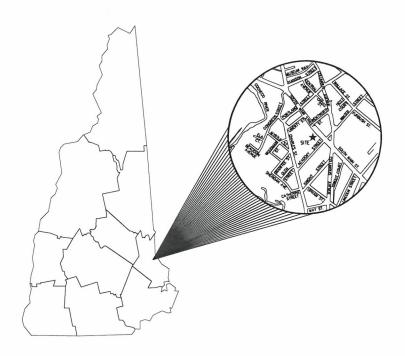


PROPOSED SERVICE CREDIT UNION BRANCH

83 SOUTH MAIN STREET

PREPARED FOR

SERVICE CREDIT UNION FEBRUARY 2019





CIVIL ENGINEERS

NORWAY PLAINS ASSOCIATES, INC. 2 CONTINENTAL BOULEVARD ROCHESTER, NEW HAMPSHIRE 03867 (603) 335-3948

ARCHITECTS

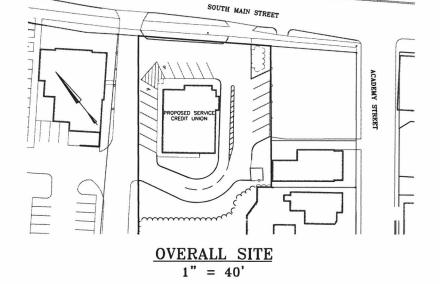
mjk, MICHAEL J. KEANE ARCHITECTS, PLLC 101 KENT PLACE NEWMARKET, NH 03857 (603) 292-1400

CAREFULLY REVIEW ALL SHEETS OF THIS PACKAGE TO INSURE PROPER CONSTRUCTION. SPECIFIC SITE CONDITIONS SHOULD BE EXPLORED PRIOR TO CONSTRUCTION. CONTACT BOTH THE DESIGN ENGINEER AND THE PROJECT OWNER FOR ANY AVAILABLE (SECTECHNICAL OR HYDROGEOLOGICAL INFORMATION AVAILABLE BUT NOT CONTAINED WITH IN THE PLAN SET. IF THERE ARE ANY QUESTIONS WITH THE DESIGN PRESENTED IN THIS PLAN SET PLEASE CONTACT THE ENGINEERING STAFF AT NORWAY PLAINS ASSOCIATES, INC. (603)—335—3948.

OWNER OF RECORD TAX MAP 125, LOT 203 OWNER OF RECORD: SERVICE CREDIT UNION 3003 LAFAYETTE ROAD PORTSMOUTH, NH 03801 SCRD BOOK 4655, PAGE 153

APPLICANT

SERVICE CREDIT UNION 3003 LAFAYETTE ROAD PORTSMOUTH, NH 03801-5904 (603) 422-8314





NADONAL POLLUTANT DISCHARGE FLIMINATION SYSTEM (NPDES).

NPDES PERMITS ARE ONLY REQUIRED FOR PROJECTS MEETING THE DISTURBED AREA CRITERIA BELOW AND LANGE A POINT SOURCE STORMWATER DISCHARGE FROM THE SITE TO AN ADJACENT WEILAND OR WATER BODY (I.E. CULVERT, SWALE, ETC. OUTLETING TO A WEILAND, CREEK, STREAM OR RIVER).

NOT REQUIRED

NPDES PERMITS CONSIST OF A NOTICE OF INTENT (NOI) FILED WITH THE ENVIRONMENTAL PROTECTION AGENCY AT LEAST 14 DAYS PRIOR TO CONSTRUCTION COMMENCING AND A STORMWATER POLLUTION PREVENTION PLAN (SWPPP) BEING PREPARED, KEPT ON SITE AND FOLLOWED BY THE CONTRACTOR.

FOR STATUS OF THIS PERMIT, CONTACT THE PROJECT GENERAL CONTRACTOR

FINAL APPROVAL BY ROCHESTER PLANNING BOARD

SHEET INDEX

SHEET INDEX

COVER

SHEET C-1 EXISTING FEATURES
SHEET C-2 SITE LAYOUT PLAN
SHEET C-3 GRADING AND DRAINAGE PLAN
SHEET C-4 CONSTRUCTION DETAILS
SHEET C-5 STORMTECH DRAINAGE DETAILS
SHEET L-1 LIGHTING PLAN AND DETAILS

1" = 10' 1" = 20' 1" = 10' 1" = 10' AS SHOWN AS SHOWN 1" = 10'

