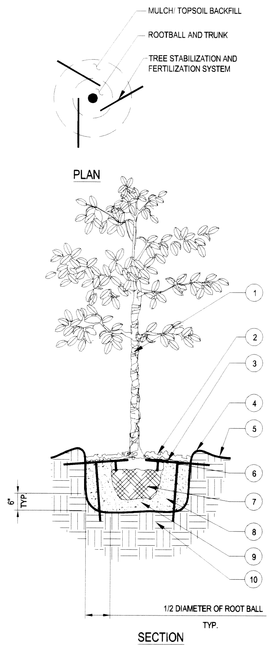


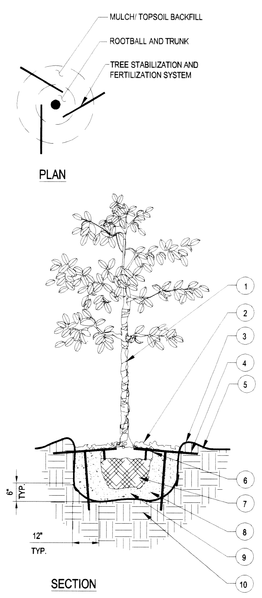
1. TREE WRAP
2. 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
3. STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.
4. 3" HIGH SOIL BERM TO HOLD WATER.
5. FINISHED GRADE (SEE GRADING PLAN)
6. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE
7. B & B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
8. PREPARED PLANTING SOIL AS SPECIFIED.
9. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
10. UNDISTURBED SUBSOIL

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT.
E. BRANCHING HEIGHT TO A.A.N. STANDARDS.

LARGE TREE PLANTING (14' OR GREATER)

N.T.S.



1. TREE WRAP
2. 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
3. 3" HIGH SOIL BERM TO HOLD WATER.
4. STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.
5. FINISHED GRADE (SEE GRADING PLAN)
6. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE
7. B & B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
8. PREPARED PLANTING SOIL AS SPECIFIED.
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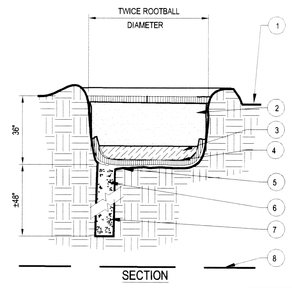
10. UNDISTURBED SUBSOIL

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT.
E. BRANCHING HEIGHT TO A.A.N. STANDARDS.

SMALL TREE PLANTING (14' OR LESS)

N.T.S.

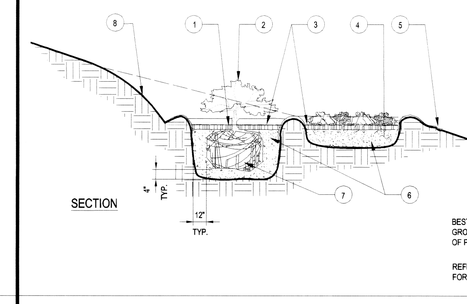


1. FINISH GRADE
2. BACKFILL WITH PREPARED PLANTING SOIL MIX AS SPECIFIED.
3. 12"± CLEAN SAND, COMPACTED. ADJUST LAYER THICKNESS SO TOP OF ROOTBALL IS AT EAST 1" ABOVE FINISHED GRADE.
4. FILTER CLOTH
5. SLOPE BOTTOM TO DRAIN
6. 18"± AUGERED HOLE PENETRATE THROUGH OCCLUDING LAYER TO WATER TABLE OR TO A DEPTH OF 7' TO ASSURE PROPER PERCOLATION.
7. BACKFILL WITH 1/2" - 3/4" GRAVEL.
8. WATER TABLE

FOR A PARKING ISLAND PLANTING SITUATION, CONTRACTOR TO BACKFILL ENTIRE LENGTH OF PLANTING AREA TO WITHIN 6" OF BACK OF CURB OR EDGE OF PAVEMENT.

POOR DRAINAGE CONDITION

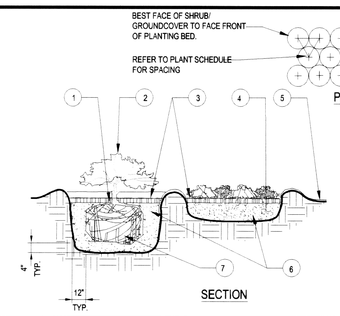
N.T.S.



