

NOTES
 1.) BEARINGS ARE REFERENCED TO GRID NORTH.
 2.) ELEVATIONS ARE NAVD88 COMPUTED USING GEOID03.
 (ELEVATIONS CHANGED TO 1929 DATUM)

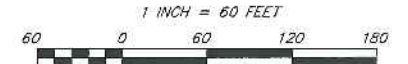
- REFERENCES**
- 1.) PLAN OF THE REDEFINITION OF LEDGEWOOD DRIVE (COBB ROAD) DATED SEPT. 21, 1955 MADE BY H.L. & E.C. JORDAN AS RECORDED IN THE CUMBERLAND COUNTY COMMISSIONERS OFFICE IN PLAN BOOK 7, PAGE 19.
 - 2.) PLAN ENTITLED "PLAN OF PROPERTY" MADE FOR TIM O'DONOVAN DATED JUNE 9, 1992 BY CULLENBERG LAND SURVEYING.
 - 3.) PLAN ENTITLED "PLAN OF PROPERTY" MADE FOR KEVIN O'DONOVAN DATED OCTOBER 26, 1999 BY CULLENBERG LAND SURVEYING.
 - 4.) SKETCH PLAN MADE FOR SUSAN FORBES DATED AUGUST 26, 2001 BY NORTHEAST CIVIL SOLUTIONS AS RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 201, PAGE 349.

- LEGEND**
- IRON PIN FOUND
 - IRON PIN SET
 - MONUMENT FOUND
 - ⊙ UTILITY POLE
 - EDGE OF PAVEMENT
 - ▧ EXISTING BUILDING
 - *** FENCE LINE
 - ⊞ STONE WALL
 - ⊕ WATER VALVE
 - ⊞ CATCHBASIN
 - ⊕ HYDRANT
 - N/F NOW OR FORMERLY
 - ⊙ TEST BORING

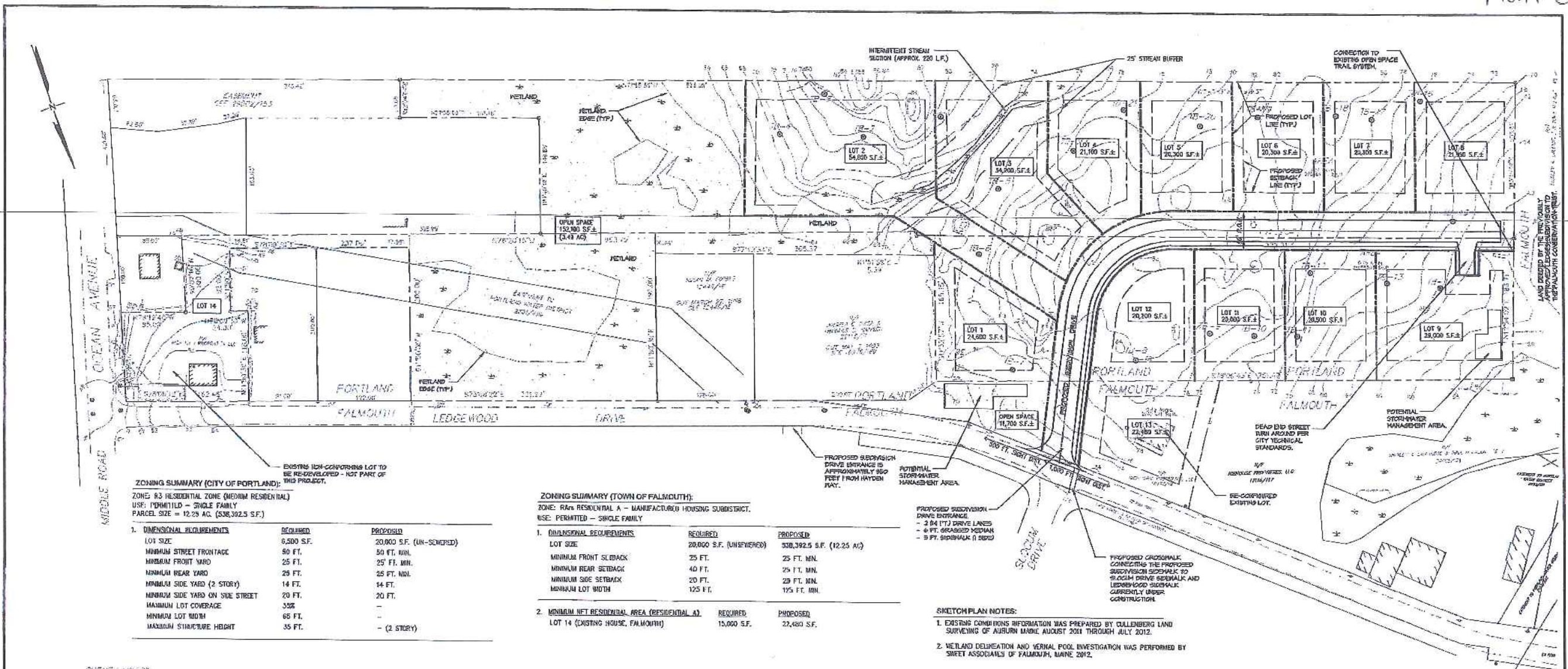
CUMBERLAND Co. REGISTRY OF DEEDS
 RECEIVED _____, 20____
 at _____ M. M. _____
 PLAN BOOK _____, PAGE _____
 ATTEST _____ REGISTER

OWNER OF RECORD
 IPO PROPERTIES, LLC
 28797/218
 28002/153

KEVIN W. CULLENBERG PLS 1278



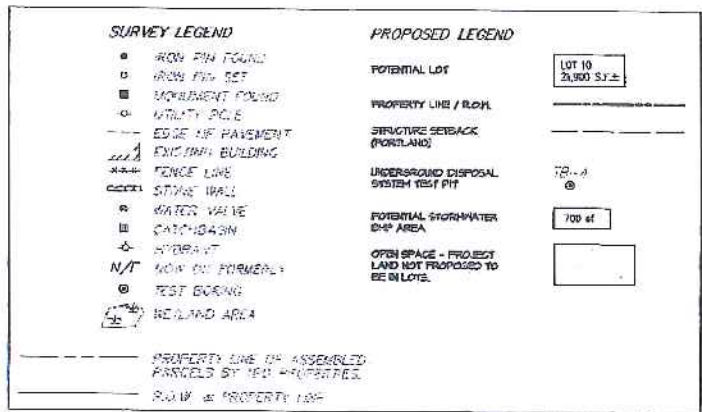
PLAN OF PROPERTY
 OCEAN AVE. & LEDGEWOOD DRIVE
 PORTLAND, MAINE
 MADE FOR
TIM O'DONOVAN
 AUGUST 27, 2011
 BY
 CULLENBERG LAND SURVEYING
 892 OLD DANVILLE ROAD
 AUBURN, MAINE 04210
 (207) 777-1150



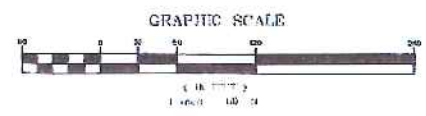
SURVEY NOTES
 1.) BEARINGS ARE REFERENCED TO GRID NORTH.
 2.) ELEVATIONS ARE NAVD83 COMPUTED USING REDUCCI

SURVEY REFERENCES
 1.) PLAN OF THE REDEVELOPMENT OF LEDGEWOOD DRIVE (MIDDLE ROAD) DATED 04/11/2011 MADE BY H.P. & C.P. BORDAN AS RECORDED IN THE CUMBERLAND COUNTY COMMISSIONERS OFFICE IN PLAN BOOK 7, PAGE 12.
 2.) PLAN ENTITLED "PLAN BY PROPERTY" MADE FOR TIM OGDONIAN DATED JUNE 9, 1992 BY CULLENBERG LAND SURVEYING.
 3.) PLAN ENTITLED "PLAN BY PROPERTY" MADE FOR KEVIN OGDONIAN DATED OCTOBER 20, 1999 BY CULLENBERG LAND SURVEYING.
 4.) SKETCH PLAN MADE FOR SIKAN FORBES DATED AUGUST 28, 2001 BY HORTONCAST ONE SOLUTIONS AS RECORDED IN THE CUMBERLAND COUNTY REGISTER OF DEEDS IN PLAN BOOK 201, PAGE 348.

OWNER OF RECORD
 TPO PROPERTIES, LLC
 25792 20th
 04024, ME



SKETCH PLAN NOTES:
 1. EXISTING CONDITIONS INFORMATION WAS PREPARED BY CALLENBERG LAND SURVEYING OF AUBURN MAINE, AUGUST 2011 THROUGH JULY 2012.
 2. WETLAND DELINEATION AND VERNAL POOL INVESTIGATION WAS PERFORMED BY SIREET ASSOCIATES OF FALMOUTH, MAINE, 2012.



REV.	DATE	STATUS	BY	CHKD/APPD.	REV.	DATE	STATUS	BY	CHKD/APPD.
B	8/23/12	REVISED AND ISSUED TO THE CITY OF PORTLAND FOR SKETCH PLAN REVIEW	DEPT.	PBB					
A	7/5/12	ISSUED TO TOWN OF FALMOUTH FOR SKETCH PLAN REVIEW	DEPT.	PBB					



LAND DESIGN SOLUTIONS
 LAND PLANNING, SITE PLANNING & LANDSCAPE ARCHITECTURE
 P.O. Box 316, 150 Longwoods Road, Cumberland, ME 04131 141.2571 434-7111
 CLIENT: **TPO PROPERTIES, LLC**
 30 LEDGEWOOD DRIVE, FALMOUTH, MAINE 04104

PROPOSED RESIDENTIAL SUBDIVISION
 1062 OCEAN AVENUE, PORTLAND, MAINE

SKETCH PLAN

DESIGN: PBB
 DRAWN: DEP1
 CHKD: PBB

DATE: MAY 2012
 SCALE: 1"=60'

PROJ. NO.
 DWG. NO.

