# MILL PLAZA REDEVELOPMENT

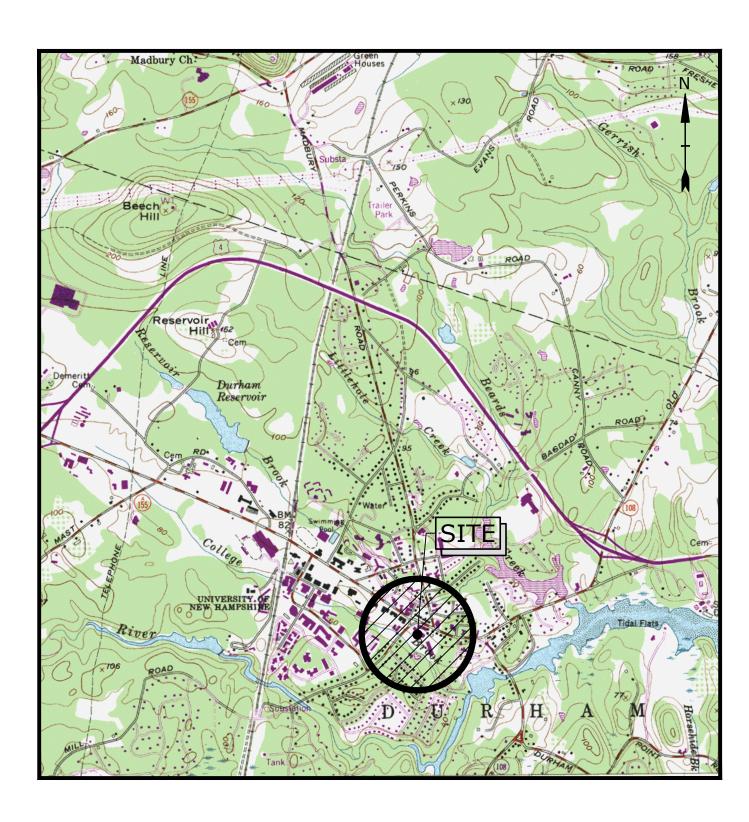
# DURHAM, NEW HAMPSHIRE

# SITE PLANS

	LIST OF DRAWINGS	
SHEET NO.	SHEET TITLE	LAST REVISED
	COVER SHEET	1/2/2020
G-101	NOTES AND LEGEND SHEET	1/2/2020
C-101	EXISTING CONDITIONS AND DEMOLITION PLAN	1/2/2020
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C-601	TRUCK TURNING PLAN	1/2/2020
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L3.0	PLANTING DETAILS	1/2/2020
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L3.2	PLANTING DETAILS	1/2/2020
L4.0	HARDSCAPE OVERALL PLAN	1/2/2020
L4.1	HARDSCAPE PLAN	1/2/2020
L4.2	HARDSCAPE PLAN	1/2/2020
ES10.1	ELECTRICAL SITE LIGHTING PLAN	1/2/2020
A20.1	EXTERIOR ELEVATIONS	1/2/2020
A20.2	EXTERIOR ELEVATIONS	1/2/2020
A20.3	RENDERINGS	1/2/2020
A20.4	RENDERINGS	1/2/2020
A20.5	RENDERINGS	1/2/2020
A30.1	SITE SECTIONS	1/2/2020

MAY 23, 2018

REVISED: JANUARY 2, 2020







Joseph M. Persechino, P.E.

OWNER/APPLICANT:

Tighe&Bond

PREPARED BY:

Colonial Durham Associates, LP 7 Mill Road, Unit L Durham, NH 03824

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WRITING BY THE BOARD AND ATTACHED HERETO

PERMIT/APPROVAL Town of Durham Site Plan Approval Town of Durham Conditional Use Approval

NHDES Sewer Connection Permit NHDES Alteration of Terrain Permit

THE CONTRACTOR SHALL NOT RELY ON SCALED DIMENSIONS AND SHALL CONTACT THE ENGINEER FOR

REPAIR EXISTING UTILITIES AND RELOCATE EXISTING UTILITIES REQUIRED TO COMPLETE THE WORK. COORDINATE ALL WORK WITHIN PUBLIC RIGHT OF WAYS WITH THE TOWN OF DURHAM.

ALL LINES AND GRADES. 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.

THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR OR PROFESSIONAL ENGINEER TO DETERMINE

IT IS THE CONTRACTOR'S RESPONSIBILITY TO FAMILIARIZE THEMSELVES AND COMPLY WITH THE CONDITIONS OF ALL OF THE PERMIT APPROVALS. 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.

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. ALL MATERIALS AND CONSTRUCTION SHALL CONFORM TO THE TOWN OF DURHAM PUBLIC WORKS DEPARTMENT, STANDARD SPECIFICATIONS AND WITH THE STATE OF NEW HAMPSHIRE DEPARTMENT OF TRANSPORTATION, "STANDARD

SPECIFICATIONS OF ROAD AND BRIDGE CONSTRUCTION", CURRENT EDITION 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. CONTRACTOR SHALL THOROUGHLY CLEAN ALL CATCH BASINS AND DRAIN LINES, WITHIN THE LIMIT OF WORK, OF SEDIMENT IMMEDIATELY UPON COMPLETION OF CONSTRUCTION.

. SEE EXISTING CONDITIONS AND DEMOLITION PLAN FOR BENCH MARK INFORMATION.

### **DEMOLITION NOTES:**

EROSION CONTROL MEASURES SHALL BE INSTALLED PRIOR TO THE START OF ANY CLEARING OR DEMOLITION ACTIVITIES. 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,

COORDINATE REMOVAL, RELOCATION, DISPOSAL OR SALVAGE OF UTILITIES WITH THE OWNER AND APPROPRIATE UTILITY

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

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. 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. 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,

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

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.

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

CONTRACTOR SHALL PROTECT ALL PROPERTY MONUMENTATION THROUGHOUT DEMOLITION AND CONSTRUCTION OPERATIONS. SHOULD ANY MONUMENTATION BE DISTURBED BY BY THE CONTRACTOR, THE CONTRACTOR SHALL EMPLOY A NEW HAMPSHIRE LICENSED SURVEYOR TO REPLACE DISTURBED MONUMENTS.

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.

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. . 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.

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 NCLUDING LEGENDS, ARROWS, CROSSWALKS AND STOP BARS SHALL MEET THE REQUIREMENTS OF AASHTO M249. ALI PAINTED PAVEMENT MARKINGS INCLUDING CENTERLINES, LANE LINES AND PAINTED MEDIANS SHALL MEET THE

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 REOUIREMENTS, LATEST EDITIONS. SEE DETAILS FOR PAVEMENT MARKINGS, ADA SYMBOLS, SIGNS AND SIGN POSTS.

PAINTED ISLANDS SHALL BE FOUR (4) INCH WIDE DIAGONAL LINES AT 3'-0" O.C. BORDERED BY FOUR (4) INCH WIDE

STOP BARS SHALL BE EIGHTEEN (18) INCHES WIDE, WHITE THERMOPLASTIC AND CONFORM TO CURRENT MUTCD

CLEAN AND COAT VERTICAL FACE OF EXISTING PAVEMENT AT SAW CUT LINE WITH RS-1 EMULSION IMMEDIATELY PRIOR TO PLACING NEW BITUMINOUS CONCRETE

SEE ARCHITECTURAL/BUILDING DRAWINGS FOR ALL CONCRETE PADS & SIDEWALKS ADJACENT TO BUILDING. CONTRACTOR TO PROVIDE BACKFILL AND COMPACTION AT CURB LINE AFTER CONCRETE FORMS FOR SIDEWALKS AND PADS

HAVE BEEN STRIPPED. COORDINATE WITH BUILDING CONTRACTOR.

ALL LIGHT POLE BASES NOT PROTECTED BY A RAISED CURB SHALL BE PAINTED YELLOW. COORDINATE ALL WORK ADJACENT TO BUILDING WITH BUILDING CONTRACTOR.

. 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 ALL DIMENSIONS ARE TO THE FACE OF CURB UNLESS OTHERWISE NOTED.

## **GRADING AND DRAINAGE NOTES:**

COMPACTION REQUIREMENTS: BELOW PAVED OR CONCRETE AREAS TRENCH BEDDING MATERIAL AND

SAND BLANKET BACKFILL

BELOW LOAM AND SEED AREAS \* 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.

ALL STORM DRAINAGE PIPES SHALL BE HIGH DENSITY POLYETHYLENE (HANCOR HI-Q, ADS N-12 OR EQUAL) OR RCP CLASS IV, UNLESS OTHERWISE SPECIFIED.

ADJUST ALL MANHOLES, CATCH BASINS, CURB BOXES, ETC. WITHIN LIMITS OF WORK TO FINISH GRADE. 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. ALL DISTURBED AREAS NOT TO BE PAVED OR OTHERWISE TREATED SHALL RECEIVE 6" LOAM, SEED FERTILIZER AND MULCH.

ALL STORM DRAIN CONSTRUCTION SHALL BE IN ACCORDANCE WITH THE NHDOT STANDARD SPECIFICATIONS FOR

HIGHWAYS AND BRIDGES, LATEST EDITION. ALL PROPOSED CATCH BASINS SHALL BE EQUIPPED WITH OIL/GAS SEPARATOR HOODS AND 4' SUMPS.

### **EROSION CONTROL NOTES:** SEE SHEET C-501 FOR GENERAL EROSION CONTROL NOTES AND DETAILS.

## UTILITY NOTES:

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 ALL WATER MAIN INSTALLATIONS SHALL BE CLASS 52, CEMENT LINED DUCTILE IRON PIPE 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 ALL SEWER PIPE SHALL BE PVC SDR 35 UNLESS OTHERWISE STATED.

CONNECTION TO EXISTING WATER MAIN SHALL BE CONSTRUCTED TO TOWN OF DURHAM STANDARDS. 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.

APPLICABLE STATE AND LOCAL CODES.

ALL ELECTRICAL MATERIAL WORKMANSHIP SHALL CONFORM TO THE NATIONAL ELECTRIC CODE, LATEST EDITION, AND ALL

THE EXACT LOCATION OF NEW UTILITY SERVICES AND CONNECTIONS SHALL BE COORDINATED WITH THE BUILDING DRAWINGS AND THE APPLICABLE UTILITY COMPANIES ALL UNDERGROUND CONDUITS SHALL HAVE NYLON PULL ROPES TO FACILITATE PULLING CABLES.

OTHER MISCELLANEOUS ITEMS NOT NECESSARILY DETAILED ON THESE DRAWINGS TO RENDER INSTALLATION OF UTILITIES CONTRACTOR SHALL PROVIDE EXCAVATION, BEDDING, BACKFILL AND COMPACTION FOR NATURAL GAS SERVICES.

). THE CONTRACTOR SHALL PROVIDE AND INSTALL ALL MANHOLES, BOXES, FITTINGS, CONNECTORS, COVER PLATES, AND

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.

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. ALL PLANTS SHALL BE NURSERY GROWN AND PLANTS AND WORKMANSHIP SHALL CONFORM TO THE AMERICAN

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.

ASSOCIATION OF NURSERYMEN STANDARDS, INCLUDING BUT NOT LIMITED TO SIZE, HEALTH, SHAPE, ETC., AND SHALL BE

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

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 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.

## **EXISTING CONDITIONS PLAN NOTES:**

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.

REFERENCE: TAX MAP 5, LOT 1-1 TOTAL PARCEL AREA: 449,328 SO. FT. OR 10.315 AC. OWNER OF RECORD: COLONIAL DURHAM ASSOCIATES

ADMINISTRATIVE OFFICES 405 PARK, 12 FLOOR

REPRESENTATIVE.

NEW YORK, NY 10022 S.C.R.D. BOOK 1716 PAGE 637

4. ZONE: CENTRAL BUSINESS (CB)

DIMENSIONAL REQUIREMENTS:

BOOK 429 PAGE 270

PROVIDED BY MOORE LOCATE SERVICE ON 3/08.

MIN. LOT AREA 5000 sq.ft. (FOR AN ALLOWED NONRESIDENTIAL USE) MIN. FRONTAGE

 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. 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. FLOOD HAZARD ZONE: ZONE X & AE (ALONG COLLEGE BROOK) PER FEMA F.I.R.M. #33017C0318E, DATED SEPTEMBER 30, 2015.

HORIZONTAL DATUM BASED ON NH STATE PLANE COORDINATE SYSTEM (NAD83) BASED

ON NGS CORRECTED OPUS SOLUTION. 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, FTC.

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.

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

### **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,

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 18. "PLAN FOR EXCHANGE ELIZABETH SMART - ALEXANDER AMELL, DURHAM, N.H." DATED

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

APRIL 1977 BY G.L. DAVIS & ASSOCIATES. S.C.R.D. PLAN #17 -100.

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.

<u>LEGEND</u>

BOLLARD

TYPICAL

F.F.

SWL

SYL

DYL

CONC.

UP#

BEARING

DIST

□------ BOXWIRE FENCE

EDGE OF STREAM

OVERHEAD WIRES

SEWER LINE

DRAIN LINE

G——G GAS LINE

TREE LINE

· STONE WALL

— 100 — CONTOUR LINE

----- EDGE OF GRAVEL

——O—— CHAINLINK FENCE

UNDERGROUND ELECTRIC LINE

SEWER LINE TO BE REMOVED

———D——— DRAIN LINE TO BE REMOVED

GAS LINE TO BE REMOVED

WATER LINE TO BE REMOVED

EASEMENT LINE

---- APPROXIMATE ABUTTERS LOT LINE

————E———— UNDERGROUND ELECTRIC LINE TO BE REMOVED

EDGE OF JURISDICTIONAL

PLAN NOTES: NOTE #6)

EDGE OF VERY POORLY

— — — — — DRAINED SOILS (SEE SEE EXISTING CONDITIONS

PLAN NOTES: NOTE #6)

**DIVISION LINE** 

WETLAND (SEE EXISTING CONDITIONS

APPROXIMATE ABANDONED SEWER

LINE PER REFERENCE PLAN #22

APPROX. BUILDING OCCUPANCY

RETAINING

CONCRETE

**GRANITE CURB** 

CONCRETE CURB

PROPERTY LINES

BITUMINOUS CURB

UTILITY POLE IDENTIFIER (SEE TABLE)

MONITORING WELL

FINISHED FLOOR

EDGE OF PAVEMENT

SINGLE WHITE LINE

SINGLE YELLOW LINE

DOUBLE YELLOW LINE

HANDICAP PARKING

DRAINAGE/SEWAGE FLOW DIRECTION ARROW

25. "EXISTING CONDITIONS PLAN OF MILL ROAD PLAZA FOR HANNAFORD BROTHERS CO."

DATED MAY 28, 2015 BY DOUCET SURVEY INC.

UTILITY POLE & GUY WIRE

LIGHT POLE (TWO ARMS)

FENCE POST

FIRE HYDRANT

GAS GATE VALVE

WATER GATE VALVE

(SEE TABLE)

(SEE TABLE)

AUTO-SPRINKLER

HOSE CONNECTION

GAS REGULATOR

ELECTRIC METER

CATCH BASIN

HAND-HOLE

DRAIN MANHOLE

ELECTRIC MANHOLE

SEWER MANHOLE

CONIFEROUS TREE

DECIDUOUS TREE

LANDSCAPED AREA

SURFACE LEDGE

**BOULDERS** 

FLAT PAVER STONE WALKWAY

HANDICAP PARKING SPACE

MANHOLE

BENCHES

CONCRETE

RIP RAP

TELEPHONE MANHOLE

JURISDICTIONAL WETLAND SYMBOL

WATER SHUTOFF VALVE

SIGN

00

UTILITY POLE W/ LIGHT

DRILL HOLE FOUND OR SET AS NOTED

WIRE FENCE FOUND ON GROUND

SURVEY MONUMENT IDENTIFIER

BUILDING OCUPANCY INDENTIFIER

IRON PIPE/ROD FOUND OR SET AS NOTED

SIGN (TWO POSTS

# **ABBREVIATIONS**

AASHTO AMERICAN ASSOCIATION OF STATE SQUARE FEET HIGHWAY & TRANSPORTATION TO BE REMOVED AMERICANS WITH DISABILITIES ACT TOP OF CURB TC TW TOP OF WALL TYP TYPICAL UD UNDERDRAIN RD ROOF DRAIN EDGE OF PAVEMENT

SINGLE WHITE LINE DOUBLE YELLOW LINE DYL CONC. CONCRETE VGC VERTICAL GRANITE CURB SGC SLOPED GRANITE CURB VBB VERTICAL BITUMINOUS BERM

**EXISTING SPOT GRADE** 

PROPOSED SPOT GRADE

INLET PROTECTION BARRIER

PROPOSED SILT SOCK

PROPOSED SEWER LINE

PROPOSED DRAIN LINE

PROPOSED WATER LINE

PROPOSED DRAIN MANHOLE

PROPOSED SEWER MANHOLE

PROPOSED LIGHT POLE BASE

PROPOSED PAINTED ARROW

PROPOSED CROSSWALK

PROPOSED CURB RADIUS

PROPOSED THRUST BLOCK

PROPOSED FIRE HYDRANT

PAVEMENT TO BE REMOVED

PROPOSED LIMIT OF WORK

EXISTING BUILDING OVERHANG

PROPOSED SAWCUT

RIGHT OF WAY LINE

EDGE OF WETLANDS

FEMA 100-YR FLOODPLAIN

PROPOSED BUILDING

PROPOSED TREE LINE

EXISTING TREE LINE

PROPOSED WATER GATE VALVE

PROPOSED CATCH BASIN

PROPOSED SIGN

UNDERGROUND ELECTRIC AND COMMUNICATIONS LINE

PROPOSED BITUMINOUS CONCRETE SIDEWALK

PROPOSED CONCRETE SIDEWALK / PAD

PROPOSED ACCESSIBLE PARKING SPACE

PROPOSED DOUBLE YELLOW LANE LINE

PROPOSED STANDARD DUTY PAVEMENT SECTION

PROPOSED HEAVY DUTY PAVEMENT SECTION

75' UPLAND WETLAND PROTECTION BUFFER

PROPOSED VERTICAL GRANITE CURB

PROPOSED SLOPED GRANITE CURB

PROPOSED GAS LINE

COND. CONDUIT FLARED END SECTION FINISHED FLOOR HIGH DENSITY POLYETHYLENE

MINIMUM NEW HAMPSHIRE DEPARTMENT OF **ENVIRONMENTAL SERVICES** NATURAL RESOURCES CONSERVATION

**OFFICIALS** 

BUILDING

ALTERATION OF TERRIAN

BOTTOM OF CURB

BOTTOM OF WALI

DRAINAGE MANHOLE

CATCH BASIN

CONSTRUCT

DIAMETER

DRAWING

INVERT

LINEAR FEET

MAXIMUM

ELEVATION

COORD COORDINATE

AOT

BLDG

CONST

DIA

ELEV

FES

HDPE

MAX

SERVICE PROPOSED CATCH BASIN PROPOSED DRAINAGE MANHOLE

PSMH PROPOSED SEWER MANHOLE POLYVINYL CHLORIDE PYD

PROPOSED YARD DRAIN RADIUS

———PF&C———PF&C———

•

VGC

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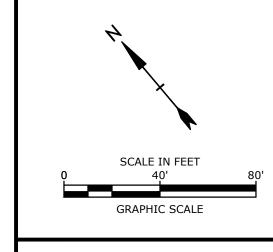
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Engineers | Environmental Speci

AUBURN PORTLAND PORTSMOUTH BOSTON Harriman Proiect No. JOSEPH



PERMIT DRAWINGS NOT FOR CONSTRUCTION



# Mill Plaza Redevelopment

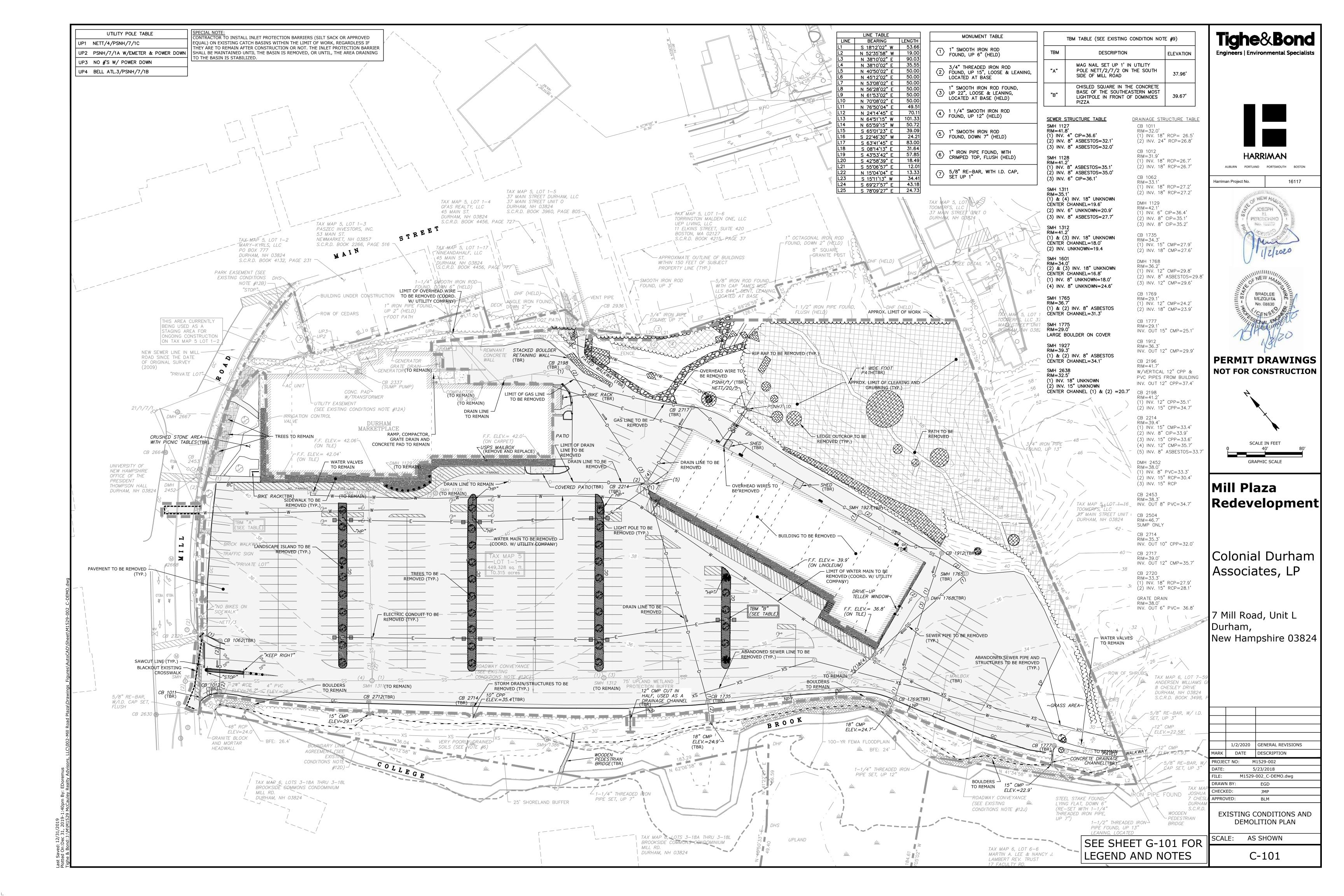
Colonial Durham Associates, LP

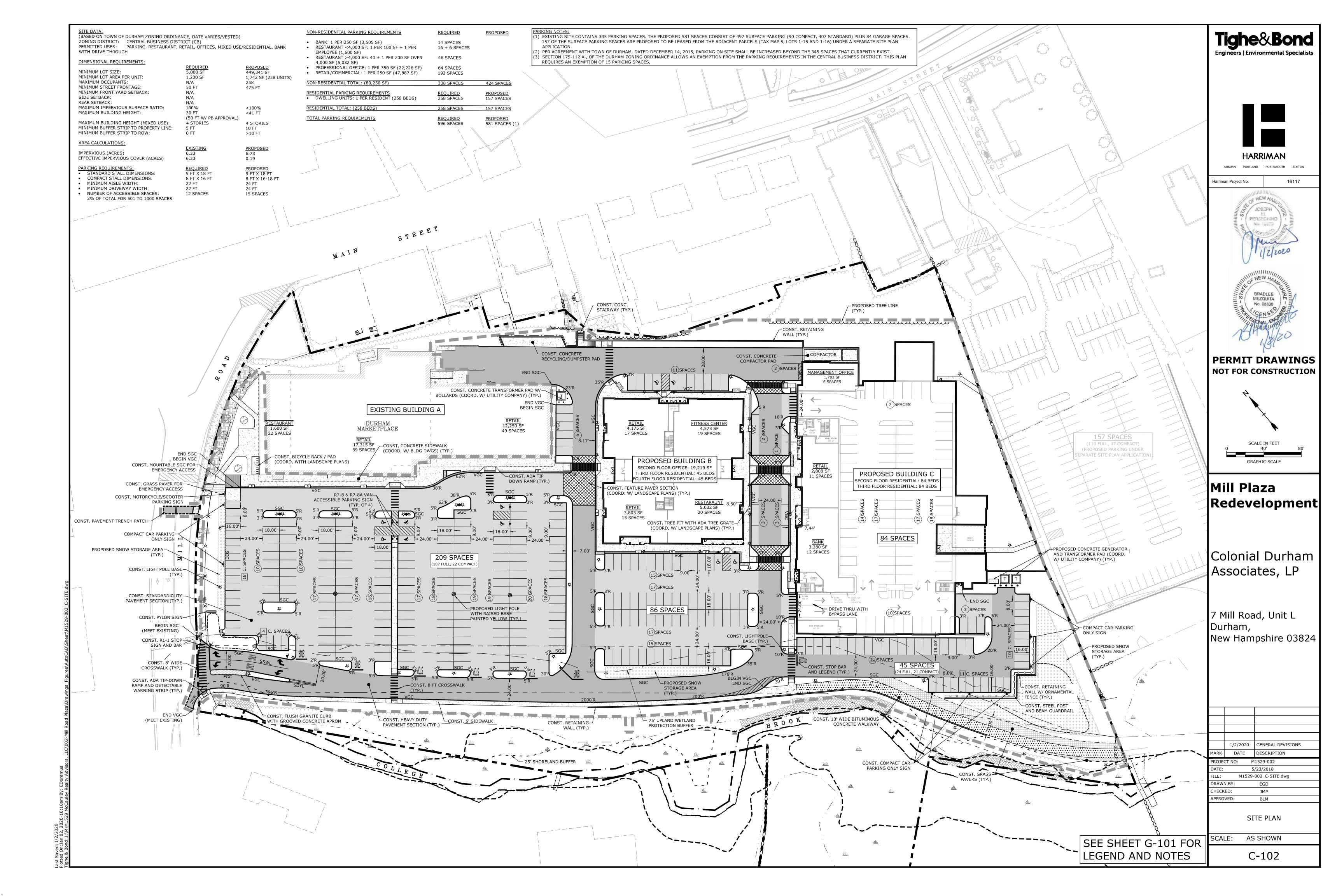
7 Mill Road, Unit L Durham, New Hampshire 03824

