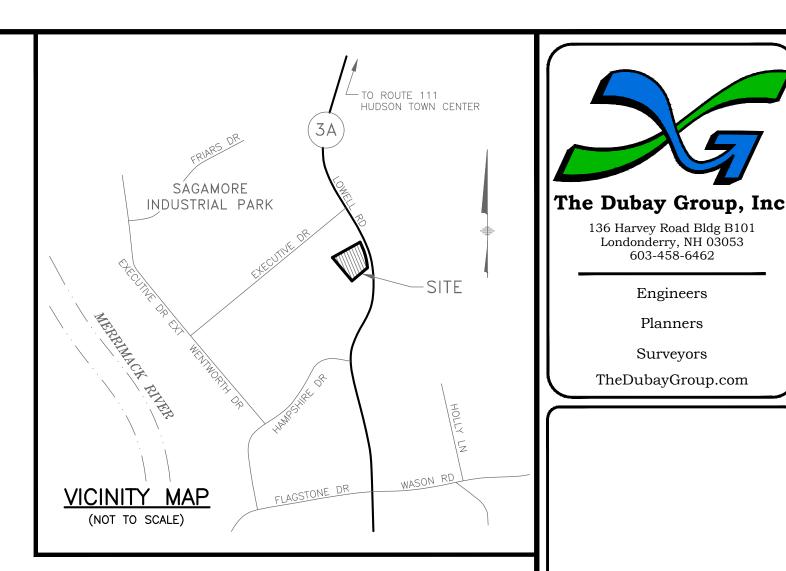
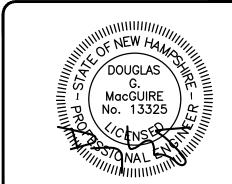
# GRANITE SUBARU EXPANSION Hudson, New Hampshire





## SHEET INDEX

- TITLE SHEET
- **EXISTING CONDITIONS PLAN**
- SITE PLAN
- GRADING, DRAINAGE, & UTILITY PLAN
- LANDSCAPE PLAN
- LIGHTING PLAN
- EROSION CONTROL PLAN
- SITE CONSTRUCTION DETAILS



136 Harvey Road Bldg B101 Londonderry, NH 03053 603-458-6462

Planners

Surveyors TheDubayGroup.com

THAT I WAS					
		REVISIONS:			
۷:	DATE:	COMMENT:	BY:		
	9/1/22	NHDES COMMENTS	SJK		
2	7/13/23	NHDES COMMENTS	SJK		
3	4/24/24	TOWN COMMENTS	SJK		
1	8/12/24	TOWN COMMENTS	SJK		

DRAWN BY:	SJK
CHECKED BY:	DGM
DATE:	DEC. 17, 2021
SCALE:	NONE
FILE:	469-COVER
DEED REF:	
H.C.R.D.: BK.	9403 PG. 2706

PROJECT:

#### **GRANITE SUBARU EXPANSION**

MAP 210 LOT 1 6 EXECUTIVE DRIVE HUDSON, NH 03051

**RAYMOND JAMES GRANITE PROP LLC** 

193 LOWELL RD HUDSON, NH 03051

SHEET TITLE:

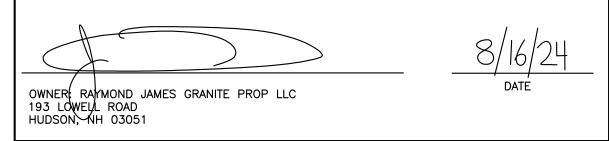
TITLE SHEET

PROJECT #469 SHEET 1

PURSUANT TO THE SITE APPROVED BY THE HUDSON, NH PLANNING BOARD REVIEW REGULATIONS OF DATE OF MEETING: THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

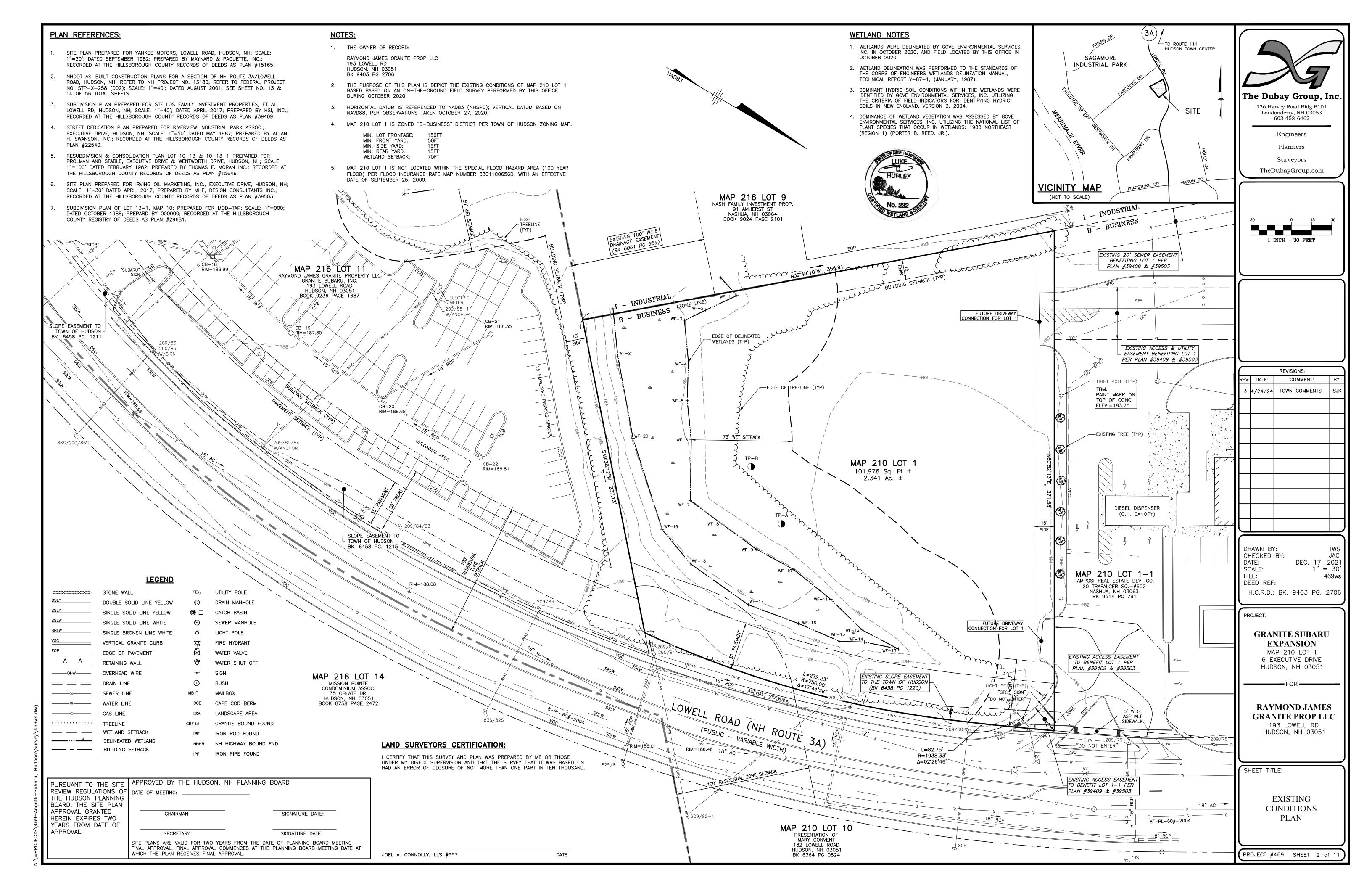
SIGNATURE DATE: SIGNATURE DATE: SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT

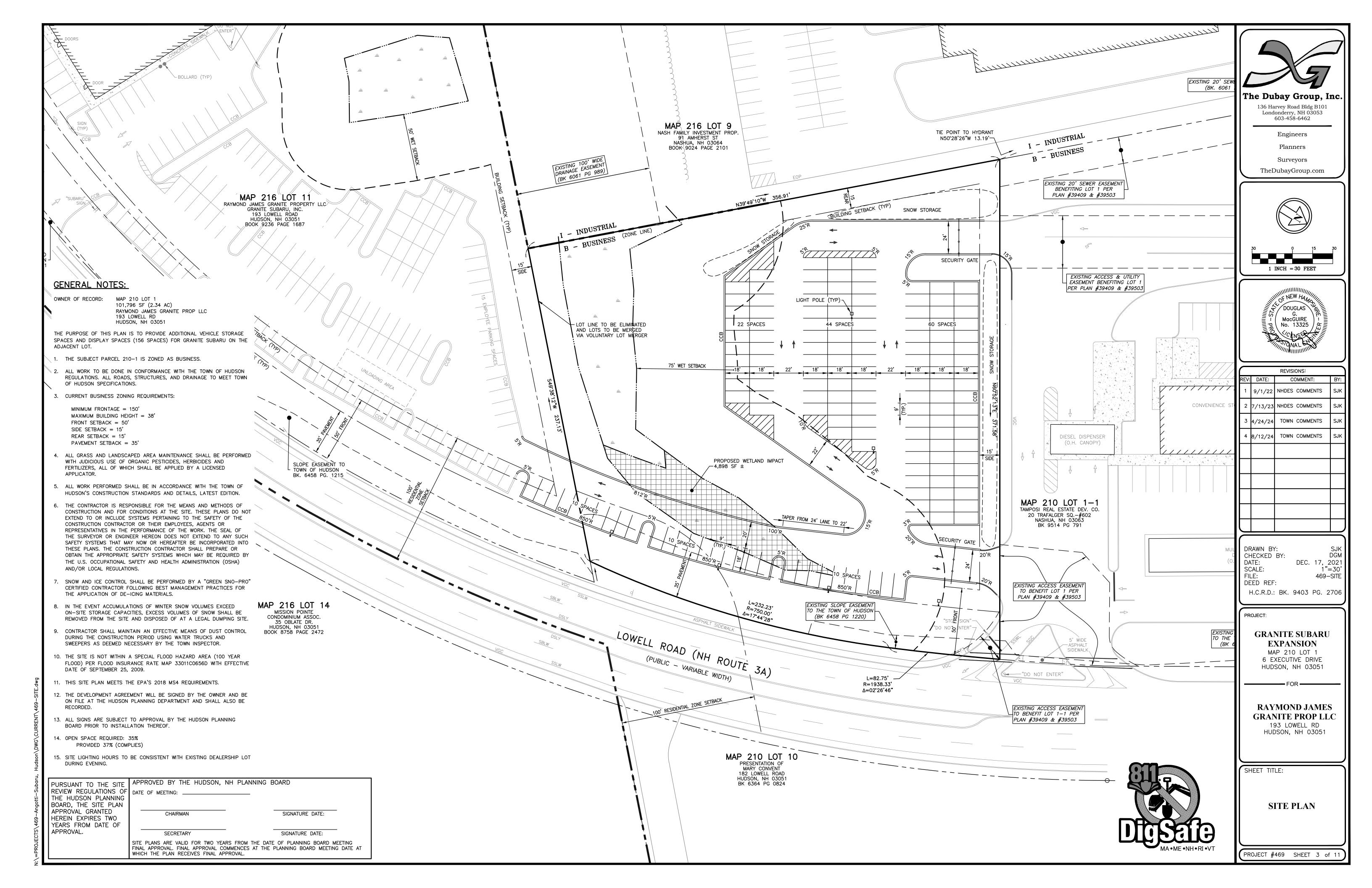
WHICH THE PLAN RECEIVES FINAL APPROVAL.

