## 405 CENTER STREET APARTMENTS

# 405 CENTER STREET AUBURN, MAINE

## **APPLICANT**

JIM WU 279 CENTER STREET AUBURN, MAINE 04210

## **OWNER**

CHUN WU 279 CENTER STREET AUBURN, MAINE 04210

## PROJECT PARCEL SITE

CITY OF AUBURN TAX ASSESSOR'S MAP & LOT NUMBER (LOCATED IN GENERAL BUSINESS DISTRICT)

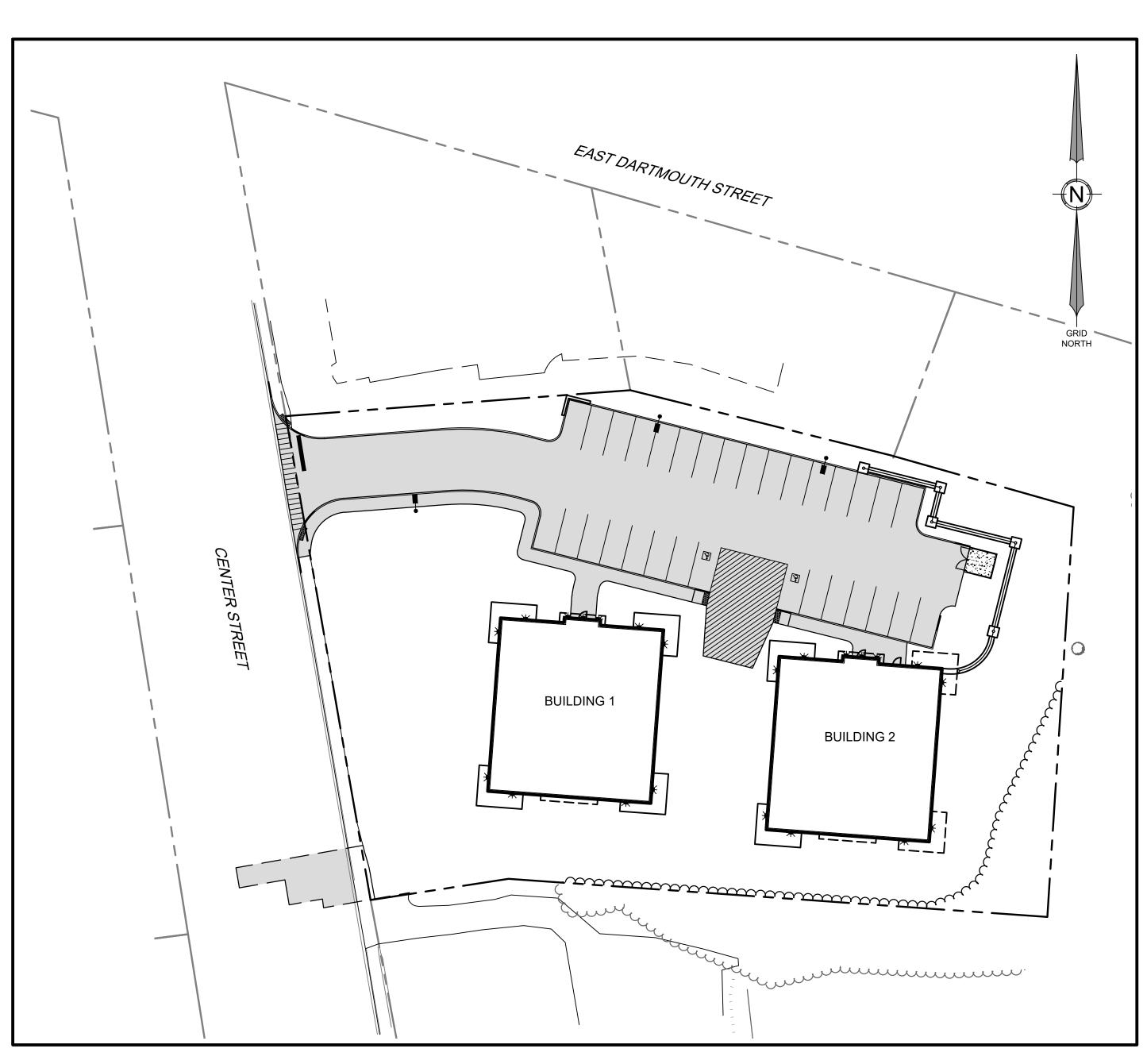
MAP
271
LOT
65

#### CONSULTANT

CIVIL ENGINEER/SURVEYOR: TERRADYN CONSULTANTS, LLC

41 CAMPUS DRIVE, SUITE 301 NEW GLOUCESTER, ME 04260 (207) 926-5111

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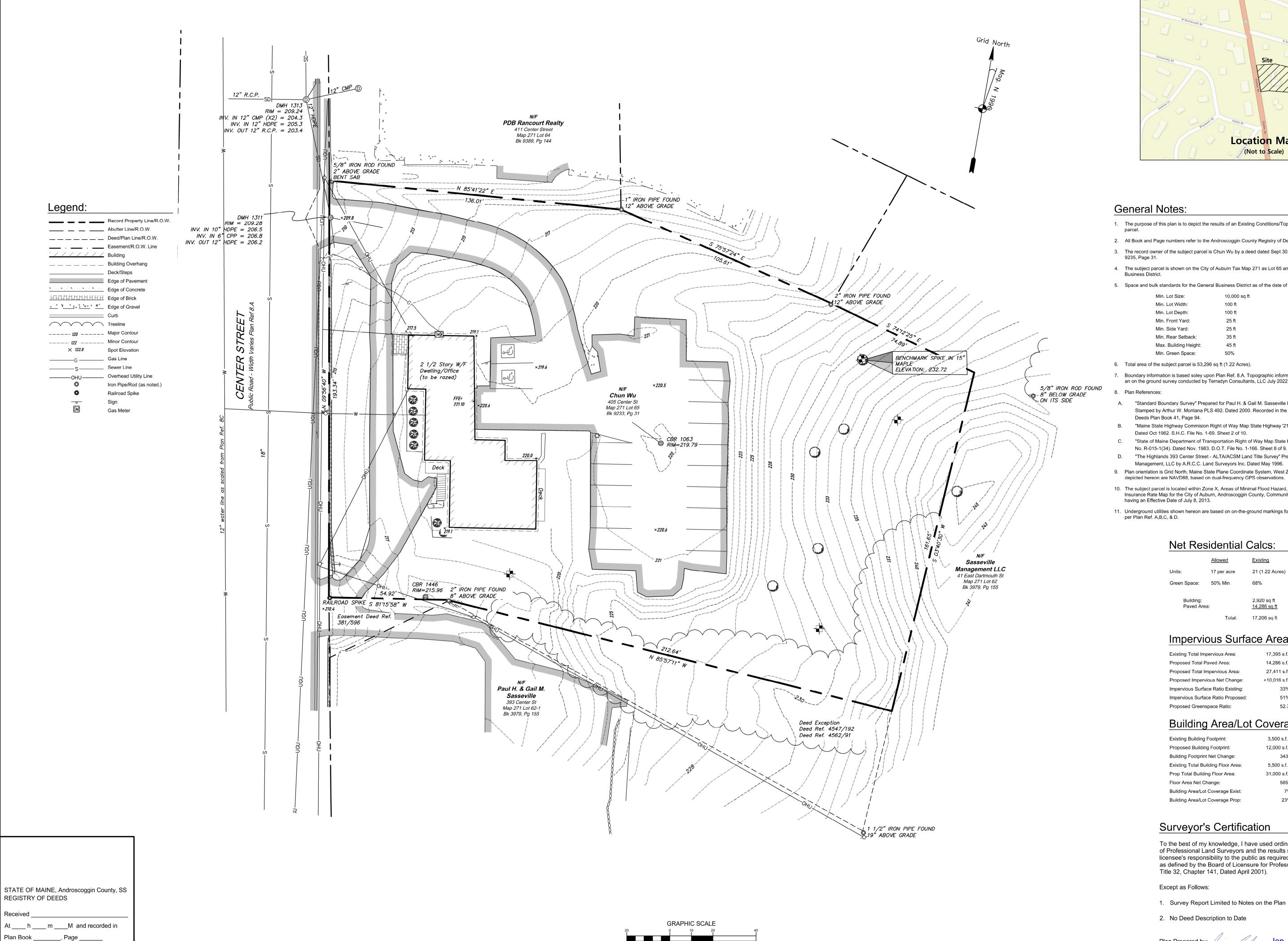
LOCATION MAP

LEGEND	(TYPICAL, ALL SHEETS)
	EXISTING PROPERTY LINE
	PROPOSED PROPERTY LINE
	PROPOSED SETBACK LINE
	EXISTING SETBACK LINE
	EXISTING EASEMENT
· ·	PROPOSED EASEMENT
	ROAD CENTERLINE
124	EXISTING MINOR CONTOUR
124	EXISTING MAJOR CONTOUR
124	PROPOSED CONTOUR
SD	EXISTING STORMDRAIN
——— SD ———	PROPOSED STORMDRAIN
W	EXISTING WATER LINE
W	PROPOSED WATER LINE
UD	PROPOSED UNDERDRAIN
	EXISTING OVERHEAD ELECTRIC
OHE	& TELEPHONE
	PROPOSED OVERHEAD ELECTRIC
——— OHE ———	& TELEPHONE
	EXISTING EDGE OF PAVEMENT
	PROPOSED EDGE OF PAVEMENT
	EXISTING EDGE OF GRAVEL
	PROPOSED EDGE OF GRAVEL
	EXISTING CURB
	PROPOSED CURB
	EDGE OF WATER
	EXISTING TREE LINE
· · · · · · · · · · · · · · · · · · ·	PROPOSED TREE LINE
0 0 0	EXISTING GUARDRAIL
<u> </u>	PROPOSED GUARDRAIL
——МВ——	EROSION CONTROL MULCH BERM
TP-A	TEST PIT
	EXISTING VALVE
×	PROPOSED VALVE
- <b>Q</b> -	EXISTING HYDRANT
	PROPOSED HYDRANT
<del>↑</del> T \$	EXISTING TRANSFORMER
<u>∵</u>	EXISTING LIGHT POLE
*	PROPOSED LIGHT POLE
-O-	EXISTING UTILITY POLE
<del>-</del>	PROPOSED UTILITY POLE
	EXISTING CATCH BASIN
	PROPOSED CATCH BASIN
	PROPOSED DRAINAGE MANHOLE
• • •	EXISTING SEWER MANHOLE
<u> </u>	EXISTING SIGN
<del></del>	PROPOSED SIGN
	EXISTING BUILDING
	PROPOSED BUILDING
	PROPOSED PAVEMENT

PLANNING BOARD	
	DATE

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						3 07-07-2023 SITE PLAN RESUBMISSION TO CITY	2   02-10-2023   SUBMIT FOR SITE PLAN APPROVAL	1 01-06-2023 SITE PLAN SUBMISSION TO CITY	NO. DATE REVISIONS	
ADDRESS:	41 CAMPUS DRIVE, SUITE 301	NEW GLOUCESTER, ME 04260	DHONE:	(207) 926-5111			www.terradynconsultants.com	urveving   Geomatics		
•	<b>&lt;</b>						CONSOLIANIS, LLC	Civil Engineering   Land Surveving   Geomatics	Stormwater Design   Land Planning   Environmental Permitting	
-	VО <sup>-</sup>	PE T F(		IIT CC		RAW STR			ON	
କୁ ପ୍ର PROJECT:	NET 1405 CENTER STREET APARTMENTS		ארבבי דודו כי			CLIENT:	-06 1		S S S AUBURN, MAINE 04210	1

C-0.0



1 INCH = 20 FT.

Received

Registrar



#### **General Notes:**

- 1. The purpose of this plan is to depict the results of an Existing Conditions/Topographic Survey of the subject
- 2. All Book and Page numbers refer to the Androscoggin County Registry of Deeds, unless otherwise noted.
- 3. The record owner of the subject parcel is Chun Wu by a deed dated Sept 30, 2015 and recorded in Book
- 4. The subject parcel is shown on the City of Auburn Tax Map 271 as Lot 65 and is located in the General
- 5. Space and bulk standards for the General Business District as of the date of this plan are as follows:

Min. Lot Size:	10,000 s
Min. Lot Width:	100 ft
Min. Lot Depth:	100 ft
Min. Front Yard:	25 ft
Min. Side Yard:	25 ft
Min. Rear Setback:	35 ft
Max. Building Height:	45 ft
Min. Green Space:	50%

- 6. Total area of the subject parcel is 53,296 sq ft (1.22 Acres).
- 7. Boundary information is based soley upon Plan Ref. 8.A. Topographic information shown hereon is based on an on the ground survey conducted by Terradyn Consultants, LLC July 2022.
- A. "Standard Boundary Survey" Prepared for Paul H. & Gail M. Sasseville by A.R.C.C. Land Surveyors Inc. Stamped by Arthur W. Montana PLS 492. Dated 2000. Recorded in the Androscoggin County Registry of Deeds Plan Book 41, Page 94.
- B. "Maine State Highway Commission Right of Way Map State Highway '21" Federal Aid Project U-021-1(6). Dated Oct 1962. S.H.C. File No. 1-69. Sheet 2 of 10.
- "State of Maine Department of Transportation Right of Way Map State Highway '21" Federal Aid Project No. R-015-1(34). Dated Nov. 1983. D.O.T. File No. 1-166. Sheet 8 of 9.
- D. "The Highlands 393 Center Street ALTA/ACSM Land Title Survey" Prepared for Sasseville
- Management, LLC by A.R.C.C. Land Surveyors Inc. Dated May 1996. 9. Plan orientation is Grid North, Maine State Plane Coordinate System, West Zone 1802-NAD83. Elevations
- 10. The subject parcel is located within Zone X, Areas of Minimal Flood Hazard, as delineated on the Flood
- 11. Underground utilities shown hereon are based on on-the-ground markings found at the time of field survey and per Plan Ref. A,B,C, & D.

