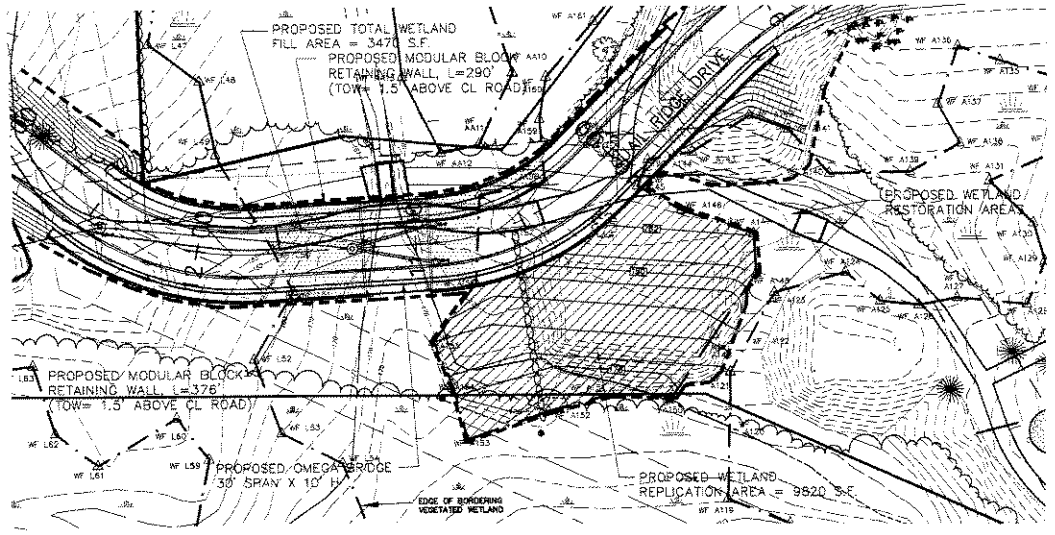
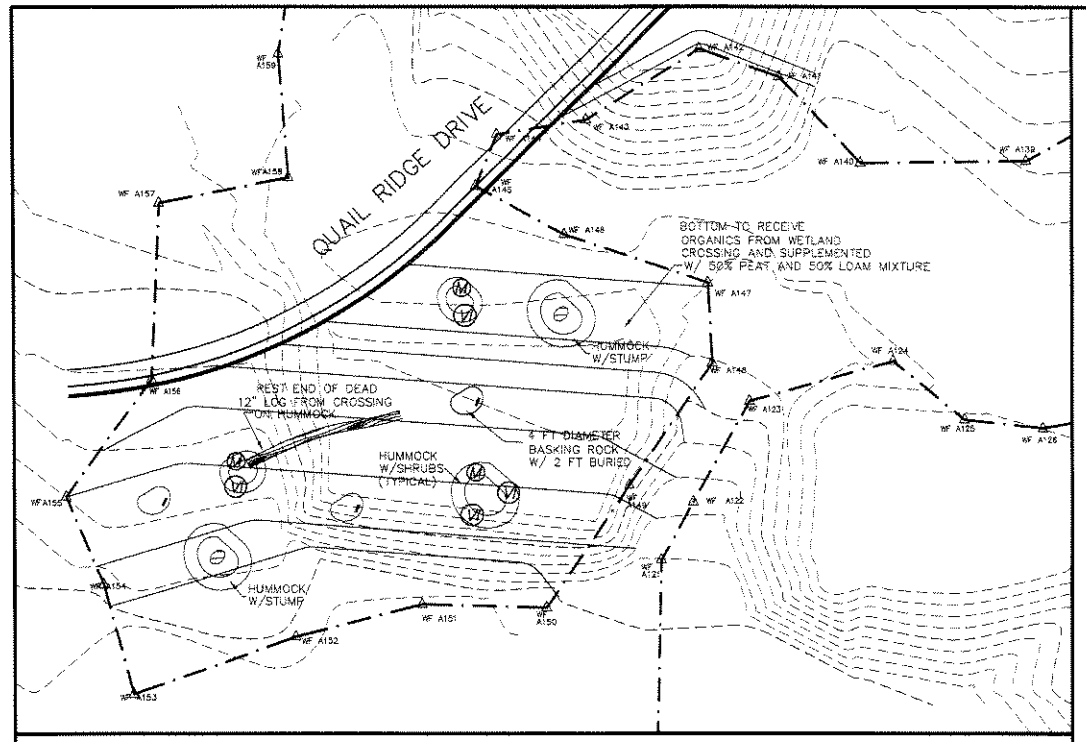


