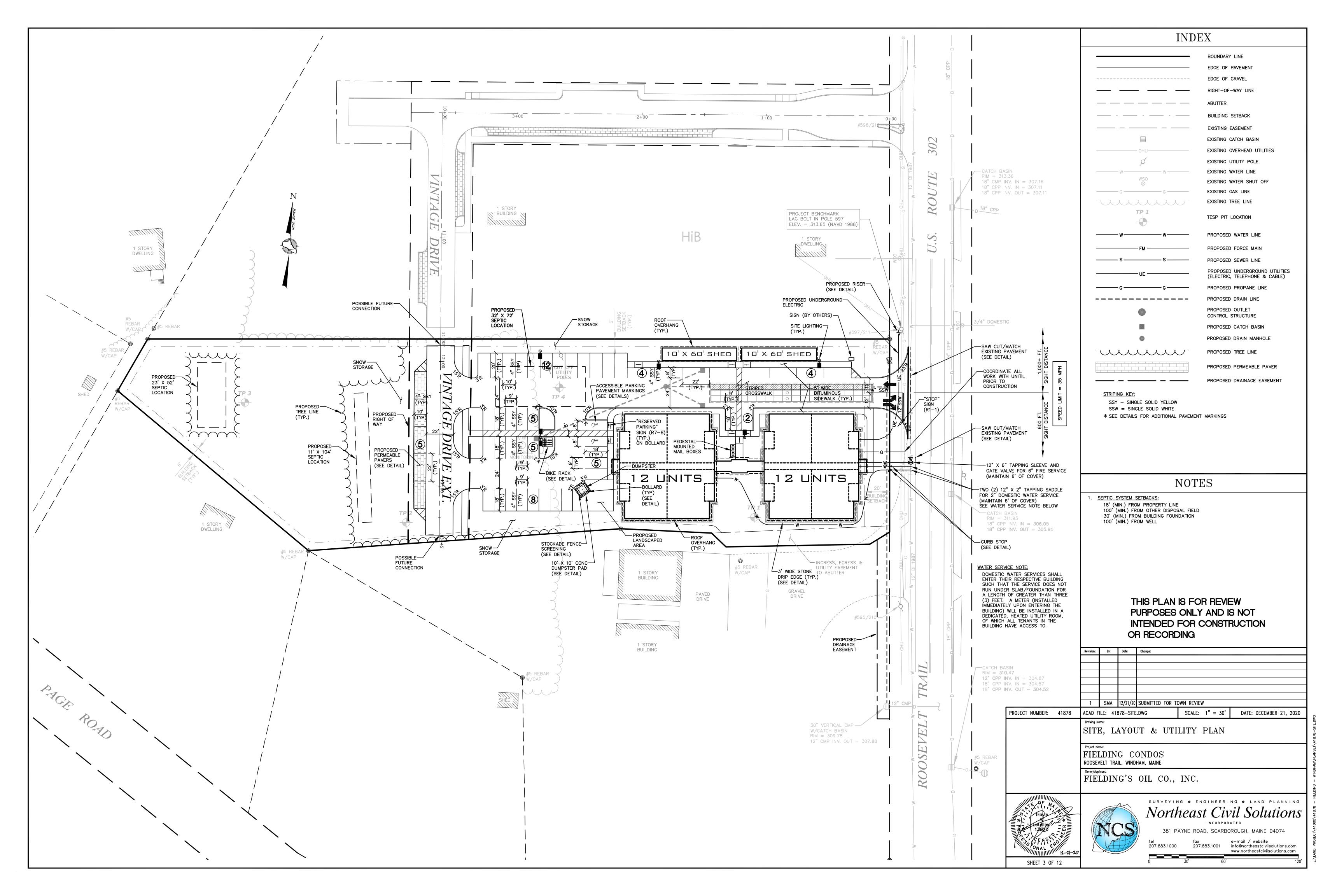
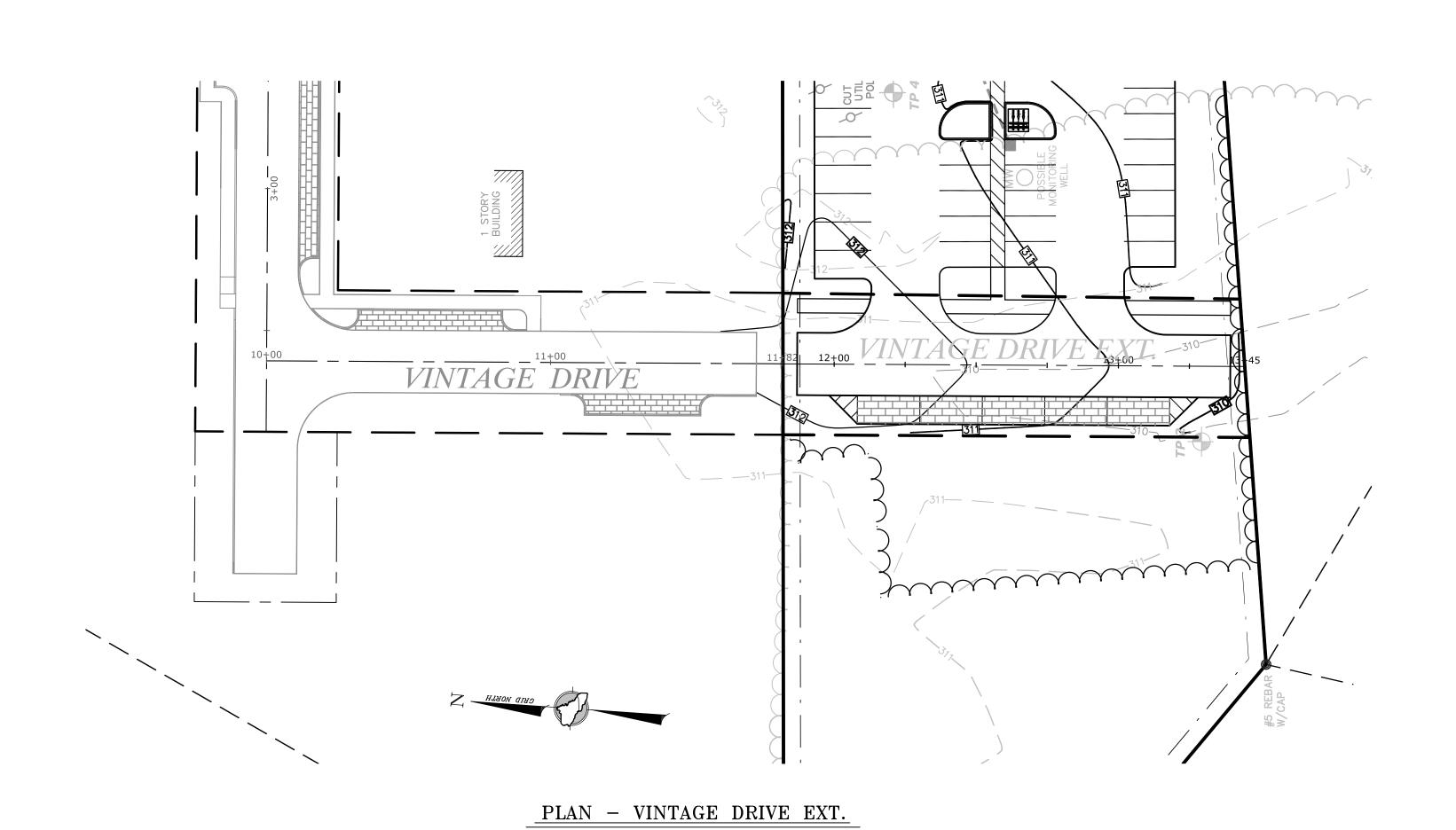


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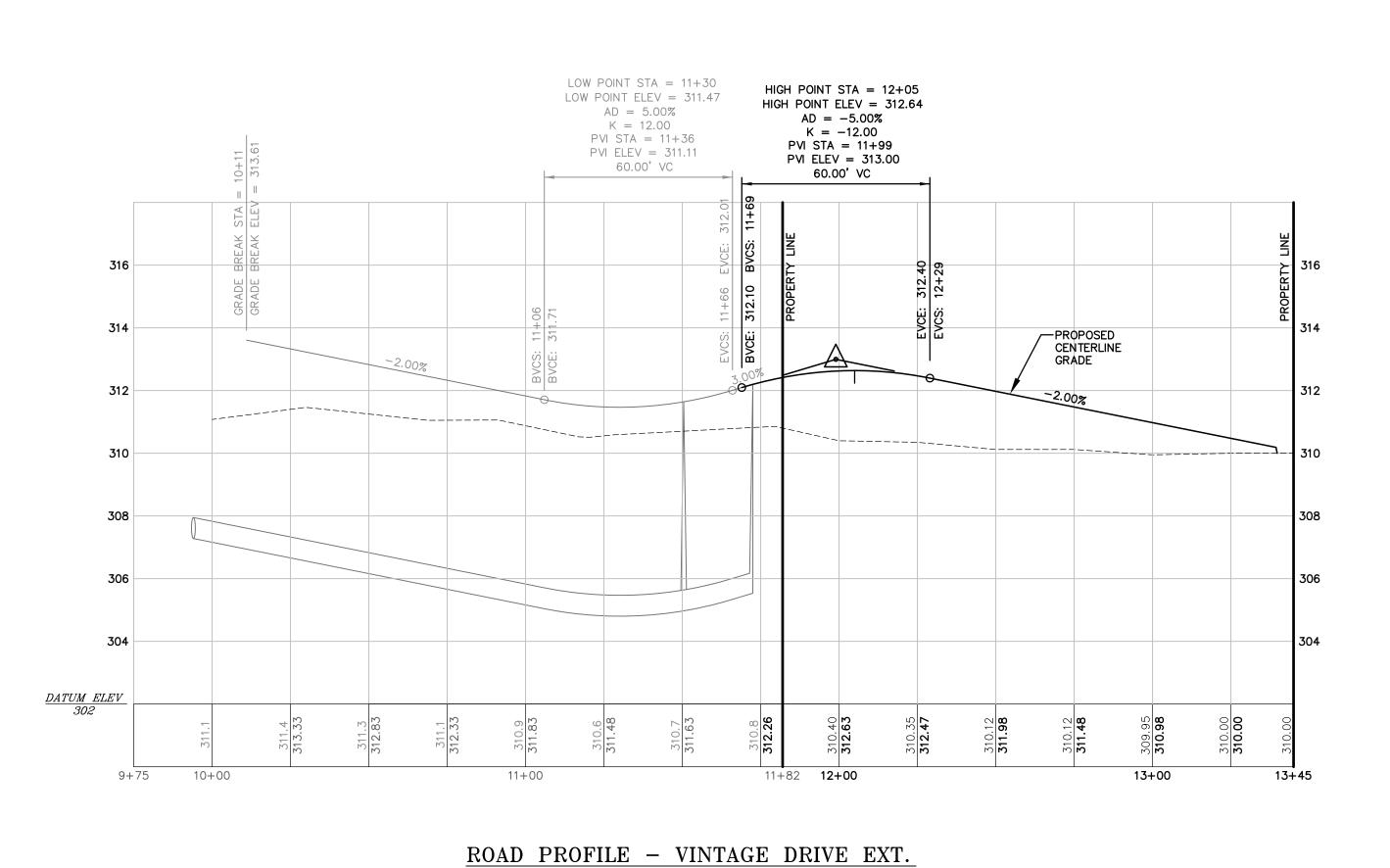
MAINE PROFESSIONAL LAND SURVEYOR No. 2080





50'-0" R.O.W. 5'-0" 7'-0" 11'-0" 11'-0" 10'-0" SIDEWALK ESPLANADE PARKING SPACE TRAVEL WAY TRAVEL WAY (SEE DETAILS) ┌─ 4"LOAM 4" LOAM → / 4" LOAM & SEED & SEED 1/4"/FT 1/4"/FT & SEED 1/4"/FT ---- PERMEABLE PAVERS └─1.5" BITUMINOUS PAVEMENT (SEE DETAIL) (MDOT 403, 9.5 MM HMA) 2" BITUMINOUS PAVEMENT (MDOT 403, 19.0 MM HMA) \_\_\_\_\_\_3" CRUSHED AGGREGATE BASE COURSE (MDOT 703.06 TYPE A) 21" AGGREGATE SUBBASE (MDOT 703.06 TYPE D) — CLEAN GRANULAR FILL COMPACTED IN 12" LIFTS (CLEAN GRANULAR FILL MUST BE FREE OF ROCKS LARGER THAN 12", STUMPS, DEBRIS. ORGANIC MATERIAL AND FROZEN MATERIAL)

> TYPICAL ROAD CROSS SECTION STA. 11+82 TO STA. 13+45 NOT TO SCALE



HORIZONTAL SCALE 1" = 30'

HORIZONTAL SCALE 1" = 30'

TO CONFIRM THE MINIMUM THICKNESS OF EACH LAYER HAS BEEN PLACED AND COMPACTED —1" BEDDING STONE MEETING ASTM #8 PER MANUFACTURER'S SPECIFICATIONS, ALL THE MATERIAL USED FOR THE CONSTRUCTION OF SPECIFICATION IN TABLE 1 THE PERMEABLE PAVER SECTION MUST BE CONFIRMED AS SUITABLE BY THE DESIGN ENGINEER. TESTING MUST BE DONE BY A CERTIFIED LABORATORY TO SHOW THAT THEY ARE PASSING -24" RESERVOIR COURSE MDEP SPECIFICATIONS. TESTING AND SUBMITTALS: THE CONTRACTOR SHALL IDENTIFY THE LOCATION OF THE SOURCE --- 18" FILTER LAYER MEETING SPECIFICATION IN TABLE 2 OF EACH COMPONENT OF THE PERMEABLE PAVER SECTION. ALL RESULTS OF FIELD AND LABORATORY TESTING SHALL BE SUBMITTED TO THE PROJECT ENGINEER FOR CONFIRMATION. THE CONTRACTOR SHALL: A) SAMPLES OF THE FILTER LAYER, RESERVOIR COURSE AND BEDDING STONE SHALL BE COLLECTED. SAMPLES MUST BE A COMPOSITE OF THREE DIFFERENT LOCATIONS MANUFACTURED BY GENEST CONCRETE WORKS, (GRABS) FROM THE STOCKPILE OR PIT FACE. SAMPLE SIZE REQUIRED WILL BE Revision: By: Date: Change: DETERMINED BY THE TESTING LABORATORY. INSTALLED PER MANUFACTURER SPECIFICATIONS. B) PERFORM A SIEVE ANALYSIS CONFORMING TO ASTM C136 (STANDARD TEST METHOD FOR SIEVE ANALYSIS OF FINE AND COARSE AGGREGATES 1996A) ON EACH TYPE OF THE SAMPLE MATERIAL. THE RESULTING FILTER MEDIA MIXTURE MUST HAVE 4% TO 7% BY WEIGHT PASSING THE #200 SIEVE AND A CLAY CONTENT OF LESS THAN 2% (DETERMINED BY HYDROMETER GRAIN SIZE ANALYSIS) PROJECT NUMBER: 41878

TABLE 2 - FILTER LAYER AGGREGATE

% PASSING BY WEIGHT

95-100

80-100

50-85

25-60

10-30

8-10

INSPECTIONS BY THE DESIGN ENGINEER OR SUITABLE THIRD PARTY WILL OCCUR AS NECESSARY

4-7

SIEVE SIZE

#8

#30

#100

#200

**BMP CONSTRUCTION OVERSIGHT NOTES:** 

TABLE 1 - BEDDING STONE (ASTM #8) SIEVE SIZE % PASSING BY WEIGHT

85-100

10-30

0-5

3/8"

