

File: 16163

April 12, 2017

Ms. Carla Nixon  
Town of Cumberland  
290 Tuttle Rd  
Cumberland, ME 04021

RE: RESPONSE TO REVIEW COMMENTS  
LOT 9, CUMBERLAND FORESIDE VILLAGE

Dear Carla,

Attached is a revised submittal for Lot 9 Cumberland Foreside Village. We have made the following changes in response to the Staff review:

1. The roadway and parking dimensional data is shown on the Site Plan, Sheet C1.1.
2. General building information is shown in a chart on C1.1 including suggested building addresses. The entrance is a driveway, not a private way.
3. The traffic study included in the application materials is dated 8/29/16.
4. Note 19 is added to C1.1 outlining requirements to protect the Northern Long-Eared Bats population.
5. We have shown the path along Route 1. It is to be placed to avoid any trees if possible. A detail is added to Sheet C2.4.
6. The building elevation orientations have been clarified.
7. We have added pole lights to the back of the parking lot. See Sheet C1.2 for revised photometrics.
8. An updated letter of financial capacity is included in this submission.
9. There is a drainage way on the rear of the lot. It is not a stream or a brook.
10. We have added additional landscaping on the south end of the pad for building #2.
11. We have added the color scheme to the drawings of the building elevations.
12. We have shown the proposed sign location on the plan. If we can get a license from MDOT, we would like to place it in the right-of-way. The right-of way in this location is extra wide, so locating on the site doesn't provide any visibility.
13. The recommended Conditions of Approval have been added to Sheet C1.1.
14. We note the second building pad will be for office use. We will return to the Board for Architectural review when the tenant is determined.
15. Existing hydrants are located 850' +/- to the south and 750' +/- to the north of the site. A new hydrant is being installed 435' from the Route One on Chelsea Way.

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16. The Contract Zone setback requirements have been added to C1.1.
17. The 3<sup>rd</sup> Amended Subdivision Plan has been replaced by the 4<sup>th</sup> Amended Subdivision Plan and is included with this submission.

We are waiting for the DEP Permit. It was submitted on September 2<sup>nd</sup>, but they have yet to process it.

Sincerely,

PINKHAM & GREER,  
CIVIL ENGINEERS

A handwritten signature in black ink, appearing to read "Thomas S. Greer".

Thomas S. Greer, P.E.

cc: (1) David Chase, (1) Loni Gravier, (1) File

Enclosures

TSG/rjs



March 1, 2017

Maine Department of Environmental Protection  
Augusta, Maine

RE: David Chase – Chase Excavating, Inc.  
Cumberland Foreside Village

To Whom It May Concern:

Mr. David Chase and Chase Excavating, Inc. are valued customers of Gorham Savings Bank and I have known and worked with them for over 25 years.

Gorham Savings Bank is aware of the Cumberland Foreside Village project in Cumberland. The Bank understands the project cost of constructing a commercial building on Lot 9 to be approximately \$500,000.00 and is very interested in working with Mr. Chase, Chase Excavating, Inc., and Cumberland Foreside Village, LLC on the financing for this project. They have the financial capacity and management capability to successfully complete the project.

Please feel free to call me with any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "R. C. Levesque", is written over a horizontal line.

Roger C. Levesque  
Executive Vice President  
(207) 222-1491  
rlevesque@gorhamsavingsbank.com

Cumberland Foreside Village, Lot 9 Cost Opinion	
Site Clearing	\$2,000.00
Erosion Control	\$3,000.00
Paving & Gravel	\$66,800.00
UDSFs	\$13,500.00
Water	\$8,500.00
Sewer	\$12,000.00
Power Communications	\$7,500.00
Foundation Excavation	\$15,500.00
Lighting	\$3,500.00
Foundation Drains	\$2,500.00
Lansdcaping	\$10,500.00
Loam& Seed	\$3,500.00
Signs	\$500.00
<b>Site Development Costs</b>	<b>\$149,300.00</b>



EXISTING		PROPOSED		LOT LINE
-----	PROPERTY LINE	-----		DRAINAGE EASEMENT
-----	ADJUTERS PROPERTY	-----		EDGE OF PAVEMENT
-----	EASEMENT	-----		CAPE COD CURB
////	EDGE OF PAVEMENT	-----		CONTOURS
-----	BUILDING	-----	230	UNDERDRAIN
-----	CURB	-----	UD	WATER LINE
-----	WETLAND LIMIT	-----	W	GRAVITY SEWER
-----	GAS LINE	-----	S	UNDERGROUND ELECTRIC
-----	SANITARY SEWER	-----	UGE	FOUNDATION DRAIN
-----	STORM DRAIN	-----	FD	SPOT GRADE
-----	CULVERT	-----	x 291.5	WATER SHUT OFF
-----	OVERHEAD WIRES	-----	W	SIGN
-----	UNDERGROUND WIRES	-----	W	RIFRAP
-----	WATER LINE	-----	W	BITUMINOUS PAVEMENT
-----	CATCH BASIN	-----	W	CONCRETE WALKWAY
-----	DRAIN MANHOLE	-----	W	DRIPSTRIP
-----	TRANSFORMER	-----	W	STONEWALL
-----	SEWER MANHOLE	-----	W	CLEARING LIMITS
-----	WATER VALVE PIT	-----	W	
-----	ELECTRIC MANHOLE	-----	W	
-----	UTILITY POLE	-----	W	
-----	SIGN	-----	W	
-----	TREE	-----	W	
-----	TREELINE	-----	W	
-----	HYDRANT	-----	W	
-----	GATE VALVE	-----	W	

CUMBERLAND: OFFICE COMMERCIAL WITH CONTRACT ZONE

SPACE STANDARD8:	OFFICE COMMERCIAL	CONTRACT ZONE SECTION
MINIMUM LOT SIZE, COMMERCIAL:	60,000 s.f.	III (J)
MINIMUM FRONTAGE:	150 FEET	III (B)
MINIMUM FRONT SETBACK:	25 FEET	III (A) (2)
MINIMUM SIDE SETBACK:	20 FEET	III (A) (2)
MINIMUM REAR SETBACK:	40 FEET	III (A) (2)
DRIVEWAY SETBACK:	10 FEET	III (A) (2)

III (A) (2) IF A COMMERCIAL LOT IS ADJACENT TO A RESIDENTIAL LOT, THERE SHALL BE A 25 FOOT BUFFER OF UNDISTURBED OR REPLANTED VEGETATION. THE DEVELOPER SHALL PROVIDE FOR ADDITIONAL PLANTINGS AS DETERMINED BY THE PLANNING BOARD. WITHIN THE 25 FOOT UNDISTURBED BUFFER WHERE EXISTING CONDITIONS DO NOT PROVIDE ADEQUATE SCREENING BETWEEN THE PROPERTIES.

III (H) THE ROUTE 1 BUFFER SHOWN ON THE PLAN SHALL BE 35 FEET FROM THE ROUTE 1 RIGHT OF WAY. 25 FEET OF THE ROUTE 1 BUFFER SHALL BE UNDISTURBED VEGETATION AND THE REMAINING 10 FEET SHALL BE USED FOR A COMMON WALKWAY. WITHIN THE COMMON WALKWAY/PATH SHALL BE CONSTRUCTED WITHIN THE ROUTE 1 RIGHT OF WAY, SUBJECT TO APPROVAL BY THE TOWN.

NO ADDITIONAL BUFFER SHALL BE REQUIRED ALONG ROUTE 1 FOR LOT 3 AS SHOWN ON THE "AMENDED AND RESTATED CONTRACT ZONING AGREEMENT BY AND BETWEEN THE TOWN OF CUMBERLAND AND CUMBERLAND FORESIDE VILLAGE, LLC" EXHIBIT B, PROVIDED THAT THE FRONT SETBACK FOR THE PROPERTY AS SHOWN IN SECTION III(A) IS MET AND THAT THE SETBACK AREA INCLUDES UNDISTURBED VEGETATION TO THE GREATEST EXTENT PRACTICABLE AND ADDITIONAL PLANTINGS AS NECESSARY TO CREATE A SUFFICIENT VEGETATED BUFFER WITHIN THE SETBACK.

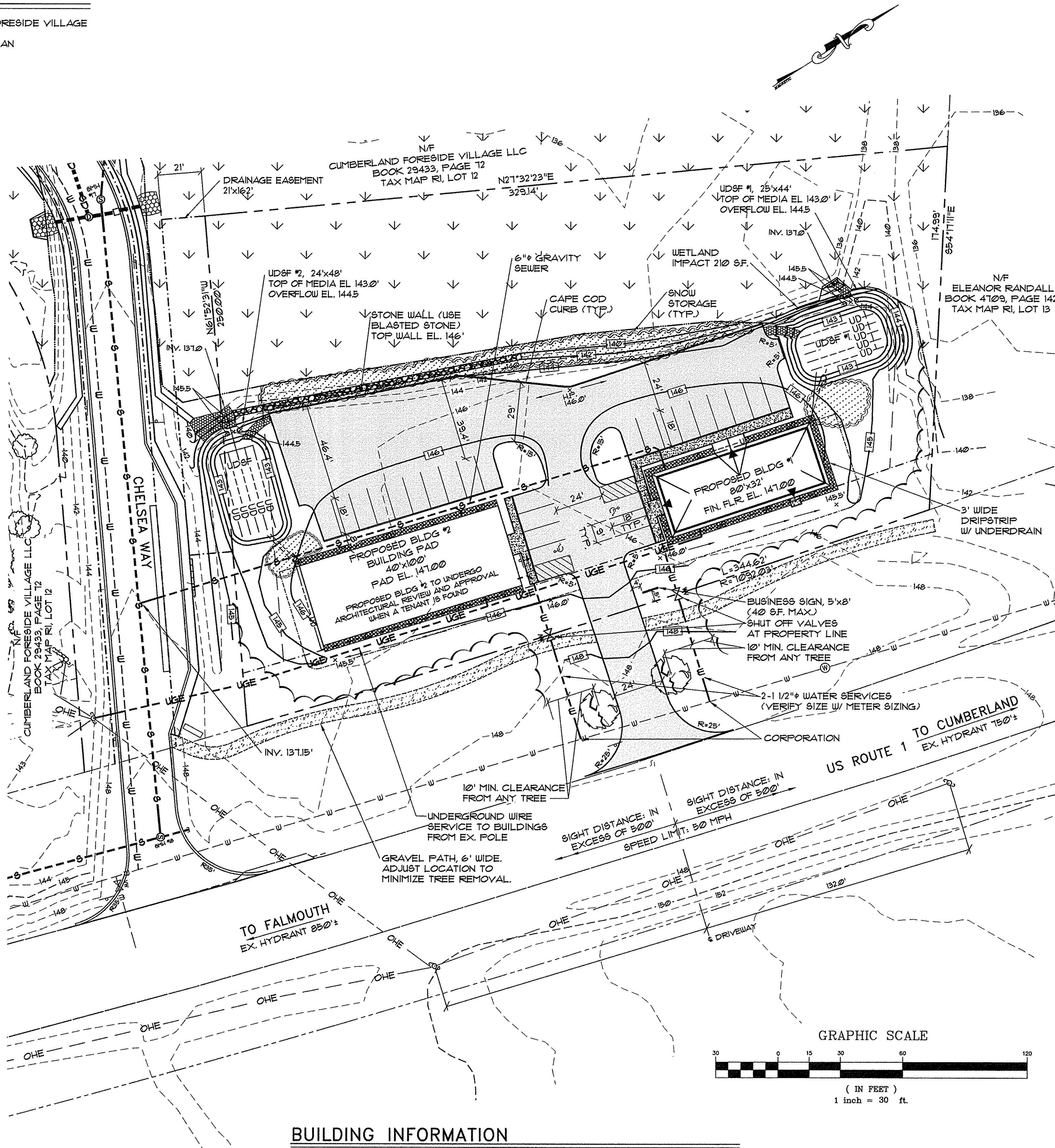
III (I) NOTWITHSTANDING ANYTHING IN SECTION III(A) ABOVE TO THE CONTRARY, THE BUILDING SETBACK FROM ROUTE 1 SHALL BE 65 FEET FROM THE ROUTE 1 RIGHT OF WAY, EXCEPT THAT THE BUILDING SETBACK FROM ROUTE 1 ON LOT 3 ONLY SHALL BE 25 FEET FROM THE ROUTE 1 RIGHT OF WAY.

1. ALL FEES SHALL BE PAID PRIOR TO PRE-CONSTRUCTION CONFERENCE.
2. A PERFORMANCE GUARANTEE IN AN AMOUNT ACCEPTABLE TO THE TOWN MANAGER SHALL BE PROVIDED PRIOR TO THE PRECONSTRUCTION CONFERENCE.
3. A PRECONSTRUCTION CONFERENCE SHALL BE HELD PRIOR TO THE START OF CONSTRUCTION.
4. ALL CLEARING LIMITS ARE TO BE STAKED AND INSPECTED BY THE TOWN ENGINEER PRIOR TO THE PRECONSTRUCTION CONFERENCE.
5. A BLASTING PERMIT, IF NEEDED, SHALL BE OBTAINED FROM THE TOWN CODE ENFORCEMENT OFFICER PRIOR TO BLASTING.

1-5D FOURTH ANNEDED SUBDIVISION PLAN CUMBERLAND FORESIDE VILLAGE  
C11 SITE, GRADING & UTILITY PLAN  
C12 EROSION CONTROL PLAN & LANDSCAPE & LIGHTING PLAN  
C21 DETAILS  
C22 DETAILS  
C23 DETAILS  
C24 DETAILS  
D11 DRAINAGE ANALYSIS, EXISTING CONDITIONS &  
DEVELOPED CONDITIONS - LOT 9

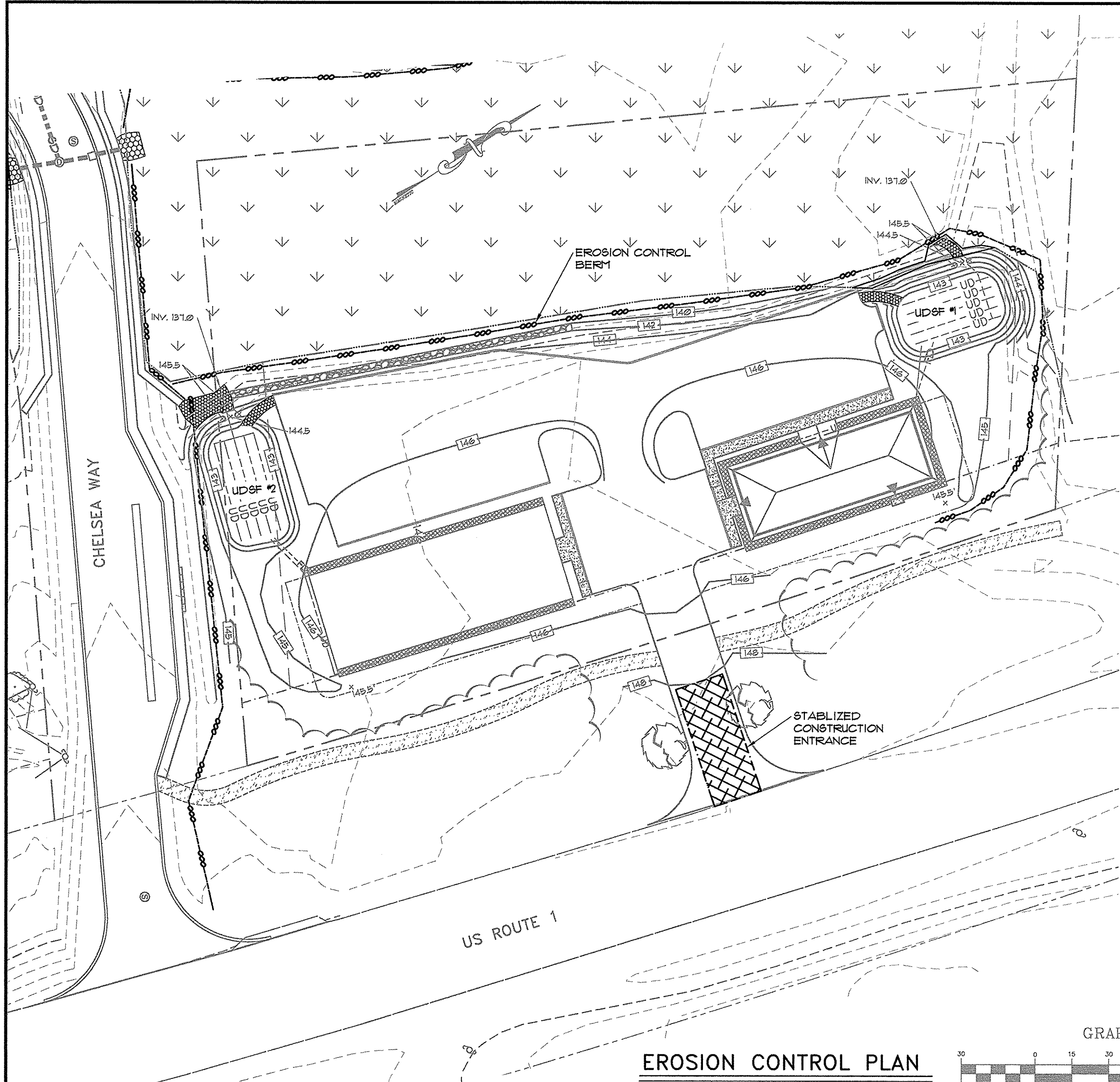
USE: PROFESSIONAL OFFICES AND BUSINESS SERVICES, MEDICAL CLINICS AND RETAIL BUSINESS IN COMMERCIAL DISTRICTS	REQUIRED: 1 FOR EACH 250 SQ. FT. OF GROSS LEASABLE AREA
2-1 STORY BUILDINGS, 6,560 SQ. FT. TOTAL	26 SPACES REQUIRED
	26 SPACES PROVIDED

