MILL PLAZA REDEVELOPMENT

DURHAM, NEW HAMPSHIRE

SITE PLANS

LIST OF DRAWINGS		
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	10/8/2021
G-101	NOTES AND LEGEND SHEET	1/2/2020
C-101	EXISTING CONDITIONS AND DEMOLITION PLAN	3/10/2021
C-102	SITE PLAN	10/8/2021
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C-104	UTILITIES PLAN	10/8/2021
C-105	CONCEPTUAL UTILITY EASEMENT PLAN	10/8/2021
C-501	EROSION CONTROL NOTES AND DETAILS SHEET	10/8/2021
C-502	DETAILS SHEET	5/20/2020
C-503	DETAILS SHEET	3/10/2021
C-504	DETAILS SHEET	3/10/2021
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C-701	BUFFER COVERAGE PLAN	10/8/2021
C-702	BUFFER RESTORATION PLAN	10/8/2021
L2.0	LANDSCAPE OVERALL PLAN	10/8/2021
L2.1	PLANTING PLAN	10/8/2021
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L2.3	PLANTING PLAN	10/8/2021
L2.4	ROOF PLANTING PLANS	10/8/2021
L3.0	PLANTING DETAILS	10/8/2021
L3.1	PLANTING DETAILS	10/8/2021
L3.2	PLANTING DETAILS	10/8/2021
L4.0	HARDSCAPE OVERALL PLAN	10/8/2021
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L4.2	HARDSCAPE PLAN	10/8/2021
A20.1	EXTERIOR ELEVATIONS	10/8/2021
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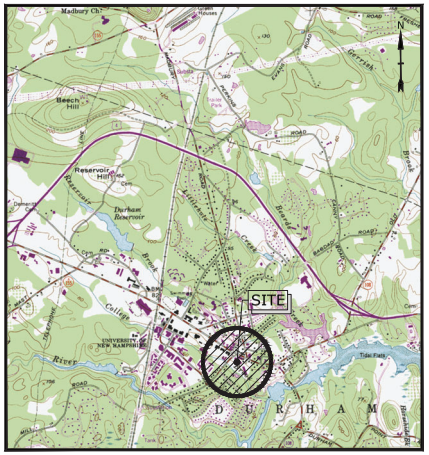
A20.5	RENDERINGS	10/8/2021
A30.1	SITE SECTIONS	10/8/2021
A40.1	RENDERED PERSPECTIVE	10/8/2021
A40.2	RENDERED PERSPECTIVE	10/8/2021
ES10.1	ELECTRICAL SITE LIGHTING PLAN	10/8/2021
ES20.1	ELECTRICAL SITE PLAN	10/8/2021

MAY 23, 2018

REVISED: OCTOBER 8, 2021



PREPARED BY:

Tighe&Bond
Engineers | Environmental Specialists

Joseph M. Persechino, P.E.

OWNER/APPLICANT:
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7 Mill Road, Unit L
Durham, NH 03824

APPROVED DATE _____
DURHAM, N.H.
PLANNING BOARD

THE SITE PLAN REVIEW REGULATIONS OF THE TOWN OF DURHAM ARE A PART OF THIS PLAN, AND APPROVAL OF THIS PLAN IS CONTINGENT UPON COMPLETION OF ALL REQUIREMENTS OF SAID REGULATIONS, EXCEPTING ONLY MODIFICATIONS MADE IN WRITING BY THE BOARD AND ATTACHED HERETO.

PERMIT/APPROVAL	APPROVED	EXPIRES	NUMBER
Town of Durham Site Plan Approval	PENDING	-	-
Town of Durham Conditional Use Approval	PENDING	-	-
NHDES Sewer Connection Permit	PENDING	-	-
NHDES Alteration of Terrain Permit	PENDING	-	-

COMPLETE SET 39 SHEETS

811 DigSafe MA·ME·NH·RI·VT

CONSTRUCTION NOTES:
1. THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR CLARIFICATION IF A REQUIRED DIMENSION IS NOT PROVIDED ON THE PLANS.
2. THE CONTRACTOR SHALL BE RESPONSIBLE FOR CONSTRUCTION MEANS AND METHODS, AND FOR SITE CONDITIONS THROUGHOUT CONSTRUCTION. NEITHER THE PLANS NOR THE SEAL OF THE ENGINEER AFFIXED HEREON EXTEND TO OR INCLUDE SYSTEMS REQUIRED FOR THE SAFETY OF THE CONTRACTOR, THEIR EMPLOYEES, AGENTS OR REPRESENTATIVES IN THE PERFORMANCE OF THE WORK. THE CONTRACTOR SHALL BE RESPONSIBLE FOR DETERMINING AND IMPLEMENTING SAFETY PROCEDURES AND SYSTEMS AS REQUIRED BY THE UNITED STATES OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION (OSHA), AND ANY STATE OR LOCAL SAFETY REGULATIONS.
3. TIGHE & BOND ASSUMES NO RESPONSIBILITY FOR ANY ISSUES LEGAL OR OTHERWISE, RESULTING FROM CHANGES MADE TO THESE DRAWINGS WITHOUT WRITTEN AUTHORIZATION OF TIGHE & BOND.

Last Save Date: October 7, 2021 8:23 AM By: EDOREMUS
Plot Date: Friday, October 08, 2021 Plotted By: Eric Doremus
File Location: J:\PROJECTS\Colonial Realty Affiliates, LLC\902-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\41529-902-C-CS-RB.dwg Layout Tab: C-CS

GENERAL NOTES:

1. THE LOCATIONS OF UNDERGROUND UTILITIES ARE APPROXIMATE AND THE LOCATIONS ARE NOT GUARANTEED BY THE OWNER OR THE ENGINEER. IT IS THE CONTRACTOR'S RESPONSIBILITY TO LOCATE ALL UTILITIES, ANTICIPATE CONFLICTS, REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK.
2. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE TOWN OF DURHAM.
3. THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR OR PROFESSIONAL ENGINEER TO DETERMINE ALL LINES AND GRADES.
4. THE CONTRACTOR SHALL VERIFY LOCATION OF ALL EXISTING UTILITIES. CALL DIG SAFE AT LEAST 72 HOURS PRIOR TO THE COMMENCEMENT OF ANY DEMOLITION/CONSTRUCTION ACTIVITIES.
5. IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES AND COMPLY WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS.
6. THE CONTRACTOR SHALL OBTAIN AND PAY FOR AND COMPLY WITH ADDITIONAL PERMITS, NOTICES AND FEES NECESSARY TO COMPLETE THE WORK AND ARRANGE FOR AND PAY FOR NECESSARY INSPECTIONS AND APPROVALS FROM THE AUTHORITIES HAVING JURISDICTION.
7. THE CONTRACTOR SHALL PHASE DEMOLITION AND CONSTRUCTION AS REQUIRED TO PROVIDE CONTINUOUS SERVICE TO EXISTING BUSINESSES AND HOMES THROUGHOUT THE CONSTRUCTION PERIOD. EXISTING BUSINESS AND HOME SERVICES INCLUDE, BUT ARE NOT LIMITED TO ELECTRICAL, COMMUNICATION, FIRE PROTECTION, DOMESTIC WATER AND SEWER SERVICES. TEMPORARY SERVICES, IF REQUIRED, SHALL COMPLY WITH ALL FEDERAL, STATE, LOCAL AND UTILITY COMPANY STANDARDS. CONTRACTOR SHALL PROVIDE DETAILED CONSTRUCTION SCHEDULE TO OWNER PRIOR TO ANY DEMOLITION/CONSTRUCTION ACTIVITIES AND SHALL COORDINATE TEMPORARY SERVICES TO ABUTTERS WITH THE UTILITY COMPANY AND AFFECTED ABUTTER.
8. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE TOWN OF DURHAM PUBLIC WORKS DEPARTMENT, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARMENT OF TRANSPORTATION, "STANDARD SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION.
9. CONTRACTOR TO SUBMIT AS-BUILT PLANS ON REPRODUCIBLE MYLARS AND IN DIGITAL FORMAT (.DWG FILE) ON DISK TO THE OWNER AND ENGINEER UPON COMPLETION OF THE PROJECT. AS-BUILTS SHALL BE PREPARED AND CERTIFIED BY A NEW HAMPSHIRE LICENSED LAND SURVEYOR OR PROFESSIONAL ENGINEER.
10. CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.
11. SEE EXISTING CONDITIONS AND DEMOLITION PLAN FOR BENCH MARK INFORMATION.

DEMOLITION NOTES:

1. EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES.
2. ALL MATERIALS SCHEDULED TO BE REMOVED SHALL BECOME THE PROPERTY OF THE CONTRACTOR UNLESS OTHERWISE SPECIFIED. THE CONTRACTOR SHALL DISPOSE OF ALL MATERIALS OFF-SITE IN ACCORDANCE WITH ALL FEDERAL, STATE, AND LOCAL REGULATIONS, ORDINANCES AND CODES.
3. COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY COMPANY.
4. ANY EXISTING WORK OR PROPERTY DAMAGED OR DISRUPTED BY CONSTRUCTION/ DEMOLITION ACTIVITIES SHALL BE REPLACED OR REPAIRED TO MATCH ORIGINAL EXISTING CONDITIONS BY THE CONTRACTOR AT NO ADDITIONAL COST TO THE OWNER.
5. SAW CUT AND REMOVE PAVEMENT ONE (1) FOOT OFF PROPOSED EDGE OF PAVEMENT OR EXISTING CURB LINE IN ALL AREAS WHERE PAVEMENT TO BE REMOVED ABUTS EXISTING PAVEMENT OR CONCRETE TO REMAIN.
6. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION AND OFF-SITE DISPOSAL OF MATERIALS REQUIRED TO COMPLETE THE WORK, EXCEPT FOR WORK NOTED TO BE COMPLETED BY OTHERS.
7. UTILITIES SHALL BE TERMINATED AT THE MAIN LINE PER UTILITY COMPANY AND TOWN OF DURHAM STANDARDS. THE CONTRACTOR SHALL REMOVE ALL ABANDONED UTILITIES LOCATED WITHIN THE LIMITS OF WORK UNLESS OTHERWISE NOTED. CONTRACTOR SHALL VERIFY ORIGIN OF ALL DRAINS AND UTILITIES PRIOR TO REMOVAL/TERMINATION TO DETERMINE IF DRAINS OR UTILITY IS ACTIVE, AND SERVICES ANY ON OR OFF-SITE STRUCTURE TO REMAIN. CONTRACTOR SHALL NOTIFY ENGINEER IMMEDIATELY OF ANY SUCH UTILITY FOUND AND SHALL MAINTAIN THESE UTILITIES UNTIL PERMANENT SOLUTION IS IN PLACE.
8. PAVEMENT REMOVAL LIMITS ARE SHOWN FOR CONTRACTOR'S CONVENIENCE. ADDITIONAL PAVEMENT REMOVAL MAY BE REQUIRED DEPENDING ON THE CONTRACTOR'S OPERATION. CONTRACTOR TO VERIFY FULL LIMITS OF PAVEMENT REMOVAL PRIOR TO BID.
9. THE CONTRACTOR SHALL REMOVE AND DISPOSE OF ALL EXISTING STRUCTURES, CONCRETE PADS, UTILITIES AND PAVEMENT WITHIN THE WORK LIMITS SHOWN HEREIN UNLESS SPECIFICALLY IDENTIFIED TO REMAIN. ITEMS TO BE REMOVED INCLUDE BUT ARE NOT LIMITED TO: CONCRETE, PAVEMENT, CURBS, LIGHTING, MANHOLES, CATCH BASINS, UNDER GROUND PIPING, POLES, STAIRS, SIGNS, FENCES, RAMPS, WALLS, BOLLARDS, BUILDING SLABS, FOUNDATION, TREES, LANDSCAPING, AND CONCRETE MEDIAN.
10. REMOVE TREES AND BRUSH AS REQUIRED FOR COMPLETION OF WORK. CONTRACTOR SHALL GRUB AND REMOVE ALL STUMPS WITHIN LIMITS OF WORK AND DISPOSE OF OFF SITE IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL LAWS AND REGULATIONS.
11. CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.
12. PROVIDE INLET PROTECTION BARRIERS AT ALL CATCH BASINS/CURB INLETS WITHIN CONSTRUCTION LIMITS AS WELL AS CATCH BASINS/CURB INLETS THAT MAY RECEIVE RUNOFF FROM CONSTRUCTION ACTIVITIES. INLET PROTECTION BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT. INLET PROTECTION BARRIERS SHALL BE "HIGH FLOW SILT SACK" BY ACF ENVIRONMENTAL OR EQUAL. INSPECT BARRIERS WEEKLY AND AFTER EACH RAIN EVENT OF 0.25 INCHES OR GREATER. CONTRACTOR SHALL COMPLETE A MAINTENANCE INSPECTION REPORT AFTER EACH INSPECTION. SEDIMENT DEPOSITS SHALL BE REMOVED AFTER EACH STORM EVENT OR MORE OFTEN IF THE FABRIC BECOMES CLOGGED OR SEDIMENT HAS ACCUMULATED TO 1/3 THE DESIGN DEPTH OF THE BARRIER.
13. THE CONTRACTOR SHALL PAY ALL COSTS NECESSARY FOR TEMPORARY PARTITIONING, BARRICADING, FENCING, SECURITY AND SAFETY DEVICES REQUIRED FOR THE MAINTENANCE OF A CLEAN AND SAFE CONSTRUCTION SITE.
14. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL UTILITIES TO BE REMOVED AND PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN.

SITE NOTES:

1. PAVEMENT MARKINGS SHALL BE INSTALLED AS SHOWN, INCLUDING PARKING SPACES, STOP BARS, ADA SYMBOLS, PAINTED ISLANDS, FIRE LANES, CROSS WALKS, ARROWS, LEGENDS AND CENTERLINES. ALL MARKINGS EXCEPT CENTERLINE AND MEDIAN ISLANDS TO BE CONSTRUCTED USING WHITE PAVEMENT MARKINGS. ALL THERMOPLASTIC PAVEMENT MARKINGS INCLUDING LEGENDS, ARROWS, CROSSWALKS AND STOP BARS SHALL MEET THE REQUIREMENTS OF AASHTO M249. ALL PAINTED PAVEMENT MARKINGS INCLUDING CENTERLINES, LANE LINES AND PAINTED MEDIANS SHALL MEET THE REQUIREMENTS OF AASHTO M248 TYPE "F".
2. ALL PAVEMENT MARKINGS AND SIGNS TO CONFORM TO "MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES", "STANDARD ALPHABETS FOR HIGHWAY SIGNS AND PAVEMENT MARKINGS", AND THE AMERICANS WITH DISABILITIES ACT REQUIREMENTS, LATEST EDITIONS.
3. SEE DETAILS FOR PAVEMENT MARKINGS, ADA SYMBOLS, SIGNS AND SIGN POSTS.
4. PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE LINES.
5. STOP BARS SHALL BE EIGHTEEN (18) INCHES WIDE, WHITE THERMOPLASTIC AND CONFORM TO CURRENT MUTCD STANDARDS.
6. CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE.
7. SEE ARCHITECTURAL/BUILDING DRAWINGS FOR ALL CONCRETE PADS & SIDEWALKS ADJACENT TO BUILDING.
8. CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS HAVE BEEN STRIPPED. COORDINATE WITH BUILDING CONTRACTOR.
9. ALL LIGHT POLE BASES NOT PROTECTED BY A RAISED CURB SHALL BE PAINTED YELLOW.
10. COORDINATE ALL WORK ADJACENT TO BUILDING WITH BUILDING CONTRACTOR.
11. CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING RETAINING WALL DESIGN FROM WALL MANUFACTURERS, AND SUBMITTING DESIGN TO ENGINEER PRIOR TO COMMENCING CONSTRUCTION. CONTRACTOR SHALL FURNISH ALL LABOR, MATERIALS AND EQUIPMENT REQUIRED TO CONSTRUCT WALL IN ACCORDANCE WITH DESIGN APPROVED BY THE ENGINEER. RETAINING WALL SHALL BE SEGMENTAL BLOCK WALL SYSTEM AS OUTLINED IN THE SPECIFICATIONS.
12. ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

GRADING AND DRAINAGE NOTES:

1. COMPACTION REQUIREMENTS:
   - BELOW PAVED OR CONCRETE AREAS 95%
   - TRENCH BEDDING MATERIAL AND SAND BLANKET BACKFILL 95%
   - BELOW LOAM AND SEED AREAS 90%

   * ALL PERCENTAGES OF COMPACTION SHALL BE OF THE MAXIMUM DRY DENSITY AT THE OPTIMUM MOISTURE CONTENT AS DETERMINED AND CONTROLLED IN ACCORDANCE WITH ASTM D-1557, METHOD C FIELD DENSITY TESTS SHALL BE MADE IN ACCORDANCE WITH ASTM D-1556 OR ASTM-2922.
2. ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL) OR RCP CLASS IV, UNLESS OTHERWISE SPECIFIED.
3. ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE.
4. CONTRACTOR SHALL PROVIDE A FINISH PAVEMENT SURFACE AND LAWN AREAS FREE OF LOW SPOTS AND PONDING AREAS. CRITICAL AREAS INCLUDE BUILDING ENTRANCES, EXITS, RAMPS AND LOADING DOCK AREAS ADJACENT TO THE BUILDING.
5. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.
6. ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NHDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, LATEST EDITION.
7. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.

EROSION CONTROL NOTES:

1. SEE SHEET C-501 FOR GENERAL EROSION CONTROL NOTES AND DETAILS.

UTILITY NOTES:

1. COORDINATE ALL UTILITY WORK WITH APPROPRIATE UTILITY COMPANY.
   - NATURAL GAS - UNITIL
   - WATER - TOWN OF DURHAM
   - SEWER - TOWN OF DURHAM
   - ELECTRIC - EVERSOURCE
   - COMMUNICATIONS - COMCAST/FAIRPOINT COMMUNICATIONS
2. ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE.
3. ALL WATER MAIN INSTALLATIONS SHALL BE PRESSURE TESTED AND CHLORINATED AFTER CONSTRUCTION PRIOR TO ACTIVATING THE SYSTEM. CONTRACTOR SHALL COORDINATE CHLORINATION AND TESTING WITH THE TOWN OF DURHAM WATER DEPARTMENT.
4. ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.
5. CONNECTION TO EXISTING WATER MAIN SHALL BE CONSTRUCTED TO TOWN OF DURHAM STANDARDS.
6. EXISTING UTILITIES TO BE REMOVED SHALL BE CAPPED AT THE MAIN AND MEET THE DEPARTMENT OF PUBLIC WORKS STANDARDS FOR CAPPING OF WATER AND SEWER SERVICES.
7. ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL APPLICABLE STATE AND LOCAL CODES.
8. THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES.
9. ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.
10. THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES COMPLETE AND OPERATIONAL.
11. CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.

Last Saved: 12/31/2019
Plotted On:Dec 31, 2019-10:27am By: EDoremus
Tighe & Bond:J:\M\M1529 McCauley Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_NOTES.dwg

12. A 10-FOOT MINIMUM EDGE TO EDGE HORIZONTAL SEPARATION SHALL BE PROVIDED BETWEEN ALL WATER AND SANITARY SEWER LINES. AN 18-INCH MINIMUM OUTSIDE TO OUTSIDE VERTICAL SEPARATION SHALL BE PROVIDED AT ALL WATER/SANITARY SEWER CROSSINGS.
13. SAW CUT AND REMOVE PAVEMENT AND CONSTRUCT PAVEMENT TRENCH PATCH FOR ALL PROPOSED UTILITIES LOCATED IN EXISTING PAVEMENT AREAS TO REMAIN
14. HYDRANTS, GATE VALVES, FITTINGS, ETC. SHALL MEET THE REQUIREMENTS OF THE TOWN OF DURHAM.
15. COORDINATE TESTING OF SEWER CONSTRUCTION WITH THE TOWN OF DURHAM.
16. ALL SEWER PIPE WITH LESS THAN 6' OF COVER BENEATH PAVEMENT AND 4' OF COVER BELOW NON PAVED SURFACES SHALL BE INSULATED WITH 2 INCH RIGID FOAM INSULATION.
17. CONTRACTOR SHALL COORDINATE ALL ELECTRIC WORK INCLUDING BUT NOT LIMITED TO: CONDUIT CONSTRUCTION, MANHOLE CONSTRUCTION, UTILITY POLE CONSTRUCTION, OVERHEAD WIRE RELOCATION, AND TRANSFORMER CONSTRUCTION WITH POWER COMPANY.
18. SITE LIGHTING SPECIFICATIONS, CONDUIT LAYOUT AND CIRCUITRY FOR PROPOSED SITE LIGHTING AND SIGN ILLUMINATION SHALL BE PROVIDED BY THE PROJECT ELECTRICAL ENGINEER.
19. CONTRACTOR SHALL CONSTRUCT ALL UTILITIES AND DRAINS TO WITHIN 10' OF THE FOUNDATION WALLS AND CONNECT THESE TO SERVICE STUBS FROM THE BUILDING.

LANDSCAPE NOTES:

1. THE CONTRACTOR SHALL FURNISH AND PLANT ALL PLANTS IN QUANTITIES AS SHOWN ON THE LANDSCAPING PLANS. NO SUBSTITUTIONS WILL BE PERMITTED UNLESS APPROVED BY OWNER. ALL PLANTS SHALL BE NURSERY GROWN.
2. ALL PLANTS SHALL BE NURSERY GROWN AND PLANTS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN ASSOCIATION OF NURSERYMEN STANDARDS, INCLUDING BUT NOT LIMITED TO SIZE, HEALTH, SHAPE, ETC., AND SHALL BE SUBJECT TO THE APPROVAL OF THE LANDSCAPE ARCHITECT PRIOR TO ARRIVAL ON-SITE AND AFTER PLANTING.
3. PLANT STOCK SHALL BE GROWN WITHIN THE HARDINESS ZONES 4 THRU 7 ESTABLISHED BY THE PLANT HARDINESS ZONE MAP, MISCELLANEOUS PUBLICATIONS NO. 814, AGRICULTURAL RESEARCH SERVICE, UNITED STATES DEPARTMENT AGRICULTURE, LATEST REVISION.
4. PLANT MATERIAL SHALL BARE THE SAME RELATIONSHIP TO FINISHED GRADE AS TO THE ORIGINAL PLANTING GRADE PRIOR TO DIGGING.
5. THE NUMBER OF EACH INDIVIDUAL PLANT TYPE AND SIZE PROVIDED IN THE PLANT LIST OR ON THE PLAN IS FOR THE CONTRACTOR'S CONVENIENCE ONLY. IF A DISCREPANCY EXISTS BETWEEN THE NUMBER OF PLANTS ON THE LABEL AND THE NUMBER OF SYMBOLS SHOWN ON THE DRAWINGS, THE GREATER NUMBER SHALL APPLY.
6. NO SUBSTITUTION OF PLANT MATERIALS WILL BE ALLOWED WITHOUT THE PRIOR WRITTEN APPROVAL OF THE OWNER'S REPRESENTATIVE.
7. THE CONTRACTOR SHALL LOCATE, VERIFY AND MARK ALL EXISTING AND NEWLY INSTALLED UNDERGROUND UTILITIES PRIOR TO ANY LAWN WORK OR PLANTING. ANY CONFLICTS WHICH MIGHT OCCUR BETWEEN PLANTING AND UTILITIES SHALL IMMEDIATELY BE REPORTED TO THE OWNER SO THAT ALTERNATE PLANTING LOCATIONS CAN BE DETERMINED.
8. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED, SHALL RECEIVE 6" OF LOAM AND SEED. NO FILL SHALL BE PLACED IN ANY WETLAND AREA.
9. THREE INCHES (3") OF BARK MULCH IS TO BE USED AROUND THE TREE AND SHRUB PLANTING AS SPECIFIED IN THE DETAILS. WHERE BARK MULCH IS TO BE USED IN A CURBED ISLAND THE BARK MULCH SHALL MEET THE TOP INSIDE EDGE OF THE CURB. ALL OTHER AREAS SHALL RECEIVE 6" INCHES OF LOAM AND SEED.
10. LANDSCAPING SHALL BE LOCATED WITHIN 150 FT OF EXTERIOR HOSE ATTACHMENT OR SHALL BE PROVIDED WITH AN IRRIGATION SYSTEM.
11. SEE PLANTING DETAILS AND SPECIFICATIONS FOR ADDITIONAL REQUIREMENTS.
12. TREE STAKES SHALL REMAIN IN PLACE FOR NO LESS THAN 6 MONTHS AND NO MORE THAN 1 YEAR.
13. PLANTING SHALL BE COMPLETED FROM APRIL 15TH THROUGH OCTOBER 1ST. NO PLANTING DURING JULY AND AUGUST UNLESS SPECIAL PROVISIONS ARE MADE FOR DROUGHT.
14. PARKING AREA PLANTED ISLANDS TO HAVE MINIMUM OF 1'-0" TOPSOIL PLACED TO WITHIN 3 INCHES OF THE TOP OF CURB ELEVATION. REMOVE ALL CONSTRUCTION DEBRIS BEFORE PLACING TOPSOIL.
15. TREES SHALL BE PRUNED IN ACCORDANCE WITH THE LATEST EDITION OF ANSI A300 "TREES, SHRUBS AND OTHER WOOD PLANT MAINTENANCE STANDARD PRACTICES.
16. ALL PLANTS SHALL BE WATERED THOROUGHLY TWICE DURING THE FIRST 24 HOUR PERIOD AFTER PLANTING. ALL PLANTS SHALL BE WATERED WEEKLY, OR MORE OFTEN, IF NECESSARY DURING THE FIRST GROWING SEASON. LANDSCAPE CONTRACTOR SHALL COORDINATE WATERING SCHEDULE WITH OWNER DURING THE ONE (1) YEAR GUARANTEE PERIOD.
17. EXISTING TREES AND SHRUBS SHOWN ON THE PLAN ARE TO REMAIN UNDISTURBED. ALL EXISTING TREES AND SHRUBS SHOWN TO REMAIN ARE TO BE PROTECTED WITH A 4-FOOT SNOW FENCE PLACED AT THE DRIP LINE OF THE BRANCHES OR AT 8 FEET MINIMUM FROM THE TREE TRUNK. ANY EXISTING TREE OR SHRUB SHOWN TO REMAIN, WHICH IS REMOVED DURING CONSTRUCTION, SHALL BE REPLACED BY A TREE OF COMPARABLE SIZE AND SPECIES TREE OR SHRUB.
18. THE CONTRACTOR SHALL GUARANTEE ALL PLANTINGS TO BE IN GOOD HEALTHY, FLOURISHING AND ACCEPTABLE CONDITION FOR A PERIOD OF ONE (1) YEAR BEGINNING AT THE DATE OF ACCEPTANCE OF SUBSTANTIAL COMPLETION. ALL GRASSES, TREES AND SHRUBS THAT, IN THE OPINION OF THE LANDSCAPE ARCHITECT, SHOW LESS THAN 80% HEALTHY GROWTH AT THE END OF ONE YEAR PERIOD SHALL BE REPLACED BY THE CONTRACTOR.
19. UPON EXPIRATION OF THE CONTRACTOR'S ONE YEAR GUARANTEE PERIOD, THE OWNER SHALL BE RESPONSIBLE FOR LANDSCAPE MAINTENANCE INCLUDING WATERING DURING PERIODS OF DROUGHT
20. THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROTECTING ALL PLANTING AND LAWNS AGAINST DAMAGE FROM ONGOING CONSTRUCTION. THIS PROTECTION SHALL BEGIN AT THE TIME THE PLANT IS INSTALLED AND CONTINUE UNTIL THE FORMAL ACCEPTANCE OF ALL THE PLANTINGS.
21. PRE-PURCHASE PLANT MATERIAL AND ARRANGE FOR DELIVERY TO MEET PROJECT SCHEDULE AS REQUIRED IT MAY BE NECESSARY TO PRE-DIG CERTAIN SPECIES WELL IN ADVANCE OF ACTUAL PLANTING DATES.

EXISTING CONDITIONS PLAN NOTES:

1. REFERENCE: TAX MAP 5, LOT 1-1
2. TOTAL PARCEL AREA: 449,328 SQ. FT. OR 10.315 AC.
3. OWNER OF RECORD: COLONIAL DURHAM ASSOCIATES
   ADMINISTRATIVE OFFICES
   405 PARK, 12 FLOOR
   NEW YORK, NY 10022
   S.C.R.D. BOOK 1716, PAGE 637
4. ZONE: CENTRAL BUSINESS (CB)
   DIMENSIONAL REQUIREMENTS:
   - MIN. LOT AREA 5000 sq.ft. (FOR AN ALLOWED NONRESIDENTIAL USE)
   - MIN. FRONTAGE 50'
   - MIN. FRONT SETBACK NONE
   - MIN. SIDE/REAR SETBACK N/A
   - MAX. BUILDING HEIGHT 30' (50' W/PLANNING BOARD APPROVAL UNDER 676:4)

   PORTIONS OF THE PROPERTY ALSO LIE WITHIN THE WETLANDS CONSERVATION, SHORELAND PROTECTION, AND FLOOD HAZARD OVERLAY DISTRICTS. SEE THE TOWN OF DURHAM ZONING ORDINANCE FOR SPECIFIC REGULATIONS.
5. FIELD SURVEY PERFORMED BY DOUCET SURVEY, INC. ON 04/08 USING A GEODIMETER 600 PRO TOTAL STATION WITH A RANGER TDS DATA COLLECTOR AND A SOKKIA B20 AUTO LEVEL. TRAVERSE ADJUSTMENT BASED ON LEAST SQUARE ANALYSIS.
6. JURISDICTIONAL WETLANDS AND VERY POORLY DRAINED SOILS DELINEATED BY NHSC, INC DURING APRIL 2008 INACCORDANCE WITH 1987 CORPS OF ENGINEERS WETLANDS DELINEATIONS MANUAL, TECHNICAL REPORT Y-87-1 AND REVERIFIED BY GOVE ENVIRONMENTAL SERVICES IN 2018.
7. FLOOD HAZARD ZONE: ZONE X & AE (ALONG COLLEGE BROOK) PER FEMA F.I.R.M. #33017C0318E, DATED SEPTEMBER 30, 2015.
8. HORIZONTAL DATUM BASED ON NH STATE PLANE COORDINATE SYSTEM (NAD83) BASED ON NGS CORRECTED OPUS SOLUTION.
9. VERTICAL DATUM IS BASED ON NAVD88.
10. THE INTENT OF THIS PLAN IS TO SHOW THE LOCATION OF BOUNDARIES IN ACCORDANCE WITH AND IN RELATION TO THE CURRENT LEGAL DESCRIPTION, AND IS NOT AN ATTEMPT TO DEFINE UNWRITTEN RIGHTS, DETERMINE THE EXTENT OF OWNERSHIP, OR DEFINE THE LIMITS OF TITLE.
12. THE PARCEL IS SUBJECT TO, AND/OR IN BENEFIT OF THE FOLLOWING EASEMENTS, RESTRICTIONS, ETC.
   - 12.1. SUBJECT TO A UTILITY EASEMENT IN FAVOR OF PSNH & NETT, SEE S.C.R.D. BOOK 854 PAGE 254.
   - 12.2. SUBJECT TO AN EASEMENT IN FAVOR OF THE TOWN OF DURHAM FOR GRADING LANDSCAPING AND PUBLIC PARK USE, SEE S.C.R.D. BOOK 924 PAGE 204.
   - 12.3. SUBJECT TO A CONVEYANCE TO THE TOWN OF DURHAM FOR ROADWAY PURPOSES, SEE S.C.R.D. BOOK 948 PAGE 15 & BOOK 966 PAGE 98. CURRENT LEGAL STATUS UNDETERMINED.
   - 12.4. SUBJECT TO THE TERMS OF A BOUNDARY LINE AGREEMENT BETWEEN TAMPOSI & LEHOULLIER AND CHENEY, SEE S.C.R.D. BOOK 966 PAGE 113.
   - 12.5. SUBJECT TO THE TERMS AND CONDITIONS OF A 10 YEAR LEASE (AS THEY MAY APPLY) MADE BETWEEN OSGOOD AND THE TOWN OF DURHAM IN FEBRUARY, 1953, SEE S.C.R.D. BOOK 613 PAGE 440.
   - 12.6. SUBJECT TO A CONVEYANCE TO THE TOWN OF DURHAM WHICH DEFINES THE EDGE OF THE MILL ROAD RIGHT OF WAY, SEE S.C.R.D. BOOK 590 PAGE 278.
   - 12.7. SUBJECT TO THE TERMS AND CONDITIONS OF A 10 YEAR LEASE (AS THEY MAY APPLY) MADE BETWEEN CHESLEY AND NETT IN APRIL, 1938, SEE S.C.R.D. BOOK 483 PAGES 73 & 394.
   - 12.8. SUBJECT TO THE TERMS AND CONDITIONS OF A 10 YEAR LEASE (AS THEY MAY APPLY) MADE BETWEEN CHESLEY AND NETT IN FEBRUARY, 1928, SEE S.C.R.D. BOOK 429 PAGE 270.
   - 12.9. SUBJECT TO A SEWER EASEMENT IN FAVOR OF THE TOWN OF DURHAM, SEE S.C.R.D. BOOK 809 PAGE 315.
   - 12.10. SUBJECT TO A SEWER/DRAIN EASEMENT IN FAVOR OF UNH, SEE S.C.R.D. BOOK 467 PAGE 489.
   - 12.11. SUBJECT TO A RIGHT OF WAY, SEE S.C.R.D. BOOK 877 PAGE 29.
13. UNDERGROUND UTILITY LOCATIONS BASED ON SURFACE EVIDENCE AND ALSO MARKINGS PROVIDED BY MOORE LOCATE SERVICE ON 3/08.

REFERENCE PLANS:

1. "MILL ROAD LAND, SAMUEL A. TAMPOSI AND EDWARD N. LEHOULLER, DURHAM, N.H." DATED APRIL 1, 1974 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. POCKET 15, FOLDER 1, PLAN 38.
2. "SITE PLAN SUPERMARKET, CURHAM, N.H." DATED 4/29/66 BY ALIBERTI, LAROCHELLE & HODSON ENGINEERING CORP. INC. POCKET 15, FOLDER 1, PLAN 11.
3. "LOT LINE REVISION DURHAM, NEW HAMPSHIRE FOR NICHOLAS B. KARABELAS" DATED JUNE 6, 1986 BY JOHN W. DURGIN ASSOCIATES, INC. S.C.R.D. PLAN #29A-22.
4. "SUBDIVISION OF LAND FOR KYREAGES INC. IN DURHAM, N.H." DATED FEBRUARY 23, 1987 BY BRUCE L. POHOPEK LAND SURVEYORS. S.C.R.D. PLAN #26-105.
5. "PLAN SHOWING LAND OWNED BY ESTATE OF LEROY GOWEN MAIN STREET, DURHAM, N.H." DATED SEPT. 1951 BY H. G. HERSEY C.E. S.C.R.D. POCKET 3, FOLDER 2, PLAN 5.
6. "PLAN OF PART OF RED TOWER ESTATE DURHAM, N.H." DATED JUNE 1944 BY JOHN W. DURGIN. S.C.R.D. POCKET 4, FOLDER 3, PLAN 7.
7. "UNIVERSITY OF NEW HAMPSHIRE FACULTY DEVELOPMENT, DURHAM, N.H." DATED NOVEMBER 1945 BY NED SPAULDING. S.C.R.D. POCKET 4, FOLDER 3, PLAN 9.
8. "WALTER W. CHENEY PLAN OF DISHMAN LOT, MILL ROAD, DURHAM, N.H." DATED OCT. 1984 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. PLAN #17E-95.
9. "BUILDING SITE PLAN PREPARED FOR PASZEC INVESTORS, INC. LOCATED AT MAIN STREET, DURHAM, NEW HAMPSHIRE" DATED 11 DEC., 2000 BY ATLANTIC SURVEY COMPANY. S.C.R.D. PLAN #63-3.
10. "DOVER ASSOCIATES SITE PLAN, DURHAM, N.H." DATED OCT. 1968 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. POCKET 5, FOLDER 1, PLAN 30.
11. "WALTER W. CHENEY SITE PLAN OSGOOD LOT, DURHAM, N.H." DATED JAN 1979 BY G.L. DAVIS & ASSOCIATES, NOT RECORDED.
12. "WALTER W. CHENEY, INC. OSGOOD LOT, DURHAM, NEW HAMPSJIRE" COPIES MAY 1990 FROM PLAN BY G.L. DAVIS & ASSOCIATES. "WALTER W. CHENEY SITE PLAN, OSGOOD LOT, DURHAM, N.H." FILE NO. 117-71S DATED JANUARY 1979, NOT RECORDED.
13. "WALTER W. CHENEY, INC. OSGOOD LOT, DURHAM, NEW HAMPSHIRE" DATED NOV. 1970 BY G.L. DAVIS & ASSOCIATES, NOT RECORDED.
14. "DEVELOPMENT PLAN - RED TOWER ESTATE, DURHAM, N.H." DATED 17 JUNE 1953 BY HERSEY A. SPAULDING, INC. S.C.R.D. POCKET 4, FOLDER 3, PLAN 27.
15. "FINAL PLAN RED TOWER DEVELOPMENT, DURHAM, NEW HAMPSHIRE" DATED DEC. 1958 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. POCKET 4, FOLDER 3, PLAN 29.
16. "DOVER ASSOCIATES SITE PLAN, DURHAM, N.H." DATED OCT. 1968 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. POCKET 5, FOLDER 1, PLAN 30.
17. "STATE OF NH NHDOT ROW PLANS TOWN OF DURHAM, COUNTY OF STRAFFORD, SHEET NO 5, S.C.R.D. PLAN #60-57.
18. "PLAN FOR EXCHANGE ELIZABETH SMART - ALEXANDER AMELL, DURHAM, N.H." DATED APRIL 1977 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. PLAN #17 -100.
19. "BUILDING LOCATION PLAN FOR DWIGHT LADD #7 CHESLEY DRIVE, DURHAM, NEW HAMPSHIRE" DATED MAY 16, 1994 BY DOUCET SURVEY, INC., NOT RECORDED.
20. "TO ESTABLISH & RELOCATE BA/RA ZONE LINE - NORTH OF COLLEGE BROOK BETWEEN MILL ROAD & CHESLEY DRIVE EXISTING SEWER LINE IS SHOWN" DATED 20 JANUARY 1978 BY C.B. KNOWLES. S.C.R.D. #17B-12.
21. "SITE PLAN CHENEY ENTERPRISES DISHMAN PROPERTY, MILL ROAD, DURHAM, NEW HAMPSHIRE" DATED MAY 1984 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. PLAN #24A-87.
22. "UNIVERSITY OF NEW HAMPSHIRE DURHAM, NH- LOW LEVEL SEWAGE SYSTEM-INTERCEPTING SEWER" SHEETS 2 AND 3, DATED DEC. 1935 BY WESTON AND SAMPSON, CONSULTING ENGINEERS, ON FILE AT UNH.
23. "PLAN OF LOT FOR JOHN O'NEIL DURHAM, NEW HAMPSHIRE" DATED MAY 10, 1956 BY G.L. DAVIS & ASSOCIATES, NOT RECORDED.
24. "EXISTING FEATURES PLAN FOR VARSITY CAPITAL ADVISORS, LLC." DATED FEBRUARY 27, 2007 BY AMES MSC. NOT RECORDED.
25. "EXISTING CONDITIONS PLAN OF MILL ROAD PLAZA FOR HANNAFORD BROTHERS CO." DATED MAY 28, 2015 BY DOUCET SURVEY INC.

