



Date: October 13, 2020
To: Planning Board
From: Kellie Walsh, Town Planner
Subject: Marc P. Demontigny Trustee (owner) and PMA Property Group LLC (applicant) – Review for acceptance and consideration of final approval for a site plan and conditional use permit to construct four 4,600 square foot and one 1,550 square foot self-storage buildings along with associated site improvements. The parcel is located at an unnumbered parcel on Power Street in the Industrial District. Tax Map 43, Lot 30.

BACKGROUND/PROPOSAL:

The applicant is before the Board seeking approval of a site plan and conditional use permit to construct four 4,600 square foot and one 1,550 square foot self-storage buildings along with associated site improvements. The property totals approximately 3.07 acres and undeveloped. The parcel lies within the Industrial Zoning district. This will be the first public hearing for the application.

PLANNING BOARD REVIEW:

The Board shall review this application based on Sections 7.13.3 and 7.14.3 of the Milford Zoning Ordinance. For your convenience, the pertinent standards and conditions from both sections are listed below.

SELF STORAGE FACILITY, SECTION 7.13.3 CONDITIONAL USE PERMIT

In addition to the standards and conditions stated in Section 7.14.0 of the Milford Zoning Ordinance, the following criteria must be met for a Conditional Use Permit to be issued by the Planning Board.

- A. Granting of the application would meet some public need or convenience.
- B. The property in question is reasonably suited for the use requested.
- C. There must be appropriate provision for access facilities adequate for the estimated traffic from public streets and sidewalks, so as to assure public safety and to avoid traffic congestion.
- D. The building design and layout is compatible with the surrounding properties.
- E. Landscaping and screening shall provide adequate visual mitigation to abutting properties.

CONDITONAL USE PERMITS, SECTION 7.14.3 STANDARDS APPLICABLE TO ALL CONDITIONAL USE PERMITS

- A. That the property in question is in conformance with the dimensional requirements of the zone or is determined to be legally non-conforming and that the proposed use is consistent with the Milford Master Plan.
- B. That the proposal meets the purposes of the Ordinance under which the application is proposed.
- C. That there will be no significant adverse impacts resulting from the proposed use upon the public health, safety and general welfare of the neighborhood and the Town of Milford.
- D. That the proposed use will not be more objectionable to nearby properties by reason of noise, fumes, vibration, or inappropriate lighting than any use of the property permitted under the existing Zoning District Ordinances.
- E. That the proposed use will not adversely affect the ground water resource of Milford, in particular the Groundwater Protection District areas as defined in Section 6.01.0 of this Ordinance.

APPLICATION STATUS:

The application is complete and ready to be accepted.

NOTICES:

Notices were sent to all property abutters on October 8, 2020.

WAIVERS:

No waivers have been requested.

ZONING:

The parcel is within the Industrial district. The intent of the Industrial District is to provide areas for manufacturing, processing, assembly, wholesaling, research and development.

TRAFFIC AND ACCESS MANAGEMENT:

Access and egress to the proposed storage facility will be from a proposed curb cut on Power Street. The internal layout of the storage facility buildings and driveway provide sufficient width/area for emergency and large transport vehicles.

PARKING:

The proposed parking appears to meet the minimum requirements set forth in Section 6.05.4 Table of off Street Parking based on the below calculation.

Maintenance office = 3 spaces per 1,000SF @ 200/1,000SF = 0.2 x 3 = 1 space

The plan proposes 3 parking spaces. The Board should discuss with the applicant the intended storage uses and determine if additional parking is required.

OPEN SPACE/LANDSCAPING:

As per Section 5.03.7 of the Zoning Ordinance, open space shall be provided for all uses, other than single-family and two-family dwellings in an amount equal not less than thirty (30) percent of the total lot area.

The applicant should confirm the total percentage/acreage of open space.

The applicant has submitted a landscaping plan for the property. The plan proposes the installation of fifteen (15) trees. This meets the minimum requirement of Section 6.08.7.A.02 which requires for one (1) tree per thirty (30) feet of landscaped strip along the parking/access way.

The applicant has also provided a landscaped strip at least ten (10) feet in width between the paved area and abutting property lines or ROW except where driveways or other openings may be required.

Additionally the applicant proposes more than forty-six (46) shrubs along the building frontage. This exceeds the minimum requirements of Section 6.08.6 which requires for one (1) shrub for every five (5) feet of building frontage.

DRAINAGE/STORMWATER MANAGEMENT

Subject to resolution of the comments cited in the engineering consultant's October 13, 2020 memorandum (See attached), the stormwater system design adequately mitigates the increase in runoff rate and volume caused by the proposed development as required by the Town's Regulations.

BUILDING ELEVATIONS

The applicant has provided the proposed building elevations for review and consideration by the Board (see attached). The proposed elevations do not provide the appropriate scale, massing and from per the Milford Zoning Ordinance or Development Regulations.

INTERDEPARTMENTAL REVIEWS:

Ambulance: No concerns/issues.

Assessing: No concerns/issues.

Building Department: No comments

Code Enforcement/ Health: No comments.

Conservation Commission: See attached comments.

Fire Department: No concerns/issues.

Heritage Commission: Comments due by 10/16/2020.

Police Department: No concerns/issues.

Public Works: A driveway culvert may be required. This will be reviewed during the driveway permitting process.

Water/Sewer Utilities: No comments.

Drainage/Stormwater: See attached letter from KV Partners.

Community Development / Planning:

Conditional Use Permit Questions/Comments

1. Zoning Ordinance, Section 7.13.3.A. Please discuss how the proposed self-storage facilities meet some public need or convenience.
2. Zoning Ordinance, Section 7.13.3.C. Please discuss the anticipated number of vehicle trips related to the proposed self-storage use.
3. Zoning Ordinance, Section 7.13.3.D. Please discuss how the design and layout is compatible with surrounding properties.

Site Plan Comments and Questions.

4. Building elevations. Please refer to Milford Development Regulations, Architectural Design Guidelines Section 6.04.3.D (Roof forms and materials).
5. Building Elevations. Please refer to Zoning Ordinance Self-Storage Facilities Standards, Section 7.13.4. A. 8. In order to promote visual compatibility with commercial development allowed in commercial and industrial zones, Self-Storage Facility buildings shall incorporate appropriate landscaping/screening and architectural design features, such as: massing; proportion; façade modulation; exterior building materials and detailing; varied roofline; pedestrian scale; etc.

STAFF RECOMMENDATIONS:

The applicant should be prepared to address the comments raised by the Planning Board, Conservation Commission, Town Consultants, Staff, and public pertaining to the Site Plan. Staff would recommend continuing the application to the next regularly scheduled meeting to allow the applicant time to address departmental and peer review comments.



Self-storage as a use will not create any undue noise, fumes, vibrations, or inappropriate lighting. There is no production associated with the use and the proposed lighting plan meets applicable regulations.

5. That the proposed use will not adversely affect the ground water resource of Milford, in particular the Groundwater Protection District areas as defined in Section 6.01.0 of this ordinance.

Self-storage is a low intensive use which would comply with the requirements of the Groundwater Protection District. A stormwater analysis has been performed and water treatment has been proposed in accordance with NHDES best management practices.

7.13.3 CONDITIONAL USE PERMIT

In addition to the standards and conditions stated in Section 7.14.0 of the Milford Zoning Ordinance, the following criteria must be met for a Conditional Use Permit to be issued by the Planning Board.

A. Granting of the application would meet some public need or convenience.

There are existing multi-family dwellings throughout in the vicinity of the proposed property which could benefit from self-storage.

B. The property in question is reasonably suited for the use requested.

The property can sufficiently accommodate the proposed self-storage facility as depicted in the submitted design plans. The property is bordered by an existing industrial use and utility easement.

C. There must be appropriate provision for access facilities adequate for the estimated traffic from public streets and sidewalks, so as to assure public safety and to avoid traffic congestion.

The self-storage use is a very low traffic generator and can easily be accommodated by the existing infrastructure in place along Powers Street. Moreover, self-storage inherently would not lend itself to pedestrian traffic since there is no need to access the use without a vehicle.

D. The building design and layout is compatible with the surrounding properties.

The proposed area is surrounded by industrial uses which would be complimentary to self-storage.

E. Landscaping and screening shall provide adequate visual mitigation to abutting properties.

The site plans include a proposed landscaping plan which provide appropriate buffering visual mitigation as required.

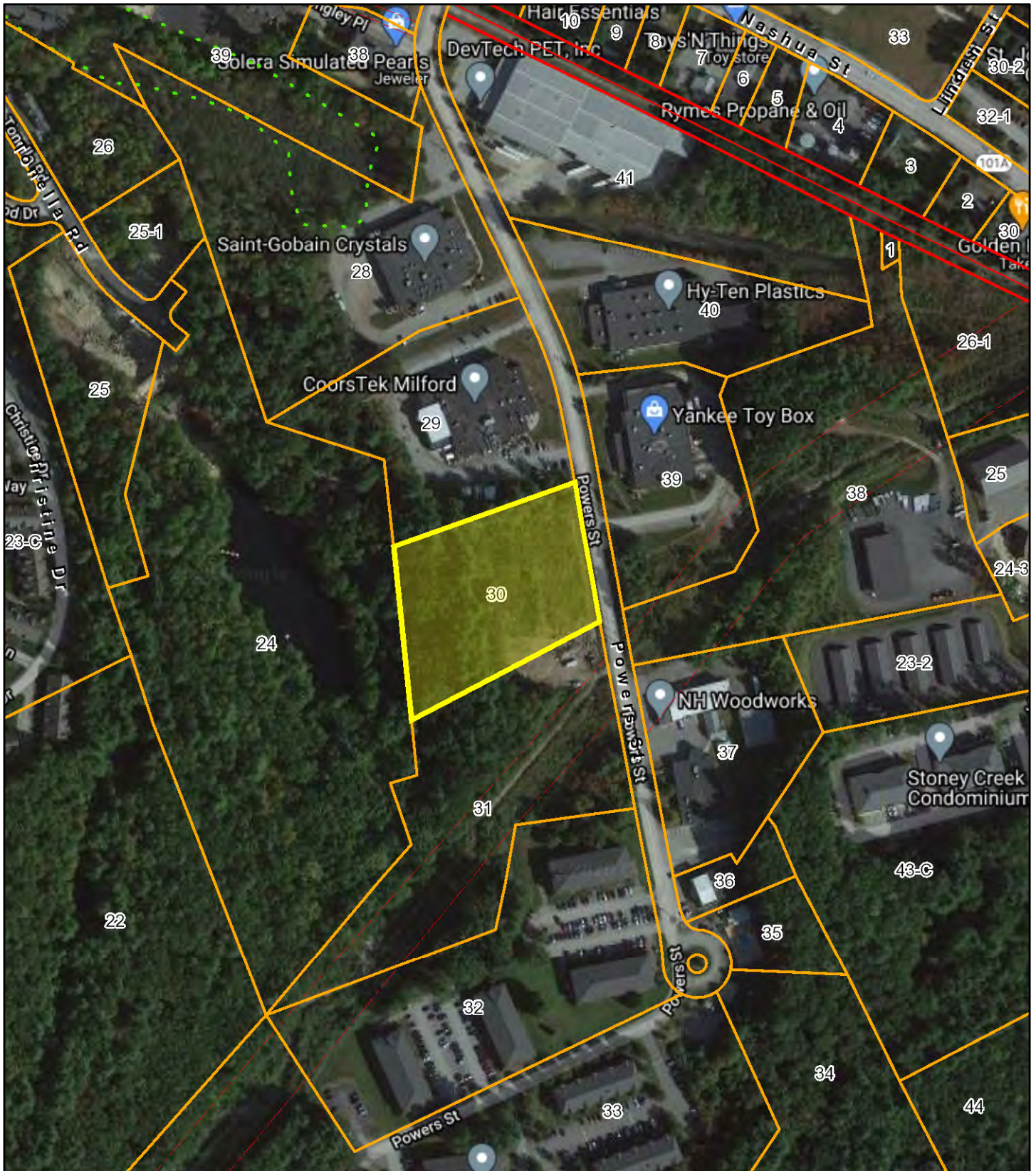


Milford, NH

1 inch = 276 Feet



October 16, 2020



Data shown on this map is provided for planning and informational purposes only. The municipality and CAI Technologies are not responsible for any use for other purposes or misuse or misrepresentation of this map.

From: [Rick Riendeau](#)
To: [Kellie Walsh](#)
Subject: RE: IDR - Power Street Self Storage
Date: Monday, October 5, 2020 3:00:19 PM

Kellie,

I may need a driveway culvert, Will review with driveway permit.

Rick Riendeau
Director of Public Works
Milford, NH
rriendeau@milford.nh.gov
W 603-673-1662
F 603-673-2206

"Public Works makes it happen"



From: Kellie Walsh
Sent: Wednesday, September 30, 2020 2:59 PM
To: Chris Costantino; Conservation Commission; Craig Frye; David Palance; Eric Schelberg; Jamie Ramsay; Jason Smedick; Kathy Doherty; Ken Flaherty; Kevin Stetson; Marti Noel; Mike Viola; Rick Riendeau
Subject: IDR - Power Street Self Storage

Attached please find the IDR for a site plan application. Please provide comment by **October 14**

Thank you in advance.

Regards,

Kellie Walsh
Town Planner
Community Development
1 Union Square
Milford NH 03055
603-249-0620
kwalsh@milford.nh.gov

October 13, 2020

Kellie Walsh, Town Planner
Town of Milford
Community Development
1 Union Square
Milford NH 03055

Re: Powers Street Self Storage Site Plan (Tax Map 43, Lot 30) – Site Plan Review

Dear Ms. Walsh:

We reviewed the thirteen-sheet plan set dated September 16, 2020 and the Stormwater Management Report dated September 15, 2020 and prepared by The Dubay Group, Inc. in accordance with our agreement with the Town. Based on that review, we offer the following comments:

SITE PLAN COMMENTS

1. The proposed retaining wall is called off on the plans as a boulder retaining wall, but the details and plan symbols indicate a Redi-Rock block wall system. The retaining wall, when considering the traffic loads above, will likely require geogrids for reinforcement. Depict the geogrid locations on the plan and verify that the geogrids will not interfere with the proposed Stormtech chamber system.
2. The plan details for the isolator row do not appear to be consistent with the proposed system shown on the plans (no manifold inlet). Please check and revise the details to be consistent with the system layout.
3. Clarify where the Nyloplast vs. precast catch basins will be used. Both details are shown but call outs on the plan are not clear where they apply.
4. Clarify where the weirs will be in the inlet catch basins to the Stormtech system and what materials the weirs will be constructed of (stainless steel or galvanized).
5. An infiltration trench was shown on the details, but it is not clear if or where it is proposed. Please clarify.
6. Add at detail for the inspection port that is indicated as “by design engineer” on the plans.

7. The infiltration system indicated in the calculations is for 100 SC-740 units, but the detail shows only 87 (4 rows of 22 less units missing at inlet locations). Please revise the plans or calculations to be consistent.
8. Test pit and ground water table information was not found. This information is required to evaluate the effectiveness of the Stormtech system.

STORMWATER PERMIT COMMENTS

1. Item No. 7 a. and b. – Test pit and infiltration information not found.

If you have any questions or need any additional information, please feel free to contact me at 603-413-6650 or on my cell phone at 603-731-1562 or by email at MVignale@kvpllc.com.

Sincerely,

KV Partners LLC



Michael S. Vignale, P.E.
Principal Engineer

Town of Milford
CONSERVATION COMMISSION

Town Hall
1 Union Square
Milford, NH 03055-4240
(603) 249-0628
Fax (603) 673-2273
www.milford.nh.gov
conservation@milford.nh.gov



MEMORANDUM

October 16, 2020

To: Milford Planning Board

**Re: Interdepartmental Review Map 43 Lot 30
Power Street Self Storage**

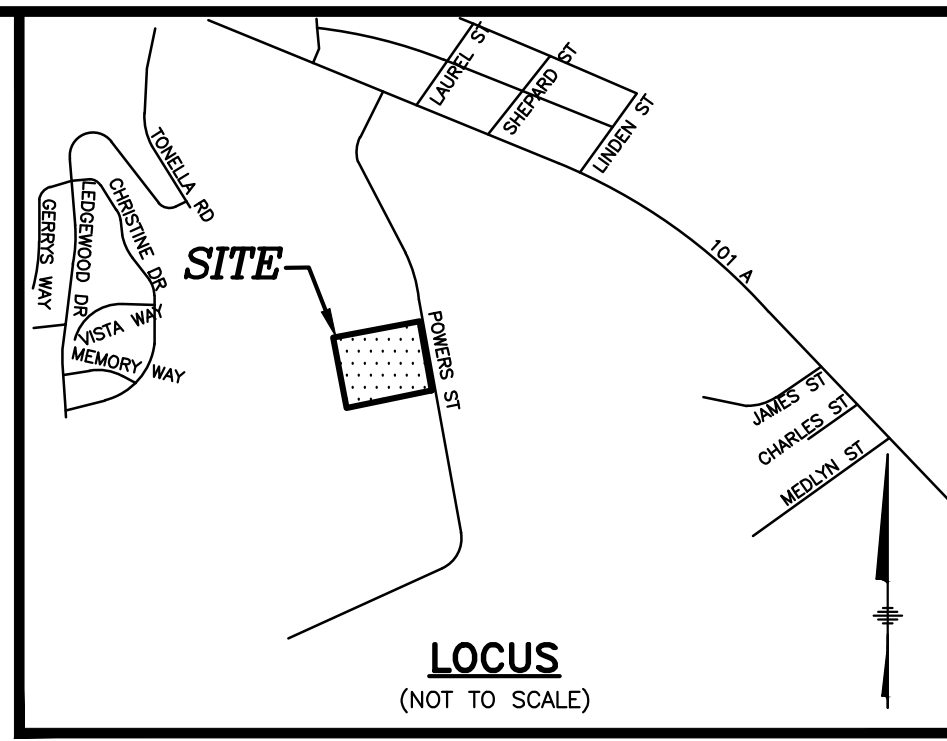
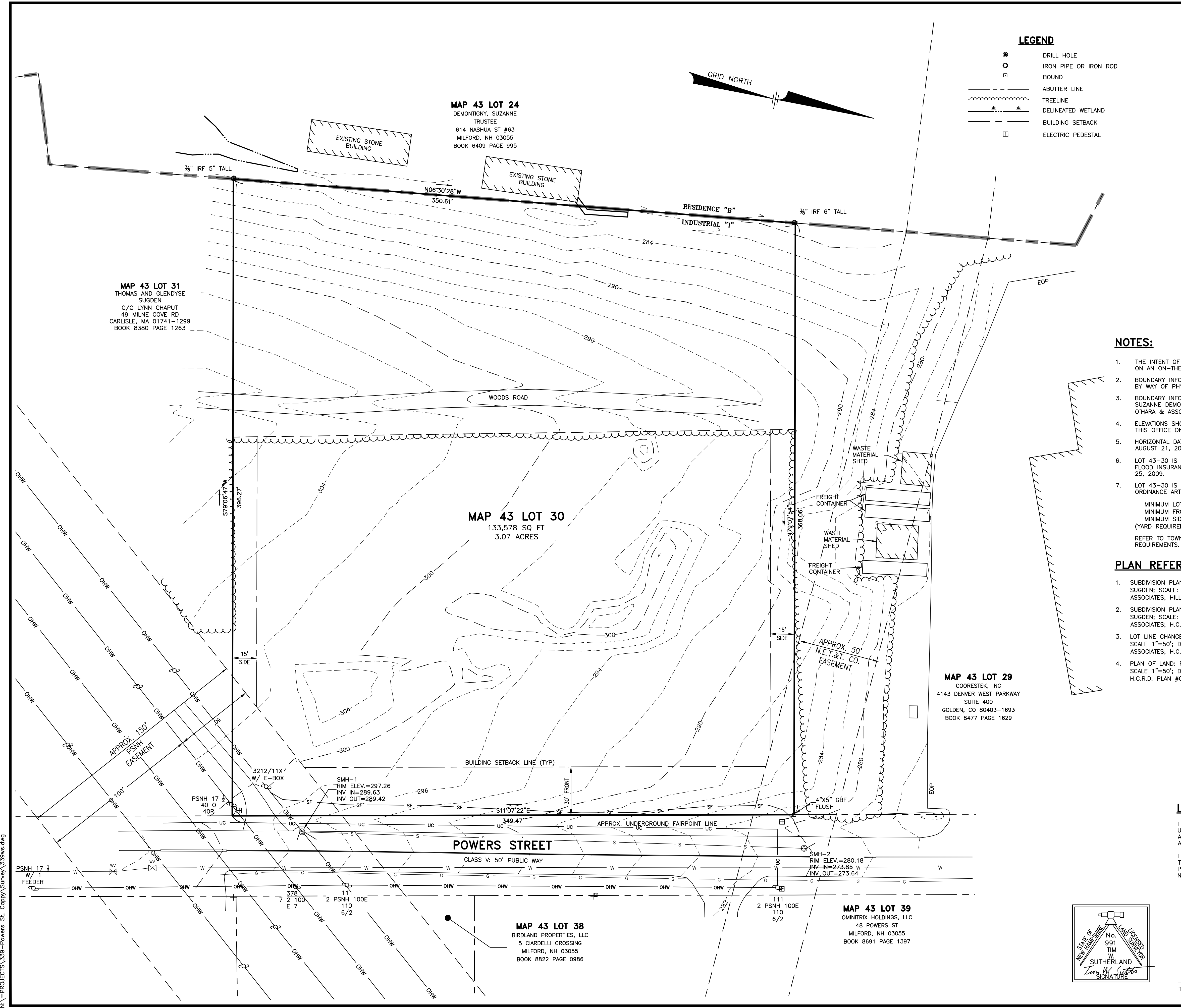
To the Board,

The Conservation Commission reviewed this plan at their October 10 meeting. The Commission has no comment other than to acknowledge the good landscaping plan.

