



Schooner Memory Care

Stetson Road Auburn , Maine

Site Plan Application

Applicant :

Auburn Memory Care, LLC
c/o Sandy River Company
P.O. Box 110
Portland, Maine

Architect :

Gawron Turgeon Architects
29 Black Point Road
Scarborough , Maine

Landscape Architect / Surveyor / Site Engineer :

Sebago Technics, Inc.
75 John Roberts Road
South Portland, Maine

March 13 , 2018

SITE PLAN APPLICATION
SCHOONER MEMORY CARE CENTER

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March 13, 2018
14300

Zach Moser, City Planner
Members of the Planning Board
City of Auburn
60 Court Street
Auburn, Maine 04210

Re: **Site Plan Application**
Schooner Memory Care Facility, Stetson Road

Dear Zach and Members of the Board,

On behalf of Auburn Memory Care, LLC I am pleased to submit the enclosed materials for your review.

The Schooner Memory Care Facility is planned on a parcel immediately west of and adjacent to Schooner Estates on Stetson Road. The project is comprised of 60 assisted living units and associated shared common areas, with memory care as a primary focus of the facility. This building is modeled on Avita of Westbrook, Avita of Brunswick and Avita of Wells. The Avita projects were developed as joint venture projects including Sandy River Company of Portland, who is leading this project.

In addition to a building designed specifically for memory care residents, the project features extensive landscaped areas, including three secure outdoor courtyards, such that residents may experience the outdoor environment as desired.

Due to the sloping topography of the site, the building will be partially one story and partially two stories, integrated into the existing terrain. A drop off area and staff / visitor parking are located at the front of the building and upper floor level, while the service area is located at the rear of the building at the lower floor level.

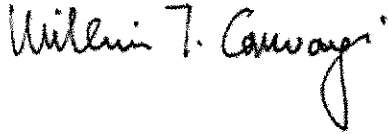
Access to the site will be across the Schooner Estates primary access driveway, and the two site will be connected via a planned pedestrian walkway. A reciprocal parking easement will be created, such that either building may use parking spaces on either site during special events.

Although the proposed impervious areas are less than three acres, the project will require a Site Location of Development Permit under a common scheme with Schooner Estates. The project will also require a Maine DEP NRPA permit and US Army Corps permit for proposed wetland fill.

We look forward to discussing the request at the April 10, 2018 Planning Board meeting. In the interim, please feel free to contact me with any questions you may have.

Sincerely,

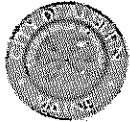
SEBAGO TECHNICS, INC.

A handwritten signature in black ink that reads "William T. Conway". The signature is written in a cursive style with a large, stylized 'W' and 'C'.

William T. Conway, RLA / LEED AP
Senior Vice President, Landscape Architecture

WTC/LLG
Enc.

cc: Daniel Maguire
John Orestis



Development Review Application

City of Auburn Planning and Permitting Department

PROJECT NAME: Schooner Memory Care Center

PROPOSED DEVELOPMENT ADDRESS: 200 Stetson Road

PARCEL ID#: 291 - 008

REVIEW TYPE: Site Plan ☒ Site Plan Amendment ☐ Special Exception ☒
Subdivision ☐ Subdivision Amendment ☐ Form Based Code Plan ☐
Planned Unit Development ☐

PROJECT DESCRIPTION: 60 UNIT Memory Care / ASSISTED LIVING CENTER

CONTACT INFORMATION:

Applicant <u>Auburn Memory Care LLC</u>
Name: <u>40 Sandy River Company</u>
Address: <u>PO Box 110</u>
Zip Code: <u>Portland ME 04112</u>
Work #:
Cell #: <u>233 - 8665</u>
Fax #:
Home #:
Email: <u>dinaquire@sandyriver2.com</u>

Project Representative <u>Will Conway</u>
Name: <u>Sehgo Technics Inc.</u>
Address: <u>75 John Roberts Rd.</u>
Zip Code: <u>So. Portland 04106</u>
Work #: <u>207. 200. 2055</u>
Cell #:
Fax #:
Home #:
Email: <u>wconway@sehgo technics.com</u>

Property Owner
Name: <u>Schooner Memory Care Acquisition, LLC</u>
Address: <u>200 Stetson Road</u>
Zip Code: <u>Auburn 04210</u>
Work #: <u>784. 2900</u>
Cell #:
Fax #:
Home #:
Email: <u>JORESTIS@NCA LTC.com</u>
Other professional representatives for the project (surveyors, engineers, etc.). <u>N/A</u>
Name:
Address:
Zip Code:
Work #:
Cell #:
Fax #:
Home #:
Email:

PROJECT DATA

The following information is required where applicable, in order complete the application

IMPERVIOUS SURFACE AREA/RATIO

Existing Total Impervious Area	<u>0</u> sq. ft.
Proposed Total Paved Area	<u>49,737</u> sq. ft.
Proposed Total Impervious Area Proposed	<u>47,343</u> sq. ft.
Impervious Net Change	<u>47,343</u> sq. ft.
Impervious surface ratio existing	<u>0</u> % of lot area
Impervious surface ratio proposed	<u>24</u> % of lot area

BUILDING AREA/LOT COVERAGE

Existing Building Footprint	<u>0</u> sq. ft.
Proposed Building Footprint	<u>47,606</u> sq. ft.
Proposed Building Footprint Net change	<u>47,606</u> sq. ft.
Existing Total Building Floor Area	<u>0</u> sq. ft.
Proposed Total Building Floor Area	<u>65,300</u> sq. ft.
Proposed Building Floor Area Net Change	<u>65,300</u> sq. ft.
New Building ?	<u>yes</u> (yes or no)
Building Area/Lot coverage existing	<u>0</u> % of lot area
Building Area/Lot coverage proposed	<u>12</u> % of lot area

ZONING or FORM BASED CODE DISTRICT

Existing

Proposed, if applicable

GENERAL BUSINESS

N/A

LAND USE

Existing

Proposed

UNDEVELOPED
CARE HOME

RESIDENTIAL, IF APPLICABLE

Existing Number of Residential Units

Proposed Number of Residential Units

Subdivision Proposed Number of Lots

N/A

↓

PARKING SPACES

Existing Number of Parking Spaces

Proposed Number of Parking Spaces

Number of Handicapped Parking Spaces

Proposed Total Parking Spaces

0

72

3

72

ESTIMATED COST OF PROJECT

TBD

DELEGATED REVIEW AUTHORITY CHECKLIST

SITE LOCATION OF DEVELOPMENT AND STORMWATER MANAGEMENT

Existing Impervious Area	<u>0</u> sq. ft.
Proposed Disturbed Area	_____ sq. ft.
Proposed Impervious Area	_____ sq. ft.

1. If the proposed disturbance is greater than one acre, then the applicant shall apply for a Maine Construction General Permit (MCGP) with MDEP.
2. If the proposed impervious area is greater than one acre including any impervious area created since 11/16/05, then the applicant shall apply for a MDEP Stormwater Management Permit, Chapter 500, with the City.
3. If total impervious area (including structures, pavement, etc) is greater than 3 acres since 1971 but less than 7 acres, then the applicant shall apply for a Site Location of Development Permit with the City. If more than 7 acres then the application shall be made to MDEP unless determined otherwise.
4. If the development is a subdivision of more than 20 acres but less than 100 acres then the applicant shall apply for a Site Location of Development Permit with the City. If more than 100 acres then the application shall be made to MDEP unless determined otherwise.

TRAFFIC ESTIMATE

Total traffic estimated in the peak hour-existing

(Since July 1, 1997)

SEE TAB 5

Total traffic estimated in the peak hour-proposed (Since July 1, 1997)

If the proposed increase in traffic exceeds 100 one-way trips in the peak hour then a traffic movement permit will be required.

Zoning Summary

1. Property is located in the General Business zoning/~~form based code~~ district.
2. Parcel Area: 9.32 acres / 406,238 square feet(sf).

Regulations	Required/Allowed	Provided
Min Lot Area	<u>10,000 SF</u>	<u>/</u>
Street Frontage	<u>100 FT</u>	<u>/ 275 FT</u>
Min Front Yard	<u>25 FT</u>	<u>/ 880 FT</u>
Min Rear Yard	<u>35 FT</u>	<u>/ 65 FT</u>
Min Side Yard	<u>25 FT</u>	<u>/ 60 FT</u>
Max. Building Height	<u>45 FT</u>	<u>/ 30 FT</u>
Use Designation	<u>Care Home</u>	<u>/ Care Home</u>
Parking Requirement	<u>1 space/ per</u>	<u>square feet of floor area or dwelling unit</u>
Total Parking:	<u>12 SPACES</u>	<u>/ SEE TAB 6</u>
Overlay zoning districts (if any):	<u>N/A</u>	<u>/</u>
Urban impaired stream watershed?	<u>YES/NO</u>	<u>If yes, watershed name</u>
	<u>N/A</u>	<u>/</u>

DEVELOPMENT REVIEW APPLICATION SUBMISSION

Submissions shall include fifteen (15) complete packets containing the following materials:

1. 5 Full size plans and 10 smaller (no larger than 11" x 17") plans containing the information found in the attached sample plan checklist.
2. Application form that is completed and signed by the property owner or designated representative.
(NOTE: All applications will be reviewed by staff and any incomplete application will not be accepted until all deficiencies are corrected.
3. Cover letter stating the nature of the project.
4. Narrative which explains how the project meets the intent, objectives or conditions of the required Zoning sections, such as Special Exception, Site Plan Law, Subdivision Law or the Form Based Code Ordinance.
5. All written submittals including evidence of right, title and interest.
6. Copy of the checklist completed for the proposal listing the material contained in the submitted application.
7. Any additional materials as required by the Form Based Code (Chapter 60-546) if applicable.
8. PDF files for all plans and application materials.

Refer to the application checklist for a detailed list of submittal requirements.

Additional information regarding zoning and form based code can be found on-line at:

<http://www.auburnmaine.gov/Pages/Government/Planning-Permitting-and-Code> or,
Contact the City Planner at: 207-333-6601 ext. 1156 or dgreene@auburnmaine.gov

Application Certification:

I hereby certify that I am the Owner of record of the named property, or that the owner of record authorizes the proposed work and that I have been authorized by the owner to make this application as his/her authorized agent. I agree to conform to all applicable laws of this jurisdiction. In addition, I certify that the City's authorized representative shall have the authority to enter all areas covered by this permit at any reasonable hour to enforce the provisions of the codes applicable to this permit.

This application is for development review only; a Performance Guarantee, Inspection Fee, Building Permit Application and other associated fees and permits will be required prior to construction.

Signature of Applicant: _____

Date: _____

3/12/18



Development Review Checklist

City of Auburn Planning and Permitting Department
City of Lewiston Department of Planning and Code Enforcement



**THE FOLLOWING INFORMATION IS REQUIRED WHERE APPLICABLE TO BE
SUBMITTED FOR AN APPLICATION TO BE COMPLETE**

PROJECT NAME: _____

PROPOSED DEVELOPMENT ADDRESS- _____

PARCEL #- _____

Required Information		Check Submitted		Applicable Ordinance	
		Applicant	Staff	Lewiston	Auburn
Site Plan					
	Owner's Names/Address	✓			
	Names of Development	✓			
	Professionally Prepared Plan	✓			
	Tax Map or Street/Parcel Number	✓			
	Zoning of Property	✓			
	Distance to Property Lines	✓			
	Boundaries of Abutting land	✓			
	Show Setbacks, Yards and Buffers	✓			
	Airport Area of Influence (Auburn only)	N/A			
	Parking Space Calcs	✓			
	Drive Openings/Locations	✓			
	Subdivision Restrictions	N/A			
	Proposed Use				
	PB/BOA/Other Restrictions	TBD			
	Fire Department Review	TBD			
	Open Space/Lot Coverage	N/A			
	Lot Layout (Lewiston only)				
	Existing Building (s)	↓			
	Existing Streets, etc.				
	Existing Driveways, etc.				
	Proposed Building(s)				
	Proposed Driveways				
Landscape Plan					
	Greenspace Requirements	N/A			
	Setbacks to Parking	✓			
	Buffer Requirements	✓			
	Street Tree Requirements	N/A			
	Screened Dumpsters	✓			
	Additional Design Guidelines	N/A			

	Planting Schedule	✓			
Stormwater & Erosion Control Plan					
	Compliance w/ chapter 500	✓			
	Show Existing Surface Drainage	✓			
	Direction of Flow	✓			
	Location of Catch Basins, etc.	✓			
	Drainage Calculations	✓			
	Erosion Control Measures	✓			
	Maine Construction General Permit	✓			
	Bonding and Inspection Fees	TBD			
	Post-Construction Stormwater Plan	✓			
	Inspection/monitoring requirements	✓			
	Third Party Inspections (Lewiston only)	N/A			
Lighting Plan					
	Full cut-off fixtures	✓			
	Meets Parking Lot Requirements	✓			
Traffic Information					
	Access Management	✓			
	Signage	✓			
	PCE - Trips in Peak Hour	✓			
	Vehicular Movements	✓			
	Safety Concerns	N/A			
	Pedestrian Circulation	✓			
	Police Traffic	TBD			
	Engineering Traffic	TBD			
Utility Plan					
	Water	✓			
	Adequacy of Water Supply				
	Water main extension agreement	N/A			
	Sewer	✓			
	Available city capacity				
	Electric	✓			
	Natural Gas	✓			
	Cable/Phone	✓			
Natural Resources					
	Shoreland Zone	N/A			
	Flood Plain	N/A			
	Wetlands or Streams	✓			
	Urban Impaired Stream	N/A			
	Phosphorus Check	N/A			
	Aquifer/Groundwater Protection	N/A			
	Applicable State Permits				
	No Name Pond Watershed (Lewiston only)	N/A			

	Lake Auburn Watershed (Auburn only)	N/A			
	Taylor Pond Watershed (Auburn only)	N/A			
Right Title or Interest					
	Verify	✓			
	Document Existing Easements, Covenants, etc.	✓			
Technical & Financial Capacity					
	Cost Est./Financial Capacity	✓			
	Performance Guarantee	TBD			
State Subdivision Law					
	Verify/Check	N/A			
	Covenants/Deed Restrictions	↓			
	Offers of Conveyance to City	↓			
	Association Documents	↓			
	Location of Proposed Streets & Sidewalks	↓			
	Proposed Lot Lines, etc.	↓			
	Data to Determine Lots, etc.	↓			
	Subdivision Lots/Blocks	↓			
	Specified Dedication of Land	✓			
Additional Subdivision Standards					
	Single-Family Cluster (Lewiston only)	N/A			
	Multi-Unit Residential Development (Lewiston only)	↓			
	Mobile Home Parks	↓			
	Private Commercial or Industrial Subdivisions (Lewiston only)	↓			
	PUD (Auburn only)	✓			
A jpeg or pdf of the proposed site plan		✓			
Final sets of the approved plans shall be submitted digitally to the City, on a CD or DVD, in AutoCAD format R 14 or greater, along with PDF images of the plans for archiving		✓			

AGREEMENT FOR PURCHASE AND SALE
OF
REAL ESTATE

AGREEMENT ("Agreement") made and entered into this 29th day of February, 2018, by and between Schooner Memory Care Acquisition, LLC, a Maine limited liability company ("Seller"), having a mailing address of 200 Stetson Road, Auburn, Maine and Auburn Memory Care, LLC, a Maine limited liability company or its assigns ("Buyer"), having a mailing address of c/o Sandy River Company, P.O.Box 110, Portland, Maine 04112.

RECITALS

Seller is party to a Memorandum of Agreement relating to a project that entails the conveyances by Seller to a Joint Venture of real property (two land parcels) located adjacent to Schooner Estates in Auburn, Maine, and the use of such assets by Buyer to develop, build and operate a new assisted living facility. This Agreement for the Purchase and Sale of Real Estate is contemplated by the Memorandum of Agreement, Joint Venture, dated December 22, 2017.

In consideration of the mutual covenants and agreements herein contained herein, the receipt and sufficiency of which are hereby acknowledged, Seller and Buyer hereby agree as follows:

1. PURCHASE AND SALE. Seller agrees to sell, and Buyer agrees to buy, on the terms and conditions hereinafter set forth certain real estate, and all appurtenances thereof, consisting of two parcels of real estate as referenced by Warranty Deeds attached as Exhibit B (collectively to be referred to as the "Property").
2. PURCHASE PRICE AND DEPOSIT: As consideration for the conveyance of the Property, Buyer shall pay to Seller at Closing the sum of \$922,000.
3. PERFORMANCE AT CLOSING: At Closing, Seller shall deliver to Buyer a deed, conveying the Property in fee simple with good and marketable title in accordance with standards of title adopted by the Maine Bar Association, and subject to the Permitted Encumbrances, and Buyer shall pay the Purchase Price as provided herein and execute all necessary papers for the completion of the purchase on or before December 31, 2018, unless extended by mutual agreement of the parties.
 - a. If Seller is unable to convey title to the Property in accordance with the provisions of this paragraph, then Seller shall have a reasonable time period, not to exceed 30 days from the time Seller receives written notice

of the defect, unless otherwise agreed to by both parties, to remedy the title, after which time, if such defect is not corrected so that there is marketable title, Buyer may within forty-five (45) days thereafter, at Buyer's option, withdraw said earnest money and neither party shall have any further obligation hereunder. Seller hereby agrees to make a good-faith effort to cure any title defect during such period, but shall not be obligated to expend more than \$5,000 to cure. If Closing of the real estate transaction is delayed on account of such defects, the parties shall bargain regarding whether and the terms under which the remainder of the closing contemplated under the Memorandum of Agreement may be consummated and this real estate transaction completed thereafter.

- b. Seller further agrees to execute and deliver to Buyer at Closing the following documents: (i) a Certificate of Non-Foreign Status (as required by Internal Revenue Service regulations); (ii) a title insurance "Seller's Affidavit" regarding mechanics liens and persons in possession; (iii) an affidavit regarding underground storage tanks (as required by Maine Law), and (iv) documents demonstrating Seller's authority to convey and good standing as evidenced by a copy of Seller's resolution authorizing the transaction contemplated herein and all other documents regarding authority or any other matter reasonably required from the Closing.
- c. To the extent that the conveyance of title to the Property to Buyer requires the subdivision of lots, Buyer shall bear the cost, or shall reimburse Seller, for the cost of any outside legal and surveyor expense reasonably necessary to secure such subdivision, including any necessary municipal or other approvals.

4. DEED: The Property shall be conveyed by a quitclaim with covenant deed and shall be free and clear of all encumbrances except for Permitted Encumbrances, and except for covenants, conditions, easements and restrictions of record and usual public utilities servicing the Property and shall be subject to applicable land use and building laws and regulations.

5. POSSESSION/OCCUPANCY: Possession/occupancy of Property shall be given to Buyer immediately at Closing unless otherwise agreed by both parties in writing.

6. RISK OF LOSS: Until transfer of title, the risk of loss or damage to said Property by fire or otherwise is assumed by Seller unless otherwise agreed in writing. Said Property shall at closing be in substantially the same condition as at present, excepting reasonable use and wear.

7. PRORATIONS: The following items shall be prorated as of the date of closing:

- a. Buyer and Seller shall each pay one-half of the transfer tax as required by the laws of the State of Maine.

- b. Buyer and Seller shall reasonably cooperate on the proration of any other needed item at Closing. The property is vacant land, and so no heating oil or water and sewer charges are expected.
 - c. Real Estate Taxes for any portions of the Property subject to such taxes, based on the municipality's current tax year.
8. INSPECTION. Buyer may enter into any part of the Property at all reasonable times in order to inspect the Property, conduct surveys, soil tests and engineering studies and to do such things as are reasonably necessary with respect to its acquisition and intended development of the Property. In the event that the Buyer does not terminate this Agreement, this inspection contingency to its obligation to close shall be conclusively deemed waived.
9. AGENCY DISCLOSURE: Buyer and Seller acknowledge that they have not engaged a real estate broker in their transaction.
10. PRIOR STATEMENTS: This Agreement and the referenced Memorandum of Agreement set forth the entire agreement between the parties relating to the conveyance of the property described in Exhibit A, and there are no other representations, agreements or understandings with respect to the subject matter of this Agreement.
11. ASSIGNS: This Agreement shall extend to and be obligatory upon successors, and assigns of the respective parties. This Agreement may be assigned only to persons or entities controlling, controlled by, or under common control of a party.
12. COUNTERPARTS: This Agreement may be signed on any number of identical counterparts, including telefax copies, with the same binding effect as if all of the signatures were on one instrument.
13. BUYER'S NOMINEE: Buyer may transfer its rights under this Agreement to an entity or the nominee which it controls. Buyer shall, however, remain jointly and severally liable with such transferee for all of Buyer's obligations under this Agreement and under the Memorandum of Agreement, and such transferee shall be required to assume joint and several liability for all such obligations. Buyer shall give Seller prompt written notice of any such transfer at least seven (7) days before the scheduled Closing, which notice shall include sufficient information to identify the transferee entity or nominee and certified copies of its organizational documents. No assignment shall be valid unless Seller has approved the agreement pursuant to which the assignment is consummated. No other assignment of this Agreement by Buyer is permitted.
14. EFFECTIVE DATE: This Agreement is a binding contract when signed by both Seller and Buyer and when that fact has been communicated to all parties or to their agents. Time is of the essence of this Agreement to the extent set forth in the Master Agreement.

15. BEST EFFORTS: Each of the parties shall undertake to take all reasonable steps necessary to achieve the satisfaction of conditions leading to a Closing under this Agreement.

16. FACSIMILE COPIES: All parties to this Agreement agree to accept facsimile or photocopies of this document and any signatures thereto as originals.

17. REPRESENTATIONS OF SELLER: Seller represents to Buyer that the following are true as of the date of this Agreement and will be true as of the Closing:

- a. To the best of Seller's knowledge, there are no violations of any applicable law, ordinance or regulation at the Property.
- b. To the best of Seller's knowledge, there are no special wastes, underground storage tanks, asbestos containing materials, waste oil, petroleum and any other hazardous substances, materials or wastes contaminating the Property. The terms used in the foregoing sentence shall include, without limitation, all substances, materials, etc., designated by such terms under any laws, ordinances, or regulations, whether federal, state, or local. This presentation shall except such materials used in the regular course of business and disposed of in compliance with all applicable laws.
- c. Other than matters of record that constitute Permitted Encumbrances, there are no outstanding pending or threatened liens, claims, rights of first refusal, or encumbrances against the Property.

18. NOTICES. Any notice or communication given pursuant to this Agreement by either of the parties to the other shall be in writing and delivered as provided in the Master Agreement for notices.

19. GOVERNING LAW. This Agreement shall be construed according to the laws of the State of Maine.

20. TERMINATION OF AGREEMENT. This Agreement shall terminate if:

- a. The Memorandum of Agreement is terminated.
- b. Any other condition precedent set forth in the Memorandum of Agreement required to be fulfilled is not fulfilled (or waived by the party having the waive such condition) by December 31, 2018.

Seller acknowledges that the laws of the State of Maine provide that every buyer of real property located in Maine must withhold a withholding tax equal to 2-1/2% of the consideration unless Seller furnishes to Buyer a certificate by the Seller stating, under penalty of perjury, that Seller is a resident of Maine or the transfer is otherwise exempt from withholding.

Buyer: Auburn Memory Care, LLC

Signature

Daniel J. Maguire
Name/Title, there unto duly authorized

Seller accepts Buyer's offer and agrees to deliver the Property at the price and upon the terms and conditions set forth above.

Signed this 28th day of Feb, 2018.

Seller: Schooner Memory Care Acquisition, LLC

Signature

JOHN C. ORESTIS
Name/Title, there unto duly authorized

EXHIBIT A

(legal descriptions as shown on Warranty Deeds begin on next page)

WARRANTY DEED

HASKELL DEVELOPMENT CORPORATION, INC., a Maine corporation of Auburn, County of Androscoggin, State of Maine, for consideration paid, grants to SCHOONER MEMORY CARE ACQUISITION, LLC, a Maine limited liability company of Portland, County of Cumberland, State of Maine, with warranty covenants the land, with any buildings thereon, situated in Auburn, County of Androscoggin, State of Maine, described as follows:

PARCEL ONE – Northerly side of Stetson Road: Beginning at an iron pin set in the ground along the northerly side of Stetson Road, said point being the most southerly corner of land conveyed by Susie and Albert James to Maurice Keene in 1957 and recorded in Book 762, Page 544, Androscoggin County Registry of Deeds, thence N 39° 30' E along a line of trees and land of Maurice Keene about two hundred thirty-five (235') feet to a 27-inch elm; thence N 36° 30' E along land of Maurice Keene and partly along a stone wall and a barbed wire fence nine hundred fifty (950') feet, more or less, to an iron pin set in the ground along a stone wall, the latter point being forty (40') feet southerly of the intersection of said stone wall and a barbed wire fence and also about fifty-four (54') feet southerly of another barbed wire fence marking other land of Maurice Keene; thence S 47° E one hundred (100') feet to an iron pin set in the ground at a point fifty (50') feet southerly of a barbed wire fence marking Maurice Keene's land; thence S 50° E two hundred (200') feet to an iron pin set in the ground at a point fifty (50') feet southerly of a barbed wire fence marking Maurice Keene's land; thence S 51° 45' E five hundred seventy-five (575') feet to an iron pin set in the ground at a point fifty (50') feet southerly of Maurice Keene's line; thence S 37° 45' W along land of Grantor [Edward J. Beauchamp and Gaetane Y. Beauchamp] eight hundred fifty-six (856') feet, more or less, to an iron pin set in the ground along the northerly line of Stetson Road; thence N 73° 50' W along Stetson Road one hundred forty-seven (147') feet to an iron pin set in the ground; thence N 72° 30' W along the northerly side of Stetson Road two hundred nine (209') feet to an iron pin set in the ground; thence N 71° 45' W along Stetson Road five hundred seventy (570') feet to the point of beginning. The area of the above-described lot is 20.3 acres.

Parcel One being the same premises described in a warranty deed from Edward J. Beauchamp and Gaetane Y. Beauchamp to Haskell Development Corporation, Inc., dated October 1, 1986, recorded in the Androscoggin County Registry of Deeds at Book 1994, Page 313. For further reference see also Parcels One and Two in a release deed from Elwell Corporation to Haskell Development Corporation, Inc., dated October 23, 1999, recorded at Book 4342, Page 281.

PARCEL TWO – Northerly of and abutting Parcel One above: A strip of land 50 feet in width and 875 feet in length bounded southerly by a parcel of land previously conveyed by Edward J. Beauchamp and Gaetane Y. Beauchamp to Haskell Development Corporation, Inc. [Book 1994, Page 313]; westerly by land of Maurice Keene and entrance of a right-of-way; northerly by other land of Maurice and Shirley Keene and easterly by land retained by Edward J. Beauchamp and Gaetane Beauchamp out of Lot 52.

Parcel Two being a portion of the same premises described in a warranty deed from Edward J. Beauchamp and Gaetane Y. Beauchamp to Haskell Development Corporation, Inc., dated December 31,

Warranty Deed from Haskell Development Corporation, Inc. to Schooner Memory Care Acquisition, LLC

1986, recorded in said Registry of Deeds at Book 2038, Page 281. For further reference see also a release deed from Elwell Corporation to Haskell Development Corporation, Inc., dated October 23, 1999, recorded at Book 4342, Page 281.

EXCLUDING from Parcels One and Two above those premises described in the following deeds:

- a. Warranty deed from Haskell Development Corporation, Inc. to Gail L. Sasseville, Trustee of Seville Horizons Enterprises, dated February 6, 1987, recorded at Book 2053, Page 261;
- b. Warranty deed from Haskell Development Corporation, Inc. to Gail L. Sasseville, Trustee of Seville Horizons Enterprises, dated May 8, 1987, recorded at Book 2088, Page 105;
- c. Warranty deed from Haskell Development Corp. to Sarto A. Sasseville, dated December 31, 1992, recorded at Book 2981, Page 91; and
- d. Warranty deed from Haskell Development Corporation, Inc. to Central Maine Healthcare Corporation, dated October 10, 2002, recorded at Book 5144, Page 199.

IN WITNESS WHEREOF, Haskell Development Corporation, Inc. has caused this instrument to be sealed with its corporate seal and signed in its corporate name by Franklin H. Goss, its President, thereunto duly authorized, as of this 27th day of June, 2012.

HASKELL DEVELOPMENT
CORPORATION, INC.



Witness

By 

Franklin H. Goss, its President

STATE OF MAINE
ANDROSCOGGIN, SS.

June 27, 2012

Then personally appeared before me the above-named Franklin H. Goss and acknowledged the foregoing instrument to be his free act and deed in his said capacity and the free act and deed of said corporation.



M. Kelly Matzen, Attorney-at-Law

06-26-12

Warranty Deed from Haskell Development Corporation, Inc. to Schooner Memory Care Acquisition, LLC

2 of 2

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

WARRANTY DEED

CENTRAL MAINE MEDICAL CENTER, a Maine non-corporation with a place of business in Lewiston, Androscoggin County, State of Maine, for consideration paid, grants to SCHOONER MEMORY CARE ACQUISITION, LLC, a Maine limited liability company of Portland, Cumberland County, State of Maine, with warranty covenants, the land, with any improvements thereon, situated in Auburn, County of Androscoggin, State of Maine, bounded and described in Exhibit A attached hereto.

IN WITNESS WHEREOF, Central Maine Medical Center has caused this instrument to be sealed with its corporate seal and signed in its corporate name by David Thompson, its CFO and Treasurer, thereunto duly authorized, effective as of this 26th day of July, 2017.

MAINE REAL ESTATE
TRANSFER TAX PAID

Central Maine Medical Center

[Signature]
Witness

By [Signature]
David Thompson
Its: CFO and Treasurer

STATE OF MAINE
ANDROSCOGGIN, SS.

July 26, 2017

Then personally appeared before me the above-name David Thompson in his aforesaid capacity as CFO and Treasurer of Central Maine Medical Center and acknowledged the foregoing instrument to be his free act and deed in said capacity and the free act and deed of Central Maine Medical Center.

Before me,

SEAL

[Signature]
Notary Public: Lisa Asselin
My Commission Expires: 11/15/19

[Type text]

LISA M. ASSELIN
NOTARY PUBLIC
State of Maine
My Commission Expires
November 15, 2019

EXHIBIT A

A certain lot or parcel of land, with any improvements located thereon, situated on the northerly side of but not adjacent to Stetson Road in the City of Auburn, Androscoggin County, Maine as shown on an Existing Conditions Plan of the Proposed Land Acquisition for Schooner Holdings, LLC by Sebago Technics, Inc. (Project number 14300-01) last dated January 26, 2017 and being more particularly bounded and described as follows:

To reach the point of beginning for the parcel herein described, commence at a 5/8" iron rebar with aluminum cap stamped RLS# 378 on the northerly sideline of the Stetson Road and at the southeasterly corner of land now or formerly of Central Maine Medical Center as described in a deed recorded in the Androscoggin County Registry of Deeds in Book 7232, Page 281 and at the southwesterly corner of land now or formerly of Schooner Holdings LLC as described in a deed recorded in said Registry in Book 6633, Page 43;

Thence N 18°-22'-25" E, along land of Schooner Holdings LLC, a distance of 415.73 feet to a 5/8" iron rebar with cap #2117 which marks the point of beginning for the parcel herein described;

Thence continuing N 18°-22'-25" E along land of Schooner Holdings LLC, a distance of 226.11 feet to a 5/8" iron rebar with cap # 1206;

Thence N 68°-50'-52" W along land of Schooner Holdings LLC, a distance of 40.00 feet to a 5/8" iron rebar with cap # 1206;

Thence N 18°-22'-25" E along land of Schooner Holdings LLC, a distance of 35.45 feet to a 5/8" iron rebar with cap # 1126, said rebar marking the southeast corner of land of Schooner Memory Care Acquisition LLC, as described in a deed recorded in said Registry in Book 8431, Page 40;

Thence N 71°-37'-35" W along land of Schooner Memory Care Acquisition, LLC, a distance of 200.35 feet to a 5/8" iron rebar with cap # 1206;

Thence S 18°-22'-25" W along land of said Schooner Memory Care Acquisition LLC, a distance of 188.42 feet to a 5/8" iron rebar with cap #1126;

Thence S 71°-37'-35" E through land of this Grantor, Central Maine Medical Center, a distance of 165.67 feet to a 5/8" iron rebar with cap #2117;

Thence S 26°-37'-35" E through land of this Grantor, Central Maine Medical Center, a distance of 105.55 feet to the point of beginning.

The total area of the above-described parcel is approximately 1.07 Acres.

Meaning and intending to describe a parcel of land being a portion of the land described in a deed to Central Maine Medical Center by Central Maine Healthcare Corporation dated August 13, 2007 and recorded in said Registry in Book 7232, Page 281. Bearings herein are based on Grid North.

[Type text]

ANDROSCOGGIN COUNTY
TINA M CHOUINARD
REGISTER OF DEEDS

Sandy River

COMPANY

March 1, 2018

City of Auburn
Planning Board
60 Court Street
Auburn, Maine 04210

Re: Funding the Development of Schooner Memory Care Center

Dear Planning Board,

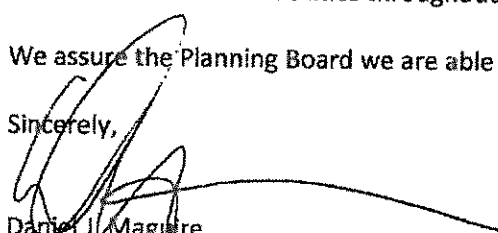
On behalf of Auburn Memory Care, LLC, we are submitting this letter to assure you we are able to fund the proposed new 60 unit assisted living facility on the campus of Schooner Estates on Stetson Road.

Sandy River Company is developing this project in partnership with the owner of Schooner Estates. This development team has a long history of successfully developing and securing debt and equity financing for senior care facilities throughout Maine. In the past 5 years, Sandy River has developed four new facilities in Maine with over \$75M in total project costs. These projects are funded with a combination of bank loans and equity raised from our pool of investors.

We are extremely confident that we will be able to secure debt financing for this project and are in discussions with Maine local banks on our upcoming projects including this project. We also have equity investors eager to invest in these kinds of projects based on our decades of experience creating successful senior care facilities throughout Maine.

We assure the Planning Board we are able to finance this proposed project.

Sincerely,



Daniel J. Maguire
Managing Partner

Real Estate Services for the Healthcare Industry

217 Commercial St., Suite 201 PO Box 110 • Portland, Maine 04112 • TEL: 207.558.6060

www.SandyRiverCompany.com



CIVIL ENGINEERING • SURVEYING • LANDSCAPE ARCHITECTURE

Memorandum

14300

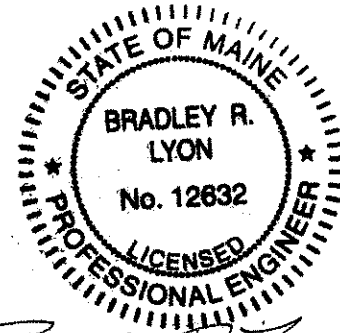
To: Will Conway, RLA, LEED-AP, Sebago Technics

From: Bradley Lyon, P.E., PTOE, Sebago Technics

Nikki Scott, EI, Sebago Technics

Date: February 12th, 2018

Subject: Trip Generation Analysis for Schooner Estates Redevelopment, Auburn



Per your request, we have completed a trip generation calculation for the proposed redevelopment of Schooner Estates on Stetson Road in Auburn, Maine. Schooner Estates is a senior living community comprised of 153 total units: 103 independent living units, 26 assisted living units and 24 residential care units that are also considered assisted living. The total number of beds currently provided in this assisted living facility is 63 beds. The proposed plan is to redevelop the existing facility and add an additional assisted living building to the site. The overall project will increase the site facilities to 213 total units, which will include 113 independent living units and 100 assisted living units with 106 beds.

Existing Trip Generation

The 10th Edition of the Institute of Transportation Engineer's (ITE) Trip Generation Manual was utilized to estimate the number of trips, or one-way trip-ends, currently generated by Schooner Estates. Land use code (LUC) 253 – Congregate Care Facility was applied for the independent living on the basis of 103 dwelling units, shown in Table 1. LUC 252 – Senior Adult Housing – Attached was also considered, however LUC 253 provides "centralized amenities such as dining, housekeeping, transportation" and "limited medical services" and LUC 252 "generally lacks centralized dining and onsite medical facilities." Therefore, LUC 253 was deemed a better representation for this facility. The trips for the assisted living units were estimated with LUC 254 – Assisted Living on the basis of 63 beds, shown in Table 2.

