

City of Portsmouth, New Hampshire

DEPARTMENT OF COMMUNITY DEVELOPMENT

Plans for the Construction of

ROCK STREET PARK IMPROVEMENTS

PROJECT SITE-

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Plans Prepared By:



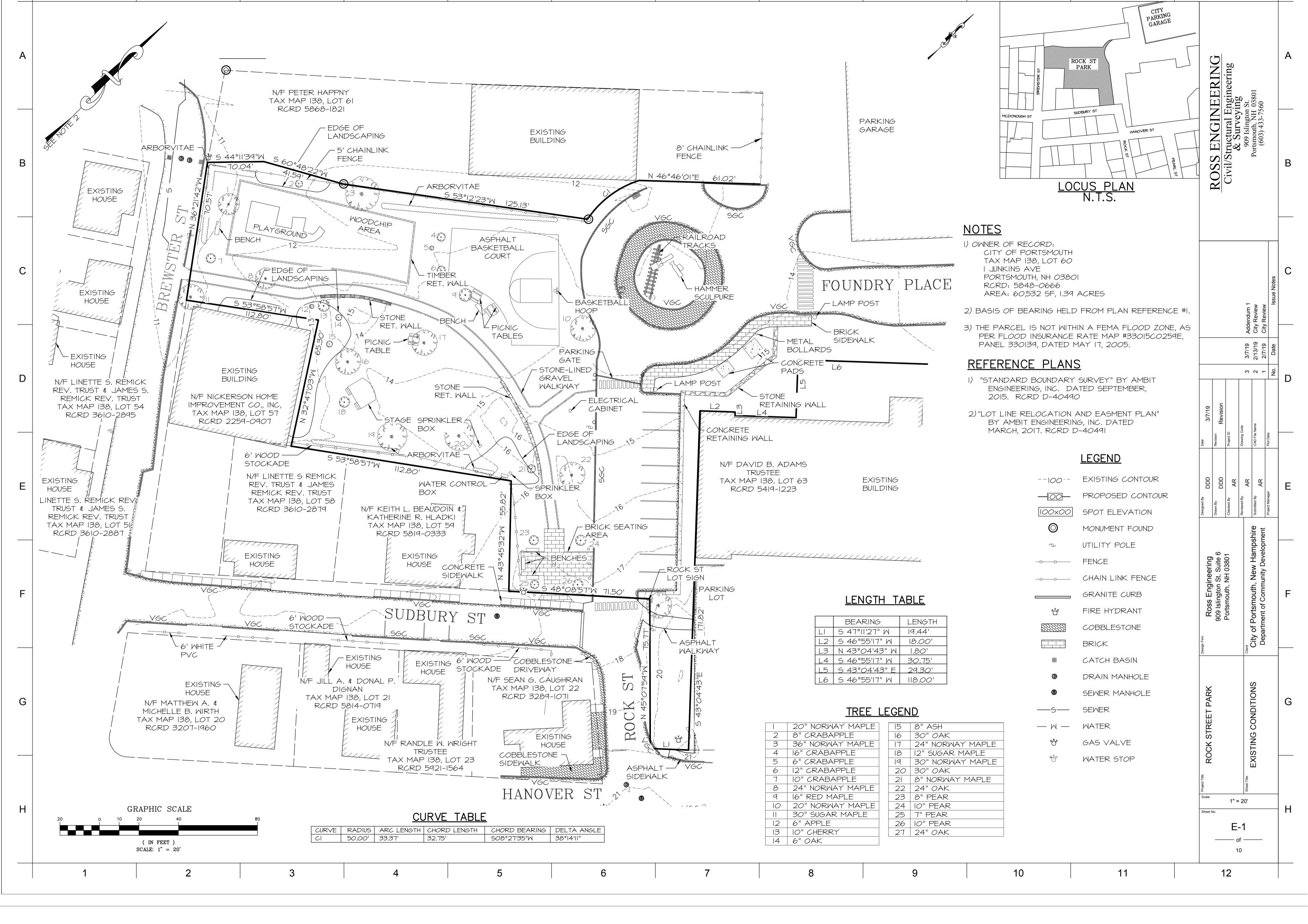
ROSS ENGINEERING

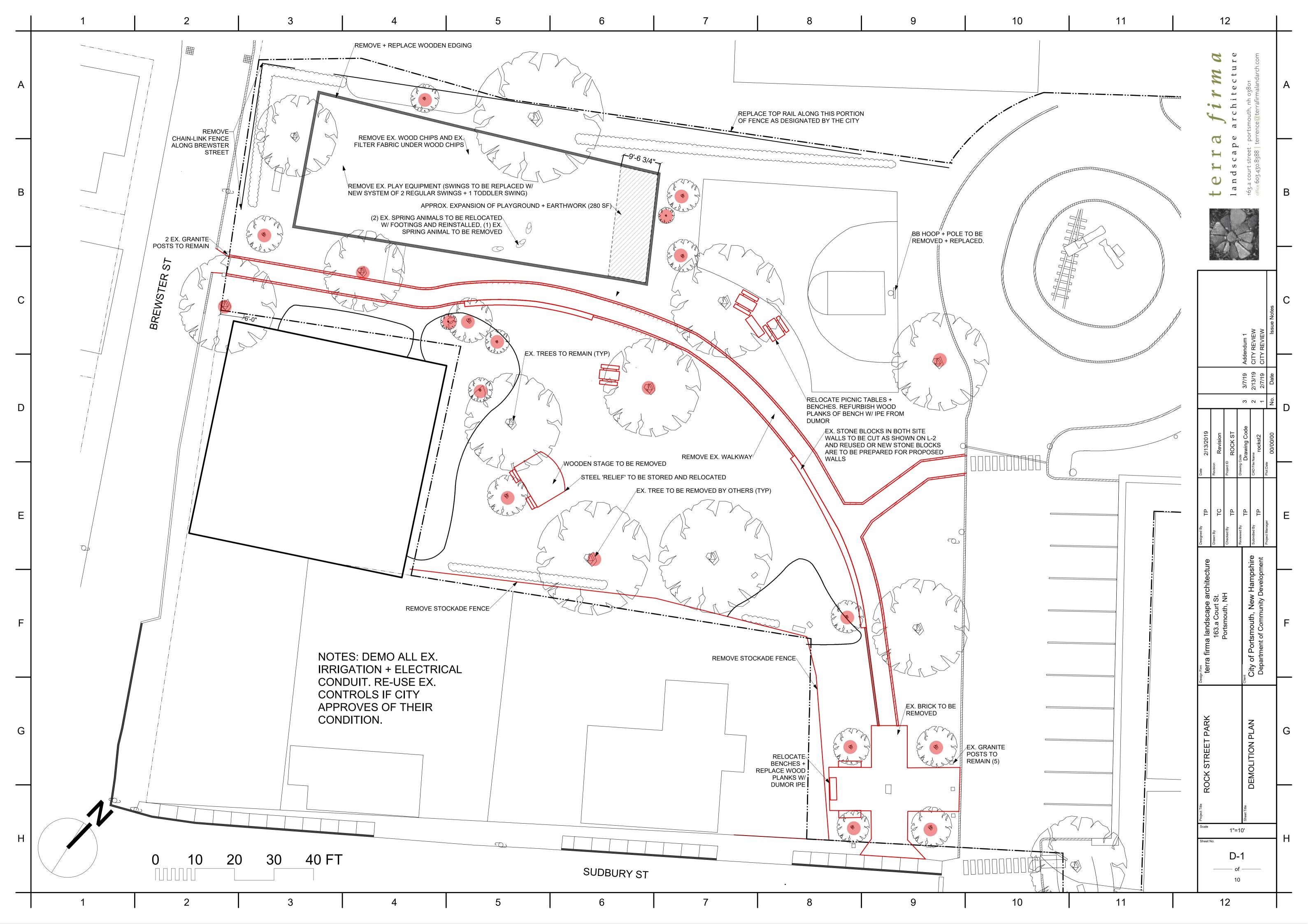
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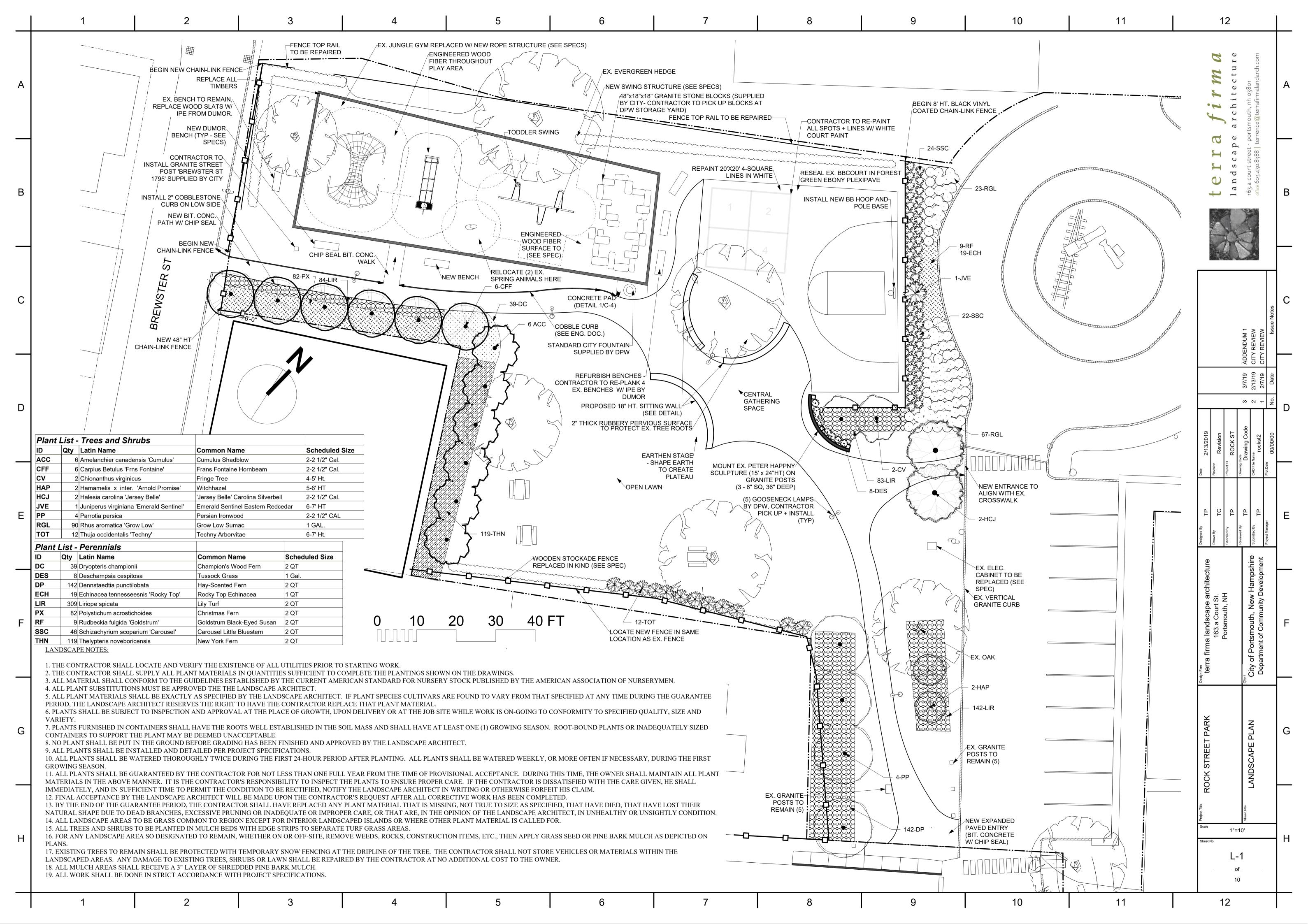
LOCATION PLAN

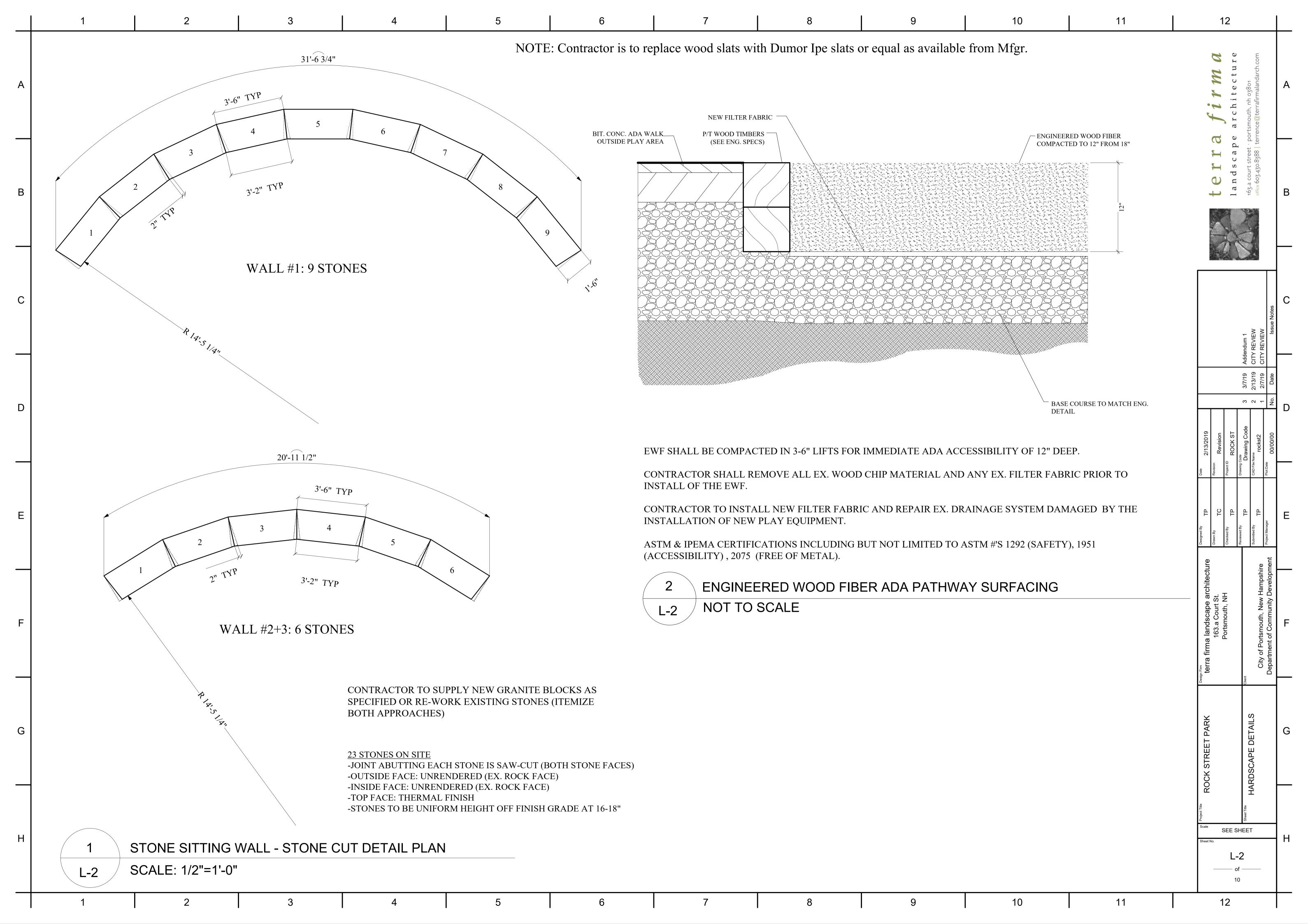
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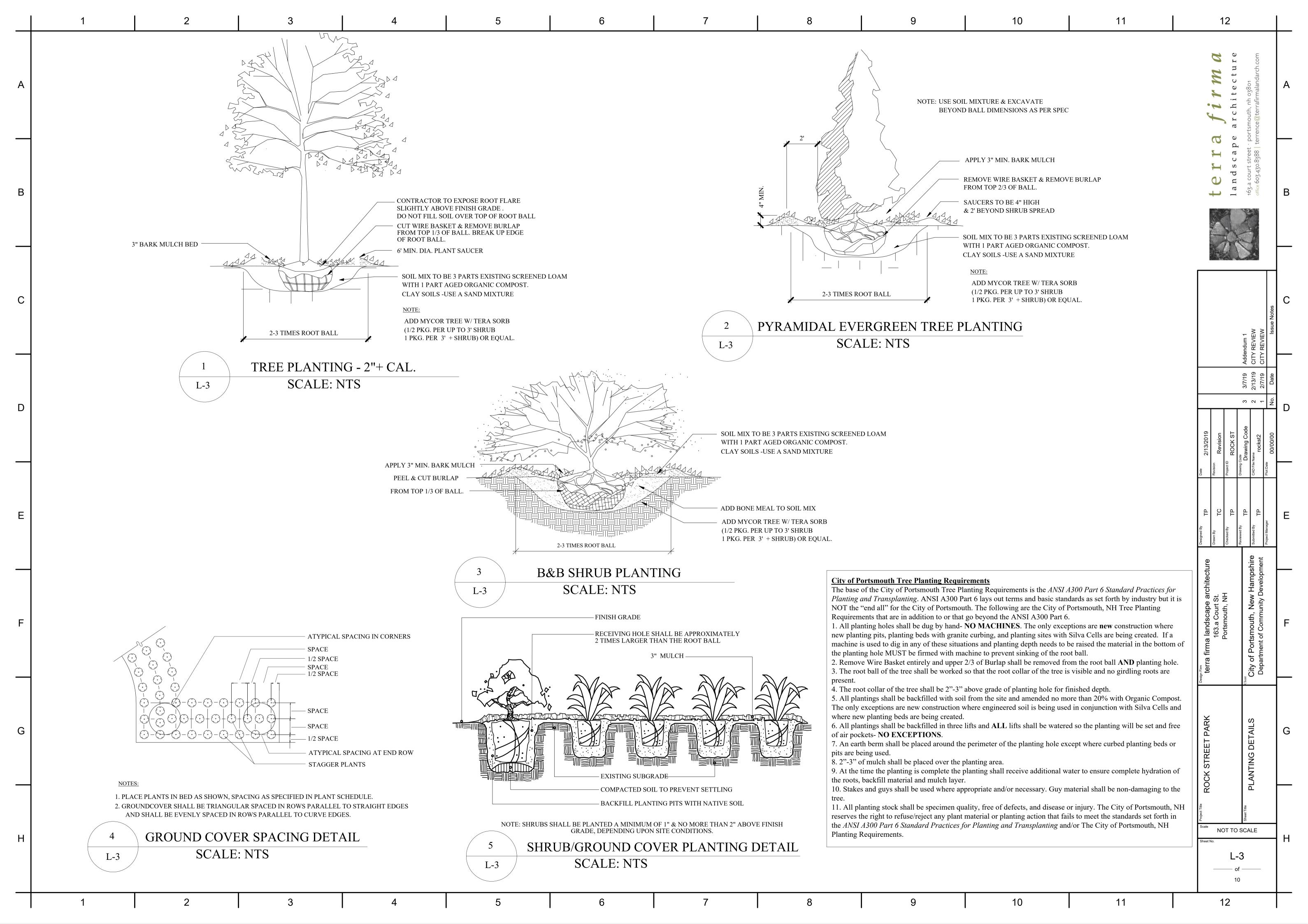
- **Existing Conditions Plan**
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 Layout and Utilities Plan
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 Details Sheet A
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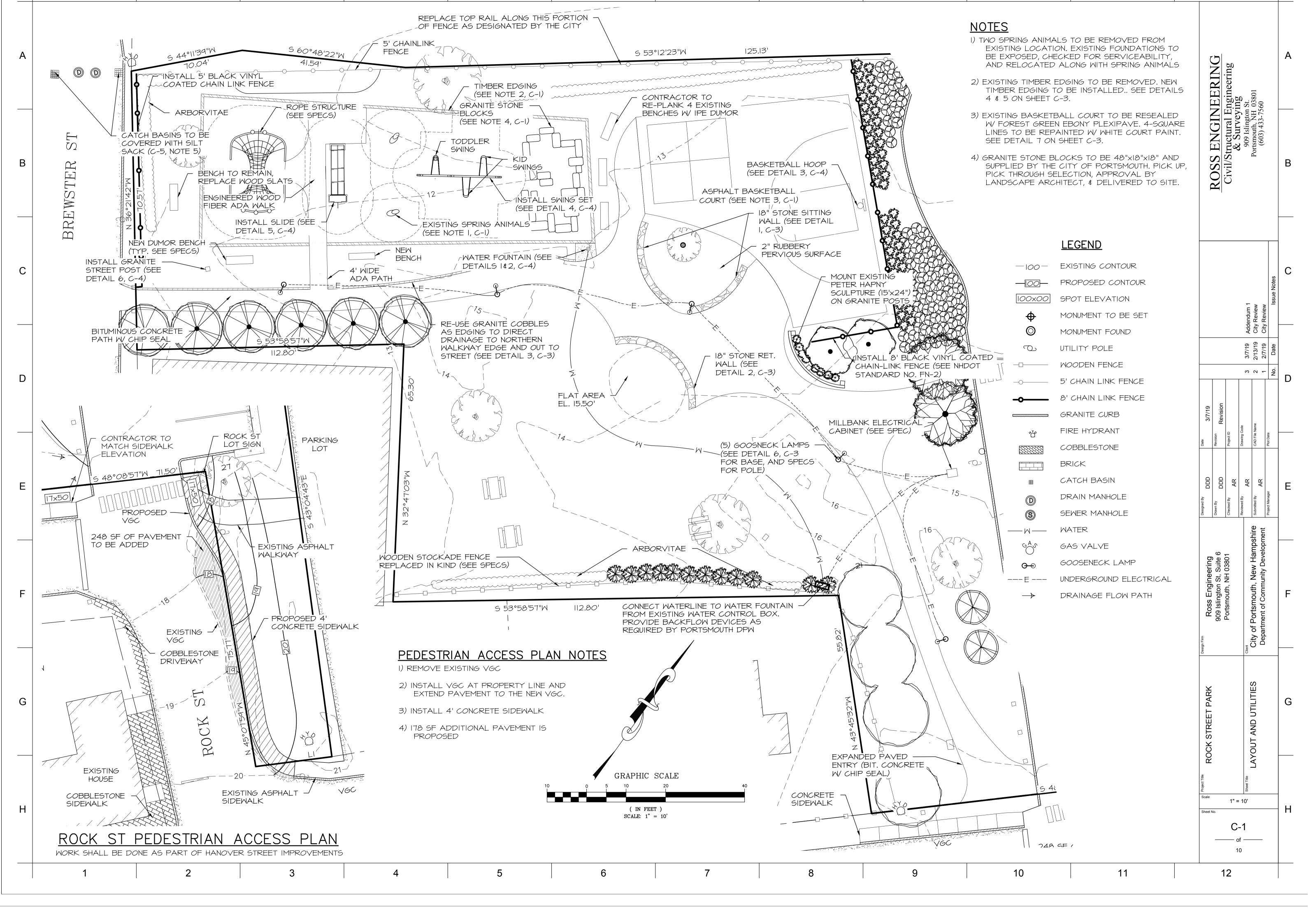


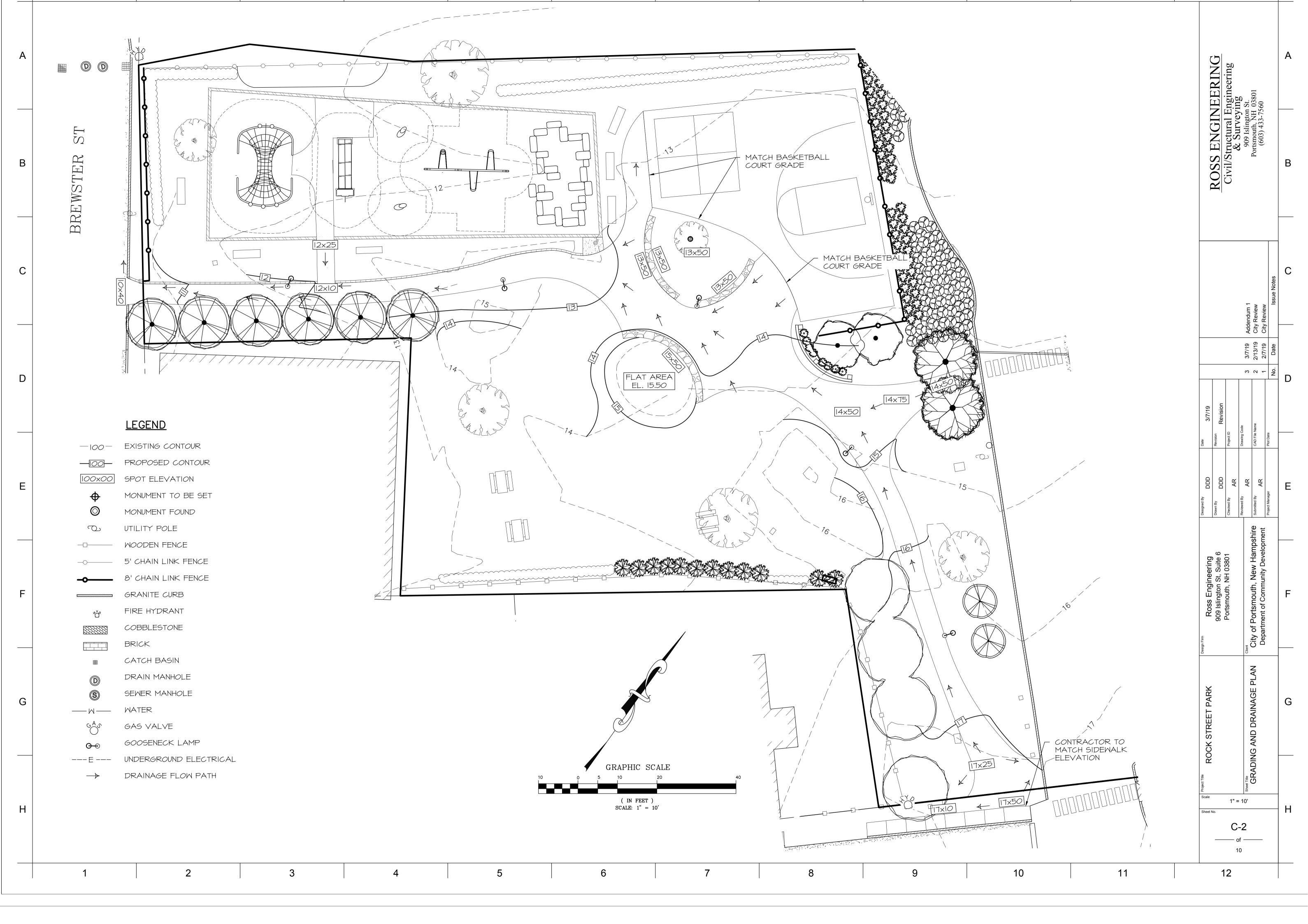


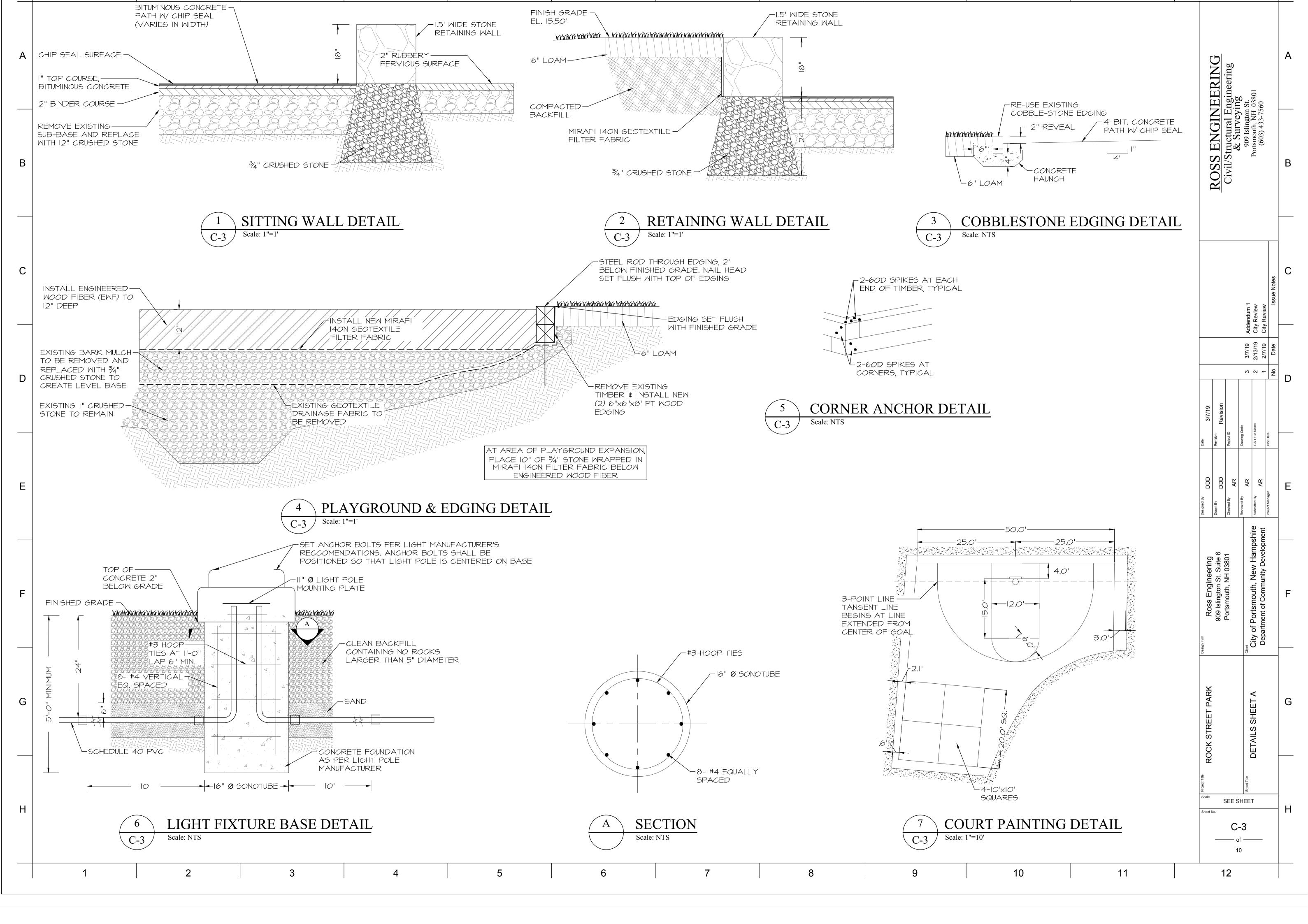


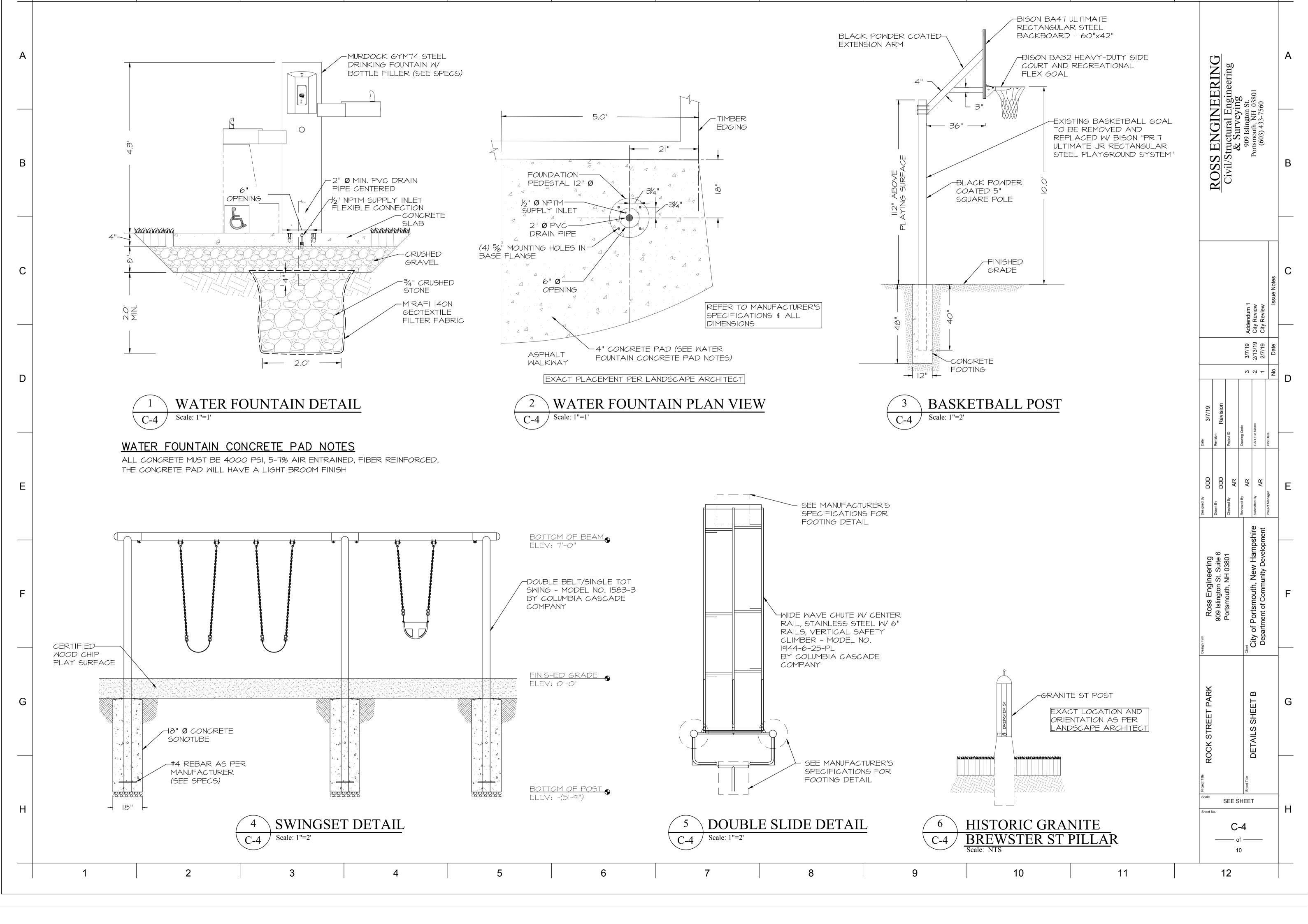












NOTES EROSION AND SEDIMENTATION CONTROL GENERAL EROSION AND SEDIMENTATION CONTROL CONSTRICTION *WELL TO MODERATELY WELL DRAINED SOILS PHASING AND SEQUENCING I) CONTRACTOR TO REVIEW ALL SURFACING TYPES, AND MATERIAL I. CONDUCT ALL CONSTRUCTION IN A MANNER AND SEQUENCE THAT CAUSES THE SEE "EROSION AND SEDIMENTATION CONTROL GENERAL NOTES" WHICH ARE TO FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS SPECIFICATIONS WITH COMMISSIONER OF PUBLIC WORKS. LEAST PRACTICAL DISTURBANCE OF THE PHYSICAL ENVIRONMENT, BUT IN NO CASE BE AN INTEGRAL PART OF THIS PROCESS. SHALL EXCEED 2 ACRES AT ANY ONE TIME BEFORE DISTURBED AREAS ARE 2. INSTALL SILT FENCING AND/OR HAY BALE BARRIERS AS PER DETAILS AND AT SEEDING