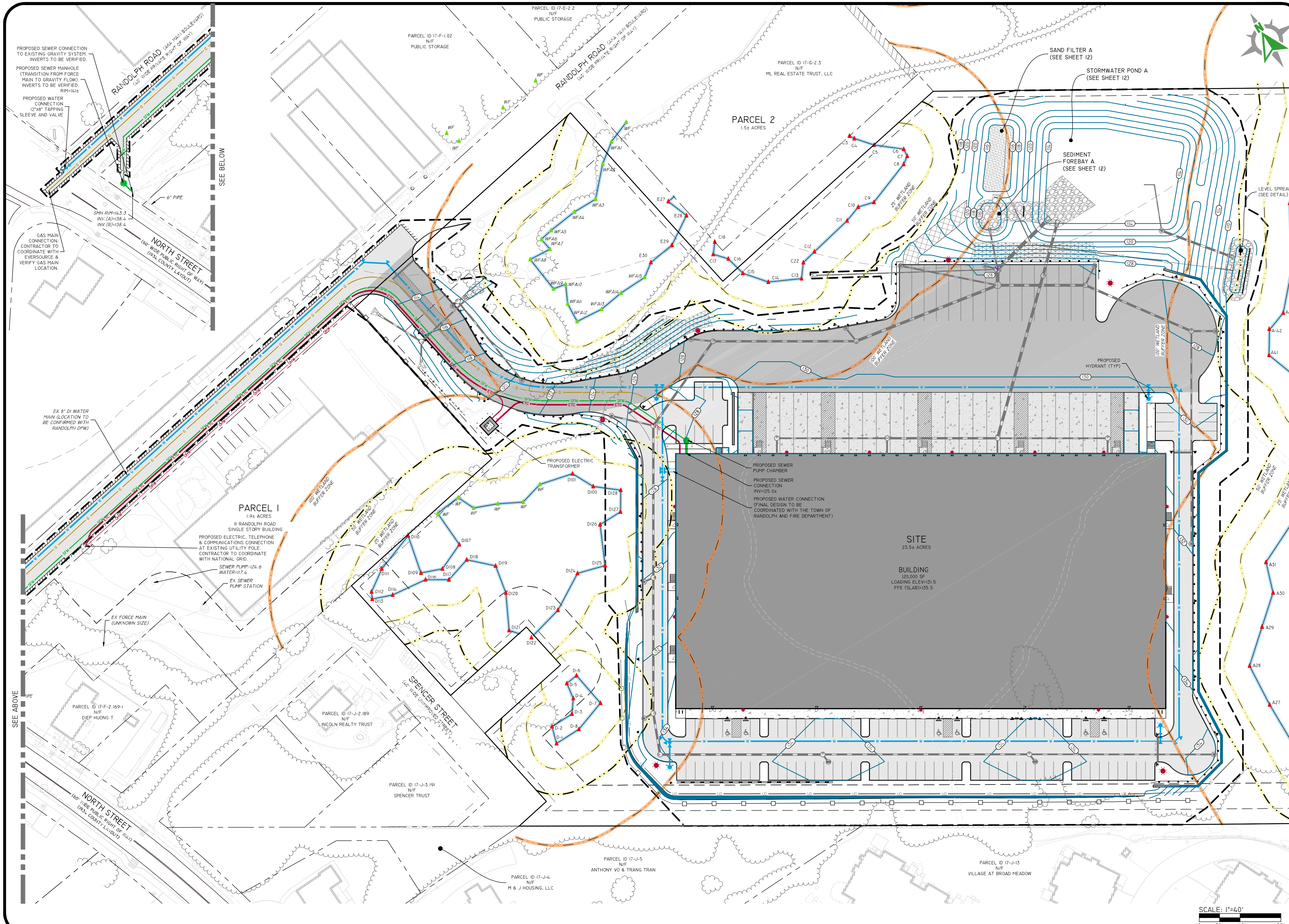

RANDOLPH ROAD (AKA MAIN BOULEVARD) (40' WIDE PRIVATE RIGHT OF WAY)
NORTH STREET (60' WIDE PUBLIC RIGHT OF WAY) (1934 COUNTY LAYOUT)
SPENCER STREET (40' WIDE UNIMPROVED STREET)
SEE BELOW
SEE ABOVE
PROPOSED SEWER CONNECTION TO EXISTING GRAVITY SYSTEM. INVERTS TO BE VERIFIED.
PROPOSED SEWER MANHOLE (TRANSITION FROM FORCE MAIN TO GRAVITY FLOW). INVERTS TO BE VERIFIED. RIM=141±
PROPOSED WATER CONNECTION 12"x8" TAPPING SLEEVE AND VALVE
6" PIPE
SMH RIM=143.3 INV.(A)=138.4 INV.(B)=138.4
GAS MAIN CONNECTION. CONTRACTOR TO COORDINATE WITH EVERSOURCE & VERIFY GAS MAIN LOCATION.
EX 8" DI WATER MAIN (LOCATION TO BE CONFIRMED WITH RANDOLPH DPW)
PARCEL 1
1.9± ACRES
11 RANDOLPH ROAD SINGLE STORY BUILDING
PROPOSED ELECTRIC, TELEPHONE & COMMUNICATIONS CONNECTION AT EXISTING UTILITY POLE. CONTRACTOR TO COORDINATE WITH NATIONAL GRID.
SEWER PUMP=124.6 WATER=117.4
EX SEWER PUMP STATION
EX FORCE MAIN (UNKNOWN SIZE)
PARCEL ID 17-E-2.2 N/F PUBLIC STORAGE
PARCEL ID 17-F-1.02 N/F PUBLIC STORAGE
PARCEL ID 17-G-2.3 N/F ML REAL ESTATE TRUST, LLC
PARCEL 2
1.5± ACRES
SAND FILTER A (SEE SHEET 12)
STORMWATER POND A (SEE SHEET 12)
SEDIMENT FOREBAY A (SEE SHEET 12)
LEVEL SPREADER (SEE DETAIL)
PROPOSED HYDRANT (TYP)
PROPOSED ELECTRIC TRANSFORMER
PROPOSED SEWER PUMP CHAMBER
PROPOSED SEWER CONNECTION INV=125.0±
PROPOSED WATER CONNECTION (FINAL DESIGN TO BE COORDINATED WITH THE TOWN OF RANDOLPH AND FIRE DEPARTMENT)
SITE
23.5± ACRES
BUILDING
120,000 SF
LOADING ELEV=131.5
FFE (SLAB)=135.5
100' WETLAND BUFFER ZONE
50' WETLAND BUFFER ZONE
25' WETLAND BUFFER ZONE
PARCEL ID 17-F-2.169-1 N/F DIEP HUONG T
PARCEL ID 17-J-2.189 N/F LINCOLN REALTY TRUST
PARCEL ID 17-J-3.191 N/F SPENCER TRUST
PARCEL ID 17-J-4 N/F M & J HOUSING, LLC
PARCEL ID 17-J-5 N/F ANTHONY VO & TRANG TRAN
PARCEL ID 17-J-13 N/F VILLAGE AT BROAD MEADOW
SCALE: 1"=40'
0 20' 40' 80'

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DRAWN BY: B.A.W. DESIGN BY: K.J.D.

UTILITIES PLAN

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

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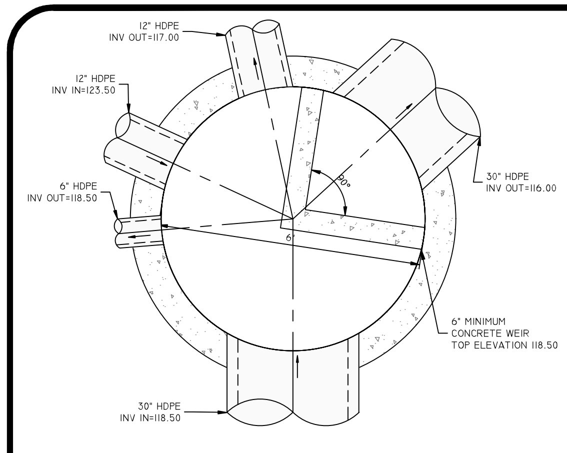
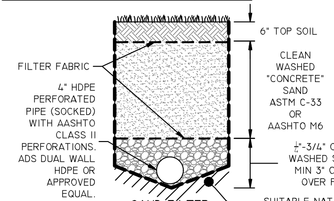


BYPASS-II (6'Ø MANHOLE)

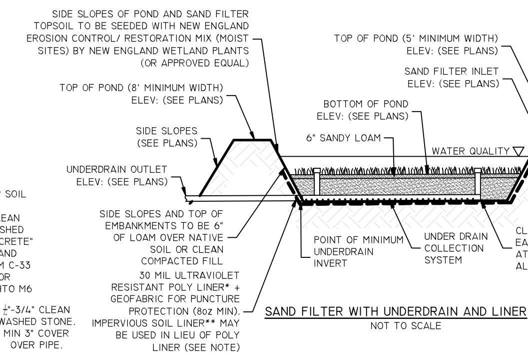
SCALE 1"=2'

DESCRIPTION	SNDF-A
TOP OF POND ELEVATION	120.00
100 YEAR STORM ELEVATION	118.96
10 YEAR STORM ELEVATION	118.84
2 YEAR STORM ELEVATION	118.62
2" WQ STORM ELEVATION	118.55
BOTTOM OF POND ELEVATION	116.00
TOP SOIL DEPTH	0.5
SAND DEPTH	1.5
MINIMUM UNDERDRAIN INVERT	114.50
UNDERDRAIN OUTLET ELEVATION	114.50
BOTTOM OF SAND ELEVATION	114.00
SEASONAL HIGH GWT ELEVATION	115.50
SOIL EVALUATION	TH-12



SAND FILTER TYPICAL SECTION

*POLY LINER JOINTS MUST BE WATERTIGHT AND SEALED IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.
**SOIL LINER SHALL BE 1' MINIMUM THICKNESS AND HAVE A MAXIMUM PERMEABILITY OF 0.03 FT/DAY (1*10^-5 CM/SEC). LINER MAY BE COMPRISED OF NATIVE MATERIALS WITH MIN OF 90% PASSING THE #200 SIEVE OR CLAY WITH A MINIMUM OF 15% PASSING THE #200 SIEVE.
LINERS MUST EXTEND UP SIDES TO EXISTING GRADE AT A MINIMUM.



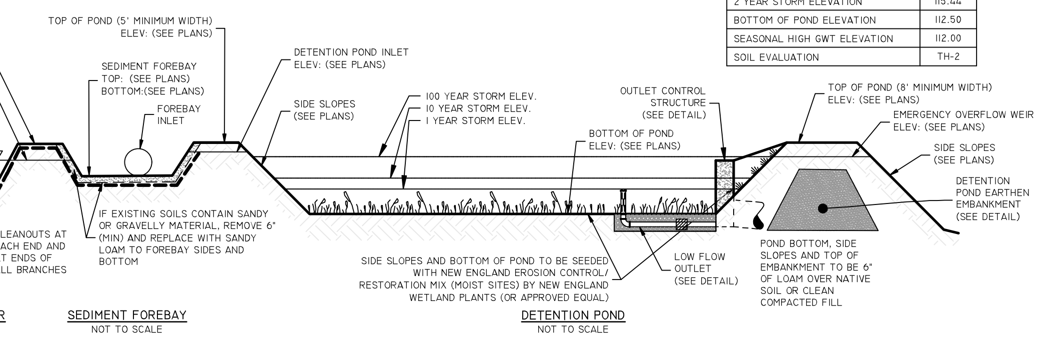
SAND FILTER WITH UNDERDRAIN AND LINER

NOT TO SCALE

SAND FILTER BMP SYSTEM

NOT TO SCALE

DESCRIPTION	DP-A
TOP OF POND ELEVATION	120.00
100 YEAR STORM ELEVATION	118.94
10 YEAR STORM ELEVATION	116.42
2 YEAR STORM ELEVATION	115.44
BOTTOM OF POND ELEVATION	112.50
SEASONAL HIGH GWT ELEVATION	112.00
SOIL EVALUATION	TH-2



SEDIMENT FOREBAY

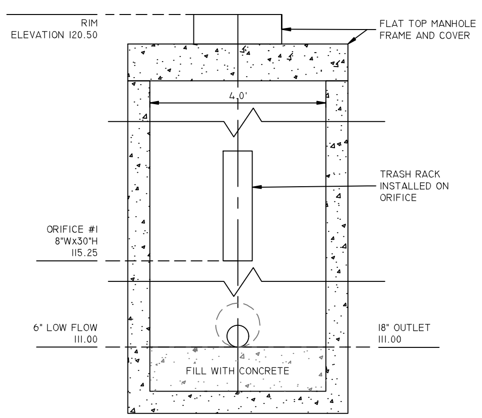
NOT TO SCALE

DETENTION POND

NOT TO SCALE

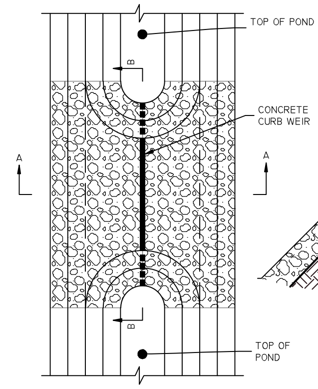
SAND FILTER BMP SYSTEM

NOT TO SCALE



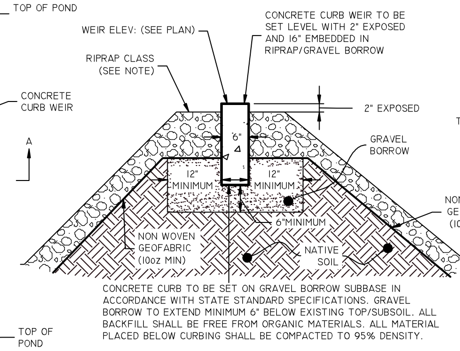
OUTLET CONTROL STRUCTURE
4' DIAMETER MANHOLE (OCS-51)

SCALE: 1"=2'



PLAN VIEW

NOT TO SCALE

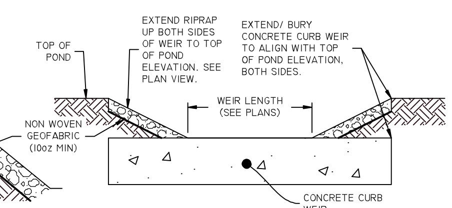


CONCRETE CURB TO BE SET ON GRAVEL BORROW SUBBASE IN ACCORDANCE WITH STATE STANDARD SPECIFICATIONS. GRAVEL BORROW TO EXTEND MINIMUM 6" BELOW EXISTING TOP/SUBSOIL. ALL BACKFILL SHALL BE FREE FROM ORGANIC MATERIALS. ALL MATERIAL PLACED BELOW CURBING SHALL BE COMPACTED TO 95% DENSITY.

SECTION A-A

NOT TO SCALE

NOTE:
ALL RIPRAP FOR CURB OUTLET WEIRS TO BE CLASS R-3 UNLESS NOTED OTHERWISE.



SECTION B-B

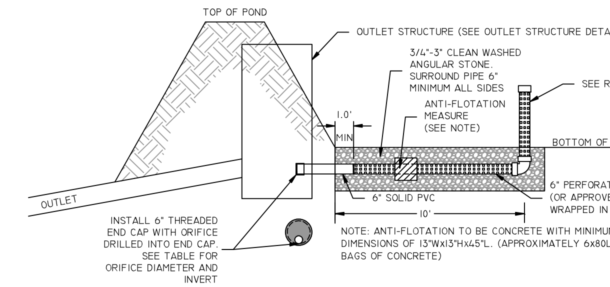
NOT TO SCALE

NOTE:
ALL CONCRETE CURB WEIRS MUST BE MONOLITHIC. CONCRETE CURB. WEIRS CANNOT BE MULTIPLE PRECAST CURBS JOINED IN SEQUENCE.