Table 1 – Existing Trip Generation
Land Use Code 253 – Congregate Care Facility
Based on 103 Dwelling Units

<i>Time Period</i>	<i>Average Trip Generation Rate Per Dwelling Unit</i>	<i>Total Trips</i>	<i>Entering</i>	<i>Exiting</i>
Weekday	2.02	208	104 (50%)	104 (50%)
AM Peak Hour of Generator	0.16	16	8 (49%)	8 (51%)
AM Peak Hour of Adjacent Street, One Hour Between 7 and 9 AM	0.07	7	4 (60%)	3 (40%)
PM Peak Hour of Generator	0.20	21	12 (57%)	9 (43%)
PM Peak Hour of Adjacent Street, One Hour Between 4 and 6 PM	0.18	19	10 (53%)	9 (47%)

Table 2 – Existing Trip Generation
Land Use Code 254 – Assisted Living
Based on 63 Beds

<i>Time Period</i>	<i>Average Trip Generation Rate Per Bed</i>	<i>Total Trips</i>	<i>Entering</i>	<i>Exiting</i>
Weekday	2.60	164	82 (50%)	82 (50%)
AM Peak Hour of Generator	0.19	12	8 (63%)	4 (37%)
AM Peak Hour of Adjacent Street, One Hour Between 7 and 9 AM	0.19	12	8 (67%)	4 (33%)
PM Peak Hour of Generator	0.34	21	9 (45%)	12 (55%)
PM Peak Hour of Adjacent Street, One Hour Between 4 and 6 PM	0.26	16	6 (38%)	10 (62%)

Based on the tables above, the existing Schooner Estates is currently generating 28 trips and 42 trips during the AM and PM peak hours of the generator, respectively.

Proposed Trip Generation

The projected trip generation was estimated with the same methodologies utilized for existing conditions given that the land uses are to remain congregate care and assisted living. LUC 253 was estimated on the basis of 113 units, as shown in Table 3. LUC 254 was estimated on the basis of 106 beds, shown in Table 4.

Table 3 – Proposed Trip Generation
Land Use Code 253 – Congregate Care Facility
Based on 113 Dwelling Units

<i>Time Period</i>	<i>Average Trip Generation Rate Per Dwelling Unit</i>	<i>Total Trips</i>	<i>Entering</i>	<i>Exiting</i>
Weekday	2.02	228	114 (50%)	114 (50%)
AM Peak Hour of Generator	0.16	18	9 (49%)	9 (51%)
AM Peak Hour of Adjacent Street, One Hour Between 7 and 9 AM	0.07	8	5 (60%)	3 (40%)
PM Peak Hour of Generator	0.20	23	13 (57%)	10 (43%)
PM Peak Hour of Adjacent Street, One Hour Between 4 and 6 PM	0.18	20	11 (53%)	9 (47%)

Table 4 – Proposed Trip Generation
Land Use Code 254 – Assisted Living
Based on 106 Beds

<i>Time Period</i>	<i>Average Trip Generation Rate Per Bed</i>	<i>Total Trips</i>	<i>Entering</i>	<i>Exiting</i>
Weekday	2.60	276	138 (50%)	138 (50%)
AM Peak Hour of Generator	0.19	20	13 (63%)	7 (37%)
AM Peak Hour of Adjacent Street, One Hour Between 7 and 9 AM	0.19	20	13 (67%)	7 (33%)
PM Peak Hour of Generator	0.34	36	16 (45%)	20 (55%)
PM Peak Hour of Adjacent Street, One Hour Between 4 and 6 PM	0.26	28	11 (38%)	17 (62%)

The proposed redevelopment of Schooner Estates is expected to generate 38 trips and 59 trips during the AM and PM peak hours of the generator, respectively. The change in trip generation between the existing facility and proposed redevelopment is shown in Table 5.

Table 5 – Change in Trip Generation

<i>Time Period</i>	<i>Existing Trips</i>	<i>Proposed Trips</i>	<i>Increase in Trips</i>
Weekday	372	504	132
AM Peak Hour of Generator	28	38	10
AM Peak Hour of Adjacent Street, One Hour Between 7 and 9 AM	19	28	9
PM Peak Hour of Generator	42	59	17
PM Peak Hour of Adjacent Street, One Hour Between 4 and 6 PM	35	48	13

As demonstrated on the previous page, the redevelopment of Schooner Estates would be expected to generate just 10 new trips and 17 new trips during the AM and PM peak hours of the generator, respectively. Given these results, the project does not require a Traffic Movement Permit (TMP) from the MaineDOT as projected trip levels do not exceed the 100-trip threshold for a TMP during any peak hour period. This level of new traffic would also not be expected to have any impact off-site on traffic operations on Stetson Road.

Conclusions

Based upon the results of this analysis for the Schooner Estates redevelopment:

- The existing facility is currently generating 28 trips and 42 trips during the AM and PM peak hour of the generator, respectively.
- The facility, after the proposed redevelopment, is expected to generate 38 trips and 59 trips during the AM and PM peak hours of the generator, respectively.
- The increase in site traffic is just 10 new trips and 17 new trips during the AM and PM peak hours of the generator, respectively. This level of new traffic would not be expected to have any impact on Stetson Road traffic operations or require a TMP from MaineDOT since projected trip levels do not exceed the 100-trip threshold.

Schooner Estates and New Project Parking

	Parking Spaces	IL Units	AL Units	State funded Residential Care Beds Units (37 beds)	Total Units	Peak # Staff Day Shift	Residents w vehicles	Typical Peak Time # Visitor Vehicles	Special Events Frequency	Typical Additional Vehicles on Special Events	Total Required Spaces (including special events)
Existing Schooner Estates	136	103	26	24	153	48	28	15	12	50	141
Redeveloped Schooner Estates	118	113	40	0	153	22	30	15	12	50	117
New Assisted Living Project	72	0	60	0	60	30	0	10	10	40	40
Total Reconfigured Schooner and New Project	190	113	100	0	213	52	30	25	22	50	157

Notes-

1. Will lose 18 spaces at existing Schooner parking as result of new project.
2. Will be relocating 37 heavier care State funded residents (and related staff) from Schooner to new project, and 10 memory care residents, thus less staff parking required at existing Schooner.
3. Combined parkings spaces after new project parking is 190, and total required is 157.
4. Will not hold special events for Schooner and new project on same day
5. Overflow from special events at existing Schooner will be able to park at new project.
6. Overflow from special events at new project will be able to park at existing Schooner estates.

Stormwater Management Plan

Schooner Memory Care Center Auburn, ME

Introduction

This Stormwater Management Plan has been prepared to address the potential impacts associated with this project due to the proposed modification in stormwater runoff characteristics. The stormwater management controls that are outlined in this plan have been modified to best suit the proposed development and to comply with applicable regulatory requirements.

The proposed development encompasses approximately 4.68 acres of the existing 9.33-acre property. The proposed development will include a new 29,000 square foot two story structure, common areas, exterior courtyards and surface parking for 72 vehicles.

Based upon the anticipated development, the project is subject to the Chapter 500 Basic and General standards. The proposed erosion controls, inspection and maintenance criteria, and the stormwater management system have been designed to meet MDEP and City of Auburn requirements.

Existing Conditions

The site is currently an undeveloped, forested parcel located adjacent to the existing Schooner Estates on Stetson Road. The property is located within the Bobbin Mill Brook watershed which is tributary to the Androscoggin River. The Parcel includes interconnected areas of wetlands located along the western portion of the site.

Slopes on site are generally between 8 and 15% with an elevation range between 245 and 285, relative to mean sea level. Surface runoff from the parcel drains to the on-site wetlands prior to exiting the site.

Proposed Development

The developer proposes to construct a 29,000-square foot building. The site is accessed from Stetson Road via the existing driveway serving Schooner Estates. Parking areas will contain a total of 72 parking spaces. Water quality treatment of stormwater runoff from the site will be accomplished by utilizing two underdrain soil filters.

The proposed development will result in the following:

Total disturbed/developed area	= 4.68 ac.
Total impervious area	= 2.23 ac.

Regulatory Requirements

Maine Department of Environmental Protection (MDEP)

MDEP Rule Chapters 500 and 502 describe stormwater management requirements for new development projects. These rules describe performance standards divided into five major categories: Basic Standard, General Standard, Phosphorous Standard, Urban Impaired Stream Standard, and Flooding Standard. The following sections describe how this project will address these stormwater management performance standards.

Basic Standard: A project must meet basic standards if it disturbs an area greater than one (1) acre. As this development will disturb approximately 4.68 acres, it is subject to the basic standard. The standard includes various erosion and sedimentation controls, inspection and maintenance procedures, and general housekeeping requirements.

General Standard: A project is subject to the general standard if it results in the creation of one (1) or more acres of impervious area or developed areas greater than five (5) acres. As this project will create approximately 2.23 acres of impervious area and disturb 4.68 acres, it is subject to the general standard. The standard requires that a minimum of 95% of all impervious areas and at least 80% of all developed areas are designed to be tributary to stormwater BMPs. Standard BMPs have been defined by the MDEP and are described thoroughly in their publication Stormwater Management for Maine: Best Management Practices manual, as revised May 2016.

Phosphorous Standard: A project must meet the phosphorous standards if located within a lake watershed. As this project is not tributary to a lake watershed, it is not subject to the phosphorus standard.

Urban Impaired Stream Standard: A project must meet the urban impaired stream standards if located within an urban impaired stream watershed. As this project is not tributary to an Urban Impaired Stream as defined by MDEP Chapter 502, this project is not subject to the urban impaired stream standard.

Flooding Standard: A project must meet the flooding standards if it creates impervious areas greater than three (3) acres, or developed areas greater than twenty (20) acres. This project will create approximately 2.23 acres of impervious area and approximately 4.68 acres of developed area; therefore, this project is not subject to the flooding standard.

Methodology

In order to evaluate drainage characteristics as a result of the proposed development activities, a quantitative analysis was performed to determine peak runoff rates in the pre-development

and post-development conditions. The evaluation was performed using the methodology outlined in the USDA Soil Conservation Service's "Urban Hydrology for Small Watersheds - Technical Release #55 (TR-55)". HydroCAD computer software was utilized to perform the calculations.

The peak runoff rates were calculated using a 24-hour duration storm event with a Type III rainfall distribution. The rainfall amounts for Androscoggin County have recently been updated and the following 24-hour duration rainfall amounts were used for this report:

Storm Frequency	24-hr Duration Rainfall (in.)
2-yr	3.0
10-yr	4.3
25-yr	5.4

Quality Treatment

A closed drainage system has been designed to collect the stormwater run-off from the development. The closed drainage system will route the collected stormwater to two under drained soil filters.

Chapter 500 requires underdrained soil filters to be designed to detain a channel protection volume equal to 1.0 inch times the subcatchment's impervious area and 0.4 inch times the subcatchment's tributary non-impervious areas.

The attached treatment table summarizes the total impervious and developed areas for the proposed development and indicates the BMP measures proposed for treating the impervious areas.

- The post-development area includes approximately 2.23 acres of impervious area and a total of approximately 4.68 acres of developed area.
- The general standard requires treatment for 95% of the new impervious areas. As such, the site is required to provide treatment for a minimum of 2.12 acres. The total area receiving treatment is approximately 2.19 acres or 98.03%.
- The general standard requires treatment for 80% of the new developed areas. As such, the site is required to provide treatment for a minimum of 3.74 acres. The total area receiving treatment is approximately 3.97 acres, or 84.80%.

Peak Flow Analysis

The subcatchment areas and times of concentration of the post-development conditions vary from the pre-development conditions based on the proposed site development and grading. The following table summarizes the results of the hydrologic analysis of the project during pre-development and post-development conditions.

Stormwater Peak Discharge Summary Table									
Study Point	2-Year Storm			10-Year Storm			25-Year Storm		
	Pre (cfs)	Post (cfs)	Diff. (cfs)	Pre (cfs)	Post (cfs)	Diff. (cfs)	Pre (cfs)	Post (cfs)	Diff. (cfs)
SP1	4.08	3.34	-0.74	13.58	8.67	-4.91	20.33	18.88	-1.45

The results of the stormwater modeling at Study Point SP1 indicate that the peak rates of runoff in the post-developed condition will be less than the pre-developed condition for the 2-year, 10-year and 25-year storm events.

Conclusions

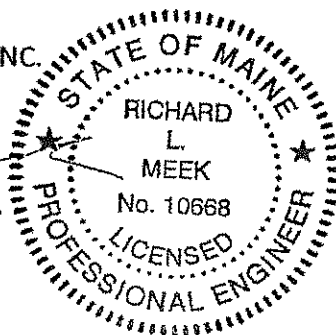
Erosion and sedimentation controls, inspection and maintenance procedures and general housekeeping requirements have been outlined to prevent unreasonable impacts on the site and to the surrounding environment.

By utilizing Best Management practices, stormwater quality treatment has been provided for at least 95% of the total impervious area and at least 80% of the total developed area. Based on the modeling data, the post-development peak rates of runoff for the 2-year, 10-year and 25-year storm events demonstrate decreases in the peak rates of runoff when compared to the pre-development peak rates of runoff.

With the incorporation of the above referenced erosion control, treatment and detention measures, the project has been designed in conformance with the Maine Department of Environmental Protection Chapter 500 Stormwater Law. Accordingly, it is anticipated that stormwater runoff from the proposed development will not cause a significant adverse effect to off-site receiving channels or downstream properties.

Prepared by,
SEBAGO TECHNICS, INC.


Richard L. Meek, P.E.
Sr. Project Engineer



March 12, 2018

Attachment A

STORMWATER QUALITY CALCULATIONS

Table 1: MDEP GENERAL STANDARD CALCULATIONS

Job # 14300

AREA ID	WATERSHED SIZE (S.F.)	EXISTING ONSITE IMPERVIOUS AREA (S.F.)	NEW ONSITE IMPERVIOUS AREA (S.F.)	EXISTING ONSITE LANDSCAPED AREA (S.F.)	NEW ONSITE LANDSCAPED AREA (S.F.)	NET NEW DEVELOPED AREA (S.F.)	NET EXISTING DEVELOPED AREAS (S.F.)	TREATMENT PROVIDED?	IMPERVIOUS AREA TREATED (S.F.)	LANDSCAPED AREA TREATED* (S.F.)	DEVELOPED AREA TREATED (S.F.)	TREATMENT BMP
11	110,033	0	52,089	0	37,687	89,776	0	YES	52,089	37,687	89,776	UDSF-1
12	103,025	0	43,338	0	39,746	83,084	0	YES	43,338	39,746	83,084	UDSF-2
13	8,796	0	1,848	0	6,948	8,796	0	NO	0	0	0	NONE
14	82,322	0	68	0	22,122	22,190	0	NO	0	0	0	NONE
TOTAL (S.F.)	304,176	0	97,343	0	106,503	203,846	0		95,427	77,433	172,860	

TOTAL NEW IMPERVIOUS AREA (S.F.)				97,343	TOTAL NEW DEVELOPED AREA (S.F.)				203,846
TOTAL IMPERVIOUS AREA RECEIVING TREATMENT (S.F.)				95,427	TOTAL DEV. AREA RECEIVING TREATMENT (S.F.)				172,860
% OF IMPERVIOUS AREA RECEIVING TREATMENT				98.03%	% OF DEV. AREA RECEIVING TREATMENT				84.80%

SEBAGO TECHNICS, INC.

75 John Roberts Road Suite 1A

South Portland, Maine 04106

Tel. (207) 200-2100

JOB 14300

SHEET NO.

1

OF

2

CALCULATED BY

DJS

DATE

2/26/2018

FILE NAME

PRINT DATE

3/12/2018

UNDERDRAINED SOIL FILTER

Task: Calculate water quality volume per MDEP chapter 500 regulations

1. Maine DEP Chapter 500, Section 4.C.(3)(b)

References

a. "must detain a runoff volume equal to 1.0 inch times the subcatchment's impervious area plus 0.4 inch times the subcatchment's landscaped area"

2. Maine DEP Best Management Practices Stormwater Manual, Section 7.1

a. "surface should represent 5% of impervious area and 2% of landscaped area"

Tributary to Underdrained Filter UDSF 1

Landscaped Area 37,687.00 SF

Impervious Area 52,089.00 SF

Minimum Surface Area

Required (2% X Landscaped + 5% X Impervious)

Total Landscaped Area 37,687.00 SF Area 753.7 SF

Total Impervious Area 52,089.00 SF Area 2,604.5 SF

Required Minimum Surface Area 3,358.2 SF

Provided Surface Area 3,647.0 SF

Treatment Volume

Required (0.4" X Landscaped + 1.0" X Impervious)

Landscaped Area 37,687.00 SF Volume 1,256.2

Impervious Area 52,089.00 SF Volume 4,340.8

Treatment Volume Required 5,597.0 CF 0.128 AF

Provided Treatment Volume 6,156.0 CF 0.141322 AF

Sediment Pre-Treatment

Per Reference 2, Chapter 7.1 "Pretreatment devices shall be provided to minimize discharge of sediment to the soil filter"

Annual Sediment Load: 55 cubic feet per acre per year of sanded area

Area to be sanded: 52,089.00 SF

Sediment Volume: 66 CF

Provided 74 CF 6 Inch Deep Forebay with area of 148 sf

SEBAGO TECHNICS, INC.

75 John Roberts Road Suite 1A

South Portland, Maine 04106

Tel. (207) 200-2100

JOB 14300

SHEET NO.

2

OF

2

CALCULATED BY

DJS

DATE

2/26/2018

FILE NAME

PRINT DATE

3/12/2018

UNDERDRAINED SOIL FILTER

Task: Calculate water quality volume per MDEP chapter 500 regulations

1. Maine DEP Chapter 500, Section 4.C.(3)(b)

References

a. "must detain a runoff volume equal to 1.0 inch times the subcatchment's impervious area plus 0.4 inch times the subcatchment's landscaped area"

2. Maine DEP Best Management Practices Stormwater Manual, Section 7.1

a. "surface should represent 5% of impervious area and 2% of landscaped area"

Tributary to Underdrained Filter UDSF 2

Landscaped Area 39,746.00 SF

Impervious Area 43,338.00 SF

Minimum Surface Area

Required (2% X Landscaped + 5% X Impervious)

Total Landscaped Area 39,746.00 SF Area 794.9 SF

Total Impervious Area 43,338.00 SF Area 2,166.9 SF

Required Minimum Surface Area 2,961.8 SF

Provided Surface Area 3,241.8 SF

Treatment Volume

Required (0.4" X Landscaped + 1.0" X Impervious)

Landscaped Area 39,746.00 SF Volume 1,324.9

Impervious Area 43,338.00 SF Volume 3,611.5

Treatment Volume Required 4,936.4 CF 0.113 AF

Provided Treatment Volume 5,372.0 CF 0.123324 AF

Sediment Pre-Treatment

Per Reference 2, Chapter 7.1 "Pretreatment devices shall be provided to minimize discharge of sediment to the soil filter"

Annual Sediment Load: 55 cubic feet per acre per year of sanded area

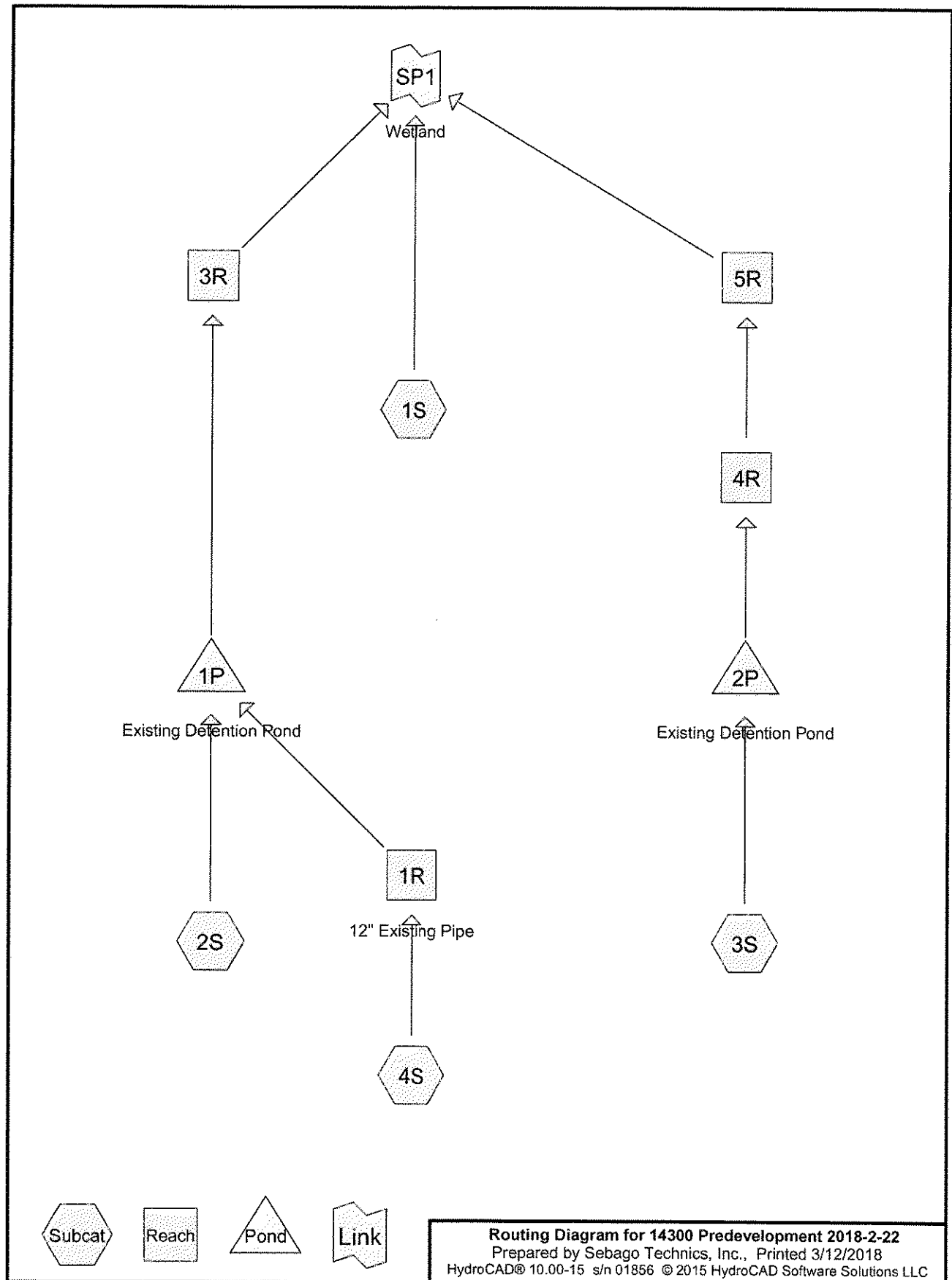
Area to be sanded: 43,338.00 SF

Sediment Volume 55 CF

Provided 63 CF 6 Inch Deep Forebay with area of 126 sf

Attachment B

HydroCAD Output



14300 Predevelopment 2018-2-22

Type III 24-hr 2-YEAR Rainfall=3.00"

Prepared by Sebago Technics, Inc.

Printed 3/12/2018

HydroCAD® 10.00-15 s/n 01856 © 2015 HydroCAD Software Solutions LLC

Page 2

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=304,176 sf 4.53% Impervious Runoff Depth=0.51"
Flow Length=634' Tc=7.5 min CN=65 Runoff=2.80 cfs 0.294 af

Subcatchment2S: Runoff Area=29,798 sf 65.39% Impervious Runoff Depth=2.16"
Tc=6.0 min CN=92 Runoff=1.66 cfs 0.123 af

Subcatchment3S: Runoff Area=18,737 sf 39.20% Impervious Runoff Depth=1.74"
Tc=6.0 min CN=87 Runoff=0.86 cfs 0.062 af

Subcatchment4S: Runoff Area=41,427 sf 34.53% Impervious Runoff Depth=1.66"
Flow Length=254' Tc=11.3 min CN=86 Runoff=1.55 cfs 0.132 af

Reach 1R: 12" Existing Pipe Avg. Flow Depth=0.39' Max Vel=5.39 fps Inflow=1.55 cfs 0.132 af
12.0" Round Pipe n=0.013 L=215.0' S=0.0178 ' Capacity=4.76 cfs Outflow=1.54 cfs 0.132 af

Reach 3R: Avg. Flow Depth=0.24' Max Vel=3.95 fps Inflow=2.19 cfs 0.140 af
n=0.030 L=68.0' S=0.1106 ' Capacity=103.42 cfs Outflow=2.20 cfs 0.140 af

Reach 4R: Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.400 L=43.0' S=0.3953 ' Capacity=138.24 cfs Outflow=0.00 cfs 0.000 af

Reach 5R: Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
n=0.400 L=475.0' S=0.0832 ' Capacity=6.73 cfs Outflow=0.00 cfs 0.000 af

Pond 1P: Existing Detention Pond Peak Elev=288.99' Storage=4,993 cf Inflow=2.97 cfs 0.255 af
Outflow=2.19 cfs 0.140 af

Pond 2P: Existing Detention Pond Peak Elev=298.96' Storage=2,715 cf Inflow=0.86 cfs 0.062 af
Outflow=0.00 cfs 0.000 af

Link SP1: Wetland Inflow=4.08 cfs 0.435 af
Primary=4.08 cfs 0.435 af

Total Runoff Area = 9.048 ac Runoff Volume = 0.612 af Average Runoff Depth = 0.81"
86.07% Pervious = 7.787 ac 13.93% Impervious = 1.261 ac

14300 Predevelopment 2018-2-22

Type III 24-hr 2-YEAR Rainfall=3.00"

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Summary for Subcatchment 1S:

Runoff = 2.80 cfs @ 12.14 hrs, Volume= 0.294 af, Depth= 0.51"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	13,780	98	Impervious
	13,101	80	>75% Grass cover, Good, HSG D
	176,573	55	Woods, Good, HSG B
	100,722	77	Woods, Good, HSG D
	304,176	65	Weighted Average
	290,396		95.47% Pervious Area
	13,780		4.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
0.8	87	0.0417	1.74		Sheet Flow, A to B
					Smooth surfaces n= 0.011 P2= 3.00"
0.2	29	0.3333	2.89		Shallow Concentrated Flow, B to C
					Woodland Kv= 5.0 fps
6.5	518	0.0714	1.34		Shallow Concentrated Flow, C to D
					Woodland Kv= 5.0 fps
7.5	634	Total			

Summary for Subcatchment 2S:

Runoff = 1.66 cfs @ 12.09 hrs, Volume= 0.123 af, Depth= 2.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	19,486	98	Impervious
	9,900	80	>75% Grass cover, Good, HSG D
	412	77	Woods, Good, HSG D
	29,798	92	Weighted Average
	10,312		34.61% Pervious Area
	19,486		65.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

14300 Predevelopment 2018-2-22

Type III 24-hr 2-YEAR Rainfall=3.00"

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Summary for Subcatchment 3S:

Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	7,345	98	Impervious
	11,392	80	>75% Grass cover, Good, HSG D
	18,737	87	Weighted Average
	11,392		60.80% Pervious Area
	7,345		39.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

Summary for Subcatchment 4S:

Runoff = 1.55 cfs @ 12.16 hrs, Volume= 0.132 af, Depth= 1.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	14,305	98	Impervious
	17,955	80	>75% Grass cover, Good, HSG D
	9,167	77	Woods, Good, HSG D
	41,427	86	Weighted Average
	27,122		65.47% Pervious Area
	14,305		34.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	43	0.0278	0.07		Sheet Flow, A to B Woods: Light underbrush n= 0.400 P2= 3.00"
0.1	23	0.2500	3.50		Shallow Concentrated Flow, B to C Short Grass Pasture Kv= 7.0 fps
0.4	125	0.0769	5.63		Shallow Concentrated Flow, C to D Paved Kv= 20.3 fps
0.2	32	0.2500	3.50		Shallow Concentrated Flow, D to E Short Grass Pasture Kv= 7.0 fps
0.7	31	0.0100	0.70		Shallow Concentrated Flow, E to F Short Grass Pasture Kv= 7.0 fps
11.3	254	Total			

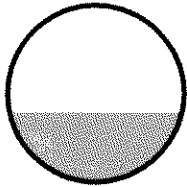
Summary for Reach 1R: 12" Existing Pipe

Inflow Area = 0.951 ac, 34.53% Impervious, Inflow Depth = 1.66" for 2-YEAR event
Inflow = 1.55 cfs @ 12.16 hrs, Volume= 0.132 af
Outflow = 1.54 cfs @ 12.17 hrs, Volume= 0.132 af, Atten= 0%, Lag= 0.5 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 5.39 fps, Min. Travel Time= 0.7 min
Avg. Velocity= 2.00 fps, Avg. Travel Time= 1.8 min

Peak Storage= 61 cf @ 12.17 hrs
Average Depth at Peak Storage= 0.39'
Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.76 cfs

12.0" Round Pipe
n= 0.013
Length= 215.0' Slope= 0.0178 '/'
Inlet Invert= 289.60', Outlet Invert= 285.77'

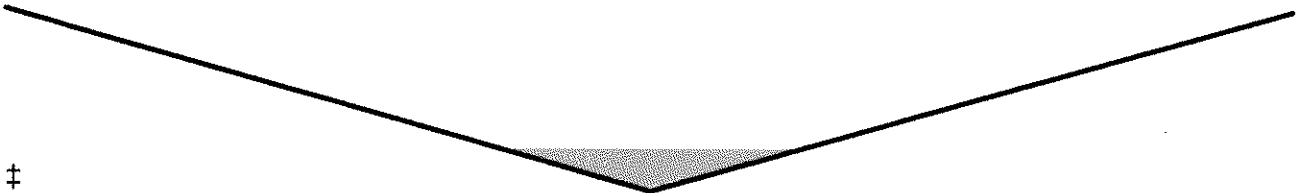
**Summary for Reach 3R:**

Inflow Area = 1.635 ac, 47.44% Impervious, Inflow Depth = 1.03" for 2-YEAR event
Inflow = 2.19 cfs @ 12.35 hrs, Volume= 0.140 af
Outflow = 2.20 cfs @ 12.35 hrs, Volume= 0.140 af, Atten= 0%, Lag= 0.2 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 3.95 fps, Min. Travel Time= 0.3 min
Avg. Velocity= 1.78 fps, Avg. Travel Time= 0.6 min

Peak Storage= 38 cf @ 12.35 hrs
Average Depth at Peak Storage= 0.24'
Bank-Full Depth= 1.00' Flow Area= 10.0 sf, Capacity= 103.42 cfs

0.00' x 1.00' deep channel, n= 0.030 Earth, grassed & winding
Side Slope Z-value= 10.0 '/' Top Width= 20.00'
Length= 68.0' Slope= 0.1106 '/'
Inlet Invert= 281.02', Outlet Invert= 273.50'



Summary for Reach 4R:

Inflow Area = 0.430 ac, 39.20% Impervious, Inflow Depth = 0.00" for 2-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.00' Flow Area= 70.0 sf, Capacity= 138.24 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 20.0 '/' Top Width= 90.00'
Length= 43.0' Slope= 0.3953 '/'
Inlet Invert= 299.00', Outlet Invert= 282.00'

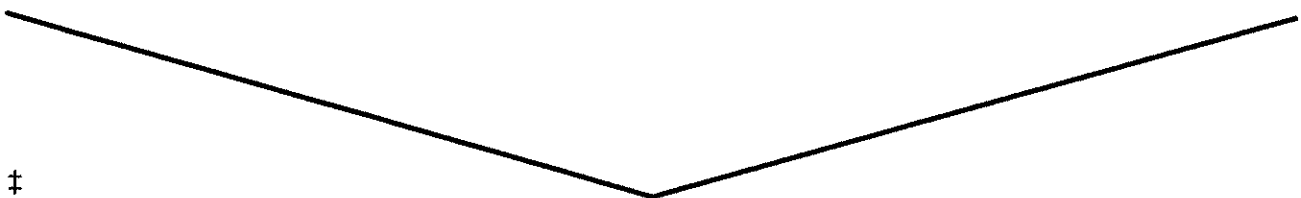
**Summary for Reach 5R:**

Inflow Area = 0.430 ac, 39.20% Impervious, Inflow Depth = 0.00" for 2-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min
Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs
Average Depth at Peak Storage= 0.00'
Bank-Full Depth= 1.00' Flow Area= 10.0 sf, Capacity= 6.73 cfs

0.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush
Side Slope Z-value= 10.0 '/' Top Width= 20.00'
Length= 475.0' Slope= 0.0832 '/'
Inlet Invert= 282.00', Outlet Invert= 242.50'



Summary for Pond 1P: Existing Detention Pond

Inflow Area = 1.635 ac, 47.44% Impervious, Inflow Depth = 1.87" for 2-YEAR event
 Inflow = 2.97 cfs @ 12.12 hrs, Volume= 0.255 af
 Outflow = 2.19 cfs @ 12.35 hrs, Volume= 0.140 af, Atten= 26%, Lag= 13.7 min
 Primary = 2.19 cfs @ 12.35 hrs, Volume= 0.140 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 288.99' @ 12.35 hrs Surf.Area= 2,648 sf Storage= 4,993 cf

Plug-Flow detention time= 207.5 min calculated for 0.140 af (55% of inflow)
 Center-of-Mass det. time= 97.4 min (913.7 - 816.3)

Volume	Invert	Avail.Storage	Storage Description
#1	285.00'	4,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
285.00	186	0	0
286.00	1,002	594	594
287.00	1,573	1,288	1,882
288.00	2,217	1,895	3,777
288.50	2,648	1,216	4,993

Device	Routing	Invert	Outlet Devices
#1	Primary	285.77'	12.0" Round Culvert L= 51.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 285.77' / 281.02' S= 0.0931 ' S= 0.0931 ' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	288.77'	24.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.08 cfs @ 12.35 hrs HW=288.99' TW=281.25' (Dynamic Tailwater)

1=Culvert (Passes 2.08 cfs of 6.23 cfs potential flow)

2=Grate (Weir Controls 2.08 cfs @ 1.52 fps)

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 0.430 ac, 39.20% Impervious, Inflow Depth = 1.74" for 2-YEAR event
 Inflow = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 298.96' @ 24.40 hrs Surf.Area= 1,620 sf Storage= 2,715 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

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Type III 24-hr 2-YEAR Rainfall=3.00"

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Volume	Invert	Avail.Storage	Storage Description
#1	296.00'	3,728 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
296.00	227	0	0
297.00	713	470	470
298.00	1,141	927	1,397
299.00	1,642	1,392	2,789
299.50	2,114	939	3,728

Device	Routing	Invert	Outlet Devices
#1	Primary	299.00'	10.0' long x 4.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=296.00' TW=299.00' (Dynamic Tailwater)

↑1=**Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 9.048 ac, 13.93% Impervious, Inflow Depth = 0.58" for 2-YEAR event
 Inflow = 4.08 cfs @ 12.35 hrs, Volume= 0.435 af
 Primary = 4.08 cfs @ 12.35 hrs, Volume= 0.435 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

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Type III 24-hr 10-YEAR Rainfall=4.30"

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=304,176 sf 4.53% Impervious Runoff Depth=1.21"
Flow Length=634' Tc=7.5 min CN=65 Runoff=8.46 cfs 0.702 af

Subcatchment2S: Runoff Area=29,798 sf 65.39% Impervious Runoff Depth=3.41"
Tc=6.0 min CN=92 Runoff=2.56 cfs 0.194 af

Subcatchment3S: Runoff Area=18,737 sf 39.20% Impervious Runoff Depth=2.91"
Tc=6.0 min CN=87 Runoff=1.42 cfs 0.104 af

Subcatchment4S: Runoff Area=41,427 sf 34.53% Impervious Runoff Depth=2.82"
Flow Length=254' Tc=11.3 min CN=86 Runoff=2.60 cfs 0.223 af

Reach 1R: 12" Existing Pipe Avg. Flow Depth=0.53' Max Vel=6.18 fps Inflow=2.60 cfs 0.223 af
12.0" Round Pipe n=0.013 L=215.0' S=0.0178 ' Capacity=4.76 cfs Outflow=2.60 cfs 0.223 af

Reach 3R: Avg. Flow Depth=0.33' Max Vel=4.88 fps Inflow=4.79 cfs 0.303 af
n=0.030 L=68.0' S=0.1106 ' Capacity=103.42 cfs Outflow=5.16 cfs 0.303 af

Reach 4R: Avg. Flow Depth=0.02' Max Vel=0.16 fps Inflow=0.14 cfs 0.040 af
n=0.400 L=43.0' S=0.3953 ' Capacity=138.24 cfs Outflow=0.14 cfs 0.040 af

Reach 5R: Avg. Flow Depth=0.20' Max Vel=0.23 fps Inflow=0.14 cfs 0.040 af
n=0.400 L=475.0' S=0.0832 ' Capacity=6.73 cfs Outflow=0.10 cfs 0.040 af

Pond 1P: Existing Detention Pond Peak Elev=289.15' Storage=4,993 cf Inflow=4.80 cfs 0.418 af
Outflow=4.79 cfs 0.303 af