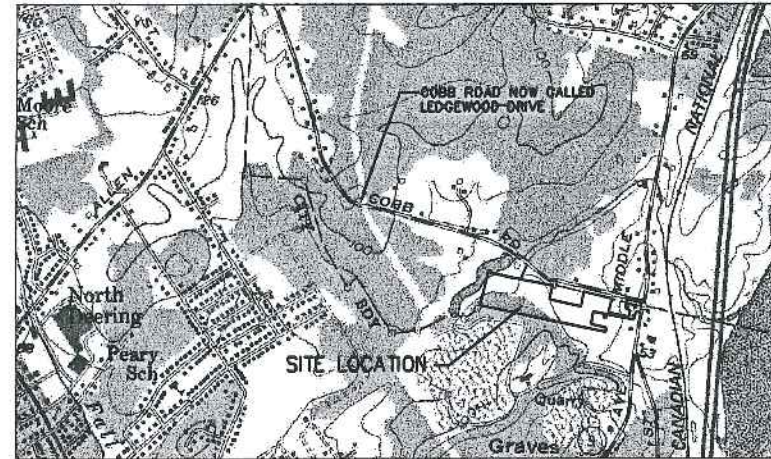
REV. B

S-101

OLD BARN ESTATES

Plan 4
2nd Workshop

1062 Ocean Avenue (Ledgewood Drive), Portland / Falmouth, Maine



PLAN LIST

- SUBDIVISION PLAT PLAN (RECORDING PLAN 1 OF 2)
- S-101 SUBDIVISION PLAN (RECORDING PLAN 2 OF 2)
- C-101 LOT DEVELOPMENT AND LANDSCAPE PLAN
- C-201 GRADING, DRAINAGE & EROSION CONTROL PLAN
- C-202 PROFILE PLAN
- C-300 EROSION & SEDIMENTATION CONTROL NOTES AND DETAILS
- C-301 SITE DETAILS
- C-302 SITE DETAILS
- C-303 SITE DETAILS
- D-100 PRE-DEVELOPMENT DRAINAGE PLAN
- D-101 OFF-SITE SUBCATCHMENT PLAN
- D-102 POST DEVELOPMENT DRAINAGE PLAN

OWNER / DEVELOPER:
TPO PROPERTIES LLC
90 Ledgewood Drive
Falmouth, ME 04104

SITE PLANNER & LANDSCAPE ARCHITECT:
LAND DESIGN SOLUTIONS
P.O. Box 316
160 Longwoods Road
Cumberland, Maine 04021
(207) 939-1717

CIVIL ENGINEER:
SITE DESIGN ASSOCIATES
25 Whitney Way
Topsham, Maine 04086

SURVEYOR:
CULLENBERG LAND SURVEYING
892 Old Danville Road
Auburn, Maine 04210

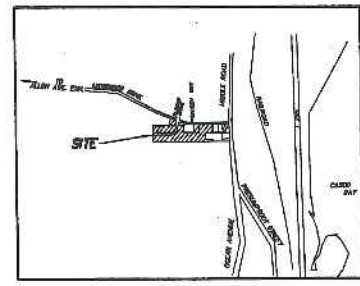
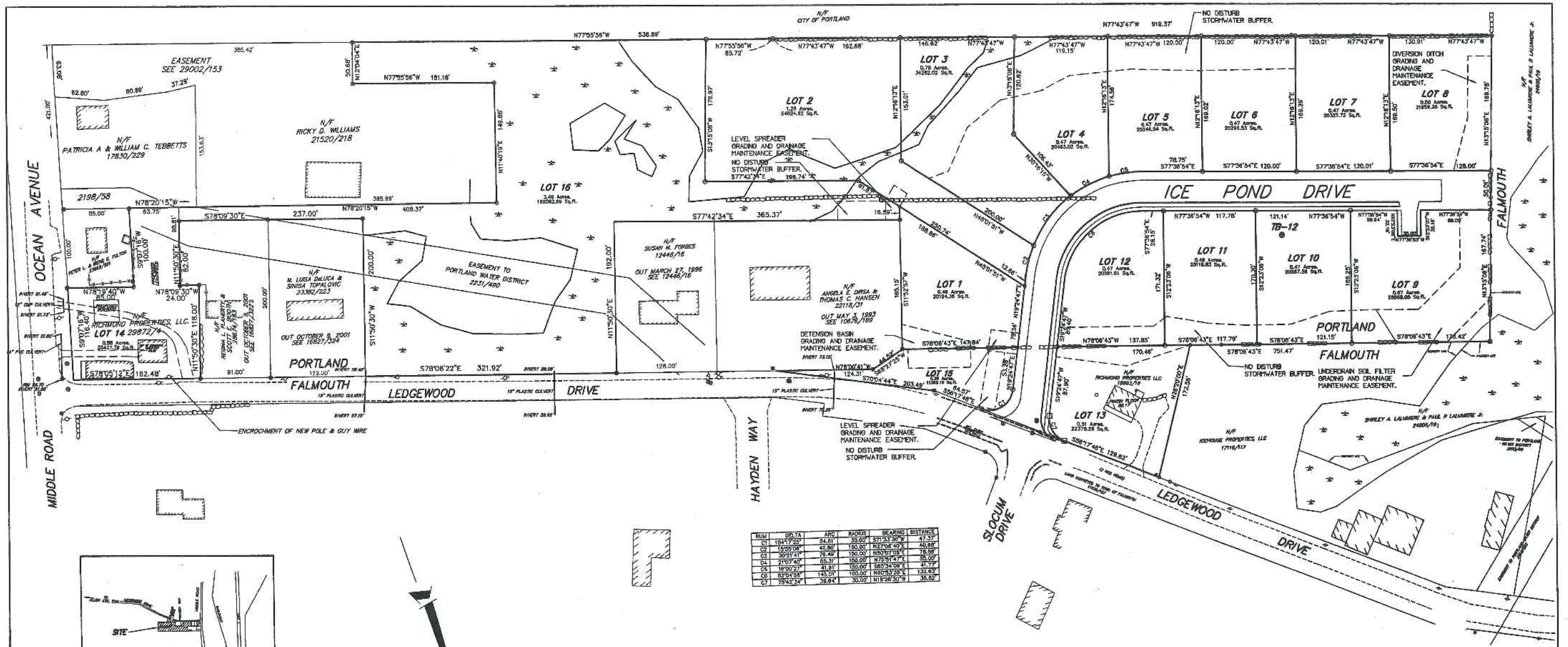
WETLAND AND SOIL SCIENTISTS:
SWEET ASSOCIATES
155 GRAY ROAD
FALMOUTH, MAINE 04105

TRAFFIC ENGINEER:
EATON TRAFFIC ENGINEERING
67 Winter Street, Suite 5
Topsham, Maine 04086

Drawing Made: 10/10/13 10:00 AM (Date) / 10:00 AM (Time) / 10/10/13 / 10:00 AM

										LAND DESIGN SOLUTIONS		DESIGN: PBB		OLD BARN ESTATES	
										LAND PLANNING, SITE PLANNING & LANDSCAPE ARCHITECTURE		DRAWN: DEPT.		1062 OCEAN AVENUE, PORTLAND, MAINE	
										P.O. Box 316, 160 Longwoods Road, Cumberland, ME 04021 Tel: (207) 939-1717		CHKD: PBB		COVER	
										CLIENT:		DATE: MAY 2012		PROJ. NO. -	
										TPO PROPERTIES, LLC		SCALE: -		DWG. NO. -	
										30 LEDGEWOOD DRIVE, FALMOUTH, MAINE 04104				REV. A	
REV.	DATE	STATUS	BY	CHKD	APPD.	REV.	DATE	STATUS	BY	CHKD	APPD.				
-	1/01/13	ISSUED TO THE CITY OF PORTLAND FOR WORKSHOP		PBB	PBB										

Plan 5 2nd wkshp



- NOTES**
- 1.) BEARINGS ARE REFERENCED TO GRID NORTH.
 - 2.) ELEVATIONS ARE NGVD29.
 - 3.) LOCATION OF ALL BUILDINGS OFF OF TPO PROPERTIES, RICHMOND PROPERTIES AND ICEHOUSE PROPERTIES ARE APPROXIMATE.
 - 4.) LOTS 15 & 16 ARE NOT BUIDABLE LOTS.

- REFERENCES**
- 1.) PLAN OF THE REDEFINITION OF LEDGEWOOD DRIVE (COBB ROAD) DATED SEPT. 21, 1955 MADE BY H.L. & E.C. JORDAN AS RECORDED IN THE CUMBERLAND COUNTY COMMISSIONERS OFFICE IN PLAN BOOK 7, PAGE 19.
 - 2.) PLAN ENTITLED "PLAN OF PROPERTY" MADE FOR TIM O'DONOVAN DATED JUNE 9, 1992 BY CULLENBERG LAND SURVEYING.
 - 3.) PLAN ENTITLED "PLAN OF PROPERTY" MADE FOR KEVIN O'DONOVAN DATED OCTOBER 26, 1999 BY CULLENBERG LAND SURVEYING.
 - 4.) SKETCH PLAN MADE FOR SUSAN FORBES DATED AUGUST 28, 2001 BY NORTHEAST CIVIL SOLUTIONS AS RECORDED IN THE CUMBERLAND COUNTY REGISTRY OF DEEDS IN PLAN BOOK 201, PAGE 349.