ABBREVIATIONS

AASHTO	AMERICAN ASSOCIATION OF STATE HIGHWAY & TRANSPORTATION OFFICIALS
ADA	AMERICANS WITH DISABILITIES ACT
AOT	ALTERATION OF TERRIAN
BLDG	BUILDING
BOC	BOTTOM OF CURB
BOW	BOTTOM OF WALL
CB	CATCH BASIN
CONST	CONSTRUCT
COORD	COORDINATE
DIA	DIAMETER
DMH	DRAINAGE MANHOLE
DWG	DRAWING
ELEV	ELEVATION
FES	FLARED END SECTION
FF	FINISHED FLOOR
HDPE	HIGH DENSITY POLYETHYLENE
INV	INVERT
LF	LINEAR FEET
MAX	MAXIMUM
MIN	MINIMUM
NHDES	NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES
NRCS	NATURAL RESOURCES CONSERVATION SERVICE
PCB	PROPOSED CATCH BASIN
PDMH	PROPOSED DRAINAGE MANHOLE
PSMH	PROPOSED SEWER MANHOLE
PVC	POLYVINYL CHLORIDE
PYD	PROPOSED YARD DRAIN
R	RADIUS
SF	SQUARE FEET
TBR	TO BE REMOVED
TC	TOP OF CURB
TW	TOP OF WALL
TYP	TYPICAL
UD	UNDERDRAIN
RD	ROOF DRAIN
EP	EDGE OF PAVEMENT
SWL	SINGLE WHITE LINE
DYL	DOUBLE YELLOW LINE
CONC.	CONCRETE
VGC	VERTICAL GRANITE CURB
SGC	SLOPED GRANITE CURB
VBB	VERTICAL BITUMINOUS BERM
COND.	CONDUIT

LEGEND

UTILITY POLE & GUY WIRE
UTILITY POLE W/ LIGHT
LIGHT POLE (TWO ARMS)
SIGN (TWO POSTS)
SIGN
DRILL HOLE FOUND OR SET AS NOTED
IRON PIPE/ROD FOUND OR SET AS NOTED
FENCE POST
WIRE FENCE FOUND ON GROUND
FIRE HYDRANT
GAS GATE VALVE
WATER GATE VALVE
SURVEY MONUMENT IDENTIFIER (SEE TABLE)
BUILDING OCUPANCY INDENTIFIER (SEE TABLE)
AUTO-SPRINKLER HOSE CONNECTION
GAS REGULATOR
ELECTRIC METER
WATER SHUTOFF VALVE
CATCH BASIN
HAND-HOLE
DRAIN MANHOLE
ELECTRIC MANHOLE
TELEPHONE MANHOLE
SEWER MANHOLE
MANHOLE
BENCHES
JURISDICTIONAL WETLAND SYMBOL
CONIFEROUS TREE
DECIDUOUS TREE
CONCRETE
RIP RAP
LANDSCAPED AREA
FLAT PAVER STONE WALKWAY
SURFACE LEDGE
BOULDERS
HANDICAP PARKING SPACE

•	BOLLARD
⇒	DRAINAGE/SEWAGE FLOW DIRECTION ARROW
MW	MONITORING WELL
TYP.	TYPICAL
RET.	RETAINING
F.F.	FINISHED FLOOR
EP	EDGE OF PAVEMENT
SWL	SINGLE WHITE LINE
SYL	SINGLE YELLOW LINE
DYL	DOUBLE YELLOW LINE
HP	HANDICAP PARKING
CONC.	CONCRETE
GC	GRANITE CURB
CC	CONCRETE CURB
BC	BITUMINOUS CURB
UP#	UTILITY POLE IDENTIFIER (SEE TABLE)
BEARING / DIST	PROPERTY LINES
	BOXWIRE FENCE
	EDGE OF STREAM
	CHAINLINK FENCE
OHW	OVERHEAD WIRES
SS	SEWER LINE
D	DRAIN LINE
G	GAS LINE
W	WATER LINE
E	UNDERGROUND ELECTRIC LINE
SS	SEWER LINE TO BE REMOVED
D	DRAIN LINE TO BE REMOVED
G	GAS LINE TO BE REMOVED
W	WATER LINE TO BE REMOVED
E	UNDERGROUND ELECTRIC LINE TO BE REMOVED
	APPROXIMATE ABUTTERS LOT LINE
	EASEMENT LINE
	TREE LINE
	STONE WALL
	GUARDRAIL
100	CONTOUR LINE
	EDGE OF JURISDICTIONAL WETLAND (SEE EXISTING CONDITIONS PLAN NOTES: NOTE #6)
	EDGE OF VERY POORLY DRAINED SOILS (SEE SEE EXISTING CONDITIONS PLAN NOTES: NOTE #6)
	EDGE OF GRAVEL
XS	APPROXIMATE ABANDONED SEWER LINE PER REFERENCE PLAN #22
	APPROX. BUILDING OCCUPANCY DIVISION LINE

x60.7'	EXISTING SPOT GRADE
× 60.7	PROPOSED SPOT GRADE
	PROPOSED SILT SOCK
	INLET PROTECTION BARRIER
SS	PROPOSED SEWER LINE
	PROPOSED DRAIN LINE
PG	PROPOSED GAS LINE
PW	PROPOSED WATER LINE
PE&C	UNDERGROUND ELECTRIC AND COMMUNICATIONS LINE
D	PROPOSED DRAIN MANHOLE
S	PROPOSED SEWER MANHOLE
	PROPOSED CATCH BASIN
	PROPOSED BITUMINOUS CONCRETE SIDEWALK
	PROPOSED CONCRETE SIDEWALK / PAD
	PROPOSED SIGN
	PROPOSED LIGHT POLE BASE
	PROPOSED ACCESSIBLE PARKING SPACE
	PROPOSED CROSSWALK
	PROPOSED PAINTED ARROW
3'R	PROPOSED CURB RADIUS
DYLL	PROPOSED DOUBLE YELLOW LANE LINE
VGC	PROPOSED VERTICAL GRANITE CURB
SGC	PROPOSED SLOPED GRANITE CURB
	PROPOSED THRUST BLOCK
	PROPOSED FIRE HYDRANT
WV	PROPOSED WATER GATE VALVE
	PAVEMENT TO BE REMOVED
	PROPOSED STANDARD DUTY PAVEMENT SECTION
	PROPOSED HEAVY DUTY PAVEMENT SECTION
	PROPOSED LIMIT OF WORK
	PROPOSED SAWCUT
	RIGHT OF WAY LINE
	EXISTING BUILDING OVERHANG
	EDGE OF WETLANDS
	75' UPLAND WETLAND PROTECTION BUFFER
	FEMA 100-YR FLOODPLAIN
	PROPOSED BUILDING
	PROPOSED TREE LINE
	EXISTING TREE LINE

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE — JOSEPH M. PERSECHINO No. 12253 — LICENSED PROFESSIONAL ENGINEER — 1/2/2020

STATE OF NEW HAMPSHIRE — BRADLEE MEZQUITA No. 08830 — LICENSED PROFESSIONAL ENGINEER — 1/2/20

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

N

SCALE IN FEET 0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	M1529-002_NOTES.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

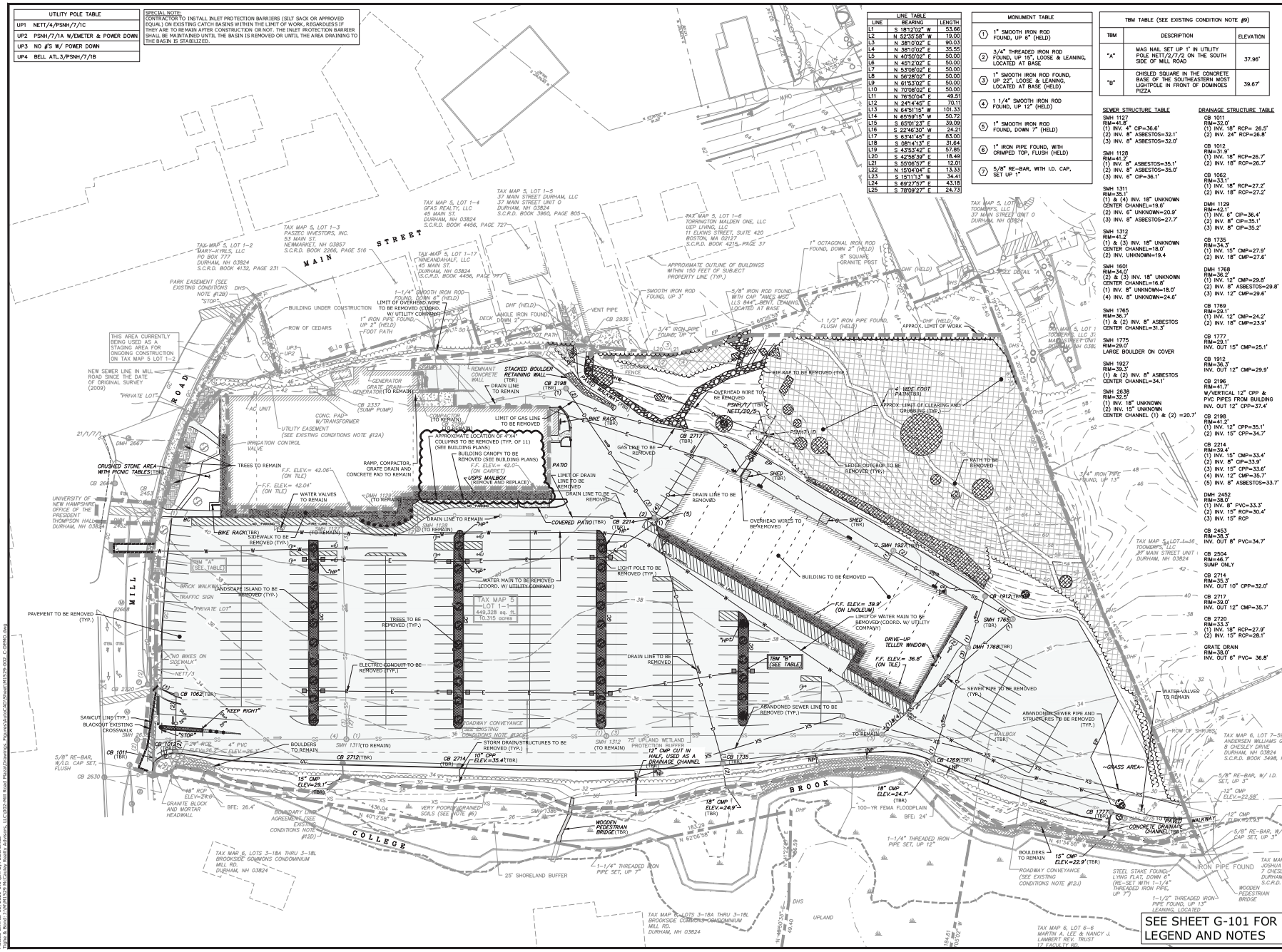
NOTES AND LEGEND SHEET

SCALE: AS SHOWN

G-101

UTILITY POLE TABLE	
UP1	NETT/4/PSNH/7/1C
UP2	PSNH/7/1A W/DMETER & POWER DOWN
UP3	NO #'S W/ POWER DOWN
UP4	BELL ATL3/PSNH/7/1B

SPECIAL NOTE:
CONTRACTOR TO INSTALL INLET PROTECTION BARRIERS (SILT SACK OR APPROVED EQUAL) ON EXISTING CATCH BASINS WITHIN THE LIMIT OF WORK, REGARDLESS IF THEY ARE TO REMAIN AFTER CONSTRUCTION OR NOT. THE INLET PROTECTION BARRIER SHALL BE MAINTAINED UNTIL THE BASIN IS REMOVED OR UNTIL THE AREA DRAINING TO THE BASIN IS STABILIZED.


MAIN STREET
MILL ROAD
COLLEGE BROOK
TAX MAP 5, LOT 1-3 PASZEC INVESTORS, INC. 53 MAIN ST. NEWMARKET, NH 03857 S.C.R.D. BOOK 2266, PAGE 516
TAX MAP 5, LOT 1-2 MARY-KYRIS, LLC PO BOX 777 DURHAM, NH 03824 S.C.R.D. BOOK 4132, PAGE 231
TAX MAP 5, LOT 1-4 GFAS REALTY, LLC 45 MAIN ST. DURHAM, NH 03824 S.C.R.D. BOOK 4456, PAGE 727
TAX MAP 5, LOT 1-7 NINEANDANALF, LLC 45 MAIN ST. DURHAM, NH 03824 (S.C.R.D. BOOK 4456, PAGE 777
TAX MAP 5, LOT 1-5 37 MAIN STREET DURHAM, LLC 37 MAIN STREET UNIT O DURHAM, NH 03824 S.C.R.D. BOOK 3960, PAGE 805
TAX MAP 5, LOT 1-6 TORRINGTON MALDEN ONE, LLC UEP LIVING, LLC 11 ELKINS STREET, SUITE 420 BOSTON, MA 02127 S.C.R.D. BOOK 4215, PAGE 37
TAX MAP 5, LOT 1-16 TOOMERFS, LLC 37 MAIN STREET UNIT O DURHAM, NH 03824
TAX MAP 5, LOT 1-1 TOOMERFS, LLC 31 MAIN STREET UNIT A DURHAM, NH 03824
TAX MAP 5, LOT 1-16 TOOMERFS, LLC 37 MAIN STREET UNIT I DURHAM, NH 03824
TAX MAP 6, LOTS 3-18A THRU 3-18L BROOKSIDE COMMONS CONDOMINIUM MILL RD. DURHAM, NH 03824
TAX MAP 6, LOT 6-6 MARTIN A. LEE & NANCY J. LAMBERT REV. TRUST 17 FAGULTY RD.
TAX MAP 6, LOT 7-59 ANDERSEN, WILLIAMS G. 8 CHESLEY DRIVE DURHAM, NH 03824 S.C.R.D. BOOK 3498, P
UNIVERSITY OF NEW HAMPSHIRE OFFICE OF THE PRESIDENT THOMPSON HALL DURHAM, NH 03824
PARK EASEMENT (SEE EXISTING CONDITIONS NOTE #12B)
BUILDING UNDER CONSTRUCTION
ROW OF CEDARS
THIS AREA CURRENTLY BEING USED AS A STAGING AREA FOR ONGOING CONSTRUCTION ON TAX MAP 5 LOT 1-2
NEW SEWER LINE IN MILL ROAD SINCE THE DATE OF ORIGINAL SURVEY (2009)
"PRIVATE LOT"
CRUSHED STONE AREA WITH PICNIC TABLES (TBR)
UTILITY EASEMENT (SEE EXISTING CONDITIONS NOTE #12A)
IRRIGATION CONTROL VALVE
TREES TO REMAIN
F.F. ELEV.= 42.06' (ON TILE)
F.F. ELEV.= 42.04' (ON TILE)
WATER VALVES TO REMAIN
RAMP, COMPACTOR, GRATE DRAIN AND CONCRETE PAD TO REMAIN
APPROXIMATE LOCATION OF ROOF COLUMNS TO BE REMOVED (TYP. OF 11) (SEE BUILDING PLANS)
BUILDING CANOPY TO BE REMOVED (SEE BUILDING PLANS)
F.F. ELEV.= 42.0' (ON CARPET)
USPS MAILBOX (REMOVE AND REPLACE)
PATIO
LIMIT OF DRAIN LINE TO BE REMOVED
DRAIN LINE TO BE REMOVED
COVERED PATIO (TBR)
BIKE RACK (TBR)
SIDEWALK TO BE REMOVED (TYP.)
TBM "A" (SEE TABLE)
BRICK WALKWAY
LANDSCAPE ISLAND TO BE REMOVED (TYP.)
TRAFFIC SIGN
PAVEMENT TO BE REMOVED (TYP.)
TAX MAP 5 LOT 1-1 449,328 sq. ft. TO.315 acres
WATER MAIN TO BE REMOVED (COORD. W/ UTILITY COMPANY)
LIGHT POLE TO BE REMOVED (TYP.)
TREES TO BE REMOVED (TYP.)
ELECTRIC CONDUIT TO BE REMOVED (TYP.)
"NO BIKES ON SIDEWALK"
"KEEP RIGHT"
SAWCUT LINE (TYP.)
BLACKOUT EXISTING CROSSWALK SMA
BOULDERS TO REMAIN
ROADWAY CONVEYANCE (SEE EXISTING CONDITIONS NOTE #12C)
STORM DRAIN/STRUCTURES TO BE REMOVED (TYP.)
12" CMP CUT IN HALF, USED AS A DRAINAGE CHANNEL (TBR)
75' UPLAND WETLAND PROTECTION BUFFER
BUILDING TO BE REMOVED
F.F. ELEV.= 39.9' (ON LINOLEUM)
LIMIT OF WATER MAIN TO BE REMOVED (COORD. W/ UTILITY COMPANY)
DRIVE-UP TELLER WINDOW
F.F. ELEV.= 36.8' (ON TILE)
TBM "B" (SEE TABLE)
SEWER PIPE TO BE REMOVED (TYP.)
ABANDONED SEWER LINE TO BE REMOVED (TYP.)
ABANDONED SEWER PIPE AND STRUCTURES TO BE REMOVED (TYP.)
WATER VALVES TO REMAIN
ROW OF SHRUBS
~GRASS AREA~
CONCRETE DRAINAGE CHANNEL (TBR)
PAVED WALKWAY
100-YR FEMA FLOODPLAIN
BFE: 24'
BFE: 26.4'
VERY POORLY DRAINED SOILS (SEE NOTE #6)
BOUNDARY LINE AGREEMENT (SEE EXISTING CONDITIONS NOTE #12D)
WOODEN PEDESTRIAN BRIDGE (TBR)
25' SHORELAND BUFFER
UPLAND
STEEL STAKE FOUND, LYING FLAT, DOWN 6' (RE-SET WITH 1-1/4" THREADED IRON PIPE, UP 7")
1-1/2" THREADED IRON PIPE FOUND, UP 13" LEANING, LOCATED
IRON PIPE FOUND
APPROX. LIMIT OF WORK
APPROXIMATE OUTLINE OF BUILDINGS WITHIN 150 FEET OF SUBJECT PROPERTY LINE (TYP.)
1" OCTAGONAL IRON ROD FOUND, DOWN 2" (HELD) 8" SQUARE GRANITE POST
5/8" IRON ROD FOUND, WITH CAP "AMES MSC LLS 844", BENT, DRAWING LOCATED AT BASE
1 1/2" IRON PIPE FOUND, FLUSH (HELD)
SMOOTH IRON ROD FOUND, UP 3"
3/4" IRON PIPE FOUND, UP 7"
1-1/4" SMOOTH IRON ROD FOUND, DOWN 1" (HELD)
LIMIT OF OVERHEAD WIRE TO BE REMOVED (COORD. W/ UTILITY COMPANY)
1" IRON PIPE FOUND, UP 2" (HELD)
FOOT PATH
ANGLE IRON FOUND, DOWN 2"
VENT PIPE
CB 2936
CB 2198 (TBR)
DRAIN LINE TO REMAIN
REMNANT CONCRETE WALL
STACKED BOULDER RETAINING WALL (TBR)
LIMIT OF GAS LINE TO BE REMOVED
GAS LINE TO BE REMOVED
CB 2717 (TBR)
OVERHEAD WIRE TO BE REMOVED
PSNH/7/1 (TBR) NETT/20/3
PSNH/7/1D
RIP RAP TO BE REMOVED (TYP.)
4' WIDE FOOT PATH (TBR)
APPROX. LIMIT OF CLEARING AND GRUBBING (TYP.)
HEDGE OUTCROP TO BE REMOVED (TYP.)
PATH TO BE REMOVED
SHED (TBR)
OVERHEAD WIRES TO BE REMOVED
SMH 1927
CB 1912 (TBR)
SMH 1765 (TBR)
DMH 1768 (TBR)
CB 1062 (TBR)
CB 1011 (TBR)
CB 2630
CB 2712 (TBR)
CB 2714 (TBR)
CB 1735 (TBR)
CB 1269 (TBR)
CB 1777 (TBR)
SMH 1312 (TO REMAIN)
SMH 1336 (TO REMAIN)
SMH 1386
15" CMP ELEV=29.1' (TBR)
18" CMP ELEV=35.4' (TBR)
18" CMP ELEV=24.9' (TBR)
18" CMP ELEV=24.7' (TBR)
15" CMP ELEV=22.9' (TBR)
5/8" RE-BAR, W/A.D. CAP SET, FLUSH
48" RCP ELEV=24.6'
GRANITE BLOCK AND MORTAR HEADWALL
4" PVC ELEV=26.7'
2" ACP ELEV=26.7'
5/8" RE-BAR, W/ I.D. SET, UP 3"
12" CMP ELEV=22.58'
12" CMP ELEV=21.93'
5/8" RE-BAR, W/ CAP SET, UP 3"
1-1/4" THREADED IRON PIPE SET, UP 12"
1-1/4" THREADED IRON PIPE SET, UP 7"
BOULDERS TO REMAIN
ROADWAY CONVEYANCE (SEE EXISTING CONDITIONS NOTE #12J)
MAILBOX (TBR)
WOODEN PEDESTRIAN BRIDGE
N 67°06'58" W
N 40°17'58" W
N 41°34'58" W
N 62°22'58" E
N 48°40'02" W
N 48°40'02" E
N 48°40'02" W
N 48°40'02" E
N 48°40'02" W
N 48°40'02

SITE DATA:
(BASED ON TOWN OF DURHAM ZONING ORDINANCE, DATE VARIES/VESTED)
ZONING DISTRICT: CENTRAL BUSINESS DISTRICT (CB)
PERMITTED USES: PARKING, RESTAURANT, RETAIL, OFFICES, MIXED USE/RESIDENTIAL, BANK WITH DRIVE-THROUGH

DIMENSIONAL REQUIREMENTS:

	REQUIRED	PROPOSED
MINIMUM LOT SIZE:	5,000 SF	449,341 SF
MINIMUM LOT AREA PER UNIT:	1,200 SF	1,742 SF (258 UNITS)
MAXIMUM OCCUPANTS:	N/A	258
MINIMUM STREET FRONTAGE:	50 FT	475 FT
MINIMUM FRONT YARD SETBACK:	N/A	
SIDE SETBACK:	N/A	
REAR SETBACK:	N/A	
MAXIMUM IMPERVIOUS SURFACE RATIO:	100%	<100%
MAXIMUM BUILDING HEIGHT:	30 FT (50 FT W/ PB APPROVAL)	<41 FT
MAXIMUM BUILDING HEIGHT (MIXED USE):	4 STORIES	4 STORIES
MINIMUM BUFFER STRIP TO PROPERTY LINE:	5 FT	10 FT
MINIMUM BUFFER STRIP TO ROW:	0 FT	>10 FT

AREA CALCULATIONS:

	EXISTING	PROPOSED
IMPERVIOUS (SF)	275,734	277,889
EFFECTIVE IMPERVIOUS COVER (SF)	275,734	8,687

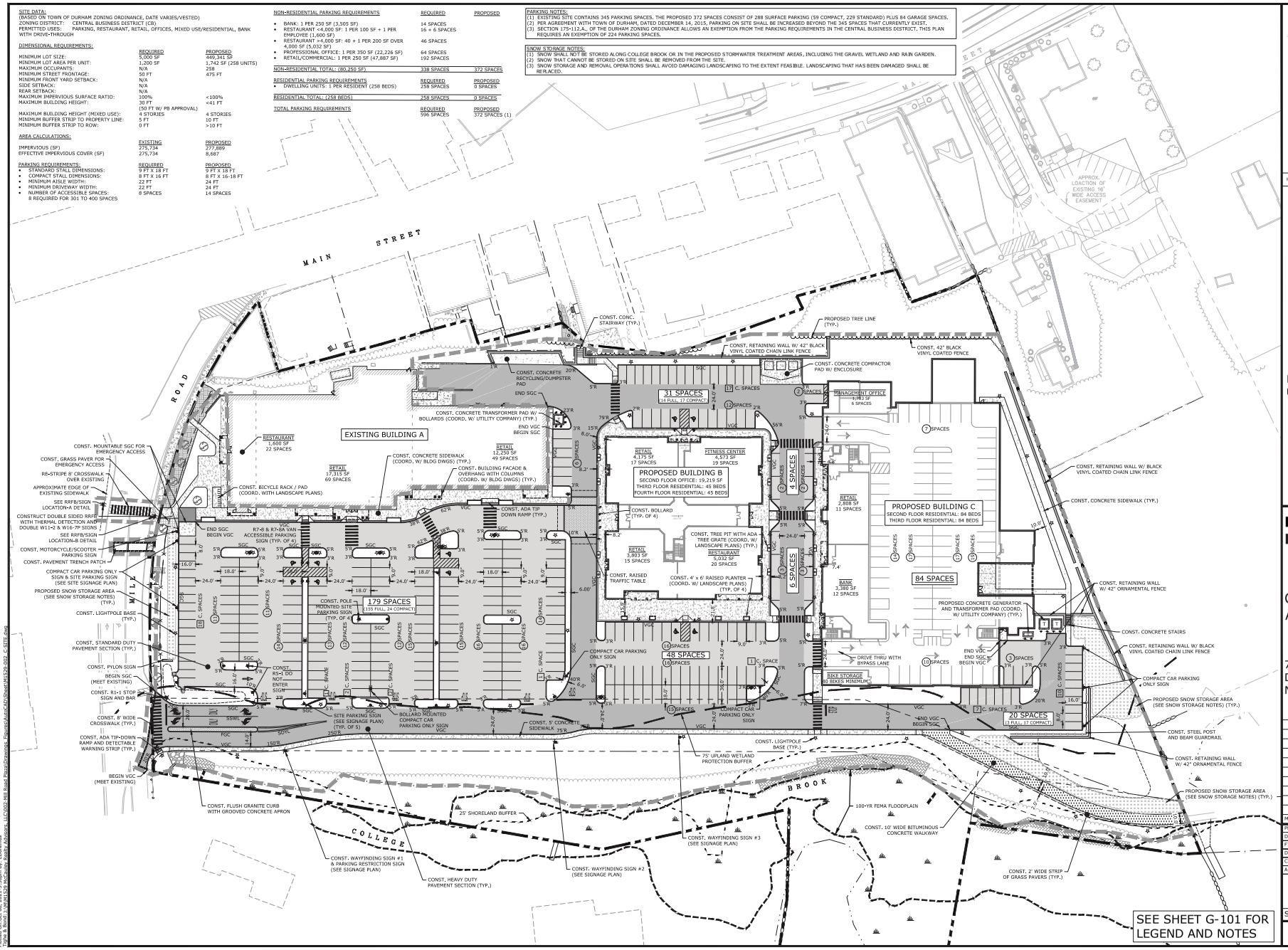
PARKING REQUIREMENTS:

	REQUIRED	PROPOSED
• STANDARD STALL DIMENSIONS:	9 FT X 18 FT	9 FT X 18 FT
• COMPACT STALL DIMENSIONS:	8 FT X 16 FT	8 FT X 16-18 FT
• MINIMUM AISLE WIDTH:	22 FT	24 FT
• MINIMUM DRIVEWAY WIDTH:	22 FT	24 FT
• NUMBER OF ACCESSIBLE SPACES: 8 REQUIRED FOR 301 TO 400 SPACES	8 SPACES	14 SPACES

NON-RESIDENTIAL PARKING REQUIREMENTS	REQUIRED	PROPOSED
• BANK: 1 PER 250 SF (3,505 SF)	14 SPACES	
• RESTAURANT <4,000 SF: 1 PER 100 SF + 1 PER EMPLOYEE (1,600 SF)	16 + 6 SPACES	
• RESTAURANT >4,000 SF: 40 + 1 PER 200 SF OVER 4,000 SF (5,032 SF)	46 SPACES	
• PROFESSIONAL OFFICE: 1 PER 350 SF (22,226 SF)	64 SPACES	
• RETAIL/COMMERCIAL: 1 PER 250 SF (47,887 SF)	192 SPACES	
NON-RESIDENTIAL TOTAL: (80,250 SF)	338 SPACES	372 SPACES
RESIDENTIAL PARKING REQUIREMENTS	REQUIRED	PROPOSED
• DWELLING UNITS: 1 PER RESIDENT (258 BEDS)	258 SPACES	0 SPACES
RESIDENTIAL TOTAL: (258 BEDS)	258 SPACES	0 SPACES
TOTAL PARKING REQUIREMENTS	REQUIRED 596 SPACES	PROPOSED 372 SPACES (1)

PARKING NOTES:
(1) EXISTING SITE CONTAINS 345 PARKING SPACES. THE PROPOSED 372 SPACES CONSIST OF 288 SURFACE PARKING (59 COMPACT, 229 STANDARD) PLUS 84 GARAGE SPACES.
(2) PER AGREEMENT WITH TOWN OF DURHAM, DATED DECEMBER 14, 2015, PARKING ON SITE SHALL BE INCREASED BEYOND THE 345 SPACES THAT CURRENTLY EXIST.
(3) SECTION 175-112.A., OF THE DURHAM ZONING ORDINANCE ALLOWS AN EXEMPTION FROM THE PARKING REQUIREMENTS IN THE CENTRAL BUSINESS DISTRICT. THIS PLAN REQUIRES AN EXEMPTION OF 224 PARKING SPACES.

SNOW STORAGE NOTES:
(1) SNOW SHALL NOT BE STORED ALONG COLLEGE BROOK OR IN THE PROPOSED STORMWATER TREATMENT AREAS, INCLUDING THE GRAVEL WETLAND AND RAIN GARDEN.
(2) SNOW THAT CANNOT BE STORED ON SITE SHALL BE REMOVED FROM THE SITE.
(3) SNOW STORAGE AND REMOVAL OPERATIONS SHALL AVOID DAMAGING LANDSCAPING TO THE EXTENT FEASIBLE. LANDSCAPING THAT HAS BEEN DAMAGED SHALL BE REPLACED.



SEE SHEET G-101 FOR LEGEND AND NOTES

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE JOSEPH M. PERSICHINO No. 13280 LICENSED PROFESSIONAL ENGINEER
10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET 0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
8	10/8/2021	RESPONSE TO COMMENTS
7	8/18/2021	GENERAL REVISIONS
6	3/10/2021	RESPONSE TO COMMENTS
5	1/20/2021	RESPONSE TO COMMENTS
4	11/4/2020	GENERAL REVISIONS
3	8/4/2020	GENERAL REVISIONS
2	5/20/2020	RESPONSE TO COMMENTS
1	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	
FILE:	M1529-002_C-SITE.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

SITE PLAN

SCALE: AS SHOWN

C-102

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-3:52pm By: EDominico
Tighe & Bond: J:\M\M1529 McCarthy Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\Arch\CAD\Sheet\M1529-002_C-SITE.dwg

DRAINAGE STRUCTURE TABLE

CB 1011
RIM=32.0'
(1) INV. 18" RCP= 26.5'
(2) INV. 24" RCP=26.8'

CB 1012
RIM=31.9'
(1) INV. 18" RCP=26.7'
(2) INV. 18" RCP=26.7'

CB 1062
RIM=33.1'
(1) INV. 18" RCP=27.2'
(2) INV. 18" RCP=27.2'

DMH 1129
RIM=42.1'
(1) INV. 6" CIP=36.4'
(2) INV. 8" CIP=35.1'
(3) INV. 8" CIP=35.2'

CB 1735
RIM=34.3'
(1) INV. 15" CMP=27.9'
(2) INV. 18" CMP=27.6'

DMH 1768
RIM=36.2'
(1) INV. 12" CMP=29.8'
(2) INV. 8" ASBESTOS=29.8'
(3) INV. 12" CMP=29.6'

CB 1769
RIM=32.4'
(1) INV. 12" CMP=27.6'
(2) INV. 18" CMP=27.3'

CB 1777
RIM=29.1'
INV. OUT 15" CMP=25.1'

CB 1912
RIM=36.3'
INV. OUT 12" CMP=29.9'

CB 2196
RIM=41.7'
W/VERTICAL 12" CPP & PVC PIPES FROM BUILDING
INV. OUT 12" CPP=37.4'

CB 2198
RIM=41.3'
(1) INV. 12" CPP=35.1'
(2) INV. 15" CPP=34.7'

CB 2214
RIM=39.4'
(1) INV. 15" CMP=33.4'
(2) INV. 8" CIP=33.9'
(3) INV. 15" CPP=33.6'
(4) INV. 12" CMP=33.7'
(5) INV. 8" ASBESTOS=33.7'

DMH 2452
RIM=38.0'
(1) INV. 8" PVC=33.3'
(2) INV. 15" RCP=30.4'
(3) INV. 15" RCP

CB 2453
RIM=38.1'
INV. OUT 8" PVC=34.7'

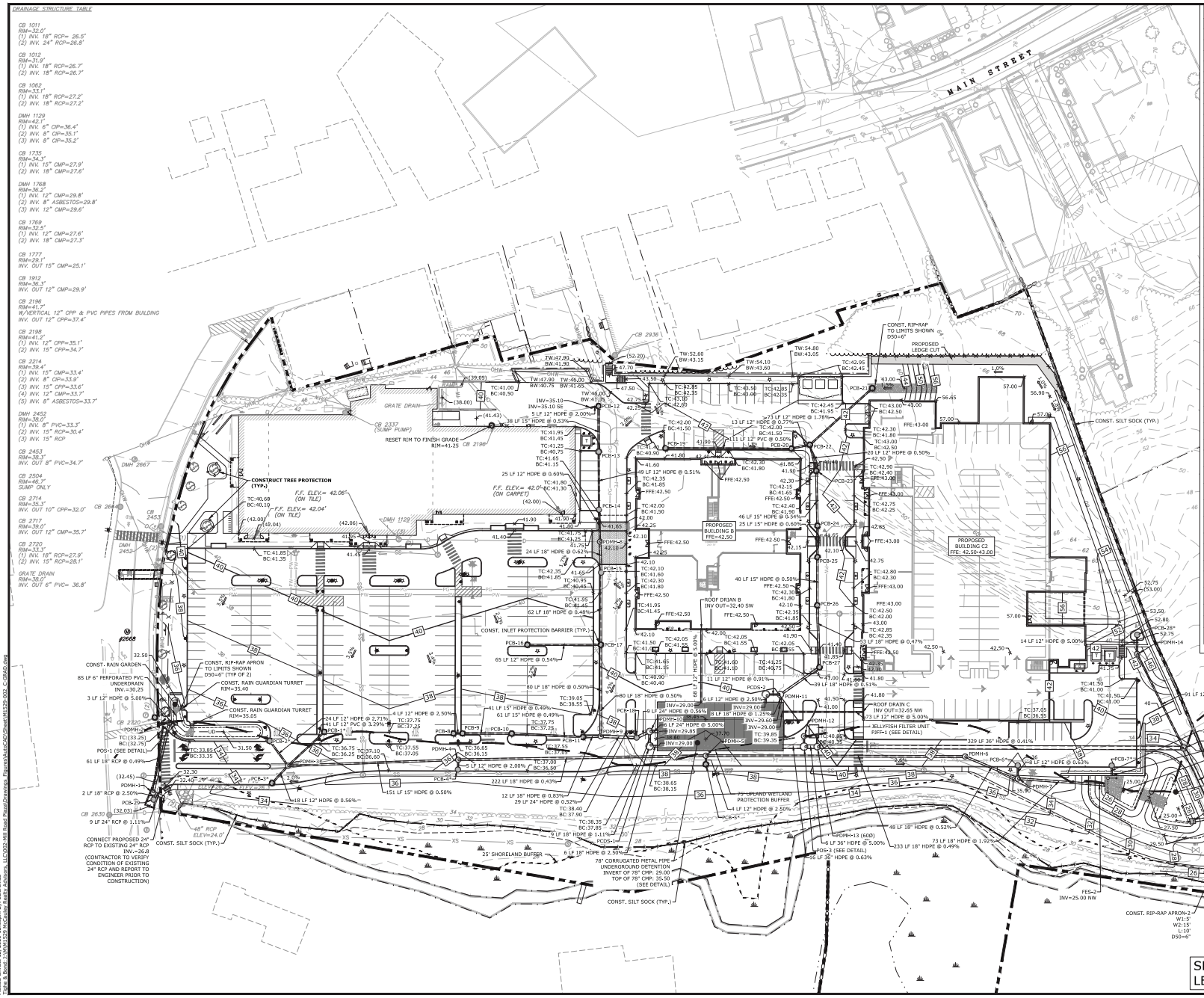
CB 2504
RIM=46.7'
SUMP ONLY

CB 2714
RIM=35.3'
INV. OUT 10" CPP=32.0'

CB 2717
RIM=39.0'
INV. OUT 12" CMP=35.7'

CB 2720
RIM=33.3'
(1) INV. 18" RCP=27.9'
(2) INV. 15" RCP=28.1'

GRATE DRAIN
RIM=38.0'
INV. OUT 6" PVC= 36.8'



DRAINAGE STRUCTURE TABLE

STRUCTURE NAME	RIM	INV. IN	INV. OUT
PCB-1*	36.45		31.20 W
PCB-2*	35.55		30.50 S
PCB-3*	34.50		29.95 E
PCB-4*	35.65		29.90 NE
PCB-5*	37.25		33.70 NE
PCB-6*	35.75		30.45 SW
PCB-7*	38.50		25.35 SW
PCB-8	36.60		32.25 SE
PCB-9	36.60	32.15 NW	32.05 SE
PCB-10	37.10	31.85 NW	31.75 SE
PCB-11	37.10	31.45 NW	31.35 SE
PCB-12	41.00	35.00 NW	34.90 SW
PCB-13	40.40	34.70 NE	34.60 SW
PCB-14	41.05	34.35 NE	34.25 SW
PCB-15	46.70	33.85 NE	33.75 SW
PCB-16	39.10		34.10 SE
PCB-17	40.90	33.45 NE 33.75 NW	33.35 SW
PCB-18	38.20	31.00 NW	30.90 E
PCB-19	41.15		36.25 SE
PCB-20	41.15	35.70 NW	35.60 SE
PCB-21	42.50		37.25 W
PCB-22	40.95	35.50 NW 35.95 E	35.40 SW
PCB-23	41.35	35.30 NE	35.20 SW
PCB-24	41.40	34.95 NE	34.85 SW
PCB-25	41.30	34.70 NE	34.60 SW
PCB-26	41.25	34.40 NE	34.30 SW
PCB-27	40.90	34.05 NE	33.95 W
PCB-28*	49.50		39.70 SW
PCB-29	31.90		27.05 NE
PDMH-1	32.00	27.50 NE 27.00 SW	26.90 SE
PDMH-2	34.15	29.00 SE 27.85 NW	27.80 SW
PDMH-3	34.80	29.85 W 29.85 N 29.85 E	29.75 SE
PDMH-4	38.85	29.80 SW 29.00 NW	28.95 SE
PDMH-5	37.50	28.00 NW 33.60 SW	27.90 SE
PDMH-6	37.10	26.75 NW	26.75 SE
PDMH-7	35.85	26.50 NW 30.40 NE	26.40 SE
PDMH-8	41.80	34.25 NW 34.10 NE	34.00 SW
PDMH-9	40.95	31.35 NW 32.95 NE	31.15 SE
PDMH-10	38.85	30.85 W	29.25 SW 30.15 SE
PDMH-11	40.00	33.75 E	29.25 NW 29.70 SW
PDMH-12	39.80	27.85 SW	27.85 SE
PDMH-13 (60Ø)	39.90	28.60 NW 27.20 NE	27.10 SE
PDMH-14	49.50	39.00 NE	34.55 S
PDMH-15 (60Ø)	34.00	25.75 NW 30.00 N	25.65 S
PDMH-16 (60Ø)	31.40	24.20 N 24.20 NW	22.70 SW
POS-1 (SEE DETAIL)	33.00	30.93 SE	29.15 NW
POS-2 (SEE DETAIL)	28.50	24.33 NW	24.33 SE
POS-3 (SEE DETAIL)	39.65	28.90 NW	28.90 SE 27.90 NE

*STRUCTURE TO HAVE OIL-WATER SEPARATOR

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE
JOSEPH M. PERSICHINO
No. 16293
LICENSED PROFESSIONAL ENGINEER
1/21/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET
0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
8	10/8/2021	RESPONSE TO COMMENTS
7	8/18/2021	GENERAL REVISIONS
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5	1/20/2021	RESPONSE TO COMMENTS
4	11/4/2020	GENERAL REVISIONS
3	8/4/2020	GENERAL REVISIONS
2	5/20/2020	RESPONSE TO COMMENTS
1	1/2/2020	GENERAL REVISIONS

PROJECT NO: M1529-002
DATE:
FILE: M1529-002_C-GRAD.dwg
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CHECKED: JMP
APPROVED: BLM

GRADING, DRAINAGE AND EROSION CONTROL PLAN

SCALE: AS SHOWN

C-103

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-1:23:52pm By: EDenmur
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SEWER STRUCTURE TABLE

SMH 1127
RIM=41.8'
(1) INV. 4" CIP=36.6'
(2) INV. 8" ASBESTOS=32.1'
(3) INV. 8" ASBESTOS=32.0'

SMH 1128
RIM=41.2'
(1) INV. 8" ASBESTOS=35.1'
(2) INV. 8" ASBESTOS=35.0'
(3) INV. 6" CIP=36.1'

SMH 1311
RIM=35.1'
(1) & (4) INV. 18" UNKNOWN CENTER CHANNEL=19.6'
(2) INV. 6" UNKNOWN=20.9'
(3) INV. 8" ASBESTOS=27.7'

SMH 1312
RIM=41.2'
(1) & (3) INV. 18" UNKNOWN CENTER CHANNEL=18.0'
(2) INV. UNKNOWN=19.4

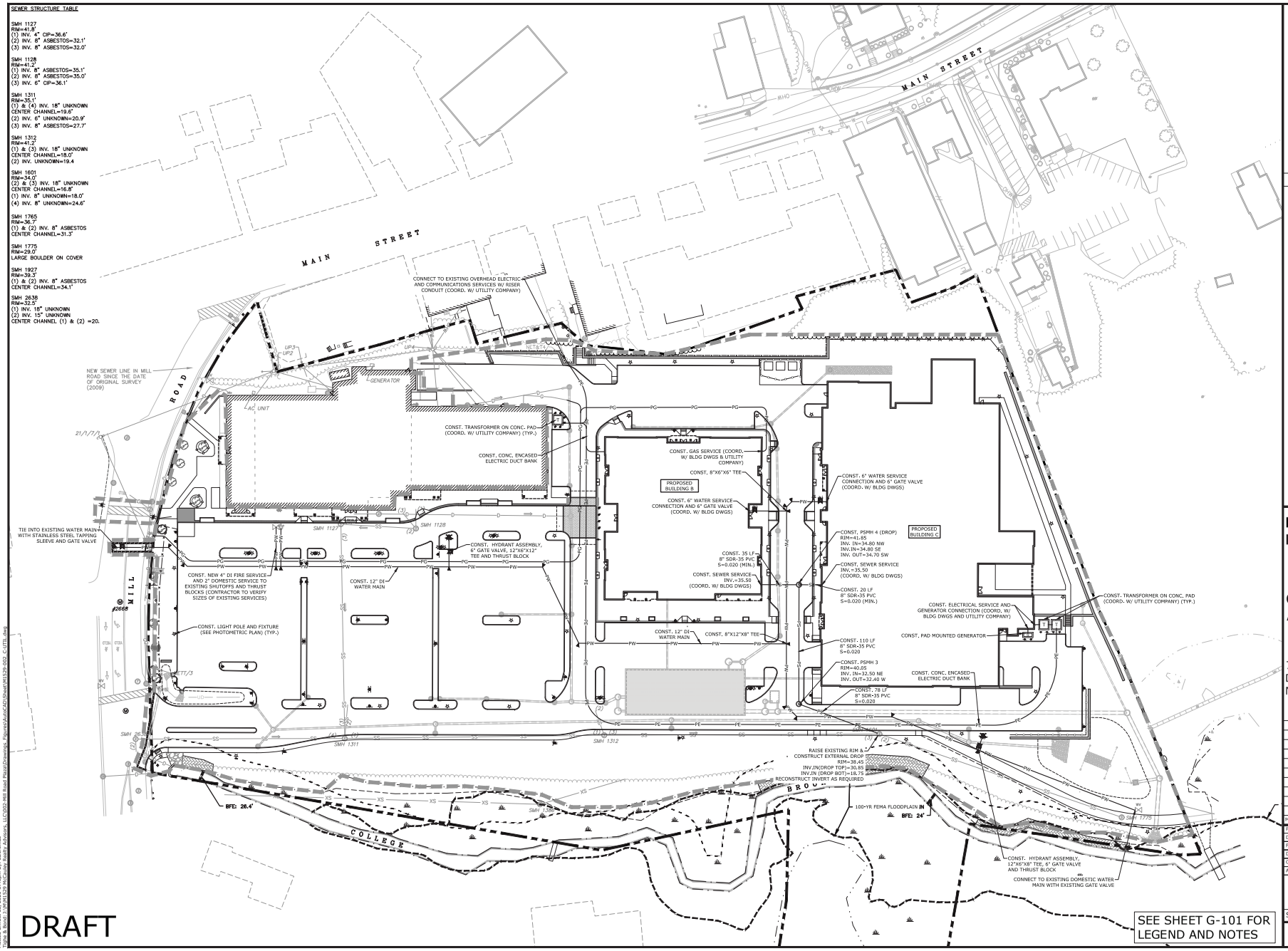
SMH 1601
RIM=34.0'
(2) & (3) INV. 18" UNKNOWN CENTER CHANNEL=16.8'
(1) INV. 8" UNKNOWN=18.0'
(4) INV. 8" UNKNOWN=24.6'

SMH 1765
RIM=36.7'
(1) & (2) INV. 8" ASBESTOS CENTER CHANNEL=31.3'

SMH 1775
RIM=29.0'
LARGE BOULDER ON COVER

SMH 1927
RIM=39.3'
(1) & (2) INV. 8" ASBESTOS CENTER CHANNEL=34.1'

SMH 2638
RIM=32.5'
(1) INV. 18" UNKNOWN
(2) INV. 15" UNKNOWN
CENTER CHANNEL (1) & (2) =20.