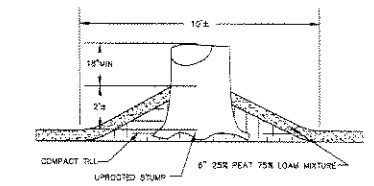
WETLAND CROSSING DETAIL

SCALE: 1"=40'

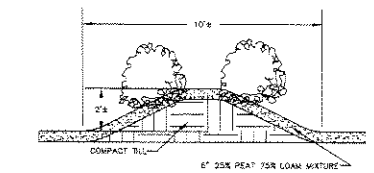


WETLAND REPLICATION PLAN

SCALE: 1"=20'



HUMMOCK W/ STUMP



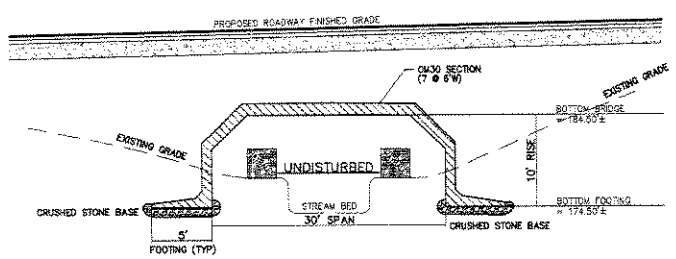
HUMMOCK W/ SHRUBS

N.T.S.

PLANT LIST

SYMBOL/BOTANICAL NAME	COMMON NAME	NO.	SIZE
SHRUBS			
A/AMELANCHIER LAEVIS	SERVICEBERRY	6	4–5' Ht
V/ILEX VERTICILLATA "WINTER RED"	WINTER RED WINTERBERRY	7	3–4' Ht
S/SALIX DISCOLOR	PUSSY WILLOW	2	2–3' Ht
M/MYRICA PENSYLVANICA	NORTHERN BAYBERRY	3	12–18" Ht
VI/VIBURNUM DENTATUM	ARROWWOOD VIBURNUM	4	12–18" Ht

*SEE LANDSCAPE PLAN FOR SHRUB PLANTING PROCEDURE



OMEGA BRIDGE CROSS SECTION

NOT TO SCALE

WETLAND RESTORATION NOTES

1. ENGINEER SHALL STAKE LIMIT OF PREVIOUS WETLAND PRIOR TO ANY WORK.
2. CONTRACTOR SHALL EXCAVATE EXISTING SOIL DOWN TO EXISTING COVERED HYDRIC SOILS. AREA SHALL THEN BE RAKED SMOOTH AND ALLOWED TO NATURALLY REESTABLISH.
3. IF AREA WITHIN PREVIOUS WETLAND LIMIT IS COVERED WITH A GRAVEL SIDEWALK, THE GRAVEL SHALL BE EXCAVATED AND REPLACED WITH SOIL CONSISTING OF A 50% PEAT AND 50% LOAM MIXTURE. AREA SHALL THEN BE RAKED SMOOTH AND ALLOWED TO NATURALLY REESTABLISH.
4. IF AREA WITHIN PREVIOUS WETLAND LIMIT IS COVERED WITH A WOODEN BRIDGE, THE BRIDGE SHALL BE DISMANTLED AND REMOVED AND THE PILE FOOTINGS PULLED. ALL FOOTING HOLES SHALL THEN BE FILLLED WITH SOIL CONSISTING OF A 50% PEAT AND 50% LOAM MIXTURE. AREA SHALL THEN BE RAKED SMOOTH AND ALLOWED TO NATURALLY REESTABLISH.
5. IF AFTER TWO GROWING SEASONS, THE WETLAND IS NOT REESTABLISHED TO THE SATISFACTION OF THE CONSERVATION COMMISSION, THE AREAS SHALL BE PLANTED WITH INDIGINEOUS WETLAND PLANTS AS DIRECTED BY THE COMMISSION.

