

#### CONSTRUCTION NOTES:

- 1.) THE CONTRACTOR MUST CONTACT CALL-BEFORE-YOU-DIG AT 1-800-922-4455 AT LEAST 48 HOURS PRIOR TO THE START OF ANY CONSTRUCTION ACTIVITY.
- 2.) OWNER OR CONTRACTOR IS RESPONSIBLE FOR OBTAINING ALL NECESSARY PERMITS, INSPECTIONS
- 3.) OWNER OR CONTRACTOR TO VERIFY ALL DIMENSIONS, LOCATIONS AND INFORMATION CONTAINED IN THESE PLAN PRIOR TO THE START OF CONSTRUCTION . THE ENGINEER SHALL BE NOTIFIED OF ANY
- 4.) ALL PAVEMENT AREAS TO BE CONSTRUCTED PER THE PAVEMENT DETAIL CONTAINED ON SHEET 2.
- 5.) ALL PAVED PARKING SPACES TO BE MARKED WITH CLEARLY VISIBLE STRIPING A MINIMUM OF 4" WIDE.
- 6.) ALL REGULAR PARKING SPACES SHALL BE 9FT. WIDE BY 18 FT. LONG.

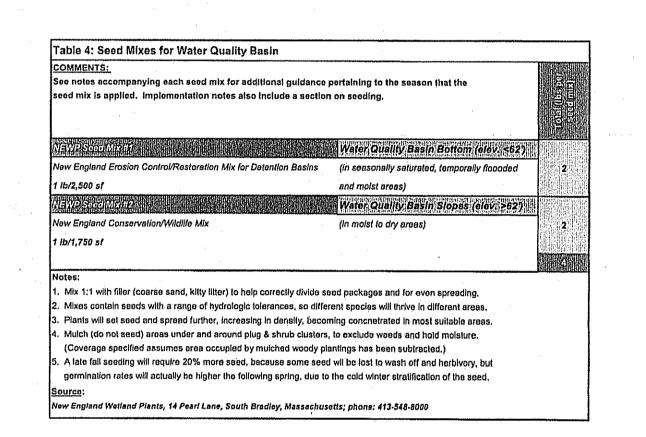
DISCREPANCIES PRIOR TO THE START OF CONSTRUCTION.

- 7.) THE LOCATION OF THE PROPOSED STORMWATER BASIN SHALL BE STAKED IN THE FIELD PRIOR TO
- 8.) AN AS-BUILT SURVEY OF THE COMPLETED STORMWATER BASIN SHALL BE SUBMITTED TO THE TOWN OF SOUTH WINDSOR FOR REVIEW.

| Hydrologic Zones: Zone A; Saturated/Shallow inundation;  |      |                     |             |      |         |                | ļ.     |
|--|------|---------------------|-------------|------|---------|----------------|--------|
| Zone B: seasonally saturated, moist  |      |                     |             |      |         |                |        |
| Zone B: seasonally saturated, moist Zone C: moderately well drained, usually moist; Zone D: well-drained |      |                     |             |      |         |                |        |
|  |      | •                   |             |      |         | Water<br>Basin | TotalS |
| Scientific Name  | Zone | Common Name         | <u>Form</u> | NMI. | Spacing | <u>% 6</u>     | 2      |
| Carex Iupulina   | В    | Hop sedge           | 2" plug     | FACW | 2'00    | 50             | 50     |
| Eutrochlum purpureum   | В    | Purple Joe Pye weed | 2" plug     | FAC  | 3,OC    | 50             | 50     |
| Vernonia noveborecensis  | В    | New York Ironweed   | 2" plug     | FACW | 3'OC    | 50             | 50     |
| Total:   |      |                     |             |      |         | 150            |        |

1. Plant between May 15 and June 30 for herbaceous species. July planting will need watering through end of August. 2. Purchased woody material may be installed either in the spring (April 15th to June 15th), or in the fall (August 15th to Oct 15th) Plant in same species groupings of two to three shrubs, ten to filteen for herbs

Use seed mixes from New England Welland Plants, Inc., South Hadley, MA (see Table 4), at specified seeding rate. 5. No seeding or plants in 3' diameter circle around each shrub and tree,1' around plugs; mulch with shred, bark or nat, wood mulch 6. Water and weed as needed during first growing season.