APPROVED BY THE TOWN OF FALMOUTH, MAINE
PLANNING BOARD dated _____

APPROVED BY THE CITY OF PORTLAND, MAINE
PLANNING BOARD dated _____

- LEGEND**
- IRON PIN FOUND
 - IRON PIN SET
 - MONUMENT FOUND
 - MONUMENT SET
 - UTILITY POLE
 - - - EDGE OF PAVEMENT
 - ▤ EXISTING BUILDING
 - FENCE LINE
 - ▢ STONE WALL
 - WATER VALVE
 - CATCHBASIN
 - ◇ HYDRANT
 - N/F NOW OR FORMERLY
 - TEST BORING

OWNER OF RECORD
TPO PROPERTIES, LLC
28797/218
29002/153

CUMBERLAND REGISTRY OF DEEDS
RECEIVED _____ 20____
at _____ M _____ M _____
PLAN BOOK _____ PAGE _____
ATTEST _____ REGISTER

1 INCH = 60 FEET

60 0 60 120 180

KEVIN W. CULLENBERG PLS 1278



PLAN 1 OF 2

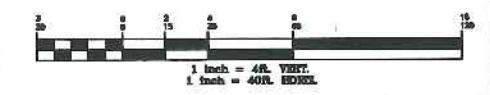
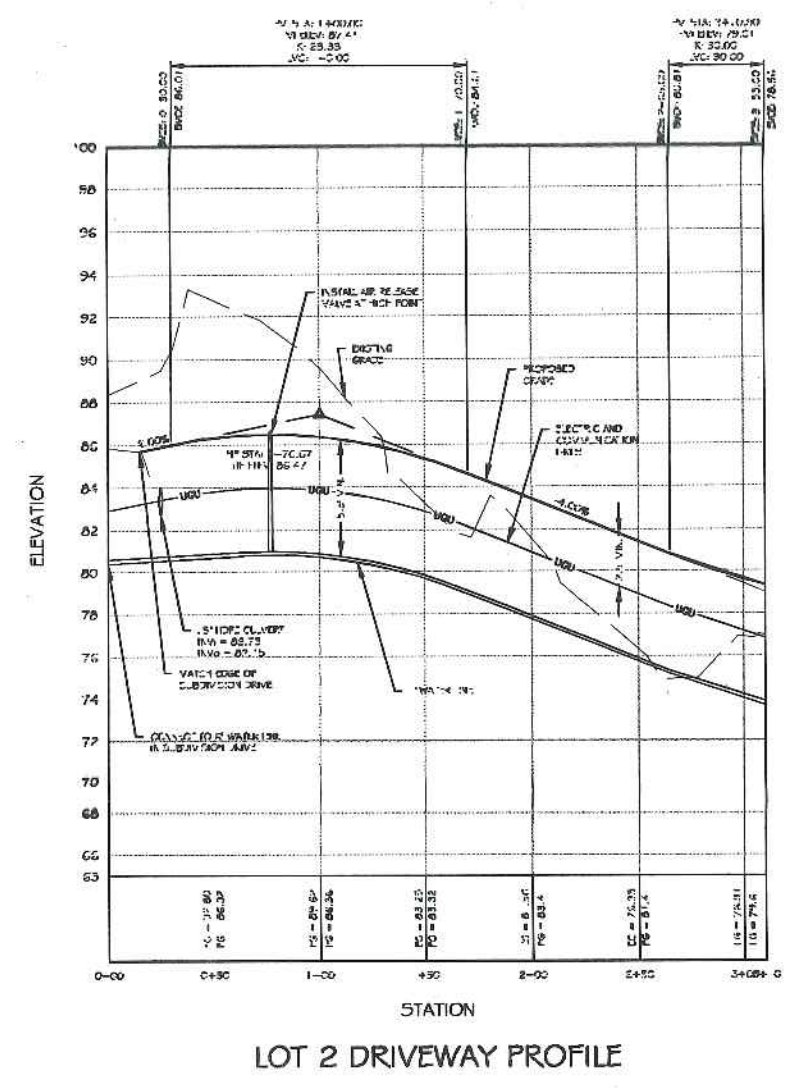
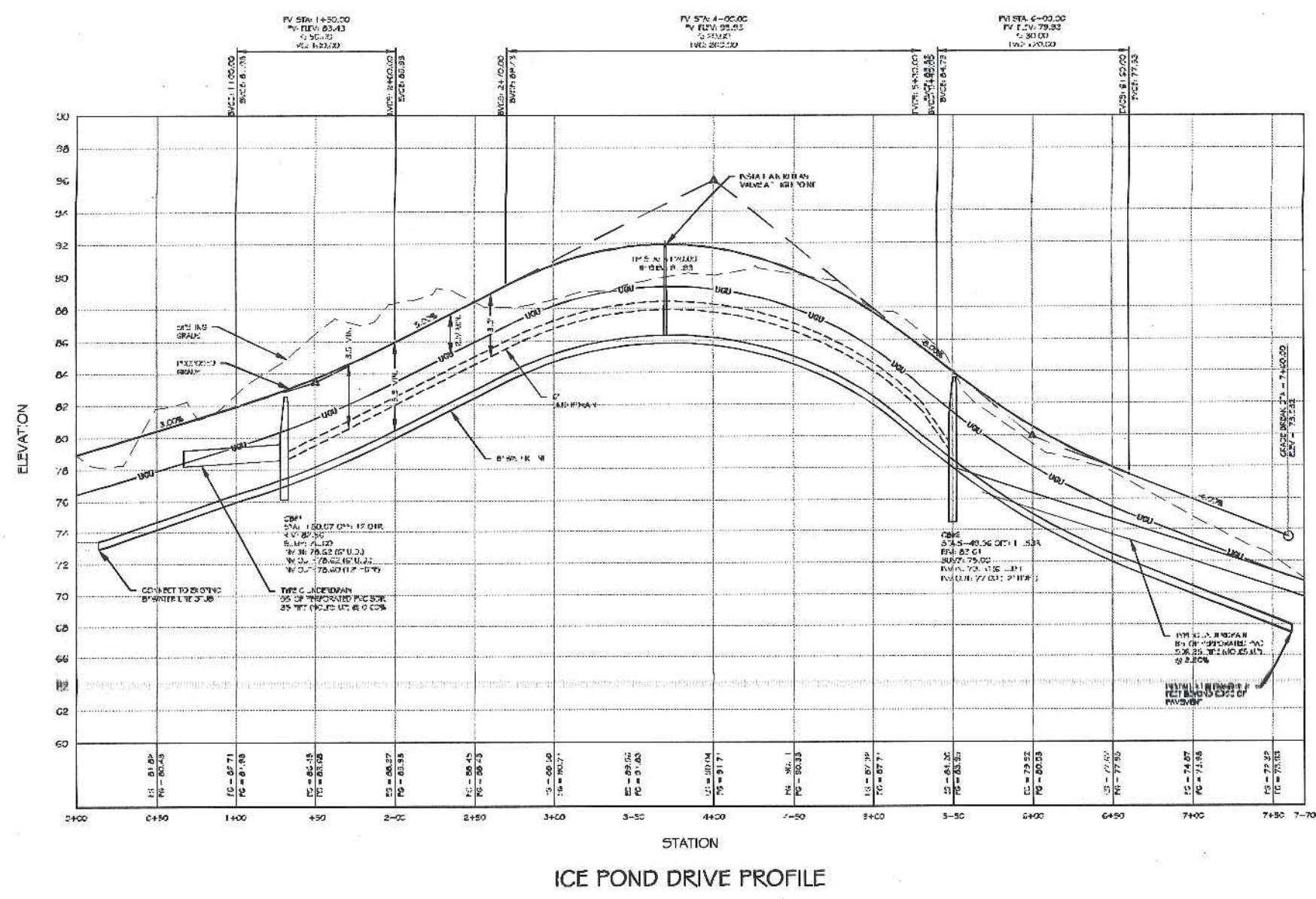
OLD BARN ESTATES
OCEAN AVE. & LEDGEWOOD DRIVE
PORTLAND & FALMOUTH, MAINE

MADE FOR

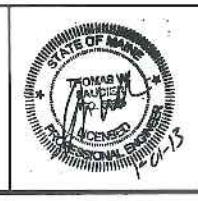
TIM O'DONOVAN
30 LEDGEWOOD DRIVE FALMOUTH, MAINE
DECEMBER 27, 2012

BY
CULLENBERG LAND SURVEYING
892 OLD DANVILLE ROAD
AUBURN, MAINE 04210
(207) 777-1150

Plan 9 2nd workshop



REV.	DATE	STATJS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
A	1/1/13	ISSUED FOR CITY OF PORTLAND WORKSHOP									



LAND DESIGN SOLUTIONS
 LAND PLANNING, SITE PLANNING & LANDSCAPE ARCHITECTURE
 P.O. Box 516, 160 Longwood Road, Cumberland, ME 04021 Tel: (207) 694-1111
 CLIENT: **TPO PROPERTIES, LLC**
 30 LEDGEWOOD DRIVE, FALMOUTH, MAINE 04104

DESIGN: PEB	FRONT NO.:	REV.:
DRAWN: DEPT.	DWG. NO.:	
CHKD: PEB		
DATE: MAY 2012		
SCALE: AS NOTED		
OLD BARN ESTATES 1082 OCEAN AVENUE, PORTLAND, MAINE		
PROFILES		
C-202		

EROSION AND SEDIMENTATION CONTROL NOTES & DETAILS

TEMPORARY EROSION AND SEDIMENTATION CONTROL MEASURES INCLUDE THE USE OF STABILIZED CONSTRUCTION ENTRANCE, SEDIMENT BARRIERS, EROSION CONTROL MIX, STONE CHECK DAMS, HAY BALE BARRIERS, CATCH BASIN INLET BARRIERS, CATCH BASIN SEDIMENT COLLECTION BAGS, EROSION CONTROL BLANKET, AND TEMPORARY SEEDING AND MULCHING AS REQUIRED. PERMANENT DEVICES INCLUDE THE USE OF RIP RAP AT EXPOSED STORM DRAIN AND CULVERT INLETS AND OUTLETS, RIP RAPPED SLOPES, AND PERMANENT VEGETATION.

A. GENERAL

- IT IS ANTICIPATED THAT CONSTRUCTION WILL BEGIN AS SOON AS POSSIBLE FOLLOWING RECEIPT OF NECESSARY PERMITS.
- ALL SOIL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE CONSTRUCTED AND MAINTAINED IN ACCORDANCE WITH THE MAINE EROSION AND SEDIMENT CONTROL BMPs, PUBLISHED BY THE BUREAU OF LAND AND WATER QUALITY MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, LATEST EDITION.
- ANY ADDITIONAL EROSION AND SEDIMENTATION CONTROL DEEMED NECESSARY BY THE OWNER'S REPRESENTATIVE, DEPARTMENT OF ENVIRONMENTAL PROTECTION (DEP) PERSONNEL AND/OR MUNICIPAL OFFICIALS SHALL BE INSTALLED BY THE CONTRACTOR.
- THE CONTRACTOR IS RESPONSIBLE FOR ALL FINES RESULTING FROM EROSION OR SEDIMENTATION FROM THE SITE TO SURROUNDING PROPERTIES, WATER BODIES, OR WETLANDS AS A RESULT OF THIS PROJECT.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE REPAIR/REPLACEMENT/MAINTENANCE OF ALL EROSION CONTROL MEASURES UNTIL ALL DISTURBED AREAS ARE STABILIZED TO THE SATISFACTION OF THE ABOVE PERSONNEL. DESCRIPTIONS OF ACCEPTABLE PERMANENT STABILIZATION FOR VARIOUS COVER TYPES FOLLOWS:
 - FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% RESTORED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR BILLING OF THE TOPSOIL.
 - FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLIPPING OF THE SOD OR DIE-OFF.
 - FOR MULCHED AREAS, PERMANENT MULCHING 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.
 - FOR AREAS STABILIZED WITH RIPRAP, PERMANENT STABILIZATION MEANS THAT 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.
 - PAVED AREAS: FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.
 - FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIP RAP, OR WITH ANOTHER NON-ERODIVE LINING CAPABLE OF WITHSTANDING THE ANTICIPATED FLOW VELOCITIES AND FLOW DEPTHS WITHOUT RELIANCE ON CHECK DAMS TO SLOW FLOW THERE MUST BE NO EVIDENCE OF SLAMMING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN CUTTING OF THE CHANNEL.

