

PROFESSIONAL CONTACTS:

APPLICANT:

HANNA REALTY ASSOCIATES, LLC
 PO BOX 1120
 PORTLAND, ME 04104
 (207) 854-5405
 CONTACT: DAVID MACHESNEY

ENGINEERING & DESIGN:

ST. GERMAIN COLLINS
 846 MAIN STREET
 WESTBROOK, ME 04092
 (207) 591-7000
 CONTACT: PETER DALFONSO, P.E., CIVIL ENGINEER
 CONTACT: ELLEN RATHBONE, PROJECT MANAGER

SURVEYOR:

TITCOMB ASSOCIATES
 133 GRAY ROAD
 FALMOUTH, ME 04105
 (207) 797-9199
 CONTACT: REX J. CROTEAU, P.L.S.

ARCHITECT:

CUSTOM CONCEPTS INC. ARCHITECTURE
 383 US ROUTE ONE, SUITE 1A
 SCARBOROUGH, ME 04074
 (207) 883-0083
 CONTACT: MIKE RICHMAN

PERMITTING DRAWINGS

FOR

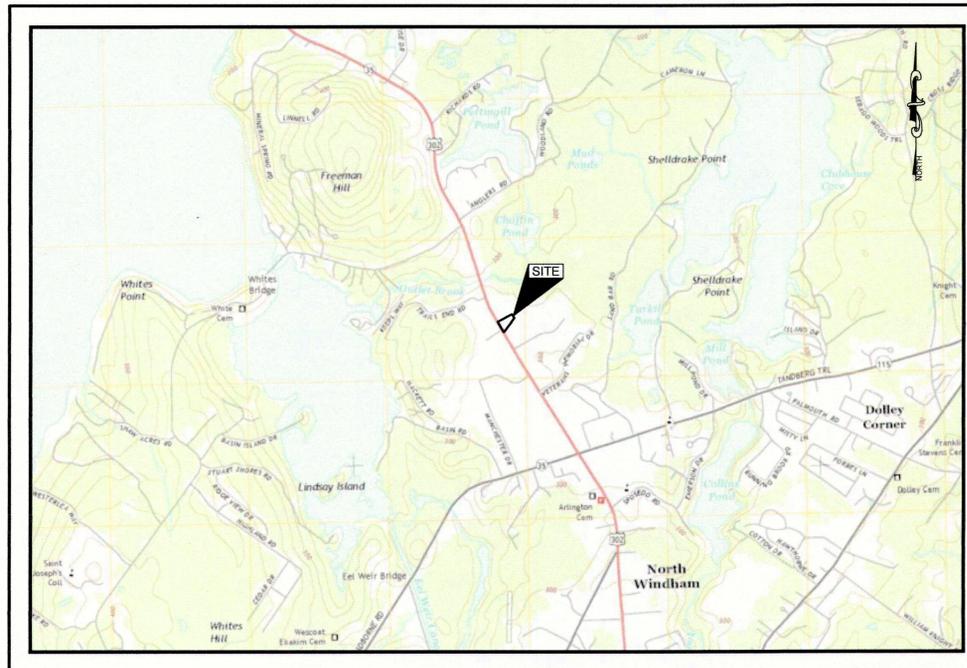
839 ROOSEVELT TRAIL

WINDHAM, MAINE

SEPTEMBER 2016

PLAN LIST:

- C-001 COVER SHEET
- EXISTING CONDITIONS SURVEY
- C-101 SITE PLAN
- C-301 SITE DETAILS
- C-302 SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS
- D-101 EXISTING CONDITIONS WATERSHED PLAN
- D-102 PROPOSED CONDITIONS WATERSHED PLAN
- L-101 LANDSCAPE PLAN
- A2.1 FLOOR PLAN
- A4.1 BUILDING ELEVATIONS
- A4.2 BUILDING ELEVATIONS



SITE LOCATION MAP 1"=2,000'

SOURCE:
 MAINEGIS, NORTH WINDHAM MAINE QUADRANGLE, DATED 2014.

COVER SHEET

PRATT ABBOTT CLEANERS
 839 ROOSEVELT TRAIL
 WINDHAM, MAINE

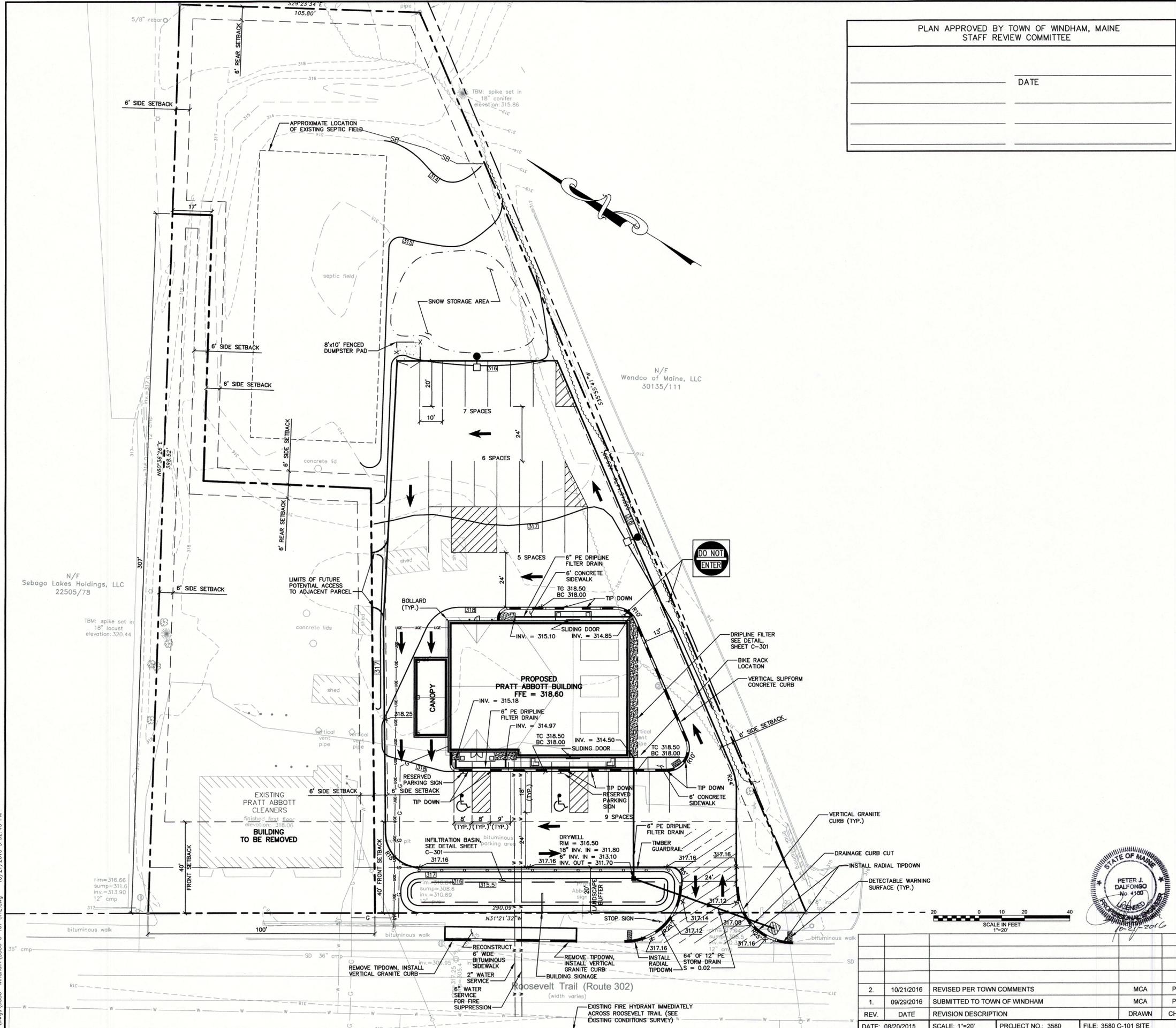
HANNA REALTY ASSOCIATES, LLC
 PO BOX 1120
 PORTLAND, ME 04104

St. Germain • Collins

C-001

REV.	DATE	REVISION DESCRIPTION	DRAWN	CHK'D
2.	10/21/2016	REVISED PER TOWN COMMENTS	MCA	PJD
1.	09/29/2016	SUBMITTED TO TOWN OF WINDHAM	MCA	PJD

DATE: 08/20/2015 SCALE: AS NOTED PROJECT NO.: 3580 FILE: 3580 C-001 Cover



PLAN APPROVED BY TOWN OF WINDHAM, MAINE
STAFF REVIEW COMMITTEE

DATE _____

LEGEND:

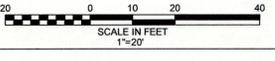
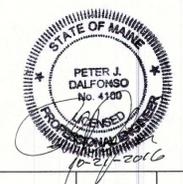
EXISTING	PROPERTY LINE	PROPOSED
---	ADJACENT PROPERTY LINE	---
○	MONUMENTS	○
---	CONTOURS (1')	---
---	EDGE OF GRAVEL	---
---	EDGE OF PAVEMENT	---
---	CURB	---
---	PAVEMENT STRIPING	---
---	BUILDINGS	---
---	TREES	---
---	SIGNS	---
---	BOLLARDS	---
---	UTILITY POLE	---
---	OVERHEAD LINE	---
---	LIGHTS	---
---	UNDERGROUND ELECTRIC	---
---	GAS LINE	---
---	WATER SHUTOFF	---
---	WATER VALVE	---
---	WATER LINE	---
---	CATCH BASIN/INFILTRATION BASIN	---
---	STORM DRAIN	---
---	TRAFFIC FLOW DIRECTION	---
---	SNOW STORAGE AREA	---
---	SILT BARRIER	---
---	INLET PROTECTION	---
---	STABILIZED CONSTRUCTION ENTRANCE	---
---	FENCE	---
---	CONCRETE	---

- NOTES:**
1. PLAN REFERENCE: "EXISTING CONDITIONS SURVEY, 839 ROOSEVELT TRAIL, WINDHAM, ME" BY TITCOMB ASSOCIATES, MAY 26, 2015.
 2. ELEVATIONS BASED ON NAVD88 DERIVED FROM GPS OBSERVATIONS.
 3. BEARINGS ARE REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, NAD83, WEST ZONE, DERIVED FROM GPS OBSERVATIONS.
 4. SITE IS LOTS 6 AND 7, MAP 71 AND IS 1.80 ACRES.
 5. SPACE AND BULK REQUIREMENTS:
 ZONE: COMMERCIAL
 MIN. LOT SIZE: 20,000 S.F.
 MIN. FRONTAGE: 100 FT.
 FRONT SETBACK: 40 FT.
 SIDE SETBACK: 6 FT.
 REAR SETBACK: 6 FT.
 MIN. FRONT LANDSCAPE BUFFER: 20 FT.
 6. PARKING REQUIREMENTS: 1/250 S.F. = 20 SPACES REQUIRED; 27 SPACES PROPOSED.
 7. RECORD OWNER: HANNA ASSOCIATES
 P.O. BOX 1120
 PORTLAND, ME 04104
 8. APPLICANT: HANNA REALTY ASSOCIATES, LLC
 P.O. BOX 1120
 PORTLAND, ME 04104
 9. WATER SERVICE TRENCH REPAIR SHALL BE OBSERVED BY THE TOWN ENGINEER.

SITE PLAN

PRATT ABBOTT CLEANERS
839 ROOSEVELT TRAIL
WINDHAM, MAINE

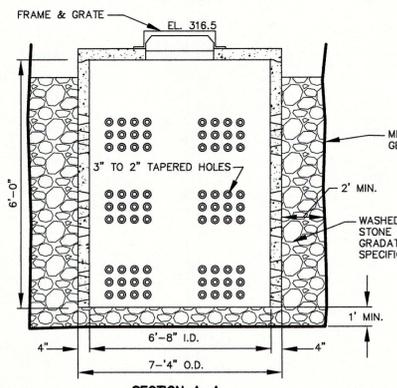
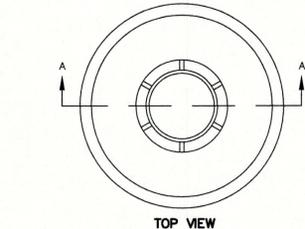
HANNA REALTY ASSOCIATES, LLC
PO BOX 1120
PORTLAND, ME 04104



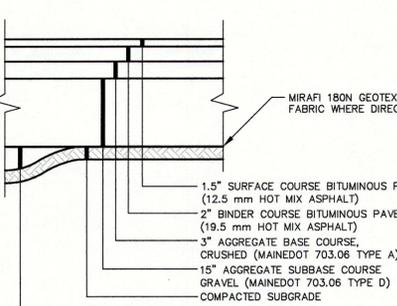
REV.	DATE	REVISION DESCRIPTION	DRAWN	CHKD
2.	10/21/2016	REVISED PER TOWN COMMENTS	MCA	PJD
1.	09/29/2016	SUBMITTED TO TOWN OF WINDHAM	MCA	PJD
REV.	DATE	REVISION DESCRIPTION	DRAWN	CHKD
DATE:	08/20/2015	SCALE: 1"=20'	PROJECT NO.: 3580	FILE: 3580 C-101 SITE

M:\Dwg\3580 Windham\3580 C-101 SITE.dwg 10/21/2016 3:52:45 PM

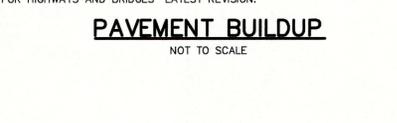
NOTES:
 1. PRECAST DRYWELL TO BE DESIGNED FOR H2O LOADING
 2. AS MANUFACTURED BY GEORGE R. ROBERTS CO.