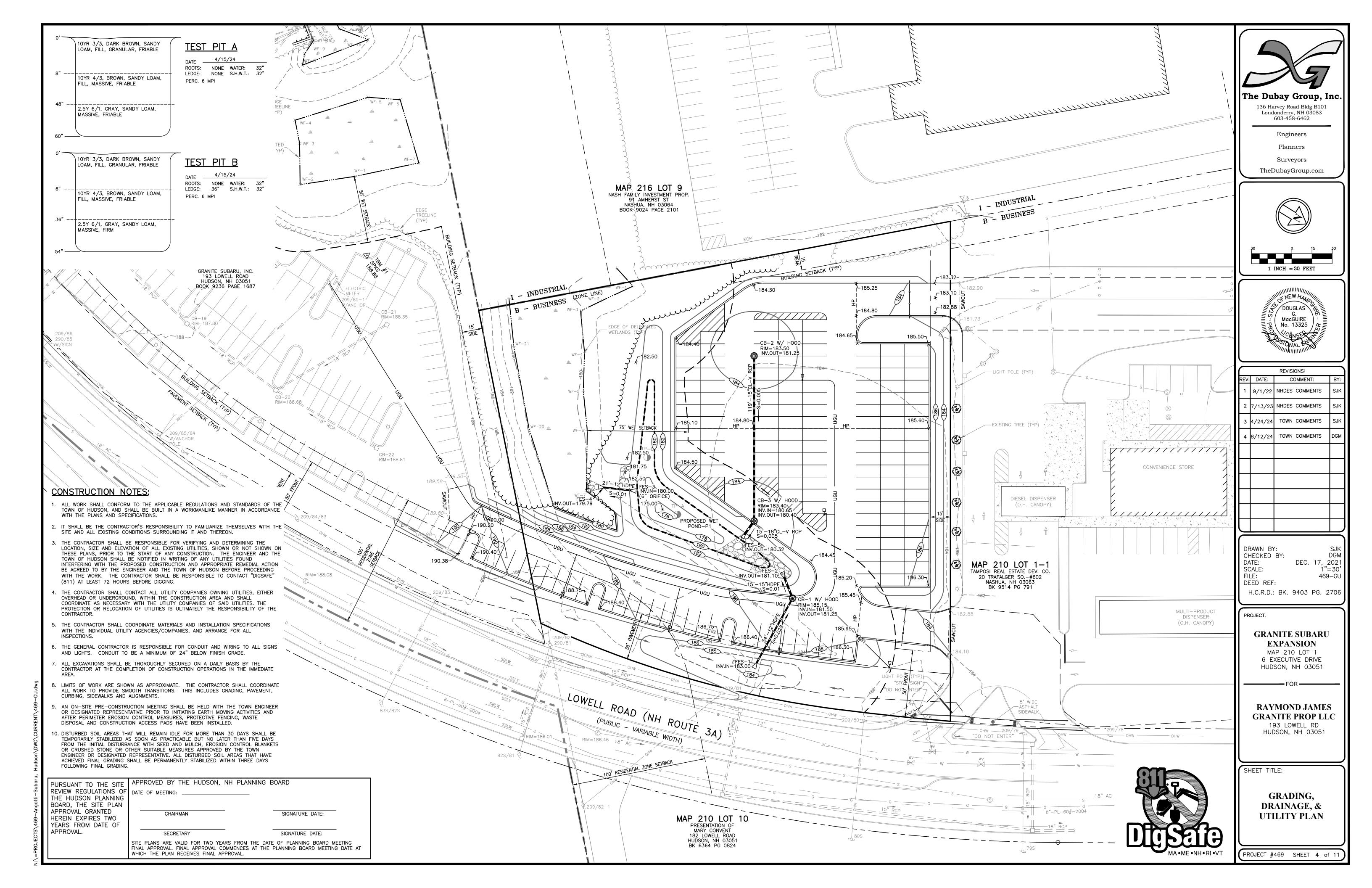


**REQUIRED PERMITS:** 1) NHDES WETLAND PERMIT

PERMIT # DATE 9/25/23 2022-01911







#### LANDSCAPE NOTES:

- I. 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.
- 2. WHEREVER POSSIBLE EXISTING TREES SHALL BE PRESERVED AND PROTECTED DURING CONSTRUCTION. DISTURBED SIDE SLOPES SHALL BE ALLOWED TO NATURALLY VEGETATE TO SUSTAIN EXISTING WILDLIFE AND PLANT LIFE.
- 3. THE PROPOSED DECIDUOUS TREES SHALL BE A MIN. 2" CALIPER @ 4' ABOVE GRADE, WITH EVERGREENS AT 6' HT.
- 4. ALL DISTURBED AREAS SHALL BE LOAMED AND SEEDED WITH A MINIMUM OF 6" SUITABLE LOAM, EXCEPT UNDER THE MULCH BEDS. SLOPES GREATER THAN 3: I SHALL BE PROTECTED WITH AN EROSION CONTROL BLANKET. (SEE PLANS BY ENGINEER)
- 5. PLANTS SHALL NOT BE INSTALLED UNTIL ALL GRADING AND CONSTRUCTION HAS BEEN COMPLETED WITHIN THE IMMEDIATE AREA OF THE PLANTING.
- 6. ALL TREES SHALL BE BALLED AND BURLAP UNLESS OTHERWISE NOTED.
- 7. ANY PROPOSED PLANT MATERIAL SUBSTITUTIONS SHALL BE APPROVED BY THE OWNER'S REPRESENTATIVE AND THE LANDSCAPE ARCHITECT.
- 8. 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.
- 9. 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.
- IO. CONTRACTOR SHALL REPORT ANY SOIL OR DRAINAGE CONDITIONS CONSIDERED DETRIMENTAL TO THE GROWTH OF PLANT MATERIAL.
- II. 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.
- 1.2. 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.
- 13. QUALITY AND SIZE OF PLANTS, SPREAD OF ROOTS, AND SIZE OF BALLS SHALL BE IN ACCORDANCE WITH ANSI 260 (REV. 1996) "AMERICAN STANDARD FOR NURSERY STOCK" AS PUBLISHED BY THE AMERICAN ASSOCIATION OF NURSERYMEN, INC.
- 14. 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.
- 15. 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
- I G. 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.
- 17. NO PLANT, SHALL BE PLANTED LESS THAN SIX FEET FROM EXISTING STRUCTURES.

BOTONICAL NAME / COMMON NAME

- 18. 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.
- 19. ALL PLANTING BEDS SHALL BE MULCHED WITH 4" LAYER OF DOUBLE SHREDDED HARDWOOD BARK MULCH.
- 20. NO SOIL CONTAINING ANY LIVING OR VIABLE PORTION OF PLANTS ON THE NEW HAMPSHIRE PROHIBITED INVASIVE SPECIES LIST (AGR TABLE 3800) SHALL BE TRANSPORTED TO OR FROM CONSTRUCTION SITES WITHOUT NOTIFICATION AND APPROVAL FROM THE NEW HAMPSHIRE DEPT. OF AGRICULTURE PER RSA 430:55.

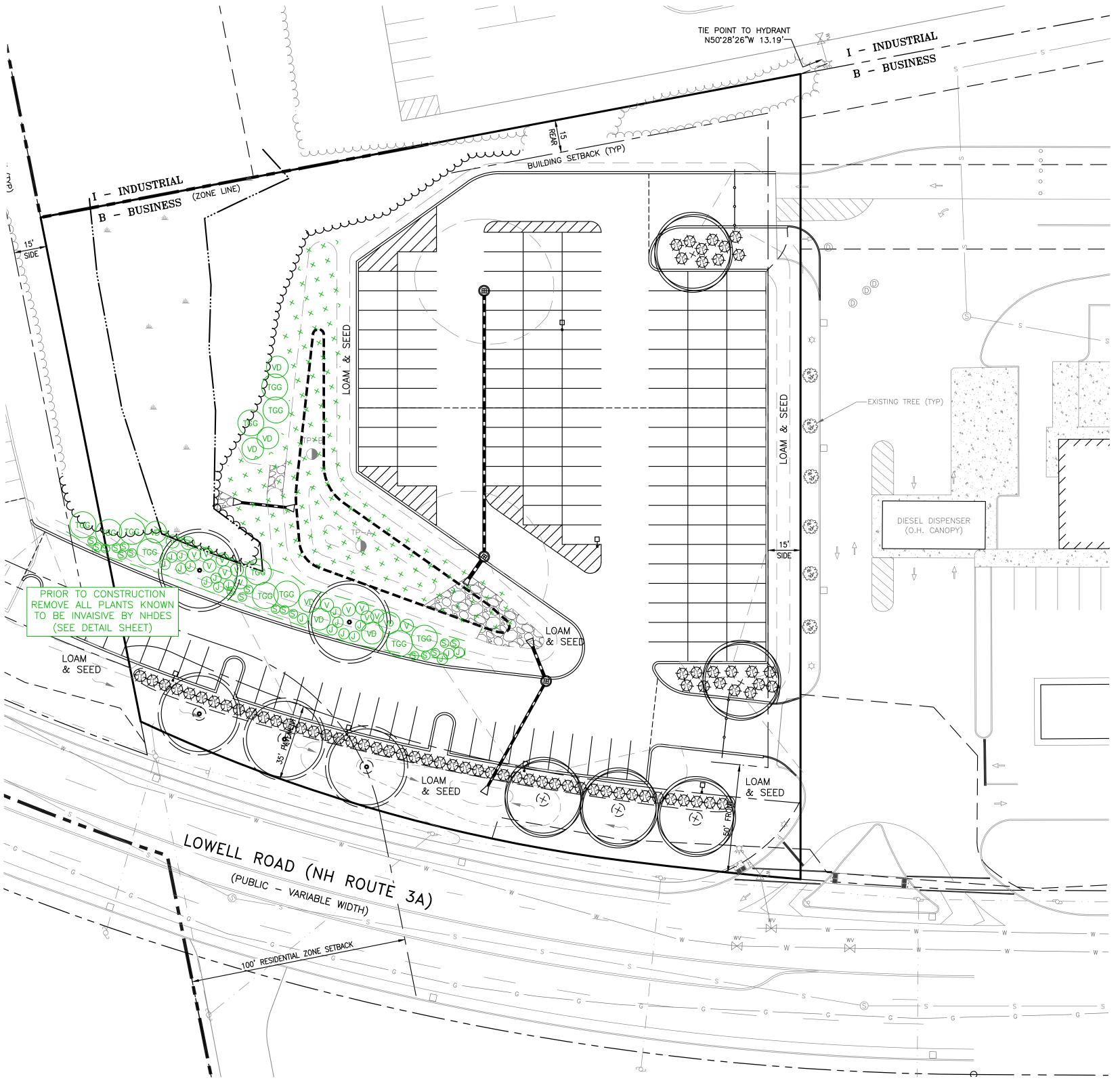
SIZE & REMARKS

MATURE HT. MATURE WIDTH

3'-4' 3'-4'