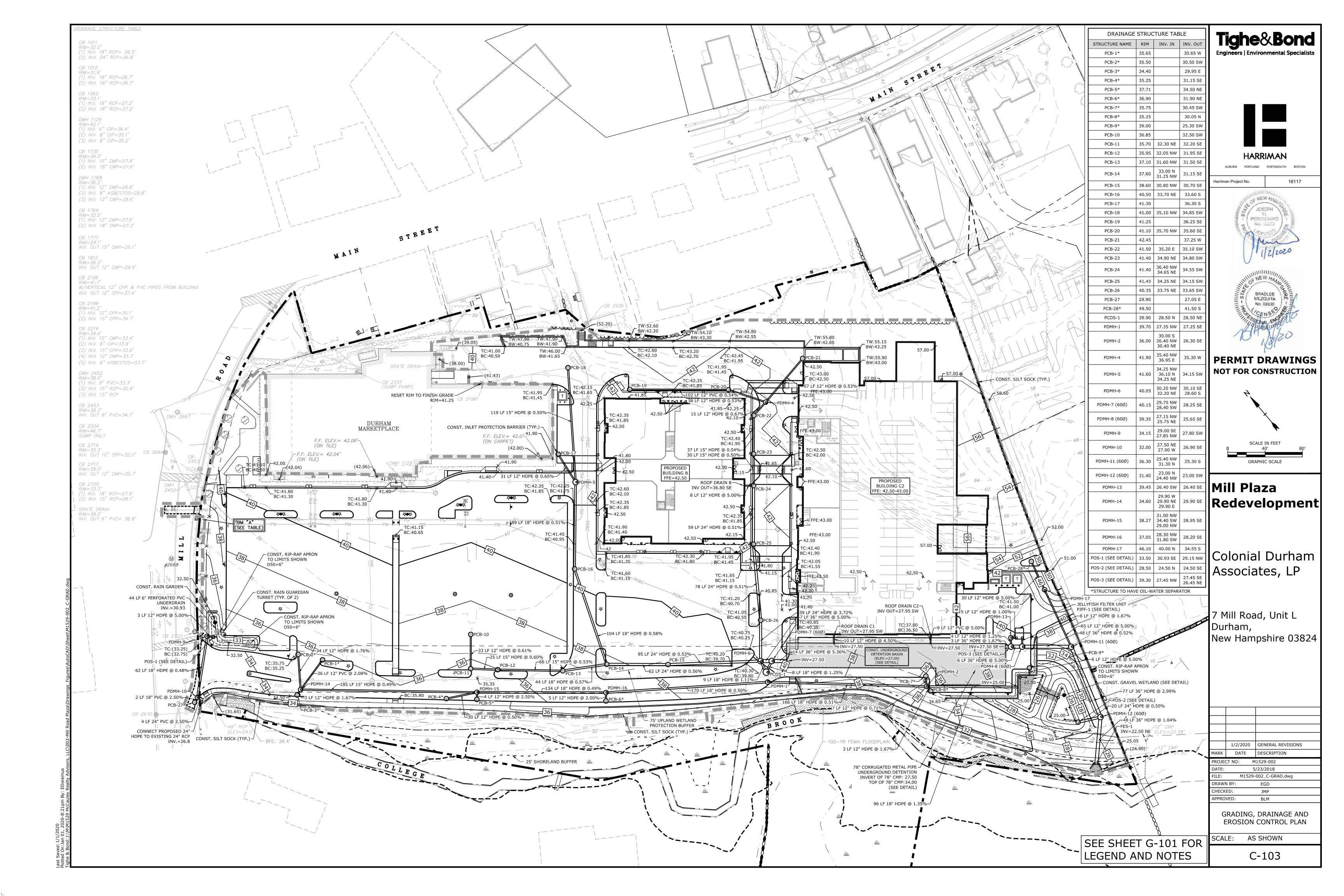
1/2/2020 GENERAL REVISIONS DATE DESCRIPTION ROJECT NO: M1529-002 5/23/2018 M1529-002 NOTES.dwa DRAWN BY: EGD HECKED: PROVED: BLM NOTES AND LEGEND SHEET

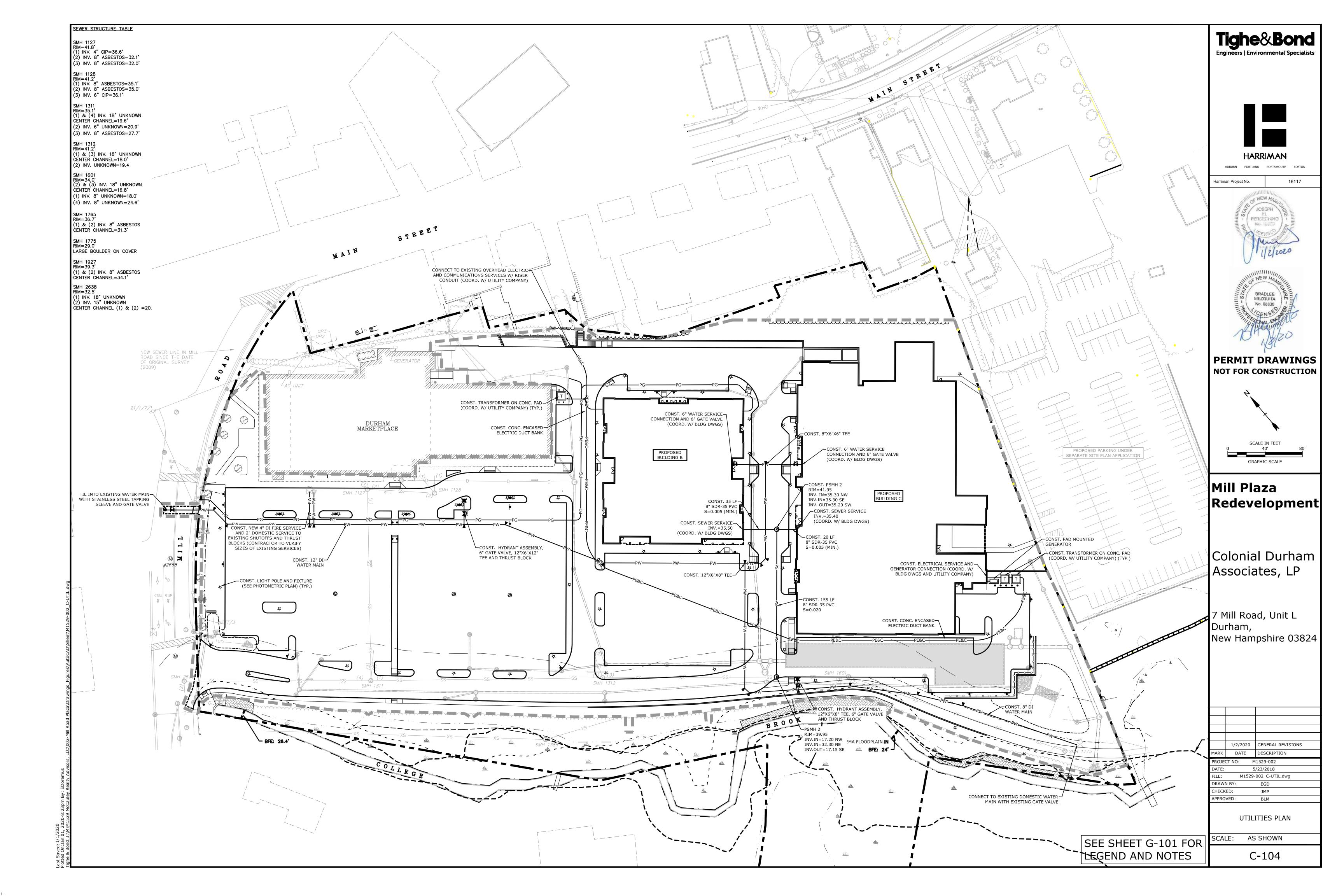
G-101

SCALE: AS SHOWN









PROJECT MAP / LOT: MAP 5/ LOT 1-1 PROJECT LATITUDE: 43°-07'-58"N PROJECT LONGITUDE: 70°-55'-30"W

HE 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 MONTH 2019, AND BE COMPLETED BY 2020.

HE TOTAL AREA TO BE DISTURBED IS APPROXIMATELY 7.5 ACRES.

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:

- 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
- 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.
- CLEAR AND DISPOSE OF DEBRIS
- CONSTRUCT TEMPORARY CULVERTS AND DIVERSION CHANNELS AS REQUIRED. GRADE AND GRAVEL ROADWAYS AND PARKING AREAS - ALL ROADS AND PARKING AREA SHALL BE STABILIZED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- BEGIN PERMANENT AND TEMPORARY SEEDING AND MULCHING. ALL CUT AND FILL SLOPES SHALL BE SEEDED AND MULCHED WITHIN 72 HOURS OF ACHIEVING FINISHED GRADE.
- DAILY, OR AS REQUIRED, CONSTRUCT TEMPORARY BERMS, DRAINS, DITCHES, PERIMETER EROSION CONTROL MEASURES, SEDIMENT TRAPS, ETC., MULCH AND SEED AS REQUIRED.
- FINISH PAVING ALL ROADWAYS AND PARKING LOTS.
- 0. INSPECT AND MAINTAIN ALL EROSION AND SEDIMENT CONTROL MEASURES. COMPLETE PERMANENT SEEDING AND LANDSCAPING.
- 2. REMOVE TRAPPED SEDIMENTS FROM COLLECTOR DEVICES AS APPROPRIATE AND THEN REMOVE TEMPORARY EROSION CONTROL MEASURES.

- THE CONSTRUCTION SEQUENCE MUST LIMIT THE DURATION AND AREA OF DISTURBANCE. 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. 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

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

- 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.
- PRIOR TO ANY WORK OR SOIL DISTURBANCE, CONTRACTOR SHALL SUBMIT SHOP DRAWINGS FOR EROSION CONTROL MEASURES AS REQUIRED IN THE PROJECT MANUAL.
- 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.
- 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.
- 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.
- THE CONTRACTOR SHALL REMOVE AND PROPERLY DISPOSE OF ALL TEMPORARY EROSION CONTROL DEVICES UPON COMPLETION OF CONSTRUCTION. ALL DISTURBED AREAS NOT OTHERWISE BEING TREATED SHALL RECEIVE 6" LOAM, SEED AND FERTILIZER.
- 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. CONSTRUCT EROSION CONTROL BLANKETS ON ALL SLOPES STEEPER THAN 3:1

- 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.
- 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; 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
- 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 FARTH/DIKES SHALL BE REMOVED ONCE PERMANENT MEASURES ARE ESTABLISHED
- 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.

- THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD.
- 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. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST FROM THE SITE TO ABUTTING

## AREAS INCLUDING BUT NOT LIMITED TO \_\_

- LOCATE STOCKPILES A MINIMUM OF 50 FEET AWAY FROM CATCH BASINS, SWALES, AND CULVERTS.
- ALL STOCKPILES SHOULD BE SURROUNDED WITH TEMPORARY EROSION CONTROL MEASURES PRIOR TO THE ONSET OF PRECIPITATION. 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 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:

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

## 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;
- 1. UTILIZE ANNUAL RYE GRASS AT A RATE OF 40 LBS/ACRE; 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 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.).
- **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:
- 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;
- 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;
- 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
  - 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
- 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.

AND FEDERAL SEED LAWS. SEEDING SHALL BE DONE NO LATER THAN SEPTEMBER 15. IN NO CASE SHALL SEEDING

- 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; . CONTRACTOR SHALL LOCATE WASHOUT AREAS AT LEAST 150 FEET AWAY FROM STORM DRAINS, SWALES AND SURFACE
- WATERS OR DELINEATED WETLANDS; D. INSPECT WASHOUT FACILITIES DAILY TO DETECT LEAKS OR TEARS AND TO IDENTIFY WHEN MATERIALS NEED TO BE

### **ALLOWABLE NON-STORMWATER DISCHARGES:**

- FIRE HYDRANT FLUSHING:
- WATERS USED TO WASH VEHICLES WHERE DETERGENTS ARE NOT USED;
- WATER USED TO CONTROL DUST:
- POTABLE WATER INCLUDING UNCONTAMINATED WATER LINE FLUSHING; ROUTINE EXTERNAL BUILDING WASH DOWN WHERE DETERGENTS ARE NOT USED;
- PAVEMENT WASH WATERS WHERE DETERGENTS ARE NOT USED: UNCONTAMINATED AIR CONDITIONING/COMPRESSOR CONDENSATION
- UNCONTAMINATED GROUND WATER OR SPRING WATER;
- 10. FOUNDATION OR FOOTING DRAINS WHICH ARE UNCONTAMINATED; 11. UNCONTAMINATED EXCAVATION DEWATERING;
- 12. LANDSCAPE IRRIGATION.

### WASTE DISPOSAL:

- 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;
- 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
- 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.
- A. ALL SANITARY WASTE SHALL BE COLLECTED FROM THE PORTABLE UNITS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

- 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. 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 ONLY SUFFICIENT AMOUNTS OF PRODUCTS TO DO THE JOB SHALL BE STORED ON SITE;
- 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;
- MANUFACTURER'S RECOMMENDATIONS FOR PROPER USE AND DISPOSAL SHALL BE FOLLOWED; THE SITE SUPERINTENDENT SHALL INSPECT DAILY TO ENSURE PROPER USE AND DISPOSAL OF MATERIALS: SUBSTANCES SHALL NOT BE MIXED WITH ONE ANOTHER UNLESS RECOMMENDED BY THE MANUFACTURER;
- 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: PRODUCTS SHALL BE KEPT IN THEIR ORIGINAL CONTAINERS UNLESS THEY ARE NOT RESEALABLE; ORIGINAL LABELS AND MATERIAL SAFETY DATA SHALL BE RETAINED FOR IMPORTANT PRODUCT INFORMATION;
- RECOMMENDED METHODS OF DISPOSAL. C. PRODUCT SPECIFIC PRACTICES - THE FOLLOWING PRODUCT SPECIFIC PRACTICES SHALL BE FOLLOWED ON SITE: 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

SURPLUS PRODUCT THAT MUST BE DISPOSED OF SHALL BE DISCARDED ACCORDING TO THE MANUFACTURER'S

- RECOMMENDATIONS 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.
- 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
- 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; 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 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 REOUIRED
- 6. THE SITE SUPERINTENDENT RESPONSIBLE FOR DAY-TO-DAY SITE OPERATIONS SHALL BE THE SPILL PREVENTION AND CLEANUP COORDINATOR. . VEHICLE FUELING AND MAINTENANCE PRACTICE:
- CONTRACTOR SHALL MAKE AN EFFORT TO PERFORM EQUIPTMENT/VEHICAL FUELING AND MAINTENANCE AT AN OFF-SITE FACILITY: CONTRACTOR SHALL PROVIDE AN ON-SITE FUELING AND MAINTENANCE AREA THAT IS CLEAN AND DRY;
- . IF POSSIBLE THE CONTRACTOR SHALL KEEP AREA COVERED CONTRACTOR SHALL KEEP A SPILL KIT AT THE FUELING AND MAINTENANCE AREA
- 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 HIS PROJECT EXCEEDS ONE (1) ACRE OF DISTURBANCE AND THUS REQUIRES A SWPPP. THE SWPPP SHALL BE PREPARED BY THE

INCLUDE:

ENGINEER. THE CONTRACTOR SHALL BE FAMILIAR WITH THE SWPPP AND KEEP AN UPDATED COPY OF THE SWPPP ONSITE AT ALL

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

3. A REPRESENTATIVE OF THE SITE CONTRACTOR, SHALL BE RESPONSIBLE FOR MAINTENANCE AND REPAIR ACTIVITIES;

- 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 SLIPPLY WELLS IN THE AREA
- 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: 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;** 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;
- 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
- 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; . 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. 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
- 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 PREVENTION OF MISFIRES. APPROPRIATE PRACTICES SHALL BE DEVELOPED AND IMPLEMENTED TO PREVENT MISFIRES. 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: REMOVE THE MUCK PILE FROM THE BLAST AREA AS SOON AS REASONABLY POSSIBLE; . MANAGE THE INTERACTION OF BLASTED ROCK PILES AND STORMWATER TO PREVENT CONTAMINATION OF WATER
- SUPPLY WELLS OR SURFACE WATER. 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:

**FXFCUTION:** 

- STORAGE OF REGULATED SUBSTANCES ON AN IMPERVIOUS SURFACE;
- SECURE STORAGE AREAS AGAINST UNAUTHORIZED ENTRY; LABEL REGULATED CONTAINERS CLEARLY AND VISIBLY;
- INSPECT STORAGE AREAS WEEKLY:

PLACE DRIP PANS UNDER SPIGOTS, VALVES, AND PUMPS;

OF EXCAVATION AND EARTHMOVING EQUIPMENT, OR ITS SUCCESSOR DOCUMENT.

HTTP://DES.NH.GOV/ORGANIZATION/COMMISSIONER/PIP/FACTSHEETS/DWGB/DOCUMENTS/DWGB-22-6.PDF

FLOW —

NECESSARY, WEIR OR EMBANKMENT

FLOW INTOUTLET OR PIPE OUTLET

EACH ACRE OF DRAINAGE AREA

TRAP SHALL DISCHARGE TO A STABILIZED AREA.

IF USING STONE

<u>SECTION</u>

THE TRAP SHALL BE INSTALLED AS CLOSE TO THE DISTURBED AREA AS POSSIBLE

TRAP OUTLET SHALL BE MINIMUM OF ONE FOOT BELOW THE CREST OF THE TRAP.

TRAP SHALL BE CLEANED WHEN 50 PERCENT OF THE ORIGINAL VOLUME IS FILLED.

MATERIALS REMOVED FROM THE TRAP SHALL BE PROPERLY DISPOSED OF AND

8. SEDIMENT TRAPS MUST BE USED AS NEEDED TO CONTAIN RUNOFF UNTIL SOILS ARE

THE MAXIMUM CONTRIBUTING AREA TO A SINGLE TRAP SHALL BE LESS THAN 5 ACRES.

THE MINIMUM VOLUME OF THE TRAP SHALL BE 3,600 CUBIC FEET OF STORAGE FOR

TO DIVERT

3:1 MAX, SLOPE

STABILIZED

STABILIZED

SIDE SLOPES TO BE

→ FLOW

PERFORATED

RISER IF USING

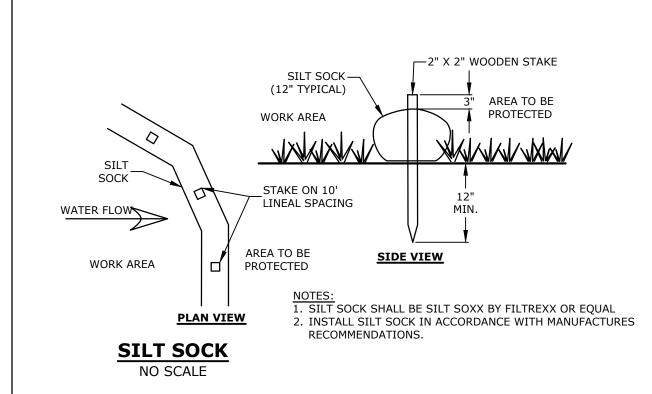
PIPE OUTLET

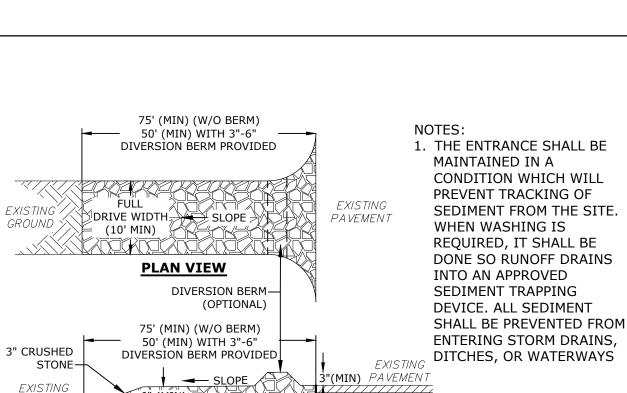
- EXCAVATION FOR

REQUIRED STORAGE

- 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;
- 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.
- 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

3. THE TRAINING OF ON-SITE EMPLOYEES AND THE ON-SITE POSTING OF RELEASE RESPONSE INFORMATION DESCRIBING



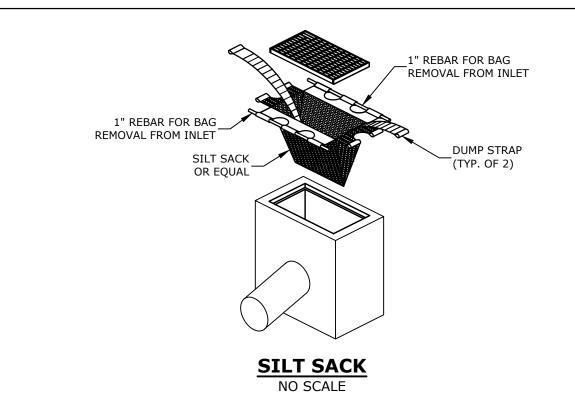


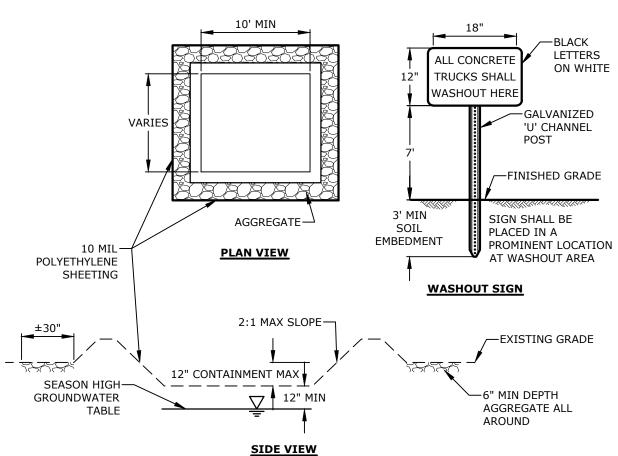
# STABILIZED CONSTRUCTION EXIT

- MIRAFI 600)

∭6" (MIN) 🕏

**SIDE VIEW** 





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

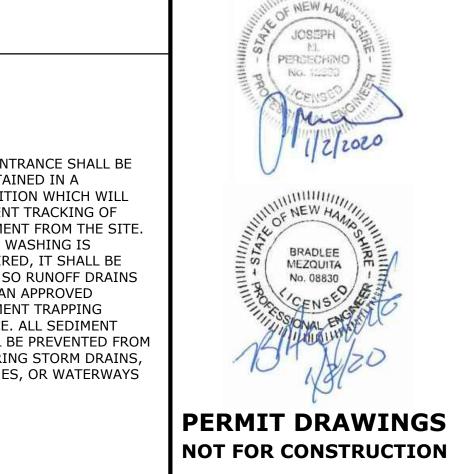
5. ONE OR MORE AREAS MAY BE INSTALLED ON THE CONSTRUCTION SITE AND MAY BE RELOCATED AS

LIQUID WASTES GENERATED 3. WASHOUT SHALL BE CLEANED OR NEW FACILITIES CONSTRUCTED AND READY TO USE ONCE WASHOUT IS 75% FULL . WASHOUT AREA(S) SHALL BE INSTALLED IN A LOCATION EASILY ACCESSIBLE BY CONCRETE TRUCKS

6. AT LEAST WEEKLY, REMOVE ACCUMULATION OF SAND AND AGGREGATE AND DISPOSE OF PROPERLY.

**SEDIMENT TRAP** 

CONSTRUCTION PROGRESSES



Engineers | Environmental

AUBURN PORTLAND PORTSMOUTH BOSTON

Harriman Project No.