1. TOP OF SHRUB ROOTBALLS TO BE PLANTED 1" - 2" HIGH WITH SOIL MOUNDING UP TO THE TOP OF ROOTBALL.
2. WHEN USED IN MASSES- PRUNE ALL SHRUBS TO ACHIEVE A UNIFORM MASS/HEIGHT
3. 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
4. EXCAVATE ENTIRE BED SPECIFIED FOR GROUNDCOVER BED.
5. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
6. PREPARED PLANTING SOIL AS SPECIFIED. NOTE: WHEN GROUND- COVERS AND SHRUBS USED IN MASSES ENTIRE BED TO BE AMENDED WITH PLANTING SOIL MIX AS SPECIFIED.
7. SCARIFY ROOTBALL SIDES AND BOTTOM.

SHRUB/GROUNDCOVER PLANTING ON SLOPE

N.T.S.



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7. SCARIFY ROOTBALL SIDES AND BOTTOM.

SHRUB/GROUNDCOVER PLANTING

N.T.S.

ERNST SEED CO. MEADOW
SEEDING SPECIFICATIONS (ERNMX-156):

FESTUCA OVINA	SHEEP FESCUE	34.69%
LOLIUM MULTIFLORUM	ANNUAL RYEGRASS	31.74%
HESPERIS MATRONALIS	DAME'S ROCKET	9.52%
CHAMAECRISTA FASCICULATA	PARTRIDGE PEA	6.96%
AGROSTIS SCABRA	TICKLEGRASS	6.53%
ACHILEA MILLEFOLIUM	WHITE YARROW	4.76%
CHRYSANTHEMUM LEUCANTHEMUM	OX-EYE DAISY	4.76%
VERBENA HASTATA	BLUE VERVAIN	0.4%
ASCLEPIAS TUBEROSA	BUTTERFLY MILKWEED	0.25%
LIATRIS SPICATA	SPIKED GAYFEATHER	0.25%
CICHORIUM INTYBUS	BLUE CHICORY	0.22%
ASTER PRENANTHOIDES	ZIGZAG ASTER	0.1%

SEED AT 15 BULK POUNDS PER ACRE

FIRST YEAR MAINTENANCE

WHEN VEGETATION REACHES 12-18" TALL, MOW TO NO LESS THAN 6" BY ROTARY MOWER OR WEED EATER TO PREVENT THE WEEDS FROM GOING TO SEED. DO NOT MOW WITH A LAWN MOWER

ANNUAL MAINTENANCE

AFTER FIRST YEAR, MOW ONE TIME AS CLOSE TO THE GROUND AS POSSIBLE IN EARLY SPRING.

NOTE TO CONTRACTOR:
NO MAINTENANCE SHALL BE PERFORMED WITHIN THE SWRPA AREA AS DESIGNATED IN THE PLAN SET.

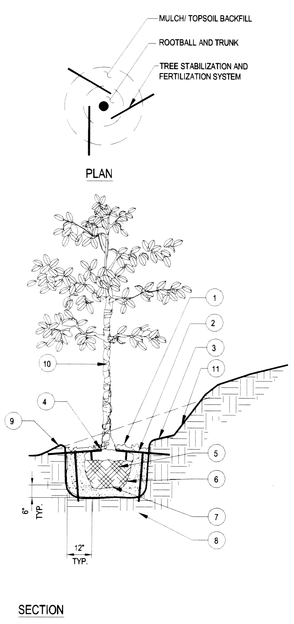
ERNST MEADOW SEEDING SPEC.