CURB OUTLET WEIR

NOT TO SCALE

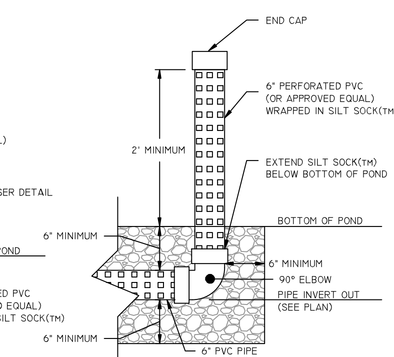
INTERNAL ORIFICE SCHEDULE		
LOCATION	DIAMETER	INVERT
DP-A	2.5"	112.50



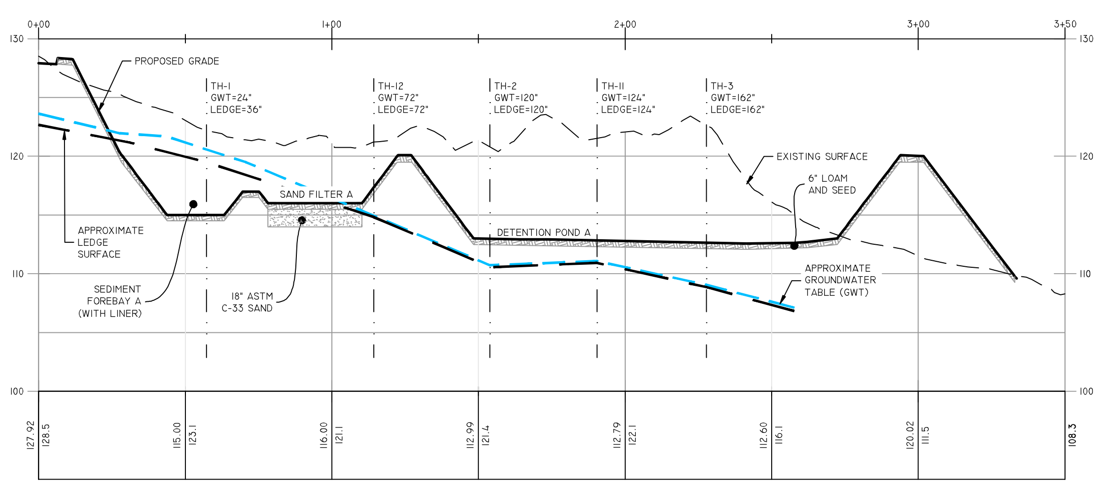
NOTE: ANTI-FLOTATION TO BE CONCRETE WITH MINIMUM DIMENSIONS OF 13"Wx13"Hx45"L. (APPROXIMATELY 6x80LB BAGS OF CONCRETE)

LOW FLOW OUTLET

NOT TO SCALE

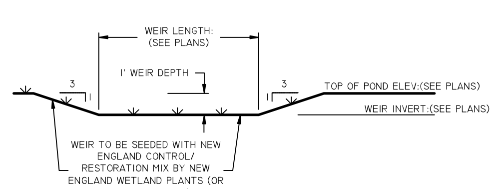


RISER DETAIL



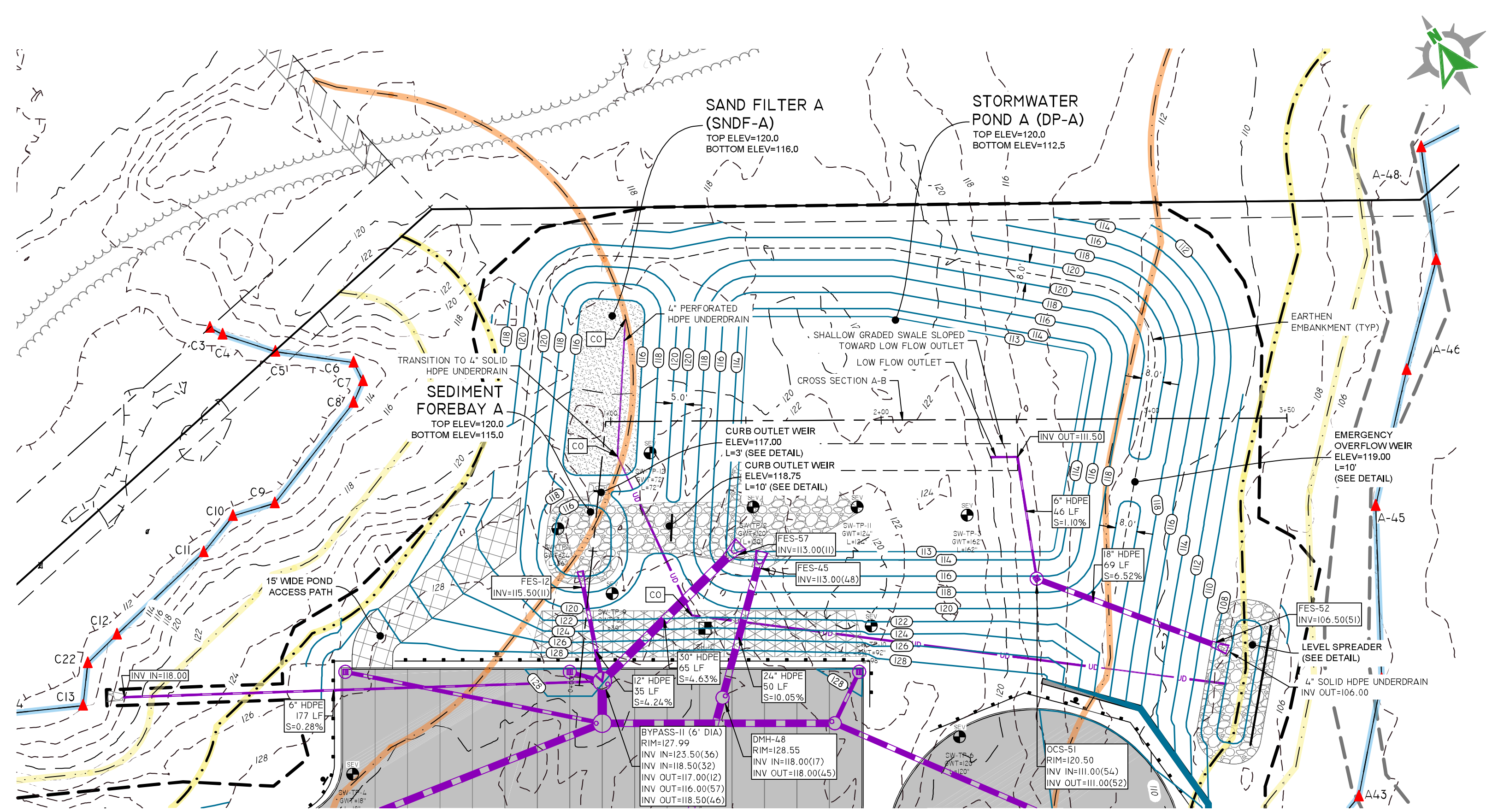
POND CROSS SECTION A-B

VERTICAL: 0 3' 6' 12'
HORIZONTAL: 0 15' 30' 60'



EMERGENCY OVERFLOW WEIR

NOT TO SCALE



POND COMPLEX A

SCALE: 1"=30'
0 15' 30' 60'

DiPrete Engineering
105 Eastern Avenue Suite 200 Dedham, MA 02026
tel 781-326-0021 fax 401-464-6006 www.diprete-eng.com
Boston • Providence • Newport

COMMONWEALTH OF MASSACHUSETTS
BRANDON D. CARR
CIVIL
No. 51472
REGISTERED PROFESSIONAL ENGINEER
5/16/2023

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES. SEE 'UTILITY NOTE' ON SHEET 3.

NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

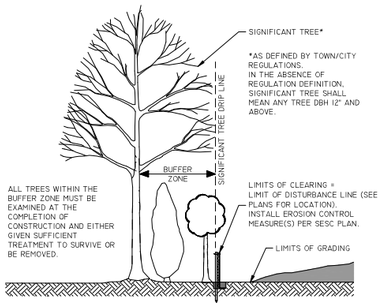
DRAWN BY: B.A.W. DESIGN BY: K.J.D.

POND DETAILS

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

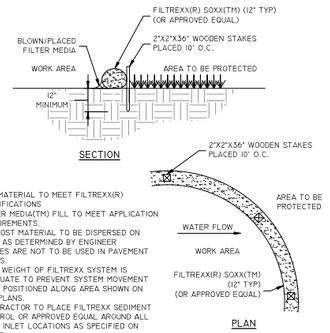
PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013



NOTE: LIMIT OF DISTURBANCE (LOD) MUST BE STAKED OUT PRIOR TO CONSTRUCTION. IF ANY SIGNIFICANT TREE DRIP LINE IS ENCROACHING PAST THE LOD, CONTRACTOR MUST CONTACT SITE ENGINEER PRIOR TO CONSTRUCTION.

LIMIT OF DISTURBANCE AT VEGETATION

NOT TO SCALE

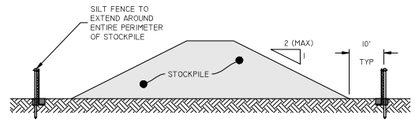


NOTES:

1. ALL MATERIAL TO MEET FILTREXX(R) SPECIFICATIONS
2. FILTER MEDIA(TM) FILL TO MEET APPLICATION REQUIREMENTS.
3. COMPOST MATERIAL TO BE DISPERSED ON SITE, AS DETERMINED BY ENGINEER
4. STAKES ARE NOT TO BE USED IN PAVEMENT AREAS.
5. SELF WEIGHT OF FILTREXX SYSTEM IS ADEQUATE TO PREVENT SYSTEM MOVEMENT ONCE POSITIONED ALONG AREA SHOWN ON THE PLANS.
6. CONTRACTOR TO PLACE FILTREXX SEDIMENT CONTROL OR APPROVED EQUAL AROUND ALL CURB INLET LOCATIONS AS SPECIFIED ON PLANS.

FILTREXX SEDIMENT CONTROL (OR APPROVED EQUAL)

NOT TO SCALE

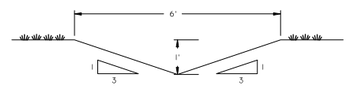


NOTES:

1. ALL STOCKPILES MUST BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH ALL APPLICABLE FEDERAL, STATE, AND MUNICIPAL REGULATIONS.
2. DIVERT ALL STORMWATER AWAY FROM STOCKPILES.
3. SOIL STOCKPILES THAT ARE NOT TO BE USED WITHIN 30 DAYS MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER FORMATION OF THE STOCKPILE WITH SEED MIX COMPATIBLE WITH THE SOIL TYPE.
4. STOCKPILE AND SILT FENCE MUST BE INSPECTED AT LEAST ONCE PER WEEK AND AFTER RAIN EVENTS IN EXCESS OF ½" OF RAINFALL. REPAIR/ REPLACE SILT FENCE (AND STOCKPILE COVERS WHERE APPLICABLE) AS NEEDED TO KEEP THEM FUNCTIONING ADEQUATELY.
5. SEDIMENT TRAPPED BY SILT FENCES MUST BE REMOVED AND PROPERLY DISPOSED OF WHENEVER SIGNIFICANT ACCUMULATION OCCURS.

STOCKPILE PROTECTION

NOT TO SCALE



TEMPORARY DIVERSION CHANNEL

NOT TO SCALE

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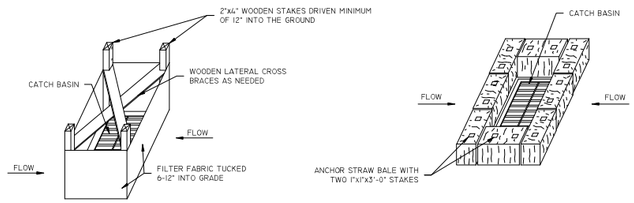
tel 781-326-0021 fax 401-464-6006 www.diprete-eng.com



SILT FENCE INSTALLATION FOR CATCH BASINS AT LOW POINTS

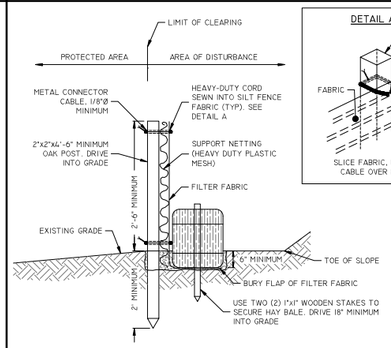
STRAW BALE FILTER INSTALLATION FOR CATCH BASINS AT LOW POINTS

NOTES:

1. STORMWATER INLETS WHICH DO NOT DISCHARGE TO SEDIMENT TRAPS OR BASINS MUST BE PROTECTED UNTIL THE TRIBUTARY AREAS ARE STABILIZED.
2. SEDIMENT MUST BE REMOVED FROM INLET PROTECTION AFTER EACH STORM.
3. REFER TO LONG TERM/SHORT TERM MAINTENANCE NOTES AND OPERATION & MAINTENANCE PLAN FOR TIMING OF PLACEMENT AND REMOVAL OF EROSION CONTROL ELEMENTS.

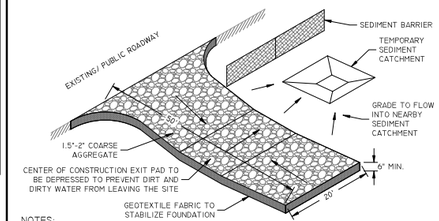
CATCH BASIN EROSION CONTROL

NOT TO SCALE



HAY BALE AND SILT FENCE DETAIL

NOT TO SCALE

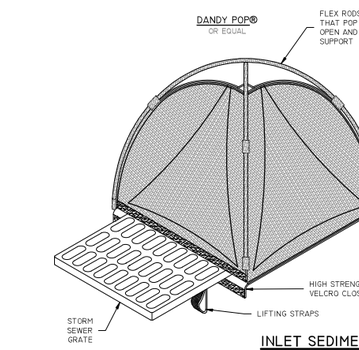


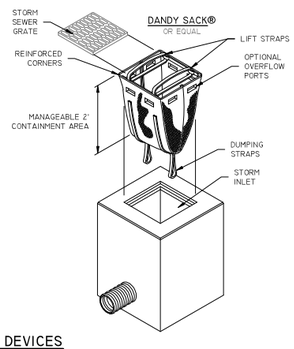
NOTES:

1. CONTRACTOR SHALL MONITOR AND MAINTAIN THE ENTRANCE TO ENSURE THAT IT IS CLEANED AND FUNCTIONING CORRECTLY TO PREVENT TRACKING OF SEDIMENT BY CONSTRUCTION VEHICLES THAT EXIT THE SITE.
2. THE MAINTENANCE SHALL INCLUDE TOP DRESSING WITH ADDITIONAL STONE OR ADDITIONAL LENGTH AS CONDITIONS DEMAND OR AS DIRECTED BY THE ENGINEER. ALL SEDIMENTS SPILLED, DROPPED, WASHED, OR TRACKED ON THE PUBLIC RIGHT OF WAY MUST BE REMOVED IMMEDIATELY BY THE CONTRACTOR.
3. CONTRACTOR PERSONNEL SHALL SUPERVISE EXITING TRAFFIC, CLEAN OFF VEHICLES, AND MAINTAIN THE SEDIMENT CATCHMENT AREA.
4. ADJACENT ENTRANCE/ EXIT ROADWAYS SHALL BE SWEPT DAILY BY CONTRACTOR.

TEMPORARY GRAVEL CONSTRUCTION ENTRANCE/ EXIT PAD

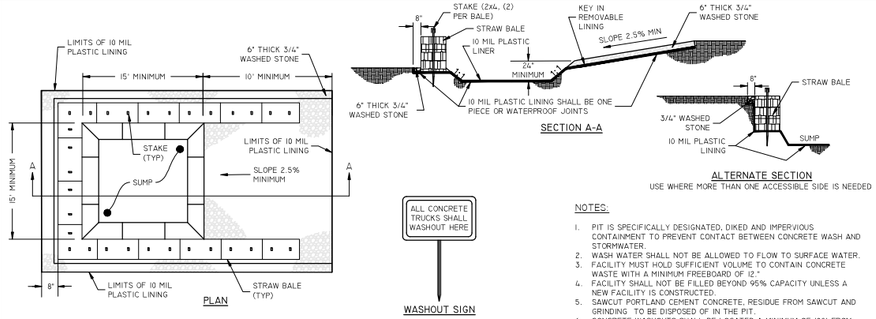
NOT TO SCALE





INLET SEDIMENT CONTROL DEVICES

NOT TO SCALE



NOTES:

1. PIT IS SPECIFICALLY DESIGNATED, DIKED AND IMPERVIOUS CONTAINMENT TO PREVENT CONTACT BETWEEN CONCRETE WASH AND STORMWATER.
2. WASH WATER SHALL NOT BE ALLOWED TO FLOW TO SURFACE WATER.
3. FACILITY MUST HOLD SUFFICIENT VOLUME TO CONTAIN CONCRETE WASTE WITH A MINIMUM FREEBOARD OF 12".
4. FACILITY SHALL NOT BE FILLED BEYOND 95% CAPACITY UNLESS A NEW FACILITY IS CONSTRUCTED.
5. SAWCUT PORTLAND CEMENT CONCRETE, RESIDUE FROM SAWCUT AND GRINDING TO BE DISPOSED OF IN THE PIT.
6. CONCRETE WASHOUTS SHALL BE LOCATED A MINIMUM OF 100' FROM DRAINAGE WAYS, INLETS, AND SURFACE WATERS.
7. MANUFACTURED CONCRETE WASHOUT DEVICES MAY BE USED IF REMOVED FROM THE SITE WHEN 95% FULL CAPACITY.