1. OWNER/APPLICANT: CUMBERLAND FORESIDE VILLAGE, LLC, 50 GRAY ROAD, FALMOUTH, ME.
2. LANDSCAPE ARCHITECT: MOHR & SEREDIN, PLEASANT STREET, PORTLAND, MAINE
3. ENGINEER: PINKHAM & GREER CIVIL ENGINEERS, 28 VANNAH AVE., PORTLAND, MAINE.
4. BOUNDARY INFORMATION BY OWEN HASKELL, INC., 390 US ROUTE ONE, FALMOUTH, MAINE.
5. TOPOGRAPHY TAKEN FROM STATE OF MAINE OFFICE OF GIS DATA CATALOG, ELEVATION AND DERIVED PRODUCTS, ELEVATION CONTOURS (2' INTERVAL FROM LIDAR), TOWN OF CUMBERLAND, ON THE GROUND SURVEY BY OWEN HASKELL, INC.
6. SOILS MAPPING AND WETLANDS MAPPING TAKEN FROM PROJECT "CUMBERLAND FORESIDE VILLAGE, U.S. ROUTE ONE, CUMBERLAND", OWEN CUMBERLAND FORESIDE VILLAGE, LLC, 50 GRAY ROAD, FALMOUTH, MAINE. APPROVED BY THE TOWN OF CUMBERLAND MARCH 20, 2001.
7. TAX MAP REFERENCE: MAP R01, PART OF LOT 12A.
8. TOTAL PARCEL: 161 ACRES
9. ZONE: OFFICE COMMERCIAL USE, CONTRACT OVERLAY ADOPTED SEPT. 2002, AMENDED 10/23/14 (CCRD BK 31893, PG 262) AND 2/11/15 (CCRD BK 32162, PG 191) AND APRIL 2016 (TO BE RECORDED).
10. ALL WORK AND SITE ALTERATIONS SHALL BE DONE IN ACCORDANCE WITH THE "MAINE EROSION AND SEDIMENT CONTROL HANDBOOK FOR CONSTRUCTION BEST MANAGEMENT PRACTICES" ISSUED BY THE BUREAU OF LAND AND WATER QUALITY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED MARCH 2003.
11. CALL DIG-SAFE PRIOR TO COMMENCING WORK, 1-800-DIG-SAFE.
12. LOT TO BE SERVICED BY PUBLIC WATER AND SEWER
13. POWER, TELEPHONE AND CABLE ARE TO BE UNDERGROUND.
14. THE INSTALLATION OF THE SANITARY SEWER SYSTEM SHALL BE OBSERVED BY THE TOWN'S ENGINEERING REPRESENTATIVE.
15. PRIOR TO ACCEPTANCE OF THE SEWER BY THE TOWN THE MAIN LINE SEWER PIPE WILL BE INTERNALLY INSPECTED BY THE PORTLAND WATER DISTRICT EQUIPMENT AT THE DEVELOPER'S EXPENSE. ALL TESTING PROCEDURES SHALL BE ACCEPTABLE TO THE TOWN
16. NO CONSTRUCTION OR FILLING OF WETLANDS OTHER THAN THAT SHOWN ON THE PLANS IS ALLOWED. A NRPA PERMIT IS REQUIRED BY DEP. THE SITE HAS A DEP PERMIT, 1-215-18-39-L-A.
17. THE DEVELOPER / OWNER WILL BE RESPONSIBLE FOR MAINTAINING THE ROAD AND PARKING AREAS, INCLUDING PLOWING.
18. THIS APPROVAL IS DEPENDENT UPON, AND LIMITED TO, THE PROPOSALS AND PLANS CONTAINED IN THE APPLICATION AND SUPPORTING DOCUMENTS SUBMITTED AND AFFIRMED BY THE APPLICANT AND ANY VARIATION FROM THE PLANS, PROPOSALS AND SUPPORTING DOCUMENTS IS SUBJECT TO REVIEW AND APPROVAL BY THE PLANNING BOARD, EXCEPT FOR DE MINIMIS CHANGES WHICH THE DIRECTOR OF PLANNING AND ZONING MAY APPROVE.
19. TO INSURE PROTECTION OF THE NORTHERN LONG-EARED BAT DEVELOPMENT STAGE CUTTING OF MATURITY TREES DURING THE MATURITY SEASON IS NOT ALLOWED. NO TREE CUTTING IS ALLOWED BETWEEN JUNE 1 AND JULY 31.



	<u>BUILDING #1</u>	<u>BUILDING #2</u>
STREET NUMBER	78 U.S. ROUTE ONE	74 U.S. ROUTE ONE
BUILDING USE	MAINE REAL ESTATE NETWORK	PAD FOR FUTURE OFFICE BLDG.
SIZE / AREA	32'x80' / 2560 SF.	40'x100' / 4,000 SF.
FINISH FLOOR ELEVATION	EL. 147.00	EL. 147.00





EROSION CONTROL PLAN

SUGGESTED SEQUENCE OF CONSTRUCTION TO CONTROL EROSION

THIS SEQUENCE OF CONSTRUCTION IS A GENERAL GUIDE TO THE CONTRACTOR. ACTUAL CONSTRUCTION PRACTICES WILL DICTATE VARIATIONS IN THE ORDER OF MAJOR EVENTS.

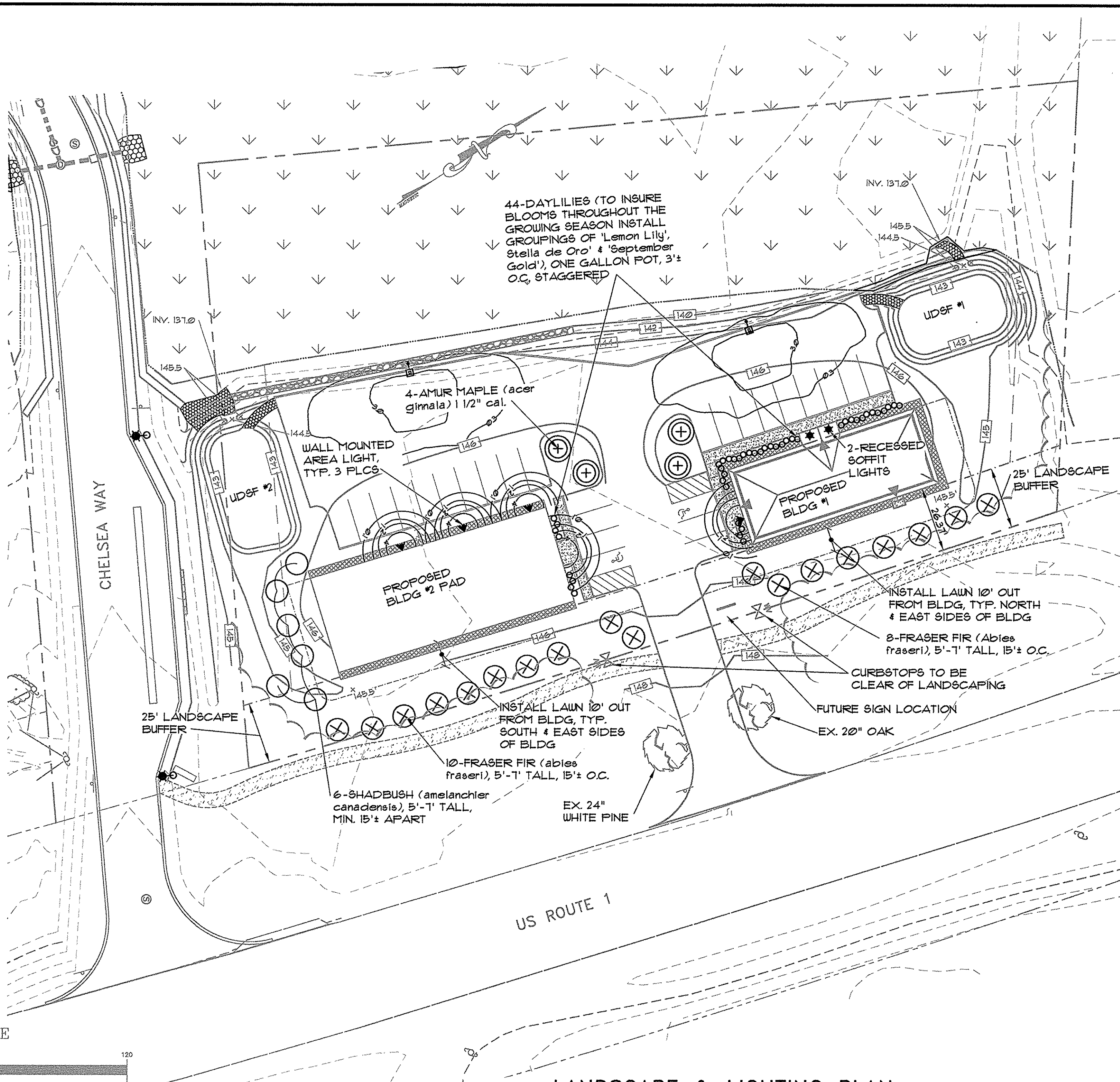
1. INSTALL PERIMETER EROSION CONTROL BERM.
2. INSTALL THE UNDERDRAINED SOIL FILTER BASINS TO ACT AS SILTATION BASIN, PRIOR TO ANY STRIPPING OF TOPSOIL OR OTHER EARTHWORK. THE UD&F WILL FUNCTION AS SILTATION BASIN DURING CONSTRUCTION.
3. CLEAR AND GRUB WORK AREAS. TEMPORARILY SEED AREAS NOT TO BE WORKED ON WITHIN 14 DAYS.
4. STRIP AND STOCKPILE ON-SITE TOPSOIL. SEED STOCKPILES WITH TEMPORARY SEED MIX.
5. BEGIN EARTHWORK FOR ROAD AND PARKING AREAS.
6. STABILIZE AREAS DRAINING TO UNDERDRAINED SOIL FILTERS.
7. INSTALL AND PROTECT STORM DRAINAGE SYSTEM.
8. ROUGH GRADE ROADWAY SIDE SLOPES.
9. FINE GRADE ROAD SIDE SLOPES AND ROUGH GRADE REMAINDER OF SITE.
10. RESEED OR TEMPORARILY SEED ANY AREA WHICH WILL BE LEFT UNDISTURBED FOR MORE THAN 14 DAYS.
11. COMPLETE FINE GRADING AND PAVING OF ROAD AND PARKING AREAS.
12. CLEAN SILTATION BASINS AND STORM DRAIN SYSTEM OF CONSTRUCTION SEDIMENTATION.
13. FINE GRADE, LOAM, SEED AND FERTILIZE REMAINDER OF SITE.
14. INSTALL UNDERDRAIN PIPING AND SOIL FILTER MATERIAL ONCE THE SITE IS STABLE.
15. REMOVE TEMPORARY SOIL EROSION MEASURES.

EROSION CONTROL LEGEND

- o--- EROSION CONTROL BERM
- [Hatched Box] STABILIZED ENTRANCE
- [Stippled Box] RIPRAP PAD OR SLOPE

NOTES:

1. ADD EROSION CONTROL MESH TO ALL SLOPES STEEPER THAN 3:1 THAT ARE NOT STABILIZED WITH RIPRAP.



LANDSCAPE & LIGHTING PLAN

HOUSEKEEPING NOTES

THIS PROJECT IS LOCATED IN A STREAM WATERSHED. PROTECTION OF THE GROUNDWATER QUALITY IS ENSURED BY HAVING GOOD HOUSEKEEPING PRACTICES AND MAINTENANCE OF THE STORMWATER SYSTEMS. SPILL PREVENTION MUST BE INCORPORATED INTO THE PLAN. THE PROJECT SHOULD FOLLOW THE FOLLOWING STEPS:

1. OWNER AND TENANTS SHOULD BE MADE AWARE OF POSSIBLE GROUNDWATER AND SURFACE WATER CONTAMINATION BASED ON THEIR ACTIONS. THE SPILLING OF PRODUCTS SUCH AS SMALL ENGINE FUEL, CLEANING PRODUCTS AND PAINTS NEED TO BE CLEANED UP. THE USE OF FERTILIZERS AND PESTICIDES SHOULD BE DONE CAUTIOUSLY AND IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS.

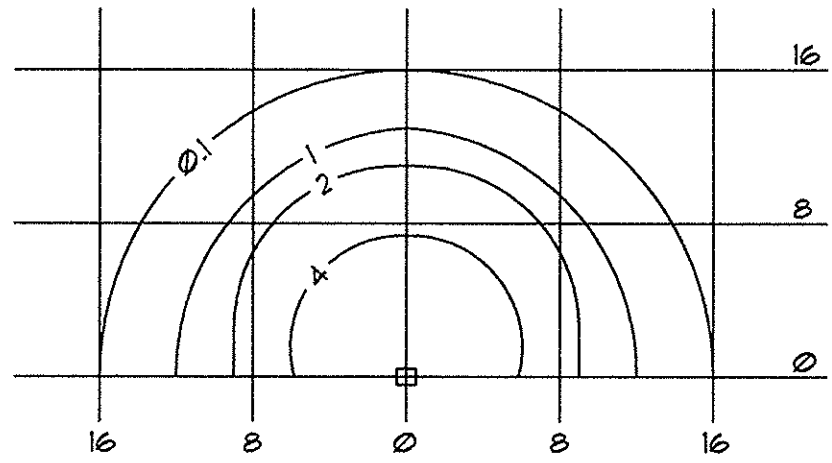
THE MAINTENANCE OF THE LANDSCAPING AND PARKING LOTS SHOULD INCLUDE THE SWEEPING OF THE PARKING LOTS AND REMOVAL OF THE MATERIALS THAT MAY CAUSE DUST.

DURING CONSTRUCTION FOLLOW THE EROSION CONTROL MEASURES OUTLINED ON THE PLANS.

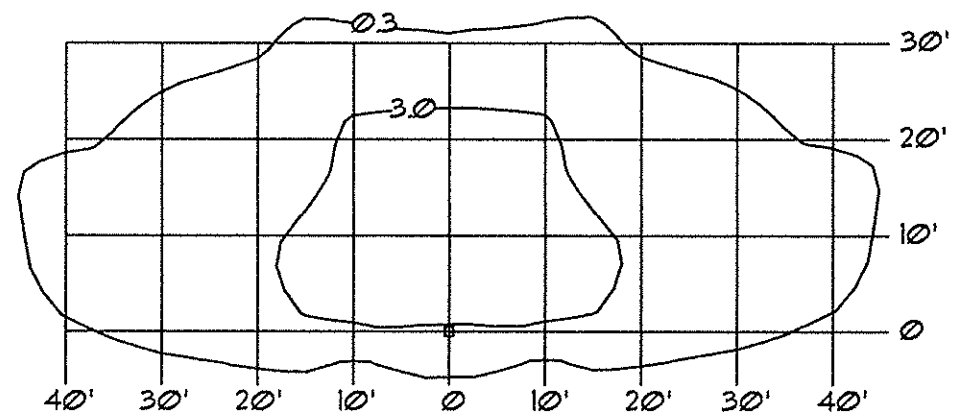
DURING CONSTRUCTION, DEVELOP A WASTE HANDLING PROGRAM THAT IDENTIFIED POTENTIAL CONTAMINATES THAT COULD BE INTRODUCED TO THE AQUIFER. FOLLOW HAZARDOUS WASTE RULES IF ANY ITEMS USED ARE CONSIDERED A HAZARDOUS WASTE. IT IS CRITICAL TO THE SITE THAT UNCONTROLLED RELEASES BE PREVENTED.

OIL ABSORBENT PADS SHOULD BE USED WHILE REFUELING EQUIPMENT.

THIS SITE MAY REQUIRE DEWATERING OF TRENCHES. DURING CONSTRUCTION, MONITOR STORMWATER RUNOFF FROM THE EQUIPMENT AND GROUND AREAS TO MINIMIZE CONTAMINATION OF GROUNDWATER.



PHOTOMETRICS WALL MOUNTED FIXTURES



PHOTOMETRICS POLE MOUNTED FIXTURES

LIGHTING NOTES

1. WHERE THE PHOTOMETRIC CONTOURS OVERLAP THEY ADD TOGETHER FOR TOTAL FOOTCANDLES.
2. WALL MOUNTED FIXTURES \*:  
E-CONOLIGHT, WALL PACK 10W HP6 - BRONZE, MODEL NO. E-WPAH0712.  
PHOTOMETRICS ARE BASED ON LIGHT LEVEL TAKEN FROM INSTALLED UNITS WITH IDEAL-SPERRY 01-021 LIGHT METER.  
MOUNTING HEIGHT = 8'.  
UNITS WILL HAVE MOTION DETECTORS AND SHUT-OFF TIMERS.
3. SOFFIT FIXTURES \*:  
LIGHTS IN THE SOFFITS OF THE BUILDING #1 ENTRANCE TO BE SOFFIT MOUNTED LED "DOWN" LIGHT FIXTURES.
4. AREA LIGHTS -□:  
SPAULDING CIMARRON CL16, SINGLE HEAD LED POLE MOUNTED FIXTURE AT 12.5 FT MOUNTING HEIGHT.  
MODEL CL16-A-32L-U-4K-3-\_-BL-B-C

**PINKHAM & GREER**  
CIVIL ENGINEERS  
28 WAWM AVE. PORTLAND, ME 04103  
TEL 207.616.3642 FAX 207.761.7426

THOMAS S. GREER  
NO. 4236  
LICENSED PROFESSIONAL ENGINEER  
MAINE

4/12/17

REV.	DATE	DESCRIPTION
3	4/12/17	REV'D PER TOWN REVIEW
2	3/1/17	ADDED LIGHT INFO & PHOTOMETRICS
1	12/2/16	REV'D PER DEP REVIEW & TOWN COMMENTS

CUMBERLAND FORESIDE VILLAGE, LLC  
50 GRAY ROAD, FALMOUTH, ME

SCALE: AS SHOWN  
DATE: AUGUST 30, 2016  
PROJECT: 16163

DRN BY: JDC  
DESG BY: TSG  
CHK BY: [Signature]

CUMBERLAND FORESIDE VILLAGE LOT 9  
U.S. ROUTE ONE, CUMBERLAND, MAINE

EROSION CONTROL PLAN AND LANDSCAPE & LIGHTING PLAN

C1.2

MAP/LOT R01/12A



GENERAL:

1. SOIL EROSION IS KEPT TO A MINIMUM.
2. NO SEDIMENT LEAVES THE CONSTRUCTION SITE PROPER.
3. ALL POSSIBLE MEASURES ARE EMPLOYED TO PREVENT SEDIMENT FROM ENTERING DRAINAGE COURSES AND WETLANDS EVEN BEYOND THE DETAILS SHOWN ON THIS PLAN IF NECESSARY.