B. EROSION AND SEDIMENTATION CONTROL MEASURES

- PRIOR TO THE BEGINNING OF CONSTRUCTION, A STABILIZED CONSTRUCTION ENTRANCE AND TEMPORARY SILT FENCE SHALL BE INSTALLED AS SHOWN ON THE PLANS OR AS DIRECTED BY THE OWNER'S REPRESENTATIVE. IT IS THE INTENT THAT SEDIMENT BARRIERS BE INSTALLED DOWN GRADIENT OF ALL DISTURBED AREAS OF THE SITE. SEDIMENT BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. ANY REQUIRED REPAIRS WILL BE MADE IMMEDIATELY. SEDIMENT DEPOSITS SHALL BE PERIODICALLY REMOVED FROM THE UPSTREAM SIDE OF THE SEDIMENT BARRIERS. THIS SEDIMENT WILL BE SPREAD AND STABILIZED IN AREAS OF THE SITE NOT SUBJECT TO EROSION. SEDIMENT BARRIERS SHALL BE REPLACED AS NECESSARY TO PROVIDE PROPER FILTERING ACTION. IF THERE ARE SIGNS OF UNDERCUTTING AT THE CENTER OR IMPOUNDING OF LARGE VOLUMES OF WATER BEHIND THEM, THEY WILL BE REPLACED WITH A TEMPORARY CRUSHED STONE CHECK DAM.
 - ALL DITCH BASINS, NEW OR EXISTING, THAT MAY RECEIVE RUNOFF FROM DISTURBED AREAS MUST BE PROTECTED DURING CONSTRUCTION. INSPECT & CLEAN OUT AS NECESSARY. LEGALLY DISPOSE OF SEDIMENT & REMOVE FLOATABLES WITH OIL ABSORBENT PADS AS APPLICABLE.
 - REMOVAL OF SODS, TREES, BUSHES AND OTHER VEGETATION AND SOIL DISTURBANCE WILL BE KEPT TO A MINIMUM WHILE ALLOWING PROPER SITE DEVELOPMENT.
 - GRUBBINGS AND ANY UNUSABLE TOPSOIL SHALL BE STRIPPED AND REMOVED FROM THE PROJECT SITE AND DISPOSED OF IN AN APPROVED MANNER.
 - ANY SUITABLE TOPSOIL WILL BE STRIPPED AND STOCKPILED FOR REUSE IN FINAL GRADING. TOPSOIL WILL BE STOCKPILED IN A MANNER SUCH THAT NATURAL DRAINAGE IS NOT OBSTRUCTED AND NO OFF-SITE SEDIMENT DAMAGE WILL BECAUSE OF A STOCKPILE. STOCKPILES WILL BE TEMPORARILY SEEDED WITH ARBORESCENT RYE, ANNUAL OR PERENNIAL RYE GRASS (DEPENDENT ON DATE SEEDING) WITHIN 7 DAYS OF FORMATION, OR TEMPORARILY MULCHED IF SEEDING CANNOT BE DONE WITHIN THE RECOMMENDED SEEDING DATES.
 - TEMPORARY DIVERSION BERMS AND DRAINAGE SWALES SHALL BE CONSTRUCTED AS NECESSARY.
 - TEMPORARY STABILIZATION SHALL BE CONDUCTED WITHIN 7 DAYS OF INITIAL DISTURBANCE OF SOILS. PRIOR TO ANY RAIN EVENT, AND PRIOR TO ANY WORK SHUT DOWN LASTING MORE THAN ONE DAY, TEMPORARY STABILIZATION INCLUDES SEED, MULCH, OR OTHER NON-ERODIBLE COVER AREAS WITHIN 75 FEET OF WETLANDS SHALL BE TEMPORARILY STABILIZED WITHIN 48 HOURS OR PRIOR TO RAIN EVENT.
 - APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
 - TEMPORARY SEEDING SPECIFICATIONS: WHERE THE SEEDBED HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF 4 INCHES BEFORE APPLYING FERTILIZER, LIME, AND SEED. APPLY LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB PER 1,000 SQUARE FEET) AND 10-10-10 (N-P205-K20) FERTILIZER AT A RATE OF 800 LBS. PER ACRE (13.8 LB. PER 1,000 SQUARE FEET). UNIFORMLY APPLY SEED AT THE RECOMMENDED SEEDING RATES AND DATES. APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
- RECOMMENDED TEMPORARY SEEDING DATES AND APPLICATION RATES ARE AS FOLLOWS:
- ARBORESCENT RYE: RECOMMENDED SEEDING DATES: 8/15 - 10/1
APPLICATION RATE: 112 LBS./ACRE
- ANNUAL RYE GRASS: RECOMMENDED SEEDING DATES: 4/1 - 7/1
APPLICATION RATE: 40 LBS./ACRE
- PERENNIAL RYE GRASS: RECOMMENDED SEEDING DATES: 8/15 - 9/15
APPLICATION RATE: 40 LBS./ACRE

- IF THE AREA WILL REMAIN UNWORKED FOR MORE THAN ONE YEAR OR HAS BEEN BROUGHT TO FINAL GRADE AND WILL NOT BE BUILT ON, THEN IMMEDIATELY PROVIDE PERMANENT STABILIZATION USING VEGETATION THROUGH PLANTING, SEEDING, SOD, OR THROUGH THE USE OF PERMANENT MULCH OR RIPRAP. IF USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION

FOR THE LIGHT, MOISTURE AND SOIL CONDITIONS. AMONG AREAS OF DISTURBED SUBSOIL WITH TOP SOIL OR OTHER ORGANIC AMENDMENTS, PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY EROSION CONTROL, BLANKETS, AND SCHEDULE SOODING, PLANTING, AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS. NEWLY SEED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC, EXCESSIVE PEDESTRIAN TRAFFIC, AND CONCENTRATED RUNOFF. UNTIL THE VEGETATION IS WELL ESTABLISHED, AREAS MUST BE REWORKED AND RESTABILIZED. IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT.

- PERMANENT SEEDING SPECIFICATION. IF A LANDSCAPE PLAN HAS BEEN PREPARED FOR THE PROJECT, SOIL PREPARATION AND SEEDING OF THAT PLAN SHALL SUPERSEDE THESE GENERAL PERMANENT SEEDING SPECIFICATIONS. IT IS RECOMMENDED THAT PERMANENT SEEDING BE COMPLETED BETWEEN APRIL 1 AND AUGUST 15 OF EACH YEAR. LATE SEASON SEEDING MAY BE DONE BETWEEN AUGUST 15 AND SEPTEMBER 15. AREAS NOT SEED OR WHICH DO NOT OBTAIN A SATISFACTORY GROWTH BY OCTOBER 1 SHALL BE SEEDING WITH ARBORESCENT RYE OR MULCHED AT RATES PREVIOUSLY SPECIFIED. SEE WINTER CONDITIONS NOTES FOR SEEDING STABILIZATION AFTER NOVEMBER 1.
 - APPLY TOPSOIL TO A MINIMUM DEPTH OF 6 INCHES. MIX TOPSOIL WITH THE SUBSOIL TO A MINIMUM DEPTH OF 2 INCHES.
 - APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS. IN LIEU OF SOIL TESTS, APPLY GROUND LIMESTONE AT A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQUARE FEET) AND GRANULAR, COMMERCIAL-GRADE, 10-10-10 (N-P205-K20) FERTILIZER AT A RATE OF 800 LBS. PER ACRE (18.4 LBS. PER 1,000 SQUARE FEET).
 - UNIFORMLY APPLY SEED MIXTURE AT THE RECOMMENDED SEEDING RATES AND DATES. APPLY HAY OR STRAW MULCH AT A RATE OF 2 TONS PER ACRE, AND ANCHOR AS NECESSARY.
 - THE SEED MIXTURE FOR LAWN AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
 - 45 % CREEPING RED FESCUE
 - 45 % KENTUCKY BLUEGRASS
 - 10 % PERENNIAL RYE GRASS
 SEEDING RATE PER 1000 SQ.FT. = 3.5 LBS. MIN.
 - THE SEED MIXTURE FOR WET AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
 - 80 % REED CANARY GRASS
 - 20 % RED TOP
 SEEDING RATE PER 1000 SQ.FT. = 0.57 LBS. MIN.
 - THE SEED MIXTURE FOR WET AREAS SHALL CONSIST OF SEEDS PROPORTIONED BY WEIGHT AS FOLLOWS:
 - 80 % REED CANARY GRASS
 - 20 % RED TOP
 SEEDING RATE PER 1000 SQ.FT. = 0.60 LBS. MIN.

- MULCH ALL AREAS SEEDING SO THAT SOIL IS NOT VISIBLE THROUGH THE MULCH REGARDLESS OF THE APPLICATION RATE.

- DITCH LININGS, STONE CHECK DAMS, AND RIPRAP INLET AND OUTLET PROTECTION SHALL BE INSTALLED WITHIN 48 HOURS OF COMPLETING THE GRADING OF THAT SECTION OF DITCH OR INSTALLATION OF CULVERT.

- RIPRAP REQUIRED AT CULVERTS AND STORM DRAIN INLETS AND OUTLETS SHALL CONSIST OF FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. STONES SHALL WEIGH FROM 10 LBS. TO 200 LBS. AND 50% OF THE STONES BY VOLUME SHALL EXCEED A UNIT WEIGHT OF APPROXIMATELY 50 LBS.