ERNST SEED CO. RETENTION BASIN
SEEDING SPECIFICATIONS (ERNMX-137):

ALOPECURUS ARUNDINACEUS	GARRISON CREEPING FOXTAIL	25%
ELYMUS VIRGINICUS	VIRGINIA WILD RYE	25%
CAREX VULPINOIDEA	FOX SEDGE	20%
AGROSTIS SCABRA	TICKLEGRASS (ROUGH BENTGRASS)	5%
POA PALUSTRIS	FOWL BLUEGRASS	5%
SPARGANIUM EURYCARPUM	GIANT BUR-REED	3%
BIDENS FRONDOSA	BEGGAR TICKS	3%
VERBENA HASTATA	BLUE VERVAIN	3%
JUNCUS EFFUSUS	SOFT RUSH	2%
SCIRPUS ATROVIRENS	GREEN BULRUSH	2%
SCIRPUS CYPERINUS	WOOL GRASS	2%
SCIRPUS POLYPHYLLUS	MANY-LEAVED BULRUSH	2%
SOLIDAGO PATULA	ROUGH-LEAVED GOLDENROD	1%
MIMULUS RINGENS	SQUARE STEM MONKEYFLOWER	1%
BIDENS CEMUA	NODDING BUR MARIGOLD	1%

1. SOW ABOVE MIX AT A RATE OF 15 LBS./ACRE
2. SUPPLEMENT ABOVE MIX WITH ANNUAL RYE AT A RATE OF 10 LBS/ACRE.
3. MOW SEEDED AREA ONCE PER YEAR.
MOWING SHALL TAKE PLACE IN EARLY SPRING ONLY.

ERNST BASIN SEEDING SPEC.



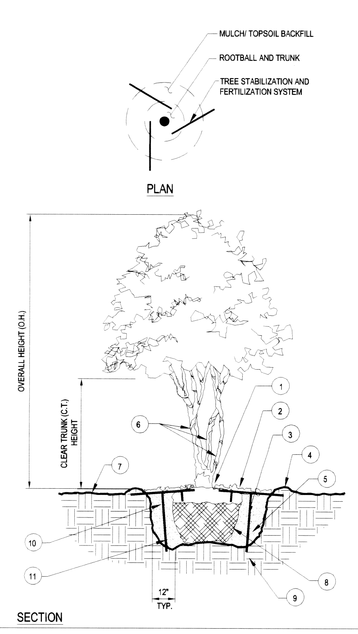
1. 4" MINIMUM OF HARDWOOD BARK MULCH COMPACTED OR AS SPECIFIED.
2. STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.
3. 4" MINIMUM OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN).
4. TOP OF ROOTBALL MIN. 1" ABOVE FINISHED GRADE
5. B&B OR CONTAINERIZED (SEE SPECIFICATIONS FOR ROOT BALL REQUIREMENTS).
6. PREPARE PLANTING SOIL AS SPECIFIED.
7. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
8. UNDISTURBED SUBSOIL
9. 3" HIGH SOIL BERM TO HOLD WATER.
10. TREE WRAP
11. CUT BACK SLOPE TO PROVIDE A FLAT SURFACE FOR PLANTING.

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
B. REMOVE BURLAP, WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT.
E. BRANCHING HEIGHT TO A.A.N. STANDARDS.

TREE PLANTING ON SLOPE

N.T.S.



1. BASE OF TREE SHALL BE PLANTED SLIGHTLY ABOVE (1" MIN.) ADJACENT FINISH GRADE. REMOVE ALL TWINE & STRAPS & CUT BURLAP FROM TOP 1/3 OF ROOTBALL. NO SYNTHETIC BURLAP WILL BE ACCEPTED.
2. 4" SHREDDED HARDWOOD BARK MULCH OR APPROVED EQUAL
3. DIAMETER OF TREE PIT TO BE TWICE THE DIAMETER OF ROOTBALL-ROUGHEN SIDES OF TREE PIT.
4. 3" HIGH SOIL BERM TO HOLD WATER.
5. TOPSOIL MIX BACKFILL
6. TREE WRAP
7. 4" MIN. OF TOPSOIL TO BRING TO FINISHED GRADE (SEE GRADING PLAN)
8. ROOTBALLS GREATER THAN 24" DIAMETER SHALL BE PLACED ON MOUND OF UNDISTURBED SOIL TO PREVENT SETTLING ROOTBALLS SMALLER THAN 24" IN DIA. MAY SIT ON COMPACTED EARTH.
9. UNDISTURBED SUBSOIL
10. PREPARE PLANTING SOIL AS SPECIFIED.
11. STAKE SIZE SHALL BE ONE SIZE HIGHER THAN REQUIRED FOR SIZE OF TREE. REFER TO SITEWORK SPECIFICATIONS FOR APPROVED MATERIALS AND INSTALLATION REQUIREMENTS.