CONCRETE WASHOUT AREA

NOT TO SCALE

GENERAL NOTES:

1. TEMPORARY SEDIMENT TRAPS SHALL MEET ALL REQUIREMENTS FOR TEMPORARY SEDIMENT TRAPS OUTLINED IN THE MASSACHUSETTS EROSION AND SEDIMENT CONTROL GUIDELINES FOR URBAN AND SUBURBAN AREAS (LATEST REVISION).
2. THE TEMPORARY SEDIMENT TRAP SHALL HAVE A MINIMUM STORAGE VOLUME OF 67 CUBIC YARDS PER ACRE OF CONTRIBUTING DRAINAGE AREA.
3. ALL CUT AND FILL SLOPES SHALL BE 2:1 OR FLATTER.
4. THE OUTLET SPILLWAY SHALL BE LOCATED AT THE MOST DISTANT HYDRAULIC POINT FROM THE INLET.
5. THE OUTLET SPILLWAY SHALL CONSISTED OF HARD, ANGULAR, WELL-GRADED STONE MIXTURE WITH d50 OF 9 INCHES MINIMUM, INSIDE FACING OF SPILLWAY TO BE LINED WITH A 1-FOOT THICK OF ½ TO 2 INCH WASHED AGGREGATE. SEE DETAIL.
6. TEMPORARY SEDIMENT TRAPS MUST OUTLET ONTO RIPRAP APRON 5 FEET LONG (MINIMUM) WITH FILTER FABRIC FOUNDATION.
7. MINIMUM WIDTH OF TOP OF EMBANKMENT IS 5 FEET.
8. MAXIMUM HEIGHT OF EMBANKMENT IS 5 FEET FROM OUTER EMBANKMENT TOE TO TOP OF EMBANKMENT.
9. SEDIMENT TRAPS ARE LIMITED TO A MAXIMUM CONTRIBUTING DRAINAGE AREA OF 5 ACRES, AND A STRUCTURE LIFE OF 2 YEARS.

INSPECTION, MAINTENANCE, AND REMOVAL REQUIREMENTS:

1. INSTALL "SEDIMENT STORAGE" STAKE WITH A MARKER AT ONE HALF DESIGN DEPTH. THIS WILL BE THE "CLEANOUT LEVEL". REMOVE SEDIMENT WHEN IT HAS ACCUMULATED TO ONE-HALF THE DESIGN DEPTH AND RESTORE THE TRAP TO ITS ORIGINAL DIMENSIONS. DEWATER IF NECESSARY.
2. DISPOSE OF THE SEDIMENT REMOVED FROM THE TRAP IN A SUITABLE AREA.
3. INSPECT THE TEMPORARY SEDIMENT TRAP AT LEAST ONCE A WEEK AND WITHIN 24 HOURS OF THE END OF A STORM WITH A RAINFALL AMOUNT OF 0.25 INCH OR GREATER.
4. CLEAN OR REPLACE SPILLWAY GRAVEL FACING IF CLOGGED. PROMPTLY REPLACE ANY DISPLACED RIPRAP, ENSURING THAT NO STONES IN SPILLWAY ARE ABOVE DESIGN GRADE.
5. INSPECT VEGETATION; RESEED AND REMULCH IF NECESSARY.
6. CHECK SPILLWAY DEPTH PERIODICALLY TO ENSURE MINIMUM OF 1.5 FEET DEPTH FROM LOWEST POINT OF THE SETTLED EMBANKMENT TO HIGHEST POINT OF SPILLWAY CREST. FILL ANY LOW AREAS OF THE EMBANKMENT TO MAINTAIN DESIGN ELEVATION.
7. AFTER ALL SEDIMENT-PRODUCING AREAS HAVE BEEN STABILIZED, INSPECTED AND APPROVED, REMOVE THE SEDIMENT TRAP AND ALL UNSTABLE SEDIMENT. RESTORE AREA TO DESIGN GRADE AND STABILIZE IN ACCORDANCE WITH LANDSCAPE PLAN/ COVER AS SHOWN ON APPLICABLE PLANS.

INSTALLATION NOTES:

EMBANKMENT:

- CLEAR, GRUB AND STRIP ALL VEGETATION AND ROOT MAT FROM ANY PROPOSED EMBANKMENT AND OUTLET AREA. USE STABLE MINERAL SOIL FREE OF ROOTS, ROCKS, DEBRIS, ORGANIC MATERIAL AND OTHER OBJECTIONABLE MATERIAL.
- PLACE EMBANKMENT FILL IN 9-INCH LIFTS, MAXIMUM. THE FILL SHOULD BE COMPACTED BY ROUTING THE CONSTRUCTION EQUIPMENT SO THAT THE ENTIRE AREA OF THE FILL IS TRAVERSED BY AT LEAST ONE WHEEL OR TREAD TRACK OF THE EQUIPMENT. CONSTRUCT SIDE SLOPES 2:1 OR FLATTER (3:1 RECOMMENDED FOR BACKSLOPE TO IMPROVE STABILITY OF STONE SPILLWAY).
- OVERFILL EMBANKMENT TO 6 INCHES ABOVE DESIGN ELEVATION TO ALLOW FOR SETTLEMENT.

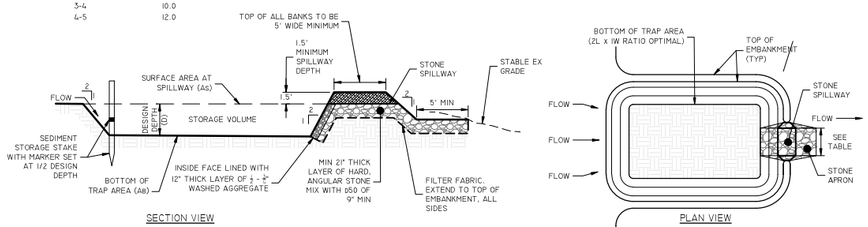
OUTLET SECTION:

- EXCAVATE TRAPEZOIDAL STONE OUTLET SECTION FROM COMPACTED EMBANKMENT. ALLOW FOR THICKNESS OF STONE SIDE SLOPES (21 INCHES MINIMUM).
- INSTALL FILTER FABRIC UNDER STONE. EXTEND FABRIC UP THE SIDES TO THE TOP OF EMBANKMENT. PLACE SPECIFIED STONE TO LINES AND GRADES SHOW ON PLANS, WORKING THE SMALL STONES INTO THE VOIDS TO ACHIEVE A DENSE MASS. SPILLWAY CREST MUST BE LEVEL WITH MINIMUM DIMENSIONS SPECIFIED. MEASURE SPILLWAY DEPTH FROM THE HIGHEST STONES IN THE SPILLWAY TO THE DESIGN ELEVATION OF TOP OF EMBANKMENT. MINIMUM DEPTH IS 1.5 FEET.
- KEEP SIDES OF THE STONE OUTLET SECTION AT LEAST 2:1 INCHES THICK THROUGH THE LEVEL SECTION AND THE DOWNSTREAM FACE OF EMBANKMENT.
- EXTEND OUTLET APRON BEYOND TOE OF EMBANKMENT ON LEVEL GRADE UNTIL STABLE CONDITIONS ARE REACHED (5' MINIMUM). EDGES AND END OF THE STONE APRON SECTION MUST BE FLUSH WITH SURROUNDING GROUND. NO OVERFALL SHOULD EXIST.
- COVER INSIDE OF FACE OF STONE OUTLET SECTION WITH A 1-FOOT THICK LAYER OF 1/2 TO 3/4 INCH AGGREGATE.
- ALL EMBANKMENTS, EARTH SPILLWAYS, AND DISTURBED AREAS DOWNSTREAM FROM THE STRUCTURE SHOULD BE VEGETATED WITHIN 3 DAYS OF COMPLETION OF THE CONSTRUCTION OF THE STRUCTURE.

SEDIMENT TRAP DIMENSIONS	TRAP A		TRAP B		TRAP C	
TRIBUTARY DRAINAGE AREA	1.00	AC	4.69	AC	2.49	AC
DESIGN DEPTH (D)	3.00	FT	3.00	FT	3.00	FT
BOTTOM OF TRAP AREA (Ab)	346	SQ.FT	2,249	SQ.FT	1,151	SQ.FT
SURFACE AREA AT SPILLWAY (As)	1,071	SQ.FT	3,732	SQ.FT	2,070	SQ.FT

SPILLWAY WIDTH

TRIBUTARY DRAINAGE AREA (ac)	MIN. BOTTOM WIDTH OF SPILLWAY (FT)
UP TO 1	4.0
1-2	6.0
2-3	8.0
3-4	10.0
4-5	12.0



TEMPORARY SEDIMENT TRAP DETAIL

NOT TO SCALE

NO.	DATE	DESCRIPTION	BY:
0.	05-06-2024	PLANNING BOARD SUBMISSION	B.A.W.

DESIGN BY: K.J.D
DRAWN BY: B.A.W.

COMMONWEALTH OF MASSACHUSETTS
BRANDON D. CARR
CIVIL
No. 51472
REGISTERED PROFESSIONAL ENGINEER
5/14/2024

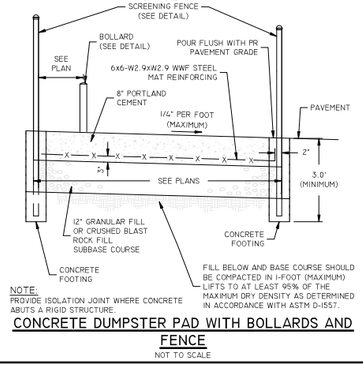
SESC Detail Sheet

Randolph Road, Multiple Parcels

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

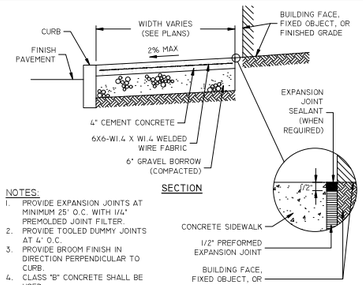
SHEET 13 OF 17



NOTE:
PROVIDE ISOLATION JOINT WHERE CONCRETE ABUTS A RIGID STRUCTURE.

CONCRETE DUMPSTER PAD WITH BOLLARDS AND FENCE

NOT TO SCALE

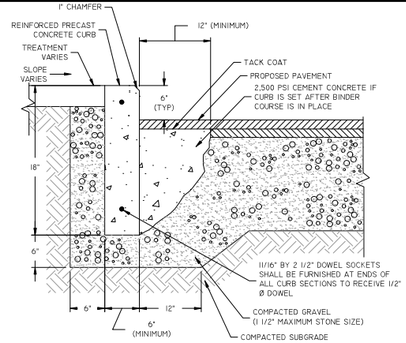


NOTES:
1. PROVIDE EXPANSION JOINTS AT MINIMUM 25' O.C. WITH 1/4" PREMOLDED JOINT FILLER.
2. PROVIDE TOOLED DUMMY JOINTS AT 4' O.C.
3. PROVIDE BROOM FINISH IN DIRECTION PERPENDICULAR TO CURB.
4. CLASS "B" CONCRETE SHALL BE USED.

JOINT DETAIL

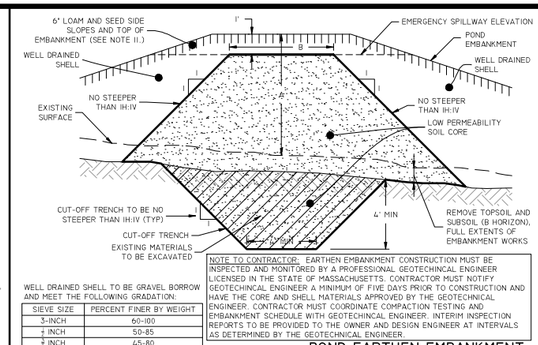
CONCRETE SIDEWALK

NOT TO SCALE



PRECAST CONCRETE CURB

NOT TO SCALE



WELL DRAINED SHELL TO BE GRAVEL BORROW AND MEET THE FOLLOWING GRADATION:

SIEVE SIZE	PERCENT FINER BY WEIGHT
3-INCH	60-100
¼ INCH	50-85
⅜ INCH	45-80
NO. 4	40-75
NO. 40	0-45
NO. 200	0-10

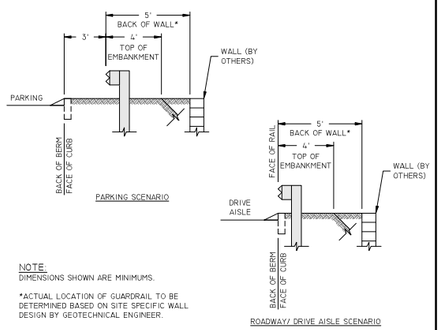
NOTE TO CONTRACTOR: EARTHEN EMBANKMENT CONSTRUCTION MUST BE INSPECTED AND MONITORED BY A PROFESSIONAL GEOTECHNICAL ENGINEER LICENSED IN THE STATE OF MASSACHUSETTS. CONTRACTOR MUST NOTIFY GEOTECHNICAL ENGINEER A MINIMUM OF FIVE DAYS PRIOR TO CONSTRUCTION AND HAVE THE CORE AND SHELL MATERIALS APPROVED BY THE GEOTECHNICAL ENGINEER. CONTRACTOR MUST COORDINATE COMPACTION TESTING AND EMBANKMENT SCHEDULE WITH GEOTECHNICAL ENGINEER. INTERIM INSPECTION REPORTS TO BE PROVIDED TO THE OWNER AND DESIGN ENGINEER AT INTERVALS AS DETERMINED BY THE GEOTECHNICAL ENGINEER.

POND EARTHEN EMBANKMENT: LOW PERMEABILITY CORE

NOT TO SCALE

POND EMBANKMENT HEIGHT "A" (FT)	TOP WIDTH OF CORE "B" (FT)
0-7.0	6.0
OVER 7.0	PER GEOTECH

NOTES:
1. LOW PERMEABILITY SOIL CORE TO BE PROVIDED FOR ALL POND EMBANKMENTS UNLESS AN ALTERNATIVE METHOD IS SPECIFICALLY NOTED ON THE PLANS.
2. LOW PERMEABILITY SOIL CORE TO BE CONSTRUCTED OF A MATERIAL WITH A MINIMUM OF 30% PASSING THE #200 SIEVE AND A MAXIMUM PERMEABILITY OF 0.00005 CM/S.
3. WELL DRAINED SHELL TO BE GRAVEL BORROW WITH LESS THAN 10% PASSING THE #200 SIEVE AND MEET THE GRADATION AS SHOWN ON THIS DETAIL.
4. ALL MATERIAL MUST BE FREE FROM DELETERIOUS/ ORGANIC MATTER, INCLUDING (BUT NOT LIMITED TO) ROOTS, SOD, RUBBLE, SNOW, ICE, RUBBISH ETC.
5. MINIMUM DEPTH OF CUT-OFF TRENCH SHALL BE 4' MEASURED FROM THE LOWEST ELEVATION OF THE UNDISTURBED EXISTING SURFACE INTERFACE. SEE DETAIL.
6. THE MINIMUM BOTTOM WIDTH OF THE CUT-OFF TRENCH SHALL BE 4', AND WIDE ENOUGH TO PERMIT OPERATION OF COMPACTION EQUIPMENT.
7. SIDE SLOPES OF THE CUT-OFF TRENCH SHALL BE NO STEEPER THAN 1H:1V.
8. IF BEDROCK IS ENCOUNTERED BELOW THE POND EMBANKMENT THE CUT OFF TRENCH MY BE MODIFIED AT THE DIRECTION OF A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER.
9. THE LOW PERMEABILITY CORE AT A MINIMUM SHALL EXTEND UP BOTH ABUTMENTS TO THE EMERGENCY SPILLWAY ELEVATION.
10. COMPACTION REQUIREMENTS FOR THE SHELL AND LOW PERMEABILITY CORE TO BE 95% OF THE MODIFIED PROCTOR PER ASTM D1557. ALL FILL TO BE PLACED IN LIFTS NOT EXCEEDING 12".
11. SIDE SLOPE OF POND EMBANKMENT TO BE NO STEEPER THAN THE SLOPES SHOWN ON THE POND-SPECIFIC DESIGN PLANS WITHOUT WRITTEN DIRECTION FROM THE DESIGN ENGINEER. IF ANY POND SIDE SLOPE IS STEEPER THAN 3H:1V, SLOPE PROTECTION MUST BE UTILIZED ON POND EMBANKMENT, WHICH MAY INCLUDE (BUT NOT BE LIMITED TO) RIPRAP AND/ OR EROSION CONTROL MATS.
12. THE LOW PERMEALITY CORE MUST BE KEPT FREE FROM STANDING WATER DURING THE BACKFILL OPERATION.
13. ALL EMBANKMENT INSTALLATIONS TO BE SUPERVISED BY A SUITABLY QUALIFIED GEOTECHNICAL ENGINEER. SEE 'NOTE TO CONTRACTOR'.
14. ANY PROPOSED DEVIATIONS FROM THIS DETAIL MUST BE DESIGNED BY A SUITABLY QUALIFIED PROFESSIONAL GEOTECHNICAL ENGINEER AND SUBMITTED TO THE SITE ENGINEER (AND AHJ WHERE REQUIRED) FOR REVIEW PRIOR TO CONSTRUCTION.