MIXTURE C 2) ALL NECESSARY NHDOT, NHDES & TOWN PERMITS MUST BE OBTAINED. <u>STABILIZED</u> SEDIMENT MIGRATION. #/ACRE <u>#/10005F</u> 3. CONSTRUCT TREATMENT SWALES , LEVEL SPREADERS AND DETENTION 2. ALL AREAS SHALL BE STABILIZED WITHIN 45 DAYS OF INITIAL DISTURBANCE. 0.45 TALL FESCUE ALL DITCHES, SWALES AND PONDS MUST BE STABILIZED PRIOR TO DIRECTING STRUCTURES AS DEPICTED ON DRAWINGS. CREEPING RED FESCUE 20 0.45 RIN eering 3) ALL CONSTRUCTION SHALL BE PER NH-DOT, STANDARD SPECIFICATIONS FLOW TO THEM. 4. INSTALL TEMPORARY GRAVEL CONSTRUCTION ENTRANCE(S) AS PER DETAIL <u>0.20</u> BIRDSFOOT TREFOIL 4. ALL GROUND AREAS OPENED UP FOR CONSTRUCTION WILL BE STABILIZED FOR ROAD & BRIDGE CONSTRUCTION. LATEST REVISION. AND AT LOCATIONS SHOWN ON THE DRAWINGS. MAINTAIN (TOP DRESS) REGULARLY 1.10 WITHIN 24 HOURS OF EARTH-DISTURBING ACTIVITIES BEING CEASED, AND WILL BE TO PREVENT TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC STREETS. FULLY STABILIZED NO LONGER THAN 14 DAYS AFTER INITIATION, (SEE NOTE II FOR LIME: AT 2 TONS PER ACRE OR 100 LBS PER 1,000 S.F. 5. STRIP AND STOCKPILE TOPSOIL. STABILIZE PILES OF SOIL CONSTRUCTION 4) UNDERGROUND UTILITIES SHALL MEET STATE AND TOWN REQUIREMENTS, TO DEFINITION OF STABLE). ALL SOILS FINISH GRADED MUST BE STABILIZED WITHIN FERTILIZER: 10 20 20 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE. MATERIAL & COVER WHERE PRACTICABLE. MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F. SEVENTY TWO HOURS OF DISTURBANCE. ALL TEMPORARY OR LONG TERM SEEDING ENSURE TYPE, SEPARATION, COVER, ETC. 6. MINIMIZE DUST THROUGH APPROPRIATE APPLICATION OF WATER OR OTHER 7 DUST SUPPRESSION TECHNIQUES ON SITE. MUST BE APPLIED TO COMPLY WITH "WINTER