# |Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

1/2/2020 GENERAL REVISIONS MARK DATE DESCRIPTION ROJECT NO: M1529-002 5/23/2018 M1529-002\_C-DTLS.dwg RAWN BY: EGD **HECKED:** 1MP

BLM

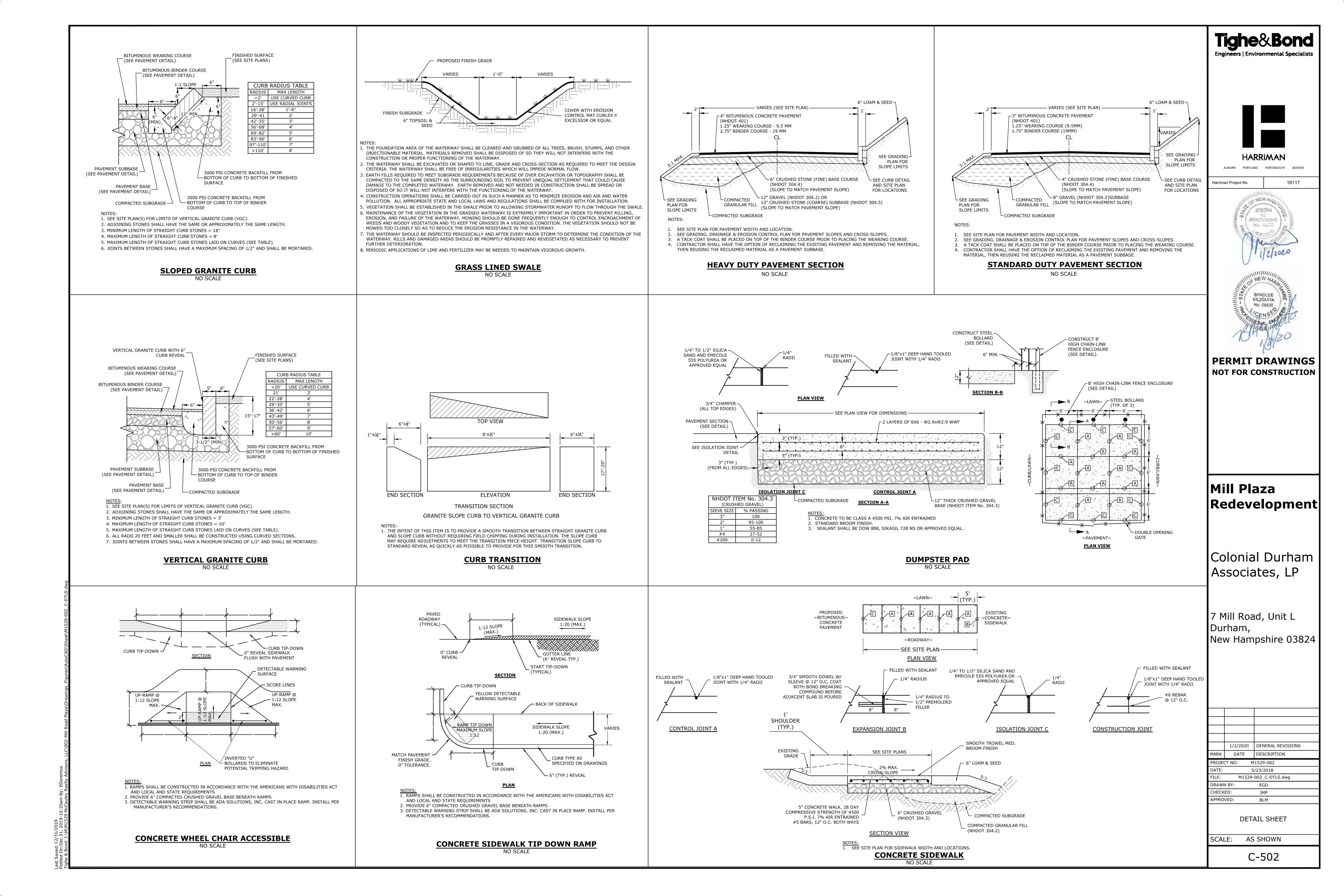
**EROSION CONTROL NOTES AND** DETAIL SHEET

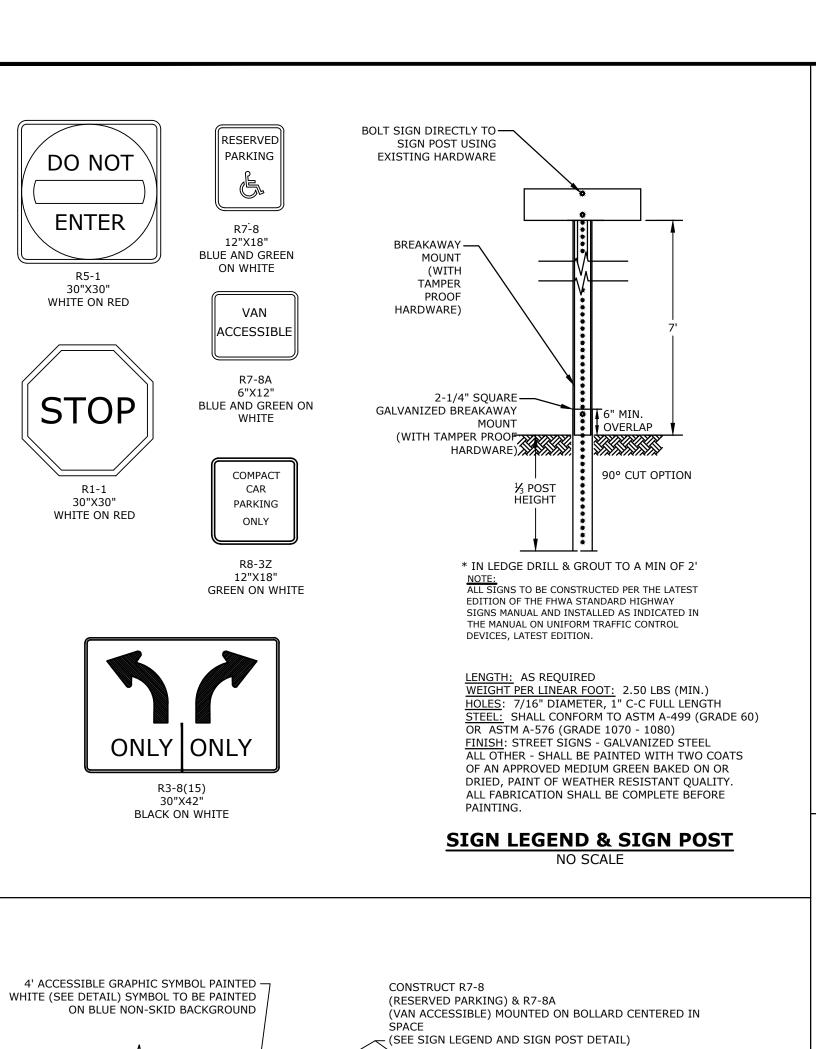
SCALE: AS SHOWN

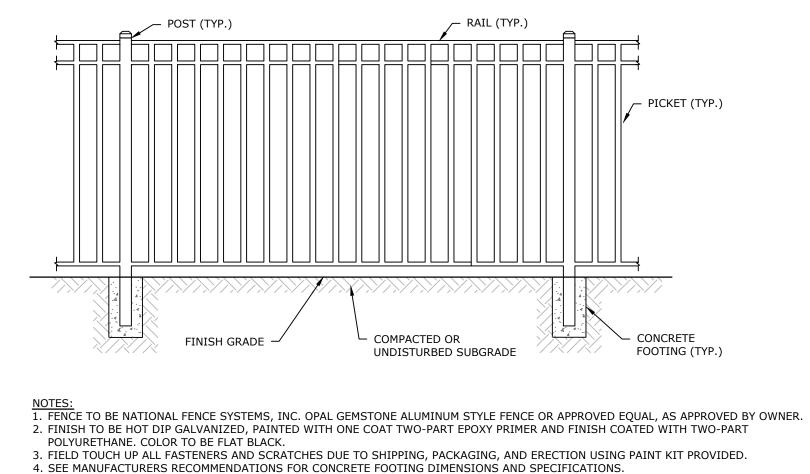
PROVED:

C-501

**CONCRETE WASHOUT AREA** 



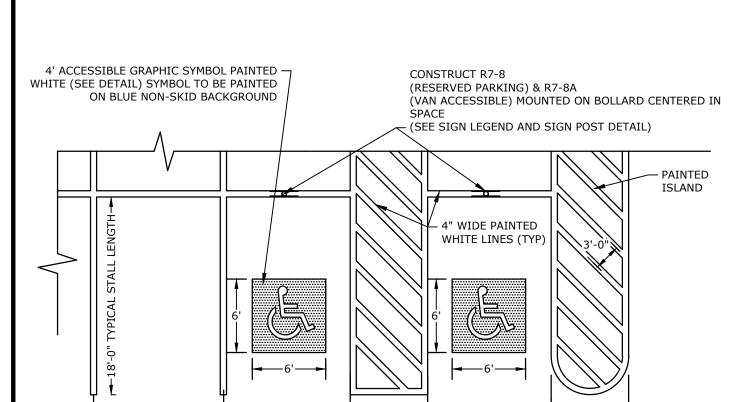




# —4'-0" (FROM CURB LINE/CROSSWALK STRIPING) STALLED IN LOCATIONS AS SHOWN LENGTH AS REQUIRED (SEE SITE PLAN) 2. STRIPING SHALL BE CONSTRUCTED USING WHITE PAINT PAINT STOP LINE THERMOPLASTIC **STOP BAR AND LEGEND** NO SCALE



Engineers | Environmental Specialis



SPACE 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.

8'-0" FOR

ACCESSIBLE

VAN

- 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

PARKING STALL/PAINTED ISLAND STRIPING

# RIP-RAP -FLARED END SECTION <u>SECTION</u> RIP-RAP MIRAFI FW-700 OR EQUAL

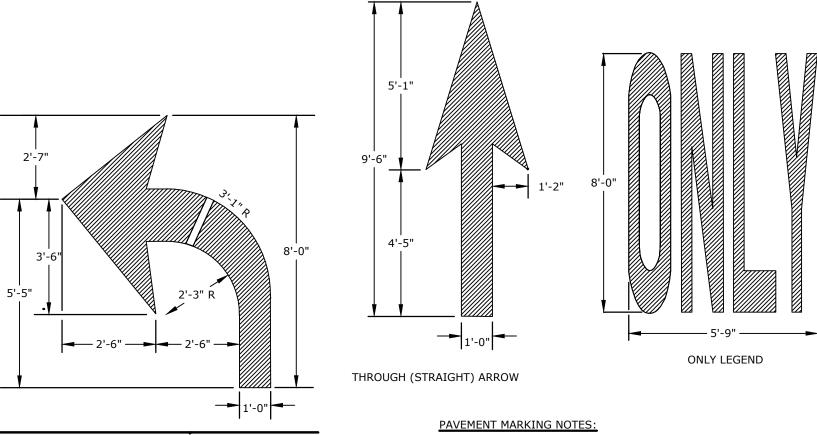
ORNAMENTAL METAL FENCE
NO SCALE

STONE SIZE AND MAT DIMENSIONS DETAILED ON PLANS.

RIP-RAP APRON DETAIL

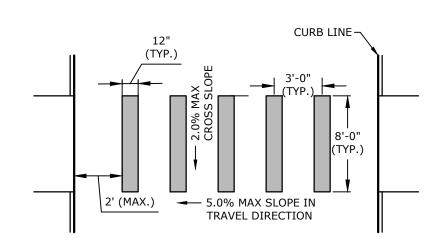
- STONE SHALL CONSIST OF SUB-ANGULAR FIELD STONE OR ROUGH UNHEWN QUARRY STONE OF APPROXIMATELY RECTANGULAR SHAPE. FLAT OR ROUND ROCKS ARE NOT ACCEPTABLE. THE STONE SHALL BE HARD AND OF SUCH QUALITY THAT IT WILL NOT DISINTEGRATE ON EXPOSURE TO WATER OR WEATHERING, BE CHEMICALLY STABLE AND IT SHALL BE SUITABLE IN ALL OTHER RESPECTS FOR THE PURPOSE INTENDED. THE BULK SPECIFIC GRAVITY (SATURATED SURFACE-DRY BASIS) OF THE INDIVIDUAL STONES SHALL
- 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





- 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
- 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

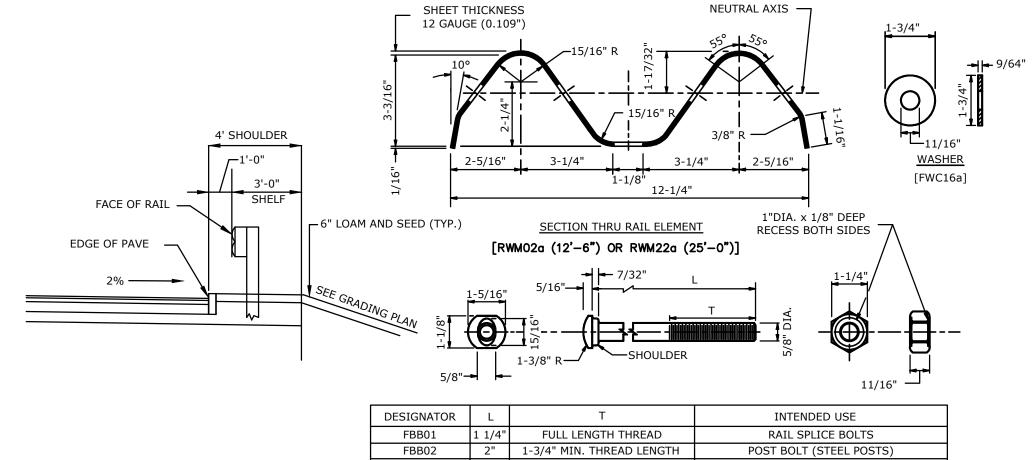
# 7. ALL STOP BARS, WORDS, SYMBOLS AND ARROW SHALL BE WHITE PAINT.



- 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



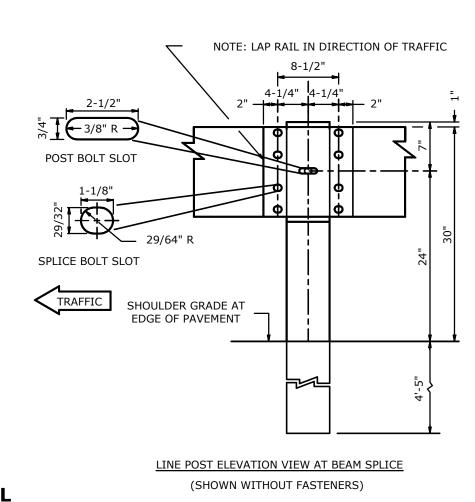
FBB03 9 1/2" 4" MIN. THREAD LENGTH POST BOLT 5/8" BUTTON HEAD BOLT AND RECESSED NUT

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 <u>FACE</u> OF RAIL.

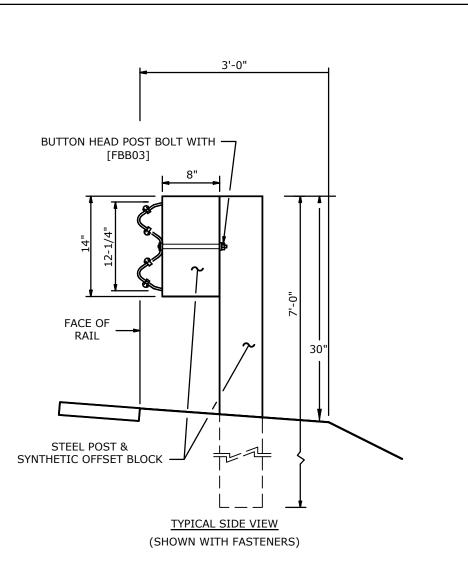
STEEL POST/STEEL BEAM GUARDRAIL



TURN ARROW

(RIGHT TURN OPPOSITE IN KIND)

**PAVEMENT MARKINGS** 



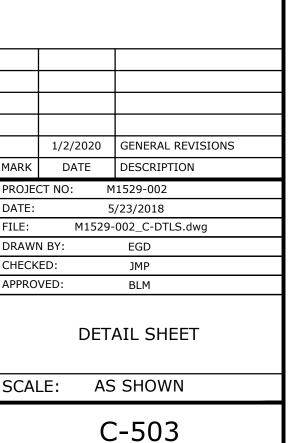
# Mill Plaza Redevelopment

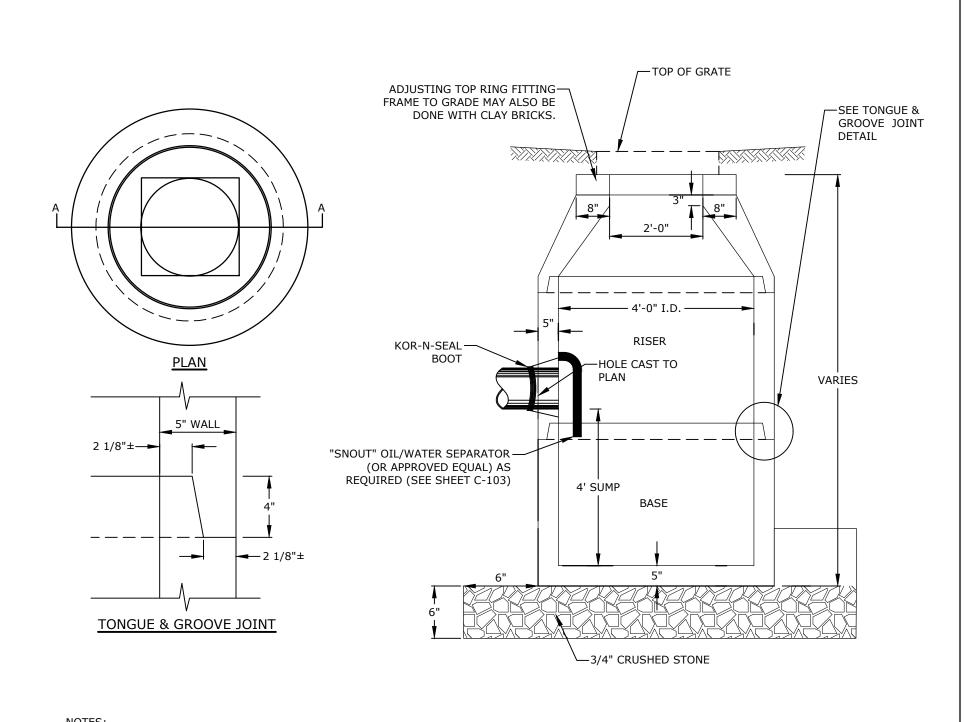
PERMIT DRAWINGS

**NOT FOR CONSTRUCTION** 

# Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824





2. CIRCUMFERENTIAL REINFORCEMENT SHALL BE 0.12 SQ.ÍN. 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.

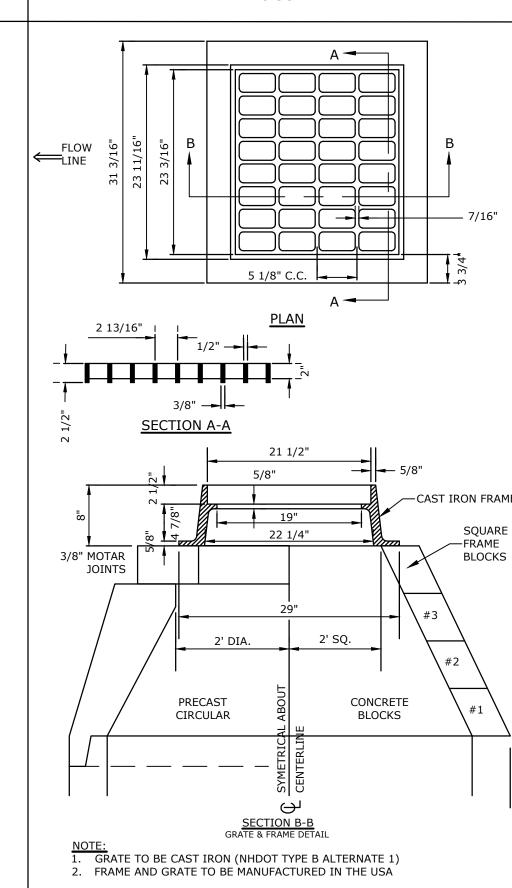
1. ALL SECTIONS SHALL BE CONCRETE CLASS AA(4000 psi).

