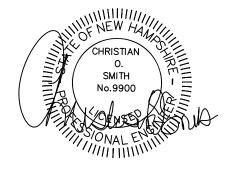
COMMERCIAI, SITH PLAN 127 PORTSMOUTH AVENUE (NH ROUTH 108) TAX MAP 52, LOT 112.2 MAY 3, 2004

CIVIL ENGINEERS:

PHONE: 603-583-4860, FAX. 603-583-4863



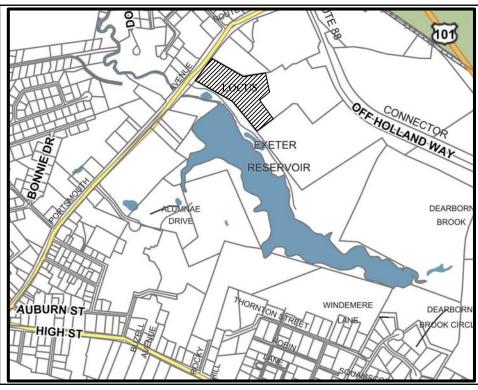
LAND SURVEYORS:



WETLAND/SOIL CONSULTANT:

GOVE ENVIRONMENTAL SERVICES INC. 8 CONTINENTAL DRIVE, BLDG 2 UNIT H EXETER, NH 03833 1-603-778-0644

LOCATION MAP



SCALE: 1"=600'

DRAWING INDEX

SHEET #	TITLE
	COVER SHEET
1	EXISTING CONDITIONS PLAN (DOUCET SURVEY)
2	SITE PLAN
3	GRADING, DRAINAGE, & EROSION CONTROL
4	EROSION & SEDIMENT CONTROL DETAILS
5	POROUS PAVEMENT & INFILTRATION TRENCH DETAILS
6	WETLAND IMPACT PLAN
7	EXETER SHORELAND IMPACT PLAN

PLAN SET LEGEND

5/8" REBAR	•		
DRILL HOLE	•		
CONC. BOUND	⊡	VGC	VERTICAL GRANITE CUF
UTILITY POLE	₽.		
DRAIN MANHOLE	(D)	OVERHEAD ELEC. LINE	
SEWER MANHOLE	S	FENCING	×
EXISTING LIGHT POLE	\$	DRAINAGE LINE	———D ———
EXISTING CATCH BASIN		SEWER LINE	S
PROPOSED CATCH BASIN	⊞	GAS LINE	
WATER GATE	₩V	WATER LINE	
WATER SHUT OFF	₩\$0	STONE WALL	
HYDRANT	₩.	TREE LINE	>>>>> <u>-</u>
PINES, ETC.	*	ABUT. PROPERTY LINES	
MAPLES, ETC.	ECV S	EXIST. PROPERTY LINES	
EXIST. SPOT GRADE	` `~√ 96×69	BUILDING SETBACK LINES	
		EXIST. CONTOUR	
PROP. SPOT GRADE	(96x69)		100
DOUBLE POST SIGN	0 0	PROP. CONTOUR	
SINGLE POST SIGN	- o -	SOIL LINES	