Pond 2P: Existing Detention Pond Peak Elev=299.04' Storage=2,848 cf Inflow=1.42 cfs 0.104 af
Outflow=0.14 cfs 0.040 af

Link SP1: Wetland Inflow=13.58 cfs 1.046 af
Primary=13.58 cfs 1.046 af

Total Runoff Area = 9.048 ac Runoff Volume = 1.224 af Average Runoff Depth = 1.62"
86.07% Pervious = 7.787 ac 13.93% Impervious = 1.261 ac

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Type III 24-hr 25-YEAR Rainfall=5.40"

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN

Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment1S: Runoff Area=304,176 sf 4.53% Impervious Runoff Depth=1.93"
Flow Length=634' Tc=7.5 min CN=65 Runoff=14.22 cfs 1.120 af

Subcatchment2S: Runoff Area=29,798 sf 65.39% Impervious Runoff Depth=4.48"
Tc=6.0 min CN=92 Runoff=3.32 cfs 0.255 af

Subcatchment3S: Runoff Area=18,737 sf 39.20% Impervious Runoff Depth=3.95"
Tc=6.0 min CN=87 Runoff=1.90 cfs 0.141 af

Subcatchment4S: Runoff Area=41,427 sf 34.53% Impervious Runoff Depth=3.84"
Flow Length=254' Tc=11.3 min CN=86 Runoff=3.51 cfs 0.304 af

Reach 1R: 12" Existing Pipe Avg. Flow Depth=0.64' Max Vel=6.62 fps Inflow=3.51 cfs 0.304 af
12.0" Round Pipe n=0.013 L=215.0' S=0.0178 '/ Capacity=4.76 cfs Outflow=3.51 cfs 0.304 af

Reach 3R: Avg. Flow Depth=0.35' Max Vel=5.16 fps Inflow=7.85 cfs 0.445 af
n=0.030 L=68.0' S=0.1106 '/ Capacity=103.42 cfs Outflow=6.44 cfs 0.445 af

Reach 4R: Avg. Flow Depth=0.05' Max Vel=0.31 fps Inflow=0.82 cfs 0.077 af
n=0.400 L=43.0' S=0.3953 '/ Capacity=138.24 cfs Outflow=0.84 cfs 0.077 af

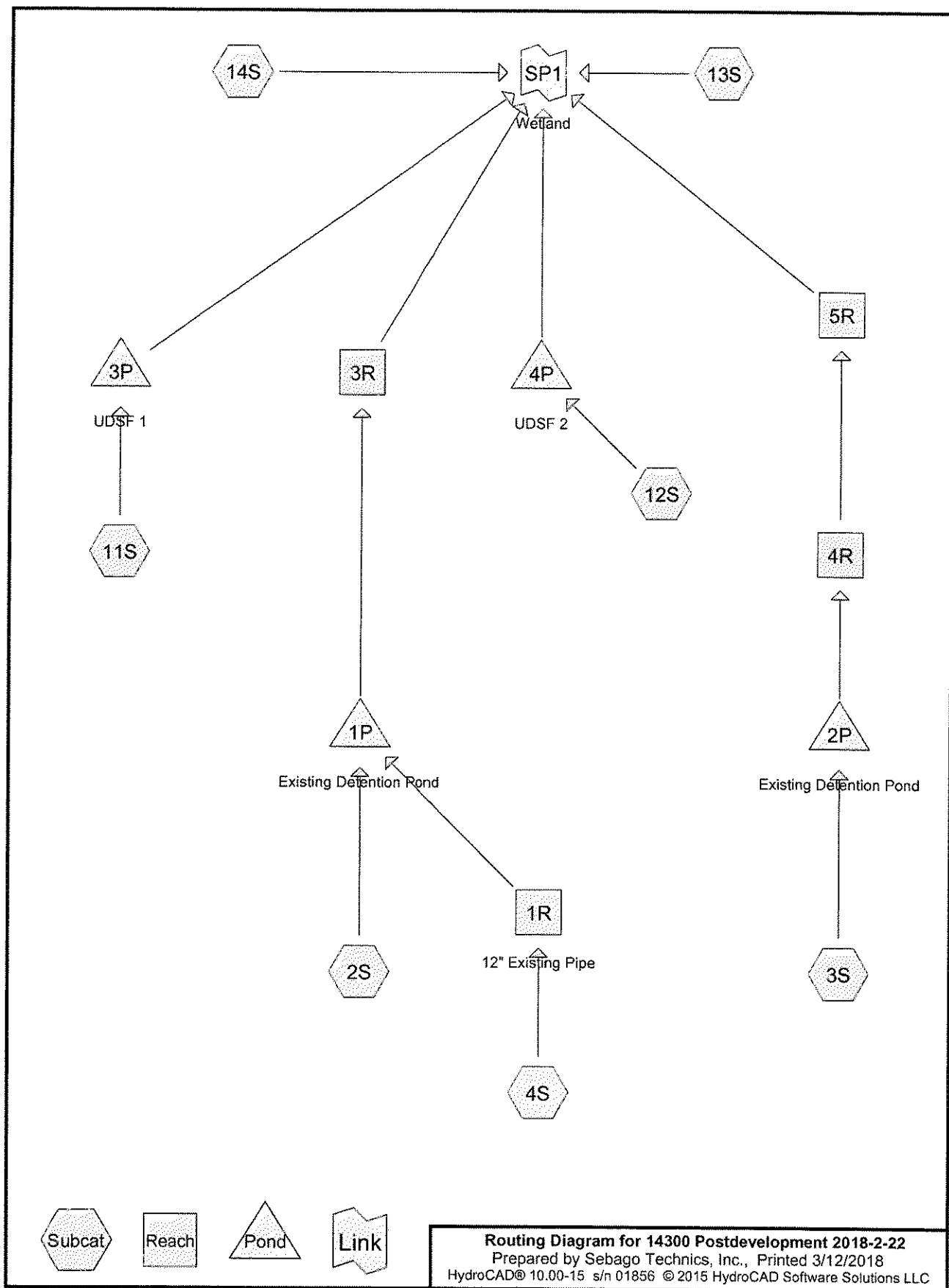
Reach 5R: Avg. Flow Depth=0.34' Max Vel=0.33 fps Inflow=0.84 cfs 0.077 af
n=0.400 L=475.0' S=0.0832 '/ Capacity=6.73 cfs Outflow=0.38 cfs 0.077 af

Pond 1P: Existing Detention Pond Peak Elev=290.56' Storage=4,993 cf Inflow=6.37 cfs 0.560 af
Outflow=7.85 cfs 0.445 af

Pond 2P: Existing Detention Pond Peak Elev=299.11' Storage=2,977 cf Inflow=1.90 cfs 0.141 af
Outflow=0.82 cfs 0.077 af

Link SP1: Wetland Inflow=20.33 cfs 1.643 af
Primary=20.33 cfs 1.643 af

Total Runoff Area = 9.048 ac Runoff Volume = 1.822 af Average Runoff Depth = 2.42"
86.07% Pervious = 7.787 ac 13.93% Impervious = 1.261 ac



14300 Postdevelopment 2018-2-22

Type III 24-hr 2-YEAR Rainfall=3.00"

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment2S: Runoff Area=29,798 sf 65.39% Impervious Runoff Depth=2.16"
 Tc=6.0 min CN=92 Runoff=1.66 cfs 0.123 af

Subcatchment3S: Runoff Area=18,737 sf 39.20% Impervious Runoff Depth=1.74"
 Tc=6.0 min CN=87 Runoff=0.86 cfs 0.062 af

Subcatchment4S: Runoff Area=41,427 sf 34.53% Impervious Runoff Depth=1.66"
 Flow Length=254' Tc=11.3 min CN=86 Runoff=1.55 cfs 0.132 af

Subcatchment11S: Runoff Area=110,033 sf 51.42% Impervious Runoff Depth=1.59"
 Tc=6.0 min CN=85 Runoff=4.61 cfs 0.334 af

Subcatchment12S: Runoff Area=103,025 sf 45.61% Impervious Runoff Depth=1.45"
 Tc=6.0 min CN=83 Runoff=3.92 cfs 0.285 af

Subcatchment13S: Runoff Area=8,796 sf 21.01% Impervious Runoff Depth=0.67"
 Tc=6.0 min CN=69 Runoff=0.13 cfs 0.011 af

Subcatchment14S: Runoff Area=82,322 sf 7.24% Impervious Runoff Depth=0.63"
 Tc=6.0 min CN=68 Runoff=1.13 cfs 0.099 af

Reach 1R: 12" Existing Pipe Avg. Flow Depth=0.39' Max Vel=5.39 fps Inflow=1.55 cfs 0.132 af
 12.0" Round Pipe n=0.013 L=215.0' S=0.0178 '/ Capacity=4.76 cfs Outflow=1.54 cfs 0.132 af

Reach 3R: Avg. Flow Depth=0.40' Max Vel=7.66 fps Inflow=2.19 cfs 0.140 af
 12.0" Round Pipe n=0.013 L=57.0' S=0.0354 '/ Capacity=6.71 cfs Outflow=2.21 cfs 0.140 af

Reach 4R: Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
 n=0.400 L=43.0' S=0.3953 '/ Capacity=138.24 cfs Outflow=0.00 cfs 0.000 af

Reach 5R: Avg. Flow Depth=0.00' Max Vel=0.00 fps Inflow=0.00 cfs 0.000 af
 n=0.400 L=475.0' S=0.0832 '/ Capacity=6.73 cfs Outflow=0.00 cfs 0.000 af

Pond 1P: Existing Detention Pond Peak Elev=288.99' Storage=4,993 cf Inflow=2.97 cfs 0.255 af
 Outflow=2.19 cfs 0.140 af

Pond 2P: Existing Detention Pond Peak Elev=298.96' Storage=2,715 cf Inflow=0.86 cfs 0.062 af
 Outflow=0.00 cfs 0.000 af

Pond 3P: UDSF 1 Peak Elev=257.89' Storage=7,017 cf Inflow=4.61 cfs 0.334 af
 Primary=0.28 cfs 0.334 af Secondary=0.00 cfs 0.000 af Outflow=0.28 cfs 0.334 af

Pond 4P: UDSF 2 Peak Elev=247.88' Storage=6,052 cf Inflow=3.92 cfs 0.285 af
 Primary=0.23 cfs 0.285 af Secondary=0.00 cfs 0.000 af Outflow=0.23 cfs 0.285 af

Link SP1: Wetland Inflow=3.34 cfs 0.870 af
 Primary=3.34 cfs 0.870 af

14300 Postdevelopment 2018-2-22

Type III 24-hr 2-YEAR Rainfall=3.00"

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Total Runoff Area = 9.048 ac Runoff Volume = 1.047 af Average Runoff Depth = 1.39"
61.31% Pervious = 5.547 ac 38.69% Impervious = 3.501 ac

Summary for Subcatchment 2S:

Runoff = 1.66 cfs @ 12.09 hrs, Volume= 0.123 af, Depth= 2.16"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	19,486	98	Impervious
	9,900	80	>75% Grass cover, Good, HSG D
	412	77	Woods, Good, HSG D
	29,798	92	Weighted Average
	10,312		34.61% Pervious Area
	19,486		65.39% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

Summary for Subcatchment 3S:

Runoff = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af, Depth= 1.74"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	7,345	98	Impervious
	11,392	80	>75% Grass cover, Good, HSG D
	18,737	87	Weighted Average
	11,392		60.80% Pervious Area
	7,345		39.20% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

Summary for Subcatchment 4S:

Runoff = 1.55 cfs @ 12.16 hrs, Volume= 0.132 af, Depth= 1.66"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

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Type III 24-hr 2-YEAR Rainfall=3.00"

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	Area (sf)	CN	Description
*	14,305	98	Impervious
	17,955	80	>75% Grass cover, Good, HSG D
	9,167	77	Woods, Good, HSG D
	41,427	86	Weighted Average
	27,122		65.47% Pervious Area
	14,305		34.53% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
9.9	43	0.0278	0.07		Sheet Flow, A to B
					Woods: Light underbrush n= 0.400 P2= 3.00"
0.1	23	0.2500	3.50		Shallow Concentrated Flow, B to C
					Short Grass Pasture Kv= 7.0 fps
0.4	125	0.0769	5.63		Shallow Concentrated Flow, C to D
					Paved Kv= 20.3 fps
0.2	32	0.2500	3.50		Shallow Concentrated Flow, D to E
					Short Grass Pasture Kv= 7.0 fps
0.7	31	0.0100	0.70		Shallow Concentrated Flow, E to F
					Short Grass Pasture Kv= 7.0 fps
11.3	254	Total			

Summary for Subcatchment 11S:

Runoff = 4.61 cfs @ 12.09 hrs, Volume= 0.334 af, Depth= 1.59"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	56,576	98	Impervious
	24,725	61	>75% Grass cover, Good, HSG B
	16,074	80	>75% Grass cover, Good, HSG D
	12,658	77	Woods, Good, HSG D
	110,033	85	Weighted Average
	53,457		48.58% Pervious Area
	56,576		51.42% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

Summary for Subcatchment 12S:

Runoff = 3.92 cfs @ 12.09 hrs, Volume= 0.285 af, Depth= 1.45"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

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Type III 24-hr 2-YEAR Rainfall=3.00"

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	Area (sf)	CN	Description
*	46,992	98	Impervious
	26,994	61	>75% Grass cover, Good, HSG B
	16,660	80	>75% Grass cover, Good, HSG D
	12,379	77	Woods, Good, HSG D
	103,025	83	Weighted Average
	56,033		54.39% Pervious Area
	46,992		45.61% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

Summary for Subcatchment 13S:

Runoff = 0.13 cfs @ 12.11 hrs, Volume= 0.011 af, Depth= 0.67"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	1,848	98	Impervious
	6,948	61	>75% Grass cover, Good, HSG B
	8,796	69	Weighted Average
	6,948		78.99% Pervious Area
	1,848		21.01% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

Summary for Subcatchment 14S:

Runoff = 1.13 cfs @ 12.11 hrs, Volume= 0.099 af, Depth= 0.63"

Runoff by SCS TR-20 method, UH=SCS, Weighted-CN, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
Type III 24-hr 2-YEAR Rainfall=3.00"

	Area (sf)	CN	Description
*	5,956	98	Impervious
	19,234	61	>75% Grass cover, Good, HSG B
	5,666	80	>75% Grass cover, Good, HSG D
	26,513	55	Woods, Good, HSG B
	24,953	77	Woods, Good, HSG D
	82,322	68	Weighted Average
	76,366		92.76% Pervious Area
	5,956		7.24% Impervious Area

Tc (min)	Length (feet)	Slope (ft/ft)	Velocity (ft/sec)	Capacity (cfs)	Description
6.0					Direct Entry, Direct Entry

Summary for Reach 1R: 12" Existing Pipe

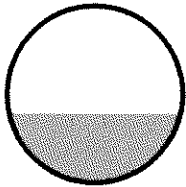
[52] Hint: Inlet/Outlet conditions not evaluated

Inflow Area = 0.951 ac, 34.53% Impervious, Inflow Depth = 1.66" for 2-YEAR event
 Inflow = 1.55 cfs @ 12.16 hrs, Volume= 0.132 af
 Outflow = 1.54 cfs @ 12.17 hrs, Volume= 0.132 af, Atten= 0%, Lag= 0.5 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Max. Velocity= 5.39 fps, Min. Travel Time= 0.7 min
 Avg. Velocity= 2.00 fps, Avg. Travel Time= 1.8 min

Peak Storage= 61 cf @ 12.17 hrs
 Average Depth at Peak Storage= 0.39'
 Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 4.76 cfs

12.0" Round Pipe
 n= 0.013
 Length= 215.0' Slope= 0.0178 '/'
 Inlet Invert= 289.60', Outlet Invert= 285.77'



Summary for Reach 3R:

[52] Hint: Inlet/Outlet conditions not evaluated

[90] Warning: Qout>Qin may require smaller dt or Finer Routing

Inflow Area = 1.635 ac, 47.44% Impervious, Inflow Depth = 1.03" for 2-YEAR event
 Inflow = 2.19 cfs @ 12.35 hrs, Volume= 0.140 af
 Outflow = 2.21 cfs @ 12.35 hrs, Volume= 0.140 af, Atten= 0%, Lag= 0.1 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Max. Velocity= 7.66 fps, Min. Travel Time= 0.1 min
 Avg. Velocity= 3.04 fps, Avg. Travel Time= 0.3 min

Peak Storage= 16 cf @ 12.35 hrs
 Average Depth at Peak Storage= 0.40'
 Bank-Full Depth= 1.00' Flow Area= 0.8 sf, Capacity= 6.71 cfs

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Type III 24-hr 2-YEAR Rainfall=3.00"

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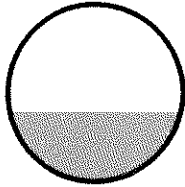
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12.0" Round Pipe

n= 0.013

Length= 57.0' Slope= 0.0354 '/'

Inlet Invert= 281.02', Outlet Invert= 279.00'

**Summary for Reach 4R:**

Inflow Area = 0.430 ac, 39.20% Impervious, Inflow Depth = 0.00" for 2-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min

Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs

Average Depth at Peak Storage= 0.00'

Bank-Full Depth= 1.00' Flow Area= 70.0 sf, Capacity= 138.24 cfs

50.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush

Side Slope Z-value= 20.0 '/' Top Width= 90.00'

Length= 43.0' Slope= 0.3953 '/'

Inlet Invert= 299.00', Outlet Invert= 282.00'

**Summary for Reach 5R:**

Inflow Area = 0.430 ac, 39.20% Impervious, Inflow Depth = 0.00" for 2-YEAR event
Inflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af
Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 0%, Lag= 0.0 min

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

Max. Velocity= 0.00 fps, Min. Travel Time= 0.0 min

Avg. Velocity = 0.00 fps, Avg. Travel Time= 0.0 min

Peak Storage= 0 cf @ 0.00 hrs

Average Depth at Peak Storage= 0.00'

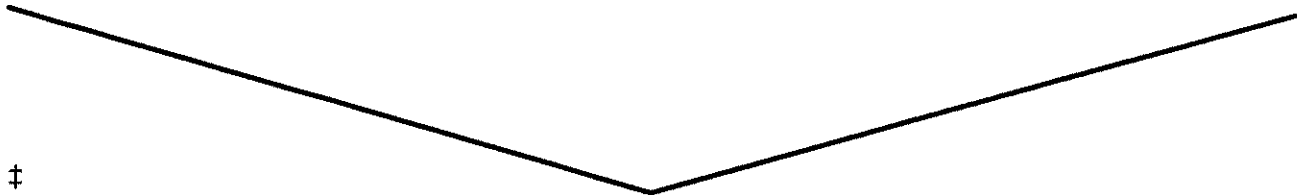
Bank-Full Depth= 1.00' Flow Area= 10.0 sf, Capacity= 6.73 cfs

0.00' x 1.00' deep channel, n= 0.400 Sheet flow: Woods+light brush

Side Slope Z-value= 10.0 '/' Top Width= 20.00'

Length= 475.0' Slope= 0.0832 '/'

Inlet Invert= 282.00', Outlet Invert= 242.50'



Summary for Pond 1P: Existing Detention Pond

[93] Warning: Storage range exceeded by 0.49'

[87] Warning: Oscillations may require smaller dt or Finer Routing (severity=117)

[62] Hint: Exceeded Reach 1R OUTLET depth by 3.00' @ 27.35 hrs

Inflow Area = 1.635 ac, 47.44% Impervious, Inflow Depth = 1.87" for 2-YEAR event
 Inflow = 2.97 cfs @ 12.12 hrs, Volume= 0.255 af
 Outflow = 2.19 cfs @ 12.35 hrs, Volume= 0.140 af, Atten= 26%, Lag= 13.7 min
 Primary = 2.19 cfs @ 12.35 hrs, Volume= 0.140 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 288.99' @ 12.35 hrs Surf.Area= 2,648 sf Storage= 4,993 cf

Plug-Flow detention time= 207.5 min calculated for 0.140 af (55% of inflow)
 Center-of-Mass det. time= 97.4 min (913.7 - 816.3)

Volume	Invert	Avail.Storage	Storage Description
#1	285.00'	4,993 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
285.00	186	0	0
286.00	1,002	594	594
287.00	1,573	1,288	1,882
288.00	2,217	1,895	3,777
288.50	2,648	1,216	4,993

Device	Routing	Invert	Outlet Devices
#1	Primary	285.77'	12.0" Round Culvert L= 71.0' CMP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 285.77' / 281.02' S= 0.0669 '/' Cc= 0.900 n= 0.013, Flow Area= 0.79 sf
#2	Device 1	288.77'	24.0" Horiz. Grate C= 0.600 Limited to weir flow at low heads

Primary OutFlow Max=2.08 cfs @ 12.35 hrs HW=288.99' TW=281.40' (Dynamic Tailwater)

1=Culvert (Passes 2.08 cfs of 6.23 cfs potential flow)

2=Grate (Weir Controls 2.08 cfs @ 1.52 fps)

Summary for Pond 2P: Existing Detention Pond

Inflow Area = 0.430 ac, 39.20% Impervious, Inflow Depth = 1.74" for 2-YEAR event
 Inflow = 0.86 cfs @ 12.09 hrs, Volume= 0.062 af
 Outflow = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af, Atten= 100%, Lag= 0.0 min
 Primary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 298.96' @ 24.40 hrs Surf.Area= 1,620 sf Storage= 2,715 cf

Plug-Flow detention time= (not calculated: initial storage exceeds outflow)
 Center-of-Mass det. time= (not calculated: no outflow)

Volume	Invert	Avail.Storage	Storage Description
#1	296.00'	3,728 cf	Custom Stage Data (Prismatic) Listed below (Recalc)
Elevation (feet)	Surf.Area (sq-ft)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
296.00	227	0	0
297.00	713	470	470
298.00	1,141	927	1,397
299.00	1,642	1,392	2,789
299.50	2,114	939	3,728

Device	Routing	Invert	Outlet Devices
#1	Primary	299.00'	10.0' long x 4.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 1.80 2.00 2.50 3.00 3.50 4.00 4.50 5.00 5.50 Coef. (English) 2.38 2.54 2.69 2.68 2.67 2.67 2.65 2.66 2.66 2.68 2.72 2.73 2.76 2.79 2.88 3.07 3.32

Primary OutFlow Max=0.00 cfs @ 0.00 hrs HW=296.00' TW=299.00' (Dynamic Tailwater)
 ↳1=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 3P: UDSF 1

Inflow Area = 2.526 ac, 51.42% Impervious, Inflow Depth = 1.59" for 2-YEAR event
 Inflow = 4.61 cfs @ 12.09 hrs, Volume= 0.334 af
 Outflow = 0.28 cfs @ 14.37 hrs, Volume= 0.334 af, Atten= 94%, Lag= 136.5 min
 Primary = 0.28 cfs @ 14.37 hrs, Volume= 0.334 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 257.89' @ 14.37 hrs Surf.Area= 4,981 sf Storage= 7,017 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)
 Center-of-Mass det. time= 281.6 min (1,110.6 - 829.0)

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Volume	Invert	Avail.Storage	Storage Description	
#1	254.83'	20,284 cf	Custom Stage Data (Prismatic) Listed below (Recalc)	
Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
254.83	3,647	0.0	0	0
254.84	3,647	40.0	15	15
256.99	3,647	40.0	3,136	3,151
257.00	3,647	100.0	36	3,187
258.00	5,150	100.0	4,399	7,586
259.00	6,335	100.0	5,743	13,328
260.00	7,577	100.0	6,956	20,284

Device	Routing	Invert	Outlet Devices
#1	Primary	253.83'	4.0" Round Culvert L= 39.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 253.83' / 253.00' S= 0.0213 '/' Cc= 0.900 n= 0.013, Flow Area= 0.09 sf
#2	Device 1	254.83'	2.410 in/hr Exfiltration over Surface area
#3	Secondary	258.40'	10.0' long x 12.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=0.28 cfs @ 14.37 hrs HW=257.89' TW=0.00' (Dynamic Tailwater)

1=Culvert (Passes 0.28 cfs of 0.57 cfs potential flow)

2=Exfiltration (Exfiltration Controls 0.28 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=254.83' TW=0.00' (Dynamic Tailwater)

3=Broad-Crested Rectangular Weir (Controls 0.00 cfs)

Summary for Pond 4P: UDSF 2

Inflow Area = 2.365 ac, 45.61% Impervious, Inflow Depth = 1.45" for 2-YEAR event
 Inflow = 3.92 cfs @ 12.09 hrs, Volume= 0.285 af
 Outflow = 0.23 cfs @ 14.71 hrs, Volume= 0.285 af, Atten= 94%, Lag= 156.9 min
 Primary = 0.23 cfs @ 14.71 hrs, Volume= 0.285 af
 Secondary = 0.00 cfs @ 0.00 hrs, Volume= 0.000 af

Routing by Dyn-Stor-Ind method, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs
 Peak Elev= 247.88' @ 14.71 hrs Surf.Area= 4,068 sf Storage= 6,052 cf

Plug-Flow detention time= (not calculated: outflow precedes inflow)

Center-of-Mass det. time= 294.0 min (1,130.0 - 836.0)

Volume	Invert	Avail.Storage	Storage Description
#1	244.83'	16,493 cf	Custom Stage Data (Prismatic) Listed below (Recalc)

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Elevation (feet)	Surf.Area (sq-ft)	Voids (%)	Inc.Store (cubic-feet)	Cum.Store (cubic-feet)
244.83	3,242	0.0	0	0
244.84	3,242	40.0	13	13
246.99	3,242	40.0	2,788	2,801
247.00	3,242	100.0	32	2,834
248.00	4,180	100.0	3,711	6,545
249.00	4,960	100.0	4,570	11,115
250.00	5,796	100.0	5,378	16,493

Device	Routing	Invert	Outlet Devices
#1	Primary	243.83'	4.0" Round Culvert L= 33.0' CPP, square edge headwall, Ke= 0.500 Inlet / Outlet Invert= 243.83' / 243.00' S= 0.0252 ' / Cc= 0.900 n= 0.013, Flow Area= 0.09 sf
#2	Device 1	244.83'	2.410 in/hr Exfiltration over Surface area
#3	Secondary	248.40'	10.0' long x 12.0' breadth Broad-Crested Rectangular Weir Head (feet) 0.20 0.40 0.60 0.80 1.00 1.20 1.40 1.60 Coef. (English) 2.57 2.62 2.70 2.67 2.66 2.67 2.66 2.64

Primary OutFlow Max=0.23 cfs @ 14.71 hrs HW=247.88' TW=0.00' (Dynamic Tailwater)

↑ **1=Culvert** (Passes 0.23 cfs of 0.61 cfs potential flow)

↑ **2=Exfiltration** (Exfiltration Controls 0.23 cfs)

Secondary OutFlow Max=0.00 cfs @ 0.00 hrs HW=244.83' TW=0.00' (Dynamic Tailwater)

↑ **3=Broad-Crested Rectangular Weir** (Controls 0.00 cfs)

Summary for Link SP1: Wetland

Inflow Area = 9.048 ac, 38.69% Impervious, Inflow Depth = 1.15" for 2-YEAR event
 Inflow = 3.34 cfs @ 12.35 hrs, Volume= 0.870 af
 Primary = 3.34 cfs @ 12.35 hrs, Volume= 0.870 af, Atten= 0%, Lag= 0.0 min

Primary outflow = Inflow, Time Span= 0.00-48.00 hrs, dt= 0.05 hrs

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Type III 24-hr 10-YEAR Rainfall=4.30"

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Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment2S: Runoff Area=29,798 sf 65.39% Impervious Runoff Depth=3.41"
 Tc=6.0 min CN=92 Runoff=2.56 cfs 0.194 af

Subcatchment3S: Runoff Area=18,737 sf 39.20% Impervious Runoff Depth=2.91"
 Tc=6.0 min CN=87 Runoff=1.42 cfs 0.104 af

Subcatchment4S: Runoff Area=41,427 sf 34.53% Impervious Runoff Depth=2.82"
 Flow Length=254' Tc=11.3 min CN=86 Runoff=2.60 cfs 0.223 af

Subcatchment11S: Runoff Area=110,033 sf 51.42% Impervious Runoff Depth=2.73"
 Tc=6.0 min CN=85 Runoff=7.87 cfs 0.574 af

Subcatchment12S: Runoff Area=103,025 sf 45.61% Impervious Runoff Depth=2.55"
 Tc=6.0 min CN=83 Runoff=6.92 cfs 0.502 af

Subcatchment13S: Runoff Area=8,796 sf 21.01% Impervious Runoff Depth=1.47"
 Tc=6.0 min CN=69 Runoff=0.33 cfs 0.025 af

Subcatchment14S: Runoff Area=82,322 sf 7.24% Impervious Runoff Depth=1.40"
 Tc=6.0 min CN=68 Runoff=2.89 cfs 0.220 af

Reach 1R: 12" Existing Pipe Avg. Flow Depth=0.53' Max Vel=6.18 fps Inflow=2.60 cfs 0.223 af
 12.0" Round Pipe n=0.013 L=215.0' S=0.0178 '/ Capacity=4.76 cfs Outflow=2.60 cfs 0.223 af

Reach 3R: Avg. Flow Depth=0.64' Max Vel=9.34 fps Inflow=4.79 cfs 0.303 af
 12.0" Round Pipe n=0.013 L=57.0' S=0.0354 '/ Capacity=6.71 cfs Outflow=4.98 cfs 0.303 af

Reach 4R: Avg. Flow Depth=0.02' Max Vel=0.16 fps Inflow=0.14 cfs 0.040 af
 n=0.400 L=43.0' S=0.3953 '/ Capacity=138.24 cfs Outflow=0.14 cfs 0.040 af

Reach 5R: Avg. Flow Depth=0.20' Max Vel=0.23 fps Inflow=0.14 cfs 0.040 af
 n=0.400 L=475.0' S=0.0832 '/ Capacity=6.73 cfs Outflow=0.10 cfs 0.040 af

Pond 1P: Existing Detention Pond Peak Elev=289.15' Storage=4,993 cf Inflow=4.80 cfs 0.418 af
 Outflow=4.79 cfs 0.303 af

Pond 2P: Existing Detention Pond Peak Elev=299.04' Storage=2,848 cf Inflow=1.42 cfs 0.104 af
 Outflow=0.14 cfs 0.040 af

Pond 3P: UDSF 1 Peak Elev=258.56' Storage=10,639 cf Inflow=7.87 cfs 0.574 af
 Primary=0.32 cfs 0.474 af Secondary=1.60 cfs 0.100 af Outflow=1.93 cfs 0.574 af

Pond 4P: UDSF 2 Peak Elev=248.56' Storage=9,012 cf Inflow=6.92 cfs 0.502 af
 Primary=0.26 cfs 0.401 af Secondary=1.66 cfs 0.102 af Outflow=1.92 cfs 0.503 af

Link SP1: Wetland Inflow=8.67 cfs 1.665 af
 Primary=8.67 cfs 1.665 af

14300 Postdevelopment 2018-2-22

Type III 24-hr 10-YEAR Rainfall=4.30"

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Page 2

Total Runoff Area = 9.048 ac Runoff Volume = 1.844 af Average Runoff Depth = 2.45"
61.31% Pervious = 5.547 ac 38.69% Impervious = 3.501 ac

14300 Postdevelopment 2018-2-22

Type III 24-hr 25-YEAR Rainfall=5.40"

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Page 3

Time span=0.00-48.00 hrs, dt=0.05 hrs, 961 points
 Runoff by SCS TR-20 method, UH=SCS, Weighted-CN
 Reach routing by Dyn-Stor-Ind method - Pond routing by Dyn-Stor-Ind method

Subcatchment2S: Runoff Area=29,798 sf 65.39% Impervious Runoff Depth=4.48"
 Tc=6.0 min CN=92 Runoff=3.32 cfs 0.255 af

Subcatchment3S: Runoff Area=18,737 sf 39.20% Impervious Runoff Depth=3.95"
 Tc=6.0 min CN=87 Runoff=1.90 cfs 0.141 af

Subcatchment4S: Runoff Area=41,427 sf 34.53% Impervious Runoff Depth=3.84"
 Flow Length=254' Tc=11.3 min CN=86 Runoff=3.51 cfs 0.304 af

Subcatchment11S: Runoff Area=110,033 sf 51.42% Impervious Runoff Depth=3.74"
 Tc=6.0 min CN=85 Runoff=10.69 cfs 0.787 af

Subcatchment12S: Runoff Area=103,025 sf 45.61% Impervious Runoff Depth=3.54"
 Tc=6.0 min CN=83 Runoff=9.53 cfs 0.697 af

Subcatchment13S: Runoff Area=8,796 sf 21.01% Impervious Runoff Depth=2.25"
 Tc=6.0 min CN=69 Runoff=0.52 cfs 0.038 af

Subcatchment14S: Runoff Area=82,322 sf 7.24% Impervious Runoff Depth=2.17"
 Tc=6.0 min CN=68 Runoff=4.63 cfs 0.342 af

Reach 1R: 12" Existing Pipe Avg. Flow Depth=0.64' Max Vel=6.62 fps Inflow=3.51 cfs 0.304 af
 12.0" Round Pipe n=0.013 L=215.0' S=0.0178 '/' Capacity=4.76 cfs Outflow=3.51 cfs 0.304 af

Reach 3R: Avg. Flow Depth=0.84' Max Vel=9.72 fps Inflow=7.85 cfs 0.445 af
 12.0" Round Pipe n=0.013 L=57.0' S=0.0354 '/' Capacity=6.71 cfs Outflow=6.88 cfs 0.445 af

Reach 4R: Avg. Flow Depth=0.05' Max Vel=0.31 fps Inflow=0.82 cfs 0.077 af
 n=0.400 L=43.0' S=0.3953 '/' Capacity=138.24 cfs Outflow=0.84 cfs 0.077 af

Reach 5R: Avg. Flow Depth=0.34' Max Vel=0.33 fps Inflow=0.84 cfs 0.077 af
 n=0.400 L=475.0' S=0.0832 '/' Capacity=6.73 cfs Outflow=0.38 cfs 0.077 af

Pond 1P: Existing Detention Pond Peak Elev=290.56' Storage=4,993 cf Inflow=6.37 cfs 0.560 af
 Outflow=7.85 cfs 0.445 af

Pond 2P: Existing Detention Pond Peak Elev=299.11' Storage=2,977 cf Inflow=1.90 cfs 0.141 af
 Outflow=0.82 cfs 0.077 af

Pond 3P: UDSF 1 Peak Elev=258.74' Storage=11,714 cf Inflow=10.69 cfs 0.787 af
 Primary=0.34 cfs 0.519 af Secondary=5.14 cfs 0.268 af Outflow=5.47 cfs 0.787 af

Pond 4P: UDSF 2 Peak Elev=248.75' Storage=9,882 cf Inflow=9.53 cfs 0.697 af
 Primary=0.27 cfs 0.440 af Secondary=5.30 cfs 0.258 af Outflow=5.56 cfs 0.698 af

Link SP1: Wetland Inflow=18.88 cfs 2.387 af
 Primary=18.88 cfs 2.387 af

14300 Postdevelopment 2018-2-22

Type III 24-hr 25-YEAR Rainfall=5.40"

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Page 4

Total Runoff Area = 9.048 ac Runoff Volume = 2.565 af Average Runoff Depth = 3.40"
61.31% Pervious = 5.547 ac 38.69% Impervious = 3.501 ac

Attachment C

Inspection, Maintenance, and Housekeeping

INSPECTION, MAINTENANCE, AND HOUSEKEEPING PLAN

Schooner Memory Care Center Auburn, Maine

Introduction

The developer responsible for the proposed project is Auburn Memory Care, LLC. The developer's address is 509 Forest Avenue, Portland, ME 04112. After construction, the driveway, building, and parking area will be maintained by the developer. The owner of the proposed project will be responsible for the maintenance of all stormwater management structures, and the keeping of records and maintenance logbook. Records of all inspections and maintenance work accomplished must be kept on file and retained for a minimum 5-year time span. The maintenance logbook will be made available to the Maine Department of Environmental Protection (MDEP) upon request. At a minimum, the appropriate and relevant activities for each of the stormwater management systems will be performed on the prescribed schedule.

The following plan outlines the anticipated inspection, maintenance, and housekeeping procedures for the erosion and sedimentation controls as well as stormwater management devices for the project site. Also, this plan outlines several housekeeping requirements that shall be followed during and after construction. These procedures should be followed in order to ensure the intended function of the designed measures and to prevent unreasonable adverse impacts to the surrounding environment.

The procedures outlined in this Inspection, Maintenance, and Housekeeping Plan are provided as an overview of the anticipated practices to be used on this site. In some instances, additional measures may be required due to unexpected conditions. For additional details on any of the erosion and sedimentation control measures or stormwater management devices to be utilized on this project, refer to the most recently revised edition of the "Maine Erosion and Sedimentation Control BMP" manual and/or the "Stormwater Management for Maine: Best Management Practices" manual as published by the MDEP.