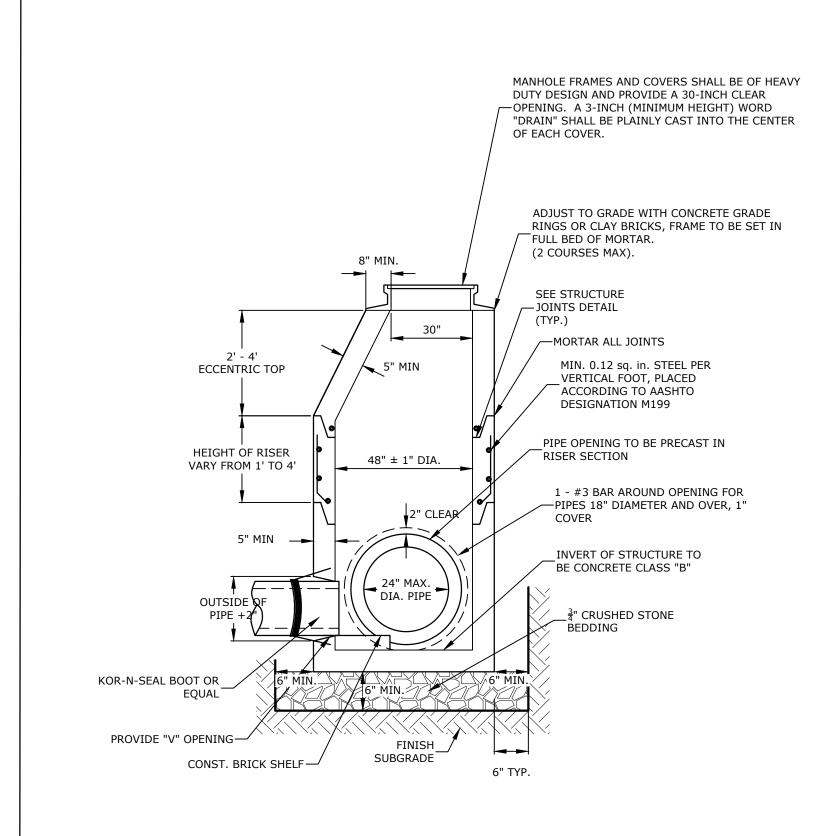
5. THE STRUCTURES SHALL BE DESIGN FOR H2O LOADING.

4. RISERS OF 1', 2', 3', & 4' CAN BE USED TO REACH DESIRED DEPTH.

6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.

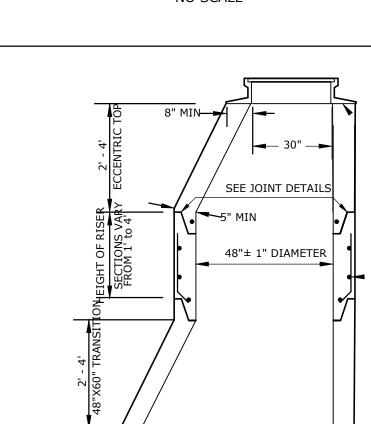
# **4' DIAMETER CATCHBASIN SNOUT OIL-WATER-DEBRIS SEPARATOR**





# 4' DIAMETER DRAIN MANHOLE

- 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 SOUARE 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 HORIZNTAL CROSS SECTION SHALL BE HOLES, AND THERE SHALL BE NO HOLES CLOSER THAN 3" TO JOINTS.



60"± 1" DIAMETER

**5' DIAMETER DRAIN MANHOLE** NO SCALE

SEE JOINT DETAILS

48"± 1" DIAMETER

└─8" CLEAR

— 6'-0" DIA. FLAT TOP

RECEIVE 4' DIA.

MANHOLE

72"± 1" DIAMETER

**6' DIAMETER DRAIN MANHOLE** 

NO SCALE

2. FRAMES USING NARROWER DIMENSIONS FOR THICKNESS ARE ALLOWED

REMAIN THE SAME TO ALLOW CONTINUED USE OF EXISTING

GRATES/COVERS AS THE EXISTING FRAMES ALLOW, WITHOUT SHIMS OR

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** 

2.A. THE FRAMES MEET OR EXCEED THE SPECIFIED LOAD RATING. 2.B. THE INTERIOR PERIMETER (SEAT AREA) DIMENSIONS OF THE FRAMES

OTHER MODIFICATIONS OR ACCOMMODATIONS.

—DIAMOND TOP

1. ALL DIMENSIONS ARE NOMINAL.

NON-SKID SURFACE

(3) STACKING

LUGS 1" x 2"

1-3/4"



Engineers | Environmental Specialists

AUBURN PORTLAND PORTSMOUTH BOSTON

PERSECHINO

BRADLEE

MEZQUITA

No. 08830

PERMIT DRAWINGS

**NOT FOR CONSTRUCTION** 

Harriman Project No.

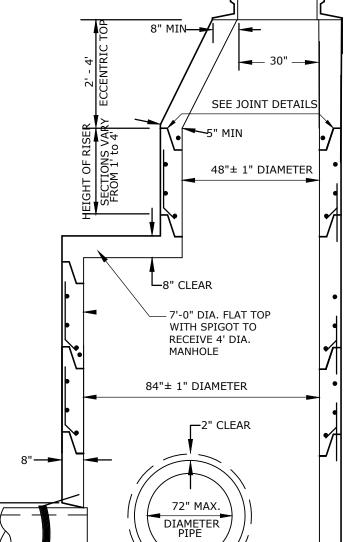
# Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

	1/2/2020	GENERAL REVISIONS
MARK	DATE	DESCRIPTION
PROJEC	CT NO:	11529-002
DATE:	5	5/23/2018
FILE:	M1529	-002_C-DTLS.dwg
DRAWI	N BY:	EGD
CHECK	ED:	JMP
APPRO	VED:	BLM
	DET	AIL SHEET

AS SHOWN

C-504

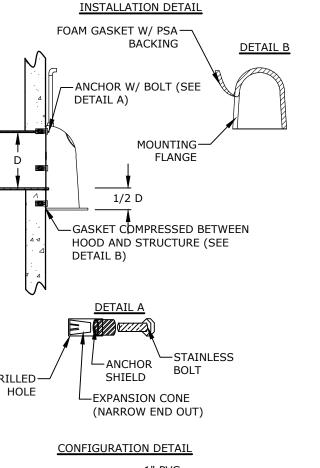


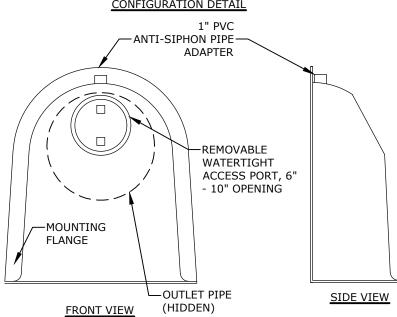
### 7' DIAMETER DRAIN MANHOLE NO SCALE

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

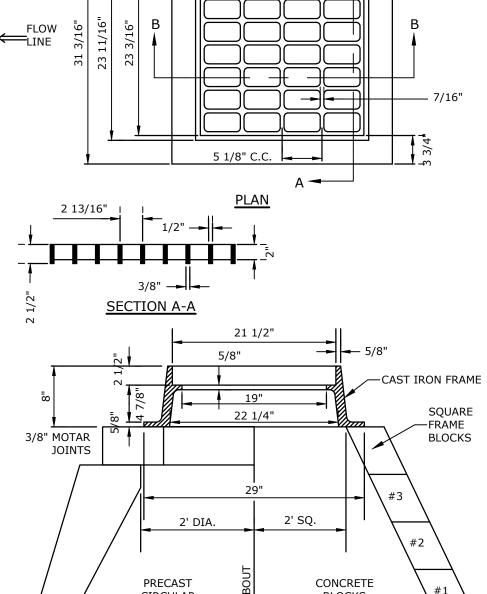
- TO .12 SQUARE INCHES PER LINEAR FOOT.
- 6. THE TONGUE AND GROOVE JOINT SHALL BE SEALED WITH ONE STRIP OF BUTYL RUBBER SEALANT.





PE 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
SQUARE STRUCTURE	

R=CIRCULAR STRUCTURE



2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF 3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST 4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLAND MAY BE SUBSTITUTED FOR END BLOCKINGS. 5. INSTALLATION AND STANDARD DIMENSIONAL REQUIREMENTS SHALL BE PER COMMUNITY SERVICES DEPARTMENT

SQUARE FEET OF CONCRETE THRUST

BLOCKING BEARING ON UNDISTURBED MATERIAL

NOTES:

1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL, WHERE

EXCAVATE LOOSE MATERIAL TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS

0.65 1.55 2.78 8.38 12.00 0.48 1.19 2.12 6.02 9.32 0.25 0.60 1.06 3.08 4.74 0.13 0.30 0.54 1.54 2.38

UNDISTURBED MATERIAL

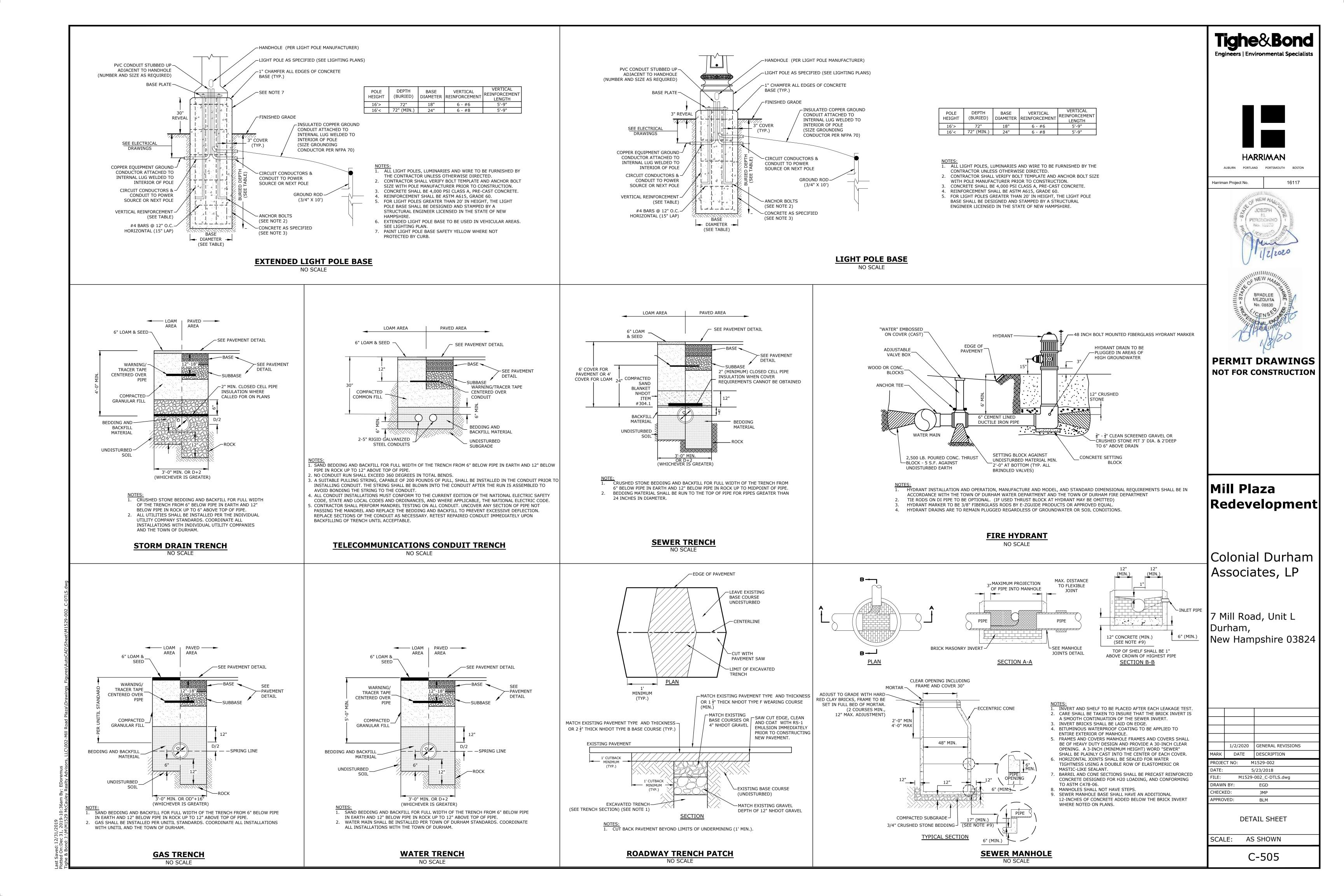
VOLUME OF CONCRETE AS

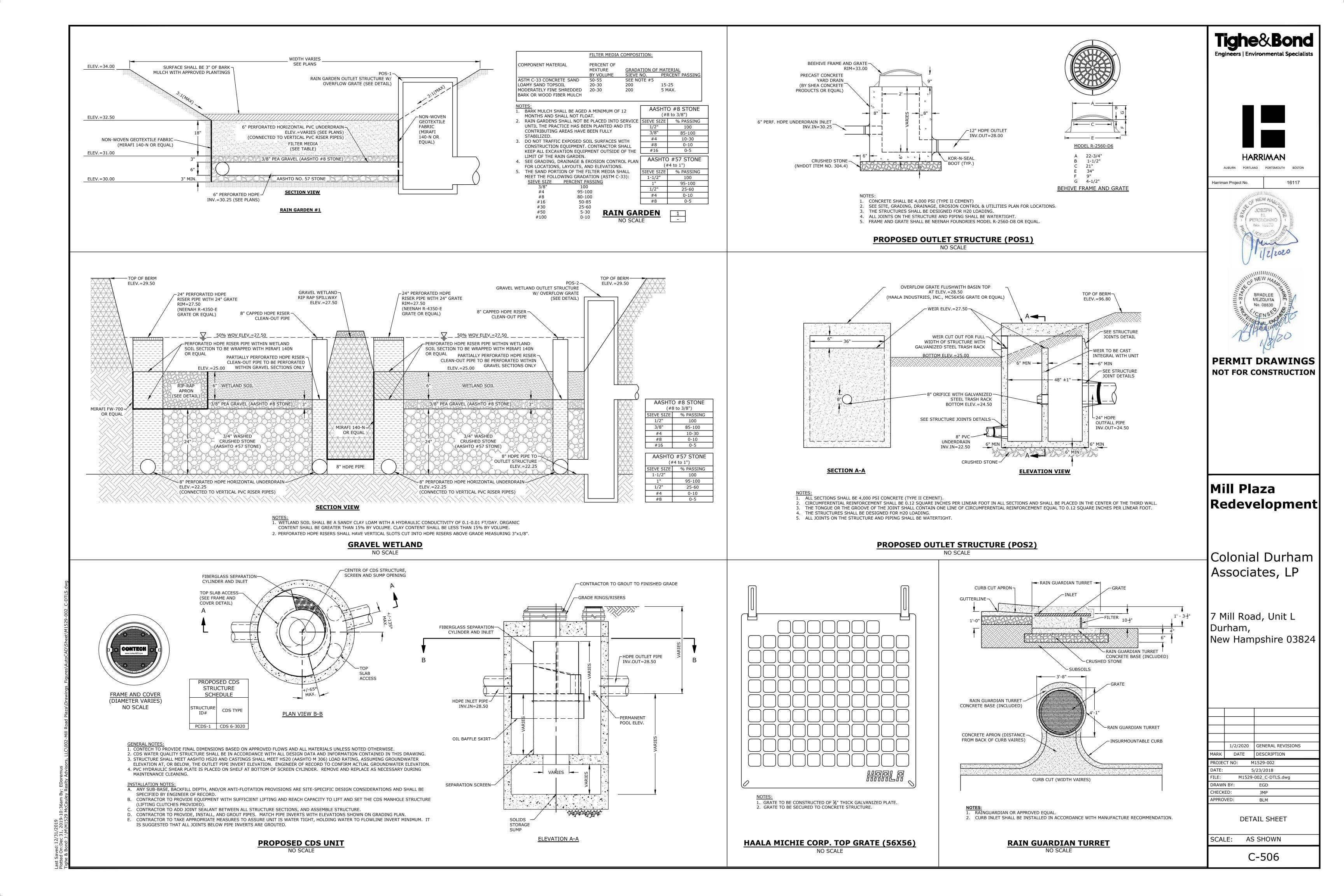
DETERMINED BY ENGINEER

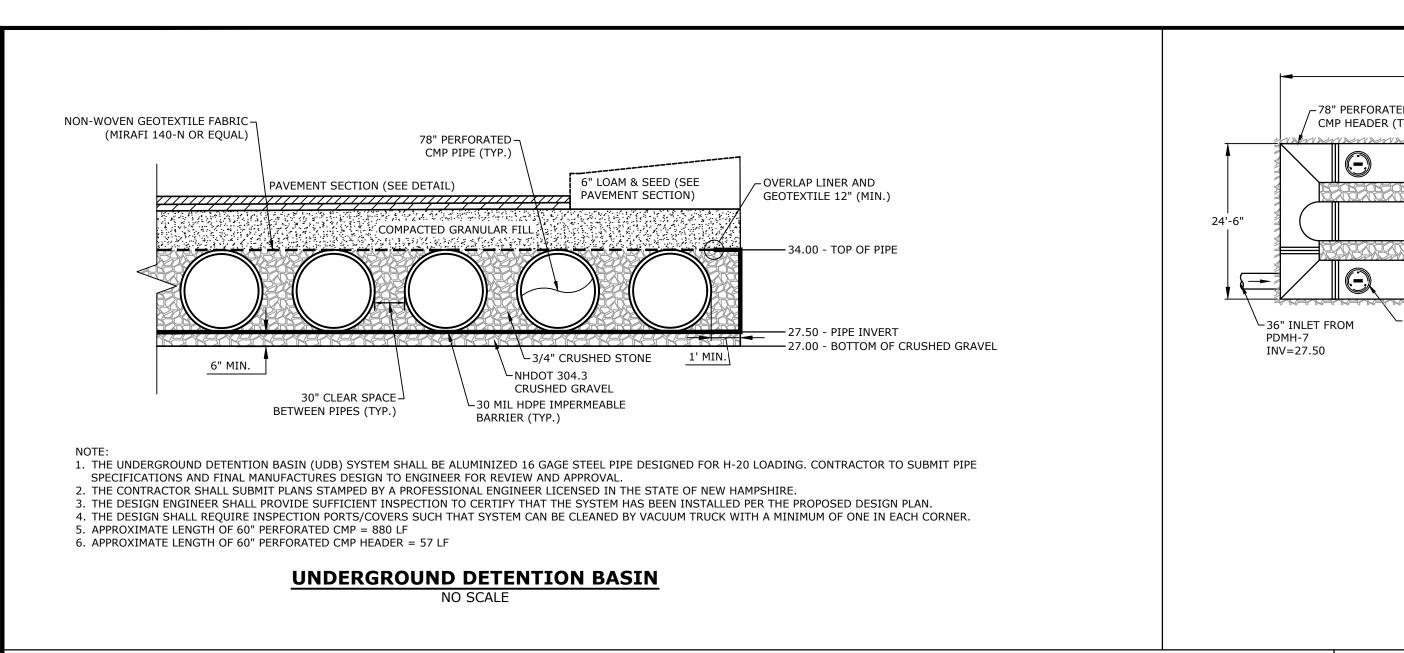
THRUST BLOCK DETAIL
NO SCALE

5. CONSTRUCT CRUSHED STONE BEDDING AND BACKFILL UNDER (6" MINIMUM THICKNESS). **CATCH BASIN FRAME & GRATE** 

4. THE STRUCTURES SHALL BE DESIGNED FOR H20 LOADING.







TRANSFER OPENING

TRANSFER OPENING

**ELEVATION VIEW** 

11'-0"

(LOCATION

MAY VARY)

**TRANSFER** 

(TOP SLAB NOT SHOWN FOR CLARITY)

OPENING

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

**RECTANGULAR JELLYFISH FILTER UNIT** 

-FRAME AND COVER (TRENCH COVER/GRATE

OPTION IS FLUSH WITH

-CARTRIDGE

—CARTRIDGE

∠HI FLO

CARTRIDGE

WEIR

-DRAINDOWN

CARTRIDGE

DECK

TOP OF STRUCTURE)

CONTRACTOR TO GROUT-TO FINISHED GRADE

CONTECH TO PROVIDE-

INLET PIPE—

OUTLET PIPE—

BOTTOM OF-

INLET BAY

FLOATABLES-

BYPASS-

OUTLET BAY-

3. STRUCTURE SHALL MEET AASHTO HS-20 LOADING REQUIREMENTS. CASTINGS SHALL MEET AASHTO M306 LOAD RATING AND BE CAST WITH THE CONTECH LOGO.

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)

.. CONTECH TO PROVIDE FINAL DIMENSIONS BASED ON APPROVED FLOWS AND ALL MATERIALS UNLESS NOTED OTHERWISE.

C. CONTRACTOR SHALL TAKE APPROPRIATE MEASURES TO PROTECT CARTRIDGES FROM CONSTRUCTION-RELATED EROSION RUNOFF.

4. STRUCTURE SHALL BE PRECAST CONCRETE CONFORMING TO ASTM C-478 AND AASHTO LOAD FACTOR DESIGN METHOD.

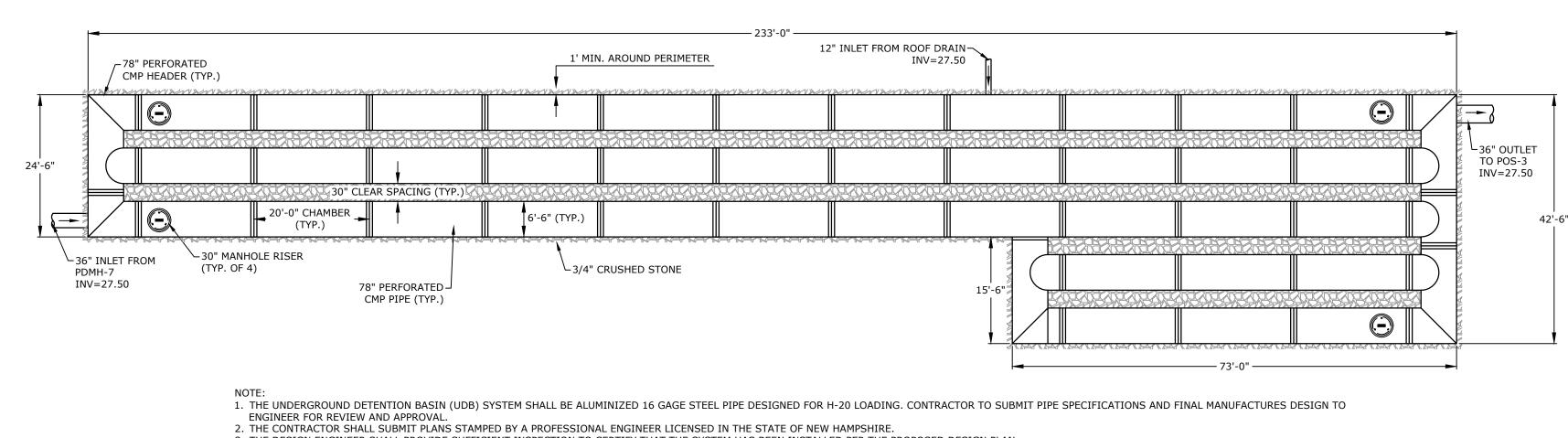
WITH SITE STABILIZATION AT (866) 740-3318.