- ALL EROSION CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAIN EROSION AND SEDIMENT CONTROL BMPs PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY, MAIN DEPARTMENT OF ENVIRONMENTAL PROTECTION, MARCH 2003.
2. THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATERBODIES, OR WETLAND AS A RESULT OF THIS PROJECT.
3. LOAM AND SEED ALL DISTURBED AREAS AS SOON AS POSSIBLE AFTER DISTURBANCE, BUT NO LONGER THAN 7 DAYS. LOAM AND SEED ANY DISTURBED AREA WITHIN 75' OF WETLANDS OR WATERBODIES WITHIN 48 HOURS OR PRIOR TO AND STORM EVENT. USE WINTER SEED RATES AND SPECIFICATIONS IF APPROPRIATE.
4. INSPECT SOIL EROSION MEASURES WEEKLY AND AFTER SIGNIFICANT STORM EVENTS. MAKE ALL NECESSARY REPAIRS TO FACILITIES AS SOON AS POSSIBLE, BUT NO LONGER THAN 2 DAYS. CLEAN AND RESET SILT FENCES AND STONE CHECK DAMS WHICH ACCUMULATE SEDIMENT AND DEBRIS.
5. PROTECT AND STABILIZE ALL AREAS NOT SCHEDULED FOR EROSION PREVENTION OR STABILIZATION BUT THAT SHOW SIGNS OF EROSION. NOTIFY OWNER OF ANY SIGNIFICANT EROSION PROBLEM.
6. APPLY MULCH TO BARE SOILS WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS, WITHIN 48 HOURS IF WITHIN 75' OF WETLAND OR WATERBODY, PRIOR TO ANY RAIN EVENT, OR PRIOR TO ANY WORK SHUTDOWN LASTING MORE THAN ONE DAY.
7. TEMPORARILY SEED WITHIN 7 DAYS ANY AREA WHICH WILL BE LEFT DISTURBED AND UNWORKED FOR MORE THAN 14 DAYS WITH THE TEMPORARY SEED MIX LISTED BELOW. IF AREA IS WITHIN 75' OF A WETLAND OR WATERBODY, SEED WITHIN 48 HOURS. PERMANENTLY SEED ANY AREA WHICH CAN BE LOAMED AS SOON AS POSSIBLE WITH THE PERMANENT SEED MIX LISTED BELOW. DO NOT USE PERMANENT SEED MIX AFTER SEPTEMBER 15.
8. MULCH ALL AREAS SEEDING SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE. DURING THE GROWING SEASON (APRIL 15 - SEPT. 30) USE EROSION CONTROL MESH (OR MULCH AND NETTING) ON:
  - THE BASE OF GRASSSED WATERWAYS
  - SLOPES STEEPER THAN 15%
  - WITHIN 100 FT. OF STREAMS AND WETLANDSBETWEEN OCT. 1 AND APRIL 14 USE EROSION CONTROL MESH (OR MULCH AND NETTING) ON:
  - SIDE SLOPES OF GRASSSED WATERWAYS
  - SLOPES STEEPER THAN 8%
9. INSTALL EROSION CONTROL MESH IN ACCORDANCE WITH MANUFACTURERS RECOMMENDATIONS. MESH TO BE EQUAL TO NORTH AMERICAN GREEN PRODUCT C12BN. ALL SLOPES STEEPER THAN 3/4V WILL BE COVERED WITH AN EROSION CONTROL MESH.
10. FOLLOW SILT FENCE MANUFACTURER'S SPECIFICATIONS AND RECOMMENDATIONS FOR INSTALLATION OF SILT FENCE. SECURE ENTIRE BOTTOM OF FENCE EITHER BY BURYING BOTTOM OF FENCE IN A TRENCH OR BERMING WITH SOIL OR CHIPPED GRUBBINGS. REFER TO SILT FENCE DETAILS.
11. PLACE AND GRADE LOAM IN A REASONABLY UNIFORM MANNER. WORK LIME AND FERTILIZER INTO THE SOIL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM SEED BED IS PREPARED. REMOVE FROM SURFACE ALL STONES LARGER THAN 2" AND ALL OTHER UNSUITABLE MATERIAL. LIME AND FERTILIZER SHOULD BE MIXED INTO SOIL PRIOR TO ROLLING EXCEPT IF INCLUDED IN HYDROSEED MIXTURE. PERMANENT STABILIZATION OF REVEGETATED AREAS IS CONSIDERED AS 90% CATCH.
12. ALL CULVERT OR PIPE OUTFALL PROTECTION MUST BE INSTALLED WITHIN 48 HOURS OF INSTALLING NEW PIPE OR CULVERT.
13. DITCHES AND CHANNELS DESIGNATED TO BE LINED WITH RIPRAP AND/OR EROSION CONTROL MESH MUST BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR CHANNEL.
14. ALL CATCH BASINS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED BY INSTALLING AND MAINTAINING SILT SACKS DURING CONSTRUCTION.
15. WATER FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. HAY BALE OR EROSION CONTROL MIX LINED BOLL) PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE.

SUITABLE TOPSOIL SALVAGED FROM SITE OR SCREENED, LOOSE AND FRIABLE SANDY LOAM OR LOAM AS DEFINED BY THE USDA SOIL CONSERVATION SERVICE CLASSIFICATION SYSTEM; FROM FERTILE AND STRUCTURE OF SUBSTRATE; REFINED OILS, ROTS, WEEDS, RHIZOMES OR OTHER UNDESIRABLE FOREIGN MATTER AS DETERMINED BY THE INSPECTING AUTHORITY. CONTRACTOR SHALL SUBMIT REPORTS OF LOAM TEST RESULTS PERFORMED BY AN INDEPENDENT TESTING LABORATORY FROM THE STATE OF TEXAS. THE COST OF TESTING SHALL BE INCIDENTAL TO THE COST OF TOPSOIL. TOPSOIL SHALL MEET THE FOLLOWING SPECIFICATIONS;

7. MATERIAL
- |   |          |
|---|----------|
| SAND - 0.00 IN. TO 0.002 IN. DIAMETER (% BY VOLUME).....  | 45 - 75  |
| SILT - 0.002 IN. TO 0.00008 IN. DIAMETER (% BY VOLUME)....  | 20 - 40  |
| CLAY - LESS THAN 0.00008 IN. DIAMETER (% BY VOLUME)....   | 5 - 15   |
| ORGANICS (SHALL MEET THE REQUIREMENTS OF MDOT<br>STANDARD SPECIFICATION <u>TIT-205 FEAT HUMUS</u> ) (% BY VOLUME) . 10 - 20 |          |
| NUTRIENTS:  |          |
| CALCIUM (CA) (% SATURATION) .....   | 60 - 80  |
| MAGNESIUM (MG) (% SATURATION) .....   | 10 - 25  |
| POTASSIUM (K) (% SATURATION) .....  | 21 - 30  |
| PHOSPHORUS (P) (POUNDS/ACRE) .....  | 10 - 40  |
| PH .....  | 60 - 6.5 |
| PERMEABILITY (INCHES PER HOUR) .....  | 3 - 10   |
| MAXIMUM STONE SIZE (INCHES) .....   | 3/4      |

USE PERMANENT SEED MIXES AND RATES BETWEEN 5/15 AND 9/30.  
USE TEMPORARY SEED MIXES FOR PERIODS LESS THAN 12 MONTHS. IF USING  
TEMPORARY SEED MIXES AND RATES BETWEEN 10/1 AND 5/14, RE-SEED WITH  
PERMANENT SEED MIX AFTER 5/15.

## MDOT 717.03(a) METHOD NUMBER 3

OATS	80.00 LBS/ACRE	4/01 - 5/14
ANNUAL RYEGRASS	40.00 LBS/ACRE	
SUDANGRASS	40.00 LBS/ACRE	5/15 - 8/14
ANNUAL RYEGRASS	80.00 LBS/ACRE	5/15 - 9/14
WINTER RYE	112.00 LBS/ACRE	9/15 - 9/30
WINTER RYE (W/ MULCH COVER)	112.00 LBS/ACRE	10/01 - 3/31

LIMING AND FERTILIZER RATES WILL BE BASED ON FIELD SOIL TESTING OF ON-SITE TOPSOILS BY A CERTIFIED LABORATORY. SUBMIT TEST RESULTS TO THE ENGINEER.

STRAW OR HAY (ANCHORED) . . . . .	70 - 90 LBS	PROTECTED AREAS
STRAW OR HAY (ANCHORED) . . . . .	185 - 275 LBS	WINDY AREAS
SHREDDED OR CHOPPED . . . . .	185 - 275 LBS	
JUTE MESH . . . . .	A6 REQUIRED	MODERATE TO HIGH WINDS AREAS

PEG AND TWINE .....	LIQUID ASPHALT
MULCH NETTING .....	WOOD CELLULOSE FIBER
ASPHALT EMULSION .....	CHEMICAL TACK

THE WINTER CONSTRUCTION PERIOD IS FROM NOVEMBER 1 THROUGH APRIL 15. IF THE CONSTRUCTION SITE IS NOT STABILIZED WITH PAVEMENT, A ROAD GRAVEL BASE, 15% MAIZE VEGETATION COVER OR RIP RAP BY NOVEMBER 15 THEN THE SITE NEEDS TO BE PROTECTED WITH OVER-WINTER STABILIZATION. AN AREA CONSIDERED OPEN IS ANY AREA NOT STABILIZED WITH PAVEMENT, VEGETATION, MULCHING, EROSION CONTROL MAT, RIP RAP OR GRAVEL BASE ON A ROAD. WINTER STABILIZATION SHALL BE COMPLETED SUCH THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT STABILIZATION AT ANY ONE TIME. LIMIT THE EXPOSED AREA TO THOSE AREAS IN WHICH WORK IS EXPECTED TO BE UNDER TAKEN DURING THE PROCEEDING 15 DAYS AND THAT CAN BE MULCHED IN ONE DAY PRIOR TO ANY SNOW EVENT. ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL THE SUBGRADE GRAVEL IS INSTALLED IN ROADWAY AREAS OR THE AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH RATE SHALL BE A MINIMUM OF 150 LBS/1000 SF. (3 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. THE CONTRACTOR MUST INSTALL ANY ADDED MEASURES WHICH MAY BE NECESSARY TO CONTROL EROSION/SEDIMENTATION FROM THE SITE DEFENDANT UPON THE ACTUAL SITE AND WEATHER CONDITIONS.

CONTINUATION OF EARTHWORK OPERATIONS ON ADDITIONAL AREAS SHALL NOT BEGIN UNTIL THE EXPOSED SOIL SURFACE ON THE AREA BEING WORKED HAS BEEN STABILIZED, IN ORDER TO MINIMIZE AREAS WITHOUT EROSION CONTROL PROTECTION.

- SOIL STOCKPILES
- STOCKPILES OF SOIL OR SUBSOIL WILL BE MULCHED FOR OVER-WINTER PROTECTION WITH HAY OR STRAW AT TWICE THE NORMAL RATE OR AT 150 LBS/1000 SF. (3 TONS/ACRE) OR WITH A FOUR INCH LAYER OF EROSION CONTROL MIX. THIS WILL BE DONE WITHIN 24 HOURS OF STOCKING AND WILL BE REESTABLISHED PRIOR TO ANY RAINFALL OR SNOWFALL. ANY SOIL STOCKPILE WILL NOT BE PLACED (EVEN COVERED WITH HAY OR STRAW) WITHIN 100 FEET FROM ANY NATURAL RESOURCES.
2. NATURAL RESOURCES PROTECTION
- IF ANY AREA WITH 100 FEET FROM ANY NATURAL RESOURCES, IF NOT STABILIZED WITH A MINIMUM OF 75% NATIVE VEGETATION CATCH, SHALL BE MULCHED BY DECEMBER 1 AND ANCHORED WITH PLASTIC NETTING OR PROTECTED WITH EROSION CONTROL MATS.
- DURING WINTER CONSTRUCTION, A DOUBLE LINE OF SEDIMENT BARRIERS (IE. SILT FENCE BACKED WITH HAY BALES OR EROSION CONTROL MIX) WILL BE PLACED BETWEEN ANY NATURAL RESOURCE AND THE DISTURBED AREA.
- PROJECTS CROSSING THE NATURAL RESOURCE SHALL BE PROTECTED A MINIMUM DISTANCE OF 100 FEET ON EITHER SIDE FROM THE RESOURCE. EXISTING PROJECTS NOT STABILIZED BY DECEMBER 1 SHALL BE PROTECTED WITH THE SECOND LINE OF SEDIMENT BARRIER TO ENSURE FUNCTIONALITY DURING THE SPRING THAW AND RAINS.
3. SEDIMENT BARRIERS
- DURING FROZEN CONDITIONS, SEDIMENT BARRIERS SHALL CONSIST OF EROSION CONTROL MIX SEDIMENT BARRIERS AS FROZEN SOIL PREVENTS THE PROPER INSTALLATION OF HAY BALES AND SEDIMENT SILT FENCES.
4. SEEDING
- BETWEEN THE DATES OF OCTOBER 15 AND APRIL 1, LOAM OR SEED WILL NOT BE REQUIRED. DURING PERIODS OF ABOVE FREEZING TEMPERATURES FINISHED AREAS SHALL BE FINE GRADED AND EITHER PROTECTED WITH MULCH OR TEMPORARILY SEEDED AND MULCHED UNTIL SUCH TIME AS THE FINAL TREATMENT CAN BE APPLIED. AFTER NOVEMBER 1 IF THE EXPOSED AREA HAS BEEN LOAMED AND FINAL GRADED WITH A UNIFORM SURFACE, THEN THE AREA MAY BE DORMANT SEEDED AT A RATE OF 3 TONS HIGHER THAN SPECIFIED FOR PERMANENT SEED AND THEN MULCHED.
- DORMANT SEEDED MAY BE PLACED PRIOR TO THE PLACEMENT OF MULCH AND FABRIC NETTING AND EROSION CONTROL BARRIERS.
- IF DORMANT SEEDED IS USED FOR THE SITE, ALL DISTURBED AREAS SHALL RECEIVE 4" OF LOAM AND BE SEEDED AT AN APPLICATION RATE OF 5 LBS/1000 SF. ALL AREAS SEEDED DURING THE WINTER WILL BE INSPECTED IN THE SPRING FOR ADEQUATE CATCH. ALL AREAS INSUFFICIENTLY VEGETATED (LESS THAN 75 % CATCH) SHALL BE REVEGETATED BY REPLACING LOAM, SEED AND MULCH.
- IF DORMANT SEEDED IS NOT USED FOR THE SITE, ALL AREAS DISTURBED IN THE WINTER SHALL BE VEGETATED IN THE SPRING.

THE APPLICANT WILL RETAIN THE SERVICES OF A PROFESSIONAL ENGINEER TO INSPECT THE CONSTRUCTION AND STABILIZATION OF ALL STORMWATER MANAGEMENT STRUCTURES, IF NECESSARY. THE ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS TO STATE THAT ALL STORMWATER MANAGEMENT STRUCTURES ARE CONSTRUCTED AND STABILIZED. THE INSPECTING ENGINEER WILL NOTIFY THE DEPARTMENT IN WRITING WITHIN 30 DAYS TO STATE THAT THE CONSTRUCTION HAS BEEN COMPLETED. ACCOMPANYING THE ENGINEER'S NOTIFICATION MUST BE A COPY OF THE TEST RESULTS FOR ANY SOIL FILL, AGGREGATE OR MULCH MATERIALS USED IN THE CONSTRUCTION OF ANY STORMWATER MANAGEMENT STRUCTURES AND FORMS. FOR EACH ENGINEER'S INSPECTIONS GIVING THE DATE OF EACH INSPECTION, THE TIME OF EACH INSPECTION, AND THE ITEMS INSPECTED ON EACH VISIT.

CONSTRUCTION SEQUENCE: THE SOIL FILTER MEDIA AND VEGETATION MUST NOT BE INSTALLED UNTIL THE AREA THAT DRAINS TO THE FILTER HAS BEEN PERMANENTLY STABILIZED WITH PAVEMENT OR OTHER STRUCTURE, 90% VEGETATION COVER, OR OTHER PERMANENT STABILIZATION UNLESS THE CONSTRUCTION CONTRIBUTING DRAINAGE AREA IS DIVERTED AROUND THE FILTER UNTIL STABILIZATION IS COMPLETED.

COMPACTION OF SOIL FILTER: FILTER SOIL MEDIA AND UNDERDRAIN BEDDING MATERIAL MUST BE COMPACTED TO BETWEEN 90% AND 92% STANDARD PROCTOR. THE BED SHOULD BE INSTALLED IN AT LEAST 2 LIFTS OF 9 INCHES TO PREVENT POCKETS OF LOOSE MEDIA.

CONSTRUCTION OVERTIGHT: INSPECTION BY A PROFESSIONAL ENGINEER WILL OCCUR AT A MINIMUM; AFTER THE PRELIMINARY CONSTRUCTION OF THE FILTER GRADES AND ONCE THE UNDERDRAIN PIPES ARE INSTALLED BUT NOT BACKFILLED,

AFTER THE DRAINAGE LAYER IS CONSTRUCTED AND PRIOR TO THE INSTALLATION OF THE FILTER MEDIA,

AFTER THE FILTER MEDIA HAS BEEN INSTALLED AND SEEDED, BIO-RETENTION CELLS MUST BE INSTALLED PER THE PROVIDED PLANTING SCHEME AND DENSITY FOR THE CANOPY COVERAGE OF 30% AND 50%.

AFTER ONE YEAR TO INSPECT HEALTH OF THE VEGETATION AND MAKE CORRECTIONS, AND ALL THE MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE OF EACH COMPONENT OF THE FILTER MEDIA. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL:

- SELECT SAMPLES FOR SAMPLING OF EACH TYPE OF MATERIAL TO BE BLENDED FOR THE MIXED FILTER MEDIA. THE SAMPLES SHALL BE TAKEN FROM THE UNDERLYING STOCKPILE. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE DETERMINED BY THE TESTING LABORATORY.
- PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING SOIL FILTER MEDIA MIXTURE MUST HAVE 8% TO 12% BY WEIGHT PASSING THE #200 SIEVE, A 4% TO 10% CONTENT OF MATERIAL PASSING THE #40 SIEVE, AND 80% TO 92% (DETERMINED HYDROMETER GRAIN SIZE ANALYSIS) AND HAVE 10% DRY WEIGHT OF ORGANIC MATTER.
- PERFORM A PERMEABILITY TEST ON THE SOIL FILTER MEDIA MIXTURE CONFORMING TO ASTM D4243 WITH THE MIXTURE COMPACTED TO 90-92% OF MAXIMUM DRY DENSITY BASED ON ASTM D698.

INSPECTIONS BY A PROFESSIONAL ENGINEER WILL CONSIST OF A VISIT TO THE SITE PRIOR TO CONSTRUCTION TO CONSULT WITH THE EARTHWORK CONTRACTOR AND A POST CONSTRUCTION MEETING TO CONFIRM GRADING ON LOTS AND FOR ALL DRIVEWAYS TO ENSURE RUNOFF IS DIRECTED ACCORDING TO PLANS AND TO OVERSEE THE RE-STABILIZATION OF THE LOT INTO A VEGETATED COVER

MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED. HOWEVER, BASED ON SITE AND WEATHER CONDITIONS DURING CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE.

5. MULCHING  
ALL AREA SHALL BE CONSIDERED TO BE DENUDED UNTIL AREAS OF FUTURE LOAM AND SEED HAVE BEEN LOAMED, SEEDED AND MULCHED. HAY AND STRAW MULCH SHALL BE APPLIED AT A RATE OF 150 LBS/1000 SF. OR 3 TONS/ACRE (TWICE THE NORMAL ACCEPTED RATE OF 15 LBS/1000 SF. OR 15 TONS/ACRE) AND SHALL BE PROPERLY ANCHORED. MULCH SHALL BE SPREAD ON TOP OF SNOW. MULCH WILL BE REAPPLIED AS A ONE INCH DEPTH OF LESS PRIOR TO APPLICATION.  
AFTER EACH DAY OF FINAL GRADING, THE AREA WILL BE PROPERLY STABILIZED WITH ANCHORED HAY OR STRAW OR EROSION CONTROL MATTING.  
AN AREA SHALL BE CONSIDERED TO HAVE BEEN STABILIZED WHEN EXPOSED SURFACES HAVE BEEN MULCHED WITH STRAW OR HAY AT A RATE OF 150 LBS/1000 SF. (3 TONS/ACRE) AND ADEQUATELY ANCHORED SO THAT GROUND SURFACE IS NOT VISIBLE THOUGH THE MULCH.