#16

GEOTEXTILE

3/4" CRUSHED STONE

**GENERAL NOTES:** 

1. PAVERS SHALL BE STORMWATER BRICK AS

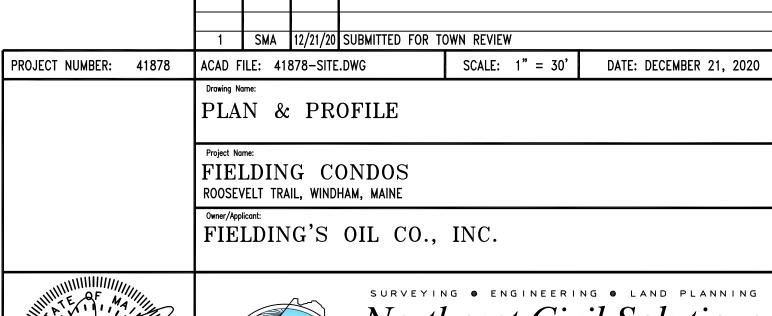
INC. OR APPROVED EQUAL. PAVERS TO BE

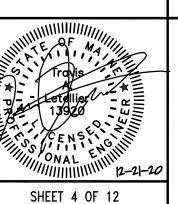
PERMEABLE PAVER DETAIL

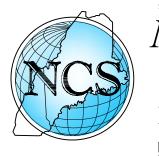
**NOT TO SCALE** 

#4

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING



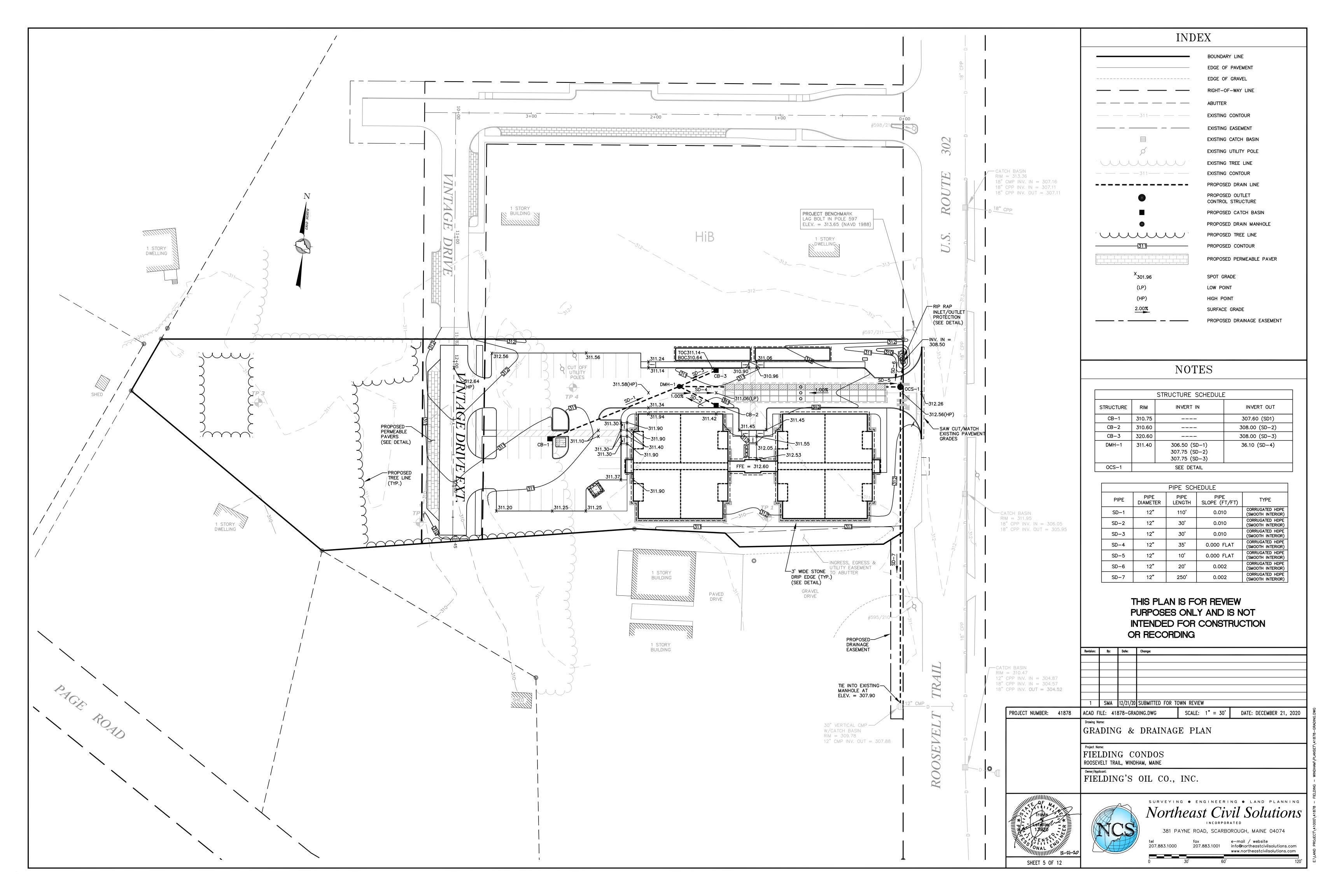


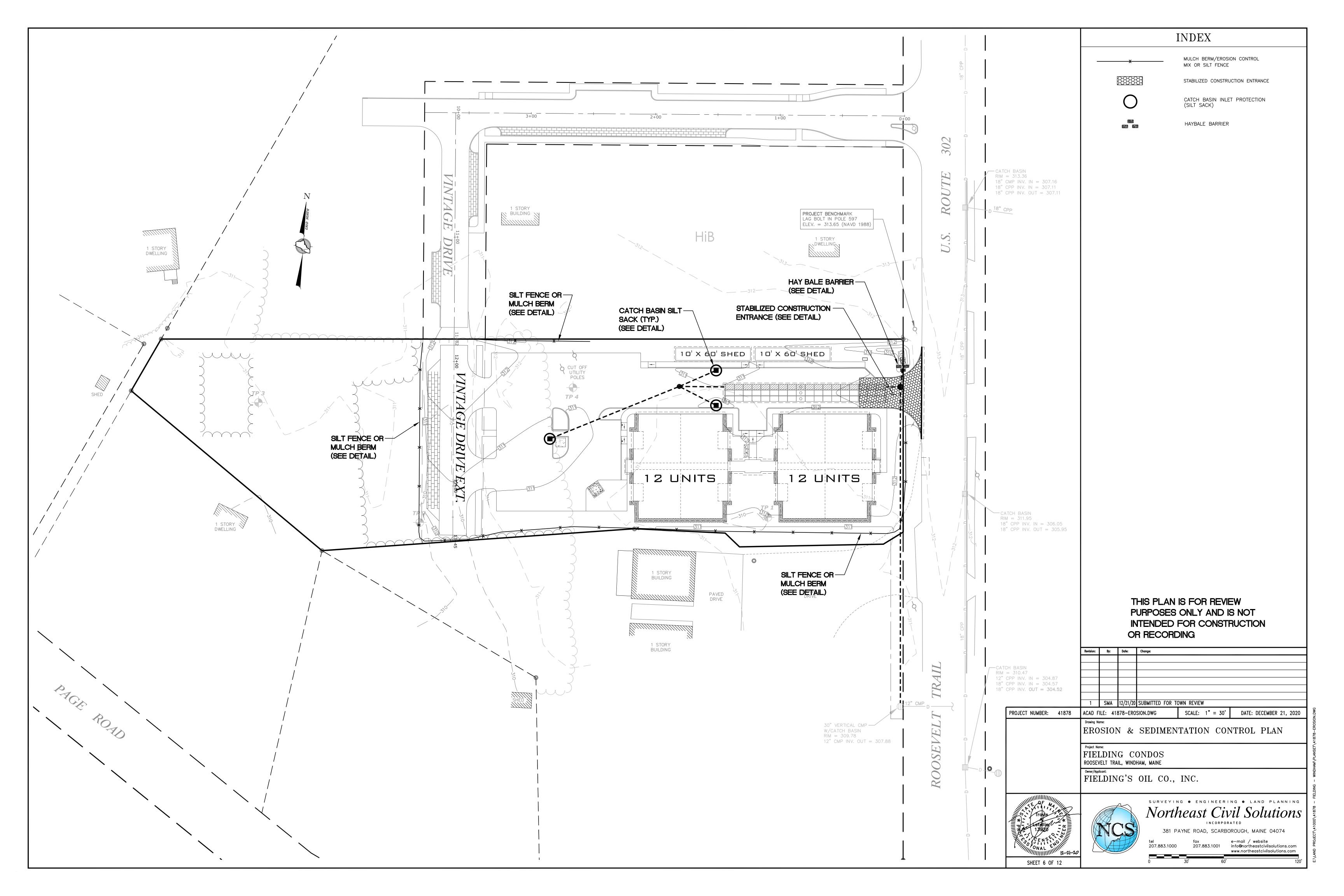




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SEDIMENTATION AND EROSION FOR THIS PROJECT IS BASED UPON SOUND CONSERVATION PRACTICES, AND ADHERES TO THE STANDARDS DETAILED IN MAINE EROSION AND SEDIMENT CONTROL BEST MANAGEMENT PRACTICES (BMP) BY THE MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION, DATED OCTÒBER 2016. THE CONTRACTOR SHALL MAKE HIMSELF FAMILIAR WITH THE AFOREMENTIONED PUBLICATION AND COMPLY WITH THE PRACTICES PRESENTED THEREIN.

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. §480-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

#### 1 EROSION AND SEDIMENTATION CONTROL

- 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, PERIMETER EROSION CONTROLS MUST BE DOUBLED. IF DISTURBANCE ACTIVITIES TAKE PLACE LESS THAN 30 FEET FROM ANY PROTECTED NATURAL RESOURCE, AND STORMWATER DISCHARGES THROUGH THE DISTURBED AREAS TOWARD THE PROTECTED NATURAL RESOURCE, PERIMETER EROSION CONTROLS MUST BE DOUBLED AND DISTURBED
- 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 BY REMOVING ACCUMULATED SEDIMENT, 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

AREAS MUST BE TEMPORARILY OR PERMANENTLY STABILIZED WITHIN 7 DAYS.

- 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 UNDERLAIN 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.
- 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-ERODIBLE 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.
- 1.5 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
- 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, SOD THROUGH THE USE OF PERMANENT MULCH, OR RIPRAP, OR ROAD SUB-BASE USING VEGETATION FOR STABILIZATION, SELECT THE PROPER VEGETATION FOR THE LIGHT, MOISTURE, AND SOIL CONDITIONS; AMEND AREAS OF DISTURBED SUBSOILS WITH TOPSOIL, COMPOST, OR FERTILIZERS; PROTECT SEEDED AREAS WITH MULCH OR, IF NECESSARY, EROSION CONTROL BLANKETS: AND SCHEDULE SODDING. PLANTING. AND SEEDING SO TO AVOID DIE-OFF FROM SUMMER DROUGHT AND FALL FROSTS NEWLY SEEDED OR SODDED AREAS MUST BE PROTECTED FROM VEHICLE TRAFFIC EXCESSIVE PEDESTRIAN TRAFFIC AND CONCENTRATED RUNOFF UNTIL THE VEGETATION IS WELL-ESTABLISHED WITH 90% COVER BY HEALTHY VEGETATION. IF NECESSARY, AREAS MUST BE REWORKED AND RESTABILIZED IF GERMINATION IS SPARSE, PLANT COVERAGE IS SPOTTY, OR TOPSOIL EROSION IS EVIDENT. ONE OR MORE OF THE FOLLOWING MAY APPLY TO
- SEEDED AREAS. FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS A 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.
- SODDED AREAS, FOR SODDED AREAS, PERMANENT STABILIZATION MEANS 1.6.2 THE COMPLETE BINDING OF THE SOD ROOTS INTO THE UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.
- PERMANENT MULCH. 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.
- RIP RAP. 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 I SIZED APPROPRIATELY. IT IS RECOMMENDED THAT ANGULAR STONE BE
- 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.
- PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED. PROVIDED IT IS FREE OF FINE MATERIALS THAT MAY RUNOFF WITH A RAIN
- DITCHES, CHANNELS, AND SWALES. FOR OPEN CHANNELS, PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH A 90% COVER OF HEALTHY VEGETATION. WITH A WELL-GRADED RIPRAP LINING. TURE 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.
- 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, THEN THESE AREAS MUST BE PROTECTED AND RUNOFF FROM THEM MUST BE CONTROLLED BY ADDITIONAL MEASURES AND RESTRICTIONS
- SITE STABILIZATION. FOR WINTER STABILIZATION, HAY MULCH IS APPLIED AT TWICE THE STANDARD TEMPORARY STABILIZATION RATE. AT THE END OF FACH CONSTRUCTION DAY AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE STABILIZED. MULCH MAY NOT BE SPREAD ON TOP OF
- SEDIMENT BARRIERS. ALL AREAS WITHIN 75 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF
- 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.
- 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.
- 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 DIVERT STORMWATER AWAY FROM THE CHANNEL PROPERLY-SPACED CHECK DAMS MUST BE INSTALLED IN THE CHANNEL TO SLOW THE WATER VELOCITY, AND A TEMPORARY LINING INSTALLED ALONG THE CHANNEL TO PREVENT SCOURING. PERMANENT STABILIZATION FOR CHANNELS IS ADDRESSED UNDER SECTION 1.6.7 ABOVE.
- THE CHANNEL SHOULD RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDE SLOPES.
- WHEN THE WATERSHED DRAINING TO A DITCH OR SWALE IS LESS THAN 1 ACRE OF TOTAL DRAINAGE AND LESS THAN 1/4 ACRE OF IMPERVIOUS AREA, DIVERSION OF RUNOFF TO ADJACENT WOODED OR OTHERWISE VEGETATED BUFFER AREAS IS ENCOURAGED WHERE THE OPPORTUNITY EXISTS.

- 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 FROSION 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 1/2 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
- 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 STABLE DITCHES, VEGETATED BUFFER AREAS, CATCH BASIN INLETS, OR STREET GUTTERS.
- CULVERTS. CULVERTS MUST BE SIZED TO AVOID UNINTENDED 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 FLEVATION OF STORAGE BEHIND THE CULVERT, CULVERT OUTLET DESIGN MUST INCORPORATE MEASURES. SUCH AS APRONS. 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
- PARKING AREAS. PARKING AREAS MUST BE CONSTRUCTED TO ENSURE RUNOFF IS DELIVERED TO ADJACENT SWALES, CATCH BASINS, CURB GUTTERS, OR BUFFER AREAS WITHOUT ERODING AREAS DOWNSLOPE. 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.

#### INSPECTION AND MAINTENANCE

- DURING CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET DURING CONSTRUCTION.
- INSPECTION AND CORRECTIVE ACTION. INSPECT DISTURBED AND IMPERVIOUS 2.1.1 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 PÉRSON WITH KNOWLEDGE OF EROSION AND STORMWATER CONTROL, INCLUDING THE STANDARDS AND CONDITIONS IN THE PERMIT, SHALL CONDUCT THE
- 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.
- 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) O 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 NEEDING 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 B PROVIDED UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST THREE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.
- POST-CONSTRUCTION. THE FOLLOWING STANDARDS MUST BE MET AFTER
- 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.
- INSPECTION AND MAINTENANCE. ALL MEASURES MUST BE MAINTAINED IN 2.2.2 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
- INSPECT VEGETATED AREAS, PARTICULARLY SLOPES AND EMBANKMENTS, EARLY IN THE GROWING SEASON OR AFTER HEAVY RAINS TO IDENTIFY ACTIVE OR POTENTIAL EROSION PROBLEMS. REPLANT BARE AREAS OR AREAS WITH SPARSE GROWTH. WHERE RILL EROSION IS EVIDENT. ARMOF THE AREA WITH AN APPROPRIATE LINING OR DIVERT THE EROSIVE FLOWS TO ON-SITE AREAS ABLE TO WITHSTAND THE CONCENTRATED FLOWS. SEE PERMANENT STABILIZATION STANDARDS IN SECTION 1.6.
- 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 VECETATED GROWTH THAT COULD OBSTRUCT FLOW AND TO REPAIR ANY EROSION OF THE DITCH LINING VEGETATED DITCHES MUST BE MOWED AT LEAST ANNUALLY OR OTHERWISE MAINTAINED TO CONTROL THE GROWTH OF WOODY VEGETATION AND MAINTAIN FLOW CAPACITY. ANY WOODY VEGETATION GROWING THROUGH RIPRAP LININGS MUST ALSO E REMOVED. REPAIR ANY SLUMPING SIDE SLOPES AS SOON AS PRACTICABLE. IF THE DITCH HAS A RIPRAP LINING, REPLACE RIPRAP ON AREAS WHERE ANY UNDERLYING FILTER FABRIC OR UNDERDRAIN GRAVEL S SHOWING THROUGH THE STONE OR WHERE STONES HAVE DISLODGED. THE CHANNEL MUST RECEIVE ADEQUATE ROUTINE MAINTENANCE TO MAINTAIN CAPACITY AND PREVENT OR CORRECT ANY EROSION OF THE CHANNEL'S BOTTOM OR SIDESLOPES.
- 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 CULVERT'S INLET AND OUTLET
- 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, AT ANY 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).
- 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 LIP TO ENSURE A BETTER DISTRIBUTION OF FLOW INTO A BUFFER. CLEAN-OUT ANY ACCUMULATION OF SEDIMENT WITHIN THE SPREADER BAYS OR TURN-OUT POOLS.
- 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.
- INSPECT AT LEAST ONE PER YEAR, EACH UNDERDRAINED 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.
- 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 BASED ON 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.

#### 2.2.3 REGULAR MAINTENANCE

- 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 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, ( GRADING OF THE GRAVEL SHOULDERS OF GRAVEL OR PAVED ROADS, MUST E ROUTINELY PERFORMED TO ENSURE THAT STORMWATER DRAINS MMEDIATELY OFF THE ROAD SURFACE TO ADJACENT BUFFER AREAS OF STABLE DITCHES, AND IS NOT IMPEDED 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 ROAD SURFACES, CLEAN-OUT ANY SEDIMENTS WITHIN OR AT THE OUTLET OF THESE STRUCTURES TO RESTORE THEIR FUNCTION.
- 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 CUI MORE THAN THREE TIMES PER YEAR, AND MAY NOT BE CUT SHORTER THAN
- 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 SEDIMENT 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 UPON REQUEST. THE PERMITTEE SHALL RETAIN A COPY OF THE LOG FOR A PERIOD OF AT LEAST FIVE YEARS FROM THE COMPLETION OF PERMANENT STABILIZATION.
- 2.3 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
- 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.
- INSPECTION AND REPAIR OF STORMWATER CONTROL SYSTEM. ALL ASPECTS OF STORMWATER CONTROL SYSTEM HAVE BEEN INSPECTED FOR DAMAGE, WEAR, AND MALFUNCTION, AND APPROPRIATE STEPS HAVE BEEN TAKEN TO REPAIR OR

REPLACE THE SYSTEM, OR PORTIONS OF THE SYSTEM.

- 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
- 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.
- DURATION OF MAINTENANCE. PERFORM MAINTENANCE AS DESCRIBED AND REQUIRED IN THE PERMIT UNLESS AND UNTIL THE SYSTEM IS FORMALLY ACCEPTED BY THE MUNICIPALITY OR QUASI-MUNICIPAL DISTRICT, OR IS PLACED UNDER THE JURISDICTION OF A LEGALLY CREATED ASSOCIATION THAT WILL BE RESPONSIBLE FOR THE MAINTENANCE OF THE SYSTEM, IF A MUNICIPALITY OR QUASI-MUNICIPAL 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 AGREES TO MAINTAIN THOSE COMPONENTS OF THE SYSTEM IN COMPLIANCE WITH DEPARTMENT STANDARDS. UPON SUCH ASSUMPTION OF RESPONSIBILITY, AND APPROVAL BY THE DEPARTMENT, THE MUNICIPALITY, QUASI-MUNICIPAL DISTRICT, OR ASSOCIATION BECOMES A CO-PERMITTEE FOR THIS PURPOSE ONLY AND MUST COMPLY WITH ALL TERMS AND CONDITIONS OF THE PERMIT.