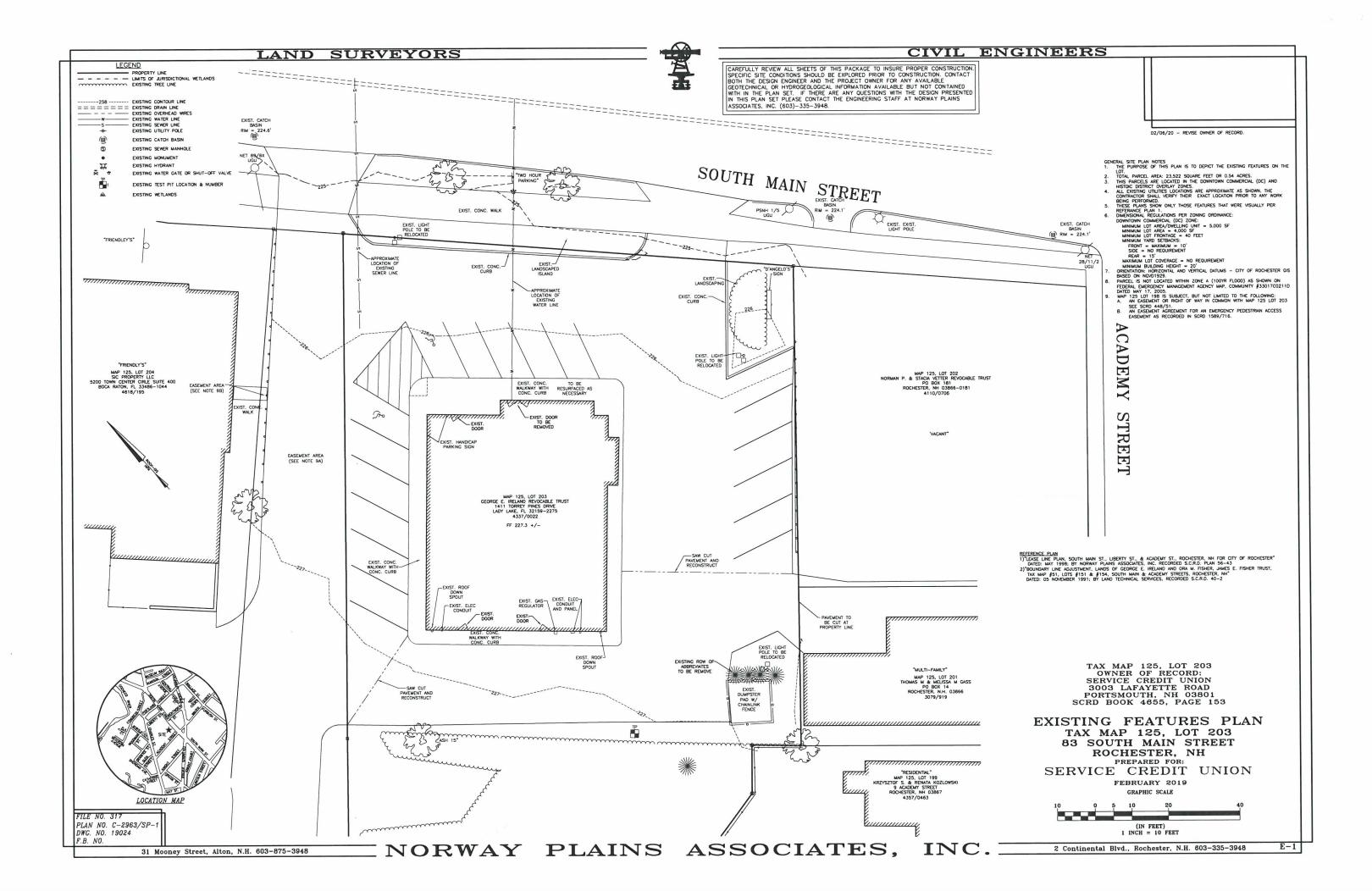
PLAN NO. C-2963/SP-1

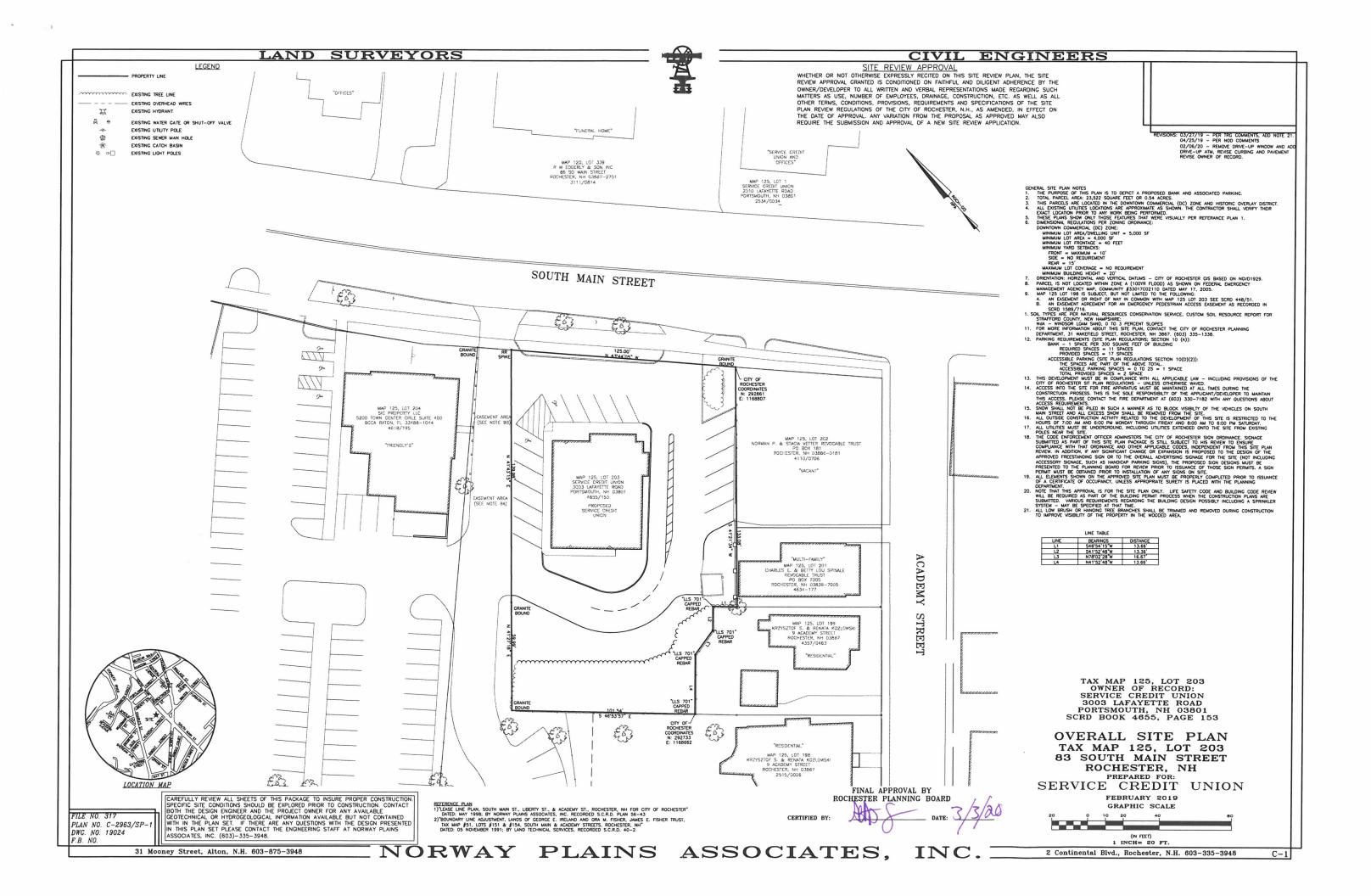
FILE NO. 317

