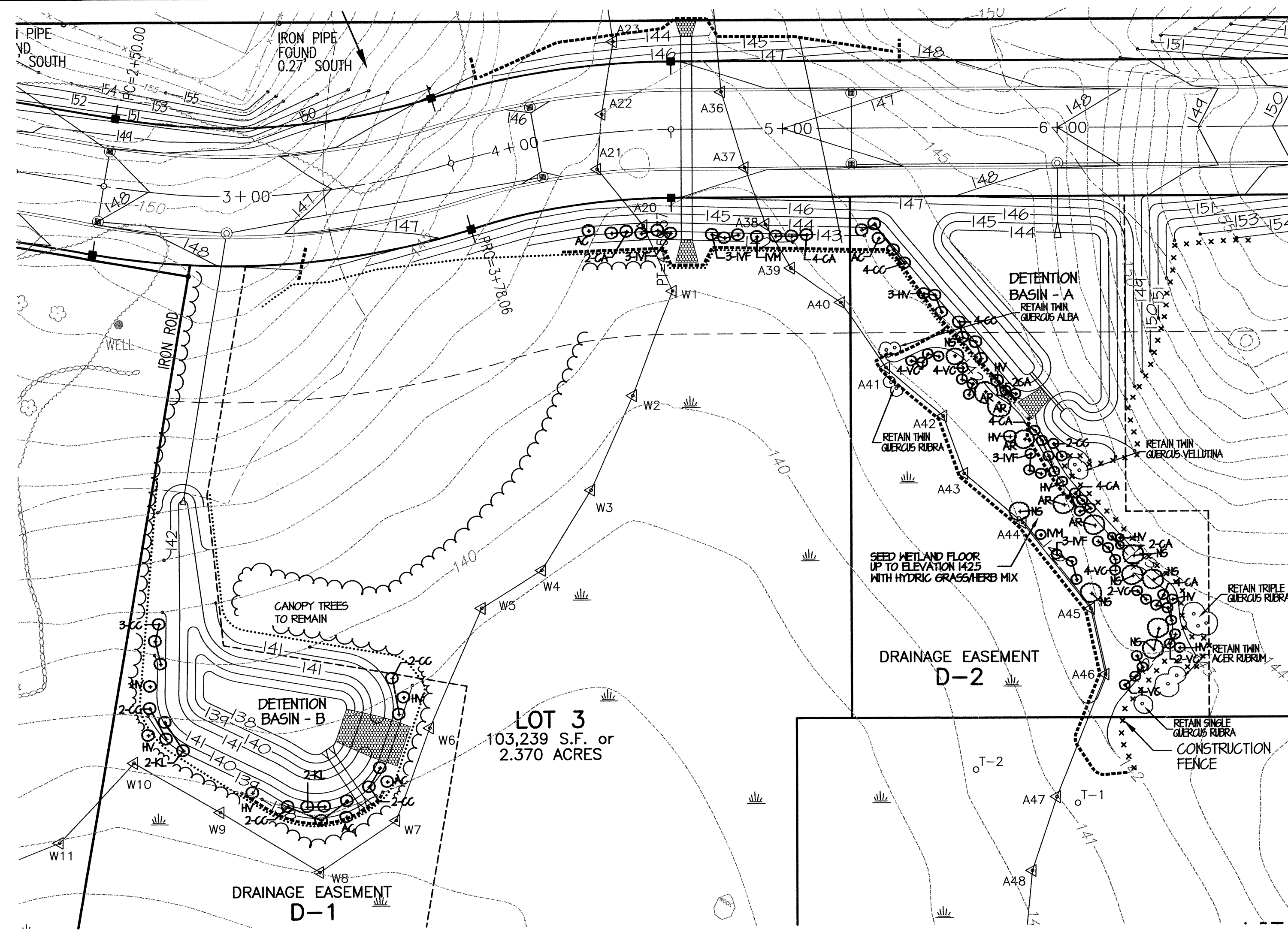


PROPOSED WETLAND REPLICATION GRADING PLAN
SCALE: 1" = 30'



PROPOSED WETLAND REPLICATION PLANTING PLAN
SCALE: 1" = 30'

