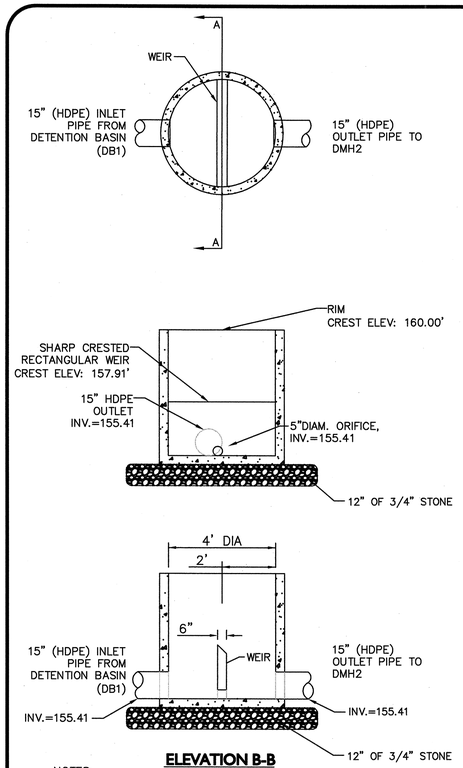
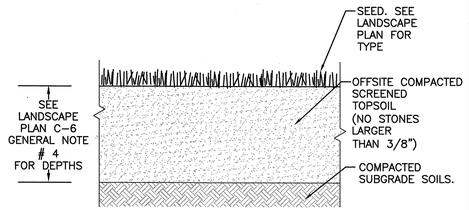


ELEVATION B-B

NOTES:

1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
2. ALL REINFORCEMENT PER ASTM C1227–93.
3. TONGUE & GROOVE JOINT SEALED WITH BUTYLE RESIN OR MASTIC.
4. WALLS ARE TO BE 6" THICK & BOTTOM TO BE 8" THICK.
5. PROVIDE 4' SUMP

OUTLET CONTROL STRUCTURE #1 (1)
NOT TO SCALE



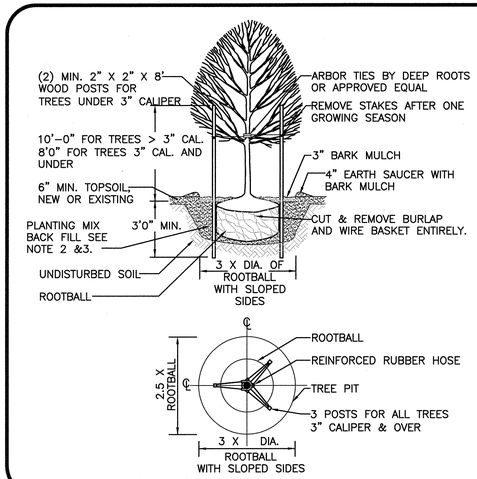
TEXTURE CLASS	% OF TOTAL WEIGHT
SAND	45% – 65%
SILT	15% – 35%
CLAY	5% – 20%

SIEVE	% PASSING
3/8"	100
NO. 4	85–100
NO. 40	60–85
NO. 100	38–60
NO. 200	28–40

NOTES:

1. TOP OF LOAM (TOPSOIL) IS FINISH GRADE.
2. ALL TOPSOIL (BOTH ONSITE AND OFFSITE SOURCES) SHALL BE COMPOSED OF A NATURAL, FERTILE, FRIABLE SOIL TYPICAL OF CULTIVATED TOPSOILS OF THE LOCALITY. OFFSITE SOIL SHALL BE SUITABLE FOR THE GERMINATION OF SEEDS AND SUPPORT OF VEGETATIVE GROWTH, WITH ADDITIVES, IF REQUIRED, TO ACHIEVE PARTICLE DISTRIBUTION AND ORGANIC CONTENT BELOW. TOPSOIL SHALL BE TAKEN FROM A WELL–DRAINED, ARIABLE SITE, FREE OF SUBSOIL, LARGE STONES, EARTH CLODS, STICKS, STUMPS, CLAY LUMPS, ROOTS, OTHER OBJECTIONABLE, EXTRANEOUS MATTER OR DEBRIS NOR CONTAIN TOXIC SUBSTANCES.
3. THE CONTRACTOR SHALL PROVIDE THE OWNER / LANDSCAPE ARCHITECT WITH TOPSOIL TEST RESULTS (RECOMMEND UMASS AMHERST SOIL TESTING LAB) FOR APPROVAL PRIOR TO OBTAINING AND PLACING THE SOIL. IF THE PLANTING SOIL (BOTH ONSITE AND OFFSITE SOURCES) DOES NOT FALL WITHIN THE REQUIRED SIEVE ANALYSIS, TEXTURAL CLASS, ORGANIC CONTENT, OR PH RANGE, IT SHALL BE ADJUSTED TO MEET THE SPECIFICATIONS THROUGH THE ADDITION OF SAND, COMPOST, LIMESTONE, OR ALUMINUM SULFATE TO BRING IT WITHIN THE SPECIFIED LIMITS AT NO ADDITIONAL COST TO THE OWNER.
4. TOPSOIL SHALL HAVE A PH VALUE BETWEEN 5.5 AND 6.5. TOPSOIL SHALL CONTAIN BETWEEN 4% AND 8% ORGANIC MATTER OF TOTAL DRY WEIGHT AND SHALL CONFORM TO THE FOLLOWING GRADATION AND TEXTURE CLASS ABOVE.

TOPSOIL FOR LAWN, TREES, SHRUBS, & PERENNIALS (2)
NOT TO SCALE



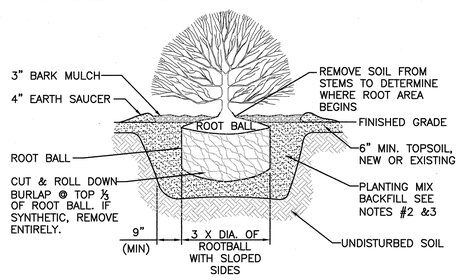
NOTES:

1. ALL TREES SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. ROOT FLARE SHALL BE 2" ABOVE FINISH GRADE. REMOVE SOIL FROM TRUNK FLARE OF TREE TO DETERMINE ACTUAL ROOTBALL AREA.
2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.

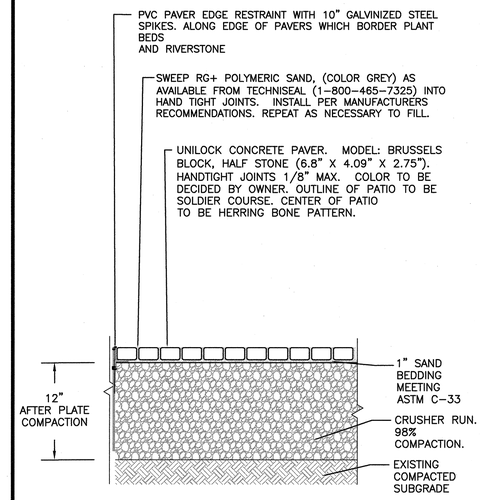
DECIDUOUS TREE PLANTING DETAIL (3)
NOT TO SCALE

NOTES:

1. ALL SHRUBS SHALL HAVE THE SAME RELATIONSHIP TO FINISH GRADE AFTER PLANTING AS THEY HAD AT THE ORIGINAL NURSERY SETTING. SET SHRUB 1"–2" ABOVE FINISH GRADE.
2. BACKFILL WITH PLANTING MIX. PLANT MIX TO BE: 50% NATIVE TOPSOIL, 20% COMPOST (LEAVES & ORGANIC MATERIAL, NO ASH) 20% PEAT MOSS, 10% SAND.
3. ADD MYCORRHIZA SOIL ADDITIVES AND SLOW RELEASE FERTILIZER WHEN PLANT HOLES ARE 50% FILLED AND WATER THOROUGHLY AT COMPLETION.
4. SHRUB BEDS TO HAVE 24" MIN. OF CONTINUOUS PLANTING SOIL.