CONSTRUCTION NOTES" (SEE WINTER ROUGH GRADE SITE. INSTALL CULVERTS AND ROAD DITCHES. GRADING AND SHAPING: CONSTRUCTION NOTES). EMPLOY TEMPORARY EROSION AND SEDIMENTATION SLOPES SHALL NOT BE STEEPER THAN 2 TO I. 3 TO I OR FLATTER SLOPES 5) CATCH BASINS ON BREWSTER ST TO BE COVERED WITH A SILT SACK FINISH GRADE AND COMPACT SITE. CONTROL DEVICES AS DETAILED ON THIS PLAN AS NECESSARY UNTIL ADEQUATE RE-SPREAD AND ADD TOPSOIL TO ALL ROADSIDE SLOPES. TOTAL TOPSOIL ARE PREFERRED. STABILIZATION HAS BEEN ASSURED (SEE NOTE II FOR DEFINITION OF STABLE). PRIOR TO AND DURING CONSTRUCTION. THICKNESS TO BE A MINIMUM OF FOUR TO SIX INCHES. SEEDBED PREPARATION: 5. TEMPORARY & LONG TERM SEEDING: USE SEED MIXTURES, FERTILIZER, LIME AND ucture Se Su 909 Isl IO. STABILIZE ALL AREAS OF BARE SOIL WITH MULCH AND SEEDING. SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM MULCHING AS RECOMMENDED (SEE SEEDING AND STABILIZATION NOTES). RE-SEED PER EROSION AND SEDIMENTATION CONTROL GENERAL NOTES. THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS. 6. STRAW OR HAY BALE BARRIERS AND SILTATION FENCING TO BE SECURELY H 12. SILT FENCING AND HAY BALES TO REMAIN AND BE MAINTAINED FOR TWENTY STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED. EMBEDDED AND STAKED AS DETAILED. WHEREVER POSSIBLE A VEGETATED STRIP SOD SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE SEEDBED. FOUR MONTHS AFTER CONSTRUCTION TO INSURE ESTABLISHMENT OF ADEQUATE SOIL OF AT LEAST TWENTY FIVE FEET IS TO BE KEPT BETWEEN SILT FENCE AND ANY STABILIZATION AND VEGETATIVE COVER. ALL SILT FENCING, HAY BALES AND FERTILIZER & LIME SHOULD BE MIXED INTO THE SOIL. EDGE OF WET AREA. TRAPPED SILT ARE THEN TO BE REMOVED