

November 27, 2017

Board of Appeals
Town Hall
Sherborn, Massachusetts 01772

Reference:

Sherborn Village
59 North Main Street
Sherborn, Massachusetts
EDC Job No.: 3438

Dear Board Members:

The following are responses in red to a letter of peer review dated, September 12, 2017, by Professional Services Corporation, PC.

If you have any questions or comments, please let us know.

Very truly yours,

ENGINEERING DESIGN CONSULTANTS, INC.

Walter Lewinski

Walter M. Lewinski, P.E.

SECTION II – STATUTORY THRESHOLDS

The application includes calculations of statutory minima as they relate to consistency with local needs.

Issues relating to the computation of statutory thresholds are summarized as follows:

COMPUTATION OF STATUTORY MINIMA

1. The application includes a computation of the existing 40B Housing Inventory. The Housing Inventory based upon DHCD counts as of February, 2017 indicates that Sherborn has 34 subsidized housing inventory units (2.3% of its housing inventory), which are 114 units shy of the 10% SHI threshold. The applicant's contribution of three units would increase the Town's SHI from 2.3% to 2.5%. **No response by EDC required.**
2. A computation for General Land Area Minimum should be provided to indicate acreage added by the project to the existing Town Low and Moderate Income Housing areas. To meet the threshold, the Land Area Minimum Standard requires that 1.5% of the total Town land area be held for affordable Chapter 40B housing. For Sherborn, 1.5% is equivalent to no more than 153.6 acres (likely less when subtracting wetlands and unbuildable areas). The application does not document existing Chapter 40B land areas toward the statutory minimum. **No response by EDC required.**

SECTION III – CONTENTS OF THE APPLICATION

PROJECT ELIGIBILITY LETTER

3. The project Comprehensive Permit application contains correspondence from Massachusetts Housing Finance Agency dated February 21, 2017 regarding the *59 North Main Street Village, Sherborn Project Eligibility/Site Approval Project #895*. The description of the project in the letter appears consistent with the Sherborn Village plans. **No response by EDC required.**
4. The project eligibility letter acknowledges the Town's concern with stormwater management and alterations to the wetland buffer zone and riverfront impacts. MassHousing requires that the applicant discuss during the public hearing, resolution of all environmental conditions per laws, regulations and standards applicable to existing conditions and to the proposed use, including but not limited to compliance with all applicable regulatory restrictions relating to floodplain management, the protection of wetlands (WPA), river and wildlife habitats, conservation areas as well as state environmental protection requirements relating to the protection of the public water supply stormwater runoff and hazardous waste safety, and further that the Applicant should provide evidence of such compliance prior to the issuance of a building permit for the project. **No response by EDC required.**
5. The project eligibility letter acknowledges the Town's concern with the project's water supply & wastewater management and requires that the Applicant must comply with Title V regulations regarding the design and construction of individual wells and septic systems, and further that the Applicant should provide evidence of such compliance prior to the issuance of a building permit for the project. **The soil absorption system plans as well as the site plans will be submitted to the Board of Health and these documents have been designed according to Title V and to the maximum extent possible the local Town of Sherborn's regulations.**

6. The project eligibility letter acknowledges the Town's concern with general operation concerns such as the impact of the project on traffic and local roads and further requires the Applicant to provide a detailed traffic study assessing potential impacts of the Project on area roadways, including traffic volumes, crash rates and the safety and level of service (LOS) of area intersections, identifying appropriate traffic mitigation in compliance with all applicable state and local requirements governing site design. The letter also requires the traffic study to review on-site parking and circulation to ensure compliance with industry standards. **EDC discussed traffic during the public hearing process and formally requested a waiver from supply any additional information.**
7. The project eligibility letter acknowledges the Town's concern with wastewater management and water use and requires the Applicant to be prepared to provide detailed information relative to proposed water and sewer use, potential impacts on existing capacity, and appropriate mitigation. The shared wastewater design is schematic and calculations were not provided in the application.
The soil absorption system plans as well as the site plans will be submitted to the Board of Health and these documents have been designed according to Title V and to the maximum extent possible the local Town of Sherborn's regulations.

EVIDENCE OF SITE CONTROL

8. Evidence of Site Control – The applicant has provided a copy of the Quitclaim Deed for the parcel conveying the property to HP Sherborn, LLC (June 23, 2015 for \$1,275,000). (DB 65811, pp 274-275). **No response by EDC required.**
8. A copy of the Purchase and Sale Agreement, dated November 1, 2016 from HP Sherborn, LLC to 59 Main Street Village, Inc., was provided (for \$1,950,000) **No response by EDC required.**
9. Any easement rights held by others (if any) should be added to the plan. **Any and all easements identified at Middlesex Registry of Deeds are identified.**

EXISTING SITE CONDITIONS

11. As set forth in the Department of Housing and Community Development's Guidelines for Local Review of Comprehensive Permits, the Applicant is required to submit a narrative detailing "alternative site uses under existing zoning." An endorsed Site Plan was supplied, showing development of the project in conformance with existing Zoning dimensional requirements for RA. **No response by EDC required.**
12. Several large trees, between 24-inches and 48-inches in diameter have been identified on the plan for preservation. Proposed grade changes and the proximity of construction near the project entrance and Unit 12 make it unlikely that three large trees (30-inch, 36-inch and 48inch) deciduous specimens will be maintained. Specific construction-stage and permanent measures to provide for tree protection should be specified.
Landscape Architect Steve Cosmos will respond has determined that the trees cannot be maintained and shall be removed.
13. Inspection of the of Flood Insurance Rate Map (FIRM), Map Number 25017C00538F, Middlesex County Massachusetts, effective date July 7th, 2014 indicates that the entirety of the site falls outside the 100-year jurisdictional floodplain of the perennial stream. The site is located outside the Zone X, with less than 0.2% chance of annual flooding (500-year floodplain). **A note has been added to the Existing Conditions Plan.**
14. The wetlands and resource areas indicated on the drawings should be referenced by date and the delineator. An Order of Resource Area Delineation (ORAD) was issued

by the Sherborn Commission (DEP #283-0361) on December 23, 2014 and it should be referenced on the drawing. If requested by the applicant, the Sherborn Conservation Commission would need to extend the ORAD prior to its three-year expiry date on December 23, 2017. **A note has been added to the Existing Conditions Plan.**

15. All abutting parcels (including any registered Land Court parcels) should be clearly designated on the drawings.
All abutting parcels are designated on the drawings.
16. Both existing well and septic soil absorption areas are located for the adjacent properties at #55 and #61 North Main Street. Well locations for properties across North Main Street (#58 and #60) have been provided as well. Well setback radii have been provided, consistent with Section 10.1 in the Board of Health Regulations. **No response by EDC required.**

EXISTING SITE CONDITIONS REPORT

17. A first level Environmental Assessment in accordance with MGL Ch. 21E should be furnished if available. **Project proponent Vin Gately to respond.**
18. The narrative does not address methods or extent of investigation for any features of historic or archeological significance, but indicates that none are currently known.
The dwelling that was located on the site was listed by the Massachusetts Historical Commission and has since been razed with permission from local approving authorities, no other listing is provided for this address.

PROPOSED SITE DEVELOPMENT PLANS

Site Planning

19. The project proposes 28 bedrooms on the 6.04 acre site which would result in 3,080 GPD of sewage flows. As on-site wells are proposed for potable water, the project is subject to nitrogen loading limitations as defined under 310 CMR 15.214(2) and would be subject to effluent limitations of 440 GPD/acre under a conventional design (or 550 GPD/acre for recirculating sand filter). **The site development program is based upon 24 bedrooms, which would result in 2,640 gpd, or 437 gpd/acre under a conventional design, however the units are restricted to 55 years or older and therefore designated as elderly housing under MassDEP guidelines which in turn results in 150 gallons per day per 2-bedroom unit, thus with 12 2-bedroom units the total daily flow for the project is 1,800 gpd or 298 gpd/acre well below any limiting thresholds.**
20. The architectural drawings indicate an optional loft space that should be construed as a third bedroom for each 2-BR unit. For age 55 and over units, sewer generation increases from 150 GPD for two-bedroom to 330 GPD for three-bedroom units. The sewer generation flows would increase to 3,960 GPD (for the third bedroom). The locus does not have sufficient land area to support excess nitrogen loading from a third bedroom for all twelve units. **The site development plan is based upon 24 bedrooms, or 12 single unit dwellings containing 2-bedroom each.**
21. Please indicate the percentage of Riverfront buffer that will be altered as a result of the project. No more than 10% of the available riverfront should be altered by development of the project. 310 CMR 10.58(4)(d)1. **Riverfront statistics are included on the Layout & Materials Plan.**

22. Although the drawings indicate twenty-two (22) test pits and eighteen (18) monitoring wells have been advanced on the site, and soils have been discussed in a general manner based upon the NRCS Soils Atlas and mapping, site specific test pit information has not been provided, but will be required beneath the soils absorption systems and the stormwater retention/detention areas.
Extensive soil testing has been conducted onsite and included with Soil Absorption System Plans which will have been provided to the Board of Health and Zoning Board.
23. The Infiltration Trench System detail on Plan Sheet 6 provided the design bottom elevation for each of the six (6) Cultec Systems. Estimated Seasonal High Groundwater (ESHGW) beneath each system should be provided in this table. A minimum 2-foot vertical separation to ESHGW is required beneath the stone for each system. If less than four feet is provided, then groundwater mounding calculations will also be required. *High ground water elevations have been added to the table.*
24. Project lighting is not indicated within the site. Proposed lighting should be developed with photometrics using specific light fixtures that are consistent with residential scale and style typically acceptable in the town. *Lighting details and photometrics have been added to Plans.*
25. Please indicate whether a streetlight is proposed for the project entrance at its intersection with North Main Street. *A pole mounted light is set to be 40°± from the intersection with North Main Street as shown on the lighting plan.*
26. Although driver visibility appears sufficient, stopping sight distance and intersection sight distance information should be provided at the entrance along North Main Street in both directions. *Sight distance in either direction is greater than 350 feet from the driveway entrance and is indicated on sheet 3.*
27. A more detailed plan prepared by a Landscape Architect or other qualified professional should be submitted indicating active and passive recreational facilities. Extending on-site pathways to connect the project to the town-owned land north of the project should also be evaluated and considered. *Steve Cosmos will address and his Landscape plans have been provided.*
28. Multifamily developments typically are required to have common mailbox locations, which can present significant site circulation issues. The location for a common mailbox facility with associated parking/pullout should be shown. *A mail and community kiosk will be located at the exit driveway as indicated on the Layout & Materials Plan.*
29. A *Stormwater Pollution Prevention Plan (SWPPP)* was submitted and are generally sufficient.
The Project Manager and Person and Entity responsible for plan compliance, as well as the Owner of the Stormwater System, as well as the person responsible for financing maintenance and emergency repairs should be added to the SWPPP when known. *This shall be provided when contractor's and project managers are contractually obligated to the project.*
30. The SWPPP should specify weekly street sweeping of North Main Street.
Weekly sweeping of North Main Street has been added to the SWPPP.

31. The applicant should confer with the Sherborn Fire/Rescue Department and provide documentation from the Department indicating their concurrence with fire access to buildings, unit separation, available pressure and volumes from the on-site well system (whether supplemental water tank, auxiliary pumping, etc. will be required), alarms, and other fire protection related matters. Please indicate whether the buildings are to be sprinklered. **A 20,000 Gal. Cistern is proposed at the entrance driveway and we met with the fire chief and safety officer to ensure that the development plan met with their satisfaction. Dwelling units shall be separated with a minimum separation of 10-feet. Project documents will continue to be forwarded to the Sherborn Fire Department to ensure acceptance of the final site development program.**
32. The applicant should confer with Police Officials and provide documentation indicating that they are satisfied with access and safety issues during construction and operation of the project. **A one-way driveway is provided with superior site visibility at the North Main Street curb cut. Project documents will continue to be forwarded to the Sherborn Police Department to ensure acceptance of the final site development program.**
33. Any temporary construction signage should be shown and details provided on the size, illumination, style, and legend. **Project proponent Vin Gately to respond.**
34. A permanent entrance sign has not been shown. Details on the size, illumination, style, and legend of any proposed sign should be given. **Project proponent Vin Gately to respond.**
35. The site should be fenced and secured during construction. **Project proponent Vin Gately to respond.**
36. Given the density of this project, snow storage is a significant concern. Snow storage areas should be designated outside paved or on adjacent grassed areas that maximize recharge, outside well setback areas. The interior soil absorption field and all buffer zones should specifically be prohibited for snow storage. **There are limited snow storage areas onsite and notes have been added to ensure that snow is removed from the project site when volume exceeds storage capacity.**
37. All walkway and any common parking area grades (common mailbox area) should adhere to all current Architectural Access Board regulations. **Site driveway at curb cut includes ADA compliant sidewalk connections with tactile mats.**

Access, Circulation, and Parking

39. As designed, the 18-foot wide interior driveway is narrow for two-way traffic, particularly for a project of this density with cars maneuvering out of closely spaced driveways into two way traffic movements. Unless the pavement width is increased, preferably to a minimum 22 feet, the design will be congested. Parking should be prohibited along the roadway edges. **The driveway has been designed for one-way traffic.**
40. The curvilinear geometry should aid in limiting vehicle speeds, however the project is not designed with a sidewalk that should be included to help segregate pedestrians from traffic. **With the driveway having only one-way traffic flow we believe that the limited volume of pedestrian traffic can safely pass along the edge of the driveway to the sidewalk at North Main Street.**
41. Fire officials should verify that they are satisfied with exterior access to the rear of Units 3, 4 and 5. Rear access is also limited behind Units 8 and 10 with rear decks about 15 feet from the no alteration zone.

We met with the fire chief and safety officer to ensure that the development plan met with their satisfaction. Project documents will continue to be forwarded to the Sherborn Fire Department to ensure acceptance of the final site development program.