PRECAST CONCRETE DRYWELL
NOT TO SCALE

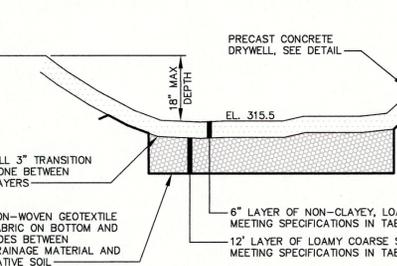


PAVEMENT BUILDUP
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

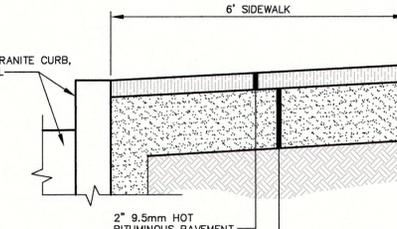
TABLE 7.3 LOAMY COARSE SAND		TABLE 7.4 SANDY LOAM	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100	#4	75-95
#20	70-100	#10	60-90
#60	15-40	#40	35-85
#200	8-15	#200	20-70
200 CLAY	<2.0	200 CLAY	<2.0



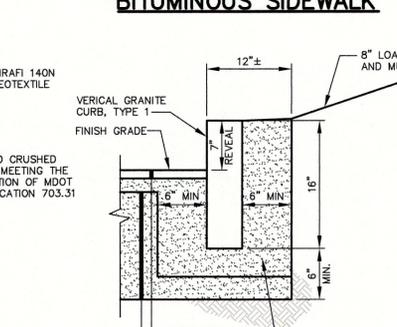
INFILTRATION BASIN
NOT TO SCALE

INFILTRATION BASIN INSTALLATION AND TESTING SPECIFICATIONS:
 • THE PERMEABILITY OF THE SOIL SHALL BE VERIFIED.
 • THE PERMEABILITY OF THE SOIL AT THE DEPTH OF THE BASE OF THE PROPOSED INFILTRATION SYSTEM SHOULD BE NO LESS THAN 0.50 INCHES PER HOUR AND NO GREATER THAN 2.41 INCHES PER HOUR.

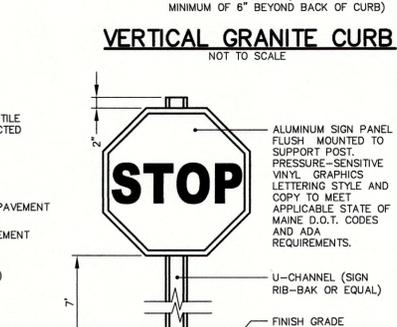
CONSTRUCTION OVERSIGHT:
 INSPECTION OF THE INFILTRATION BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 • AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES.
 • AFTER THE LOAMY COARSE SAND LAYER HAS BEEN INSTALLED;
 • AFTER THE 3-INCH TRANSITION ZONE BETWEEN LAYERS HAS BEEN LITTED;
 • AFTER THE LOAMY TOPSOIL LAYER HAS BEEN INSTALLED AND SEEDED;
 • AFTER ONE YEAR TO INSPECT THE HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 • ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.



BITUMINOUS SIDEWALK



VERTICAL GRANITE CURB
NOT TO SCALE



STOP SIGN
NOT TO SCALE



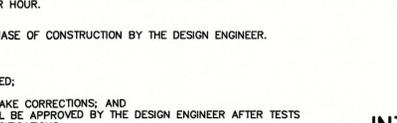
INTERNATIONAL BARRIER FREE SYMBOL
NOT TO SCALE



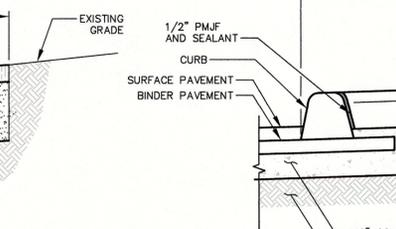
TIMBER GUARDRAIL
NOT TO SCALE



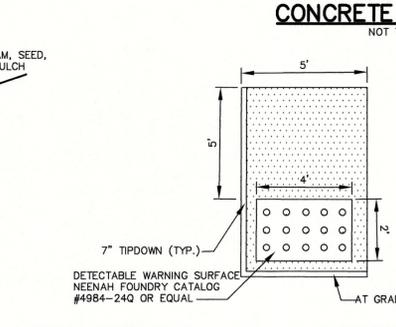
TYPICAL TRENCH SECTION
NOT TO SCALE



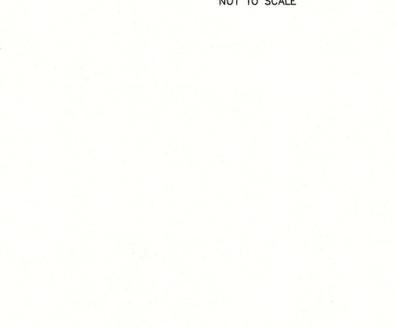
ACCESSIBLE RAMP & DETECTABLE WARNING SURFACE
NOT TO SCALE



CONCRETE SIDEWALK
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

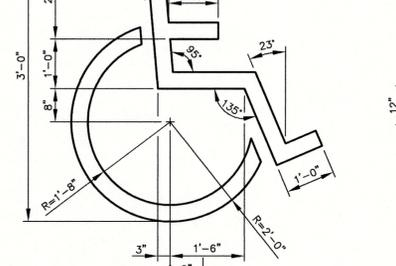


PAVEMENT BUILDUP
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

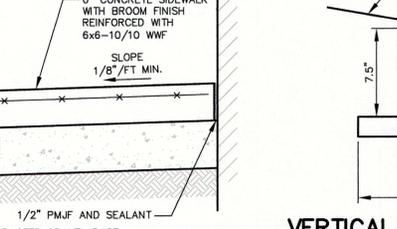
TABLE 7.3 LOAMY COARSE SAND		TABLE 7.4 SANDY LOAM	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100	#4	75-95
#20	70-100	#10	60-90
#60	15-40	#40	35-85
#200	8-15	#200	20-70
200 CLAY	<2.0	200 CLAY	<2.0



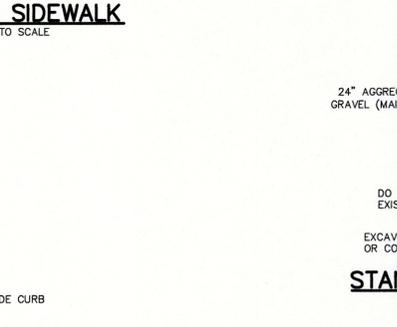
INFILTRATION BASIN
NOT TO SCALE

INFILTRATION BASIN INSTALLATION AND TESTING SPECIFICATIONS:
 • THE PERMEABILITY OF THE SOIL SHALL BE VERIFIED.
 • THE PERMEABILITY OF THE SOIL AT THE DEPTH OF THE BASE OF THE PROPOSED INFILTRATION SYSTEM SHOULD BE NO LESS THAN 0.50 INCHES PER HOUR AND NO GREATER THAN 2.41 INCHES PER HOUR.

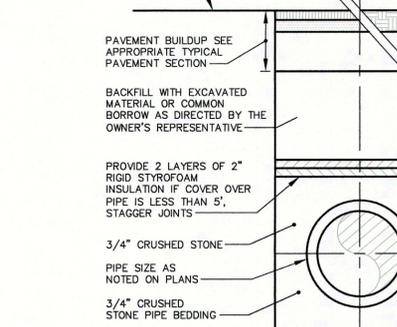
CONSTRUCTION OVERSIGHT:
 INSPECTION OF THE INFILTRATION BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 • AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES.
 • AFTER THE LOAMY COARSE SAND LAYER HAS BEEN INSTALLED;
 • AFTER THE 3-INCH TRANSITION ZONE BETWEEN LAYERS HAS BEEN LITTED;
 • AFTER THE LOAMY TOPSOIL LAYER HAS BEEN INSTALLED AND SEEDED;
 • AFTER ONE YEAR TO INSPECT THE HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 • ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.



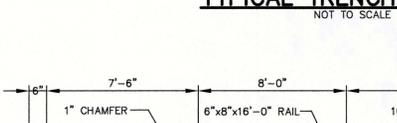
VERTICAL SLIPFORM CONCRETE CURB
NOT TO SCALE



ACCESSIBLE RAMP & DETECTABLE WARNING SURFACE
NOT TO SCALE

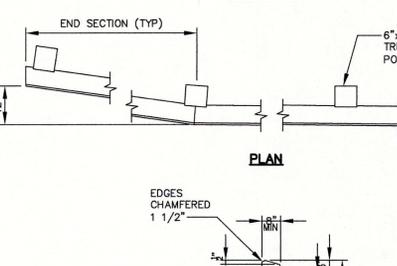


PAVEMENT BUILDUP
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

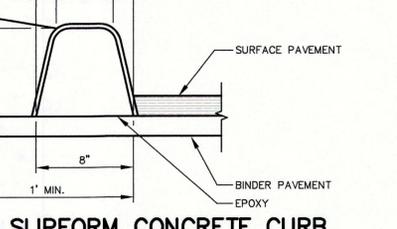
TABLE 7.3 LOAMY COARSE SAND		TABLE 7.4 SANDY LOAM	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100	#4	75-95
#20	70-100	#10	60-90
#60	15-40	#40	35-85
#200	8-15	#200	20-70
200 CLAY	<2.0	200 CLAY	<2.0



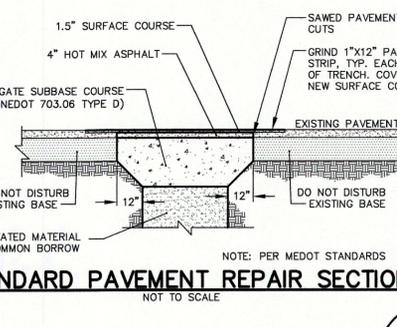
INFILTRATION BASIN
NOT TO SCALE

INFILTRATION BASIN INSTALLATION AND TESTING SPECIFICATIONS:
 • THE PERMEABILITY OF THE SOIL SHALL BE VERIFIED.
 • THE PERMEABILITY OF THE SOIL AT THE DEPTH OF THE BASE OF THE PROPOSED INFILTRATION SYSTEM SHOULD BE NO LESS THAN 0.50 INCHES PER HOUR AND NO GREATER THAN 2.41 INCHES PER HOUR.

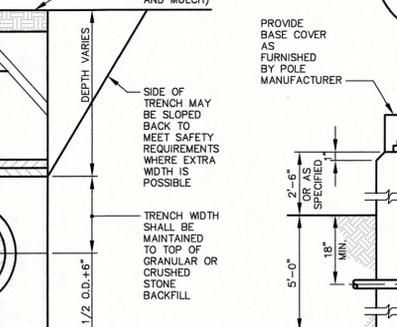
CONSTRUCTION OVERSIGHT:
 INSPECTION OF THE INFILTRATION BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 • AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES.
 • AFTER THE LOAMY COARSE SAND LAYER HAS BEEN INSTALLED;
 • AFTER THE 3-INCH TRANSITION ZONE BETWEEN LAYERS HAS BEEN LITTED;
 • AFTER THE LOAMY TOPSOIL LAYER HAS BEEN INSTALLED AND SEEDED;
 • AFTER ONE YEAR TO INSPECT THE HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 • ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.



VERTICAL SLIPFORM CONCRETE CURB
NOT TO SCALE



ACCESSIBLE RAMP & DETECTABLE WARNING SURFACE
NOT TO SCALE

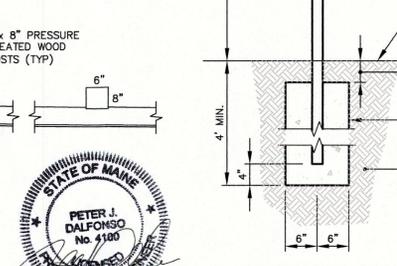


PAVEMENT BUILDUP
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

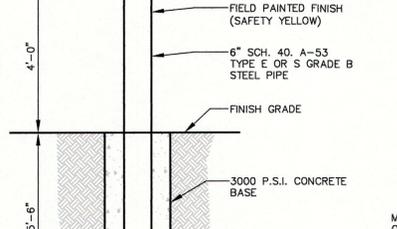
TABLE 7.3 LOAMY COARSE SAND		TABLE 7.4 SANDY LOAM	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100	#4	75-95
#20	70-100	#10	60-90
#60	15-40	#40	35-85
#200	8-15	#200	20-70
200 CLAY	<2.0	200 CLAY	<2.0



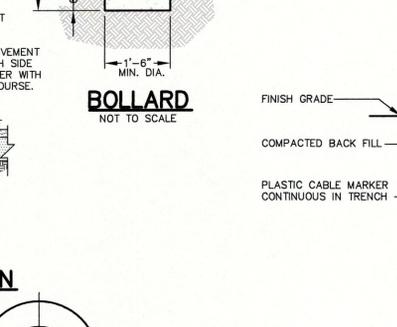
INFILTRATION BASIN
NOT TO SCALE

INFILTRATION BASIN INSTALLATION AND TESTING SPECIFICATIONS:
 • THE PERMEABILITY OF THE SOIL SHALL BE VERIFIED.
 • THE PERMEABILITY OF THE SOIL AT THE DEPTH OF THE BASE OF THE PROPOSED INFILTRATION SYSTEM SHOULD BE NO LESS THAN 0.50 INCHES PER HOUR AND NO GREATER THAN 2.41 INCHES PER HOUR.

