

February 3, 2025

Planning Board
Town Hall
Southborough, Massachusetts 01772

Reference: 2 East Main Street
Southborough, Massachusetts
EDC Job No.: 3650

Dear Board Members:

We are writing to address the Peer Review Comments as provided by Fuss & O'Neil dated January 9, 2025. The following addresses each point raised in their review letter with EDC's response in red.

Major Site Plan and Special Downtown District Review

1. Per Section 174-2 of the Zoning, mixed-use development is defined as a development that includes any combination of permitted nonresidential uses and one or more dwelling units within a single structure; provided, however, that the inclusion of two or more dwelling units in a mixed-use development shall not be deemed a multifamily dwelling. The ground floor facing the street shall be used only for permitted nonresidential uses, and residential dwellings cannot exceed 40% of the gross floor area of the above ground level floor space of the building. The residential dwellings appear to be greater than 40% of the gross floor area of the ground level floor. Applicant shall review and revise as required.

Just when you think it might be possible to actually put forth a successful mixed-use development in Downtown Southborough you find that another obstacle was ever present. The mixed-use restriction described above was introduced into the definitions section of the zoning bylaw which we clearly missed. The language outlined in the 174-8.12 Downtown District describing uses and densities does not include any mixed-use limitations on the contrary it actually outlines an as of right FAR of 0.40 and special permit FAR of 0.50 affording almost 8,000 sf. and 10,000 sf. of buildout respectively, however it is now very clear that this "Mixed-use" Residential density restriction was somehow included in the final drafting of the zoning bylaw and Downtown District to severely restrict project size to the point of economic failure. We have met with Building Inspector Chris Lund and have discussed this definition further and find that there is no interpretation of "Mixed-use" that includes residential use on upper floors that would yield a successful mixed-use development opportunity. Therefore, we must eliminate the planned 1st floor retail component and now proceed with a single-use multifamily residential building that contains 6 1-bedroom units. The Amended Site Plans are substantially similar, having now been updated to include the residential use recapitulation with a slightly smaller building and parking lot footprint with 21 total parking spaces provided.

2. Per Section 174-8.12 F (8)(a) of the Zoning, maximum building height of 35 feet and three stories. In review of the Site Plans, the Building Layout sheet shows from ground to roof is 33'-3 1/4" tall, however, does not include the cupola on the top of the building. The

Plan does not include a dimension for the cupola. A dimension of the cupola must be provided. The Applicant shall review the total building height, which includes the cupola, to ensure it's under the 35 feet height limit.

The building has been modified to better address the single-use residential character while retaining the 3-story elevation that includes the copula which does not count towards building height as provided in the definition of Height outlined in the Southborough Zoning By-law.

3. Per Section 174-8.12 G (5) of the Zoning, any multifamily or mixed-use building with four or more units, at least 12.5% of the units shall be affordable housing that is eligible for the Chapter 40B Subsidized Housing Inventory (SHI) in accordance with the Chapter 40B regulations and Guidelines of the Massachusetts Department of Housing and Community Development. Please confirm that at a minimum one of the dwellings will be listed as an affordable housing unit.

A single affordable unit continues to be required, and it is fully understood that the designated unit must adhere to the town's Chapter 40B Subsidized Housing Inventory.

4. Per Section 174-10 B (2)(b)[12] of the Zoning, surfacing, indicating treatment of all surfaces. In review of the Plans, it was observed a material is not proposed for the seating area just south of the dumpster enclosure. Please revise Site Plans to include material type and layout of the proposed seating area.

The seating area is maintained and will be prepared with permeable pavers as described.

5. Per Section 174-11 C (1)(a) of the Zoning, signs not exceeding four square feet in area and bearing only property numbers, or names of residents on premises do not require a permit from the Inspector of Buildings. Proposed Site Plans detail for the sign states a maximum sign area of 25 square feet for signage. This would require permitting through the Inspector of Buildings. Please file permits as required.

The sign would only identify the property and would not require a permit.

6. Per Section 174-12 C (2) of the Zoning, each parking space shall be at least 9 1/2 feet wide and 18 feet long. Proposed Site Plans indicate parking spaces are 9 feet wide and 18 feet long. Please revise the parking spaces to be 9 1/2 feet wide or request a waiver.

Although we still believe that a waiver to permit 9-foot wide parking spaces is warranted as this parking space size is not restrictive and can be found at many public and private facilities in town without repercussions, the proposed parking spaces have been increased to 9.5-feet wide with the exception of the handicap parking space that adheres to the Massachusetts ABB Requirements.

7. Per Section 174-12 F (4) of the Zoning, mixed-use development for off-street parking requirements for development in the Downtown District shall be one space per 300 square feet of nonresidential floor area. As commented in another comment within this letter, due to discrepancies in the Site Plans and the Architectural Plans, it is unclear what the total floor area is for the nonresidential use. Please review the and revise off-street parking spaces as required.

The parking lot has been updated to support single-use multifamily and provides 2 parking spaces per residential unit thus requiring a total of 12-spaces with a total of 21-spaces provided thereby affording 7 additional spaces for visitors.

8. Per Section 174-12 G (1) of the Zoning, any driveway likely to carry more than 200 trips per average business day must comply with the requirement outline in this Section

of the Zoning. If the project does not comply the Applicant must get special permit form the for the alternative configuration

This single-use multifamily project will generate between 5 to 7 trips per day per unit based upon low to mid rise multifamily ITE trip generation rates, therefore a total of 30-42 trips per day can be expected from this project, well below this threshold.

9. Per Section 174-12.1 F of the Zoning, total site lumen limit shall be 2.5 lumens per square foot of hardscape in the Business Village. Applicant is seeking a wavier to allow 3.84 lumen per square foot as shown on the lighting plan attached to the Special Permit for Downtown Mixed-Use Facility. It is at the discretion of the Planning Board to approve or deny this request.

Maintaining pedestrian safety is our greatest concern so having sufficient lighting to ensure that the travel paths are adequately illuminated is a priority. We have significantly cut back on the visible light by introducing soffit lighting at each entrance that will rely upon waterproof LED ceiling lights while maintaining the original parking lot fixture layout but reducing the fixture wattage to 69 Watts thus bringing the project lumen level below the LZ-2 zone 29,525 total lumen threshold.

10. Per Section 174-12.1 J of the Zoning, automatic switch controls shall be provided that automatically extinguish all outdoor lighting when sufficient daylight is available using a control device or system such as a photoelectric switch, astronomic time switch or equivalent function from a programmable lighting controller, building automation system or lighting energy management system, all with battery or similar backup power or device. Please provide documentation on intended system for controlling site lighting.

The lighting system will be regulated by a programable photocell.

11. Per Section 174-13 B (9) of the Zoning, a permanent water supply system or other acceptable watering method, shall be provided for all planting areas. In order to protect the Town's water supply, and encourage sound landscaping practices, the Town of Southborough recommends sustainable watering systems, such as: rainwater recycling systems, automatic shut-off devices, drought-tolerant native plant material, and careful irrigation scheduling, among others. Please clarify an intended watering method for all planting areas.

The proposed landscaping will consist of drought tolerant native species with automated irrigation systems that will minimize any impact upon the municipal water supply.

12. Per Section 174-13 C of the Zoning, street planting is required for all nonresidential premises. Street plantings at the front of lots shall contribute to the creation of an impression of a separation of the street and the developed area of the site without necessarily eliminating visual contact between them. A landscaped buffer strip shall be a minimum of 15 feet in depth. The Planning Board may reduce or modify this requirement if, in their judgment, strict compliance would create a substantial hardship due to existing conditions such as lot size, location of existing buildings, or environmental conditions. It is at the discretion of the Planning Board to require the planting plan be revised to include plantings at the frontage of the property.

This single-use multifamily provides for landscape planting areas along both East Main and Newton Streets as well as observes the building setback requirements of the underlying Downtown Zoning District. A greater number of native trees are proposed than are mandated by the bylaw.

13. Per Section 174-13 D of the Zoning, side and rear line planting area shall have a buffer strip a minimum of 10 feet in width. In review of the proposed Site Plans it appears that a 10 foot buffer is not kept at the northern property line. Please revise the site parking area to allow a 10 foot buffer strip along the northern property line.

The minimum 10-foot buffer is provided within front, side and rear yard setbacks.

14. Per Section 174-13.5 I (1)(c) of the Zoning, the duration of the exposure of disturbed areas due to removal, soil removal, and/or regrading shall be set forth in a written time table. Please provide a written time table for all areas that will experience disturbance.

Once the building is erected and made weather tight, we would anticipate that the remaining site work activities could be completed with permanent stabilization within 4-6 months as long as a suitable growing season window was available.

15. Per Section 174-13.5 I (1)(e) of the Zoning, there shall be no net increase in the volume of stormwater runoff across the boundaries of the site unless provisions have been made to tie into the public storm drains, where available, with the approval of the appropriate parties or authorities or, the Commission has determined that all reasonable provisions have been made to minimize any changes in stormwater runoff at the site. Please include in the Stormwater Report calculations to ensure that there is no net increase of stormwater runoff due to proposed conditions.

A net decrease in peak rate and volume will result from this development with supporting drainage calculations provided.

16. Per Section 174-13.5 I (1)(h) of the Zoning, Areas to be planted shall be loamed with not less than six inches compacted depth of good quality loam and seeded with turf grass seed or other appropriate ground cover in accordance with good planting practice. In review of the Proposed Site Plans, note 23 on sheet 4 calls for a minimum of 4" of loam. Please revise to ensure a minimum of six inches of loam.

The note has been amended.

17. Per Section 174-13.5 I (1)(m) of the Zoning, dust control shall be used during grading operations if the grading is to occur within 500 feet of the property line of an occupied residence or place of business. Dust control methods may consist of grading fine soils on calm days only or dampening the ground with water. Please revise both the Pollution Prevention and Operation & Maintenance Plan and Proposed Site Plans to include measures for dust control over the course of construction.

The SWPPP & O&M and Construction Note 8 on sheet 4 added to address dust control have been amended accordingly.

Additional Comments

18. In review of the Proposed Site Plans, it is uncertain that the parking area can accommodate a turning radius that can support emergency vehicles, specifically the American Association of State Highway and Transportation Officials (AASHTO) BUS-45 design standard. It recommended that the Applicant reviews the turning radius for the parking area to ensure the required vehicle size can enter and exit the parking area.

The building is highly accessible from both East Main and Newton Streets for the Bus-45 vehicle and if necessary, we can design a second curb cut along the sidewalk at the rear of the proposed building to permit the Bus-45 vehicle to enter and park at the rear of the building. This modification would result in the elimination of 2 parking spaces.

19. There is a discrepancy between building footprint shown on the Site Plans and the Architectural Plans In reviewing the Proposed Site Plan, the Site Layout shows the proposed building as 40'x75', however, the architectural plan shows the building as 44'x75'. There also appears to be a third floor, most likely an attic or similar smaller space, that is unclear on purpose or total square footage. Please clarify the building footprint, gross square footage, and third floor information.

The architectural plan has been updated to reflect the single-use multifamily structure, and the site plan supports the 40'x70' overall building limits.

20. Per Standard 2 of the Handbook, stormwater management systems shall be designed so that post-development peak discharge rates do not exceed pre-development peak discharge rates. Calculations have not been provided to show the project provides peak flow attenuation. Please provide the required calculations as required by the Handbook.

The Updated Stormwater Report is appended, and the peak rate is reduced.

21. Per Standard 3 of the Handbook, the loss of annual recharge to groundwater shall be eliminated or minimized through the use of infiltration measures including environmentally sensitive site design, low impact development techniques, stormwater best management practices, and good operation and maintenance. At a minimum, the annual recharge from the post-development site shall approximate the annual recharge from pre-development conditions based on soil type. This Standard is met when the stormwater management system is designed to infiltrate the required recharge volume as determined in accordance with the Massachusetts Stormwater Handbook. Please provide the required recharge calculations to demonstrate compliance with this Standard.

The Updated Stormwater Report is appended, and the roof stormwater will be recharged as required.

22. Per Standard 4 of the Handbook, stormwater management systems shall be designed to remove 80% of the average annual post-construction load of Total Suspended Solids (TSS) and Water Quality Volume. Please provide the required 80% TSS Removal and Water Quality Volume calculations to demonstrate compliance with this Standard.

The Updated Stormwater Report is appended, and the requisite Water Quality Volume is satisfied.

23. In review of the Proposed Site Plans, it was observed that the drainage design has the infiltration units discharging towards the wetlands on site with no treatment calculations provided within the Stormwater Report. In accordance with the Handbook, no new stormwater conveyances may discharge untreated stormwater directly to or cause erosion in wetlands or waters of the Commonwealth. Please revise the Stormwater Report to include the calculations required for ensuring treatment is provided per the Handbook.

The Updated Stormwater Report is appended with supporting computations.

24. In review of the Proposed Site Plans, there is a proposed wet basin located along the wetland in the northwest corner of the site.

a. The Applicant proposes to install erosion control barriers within the wetlands. The Applicant shall insure the Conservation Commission are aware of the installation of the erosion control barriers and have reviewed the plans. The originally approved Order of Conditions DEP 290-782 that continues to apply to this site supported the construction of a Wet Basin which was initially constructed in December 2017. This work activity was coordinated with then Conservation Administrator Beth Rosenblum who performed several site inspections when this work was undertaken, however with the passage of time we anticipate that the current Conservation Administrator Melissa Danza will want to ensure the long-term viability of the Wet Basin. Since the originally approved work limits continue to apply to this work task, we have maintained the originally approved ECB work limit and the construction details of the Wet Basin as if it was not yet completed.

b. The Applicant has not provided any details or sizing calculations for the wet basin. To ensure proper design of the wet basin, details and appropriate calculations must be provided for the wet basin. If appropriate, calculations should include treatment sizing as required by the Handbook. **The Updated Stormwater Report is appended, and the peak rate is reduced, the TSS volume is achieved with the Vortsentry Unit and the Wet Basin provides increased wetland surface area that will benefit stormwater that flows onto and through the subject property.**

25. In review of the Stormwater Report, under the Standard 3 paragraph, the Applicant states the project proposes to enhance the exiting stormwater ditch to provide additional stormwater storage. The Site Plans do not clearly show the existing ditch or the proposed enhancement to the ditch. Please revise the Site Plans accordingly. **The existing topography off locus along the railroad right-of-way has been added to the Site Plan and it is this ditch that has been expanded onto the subject property that will provide additional peak storage volume for the upstream contributing watershed.**

