

SITE CONSTRUCTION NOTES:

EROSION AND SEDIMENTATION CONTROL NOTES

1. APPROPRIATE PRECAUTIONS SHALL BE TAKEN TO PREVENT THE TRACKING OF SOIL FROM CONSTRUCTION EQUIPMENT ONTO PAVED ROADWAYS LOCATED BEYOND WORK LIMITS OR CONSTRUCTED AS PART OF THE PROJECT.
2. ALL PERIMETER EROSION AND SEDIMENTATION CONTROLS MUST BE INSTALLED PRIOR TO THE COMMENCEMENT OF EARTHWORK.
3. NO WORK IS TO OCCUR ON THE WETLAND SIDE OF THE PERIMETER CONTROLS. ALL PERIMETER CONTROLS SERVE AS THE LIMIT OF CLEARING, SURFACE DISTURBANCE, AND WORK IN GENERAL. ACCORDINGLY, NO STONES, BRUSH, CONSTRUCTION DEBRIS, LITTER, OR OTHER MATERIALS ARE TO BE DEPOSITED ON THE WETLAND SIDE OF THE PERIMETER EROSION AND SEDIMENTATION CONTROLS AND/OR LIMITS OF DISTURBANCE.
4. THE ENGINEER/BIOLOGIST RESERVES THE RIGHT TO SPECIFY ADDITIONAL CONTROLS AS CONDITIONS MAY WARRANT. ACCESSIBLE RESERVES OF SILT FENCE, HAY BALES, STAKES, AND CRUSHED STONE ARE TO BE MAINTAINED ON SITE FOR ROUTINE MAINTENANCE AND IN THE EVENT OF UNANTICIPATED PROBLEMS REQUIRING EMERGENCY RESPONSE.
5. SILT FENCE AND HAY BALES SHALL BE INSTALLED IN ACCORDANCE WITH THE DETAILS PROVIDED AND IN ACCORDANCE WITH TIMINGS SPECIFIED ON THE PLANS. ALL SILT FENCE IS TO BE INSTALLED WITH THE LOWER 6 INCHES BURIED AND BACKFILLED WITH COMPACTED SOIL MATERIAL. ALL HAY BALES (UNLESS SPECIFIED OTHERWISE) ARE TO BE DOUBLE STAKED AND INSTALLED WITH THE LOWER 4 INCHES BURIED AND BACKFILLED WITH COMPACTED SOIL MATERIAL. IF USED IN COMBINATION, A SUFFICIENT AMOUNT OF THE SILT FENCE SHALL BE PLACED IN THE TRENCH SO THAT THE HAY BALE STAKES ARE DRIVEN THROUGH THE FABRIC.
6. SEE SEPARATE NOTES AND CONSTRUCTION SEQUENCES FOR EROSION AND SEDIMENTATION CONTROL MEASURES SPECIFIC TO WETLAND REPLICATION AT WETLANDS J AND M AND TO WETLAND ENHANCEMENT AT WETLAND H.
7. THE TOE OF FILL SLOPES IS TO REMAIN AT LEAST ONE FOOT INSIDE OF EROSION CONTROLS. UNDER NO CIRCUMSTANCE SHALL THE CONTROLS BE COVERED WITH FILL MATERIAL. ANY FILL MATERIAL THAT IS PLACED AGAINST THE CONTROLS SHALL BE IMMEDIATELY REMOVED.
8. A LINE OF STAKED, UNTRENCHED HAY BALES SHALL BE INSTALLED ALONG THE INSIDE TOE OF DRAINAGE BASIN SLOPES UPON FINAL GRADING AND SOILS INSTALLATION AS CONDITIONS AND SEASONAL TIMING WARRANT. THIS SITUATION TYPICALLY WILL APPLY WHERE SLOPES EXCEED FIVE FEET IN ELEVATION. THE BALES MUST REMAIN IN PLACE UNTIL THE GIVEN SLOPE HAS SUFFICIENTLY STABILIZED.
9. ALL MATERIALS STOCKPILES TO REMAIN IDLE FOR MORE THAN 20 CONSECUTIVE DAYS ARE TO BE RINGED WITH EITHER TRENCHED AND STAKED SILT FENCE OR STAKED HAY BALES.
10. NO CONSTRUCTION EQUIPMENT OR MATERIALS STOCKPILES UNRELATED TO WETLAND REPLICATION AND ENHANCEMENT ACTIVITIES ARE TO BE STORED WITHIN THE 100-FOOT BUFFER ZONE OF WETLAND RESERVE AREAS.
11. ALL DISTURBED SOILS NOT DESIGNATED FOR OTHER SURFACE TREATMENT ARE TO BE LOAMED AND SEEDED IMMEDIATELY FOLLOWING FINAL GRADING. PLANTABLE LOAM SHALL BE APPLIED AT A DEPTH OF FOUR INCHES.
12. FOR AREAS TO BE HYDROSEED, THE HYDROSEED MIX SHALL CONTAIN AN APPROPRIATE TACIFYING AGENT. STRAW MULCH SHALL BE SPREAD AS NEEDED AT THE DISCRETION OF THE ENGINEER/BIOLOGIST AND/OR CONSERVATION AGENT.
13. ALL EROSION AND SEDIMENTATION CONTROLS MUST BE PROPERLY MAINTAINED, AND THE STRICTEST PRECAUTION MUST BE TAKEN TO AVOID AND MINIMIZE THE TRANSPORT OF SEDIMENTS TO WETLAND RESERVE AREAS AND CLOSED DRAINAGE SYSTEMS THROUGHOUT ALL PHASES OF CONSTRUCTION.
14. EROSION AND SEDIMENTATION CONTROLS AND DRAINAGE STRUCTURES AND THEIR INLET AND OUTLET CONTROLS ARE TO BE INSPECTED WEEKLY AND IMMEDIATELY FOLLOWING PRECIPITATION EVENTS RESULTING IN RAINFALL OF >0.25". THE STORMWATER POLLUTION PREVENTION PLAN (SWPPP) PREPARED FOR THE PROJECT SHALL REMAIN ON SITE AND MUST BE ADHERED TO THROUGH ALL STAGES OF CONSTRUCTION. SITE MONITORING AND REPORTING SHALL BE AS SPECIFIED IN THE SWPPP AND ON THESE PLANS AND IN ACCORDANCE WITH APPLICABLE REGULATIONS.
15. EROSION AND SEDIMENTATION CONTROLS ARE TO REMAIN IN PLACE UNTIL ALL SOILS HAVE STABILIZED AND SHALL BE REMOVED ONLY UPON AUTHORIZATION FROM THE ENGINEER/BIOLOGIST AND/OR THE CONSERVATION AGENT.