TREE AND SHRUB PLANTING SCHEDULE

WETLAND REPLICATION AREA			
5	AR	RED MAPLE	ACER RUBRUM 1-1/2" CAL MIN B4B
8	N5	TUPELO	NYSSA SYLVATICA 1-1/2" CAL MIN B4B
4	HY	WITCH HAZEL	HAMAMELIS VIRGINIANA 4-5' MIN B4B
2	VM	HINTERBERRY (MALE)	ILEX VERTICILLATA 3-4' MIN B4B
6	VF	HINTERBERRY (FEMALE)	ILEX VERTICILLATA 3-4' MIN B4B
20	VC	HIGHBUSH BLUEBERRY	VACCINIUM CORYMBOSUM 3-4' MIN B4B
14	CA	SWEET PEPPERBUSH	CLETHRA ALNIFOLIA 3-4' MIN B4B
ROAD CROSSING (SOUTH)			
1	AC	SHADEBUSH	AMELANCHIER CANADENSIS 4-5' MIN B4B
1	VM	HINTERBERRY (MALE)	ILEX VERTICILLATA 3-4' MIN B4B
6	VF	HINTERBERRY (FEMALE)	ILEX VERTICILLATA 3-4' MIN B4B
5	CA	SWEET PEPPERBUSH	CLETHRA ALNIFOLIA 3-4' MIN B4B
DETENTION BASIN A			
1	AC	SHADEBUSH	AMELANCHIER CANADENSIS 4-5' MIN B4B
4	HY	WITCH HAZEL	HAMAMELIS VIRGINIANA 4-5' MIN B4B
10	CC	BAKED HAZELNUT/AMERICAN HAZELNUT	CORYLUS CORNUTA 3-4' MIN B4B
5	CA	SWEET PEPPERBUSH	CLETHRA ALNIFOLIA 3-4' MIN B4B
DETENTION BASIN B			
2	AC	SHADEBUSH	AMELANCHIER CANADENSIS 4-5' MIN B4B
4	HY	WITCH HAZEL	HAMAMELIS VIRGINIANA 4-5' MIN B4B
12	CC	BAKED HAZELNUT/AMERICAN HAZELNUT	CORYLUS CORNUTA 3-4' MIN B4B
4	KL	MOUNTAIN LAUREL	KALHIA LATIFOLIA 3-4' MIN B4B

EROSION AND SEDIMENTATION CONTROL

- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK AT THE SPECIFIC AREAS INDICATED ON THE PLANS. VEGETATIVE CLEARING MAY OCCUR PRIOR TO INSTALLATION OF SUCH CONTROLS, BUT NO GRUBBING, GRADING, FILLING, OR OTHER SOIL DISTURBANCE SHALL OCCUR PRIOR TO CONTROL INSTALLATION.
- NO WORK IS TO OCCUR ON THE WETLAND SIDE OF PERIMETER EROSION AND SEDIMENTATION CONTROLS. ALL PERIMETER CONTROLS SERVE AS THE PROJECT LIMIT OF CLEARING AND SURFACE DISTURBANCE.
- NO STONES, BRUSH, CONSTRUCTION DEBRIS, LITTER, OR OTHER MATERIALS ARE TO BE DEPOSITED ON THE WETLAND SIDE OF PERIMETER EROSION AND SEDIMENTATION CONTROLS.
- ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE PROPERLY MAINTAINED AND MUST REMAIN IN PLACE UNTIL SOILS HAVE STABILIZED TO THE SATISFACTION OF THE ENGINEER AND/OR THE CONSERVATION COMMISSION.