## Net Residential Calcs:

Units:	17 per acre	21 (1.22 A
Green Space:	50% Min	68%
Building: Paved Are	ea:	2,920 sq ft 14,286 sq
	Total:	17 206 sq

#### Impervious Surface Area/Ratio:

Existing Total Impervious Area:	17,395 s.
Proposed Total Paved Area:	14,286 s.
Proposed Total Impervious Area:	27,411 s.
Proposed Impervious Net Change:	+10,016 s.
Impervious Surface Ratio Existing:	33
Impervious Surface Ratio Proposed:	51
Proposed Greenspace Ratio:	52

#### Building Area/Lot Coverage:

Existing Building Footprint:	3,500 s.f. (approx.)
Proposed Building Footprint:	12,000 s.f. (approx.)
Building Footprint Net Change:	343%
Existing Total Building Floor Area:	5,500 s.f. (per assessor's reco
Prop Total Building Floor Area:	31,000 s.f. (approx.)
Floor Area Net Change:	565%
Building Area/Lot Coverage Exist:	7%
Building Area/Lot Coverage Prop:	23%

## Surveyor's Certification

To the best of my knowledge, I have used ordinary and prudent conduct expected of Professional Land Surveyors and the results shown here represent the licensee's responsibility to the public as required under the Standards of Practice as defined by the Board of Licensure for Professional Land Surveyors (M.R.S.A Title 32, Chapter 141, Dated April 2001).

Except as Follows:

- 1. Survey Report Limited to Notes on the Plan
- 2. No Deed Description to Date

Jimmy C. Courbron PLS # 2532

TATE OF MAIN JIMMY C. COURBRON No. PLS2532

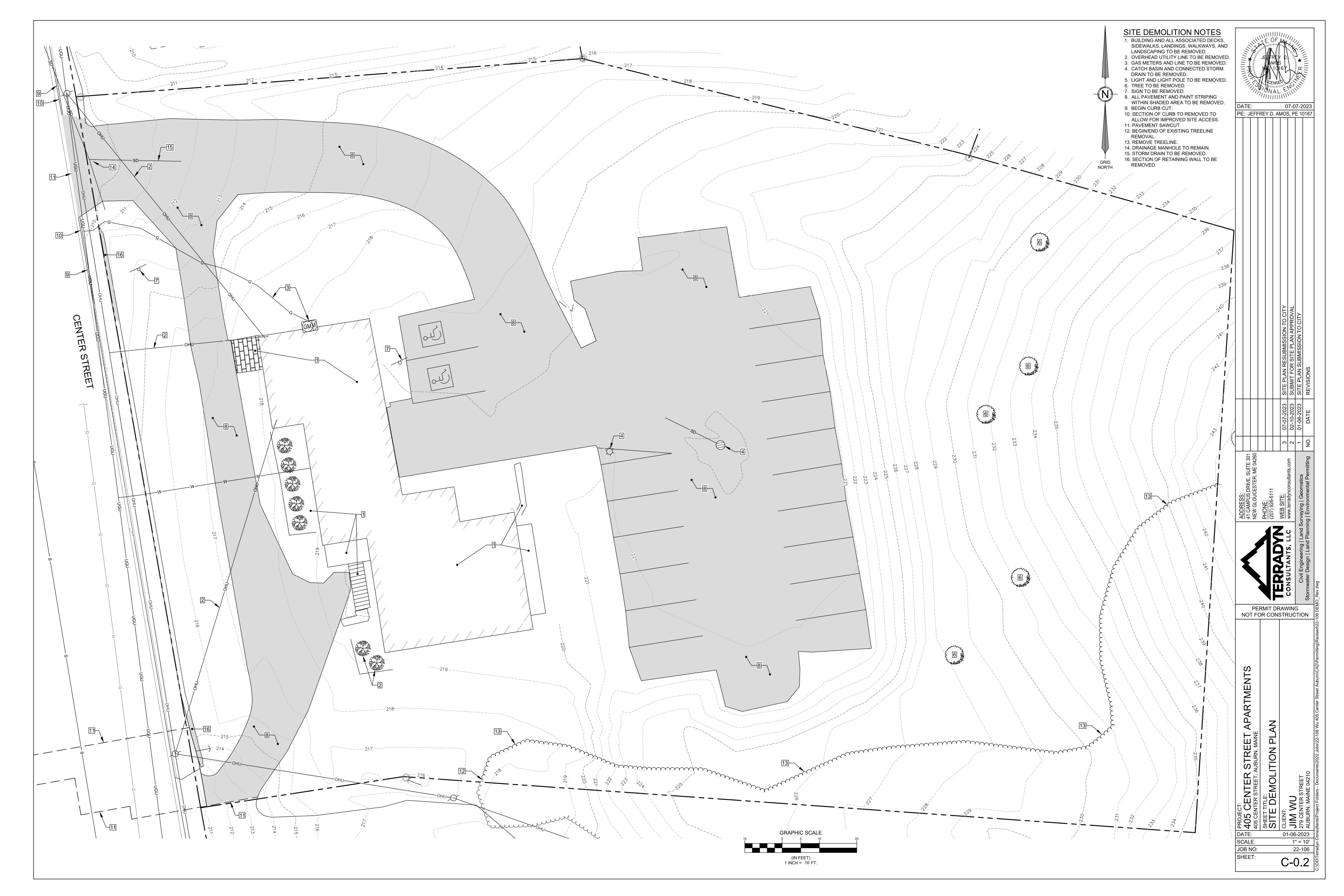
DATE

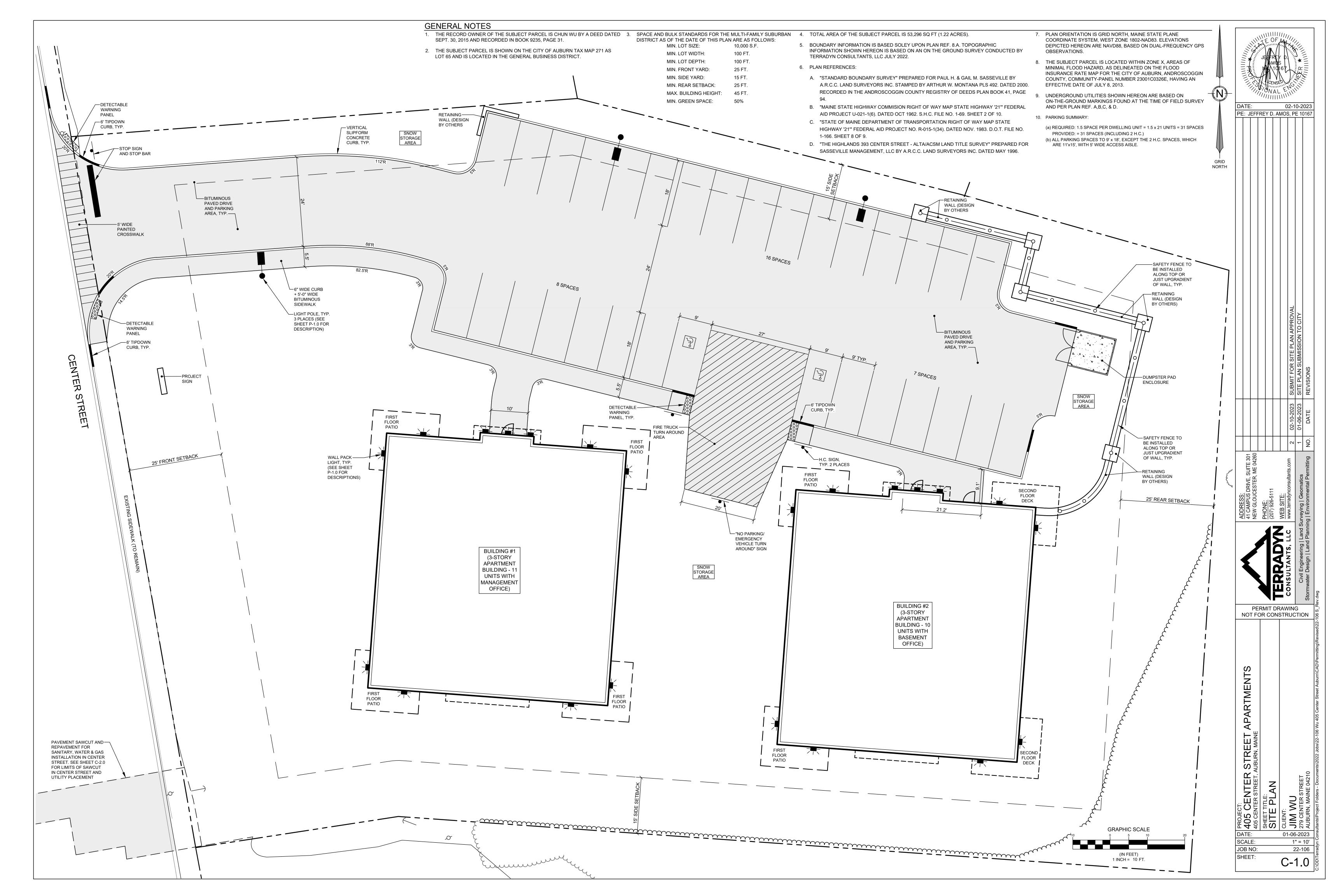
ISSUED for Planning Board Review

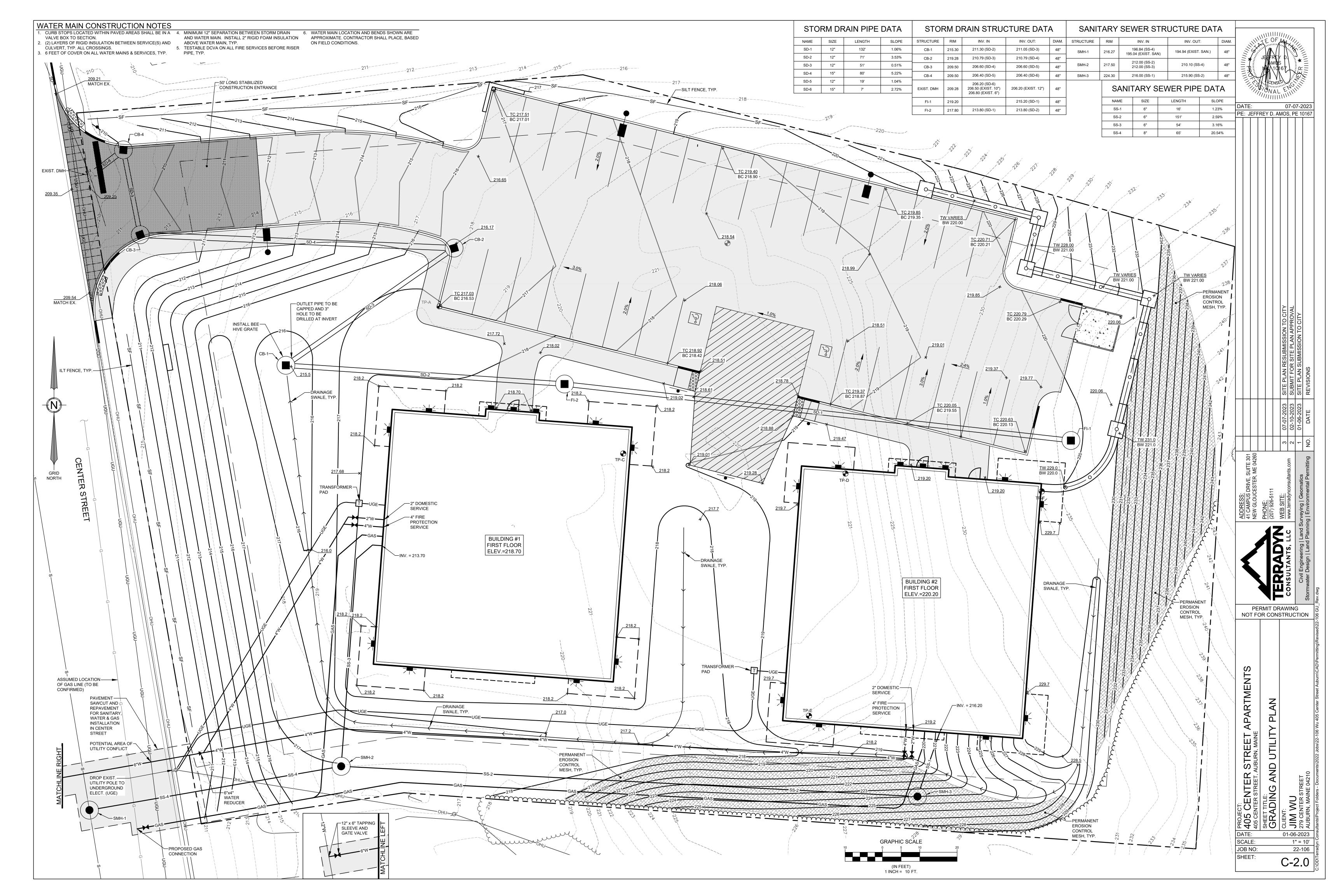
ENTER STREET APARTMENTS
ER STREET, AUBURN, MAINE

01/05/2023 SCALE: 1"= 20' JOB NO: 22-106

Sheet Size: 24" X 36"







#### EROSION AND SEDIMENT CONTROL PLAN

PRE-CONSTRUCTION PHASE
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 MRSA § 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 MUST BE TAKEN. THE SITE MUST BE MAINTAINED TO PREVENT UNREASONABLE EROSION AND SEDIMENTATION. MINIMIZE DISTURBED AREAS AND PROTECT NATURAL DOWNGRADIENT BUFFER AREAS TO THE EXTENT PRACTICABLE.

ALL EROSION AND SEDIMENT CONTROL MEASURES SHALL BE INSTALLED IN ACCORDANCE WITH "MAINE EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR CONSTRUCTION: BEST MANAGEMENT PRACTICES" PUBLISHED BY THE CUMBERLAND COUNTY SOIL AND WATER CONSERVATION DISTRICT AND MAINE DEPARTMENT OF ENVIRONMENTAL PROTECTION. MARCH 2016 OR LATEST EDITION. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO POSSESS A COPY OF THE EROSION CONTROL PLAN AT ALL TIMES.

A. SEDIMENT BARRIERS. PRIOR TO THE BEGINNING OF ANY CONSTRUCTION, PROPERLY INSTALL SEDIMENT BARRIERS AT THE EDGE OF ANY DOWNGRADIENT DISTURBED AREA AND ADJACENT TO ANY DRAINAGE CHANNELS WITHIN THE PROPOSED DISTURBED AREA. MAINTAIN THE SEDIMENT BARRIERS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

B. CONSTRUCTION ENTRANCE: PRIOR TO ANY CLEARING OR GRUBBING, A CONSTRUCTION ENTRANCE SHALL BE CONSTRUCTED AT THE INTERSECTION WITH THE PROPOSED ACCESS DRIVE AND THE EXISTING ROADWAY TO AVOID TRACKING OF MUD. DUST AND DEBRIS FROM THE SITE. TRACKED MUD OR SEDIMENT SHALL BE REMOVED PRIOR TO A STORM EVENT BY VACUUM SWEEPING.

C. RIPRAP: SINCE RIPRAP IS USED WHERE EROSION POTENTIAL IS HIGH, CONSTRUCTION MUST BE SEQUENCED SO THAT THE RIPRAP IS PUT IN PLACE WITH THE MINIMUM DELAY. DISTURBANCE OF AREAS WHERE RIPRAP IS TO BE PLACED SHOULD BE UNDERTAKEN ONLY WHEN FINAL PREPARATION AND PLACEMENT OF THE RIPRAP CAN FOLLOW IMMEDIATELY BEHIND THE INITIAL DISTURBANCE. WHERE RIPRAP IS USED FOR OUTLET PROTECTION. THE RIPRAP SHOULD BE PLACED BEFORE OR IN CONJUNCTION WITH THE CONSTRUCTION OF THE PIPE OR CHANNEL SO THAT IT IS IN PLACE WHEN THE PIPE OR CHANNEL BEGINS TO OPERATE. MAINTAIN TEMPORARY RIPRAP, SUCH AS TEMPORARY CHECK DAMS UNTIL THE DISTURBED AREA IS PERMANENTLY STABILIZED.

D. TEMPORARY STABILIZATION. STABILIZE WITH TEMPORARY SEEDING, MULCH, OR OTHER NON-ERODABLE COVER ANY EXPOSED SOILS THAT WILL REMAIN UNWORKED FOR MORE THAN 14 DAYS EXCEPT, STABILIZE AREAS WITHIN 100 FEET OF A WETLAND OR WATERBODY WITHIN 7 DAYS OR PRIOR TO A PREDICTED STORM EVENT. WHICHEVER COMES FIRST, IF, HAY OR STRAW MUI CH IS USED, THE APPLICATION RATE MUST BE 2 BALES (70-90 POUNDS) PER 1000 SF OR 1.5 TO 2 TONS (90-100 BALES) PER ACRE TO COVER 75 TO 90% OF THE GROUND SURFACE. HAY MULCH MUST BE KEPT MOIST OR ANCHORED TO PREVENT WIND BLOWING. AN EROSION CONTROL BLANKET OR MAT SHALL BE USED AT THE BASE OF GRASSED WATERWAYS, STEEP SLOPES (15% OR GREATER) AND ON ANY DISTURBED SOIL WITHIN 100 FEET OF LAKES, STREAMS AND WETLANDS. GRADING SHALL BE PLANNED SO AS TO MINIMIZE THE LENGTH OF TIME BETWEEN INITIAL SOIL EXPOSURE AND FINAL GRADING. ON LARGE PROJECTS THIS SHOULD BE ACCOMPLISHED BY PHASING THE OPERATION AND COMPLETING THE FIRST PHASE UP TO FINAL GRADING AND SEEDING BEFORE STARTING THE SECOND PHASE, AND SO

E. EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES AND MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX SHOULD BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH SUCH AS FLY ASH OR YARD SCRAPING. LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX. THE MIX COMPOSITION SHOULD MEET THE FOLLOWING STANDARDS

- THE ORGANIC MATTER CONTENT SHOULD BE BETWEEN 80% AND 100%. DRY WEIGHT BASIS.
- PARTICLE SIZE BY WEIGHT SHOULD BE 100% PASSING A 6" SCREEN AND 70% TO 85% PASSING A 0.75" SCREEN THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED
- SOLUBLE SALTS CONTENT SHALL BE <4.0 MMHOS/CM.</li>

UNDERLYING SOIL WITH NO SLUMPING OF THE SOD OR DIE-OFF.

- THE pH SHALL BE BETWEEN 5.0 AND 8.0

F. VEGETATED WATERWAY. UPON FINAL GRADING, THE DISTURBED AREAS SHALL BE IMMEDIATELY SEEDED TO PERMANENT VEGETATION AND MULCHED AND WILL NOT BE USED AS OUTLETS UNTIL A DENSE, VIGOROUS VEGETATIVE COVER HAS BEEN OBTAINED. ONCE SOIL IS EXPOSED FOR WATERWAY CONSTRUCTION. IT SHOULD BE IMMEDIATELY SHAPED. GRADED AND STABILIZED. VEGETATED WATERWAYS NEED TO BE STABILIZED EARLY DURING THE GROWING SEASON (PRIOR TO SEPTEMBER 15). IF FINAL SEEDING OF WATERWAYS IS DELAYED PAST SEPTEMBER 15. EMERGENCY PROVISIONS SUCH AS SOD OR RIPRAP MAY BE REQUIRED TO STABILIZE THE CHANNEL. WATERWAYS SHOULD BE FULLY STABILIZED PRIOR TO DIRECTING RUNOFF TO THEM.

A. SEEDED AREAS, FOR SEEDED AREAS, PERMANENT STABILIZATION MEANS AN 90% COVER OF THE DISTURBED AREA WITH MATURE, HEALTHY PLANTS WITH NO EVIDENCE OF WASHING OR RILLING OF THE TOPSOIL.

B. SODDED AREAS. FOR SODDED AREAS, PERMANENT STABILIZATION MEANS THE COMPLETE BINDING OF THE SOD ROOTS INTO THE

C. 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 D. RIPRAP. 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, IT IS RECOMMENDED THAT ANGULAR STONE BE USED. E. AGRICULTURAL USE. FOR CONSTRUCTION PROJECTS ON LAND USED FOR AGRICULTURAL PURPOSES (E.G., PIPELINES ACROSS CROP

LAND), PERMANENT STABILIZATION MAY BE ACCOMPLISHED BY RETURNING THE DISTURBED LAND TO AGRICULTURAL USE. F. PAVED AREAS. FOR PAVED AREAS, PERMANENT STABILIZATION MEANS THE PLACEMENT OF THE COMPACTED GRAVEL SUBBASE IS COMPLETED.

G DITCHES CHANNELS AND SWALES FOR OPEN CHANNELS PERMANENT STABILIZATION MEANS THE CHANNEL IS STABILIZED WITH MATURE VEGETATION AT LEAST THREE INCHES IN HEIGHT, WITH WELL-GRADED RIPRAP, OR WITH ANOTHER NON-EROSIVE 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 SLUMPING OF THE LINING, UNDERCUTTING OF THE BANKS, OR DOWN-CUTTING OF THE

CHANNEL

GENERAL CONSTRUCTION PHASE
THE FOLLOWING EROSION CONTROL MEASURES SHALL BE FOLLOWED BY THE CONTRACTOR THROUGHOUT CONSTRUCTION OF THIS

A. ALL TOPSOIL SHALL BE COLLECTED, STOCKPILED, SEEDED WITH RYE AT 3 POUNDS/1,000 SF AND MULCHED, AND REUSED AS REQUIRED. SILT FENCING SHALL BE PLACED DOWN GRADIENT FROM THE STOCKPILED LOAM. STOCKPILE TO BE LOCATED BY DESIGNATION OF THE OWNER AND INSPECTING ENGINEER.

B. THE INSPECTING ENGINEER AT HIS/HER DISCRETION, MAY REQUIRE ADDITIONAL EROSION CONTROL MEASURES AND/OR SUPPLEMENTAL VEGETATIVE PROVISIONS TO MAINTAIN STABILITY OF EARTHWORKS AND FINISH GRADED AREAS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING AND INSTALLING ANY SUPPLEMENTAL MEASURES AS DIRECTED BY THE INSPECTING ENGINEER. FAILURE TO COMPLY WITH THE ENGINEER'S DIRECTIONS WILL RESULT IN DISCONTINUATION OF CONSTRUCTION ACTIVITIES.

C. EROSION CONTROL MESH SHALL BE APPLIED IN ACCORDANCE WITH THE PLANS OVER ALL FINISH SEEDED AREAS AS SPECIFIED ON THE DESIGN PLANS.

D. ALL GRADED OR DISTURBED AREAS INCLUDING SLOPES SHALL BE PROTECTED DURING CLEARING AND CONSTRUCTION IN ACCORDANCE WITH THE APPROVED EROSION AND SEDIMENT CONTROL PLAN UNTIL THEY ARE ADEQUATELY STABILIZED.

E. ALL EROSION, AND SEDIMENT CONTROL PRACTICES AND MEASURES SHALL BE CONSTRUCTED, APPLIED AND MAINTAINED IN ACCORDANCE WITH THE APPROVED FROSION AND SEDIMENT CONTROL PLAN

F. AREAS TO BE FILLED SHALL BE CLEARED, GRUBBED AND STRIPPED OF TOPSOIL TO REMOVE TREES, VEGETATION, ROOTS OR OTHER OBJECTIONABLE MATERIALS.