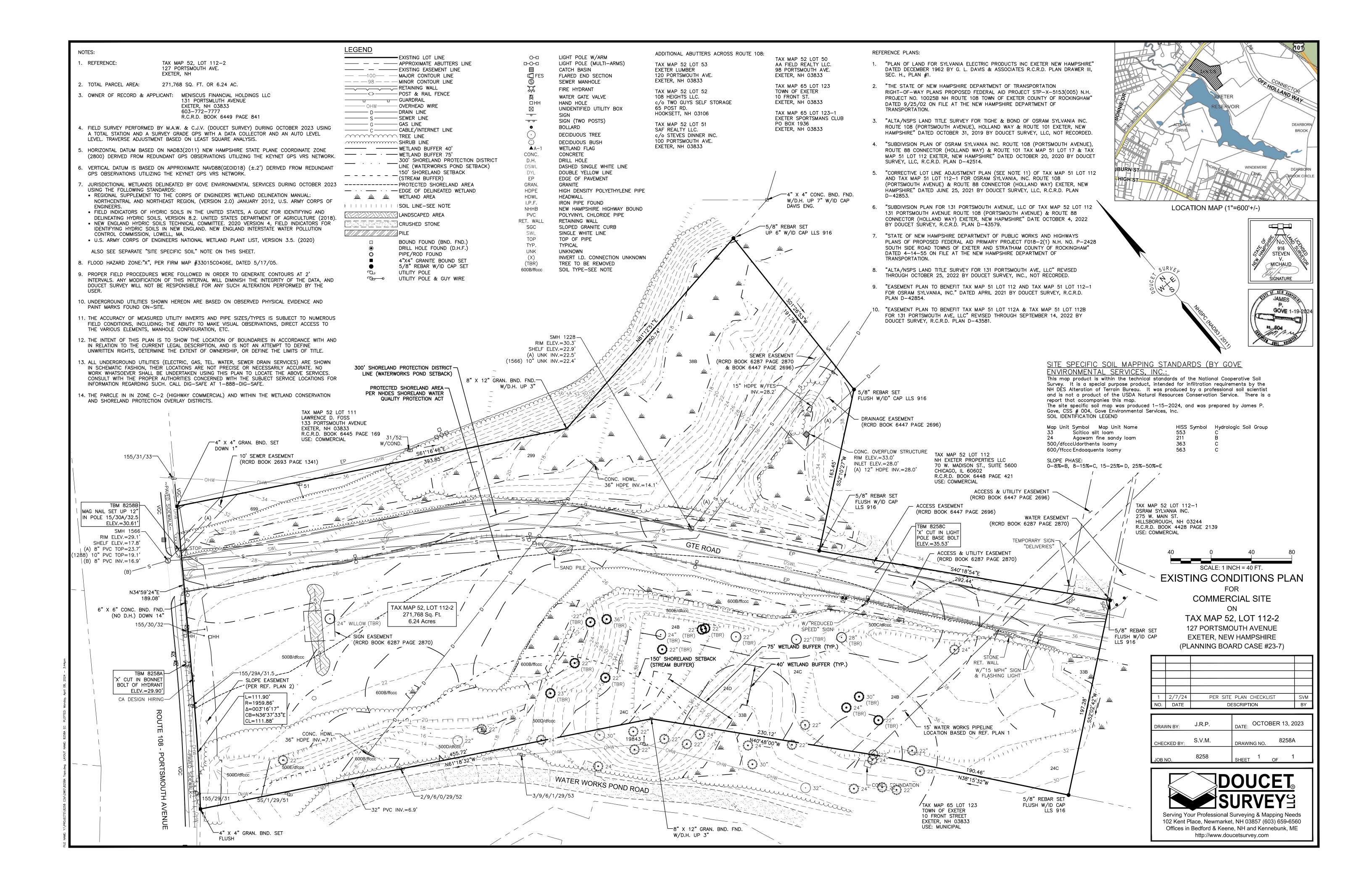
RECORD OWNER/APPLICANT

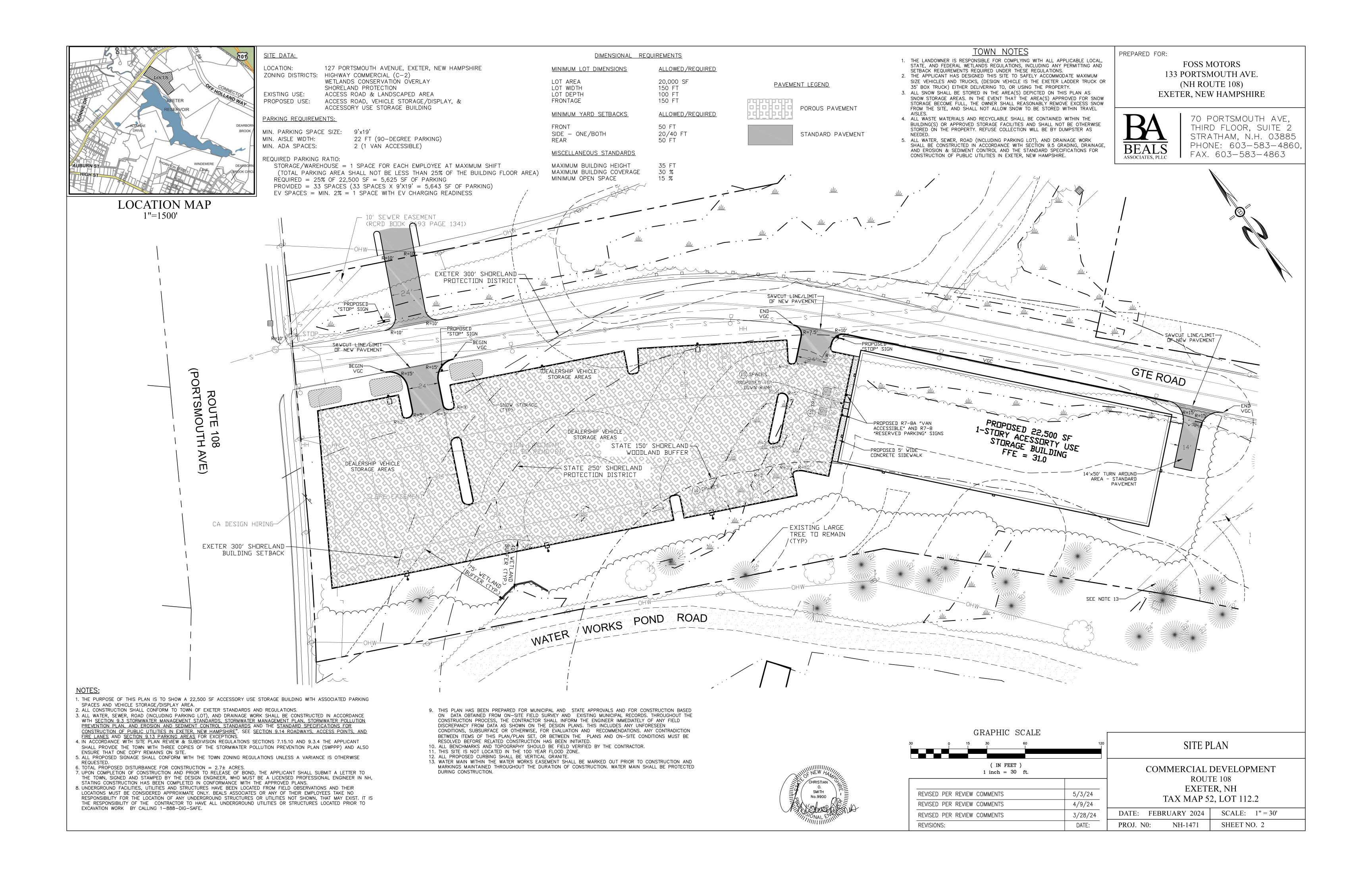
MENISCUS FINANCIAL HOLDINGS, LLC 133 PORTSMOUTH AVE. (NH ROUTE 108) EXETER, NEW HAMPSHIRE

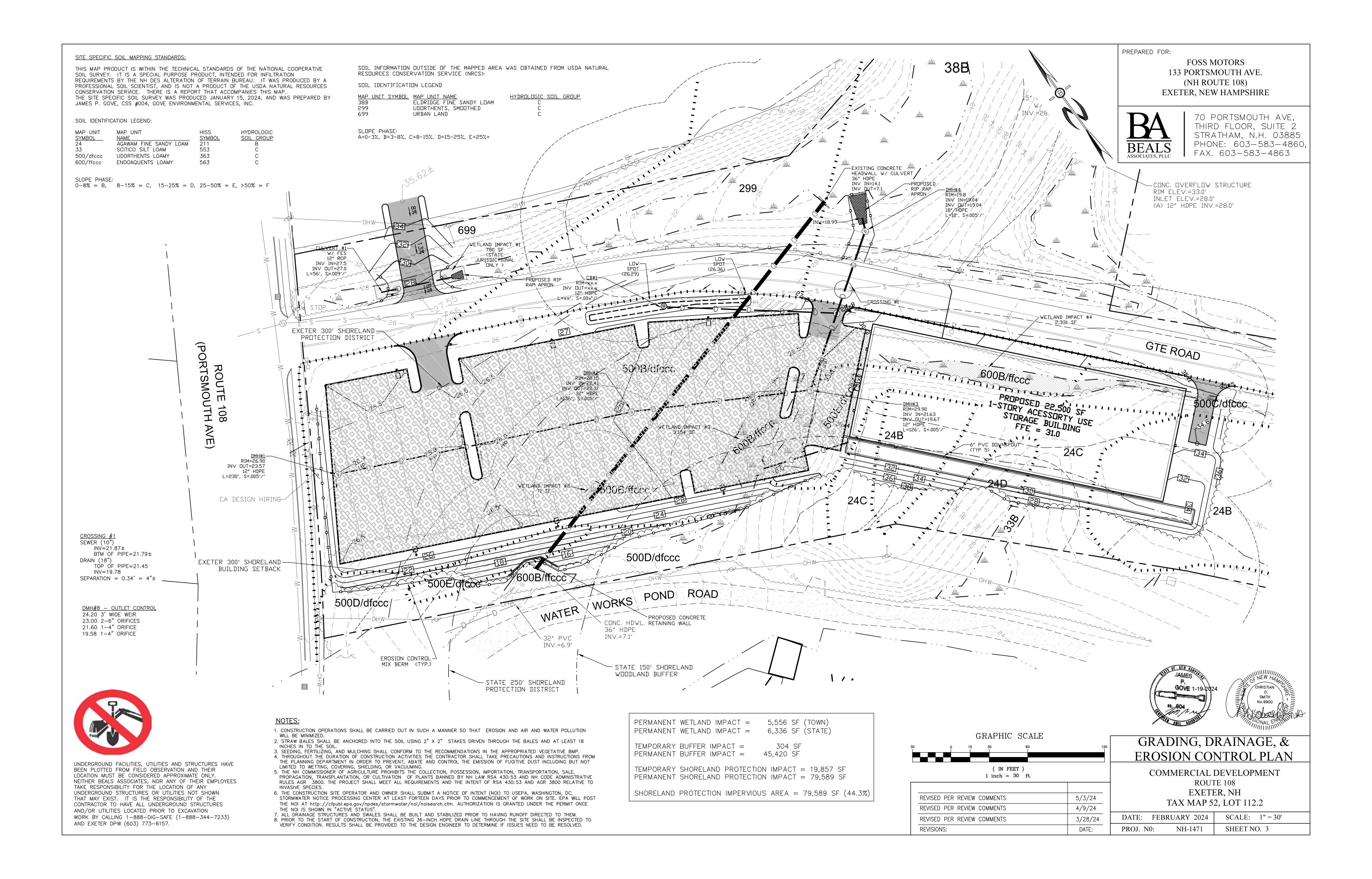
REQUIRED STATE AND FEDERAL PERMITS CONSTRUCTION GENERAL PERMIT

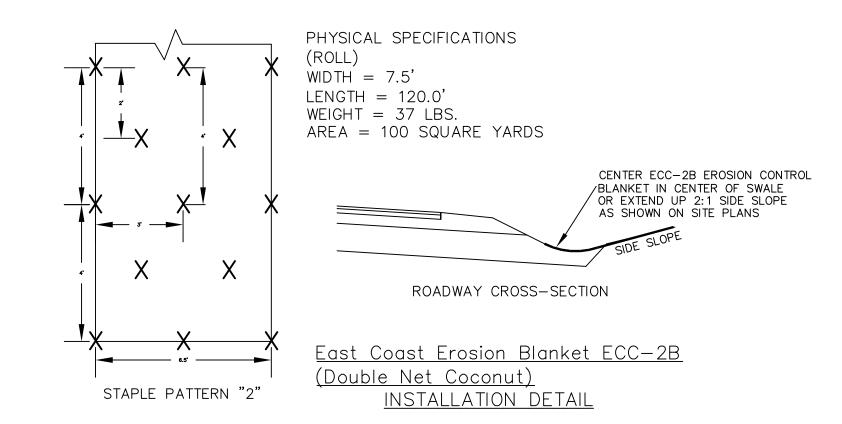
NHDES ALTERATION OF TERRAIN PERMIT NHDES SHORELAND PERMIT NHDES WETLANDS BUREAU DREDGE AND FILL

	REVISIONS:	DATE:
1		
2		
3		
4		
5		









** WITHIN 50 FEET DISTURBANCE TO ANY WETLAND, A DOUBLE ROW OF EROSION BARRIER (SILT FENCE, SILT SOCK, OR MULCH BERM) SHALL BE INSTALLED.