During Construction

1. **Inspection:** During the construction process, it is the Contractor's responsibility to comply with the inspection and maintenance procedures outlined in this section. These responsibilities include inspecting disturbed and impervious areas, erosion control measures, materials storage areas that are exposed to precipitation, and locations where vehicles enter or exit the site. These areas shall be inspected at least once a week as well as before and after a storm event, and prior to completing permanent stabilization measures. A person with knowledge of erosion and stormwater control, including the standards and conditions in any applicable permits, shall conduct the inspections.

2. **Maintenance:** All measures shall be maintained in an effective operating condition until areas are permanently stabilized. If Best Management Practices (BMPs) need to be maintained or modified, additional BMPs are necessary, or other corrective action is needed, implementation must be completed within seven (7) calendar days and prior to any storm event (rainfall).
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained on-site. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of erosion and sedimentation controls, material storage areas, and vehicle access points to the site. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. The permittee shall retain a copy of the log for a period of at least three (3) years from the completion of permanent stabilization.
4. **Specific Inspection and Maintenance Tasks:** The following is a list of erosion control and stormwater management measures and the specific inspection and maintenance tasks to be performed during construction.

A. Sediment Barriers:

- Hay bale barriers, silt fences, and filter berms shall be inspected immediately after each rainfall and at least daily during prolonged rainfall.
- If the fabric on the silt fence or filter barrier should decompose or become ineffective prior to the end of the expected usable life and the barrier is still necessary, it shall be replaced.
- Sediment deposits should be removed after each storm event. They must be removed before deposits reach approximately one-half the height of the barrier.
- Filter berms shall be reshaped as needed.
- Any sediment deposits remaining in place after the silt fence or filter barrier is no longer required should be dressed to conform to the existing grade, prepared, and seeded.

B. Riprap Materials:

- Once a riprap installation has been completed, it should require very little maintenance. It shall, however, be inspected periodically to determine if high flows have caused scour beneath the riprap or dislodged any of the stone.

C. Stabilized Construction Entrances/Exits:

- The exit shall be maintained in a condition that will prevent tracking of sediment onto public rights-of-way.
- When the control pad becomes ineffective, the stone shall be removed along with the collected soil material. The entrance should then be reconstructed.
- Areas that have received mud-tracking or sediment deposits shall be swept or washed. Washing shall be done on an area stabilized with aggregate, which drains into an approved sediment-trapping device (not into storm drains, ditches, or waterways).

D. Temporary Seed and Mulch:

- Mulched areas should be inspected after rain events to check for rill erosion.
- If less than 90% of the soil surface is covered by mulch, additional mulch shall be applied in bare areas.
- In applications where seeding and mulch have been applied in conjunction with erosion control blankets, the blankets must be inspected after rain events for dislocation or undercutting.
- Mulch shall continue to be reapplied until 95% of the soil surface has established temporary vegetative cover.

E. Level Lip Spreaders and Ditch Turnouts:

- The level spreader pool should be inspected after rainfall events for sediment accumulation and debris that may reduce its capacity. Sediment and debris buildup should be removed once the volume of the pool has been reduced by 25%.
- The level lip must be constructed so that runoff flows slowly over the lip to a sheet flow through the receiving buffer. Repair or reconstruction of the level lip is required when flow from the spreader becomes channelized.
- Do not store snow removed from the street and/or parking lot within the area of a level spreader.

F. Stabilized Temporary Drainage Swales:

- Sediment accumulation in the swale shall be removed once the cross section of the swale is reduced by 25%.
 - The swales shall be inspected after rainfall events. Any evidence of sloughing of the side slopes or channel erosion shall be repaired and corrective action should be taken to prevent reoccurrence of the problem.
 - In addition to the stabilized lining of the channel (i.e. erosion control blankets), stone check dams may be needed to further reduce channel velocity.
5. **Housekeeping:** The following general performance standards apply to the proposed project.
- A. Spill Prevention: Controls must be used to prevent pollutants from being discharged from materials on-site, including storage practices to minimize exposure of the materials to stormwater, and appropriate spill prevention, containment, and response planning and implementation.
 - B. Groundwater Protection: During construction, liquid petroleum products and other hazardous materials with the potential to contaminate groundwater may not be stored or handled in areas of the site draining to an infiltration area. An "infiltration area" is any area of the site that by design or as a result of soils, topography and other relevant factors, accumulates runoff that infiltrates into the soil. Dikes, berms, sumps, and other forms of secondary containment that prevent discharge to groundwater may be used to isolate portions of the site for the purposes of storage and handling of these materials.
 - C. Fugitive Sediment and Dust: Actions must be taken to insure that activities do not result in noticeable erosion of soils or fugitive dust emissions during or after construction. Oil may not be used for dust control.
 - D. Debris and Other Materials: Litter, construction debris, and chemicals exposed to stormwater must be prevented from becoming a pollutant source.
 - E. Trench Dewatering: Trench dewatering is the removal of water from trenches, foundations, cofferdams, ponds, and other areas within the construction area that retain water after excavation. In most cases, the collected water is heavily silted and hinders correct and safe construction practices. The collected water must be removed from the ponded area, either through gravity or pumping, and must be spread through natural wooded buffers or removed to areas that are specifically designed to collect the maximum amount of sediment possible, like a cofferdam sedimentation basin. Avoid allowing the water to flow over disturbed areas of the site. Equivalent measures may be taken if approved.

After Construction

1. **Inspection:** After construction, it is the responsibility of the owner or assigned heirs to comply with the inspection, maintenance, and housekeeping procedures outlined in this section. All measures must be maintained in effective operating condition. A person with knowledge of erosion and stormwater control, including the standards and conditions in all applicable permits, shall conduct the inspections.
2. **Specific Inspection, Maintenance, and Housekeeping Tasks:** The following is a list of permanent erosion control and stormwater management measures and the inspection, maintenance, and housekeeping tasks to be performed after construction.
 - A. Vegetated Areas:
 - Inspect vegetated areas, particularly slopes and embankments, early in the growing season or after heavy rains to identify active or potential erosion problems.
 - Replant bare areas or areas with sparse growth. Where rill erosion is evident, armor the area with an appropriate lining or divert the erosive flows to on-site areas able to withstand the concentrated flows.
 - B. Ditches, Swales, and Other Open Channels:
 - Inspect ditches, swales and other open stormwater channels in the spring, in the late fall, and after heavy rains to remove any obstructions to flow. Remove accumulated sediments and debris, remove woody vegetative growth that could obstruct flow, and repair any erosion of the ditch lining.
 - Vegetated ditches must be mowed at least annually or otherwise maintained to control the growth of woody vegetation and maintain flow capacity.
 - Any woody vegetation growing through riprap linings must also be removed. Repair any slumping side slopes as soon as practicable.
 - If the ditch has a riprap lining, replace riprap in areas where any underlying filter fabric or underdrain gravel is showing through the stone or where stones have dislodged.
 - C. Culverts:
 - Inspect culverts in the spring, in the late fall, and after heavy rains to remove any obstructions to flow.
 - Remove accumulated sediments and debris at the inlet, at the outlet, and

within the conduit.

- Inspect and repair any erosion damage at the culvert's inlet and outlet.

D. Catch Basins/Outlet Control Structures:

- Inspect and, if required, clean-out basins at least once a year, preferably in early spring.
- Clean out must include the removal and legal disposal of accumulated sediments and debris at the bottom of the basin, at any inlet grates, at any inflow channels to the basin, and at any pipes between basins.

E. Level Lip Spreaders, Rip-Rap Outfalls and Ditch Turnouts:

- The level spreader pool should be inspected after significant rainfall events for sediment accumulation and debris that may reduce its capacity. Sediment and debris buildup should be removed once the volume of the pool has been reduced by 25%.
- The level lip must be constructed so that runoff flows slowly over the lip to a sheet flow through the receiving buffer. Repair or reconstruction of the level lip is required when flow from the spreader becomes channelized.
- Do not store snow removed from the street and/or parking lot within the area of a level spreader.

F. Winter Sanding

- Clear accumulation of winter sand along roadways at least once a year, preferably in the spring.
- Accumulations on pavement may be removed by pavement sweeping.
- Accumulations of sand along road shoulders may be removed by grading excess sand to the pavement edge and removing it manually or by a front-end loader or other acceptable method.

G. Underdrained Filtration Pond

- The soil filter should be inspected after every major storm in the first few months to ensure proper function. Thereafter, the filter should be inspected at least once every six months to ensure that it is draining in no less than 24 hours and no more than 48 hours.
 - The top several inches of the filter shall be replaced with fresh material when water ponds on the surface of the bed for more than 72 hours.
 - The filter bed vegetations shall be mowed once or twice per year to a grass height no less than six (6) inches.
 - Fertilization of the under drained filter area should be avoided unless absolutely necessary to establish vegetation.
 - Harvesting and pruning of excessive growth will need to be done occasionally. Weeding to control unwanted or invasive plants may also be necessary.
 - Inspect embankment for erosion, settling, and structural failure.
3. **Documentation:** A log summarizing the inspections and any corrective action taken must be maintained. The log must include the name(s) and qualifications of the person making the inspections, the date(s) of the inspections, and major observations about the operation and maintenance of controls. Major observations must include BMPs that need maintenance, BMPs that failed to operate as designed or proved inadequate for a particular location, and locations where additional BMPs are needed. For each BMP requiring maintenance, BMP needing replacement, and location needing additional BMPs, note in the log the corrective action taken and when it was taken. The log must be made accessible to the appropriate regulatory agency upon request. A sample "Stormwater Inspection and Maintenance Form" has been included as Attachment 1 of this Inspection, Maintenance, and Housekeeping Plan.
4. **Recertification:** A certification of the following shall be submitted to the Maine Department of Environmental Protection (MDEP) within three months of the expiration of each five year interval from the date of issuance of MDEP permits.
- A. Identification and repair of erosion problems. All areas of the project site have been inspected for areas of erosion, and appropriate steps have been taken to permanently stabilize these areas.
 - B. Inspection and repair of stormwater control system. All aspects of the stormwater control system have been inspected for damage, wear, and malfunction, and appropriate steps have been taken to repair or replace the system, or portions of the system.

- C. The Inspection, Maintenance, and Housekeeping Plan for the site is being implemented as written, or modifications to the plan have been submitted to and approved by the MDEP, and the maintenance log is being maintained.
5. **Duration of Maintenance:** Perform maintenance as described and required for any associated permits unless and until the system is formally accepted by a municipality or quasi-municipal district, or is placed under the jurisdiction of a legally created association that will be responsible for the maintenance of the system. If a municipality or quasi-municipal district chooses to accept a stormwater management system, or a component of a stormwater system, it must provide a letter to the MDEP stating that it assumes responsibility for the system. The letter must specify the components of the system for which the municipality or district will assume responsibility, and that the municipality or district agrees to maintain those components of the system in compliance with MDEP standards. Upon such assumption of responsibility, and approval by the MDEP, the municipality, quasi-municipal district, or association becomes a co-permittee for this purpose only and must comply with all terms and conditions of the permit.

Attachments

Attachment 1 – Sample Stormwater Inspection and Maintenance Form

MAINTENANCE LOG

**Schooner Memory Care Center
Auburn, Maine
Attachment 1**

This log is intended to accompany the stormwater Inspection, Maintenance and Housekeeping Plan for Schooner Memory Care Center. The following items shall be checked, cleaned and maintained on a regular basis as specified in the Maintenance Plan and as described in the table below. This log shall be kept on file for a minimum of five (5) years and shall be available for review by the MDEP. Qualified personnel familiar with drainage systems and soils shall perform all inspections. Attached is a copy of the construction and post-construction maintenance logs.

Item	Maintenance Required & Frequency	Date Completed	Maintenance Personnel	Comments
Vegetated Areas	Inspect Slopes			
	Replant Bare Areas			
	Check after Major Storms			
Ditches and Swales	Inspect after major rainfall event producing greater than 3" of rain in 2 hours.			
	Repair erosion or damage immediately.			
Culverts	Inspect culverts monthly or after rainfall of >1"			
	Clean culverts when sediment occupies more than 20% of pipe diameter			
	Repair any erosion at inlet and outlet pipes			
	Replace displaced riprap at least once a year			
	Remove vegetation growing through riprap at least once a year			
Catch Basins/ Outlet Control Structures	Inspect and cleanout basins at least annually, (Spring)			
Level Spreader, Rip- Rap Outfalls and Ditch Turnouts	Inspect after significant rainfall events for sediment accumulation			
	If volume of pool is reduced by 25%, must remove sediment and debris			
Level Spreader and Ditch Turnouts	Repair or reconstruct the riprap if flow from the spreader becomes channelized			

Item	Maintenance Required & Frequency	Date Completed	Maintenance Personnel	Comments
	No snow storage is allowed in the level lip spreader			
Winter Sanding	Clean annually (Spring)			
	Remove sand and sediment from roadway shoulders			
Underdrained Filtration Pond	Inspect filter every 6 months to ensure drain times between 24-48 hours.			
	Replace top several inches of the filter if drain time is more than 72 hours.			
	Inspect inlet and outlet control structure for blockage.			
	Mow filter bed vegetation no more than twice a year to a height no less than 6 inches.			
	Remove or prune unwanted vegetation as necessary.			
	Inspect embankment for erosion settling and structural failure			

CIMARRON LED	Cat.#		
	Job	Type	
			Approvals

SPECIFICATIONS

Construction:

- Stylish vertically finned die-cast solid top housing for maximum heat dissipation; Stops collection of unsightly debris from gathering on top of the housing
- Rugged lower die-cast aluminum heat sink accelerates thermal management and optimizes PCB and optical performance
- Separate optical and electrical compartment for optimum component operation
- One piece die cut silicone gasket ensures weather proof seal around each individual LED for IP65 rating
- Backlight Control (BC) option available for 85% spill light reduction, doesn't change fixture appearance or EPA, recommended for Type III and Type IV distributions
- Stamped bezel provides mechanical compression to seal the optical assembly
- Complements the Hubbell Southwest series of outdoor fixtures
- Weight - 45.0 pounds, EPA - 1.3 ft²
- Suitable for applications requiring 3G testing prescribed by ANSI C136.31

Optics:

- Choice of 72 high brightness LED configurations with individual acrylic lenses specially designed for IES Type II, III, IV and V distributions
- Auto optics designed for front row 1A and interior rows 2A (see distribution under ordering and page 2)
- CCT: 3000K (80 CRI), 4000K (70 CRI), 5000K (70 CRI), and turtle friendly Amber LED options

Electrical:

- Universal input voltage 120-277 VAC, 50/60 Hz
- Integral step-down transformer for 347V & 480V
- Ambient operating temperature -40° C to 40° C
- Automatic thermal self-protection
- Drivers have greater than 90% power factor and less than 10% THD
- Optional continuous dimming to 10% or dual circuitry available

- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- 1050 mA driver available with 90L configuration for increased lumen output
- LED electrical assembly, including PR devices, consumes no power in the 'off' state
- Surge protection - 20KA; Turns fixture off at end of life; Includes LED for end of life indication (see surge suppressor page 4)

Controls:

- Drivers are 0-10V dimming standard. Photocell, occupancy sensor and wireless controls available for complete on/off and dimming control

Lumen maintenance:

- L90 at 60,000 hours (Projected per IESNA TM-21-11)

Installation:

- Two die-cast aluminum arm designs: The decorative arm offers a sleek upswept look while the straight arm follows the housing's contoured lines for continuity of style
- Fixture ships with arm installed for ease of installation and mounts to #2 drill pattern
- Wall bracket, mast arm fitter and pole accessories are also available allowing easy mounting for virtually any application

Finish:

- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

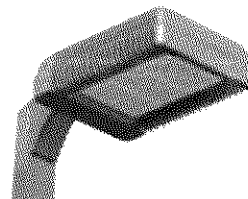
Warranty:

Five year limited warranty (for more information visit: <http://www.hubbelloutdoor.com/resources/warranty/>)

Listings:

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations
- Models meet DesignLights Consortium (DLC) qualifications, consult DLC website for more details: <http://www.designlights.org/QPL>
- IDA approved • IP65

PRODUCT IMAGE(S)



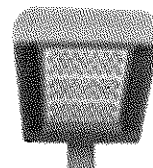
90 LED 3/4 VIEW



30 LED

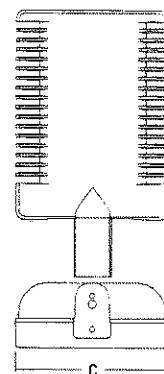
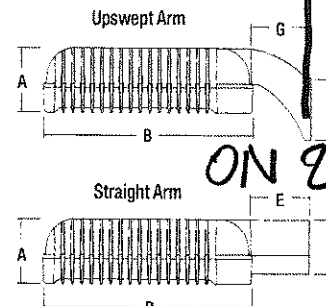


60 LED



90 LED

DIMENSIONS



A	B	C	D	E	F	G
6 3/4" 171mm	21 3/4" 552mm	16" 406mm	6 5/8" 168mm	6 5/16" 160mm	5 5/8" 143mm	6 1/8" 155mm

CERTIFICATIONS/LISTINGS



*3000K and warmer CCTs only

ORDERING INFORMATION SEE NEXT PAGE



HUBBELL
Outdoor Lighting

Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000

Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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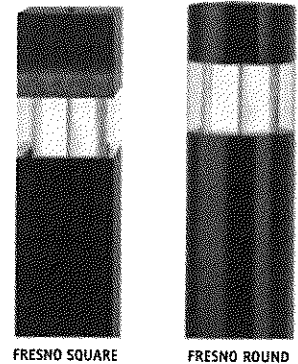


HUBBELL
Lighting

Fresno FN

Bollards

- Rotatable LED assembly adjustment for ideal placement and aiming of asymmetric light pattern
- 24 high brightness LEDs at 500mA deliver symmetric distribution at 46w
- 12 high brightness LEDs at 700mA deliver asymmetric distribution at 30w
- Available in three different color correlated temperatures
- >60,000 HOUR L90
- Extruded aluminum housing with single screw access for top relamping; Decorative cast top with tamper resistant hardware
- Sealed one-piece, clear acrylic lens
- Durable Lektrocote™ TGIC thermoset polyester powder coat paint finish assures long life and maintenance-free service
- Concealed, cast aluminum anchor base; Four 1/2" x 10" anchor bolts on 4" diameter bolt circle
- Listed to UL1598 for use in wet locations
- 5 year limited system warranty



MADE-TO-ORDER ORDERING INFORMATION

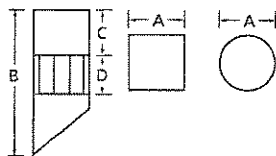
SERIES	SOURCE/WATTAGE/LED	VOLTAGE	COLOR	OPTIONS ¹
FN1 Fresno Square	12LU-3K asymmetric, 27W, 3000K CCT	U 120V-277V	DB Dark Bronze	CD 0-10V dimmable
FN2 Fresno Round	12LU-4K asymmetric, 27W, 4000K CCT	1 120	BL Black	24 24" OAH ²
	12LU-5K asymmetric, 27W, 5000K CCT	2 277	WH White	30 30" OAH ²
	24LU-3K symmetric, 41W, 3000K CCT	3 240	GR Gray	36 36" OAH ²
	24LU-4K symmetric, 41W, 4000K CCT	4 277	PS Platinum Silver	F(X) Fusing ³
	24LU-5K symmetric, 41W, 5000K CCT	5 480	RD Red (premium color)	P(X) Button Photocell ³
	24LU-AM symmetric, 20W, Amber 590nm	F 347	FG Forest Green (premium color)	ABS Bolts shipped ahead
			CC Custom Color (consult factory)	

¹ Any or all options may be used together

² Standard fixture height is 42", only one overall height (OAH) may be selected

³ Replace '(X)' with corresponding voltage (1=120, 2=208, 3=240, 4=277, 5=480, 6=347), Button Photocell not available in 480V

DIMENSIONS



	A	B	C	D	Weight
FN1	6 3/4" sq. 171 mm	42" 1067 mm	6" 152 mm	4" 102 mm	41 lbs. 18.6 kg
FN2	7" dia. 178 mm	42" 1067 mm	6" 152 mm	4" 102 mm	41 lbs. 18.6 kg



HUBBELL
Outdoor Lighting

Tab 9 Zoning Conformance Narrative

CONFORMANCE WITH SITE PLAN REVIEW STANDARDS SECTION 60- 1304 :

- A. ADEQUATE PROVISIONS HAVE BEEN MADE TO ENSURE THAT VEHICULAR LOADING, UNLOADING, PARKING AND PEDESTRIAN CIRCULATION ON THE SITE AND ONTO ADJACENT PUBLIC STREETS WILL NOT CREATE HAZARDS TO SAFETY.
- B. THE BULK, LOCATION OR OPERATIONS OF THE PROPOSED BUILDING WILL NOT BE DETRIMENTAL NOR ADVERSELY AFFECT THE USE AND VALUES OF EXISTING DEVELOPMENT IN THE NEIGHBORHOOD OR THE HEALTH AND SAFETY OF PERSONS RESIDING OR WORKING THEREIN.
- C. THE PROVISIONS FOR ON – SITE LANDSCAPING ARE ADEQUATE TO SCREEN NEIGHBORING PROPERTIES FROM UNSIGHTLY FEATURES OF THE DEVELOPMENT.
- D. THE SITE PLAN ADEQUATELY PREVENTS SOIL AND DRAINAGE PROBLEMS WHICH THE DEVELOPMENT MAY GIVE RISE TO IN ACCORDANCE WITH SECTION 60-1301 (14) .
- E. EXTERIOR LIGHTING WILL NOT CREATE SAFETY HAZARDS FOR MOTORISTS TRAVELING ON ADJACENT STREETS , IS ADEQUATE FOR THE SAFETY OF OCCUPANTS OR USERS OF THE SITE, AND WILL NOT CREATE A NUISANCE AFFECTING ADJACENT PROPERTIES.
- F. THE PROPOSED DEVELOPMENT WILL NOT UNDULY BURDEN OFF-SITE SEWER DRAINAGE OR WATER SYSTEMS.
- G. THE PROPOSED DEVELOPMENT PROVIDES FOR ADEQUATE ACCESS TO THE SITE AND THE PROPOSED BUILDING FOR EMERGENCY VEHICLES, AND WILL NOT CREATE A FIRE SAFETY HAZARD.
- H. THE PROPOSED DEVELOPMENT DOES NOT VIOLATE PROVISIONS OF THE ZONING REGULATIONS APPLICABLE TO THE SITE OR OTHER APPLICABLE LAWS , REGULATIONS OR ORDINANCES.
- I. THE PROPOSED DEVELOPMENT WILL NOT UNDULY IMPACT THE ABILITY TO PROVIDE MUNICIPAL SERVICES.

CONFORMANCE WITH SPECIAL EXCEPTION REVIEW STANDARDS SECTION 60-1336 :

- 1. THE SPECIAL EXCEPTION SOUGHT FULFILLS THE SPECIFIC REQUIREMENTS SET FORTH IN THE ZONING ORDINANCE RELATIVE TO SUCH AN EXCEPTION.
- 2. THE SPECIAL EXCEPTION SOUGHT WILL NEITHER CREATE NOR AGGRAVATE A TRAFFIC HAZARD, A FIRE HAZARD OR ANY OTHER SAFETY HAZARD.
- 3. THE SPECIAL EXCEPTION SOUGHT WILL NOT BLOCK OR HAMPER THE MASTER DEVELOPMENT PLAN PATTERN OF HIGHWAY CIRCULATION OR OF PLANNED MAJOR PUBLIC OR SEMIPUBLIC LAND ACQUISITION.
- 4. THE EXCEPTION SOUGHT WILL NOT ALTER THE ESSENTIAL CHARACTERISTICS OF THE NEIGHBORHOOD AND WILL NOT TEND TO DEPRECIATE THE VALUE OF PROPERTY ADJOINING AND NEIGHBORING THE PROPERTY UNDER APPLICATION.
- 5. REASONABLE PROVISIONS HAVE BEEN MADE FOR ADEQUATE LAND SPACE, LOT WIDTH, LOT AREA, STORMWATER MANAGEMENT IN ACCORDANCE WITH SECTION 60-1301 (14), GREEN SPACE, DRIVEWAY LAYOUT, ROAD ACCESS, OFF – STREET PARKING, LANDSCAPING , BUILDING SEPARATION, SEWAGE DISPOSAL, WATER SUPPLY, AND FIRE SAFETY.

6. THE STANDARDS IMPOSED ARE, IN ALL CASES, AT LEAST AS STRINGENT AS THOSE ELSEWHERE IMPOSED BY THE CITY BUILDING CODE AND BY THE PROVISIONS OF THIS CHAPTER.
7. ESSENTIAL CITY SERVICES WHICH WILL BE REQUIRED FOR THE PROJECT ARE PRESENTLY AVAILABLE OR CAN BE MADE AVAILABLE WITHOUT DISRUPTING THE CITY'S MASTER DEVELOPMENT PLAN.



Schooner Memory Care

Stetson Road Auburn , Maine

Site Plan Application

Applicant :

Auburn Memory Care, LLC
c/o Sandy River Company
P.O. Box 110
Portland, Maine

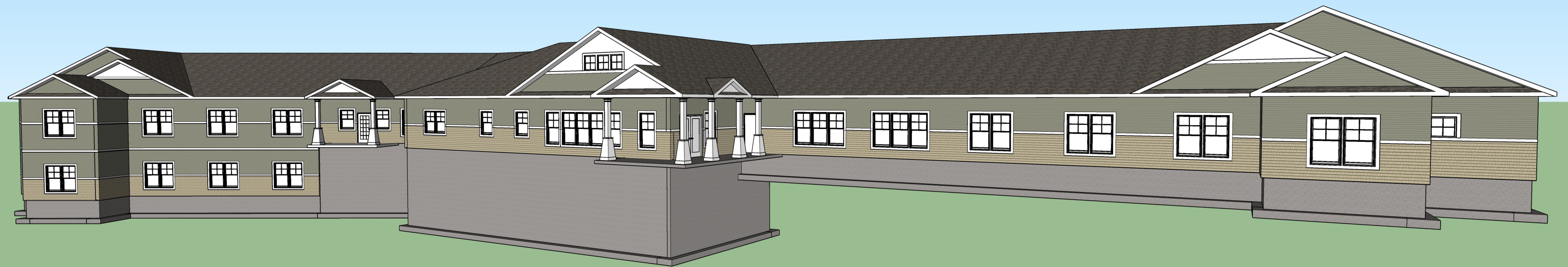
Architect :

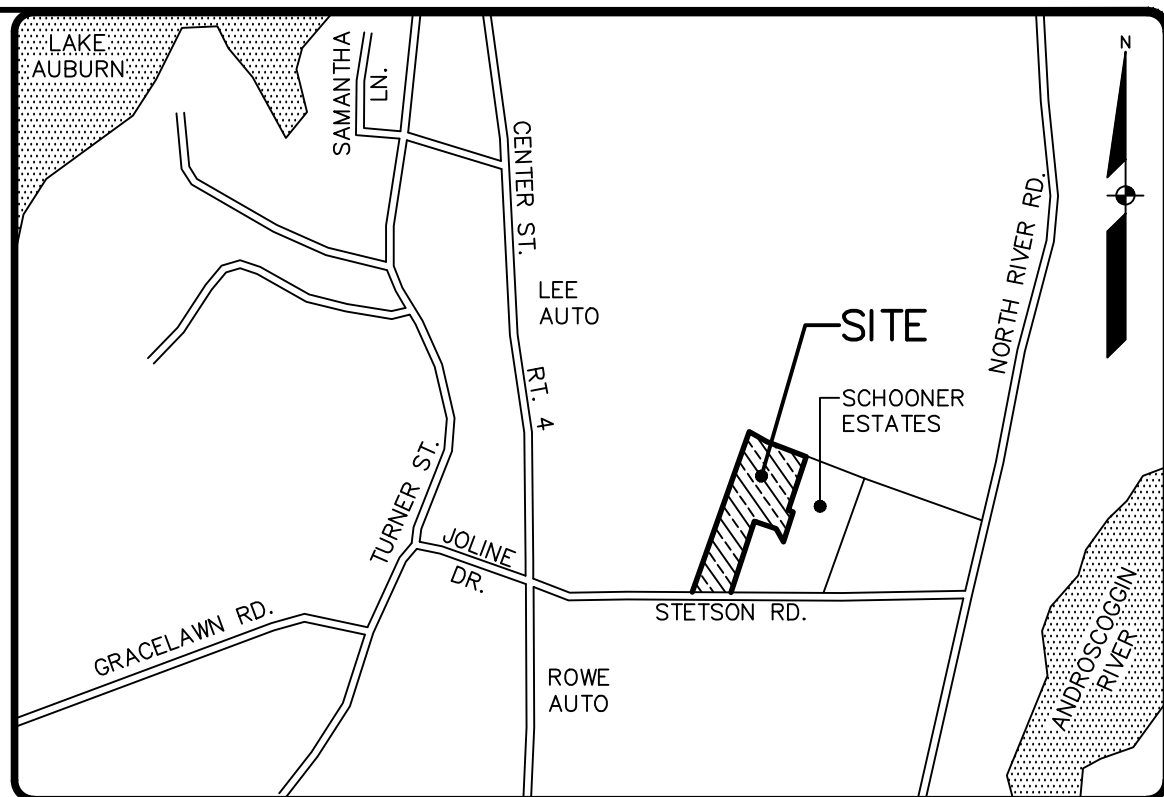
Gawron Turgeon Architects
29 Black Point Road
Scarborough , Maine

Landscape Architect / Surveyor / Site Engineer :

Sebago Technics, Inc.
75 John Roberts Road
South Portland, Maine

March 13 , 2018





PLAN REFERENCES:

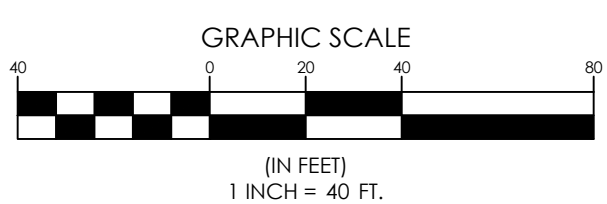
- A. ALTA/ ACSS LAND TITLE SURVEY OF SCHOONER ESTATES PREPARED FOR SCHOONER HOLDINGS, LLC BY TECHNICAL SERVICES, INC (JOB NUMBER 88-5017C) DATED MAY 24, 2001, NOT RECORDED.
- B. ALTA/ ACSS LAND TITLE SURVEY OF SCHOONER ESTATES PREPARED FOR THE SCHOONER ESTATE, LLC BY TECHNICAL SERVICES, INC (JOB NUMBER 88-5017C) DATED MAY 24, 2001, NOT RECORDED.
- C. LAND TITLE - REVISION I OF SCHOONER ESTATES PREPARED FOR SHELITE HORIZONS ENTERPRISES BY TURNER SURVEYING COMPANY, INC (JOB NUMBER 88003) DATED JUNE 27, 2009, NOT RECORDED.
- D. BOUNDARY SURVEY OF PROPOSED CENTRAL MANE HEALTH CARE CORP. FACILITY FOR LAND ENGINEERING BY SURVEYWORKS, INC (FILE NUMBER 02-403558D) DATED JANUARY 24, 2003, NOT RECORDED.
- E. SURVEY FOR EDWARD J BEAUCHAMP, AUBURN MANE, BY VINCENT J.P. LEBLANC DATED JANUARY 27, 1972, NOT RECORDED.
- F. TOPOGRAPHY FOR DR. SARTO A. SASSVELLE, AUBURN MANE, BY VINCENT J.P. LEBLANC DATED FEBRUARY 1988, NOT RECORDED.

7. PLAN ORIENTATION IS GRID NORTH, MANE STATE PLANE COORDINATE SYSTEM, WEST ZONE 1802-NAD83, ELEVATIONS DEPICTED HEREON ARE NAVD83, BASED ON DUAL FREQUENCY GPS DATA.

8. UTILITY INFORMATION DEPICTED HEREON IS COMPILED USING PHYSICAL EVIDENCE LOCATED IN THE FIELD. UTILITIES DEPICTED HEREON MAY NOT NECESSARILY REPRESENT ALL EXISTING UTILITIES. CONTRACTORS AND/OR DESIGNERS NEED TO CONTACT DIG-SAFE SYSTEMS (1-888-486-4348) TO FIELD VERIFY EXISTING UTILITIES PRIOR TO CONSTRUCTION AND/OR EXCAVATION.

9. THE LOSS OF PROPERTY AS DEPICTED HEREON DOES NOT FALL WITHIN A SPECIAL FLOOD HAZARD AREA. THE FLOOD INSURANCE RATE MAP FOR ANDROSQUA COUNTY, MANE, COMMUNITY-NUMBER 22004 0214 E, HAVING AN EFFECTIVE DATE OF JULY 8, 2015.

10. LAND DELINEATION WAS PERFORMED ON THIS PROJECT SITE IN NOVEMBER AND DECEMBER 2015 BY ALBERT FRICK ASSOCIATES, INC PER WETLAND DELINEATION PLAN PREPARED FOR GAWKON - THURGOOD (JOHN ORESTIS) 200 STATION ROAD, AUBURN MANE 04210.



SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM

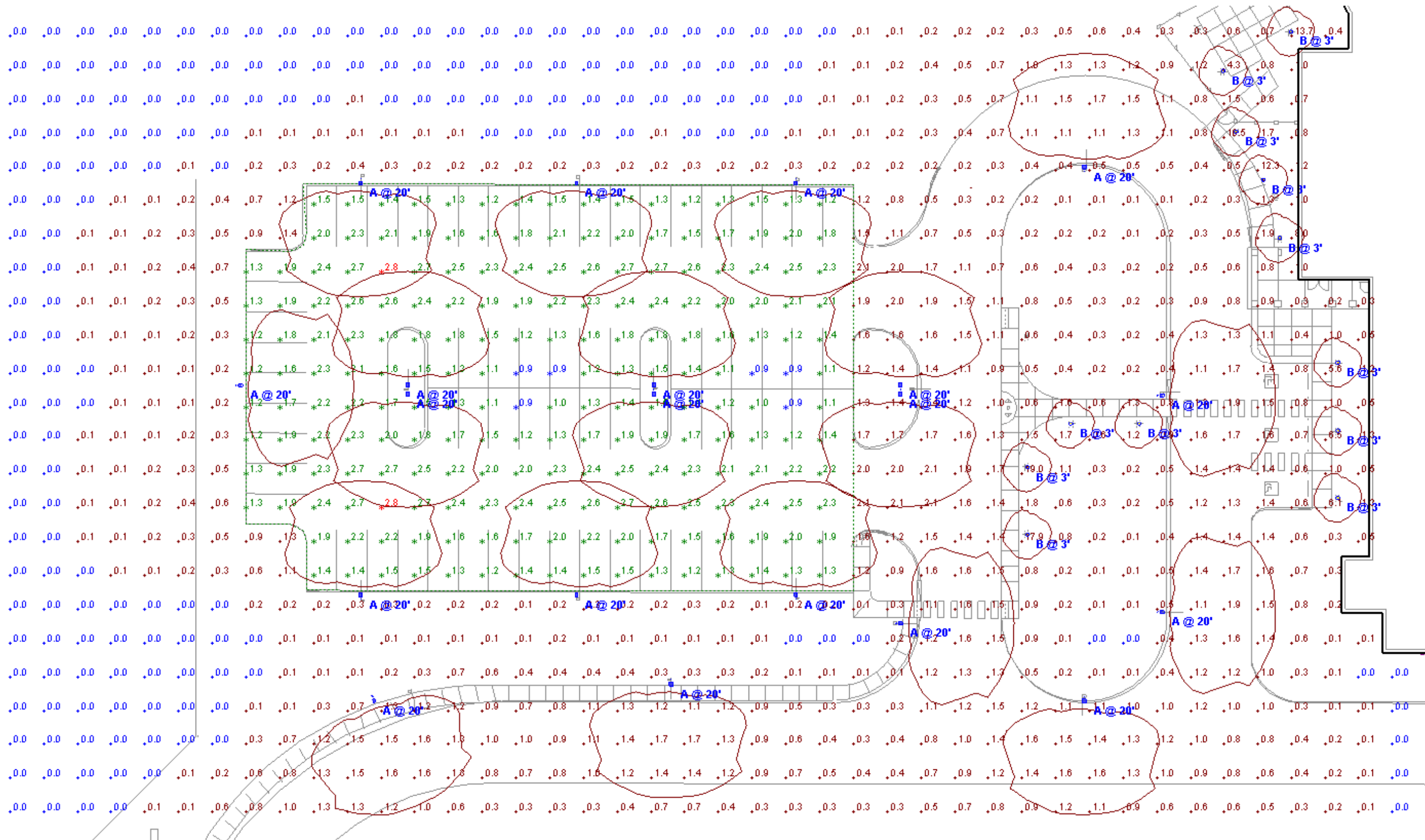
PROJECT NO.	SCALE
14300	1" = 40'

SHEET 1 OF 1



4194 Schooner Memory Care
Photometric

Designer
SAJ
Date
3/12/2018
Scale
Not to Scale
Drawing No.
E0
Summary

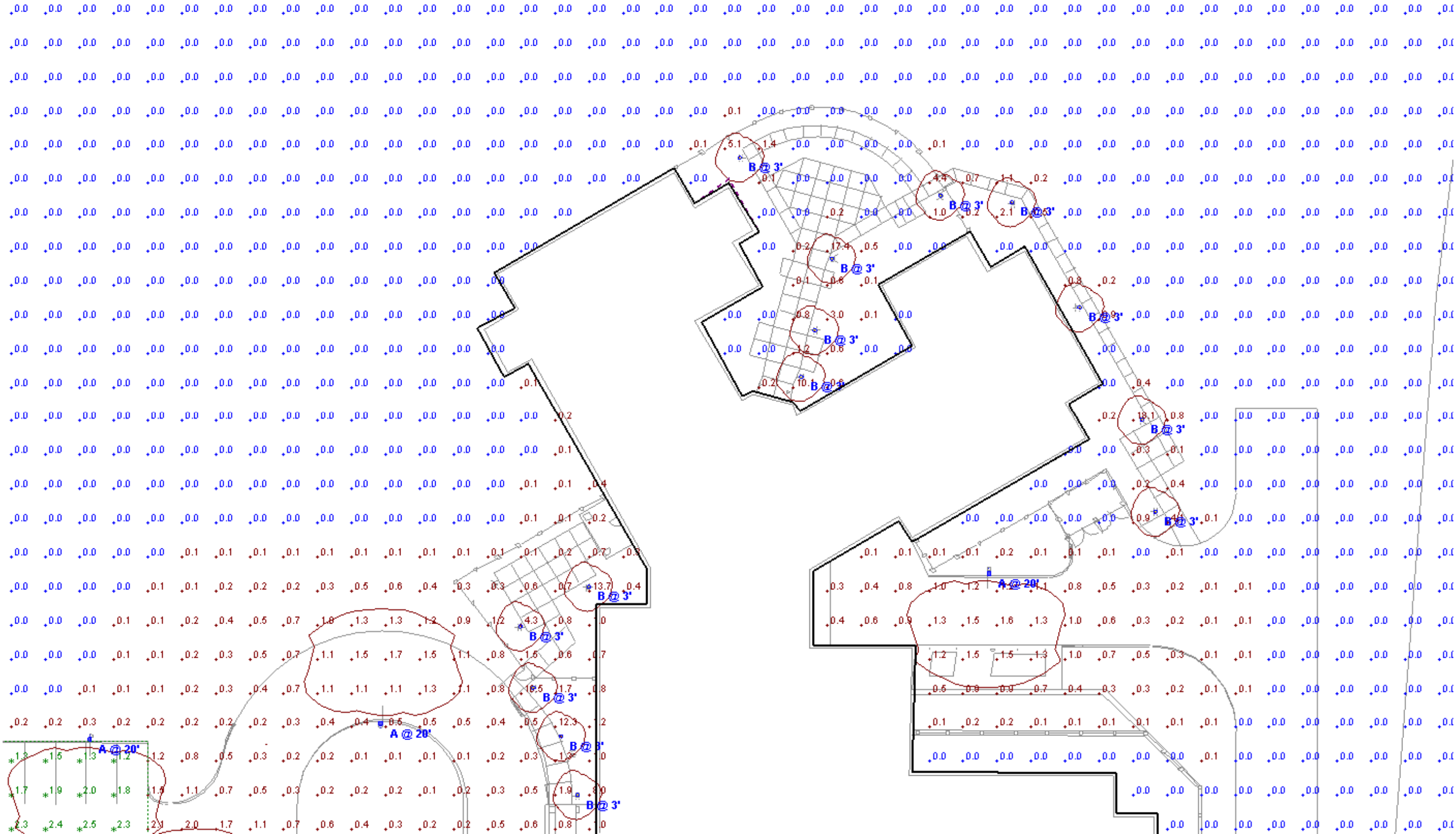


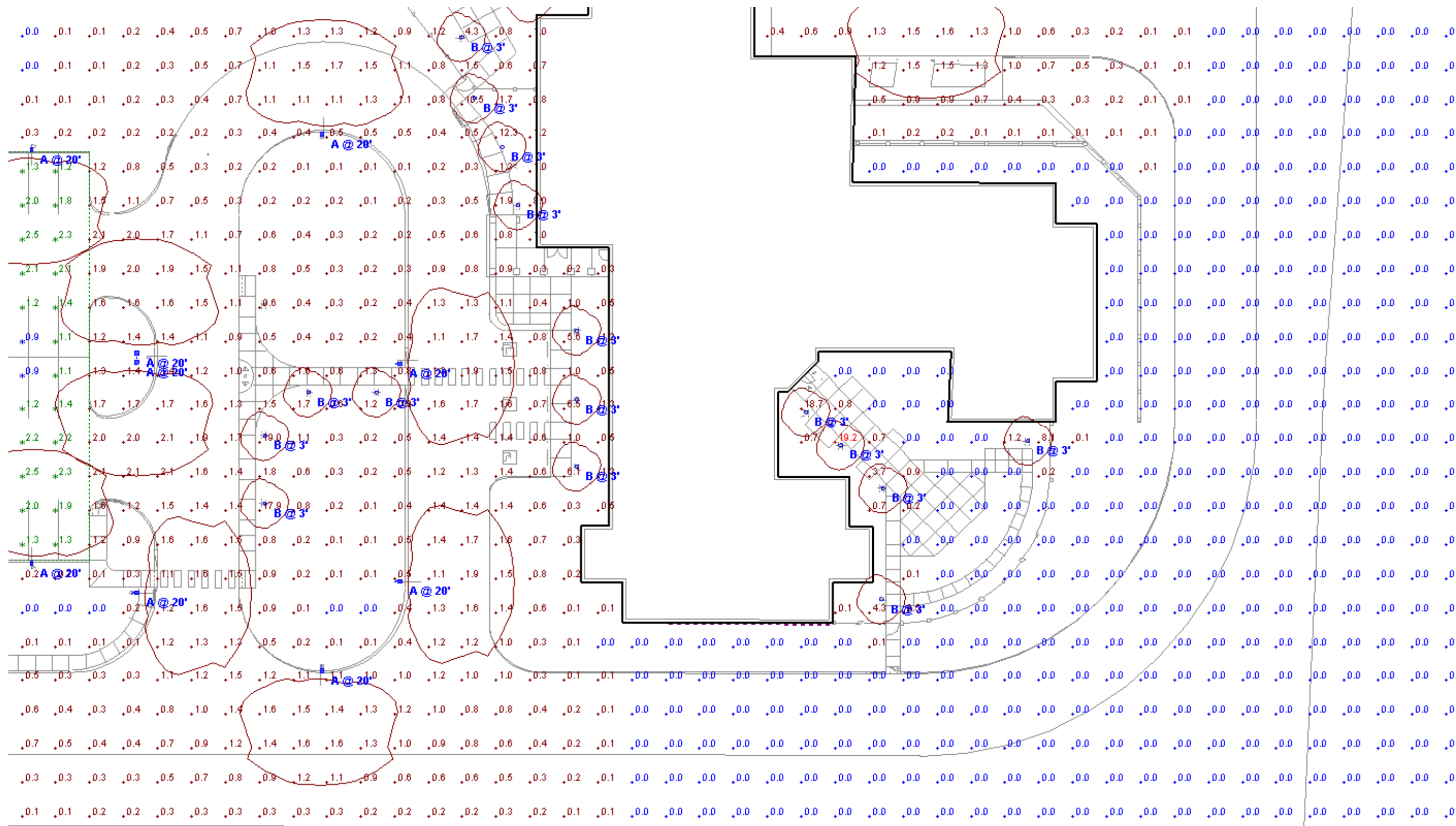
Statistics							
Description	Symbol	Avg	Max	Min	Max / Min	Avg / Min	Avg / Max
Overall Site	+	0.2 fc	19.2 fc	0.0 fc	N/A	N/A	0.0:1
West Parking Area	X	1.8 fc	2.8 fc	0.9 fc	3.1:1	2.0:1	0.6:1



4194 Schooner Memory Care
Photometric

Designer
SAJ
Date
3/12/2018
Scale
Not to Scale
Drawing No.
E0
Summary





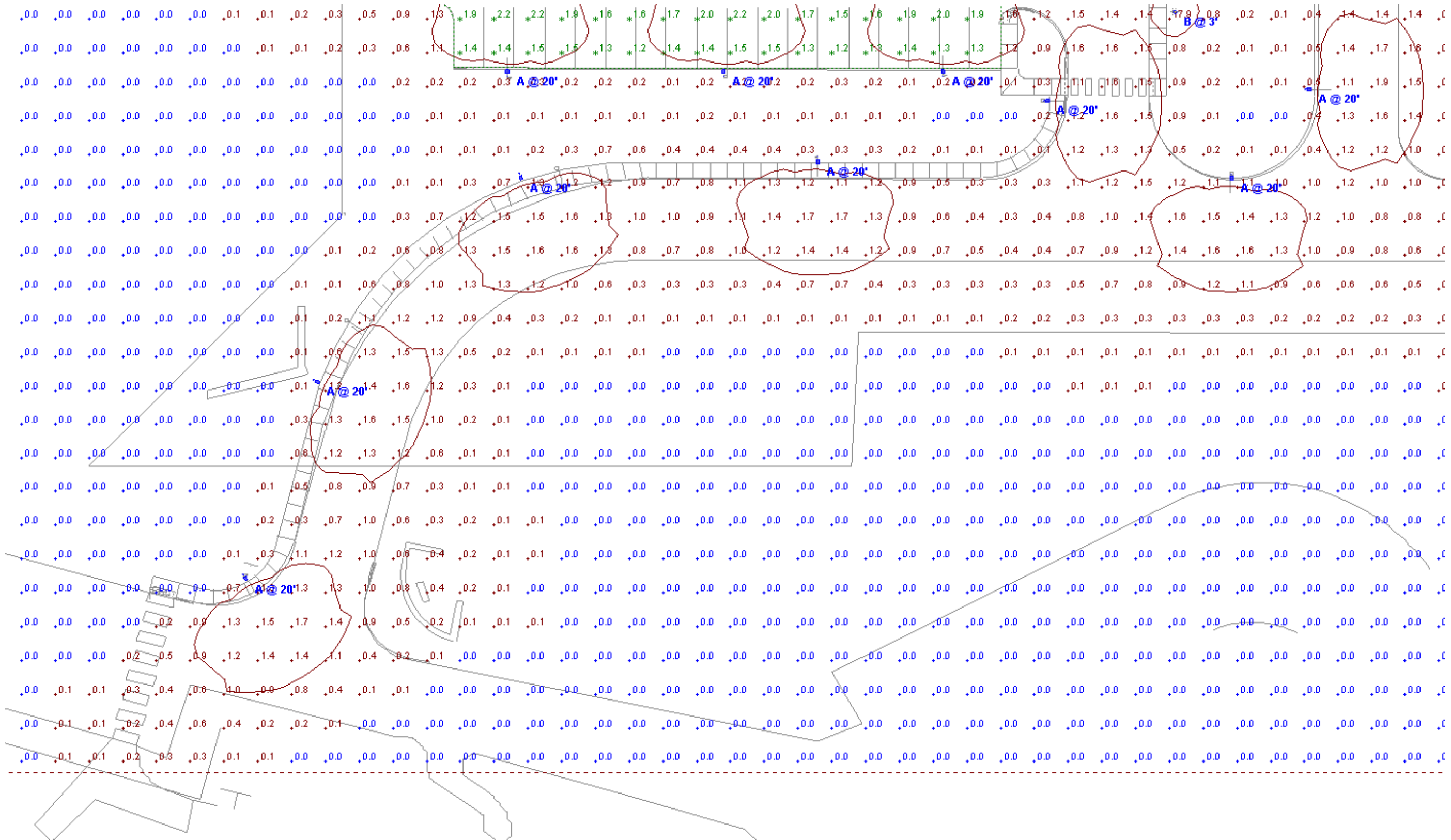
4194 Schooner Memory Care
Photometric

Designer
SAJ
Date
3/12/2018
Scale
Not to Scale
Drawing No.
E0
Summary



4194 Schooner Memory Care
Photometric

Designer
SAJ
Date
3/12/2018
Scale
Not to Scale
Drawing No.
E0
Summary





Luminaire Schedule											
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
	A	23	SPAULDING LIGHTING	CL1-30L-4K-3-BC	CIMARRON CL1	30 LEDs - 4000K - 70 CRI	1	CL1-30L-4K-3-BC.ies	5131.601	0.75	70
	B	26	HUBBELL OUTDOOR LIGHTING	FN1-24LU-4K-XX	Fresno Square Bollard	4000K LEDs	1	FN1-24LU-4K-XX.ies	1442.89	0.75	40.7

Statistics							
Description	Symbol	Avg	Max	Min	Max / Min	Avg / Min	Avg / Max
Overall Site	+	0.2 fc	19.2 fc	0.0 fc	N/A	N/A	0.0:1
West Parking Area	X	1.8 fc	2.8 fc	0.9 fc	3.1:1	2.0:1	0.6:1

Designer
SAJ
Date
3/12/2018
Scale
Not to Scale
Drawing No.
E0
Summary

CIMARRON LED

Cat.#

Job

Type

A



HUBBELL
Outdoor Lighting

Approvals

SPECIFICATIONS

Construction:

- Stylish vertically finned die-cast solid top housing for maximum heat dissipation; Stops collection of unsightly debris from gathering on top of the housing
- Rugged lower die-cast aluminum heat sink accelerates thermal management and optimizes PCB and optical performance
- Separate optical and electrical compartment for optimum component operation
- One piece die cut silicone gasket ensures weather proof seal around each individual LED for IP65 rating
- Backlight Control (BC) option available for 85% spill light reduction, doesn't change fixture appearance or EPA, recommended for Type III and Type IV distributions
- Stamped bezel provides mechanical compression to seal the optical assembly
- Complements the Hubbell Southwest series of outdoor fixtures
- Weight - 45.0 pounds, EPA - 1.3 ft²
- Suitable for applications requiring 3G testing prescribed by ANSI C136.31

Optics:

- Choice of 72 high brightness LED configurations with individual acrylic lenses specially designed for IES Type II, III, IV and V distributions
- Auto optics designed for front row 1A and interior rows 2A (see distribution under ordering and page 2)
- CCT: 3000K (80 CRI), 4000K (70 CRI), 5000K (70 CRI), and turtle friendly Amber LED options

Electrical:

- Universal input voltage 120-277 VAC, 50/60 Hz
- Integral step-down transformer for 347V & 480V
- Ambient operating temperature -40° C to 40° C
- Automatic thermal self-protection
- Drivers have greater than 90% power factor and less than 10% THD
- Optional continuous dimming to 10% or dual circuitry available

- LED drivers have output power over-voltage, over-current protection and short circuit protection with auto recovery
- 1050 mA driver available with 90L configuration for increased lumen output
- LED electrical assembly, including PR devices, consumes no power in the 'off' state
- Surge protection - 20KA; Turns fixture off at end of life; Includes LED for end of life indication (see surge suppressor page 4)

Controls:

- Drivers are 0-10V dimming standard. Photocell, occupancy sensor and wireless controls available for complete on/off and dimming control

Lumen maintenance:

- L90 at 60,000 hours (Projected per IESNA TM-21-11)

Installation:

- Two die-cast aluminum arm designs: The decorative arm offers a sleek upswept look while the straight arm follows the housing's contoured lines for continuity of style
- Fixture ships with arm installed for ease of installation and mounts to #2 drill pattern

- Wall bracket, mast arm fitter and pole accessories are also available allowing easy mounting for virtually any application

Finish:

- TGIC thermoset polyester powder paint finish applied at nominal 2.5 mil thickness

Warranty:

Five year limited warranty (for more information visit: <http://www.hubbelloutdoor.com/resources/warranty/>)

Listings:

- Listed to UL1598 and CSA C22.2#250.0-24 for wet locations
- Models meet DesignLights Consortium (DLC) qualifications, consult DLC website for more details: <http://www.designlights.org/QPL>
- IDA approved • IP65

PRODUCT IMAGE(S)



90 LED 3/4 VIEW



30 LED

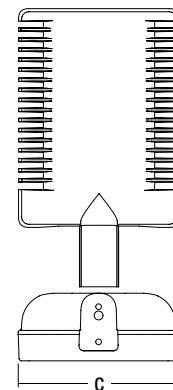
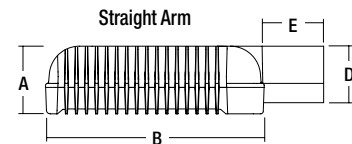
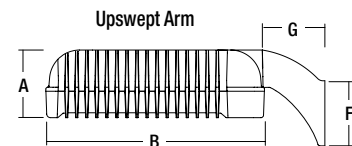


60 LED



90 LED

DIMENSIONS



A	B	C	D	E	F	G
6 3/4" 171mm	21 3/4" 552mm	16" 406mm	6 5/8" 168mm	6 5/16" 160mm	5 5/8" 143mm	6 1/8" 155mm

CERTIFICATIONS/LISTINGS



*3000K and warmer CCTs only

ORDERING INFORMATION SEE NEXT PAGE



HUBBELL
Outdoor Lighting

Hubbell Outdoor Lighting • 701 Millennium Boulevard • Greenville, SC 29607 • Phone: 864-678-1000
Due to our continued efforts to improve our products, product specifications are subject to change without notice.

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Printed in USA CL1LED-SPEC January 23, 2018 11:44 AM



FRESNO SERIES	Cat.#		 HUBBELL Outdoor Lighting
	Job	Type B	

INTENDED USE:

- Fresno series bollards are designed to illuminate walkways and courtyards

CONSTRUCTION:

- Extruded aluminum 6061 alloy square or round housing, with tamper resistant hardware; flat top, for round FN2.
- Single screw access for service and maintenance
- Sealed one-piece, clear acrylic lens; Specular, anodized aluminum optical systems
- Concealed, cast aluminum 360 alloy anchor base; Four 1/2" x 10" anchor bolts
- Durable Lektrocote® TGIC thermoset polyester powder coat paint finish assures long life and maintenance-free service

ELECTRICAL:

- Universal voltage (120-277V, 50/60Hz) drivers with +/- 10% tolerance, starting temperature rated at -20°F
- Optional continuous dimming to 10% (0-10V)
- Rotatable LED assembly adjustment for ideal placement and aiming of asymmetric light pattern
- Available in 5000K, 4000K, 3000K CCT and Monochromatic Amber
- Long life >60,000 hour L90 rated at 25°C

CERTIFICATIONS/LISTINGS

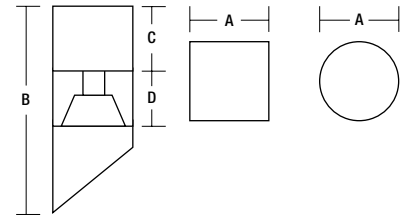
LISTINGS:

- Listed to UL1598 for use in wet locations

WARRANTY:

- Five year limited warranty (for more information visit: <http://www.hubbelloutdoor.com/resources/warranty/>)

PRODUCT IMAGE(S)

DIMENSIONS


	A	B	C	D	Weight
FN1	6.75" sq. 171 mm	42.0" 1067 mm	6.0" 152 mm	4.0" 102 mm	41 lbs 19 kg
FN2	7.0" dia 178 mm	42.0" 1067 mm	6.0" 152 mm	4.0" 102 mm	41 lbs 19 kg

ORDERING INFORMATION

ORDERING EXAMPLES: FN2-12LU-3K-U-DB-CD-DM-36-ABS

SERIES	LED	VOLTAGE	CCT	FINISH	OPTIONS ¹
FN1 Fresno Square	12L asymmetric, 27W	U 120V-277V	3K 3000K	DB Dark Bronze	CD 0-10V dimmable
FN2 Fresno Round	24L symmetric, 41W ⁴	1 120	4K 4000K	BL Black	24 24" OAH ²
		2 277	5K 5000K	WH White	30 30" OAH ²
		3 240	AM Amber 590nm ⁴	GR Gray	36 36" OAH ²
		4 277		PS Platinum Silver	DM Dome Top (FN2 only)
		5 480		RD Red (premium color)	F(X) Fusing ³
		F 347		FG Forest Green (premium color)	P(X) Button Photocell ³
				CC Custom Color (consult factory)	ABS Bolts shipped ahead

¹ Any or all options may be used together

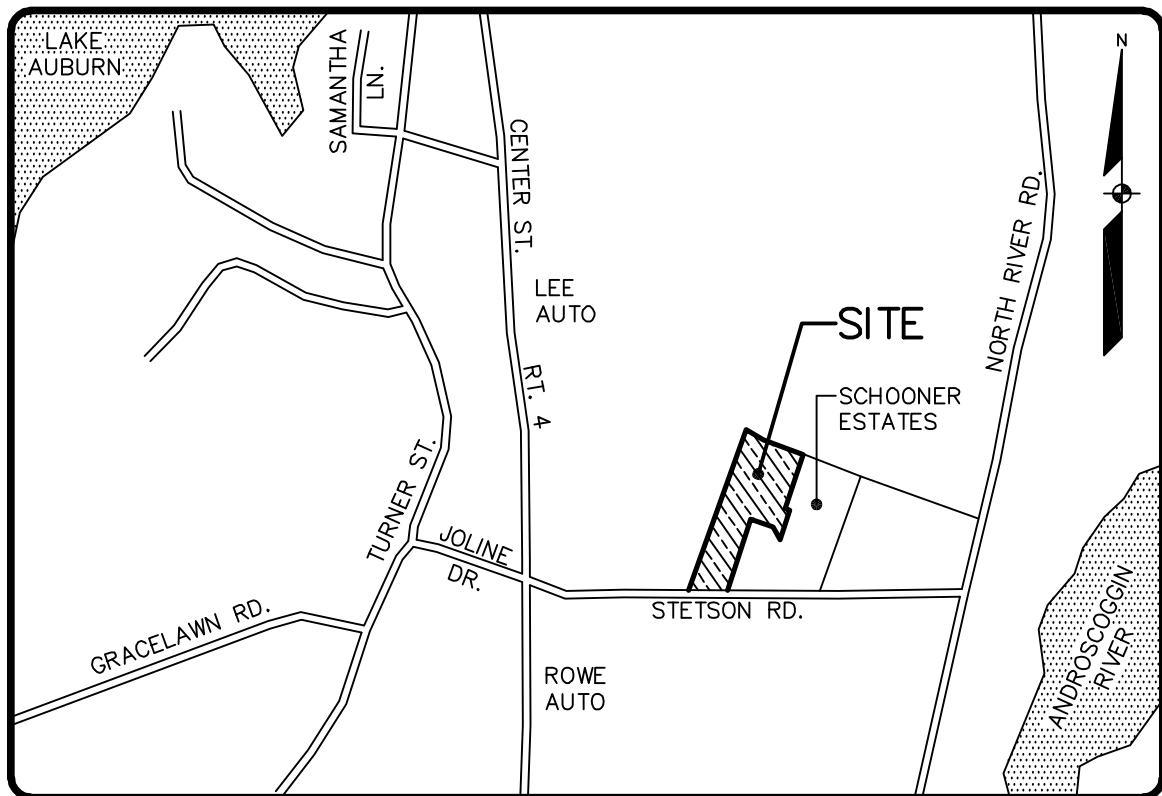
² Standard fixture height is 42", only one overall height (OAH) may be selected

³ Replace '(X)' with corresponding voltage (1=120, 2=208, 3=240, 4=277, 5=480, 6=347), Button Photocell not available in 480V

⁴ 24L only, 20W

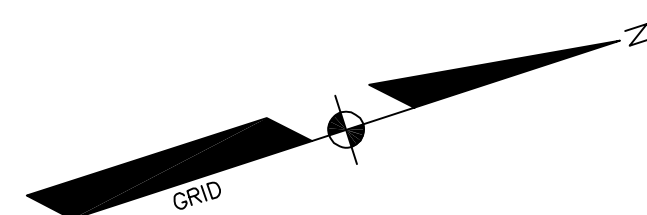
SCHOONER MEMORY CARE CENTER

STETSON ROAD
AUBURN, MAINE



LOCATION MAP

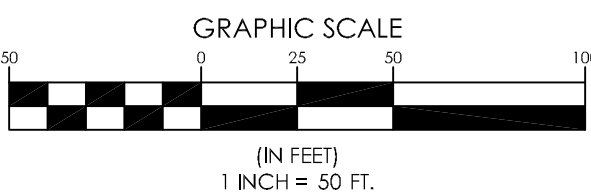
NTS



N/F
MAURICE R. &
SHIRLEY I. KEENE
136 STETSON ROAD
BK 860 PG 30
MAP 291, LOT 7

N/F
MAURICE R. &
SHIRLEY I. KEENE
840 NORTH RIVER ROAD
BK 860 PG 27
MAP 302, LOT 1

N/F
CENTRAL MAINE
HEALTHCARE CORP
BK 7202 PG 195



APPLICANT:
AUBURN MEMORY
CARE, LLC
509 FOREST AVENUE
PORTLAND, MAINE 04112

ENGINEER/SURVEYOR/
LANDSCAPE ARCHITECT:

SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

PROJECT ARCHITECT:
GAWRON TURGEON
ARCHITECTS
29 BLACK POINT ROAD
SCARBOROUGH, MAINE 04074

SCHOONER
MEMORY
CARE
CENTER

SCHOONER
ESTATES

N/F
SCHOONER
HOLDINGS LLC
BK 6633 PG 43

SHEET INDEX

SHEET	DESCRIPTION
1	COVER SHEET
2	SITE PLAN
3	OVERALL GRADING PLAN
4	GRADING PLAN
5	GRADING PLAN
6	UTILITY PLAN
7	OVERALL LANDSCAPE PLAN
8	LANDSCAPE PLAN
9	LANDSCAPE PLAN
10	DETAILS
11	DETAILS
12	DETAILS
13	DETAILS
1	PRE DEVELOPMENT WATERSHED PLAN
2	POST DEVELOPMENT WATERSHED PLAN

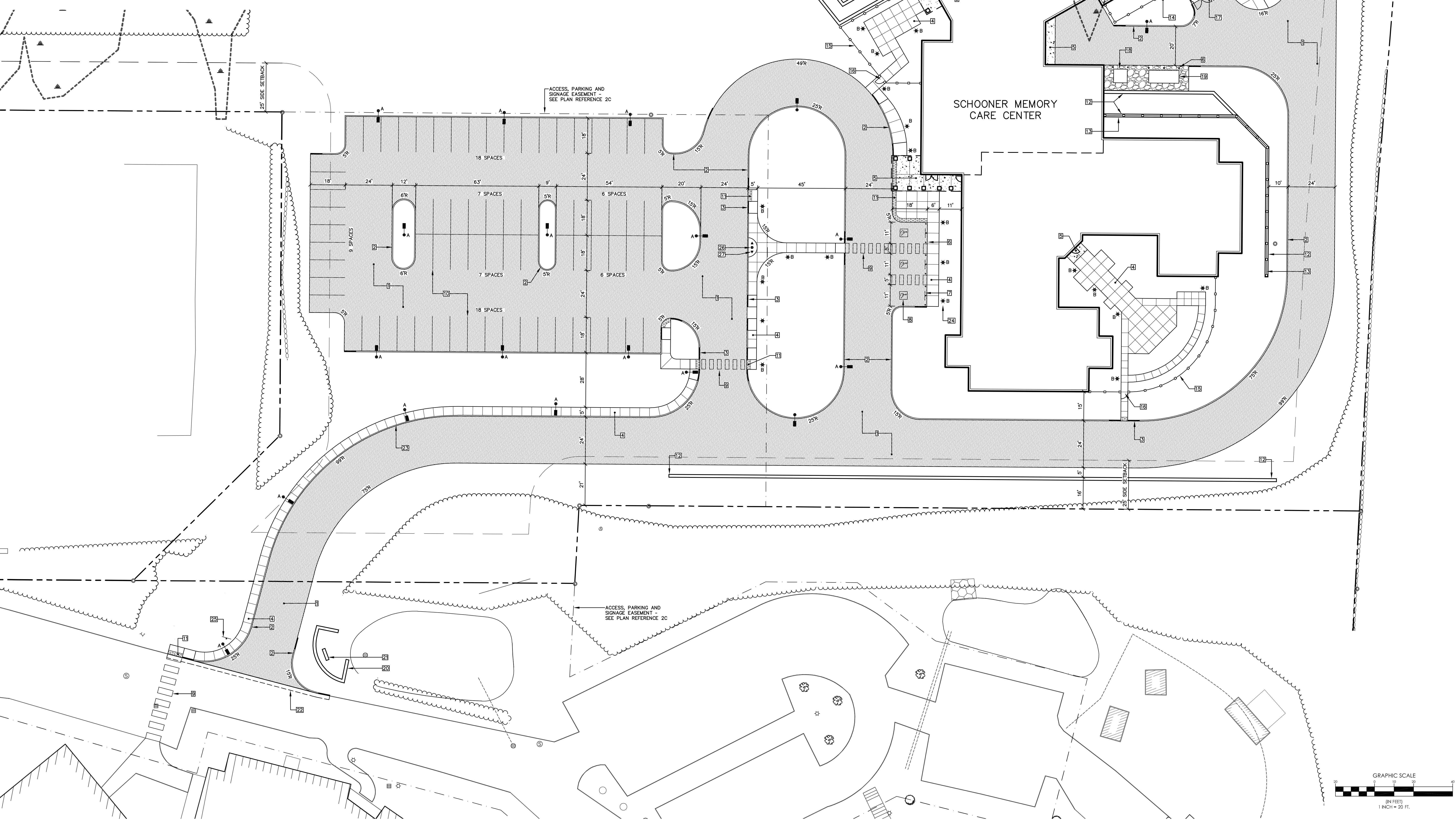
EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE/R.O.W.	---
---	SETBACK	---
---	EASEMENT	---
---	IRON PIPE/ROD	---
---	BUILDING	---
---	EDGE WETLAND	---
---	WETLANDS	---
---	STREAM	---
---	EDGE PAVEMENT	---
---	PAVEMENT SAWCUT	---
---	EDGE CONCRETE	---
---	PAVEMENT PAINT	---
---	EDGE GRAVEL	---
---	CURB LINE	---
---	TREELINE	---
---	CHAIN LINK FENCE	---
---	STOCKADE FENCE	---
---	STONE WALL	---
---	RETAINING WALL	---
---	DECIDUOUS TREE	---
---	CONIFEROUS TREE	---
---	BOLLARD	---
---	SIGN	---
---	WATER GATE VALVE	---
---	HYDRANT	---
---	SANITARY MANHOLE	---
---	DRAINAGE MANHOLE	---
---	CATCH BASIN	---
---	TRANSFORMER PAD	---
---	LIGHT POLE	---
---	UTILITY POLE	---
---	GUY WIRE	---

GENERAL NOTES

- SUBJECT PARCEL IS SHOWN ON THE ASSESSORS MAP AS PARCEL ID NO. 291 - 008.
- PLAN REFERENCES:
 - EXISTING CONDITIONS SURVEY OF SCHOONER ESTATES PROPERTY, FOR SCHOONER HOLDINGS, LLC PREPARED BY SEBAGO TECHNIQS, INC., DATED MARCH 12, 2018.
 - EXISTING CONDITIONS SURVEY OF SCHOONER MEMORY CARE CENTER PROPERTY, FOR AUBURN MEMORY CARE, LLC PREPARED BY SEBAGO TECHNIQS, INC., DATED MARCH 12, 2018.
 - EASEMENT PLAN OF SCHOONER ESTATES AND SCHOONER MEMORY CARE CENTER PROPERTIES, FOR AUBURN MEMORY CARE, LLC PREPARED BY SEBAGO TECHNIQS, INC., DATE MARCH 12, 2018.
- PROPERTY BOUNDARY, TOPOGRAPHY, WETLAND DELINEATION AND PROPOSED EASEMENTS ARE BASED UPON PLAN REFERENCE 2A - 2C.
- PROPERTY IS LOCATED WITHIN THE GENERAL BUSINESS (GB) DISTRICT.
- THE PROPOSED USE IS BEST DESCRIBED IN THE ZONING ORDINANCE AS A CARE HOME, WHICH IS ALLOWED IN THE GB ZONING DISTRICT AS A SPECIAL EXCEPTION.
- DIMENSIONAL REGULATIONS WITHIN THE GB ZONING DISTRICT:
 - LOT AREA, WIDTH, AND DEPTH 10,000 SF, 100 FT., 100 FT.
 - DENSITY MAX. 30% BUILDING COVERAGE
 - FRONT & SIDE YARD 25 FT.
 - REAR YARD 35 FT.
 - BUILDING HEIGHT 4 STORIES / 45 FT.
- PARKING REQUIREMENTS : THE ZONING ORDINANCE DOES NOT CONTAIN PARKING REQUIREMENTS SPECIFIC TO THE PROPOSED FACILITY. THE APPLICANT PROPOSES THE FOLLOWING PARKING REQUIREMENTS:
 - SPACE PER EMPLOYEE @ MAXIMUM SHIFT = 30 SPACES
 - 10 VISITOR VEHICLES @ MAXIMUM VISITOR TIME = 10 SPACES
 - TOTAL REQUIRED SPACES = 40
 - TOTAL PROPOSED SPACES = 72

SITE PLAN KEY NOTES

- PARKING LOT PAVING, TYP.
- SURFORM CONCRETE CURB, TYP.
- TIP DOWN CURB, TYP.
- 4" CONCRETE PAVING
- CONCRETE STRUCTURAL SLAB
- METAL BOLLARD, TYP.
- METAL BOLLARD WITH ADA SIGN, TYP.
- ADA BLUE PAINTED SYMBOL, TYP.
- 24" X 24" SOLID WHITE PAINTED BARS, 24" APART
- 4" WHITE PAINT STRIPING, TYP.
- TRUNCATED DOME PAVERS, TYP.
- CONCRETE BLOCK RETAINING WALL
- PEDESTRIAN GUARDRAIL
- 6 FT. CEDAR FENCING
- 8 FT. CEDAR FENCING
- 3 FT. GATE
- DUMPSTER ENCLOSURE
- TRANSFORMER
- 8" CONCRETE GENERATOR SLAB - 6.5 FT. X 15.5 FT.
- STONE WALL
- PROJECT SIGN
- PAVEMENT SAW CUT
- LIGHT FIXTURE 'A', TYP. - SPAULDING CIMMARON LED, 20 FT. POLE, COLOR BLACK
- LIGHT FIXTURE 'B', TYP. - SPAULDING FRESNO LED BOLLARD, COLOR BLACK
- STOP SIGN COMPLIANT WITH MUTCD
- FLAGPOLE - GORHAM FLAG CENTER MODEL NO. PLP 25.1 - 25 FT. FIBERGLASS, INTERNAL HALYARD, COLOR WHITE - PROVIDE 4' X 6' AMERICAN FLAG
- (2) FLAGPOLE UPLIGHTS - LSI LIGHTING MODEL NO. XIG - B - LED - 19 - 350 - CW - UE - NFLZS - NB - DSB OR EQUAL



DESIGNED
WTC

CHECKED
RLM

A. WTC 3-12-18

DATE: 3-12-18

STATUS: SUBMITTED TO CITY

REVIEW BY: DATE: STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQS, INC. ANY ALTERATIONS, APPROVED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQS, INC.