The Commission appreciates the opportunity to review this application. We look forward to seeing a well-designed project that improves the natural resource functionality of the site.

Very Respectfully,

Chris Costantino
Milford Conservation Commission Alternate | Coordinator



- LEGEND**
- DRILL HOLE
 - IRON PIPE OR IRON ROD
 - BOUND
 - ABUTTER LINE
 - TREELINE
 - DELINEATED WETLAND
 - BUILDING SETBACK
 - ELECTRIC PEDESTAL

The Dubay Group, Inc.
 136 Harvey Road, Bldg B101
 Londonderry, NH 03053
 603-458-6462

Engineers
 Planners
 Surveyors

TheDubayGroup.com

NOTES:

- THE INTENT OF THIS PLAN IS TO SHOW THE EXISTING CONDITIONS FOR MAP 43 LOT 30, BASED ON AN ON-THE-GROUND SURVEY PERFORMED BY THIS OFFICE AUGUST 2018.
 - BOUNDARY INFORMATION FOR LOT 43-30 IS BASED ON A RETRACEMENT SURVEY BY THIS OFFICE BY WAY OF PHYSICAL EVIDENCE, RECORDED DEEDS AND PLANS.
 - BOUNDARY INFORMATION SHOWN FOR LOT 43-24 IS TAKEN FROM A SURVEY AND PLAN FOR THE SUZANNE DEMONTIGNY REVOCABLE TRUST OF 2000, DATED MAY 2009, PREPARED BY DAVID M. O'HARA & ASSOCIATES. PLAN NOT RECORDED.
 - ELEVATIONS SHOWN HEREON ARE BASED ON NAVD88 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON AUGUST 21, 2018.
 - HORIZONTAL DATUM BASED ON NAD83 PER GPS OBSERVATIONS PERFORMED BY THIS OFFICE ON AUGUST 21, 2018.
 - LOT 43-30 IS NOT WITHIN A SPECIAL FLOOD HAZARD AREA (100 YEAR FLOOD ZONE) PER FLOOD INSURANCE RATE MAP NUMBER 33011C0459D, WITH AN EFFECTIVE DATE OF SEPTEMBER 25, 2009.
 - LOT 43-30 IS ZONED UNDER INDUSTRIAL "I" DISTRICT PER TOWN OF MILFORD ZONING ORDINANCE ARTICLE 5.03.0.
- MINIMUM LOT SIZE: 20,000 SQ. FT. (SERVICED BY TOWN WATER/SEWER)
 MINIMUM FRONT SETBACK: 30'
 MINIMUM SIDE/REAR SETBACK: 15'
 (YARD REQUIREMENTS WRITTEN UNDER ARTICLE 5.03.6.)
- REFER TO TOWN OF MILFORD ZONING ORDINANCE AND SITE PLAN REGULATIONS FOR ADDITIONAL REQUIREMENTS.

PLAN REFERENCES:

- SUBDIVISION PLAN OF LAND: POWERS STREET, MILFORD, NH; SURVEYED FOR THOMAS SUGDEN; SCALE: 1" = 50'; DATED APRIL 1977; PREPARED BY W. ROBERT NOLTE & ASSOCIATES; HILLSBOROUGH COUNTY REGISTRY OF DEEDS PLAN #10132.
- SUBDIVISION PLAN OF LAND: POWERS STREET, MILFORD, NH; SURVEYED FOR THOMAS SUGDEN; SCALE: 1" = 50'; DATED OCTOBER 1977; PREPARED BY W. ROBERT NOLTE & ASSOCIATES; H.C.R.D. PLAN #10921.
- LOT LINE CHANGE: POWERS STREET, MILFORD, NH; SURVEYED FOR GARDOC COMPANY; SCALE 1"=50'; DATED NOVEMBER 1979; PREPARED BY W. ROBERT NOLTE & ASSOCIATES; H.C.R.D. PLAN #12970.
- PLAN OF LAND: POWERS STREET, MILFORD, NH; SURVEYED FOR THOMAS W. SUGDEN; SCALE 1"=50'; DATED APRIL 1973; PREPARED BY W. ROBERT NOLTE & ASSOCIATES; H.C.R.D. PLAN #06734.

REVISIONS:

REV.	DATE:	COMMENT:	BY:

DRAWN BY: MNW
 CHECKED BY: TWS
 DATE: SEP 16, 2020
 SCALE: 1"=30'
 FILE: 339ws
 DEED REF: BK 8985 PG 2356

PROJECT:
**POWERS STREET
 SELF STORAGE**
 MAP 43 LOT 30
 POWERS ST
 MILFORD, NH 03055

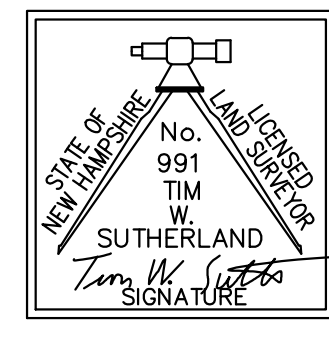
FOR

**PMA PROPERTY
 GROUP, LLC**
 614 NASHUA ST #127
 MILFORD, NH 03055

LAND SURVEYORS CERTIFICATION:

I CERTIFY THAT THIS SURVEY AND PLAN WAS PREPARED BY ME OR THOSE UNDER MY DIRECT SUPERVISION AND THAT THIS PLAN IS THE RESULT OF AN ACTUAL SURVEY PERFORMED ON THE GROUND IN AUGUST, 2018 AND HAS AN ERROR OF CLOSURE OF NOT MORE THAN ONE PART IN TEN THOUSAND.

I CERTIFY THAT THIS SURVEY PLAN IS NOT A SUBDIVISION PURSUANT TO THIS TITLE AND THAT THE LINES OF STREETS AND WAYS SHOWN ARE THOSE OF PUBLIC OR PRIVATE STREETS OR WAYS ALREADY ESTABLISHED AND THAT NO NEW WAYS ARE SHOWN.



Tim W. Sutherland
 TIMOTHY W. SUTHERLAND, LLS #991

9/10/20
 DATE

SHEET TITLE:
**EXISTING
 CONDITIONS
 PLAN**

PROJECT #339 SHEET 2 of 13

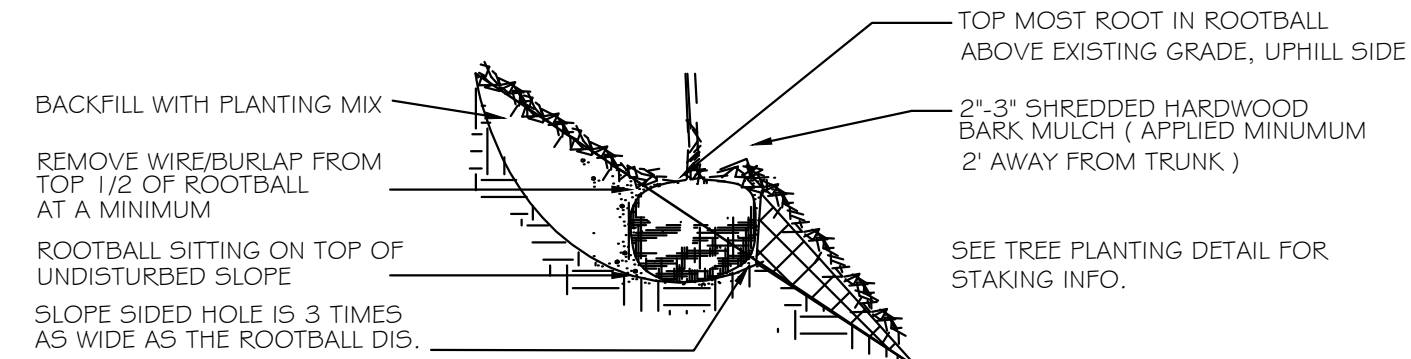
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LANDSCAPE NOTES:

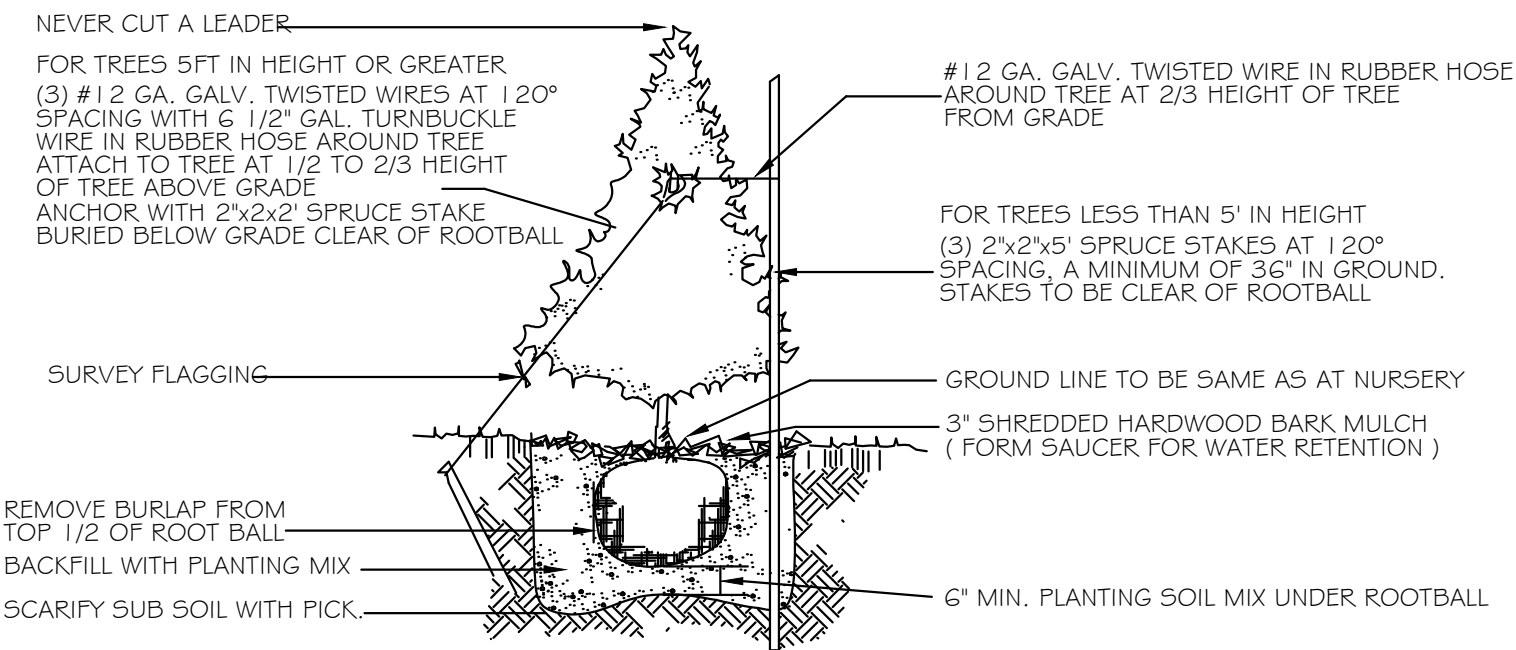
- PRIOR TO CONSTRUCTION THE CONTRACTOR IS RESPONSIBLE FOR VERIFICATION OF ALL EXISTING AND NEWLY INSTALLED UTILITIES AND SHALL NOTIFY THE OWNERS REPRESENTATIVE OF ANY CONFLICTS.
- LANDSCAPING SHOWN ON THIS PLAN HAS BEEN DESIGNED TO COMPLY WITH THE TOWN OF MILFORD LANDSCAPE REGULATIONS.
- WHEREVER POSSIBLE EXISTING TREES SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION AS SHOWN.
- THE PROPOSED DECIDUOUS TREES SHALL BE A MIN. 2.5"-3.5" CALIPER WITH A MINIMUM HEIGHT OF 12', EVERGREEN TREES A MINIMUM OF 6' HIGH AND SHRUBS 2' AT TIME OF PLANTING.
- ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED WITH A MINIMUM OF 4-6" SUITABLE LOAM, EXCEPT UNDER THE MULCH BEDS. SLOPES GREATER THAN 3:1 SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET.
- PLANTS SHALL NOT BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED WITHIN THE IMMEDIATE AREA OF THE PLANTING.
- ALL TREES SHALL BE BALLED AND BURLAP UNLESS OTHERWISE NOTED.
- ANY PROPOSED PLANT MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE, THE TOWN OF MILFORD STAFF AND THE LANDSCAPE ARCHITECT.
- WHERE APPLICABLE THE CONTRACTOR SHALL HAVE ALL FALL TRANSPLANTING HAZARD PLANTS DUG IN THE SPRING. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PLANTING AT CORRECT GRADES AND ALIGNMENT. LAYOUT TO BE APPROVED BY OWNERS REPRESENTATIVE PRIOR TO INSTALLATION.
- PLANTS SHALL BE TYPICAL OF THEIR SPECIES AND VARIETY; HAVE NORMAL GROWTH HABITS; WELL DEVELOPED BRANCHES, DENSELY FOLIATED, VIGOROUS ROOT SYSTEMS AND BE FREE FROM DEFECTS AND INJURIES.
- CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
- ALL PLANT MATERIAL SHALL BE GUARANTEED BY THE CONTRACTOR TO BE IN VIGOROUS GROWING CONDITION. PROVISION SHALL BE MADE FOR A GROWTH GUARANTEE OF AT LEAST ONE YEAR FROM THE DATE OF ACCEPTANCE FOR TREES AND SHRUBS. REPLACEMENTS SHALL BE MADE AT THE BEGINNING OF THE FIRST SUCCEEDING PLANTING SEASON. ALL REPLACEMENTS SHALL HAVE A GUARANTEE EQUAL TO THAT STATED ABOVE.
- INSOFAR AS IT IS PRACTICABLE, PLANT MATERIAL SHALL BE PLANTED ON THE DAY OF DELIVERY. IN THE EVENT THIS IS NOT POSSIBLE, THE CONTRACTOR SHALL PROTECT STOCK NOT PLANTED. PLANTS SHALL NOT REMAIN UNPLANTED FOR LONGER THAN A THREE DAY PERIOD AFTER DELIVERY. ANY PLANTS NOT INSTALLED DURING THIS PERIOD WILL BE REJECTED.
- QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI Z60.1 "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSEYMEN, INC.
- ALL PLANTS SHALL BE PLANTED IN AMENDED TOP SOIL THAT IS THOROUGHLY WATERED AND TAMPED AS BACK FILLING PROGRESSES. PLANTING MIX TO BE AS SHOWN ON PLANTING DETAILS. LARGE PLANTING AREAS TO INCORPORATE FERTILIZER AND SOIL CONDITIONERS AS STATED IN PLANTING SPECIFICATIONS.
- PLANTS SHALL NOT BE BOUND WITH WIRE OR ROPE AT ANY TIME SO AS TO DAMAGE THE BARK OR BREAK BRANCHES. PLANTS SHALL BE HANDLED FROM THE BOTTOM OF THE BALL ONLY.
- PLANTING OPERATIONS SHALL BE PERFORMED DURING PERIODS WITHIN THE PLANTING SEASON WHEN WEATHER AND SOIL CONDITIONS ARE SUITABLE AND IN ACCORDANCE WITH ACCEPTED LOCAL PRACTICE. PLANTS SHALL NOT BE INSTALLED IN TOPSOIL THAT IS IN A MUDDY OR FROZEN CONDITION. ALL PLANT MATERIAL SHALL BE SPRAYED WITH "WILT-PRUF" OR EQUAL AS PER MANUFACTURER'S INSTRUCTIONS.
- NO PLANT, EXCEPT GROUND COVERS/PERENNIALS, SHALL BE PLANTED LESS THAN TWO FEET FROM EXISTING STRUCTURES AND SIDEWALKS.
- SET ALL PLANTS PLUMB AND STRAIGHT. SET AT SUCH LEVEL THAT, A NORMAL OR NATURAL RELATIONSHIP TO THE CROWN OF THE PLANT WITH THE GROUND SURFACE WILL BE ESTABLISHED. LOCATE PLANT IN THE CENTER OF THE PIT.
- ALL EXISTING TREES TO REMAIN SHALL BE PRUNED TO REMOVE ANY DAMAGED BRANCHES AS A RESULT OF CONSTRUCTION OPERATIONS. ALL EXISTING TREES SHALL BE FERTILIZED WITH A REGULAR GARDEN FERTILIZER (5-10-5) UPON COMPLETION OF WORK. THE ENTIRE LIMB OF ANY DAMAGED BRANCH SHALL BE CUT OFF AT THE TRUNK. CONTRACTOR TO ENSURE THAT CUTS ARE SMOOTH AND STRAIGHT. ANY EXPOSED ROOTS SHALL BE CUT BACK WITH SHARP TOOLS AND FILLED AROUND WITH TOPSOIL. COMPLETELY SATURATE THESE AREAS WITH WATER. ROOTS SHALL NOT BE LEFT EXPOSED FOR MORE THAN ONE (1) DAY. CONTRACTOR IS TO PROTECT ALL EXISTING TREES TO REMAIN BY ERECTING TREE PROTECTION FENCE AT THE DRIP LINE. THIS WILL ENSURE NO COMPACTION OF THE ROOT MASS.
- ALL PLANTING BEDS SHALL BE MULCHED WITH 3" LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH. MULCH SHALL NOT COVER ROOT FLARE OF TREES.
- THE PURPOSE OF THIS PLAN IS FOR LANDSCAPE PURPOSES ONLY.
- THE OWNER AND THEIR REPRESENTATIVE SHALL BE RESPONSIBLE FOR PROVIDING, PROTECTING AND MAINTAINING ALL LANDSCAPING IN HEALTHY AND GROWING CONDITION, AND REPLACING IT WHEN NECESSARY TO INSURE CONTINUOUS CONFORMANCE WITH THESE GUIDELINES. ANY LANDSCAPE ELEMENT THAT DIES, OR IS OTHERWISE REMOVED, SHALL BE PROMPTLY REPLACED WITH THE SAME, IF NOT SIMILAR TO, HEIGHT OR TEXTURE ELEMENT AS ORIGINALLY INTENDED. IN ADDITION, LANDSCAPED AREAS SHALL BE KEPT FREE OF ALL DEBRIS, RUBBISH, WEEDS AND OVERGROWN TURF GRASS. IF THE OWNERSHIP OF A SITE IS CONVEYED TO A NEW PROPERTY OWNER, THE NEW OWNER SHALL BE RESPONSIBLE FOR MAINTAINING ALL LANDSCAPING IN ACCORDANCE WITH THE APPROVED FINAL LANDSCAPING PLAN.
- ALL NEW PLANTING AREAS, LAWN AND SOD SHALL BE PROVIDED WITH A TEMPORARY IRRIGATION SYSTEM. DRIP IRRIGATION SHALL BE USED IN ALL PLANTING AREAS.
- INVASIVE SPECIES AND/OR TOXIC PLANTS SUCH AS POISON IVY, POISON OAK, POISON SUMAC AND/OR GIANT HOG WEED SHALL BE MANAGED ACCORDING TO ACCEPTED HORTICULTURAL TECHNIQUES AND PROVISIONS CREATED BY THE STATE OF NH AND THE STANDARDS OF ANSI A300.7.