G. AREAS SHALL BE SCARIFIED TO A MINIMUM DEPTH OF 3 INCHES PRIOR TO PLACEMENT OF TOPSOIL.

H. ALL FILLS SHALL BE COMPACTED AS REQUIRED TO REDUCE EROSION, SLIPPAGE, SETTLEMENT, SUBSIDENCE OR OTHER RELATED PROBLEMS. FILL INTENDED TO SUPPORT BUILDINGS, STRUCTURES AND CONDUITS, ETC., SHALL BE COMPACTED IN ACCORDANCE WITH LOCAL REQUIREMENTS OR CODES.

I. ALL FILLS SHALL BE PLACED AND COMPACTED IN LAYERS NOT TO EXCEED 8 INCHES IN THICKNESS.

J. EXCEPT FOR APPROVED LANDFILLS OR NON-STRUCTURAL FILLS, FILL MATERIAL SHALL BE FREE OF BRUSH, RUBBISH, ROCKS, LOGS, STUMPS, BUILDING DEBRIS AND OTHER OBJECTIONABLE MATERIALS THAT WOULD INTERFERE WITH OR PREVENT CONSTRUCTION OF SATISFACTORY LIFTS.

K. FROZEN MATERIAL OR SOFT, MUCKY OR HIGHLY COMPRESSIBLE MATERIALS SHALL NOT BE INCORPORATED INTO FILL SLOPES OR STRUCTURAL FILLS.

L. FILL SHALL NOT BE PLACED ON A FROZEN FOUNDATION.

A RATE OF 3 TONS PER ACRE (138 LB. PER 1,000 SQ. FT).

- M. SEEPS OR SPRINGS ENCOUNTERED DURING CONSTRUCTION SHALL BE HANDLED APPROPRIATELY.
- N. ALL GRADED AREAS SHALL BE PERMANENTLY STABILIZED IMMEDIATELY FOLLOWING FINISHED GRADING.

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

ERMANENT VEGETATIVE COVER SHOULD BE ESTABLISHED ON DISTURBED AREAS WHERE PERMANENT, LONG LIVED VEGETATIVE COVER IS NEEDED TO STABILIZE THE SOIL, TO REDUCE DAMAGES FROM SEDIMENT AND RUNOFF, AND TO ENHANCE THE ENVIRONMENT.

. GRADE AS FEASIBLE TO PERMIT THE USE OF CONVENTIONAL EQUIPMENT FOR SEEDBED PREPARATION, SEEDING, MULCH

APPLICATION AND ANCHORING, AND MAINTENANCE.

B. APPLY LIMESTONE AND FERTILIZER ACCORDING TO SOIL TESTS SUCH AS THOSE OFFERED BY THE UNIVERSITY OF MAINE SOIL TESTING LABORATORY. SOIL SAMPLE MAILERS ARE AVAILABLE FROM THE LOCAL COOPERATIVE EXTENSION SERVICE OFFICE. IF SOIL TESTING IS NOT FEASIBLE ON SMALL OR VARIABLE SITES, OR WHERE TIMING IS CRITICAL, FERTILIZER MAY BE APPLIED AT THE RATE OF 800 POUNDS PER ACRE OR 18.4 POUNDS PER 1,000 SQUARE FEET USING 10-20-20 (N-P2O5-K2O) OR EQUIVALENT. APPLY GROUND LIMESTONE (EQUIVALENT TO 50% CALCIUM PLUS MAGNESIUM OXIDE) AT

C. WORK LIME AND FERTILIZER INTO THE SOIL AS NEARLY AS PRACTICAL TO A DEPTH OF 4 INCHES WITH A DISC, SPRING TOOTH HARROW OR OTHER SUITABLE EQUIPMENT. THE FINAL HARROWING OPERATION SHOULD BE ON THE GENERAL CONTOUR. CONTINUE TILLAGE UNTIL A REASONABLY UNIFORM, FINE SEEDBED IS PREPARED, ALL BUT CLAY OR SILTY SOILS AND COARSE SANDS SHOULD BE ROLLED TO FIRM THE SEEDBED WHEREVER FEASIBLE.D. REMOVE FROM THE SURFACE ALL STONES 2 INCHES OR LARGER IN ANY DIMENSION. REMOVE ALL OTHER DEBRIS, SUCH AS WIRE, CABLE, TREE ROOTS, CONCRETE, CLODS, LUMPS OR OTHER UNSUITABLE MATERIAL.

E. INSPECT SEEDBED JUST BEFORE SEEDING. IF TRAFFIC HAS LEFT THE SOIL COMPACTED; THE AREA MUST BE TILLED AND FIRMED AS ABOVE.

F. PERMANENT SEEDING SHOULD BE MADE 45 DAYS PRIOR TO THE FIRST KILLING FROST OR AS A DORMANT SEEDING WITH MULCH AFTER THE FIRST KILLING FROST AND BEFORE SNOWFALL, WHEN CROWN VETCH IS SEEDED IN LATER SUMMER, AT LEAST 35% OF THE SEED SHOULD BE HARD SEED (UNSCARIFIED). IF SEEDING CANNOT BE DONE WITHIN THE SEEDING DATES. MULCH ACCORDING TO THE TEMPORARY MULCHING BMP AND OVERWINTER STABILIZATION AND CONSTRUCTION TO PROTECT THE SITE AND DELAY SEEDING UNTIL THE NEXT RECOMMENDED SEEDING PERIOD.

G. FOLLOWING SEED BED PREPARTATION. SWALE AREAS. FILL AREAS AND BACK SLOPES SHALL BE SEEDED AT A RATE OF 3 LBS./1,000 S.F. WITH A MIXTURE OF 35% CREEPING RED FESCUE, 6% RED TOP, 24% KENTUCKY BLUEGRASS, 10% PERENNIAL RYEGRASS, 20% ANNUAL RYEGRASS AND 5% WHITE DUTCH CLOVER.

I. AREAS WHICH HAVE BEEN TEMPORARILY OR PERMANENTLY SEEDED SHALL BE MULCHED IMMEDIATELY FOLLOWING SEEDING. J. AREAS WHICH CANNOT BE SEEDED WITHIN THE GROWING SEASON SHALL BE MULCHED FOR OVER-WINTER PROTECTION AND THE AREA SHOULD BE SEEDED AT THE BEGINNING OF THE GROWING SEASON.

IF AN AREA IS NOT STABILIZED WITH TEMPORARY OR PERMANENT MEASURES BY NOVEMBER 15, THEN THE SITE MUST BE PROTECTED WITH ADDITIONAL STABILIZATION MEASURES.

A. PERMANENT STABILIZATION CONSISTS OF AT LEAST 90% VEGETATION, PAVEMENT/GRAVEL BASE OR RIPRAP.

B. DO NOT EXPOSE SLOPES OR LEAVE SLOPES EXPOSED OVER THE WINTER OR FOR ANY OTHER EXTENDED TIME OF WORK SUSPENSION UNLESS FULLY PROTECTED WITH MULCH.

C. APPLY HAY MULCH AT TWICE THE STANDARD RATE (150 LBS. PER 1,000 SF). THE MULCH MUST BE THICK ENOUGH SUCH THAT THE GROUND SURFACE WILL NOT BE VISIBLE AND MUST BE ANCHORED.

D. USE MULCH AND MULCH NETTING OR AN EROSION CONTROL MULCH BLANKET OR ALL SLOPES GREATER THAN 8 % OR OTHER AREAS EXPOSED TO DIRECT WIND.

E. INSTALL AN EROSION CONTROL BLANKET IN ALL DRAINAGEWAYS (BOTTOM AND SIDES) WITH A SLOPE GREATER THAN 3 %.

F. SEE THE VEGETATION MEASURES FOR MORE INFORMATION ON SEEDING DATES AND TYPES. G. WINTER EXCAVATION AND EARTHWORK SHALL BE COMPLETED SO THAT NO MORE THAN 1 ACRE OF THE SITE IS WITHOUT

H. AN AREA WITHIN 100 FEET OF A PROTECTED NATURAL RESOURCE MUST BE PROTECTED WITH A DOUBLE ROW OF SEDIMENT

I. TEMPORARY MULCH MUST BE APPLIED WITHIN 7 DAYS OF SOIL EXPOSURE OR PRIOR TO ANY STORM EVENT, BUT AFTER EVERY WORKDAY IN AREAS WITHIN 100 FEET FROM A PROTECTED NATURAL RESOURCE.

J. AREAS THAT HAVE BEEN BROUGHT TO FINAL GRADE MUST BE PERMANENTLY MULCHED THAT SAME DAY.

K. IF SNOWFALL IS GREATER THAN 1 INCH (FRESH OR CUMULATIVE). THE SNOW SHALL BE REMOVED FROM THE AREAS DUE TO BE SEEDED AND MULCHED.

L. LOAM SHALL BE FREE OF FROZEN CLUMPS BEFORE IT IS APPLIED.

HTTP://WWW.MAINE.GOV/DEP/SPILLS/EMERGSPILLRESP/

M. 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

N. EROSION CONTROL MUST BE INSPECTED AFTER EACH RAINFALL, SNOW STORM, OR THAWING EVENT AND AT LEAST ONCE A WEEK BETWEEN NOVEMBER 15 AND APRIL 15.

STABILIZATION AT ANY ONE TIME.

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

B. A LOG (REPORT) MUST BE KEPT SUMMARIZING THE SCOPE OF THE INSPECTION, NAME(S) AND QUALIFICATIONS OF THE PERSONNEL MAKING THE INSPECTION, THE DATE(S) OF THE INSPECTION, 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 INSPECTION. FOLLOW-UP TO CORRECT DEFICIENCIES OR ENHANCE CONTROLS MUST ALSO BE INDICATED IN THE LOG AND DATED, INCLUDING WHAT ACTION WAS TAKEN AND WHEN.

A DEWATERING PLAN IS NEEDED TO ADDRESS EXCAVATION DE-WATERING FOLLOWING HEAVY RAINFALL EVENTS OR WHERE THE EXCAVATION MAY INTERCEPT THE GROUNDWATER TABLE DURING CONSTRUCTION. THE COLLECTED WATER NEEDS TREATMENT AND A DISCHARGE POINT THAT WILL NOT CAUSE DOWNGRADIENT EROSION AND OFFSITE SEDIMENTATION OR WITHIN A RESOURCE.

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

NOTE: ANY SPILL OR RELEASE OF TOXIC OR HAZARDOUS SUBSTANCES MUST BE REPORTED TO THE DEPARTMENT. FOR OIL SPILLS, CALL 1-800-482-0777 WHICH IS AVAILABLE 24 HOURS A DAY. FOR SPILLS OF TOXIC OR HAZARDOUS MATERIAL, CALL 1-800-452-4664 WHICH IS AVAILABLE 24 HOURS A DAY, FOR MORE INFORMATION, VISIT THE DEPARTMENT'S WEBSITE AT:

2. GROUNDWATER PROTECTION, DURING CONSTRUCTION, LIQUID PETROLEUM PRODUCTS AND OTHER HAZARDOUS MATERIALS WITH THE POTENTIAL TO CONTAMINATE GROUNDWATER MAY NOT BE STORED OR HANDLED IN AREAS OF THE SITE DRAINING TO AN INFILTRATION AREA. AN "INFILTRATION AREA" IS ANY AREA OF THE SITE THAT BY DESIGN OR AS A RESULT OF SOILS. TOPOGRAPHY AND OTHER RELEVANT FACTORS ACCUMULATES 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.

SEE MAINE DEP CHAPTER 500 APPENDIX D FOR LICENSE BY RULE STANDARDS FOR INFILTRATION OF STORMWATER.

NOTE: LACK OF APPROPRIATE POLLUTANT REMOVAL BEST MANAGEMENT PRACTICES (BMPS) MAY RESULT IN VIOLATIONS OF THE GROUNDWATER QUALITY STANDARD ESTABLISHED BY 38 M.R.S.A. §465-C(1).

3. FUGITIVE SEDIMENT AND DUST. ACTIONS MUST BE TAKEN TO ENSURE THAT ACTIVITIES DO NOT RESULT IN NOTICEABLE EROSION OF SOILS OR FUGITIVE DUST EMISSIONS DURING OR AFTER CONSTRUCTION. OIL MAY NOT BE USED FOR DUST CONTROL, BUT OTHER WATER ADDITIVES MAY BE CONSIDERED 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 AND DUST.