#### LANDSCAPE LEGEND:

	DEC	IDUOUS SHADE TREE			
•	5	ACER SACCHARUM 'COMMEMORATION' / COMMEMORATION SUGAR MAPLE	2" CAL.(@ 4' ABOVE GRADE) B\$B	40'-60'	30'-40'
+	5	GLEDITSIA T.I. 'HALKA' / HALKA HONEYLOCUST	2" CAL.(@ 4' ABOVE GRADE) B\$B	30'-40'	30'-40'
<b>Ø</b>	70	TAXUS MEDIA 'EVER-LOW' / EVER-LOW YEW	5 GAL.	2'	5'-6'
TGG	12	THUJA PLICATA 'GREEN GIANT' / ARBORVITAE, GREEN GIANT	G' HT. B¢B	30'-40'	l 5'-20'
	19	JUNIPERUS CHINENSIS 'SEAGREEN' / SEAGREEN JUNIPER	30" B\$B	5'-6'	4'-5'
VD	8	VIBURNUM DENTANUM / ARROWWOOD VIBURNUM	4' HT. B\$B	8'-10'	8'-10'
V	15	VACCINIUM CORYMBOSUM / HIGH BUSH BLUEBERRY	4' HT. B¢B	8'-10'	8'-10'



SEED DETENTION POND WITH ERNST NATIVE DETENTION AREA MIX -ITEM NUMBER: ERNMX-183

MIX COMPOSITION 26.0% PANICUM CLANDESTINUM, TIOGA (DEERTONGUE, TIOGA), 25.0% PANICUM VIRGATUM, 'SHELTER' (SWITCHGRASS, 'SHELTER'), 20.0% CAREX VULPINOIDEA, PA ECOTYPE (FOX SEDGE, PA ECOTYPE), 20.0% ELYMUS VIRGINICUS, 'MADISON' (VIRGINIA WILDRYE, "MADISON") 4.0% AGROSTIS PERENNANS, ALBANY PINE BUSH-NY ECOTYPE (AUTUMN BENTGRASS, ALBANY PINE BUSH-NY ECOTYPE), 3.0% JUNCUS EFFUSUS (SOFT RUSH), I.O% JUNCUS TENUIS, PA ECOTYPE (PATH RUSH, PA ECOTYPE), I.O% PANICUM RIGIDULUM, PA ECOTYPE (REDTOP PANICGRASS, PA ECOTYPE)

SEEDING RATE: 20 LB PER ACRE, OR 1/2 LB PER 1,000 SQ FT

MAINTENANCE: ONCE A YEAR, IN LATE FALL WHEN ALL FLOWERS HAVE RIPENED AND DROPPED THEIR SEEDS MOW THE DETENTION/RETENTION AREAS. ONCE-A-YEAR MOWING WILL REMOVE TREE AND BRUSH SEEDLINGS, IF LEFT UN-MOWED, TREES AND BRUSH WILL EVENTUALLY TAKE OVER.

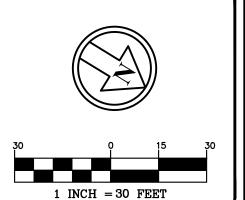




136 Harvey Road Bldg B101 Londonderry, NH 03053 603-458-6462

> Engineers Planners

Surveyors TheDubayGroup.com



**REVISIONS:** COMMENT:

TOWN COMMENTS

DRAWN BY: CHECKED BY: DATE: SCALE: 1"=30' 469-LANDSCAPE DEED REF:

H.C.R.D.: BK. 9403 PG. 2706

PROJECT:

**GRANITE SUBARU EXPANSION** 

MAP 210 LOT 1 6 EXECUTIVE DRIVE HUDSON, NH 03051

RAYMOND JAMES **GRANITE PROP LLC** 193 LOWELL RD HUDSON, NH 03051

SHEET TITLE:

LANDSCAPE PLAN

PROJECT #469 SHEET 5 of

REVIEW REGULATIONS OF DATE OF MEETING: THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

PURSUANT TO THE SITE APPROVED BY THE HUDSON, NH PLANNING BOARD

ILEX VERTICILLATA 'RED SPRITE' / RED SPRITE WINTERBERRY

SIGNATURE DATE:

SIGNATURE DATE:

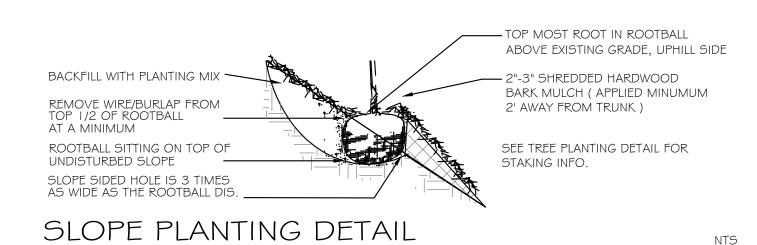
SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

#### SHRUB PLANTING DETAIL

NEVER CUT A LEADER PRUNE 1/5 OF EXISTING LEAF AREA WHILE RETAINING NATURAL FORM. FOR TREES WITH CAL. LESS THAN 3" (TYPE II)
FOR TREES WITH CALIPER 3" OR GREATER (3) 2"x2"x8" SPRUCE STAKES ABOVE GROUND TO LOWEST BRANCH STAKES TO BE CLEAR OF ROOTBALL 6 1/2" GALV. TURNBUCKLE \$ #12 GA. GALV. WISTED WIRE IN RUBBER HOSE AROUND TREE ANCHOR WITH 2"x2"x2' SPRUCE STAKE BURIED BELOW GRADE CLEAR OF ROOTBALI - #12 GA. GALV. TWISTED WIRE IN RUBBER HOSE GROUND LINE TO BE SAME AS AT NURSERY ROOT FLARE TO BE EXPOSED

I 2" MIN. PLANTING SOIL MIX UNDER ROOTBALL

### DECIDUOUS TREE PLANTING DETAIL





REMOVE BURLAP FROM-

BACKFILL WITH PLANTING MIX

PURSUANT TO THE SITE REVIEW REGULATIONS OF DATE OF MEETING: THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF APPROVAL.

APPROVED BY THE HUDSON, NH PLANNING BOARD CHAIRMAN SIGNATURE DATE: SIGNATURE DATE: SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT

WHICH THE PLAN RECEIVES FINAL APPROVAL.

UNIVERSITY of NEW HAMPSHIRE Methods for Disposing
COOPERATIVE EXTENSION
Non-Native Invasive Plants

## **Non-Native Invasive Plants**

Prepared by the Invasives Species Outreach Group, volunteers interested in helping people control invasive plants. Assistance provided by the Piscataquog Land Conservancy and the NH Invasives Species Committee. Edited by Karen Bennett, Extension Forestry Professor and Specialist.



Tatarian honeysuckle Lonicera tatarica

USDA-NRCS PLANTS Database / Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British Possessions. Vol. 3: 282.

the appropriate disposal method. Most are spread by seed and are dispersed by wind, water, animals, or people. Some reproduce by vegetative means from pieces of stems or roots forming new plants. Others spread through both seed and vegetative means.

Because movement and disposal of viable plant parts is restricted (see NH Regulations), viable invasive parts can't be brought to most transfer stations in the state. Check with your transfer station to see if there is an approved, designated area for invasives disposal. This fact sheet gives recommendations for rendering plant parts non-

Control of invasives is beyond the scope of this fact sheet. For information about control visit www.nhinvasives.org or contact your UNH Cooperative Extension office.

Invasive plants grow well even in less than desirable conditions such as sandy soils along roadsides, shaded wooded areas, and in wetlands.

Non-native invasive plants crowd out natives in

taxpayers billions of dollars each year from lost

biodiversity, impacts to natural resources and the

environment, and the cost to control and eradicate

natural and managed landscapes. They cost

agricultural and forest crops, decreased

In ideal conditions, they grow and spread even faster. There are many ways to remove these nonnative invasives, but once removed, care is needed to dispose the removed plant material so the plants don't grow where disposed.

Knowing how a particular plant reproduces indicates its method of spread and helps determine

#### **New Hampshire Regulations**

Prohibited invasive species shall only be disposed of in a manner that renders them nonliving and nonviable. (Agr. 3802.04)

No person shall collect, transport, import, export, move, buy, sell, distribute, propagate or transplant any living and viable portion of any plant species, which includes all of their cultivars and varieties, listed in Table 3800.1 of the New Hampshire prohibited invasive species list. (Agr 3802.01)

## **Suggested Disposal Methods for Non-Native Invasive Plants**

This table provides information concerning the disposal of removed invasive plant material. If the infestation is treated with herbicide and left in place, these guidelines don't apply. Don't bring invasives to a local transfer station, unless there is a designated area for their disposal, or they have been rendered non-viable. This listing includes wetland and upland plants from the New Hampshire Prohibited Invasive Species List. The disposal of aquatic plants isn't addressed.

<b>Woody Plants</b>	Method of Reproducing	Methods of Disposal
Norway maple  (Acer platanoides)  European barberry (Berberis vulgaris)  Japanese barberry (Berberis thunbergii)  autumn olive (Elaeagnus umbellata)  burning bush (Euonymus alatus)  Morrow's honeysuckle (Lonicera morrowii)  Tatarian honeysuckle (Lonicera tatarica)  showy bush honeysuckle (Lonicera x bella)  common buckthorn (Rhamnus cathartica)  glossy buckthorn (Frangula alnus)	Fruit and Seeds	Prior to fruit/seed ripening Seedlings and small plants  Pull or cut and leave on site with roots exposed. No special care needed.  Larger plants  Use as firewood.  Make a brush pile.  Chip.  Burn.  After fruit/seed is ripe  Don't remove from site.  Burn.  Make a covered brush pile.  Chip once all fruit has dropped from branches.  Leave resulting chips on site and monitor.
oriental bittersweet (Celastrus orbiculatus) multiflora rose (Rosa multiflora)	Fruits, Seeds, Plant Fragments	Prior to fruit/seed ripening Seedlings and small plants

#### **How and When to Dispose of Invasives?**

To prevent seed from spreading remove invasive plants before seeds are set (produced). Some plants continue to grow, flower and set seed even after pulling or cutting. Seeds can remain viable in the ground for many years. If the plant has flowers or seeds, place the flowers and seeds in a heavy plastic bag "head first" at the weeding site and transport to the disposal site. The following are general descriptions of disposal methods. See the chart for recommendations by species.