SITE PLAN
OF:
SCHOONER MEMORY CARE CENTER
STEVEN ROAD
AUBURN, MAINE
FOR:
AUBURN MEMORY CARE, LLC
509 FOREST AVENUE
PORTLAND, MAINE 04112

PROJECT NO.
14300

SHEET 2 OF 13

SCALE
1"=20'

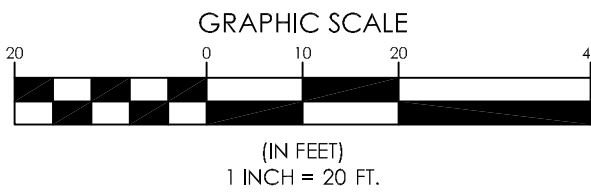
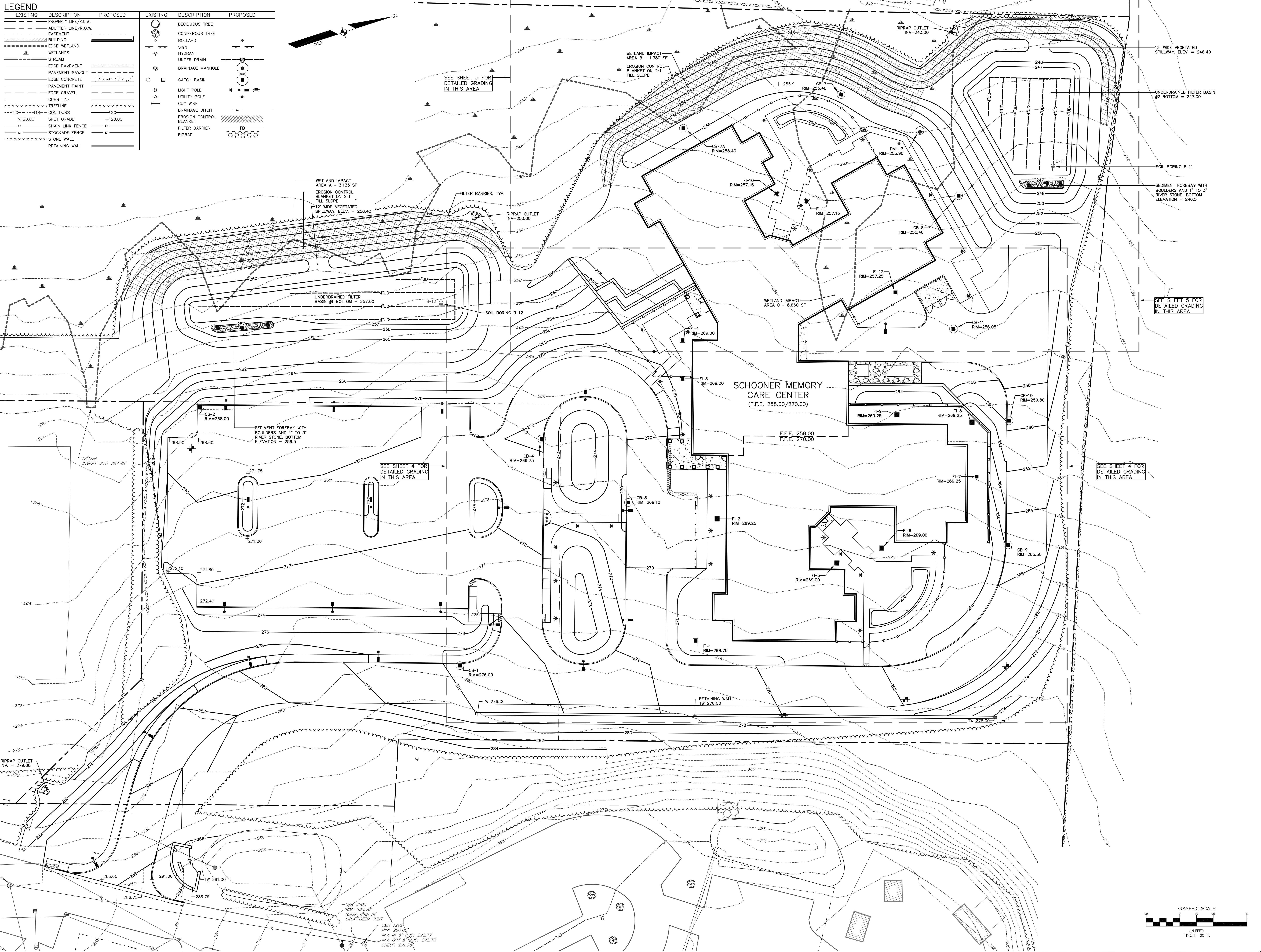
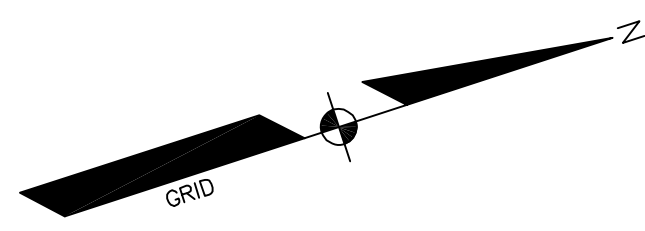
14300S.dwg, 7/6/2018

SEBAGO
TECHNIQS
WWW.SEBAGOTECHNIQS.COM
75 JOHNSON ROAD
SUITE 404
SOUTH PORTLAND, ME 04106
TEL: 207-200-2100

RICHARD L. WICK, P.E. 10068
WILLIAM T. CONWAY, R.L.A. 108

RICHARD L. WICK, P.E. 10068
WILLIAM T. CONWAY, R.L.A. 108

LEGEND			
EXISTING	DESCRIPTION	PROPOSED	DESCRIPTION
---	PROPERTY LINE/R.O.W.	---	DECIDUOUS TREE
---	ABUTTER LINE/R.O.W.	---	CONIFEROUS TREE
---	EASEMENT	---	BOLLARD
---	EDGE WETLAND	---	HYDRANT
---	WETLANDS	---	UNDER DRAIN
---	STREAM	---	DRAINAGE MANHOLE
---	EDGE PAVEMENT	---	CATCH BASIN
---	PAVEMENT SAWCUT	---	LIGHT POLE
---	EDGE CONCRETE	---	UTILITY POLE
---	PAVEMENT PAINT	---	GUY WIRE
---	EDGE GRAVEL	---	DRAINAGE DITCH
---	CURB LINE	---	EROSION CONTROL BLANKET
---	TREELINE	---	FILTER BARRIER
---	CONTOURS	---	RIPRAP
---	SPOT GRADE	---	
---	CHAIN LINK FENCE	---	
---	STOCKADE FENCE	---	
---	STONE WALL	---	
---	RETAINING WALL	---	



GRADING PLAN
OF:
SCHOONER MEMORY CARE CENTER
STETSON ROAD
AUBURN, MAINE
FOR:
AUBURN MEMORY CARE, LLC
509 FOREST AVENUE
PORTLAND, MAINE 04112

PROJECT NO.
14300

SHEET 3 OF 13

SCALE
1"=20'

DESIGNED
WTC

CHECKED
RLM

DATE: 3-12-18

STATUS: SITE PLAN SUBMISSION TO CITY

REVIEWED BY: A. WTC

DATE: 3-12-18

STATUS: SITE PLAN SUBMISSION TO CITY

WWW.SEBAGOTECHNICS.COM

75 JOHNSON ROAD

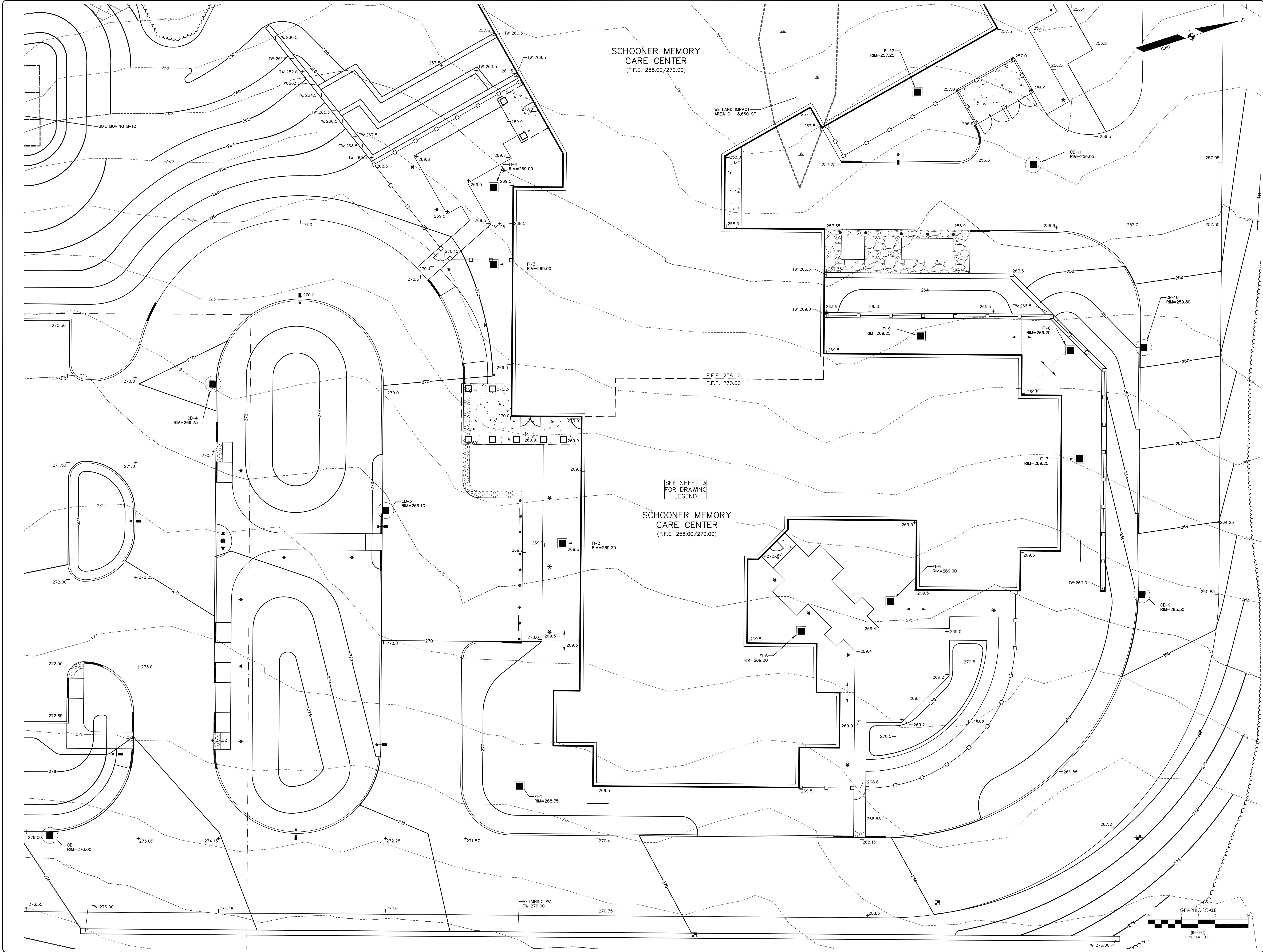
SOUTH PORTLAND, ME 04106

TEL: 207-200-2100

SEBAGO
TECHNICS

RICHARD L. WICK, P.E. 10668

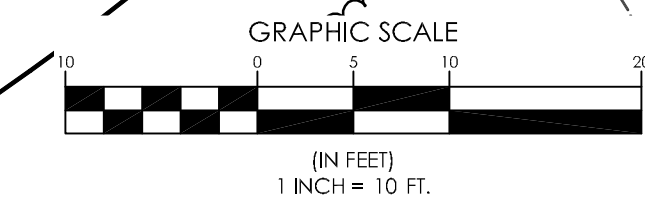
WILLIAM T. CONWAY, R.L.A. 106



SCHOONER MEMORY CARE CENTER
(F.F.E. 258.00/270.00)

SCHOONER MEMORY CARE CENTER
(F.F.E. 258.00/270.00)

SEE SHEET 3
FOR DRAWING
LEGEND



GRADING PLAN
OF:
SCHOONER MEMORY CARE CENTER
STEINSON ROAD
AUBURN, MAINE
FOR:
AUBURN MEMORY CARE, LLC
509 FOREST AVENUE
PORTLAND, MAINE 04112

PROJECT NO.
14300

SHEET 4 OF 13

SCALE
1"=10'

DESIGNED
WTC

CHECKED
RLM

DATE:
3-12-18

STATUS:
SITE PLAN SUBMISSION TO CITY

REVIEWED BY:
A. WTC

DATE:
3-12-18

STATUS:
SITE PLAN SUBMISSION TO CITY

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQUES, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQUES, INC.

WWW.SEBAGOTECHNIQUES.COM
75 JOHNSON AVENUE
SOUTH PORTLAND, ME 04106
TEL: 207-200-2100

RICHARD L. WICK, P.E. 10668
WILLIAM T. CONWAY, R.L.A. 106
RICHARD L. WICK, P.E. 10668
WILLIAM T. CONWAY, R.L.A. 106

STORM DRAIN STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
CB-1	276.00		270.00 (SD-1)	48"
CB-2	268.00	263.56 (SD-2)	260.15 (SD-39)	48"
CB-3	269.10	265.99 (SD-5) 265.24 (SD-4)	265.14 (SD-6)	48"
CB-4	269.75	265.34 (SD-8) 264.82 (SD-6) 266.75 (SD-1)	264.57 (SD-2)	48"
CB-7	255.40	250.81 (SD-25A) 252.40 (SD-25)	250.71 (SD-14)	48"
CB-7A	255.40	251.40 (FD-4)	251.30 (SD-25A)	48"
CB-8	255.40	249.97 (SD-15) 250.80 (FD-3)	249.87 (SD-27)	48"
CB-9	265.50	263.17 (SD-18) 262.99 (WD-2)	260.30 (SD-19)	48"
CB-10	259.80	256.80 (SD-19) 256.80 (SD-21)	254.82 (SD-23)	48"
CB-11	256.05	253.05 (SD-16) 253.05 (SD-23)	252.05 (SD-26)	48"
DMH-3	255.90	250.45 (SD-14)	250.20 (SD-15)	48"
FI-1	268.75	265.85 (FD-1) 265.85 (WD-1)	265.70 (SD-4)	24"x24"
FI-2	269.25		266.25 (SD-5)	24"x24"
FI-3	269.00	265.89 (SD-7) 265.89 (RD-1)	265.79 (SD-8)	24"x24"
FI-4	269.00		266.00 (SD-7)	24"x24"
FI-5	269.00		266.00 (SD-17)	24"x24"
FI-6	269.00	265.40 (SD-17)	265.30 (SD-18)	24"x24"
FI-7	269.25	266.35 (FD-2)	266.20 (SD-22)	24"x24"
FI-8	269.25	265.82 (SD-20) 265.88 (SD-22)	256.91 (SD-21)	24"x24"
FI-9	269.25		266.25 (SD-20)	24"x24"
FI-10	257.15		254.15 (SD-24)	24"x24"
FI-11	257.15	253.92 (SD-24)	253.82 (SD-25)	24"x24"
FI-12	257.25		254.25 (SD-16)	24"x24"

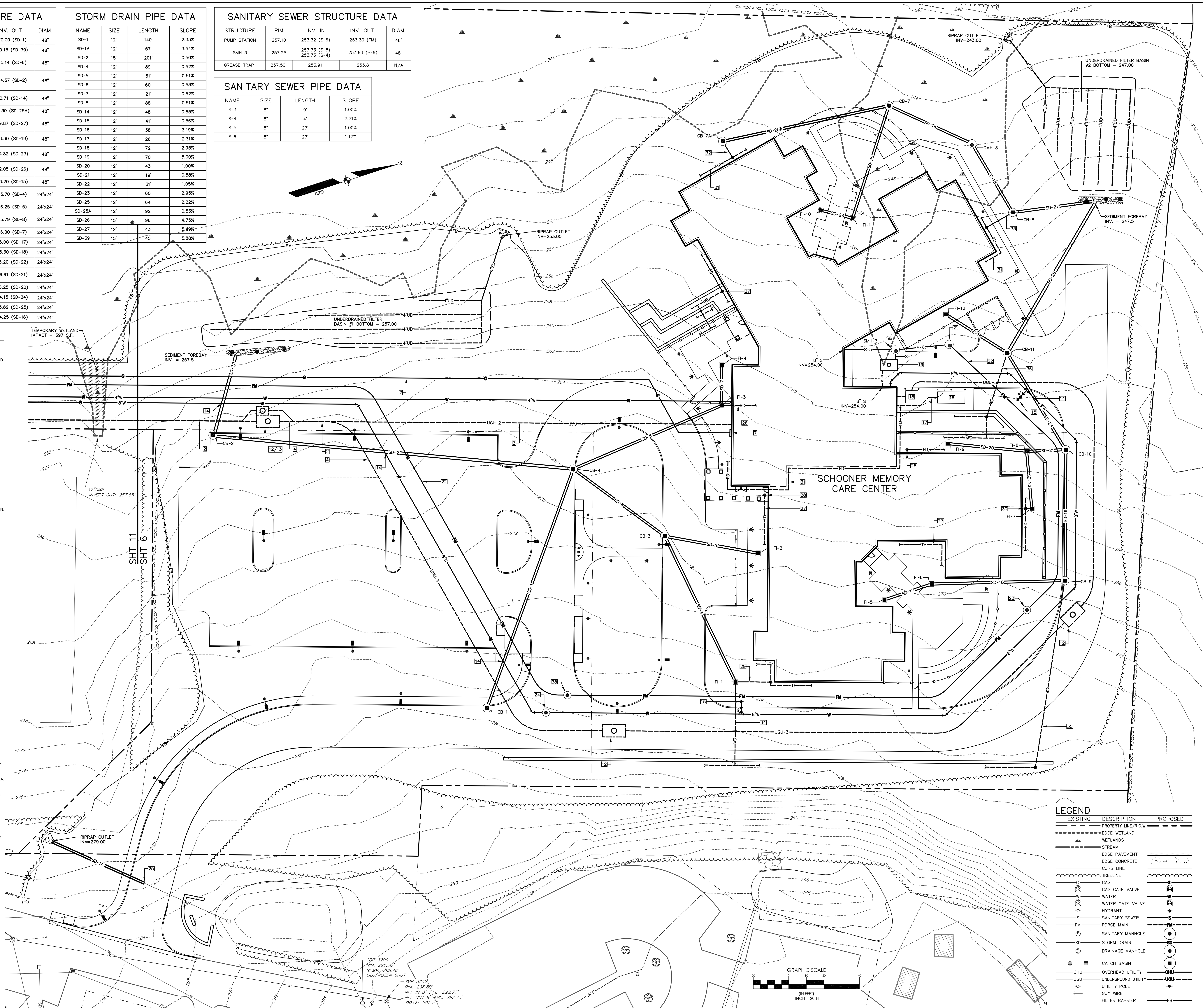
STORM DRAIN PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
SD-1	12"	140'	2.33%
SD-1A	12"	57'	3.54%
SD-2	15"	201'	0.50%
SD-4	12"	89'	0.52%
SD-5	12"	51'	0.51%
SD-6	12"	60'	0.53%
SD-7	12"	21'	0.52%
SD-8	12"	88'	0.51%
SD-14	12"	48'	0.55%
SD-15	12"	41'	0.56%
SD-16	12"	38'	3.19%
SD-17	12"	26'	2.31%
SD-18	12"	72'	2.95%
SD-19	12"	70'	5.00%
SD-20	12"	43'	1.00%
SD-21	12"	19'	0.58%
SD-22	12"	31'	1.05%
SD-23	12"	60'	2.95%
SD-25	12"	64'	2.22%
SD-25A	12"	92'	0.53%
SD-26	15"	96'	4.75%
SD-27	12"	43'	5.49%
SD-39	15"	45'	5.88%

SANITARY SEWER STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
PUMP STATION	257.10	253.32 (S-6)	253.30 (FM)	48"
SMH-3	257.25	253.73 (S-5) 253.73 (S-4)	253.63 (S-6)	48"
GREASE TRAP	257.50	253.91	253.81	N/A

SANITARY SEWER PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
S-3	8"	9'	1.00%
S-4	8"	4'	7.71%
S-5	8"	27'	1.00%
S-6	8"	27'	1.17%

UTILITY NOTES

- NEW RISER POLE TO BE SET BY CMP. SPECTRUM & FAIRPOINT TO FOLLOW.
- UGU - 1 DENOTES (2) 5" CONDUITS FOR CMP AND (3) 4" TEL / DATA CONDUITS.
- UGU - 2 DENOTES (3) 4" TEL / DATA CONDUITS.
- UGU - 3 DENOTES (2) 5" CONDUITS FOR CMP.
- 8" x 8" TAPPING SLEEVE AND GATE VALVE + 8" x 4" TAPPING SLEEVE AND GATE VALVE PER THE AUBURN WATER & SEWERAGE DISTRICT STANDARDS.
- SET NEW SEWER MANHOLE OVER EXISTING SEWER MAIN - SMH - 1:
RIM ELEV = 265.00
EXISTING INV. IN = 256.10
NEW INV. IN = 256.20
CONDUCT TEST PIT TO CONFIRM ELEVATION OF EXISTING 8" SEWER MAIN PRIOR TO SUBMITTING SHOP DRAWINGS FOR SMH-1 AND SMH-2.
- GAS PROVIDER TO TAP EXISTING MAIN AND INSTALL GAS LINE TO METER AT NEW BUILDING.
- REPAIR STREET AND SIDEWALK PAVING AFTER UTILITY INSTALLATION.
- SMH - 2 FORCE MAIN TERMINUS MANHOLE.
- 20 FT. FUTURE GRAVITY SEWER STUB INV. = 257.09. SET REBAR TO GRADE AT THIS LOCATION.
- 8" & 4" GATE VALVES, 20 FT. C.I. WATER LINE STUBS FOR FUTURE. SET REBAR TO GRADE AT THIS LOCATION.
- 7 FT. x 13 FT. STANDARD CMP VAULT.
- 5 FT. x 7 FT. TEL / DATA VAULT.
- DEFLECT WATER MAIN UNDER STORM DRAIN- PROVIDE 12" MIN. SEPARATION.
- 8" GATE VALVE AND FIRE HYDRANT.
- 6.5 FT. x 15.5 FT. 8" CONCRETE SLAB FOR GENERATOR.
- UGU - 4 DENOTES CONDUIT TO GENERATOR- SEE MEP DRAWINGS.
- 7 FT. x 7 FT. TRANSFORMER.
- 1500 GAL. GREASE TRAP.
- SMH - 3 SEWER MANHOLE.
- SEWER PUMP STATION.
- 4" SCH. 40 PVC FORCE MAIN.
- FORCE MAIN CLEANOUT IN MANHOLE.
- AIR RELEASE VALVE IN MANHOLE.
- CONNECT NEW SD-1A TO EXISTING 12" CMP INV. 261.02.
- 6" SCH. 40 PVC ROOF DRAIN TO FI-3. INV. @ BUILDING = 268.00.
- 4" CONTINUOUS FOOTING DRAIN AT PERIMETER OF UPPER FLOOR.
- CAP 4" FOOTING DRAIN, EXTEND TO GRADE WITH THREADED CLEANOUT.
- OUTLET UPPER FLOOR FOOTING DRAIN TO FI - 1. PROVIDE THREADED CLEANOUT AT FOUNDATION.
- OUTLET UPPER FLOOR FOOTING DRAIN TO FI - 7. PROVIDE THREADED CLEANOUT AT FOUNDATION.
- 4" CONTINUOUS FOOTING DRAIN AT PERIMETER OF LOWER FLOOR.
- OUTLET LOWER FLOOR FOOTING DRAIN TO CB - 7A. PROVIDE THREADED CLEANOUT AT FOUNDATION.
- OUTLET LOWER FLOOR FOOTING DRAIN TO CB - 8. PROVIDE THREADED CLEANOUT AT FOUNDATION.
- 6" PVC WALL DRAIN OUTLET TO FI - 1.
- 6" PVC WALL DRAIN OUTLET TO CB - 9.
- 6" PVC WALL DRAIN OUTLET TO CB - 11.
- CONNECT WALL DRAINS TO LOWER LEVEL FOOTING DRAIN.
- FORCE MAIN AIR RELEASE VALVE IN MANHOLE.



LEGEND		
EXISTING	DESCRIPTION	PROPOSED
---	PROPERTY LINE/R.O.W.	---
---	EDGE WETLAND	---
---	WETLANDS	---
---	STREAM	---
---	EDGE PAVEMENT	---
---	EDGE CONCRETE	---
---	CURB LINE	---
---	TREELINE	---
G	GAS	G
W	GAS GATE VALVE	W
W	WATER	W
W	WATER GATE VALVE	W
H	HYDRANT	H
S	SANITARY SEWER	S
FM	FORCE MAIN	FM
SM	SANITARY MANHOLE	SM
SD	STORM DRAIN	SD
DM	DRAINAGE MANHOLE	DM
CB	CATCH BASIN	CB
OHU	OVERHEAD UTILITY	OHU
UGU	UNDERGROUND UTILITY	UGU
U	UTILITY POLE	U
G	GUY WIRE	G
FB	FILTER BARRIER	FB

UTILITY PLAN
OF:
SCHOONER MEMORY CARE CENTER
STEVEN ROAD
AUBURN, MAINE
FOR:
AUBURN MEMORY CARE, LLC
509 FOREST AVENUE
PORTLAND, MAINE 04112

PROJECT NO. 14300
SCALE 1"=20'

SHEET 6 OF 13

DESIGNED WTC
CHECKED RLM

A. WTC 3-12-18 SITE PLAN SUBMISSION TO CITY
REV. BY: DATE: STATUS:
THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNIQUES, INC. ANY ALTERATIONS, AUTHORIZED OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNIQUES, INC.

SEBAGO
TECHNIQUES
WWW.SEBAGOTECHNIQUES.COM
75 JOHNSON ROAD
Salem, MA 01970
Tel. 207-200-2100

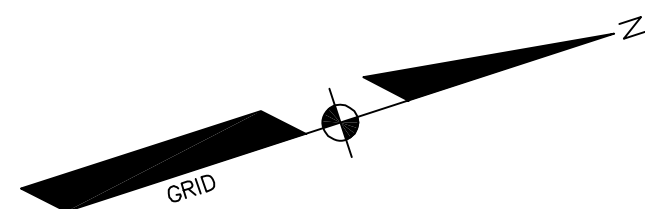
RICHARD L. MEYER, P.E. 10668
WILLIAM T. CONWAY, R.L.A. 106
RICHARD L. MEYER, P.E. 10668
WILLIAM T. CONWAY, R.L.A. 106

SEAL
RICHARD L. MEYER, P.E.
NO. 10668
STATE OF MAINE
3-12-18

SEAL
WILLIAM T. CONWAY, R.L.A.
NO. 106
STATE OF MAINE
3-12-18

KEY	BOTANICAL NAME / COMMON NAME	SIZE / REMARKS
AF	ABIES FRASER / FRASER FIR	6 FT. - 14 FT. AS NOTED
PC	PICEA OMORICA / SERBIAN SPRUCE	6 FT. - 10 FT. AS NOTED
NY	NYSSA SYLVATICA / RED SPRELO	3 IN. CAL.
UA	ULMUS A. 'VALLEY FARGE' / VALLEY FARGE ELM	4 IN. CAL.
GF	QUERCUS PALustris 'TINGREEN' / GREEN PILLAR OAK	3 IN. CAL.
NU	NUSSIA NUBA / RIVER BIRCH	12 FT. - 12 FT. CLUMP
PX	PRUNUS X 'ACCOLADE' / ACCOLADE CHERRY	3 IN. CAL.
ML	MAGNOLIA X 'LEONARD MESSEL' / MAGNOLIA	2.5 IN. CAL.
ML	MAGNOLIA X 'ELIZABETH' / 'YELLOW MAGNOLIA	2.5 IN. CAL.
SR	SYRINGA R. 'VICTORY BELT' / TREFORM LILAC	2.5 IN. CAL.
RO	ROSA 'DOUBLE KNOWLEDGE' / 'ROSE OF SHARON'	3 IN. CAL.
EF	EUNOMYUS 'EMERALD GAIETY' / EUNOMYUS	NO. 5 CONT.
CE	CLETHRA A. 'COMPACT GAIETY' / COMPACT CLETHRA	NO. 5 CONT.
BA	BAYBERRY / BAYBERRY	NO. 5 CONT.
AK	AZALEA X 'KAREN' / AZALEA	NO. 5 CONT.
CA	CORNUS ALTERNIFOLIA / 'PAGODA POWDOW	6FT. - 8 FT. B&B
DR	DWARF P. SWEET SUGAR / 'DWARF PANGAEA	NO. 5 CONT.
RR	ROSA RUSSICA / 'SEA ROSE' (MIXED COLORS)	NO. 5 CONT.
SM	SPARGANGLER X 'SARGENT' / 'SARGENT' SPARGANGLER	NO. 5 CONT.
JP	JUNIPERUS X 'BLUE POINT' / BLUE POINT JUNIPER	6 FT. HGT.
KN	KALAMIA X 'NATHAN HALE' / MOUNTAIN LAUREL	NO. 5 CONT.
DM	DWARF 'MUGO' / DWARF 'MUGO'	NO. 5 CONT.
RR	RHOODENDRON X 'J.M. COMPACT' / RHOODENDRON	NO. 5 CONT.
CB	VERBURNUM X. CARCEPHALUM 'CAYUGA' / VERBURNUM	NO. 5 CONT.
CB	VERBURNUM X. 'COMPACT' / VERBURNUM	NO. 5 CONT.
CS	CSOROS X 'SANTIN' / COMPACT RED TWIG DOGWOOD	NO. 5 CONT.
CS	CSOROS X 'WAGD CARPENTER' / WAGD CARPENTER	NO. 5 CONT.
SH	SHIBIRATA 'VANHOUTE' / REBERRY / BRIDAL WEAVER	NO. 5 CONT.
MG	MIRICA GLAD / BAYBERRY	NO. 5 CONT.
PC	PICTOCHRYDUS UVA / PURSI / BEARBERRY	NO. 5 CONT.
LS	LEUCANTHEMUM S. 'PERCY' / SHAESTA DISSY	NO. 1 CONT.
MS	MISCANTHUS S. 'PURPURESCENS' / FLAME GRASS	NO. 1 CONT.
PA	POLYDRUM ACROSTICHUM / CHRISTMAS FERN	NO. 1 CONT.
PE	PEROVSKIA A. 'LITTLE SPIR' / DWARF RUSSIAN SAGE	NO. 1 CONT.
IS	IRIS VERSICOLOR / 'BLUE FLAG IRIS	NO. 1 CONT.
DA	DAUNIA 'MAY NIGHT' / MAY NIGHT DAUNIA	NO. 1 CONT.
HO	HOSTA X 'PATRIOT' / HOSTA	NO. 1 CONT.
ST	STACHYS X 'STELL' / STACHYS / DAYLILY	NO. 1 CONT.
PT	PACHYSTANDA TERMINALIS / JAPANESE SPURGE	FLATS/ 6" SPACING

SEED MIX 'A' - MDOT SEEDING METHOD NO. 1
SEED MIX 'B' - NORTHEAST WILDFLOWER SEED MIX - APPLY 50 LBS PER ACRE (WWW.AMERICANMEADOWS.COM)



SEE SHEET 9
FOR DETAILED
LANDSCAPING
IN THIS AREA

SEE SHEET 8
FOR DETAILED
LANDSCAPING
IN THIS AREA

SCHOONER MEMORY
CARE CENTER

SCHOONER MEMORY
CARE CENTER

ICHMARK
BOLT OF HYDRANT
'VATION: 285.99'

EXISTING	PROPOSED
	PROPERTY LINE/R.O.W.
	ABUTTER LINE/R.O.W.
	SETBACK
	EASEMENT
	BUILDING
	EDGE PAVEMENT
	CURB LINE
	EDGE OF WATER
	TREELINE
	EDGE PAVEMENT
	DECIDUOUS TREE
	CONIFEROUS TREE
	LIGHT POLE
	SIGN

GRAPHIC SCALE

20 0 10 20

(IN FEET)

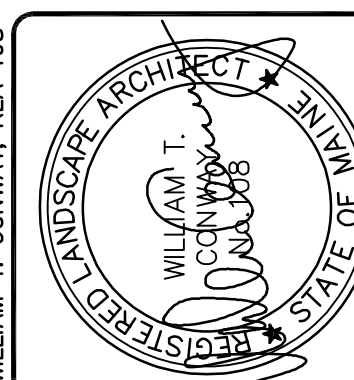
1 INCH = F20

OVERALL LANDSCAPE PLAN
OF:
SSCHOONER MEMORY CARE CENTER
STEINSON ROAD
AUBURN, MAINE
FOR:
AUBURN MEMORY CARE, LLC

PROJECT NO.	SCALE
14700	1"=20'

SHEET 7 OF 13

WILLIAM T. CONWAY, RIA 108



DESIGNED	CHECKED
DATE	SIGNATURE

A	WTC	3-12-18	SITE PLAN SUBMISSION TO CITY
REV:	BY:	DATE:	STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICS, INC. ANY ALTERATIONS,

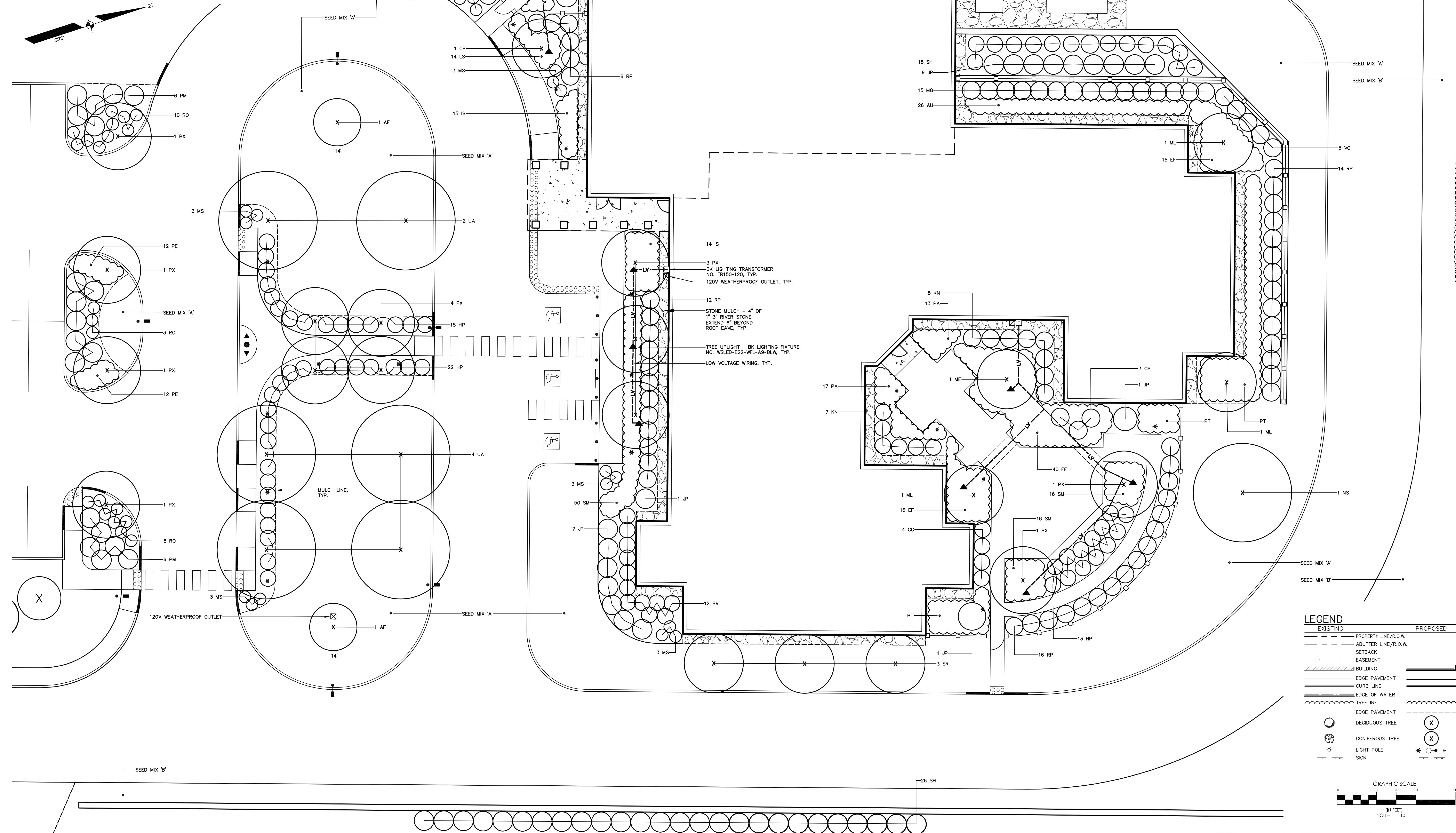
SEBAGO
TECHNICS
www.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106