NOTE: DEWATERING A STREAM WITHOUT A PERMIT FROM THE DEPARTMENT MAY VIOLATE STATE WATER QUALITY STANDARDS AND THE

4. DEBRIS AND OTHER MATERIALS. MINIMIZE THE EXPOSURE OF CONSTRUCTION DEBRIS, BUILDING AND LANDSCAPING MATERIALS, TRASH, FERTILIZERS, PESTICIDES, HERBICIDES, DETERGENTS, SANITARY WASTE AND OTHER MATERIALS TO PRECIPITATION AND STORMWATER

RUNOFF. THESE MATERIALS MUST BE PREVENTED FROM BECOMING A POLLUTANT SOURCE. NOTE: TO PREVENT THESE MATERIALS FROM BECOMING A SOURCE OF POLLUTANTS, CONSTRUCTION AND POST-CONSTRUCTION ACTIVITIES RELATED TO A PROJECT MAY BE REQUIRED TO COMPLY WITH APPLICABLE PROVISION OF RULES RELATED TO SOLID, UNIVERSAL, AND HAZARDOUS WASTE, INCLUDING, BUT NOT LIMITED TO, THE MAINE SOLID WASTE AND HAZARDOUS WASTE MANAGEMENT RULES; MAINE HAZARDOUS WASTE MANAGEMENT RULES; MAINE OIL CONVEYANCE AND STORAGE RULES; AND MAINE

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

NOTE: DEWATERING CONTROLS ARE DISCUSSED IN THE "MAINE EROSION AND SEDIMENT CONTROL BMPS, MAINE DEPARTMENT OF

6. 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 ARE:

(a) DISCHARGES FROM FIREFIGHTING ACTIVITY; (b) FIRE HYDRANT FLUSHINGS;

LANDSCAPE IRRIGATION.

PESTICIDE REQUIREMENTS.

(c) VEHICLE WASHWATER IF DETERGENTS ARE NOT USED AND WASHING IS LIMITED TO THE EXTERIOR OF VEHICLES (ENGINE,

UNDERCARRIAGE AND TRANSMISSION WASHING IS PROHIBITED); (d) DUST CONTROL RUNOFF IN ACCORDANCE WITH PERMIT CONDITIONS AND APPENDIX (C)(3);

(e) ROUTINE EXTERNAL BUILDING WASHDOWN, NOT INCLUDING SURFACE PAINT REMOVAL, THAT DOES NOT INVOLVE DETERGENTS; (f) PAVEMENT WASHWATER (WHERE SPILLS/LEAKS OF TOXIC OR HAZARDOUS MATERIALS HAVE NOT OCCURRED, UNLESS ALL SPILLED MATERIAL HAD BEEN REMOVED) IF DETERGENTS ARE NOT USED:

(a) UNCONTAMINATED AIR CONDITIONING OR COMPRESSOR CONDENSATE (h) UNCONTAMINATED GROUNDWATER OR SPRING WATER:

FOUNDATION OR FOOTER DRAIN-WATER WHERE FLOWS ARE NOT CONTAMINATED;

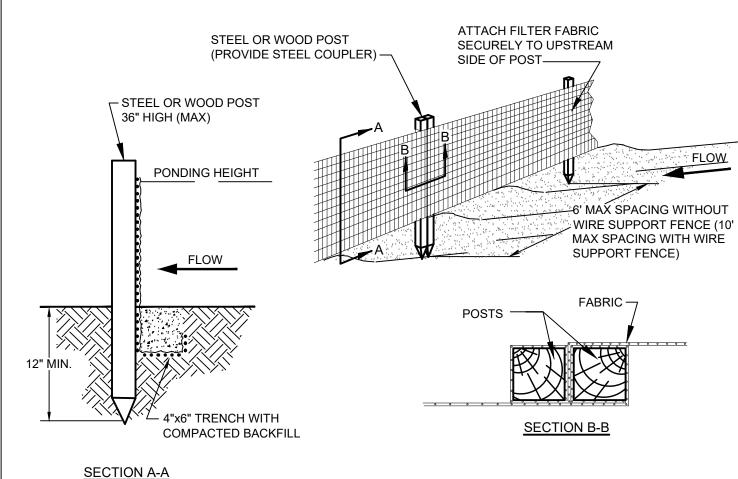
UNCONTAMINATED EXCAVATION DEWATERING (SEE REQUIREMENTS IN APPENDIX C(5)); k) POTABLE WATER SOURCES INCLUDING WATERLINE FLUSHINGS: AND

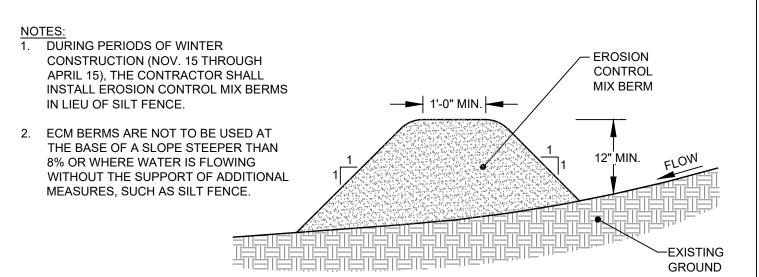
7. UNAUTHORIZED NON-STORMWATER DISCHARGES. THE DEPARTMENT'S APPROVAL UNDER THIS CHAPTER DOES NOT AUTHORIZE A DISCHARGE THAT IS MIXED WITH A SOURCE OF NON-STORMWATER, OTHER THAN THOSE DISCHARGES IN COMPLIANCE WITH APPENDIX C (6). SPECIFICALLY, THE DEPARTMENT'S APPROVAL DOES NOT AUTHORIZE DISCHARGES OF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

(a) WASTEWATER FROM THE WASHOUT OR CLEANOUT OF CONCRETE, STUCCO, PAINT, FORM RELEASE OILS, CURING COMPOUNDS OR OTHER CONSTRUCTION MATERIALS:

(b) FUELS, OILS OR OTHER POLLUTANTS USED IN VEHICLE AND EQUIPMENT OPERATION AND MAINTENANCE (c) SOAPS, SOLVENTS, OR DETERGENTS USED IN VEHICLE AND EQUIPMENT WASHING: AND (d) TOXIC OR HAZARDOUS SUBSTANCES FROM A SPILL OR OTHER RELEASE.

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





EROSION CONTROL MIX: EROSION CONTROL MIX SHALL CONTAIN A WELL-GRADED MIXTURE OF PARTICLE SIZES & MAY CONTAIN ROCKS LESS THAN 4" IN DIAMETER. EROSION CONTROL MIX MUST BE FREE OF REFUSE, PHYSICAL CONTAMINANTS, AND MATERIAL TOXIC TO PLANT GROWTH. THE MIX COMPOSITION SHALL MEET THE FOLLOWING STANDARDS: - THE ORGANIC MATTER CONTENT SHALL BE BETWEEN 80% - 100% DRY WEIGHT BASIS

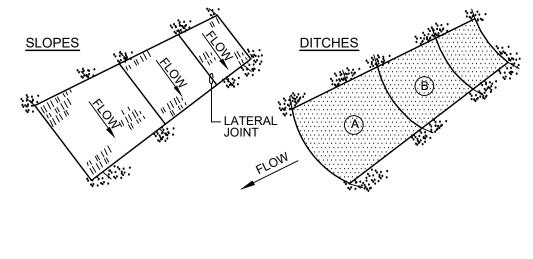
- PARTICLE SIZE BY WEIGHT SHALL BE 100% PASSING A 6" SCREEN AND A MINIMUM OF 70%. MAXIMUM OF 85% PASSING A 0.75" SCREEN - THE ORGANIC PORTION NEEDS TO BE FIBROUS AND ELONGATED

- LARGE PORTIONS OF SILTS, CLAYS OR FINE SANDS ARE NOT ACCEPTABLE IN THE MIX.

- SOLUBLE SALTS CONTENT SHALL BE < 4.0 mmhos/cm.

- ph SHALL FALL BETWEEN 5.0 - 8.0.

**EROSION CONTROL MIX BERM** 



1. BURY THE TOP END OF THE MESH MATERIAL IN A 6" TRENCH AND BACKFILL AND TAMP TRENCHING SECURE END

WITH STAPLES AT 6" SPACING, 4" DOWN FROM EXPOSED END. 2. FLOW DIRECTION JOINTS TO HAVE UPPER END OF LOWER STRIP BURIED WITH UPPER LAYERS OVERLAPPED 4" AND

STAPLED. OVERLAP B OVER A. 3. LATERAL JOINTS TO HAVE 4" OVERLAP OF STRIPS. STAPLE 18" ON CENTER.

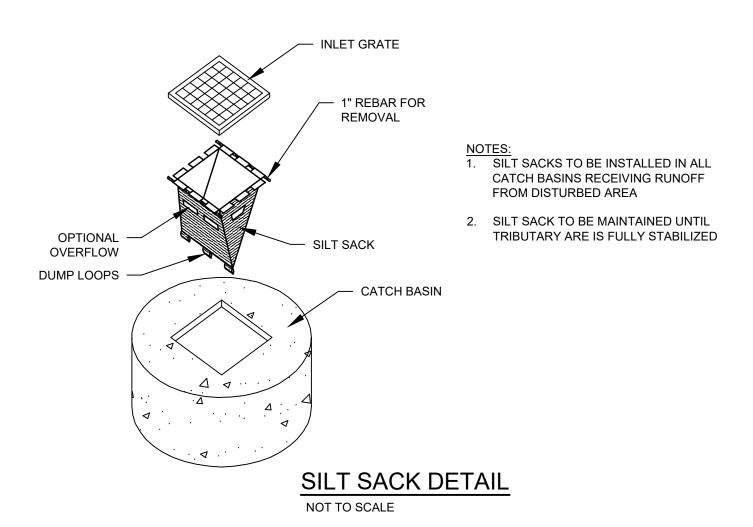
4. STAPLE OUTSIDE LATERAL EDGE 2' ON CENTER.

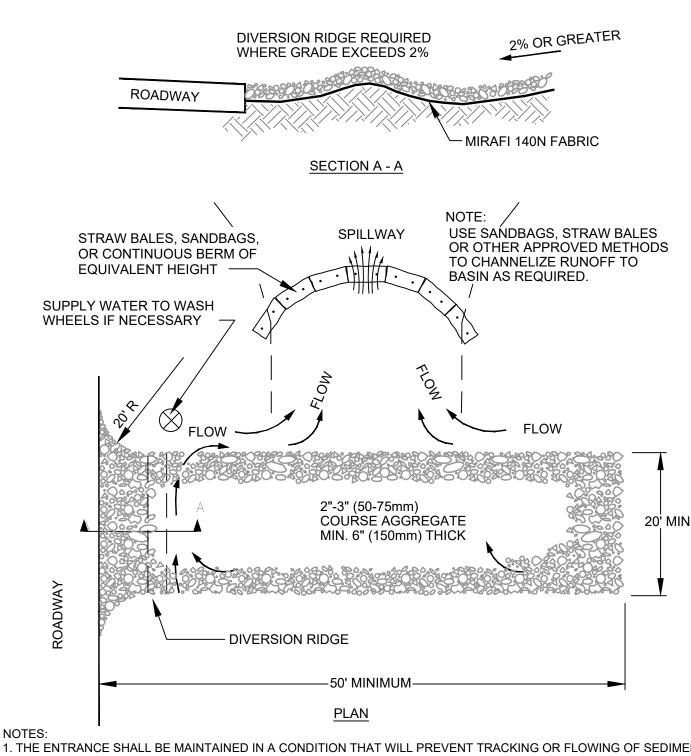
5. WIRE STAPLES TO BE MIN. OF #11 WIRE, 6" LONG & 1-1/2" WIDE.

6. USE NORTH AMERICAN GREEN DS 150 (OR APPROVED EQUAL) ON SLOPES BETWEEN 4:1-2:1. USE NORTH AMERICAN GREEN VMAX SC250 PERMANENT TURF REINFORCEMENT MAT (OR APPROVED EQUAL) ON SLOPES 2:1 AND STEEPER..

#### **EROSION CONTROL BLANKET**

NOT TO SCALE





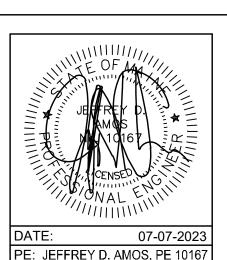
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHT-OF-WAYS. THIS MAY REQUIRE TOP DRESSING, REPAIR AND/OR CLEAN OUT OF ANY MEASURES USED TO TRAP SEDIMENT.