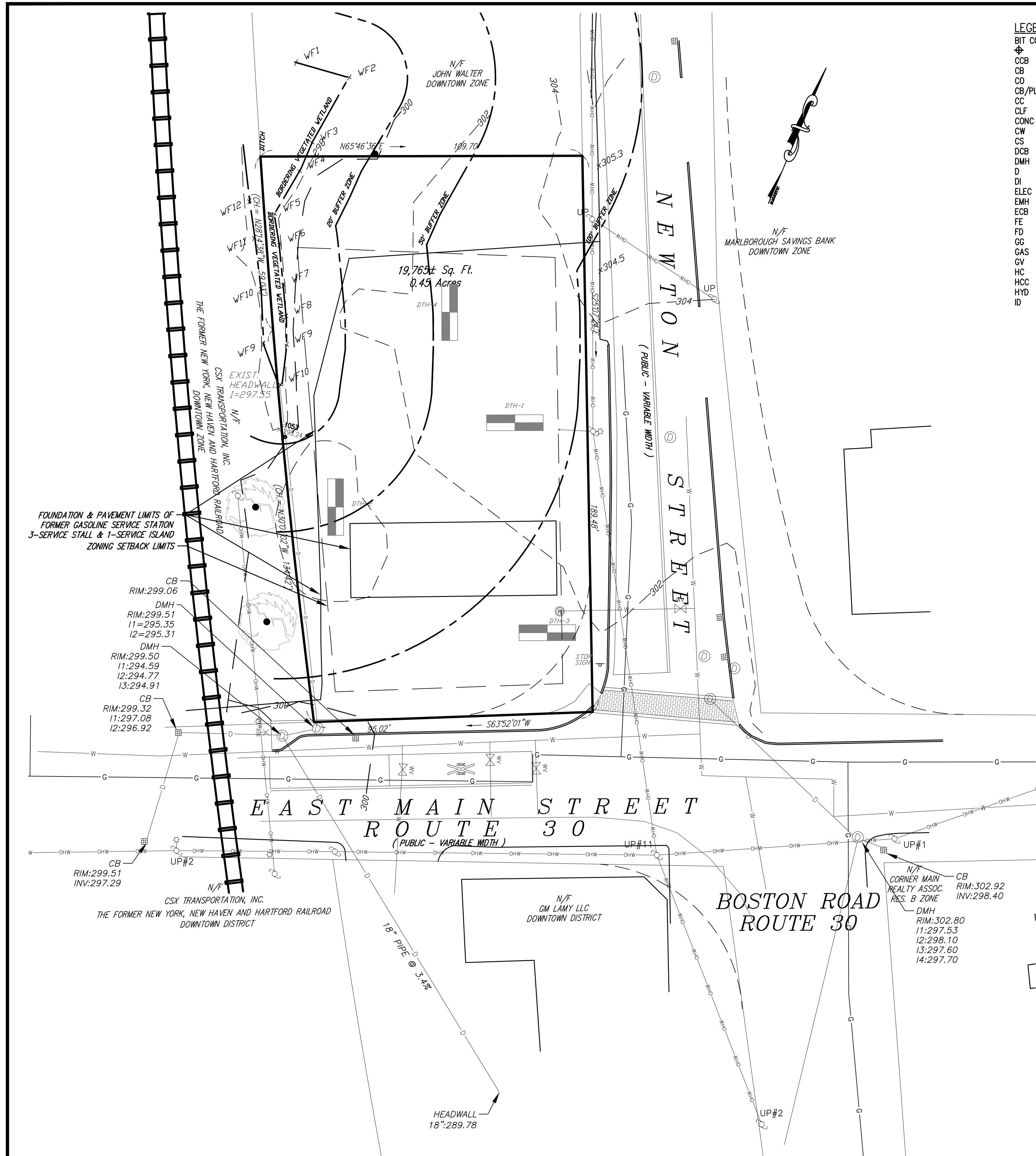
Although our original goal had been to jumpstart the revitalization of Downtown Southborough with a Mixed-use Retail & Residential Development at the 2 East Main Street location the zoning bylaw just doesn't support this option and having previously tried and failed to secure approval for an office building at this location makes pursuit of a Multifamily Residential Development the only financially viable development option available. We look forward to presenting these site plan modifications at the next available meeting date. Thank you for your consideration.

Very truly yours,

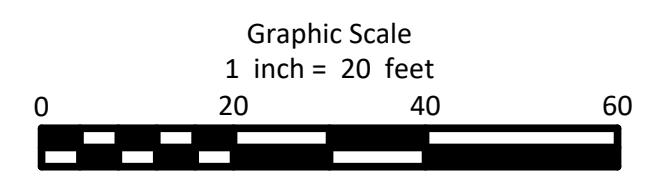
ENGINEERING DESIGN CONSULTANTS, INC.

Peter Bemis

Peter Bemis



EXISTING CONDITIONS



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REV. NO.	DATE	REVISION	MADE BY	CHKD BY	APPD BY
1	1/28/25	NO CHANGE - REISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB
0	11/1/24	ISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB

LEGEND

BIT CONC	BITUMINOUS CONCRETE	INV	INVERT
⊕	BORING	LP	LIGHT POLE
CCB	CAPE COD BERM	MH	MANHOLE
CB	CATCHBASIN	PPVC	PERFORATED POLY-VINYL-CHLORIDE
CO	CLEAN OUT	PVC	POLY-VINYL-CHLORIDE
CB/PLUG	CONCRETE BOUND/PLUG	PIV	POST INDICATOR VALVE
CC	CONCRETE CURB	RCP	REINFORCED CONCRETE PIPE
CLF	CHAIN LINK FENCE	RD	ROOF DRAIN
CONC	CONCRETE	S	SEWER LINE
CW	CROSSWALK	SMH	SEWER MANHOLE
CS	CURB STOP	S	SIGN
DCB	DOUBLE CATCH BASIN	SWSL	SINGLE WHITE BROKEN LINE
DMH	DRAIN MANHOLE	SWSL	SINGLE WHITE SOLID LINE
D	DRAIN LINE	SCC	SLOPED GRANITE CURB
DI	DUCTILE IRON	SB	SPEED BUMP
ELEC	ELECTRIC	SB/DH	STONE BOUND/DRILLHOLE
EMH	ELECTRIC MANHOLE	TELE	TELEPHONE LINE
ECB	EROSION CONTROL BARRIER	TMH	TELEPHONE MANHOLE
FE	FLARED END	⊕	TEST PIT
FD	FOUNDATION DRAIN	TRANS	TRANSFORMER
GG	GAS GATE	TS	TRANSITION STONE
GAS	GAS LINE	TD	TRENCH DRAIN
GV	GATE VALVE	UD	UNDER DRAIN
HC	HANDICAPPED RAMP	VGC	VERTICAL GRANITE CURB
HCC	HANDICAPPED CONCRETE CURB	WG	WATER GATE
HYD	HYDRANT	W	WATER LINE
ID	INTERCEPTOR DRAIN	⋈	WETLAND FLAG

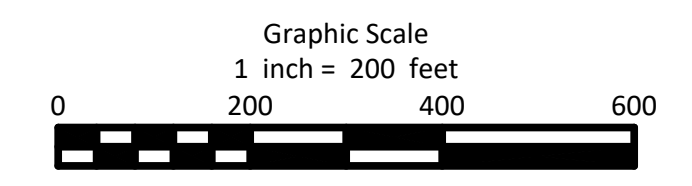
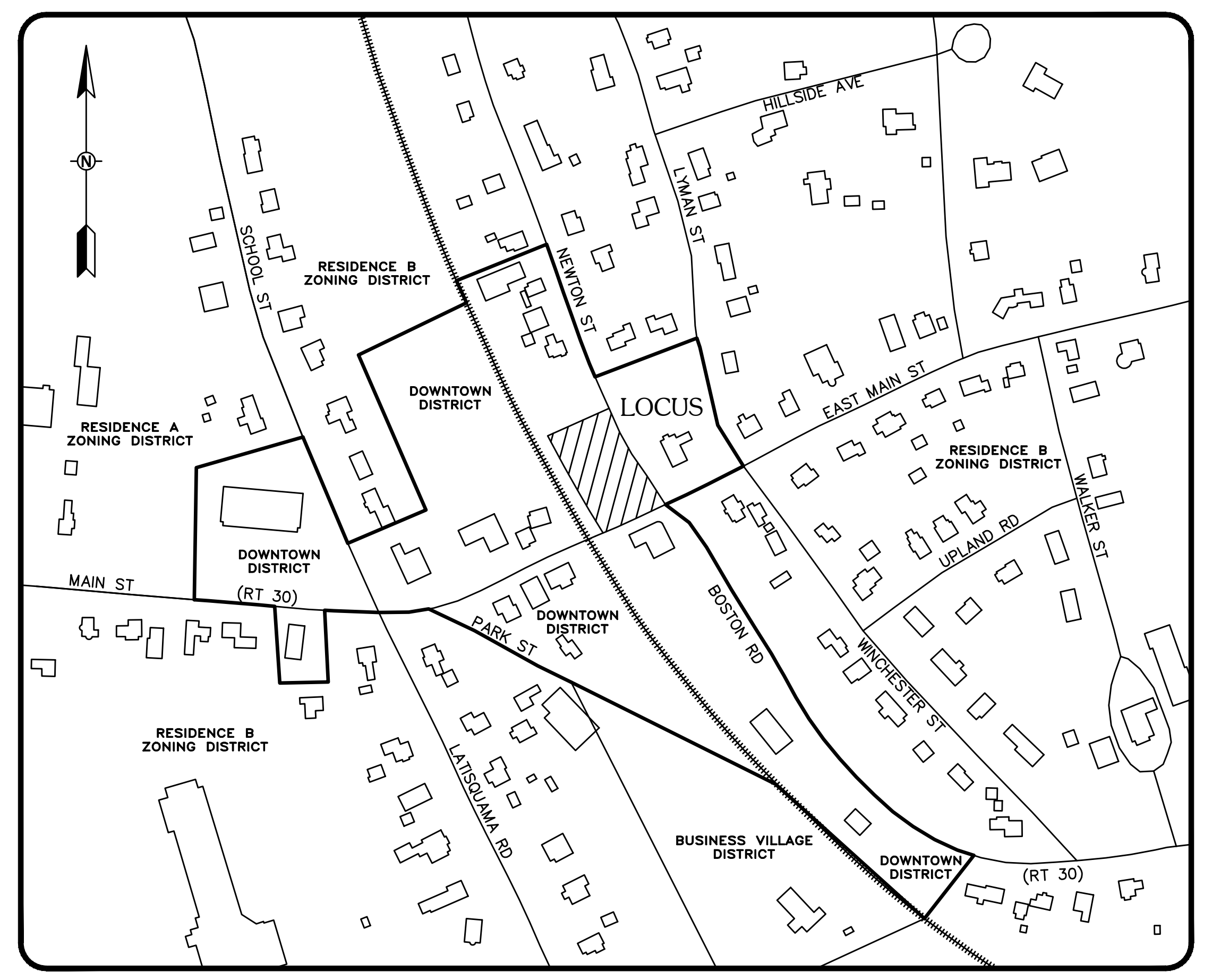
ZONING LEGEND:
DISTRICT - DOWNTOWN DISTRICT

CRITERION	REQUIRED	PROPOSED
MIN. LOT AREA	5,000 SF	19,765± SF
LOT FRONTAGE	60'	95.02'
FRONT YARD	10'	10.2' & 10.7'
SIDE YARD	10'	10.5'
REAR YARD	35'	139.8'
BUILDING HEIGHT	35'	34'
BUILDING STORIES	3	2 1/2
BUILDING AREA	N/A	9,000±SF
MAX. FRONT SETBACK	20'	10.2' & 10.7'
MAX. FAR COVERAGE	40% (7,906 SF)	50% (9,882 SF)
MIN. LANDSCAPE	20% (3,953 SF)	45.5% (9,000± SF) SP REQ.
MIN. FACADE BUILDOUT	70% (66.5' E. MAIN 142.1 NEWTON)	75' E. MAIN 40' NEWTON WAIVE
PARKING CLASSIFICATION	NONRESIDENTIAL: 3.5/1000 SF	NONRESIDENTIAL: 10.5 SPACES
PARKING ALLOCATION	RESIDENTIAL: 2/UNIT	RESIDENTIAL: 8 SPACES
	18.5 SPACES	TOTAL OF 23 SPACES PROVIDED

NOTE: UNDERGROUND UTILITY LOCATIONS ARE NOT GUARANTEED.

IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO VERIFY LOCATIONS AND ELEVATIONS OF EXISTING UTILITIES PRIOR TO COMMENCEMENT OF ANY CONSTRUCTION.

DIGSAFE IS TO BE NOTIFIED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION. CALL DIGSAFE AT 811



LOCUS MAP

TOWN OF SOUTHBOROUGH
PLANNING BOARD

MAJOR SITE PLAN &
DOWNTOWN DISTRICT

DATE: _____

DRAWING TITLE:
EXISTING CONDITIONS & LOCUS MAP

PREPARED FOR:
PETER BEMIS
P.O. BOX 270
SOUTHBOROUGH, MASSACHUSETTS

SCALE: 1" = 20'

DATE: NOVEMBER 1, 2024

SHEET: 1 OF 4

PLAN NO.: 3650 SITEPLAN
FILE NO.: 3650 SITE PLAN.dwg

PROJECT TITLE:
2 EAST MAIN STREET SITE PLAN
2 EAST MAIN STREET
SOUTHBOROUGH, MASSACHUSETTS

PREPARED BY:
EDC Engineering Design Consultants, Inc.
32 Turnpike Road
Southborough, Massachusetts
(508) 480-0225

SHEET NO.:
1

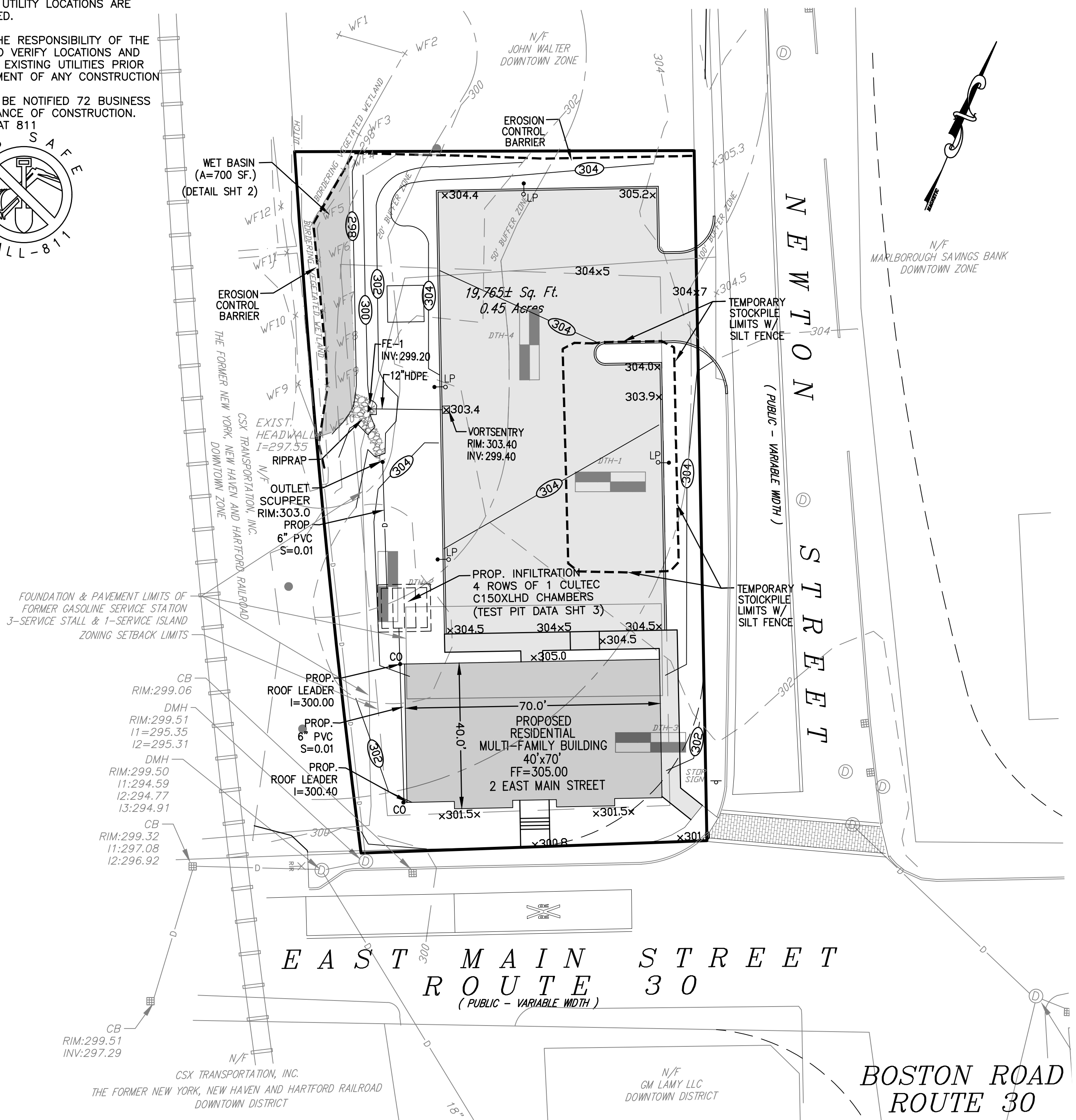


Walter M. Lewinski

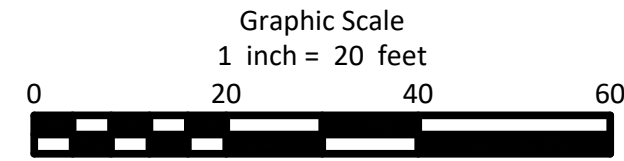
NOTE:
UNDERGROUND UTILITY LOCATIONS ARE
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TO COMMENCEMENT OF ANY CONSTRUCTION