- THE ENGINEER RESERVES THE RIGHT TO SPECIFY ADDITIONAL CONTROLS AS CONDITIONS MAY WARRANT. ACCESSIBLE RESERVES OF SILT FENCE, HAY BALES, AND STAKES ARE TO BE MAINTAINED ON SITE FOR ROUTINE MAINTENANCE AND IN THE EVENT OF UNANTICIPATED PROBLEMS REQUIRING IMMEDIATE RESPONSE.
- THE TOE OF FILL SLOPES IS TO REMAIN AT LEAST ONE FOOT INSIDE OF ALL EROSION CONTROLS. UNDER NO CIRCUMSTANCE SHALL THE EROSION CONTROLS BE COVERED WITH FILL MATERIAL. ANY FILL MATERIAL THAT IS PLACED ON EROSION CONTROLS SHALL BE IMMEDIATELY REMOVED.
- ALL SILT FENCE IS TO BE INSTALLED WITH THE LOWER 6 INCHES BURIED AND BACKFILLED WITH COMPACTED SOIL MATERIAL. ALL HAY BALES ARE TO BE DOUBLE STAKED AND INSTALLED WITH THE LOWER 4 INCHES BURIED AND BACKFILLED WITH COMPACTED SOIL MATERIAL, EXCEPT AS NOTED WITHIN THE WETLAND REPLICATION AREA. WHEN USED IN COMBINATION, A SUFFICIENT AMOUNT OF THE SILT FENCE SHALL BE PLACED IN THE TRENCH SO THAT THE HAYBALE STAKES ARE DRIVEN THROUGH THE FABRIC.
- HAY-BALE CHECK DAMS ARE TO BE INSTALLED AT THE TOE OF SLOPES AT EACH CORNER OF THE WETLAND CROSSING, AS DENOTED ON THE PLANS, AND AT ANY OTHER AREA WHERE STORMWATER HAS THE OPPORTUNITY TO DRAIN ALONG THE TOE OF NEWLY-CREATED SLOPES AND INTO WETLANDS.
- ALL DISTURBED SOILS EITHER NEWLY CREATED, OR EXPOSED, WITHIN 100 FEET OF WETLANDS PRIOR TO OCTOBER 15 OF ANY CALENDAR YEAR SHALL BE SEEDED OR PROTECTED BY THAT DATE. ANY AREAS THAT DO NOT HAVE ADEQUATE VEGETATIVE STABILIZATION BY NOVEMBER 15 OF THE SAME YEAR MUST BE STABILIZED THROUGH THE USE OF EROSION CONTROL MATTING, HAY MULCH, OR EQUIVALENT.
- SOIL STOCKPILES TO REMAIN IDLE MORE THAN 30 CALENDAR DAYS ARE TO BE RINGED WITH EITHER SILT FENCE OR STAKED HAY BALES AND SEEDED WITH A CONSERVATION GRASS MIX.
- ALL DISTURBED SOILS NOT DESIGNATED FOR OTHER SURFACE TREATMENT ARE TO BE LOAMED AND SEEDED IMMEDIATELY FOLLOWING FINAL GRADING.
- APPROPRIATE PRECAUTIONS SHOULD BE TAKEN TO PREVENT THE TRACKING OF SOIL BEYOND PROJECT LIMITS DUE TO CONSTRUCTION EQUIPMENT.