42. The geometry of the roadway should accommodate the largest Fire/Rescue Department's design vehicle. Concern was expressed regarding the roadway geometry in the rear of the site. Documentation should be provided indicating that the Department's concerns have been addressed and should include approval for the layout and methods of construction of the on-site access and circulation system. **The driveway was designed with the Fire/Rescue Department design vehicle. We reviewed the turning templates with Sherborn Fire officials.**
43. For safety, vertical faced granite curb or precast concrete curb should be specified along both sides of the main drive and intersection radii. **The project was designed using cape-cod berm so that vehicles could park on the gravel-pave2 areas that are designated on sheet 4.**

Grading

44. Construction of the proposed site improvements will likely include reuse of onsite materials. General information on the structural reuse of onsite soil types should be provided. **The site consists of sands and gravels with depth, overlain by layers of sandy loams. All onsite materials are to be reused as part of the redevelopment activities. There will be imported materials including processed gravels for roadway and driveways, sands and aggregates for bedding utilities, septic system sands, gravels and aggregates for system construction and mulches for landscaping activities. Trees will be cut to trunk lengths and hauled away with limbs chipped onsite for reuse when needed or hauled away.**
45. The proposed grades do not differ significantly from existing grades. It is not anticipated that significant quantities of native material will be exported from the project. Similarly, the site should not require import of bulk material for fill. **Site is balanced except for required import materials as noted in item 44 above.**

Landscaping

46. The applicant should be encouraged to limit turf areas due to water demand and requirements for lawn chemicals and fertilizer. A Turf Management plan should be provided that adequately protects the adjacent resource areas from nitrate and phosphate loadings. **See Landscape Plan by Cosmos Associates.**
47. A *Tree Protection Plan* should be provided for the trees to be preserved along the front of the site. **See Landscape Plan by Cosmos Associates.**
48. Minimal landscape improvements are proposed for the project. Street trees should be considered to enhance the appearance of the project. **See Landscape Plan by Cosmos Associates.**

PROJECT IMPACTS

38. The Applicant should prepare and submit for review, a detailed management plan indicating the organization and funding mechanism for a homeowners' association or other organization that will be responsible for maintaining the on-site parking, access,

utilities, and landscaping and for contributing to ongoing maintenance of the shared wastewater facility. **Project proponent Vin Gately to respond.**

49. Any impacts to abutters from construction noise, vibration, or any required blasting should be identified. **Based upon the soils work completed to date we do not anticipate any blasting, however in the event it is required all blasting will be conducted in accordance with local requirements which include abutter notification. Work hours for the project will adhere to the local Sherborn ordinances concerning commercial work activities.**
50. The project driveway is directly opposite the existing residence across North Main Street at #58 North Main Street. This residence should be plotted on the drawings in relation to the driveway. Headlights from exiting cars will impact this residence and should be mitigated. A contribution toward off-site vegetated screening should be coordinated with the property owner. **The residences across North Main Street have been added to sheet 3 & sheet 4, this item shall be discussed.**
51. Landscape design should include screening residential abutters on both sides of the project. Screening should be focused in the non-buildable parcel A on the left side of the project, and behind Units 11 and 12 on the right. **See Landscape Plan by Cosmos Associates.**
52. The extent of construction traffic including truck trips should be identified. Proposed truck routes and scheduling should be shown. The analysis should include a distribution breakdown. **Construction traffic will vary with the specific construction activity and construction sequence. Project proponent Vin Gately to further respond.**
53. A dedicated location should be provided on the site for equipment fueling operations that is sited outside the wetland and riverfront buffers and minimizes the potential for contamination of individual wells from spills. **The SWPPP Plan identifies the fueling location and procedures.**
54. The development team should provide a rough construction schedule with anticipated milestone dates for major components of the project. Verify that the project will be constructed as a single phase. **Project proponent Vin Gately to respond.**
55. The MassHousing Project Eligibility letter recommended that the applicant provide a detailed traffic study, assessing the potential impacts of the Project on area roadways, including traffic volumes, crash rates, and the safety and level of service of area intersections. The Study should identify appropriate traffic mitigation, and address on-site parking and circulation. The estimated traffic generated from the project should be evaluated based upon the ITE Trip Generation Manual, 9th Edition (latest). Peak hour generation should be addressed in the analysis. **Project proponent Vin Gately to respond.**
56. A Traffic Management Plan should be submitted that has the approval of the Sherborn Chief of Police. As a minimum the Traffic Management Plan should identify the number of truck trips, proposed truck routes, and an overall construction schedule. **Project proponent Vin Gately to respond.**

PRELIMINARY ARCHITECTURAL DESIGN

58. The affordable units have been designated on the plans as Unit #2, #4 and #12. Each of the affordable units are designated as three-bedroom units (Architectural Type A). All others are designated as two bedroom units. **All should be uniformly distributed throughout all buildings. Verify the proposed distribution of the affordable units.**

dwelling units shall be 2-bedroom units, the affordable units are designated as units #2, #4 and #12. Project proponent Vin Gately to further respond.

59. Preliminary architectural drawings were provided for review depicting six types of units. In addition to bedroom counts, the building floor plans should be evaluated to include the study, loft and similar rooms that should be counted as “bedrooms” for the purposes of determining sewage generation. There is not a significant difference between the three-bedroom configuration and two-bedroom layout between the unit types and it appears all units could use the loft as the third bedroom. **All dwelling units shall be 2-bedroom units.** Project proponent Vin Gately to further respond.
60. Information on exterior finishes should be provided. **Project proponent Vin Gately to respond.**
61. The height of each building should be calculated, as set forth in the Zoning Bylaw. **Building height will comply with the underlying zoning provisions.** Project proponent Vin Gately to further respond.

UTILITIES PLAN

62. Specific arrangements for operation and maintenance of the sewer dosing chamber should be detailed. **A separate management company shall be hired to operate and maintain the septic system.** Project proponent Vin Gately to further respond.
63. Water for the project will be drawn from two on-site wells. Construction Note #6 references an 8-inch CLDI water main, which does not appear to be correct. Additional detail of the design should be provided including pipe sizes, pump details, backup generation, etc. A 2" PVC water line is to be provided. **Additional water system details will be forthcoming from Provencher Engineering.**
64. Verify pipe materials, depth of cover and minimum separation between services for water and sewer services. **Additional utility details have been added to plans and we anticipate that additional water system details will be forthcoming from Provencher Engineering.**

UTILITIES PLAN – STORMDRAINS

65. The plan shows all the on-site galleys that accommodate runoff are retention systems. In order for each system to be effective, it must be empty prior to a storm event. All basins must be designed such that spring high groundwater is two feet below the bottom of the basin. Soils information should be provided. **All Cultec chambers have been designed to be at least 2-feet above high ground water.**
66. Logs of test pits were not furnished with the plans or report. Existing groundwater elevations must be determined for each of the six systems. Provide soils test data including soils classification, observed groundwater and mottled soils elevations in the footprint of each system. **The test pit logs are attached.**
67. Pipe capacity calculations for the storm drain system should be added to the stormwater management report. **The pipe capacity calculations have been added to the report.**

REQUIRED EXEMPTIONS

68. The application documents variances required from the Zoning By-Laws of the Town of Sherborn. An additional section was identified that will require a variance. Section 4.3.6. Number and Location of Dwellings on One Lot. **EDC prepared a waiver outline letter and does not anticipate any additional items at this time.**
69. A variance has been requested from Section 5.2.6.a of the By-Laws regarding permanent monument signage. The proposed project signage should be provided for evaluation by the Board. **Project proponent Vin Gately to respond.**
70. Submit a tabulation of departures from the Planning Board's Rules & Regulations, which serve as Town construction standards, particularly Section 4.0- *Design Standards* and Section 5.0- *Required Improvements*. Describe why there is a public interest in allowing various downgrades. **EDC prepared a waiver outline letter and does not anticipate any additional items at this time.**

FEDERAL AND STATE PERMITS AND MEPA COMPLIANCE

71. An NPDES General Construction Permit is required for sites involving disturbance greater than or equal to 1 acre. **A NPDES will be filed with EPA in advance of any construction activities.**

SHERBORN VILLAGE

IN

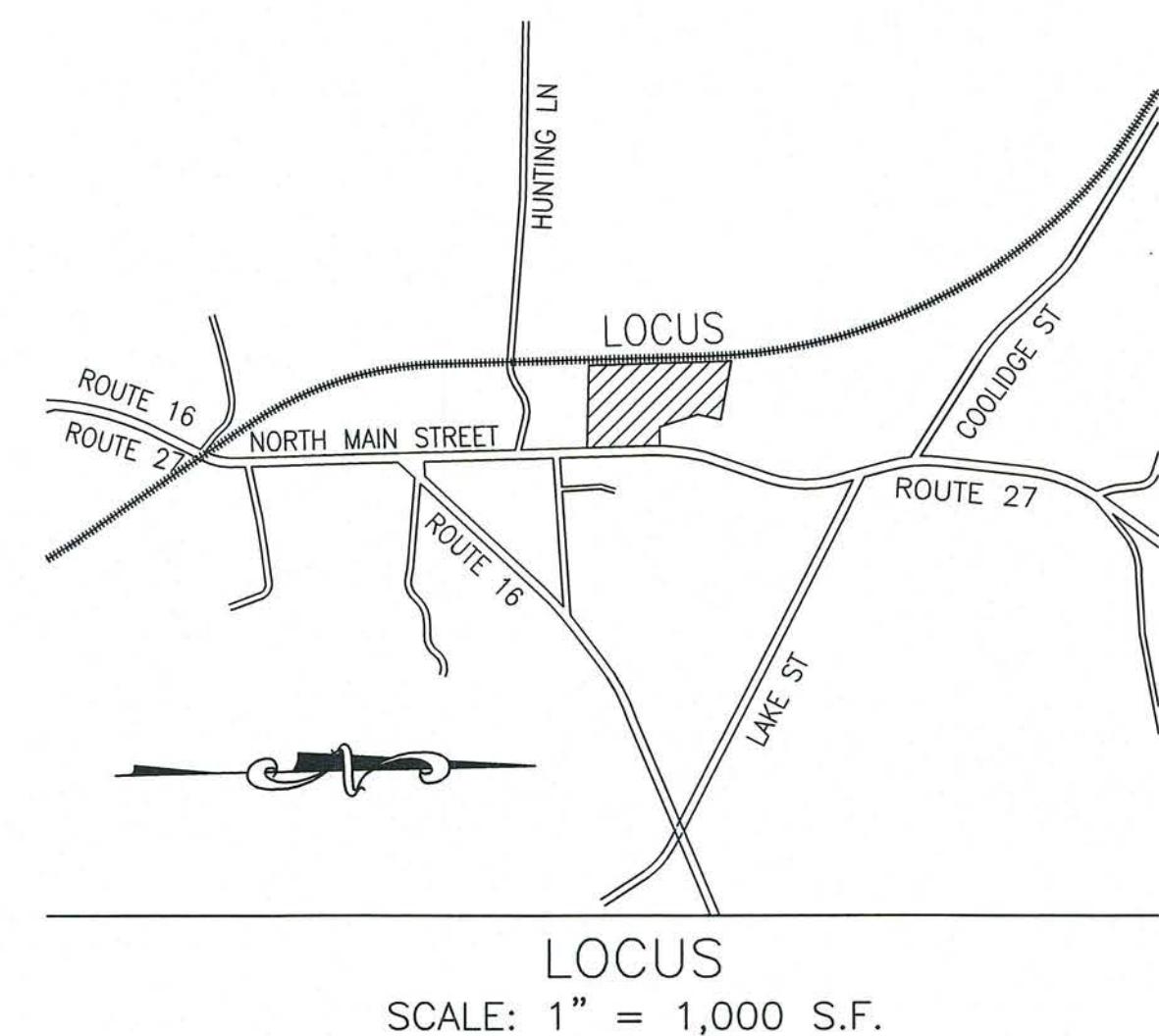
SHERBORN, MASSACHUSETTS

(MIDDLESEX COUNTY)

HERITAGE PROPERTIES
490-B BOSTON POST ROAD
SUDBURY, MA 01776

OWNER/APPLICANT:
HERITAGE PROPERTIES
490-B BOSTON POST ROAD
SUDBURY, MA 01776

ENGINEER:
ENGINEERING DESIGN
CONSULTANTS, INC.
32 TURNPIKE ROAD
SOUTHBOROUGH, MASSACHUSETTS



SHEET INDEX	
SHEET	TITLE
1	COVER
2	EXISTING CONDITIONS
3	LAYOUT & MATERIALS
4	GRADING & UTILITIES
5	PROFILE
6	LIGHTING
7	DETAILS
L1	LANDSCAPE PLAN
L2	LANDSCAPE DETAILS

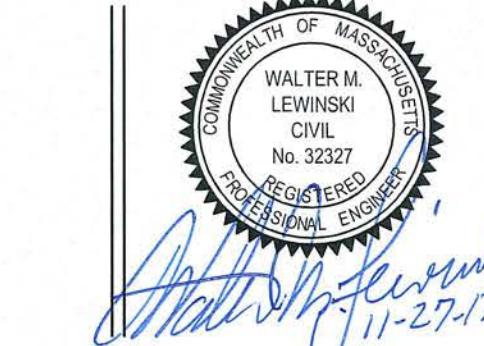
LEGEND	
BIT CONC	BITUMINOUS CONCRETE
CB	CATCH BASIN
CC	CONCRETE CURB
CCB	CAPE COD BERM
CO	CLEAN OUT
CONC	CONCRETE
CS	CURB STOP
D	DRAINLINE
DCB	DOUBLE CATCH BASIN
DI	DUCTILE IRON
DMH	DRAIN MANHOLE
ELEC	ELECTRIC
EMH	ELECTRIC MANHOLE
ETC	ELECTRIC, TELEPHONE, CABLE
FD	FOUNDATION DRAIN
FE	FLARED END
GAS	GAS LINE
GG	GAS GATE
GV	GATE VALVE
HC	HANDICAPPED RAMP
HYD	HYDRANT
INV	INVERT
LP	LIGHT POLE
MH	MANHOLE
PIV	POST INDICATOR VALVE
PPVC	PERFORATED POLY-VINYL-CHLORIDE
PVC	POLY-VINYL-CHLORIDE
RCP	REINFORCED CONCRETE PIPE
RD OR RL	ROOF DRAIN OR ROOF LEADER
S	SEWER LINE
SB/DH	STONE BOUND/DRILLHOLE
SGC	SLOPED GRANITE CURB
SMH	SEWER MANHOLE
TD	TRENCH DRAIN
TELE	TELEPHONE LINE
TMH	TELEPHONE MANHOLE
TRANS	TRANSFORMER
TS	TRANSITION STONE
UD	UNDERDRAIN
VGC	VERTICAL GRANITE CURB
W	WATER LINE
WG	WATER GATE
— S	SIGN
⊕	BORING
TP	SOIL TEST PIT
⊕	PERCOLATION TEST
⊕WF	WETLAND FLAG
ECB	EROSION CONTROL BARRIER
T24	24" TREE
□ (TBS)	STONE BOUND/DRILL HOLE TO BE SET
□	WATER SHUTOFF

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Engineering Design Consultants, Inc.'s liability for this plan is limited to the extent of its fee less third party costs.