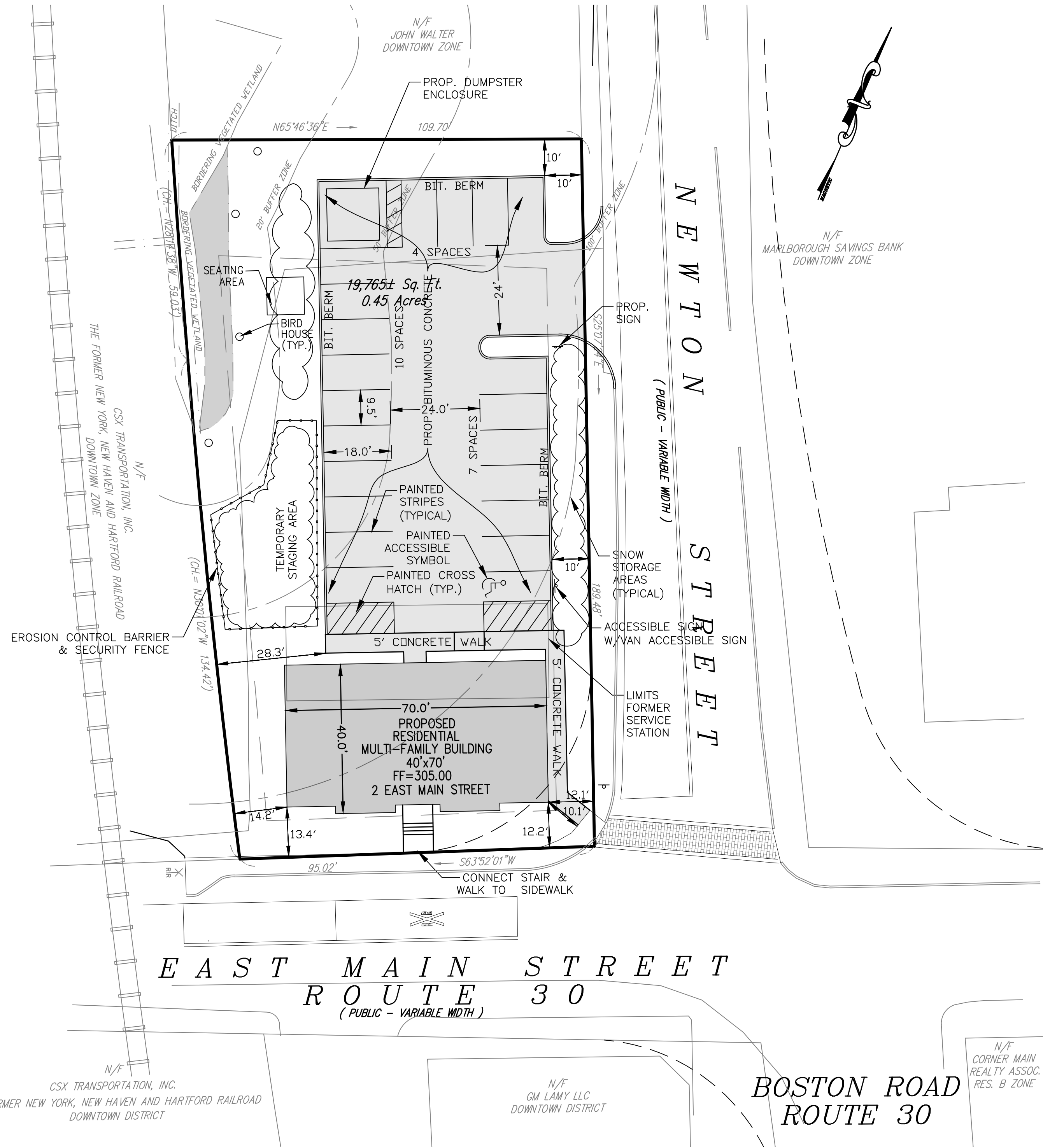
DIGSAFE IS TO BE NOTIFIED 72 BUSINESS
HOURS IN ADVANCE OF CONSTRUCTION.
CALL DIGSAFE AT 811



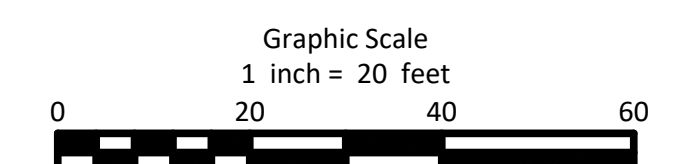
GRADING AND
DRAINAGE VIEW



2 EAST MAIN STREET
MAP 54 PARCEL 43



LAYOUT AND
MATERIALS VIEW



2 EAST MAIN STREET
MAP 54 PARCEL 43

ZONING LEGEND:
DISTRICT - DOWNTOWN DISTRICT

CRITERION	REQUIRED	PROPOSED
MIN. LOT AREA	5,000 SF	19,765± SF
LOT FRONTAGE	60'	95.02'
FRONT YARD	10'	10.2' & 10.7'
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BUILDING HEIGHT	35'	34'
BUILDING STORIES	3	2 1/2
BUILDING AREA	N/A	9,000± SF
MAX. FRONT SETBACK	10.2' & 10.7'	
MAX. FAR COVERAGE	40% (7,906 SF) 50% (9,882 SF)	45.5% (9,000± SF) SP REQ.
MIN. LANDSCAPE	20% (3,953 SF)	37.3% (7,380± SF)
MIN. FACADE BUILDOUT	70% (66.5' E. MAIN 142.1 NEWTON)	75' E. MAIN 40' NEWTON WAIVE
PARKING CLASSIFICATION	NONRESIDENTIAL: 3.5/1000 SF RESIDENTIAL: 12 SPACES REQ.	NONRESIDENTIAL: 0 SPACES REQ. RESIDENTIAL: 12 SPACES REQ.
PARKING ALLOCATION	12 SPACES REQ.	TOTAL OF 21 SPACES PROVIDED

LEGEND SEE SHEET 1 OF 4

CURRENT OWNER OF RECORD:

PETER BEMIS
P.O. BOX 270
SOUTHBOROUGH, MA

DEED REFERENCE: BOOK 64133 PAGE 103

ASSESSOR'S MAP 54 PARCEL 43

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REV. NO.	DATE	REVISION	MADE BY	CHKD BY	APPD BY
1	1/28/25	ADDRESS COMMENTS & REISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB
0	11/1/24	ISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB



DRAWING TITLE:
**LAYOUT & MATERIALS
GRADING & DRAINAGE PLAN**

PREPARED FOR:
PETER BEMIS
P.O. BOX 270
SOUTHBOROUGH, MASSACHUSETTS

SCALE: 1" = 20'

DATE: NOVEMBER 1, 2024

SHEET: 2 OF 4

PLAN NO.: 3650 SITEPLAN
FILE NO.: 3650 SITE PLAN.dwg

PROJECT TITLE:
**2 EAST MAIN STREET SITE PLAN
2 EAST MAIN STREET
SOUTHBOROUGH, MASSACHUSETTS**

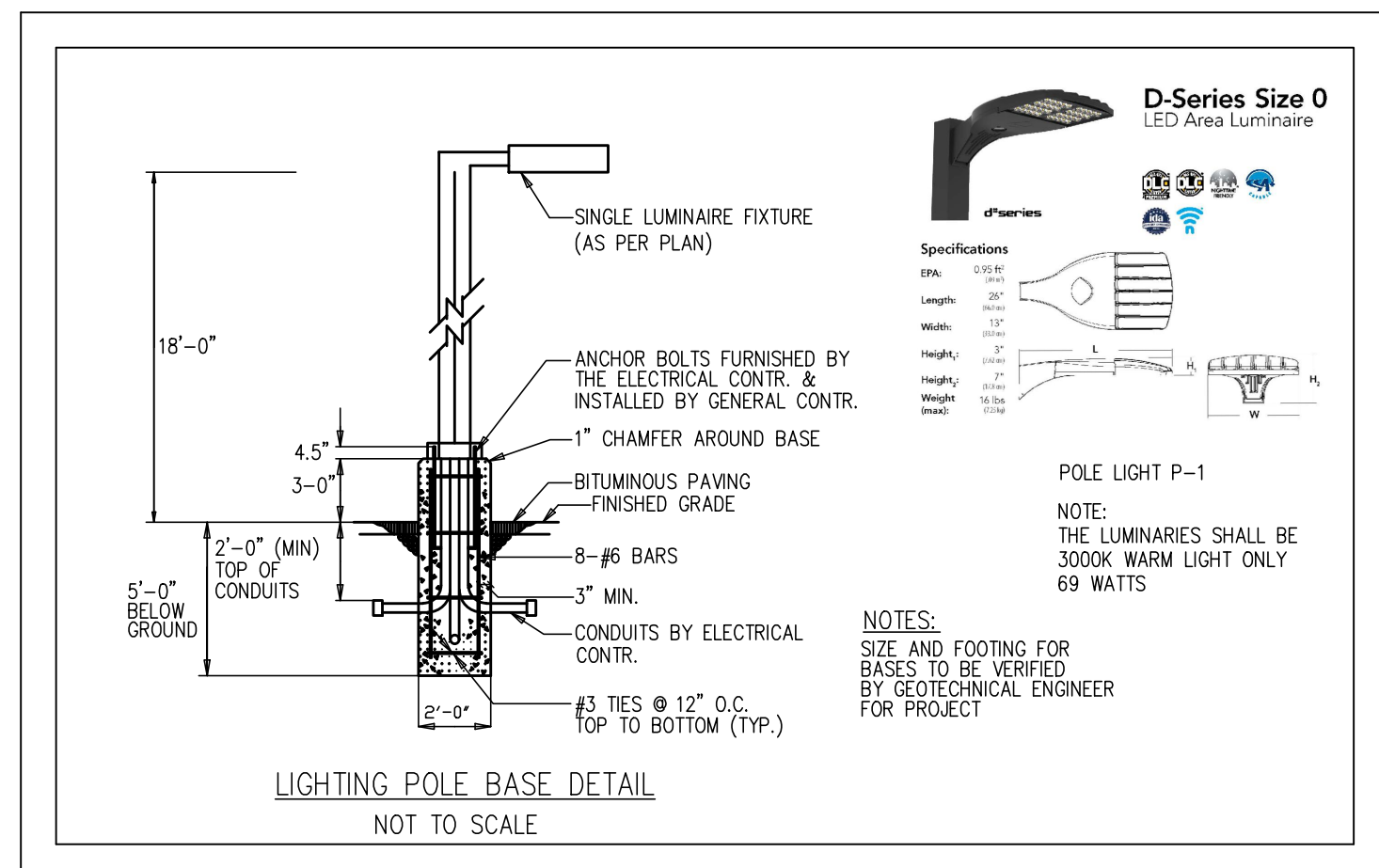
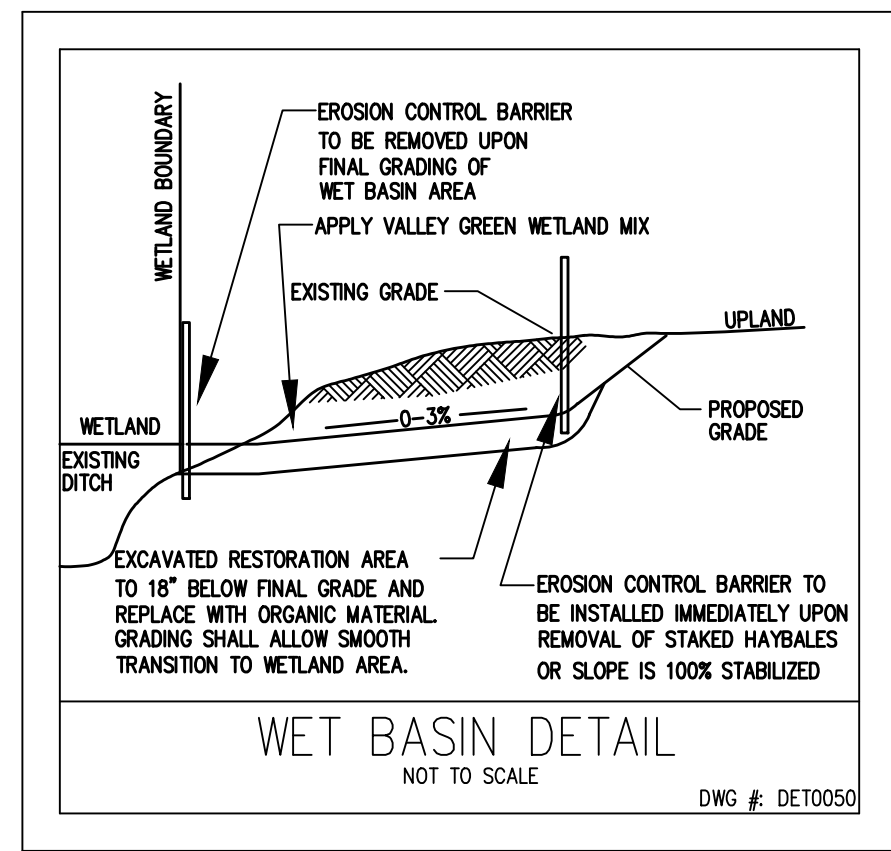
PREPARED BY:
Engineering Design Consultants, Inc.
32 Turnpike Road
Southborough, Massachusetts 01772
TELE NO.: (508) 480-0225 FAX NO.: (508) 485-1937

TOWN OF SOUTHBOROUGH
PLANNING BOARD
MAJOR SITE PLAN &
DOWNTOWN DISTRICT

DATE: _____

SHEET NO.:

2

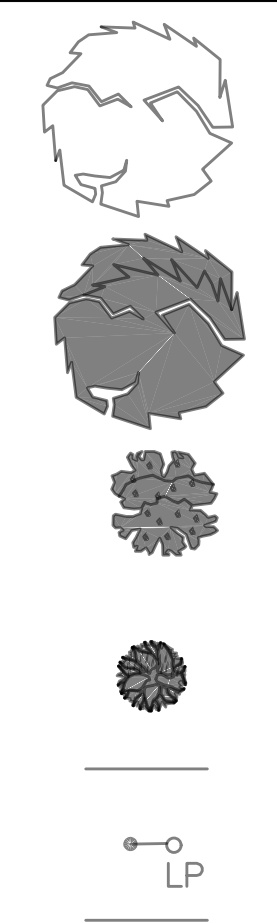


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DIGSAFE IS TO BE NOTIFIED 72 BUSINESS HOURS IN ADVANCE OF CONSTRUCTION. CALL DIGSAFE AT 811