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SEE SHEET G-101 FOR LEGEND AND NOTES

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE JOSEPH M. PESECHINO No. 16280 LICENSED PROFESSIONAL ENGINEER 10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET 0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
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2	5/20/2020	RESPONSE TO COMMENTS
1	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	
FILE:	M1529-002_C-UTIL.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

UTILITIES PLAN

SCALE: AS SHOWN

C-104

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-3:46pm By: EDonovan
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LEGEND

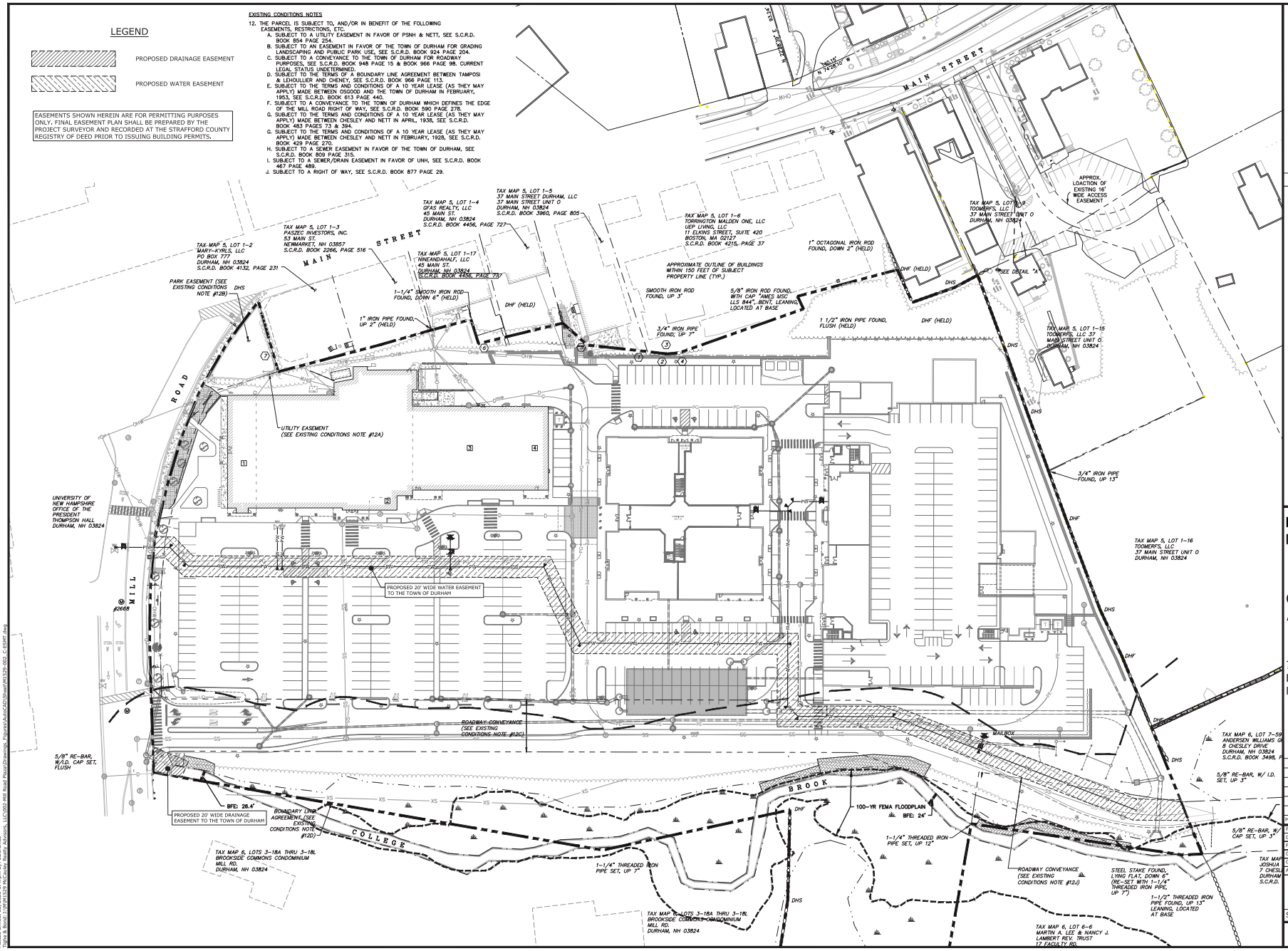
PROPOSED DRAINAGE EASEMENT

PROPOSED WATER EASEMENT

EASEMENTS SHOWN HEREIN ARE FOR PERMITTING PURPOSES ONLY. FINAL EASEMENT PLAN SHALL BE PREPARED BY THE PROJECT SURVEYOR AND RECORDED AT THE STRAFFORD COUNTY REGISTRY OF DEED PRIOR TO ISSUING BUILDING PERMITS.

EXISTING CONDITIONS NOTES

12. THE PARCEL IS SUBJECT TO, AND/OR IN BENEFIT OF THE FOLLOWING EASEMENTS, RESTRICTIONS, ETC.
    - A. SUBJECT TO A UTILITY EASEMENT IN FAVOR OF PSNH & NETT, SEE S.C.R.D. BOOK 854 PAGE 254.
    - B. SUBJECT TO AN EASEMENT IN FAVOR OF THE TOWN OF DURHAM FOR GRADING LANDSCAPING AND PUBLIC PARK USE, SEE S.C.R.D. BOOK 924 PAGE 204.
    - C. SUBJECT TO A CONVEYANCE TO THE TOWN OF DURHAM FOR ROADWAY PURPOSES, SEE S.C.R.D. BOOK 948 PAGE 15 & BOOK 966 PAGE 98. CURRENT LEGAL STATUS UNDETERMINED.
    - D. SUBJECT TO THE TERMS OF A BOUNDARY LINE AGREEMENT BETWEEN TAMPOSI & LEHOULLIER AND CHENEY, SEE S.C.R.D. BOOK 966 PAGE 113.
    - E. SUBJECT TO THE TERMS AND CONDITIONS OF A 10 YEAR LEASE (AS THEY MAY APPLY) MADE BETWEEN OSGOOD AND THE TOWN OF DURHAM IN FEBRUARY, 1953, SEE S.C.R.D. BOOK 613 PAGE 440.
    - F. SUBJECT TO A CONVEYANCE TO THE TOWN OF DURHAM WHICH DEFINES THE EDGE OF THE MILL ROAD RIGHT OF WAY, SEE S.C.R.D. BOOK 590 PAGE 278.
    - G. SUBJECT TO THE TERMS AND CONDITIONS OF A 10 YEAR LEASE (AS THEY MAY APPLY) MADE BETWEEN CHESLEY AND NETT IN APRIL, 1938, SEE S.C.R.D. BOOK 483 PAGES 73 & 394.
    - G. SUBJECT TO THE TERMS AND CONDITIONS OF A 10 YEAR LEASE (AS THEY MAY APPLY) MADE BETWEEN CHESLEY AND NETT IN FEBRUARY, 1928, SEE S.C.R.D. BOOK 429 PAGE 270.
    - H. SUBJECT TO A SEWER EASEMENT IN FAVOR OF THE TOWN OF DURHAM, SEE S.C.R.D. BOOK 809 PAGE 315.
    - I. SUBJECT TO A SEWER/DRAIN EASEMENT IN FAVOR OF UNH, SEE S.C.R.D. BOOK 487 PAGE 489.
    - J. SUBJECT TO A RIGHT OF WAY, SEE S.C.R.D. BOOK 877 PAGE 29.



Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

STATE OF NEW HAMPSHIRE JOSEPH M. PERSICHINO No. 10731 LICENSED PROFESSIONAL ENGINEER 10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET 0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
1	10/8/2021	RESPONSE TO COMMENTS

PROJECT NO:	M1529-002
DATE:	3/10/2021
FILE:	M1529-002_C-ESMT.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

CONCEPTUAL UTILITY EASEMENT PLAN

SCALE: AS SHOWN

C-105

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-3:47pm By: EDonovan
Tighe & Bond: J:\M\M1529 McCarthy Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-ESMT.dwg

GENERAL PROJECT INFORMATION

PROJECT OWNER: COLONIAL DURHAM ASSOCIATES
405 PARK, 12 FLOOR,
NEW YORK, NY 10022
PROJECT NAME: MILL ROAD PLAZA
PROJECT ADDRESS: 5 MILL ROAD, DURHAM, NH 03804
PROJECT MAP / LOT: MAP 5/ LOT 1-1
PROJECT LATITUDE: 43°-07'-58"N
PROJECT LONGITUDE: 70°-55'-30"W

PROJECT DESCRIPTION

THE PROJECT CONSISTS OF THE DEMOLITION OF A 24,000 SF RETAIL BUILDING AND EXISTING PARKING LOT AS WELL AS THE CONSTRUCTION OF A NEW PARKING LOT AND TWO (2) NEW ASSOCIATED BUILDINGS INCLUDING RETAIL, HOUSING AND A PARKING GARAGE. THE WORK IS ANTICIPATED TO START IN 2022, AND BE COMPLETED BY 2023.

DISTURBED AREA

THE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 7.9 ACRES.

SOIL CHARACTERISTICS

BASED ON THE USCS SITE SPECIFIC SOIL SURVEY CONDUCTED BY LUKE HARLEY OF GOVE ENVIRONMENTAL SERVICES, ON MAY 4, 2018 THE SOILS ON SITE CONSIST OF UDORTHENTS, BUXTON, AND HOLLIS SOILS WHICH ARE POORLY DRAINED SOILS WITH HYDROLOGIC SOIL GROUP RATING(S) OF C AND D

NAME OF RECEIVING WATERS

THE STORMWATER RUNOFF FROM THE SITE WILL BE DISCHARGED VIA OVERLAND FLOW TO A CLOSED DRAINAGE SYSTEM, TREATED VIA VARIOUS STORMWATER TREATMENT DEVICES PRIOR TO DISCHARGE TO COLLEGE BROOK.

CONSTRUCTION SEQUENCE OF MAJOR ACTIVITIES:

1. CUT AND CLEAR TREES.
2. CONSTRUCT TEMPORARY AND PERMANENT SEDIMENT, EROSION AND DETENTION CONTROL FACILITIES. EROSION, SEDIMENT AND DETENTION MEASURES SHALL BE INSTALLED PRIOR TO ANY EARTH MOVING OPERATIONS THAT WILL INFLUENCE STORMWATER RUNOFF SUCH AS:
   - NEW CONSTRUCTION
   - DEVELOPMENT OF BORROW PIT AREAS
   - DISPOSAL OF SEDIMENT SPOIL, STUMP AND OTHER SOLID WASTE
   - FLOOD PLAIN EXCAVATION WORK
   - STREAM CHANNEL MODIFICATIONS
   - CONTROL OF DUST
   - CONSTRUCTION OF ACCESS AND HAUL ROAD
   - NEARNESS OF CONSTRUCTION SITE TO RECEIVING WATERS
   - CONSTRUCTION DURING LATE WINTER AND EARLY SPRING
3. ALL PERMANENT DITCHES, SWALES, DETENTION, RETENTION AND SEDIMENTATION BASINS TO BE STABILIZED USING THE VEGETATIVE AND NON-STRUCTURAL BMPS PRIOR TO DIRECTING RUNOFF TO THEM.
4. CLEAR AND DISPOSE OF DEBRIS.
5. CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED.
6. GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
7. BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
8. DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
9. FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
10. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES.
11. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
12. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

SPECIAL CONSTRUCTION NOTES:

1. THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.
2. THE PROJECT IS TO BE MANAGED IN A MANNER THAT MEETS THE REQUIREMENTS AND INTENT OF RSA 430:53 AND CHAPTER AGR 3800 RELATIVE TO INVASIVE SPECIES.
3. LOT DISTURBANCE, OTHER THAN THAT SHOWN ON THE APPROVED PLANS, SHALL NOT COMMENCE UNTIL AFTER THE ROADWAY HAS THE BASE COURSE TO DESIGN ELEVATION AND THE ASSOCIATED DRAINAGE IS COMPLETE AND STABLE. - THIS NOTE IS APPLICABLE TO SINGLE/DUPLEX FAMILY SUBDIVISIONS, WHEN LOT DEVELOPMENT IS NOT PART OF THE PERMIT.

NOTE: THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE.

EROSION CONTROL NOTES:

1. ALL EROSION CONTROL MEASURES AND PRACTICES SHALL CONFORM TO THE "NEW HAMPSHIRE STORMWATER MANUAL VOLUME 3: EROSION AND SEDIMENT CONTROLS DURING CONSTRUCTION" PREPARED BY THE NHDES.
2. PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
3. CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL BARRIERS, INCLUDING HAY BALE, SILT FENCES, MULCH BERMS, SILT SACKS AND SILT SOCKS AS SHOWN IN THESE DRAWINGS AS THE FIRST ORDER OF WORK.
4. SILT SACK INLET PROTECTION SHALL BE INSTALLED IN ALL EXISTING AND PROPOSED CATCH BASIN INLETS WITHIN THE WORK LIMITS AND BE MAINTAINED FOR THE DURATION OF THE PROJECT.
5. PERIMETER CONTROLS INCLUDING SILT FENCES, MULCH BERM, SILT SOCK, AND/OR HAY BALE BARRIERS SHALL BE MAINTAINED FOR THE DURATION OF THE PROJECT UNTIL NON-PAVED AREAS HAVE BEEN STABILIZED.
6. THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION.
7. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.
8. INSPECT ALL INLET PROTECTION AND PERIMETER CONTROLS WEEKLY AND AFTER EACH RAIN STORM OF 0.25 INCH OR GREATER. REPAIR/MODIFY PROTECTION AS NECESSARY TO MAXIMIZE EFFICIENCY OF FILTER. REPLACE ALL FILTERS WHEN SEDIMENT IS 1/3 THE FILTER HEIGHT.
9. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1.

STABILIZATION:

1. AN AREA SHALL BE CONSIDERED STABLE WHEN ONE OF THE FOLLOWING HAS OCCURRED:
   A. BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED;
   B. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED;
   C. A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIPRAP HAS BEEN INSTALLED;
   D. EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED.
2. WINTER STABILIZATION PRACTICES:
   A. ALL PROPOSED VEGETATED AREAS THAT DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE COMPLETED IN ADVANCE OF THAW OR SPRING MELT EVENTS;
   B. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85 PERCENT VEGETATIVE GROWTH BY OCTOBER 15, OR WHICH ARE DISTURBED AFTER OCTOBER 15, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS;
   C. AFTER NOVEMBER 15, INCOMPLETE ROAD OR PARKING SURFACES, WHERE WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3, OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEARED OF ANY ACCUMULATED SNOW AFTER EACH STORM EVENT;
3. STABILIZATION SHALL BE INITIATED ON ALL LOAM STOCKPILES, AND DISTURBED AREAS, WHERE CONSTRUCTION ACTIVITY SHALL NOT OCCUR FOR MORE THAN TWENTY-ONE (21) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS PERMANENTLY OR TEMPORARILY CEASED IN THAT AREA. STABILIZATION MEASURES TO BE USED INCLUDE:
   A. TEMPORARY SEEDING;
   B. MULCHING.
4. WHEN CONSTRUCTION ACTIVITY PERMANENTLY OR TEMPORARILY CEASES WITHIN 100 FEET OF NEARBY SURFACE WATERS OR DELINEATED WETLANDS, THE AREA SHALL BE STABILIZED WITHIN SEVEN (7) DAYS OR PRIOR TO A RAIN EVENT. ONCE CONSTRUCTION ACTIVITY CEASES PERMANENTLY IN AN THESE AREAS, SILT FENCES, MULCH BERMS, HAY BALE BARRIERS AND ANY EARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED.
5. DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH DIKES, PIPING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT FENCES, MULCH BERMS, HAY BALE BARRIERS, OR SILT SOCKS. ALL STORM DRAIN BASIN INLETS SHALL BE PROVIDED WITH FLARED END SECTIONS AND TRASH RACKS. THE SITE SHALL BE STABILIZED FOR THE WINTER BY NOVEMBER 15.

DUST CONTROL:

1. THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
2. DUST CONTROL METHODS SHALL INCLUDE, BUT BE NOT LIMITED TO SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED DUMP TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING.
3. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING AREAS.

STOCKPILES:

1. LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM COLLEGE BROOK, CATCH BASINS, SWALES, AND CULVERTS.
2. ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION.
3. PERIMETER BARRIERS SHOULD BE MAINTAINED AT ALL TIMES, AND ADJUSTED AS NEEDED TO ACCOMMODATE THE DELIVERY AND REMOVAL OF MATERIALS FROM THE STOCKPILE. THE INTEGRITY OF THE BARRIER SHOULD BE INSPECTED AT THE END OF EACH WORKING DAY.
4. PROTECT ALL STOCKPILES FROM STORMWATER RUN-OFF USING TEMPORARY EROSION CONTROL MEASURES SUCH AS BERMS, SILT SOCK, OR OTHER APPROVED PRACTICE TO PREVENT MIGRATION OF MATERIAL BEYOND THE IMMEDIATE CONFINES OF THE STOCKPILES.

OFF SITE VEHICLE TRACKING:

1. THE CONTRACTOR SHALL CONSTRUCT STABILIZED CONSTRUCTION ENTRANCE(S) PRIOR TO ANY EXCAVATION ACTIVITIES.

VEGETATION:

1. TEMPORARY GRASS COVER:
   A. SEEDBED PREPARATION:
      1. APPLY FERTILIZER AT THE RATE OF 600 POUNDS PER ACRE OF 10-10-10. APPLY LIMESTONE (EQUIVALENT TO 50 PERCENT CALCIUM PLUS MAGNESIUM OXIDE) AT A RATE OF THREE (3) TONS PER ACRE;
   B. SEEDING:
      1. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE;
      2. WHERE THE SOIL HAS BEEN COMPACTED BY CONSTRUCTION OPERATIONS, LOOSEN SOIL TO A DEPTH OF TWO (2) INCHES BEFORE APPLYING FERTILIZER, LIME AND SEED;
      3. APPLY SEED UNIFORMLY BY HAND, CYCLONE SEEDER, OR HYDROSEEDER (SLURRY INCLUDING SEED AND FERTILIZER). HYDROSEEDINGS, WHICH INCLUDE MULCH, MAY BE LEFT ON SOIL SURFACE. SEEDING RATES MUST BE INCREASED 10% WHEN HYDROSEEDING;
   C. MAINTENANCE:
      1. TEMPORARY SEEDING SHALL BE PERIODICALLY INSPECTED. AT A MINIMUM, 95% OF THE SOIL SURFACE SHOULD BE COVERED BY VEGETATION. IF ANY EVIDENCE OF EROSION OR SEDIMENTATION IS APPARENT, REPAIRS SHALL BE MADE AND OTHER TEMPORARY MEASURES USED IN THE INTERIM (MULCH, FILTER BARRIERS, CHECK DAMS, ETC.).
2. VEGETATIVE PRACTICE:
   A. FOR PERMANENT MEASURES AND PLANTINGS:
      1. LIMESTONE SHALL BE THOROUGHLY INCORPORATED INTO THE LOAM LAYER AT A RATE OF THREE (3) TONS PER ACRE IN ORDER TO PROVIDE A PH VALUE OF 5.5 TO 6.5;
      2. FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAM AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 800 POUNDS PER ACRE OF 10-20-20 FERTILIZER;
      3. SOIL CONDITIONERS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY WORKED INTO THE LOAM. LOAM SHALL BE RAKED UNTIL THE SURFACE IS FINELY PULVERIZED, SMOOTH AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE REQUIRED LINES AND GRADES WITH APPROVED ROLLERS WEIGHING BETWEEN 4-1/2 POUNDS AND 5-1/2 POUNDS PER INCH OF WIDTH;
      4. SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREFERABLY BY MACHINE, BUT IF BY HAND, ONLY BY EXPERIENCED WORKMEN. IMMEDIATELY BEFORE SEEDING, THE SOIL SHALL BE LIGHTLY RAKED. ONE HALF THE SEED SHALL BE SOWN IN ONE DIRECTION AND THE OTHER HALF AT RIGHT ANGLES TO THE ORIGINAL DIRECTION. IT SHALL BE LIGHTLY RAKED INTO THE SOIL TO A DEPTH NOT OVER 1/4 INCH AND ROLLED WITH A HAND ROLLER WEIGHING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH;
      5. HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AS INDICATED ABOVE;
      6. SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, WITHOUT WASHING AWAY THE SOIL, UNTIL THE GRASS IS WELL ESTABLISHED. ANY AREAS WHICH ARE NOT SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDED, AND ALL NOXIOUS WEEDS REMOVED;
      7. THE CONTRACTOR SHALL PROTECT AND MAINTAIN THE SEEDED AREAS UNTIL ACCEPTED;
      8. A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE APPLIED AT THE INDICATED RATE:

SEED MIX	APPLICATION RATE
CREEPING RED FESCUE	60 % WEIGHT
TALL FESCUE	30 % WEIGHT
REDTOP	10% WEIGHT

IN NO CASE SHALL THE WEED CONTENT EXCEED ONE (1) PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING TAKE PLACE OVER SNOW.

3. DORMANT SEEDING (SEPTEMBER 15 TO FIRST SNOWFALL):
   A. FOLLOW PERMANENT MEASURES SLOPE, LIME, FERTILIZER AND GRADING REQUIREMENTS. APPLY SEED MIXTURE AT TWICE THE INDICATED RATE. APPLY MULCH AS INDICATED FOR PERMANENT MEASURES.

CONCRETE WASHOUT AREA:

1. CONCRETE WASHOUT AREA SHALL BE LOCATED A MINIMUM OF 50 FEET AWAY FROM COLLEGE BROOK AND A MINIMUM OF 150 FEET AWAY FROM STORM DRAINS, SWALES, AND SURFACE WATERS OR DELINEATED WETLANDS;
2. THE FOLLOWING ARE THE ONLY NON-STORMWATER DISCHARGES ALLOWED. ALL OTHER NON-STORMWATER DISCHARGES ARE PROHIBITED ON SITE:
   A. THE CONCRETE DELIVERY TRUCKS SHALL, WHENEVER POSSIBLE, USE WASHOUT FACILITIES AT THEIR OWN PLANT OR DISPATCH FACILITY;
   B. IF IT IS NECESSARY, SITE CONTRACTOR SHALL DESIGNATE SPECIFIC WASHOUT AREAS AND DESIGN FACILITIES TO HANDLE ANTICIPATED WASHOUT WATER;
   C. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE REMOVED.

ALLOWABLE NON-STORMWATER DISCHARGES:

1. FIRE-FIGHTING ACTIVITIES;
2. FIRE HYDRANT FLUSHING;
3. WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
4. WATER USED TO CONTROL DUST;
5. POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING;
6. ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
7. PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED;
8. UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION;
9. UNCONTAMINATED GROUND WATER OR SPRING WATER;
10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED;
11. UNCONTAMINATED EXCAVATION DEWATERING;
12. LANDSCAPE IRRIGATION.

WASTE DISPOSAL:

1. WASTE MATERIAL:
   A. ALL WASTE MATERIALS SHALL BE COLLECTED AND STORED IN SECURELY LIDDED RECEPTACLES. ALL TRASH AND CONSTRUCTION DEBRIS FROM THE SITE SHALL BE DEPOSITED IN A DUMPSTER;
   B. NO CONSTRUCTION WASTE MATERIALS SHALL BE BURIED ON SITE;
   C. ALL PERSONNEL SHALL BE INSTRUCTED REGARDING THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.
2. HAZARDOUS WASTE:
   A. ALL HAZARDOUS WASTE MATERIALS SHALL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OR BY THE MANUFACTURER;
   B. SITE PERSONNEL SHALL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.
3. SANITARY WASTE:
   A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

SPILL PREVENTION:

1. CONTRACTOR SHALL BE FAMILIAR WITH SPILL PREVENTION MEASURES REQUIRED BY LOCAL, STATE AND FEDERAL AGENCIES. AT A MINIMUM, CONTRACTOR SHALL FOLLOW THE BEST MANAGEMENT SPILL PREVENTION PRACTICES OUTLINED BELOW.
2. THE FOLLOWING ARE THE MATERIAL MANAGEMENT PRACTICES THAT SHALL BE USED TO REDUCE THE RISK OF SPILLS OR OTHER ACCIDENTAL EXPOSURE OF MATERIALS AND SUBSTANCES DURING CONSTRUCTION TO STORMWATER RUNOFF:
   A. GOOD HOUSEKEEPING - THE FOLLOWING GOOD HOUSEKEEPING PRACTICE SHALL BE FOLLOWED ON SITE DURING CONSTRUCTION:
      1. ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
      2. ALL MATERIALS STORED ON SITE SHALL BE STORED IN A NEAT, ORDERLY MANNER IN THEIR PROPER (ORIGINAL IF POSSIBLE) CONTAINERS AND, IF POSSIBLE, UNDER A ROOF OR OTHER ENCLOSURE;
      3. MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED;
      4. THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS;
      5. SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
      6. WHENEVER POSSIBLE ALL OF A PRODUCT SHALL BE USED UP BEFORE DISPOSING OF THE CONTAINER.
   B. HAZARDOUS PRODUCTS - THE FOLLOWING PRACTICES SHALL BE USED TO REDUCE THE RISKS ASSOCIATED WITH HAZARDOUS MATERIALS:
      1. PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE;
      2. ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
      3. SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S RECOMMENDED METHODS OF DISPOSAL.
   C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE:
      1. PETROLEUM PRODUCTS:
         - ALL ON SITE VEHICLES SHALL BE MONITORED FOR LEAKS AND RECEIVE REGULAR PREVENTIVE MAINTENANCE TO REDUCE LEAKAGE;
         - PETROLEUM PRODUCTS SHALL BE STORED IN TIGHTLY SEALED CONTAINERS WHICH ARE CLEARLY LABELED. ANY ASPHALT BASED SUBSTANCES USED ON SITE SHALL BE APPLIED ACCORDING TO THE MANUFACTURER'S RECOMMENDATIONS.
      2. FERTILIZERS:
         - FERTILIZERS USED SHALL BE APPLIED ONLY IN THE MINIMUM AMOUNTS DIRECTED BY THE SPECIFICATIONS;
         - ONCE APPLIED FERTILIZER SHALL BE WORKED INTO THE SOIL TO LIMIT EXPOSURE TO STORMWATER;
         - STORAGE SHALL BE IN A COVERED SHED OR ENCLOSED TRAILERS. THE CONTENTS OF ANY PARTIALLY USED BAGS OF FERTILIZER SHALL BE TRANSFERRED TO A SEALABLE PLASTIC BIN TO AVOID SPILLS.
      3. PAINTS:
         - ALL CONTAINERS SHALL BE TIGHTLY SEALED AND STORED WHEN NOT REQUIRED FOR USE;
         - EXCESS PAINT SHALL NOT BE DISCHARGED TO THE STORM SEWER SYSTEM;
         - EXCESS PAINT SHALL BE DISPOSED OF PROPERLY ACCORDING TO MANUFACTURER'S INSTRUCTIONS OR STATE AND LOCAL REGULATIONS.
   D. SPILL CONTROL PRACTICES - IN ADDITION TO GOOD HOUSEKEEPING AND MATERIAL MANAGEMENT PRACTICES DISCUSSED IN THE PREVIOUS SECTION, THE FOLLOWING PRACTICES SHALL BE FOLLOWED FOR SPILL PREVENTION AND CLEANUP:
      1. MANUFACTURER'S RECOMMENDED METHODS FOR SPILL CLEANUP SHALL BE CLEARLY POSTED AND SITE PERSONNEL SHALL BE MADE AWARE OF THE PROCEDURES AND THE LOCATION OF THE INFORMATION AND CLEANUP SUPPLIES;
      2. MATERIALS AND EQUIPMENT NECESSARY FOR SPILL CLEANUP SHALL BE KEPT IN THE MATERIAL STORAGE AREA ON SITE. EQUIPMENT AND MATERIALS SHALL INCLUDE BUT NOT BE LIMITED TO BROOMS, DUSTPANS, MOPS, RAGS, GLOVES, GOGGLES, KITTY LITTER, SAND, SAWDUST AND PLASTIC OR METAL TRASH CONTAINERS SPECIFICALLY FOR THIS PURPOSE;
      3. ALL SPILLS SHALL BE CLEANED UP IMMEDIATELY AFTER DISCOVERY;
      4. THE SPILL AREA SHALL BE KEPT WELL VENTILATED AND PERSONNEL SHALL WEAR APPROPRIATE PROTECTIVE CLOTHING TO PREVENT INJURY FROM CONTACT WITH A HAZARDOUS SUBSTANCE;
      5. SPILLS OF TOXIC OR HAZARDOUS MATERIAL SHALL BE REPORTED TO THE APPROPRIATE LOCAL, STATE OR FEDERAL AGENCIES AS REQUIRED;
      6. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR.
   E. VEHICLE FUELING AND MAINTENANCE PRACTICE:
      1. CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPMENT/VEHICAL FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY;
      2. CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
      3. IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED;
      4. CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA;
      5. CONTRACTOR SHALL REGULARLY INSPECT VEHICLES FOR LEAKS AND DAMAGE;
      6. CONTRACTOR SHALL USE DRIP PANS, DRIP CLOTHS, OR ABSORBENT PADS WHEN REPLACING SPENT FLUID.

EROSION CONTROL OBSERVATIONS AND MAINTENANCE PRACTICES

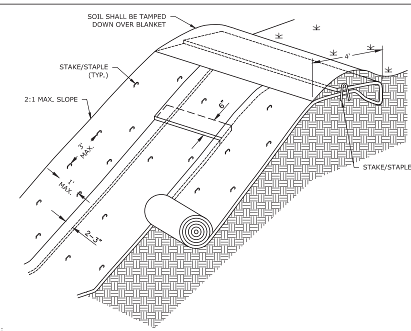
THIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE ENGINEER. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL TIMES.

THE FOLLOWING REPRESENTS THE GENERAL OBSERVATION AND REPORTING PRACTICES THAT SHALL BE FOLLOWED AS PART OF THIS PROJECT:

1. OBSERVATIONS OF THE PROJECT FOR COMPLIANCE WITH THE SWPPP SHALL BE MADE BY THE CONTRACTOR AT LEAST ONCE A WEEK OR WITHIN 24 HOURS OF A STORM 0.25 INCHES OR GREATER;
2. AN OBSERVATION REPORT SHALL BE MADE AFTER EACH OBSERVATION AND DISTRIBUTED TO THE ENGINEER, THE OWNER, AND THE CONTRACTOR;
3. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES;
4. IF A REPAIR IS NECESSARY, IT SHALL BE INITIATED WITHIN 24 HOURS OF REPORT.

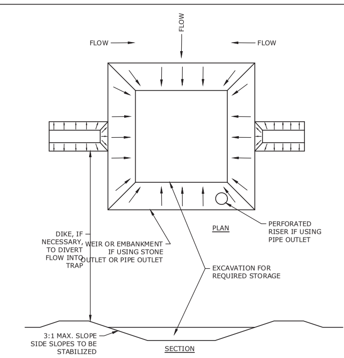
BLASTING NOTES:

1. IF MORE THAN 5000 CUBIC YARDS ARE TO BE BLASTED A BLASTING PLAN SHALL BE PROVIDED. THE BLASTING PLAN SHALL INCLUDE:
   A. LOCATION AND IDENTIFICATION OF DRINKING WATER WELLS LOCATED WITHIN 2000 FEET OF THE PROPOSED BLASTING ACTIVITIES;
   B. A GROUNDWATER QUALITY SAMPLING PROGRAM, APPROVED BY NHDES PRIOR TO INITIATING BLASTING, TO MONITOR FOR NITRATE AND NITRITE EITHER IN THE DRINKING WATER SUPPLY WELLS OR IN OTHER WELLS THAT ARE REPRESENTATIVE OF THE DRINKING WATER SUPPLY WELLS IN THE AREA.
      1. THE GROUNDWATER SAMPLING PROGRAM MUST BE IMPLEMENTED ONCE APPROVED BY NHDES.
2. THE FOLLOWING BEST MANAGEMENT PROCEDURES FOR BLASTING SHALL BE COMPLIED WITH:
   A. LOADING PRACTICES - THE FOLLOWING BLASTHOLE LOADING PRACTICES TO MINIMIZE ENVIRONMENTAL EFFECTS SHALL BE FOLLOWED:
      1. DRILLING LOGS SHALL BE MAINTAINED BY THE DRILLER AND COMMUNICATED DIRECTLY TO THE BLASTER. THE LOGS SHALL INDICATE DEPTHS AND LENGTHS OF VOIDS, CAVITIES, AND FAULT ZONES OR OTHER WEAK ZONES ENCOUNTERED AS WELL AS GROUNDWATER CONDITIONS;
      2. EXPLOSIVE PRODUCTS SHALL BE MANAGED ON-SITE SO THAT THEY ARE EITHER USED IN THE BOREHOLE, RETURNED TO THE DELIVERY VEHICLE, OR PLACED IN SECURE CONTAINERS FOR OFF-SITE DISPOSAL;
      3. SPILLAGE AROUND THE BOREHOLE SHALL EITHER BE PLACED IN THE BOREHOLE OR CLEANED UP AND RETURNED TO AN APPROPRIATE VEHICLE FOR HANDLING OR PLACEMENT IN SECURED CONTAINERS FOR OFF-SITE DISPOSAL;
      4. LOADED EXPLOSIVES SHALL BE DETONATED AS SOON AS POSSIBLE AND SHALL NOT BE LEFT IN THE BLASTHOLES OVERNIGHT, UNLESS WEATHER OR OTHER SAFETY CONCERNS REASONABLY DICTATE THAT DETONATION SHOULD BE POSTPONED;
      5. LOADING EQUIPMENT SHALL BE CLEANED IN AN AREA WHERE WASTEWATER CAN BE PROPERLY CONTAINED AND HANDLED IN A MANNER THAT PREVENTS RELEASE OF CONTAMINANTS TO THE ENVIRONMENT;
      6. EXPLOSIVES SHALL BE LOADED TO MAINTAIN GOOD CONTINUITY IN THE COLUMN LOAD TO PROMOTE COMPLETE DETONATION. INDUSTRY ACCEPTED LOADING PRACTICES FOR PRIMING, STEMMING, DECKING AND COLUMN RISE NEED TO BE ATTENDED TO.
   B. EXPLOSIVE SELECTION - THE FOLLOWING BMPS SHALL BE FOLLOWED TO REDUCE THE POTENTIAL FOR GROUNDWATER CONTAMINATION WHEN EXPLOSIVES ARE USED:
      1. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT ARE APPROPRIATE FOR SITE CONDITIONS AND SAFE BLAST EXECUTION;
      2. EXPLOSIVE PRODUCTS SHALL BE SELECTED THAT HAVE THE APPROPRIATE WATER RESISTANCE FOR THE SITE CONDITIONS PRESENT TO MINIMIZE THE POTENTIAL FOR HAZARDOUS EFFECT OF THE PRODUCT UPON GROUNDWATER
   C. PREVENTION OF MISFIRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES.
   D. MUCK PILES MANAGEMENT - MUCK PILES (THE BLASTED PIECES OF ROCK) AND ROCK PILES SHALL BE MANAGED IN A MANNER TO REDUCE THE POTENTIAL FOR CONTAMINATION BY IMPLEMENTING THE FOLLOWING MEASURES:
      1. REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE;
      2. MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER SUPPLY WELLS OR SURFACE WATER.
   E. SPILL PREVENTION MEASURES AND SPILL MITIGATION - SPILL PREVENTION AND SPILL MITIGATION MEASURES SHALL BE IMPLEMENTED TO PREVENT THE RELEASE OF FUEL AND OTHER RELATED SUBSTANCES TO THE ENVIRONMENT. THE MEASURES SHALL INCLUDE AT A MINIMUM:
      1. THE FUEL STORAGE REQUIREMENTS SHALL INCLUDE:
         - STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE;
         - SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY;
         - LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY;
         - INSPECT STORAGE AREAS WEEKLY;
         - COVER REGULATED CONTAINERS IN OUTSIDE STORAGE AREAS;
         - WHEREVER POSSIBLE, KEEP REGULATED CONTAINERS THAT ARE STORED OUTSIDE MORE THAN 50 FEET FROM SURFACE WATER AND STORM DRAINS, 75 FEET FROM PRIVATE WELLS, AND 400 FEET FROM PUBLIC WELLS;
         - SECONDARY CONTAINMENT IS REQUIRED FOR CONTAINERS CONTAINING REGULATED SUBSTANCES STORED OUTSIDE, EXCEPT FOR ON PREMISE USE HEATING FUEL TANKS, OR ABOVEGROUND OR UNDERGROUND STORAGE TANKS OTHERWISE REGULATED.
      2. THE FUEL HANDLING REQUIREMENTS SHALL INCLUDE:
         - EXCEPT WHEN IN USE, KEEP CONTAINERS CONTAINING REGULATED SUBSTANCES CLOSED AND SEALED;
         - PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;
         - HAVE SPILL CONTROL AND CONTAINMENT EQUIPMENT READILY AVAILABLE IN ALL WORK AREAS;
         - USE FUNNELS AND DRIP PANS WHEN TRANSFERRING REGULATED SUBSTANCES;
         - PERFORM TRANSFERS OF REGULATED SUBSTANCES OVER AN IMPERVIOUS SURFACE.
      3. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING WHAT TO DO IN THE EVENT OF A SPILL OF REGULATED SUBSTANCES.
      4. FUELING AND MAINTENANCE OF EXCAVATION, EARTHMOVING AND OTHER CONSTRUCTION RELATED EQUIPMENT SHALL COMPLY WITH THE REGULATIONS OF THE NEW HAMPSHIRE DEPARTMENT OF ENVIRONMENTAL SERVICES. THESE REQUIREMENTS ARE SUMMARIZED IN WD-DWGB-22-6 BEST MANAGEMENT PRACTICES FOR FUELING AND MAINTENANCE OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT.
         HTTP://DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF



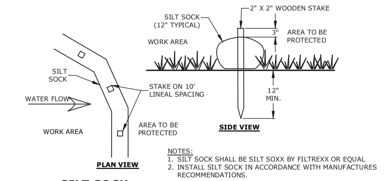
NOTES:
1. EROSION CONTROL BLANKET SHALL BE INSTALLED VERTICALLY DOWNSLOPE.
2. STAKES/STAPLES SHALL BE PLACED NO MORE THAN 3 FT. APART VERTICALLY, AND 1 FT. APART HORIZONTALLY.
3. SLOPE SURFACE SHALL BE FREE OF STICKS, ROCKS, AND OTHER OBSTRUCTIONS.
4. BLANKETS SHALL BE ROLLED OUT LOOSELY WITH 3-4 STAPLES PER SQUARE YARD TO MAINTAIN DIRECT SOIL CONTACT. DO NOT STRETCH THE BLANKETS.
5. EROSION CONTROL BLANKET SHALL BE C130 COCONUT MATTING OR APPROVED EQUAL.