WETLAND REPLICATION NOTES

- WORK ON THE REPLACEMENT WETLAND IS NOT TO COMMENCE WITHOUT FIRST NOTIFYING CAPUTO AND WICK LTD. THE ENGINEER WILL REVIEW IN THE FIELD PROJECT LIMITS, TREES TO BE RETAINED, AND GENERAL CONSTRUCTION SEQUENCE AND METHODS.
- NO WORK IS TO OCCUR ON THE WETLAND SIDE OF APPROVED PROJECT LIMITS. PERIMETER HAY BALES ARE TO BE INSTALLED PRIOR TO EARTHWORK AND WILL SERVE AS WORK LIMITS. NO STONES, BRUSH, CONSTRUCTION DEBRIS, LITTER, OR OTHER MATERIALS ARE TO BE DEPOSITED ON THE WETLAND SIDE OF THE HAY BALES.
- TREES AND SHRUBS CURRENTLY PRESENT ALONG THE PROJECT LIMITS AND WETLAND EDGE SHALL BE RETAINED.
- THE WETLAND FLOOR SHALL BE OVER-EXCAVATED TO ACCOMMODATE 6 INCHES OF EVENLY SPREAD ORGANIC-MIX SOIL. ALL SOILS EXCAVATED AS PART OF THE PROJECT SHALL BE EITHER RE-USED ON SITE WITHIN APPROVED PROJECT LIMITS OR SHALL BE RESPONSIBLY HAULED OFF SITE AND DEPOSITED IN AN APPROVED UPLAND LOCATION OUTSIDE OF WETLAND AREAS.
- THE EXCAVATED WETLAND FLOOR SHALL BE GRADED TO GRADUALLY BLEND WITH THE UNDISTURBED WETLAND FLOOR.
- FOLLOWING FINAL SHAPING OF THE REPLICATION AREA, THE ORGANIC-MIX SOIL SHALL BE SPREAD ON THE BASIN FLOOR AND ON THE SIDE SLOPES UP TO ELEVATION 143.0 (WHERE APPLICABLE) TO A DEPTH OF SIX INCHES. CARE SHALL BE TAKEN TO AVOID MECHANICAL COMPACTION OF THE ORGANIC-MIX SOIL ONCE IT IS LAYED AND SPREAD ON THE WETLAND FLOOR. SIX INCHES OF LOAM SHALL BE SPREAD ON WETLAND SIDE SLOPES ABOVE ELEVATION 143.0 FOLLOWING FINAL SHAPING.
- THE ORGANIC MIX SOIL SHALL COMPRISE LOAM BLENDED WITH PEAT MOSS AND/OR HUMUS AT A RATIO OF THREE PARTS MINERAL SOIL TO ONE PART PEAT/HUMUS.
- ANY SUITABLE "O" AND "A"-HORIZON (TOP) SOILS STRIPPED FROM THE IMPACT AREA MAY BE USED TO SUPPLEMENT THE ORGANIC-MIX SOIL AS DIRECTED BY THE ENGINEER. SOILS FROM THE IMPACT AREA MAY BE STOCKPILED PRIOR TO REESPREADING IN THE REPLICATION AREA, BUT THEY SHALL BE STOCKPILED FOR AS SHORT A DURATION AS FEASIBLE AND SHALL REMAIN COVERED WITH TARPS TO RETAIN MOISTURE CONTENT AND TO MINIMIZE EXPOSURE TO DIRECT SUNLIGHT.
- A LINE OF STAKED, UNTRENCHED HAY BALES SHALL BE INSTALLED ON THE WETLAND FLOOR AT THE TOE OF THE GRADED SLOPES WHERE SHOWN ON THE PLAN IMMEDIATELY FOLLOWING TOPSOIL SPREADING.
- THE ENGINEER RESERVES THE RIGHT TO SPECIFY THE INSTALLATION OF ADDITIONAL STAKED HAY BALES AND/OR SILT FENCE DURING CONSTRUCTION AS NECESSARY BASED ON FIELD CONDITIONS.
- TREES AND SHRUBS SHALL BE PLANTED AS SHOWN ON THE PLANS.
- THE WETLAND FLOOR AND LOWEST ONE FOOT OF THE SIDE SLOPES (UP TO ELEVATION 143.0 WHERE APPLICABLE) SHALL BE SEEDED WITH A HYDRIC GRASS/HERB SEED MIX TO BE APPROVED BY THE ENGINEER.
- WETLAND SIDE SLOPES ABOVE ELEVATION 142.0 AND ALL UPLAND AREAS EXPOSED AS A RESULT OF WETLAND REPLICATION ACTIVITIES SHALL BE SEEDED WITH A CONSERVATION GRASS MIX. THE LOWEST ONE FOOT OF THE SIDE SLOPES SHALL BE SEEDED WITH BOTH SEED MIXES.
- THE PERIMETER AND INTERIOR HAY-BALE LINES ARE TO REMAIN IN PLACE UNTIL SOILS HAVE STABILIZED TO THE SATISFACTION OF THE ENGINEER AND/OR THE CONSERVATION COMMISSION.
- THE CONTRACTOR IS RESPONSIBLE FOR WATERING TREES, SHRUBS, AND SEED AS NECESSARY TO ENSURE GERMINATION AND SURVIVAL.