DRAWN BY:	WML	REVISIONS	11/27/17	ISSUED FOR PEER REVIEW
CHK'D BY:	PSB	0	7/25/17	ISSUED FOR PEER REVIEW
APPROV'D BY:	PSB	REV #	DATE	DESCRIPTION



PREPARED BY:

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

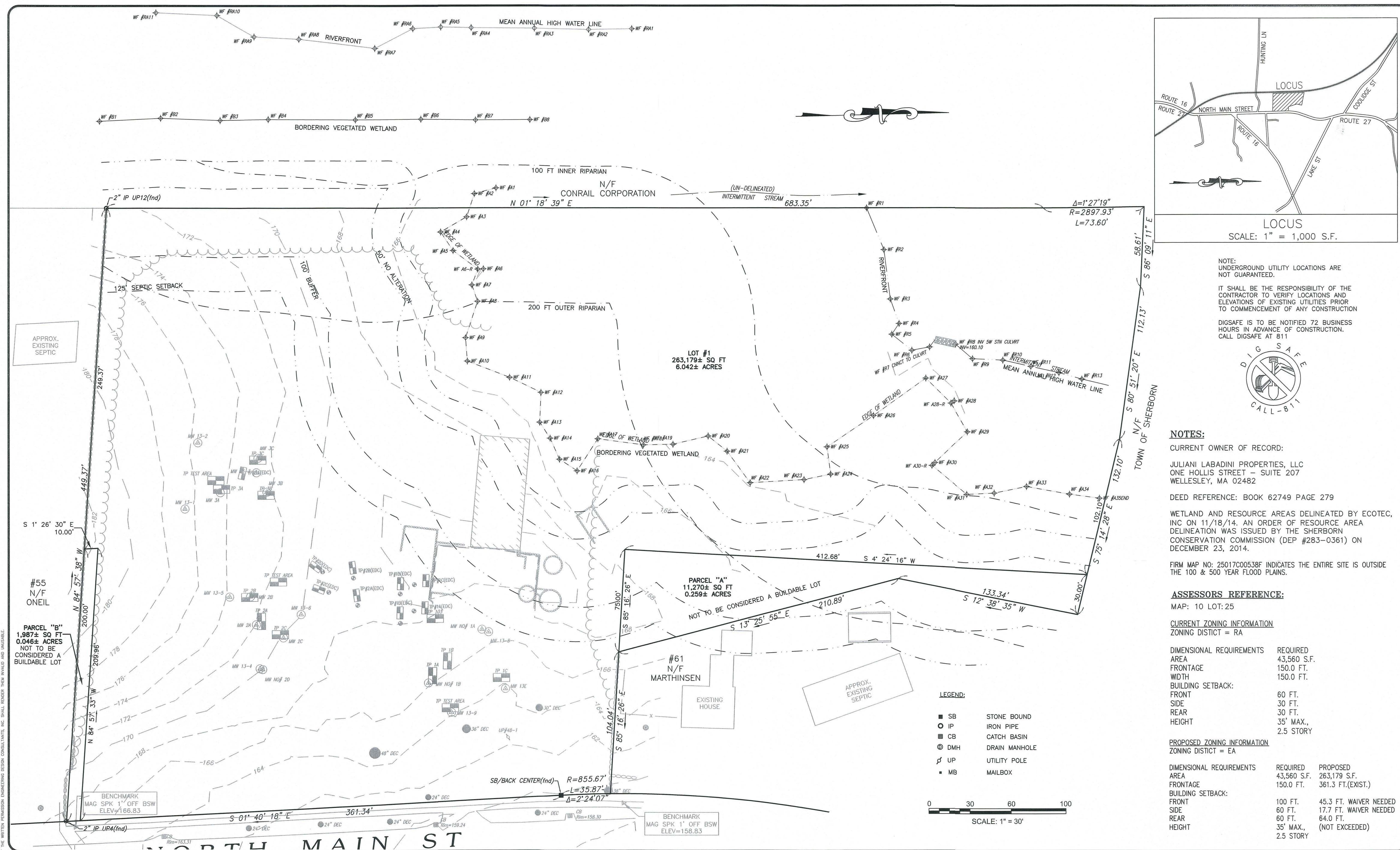
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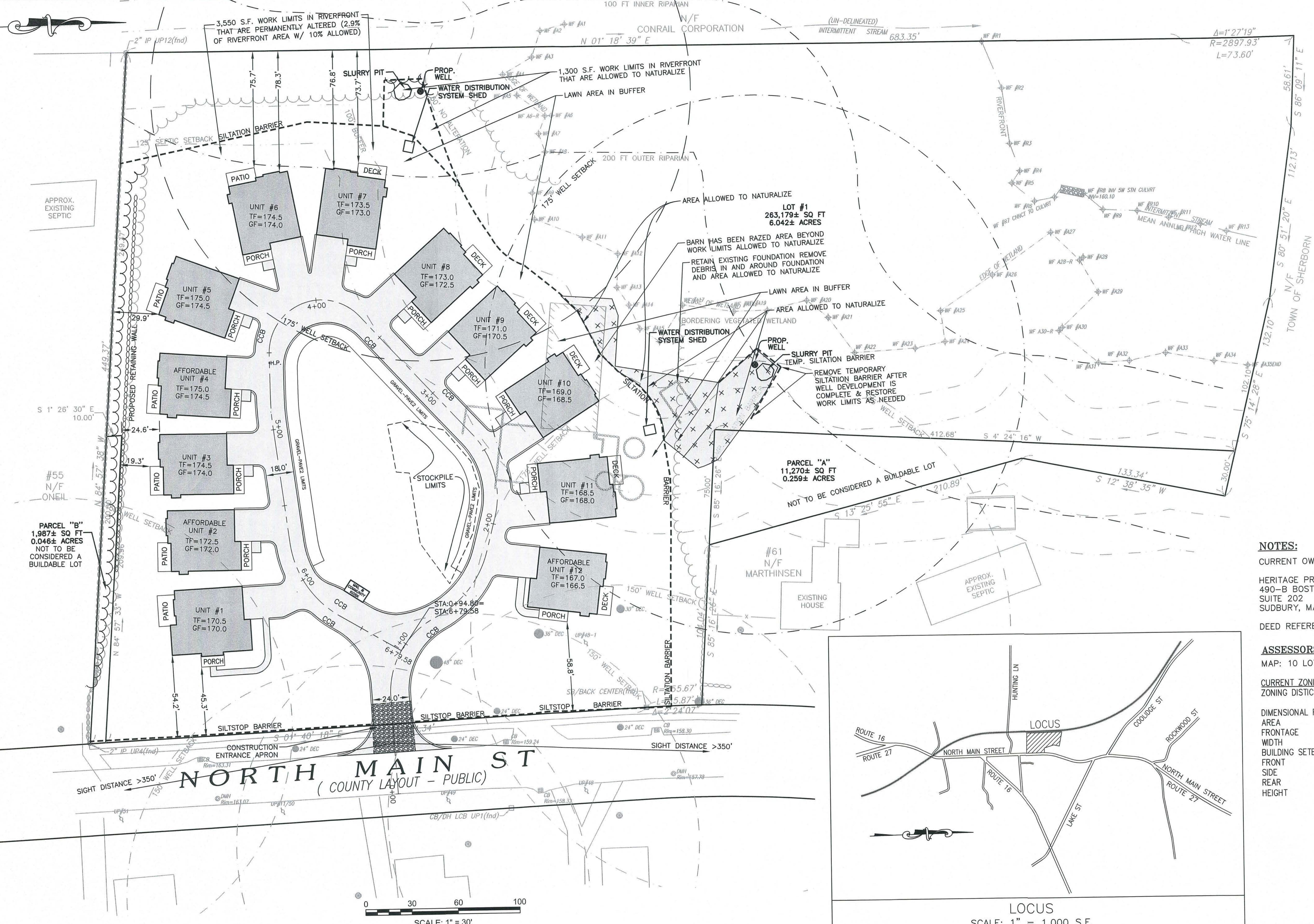
SHERBORN VILLAGE
A
RESIDENTIAL DEVELOPMENT
IN
SHERBORN, MASSACHUSETTS

TITLE:

COVER
#59 NORTH MAIN STREET
SHERBORN, MASSACHUSETTS
OWNER/APPLICANT:
HERITAGE PROPERTIES
490-B BOSTON POST ROAD
SUDBURY, MA 01776

FILE NO.: 3438
COVER
DATE: JULY 25, 2017
PLAN NO.: 1
1 OF 7





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CTOR, NOR FOR THE SAFETY OF PUBLIC OR
CTORS EMPLOYEES; OR FOR THE FAILURE OF THE
CTOR TO CARRY OUT THE WORK IN ACCORDANCE
E CONTRACT DOCUMENTS.

RING DESIGN CONSULTANTS, INC.'S LIABILITY FOR
AN IS LIMITED TO THE EXTENT OF ITS FEE LESS
PARTY COSTS.

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



CONSTRUCTION NOTES

- DWELLING INFILTRATION SHALL BE CULTEC RECHARGER C150XLHD, ELEVATIONS AS SHOWN ON THE DETAILS. THEY SHALL BE INTERCONNECTED WITH THE CULTEC HVLV FC-24 FEED CONNECTOR AND 8-INCH DIAMETER ADS N-12 PIPE. ROOF LEADERS SHALL BE 4-INCH ADS.
- DRIVEWAY INFILTRATION SHALL BE CULTEC RECHARGER C330XLHD, ELEVATIONS AS SHOWN ON THE DETAILS.
- SEWER PIPE SHALL BE 6" SCH-40 PVC, PRIME AND THOROUGHLY GLUE ALL PIPE FITTINGS.
- MINIMUM SLOPE OF SEWER CONNECTIONS FROM UNITS S=0.010.
- UNITS SHALL HAVE SEWER BACKFLOW PREVENTERS.
- WATER MAIN LINE SHALL BE 2" PVC
- WATER SERVICES SHALL BE 1 $\frac{1}{4}$ TYPE K COPPER.
- SEE CONSTRUCTION NOTES AND DETAILS ON SHEET 6
- AREA "A" & "B" SHALL BE VORTSENTRY HS36 UNITS.
- SEWER PIPE CROSSING WATER LINE OR DRAIN LINE SHALL BE ENCASED IN CONCRETE WITH A MINIMUM OF 6-INCHES OF CONCRETE ALL AROUND AND 5-FEET TO EITHER SIDE OF THE UTILITY CROSSING.

NOTES:

CURRENT OWNER OF RECORD

P SHERBORN LLC
90-B BOSTON POST ROAD
SUITE 202
NADBURY, MA 01776

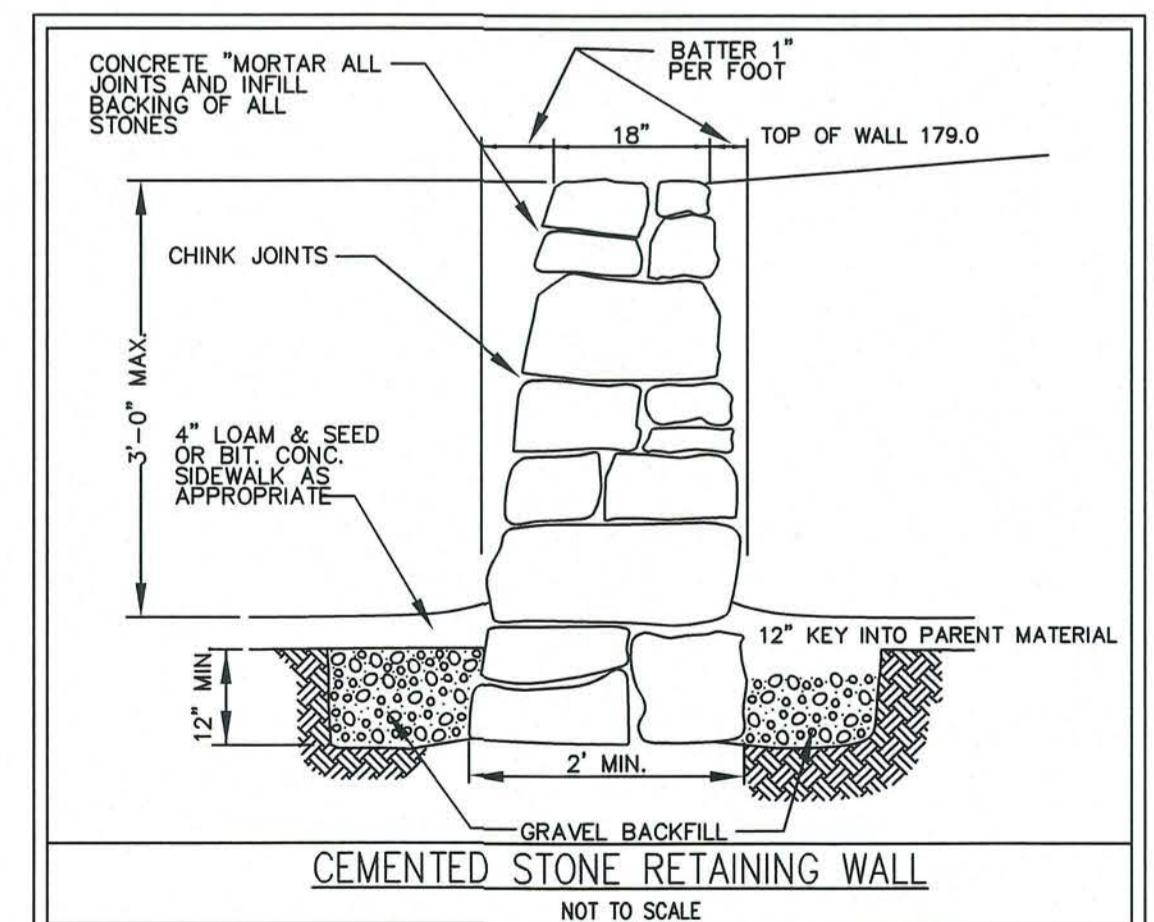
SEARCHED REFERENCE: BOOK 65811 PAGE 274

ASSESSORS REFERENCE:

MAP: 10 LOT: 25

CURRENT ZONING INFORMATION
ZONING DISTRICT = RA

ITEM	DESCRIPTION	STANDARD	PROPOSED
IMENSIONAL REQUIREMENTS		REQUIRED	PROPOSED
AREA	43,560 S.F.	263,179 S.F.	
FRONTAGE	150.0 FT.		
WIDTH	150.0 FT.		
BUILDING SETBACK:			
FRONT	60 FT.	45.3 FT	
IDE	30 FT.	19.3 FT	
EAR	30 FT.	73.7 FT	
EIGHT	35' MAX., 2.5 STORY	<35' 2.5 STORY	



		REVISIONS:	
DRWN BY:	WML	0	11/27/17
CHK'D BY:	PSB	0	7/25/17
APRVD BY:	PSB	ISSUED FOR PEER REVIEW	
		REV. #	DATE
		DESCRIPTION	

A circular registration stamp for Walter M. Lewinski, Civil Engineer, No. 32327, Registered Professional Engineer, Commonwealth of Massachusetts. The stamp is signed with a blue ink signature and dated 1-27-17.