NOTES:

A. FINAL TREE STAKING DETAILS AND PLACEMENT TO BE APPROVED BY OWNER.
B. SET TREE AT ORIGINAL DEPTH. REMOVE BURLAP WIRE AND STRAPS (ANYTHING THAT COULD GIRDLE TREE OR RESTRICT ROOT GROWTH) ON UPPER 1/3 OF ROOTBALL.
C. SEE LANDSCAPE NOTES FOR THE TYPE OF MULCH MATERIAL TO USE.
D. PRUNE TREE AS DIRECTED BY LANDSCAPE ARCHITECT
E. BRANCHING HEIGHT TO A.A.N. STANDARDS

MULTI-TRUNK TREE PLANTING

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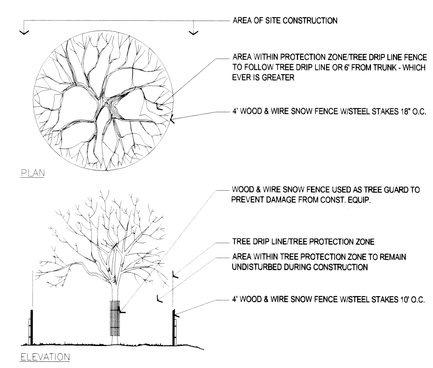

TREE PROTECTION DURING CONSTRUCTION

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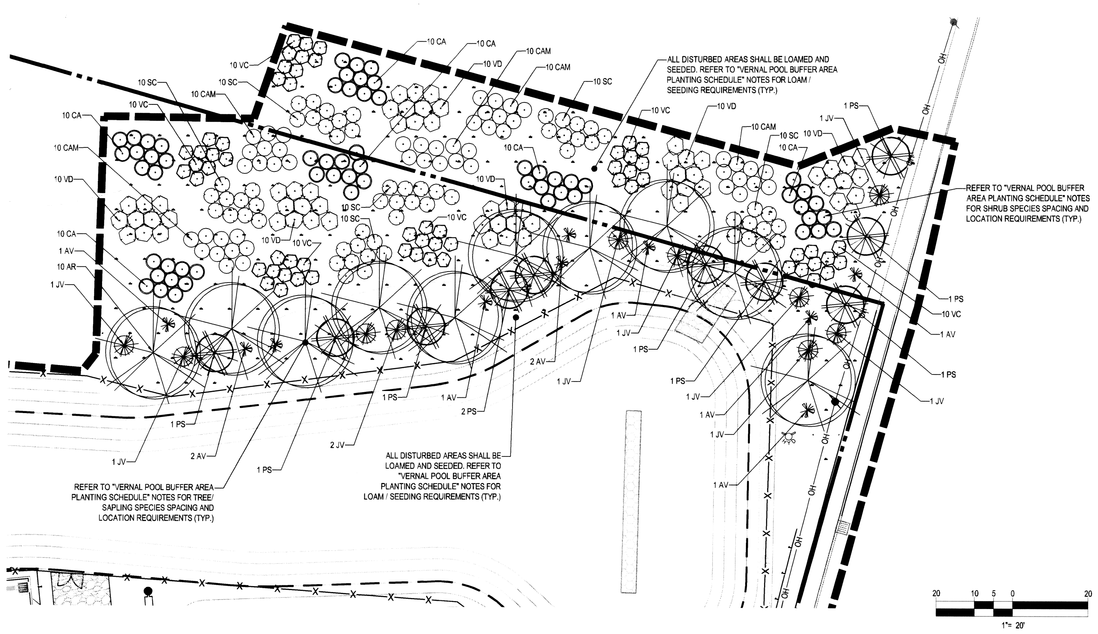