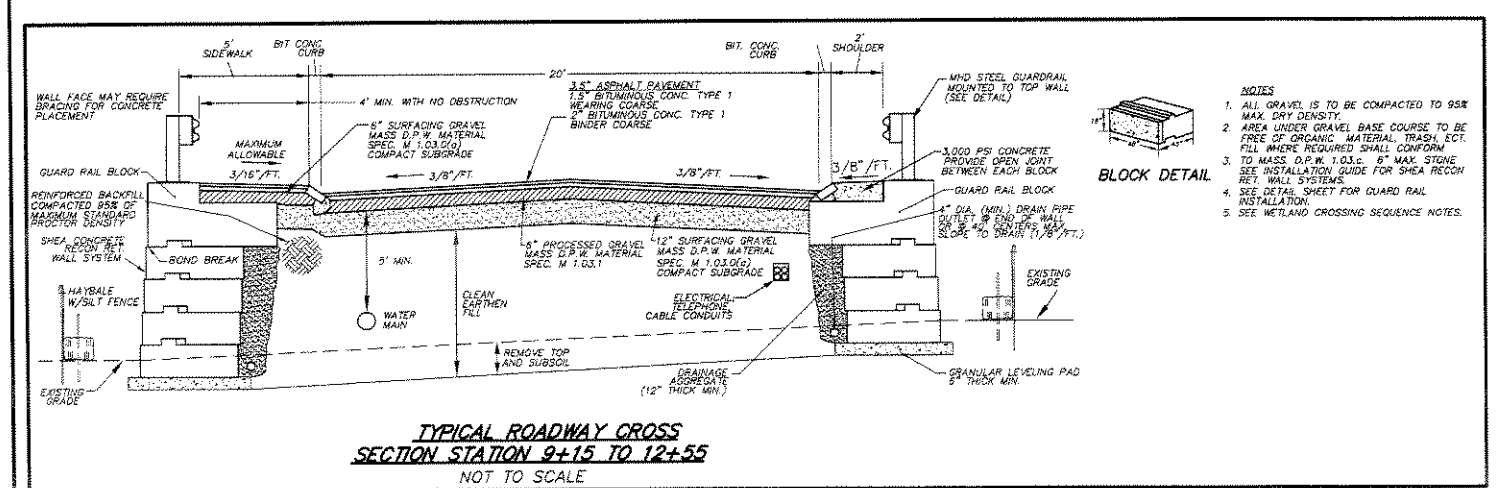
PROCEDURE FOR CONSTRUCTION OF WETLAND REPLICATION AREA

1. INSTALL AND MAINTAIN SILTATION BARRIERS ON THE EDGE OF THE EXISTING WETLAND ADJACENT TO PROPOSED REPLICATION AREA AND ADJACENT TO THE PROPOSED ROADWAY CROSSING OF WETLAND.
2. EXCAVATE AND GRADE THE REPLICATION AREA TO A DEPTH OF APPROXIMATELY ONE FOOT BELOW THE GRADES SHOWN ON THE REPLICATION AREA PLAN.
3. EXCAVATION OF WETLAND AREA TO BE DISTURBED BY ROADWAY CONSTRUCTION SHALL OCCUR AFTER THE REPLICATION WETLAND HAS BEEN EXCAVATED TO SUBGRADE. THE TOPSOIL OR PEAT FROM THE FILL AREA SHALL BE TRANSFERRED DIRECTLY TO THE REPLICATION AREA. DO NOT REMOVE VEGETATION, SHRUBS, ROOTBALLS OR SMALL TREE STUMPS. TRIM VEGETATION TO MAKE IT WORKABLE. PLACE ALL ROOT CLUSTERS IN REPLICATION AREA. STOCKPILING OF MATERIAL SHALL BE ALLOWED ONLY TEMPORARILY. ADDITIONAL FILL REQUIRED TO BRING REPLICATION AREA TO GRADE SHALL BE COMPOSED OF A 25% PEAT AND 75% LOAM MIXTURE.
4. THE REPLICATION AREA SHOULD BE GRADED TO BE LEVEL WITH THE ADJACENT NATURAL WETLAND. HAND LEVELING AND RAKING SHALL BE USED TO AVOID SOIL COMPACTION. ANY POTHOLES OR DEPRESSIONS SHOULD BE FILLED TO AVOID STAGNANT PUDDLES. ANY BERMS RESULTING BETWEEN THE CREATED AND NATURAL WETLANDS SHOULD BE REMOVED TO ALLOW UNRESTRICTED HYDRAULIC CONNECTION.