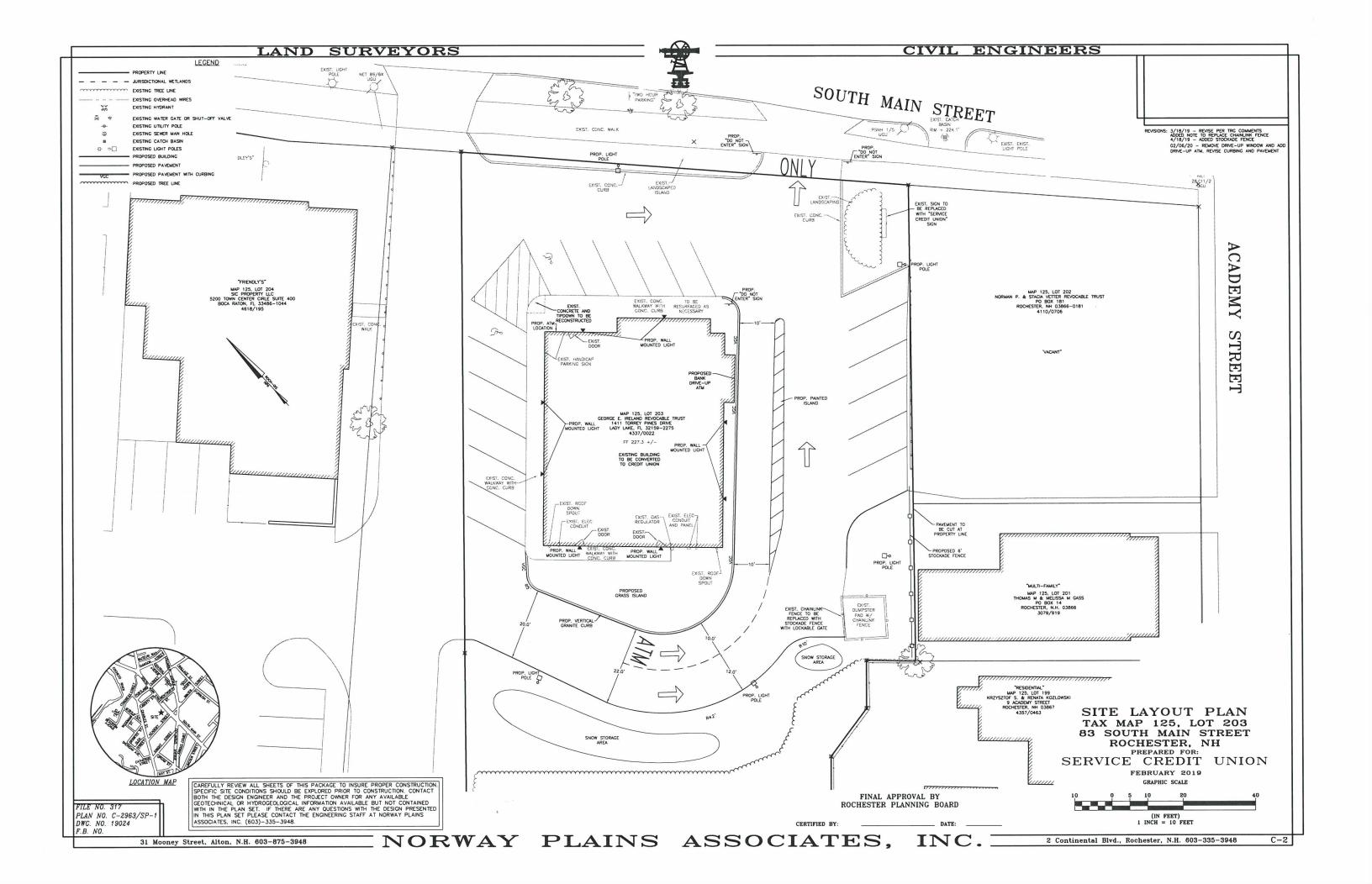
31 Mooney Street, Alton, N.H. 603-875-3948

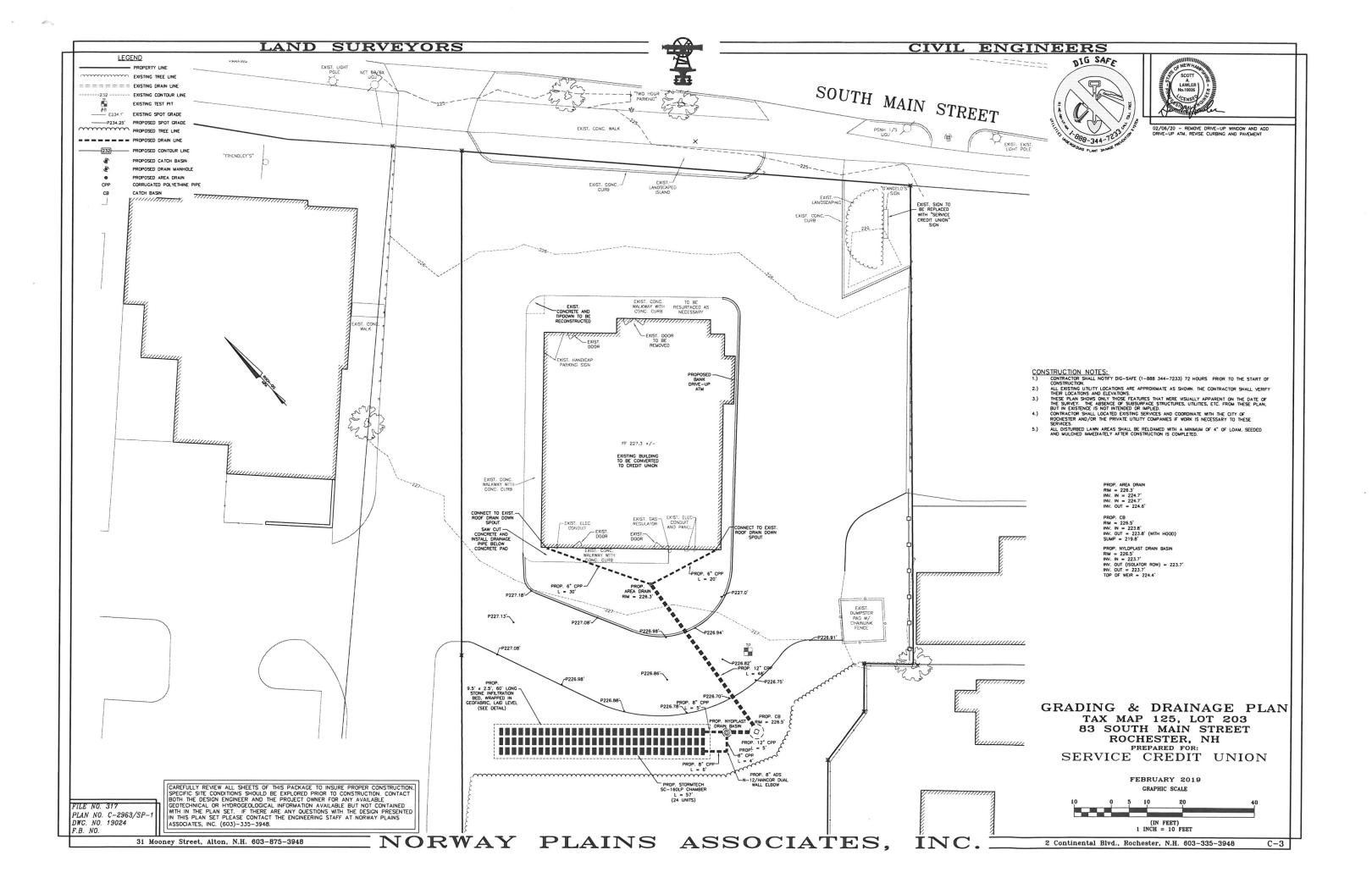
NORWAY PLAINS ASSOCIATES.