TYPICAL EROSION CONTROL BLANKET
NO SCALE



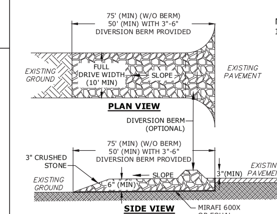
NOTES:
1. THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE.
2. THE MAXIMUM CONTRIBUTING AREA TO A SINGLE TRAP SHALL BE LESS THAN 5 ACRES.
3. THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR EACH ACRE OF DRAINAGE AREA.
4. TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP.
5. TRAP SHALL DISCHARGE TO A STABILIZED AREA.
6. TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED.
7. MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND STABILIZED.
8. SEDIMENT TRAPS MUST BE USED AS NEEDED TO CONTAIN RUNOFF UNTIL SOILS ARE STABILIZED.
9. SEDIMENT TRAP SHALL BE LOCATED A MINIMUM OF 50 FEET AWAY FROM COLLEGE BROOK.

SEDIMENT TRAP
NO SCALE



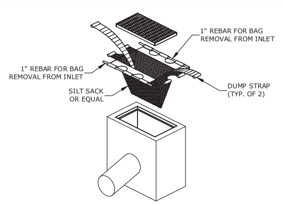
NOTES:
1. SILT SOCK SHALL BE SILT SOXX BY FILTREXX OR EQUAL
2. INSTALL SILT SOCK IN ACCORDANCE WITH MANUFACTURES RECOMMENDATIONS.

SILT SOCK
NO SCALE

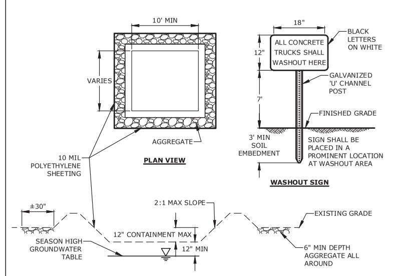


NOTES:
1. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SEDIMENT FROM THE SITE. WHEN WASHING IS REQUIRED, IT SHALL BE DONE SO RUNOFF DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS

STABILIZED CONSTRUCTION EXIT
NO SCALE



SILT SACK
NO SCALE



NOTES:
1. CONTAINMENT SHALL BE STRUCTURALLY SOUND AND LEAK FREE AND CONTAIN ALL LIQUID WASTES.
2. CONTAINMENT DEVICES MUST BE OF SUFFICIENT QUANTITY OR VOLUME TO COMPLETELY CONTAIN THE LIQUID WASTES GENERATED.
3. WASHOUT SHALL BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL.
4. WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS CONSTRUCTION PROGRESSES.
6. AT LEAST WEEKLY, REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.
7. WASHOUT AREA SHALL BE LOCATED A MINIMUM OF 50 FEET AWAY FROM COLLEGE BROOK.

CONCRETE WASHOUT AREA
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE - JOSEPH M. PERSECHINO No. 12259 LICENSED PROFESSIONAL ENGINEER
10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
8	10/8/2021	RESPONSE TO COMMENTS
7	8/18/2021	GENERAL REVISIONS
6	3/10/2021	RESPONSE TO COMMENTS
5	1/20/2021	RESPONSE TO COMMENTS
4	11/4/2020	GENERAL REVISIONS
3	8/4/2020	GENERAL REVISIONS
2	5/20/2020	RESPONSE TO COMMENTS
1	1/2/2020	GENERAL REVISIONS

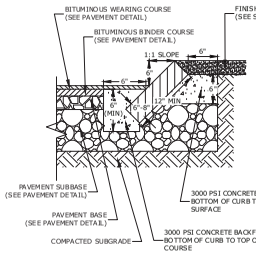
PROJECT NO: M1529-002
DATE:
FILE: M1529-002_C-DTLS.dwg
DRAWN BY: EGD
CHECKED: JMP
APPROVED: BLM

EROSION CONTROL NOTES AND DETAIL SHEET

SCALE: AS SHOWN

C-501

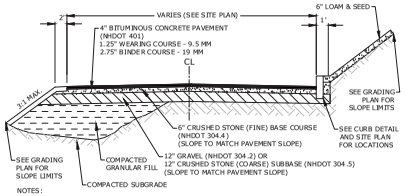
Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-4:08pm By: EDoremus
Tighe & Bond: J:\M\M1529 McCauley Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-DTLS.dwg



CURB RADIUS TABLE	
RADIUS	MAX LENGTH
<2'	USE CURVED CURB
2'-15'	USE RADIAL JOINTS
16'-28'	1'-6"
29'-41'	2'
42'-55'	3'
56'-68'	4'
69'-82'	5'
83'-96'	6'
97'-110'	7'
>110'	8'

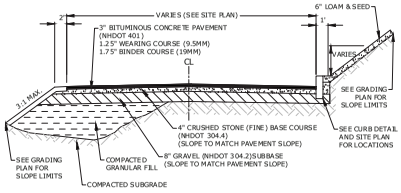
NOTES:
1. SEE SITE PLAN(S) FOR LIMITS OF VERTICAL GRANITE CURB (VGC).
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 18'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 8'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
6. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.

SLOPED GRANITE CURB
NO SCALE



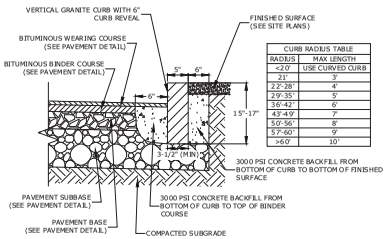
NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PAVEMENT SLOPES AND CROSS-SLOPES.
3. A TACK COAT SHALL BE PLACED ON TOP OF THE BINDER COURSE PRIOR TO PLACING THE WEARING COURSE.
4. CONTRACTOR SHALL HAVE THE OPTION OF RECLAIMING THE EXISTING PAVEMENT AND REMOVING THE MATERIAL, THEN REUSING THE RECLAIMED MATERIAL AS A PAVEMENT SUBBASE.

HEAVY DUTY PAVEMENT SECTION
NO SCALE



NOTES:
1. SEE SITE PLAN FOR PAVEMENT WIDTH AND LOCATION.
2. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR PAVEMENT SLOPES AND CROSS-SLOPES.
3. A TACK COAT SHALL BE PLACED ON TOP OF THE BINDER COURSE PRIOR TO PLACING THE WEARING COURSE.
4. CONTRACTOR SHALL HAVE THE OPTION OF RECLAIMING THE EXISTING PAVEMENT AND REMOVING THE MATERIAL, THEN REUSING THE RECLAIMED MATERIAL AS A PAVEMENT SUBBASE.

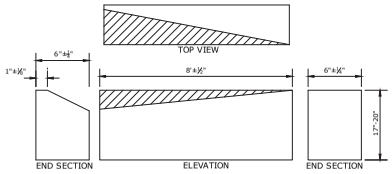
STANDARD DUTY PAVEMENT SECTION
NO SCALE



CURB RADIUS TABLE	
RADIUS	MAX LENGTH
<2'0'	USE CURVED CURB
21'	3'
22'-28'	4'
29'-35'	5'
36'-42'	6'
43'-49'	7'
50'-56'	8'
57'-60'	9'
>6'0'	10'

NOTES:
1. SEE SITE PLAN(S) FOR LIMITS OF VERTICAL GRANITE CURB (VGC).
2. ADJOINING STONES SHALL HAVE THE SAME OR APPROXIMATELY THE SAME LENGTH.
3. MINIMUM LENGTH OF STRAIGHT CURB STONES = 3'
4. MAXIMUM LENGTH OF STRAIGHT CURB STONES = 10'
5. MAXIMUM LENGTH OF STRAIGHT CURB STONES LAID ON CURVES (SEE TABLE).
6. ALL RADII 20 FEET AND SMALLER SHALL BE CONSTRUCTED USING CURVED SECTIONS.
7. JOINTS BETWEEN STONES SHALL HAVE A MAXIMUM SPACING OF 1/2" AND SHALL BE MORTARED.

VERTICAL GRANITE CURB
NO SCALE

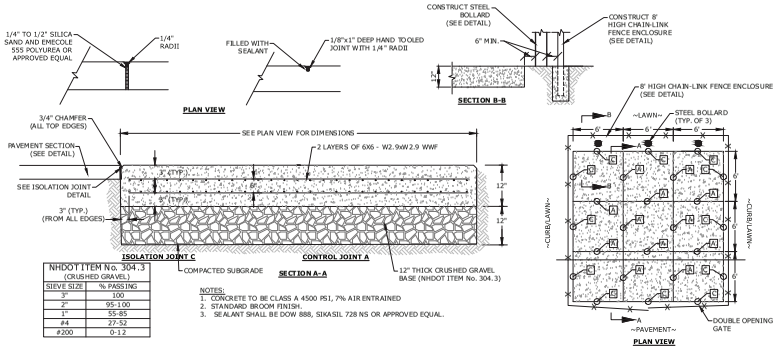


TRANSITION SECTION

GRANITE SLOPE CURB TO VERTICAL GRANITE CURB

NOTES:
1. THE INTENT OF THIS ITEM IS TO PROVIDE A SMOOTH TRANSITION BETWEEN STRAIGHT GRANITE CURB AND SLOPE CURB WITHOUT REQUIRING FIELD CHIPPING DURING INSTALLATION. THE SLOPE CURB MAY REQUIRE ADJUSTMENTS TO MEET THE TRANSITION PIECE HEIGHT. TRANSITION SLOPE CURB TO STANDARD REVEAL AS QUICKLY AS POSSIBLE TO PROVIDE FOR THIS SMOOTH TRANSITION.

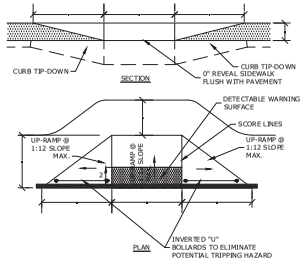
CURB TRANSITION
NO SCALE



NHDOT ITEM No. 304.3 (CRUSHED GRAVEL)	
SIEVE SIZE	% PASSING
3"	100
2"	95-100
1"	55-85
#4	27-52
#200	0-12

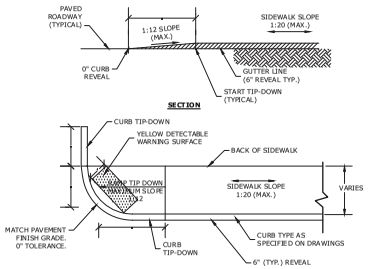
NOTES:
1. CONCRETE TO BE CLASS A 4500 PSI, 7% AIR ENTRAINED
2. STANDARD BROOM FINISH.
3. SEALANT SHALL BE DOW 888, SIKASIL 728 NS OR APPROVED EQUAL.

DUMPSTER PAD
NO SCALE



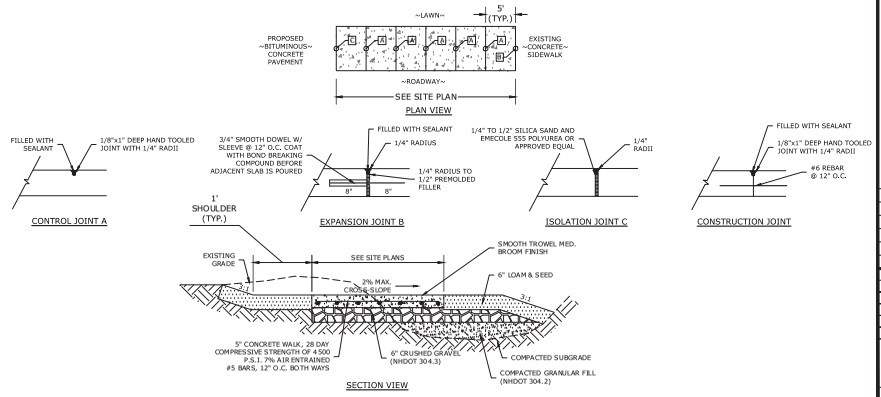
NOTES:
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS
2. PROVIDE 6" COMPACTED CRUSHED GRAVEL BASE BENEATH RAMPS
3. DETECTABLE WARNING STRIP SHALL BE ADA SOLUTIONS, INC. CAST IN PLACE RAMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

CONCRETE WHEEL CHAIR ACCESSIBLE
NO SCALE



NOTES:
1. RAMPS SHALL BE CONSTRUCTED IN ACCORDANCE WITH THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS
2. PROVIDE 6" COMPACTED CRUSHED GRAVEL BASE BENEATH RAMPS.
3. DETECTABLE WARNING STRIP SHALL BE ADA SOLUTIONS, INC. CAST IN PLACE RAMP. INSTALL PER MANUFACTURER'S RECOMMENDATIONS.

CONCRETE SIDEWALK TIP DOWN RAMP
NO SCALE



NOTES:
1. SEE SITE PLAN FOR SIDEWALK WIDTH AND LOCATIONS.

CONCRETE SIDEWALK
NO SCALE

Last Saved: 5/20/2020
Plotted On:May 20, 2020-5:54pm By: EDonnelly
Tighe & Bond: J:\M\M1529 McCarthy Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-DTLS.dwg

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE BRADLEY MEZQUITA No. 08830 LICENSED PROFESSIONAL ENGINEER 5-20-2020

STATE OF NEW HAMPSHIRE JOSEPH M. PERSICHINO No. 12938 LICENSED PROFESSIONAL ENGINEER 5/20/20

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

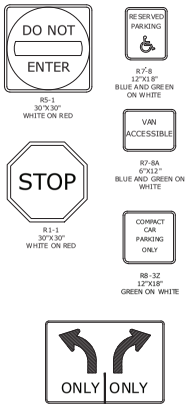
MARK	DATE	DESCRIPTION
2	5/20/2020	RESPONSE TO COMMENTS
1	1/3/2020	GENERAL REVISIONS

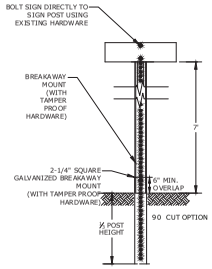
PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	M1529-002_C-DTLS.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

DETAIL SHEET

SCALE: AS SHOWN

C-502



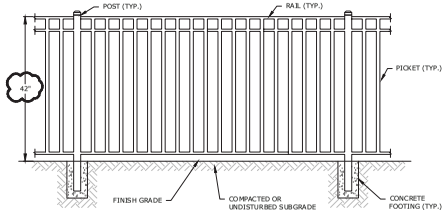


* IN LEDGE DRILL & GROUT TO A MIN OF 2'

NOTE:
ALL SIGNS TO BE CONSTRUCTED PER THE LATEST EDITION OF THE FHWA STANDARD HIGHWAY SIGNS MANUAL AND INSTALLED AS INDICATED IN THE MANUAL ON UNIFORM TRAFFIC CONTROL DEVICES, LATEST EDITION.

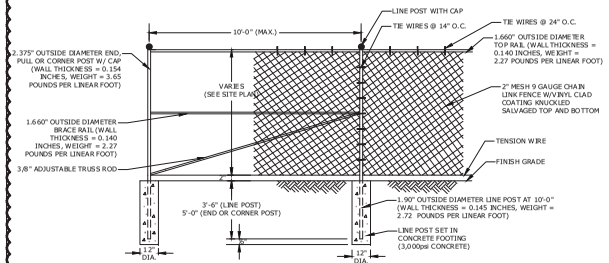
LENGTH: AS REQUIRED
WEIGHT PER LINEAR FOOT: 2.50 LBS (MIN.)
HOLES: 7/16" DIAMETER, 1" C-C FULL LENGTH
STEEL: SHALL CONFORM TO ASTM A-499 (GRADE 60) OR ASTM A-576 (GRADE 1070 - 1080)
FINISH: STREET SIGNS - GALVANIZED STEEL
ALL OTHER - SHALL BE PAINTED WITH TWO COATS OF AN APPROVED MEDIUM GREEN BAKED ON OR DRIED, PAINT OF WEATHER RESISTANT QUALITY. ALL FABRICATION SHALL BE COMPLETE BEFORE PAINTING.

SIGN LEGEND & SIGN POST
NO SCALE



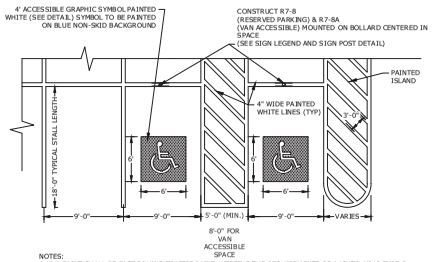
NOTES:
1. FENCE TO BE NATIONAL FENCE SYSTEMS, INC. OPAL GEMSTONE ALUMINUM STYLE FENCE OR APPROVED EQUAL, AS APPROVED BY OWNER.
2. FINISH TO BE HOT DIP GALVANIZED, PAINTED WITH ONE COAT TWO-PART EPOXY PRIMER AND FINISH COATED WITH TWO-PART POLYURETHANE. COLOR TO BE FLAT BLACK.
3. FIELD TOUCH UP ALL FASTENERS AND SCRATCHES DUE TO SHIPPING, PACKAGING, AND ERECTION USING PAINT KIT PROVIDED.
4. SEE MANUFACTURERS RECOMMENDATIONS FOR CONCRETE FOOTING DIMENSIONS AND SPECIFICATIONS.

ORNAMENTAL METAL FENCE
NO SCALE



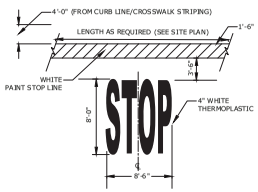
NOTES:
1. CORNER POSTS SHALL BE USED AT SHARP BREAKS IN GRADE AND CHANGES IN HORIZONTAL ALIGNMENT OF 15° OR MORE.
2. POSTS, RAILS & BRACES SHALL BE TYPE I, SCHEDULE 40 BLACK VINYL COATED PIPE.
3. FABRIC TO BE BLACK VINYL COATED.
4. TIE WIRES SHALL BE 9 GAUGE GALVANIZED STEEL WIRE FOR ATTACHMENT OF FABRIC TO LINE POSTS.
5. TIE WIRES SHALL BE 13 GAUGE GALVANIZED STEEL WIRE FOR ATTACHMENT OF FABRIC TO RAILS AND BRACES.
6. HOG RING TIES SHALL BE 12 - 1/2 GAUGE GALVANIZED STEEL WIRE FOR ATTACHMENT OF FABRIC TO TENSION WIRE.

CHAIN LINK FENCE
NO SCALE



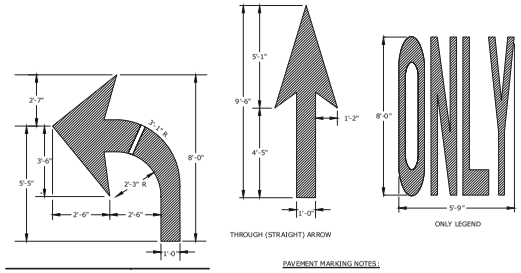
NOTES:
1. ALL PAINT SHALL BE FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.
2. SYMBOLS & PARKING STALLS SHALL CONFORM TO THE REQUIREMENTS OF THE AMERICANS WITH DISABILITIES ACT AND LOCAL AND STATE REQUIREMENTS.
3. FINISH PAVEMENT GRADES AT ALL HANDICAP ACCESSIBLE STALLS AND PAINTED ACCESS AISLES SHALL NOT EXCEED 2% IN ANY DIRECTION.

PARKING STALL/PAINTED ISLAND STRIPING
NO SCALE



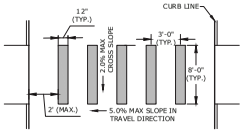
NOTE:
1. PAVEMENT MARKINGS TO BE INSTALLED IN LOCATIONS AS SHOWN ON SITE PLAN.
2. STRIPING SHALL BE CONSTRUCTED USING WHITE PAINT

STOP BAR AND LEGEND
NO SCALE



PAVEMENT MARKING NOTES:
1. ALL WORDS AND SYMBOLS SHALL BE RETROREFLECTIVE WHITE AND SHALL CONFORM TO THE LATEST VERSION OF THE MUTCD.
2. MULTI-WORD MESSAGES SHALL READ "UP"; THAT IS, THE FIRST WORD SHALL BE NEAREST THE APPROACHING DRIVER.
3. THE WORD "ONLY" SHALL NOT BE USED WITH THROUGH OR COMBINATION ARROWS, AND SHALL NOT BE USED ADJACENT TO A BROKEN LANE LINE. A WORD/SYMBOL SHALL PRECEED THE WORD "ONLY".
4. COMBINATION ARROWS MAY BE COMPRISED OF 2 SINGLE ARROWS (e.g. TURN AND THROUGH ARROWS). HOWEVER, THE SHAFTS OF THE ARROWS SHALL COINCIDE AS SHOWN.
5. PREFORMED WORDS AND SYMBOLS SHALL BE PRE-CUT BY THE MANUFACTURER.
6. WRONG-WAY ARROWS SHALL NOT BE SUBSTITUTED FOR THROUGH ARROWS.
7. ALL STOP BARS, WORDS, SYMBOLS AND ARROW SHALL BE WHITE PAINT.

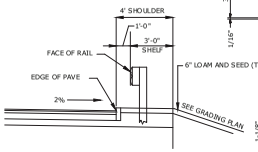
PAVEMENT MARKINGS
NO SCALE

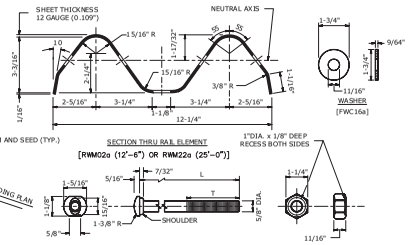


PLAN VIEW

NOTES:
1. PAVEMENT MARKINGS AND STRIPING TO BE CONSTRUCTED USING FAST DRYING TRAFFIC PAINT, MEETING THE REQUIREMENTS OF AASHTO M248-TYPE F. PAINT SHALL BE APPLIED AS SPECIFIED BY MANUFACTURER.
2. 12" INCH LINES SHALL BE APPLIED IN ONE APPLICATION, NO COMBINATION OF LINES (TWO - 6" LINES) WILL BE ACCEPTED.
2. LONGITUDINAL CROSSWALK LINES TO BE PARALLEL TO CURB LINE.
4. ALL LONGITUDINAL CROSSWALK LINES TO BE THE SAME LENGTH AND PROPERLY ALIGNED.

CROSSWALK STRIPING
NO SCALE



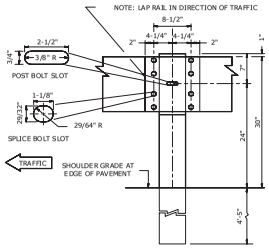


DESIGNATOR	L	T	INTENDED USE
FBB01	1 1/4"	FULL LENGTH THREAD	RAIL SPLICE BOLTS
FBB02	2"	1-3/4" MIN. THREAD LENGTH	POST BOLT (STEEL POSTS)
FBB03	9 1/2"	4" MIN. THREAD LENGTH	POST BOLT

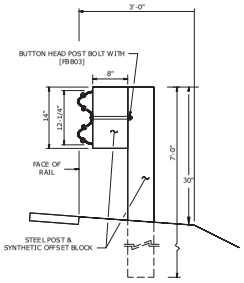
5/8" BUTTON HEAD BOLT AND RECESSED NUT

NOTES:
1. THE LENGTH OF NEED IS THE TOTAL LENGTH OF A LONGITUDINAL BARRIER NEEDED TO SHIELD AN AREA OF CONCERN. TO DETERMINE THE LENGTH OF NEED, REFER TO THE "ROADSIDE DESIGN GUIDE" - AASHTO (1989).
2. DESIGNATION PROVIDED IN BRACKETS ( ) REFERENCE STANDARD ELEMENTS DETAILED IN "A GUIDE TO STANDARDIZED HIGHWAY BARRIER RAIL HARDWARE" (1979) - AASHTO - AGC - ARTBA JOINT COOPERATIVE COMMITTEE.
3. USE 12'-6" LENGTH RAIL ELEMENT IN CURVES OF LESS THAN 300' RAIL RADIUS.
4. ALL DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
5. USE 6'-0" LONG POSTS WHEN FILL SLOPE IS 4:1 OR FLATTER AND/OR WHEN FIELD CONDITIONS DICTATE (e.g., LEDGE FILLS), AS DETERMINED BY THE ENGINEER.
6. WHEN GUARDRAIL IS INSTALLED BEHIND CURB, EITHER 6'-0" BEHIND SLOPE CURB ON A CLOSED RAMP OR AT THE BACK OF SIDEWALK WITH BARRIER CURB. THE RAIL HEIGHT SHALL BE SET FROM THE GRADE AT THE FACE OF RAIL.

STEEL POST/STEEL BEAM GUARDRAIL
NO SCALE



LINE POST ELEVATION VIEW AT BEAM SPLICE
(SHOWN WITHOUT FASTENERS)



TYPICAL SIDE VIEW
(SHOWN WITH FASTENERS)

Last Saved: 3/10/2021
Plotted On:Mar 10, 2021-1:14pm By: EDonahue
Tighe & Bond: J:\M\M1529 McCarthy Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-DTLS.dwg

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE JOSEPH M. PERSICHINO No. 12820 LICENSED PROFESSIONAL ENGINEER
3/10/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

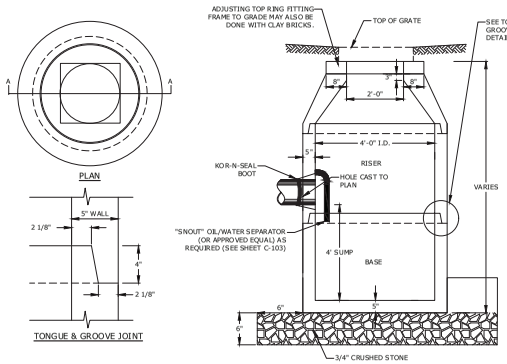
MARK	DATE	DESCRIPTION
6	3/10/2021	RESPONSE TO COMMENTS
5	1/20/2021	RESPONSE TO COMMENTS
4	11/4/2020	GENERAL REVISIONS
3	8/4/2020	GENERAL REVISIONS
2	5/20/2020	RESPONSE TO COMMENTS
1	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	M1529-002_C-DTLS.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

DETAIL SHEET

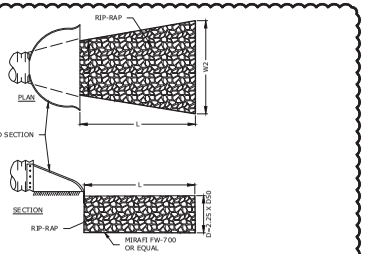
SCALE: AS SHOWN

C-503



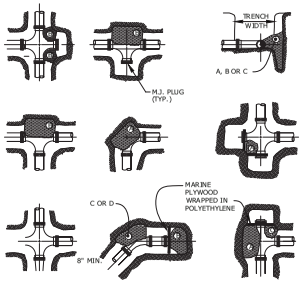
NOTES:
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ. IN. PER LINEAR FT. IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF WALL.
3. THE TONGUE AND GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQ. IN. PER LINEAR FT.
4. RISERS OF 1', 2', 3', & 4' CAN BE USED TO REACH DESIRED DEPTH.
5. THE STRUCTURES SHALL BE DESIGN FOR H20 LOADING.
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

4' DIAMETER CATCHBASIN
NO SCALE



NOTES:
1. STONE SIZE AND MAT DIMENSIONS DETAILED ON PLANS.
2. STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE AND IT SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL BE AT LEAST 2.5.
3. THE STONE SHALL BE COMPOSED OF A WELL-GRADED MIXTURE DOWN TO THE ONE-INCH SIZE PARTICLE SUCH THAT 50 PERCENT OF THE MIXTURE BY WEIGHT SHALL BE LARGER THAN THE D50 SIZE SPECIFIED. A WELL-GRADED MIXTURE IS DEFINED AS A MIXTURE COMPOSED PRIMARILY OF THE LARGER STONE SIZE BUT WITH A SUFFICIENT MIXTURE OF OTHER SIZES TO FILL THE PROGRESSIVELY SMALLER VOIDS BETWEEN THE STONES. THE DIAMETER OF THE LARGEST STONE SIZE IN SUCH A MIXTURE SHALL BE 1.5 TIMES THE D50 SIZE.

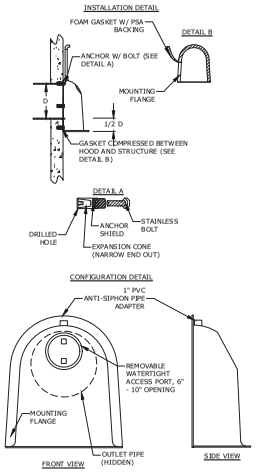
RIP-RAP APRON DETAIL
NO SCALE



SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL					
TEST PRESSURE = 200	REACTION TYPE	PIPE SIZE 4"	6"	8"	10"	12"
	A 90	0.89	2.19	3.82	11.14	17.24
	B 180	0.65	1.55	2.78	8.38	12.60
	C 45	0.48	1.19	2.12	6.02	9.32
	D 22-1/2	0.25	0.60	1.06	3.08	4.74
	E 11-1/4	0.13	0.30	0.54	1.54	2.38

NOTES:
1. FOR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKING.
5. INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE PER COMMUNITY SERVICES DEPARTMENT.

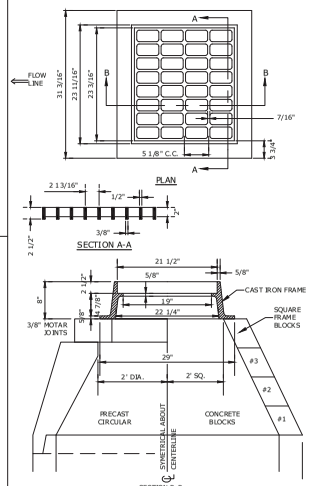
THRUST BLOCK DETAIL
NO SCALE



PIPE SIZE (I.D.)	SNOUT MODEL REQ'D
12"	18R
15"	18R
18"	24R
24"	30R
30"	54R
36"	54R
42"	72F
48"	72F
54"	96F
60"	96F
66"	96F

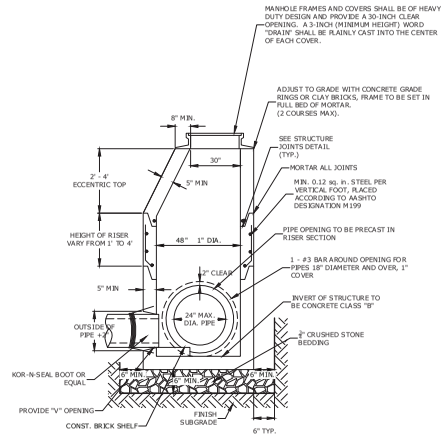
F=SQUARE STRUCTURE
R=CIRCULAR STRUCTURE

SNOUT OIL-WATER-DEBRIS SEPARATOR
NO SCALE



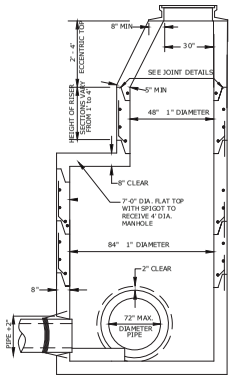
NOTE:
1. GRATE TO BE CAST IRON (NHDOT TYPE B ALTERNATE 1)
2. FRAME AND GRATE TO BE MANUFACTURED IN THE USA

CATCH BASIN FRAME & GRATE
NO SCALE



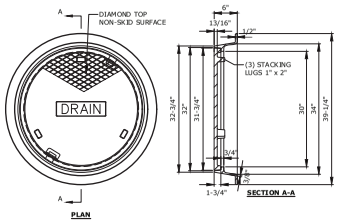
4' DIAMETER DRAIN MANHOLE
NO SCALE

NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
7. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
8. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11 ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
10. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.



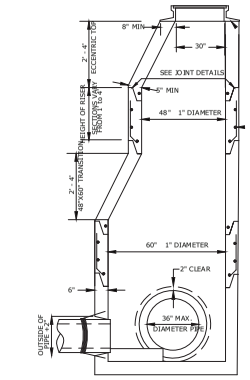
7' DIAMETER DRAIN MANHOLE
NO SCALE

NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO .12 SQUARE INCHES PER LINEAR FOOT.
4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS).
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

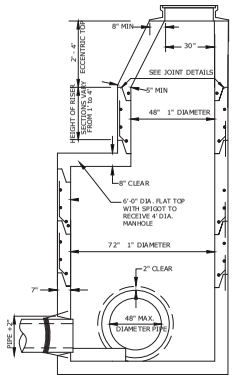


NOTES:
1. ALL DIMENSIONS ARE NOMINAL.
2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED PROVIDED:
   2.A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING.
   2.B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR OTHER MODIFICATIONS OR ACCOMMODATIONS.
   2.C. ALL OTHER PERTINENT REQUIREMENTS OF THE SPECIFICATIONS ARE MET.
3. LABEL TYPE OF MANHOLE WITH 3" HIGH LETTERS IN HE CENTER OF THE COVER.

DRAIN MANHOLE FRAME & COVER
NO SCALE



5' DIAMETER DRAIN MANHOLE
NO SCALE



6' DIAMETER DRAIN MANHOLE
NO SCALE

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HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

STATE OF NEW HAMPSHIRE JOSEPH H. PERSIGNANO No. 12820 LICENSED PROFESSIONAL ENGINEER 3/10/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
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PROJECT NO:	M1529-002
DATE:	5/23/2018
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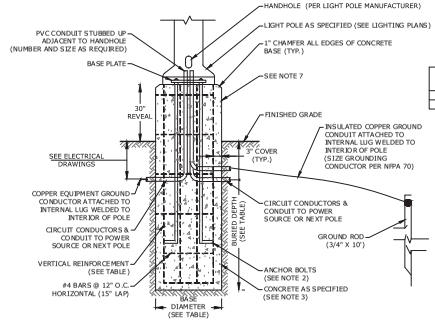
DRAWN BY:	EGD
CHECKED:	JHP
APPROVED:	BLM

DETAIL SHEET

SCALE: AS SHOWN

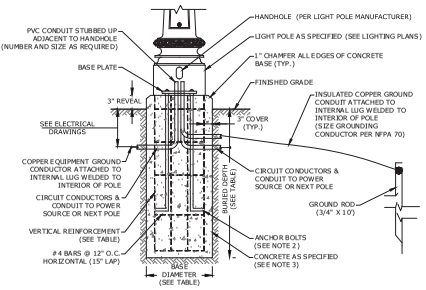
C-504



POLE HEIGHT	DEPTH (BURIED)	BASE DIAMETER	VERTICAL REINFORCEMENT	VERTICAL REINFORCEMENT LENGTH
16'>	72"	18"	6 - #6	5'-9"
16'<	72" (MIN.)	24"	6 - #8	5'-9"

NOTES:
1. ALL LIGHT POLES, LUMINARIES AND WIRE TO BE FURNISHED BY THE CONTRACTOR UNLESS OTHERWISE DIRECTED.
2. CONTRACTOR SHALL VERIFY BOLT TEMPLATE AND ANCHOR BOLT SIZE WITH POLE MANUFACTURER PRIOR TO CONSTRUCTION.
3. CONCRETE SHALL BE 4,000 PSI CLASS A, PRE-CAST CONCRETE.
4. REINFORCEMENT SHALL BE ASTM A615, GRADE 60.
5. FOR LIGHT POLES GREATER THAN 20' IN HEIGHT, THE LIGHT POLE BASE SHALL BE DESIGNED AND STAMPED BY A STRUCTURAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
6. EXTENDED LIGHT POLE BASE TO BE USED IN VEHICULAR AREAS. SEE LIGHTING PLAN.
7. PAINT LIGHT POLE BASE SAFETY YELLOW WHERE NOT PROTECTED BY CURB.

EXTENDED LIGHT POLE BASE
NO SCALE



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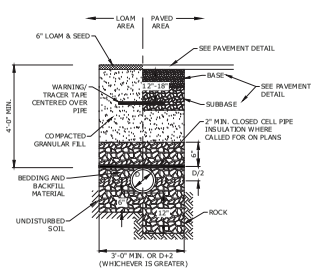
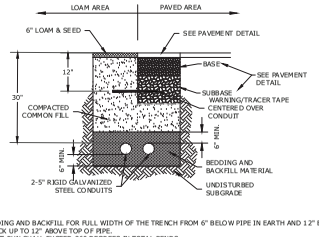
LIGHT POLE BASE
NO SCALE



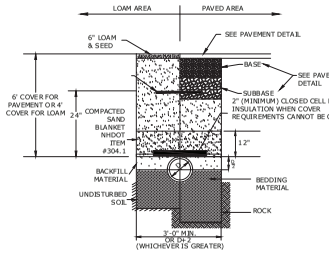
NOTES:
1. CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. ALL UTILITIES SHALL BE INSTALLED PER THE INDIVIDUAL UTILITY COMPANY STANDARDS. COORDINATE ALL INSTALLATIONS WITH INDIVIDUAL UTILITY COMPANIES AND THE TOWN OF DURHAM.

STORM DRAIN TRENCH
NO SCALE



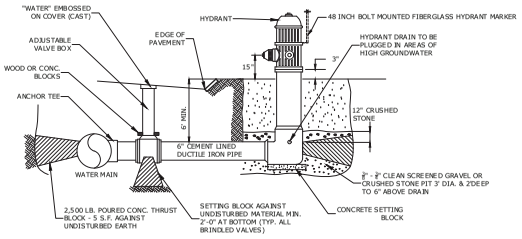
NOTES:
1. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. NO CONDUIT RUN SHALL EXCEED 360 DEGREES IN TOTAL BENDS.
3. A SUITABLE PULLING STRING, CAPABLE OF 200 POUNDS OF PULL, SHALL BE INSTALLED IN THE CONDUIT PRIOR TO INSTALLING CONDUIT. THE STRING SHALL BE BLOWN INTO THE CONDUIT AFTER THE RUN IS ASSEMBLED TO AVOID BONDING THE STRING TO THE CONDUIT.
4. ALL CONDUIT INSTALLATIONS MUST CONFORM TO THE CURRENT EDITION OF THE NATIONAL ELECTRIC SAFETY CODE, STATE AND LOCAL CODES AND ORDINANCES, AND WHERE APPLICABLE, THE NATIONAL ELECTRIC CODE.
5. CONTRACTOR SHALL PERFORM MANDREL TESTING ON ALL CONDUIT. UNCOVER ANY SECTION OF PIPE NOT PASSING THE MANDREL AND REPLACE THE BEDDING AND BACKFILL TO PREVENT EXCESSIVE DEFLECTION. REPLACE SECTIONS OF THE CONDUIT AS NECESSARY. RETEST REPAIRED CONDUIT IMMEDIATELY UPON BACKFILLING OF TRENCH UNTIL ACCEPTABLE.