- EROSION CONTROL BLANKET SHALL BE INSTALLED ON ALL PERMANENT SLOPES STEEPER THAN 3:1, IN THE CASE OF DITCHES NOT OTHERWISE PROTECTED, AND ANY DISTURBED AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE (E.G. WETLANDS AND WATER BODIES). EROSION CONTROL BLANKET SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURER'S RECOMMENDATIONS.

- TEMPORARY CONTROL MEASURES, SUCH AS SILT FENCE, SHALL BE REMOVED WITHIN 30 DAYS AFTER PERMANENT STABILIZATION IS ACHIEVED.

C. WINTER CONDITIONS

- "WINTER CONSTRUCTION" IS CONSTRUCTION ACTIVITY PERFORMED DURING THE PERIOD FROM NOVEMBER 1 THROUGH APRIL 15. IF AREAS WITHIN 15 FEET OF AREAS WITHIN 15 FEET OF AREAS NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES OUTLINED ABOVE BY NOVEMBER 15, THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES THAT ARE SPECIFIC TO WINTER CONDITIONS. NO MORE THAN ONE ACRE OF THE SITE MAY BE WITHOUT STABILIZATION AT ONE TIME. SLOPE STABILIZATION AND DISTURBED AREA STABILIZATION DURING WINTER CONDITIONS SHOULD BE ADDRESSED IN ACCORDANCE WITH SECTION A-3 OF THE MAINE EROSION AND SEDIMENT CONTROL BMPs, MARCH 2003.
- AREAS WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT BARRIERS.
- HAY MULCH SHALL BE 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.
- AFTER NOVEMBER 1 OR THE FIRST KILLING FROST FOR THE REGION AND BEFORE SNOW FALL, ALL EXPOSED AND DISTURBED AREAS NOT TO UNDERGO FURTHER DISTURBANCE ARE TO HAVE DORMANT SEEDING. THE DORMANT SEEDING METHOD: PREPARE THE SEEDBED, LIME AND FERTILIZE, APPLY THE SELECTED PERMANENT SEED MIXTURE AT THREE TIMES THE REGULAR SEEDING RATE, AND MULCH AND ANCHOR. DORMANT SEEDINGS NEED TO BE ANCHORED EXTREMELY WELL ON SLOPES, DITCH BASINS AND AREAS OF CONCENTRATED FLOWS. DORMANT SEEDING REQUIRES INSPECTION AND RESEEDING AS NEEDED IN THE SPRING. ALL AREAS WHERE COVER IS INADEQUATE MUST BE IMMEDIATELY RESEEDED AND MULCHED AS SOON AS POSSIBLE.
- ALL VEGETATED DITCH LINES THAT HAVE NOT BEEN STABILIZED BY SEPTEMBER 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 MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION.
- 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.

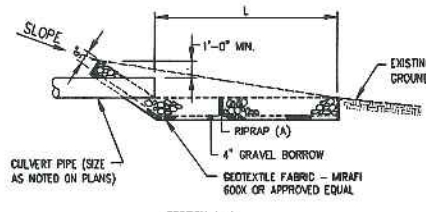
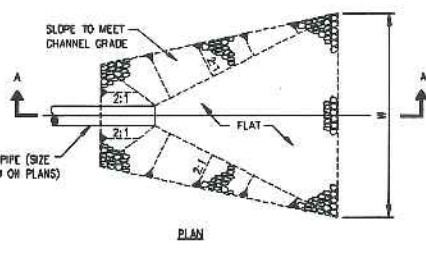
D. HOUSEKEEPING

- SPILL PREVENTION CONTROLS MUST BE USED TO PREVENT POLLUTANTS FROM BEING DISCHARGED FROM MATERIALS ON SITE, INCLUDING STORAGE PRACTICES TO MINIMIZE EXPOSURE OF THE MATERIALS TO STORMWATER, AND APPROPRIATE LIQUID PREVENTION, CONTAINMENT, AND RESPONSE PLANNING AND IMPLEMENTATION.
- 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 RUNOFF THAT INFILTRATES INTO THE SOIL. DRES, 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.
- 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.

- DEBRIS AND OTHER MATERIAL, LITTER, CONSTRUCTION DEBRIS, AND CONSTRUCTION CHEMICALS EXPOSED TO STORM WATER, MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE.
- TRENCH OR FOUNDATION DE-WATERING. TRENCH 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 SILETED AND HINDERS CORRECT AND SAFE CONSTRUCTION PRACTICES. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING THE PONDED WATER EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPREAD THROUGH NATURAL WOODED BUTTERS OR REMOTE AREAS THAT ARE SPECIFICALLY DESIGNATED TO COLLECT THE MAXIMUM AMOUNT OF SEDIMENT POSSIBLE. LIKE A COFFER DAM SEDIMENTATION BASIN, AVOID ALLOWING THE WATER TO FLOW OVER DISTURBED AREAS OF THE SITE.

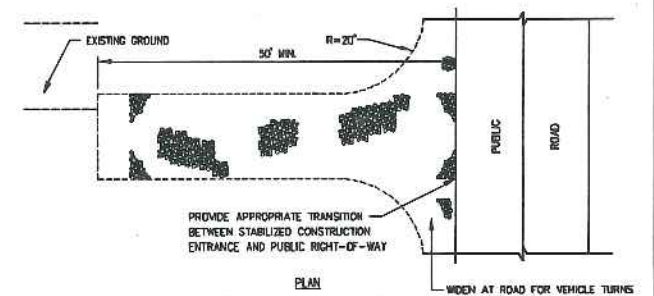
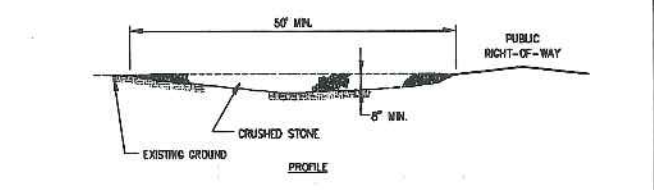
E. INSPECTION AND MAINTENANCE

- INSPECT DISTURBED AND IMPERVIOUS AREAS, EROSION AND STORMWATER CONTROL MEASURES, AREAS USED FOR STORAGE THAT ARE EXPOSED TO PRECIPITATION, AND LOCATIONS WHERE VEHICLES ENTER OR EXIT THE SITE AT LEAST ONCE A WEEK AS WELL AS BEFORE AND AFTER STORM EVENTS, PRIOR TO COMPLETION OF PERMANENT STABILIZATION. A PERSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROLS, INCLUDING THE STANDARDS IN THE MAINE CONSTRUCTION GENERAL PERMIT AND ANY DEP OR MUNICIPAL COMPANION DOCUMENTS, MUST CONDUCT THE INSPECTION. THIS PERSON MUST BE IDENTIFIED IN THE INSPECTION LOG. IF BEST MANAGEMENT PRACTICES BMPs NEED TO BE MODIFIED OR IF ADDITIONAL 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.
- AN INSPECTION AND MAINTENANCE LOG MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME AND QUALIFICATIONS OF THE PERSON PERFORMING THE INSPECTION, DATE, AND MAJOR OBSERVATIONS RELATING TO OPERATION OF EROSION AND SEDIMENTATION CONTROLS AND POLLUTION PREVENTION MEASURES. MAJOR OBSERVATIONS MUST INCLUDE: BMPs THAT NEED TO BE MAINTAINED, LOCATION(S) OF BMPs THAT FAILED TO OPERATE AS DESIGNED OR PROVED INADEQUATE FOR A PARTICULAR LOCATION, AND LOCATION(S) WHERE ADDITIONAL BMPs ARE NEEDED THAT DID NOT EXIST AT THE TIME OF THE INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR DEFICIENCY CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.
- IT IS RECOMMENDED THAT THE OWNER RETAIN THE SERVICES OF THE DESIGN ENGINEER FOR SITE INSPECTIONS IN COMPLIANCE WITH MAINE DEP STORMWATER RULES, CHAPTER 500.



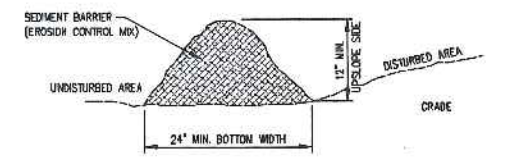
PIPE DIA.	L	W	A	D ₅₀
6"	4'	2'	5'	2"
12"	8'	4'	10'	4"
15"	8'	5'	10'	4"
30"	18'	10'	20'	6"

RIPRAP INLET/OUTLET PROTECTION
SCALE: N.T.S.

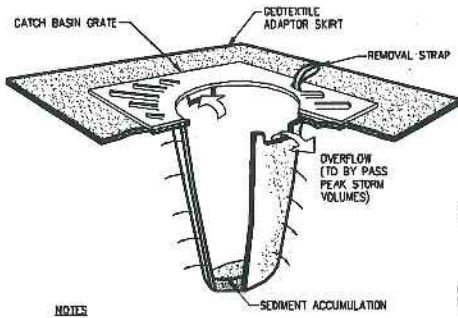


- CONSTRUCTION SPECIFICATIONS:**
- STONE SIZE - AASHTO DESIGNATION M 43, SIZE NO. 2 (2 1/2" TO 1 1/2"). USE CRUSHED STONE.
 - LENGTH - AS EFFECTIVE, BUT NOT LESS THAN 50 FEET.
 - THICKNESS - NOT LESS THAN EIGHT (8) INCHES.
 - WIDTH - NOT LESS THAN FULL WIDTH OF ALL POINTS OF INGRESS OR EGRESS.
 - MAINTENANCE - 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
SCALE: N.T.S.