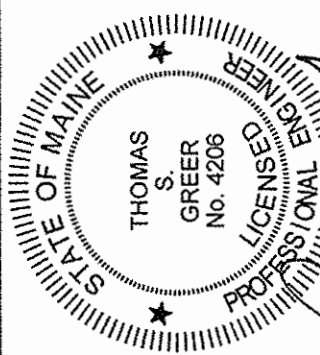
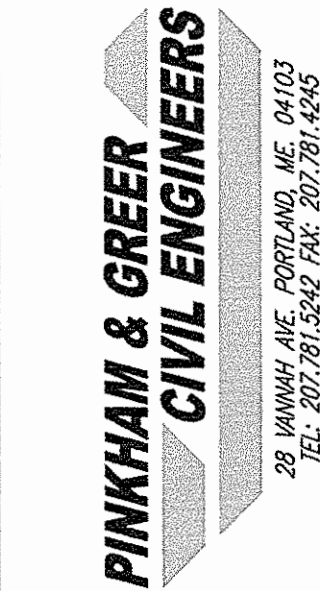
BETWEEN THE DATES OF NOVEMBER 1 AND APRIL 15, ALL MULCH SHALL BE ANCHORED BY EITHER PE LINE, MULCH NETTING, ASPHALT EMULSION CHEMICAL TACK, OR WOOD CELLULOSE FIBER. WHEN GROUND SURFACE IS NOT VISIBLE THROUGH THE MULCH THEN COVER IS SUFFICIENT. AFTER NOVEMBER 1, MULCH AND ANCHORING OF ALL BARE SOIL SHALL OCCUR AT THE END OF EACH FINAL GRADING WORK DAY.

- MULCHING ON SLOPES AND DITCHES  
SLOPES SHALL NOT BE LEFT EXPOSED FOR ANY EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY  
MULCHED AND ANCHORED WITH PEG AND NETTING OR WITH EROSION CONTROL BLANKETS.  
MULCHING SHALL BE APPLIED AT A RATE OF 250 LBS/1000 SF, ON ALL SLOPES GREATER THAN 2%.  
MULCH NETTING SHALL BE USED TO ANCHOR MULCH IN ALL DRAINAGE WAYS WITH A SLOPE GREATER  
THAN 3% FOR SLOPES EXPOSED TO DIRECT WINDS AND FOR ALL OTHER SLOPES GREATER THAN 2%  
EROSION CONTROL BLANKETS SHALL BE USED IN LIEU OF MULCH IN ALL DRAINAGE WAYS WITH SLOPE  
GREATER THAN 2%.  
EROSION CONTROL MIX CAN BE USED AS A SUBSTITUTE FOR EROSION CONTROL BLANKETS ON ALL  
SLOPES EXCEPT DITCHES.
1. TRENCH DEWATERING AND TEMPORARY STREAM DIVERSION  
WATER FLOW FROM CONSTRUCTION TRENCH DEWATERING OR TEMPORARY STREAM DIVERSION WILL PASS  
FIRST THROUGH A FILTER BAG OR SECONDARY CONTAINMENT STRUCTURE (E.G. COY BAG) OR EROSION  
CONTROL MATS PRIOR TO DISCHARGE. THE DISCHARGE SITE SHALL BE SELECTED TO  
AVOID FLOODING, ICING, AND SEDIMENT DISCHARGES TO A PROTECTED RESOURCE. IN NO CASE  
SHALL THE FILTER BAG OR CONTAINMENT STRUCTURE BE LOCATED WITHIN 100 FEET OF A PROTECTED  
NATURAL RESOURCE.
2. INSPECTION AND MONITORING  
MAINTENANCE MEASURES SHALL BE APPLIED AS NEEDED DURING THE ENTIRE CONSTRUCTION SEASON  
AFTER EACH RAINFALL, SNOW STORM OR PERIOD OF THAWING AND RUNOFF. THE SITE CONTRACTOR  
SHALL PERFORM A VISUAL INSPECTION OF ALL INSTALLED EROSION CONTROL MEASURES AND  
PERFORM REPAIRS AS NEEDED TO INSURE THEIR CONTINUOUS FUNCTION. FOLLOWING THE TEMPORARY  
AND/OR FINAL SEEDING AND MULCHING, THE CONTRACTOR SHALL, IN THE SPRING, INSPECT AND  
REPAIR ANY DAMAGED AND/OR UNESTABLISHED SPOTS. ESTABLISHED VEGETATIVE COVER MEANS A  
MINIMUM OF 25 TO 30% OF AREAS VEGETATED WITH VIGOROUS GROWTH.

1. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DITCHES AND CHANNELS - THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL STONE-LINED DITCHES AND CHANNELS ON THE SITE BY NOVEMBER 1. THE CONTRACTOR WILL CONSTRUCT AND STABILIZE ALL GRASS-LINED DITCHES AND CHANNELS ON THE SITE BY SEPTEMBER 15. IF THE CONTRACTOR FAILS TO STABILIZE A DITCH OR CHANNEL TO BE GRASS-LINED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE DITCH FOR LATE FALL AND WINTER:

- a. INSTALL A SOD LINING IN THE DITCH - THE CONTRACTOR WILL LINE THE DITCH WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, WATERING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL, AND ANCHORING THE SOD WITH JUTE OR PLASTIC MESH TO PREVENT THE SOD STRIPS FROM SLOUGHING DURING FLOW CONDITIONS.
- b. INSTALL A STONE LINING IN THE DITCH - THE CONTRACTOR WILL LINE THE DITCH WITH STONE RIPRAP BY NOVEMBER 1. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE AND LINING THICKNESS NEEDED TO WITHSTAND THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHIN THE DITCH. IF NECESSARY, THE CONTRACTOR WILL REGRADE THE DITCH PRIOR TO PLACING THE STONE LINING SO TO PREVENT THE STONE LINING FROM REDUCING THE DITCH'S CROSS-SECTIONAL AREA.
2. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DISTURBED SLOPES - THE CONTRACTOR WILL CONSTRUCT AND STABILIZE STONE-COVERED SLOPES BY NOVEMBER 1. THE CONTRACTOR WILL SEED AND MULCH ALL SLOPES TO BE VEGETATED BY SEPTEMBER 15. ANY AREA HAVING A GRADE GREATER THAN 15% (10H:1V) IS A SLOPE. IF THE CONTRACTOR FAILS TO STABILIZE ANY SLOPE TO BE VEGETATED BY SEPTEMBER 15, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SLOPE FOR LATE FALL AND WINTER:

- a. STABILIZE THE SOIL WITH TEMPORARY VEGETATION AND EROSION CONTROL MATS - BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SLOPE WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET AND APPLY EROSION CONTROL MATS OVER THE MULCHED SLOPE. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SLOPE BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL COVER THE SLOPE WITH A LAYER OF WOODWASTE COMPOST AS DESCRIBED IN ITEM C OF THIS CONDITION OR WITH STONE RIPRAP AS DESCRIBED IN ITEM D OF THIS CONDITION.
- b. STABILIZE THE SLOPE WITH SOD - THE CONTRACTOR WILL STABILIZE THE DISTURBED SLOPE WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SLOPE WITH WIRE PINS, ROLLING THE SOD TO GUARANTEE CONTACT BETWEEN THE SOD AND UNDERLYING SOIL, AND WATERING TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL. THE CONTRACTOR WILL NOT USE LATE-SEASON SOD INSTALLATION TO STABILIZE SLOPES HAVING A GRADE GREATER THAN 33% (3H:1V).
- c. STABILIZE THE SLOPE WITH WOODWASTE COMPOST - THE CONTRACTOR WILL PLACE A SIX-INCH LAYER OF WOODWASTE COMPOST ON THE SLOPE BY NOVEMBER 1. PRIOR TO PLACING THE WOODWASTE COMPOST, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED SLOPE. THE CONTRACTOR WILL NOT USE WOODWASTE COMPOST TO STABILIZE SLOPES HAVING GRADES GREATER THAN 50% (2H:1V) OR HAVING GROUNDWATER SEEPS ON THE SLOPE FACE.
- d. STABILIZE THE SLOPE WITH STONE RIPRAP - THE CONTRACTOR WILL PLACE A LAYER OF STONE RIPRAP ON THE SLOPE BY NOVEMBER 1. THE CONTRACTOR WILL HIRE A REGISTERED PROFESSIONAL ENGINEER TO DETERMINE THE STONE SIZE NEEDED FOR DRAINAGE AND SOIL SEPARATION.
- e. STANDARD CONDITIONS REQUIRING THE TIMELY STABILIZATION OF DISTURBED SOILS - BY SEPTEMBER 15 THE CONTRACTOR WILL SEED AND MULCH ALL DISTURBED SOILS ON AREAS HAVING A SLOPE LESS THAN 15%. IF THE CONTRACTOR FAILS TO STABILIZE THESE SOILS BY THIS DATE, THEN THE CONTRACTOR WILL TAKE ONE OF THE FOLLOWING ACTIONS TO STABILIZE THE SOIL FOR LATE FALL AND WINTER:
  - a. STABILIZING THE SOIL WITH TEMPORARY VEGETATION - BY OCTOBER 1 THE CONTRACTOR WILL SEED THE DISTURBED SOIL WITH WINTER RYE AT A SEEDING RATE OF 3 POUNDS PER 1000 SQUARE FEET, AND ANCHOR THE MULCH WITH PLASTIC NETTING. THE CONTRACTOR WILL MONITOR GROWTH OF THE RYE OVER THE NEXT 30 DAYS. IF THE RYE FAILS TO GROW AT LEAST THREE INCHES OR COVER AT LEAST 75% OF THE DISTURBED SOIL BEFORE NOVEMBER 1, THEN THE CONTRACTOR WILL MULCH THE AREA FOR OVER-WINTER PROTECTION AS DESCRIBED IN ITEM C OF THIS STANDARD CONDITION.
  - b. STABILIZE THE SOIL WITH SOD - THE CONTRACTOR WILL STABILIZE THE DISTURBED SOIL WITH PROPERLY INSTALLED SOD BY OCTOBER 1. PROPER INSTALLATION INCLUDES THE CONTRACTOR PINNING THE SOD ONTO THE SOIL WITH WIRE PINS, ROLLING THE SOD TO PROMOTE ROOT GROWTH INTO THE DISTURBED SOIL.
  - c. STABILIZE THE SOIL WITH MULCH - BY NOVEMBER 1 THE CONTRACTOR WILL MULCH THE DISTURBED SOIL BY SPREADING HAY OR STRAW AT A RATE OF AT LEAST 150 POUNDS PER 1000 SQUARE FEET ON THE AREA SO THAT NO SOIL IS VISIBLE THROUGH THE MULCH. PRIOR TO APPLYING THE MULCH, THE CONTRACTOR WILL REMOVE ANY SNOW ACCUMULATION ON THE DISTURBED AREA. IMMEDIATELY AFTER APPLYING THE MULCH, THE CONTRACTOR WILL ANCHOR THE MULCH WITH PLASTIC NETTING TO PREVENT WIND FROM MOVING THE MULCH OFF THE DISTURBED SOIL.

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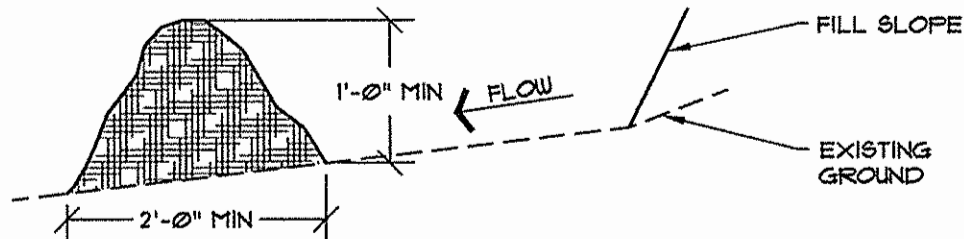
CUMBERLAND FORESIDE VILLAGE, LLC  
50 GRAY ROAD, FALMOUTH, ME

CUMBERLAND FORESIDE  
VILLAGE LOT 9  
U.S. ROUTE ONE, CUMBERLAND, MAINE

## DETAILS

C2.1





NOTES:

- EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE SITE. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR FLUME GRIT AND FRAGMENTED WOOD GENERATED FROM WATER-FLUME LOG HANDLING SYSTEMS. WOOD CHIPS, GROUND CONSTRUCTION DEBRIS, REPROCESSED WOOD PRODUCTS OR BARK CHIPS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX. EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:
  - ORGANIC MATERIAL: BETWEEN 20% - 100% (DRY WEIGHT BASIS)
  - PARTICLE SIZE: BY WEIGHT, 100% PASSING 6" SCREEN, 70-85% PASSING 0.15" SCREEN
  - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
  - LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
  - SOLUBLE SALTS CONTENT SHALL BE LESS THAN 4.0 MMHOS/CM.
  - PH: 5.0 - 8.0
- ON SLOPES LESS THAN 5% OR AT THE BOTTOM OF SLOPES 3:1 OR LESS UP TO 20 FEET LONG, THE BARRIER MUST CONFORM TO THE ABOVE DIMENSIONS. ON THE LONGER OR STEEPER SLOPES, THE BARRIER SHOULD BE WIDER TO ACCOMMODATE THE ADDITIONAL FLOW.
- THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL ELEVATION. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS.
- LOCATIONS WHERE OTHER BMP'S SHOULD BE USED:
  - AT LOW POINTS OF CONCENTRATED FLOW
  - BELOW CULVERT CULIT AFFRAYS
  - WHERE A PREVIOUS STAND-ALONE EROSION CONTROL MIX APPLICATION HAS FAILED
  - AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM (LARGE UPRADIANT WATERSHED)
  - AROUND CATCH BASINS AND CLOSED STORM DRAIN SYSTEMS.

THE EROSION CONTROL MIX BARRIERS SHOULD BE INSPECTED REGULARLY AND AFTER EACH LARGE RAINFALL, REPAIR ALL DAMAGED SECTIONS OF BERM IMMEDIATELY BY REPLACING OR ADDING ADDITIONAL MATERIAL PLACED ON THE BERM TO THE DESIRED HEIGHT AND WIDTH.

IT MAY BE NECESSARY TO REINFORCE THE BARRIER WITH SILT FENCE OR STONE CHECK DAMS IF

- THERE ARE SIGNS OF UNDERCUTTING OR THE IMPOUNDMENT OF LARGE VOLUMES OF WATER.

SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE-HALF THE HEIGHT OF THE BARRIER.

REPLACE SECTIONS OF BERM THAT DECOMPOSE, BECOME CLOGGED WITH SEDIMENT OR OTHERWISE BECOME INEFFECTIVE. THE BARRIER SHOULD BE RESHAPED AS NEEDED.

EROSION CONTROL MIX BARRIERS CAN BE LEFT IN PLACE AFTER CONSTRUCTION. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER BARRIER IS NO LONGER REQUIRED SHOULD BE SPREAD TO CONFORM TO THE EXISTING GRADE AND BE SEEDED AND MULCHED. WOODY VEGETATION CAN BE PLANTED INTO THE BARRIERS, OR THEY CAN BE OVER-SEEDED WITH LEGUMES. IF THE BARRIER NEEDS TO BE REMOVED, IT CAN BE SPREAD OUT INTO THE LANDSCAPE.

5 EROSION CONTROL MIX SEDIMENT BARRIER NOT TO SCALE

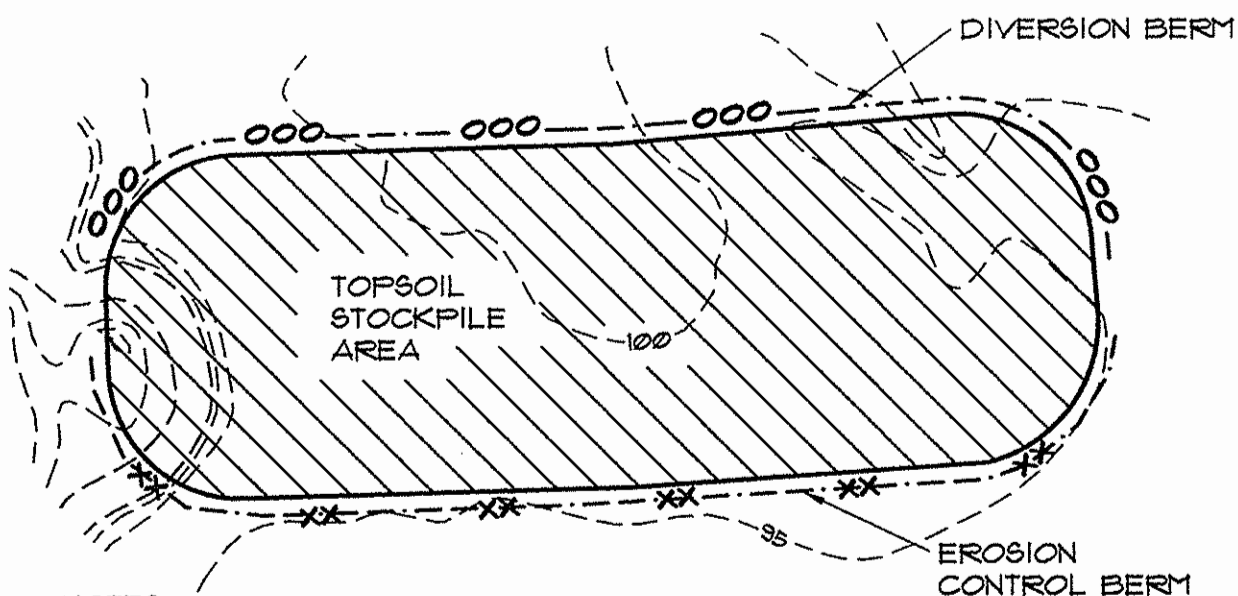
LANDSCAPE NOTES

GENERAL:

- SAVE EXISTING TREES AS SHOWN. DO NOT CUT OR CLEAR ANY VEGETATION BEYOND THE IMPACT LIMIT LINE.
- ALL PLANT MATERIALS INSTALLED ARE TO MEET THE SPECIFICATIONS OF THE "AMERICAN STANDARDS FOR NURSERY STOCK" BY THE AMERICAN ASSOCIATION OF NURSEYRTEEN.
- ALL PROPOSED PLANT LOCATIONS SHALL BE AS SHOWN ON PLANS. CONTRACTOR SHALL VERIFY LOCATION OF ALL UTILITIES PRIOR TO PLANTING AND WILL NOTIFY OWNER'S REPRESENTATIVE IN THE EVENT OF CONFLICTS.
- PLANT LOCATIONS ARE TO BE SCALED FROM THELANDSCAPE PLAN UNLESS NOTED OTHERWISE.
- NO PLANT MATERIAL SHALL BE INSTALLED UNTIL FINAL GRADING AND CONSTRUCTION HAS BEEN COMPLETED IN THE IMMEDIATE AREA.
- FINAL QUANTITY FOR EACH PLANT TYPE IS NOTED IN THE PLANT LIST. THIS NUMBER SHALL TAKE PRECEDENCE IN THE CASE OF ANY DISCREPANCY BETWEEN QUANTITIES SHOWN IN THE LIST AND ON THE PLAN.
- ANY PROPOSED SUBSTITUTIONS MUST BE APPROVED BY THE OWNER OR THE OWNER'S REPRESENTATIVE.
- ALL DISTURBED AREAS TO BE LOAMED AND SEEDED.