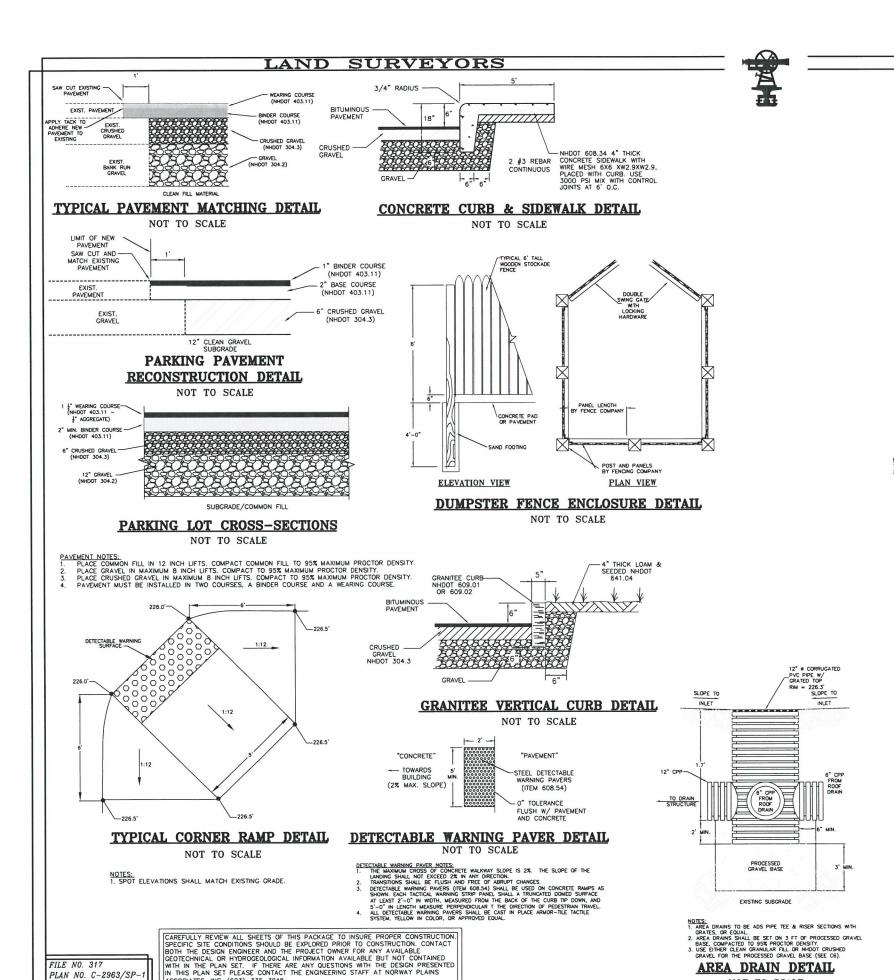
2 Continental Blvd., Rochester, N.H. 603-335-3948

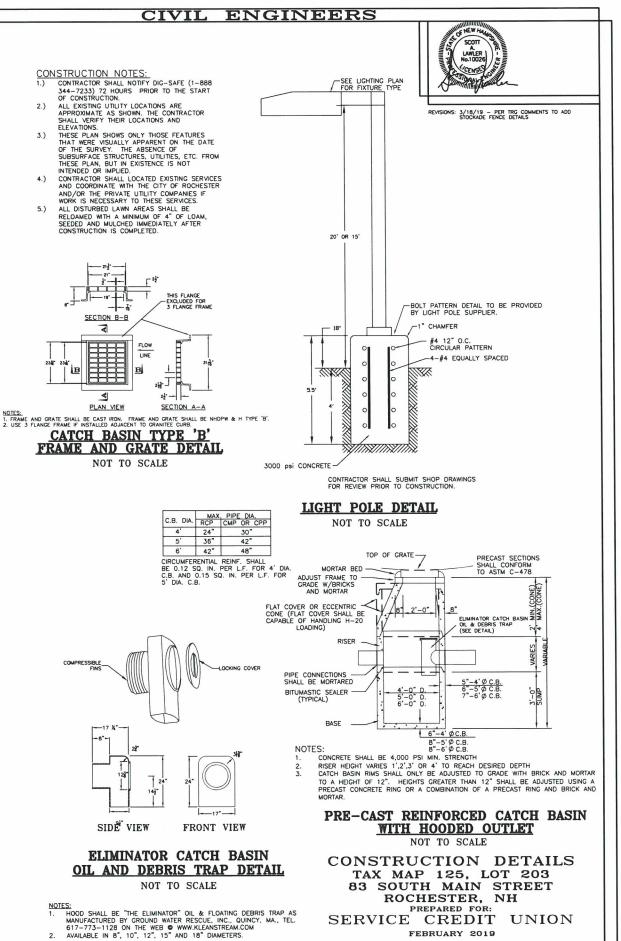












NORWAY PLAINS ASSOCIATES, INC.

AREA DRAIN DETAIL

FEBRUARY 2019

ASSOCIATES, INC. (603)-335-3948.