TEMPORARY EROSION CONTROL MEASURES

1. THE SMALLEST PRACTICAL AREA SHALL BE DISTURBED DURING CONSTRUCTION, BUT NO MORE THAN 5 ACRES OF LAND SHALL BE EXPOSED BEFORE DISTURBED AREAS ARE STABILIZED*.

2. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND AT LOCATIONS AS REQUIRED OR

DIRECTED BY THE ENGINEER ALL DISTURBED AREAS SHALL BE RETURNED TO ORIGINAL GRADES AND ELEVATIONS.

3. DISTURBED AREAS SHALL BE LOAMED WITH A MINIMUM OF 4" OF LOAM AND SEEDED WITH NOT LESS THAN 1.10 POUNDS OF SEED PER 1000 SQUARE FEET OF AREA. (48 POUNDS PER ACRE) SEE SEED SPECIFICATIONS THIS SHEET.

4. SILT FENCES AND OTHER EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY RAIN EVENT GREATER THAN 0.25" DURING THE LIFE OF THE PROJECT. ALL DAMAGED AREAS SHALL BE REPAIRED, SEDIMENT DEPOSITS SHALL PERIODICALLY BE REMOVED AND DISPOSED OF.

5. AFTER ALL DISTURBED AREAS HAVE BEEN STABILIZED, THE TEMPORARY EROSION CONTROL MEASURES ARE TO BE REMOVED AND THE AREA DISTURBED BY THE REMOVAL SMOOTHED AND RE-VEGETATED.
6. AREAS MUST BE SEEDED AND MULCHED WITHIN 3 DAYS OF FINAL GRADING, PERMANENTLY STABILIZED WITHIN 15 DAYS OF FINAL

- GRADING, OR TEMPORARILY STABILIZED WITHIN 30 DAYS OF INITIAL DISTURBANCE OF SOIL. * AN AREA SHALL BE CONSIDERED STABLE IF ONE OF THE FOLLOWING HAS OCCURRED:
 - BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED
 A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
 - A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED.
 A MINIMUM OF 3 INCHES OF NON-EROSIVE MATERIAL SUCH AS RIPRAP HAS BEEN INSTALLED.
 - EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.

CONSTRUCTION SPECIFICATIONS

- 1. STRUCTURES SHALL BE INSTALLED ACCORDING TO THE DIMENSIONS SHOWN ON THE PLANS AT THE APPROPRIATE SPACING.
- 2. CONSTRUCTION OPERATIONS SHALL BE CARRIED OUT IN SUCH A MANNER SO THAT EROSION AND AIR AND WATER POLLUTION WILL BE MINIMIZED.
- 3. WHEN TIMBER STRUCTURES ARE USED, THE TIMBER SHALL EXTEND AT LEAST 18" INTO THE SOIL.
 4. STRAW BALES SHALL BE ANCHORED INTO THE SOIL USING 2" X 2" STAKES DRIVEN THROUGH THE BALES
- AND AT LEAST 18 INCHES IN TO THE SOIL.
 5. SEEDING, FERTILIZING, AND MULCHING SHALL CONFORM TO THE RECOMMENDATIONS IN THE APPROPRIATED VEGETATIVE BMP.
- 6. STRUCTURES SHALL BE REMOVED FROM THE CHANNEL WHEN THEIR USEFUL LIFE HAS BEEN COMPLETED.
 7. THROUGHOUT THE DURATION OF CONSTRUCTION ACTIVITIES THE CONTRACTOR SHALL TAKE PRECAUTIONS AND INSTRUCTIONS FROM THE PLANNING DEPARTMENT IN ORDER TO PREVENT, ABATE AND CONTROL THE
- EMISSION OF FUGITIVE DUST INCLUDING BUT NOT LIMITED TO WETTING, COVERING, SHIELDING, OR VACUUMING.

 8. THE NH COMMISSIONER OF AGRICULTURE PROHIBITS THE COLLECTION, POSSESSION, IMPORTATION,
 TRANSPORTATION, SALE, PROPAGATION, TRANSPLANTATION, OR CULTIVATION OF PLANTS BANNED BY NH LAW
 RSA 430:53 AND NH CODE ADMINISTRATIVE RULES AGR 3800. THE PROJECT SHALL MEET ALL
- REQUIREMENTS AND THE INTENT OF . RSA 430:53 AND AGR 3800 RELATIVE TO INVASIVE SPECIES

 9. THE CONSTRUCTION SITE OPERATOR AND OWNER SHALL SUBMIT A NOTICE OF INTENT (NOI) TO USEPA, WASHINGTON, DC, STORMWATER NOTICE PROCESSING CENTER AT LEAST FORTEEN DAYS PRIOR TO COMMENCEMENT OF WORK ON SITE. EPA WILL POST THE NOI AT

http://cfpubl.epa.gov/npdes/stormwater/noi/noisearch.cfm. AUTHORIZATION IS GRANTED UNDER THE PERMIT ONCE THE NOI IS SHOWN IN "ACTIVE STATUS".

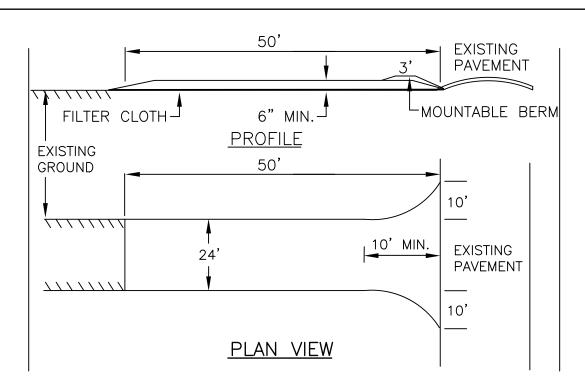
CONSTRUCTION SEQUENCE

- 1. CUT AND REMOVE TREES IN CONSTRUCTION AREAS AS REQUIRED OR DIRECTED.
- 2. CONSTRUCT AND/OR INSTALL TEMPORARY AND PERMANENT SEDIMENT EROSION AND DETENTION CONTROL FACILITIES AS REQUIRED. EROSION, SEDIMENT AND DETENTION CONTROL FACILITIES SHALL BE INSTALLED AND STABILIZED PRIOR TO ANY EARTH MOVING OPERATION AND PRIOR TO DIRECTING RUNOFF TO THEM.
- 3. CLEAR, CUT, GRUB AND DISPOSE OF DEBRIS IN APPROVED FACILITIES. STUMPS AND DEBRIS ARE TO BE REMOVED FROM SITE AND DISPOSED OF PER STATE AND LOCAL REGULATIONS.
- 4. EXCAVATE AND STOCKPILE TOPSOIL /LOAM. ALL AREAS SHALL BE STABILIZED IMMEDIATELY AFTER GRADING.
- 5. CONSTRUCT TEMPORARY CULVERTS AS REQUIRED OR DIRECTED.
 6. CONSTRUCT THE ROADWAY/DRIVEWAYS AND ITS ASSOCIATED DRAINAGE STRUCTURES. ALL ROADWAYS, PARKING AREAS, AND CUT/FILL SLOPES SHALL BE STABILIZED AND/OR LOAMED AND SEEDED WITHIN 72—HOURS OF ACHIEVING
- FINISH GRADE AS APPLICABLE.
 7. INSTALL PIPE AND CONSTRUCTION ASSOCIATED APPURTENANCES AS REQUIRED OR DIRECTED. ALL DISTURBED AREAS SHALL STABILIZED IMMEDIATELY AFTER GRADING.
 8. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES AND DISTURBED AREAS
- SHALL BE SEEDED OR MULCHED AS REQUIRED, OR DIRECTED.

 9. DAILY OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINAGE CHECK DAMS, DITCHES, SEDIMENT TRAPS, ETC.

 TO PREVENT EROSION ON THE SITE AND PREVENT ANY SILTATION OF ABUTTING WATERS OR PROPERTY.
- 10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES DURING CONSTRUCTION
 11. COMPLETE PERMANENT SEEDING AND LANDSCAPING
 12. REMOVE TEMPORARY EROSION CONTROL MEASURES AFTER SEEDING AREAS HAVE ESTABLISHED THEMSELVES AND SITE IMPROVEMENTS ARE COMPLETE. SMOOTH AND REVEGETATE ALL DISTURBED AREAS.
 13. ALL SWALES AND DRAINAGE STRUCTURES WILL BE CONSTRUCTED AND STABILIZED PRIOR TO HAVING RUNOFF
- DIRECTED TO THEM.