STABILIZED CONSTRUCTION ENTRANCE

3. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH CRUSHED STONE THAT DRAINS

2. WHEN NECESSARY, WHEELS SHALL BE CLEANED PRIOR TO ENTRANCE ONTO PUBLIC RIGHT-OF-WAY.

INTO AN APPROVED SEDIMENT TRAP OR SEDIMENT BASIN.



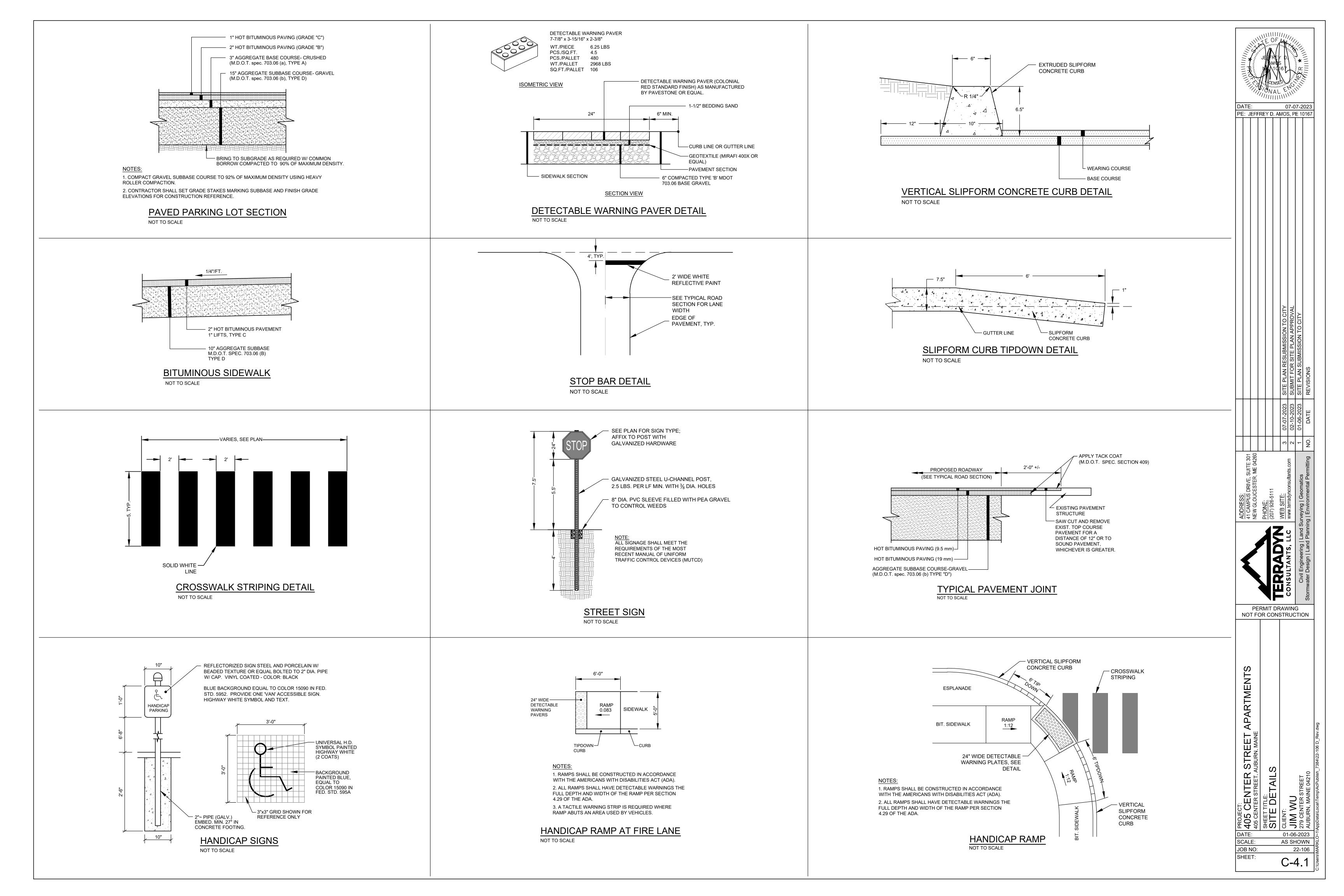
PERMIT DRAWING

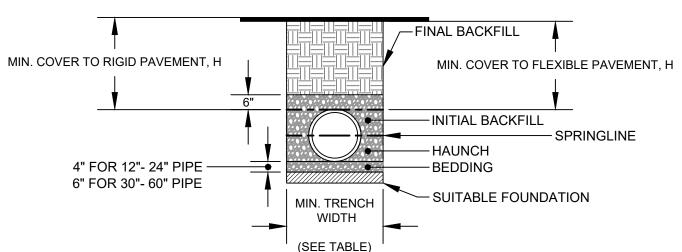
NOT FOR CONSTRUCTION

 $\cap$ AP S ENTER 405

01-06-2023

DATE: SCALE: **AS SHOWN** JOB NO 22-106





1. ALL PIPE SYSTEMS SHALL BE INSTALLED IN ACCORDANCE WITH ASTM D2321, "STANDARD PRACTICE FOR UNDERGROUND INSTALLATION OF THERMOPLASTIC PIPE FOR SEWERS AND OTHER GRAVITY FLOW APPLICATIONS", LATEST ADDITION

2. MEASURES SHOULD BE TAKEN TO PREVENT MIGRATION OF NATIVE FINES INTO BACKFILL MATERIAL, WHEN REQUIRED.

3. FOUNDATION: WHERE THE TRENCH BOTTOM IS UNSTABLE, THE CONTRACTOR SHALL EXCAVATE TO A DEPTH REQUIRED BY THE ENGINEER AND REPLACE WITH SUITABLE MATERIAL AS SPECIFIED BY THE ENGINEER. AS AN ALTERNATIVE AND AT THE DISCRETION OF THE DESIGN ENGINEER. THE TRENCH BOTTOM MAY BE STABILIZED USING A GEOTEXTILE MATERIAL.

4. BEDDING: SUITABLE MATERIAL SHALL BE CLASS I, II OR III. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. UNLESS OTHERWISE NOTED BY THE ENGINEER, MINIMUM BEDDING THICKNESS SHALL BE 4" (100mm) FOR 4"-24" (100mm-600mm); 6" (150mm) FOR 30"-60" (750mm-900mm).

5. INITIAL BACKFILL: SUITABLE MATERIAL SHALL BE CLASS I, II OR III IN THE PIPE ZONE EXTENDING NOT LESS THAN 6" ABOVE CROWN OF PIPE. THE CONTRACTOR SHALL PROVIDE DOCUMENTATION FOR MATERIAL SPECIFICATION TO ENGINEER. MATERIAL SHALL BE INSTALLED AS REQUIRED IN ASTM D2321, LATEST EDITION.

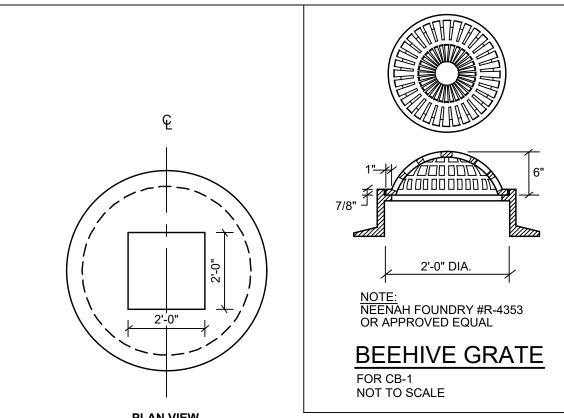
6. MINIMUM COVER: MINIMUM COVER, H, IN NON-TRAFFIC APPLICATIONS (GRASS OR LANDSCAPE AREAS) IS 12" FROM THE TOP OF PIPE TO GROUND SURFACE. ADDITIONAL COVER MAY BE REQUIRED TO PREVENT FLOTATION. FOR TRAFFIC APPLICATIONS, MINIMUM COVER, H, IS 12" UP TO 48" DIAMETER PIPE AND 24" OF COVER FOR 54"-60" DIAMETER PIPE, MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TO TOP OF RIGID PAVEMENT.

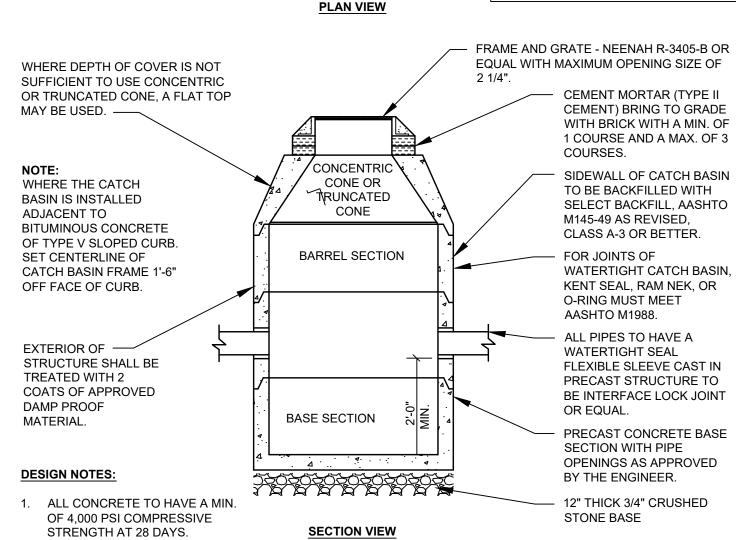
# RECOMMENDED MINIMUM TRENCH WIDTHS PIPE DIAM. MIN. TRENCH WIDTH

MINIMUM RECOMMENDED COVER BASED ON				
VEHICLE LOADING CONDITIONS				
	SURFACE L	IVE LOADING CONDITION		
PIPE DIAM.	H-25	HEAVY CONSTRUCTION		
FIFE DIAW.	п-25	(75T AXLE LOAD) *		
12" - 48"	12"	48"		
54" - 60"	24"	60"		

\* VEHICLES IN EXCESS OF 75T MAY REQUIRE ADDITIONAL COVER

## TYPICAL TRENCH DETAIL

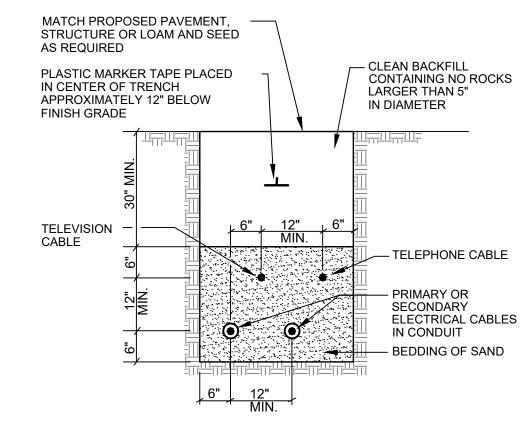




- 2. DESIGN LOAD FOR H-20 WHEEL
- 3. CATCH BASIN TO CONFORM TO ASTM-C478 SPECIFICATIONS.
- 4. REINFORCE TO 0.12 IN SQ./LF..

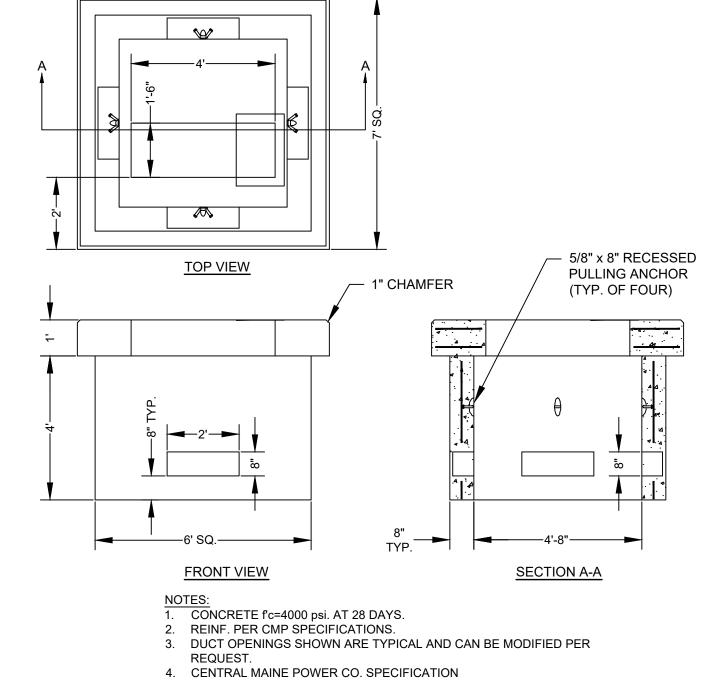
CASCADE GRATES SHALL BE INSTALLED ON GRADIENT OF GUTTER IF PROFILE GRADE EXCEEDS 5% GRATES SHALL BE DEPRESSED 2" BELOW NORMAL GUTTER GRADE UNLESS THIS DEPRESSION INTERFERES WITH TRAFFIC. PARALLEL BAR GRATES SHALL BE INSTALLED ON A LEVEL GRADIENT.