**Burning:** Large woody branches and trunks can be used as firewood or burned in piles. For outside burning, a written fire permit from the local forest fire warden is required unless the ground is covered in snow. Brush larger than 5 inches in diameter can't be burned. Invasive plants with easily airborne seeds like black swallow-wort with mature seed pods (indicated by their brown color) shouldn't be burned as the seeds may disperse by the hot air created by the fire.

Bagging (solarization): Use this technique with softertissue plants. Use heavy black or clear plastic bags (contractor grade), making sure that no parts of the plants poke through. Allow the bags to sit in the sun for several weeks and on dark pavement for the best effect.

SDA-NRCS PLANTS Database Britton, N.L., and A. Brown. 1913. An illustrated flora of the northern United States, Canada and the British

Tarping and Drying: Pile material on a sheet of plastic and cover with a tarp, fastening the tarp to the ground and monitoring it for escapes. Let the material dry for several weeks, or until it is clearly nonviable.

**Chipping:** Use this method for woody plants that don't reproduce vegetatively.

**Burying:** This is risky, but can be done with watchful diligence. Lay thick plastic in a deep pit before placing the cut up plant material in the hole. Place the material away from the edge of the plastic before covering it with more heavy plastic. Eliminate as much air as possible and toss in soil to weight down the material in the pit. Note that the top of the buried material should be at least three feet underground. Japanese knotweed should be at least 5 feet underground!

**Drowning:** Fill a large barrel with water and place soft-tissue plants in the water. Check after a few weeks and look for rotted plant material (roots, stems, leaves, flowers). Wellrotted plant material may be composted. A word of caution- seeds may still be viable after using this method. Do this before seeds are set. This method isn't used often. Be prepared for an awful stink!

**Composting:** Invasive plants can take root in compost. Don't compost any invasives unless you know there is no viable (living) plant material left. Use one of the above techniques (bagging, tarping, drying, chipping, or drowning) to render the plants nonviable before composting. Closely examine the plant before composting and avoid composting seeds.

Be diligent looking for seedlings for years in areas where removal and disposal took place.

Non-Woody Plants	Method of Reproducing	Methods of Disposal
garlic mustard  (Alliaria petiolata)  spotted knapweed  (Centaurea maculosa)  Sap of related knapweed can cause skin irritation and tumors. Wear gloves when handling.  black swallow-wort  (Cynanchum nigrum)  May cause skin rash. Wear gloves and long sleeves when handling.  pale swallow-wort  (Cynanchum rossicum)  giant hogweed  (Heracleum mantegazzianum)  Can cause major skin rash. Wear gloves and long sleeves when handling.  dame's rocket  (Hesperis matronalis) perennial pepperweed  (Lepidium latifolium)  purple loosestrife  (Lythrum salicaria)  Japanese stilt grass  (Microstegium vimineum)  mile-a-minute weed  (Polygonum perfoliatum)	Fruits and Seeds	Prior to flowering Depends on scale of infestation Small infestation Pull or cut plant and leave on site with roots exposed.  Large infestation Pull or cut plant and pile. (You can pile onto or cover with plastic sheeting). Monitor. Remove any re-sprouting material  During and following flowering Do nothing until the following year or remove flowering heads and bag and let rot.  Small infestation Pull or cut plant and leave on site with roots exposed.  Large infestation Pull or cut plant and pile remaining materia (You can pile onto plastic or cover with plastic sheeting). Monitor. Remove any re-sprouting material
common reed (Phragmites australis) Japanese knotweed (Polygonum cuspidatum) Bohemian knotweed (Polygonum x bohemicum)	Fruits, Seeds, Plant Fragments Primary means of spread in these species is by plant parts. Although all care should be given to preventing the dispersal of seed during control activities, the presence of seed doesn't materially influence disposal activities.	Small infestation  Bag all plant material and let rot.  Never pile and use resulting material as compost.  Burn.  Large infestation  Remove material to unsuitable habitat (dry, hot and sunny or dry and shaded location) and scatter or pile.  Monitor and remove any sprouting material  Pile, let dry, and burn.

UNH Cooperative Extension programs and policies are consistent with pertinent Federal and State laws and regulations, and prohibits discrimination in its programs, activities and employment on the basis of race, color, national origin, gender, religion, age, disability, political beliefs, sex, sexual orientation, or veteran's, marital or family status. College of Life Sciences and Agriculture, County Governments, NH Dept. of Resources and Economic Development, Division of Forests and Lands, NH Fish and Game, and U.S. Dept. of Agriculture cooperating.

The Dubay Group, Inc.

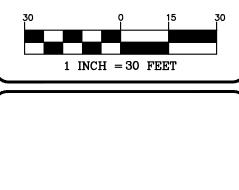
136 Harvey Road Bldg B101 Londonderry, NH 03053 603-458-6462

> Engineers Planners

Surveyors

TheDubayGroup.com





**REVISIONS:** 

COMMENT:

	I		
	I		
_			
	I		
	I		

RAWN BY:	RE
HECKED BY:	DC
ATE:	DEC. 17, 20
CALE:	1"=3
LE:	469-LANDSCAF
EED REF:	

H.C.R.D.: BK. 9403 PG. 2706

PROJECT:

**GRANITE SUBARU EXPANSION** 

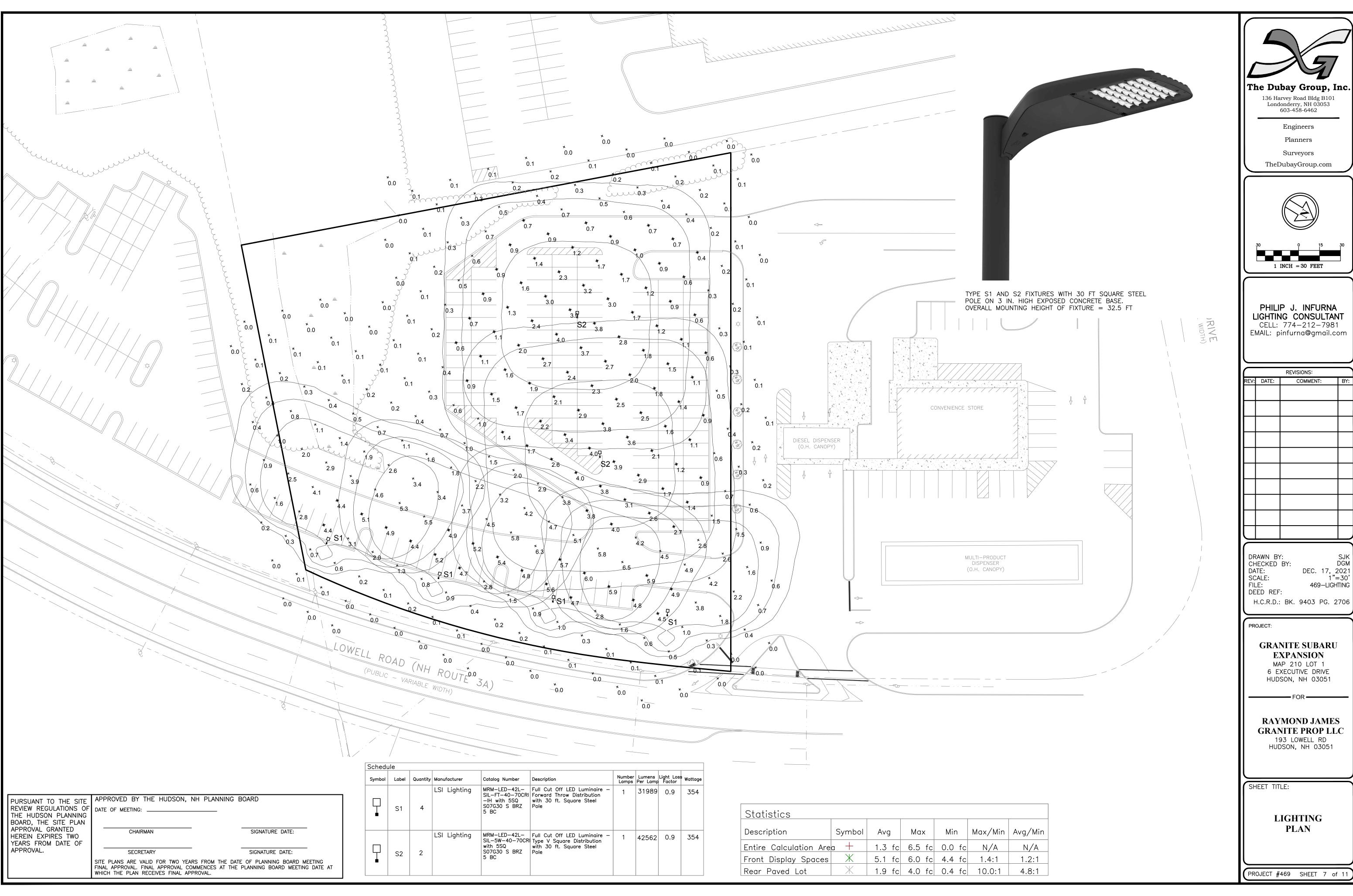
MAP 210 LOT 1 6 EXECUTIVE DRIVE HUDSON, NH 03051

**RAYMOND JAMES GRANITE PROP LLC** 

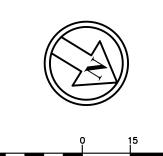
> 193 LOWELL RD HUDSON, NH 03051

LANDSCAPE **DETAILS** 

PROJECT #469 SHEET 6 of 1



The Dubay Group, Inc.