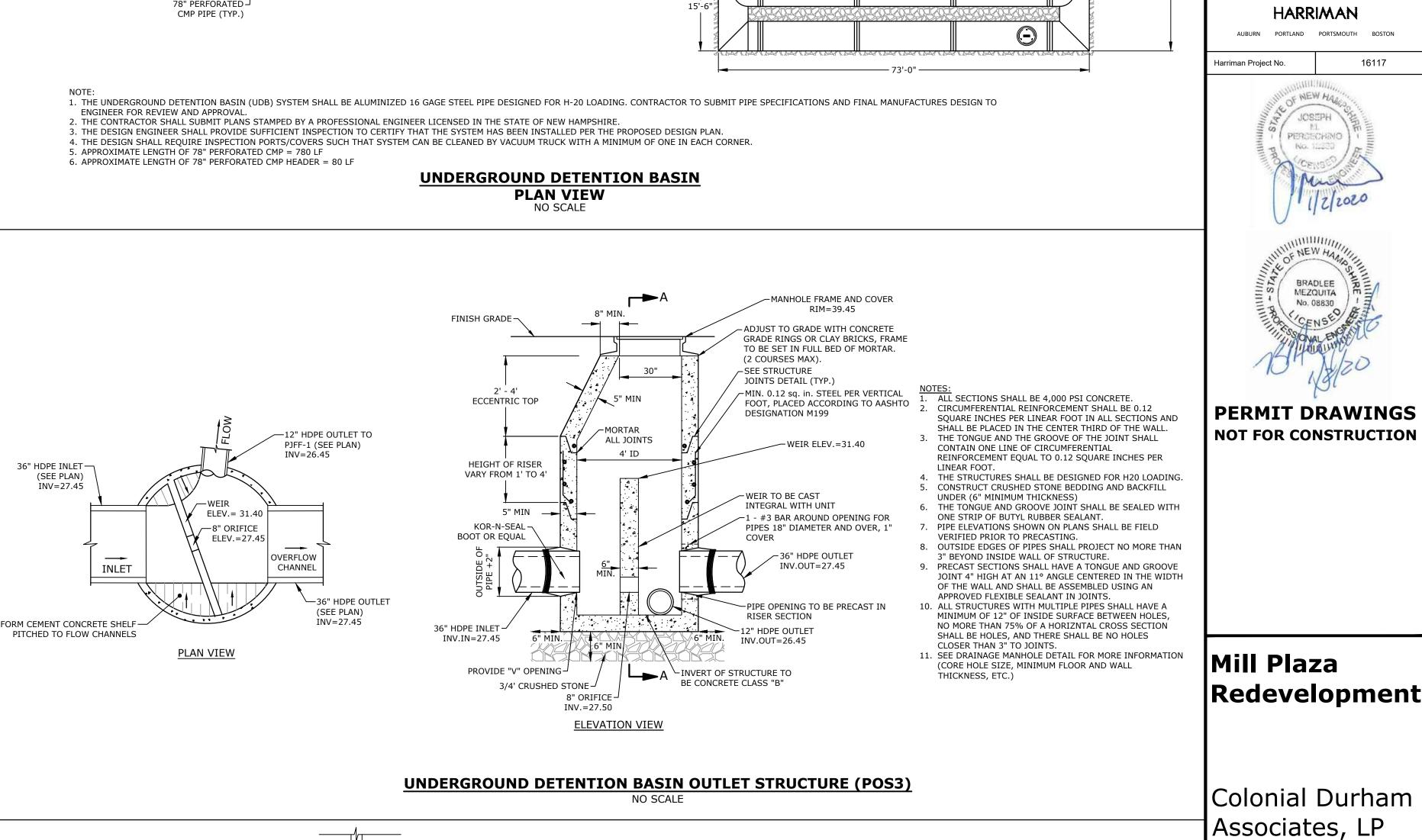
WEIR

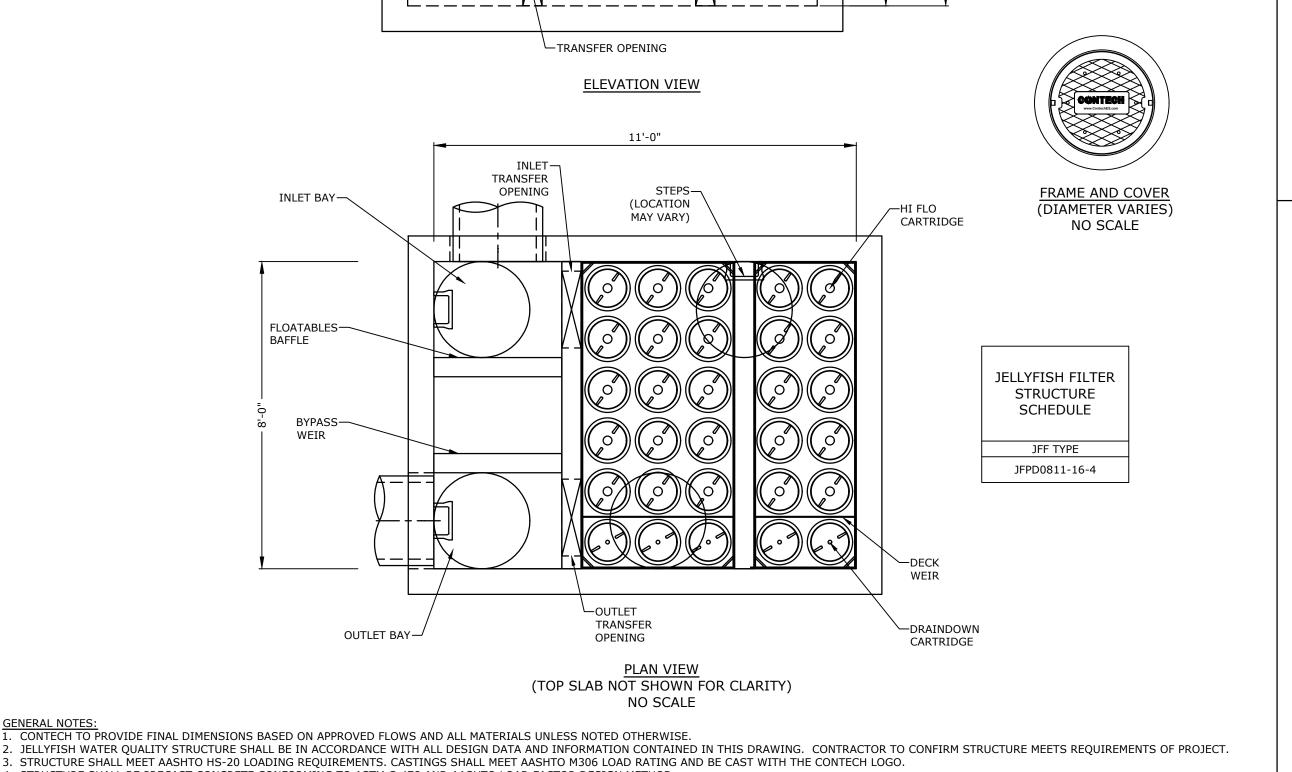
FLOATABLES BAFFLE

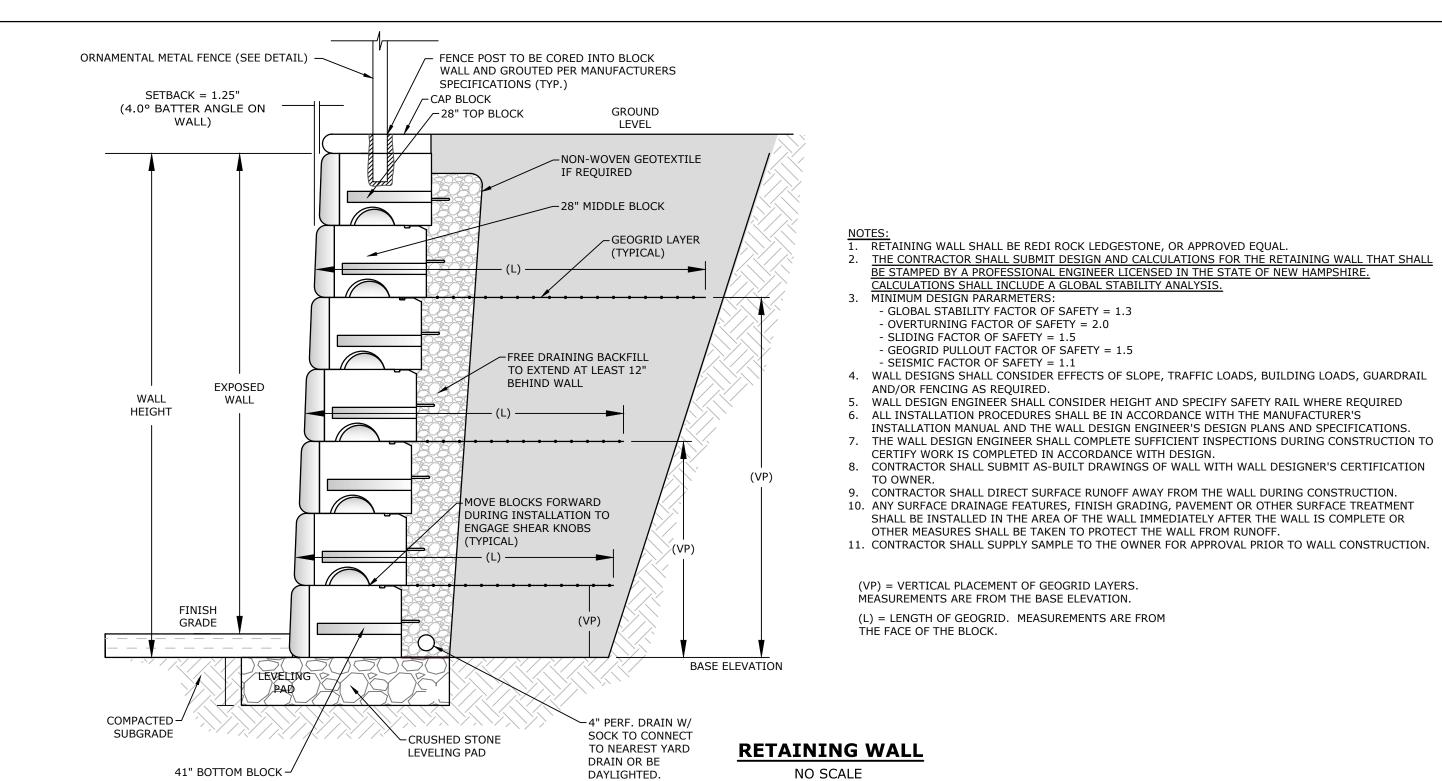
TOP OF BYPASS WEIR—

GRADE RING/RISER





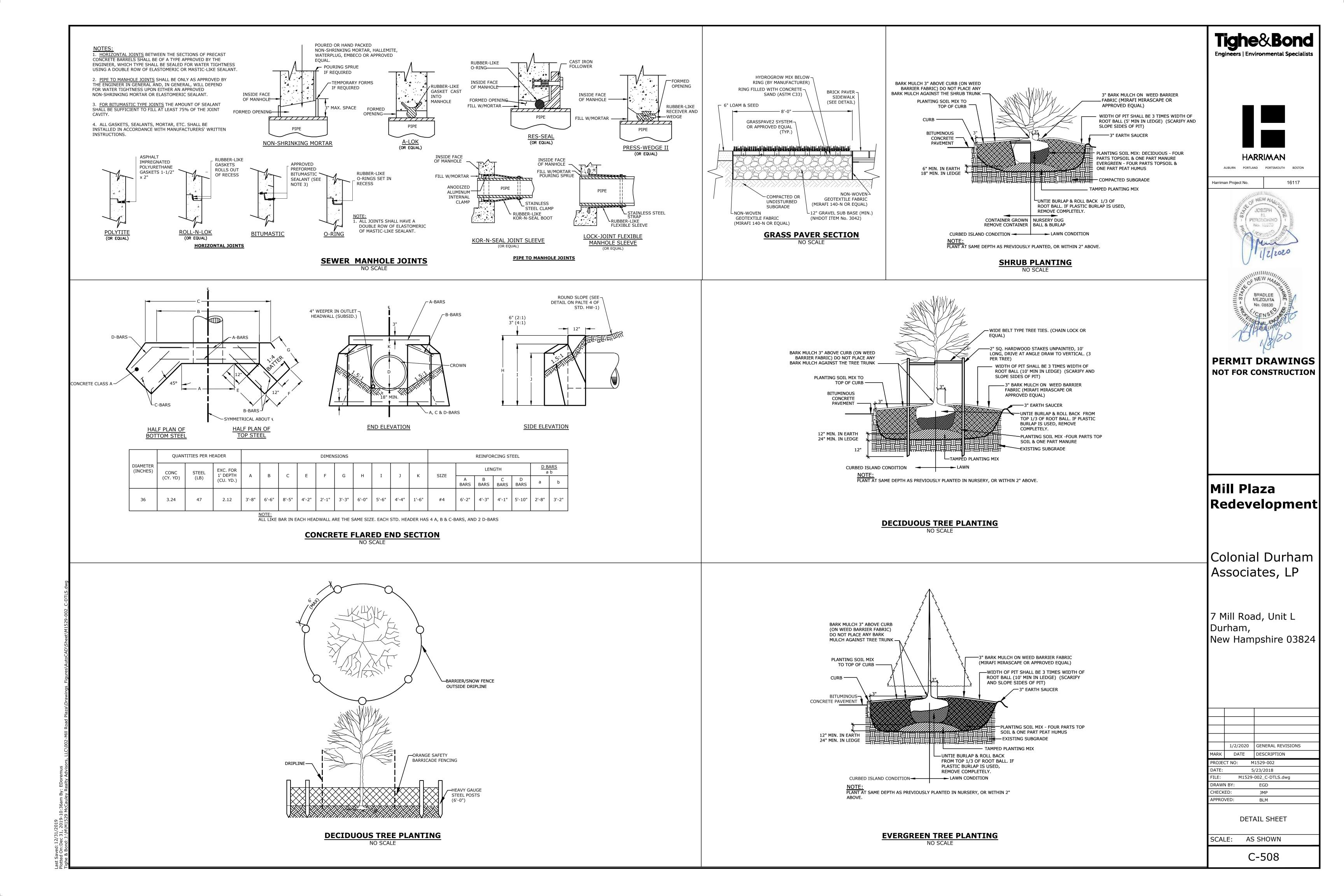


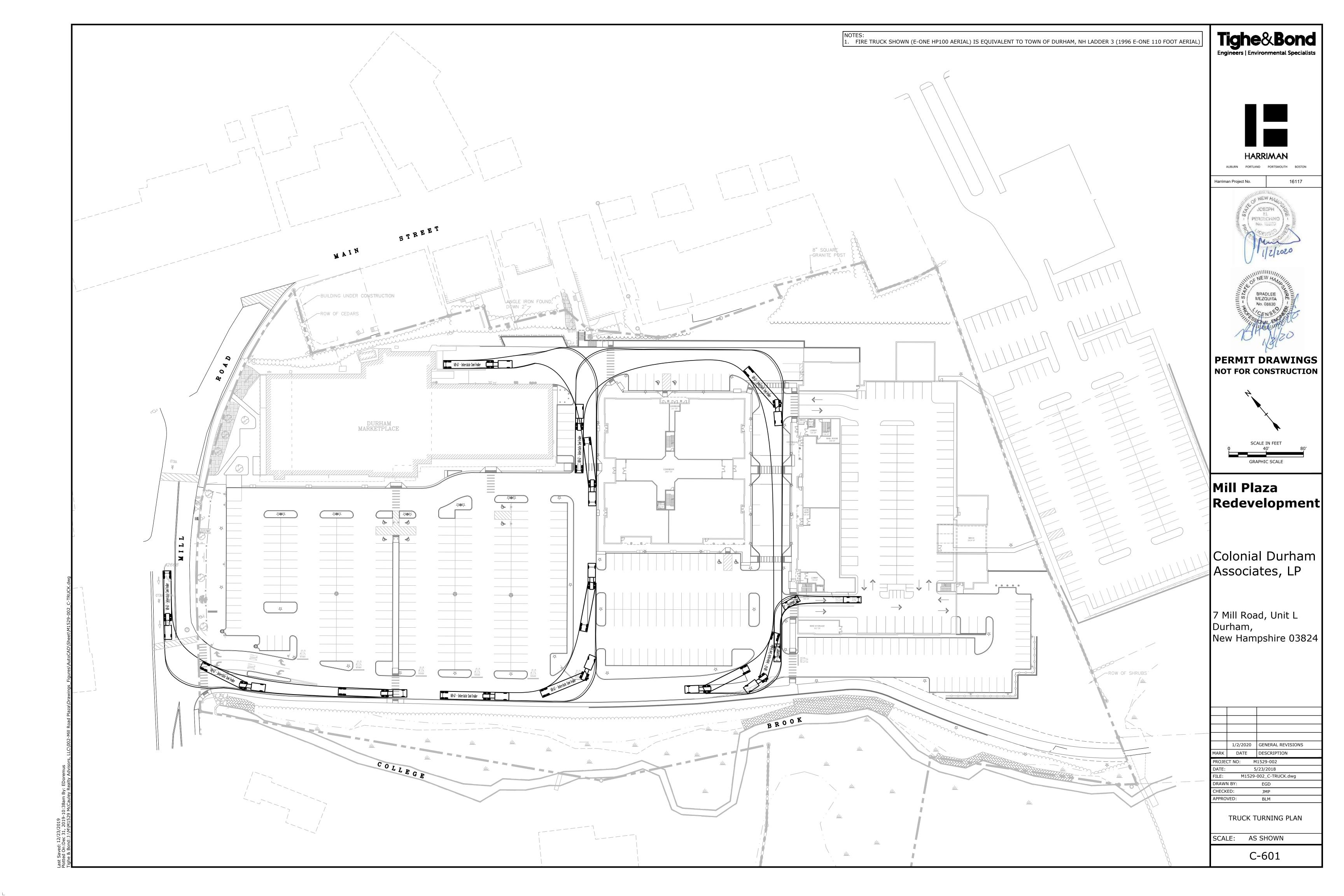


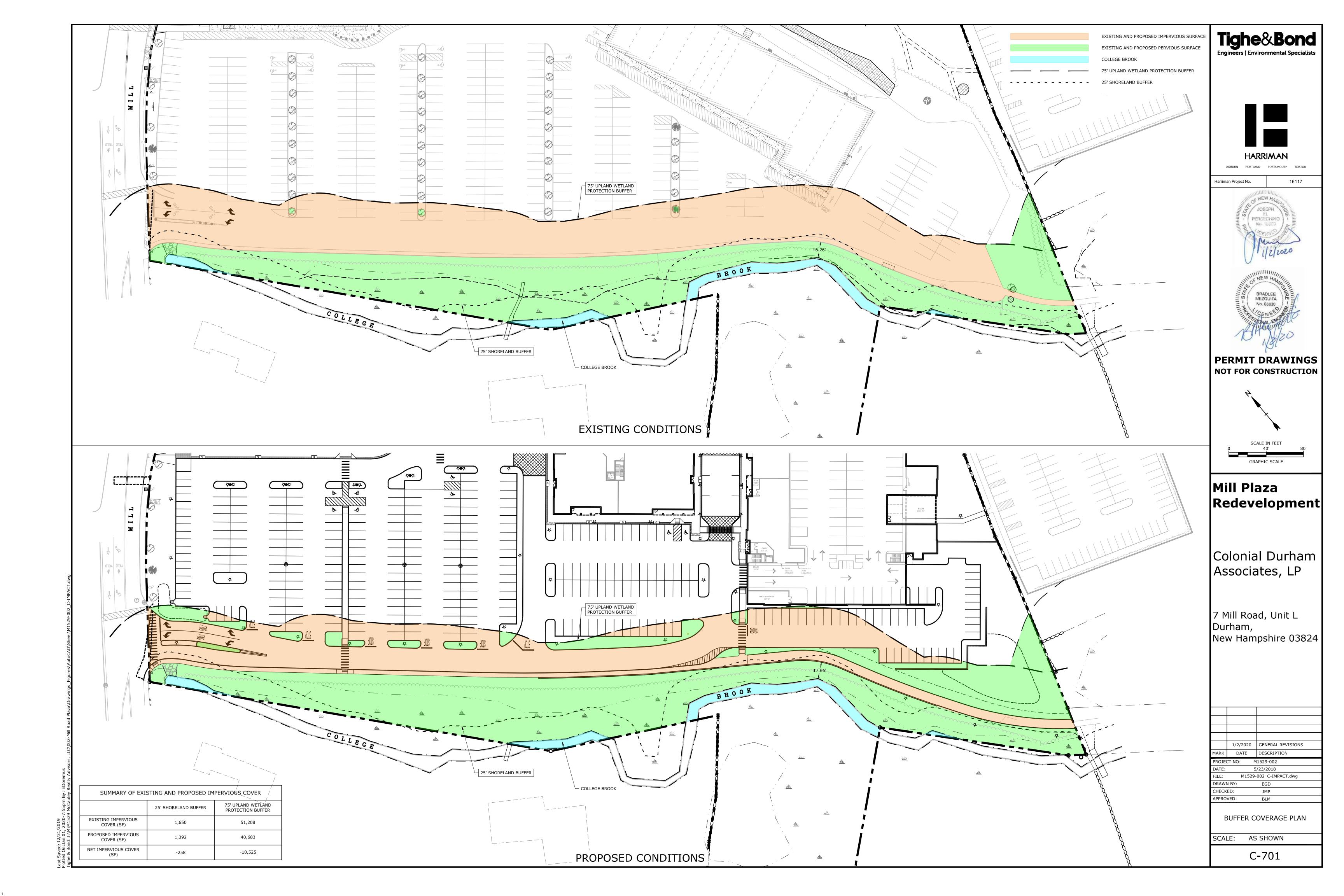
7 Mill Road, Unit L Durham, New Hampshire 03824