GENERAL CONSTRUCTION NOTES

1. THE LOCATION AND DEPTH OF EXISTING UTILITIES HAVE BEEN PLOTTED FROM THE LATEST AVAILABLE INFORMATION. THE UTILITY LOCATIONS ARE APPROXIMATE AND MAY NOT BE ALL INCLUSIVE. THE CONTRACTOR SHALL CHECK AND VERIFY THE LOCATIONS OF ALL EXISTING UTILITIES, BOTH OVERHEAD AND UNDERGROUND, AND "DIG-SAFE" MUST BE NOTIFIED PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS.
2. ANY DAMAGE TO EXISTING UTILITIES SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, AND ANY COSTS ASSOCIATED WITH THE REPAIR OF DAMAGED UTILITIES SHALL BE THE CONTRACTOR'S RESPONSIBILITY WITH NO ADDITIONAL COST TO THE OWNER. NO EXCAVATION SHALL COMMENCE UNTIL ALL UTILITY COMPANIES AND/OR TOWN DEPARTMENTS WHOSE FACILITIES MAY BE AFFECTED BY THE WORK TO BE PERFORMED BY THE CONTRACTOR ARE NOTIFIED AT LEAST 12 HOURS IN ADVANCE.
3. IT SHALL BE THE CONTRACTOR'S SOLE RESPONSIBILITY TO OBTAIN AND PAY FOR ANY AND ALL PERMITS REQUIRED BY THE STATE OF MASSACHUSETTS AND THE TOWN OF SEEKONK PRIOR TO COMMENCING ANY CONSTRUCTION OPERATIONS.
4. ALL SITE WORK, INCLUDING BUT NOT LIMITED TO, BITUMINOUS PAVEMENT, GRAVEL, DRAINAGE PIPE AND STRUCTURES, WATER LINE INSTALLATION, PAVEMENT SAWCUTTING, ETC. SHALL CONFORM TO THE MASSACHUSETTS HIGHWAY STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, 1995 EDITION (WITH LATEST ADDENDA), THE REGULATIONS GOVERNING THE SUBDIVISION OF LAND IN THE TOWN OF SEEKONK, MA DATED AUGUST 2002 AND THE RULES AND REGULATIONS OF THE SEEKONK WATER DISTRICT.
5. THE CONTRACTOR SHALL BE RESPONSIBLE FOR REMOVING AND LEGALLY DISPOSING (R&D) ALL MATERIALS TO INCLUDE BUT NOT LIMITED TO, TREES, STUMPS, UNSUITABLE MATERIAL, BITUMINOUS PAVEMENT, ETC.
6. ALL CONSTRUCTION WORK SHALL BE PERFORMED IN THE DRY. THE CONTRACTOR SHALL PROVIDE, OPERATE, AND MAINTAIN ALL PUMPS, DRAINS, WELL POINTS, SCREENS, OR OTHER FACILITIES NECESSARY TO CONTROL, COLLECT, AND DISPOSE OF ALL SURFACE AND SUBSURFACE WATER ENCOUNTERED IN THE PERFORMANCE OF THE WORK (SEE SWPPP).
7. STOCKPILES OF EARTH MATERIALS SHALL NOT BE LOCATED ADJACENT TO DRAINAGE STRUCTURES AND/OR WETLAND AREAS.
8. ALL DISTURBED AREAS OUTSIDE THE PROPOSED PAVEMENT AREAS SHALL RECEIVE A MINIMUM 4 INCHES OF LOAM AND SEED.
9. UNLESS OTHERWISE NOTED, ALL DRAINAGE PIPE WILL BE HIGH DENSITY POLYETHYLENE (HDPE), SMOOTH INTERIOR, AND UNLESS NOTED OTHERWISE ALL DRAINAGE STRUCTURES SHALL CONFORM TO THOSE INDICATED ON THE PLANS AND THE TOWN OF SEEKONK AND MASS HIGHWAY STANDARDS.
10. ANY ITEMS OF WORK NOT SPECIFICALLY INDICATED ON THE PLANS BUT REQUIRED FOR THE COMPLETE CONSTRUCTION OF THE PROJECT WILL BE CONSIDERED INCIDENTAL TO THE PROJECT. IT WILL BE THE CONTRACTOR'S RESPONSIBILITY TO VERIFY ALL EXISTING SITE CONDITIONS.
11. THE CONTRACTOR IS RESPONSIBLE FOR DUST CONTROL. THIS OPERATION SHALL INCLUDE SWEEPING ALL PAVED SURFACES LOCATED IN THE SITE AREA AND ANY OFF-SITE AREAS THAT ARE IMPACTED BY SITE CONSTRUCTION ON A REGULAR BASIS. ONLY CLEAN POTABLE WATER SHALL BE USED TO CONTROL DUST. CHEMICAL DUST SUPPRESSANTS SHALL NOT BE USED.