#### 3 HOUSEKEEPING

- 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
- 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. 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 ADEQUATE PRE-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 FINES, REDUCTION IN INFILTRATION RATE, AND CONSEQUENT FLOODING AND DESTABILIZATION.
- 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 AS NEEDED. A STABILIZED CONSTRUCTION ENTRANCE (SCE) SHOULD BE INCLUDED TO MINIMIZE TRACKING OF MUD AND SEDIMENT. IF OFF-SITE TRACKING OCCURS, PUBLIC ROADS SHOULD BE SWEPT IMMEDIATELY AND NO LESS THAN ONCE A WEEK AND PRIOR TO SIGNIFICANT STORM EVENTS. OPERATIONS DURING DRY MONTHS, THAT EXPERIENCE FUGITIVE DUST PROBLEMS, SHOULD WET DOWN UNPAVED ACCESS ROADS ONCE A WEEK OR MORE FREQUENTLY AS NEEDED WITH A WATER ADDITIVE TO SUPPRESS FUGITIVE SEDIMENT
- 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
- 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 PONDED AREA. EITHER THROUGH GRAVITY OR PUMPING, MUST BE SPEAD 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
- AUTHORIZED NON-STORMWATER DISCHARGES. IDENTIFY AND PREVENT CONTAMINATION BY NON-STORMWATER DISCHARGES. WHERE ALLOWED NON-STORMWATER DISCHARGES EXIST, THEY MUST BE IDENTIFIED AND STEPS SHOULD BE TAKEN TO ENSURE THE IMPLEMENTATION OF APPROPRIATE POLLUTION PREVENTION MEASURES FOR THE NON-STORMWATER COMPONENT(S) OF THE DISCHARGE. AUTHORIZED NON-STORMWATER

#### DISCHARGES FROM FIREFIGHTING ACTIVITY; FIRE HYDRANT FLUSHINGS:

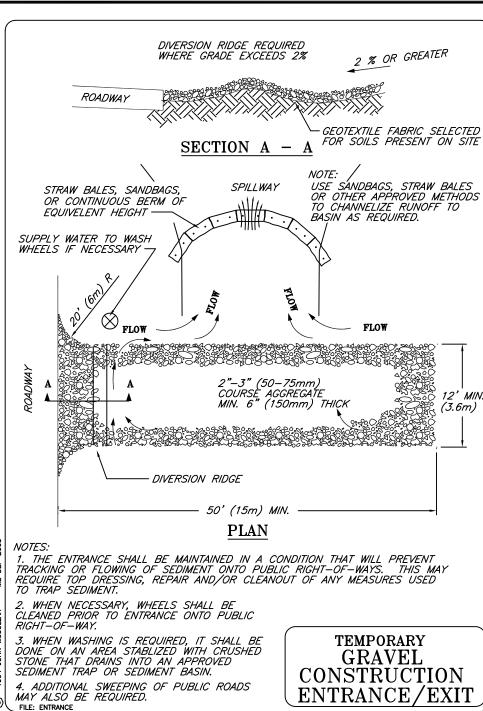
- VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE, UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED): DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX
- 3.6.5 ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS; PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS
- MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED; UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE;
- FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED; 3.6.10 UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX

UNCONTAMINATED GROUNDWATER OR SPRING WATER:

- PÒTÁBLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS; AND LANDSCAPE IRRIGATION.
- 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 WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT,
- FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING; 3.7.3

FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS;

3.7.4 TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.



BASIC STANDARDS - EROSION CONTROL MEASURES:

**GENERAL NOTE:** 

SHALL MEET MDOT ITEM 656.

HOWEVER. BASED ON SITE AND WEATHER CONDITIONS DURING

REPAIRED IMMEDIATELY DURING CONSTRUCTION AND NEED TO BE

MAINTAINED UNTIL THE SITE IS FULLY STABILIZED OR VEGETATION IS

ESTABLISHED. A CONSTRUCTION LOG MUST BE MAINTAINED FOR THE

MINIMUM EROSION CONTROL MEASURES WILL NEED TO BE IMPLEMENTED

OF THE EROSION CONTROL PLAN UNTIL THE SITE IS FULLY STABILIZED.

CONSTRUCTION, ADDITIONAL EROSION CONTROL MEASURES MAY NEED TO

BE IMPLEMENTED. ALL AREAS OF INSTABILITY AND EROSION MUST BE

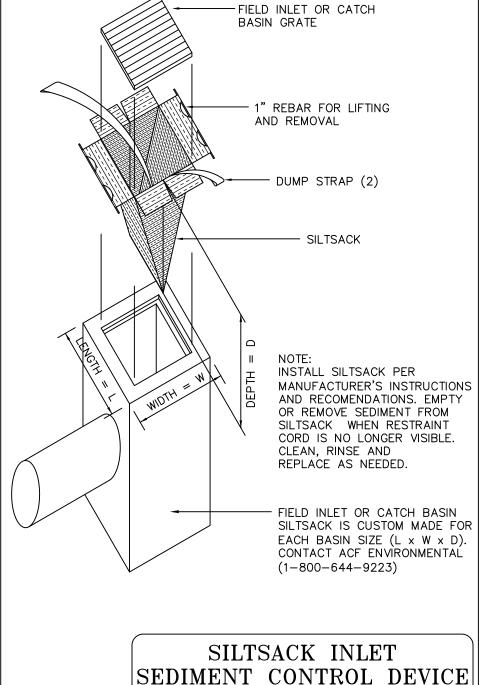
EROSION AND SEDIMENTATION CONTROL INSPECTIONS AND MAINTENANCE.

ALL EROSION AND SEDIMENTATION CONTROL MEASURES

AND THE APPLICANT WILL BE RESPONSIBLE TO MAINTAIN ALL COMPONENTS

*∟1.0 X D (12" MIN.)* **ELEVATION** GEOTEXTILE FILTER FABRIC BENEATH STONE ----LAYER THICKNESS BASED ON LINDISTLIBBED SOILS OR 6' OF 4"-MINLIS 2.25 X D50 BANK RUN GRAVEL FREE OF FINES, CLAYS, SILTS. SECTION APRON LENGTH PER DESIGN 'D' = PIPE DIAMETER NOTES: 1. CONSULT WITH IF&W IF FISH PASSAGE WILL BE INHIBITED DURING LOW FLOWS. 2. REFER TO DESIGN NOTES AND LIMITATIONS IN TEXT ON PIPE OUTLET PROTECTION. 3. IN DEFINED CHANNELS, APRON SHALL EXTEND FULL WIDTH OF BOTTOM AND ONE FOOT ABOVE MAX. TAILWATER OR UP TO BANK FULL, WHICHEVER IS LESS. PROTECTION (RIP RAP) シ<u> FILE: OUTLETAPRON</u>

PIPE INLET/OUTLET



7 *PONDING HEIGHT* PONDING HEIGHT ←CLÉAN STONE FLOW 8" (200mm) (TYP) STORAGE HT. 12" MIN. 12" MIN. (300mm) (300mm) *└\_4"x6" (100 X 150mn* TRENCH WITH COMPACTED BACKFILL LEDGE, FROZEN GROUND, HEAVY ROOTS INSTALLATION WITHOUT TRENCHING TRENCH DETAIL \*DO NOT USE MULCH BERM 1. SILT FENCE SHALL BE PLACED ON SLOPE CONTOURS TO MAXIMIZE PONDING EFFICIENCY. IN AREAS IN OR NEAR INSPECT AND REPAIR FENCE AFTER EACH WETLANDS STORM EVENT AND REMOVE SEDIMENT WHEN NECESSARY. 9" (225mm) MAXIMUM RECOMMENDED STORAGE HEIGHT. (USE SILT FENCE INSTEAD) 3. REMOVED SEDIMENT SHALL BE DEPOSITED TO AN AREA THAT WILL NOT CONTRIBUTE TDIMENT OFF—SITE AND CAN BE PERMANENTLY SILT FENCE 4. DO NOT PLACE SILT FENCE IN STREAMS OR CONCENTRATED FLOW CONDITIONS. FILE: SILTFENC FROSION CONTROL MIX CAN BE MANUFACTURED ON OR OFF THE PROJECT SITE IT MUST CONSIST

FLOW

10' (3m) MAXIMUM SPACING WITH

6' (1.8m) MAXIMUM SPACING WITHOUT

WIRE SÚPPORT FENCE

NOTE: PRE-FABRICATED SILT FENCE IS ACCEPTABLE IF INSTALLED PER MANUFACTURER.

FROSION CONTROL MIX BERMS

NEEDED WITHOUT WIRE MESH SUPPORT—

ATTACH FILTER FABRIC

SECURELY TO UPSTREAM SIDE OF POST

PONDING IS ANTICIPATED OR OCCURS—

OUBLE NUMBER OF STAKES FOR SUPPORT.

PRIMARILY OF ORGANIC MATERIAL, SEPARATED AT THE POINT OF GENERATION, AND MAY INCLUDE: SHREDDED BARK, STUMP GRINDINGS, COMPOSTED BARK, OR ACCEPTABLE MANUFACTURED PRODUCTS. WOOD AND BARK CHIPS, GROUND CONSTRUCTION DEBRIS OR REPROCESSED WOOD PRODUCTS WILL NOT BE ACCEPTABLE AS THE ORGANIC COMPONENT OF THE MIX.

EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKSLESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS:

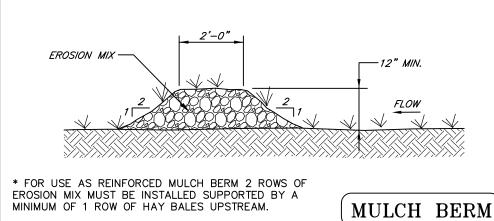
• THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80 AND 100%, DRY WEIGHT BASIS. • PARTICLE SIZE BY WEIGHT SHALL BE 100 % PASSING A 6" SCREEN AND A MINIMUM OF 70 %, MAXIMUM OF 85%, PASSING A 0.75" SCREEN. • THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED. • LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.

• SOLUBLE SALTS CONTENT SHALL BE < 4.0 MMHOS/CM.

• THE PH SHOULD FALL BETWEEN 5.0 AND 8.0. • THE BARRIER MUST BE PLACED ALONG A RELATIVELY LEVEL CONTOUR. IT MAY BE NECESSARY TO CUT TALL GRASSES OR WOODY VEGETATION TO AVOID CREATING VOIDS AND BRIDGES THAT WOULD ENABLE FINES TO WASH UNDER THE BARRIER THROUGH THE GRASS BLADES OR PLANT STEMS • ON SLOPES LESS THAN 5 % OR AT THE BOTTOM OF STEEPER SLOPES (<2:1) UP TO 20 FEET LONG.

AND A MINIMUM OF TWO FEET WIDE. ON LONGER OR STEEPER SLOPES, THE BARRIER SHOULD BE WIDER TO ACCOMMODATE THE ADDITIONAL RUNOFF. • FROZEN GROUND, OUTCROPS OF BEDROCK AND VERY ROOTED FORESTED AREAS ARE LOCATIONS TERE BERMS OF EROSION CONTROL MIX ARE MOST PRACTICAL AND EFFECTIV OTHER BMPS SHOULD BE USED AT LOW POINTS OF CONCENTRATED RUNOFF, BELOW CULVERT OUTLET APRONS, AROUND CATCH BASINS AND CLOSED STORM SYSTEMS, AND AT THE BOTTOM OF STEEP PERIMETER SLOPES THAT ARE MORE THAN 50 FEET FROM TOP TO BOTTOM (I.E., A LARGE UP GRADIENT CONTRIBUTING WATERSHED).

THE BARRIER MUST BE A MINIMUM OF 12" HIGH. AS MEASURED ON THE LIPHILL SIDE OF THE BARRIER



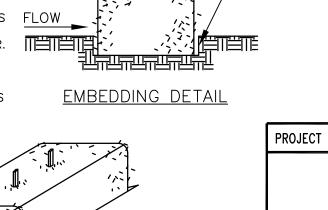
THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

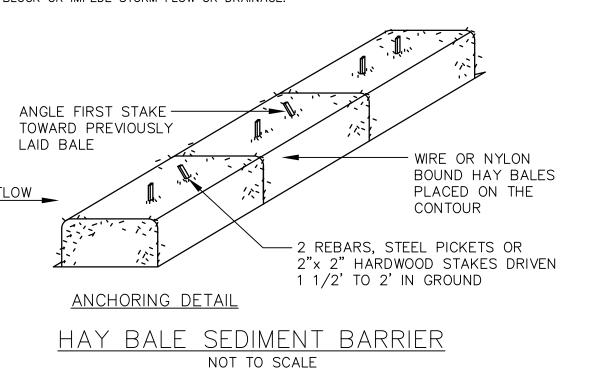
#### 1. BALES SHALL BE PLACED IN A ROW WITH ENDS TIGHTLY ABUTTING THE ADJACENT BALES.

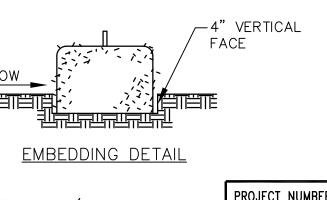
2. EACH BALE SHALL BE EMBEDDED IN THE SOIL A MINIMUM OF 4". 3. BALES SHALL BE SECURELY ANCHORED IN PLACE BY STAKES OR REBARS FLOW DRIVEN THROUGH THE BALES. THE FIRST STAKE IN EACH BALE SHALL BE ANGLED TOWARD PREVIOUSLY LAID BALE TO FORCE BALES TOGETHER.

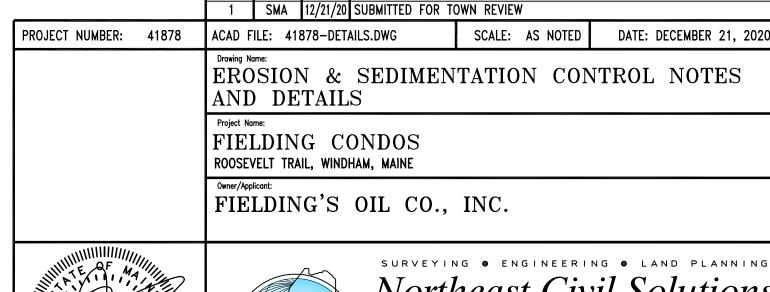
4. INSPECTION SHALL BE FREQUENT AND REPAIR OR REPLACEMENT SHALL

- BE MADE PROMPTLY AS DIRECTED BY PROJECT ENGINEER.
- 5. BALES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFULNESS SO AS NOT TO BLOCK OR IMPEDE STORM FLOW OR DRAINAGE.

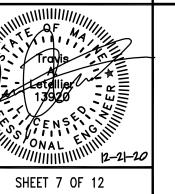


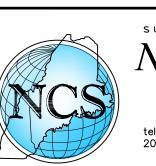


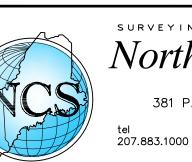




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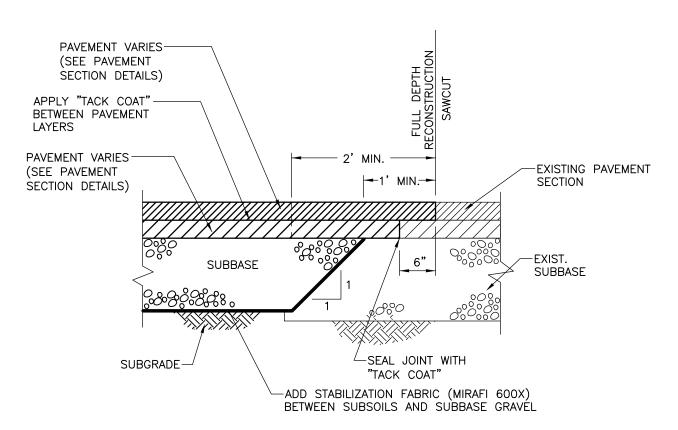






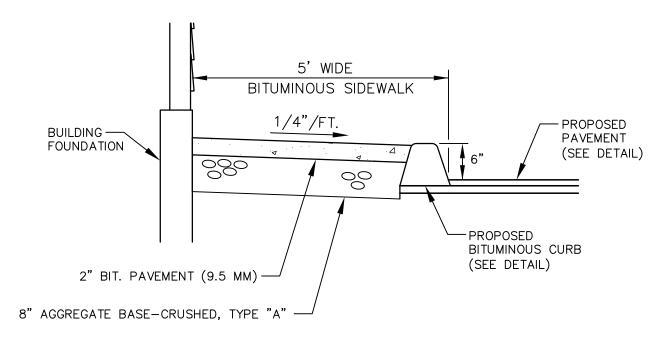
207.883.1001

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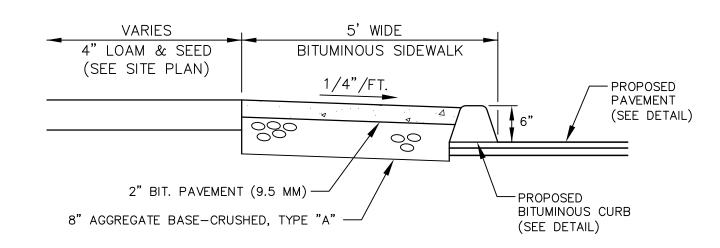
NOTE: PER MDOT ITEM 403

# SAWCUT & PAVEMENT MATCH DETAIL



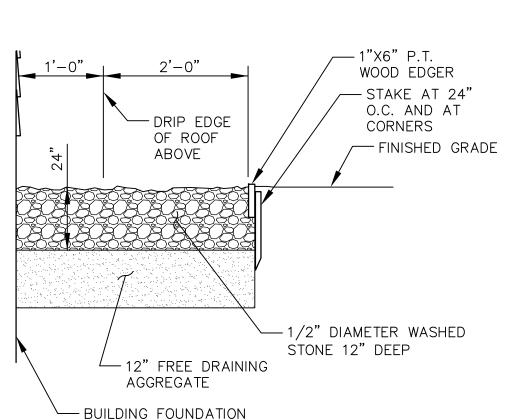
BITUMINOUS SIDEWALK DETAIL

N.T.S.



BITUMINOUS SIDEWALK DETAIL

N.T.S.