FROM THE SITE AND PROPERLY DISPOSED THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH 7. SEEDED AREAS WILL BE FERTILIZED AND RE-SEEDED AS NECESSARY TO CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED ENSURE VEGETATIVE ESTABLISHMENT. ACROSS THE SLOPE WHEREVER PRACTICAL. 13. PERIMETER CONTROLS SHALL BE INSTALLED PRIOR TO EARTH MOVING 8. SEDIMENT BASIN(S), IF REQUIRED, TO BE CHECKED AFTER EACH SIGNIFICANT N/ OPERATIONS. RAINFALL AND CLEANED AS NEEDED TO RETAIN DESIGN CAPACITY. 14. PONDS AND SWALES SHALL BE INSTALLED EARLY ON IN THE CONSTRUCTION * FROM: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL 9. STRAW BALE AND/OR SILT FENCE BARRIERS WILL BE CHECKED REGULARLY SEQUENCE - BEFORE ROUGH GRADING THE SITE. HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER AND AFTER EACH SIGNIFICANT RAINFALL. NECESSARY REPAIRS WILL BE MADE TO 15. ALL DITCHES AND SWALES SHALL BE STABILIZED PRIOR TO DIRECTING RUNOFF CORRECT UNDERMINING OR DETERIORATION OF THE BARRIER AS WELL AS CLEANING, TO THEM SHORT TERM SEEDING REMOVAL AND PROPER DISPOSAL OF TRAPPED SEDIMENT. 16. ALL ROADWAYS AND PARKING LOTS SHALL BE STABILIZED WITHIN 72 HOURS 10. TREATMENT SWALES WILL BE CHECKED WEEKLY AND REPAIRED WHEN *WELL TO MODERATELY WELL DRAINED SOILS INSERT REBAR TO OF ACHIEVING FINISHED GRADE. NECESSARY UNTIL ADEQUATE VEGETATIVE COVER HAS BEEN ESTABLISHED. REMOVE AND DUMP 17. ALL CUT AND FILL SLOPES SHALL BE SEEDED/LOAMED WITHIN 72 HOURS OF II. AN AREA SHALL BE CONSIDERED FULLY STABLE IF ONE OF THE FOLLOWING FOR CUT AND FILL AREA AND FOR WATERWAYS AND CHANNELS SILTSACK ACHIEVING FINISH GRADE. HAS OCCURRED: 18. ALL EROSION CONTROLS SHALL BE INSPECTED WEEKLY AND AFTER EVERY BASE COURSE