1 INCH = 30 FEET

PHILIP J. INFURNA LIGHTING CONSULTANT CELL: 774-212-7981

REVISIONS:				
REV:	DATE:	COMMENT:	BY:	

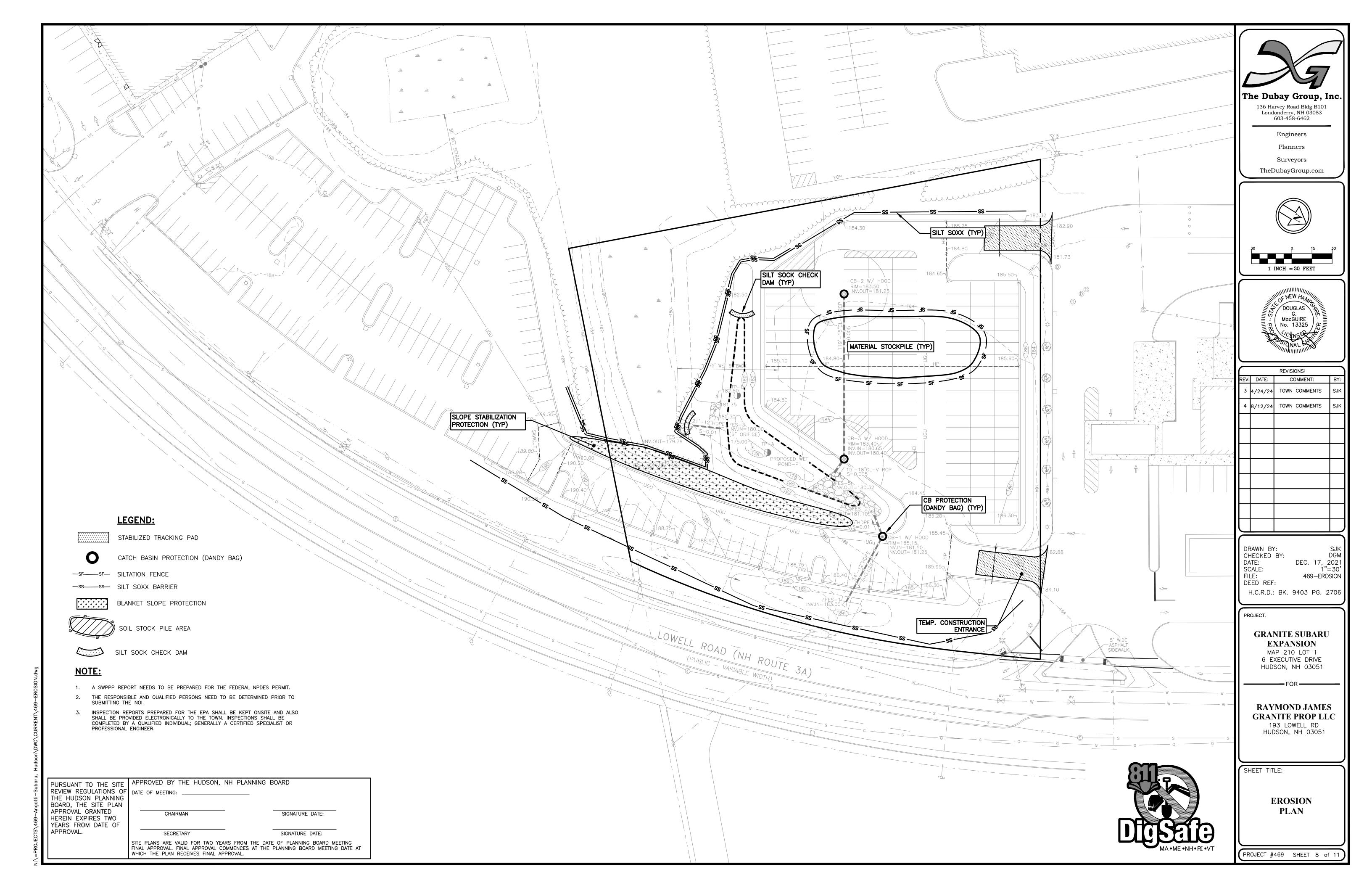
DEC. 17, 2021 1"=30' 469-LIGHTING

## **EXPANSION**

6 EXECUTIVE DRIVE HUDSON, NH 03051

RAYMOND JAMES **GRANITE PROP LLC** 193 LOWELL RD

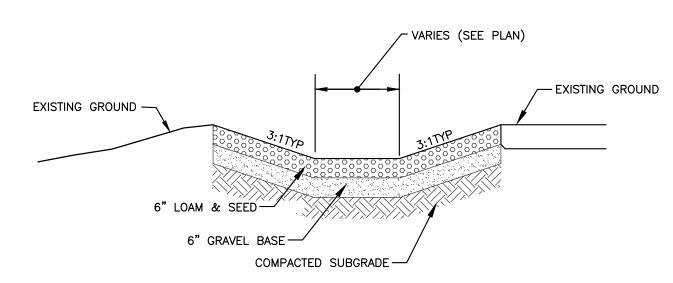
PROJECT #469 SHEET 7 of 1



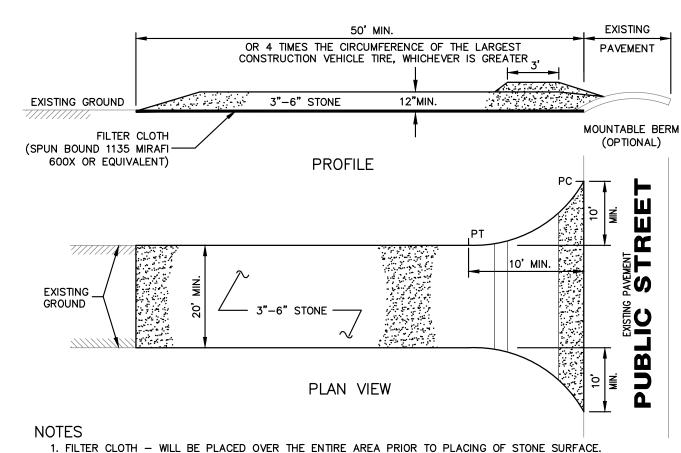
## SILT SOCK DETAIL

4. COMPOST MATERIAL SHALL BE DISPERSED ON SITE, AS

DETERMINED BY THE ENGINEER.

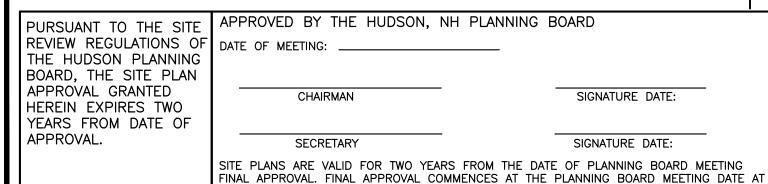


#### TYPICAL GRASS LINED SWALE NOT TO SCALE

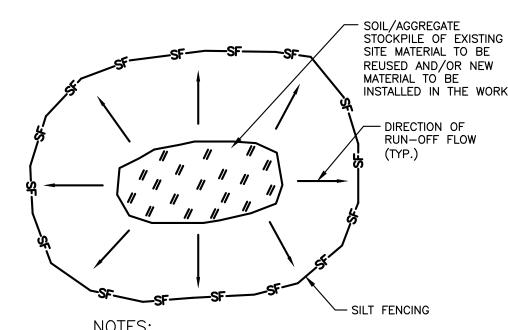


- 1. FILTER CLOTH WILL BE PLACED OVER THE ENTIRE AREA PRIOR TO PLACING OF STONE SURFACE.
- 2. WATER ALL SURFACE WATER FLOWING OR DIVERTED TOWARD CONSTRUCTION ENTRANCES SHALL BE PIPED ACROSS THE ENTRANCE. IF PIPING IS IMPRACTICAL, A MOUNTABLE BERM WITH 5:1 SLOPES WILL BE
- 3. MAINTENANCE THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-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 RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.
- 4. WASHING WHEELS SHALL BE CLEANED TO REMOVE SEDIMENT PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE AND WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE.
- 5. PERIODIC INSPECTION AND NEEDED MAINTENANCE SHALL BE PROVIDED AFTER EACH RAIN STORM EVENT.

#### USDA-SCS STABILIZED TRACKING PAD

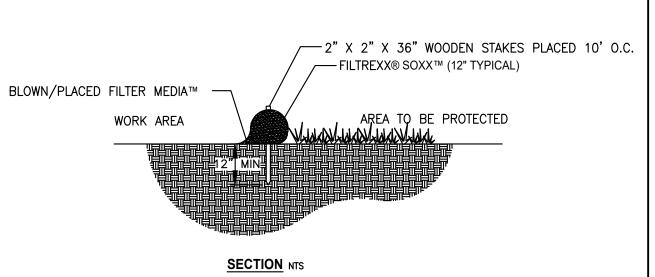


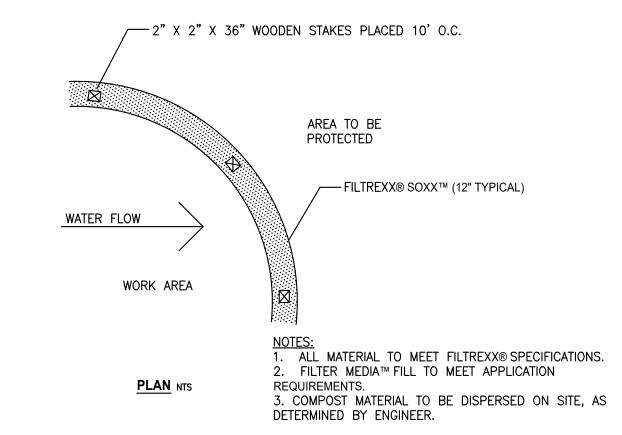
WHICH THE PLAN RECEIVES FINAL APPROVAL.



- 1. ALL EXISTING EXCAVATED MATERIAL THAT IS NOT TO BE REUSED IN THE WORK IS TO BE IMMEDIATELY REMOVED FROM THE SITE AND PROPERLY DISPOSED OF
- 2. RESTORE STOCKPILE SITES TO PRE-EXISTING PROJECT CONDITION AND RESEED AS REQUIRED.
- 3. STOCKPILE HEIGHTS MUST NOT EXCEED 35'. STOCKPILE SLOPES MUST BE 2:1 OR FLATTER.