## TYPICAL CATCH BASIN

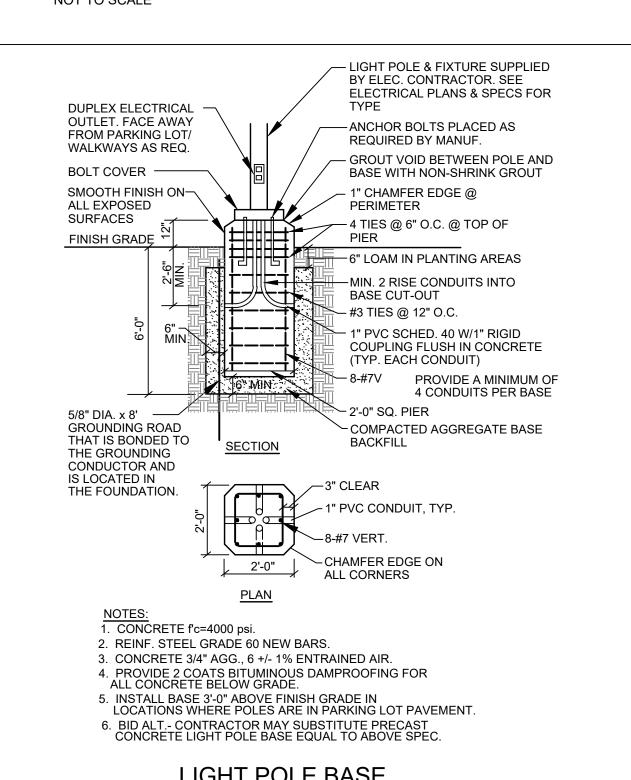


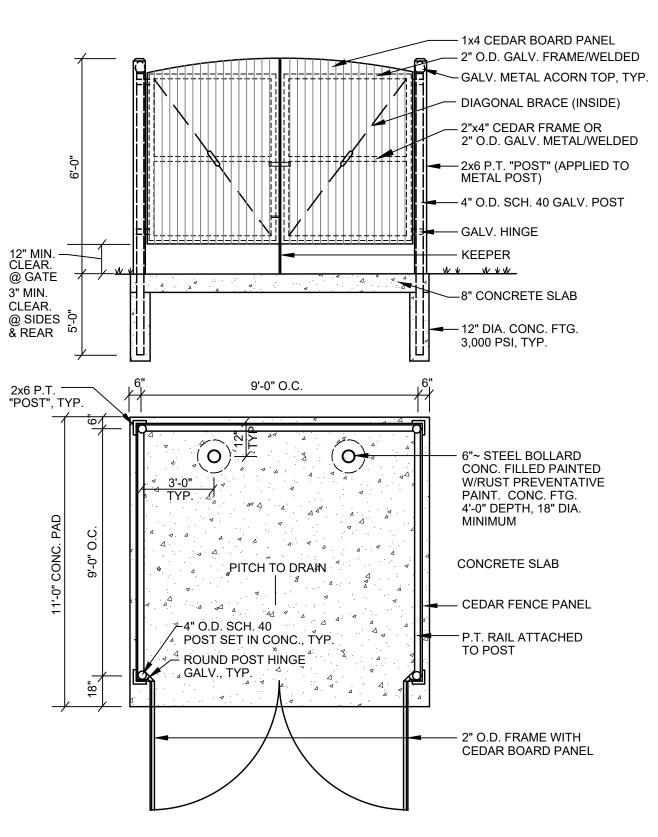
CABLES TO BE ENCASED IN SCHEDULE 40 PVC CONDUIT WHEN RUN BENEATH PAVED AREAS.

## TYPICAL UNDERGROUND CABLE INSTALLATION

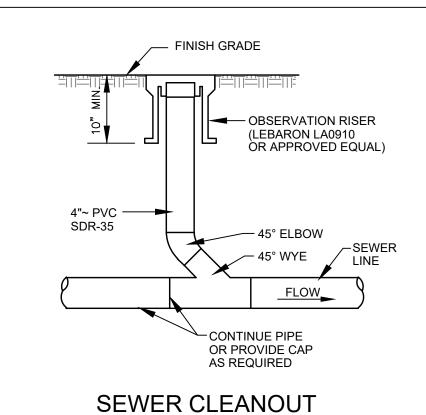


#### 7'X7' TRANSFORMER PAD (75-500 KVA) NOT TO SCALE





#### TYPICAL DUMPSTER ENCLOSURE NOT TO SCALE



NOT TO SCALE



1" CC X M.I.P. BALL VALVE -TAPPED DIRECTLY ON

TOP OF WATER MAIN,

BRASS ELBOW ——

SEE NOTE

NOT TO SCALE

PAVEMENT OR -

GRAVEL

SERVICE BOX & -

36" S.S. ROD

OPEN LEFT

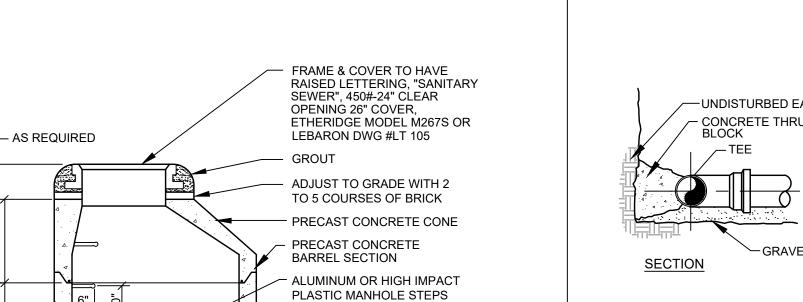
1" COMP. X M.I.P. ADAPTER

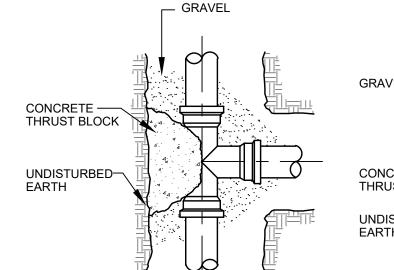
2" WIDE

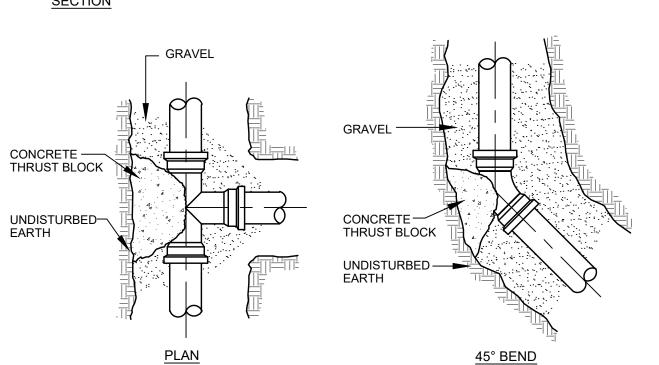
**─**18"±──

1" COMP. BALL VALVE, -

2" RIGID INSULATION,







TEE & BEND DETAIL

NOT TO SCALE

PRECAST SEWER MANHOLE

NOTE: PIPE CONNECTIONS SHALL BE WATERTIGHT

PROVIDES LEAKPROOF CONNECTION

FLEXIBLE BOOT CONNECTORS

@ 12" O.C.

- SLOPE 1/2" PER FOOT

2 STRIPS BUTYL RUBBER

SEALANT (1 IN. SQ.) TYP. ALL

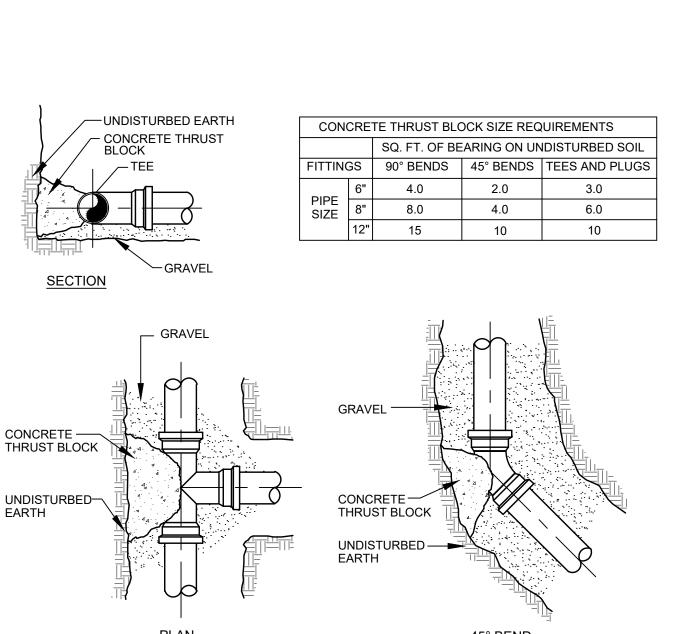
PRECAST CONCRETE BASE

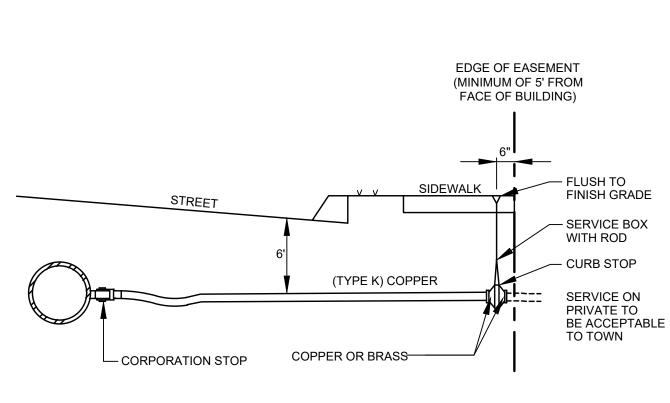
- MASONRY FILL WITH BRICK

CHANNEL AT THE PIPE

CRUSHED STONE

JOINTS INSURES JÓINTS ARE





- 1"COMP. X F.I.P. ADAPTER WITH

— 26" GATE BOX TOP WITH COVER

OTHER THAN D.I. OR C.I. MUST

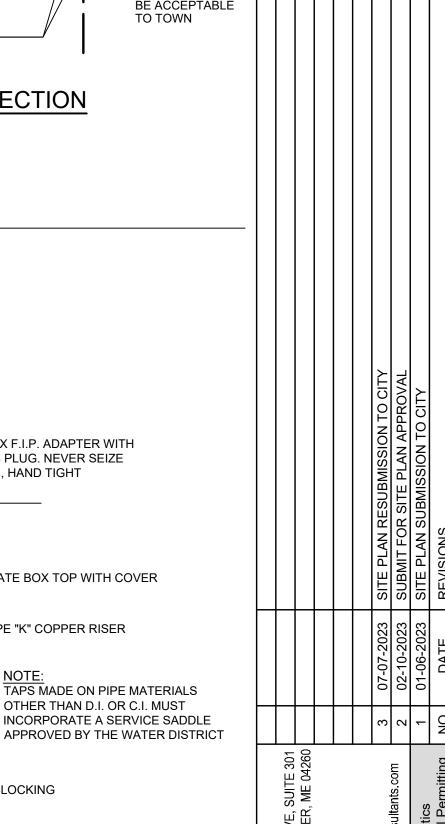
- 1" TYPE "K" COPPER RISER

P.T. BLOCKING

1" BRASS PLUG. NEVER SEIZE

ON PLUG, HAND TIGHT

TYPICAL WATER SERVICE CONNECTION



07-07-2023

PE: JEFFREY D. AMOS, PE 10167

NOT FOR CONSTRUCTION

01-06-2023

DATE: SCALE: AS SHOWN JOB NO 22-106

C-4.2



LOCATION: CATALOG #:

#### MICROSTRIKE STRIKE

#### **FEATURES**

VIPER LUMINAIRE

 Low profile LED area/site luminaire with a variety of IES distributions for lighting applications such as auto dealership, retail, commercial, and campus parking lots

• Featuring two different optical technologies, Strike and Micro Strike Optics, which provide the best distribution patterns for retrofit or new construction

• Rated for high vibration applications including bridges and overpasses. All sizes are rated for 1.5G

· Control options including photo control, occulul JAHNATION BEYOND PROPERTY LINES AT SITE ENTRANCE wiSCAPE and 7-Pin with networked controls ARE PROVIDED FOR PEDESTRIAN AND VEHICLE SAFETY.