LANDSCAPE LEGEND

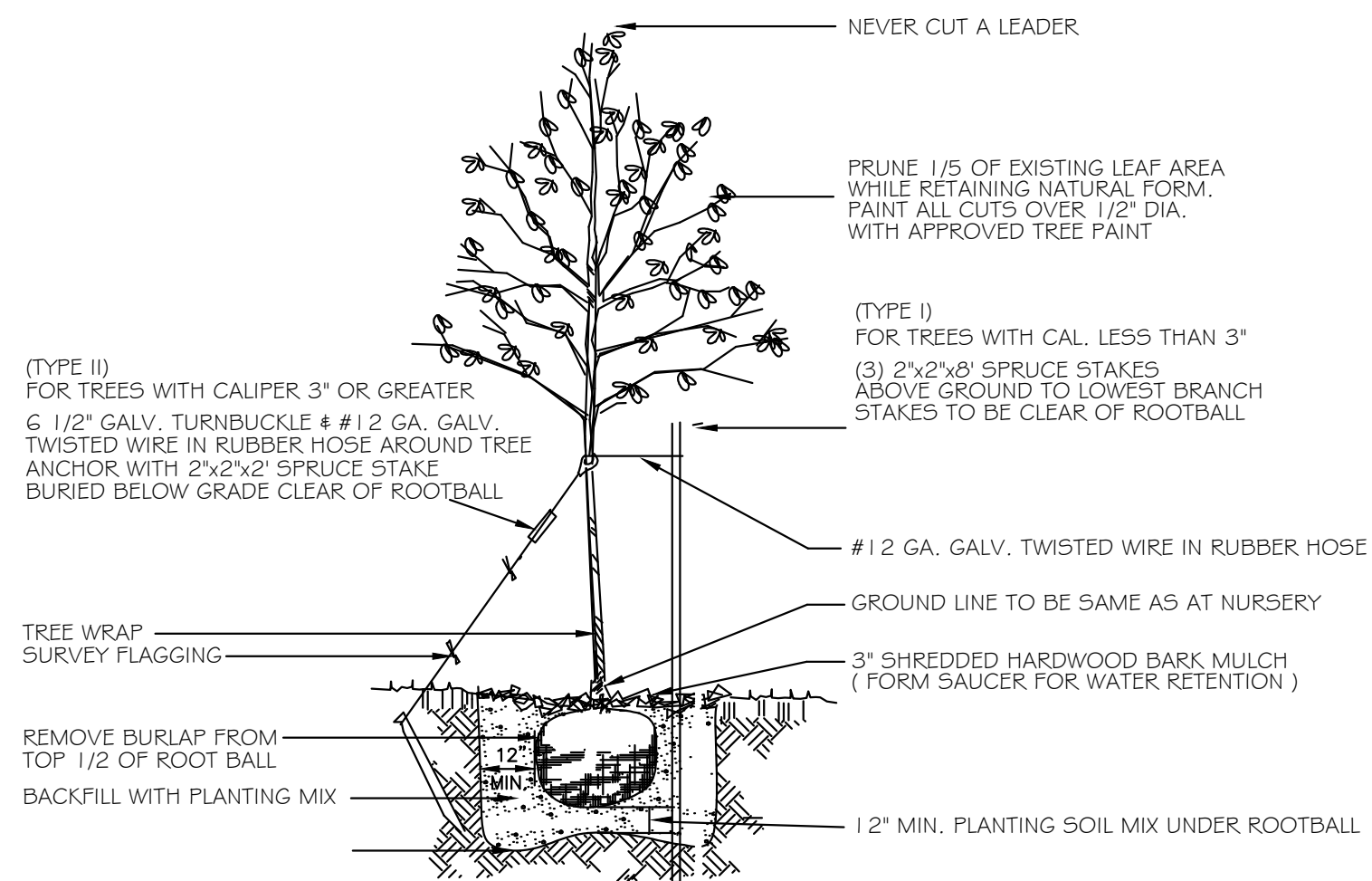
	4	ACER RUBRUM BOHALL / BOWHALL RED MAPLE	2.5" CAL. B4B	10'-15'	40'-60'
	4	ACER RUBRUM 'KARPICK' / KARPICK RED MAPLE	2.5" CAL. B4B	40'-60'	15'-20'
	7	QUERCUS PALUSTRIS 'GREEN PILLAR' / GREEN PILLAR PIN OAK	2.5" CAL. B4B	40'-60'	10'-15'
	4	JUNIPERUS VIRGINIANA / EASTERN RED CEDAR	6" HT. B4B	30'-40'	15'-20'
	7	JUNIPERUS VIRGINIANA 'GREY OWL' / GREY OWL JUNIPER	30" B4B	2'-3'	6'-8'
	13	JUNIPERUS CHINENSIS 'SEAGREEN' / SEAGREEN JUNIPER	30" B4B	5'-6'	4'-5'
	2	VIBURNUM DENTANUM / ARROWWOOD VIBURNUM	4" HT. B4B	8'-10'	8'-10'
	4	CARYOPTERIS CLANDONENSIS DARK KNIGHT / DARK KNIGHT SPIREA	5 GAL.	3'-4'	4'-5'
	12	RHUS AROMATICA 'GROW LOW' / GROW LOW SUMAC	3 GAL.	18"-24"	6'-8'
	9	PENNISETUM AKOPECUROIDES HAMELN-DWARF FOUNTAIN GRASS	2 GAL.	2'-3'	2'-3'



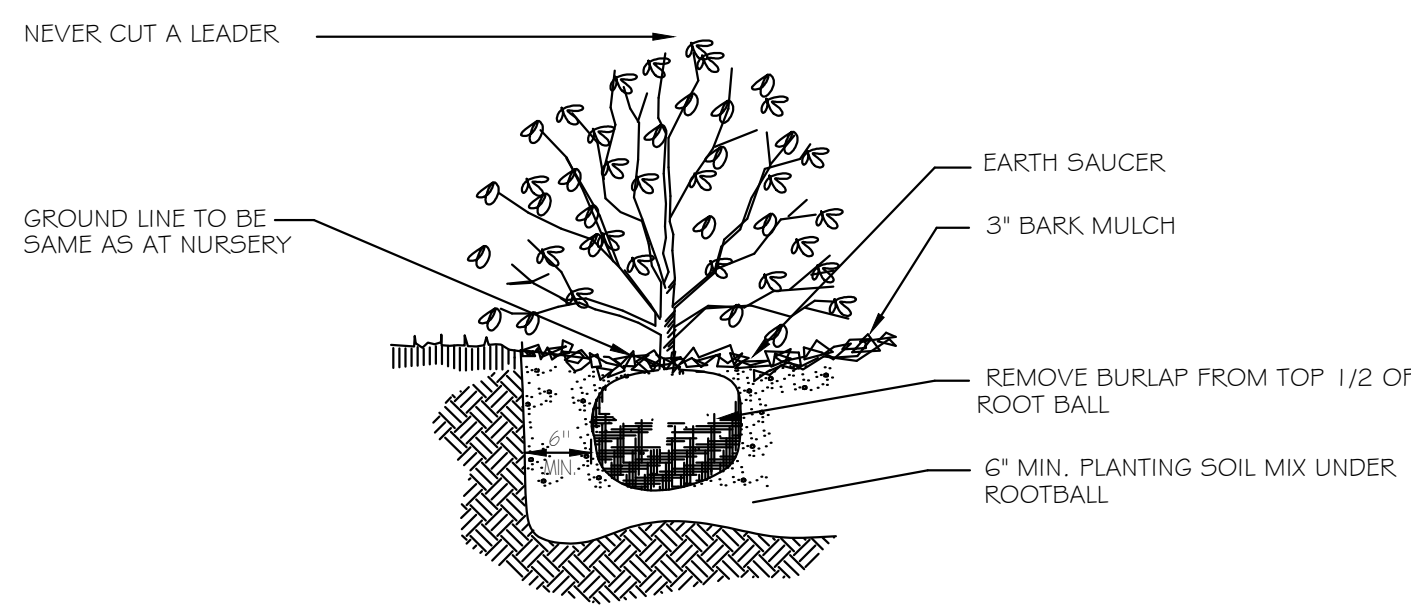
SLOPE PLANTING DETAIL NTS



EVERGREEN PLANTING DETAIL NTS



DECIDUOUS TREE PLANTING DETAIL NTS



SHRUB PLANTING DETAIL NTS



The Dubai Group, Inc.
136 Harvey Road, Bldg B101
Londonderry, NH 03053
603-458-6462

Engineers
Planners
Surveyors
TheDubayGroup.com

REVISIONS:

REV.	DATE:	COMMENT:	BY:

DRAWN BY: REK
CHECKED BY:
DATE: SEP 16, 2020
SCALE: 1"=20'
FILE: 339-LANDSCAPE
DEED REF: BK 8985 PG 2356

PROJECT:

**POWERS STREET
SELF STORAGE**
MAP 43 LOT 30
POWERS ST
MILFORD, NH 03055

FOR

**PMA PROPERTY
GROUP, LLC**
614 NASHUA ST #127
MILFORD, NH 03055

SHEET TITLE:

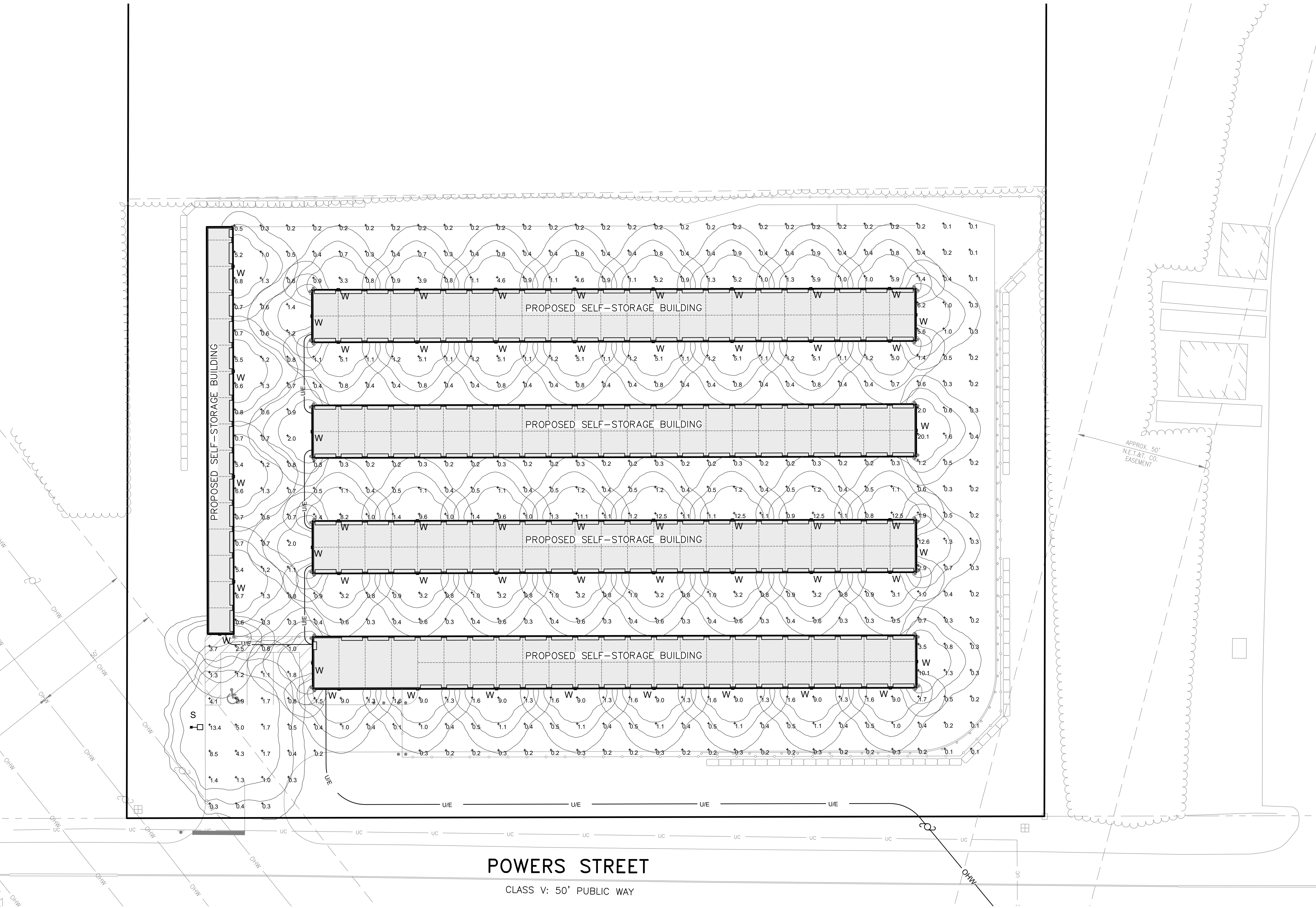
**LANDSCAPE
DETAILS**



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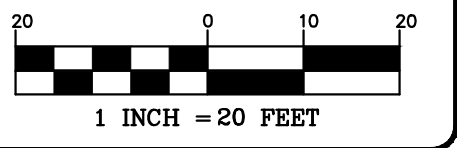
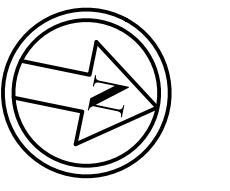
Symbol	Label	Quantity	Manufacturer	Catalog Number	Description	Lamp	Number Lamps	Filename	Lumens Per Lamp	Light Loss Factor	Wattage
□	S	1	LSI INDUSTRIES, INC	XDLS-FT-LED-SS-CW	Full Cut Off Pole mounted LED Luminaire with 12 ft. round steel pole		1	XDLS-FT-LED-SS-CW.ies	6544	0.9	71.2
□	W	53	LSI INDUSTRIES, INC.	TSWP-LED-02L-40			1	TSWP-LED-02L-40.ies	2282	0.9	20.42

Statistics						
Description	Symbol	Max	Min	Max/Min	Avg/Min	Avg
Paved	+	20.1 fc	0.1 fc	201.0:1	15.0:1	1.5 fc



The Dubai Group, Inc.
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REVISIONS:			
REV.	DATE	COMMENT	BY

DRAWN BY: SJK
 CHECKED BY: DGM
 DATE: SEP 16, 2020
 SCALE: 1"=20'
 FILE: 339-LIGHTING
 DEED REF: BK 8985 PG 2356

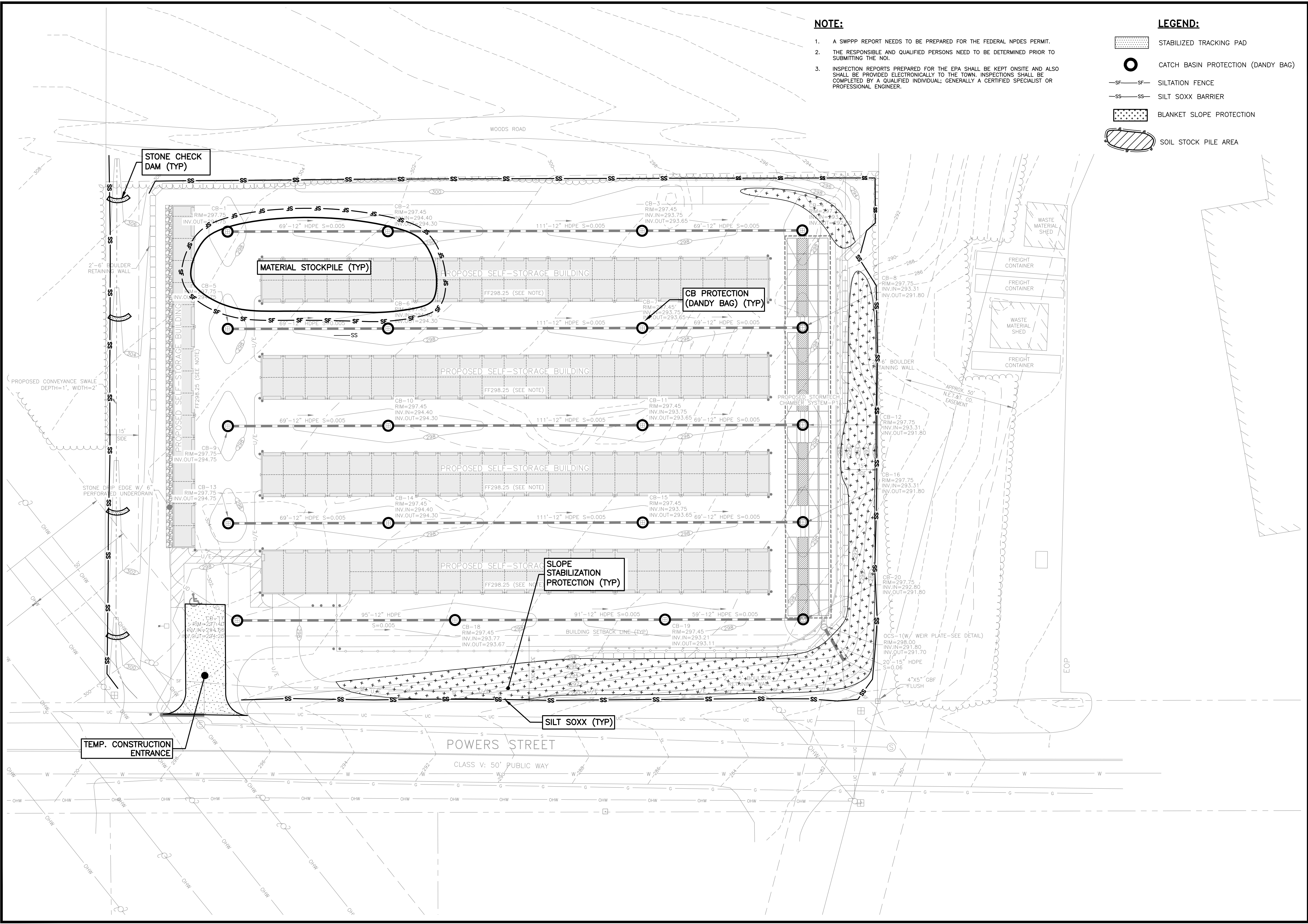
PROJECT:
POWERS STREET SELF STORAGE
 MAP 43 LOT 30
 POWERS ST
 MILFORD, NH 03055

FOR
PMA PROPERTY GROUP, LLC
 614 NASHUA ST #127
 MILFORD, NH 03055

SHEET TITLE:
LIGHTING PLAN

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N:\PROJECTS\339-Powers St. Copy\DWG\CURRENT\339-EROSION.dwg

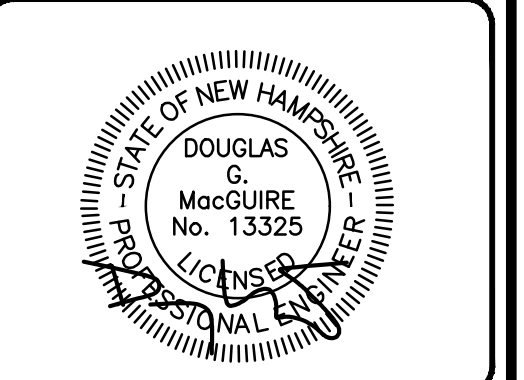
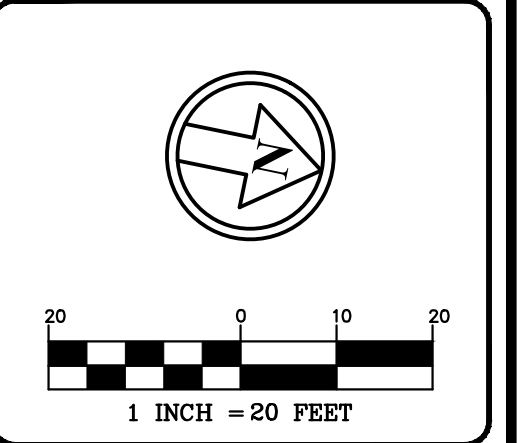


- NOTE:**
1. A SWPPP REPORT NEEDS TO BE PREPARED FOR THE FEDERAL NPDES PERMIT.
 2. THE RESPONSIBLE AND QUALIFIED PERSONS NEED TO BE DETERMINED PRIOR TO SUBMITTING THE NOI.
 3. INSPECTION REPORTS PREPARED FOR THE EPA SHALL BE KEPT ONSITE AND ALSO SHALL BE PROVIDED ELECTRONICALLY TO THE TOWN. INSPECTIONS SHALL BE COMPLETED BY A QUALIFIED INDIVIDUAL; GENERALLY A CERTIFIED SPECIALIST OR PROFESSIONAL ENGINEER.