TELECOMMUNICATIONS CONDUIT TRENCH
NO SCALE



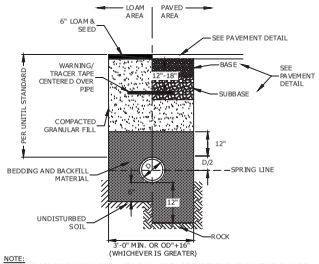
NOTE:
1. CRUSHED STONE BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN ROCK UP TO MIDPOINT OF PIPE.
2. BEDDING MATERIAL SHALL BE RUN TO THE TOP OF PIPE FOR PIPES GREATER THAN 24 INCHES IN DIAMETER.

SEWER TRENCH
NO SCALE



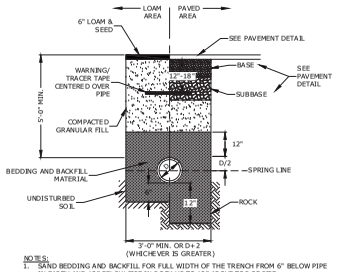
NOTES:
1. HYDRANT INSTALLATION AND OPERATION, MANUFACTURE AND MODEL, AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE IN ACCORDANCE WITH THE TOWN OF DURHAM WATER DEPARTMENT AND THE TOWN OF DURHAM FIRE DEPARTMENT
2. TIE RODS ON DI PIPE TO BE OPTIONAL. (IF USED THRUST BLOCK AT HYDRANT MAY BE OMITTED)
3. HYDRANT MARKER TO BE 3/8" FIBERGLASS RODS BY E-ZGUIDE PRODUCTS OR APPROVED EQUAL.
4. HYDRANT DRAINS ARE TO REMAIN PLUGGED REGARDLESS OF GROUNDWATER OR SOIL CONDITIONS.

FIRE HYDRANT
NO SCALE



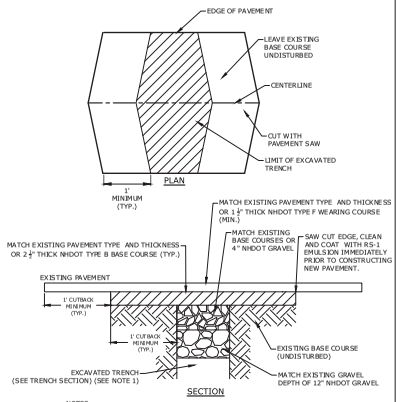
NOTE:
1. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. GAS SHALL BE INSTALLED PER UNITIL STANDARDS. COORDINATE ALL INSTALLATIONS WITH UNITIL AND THE TOWN OF DURHAM.

GAS TRENCH
NO SCALE



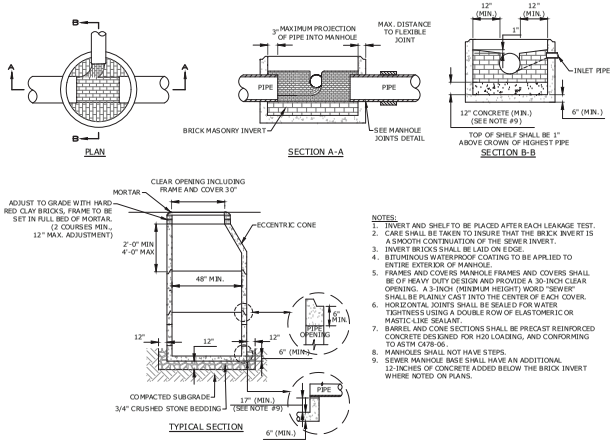
NOTES:
1. SAND BEDDING AND BACKFILL FOR FULL WIDTH OF THE TRENCH FROM 6" BELOW PIPE IN EARTH AND 12" BELOW PIPE IN ROCK UP TO 12" ABOVE TOP OF PIPE.
2. WATER MAIN SHALL BE INSTALLED PER TOWN OF DURHAM STANDARDS. COORDINATE ALL INSTALLATIONS WITH THE TOWN OF DURHAM.

WATER TRENCH
NO SCALE



NOTES:
1. CUT BACK PAVEMENT BEYOND LIMITS OF UNDERMINING (1' MIN.).

ROADWAY TRENCH PATCH
NO SCALE



NOTES:
1. INVERT AND SHELF TO BE PLACED AFTER EACH LEAKAGE TEST.
2. CARE SHALL BE TAKEN TO INSURE THAT THE BRICK INVERT IS A SMOOTH CONTINUATION OF THE SEWER INVERT.
3. INVERT BRICKS SHALL BE LAID ON EDGE.
4. BITUMINOUS WATERPROOF COATING TO BE APPLIED TO ENTIRE EXTERIOR OF MANHOLE.
5. FRAMES AND COVERS MANHOLE FRAMES AND COVERS SHALL BE OF HEAVY DUTY DESIGN AND PROVIDE A 30-INCH CLEAR OPENING. A 3-INCH (MINIMUM HEIGHT) WORD "SEWER" SHALL BE PLAINLY CAST INTO THE CENTER OF EACH COVER.
6. HORIZONTAL JOINTS SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.
7. BARREL AND CONE SECTIONS SHALL BE PRECAST REINFORCED CONCRETE DESIGNED FOR H20 LOADING, AND CONFORMING TO ASTM C478-06.
8. MANHOLES SHALL NOT HAVE STEPS.
9. SEWER MANHOLE BASE SHALL HAVE AN ADDITIONAL 12-INCHES OF CONCRETE ADDED BELOW THE BRICK INVERT WHERE NOTED ON PLANS.

SEWER MANHOLE
NO SCALE

Last Saved: 12/31/2019
Plotted On:Jan 02, 2020-10:36am By: EDonovius
Tighe & Bond:J:\M\M1529 McCarthy Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-DTLS.dwg

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE JOSEPH H. PERCHIKO No. 13670 LICENSED PROFESSIONAL ENGINEER
1/2/2020

STATE OF NEW HAMPSHIRE BRADLEE MILZOUITA No. 08830 LICENSED PROFESSIONAL ENGINEER
1/3/20

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

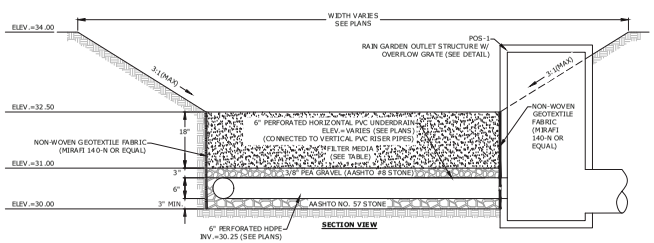
MARK	DATE	DESCRIPTION
	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	M1529-002_C-DTLS.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

DETAIL SHEET

SCALE: AS SHOWN

C-505



SECTION VIEW

RAIN GARDEN #1

FILTER MEDIA COMPOSITION:

COMPONENT MATERIAL	PERCENT OF MIXTURE BY VOLUME	GRADATION OF MATERIAL SIEVE NO.	PERCENT PASSING
ASTM C-33 CONCRETE SAND	50-55	SEE NOTE #5	
LOAMY SAND TOPSOIL	20-30	200	15-25
MODERATELY FINE SHREDDED BARK OR WOOD FIBER MULCH	20-30	200	5 MAX.

NOTES:
1. BARK MULCH SHALL BE AGED A MINIMUM OF 12 MONTHS AND SHALL NOT FLOAT.
2. RAIN GARDENS SHALL NOT BE PLACED INTO SERVICE UNTIL THE PRACTICE HAS BEEN PLANTED AND ITS CONTRIBUTING AREAS HAVE BEEN FULLY STABILIZED.
3. DO NOT TRAFFIC EXPOSED SOIL SURFACES WITH CONSTRUCTION EQUIPMENT. CONTRACTOR SHALL KEEP ALL EXCAVATION EQUIPMENT OUTSIDE OF THE LIMIT OF THE RAIN GARDEN.
4. SEE GRADING, DRAINAGE & EROSION CONTROL PLAN FOR LOCATIONS, LAYOUTS, AND ELEVATIONS.
5. THE SAND PORTION OF THE FILTER MEDIA SHALL MEET THE FOLLOWING GRADATION (ASTM C-33):

SIEVE SIZE	PERCENT PASSING
3/8"	100
#4	95-100
#8	80-100
#16	50-85
#30	25-60
#50	5-30
#100	0-10

AASHTO #8 STONE
(#8 to 3/8")

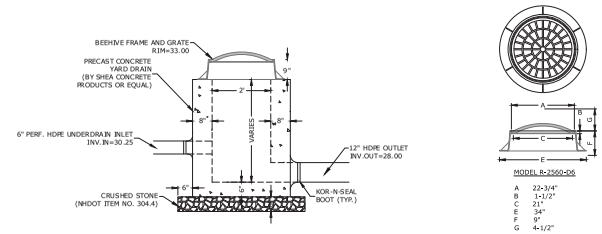
SIEVE SIZE	% PASSING
1/2"	100
3/8"	85-100
#4	10-30
#8	0-10
#16	0-5

AASHTO #57 STONE
(#4 to 1")

SIEVE SIZE	% PASSING
1-1/2"	100
1"	95-100
1/2"	25-60
#4	0-10
#8	0-5

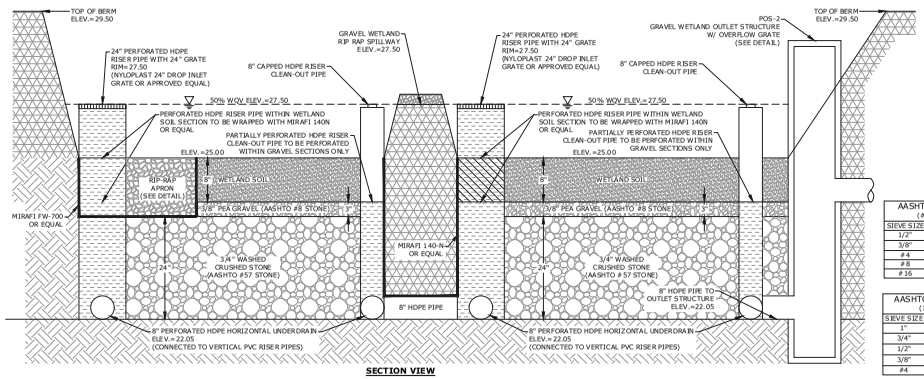
RAIN GARDEN
NO SCALE

1
-



NOTES:
1. CONCRETE SHALL BE 4,000 PSI (TYPE II CEMENT)
2. SEE SITE, GRADING, DRAINAGE, EROSION CONTROL & UTILITIES PLAN FOR LOCATIONS.
3. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
4. ALL JOINTS ON THE STRUCTURE AND PIPING SHALL BE WATERTIGHT.
5. FRAME AND GRATE SHALL BE NEENAH FOUNDRIES MODEL R-2560-D8 OR EQUAL.

PROPOSED OUTLET STRUCTURE (POS1)
NO SCALE



SECTION VIEW

AASHTO #8 STONE
(#8 to 3/8")

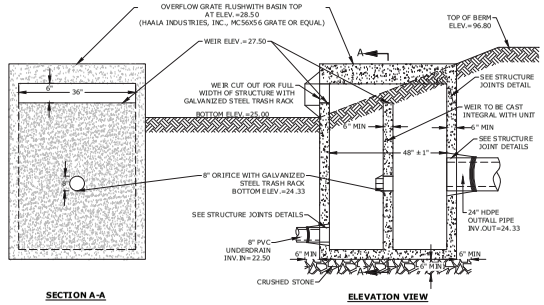
SIEVE SIZE	% PASSING
1/2"	100
3/8"	85-100
#4	10-30
#8	0-10
#16	0-5

AASHTO #67 STONE
(1" to #4)

SIEVE SIZE	% PASSING
1"	100
3/4"	90-100
1/2"	20-55
3/8"	0-15
#4	0-5

NOTES:
1. WETLAND SOIL SHALL BE A SANDY CLAY LOAM WITH A HYDRAULIC CONDUCTIVITY OF 0.1-0.01 FT/DAY. ORGANIC CONTENT SHALL BE GREATER THAN 15% BY VOLUME. CLAY CONTENT SHALL BE LESS THAN 15% BY VOLUME.
2. PERFORATED HDPE RISERS SHALL HAVE VERTICAL SLOTS CUT INTO HDPE RISERS ABOVE GRADE MEASURING 3"x1/8".

GRAVEL WETLAND
NO SCALE



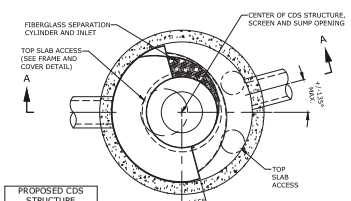
SECTION A-A

ELEVATION VIEW

NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE (TYPE II CEMENT).
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER OF THE THIRD WALL.
3. THE TONGUE OR THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. ALL JOINTS ON THE STRUCTURE AND PIPING SHALL BE WATERTIGHT.

PROPOSED OUTLET STRUCTURE (POS2)
NO SCALE

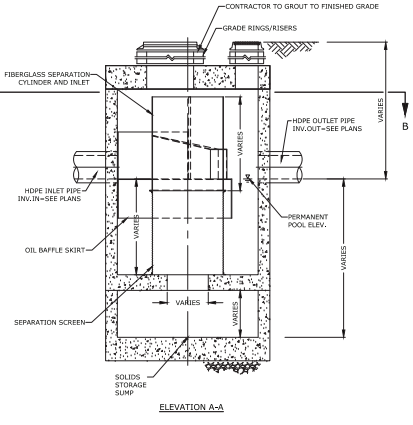
FRAME AND COVER
(DIAMETER VARIES)
NO SCALE



PLAN VIEW B-B

PROPOSED CDS
STRUCTURE
SCHEDULE

STRUCTURE ID#	CDS TYPE
PCDS-1	CDS 3020-6
PCDS-2	CDS 2015-4

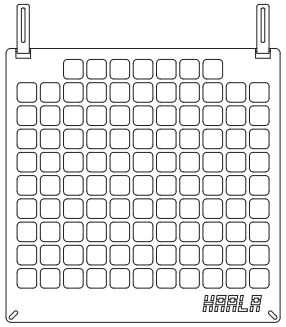


ELEVATION A-A

GENERAL NOTES:
1. CONTECH TO PROVIDE FINAL DIMENSIONS BASED ON APPROVED FLOWS AND ALL MATERIALS UNLESS NOTED OTHERWISE.
2. CDS WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING.
3. STRUCTURE SHALL MEET AASHTO HS20 AND CASTINGS SHALL MEET HS20 (AASHTO M 306) LOAD RATING, ASSUMING GROUNDWATER ELEVATION AT, OR BELOW, THE OUTLET PIPE INVERT ELEVATION. ENGINEER OF RECORD TO CONFIRM ACTUAL GROUNDWATER ELEVATION.
4. PVC HYDRAULIC SHEAR PLATE IS PLACED ON SHELF AT BOTTOM OF SCREEN CYLINDER. REMOVE AND REPLACE AS NECESSARY DURING MAINTENANCE CLEANING.

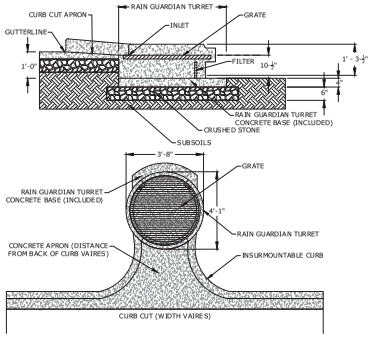
INSTALLATION NOTES:
A. ANY SUB-BASE, BACKFILL DEPTH, AND/OR ANTI-FLOTATION PROVISIONS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF RECORD.
B. CONTRACTOR TO PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE CDS MANHOLE STRUCTURE (LIFTING CLUTCHES PROVIDED).
C. CONTRACTOR TO ADD JOINT SEALANT BETWEEN ALL STRUCTURE SECTIONS, AND ASSEMBLE STRUCTURE.
D. CONTRACTOR TO PROVIDE, INSTALL, AND GROUT PIPES. MATCH PIPE INVERTS WITH ELEVATIONS SHOWN ON GRADING PLAN.
E. CONTRACTOR TO TAKE APPROPRIATE MEASURES TO ASSURE UNIT IS WATER TIGHT, HOLDING WATER TO FLOWLINE INVERT MINIMUM. IT IS SUGGESTED THAT ALL JOINTS BELOW PIPE INVERTS ARE GROUTED.

PROPOSED CDS UNIT
NO SCALE



NOTES:
1. GRATE TO BE CONSTRUCTED OF 3/8" THICK GALVANIZED PLATE.
2. GRATE TO BE SECURED TO CONCRETE STRUCTURE.

HAALA MICHIE CORP. TOP GRATE (56X56)
NO SCALE



NOTES:
1. RAINGUARDIAN OR APPROVED EQUAL.
2. CURB INLET SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURE RECOMMENDATION.

RAIN GUARDIAN TURRET
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

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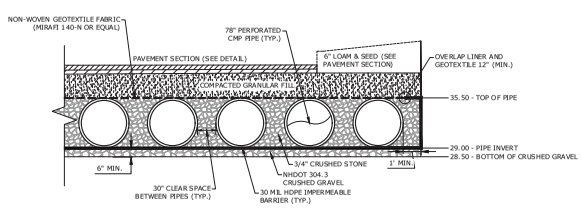
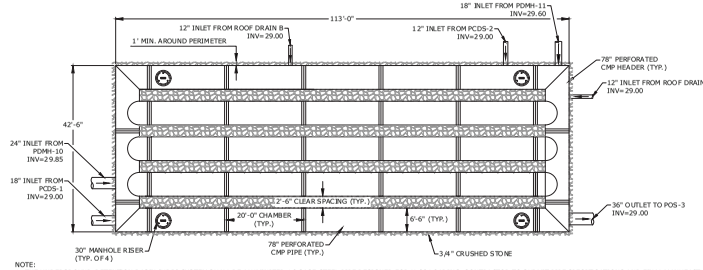
C-506

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-3:37pm By: EDonovan
Tighe & Bond: J:\M\M1529 McCarthy Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Plans\AutoCAD\Sheet\M1529-002_C-DTLS.dwg



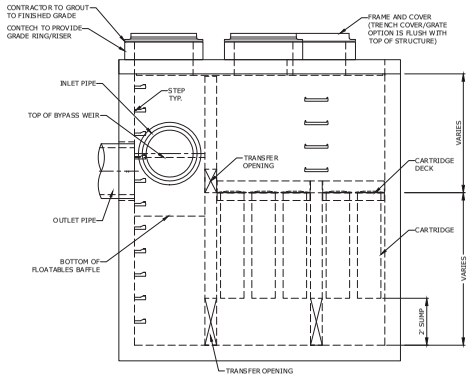
NOTE:
1. THE UNDERGROUND DETENTION BASIN (UDB) SYSTEM SHALL BE ALUMINIZED 16 GAGE STEEL PIPE DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT PIPE SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR REVIEW AND APPROVAL.
2. THE CONTRACTOR SHALL SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
3. THE DESIGN ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED PER THE PROPOSED DESIGN PLAN.
4. THE DESIGN SHALL REQUIRE INSPECTION PORTS/COVERS SUCH THAT SYSTEM CAN BE CLEANED BY VACUUM TRUCK WITH A MINIMUM OF ONE IN EACH CORNER.
5. APPROXIMATE LENGTH OF 60" PERFORATED CMP = 600 LF
6. APPROXIMATE LENGTH OF 60" PERFORATED CMP HEADER = 107 LF

UNDERGROUND DETENTION BASIN
NO SCALE



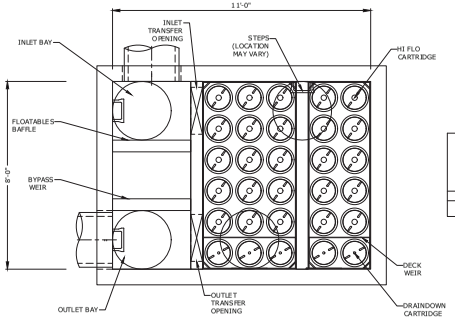
NOTE:
1. THE UNDERGROUND DETENTION BASIN (UDB) SYSTEM SHALL BE ALUMINIZED 16 GAGE STEEL PIPE DESIGNED FOR H-20 LOADING. CONTRACTOR TO SUBMIT PIPE SPECIFICATIONS AND FINAL MANUFACTURES DESIGN TO ENGINEER FOR REVIEW AND APPROVAL.
2. THE CONTRACTOR SHALL SUBMIT PLANS STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE.
3. THE DESIGN ENGINEER SHALL PROVIDE SUFFICIENT INSPECTION TO CERTIFY THAT THE SYSTEM HAS BEEN INSTALLED PER THE PROPOSED DESIGN PLAN.
4. THE DESIGN SHALL REQUIRE INSPECTION PORTS/COVERS SUCH THAT SYSTEM CAN BE CLEANED BY VACUUM TRUCK WITH A MINIMUM OF ONE IN EACH CORNER.
5. APPROXIMATE LENGTH OF 78" PERFORATED CMP = 500 LF
6. APPROXIMATE LENGTH OF 78" PERFORATED CMP HEADER = 85 LF

UNDERGROUND DETENTION BASIN PLAN VIEW
NO SCALE



ELEVATION VIEW

FRAME AND COVER (DIAMETER VARIES)
NO SCALE



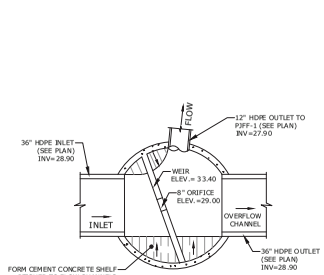
PLAN VIEW
(TOP SLAB NOT SHOWN FOR CLARITY)
NO SCALE

JELLYFISH FILTER STRUCTURE SCHEDULE
JFF TYPE
JFPD0811-18-4

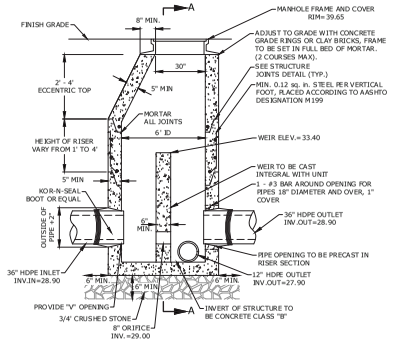
GENERAL NOTES:
1. CONTECH TO PROVIDE FINAL DIMENSIONS BASED ON APPROVED FLOWS AND ALL MATERIALS UNLESS NOTED OTHERWISE.
2. JELLYFISH WATER QUALITY STRUCTURE SHALL BE IN ACCORDANCE WITH ALL DESIGN DATA AND INFORMATION CONTAINED IN THIS DRAWING. CONTRACTOR TO CONFIRM STRUCTURE MEETS REQUIREMENTS OF PROJECT.
3. STRUCTURE SHALL MEET AASHTO HS-20 LOADING REQUIREMENTS. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.
4. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

INSTALLATION NOTES
A. CONTRACTOR SHALL PROVIDE EQUIPMENT WITH SUFFICIENT LIFTING AND REACH CAPACITY TO LIFT AND SET THE STRUCTURE (LIFTING CLUTCHES PROVIDED)
B. CONTRACTOR SHALL INSTALL AND LEVEL THE STRUCTURE, SEALING THE JOINTS, LINE ENTRY AND EXIT POINTS (NON-SHRINK GROUT WITH APPROVED WATERSTOP OR FLEXIBLE BOOT)
C. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.
D. CARTRIDGE INSTALLATION, BY CONTECH, SHALL OCCUR ONLY AFTER SITE HAS BEEN STABILIZED AND THE JELLYFISH UNIT IS CLEAN AND FREE OF DEBRIS. CONTACT CONTECH TO COORDINATE CARTRIDGE INSTALLATION WITH SITE STABILIZATION AT (866) 740-3318.

RECTANGULAR JELLYFISH FILTER UNIT
NO SCALE



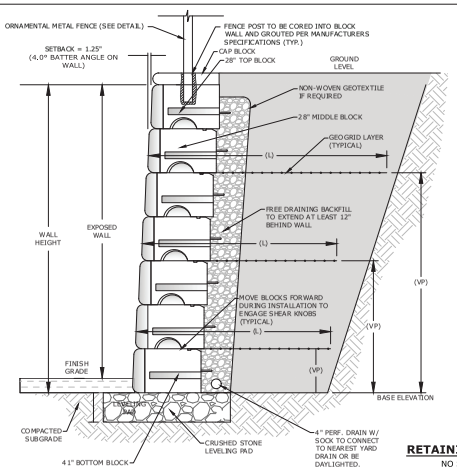
PLAN VIEW



ELEVATION VIEW

NOTES:
1. ALL SECTIONS SHALL BE 4,000 PSI CONCRETE.
2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQUARE INCHES PER LINEAR FOOT IN ALL SECTIONS AND SHALL BE PLACED IN THE CENTER THIRD OF THE WALL.
3. THE TONGUE AND THE GROOVE OF THE JOINT SHALL CONTAIN ONE LINE OF CIRCUMFERENTIAL REINFORCEMENT EQUAL TO 0.12 SQUARE INCHES PER LINEAR FOOT.
4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.
5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS)
6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.
7. PIPE ELEVATIONS SHOWN ON PLANS SHALL BE FIELD VERIFIED PRIOR TO PRECASTING.
8. OUTSIDE EDGES OF PIPES SHALL PROJECT NO MORE THAN 3" BEYOND INSIDE WALL OF STRUCTURE.
9. PRECAST SECTIONS SHALL HAVE A TONGUE AND GROOVE JOINT 4" HIGH AT AN 11° ANGLE CENTERED IN THE WIDTH OF THE WALL AND SHALL BE ASSEMBLED USING AN APPROVED FLEXIBLE SEALANT IN JOINTS.
10. ALL STRUCTURES WITH MULTIPLE PIPES SHALL HAVE A MINIMUM OF 12" OF INSIDE SURFACE BETWEEN HOLES, NO MORE THAN 75% OF A HORIZONTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.
11. SEE DRAINAGE MANHOLE DETAIL FOR MORE INFORMATION (CORE HOLE SIZE, MINIMUM FLOOR AND WALL THICKNESS, ETC.)

UNDERGROUND DETENTION BASIN OUTLET STRUCTURE (POS3)
NO SCALE



NOTES:
1. RETAINING WALL SHALL BE REDI ROCK LEDGESTONE, OR APPROVED EQUAL.
2. THE CONTRACTOR SHALL SUBMIT DESIGN AND CALCULATIONS FOR THE RETAINING WALL THAT SHALL BE STAMPED BY A PROFESSIONAL ENGINEER LICENSED IN THE STATE OF NEW HAMPSHIRE. CALCULATIONS SHALL INCLUDE A GLOBAL STABILITY ANALYSIS.
3. MINIMUM DESIGN PARAMETERS:
   - GLOBAL STABILITY FACTOR OF SAFETY = 1.3
   - OVERTURNING FACTOR OF SAFETY = 2.0
   - SLIDING FACTOR OF SAFETY = 1.5
   - GEOGRID PULLOUT FACTOR OF SAFETY = 1.5
   - SEISMIC FACTOR OF SAFETY = 1.1
4. WALL DESIGNS SHALL CONSIDER EFFECTS OF SLOPE, TRAFFIC LOADS, BUILDING LOADS, GUARDRAIL AND/OR FENCING AS REQUIRED.
5. WALL DESIGN ENGINEER SHALL CONSIDER HEIGHT AND SPECIFY SAFETY RAIL WHERE REQUIRED
6. ALL INSTALLATION PROCEDURES SHALL BE IN ACCORDANCE WITH THE MANUFACTURER'S INSTALLATION MANUAL AND THE WALL DESIGN ENGINEER'S DESIGN PLANS AND SPECIFICATIONS.
7. THE WALL DESIGN ENGINEER SHALL COMPLETE SUFFICIENT INSPECTIONS DURING CONSTRUCTION TO CERTIFY WORK IS COMPLETED IN ACCORDANCE WITH DESIGN.
8. CONTRACTOR SHALL SUBMIT AS-BUILT DRAWINGS OF WALL WITH WALL DESIGNER'S CERTIFICATION TO OWNER.
9. CONTRACTOR SHALL DIRECT SURFACE RUNOFF AWAY FROM THE WALL DURING CONSTRUCTION.
10. ANY SURFACE DRAINAGE FEATURES, FINISH GRADING, PAVEMENT OR OTHER SURFACE TREATMENT SHALL BE INSTALLED IN THE AREA OF THE WALL IMMEDIATELY AFTER THE WALL IS COMPLETE OR OTHER MEASURES SHALL BE TAKEN TO PROTECT THE WALL FROM RUNOFF.
11. CONTRACTOR SHALL SUPPLY SAMPLE TO THE OWNER FOR APPROVAL PRIOR TO WALL CONSTRUCTION.

(VP) = VERTICAL PLACEMENT OF GEOGRID LAYERS. MEASUREMENTS ARE FROM THE BASE ELEVATION.

(L) = LENGTH OF GEOGRID. MEASUREMENTS ARE FROM THE FACE OF THE BLOCK.

RETAINING WALL
NO SCALE

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Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

STATE OF NEW HAMPSHIRE
JOSEPH H. PERSICHINO
No. 15393
LICENSED
PROFESSIONAL ENGINEER
10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
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New Hampshire 03824

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SCALE: AS SHOWN

C-507

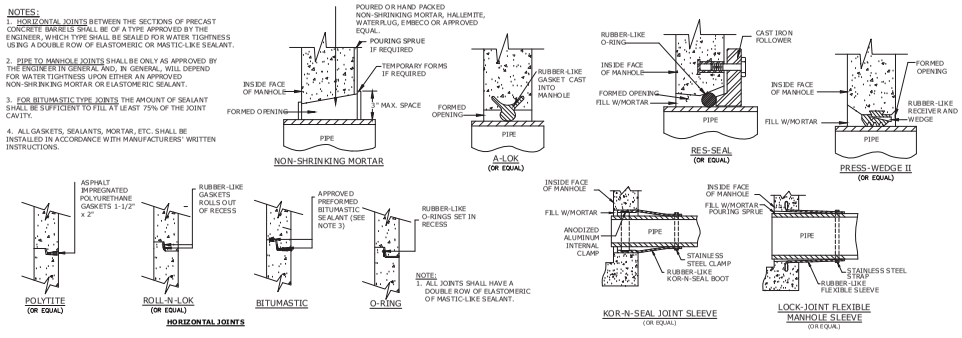
NOTES:

1. HORIZONTAL JOINTS BETWEEN THE SECTIONS OF PRECAST CONCRETE BARRELS SHALL BE OF A TYPE APPROVED BY THE ENGINEER, WHICH TYPE SHALL BE SEALED FOR WATER TIGHTNESS USING A DOUBLE ROW OF ELASTOMERIC OR MASTIC-LIKE SEALANT.

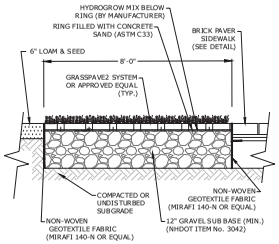
2. PIPE TO MANHOLE JOINTS SHALL BE ONLY AS APPROVED BY THE ENGINEER IN GENERAL AND, IN GENERAL, WILL DEPEND FOR WATER TIGHTNESS UPON EITHER AN APPROVED NON-SHRINKING MORTAR OR ELASTOMERIC SEALANT.

3. FOR BITUMASTIC TYPE JOINTS THE AMOUNT OF SEALANT SHALL BE SUFFICIENT TO FILL AT LEAST 75% OF THE JOINT CAVITY.

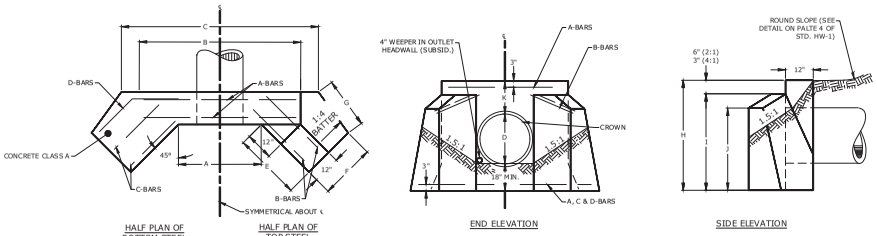
4. ALL GASKETS, SEALANTS, MORTAR, ETC. SHALL BE INSTALLED IN ACCORDANCE WITH MANUFACTURERS' WRITTEN INSTRUCTIONS.



SEWER MANHOLE JOINTS
NO SCALE



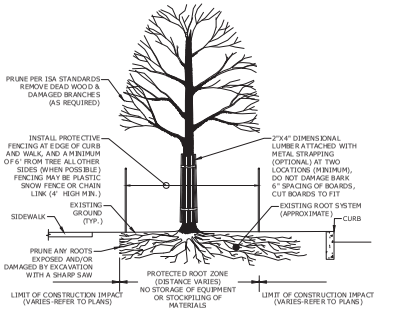
GRASS PAVER SECTION
NO SCALE



DIAMETER (INCHES)	QUANTITIES PER HEADER			DIMENSIONS										REINFORCING STEEL						
	CONC. (CY. YD)	STEEL (LB)	EXC. FOR 1' DEPTH (CU. YD.)	A	B	C	E	F	G	H	I	J	K	SIZE	LENGTH				D BARS a b	
															A BARS	B BARS	C BARS	D BARS	a	b
36	3.24	47	2.12	3'-8"	6'-6"	8'-5"	4'-2"	2'-1"	3'-3"	6'-0"	5'-6"	4'-4"	1'-6"	#4	6'-2"	4'-3"	4'-1"	5'-10"	2'-8"	3'-2"

NOTE:
ALL LIKE BAR IN EACH HEADWALL ARE THE SAME SIZE. EACH STD. HEADER HAS 4 A, B & C-BARS, AND 2 D-BARS

CONCRETE FLARED END SECTION
NO SCALE



NOTE:
1. CONTRACTOR SHALL WALK THE PERIMETER OF THE SITE WITH OWNER PRIOR TO CONSTRUCTION TO IDENTIFY TREES TO BE PROTECTED DURING CONSTRUCTION.