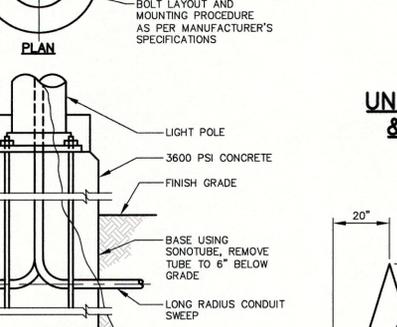
CONSTRUCTION OVERSIGHT:
 INSPECTION OF THE INFILTRATION BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 • AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES.
 • AFTER THE LOAMY COARSE SAND LAYER HAS BEEN INSTALLED;
 • AFTER THE 3-INCH TRANSITION ZONE BETWEEN LAYERS HAS BEEN LITTED;
 • AFTER THE LOAMY TOPSOIL LAYER HAS BEEN INSTALLED AND SEEDED;
 • AFTER ONE YEAR TO INSPECT THE HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 • ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.



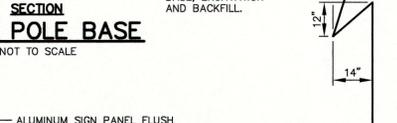
VERTICAL SLIPFORM CONCRETE CURB
NOT TO SCALE



ACCESSIBLE RAMP & DETECTABLE WARNING SURFACE
NOT TO SCALE

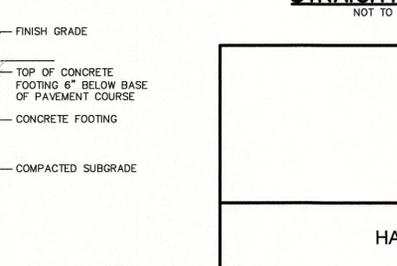


PAVEMENT BUILDUP
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

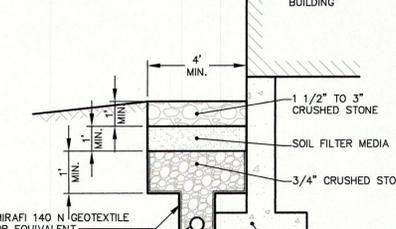
TABLE 7.3 LOAMY COARSE SAND		TABLE 7.4 SANDY LOAM	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100	#4	75-95
#20	70-100	#10	60-90
#60	15-40	#40	35-85
#200	8-15	#200	20-70
200 CLAY	<2.0	200 CLAY	<2.0



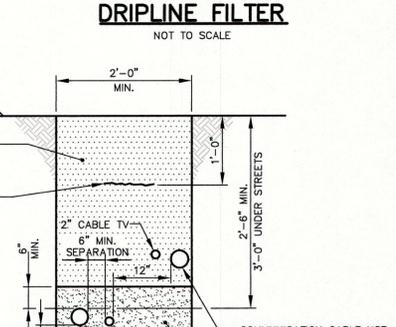
INFILTRATION BASIN
NOT TO SCALE

INFILTRATION BASIN INSTALLATION AND TESTING SPECIFICATIONS:
 • THE PERMEABILITY OF THE SOIL SHALL BE VERIFIED.
 • THE PERMEABILITY OF THE SOIL AT THE DEPTH OF THE BASE OF THE PROPOSED INFILTRATION SYSTEM SHOULD BE NO LESS THAN 0.50 INCHES PER HOUR AND NO GREATER THAN 2.41 INCHES PER HOUR.

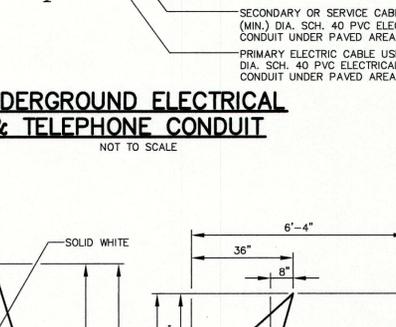
CONSTRUCTION OVERSIGHT:
 INSPECTION OF THE INFILTRATION BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 • AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES.
 • AFTER THE LOAMY COARSE SAND LAYER HAS BEEN INSTALLED;
 • AFTER THE 3-INCH TRANSITION ZONE BETWEEN LAYERS HAS BEEN LITTED;
 • AFTER THE LOAMY TOPSOIL LAYER HAS BEEN INSTALLED AND SEEDED;
 • AFTER ONE YEAR TO INSPECT THE HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 • ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.



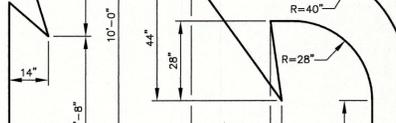
DRIPLINE FILTER
NOT TO SCALE



ACCESSIBLE RAMP & DETECTABLE WARNING SURFACE
NOT TO SCALE

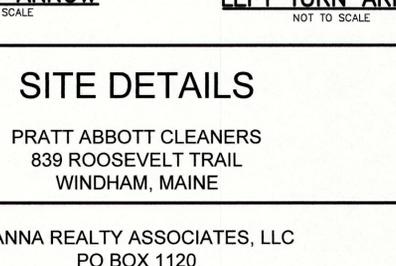


PAVEMENT BUILDUP
NOT TO SCALE



VERTICAL GRANITE CURB
NOT TO SCALE

TABLE 7.3 LOAMY COARSE SAND		TABLE 7.4 SANDY LOAM	
SIEVE SIZE	% PASSING BY WEIGHT	SIEVE SIZE	% PASSING BY WEIGHT
#10	85-100	#4	75-95
#20	70-100	#10	60-90
#60	15-40	#40	35-85
#200	8-15	#200	20-70
200 CLAY	<2.0	200 CLAY	<2.0



INFILTRATION BASIN
NOT TO SCALE

INFILTRATION BASIN INSTALLATION AND TESTING SPECIFICATIONS:
 • THE PERMEABILITY OF THE SOIL SHALL BE VERIFIED.
 • THE PERMEABILITY OF THE SOIL AT THE DEPTH OF THE BASE OF THE PROPOSED INFILTRATION SYSTEM SHOULD BE NO LESS THAN 0.50 INCHES PER HOUR AND NO GREATER THAN 2.41 INCHES PER HOUR.

CONSTRUCTION OVERSIGHT:
 INSPECTION OF THE INFILTRATION BASIN SHALL BE PROVIDED FOR EACH PHASE OF CONSTRUCTION BY THE DESIGN ENGINEER. AT A MINIMUM, INSPECTIONS WILL OCCUR:
 • AFTER PRELIMINARY CONSTRUCTION OF THE FILTER GRADES.
 • AFTER THE LOAMY COARSE SAND LAYER HAS BEEN INSTALLED;
 • AFTER THE 3-INCH TRANSITION ZONE BETWEEN LAYERS HAS BEEN LITTED;
 • AFTER THE LOAMY TOPSOIL LAYER HAS BEEN INSTALLED AND SEEDED;
 • AFTER ONE YEAR TO INSPECT THE HEALTH OF THE VEGETATION AND MAKE CORRECTIONS; AND
 • ALL MATERIAL USED FOR THE CONSTRUCTION OF THE FILTER BASIN WILL BE APPROVED BY THE DESIGN ENGINEER AFTER TESTS BY A CERTIFIED LABORATORY SHOW THAT THEY ARE PASSING DEP SPECIFICATIONS.

VERTICAL SLIPFORM CONCRETE CURB

NOT TO SCALE

STANDARD PAVEMENT REPAIR SECTION

NOT TO SCALE

TYPICAL TRENCH SECTION

NOT TO SCALE

RESERVED PARKING SIGN

NOT TO SCALE

TIMBER GUARDRAIL

NOT TO SCALE

BOLLARD

NOT TO SCALE

LIGHT POLE BASE

NOT TO SCALE

UNDERGROUND ELECTRICAL & TELEPHONE CONDUIT

NOT TO SCALE

STRAIGHT ARROW

NOT TO SCALE

LEFT TURN ARROW

NOT TO SCALE

SITE DETAILS

PRATT ABBOTT CLEANERS
 839 ROOSEVELT TRAIL
 WINDHAM, MAINE

HANNA REALTY ASSOCIATES, LLC
 PO BOX 1120
 PORTLAND, ME 04104

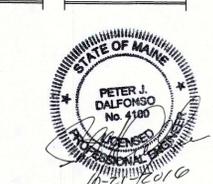
St. Germain Collins

C-301

846 MAIN ST., WESTBROOK, ME 04092 TEL:207-591-7000 WWW.STGERMAINCOLLINS.COM

REV.	DATE	REVISION DESCRIPTION	DRAWN	CHK'D
2.	10/21/2016	REVISED PER TOWN COMMENTS	MCA	PJD
1.	09/29/2016	SUBMITTED TO TOWN OF WINDHAM	MCA	PJD

DATE: 08/20/2015 SCALE: NONE PROJECT NO.: 3580 FILE: 3580 C-301-2 Details



M:\Draws\3580 Windham\3580 C-301-2 Details.dwg 10/21/2016 4:14:22 PM

EROSION AND SEDIMENTATION CONTROL

A PERSON WHO CONDUCTS, OR CAUSES TO BE CONDUCTED, AN ACTIVITY THAT INVOLVES FILLING, DISPLACING OR EXPOSING SOIL OR OTHER EARTHEN MATERIALS SHALL TAKE MEASURES TO PREVENT UNREASONABLE EROSION OF SOIL OR SEDIMENT BEYOND THE PROJECT SITE OR INTO A PROTECTED NATURAL RESOURCE AS DEFINED IN 38 M.R.S. §460-B. EROSION CONTROL MEASURES MUST BE IN PLACE BEFORE THE ACTIVITY BEGINS. MEASURES MUST REMAIN IN PLACE AND FUNCTIONAL UNTIL THE SITE IS PERMANENTLY STABILIZED. ADEQUATE AND TIMELY TEMPORARY AND PERMANENT STABILIZATION MEASURES MUST BE TAKEN.

1. POLLUTION PREVENTION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE. CONTROL STORMWATER VOLUME AND VELOCITY WITHIN THE SITE TO MINIMIZE SOIL EROSION. MINIMIZE THE DISTURBANCE OF STEEP SLOPES. CONTROL STORMWATER DISCHARGES, INCLUDING BOTH PEAK FLOW RATES AND VOLUME, TO MINIMIZE EROSION AT OUTLETS. THE DISCHARGE MAY NOT RESULT IN EROSION OF ANY OPEN DRAINAGE CHANNELS, SWALES, STREAM CHANNELS OR STREAM BANKS, UPLAND, OR COASTAL OR FRESHWATER WETLANDS OFF THE PROJECT SITE.

WHENEVER PRACTICABLE, NO DISTURBANCE ACTIVITIES SHOULD TAKE PLACE WITHIN 50 FEET OF ANY PROTECTED NATURAL RESOURCE. IF DISTURBANCE ACTIVITIES TAKE PLACE BETWEEN 30 FEET AND 50 FEET OF ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERMITTEEER CONTROLS MUST BE DOUBLED AND DISTURBED AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

2. SEDIMENT BARRIERS. PRIOR TO CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE DOWNGRADIENT EDGE OF ANY AREA TO BE DISTURBED AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE DISTURBED AREA. SEDIMENT BARRIERS SHOULD BE INSTALLED DOWNGRADIENT OF SOIL OR SEDIMENT STOCKPILES AND STORMWATER PREVENTED FROM RUNNING ONTO THE STOCKPILE. MAINTAIN THE SEDIMENT BARRIERS PERMANENTLY STABILIZED, OR REMOVING AND REPLACING THE BARRIER UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED. WHERE A DISCHARGE TO A STORM DRAIN INLET OCCURS, IF THE STORM DRAIN CARRIES WATER DIRECTLY TO A SURFACE WATER AND YOU HAVE AUTHORITY TO ACCESS THE STORM DRAIN INLET, YOU MUST INSTALL AND MAINTAIN PROTECTION MEASURES THAT REMOVE SEDIMENT FROM THE DISCHARGE.