NOT TO SCALE

# 1 1/2" BIT. WEARING COURSE "C" GRADE — (9.5 MM AGGREGATE) 2" BIT. BASE COURSE "B" GRADE (12.5 MM AGGREGATE) 6" CRUSHED GRAVEL BASE COURSE -(MDOT SPEC. 703.06 (A) TYPE A) 16" GRAVEL SUBBASE — (MDOT SPEC 703.06 (B) TYPE D) NOTE: PER MDOT ITEM 403

# TYP. PAVEMENT SECTION (FULL DEPTH CONSTRUCTION) NOT TO SCALE

ROUGH BROOM FINISH -

√−#4 **@** 12 EW

PAVEMENT-

SECTION

SEE PLAN FOR DIMENSIONS AND GRADING

- COMPACTED SUBGRADE

**SECTION** 

**DUMPSTER PAD DETAIL** NOT TO SCALE

CONCRETE

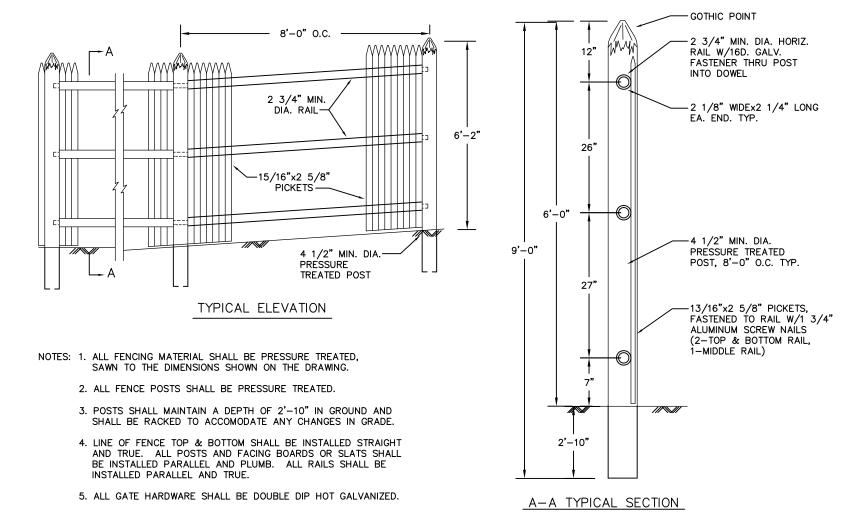
SECTION

#4 @ PERIMETER (TYP)-

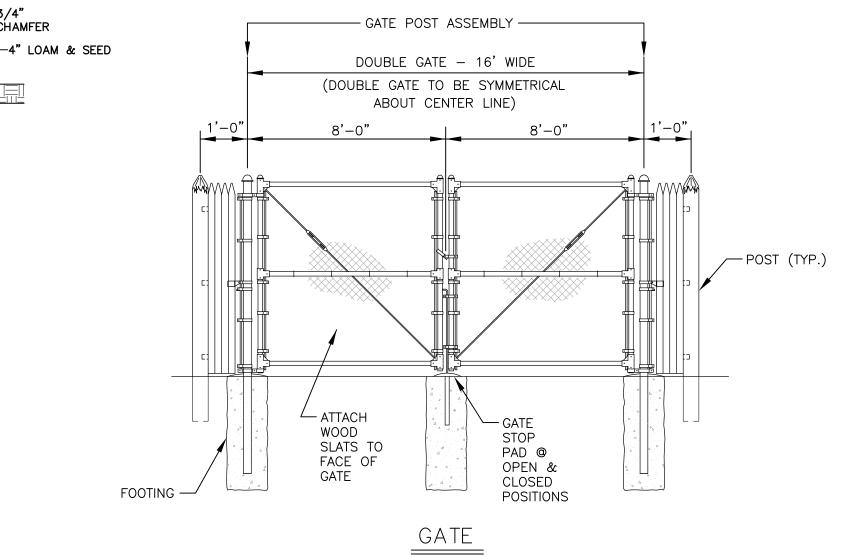
#4 @12 EW — 🎺 🌣 💖 🚉

 $ardsymbol{oxed}$  COMPACTED STRUCTURAL FILL

CHAMFER



#### STOCKADE FENCE DETAIL N.T.S.

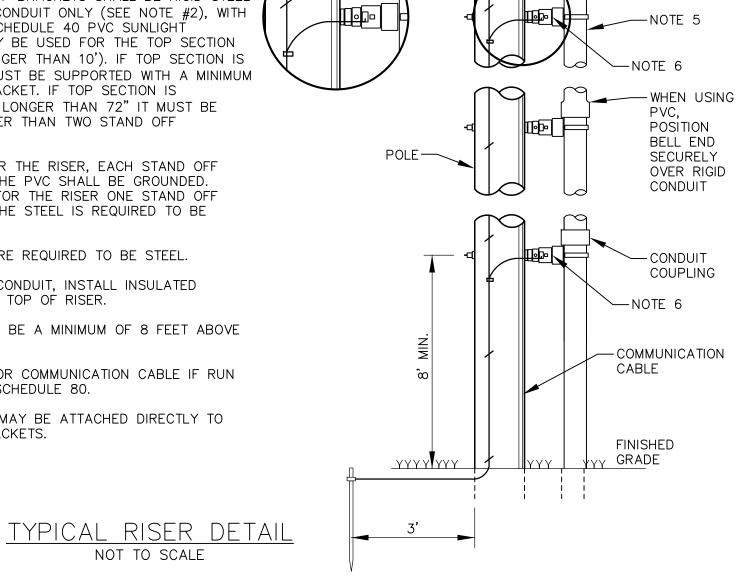


#### NOTES:

- 1. STAND OFF BRACKETS ARE REQUIRED WHEN MORE THAN ONE CONDUIT PER UTILITY IS TO BE INSTALLED ON A POLE.
- 2. ALL THREE PHASE PRIMARY RISERS, WHETHER STAND OFF BRACKETS ARE USED OR NOT, SHALL BE RIGID STEEL FOR THE FIRST SECTION.
- 3. ON SINGLE PHASE PRIMARY, SECONDARY AND SERVICE URD RISERS USING STAND OFF BRACKETS, RIGID STEEL OR SCHEDULE 80 MAY BE USED.
- 4. WHERE RIGID STEEL OR SCHEDULE 80 PVC IS USED FOR THE RISER, ONE BRACKET SHALL BE USED TO SUPPORT EACH SECTION OF CONDUIT UP TO 10 FEET IN LENGTH. EACH BRACKET IS TO BE PLACED JUST BELOW THE RISER CONDUIT COUPLING.
- 5. CONDUIT SECTIONS FOR A SINGLE PHASE OR THREE PHASE RISERS USING STAND OFF BRACKETS SHALL BE RIGID STEEL OR SCHEDULE 80 PVC CONDUIT ONLY (SEE NOTE #2), WITH THE EXCEPTION THAT SCHEDULE 40 PVC SUNLIGHT RESISTANT CONDUIT MAY BE USED FOR THE TOP SECTION OF THE RISER (NOT LONGER THAN 10'). IF TOP SECTION IS LONGER THAN 24" IT MUST BE SUPPORTED WITH A MINIMUM OF ONE STAND OFF BRACKET. IF TOP SECTION IS SCHEDULE 40 PVC AND LONGER THAN 72" IT MUST BE SUPPORTED BY NO FEWER THAN TWO STAND OFF BRACKETS.
- 6. WHERE PVC IS USED FOR THE RISER, EACH STAND OFF BRACKET SUPPORTING THE PVC SHALL BE GROUNDED. WHERE STEEL IS USED FOR THE RISER ONE STAND OFF BRACKET SUPPORTING THE STEEL IS REQUIRED TO BE GROUNDED.
- 7. SWEEPS, WHEN USED, ARE REQUIRED TO BE STEEL.
- 8. IF RISER IS ALL STEEL CONDUIT, INSTALL INSULATED GROUNDING BUSHING AT TOP OF RISER.
- 9. LOWEST BRACKET SHALL BE A MINIMUM OF 8 FEET ABOVE FINISHED GRADE.
- 10. ALTERNATE LOCATION FOR COMMUNICATION CABLE IF RUN IN METAL CONDUIT OR SCHEDULE 80.

NOT TO SCALE

11. COMMUNICATION CABLE MAY BE ATTACHED DIRECTLY TO POLE ADJACENT TO BRACKETS.



24" MAX.

NOTE 10-

NEUTRAL-

RISER

POLE

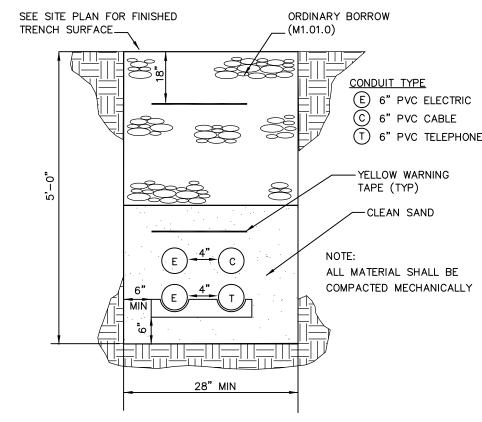
RISER

TYPICALLY

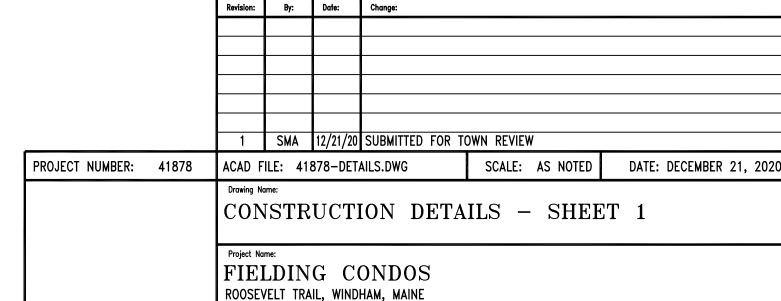
LOCATED ON

EITHER BACK

QUARTER OF



ALL TRENCH CONDUITS SHALL BE SCHEDULE 40 PVC, UNLESS OTHERWISE NOTED COMMON TRENCH DETAIL 1ø ELECTRIC/TELEPHONE/CABLE NOT TO SCALE

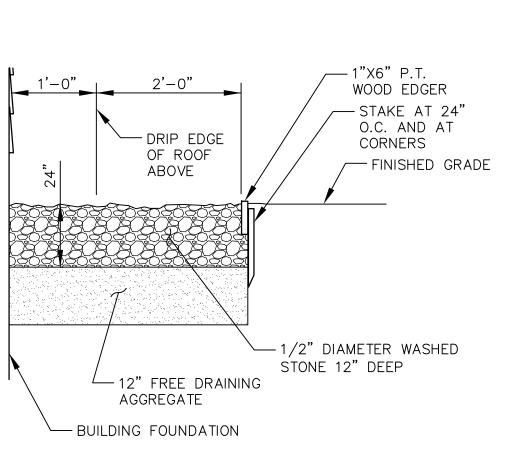


SHEET 8 OF 12

FIELDING'S OIL CO., INC.

Northeast Civil Solutions

381 PAYNE ROAD, SCARBOROUGH, MAINE 04074 207.883.1001 info@northeastcivilsolutions.com www.northeastcivilsolutions.com



STONE DRIP EDGE INFILTRATION DETAIL

N.T.S. CHAMFER — -BASE COVER ANCHOR BOLTS-(PER POLE [6" — WALKWAY AREAS MANUFACTURER'S 6" - UNPAVED AREAS WITH CURB PROTECTION SPECIFICATIONS) 36" - PARKING/DRIVES WITHOUT CURB PROTECTION FINISHED GRADE — NOTES: 1. POLE BASE IS DESIGNED FOR SOIL BEARING PRESSURE OF 100 PSF/FT BASED ON SOIL TYPE. CONTACT STRUCTURAL ENGINEER IF LOWER ON-SITE SOIL BEARING PRESSURE IS ENCOUNTERED. 2. FACTORY SUPPLIED TEMPLATE -WIRE & CONDUIT MUST BE USED WHEN SETTING (PER ELECTRICAL GROUND WIRE -ANCHOR BOLTS. PLANS) (PER LOCAL CODE) 3. FOR LOCATION, SEE PHOTOMETRIC PLAN. EMBEDMENT DEPTH (BELOW GRADE) 4'-6" 30"

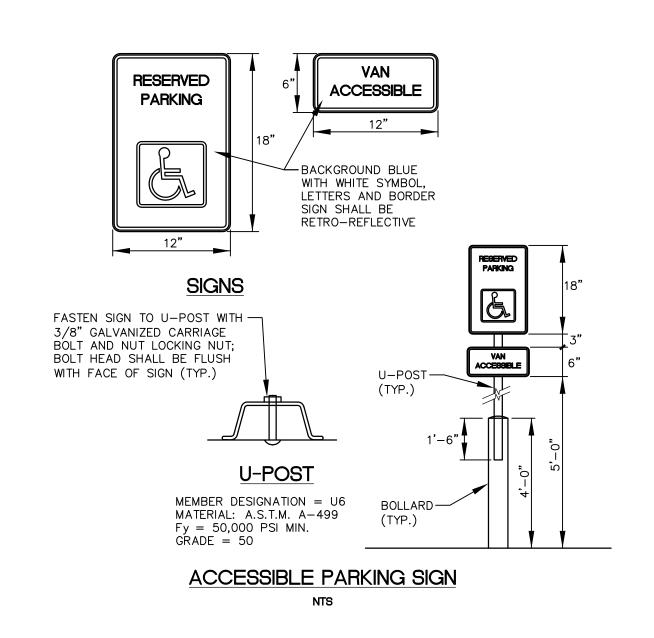
CONCRETE DIAMETER

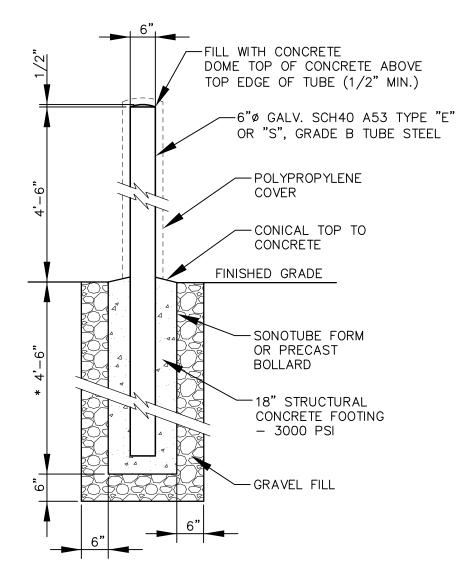
LIGHT POLE BASE

THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

TRAFFIC SIGNS								
IDENTIFICATION	SIGN	SIGN	POST PER	TEXT	SIGN AREA SQ. FT.			REMARKS
NUMBER	HEIGHT	WIDTH	SIGN	,=,,,	SIGNS REQ'D.	NOM. AREA	TOTAL AREA	NEWANNS
R1-1	30"	30"	1	STOP	1	6.25	6.25	PER MUTCD
R7-8	18"	12"	1	RESERVED PARKING	2	1.5	1.5	PER MUTCD
R7-8b	6"	12"	1	VAN ACCESSIBLE	1	0.5	0.5	PER MUTCD

NOTE: ALL SIGNS SHALL CONFORM TO MUTCD STANDARDS AND MDOT ITEM 645



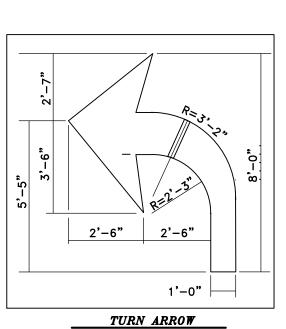


## NOTES;

- 1. PLACE BOLLARDS AS SHOWN IN PLAN VIEW AND/OR ACCESSIBLE PARKING LAYOUT DETAIL.
- 2. BOLLARDS PLACED IN/AT DUMPSTER ENCLOSURE:
- A. INSIDE: 6' TO CENTERLINE FROM FENCE SIDES (2 BOLLARDS); 1.0' TO CENTERLINE FROM BACK OF FENCE

BOLLARD DETAIL

B. OUTSIDE: AS SHOWN AT DETAIL (1 PER CORNER AT FRONT)



ALTERNATE

KNOCK OUTS

3 PLACES

INLET

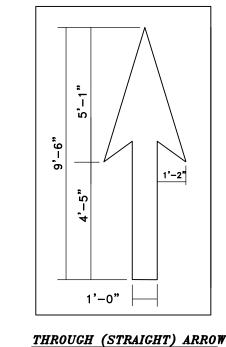
4" INLET¬

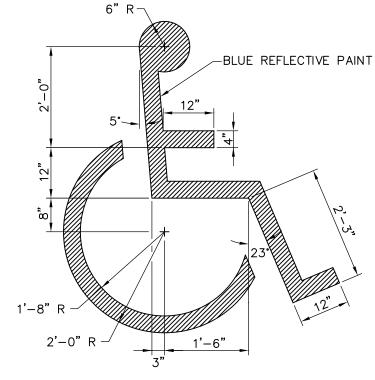
CAPACITY

(GALLONS)

1" TAPER¬→ 5" →

WEIGHT







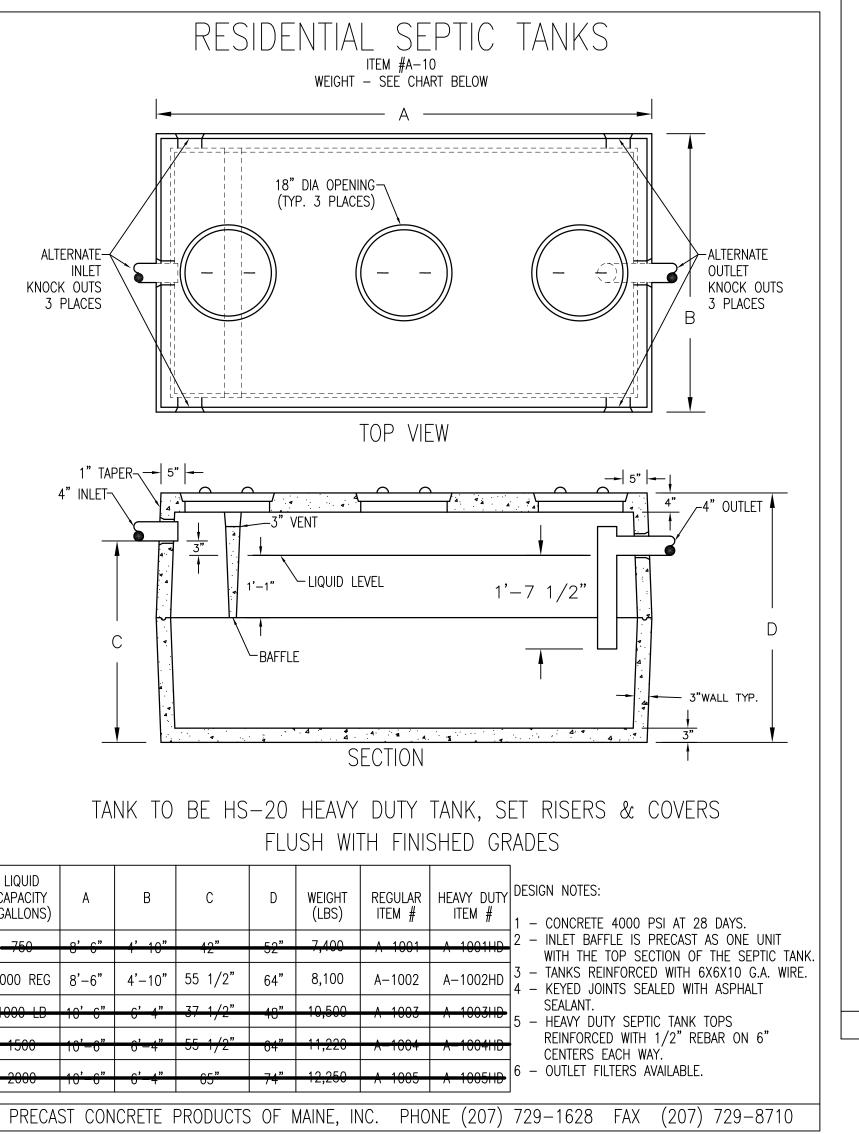
## PAVEMENT MARKING NOTES .