GRAVELS HAVE BEEN INSTALLED IN AREAS TO BE PAVED. SEEDING MIXTURE C HALF-INCH OF RAINFALL. A MINIMUM OF 85% VEGETATED GROWTH HAS BEEN ESTABLISHED <u>#/ACRE</u> #/1000SF A MINIMUM OF 3" OF NON-EROSIVE MATERIAL SUCH AS STONE OR RIP RAP HAS FOR APRIL I - AUGUST 15 BEEN INSTALLED. ANNUAL RYE GRASS 40 EROSION CONTROL BLANKETS HAVE BEEN PROPERLY INSTALLED. FOR FALL SEEDING II. ALL EROSION AND SEDIMENTATION CONTROL MEASURES IN THE PLAN SHALL ALL PLANT MATERIALS SHALL BE FIRST QUALITY NURSERY GROWN STOCK. BASIN 2.5 **WINTER RYE** MEET THE DESIGN BASED ON STANDARDS AND SPECIFICATIONS SET FORTH IN THE 2. ALL PLANTS SHALL BE PLANTED IN ACCORDANCE WITH NEW HAMPSHIRE STORM WATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL LIME: AT I TON PER ACRE OR 100 LBS PER 1,000 S.F. LANDSCAPE ASSOCIATION STANDARDS AND GUARANTEED FOR ONE YEAR BY THE HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE (DECEMBER LANDSCAPE CONTRACTOR. FERTILIZER: 10 10 (NITROGEN, PHOSPHATE, POTASH AT 500# PER ACRE. 2008 OR LATEST) PREPARED BY ROCKINGHAM COUNTY CONSERVATION DISTRICT, 3. ALL TREES AND SHRUBS SHALL HAVE WATER SAUCERS BUILT AROUND THEIR MULCH: HAY OR CLEAN STRAW; 2 TONS/ACRE OR 2 BALES/1000 S.F. N.H. DES AND NRCS. BASES AND THESE SHALL BE MULCHED WITH 4" OF DARK BROWN AGED BARK MULCH. SILTSACK IS TO BE SECURED BY WEIGHT OF BASIN MULCH MUST BE KEPT 2" AWAY FROM THEIR TRUNKS. GRADING AND SHAPING: GRATE TO PREVENT SEDIMENT FROM ENTERING THE 4. ALL TREES AND SHRUBS SHALL BE PLANTED AND MULCHED BEFORE LAWN IS SLOPES SHALL NOT BE STEEPER THAN 2 TO I. 3 TO I OR FLATTER DRAIN LINE WINTER CONSTRUCTION NOTES SLOPES ARE PREFERRED. I. ALL PROPOSED VEGETATED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 85% SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER MAINTENANCE REQUIREMENTS THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS. 15TH, SHALL BE STABILIZED BY SEEDING AND INSTALLING EROSION CONTROL ALL TREES, SHRUBS, AND PERENNIALS WILL NEED TO BE WATERED THROUGH STONES LARGER THAN FOUR INCHES AND TRASH SHOULD BE REMOVED. BLANKETS ON SLOPES GREATER THAN 3:1, AND SEEDING AND PLACING 3 TO 4 TONS THANKSGIVING DURING THE FIRST SEASON IN WHICH THEY ARE INSTALLED. SOD SHOULD BE TILLED TO A DEPTH OF FOUR INCHES TO PREPARE OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELSEWHERE. THE 2. AN UNDERGROUND DRIP IRRIGATION SYSTEM IS RECOMMENDED. IF AN SEEDBED. FERTILIZER & LIME SHOULD BE MIXED INTO THE SOIL. INSTALLATION OF EROSION CONTROL BLANKETS OR MULCH AND NETTING SHALL NOT UNDERGROUND DRIP IRRIGATION SYSTEM IS NOT INSTALLED, SOAKER HOSES WOUND THE SEEDBED SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH OCCUR OVER ACCUMULATED SNOW OR ON FROZEN GROUND AND SHALL BE THROUGHOUT PLANTING BEDS ARE ACCEPTABLE. ALTHOUGH OVERHEAD SPRINKLERS COMPETED IN ADVANCE OF THAW OR SPRING MELT EVENT .: CONDITION. THE LAST TILLAGE OPERATION SHOULD BE PERFORMED e 2 4 ARE RECOMMENDED FOR LAWN AREAS, THEY ARE NOT ACCEPTABLE FOR IRRIGATING ACROSS THE SLOPE WHEREVER PRACTICAL. 2. ALL DITCHES OR SWALES WHICH DO NOT EXHIBIT A MINIMUM OF 85% TREES AND SHRUBS. VEGETATIVE GROWTH BY OCTOBER 15TH, OR WHICH ARE DISTURBED AFTER OCTOBER 15TH, SHALL BE STABILIZED TEMPORARILY WITH STONE OR EROSION CONTROL * FROM: STORMWATER MANAGEMENT AND EROSION AND SEDIMENTATION CONTROL HANDBOOK FOR URBAN AND DEVELOPING AREAS IN NEW HAMPSHIRE, DECEMBER BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS; SEEDING