3. STABILIZED CONSTRUCTION ENTRANCE. PRIOR TO CONSTRUCTION, PROPERLY INSTALL A STABILIZED CONSTRUCTION ENTRANCE (SCE) AT ALL POINTS OF EGRESS FROM THE SITE. THE SCE IS A STABILIZED PAD OF AGGREGATE, UNDERLAY BY A GEOTEXTILE FILTER FABRIC, USED TO PREVENT TRAFFIC FROM TRACKING MATERIAL AWAY FROM THE SITE ONTO PUBLIC ROWS. MAINTAIN THE SCE UNTIL ALL DISTURBED AREAS ARE STABILIZED.

4. TEMPORARY STABILIZATION. WITHIN 7 DAYS OF THE CESSATION OF CONSTRUCTION ACTIVITIES IN AN AREA THAT WILL NOT BE WORKED FOR MORE THAN 7 DAYS, STABILIZE ANY EXPOSED SOIL WITH MULCH, OR OTHER NON-EROSIVE COVER. STABILIZE AREAS WITHIN 75 FEET OF A WETLAND OR WATERBODY WITHIN 48 HOURS OF THE INITIAL DISTURBANCE OF THE SOIL OR PRIOR TO ANY STORM EVENT, WHICHEVER COMES FIRST.

5. REMOVAL OF TEMPORARY MEASURES. REMOVE ANY TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ATTAINED. REMOVE ANY ACCUMULATED SEDIMENTS AND STABILIZE.

6. PERMANENT STABILIZATION. IF THE AREA WILL NOT BE WORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE, THEN PERMANENTLY STABILIZE THE AREA WITHIN 7 DAYS BY PLANTING VEGETATION, SEEDING SOIL, OR THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND SOILS AS NECESSARY; PROTECT SOILS FROM ANY PROTECTED NATURAL RESOURCES; PROTECT SEEDS WITH MULCH, OR IF NECESSARY, ERNETS, BLANKETS, AND SCHEDULE SOODING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEEDD OR SOODD AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH BOX COVER FROM VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND REESTABLISHED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO A PARTICULAR SITE.

- (A) SEEDD AREAS. FOR SEEDD AREAS, PERMANENT STABILIZATION MEANS A BOX COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR BILLING OF THE TOPSOIL.
- (B) SOODD AREAS. FOR SOODD AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOO ROOTS INTO THE UNDERLYING SOIL, WITH NO SLUMPING OF THE SOO OR DIE-OFF.
- (C) PERMANENT MULCH. FOR MULCHED AREAS, PERMANENT STABILIZATION MEANS TOTAL COVERAGE OF THE EXPOSED AREA WITH AN APPROVED MULCH MATERIAL. EROSION CONTROL MIX MAY BE USED AS MULCH FOR PERMANENT STABILIZATION ACCORDING TO THE APPROVED APPLICATION RATES AND LIMITATIONS.
- (D) RIPRAP. FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS SLOPES STABILIZED WITH RIPRAP HAVE AN APPROPRIATE BACKING OF A WELL-GRADED GRAVEL OR APPROVED GEOTEXTILE TO PREVENT SOIL MOVEMENT FROM BEHIND THE RIPRAP. STONE MUST BE SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE USED.
- (E) AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE.
- (F) PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE PERMANENT COVER OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED, PROVIDED IT IS FREE OF FINE MATERIALS THAT WILL RUNOFF WITH A RAIN EVENT.
- (G) DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A BOX COVER OF HEALTHY VEGETATION WITH A WELL-GRADED RIPRAP LINING, TURN REINFORCEMENT MAT, OR WITH ANOTHER NON-EROSIVE LINING SUCH AS CONCRETE OR ASPHALT PAVEMENT. THERE MUST BE NO EVIDENCE OF SLUMPING OF THE CHANNEL LINING, UNDERCUTTING OF THE CHANNEL BANKS, OR DOWN-CUTTING OF THE CHANNEL.

7. WINTER CONSTRUCTION. "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF DISTURBED AREAS ARE NOT STABILIZED WITH PERMANENT MEASURES BY NOVEMBER 1 OR NEW SOIL DISTURBANCE OCCURS AFTER NOVEMBER 1, BUT BEFORE APRIL 15, THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS.

- (A) SITE STABILIZATION. FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF EACH CONSTRUCTION DAY, AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF SNOW.
- (B) SEDIMENT BARRIERS. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.
- (C) DITCH. ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY NOVEMBER 1, OR WILL BE WORKED DURING THE WINTER CONSTRUCTION PERIOD, MUST BE STABILIZED WITH AN APPROPRIATE STONE LINING BACKED BY AN APPROPRIATE GRAVEL BED OR GEOTEXTILE UNLESS SPECIFICALLY RELEASED FROM THIS STANDARD BY THE DEPARTMENT.
- (D) SLOPES. MULCH NETTING MUST BE USED TO ANCHOR MULCH ON ALL SLOPES GREATER THAN 8% UNLESS EROSION CONTROL BLANKETS OR EROSION CONTROL MIX IS BEING USED ON THESE SLOPES.

8. STORMWATER CHANNELS, DITCHES, SWALES, AND OTHER OPEN STORMWATER CHANNELS MUST BE DESIGNED, CONSTRUCTED, AND STABILIZED USING MEASURES THAT ACHIEVE LONG-TERM EROSION CONTROL. DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS MUST BE SIZED TO HANDLE, AT A MINIMUM, THE EXPECTED VOLUME RUN-OFF EACH CHANNEL SHOULD BE CONSTRUCTED IN SECTIONS SO THAT THE SECTION'S GRADING, SHAPING, AND INSTALLATION OF THE PERMANENT LINING CAN BE COMPLETED THE SAME DAY. IF A CHANNEL'S FINAL GRADING OR LINING INSTALLATION MUST BE DELAYED, THEN DIVERSION BERMS MUST BE USED TO PREVENT UNWANTED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY, AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES, SUCH AS APPROVED STONE LINING, TO PREVENT SCOUR OF THE STREAM CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER DEPTH.

- (A) THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.
- (B) WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN ¼ ACRE OF IMPERVIOUS AREA, DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE THE OPPORTUNITY EXISTS.

9. SEDIMENT BASINS. SEDIMENT BASINS MUST BE DESIGNED TO PROVIDE STORAGE FOR EITHER THE CALCULATED RUNOFF FROM A 2-YEAR, 24-HOUR STORM OR PROVIDE FOR 3,600 CUBIC FEET OF CAPACITY PER ACRE DRAINING TO THE BASIN. OUTLET STRUCTURES MUST DISCHARGE WATER FROM THE SURFACE OF THE BASIN WHENEVER POSSIBLE. EROSION CONTROLS AND VELOCITY DISSIPATION DEVICES MUST BE USED IF THE DISCHARGING WATERS ARE LIKELY TO CREATE EROSION. ACCUMULATED SEDIMENT MUST BE REMOVED AS NEEDED FROM THE BASIN TO MAINTAIN AT LEAST ½ OF THE DESIGN CAPACITY OF THE BASIN.

THE USE OF CATIONIC TREATMENT CHEMICALS, SUCH AS POLYMERS, FLOCCULANTS, OR OTHER CHEMICALS THAT CONTAIN AN OVERALL POSITIVE CHARGE, DESIGNED TO REDUCE TURBIDITY IN STORMWATER MUST RECEIVE PRIOR APPROVAL FROM THE DEPARTMENT. WHEN REQUESTING APPROVAL TO USE CATIONIC TREATMENT CHEMICALS, YOU MUST DESCRIBE APPROPRIATE CONTROLS AND IMPLEMENTATION PROCEDURES TO ENSURE THE USE WILL NOT LEAD TO A VIOLATION OF WATER QUALITY STANDARDS. IN ADDITION, YOU MUST SPECIFY THE TYPE(S) OF SOIL LIKELY TO BE TREATED ON THE SITE, CHEMICALS TO BE USED AND HOW THEY ARE TO BE APPLIED AND IN WHAT QUANTITY, ANY MANUFACTURER'S RECOMMENDATIONS, AND ANY TRAINING HAD BY PERSONNEL WHO WILL HANDLE AND APPLY THE CHEMICALS.

10. ROADS, GRAVEL AND PAVED ROADS MUST BE DESIGNED AND CONSTRUCTED WITH CROWNS OR OTHER MEASURES, SUCH AS WATER BARS, TO ENSURE THAT STORMWATER IS DELIVERED IMMEDIATELY TO ADJACENT DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN INLETS, OR STREET OUTLETS.

11. CULVERTS. CULVERTS MUST BE SIZED TO AVOID UNWANTED FLOODING OF UPSTREAM AREAS OR FREQUENT OVERTOPPING OF ROADWAYS. CULVERT INLETS MUST BE PROTECTED WITH APPROPRIATE MATERIALS FOR THE EXPECTED ENTRANCE VELOCITY, AND PROTECTION MUST EXTEND AT LEAST AS HIGH AS THE EXPECTED MAXIMUM ELEVATION OF STORAGE BEHIND THE CULVERT. CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES, SUCH AS APPROVED STONE LINING, TO PREVENT SCOUR OF THE STREAM CHANNEL. OUTLET PROTECTION MEASURES MUST BE DESIGNED TO STAY WITHIN THE CHANNEL LIMITS. THE DESIGN MUST TAKE ACCOUNT OF TAILWATER DEPTH.

12. PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB OUTLETS, OR BUFFER AREAS WITHOUT CROWDING AREAS DOWNSTREAM. THE PARKING AREA'S SUBBASE COMPACTION AND GRADING MUST BE DONE TO ENSURE RUNOFF IS EVENLY DISTRIBUTED TO ADJACENT BUFFERS OR SIDE SLOPES. CATCH BASINS MUST BE LOCATED AND SET TO PROVIDE ENOUGH STORAGE DEPTH AT THE INLET TO ALLOW INFLOW OF PEAK RUNOFF RATES WITHOUT BY-PASS OF RUNOFF TO OTHER AREAS.

13. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

INSPECTION AND MAINTENANCE

1. DURING CONSTRUCTION, THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.

(A) INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION CONTROL MEASURES, MATERIALS STORAGE AREAS THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE. INSPECT THESE AREAS AT LEAST ONCE A WEEK AS WELL AS BEFORE AND WITHIN 24 HOURS AFTER A STORM EVENT (RAINFALL), AND PRIOR TO COMPLETING PERMANENT STABILIZATION MEASURES. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS.

(B) MAINTENANCE. IF BEST MANAGEMENT PRACTICES (BMPs) NEED TO BE REPAIRED, THE REPAIR WORK SHOULD BE INITIATED UPON DISCOVERY OF THE PROBLEM BUT NO LATER THAN THE END OF THE NEXT WORKDAY. IF ADDITIONAL BMPs OR SIGNIFICANT REPAIR OF BMPs ARE NECESSARY, IMPLEMENTATION MUST BE COMPLETED WITHIN 7 CALENDAR DAYS AND PRIOR TO ANY STORM EVENT (RAINFALL). ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION UNTIL AREAS ARE PERMANENTLY STABILIZED.

(C) DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING THE INSPECTIONS AND ANY CORRECTIVE ACTION TAKEN. THE LOG MUST INCLUDE THE NAME(S) AND QUALIFICATIONS OF THE PERSON MAKING THE INSPECTIONS, THE DATE(S) OF THE INSPECTIONS, AND MAJOR OBSERVATIONS ABOUT THE OPERATION AND MAINTENANCE OF EROSION AND SEDIMENTATION CONTROLS, MATERIALS STORAGE AREAS, AND VEHICLES ACCESS POINTS TO THE PARCEL. MAJOR OBSERVATIONS MUST INCLUDE BMPs THAT NEED MAINTENANCE, BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED. FOR EACH BMP REQUIRING MAINTENANCE, BMP REPAIR, REPLACEMENT, AND LOCATION NEEDING ADDITIONAL BMPs, NOTE IN THE LOG THE CORRECTIVE ACTION TAKEN AND WHEN IT WAS TAKEN.

THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY MUST BE PROVIDED UPON REQUEST. THE PERMITTEEER SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.

2. POST-CONSTRUCTION, THE FOLLOWING STANDARDS MUST BE MET AFTER CONSTRUCTION.

(A) PLAN. CARRY OUT AN APPROVED INSPECTION AND MAINTENANCE PLAN THAT IS CONSISTENT WITH THE MINIMUM REQUIREMENTS OF THIS SECTION. THE PLAN MUST ADDRESS INSPECTION AND MAINTENANCE OF THE PROJECT'S PERMANENT EROSION CONTROL MEASURES AND STORMWATER MANAGEMENT SYSTEM. THIS PLAN MAY BE COMBINED WITH THE PLAN LISTED IN SECTION 2(A) OF THIS APPENDIX. SEE SECTION 7(C)(2) FOR SUBMISSION REQUIREMENTS.

(B) INSPECTION AND MAINTENANCE. ALL MEASURES MUST BE MAINTAINED IN EFFECTIVE OPERATING CONDITION. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE INSPECTIONS. THE FOLLOWING AREAS, FACILITIES, AND MEASURES MUST BE INSPECTED AND IDENTIFIED DEFICIENCIES MUST BE CORRECTED. AREAS, FACILITIES, AND MEASURES OTHER THAN THOSE LISTED BELOW MAY ALSO REQUIRE INSPECTION ON A SPECIFIC SITE. INSPECTION OR MAINTENANCE TASKS OTHER THAN THOSE DISCUSSED BELOW MUST BE INCLUDED IN THE MAINTENANCE PLAN DEVELOPED FOR A SPECIFIC SITE.