TABLES OF PLANTING MATERIALS FOR WATER QUALITY BASIN

| Table 1. Trees Hydrologic Zones: Zone A:                           |                         |  | •                | saturațed, mol                        | st          |             |                        |            |
|--|-------------------------|--|------------------|---------------------------------------|-------------|-------------|------------------------|------------|
| Zone C: moderately well drat<br>Scientific Name<br>FULL SIZE TREES | ined, usually r<br>Zone | noist; Zone D; well-drained<br>Common Namo | i<br><u>Size</u> | Shade<br>tolerant?                    | <u>NWI*</u> | Form        | Water Quality<br>Basin | TotalS     |
| Quercus palustris  | B,C                     | Pin Oak                                    | 4'-6'            | Y                                     | FACW        | nursary pot | <del></del>            | 1 7        |
| Acer rubrum  | D                       | Red maple                                  | 4'-6'            | Ý                                     | FACU-       | nursery pot | 1                      | 7          |
| Total:   |                         |  |                  | · · · · · · · · · · · · · · · · · · · |             |             | 2                      | THE PERSON |
| SMALL TREES/LARGI  | SHRUBS                  |  |                  | <del></del>                           |             |             |                        |            |
| Sallx discolor   | B,C                     | Pussy willow                               | 3'-4'            | N                                     | FACW        | nursory pot | 2                      | 2          |
| Total:   |                         |  |                  |                                       |             |             | 2                      | 1882       |
| Table 2. Shrubs  |                         |  |                  |                                       |             |             |                        | 1          |
| Scientific Name  | Zono                    | Common Name                                | Size             | <u>Shada</u><br>tolerant?             | NWI*        | Form        |                        | Totals     |
| MEDIUM TO LOW SHE  |                         |  |                  |                                       |             |             |                        |            |
| Clethra alnifolia  | B,C                     | Sweet pepperbush                           | 3'-4'            | Y                                     | FAC+        | pot         | 2                      | 2          |
| Lyonia ligustrina  | B,C                     | Maleberry                                  | 3'-4'            | Y/N                                   | FACW        | pot         | 2                      | 2          |
| Viburnum lentago   | B,C                     | Nannyberry                                 | 3'-4'            | Y                                     | FAC         | pot         | 2                      | 2          |
| Swide recemose   | B,C                     | Gray dogwood                               | 3'-4'            | Y                                     | FAC         | pol         | 6                      | 6          |

EROSION CONTROL CONSTRUCTION SEQUENCE PLAN SITE DEVELOPMENT
NOTE: ALL EROSION AND SEDIMENT CONTROL ACTIVITIES SHALL CONFORM TO THE METHODS OUTLINED IN THE 2002 CONNECTICUT GUIDELINES FOR EROSION AND SEDIMENT CONTROL MANUAL.

1.) COORDINATE MARKING OF LIMITS OF DISTURBANCE BY A LICENSED LAND SURVEYOR. SUPPLY TOWN OF SOUTH WINDSOR EROSION CONTROL OFFICER WITH A LETTER FROM THE SURVEYOR CERTIFYING THE LIMITS OF DISTURBANCE WERE MARKED IN ACCORDANCE WITH THE APPROVED PLAN.

2.) CLEAR TREES AS REQUIRED.

3.) PRIOR TO SOIL DISTURBANCE INSTALL EROSION CONTROL MEASURES, SILT FENCE AND ANTI-TRACKING PAD (SEE PLAN DETAILS AND LOCATIONS). ADDITIONAL MEASURES MAY BE REQUIRED AS SITE CONDITIONS REQUIRE. COORDINATE AN INSPECTION OF INSTALLED MEASURES WITH THE TOWN OF SOUTH WINDSOR EROSION CONTROL OFFICER. SUPPLY THE TOWN OF SOUTH WINDSOR EROSION CONTROL OFFICER WITH THE NAME AND PHONE NUMBER OF A CONTACT PERSON RESPONSIBLE FOR THE EROSION CONTROL MEASURES.