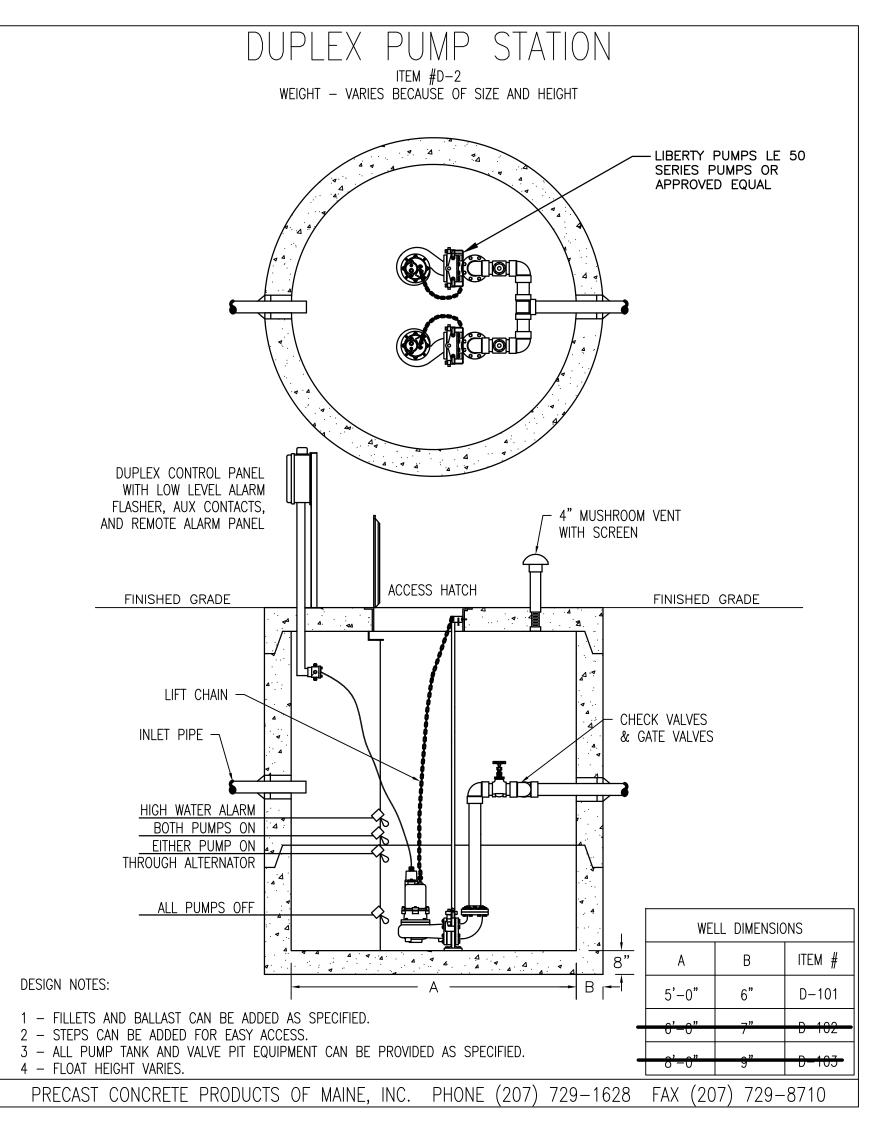
NOTE: PER MDOT ITEM 627

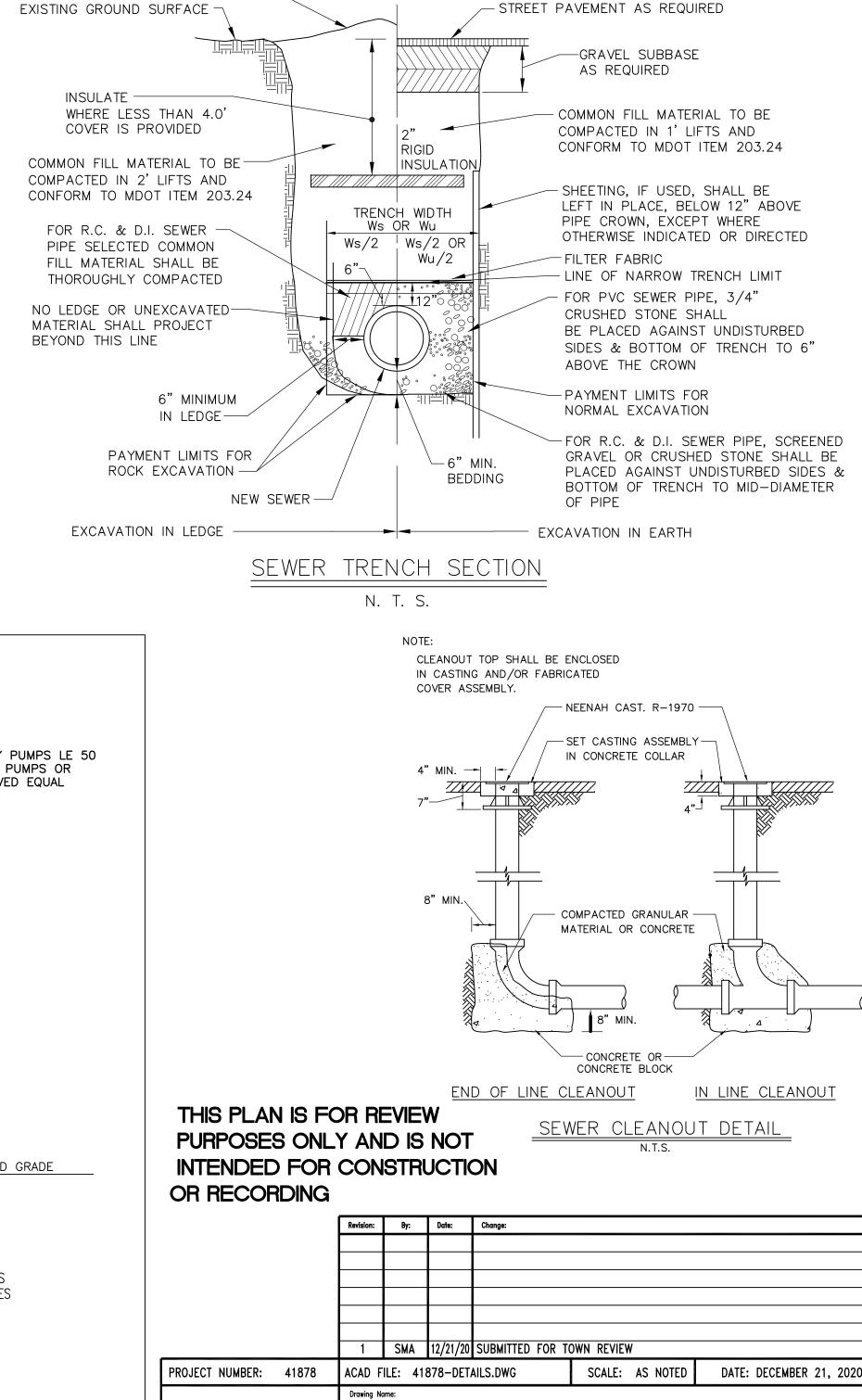
STRIPING ARROWS

N.T.S.

- 1. ALL PAVEMENT MARKING WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST EDITION OF THE MANUAL OF UNIFORM TRAFFIC CONTROL DEVICES MUTCD AND MDOT ITEM 627.
- 2. WORDS AND SYMBOLS SHALL BE CENTERED LATERALLY WITHIN THE LANE. THE LONGITUDINAL DIMENSION SHALL BE PARALLEL TO THE LANE.
- 3. MULTI-WORD MESSAGES SHALL READ "UP"; THAT IS, THE FIRST WORD SHALL BE NEAREST THE APPROACHING DRIVER.
- 4. THE WORD "ONLY" SHALL NOT BE USED WITH THROUGH OR COMBINATION ARROWS, AND SHALL NOT BE USED ADJACENT TO A BROKEN LANE LINE. A TURN ARROW SHALL PRECEED THE WORD "ONLY".
- 5. COMBINATION ARROWS MAY BE COMPRISED OF 2 SINGLE ARROWS (e.g. TURN AND THROUGH ARROWS). HOWEVER, THE SHAFTS OF THE ARROWS SHALL COINCIDE.
- 6. PREFORMED TAPE WORDS AND SYMBOLS SHALL BE PRE-CUT, EITHER BY THE MANUFACTURER OR THE CONTRACTOR.
- 7. WRONG-WAY ARROWS SHALL NOT BE SUBSTITUTED FOR THROUGH ARROWS.
- 8. LONGITUDINAL SPACING BETWEEN SUCCESSIVE WORDS AND/OR SYMBOLS SHOULD BE AT LEAST 4 TIMES THE HEIGHT OF THE LARGEST CHARACTER.







NOTES:

1. TRENCHES LOCATED ON THE ROAD

AS STREET EXCEPT FOR PAVING

2. SATISFACTORY EXCAVATED MATERIAL

LINE OF NARROW TRENCH LIMIT.

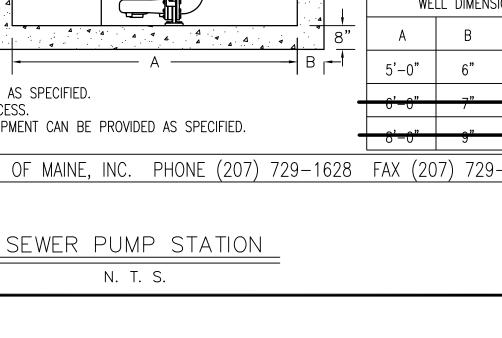
FINAL GRADING -

SHOULDER SHALL BE TREATED THE SAME

CAN BE USED FOR BACKFILL ABOVE THE

CROSS COUNTRY → STREET

TRENCH WIDTH DATA





SHEET 9 OF 12

FIELDING CONDOS

ROOSEVELT TRAIL, WINDHAM, MAINE

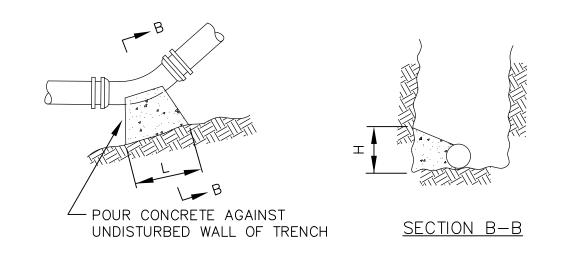
FIELDING'S OIL CO., INC.



CONSTRUCTION DETAILS - SHEET 2



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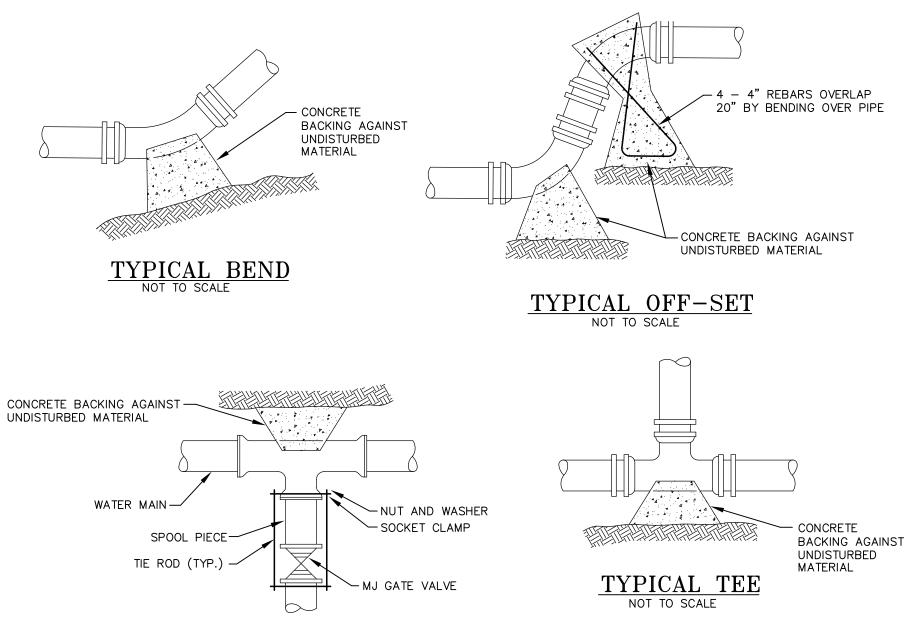


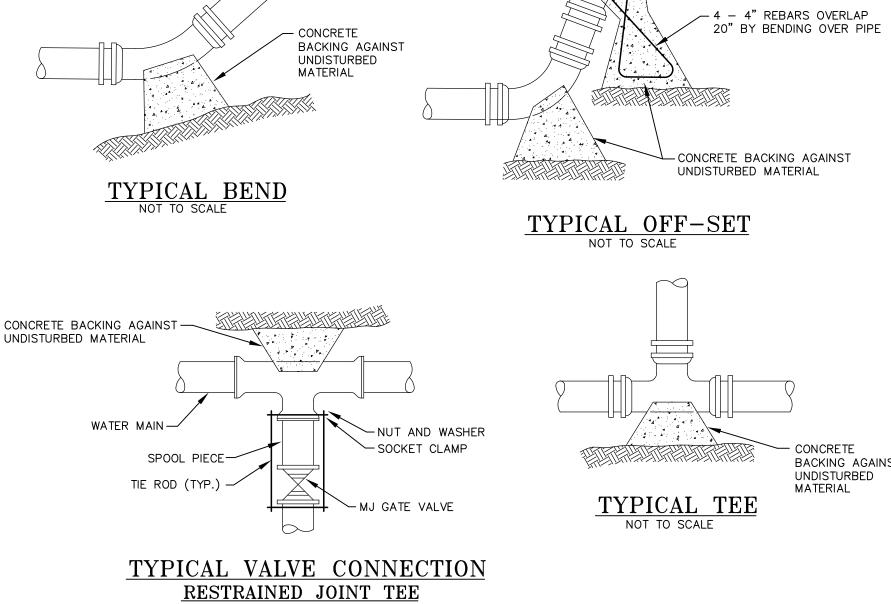
BEARING AREAS — SQUARE FEET							
NOMINAL		FITTING					
DIAMETER OF FITTING	DEAD END	BRANCH OF TEE	90° BEND	45° BEND	BEND SMALLER THAN 45° GREATER THAN 10°		
6"	2	2	3	2	2		
8"	4	4	5	3	2		
10"	6	6	8	4	2		
12"	8	8	10	6	3		
14"	12	12	16	9	4		
16"	12	12	20	10	5		

- 1. ALL BENDS, TEE HYDRANTS AND DEAD ENDS SHALL BE BRACED WITH
- CONCRETE THRUST BLOCKS. 2. BEARING AREA IS AREA OF CONCRETE IN CONTACT WITH WALL OF TRENCH=HxL. 3. HEIGHT (H) AND LENGTH (L) AS REQUIRED TO OBTAIN BEARING AREA IN TABLE.