3

PLANT SCHEDULE

KEY BOTANICAL NAME / COMMON NAME	SIZE / REMARKS
AF ABIES FRASERI / FRASER FIR	6 FT. - 14 FT. AS NOTED
PC PICEA OMORICA / SERBIAN SPRUCE	6 FT. - 10 FT. AS NOTED
NS NYSSA SYLVATICA / BLACK TURPELO	4 IN. CAL.
UA ULMUS A. 'VALLEY FORGE' / VALLEY FORGE ELM	4 IN. CAL.
QP QUERCUS PALUSTRIS 'PINGREEN' / GREEN PILLAR OAK	3 IN. CAL.
BN BETULA NIGRA / RIVER BIRCH	10 FT. - 12 FT. CLUMP
PX PRUNUS X. 'ACCOLADE' / ACCOLADE CHERRY	3 IN. CAL.
ME MAGNOLIA X. 'LEONARD MESSEL' / MAGNOLIA	2.5 IN. CAL.
ME MAGNOLIA X. 'ELIZABETH' / YELLOW MAGNOLIA	2.5 IN. CAL.
SR SYRINGA R. 'IVORY SILK' TREIFORM LILAC	2.5 IN. CAL.
RO ROSA X. 'DOUBLE KNOCKOUT' / KNOCKOUT ROSE	NO. 3 CONT.
EF EUONYMUS 'EMERALD GAITY' / EUONYMUS	NO. 3 CONT.
CC CLETHRA A. 'COMPACTA' / COMPACT CLETHRA	NO. 5 CONT.
MG MYRICA GALE / BAYBERRY	NO. 5 CONT.
AK AZALEA X. 'KAREN' / AZALEA	NO. 5 CONT.
CP CORNUS ALTERNIFOLIA / PAGODA DOGWOOD	6FT. - 8 FT. B&B
HP HYDRANGEA P. 'SWEET SUMMER' / HYDRANGEA	NO. 5 CONT.
RR ROSA RUGOSA / SEA ROSE (MIXED COLORS)	NO. 5 CONT.
JS JUNIPERUS X. 'SARGENT' / SARGENT JUNIPER	NO. 5 CONT.
JP JUNIPERUS X. 'BLUE POINT' / BLUE POINT JUNIPER	6 FT. TOT.
KN KALMIA X. 'NATHAN HALE' / MOUNTAIN LAUREL	NO. 5 CONT.
PM PINUS M. 'MUGO' / DWARF MUGO PINE	NO. 5 CONT.
RP RHODODENDRON X. 'P.M. COMPACTA' / RHODODENDRON	NO. 5 CONT.
VC VIBURNUM X. CARICEPHALUM 'CAYUGA' / VIBURNUM	NO. 5 CONT.
LV LEUCOTHOE F. 'COMPACTA' / COMPACT LEUCOTHOE	NO. 3 CONT.
CS CORNUS S. 'ISANTI' / COMPACT RED TWIG DOGWOOD	NO. 5 CONT.
SV SPIRAEA X. 'MAGIC CARPET' / BRIDAL WREATH SPIRAEA	NO. 3 CONT.
SH SPIRAEA VANHOUTTEI 'RENAISSANCE' / BRIDAL WREATH	NO. 5 CONT.
MG MYRICA GALE / BAYBERRY	NO. 5 CONT.
AU ARCTOSTAPHYLOS UVA - URSI / BEARBERRY	NO. 3 CONT.
LS LEUCANTHEMUM S. 'BECKY' / SHASTA DAISY	NO. 1 CONT.
MS MISCANTHUS S. 'PURPURESCENS' / FLAME GRASS	NO. 1 CONT.
PA POLYSTICHUM ACROSTICHODES/ CHRISTMAS FERN	NO. 1 CONT.
PER PEROVSKIA A. 'LITTLE SPIRE' / DWARF RUSSIAN SAGE	NO. 1 CONT.
IS IRIS VERSICOLOR / BLUE FLAG IRIS	NO. 1 CONT.
SM SALVIA X. 'MAY NIGHT' / SALVIA	NO. 1 CONT.
HO HOSTA X. 'PATRIOT' / HOSTA	NO. 1 CONT.
HC HEMEROCALLIS X. 'STELLA D'ORO' / DAYLILLY	NO. 1 CONT.
PT PACHYSANDRA TERMINALIS / JAPANESE SPURGE	FLATS, 6" SPACING

SEED MIX 'A' - MDO SEEDING METHOD NO. 1
SEED MIX 'B' - NORTHEAST WILDFLOWER SEED MIX - APPLY 50 LBS PER ACRE (WWW.AMERICANMEADOWS.COM)



LEGEND	
EXISTING	PROPOSED
PROPERTY LINE/R.O.W.	ABUTTER LINE/R.O.W.
SETBACK	EASEMENT
BUILDING	EDGE PAVEMENT
CURB LINE	EDGE OF WATER
TREELINE	EDGE PAVEMENT
DECIDUOUS TREE	CONIFEROUS TREE
LIGHT POLE	SIGN

LANDSCAPE PLAN
OF:
SCHOOVER MEMORY CARE CENTER
STETSON ROAD
AUBURN, MAINE

FOR:
AUBURN MEMORY CARE, LLC
509 FOREST AVENUE
PORTLAND, MAINE 04112

DESIGNED
WTC

CHECKED
RLM

DATE: 3-12-18
STATUS: SITE PLAN SUBMISSION TO CITY

REVISIONS:
1. A. WTC 3-12-18
2. RLM 3-12-18

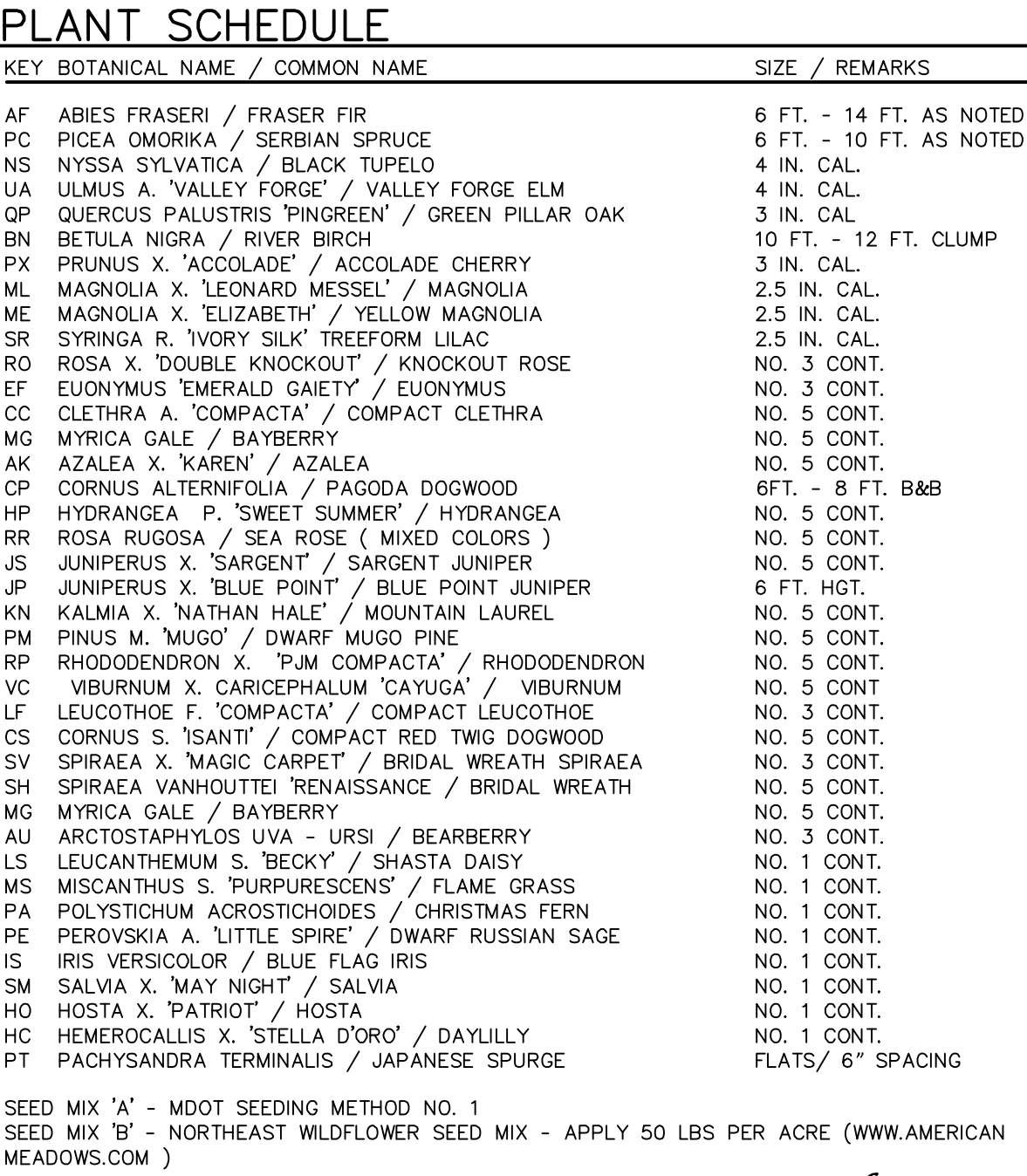
WWW.SEBAGOTECHNICS.COM
75 JOHNSON ROAD
SOUTH PORTLAND, ME 04106
TEL: 207-200-2100

PROJECT NO.
14300

SCALE
1"=10'

SHEET 8 OF 13

WILLIAM T. CONWAY, RLA 108
PROFESSIONAL LANDSCAPE ARCHITECT
STATE OF MAINE
3-12-18



SEBAGO
TECHNICS
WWW.SEBAGOTECHNICS.COM
75 John Roberts Rd.
Suite 4A
South Portland, ME 04106
Tel. 207-200-2100

LEGEND

EXISTING	PROPOSED
	
PROPERTY LINE/R.O.W.	
	
ABUTTER LINE/R.O.W.	
	
SETBACK	
	
EASEMENT	
	
BUILDING	
	
EDGE PAVEMENT	
	
CURB LINE	
	
EDGE OF WATER	
	
TREELINE	
	
EDGE PAVEMENT	
	
DECIDUOUS TREE	
	
CONEIFEROUS TREE	
	
	
LIGHT POLE	
	
SIGN	

EROSION CONTROL MEASURES:

PRE-CONSTRUCTION PHASE

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS (SILT FENCE) WILL BE STAKED/INSTALLED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST EROSION. THE PLACEMENT OF SEDIMENT BARRIERS SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THIS EROSION CONTROL PLAN AND NOTES. IN THIS PLAN, THE CONSTRUCTION YEAR SHALL BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED AT THE INTERSECTION OF THE PROPOSED ENTRANCES AND EXISTING ROADWAYS TO AVOID TRACKING OF MUD, DUST AND DEBRIS FROM THE SITE.

PRIOR TO CONSTRUCTION, THE CONTRACTOR SHALL PREPARE A DETAILED SCHEDULE AND MARKED UP PLAN INDICATING AREAS AND COMPONENTS OF THE CONSTRUCTION RELATED TO THE PLACEMENT OF SEDIMENT BARRIERS. THE CONTRACTOR SHALL SCHEDULE A PRE-CONSTRUCTION MEETING WITH THE MUNICIPAL STAFF. THREE COPIES OF THE SCHEDULE AND MARKED UP PLAN SHALL BE SUBMITTED TO THE MUNICIPAL STAFF PRIOR TO THE SCHEDULED MEETING. THE CONTRACTOR SHALL BE GIVEN THE 14 DAY LIMIT OF DISTURBANCE IN THE SCHEDULE ADDRESSING TEMPORARY AND PERMANENT VEGETATION MEASURES.

CONSTRUCTION AND POST-CONSTRUCTION PHASE

AREAS UNDERGOING ACTUAL CONSTRUCTION SHALL ONLY EXPOSE THAT AMOUNT OF MINERAL SOIL NECESSARY FOR PROGRESSIVE AND EFFICIENT CONSTRUCTION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD. OPEN AREAS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL AS SHOWN ON THE DESIGN PLANS AND AS DESCRIBED WITHIN THIS EROSION CONTROL PLAN WITHIN 14 DAYS OF DISTURBANCE. AREAS LOCATED WITHIN 100' OF STREAMS SHALL BE ANCHORED WITH TEMPORARY EROSION CONTROL WITHIN SEVEN (7) DAYS. REFER TO WINTER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR.

THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEPENDENT UPON THE ACTUAL SITE AND WEATHER CONDITIONS. CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL. PROTECTION.

EROSION CONTROL APPLICATIONS & MEASURES

THE PLACEMENT OF EROSION CONTROL MEASURES SHALL BE COMPLETED IN ACCORDANCE WITH GUIDELINES ESTABLISHED IN BEST MANAGEMENT PRACTICES AND IN ACCORDANCE WITH THE EROSION CONTROL PLAN AND DETAILS IN THE PLAN SET.

1. TEMPORARY MULCHING:

ALL DISTURBED AREAS SHALL BE MULCHED WITH MATERIALS SPECIFIED BEFORE PRIOR TO ANY STORM EVENT. ALL DISTURBED AREAS NOT LAID GRADED WITHIN 14 DAYS SHALL BE MULCHED. AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED, SHALL BE MULCHED IMMEDIATELY. FOLLOWING SEEDING, EROSION CONTROL BLANKETS ARE RECOMMENDED TO BE USED AT THE BASE OF GRASS, WATERWAYS AND ON SLOPES GREATER THAN 15%. MULCH ANCHORING SHOULD BE USED ON SLOPES GREATER THAN 5% AFTER SEPTEMBER 15TH OF THE CONSTRUCTION YEAR (SEE WATER EROSION CONTROL NOTES FOR THE TREATMENT OF OPEN AREAS AFTER OCTOBER 1ST OF THE CONSTRUCTION YEAR). TYPES OF MULCH: HAY OR STRAW SHALL BE APPLIED AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE). EROSION CONTROL MIX SHALL BE APPLIED SUCH THAT THE THICKNESS ON SLOPES 3:1 OR LESS IS 2 INCHES PLUS 1/2" INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THE THICKNESS ON SLOPES BETWEEN 3:1 AND 2:1 SHALL BE 4 INCHES PLUS 1/2 INCH PER 20 FEET OF SLOPE UP TO 100 FEET. THIS SHALL NOT BE USED ON SLOPES GREATER THAN 2:1. EROSION CONTROL BLANKET: SHALL BE INSTALLED SUCH THAT CONTINUOUS CONTACT BETWEEN THE MAT AND THE SOIL IS OBTAINED. INSTALL BLANKETS AND STAPLE IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

2. SOIL STOCKPILES:

STOCKPILES OF SOIL OR SUBSOIL SHALL BE MULCHED WITH HAY OR STRAW AT A RATE OF 75 LBS/1,000 S.F. (1.5 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.

3. NATURAL RESOURCES PROTECTION:

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED USING TEMPORARY MULCHING (AS DESCRIBED IN PART 1. OF THIS SECTION) WITHIN 7 DAYS OF EXPOSURE OR PRIOR TO ANY STORM EVENT (AS IS DESCRIBED IN PART 4. OF THIS SECTION) SHALL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROBLEMS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE.

4. SEDIMENT BARRIERS:

PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, SEDIMENT BARRIERS SHALL BE STAKED ACROSS THE SLOPE(S), ON THE CONTOUR AT OR JUST BELOW THE LIMITS OF CLEARING OR GRUBBING, AND/OR JUST ABOVE ANY ADJACENT PROPERTY LINE OR WATERCOURSE TO PROTECT AGAINST CONSTRUCTION RELATED EROSION. SEDIMENT BARRIERS SHALL BE MAINTAINED BY THE CONTRACTOR UNTIL ALL EXPOSED SOILS HAVE AT LEAST 85% OR VIGOROUS PERENNIAL VEGETATIVE COVER TO PREVENT EROSION.

SILT FENCE: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE EFFECTIVE HEIGHT OF THE FENCE SHALL NOT EXCEED 36 INCHES. IT IS RECOMMENDED THAT SILT FENCE BE REMOVED BY CUTTING THE FENCE MATERIALS AT GROUND LEVEL SO AS TO AVOID ADDITIONAL SOIL DISTURBANCE.

HAY BALES: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. BALES SHALL BE WIRE-BOUND OR STRING-TIED AND THESE BINDINGS MUST REMAIN PARALLEL WITH THE GROUND SURFACE DURING INSTALLATION TO PREVENT DETRIORATION OF THE BINDINGS. BALES SHALL BE INSTALLED WITHIN A MINIMUM 4 INCH DEEP TRENCH LINE WITH ENDS OF ADJACENT BALES TIGHTLY ABUTTING ONE ANOTHER.

EROSION CONTROL MIX: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE MIX SHALL CONSIST PRIMARILY OF ORGANIC MATERIAL AND CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4 INCHES IN DIAMETER. THE MIX COMPOSITION SHALL MEET THE STANDARDS DESCRIBED WITHIN THE MDPF BEST MANAGEMENT PRACTICES. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

CONTINUOUS CONTAINED BERM: SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THIS SEDIMENT BARRIER IS EROSION CONTROL MIX PLACED WITHIN A SYNTHETIC TUBULAR NETTING AND PERFORMS AS A STURDY SEDIMENT BARRIER THAT WORKS WELL ON HARD GROUND SUCH AS FROZEN CONDITIONS, TRAVELED AREAS OR PAVEMENT. NO TRENCHING IS REQUIRED FOR INSTALLATION OF THIS BARRIER.

5. TEMPORARY CHECK DAMS:

SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. CHECK DAMS SHALL BE PLACED WITHIN DITCHES/ SWALES AS SPECIFIED ON THE DESIGN PLANS IMMEDIATELY AFTER FINAL GRADING. CHECK DAMS SHALL BE 10 FEET HIGH. TEMPORARY CHECK DAMS MAY BE REMOVED ONLY AFTER THE ROADWAYS ARE PAVED AND THE VEGETATED SWALES ARE ESTABLISHED WITH AT LEAST 85% OR VIGOROUS PERENNIAL GROWTH. THE AREA BENEATH THE CHECK DAM MUST BE SEEDED AND MULCHED IMMEDIATELY AFTER REMOVAL OF THE CHECK DAM.

STONE CHECK DAMS: SHOULD BE CONSTRUCTED OF 2 TO 3 INCH STONE AND PLACED SUCH THAT COMPLETE COVERAGE OF THE SWALE IS OBTAINED AND THAT THE CENTER OF THE DAM IS 6 INCHES LOWER THAN THE OUTER EDGES.

HAY BALE CHECK DAMS: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET CHECK DAMS.

MANUFACTURED CHECK DAMS: MANUFACTURED CHECK DAMS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF AUTHORIZED BY THE PROPER LOCAL, STATE OR FEDERAL REGULATING AGENCIES. THESE UNITS SHALL BE INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

6. STORMDRAIN INLET PROTECTION:

INLET PROTECTION SHALL BE PLACED AROUND A STORMDRAIN DROP INLET CURB INLET PRIOR TO PERMANENT STABILIZATION OF THE IMMEDIATE AND UPSTREAM DISTURBED AREAS. THEY SHALL BE CONSTRUCTED IN A MANNER THAT WILL FACILITATE CLEAN-OUT AND DISPOSAL OF TRAPPED SEDIMENTS AND MINIMIZE INTERFERENCE WITH CONSTRUCTION ACTIVITIES. ANY RESULANT FLOWING OF WATER FROM THE PROTECTION METHOD MUST NOT CAUSE EXCESSIVE INCONVENIENCE OR DAMAGE TO ADJACENT AREAS OR STRUCTURES.

HAY BALE DROP INLET PROTECTION: WE DO NOT RECOMMEND THE USE OF HAY BALES AS INLET PROTECTION.

CONCRETE BLOCK AND STONE INLET SEDIMENT FILTER (DROP OR CURB INLET): SHALL BE INSTALLED PER THE DETAIL ON THE PLANS. THE HEIGHT OF THE CONCRETE BLOCK BARRIER CAN VARY BUT MUST BE BETWEEN 12 AND 24 INCHES TALL. A MINIMUM OF 1 INCH CRUSHED STONE SHALL BE USED.

MANUFACTURED SEDIMENT BARRIERS AND FILTER (DROP OR CURB INLET): MANUFACTURED FILTERS, AS SPECIFIED IN THE DETAIL ON THE PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MANUFACTURER'S RECOMMENDATIONS.

7. STABILIZED CONSTRUCTION ENTRANCE/EXIT:

PRIOR TO CLEARING AND/OR GRUBBING THE SITE A STABILIZED CONSTRUCTION ENTRANCE/EXIT SHALL BE CONSTRUCTED WHEREVER TRAFFIC WILL EXIT THE CONSTRUCTION SITE ONTO A PAVED ROADWAY IN ORDER TO MINIMIZE THE TRACKING OF SEDIMENT AND DEBRIS FROM THE CONSTRUCTION SITE ONTO PUBLIC ROADWAYS. THE ENTRANCES AND ADJACENT ROADWAY AREAS SHALL BE PERIODICALLY SWEEP OR WASHED TO FURTHER MINIMIZE THE TRACKING OF MUD, DUST OR DEBRIS FROM THE CONSTRUCTION AREA. STABILIZED CONSTRUCTION EXITS SHALL BE CONSTRUCTED IN AREAS SPECIFIED ON THE PLANS AND AS DETAILED ON THE PLANS.

8. DUST CONTROL:

DUST CONTROL DURING CONSTRUCTION SHALL BE ACHIEVED BY THE USE OF A WATERING TRUCK TO PERIODICALLY SPRINKLE THE EXPOSED ROADWAY AREAS AS NECESSARY TO REDUCE DUST DURING THE DRY MONTHS. APPLYING OTHER DUST CONTROL PRODUCTS SUCH AS CALCIUM CHLORIDE OR OTHER MANUFACTURED PRODUCTS ARE ALLOWED IF AUTHORIZED BY THE PROPER LOCAL, STATE AND/OR FEDERAL REGULATING AGENCIES. HOWEVER, IT IS THE CONTRACTOR'S ULTIMATE RESPONSIBILITY TO MITIGATE DUST AND SOIL LOSS FROM THE SITE.

9. TEMPORARY VEGETATION:

TEMPORARY VEGETATION SHALL BE APPLIED TO DISTURBED AREAS THAT WILL NOT RECEIVE FINAL GRADING FOR PERIODS UP TO 12 MONTHS. THIS PROCEDURE SHOULD BE USED EXTENSIVELY IN AREAS ADJACENT TO NATURAL RESOURCES. SEEDING PREPARATION AND APPLICATION OF SEED SHALL BE CONDUCTED AS INDICATED IN THE PERMANENT VEGETATION SECTION OF THIS NARRATIVE. SPECIFIC SEEDS (FAST GROWING AND SHORT LIVING) SHALL BE SELECTED FROM THE MAINE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/2003 OR LATER. ALTERNATIVE EROSION CONTROL MEASURES SHOULD BE USED IF SEEDING CAN NOT BE DONE BEFORE SEPTEMBER 15TH OF THE CONSTRUCTION YEAR.

10. PERMANENT VEGETATION:

REVEGETATION MEASURES SHALL COMMENCE IMMEDIATELY UPON COMPLETION OF FINAL GRADING OF AREAS TO BE LOADED AND SEEDED. THE APPLICATION OF SEED SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. PLEASE REFER TO THE WINTER EROSION CONTROL NOTES FOR MORE DETAIL. REVEGETATION MEASURES SHALL CONSIST OF THE FOLLOWING:

SEEDING PREPARATION:

A. FOUR (4) INCHES OF LOAM SHALL BE SPREAD OVER DISTURBED AREAS AND SMOOTHED TO A UNIFORM SURFACE. LOAM SHALL BE FREE OF SUBSOIL, CLAY LUMPS, STONES AND OTHER OBJECTS OVER 2 INCHES OR LARGER IN ANY DIMENSION, AND WITHOUT WEEDS, ROOTS OR OTHER OBJECTIONABLE MATERIAL.

B. SOILS TESTS SHALL BE TAKEN AT THE TIME OF SOIL STRIPPING TO DETERMINE FERTILIZATION REQUIREMENTS. SOILS TESTS SHALL BE TAKEN PROMPTLY AS TO NOT INTERFERE WITH THE 14-DAY LIMIT ON SOIL EXPOSURE. BASED UPON TEST RESULTS, SOIL AMENDMENTS SHALL BE INCORPORATED INTO THE SOIL PRIOR TO FINAL SEEDING. IN LIEU OF SOIL TESTS, SOIL AMENDMENTS MAY BE APPLIED AS FOLLOWS:

ITEM	APPLICATION RATE
10-20-20 FERTILIZER (N-P205-K20 OR EQUAL)	18.4 LBS./1,000 S.F.
GROUND LIMESTONE (50% CALCIUM & MAGNESIUM OXIDE)	138 LBS./1,000 S.F.
C. WORK LINE AND FERTILIZER INTO THE SOIL, AS NEARLY AS PRACTICAL, TO A DEPTH OF 4 INCHES WITH PROPER EQUIPMENT. ROLL THE AREA TO FIRM THE SEEDED EXCEPT ON CLAY OR SILTY SOILS OR COARSE SAND.	

APPLICATION OF SEED:

A. SEEDING SHALL BE CONDUCTED BETWEEN APRIL 1ST AND OCTOBER 1ST OF THE CONSTRUCTION YEAR. GENERALLY A SEED MIXTURE MAY BE APPLIED AS FOLLOWS: (MDP SEED MIX 2 IS DISPLAYED)

SEED TYPE	APPLICATION RATE
CREeping RED FESCUE	0.48 LBS./1,000 S.F. (20 LBS./ACRE)
RED TOP	0.05 LBS./1,000 S.F. (2 LBS./ACRE)
TAIL FESCUE	0.48 LBS./1,000 S.F. (20 LBS./ACRE)
TOTAL	0.97 LBS./1,000 S.F. (42 LBS./ACRE)

NOTE: A SPECIFIC SEED MIXTURE SHOULD BE CHOSEN TO MATCH THE SOILS CONDITION OF THE SITE. VARIOUS AGENCIES CAN RECOMMEND SEED MIXTURES. MDPF RECOMMENDED SEED MIXTURES ARE IN THE EROSION AND SEDIMENT CONTROL BMP MANUAL DATED 3/2003 OR LATER.

B. HYDROSEEDING: SHALL BE CONDUCTED ON PREPARED AREAS WITH SLOPES LESS THAN 2:1. LIME AND FERTILIZER MAY BE APPLIED SIMULTANEOUSLY WITH THE SEED. RECOMMENDED SEEDING RATES MUST BE INCREASED BY 10% WHEN HYDROSEEDING.

C. MULCHING: SHALL COMMENCE IMMEDIATELY AFTER SEED IS APPLIED. REFER TO THE TEMPORARY MULCHING SECTION OF THIS NARRATIVE FOR DETAILS.

SEEDING:

FOLLOWING SEEDED PREPARATION, SOD CAN BE APPLIED IN LIEU OF SEEDING IN AREAS WHERE IMMEDIATE VEGETATION IS MOST BENEFICIAL SUCH AS DITCHES, AROUND STORMWATER DROP INLETS AND AREAS OF AESTHETIC VALUE. SOD SHOULD BE LAID AT RIGHT ANGLES TO THE DIRECTION OF FLOW, STARTING AT THE LOWEST ELEVATION. SOD SHOULD BE ROLLED OR TAMPED DOWN TO EVEN OUT THE JOINTS ONCE LAID DOWN. WHEN FLOW IS PREVALENT THE SOD MUST BE PROPERLY ANCHORED DOWN. IRRIGATE THE SOD IMMEDIATELY AFTER INSTALLATION. SEEDING SHALL BE ESTABLISHED BETWEEN APRIL 1ST AND NOVEMBER 15TH OF THE CONSTRUCTION YEAR, HOWEVER, REFER TO THE WINTER EROSION CONTROL NOTES FOR ANY ACTIVITIES AFTER OCTOBER 1ST.

TRENCH DEWATERING AND TEMPORARY STREAM DIVERSION:

WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAMINANT STRUCTURE (E.G. HAY BALE LEAD POOL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAMINANT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

STANDARDS FOR TIMELY STABILIZATION:

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- BY SEPTEMBER 15, THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDPF WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BY NOVEMBER 1, THEN THE APPLICANT WILL COVER THE SLOPE WITH A LAYER OF WOOD WASTE COMPOST AS DESCRIBED IN ITEM 2(C) OF THIS STANDARD OR WITH STONE RIPRAP AS DESCRIBED IN ITEM 2(D) OF THIS STANDARD.
- STABILIZE THE SLOPE WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 15% (10H:1V).
- STABILIZE THE SLOPE WITH WOOD WASTE COMPOST -- THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADIES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- STABILIZE THE SLOPE WITH STONE RIPRAP -- THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 15. THE APPLICANT WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR STABILITY AND TO DESIGN A FILTER LAYER FOR UNDERNEATH THE RIPRAP.

STANDARD FOR THE TIMELY STABILIZATION OF DISTURBED SLOPES -- BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. THE MDPF WILL CONSIDER ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) TO BE A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER.

- STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C) OF THIS STANDARD.
- STABILIZE THE SOIL WITH SOD -- THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 15% (10H:1V).
- STABILIZE THE SOIL WITH WOOD WASTE COMPOST -- THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADIES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

CONSTRUCTION SCHEDULE

SITE IMPROVEMENTS WILL MOST LIKELY BEGIN IN SUMMER/FALL 2018, DEPENDING UPON FINAL PROJECT APPROVAL. THE FOLLOWING SCHEDULE IS ANTICIPATED FOR THE CONSTRUCTION OF THE SITE IMPROVEMENTS.

SCHEDULE	
1. ESTIMATED CONSTRUCTION TIME:	12 MONTHS
*2. EROSION CONTROL MEASURES PLACED:	WEEK 1 - WEEK 2
3. SITE CLEARING AND GRUBBING:	WEEK 2 - WEEK 4
4. BUILDING CONSTRUCTION	WEEK 4 - WEEK 28
5. CONSTRUCTION OF PARKING SUBBASE FOR ACCESS:	WEEK 4 - WEEK 8
6. STORMWATER MANAGEMENT AREA CONSTRUCTION	WEEK 6 - WEEK 10
7. UTILITY IMPROVEMENTS	WEEK 6 - WEEK 12
8. PARKING BASE AND BINDER PAVEMENT	WEEK 12 - WEEK 14
9. STABILIZE FOR WINTER	WEEK 14
10. LANDSCAPING AND SEEDING	WEEK 41
11. CONSTRUCTION OF FINISH PAVEMENT	WEEK 42
12. FINAL SEEDING ON PREPARED AREAS, (DURING GROWING SEASON)	WEEK 43 - WEEK 44
13. BIWEEKLY MONITORING OF VEGETATIVE GROW	WEEK 41 - WEEK 52
*14. RE-SEEDING OF AREAS, IF NEEDED:	WEEK 52
*15. REMOVAL OF EROSION CONTROL DEVICES:	UPON FINAL PROJECT COMPLETION AND STABILIZATION
** DATES ARE SUBJECT TO CHANGE AT THE DISCRETION OF THE ENGINEER, DEPENDING ON CONSTRUCTION PROGRESS.	

INSPECTIONS/MONITORING:

- MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION CYCLE. AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF, OR AT LEAST EVERY SEVEN (7) DAYS, THE CONTRACTOR SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES. THE CONTRACTOR SHALL PERFORM REPAIRS AS NEEDED TO ALLOW CONTINUED PROPER FUNCTIONING OF THE EROSION CONTROL MEASURE. THE CONTRACTOR SHALL PROVIDE THE NECESSARY REGULATING AGENCIES WITH WRITTEN DOCUMENTATION DESCRIBING DATES OF INSPECTIONS AND NECESSARY FOLLOW-UP WORK TO MAINTAIN EROSION CONTROL MEASURES WITHIN THE REQUIREMENTS OF THIS PLAN.
- FOLLOWING THE TEMPORARY AND/OR FINAL SEEDINGS, THE CONTRACTOR SHALL INSPECT THE WORK AREA SEMIMONTHLY UNTIL THE SEEDINGS HAVE BEEN ESTABLISHED. ESTABLISHED MEANS A MINIMUM OF 85%-90% OF AREAS VEGETATED WITH VIGOROUS GROWTH. RESEEDING SHALL BE CARRIED OUT BY THE CONTRACTOR WITH FOLLOW-UP INSPECTIONS IN THE EVENT OF ANY FAILURES UNTIL VEGETATION IS ADEQUATELY ESTABLISHED.

HOUSEKEEPING:

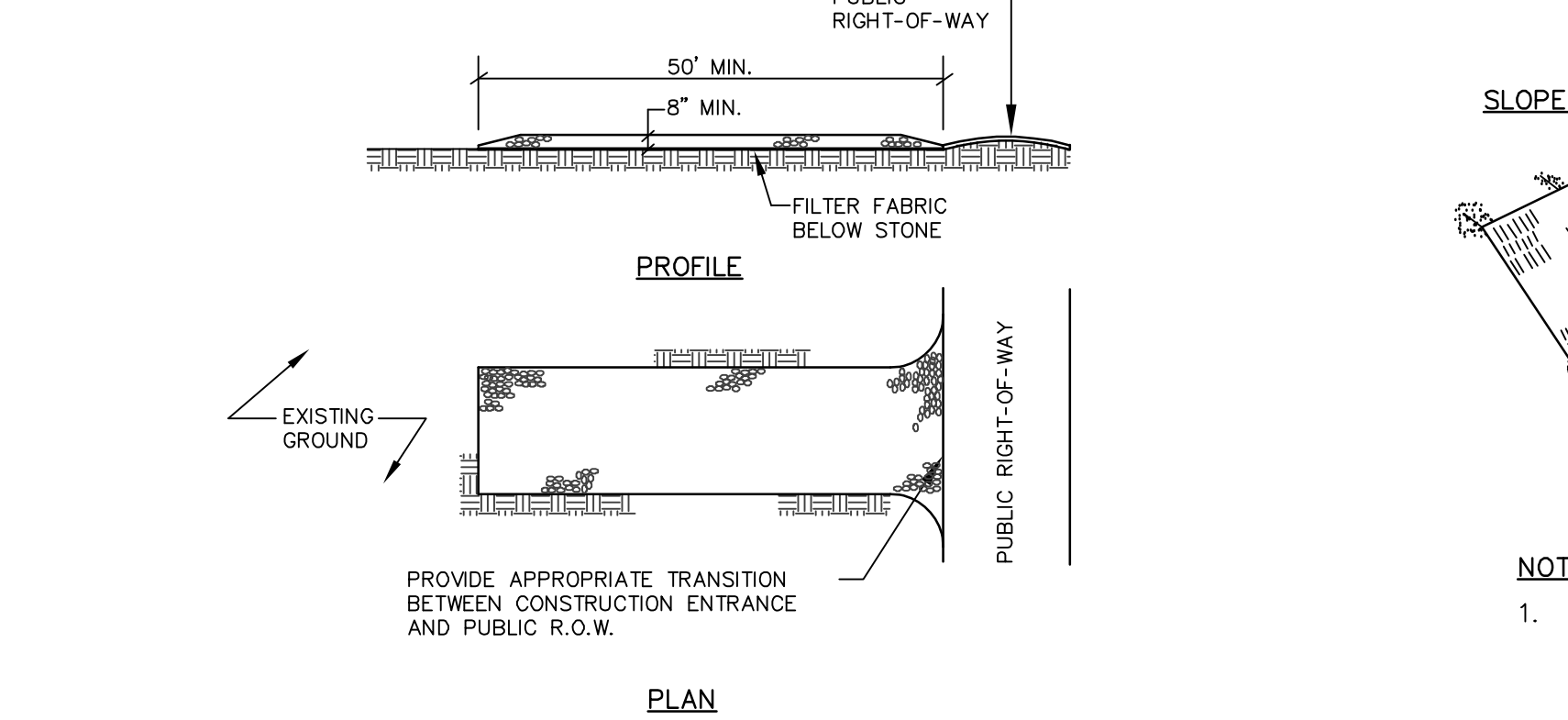
A. **SOIL PREVENTION:** CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON-SITE, INCLUDING PLANS, MAY BE USED IF INSTALLED IN ACCORDANCE WITH THE MATERIALS TO STORMWATER, AND APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.

B. **GROUNDWATER PROTECTION:** DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF CHANGES IN TOPOGRAPHY AND OTHER RELEVANT FACTORS, ACCUMULATES RUNOFF THAT INFILTRATES INTO THE SOIL. DIKES, BERMS, Sumps, AND OTHER FORMS OF SECONDARY CONTAINMENT MUST BE USED TO PREVENT DISCHARGE TO GROUNDWATER. MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS.

C. **EVGITIVE SEDIMENT AND DUST:** ACTIONS MUST BE TAKEN TO INSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL.

D. **DEBRIS AND OTHER MATERIALS:** LITTER, CONSTRUCTION DEBRIS, AND CHEMICALS EXPOSED TO STORMWATER MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

E. **TRENCH DEWATERING:** TRENCH DEWATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFERDAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT REMAIN WATER AFTER EXCAVATION. IN MOST CASES, THE COLLECTED WATER IS HEAVILY SiltED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER MUST BE REMOVED FROM THE TONED AREA, EITHER THROUGH GRAVITY PUMPS, AND MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED.