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

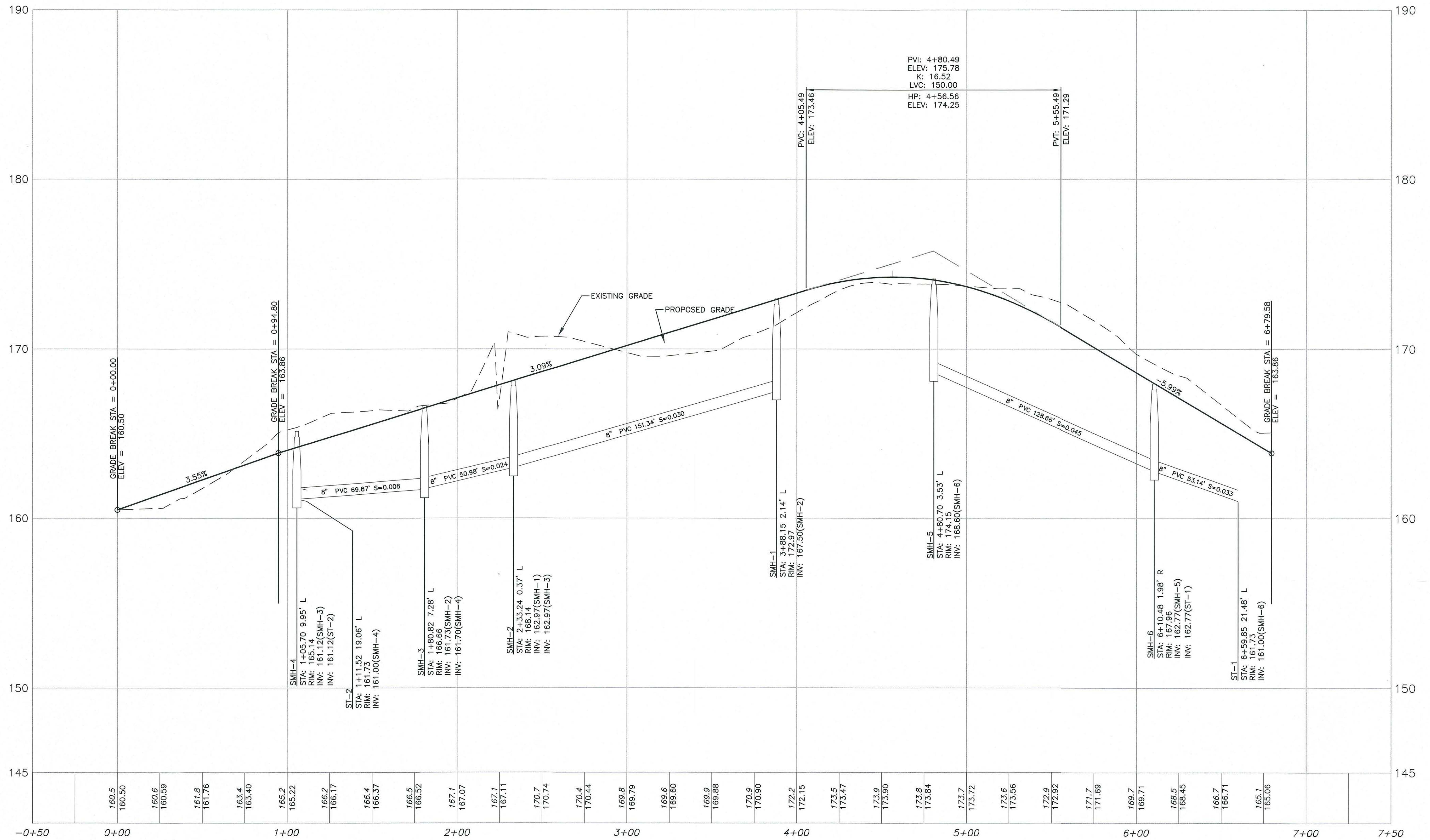
|| PROJECT:

SHERBORN VILLAGE
A
RESIDENTIAL DEVELOPMENT
IN
SHERBORN, MASSACHUSETTS

GRADING & UTILITIES
#59 NORTH MAIN STREET
SHERBORN, MASSACHUSETTS

HERITAGE PROPERTIES
490-B BOSTON POST ROAD
SUDBURY, MA 01776

RE NO.: 3438
GRADING & UTILITIES
TE: JULY 25, 2017
AN NO.: 4 OF 7
4

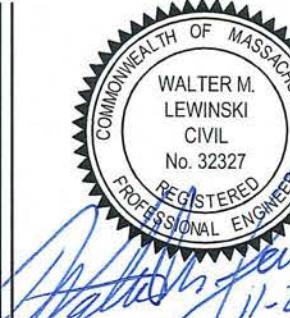


Engineering Design Consultants, Inc. shall not be responsible for construction means, methods, techniques, or procedures utilized by the contractor, nor for the safety of public or contractors' employees, or for the failure of the contractor to carry out the work in accordance with the contract documents.

Engineering Design Consultants, Inc.'s liability for this plan is limited to the extent of its fee less third party costs.

DRW BY:	WML
CHKD BY:	PSB
APRV BY:	PSB
REVISIONS:	
REV #:	0
DATE:	11/27/17
ISSUED FOR PEER REVIEW	ISSUED FOR PEER REVIEW
DESCRIPTION:	

John J. Pawlak, PE



PREPARED BY:

CE

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

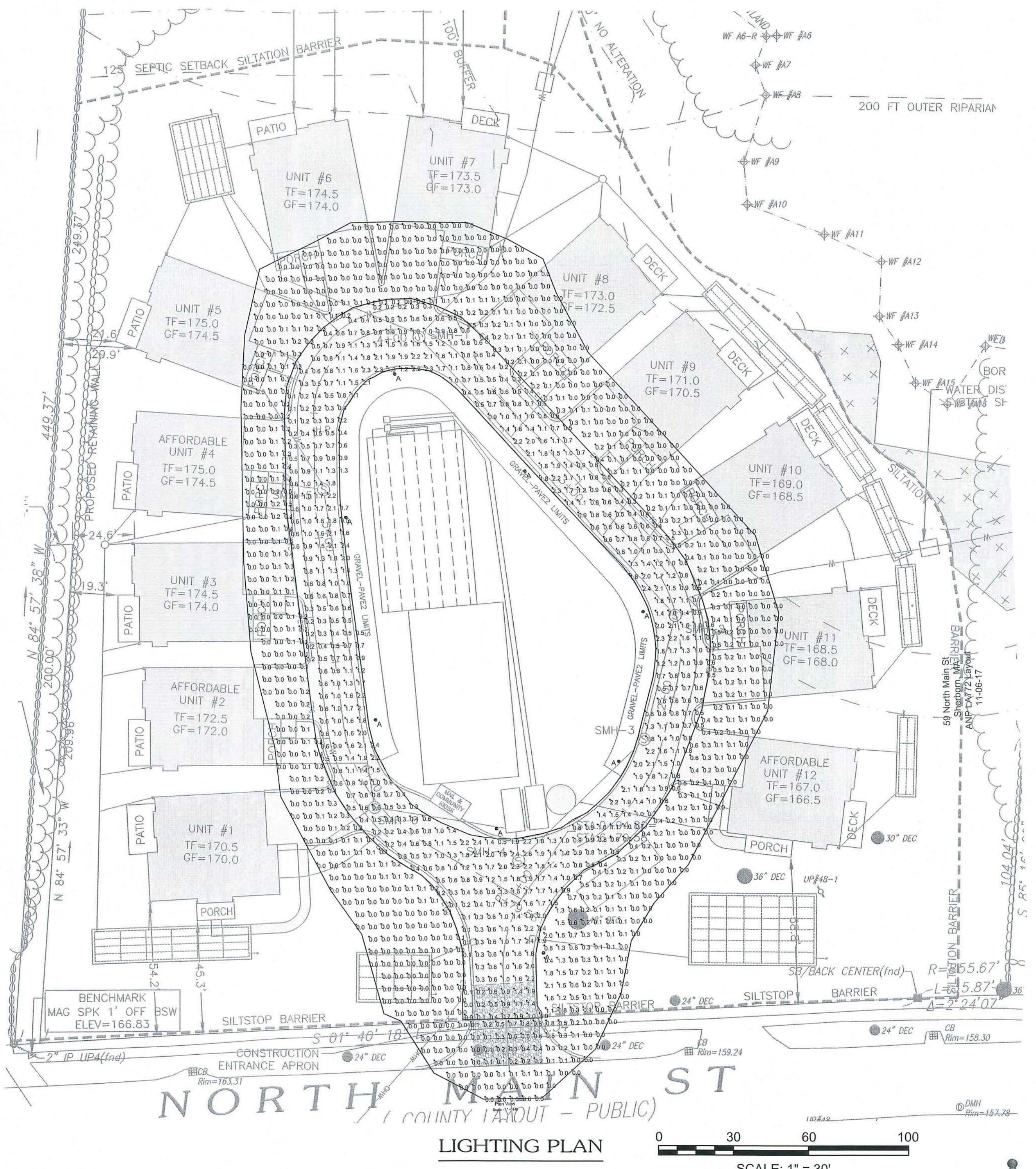
PROJECT:

SHERBORN VILLAGE
A
RESIDENTIAL DEVELOPMENT
IN
SHERBORN, MASSACHUSETTS

TITLE:

PROFILE
#59 NORTH MAIN STREET
SHERBORN, MASSACHUSETTS
HERITAGE PROPERTIES
490-B BOSTON POST ROAD
SUDSBURY, MA 01776

FILE NO: 3438
PROFILE
DATE: JULY 25, 2017
PLAN NO: 5
7



Statistics					
Description	Symbol	Avg	Max	Min	Max/Min
Roadway	+	1.0 fc	2.6 fc	0.0 fc	N/A
Roadway Spill	+	0.1 fc	2.1 fc	0.0 fc	N/A

Schedule								
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Number Lamps	Filename	Lumens Per Lamp
Ⓐ	A	8	ANP LIGHTING	LA772 1 FR 46W N T35K FINISH	30" X 14" DIA. LED TRADITIONAL LUMINAIRE 3500K LEDS WITH TYPE III OPTICS AND FROSTED LENS	1	L02133101.IES	2977



LA772

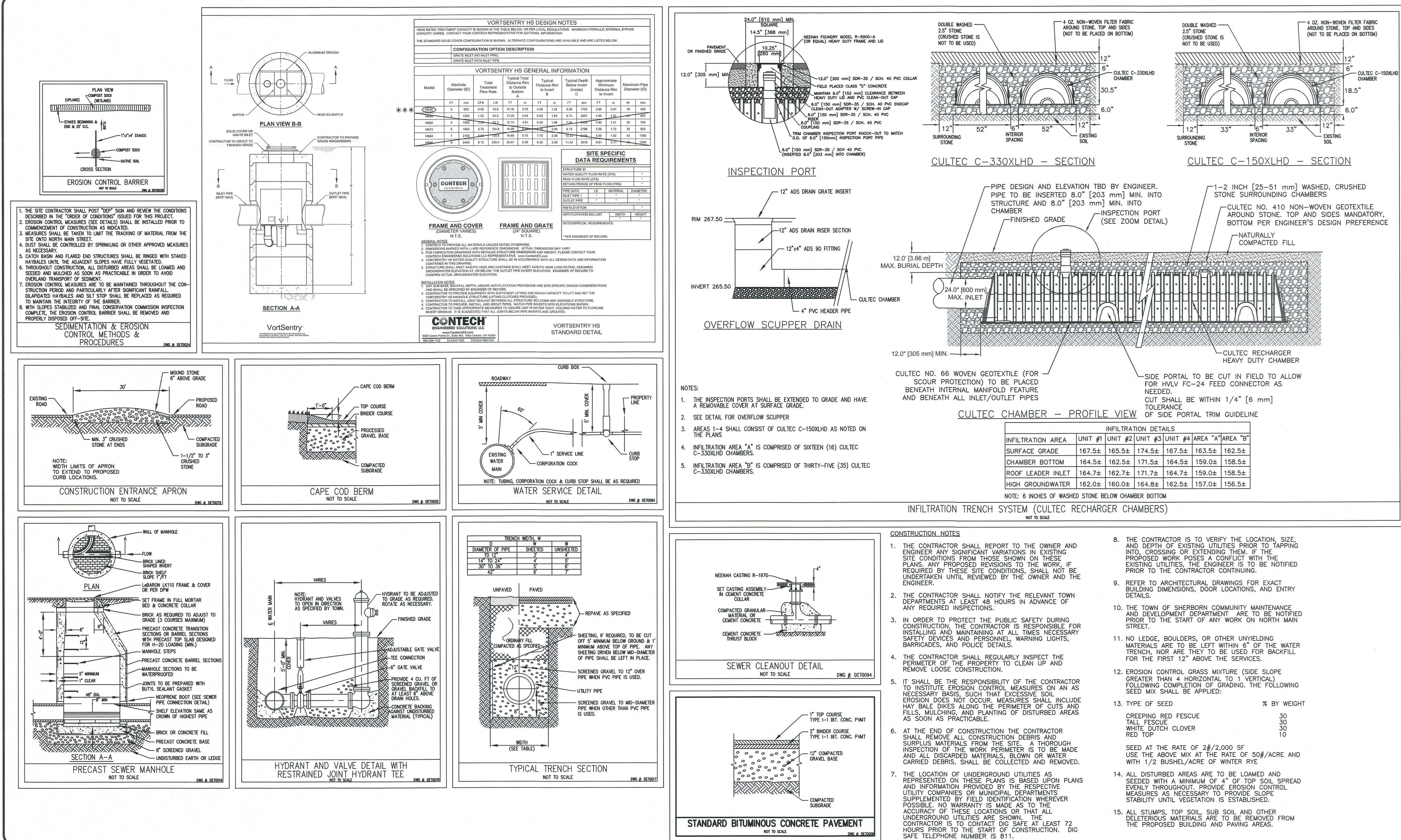
This Series of Fixtures have Classic Old World Charm with a Modern Interpretation. The Dome Shaped Crown has Tool-less Entry into its Hinged and Gasketed Hood for Easy Driver/Ballast Access. It is Constructed of Heavy Duty Cast Aluminum with Stainless Steel Hardware. The Hood is Not Open. Center Leads to the Modern Feel of the Fixture. This Fixture is the Smallest in the Series of Three. This Series of Fixtures have Classic Old World Charm with a Modern Interpretation. The Dome Shaped Crown has Tool-less Entry into its Hinged and Gasketed Hood for Easy Driver/Ballast Access. It is Constructed of Heavy Duty Cast Aluminum with Stainless Steel Hardware. The Three Strut Open Center Leads to the Modern Feel of the Fixture. This Fixture is the Smallest in the Series of Three.

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





Engineering Design Consultants, Inc. shall not be responsible for construction means, methods, techniques, or procedures utilized by the contractor, nor for the safety of public or contractor employees, or for the failure of the contractor to carry out the work in accordance with the contract documents.

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REVISIONS: 0 11/27/17 ISSUED FOR PEER REVIEW
WML DATE: 7/25/17 ISSUED FOR PEER REVIEW
CHECK BY: PSB APPROV BY: PSB

PREPARED BY:
WALTER M. LEWINSKI, C.E.
REGISTERED PROFESSIONAL ENGINEER
Engineering Design Consultants, Inc.