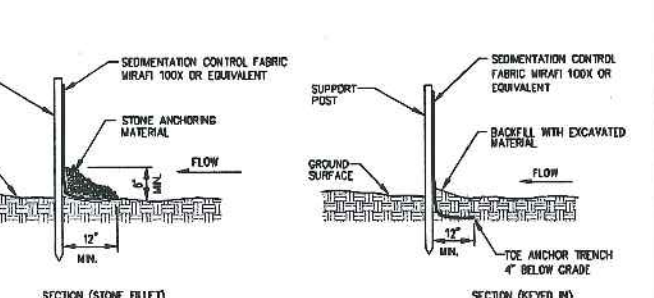
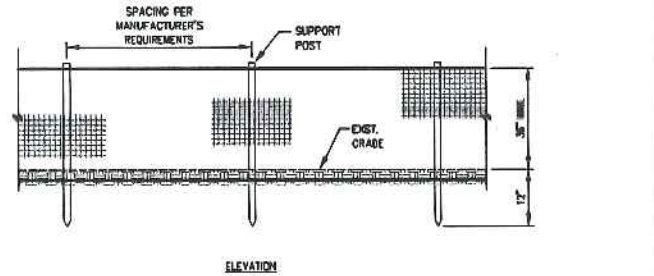


- NOTES:**
- THE EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH.
 - MATERIAL SHALL MEET THE FOLLOWING REQUIREMENTS:
 - THE ORGANIC CONTENT SHALL BE BETWEEN 80 AND 100% DRY WEIGHT BASIS
 - PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MAXIMUM OF 85% PASSING A 0.75" SIEVE
 - 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 <4.0 MMHGS/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 DECAYED, CLOGGED WITH SEDIMENT, ERODED OR INEFFECTIVE, IT MUST BE REPLACED OR REPAIRED. THE BARRIER SHOULD BE RESHAPED AS NECESSARY.
 - WHEN BARRIER IS DECAYED, CLOGGED WITH SEDIMENT, ERODED OR INEFFECTIVE, IT MUST BE REPLACED OR REPAIRED. THE BARRIER SHOULD BE RESHAPED AS NECESSARY.



- NOTES:**
- CATCH BASIN PROTECTION TO BE "SILTSTACK" (BY ACF ENVIRONMENTAL) OR "STREAM GUARD" (BY FOSS ENVIRONMENTAL SERVICES).
 - INSERT TO BE EMPTIED IN AN APPROVED MANNER WHEN IT IS 1/2 FULL OF SEDIMENT.
 - INSPECT INSERT AFTER ALL RAINFALL EVENTS, REPAIR AND MAINTAIN AS REQUIRED.

TEMPORARY INLET PROTECTION
SCALE: N.T.S.



SILTATION FENCE
SCALE: N.T.S.

SEDIMENT BARRIER (EROSION CONTROL MIX)
SCALE: N.T.S.

Maine Department of Environmental Protection, Bureau of Land and Water Quality, 100 State Street, Portland, ME 04102

REV.	DATE	STATUS	BY	CHKD	APPD	REV.	DATE	STATUS	BY	CHKD	APPD
A	1/01/13	SUBMITTED TO CITY OF PORTLAND FOR WORKSHOP	DEPT.	PBB	TWS						



LAND DESIGN SOLUTIONS
LAND PLANNING, SITE PLANNING & LANDSCAPE ARCHITECTURE

P.O. Box 916, 160 Longwoods Road, Cumberland, ME 04091 (207) 484-1177

CLIENT: **TPO PROPERTIES, LLC**
30 LEDGEWOOD DRIVE, FALMOUTH, MAINE 04104

DESIGN: PBB
DRAWN: DEPT.
CHKD: PBB

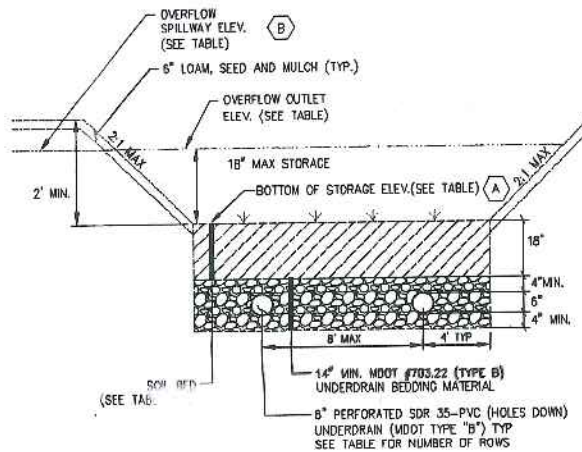
DATE: MAY 2012
SCALE: AS NOTED

PROJ. NO. -
DWG. NO. C-300

REV. A

OLD BARN ESTATES
1062 OCEAN AVENUE, PORTLAND, MAINE

EROSION AND SEDIMENTATION NOTES AND DETAILS



- GRASSED UNDERDRAINED SOIL FILTER NOTES:**
1. THE SOIL BED SHALL CONSIST OF THE FOLLOWING:
18" SOIL FILTER BED (SEE TABLE 7-2)
14" MDOT #703.22 (TYPE B) (SEE TABLE 7-1)
 2. THE SOIL BED SHALL BE 18 INCHES IN DEPTH.
 3. THE SOIL BED MATERIAL SHALL BE LIGHTLY COMPACTED (90% TO 92% STANDARD PROCTOR) USING WATER. IF HEAVY COMPACTION OCCURS, ROTOTILL AGAIN PRIOR TO SEEDING OR SODDING.
 4. SEE LANDSCAPE PLAN FOR SEEDING INFORMATION.
 5. REFER TO GRADING PLANS FOR UNDERDRAIN LAYOUT.
 6. THE MAXIMUM DISTANCE BETWEEN UNDERDRAIN PIPES SHALL BE 8 FEET.
 7. GRASSED UNDERDRAINED SOIL FILTER MEDIA SHALL NOT BE INSTALLED UNTIL THE TRIBUTARY AREA HAS BEEN PERMANENTLY STABILIZED.

1 GRASSED UNDERDRAINED SOIL FILTER - TYP. CROSS SECTION
SCALE: N.T.S.

GRASSED UNDERDRAINED SOIL FILTER SCHEDULE										
GRASSED UNDERDRAINED SOIL FILTER #	BOTTOM ELEV. (A)	FILTER LENGTH	OVERFLOW OUTLET ELEV. (B)	ROWS OF PIPE PER FILTER	UNDERDRAIN INVERT	UNDERDRAIN OUTLET INVERT	PEAK WATER ELEVATION			
							2 YEAR STORM	10 YEAR STORM	20 YEAR STORM	50 YEAR STORM
T1	65.5	110'	67.0	2	63.2	63.1	67.1	67.3	67.3	67.3
T2	76.0	106'	77.5	2	73.7	73.5	77.3	77.7	77.7	77.8

Table 7-1 MDOT Specifications for Underdrains (MDOT #703.22)

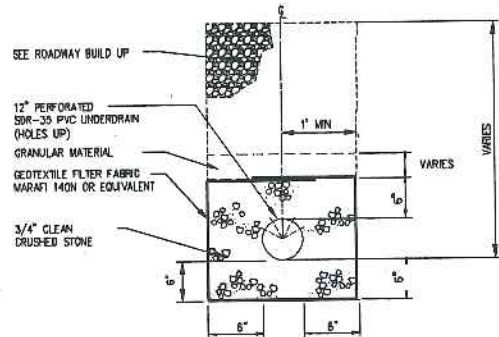
Sieve Size	% by Weight
Underdrain Type B	
1"	90-100
1/2"	75-100
#4	50-100
#20	15-80
#50	0-15
#200	0-5

Table 7-2 Soil Filter Media, 18" Deep (Option 2)

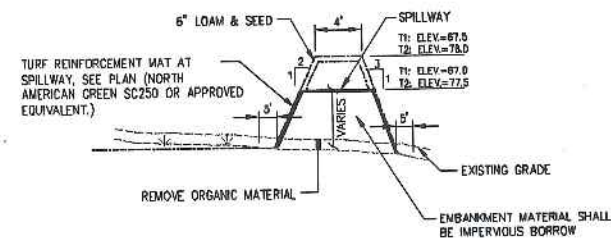
Filter Media	Mixture by Volume	Specification
Sand	50%-55%	MDOT Specification #703.01 Fine Aggregate for Concrete (see Table 7-3)
Topsoil	20%-30%	Loamy sand (open) with minimal clay content and between 10 to 25% fines passing the #200 sieve
Mulch	20%-30%	Moderately fine, shredded bark or wood fiber mulch (organic material - well composed with no manure or stump residues) with less than 5% passing the #200 sieve

Table 7-3 MDOT Specifications for Aggregate (MDOT #703.01)

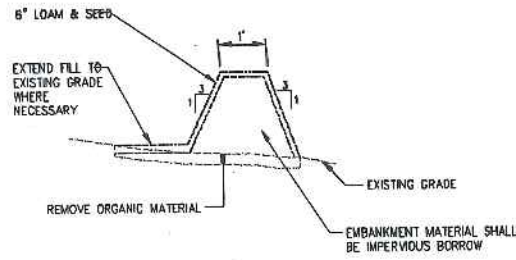
Sieve Size	% by Weight
3/8"	100
#4	85-100
#8	80-100
#16	50-85
#30	25-80
#60	10-30
#100	2-10
#200	0-5



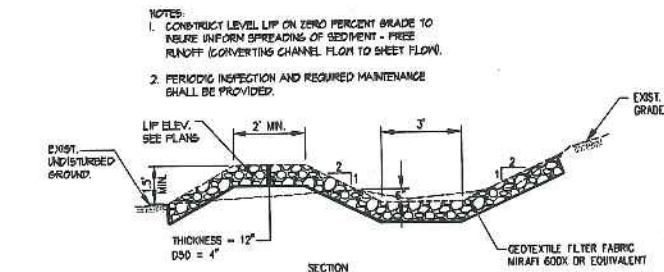
6 TYPE C UNDERDRAIN TRENCH
SCALE: N.T.S.



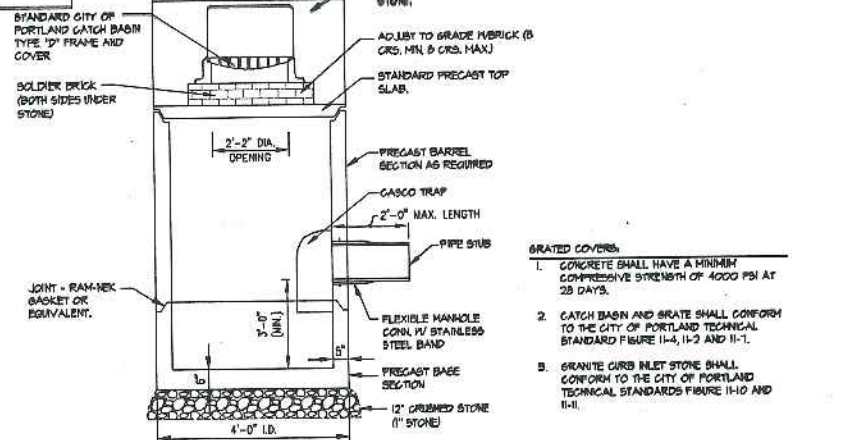
2 TYPICAL EMBANKMENT/SPILLWAY DETAIL
SCALE: N.T.S.