MAINTENANCE:

- LAUNGS SHALL BE WATERED, FERTILIZED AND MOWN ON A REGULAR BASIS ACCORDING TO SEASON AND RAINFALL, TO PRODUCE A STRONG TURF OF 80% MIN. COVERAGE WITHIN THE FIRST YEAR, FREE FROM SIZABLE THIN OR BARE SPOTS. REGRADING AND RESEEDING WILL BE PERFORMED ON BARE SPOTS UNTIL COVERAGE IS COMPLETE.
- TREES & SHRUBS: THE ESTABLISHMENT PERIOD SHALL BE TWO CALENDAR YEARS FROM THE DATE OF FINAL ACCEPTANCE. DURING THE ESTABLISHMENT PERIOD THE OWNER OR OWNER'S CONTRACTOR SHALL WATER, CULTIVATE AND PRUNE AS REQUIRED TO MAINTAIN A HEALTHY GROWING CONDITION.
- AT THE END OF THE ESTABLISHMENT PERIOD AND UPON SUBSEQUENT ANNUAL INSPECTIONS, PLANTS WHICH HAVE DIED OR FAILED TO THRIVE SHALL BE REPLACED WITH EQUIVALENT SIZE AND SPECIES. AFTER THE CONTRACTOR'S GUARANTEE PERIOD HAS ENDED, IT IS THE OWNER'S RESPONSIBILITY TO MAINTAIN AND REPLACE PLANTINGS.
- TREES, SHRUBS AND LAUNGS WHICH ARE NOT IRRIGATED WITH AN AUTOMATIC SPRINKLER OR DRIP SYSTEM SHALL BE THOROUGHLY WATERED ON A REGULAR BASIS DURING PERIODS OF BELOW AVERAGE RAINFALL. SOIL SHOULD BE SAMPLED AT A DEPTH OF 12" AND IF DRY, WATER TO DEPTH OF 24".
- MULCH IS TO BE MAINTAINED AT A DEPTH TO COMPLETELY COVER THE SOIL AND TO PRESERVE MOISTURE AND MINIMIZE WEEDS.
- TREES, SHRUBS AND LAUNGS SHALL BE FERTILIZED ANNUALLY AND TREATED WITH INSECTICIDES AND/OR FUNGICIDES AS REQUIRED FOR CONTINUED HEALTHY GROWTH.
- SUCKERS, WEEDS, AND DEAD WOOD SHALL BE REMOVED ON A SEASONAL BASIS, AND SHRUBS SHALL BE PRUNED TWICE A YEAR ACCORDING TO THE REQUIREMENTS OF EACH SPECIES (I.E. SOME SPECIES SHOULD NOT BE PRUNED AT ALL). SHRUBS SHALL NOT BE PRUNED INTO INDIVIDUALS BUT ALLOWED TO GROW INTO A MASS.
- WHERE TREES ARE LOCATED NEAR SIDEWALKS OR PARKING LOTS, THE CANOPY SHALL BE LIMBED UP TO PROMOTE SAFE CLEARANCE TO 8' ABOVE GRADE.
- LAUN AREAS SHALL BE MOWN AS OFTEN AS NECESSARY TO KEEP LAUNGS TO A 2 1/2 - 3" HEIGHT, AND AERATED ON A SEASONAL BASIS.
- BEDS AND LAUN EDGES SHALL BE REGULARLY TRIMMED AND EDGED.
- PERENNIAL AND ANNUAL BEDS SHALL BE DESIGNED, PLANTED AND MAINTAINED FOR SEASONAL COLOR AND INTEREST. ANNUALS MAY BE INCORPORATED TO A MAXIMUM LIMIT OF 25% OF THE BED AREA OF MAINTAINED BEDS FROM MAY IS THROUGH NOVEMBER IS. PERENNIAL BEDS SHALL BE WATERED AS REQUIRED FOR HEALTHY PLANT GROWTH, AND WEEDED AND DEADHEADED ON A MONTHLY BASIS.

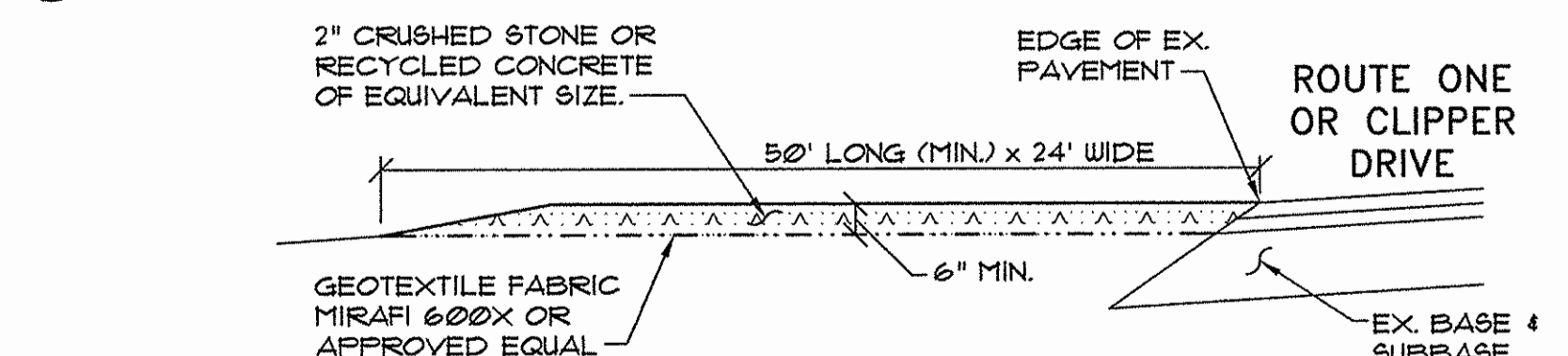


NOTES:

- LOCATE SOIL STOCKPILES AS FAR FROM PROTECTED RESOURCES AS POSSIBLE (FONDS, RIVERS, STREAMS, BROOKS, & WETLANDS). LOCATE SOIL STOCKPILES AWAY FROM AREAS OF CONCENTRATED FLOW OR POTENTIAL FLOODING.
- ERECT EROSION CONTROL BERM DOWN SLOPE OF STOCKPILES.
- STABILIZE STOCKPILES THAT WILL NOT BE WORKED FOR 14 OR MORE DAYS IN THE GROWING SEASON OR WILL REMAIN UNWORKED OR PARTIALLY UNWORKED OVER THE WINTER (NOVEMBER 1 TO APRIL 15) WITH TEMPORARY SEED, MULCH AND MULCH ANCHORING OR EROSION CONTROL BLANKET OR MESH AS SPECIFIED IN THE EROSION CONTROL PLAN. IN WINTER APPLY HAY MULCH AT THE RATE OF AT LEAST 150 LBS/1000 SF AND THICK ENOUGH THAT THE GROUND SURFACE IS NOT VISIBLE AND ANCHOR IF STOCKPILE HAS NOT BEEN PERMANENTLY STABILIZED USING ANOTHER METHOD (TARPS, PERMANENT SEED (< 90% VEGETATED), EROSION CONTROL BLANKET OR EROSION CONTROL MIX. EROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE SITE. IT MUST CONSIST PRIMARILY OF ORGANIC MATERIAL SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR FLUME GRIT AND FRAGMENTED WOOD GENERATED FROM WATER-FLUME LOG HANDLING SYSTEMS. WOOD CHIPS, GROUND CONSTRUCTION DEBRIS, REPROCESSED WOOD PRODUCTS OR BARK CHIPS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX. EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:
  - ORGANIC MATERIAL: BETWEEN 20% - 100% (DRY WEIGHT BASIS)
  - PARTICLE SIZE: BY WEIGHT, 100% PASSING 6" SCREEN, 70-85% PASSING 0.15" SCREEN
  - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED.
  - LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.
  - SOLUBLE SALTS CONTENT SHALL BE LESS THAN 4.0 MMHOS/CM.
  - PH: 5.0 - 8.0
- IF SLOPE OF LAND IS GREATER THAN 5%, CONSTRUCT A DIVERSION BERM UPHILL OF THE STOCKPILE TO DIVERT FLOW.

4 SOILS STOCKPILE DETAIL NOT TO SCALE

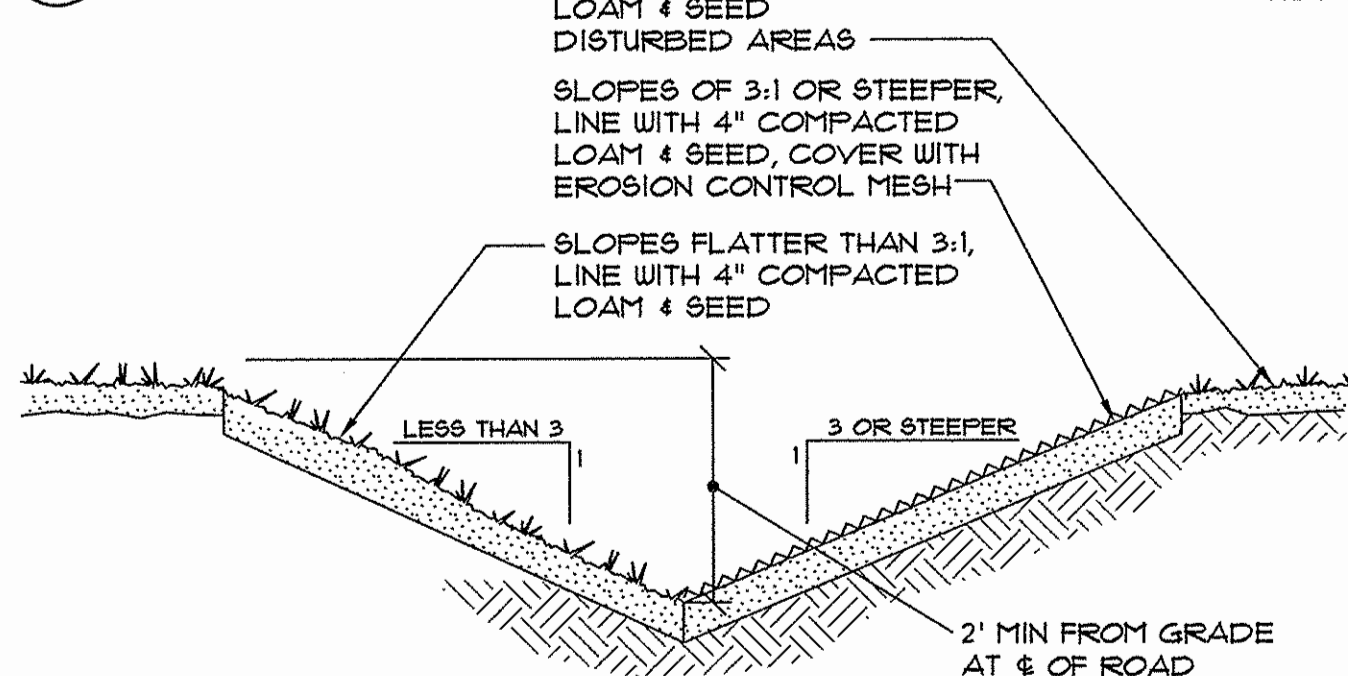
1 EROSION CONTROL MESH INSTALLATION DETAIL NOT TO SCALE



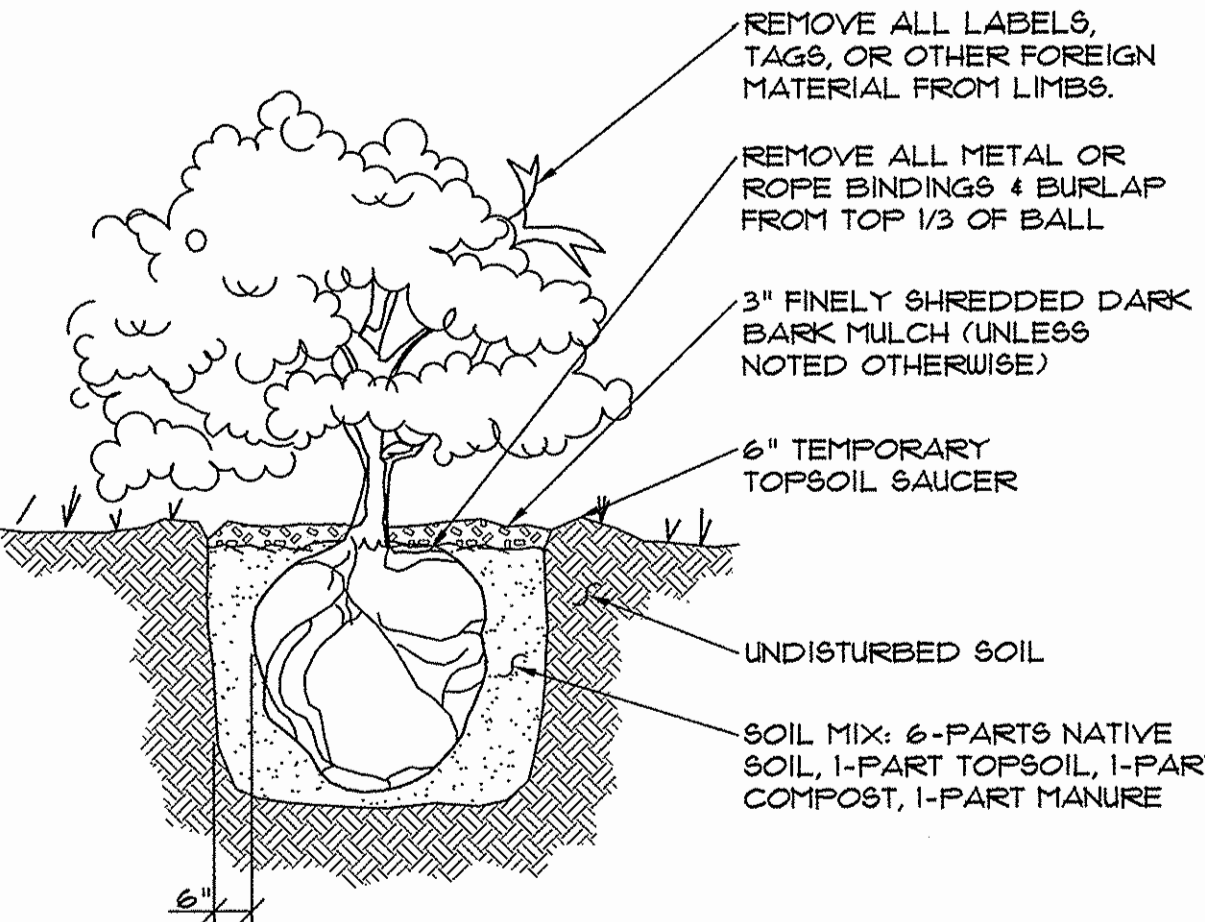
NOTES:

- MAINTAIN ENTRANCE IN A CONDITION THAT WILL PREVENT TRACKING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAY. IF WASHING IS REQUIRED PREVENT SEDIMENT FROM ENTERING WATERWAYS, DITCHES OR STORM DRAINS.
- REMOVE STABILIZED CONSTRUCTION ENTRANCE TO FINISH ROAD CONSTRUCTION & PAVEMENT.

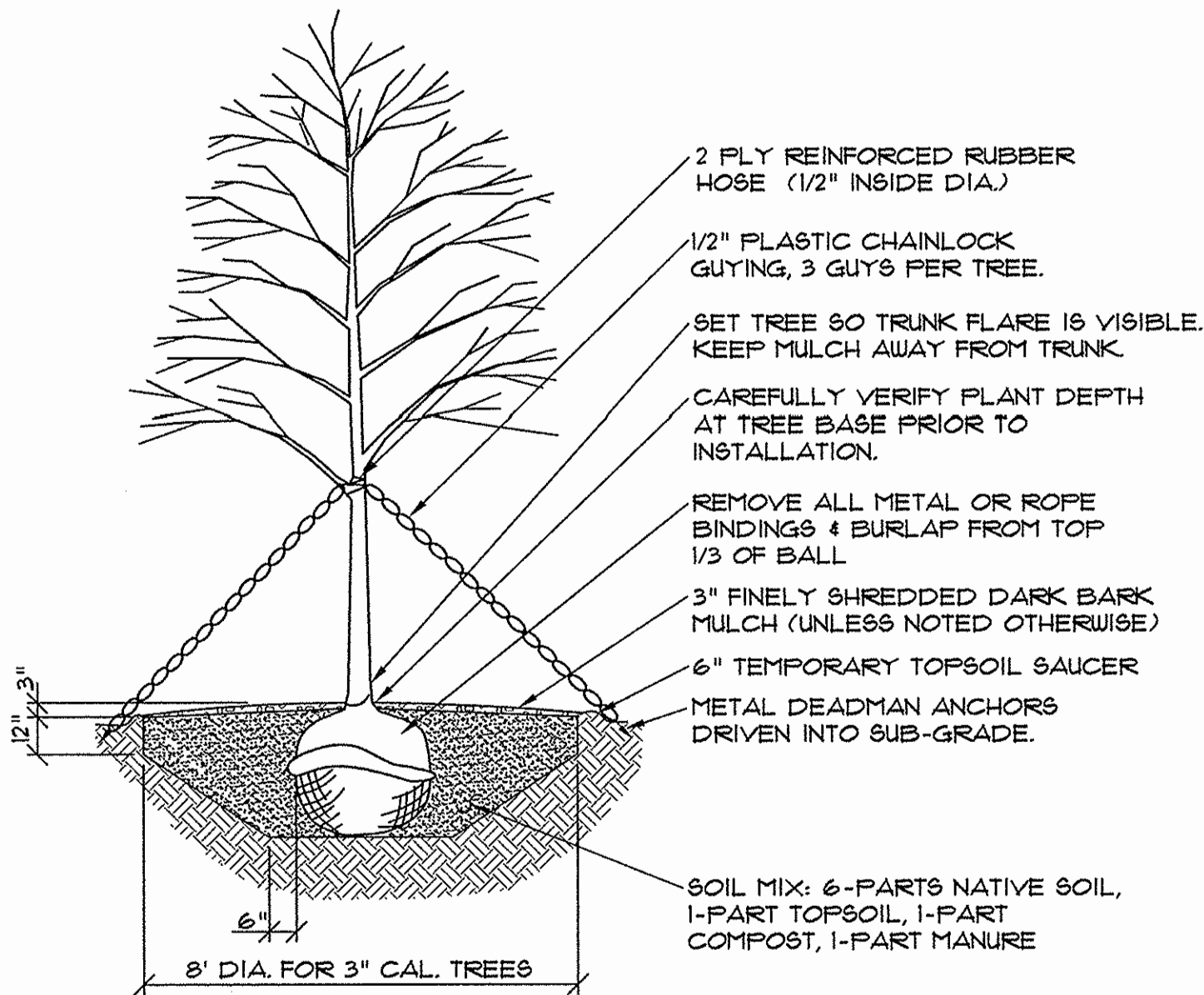
2 STABILIZED CONSTRUCTION ENTRANCE DETAIL NOT TO SCALE



3 GRASS DITCH SECTION NOT TO SCALE



6 SHRUB PLANTING DETAIL NOT TO SCALE



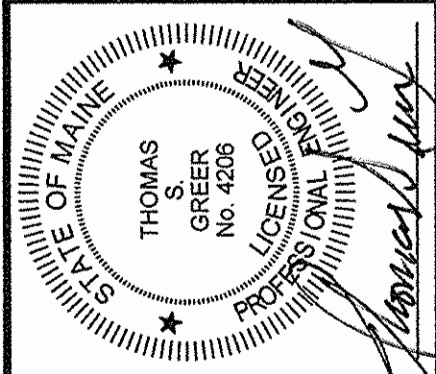
NOTES:

- PRUNE ALL DEAD AND BROKEN BRANCHES. RETAIN NATURAL SHAPE, NEVER CUT LEADER.
- IN LEDGE CONDITIONS, BLASTING SHALL BE 10' DIA AND 4' BELOW TREE HOLE BOTTOM GRADE.