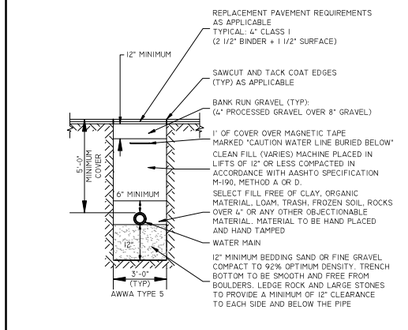


NOTE:
DIMENSIONS SHOWN ARE MINIMUMS.

*ACTUAL LOCATION OF GUARDRAIL TO BE DETERMINED BASED ON SITE SPECIFIC WALL DESIGN BY GEOTECHNICAL ENGINEER.

GUARDRAIL OFFSET SCENARIOS

NOT TO SCALE

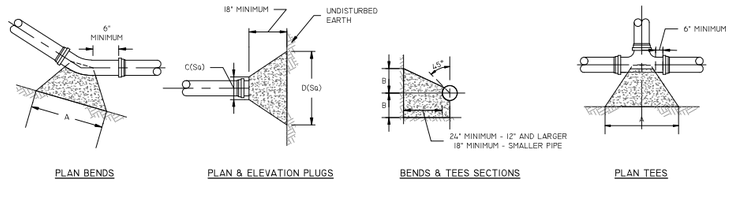


WATER TRENCH DETAIL

NOT TO SCALE

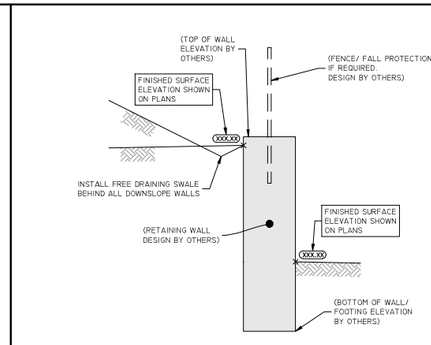
NOTES:
1. ALL CONCRETE SHALL BE 4,000 P.S.I. @ 28 DAYS
2. CONCRETE THRUST BLOCKS SHALL BEAR AGAINST UNDISTURBED EARTH
3. FORMS TO BE USED AS NECESSARY
4. ALL BOLTS AND NUTS TO BE PROTECTED FROM CONCRETE AND EASILY ACCESSIBLE WHEN THRUST BLOCK INSTALLED
5. REGISTERED PROFESSIONAL ENGINEER IN THE STATE OF MASSACHUSETTS SHALL VERIFY CALCULATIONS DURING DESIGN TO MEET CONDITIONS OF PROJECT.

SIZE	TEES		PLUGS		90° BEND		45° BEND		22.5° BEND		11.25° BEND	
	A	B	C	D	A	B	A	B	A	B	A	B
6"	20"	10"	10"	21"	24"	12"	18"	9"	13"	7"	9"	5"
8"	26"	13"	12"	26"	32"	16"	24"	12"	17"	9"	12"	6"
10"	34"	17"	14"	34"	40"	20"	30"	15"	22"	11"	15"	8"
12"	41"	20"	16"	41"	48"	24"	35"	18"	25"	13"	18"	9"
16"	54"	27"	20"	54"	64"	32"	47"	23"	34"	17"	24"	12"



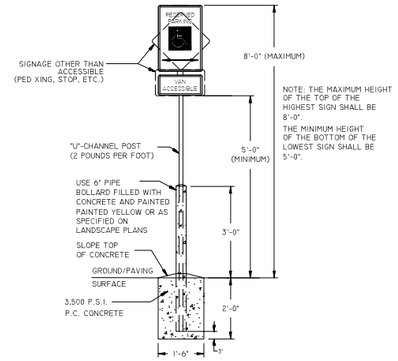
THRUST BLOCK

NOT TO SCALE



GRADING AT RETAINING WALL

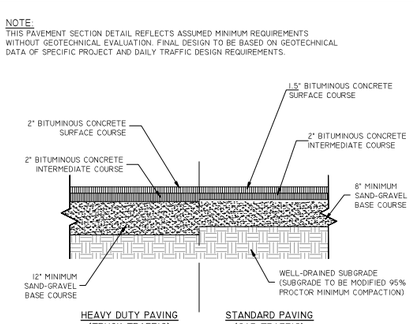
NOT TO SCALE



BOLLARD MOUNTED SIGN DETAIL

NOT TO SCALE

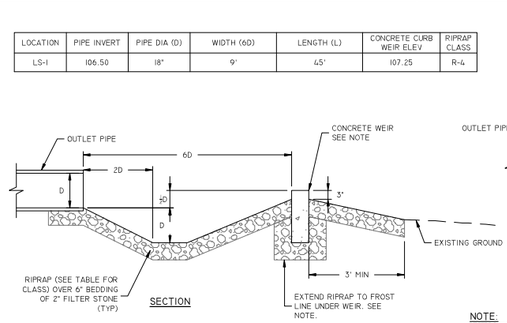
NOTE:
THIS PAVEMENT SECTION DETAIL REFLECTS ASSUMED MINIMUM REQUIREMENTS WITHOUT GEOTECHNICAL EVALUATION. FINAL DESIGN TO BE BASED ON GEOTECHNICAL DATA OF SPECIFIC PROJECT AND DAILY TRAFFIC DESIGN REQUIREMENTS.



TYPICAL PAVEMENT SECTION

NOT TO SCALE

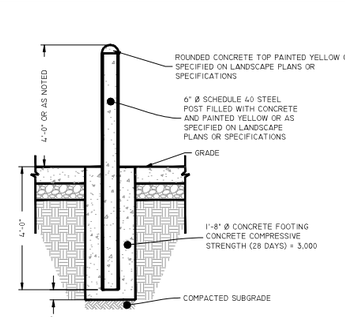
LOCATION	PIPE INVERT	PIPE DIA (D)	WIDTH (6D)	LENGTH (L)	CONCRETE CURB WEIR ELEV	RIPRAP CLASS
LS-1	106.50	18"	9'	45'	107.25	R-4



NOTE:
CONCRETE WEIR MAY BE
- MONOLITHIC, CAST IN PLACE CONCRETE WITH INVERT BELOW THE FROST LINE (MINIMAL MAINTENANCE)
- SERIES OF PRECAST CONCRETE CURB SECTIONS, NO END CHAMFERS. (FREQUENT MAINTENANCE TO KEEP WEIR LEVEL) - MUST INCLUDE GRAVEL BASE DOWN TO FROST DEPTH
- TIMBER NOT PERMITTED

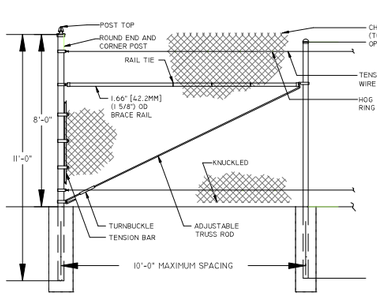
LEVEL SPREADER

NOT TO SCALE



BOLLARD DETAIL

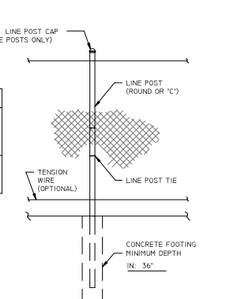
NOT TO SCALE



NOTE:
1. FOOTING WIDTH TO BE (4)X POST WIDTH. MINIMUM DEPTH 36".

END AND CORNER POST TOP OPTIONS		TOP AND BOTTOM FABRIC OPTIONS	
STANDARD	DOME	TWIST	KNUCKLE

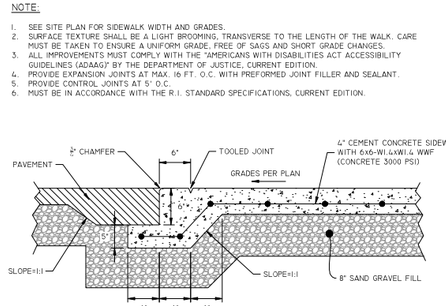
PRIVACY OPTIONS	
STANDARD-PDS	FIN/SLAT 1000



DUMPSTER SCREENING FENCE DETAIL

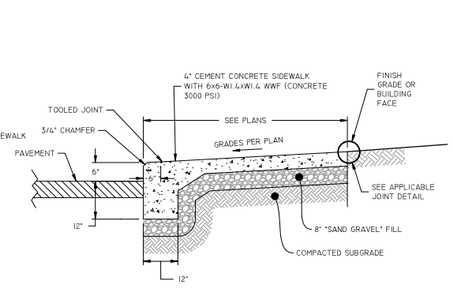
NOT TO SCALE

NOTE:
1. SEE SITE PLAN FOR SIDEWALK WIDTH AND GRADES.
2. SURFACE TEXTURE SHALL BE A LIGHT BROOMING, TRANSVERSE TO THE LENGTH OF THE WALK. CARE MUST BE TAKEN TO ENSURE A UNIFORM GRADE, FREE OF SAGS AND SHORT GRADE CHANGES.
3. ALL IMPROVEMENTS MUST COMPLY WITH THE "AMERICANS WITH DISABILITIES ACT ACCESSIBILITY GUIDELINES (ADAAG)" BY THE DEPARTMENT OF JUSTICE, CURRENT EDITION.
4. PROVIDE EXPANSION JOINTS ΔT MAX. 16 FT. O.C. WITH PREFORMED JOINT FILLER AND SEALANT.
5. PROVIDE CONTROL JOINTS AT 5' O.C.
6. MUST BE IN ACCORDANCE WITH THE R.I. STANDARD SPECIFICATIONS, CURRENT EDITION.



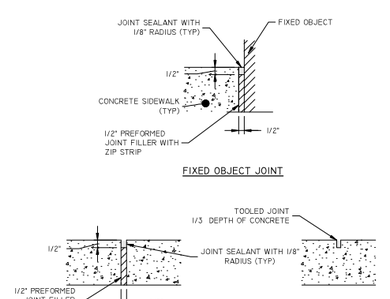
MONOLITHIC CONCRETE SIDEWALK (FLUSH)

NOT TO SCALE



MONOLITHIC CONCRETE SIDEWALK (6" REVEAL)

NOT TO SCALE



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COMMONWEALTH OF MASSACHUSETTS
BRANDON D. CARR
CIVIL
No. 51472
REGISTERED PROFESSIONAL ENGINEER
5/16/2023

NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.M.

DRAWN BY: B.A.M. | DESIGN BY: K.J.D.

DETAIL SHEET-I

RANDOLPH ROAD, MULTIPLE PARCELS

WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

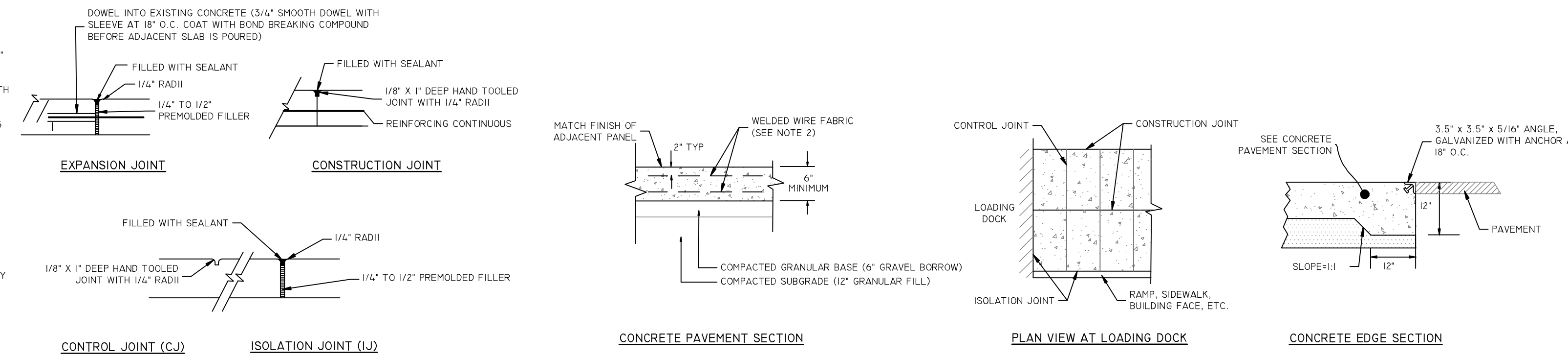
PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

\\DE&T\DRAGEVY\DEMAIN\PROJECTS\3956-003 RANDOLPH ROAD (1)\AUTOCAD DRAWINGS\3956-003-CVAR.DWG PLOTTED: 5/15/2023

JOB NO. 3956-003 COPYRIGHT 2023 BY DIPRETE ENGINEERING ASSOCIATES, INC.

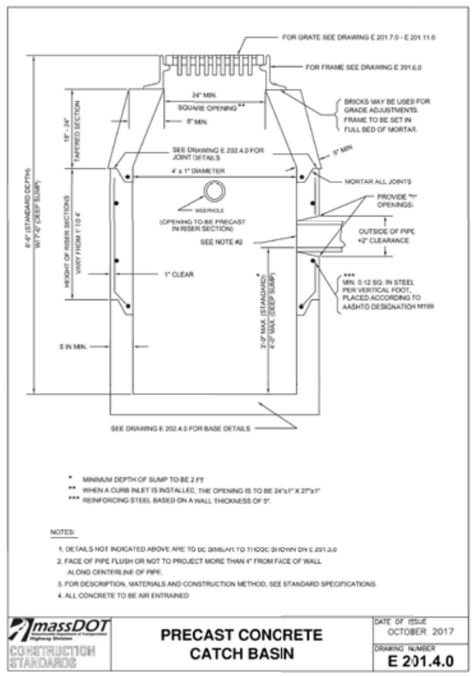
NOTES:

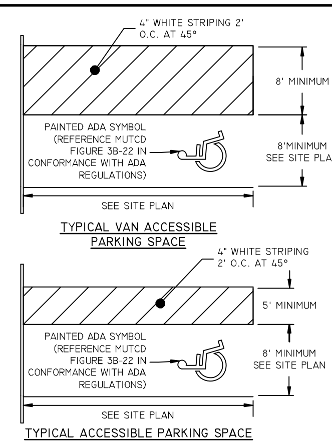
1. FOR AREAS TO BE PAVED WITH PORTLAND CEMENT-BASED CONCRETE, A SIX-INCH THICK SLAB ON GRADE IS RECOMMENDED, WITH A MINIMUM 6-INCH THICK "GRAVEL BORROW" BASE COURSE AND A 12-INCH THICK "GRANULAR FILL" SUBBASE.
2. THE CONCRETE SHOULD HAVE A MINIMUM UNCONFINED COMPRESSIVE STRENGTH OF 5,000 POUNDS PER SQUARE INCH, WITH AIR ENTRAINMENT OF 4 TO 6 PERCENT. THE THICKNESS IS BASED ON A MODULUS OF SUBGRADE REACTION OF 150 POUNDS PER CUBIC INCH. GRADE 60 SIX-INCH BY SIX-INCH W5.5 X W5.5 WELDED WIRE FABRIC (AS = 0.11 INCHES2/FOOT) REINFORCEMENT IS RECOMMENDED TO MINIMIZE CRACK OPENINGS.
3. CONCRETE PAVEMENT SHOULD HAVE EXPANSION JOINTS AT A MAXIMUM SPACING OF 45 FEET WITH A JOINT FILLER THICKNESS BASED ON THE THERMAL EXPANSION. ALL EXPANSION JOINTS SHOULD BE SEALED WITH AN AASHTO-APPROVED ELASTOMERIC JOINT SEALER.
4. SLABS SEPARATED BY AN EXPANSION JOINT SHOULD BE TIED TOGETHER WITH DOWELS THAT ARE 2-FOOT-6-INCHES LONG AT A SPACING OF 18 INCHES. DOWELS SHOULD BE SLEEVED ON ONE SIDE OF THE JOINT.
5. CONTROL JOINTS SHOULD BE CONSTRUCTED AT A SPACING OF APPROXIMATELY 15 FEET IN BOTH DIRECTIONS.
6. INCREASED SLAB THICKNESS TO BE USED WHERE CONCRETE ABUTS BITUMINOUS PAVEMENT OR LANDSCAPING.
7. ALL WORK PERFORMED HEREIN SHALL BE GOVERNED BY MASSDOT STANDARD SPECIFICATIONS AND DETAILS UNLESS OTHERWISE SPECIFIED IN THIS PLAN SET.