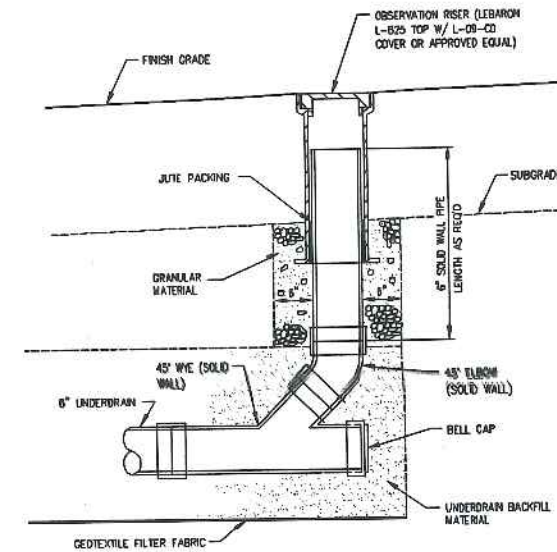
3 INTERCEPTOR SWALE DETAIL
SCALE: N.T.S.



4 STONE BERM LEVEL SPREADER

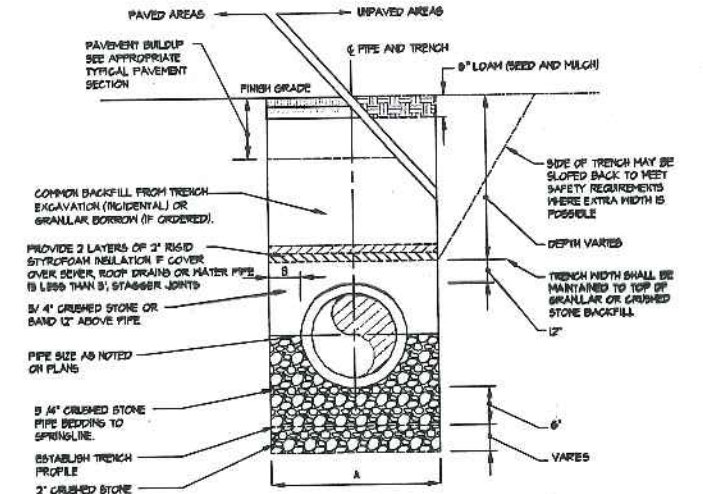


7 CATCH BASIN
SCALE: N.T.S.



5 UNDERDRAIN CLEANOUT
SCALE: N.T.S.

- NOTES:**
1. DIMENSION 'B' SHALL BE SUFFICIENT TO ALLOW CRUSHED STONE BEDDING TO BE PLACED AND COMPACTED UNDER THE HANGERS OF THE PIPE, BUT IN ALL CASES THE DIMENSION SHALL BE AT LEAST 4".
 2. PIPE TRENCH INSTALLATION SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL STANDARDS FIGURE 8-12.



TRENCH BACKFILL SCHEDULE

PIPE MATERIAL	PIPE BEDDING	INITIAL BACKFILL	BACKFILL	PIPE DIAMETER 'D' (INCHES)	MAX TRENCH WIDTH 'A' (FEET)
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	4	4.0
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	6	4.0
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	8	4.0
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	10	4.0
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	12	5.0
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	15	5.0
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	24	5.0
	3/4" CRUSHED STONE	3/4" CRUSHED STONE	**EXCAVATED MATERIAL OR GRANULAR BORROW	30	6.0

- GRATED COVERS:**
1. CONCRETE SHALL HAVE A MINIMUM COMPRESSIVE STRENGTH OF 4000 PSI AT 28 DAYS.
 2. CATCH BASIN AND GRATE SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL STANDARD FIGURE 11-4, 11-2 AND 11-1.
 3. GRANITE CURB INLET STONE SHALL CONFORM TO THE CITY OF PORTLAND TECHNICAL STANDARDS FIGURE 11-10 AND 11-11.

8 TYPICAL TRENCH SECTION
SCALE: N.T.S.

1/2" PERFORATED SDR-35 PVC UNDERDRAIN (HOLES UP)
 GRANULAR MATERIAL
 GEOTEXTILE FILTER FABRIC MARAT 140N OR EQUIVALENT
 3/4" CLEAN CRUSHED STONE

REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
A	1/01/13	SUBMITTED TO CITY OF PORTLAND FOR WORKSHOP	DEPT.	PBB	TWS						



LAND DESIGN SOLUTIONS
 LAND PLANNING, SITE PLANNING & LANDSCAPE ARCHITECTURE
 P.O. Box 816, 160 Longwood Road, Cumberland, ME 04081 161(207) 454-1111
 CLIENT: **TPO PROPERTIES, LLC**
 30 LEDGEWOOD DRIVE, FALMOUTH, MAINE 04104

DESIGN: PBB
 DRAWN: DEPT.
 CHKD: PBB
 DATE: MAY 2012
 SCALE: AS NOTED

OLD BARN ESTATES
 1062 OCEAN AVENUE, PORTLAND, MAINE

SITE DETAILS

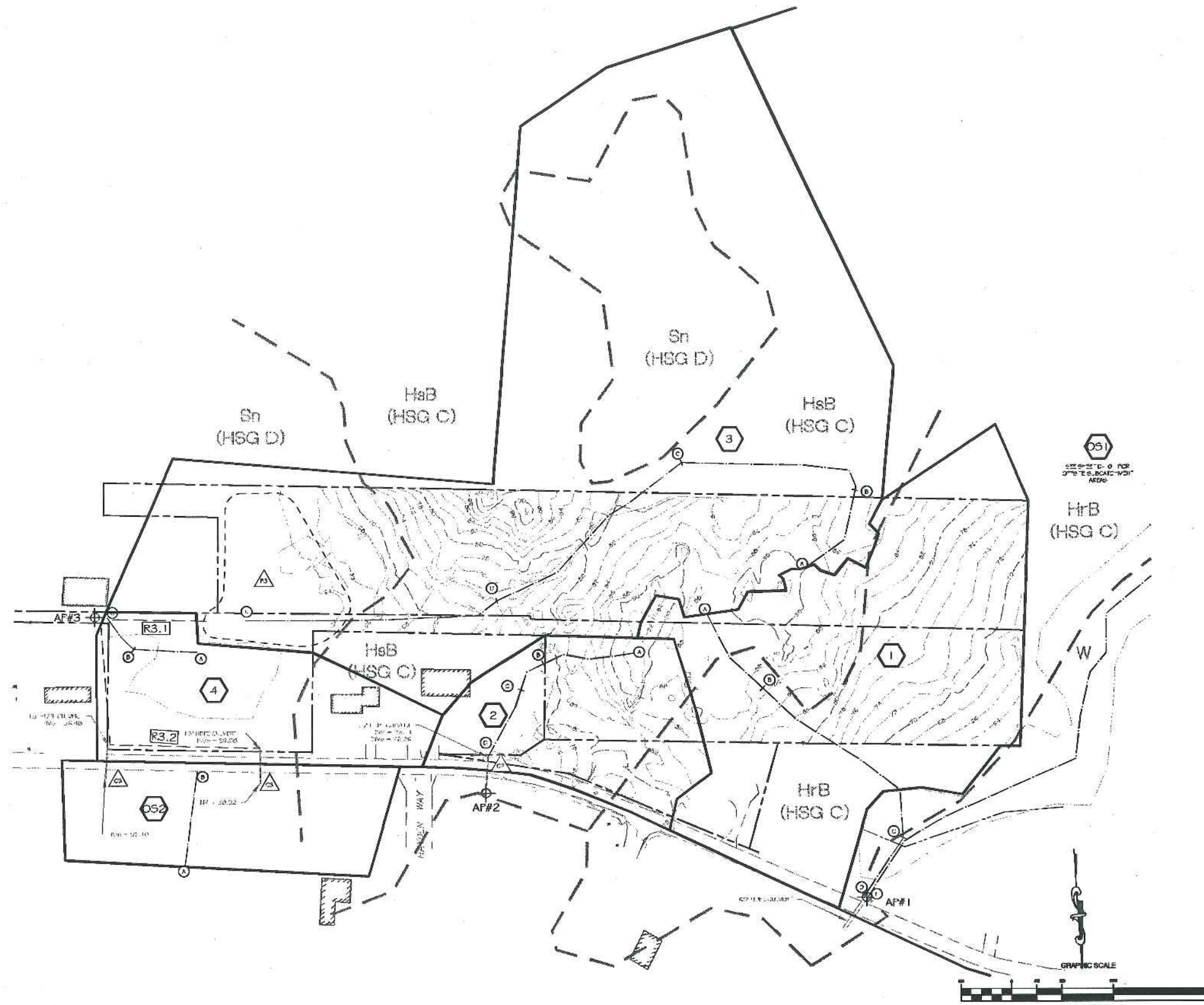
PROJ. NO.
 DWG. NO.
 REV. A
C-302

SUBCATCHMENT DATA			
SEGMENT	AREA	SLOPE	FLOW TYPE
SUBCATCHMENT 1			
B.C.	150	0.024	SHRUB FLOW
B.C.	160	0.025	SHRUB CONCENTRATED FLOW
C.D.	110	0.021	" "
SUBCATCHMENT 2			
B.C.	150	0.025	SHRUB FLOW
B.C.	50	0.025	SHRUB CONCENTRATED FLOW
C.D.	90	0.025	SHRUB CONCENTRATED FLOW
SUBCATCHMENT 3			
B.C.	150	0.025	SHRUB FLOW
B.C.	500	0.025	SHRUB CONCENTRATED FLOW
C.D.	500	0.025	" "
C.D.	440	0.022	PARADOX CHANNELED FLOW
SUBCATCHMENT 4			
B.C.	100	0.025	SHRUB FLOW
B.C.	80	0.021	SHRUB CONCENTRATED FLOW

SOIL LEGEND

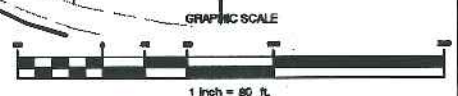
SYMBOL	DESCRIPTION	PERCENT SOIL GROUP
HsB	HOLDS WATER, 11% SAND, 10% CLAY, 79% TO 89% S.O.M.	CC
HsD	HOLDS WATER, 11% SAND, 10% CLAY, 79% TO 89% S.O.M.	CC
S	SANDY CLAY, 25% TO 85% S.O.M.	C
W	WATER	NOT APPLICABLE

SOURCE: SOIL SURVEY MAP, MAINE, U.S. DEPARTMENT OF AGRICULTURE, 1:250,000 SCALE, 1984. ADAPTED FROM MAINE SOIL SURVEY, 1984. MAINE SOIL SURVEY, 1984. MAINE SOIL SURVEY, 1984.