(C) INSPECT VEGETATED AREAS, PARTICULARLY SLOPES AND EMBANKMENTS, EARLY IN THE GROWING SEASON WITH AFTER HEAVY RAINS TO IDENTIFY ACTIVE OR POTENTIAL EROSION PROBLEMS. REPLANT BARE AREAS OR AREAS WITH SPARSE GROWTH WHERE SOIL EROSION IS EVIDENT. ARMOR THE AREA WITH AN APPROPRIATE LINING OR DIVERT THE EROSION FLOWS TO ON-SITE AREAS ABLE TO WITHSTAND THE CONCENTRATED FLOWS. SEE PERMANENT STABILIZATION STANDARDS IN APPENDIX A(5).

(D) INSPECT DITCHES, SWALES AND OTHER OPEN STORMWATER CHANNELS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW, REMOVE ACCUMULATED SEDIMENTS AND DEBRIS, TO CONTROL VEGETATED GROWTH THAT COULD OBSTRUCT FLOW, AND TO REPAIR ANY EROSION OF THE DITCH LINING. VEGETATED DITCHES MUST BE MOWED AT LEAST ANNUALLY. VEGETATED DITCHES WITHIN 25 FEET OF A PROTECTED NATURAL RESOURCE MUST BE MOWED AT LEAST TWICE A YEAR. VEGETATED DITCHES WITHIN 25 FEET OF A PROTECTED NATURAL RESOURCE MUST BE MOWED AT LEAST TWICE A YEAR. VEGETATED DITCHES WITHIN 25 FEET OF A PROTECTED NATURAL RESOURCE MUST BE MOWED AT LEAST TWICE A YEAR. VEGETATED DITCHES WITHIN 25 FEET OF A PROTECTED NATURAL RESOURCE MUST BE MOWED AT LEAST TWICE A YEAR. VEGETATED DITCHES WITHIN 25 FEET OF A PROTECTED NATURAL RESOURCE MUST BE MOWED AT LEAST TWICE A YEAR.

(E) INSPECT CULVERTS IN THE SPRING, IN LATE FALL, AND AFTER HEAVY RAINS TO REMOVE ANY OBSTRUCTIONS TO FLOW, REMOVE ACCUMULATED SEDIMENTS AND DEBRIS AT THE INLET, AT THE OUTLET, AND WITHIN THE CONDUIT, AND TO REPAIR ANY EROSION DAMAGE AT THE CULVERTS INLET AND OUTLET.

(F) INSPECT AND CLEAN OUT CATCH BASINS. CLEAN-OUT MUST INCLUDE THE REMOVAL AND LEGAL DISPOSAL OF ANY ACCUMULATED SEDIMENTS AND DEBRIS AT THE BOTTOM OF THE BASIN. INLET GRATES, AT ANY INFLOW CHANNELS TO THE BASIN, AND AT ANY PIPES BETWEEN BASINS, IF THE BASIN OUTLET IS DESIGNED TO TRAP FLOATABLE MATERIALS, THEN REMOVE THE FLOATING DEBRIS AND ANY FLOATING OILS (USING OIL-ABSORPTIVE PADS).

(G) INSPECT RESOURCE AND TREATMENT BUFFERS ONCE A YEAR FOR EVIDENCE OF EROSION, CONCENTRATING FLOW, AND ENCROACHMENT BY DEVELOPMENT. IF FLOWS ARE CONCENTRATING WITHIN A BUFFER, SITE GRADING, LEVEL SPREADERS, OR DITCH TURN-OUTS MUST BE USED TO ENSURE A MORE EVEN DISTRIBUTION OF FLOW INTO A BUFFER. CHECK DOWN SLOPE OF ALL SPREADERS AND TURN-OUTS FOR EROSION. IF EROSION IS PRESENT, ADJUST OR MODIFY THE SPREADER'S OR TURNOUT'S UP TO ENSURE A BETTER DISTRIBUTION OF FLOW INTO A BUFFER. CLEAN-OUT ANY ACCUMULATION OF SEDIMENT WITHIN THE SPREADER BAYS OR TURN-OUT POOLS.

(H) INSPECT AT LEAST ONCE PER YEAR, EACH STORMWATER MANAGEMENT POND OR BASIN, INCLUDING THE POND'S EMBANKMENTS, OUTLET STRUCTURE, AND EMERGENCY SPILLWAY. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE POND. CONTROL WOODY VEGETATION ON THE POND'S EMBANKMENTS.

(I) INSPECT AT LEAST ONE PER YEAR, EACH UNDERDRAIN FILTER, INCLUDING THE FILTER EMBANKMENTS, VEGETATION, UNDERDRAIN PIPING, AND OVERFLOW SPILLWAY. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS IN THE FILTER. IF NEEDED, REHABILITATE ANY CLOGGED SURFACE LININGS, AND FLUSH UNDERDRAIN PIPING.

(J) INSPECT EACH MANUFACTURED SYSTEM INSTALLED ON THE SITE, INCLUDING THE SYSTEM'S INLET, TREATMENT CHAMBER(S), AND OUTLET AT LEAST ONCE PER YEAR, OR IN ACCORDANCE WITH THE MAINTENANCE GUIDELINES RECOMMENDED BY THE MANUFACTURER. REMOVE AND DISPOSE OF THE ESTIMATED RUNOFF AND POLLUTANT LOAD EXPECTED TO THE SYSTEM FROM THE PROJECT. REMOVE AND DISPOSE OF ACCUMULATED SEDIMENTS, DEBRIS, AND CONTAMINATED WATERS FROM THE SYSTEM AND, IF APPLICABLE, REMOVE AND REPLACE ANY CLOGGED OR SPENT FILTER MEDIA.

(C) REGULAR MAINTENANCE

(K) CLEAR ACCUMULATIONS OF WINTER SAND IN PARKING LOTS AND ALONG ROADWAYS AT LEAST ONCE A YEAR, PREFERABLY IN THE SPRING. ACCUMULATIONS ON PAVEMENT MAY BE REMOVED BY PAVEMENT SWEEPING. ACCUMULATIONS OF SAND AND ALONG ROAD SHOULDERS MAY BE REMOVED BY GRADING EXCESS SAND TO THE PAVEMENT EDGE AND REMOVING IT MANUALLY OR BY A FRONT-END LOADER. GRADING OF GRAVEL ROADS, OR GRADING OF THE GRAVEL SHOULDERS OF GRAVEL OR PAVED ROADS, MUST BE ROUTINELY PERFORMED TO ENSURE THAT STORMWATER DRAINS IMMEDIATELY OFF THE ROAD SURFACE TO ADJACENT BUFFER AREAS OR STABLE DITCHES, AND IS NOT IMPERED BY ACCUMULATIONS OF GRADED MATERIAL ON THE ROAD SHOULDER OR BY EXCAVATION OF FALSE DITCHES IN THE SHOULDER. IF WATER BARS OR OPEN-TOP CULVERTS ARE USED TO DIVERT RUNOFF FROM THE ROAD SURFACE, CLEAN-OUT ANY SEDIMENTS WITHIN OR AT THE OUTLET OF THESE STRUCTURES TO RESTORE THEIR FUNCTION.

(L) MANAGE EACH BUFFER'S VEGETATION CONSISTENTLY WITH THE REQUIREMENTS IN ANY DEED RESTRICTIONS FOR THE BUFFER. WOODED BUFFERS MUST REMAIN FULLY WOODED AND HAVE NO DISTURBANCE TO THE DUFF LAYER. VEGETATION IN NON-WOODED BUFFERS MAY NOT BE CUT MORE THAN THREE TIMES PER YEAR, AND MAY NOT BE CUT SHORTER THAN SIX INCHES.

(M) DOCUMENTATION. KEEP A LOG (REPORT) SUMMARIZING INSPECTIONS, MAINTENANCE, AND ANY CORRECTIVE ACTIONS TAKEN. THE LOG MUST INCLUDE THE DATE ON WHICH EACH INSPECTION OR MAINTENANCE TASK WAS PERFORMED, A DESCRIPTION OF THE INSPECTION FINDINGS OR MAINTENANCE COMPLETED, AND THE NAME OF THE INSPECTOR OR MAINTENANCE PERSONNEL PERFORMING THE TASK. IF A MAINTENANCE TASK REQUIRES THE CLEAN-OUT OF ANY SEDIMENTS OR DEBRIS, INDICATE WHERE THE SEDIMENT AND DEBRIS WAS DISPOSED AFTER REMOVAL. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY PROVIDED TO THE DEPARTMENT. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY PROVIDED TO THE DEPARTMENT. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY PROVIDED TO THE DEPARTMENT. THE LOG MUST BE MADE ACCESSIBLE TO DEPARTMENT STAFF AND A COPY PROVIDED TO THE DEPARTMENT.

3. RE-CERTIFICATION. SUBMIT A CERTIFICATION OF THE FOLLOWING TO THE DEPARTMENT WITHIN THREE MONTHS OF THE EXPIRATION OF EACH FIVE-YEAR INTERVAL FROM THE DATE OF ISSUANCE OF THE PERMIT.

(A) IDENTIFICATION AND REPAIR OF EROSION PROBLEMS. ALL AREAS OF THE PROJECT SITE HAVE BEEN INSPECTED FOR AREAS OF EROSION, AND APPROPRIATE STEPS HAVE BEEN TAKEN TO PERMANENTLY STABILIZE THESE AREAS.

(B) INSPECTION AND REPAIR OF STORMWATER CONTROL SYSTEM. ALL ASPECTS OF THE STORMWATER CONTROL SYSTEM HAVE BEEN INSPECTED FOR DAMAGE, WEAR, AND MALFUNCTION. APPROPRIATE STEPS HAVE BEEN TAKEN TO REPAIR OR REPLACE THE SYSTEM, OR PORTIONS OF THE SYSTEM.

(C) MAINTENANCE. THE EROSION AND STORMWATER MAINTENANCE PLAN FOR THE SITE IS BEING IMPLEMENTED AS WRITTEN, OR MODIFICATIONS TO THE PLAN HAVE BEEN SUBMITTED TO AND APPROVED BY THE DEPARTMENT, AND THE MAINTENANCE LOG IS BEING MAINTAINED.

MUNICIPALITIES WITH SEPARATE STORM SEWER SYSTEMS REGULATED UNDER THE MAINE POLLUTANT DISCHARGE ELIMINATION SYSTEM (MPDES) PROGRAM MAY REPORT ON ALL REGULATED SYSTEMS UNDER THEIR CONTROL, AS PART OF THEIR REQUIRED ANNUAL REPORTING IN LIEU OF SEPARATE CERTIFICATION OF EACH SYSTEM. MUNICIPALITIES NOT REGULATED BY THE MPDES PROGRAM, BUT THAT ARE RESPONSIBLE FOR MAINTENANCE OF PERMITTED STORMWATER SYSTEMS, MAY REPORT ON MULTIPLE STORMWATER SYSTEMS IN ONE REPORT.

4. DURATION OF MAINTENANCE. PERFORM MAINTENANCE AS DESCRIBED AND REQUIRED IN THE PERMIT UNLESS AND UNTIL THE SYSTEM IS FORMALLY ACCEPTED BY THE MUNICIPALITY OR QUAS-MUNICIPALITY DISTRICT. THE MAINTENANCE LOG MUST BE INSTALLED IN THE OFFICE OF A LEGALLY CREATED ASSOCIATION THAT WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM. IF A MUNICIPALITY OR QUAS-MUNICIPALITY DISTRICT CHOOSES TO ACCEPT A STORMWATER MANAGEMENT SYSTEM, OR A COMPONENT OF A STORMWATER SYSTEM, IT MUST PROVIDE A LETTER TO THE DEPARTMENT STATING THAT IT ASSUMES RESPONSIBILITY FOR THE SYSTEM. THE LETTER MUST SPECIFY THE COMPONENTS OF THE SYSTEM FOR WHICH THE MUNICIPALITY OR DISTRICT WILL ASSUME RESPONSIBILITY, AND THAT THE MUNICIPALITY OR DISTRICT WILL MAINTAIN THOSE COMPONENTS OF THE SYSTEM IN COMPLIANCE WITH THE DEPARTMENT STANDARDS. UPON SUCH ASSUMPTION OF RESPONSIBILITY, AND APPROVAL BY THE DEPARTMENT, THE MUNICIPALITY, QUAS-MUNICIPALITY DISTRICT, OR ASSOCIATION BECOMES A CO-PERMITTEEER FOR THIS PURPOSE ONLY AND MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THE PERMIT.

5. ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.