CONCRETE PAVEMENT DETAIL

NOT TO SCALE



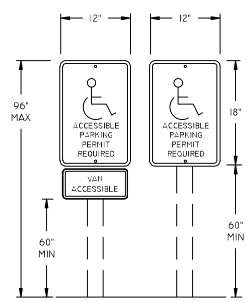


NOTES

1. ALL PAINT MUST BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248 TYPE F, PAINT MUST BE APPLIED AS SPECIFIED BY THE MANUFACTURER.
2. APPLY 2 COATS OF TRAFFIC TYPE PAINT. APPLY THE FIRST COAT NOT LESS THAN FIVE DAYS AFTER THE PLACING OF BITUMINOUS PAVEMENT. ALLOW FOR MINIMUM CURE TIME OF 24 HOURS BETWEEN APPLICATIONS.
3. FOR REDEVELOPMENT SITES, PAINT COLOR AND SIZE/ STENCILING OF PAINTED ADA SYMBOL MUST MATCH ADJACENT SPACES, SO LONG AS THEY COMPLY WITH THE CURRENT EDITIONS OF ALL APPLICABLE STANDARDS AND REGULATIONS.

TYPICAL ACCESSIBLE PARKING SPACES

NOT TO SCALE

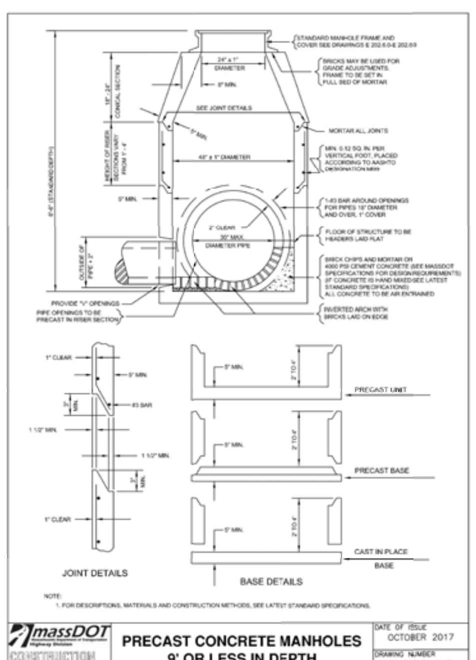


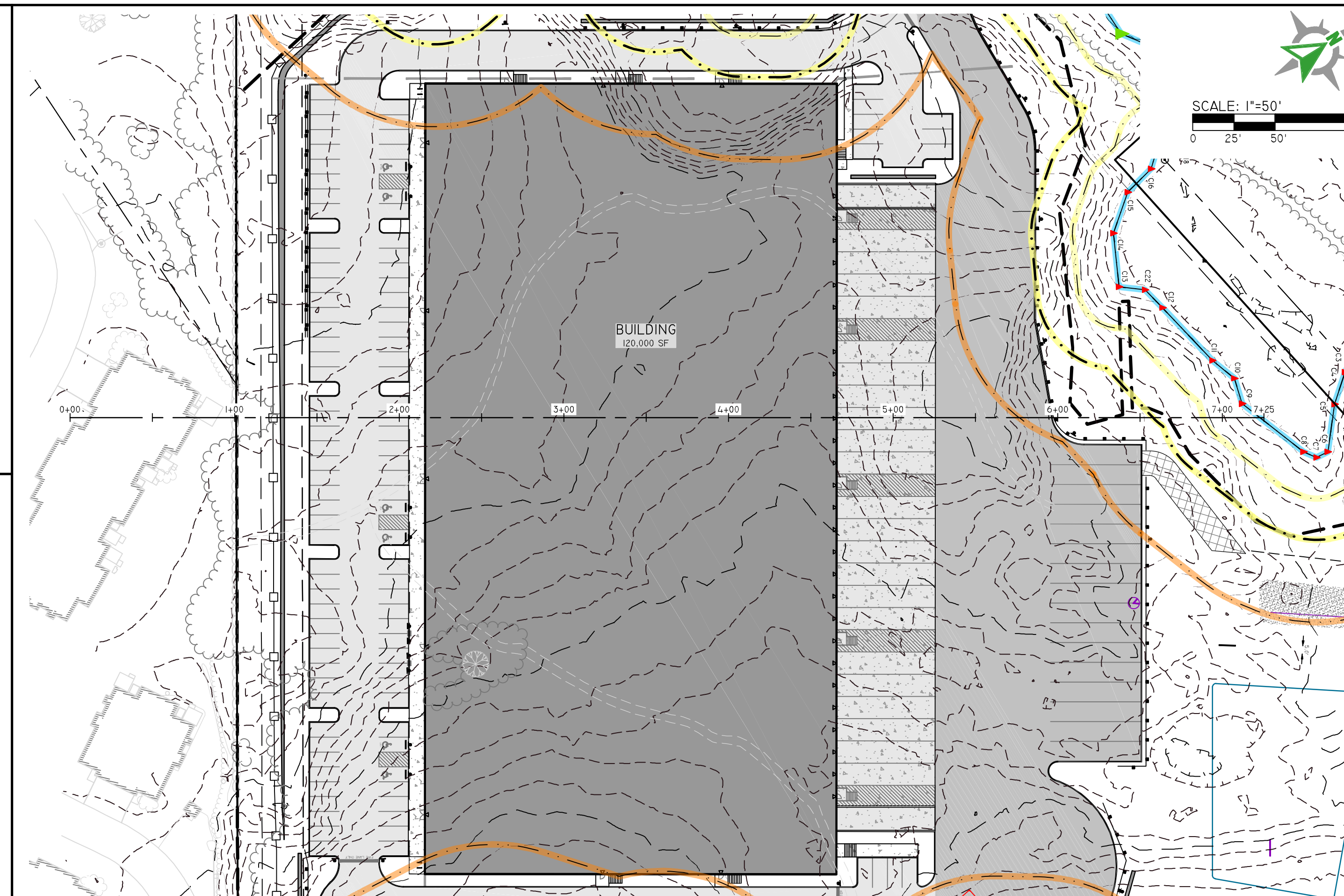
NOTES:

1. SIGN MUST BE PLACED BEHIND APPLICABLE VAN ACCESSIBLE OR ACCESSIBLE SPACE AS SHOWN ON SITE PLAN.
2. ACCESSIBLE PARKING SPACES AND SIGNAGE MUST COMPLY WITH LATEST VERSION OF THE ADA STANDARDS FOR ACCESSIBLE DESIGN, THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES (MUTCD) OR THE APPLICABLE STATE/ MUNICIPAL BUILDING CODE, WHICHEVER STANDARD CONTROLS.
3. THE MAXIMUM HEIGHT OF THE TOP OF THE HIGHEST SIGN SHALL BE 96".
4. THE MINIMUM HEIGHT OF THE BOTTOM OF THE LOWEST SIGN SHALL BE 60".
5. THE ABOVE NOTES APPLY REGARDLESS OF ADA SIGN MOUNTING TYPE (I.E. POLE MOUNTED, BOLLARD MOUNTED, WALL MOUNTED ETC)

TYPICAL ACCESSIBLE PARKING SIGN

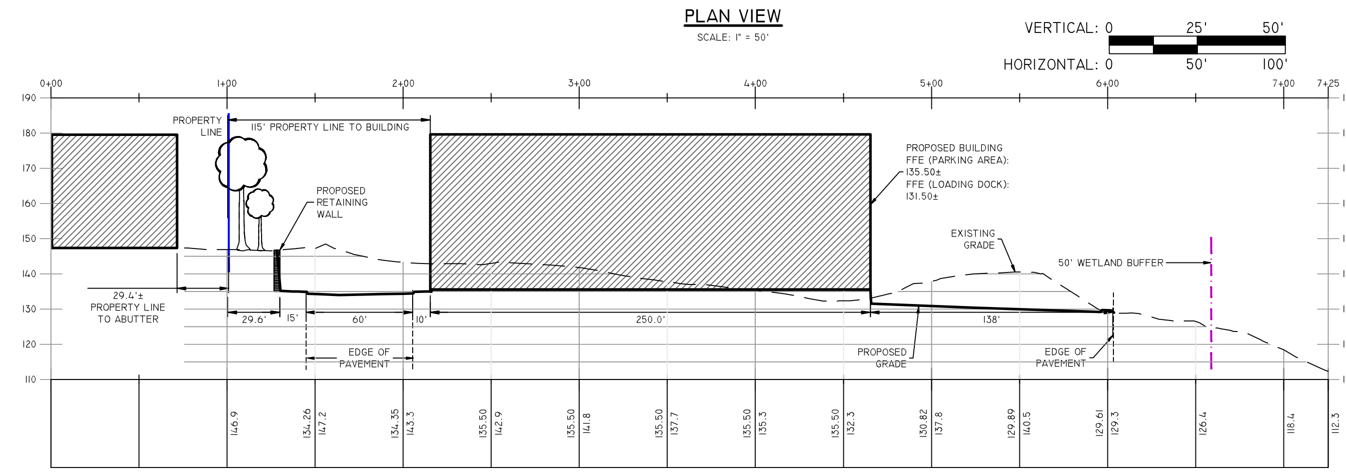
NOT TO SCALE





PLAN VIEW

SCALE: 1" = 50'



BUILDING CROSS SECTION DETAIL

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COMMONWEALTH OF MASSACHUSETTS
BRANDON D. CARR
CIVIL
No. 51472
REGISTERED PROFESSIONAL ENGINEER
5/16/2023

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES. SEE 'UTILITY NOTE' ON SHEET 3.

NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

DRAWN BY: B.A.W. DESIGN BY: K.J.D.

DETAIL SHEET-2

RANDOLPH ROAD, MULTIPLE PARCELS
WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

SHEET 15 OF 17

RANDOLPH ROAD

SPENCER STREET

EXISTING VEGETATION TO REMAIN

SEED STEEP SLOPES WITH MASSDOT 765.421 MID HEIGHT GRASSLAND MIX OR APPROVED EQUAL

LOAM & SEED

SITE
23.5± ACRES

BUILDING
120,000 SF
LOADING ELEV=131.5
FFE (SLAB)=135.5

MAINTAIN ALL MATURE TREES ABOVE STONE FACE AND PROTECT THROUGHOUT THE DURATION OF CONSTRUCTION

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

PLANTING NOTES:

1. SITE INFORMATION TAKEN FROM PLANS PREPARED BY DIPRETE ENGINEERING. SEE ENGINEERING PLANS FOR MORE DETAIL.
2. CONTRACTOR TO VERIFY ALL UTILITY LOCATIONS BY NOTIFYING DIG-SAFE 1-888-344-7233 AT LEAST 72 HOURS PRIOR TO ANY CONSTRUCTION OR SITE PREPARATION AND ANY/OR ALL LOCAL UTILITY COMPANIES AS REQUIRED.
3. CONTRACTOR TO PROVIDE A TWO (2) YEAR GUARANTEE FOR ALL MATERIALS. CONTRACTOR GUARANTEES THAT PLANTS WILL REMAIN HEALTHY FOR TWO (2) GROWING SEASONS. CONTRACTOR TO MAINTAIN ALL PLANTING AND LAWNS UNTIL FINAL PROJECT ACCEPTANCE. GUARANTEE PERIOD TO COMMENCE AT FINAL ACCEPTANCE. ANY REPLACEMENT PLANTS SHALL BE OF THE SAME SIZE AND SPECIES AS SPECIFIED WITH NEW GUARANTEE COMMENCING ON THE DATE OF REPLACEMENT.
4. ALL PLANT MATERIAL SHALL CONFORM, IN ALL RESPECTS, TO THE GUIDELINES OF "THE AMERICAN STANDARD FOR NURSERY STOCK," LATEST EDITION, PUBLISHED BY THE AMERICAN NURSERY & LANDSCAPE ASSOCIATION, INC. ALL PLANTS SHALL BE NURSERY GROWN AND SHALL HAVE BEEN GROWN UNDER CLIMATIC CONDITIONS SIMILAR TO THOSE IN THE LOCALITY OF THE PROJECT FOR AT LEAST TWO (2) YEARS.
5. PLANT SUBSTITUTION SELECTION MUST BE APPROVED BY LANDSCAPE ARCHITECT PRIOR TO INSTALLATION.
6. ALL PLANTS TO BE PLANTED SO THAT AFTER SETTLEMENT THEY BEAR THE SAME RELATION TO THE SURROUNDING GROUND AS TO THEIR ORIGINAL GRADE BEFORE DIGGING.
7. CREATE SAUCER AROUND INDIVIDUAL PLANTS CAPABLE OF HOLDING WATER. ALL PLANTS TO BE FLOODED WITH CLEAN WATER TWICE WITHIN THE FIRST 24 HOURS OF PLANTING. ADDITIONAL WATERING SHALL BE MADE AS REQUIRED TO KEEP PLANTS FROM WILTING AND DRYING OUT UNTIL FINAL ACCEPTANCE.
8. ALL PLANTS TO RECEIVE THREE (3) INCHES OF MULCH COMPRISED OF DARK, AGED SHREDDED BARK AND SHALL COVER PLANTING BEDS AS SHOWN ON DRAWINGS.
9. TRIM BROKEN AND DEAD BRANCHES FROM TREES AND SHRUBS AFTER PLANTING. NEVER CUT A LEADER.
10. CONTRACTOR TO LOAM AND SEED ALL DISTURBED AREAS USING AN ENDOPHYTE ENHANCED GRASS SEED MIX AT A RATE OF 5-7 LBS. PER 1,000 SF OR AS DIRECTED BY TOWN. ANY SOD (TURF) UTILIZED SHALL BE DROUGHT TOLERANT ENDOPHYTES OR PREDOMINANTLY FESCUE IN CHARACTER. STORMWATER SYSTEMS SHALL BE SEEDED PER POND DETAILS OR AS NOTED.
11. RECOMMENDED DATES FOR PLANTING ARE MARCH 15 TO JUNE 15 AND SEPTEMBER 15 TO NOVEMBER 15.
12. ALL LANDSCAPED AREAS SHALL BE KEPT FREE OF WEEDS AND DEBRIS. ALL VEGETATION WITHIN SAID AREAS SHALL BE MAINTAINED FREE OF PHYSICAL DAMAGE CAUSED BY CHEMICALS, INSECTS, DISEASES, LACK OF WATER OR OTHER CAUSES. DAMAGED PLANTS SHALL BE REPLACED WITH THE SAME OR SIMILAR VEGETATION ON AN ANNUAL BASIS.
13. LOAM MOVED ON SITE TO BE STOCKPILED AND RETAINED AND TO BE USED AS REQUIRED FOR THE LANDSCAPE DESIGN. LOAM SHALL NOT BE MIXED WITH ANY UNSUITABLE MATERIALS OR SUBSOIL. EXCESS LOAM TO REMAIN ON THE OWNER'S PROPERTY AND ONLY REMOVED WITH THE OWNERS PERMISSION. NEW LOAM SHALL BE FRIABLE, FERTILE, MEDIUM TEXTURED SANDY LOAM THAT IS FREE OF TOXIC MATERIALS FOR HEALTHY PLANT GROWTH AND SURVIVAL. LOAM SHALL BE FREE OF MATTER 1" OR GREATER IN DIAMETER AND WHEN TESTED SHALL HAVE A PH BETWEEN 5.5 AND 7.5. CONTRACTOR TO PROVIDE 8 INCHES OF GOOD QUALITY, LOAM AND/OR REUSE EXISTING LOAM TO PROVIDE A MINIMUM 6 INCH DEPTH.
14. FORMING AND PLANTING OF THE PROPOSED BERM TO BE COMPLETED WITHIN THE FIRST 4 MONTHS OF CONSTRUCTION (AS LONG AS THAT FALLS WITHIN THE PLANTING SEASON) AND A 2-YEAR MONITORING AND PLANT GUARANTEE ON THE PLANTS ON THE BERM IS REQUIRED. SCREENING PLANTING TO BE PRUNED IF NEEDED TO MAINTAIN APPROPRIATE DENSITY AND HEIGHT.
15. ANY DISTURBED AREA DURING CONSTRUCTION SHALL BE RESTORED TO THEIR ORIGINAL STATE BY THE CONTRACTOR BEFORE COMPLETION OF THE PROJECT.
16. IRRIGATION BY OTHERS.
17. LIGHTING PHOTOMETRICS/DESIGN BY OTHERS.
18. THIS PLAN IS FOR LANDSCAPE PLANTING ONLY.
19. ALL VEGETATION OUTSIDE THE LIMIT OF WORK SHOWN WILL BE PRESERVED.