 14. FINISH PAVING ALL ROADWAYS/DRIVEWAYS.
- 15. LOT DISTURBANCE OTHER THAN THAT SHOWN ON THE APPROVED PLANS SHALL NOT COMMENCE UNTIL THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE.



1. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE 3 INCH STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT.
2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, EXCEPT FOR A SINGLE

RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD APPLY.

3. THE THICKNESS OF THE STONE FOR THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 6 INCHES.

4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS GREATER. 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PROF.

REQUIRED FOR A SINGLE FAMILY RESIDENCE LOT.
6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARD THE CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY BE SUBSTITUTED FOR THE PIPE.

7. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT 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 CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHT-OF-WAY MUST BE REMOVED

STABILIZED CONSTRUCTION ENTRANCE

WINTER MAINTENANCE

1. ALL DISTURBED AREAS THAT DO NOT HAVE AT LEAST 85% VEGETATIVE COVERAGE PRIOR TO OCTOBER 15TH, SHALL BE STABILIZED BY APPLYING MULCH AT A RATE OF 3-4 TONS PER ACRE. ALL SIDE SLOPES, STEEPER THAN 4:1, THAT ARE NOT DIRECTED TO SWALES OR DETENTION BASINS, SHALL BE LINED WITH BIODEGRADABLE/PHOTODEGRADABLE "JUTE MATTING" (EXCELSIOR'S CURLEX II OR EQUAL). ALL OTHER SLOPES SHALL BE MULCHED AND TACKED AT A RATE OF 3-4 TONS PER ACRE. THE APPLICATION OF MULCH AND/OR JUTE MATTING SHALL NOT OCCUR OVER EXISTING SNOW COVER. IF THE SITE IS ACTIVE AFTER OCTOBER 15TH, ANY SNOW THAT ACCUMULATES ON DISTURBED AREAS SHALL BE REMOVED. PRIOR TO SPRING THAW ALL AREAS WILL BE STABILIZED, AS DIRECTED ABOVE.

2. ALL SWALES THAT DO NOT HAVE FULLY ESTABLISHED VEGETATION SHALL BE EITHER LINED WITH TEMPORARY JUTE MATTING OR TEMPORARY STONE CHECK DAMS (APPROPRIATELY SPACED). STONE CHECK DAMS WILL BE MAINTAINED THROUGHOUT THE WINTER MONTHS. IF THE SWALES ARE TO BE MATTED WITH PERMANENT LINERS OR RIPRAP WITH ENGINEERING FABRIC, THIS SHALL BE COMPLETED PRIOR TO WINTER SHUTDOWN OR AS SOON AS THEY ARE PROPERLY GRADED AND SHAPED.

3. PRIOR TO OCT. 15TH ALL ROADWAY AND PARKING AREAS SHALL BE BROUGHT UP TO AND THROUGH THE BANK RUN GRAVEL APPLICATION. IF THESE AREAS' ELEVATIONS ARE PROPOSED TO REMAIN BELOW THE PROPOSED SUBGRADE ELEVATION, THE SUBGRADE MATERIAL SHALL BE ROUGHLY CROWNED AND A 3" LAYER OF CRUSHED GRAVEL SHALL BE PLACED AND COMPACTED. THIS WILL ALLOW THE SUBGRADE TO SHED RUNOFF AND WILL REDUCE ROADWAY EROSION. THIS CRUSHED GRAVEL DOES NOT HAVE TO CONFORM TO NH DOT 304.3, BUT SHALL HAVE BETWEEN 15-25% PASSING THE #200 SIEVE AND THE LARGEST STONE SIZE SHALL BE 2". IF THE SITE IS ACTIVE AFTER NOVEMBER 15TH, ANY ACCUMULATED SNOW SHALL BE REMOVED FROM ALL ROADWAY AND PARKING AREAS.

4. AFTER OCTOBER 15TH, THE END OF NEW HAMPSHIRE'S AVERAGE GROWING SEASON, NO ADDITIONAL LOAM SHALL BE SPREAD ON SIDE SLOPES AND SWALES. THE STOCKPILES THAT WILL BE LEFT UNDISTURBED UNTIL SPRING SHALL BE SEEDED BY THIS DATE. AFTER OCTOBER 15TH, ANY NEW OR DISTURBED PILES SHALL BE MULCHED AT A RATE OF 3-4 TONS PER ACRE. ALL STOCKPILES THAT WILL REMAIN THROUGHOUT THE WINTER SHALL BE SURROUNDED WITH SILT

SEEDING SPECIFICATIONS

& LANDSCAPE PLAN FOR FERTILIZER REQUIREMENTS.

1. GRADING AND SHAPING

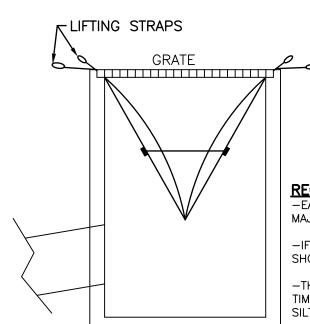
2. SEEDBED PREPARATION

- A. SLOPES SHALL NOT BE STEEPER THAN 2:1;3:1 SLOPES OR FLATTER ARE PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE RECOMMENDED.
- A. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS.

 B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE
- B. STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED SHOULD BE LEFT IN REASONABLY FIRM AND SMOOTH CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER PRACTICAL.
- 3. ESTABLISHING A STAND

 A. LIME AND FERTILIZER SHOULD BE APPLIED PRIOR TO OR AT THE TIME OF SEEDING AND INCORPORATED INTO THE SOIL KINDS AND AMOUNTS OF LIME AND FERTILIZER SHOULD BE BASED ON AN EVALUATION OF SOIL TESTS. REFER TO LIGHTING
- B. SEED SHOULD BE SPREAD UNIFORMLY BY THE METHOD MOST APPROPRIATE FOR THE SITE. METHODS INCLUDE BROADCASTING, DRILLING AND HYDROSEEDING. WHERE BROADCASTING IS USED, COVER SEED WITH .25 INCH OF SOIL OR LESS, BY CULTIPACKING OR RAKING.
- C. A NEW ENGLAND NATIVE SEED MIXTURE SHALL BE USED. REFER TO MANUFACTURER'S SPECIFICATIONS FOR RATES OF SEEDING.
- D. WHEN SEEDED AREAS ARE MULCHED, PLANTINGS MAY BE MADE FROM EARLY SPRING TO EARLY OCTOBER. WHEN SEEDED AREAS ARE NOT MULCHED, PLANTINGS SHOULD BE MADE FROM EARLY SPRING TO MAY 20 OR FROM AUGUST 10 TO SEPTEMBER 1.
- 4. MULCH
 - A. HAY, STRAW, OR OTHER MULCH, WHEN NEEDED, SHOULD BE APPLIED IMMEDIATELY AFTER SEEDING.
- B. MULCH WILL BE HELD IN PLACE USING APPROPRIATE TECHNIQUES FROM THE BEST MANAGEMENT PRACTICE FOR MULCHING. HAY OR STRAW MULCH SHALL BE PLACED AT A RATE OF 90 LBS PER 1000 SQ. FT.
- 5. MAINTENANCE TO ESTABLISH A STAND
- A. PLANTED AREA SHOULD BE PROTECTED FROM DAMAGE BY FIRE, GRAZING, TRAFFIC, AND DENSE WEED GROWTH.

 B. FERTILIZATION NEEDS SHOULD BE DETERMINED BY ONSITE INSPECTIONS. SUPPLEMENTAL FERTILIZER IS USUALLY
 THE KEY TO FULLY COMPLETE THE ESTABLISHMENT OF THE STAND BECAUSE MOST PERENNIAL STAKE 2 TO 3 YEARS TO
- C. IN WATERWAYS, CHANNELS, OR SWALES WHERE UNIFORM FLOW CONDITIONS ARE ANTICIPATED, OCCASIONAL MOWING MAY BE NECESSARY TO CONTROL GROWTH OF WOODY VEGETATION.