TREE PROTECTION FOR EXISTING TREE
NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE BRADLEY MEZQUITA No. 08830 LICENSED PROFESSIONAL ENGINEER
5/20/2020

STATE OF NEW HAMPSHIRE JOSEPH M. PERSICHINO No. 18588 LICENSED PROFESSIONAL ENGINEER
5/20/20

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
2	5/20/2020	RESPONSE TO COMMENTS
1	1/3/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	M1529-002_C-DTLS.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

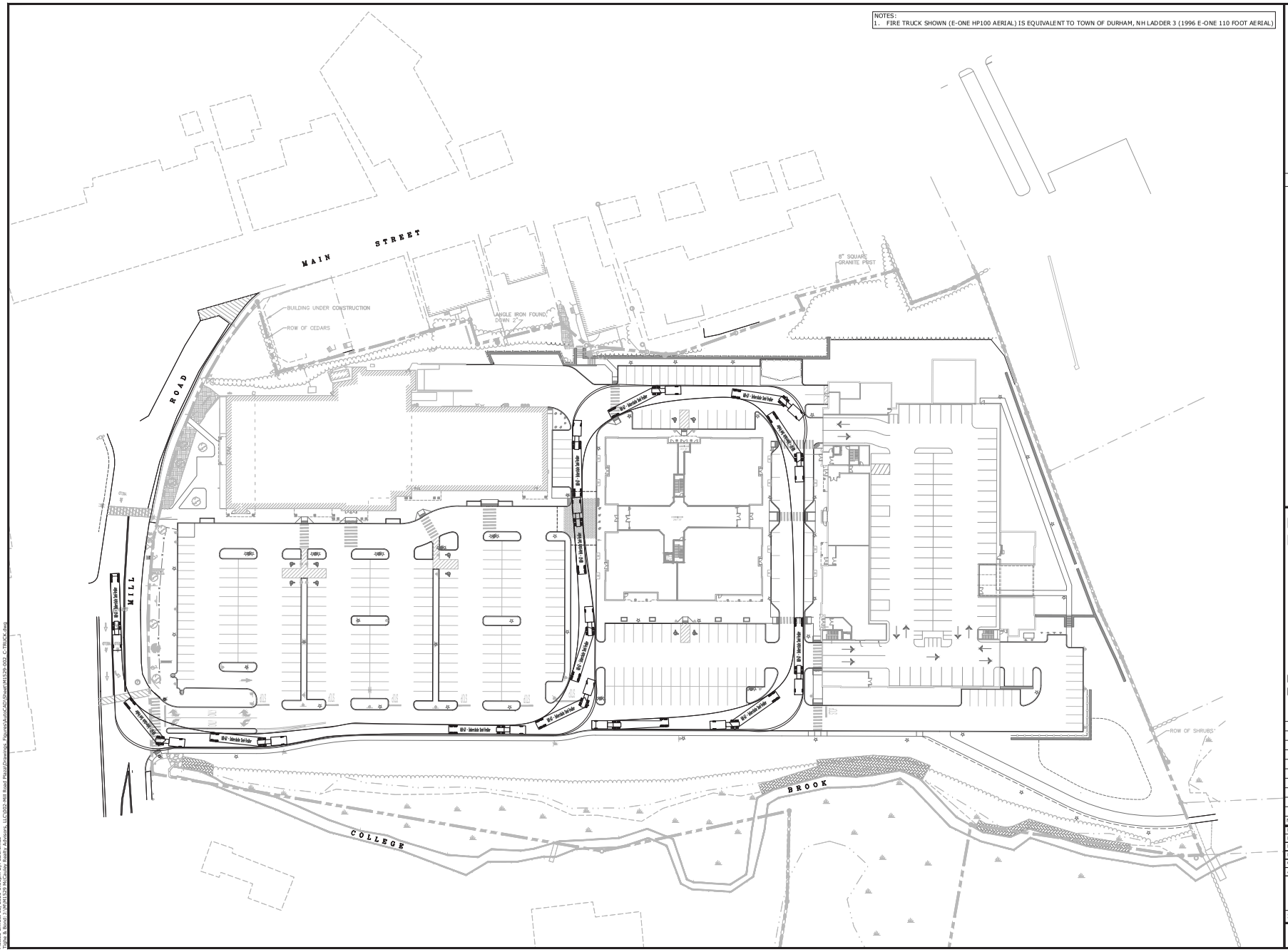
DETAIL SHEET

SCALE: AS SHOWN

C-508

Last Saved: 5/20/2020
Plotted On:May 20, 2020-5:14pm By: EDominus
Tighe & Bond: J:\M\M1529 McCauley Realty Advisors, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-DTLS.dwg

NOTES:
1. FIRE TRUCK SHOWN (E-ONE HP100 AERIAL) IS EQUIVALENT TO TOWN OF DURHAM, NH LADDER 3 (1996 E-ONE 110 FOOT AERIAL)



Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

STATE OF NEW HAMPSHIRE
JOSEPH M. PEROCCHIO
No. 16280
LICENSED
PROFESSIONAL ENGINEER
10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET
0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
8	10/8/2021	RESPONSE TO COMMENTS
7	8/18/2021	GENERAL REVISIONS
6	3/10/2021	RESPONSE TO COMMENTS
5	1/20/2021	RESPONSE TO COMMENTS
4	11/4/2020	GENERAL REVISIONS
3	8/4/2020	GENERAL REVISIONS
2	5/20/2020	RESPONSE TO COMMENTS
1	1/2/2020	GENERAL REVISIONS

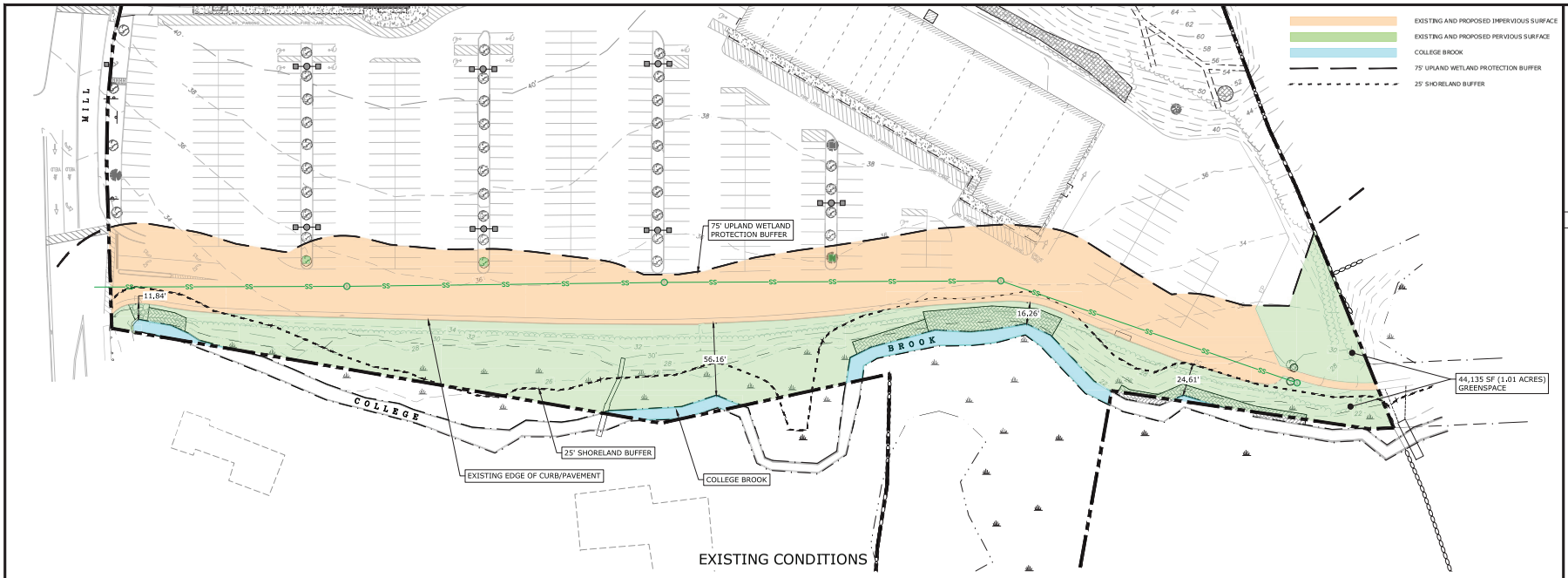
PROJECT NO:	M1529-002
DATE:	
FILE:	M1529-002_C-TRUCK.dwg
DRAWN BY:	EGD
CHECKED:	JHP
APPROVED:	BLM

TRUCK TURNING PLAN

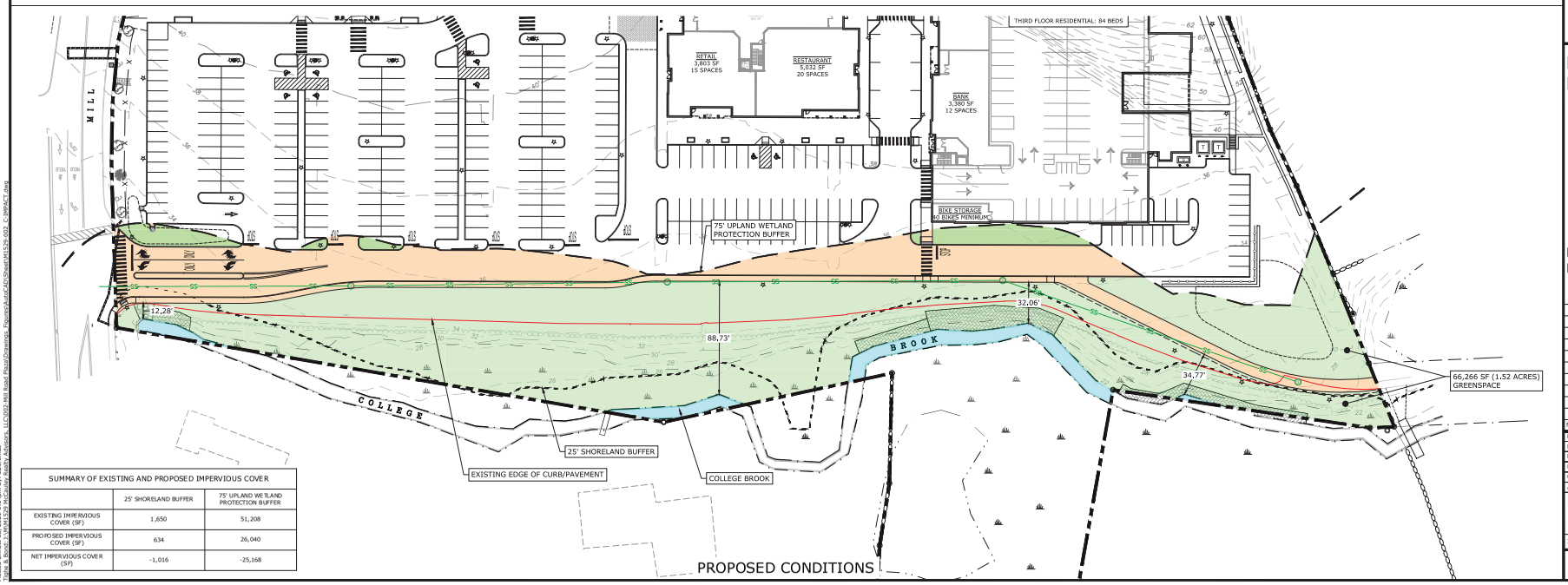
SCALE: AS SHOWN

C-601

Last Saved: 9/29/2021
Plotted On:Oct 08, 2021-2:12pm By: EDrewniak
Name & Path: V:\M1529 Mill Plaza Owners, LLC\002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-TRUCK.dwg



EXISTING CONDITIONS



PROPOSED CONDITIONS

SUMMARY OF EXISTING AND PROPOSED IMPERVIOUS COVER		
	25' SHORELAND BUFFER	75' UPLAND WETLAND PROTECTION BUFFER
EXISTING IMPERVIOUS COVER (SF)	1,650	51,208
PROPOSED IMPERVIOUS COVER (SF)	634	26,040
NET IMPERVIOUS COVER (SF)	-1,016	-25,168

Last Saved: 9/29/2021
Plotted On:Oct 08, 2021
Plotted By: Elizabeth Gray-Gilpin By: EGrayGilpin
V:\0002-Mill Road Plaza\Drawings_Figures\AutoCAD\Sheet\M1529-002_C-IMPACT.dwg

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE
JOSEPH M. PESCHCHIO
No. 16338
LICENSED
PROFESSIONAL ENGINEER
10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET
0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

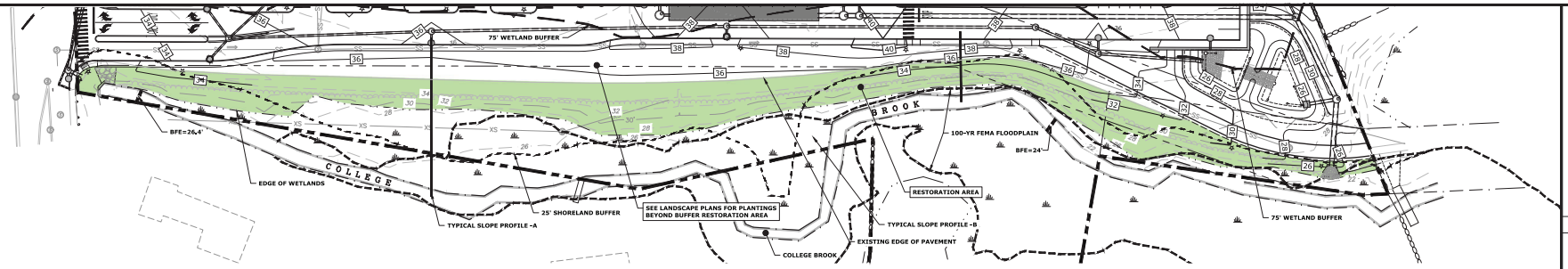
MARK	DATE	DESCRIPTION
8	10/8/2021	RESPONSE TO COMMENTS
7	8/18/2021	GENERAL REVISIONS
6	3/10/2021	RESPONSE TO COMMENTS
5	1/20/2021	RESPONSE TO COMMENTS
4	11/4/2020	GENERAL REVISIONS
3	8/4/2020	GENERAL REVISIONS
2	5/20/2020	RESPONSE TO COMMENTS
1	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	
FILE:	M1529-002_C-IMPACT.dwg
DRAWN BY:	EGD
CHECKED:	JMP
APPROVED:	BLM

BUFFER COVERAGE PLAN

SCALE: AS SHOWN

C-701



PROPOSED CONDITIONS

SCALE: 1"=40'

RESTORATION PLAN SEQUENCE OF ACTIVITIES:

1. PRIOR TO RESTORATION:
   A. FLAG WETLAND BETWEEN THE SLOPE AND COLLEGE BROOK ALONG THE RESTORATION AREA.
   B. CONDUCT AN INVENTORY OF INVASIVE SPECIES TO BE MANAGED.
   C. CONSULT WITH A LICENSED PESTICIDE APPLICATOR EXPERIENCED IN NATURAL AREAS RESTORATION ON APPROPRIATE HERBICIDES FOR THE CONTROL OF INVASIVE SPECIES AT THE SITE.
   D. CONSULT WITH A LICENSED PESTICIDE APPLICATOR REGARDING THE NEED FOR A SPECIAL PERMIT FROM THE NH DIVISION OF PESTICIDE CONTROL. OBTAIN PERMITS ANNUALLY AS NEEDED FOR EACH YEAR OF TREATMENT.
2. YEAR 1
   A. MARK IN THE FIELD NATIVE SPECIES TO BE SAVED AND/OR INVASIVE SPECIES TO BE REMOVED. REVIEW WITH PESTICIDE CONTRACTOR.
   B. DETERMINE THE SEQUENCE OF WORK WITH THE LICENSED PESTICIDE APPLICATOR BASED ON SITE CONDITIONS AND TIMING. ALTERNATIVE 1 IS LIKELY TO RESULT IN LESS DAMAGE TO NATIVE SPECIES, USE LESS HERBICIDE, HAVE LESS DANGER OF DRIFT, AND BE MORE ACCEPTABLE IN A PUBLIC AREA. ALTERNATIVE 2 IS LIKELY TO ACHIEVE GREATER INITIAL CONTROL DUE TO GREATER LEAF AREA FOR HERBICIDE UPTAKE.
   I. ALTERNATIVE 1 (PREFERRED):
      a. MOW INVASIVE VEGETATION WITH A BOOM MOUNTED MOWER IN JUNE. LARGER STEMS AND VINES MAY BE TREATED USING CUT-STUMP DIRECT APPLICATION METHODS AT THIS TIME.
      b. APPLY A LATE SUMMER FOLIAR HERBICIDE TREATMENT TO INVASIVE RESPROUTS IN AUGUST OR SEPTEMBER USING MATERIALS WITH LOW SOIL ACTIVITY.
   II. ALTERNATIVE 2:
      a. APPLY A LATE SUMMER FOLIAR HERBICIDE TREATMENT (SEPTEMBER) TO MINIMIZE THE BROWNOUT PERIOD. USE MATERIALS WITH LOW SOIL ACTIVITY. LARGER STEMS AND VINES MAY BE TREATED USING CUT-STUMP METHODS.
      b. MOW TREATED INVASIVE VEGETATION WITH A BOOM MOUNTED MOWER DURING THE DORMANT SEASON.
3. YEAR 2
   A. CONDUCT SEEDING APRIL 20-MAY 30.
   B. EVALUATE HERBICIDE TREATMENT EFFECTIVENESS BY MAY 30.
   C. IF >75% INVASIVE SPECIES CONTROL IS ACHIEVED, PLANTINGS MAY PROCEED PROVIDED ANY LABELED HERBICIDE WAITING PERIOD FOR PLANTINGS HAS BEEN COMPLETED.
   D. PLANT SHRUBS IN PREDOMINANTLY MONOSPECIFIC CLUSTERS AND DISTRIBUTE IN A NATURALISTIC MANNER.
   E. INSPECT PLANTINGS EVERY ONE TO TWO WEEKS AND WATER AS NEEDED.
   F. APPLY SPOT TREATMENTS OF HERBICIDE WITH LOW SOIL ACTIVITY IN LATE SUMMER (AUGUST-SEPTEMBER) BEING CAREFUL TO AVOID DAMAGE TO PLANTINGS.
4. YEARS 3-5
   A. MONITOR PLANTINGS AND SEEDING AND SPOT PLANT/SEED AS NEEDED TO REPLACE PLANTS OR FILL IN SEEDED GAPS AS NEEDED
   B. APPLY SPOT TREATMENT OF HERBICIDE WITH LOW SOIL ACTIVITY TO INVASIVE SPECIES BEING CAREFUL TO AVOID PLANTINGS.

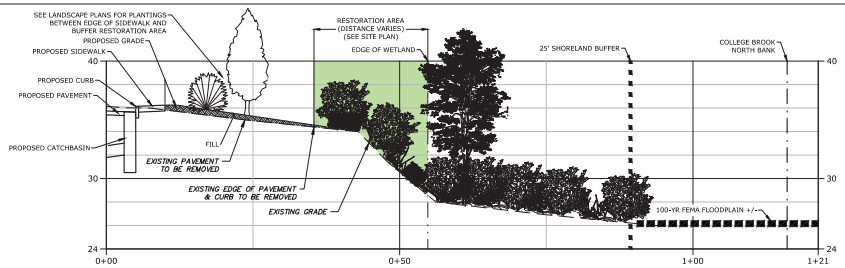
PLANTING SCHEDULE

SCIENTIFIC NAME*	COMMON NAME*	PLANTING TYPE	PLANTING/SEEDING RATES	QUANTITY	NOTES
VARIOUS-- SEE NEWP.COM	NEW ENGLAND EROSION CONTROL/ RESTORATION MIX FOR DRY SITES	SEED MIX (NEW ENGLAND WETLAND PLANTS)	20LB/AC	12 LB	BLEND THE TWO SEED MIXES. HYDROSEED WITH MULCH AND TACKIFIER OR HAND SEED WITH LIGHT MULCH OF WEED-FREE STRAW APRIL 20-MAY 30 (TOUCH-UPS MAY BE DONE AUGUST 15-SEPT 10.)
VARIOUS-- SEE NEWP.COM	NEW ENGLAND SEMI-SHADE GRASS AND FORBS MIX	SEED MIX (NEW ENGLAND WETLAND PLANTS)	25LB/AC	14 LB	
CORYLUS AMERICANA	AMERICAN HAZELNUT	3'-4' TALL, CONTAINER	5' OC IN CLUSTERS OF 3-5	75 Plants	MULCH 4"-6" DEEP IN A 2.5' RADIUS AROUND EACH SHRUB. SEE PLANTING DETAIL
HAMAMELIS VIRGINIANA	WITCH HAZEL	3'-4' TALL, CONTAINER	5' OC IN CLUSTERS OF 3-5	45 Plants	
BLACK CHOKEBERRY	PHOTINIA MELANOCARPA	3'-4' TALL, CONTAINER	5' OC IN CLUSTERS OF 3-5	75 Plants	
CORNUS RACEMOSA	GRAY DOGWOOD	3'-4' TALL, CONTAINER	5' OC IN CLUSTERS OF 3-5	115 Plants	

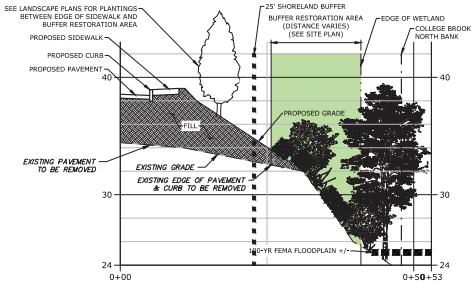
*SEED MIXES AND PLANT MATERIALS ARE AVAILABLE FROM NEW ENGLAND WETLAND PLANTS

*EQUIVALENT SUBSTITUTIONS MAY BE MADE WITH APPROVAL BY A CERTIFIED WETLAND SCIENTIST OR LANDSCAPE ARCHITECT

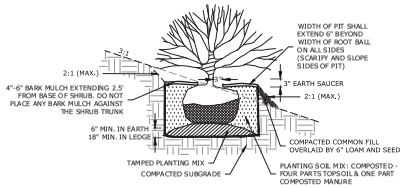
*USE ONLY NATIVE, NON-HORTICULTURAL PLANTS



TYPICAL SLOPE PROFILE - A

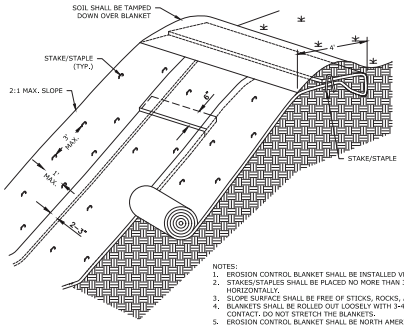


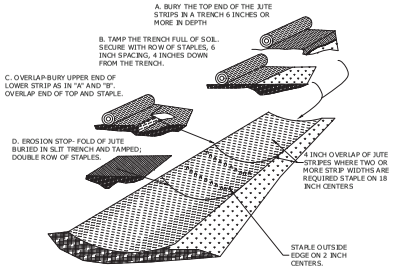
TYPICAL SLOPE PROFILE - B



SHRUB PLANTING ON EMBANKMENT

NO SCALE





NOTES:
1. EROSION CONTROL BLANKET SHALL BE INSTALLED VERTICALLY DOWNSLOPE.
2. STAKES/STAPLES SHALL BE PLACED NO MORE THAN 3 FT. APART VERTICALLY, AND 1 FT. APART HORIZONTALLY.
3. SLOPE SURFACE SHALL BE FREE OF STICKS, ROCKS, AND OTHER OBSTRUCTIONS.
4. BLANKETS SHALL BE ROLLED OUT LOOSELY WITH 3-4 STAPLES PER SQUARE YARD TO MAINTAIN DIRECT SOIL CONTACT. DO NOT STRETCH THE BLANKETS.
5. EROSION CONTROL BLANKET SHALL BE NORTH AMERICAN GREEN BCN150 OR APPROVED EQUAL.

TYPICAL EROSION CONTROL BLANKET

NO SCALE

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

STATE OF NEW HAMPSHIRE JOSEPH M. PEROCCHIO No. 16288 LICENSED PROFESSIONAL ENGINEER 10/8/21

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
1	10/8/2021	RESPONSE TO COMMENTS

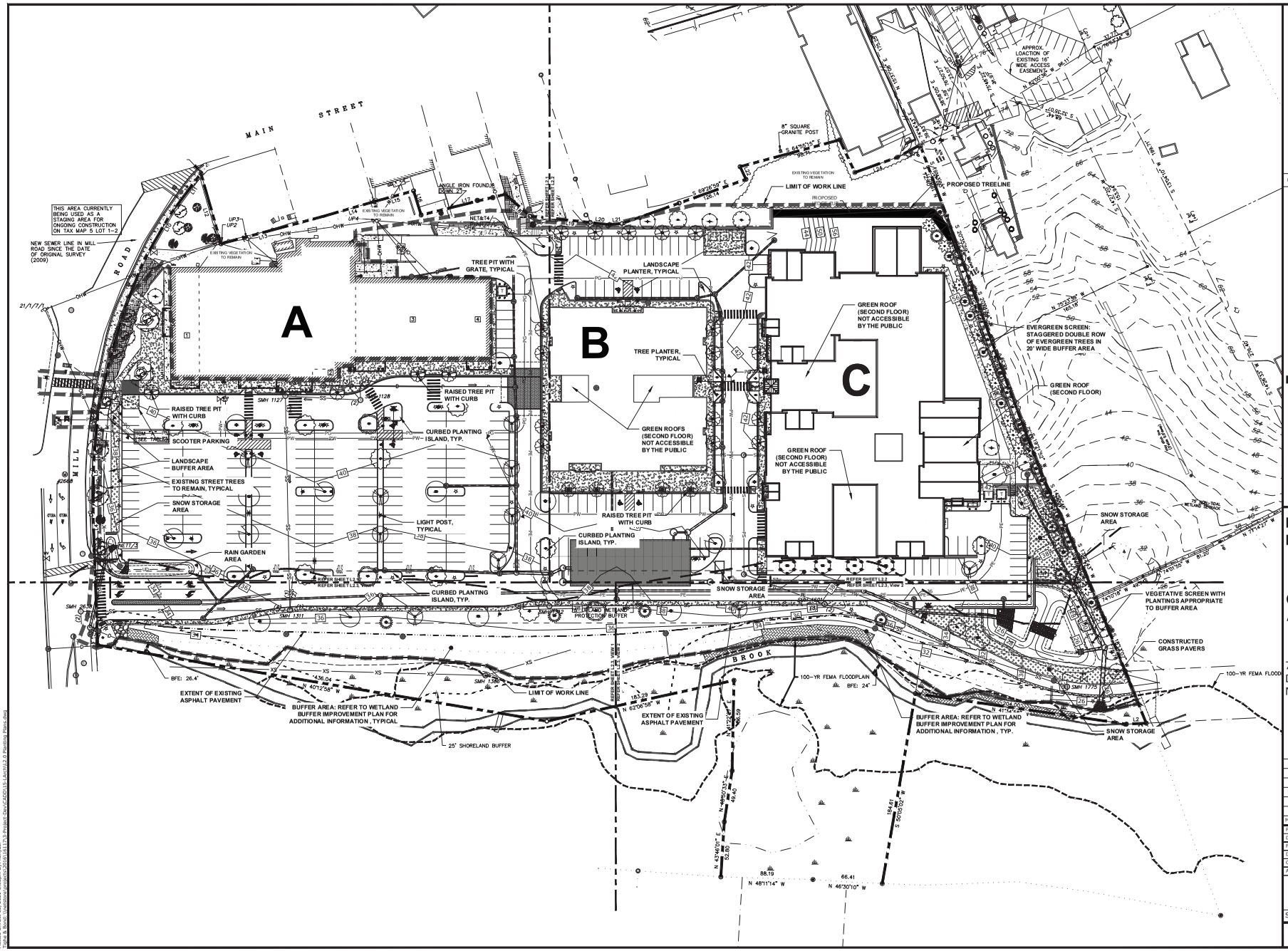
PROJECT NO:	M1529-002
DATE:	3/10/2021
FILE:	M1529-002_C-RESTORE.dwg
DRAWN BY:	RGD
CHECKED:	JHP
APPROVED:	BLM

RESTORATION PLAN

SCALE: AS SHOWN

C-702

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-4:57pm By: EDarnelle
Plotted By: LWR-Durham Realty Advisors, LLC\002-Mill Road Plaza\Report_Evaluation\Restoration\M1529-002_C-RESTORE.dwg



Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET
0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
6	10/8/2021	Response to Comments
5	3/10/2021	Response to Comments
4	1/20/2021	Planning Board Comments
3	6/2/2020	Planning Board Comments
2	5/20/2020	Planning Board Comments
1	1/2/2020	General Revisions

PROJECT NO:	M15.29-002
DATE:	05/23/18
FILE:	L2.0 Planting Plans.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

LANDSCAPE OVERALL PLAN

SCALE:

L2.0

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-3:38pm By: hanyder
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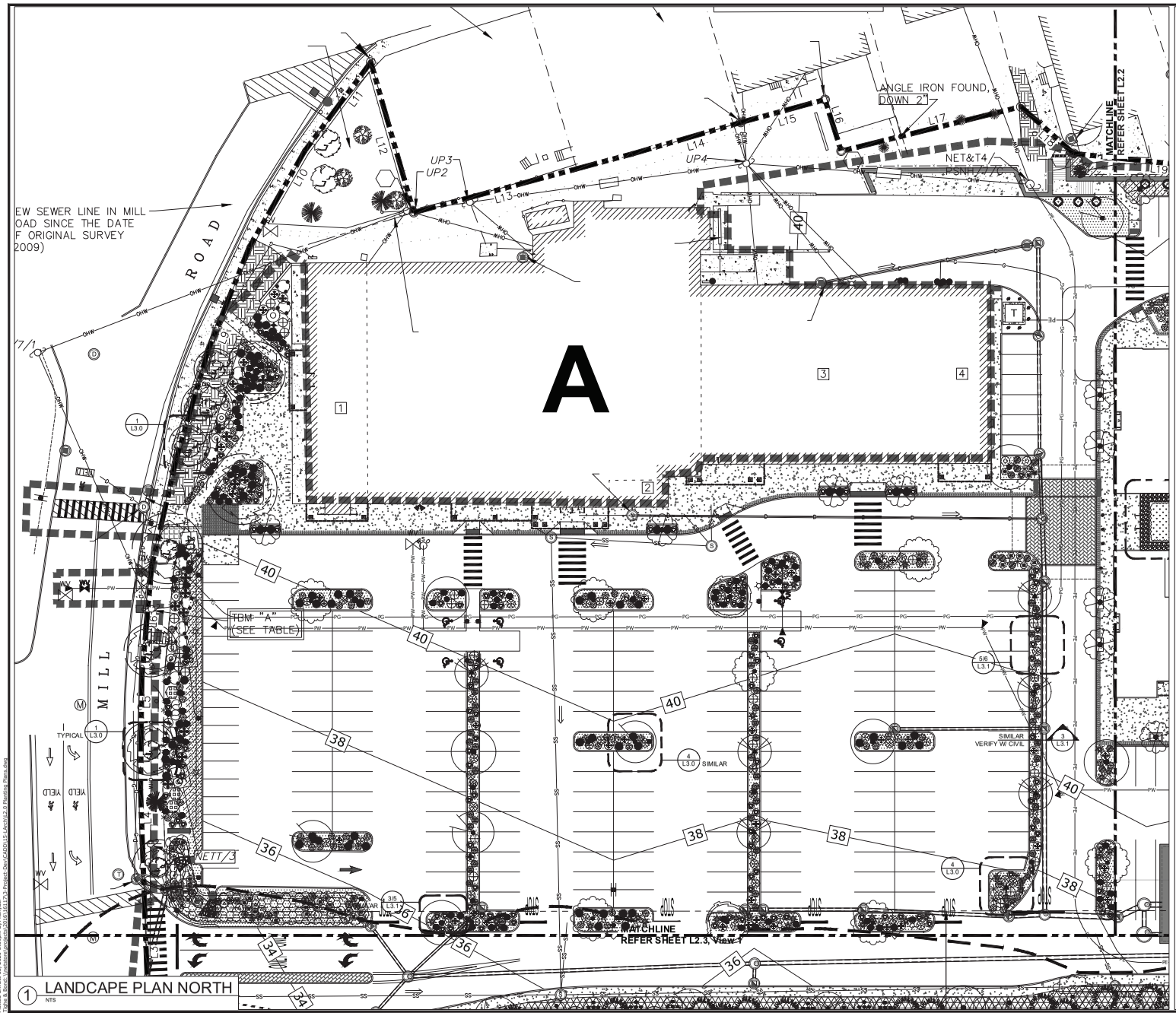


PLANT LEGEND

SHADE TREES	SIZE	NOTES	QTY
Existing Tree to Remain Preserve and Protect in Place			Verify in Field
Acer rubrum October Glory October Glory Red Maple	2.0" - 2.5" Cal. 16'Ht x 30w	Zone: 3 Fall Plant Hazard	8
Acer x freemanii 'Armstrong' Freeman Maple (Fastigiate)	2.0" - 2.5" Cal. 40'Ht x 15'w	Zone: 3	24
Carpinus caroliana American Hornbeam	2.0" - 2.5" Cal. 35'Ht x 25'w	Zone: 3a Fall Plant Hazard	4
Celtis occidentalis Common Hackberry	2.0" - 2.5" Cal. 40'Ht x 30w	Zone: 1 Fall Plant Hazard	5
Ginkgo biloba 'Princeton Sentry' Maidenhair Tree (Male only)	3.0" - 3.5" Cal. 45'Ht x 25'w	Zone: 3	10
Nyssa sylvatica var. Marshall Black Gum	2.0" - 2.5" Cal. 40'Ht x 25'w	Zone: 3 Fall Plant Hazard	9
Quercus robur f. fastigiata English Oak - Fastigiate	2.0" - 2.5" Cal.	Zone: 5	4

FLOWERING TREES	SIZE	NOTES	QTY
Amelanchier arborea Downey Serviceberry	1.5" - 2.0" Cal. 20'Ht x 20'w	Zone: 4 Fall Plant Hazard	6
Cercis canadensis Eastern Redbud	1.5" - 2.0" Cal. 30'Ht x 30'w	Zone: 4 Fall Plant Hazard	25
Malus 'Snowdrift' Snowdrift Crabapple	1.5" - 2.0" Cal. 20'Ht x 20'w	Zone: 4 Fall Plant Hazard	3

ORNAMENTAL TREES	SIZE	NOTES	QTY
Betula nigra 'Heritage' River Birch	12'Ht 6ts B 40'Ht x 30'w	Zone: 3a Fall Plant Hazard	7
Stewartia ovata Mountain Stewartia	1.0" - 1.5" Cal. 20'Ht x 20'w	Zone: 5	10

CONIFER TREES	SIZE	NOTES	QTY
Abies balsamea 'Columnaris' Balsam Fir var. 'Columnaris'	10' - 12' 30'Ht x 15'w	Zone: 3	5
Juniperus virginiana 'Burkii' Red Cedar var. Burkii	10' - 12' 10'Ht x 5'w	Zone: 2 Fall Plant Hazard	14
Thuja occidentalis Eastern Arborvitae	6' - 10' 30'Ht x 10'w	Zone: 2	19
Picea abies 'Cupressina' Columnar Norway Spruce	12' - 14' 20'Ht x 10'w	Zone: 3	13

DECIDUOUS SHRUBS	SIZE	NOTES	QTY
Aronia melanocarpa Black Chokeberry	2 Gallon 4'Ht x 3w	Zone: 3	7
Aronia arbutifolia 'Brilliantissima' Red Chokeberry	2 Gallon 4'Ht x 3w	Zone: 5	7
Cornus sericea Red Osier Dogwood	2 Gallon 6'Ht x 3w	Zone: 2 Fall Plant Hazard	14
Diervilla lonicera Dwarf Bush Honeysuckle	2 Gallon 2'Ht x 2w	Zone: 3	12
Fothergilla gardenii Dwarf Witch Alder	2 Gallon 3'Ht x 3w	Zone: 5	7
Hydrangea arborescens 'Annabelle' Smooth Hydrangea	2 Gallon 4'Ht x 4w	Zone: 3	7
Ilex verticillata 'Winter Red' Winterberry	2 Gallon 6'Ht x 6w	Zone: 3	7
Lindera benzoin Spicebush	2 Gallon 4'Ht x 4w	Zone: 3	7
Rhus aromatica 'Gro-low' Fragrant Sumac	2 Gallon 2'Ht x 6w	Zone: 3	7
Viburnum dentatum 'Chicago Lustre' Arrowwood	2 Gallon 6'Ht x 6w	Zone: 2	7
Viburnum trilobum Cranberrybush	2 Gallon	Zone: 2	3

EVERGREEN SHRUBS	SIZE	NOTES	QTY
Juniperus communis Common Juniper	2 Gallon 2'Ht x 3w	Zone: 2	36
Kalmia latifolia Mountain Laurel	2 Gallon 5'Ht x 3w	Zone: 3	75
Ilex glabra Inkberry	2 Gallon 6'Ht x 6w	Zone: 4	23
Rhododendron catawbiense 'Album' White Catawba Rhododendron	2 Gallon 5'Ht x 7w	Zone: 4	21

GROUNDCOVERS	SIZE	NOTES	QTY
Arctostaphylos uva-ursi Kinnikinnick	1 Gallon 1'Ht x 4w	Zone: 2	150
Coreopsis lanceolata Tickseed	1 Gallon 2'Ht x 2w	Zone: 4	120
Vaccinium angustifolium Low Sweet Blueberry	1 Gallon 2'Ht x 4w	Zone: 2	42

PERENNIALS	SIZE	NOTES	QTY
Astilbe var. 'Snowdrift' Snowdrift Astilbe	#2 Container 1.75'Ht x 1.25w	Zone: 4	28
Coreopsis grandiflora Large Flowered Tickseed	#2 Container 2.5'Ht x 1.25w	Zone: 4a	97
Dianthus Bleeding Heart	#2 Container 1.25'Ht x 1.25w	Zone: 3	11
Echinacea magna Purple Cone Flower	#2 Container 2.5'Ht x 2w	Zone: 4a	46
Helianthus salicifolius Table Mountain Sunflower	#2 Container 1.25'Ht x 1.25w	Zone: 5	14
Hemerocallis lilioasphodelus Lemon Lily	#2 Container 2.5'Ht x 1.75w	Zone: 4	34
Hemerocallis fulva Orange Daylily	#2 Container 3.25'Ht x 2.25w	Zone: 3	47
Hyacinthoides hispanica Spanish Bluebell	#2 Container 1.5'Ht x 1w	Zone: 3	8
Liatris spicata Liatris	#2 Container 3'Ht x 1.25w	Zone: 3	18
Polygonatum odoratum Solomon's Seal	#2 Container 3'Ht x 1w	Zone: 3	15
Pulmonaria 'Baby Blue' Lungwort	#2 Container 9'Ht x 1'w	Zone: 4	15
Rudbeckia hirta Black-eyed Susan	#2 Container 2.5'Ht x 1.25w	Zone: 4a	80

VINE			QTY
Parthenocissus tricuspidata Boston Ivy	#2 Container 10'Ht x 10'w	Zone: 4	10
Clematis virginiana Woodbine	#2 Cont.,wire 20'Ht x 6' w	Zone: 3	10

SEED MIX	QTY
Conservation / Wildlife Seed Mix (Low-maintenance areas) Source: NE. Wetland Plants	21,800 S.F.
Wetland Seed Mix (Restoration) Source: NE. Wetland Plants	13,765 S.F.

LANDSCAPE MATERIALS		QTY
Bark Mulch Shredded Organic Bark Mulch	3" depth all planting areas	19,650 S.F.
Landscape Border Landscape edging material		645 LIN. FT.

PLANT LEGEND: STORMWATER

PERENNIAL	SIZE	NOTES	QTY
Aquilegia canadensis Red Columbine	5 PWS	Zone: 3 Rain garden area	50
Eutrochium purpureum Sweet Joe Pye Weed var 'Little Joe'	5 PWS	Zone: 3 Rain garden area	25
Monarda fistulosa Bee Balm	5 PWS	Zone: 3 Rain garden area	40
Penstemon digitalis Foxglove	5 PWS	Zone: 3 Rain garden area	45

GRASSES	SIZE	NOTES	QTY
Schizachyrium scoparium Little bluestem	5 PWS	Zone: 3 Rain garden area	10

GROUNDCOVERS	SIZE	NOTES	QTY
Cornus canadensis Bunchberry	1 Gallon	Zone: 2 Fall plant hazard	51
Vaccinium angustifolium Lowbush blueberry	5 PWS	Zone: 2 Rain garden area	25

SPECIALITY SEED MIX	QTY
Wetland Seed Mix (Restoration) Source: NE. Wetland Plants	8,075 S.F.
Erosion Control / Restoration (Detention basins) Source: NE. Wetland Plants	4,650 S.F.

NOTES:

1. Not all plant material species and quantities shown will be used. Final plant material selection and quantities will be determined by the owner, in consultation with the landscape architect, and subject to approval by local and state regulations and agencies.
2. Plant material specified shall conform to ANLA American Standard for Nursery Stock, ANSI Z60.1 current edition.
3. Height and width noted for each plant species represents the average mature size of the species in the Northeast under favorable conditions, and will vary depending on site and other maintenance practices.
4. No permanent irrigation system is proposed. Contractor shall be responsible for watering of plant material till established and for term of maintenance period.