5. SIDE SLOPES AT THE REPLICATION AREA SHALL NOT EXCEED A 2:1 SLOPE AND SHALL IMMEDIATELY BE LOAMED AND SEEDED. HUMMOCKS, ROCKS, LOGS, STUMPS, MICROPOOL AND PLANTINGS SHALL THEN BE INSTALLED IN ACCORDANCE WITH THE WETLAND REPLICATION PLAN.
6. AFTER THE REPLICATION AREA HAS BEEN CONSTRUCTED, STAKED HAYBALES SHALL BE PLACED BETWEEN THE REPLICATION AREA AND ANY DISTURBED UPLAND AREAS TO PREVENT SILTATION OF THE REPLICATION AREA.
7. IF AFTER ONE GROWING SEASON, WETLAND VEGETATION HAS NOT BECOME ESTABLISHED ON THE REPLICATION AREA FLOOR BY NATURAL COLONIZATION, A WETLANDS REPLICATION AREA PLANTING PLAN SHALL BE CARRIED OUT UNDER THE SUPERVISION OF THE ACTON CONSERVATION COMMISSION CONSISTING OF THE FOLLOWING :

   A)A 50% PEAT AND 50% LOAM MIXTURE SHALL BE HAND SPREAD THROUGHOUT REPLICATION AREAS TO A 6" THICKNESS.

   B)REPLICATION AREA SHALL THEN BE PLANTED WITH AN EQUAL DISTRIBUTION OF RED MAPLE SAPLINGS, HIGH BUSH BLUEBERRY, SWEET PEPPERBUSH AND CINNAMON FERN, SET AT 5' RANDOM SPACING.

   C)REPLICATION AREA SHALL THEN BE SEEDED WITH A HYDROPHILIC GRASS MIXTURE OF REDTOP, BLUEJOINT AND SWITCHGRASS, AT A RATE OF 1LB. PER 1000 S.F.
8. THE REPLICATION AREA (EITHER VEGETATED NATURALLY OR WITH COMMERCIALLY PURCHASED SUPPLEMENTS) SHOULD BE INSPECTED AT THE END OF THE FIRST AND SECOND GROWING SEASONS. REPLANTING AND REPAIRS SHOULD BE SCHEDULED AS NEEDED TO PROVIDE ADEQUATE COVER.