NOTES:

- STONE SIZE-- AASHTO DESIGNATION M43, SIZE NO. 2 (1 1/2" TO 1 1/2"). USE CRUSHED STONE.
- LENGTH-- AS SHOWN ON PLANS, MIN. 50 FEET.
- THICKNESS-- NOT LESS THAN EIGHT (8) INCHES.
- WIDTH-- NOT LESS THAN FULL WIDTH OF ALL POINT OF INGRESS OR EGRESS.
- MAINTENANCE-- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF FLOODING SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. THIS MAY REQUIRE PERIODIC TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE

NOT TO SCALE

WINTER EROSION CONTROL MEASURES:

THE WINTER CONSTRUCTION PERIOD IS FROM OCTOBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 75% MATURE VEGETATION COVER OR RIPRAP BY NOVEMBER 15, THEN THE SITE NEEDS TO BE PROTECTED AGAINST EROSION. THE PROTECTION OF THE SITE AGAINST EROSION IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MATS, RIPRAP OR GRAVEL BASE ON A ROAD.

THE PROTECTION OF THE EARTHWORK SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA OF THE SITE TO NO MORE THAN 1 ACRE. THE EXPOSED AREA SHALL BE PROTECTED BY A FLOODING, LONG-TERM SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED BE STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

1. SOIL STOCKPILES

STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS./1,000 S.F. (3 TONS PER ACRE) OR WITH A FOUR-INCH LAYER OF WOOD WASTE EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND RE-ESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL.

2. NATURAL RESOURCES PROTECTION

ANY AREAS WITHIN 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% MATURE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS. DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (E.G. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA. PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.

3. SEDIMENT BARRIERS

DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF WOOD WASTE FILTER BERMS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT BARRIERS.

4. MULCHING

ALL AREAS SHALL BE CONSIDERED TO BE DENIED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOADED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LB. PER 1,000 SQUARE FEET OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 75-LBS./1,000 S.F. OR 1.5 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL NOT BE SPREAD ON TOP OF SNOW. THE SNOW WILL BE REMOVED DOWN TO A ONE-INCH DEPTH AS LESS PRIOR TO APPLICATION. AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING. AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN EITHER MULCHED WITH STRAW OR HAY AT A RATE OF 150 LB. PER 1,000 SQUARE FEET (3 TONS/ACRE) AND ADEQUATELY ANCHORED THAT GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH.

BETWEEN THE DATES OF SEPTEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PEG LINE, MULCH NETTING, ASPHALT EMULSION CHALK, TRACK OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT.

AFTER NOVEMBER 1ST, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

5. MULCHING ON SLOPES AND DITCHES

SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL MATS. MULCHING SHALL BE APPLIED AT A RATE OF 230 LBS./1,000 S.F. ON ALL SLOPES GREATER THAN 8%. MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 8%. EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPES 8%.

STABILIZE THE SOIL WITH TEMPORARY VEGETATION -- BY OCTOBER 1 THE APPLICANT WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1,000 SQUARE FEET, LIGHTLY MULCH THE SEEDED SOIL WITH HAY OR STRAW AT 75 POUNDS PER 1,000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE APPLICANT WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BEFORE NOVEMBER 15, THEN THE APPLICANT WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM 3(C) OF THIS STANDARD.

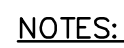
STABILIZE THE SOIL WITH SOD -- THE APPLICANT WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE APPLICANT PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE APPLICANT WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).

STABILIZE THE SOIL WITH WOOD WASTE COMPOST -- THE APPLICANT WILL PLACE A SIX-INCH LAYER OF WOOD WASTE COMPOST ON THE SLOPE BY NOVEMBER 15. PRIOR TO PLACING THE WOOD WASTE COMPOST, THE APPLICANT WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE APPLICANT WILL NOT USE WOOD WASTE COMPOST TO STABILIZE SLOPES HAVING GRADIES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.

1	NEW RISER POLE TO BE SET BY CMP, SPECTRUM & FAIRPOINT TO FOLLOW
2	UGL - 1 DENOTES (2) 5" CONDUITS FOR CMP AND (3) 4" TEL / DATA CONDUITS
3	UGL - 2 DENOTES (3) 4" TEL / DATA CONDUITS
4	UGL - 3 DENOTES (2) 5" CONDUITS FOR CMP
5	8" X 8" TAPPING SLEEVE AND GATE VALVE + 8" X 4" TAPPING SLEEVE AND GATE VALVE FOR THE ALBUQUERQUE AND SMOKEHORN DISTRICT STATIONS
6	SET SEWER MAIN MANHOLE OVER EXISTING SEWER MAIN - SMH - 1: RM ELEV. = 256.00 EXISTING INV. IN. = 256.20 NEW INV. IN. = 256.20 EXISTING INV. OUT. = 256.10 CONDUCT TEST PIT TO CONFIRM ELEVATION OF EXISTING 8" SEWER MAIN PRIOR TO SUBMITTING SHOP DRAWINGS FOR SMH-1 AND SMH-2
7	GAS PROVIDER TO TAP EXISTING MAIN AND INSTALL GAS LINE TO METER AT NEW BUILDING
8	REPAIR STREET AND SIDEWALK PAVING AFTER UTILITY INSTALLATION
9	SMH - 2 FORCE MAIN TERMINAL MANHOLE
10	20 FT. FUTURE GRAVITY SEWER STUB INV. = XXX.XX. SET REBAR TO GRAD AT THIS LOCATION
11	8" X 4" GATE VALVES, 20 FT C.I. WATER LINE STUBS FOR FUTURE, SET REBAR TO GRADE AT THIS LOCATION
12	7 FT. X 13 FT. STANDARD CMP VAULT
13	5 FT. X 7 FT. TEL / DATA VAULT
14	DEFLECT WATER MAIN UNDER STORM DRAIN - PROVIDE 12" MIN. SEPARATION
15	8" GATE VALVE AND FIRE HYDRANT
16	6.5 FT. X 15.5 FT. 8" CONCRETE SLAB FOR GENERATOR
17	UGL - 4 DENOTES CONDUIT TO GENERATOR - SEE MEP DRAWINGS
18	7.5 FT. X 7 FT. TRANSFORMER
19	150 GAL. GAS FUEL TRANSFER
20	SMH - 3 SEWER MANHOLE
21	SEWER PUMP STATION
22	4" SCH. 40 PVC FORCE MAIN
23	FORCE MAIN CLEANOUT IN MANHOLE
24	AIR RELEASE VALVE IN MANHOLE
25	CONNECT NEW SD-1A TO EXISTING 12" CMP INV. = 281.02
26	6" SCH. 40 PVC FORF DRAIN TO FI-3 INV. @ BUILDING = 266.00
27	4" CONTINUOUS FOOTING DRAIN AT PERIMETER OF UPPER FLOOR
28	CAP FOOTING DRAIN, EXTEND TO GRADE WITH THREADED CLEANOUT
29	OUTLET UPPER FLOOR FOOTING DRAIN TO FI - 1, PROVIDE THREADED CLEANOUT AT FOUNDATION
30	OUTLET UPPER FLOOR FOOTING DRAIN TO FI - 7, PROVIDE THREADED CLEANOUT AT FOUNDATION
31	4" CONTINUOUS FOOTING DRAIN AT PERIMETER OF LOWER FLOOR
32	OUTLET LOWER FLOOR FOOTING DRAIN TO CB - 7A, PROVIDE THREADED CLEANOUT AT FOUNDATION
33	OUTLET LOWER FLOOR FOOTING DRAIN TO CB - 8, PROVIDE THREADED CLEANOUT AT FOUNDATION
34	6" PVC WALL DRAIN OUTLET TO FI - 1.
35	6" PVC WALL DRAIN OUTLET TO CB - 9.
36	6" PVC WALL DRAIN OUTLET TO CB - 11.
37	CONNECT WALL DRAINS TO LOWER LEVEL FOOTING DRAIN
38	FORCE MAIN AIR RELEASE VALVE IN MANHOLE

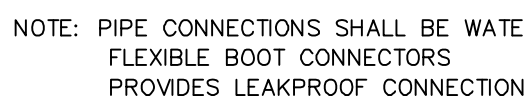
1. WATER AND SEWER MATERIALS AND INSTALLATION SHALL COMPLY WITH THE AUBURN WATER & SEWERAGE DISTRICTS STANDARDS AND SPECIFICATIONS. THE DISTRICTS SHALL BE RESPONSIBLE FOR ENSURING THAT REPRESENTATIVES OF THE DISTRICTS ARE PRESENT FOR ALL PHASES OF CONSTRUCTION AND TESTING AS NOTED IN THE DISTRICTS STANDARDS.
2. WITHIN THE STETSON ROAD RIGHT OF WAY SHALL COMPLY WITH THE CITY OF AUBURN'S STANDARDS AND SPECIFICATIONS WHICH ARE LOCATED AT THE CITY STORES. IN AREAS WHERE UTILITIES ARE TO BE INSTALLED IN THE RIGHT OF WAY, THE FOLLOWING PRACTICES MUST BE FOLLOWED:
 - A. STAKED HAY BALES OR SILT FENCE BARRIERS MUST BE USED TO PREVENT EROSION AND MINIMIZE SOIL DISTURBANCE AND THE RESOURCE BEFORE THE ACTIVITY BEGINS.
 - B. HAY BALES OR SILT FENCE BARRIERS MUST BE MAINTAINED UNTIL THE DISTURBED AREA IS COMPLETELY STABILIZED.
 - C. WITHIN 7 CALENDAR DAYS FOLLOWING THE COMPLETION OF ANY DISTURBANCE DUE TO A STORM EVENT, MULCH MUST BE SPREAD ON ANY EXPOSED SOIL.
3. ALL DISTURBED SOILS MUST BE PERMANENTLY STABILIZED; AND
4. EROSION CONTROL MEASURES OF FINAL STABILIZATION OF THE SITE, ANY SILT FENCE MUST BE REMOVED.
5. FILLING OF ANY WETLANDS OR WETLAND THAT WAS BE RE-FILLED WITH THE SAME MATERIAL THAT WAS EXCAVATED. THE ORIGINAL GRADE AND ELEVATION OF THE WETLAND MUST BE MAINTAINED. EXCAVATED MATERIAL MUST BE REMOVED FROM THE WETLAND OR EXCAVATED AND STOCKPILED TO BE USED FOR FILLING MATERIAL SUCH AS CRUSHED TON OR SAND MAY BE USED PROVIDED THAT IT DOES NOT CONTAIN ANY TOXIC WASTE WHERE APPROPRIATE TO PREVENT WETLAND FROM DRAINING DURING THE BEDDING MATERIAL.
6. EXCAVATION AND FILLING OF WETLANDS MUST BE PERFORMED EITHER DURING A PERIOD WHEN NO RAIN IS FLOWING, OR WHEN THE FLOW OF WATER IS SUCH AS DIVERTING WATER FLOW BY COFFER DAM AND PUMPING AROUND AROUND THE AREA OF EXCAVATION. WHEN FLOWING WITHIN THE WETLANDS THERE MUST BE NO WIDER THAN NECESSARY TO INSTALL THE UTILITY. WHEN THE UTILITY IS INSTALLED, THE EQUIPMENT IN THE STREAM, EQUIPMENT OPERATING ON THE STREAMBANKS MAY BE EXTENDED TO THE STREAM WITH A BUILT UP SIMILAR TO EXTENDING TO THE STREAM CROSS SECTIONS ON ROCK, GRAVEL OR LEDGE BOTTOM.
7. WHEN EXCAVATED OR FILLING OF WETLANDS MUST TRAVEL IN THE WETLANDS MUST TRAVEL AND WORK ON MATS OR PLATFORMS IN ORDER TO PROTECT THE RESOURCE.
8. ANY DEBRIS OR EXCAVATED MATERIAL MUST BE STABILIZED EITHER BY COVERING WITH MATS OR PLATFORMS, HAY BALES OR SILT FENCE MUST BE USED WHEN NECESSARY TO PROTECT THE RESOURCE.
9. ANY DEBRIS GENERATED DURING THE ACTIVITY MUST BE PREVENTED FROM WASHING DOWNSTREAM AND MUST BE REMOVED FROM THE STREAM. THE REMOVAL OF DEBRIS MUST BE IN CONFORMANCE WITH MAINE REGULATORY WASTE MANAGEMENT ACT AND WASTE MANAGEMENT ACT, 38 MRSA SECTION 1-301.
10. ANY ROAD OR DRIVEWAY THAT IS SOIL MUST NOT ALLOWED IN THE RESOURCE EXCEPT THAT FILL MAY BE USED ON TOP OF MATS OR PLATFORMS FOR EQUIPMENT ACCESS.
11. LUMBER MATERIALS SHALL NOT BE USED WITHIN THE WETLANDS.
12. BLASTING IN INUNDATED AREAS IS PROHIBITED.

EXISTING	DESCRIPTION	PROPOSED
-----	PROPERTY LINE/R.O.W.	-----
-----	EDGE, WETLAND	-----
	WETLANDS	
-----	STREAM	-----
-----	EDGE PAVEMENT	-----
-----	EDGE CONCRETE	-----
-----	CURB LINE	-----
	BELTLINE	
	GAS GATE VALVE	
	WATER	
	WATER GATE VALVE	
	HYDRANT	
	SANITARY SEWER	
	FORCE MAIN	
	SANITARY MANHOLE	
	STORM DRAIN	
	DRAINAGE MANHOLE	
	CATCH BASIN	
	OVERHEAD UTILITY	
	UNDERGROUND UTILITY	
	UTILITY POLE	
	GUY WIRE	
	FILTER BARRIER	



1. 4"-0" I.D. TYPICAL. SOME STRUCTURES MAY REQUIRE LARGER I.D. PROVIDE SHOP DRAWINGS.
2. DRAINAGE STRUCTURES TO BE DESIGNED FOR H-20 LOADING.
3. PIPE SIZES AND INVERTS AS NOTED ON PLANS.
4. CATCH BASIN FRAME AND GRATE TO BE EAST JORDAN FOUNDRY 5250 OR APPROVED EQUAL.
5. DRAINAGE MANHOLE FRAME AND COVER TO BE EAST JORDAN FOUNDRY 11 TYPE A, OR APPROVED EQUAL. COVER SHALL BE MARKED "DRAIN".

NOT TO SCALE



NOT TO SCALE



- (1) CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT.
- (2) PRIMARY ELECTRIC SERVICE TO BE PROVIDED BY OTHERS, INCLUDING TRANSFORMER. ELECTRICAL CONTRACTOR RESPONSIBLE FOR SECONDARY ELECTRICAL FROM TRANSFORMER TO BUILDING, GENERATOR CONNECTIONS, ALL SITE LIGHTING AND EXTERIOR OUTLETS AND LOW VOLTAGE LIGHTING.

CABLE INSTALLATION

NOT TO SCALE



NOT TO SCALE



NOT TO SCALE



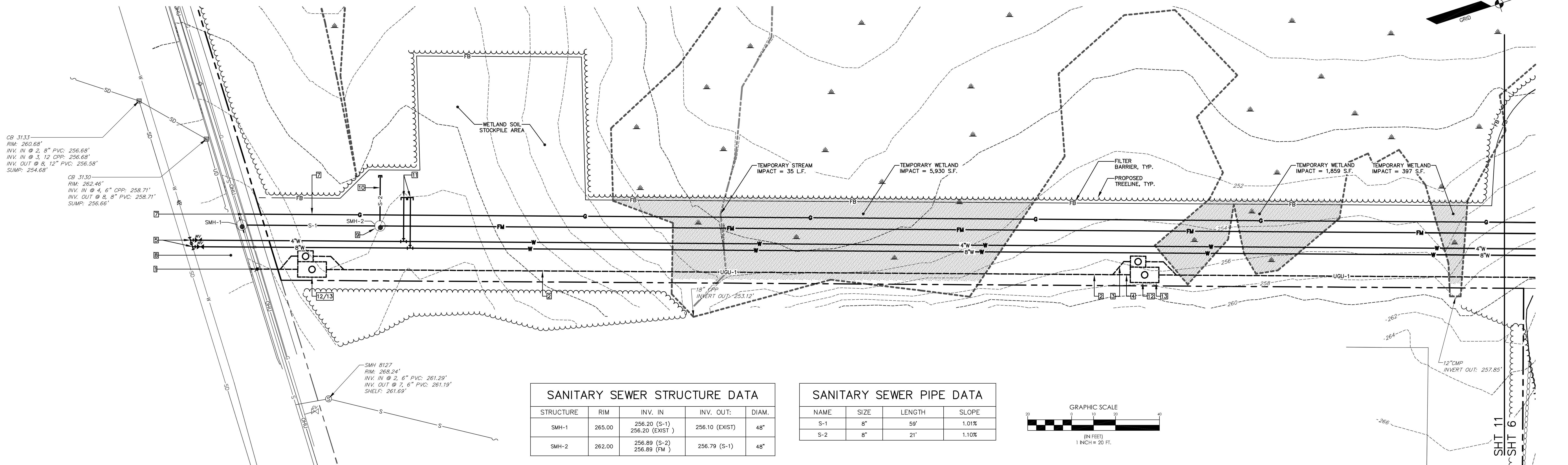
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SECTION

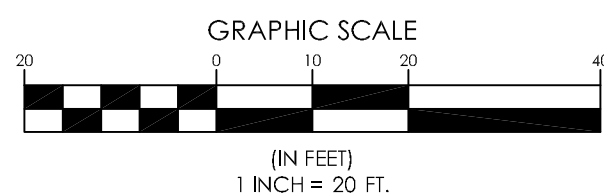
- NOTES:**
1. STRUCTURE SHALL BE 1,500 GALLON GREASE TRAP AS MANUFACTURED BY PRECAST CONCRETE PRODUCTS OF MAINE, INC. (ITEM #A-904) OR APPROVED EQUAL.
 2. CONCRETE 4000 PSI AT 28 DAYS.
 3. INLET & OUTLET PIPES SHALL BE ONE UNIT WITH THE TOP SECTION OF THE SEPTIC TANK.
 4. TANKS REINFORCED WITH 6X6X10 G.A.WIRE.
 5. KEYS JOINTS SEALED WITH ASPHALT SEALANT.
 6. HEAD & BUTYCE TANK TOPS REINFORCED WITH 1/2" REBAR ON 6" CENTERS EACH WAY.
 7. GREASE FILTER AVAILABLE.
 8. PROVIDE PRECAST SECTIONS AND EAST JORDAN FOUNDRY 1122 TYPE A FRAME AND COVER MARKED "SEWER".

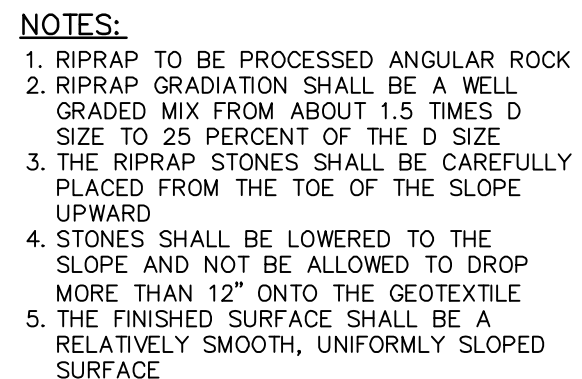
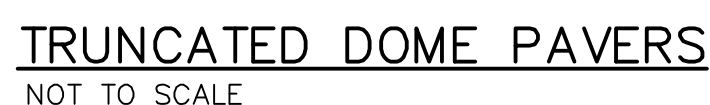
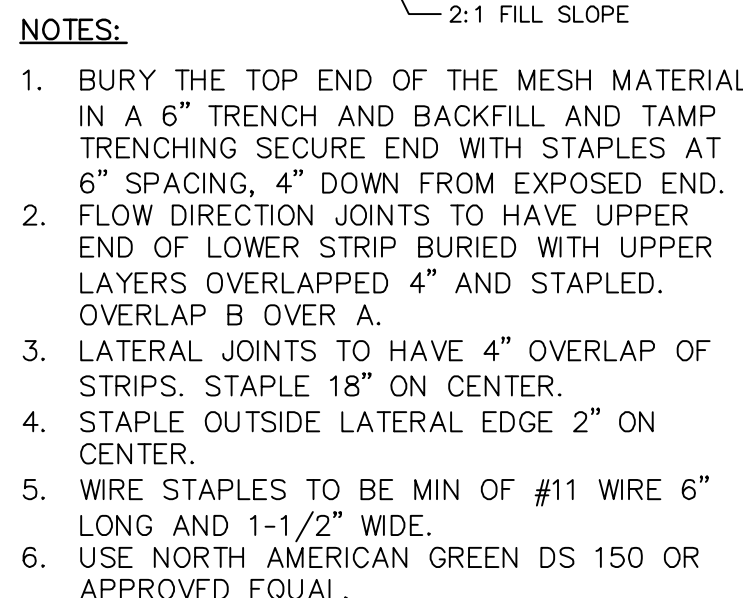
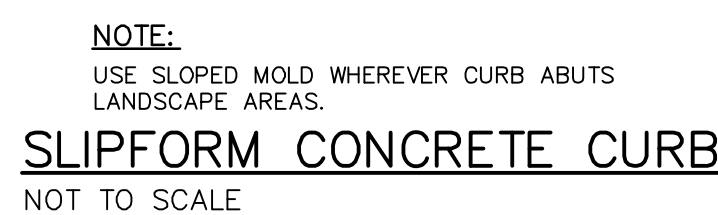
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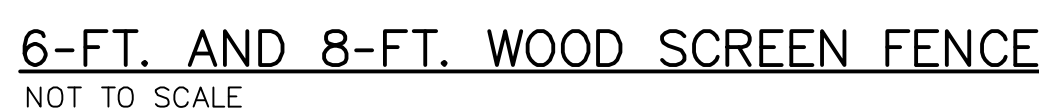
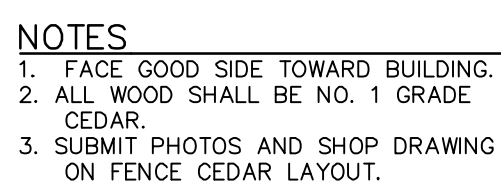
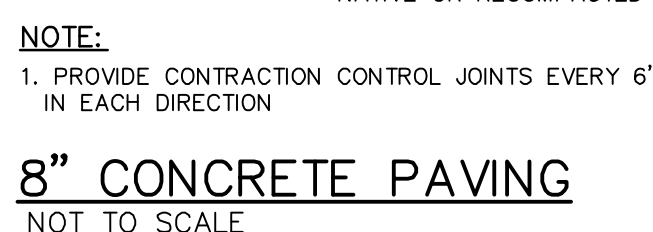
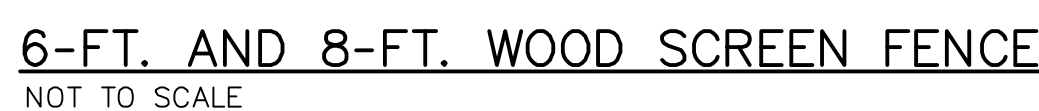
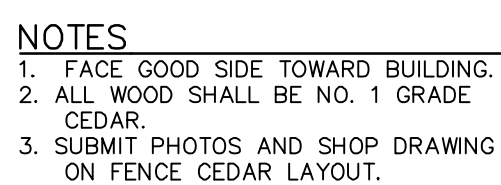
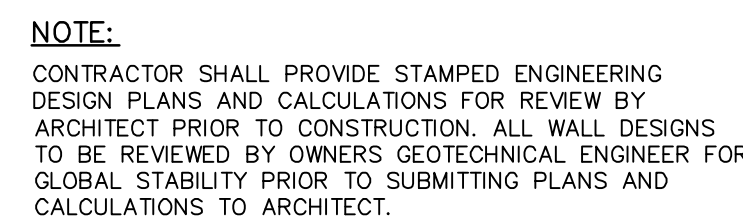
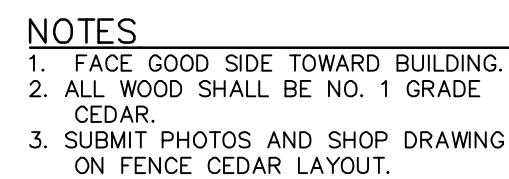
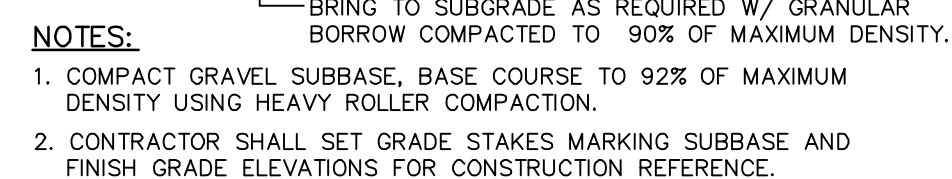
SANITARY SEWER STRUCTURE DATA				
STRUCTURE	RIM	INV. IN	INV. OUT:	DIAM.
SMH-1	265.00	256.20 (S-1) 256.20 (EXIST)	256.10 (EXIST)	48"
SMH-2	262.00	256.89 (S-2) 256.89 (FM)	256.79 (S-1)	48"

SANITARY SEWER PIPE DATA			
NAME	SIZE	LENGTH	SLOPE
S-1	8"	59'	1.01%
S-2	8"	21'	1.10%





CULVERT DIAMETER - D (IN.)	APRON LENGTH - L (FT.)	WIDTH - W1 (FT)	WIDTH - W2 (FT)	RIPRAP D50 (IN.)	RIPRAP THICKNESS (IN.)
12	8	3	9	6	14
15	10	4	12	6	14
18	13	5	15	7	16
24	18	6	20	8	18
36	29	9	32	11	25
42	33	11	37	12	27
48	39	12	43	16	36



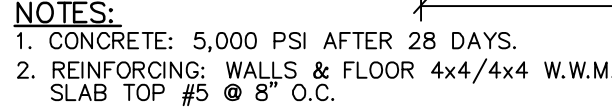


1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATIONS
2. PLACE BORROW MATERIAL IN 12" LIFTS COMPACTED TO 95% OF MAXIMUM
3. INSTALL RIPRAP AND EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.

SOIL BORING SUMMARY TABLE					
BORING NO.	EXIST. GRADE (FT.)	EXIST. SHWT		PROPOSED BMP STRUCTURE	UNDERDRAIN INVERT ELEV. (FT.)
		DEPTH (IN.)	ELEV. (FT.)		
11	251.00+/-	120	241.00+/-	UNDERDRAINED FILTER POND-USF-2	243.83
12	256.00+/-	48	251.00+/-	UNDERDRAINED FILTER POND-USF-1	253.83



1. CONSTRUCTION OF COMMON BORROW MATERIAL MEETING M.D.O.T. SPECIFICATION.
2. PLACE BORROW MATERIAL IN 12" LIFTS. COMPACTED TO 95% OF MAXIMUM DRY DENSITY.
3. EROSION CONTROL MESH WHERE SPECIFIED ON PLANS
4. LOAM, SEED, AND STABILIZE IN ACCORDANCE WITH SEDIMENTATION AND EROSION CONTROL PLAN.



PUMP STATION
NOT TO SCALE

- NOTES

- | | | | |
|-----|--|-----|--|
| 1. | LIFT STATION SHALL BE DUPLEX LIFT STATION PANEL AND CONTROLS FOR THE OPERATIONS OF 3.0 HP BARNES GRINDER OPERATING AT APPROXIMATELY 33.3 TO 33.5 PSI @ 1/2 THD. THE PUMPS ARE MODEL XGV30X2, 3-PHASE, 60 HZ, 230 VOLT, 3450 RPM AND 12.6 FLA. 4-2" IMPELLER. | 15. | ALL LIFT STATION PIPING SHALL BE FLANGED PIPING AND VALVE. |
| 2. | PUMPS SHALL HAVE BREAK AWAY FITTINGS. BREAK AWAY FITTINGS FOR NON-SPARKING PUMPS, HARD WIRE, WIRING, AND CONTROL PANEL TO BE EXPLOSION PROOF. | 16. | COAT EXTERIOR OF STRUCTURES WITH KOPPERS BITUMASTIC 3000 M OR EQUAL. |
| 3. | ALL UNDERGROUND ELECTRIC POWER LINES SHALL BE INSTALLED IN PVC CONDUIT. ABOVE GROUND SERVICES SHALL BE INSTALLED IN SCHEDULE 40 GALVANNEED CONDUIT. ALL WIRING SHALL MEET ALL ELECTRIC COMPANY. ALL ELECTRICAL WIRING SHALL MEET ALL LOCAL ELECTRICAL CODE REQUIREMENTS. | 17. | WET WELL SHALL BE INSTALLED ON A MINIMUM 12" BED OF SCREENED GRAVEL. |
| 4. | THE PANEL SHALL BE EQUIPPED WITH AN INNER DOOR THAT HAS ELABORATE METER WARNING LIGHTS FOR TEMPERATURE, SENSORS, CONTROL SWITCHES FOR THE INDIVIDUAL PUMPS (AUTO, OFF, AND RUN) AND A CONTROL SWITCH FOR THE ALARM WITH TEST AND SILENCE. | 18. | CONTRACTOR TO CONFIRM OPERATING ELEVATIONS WITH ENGINEER BEFORE ORDERING STATION. |
| 5. | THE MAIN BREAKERS (CONTROL AND PUMPS) AND FUSES FOR BOTH THE ALARM AND CONTROLS SHALL BE ACCESSIBLE WITHOUT OPENING THE INNER DOOR. | 19. | CONTRACTOR TO SUBMIT SPECIFICATIONS FOR PUMPS, CONTROL PANELS, AND ALARM FOR OWNER AND ENGINEERS APPROVAL. |
| 6. | THE PANEL SHALL HAVE BOTH A RED VISIBLE ALARM LIGHT AND AN AUDIBLE METER BELL ALARM. THE ENCLOSURE SHALL BE A FIBERGLASS NEMA 4X RATED, UL508A COMPLIANT LISTED AND APPROVED FOR THE PUMPS. A 1/2" W/8" W/8" SOLIDATECH PROVIDED ON THE INNER FACE OF THE PANEL DOOR. THE DOOR SHALL HAVE A WEATHER SEAL AND LOCKABLE LATCHES. | 20. | ELECTRIC SERVICES SHALL BE VERIFIED BY CONTRACTOR AND COORDINATED WITH OWNER, ELECTRIC COMPANY AND PUMP STATION MANUFACTURER PRIOR TO INSTALLATION. CONTRACTOR SHALL PROVIDE AND INSTALL ALL ELECTRICAL COMPONENTS REQUIRED FOR PUMP STATION MEETING APPLICABLE STATE, FEDERAL, AND LOCAL CODES. |
| 7. | THE PANEL SHALL HAVE THE REQUIRED CIRCUITRY, CONTROLLERS, CIRCUIT BREAKERS, DELAYS, MOTOR STARTERS, RELAYS, TERMINAL BLOCK AND GROUNDING REQUIRED TO OPERATE THE PUMPS IN AN ALTERNATING SEQUENCE. | 21. | PRIOR TO CONSTRUCTION, CONTRACTOR SHALL MEET ON-SITE WITH OWNER AND ENGINEER TO REVIEW LOCATION OF PUMP STATION AND VALVE PIT. DEPENDING ON PHYSICAL SITE FEATURES, THE ENGINEER RESERVES THE RIGHT TO MODIFY LOCATIONS. |
| 8. | THE PANEL SHALL BE MANUFACTURED BY PRIMEX CONTROLS OR APPROVED EQUIVALENT. | 22. | UPON INSTALLATION OF PUMP STATION, CONTRACTOR SHALL PROVIDE OWNER WITH THE FOLLOWING:
A. OPERATION AND MAINTENANCE MANUALS
B. ONE-YEAR WARRANTY ON ALL STRUCTURES, PUMP STATION MECHANICS AND ELECTRIC COMPONENTS, ALL PIPING AND CONNECTIONS. |
| 9. | THE PUMPS, CONTROLS, FLOATS AND FLOAT RACK SHALL BE SUPPLIED BY ONE DISTRIBUTOR OR MANUFACTURER. DISTRIBUTOR OR MANUFACTURER SUPPLYING EQUIPMENT SHALL CONFIRM ALL EQUIPMENT MEETS THE INTENT OF THIS SPECIFICATION, AND THAT ALL EQUIPMENT SUPPLIED IS COMPATIBLE FOR THIS SPECIFIC APPLICATION. ALL EQUIPMENT SUPPLIED REQUIRING FACTORY START-UP TO OBTAIN WARRANTY SHALL BE INCLUDED AND PERFORMED BY FACTORY AUTHORIZED PERSONNEL. ANY DEFICIENCIES SHALL BE ADDRESSED PRIOR TO FINAL ACCEPTANCE. | | |
| 10. | PUMP POWER/CONTROL CABLES AND FLOAT CABLES SHALL BE ROUTED TO THE WET WELL IN SEPARATE CONDUITS WITH THE PROPER EXPANSION JOINTS, SEAL OFFS, WATER-TIGHT JUNCTION BOXES WITH GORD GRIPS AND EXPANSION JOINTS, WIRE SIZING AND CONDUITS FEEDING AND LEAVING THE CONTROL PANEL SHALL BE PROPERLY SIZED, SHALL SUPPORT THE LOAD OF TWO PUMPS OPERATING AND MEET ALL APPLICABLE LOCAL & STATE ELECTRICAL CODES. | | |
| 11. | PUMPS SHALL BE PROVIDED WITH MOISTURE SENSORS MATCHED TO THE PUMPS. | | |
| 12. | FLOAT CONTROLS SHALL BE NON-MERCUARY MECHANICAL FLOATS. | | |
| 13. | CONCRETE: 5,000 PSI AFTER 28 DAYS. REINFORCING STEEL MIN. YIELD STRESS OF 40,000 PSI | | |
| 14. | REINFORCING: WALLS & FLOOR 4X4/4X4 W.W.M. SLAB TOP #5 @ 8" O.C. | | |



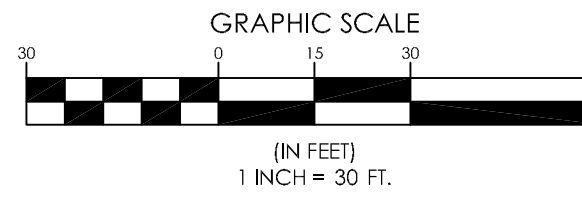
1. CONCRETE f'_c = 5000 psi. @ 28 DAYS WITH STEEL REINFORCEMENT
2. CONDUIT AND ANCHOR BOLTS PLACED AS REQUIRED PROVIDED BY ELECTRICAL CONTRACTOR
3. PROVIDE 2 COATS BITUMINOUS DAMPROOFING FOR ALL CONCRETE BELOW GRADE.
4. INSTALL BASE 3'-0" ABOVE FINISH GRADE IN LOCATIONS WHERE POLES ARE IN PARKING LOT PAVEMENT.
5. LIGHT POLE BASE AS MANUFACTURED BY SUPERIOR CONCRETE OR APPROVED EQUAL





- LEGEND**
- EXISTING
- PROPERTY LINE/R.O.W.
 - ABUTTER LINE/R.O.W.
 - DEED LINE/R.O.W.
 - IRON PIPE/ROD
 - SOILS
 - TP-1 TEST PIT
 - BUILDING
 - DECK/STEPS/OVERHANG
 - EDGE WETLAND
 - WETLANDS
 - EDGE PAVEMENT
 - EDGE CONCRETE
 - TREELINE
 - CONTOURS
 - STONE WALL
 - DECIDUOUS TREE
 - CONIFEROUS TREE
 - STORM DRAIN
 - DRAINAGE MANHOLE
 - CATCH BASIN

- LEGEND**
- WATERSHED BOUNDARY
 - TIME OF CONCENTRATION
 - REACH
 - WATERSHED LABEL
 - REACH
 - DETENTION POND
 - SOILS BOUNDARY



RICHARD L. WICK, P.E. 10668

SEBAGO TECHNICAL SERVICES, INC.

DESIGNED: DJS

CHECKED: RLM

A. WTC 3-12-18 SITE PLAN SUBMISSION TO CITY

REV. BY: DATE: STATUS:

THIS PLAN SHALL NOT BE MODIFIED WITHOUT WRITTEN PERMISSION FROM SEBAGO TECHNICAL SERVICES, INC. ANY ALTERATIONS, AUTHORIZED OR OTHERWISE, SHALL BE AT THE USER'S SOLE RISK AND WITHOUT LIABILITY TO SEBAGO TECHNICAL SERVICES, INC.

SEBAGO TECHNICAL SERVICES

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SOUTH PORTLAND, ME 04106

TEL: 207-200-2100

PRE DEVELOPMENT WATERSHED PLAN

OF: SCHOONER MEMORY CARE CENTER

STEVEN ROAD

AUBURN, MAINE

FOR: AUBURN MEMORY CARE, LLC

509 FOREST AVENUE

PORTLAND, MAINE 04112

14300SMP.dwg 14B PRE

PROJECT NO. 14300

SCALE 1"=30'

SHEET 1 OF 2