7 DECIDUOUS TREE PLANTING DETAIL NOT TO SCALE

PINKHAM & GREER  
CIVIL ENGINEERS

28 WILLOW AVE. PORTLAND, ME, 04103  
TEL: 207.631.5542 FAX: 207.631.5445



REV.	DATE	DESCRIPTION

CUMBERLAND FORESIDE VILLAGE, LLC  
50 GRAY ROAD, FALMOUTH, ME

SCALE: AS SHOWN  
DATE: AUGUST 30, 2016  
PROJECT: 16163

CUMBERLAND FORESIDE  
VILLAGE LOT 9  
U.S. ROUTE ONE, CUMBERLAND, MAINE

DETAILS

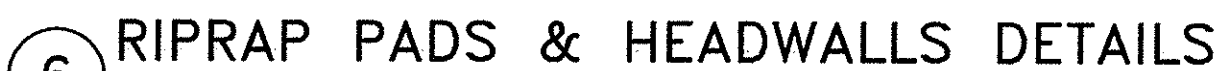
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MAP/LOT R01/ 12A



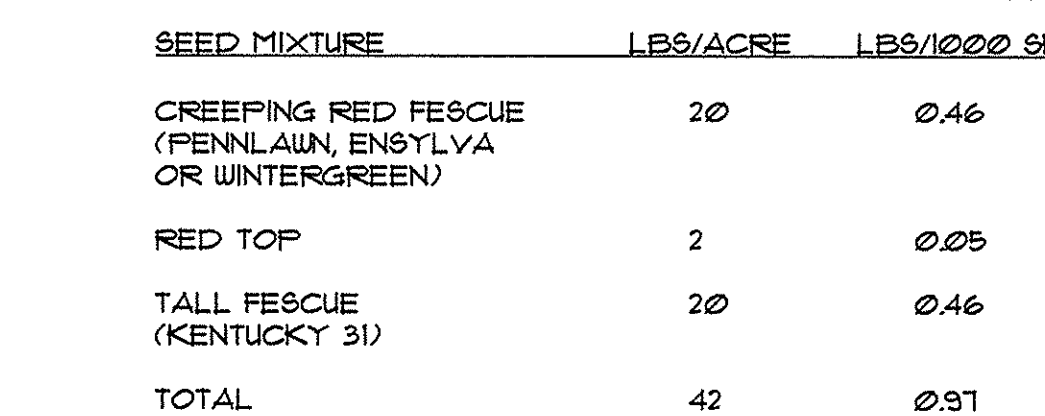


- ## 7 EMERGENCY OVERFLOW SECTION



- | TABLE A  |             | TABLE B           |                   |   | TABLE C  |             |
|--|-------------|-------------------|-------------------|---|--|-------------|
| ME DOT SPECIFICATIONS FOR UNDERDRAINS (MDOT #103.22) |             | SOIL FILTER MEDIA |                   |   | ME DOT SPECIFICATIONS FOR UNDERDRAINS (MDOT #103.01) |             |
| SIEVE SIZE   | % BY WEIGHT | FILTER MEDIA      | MIXTURE BY VOLUME | SPECIFICATION   | SIEVE SIZE   | % BY WEIGHT |
| UNDERDRAIN TYPE C                                    |             | SAND              | 70%-80%           | ME DOT SPECIFICATION #103.01 FINE AGGREGATE FOR CONCRETE (SEE TABLE C)                        | #4   | 95-100      |
| 1"   | 100         |                   |                   | #8  | 80-100   |             |
| 3/4"   | 90-100      |                   |                   | #16   | 50-85  |             |
| 3/8"   | 0-75        | MULCH             | 20%-30%           | MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH WITH LESS THAN 8%-10% PASSING THE 200 SIEVE | #30  | 25-60       |
| #4   | 0-25        |                   |                   | #60   | 10-30  |             |
| #10  | 0-5         |                   |                   | #100  | 2-10   |             |
|  |             |                   |                   |   | #200   | 0-5         |

### ① UNDERDRAINED SOIL FILTER NOTES



- ### SOIL LINER NOTES

THE COMPACT SOIL LINER SHALL HAVE THE FOLLOWING CHARACTERISTICS:

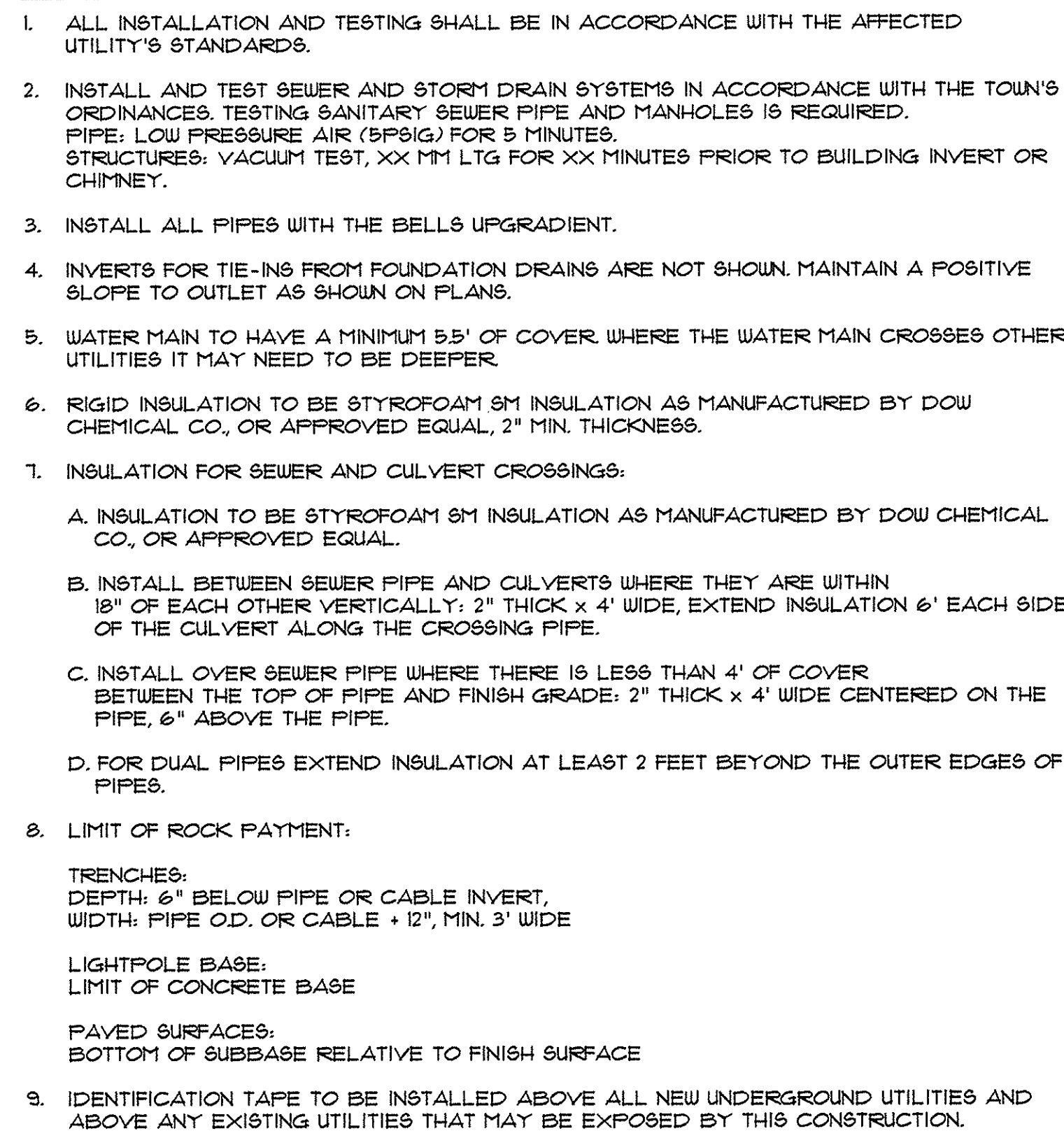
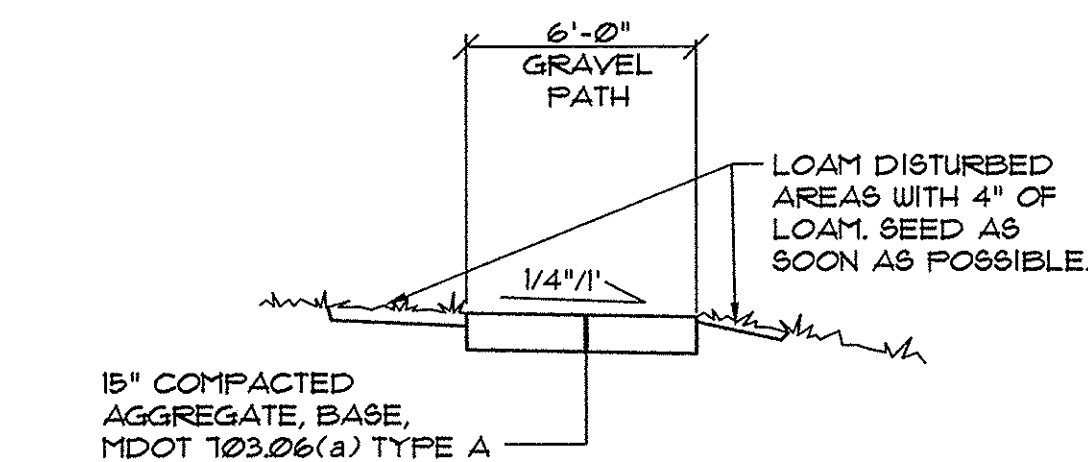
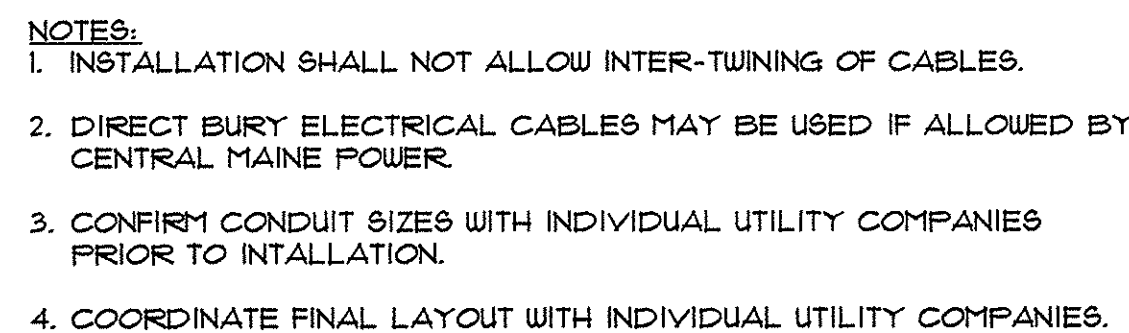
- NOT TO SCALE







1. TUBE TYPE POLYETHYLENE ENCASEMENT SHALL BE INSTALLED ON ALL DUCTILE IRON PIPE AND FITTINGS IN ACCORDANCE WITH AWWA STANDARD C105 - LATEST REVISION, METHOD A.
2. POLYETHYLENE ENCASEMENT SHALL BE EITHER LINEAR LOW-DENSITY POLYETHYLENE (LLDPE) FILM WITH A MINIMUM THICKNESS OF 8-MIL OR HIGH-DENSITY, CROSSLINKED-LAMINATED POLYETHYLENE (HDCLPE) FILM WITH A MINIMUM THICKNESS OF 4-MIL.
3. CIRCUMFERENTIAL WRAPS OF TAPE OR PLASTIC TIE STRAPS SHALL BE PLACED AT 2-FT. INTERVALS ALONG THE BARREL OF THE PIPE.
4. THE POLYETHYLENE ENCASEMENT SHALL PREVENT CONTACT BETWEEN THE PIPE AND THE SURROUNDING BACKFILL AND BEDDING MATERIAL BUT IS NOT INTENDED TO BE A COMPLETELY AIRTIGHT OR WATERTIGHT ENCLOSURE. ALL LUMPS OF SOIL, CLUD, GRASS AND SO FORTH, ON THE PIPE SURFACE SHALL BE REMOVED PRIOR TO INSTALLATION OF THE POLYETHYLENE ENCASEMENT. DURING INSTALLATION, CARE SHALL BE EXERCISED TO PREVENT SOIL OR EMBANKMENT MATERIAL FROM BECOMING TRAPPED BETWEEN THE PIPE AND THE POLYETHYLENE.
5. THE POLYETHYLENE FILM SHALL BE FITTED TO THE CONTOUR OF THE PIPE TO EFFECT A SNUG, BUT NOT TIGHT, ENCASEMENT WITH MINIMUM SPACE BETWEEN THE POLYETHYLENE AND THE PIPE. SUFFICIENT SLACK SHALL BE PROVIDED IN CONTOURING TO PREVENT STRETCHING THE POLYETHYLENE WHERE IT BRIDGES IRREGULAR SURFACES, SUCH AS BELL-SPIGOT INTERFACES, BOLTED JOINTS, OR FITTINGS, AND TO PREVENT DAMAGE TO THE POLYETHYLENE DUE TO BACKFILLING OPERATIONS. OVERLAPS AND ENDS SHALL BE SECURED WITH ADHESIVE TAPE, STRING, PLASTIC TIE STRAPS, OR ANY OTHER MATERIAL CAPABLE OF HOLDING THE POLYETHYLENE ENCASEMENT IN PLACE UNTIL BACKFILLING OPERATIONS ARE COMPLETE.
6. THREE LAYERS OF POLYETHYLENE ADHESIVE TAPE SHALL BE WRAPPED AROUND ANY POLYWRAPPED PIPE WHERE A TAPPING MACHINE WILL BE PLACED. ALL COPPER SERVICES CONNECTED TO A PIPE WRAPPED IN POLYETHYLENE ENCASEMENT SHALL BE WRAPPED WITHIN THREE FEET OF THE PIPE.



DETECTABLE UNDERGROUND MARKING TAPE TO BE PERMANENT, BRIGHT-COLORED, CONTINUOUS-PRINTED PLASTICIZED ALUMINUM TAPE, INTENDED FOR DIRECT-BURIAL SERVICE NOT LESS THAN 3" WIDE X 5 MILS THICK. PROVIDE TAPE WITH BLACK PRINTING IDENTIFYING THE UTILITY. DETECTABLE WARNING TAPE REQUIRED OVER ALL WATER, SEWER, DRAINAGE, OR GAS UTILITIES. TAPE TO BE TERRA TAPE BY REEF INDUSTRIES, INC., [www.reefindustries.com](http://www.reefindustries.com), OR EQUAL.

**APWA UNIFORM COLOR CODE:**

WHITE	PROPOSED EXCAVATION
PINK	TEMPORARY SURVEY MARKINGS
RED	ELECTRIC POWER LINES, CABLES, CONDUIT AND LIGHTING CABLES
YELLOW	GAS, OIL, STEAM, PETROLEUM OR GASEOUS MATERIALS
ORANGE	CABLE TELEVISION, ALARM OR SIGNAL LINES, CABLES OR CONDUIT
BLUE	POTABLE WATER
PURPLE	RECLAIMED WATER, IRRIGATION AND SLURRY LINES
GREEN	SEWERS AND DRAIN LINES

10. MATERIALS: SEE PLANS FOR SIZES

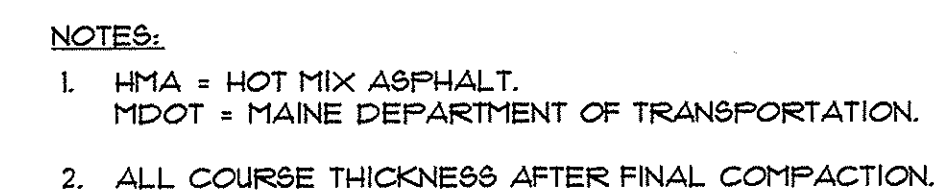
STORM DRAIN:	
TYPICAL:	FE N12, SMOOTH WALL
WITHIN ROW OF STATE ROAD:	REINFORCED CONCRETE PIPE
UNDERDRAIN:	
MEETING AASHTO H-20 LOADING	PERFORATED FE N12

SANITARY SEWER: PVC, SDR 35  
MEETING ASTM D3034 W/ A REMOVABLE GASKET MEETING ASTM D3212

WATER MAIN: CEMENT LINED DUCTILE IRON CLASS 50

WATER SERVICE: CTS 200 PSI, PE

FOUNDATION DRAIN: PERFORATED PE N12  
MEETING AASHTO H-20 LOADING  
COORD. WITH STRUCTURAL FOR CONNECTION WITHIN 8' OF FOUNDATION