- LEGEND:**
- [Stippled Area] STABILIZED TRACKING PAD
 - [Circle with X] CATCH BASIN PROTECTION (DANDY BAG)
 - [Dashed Line] SILTATION FENCE
 - [Dashed Line with X] SILT SOXX BARRIER
 - [Stippled Area] BLANKET SLOPE PROTECTION
 - [Hatched Area] SOIL STOCK PILE AREA

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REVISIONS:

REV.	DATE	COMMENT	BY

DRAWN BY: JMM
 CHECKED BY: DGM
 DATE: SEP 16, 2020
 SCALE: 1"=20'
 FILE: 339-EROSION
 DEED REF: BK 8985 PG 2356

PROJECT:
POWERS STREET SELF STORAGE
 MAP 43 LOT 30
 POWERS ST
 MILFORD, NH 03055

FOR

PMA PROPERTY GROUP, LLC
 614 NASHUA ST #127
 MILFORD, NH 03055

SHEET TITLE:
EROSION CONTROL PLAN

PROJECT #339 SHEET 8 of 13

EROSION CONTROL NOTES

CONSTRUCTION SEQUENCE

- PRIOR TO CONSTRUCTION, AN INITIAL PRE CONSTRUCTION MEETING(S) SHALL TAKE PLACE WITH THE CONTRACTOR, OWNER, TOWN AGENTS.
- THIS SITE WILL REQUIRE A USEPA NPDES PERMIT FOR STORMWATER DISCHARGE FOR THE SITE CONSTRUCTION SINCE THE DISTURBANCE EXCEEDS ONE ACRE. THE CONSTRUCTION SITE OPERATOR SHALL DEVELOP AND IMPLEMENT A CONSTRUCTION STORM WATER POLLUTION PREVENTION PLAN (SWPPP), WHICH SHALL REMAIN ON SITE AND MADE ACCESSIBLE TO THE PUBLIC. A COMPLETED NOTICE OF TERMINATION (NOT) SHALL BE SUBMITTED TO NPDES PERMITTING AUTHORITY WITHIN 30 DAYS AFTER EITHER OF THE FOLLOWING CONDITIONS HAVE BEEN MET: FINAL STABILIZATION HAS BEEN ACHIEVED ON ALL PORTIONS OF THE SITE FOR WHICH THE PERMITTEE IS RESPONSIBLE; OR ANOTHER OPERATOR/PERMITTEE HAS ASSUMED CONTROL OVER ALL AREAS OF THE SITE THAT HAVE NOT BEEN FINALLY STABILIZED.
- INSTALL PERIMETER CONTROLS, I.E. SILT FENCE AND/OR SILTSOXX AROUND THE LIMITS OF DISTURBANCE BEFORE ANY EARTH MOVING OPERATION.
- CONSTRUCT TEMPORARY CONSTRUCTION EXIT.
- CLEAR AND GRUB WITHIN AREAS OF DISTURBANCE UNLESS OTHERWISE NOTED.
- REMOVE AND STOCKPILE MATERIALS AS REQUIRED. STOCKPILE SHALL BE SURROUNDED WITH AN EROSION CONTROL DEVICE TO PREVENT EROSION. STOCKPILE AREAS ARE LIMITED AND THUS MANAGEMENT OF MATERIALS WILL BE REQUIRED.
- SHAPE PROPOSED DRAINAGE PONDS, DITCHES AND/OR SWALES.
- PERFORM ROUGH SITE GRADING. INSTALL DRAINAGE SYSTEMS AND UTILITIES.
- INSTALL UNDERGROUND UTILITIES AND PLACE EROSION CONTROL MEASURES AROUND ANY CATCH BASINS PRIOR TO DIRECTING ANY RUNOFF TO THEM. DRAINAGE SYSTEMS SHALL BE CONSTRUCTED AND STABILIZED PRIOR TO DIRECTING ANY FLOW TO THEM. ALL SIDE SLOPES SHALL BE STABILIZED WITHIN 72 HOURS.
- LAYOUT AND INSTALL ALL BURIED UTILITIES AND SERVICES UP TO 10' OF THE PROPOSED BUILDING FOUNDATIONS. CAP AND MARK TERMINATIONS OR LOG SWING TIES.
- FINISH GRADE SITE, BACKFILL ROAD SUBBASE GRAVEL IN. PROVIDE TEMPORARY EROSION PROTECTION TO DITCHES AND SWALES WHERE APPLICABLE, IN THE FORM OF MULCHING, JUTE MATTING OR STONE CHECK DAMS.
- ANY PERMANENT DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- PLACE BINDER LAYER OF PAVEMENT.
- AFTER ALL DRAINAGE AND ROADWAY IMPROVEMENTS (NOT INCLUDING FINAL LAYER OF PAVEMENT) HAVE BEEN COMPLETED, BEGIN CONSTRUCTION OF THE BUILDING FOUNDATIONS AND CONNECT TO SITE UTILITIES. BEGIN BUILDING CONSTRUCTION.
- PLANT LANDSCAPING IN AREAS OUT OF WAY OF BUILDING CONSTRUCTION. PREPARE AND STABILIZE FINAL SITE GRADING BY ADDING TOPSOIL, SEED, MULCH AND FERTILIZER.
- AFTER BUILDINGS ARE COMPLETED, FINISH ALL REMAINING LANDSCAPED WORK.
- CONSTRUCT ASPHALT WEARING COURSE.
- REMOVE TRAPPED SEDIMENTS FROM COLLECTION DEVICES AS APPROPRIATE, AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES UPON COMPLETION OF FINAL STABILIZATION OF THE SITE.

GENERAL CONSTRUCTION NOTES

- THE TEMPORARY BMPs ASSOCIATED WITH THIS PROJECT WILL BE THE RESPONSIBILITY OF THE CONTRACTOR AND LANDOWNER, WHO WILL BE RESPONSIBLE FOR INSPECTION, OPERATION, AND MAINTENANCE.
- EROSION CONTROL PROCEDURES SHALL CONFORM TO SECTION 645 OF THE "STANDARD SPECIFICATION FOR ROAD AND BRIDGE CONSTRUCTION OF THE NHDOT". EROSION CONTROL SHALL BE INSTALLED DOWNHILL OF ALL AREAS WHERE WORK WILL EXPOSE UNPROTECTED SOIL TO PREVENT SEDIMENT FROM ENTERING CATCH BASINS, DRAINAGE STRUCTURES AND/OR DRAINAGE WAYS. INSTALL TEMPORARY SEDIMENT AND EROSION CONTROL MEASURES PRIOR TO ANY EARTH MOVING OPERATIONS. THE CONTRACTOR SHALL MANAGE THE PROJECT IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
- EROSION CONTROL DEVICES SHALL BE INSTALLED WHERE REQUIRED PRIOR TO ANY ON-SITE GRADING OR DISTURBANCE OF EXISTING SURFACE MATERIAL. EROSION CONTROL MEASURES SHALL BE MAINTAINED DURING DEVELOPMENT AND SHALL BE CHECKED PERIODICALLY AND EXCESS SILT SHALL BE REMOVED.
- ALL DISTURBED AREAS WHICH ARE FINISH GRADED SHALL BE LOAMED (6" MINIMUM) AND SEEDED. SEE SEEDING AND FERTILIZER SPECIFICATION. SEE SLOPE DESIGN AND/OR LANDSCAPE PLAN FOR ADDITIONAL INFORMATION.
- ANY DISTURBED AREAS WHICH ARE TO BE LEFT TEMPORARILY, AND WHICH WILL BE REGRADED LATER SHALL BE MACHINED STRAW MULCHED AND SEEDED WITH SLOPE STABILIZATION SEED MIXTURE TO PREVENT EROSION. STRAW MULCH SHALL BE APPLIED AT A RATE OF 2 TONS/ACRE.
- ALL DRAINAGE SYSTEMS (DITCHES, SWALES, DRAINAGE PONDS/BASINS, ETC.) SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM. STORMWATER FLOWS ARE NOT TO BE DIRECTED TO THESE SYSTEMS UNTIL CONTRIBUTING AREAS HAVE ALSO BEEN FULLY STABILIZED.
- CONTRACTOR SHALL PROVIDE DUST CONTROL MEASURES IN ACCORDANCE WITH NHDES, EPA & TOWN REQUIREMENTS FOR THE DURATION OF THE PROJECT. WATER FOR DUST CONTROL SHALL BE PROVIDED ON SITE. FUGITIVE DUST IS CONTROLLED IN ACCORDANCE WITH ENV-A 1000.
- ALL EROSION CONTROLS ARE TO BE INSPECTED WEEKLY AND AFTER 0.5" OR GREATER OF RAINFALL WITHIN A 24 HOUR PERIOD.
- ALL FILLS SHALL BE PLACED AND COMPACTED TO 90% MODIFIED PROCTOR DENSITY IN LAYERS NOT EXCEEDING 18 INCHES IN THICKNESS UNLESS OTHERWISE NOTED. FILL MATERIAL SHALL BE FREE FROM STUMPS, WOOD, ROOTS, ETC. AND SHALL NOT BE PLACED ON FROZEN FOUNDATION SUBGRADE.
- SILT FENCES AND/OR SILTSOXX SHALL BE PERIODICALLY INSPECTED DURING THE LIFE OF THE PROJECT AND AFTER EACH STORM. ALL DAMAGED SILT FENCES AND/OR SILTSOXX SHALL BE REPAIRED. SEDIMENT DEPOSITS SHALL BE PERIODICALLY REMOVED AND DISPOSED IN A SECURE LOCATION.
- PAVED AREAS MUST BE KEPT CLEAN AT ALL TIMES.
- ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA.
- THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT IN NO CASE SHALL EXCEED 5 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE STABILIZED. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 72 HOURS AFTER FINAL GRADING. EXPOSURE OF UNSTABILIZED SOILS SHALL BE TEMPORARILY STABILIZED AS SOON AS POSSIBLE BUT NO LATER THAN 45 DAYS OF INITIAL DISTURBANCE.
- WINTERIZATION EFFORTS FOR AREAS NOT STABILIZED BY NOV. 1ST SHALL BE MADE BY THE APPROPRIATE USE OF MATTING, BLANKETS, MULCH AND SEEDING.
- AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS HAS BEEN INSTALLED IN AREAS TO BE PAVED;
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
 - A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS BEEN INSTALLED; OR

D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

- IF, DURING CONSTRUCTION, IT BECOMES APPARENT THAT ADDITIONAL EROSION CONTROL MEASURES ARE REQUIRED TO STOP ANY EROSION ON THE CONSTRUCTION SITE DUE TO ACTUAL SITE CONDITIONS, THE CONTRACTOR SHALL BE REQUIRED TO IMMEDIATELY INSTALL AND MAINTAIN THE NECESSARY EROSION PROTECTION.

SEEDING SPECIFICATION

- TEMPORARY SEED
 - TEMPORARY VEGETATIVE COVER SHOULD BE APPLIED WHERE EXPOSED SOIL SURFACES WILL NOT BE FINAL GRADED WITHIN 45 DAYS.
 - SEED BED PREPARATION SHALL BE IN ACCORDANCE WITH THE NHDES STORMWATER MANAGEMENT MANUAL, VOLUME 3, TEMPORARY VEGETATION SECTION.
- SEEDING MIXTURE

MIXTURE	SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
WINTER RYE	WINTER RYE	112	2.50
	OATS	80	2.00
	ANNUAL RYEGRASS	40	1.00
	PERENNIAL RYEGRASS	30	0.17
	TOTAL	262	5.67
- SEEDING SCHEDULE
 - SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES.
 - PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST. IF SEEDING CANNOT BE DONE WITHIN THE SPECIFIED SEEDING DATES, MULCH ACCORDING TO THE NEW HAMPSHIRE STORMWATER MANAGEMENT MANUAL, VOLUME 3, CONSTRUCTION PHASE EROSION AND SEDIMENT CONTROLS AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.
- ESTABLISHING A STAND OF GRASS
 - STONES AND TRASH SHOULD BE REMOVED FROM LOAMED AREAS SO AS NOT TO INTERFERE WITH THE SEEDING PROCESS.
 - WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
 - IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHOULD BE APPLIED DURING THE GROWING SEASON.
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TEST RECOMMENDATIONS. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 600 POUNDS PER ACRE OR 13.8 POUNDS PER 1,000 SQUARE FEET OF LOW PHOSPHATE FERTILIZER (N-P205-K20) OR EQUIVALENT. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET).
 - FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER
- SEED SHOULD BE SPREAD UNIFORMLY BY A METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDING HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER.
 - INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE AND AMOUNT OF INOCULANTS.
 - NORMAL SEEDING DEPTH IS FROM 1/4 TO 1/2 INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING.
 - WHERE FEASIBLE, EXCEPT WHERE EITHER A CULTIPACKER TYPE SEEDER OR HYDROSEEDER IS USED, THE SEEDBED SHOULD BE FIRMED FOLLOWING SEEDING OPERATIONS WITH A ROLLER, OR LIGHT DRAG.
 - THE GRADE "A" OF SEEDING MIXTURE SHOULD BE USED WITH THE FOLLOWING SEEDING RATES, BASED ON THE SEEDING GUIDE.

MIXTURE	SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. FT.
A	TALL FESCUE	20	0.45
	CREeping RED FESCUE	20	0.45
	REDTOP	2	0.05
	TOTAL	42	0.95

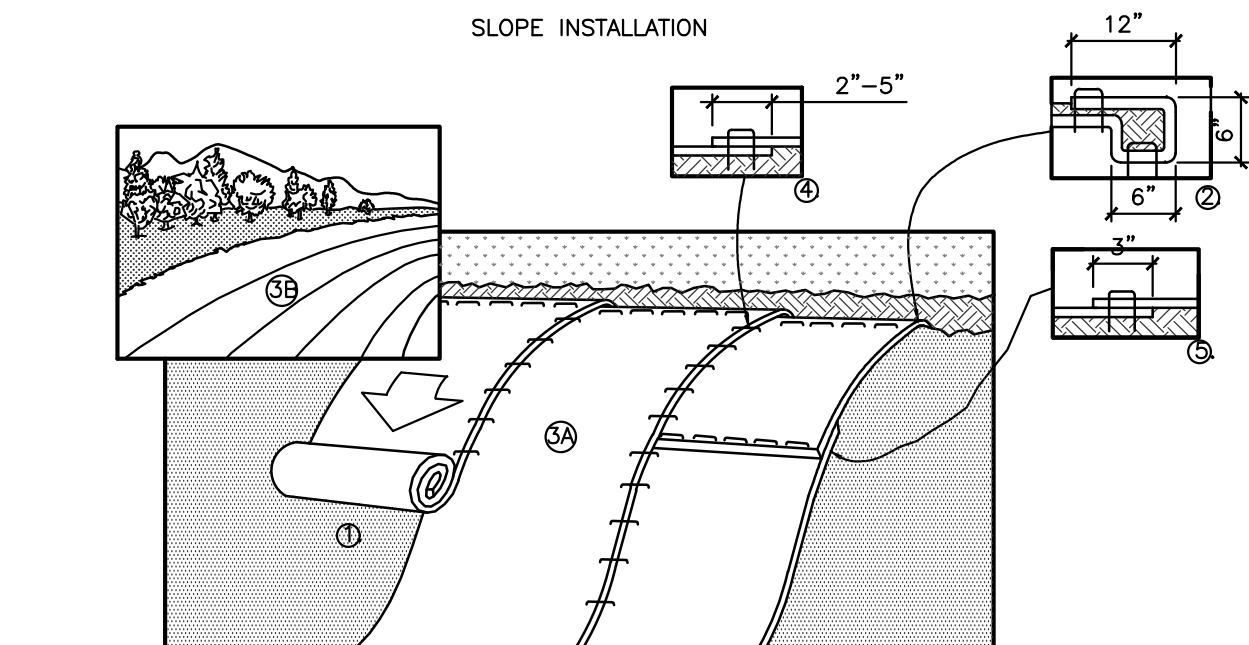
- ALTERNATE PERMANENT SEEDING FOR AREAS NOT RECEIVING LAWN OR LANDSCAPING SHALL BE AS FOLLOWS:
 - THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX CONTAINS A SELECTION OF NATIVE GRASSES AND WILDFLOWERS DESIGNED TO COLONIZE GENERALLY MOIST, RECENTLY DISTURBED SITES WHERE QUICK GROWTH OF VEGETATION IS DESIRED TO STABILIZE THE SOIL SURFACE. THIS MIX IS PARTICULARLY APPROPRIATE FOR DETENTION BASINS WHICH DO NOT NORMALLY HOLD STANDING WATER. THE PLANTS IN THIS MIX CAN TOLERATE INFREQUENT INUNDATION, BUT NOT CONSTANT FLOODING. IN NEW ENGLAND, THE BEST RESULTS ARE OBTAINED WITH A SPRING OR EARLY FALL SEEDING. SUMMER AND FALL SEEDING CAN BE SUCCESSFUL WITH A LIGHT MULCHING OF WEED-FREE STRAW TO CONSERVE MOISTURE. LATE FALL AND WINTER DORMANT SEEDING REQUIRE A SLIGHT INCREASE IN THE SEEDING RATE. FERTILIZATION IS NOT REQUIRED UNLESS THE SOILS ARE PARTICULARLY INFERTILE.
 - APPLICATION RATE: 35 LBS/ACRE 1245 SQ FT/LB
 - SPECIES: SWITCHGRASS (PANICUM VIRGATUM), CREeping RED FESCUE (FESTUCA RUBRA), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), FOX SEDGE (CAREX VULPINOIDEA), CREeping BENTGRASS (ACROSTIS STOLONIFERA), SILKY WILD RYE (ELYMUS VILLOsus), NODDING BUR-MARIGOLD (BIDENS CERNUA), SOFT RUSH (JUNCUS EFFUSUS), GRASS-LEAVED GOLDENROD (SOLIDAGO GRAMINIFOLIA), SENSITIVE FERN (ONOCLEA SENSIBILIS), JOE-PYE WEED (EUPATORIUM MACULATUM), BONESET (EUPATORIUM PERFOLIATUM), FLAT-TOP ASTER (ASTER UMBELLATUS), NEW YORK ASTER (ASTER NOVI-BELGII), BLUE VERVAIn (VERBENA HASTATA).

WINTER NOTES

- ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
- ALL AREAS TO BE PLANTED WHICH DO NOT EXHIBIT A MINIMUM OF 85% VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.
- AFTER NOVEMBER 15TH, INCOMPLETE SURFACES TO BE PAVED, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3 OR CRUSHED STONE.

MAINTENANCE AND PROTECTION

- THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT DEVELOPS.
- TO BE ACCEPTABLE, SEEDING AREAS SHALL CONSIST OF A UNIFORM STAND OF AT LEAST 90 PERCENT ESTABLISHED PERMANENT GRASS SPECIES, WITH A UNIFORM COUNT OF AT LEAST 100 PLANTS PER SQUARE FOOT.
- SEEDING AREAS WILL BE FERTILIZED AND RE-SEEDING AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.
- THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY, UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
- THE SILT FENCE AND/OR SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- SILT FENCE AND/OR SILTSOXX SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SILT FENCE AND/OR SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDING.



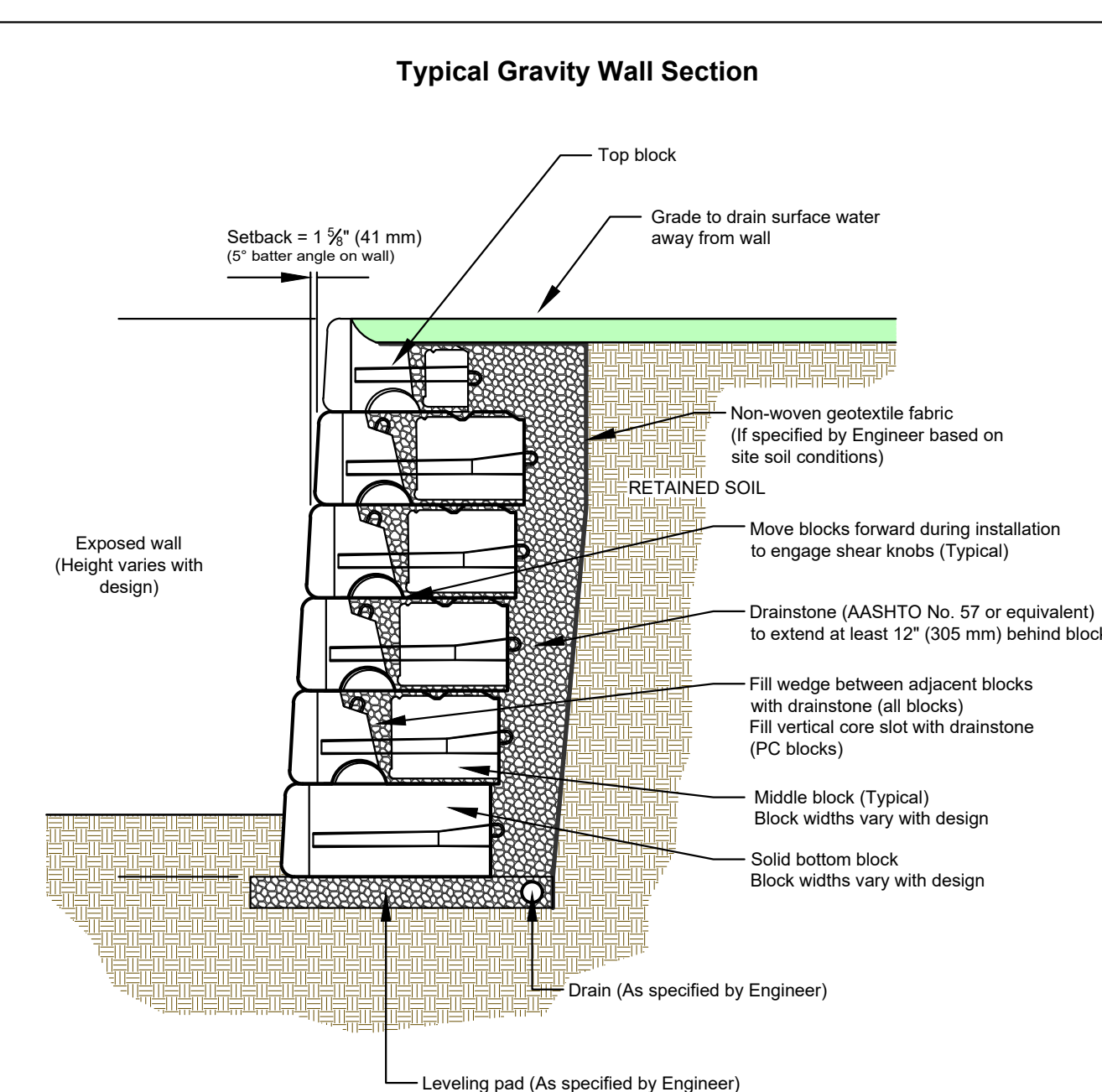
MATTING INSTALLATION NOTES

- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE SLOPE BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET BACK OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL THE BLANKETS (A) DOWN OR (B) HORIZONTALLY ACROSS THE SLOPE. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- THE EDGES OF PARALLEL BLANKETS MUST BE STAPLED WITH APPROXIMATELY 2"-5" OVERLAP DEPENDING ON BLANKET TYPE. TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- CONSECUTIVE BLANKETS SPICED DOWN THE SLOPE MUST BE PLACED END OVER END (SHINGLE STYLE) WITH AN APPROXIMATE 3" OVERLAP. STAPLE THROUGH OVERLAPPED AREA, APPROXIMATELY 12" APART ACROSS ENTIRE BLANKET WIDTH.
- IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" MAY BE NECESSARY TO PROPERLY SECURE THE BLANKETS.
- INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS.
- MATting IS REQUIRED ON ALL SLOPES STEEPER THAN 3:1.