DIG SAFE CALL-811



EXISTING TREE TO BE RETAINED

PROPOSED SWEETGUM TREE (2.5"–3.0" CAL.) 2 PROPOSED LIQUIDAMBAR STYRACIFLUA

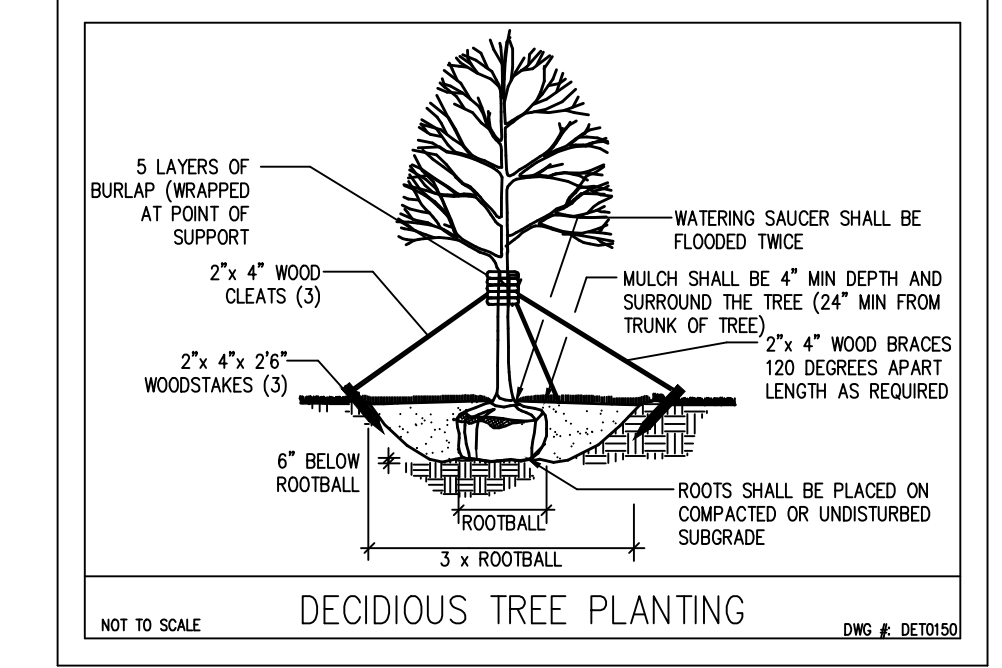
PROPOSED FLOWERING DOGWOOD TREE (2.0"–2.5" CAL.) 5 PROPOSED CORNUS FLORIDA

PROPOSED GREEN GIANT ARBORVITAE TREE (6'–8' HT.) 8 PROPOSED THUJA STANDISHII X PLICATA

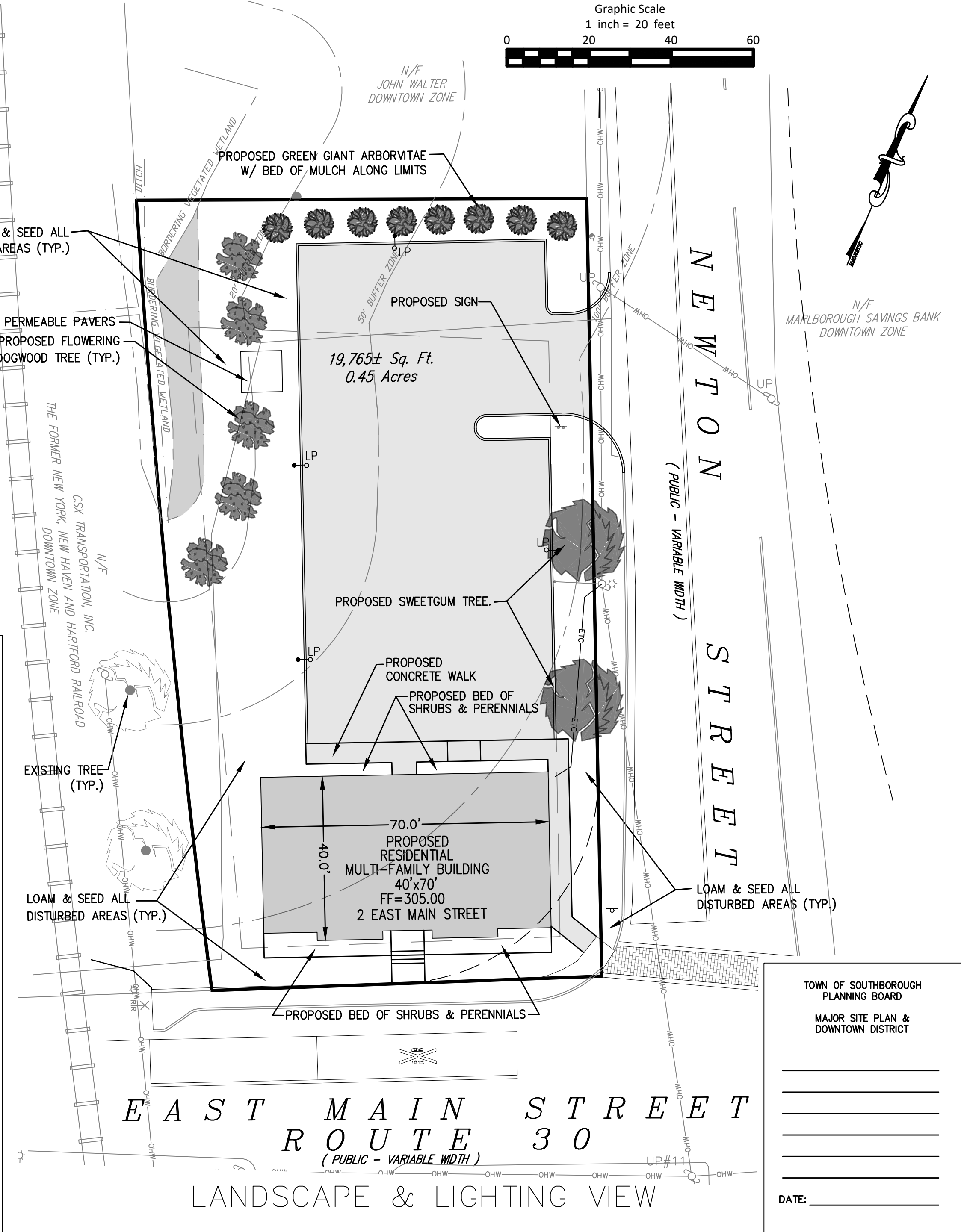
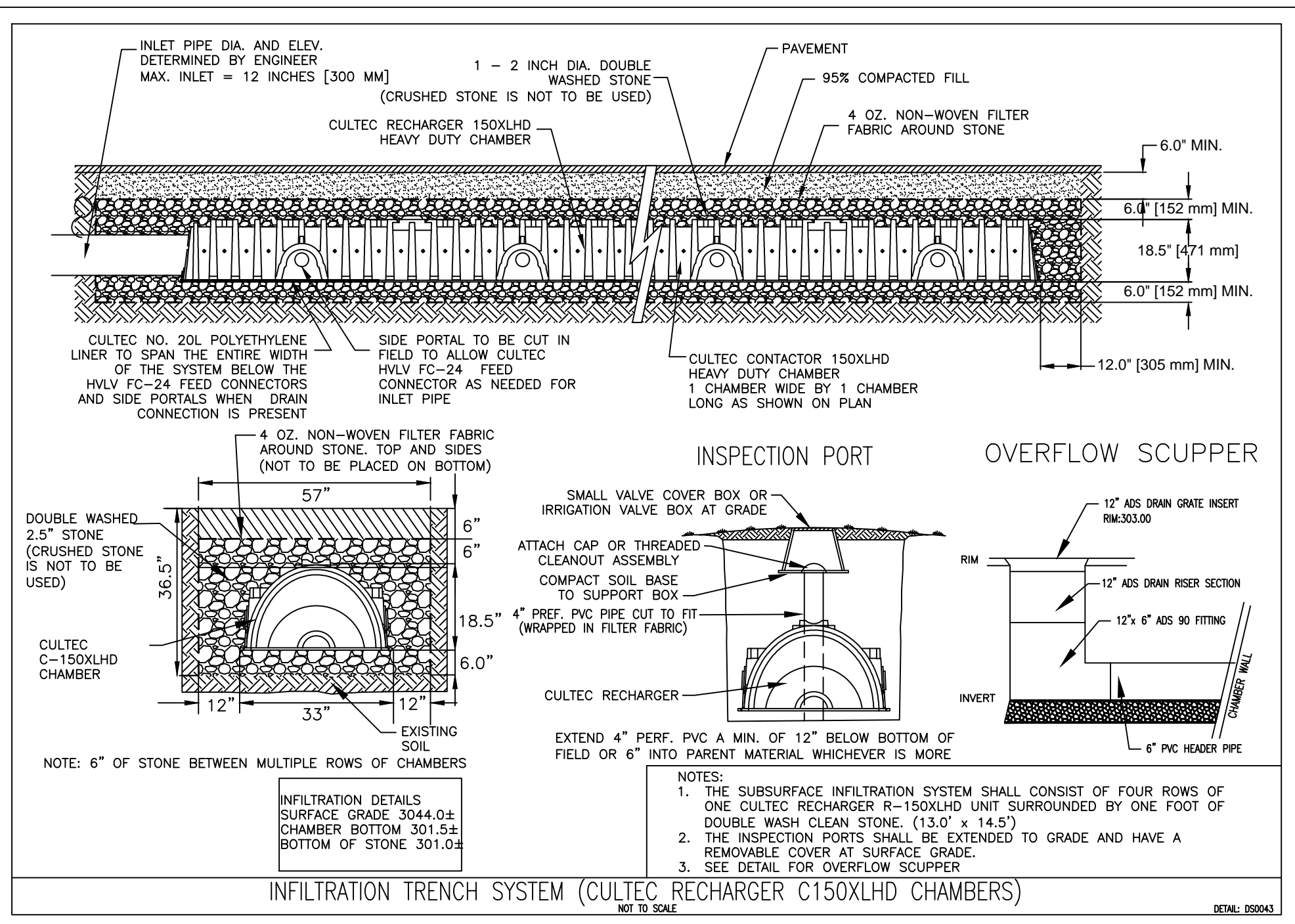
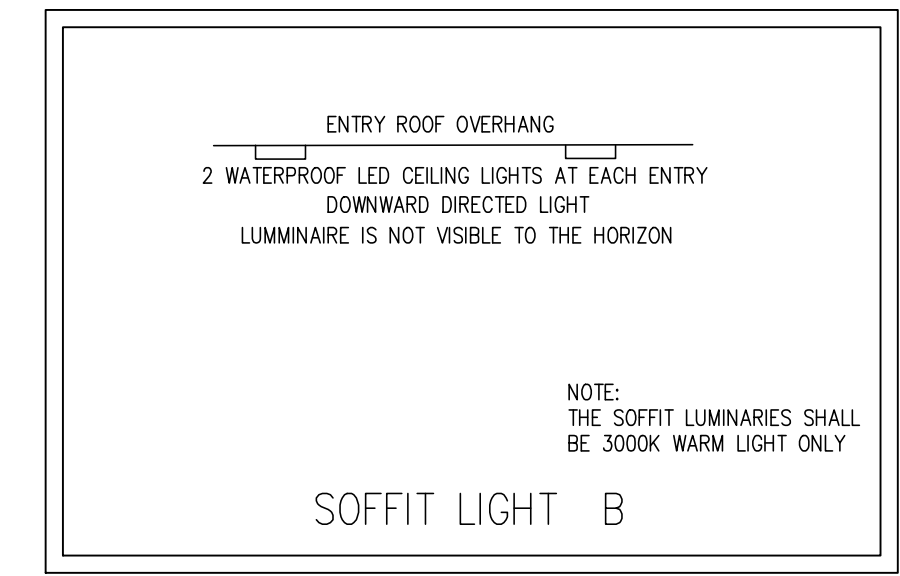
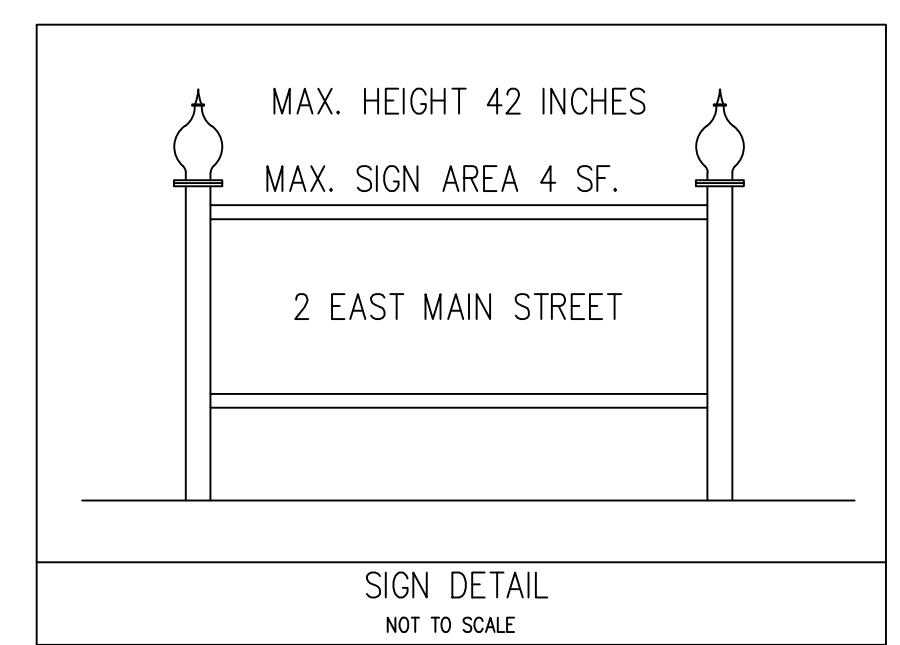
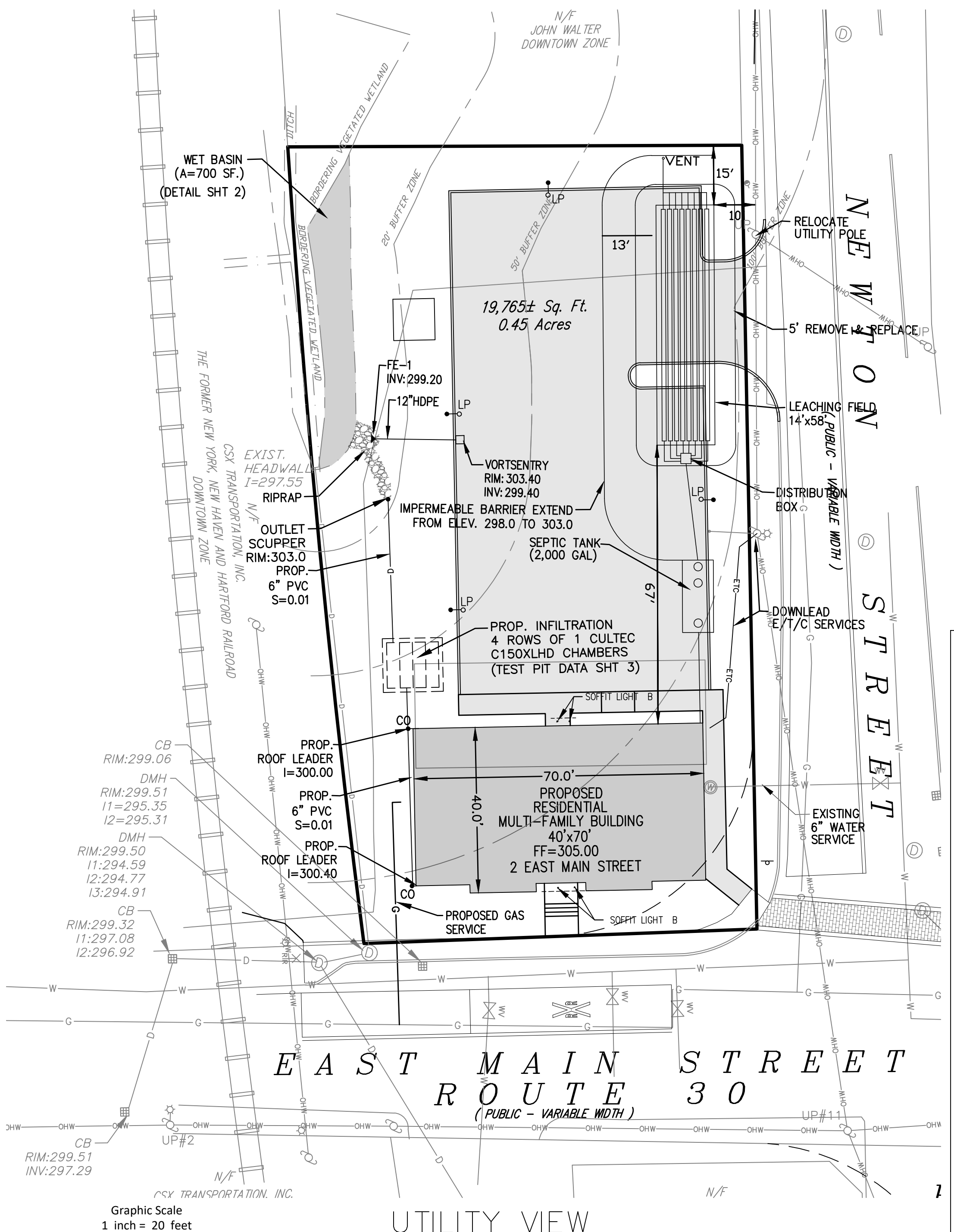
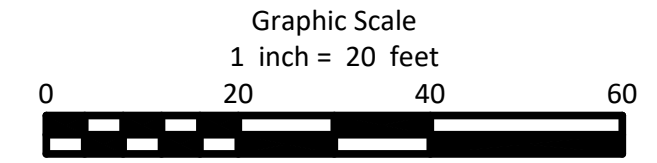
PROPOSED FENCE SHALL BE 6' HT. BOARD TYPE