AND STABILIZATION FOR LOAMED SITE: 3. AFTER NOVEMBER 15TH, INCOMPLETE ROAD OR PARKING SURFACES, WHERE FOR TEMPORARY & LONG TERM SEEDINGS USE AGWAY'S SOIL CONSERVATION GRASS WORK HAS STOPPED FOR THE WINTER SEASON, SHALL BE PROTECTED WITH A NECESSARY STABILIZATION CONSTRUCTION ENTRANCE SEED OR EQUAL MINIMUM OF 3 INCHES OF CRUSHED GRAVEL PER NHDOT ITEM 304.3. ·FINISH GRADE COMPONENTS: ANNUAL RYE GRASS, PERENNIAL RYE GRASS, WHITE CLOVER, 2 SPECIFICATIONS FESCUES, SEED AT A RATE OF 100 POUNDS PER ACRE, I. STONE FOR A STABILIZED CONSTRUCTION ENTRANCE SHALL BE I TO 2 INCH FERTILIZER & LIME: STONE, RECLAIMED STONE, OR RECYCLED CONCRETE EQUIVALENT. NITROGEN (N) 50 LBS/ACRE, PHOSPHATE (P205) 100 LBS/ACRE, POTASH (K20) 100 2. THE LENGTH OF THE STABILIZED ENTRANCE SHALL NOT BE LESS THAN 50 FEET, LBS/ACRE, LIME 2000 LBS/ACRE EXCEPT FOR A SINGLE RESIDENTIAL LOT WHERE A 30 FOOT MINIMUM LENGTH WOULD MULCH: CLEAN BACKFILL CONTAINING NO HAY OR STRAW 1.5-2 TONS/ACRE 3. THE THICKNESS OF THE STONE FOR THE STABILIZATION ENTRANCE SHALL NOT ROCKS LARGER THAN 5" DIAMETER BE LESS THAN 6 INCHES. A) GRADING AND SHAPING 4. THE WIDTH OF THE ENTRANCE SHALL NOT BE LESS THAN THE FULL WIDTH OF THE I) SLOPES SHALL NOT BE STEEPER THAN 2:1; 3:1 SLOPES OR FLATTER ARE ENTRANCE WHERE INGRESS OR EGRESS OCCURS OR 10 FEET, WHICH EVER IS PREFERRED. WHERE MOWING WILL BE DONE, 3:1 SLOPES OR FLATTER ARE -YELLOW PLASTIC MARKER TAPE RECOMMENDED. 5. GEOTEXTILE FILTER CLOTH SHALL BE PLACED OVER THE ENTIRE AREA PRIOR PLACED APPROX. 12" ABOVE CABLE O PLACING THE STONE. FILTER CLOTH IS NOT REQUIRED FOR A SINGLE FAMIL $_{