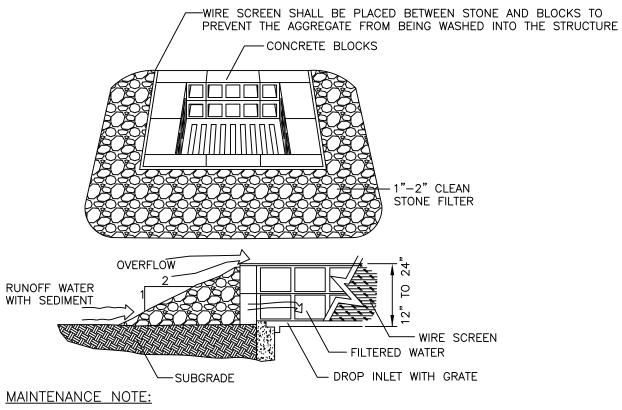


RECOMMENDED MAINTENANCE SCHEDULE -EACH SITLSACK SHOULD BE INSPECTED AFTER EVER MAJOR RAIN EVENT

-IF THERE HAVE BEEN NO MAJOR EVENTS, SILTSACK SHOULD BE INSPECTED EVERY 2-3 WEEKS

-THE RESTRAINT CORD SHOULD BE VISIBLE AT ALL TIMES. IF CORD IS COVERED WITH SEDIMENT, THE SILTSACK SHOULD BE EMPTIED.

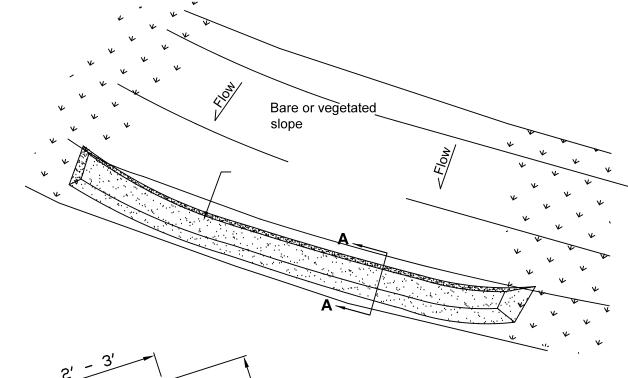


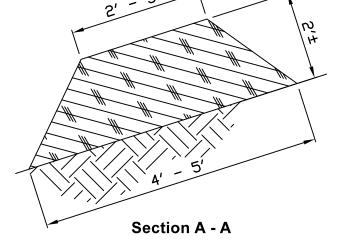


1. ALL STRUCTURES SHOULD BE INSPECTED AFTER EVERY RAINFALL AND REPAIRS MADE AS NECESSARY. SEDIMENT SHOULD BE REMOVED FROM TRAPPING DEVICES AFTER THE SEDIMENT HAS REACHED A MAXIMUM OF ONE HALF THE DEPTH OF THE TRAP. THE SEDIMENT SHOULD BE DISPOSED IN A SUITABLE UPLAND AREA AND PROTECTED FROM EROSION BY EITHER STRUCTURE OR VEGETATIVE MEANS. THE TEMPORARY TRAPS SHOULD BE REMOVED AND THE AREA REPAIRED AS SOON AS THE CONTRIBUTING DRAINAGE AREA TO THE INLET HAS BEEN COMPLETELY STABILIZED.

TEMPORARY CATCH BASIN INLET PROTECTION (Block and Gravel Drop Inlet Sediment Filter)

NOT TO SCALE





Mix material should consist of 30-50% large (1-3") particles. The organic matter content should be 25%-65%, dry weight basis. The organic matter may originate from a variety of vegetative sources, but needs to be fibrous and elongated. The mix shall be free of silt, clay, fine sand, refuse and contaminants or any material toxic to plant growth. Erosion Control Mix berms are effective filters for overland flow conditions and should not be used to filter concentrated flow such as that found in drainage ditchs, streams, etc.

Erosion Control Mix Berm

REVISED PER REVIEW COMMENTS	3/28/24
REVISIONS:	DATE:

EROSION & SEDIMENT CONTROL DETAILS

COMMERCIAL DEVELOPMENT
ROUTE 108
EXETER, NH
TAX MAP 52, LOT 112.2

DATE:	FEB, 2024	SCALE:	NTS
PROJ. N0:	NH-1471	SHEET NO.	4

CONSTRUCTION SPECIFICATIONS FOR POROUS ASPHALT THE UNH STORM WATER CENTER

INSTALLATION RECOMMENDATIONS

B. POROUS ASPHALT

A. PERCOLATION BEDS (REFERS TO NO 57 STONE)

. OWNER SHALL BE NOTIFIED AT LEAST 24 HOURS PRIOR TO ALL PERCOLATION BED AND POROUS PAVING WORK. 2. SUB GRADE PREPARATION

A.EXISTING SUB GRADE UNDER BED AREAS SHALL NOT BE COMPACTED OR SUBJECT TO EXCESSIVE CONSTRUCTION EQUIPMENT TRAFFIC PRIOR TO

B. WHERE EROSION OF SUB GRADE HAS CAUSED ACCUMULATION OF FINE MATERIALS AND/OR SURFACE PONDING, THIS MATERIAL SHALL BE REMOVED WITH LIGHT EQUIPMENT AND THE UNDERLYING SOILS SCARIFIED TO A MINIMUM DEPTH OF 6 INCHES WITH A YORK RAKE OR EQUIVALENT C. BRING SUB GRADE OF STONE PERCOLATION BED TO LINE, GRADE, AND ELEVATIONS INDICATED. FILL AND LIGHTLY REGRADE ANY AREAS DAMAGED BY EROSION, PONDING, OR TRAFFIC COMPACTION BEFORE THE PLACING OF STONE. ALL BED BOTTOMS ARE LEVEL GRADE.

3. RECHARGE BED INSTALLATION (REFERS TO NO 3 STONE) A.UPON COMPLETION OF SUB GRADE WORK, THE ENGINEER SHALL BE NOTIFIED AND SHALL INSPECT AT HIS DISCRETION BEFORE PROCEEDING WITH PERCOLATION BED INSTALLATION.

B.PERCOLATION BED AGGREGATE SHALL BE PLACED IMMEDIATELY AFTER APPROVAL OF SUB GRADE PREPARATION. ANY ACCUMULATION OF DEBRIS OR SEDIMENT WHICH HAS TAKEN PLACE AFTER APPROVAL OF SUB GRADE SHALL BE REMOVED PRIOR TO INSTALLATION OF AGGREGATE AT NO

C.INSTALL COARSE AGGREGATE NO. 3 (1 1/2" STONE) IN 8-INCH MAXIMUM LIFTS. LIGHTLY COMPACT EACH LAYER WITH EQUIPMENT, KEEPING EQUIPMENT MOVEMENT OVER STORAGE BED SUBGRADES TO A MINIMUM. INSTALL AGGREGATE TO GRADES INDICATED ON THE DRAWINGS. D. INSTALL 3" LIFT PEA GRAVEL LAYER TO PREVENT MIGRATION OF FINES FROM THE FILTER COARSE (NHDOT 304.1)

E.INSTALL FILTER COARSE (NHDOT 304.1 SAND LESS THAN 2% FINES) IN 2, 4" LIFTS. LIGHTLY COMPACT EACH LAYER WITH EQUIPMENT, KEEPING EQUIPMENT MOVEMENT OVER STORAGE BED SUBGRADES TO A MINIMUM. INSTALL AGGREGATE TO GRADES INDICATED ON THE DRAWINGS. F.INSTALL CHOKER BASE COURSE (AASHTO # 57 STONE) AGGREGATE EVENLY OVER SURFACE OF STONE BED, SUFFICIENT TO ALLOW PLACEMENT OF PAVEMENT, AND NOTIFY ENGINEER FOR APPROVAL. CHOKER BASE COURSE SHALL BE SUFFICIENT TO ALLOW FOR EVEN PLACEMENT OF ASPHALT BUT NO THICKER THAN 4-INCH IN DEPTH.