MATERIALS STOCKPILE DETAIL NOT TO SCALE





FILTREXX® SEDIMENT CONTROL NOT TO SCALE

ITEM 641.04 6" ROLLED LOAM & SEED 642. LIMESTONE 643.11 FERTILIZER

LOAM & SEED DETAIL NOT TO SCALE

645.1 MULCH

#### **EROSION CONTROL NOTES**

#### CONSTRUCTION SEQUENCE

- PRIOR TO CONSTRUCTION, AN INITIAL PRE CONSTRUCTION MEETING(S) SHALL TAKE PLACE WITH THE CONTRACTOR, OWNER, AND TOWN AGENTS.
- 2. 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 STORMWATER 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 PERMITTED 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.
- 4. CONSTRUCT TEMPORARY CONSTRUCTION EXIT.
- 5. CLEAR AND GRUB WITHIN AREAS OF DISTURBANCE UNLESS OTHERWISE NOTED.
- 6. 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.
- 7. SHAPE PROPOSED DRAINAGE PONDS, DITCHES AND/OR SWALES.
- 8. PERFORM ROUGH SITE GRADING, INSTALL DRAINAGE SYSTEMS AND UTILITIES.
- 9. 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.
- 10. LAYOUT AND INSTALL ALL BURIED UTILITIES AND SERVICES UP TO 10' OF THE PROPOSED BUILDING FOUNDATIONS, CAP AND MARK TERMINATIONS OR LOG SWING TIES.
- 11. FINISH GRADE SITE, BACKFILL ROAD SUBBASE GRAVEL IN TWO, COMPACTED LIFTS, PROVIDE TEMPORARY EROSION PROTECTION TO DITCHES AND SWALES WHERE APPLICABLE, IN THE FORM OF MULCHING, JUTE MATTING OR STONE CHECK DAMS.
- 12. INSTALL EXTERIOR LIGHT POLE BASES, AND MAKE FINAL CONNECTIONS TO CONDUIT.
- 13. ANY PERMANENT DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.
- 14. PLACE BINDER LAYER OF PAVEMENT, THEN RAISE CATCH BASIN FRAMES TO FINAL GRADE. REINSTALL BASIN INLET PROTECTION.
- 15. 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.
- 16. PLANT LANDSCAPING IN AREAS OUT OF WAY OF BUILDING CONSTRUCTION. PREPARE AND STABILIZE FINAL SITE GRADING BY ADDING TOPSOIL, SEED, MULCH AND FERTILIZER.
- 17. AFTER BUILDINGS ARE COMPLETED, FINISH ALL REMAINING LANDSCAPED WORK.
- 18. CONSTRUCT ASPHALT WEARING COURSE.
- 19. 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.
- 4. 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
- 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.
- 6. 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.
- 8. ALL EROSION CONTROLS ARE TO BE INSPECTED WEEKLY AND AFTER 0.5" OR GREATER OF RAINFALL WITHIN A 24 HOUR PERIOD.
- 9. 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.
- 10. 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 PERIODICALLY BE REMOVED AND DISPOSED IN A SECURE LOCATION.
- 11. PAVED AREAS MUST BE KEPT CLEAN AT ALL TIMES.
- 12. ALL DEWATERING OPERATIONS MUST DISCHARGE DIRECTLY INTO A SEDIMENT FILTER AREA.
- 13. 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.
- 14. WINTERIZATION EFFORTS FOR AREAS NOT STABILIZED BY NOV. 1ST SHALL BE MADE BY THE APPROPRIATE USE OF MATTING, BLANKETS, MULCH AND SEEDING.
- 15. AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED: A. BASE COURSE GRAVELS HAS BEEN INSTALLED IN AREAS TO BE PAVED;

- B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
- C. 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.
- 16. 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

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

SEEDING MIXTURE						
MIXTURE	SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ. F			
	WINTER RYE	112	2.50			
	OATS	80	2.00			
	ANNUAL RYEGRASS	40	1.00			
	PERENNIAL RYEGRASS	30	0.17			
	TOTAL	262	5.67			

#### 2. SEEDING SCHEDULE

- A. SPRING SEEDING USUALLY GIVES THE BEST RESULTS FOR ALL SEED MIXES OR WITH LEGUMES.
- B. PERMANENT SEEDING SHOULD BE COMPLETED 45 DAYS PRIOR TO THE FIRST KILLING FROST. 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.
- 3. ESTABLISHING A STAND OF GRASS
- A. STONES AND TRASH SHOULD BE REMOVED FROM LOAMED AREAS SO AS NOT TO INTERFERE WITH THE SEEDING PROCESS.
- B. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 2 INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED.
- C. IF APPLICABLE, FERTILIZER AND ORGANIC SOIL AMENDMENTS SHOULD BE APPLIED DURING THE GROWING SEASON.
- D. 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).
- E. FERTILIZER SHOULD BE RESTRICTED TO A LOW PHOSPHATE, SLOW RELEASE NITROGEN FERTILIZER
- 4. SEED SHOULD BE SPREAD UNIFORMLY BY A METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDING HAND, CYCLONE SEEDER, DRILL, CULTIPACKER TYPE SEEDER OR HYDROSEEDER.
- A. INOCULATE ALL LEGUME SEED WITH THE CORRECT TYPE AND AMOUNT OF INOCULANTS.
- B. NORMAL SEEDING DEPTH IS FROM ¼ TO ½ INCH. HYDROSEEDING THAT INCLUDES MULCH MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10 % WHEN HYDROSEEDING
- C. 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. POLINDS PER ACRE POLINDS PER 1.000 SQ. FT. MINTURE CRECIES

MIXTURE	SPECIES	POUNDS PER ACRE	POUNDS PER 1,000 SQ.
Α	TALL FESCUE	45	1.04
	CREEPING RED FESCUE	45	1.04
	REDTOP	7	0.12
	TOTAL	97	2.22

- 5. ALTERNATE PERMANENT SEEDING FOR AREAS NOT RECEIVING LAWN OR LANDSCAPING SHALL BE AS FOLLOWS:
- A. THE NEW ENGLAND EROSION CONTROL/RESTORATION MIX CONTAINS A SELECTION OF NATIVE GRASSES AND WILDELOWERS 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.
- B. APPLICATION RATE: 35 LBS/ACRE 1245 SQ FT/LB
- C. SPECIES: SWITCHGRASS (PANICUM VIRGATUM), CREEPING RED FESCUE (FESTUCA RUBRA), VIRGINIA WILD RYE (ELYMUS VIRGINICUS), FOX SEDGE (CAREX VULPINOIDEA), CREEPING BENTGRASS (AGROSTIS 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**

- 1. 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;
- 2. 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 OCTOBER 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

- 1. THE CONTRACTOR SHALL TAKE WHATEVER MEASURES ARE NECESSARY TO PROTECT THE GRASS WHILE IT
- 2. TO BE ACCEPTABLE, SEEDED 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.
- 3. SEEDED AREAS WILL BE FERTILIZED AND RE-SEEDED AS NECESSARY TO INSURE VEGETATIVE ESTABLISHMENT.
- 4. THE SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN NECESSARY, UNTIL ADEQUATE VEGETATION IS ESTABLISHED.
- 5. THE SILT FENCE AND/OR SILTSOXX BARRIER SHALL BE CHECKED AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL.
- 6. SILT FENCE AND/OR SILTSOXX SHALL BE REMOVED ONCE VEGETATION IS ESTABLISHED, AND DISTURBED AREAS RESULTING FROM SLIT FENCE AND/OR SILTSOXX REMOVAL SHALL BE PERMANENTLY SEEDED.



The Dubay Group, Inc.

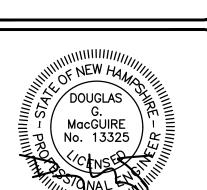
136 Harvey Road Bldg B101

Londonderry, NH 03053 603-458-6462

Engineers

Planners

Surveyors TheDubayGroup.com



**REVISIONS** COMMENT: /·I DATF· I

DRAWN BY: CHECKED BY: DATE: DEC. 17, 2021 SCALE:

H.C.R.D.: BK. 9403 PG. 2706

469-DETAILS

PROJECT:

FILE:

DEED REF:

#### **GRANITE SUBARU EXPANSION**

MAP 210 LOT 1 6 EXECUTIVE DRIVE HUDSON, NH 03051

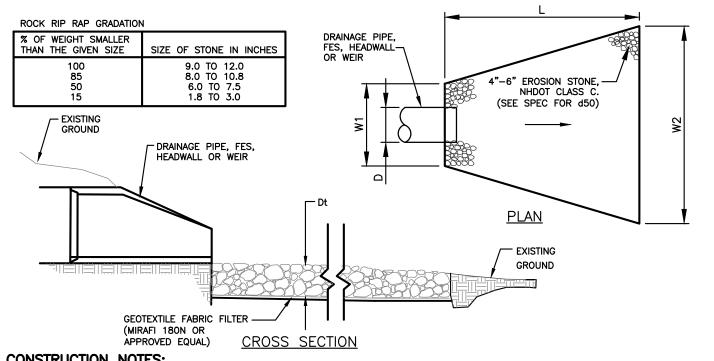
**RAYMOND JAMES** GRANITE PROP LLC 193 LOWELL RD

HUDSON, NH 03051

SHEET TITLE:

SITE **DETAILS-**1

PROJECT #469 SHEET 9 of  $^\circ$ 



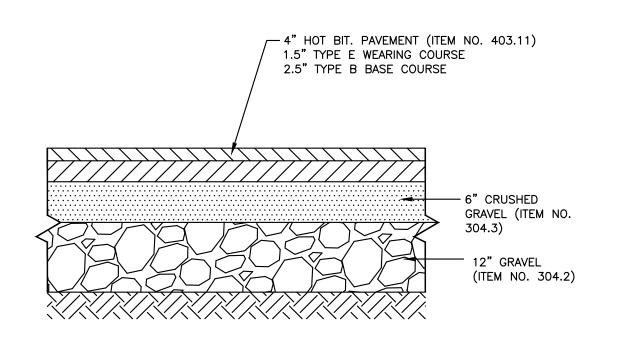
#### **CONSTRUCTION NOTES:**

- 1. THE SUBGRADE, GEOTEXTILE FABRIC, AND RIPRAP SHALL BE PREPARED TO THE LINES AND GRADES SHOWN ON THE PLANS.
- 2. THE ROCK OR GRAVEL USED FOR RIPRAP SHALL CONFORM TO THE SPECIFIED GRADATION.
- 3. GEOTEXTILE FABRICS SHALL BE PROTECTED FROM PUNCTURE OR TEARING DURING THE PLACEMENT OF THE ROCK RIPRAP, DAMAGED AREAS IN THE FABRIC SHALL BE REPAIRED BY PLACING A PIECE OF FABRIC OVER THE DAMAGED AREA OR BY COMPLETE REPLACEMENT OF THE FABRIC. ALL OVERLAPS REQUIRED FOR REPAIRS OR JOINING TWO PIECES OF FABRIC SHALL BE A MINIMUM OF 12 INCHES.
- 4. STONE FOR THE RIPRAP MAY BE PLACED BY EQUIPMENT AND SHALL BE CONSTRUCTED TO THE FULL LAYER THICKNESS IN ONE OPERATION AND IN SUCH A MANNER AS TO PREVENT SEGREGATION OF THE STONE SIZES.
- 5. THE MEDIAN STONE DIAMETER FOR THE RIPRAP APRON IS d50. FIFTY PERCENT BY WEIGHT OF THE RIPRAP MIXTURE SHALL BE SMALLER THAN THE MEDIAN STONE SIZE. THE LARGEST STONE SIZE IN THE MIXTURE SHALL BE 1.5 TIMES THE d50.