HOUSEKEEPING

1. SPILL PREVENTION. CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM CONSTRUCTION AND WASTE MATERIALS STORED ON SITE TO ENTER STORMWATER, WHICH INCLUDES STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER. THE SITE CONTRACTOR OR OPERATOR MUST DEVELOP, AND IMPLEMENT AS NECESSARY, APPROPRIATE SPILL PREVENTION, CONTAINMENT, AND RESPONSE PLANNING MEASURES.

2. GROUNDWATER PROTECTION. DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS, TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES OR TRAPS INTO THE SOIL DIKES, BERMS, Sumps, AND OTHER FORMS OF SECONDARY CONTAINMENT THAT PREVENT DISCHARGE TO GROUNDWATER MAY BE USED TO ISOLATE PORTIONS OF THE SITE FOR THE PURPOSES OF STORAGE AND HANDLING OF THESE MATERIALS. ANY PROJECT PROPOSING INFILTRATION OF STORMWATER MUST PROVIDE TREATMENT OF STORMWATER PRIOR TO DISCHARGE OF STORMWATER TO THE INFILTRATION AREA, OR PROVIDE FOR TREATMENT WITHIN THE INFILTRATION AREA, IN ORDER TO PREVENT THE ACCUMULATION OF FILLS, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED. CONSTRUCTION ENTRANCE (SCE) SHOULD INCLUDE MEASURES TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEEPED IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS SHOULD MOW UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST.

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.

5. EXCAVATION DE-WATERING. EXCAVATION DE-WATERING IS THE REMOVAL OF WATER FROM TRENCHES, FOUNDATIONS, COFFER DAMS, PONDS, AND OTHER AREAS WITHIN THE CONSTRUCTION AREA THAT RETAIN WATER AFTER EXCAVATION. IN MOST CASES THE COLLECTED WATER IS HEAVILY SILTED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE COLLECTED WATER REMOVED FROM THE PONDING AREA, EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUFFERS OR REMOVED TO AREAS THAT ARE SPECIFICALLY DESIGNED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE, LIKE A COFFERDAM SEDIMENTATION BASIN. AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE. EQUIVALENT MEASURES MAY BE TAKEN IF APPROVED BY THE DEPARTMENT.

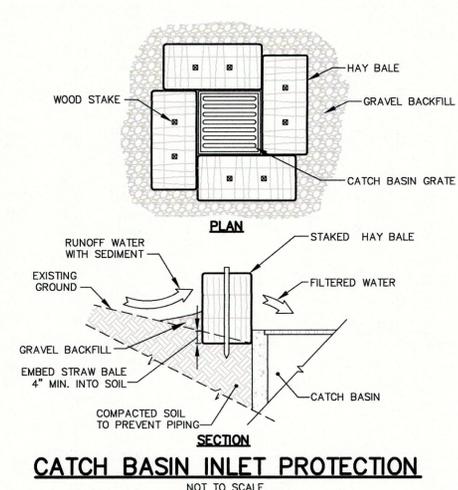
6. UNAUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES ARE IDENTIFIED AND STEPS SHOULD BE TAKEN TO INSURE THAT THE DISCHARGE IS IN COMPLIANCE WITH THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER DISCHARGES ARE:

- (A) DISCHARGES FROM FIREFIGHTING ACTIVITY;
- (B) FIRE HYDRANT FLUSHINGS;
- (C) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED);
- (D) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);
- (E) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS;
- (F) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF BEEN DEPOSITED ON UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT AND DUST;
- (G) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- (H) UNCONTAMINATED GROUNDWATER OR SPRING WATER;
- (I) FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;
- (J) UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX (C)(5));
- (K) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND
- (L) LANDSCAPE IRRIGATION.

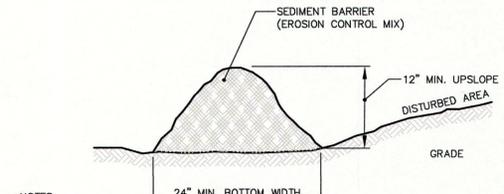
7. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF THE FOLLOWING:

- (A) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;
- (B) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE;
- (C) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; AND
- (D) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

(8) ADDITIONAL REQUIREMENTS. ADDITIONAL REQUIREMENTS MAY BE APPLIED ON A SITE-SPECIFIC BASIS.



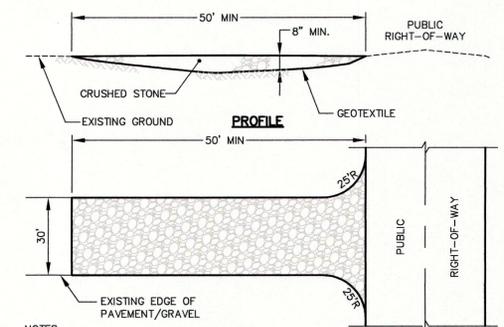
CATCH BASIN INLET PROTECTION
NOT TO SCALE



SEDIMENT BARRIER (EROSION CONTROL MIX)
NOT TO SCALE

- NOTES:
- EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. LARGE PORTIONS OF SILT, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX. THE ORGANIC MATTER CONTENT NEEDS TO BE FIBROUS AND ELONGATED, AND SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS. PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 4" SCREEN AND A MAXIMUM OF 80% PASSING A 0.75" SCREEN AND MAY CONTAIN ROCKS LESS THAN 4" DIAMETER. SOLUBLE SALTS CONTENT SHALL BE <0.4 MMHOS/CM. THE pH SHOULD FALL BETWEEN 5.0 AND 8.0.
 - PLACE BARRIER ALONG A RELATIVELY FLAT CONTOUR. CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES WHERE FINES CAN WASH UNDER THE BARRIER THROUGH GRASS BLADES AND BRANCHES.
 - PLACEMENT OF BARRIER SHOULD BE: - AT TOE OF THE SLOPE. - FROZEN GROUND, BEDROCK OR ROOTED FORESTED AREAS. - THE EDGE OF GRAVEL AND AREAS UNDER CONSTRUCTION.
 - BARRIER SHALL NOT BE USED ADJACENT TO WETLANDS.
 - REMOVE SEDIMENT DEPOSITS WHEN THEY REACH APPROXIMATELY ONE HALF THE HEIGHT OF THE BARRIER.
 - WHEN BARRIER IS DECOMPOSED, CLOGGED WITH SEDIMENT, ERODED, OR INEFFECTIVE, IT MUST BE REPLACED OR REPAIRED. THE BARRIER SHOULD BE RESHAPED AS NECESSARY.

SEDIMENT BARRIER (EROSION CONTROL MIX)
NOT TO SCALE



STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

- NOTES:
- USE CRUSHED STONE. STONE AGGREGATE SIZE -- AASHTO DESIGNATION M 43, SIZE NO. 2 (2 1/2" TO 1 1/2").
 - GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE. ACCEPTABLE MATERIALS ARE TREVIRA SPUNBOND 1135 MIRAFI 600X, OR EQUIVALENT.
 - LENGTH -- AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
 - THICKNESS -- NOT LESS THAN EIGHT (8) INCHES.
 - PROVIDE APPROPRIATE TRANSITION BETWEEN STABILIZED CONSTRUCTION ENTRANCE AND PUBLIC RIGHT-OF-WAY. INGRESS OR EGRESS, SLOPES NO STEEPER THAN 5:1 SLOPE.
 - MAINTENANCE -- THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY REQUIRE PERIODIC REPAIR AND TOP DRESSING WITH ADDITIONAL STONE AS CONDITIONS DEMAND. ALL SEDIMENT SPILLED, DROPPED, WASHED OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED IMMEDIATELY.

STABILIZED CONSTRUCTION ENTRANCE
NOT TO SCALE

SOIL EROSION & SEDIMENT CONTROL NOTES & DETAILS

PRATT ABBOTT CLEANERS
839 ROOSEVELT TRAIL
WINDHAM, MAINE

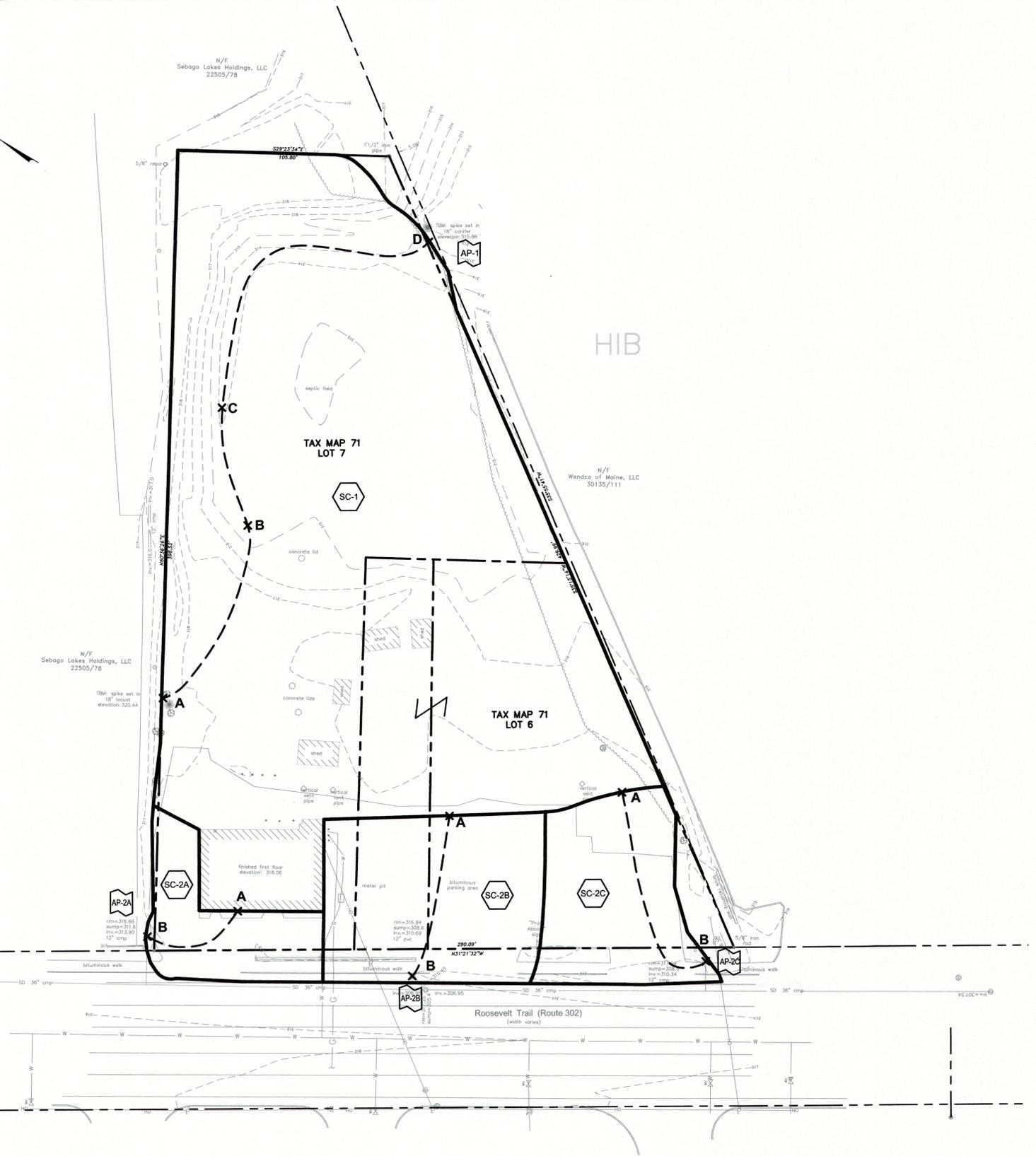
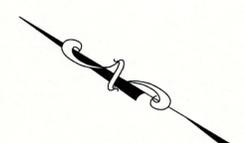
HANNA REALTY ASSOCIATES, LLC
PO BOX 1120
PORTLAND, ME 04104

St. Germain Collins

C-302

846 MAIN ST., WESTBROOK, ME 04092 TEL: 207-591-7000 WWW.STGERMAINCOLLINS.COM

REV.	DATE	REVISION DESCRIPTION	DRAWN	CHK'D
2.	10/21/2016	REVISED PER TOWN COMMENTS	MCA	PJD
1.	09/29/			



LEGEND:

EXISTING	PROPOSED
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	MONUMENTS
	CONTOURS (1')
	CONTOURS (5')
	EDGE OF GRAVEL
	EDGE OF PAVEMENT
	CURB
	PAVEMENT STRIPING
	BUILDINGS
	TREES
	SIGNS
	BOLLARDS
	UTILITY POLE & OVERHEAD LINE
	LIGHTS
	GAS LINE
	WATER SHUTOFF, VALVE, HYDRANT & WATER LINE
	CATCH BASIN & STORM DRAIN
	SUBCATCHMENT
	ANALYSIS POINT
	TIME OF CONCENTRATION FLOW PATH
	WATERSHED BOUNDARY

SC-1 AREA: 62,306 S.F.
 Tc:
 A-B SF L=100' S=0.0150
 B-C SHC L=60' S=0.0330
 C-D C L=170' S=0.0130

SC-2A AREA: 4,107 S.F.
 Tc:
 A-B SF L=60' S=0.0150

SC-2B AREA: 9,076 S.F.
 Tc:
 A-B SF L=80' S=0.0150

SC-2C AREA: 6,614 S.F.
 Tc:
 A-B SF L=107' S=0.0150

SOILS TYPE LEGEND:

HIB HINCKLEY LOAMY SAND (HYDROLOGIC SOIL GROUP: A) - 100% OF SITE

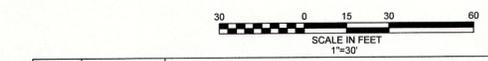
SOIL TYPES FOR THE SITE WERE OBTAINED FROM MEDIUM INTENSITY SOILS MAPPING BY THE NATURAL RESOURCE CONSERVATION SERVICE.