CONSTRUCTION SEQUENCE

- NOTIFY THE SEEKONK CONSERVATION COMMISSION PRIOR TO THE COMMENCEMENT OF CONSTRUCTION, AS SPECIFIED IN THE ORDER CONDITIONS UNDER MADEP FILE NO. SE 64-504, AND ERECT A SIGN AT THE SITE ENTRY IDENTIFYING THE MADEP FILE NO. TO THE SPECIFICATIONS ALSO IDENTIFIED IN THE ORDER OF CONDITIONS.
- SURVEY LOCATE ROAD CENTERLINES AND ALL LIMITS OF DISTURBANCE PRIOR TO CLEARING AND GRUBBING.
- CLEAR TREES AND SHRUBS WITHIN PROJECT LIMITS SPECIFIED. CARE SHALL BE EXERCISED TO FELL TREES TOWARD THE PROJECT WORK AREA AND NOT BEYOND PROJECT LIMITS.
- PROPERLY INSTALL PERIMETER EROSION CONTROLS AND ORANGE CONSTRUCTION FENCING PRIOR TO THE COMMENCEMENT OF EARTHWORK, AND IN STRICT ADHERENCE TO THE LOCATIONS SHOWN ON THE PLANS.
- GRUB WORK AREAS AND ENSURE THAT NO SLASH, STUMPS, OR DEBRIS ARE DEPOSITED OUTSIDE OF APPROVED PROJECT LIMITS.
- ESTABLISH ROAD BEDDING AND CROSS CULVERTS, AND FILL ROAD BED SUFFICIENT FOR SITE ACCESS.
- CONSTRUCT WETLAND REPLICATION AREA IN ACCORDANCE WITH NOTES PROVIDED ON THIS SHEET. MACHINERY ACCESS FOR WETLAND REPLICATION SHALL BE THROUGH PROPOSED DETENTION BASIN "A". INSTALL WETLAND REPLICATION PLANTINGS UPON COMPLETION OF FINAL GRADING AND ORGANIC SOIL PLACEMENT. PLANTING SHALL BE SEQUENCED WITH DETENTION BASIN "A" CONSTRUCTION SUCH THAT ACCESS FOR PLANTING IS MAINTAINED AND SUCH THAT THE TOE OF THE BASIN SLOPE IS AT FINISH GRADE PRIOR TO PLANTING.
- CONSTRUCT DETENTION BASINS SEQUENTIALLY PRIOR TO INSTALLATION OF DRAINAGE PIPING. ALL BASINS ARE TO BE FINAL SHAPED, LOAMED, SEEDED, AND STABILIZED WITH GRASS SUFFICIENT IN MATURITY TO ADEQUATELY RETAIN SOILS PRIOR TO THE INTRODUCTION OF PROJECT STORMWATER.
- ONCE STORMWATER IS TO BE INTRODUCED INTO THE BASINS, AND ONLY AFTER ADEQUATE SOIL STABILIZATION HAS BEEN ACHIEVED BY GRASS COVER, A THREE-FOOT SECTION OF PERIMETER CONTROLS AT THE OUTLET OF EACH BASIN SHALL BE REMOVED AND REPLACED WITH A CRUSHED-STONE CHECK DAM AS SPECIFICALLY NOTED ON THE PLANS.
- FINALIZE SITE AND ROAD GRADINGS, COMPLETE IN-ROAD UTILITY INSTALLATION, SET CURBING AND BINDER, AND APPLY PAVEMENT TOP COAT.
- LOAM ALL EXPOSED AREAS NOT DESIGNATED FOR OTHER TREATMENT. INSTALL TREE AND SHRUB PLANTINGS WHERE SHOWN ON THE PLANS, AND SEED ALL EXPOSED SOILS. SEE EROSION AND SEDIMENTATION CONTROL NOTES REGARDING EROSION AND STABILIZATION CONCERNS AND TIMING.
- THE CONTRACTOR/OWNER IS RESPONSIBLE FOR ENSURING THE SURVIVAL OF ALL TREE AND SHRUB PLANTINGS FOR NOT LESS THAN TWO YEARS. ANY PLANTED TREES AND SHRUBS THAT DO NOT SURVIVE, OR THAT EXHIBIT ILL CONDITION DURING THIS PERIOD SHALL BE REPLACED BY THE CONTRACTOR/OWNER AT NO EXPENSE TO THE TOWN.

STORMWATER MAINTENANCE SCHEDULE

- THE ROADWAY AREA IS TO BE SHEPT CLEAN ON A SEMI-ANNUAL BASIS TO REMOVE CONTAMINANTS AND SOIL FINES. IT IS PARTICULARLY IMPORTANT TO SCHEDULE SPRING SHEEPING TO REMOVE RESIDUAL SAND RESULTING FROM WINTER SNOW AND ICE REMOVAL OPERATIONS.
- INSPECT CATCH BASINS AND DRAIN MANHOLES SEMI-ANNUALLY (SPRING AND LATE FALL/EARLY WINTER) AND REMOVE SEDIMENT, LEAVES AND DEBRIS AS NECESSARY. IT IS IMPORTANT THAT THE PUMPS BE PROPERLY MAINTAINED TO PREVENT DISCHARGE OF FINES INTO THE STORMWATER SYSTEM.
- INSPECT INTERCONNECTION PIPING ON AN ANNUAL BASIS, AND REMOVE ALL FINES OR OTHER CONTAMINANTS. LATE SPRING OR EARLY SUMMER INSPECTION SCHEDULE IS CONSIDERED PREFERABLE.
- INSPECT THE DETENTION BASINS AND WATER QUALITY SWALES ON AN ANNUAL BASIS, AND REMOVE ANY SEDIMENT, LEAVES AND DEBRIS. LATE SPRING OR EARLY SUMMER INSPECTION SCHEDULE IS CONSIDERED PREFERABLE.

REPLICATION AND GRADING PLAN NO. 1

DEFINITIVE SUBDIVISION HOLLAND WOODS H. CHARLES TAPALIAN DAVIS STREET SEEKONK, MASSACHUSETTS	
CAPUTO AND WICK LTD.	DATE JULY 31, 2002
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REV: 9/23/02

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