DRAINAGE WORK:

1. THE DRAINAGE SYSTEM SHALL BE INSTALLED BY STARTING AT THE DOWNGRADIENT END AND WORKING UPGRADE.
2. RIP-RAP SHALL BE INSTALLED AT PIPE INLETS AND OUTLETS IMMEDIATELY AFTER INSTALLING PIPE. STAKED HAY BALES SHALL BE INSTALLED AT THE OUTFALL OF ALL TEMPORARY BASINS AND SHALES AND SHALL REMAIN IN PLACE UNTIL ALL TRIBUTARY AREAS ARE STABILIZED.
3. RUNOFF SHALL NOT BE ALLOWED TO ENTER PIPES FROM UNSTABILIZED SURFACES.
4. TRENCH EXCAVATIONS SHALL BE LIMITED TO THE MINIMUM LENGTH REQUIRED FOR DAILY PIPE INSTALLATION. ALL TRENCHES SHALL BE BACK FILLED AS SOON AS POSSIBLE. THE UPSTREAM ENDS OF PIPES SHALL BE CLOSED NIGHTLY WITH FLYWOOD CAPS.
5. IT IS IMPORTANT THAT BINDER COURSE BE INSTALLED IN ROADWAYS AS SOON AS FEASIBLE AS THESE AREAS WILL FUNCTION AS A CONDUIT FOR RUNOFF. FRAME & GRATE/COVER SETS MUST BE INSTALLED TO THE ELEVATION OF THE TOP OF THE BINDER COURSE. A SECOND ADJUSTMENT WILL BE NECESSARY PRIOR TO INSTALLING THE SURFACE COURSE.

WATER SUPPLY AND SITE UTILITIES:

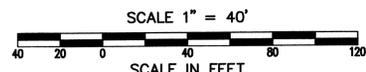
1. CARE SHALL BE TAKEN TO ASSURE THAT UTILITY TRENCHES DO NOT CHANNELIZE RUNOFF TOWARDS EXISTING STREETS AND OTHER OFF-SITE SENSITIVE AREAS.
2. WATER LINES AND APPURTENANCES SHALL BE INSTALLED IN ACCORDANCE WITH THE CONSTRUCTION SPECIFICATIONS AND THE SEEKONK WATER DISTRICT.