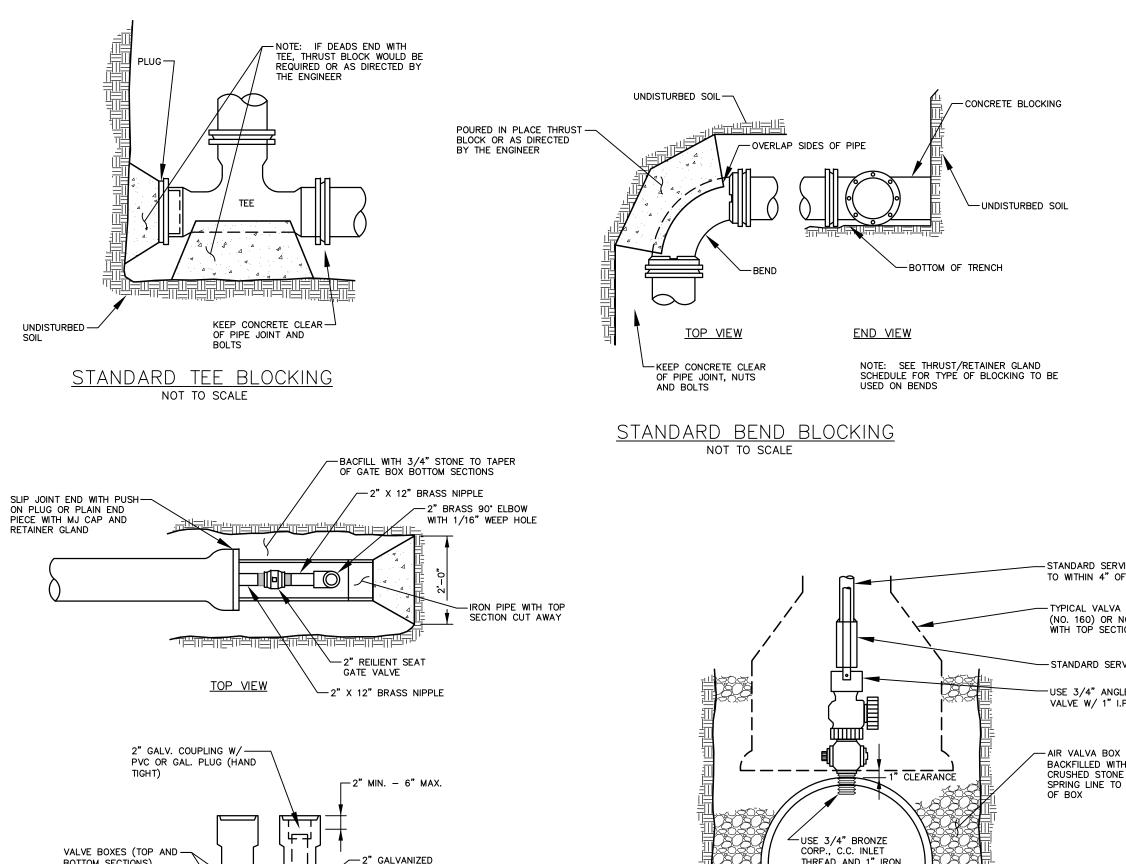
THRUST BLOCK DETAILS NOT TO SCALE

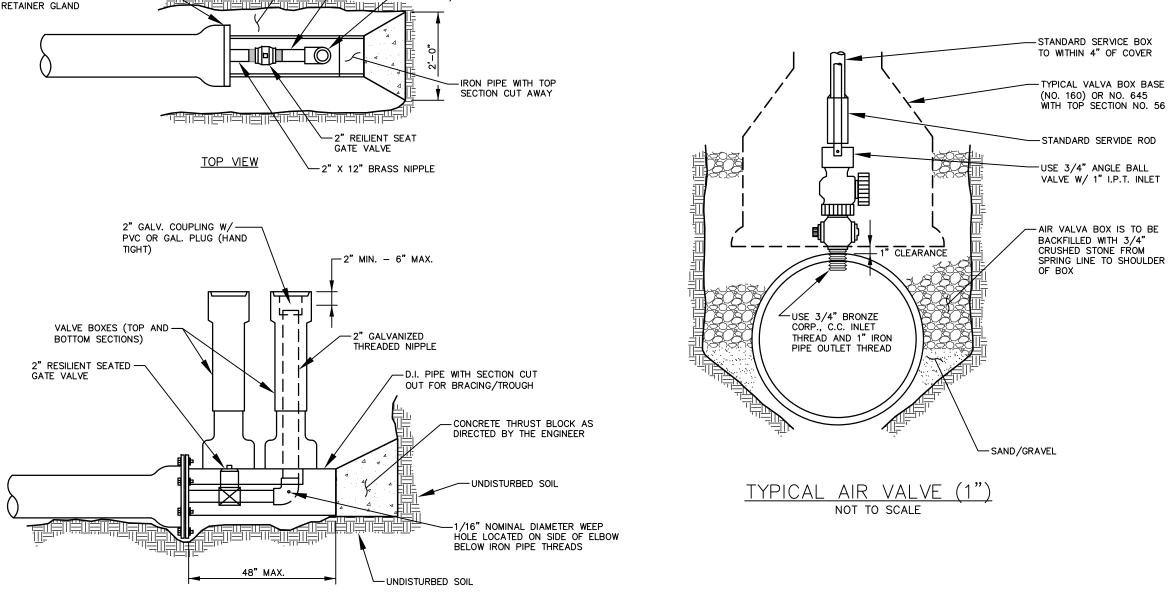
STANDARD 2" BLOW OFF NOT TO SCALE

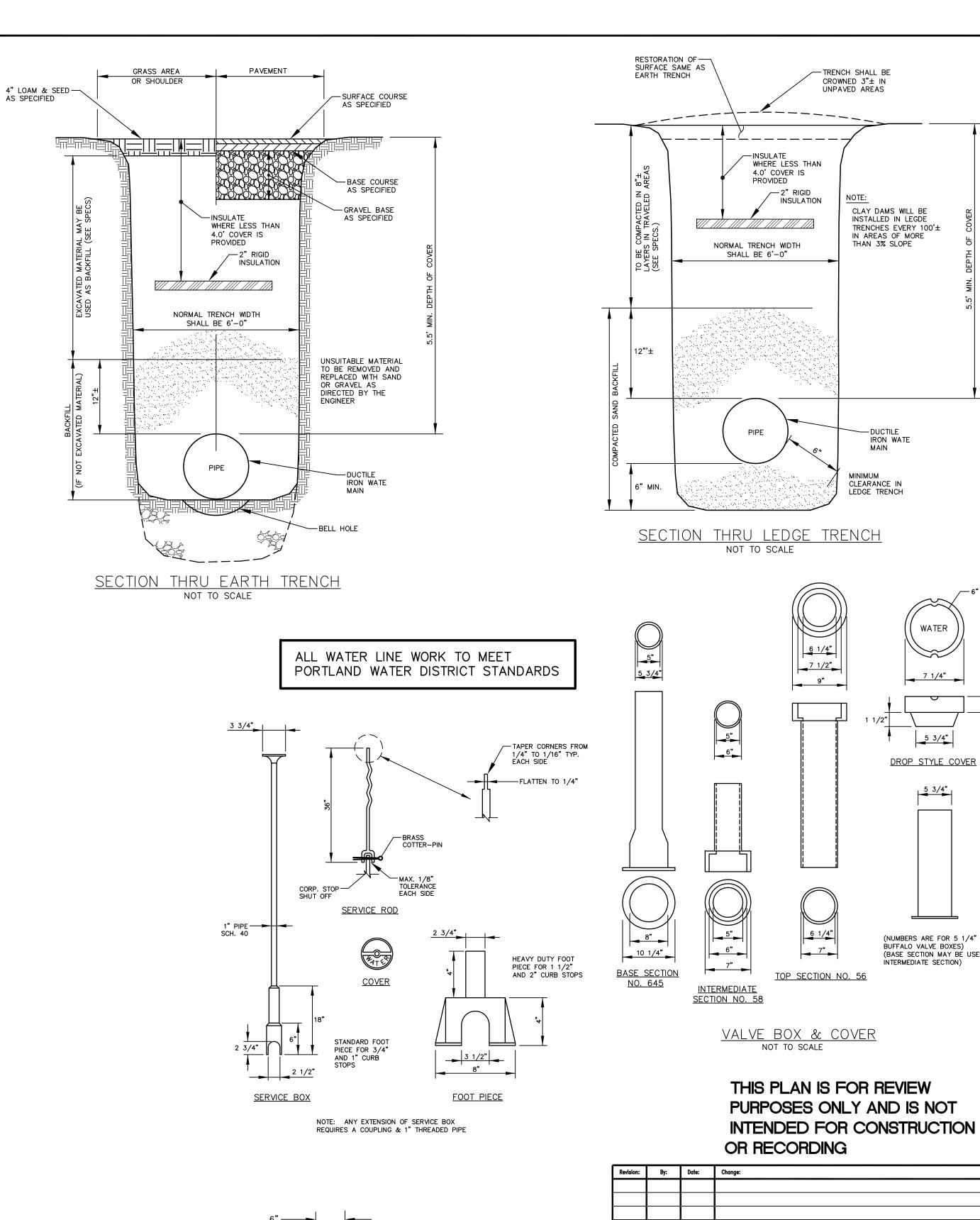


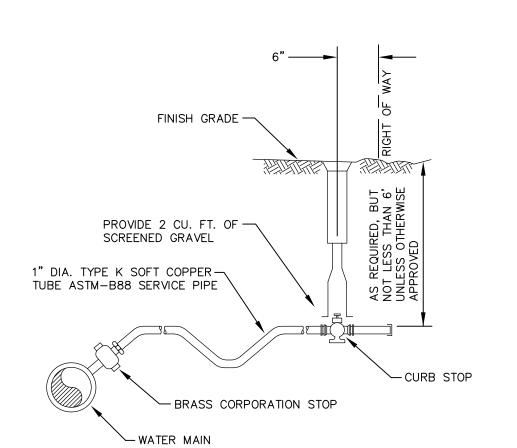


NOT TO SCALE

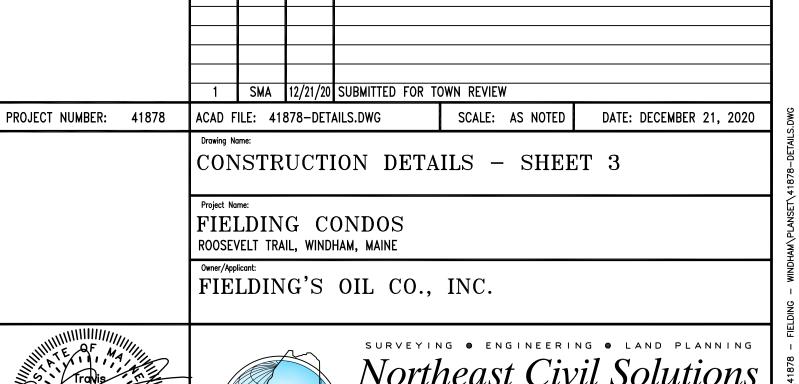


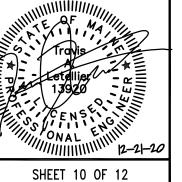






TYPICAL WATER SERVICE CONNECTION







Northeast Civil Solutions 381 PAYNE ROAD, SCARBOROUGH, MAINE 04074

TRENCH SHALL BE CROWNED 3"± IN UNPAVED AREAS

CLAY DAMS WILL BE INSTALLED IN LEGDE TRENCHES EVERY 100'± IN AREAS OF MORE THAN 3% SLOPE

DUCTILE
IRON WATE

MINIMUM CLEARANCE IN

LEDGE TRENCH

WATER

5 3/4"

DROP STYLE COVER

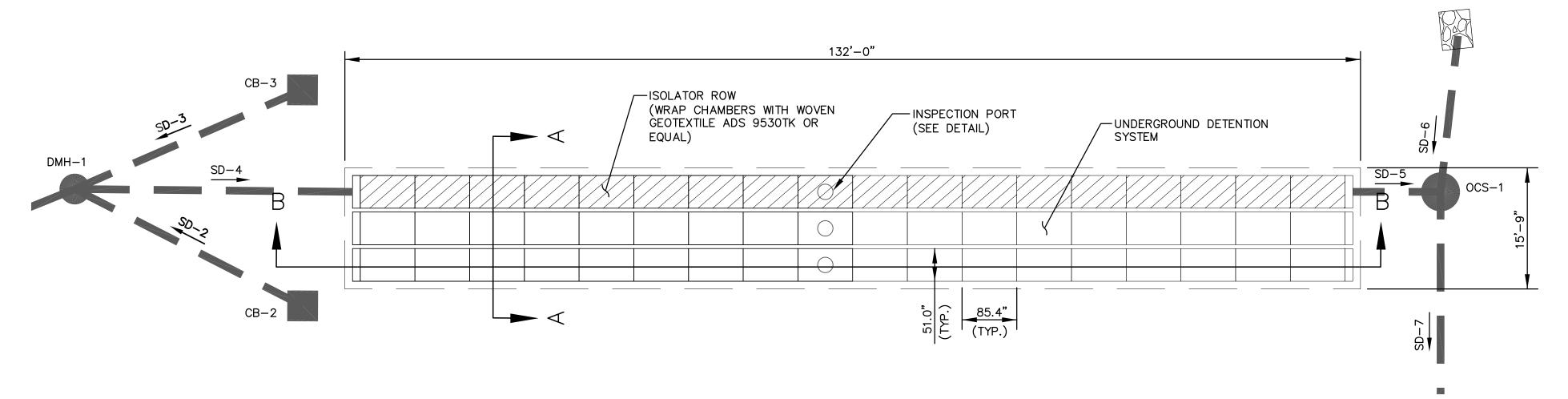
(NUMBERS ARE FOR 5 1/4"

BUFFALO VALVE BOXES) (BASE SECTION MAY BE USED AS

INTERMEDIATE SECTION)

INSULATION

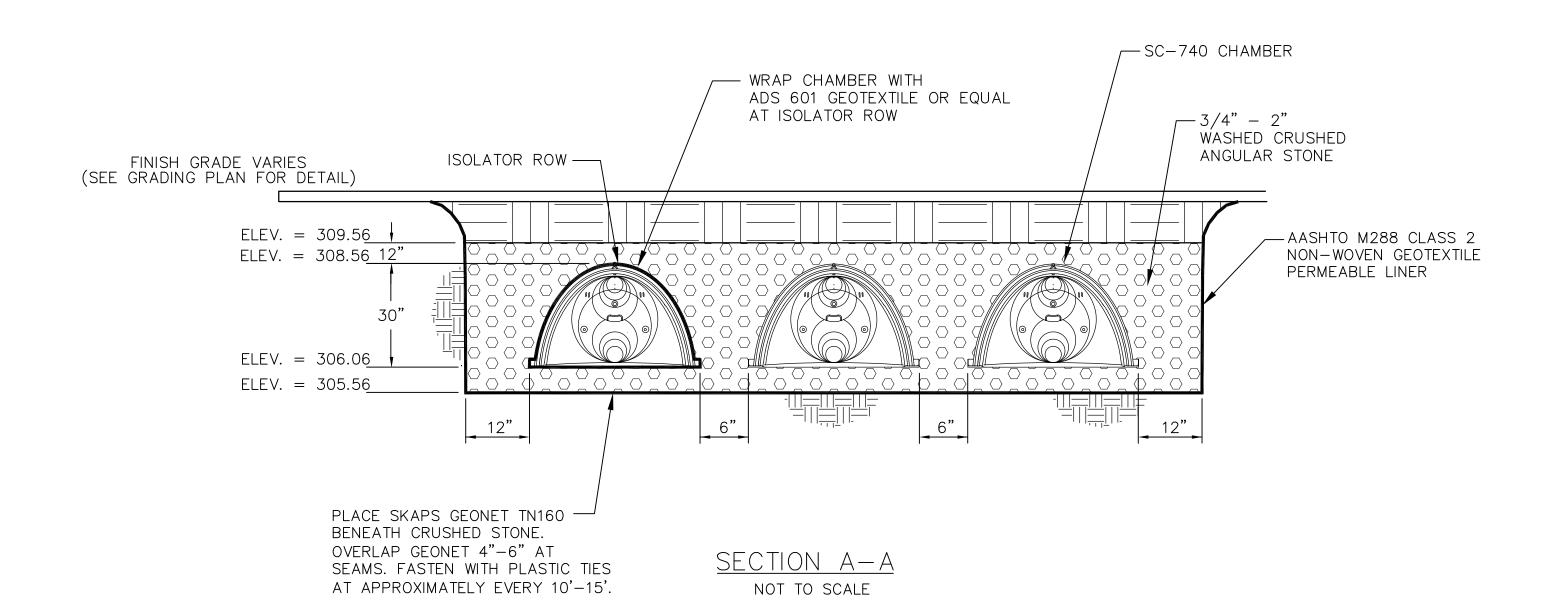
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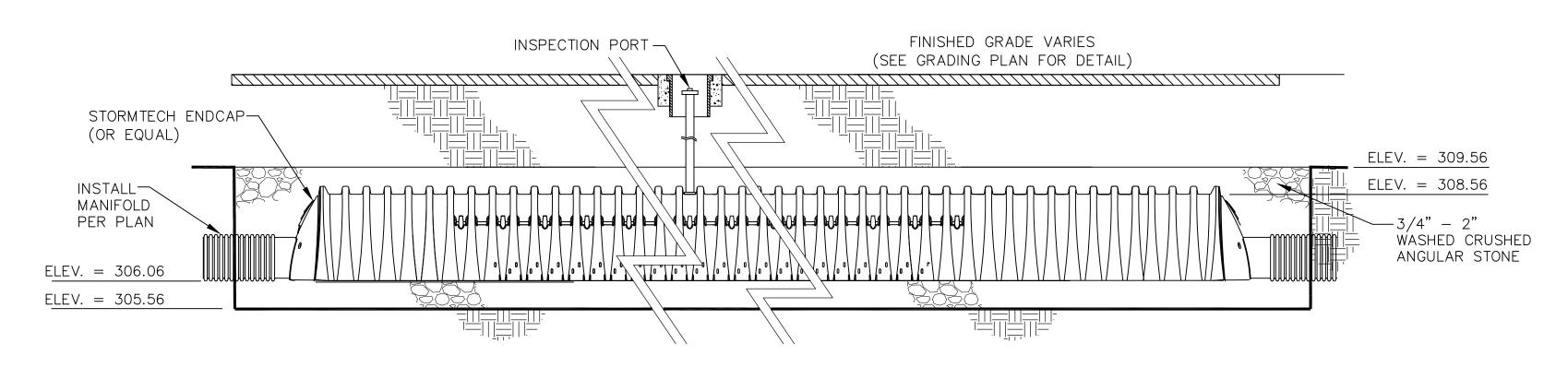


# STORMWATER TREATMENT SYSTEM

 $\frac{|CR |RCA||V|C|| |S||S||C|}{SCALE: 1" = 10'}$ 

- NOTES:
- MANHOLE FRAME AND GRATE SHALL BE DESIGNED TO WITHSTAND H-20 LOADING.
- 2. ACCESS LADDER WITH PRECAST DROP FRONT STEEL REINFORCED COPOLYMER RUNGS AT 12" O.C.
- 3. Lebaron Standard Frame and Cover Set in Mortar. Cat no LK 110 Set on top of Brick Masonry and Sealed With Mortar. Cover to be supplied With 3" Lettering to Read "Drain".





SECTION B-B
NOT TO SCALE

	TABLE 7-3 SAND FILTER MEDIA					
SIEVE SIZE	% BY WEIGHT					
3/8"	100					
#4	95–100					
#8	80-100					
#16	50-85					
#30	25-60					
#60	10-30					
#100	2–10					
#200	0-5 (8-10% IS PREFERRED)					

MAINE DOT SPECIFICATION AGGREGATE MDOT #703.01

		E 7—1 IFICATIONS FOR ME DOT #703.2:
	SIEVE SIZE	% BY WEIGHT
	UNDERDR	AIN TYPE B
	1"	90–100
	1/2"	75–100
	#4	50-100
	#20	15-80
	<b>#</b> 50	0-15
	#200	0-5
)	UNDERDRA	AIN TYPE C
	1"	100
	3/4"	90-100
	3/8"	0-75
	#4	0-25

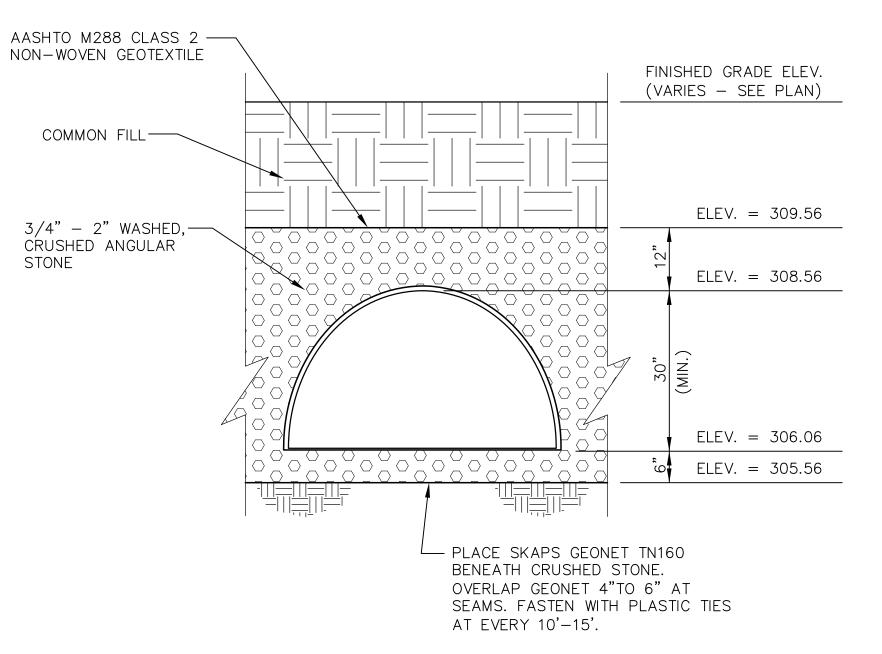
TYPE B COARSE GRAVEL SHALL HAVE NO MORE THAN 5% (PREFERABLY 2%) OF FINES PASSING THE #200 SIEVE

#10

0-5

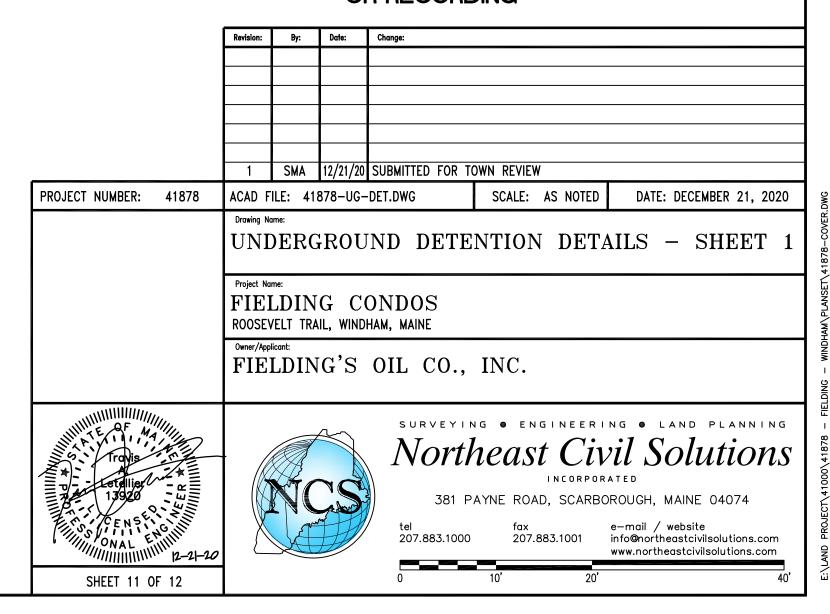
#### SAND FILTER SPECIFICATIONS:

- 1. SAND MATERIAL TO HAVE UNIFORM MIX, FREE OF STONES, STUMPS, ROOTS OR OTHER OBJECTS LARGER THAN 2".
- 2. FILTER MEDIA SHALL CONSIST OF SILT/SAND LAYER WITH A FINES CONTENT OF 8% BUT NOT GREATER THAN 10% (I.E. 8%-10% PASSING #200 SIEVE)
- 3. DO NOT OVER COMPACT SAND MEDIA.
  PERMEABILITY OF FILTER WILL DECREASE IF
  OVER COMPACTED. ANTICIPATED LEVEL OF
  COMPACTION IS EQUAL TO 90-92% STANDARD
  PROCTOR.
- 4. MEDIA SHALL HAVE FILTRATION VELOCITY
  BETWEEN 2.5 AND 4.75 IN/HR SUCH THAT THE
  SYSTEM WILL DRAIN WITHIN 24-48 HOURS.