## 1 SCHEDULE OF SURFACE FINISHES



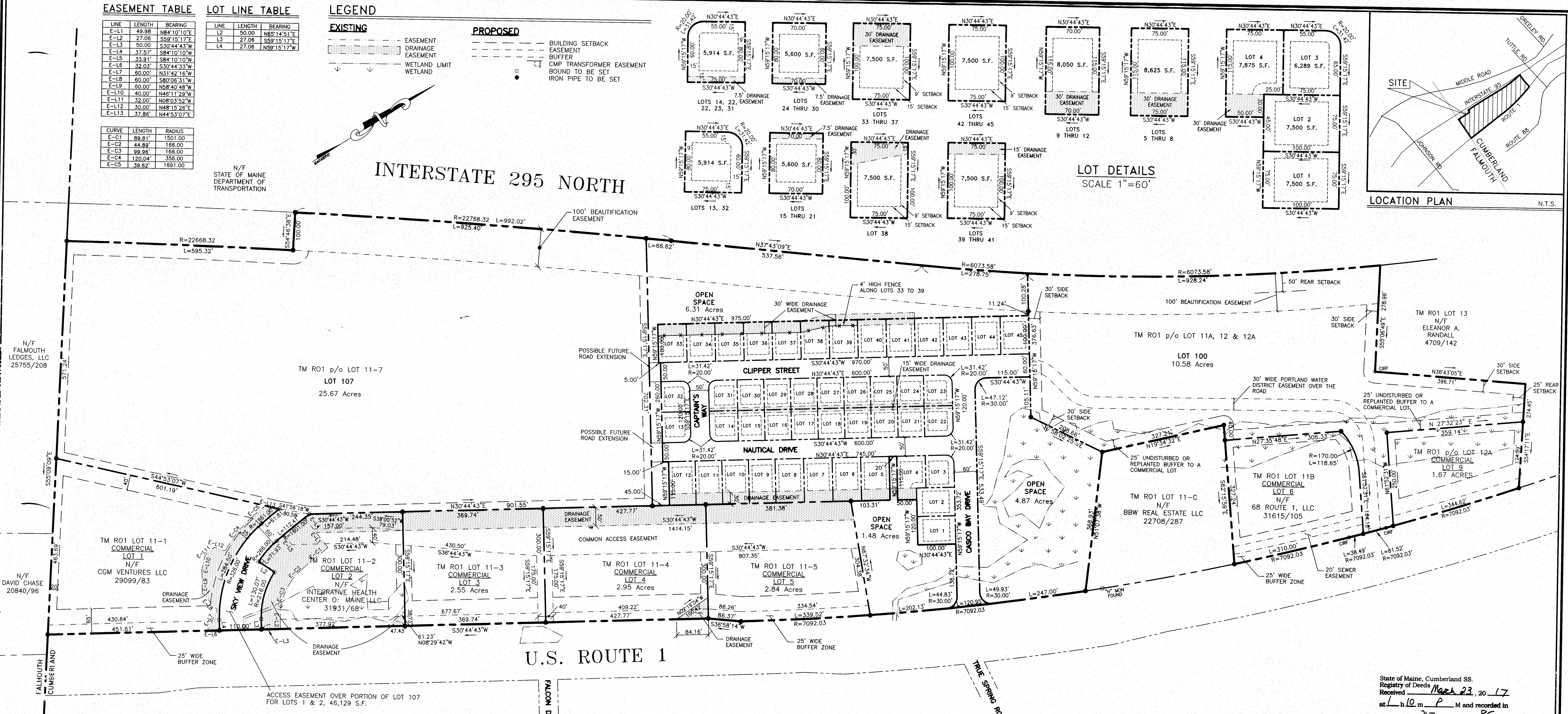
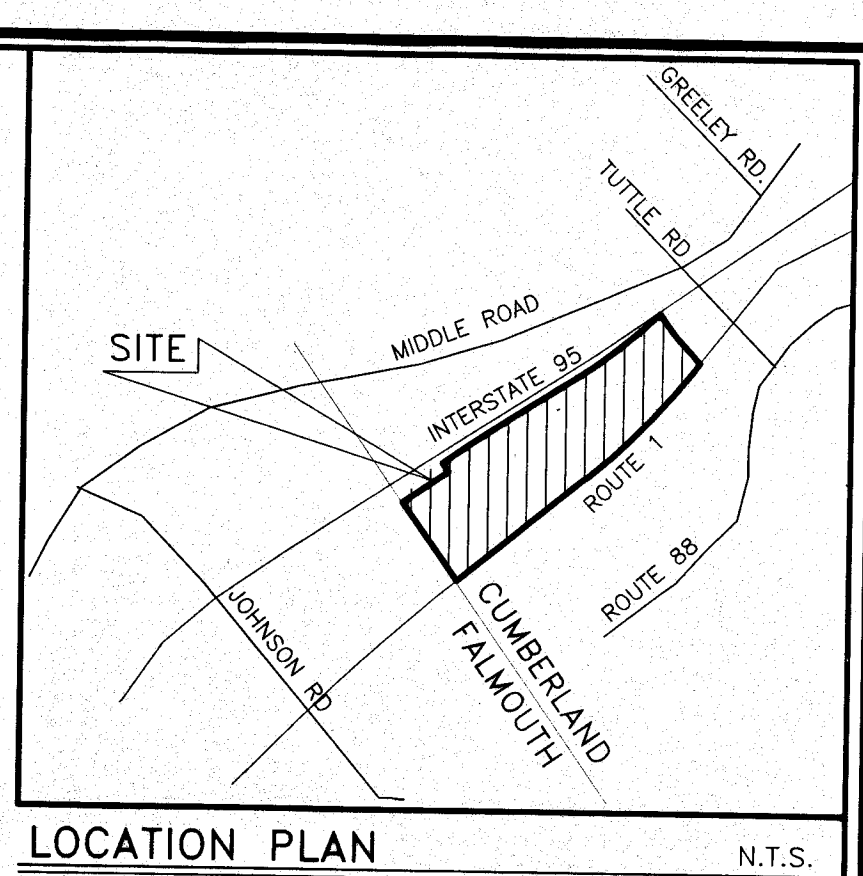
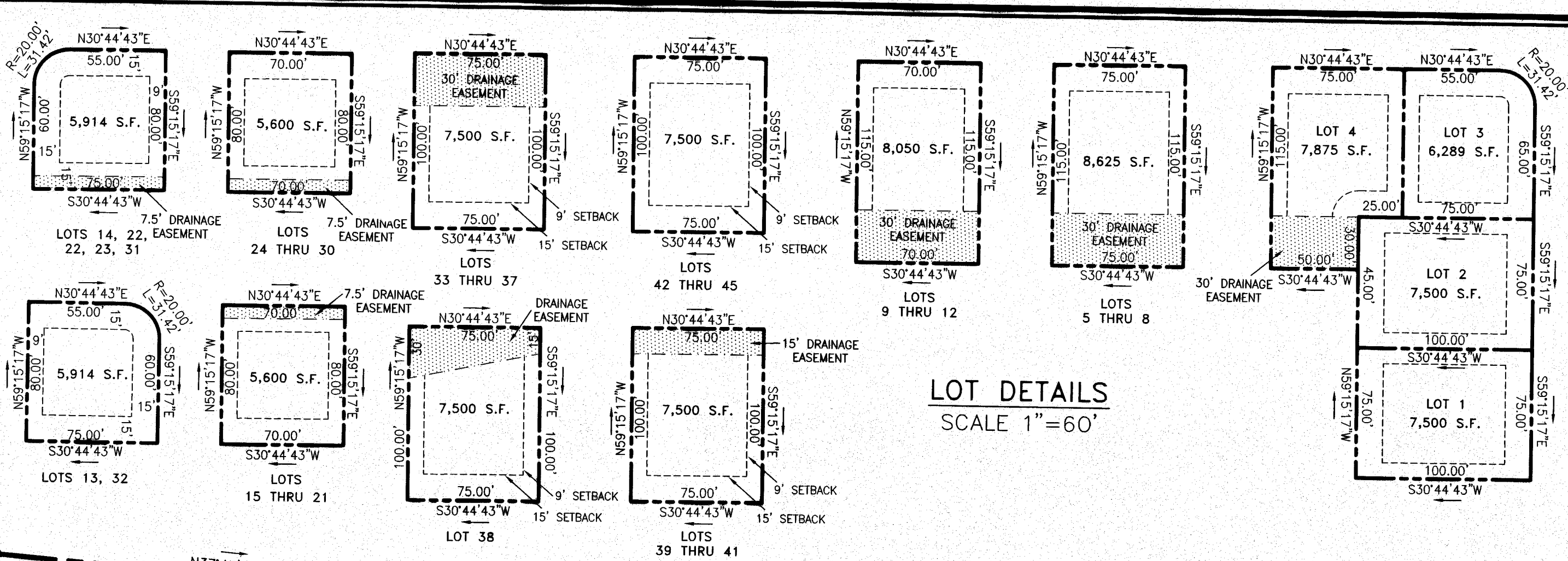
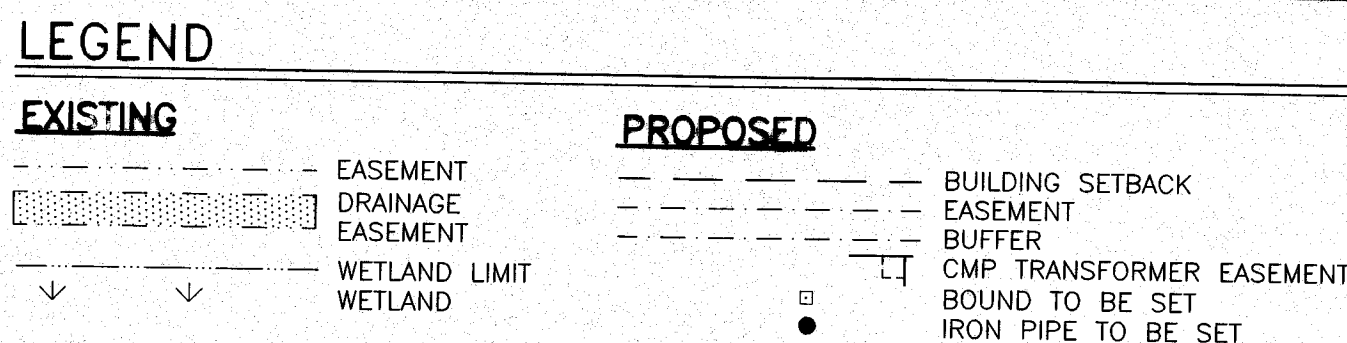
MAP/LOT R01/ 12A



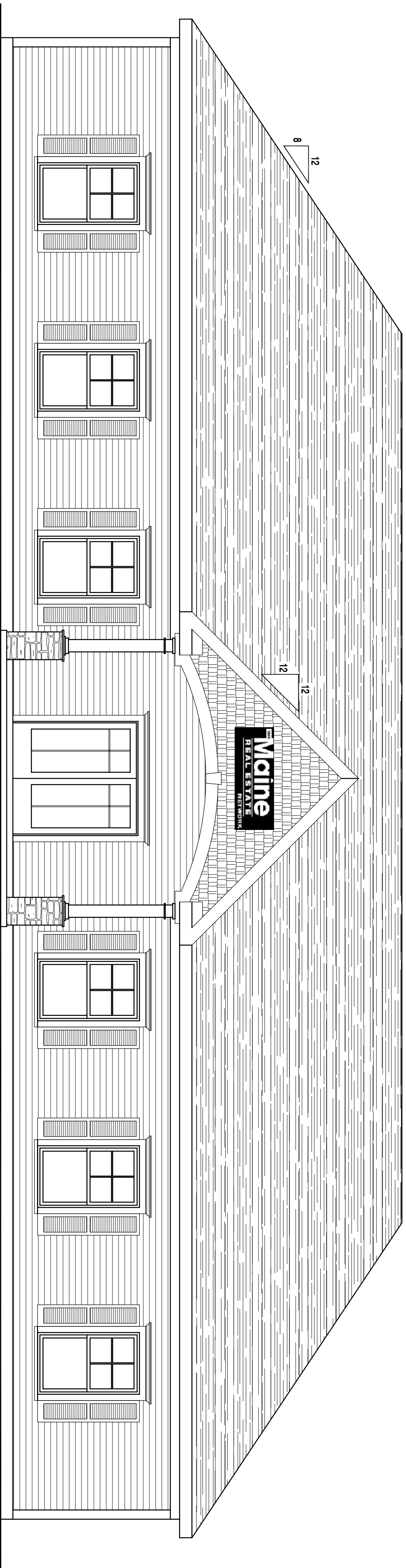
EASEMENT TABLE			LOT LINE TABLE		
LINE	LENGTH	BEARING	LINE	LENGTH	BEARING
E-1	49.88	N84°10'10"E	L2	50.00	N85°14'51"E
E-2	27.06	S59°15'17"E	L3	27.06	S59°15'17"E
E-3	50.00	S30°44'43"W	L4	27.06	N59°15'17"W
E-4	37.57	S84°10'10"W			
E-5	33.91	S30°44'43"W			
E-6	32.03	S30°44'43"W			
E-7	60.00	N31°42'16"W			
E-8	60.00	S80°06'31"W			
E-9	60.00	N58°40'48"W			
E-10	40.00	N48°11'29"W			
E-11	32.00	N08°03'52"W			
E-12	30.00	N48°15'26"E			
E-13	37.86	N44°53'07"E			

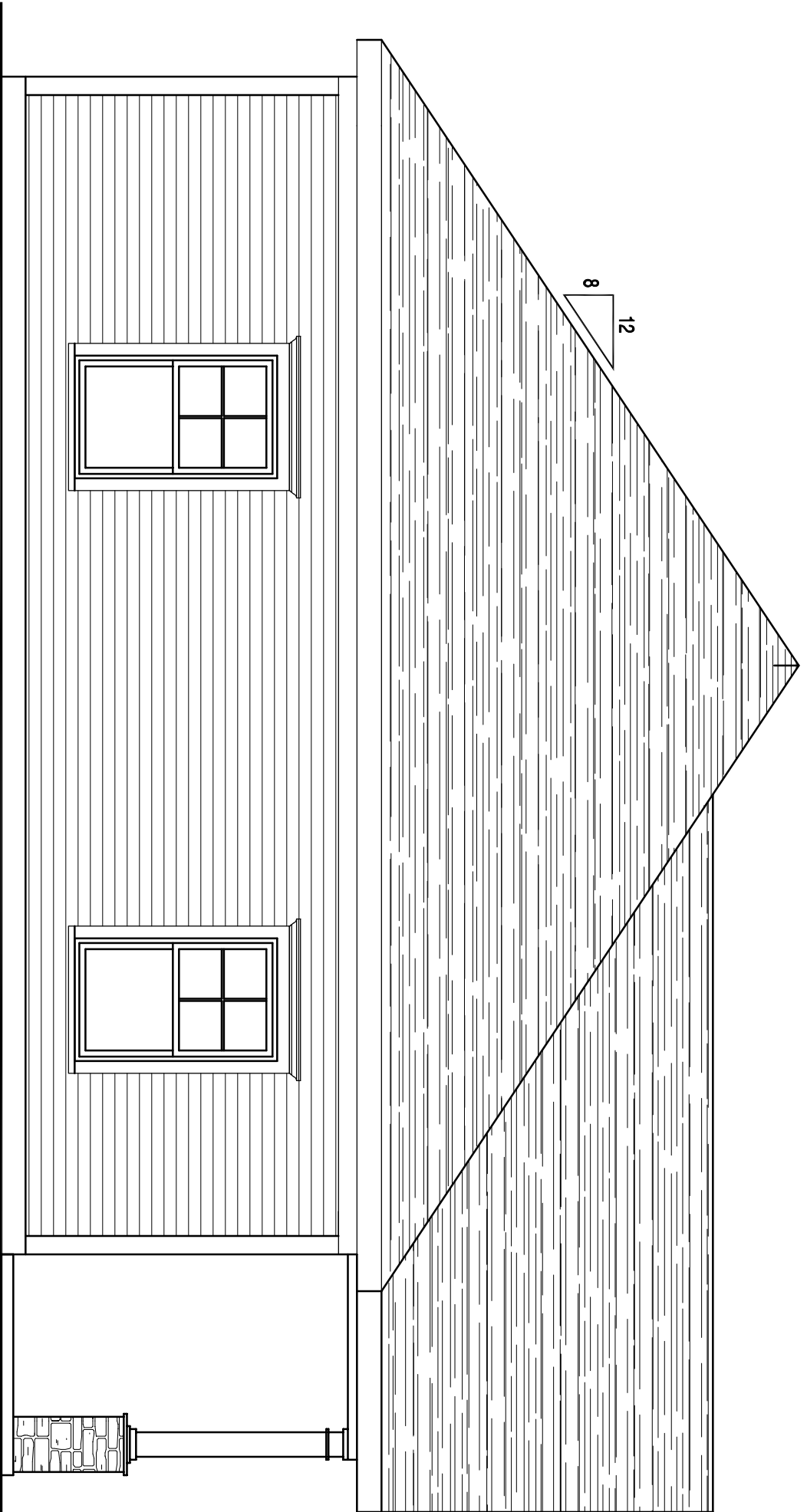
CURVE	LENGTH	RADIUS
E-C1	89.81	1501.00
E-C2	44.89	166.00
E-C3	99.96	166.00
E-C4	120.04	356.00
E-C5	39.62	1691.00