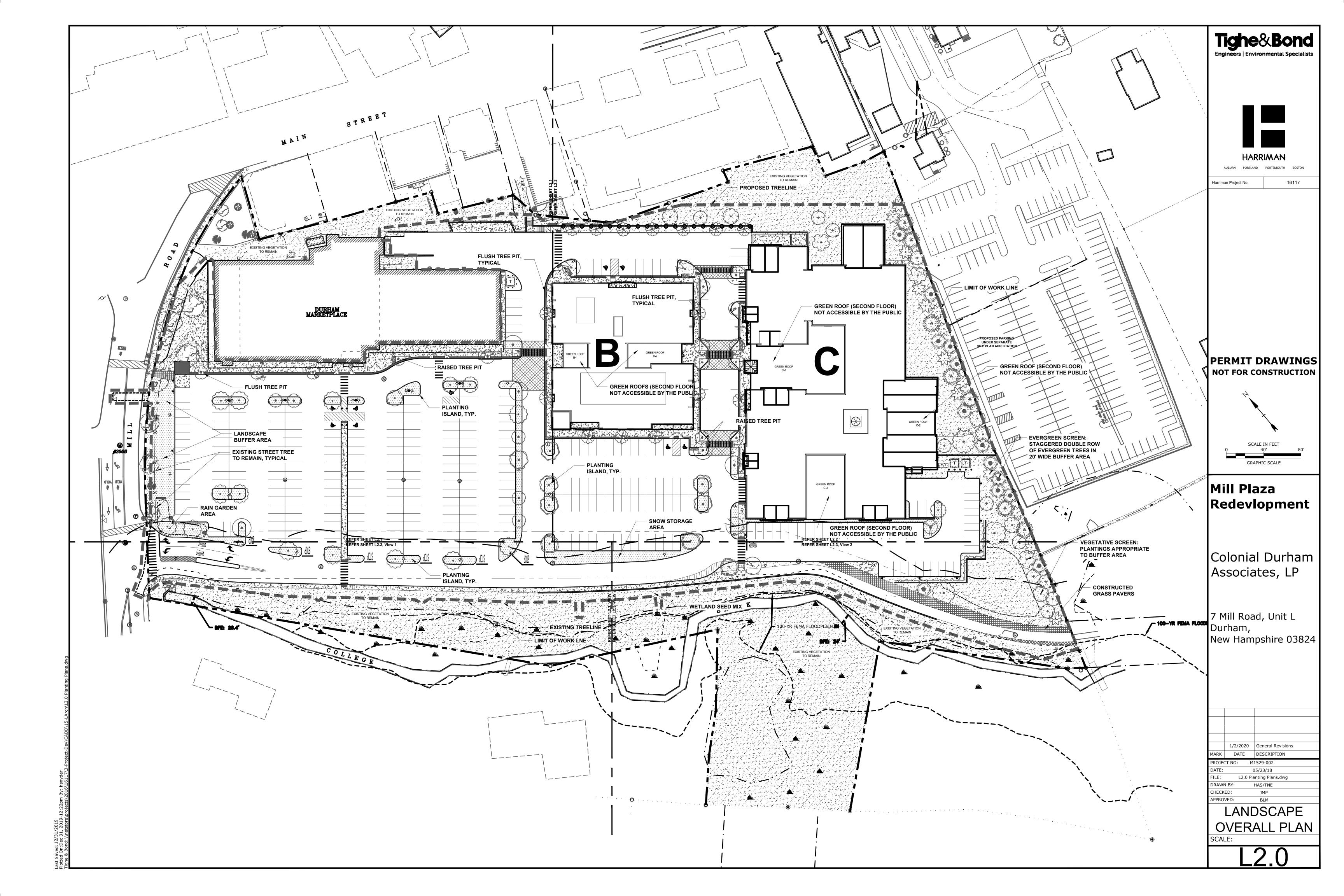
**Engineers | Environmental S** 

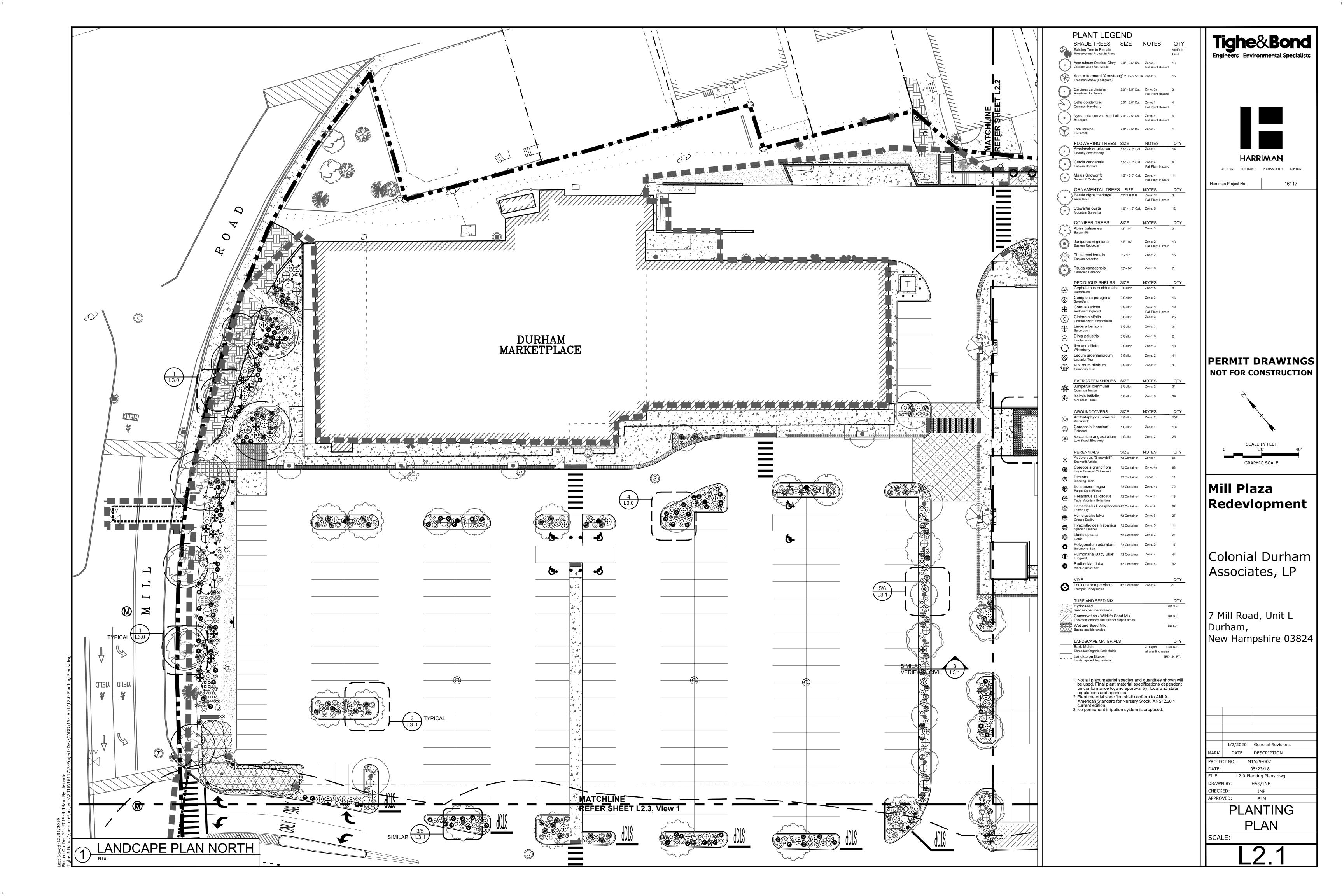
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ATE:	5	7/23/2018		
LE:	: M1529-002_C-DTLS.dwg			
RAWN BY: EGD				
HECKED:		JMP		
PROVED:		BLM		
DETAIL SHEET				
CAI	LE: AS	SHOWN		
C-507				

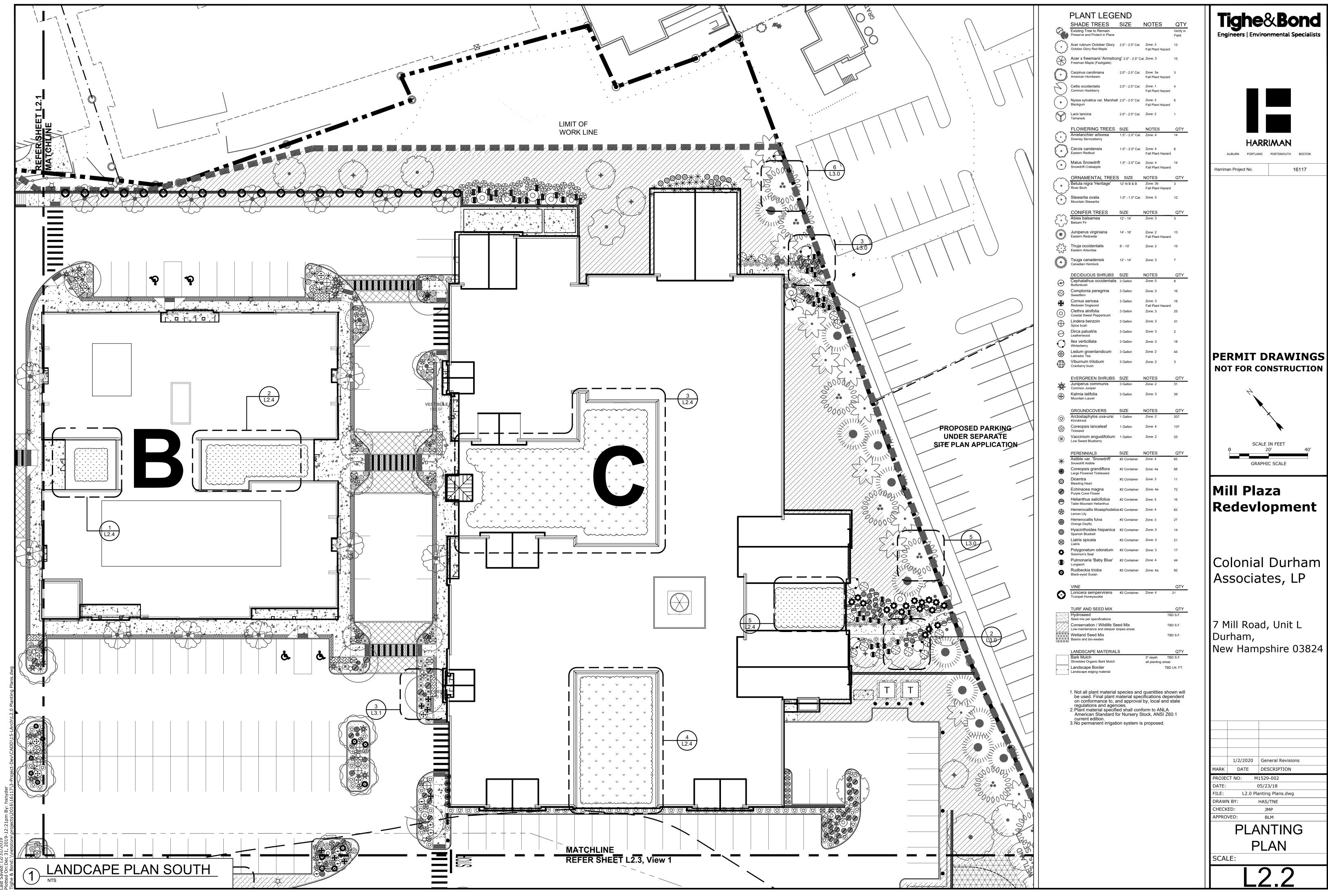


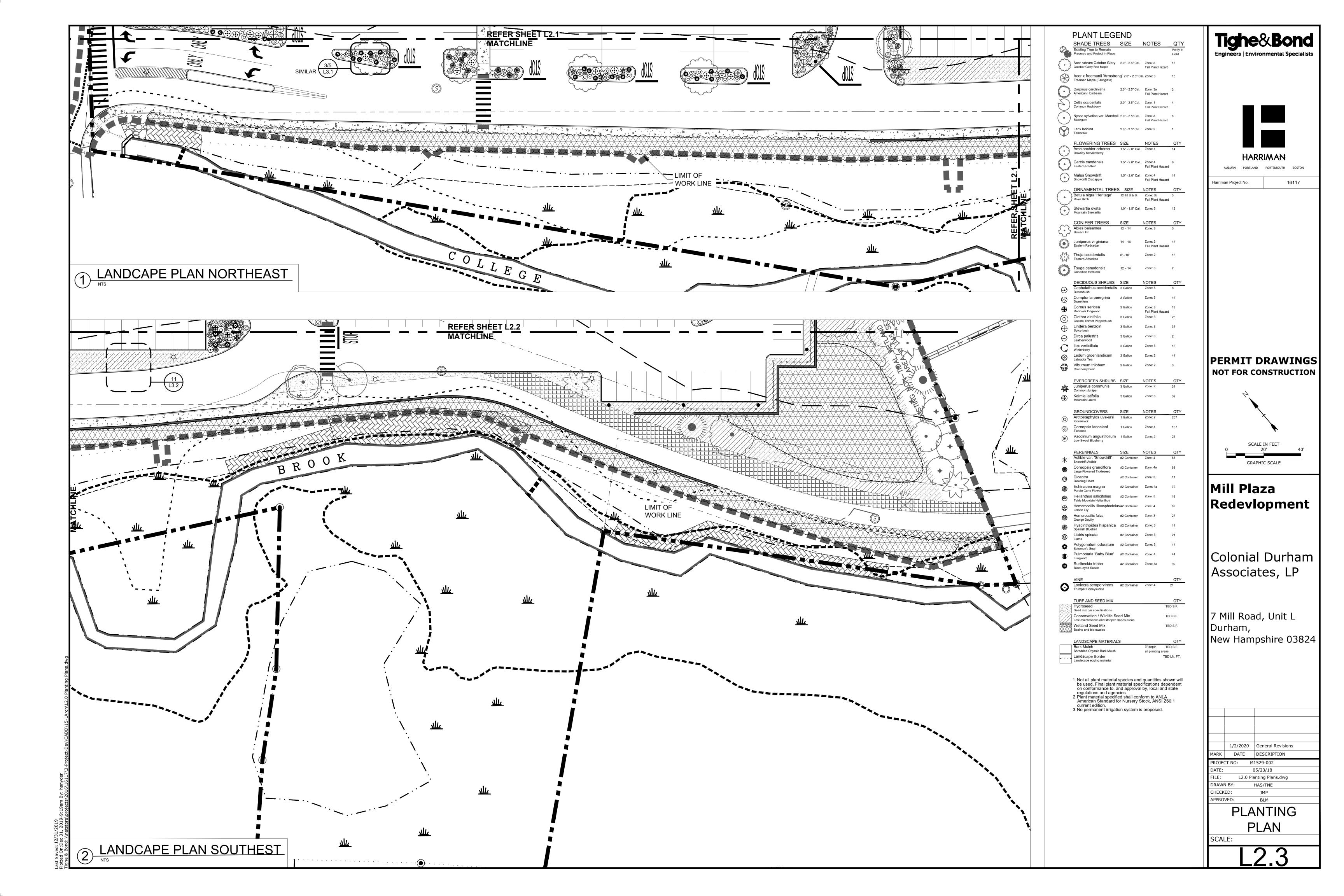


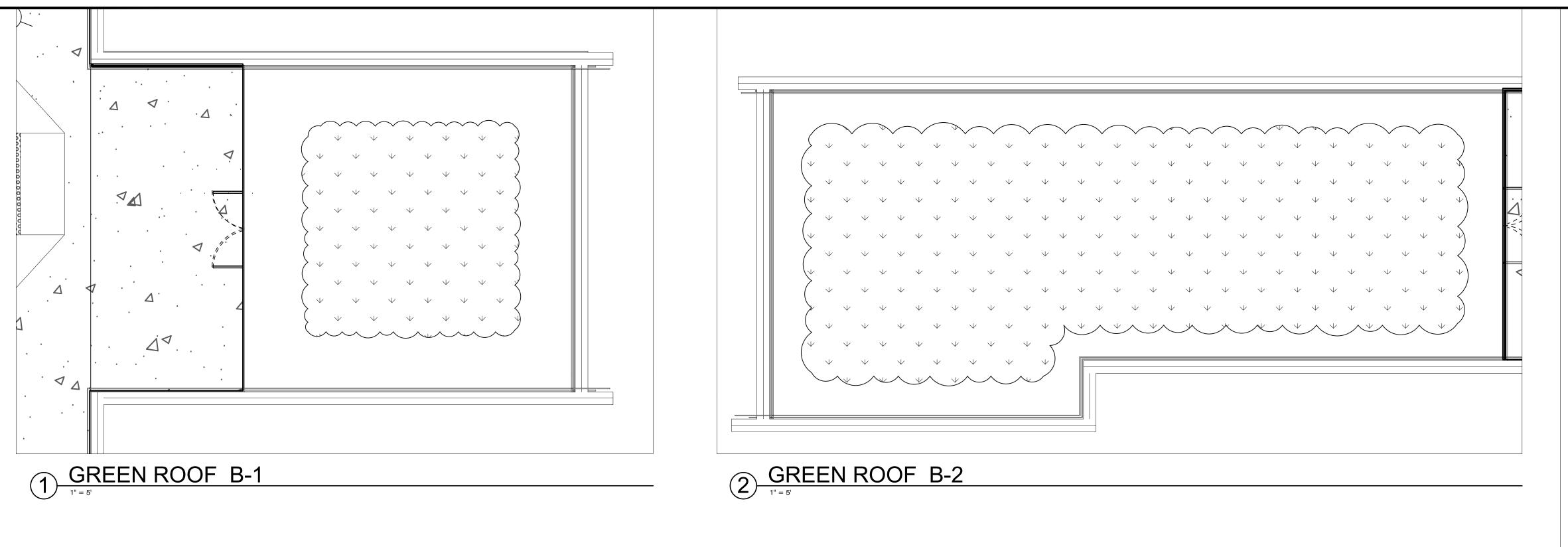




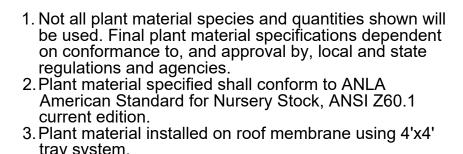




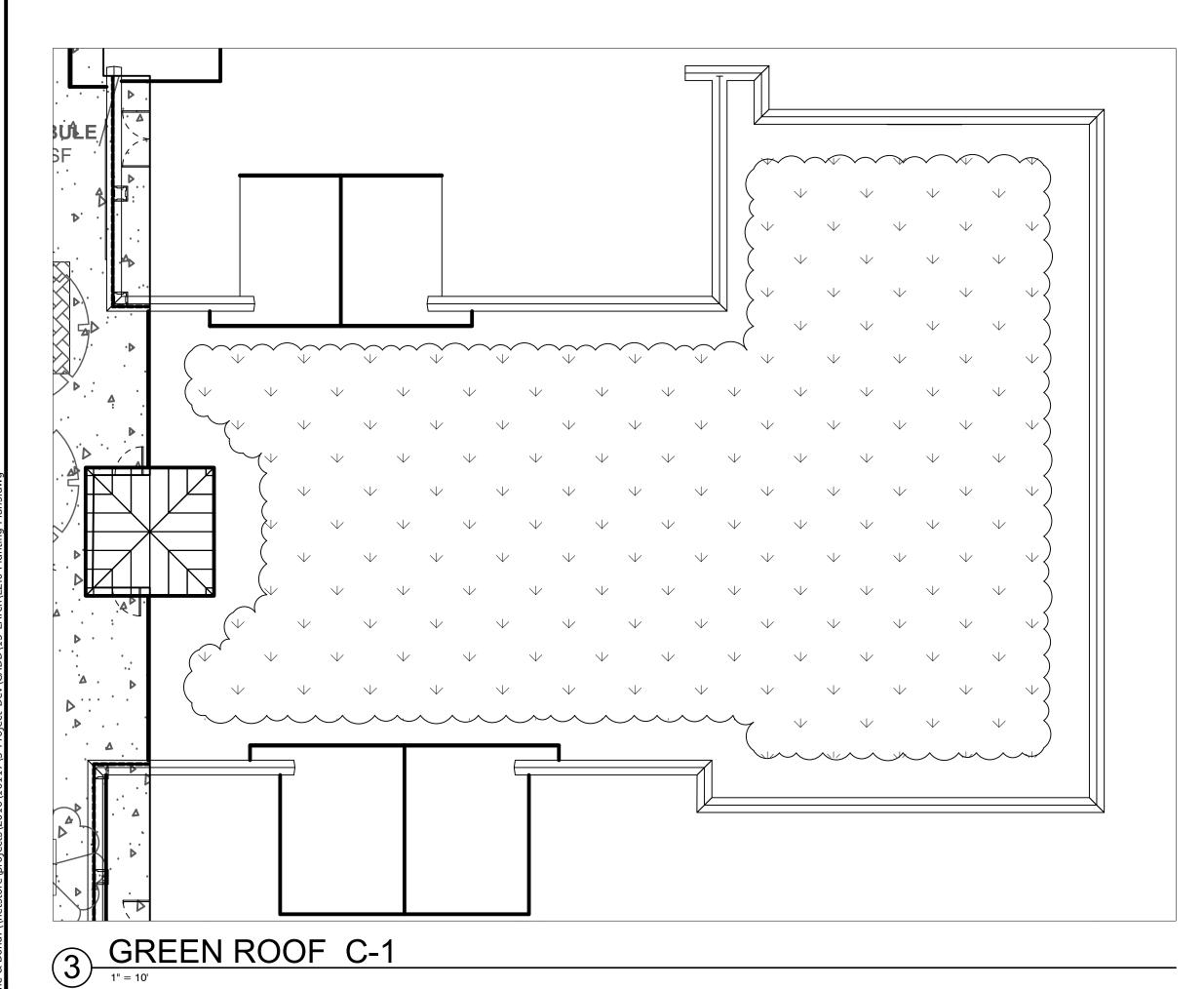


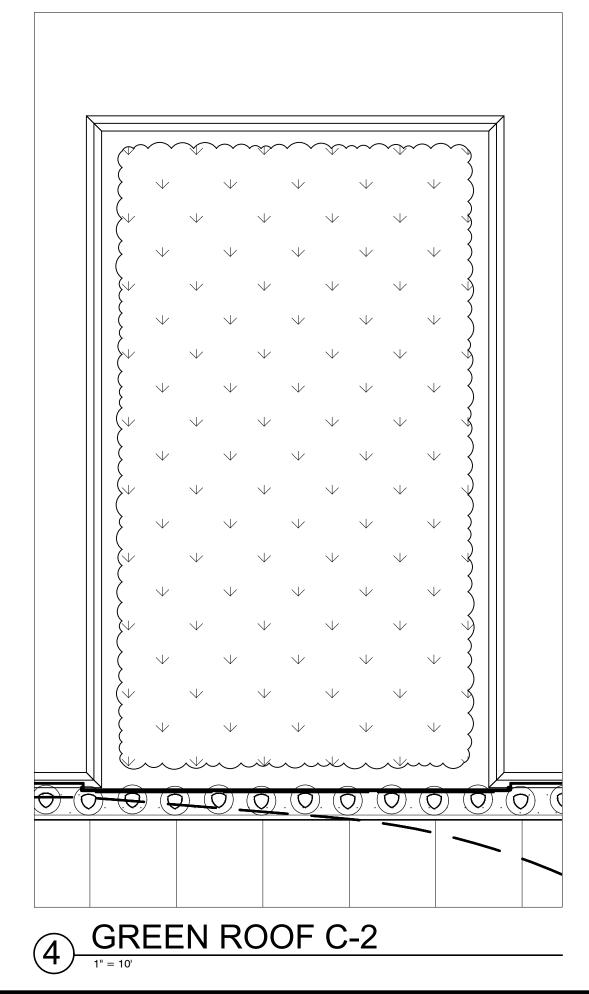


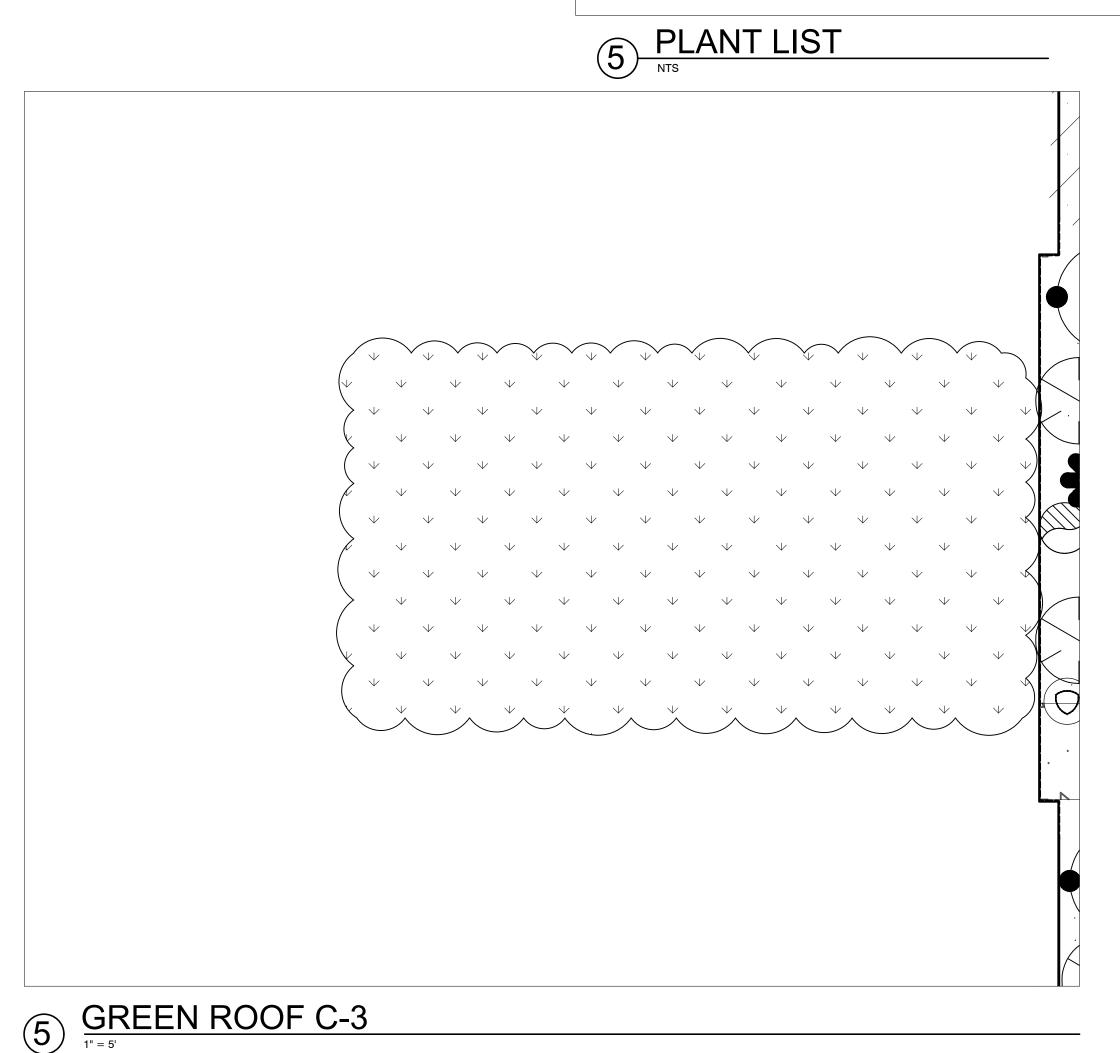
			ID. OD		
		PLANT LEGEN	ND: GR	EEN KC	JUES
		DECIDUOUS SHRUBS	SIZE	NOTES	QT
		Buddleia daviddii Butterfly Bush	2 Gallon	Zone: 4	20
	{ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Nandina domestica 'Nana	<sup>'</sup> 2 Gallon	Zone: 4	20
		EVERGREEN SHRUBS	SIZE	NOTES	QTY
		Juniperus procumbens Common Garden Juniper	1 Gallon	Zone: 4	25
	\ \ \ \ \ \ \	Gaultheria procumbens	1 Gallon	Zone: 3	40
		Wintergreen			
		PERENNIALS	SIZE	NOTES	QTY
		Achillea millfolium	#3 Container	Zone: 3	175
	} \	Yarrow Ajuga reptans	1 Gallon	Zone: 3	175
\(\psi\) \(\	{	Common Bugle	1 Gallon	20110. 0	170
$\psi$ $\psi$ $\psi$ $\psi$ $\psi$	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Allium schoenoprasum Chives	#1 Container	Zone: 4	175
$\psi$ $\psi$ $\psi$ $\psi$ $\psi$ $\psi$	\ \{\ \forall \}	Aquilegia candensis	#3 Container	Zone: 3	175
$\psi$ $\psi$ $\psi$ $\psi$ $\psi$	{	Hemerocallis 'Anna Warn	e#3 container	Zone: 3a	175
	{	Day Lilly		_	
	1 8 \$	Lavandula angustifolia English Lavender	#3 Container	Zone: 5	175
	\ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Oenothera fruticosa	#2 Container	Zone: 4	175
	\ \ \ \ \ \ \ \ \	Evening Primrose Rudbeckia fulgida	#3 Container	Zone: 3	175
	} {	Ornage Coneflower			
	{	Sedum varieties Perennial sedum	#1 Container	Zone: 4	175
		Stachys byzantina	#2 Container	Zone: 4	175
	\ \ \	Lamb's Ears Symphyostrichum novae-angliae	#3 Container	Zone: 4	175
	\(\frac{\psi_{\psi}}{2}\)	New England Aster	50		0
		ORNAMENTAL GRASSE	C C17E	NOTES	QTY
		Carex flacca	#3 container	Zone: 4	150
	} \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \ \	Blue - green Sedge			
		Eragrostis spectabilis Purple Lovegrass	#3 container	Zone: 5	200
	\ \{\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\	Festuca glauca Blue Fescue	#3 container	Zone: 4	175
		DIUC FCSCUC			