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COMMONWEALTH OF MASSACHUSETTS
ALEXANDRA D. ARES
No. 15144
REGISTERED LANDSCAPE ARCHITECT
5/16/2024

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED "ISSUED FOR CONSTRUCTION" AND STAMPED BY DIPRETE ENGINEERING'S REGISTERED PROFESSIONAL ENGINEER.
DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING LETTERHEAD THAT ARE SIGNED AND STAMPED BY A PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DISCLAIMS ANY RESPONSIBILITY FOR ALL OTHER PLANS.
THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA APPROVALS IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.
EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE. THE CONTRACTOR IS RESPONSIBLE FOR ANY DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES.
SEE UTILITY NOTE ON SHEET 1.

NO.	DATE	DESCRIPTION	BY:
1	05-16-2024	PLANNING BOARD SUBMISSION	B.A.W.

DESIGN BY: K.J.D.
DRAWN BY: B.A.W.

LANDSCAPE PLAN
RANDOLPH ROAD, MULTIPLE PARCELS
WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

TOWN OF RANDOLPH, MA ZONING REGULATIONS:

CHAPTER 200 ZONING
ARTICLE XI
SITE PLAN AND DESIGN REVIEW
§ 200-94. STANDARDS AND CRITERIA.

THE PLANNING BOARD, TOWN COUNCIL OR THEIR RESPECTIVE DESIGNEE(S) SHALL REVIEW ALL SITE PLANS AND DESIGN REVIEW APPLICATIONS AND PROJECTS AS DESCRIBED IN THIS ZONING ORDINANCE IN ORDER TO ASSESS THE DEGREE TO WHICH A PROPOSED PROJECT, USE OR ACTIVITY IS CONSISTENT WITH THE SITE FOR THE PERMITTED USE AND WHETHER IT IS PERMISSIBLE BY THE REGULATIONS OF THE ZONING DISTRICT IN WHICH IT IS LOCATED. THE PROJECT IS EXPECTED TO CONFORM TO ALL PROVISIONS OF THIS CHAPTER, INCLUDING MEETING THE CRITERIA FOR GRANTING ANY PERMIT OR SPECIAL PERMIT AND ALL APPLICABLE PLANNING BOARD OR TOWN COUNCIL POLICIES AND PROCEDURES.

B. DESIGN STANDARDS.
(1) PROJECTS MUST MEET THE FOLLOWING BUILDING AND SITE DESIGN CRITERIA:
(E) PEDESTRIAN CIRCULATION. ALL PROJECTS SHALL BE PEDESTRIAN-ORIENTED THROUGH DESIGN FEATURES THAT ENHANCE PEDESTRIAN SAFETY, EFFICIENCY, AND CONNECTIVITY, WITH A CLEAR DEFINITION BETWEEN VEHICULAR AREAS AND PEDESTRIAN WALKWAYS.
[1] SIDEWALKS. PEDESTRIAN CONNECTIVITY BETWEEN THE PROJECT BUILDING ENTRANCES AND PARKING AREAS, PUBLIC SIDEWALKS, OUTPARCEL BUILDINGS, AND TRANSIT STOPS SHALL BE CLEARLY INDICATED THROUGH THE USE OF LANDSCAPED AREAS AND SIDEWALKS WHICH ARE MADE OF MATERIALS SUCH AS SCORED CONCRETE, PAVERS OR BRICKS. ALL CUSTOMER ENTRANCES SHALL INCLUDE SIDEWALKS ALONG THE FULL LENGTH OF THE FACADE.
[2] PEDESTRIAN AMENITY AREAS. ALL PROJECTS SHALL INCLUDE DESIGN FEATURES SUCH AS PEDESTRIAN AMENITY AREAS, WHICH SHOULD INCLUDE WELL-LANDSCAPED SITTING AREAS WITH DESIGN COMPONENTS SUCH AS SEATING ELEMENTS AND/OR OTHER AMENITIES IN SHADED AREAS.

SIDEWALKS ARE PROPOSED TO PROVIDE ACCESS TO THE MAIN ENTRANCE OF THE BUILDING. PLANTINGS ARE PROPOSED AROUND THE PERIMETER OF THE BUILDING WHERE FEASIBLE AS WELL.

(F) PARKING AREAS. PARKING LOTS AND ACCESS AISLE WAYS SHALL BE DESIGNED UTILIZING THE FOLLOWING STANDARDS:
[1] PARKING LOT DESIGN. VAST, UNBROKEN PARKING LOTS ARE PROHIBITED. PARKING AREAS SHALL BE DESIGNED TO BE BROKEN UP WITH LANDSCAPE ISLANDS, PEDESTRIAN WALKWAYS, SIGNIFICANT LANDSCAPING OR GEOGRAPHIC FEATURES AND/OR BY THE DESIGN COMPONENTS OF THE PROPOSED BUILDING. PARKING LOT LANDSCAPE ISLANDS SHALL INCLUDE PEDESTRIAN AMENITIES WHERE APPROPRIATE TO FACILITATE PEDESTRIAN CONNECTIVITY.

THE PARKING AREA IS DESIGNED TO BE BROKEN UP WITH LANDSCAPE ISLAND AND SIDEWALKS THAT PROVIDE ACCESS TO THE MAIN ENTRY OF THE BUILDING.

[2] ALTERNATIVE PARKING LOT DESIGNS INCORPORATING NATURAL RESOURCES ARE ENCOURAGED, SUBJECT TO REVIEW BY THE APPLICABLE ACTING BODY OR THEIR RESPECTIVE DESIGNEE(S).
[3] PARKING SPACES. THE NUMBER OF PARKING SPACES SHALL BE DETERMINED IN ACCORDANCE WITH § 200-22 OF THIS CHAPTER AND THE TABLE OF DIMENSIONAL REQUIREMENTS. EACH PARKING SPACE IN EXCESS OF THE MINIMUM SHALL REQUIRE ADDITIONAL LANDSCAPED AREAS OF AT LEAST TEN (10) SQUARE FEET TO BE PLACED WITHIN THE INTERNAL PARKING AREA AND/OR RIGHT-OF-WAY BUFFER.

108 PARKING SPACES ARE PROPOSED AS WELL AS 22 TRUCK LOADING AND 16 TRAILER STORAGE SPACES.

[4] PARKING SPACES SHOULD BE BROKEN INTO GROUPS OF TEN (10) OR LESS WITH A REQUIREMENT OF TWO HUNDRED (200) SQUARE FEET OF PLANTED AREA FOR EVERY ONE THOUSAND (1,000) SQUARE FEET OF PARKING AREA. THE PLANTING AREA IS TO BE LOCATED INTERNAL TO THE PARKING AREA. LANDSCAPE ISLANDS AND MEDIANS MAY BE USED TO MEET THIS REQUIREMENT. IN SITUATIONS WHERE THE ACTING BODY DETERMINES THAT IT IS IMPRACTICAL TO PROVIDE INTERNAL LANDSCAPED AREA MEETING THE ABOVE REQUIREMENTS, THE PARKING AREA MAY INSTEAD BE PROVIDED WITH ADDITIONAL LANDSCAPED AREA THAT MORE EFFECTIVELY SCREENS IT FROM PUBLIC VIEW BY PROVIDING GREATER DEPTH AND/OR DENSITY TO PERIMETER LANDSCAPING.

PARKING SPACES ARE BROKEN INTO GROUPS OF TEN (10) OR LESS WHERE FEASIBLE.
PLANTED AREA REQUIREMENT = 200 SF/ 1,000 SF
PROPOSED PARKING AREA = 17,496 SF
PLANTED AREA REQUIRED = 17,496 SF/ 1,000 SF = 17.50 X 200 = 3,500 SF±
PLANTED AREA PROPOSED = 4,117 SF >3,500 SF±

[5] PARKING LOTS, LOADING AREAS, STORAGE AREAS, DUMPSTERS, REFUSE COLLECTION AND STORAGE AREAS, AND SERVICE AREAS SHALL BE SCREENED FROM VIEW, FROM ALL PUBLIC RIGHTS-OF-WAY AND ALL ADJACENT PROPERTIES, BY THE USE OF LANDSCAPING BUFFERS, BERMS, NATURAL CONTOURS, FENCES OR A COMBINATION OF THE ABOVE.

EXISTING AND/OR PROPOSED PLANTING ARE PROVIDED AS BUFFERS.

(G) GENERAL LANDSCAPING REQUIREMENTS. THE FOLLOWING LANDSCAPING STANDARDS SHALL BE INCORPORATED INTO THE DESIGN OF ALL PROJECTS:
[1] SOD ALONE DOES NOT QUALIFY AS LANDSCAPING. ALL REQUIRED LANDSCAPING MUST CONTAIN PLANTS OTHER THAN SOD GRASSES, WHICH MAY INCLUDE SHRUBS, ORNAMENTAL GRASSES, FLOWERS, EVERGREENS AND TREES.

A MIX OF PLANTINGS IS PROPOSED.

[2] PRESERVATION AND PROTECTION OF EXISTING NATIVE SPECIES OF PLANT MATERIAL IS STRONGLY ENCOURAGED. EXISTING NATIVE SPECIES AND NATURAL COVER SHOULD BE RETAINED WHEREVER POSSIBLE. WHERE PLANTING REQUIREMENTS FOR LANDSCAPED AREAS RESULT IN THE NEED TO ADD ADDITIONAL TREES OR SHRUBS IN AN EXISTING NATURAL AREA, THERE SHALL BE MINIMUM DISTURBANCE TO NATIVE SPECIES.

EXISTING VEGETATION IS PROPOSED TO BE RETAINED WHERE FEASIBLE.

[3] LANDSCAPING SHOULD BE PROVIDED ALONG AND AGAINST ALL BUILDINGS TO ANCHOR IT TO THE SURROUNDING ENVIRONMENT AND TO SOFTEN THE STRUCTURE. IN-GROUND LANDSCAPING SHOULD COMPRISE THE MAJORITY OF THE LANDSCAPING REQUIREMENTS. RAISED PLANTERS ARE ACCEPTABLE WHEN DESIGNED TO ACCENTUATE THE ARCHITECTURE AND/OR ENHANCE PEDESTRIAN AREAS.

LANDSCAPING IS PROPOSED ALONG THE PERIMETER OF THE PROPOSED BUILDING.

[4] DENSE LANDSCAPING AND/OR ARCHITECTURAL TREATMENTS SHOULD BE PROVIDED TO SCREEN UNATTRACTIVE VIEWS AND FEATURES.
[5] SCREENING COULD BE ACCOMPLISHED BY EMPLOYING FENCES MADE OF GOOD-QUALITY MATERIALS SUCH AS WOOD, STEEL, CAST IRON, WITH BRICK OR STONE MASONRY ELEMENTS. THE USE OF CHAIN-LINK FENCE VISIBLE FROM PUBLIC AREAS IS STRONGLY DISCOURAGED AND REQUIRES APPROVAL OF THE APPLICABLE ACTING BODY OR THEIR RESPECTIVE DESIGNEE(S).

EXISTING VEGETATION IS TO REMAIN TO PROVIDE SCREENING/BUFFER.

[6] AS LISTED IN THE TABLE OF DIMENSIONAL REQUIREMENTS A LANDSCAPING BUFFER IS REQUIRED ALONG ANY PROPERTY LINE THAT IS ADJACENT TO A PUBLIC RIGHT-OF-WAY. THE BUFFER SHALL BE PLANTED WITH SHRUBS, GRASS, AND TREES. TREES ARE TO BE PLANTED BASED ON STANDARDS DELINEATED IN SUBSECTION B(2)(H) OF THIS § 200-94.

EXISTING VEGETATION IS TO REMAIN ALONG THE PUBLIC RIGHT-OF-WAYS.

[7] A LANDSCAPING BUFFER NO LESS THAN FORTY (40) FEET WIDE, OR AS DEFINED IN § 200-33, SHOULD BE PROVIDED TO SCREEN COMMERCIAL AND INDUSTRIAL USES FROM RESIDENTIAL PROPERTIES. THE BUFFER SHOULD OFFER A MINIMUM OF SIXTY PERCENT (60%) OPACITY. THIS MAY REQUIRE LARGER QUANTITIES OF PLANTINGS OR THE USE OF MORE MATURE PLANTS.

EXISTING VEGETATION IS TO REMAIN TO PROVIDE SCREENING/BUFFER.

[8] LANDSCAPING SHOULD MINIMIZE POTENTIAL EROSION THROUGH THE USE OF PLANT MATERIALS WHICH AID IN SOIL STABILIZATION.
[9] INSTALLATION OF ALL PLANT MATERIAL SHALL CONFORM TO STANDARD ACCEPTABLE HORTICULTURAL PRACTICES.
[10] WHERE BERMS ARE USED WITHIN A LANDSCAPED AREA, SLOPES SHALL NOT EXCEED THIRTY DEGREES (30°) AND SHALL BE COMPLETELY COVERED WITH VEGETATION.
[11] MAINTENANCE OF ALL LANDSCAPED AREAS SHALL BE THE SOLE RESPONSIBILITY OF THE PROPERTY OWNER. FAILURE TO MAINTAIN PLANTINGS AND OTHER FEATURES OF THE REQUIRED LANDSCAPING AREAS IN AN ATTRACTIVE AND HEALTHY STATE SHALL BE CONSIDERED A VIOLATION OF THIS CHAPTER AND SUBJECT TO § 200-42.
[12] ALL LANDSCAPING MATERIAL SHALL MEET THE REQUIREMENTS OF THE CLEAR SIGHT AREA § 200-32 OF THIS CHAPTER.
[13] FOR PROJECTS THAT ARE EXISTING NONCONFORMING USES OR WHERE EXISTING DEVELOPMENT PREVENTS STRICT COMPLIANCE WITH THIS SECTION, ALTERNATIVE DESIGN MAY BE ALLOWED AT THE DISCRETION OF THE APPLICABLE ACTING BODY OR THEIR RESPECTIVE DESIGNEE(S).

(H) LANDSCAPE PLANTING REQUIREMENTS.
[1] ALONG ROADWAYS. A LANDSCAPED BUFFER AREA ACCORDING TO THE TABLE OF DIMENSIONAL REQUIREMENTS SHALL BE ESTABLISHED ADJACENT TO ANY PUBLIC ROAD. THE BUFFER AREA SHALL BE A CONTINUOUS AREA (EXCEPT FOR APPROVED ACCESSWAYS) PLANTED WITH GRASS, SHRUBS AND SHADE TREES.

EXISTING VEGETATION IS TO REMAIN TO PROVIDE SCREENING/BUFFER.

[A] PLANTS SHALL BE SOUND, VIGOROUS, FREE FROM MUTILATION, PLANT DISEASE, INSECT PESTS OR THEIR EGGS, AND FUNGUS AND SHALL HAVE HEALTHY, NORMAL ROOT SYSTEMS. PLANTS SHALL BE NURSERY-GROWN STOCK IN CONTAINERS OR FRESHLY DUG, BALLED AND BURLAPPED.
[B] IN ALL DISTRICTS WHERE A PLANTING STRIP OR BUFFER STRIP IS REQUIRED, LANDSCAPING SHALL BE REQUIRED IN THE SAID STRIP AT A MINIMUM OF ONE (1) TREE PER 30 LINEAL FOOT AND MUST ALSO INCLUDE LOWER-LEVEL ELEMENTS SUCH AS SHRUBS, PERENNIALS, HEDGES, FENCES, WALLS AND/OR PLANTED BERMS.

EXISTING VEGETATION IS TO REMAIN TO PROVIDE SCREENING/BUFFER.

[C] DECIDUOUS TREES SHALL BE AT LEAST TWO (2) INCHES IN CALIPER AS MEASURED SIX (6) INCHES ABOVE THE ROOT BALL AT THE TIME OF PLANTING.

PROPOSED TREES ARE TO BE LEAST TW0 (2) IN CALIPER AND ARE CHOSEN FROM APPENDIX C - STREET TREES OF THE SUBDIVISION REGULATIONS.

[D] EVERGREEN TREES SHALL BE A MINIMUM OF EIGHT (8) FEET IN HEIGHT AT THE TIME OF PLANTING.

PROPOSED EVERGREEN TREES ARE TO BE A MINIMUM OF EIGHT (8) FEET IN HEIGHT.

[E] SHRUBS AND HEDGES SHALL BE AT LEAST THIRTY (30) INCHES IN HEIGHT AT THE TIME OF PLANTING.