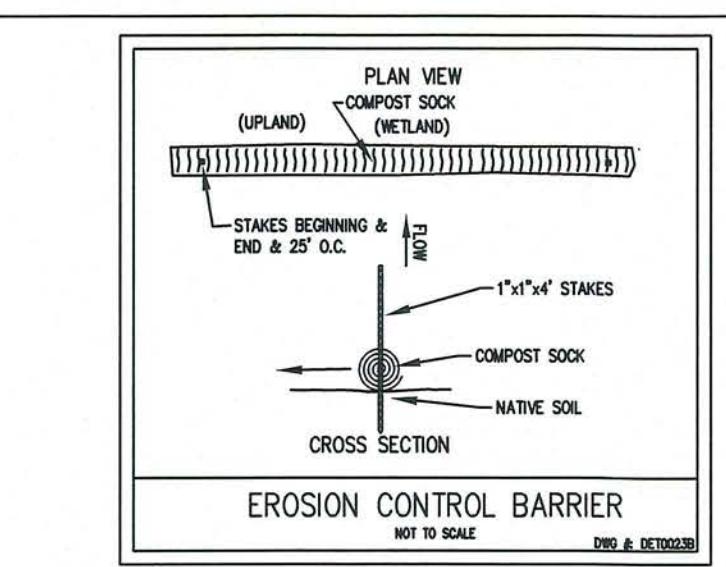
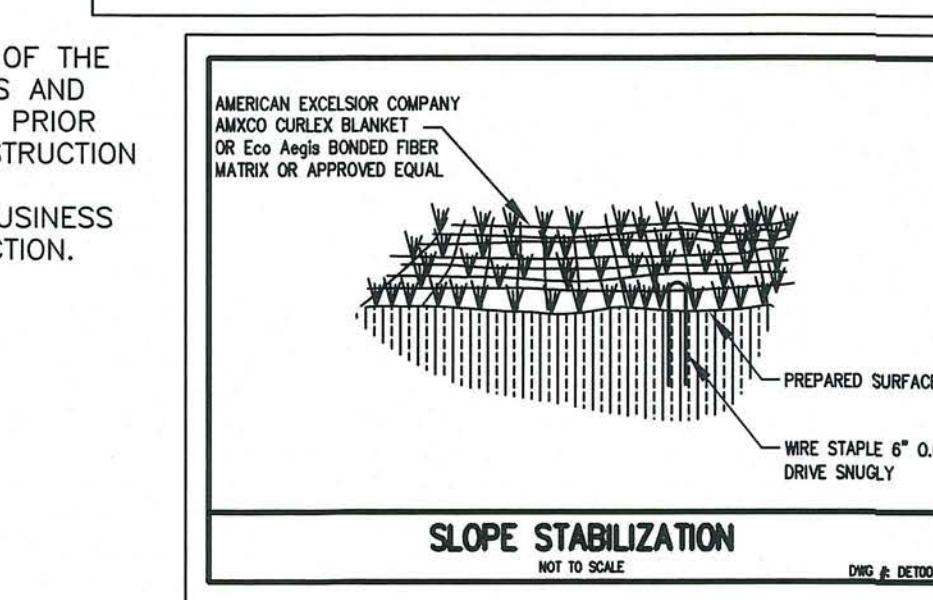
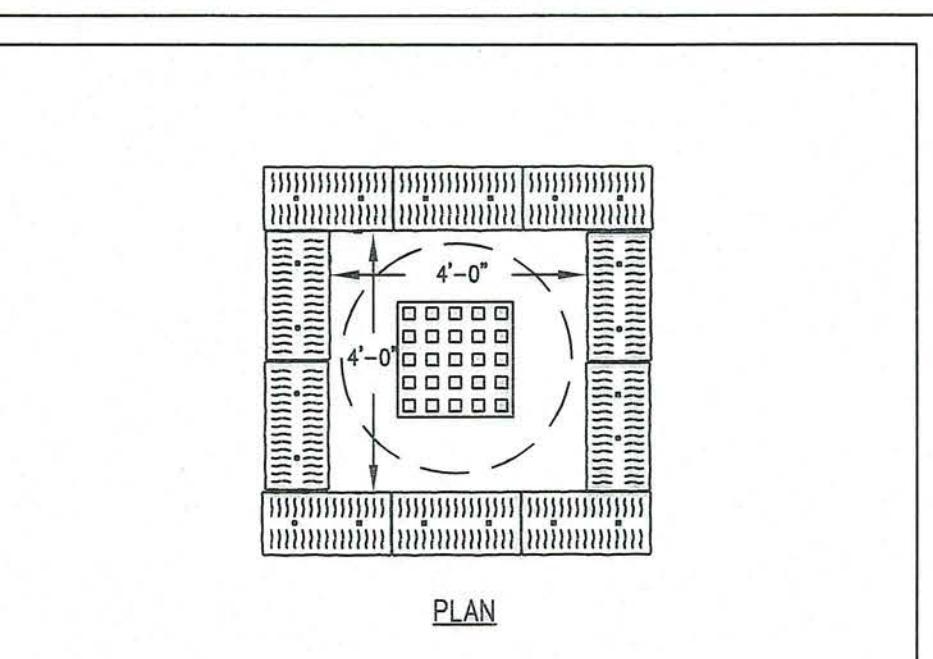
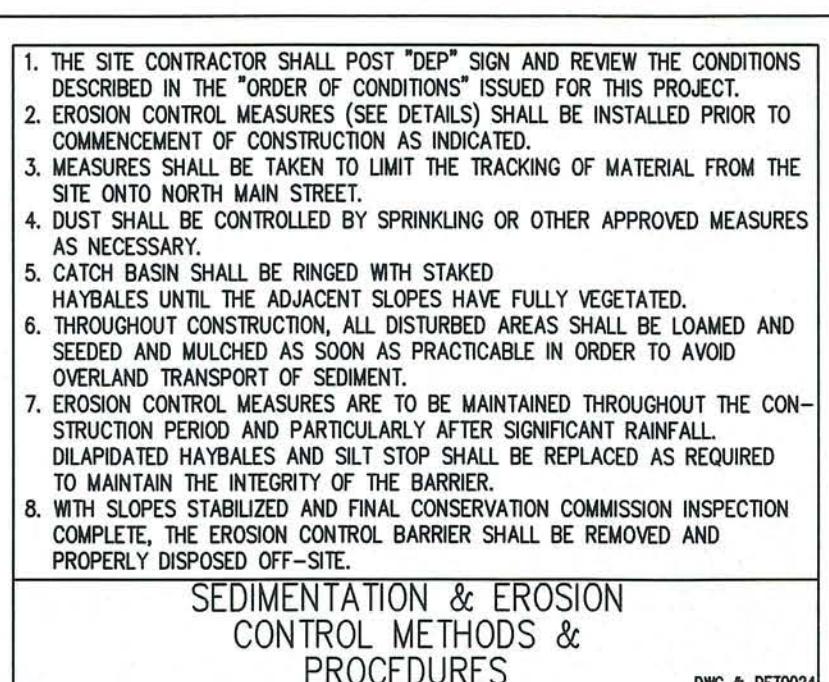
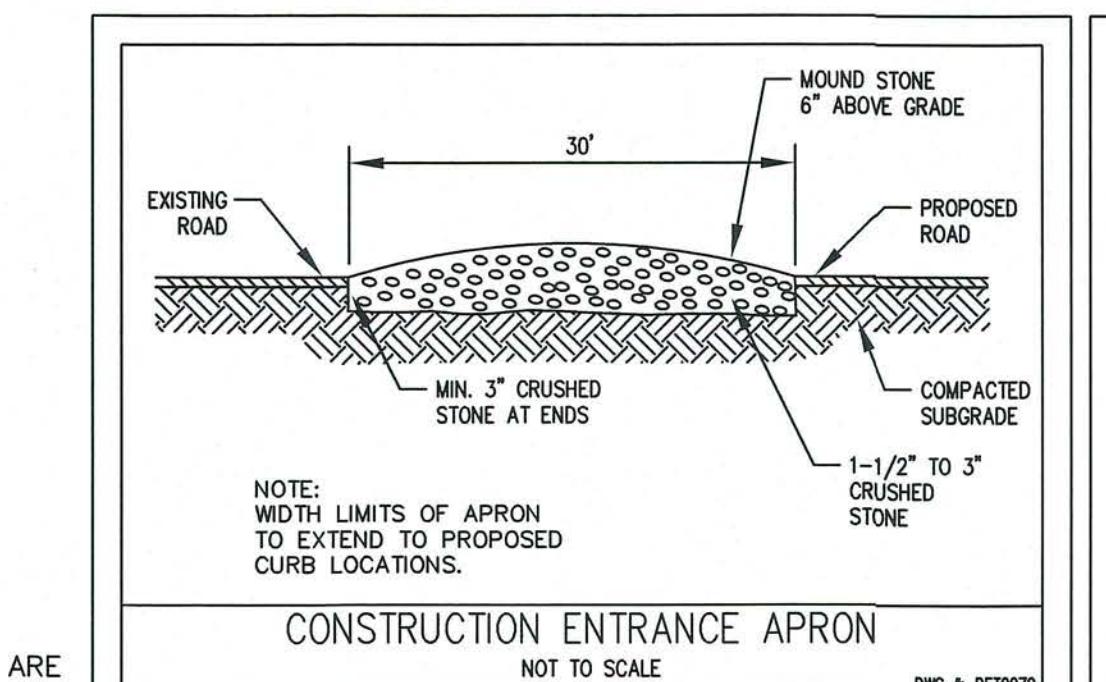
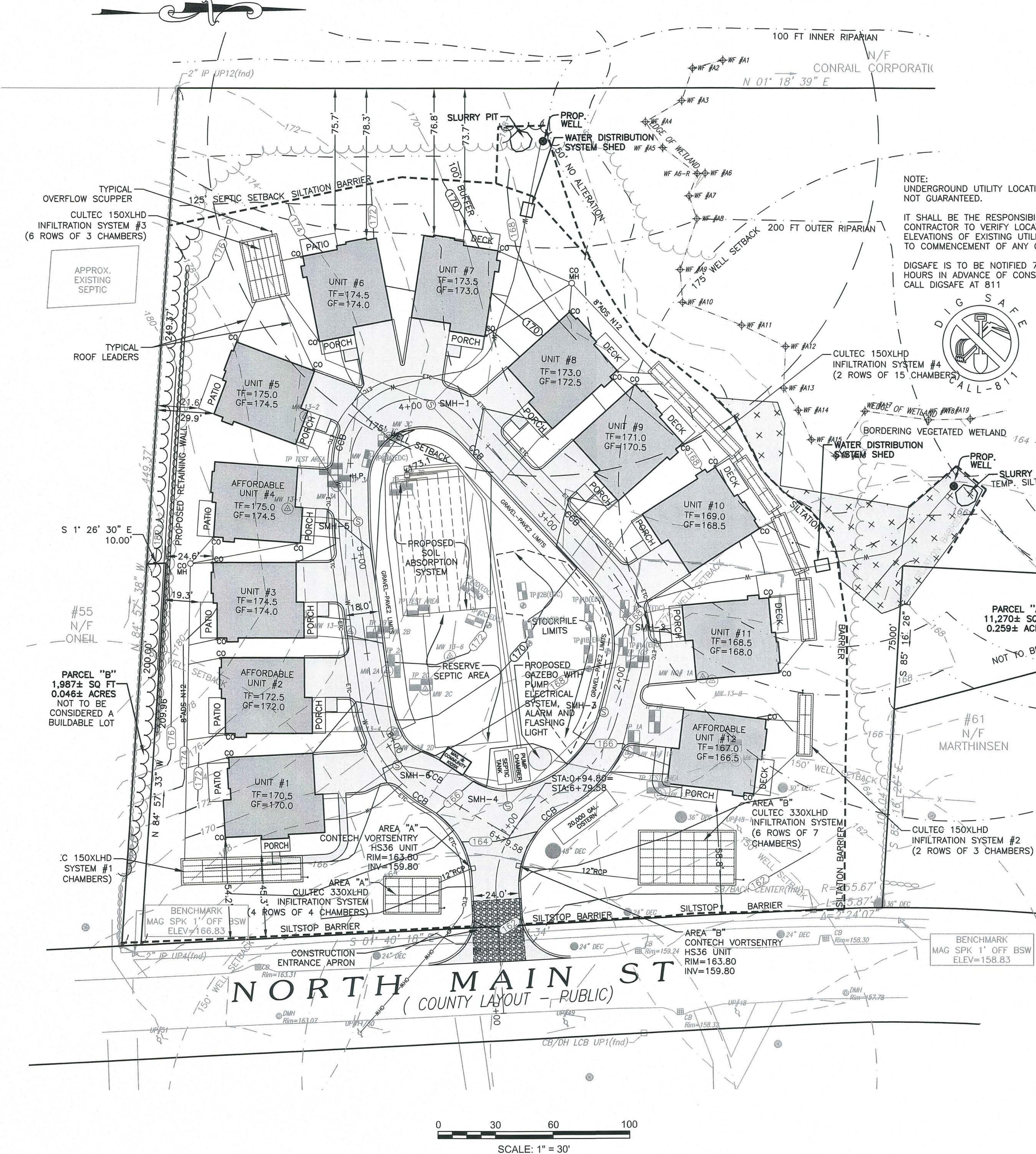
32 Turnpike Road
Southborough, Massachusetts (508) 480-0225

PROJECT:

SHERBORN VILLAGE
A
RESIDENTIAL DEVELOPMENT
IN
SHERBORN, MASSACHUSETTS

DETAILS
#59 NORTH MAIN STREET
SHERBORN, MASSACHUSETTS
HERITAGE PROPERTIES
490-B BOSTON POST ROAD
SUDSBURY, MA 01776

FILE NO: 3438
DETAILS
DATE: JULY 25, 2017
PLAN NO: 7 OF 7



OPERATION AND MAINTENANCE PLAN:

MAJOR O&M TASKS AND DESCRIPTIONS OUTLINED AS FOLLOWS:

1. SCHEDULE OF SHORT-TERM OPERATION AND MAINTENANCE (DURING CONSTRUCTION):

- EROSION CONTROL BARRIER: THE EROSION CONTROL BARRIER SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL BE INSPECTED WEEKLY, PRIOR TO STORM EVENTS AND IMMEDIATELY AFTER STORM EVENTS TO ENSURE ITS INTEGRITY. PORTIONS OF THE EROSION CONTROL BARRIER SHALL BE REMEDIED AS NECESSARY TO PREVENT EROSION.
- CONSTRUCTION ENTRANCE APRON: THE CONSTRUCTION ENTRANCE APRON SHALL BE INSTALLED PRIOR TO COMMENCEMENT OF CONSTRUCTION AND SHALL BE INSPECTED WEEKLY. THE CONSTRUCTION ENTRANCE APRON SHALL BE REPLACED WHEN DEBRIS BECOMES NOTICEABLE ON THE EXISTING PAVEMENT SURFACES OPPOSITE THE CONSTRUCTION SIDE OF THE PROPOSED WORK.
- SLOPE STABILIZATION: THE SLOPE STABILIZATION CONTROLS SHALL BE INSTALLED IMMEDIATELY UPON OBTAINING FINAL GRADES AS SHOWN ON THE PROJECT PLANS. AREAS IN FAILURE SHALL BE RE-GRADED TO FINAL GRADE AND STABILIZED AS NECESSARY.
- CONSTRUCTION COMPLETION: THE ENTIRE STORM WATER MANAGEMENT SYSTEM SHALL BE INSPECTED UPON COMPLETION OF CONSTRUCTION. PORTIONS OF THE SYSTEM CONTAINING SEDIMENTATION SHALL BE PROPERLY CLEANED AND THE SILT REMOVED.