SLOPE PROTECTION EROSION CONTROL MATTING

NOT TO SCALE

(THIS DETAIL IS PROVIDED FOR AREAS THAT MAY REQUIRE ADDITIONAL PROTECTION BASED ON FIELD CONDITIONS.)



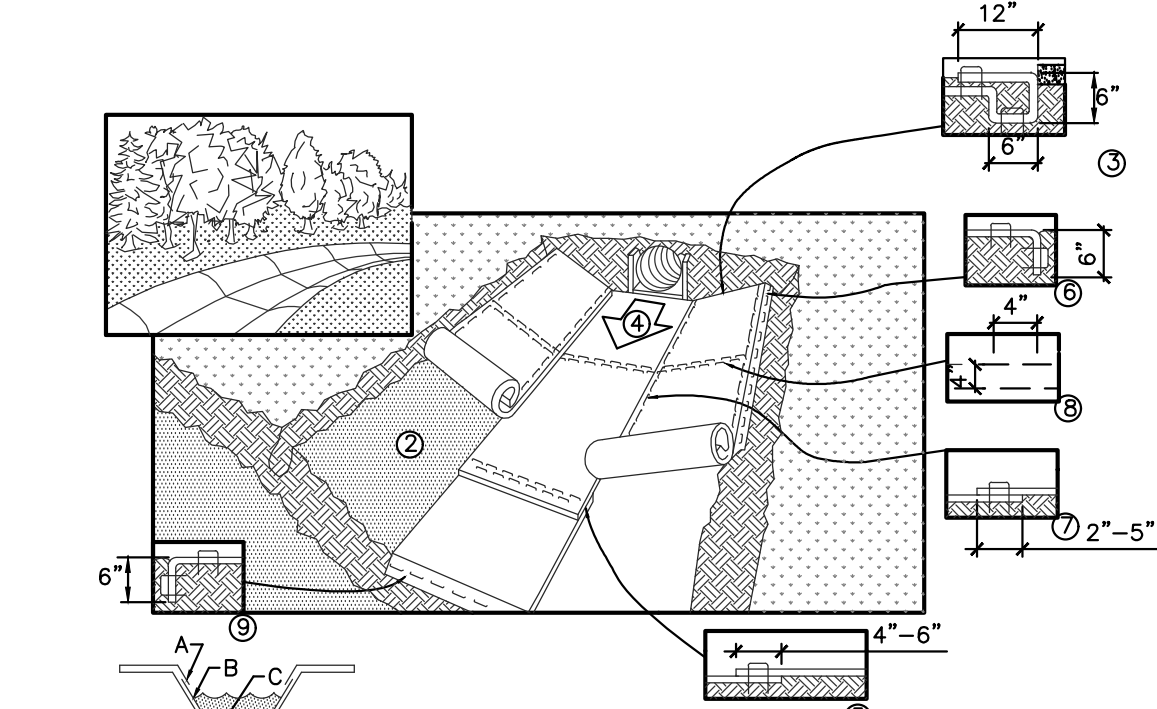
This drawing is for reference only. Determination of the suitability and/or manner of use of any details contained in this document is the sole responsibility of the design engineer of record. Final project designs, including all construction details, shall be prepared by a licensed professional engineer using the actual conditions of the proposed site.

DRAWN BY:	JRJ	TITLE:	Typical Gravity Wall Detail
APPROVED BY:	JRJ		
DATE:	17MAR2016		
SHEET:	1 of 1	FILE:	1 Typical Gravity Wall Detail 031716.dwg



CHANNEL INSTALLATION SPECIFICATIONS

- INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS
- PREPARE SOIL BEFORE INSTALLING BLANKETS, INCLUDING ANY NECESSARY APPLICATION OF LIME, FERTILIZER, AND SEED. NOTE: WHEN USING CELL-O-SEED, DO NOT SEED PREPARED AREA. CELL-O-SEED MUST BE INSTALLED WITH THE PAPER SIDE DOWN.
- BEGIN AT THE TOP OF THE CHANNEL BY ANCHORING THE BLANKET IN A 6" DEEP X 6" WIDE TRENCH WITH APPROXIMATELY 12" OF BLANKET EXTENDED BEYOND THE UP-SLOPE PORTION OF THE TRENCH. ANCHOR THE BLANKET WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN THE BOTTOM OF THE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING. APPLY SEED TO COMPACTED SOIL AND FOLD REMAINING 12" PORTION OF BLANKET OVER SEED AND COMPACTED SOIL. SECURE BLANKET OVER COMPACTED SOIL WITH A ROW OF STAPLES/STAKES SPACED APPROXIMATELY 12" APART ACROSS THE WIDTH OF THE BLANKET.
- ROLL CENTER BLANKET IN DIRECTION OF WATER FLOW IN BOTTOM OF CHANNEL. BLANKETS WILL UNROLL WITH APPROPRIATE SIDE AGAINST THE SOIL SURFACE. ALL BLANKETS MUST BE SECURELY FASTENED TO SOIL SURFACE BY PLACING STAPLES/STAKES IN APPROPRIATE LOCATIONS AS SHOWN IN THE STAPLE PATTERN GUIDE. WHEN USING OPTIONAL DOT SYSTEM, STAPLES/STAKES SHOULD BE PLACED THROUGH EACH OF THE COLORED DOTS CORRESPONDING TO THE APPROPRIATE STAPLE PATTERN.
- PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4"(10") ON CENTER TO SECURE BLANKETS.
- FULL-LENGTH EDGE OF BLANKETS AT TOP OF SIDE SLOPES MUST BE ANCHORED WITH A ROW OF STAPLES/STAKES APPROXIMATELY 12" APART IN A 6" DEEP X 6" WIDE TRENCH. BACKFILL AND COMPACT THE TRENCH AFTER STAPLING.
- ADJACENT BLANKETS MUST BE OVERLAPPED APPROXIMATELY 2"-5" (DEPENDING ON BLANKET TYPE) AND STAPLED TO ENSURE PROPER SEAM ALIGNMENT, PLACE THE EDGE OF THE OVERLAPPING BLANKET (BLANKET BEING INSTALLED ON TOP) EVEN WITH THE COLORED SEAM STITCH ON THE PREVIOUSLY INSTALLED BLANKET.
- IN HIGH FLOW CHANNEL APPLICATIONS, A STAPLE CHECK SLOT IS RECOMMENDED AT 30' TO 40' INTERVALS. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4" ON CENTER OVER ENTIRE WIDTH OF CHANNEL.



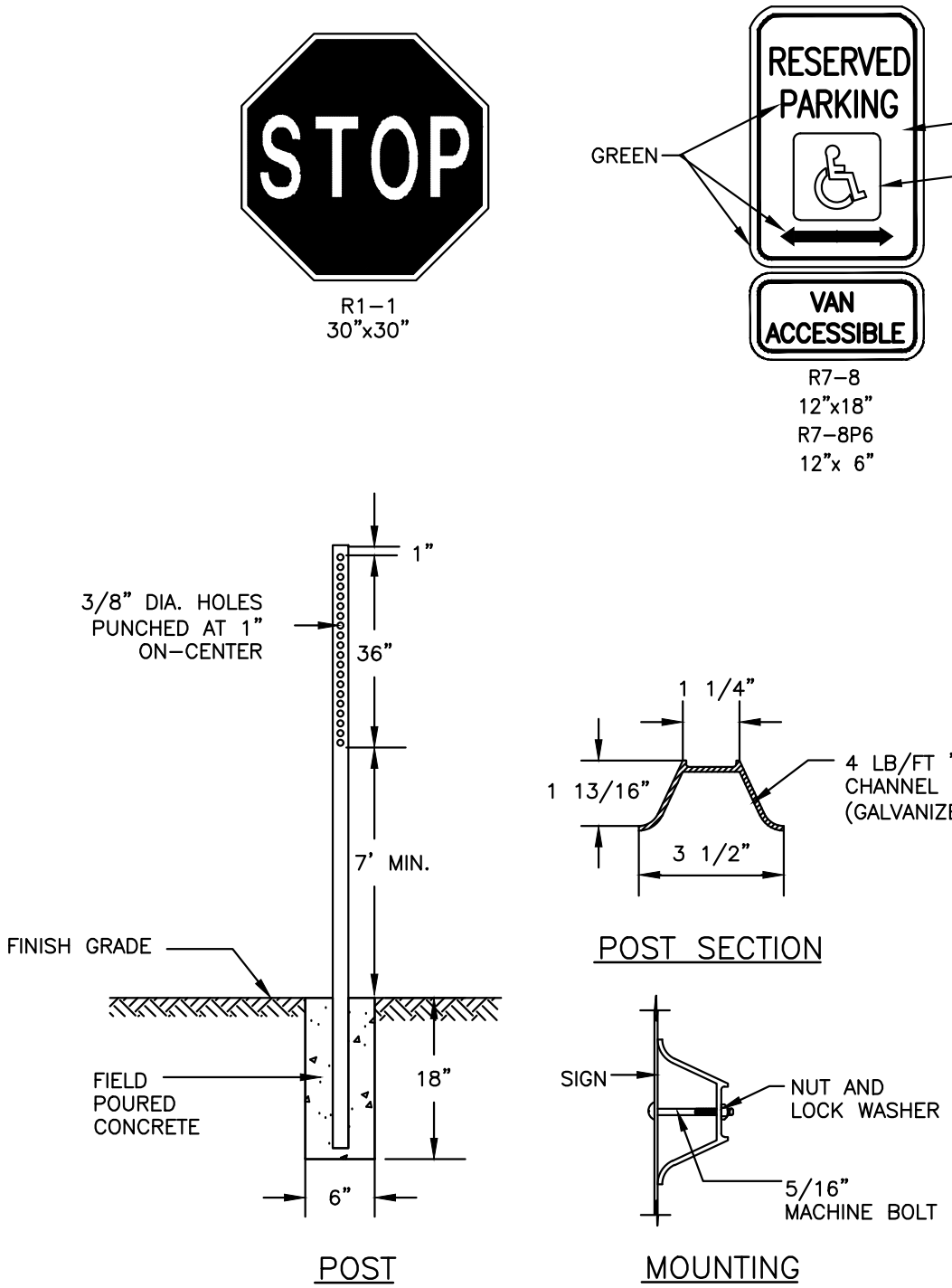
CRITICAL POINTS

- OVERLAPS AND SEAMS
 - PROJECTED WATER LINE
 - CHANNEL BOTTOM/SIDE SLOPE VERTICES
- * HORIZONTAL STAPLE SPACING SHOULD BE ALTERED IF NECESSARY TO ALLOW STAPLES TO SECURE THE CRITICAL POINTS ALONG THE CHANNEL SURFACE.
- ** IN LOOSE SOIL CONDITIONS, THE USE OF STAPLE OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

ROLLED EROSION CONTROL MATTING

NOT TO SCALE

(THIS DETAIL IS PROVIDED FOR AREAS THAT MAY REQUIRE ADDITIONAL PROTECTION BASED ON FIELD CONDITIONS.)



TYPICAL SIGN POST DETAIL

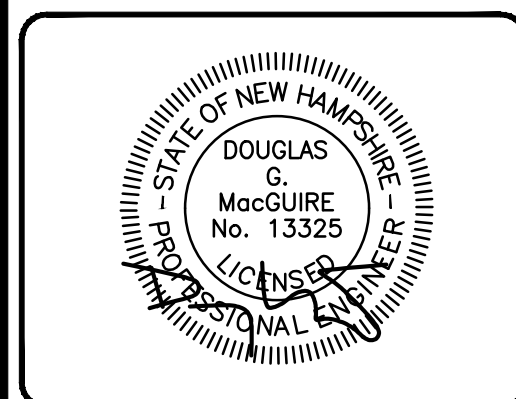
NOT TO SCALE



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Engineers
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REVISIONS:

REV:	DATE:	COMMENT:	BY:

DRAWN BY: SJK
CHECKED BY: DGM
DATE: SEP 16, 2020
SCALE: AS NOTED
FILE: 339-DETAILS
DEED REF: BK 8985 PG 2356

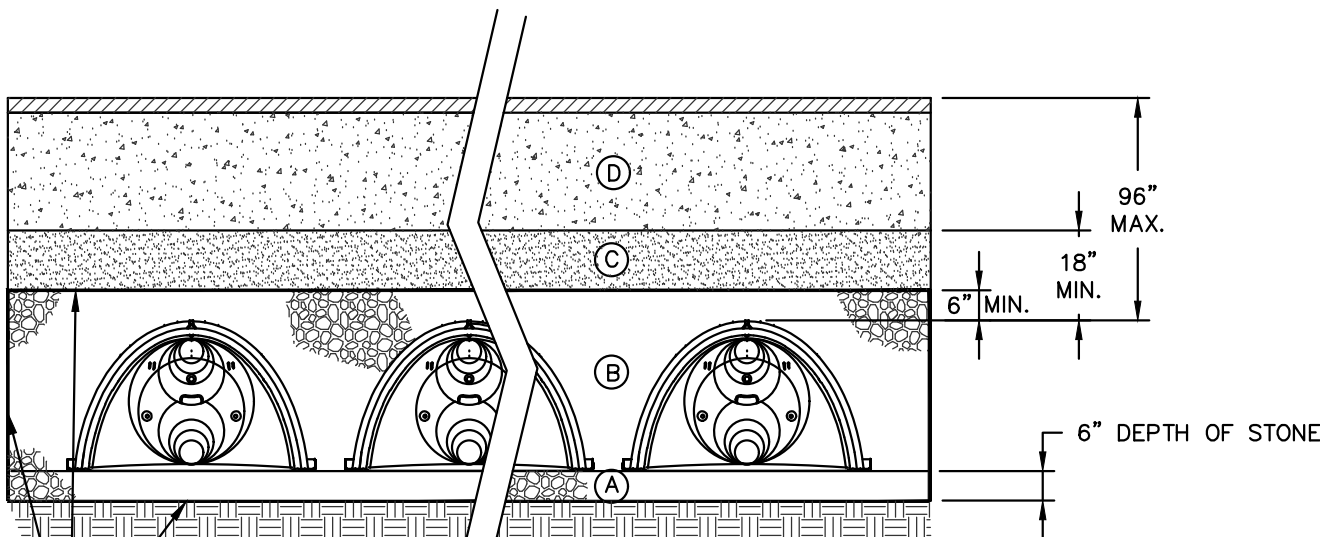
PROJECT:
POWERS STREET SELF STORAGE
MAP 43 LOT 30
POWERS ST
MILFORD, NH 03055

FOR:
PMA PROPERTY GROUP, LLC
614 NASHUA ST #127
MILFORD, NH 03055

SHEET TITLE:
SITE DETAILS-1

PROJECT #339 SHEET 9 of 13

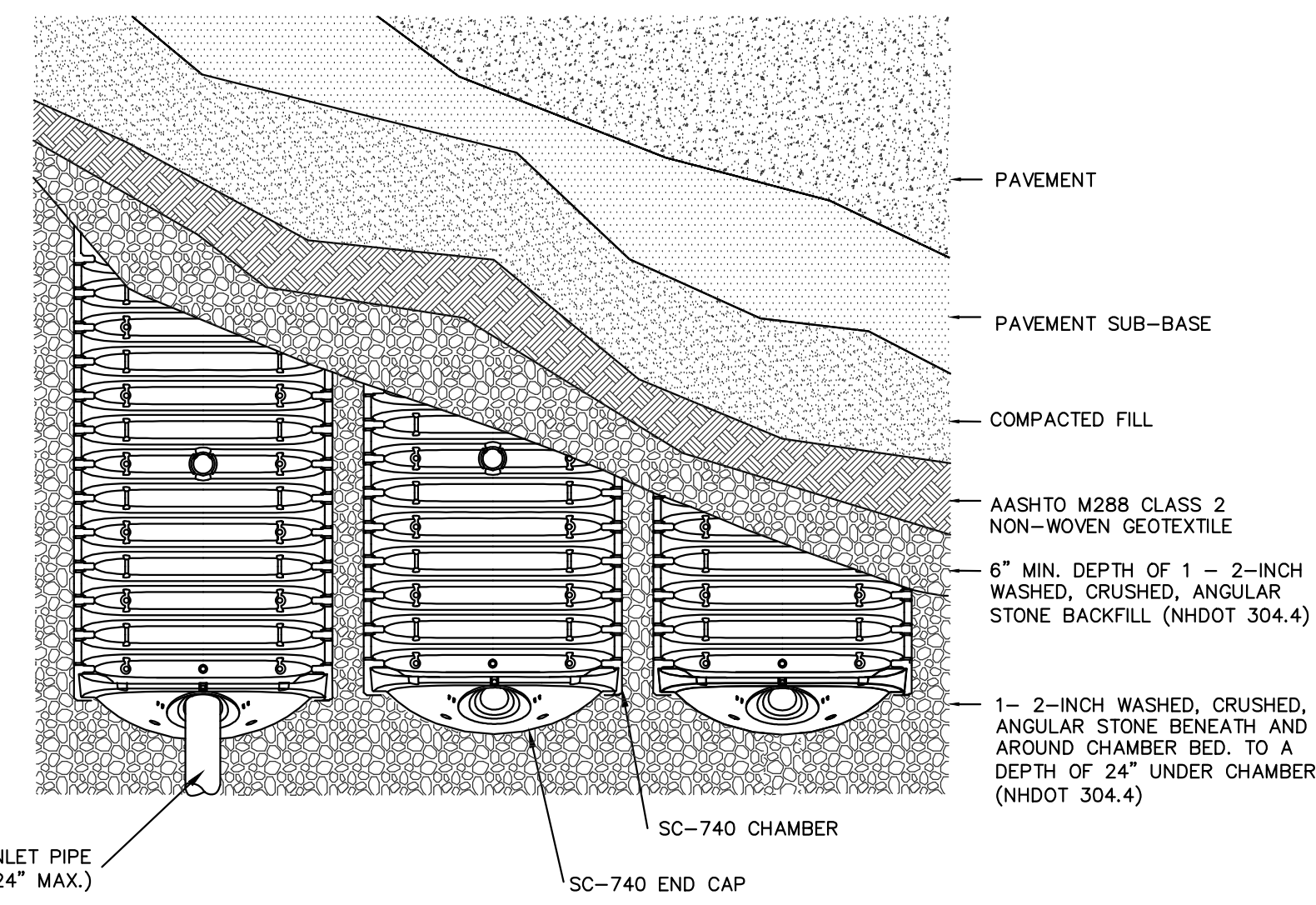
MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
① FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS.	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
② FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	A-1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
③ EMBEDMENT STONE SURROUNDING AND TO A 6" ELEVATION ABOVE CHAMBERS	DOUBLE WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4 - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
④ FOUNDATION STONE BELOW CHAMBERS	DOUBLE WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4 - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY



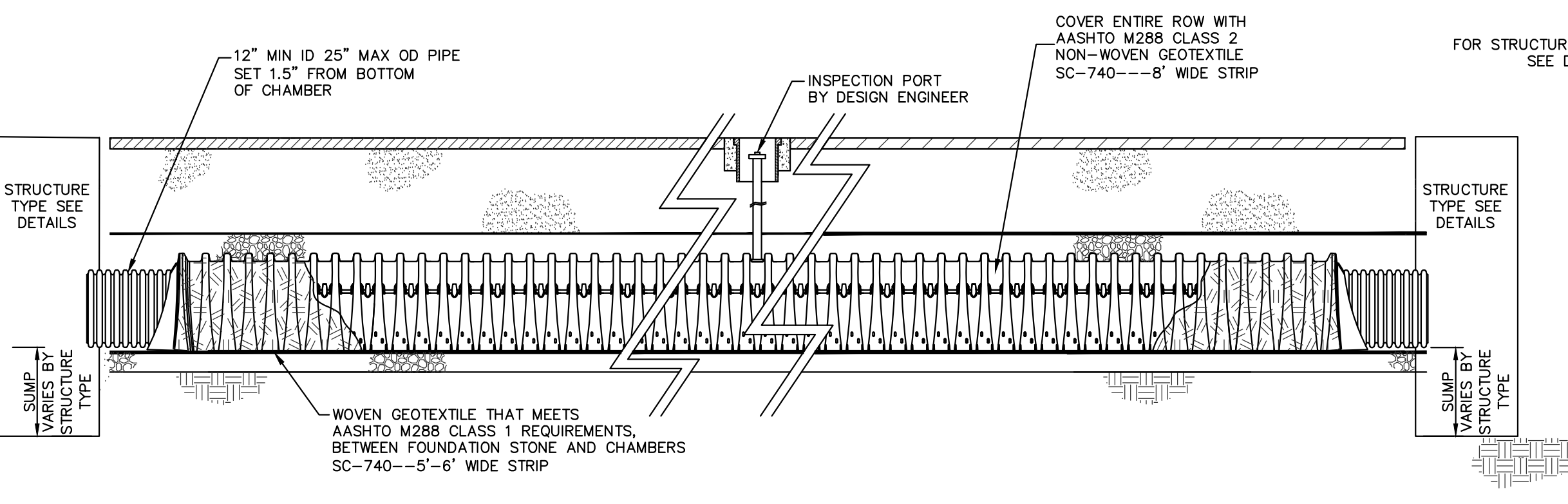
ACCEPTABLE FILL MATERIALS
STORMTECH SC-740 CHAMBER SYSTEM

NOTES
1. THE INSTALLER SHALL NOT ALLOW ANY VEHICULAR OR CONSTRUCTION EQUIPMENT TRAVEL TO OCCUR ACROSS THE PROPOSED RECHARGE BASIN AREA AT ANY TIME EXCEPT DURING EXCAVATION OF TOPSOIL, SUBSOIL AND OTHER MATERIALS NOT SUITABLE FOR BED BOTTOM CONDITIONS.
2. CAUTION SHOULD BE EXERCISED DURING SITE PREPARATION TO AVOID COMPACTION OF THE INFILTRATIVE SURFACE.