4. SURROUNDING AREAS A.BEFORE THE POROUS PAVEMENT IS INSTALLED, ADJACENT SOIL AREAS SHOULD BE SLOPED AWAY FROM ALL PAVEMENT EDGES, TO PREVENT

POTENTIAL SEDIMENT FROM WASHING ONTO THE PAVEMENT SURFACE. B.TO ACCOMPLISH THIS, A SEQUENCE OF SWALES SHOULD BE EXCAVATED INTO ALL EARTHEN (UNPAVED) AREAS AT LEAST ON THE UPHILL SIDES OF THE PAVEMENT, AND WHERE NECESSARY, TO BELOW THE CURB OR PAVEMENT ELEVATION. ITS SHAPE AND PAINTINGS CAN BE INTEGRATED WITH THE PROJECT'S ARCHITECTURE AND LANDSCAPE, AND DESIGNED TO MAXIMIZE INFILTRATION. SWALE OVERFLOW, WHEN IT OCCURS, CAN BE DISCHARGED FROM ONE SWALE TO ANOTHER BY CONNECTING PIPES UNDER DRIVEWAYS. C.BUILDING BASEMENTS AND FOUNDATIONS SHOULD BE WATERPROOFED AS NECESSARY, WHERE THE POROUS PAVEMENT ABUTS BUILDINGS.

. TRANSPORTING MATERIAL A.TRANSPORTING OF MIX TO THE SITE SHALL BE IN VEHICLES WITH SMOOTH, CLEAN DUMP BEDS THAT HAVE BEEN SPRAYED WITH A NON-PETROLEUM RELEASE AGENT.

B. THE MIX SHALL BE COVERED DURING TRANSPORT TO CONTROL COOLING. POROUS BITUMINOUS ASPHALT SHALL NOT BE STORED IN EXCESS OF 90 MINUTES BEFORE PLACEMENT.

A.THE POROUS BITUMINOUS SURFACE COURSE SHALL BE LAID IN ONE LIFT DIRECTLY OVER THE CHOKER COARSE, FILTER COARSE, AND CRUSHED STONE BASE COURSE TO A 4-INCH FINISHED THICKNESS. THE SURFACE CAN BE LAID IN TWO LIFTS IF SECOND LIFT IS DONE WITHIN 10 BUSINESS

AND THE INITIAL COURSE IS CLEAN AND FREE OF SEDIMENT. B.THE LAYING TEMPERATURE OF THE BITUMINOUS MIX SHALL BE BETWEEN 300 DEGREES FAHRENHEIT AND 350 DEGREES FAHRENHEIT (BASED ON THE RECOMMENDATIONS OF THE ASPHALT SUPPLIER). C.INSTALLATION SHALL TAKE PLACE WHEN AMBIENT TEMPERATURES ARE 55 DEGREES FAHRENHEIT OR ABOVE, WHEN MEASURED IN THE SHADE AWAY

D.THE USE OF A REMIXING MATERIAL TRANSFER DEVICE BETWEEN THE TRUCKS AND THE PAVER IS HIGHLY RECOMMENDED TO ELIMINATE COLD LUMPS IN THE MIX. E.THE POLYMER-MODIFIED ASPHALT IS VERY DIFFICULT TO RAKE, A WELL-HEATED SCREED SHOULD BE USED TO MINIMIZE THE NEED FOR RAKING.

F. COMPACTION OF THE SURFACE COURSE SHALL TAKE PLACE WHEN THE SURFACE IS COOL ENOUGH TO RESIST A 10-TON ROLLER. (140°F. SURFACE TEMPERATURE) ONE OR TWO PASSES IS ALL THAT IS REQUIRED FOR PROPER COMPACTION. MORE ROLLING COULD CAUSE A REDUCTION IN THE SURFACE POROSITY WHICH IS UNACCEPTABLE.

4. IN THE EVENT CONSTRUCTION SEDIMENT IS INADVERTENTLY DEPOSITED ON THE FINISHED POROUS SURFACE, IT MUST BE IMMEDIATELY REMOVED BY VACUUMING.

PUDDLE FORMATION OR SURFACE RUNOFF, AND SHALL BE OBSERVED BY THE ENGINEER AND OWNER.

AFTER FINAL ROLLING, NO VEHICULAR TRAFFIC OF ANY KIND SHALL BE PERMITTED ON THE SURFACE UNTIL COOLING AND HARDENING HAS TAKEN PLACE, AND IN NO CASE WITHIN THE FIRST 48 HOURS. PROVIDE BARRIERS AS NECESSARY AT NO EXTRA COST TO THE OWNER TO PREVENT VEHICULAR USE: REMOVE AT THE DISCRETION OF THE ENGINEER. STRIPING PAINT FOR TRAFFIC LANES AND PARKING BAYS SHALL BE CHLORINATED RUBBER BASE, FACTORY MIXED, NON-BLEEDING, FAST DRYING. BEST QUALITY, WHITE TRAFFIC PAINT WITH A LIFE EXPECTANCY OF TWO YEARS UNDER NORMAL TRAFFIC USE.

A.PAVEMENT-MARKING PAINT; LATEX, WATER-BASE EMULSION, READY-MIXED, COMPLYING WITH PS TT-P-1952. B.SWEEP AND CLEAN SURFACE TO ELIMINATE LOOSE MATERIAL AND DUST. C.PAINT 4 INCH WIDE TRAFFIC LANE STRIPING IN ACCORDANCE WITH LAYOUTS OF PLAN. APPLY PAINT WITH MECHANICAL EQUIPMENT TO PRODUCE UNIFORM STRAIGHT EDGES. APPLY IN TWO COATS AT MANUFACTURER'S RECOMMENDED RATES. PROVIDE CLEAR, SHARP LINES USING WHITE TRAFFIC PAINT, INSTALLED IN ACCORDANCE WITH NHDOT SPECIFICATIONS.

WORK SHALL BE DONE EXPERTLY THROUGHOUT, WITHOUT STAINING OR INJURY TO OTHER WORK. RANSITION TO ADJACENT IMPERVIOUS BITUMINOUS PAVING SHALL BE MERGED NEATLY WITH FLUSH, CLEAN LINE. FINISHED PAVING SHALL BE EVEN, WITHOUT POCKETS, AND GRADED TO ELEVATIONS SHOWN ON DRAWING. 7. POROUS PAVEMENT BEDS SHALL NOT BE USED FOR EQUIPMENT OR MATERIALS STORAGE DURING CONSTRUCTION, AND UNDER NO CIRCUMSTANCES

SHALL VEHICLES BE ALLOWED TO DEPOSIT SOIL ON PAVED POROUS SURFACES. 8. REPAIR OF DAMAGED PAVING A.ANY EXISTING PAVING ON OR ADJACENT TO THE SITE THAT HAS BEEN DAMAGED AS A RESULT OF CONSTRUCTION WORK SHALL HE REPAIRED TO

THE SATISFACTION OF THE OWNER WITHOUT ADDITIONAL COST TO THE OWNER. 9 FIFID QUALITY CONTROL A.THE FULL PERMEABILITY OF THE PAVEMENT SURFACE SHALL BE TESTED BY APPLICATION OF CLEAN WATER AT THE RATE OF AT LEAST 5 GPM OVER THE SURFACE, USING A HOSE OR OTHER DISTRIBUTION DEVISE. WATER USED FOR THE TEST SHALL BE CLEAN, FREE OF SUSPENDED SOLIDS AND DELETERIOUS LIQUIDS AND WILL BE PROVIDED AT NO EXTRA COST TO THE OWNER. ALL APPLIED WATER SHALL INFILTRATE DIRECTLY WITHOUT

B.TEST IN-PLACE BASE AND SURFACE COURSE FOR COMPLIANCE WITH REQUIREMENTS FOR THICKNESS AND SURFACE SMOOTHNESS. REPAIR OR REMOVE AND REPLACE UNACCEPTABLE WORK AS DIRECTED BY THE OWNER. C.SURFACE SMOOTHNESS: TEST FINISHED SURFACE FOR SMOOTHNESS AND EVEN DRAINAGE, USING A TEN-FOOT TO CENTERLINE OF PAVED AREA. SURFACE WILL NOT BE ACCEPTED IF GAPS OR RIDGES EXCEED 3116 OF AN INCH.