• New customizable lumen output feature allows for the wattage and lumen output to be customized in the factory to meet whatever specification requirements may entail

• Field interchangeable mounting provides additional flexibility after the fixture has shipped

## CONTROL TECHNOLOGY

#### LCONTROLS WISCAPE

#### **SPECIFICATIONS** CONSTRUCTION

 Die-cast housing with hidden vertical heat fins are optimal for heat dissipation while keeping a clean smooth outer surface · Corrosion resistant, die-cast aluminum housing

with 1000 hour powder coat paint finish • External hardware is corrosion resistant Micro Strike Optics (160, 320, 480, or 720 LED counts) maximize uniformity in applications

and come standard with mid-power LEDs which evenly illuminate the entire luminous surface area to provide a low glare appearance. Catalog logic found on page 2 Strike Optics (36, 72, 108, or 162 LED counts) maximum pole spacing in new applications with high powered LEDs. Strike optics are

neld in place with a polycarbonate bezel to mimic the appearance of the Micro Strike Optics so both solutions can be combined on the same application. Catalog logic found on page 3

 Both optics maximize target zone illumination with minimal losses at the house-side. reducing light trespass issues. Additional backlight control shields and house side shields can be added for further reduction of illumination behind the pole

 One-piece silicone gasket ensures a weatherproof seal Zero up-light at 0 degrees of tilt

 Field rotatable optics INSTALLATION Mounting patterns for each arm can be

found on page 11 Optional universal mounting block for ease of installation during retrofit applications. Available as an option (ASQU) or accessory for square and round poles

• All mounting hardware included

INSTALLATION (CONTINUED)

 For products with EPA less than 1 mounted to a pole greater that 20ft, a vibration damper

Universal 120-277 VAC or 347-480 VAC input voltage, 50/60 Hz Ambient operating temperature -40°C to 40°C

• Drivers have greater than 90% power factor and less than 20% THD • LED drivers have output power over-voltage, over-current protection and short circuit

protection with auto recovery • Field replaceable surge protection device provides 20kA protection meeting ANSI/ IEEE C62.41.2 Category C High and Surge Location Category C3; Automatically takes fixture off-line for protection when device is

 Dual Driver option provides 2 drivers within luminaire but only one set of leads exiting the luminaire, where Dual Power Feed provides two drivers which can be wired independently as two sets of leads are extended from the luminaire. Both options cannot be combined

Photo control, occupancy sensor programmable controls, and Zigbee wireless controls available for complete on/off and dimming

 Please consult brand or sales representative when combining control and electrical options as some combinations may not operate as anticipated depending on your application • 7-pin ANSI C136.41-2013 photocontrol receptacle option available for twist lock photocontrols or wireless control modules (control accessories sold separately)

#### CONTROLS (CONTINUED) Knuckle arm fitter option available for 2-3/8"

 O-10V Dimming Drivers are standard and dimming leads are extended out of the luminaire unless control options require connection to the dimming leads. Must specify if wiring leads are to be greater than the 6" standard NX Lighting Controls™ available with in fixture wireless control module, features dimming

10-DAY QUICK SHIP PROGRAM QS<sub>10</sub>

and occupancy sensor wiSCAPE® available with in fixture wireless control module, features dimming and occupancy sensor. Also available in 7-pin
 sensor.

CERTIFICATIONS DLC® (DesignLights Consortium Qualified), with some Premium Qualified configurations. Not all product variations listed in this document are DLC® qualified. Refer to http://www.designlights.org for the product to data. most up-to-date list. • Listed to UL1598 and CSA C22.2#250.0-

24 for wet locations and 40°C ambient • 1.5 G rated for ANSI C136.31 high vibration

 Meets IDA recommendations using 3K CCT configuration at 0 degrees of tilt This product qualifies as a "designated country construction material" per FAR 52.225-11 Buy American-Construction Materials under Trade Agreements effective

#### WARRANTY 5 year warranty

Fixture is IP65 rated

KEY DATA			
Lumen Range	5,000–80,000		
Wattage Range	36–600		
Efficacy Range (LPW)	92–155		
Weight lbs. (kg)	13.7-30.9 (6.2-13.9)		

#### Current @

currentlighting.com/beacon © 2022 HLI Solutions, Inc. All rights reserved. Information and specifications subject to change without notice. All values are design or typical values when measured under laboratory conditions.

BEA\_VIPERSPEC\_R04

RAB

Page 1 of 13

Rev 03/13/23

#### WBLED18Y FIXTURE TAG: L2

Weight: 14.0 lbs



18 Watt LED wall sconce. Die-cast aluminum wall bracket with five 1/2" conduit opening with plugs.

Color: Bronze

	405 C	ENTER	DECOR		
	Prepare TWP	ed By:	Date: 7.7.23		
	Driver Info		LED Info		
	Type	Constant Current	Watts	18W	
	120V	0.24A	Color Temp	3000K (War	m)
	208V	0.18A	Color Accuracy	75 CRI	
gs	240V	0.15A	L70 Lifespan	100,000 Ho	urs
	277V	0.12A	Lumens	1,886 lm	
	Input Watts	17.1W	Efficacy	110.3 lm/W	

#### **Technical Specifications**

Compliance

UL Listed:
Suitable for wet locations
IESNA LM-79 & LM-80 Testing:
RAB LED luminaires and LED components have been tested by an independent laboratory in accordance

**LED Characteristics** Long-life, high-efficiency, surface-mount LEDs

**Color Consistency:** 5-step MacAdam Ellipse binning to achieve consistent fixture-to-fixture color Color Stability:

with IESNA LM-79 and LM-80

LED color temperature is warrantied to shift no more

than 200K in color temperature over a 5-year period

Need help? Tech help line: (888) 722-1000 Email: sales@rablighting.com Website: www.rablighting.com

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**Color Uniformity:** RAB's range of Correlated Color Temperature follows the guidelines of the American National Standard for Specifications for the Chromaticity of Solid State Lighting (SSL) Products, ANSI C78.377-2017

100,000-Hour LED lifespan based on IES LM-80 results and TM-21 calculations

**BUG Rating:** B1 U3 G1 Construction

Cold Weather Starting: The minimum starting temperature is -40°C (-40°F)

Thermal Management Cast aluminum Thermal Management system for optimal heat sinking. The BLED is designed for cool operation, maximum efficiency and long life by minimizing LED junction temperature.

Reinforced Die-cast Aluminum

Polycarbonate lens Reflector

Vacuum-metalized polycarbonate High-temperature silicone gaskets seal out moisture gaskets seal out moisture

Page 1 of 2

FEATURES & BENEFITS 2" Deep - Install Where Ceiling Space Is Limited Type IC Rated - No Housing Required CRI 90+ for True Color Rendering Fast & Easy To Install - Save On Labor

Commercial Grade Quality With Architectural Design

4" Round Recessed LED With Integral

Driver In Connection Box

Type IC, Air-Tight, Wet & Plenum

0.0

0.0

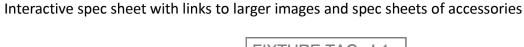
0.0 0.

MOUNTING Cut Hole In Ceiling And Snap Fixture In Opening With Attached Spring Clips. Ceiling Clearance Required: 2"

Driver Inside Connection Box - No Junction Box Needed

Armored Cable & Metal Connectors - Open Plenum Rated

DESCRIPTION



0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.1 0.1 0.2

0.0 0.0 0.0 0.0 0.1 0.1 0.2

0.0 0.0 0.0 0.0 0.1 0.2

0.0 0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0

MAX ILLUMINATION AT PROPERTY

LINE FROM PROPOSED LIGHTS

MAX ILLUMINATION

0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0

0.0 0.0

0.1 0.2

## LL4RR

LABEL

0.9 0.9

0.0 0.1 0.5 0.3 0.0 0.0 0.2

0.0 0.0 0.0 0.0 0.0 0.0 0.0 0.1

LIGHT FIXTURE

CANOPY

WALL SCONCE

VIPER AREA/SITE

VIPER AREA/SITE

0.2

0.2 0.2 0.2 0.2

0.1 0.4

0.0 0.1

0.0 0.0

0.0 0.1

0.0 0.0 \ 0.1 0.9 **A** 

0.0

0.1

0.0 0.0

p.0 0.0

<del>0.0</del> - 0.0 0.0 0.0

0.0 0.0 0.0 0.0

REQURIED VALUE

N/A

N/A

**AUBURN LIGHTING STANDARDS** 

1.5 1.4

0.8 0.9

PHOTOMETRIC LIGHT

LEVEL, TYP.

## 4" Round Regressed 2nd Gen Plenum LED 14.5W

PROVIDED VALUE

0.4 FC

6.5 FC

Project: 405 CENTER STREET APARTMENTS

Qty:

SPECIFICATION **Recessed Ceiling Mount** Applications Energy Used Color Temperature (K) 2700 (3000) 4000 | Dim to Warm 3000-1800K 950 | 1000 (1020) 900 Light Output (lm) 90 W Halogen Equivalent 90° Beam Angle CRI 90 + Default Driver Input 120V AC Triac Dimmable 120V-347V AC 0-10V Dimmable **Optional Driver Input** Max 5 No 12 AWG or 8 No 14 AWG Power Factor Insulated Ceilings, Open Plenum, Wet Approved Location IP Rating IP 54 Air Tight -40°F (-40°C) to +104°F (+40°C) Ambient Temperature Projected Life 70% Light Output at 50,000 Hours

10 Year Residential / 5 Year Commercial

1. LIGHTING PLAN PREPARED USING DESIGN MASTER PHOTOMETRICS SOFTWARE

0.1

0.1

0.0 0.0 0.0 0.1

0.1 0.0 0.0 0

0.2 0.1

0.2 0.5

0.0 0.0 0.2 0.9

MANUFACTURERS ID

LLL-LD1535TR

WBLED18Y

VP-1-160L-50-3K7-4W-HSS-90-B

VP-ST-1-36L-39-3K7-3

- 0.0 0.0 0.1 044,

LIGHT FIXTURE TABLE

0.2

PHOTOMETRIC LIGHT LEVEL CONTOUR, TYP.

1.1 1.3 1.2 1.1 1.2 1.5

0.0 0.0 0.0

0.7 0.9 0.9 0.5 0.2

PROPOSED WALL

LUMENS

900

1,886

7,500

5,028

MOUNTED LIGHT

/ 0.7 , 0.4 0.2

0.0 0.0 0.0 0.0 0.0

0.0 0.0 0.0 0.0 0.0

¬ PROPERTY

0.0

0.0

10.0 0.0

0.1 | 0.0

0.1 0.0

0.1

0.0

✓ CANOPY MOUNTED

- PROPOSED

( LIGHT

NUMBER OF LIGHTS | MOUNTING HEIGHT | MOUNTING LOCATION

20'

0.0

0.0 0.0 0.0

0.0

CANOPY

WALL

POLE

POLE

BOUNDARY

PROPOSED POLE

MOUNTED LIGHT

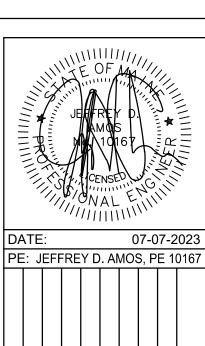
2. ONLY PROPOSED LIGHTING FIXTURES ARE MODELED 3. DEPRECIATION FACTOR FOR LED IS 0.90

MANUFACTURER

LOTUS LED LIGHTS

CURRENT

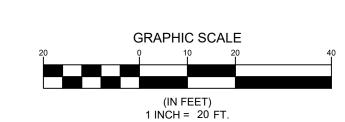
CURRENT



NOT FOR CONSTRUCTION

STREET ALIBIEN MAINE ENTER BESTREET A

DATE: 01-06-2023 SCALE: 1" = 20' 22-106 P-1.0



FIXTURE TAG: L1

Location: AUBURN, ME Model #:

Notes:

Warranty

Junction Box Wire Capacity Certification cULus, Energy Star (except DTW)

DIMENSIONS: ID 4" OD 5" Cut Out 4" to 4 1/4"