PLAN NO. C-2963/SP-

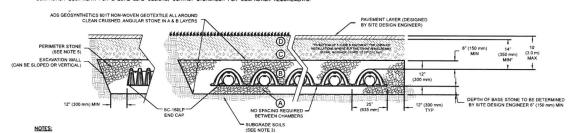
DWG. NO. 19024

LAND SURVEYORS

ACCEPTABLE FILL MATERIALS: STORMTECH SC-160LP CHAMBER SYSTEMS

| | MATERIAL LOCATION | DESCRIPTION | AASHTO MATERIAL CLASSIFICATIONS | COMPACTION / DENSITY REQUIREMENT |
|---|---|--|--|---|
| D | FINAL FILL: FILL MATERIAL FOR LAYER 'D' STARTS FROM THE TOP OF THE 'C' LAYER TO THE BOTTOM OF FLEXIBLE PAVEMENT OR UNPAVED FINISHED GRADE ABOVE. NOTE THAT PAVEMENT SUBBASE MAY BE PART OF THE 'D' LAYER | ANY SOIL/ROCK MATERIALS, NATIVE SOILS, OR PER ENGINEER'S PLANS, CHECK PLANS FOR PAVEMENT SUBGRADE REQUIREMENTS. | N/A | PREPARE PER SITE DESIGN ENGINEER'S PLANS, PAVED INSTALLATIONS MAY HAVE STRINGENT MATERIAL AND PREPARATION REQUIREMENTS. |
| С | INITIAL FILL: FILL MATERIAL FOR LAYER 'C' STARTS FROM THE TOP OF THE EMBEDMENT STONE (SE LAYER) TO 14" (385 mm) ABOVE THE TOP OF THE CO-MADER MO'T FMAT PAVAMENT SUBBASIE MAY BE A FART OF THE 'C' LAYER. | GRANULAR WELL-GRADED SOIL/AGGREGATE MIXTURES, <35% FINES OR PROCESSED AGGREGATE. MOST PAVEMENT SUBBASE MATERIALS CAN BE USED IN LIEU OF THIS LAYER. | 57, 6, 67, 68, 7, 78, 8, 89, 9, 10 | ROLLER GROSS VEHICLE WEIGHT NOT TO EXCEED 12,000 Bis (53 kN) DYNAMIC FORCE MOTTO EXCEED 20,000 lbs (89 kN). |
| В | EMBEDMENT STONE: FILL SURROUNDING THE CHAMBERS FROM THE FOUNDATION STONE (A' LAYER) TO THE 'C' LAYER ABOVE. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M43 ¹ 3, 357, 4, 467, 5, 56, 57 | NO COMPACTION REQUIRED. |
| А | FOUNDATION STONE: FILL BELOW CHAMBERS FROM THE SUBGRADE UP TO THE FOOT (BOTTOM) OF THE CHAMBER. | CLEAN, CRUSHED, ANGULAR STONE | AASHTO M431 3, 357, 4, 467, 5, 56, 57 | PLATE COMPACT OR ROLL TO ACHIEVE A FLAT SURFACE. * * |

- ASSE MULE:
 THE LISTED ANSHTO DESIGNATIONS ARE FOR GRADATIONS ONLY. THE STONE MUST ALSO BE CLEAN, CRUSHED, ANGULAR, FOR EXAMPLE, A SPECIFICATION FOR \$4 STONE WOULD STATE:
 "CLEAN, CRUSHED, ANGULAR NO. 4 (ASSITO MAS) STONE".
 "CLEAN, CRUSHED, ANGULAR NO. 4 (ASSITO MAS) STONE".
 "STORMITCH COMPACTION. REQUIREMENTS ARE MET FOR "A" LOCATION MATERIALS WHEN PLACED AND COMPACTED IN 6" (150 mm) (MAX) LITS USING TWO FULL COVERAGES WITH A VIBRATORY COMPACTION.
 "VIBRATORY COMPACTION."
 "WHEN THE PROPERTY MAY BE COMPROMISED BY COMPACTION FOR STANDARD DESIGN FOR DESCRIPTIONS A. FLAT SURFACE MAY BE COMPROMISED BY PRACTICE WITHOUT STANDARD DESIGN FOR DESCRIPTIONS A. FLAT SURFACE MAY BE COMPROMISED BY PRACTICE WITHOUT STANDARD DESIGN FOR THE SURFACE MAY BE COMPROMISED BY PRACTICE WITHOUT STANDARD DESIGN FOR THE SURFACE MAY BE COMPROMISED BY PRACTICE WITHOUT STANDARD DESIGN FOR THE SURFACE MAY BE COMPROMISED.



RIM ELEV. = 226.5'-

- SC-160LP CHAMBERS SHALL BE DESIGNED IN ACCORDANCE WITH ASTM F2787 "STANDARD PRACTICE FOR STRUCTURAL DESIGN OF THERMOPLASTIC CORRUGATED WALL STORMWATER COLLECTION CHAMBERS".
 "ACCEPTIAGLE FILL MATERIALS" TABLE ABOVE PROVIDES MATERIAL LOCATIONS, DESCRIPTIONS, GRADATIONS, AND COMPACTION REQUIREMENTS FOR FOUNDATION, EMBEDMENT, AND FILL MATERIALS.
- "ACCEPTABLE FILL MATERIALS" IABLE ABUVE MODIFIED MATERIAL LOCATIONS, DESCRIPTIONS, OF THE MATERIALS.
 THE SITE DESIGN ENGINEER IS RESPONSIBLE FOR ASSESSING THE BEARING RESISTANCE (ALLOWABLE BEARING CAPACITY) OF THE SUBGRADE SOILS AND THE DEPTH OF FOUNDATION STONE WITH CONSIDERATION FOR THE RANGE OF EXPECTED SOIL MOISTURE CONDITIONS.
 PERMIETER STONE MUST BE EXTENDED HORIZONTALLY TO THE EXCAVATION MALL FOR BOTH VERTICAL AND SLOPED EXCAVATION WALLS.
 ONCE LAYER "IS PLACED, ANY SOIL/MATERIAL CAN BE PLACED IN LAYER" OF UP TO THE FINISHED GRADE, MOST PAVEMENT SUBBASE SOILS CAN BE USED TO REPLACE THE MATERIAL REQUIREMENTS OF LAYER "C" OR "D" AT THE SITE DESIGN ENGINEER'S DISCRETION.