> " OPEN GRADED POROUS PAVED FINISH SURFACE 15% TO 20% VOID RATIO 12" NHDOT 304.1 SAND (LESS THAN 2% FINES) 12" NO. 3 STONE (1-1/2"). PVC UNDERDRAIN 6" PERFORATED

NOTES:

1. 4" FRICTION COARSE CONSISTS OF COARSER AGGREGATE AND STIFFER BINDER. SEE TABLE 2. A WORKING COURSE 4" THICK CONSISTS OF AASHTO NO. 57 STONE. 3. 6" UNDERDRAIN TO BE SET ABOVE CRUSHED GRAVEL BOTTOM TO ALLOW FOR STORAGE

TO PREVENT MIGRATION OF FINE MATERIALS

BASE AND SIDE SLOPES TO BE LINED -W/ NON-WOVEN GEOTEXTILE FABRIC

AND INFILTRATION. 2.4" OF WATER CAN BE DETAINED UNDER THE UNDERDRAIN.

4. TOP COAT SHOULD BE VACUUMED A MINIMUM OF TWICE A YEAR. . ADJACENT AREAS TO POROUS PAVEMENT SHOULD BE GRADED AWAY FROM PAVEMENT TO PREVENT SEDIMENT FROM RUNNING ONTO POROUS AREA AND CLOGGING PORES. ROOF RUNOFF CAN FLOW ONTO PAVEMENT OR INTO SUBBASE MATERIAL.

POROUS PAVEMENT

NOT TO SCALE

MIX SUMMARY POROUS ASPHALT PAVEMENT MIX

THE UNH STORM WATER CENTER WEDNESDAY, NOVEMBER 01, 2006

POROUS ASPHALT SHALL BE FOUR INCHES THICK WITH A BITUMINOUS MIX OF 6% TO 6.5% BY WEIGHT DRY AGGREGATE AND AIR VOIDS OF 18-22%. IN ACCORDANCE WITH ASTM D6390, DRAIN DOWN OF THE BINDER SHALL BE NO GREATER THAN 0.3%. IF MORE ABSORPTIVE AGGREGATES, SUCH AS LIMESTONE, ARE USED IN THE MIX, THEN THE AMOUNT OF BITUMEN IS TO BE BASED ON THE TESTING PROCEDURES OUTLINED IN THE NATIONAL ASPHALT PAVEMENT ASSOCIATION'S INFORMATION SERIES 131 - "PERVIOUS ASPHALT PAVEMENTS" (2003) OR NHDOT EQUIVALENT. MIX SUPPLIERS MAY HAVE A SUITABLE IN-HOUSE SPECIFICATION FOR OPEN GRADED FRICTION COURSE (OGFC) THAT CAN BE USED.

USE NEAT ASPHALT BINDER MODIFIED WITH AN ELASTOMERIC POLYMER TO PRODUCE A BINDER MEETING THE REQUIREMENTS OF PG 76-22 AS SPECIFIED IN AASHTO MP- I. THE ELASTOMER POLYMER SHALL BE STYRENE-BUTADIENE-STYRENE (SBS), OR APPROVED EQUAL, APPLIED AT A RATE OF 3% BY WEIGHT OF THE TOTAL BINDER. THE COMPOSITE MATERIALS SHALL BE THOROUGHLY BLENDED AT THE ASPHALT REFINERY OR TERMINAL PRIOR TO BEING LOADED INTO THE TRANSPORT VEHICLE. THE POLYMER MODIFIED ASPHALT BINDER SHALL BE HEAT AND STORAGE STABLE.

AGGREGATE SHALL BE MINIMUM 90% CRUSHED MATERIAL AND HAVE A GRADATION OF:

COMPOSITION OF MIXTURE

SIEVE SIZE (INCH/MM)PERCENT PASSING0.75/191000.50/12.585-1000.375/9.555-75N0.4/4.7510-25N0.8/2.365-10N0.200/0.0752-4TOTAL AGGREGATE93-.5-94% ASPHALT OF TOTAL MIX6-6.5 ADD HYDRATED LIME AT A DOSAGE RATE OF 1.0% BY WEIGHT OF THE TOTAL DRY AGGREGATE TO MIXES CONTAINING GRANITE. HYDRATED LIME SHALL MEET THE REQUIREMENTS OF ASTM C 977. THE ADDITIVE MUST BE ABLE TO PREVENT THE SEPARATION OF THE ASPHALT BINDER FROM THE AGGREGATE AND ACHIEVE A REQUIRED TENSILE STRENGTH RATIO (TSR) OF AT LEAST 80% ON THE ASPHALT MIX WHEN TESTED IN ACCORDANCE

WITH AASHTO T 283. THE ASPHALTIC MIX SHALL BE TESTED FOR ITS RESISTANCE TO STRIPPING BY WATER IN ACCORDANCE WITH ASTM D-1664. IF

NO WORK SHALL BE STARTED UNTIL THE CONTRACTOR HAS SUBMITTED AND THE ENGINEER HAS APPROVED A MIX DESIGN INCLUDING THE PERCENTAGE OF EACH INGREDIENT INCLUDING BINDER, POLYMER, AND THE JOB-MIX FORMULA FROM SUCH A COMBINATION. THE JOB-MIX FORMULA SHALL ESTABLISH A SINGLE PERCENTAGE OF AGGREGATE PASSING SIEVE AND A SINGLE PERCENTAGE OF BITUMINOUS MATERIAL TO BE ADDED TO THE AGGREGATE. NO CHANGE IN THE JOB-MIX FORMULA MAY BE MADE WITHOUT WRITTEN APPROVAL OF THE ENGINEER. THE JOB-MIX FORMULA MUST FALL WIT H THE MASTER RANGE SPECIFIED IN COMPOSITION OF MIXTURE TABLE.

TRANSPORTING MATERIAL: SEE CONSTRUCTION AND INSTALL SPECIFICATIONS

FOR QUESTIONS ON MIX SPECIFICATIONS CONTACT ROBERT ROSEEN, PHD, AT THE UNH STORM WATER CENTER. 603-862-4024.

THE ESTIMATED COATING AREA IS NOT ABOVE 95 PERCENT, ANTI-STRIPPING AGENTS SHALL BE ADDED TO THE ASPHALT.

MAINTENANCE SPECIFICATIONS FOR POROUS ASPHALT PARKING LOT AREAS AND LOW VOLUME ROADS THE UNH STORM WATER CENTER WEDNESDAY, NOVEMBER 01, 2006

THE FOLLOWING RECOMMENDATIONS WILL HELP ASSURE THAT THE PAVEMENT IS MAINTAINED TO PRESERVE ITS HYDROLOGIC EFFECTIVENESS.

WINTER MAINTENANCE:

1. SANDING FOR WINTER TRACTION IS PROHIBITED. DEICING IS PERMITTED (NAC1, MGC12, OR EQUIVALENT). REDUCED SALT APPLICATION IS POSSIBLE AND CAN BE A COST SAVINGS FOR WINTER MAINTENANCE. NONTOXIC, ORGANIĆ DEICERS, APPLIED EITHER AS BLENDED, MAGNESIUM CHLORIDE-BASED LIQUID PRODUCTS OR AS PRETREATED SALT, ARE PREFERABLE. 2. PLOWING IS ALLOWED, BLADE SHOULD BE SET APPROXIMATELY 1" ABOVE ROAD SURFACE. ICE AND LIGHT SNOW ACCUMULATION ARE GENERALLY NOT AS PROBLEMATIC AS FOR STANDARD ASPHALT. SNOW WILL ACCUMULATE DURING HEAVIER STORMS AND SHOULD BE PLOWED.

ROUTINE MAINTENANCE;

. ASPHALT SEAL COATING MUST BE ABSOLUTELY FORBIDDEN. SURFACE SEAL COATING IS NOT REVERSIBLE. 2. THE PAVEMENT SURFACE SHOULD BE VACUUMED 2 OR 3 TIMES PER YEAR, AND AT ANY ADDITIONAL TIMES SEDIMENT IS SPILLED, ERODED, OR TRACKED ONTO THE SURFACE. 3. PLANTED AREAS ADJACENT TO PERVIOUS PAVEMENT SHOULD BE WELL MAINTAINED TO PREVENT SOIL WASHOUT ONTO THE PAVEMENT. IF ANY BARE SPOTS OR ERODED AREAS ARE OBSERVED WITHIN THE PLANTED AREAS, THEY SHOULD BE REPLANTED AND/OR STABILIZED AT ONCE.