PROPOSED SHRUBS ARE TO BE AT LEAST THIRTY (30) INCHES IN HEIGHT.

[F] ANY PLANTINGS THAT DO NOT MEET THE ESTABLISHED STANDARDS MUST BE REVIEWED BY THE APPLICABLE ACTING BODY OR THEIR RESPECTIVE DESIGNEE(S).

[2] PROPERTY LINES. ON ALL PROPERTY LINES, A LANDSCAPED BUFFER SHALL BE PROVIDED AND MAINTAINED AS SPECIFIED IN § 200-33 AND THE TABLE OF DIMENSIONAL REQUIREMENTS.
[A] THE LANDSCAPED BUFFER SHALL BE MAINTAINED BY THE OWNER OF THE PROPERTY.
[B] THE BUFFER SHALL CONSIST OF SHRUBS AND TREES OF A SPECIES COMMON TO THE AREA AND APPROPRIATE FOR SCREENING.
[C] PLANTS SHALL BE SOUND, VIGOROUS, FREE FROM MUTILATION, PLANT DISEASE, INSECT PESTS OR THEIR EGGS, AND FUNGUS AND SHALL HAVE HEALTHY, NORMAL ROOT SYSTEMS. PLANTS SHALL BE NURSERYGROWN STOCK IN CONTAINERS OR FRESHLY DUG, BALLED AND BURLAPPED.
[D] (RESERVED)
[E] (RESERVED)
[F] IN ALL DISTRICTS WHERE A PLANTING STRIP (OR BUFFER STRIP) IS REQUIRED, LANDSCAPING SHALL BE REQUIRED IN THE SAID STRIP AT A MINIMUM OF ONE (1) TREE PER 30 LINEAL FOOT AND MUST ALSO INCLUDE LOWER-LEVEL ELEMENTS SUCH AS SHRUBS, PERENNIALS, HEDGES, FENCES, WALLS AND/OR PLANTED BERMS.
[G] DECIDUOUS TREES SHALL BE AT LEAST TWO (2) INCHES IN CALIPER AS MEASURED SIX (6) INCHES ABOVE THE ROOT BALL AT THE TIME OF PLANTING.
[H] EVERGREEN TREES SHALL BE A MINIMUM OF EIGHT (8) FEET IN HEIGHT AT THE TIME OF PLANTING.
[I] SHRUBS AND HEDGES SHALL BE AT LEAST THIRTY (30) INCHES IN HEIGHT AT THE TIME OF PLANTING.
[J] ANY PLANTINGS THAT DO NOT MEET THE ESTABLISHED STANDARDS MUST BE REVIEWED BY THE APPLICABLE ACTING BODY OR ITS DESIGNEE(S).
[K] PLANTINGS SHALL BE SIZED AND SPACED TO MINIMIZE VISUAL INTRUSION.
[3] WITHIN THE LOT:
[A] LARGE MATURING TREES SHALL BE PLACED NO CLOSER THAN THIRTY-FIVE (35) FEET ON CENTER.
[B] SMALLER MATURING TREES SHALL BE PLACED NO CLOSER THAN TWENTY (20) FEET ON CENTER.
[C] WHEN SPACING IS LIMITED OR TO ACHIEVE A CERTAIN EFFECT, CLOSER SPACING MAY BE CONSIDERED. THIS APPLIES TO LOCATIONS WHERE LARGE MATURING EVERGREENS ARE BEING USED AS A SCREEN.

EXISTING VEGETATION IS TO REMAIN TO PROVIDE SCREENING/BUFFER.

§ 200-32. CORNER SETBACK FOR FENCES AND OTHER LANDSCAPING.
A. CORNER LOTS AND INTERSECTING STREETS. NO BUILDING OR STRUCTURE IN ANY DISTRICT MAY BE ERECTED AND NO FENCE OR VEGETATION, EXCEPT TREE TRUNKS, MAY BE MAINTAINED OR ALLOWED TO REMAIN BETWEEN THREE (3) FEET AND EIGHT (8) FEET ABOVE THE PLANE THROUGH THEIR CENTER-LINE GRADES BETWEEN THE PROPERTY LINES OF INTERSECTING STREETS AND A LINE JOINING POINTS ON SUCH LINES TWENTY-FIVE (25) FEET DISTANT FROM THEIR POINT OF INTERSECTION OR, IN THE CASE OF A ROUNDED CORNER, THE POINT OF INTERSECTION OF THEIR TANGENTS.

NO NEW VEGETATION IS PROPOSED AT THE JUNCTION OF AN INTERSECTING STREET.

§ 200-33. BUFFER STRIPS.
B. INDUSTRIAL DISTRICTS ABUTTING RESIDENTIAL DISTRICTS OR MULTIFAMILY DISTRICTS.
(1) IN AN INDUSTRIAL DISTRICT WHERE THE LOT ABUTS OR IS WITHIN FORTY (40) FEET OF THE SIDE OR REAR OUNDARY LINE OF ANY RESIDENTIAL DISTRICT (INCLUDING ANY RESIDENTIAL DISTRICTS IN ANY ADJACENT MUNICIPALITY) OR MULTIFAMILY DISTRICT, THERE SHALL BE PROVIDED ON ALL PORTIONS OF SAID LOT WITHIN FORTY (40) FEET OF SAID BOUNDARY LINE A BUFFER STRIP, AS FOLLOWS: THE PORTION OF SUCH BUFFER FOR AND MAINTAINED AS A PLANTING AREA FOR LAWNS, TREES, SHRUBS AND OTHER LANDSCAPE MATERIALS TO PROVIDE A PARKLIKE AREA OF SEPARATION BETWEEN DISTRICTS.
(2) IN THIS BUFFER ZONE, NO BUILDING, STRUCTURE OR PAVEMENT OF ANY NATURE, EXCLUDING NONACCESSORY SIGNS, MAY BE CONSTRUCTED OR MAINTAINED.
(3) NO BUILDING, STRUCTURE OR PAVED SPACE ASSOCIATED WITH PARKING MAY BE LOCATED IN THE BUFFER STRIP.
(4) PLANTINGS IN THE BUFFER STRIP SHALL BE MAINTAINED BY THE OWNER OF THE PROPERTY USED FOR NONRESIDENTIAL PURPOSES.

EXISTING VEGETATION IS TO REMAIN TO PROVIDE SCREENING/BUFFER.

G. BUFFERS SHALL CONFORM TO THE TABLE OF DIMENSIONAL REQUIREMENTS INCLUDED AS AN ATTACHMENT TO THIS CHAPTER FOR EACH DISTRICT AND DISTRICTS ABUTTING SAME DISTRICTS. NOTHING IN THIS SECTION SHALL ALLOW ONE (1) DISTRICT OR LOT TO USE AN ADJOINING DISTRICT OR LOT TO MEET ITS BUFFER REQUIREMENT.

§ 200-34. LOT COVERAGE.
A. BUILDING LOT COVERAGE.
(1) IN ALL DISTRICTS, NO BUILDING SHALL BE CONSTRUCTED SO AS TO COVER, TOGETHER WITH OTHER BUILDINGS ON THE LOT, A LARGER PORTION OF THE LOT AREA THAN THE PERMITTED BUILDING LOT COVERAGE AS SPECIFIED IN THE TABLE OF DIMENSIONAL REQUIREMENTS FOR THE DISTRICT IN WHICH SAID LOT IS LOCATED.
(2) BUILDING LOT COVERAGE IS THE TOTAL AREA COVERED, MEASURED FROM THE OUTSIDE OF THE EXTERIOR WALLS, BY ALL PRINCIPAL AND ACCESSORY BUILDINGS ON A LOT.
(3) IN ALL DISTRICTS, THE FOLLOWING SHALL NOT BE COUNTED AS LOT COVERAGE:
(A) LAWNS, GARDENS AND UNPAVED LANDSCAPED AREAS;
(B) DRAINAGEWAYS;
(C) OPEN PLAY STRUCTURE WITHOUT ROOFS, SAND BOXES, OR SWINGS, NOT LOCATED ON A PAVED SURFACE;
(D) FOUNTAINS;
(E) SWIMMING POOLS (NOTE: APRONS, DECKS AND WALKS ADJACENT TO SWIMMING POOLS SHALL BE CONSIDERED AS LOT COVERAGE.);
(F) FENCES;
(G) RETAINING WALLS LESS THAN TWELVE (12) INCHES IN WIDTH ACROSS THE TOP SURFACE; IF TWELVE (12) INCHES OR GREATER, THE ENTIRE TOP SURFACE SHALL BE CONSIDERED AS LOT COVERAGE; AND/OR
(H) RAMPS FOR THE DISABLED, FOR WHICH THE SOLE PURPOSE IS TO PROVIDE ACCESS FOR THE DISABLED, AND WHICH HAVE NO MORE THAN THE MINIMUM DIMENSIONS REQUIRED TO MEET ACCESSIBILITY STANDARDS.
(4) WHERE A MAXIMUM LOT COVERAGE IS SPECIFIED IN THE TABLE OF DIMENSIONAL REQUIREMENTS 2 NO BUILDING OR PART OF A BUILDING OR PAVED AREA OR OTHER FORM OF COVERAGE SHALL EXCEED SUCH MAXIMUM ALLOWABLE COVERAGE EXCEPT AS SPECIFICALLY AUTHORIZED BY THIS CHAPTER.

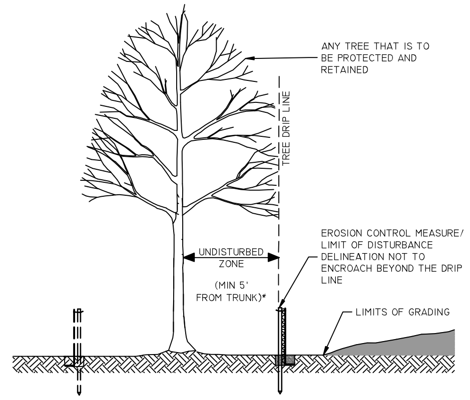
SEE OVERALL SITE PLAN TABLE FOR COVERAGE INFORMATION.

B. IMPERVIOUS LOT COVERAGE. IN ALL DISTRICTS, NO LOT SHALL HAVE MORE COVERAGE BY IMPERVIOUS SURFACE THAN AS SPECIFIED IN THE TABLE OF DIMENSIONAL REQUIREMENTS. RAMPS FOR THE DISABLED, FOR WHICH THE SOLE PURPOSE IS TO PROVIDE ACCESS FOR THE DISABLED, AND WHICH HAVE NO MORE THAN THE MINIMUM DIMENSIONS REQUIRED TO MEET ACCESSIBILITY STANDARDS, SHALL NOT BE COUNTED AS COVERAGE.

SEE OVERALL SITE PLAN TABLE FOR COVERAGE INFORMATION.

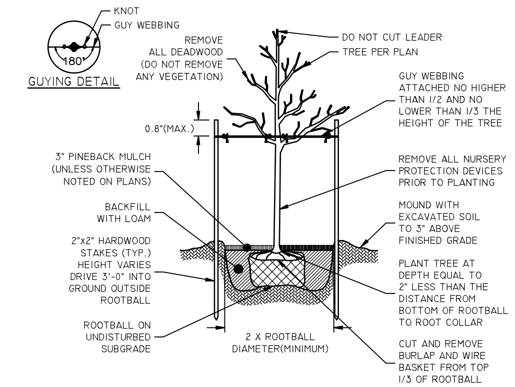
C. GREEN AREA/OPEN SPACE. SEE DEFINITIONS.
D. MAXIMUM LOT COVERAGE. THE TOTAL LOT NON-GREEN AREA/OPEN SPACE MAY NOT EXCEED THE MAXIMUM COVERAGE SPECIFIED IN THE TABLE OF DIMENSIONAL REQUIREMENTS. IN ORDER TO FULFILL THE INTENT OF MAXIMUM LOT COVERAGE, AN APPLICANT MAY SHIFT A PERCENTAGE OF THE BUILDING LOT COVERAGE REQUIREMENT AND THE IMPERVIOUS LOT COVERAGE REQUIREMENT, BUT IN NO CASE SHALL THE MAXIMUM COVERAGE PERCENTAGE NOTED IN THE TABLE BE EXCEEDED.

SEE OVERALL SITE PLAN TABLE FOR COVERAGE INFORMATION.

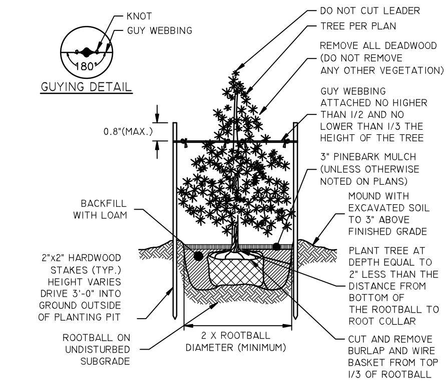


*LIMIT OF DISTURBANCE IS AT THE DRIP LINE OF OUTERMOST BRANCH OR 5' FROM TRUNK, WHICHEVER IS GREATER.

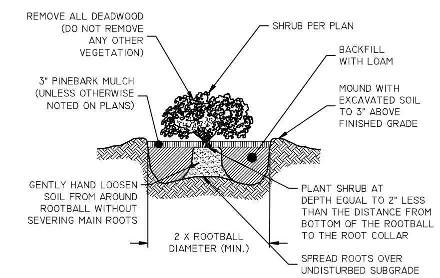
TREE PROTECTION DETAIL
NOT TO SCALE



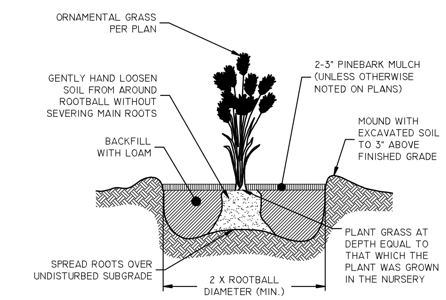
LARGE TREE STAKING AND PLANTING DETAIL
(2" CALIPER AND GREATER)
NOT TO SCALE



EVERGREEN TREE PLANTING DETAIL
(4'-0" HIGH AND GREATER)
NOT TO SCALE



CONTAINER GROWN SHRUB PLANTING DETAIL
NOT TO SCALE



ORNAMENTAL GRASS PLANTING DETAIL
NOT TO SCALE

PLANT SCHEDULE

TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	AC	6	Acer campestre	Hedge Maple	2.5/3" CAL B&B
	AR	4	Acer rubrum 'October Glory'	October Glory Red Maple	3" CAL B&B MIN
	AMC	8	Amelanchier canadensis	Canadian Serviceberry	2.5/3" CAL B&B
	GT	4	Gleditsia triacanthos inermis 'Shademaster'	Shademaster Honey Locust	2.5/3" CAL B&B
	SR	4	Syringa reticulata 'Ivory Silk'	Ivory Silk Japanese Tree Lilac	2.5/3" CAL B&B
	TC	1	Tilia cordata	Littleleaf Linden	3" CAL B&B MIN
EVERGREEN TREES	CODE	QTY	BOTANICAL NAME	COMMON NAME	CONT
	IA	5	Ilex opaca	American Holly	8` HT MIN
	JV	20	Juniperus virginiana	Eastern Red Cedar	8` HT MIN
	PG	5	Picea glauca	White Spruce	8` HT MIN
SHRUBS	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
	IG	24	Ilex glabra 'Shamrock'	Shamrock Inkberry Holly	3.5` HT MIN
	PL	32	Prunus laurocerasus `Otto Luyken`	Luykens Laurel	3.5` HT MIN
	RG	40	Rhus aromatica `Gro-Low`	Gro-Low Fragrant Sumac	24" SP MIN
	RXR	11	Rosa x 'Radwhite' TM	White Knock Out Rose	24" SP MIN
GRASSES	CODE	QTY	BOTANICAL NAME	COMMON NAME	SIZE
	PVS	81	Panicum virgatum `Shenandoah`	Shenandoah Switch Grass	2 gal
	PAH	52	Pennisetum alopecuroides `Hameln`	Hameln Dwarf Fountain Grass	2 gal

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MASSACHUSETTS ALEXANDRA C. AVERY REGISTERED LANDSCAPE ARCHITECT NO. 1544
5/16/202

THIS PLAN SET MUST NOT BE USED FOR CONSTRUCTION PURPOSES UNLESS STAMPED 'ISSUED FOR CONSTRUCTION' AND STAMPED BY A REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING.

DIPRETE ENGINEERING ONLY WARRANTS PLANS ON A DIPRETE ENGINEERING TITLE BLOCK STAMPED BY REGISTERED PROFESSIONAL ENGINEER OF DIPRETE ENGINEERING. DIPRETE ENGINEERING DOES NOT WARRANT PLANS BY ANY OTHER PARTY.