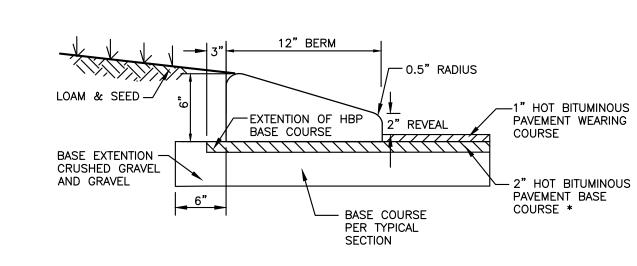
#### **MAINTENANCE**

1. THE OUTLET PROTECTION SHOULD BE CHECKED AT LEAST ANNUALLY AND AFTER EVERY MAJOR STORM WITHIN THE GROWING STABILIZATION PERIOD. IF THE RIPRAP HAS BEEN DISPLACED, UNDERMINED OR DAMAGED, IT SHOULD BE REPAIRED IMMEDIATELY. THE CHANNEL IMMEDIATELY BELOW THE OUTLET SHOULD BE CHECKED TO SEE THAT EROSION IS NOT OCCURRING. THE DOWNSTREAM CHANNEL SHOULD BE KEPT CLEAR OF OBSTRUCTIONS SUCH AS FALLEN TREES, DEBRIS, AND SEDIMENT THAT COULD CHANGE FLOW PATTERNS AND/OR TAILWATER DEPTHS ON THE PIPES. REPAIRS MUST BE CARRIED OUT IMMEDIATELY TO AVOID ADDITIONAL DAMAGE TO THE OUTLET

## STONE LINED OUTLET PROTECTION

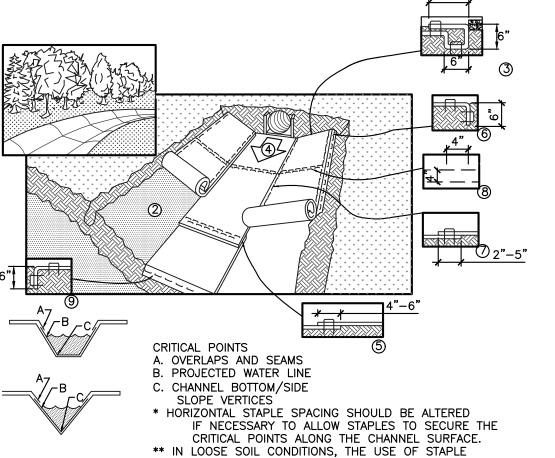


#### TYPICAL DRIVEWAY AND PARKING LOT SECTION NOT TO SCALE



#### CAPE COD BERM SECTION

NOT TO SCALE



OR STAKE LENGTHS GREATER THAN 6" (15 cm) MAY

BE NECESSARY TO PROPERLY ANCHOR THE BLANKETS.

## ROLLED EROSION CONTROL MATTING

#### CHANNEL INSTALLATION SPECIFICATIONS

1. INSTALL PRODUCT IN ACCORDANCE WITH MANUFACTURER'S SPECIFICATIONS 2. 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

3. 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.

4. 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

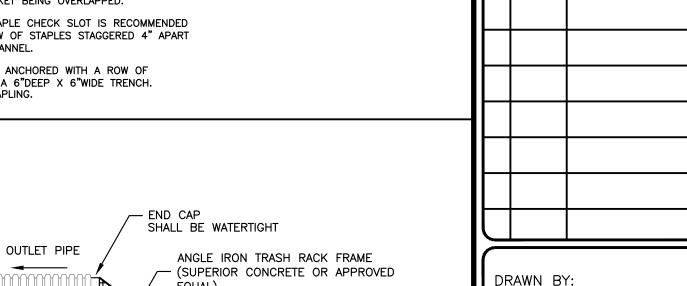
5. PLACE CONSECUTIVE BLANKETS END OVER END (SHINGLE STYLE) WITH A 4"-6" OVERLAP. USE A DOUBLE ROW OF STAPLES STAGGERED 4" APART AND 4"(10") ON CENTER TO SECURE BLANKETS.

6. 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.

7. 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 BLANKET BEING OVERLAPPED.

8. 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.

THE TERMINAL END OF THE BLANKETS 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.



#5 REBAR @ 4" O.C. OR 1/2 ORIFICE

TRASH RACK DETAIL

NOT TO SCALE

DIAMETER, WHICHEVER IS LESS.

CHECKED BY: DGM DATE: DEC. 17, 2021 SCALE: FILE: 469-DETAILS DEED REF:

The Dubay Group, Inc.

136 Harvey Road Bldg B101

Londonderry, NH 03053

603-458-6462

Engineers

Planners

Surveyors

TheDubayGroup.com

E NEW HA

/DOUGLAS

MacGUIRE

No. 13325

REVISIONS

-V·I DATF: I

COMMENT:

TOWN COMMENTS

H.C.R.D.: BK. 9403 PG. 2706

PROJECT:

#### **GRANITE SUBARU EXPANSION**

MAP 210 LOT 1 6 EXECUTIVE DRIVE HUDSON, NH 03051

**RAYMOND JAMES GRANITE PROP LLC** 193 LOWELL RD HUDSON, NH 03051

SHEET TITLE:

**SITE DETAILS-2** 

PROJECT #469 SHEET 10 of

LIFT STRAPS DANDY BAG STANDARD FABRIC IS AN ORANGE WOVEN MONOFILAMENT DUMPING STRAP ALLOWS FOR EASY REMOVAL OF CONTENTS INSTALLATION

INSTALLATION: REMOVE THE GRATE FROM CATCH BASIN. IF USING OPTIONAL OIL ABSORBENTS; PLACE ABSORBENT PILLOW IN UNIT. STAND THE GRATE ON END. MOVE THE TOP LIFTING STRAPS OUT OF THE WAY AND PLACE THE GRATE INTO THE DANDY BAG®II SO THAT THE GRATE IS BELOW THE TOP STRAPS AND ABOVE THE LOWER STRAPS. HOLDING THE LIFTING DEVICES, INSERT THE GRATE INTO THE INLET. MAINTENANCE

MAINTENANCE: REMOVE ALL ACCUMULATED SEDIMENT AND DEBRIS FROM VICINITY OF UNIT AFTER EACH STORM EVENT. AFTER EACH STORM EVENT AND AT REGULAR INTERVALS, LOOK INTO THE DANDY BAG II.® IF THE CONTAINMENT AREA IS MORE THAN 1/3 FULL OF SEDIMENT, THE UNIT MUST BE EMPTIED. TO EMPTY UNIT, LIFT THE UNIT OUT OF THE INLET USING THE LIFTING STRAPS AND REMOVE THE GRATE. IF USING OPTIONAL OIL ABSORBENTS; REPLACE ABSORBENT WHEN NEAR SATURATION.

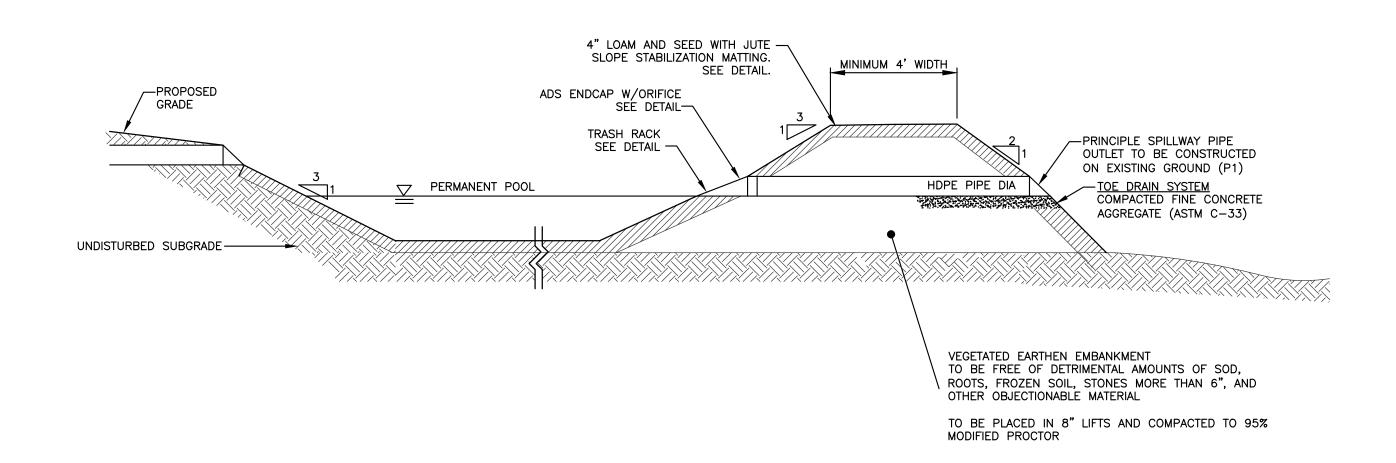
REVIEW REGULATIONS OF DATE OF MEETING: THE HUDSON PLANNING BOARD, THE SITE PLAN APPROVAL GRANTED HEREIN EXPIRES TWO YEARS FROM DATE OF

APPROVAL.

PURSUANT TO THE SITE APPROVED BY THE HUDSON, NH PLANNING BOARD

CHAIRMAN SIGNATURE DATE: SECRETARY SIGNATURE DATE:

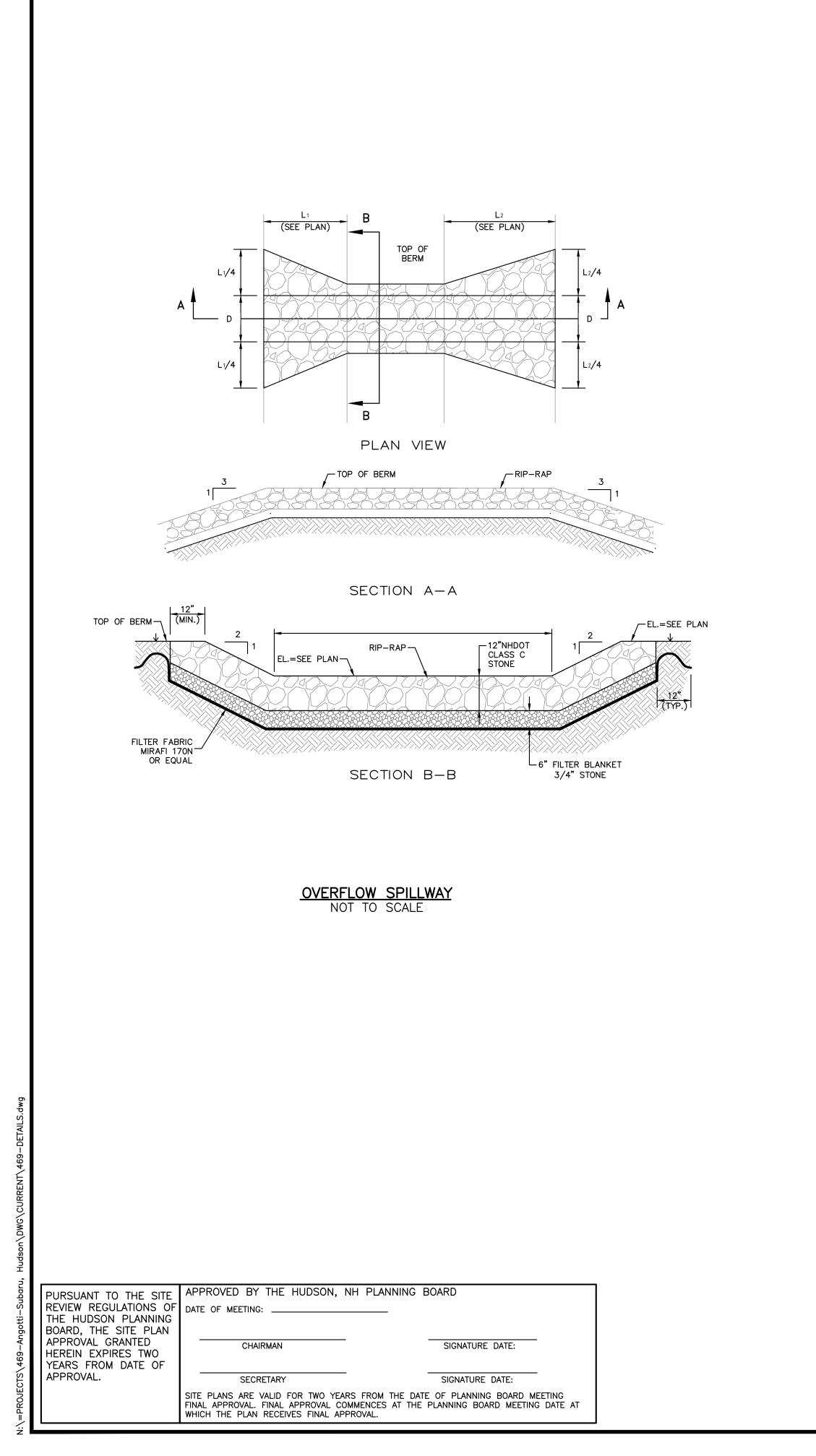
SITE PLANS ARE VALID FOR TWO YEARS FROM THE DATE OF PLANNING BOARD MEETING FINAL APPROVAL. FINAL APPROVAL COMMENCES AT THE PLANNING BOARD MEETING DATE AT WHICH THE PLAN RECEIVES FINAL APPROVAL.