- JEMITECH CHAMBER SPECIFICATIONS
 CHAMBERS SHALL BE STORMECH SC.—160LP OR APPROVED EQUAL.
 CHAMBERS SHALL BE MANUFACTURED FROM VIRGIN POLYPROPHIENE.
 CHAMBER ROWS SHALL PROMIDE CONTINUOUS, UNOBSTRUCTED INTERNAL, SPACE WITH NO INTERNAL SUPPORT
 PANELS THAT WOULD IMPEDE FLOW OR LIBIT ACCESS FOR INSPECTION.
 THE STRUCTURAL DESIGN OF THE CHAMBERS, THE STRUCTURAL BACKFILL, AND THE INSTALLATION REQUIREMENTS
 SHALL ENSURE THAT THE LOAD FACTIONS SPECIFIED IN THE ABSHTO LERD BRIDGE DESIGN SPECIFICATIONS,
 SECTION 12:12, ARE MET FOR: 1) LONG-DURATION DEAD LOADS AND 2) SHORT-DURATION LIVE (DADS, BASED
 ON THE ASSTTO DESIGN TRUCK WITH CONSIDERATION FOR MACH AND MILTIPLE VENICLE PRESENCES.
 CHAMBERS SHALL MEET THE MATERIAL REQUIREMENTS IN ASTM F2-18, "STANDARD SPECIFICATION FOR
 POLYPROPLICIAL PP) THERMOPLASTIC CORRUCATED WALL STORMANIES COLLICIONS CHAMBERS," (NOTE: THE
 STANDARD SHALL BE DESIGNED AND ALLOWABLE LOADS OFTENNION IN ACCORDANCE MALL STRAMMATE COLLECTION
 CHAMBERS SHALL BE DESIGNED AND ALLOWABLE LOADS OFTENNION IN ACCORDANCE MALL STRAMMATER COLLECTION
 CHAMBERS."

- CHAMBERS

 CHAMBERS THAT ARE APPROVED BY THE SITE DESIGN ENGINEER WILL BE ALLOWED. THE CHAMBER
 MANUFACTURER SHALL SUBMIT THE FOLLOWING UPON REQUEST TO THE SITE DESIGN ENGINEER FOR APPROVAL
 BEFORE DELIVERING CHAMBERS TO THE PROLECT SITE:

 A STRUCTURAL EVALUATION THAT DEMONSTRATES THAT THE SAFETY FACTORS ARE CREATER THAN OR EQUAL
 TO 1.95 FOR DEAD LOAD AND 1.75 FOR LIVE LOAD, THE MINIMUM REQUIRED BY ASTM F2787 AND BY
 ASSITTO FOR THERMOPLASTIC ON WHICH THE STRUCTURAL EVALUATION IS BASED.
 CHAMBERS AND END CAPS SHALL BE PRODUCED AT AN ISO 9001 CERTIFIED MANUFACTURING FACILITY.

- MPORTANT NOTES FOR THE BIDDING AND INSTALLATION OF THE SC-160LP SYSTEM

 STORMIECH SC-160LP CHAMBERS SHALL NOT BE INSTALLED UNTIL THE MANUFACTURER'S REPRESENTATIVE HAS COMPLETED A PRE-CONSTRUCTION MEETING WITH THE INSTALLERS.

 STORMIECH SC-160LP CHAMBERS SHALL BE INSTALLED IN ACCORDANCE WITH THE "STORMIECH SC-160LP CONSTRUCTION OF STORMIECH SC-160LP CONSTRUCTION OF STORMIECH SC-160LP CONSTRUCTION OF STORMING AND EMBEDMENT STONE SURROUNDING CHAMBERS MUST BE A CLEAN, CRUSHED, ANQUIAR STONE; ASANTO MAS JA3.57, 4. 47, 5. 56, 60 57.

 1. THE FOUNDATION STONE SHALL BE LEVELED AND COMPACTED PRIOR TO PLACING CHAMBERS.

 1. THE FOUNDATION STONE SHALL BE DETERMINED BASED ON THE SUBGRADE BEARING CAPACITY PROVIDED BY THE SITE DESIGN ENGINEER.

 1. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES CONCERNING CHAMBER FOUNDATION DESIGN AND SUBGRADE BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.

 1. THE CONTRACTOR MUST REPORT ANY DISCREPANCIES CONCERNING CHAMBER FOUNDATION DESIGN AND SUBGRADE BEARING CAPACITIES TO THE SITE DESIGN ENGINEER.

 2. JOHN'S BETWEEN CHAMBERS SHALL BE FREETLY SATED PRIOR TO PLACING STONE.

 3. CHAMBERS ARE NOT TO BE BACKFILLED WITH A NODITIONAL SPACING BETWEEN ROWS IS REQUIRED.

 4. CHAMBERS ARE NOT TO BE BACKFILLED WITH A NODITIONAL SPACING BETWEEN ROWS IS REQUIRED.

 5. STONMEDHOLD RECOMMEND SHOULD BE SECONATION OF SUBGRADE.

 5. BACKFILL AS ROWS ARE BUILT USING AN EXCANATION ON THE FOUNDATION STONE OR SUBGRADE.

 6. BACKFILL AS ROWS ARE BUILT USING AN EXCANATION ON THE FOUNDATION FOR ALL INLETS TO PROTECT THE SUBSURFACE STORMANTER MANAGEMENT SYSTEM FROM CONSTRUCTION STE RUNOFF.

FILE NO. 317

DWG. NO. 19024

PLAN NO. C-2963/SP-1

- NOTES FOR CONSTRUCTION COUPMENT OVER SC-160LP CHAMBERS IS LIMITED:

 1. THE USE OF CONSTRUCTION EQUIPMENT OVER SC-160LP CHAMBERS IS LIMITED:

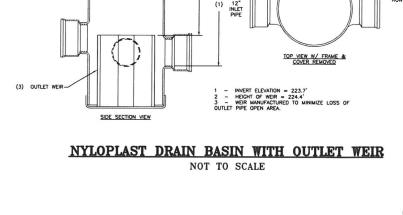
 NO ROUGHER THEO LOADERS, DUMP TRUCKS, OR EXCAVATIONS ARE ALLOWED UNTIL PROPER FILL DEPTHS ARE
 REACHED IN ACCORDANCE WITH THE "STORNIECH SC-160LP CONSTRUCTION GUIDE".

 WIGHT LIMITS FOR CONSTRUCTION COUPMENT CAN BE FOUND IN THE "STORNIECH SC-106LP CONSTRUCTION GUIDE".

 5. FULL 36" (900 mm) OF STABILIZED COVER MATERIALS OVER THE CHAMBERS IS REQUIRED FOR DUMP TRUCK TRAVEL OR
 DUMPING.

USE OF A DOZER TO PUSH EMBEDMENT STONE BETWEEN THE ROWS OF CHAMBERS MAY CAUSE DAMAGE TO THE CHAMBI AND IS NOT AN ACCEPTABLE BACKFILL METHOD. ANY CHAMBERS DAMAGED BY THE "DUMP AND PUSH" METHOD ARE NOT COVERED UNDER THE STORMERCH STANDARD WARRANTY.

CONTACT STORMTECH AT 1-888-892-2694 WITH ANY QUESTIONS ON INSTALLATION REQUIREMENTS OR WEIGHT LIMITS FOR CONSTRUCTION FOLLOWER.