THE CONTRACTOR IS RESPONSIBLE FOR ALL OF THE MEANS, METHODS, SAFETY PRECAUTIONS AND REQUIREMENTS, AND OSHA CONFORMANCE IN THE IMPLEMENTATION OF THIS PLAN AND DESIGN.

EXISTING UTILITIES SHOWN ON THIS PLAN ARE APPROXIMATE ONLY. DIPRETE ENGINEERING ASSUMES NO RESPONSIBILITY FOR DAMAGES INCURRED DUE TO LOCATIONS OF EXISTING UTILITIES. SEE 'UTILITY NOTE' ON SHEET 3.

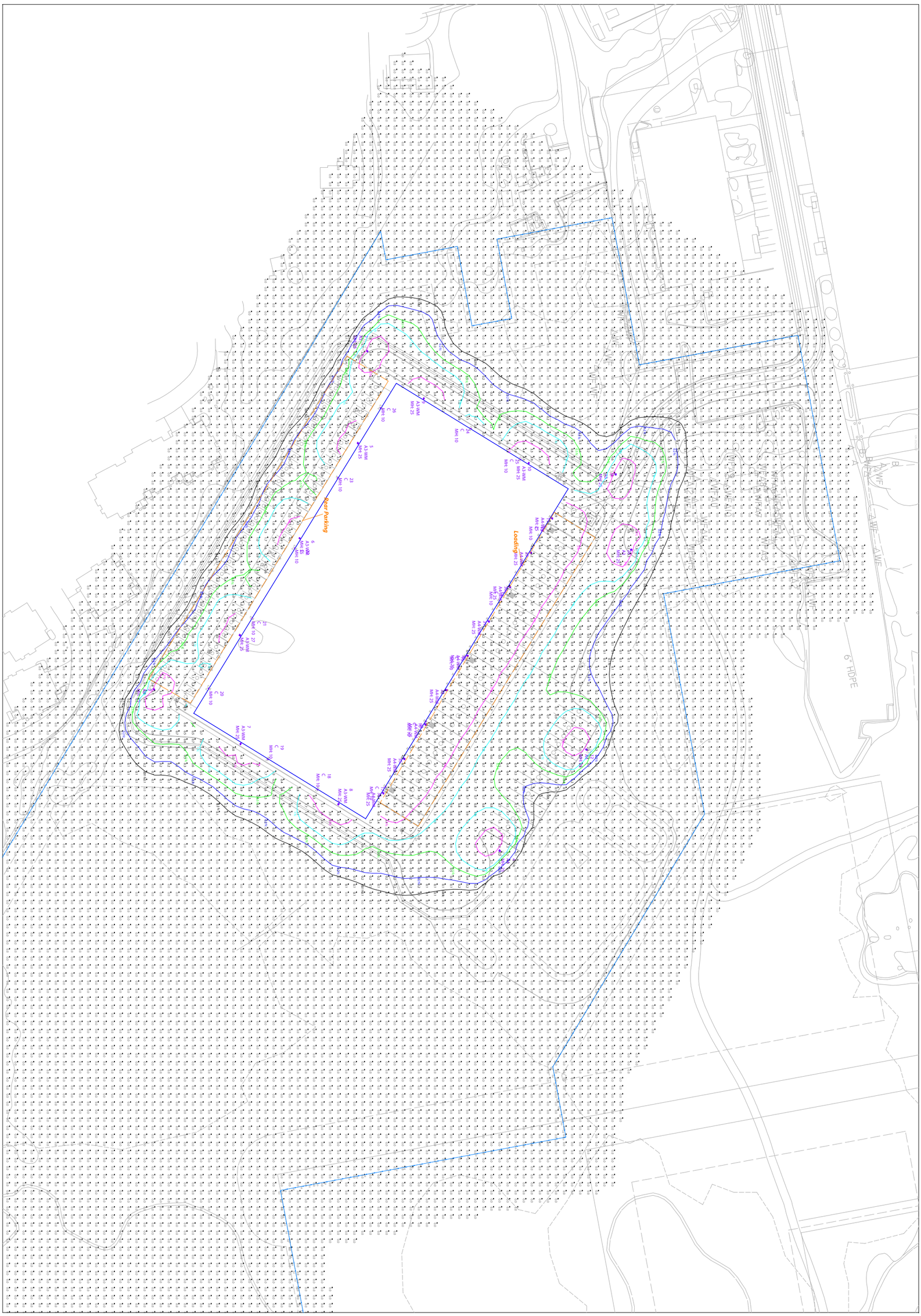
NO.	DATE	DESCRIPTION	BY:
0	05-16-2023	PLANNING BOARD SUBMISSION	B.A.W.

DRAWN BY: B.A.W. DESIGN BY: K.J.D.

LANDSCAPE NOTES & DETAILS
RANDOLPH ROAD, MULTIPLE PARCELS
WAREHOUSE DISTRIBUTION FACILITY
RANDOLPH, MASSACHUSETTS

PREPARED FOR:
BLUEWATER PROPERTY ACQUISITIONS, LLC
205 HUDSON STREET, 8TH FLOOR
NEW YORK, NEW YORK 10013

Scale: 1 inch= 50 Ft.



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Job Name:
2954-003 Randolph
Randolph, MA

Lighting Layout
Version C

SHEET 1 OF 2

Scale: as noted	PROJECT #209018
Date:5/12/2023	CASE #1098922
Filename: 2954-003 Randolph Ltg Layout 1098922C.AGI	
Drawn By: dvento	

Filename: Z:\Job Files\Holbrook Associated\Holbrook Associated 101064\2954-003 Randolph\Working Files\AGI\2954-003 Randolph Ltg Layout 1098922C.AGI

PLOT TO 24"X36"PAG

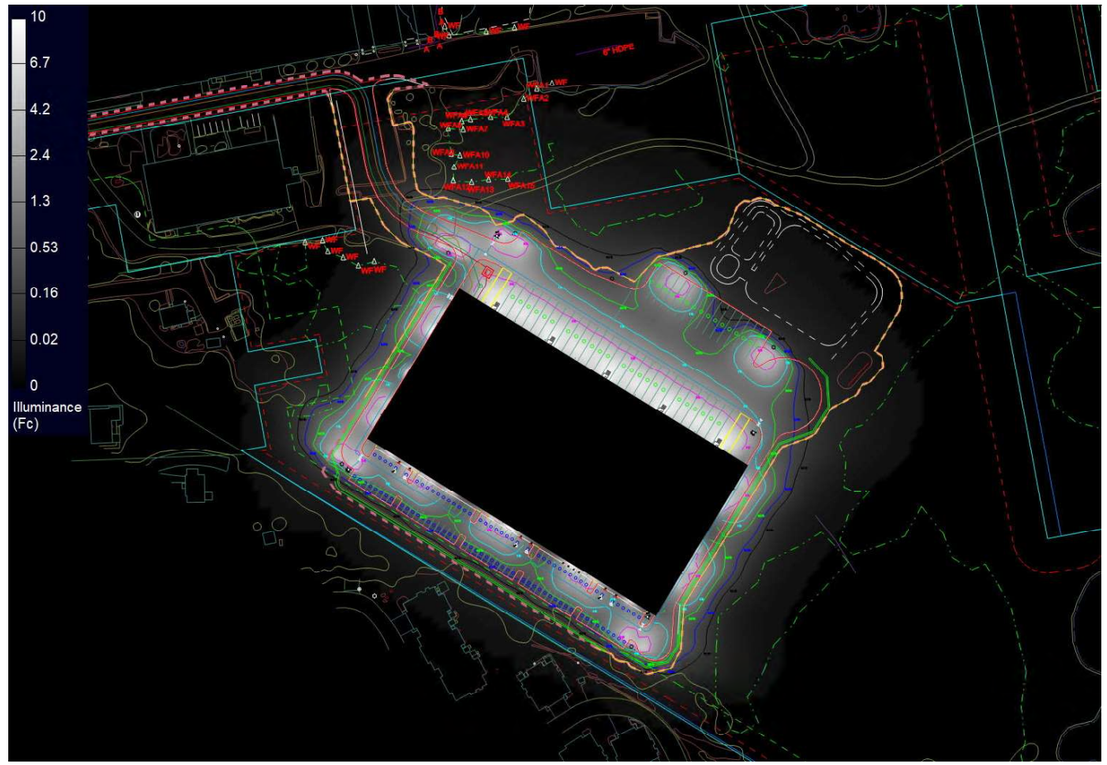
PLOT TO 24"X36"PAG

Calculation Summary											
Label	**CalcType**	**Units**	**Avg**	**Max**	**Min**	**Avg/Min**	**Max/Min**	**Description**	**PtSpcLr**	**PtSpcTb**	**Meter Type**
Property Line	Illuminance	Fc	0.00	0.0	0.0	N.A.	N.A.	Readings taken at 0'-0"AFG	10	N.A.	Horizontal
Site	Illuminance	Fc	0.24	13.5	0.0	N.A.	N.A.	Readings taken at 0'-0" AFG	10	10	Horizontal
Loading	Illuminance	Fc	5.35	13.5	1.5	3.57	9.00	statistical area			
Rear Parking	Illuminance	Fc	1.23	4.9	0.2	6.15	24.50	statistical area			

Luminaire Schedule			All quotes/orders generated from this layout must be forwarded to the Local Rep Agency									
Symbol	**Qty**	**Tag**	**Label**	**Arrangement**	**LLF**	**Lum. Lumens**	**Arr. Lum. Lumens**	**Description**	**Lum. Watts**	**Arr. Watts**	**Total Watts**	**BUG Rating**
	4	A3	ALEDM3TY @90w	Single	1.000	12835	12835	TYPE III - POLE MOUNT	91	91	364	B2-U0-G2
	7	A3-WM	ALEDM3TWMY @90w	Single	1.000	12835	12835	TYPE III - WALL MOUNT	91	91	637	B2-U0-G2
	2	A4	ALEDM4TY @90w	Single	1.000	12666	12666	TYPE IV - POLE MOUNT	91.5	91.5	183	B1-U0-G3
	9	A4-WM	ALEDM4TWMY @ 150W	Single	1.000	19267	19267	TYPE IV - WALL MOUNT	148.2	148.2	1333.8	B2-U0-G4
	14	C	SLIM17FA15ADJ @3K	Single	1.000	1761	1761	WALLPACK	14.2	14.2	198.8	B1-U1-G0

Expanded Luminaire Location Summary						
LumNo	**Tag**	**X**	**Y**	**MTG HT**	**Orient**	**Tilt**
1	A3	784457.694	2893257.996	25	65.37	0
2	A3	784305.191	2892950.233	25	58.389	0
3	A3	784724.309	2892685.612	25	60.007	0
4	A4	784924.114	2893113.988	25	230.152	0
5	A3-WM	784418.936	2892938.277	25	235.814	0
6	A3-WM	784536.861	2892866.128	25	240.714	0
7	A3-WM	784791.93	2892792.9	25	325.713	0
8	A3-WM	784866.624	2892914.218	25	323.87	0
9	A3-WM	784363.608	2893020.123	25	147.995	0
10	A3-WM	784443.686	2893150.261	25	150.304	0
11	A4-WM	784512.22	2893179.332	25	59.703	0
12	A4	784798.832	2893221.601	25	233.893	0
13	C	784522.603	2893170.547	10	61.075	0
14	C	784603.251	2893121.141	10	61.075	0
15	C	784683.614	2893071.854	10	61.075	0
16	C	784764.237	2893022.622	10	61.075	0
17	C	784844.845	2892972.89	10	61.075	0
18	C	784848.477	2892888.169	10	325.008	0
19	C	784810.961	2892826.68	10	330.406	0
20	C	784723.198	2892753.413	10	240.255	0
21	C	784636.123	2892806.92	10	237.014	0
22	C	784549.336	2892859.984	10	240.145	0
23	C	784462.049	2892913.305	10	236.064	0
24	C	784401.15	2893078.455	10	148.738	0
25	C	784438.977	2893139.649	10	150.146	0
26	C	784375.488	2892966.341	10	236.064	0
27	A3-WM	784656.931	2892791.966	25	240.714	0
28	A3	784550.903	2893277.072	25	244.46	0
29	A4-WM	784554.824	2893153.161	25	59.703	0
30	A4-WM	784597.428	2893126.99	25	59.703	0
31	A4-WM	784640.032	2893100.82	25	59.703	0
32	A4-WM	784682.635	2893074.649	25	59.703	0
33	A4-WM	784725.239	2893048.478	25	59.703	0
34	A4-WM	784767.843	2893022.307	25	59.703	0
35	A4-WM	784810.447	2892996.136	25	59.703	0
36	A4-WM	784853.051	2892969.966	25	59.703	0
Total Quantity: 36						

Luminaire Tag Summary	
Tag	**Qty**
A3	4
A3-WM	7
A4	2
A4-WM	9
C	14



NOTES:
* The light loss factor (LLF) is a product of many variables. RAB's standard is to use the initial 1.0 LLF in accordance with most municipal lighting ordinance light trespass requirements, unless otherwise noted.

* Illumination values shown (in footcandles) are the predicted results for planes of calculation either horizontal, vertical or inclined as designated in the calculation summary. Meter orientation is normal to the plane of calculation.

* The calculated results of this lighting simulation represent an anticipated prediction of system performance. Actual measured results may vary from the anticipated performance and are subject to means and methods which are beyond the control of RAB Lighting Inc.

* Mounting height determination is job site specific, our lighting simulations assume a mounting height (insertion point of the luminaire symbol) to be taken at the top of the symbol for ceiling mounted luminaires and at the bottom of the symbol for all other luminaire mounting configurations.

* RAB disclaims all responsibility for the suitability of existing or proposed poles and bases to support proposed fixtures. This is the owner's, installer's and/or end-user's responsibility based on the weight and effective projected area ("EPA") of the proposed fixtures and the owner's site and soil conditions, wind zone, and many other factors. A professional engineer licensed to practice in the state the site is located should be engaged to assist in this determination.

* The landscape material shown hereon is conceptual and is not intended to be an accurate representation of any particular plant, shrub, bush, or tree, as these materials are living objects, and subject to constant change. The conceptual objects shown are for illustrative purposes only. The actual illumination values measured in the field will vary.

* Photometric model elements such as buildings, rooms, plants, furnishings or any architectural details which impact the dispersion of light must be detailed by the customer documents for inclusion in the RAB Lighting Design. The owner/contractor/customer/end-user must provide accurate and complete construction drawings that reflect what will be the final construction RAB is not responsible for any inaccuracies caused by incomplete, inaccurate, or outdated information provided by the owner/contractor/customer/end-user.

* RAB Lighting Inc. luminaire and product designs are protected under U.S. and International intellectual property laws. Patents issued or pending may apply. Please see www.rablighting.com/ip.

* The Lighting Analysis, EZLayout, Energy Analysis and/or Visual Simulation ("Lighting Design") provided by RAB Lighting Inc. ("RAB") represents an anticipated prediction of lighting system performance based upon design parameters and information supplied by others. These design parameters and information provided by others have not been field verified by RAB and therefore actual measured results may vary from the actual field conditions. RAB recommends that design parameters and other information be field verified to reduce variation.

* RAB does not warranty, either implied or stated, actual measured light levels or energy consumption levels as compared to those illustrated by the Lighting Design.

* RAB does not warranty, either implied or stated, nor represents the appropriateness, completeness or suitability of the Lighting Design as compliant with any applicable regulatory code requirements with the exception of those expressly stated on drawings created and submitted by RAB. The Lighting Design is issued, in whole or in part, as advisory documents for informational and convenience purposes only, is not intended for construction nor as a part of a project's construction documentation package, and should not be relied upon for any purpose.

* Immediately prior to any party ordering RAB products used in the Lighting Design, the ordering party must verify that the lumen output of the fixtures being ordered (as shown on RAB's website) match the lumen output shown in the Lighting Design. Occasionally, Lighting Designs previously provided use fixtures that are then updated prior to an order and such updates could change the lumen output of the fixture. This in turn, could impact the installed lighting performance that differs from the Lighting Design.

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Prepared For:
Holbrook Associated
35 Reservoir Park Drive
Rockland, MA 02370
Tel: 781-871-0011

Job Name:
2954-003 Randolph
Randolph, MA

Lighting Layout
Version C

SHEET 2 OF 2

Scale: as noted

Date:5/12/2023

Filename: 2954-003 Randolph Ltg Layout 10989220

Drawn By: dvento

Filename: Z:\Job Files\Holbrook Associated\Holbrook Associated 10106412\954-003 Randolph\Working Files\AGI\2954-003 Randolph Ltg Layout 1098922C.AGI

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