4. IMMEDIATELY CLEAN ANY SOIL DEPOSITED ON PAVEMENT. SUPERFICIAL DIRT DOES NOT NECESSARILY CLOG THE PAVEMENT VOIDS. HOWEVER, DIRT THAT IS GROUND IN REPEATEDLY BY TIRES CAN LEAD TO CLOGGING. THEREFORE, TRUCKS OR OTHER HEAVY VEHICLES SHOULD BE PREVENTED FROM TRACKING OR SPILLING DIRT ONTO THE PAVEMENT 5. DO NOT ALLOW CONSTRUCTION STAGING, SOIL/MULCH STORAGE, ETC. ON UNPROTECTED PAVEMENT SURFACE 6. REPAIRS: POTHOLES OF LESS THAN 50 SQUARE FEET CAN BE PATCHED BY ANY MEANS SUITABLE WITH STANDARD PAVEMENT OR A PERVIOUS MIX IS PREFERRED. FOR AREAS GREATER THAN 50 SQ. FT. IN NEED OF REPAIR, APPROVAL OF PATCH TYPE SHOULD BE SOUGHT FROM A QUALIFIED ENGINEER. ANY REQUIRED REPAIR OF DRAINAGE STRUCTURES SHOULD BE DONE PROMPTLY TO ENSURE CONTINUED PROPER FUNCTIONING OF THE SYSTEM.

7. WRITTEN AND VERBAL COMMUNICATION TO THE POROUS PAVEMENT'S FUTURE OWNER SHOULD MAKE CLEAR THE PAVEMENT'S SPECIAL PURPOSE AND SPECIAL MAINTENANCE REQUIREMENTS SUCH AS THOSE LISTED HERE. 8. A PERMANENT SIGN SHOULD BE ADDED AT THE ENTRANCE AND END OF THE POROUS ASPHALT AREA TO INFORM RESIDENTS AND MAINTENANCE STAFF OF THE SPECIAL NATURE AND PURPOSE OF THE PAVEMENT, AND ITS SPECIAL MAINTENANCE REQUIREMENTS.

SIGNAGE SHOULD READ AS FOLLOWS:

REMAINDER OF PROJECT HAS BEEN PAVED WITH POROUS PAVEMENT

MAINTENANCE REQUIREMENTS:

1. PLOW WITH SLIGHTLY RAISED BLADE ONLY 2. SANDING OF SURFACE PROHIBITED 3. DEICING PERMITTED (NAC1, MGC12 OR EQUIVALENT) 4. SEAL - COATING PROHIBITED 5. CLEANING BY PRESSURIZED AIR OR WATER PROHIBITED 6.DRY VACUUM SEMI-ANNUALLY

REMAINDER OF PROJECT HAS BEEN PAVED WITH POROUS PAVEMENT MAINTENANCE REQUIREMENTS:

PLOW WITH SLIGHTLY RAISED BLADE ONLY *SANDING OF SURFACE PROHIBITED* *DEICING PERMITTED (NAC1, MGC12 OR EQUIVALENT)* *SEAL-COATING PROHIBITED*

CLEANING BY PRESSURIZED AIR OR WATER PROHIBITED *DRY VACUUM SEMI-ANNUALLY*

SIGN DETAIL

NOT TO SCALE

PREPARED FOR:

FOSS MOTORS 133 PORTSMOUTH AVE. (NH ROUTE 108) EXETER, NEW HAMPSHIRE



70 PORTSMOUTH AVE, THIRD FLOOR, SUITE 2 STRATHAM, N.H. 03885 PHONE: 603-583-4860 FAX. 603-583-4863

MINIMUM COMPACTION REQUIREMENTS

COMPACTION SHALL BE PERFORMED TO NOT LESS THAN NINETY-FIVE PERCENT (95%) MAXIMUM DENSITY AS DETERMINED IN A LABORATORY COMPACTION TEST, PERFORMED UNDER THE SPECIFICATIONS OF ASTM D1557-64T, METHOD "A", (BACK FILL MATERIAL OF A STONY NATURE SHALL BE TESTED UNDER METHOD "C" OR "D" OF THE SAME ASTM DESIGNATION) OR OTHER APPROVED ASTM OR AMERICAN ASSOCIATION OF STATE HIGHWAY AND TRANSPORTATION OFFICIALS (AASHTO) SPECIFICATIONS. SUCH TEXT SHALL ALSO BE USED FOR ESTABLISHING THE OPTIMUM MOISTURE CONTENT OF THE MATERIALS. THE IN-PLACE DRY UNIT WEIGHT OF THE COMPACTED MATERIALS SHALL BE DETERMINED BY METHODS SPECIFIED UNDER ASTM "D" 1556-58T OR OTHER APPROVED ASTM OR AASHTO SPECIFICATIONS. THE IN-PLACE COMPACTION TEST TO BE CONSISTENT WITH THE APPROVED LABORATORY COMPACTION TEST.

TARLE 5 POROLIS ASPHALT MIX DESIGN CRITERIA

TABLE 5. PURUUS ASPHALI MIX DESIGN CRITERIA.	
 SIEVE SIZE (INCH/MM)	PERCENT PASSING (%
0.75/19	100
0.50/12.5	85-100
0.375/9.5	55-75
NO.4/4.75	10-25
NO.8/2.36	5-10
NO.200/0.075 (#200)	2-4
BINDER CONTENT (AASHTO T164)	6.0-6.5%
AIR VOID CONTENT BY CORELOK (ASTM D6752)*	16.0-20.0%
AIR VOID CONTENT BY PARAFFIN WAX (AASHTO T275	
DRAINDOWN (ASTM D6390)**	<= 0.3 %

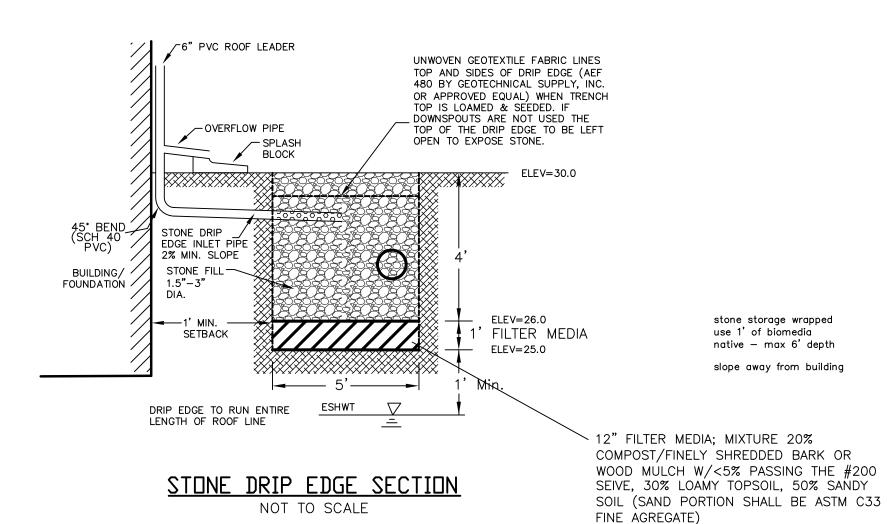
* EITHER METHOD IS ACCEPTABLE

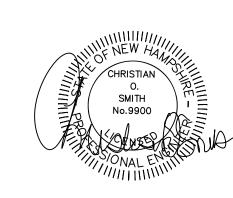
RETAINED TENSILE STRENGTH (AASHTO 283)***

HYDRATED LIME (ASTM C977) OR A FATTY AMINE, TO RAISE THE TSR VALUE ABOVE 80%.

CELLULOSE OR MINERAL FIBERS MAY BE USED TO REDUCE DRAINDOWN. *IF THE TSR (RETAINED TENSILE STRENGTH) VALUES FALL BELOW 80% WHEN TESTED PER NAPA IS 131 (WITH A SINGLE FREEZE THAW CYCLE RATHER THAN 5). STEP 4, THE CONTRACTOR SHALL EMPLOY AN ANTISTRIP ADDITIVE, SUCH AS

>= 80 %





REVISIONS: POROUS PAVEMENT & INFILTRATION TRENCH

> **DETAILS** COMMERCIAL DEVELOPMENT

ROUTE 108 EXETER, NH TAX MAP 52, LOT 112.2

DATE: MAY 3, 2024 SCALE: NTS PROJ. N0: NH-1471 SHEET NO.