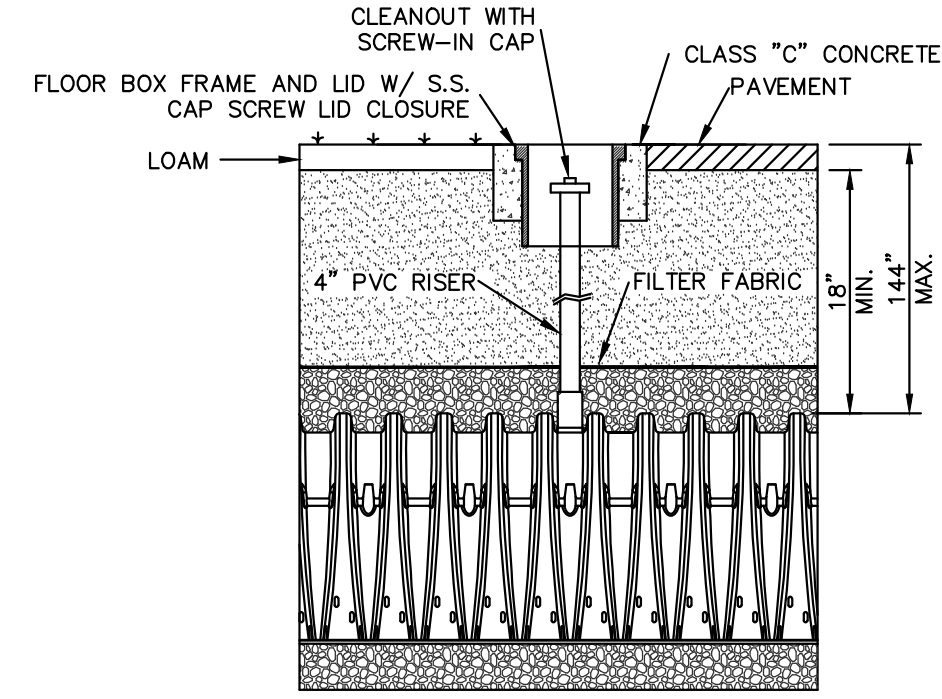
ACCEPTABLE FILL MATERIALS
STORMTECH SC-740 CHAMBER SYSTEM



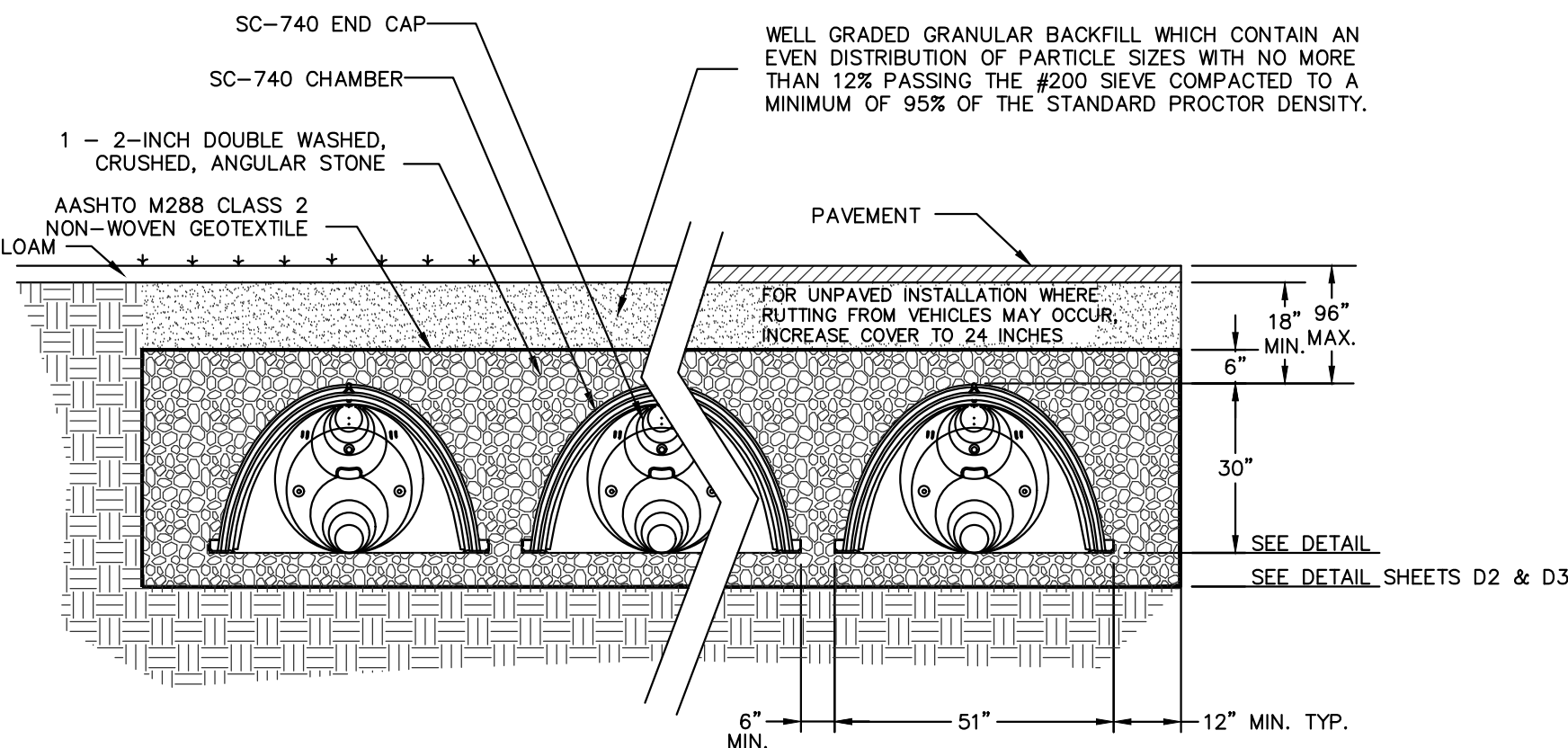
STORMTECH SC-740 CHAMBER SYSTEM
PLAN VIEW DETAIL
NOT TO SCALE



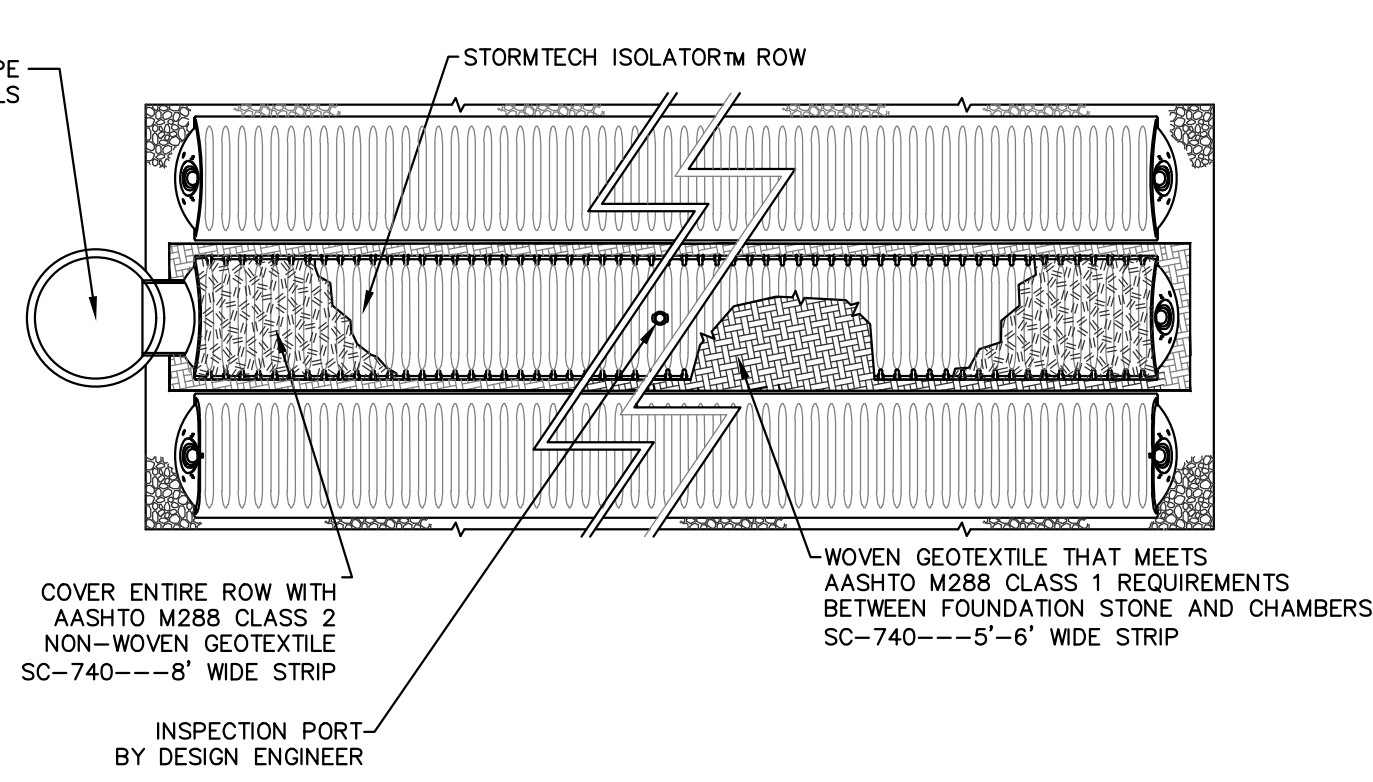
STORMTECH ISOLATOR™ ROW & INLET
PROFILE VIEW
NOT TO SCALE



STORMTECH SC-740 CHAMBER SYSTEM
INSPECTION PORT DETAIL
NOT TO SCALE



STORMTECH SC-740 CHAMBER SYSTEM
TYPICAL CROSS SECTION DETAIL
NOT TO SCALE



STORMTECH ISOLATOR™ ROW
PLAN VIEW
NOT TO SCALE

GENERAL NOTES

- DO NOT DISCHARGE SEDIMENT-LADEN WATERS FROM CONSTRUCTION ACTIVITIES (RUNOFF, WATER FROM EXCAVATIONS) TO THE INFILTRATION SYSTEMS.
- DO NOT TRAFFIC EXPOSED SOIL SURFACE WITH CONSTRUCTION EQUIPMENT. IF FEASIBLE, PERFORM EXCAVATIONS WITH EQUIPMENT POSITIONED OUTSIDE THE LIMITS OF THE INFILTRATION SYSTEMS.
- AFTER THE AREAS ARE EXCAVATED TO THE FINAL DESIGN ELEVATION, THE FLOOR SHOULD BE DEEPLY TILLED WITH A ROTARY TILLER OR DISC HARROW TO RESTORE INFILTRATION RATES, FOLLOWED BY A PASS WITH A LEVELING DRAG.
- DO NOT PLACE INFILTRATION SYSTEMS INTO SERVICE UNTIL THE CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.

STORMTECH PRODUCT SPECIFICATIONS

- GENERAL
 - STORMTECH CHAMBERS ARE DESIGNED TO CONTROL STORMWATER RUNOFF. AS A SUBSURFACE RETENTION SYSTEM, STORMTECH CHAMBERS RETAIN AND ALLOW EFFECTIVE INFILTRATION OF WATER INTO THE SOIL. AS A SUBSURFACE DETENTION SYSTEM, STORMTECH CHAMBERS DETAIN AND ALLOW FOR THE METERED FLOW OF WATER TO AN OUTFALL.
 - CHAMBER PARAMETERS
 - THE CHAMBER SHALL BE INJECTION MOLDED OF POLYPROPYLENE RESIN TO BE INHERENTLY RESISTANT TO ENVIRONMENTAL STRESS CRACKING (ESCR), AND TO MAINTAIN ADEQUATE STIFFNESS THROUGH HIGHER TEMPERATURES EXPERIENCED DURING INSTALLATION AND SERVICE.
 - THE NOMINAL CHAMBER DIMENSIONS OF THE STORMTECH SC-740 SHALL BE 30.0 INCHES TALL, 51.0 INCHES WIDE AND 90.7 INCHES LONG.
 - THE CHAMBER SHALL HAVE A CONTINUOUSLY CURVED SECTION PROFILE.
 - THE CHAMBER SHALL BE OPEN-BOTTOMED.
 - THE CHAMBER SHALL INCORPORATE AN OVERLAPPING CORRUGATION JOINT SYSTEM TO ALLOW CHAMBER ROWS OF ALMOST ANY LENGTH TO BE CREATED. THE OVERLAPPING CORRUGATION JOINT SYSTEM SHALL BE EFFECTIVE WHILE ALLOWING A CHAMBER TO BE TRIMMED TO SHORTEN ITS OVERALL LENGTH.
 - THE NOMINAL STORAGE VOLUME OF A JOINED STORMTECH SC-740 CHAMBER SHALL BE 74.9 CUBIC FEET PER CHAMBER WHEN INSTALLED PER STORMTECH'S TYPICAL DETAILS (INCLUDES THE VOLUME OF CRUSHED ANGULAR STONE WITH AN ASSUMED 40% POROSITY). THIS EQUATES TO 2.2 CUBIC FEET OF STORAGE/SQUARE FOOT OF BED.
 - THE CHAMBER SHALL HAVE FORTY-EIGHT ORIFICES PENETRATING THE SIDEWALLS TO ALLOW FOR LATERAL CONVEYANCE OF WATER.
 - THE CHAMBER SHALL HAVE TWO ORIFICES NEAR ITS TOP TO ALLOW FOR EQUALIZATION OF AIR PRESSURE BETWEEN ITS INTERIOR AND EXTERIOR.
 - THE CHAMBER SHALL HAVE BOTH OF ITS ENDS OPEN TO ALLOW FOR UNIMPEDED HYDRAULIC FLOWS AND VISUAL INSPECTIONS DOWN A ROW'S ENTIRE LENGTH.
 - THE CHAMBER SHALL HAVE 14 CORRUGATIONS.
 - THE CHAMBER SHALL HAVE A CIRCULAR, INDENTED, FLAT SURFACE ON THE TOP OF THE CHAMBER FOR AN OPTIONAL 4-INCH INSPECTION PORT OR CLEAN-OUT.
 - THE CHAMBER SHALL BE ANALYZED AND DESIGNED USING CASTING METHODS FOR THERMOPLASTIC CULVERTS CONTAINED IN THE LRFD BRIDGE DESIGN SPECIFICATIONS, 2ND EDITION, INCLUDING INTERIM SPECIFICATIONS THROUGH 2001. DESIGN LIVE LOAD SHALL BE THE AASHTO HS20 TRUCK. DESIGN SHALL CONSIDER EARTH AND LIVE LOADS AS APPROPRIATE FOR THE MINIMUM TO MAXIMUM SPECIFIED DEPTH OF FILL.
 - THE CHAMBER SHALL BE MANUFACTURED IN AN ISO 9001:2000 CERTIFIED FACILITY.
 - END CAP PARAMETERS
 - THE END CAP SHALL BE INJECTION MOLDED OF POLYPROPYLENE RESIN TO BE INHERENTLY RESISTANT TO ENVIRONMENTAL STRESS CRACKING, AND TO MAINTAIN ADEQUATE STIFFNESS THROUGH HIGHER TEMPERATURES EXPERIENCED DURING INSTALLATION AND SERVICE.
 - THE END CAP SHALL BE DESIGNED TO FIT INTO ANY CORRUGATION OF A CHAMBER, WHICH ALLOWS CAPPING A CHAMBER THAT HAS ITS LENGTH TRIMMED; SEGMENTING ROWS INTO STORAGE BASINS OF VARIOUS LENGTHS.
 - THE END CAP SHALL HAVE SAW GUIDES TO ALLOW EASY CUTTING FOR VARIOUS DIAMETERS OF PIPE THAT MAY BE USED TO INLET THE SYSTEM.
 - THE END CAP SHALL HAVE EXCESS STRUCTURAL ADEQUACIES TO ALLOW CUTTING AN ORIFICE OF ANY SIZE AT ANY INVERT ELEVATION.
 - THE PRIMARY FACE OF AN END CAP SHALL BE CURVED OUTWARD TO RESIST HORIZONTAL LOADS GENERATED NEAR THE EDGES OF BEDS.
 - THE END CAP SHALL BE MANUFACTURED IN AN ISO 9001:2000 CERTIFIED FACILITY.