PROPOSED LIGHT POLE & BASE

PROPOSED SIGN SHALL BE MAX. 3.5' HT. W/ MAX. 4 SF. AREA



**2 EAST MAIN STREET
MAP 54 PARCEL 43**



**2 EAST MAIN STREET
MAP 54 PARCEL 43**

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REV. NO.	DATE	REVISION	MADE BY	CHKD BY	APPD BY
1	1/28/25	ADDRESS COMMENTS & REISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB
0	11/1/24	ISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB



DRAWING TITLE: **UTILITY LANDSCAPE & LIGHTING PLAN**

PREPARED FOR: **PETER BEMIS
P.O. BOX 270
SOUTHBOROUGH, MASSACHUSETTS**

SCALE: 1" = 20'

DATE: NOVEMBER 1, 2024

SHEET: 3 OF 4

PLAN NO.: 3650 SITE PLAN
FILE NO.: 0650 SITE PLAN.dwg

PROJECT TITLE: **2 EAST MAIN STREET SITE PLAN
2 EAST MAIN STREET
SOUTHBOROUGH, MASSACHUSETTS**

PREPARED BY: **Engineering Design Consultants, Inc.
32 Turnpike Road
Southborough, Massachusetts
(508) 480-0225**

SHEET NO.: **3**

CONSTRUCTION NOTES

- THE CONTRACTOR SHALL REPORT TO THE OWNER AND ENGINEER ANY SIGNIFICANT VARIATIONS IN EXISTING SITE CONDITIONS FROM THOSE SHOWN ON THESE PLANS. ANY PROPOSED REVISIONS TO THE WORK, IF REQUIRED BY THESE SITE CONDITIONS, SHALL NOT BE UNDERTAKEN UNTIL REVIEWED BY THE OWNER AND THE ENGINEER.
- THE CONTRACTOR SHALL NOTIFY THE RELEVANT TOWN DEPARTMENTS AT LEAST 48 HOURS IN ADVANCE OF ANY REQUIRED INSPECTIONS.
- IN ORDER TO PROTECT THE PUBLIC SAFETY DURING CONSTRUCTION, THE CONTRACTOR IS RESPONSIBLE FOR INSTALLING AND MAINTAINING AT ALL TIMES NECESSARY SAFETY DEVICES AND PERSONNEL, WARNING LIGHTS, BARRICADES, AND POLICE DETAILS.
- THE CONTRACTOR SHALL REGULARLY INSPECT THE PERIMETER OF THE PROPERTY TO CLEAN UP AND REMOVE LOOSE CONSTRUCTION.
- IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO INSTITUTE EROSION CONTROL MEASURES ON AN AS NECESSARY BASIS, SUCH THAT EXCESSIVE SOIL EROSION DOES NOT OCCUR. MEASURES SHALL INCLUDE MAY BALE DIKES ALONG THE PERIMETER OF CUTS AND FILLS, MULCHING, AND PLANTING OF DISTURBED AREAS AS SOON AS PRACTICABLE.
- AT THE END OF CONSTRUCTION THE CONTRACTOR SHALL REMOVE ALL CONSTRUCTION DEBRIS AND SURPLUS MATERIALS FROM THE SITE. A THOROUGH INSPECTION OF THE WORK PERIMETER IS TO BE MADE AND ALL DISCARDED MATERIALS, BLOWN OR WATER CARRIED DEBRIS, SHALL BE COLLECTED AND REMOVED.
- UNLESS OTHERWISE SPECIFIED, ON-SITE FILL SHALL BE GRAVELLY FILL COMPOSED OF SAND, GRAVEL, CRUSHED STONE, OR MIXTURES THEREOF. THE MATERIAL IS TO BE FREE OF ORGANIC MATTER AND SHALL NOT CONTAIN MORE THAN 30% FINE PARTICLES AS MEASURED BY TOTAL PERCENT WEIGHT. FINE PARTICLES SHALL BE THOSE PASSING A NO. 200 SIEVE (0.0029 INCHES OR 75 MICROMETERS). SUCH MATERIAL SHALL NOT BE FROZEN WHEN PLACED AND IT SHOULD RETAIN ITS FREE-DRAINING PROPERTIES AFTER COMPACTION.
- THE GENERATION OF DUST MUST BE MINIMIZED TO AVOID POLLUTANTS FROM BEING DISCHARGED INTO SURFACE WATERS. AS NEEDED, DUST CONTROL WILL BE MAINTAINED BY LIMITING SOIL EXPOSURE VIA THE USE OF MULCH, VEGETATIVE COVER, STONE OR TARPS. AS NEEDED IRRIGATION SPRINKLERS OR WATER TRUCK APPLICATIONS MAY BE USED DURING GRADING TO MINIMIZE AIRBORNE SEDIMENT TRANSPORT. REPETITIVE TREATMENTS WILL BE DONE AS NECESSARY UNTIL SURFACES ARE PAVED OR OTHERWISE STABILIZED. CALCIUM CHLORIDE SPRAY OR CHEMICAL ADHESIVE APPLICATION SHALL ONLY BE USED IF OTHER ALTERNATIVES ARE DEEMED INEFFECTIVE AND UPON APPROVAL FROM THE CONSERVATION COMMISSION. AT THE END OF CONSTRUCTION, AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE CONTRACTOR SHALL CLEAN THE SLOPES OF ALL CATCH BASINS AND THE INVERTS OF ALL DRAINS.
- THE LOCATION OF UNDERGROUND UTILITIES AS REPRESENTED ON THESE PLANS IS BASED UPON PLANS AND INFORMATION PROVIDED BY THE RESPECTIVE UTILITY COMPANIES OR MUNICIPAL DEPARTMENTS SUPPLEMENTED BY FIELD IDENTIFICATION WHEREVER POSSIBLE. NO WARRANTY IS MADE AS TO THE ACCURACY OF THESE LOCATIONS OR THAT ALL UNDERGROUND UTILITIES ARE SHOWN. THE CONTRACTOR IS TO CONTACT DIG SAFE AT LEAST 72 HOURS PRIOR TO THE START OF CONSTRUCTION. DIG SAFE TELEPHONE NUMBER IS 811.
- THE CONTRACTOR IS TO VERIFY THE LOCATION, SIZE, AND DEPTH OF EXISTING UTILITIES PRIOR TO TAPPING INTO, CROSSING OR EXTENDING THEM. IF THE PROPOSED WORK POSES A CONFLICT WITH THE EXISTING UTILITIES, THE ENGINEER IS TO BE NOTIFIED PRIOR TO THE CONTRACTOR CONTINUING.
- REFER TO ARCHITECTURAL DRAWINGS FOR EXACT BUILDING DIMENSIONS, DOOR LOCATIONS, AND ENTRY DETAILS.
- REFER TO PLUMBING DRAWINGS FOR EXACT SIZE AND LOCATION OF WATER, ROOF DRAIN AND SANITARY SEWER CONNECTIONS.
- REFER TO ELECTRICAL DRAWINGS FOR SITE LIGHTING CIRCUITS, FIXTURE DETAILS AND BUILDING CONNECTION LOCATIONS. ELECTRICAL CONTRACTOR SHALL CONFIRM THAT SITE LIGHTING LAYOUT WILL PROPERLY COVER PARKING LOT LIMITS AND NOT CAST GLARE UPON ADJOINING PROPERTIES.
- ALL REINFORCED CONCRETE PIPE IS TO BE CLASS III. ALL PVC SANITARY SEWER TO BE SDR 35 WITH RUBBER RING JOINTS. ALL PVC STORM DRAIN (PERFORATED AND SOLID) SHALL BE SDR 35, ADS TYPE N12 POLYETHYLENE PIPE OR APPROVED EQUAL. WATER MAIN IS TO BE CLASS 52 CEMENT LINED DUCTILE IRON.
- WALKS SHALL BE OF 4" THICK PORTLAND CEMENT AND SHALL BE CONSTRUCTED ON 6" OF THICK COMPACTED BANK RUN GRAVEL. CONCRETE FOR WALKS SHALL HAVE A MINIMUM 28 DAY COMPRESSION STRENGTH OF 4,000 PSI. WALKS SHALL BE REINFORCED WITH WWM 6X6 #10/10, CONFORMING TO ASTM A184.

- THE TOWN OF SOUTHBOROUGH DEPARTMENT OF PUBLIC WORKS IS TO BE NOTIFIED PRIOR TO THE START OF ANY WORK ON NEWTON/EAST MAIN STREETS.
- THE TOWN OF SOUTHBOROUGH DEPARTMENT OF PUBLIC WORKS IS TO BE NOTIFIED PRIOR TO THE START OF ANY WORK ON THEIR SERVICES.
- NO LEDGE, BOULDERS, OR OTHER UNYIELDING MATERIALS ARE TO BE LEFT WITHIN 6" OF THE WATER AND SEWER IN THE TRENCH, NOR ARE THEY TO BE USED FOR BACKFILL FOR THE FIRST 12" ABOVE THE SERVICES.
- STANDARD PAVEMENT AREAS SHALL HAVE 12 INCHES OF GOOD, CLEAN BANK-RUN GRAVEL, CONFORMING TO MPMW M1.03.1, WITH NO STONES LARGER THAN 3" IN DIAMETER AND SHALL BE PLACED AND ROLLED WITH AT LEAST A TEN TON ROLLER. THE SURFACES SHALL BE WET DURING ROLLING TO BIND THE MATERIAL. ALL STONES OF 4" DIAMETER OR LARGER SHALL BE REMOVED FROM THE SUB-BASE PRIOR TO PLACING BASE MATERIAL.
- STANDARD PAVEMENT AREAS SHALL BE PAVED TO A THICKNESS OF 3" MEASURED AFTER COMPACTION, WITH A 2" BINDER COURSE AND 1" TOP COURSE OF CLASS I BITUMINOUS CONCRETE PAVEMENT, TYPE I-1.
- THE AGGREGATE SHALL BE COMPOSED, MIXED AND LAID HOT IN TWO COURSES AS SPECIFIED IN THE "COMMONWEALTH OF MASSACHUSETTS STANDARD SPECIFICATIONS FOR HIGHWAY AND BRIDGES", 1988 EDITION SECTION 460 FOR CLASS I BITUMINOUS CONCRETE PAVEMENT, AS SPECIFICALLY SET FORTH IN SECTION 460.20 AND 460.22.
- ANY EXISTING PAVEMENT REMOVED FOR UTILITY TRENCH EXCAVATION WITHIN CONSTITUTION BOULEVARD OR OTHERWISE DAMAGED DURING CONSTRUCTION, SHALL BE REPLACED WITH A FULL DEPTH OF PAVEMENT SECTION AS SHOWN ON THE TRENCH PATCHING DETAIL IDENTIFIED HEREON.
- EROSION CONTROL GRASS MIXTURE (SIDE SLOPE GREATER THAN 4 HORIZONTAL TO 1 VERTICAL) FOLLOWING COMPLETION OF GRADING. THE FOLLOWING SEED MIX SHALL BE APPLIED:

TYPE OF SEED % BY WEIGHT

CREeping RED FESCUE	30
TALL FESCUE	30
WHITE DUTCH CLOVER	30
RED TOP	10

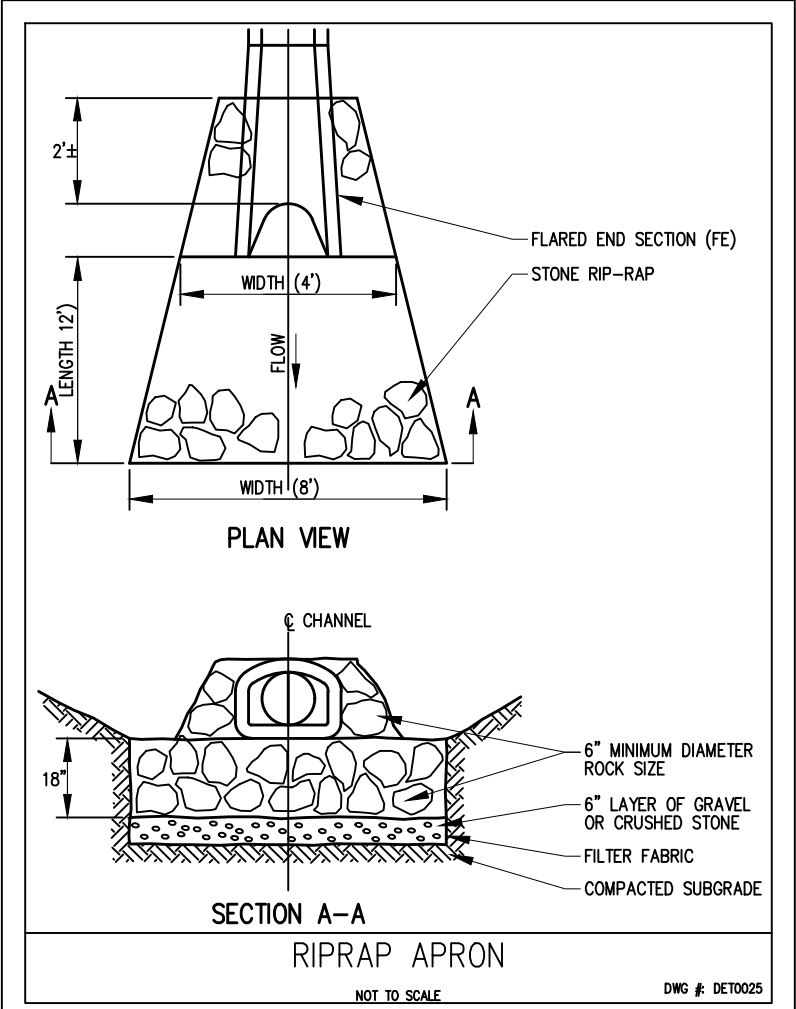
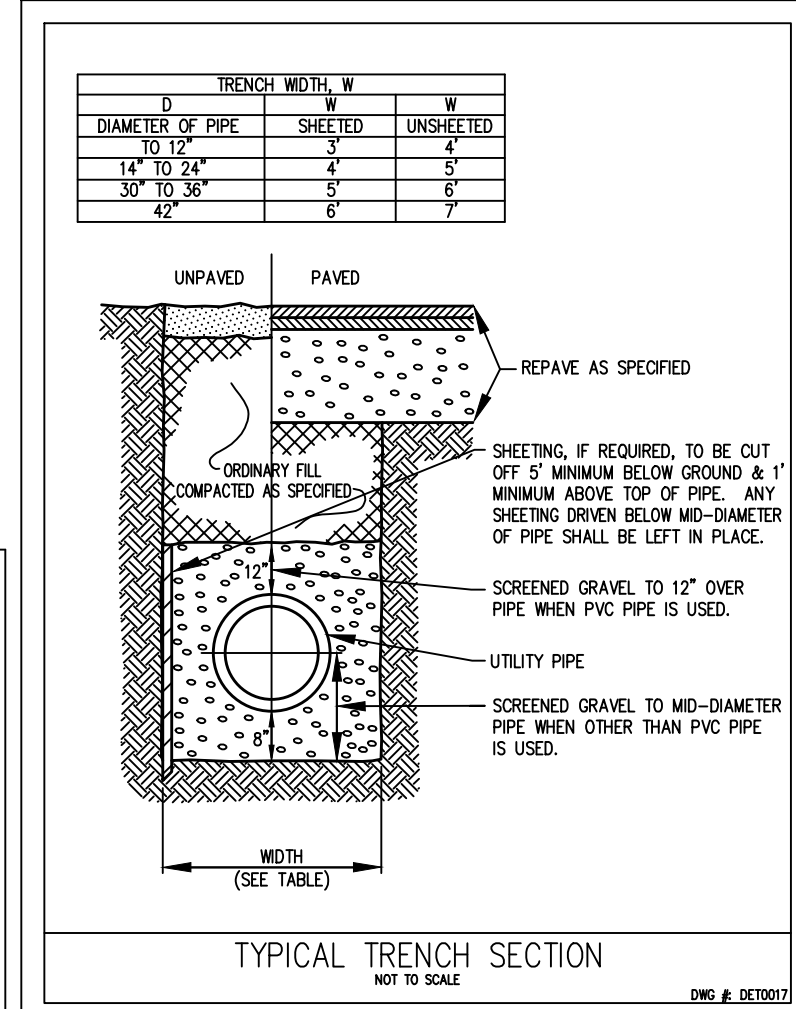
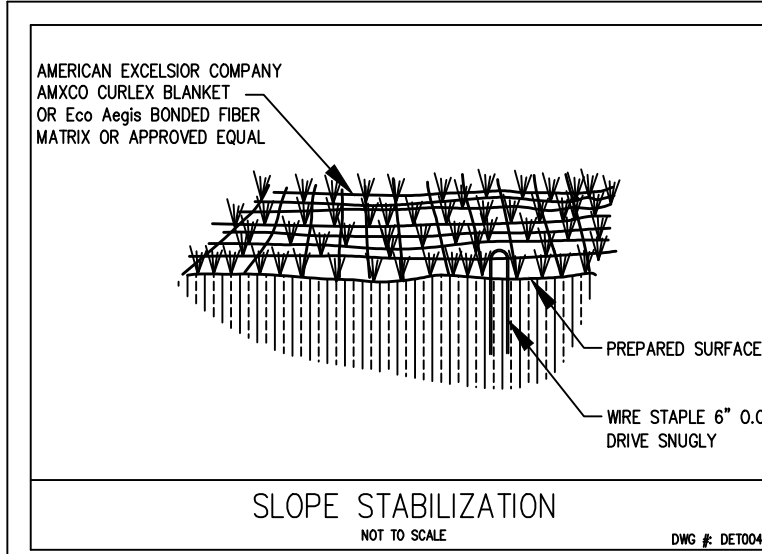
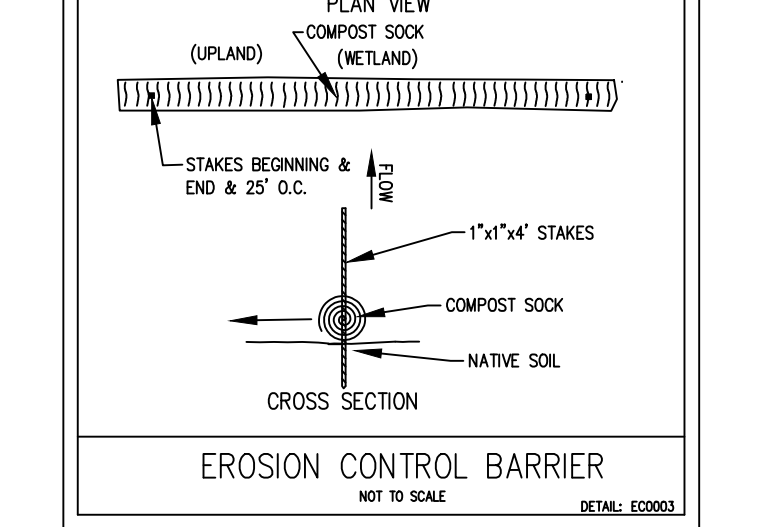
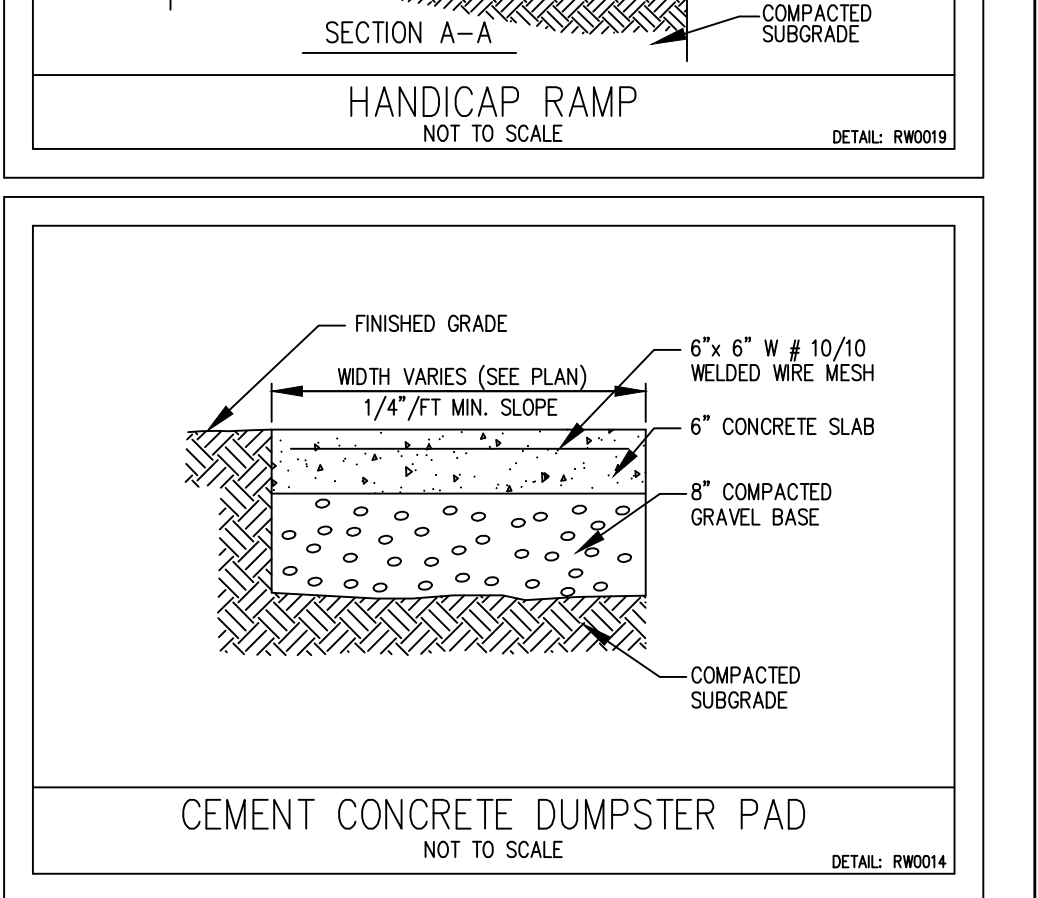
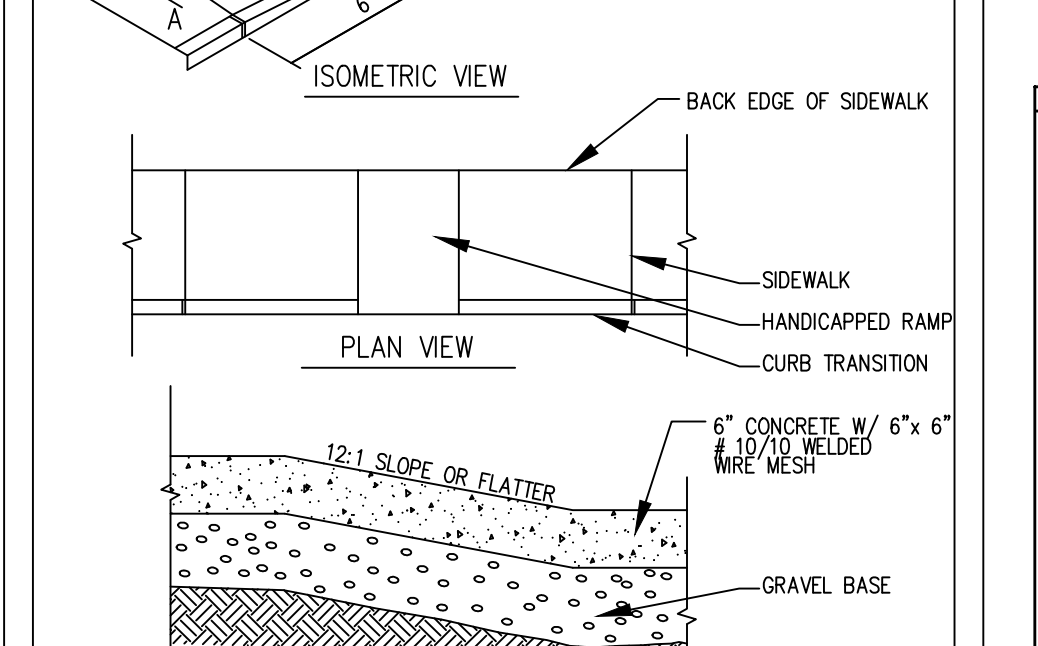
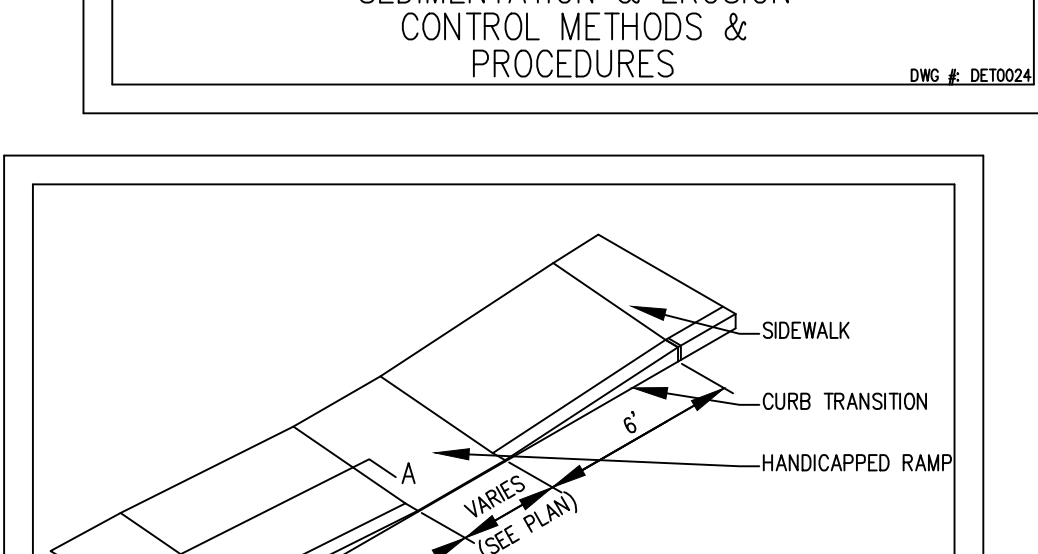
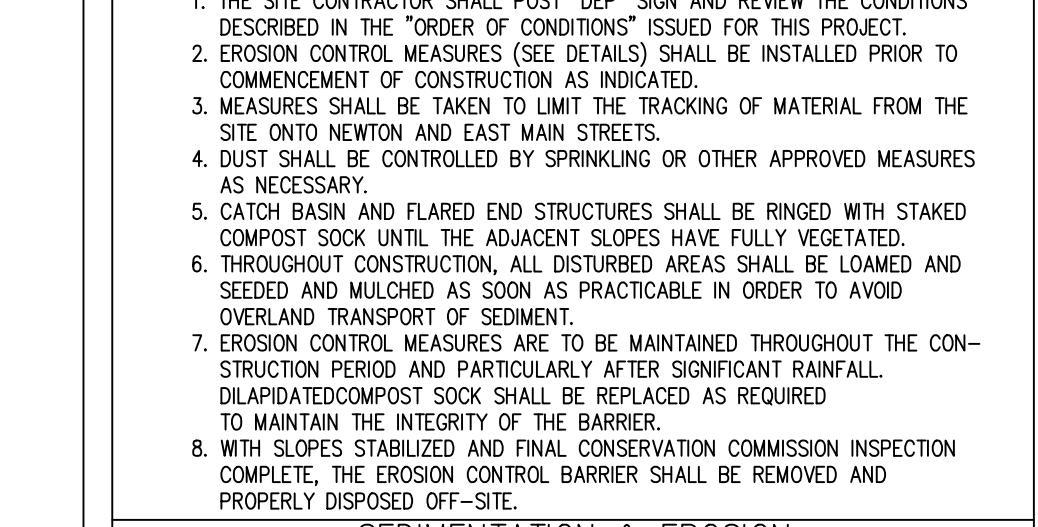
SEED AT THE RATE OF 2#/2,000 SF
USE THE ABOVE MIX AT THE RATE OF 50#/ACRE AND WITH 1/2 BUSHEL/ACRE OF WINTER RYE

SOIL TEST DATA

DEPTH	TEST	RESULT
DEEP HOLE # DTH-2		302.2
48"	FILL	298.2
54" B	SANDY LOAM 10YR6/4	297.7
66"	5YR5/6 MOTTLES	296.7
72"	STANDING WATER	296.2
108" C	SANDY LOAM 2.5YR5/3	293.3

66" ESTIMATED SEASONAL HIGH GROUNDWATER = 296.7

SOIL TESTS PERFORMED BY: PETER BEMIS, SOIL EVALUATOR ON JUNE 10, 2004. PETER BEMIS PASSED THE SOIL EVALUATOR EXAMINATION APPROVED BY DEP IN NOVEMBER 1994 AND HAS CERTIFIED THAT HIS ANALYSIS WAS PERFORMED CONSISTENT WITH 310 CMR 15.017. SOIL TESTS WITNESSED BY PAUL PINSKI, SBOH.