TYPICAL ROADWAY CROSS SECTION STATION 9+15 TO 12+55

NOT TO SCALE

BLOCK DETAIL

NOTES

1. ALL GRAVEL IS TO BE COMPACTED TO 95% MAX. DRY DENSITY.
2. AREA UNDER GRAVEL BASE COURSE TO BE FREE OF ORGANIC MATERIAL, TRASH, ECT. FILL WHERE REQUIRED SHALL CONFORM TO MASS. D.P.W. 1.03.c. 6" MAX. STONE. SEE INSTALLATION GUIDE FOR SHEA RECON RET. WALL SYSTEMS.
3. SEE DETAIL SHEET FOR GUARD RAIL INSTALLATION.
4. SEE WETLAND CROSSING SEQUENCE NOTES.

CONSTRUCTION SEQUENCE FOR WETLAND CROSSING

1. INSTALL SILTATION BARRIER PRIOR TO THE COMMENCEMENT OF ANY CONSTRUCTION AT ALL LOCATIONS SHOWN ON THE PLAN. SET SILTATION BARRIER LINES IN THE LOCATIONS STAKED BY THE DESIGN ENGINEER.
2. NOTIFY CONSERVATION COMMISSION FORTY-EIGHT HOURS (48) HOURS PRIOR TO STARTING DATE OF CONSTRUCTION.
3. CLEAR AND GRUB AREA WITHIN WETLANDS CROSSING AND DESIGNATED AREA FOR WETLANDS REPLICATION.
4. EXCAVATE MATERIAL WITHIN WETLANDS REPLICATION AREA TO ONE (1) FOOT BELOW GRADES SHOWN ON PLAN. STOCKPILE EXCAVATED MATERIAL OUTSIDE OF THE BUFFER ZONE.
5. STRIP ORGANIC MATERIAL FROM AREA WITHIN WETLANDS CROSSING AND SPREAD EXCAVATED ORGANIC MATERIAL OVER WETLANDS REPLICATION AREA TO THE GRADES SHOWN ON THE PLAN. COMPLETE WETLAND REPLICATION AREA IN COMPLIANCE WITH "PROCEDURES FOR CONSTRUCTION OF WETLAND REPLICATION AREA".
6. INSTALL RET-WALLS & CULVERT.
7. PLACE AND COMPACT GRAVEL FILL FOR ELLSWORTH VILLAGE ROAD WITHIN WETLAND CROSSING TO THE GRADES SHOWN ON THE PLAN.
8. STABILIZE SLOPES IN WETLAND FILL AREA WITH 6" OF LOAM AND HYDROSEEDING.
9. INSTALL PROPOSED UNDERGROUND UTILITIES.
10. INSTALL ROADWAY SURFACE TO THE WIDTH SHOWN ON THE PLAN.
11. LOAM AND SEED ALL DISTURBED SURFACES WHICH HAVE NOT BEEN STABILIZED.
12. REMOVE SILTATION BARRIERS AFTER ALL VEGETATION IS ESTABLISHED AND THE APPROVING AUTHORITY HAS ISSUED A CERTIFICATE OF COMPLIANCE.

THE RESIDENCES AT QUAIL RIDGE

SENIOR RESIDENCE SPECIAL PERMIT

ACTON, MASSACHUSETTS

(MIDDLESEX COUNTY)

WETLAND CROSSING AND REPLICATION DETAILS

FOR: QUAIL RIDGE COUNTRY CLUB, LLC

SCALE: 1"=40' JULY 18, 2007

STAMSKI AND McNARY, INC.

80 HARRIS STREET ACTON, MASS.

ENGINEERING – PLANNING – SURVEYING

COMMONWEALTH OF MASSACHUSETTS WILLIAM F. McNARY No. 30753 PROFESSIONAL LAND SURVEYOR

COMMONWEALTH OF MASSACHUSETTS JOSEPH MARCH CIVIL #40477 REGISTERED PROFESSIONAL ENGINEER

(3283BWCRD.dwg) Sheet 38 of 48 SM-3283