- NOTES:**
1. PLAN REFERENCE: "EXISTING CONDITIONS SURVEY, 839 ROOSEVELT TRAIL, WINDHAM, ME" BY TITCOMB ASSOCIATES, MAY 25, 2015.
 2. ELEVATIONS BASED ON NAVD88 DERIVED FROM GPS OBSERVATIONS.
 3. BEARINGS ARE REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, NAD83, WEST ZONE, DERIVED FROM GPS OBSERVATIONS.

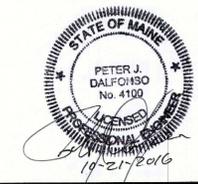
**EXISTING CONDITIONS
WATERSHED PLAN**
 PRATT ABBOTT CLEANERS
 839 ROOSEVELT TRAIL
 WINDHAM, MAINE

HANNA REALTY ASSOCIATES, LLC
 PO BOX 1120
 PORTLAND, ME 04104

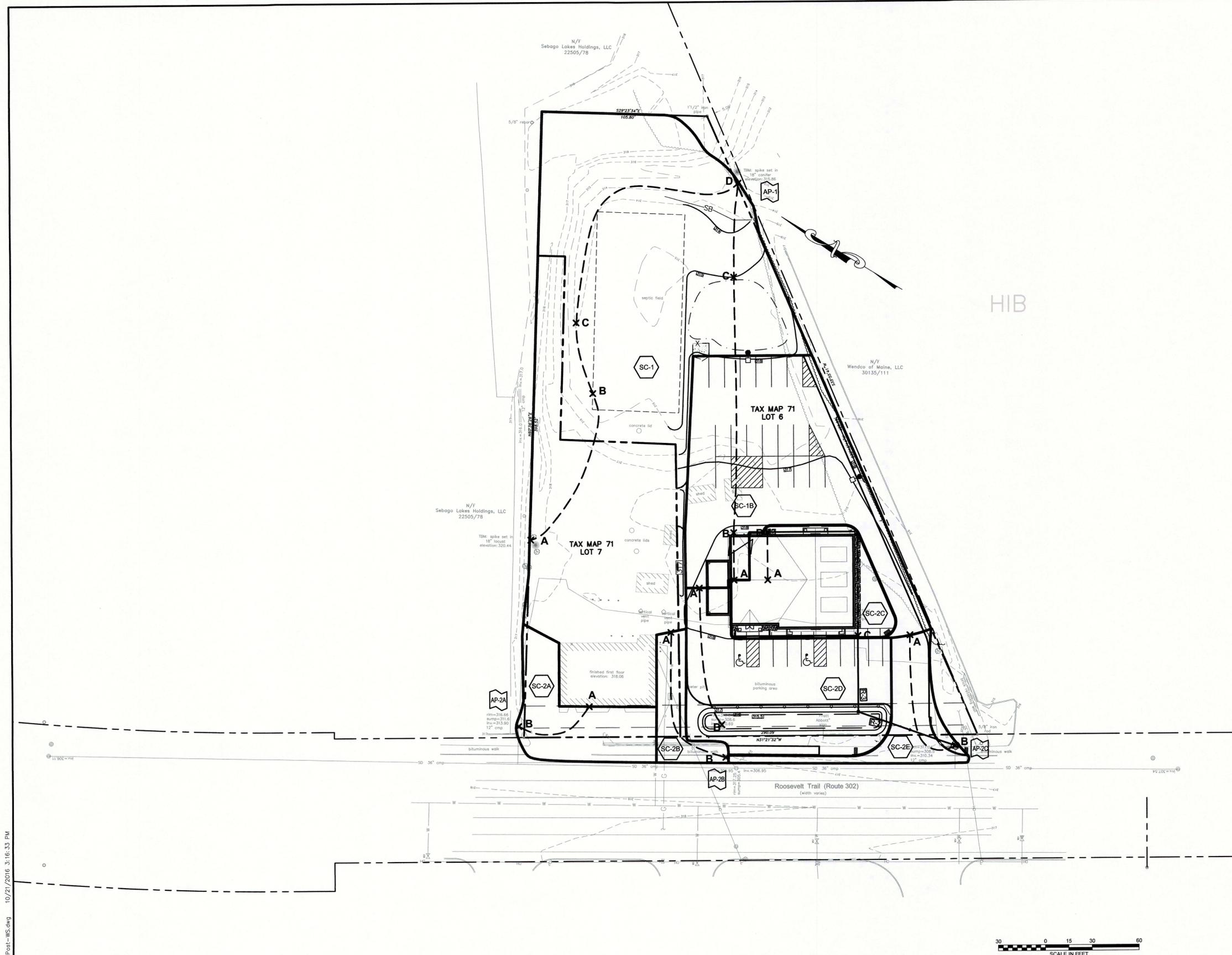
St. Germain • Collins		D-101



REV.	DATE	REVISION DESCRIPTION	DRAWN	CHK'D
2.	10/21/2016	REVISED PER TOWN COMMENTS	MCA	PJD
1.	09/29/2016	SUBMITTED TO TOWN OF WINDHAM	MCA	PJD
REV.	DATE	REVISION DESCRIPTION	DRAWN	CHK'D
DATE:	08/20/2015	SCALE: 1"=30'	PROJECT NO.: 3580	FILE: 3580 D-101 Pre-WS



M:\Dwg\3580 Windham_3580 D-101 Pre-WS.dwg 10/21/2016 3:17:41 PM



LEGEND:

EXISTING	PROPOSED
	PROPERTY LINE
	ADJACENT PROPERTY LINE
	MONUMENTS
	CONTOURS (1')
	CONTOURS (5')
	EDGE OF GRAVEL
	EDGE OF PAVEMENT
	CURB
	PAVEMENT STRIPING
	BUILDINGS
	TREES
	SIGNS
	BOLLARDS
	UTILITY POLE & OVERHEAD LINE
	LIGHTS
	GAS LINE
	WATER SHUTOFF, VALVE, & WATER LINE
	CATCH BASIN & STORM DRAIN
	SUBCATCHMENT
	ANALYSIS POINT
	REACH
	TIME OF CONCENTRATION FLOW PATH
	WATERSHED BOUNDARY

SC-1 AREA: 42,099 S.F.
 Tc:
 A-B SF L=100' S=0.0150
 B-C SHC L=50' S=0.0150
 C-D C L=185' S=0.0130

SC-1B AREA: 14,042 S.F.
 Tc:
 A-B SF L=30' S=0.3300
 B-C SCF L=110 S=0.0200
 C-D SCF L=110 S=0.0200

SC-2A AREA: 4,105 S.F.
 Tc:
 A-B SF L=60' S=0.0150

SC-2B AREA: 1,961 S.F.
 Tc:
 A-B SF L=100' S=0.0150

SC-2C AREA: 6,331 S.F.
 Tc:
 A-B SF L=31' S=0.3300
 B-C CH L=122' S=0.005

SC-2D AREA: 10,370 S.F.
 Tc:
 A-B SF L=89' S=0.0150

SC-2E AREA: 2,924 S.F.
 Tc:
 A-B SF L=91 S=0.0150

SOILS TYPE LEGEND:

HIB HINCKLEY LOAMY SAND (HYDROLOGIC SOIL GROUP: A) - 100% OF SITE

SOIL TYPES FOR THE SITE WERE OBTAINED FROM MEDIUM INTENSITY SOILS MAPPING BY THE NATURAL RESOURCE CONSERVATION SERVICE.

- NOTES:**
1. PLAN REFERENCE: "EXISTING CONDITIONS SURVEY, 839 ROOSEVELT TRAIL, WINDHAM, ME" BY TITCOMB ASSOCIATES, MAY 25, 2015.
 2. ELEVATIONS BASED ON NAVD88 DERIVED FROM GPS OBSERVATIONS.
 3. BEARINGS ARE REFERENCED TO GRID NORTH, MAINE STATE PLANE COORDINATE SYSTEM, NAD83, WEST ZONE, DERIVED FROM GPS OBSERVATIONS.

**PROPOSED CONDITIONS
 WATERSHED PLAN**
 PRATT ABBOTT CLEANERS
 839 ROOSEVELT TRAIL
 WINDHAM, MAINE

HANNA REALTY ASSOCIATES, LLC
 PO BOX 1120
 PORTLAND, ME 04104

St. Germain • Collins

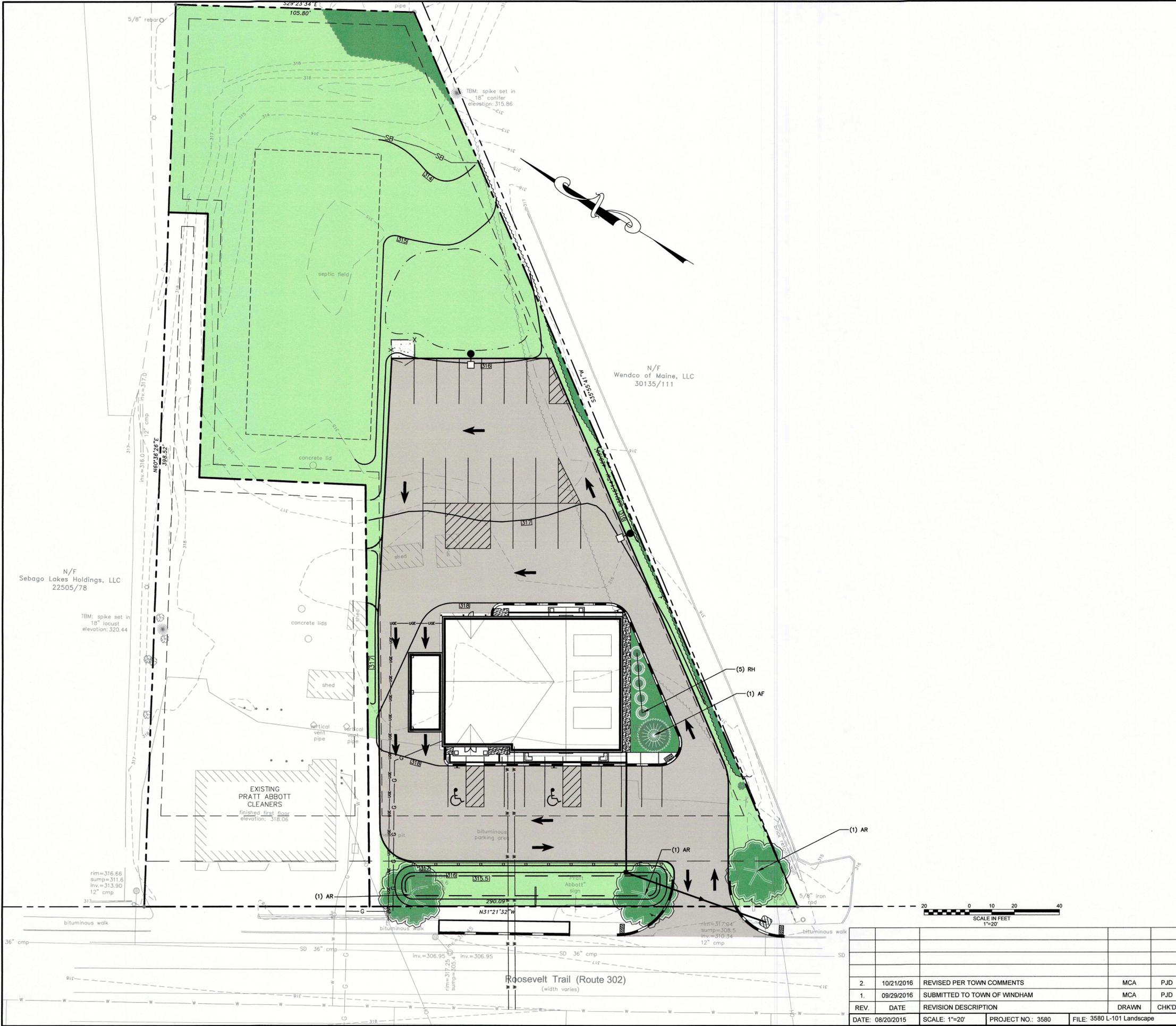
D-102

REV.	DATE	REVISION DESCRIPTION	DRAWN	CHK'D
2.	10/21/2016	REVISED PER TOWN COMMENTS	MCA	PJD
1.	09/29/2016	SUBMITTED TO TOWN OF WINDHAM	MCA	PJD
REV.	DATE	REVISION DESCRIPTION	DRAWN	CHK'D