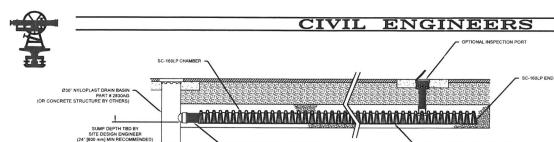














SC-160LP ISOLATOR ROW DETAIL

- INSPECTION & MAINTENANCE

 STEP 1) INSPECT ISOLATOR ROW FOR SEDIMENT

 A. INSPECTION PORTS (IF PRESENT)

 A.1. REMOVE/OPEN LID ON NYLOPLAST INLINE DRAIN

 A.2. REMOVE AND CLEAN FLEXSTORM FILTER IF INSTALLED

 A.3. USING A FLASHLIGHT AND STADIA ROD, MEASURE DEPTH OF SEDIMENT AND RECORD ON MAINTENANCE

 LOOG

 A.4. LOWER A CAMERA INTO ISOLATOR ROW FOR VISUAL INSPECTION OF SEDIMENT LEVELS (OPTIONAL)

 A.5. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

 B. AL1 ISOLATOR ROWS

 PERMICHIER AT UPSTREAM END OF ISOLATOR ROW

 OF ISOLATOR ROWS

 MIRRORS ON POLITICAL PROPERTY OF THE PROPERTY OF MIRRORS ON POLITICAL PROPERTY OF THE PROPERTY OF TH
- A.S. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

 8. ALL ISOLATOR BOWS

 8. 1. REMOVE COVER FROM STRUCTURE AT UPSTREAM END OF ISOLATOR ROW

 8. 2. USING A FLASHIGHT, INSPECT DOWN THE ISOLATOR ROW THROUGH OUTLET PIPE) MIRRORS ON POLES OR CAMERAS MAY BE USED TO AVOID A CONFINED SPACE ENTRY! FE INTERING MANHOLE

 8. 3. IF SEDIMENT IS AT, OR ABOVE, 3" (80 mm) PROCEED TO STEP 2. IF NOT, PROCEED TO STEP 3.

 STEP 2) CLEAN OUT ISOLATOR ROW USING THE JETNAC PROCESS

 A. A FIXED CLILVERT CLEANING NOZZLE WITH REAR FACING SPREAD OF 45" (1.1 m) OR MORE IS PREFERRED B. APPLY MULTIPLE PASSES OF JETNAC UNITE MACRILISH WATER IS CLEAN

 C. VACUUM STRUCTURE SUMP AS REQUIRED

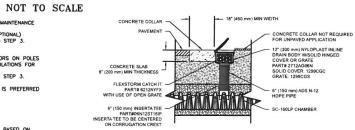
 STEP 3) REPLACE ALL COVERS, GRATES, FILERS, AND LOSS. RECORD OBSERVATIONS AND ACTIONS.

 STEP 4) INSPECT AND CLEAN BASINS AND MANHOLES UPSTREAM OF THE STORMTECH SYSTEM.

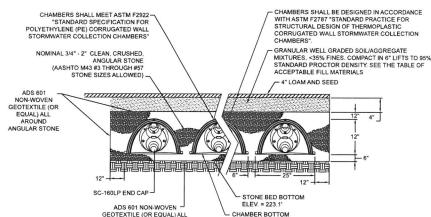
NOTES

1. INSPECT EVERY 6 MONTHS DURING THE FIRST YEAR OF OPERATION. ADJUST THE INSPECTION INTERVAL BASED ON PREVIOUS OBSERVATIONS OF SEDIMENT ACCUMULATION AND HIGH WATER ELEVATIONS."J

2. CONDUCT JETTING AND VACTORING ANNUALLY OR WHEN INSPECTION SHOWS THAT MAINTENANCE IS NECESSARY.



SC-160LP 6" INSPECTION PORT DETAIL





NOT TO SCALE







| PART # | STUB | A |
|-------------|-------------|---------------|
| SC160IEPP | 6" (150 mm) | 0.66" (16 mm) |
| SCIBULEFF | 8" (200 mm) | 0.80" (20 mm) |
| SC160IEPP08 | 8" (200 mm) | 0.96" (24 mm) |

SC-160LP CHAMBER DETAIL NOT TO SCALE

STORMTECH DRAINAGE DETAILS TAX MAP 125, LOT 203 83 SOUTH MAIN STREET ROCHESTER, NH PREPARED FOR:

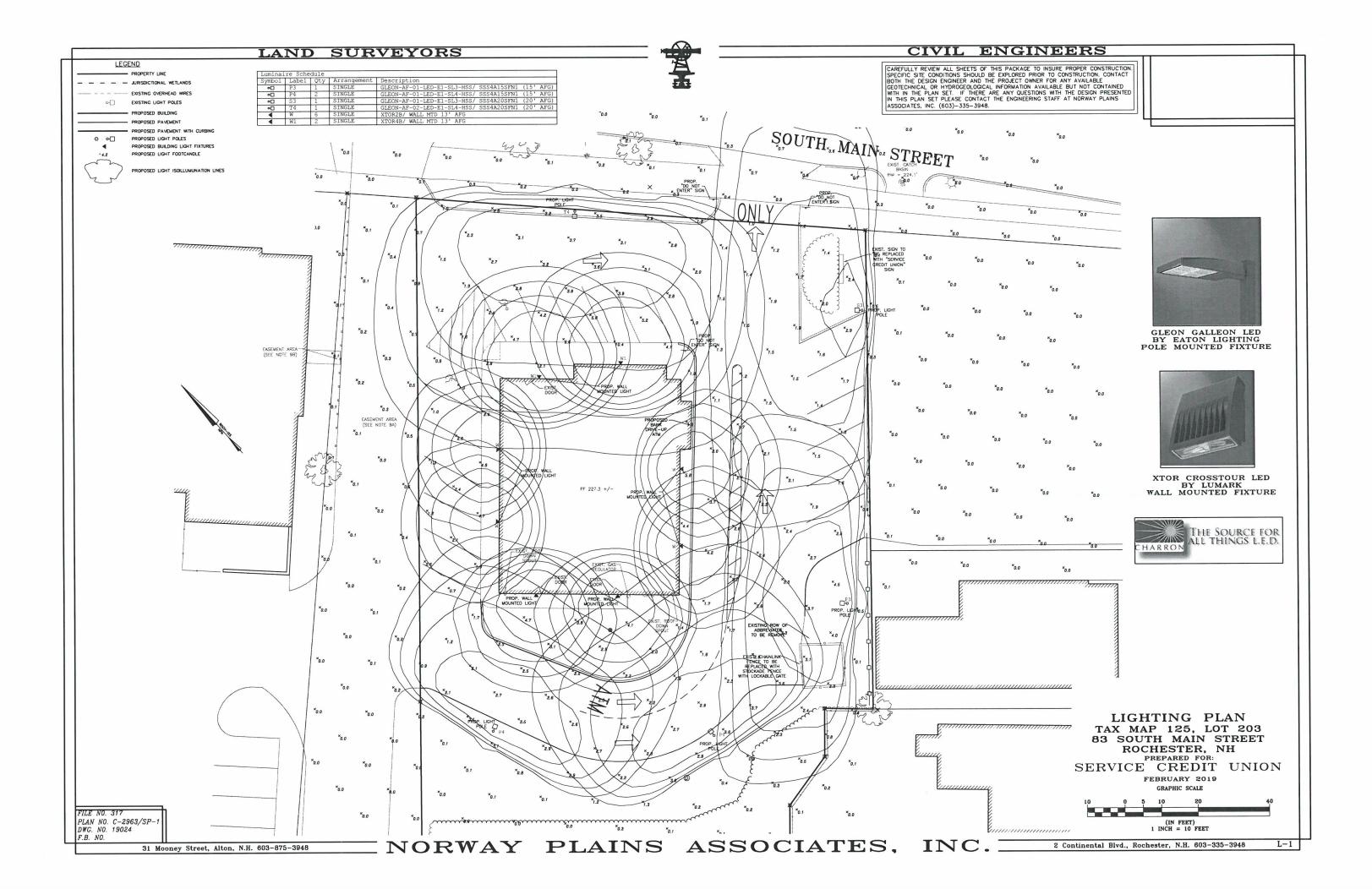
SERVICE CREDIT UNION FEBRUARY 2019

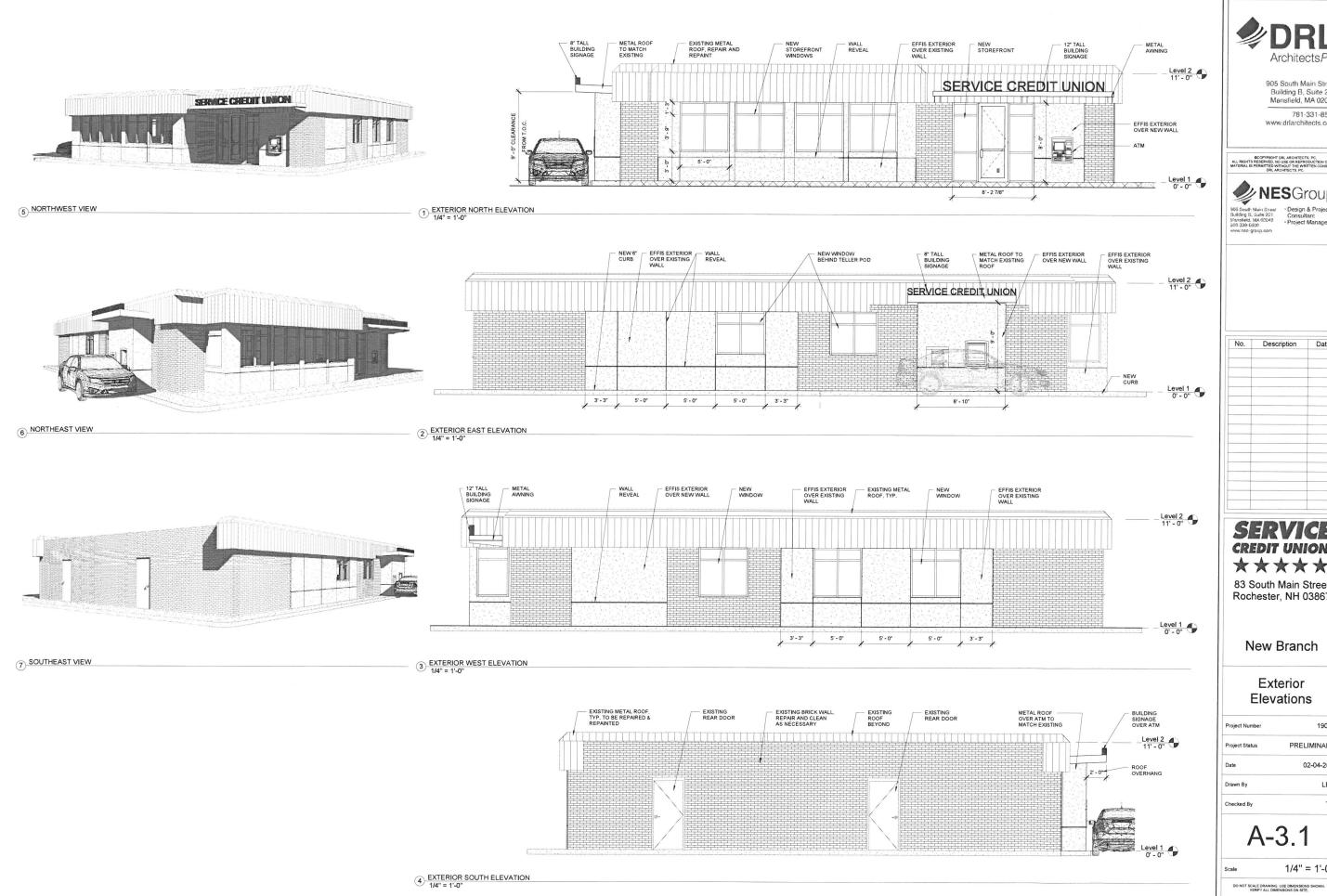
2 Continental Blvd., Rochester, N.H. 603-335-3948

ASSOCIATES, INC. (603)-335-3948. 31 Mooney Street, Alton, N.H. 603-875-3948

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NORWAY PLAINS ASSOCIATES, INC. I







905 South Main Street Building B, Suite 201 Mansfield, MA 02048 781-331-8541 www.drlarchitects.com



905 South Main Street Building B, Suitle 201 Manifeldt, MA 03048 508 339-6000 www.nee-group.com

No. Description Date

SERVICE' **CREDIT UNION** ****

83 South Main Street Rochester, NH 03867

New Branch

Exterior Elevations

| Project Number | 19063 |
|----------------|-------------|
| Project Status | PRELIMINARY |
| Date | 02-04-2020 |
| Drawn By | LBD |
| Checked By | TC |
| | |

1/4" = 1'-0"