STORMTECH INSTALLATION NOTES

- STORMTECH LLC ("STORMTECH") REQUIRES INSTALLING CONTRACTORS TO USE AND UNDERSTAND STORMTECH'S LATEST INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION.
- OUR TECHNICAL SERVICES DEPARTMENT OFFERS INSTALLATION CONSULTATIONS TO INSTALLING CONTRACTORS. CONTACT OUR TECHNICAL SERVICES REPRESENTATIVE AT LEAST 30 DAYS PRIOR TO SYSTEM INSTALLATION TO ARRANGE A PRE-INSTALLATION CONSULTATION. OUR REPRESENTATIVES CAN THEN ANSWER QUESTIONS OR ADDRESS COMMENTS ON THE STORMTECH CHAMBER SYSTEM AND INFORM THE INSTALLING CONTRACTOR OF THE MINIMUM INSTALLATION REQUIREMENTS BEFORE BEGINNING THE SYSTEM'S CONSTRUCTION. CALL 1-888-892-2694 TO SPEAK TO A TECHNICAL SERVICE REPRESENTATIVE OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF OUR INSTALLATION INSTRUCTIONS.
- STORMTECH'S REQUIREMENTS FOR SYSTEMS WITH PAVEMENT DESIGN (ASPHALT, CONCRETE PAVERS, ETC.): MINIMUM COVER IS 18 INCHES NOT INCLUDING PAVEMENT; MAXIMUM COVER IS 96 INCHES INCLUDING PAVEMENT. FOR INSTALLATIONS THAT DO NOT INCLUDE PAVEMENT, WHERE RUTTING FROM VEHICLES MAY OCCUR, MINIMUM REQUIRED COVER IS 24 INCHES, MAXIMUM COVER IS 96 INCHES.
- THE CONTRACTOR MUST REPORT ANY DISCREPANCIES WITH CHAMBER FOUNDATION MATERIALS BEARING CAPACITIES TO THE DESIGN ENGINEER.
- AASHTO M288 CLASS 2 NON-WOVEN GEOTEXTILE (FILTER FABRIC) MUST BE USED AS INDICATED IN THE PROJECT PLANS.
- STONE PLACEMENT BETWEEN CHAMBERS ROWS AND AROUND PERIMETER MUST FOLLOW INSTRUCTIONS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
- BACKFILLING OVER THE CHAMBERS MUST FOLLOW REQUIREMENTS AS INDICATED IN THE MOST CURRENT VERSION OF STORMTECH'S INSTALLATION INSTRUCTIONS.
- THE CONTRACTOR MUST REFER TO STORMTECH'S INSTALLATION INSTRUCTIONS FOR A TABLE OF ACCEPTABLE VEHICLE LOADS AT VARIOUS DEPTHS OF COVER. THIS INFORMATION IS ALSO AVAILABLE AT STORMTECH'S WEBSITE: WWW.STORMTECH.COM. THE CONTRACTOR IS RESPONSIBLE FOR PREVENTING VEHICLES THAT EXCEED STORMTECH'S REQUIREMENTS FROM TRAVELING ACROSS OR PARKING OVER THE STORMWATER SYSTEM. TEMPORARY FENCING, WARNING TAPE AND APPROPRIATELY LOCATED SIGNS ARE COMMONLY USED TO PREVENT UNAUTHORIZED VEHICLES FROM ENTERING SENSITIVE CONSTRUCTION AREAS.
- THE CONTRACTOR MUST APPLY EROSION AND SEDIMENT CONTROL MEASURES TO PROTECT THE STORMWATER SYSTEM DURING ALL PHASES OF SITE CONSTRUCTION PER LOCAL CODES AND DESIGN ENGINEER'S SPECIFICATIONS.
- STORMTECH PRODUCT WARRANTY IS LIMITED. SEE CURRENT PRODUCT WARRANTY FOR DETAILS. TO ACQUIRE A COPY CALL STORMTECH AT 1-888-892-2694 OR VISIT WWW.STORMTECH.COM.

OPERATION AND MAINTENANCE PLAN
STORMTECH SC-740 CHAMBER SYSTEM

THE OWNER IS RESPONSIBLE FOR THE MAINTENANCE AND OPERATION OF THE PROPOSED STORMWATER COLLECTION SYSTEM INCLUDING ROUTINE INSPECTION, CLEANING AND MAINTENANCE OF MANHOLES, DEEP SUMP HOODED CATCH BASINS, CLEAN OUTFITS, UNDERGROUND DETENTION SYSTEMS AND REGULAR STREET SWEEPING.

SCHEDULE FOR INSPECTION AND MAINTENANCE AFTER CONSTRUCTION:

STREET SWEEPING

- STREET SWEEPING EFFORTS SHALL BE CONDUCTED AT LEAST ONCE A MONTH OUTSIDE OF WINTER MONTHS.
- SAND SWEEPED FROM THE ROADWAYS AND PARKING LOTS WILL BE REMOVED TO AN APPROVED OFF-SITE LOCATION.

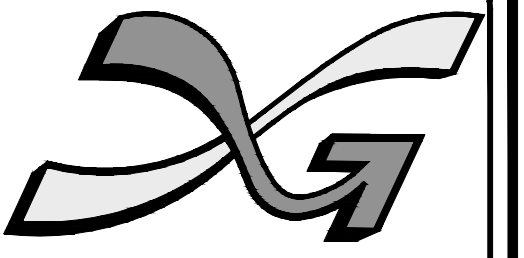
DEEP SUMP CATCH BASINS & LEACHING CATCH BASINS

- INLETS SHOULD BE CLEANED ANNUALLY AND INSPECTED SEMI-ANNUALLY.
- ALL SEDIMENTS, FLOATABLES, AND HYDROCARBONS SHOULD BE PROPERLY HANDLED AND DISPOSED OF, IN ACCORDANCE WITH LOCAL, STATE, AND FEDERAL GUIDELINES AND REGULATIONS.

UNDERGROUND DETENTION SYSTEMS (STORMTECH ISOLATOR SC-740 CHAMBER OR EQUAL)

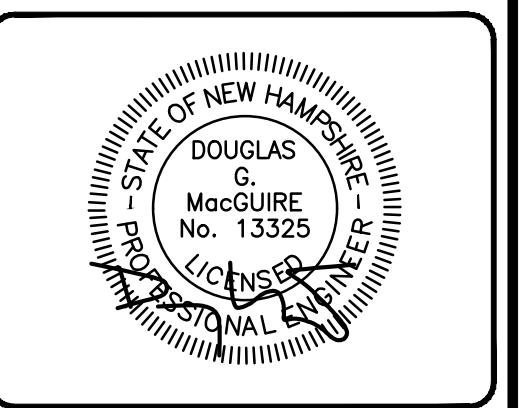
- ISOLATOR ROWS AND PIPE HEADERS SHALL BE INSPECTED IMMEDIATELY AFTER COMPLETION OF THE SITE'S CONSTRUCTION. THE NORMAL INSPECTION SCHEDULE AFTER CONSTRUCTION FOR ISOLATOR ROWS IS SEMI ANNUAL UNTIL AN UNDERSTANDING OF THE SITE'S CHARACTERISTICS IS DEVELOPED. PIPE HEADERS SHOULD BE INSPECTED QUARTERLY AFTER CONSTRUCTION.
- INSPECTION OF THE ISOLATOR ROW SHALL INVOLVE A VISUAL CHECK USING EITHER THE INSPECTION PORTS OR AN ACCESS MANHOLE.
- IF UPON VISUAL INSPECTION OF THE ISOLATOR ROW, IT IS FOUND THAT SEDIMENT HAS ACCUMULATED TO AN AVERAGE DEPTH EXCEEDING 3 INCHES, CLEANOUT IS REQUIRED.
- CLEANOUT OF SEDIMENT WITHIN THE PIPE HEADER IS REQUIRED WHEN THE SEDIMENT VOLUME HAS REDUCED THE STORAGE AREA BY 25% OR THE DEPTH OF SEDIMENT HAS REACHED APPROXIMATELY 25% OF THE DIAMETER OF THE STRUCTURE.
- CLEANOUT OF THE ACCUMULATED MATERIAL IN THE PIPE HEADER SHOULD BE ACCOMPLISHED BY VACUUM PUMPING. CLEANOUT SHOULD BE PERFORMED DURING DRY WEATHER AND CARE SHOULD BE TAKEN TO AVOID FLUSHING SEDIMENTS OUT THROUGH THE OUTLET PIPES AND INTO THE CHAMBER ROWS.

A SITE MAINTENANCE LOG WILL BE KEPT. THIS LOG WILL RECORD THE DATES WHEN MAINTENANCE TASKS WERE COMPLETED, THE PERSON WHO COMPLETED THE TASK, AND ANY OBSERVATIONS OF MALFUNCTIONS IN COMPONENTS OF THE STORMWATER MANAGEMENT SYSTEM. CALL 1-888-892-2694 TO SPEAK TO A TECHNICAL REPRESENTATIVE OR VISIT WWW.STORMTECH.COM.



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Engineers
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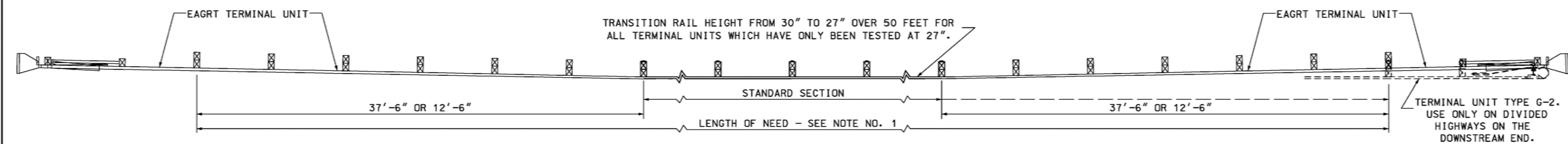
REVISIONS:			
REV#	DATE	COMMENT	BY

DRAWN BY: SJK
CHECKED BY: DGM
DATE: SEP 16, 2020
SCALE: AS NOTED
FILE: 339-DETAILS
DEED REF: BK 8985 PG 2356

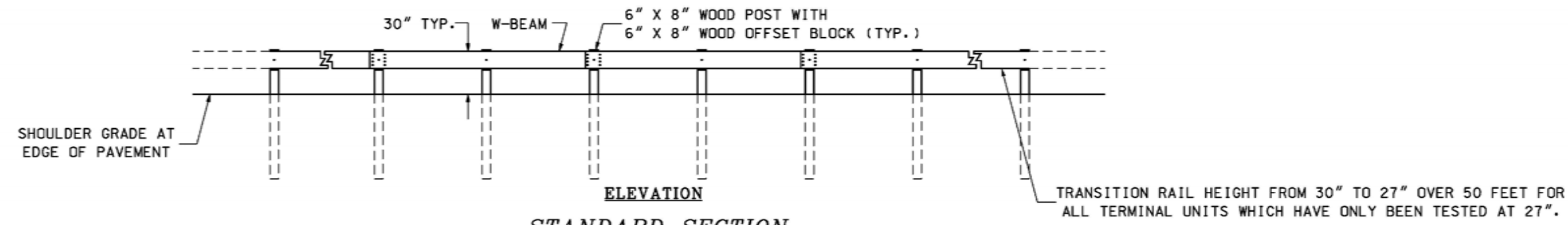
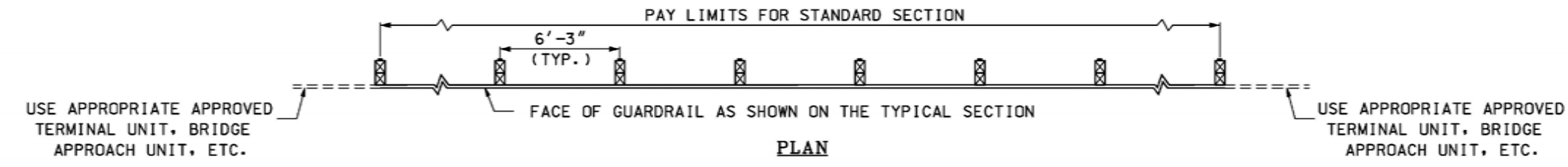
PROJECT:
POWERS STREET
SELF STORAGE
MAP 43 LOT 30
POWERS ST
MILFORD, NH 03055

FOR
PMA PROPERTY
GROUP, LLC
614 NASHUA ST #127
MILFORD, NH 03055

SHEET TITLE:
SITE
DETAILS-4

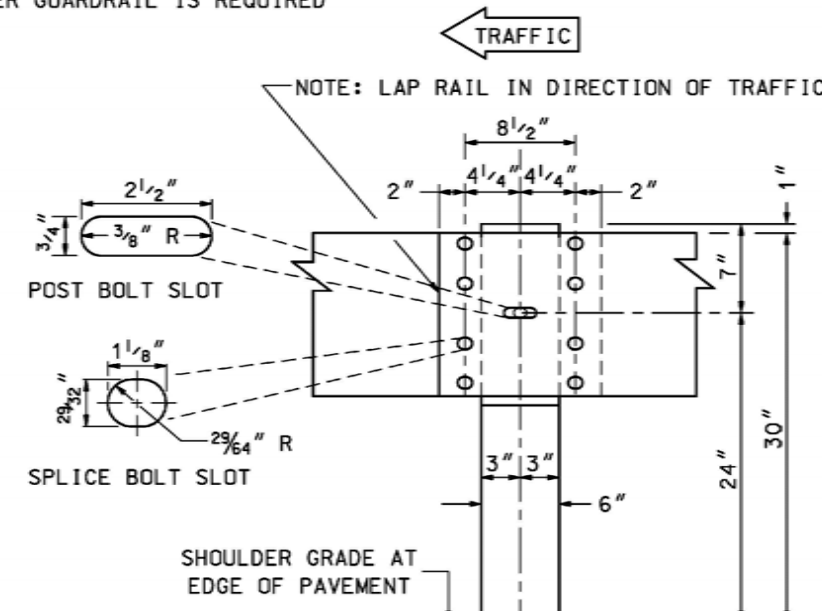
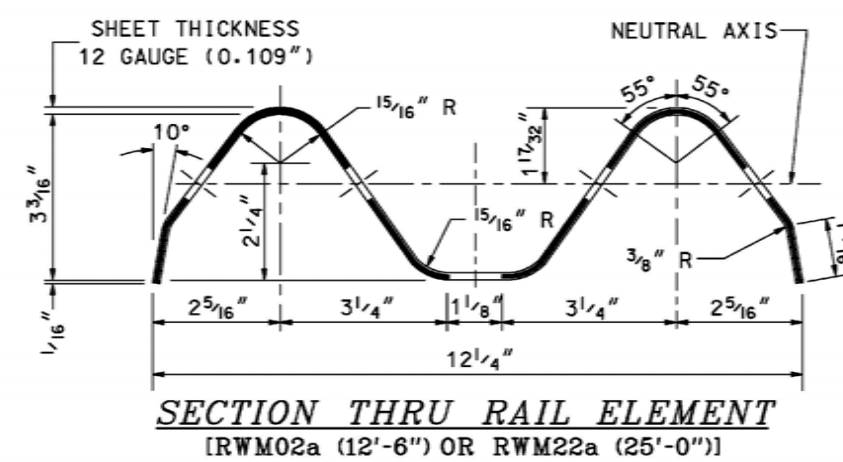


SAMPLE GUARDRAIL INSTALLATION LAYOUT

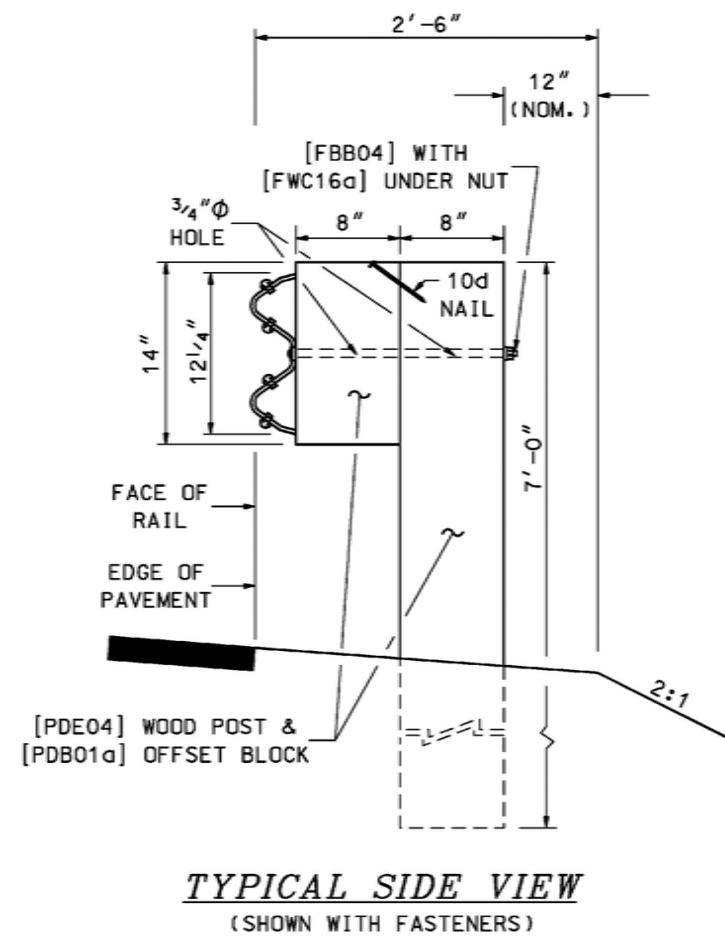


STANDARD SECTION

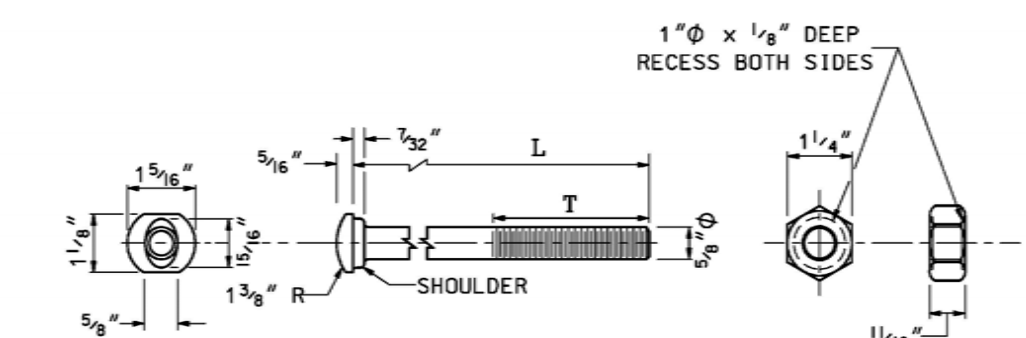
ITEM 606.140 - BEAM GUARDRAIL (STANDARD SECTION-WOOD POSTS)
 PAID: LINEAR FOOT
 USE: WHEREVER GUARDRAIL IS REQUIRED



LINE POST ELEVATION VIEW AT BEAM SPLICE
 (SHOWN WITHOUT FASTENERS)

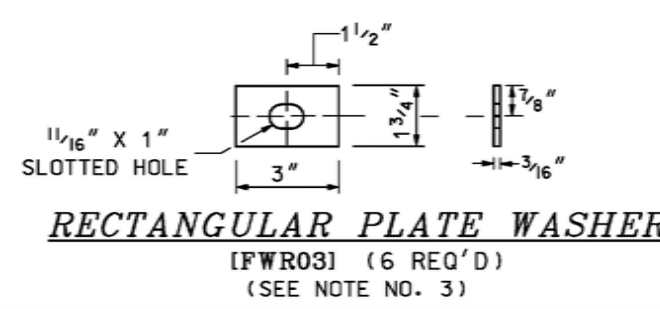


TYPICAL SIDE VIEW
 (SHOWN WITH FASTENERS)

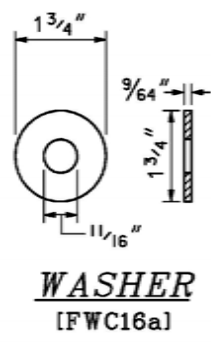


DESIGNATOR	L	T	INTENDED USE
FBB01	1 1/2"	FULL LENGTH THREAD	RAIL SPLICE BOLTS
FBB02	2"	1 3/4" MIN. THREAD LENGTH	POST BOLT (STEEL POSTS)
FBB03	10"	4" MIN. THREAD LENGTH	POST BOLT
FBB04	18"	4" MIN. THREAD LENGTH	POST BOLT (WOOD POSTS)

5/8" BUTTON HEAD BOLT AND RECESSED NUT
 (FBB01-04)



RECTANGULAR PLATE WASHER
 (FWR03) (6 REQ'D)
 (SEE NOTE NO. 3)



WASHER
 (FWC16a)