Tighe&Bond
Engineering | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET
0 20' 40'
GRAPHIC SCALE

Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
6	10/8/2021	Response to Comments
5	3/10/2021	Response to Comments
4	1/20/2021	Planning Board Comments
3	6/2/2020	Planning Board Comments
2	5/20/2020	Planning Board Comments
1	1/2/2020	General Revisions

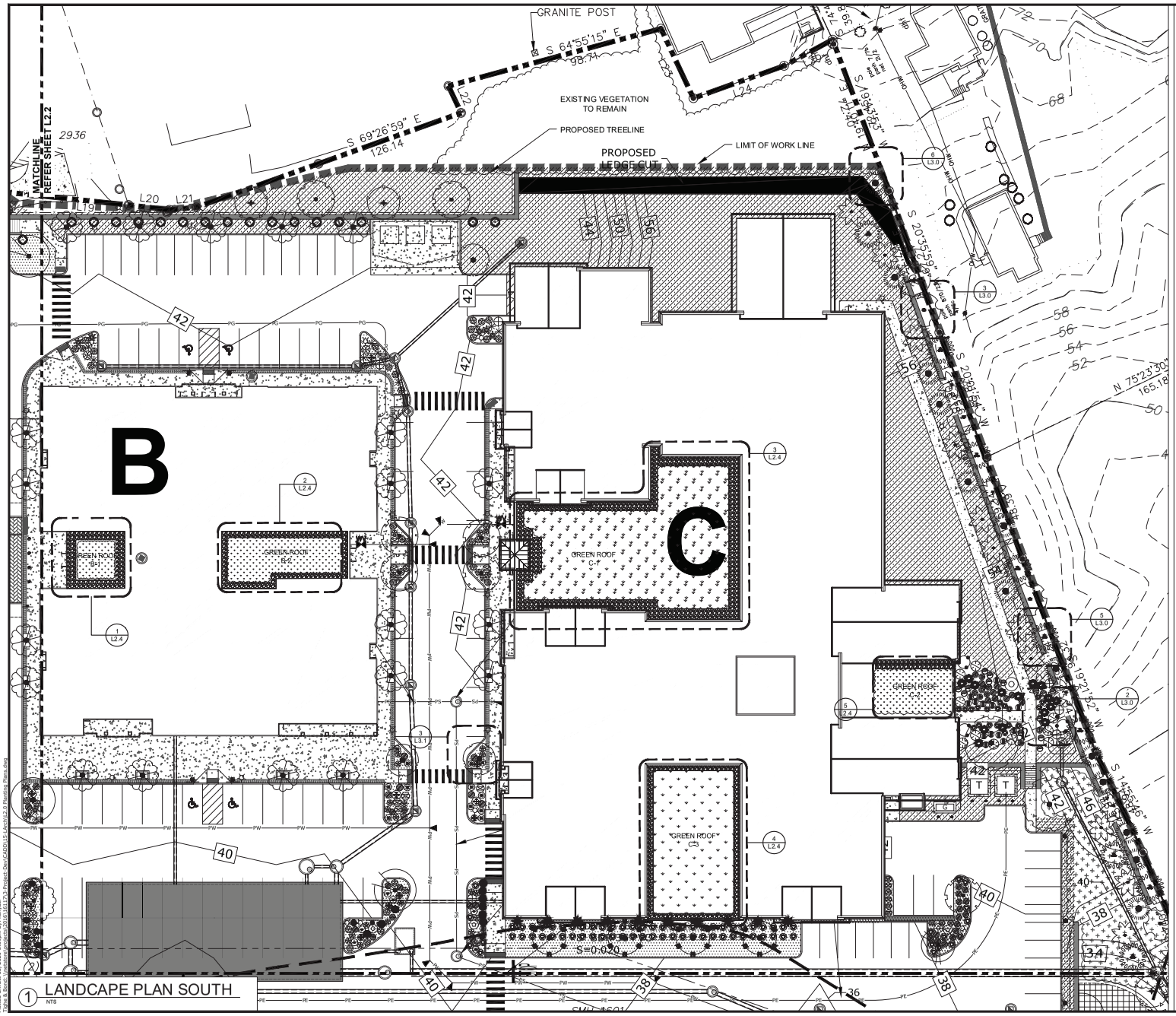
PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	L2.0 Planting Plans.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

PLANTING PLAN

SCALE:

L2.1

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-3:39pm By: tsnyder
Tighe & Bond: \\tighebond\projects\3516\16117-3-Project Dev\CADD\15-Larch\2.0 Planting Plans.dwg



1 LANDCAPE PLAN SOUTH
NTS

PLANT LEGEND

SHADE TREES	SIZE	NOTES	QTY
Existing Trees to Remain Preserve and Protect in Place			Verify in Field
Acer rubrum October Glory October Glory Red Maple	2.0" - 2.5" Cal. 50'ht x 30'w	Zone 5 Fall Plant Hazard	8
Acer x freemanii 'Armstrong' Freeman Maple (Firestgate)	2.0" - 2.5" Cal. 40'ht x 15'w	Zone 3	24
Carpinus caroliniana American Hornbeam	2.0" - 2.5" Cal. 25'ht x 20'w	Zone 3a Fall Plant Hazard	4
Celtis occidentalis Common Hackberry	2.0" - 2.5" Cal. 40'ht x 30'w	Zone 1 Fall Plant Hazard	5
Ginkgo biloba 'Princeton Sentry' Maidenhair Tree (Male only)	3.0" - 3.5" Cal. 45'ht x 20'w	Zone 3	10
Nyssa sylvatica var. Marshall Black gum	2.0" - 2.5" Cal. 35'ht x 25'w	Zone 3 Fall Plant Hazard	9
Quercus robur f. fastigiata English Oak - Fastigiate	2.0" - 2.5" Cal.	Zone 5	4
FLOWERING TREES	**SIZE**	**NOTES**	**QTY**
Amelanchier arborea Downy Serviceberry	1.5" - 2.0" Cal. 20'ht x 20'w	Zone 4	9
Cercis canadensis Eastern Redbud	1.5" - 2.0" Cal. 20'ht x 30'w	Zone 4 Fall Plant Hazard	26
Malus Sheaverith Sheaverith Crabapple	1.5" - 2.0" Cal. 20'ht x 20'w	Zone 4 Fall Plant Hazard	3
ORNAMENTAL TREES	**SIZE**	**NOTES**	**QTY**
Betula nigra 'Heritage' River Birch	12' ht & B 40'ht x 30'w	Zone 3b Fall Plant Hazard	7
Stewartia ovata Mountain Stewartia	1.5" - 1.5" Cal. 25'ht x 20'w	Zone 5	10
CONIFER TREES	**SIZE**	**NOTES**	**QTY**
Abies balsamea 'Columnaris' Balsam Fir var. Columnaris	10' - 12' 30'ht x 15'w	Zone 3	5
Juniperus virginiana 'Burki' Red Cedar var. Burki	10' - 12' 15'ht x 5'w	Zone 2 Fall Plant Hazard	14
Thuja occidentalis Eastern Arborvitae	8' - 10' 30'ht x 10w	Zone 2	10
Picea abies 'Cupressina' Columnar Norway Spruce	12' - 14' 25'ht x 10' w	Zone 3	13
DECIDUOUS SHRUBS	**SIZE**	**NOTES**	**QTY**
Cephalanthus occidentalis Buttonbush	2 Gallon 4'ht x 3'w	Zone 5	7
Comptonia peregrina Sweetfern	2 Gallon 2'ht x 3'w	Zone 3	10
Cornus sericea Redosier Dogwood	2 Gallon 5'ht x 3'w	Zone 3 Fall Plant Hazard	16
Clethra alnifolia Coastal Sweet Pepperbush	2 Gallon 4'ht x 4'w	Zone 3	18
Dirca palustris Leatherwood	2 Gallon 4'ht x 3'w	Zone 3	2
Fothergilla gardenii Dwarf Fothergilla	2 Gallon 3'ht x 4'w	Zone 5	64
Ilex verticillata Winterberry	2 Gallon 6'ht x 6'w	Zone 3	15
Lindera benzoin Spice bush	2 Gallon 4'ht x 4'w	Zone 3	32
Viburnum trilobum Cranberry bush	2 Gallon	Zone 2	3
EVERGREEN SHRUBS	**SIZE**	**NOTES**	**QTY**
Juniperus communis Common Juniper	2 Gallon 2'ht x 5'w	Zone 2	36
Kalmia latifolia Mountain Laurel	2 Gallon 5'ht x 3'w	Zone 3	76
Ilex glabra Inkberry	2 Gallon 6'ht x 6'w	Zone 4	23
Rhododendron catawbiense 'Album' White Catawba Rhododendron	2 Gallon 5'ht x 7'w	Zone 4	21
GROUNDCOVERS	**SIZE**	**NOTES**	**QTY**
Arctostaphylos uva-ursi Kinnikinick	1 Gallon 1'ht x 4'w	Zone 2	189
Coreopsis lanceleaf Tickseed	1 Gallon 2'ht x 2'w	Zone 4	129
Vaccinium angustifolium Low Sweet Blueberry	1 Gallon 2'ht x 4'w	Zone 2	42
PERENNIALS	**SIZE**	**NOTES**	**QTY**
Aster var. 'Snowflurry' Snowflurry Aster	#2 Container 1.75'ht x 1.25'w	Zone 4	28
Coreopsis grandiflora Large Flowered Tickseed	#2 Container 2.5'ht x 1.25'w	Zone 4a	97
Dicentra Bleeding Heart	#2 Container 1.25'ht x 1.25'w	Zone 3	11
Echinacea magna Purple Cone Flower	#2 Container 2.5'ht x2'w	Zone 4a	46
Helianthus salicifolius Dade Mountain Helianthus	#2 Container 1.25'ht x 1.25'w	Zone 5	14
Hemerocallis 'Joaquin Lynn' Lemon Lily	#2 Container 2.5'ht x 1.75'w	Zone 4	34
Hemerocallis fulva Orange Daylily	#2 Container 2.25'ht x 2.25'w	Zone 3	47
Hyacinthoides hispanica Spanish Bluebell	#2 Container 1.5'ht x 1'w	Zone 3	8
Liatris spicata Liatris	#2 Container 3'ht x 1.25'w	Zone 3	18
Polygonatum odoratum Solomon's Seal	#2 Container 3'ht x 1'w	Zone 3	15
Pulmonaria 'Baby Blue' Lungwort	#2 Container 9'ht x 1'w	Zone 4	15
Rudbeckia triloba Black-eyed Susan	#2 Container 2.5'ht x 1.25'w	Zone 4a	60
VINE			**QTY**
Parthenocissus tricuspidata Boston Ivy	#2 Container 15'ht x 10w	Zone 4	14
Clematis virginiana Woodbine	#2 Cont.and rer 20'ht x 6' w	Zone 3	10
SEED MIX			**QTY**
Corner vision / Wildlife Seed Mix (Low-maintenance areas) Source: N.E. Wetland Plants			21,200 S.F.
Wetland Seed Mix (Restoration) Source: N.E. Wetland Plants			15,765 S.F.
LANDSCAPE MATERIALS			**QTY**
Bark Mulch Shredded Organic Bark Mulch		3" depth - all planting areas	19,450 S.F.
Landscape Border Landscape edging material			645 LIN. FT.

PLANT LEGEND: STORMWATER

PERENNIAL	SIZE	NOTES	QTY
Aquilegia canadensis Red Columbine	SP #5	Zone 3 Rain garden area	60
Eutrochium purpureum Sweet Joe Pye Weed var 'Little Joe'	SP #5	Zone 3 Rain garden area	25
Monarda fistulosa Bee balm	SP #5	Zone 3 Rain garden area	40
Penstemon digitalis Foxglove	SP #5	Zone 3 Rain garden area	45
GRASSES	**SIZE**	**NOTES**	**QTY**
Schizachyrium scoparium Little Bluestem	SP #5	Zone 3 Rain garden area	15
GROUNDCOVERS	**SIZE**	**NOTES**	**QTY**
Cornus canadensis Bunchberry	1 Gallon	Zone 2 Fall plant hazard	21
Vaccinium angustifolium Lowbush blueberry	SP #5	Zone 2 Rain garden area	25
SPECIALTY SEED MIX			**QTY**
Wetland Seed Mix (Restoration) Source: N.E. Wetland Plants			6,875 S.F.
Erosion Control / Restoration (Detention basins) Source: N.E. Wetland Plants			4,800 S.F.

NOTES
1. Not all plant material species and quantities shown will be used. Final plant material specifications dependent on conformance to, and availability at time of bid, of specified plant material.
2. Plant material specified shall conform to ANLA American Standard for Nursery Stock, ANSI Z60.1 current edition.
3. Quantities shown are based on the best information, represents the anticipated plant size at maturity given known and anticipated site conditions, and without pruning and other maintenance operations.
4. No permanent irrigation system is proposed. Contractor shall be responsible for watering, of plant material until established and for term

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET
0 20' 40'
GRAPHIC SCALE

Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

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1	1/2/2020	General Revisions

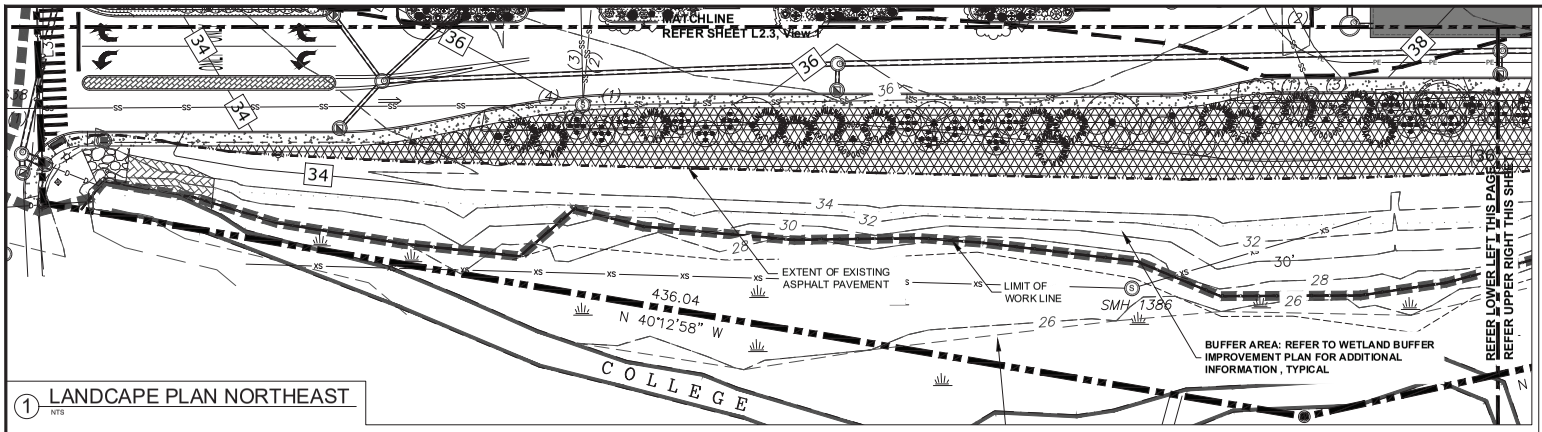
PROJECT NO: M1529-002
DATE: 05/23/18
FILE: L2.0 Planting Plans.dwg
DRAWN BY: HAS/TNE
CHECKED: JWP
APPROVED: BLM

PLANTING PLAN

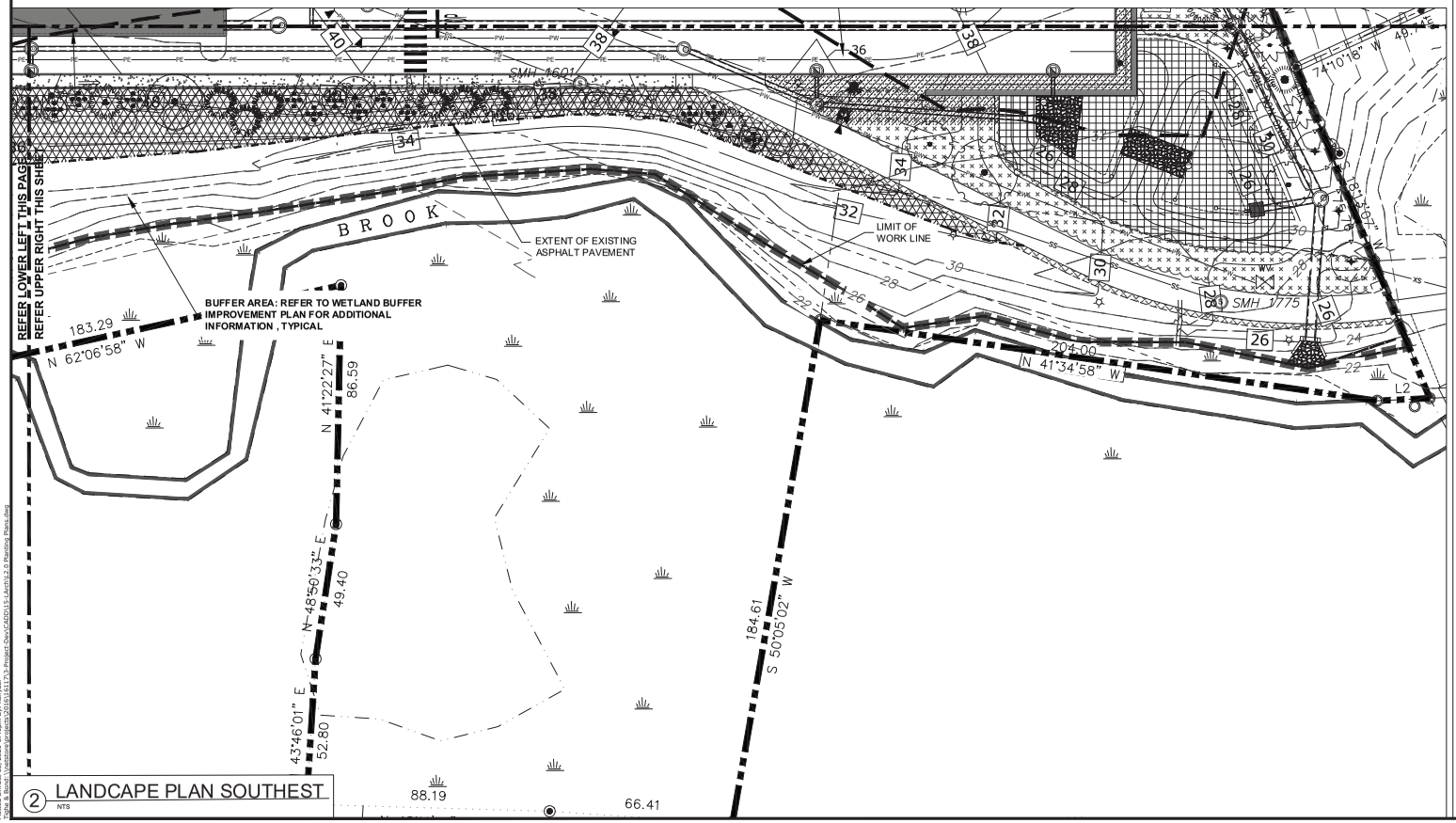
SCALE:

L2.2

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-2:39pm By: tonyler
Tighe & Bond: \\tbdomain\projects\P\M1529\M1529-Harris\02-Project Docs\CADD\15-Layouts\L2.0 Planting Plans.dwg



1 LANDCAPE PLAN NORTHEAST
NTS



2 LANDCAPE PLAN SOUTHEST
NTS

PLANT LEGEND

SHADE TREES	SIZE	NOTES	QTY
Existing Tree to Remain Preserve and Protect in Place			Well in Field
Acer rubrum October Glory October Glory Red Maple	2.0" - 2.5" Cal. 10'H x 3.0W	Zone: 3 Fall Plant Hazard	6
Acer x freemani 'Armstrong' Freeman Maple (Firestalker)	2.0" - 2.5" Cal. 40'H x 15'W	Zone: 3	24
Carpinus caroliniana American Hornbeam	2.0" - 2.5" Cal. 35'H x 25W	Zone: 3a Fall Plant Hazard	4
Celtis occidentalis Common Hackberry	2.0" - 2.5" Cal. 40'H x 30W	Zone: 1 Fall Plant Hazard	5
Ginkgo biloba 'Princeton Sentry' Maidenhair Tree (Male only)	3.0" - 3.5" Cal. 40'H x 25W	Zone: 3	10
Nyssa sylvatica var. Marshall Blackgum	2.0" - 2.5" Cal. 40'H x 25W	Zone: 3 Fall Plant Hazard	9
Quercus robur f. fastigiata English Oak - Fastigiate	2.0" - 2.5" Cal.	Zone: 5	4

FLOWERING TREES	SIZE	NOTES	QTY
Amelanchier arborea Downey Serviceberry	1.0" - 2.0" Cal. 30'H x 20'W	Zone: 4	9
Cercis canadensis Eastern Redbud	1.0" - 2.0" Cal. 30'H x 30'W	Zone: 4 Fall Plant Hazard	26
Malus Sinowdrift Sinowdrift Crabapple	1.0" - 2.0" Cal. 30'H x 20'W	Zone: 4 Fall Plant Hazard	3

ORNAMENTAL TREES	SIZE	NOTES	QTY
Betula nigra 'Heritage' River Birch	12'H B & B 40'H x 30'W	Zone: 3b Fall Plant Hazard	3
Stewartia ovata Mountain Stewartia	1.0" - 1.5" Cal. 25'H x 25'W	Zone: 5	10

CONIFER TREES	SIZE	NOTES	QTY
Abies balsamea 'Columnaris' Balsam Fir var. 'Columnaris'	10' - 12' 35'H x 10'W	Zone: 3	5
Juniperus virginiana 'Burki' Red Cedar var. Burki	10 - 12' 10'H x 5'W	Zone: 2 Fall Plant Hazard	14
Thuja occidentalis Eastern Arborvitae	8' - 10' 30'H x 10'W	Zone: 2	19
Picea abies 'Cupressina' Columnar Norway Spruce	12' - 14' 35'H x 10' W	Zone: 3	13

DECIDUOUS SHRUBS	SIZE	NOTES	QTY
Cephalanthus occidentalis Buttonbush	2 Gallon 4'H x 3W	Zone: 5	7
Comptonia peregrina Sweetfern	2 Gallon 2'H x 3W	Zone: 3	10
Cornus sericea Redosier Dogwood	2 Gallon 5'H x 3W	Zone: 3 Fall Plant Hazard	16
Clethra alnifolia Coastal Sweet Pepperbush	2 Gallon 4'H x 4W	Zone: 3	18
Dirca palustris Leatherwood	2 Gallon 4'H x 3W	Zone: 3	2
Fothergilla gardenii Dwarf Fothergilla	2 Gallon 3'H x 4W	Zone: 5	64
Ilex verticillata Winterberry	2 Gallon 8'H x 6W	Zone: 3	15
Lindera benzoin Spice bush	2 Gallon 4'H x 4W	Zone: 3	32
Viburnum trilobum Cranberry bush	2 Gallon	Zone: 2	3

EVERGREEN SHRUBS	SIZE	NOTES	QTY
Juniperus communis Common Juniper	3 Gallon 2'H x 5W	Zone: 2	30
Kalmia latifolia Mountain Laurel	3 Gallon 5'H x 3W	Zone: 3	15
Ilex glabra Inkberry	2 Gallon 6'H x 6W	Zone: 4	28
Rhododendron catawbiense 'Album' White Catawba Rhododendron	3 Gallon 6'H x 7W	Zone: 4	21

GROUNDCOVERS	SIZE	NOTES	QTY
Arctostaphylos uva-ursi Kinnikinnik	1 Gallon 1'H x 4W	Zone: 2	169
Coreopsis lanceleaf Tickseed	1 Gallon 2'H x 2W	Zone: 4	129
Vaccinium angustifolium Low Sweet Blueberry	1 Gallon 2'H x 4W	Zone: 2	42

PERENNIALS	SIZE	NOTES	QTY
Aster var. 'Snowsprite' Snowsprite Aster	#2 Container 1.5'H x 1.25W	Zone: 4	26
Coreopsis grandiflora Large Flowered Tickseed	#2 Container 2.0'H x 1.25'W	Zone: 4a	97
Dicentra Bleeding Heart	#2 Container 1.25'H x 1.25W	Zone: 3	11
Echinacea magna Purple Cone Flower	#2 Container 2.5'H x 2W	Zone: 4a	46
Helianthus salicifolius Table Mountain Helianthus	#2 Container 1.25'H x 1.25W	Zone: 5	14
Hemerocallis lilioasphodelus Lemon Lily	#2 Container 2.0'H x 1.75'W	Zone: 4	34
Hemerocallis fulva Orange Daylily	#2 Container 2.25'H x 2.25W	Zone: 3	47
Hyacinthoides hispanica Spanish Bluebell	#2 Container 1.5'H x 1'W	Zone: 3	6
Liatris spicata Liatris	#2 Container 3'H x 1.25W	Zone: 3	16
Polygonatum odoratum Solomon's Seal	#2 Container 3'H x 1'W	Zone: 3	15
Pulmonaria 'Baby Blue' Lungwort	#2 Container 8'H x 1'W	Zone: 4	15
Rudbeckia triloba Black-eyed Susan	#2 Container 2.5'H x 1.25W	Zone: 4a	80

VINE	QTY
Parthenocissus tricuspidata Boston Ivy	#2 Container 10'H x 10'W Zone: 4 — 10
Clematis virginiana Woodbine	#2 Container 30'H x 6' w Zone: 3 — 10

SEED MIX	QTY
Conservation / Wildlife Seed Mix (Low-maintenance areas) Source: N.E. Wetland Plants	21,200 S.F.
Wetland Seed Mix (Restoration) Source: N.E. Wetland Plants	13,195 S.F.

LANDSCAPE MATERIALS		QTY
Bark Mulch Shredded Organic Bark Mulch	3" depth all planting areas	18,400 S.F.
Landscape Border Landscape edging material		645 LIN. FT.

PLANT LEGEND: STORMWATER

PERENNIAL	SIZE	NOTES	QTY
Aquilegia canadensis Red Columbine	1PNS	Zone: 3 Rain garden area	10
Eutrochium purpureum Sweet Joe Pye Weed var "Little Joe"	5PNS	Zone: 3 Rain garden area	25
Monarda fistulosa Bee balm	5PNS	Zone: 3 Rain garden area	40
Penstemon digitalis Foxglove	5PNS	Zone: 3 Rain garden area	40

GRASSES	SIZE	NOTES	QTY
Schizachyrium scoparium Little bluestem	5PNS	Zone: 3 Rain garden area	6

GROUNDCOVERS	SIZE	NOTES	QTY
Cornus canadensis Bunchberry	1 Gallon	Zone: 2 Fall plant hazard	21
Vaccinium angustifolium Lowbush blueberry	5PNS	Zone: 2 Rain garden area	25

SPECIALITY SEED MIX	QTY
Wetland Seed Mix (Restoration) Source: N.E. Wetland Plants	8,075 S.F.
Erosion Control / Restoration (Detention basins) Source: N.E. Wetland Plants	4,650 S.F.

NOTES:
1. Not all plant material specified and quantities shown will be used. Final plant material specifications dependent on conformance to, and approval by, local and state regulations and agencies.
2. Plant material specified shall conform to AHLA American Standard for Nursery Stock, ANSI Z60.1 current edition.
3. Plant material specified and shown on plans represents the anticipated plant size at maturity, given known and anticipated site conditions, and without pruning and other maintenance operations.
4. No permanent irrigation system is proposed. Contractor shall be responsible for watering of plant material till established and for term

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

SCALE IN FEET
0 20' 40'
GRAPHIC SCALE

Mill Plaza Redevlopment

Colonial Durham Associates, LP

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1	1/2/2020	General Revisions

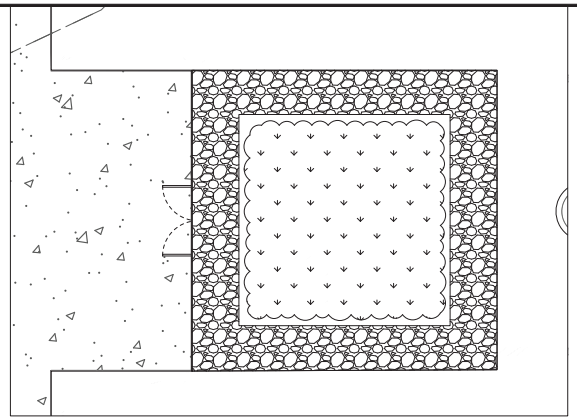
PROJECT NO: M1529-002
DATE: 05/23/18
FILE: L2.0 Planting Plans.dwg
DRAWN BY: HAS/TNE
CHECKED: JWP
APPROVED: BLM

PLANTING PLAN

SCALE:

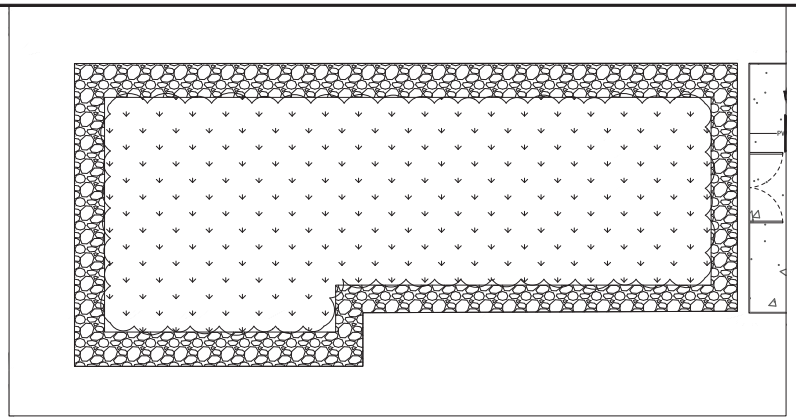
L2.3

Last Saved: 10/8/2021
Plotted On:Oct 08, 2021-3:40pm By: tsnyder
Tighe & Bond: \\wildcloud.projects\32016\16117-3-Project Dev\CADD\15-Layout\L2.0 Planting Plans.dwg



1 GREEN ROOF B-1
1" = 5'

SCALE IN FEET 0 5' 10'
GRAPHIC SCALE



2 GREEN ROOF B-2
1" = 5'

SCALE IN FEET 0 5' 10'
GRAPHIC SCALE

PLANT LEGEND: GREEN ROOFS

DECIDUOUS SHRUBS	SIZE	NOTES	QTY
Buddleia davidii Butterfly Bush	2 Gallon	Zone: 4	20
Nandina domestica 'Nana'	2 Gallon	Zone: 4	20

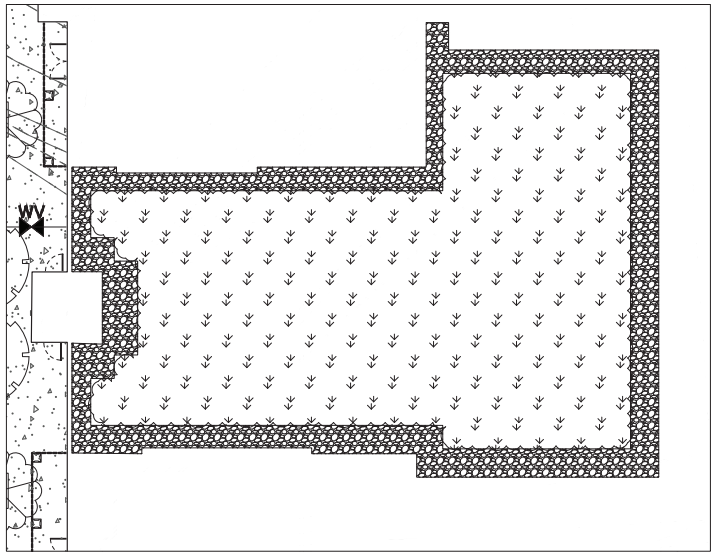
EVERGREEN SHRUBS	SIZE	NOTES	QTY
Juniperus procumbens Common Garden Juniper	1 Gallon	Zone: 4	25
Gaultheria procumbens Wintergreen	1 Gallon	Zone: 3	40

PERENNIALS	SIZE	NOTES	QTY
Achillea millfolium Yarrow	#3 Container	Zone: 3	175
Ajuga reptans Common Bugle	1 Gallon	Zone: 3	175
Allium schoenoprasum Chives	#1 Container	Zone: 4	175
Aquilegia candensis Columbine	#3 Container	Zone: 3	175
Hemerocallis 'Anna Warner' Day Lilly	#3 container	Zone: 3 a	175
Lavandula angustifolia English Lavender	#3 Container	Zone: 5	175
Oenothera fruticosa Evening Primrose	#2 Container	Zone: 4	175
Rudbeckia fulgida Omage Coneflower	#3 Container	Zone: 3	175
Sedum varieties Perennial sedum	#1 Container	Zone: 4	175
Stachys byzantina Lamb's Ears	#2 Container	Zone: 4	175
Symphyostrichum novae-angliae New England Aster	#3 Container	Zone: 4	175

ORNAMENTAL GRASSES	SIZE	NOTES	QTY
Carex flacca Blue - green Sedge	#3 container	Zone: 4	150
Eragrostis spectabilis Purple Lovegrass	#3 container	Zone: 5	200
Festuca glauca Blue Fescue	#3 container	Zone: 4	175

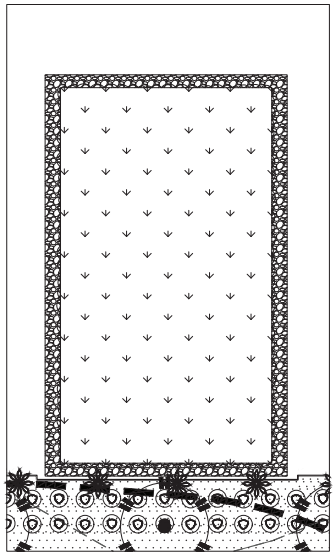
1. Not all plant material species and quantities shown will be used. Final plant material specifications dependent on conformance to, and approval by, local and state regulations and agencies.
2. Plant material specified shall conform to ANLA American Standard for Nursery Stock, ANSI Z60.1 current edition.
3. Plant material installed on roof membrane using 4'x4' tray system.
4. No permanent irrigation system is proposed.

6 PLANT LIST
NTS



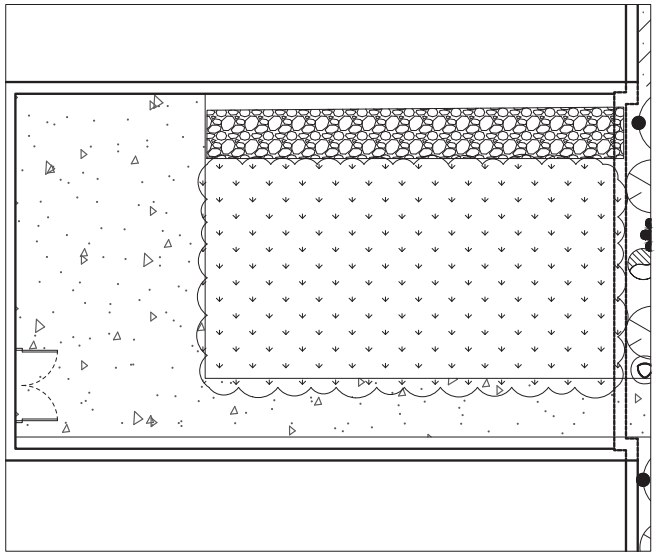
3 GREEN ROOF C-1
1" = 10'

SCALE IN FEET 0 10' 20'
GRAPHIC SCALE



4 GREEN ROOF C-2
1" = 10'

SCALE IN FEET 0 10' 20'
GRAPHIC SCALE



5 GREEN ROOF C-3
1" = 5'

SCALE IN FEET 0 5' 10'
GRAPHIC SCALE

Tighe&Bond
Engineers | Environmental Specialists

HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 16117

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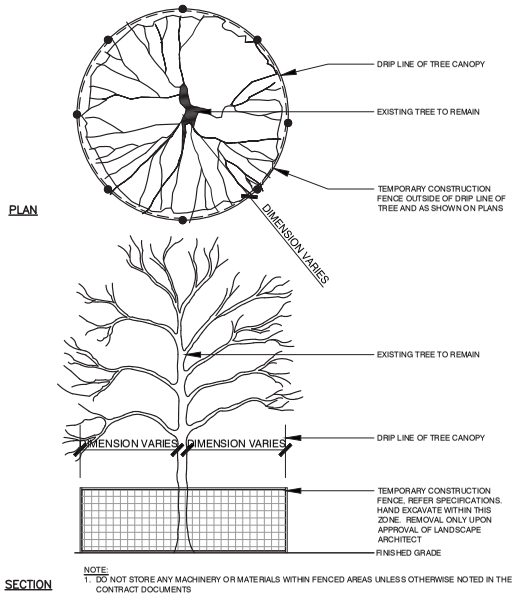
PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	L2.0 Planting Plans.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

ROOF PLANTING PLANS

SCALE:

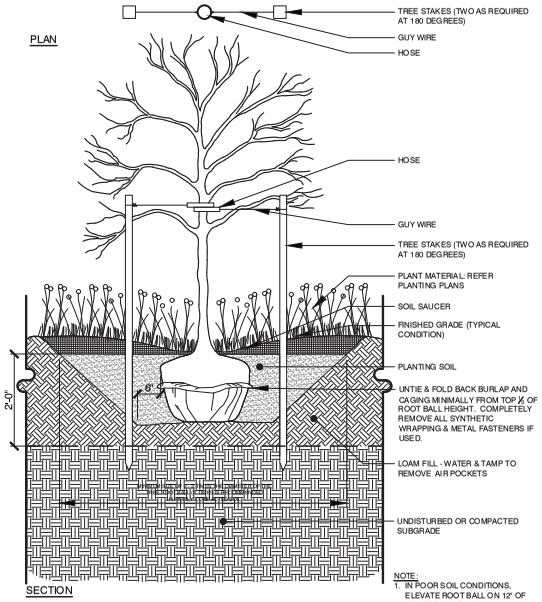
L2.4

Last Saved: 10/7/2021
Last Plotted: 10/08/2021
Tighe & Bond: \\vastaus\projects\2016\16173-Project-Dev\CADD\LS-Arch\L2.0 Planting Plans.dwg



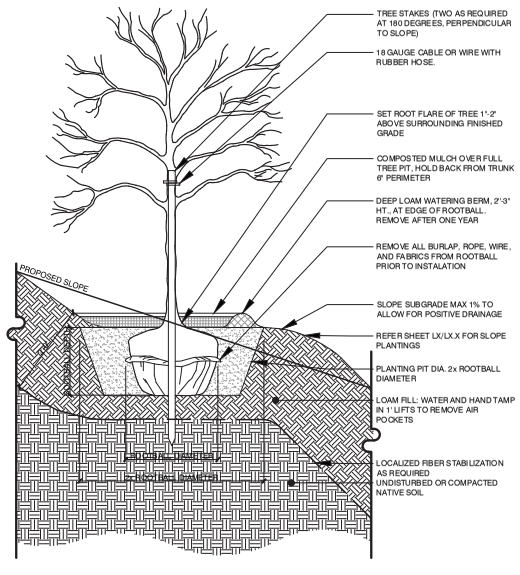
NOTE:
1. DO NOT STORE ANY MACHINERY OR MATERIALS WITHIN FENCED AREAS UNLESS OTHERWISE NOTED IN THE CONTRACT DOCUMENTS

1 PROTECTION FOR EXISTING TREES
Scale: Not To Scale

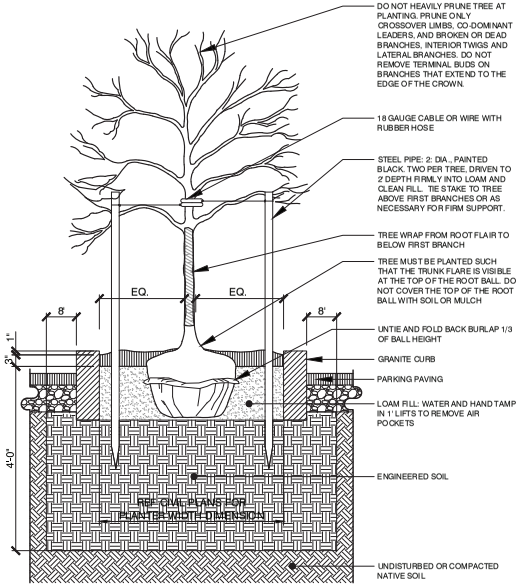


NOTE:
1. IN POOR SOIL CONDITIONS, ELEVATE ROOT BALL ON 12" OF COMPACTED SAND

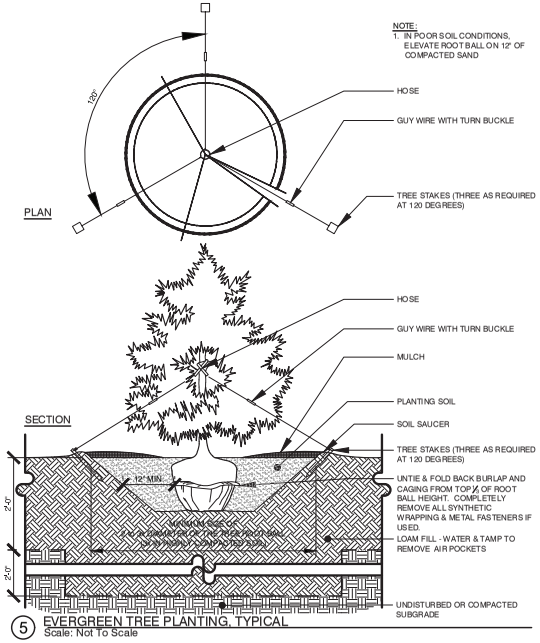
2 DECIDIOUS TREE PLANTING, TYPICAL
Scale: Not To Scale



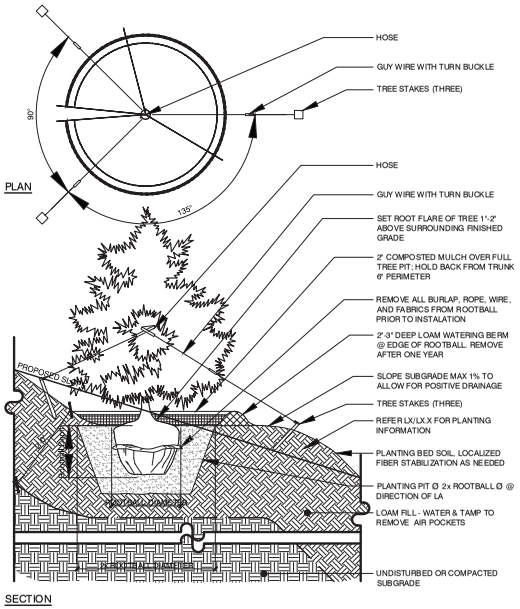
3 DECIDIOUS TREE PLANTING, STEEP TO MODERATE SLOPES
Scale: Not To Scale



4 DECIDIOUS TREE PLANTING: CENTER PARKING ISLAND
Scale: Not To Scale



5 EVERGREEN TREE PLANTING, TYPICAL
Scale: Not To Scale



6 EVERGREEN TREE PLANTING, STEEP TO MODERATE SLOPES
Scale: Not To Scale

Last Saved: 9/29/2021
Plotted On:Oct 05, 2021-1:22:42pm By: hsnyder
Tighe & Bond: \\tighebond\projects\25816\161173-Project Dev\CADD\15-Latch\L3.0 Planting Details.dwg

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HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No. 161 17

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

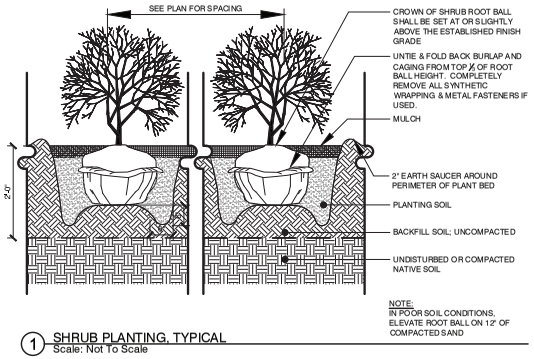
MARK	DATE	DESCRIPTION
6	10/8/2021	Response to Comments
5	3/10/2021	Response to Comments
4	1/20/2021	Planning Board Comments
3	6/2/2020	Planning Board Comments
2	5/20/2020	Planning Board Comments
1	1/3/2020	General Revisions

PROJECT NO: M1529-002
DATE: 05/23/18
FILE: L3.0 Planting Details.dwg
DRAWN BY: HAS/TNE
CHECKED: JHP
APPROVED: BLM

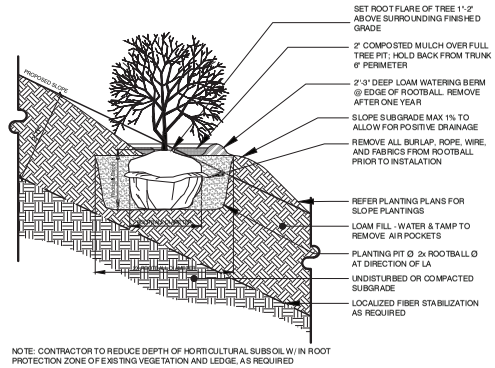
PLANTING DETAILS

SCALE:

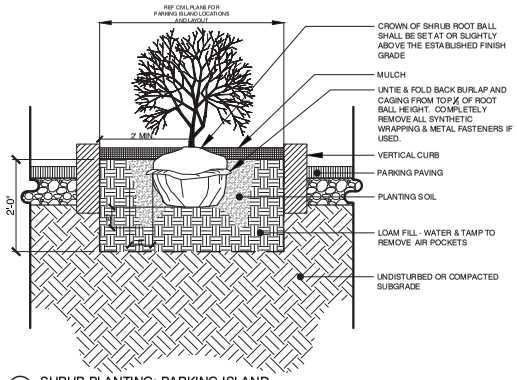
L3.0



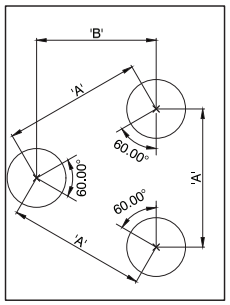
1 SHRUB PLANTING, TYPICAL
Scale: Not To Scale



2 SHRUB PLANTING: STEEP TO MODERATE SLOPES
Scale: Not to Scale

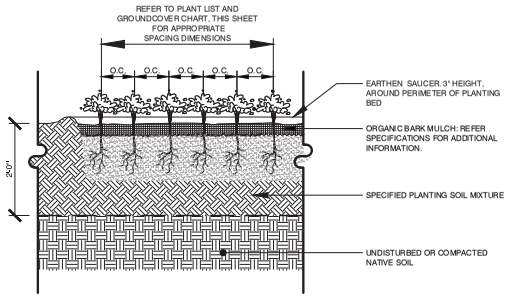


3 SHRUB PLANTING: PARKING ISLAND
Scale: Not To Scale

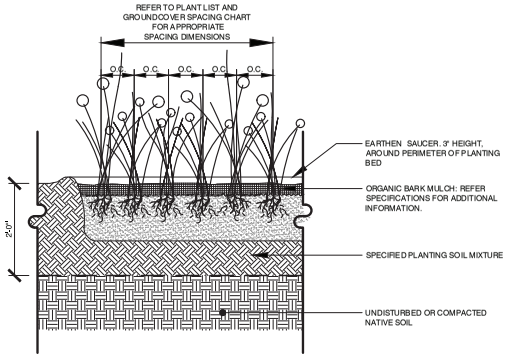


PLANT SPACING ('A')	ROW SPACING ('B')
6 IN. O.C.	5 IN. O.C.
8 IN. O.C.	7 IN. O.C.
10 IN. O.C.	8 ½ IN. O.C.
12 IN. O.C.	10 ½ IN. O.C.
15 IN. O.C.	13 IN. O.C.
18 IN. O.C.	16 IN. O.C.
24 IN. O.C.	21 IN. O.C.
30 IN. O.C.	26 IN. O.C.
36 IN. O.C.	30 IN. O.C.
48 IN. O.C.	42 IN. O.C.
54 IN. O.C.	48 IN. O.C.
60 IN. O.C.	54 IN. O.C.