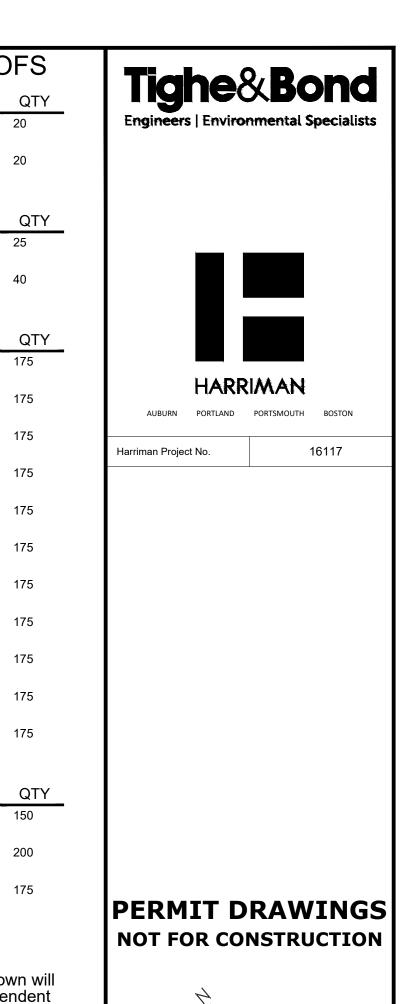


tray system.
4.No permanent irrigation system is proposed.









# Mill Plaza Redevlopment

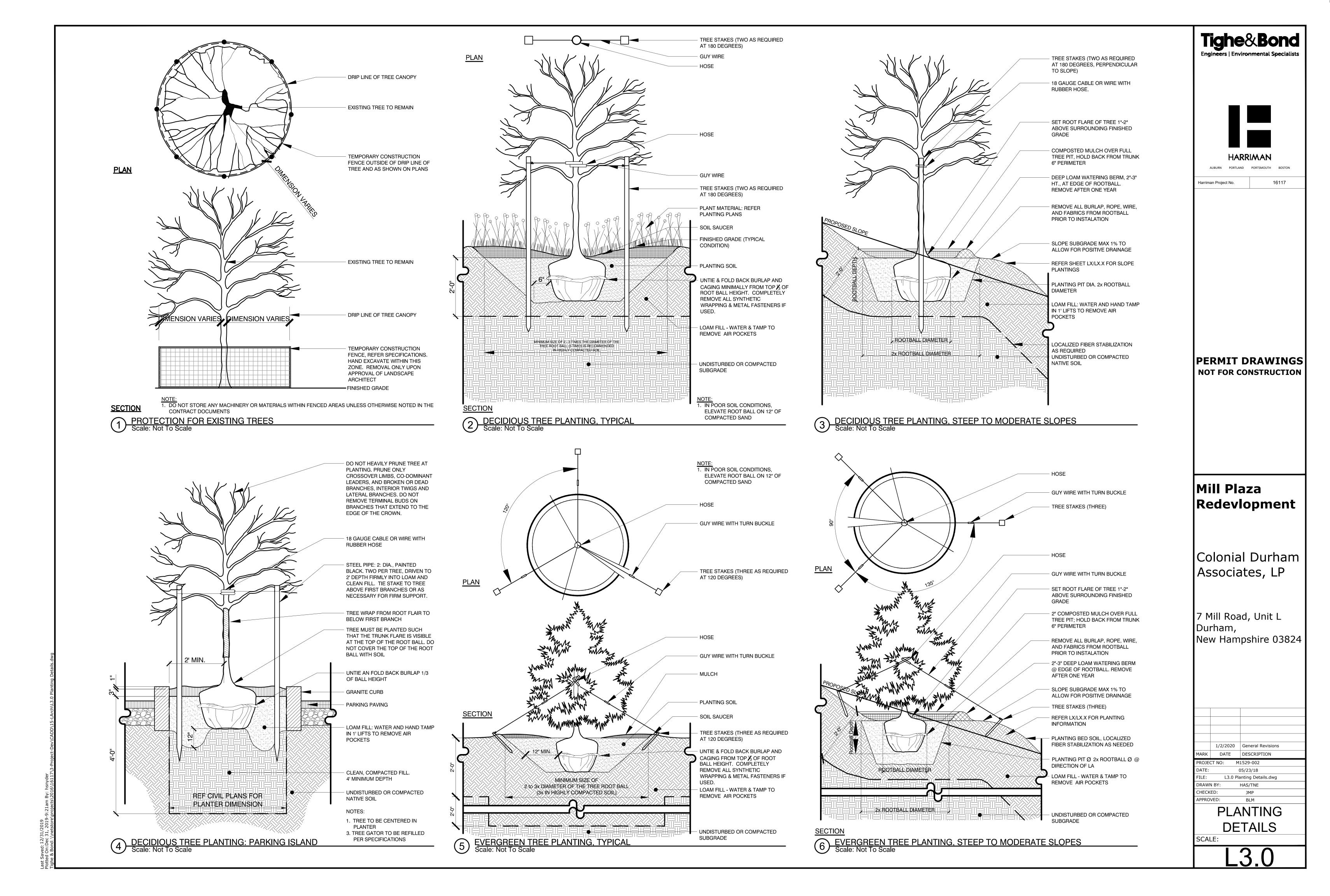
GRAPHIC SCALE

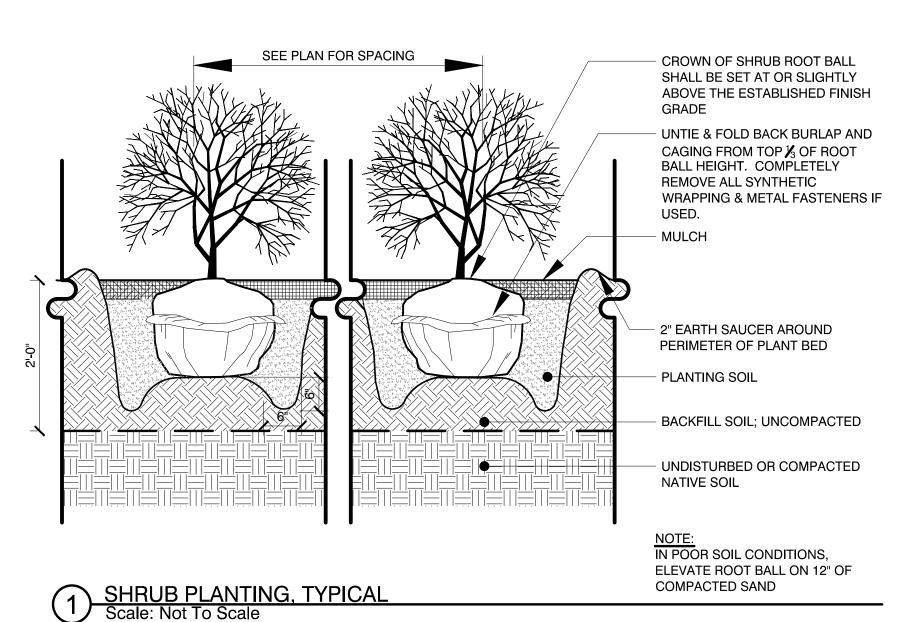
Colonial Durham Associates, LP

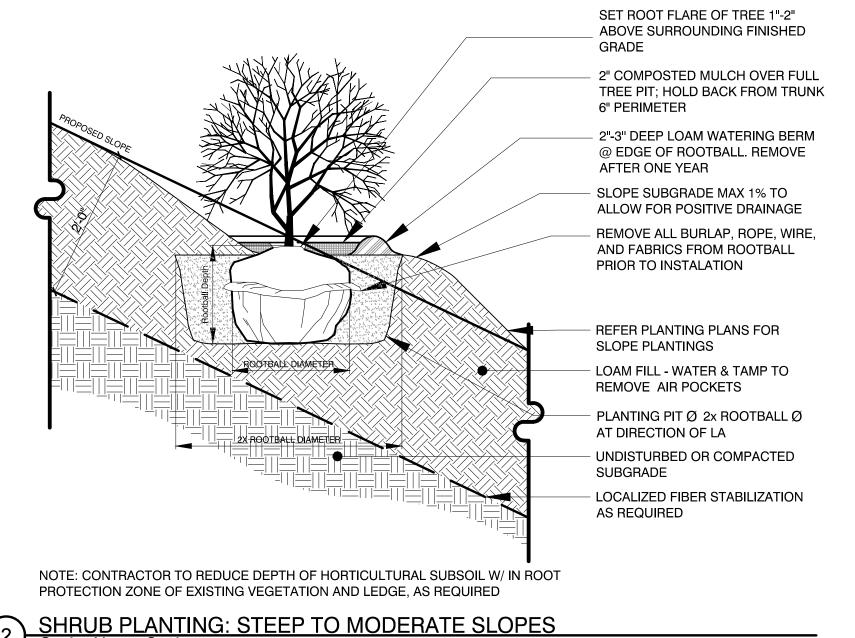
7 Mill Road, Unit L Durham, New Hampshire 03824

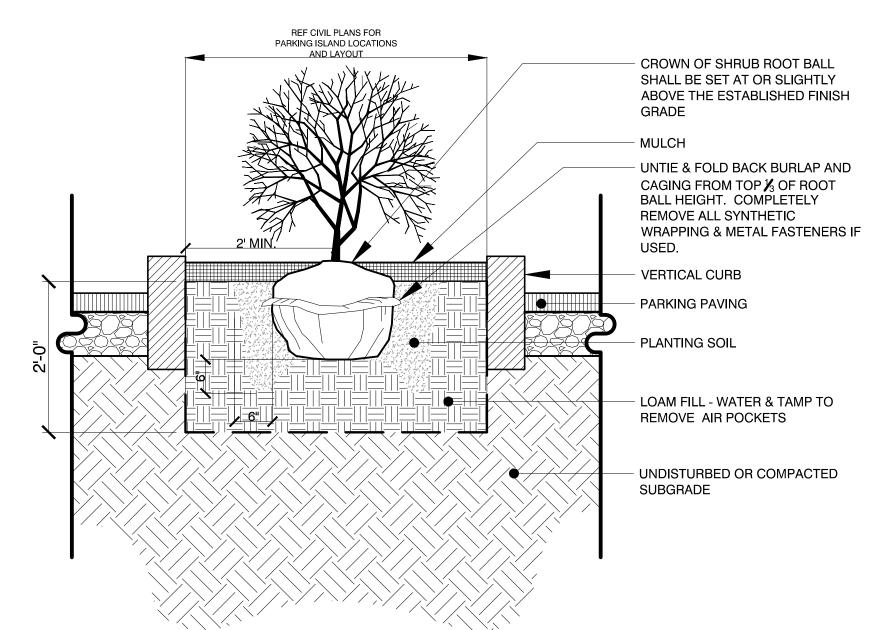
	1/2/2020	General Revisions	
K	DATE	DESCRIPTION	
JECT NO: M1529-002			
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:	L2.0 Planting Plans.dwg		
WN BY:		HAS/TNE	
CK	ED:	JMP	

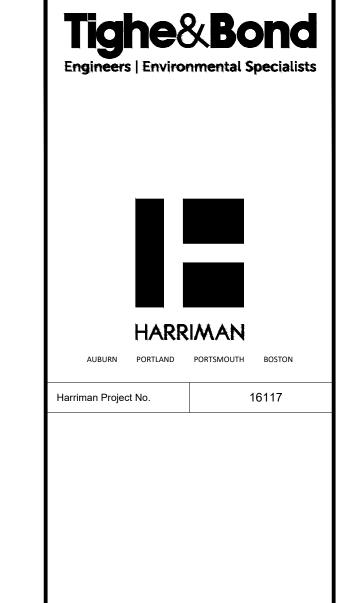
ROOF PLANTING **PLANS** 











SHRUB PLANTING: PARKING ISLAND

	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.

REPLACED IN-KIND WITH PLANT MATERIAL OF SAME SPECIES,

SIZE AND FORM.

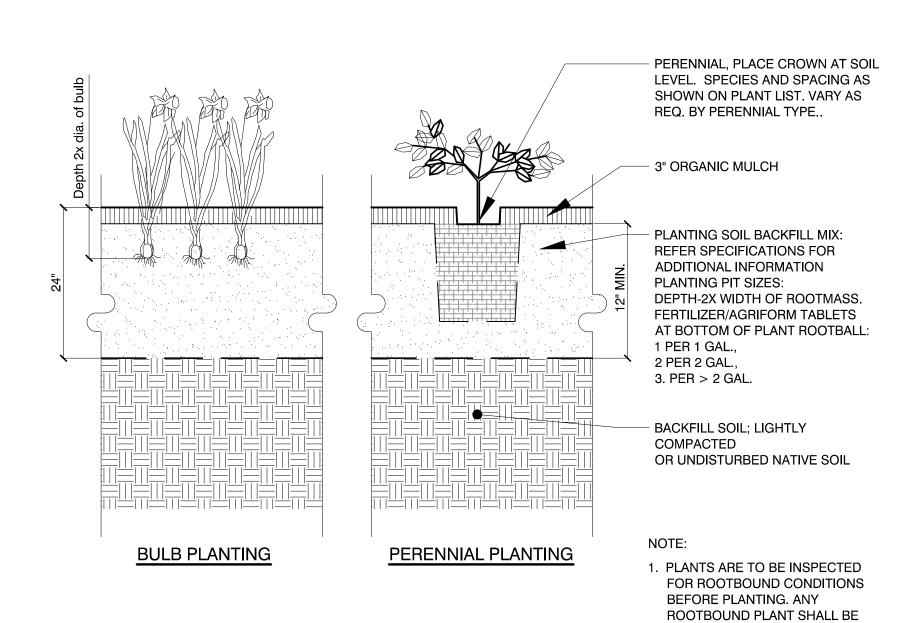
REFER TO PLANT LIST AND GROUNDCOVER CHART, THIS SHEET FOR APPROPRIATE SPACING DIMENSIONS EARTHEN SAUCER. 3" HEIGHT, AROUND PERIMETER OF PLANTING ORGANIC BARK MULCH: REFER SPECIFICATIONS FOR ADDITIONAL INFORMATION. SPECIFIED PLANTING SOIL MIXTURE - UNDISTURBED OR COMPACTED NATIVE SOIL

5 GROUNDCOVER PLANTING, TYPICAL Scale: Not To Scale

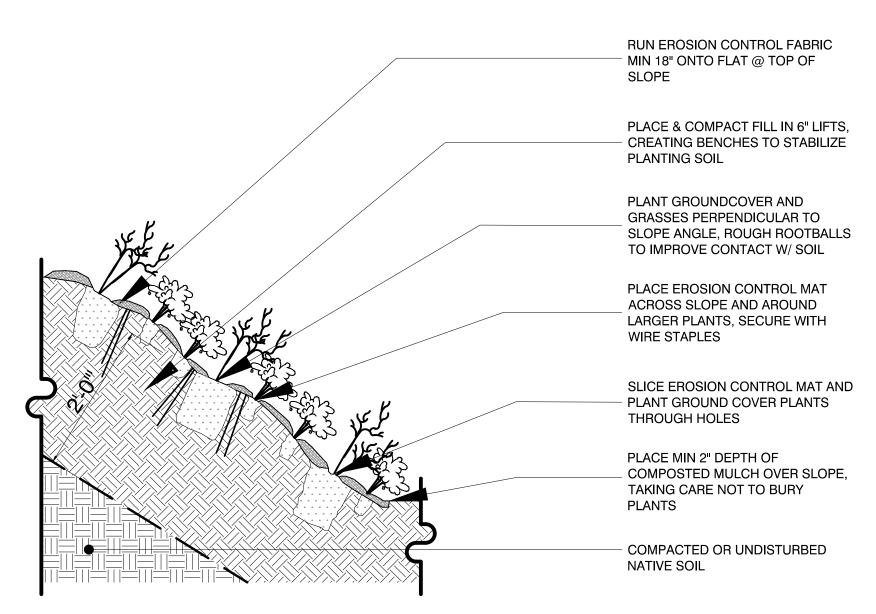
REFER TO PLANT LIST AND GROUNDCOVER SPACING CHART FOR APPROPRIATE SPACING DIMENSIONS EARTHEN SAUCER. 3" HEIGHT, AROUND PERIMETER OF PLANTING ORGANIC BARK MULCH: REFER SPECIFICATIONS FOR ADDITIONAL INFORMATION. SPECIFIED PLANTING SOIL MIXTURE UNDISTURBED OR COMPACTED NATIVE SOIL

ORNAMENTAL GRASS PLANTING, TYPICAL Scale: Not To Scale

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



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



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

Mill Plaza Redevlopment

PERMIT DRAWINGS

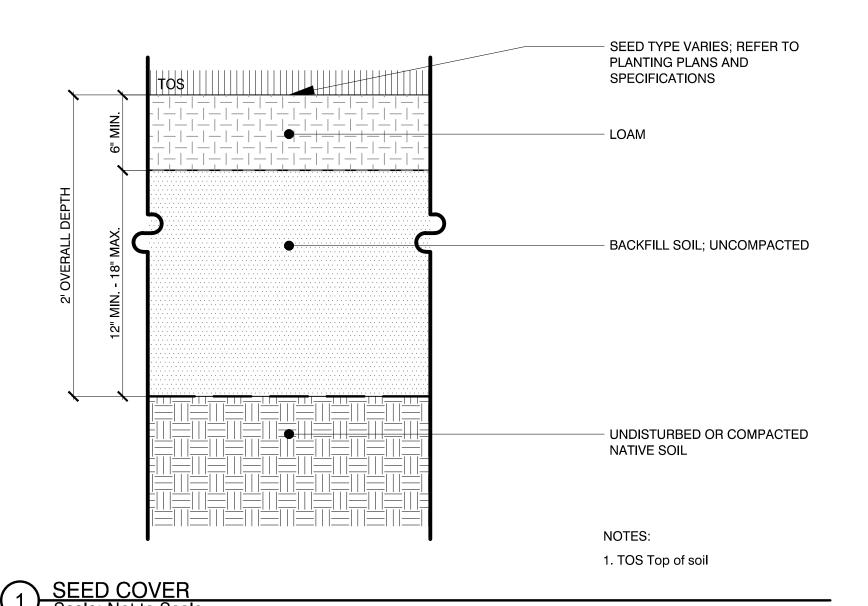
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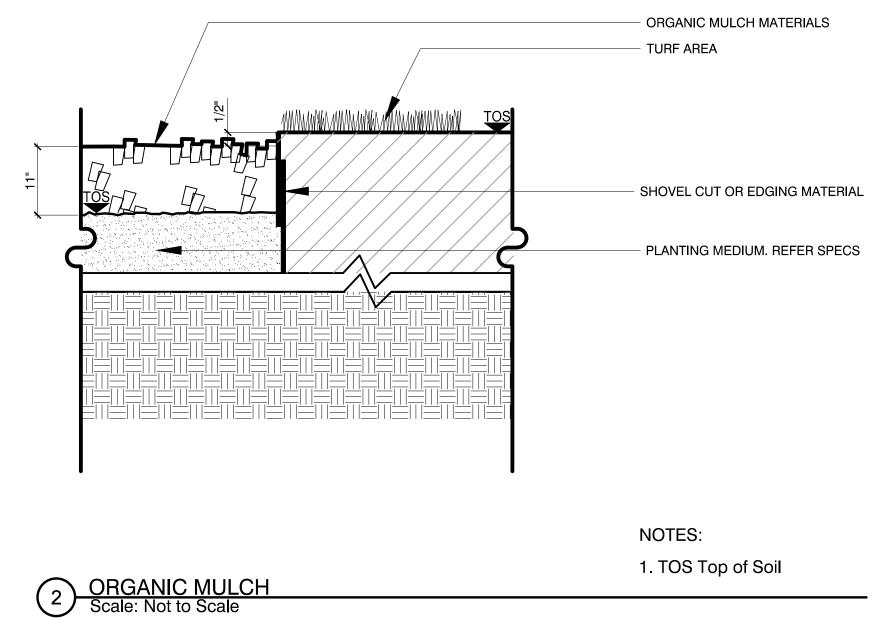
Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

1/2/2020 General Revisions MARK DATE DESCRIPTION PROJECT NO: M1529-002 05/23/18 L3.0 Planting Details.dwg HAS/TNE DRAWN BY: CHECKED: PPROVED:

**PLANTING DETAILS** 







PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevlopment

Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

1/2/2020 General Revisions

MARK DATE DESCRIPTION

PROJECT NO: M1529-002

DATE: 05/23/18

PROJECT NO: M1529-002

DATE: 05/23/18

FILE: L3.0 Planting Details.dwg

DRAWN BY: HAS/TNE

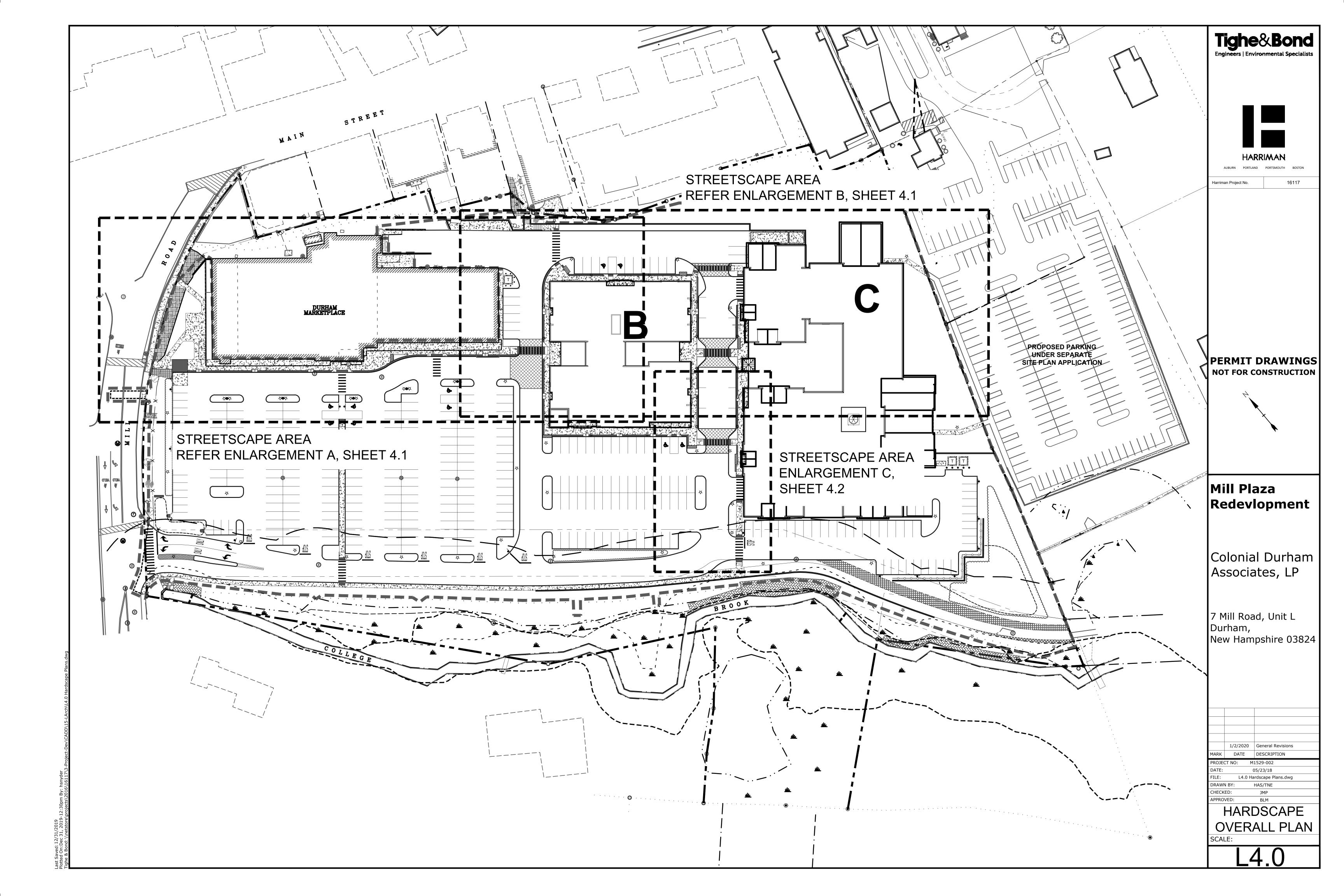
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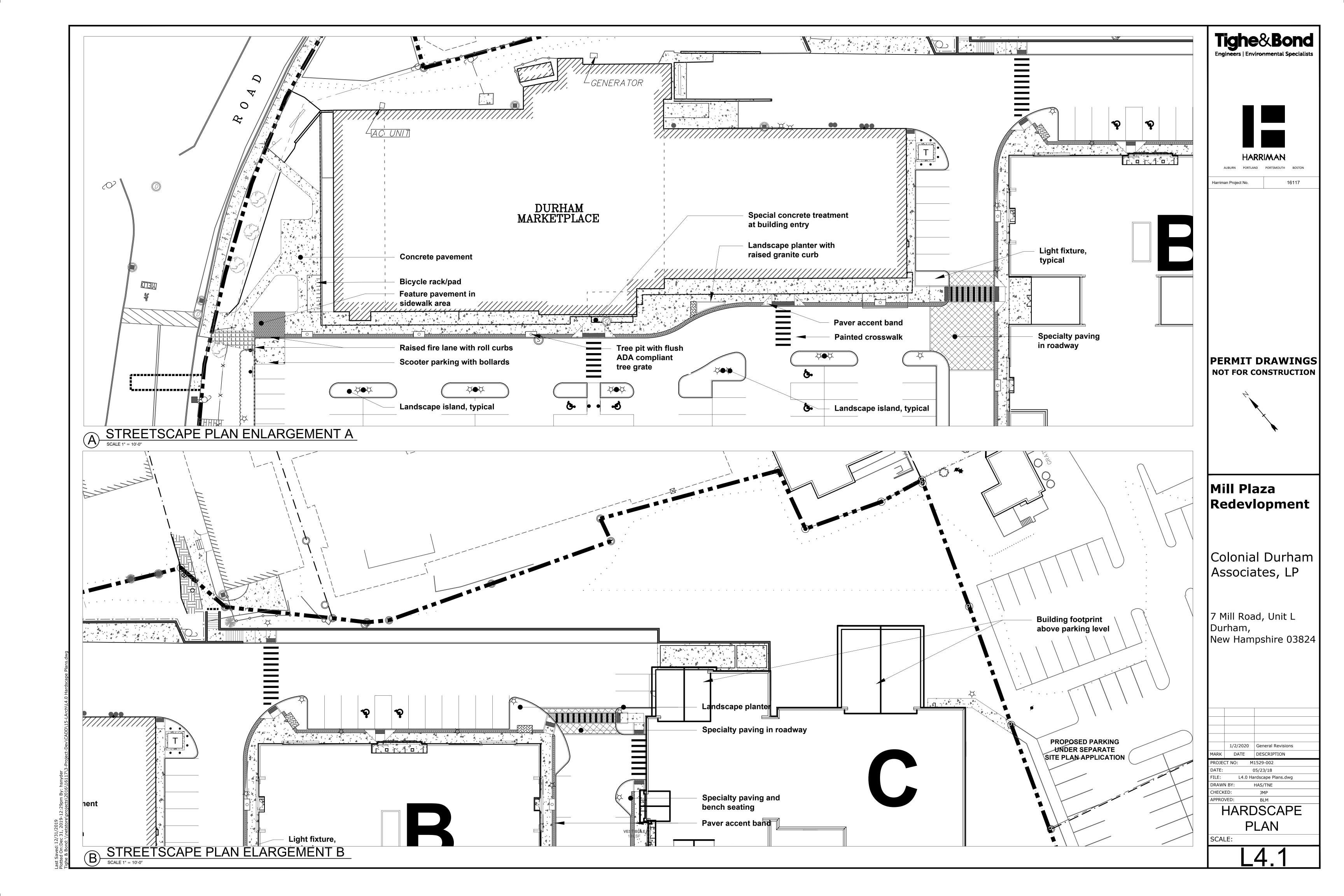
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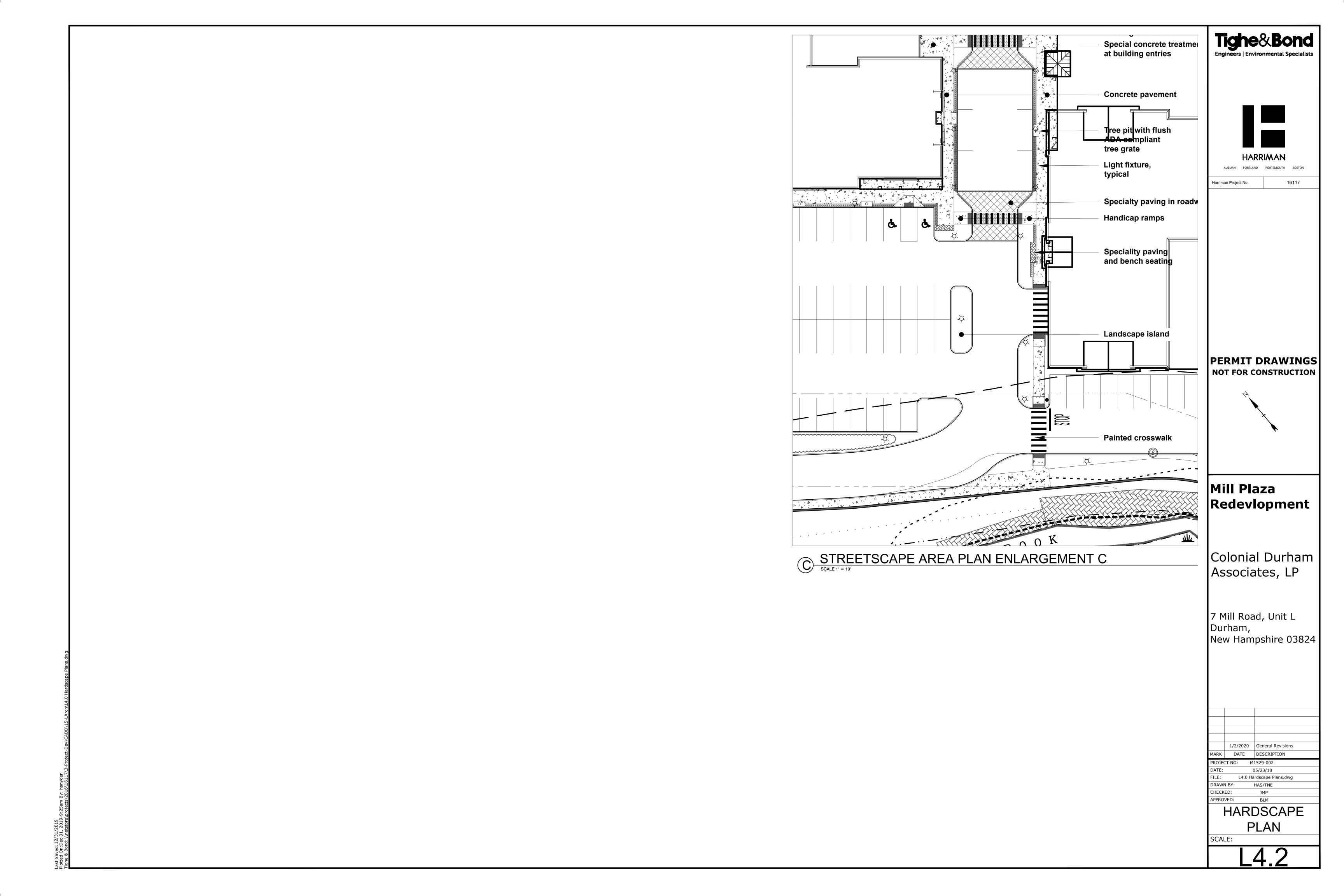
PLANTING DETAILS

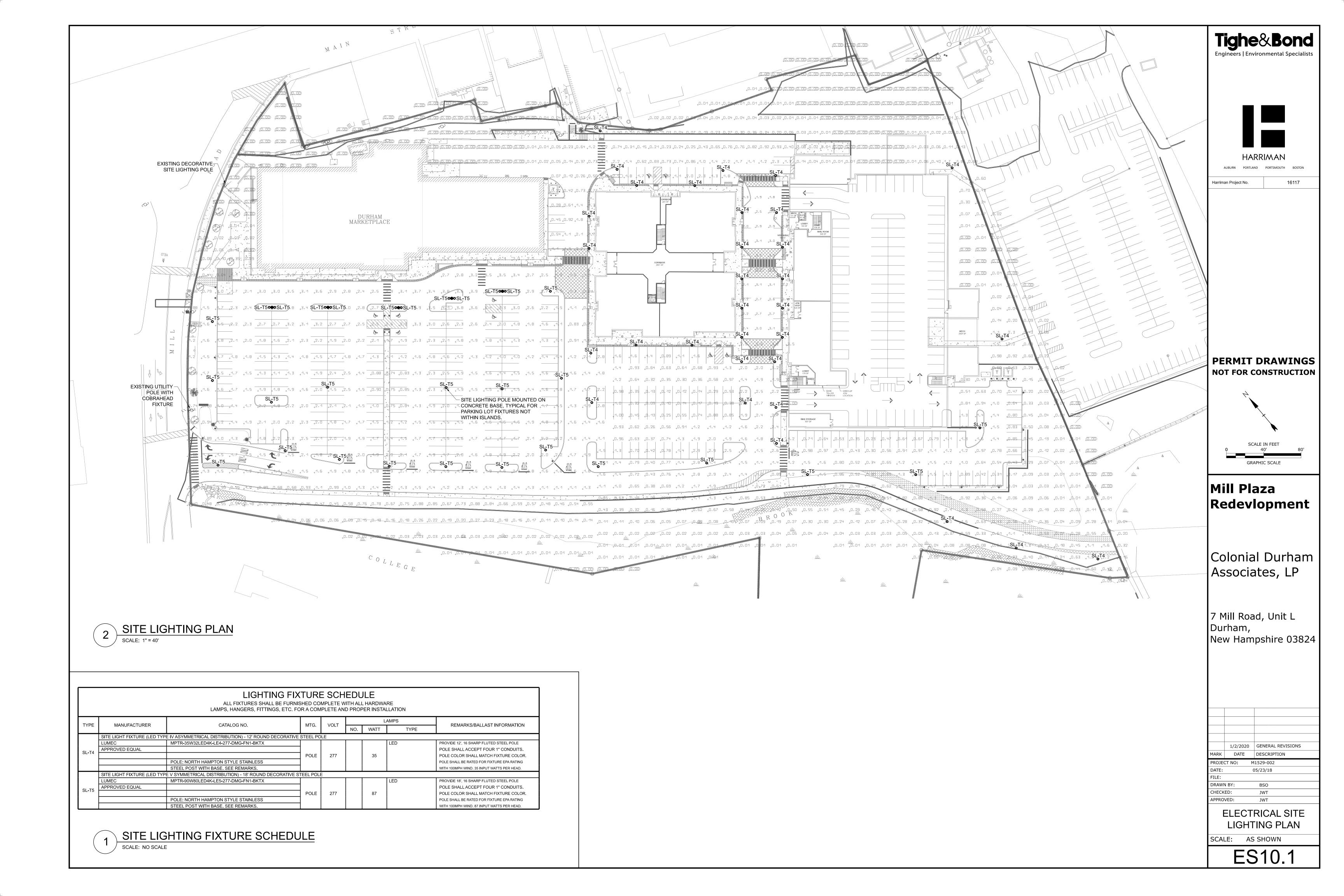
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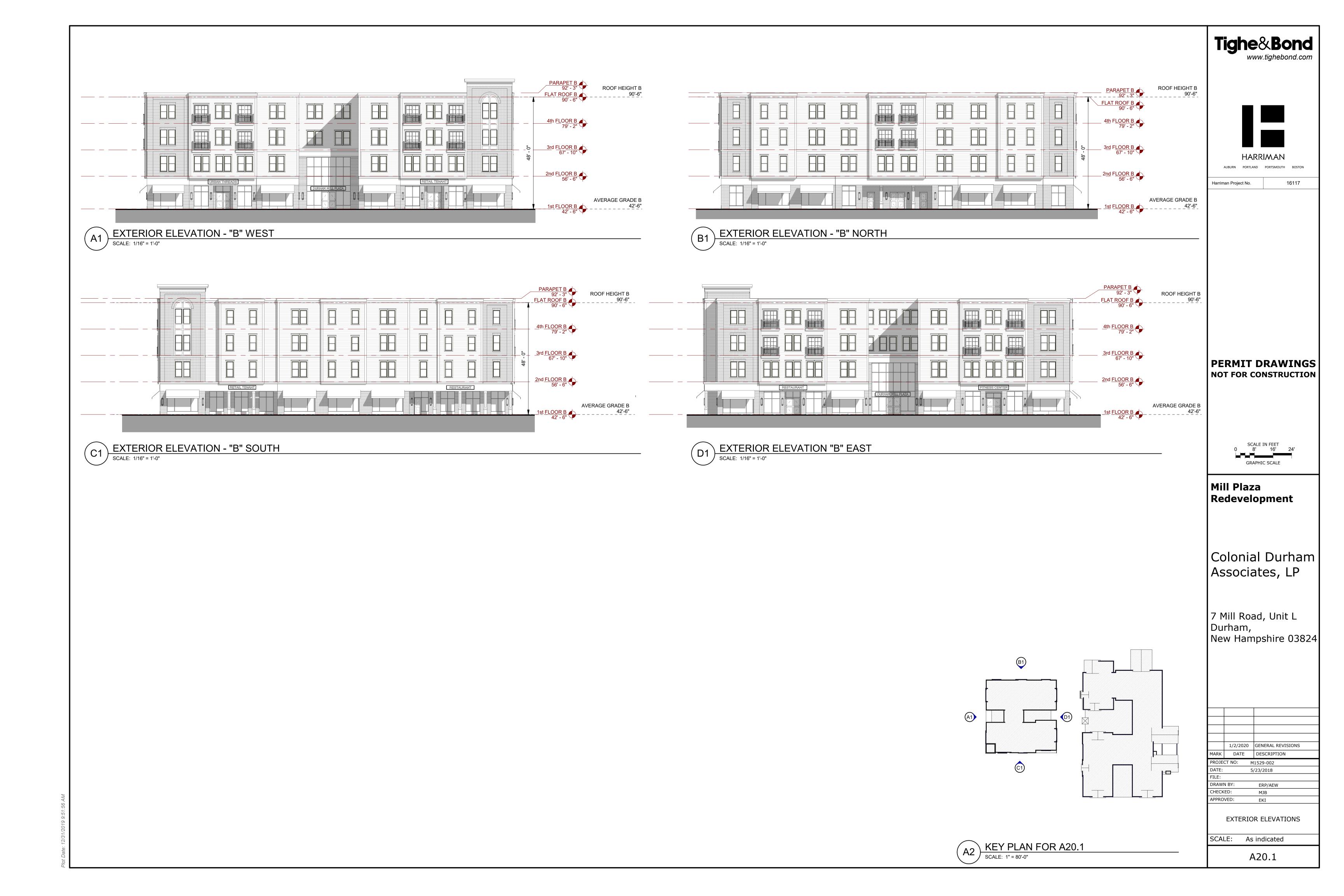
L3.2













PERMIT DRAWINGS NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

1/2/2020 GENERAL REVISIONS MARK DATE DESCRIPTION M1529-002 ERP/AEW

**EXTERIOR ELEVATIONS** 

As indicated A20.2



A1 RENDERED ELEVATION "B" WEST



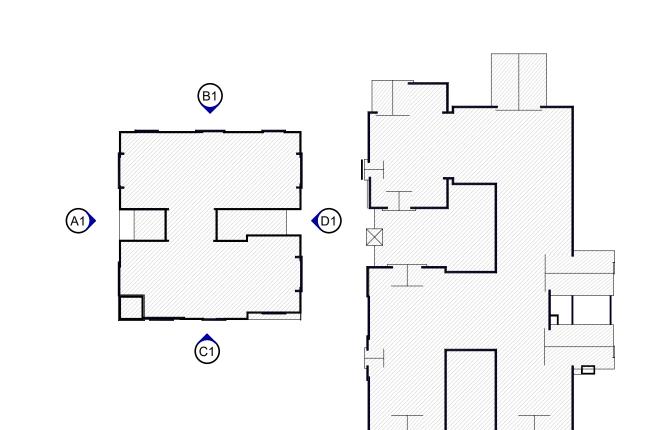
B1 RENDERED ELEVATION "B" NORTH



(C1) RENDERED ELEVATION "B" SOUTH



D1 RENDERED ELEVATION "B" EAST



A2) KEY PLAN FOR A20.3

SCALE: 1" = 80'-0"



PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

	1/2/2020	GENERAL REVISIONS
IARK	DATE	DESCRIPTION
ROJECT NO: M		11529-002
ATE: 5/		/23/2018
ILE:		
RAWN BY:		ERP/AEW
HECKED:		МЈВ
PPROVED:		EKI

RENDERINGS

LE: 1" = 80'-0"
A20.3



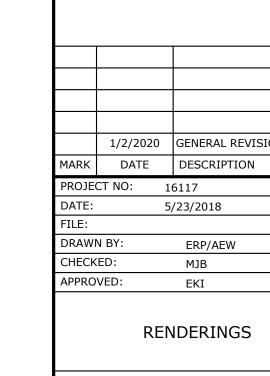


PERMIT DRAWINGS NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824



**C**1

A1 🖂

KEY PLAN FOR A20.4

SCALE: 1" = 80'-0"

1" = 80'-0" A20.4



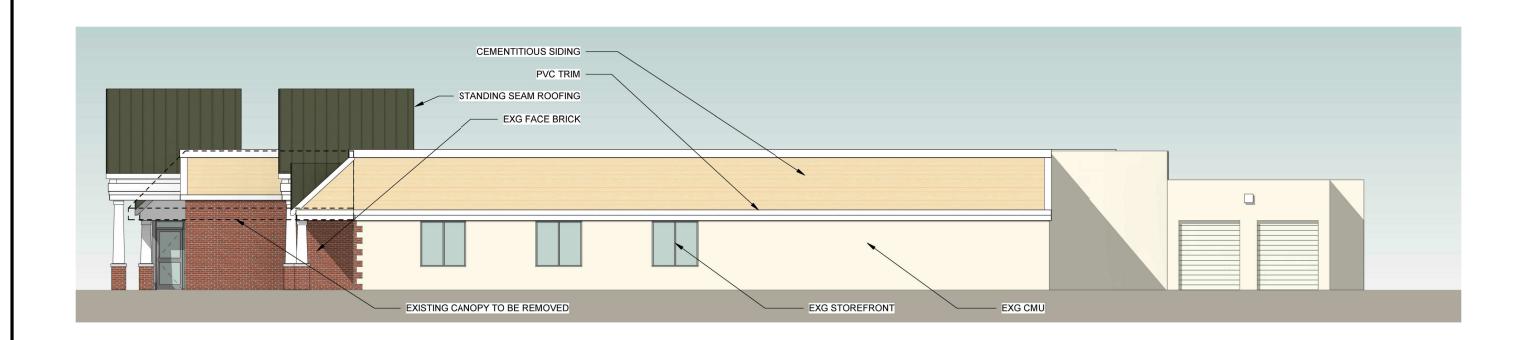
B2 RENDERED ELEVATION "C" NORTH



A1 RENDERED ELEVATION "C" WEST NO SCALE







# B1 RETAIL - RIGHT ELEVATION SCALE: NO SCALE



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

Tighe&Bond
www.tighebond.com



Harriman Project No. 16117

PERMIT DRAWINGS
NOT FOR CONSTRUCTION

Mill Plaza Redevelopment

Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

1/2/2020 GENERAL REVISIONS

MARK DATE DESCRIPTION

PROJECT NO: 16117

DATE: 5/23/2018

FILE:

DRAWN BY: DRE

CHECKED: DRE

APPROVED: DRE

RETAIL ELEVATIONS

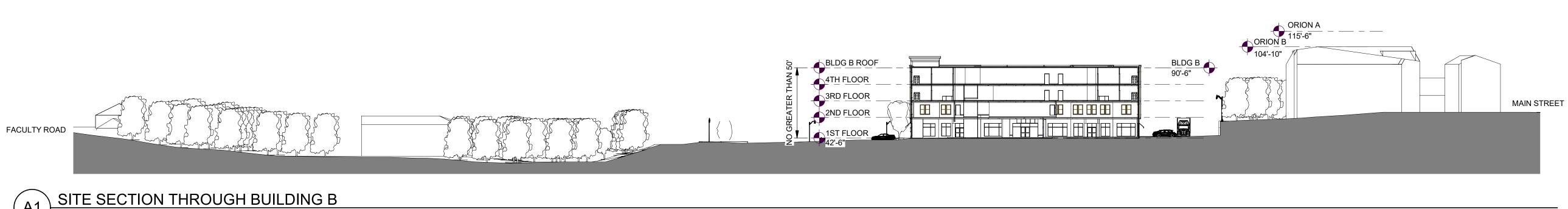
A20.5

SCALE: NO SCALE

RETAIL - FRONT ELEVATION

SCALE: NO SCALE





Redevelopment

Mill Plaza

Colonial Durham Associates, LP

7 Mill Road, Unit L Durham, New Hampshire 03824

	1/2/2020	GENERAL REVISIONS		
1ARK	DATE	DESCRIPTION		
PROJECT NO: M1529-002				
DATE: 5/		/23/2018		
ILE:				
RAWI	N BY:	AEW		
CHECKED:		EKI		
PPRO	VED:	EKI		

SITE SECTIONS

SCALE: As indicated

A30.1

12/21/2010 12:03:18 DM

SCALE: 1" = 40'-0"