DRAINAGE LEGEND

	SUBCATCHMENT BOUNDARY
	SUBCATCHMENT DESIGNATION
	TIME OF CONCENTRATION FLOW
	REACH
	REACH DESIGNATION
	ANALYSIS POINT
	POND TEXT
	POND BOUNDARY
	SOIL BOUNDARY



REV.	DATE	STATUS	BY	CHKD.	APPD.	REV.	DATE	STATUS	BY	CHKD.	APPD.
A	1/1/13	ISSUED FOR CITY OF PORTLAND WORKSHOP									



LAND DESIGN SOLUTIONS
 LAND PLANNING, SITE PLANNING & LANDSCAPE ARCHITECTURE
 P.O. Box 516, 160 Longwoods Road, Cumberland ME 04081 (207) 834-7171
 CLIENT: **TPO PROPERTIES, LLC**
 30 LEDGEWOOD DRIVE, FALMOUTH, MAINE 04104

DESIGN: PDB	OLD BARN ESTATES 1062 OCEAN AVENUE, PORTLAND, MAINE
DRAWN: DEPT.	PRE-DEVELOPMENT DRAINAGE PLAN
CHKD: PBB	
DATE: JAN 2013	PROJ. NO.
SCALE: 1" = 80'	DWG. NO.
	REV. A
	D-100

SUBCATCHMENT 1.1			
REACH	LENGTH	SLOPE	FLOW TYPE
A-B	150	0.080	S-DET FLOW
B-C	40	0.080	S-DET FLOW
C-D	75	0.050	S-ALLOW CONCENTRATED FLOW
D-E	180	0.047	TRAP FLOW

SUBCATCHMENT 1.2			
REACH	LENGTH	SLOPE	FLOW TYPE
A-B	150	0.050	S-DET FLOW
B-C	200	0.050	S-ALLOW CONCENTRATED FLOW

SUBCATCHMENT 1.3			
REACH	LENGTH	SLOPE	FLOW TYPE
A-B	150	0.080	S-DET FLOW
B-C	137	0.073	S-ALLOW CONCENTRATED FLOW

SUBCATCHMENT 1.4			
REACH	LENGTH	SLOPE	FLOW TYPE
A-B	150	0.054	S-DET FLOW
B-C	58	0.034	S-ALLOW CONCENTRATED FLOW
C-D	127	0.038	S-ALLOW CONCENTRATED FLOW

SUBCATCHMENT 2.3			
REACH	LENGTH	SLOPE	FLOW TYPE
A-B	30	0.133	S-DET FLOW
B-C	80	0.083	S-DET FLOW
C-D	42	0.073	S-ALLOW CONCENTRATED FLOW

SUBCATCHMENT 3.1			
REACH	LENGTH	SLOPE	FLOW TYPE
A-B	150	0.150	S-DET FLOW
B-C	200	0.150	S-ALLOW CONCENTRATED FLOW
C-D	300	0.073	S-ALLOW CONCENTRATED FLOW

SUBCATCHMENT 3.2			
REACH	LENGTH	SLOPE	FLOW TYPE
A-B	150	0.077	S-DET FLOW
B-C	150	0.077	S-ALLOW CONCENTRATED FLOW
C-D	131	0.100	S-ALLOW CONCENTRATED FLOW
E-F	62	0.050	S-ALLOW CONCENTRATED FLOW
G-H	100	0.050	TRANSITIONIC FLOW

SOIL LEGEND

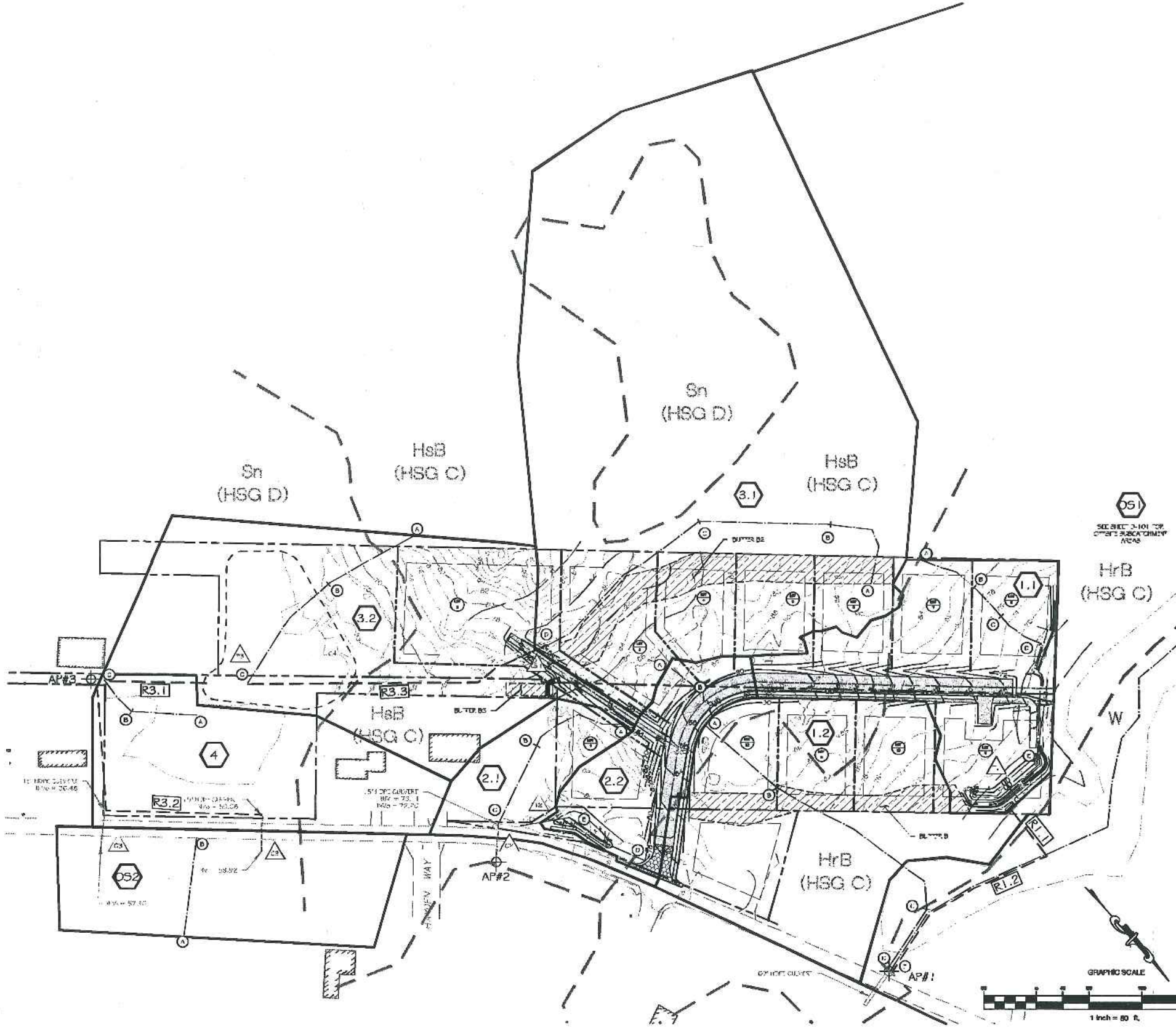
SYMBOL DESCRIPTION HYDROLOGIC SOIL GROUP

1-3 CLAY, VERY ROCKY TO SANDY CLAY, 3% TO 8% SLOPE OF

4-6 CLAY, FINE SANDY CLAY TO SILTY SAND

7-9 SANDY CLAY, SAND

SOURCE: SOIL SURVEY DATA, NATIONAL ENGINEERING CONSULTANTS SERVICE, IN THE STATE DEPARTMENT OF AGRICULTURE, NEW SOIL SURVEY, AVAILABLE ONLINE AT: <http://www3.usbr.gov/nrcs/usda/gis/>, ACCESSION: 10/1/02



DRAINAGE LEGEND

	SUBCATCHMENT BOUNDARY
	SUBCATCHMENT DESIGNATION
	TIME OF CONCENTRATION FLOW
	REACH
	REACH DESIGNATION
	ANALYSIS POINT
	POND TEXT
	POND BOUNDARY
	SOIL BOUNDARY

REV	DATE	STATUS	BY	CHKD	APPD	RFV	DATE	STATUS	BY	CHKD	APPD
A	1/1/12	ISSUED FOR CITY OF PORTLAND WORKSHOP									



LAND DESIGN SOLUTIONS
 LAND PLANNING, SITE PLANNING & LANDSCAPE ARCHITECTURE
 P.O. Box 386, 160 Longsight Road, Casco and, ME 04021 tel: (207) 434-7777
 CLIENT: **TPO PROPERTIES, LLC**
 30 LEDGEWOOD DRIVE, FALMOUTH, MAINE 04104

DESIGN: POB
 DRAWN: DEPT.
 CHECKED: POB
 DATE: JAN 2013
 SCALE: 1" = 30'

PROPOSED RESIDENTIAL SUBDIVISION
 1082 OCEAN AVENUE, PORTLAND, MAINE
POST DEVELOPMENT DRAINAGE PLAN

PROJ. NO. _____
 URG. NO. _____

REV. _____
D-102

County Name: York; Project No.: 1082 Ocean Ave; Date: 1/1/12; 12:39 PM