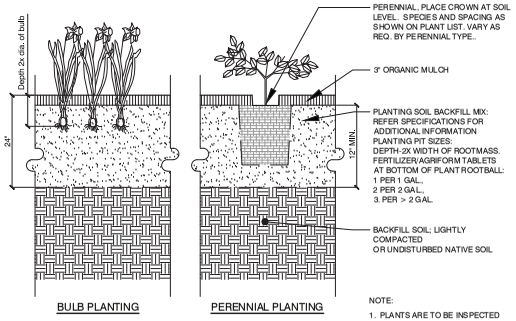
4 GROUNDCOVER, PERENNIAL AND ORNAMENTAL GRASS SPACING CHART
Scale: Not to Scale



5 GROUNDCOVER PLANTING, TYPICAL
Scale: Not To Scale

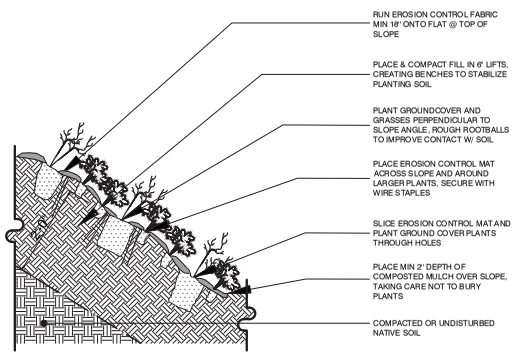


6 ORNAMENTAL GRASS PLANTING, TYPICAL
Scale: Not To Scale



NOTE:
1. PLANTS ARE TO BE INSPECTED FOR ROOTBOUND CONDITIONS BEFORE PLANTING. ANY ROOTBOUND PLANT SHALL BE REPLACED IN-KIND WITH PLANT MATERIAL OF SAME SPECIES, SIZE AND FORM.

7 BULB AND PERENNIAL PLANTING, TYPICAL
Scale: Not to Scale



8 GROUNCOVER PLANTINGS: 3:1 SLOPE OR GREATER
Scale: Not to Scale

Tighe&Bond
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AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

PERMIT DRAWINGS
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Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
6	10/8/2021	Response to Comments
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4	1/20/2021	Planning Board Comments
3	6/2/2020	Planning Board Comments
2	5/20/2020	Planning Board Comments
1	1/3/2020	General Revisions

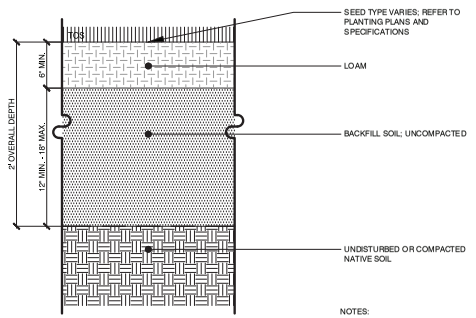
PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	L3.0 Planting Details.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

PLANTING DETAILS

SCALE:

L3.1

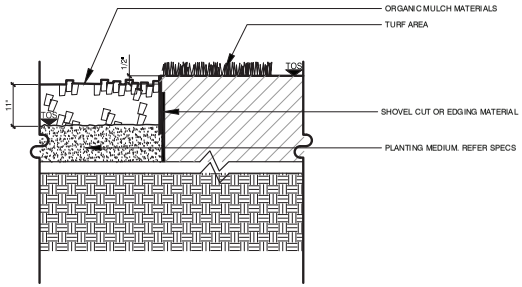
Last Saved: 9/29/2021
Plotted On:Oct 06, 2021-12:43pm By: hsnyder
Tighe & Bond: \\eastern\projects\25816\16117-3-Project Dev\CADD\15-Layout\L3.0 Planting Details.dwg



NOTES:

1. TOS Top of soil

1 SEED COVER
Scale: Not to Scale



NOTES:

1. TOS Top of Soil

2 ORGANIC MULCH
Scale: Not to Scale

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Harriman Project No. 16117

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Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
6	10/8/2021	Response to Comments
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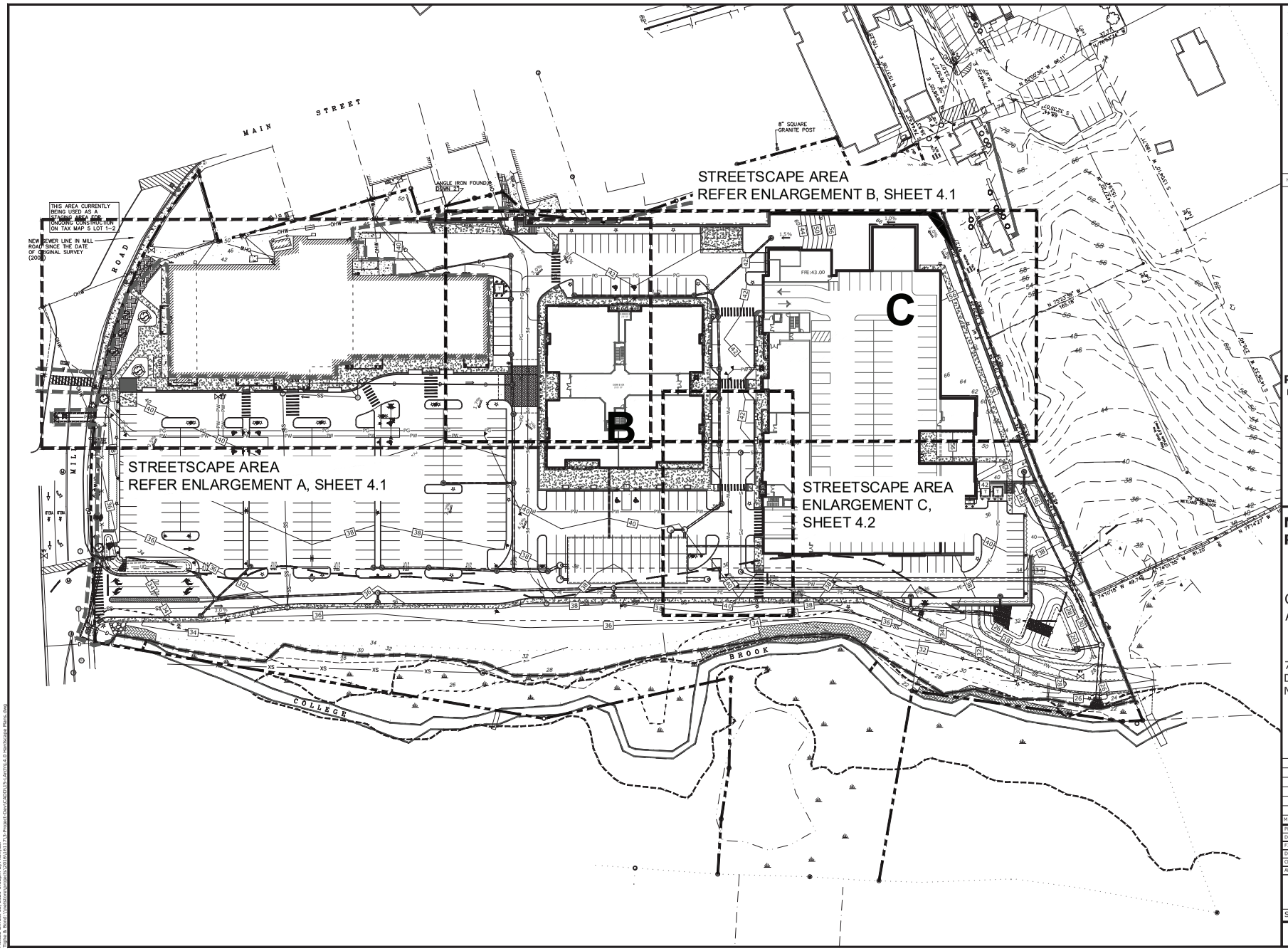
PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	L3.0 Planting Details.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

PLANTING DETAILS

SCALE:

L3.2

Last Saved: 9/29/2021
Plotted On:Oct 08, 2021-12:44pm By: hsnyder
Tighe & Bond: \\wildcloud\projects\2016\16117-3-Project Dev\CADD\15-Arch\L3.0 Planting Details.dwg



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Harriman Project No. 16117

PERMIT DRAWINGS
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Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

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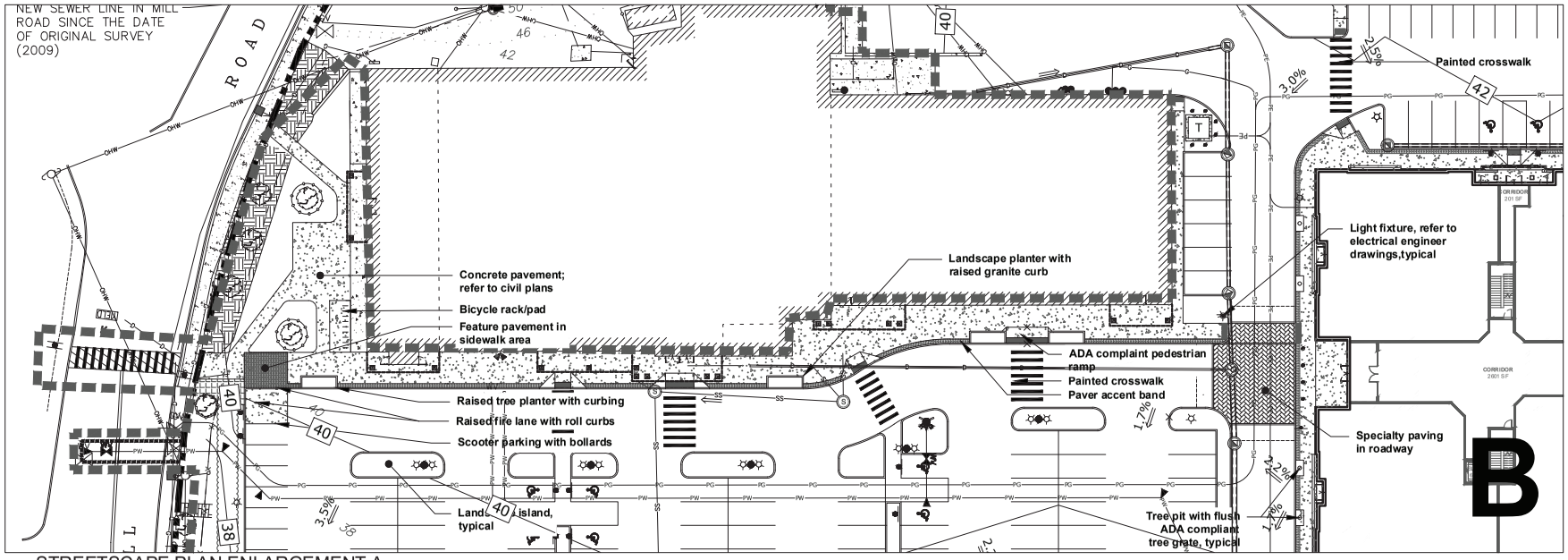
PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	L4.0 Hardscape Plans.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

HARDSCAPE OVERALL PLAN

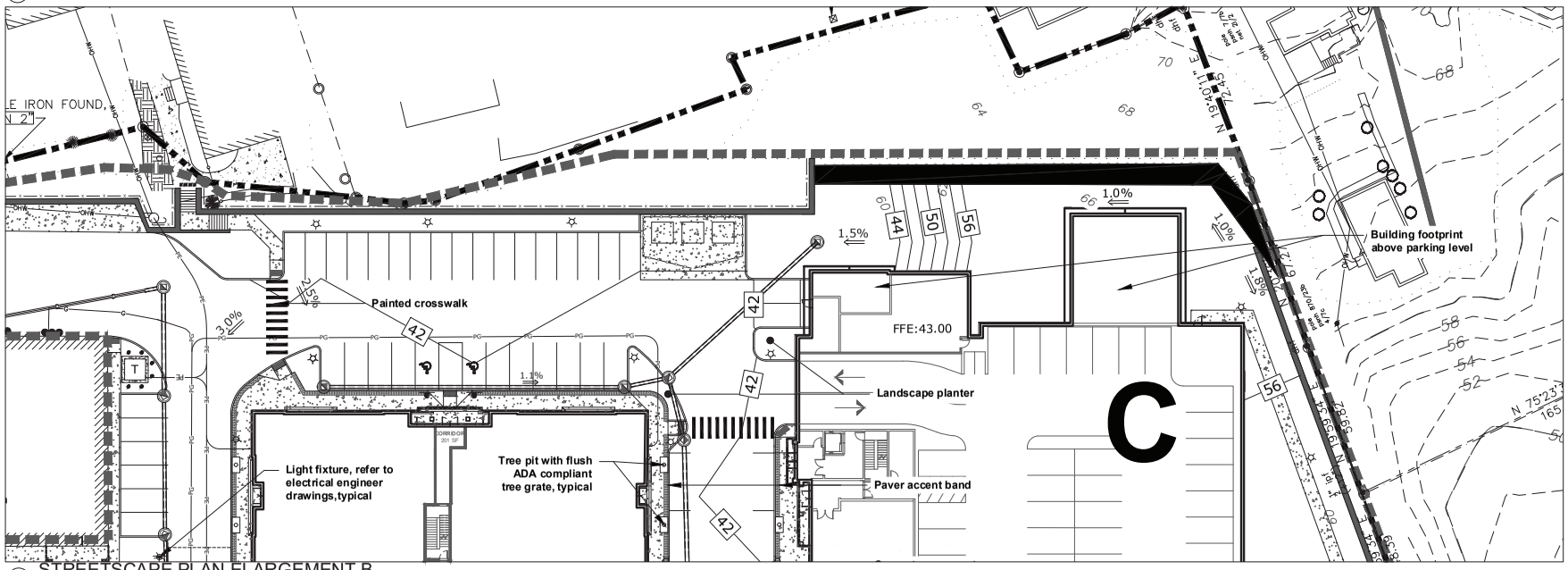
SCALE:

L4.0

Last Saved: 10/6/2021
Plotted On:Oct 06, 2021-5:02pm By: tsmeller
Tighe & Bond: \\tighebond.prod.sharepoint.com\sites\TB-Project-Docs\CADD\15-Litchfield\L4.0 Hardscape Plans.dwg



A STREETSCAPE PLAN ENLARGEMENT A
SCALE 1" = 10'-0"



B STREETSCAPE PLAN ELARGEMENT B
SCALE 1" = 10'-0"

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Harriman Project No. 16117

PERMIT DRAWINGS
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Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
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1	1/3/2020	General Revisions

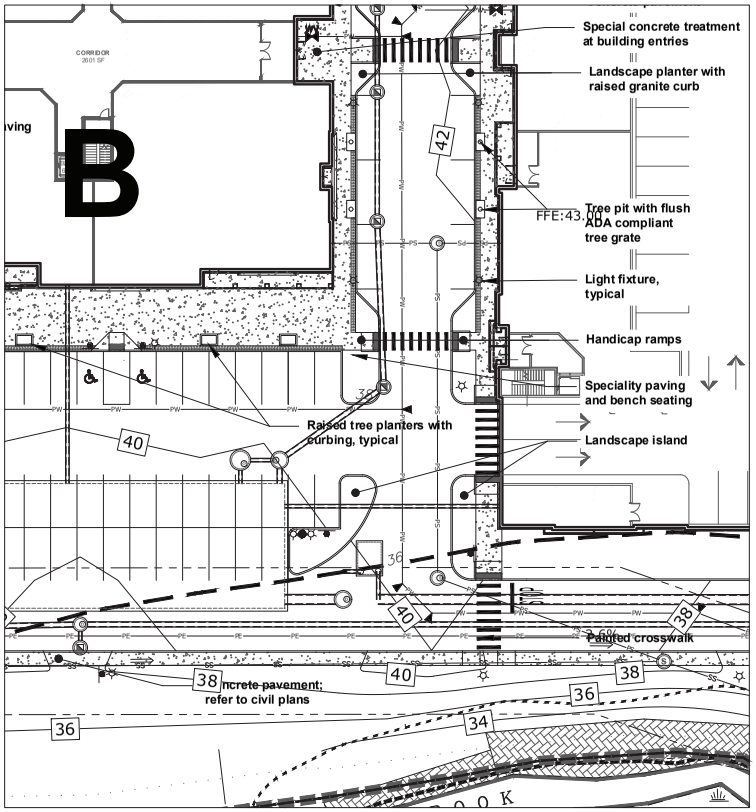
PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	L4.0 Hardscape Plans.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

HARDSCAPE PLAN

SCALE:

L4.1

Last Saved: 10/6/2021
Plotted On:Oct 06, 2021-4:53pm By: hsnyder
Tighe & Bond: \\tighebond\projects\30\16\16117-3-Project Dox\CADD\15-Layout\L4.0 Hardscape Plans.dwg



C STREETSCAPE AREA PLAN ENLARGEMENT C
SCALE 1" = 10'

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AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

PERMIT DRAWINGS
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Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
6	10/8/2021	Response to Comments
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1	1/3/2020	General Revisions

PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	L4.0 Hardscape Plans.dwg
DRAWN BY:	HAS/TNE
CHECKED:	JHP
APPROVED:	BLM

HARDSCAPE PLAN

SCALE:

L4.2

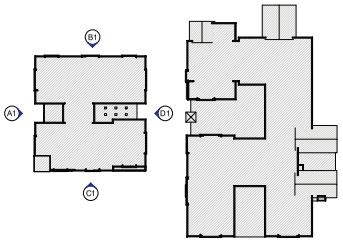
Last Saved: 10/6/2021
Plotted On:Oct 06, 2021-5:03pm By: hsnyder
Tighe & Bond: \\wildstone\projects\M\M1529\M1529-002\CAD\15-Layout\L4.0 Hardscape Plans.dwg

A1 EXTERIOR ELEVATION - "B" WEST
SCALE: 1/16" = 1'-0"

B1 EXTERIOR ELEVATION - "B" NORTH
SCALE: 1/16" = 1'-0"

C1 EXTERIOR ELEVATION - "B" SOUTH
SCALE: 1/16" = 1'-0"

D1 EXTERIOR ELEVATION "B" EAST
SCALE: 1/16" = 1'-0"



A2 KEY PLAN FOR A20.1
SCALE: 1" = 80'-0"

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SCALE IN FEET

GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	10/8/2021	RESPONSE TO COMMENTS
	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/28/2018
FILE:	
DRAWN BY:	ERP/AEW/SAA
CHECKED:	MDL
APPROVED:	MDL

EXTERIOR ELEVATIONS

SCALE: As indicated

A20.1

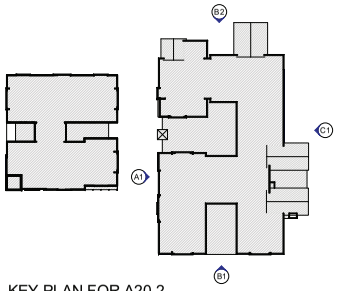
Plot Date: 9/28/2021 9:35:54 AM

C1 EXTERIOR ELEVATION - "C" EAST
SCALE: 1/16" = 1'-0"

B1 EXTERIOR ELEVATION - "C" SOUTH
SCALE: 1/16" = 1'-0"

B2 EXTERIOR ELEVATION "C" NORTH
SCALE: 1/16" = 1'-0"

A1 EXTERIOR ELEVATION - "C" WEST
SCALE: 1/16" = 1'-0"



A2 KEY PLAN FOR A20.2
SCALE: 1" = 80'-0"

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HARRIMAN
AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

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SCALE IN FEET
0 8' 16' 24'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	10/8/2021	RESPONSE TO COMMENTS
	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	
DRAWN BY:	ERP/SAA
CHECKED:	MDL
APPROVED:	MDL

EXTERIOR ELEVATIONS

SCALE: As indicated

A20.2

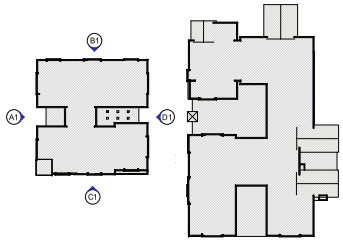
Plot Date: 9/28/2021 5:39:56 PM

D1 RENDERED ELEVATION - "B" WEST
SCALE: 1/16" = 1'-0"

D2 RENDERED ELEVATION - "B" NORTH
SCALE: 1/16" = 1'-0"

C1 RENDERED ELEVATION - "B" SOUTH
SCALE: 1/16" = 1'-0"

C2 RENDERED ELEVATION "B" EAST
SCALE: 1/16" = 1'-0"



A2 KEY PLAN FOR A20.3
SCALE: 1" = 80'-0"

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AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

PERMIT DRAWINGS
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SCALE IN FEET

GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	10/8/2021	RESPONSE TO COMMENTS
	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/28/2018
FILE:	
DRAWN BY:	ERP/AEW/SAA
CHECKED:	MDL
APPROVED:	MDL

RENDERINGS

SCALE: As indicated

A20.3

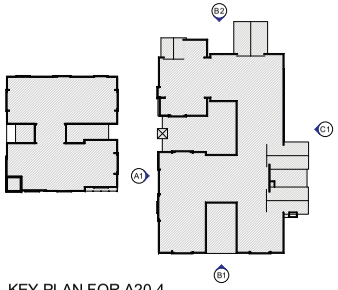
Plot Date: 9/28/2021 10:45:11 AM

C1 EXTERIOR ELEVATION - "C" EAST
SCALE: 1/16" = 1'-0"

B1 EXTERIOR ELEVATION - "C" SOUTH
SCALE: 1/16" = 1'-0"

B2 EXTERIOR ELEVATION "C" NORTH
SCALE: 1/16" = 1'-0"

A1 EXTERIOR ELEVATION - "C" WEST
SCALE: 1/16" = 1'-0"



A2 KEY PLAN FOR A20.4
SCALE: 1" = 80'-0"

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AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.	16117

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SCALE IN FEET
0 8' 16' 24'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
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	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

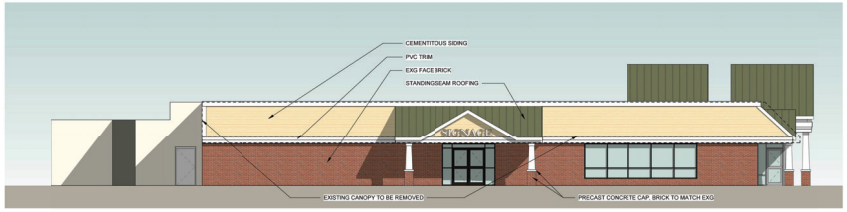
PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	
DRAWN BY:	ERP/SAA
CHECKED:	MDL
APPROVED:	MDL

EXTERIOR ELEVATIONS

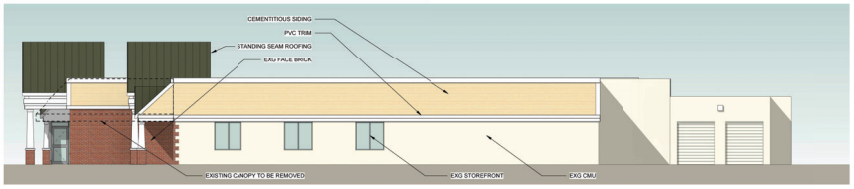
SCALE: As indicated

A20.4

Plot Date: 9/28/2021 5:48:54 PM



C1 RETAIL - LEFT ELEVATION
SCALE: NO SCALE



B1 RETAIL - RIGHT ELEVATION
SCALE: NO SCALE

NOTE: CONCEPTUAL ILLUSTRATION OF FACADE IMPROVEMENTS, SUBJECT TO DISCUSSION WITH HANNAFORD AND RITE AID.

A1 RETAIL - FRONT ELEVATION
SCALE: NO SCALE

Plot Date: 12/31/2019 2:16:38 PM

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Harriman Project No.	16117

PERMIT DRAWINGS
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SCALE IN FEET

GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	10/8/2021	RESPONSE TO COMMENTS
	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

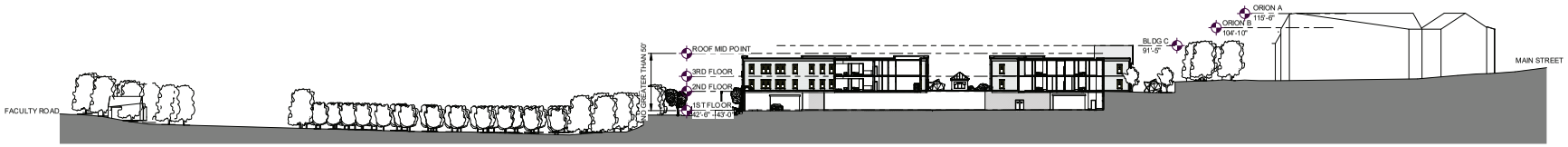
PROJECT NO:	16117
DATE:	5/23/2018
FILE:	
DRAWN BY:	DRE
CHECKED:	MDL
APPROVED:	MDL

RETAIL ELEVATIONS

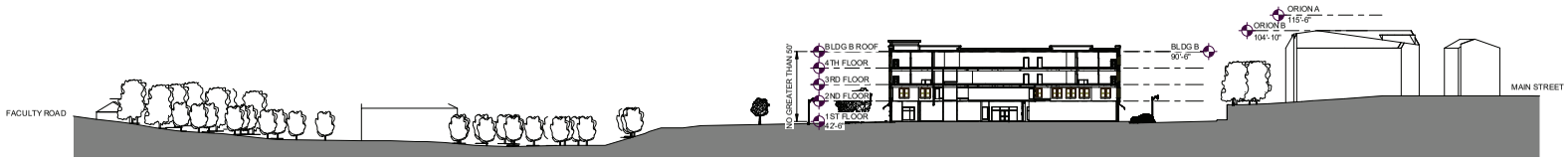
SCALE: NO SCALE

A20.5

C1 SOUTH SITE SECTION
SCALE: 1" = 30'-0"



B1 SITE SECTION THROUGH BUILDING C
SCALE: 1" = 40'-0"



A1 SITE SECTION THROUGH BUILDING B
SCALE: 1" = 40'-0"

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SCALE IN FEET
0 20' 40' 60'
GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	10/8/2021	RESPONSE TO COMMENTS
	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	
DRAWN BY:	SAA
CHECKED:	MDL
APPROVED:	MDL

SITE SECTIONS

SCALE: As indicated

A30.1

Plot Date: 10/7/2021 2:43:07 PM

VIEW AT PEDESTRIAN CROSSING BETWEEN BUILDINGS A & B LOOKING EAST

Plot Date: 10/8/2021 9:55:25 AM

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Harriman Project No.	16117

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SCALE IN FEET

GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	10/8/2021	RESPONSE TO COMMENTS
	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	
DRAWN BY:	SAA
CHECKED:	MDL
APPROVED:	MDL

RENDERED PERSPECTIVE

SCALE:

A40.1

VIEW AT PEDESTRIAN CROSSING BETWEEN BUILDINGS B & C LOOKING SOUTH

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Harriman Project No.	16117

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SCALE IN FEET

GRAPHIC SCALE

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

MARK	DATE	DESCRIPTION
	10/8/2021	RESPONSE TO COMMENTS
	1/20/2021	PLANNNING BOARD COMMENTS
	1/2/2020	GENERAL REVISIONS

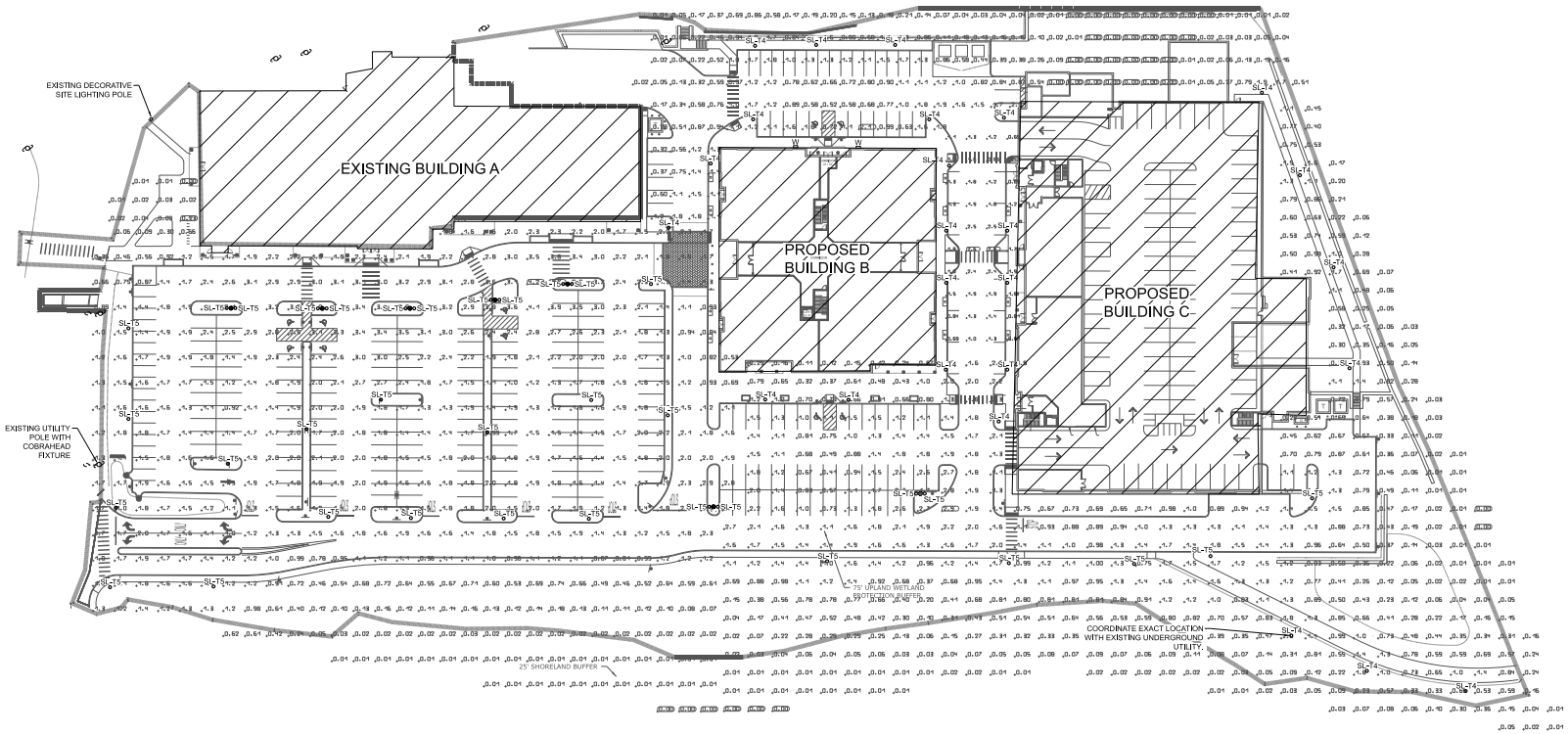
PROJECT NO:	M1529-002
DATE:	5/23/2018
FILE:	
DRAWN BY:	SAA
CHECKED:	MDL
APPROVED:	MDL

RENDERED PERSPECTIVE

SCALE:

A40.2

Plot Date: 10/8/2021 9:52:16 AM



2 SITE LIGHTING PLAN

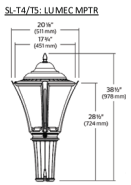
SCALE: 1" = 40'

LIGHTING FIXTURE SCHEDULE

ALL FIXTURES SHALL BE FURNISHED COMPLETE WITH ALL HARDWARE
LAMPS, HANGERS, FITTINGS, ETC. FOR A COMPLETE AND PROPER INSTALLATION

TYPE	MANUFACTURER	CATALOG NO.	MTG.	VOLT	LAMPS NO.	LAMPS WATT	LAMPS TYPE	REMARKS/BALLAST INFORMATION
	SITE LIGHT FIXTURE (LED TYPE IV ASYMMETRICAL DISTRIBUTION) - 12' ROUND DECORATIVE STEEL POLE							
SL-T4	LUMEC	MPTR-35W32LED4K-LE4-277-DMG-FN1-BKTX	POLE	277		35	LED	PROVIDE 12', 16 SHARP FLUTED STEEL POLE
	APPROVED EQUAL							POLE SHALL ACCEPT FOUR 1" CONDUITS.
								POLE COLOR SHALL MATCH FIXTURE COLOR.
		POLE: NORTH HAMPTON STYLE STAINLESS						POLE SHALL BE RATED FOR FIXTURE EPA RATING
		STEEL POST WITH BASE. SEE REMARKS.						WITH 100MPH WIND. 35 INPUT WATTS PER HEAD.
	SITE LIGHT FIXTURE (LED TYPE V SYMMETRICAL DISTRIBUTION) - 18' ROUND DECORATIVE STEEL POLE							
SL-T5	LUMEC	MPTR-90W80LED4K-LE5-277-DMG-FN1-BKTX	POLE	277		87	LED	PROVIDE 18', 16 SHARP FLUTED STEEL POLE
	APPROVED EQUAL							POLE SHALL ACCEPT FOUR 1" CONDUITS.
								POLE COLOR SHALL MATCH FIXTURE COLOR.
		POLE: NORTH HAMPTON STYLE STAINLESS						POLE SHALL BE RATED FOR FIXTURE EPA RATING
		STEEL POST WITH BASE. SEE REMARKS.						WITH 100MPH WIND. 87 INPUT WATTS PER HEAD.
	SLIM12N RAB LOW PROFILE WALL PACK							
W	SLIM12N		WALL	277		123	LED	
	APPROVED EQUAL							

SL-T4/T5: LUMEC MPTR



W: SLIM12N

1 SITE LIGHTING FIXTURE SCHEDULE

SCALE: NO SCALE

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SCALE IN FEET
0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

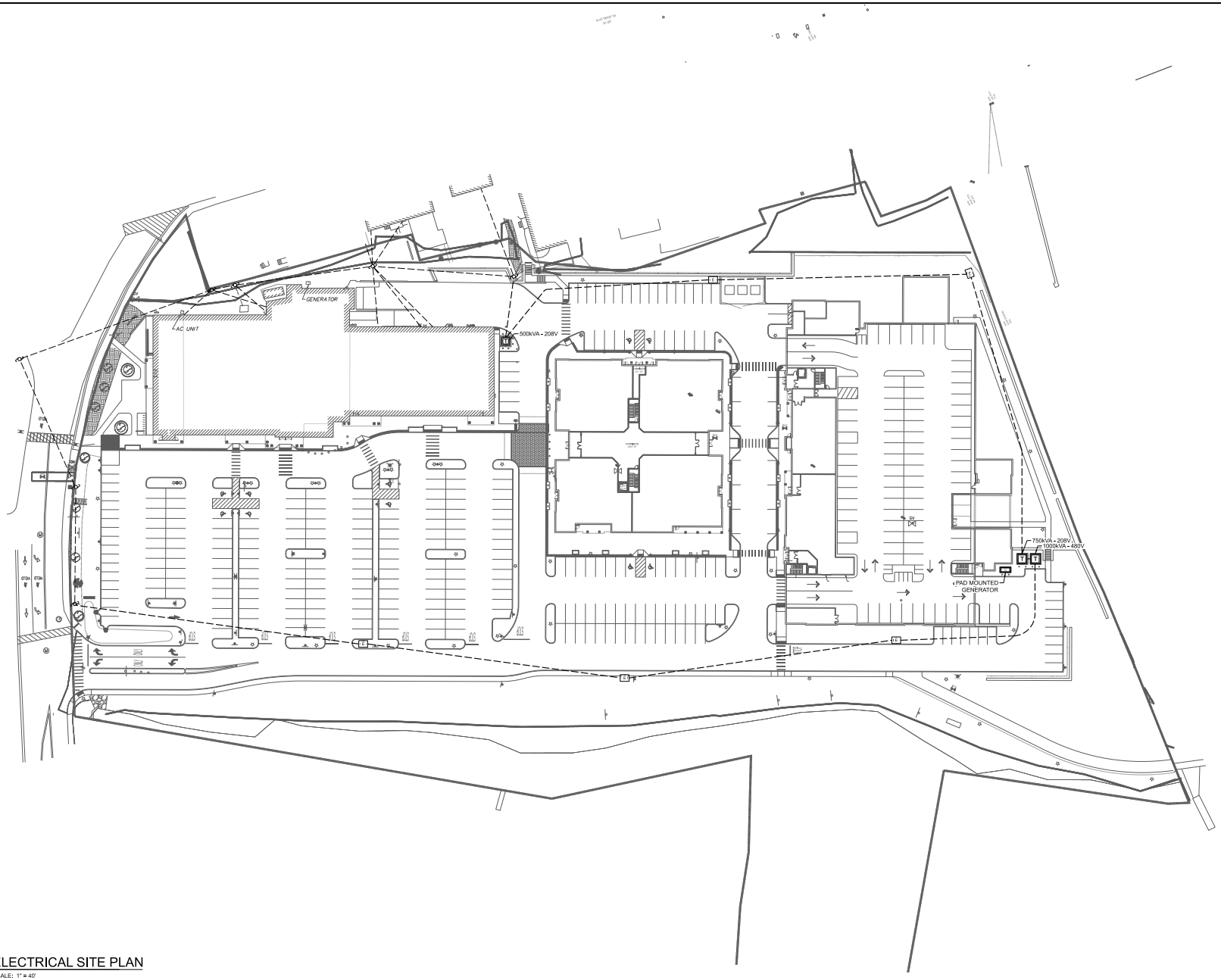
8	10/08/21	RESPONSE TO COMMENTS

PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	$(getvar, "dwgname")
DRAWN BY:	BSO
CHECKED:	JWT
APPROVED:	JWT

ELECTRICAL SITE LIGHTING PLAN

SCALE: AS SHOWN

ES10.1



1 ELECTRICAL SITE PLAN
SCALE: 1" = 40'

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Harriman Project No.	16117

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SCALE IN FEET
0 40' 80'
GRAPHIC SCALE

Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L
Durham,
New Hampshire 03824

10/08/2021	RESPONSE TO COMMENTS
9/29/2021	RESPONSE TO COMMENTS
1/20/2021	PLANNING BOARD COMMENTS
1/2/2020	GENERAL REVISIONS

PROJECT NO:	M1529-002
DATE:	05/23/18
FILE:	
DRAWN BY:	JWT
CHECKED:	JWT
APPROVED:	JWT

ELECTRICAL SITE PLAN

SCALE: AS SHOWN

ES20.1

m:\pm\ 8v: $(getvar, "TbpFrname")