SEEDING AND LANDSCAPING:

1. LANDSCAPING SHALL OCCUR AS SOON AS POSSIBLE AFTER GENERAL CONSTRUCTION OPERATIONS IN ORDER TO PROVIDE PERMANENT STABILIZATION OF DISTURBED SURFACES.
2. THE CONTRACTOR SHALL UTILIZE SLOPE STABILIZATION METHODS AND MATERIALS THAT MAY BE ADJUSTED TO VARYING SITE CONDITIONS. EROSION CONTROL BLANKETS OR HIRAFI HIRAFET (OR SIMILAR PRODUCTS) SHALL BE MADE AVAILABLE ON SITE FOR EMERGENCY USE.
3. IF THE SEASON OR ADVERSE WEATHER CONDITIONS DO NOT PERMIT PROPER GROWTH OF VEGETATION, TEMPORARY MULCHING WITH STRAW OR OTHER METHODS SHALL BE PROVIDED.
4. ALL DISTURBED SURFACES TO BE PLANTED SHALL RECEIVE A MINIMUM OF 4 INCHES OF TOPSOIL WITH THE SURFACE SMOOTHED TO THE SPECIFIED GRADES.
5. SEED APPLICATION SHALL BE IN ACCORDANCE WITH THE MANUFACTURERS DIRECTIONS.

RECOMMENDED STORMWATER MAINTENANCE SCHEDULE

1. THE ROADWAY, DRIVEWAY, AND PARKING AREAS SHALL BE SWEEPED CLEAN MONTHLY WITH A HIGH EFFICIENCY VACUUM SWEEPER TO REMOVE CONTAMINANTS AND SOIL FINES. IT IS PARTICULARLY IMPORTANT TO SCHEDULE SPRING SWEEPINGS TO REMOVE RESIDUAL SAND RESULTING FROM WINTER SNOW AND ICE REMOVAL OPERATIONS.
2. NO WINTER SANDING SHALL BE ALLOWED ON THESE SURFACES. SALT USE SHALL BE MINIMAL. WHEN NECESSARY TO LOOSEN SOIL ON THE PAVEMENT SURFACE, JET WASHING SHALL BE USED IN COMBINATION WITH VACUUM SWEEPING.
3. INSPECT THE POROUS PAVEMENT SURFACES BIANNUALLY FOR DETERIORATION OR SPALLING. REPAIRS TO THESE AREAS WITH SHALL NOT BE WITH SIMILAR MATERIALS. STANDARD IMPERVIOUS PAVEMENTS SHALL NOT BE ALLOWED FOR PATCHING IN THESE AREAS.
4. INSPECT CATCH BASINS AND DRAIN MANHOLES BIANNUALLY (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 SYSTEMS.
5. INSPECT INTERCONNECTION PIPING ON AN ANNUAL BASIS, AND REMOVE ALL FINES OR OTHER CONTAMINANTS. A LATE SPRING OR EARLY SUMMER INSPECTION IS PREFERABLE. PROVIDE TRAPS TO CATCH SEDIMENT AND DEBRIS REMOVED DURING CLEANING. SEDIMENT SHALL NOT BE ALLOWED TO FLOW INTO DOWNSTREAM BMP'S.
6. INSPECTION AND CLEANING OF PROPRIETARY STORMWATER TREATMENT DEVICES ARE TO BE IN ACCORDANCE WITH THE MANUFACTURER RECOMMENDATIONS.
7. INSPECT THE FOREBAYS, INFILTRATION BASINS, AND INFILTRATION TRENCHES TWICE ANNUALLY. REMOVE ANY SEDIMENT, LEAVES, AND DEBRIS. SPRING AND FALL INSPECTIONS ARE PREFERABLE.
8. LANDSCAPED AREAS SHALL BE WELL MAINTAINED TO PREVENT SOIL FROM BEING TRANSPORTED ONTO THE PAVEMENT SURFACE. THIS IS PARTICULARLY IMPORTANT IN AREAS SURROUNDING POROUS PAVEMENT.
9. INSPECT NET BASINS ANNUALLY TO ENSURE THEY ARE OPERATING AS DESIGNED. CHECK FOR SUBSIDENCE, EROSION, CRACKING OR TREE GROWTH ON ENBANKMENTS, DAMAGE TO OUTLETS, AND EMERGENCE OF INVASIVE PLANT SPECIES. MAKE THE NECESSARY REPAIRS IMMEDIATELY. REMOVE ACCUMULATED SEDIMENT FROM THE BASINS AS NECESSARY, AND AT LEAST EVERY TEN YEARS.
10. INFILTRATION BASIN SHALL BE MOWED AT LEAST TWICE A YEAR DURING THE GROWING SEASON. REMOVE GRASS CLIPPINGS AND ACCUMULATED ORGANIC MATTER. USE DEEP TILLING TO BREAK UP CLOGGED SURFACE AND REVEGETATE IMMEDIATELY, WHEN NECESSARY.



	DRAINAGE AND UTILITY PLAN NO. 3 GREENBRIER CONDOMINIUMS PREPARED FOR RI SEEKONK HOLDINGS, LLC FALL RIVER AVENUE & COLE STREET SEEKONK, MASSACHUSETTS	
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