SHRUB PLANTING DETAIL (4)
NOT TO SCALE



SAND ASTM C–33

SIEVE	PERCENT PASSING
9.5–MM (3/8 IN.)	100%
4.75–MM (NO. 4)	95 TO 100%
2.36–MM (NO. 8)	80 TO 100%
1.18–MM (NO. 16)	50 TO 85%
600–µM (NO.30)	25 TO 60%
300–µM (NO. 50)	5 TO 30%
150–µM (NO. 100)	0 TO 10%

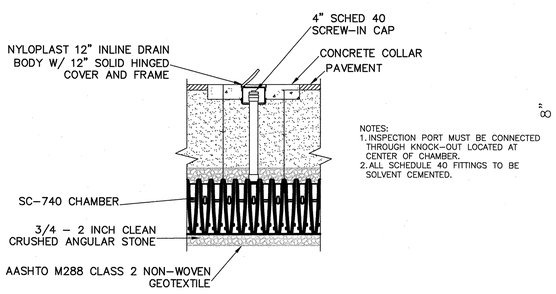
CRUSHER RUN

SIEVE	PERCENT PASSING
2"	100%
1 1/2"	70–100%
3/4"	50 – 85%
NO. 4	30–55%
NO. 50	8 – 24%
NO. 200	3 – 8%

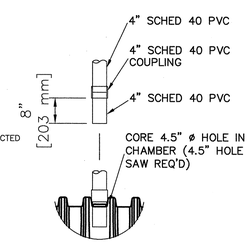
NOTES:

1. SUBMIT SHOP DRAWING OF EDGE RESTRAINT FOR APPROVAL PRIOR TO ORDERING.
2. SUBMIT SAMPLES & SHOP DRAWING OF PAVERS AND COLOR CHART FOR APPROVAL PRIOR TO ORDERING.
3. SUBMIT SHOP DRAWING FOR APPROVAL OF SAND AND CRUSHED GRAVEL SIEVE ANALYSIS PRIOR TO ORDERING.

PATIO AREA CONCRETE PAVERS (5)
NOT TO SCALE

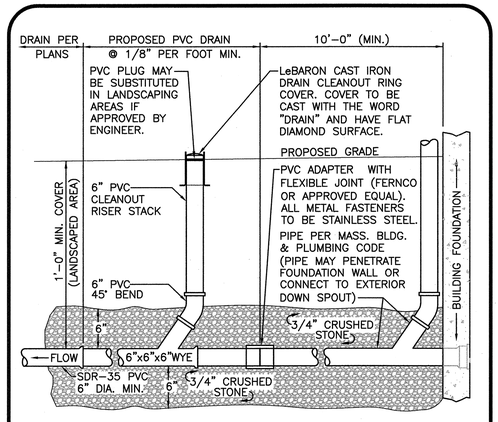


NOTES:
1. INSPECTION PORT MUST BE CONNECTED THROUGH KNOCK–OUT LOCATED AT CENTER OF CHAMBER.
2. ALL SCHEDULE 40 FITTINGS TO BE SOLVENT CEMENTED.



CONNECTION DETAIL
NTS

SC-740 INSPECTION PORT DETAIL (6)
NOT TO SCALE



ROOF LEADER (7)
NOT TO SCALE

N:\PROJECTS\1453–03\CIVIL\DRAWINGS\CURRENT\C–1453–03 – DETAILS.DWG

11/7/13
COMMONWEALTH OF MASSACHUSETTS
TIMOTHY J. WILLIAMS
No. 43119
REGISTERED PROFESSIONAL ENGINEER

PROFESSIONAL ENGINEER FOR
ALLEN & MAJOR ASSOCIATES, INC.

REV	DATE	DESCRIPTION

APPLICANT\OWNER:
100 DISCOVERY WAY LLC
259 TURNPIKE ROAD, SUITE 100
SOUTHBOROUGH, MA 01772

PROJECT:
BUILDING ADDITION
100 DISCOVERY WAY
ACTON, MA 01720

PROJECT NO.	1453-03	DATE:	11-07-13
SCALE:	N.T.S.	DWG. NAME:	C1453-03
DESIGNED BY:	RB/KEA	CHECKED BY:	TJW

PREPARED BY:

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environmental consulting ◆ landscape architecture
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DRAWING TITLE: DETAILS

SHEET No. D-3

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