m I}$ B) SEED BED PREPARATION RESIDENCE LOT. I) SURFACE AND SEEPAGE WATER SHOULD BE DRAINED OR DIVERTED FROM THE 6. ALL SURFACE WATER THAT IS FLOWING TO OR DIVERTED TOWARDS THE SITE TO PREVENT DROWNING OR WINTER KILLING OF THE PLANTS. CONSTRUCTION ENTRANCE SHALL BE PIPED BENEATH THE ENTRANCE. IF PIPING IS 2) STONES LARGER THAN 4 INCHES AND TRASH SHOULD BE REMOVED BECAUSE IMPRACTICAL, A BERM WITH 5:1 SLOPES THAT CAN BE CROSSED BY VEHICLES MAY THEY INTERFERE WITH SEEDING AND FUTURE MAINTENANCE OF THE AREA. WHERE BE SUBSTITUTED FOR THE PIPE. ELECTRIC - PRIMARY OR SECONDARY FEASIBLE, THE SOIL SHOULD BE TILLED TO A DEPTH OF ABOUT 4 INCHES TO THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION THAT WILL PREVENT CABLE (DIRECT BURIAL AS PER CODE) PREPARE A SEEDBED AND MIX FERTILIZER AND LIME INTO THE SOIL. THE SEEDBED TRACKING OR FLOWING OF SEDIMENT ONTO PUBLIC RIGHTS-OF-WAY. THIS MAY SHOULD BE LEFT IN A REASONABLY FIRM AND SMOOTH CONDITION. THE LAST REQUIRE PERIODIC TOP DRESSING OF ADDITIONAL STONE AS CONDITIONS DEMAND TILLAGE OPERATION SHOULD BE PERFORMED ACROSS THE SLOPE WHEREVER AND REPAIR AND/OR CLEANOUT OF ANY MEASURES USED TO TRAP SEDIMENT. ALL PRACTICAL. SEDIMENT SPILLED, WASHED, OR TRACKED ONTO PUBLIC RIGHTS-OF-WAY MUST BE REMOVED PROMPTLY. ELECTRICAL TRENCHING 8. WHEELS SHALL BE CLEANED TO REMOVE MUD PRIOR TO ENTRANCE ONTO PUBLIC RIGHTS-OF-WAY. WHEN WASHING IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH STONE WHICH DRAINS INTO AN APPROVED SEDIMENT TRAPPING DEVICE. BACKFILL MATERIAL (ENGINEER'S APPROVAL REQUIRED) - ¾" COPPER SAND GRANULAR CONTROL NOTE: EROSION I. SEE SITE PLAN FOR PIPE SIZES AND SERVICES. 2. WATER PIPE TO BE 3/4" COPPER. 3. CONTRACTOR TO REVIEW ALL UTILITIES WITH PORTSMOUTH WATERLINE INSTALLATION SEE SHEET 10 12 11