2. MAINTENANCE AGREEMENT/SCHEDULE FOR LONG-TERM OPERATION AND MAINTENANCE (POST CONSTRUCTION)

- OWNER OF THE STORMWATER SYSTEM: _____
OWNERS SIGNATURE: _____ DATE: _____
- PERSON RESPONSIBLE FOR FINANCING MAINTENANCE AND EMERGENCY REPAIRS: _____
- THE ESTIMATED ANNUAL MAINTENANCE COST OF THIS STORMWATER MANAGEMENT SYSTEM IS \$5,000.

- CDS UNIT INSPECTIONS: INSPECTION IS THE KEY TO EFFECTIVE MAINTENANCE AND IS EASILY PERFORMED. POLLUTANT DEPOSITION AND TRANSPORT MAY VARY FROM YEAR TO YEAR, AND REGULAR INSPECTIONS WILL HELP INSURE THAT THE SYSTEM IS CLEANED OUT AT THE APPROPRIATE TIME. AT A MINIMUM, INSPECTIONS SHOULD BE PERFORMED TWICE PER YEAR (I.E. SPRING AND FALL) HOWEVER MORE FREQUENT INSPECTIONS MAY BE NECESSARY WHERE FREQUENT WINTER SANDING OPERATIONS MAY LEAD TO RAPID ACCUMULATIONS. THE VISUAL INSPECTION SHOULD ASCERTAIN THAT THE SYSTEM IS WORKING PROPERLY. THE INSPECTOR SHOULD ALSO IDENTIFY ACCUMULATIONS OF POLLUTANTS AND SEDIMENT IN THE SYSTEM. MEASURING POLLUTANT ACCUMULATION CAN BE DONE WITH A CALIBRATED DIPSTICK, TAPE MEASURE OR OTHER MEASURING INSTRUMENT. IT IS USEFUL AND OFTEN REQUIRED AS PART OF A PERMIT TO RECORD A RECORD OF EACH INSPECTION. (SEE THE INSPECTION AND MAINTENANCE GUIDE PROVIDED BY THE MANUFACTURER, ATTACHED TO THE DRAINAGE CALCULATIONS SUBMITTED WITH THIS PLAN)
- CLEANING OF THE CDS UNITS SHOULD BE DONE WHEN SEDIMENT ACCUMULATES AT A DEPTH OF TWO FEET WITHIN THE UNIT AND SHOULD BE DONE DURING DRY WEATHER CONDITIONS WHEN NO FLOW IS ENTERING THE SYSTEM. CLEANOUT WITH A VACUUM TRUCK IS GENERALLY THE MOST EFFECTIVE AND CONVENIENT METHOD OF EXCAVATING POLLUTANTS FROM THE SYSTEM. SIMPLY REMOVE THE MANHOLE COVERS AND REMOVE THE VACUUM HOSE INTO THE SUMP. THE SYSTEM SHOULD BE COMPLETELY DRAINED DOWN AND THE SUMP FULLY EVACUATED OF SEDIMENT. THE AREA OUTSIDE THE SCREEN SHOULD BE PUMPED OUT ALSO IF POLLUTANT BUILD-UP EXISTS IN THIS AREA.

- INfiltration Chambers: Constructed infiltration chambers are provided with inspection ports that afford visual access to the chambers. Periodic small-scale maintenance at regular intervals to evaluate and remove any accumulated sediment may be necessary, however with proper maintenance of the CDS units and maintaining a healthy lawn should be potential enough to prevent any accumulation in the infiltration chambers. Inspect the infiltration chambers twice annually at the same time as the catch basins and remove any sediment accumulations. If stormwater is remaining in the chambers, it is a sign the bottom is clogged. The chambers should be removed as well as the stone bed, the material below should be scarified and the stone bed and chambers replaced.

- Inspection Reports: See #12 under "CONSTRUCTION PERIOD POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL PLAN" for reports, reports shall be maintained for submission to the Director of Community Maintenance and Development annually for a period of three years. If maintenance or repairs are necessary, a document shall be provided to the Director of Community Maintenance and Development listing the component that was maintained/repaired and when the repair was completed.

- Illicit Discharges: All illicit discharges to any part of the stormwater system are strictly prohibited. If an accidental spill occurs (oil and/or chemical spills, radiation emergencies, and biological discharges) the National Response Center must be called at 1-800-424-8802.

CONSTRUCTION PERIOD POLLUTION PREVENTION AND EROSION AND SEDIMENTATION CONTROL PLAN:

- NAME OF PERSON AND ENTITY RESPONSIBLE FOR PLAN COMPLIANCE: _____
- PROJECT MANAGER OF SHERBORN VILLAGE IS THE CONTACT PERSON. CONTACT NUMBER IS _____

- CONSTRUCTION PERIOD POLLUTION PREVENTION MEASURES: AS DEFINED WITHIN.
- EROSION AND SEDIMENTATION CONTROL PLAN DRAWINGS: REFER TO PLAN VIEW FOR EROSION CONTROL MEASURE LOCATIONS.

- DETAIL DRAWINGS AND SPECIFICATIONS FOR EROSION CONTROL: REFER TO INDIVIDUAL DETAILS FOR INSTALLATION OF EROSION CONTROL MEASURES.

- VEGETATION PLANNING: THE PROPOSED CONSTRUCTION ACTIVITIES WILL BE PERFORMED WITHIN THE LIMITS OF WORK AREA (SILTATION BARRIER BEING THE LIMIT OF WORK). THE FINAL PROPOSED SURFACE WILL CONSIST OF PAVING, TREES/SHRUBS/MULCH AND GRASSED AREAS REFER TO SEQUENCING BELOW.

- SITE DEVELOPMENT PLAN: REFER TO PLAN VIEW & APPROVED SITE PLANS.

- CONSTRUCTION SEQUENCING PLAN: THE FOLLOWING CONSTRUCTION SEQUENCE SHALL BE FOLLOWED:

- EROSION CONTROL PROVISIONS IN PLACE AND INSPECTED PRIOR TO ANY AND ALL CONSTRUCTION.
- EROSION CONTROL MEASURES AT EXISTING CATCH BASINS IN NORTH MAIN STREET.
- CLEAR AND GRUB WOODED AREAS, REMOVE ALL UNUSABLE MATERIAL FROM SITE.
- STRIP AND STOCKPILE TOPSOIL, PROVIDE TEMPORARY SEEDING OF STOCKPILE, PLACE SILTATION BARRIER AROUND STOCKPILE AND PLACE TARPS OVER THE STOCKPILE IF NECESSARY.
- ROUGH GRADE LOT AND DRIVES, REMOVE UNUSABLE MATERIAL FROM SITE.
- LOCATE AND PROTECT EXISTING SEWER, SANITARY, AND DRINKING WATER LINES, PROTECT THE INFILTRATION AREA FROM STORMWATER RUNOFF, NO SILT OR TOSOL IS TO BE DEPOSITED IN THIS AREA, THE INFILTRATION CAPACITY OF THE NATIVE SOIL MUST BE PROTECTED.
- PERFORM BINDER BASE PAVING OPERATIONS.
- CONSTRUCTURE OF BUILDING UNITS.
- EROSION CONTROL MEASURES AT NEW DRAINAGE INLET UNITS.
- FIN GRADING.
- LOAM AND SEED ALL DISTURBED AREAS & LANDSCAPE.
- PERFORM FINAL PAVING OPERATIONS.
- REMOVE EROSION CONTROL PROVISIONS UPON STABILIZATION AND FINAL SITE INSPECTION.

- SEQUENCING OF EROSION AND SEDIMENTATION CONTROLS: EROSION CONTROL PROVISIONS IN PLACE AND INSPECTED PRIOR TO ANY AND ALL CONSTRUCTION.

- OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS: THE CONTRACTOR/OPERATOR IS RESPONSIBLE FOR MAINTAINING A STABLE SITE. THE OPERATOR SHALL EMPLOY EROSION AND SEDIMENTATION CONTROLS TO PREVENT EROSION AND SEDIMENT RELEASES BEYOND THE SEDIMENT BARRIER. THE EROSION CONTROL MEASURES INDICATED ARE THE MINIMUM THAT SHOULD BE EMPLOYED. THE CONTRACTOR/OPERATOR SHALL EMPLOY ADDITIONAL CONTROLS AS THE ON-SITE CONSTRUCTION EXPERIENCE dictates.

- STREET SWEEPING OF NORTH MAIN STREET SHALL BE PROVIDED ONCE A WEEK UNTIL CONSTRUCTION COMPLETION.

- INSPECTION SCHEDULE:

- INSPECTIONS SHALL TAKE PLACE AT LEAST ONCE EVERY 7 CALENDAR DAYS OR WITHIN 24 HOURS OF THE END OF A STORM OF A 0.25" OF RAIN OR GREATER.
- INSPECTION FREQUENCY MAY BE REDUCED TO ONCE A MONTH IF THE ENTIRE SITE IS TEMPORARILY STABILIZED OR THE ENTIRE SITE IS NOT DISTURBED.
- INSPECTIONS MUST BE CONDUCTED BY A PROPERLY AUTHORIZED QUALIFIED PERSONNEL.

- INSPECTIONS SHALL INCLUDE ALL AREAS OF THE SITE DISTURBED BY CONSTRUCTION ACTIVITIES. INSPECTIONS MUST LOOK FOR EVIDENCE OF POLLUTANTS OR POTENTIAL POLLUTANTS ENTERING THE STORM WATER SYSTEM. SEDIMENT AND EROSION CONTROL MEASURES SHOULD BE INSPECTED TO ENSURE PROPER OPERATION. LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE MUST BE INSPECTED FOR EVIDENCE OF OFF-SITE SEDIMENT TRACKING.

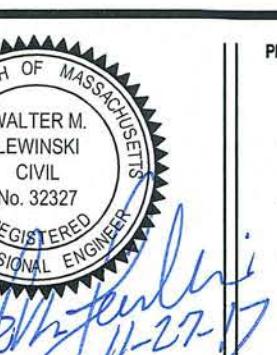
- MAINTENANCE SCHEDULE: REPORTS SUMMARIZING THE INSPECTIONS SHOULD BE KEPT AS PART OF THIS CONSTRUCTION PERIOD POLLUTION PREVENTION AND SEDIMENTATION CONTROL PLAN. AT A MINIMUM THE INSPECTION REPORTS SHALL INCLUDE:

- INSPECTION DATE;
- NAME, TITLE AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION;
- WEATHER CONDITIONS AT THE TIME OF INSPECTION AND SINCE THE PREVIOUS INSPECTION, INCLUDING A BEST ESTIMATE OF THE BEGINNING OF EACH STORM EVENT THAT OCCURRED, DURATION OF EACH STORM EVENT, APPROXIMATE AMOUNT OF RAINFALL DURING EACH STORM EVENT, AND WHETHER ANY DISCHARGES HAVE OCCURRED;

- DISCHARGES THAT OCCURRED AT THE TIME OF INSPECTION;
- LOCATION OF DISCHARGES OR SEDIMENTATION FROM THE SITE;
- LOCATION OF "BMPs" THAT NEED TO BE MAINTAINED;
- LOCATION OF "BMPs" THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION;

- LOCATION WHERE ADDITIONAL "BMPs" ARE NEEDED THAT DID NOT EXIST AT THE TIME OF INSPECTION; AND ALL REPORTS SHALL BE SUBMITTED TO THE DIRECTOR OF COMMUNITY MAINTENANCE AND DEVELOPMENT ON A MONTHLY BASIS DURING CONSTRUCTION PERIOD, AND MAINTAINED FOR THREE YEARS AFTER FINAL CONSTRUCTION PROJECT CLOSEOUT IS COMPLETE.

REVISIONS:	WML
CHKD BY:	PSB
APRD BY:	PSB
REV #:	0
DATE:	11/27/17
DESCRIPTION:	ISSUED FOR PEER REVIEW
REV #:	0
DATE:	7/25/17
DESCRIPTION:	ISSUED FOR PEER REVIEW



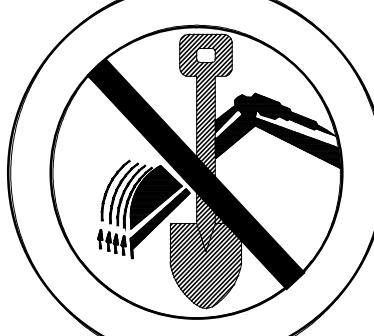
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Engineering Design Consultants, Inc.
32 Turnpike Road
Southborough, Massachusetts
(508) 480-0225

PROJECT:
SHERBORN VILLAGE
A
RESIDENTIAL DEVELOPMENT
IN
SHERBORN, MASSACHUSETTS

TITLE: STORMWATER POLLUTION PREVENTION PLAN
#59 NORTH MAIN STREET
SHERBORN, MASSACHUSETTS
OWNER/APPLICANT:
HERITAGE PROPERTIES
490-B BOSTON POST ROAD
SUDSBURY, MA 01776

FILE NO: 3438
SWPPP
DATE: JULY 25, 2017
PLAN NO: 1
1
1



Call DIGSAFE, 1-888-344-7233,
for location and marking of all
utilities prior to any excavation.
Private utilities may require
additional marking and investigation

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CONTRACTOR TO CARRY OUT THE WORKING ACCORDANCE WITH THE CONTRACT DOCUMENTS.
THE EXTENT OF COSMOS ASSOCIATES LIABILITY FOR THIS PLAN IS LIMITED TO THE EXTENT OF ITS FEE LESS THIRD PARTY COSTS.