DATE: 08/20/2015 SCALE: 1"=30' PROJECT NO.: 3580 FILE: 3580 D-102 Post-WS



M:\Dwg\3580 Windham_3580 D-102 Post-WS.dwg 10/21/2016 3:16:33 PM



PLANT LIST:

SYMBOL	ABBREVIATION	BOTANICAL NAME	COMMON NAME	QTY
	AF	ABIES FRASERI	FRASER FIR	1
	AR	ACER RUBRUM 'BURGUNDY BELLE'	RED MAPLE	3
	RH	RHODODENDRON 'AGLO	RHODODENDRON (SMALL-LEAF)	5

LANDSCAPING LEGEND:

	GRASS
	PLANTS
	TREES
	PAVEMENT

LANDSCAPE PLAN

PRATT ABBOTT CLEANERS
839 ROOSEVELT TRAIL
WINDHAM, MAINE

HANNA REALTY ASSOCIATES, LLC
PO BOX 1120
PORTLAND, ME 04104

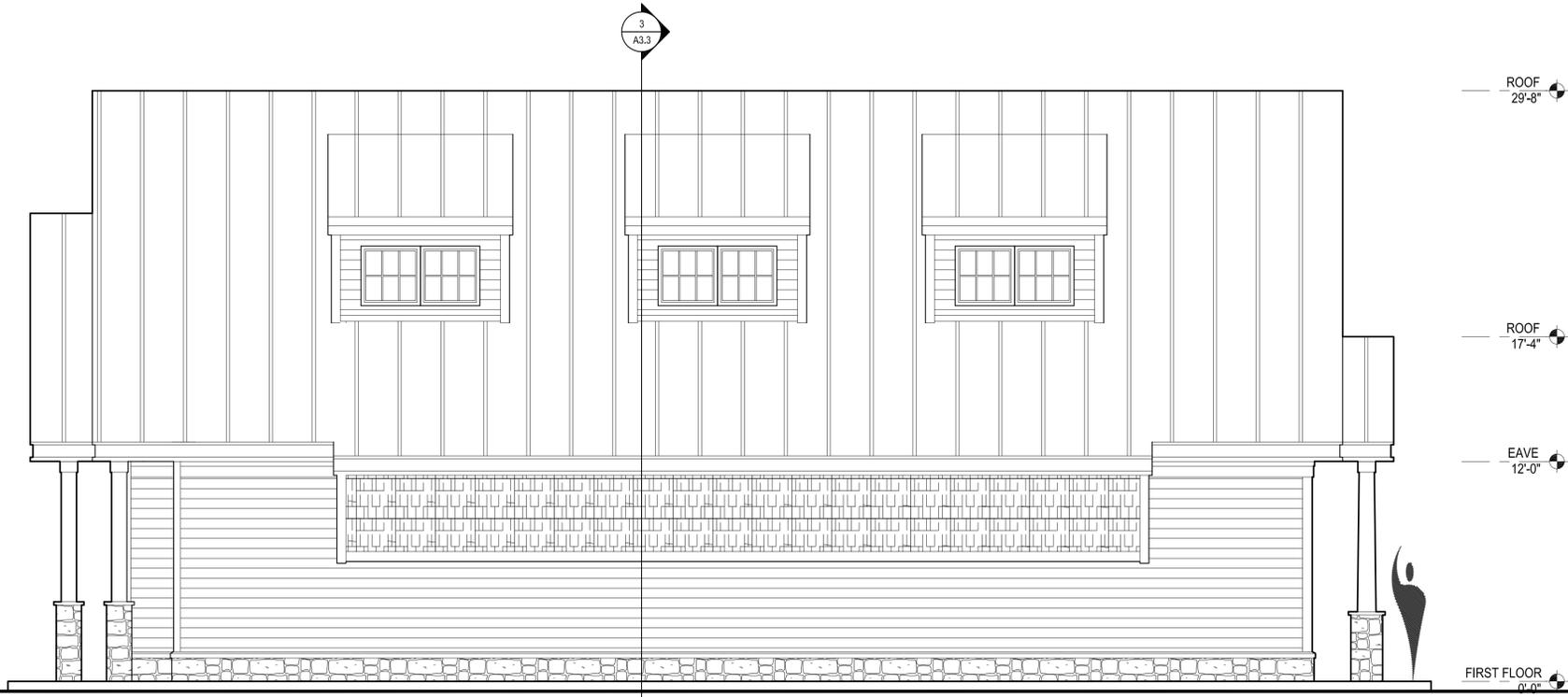
St. Germain • Collins

L-101

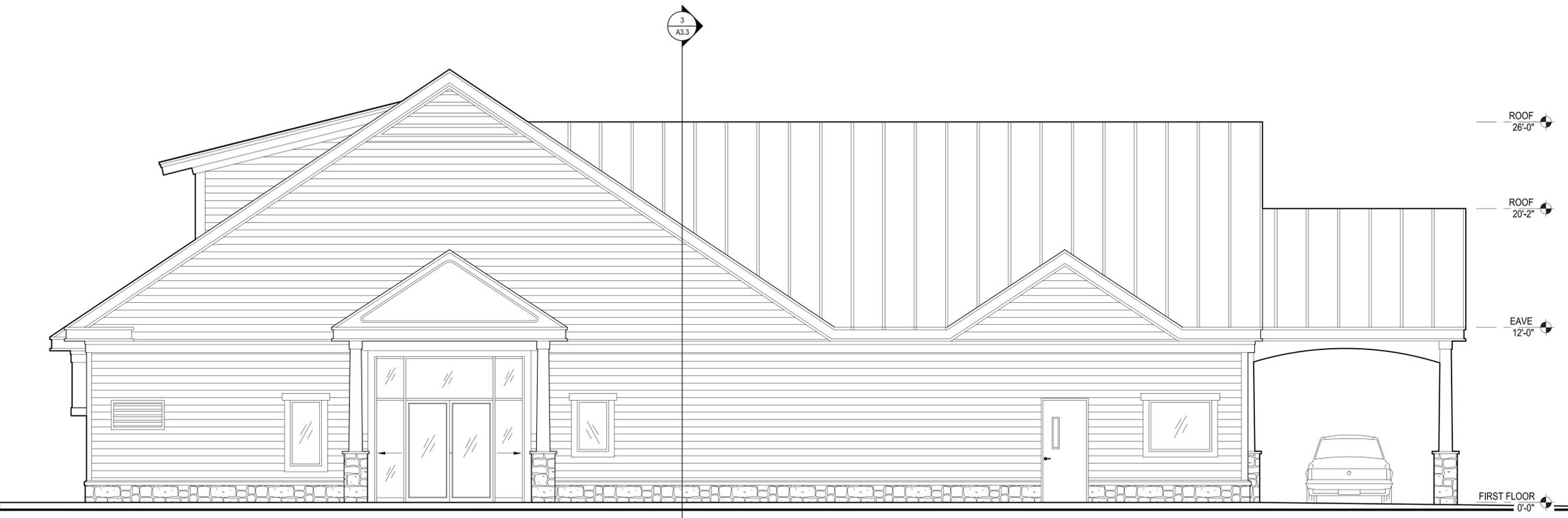
REV.	DATE	REVISION DESCRIPTION	DRAWN	CHKD
2.	10/21/2016	REVISED PER TOWN COMMENTS	MCA	PJD
1.	09/29/2016	SUBMITTED TO TOWN OF WINDHAM	MCA	PJD

DATE: 08/20/2015 SCALE: 1"=20' PROJECT NO.: 3580 FILE: 3580 L-101 Landscape

H:\Drawings\3580 - Windham\3580 L-101 Landscape.dwg 10/21/2016 3:15:25 PM



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



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

DESCRIPTION	
NO.	DATE
REVISIONS	

CUSTOM CONCEPTS, INC.

A R C H I T E C T U R E

383 U.S. ROUTE 1, SUITE 1a, SCARBOROUGH, MAINE 04074
Phone: (207) 883-0083 WWW.CUSTOMCONCEPTS.COM

PROJECT: Pratt Abbott Cleaners, Wintham
JOB NUMBER: 9254-16
DRAWING TITLE: BUILDING ELEVATIONS
DRAWN BY: CMB
SCALE: 1/4" = 1'-0"

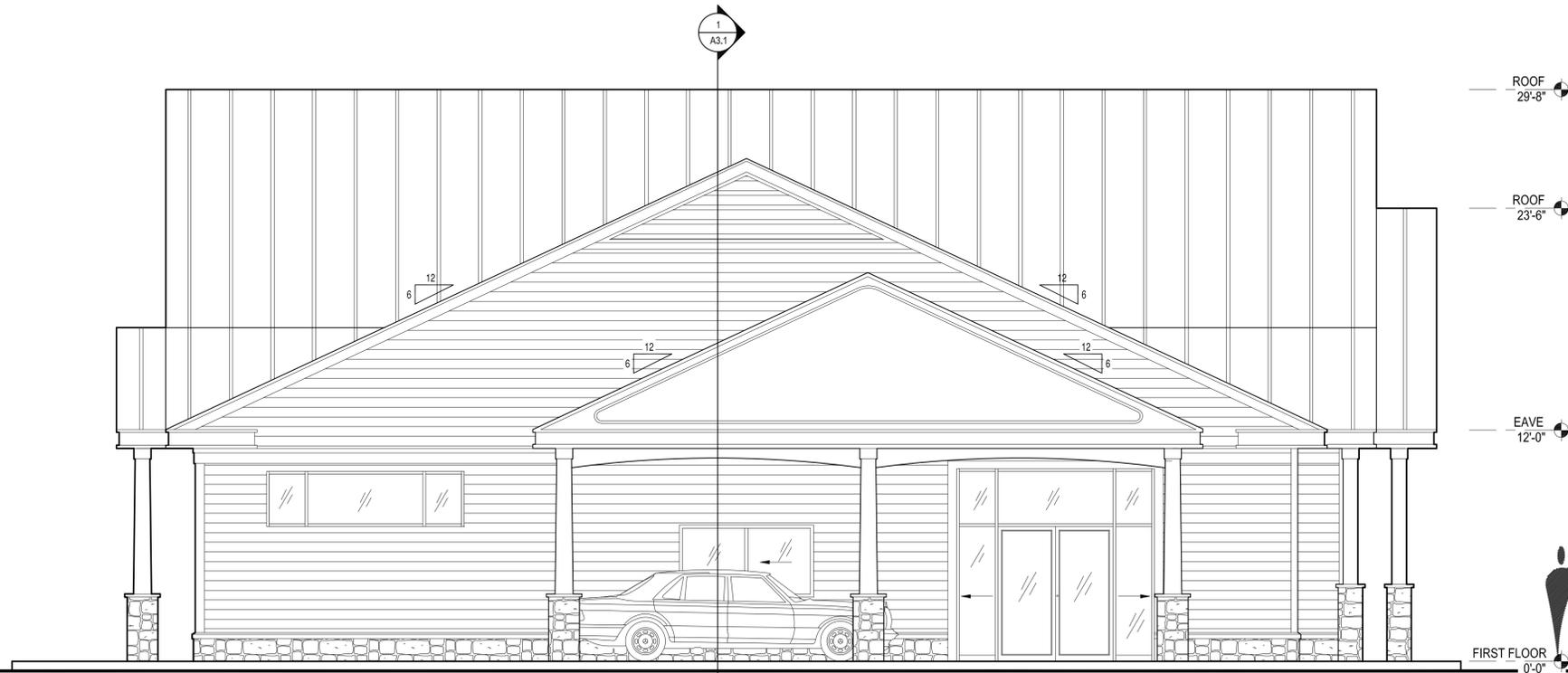
Preliminary Design
 Design Development
 Construction Documents
 CLIENT REVIEW FOR PERMITS
 ESTIMATING

OWNER APPROVAL:

DATE: Sept. 26, 2016

A4.1





ROOF 29'-8"

ROOF 23'-6"

EAVE 12'-0"

FIRST FLOOR 0'-0"

North Elevation
Scale: 1/8" = 1'-0"



ROOF 29'-8"

PAINTED LAPPED WOOD SIDING, 6" EXPOSURE

EAVE 12'-0"

FIRST FLOOR 0'-0"

West Elevation
Scale: 1/8" = 1'-0"

DESCRIPTION	
NO.	DATE
REVISIONS	
CUSTOM CONCEPTS, INC. A R C H I T E C T U R E 383 U.S. ROUTE 1, SUITE 1a, SCARBOROUGH, MAINE 04074 Phone: (207) 883-0083 WWW.CUSTOMCONCEPTS.COM PROJECT: Pratt Abbott Cleaners, Wintham JOB NUMBER: 9254-16 DRAWING TITLE: BUILDING ELEVATIONS DRAWN BY: CMB SCALE: 1/4" = 1'-0" OWNER APPROVAL:	
<input type="checkbox"/> Design Documents <input type="checkbox"/> Development Documents <input type="checkbox"/> Preliminary Design Documents <input checked="" type="checkbox"/> CLIENT REVIEW FOR PERMITS <input type="checkbox"/> CLIENT REVIEW FOR PERMITS ESTIMATING	
DATE: Sept. 26, 2016	
A4.2	