VORTSENTRY HS DESIGN NOTES

VISHI RATED TREATMENT CAPACITY IS SHOWN IN THE TABLE BELOW, OR PER LOCAL REGULATIONS. MAXIMUM HYDRAULIC INTERNAL BYPASS CAPACITY VARIES. CONTACT YOUR CONTECH REPRESENTATIVE FOR ADDITIONAL INFORMATION.

THE STANDARD SOLID COVER CONFIGURATION IS SHOWN. ALTERNATE CONFIGURATIONS ARE AVAILABLE AND ARE LISTED BELOW.

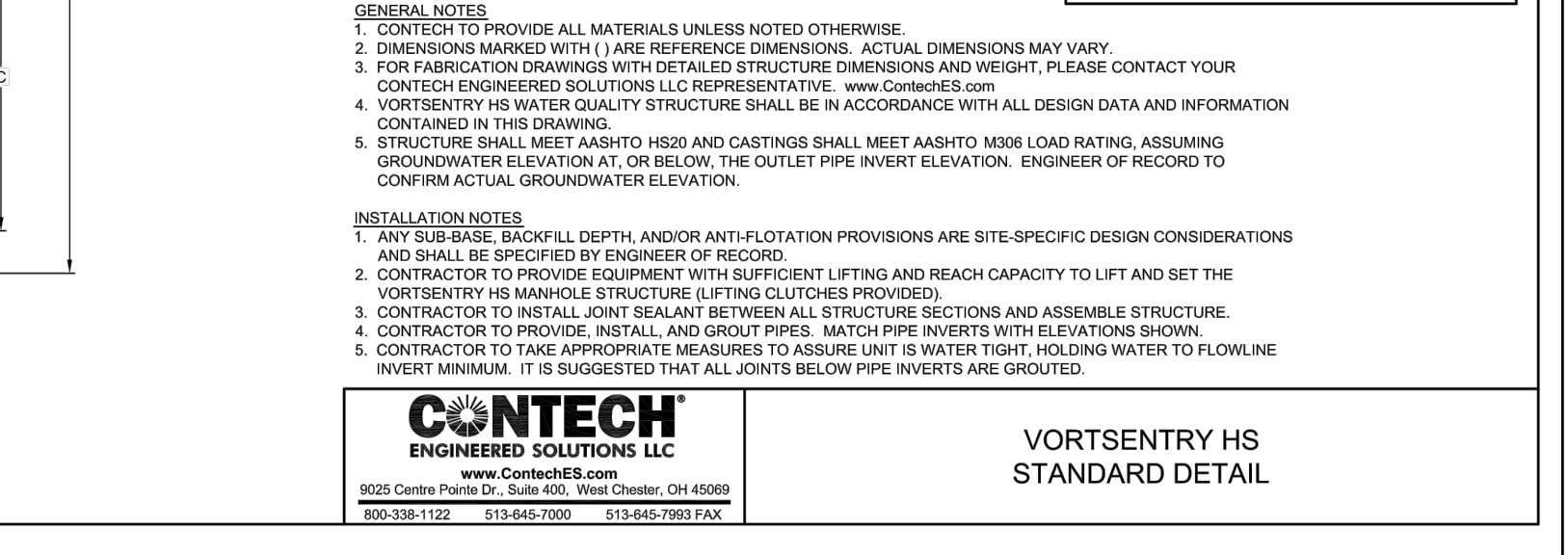
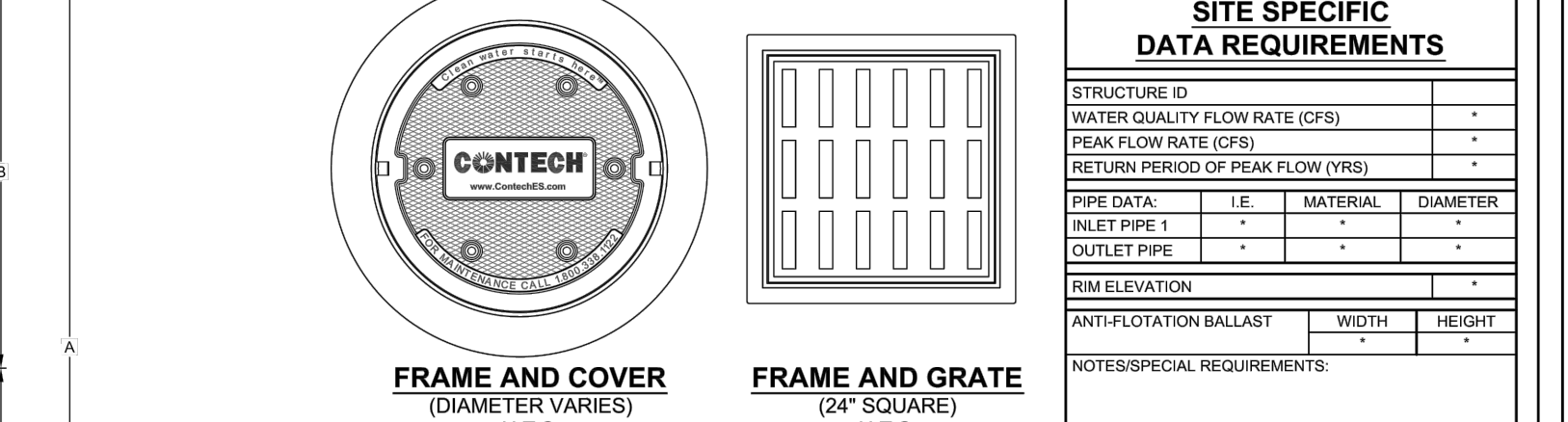
CONFIGURATION OPTION DESCRIPTION

GRATE (W/ET RET. ALLET PIPE)

GRATE INLET WITH INLET PIPE

VORTSENTRY HS GENERAL INFORMATION

Model	Manhole Diameter (D)		Total Treatment Flow Rate		Typical Total Distance From to Outside Bottom		Typical Distance From to Invert		Typical Depth Below Invert (inside)		Approximate Minimum Distance From to Invert		Maximum Pipe Diameter (D)	
	FT	MM	GFS	LBS	FT	M	FT	M	FT	MM	FT	M	IN	MM
HS43	3	900	0.55	16.6	10.16	3.10	4.08	1.24	5.58	1702	3.00	0.91	18	455
HS46	4	1200	1.20	34.0	13.25	4.04	6.00	1.83	8.75	2057	4.00	1.22	24	600
HS50	5	1500	2.20	62.3	15.13	4.61	6.50	1.98	7.96	2426	4.52	1.47	30	750
HS72	6	1800	3.70	104.8	16.56	5.05	6.75	2.06	9.15	2788	5.59	1.70	36	900
HS84	7	2100	5.60	158.6	18.85	5.75	7.75	2.36	10.35	3156	5.00	1.52	42	1050
HS96	8	2400	8.10	229.4	20.87	6.38	8.50	2.59	11.54	3518	6.81	2.11	48	1200

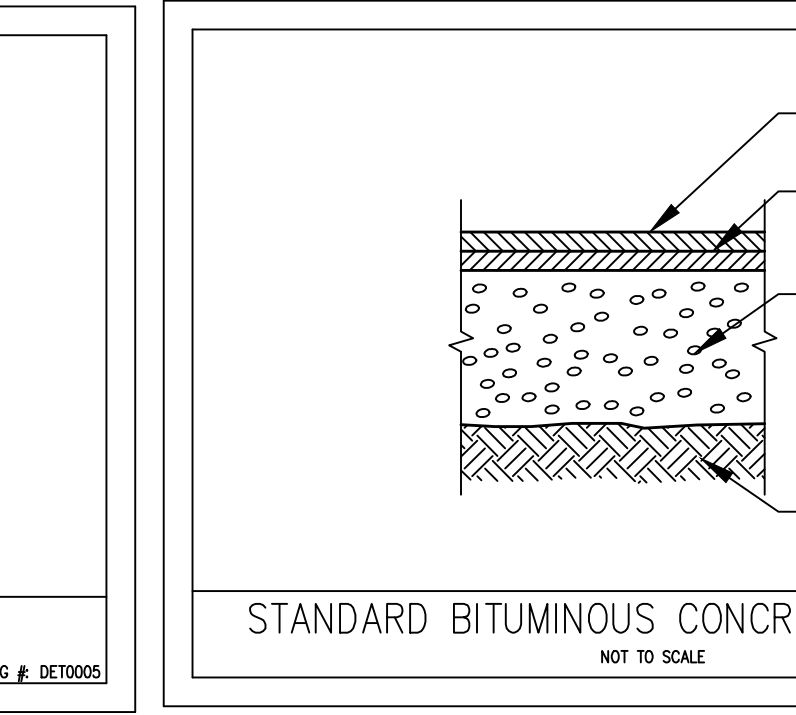
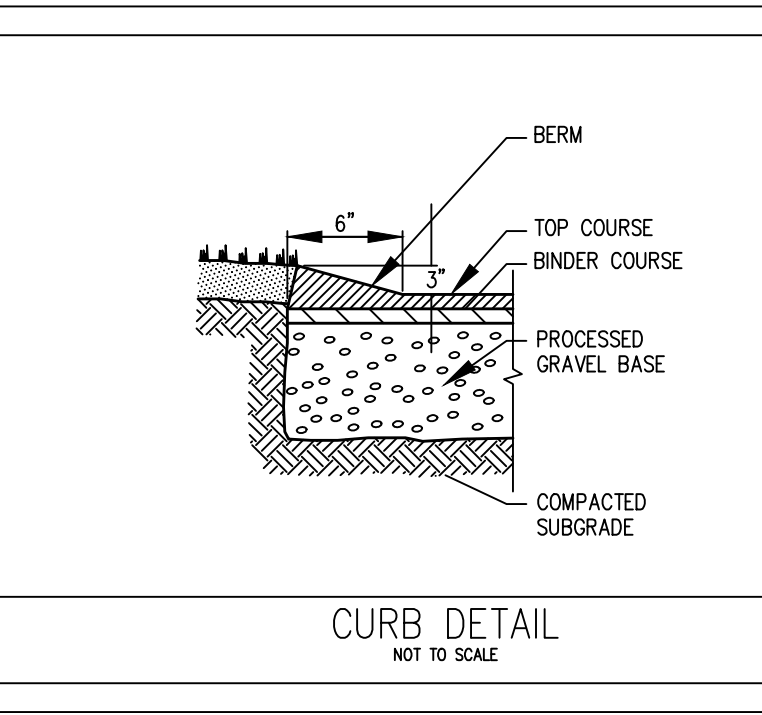
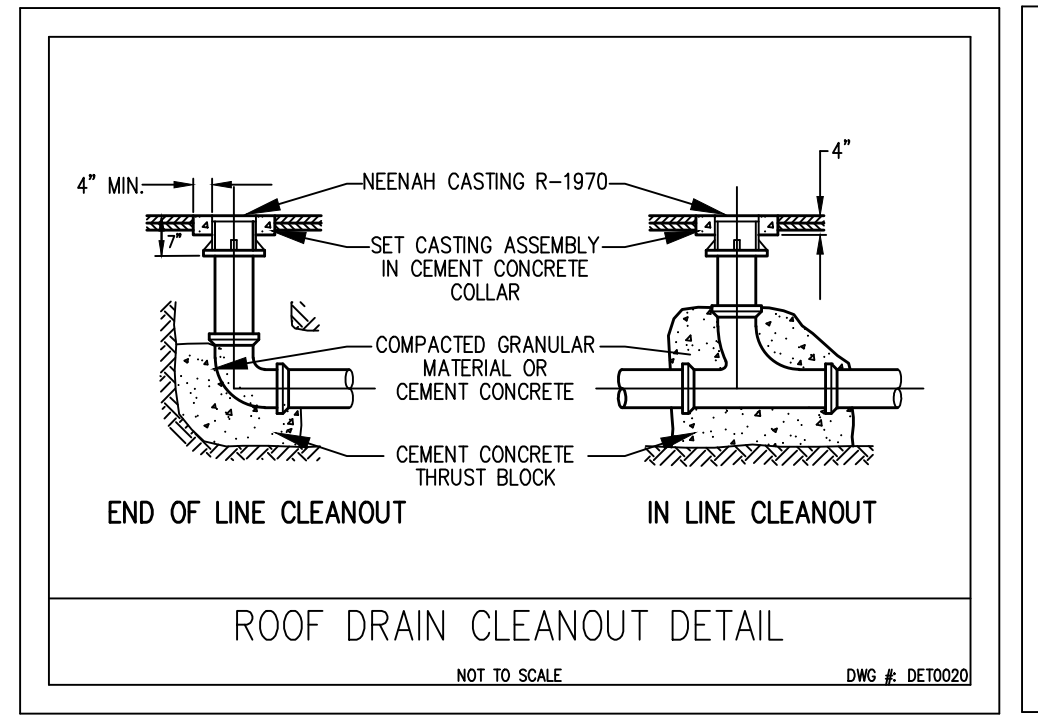
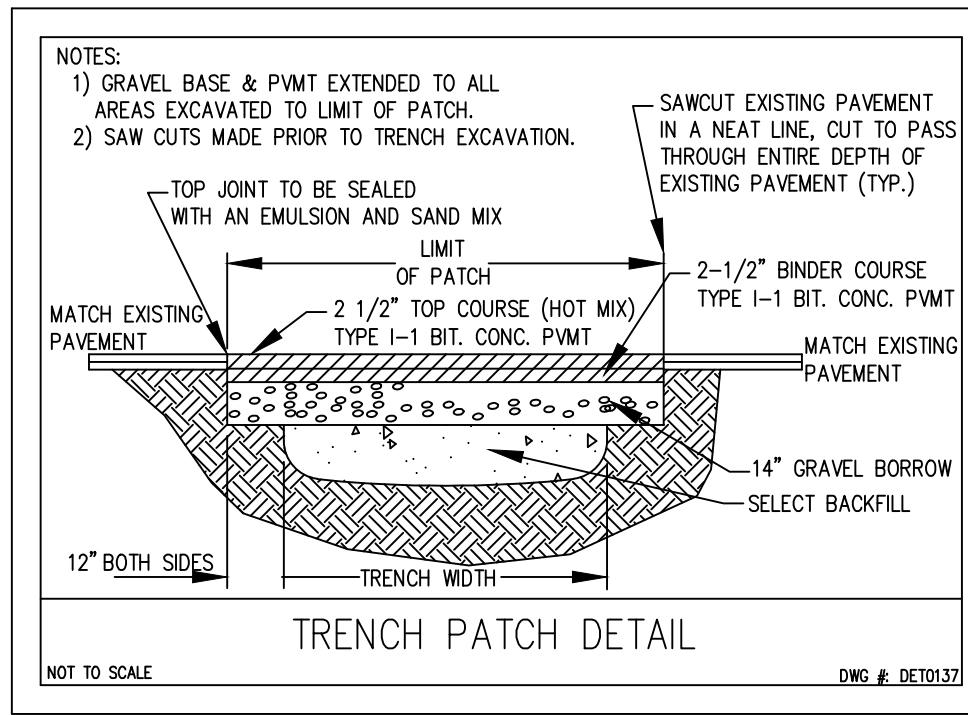
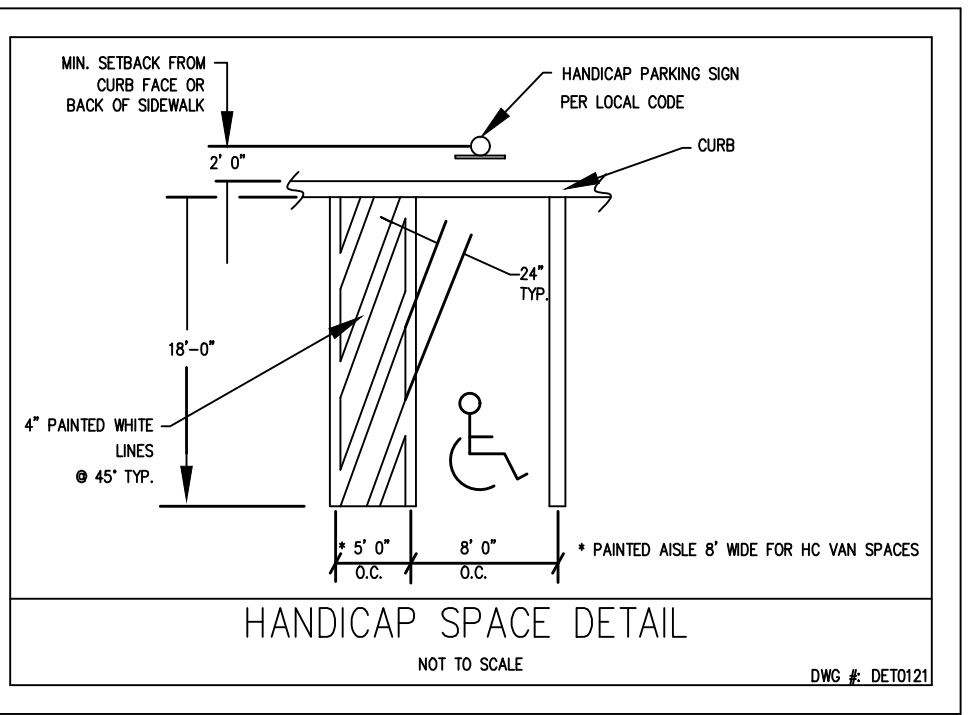
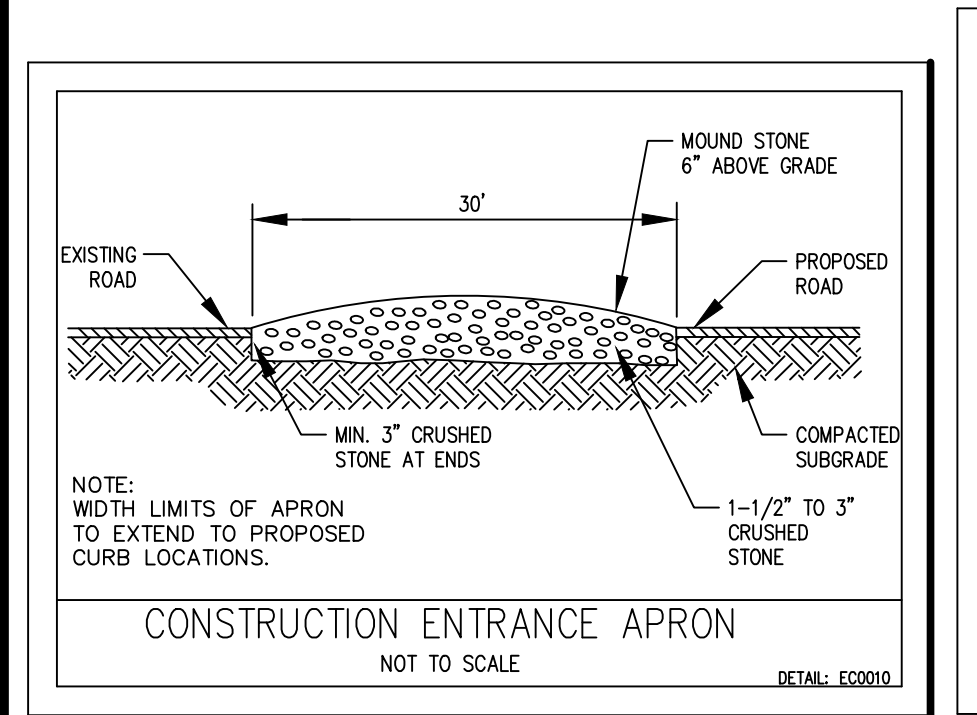