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PLANT LIST:

TREES - DECIDUOUS AND EVERGREEN

Qty.	Sym.	Botanical Name	Common Name	Size
5	AF	<i>Acer x freemanii</i> 'Autumn Blaze'	Autumn Blaze Maple	2 1/2 - 3" cal.
7	AR	<i>Acer rubrum</i> 'October Glory'	'October Glory' Red Maple	2 1/2 - 3" cal.
8	AS	<i>Acer saccharum</i> 'Green Mountain'	'Green Mountain' Sugar Maple	2 1/2 - 3" cal.
7	BN	<i>Betula nigra</i> 'Heritage'	'Heritage' River Birch	12-14' ht. clump
3	CF	<i>Cornus florida</i> 'Cherokee Brave'	'Cherokee Brave' Dogwood	2 - 2 1/2" cal.
3	GT	<i>Gleditsia triacanthos</i> 'Skyline'	'Skyline' Honeylocust	2 1/2 - 3" cal.
5	LS	<i>Liquidamber styraciflua</i> 'Ward'	'Ward' Cherokee Sweetgum	2 1/2 - 3" cal.
12	PA	<i>Picea abies</i>	Norway Spruce	10 - 12' height
3	PP	<i>Picea pungens</i> glauca	Colorado Blue Spruce	8 - 10' height
1	QP	<i>Quercus palustris</i>	Pin Oak	2 1/2 - 3" cal.
15	TS	<i>Thuja stan. x plicata</i> 'Green Giant'	'Green Giant' Arborvitae	8 - 10' height
<u>SHRUBS - DECIDUOUS AND EVERGREEN</u>				
12	PF	<i>Pieris floribunda</i>	Mountain Andromeda	24 - 30" height
5	RP	<i>Rhododendron</i> 'PJM'	'PJM' Rhododendron	24 - 30" height
6	SP	<i>Syringa patula</i> 'Miss Kim'	'Miss Kim' Lilac	24 - 30" height
<u>ORNAMENTAL GRASSES</u>				
6	MP	<i>Miscanthus purpurascens</i>	Maiden Grass	5 gallon pot

PLANTING NOTES:

1. Trees and shrubs shall be uniform, full and bushy, and well branched specimen plants. All plants to be approved by Landscape Architect.
2. Plants shall be balled and burlapped or container grown.
3. Plants to conform to the requirements established in 'American Standards For Nursery Stock', latest edition.
4. Plant beds to receive 3-inch min. depth of shredded bark mulch. Contractor to submit bark samples for approval.
5. Plants shall be guaranteed for 1-year after installation.
6. Plants to be field located and approved by the Landscape Architect.
7. Loam (5" min. depth) and seed all lawn areas and disturbed areas not noted to receive other treatment.
See Civil Plans for limit of work

REV	DATE	REVISION	RE
1	11/7/2017	REVISED PLANTING AND PLANT LIST.	

LANDSCAPE PLAN

NORTH MAIN STREET

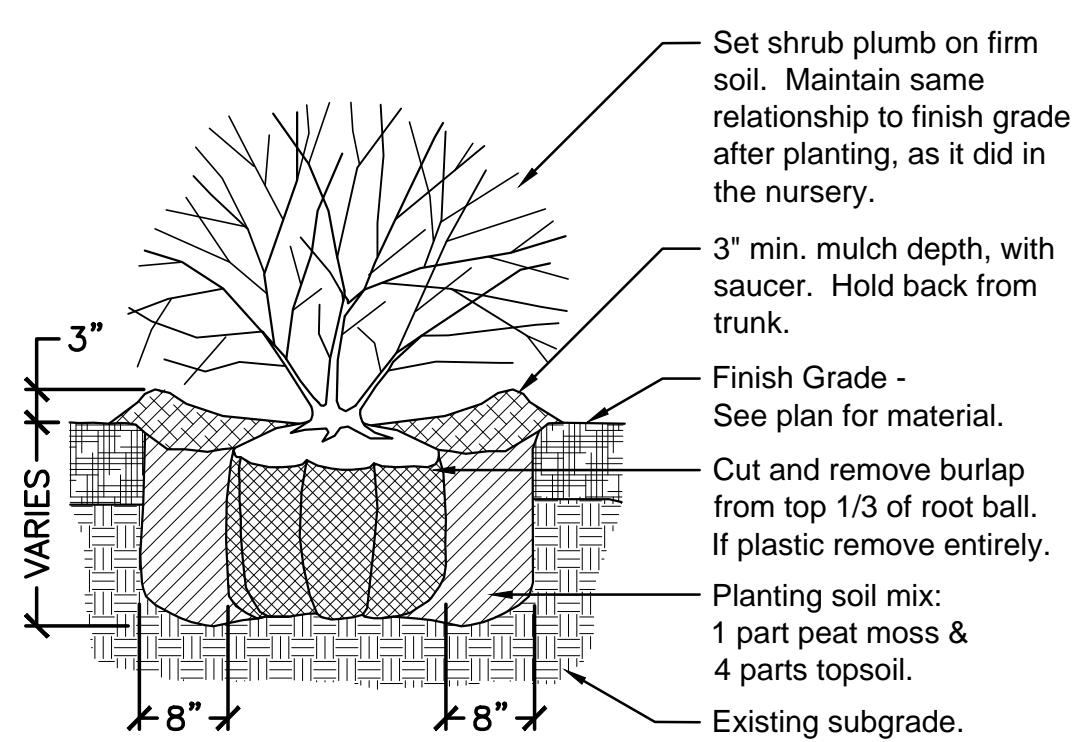
SHERBORN, MA

Cosmos Associates

Landscape Architects & Site Planners
Bismarck, Grand Forks, ND 58201

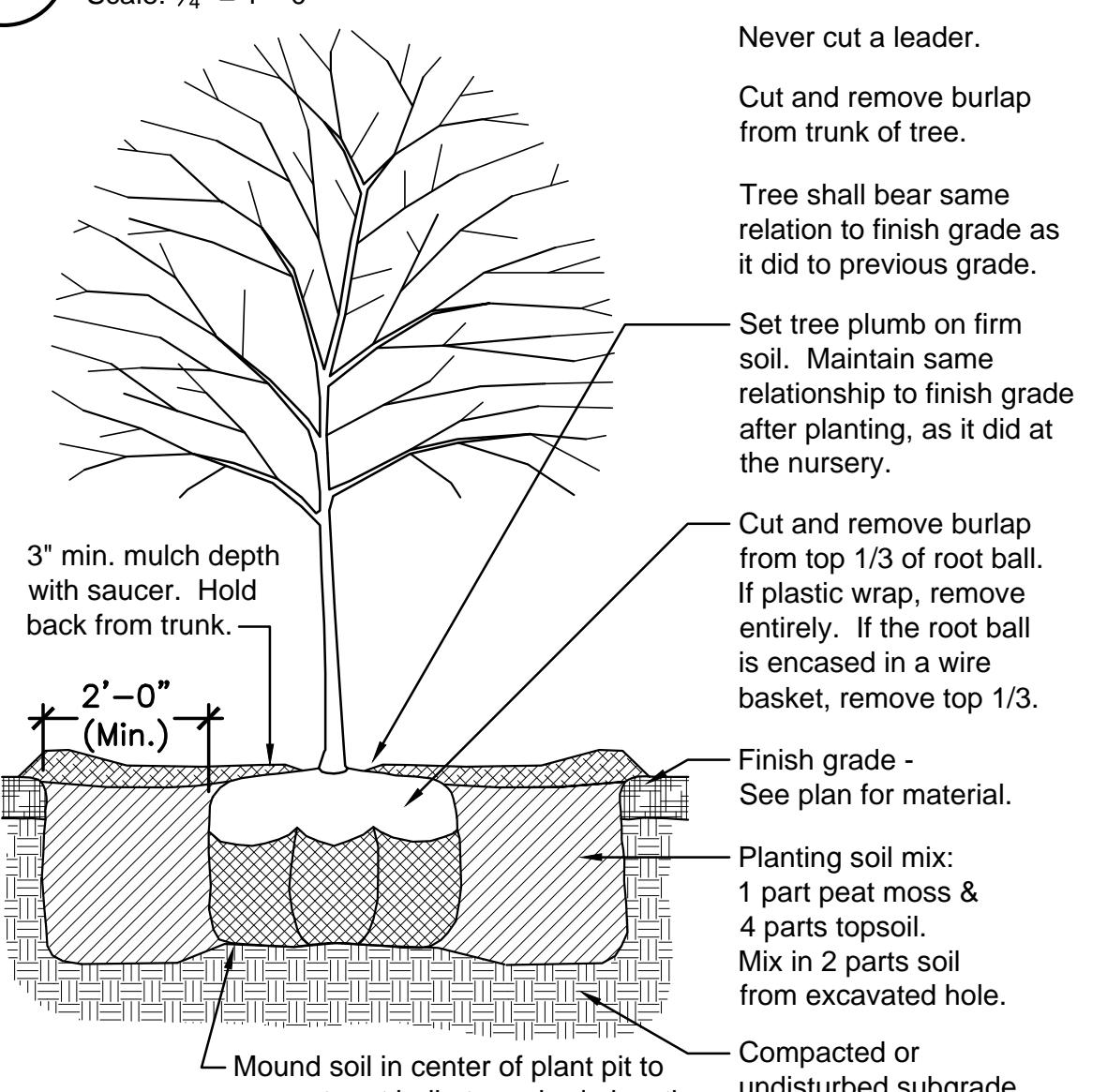
5 Longview Street, Natick, MA 01760
508.628.3595 www.cosmosassociates.com

L1



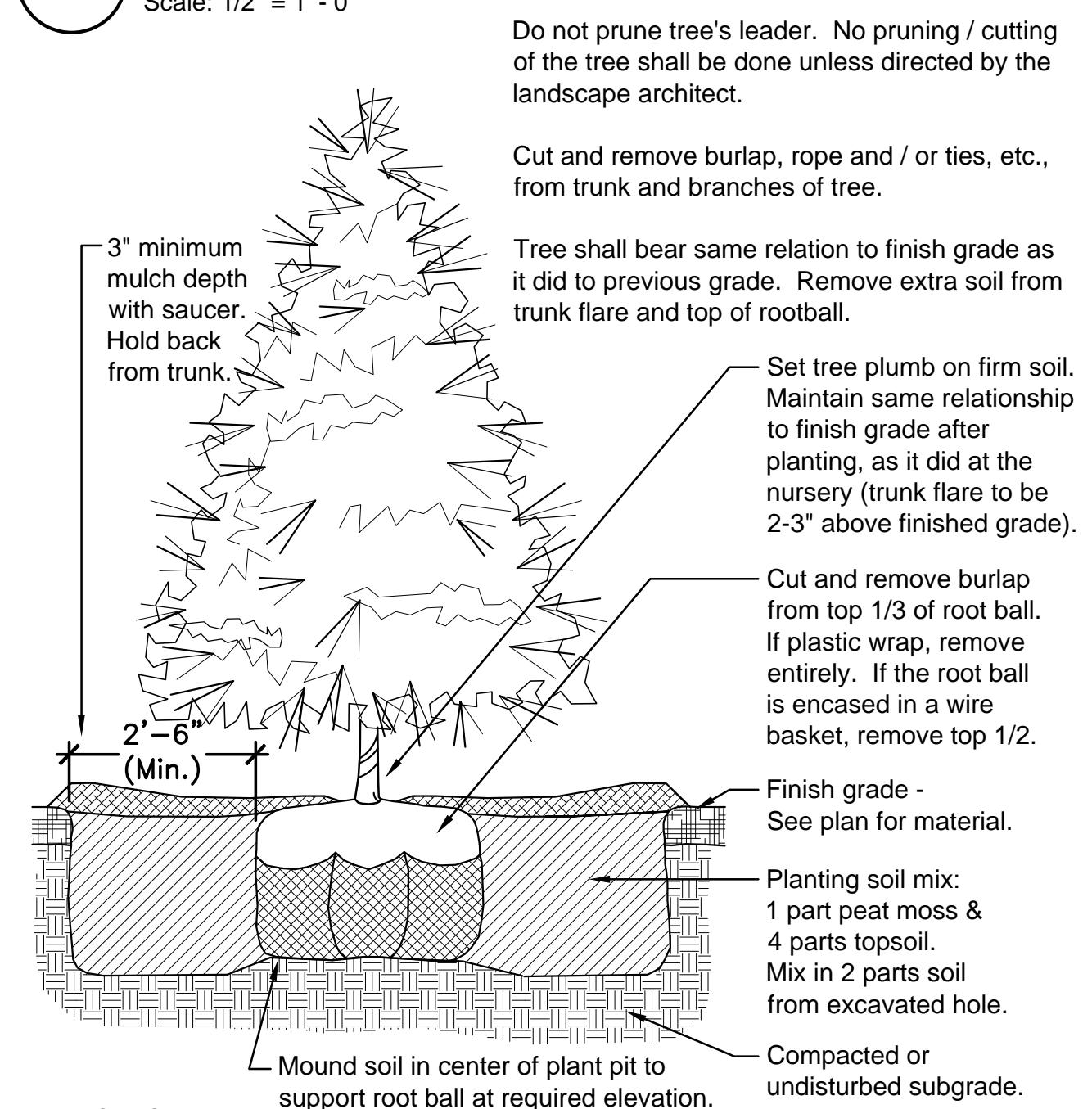
1 TYPICAL SHRUB PLANTING

Scale: $\frac{3}{4}'' = 1' - 0''$



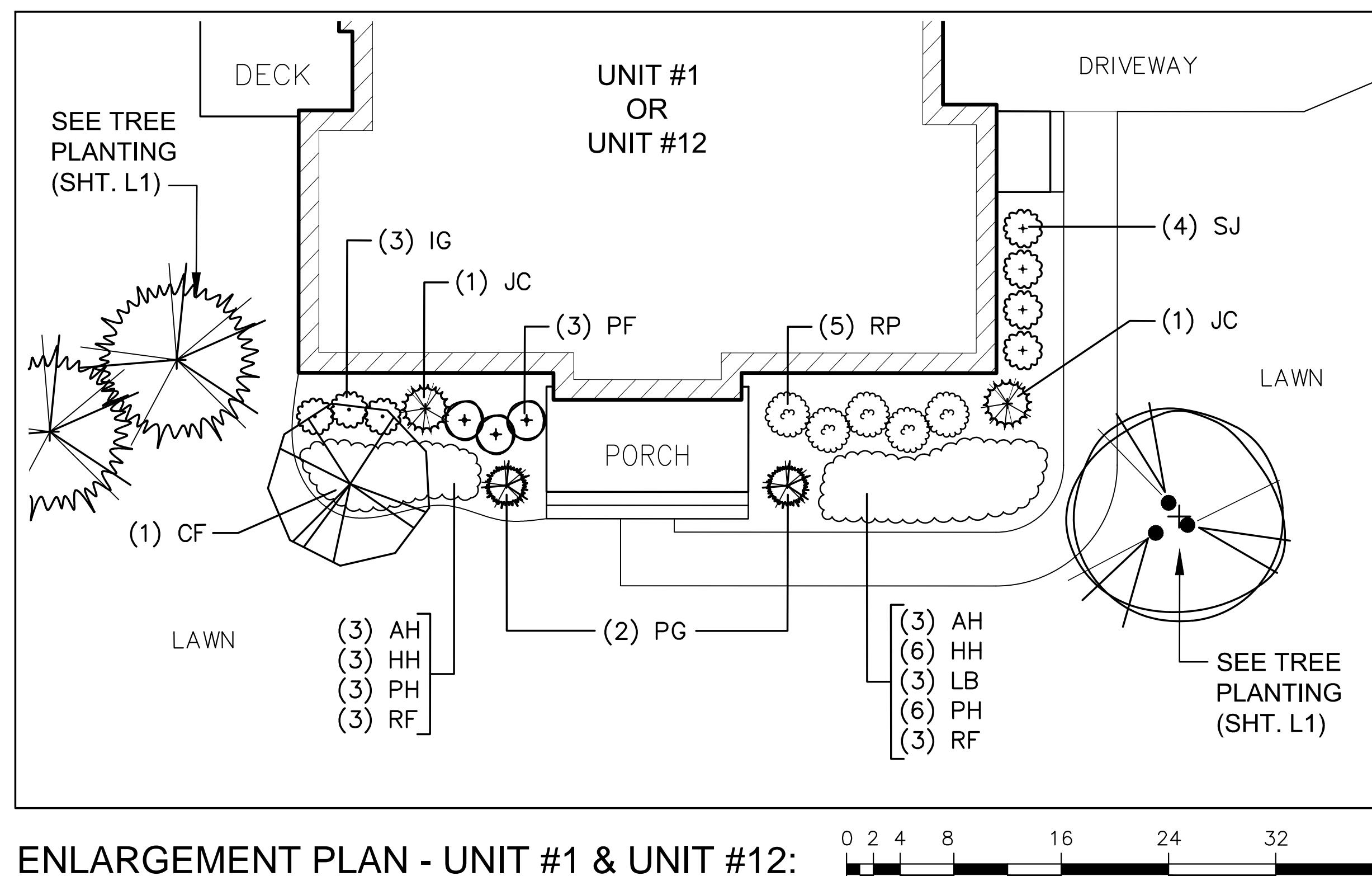
2 TYP. DECIDUOUS TREE PLANTING

Scale: $\frac{1}{2}'' = 1' - 0''$



3 TYP. EVERGREEN TREE PLANTING

Scale: $\frac{1}{2}'' = 1' - 0''$



ENLARGEMENT PLAN - UNIT #1 & UNIT #12:

PLANT LIST:

TREES AND SHRUBS - DECIDUOUS AND EVERGREEN

Qty.	Sym.	Botanical Name	Common Name	Size
2	CF	<i>Cornus florida</i> 'Cherokee Brave'	'Cherokee Brave' Dogwood	2 - 2 1/2" cal.
6	IG	<i>Ilex glabra</i> 'Shamrock'	'Shamrock' Inkberry	24 - 30" height
4	JC	<i>Juniperus chinensis</i> communis	'Gold Cone' Common Juniper	10 gallon pot
6	PF	<i>Pieris floribunda</i>	Mountain Andromeda	24 - 30" height
4	PG	<i>Picea glauca</i> 'Conica'	Dwarf Alberta Spruce	30 - 36" height
10	RP	<i>Rhododendron</i> 'PJM'	'PJM' Rhododendron	24 - 30" height
8	SJ	<i>Spirea japonica</i> 'Gold Mound'	'Gold Mound' Spirea	18 - 24" height

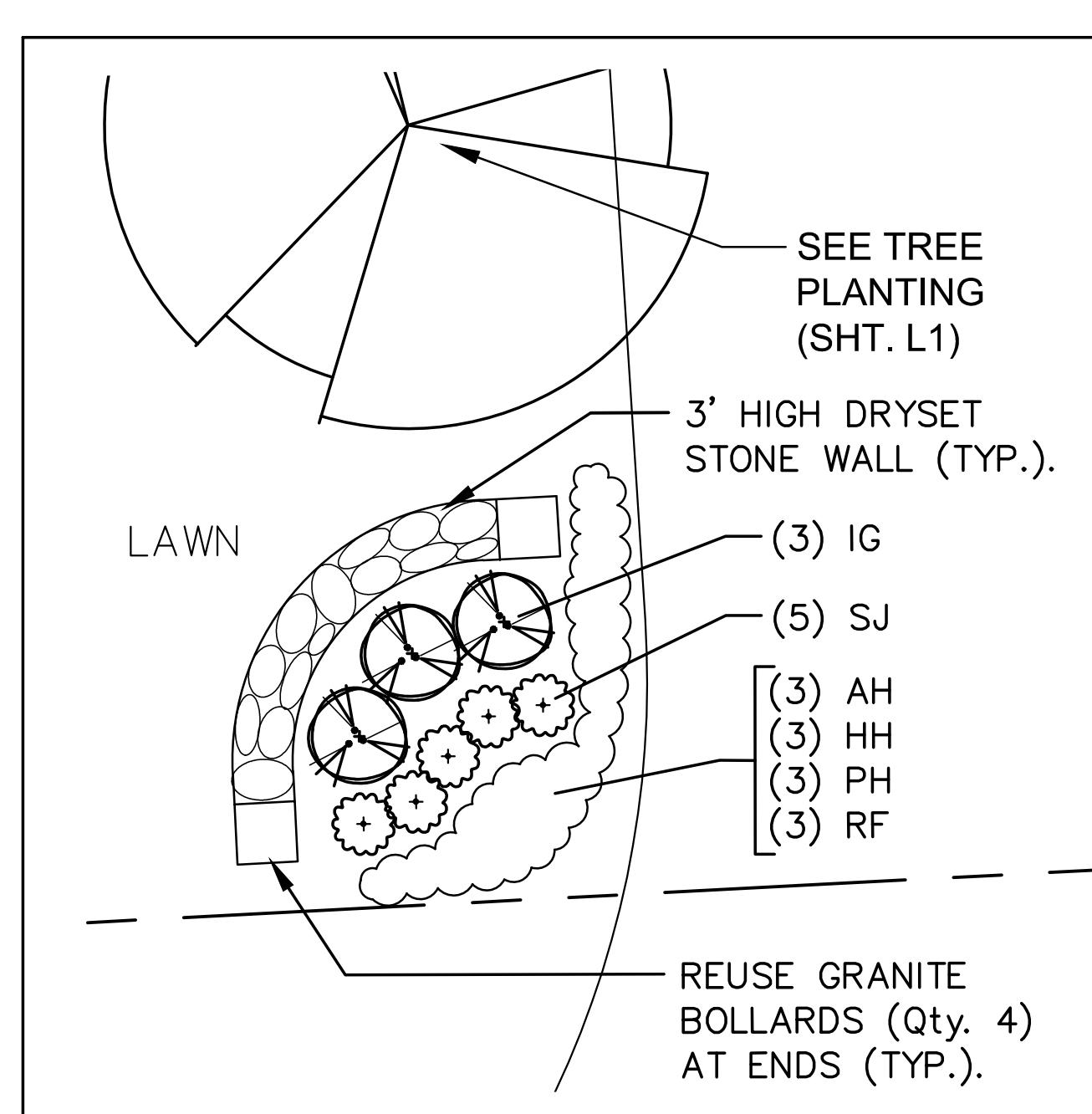
PERENNIALS AND ORNAMENTAL GRASSES				
12	AH	<i>Amsonia hubrichtii</i>	Blue Star	2 gallon pot
18	HH	<i>Hemerocallis</i> x 'Happy Returns'	'Happy Returns' Daylily	2 gallon pot
6	LB	<i>Leucanthemum</i> x <i>superbum</i> 'Becky'	'Becky' Shasta Daisy	2 gallon pot
18	PH	<i>Pennisetum alopecuroides</i> 'Hameln'	'Hameln' Dwarf Fountain Grass	2 gallon pot
12	RF	<i>Rudbeckia fulgida</i> 'Goldsturm'	'Goldsturm' Black-Eyed Susan	2 gallon pot

SCALE: $\frac{1}{8}'' = 1' - 0''$

PLANTING NOTES:

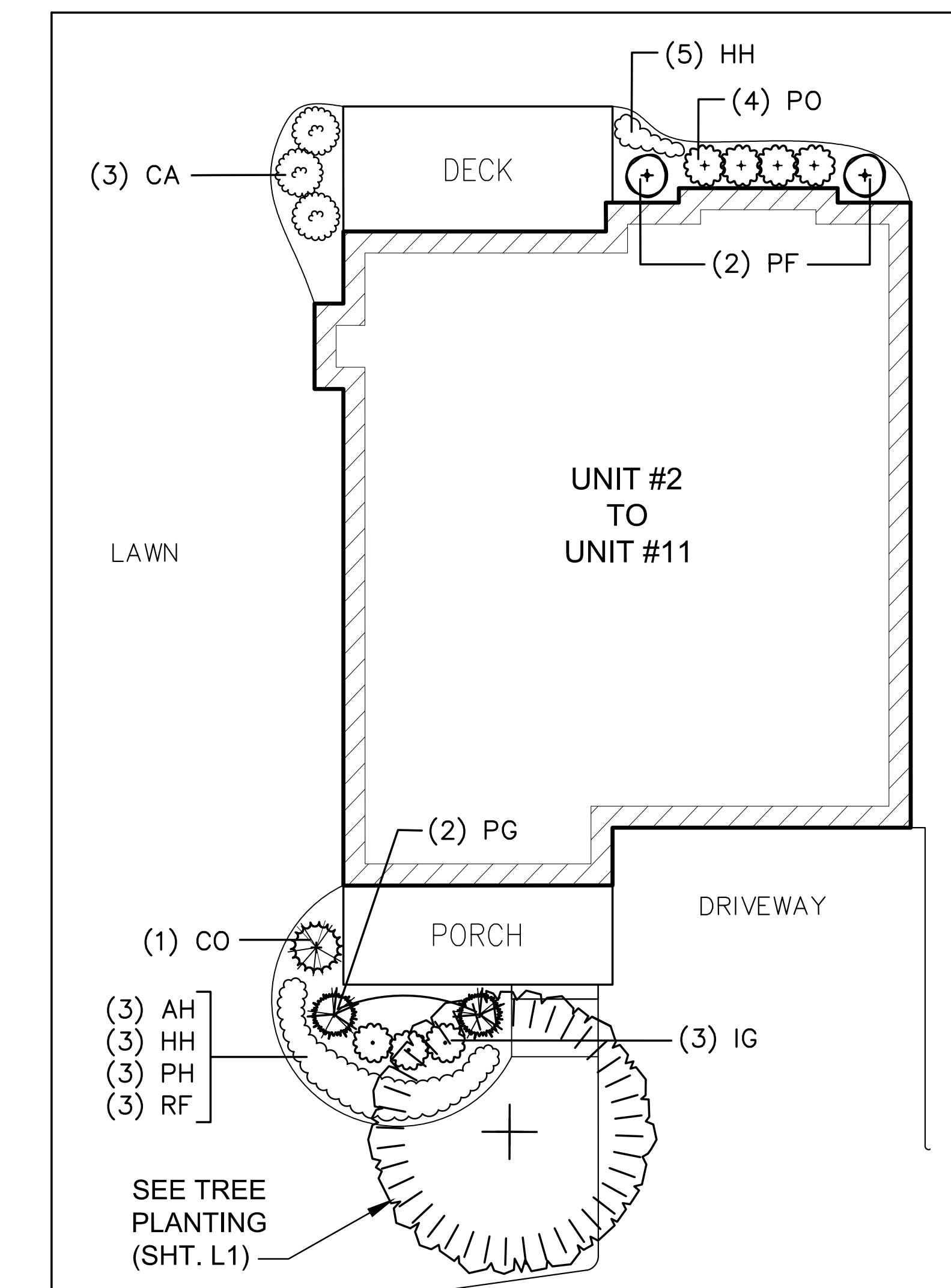
1. Trees and shrubs shall be uniform, full and bushy, and well branched specimen plants. All plants to be approved by Landscape Architect.
2. Plants shall be balled and burlapped or container grown.
3. Plants to conform to the requirements established in 'American Standards For Nursery Stock', latest edition.
4. Plant beds to receive 3-inch min. depth of shredded bark mulch. Contractor to submit bark samples for approval.
5. Plants shall be guaranteed for 1-year after installation.
6. Plants to be field located and approved by the Landscape Architect.
7. Loam (5" min. depth) and seed all lawn areas and disturbed areas not noted to receive other treatment. See Civil Plans for limit of work.

NOTE: QUANTITIES LISTED ABOVE, INCLUDE PLANTINGS AT UNITS #1 AND #12.



ENLARGEMENT PLAN - WALL AT ENTRY

SCALE: $\frac{1}{4}'' = 1' - 0''$



ENLARGEMENT PLAN - UNIT #2 TO UNIT #11:

PLANT LIST:

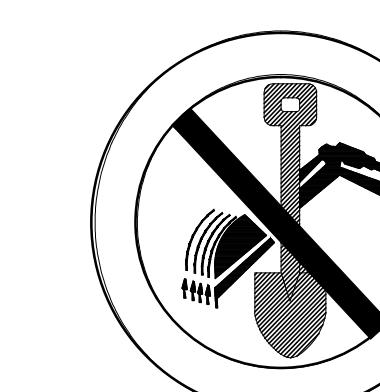
SHRUBS - DECIDUOUS AND EVERGREEN

Qty.	Sym.	Botanical Name	Common Name	Size
30	CA	<i>Clethra alnifolia</i> 'Ruby Spice'	'Ruby Spice' Summersweet	24 - 30" height
10	CO	<i>Chamaecyparis obtusa</i> 'Fernspray'	'Fernspray' Hinoki Cypress	3 - 4' height
30	IG	<i>Ilex glabra</i> 'Shamrock'	'Shamrock' Inkberry	24 - 30" height
20	PF	<i>Pieris floribunda</i>	Mountain Andromeda	24 - 30" height
20	PG	<i>Picea glauca</i> 'Conica'	Dwarf Alberta Spruce	30 - 36" height
40	PO	<i>Physocarpus opulifolius</i> 'Diabolo'	'Diabolo' Purple Ninebark	24 - 30" height

PERENNIALS AND ORNAMENTAL GRASSES				
30	AH	<i>Amsonia hubrichtii</i>	Blue Star	2 gallon pot
80	HH	<i>Hemerocallis</i> x 'Happy Returns'	'Happy Returns' Daylily	2 gallon pot
30	PH	<i>Pennisetum alopecuroides</i> 'Hameln'	'Hameln' Dwarf Fountain Grass	2 gallon pot
30	RF	<i>Rudbeckia fulgida</i> 'Goldsturm'	'Goldsturm' Black-Eyed Susan	2 gallon pot

SCALE: $\frac{1}{8}'' = 1' - 0''$

NOTE: QUANTITIES LISTED ABOVE, INCLUDE PLANTINGS AT UNITS #2 TO #11.



Call DIGSAFE, 1-888-344-7233,
for location and marking of all
utilities prior to any excavation.
Private utilities may require
additional marking and investigation.

SCALE AS SHOWN	1 11/7/2017	REVISED PLANTING AND PLANT LIST.	REC
REV	DATE	REVISION	BY
SHEET 2 OF 2			
DATE 10/3/2017			
PLAN NO. Sherborn_Lndsg_2017-11.dwg			
DRAWN BY REC			
CHECKED BY SCC			

LANDSCAPE ENLARGEMENTS

NORTH MAIN STREET

SHERBORN, MA

Cosmos Associates

Landscape Architects & Site Planners
5 Longview Street, Natick, MA 01760
p: 508.628.3595 www.cosmosassociates.com

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