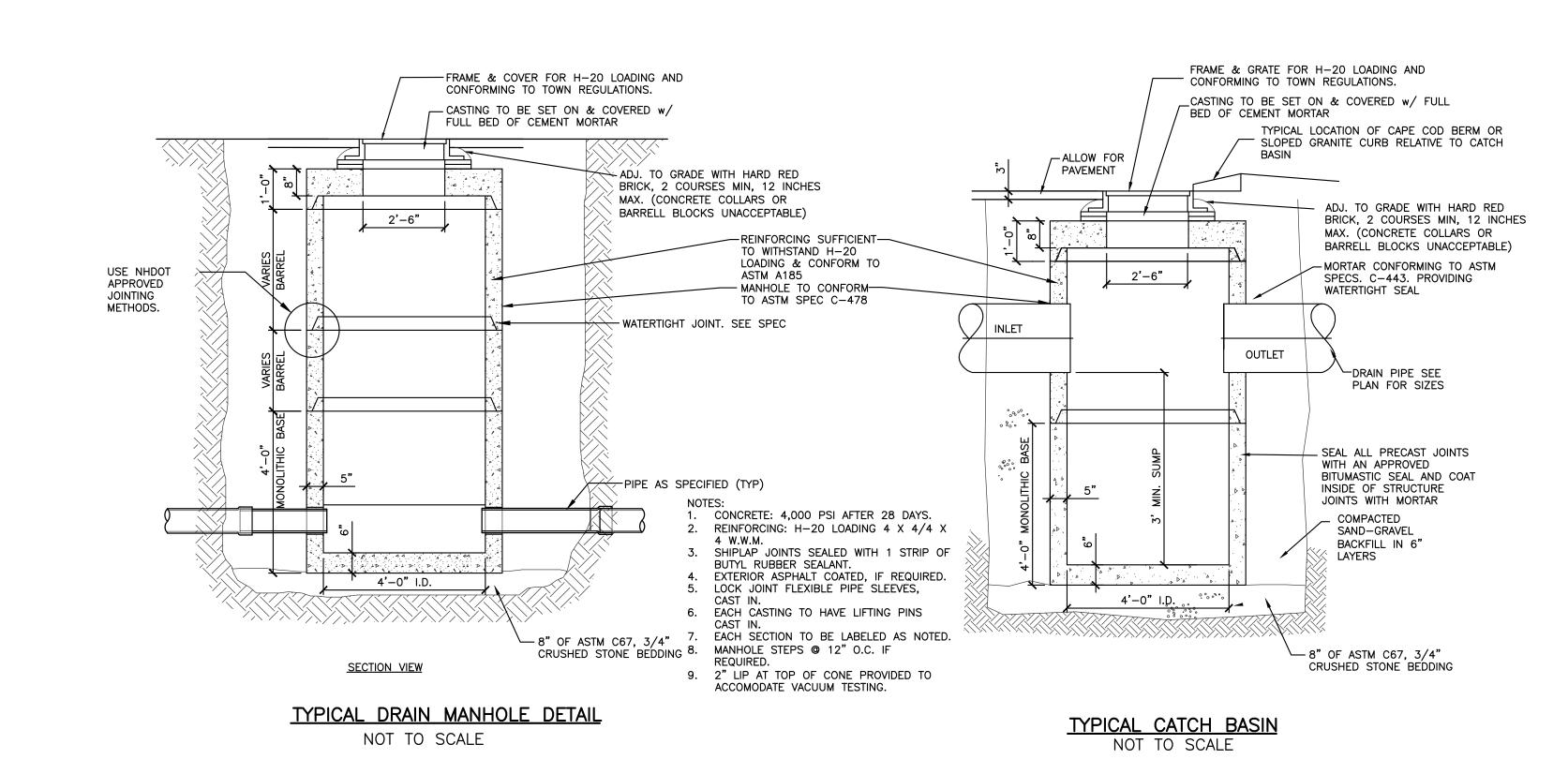


TYPICAL POND SECTION NOT TO SCALE

ELEVATION=180.00

ORIFICE END CAP DETAIL NOT TO SCALE





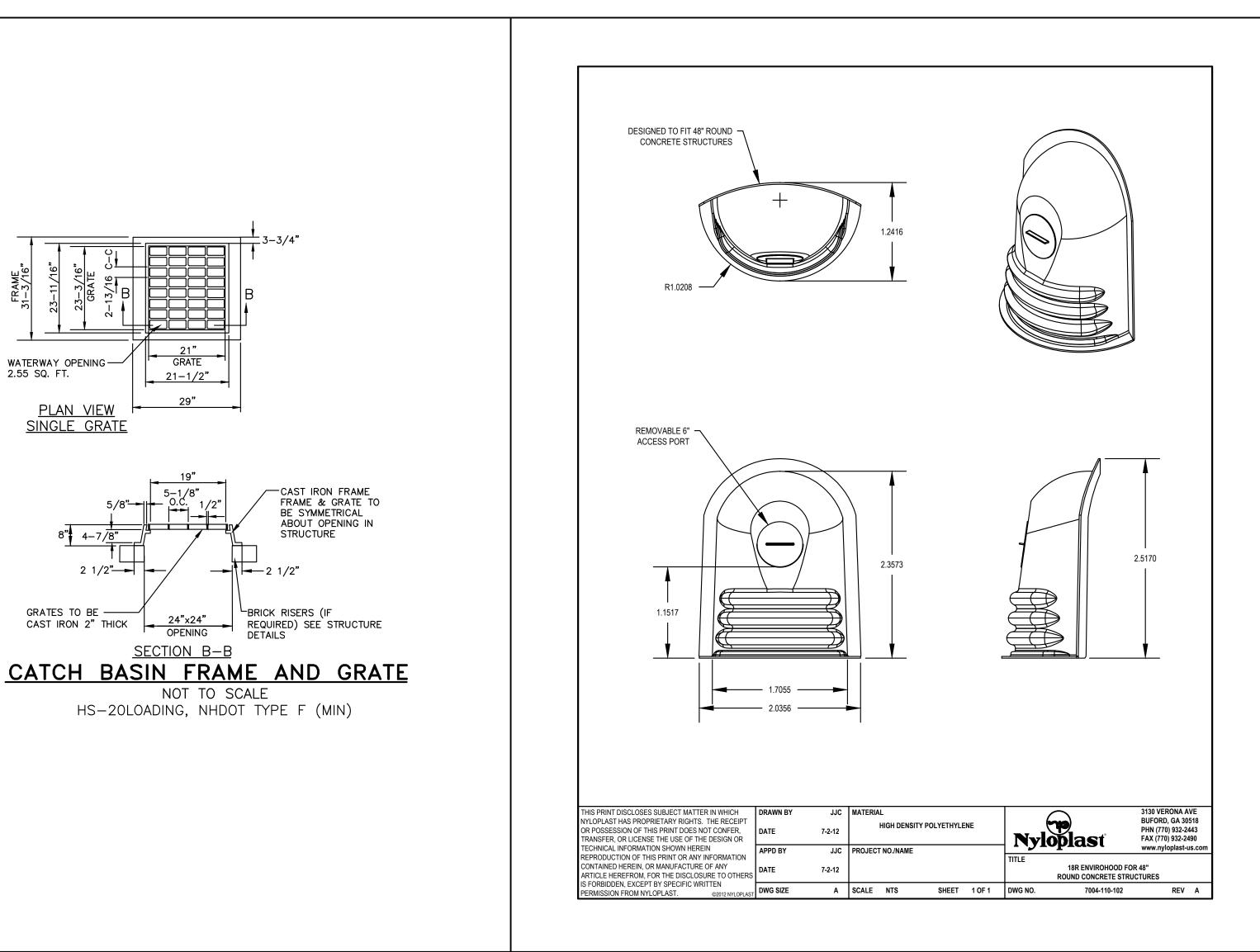
WATERWAY OPENING -2.55 SQ. FT.

<u>PLAN VIEW</u> <u>SINGLE GRATE</u>

2 1/2"--

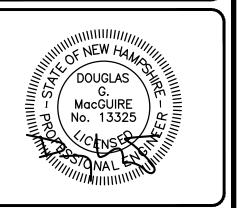
GRATES TO BE ----

CAST IRON 2" THICK





TheDubayGroup.com



REVISIONS:					
REV:	DATE:	COMMENT:	BY:		
4	8/12/24	TOWN COMMENTS	SJK		
$\succ$			$\dashv$		

DRAWN BY: CHECKED BY: DATE: SCALF:	DEC.	17,	SJK DGM 2021
FILE: DEED REF:	46	59-D	ETAILS
H.C.R.D.: BK.	9403	PG.	2706

PROJECT:

#### **GRANITE SUBARU EXPANSION** MAP 210 LOT 1

6 EXECUTIVE DRIVE HUDSON, NH 03051

**RAYMOND JAMES GRANITE PROP LLC** 193 LOWELL RD

HUDSON, NH 03051

SHEET TITLE:

**SITE DETAILS-3** 

PROJECT #469 SHEET 11 of 1