1. VORTSENTRY: SHOULD BE INSPECTED ON AN ANNUAL BASIS OR MORE FREQUENTLY AS PER O&M PLAN AND/OR ADVISED BY THE SOUTHBORO CONCOM ADMINISTRATOR. SEDIMENT REMOVAL SHOULD BE ACCOMPLISHED BY MEANS OF VACUUM PUMPING AND NOT BY MEANS OF A CLAMSHELL BUCKET (SEE MANUFACTURER'S MANUAL).

2. GENERAL RECOMMENDATIONS: THE USE OF SAND IN PAVED AREAS SHOULD BE KEPT TO A MINIMUM. THE PAVED AREAS OF THE SITE SHOULD BE SWEPT AFTER VISIBLE SEDIMENT ACCUMULATION HAS OCCURRED.

STORMWATER COLLECTION & TREATMENT SYSTEM INSPECTION & MAINTENANCE GUIDELINES

(DWG # DET001)



TOWN OF SOUTHBOROUGH PLANNING BOARD

MAJOR SITE PLAN & DOWNTOWN DISTRICT

DATE: _____

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1	1/28/25	ADDRESS COMMENTS & REISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB
0	11/1/24	ISSUED FOR SITE PLAN REVIEW	PSB	WML	PSB
		MADE BY	CHKD BY	APPD BY	



DRAWING TITLE: CONSTRUCTION NOTES & DETAILS

PREPARED FOR: PETER BEMIS, P.O. BOX 270, SOUTHBOROUGH, MASSACHUSETTS

SCALE: AS NOTED

DATE: NOVEMBER 1, 2024

SHEET: 4 OF 4

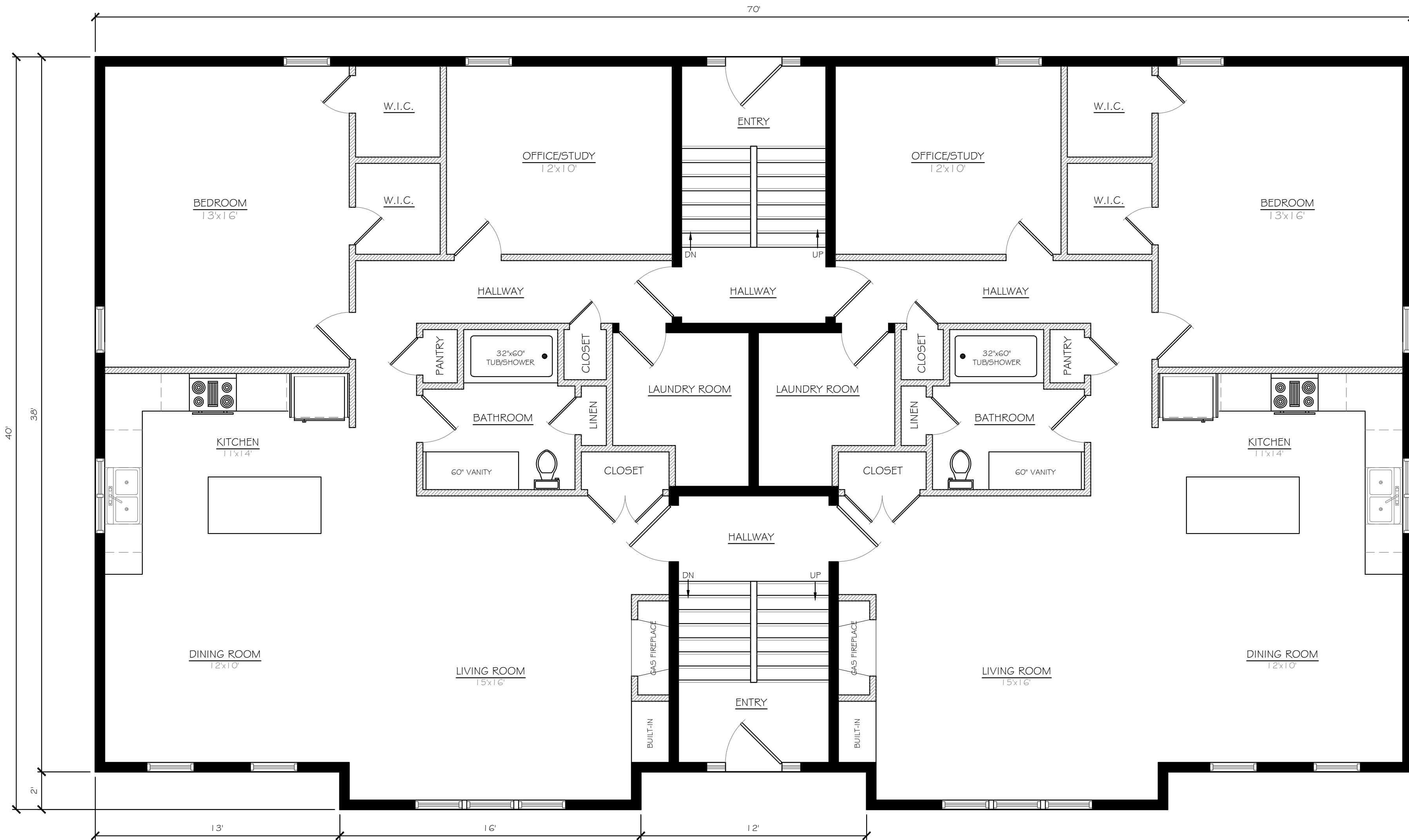
PLAN NO.: 3650 SITE PLAN

FILE NO.: 3650 SITE PLAN.dwg

PROJECT TITLE: 2 EAST MAIN STREET SITE PLAN, 2 EAST MAIN STREET, SOUTHBOROUGH, MASSACHUSETTS

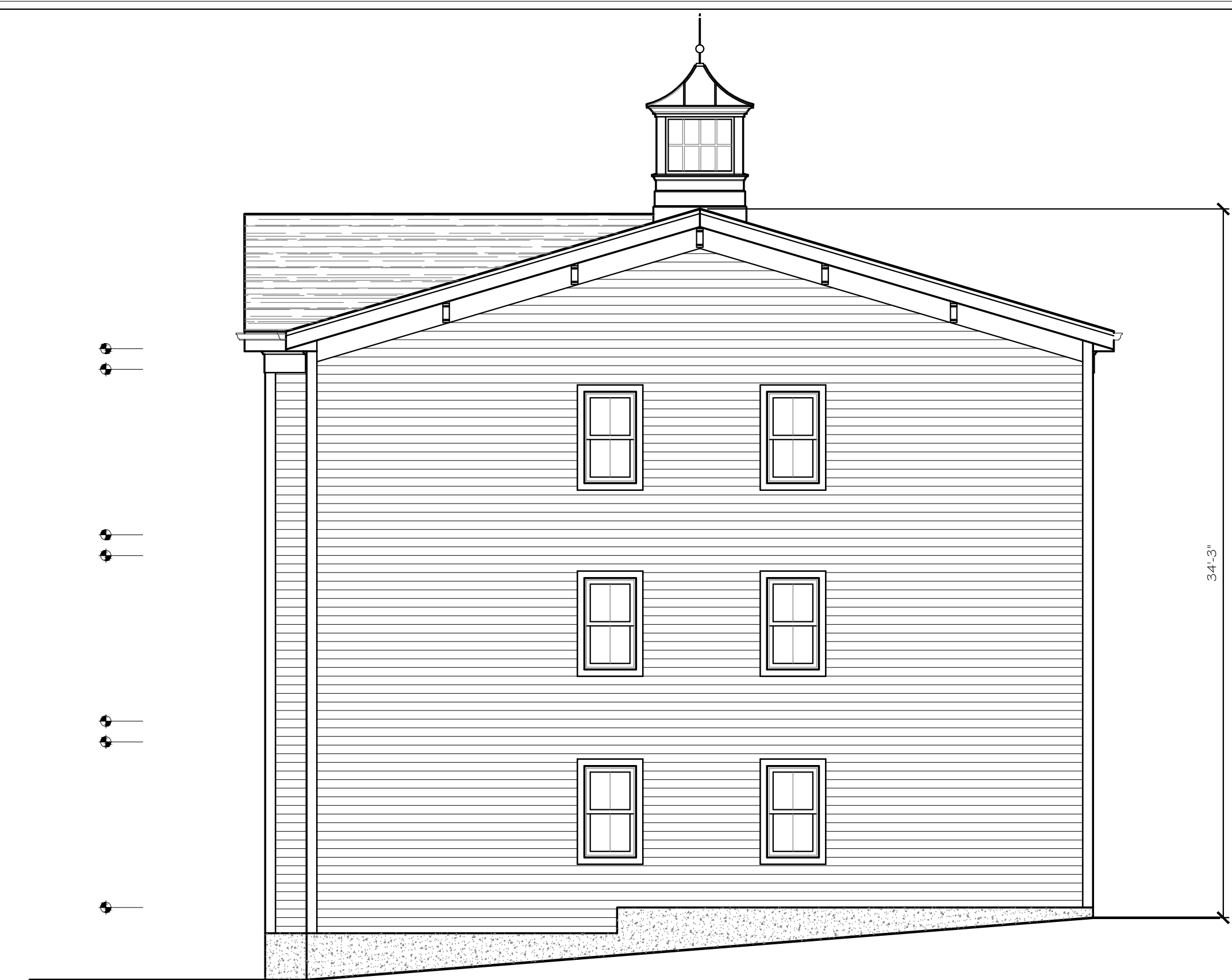
PREPARED BY: Engineering Design Consultants, Inc., 32 Tumpike Road, Southborough, Massachusetts, (508) 480-0225

SHEET NO.: 4



PROPOSED FIRST FLOOR PLAN
 SCALE: 1/4" = 1'-0"
 1,250 Sq. Ft. Living Area Per Unit

PROPOSED WALL LEGEND	
	PROPOSED 2"x6" LUMBER WALLS @ 24" O.C.
	PROPOSED 2"x4" LUMBER WALLS @ 24" O.C.



PROPOSED RIGHT SIDE ELEVATION
 SCALE: 3/16" = 1'-0"



PROPOSED FRONT ELEVATION
 SCALE: 3/16" = 1'-0"

I.E. DESIGNS
 No. Dartmouth, MA 02747,
 TEL: (774) 451-4440
 EMAIL: icdesigns84@gmail.com

Project:
 Proposed 6 Unit Building
 2 East Main Street
 Southborough, MA

Prepared For:
 Peter Bemis
 Engineering Design
 Consultants, Inc.

I.E. Designs - Tel: 774-451-4440		
Drawn By: Ian E. Souza		
Scale: AS SHOWN		
Issue Date: 2/3/2025		
Revisions		
No.	Date	Description

Sheet Title:
 Proposed Draft Floor
 Layout Plans
 A1.0