# UNDERGROUND DETENTION CROSS SECTION NOT TO SCALE

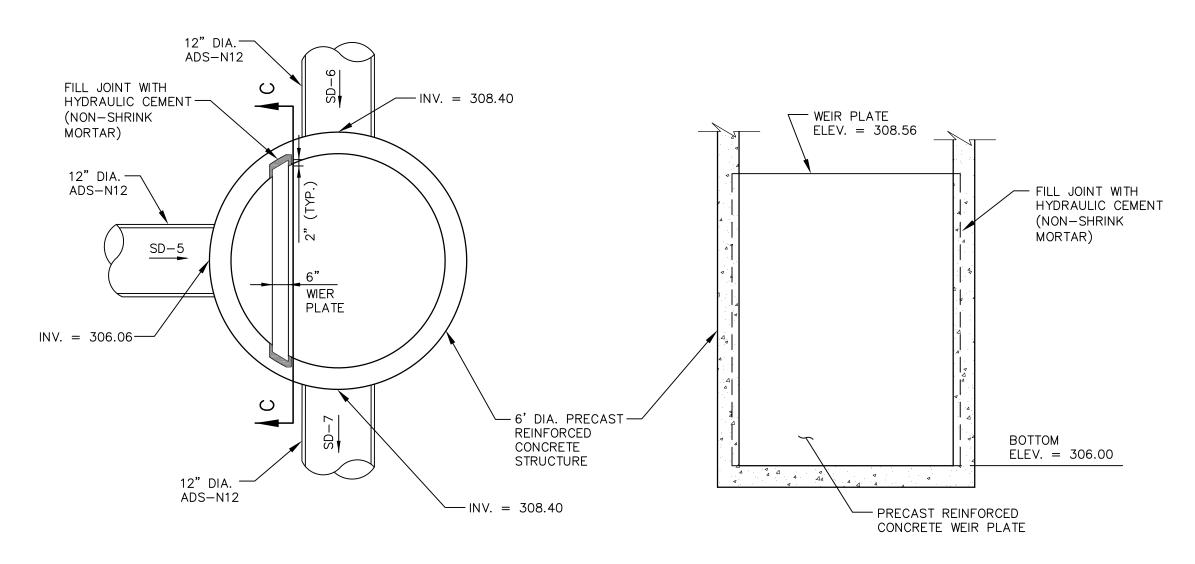
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OR RECORDING



## ISOLATOR ROW DETAIL

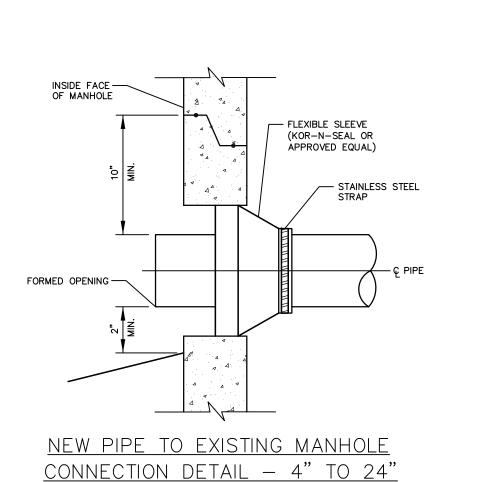
NOT TO SCALE

1. ALL DESIGN SPECIFICATIONS FOR STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE STORMTECH DESIGN MANUAL. 2. THE INSTALLATION OF STORMTECH CHAMBERS SHALL BE IN ACCORDANCE WITH THE LATEST STORMTECH INSTALLATION INSTRUCTIONS. 3. THE CONTRACTOR IS ADVISED TO REVIEW AND UNDERSTAND THE INSTALLATION INSTRUCTIONS PRIOR TO BEGINNING SYSTEM INSTALLATION. CALL 1-888-892-2694 OR VISIT WWW.STORMTECH.COM TO RECEIVE A COPY OF THE LATEST STORMTECH INSTALLATION INSTRUCTIONS.

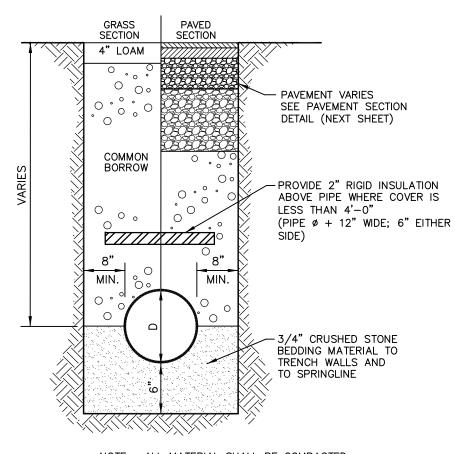


OUTLET CONTROL STRUCTURE OCS-1 NOT TO SCALE NOTE: STRUCTURE TO BE DESIGNED TO WITHSTAND HS-20 LOADING

SECTION C-C (WEIR PLATE) NOT TO SCALE



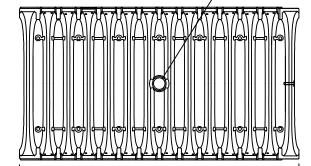
NOT TO SCALE



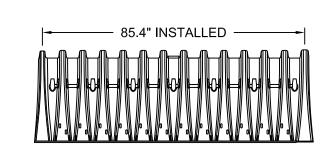
NOTE: ALL MATERIAL SHALL BE COMPACTED TO 95% OF THE MAXIMUM PROCTOR DENSITY (MODIFIED) PER MDOT ITEM 603

TYPICAL STORM DRAIN TRENCH SECTION NOT TO SCALE

#### ACCEPTS 4" SCH 40 PIPE FOR CLEANOUT OR INSPECTION PORT



—— 90.7" ACTUAL LENGTH ——



51.0" x 30.0" x 85.4" 45.9 CUBIC FEET 74.9 CUBIC FEET 75 LBS.

STUBS AT TOP OF END CAP FOR PARTS NUMBERS ENDING WITH "T"

NOMINAL CHAMBER SPECIFICATIONS

SIZE (W x H x INSTALLED LENGTH)

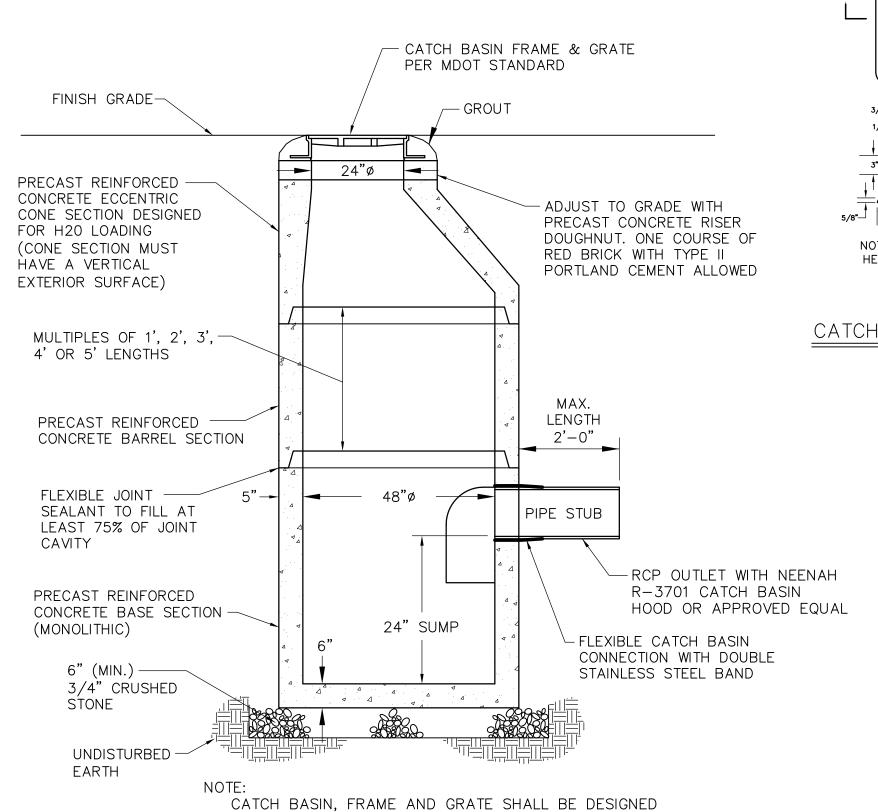
MINIMUM INSTALLED STORAGE

CHAMBER STORAGE

STUBS AT BOTTOM OF END CAP FOR PARTS NUMBERS ENDING WITH

PART #	CHAMBER	PIPE SIZE	A	В	С	D
SC740EPE12B	SC 740	<del>12 in (300 mm)</del>	<del>14.70 in (373 mm)</del>	7.70 in (196 mm)	N/A	1.20 in (30 mm)
SC740EPE24B	SC 740	24 in (600)mm	18.50 in (470 mm)	9.45 in (240 mm)	N/A	0.10 in (3 mm)
NOTE: ALL DIMENS ALL STUBS, EXCEPT SC740EPE24B ARE BOTTOM OF END CA THE OUTSIDE DIAME IS FLUSH WITH THE END CAP. FOR AI INFORMATION CONTA AT 1-888-892-269	FOR THE PLACED AT AP SUCH THAT ITER OF THE STUB BOTTOM OF THE DOITIONAL ACT STORMTECH	BELOW THE BOTTO APPROXIMATELY 1 SHOULD BE REMO	:740EPE24B THE 24" STUE DM OF THE END CAP .75". BACKFILL MATERIAL VED FROM BELOW THE N- HE FITTING SETS LEVEL.			

SC-740 TECHNICAL DETAILS NOT TO SCALE



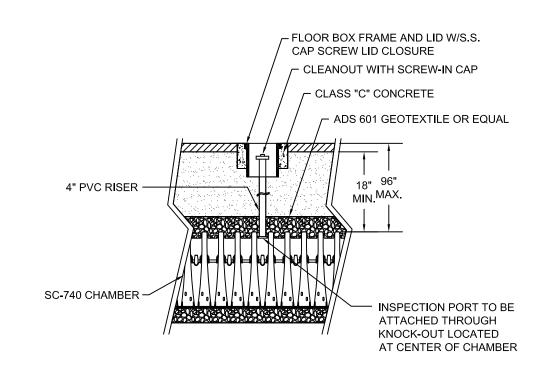
PER MDOT ITEM 604. PRECAST CONCRETE CATCH BASIN DETAIL

TO WITHSTAND HS-20 LOADING.

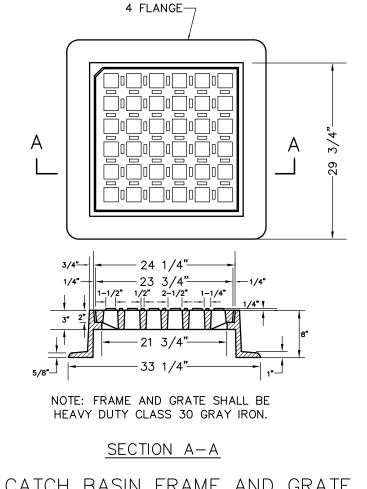
#### ACCEPTABLE FILL MATERIALS STORMTECH SC-740 CHAMBER SYSTEMS

MATERIAL LOCATION	DESCRIPTION	AASHTO M43 DESIGNATION	AASHTO M145 DESIGNATION	COMPACTION/DENSITY REQUIREMENT
FILL MATERIAL FROM 18" TO GRADE ABOVE CHAMBERS	ANY SOIL/ROCK MATERIALS, NATIVE SOILS OR PER ENGINEER'S PLANS. (SEE TYPICAL STORMWATER TRENCH SECTION ON SHEET C-10)	N/A	N/A	PREPARE PER ENGINEER'S PLANS. PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS.
FILL MATERIAL FOR 6" TO 18" ELEVATION ABOVE CHAMBERS (24" FOR UNPAVED INSTALLATIONS)	GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES.	3, 357, 4, 467, 5, 56, 57, 6, 67, 68, 7, 78, 8, 89, 9, 10	A-1 A-2 A-3	COMPACT IN 6" LIFTS TO A MINIMUM 95% STANDARD PROCTOR DENSITY. ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 LBS. DYNAMIC FORCE NOT TO EXCEED 20,000 LBS.
EMBEDMENT STONE SURROUNDING TO AN ELEVATION 12" ABOVE & 6" BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4 - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	NO COMPACTION REQUIRED
FOUNDATION BELOW CHAMBERS	WASHED ANGULAR STONE WITH THE MAJORITY OF PARTICLES BETWEEN 3/4 - 2 INCH	3, 357, 4, 467, 5, 56, 57	N/A	PLATE COMPACT OR ROLL TO ACHIEVE A 95% STANDARD PROCTOR DENSITY
SUBSURFACE SOIL FILTER	SEE CROSS SECTION	N/A	N/A	

STORMTECH ACCEPTABLE FILL MATERIALS



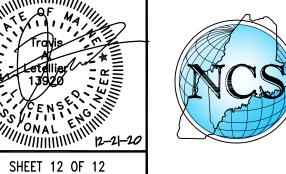
## STORMTECH INSPECTION PORT DETAIL NOT TO SCALE



CATCH BASIN FRAME AND GRATE N.T.S.

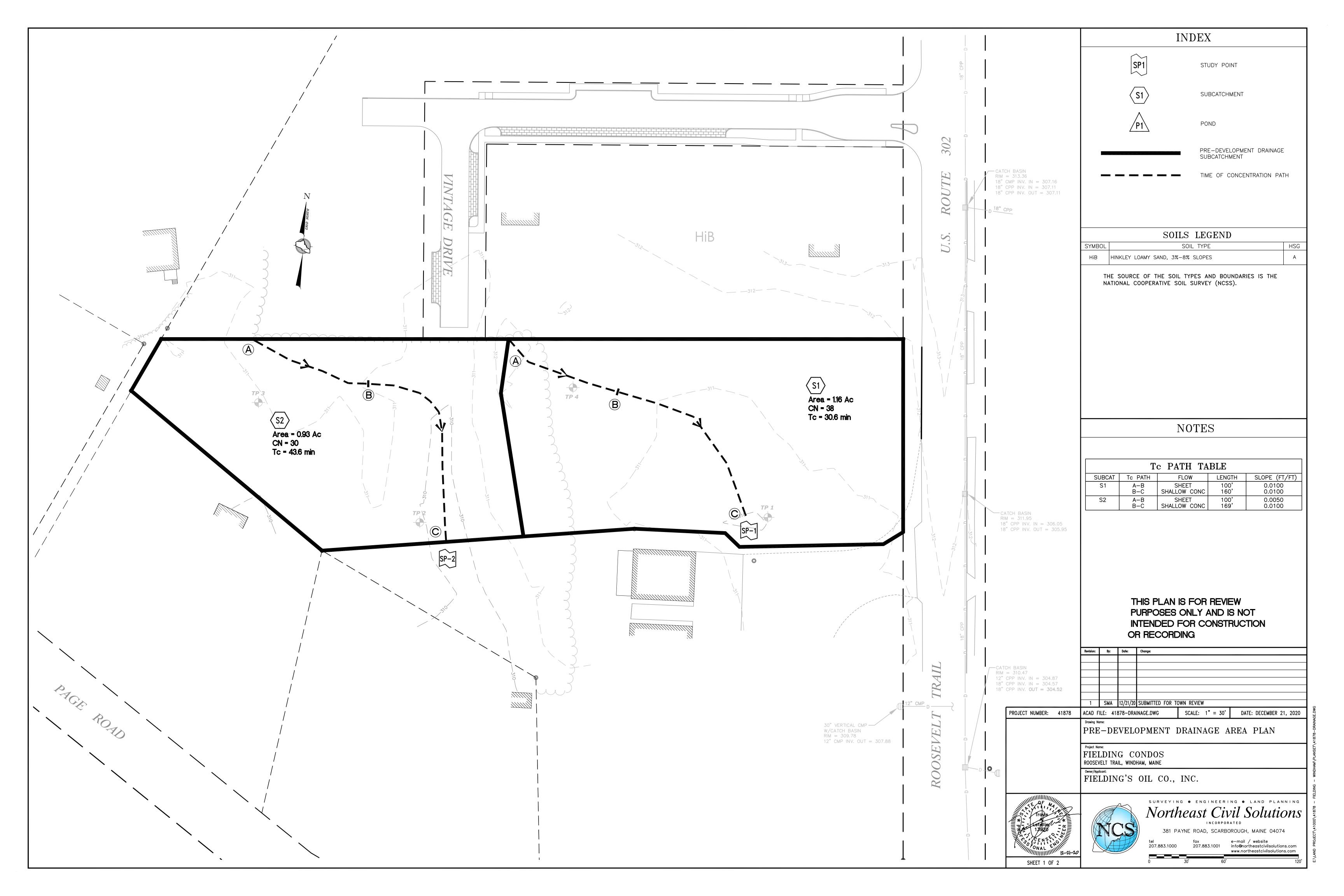
THIS PLAN IS FOR REVIEW PURPOSES ONLY AND IS NOT INTENDED FOR CONSTRUCTION OR RECORDING