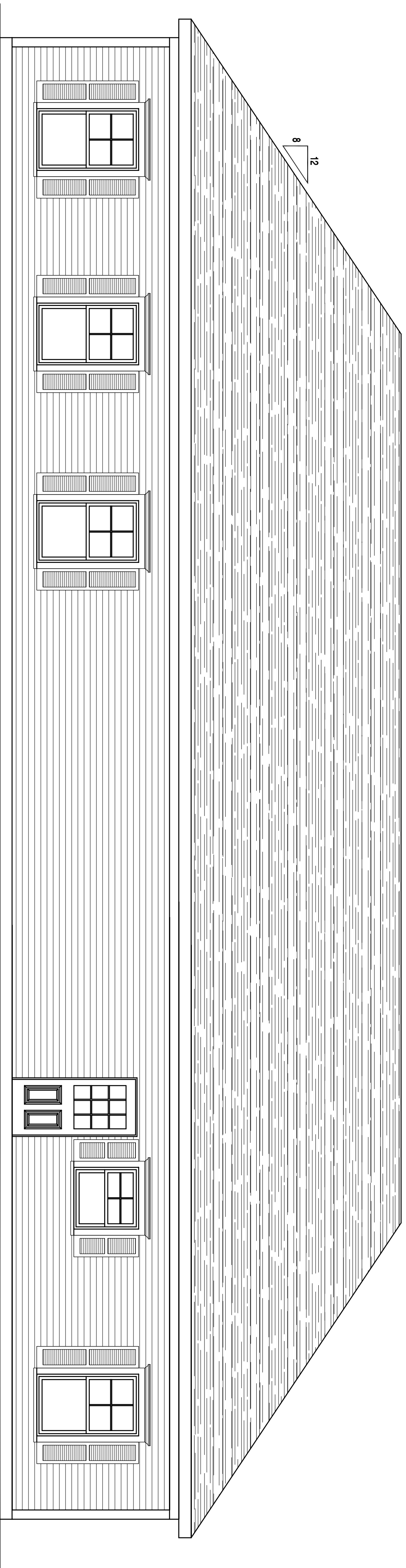




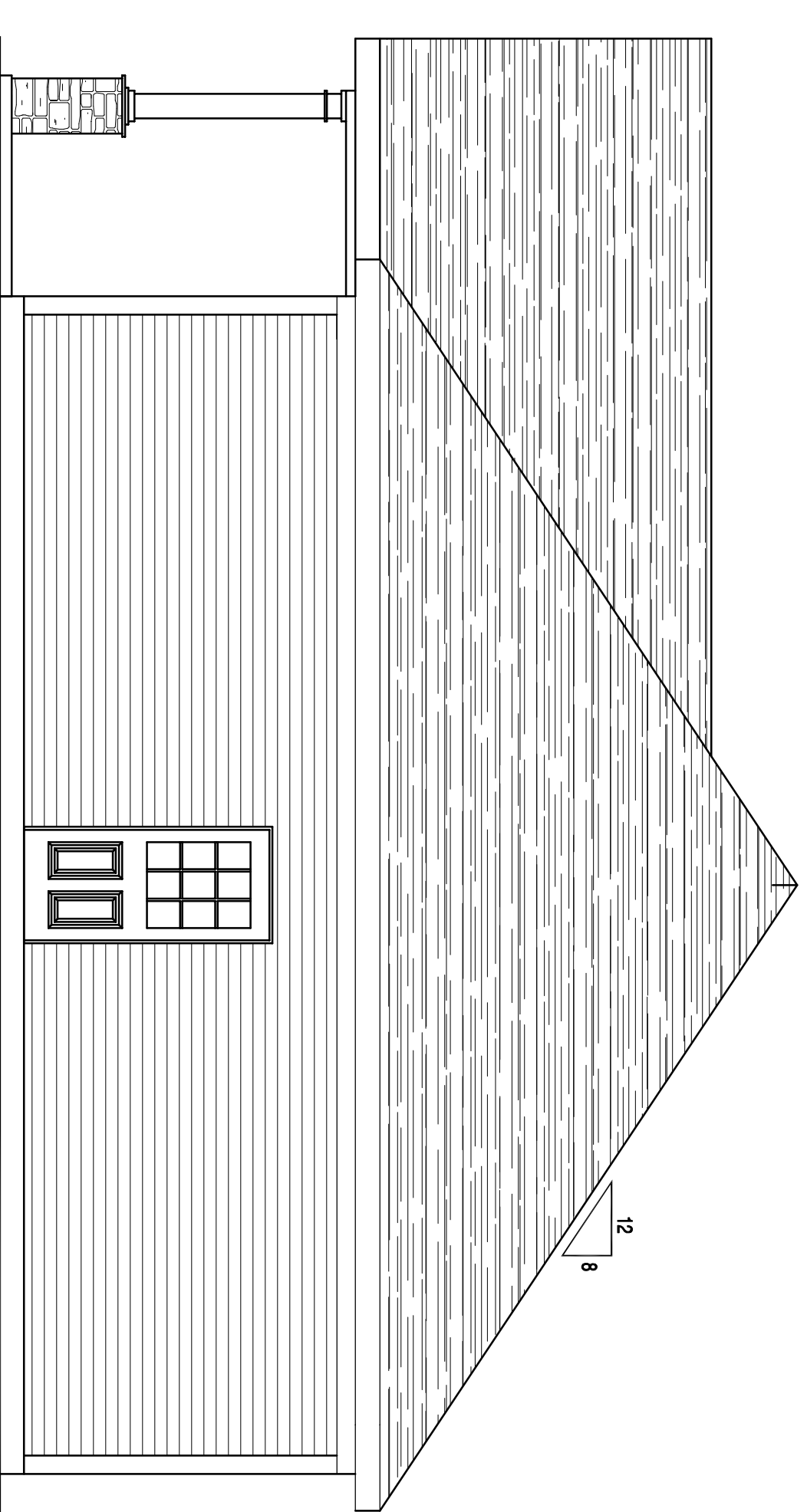
FRONT ELEVATION  
Parking Lot Elevation



LEFT ELEVATION  
Sideyard Elevation



REAR ELEVATION  
Route One Elevation



RIGHT ELEVATION  
Driveway Elevation

BUILDING SIDING TO BE WHITE VINYL CLAPBOARD

WINDOWS TO BE BLACK TRIM VINYL

ROOF TO BE BLACK ARCHITECTURAL GRADE ASPHALT SHINGLES

Revisions:

REVISED: 06/06/16
REVISED: 06/15/16
REVISED: 08/26/16
REVISED: 04/12/17

Date : 08/12/16

Scale : 1/4"=1'-0"

Drawn By: MTA

Project: 08051116

Sheet Number:

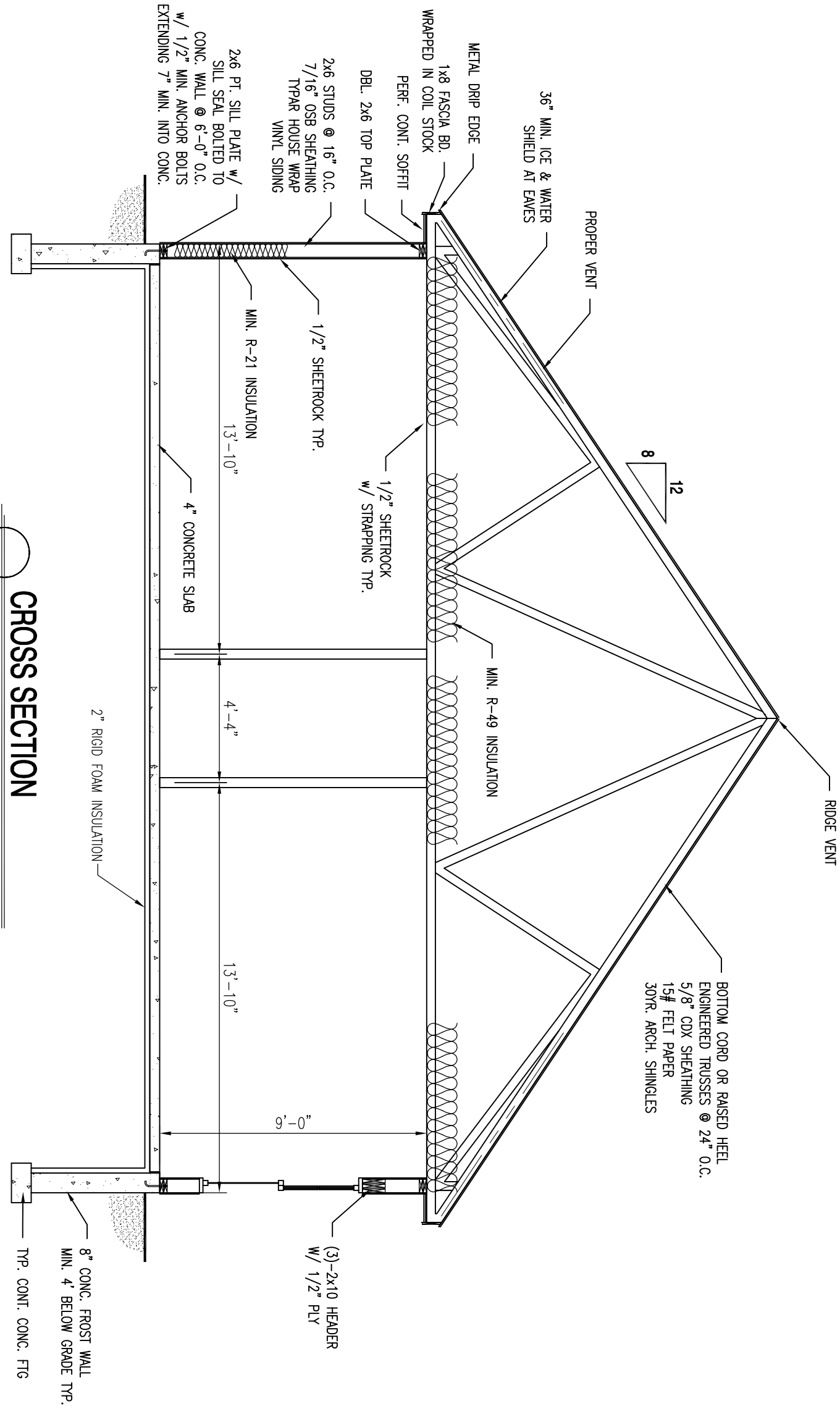
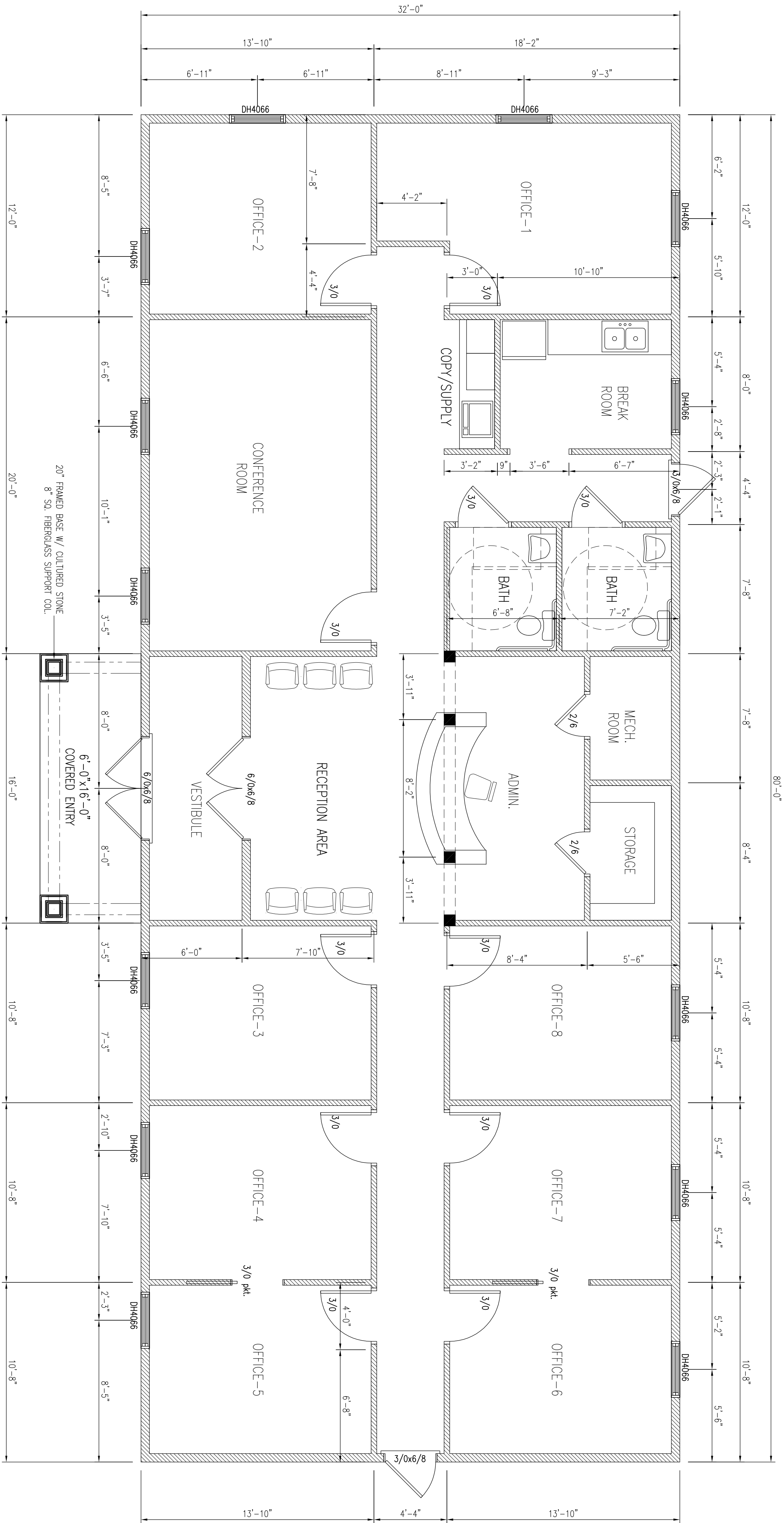
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ELEVATIONS  
THE MAINE REAL ESTATE NETWORK  
RT. 1 CUMBERLAND







## FLOOR PLAN, SECTION THE MAINE REAL ESTATE NETWORK RT.1 CUMBERLAND

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### Revisions:

06/06/16	REVISED: 06/06/16
06/15/16	REVISED: 06/15/16
08/26/16	REVISED: 08/26/16

Date : 08/12/16

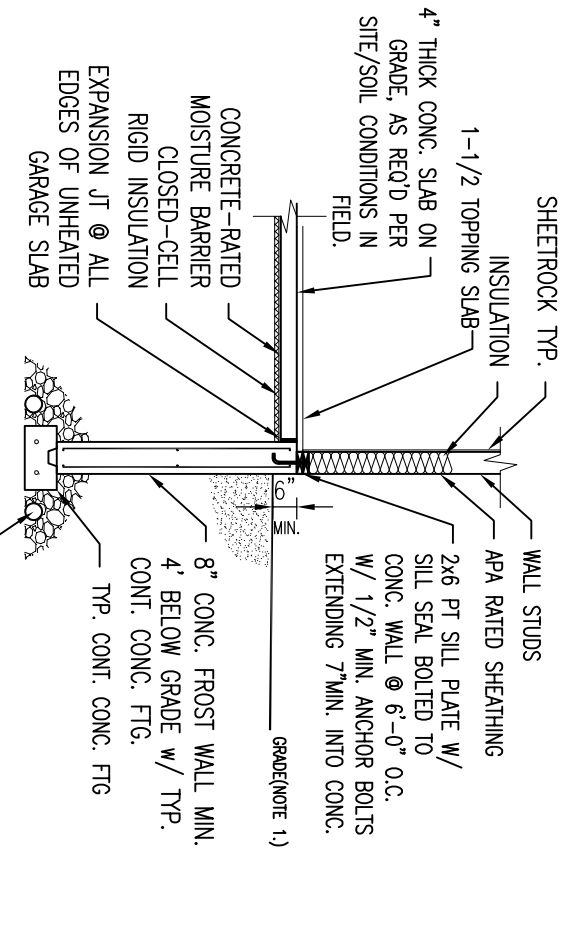
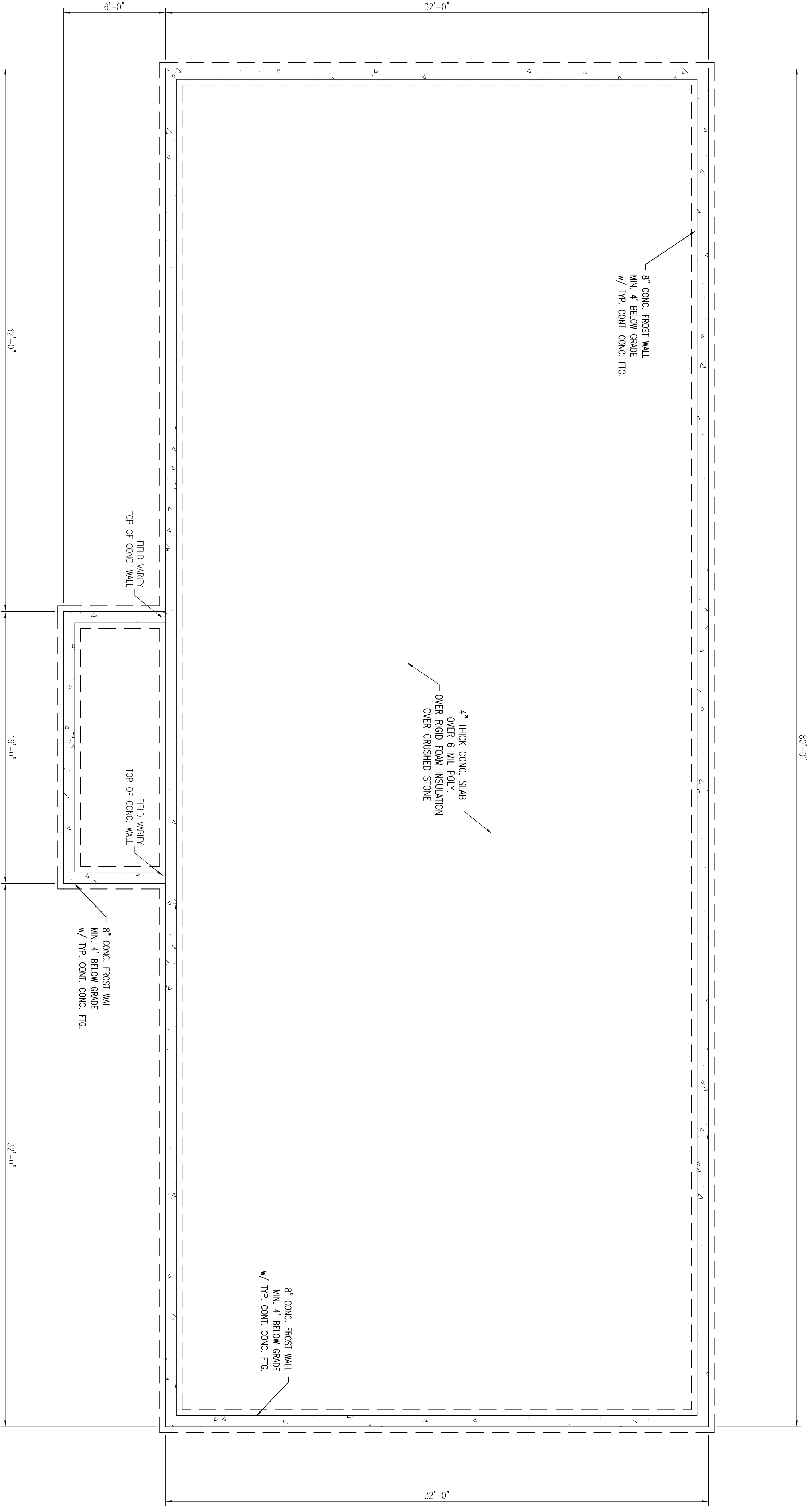
Scale : 1/4"=1'-0"

Drawn By: MTA

Project: 08051116

Sheet Number:





NOTE:  
1. THE GROUND IMMEDIATELY ADJACENT TO THE FOUNDATION SHALL BE SLOPED AWAY FROM THE BUILDING AT A SLOPE OF 1/2" VERTICAL TO 12" HORIZONTAL FOR A MINIMUM DISTANCE OF 8'-0". THIS CONDITION SHALL EXIST AFTER SETTLEMENT OR BUCKLING HAS OCCURRED.

**TYPICAL RADIANT-HEAT/SLAB DETAIL**  
1/4" = 1'-0"

**ALL FOUNDATION NOTES:**

1. 4" DIA. CONTINUOUS PERIMETER DRAIN WITH HOLES ORIENTED DOWN, SLOPED TO DRAINAGE OR TO STORM SEWER OR DRAINAGE.
2. ALL LALLY COLUMNS THIS SHEET ASSUMED TO BE TYP.
3. ALL INTERIOR FOOTINGS TO BE DESIGNED PER SOIL CONDITIONS, CONTRACTOR TO VERIFY.
4. DECK SUPPORTS ASSUMED TO BE 10" DIA. SONOTUBES, SOIL CONDITIONS TO DETERMINE FOOTING DESIGN, CONTRACTOR TO VERIFY.
5. FOR PLUMBING LOCATION/LAYOUT, SEE GROUND FLOOR PLAN.
6. CONTRACTOR TO VERIFY CONDITIONS IN FIELD AND STEP RUNS/STOPS AS REQUIRED PER GRADE AND SOIL CONDITIONS.
7. BASEMENT FINISHES PER OWNER/CONTRACTOR (TO BE DETERMINED).
8. FOUNDATION WALLS OR DRAINAGE DRAINAGE, DESIGN SHALL BE DETERMINED BY CONTRACTOR TO VERIFY. FOUNDATION WALLS AND SIZES TO BE DETERMINED PER OWNER/CONTRACTOR AND LOCAL CODES.

**FOUNDATION PLAN**  
1/4" = 1'-0"



**FOUNDATION PLAN**  
**THE MAINE REAL ESTATE NETWORK**  
**RT.1 CUMBERLAND**

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**Revisions:**

06/05/06	-

**Date :** 08/12/16  
**Scale :** 1/4"=1'-0"  
**Drawn By:** MTA  
**Project:** 008051116  
**Sheet Number:**