VERNAL POOL BUFFER AREA PLANTING SCHEDULE

KEY	QTY*	BOTANICAL NAME	COMMON NAME	SIZE	REMARKS	TYPE
CA	60	CLETHRA ALNIFOLA	SWEET PEPPERBUSH	2 GAL.	CONT.	SHRUB
VD	60	VIBURNUM DENTATUM	ARROWWOOD	2'-4' HT.	B+B	SHRUB
VC	60	VACCINIUM CORYMBOSUM	HIGHBUSH BLUEBERRY	2'-3' HT.	CONT.	SHRUB
CAM	60	CORNUS AMMOMUM	SILKY DOGWOOD	2'-3' HT.	CONT.	SHRUB
SC	60	SAMBUCUS CANADENSIS	ELDERBERRY	2'-3' HT.	CONT.	SHRUB
AV	10	ARBOR VITAE	ARBOR VITAE	5'-6' HT.	B+B	SAPLING
JV	10	JUNIPERUS VIGINIANA	RED CEDAR	4' AVG. HT.	B+B	SAPLING
AR	10	ACER RUBRUM	RED MAPLE	4'-6' HT.	B+B	TREE
PS	10	PINUS STROBUS	WHITE PINE	4'-6' HT.	B+B	TREE

NOTES:

1. THE BUFFER AREA SHALL HAVE A 10-12 INCH LAYER OF A SANDY LOAM TOPSOIL WITH AT LEAST 5% ORGANIC MATTER CONTENT SPREAD OVER THE BASE SEDIMENTS AFTER REMOVAL OF THE EXISTING PAVEMENT AND OTHER UNSUITABLE MATERIAL.
2. A CONSERVATION SEED MIX WILL BE APPLIED OVER THE ENTIRE BUFFER AREA WHEREVER CONDITIONS HAVE BEEN DISTURBED.
   A. CONSERVATION SEED MIX TO BE NEW ENGLAND CONSERVATION / WILDLIFE MIX, OR COMPARABLE.
3. THE TREES/SPLING SPECIES (RED MAPLE, WHITE PINE, RED CEDAR, AND ARBOR VITAE) WILL BE PLANTED AT 8-10 FOOT SPACINGS IN THE OUTER WESTERN PERIMETER OF THE BUFFER AREA CLOSEST TO THE PROPOSED DEVELOPMENT AREA.

THE SHRUB SPECIES SHOULD BE PLANTED IN CLUSTERS OF 8-10 SPECIMENS OF ONE SPECIES, AT ROUGHLY 3-4 FOOT SPACINGS, SUCH THAT THERE WILL BE 6 CLUSTERS OF EACH SPECIES DISTRIBUTED BROADLY THROUGHOUT THE BUFFER AREA.

VERNAL POOL BUFFER AREA PLANTING RESTORATION PLAN

SCALE: 1" = 20'

BOHLER ENGINEERING
CORPORATE OFFICE:
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TOWNSEND, MA
ALBANY, NY
ROSCOE/CATSKILL, NY
CENTER VALLEY, PA
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CHARLOTTE, NC
STERLING, VA
FORT LAUDERDALE, FL
TAMPA, FL
CIVIL & CONSULTING ENGINEERS
SURVEYORS
PROJECT MANAGERS
ENVIRONMENTAL CONSULTANTS
LANDSCAPE ARCHITECTS

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REVISIONS

REV	DATE	COMMENT	BY
1	6/03/11	REVS PER TOWN PB FILING	KBS
2	9/6/11	BUILDING LOCATION	AWP
3	11/14/11	TOWN REVIEW COMMENTS	AWP
4	12/14/11	REVS PER TOWN/PEER REVIEW COMMENT	EGD
5	01/23/12	REVS PER CON. COMM. COMMENTS	JSE
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(MA, ME, NH, RI, VT 1-888-344-7233)
(CT 1-800-922-4455)
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PERMIT SET

PROJECT No.: W050623
DRAWN BY: KBS/CFD
CHECKED BY: MDS/JAK
DATE: 03/14/2011
SCALE: AS SHOWN
CAD I.D.: W050623SS5

PROJECT: SITE DEVELOPMENT PLANS FOR Walmart

STORE # 2184-07
PROPOSED RETAIL DEVELOPMENT

LOTS 25, 29, 30, 33, 63, 199 & 218, MAP 7
1300 FALL RIVER AVENUE &
ANTHONY STREET
TOWN OF SEEKONK
BRISTOL COUNTY, MA

BOHLER ENGINEERING
352 TURNPIKE ROAD
SOUTHBOROUGH, MA 01772
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MAINE LICENSE No. 11023
NEW HAMPSHIRE LICENSE No. 12931

SHEET TITLE:
LANDSCAPE SPECIFICATIONS AND DETAILS SHEET

SHEET NUMBER:
C-5
OF 18

REV 5-01/23/2012