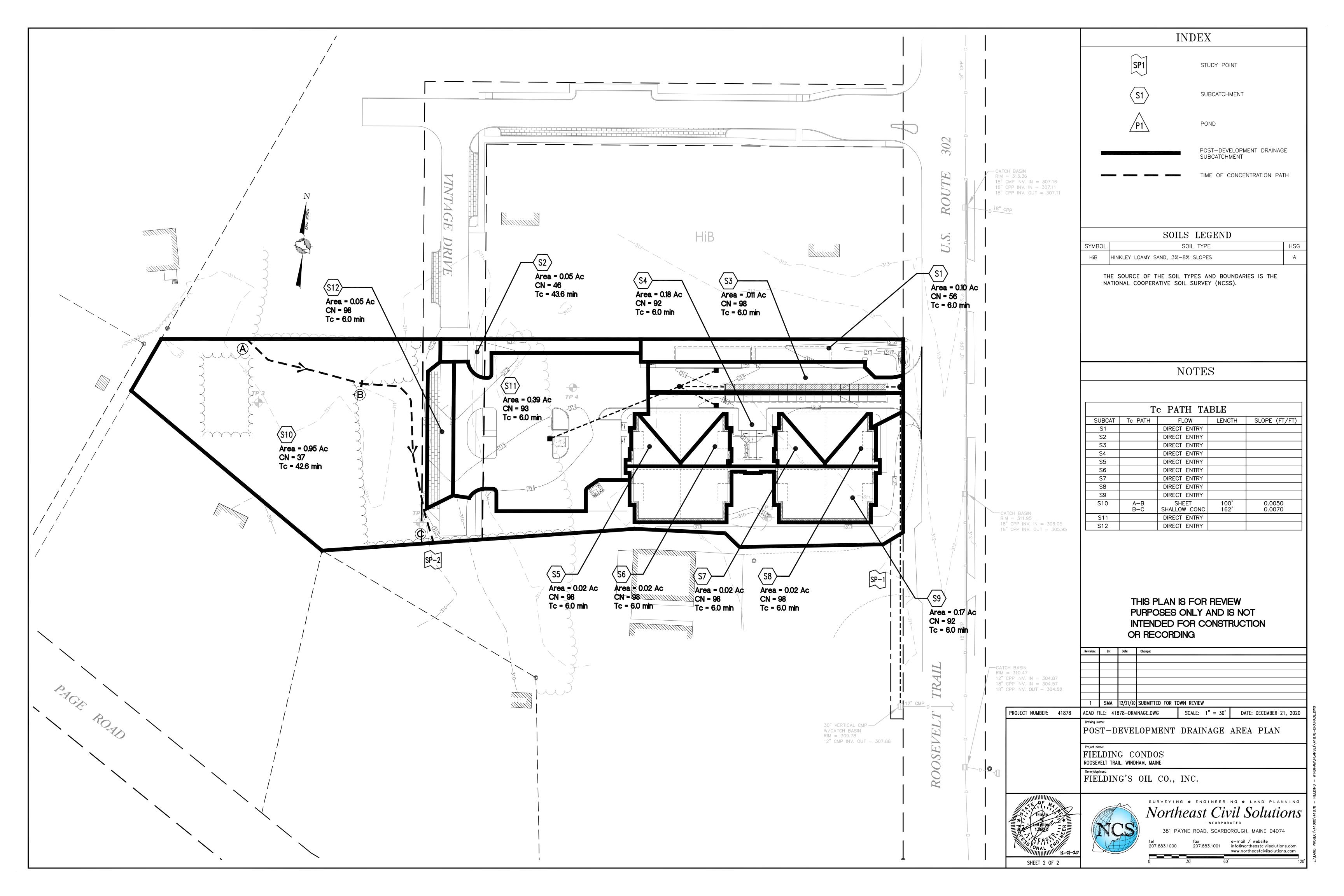
	1 SMA 12/21/20 SUBMITTED FOR TOWN REVIEW
PROJECT NUMBER: 41878	ACAD FILE: 41878-UG-DET.DWG SCALE: AS NOTED DATE: DECEMBER 21, 2020
	UNDERGROUND DETENTION DETAILS - SHEET 2  Project Name: FIELDING CONDOS ROOSEVELT TRAIL, WINDHAM, MAINE  Owner/Applicant: FIELDING'S OIL CO., INC.
Trovis K. J.	Northeast Civil Solutions  INCORPORATED  381 PAYNE ROAD, SCARBOROUGH, MAINE 04074

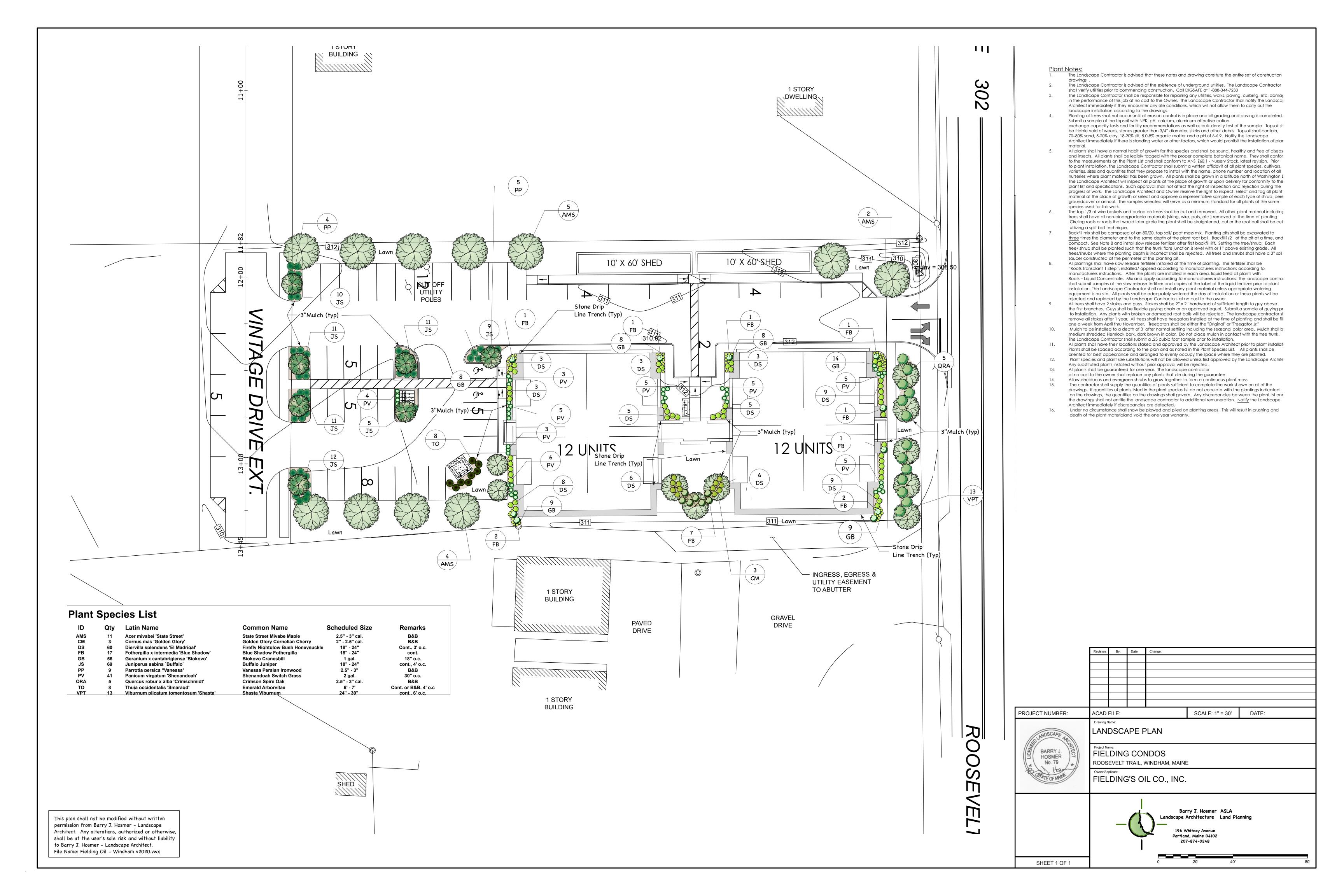


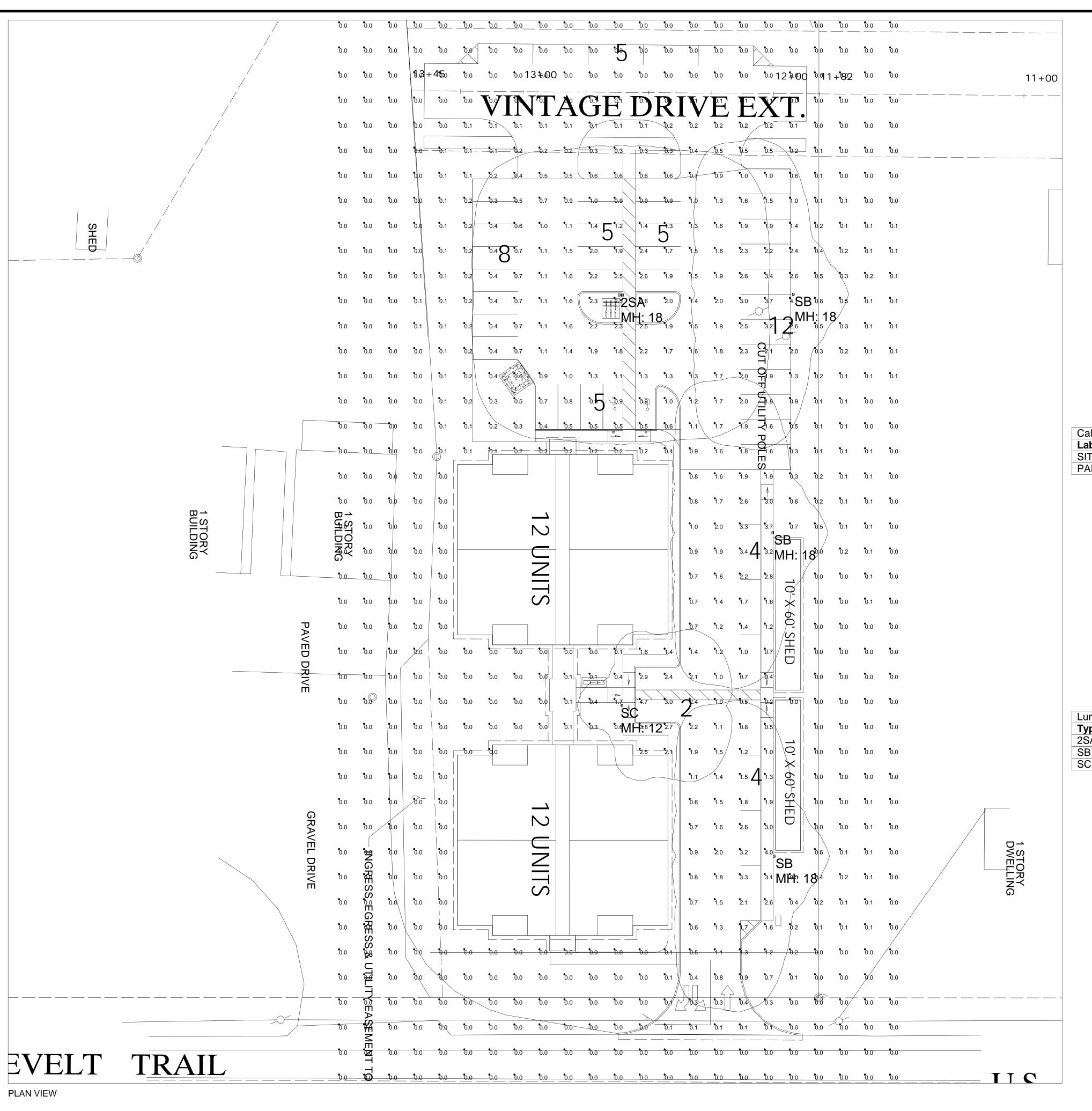
Revision: By: Date: Change:

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NOTES:

1) EXACT MOUNTING DETAILS TO BE DETERMINED AT JOBSITE BY OTHERS.

2) CALCULATIONS MAY or MAY NOT SHOW THE EFFECT OF SHADOWING CAUSED BY BUILDINGS AND OBJECTS WITHIN THE CALCULATED SPACE OR IN THE SITE AREA.

3) READINGS SHOWN ARE INITIAL HORIZONTAL FOOTCANDLES ON A FLAT SITE WITHOUT REFLECTIONS OR OBSTRUCTIONS UNLESS OTHERWISE INDICATED. 4) THIS CALCULATION IS BASED ON LIMITED INFORMATION SUPPLIED BY OTHERS TO

SWANEY LIGHTING ASSOCIATES AND STANDARD ASSUMPTIONS OF THE SPACE AND/OR SITE. 5) CONFORMANCE TO CODES AND OTHER LOCAL REQUIREMENTS AS DETERMINED BY THE AHJ ARE THE RESPONSIBILITY OF THE OWNER AND/OR THE OWNER'S REPRESENTATIVE.

6) THIS LAYOUT DRAWING MUST BE COORDINATED WITH THE SITE LOCATION FOR CORRECT FIXTURE ORIENTATION.

7) DOCUMENTS PRINTED OR PLOTTED FROM ELECTRONIC FILES MAY

OR PLOTTED-TO-SCALE DRAWING IS PRINTED TO SCALE.

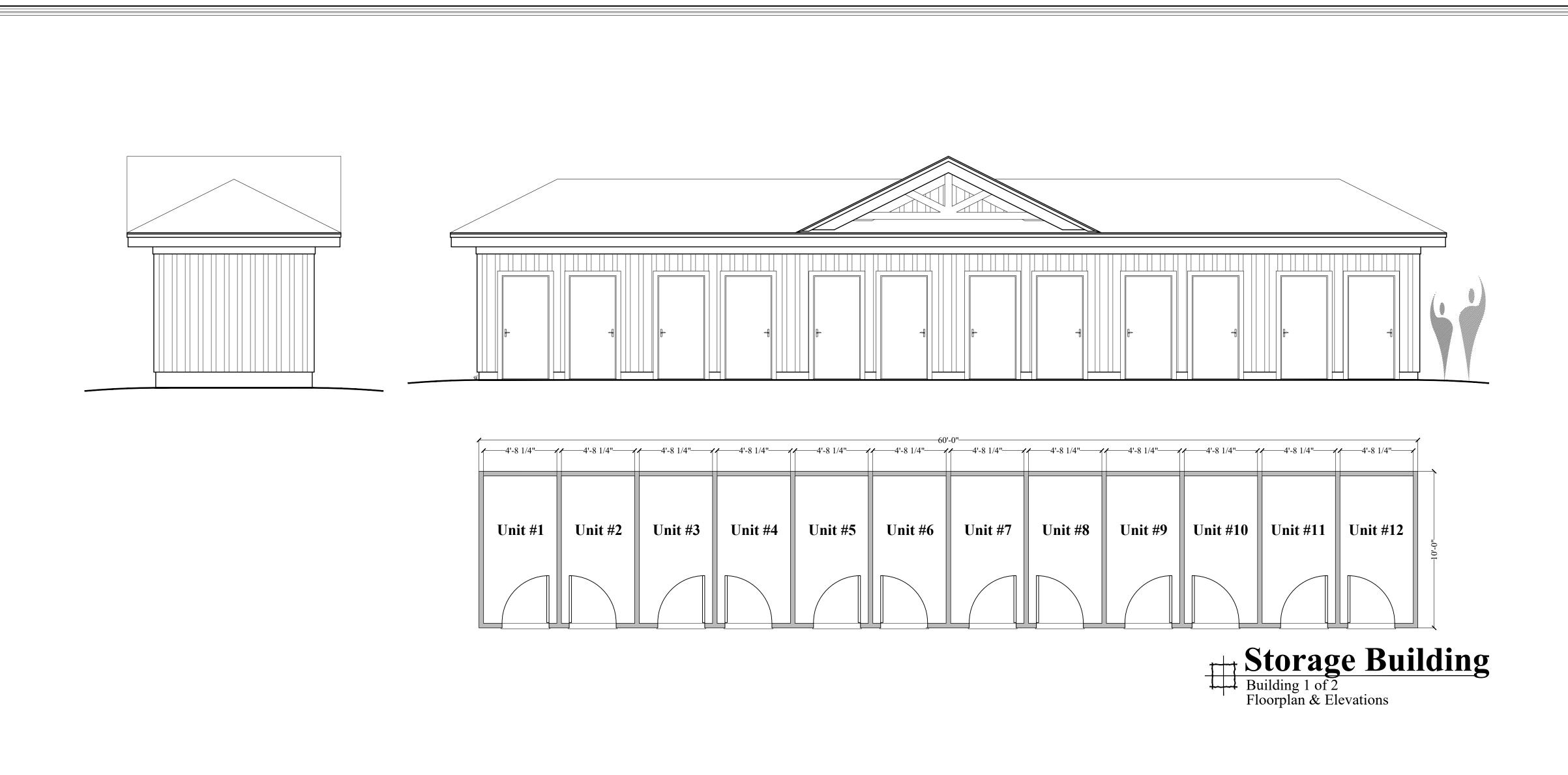
APPEAR AT OTHER THAN THE DESIRED OR ASSUMED GRAPHIC SCALES. IT IS THE RESPONSIBILITY OF THE RECIPIENT TO VERIFY THAT THE PRINTED

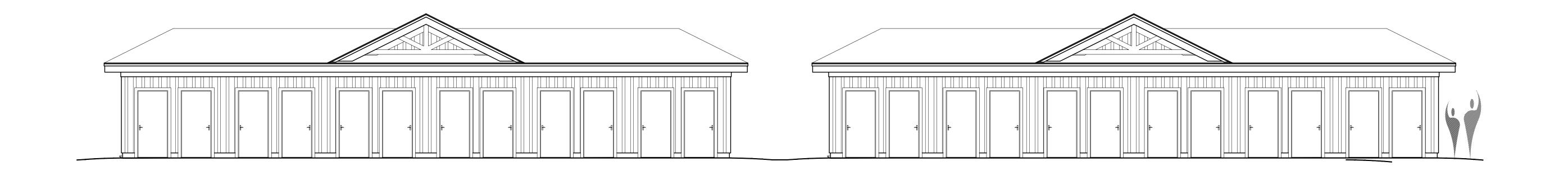
Calculation Summary					
Label	Avg	Max	Min	Avg/Min	Max/Min
SITE	0.45	4.7	0.0	N.A.	N.A.
PARKING	1.48	4.1	0.3	4.93	13.67

Luminaire Schedule (note fixture cataloge numbers are not complete)						
Туре	Qty	Lum. Lumens	LLF	Lum. Watts	Description	
2SA	1	7908	0.900	80.52	TWIN VP-S-36L-80-3K7-4W	
SB	3	8238	0.900	81	VP-S-36L-80-3K7-3	
SC	1	5400	0.900	54	VP-S-24L-55-3K7-4	

SWANEY LIGHTING ASSOCIATES, INC

FIELDING APARTMENTS WINDHAM, ME SITE LIGHTING LAYOUT





Revisions  $\circ$ S  $\bigcirc$ 

Dec. 21, 2020

PRELIMINARY

Not for Permitting or Construction