GUARDRAIL STANDARD
BEAM GUARDRAIL
STANDARD SECTION-WOOD POSTS
& HARDWARE DETAILS

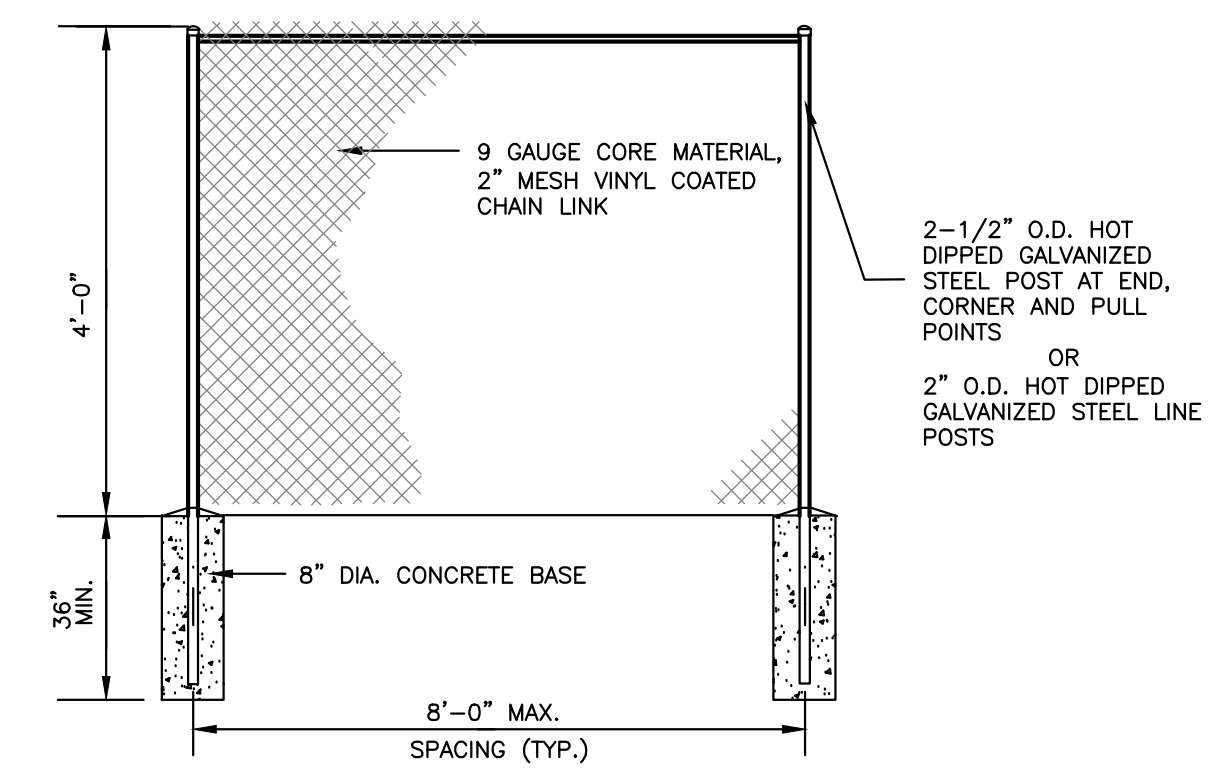
STANDARD NO. GR-1

REVISION DATE	07-13-2001
	06-16-2010
DGN FILE NAME	GR-1

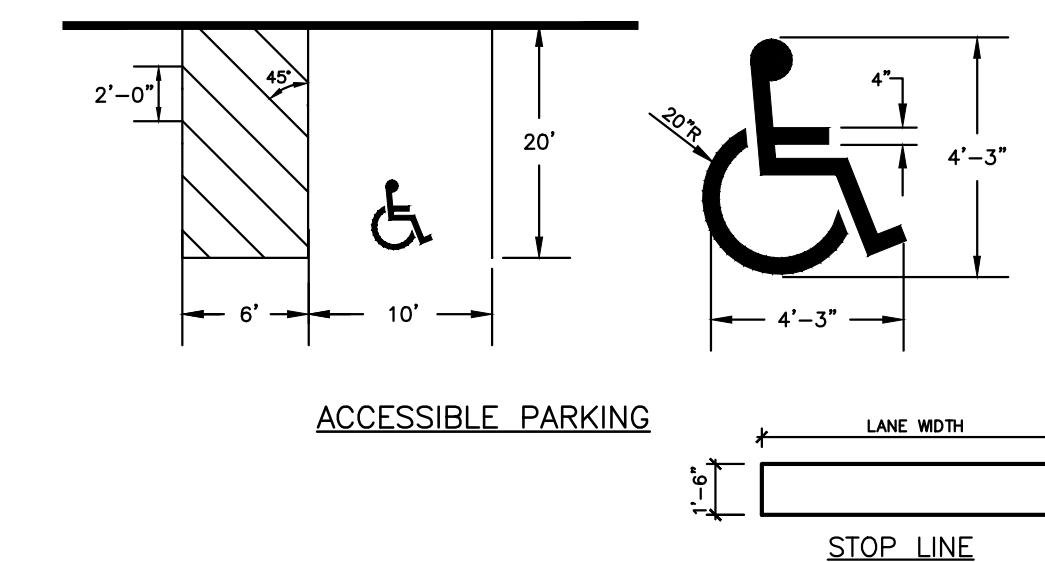
STANDARD PLANS

GENERAL NOTES

1. LENGTH OF NEED IS THE TOTAL LENGTH OF A LONGITUDINAL BARRIER NEEDED TO SHIELD AN AREA OF CONCERN. TO DETERMINE THE LENGTH OF NEED, REFER TO THE "ROADSIDE DESIGN GUIDE" - AASHTO, LATEST ADOPTED VERSION.
2. DESIGNATIONS PROVIDED IN BRACKETS [] REFERENCE STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED HIGHWAY BARRIER HARDWARE" - LATEST ADOPTED VERSION, AASHTO-AGC-ARTBA JOINT COOPERATIVE COMMITTEE.
3. THE RECTANGULAR PLATE WASHER [FWR03] IS USED ONLY FOR 37'-6" OF STANDARD SECTION UPSTREAM OF A TERMINAL UNIT TYPE G-2 (SEE STANDARD NO. GR-10).
4. USE 12'-6" LENGTH RAIL ELEMENT IN CURVES OF LESS THAN 300' RAIL RADIUS.
5. WHEN GUARDRAIL IS INSTALLED BEHIND CURB, EITHER 6'-0" BEHIND SLOPE CURB ON A CURBED RAMP OR AT THE BACK OF SIDEWALK WITH BARRIER CURB, THE RAIL HEIGHT SHALL BE SET FROM THE GRADE AT THE FACE OF RAIL.
6. POSTS SHORTER THAN THE 7'-0" INDICATED ON THE DETAIL, BUT NOT LESS THAN 6'-0", MAY ONLY BE USED WHEN:
 - A) THE SLOPE BEHIND THE GUARDRAIL IS NO STEEPER THAN 4:1
 - B) WHERE THE DISTANCE FROM THE BACK OF THE POST TO THE BREAK OF THE SLOPE IS A MINIMUM OF 2'-0"
 - C) AND THEN ONLY AS APPROVED OR SPECIFICALLY SHOWN ON THE PLANS.
7. TO INSTALL THE 7'-0" POSTS IN ROCK FILL AREAS AND IN AREAS OF OTHER DIFFICULT SITE CONDITIONS, METHODS SUCH AS AUGURING, EXCAVATING, AND OTHER MORE UNUSUAL METHODS MAY BE REQUIRED FOR INSTALLING POSTS. THOSE CONDITIONS AND THE REQUIREMENT FOR UNUSUAL METHODS OF POST INSTALLATION ARE NOT CONSIDERED JUSTIFICATION FOR REDUCING THE EMBEDMENT DEPTH OF THE POSTS AND WILL NOT BE APPROVED AS SUCH.



TYPICAL CHAIN LINK FENCE DETAIL
 NOT TO SCALE



ACCESSIBLE PARKING

GENERAL NOTES:

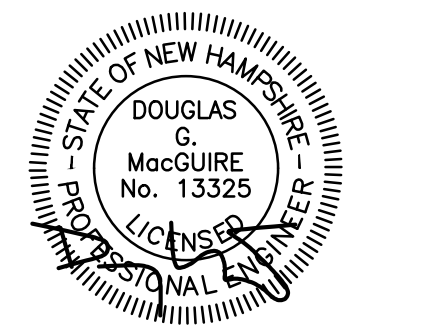
1. ALL PAVEMENT MARKINGS SHALL BE IN CONFORMANCE WITH THE CURRENT EDITION OF MUTCD.
2. WIDTH OF LINES SHALL VARY NO MORE THAN = 1/4 INCH FROM THAT SPECIFIED.
3. THE WET FILM THICKNESS OF A PAINTED LINE SHALL BE A MINIMUM OF 15 MILS THROUGHOUT THE ENTIRE WIDTH AND LENGTH OF LINE SPECIFIED.
4. OVERSPRAY SHALL BE KEPT TO AN ABSOLUTE MINIMUM.
5. STOP LINES & CROSSWALKS SHALL BE WHITE THERMOPLASTIC.
6. CROSSWALK BARS SHALL BE 24" WIDTH AND 10' IN LENGTH WITH 24" SPACING.

TYPICAL PAVEMENT STRIPING DETAILS
 NOT TO SCALE



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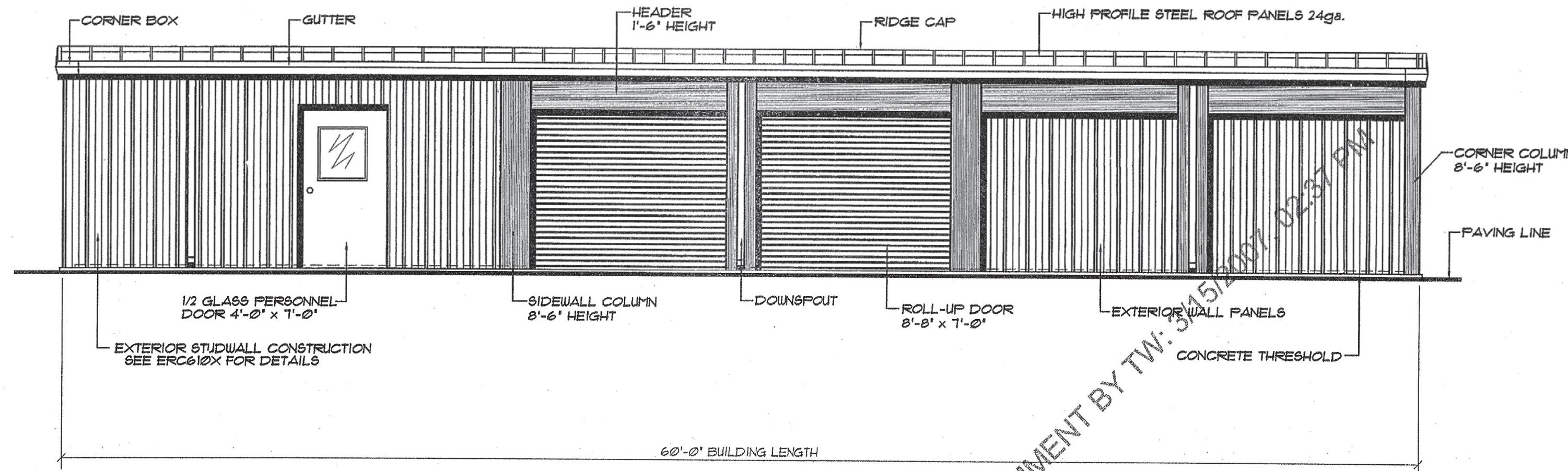
REVISIONS:			
REV.	DATE:	COMMENT:	BY:

DRAWN BY: SJK
 CHECKED BY: DGM
 DATE: SEP 16, 2020
 SCALE: AS NOTED
 FILE: 339-DETAILS
 DEED REF: BK 8985 PG 2356

PROJECT:
POWERS STREET SELF STORAGE
 MAP 43 LOT 30
 POWERS ST
 MILFORD, NH 03055

FOR
PMA PROPERTY GROUP, LLC
 614 NASHUA ST #127
 MILFORD, NH 03055

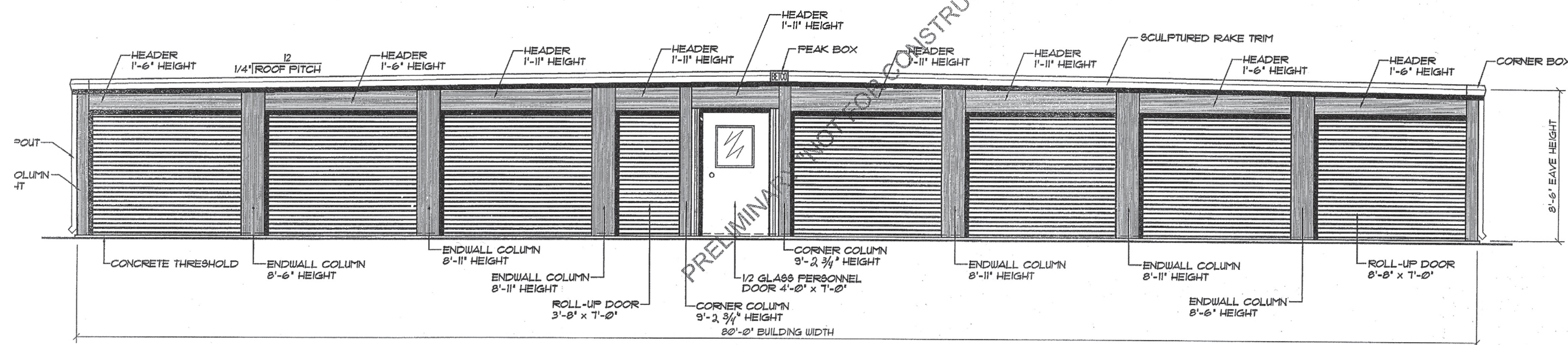
SHEET TITLE:
SITE DETAILS-5



A SIDEWALL ELEVATION... BUILDING "1"
 S1 SCALE: 1/4" = 1'-0"

NOTE: DOWNSPOUTS LOCATIONS SHOWN FOR ELEVATION PURPOSE ONLY. REFER TO FLOOR PLAN SHEETS FOR LOCATIONS

FOR APPROVAL ONLY
 NOT FOR FIELD USE
 DATE 3-22-07
 BY Madsu

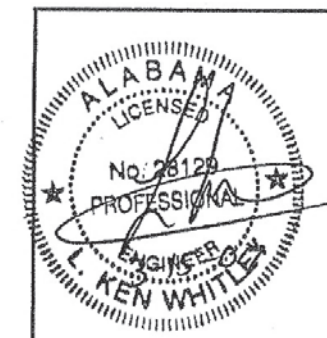


B ENDWALL ELEVATION... BUILDING "1"
 S1 SCALE: 1/4" = 1'-0"

NOTE: ... SEE OWNER FOR BUILDING ORIENTATION ON SITE

GENERAL NOTES:

1. CONCRETE FOUNDATIONS AND FLOOR SLAB ARE TO BE SUPPLIED AND INSTALLED BY OTHERS. WEDGE ANCHORS FOR INTERIOR AND EXTERIOR FOOTINGS SUPPLIED AND INSTALLED BY BETCO.
2. EXTERIOR OPENINGS, NOT DESIGNATED AS DOOR LOCATIONS, TO BE COMPLETED USING EXTERIOR WALL PANELS FURNISHED BY BETCO.
3. USE DOW 791 SILICONE CAULK AND 1/2" WIDE BUTYL RUBBER TAPE SEALANT FOR ALL INSTALLATION. USE DOW 799 SILICONE CAULK AT DOWNSPOUT TO GUTTER JOINT.
4. INTERIOR PARTITIONS PERPENDICULAR TO ROOF BEAM(S) MUST BE COMPLETED BEFORE ROOF PANELS ARE INSTALLED. USE PARTITION FRAMING TO PLUMB AND SQUARE COLUMNS AND HEADER SECTIONS. CHECK BUILDING WIDTH AT TOP OF COLUMNS PRIOR TO ROOF INSTALLATION.
5. POWDER DRIVEN FASTENERS BY BETCO.
6. DOORS SUPPLIED BY BETCO.
7. THOROUGHLY SWEEP ROOF PANELS FOLLOWING INSTALLATION TO REMOVE METAL DRILLINGS.
8. BUILDING ERECTION IS BY BETCO.
9. THIS DESIGN IS BASED ON USING ONLY METAL BUILDING COMPONENTS WHICH ARE PROPRIETARY TO BETCO. FURTHER, THE PROFESSIONAL ENGINEER'S SEAL IS INVALID UNLESS ONLY BETCO METAL BUILDING COMPONENTS ARE UTILIZED.
10. METAL STUDS (IF APPLICABLE) MAY REQUIRE FIELD CUTTING DEPENDING UPON THE EAVE HEIGHT OF THE STRUCTURE.



DATE:	2/8/07
DRAWN BY:	A WHITLEY
SCALE:	AS NOTED
APPROVED BY:	
REVISIONS:	
DATE:	
BY:	

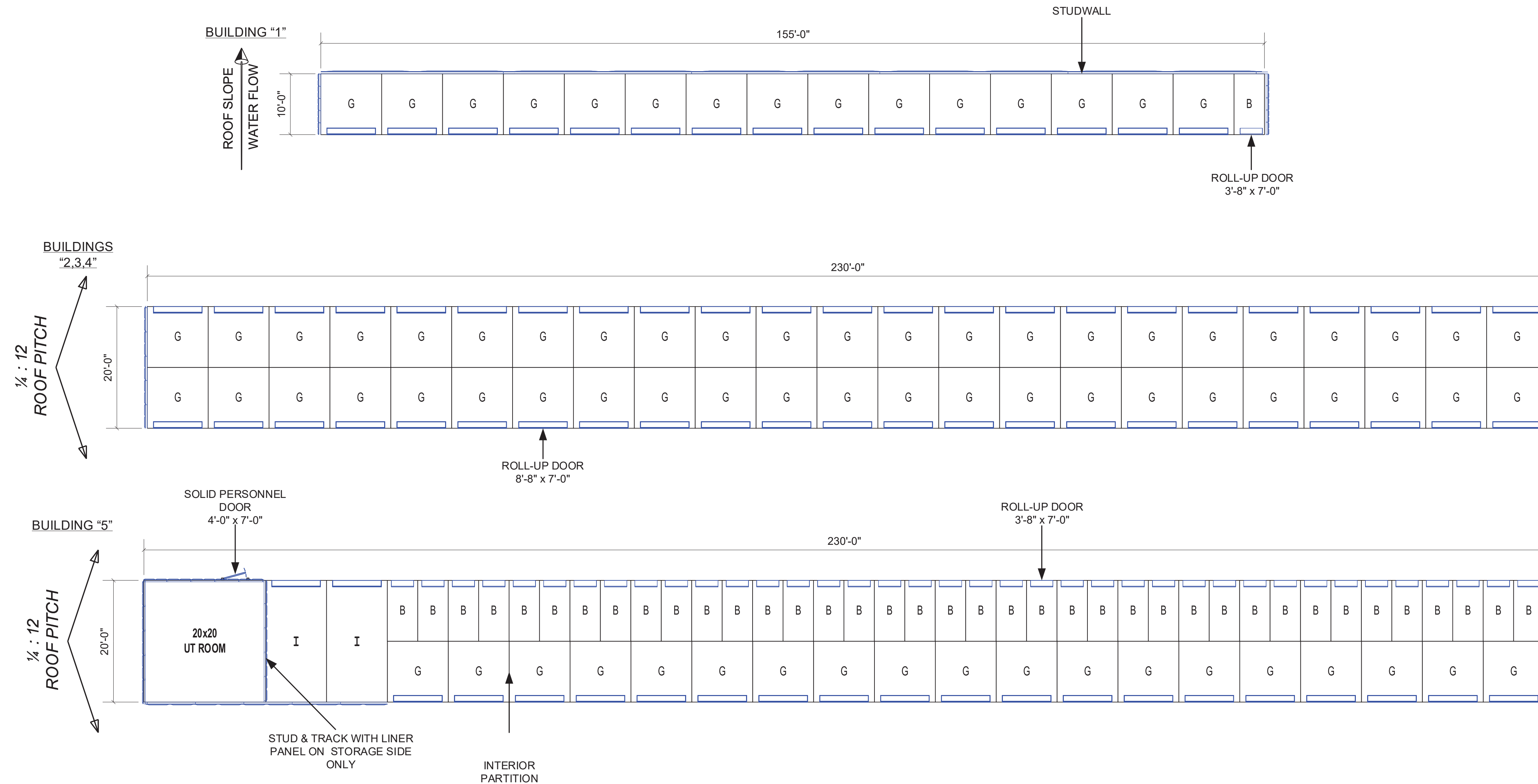


P.O. BOX 1650
 STATESVILLE, NC 28687
 (800)654-7813

PROJECT NAME:	MINI STORAGE
PROJECT ADDRESS:	
OWNER:	
SHEET TITLE:	ELEVATIONS & NOTES BUILDING "1"
DATE:	

RECEIVED MA

NOTE: BETCO INC. ESTIMATING DRAWING
NOT FOR FIELD CONSTRUCTION



UNIT MIX SCHEDULE					
UNIT TAG	DESCRIPTION	UNIT COUNT	UNIT TAG	DESCRIPTION	UNIT COUNT
A	5' x 5'	0	I	10' x 20'	0
B	5' x 10'	0	J	10' x 25'	0
C	5' x 15'	0	K	10' x 30'	0
D	5' x 20'	0	L	15' x 15'	0
E	7.5' x 10'	0	M	15' x 20'	0
F	8' x 10'	0	N	15' x 25'	0
G	10' x 10'	0	O	15' x 30'	0
H	10' x 15'	0	P	20' x 30'	0

FOR APPROVAL ONLY
NOT FOR FIELD USE
SIGNATURE: _____
DATE: _____

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	DATE: 3-17-2020	PROJECT NAME: SELF STORAGE PROJECT
	DRAWN BY: HT3	PROJECT ADDRESS: MILFORD NH
	SCALE: NOT TO SCALE	OWNER: JUSTIN DEMONTIGNY
	228 COMMERCE BLVD STATESVILLE, NC 28625	PROJECT NO.: 2180-R1
		SHEET TITLE: FLOOR PLAN BUILDINGS 1-5
		DRAWING NUMBER: 1 OF 1