3.) PERIODICALLY AND AFTER LARGE RAIN EVENTS INSPECT EROSION CONTROL MEASURES AND

- 4.) GRUB AND STRIP TOPSOIL. STOCKPILE TOPSOIL IN AREAS INDICATED ON THE APPROVED PLAN.
- 5.) PARTLY CONSTRUCT DETENTION BASIN AND RAIN GARDEN WITH NO DIRECT OUTLETS TO SERVE AS TEMPORARY SILT POOLS DURING CONSTRUCTION.
- 6.) CONSTRUCT AND STABILIZE DRIVEWAY GRAVEL BASE.
- 7.) CONSTRUCT BUILDING, UNDERGROUND UTILITY CONNECTIONS, PARKING AREA, FINAL DETENTION BASIN, RAIN GARDEN AND OTHER IMPROVEMENTS AS SHOWN.

8.) SPREAD STOCKPILED TOPSOIL. MACHINE RAKE, FERTILIZE, SEED AND MULCH DISTURBED AREAS. USE GRASS SEED THAT IS ACCEPTABLE FOR THE SITE CONDITIONS (I.E., SUN OR SHADE) AND THE SEASON OF THE YEAR IN WHICH THIS ACTIVITY IS COMPLETED. PROVIDE TEMPORARY STABILIZATION OF THE SITE ( I.e. STRAW OR HAY ETC..) IF THE TOPSOIL IS SPREAD DURING A TIME OF YEAR WHEN GRASS SEED WILL NOT GERMINATE. PROVIDE PERMANENT STABILIZATION WHEN WEATHER CONDITIONS ALLOW.

- 9.) REMOVE EROSION CONTROL MEASURES AFTER THE SITE HAS BECOME FULLY ESTABLISHED.
- 10.) ANY EXISTING DISTURBED AREAS MUST BE SEEDED WITH PERMANENT OR TEMPORARY GROUND COVER AND MULCHED BY OCTOBER 15.

11.) DEWATERING OPERATIONS, IF REQUIRED, SHALL UTILIZE A CRUSHED STONE INTAKE SUMP AND A TEMPORARY OUTLET SILT POOL LOCATED WITHIN THE LIMITS

OF DISTURBANCE. PREPARATION: FINE GRADE AND RAKE SOIL SURFACE TO REMOVE STONES LARGER THAN 2" IN DIAMETER INSTALL SEEDED EROSION CONTROL DEVICES SUCH AS SURFACE WATER DIVERSIONS AS REQUIRED.

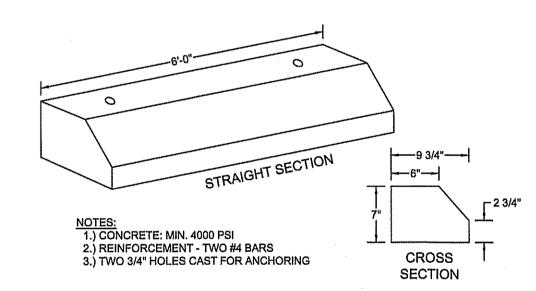
APPLY LIMESTONE AT A RATE OF 2 TONS/AC. OR 90 LBS./1000 SQ.FT. FERTILIZE WITH 10-10-10 AT A RATE OF 300 LBS./AC, OR 7.5 LBS. PER 1000 SQ.FT. WORK LIME AND FERTILIZER INTO SOIL UNIFORMLY TO A SEED APPLICATION: APPLY SEED MIXTURE FROM THE CHART BELOW BY HAND, CYCLONE SEEDER OR

HYDRO SEEDER. INCREASE SEED MIXTURE BY 10% IF HYDRO SEEDER IS USED. LIGHTLY DRAG OR ROLL THE SEEDED SURFACE TO COVER SEED. SEEDING SHOULD BE DONE BETWEEN THE TIMES SHOWN ON THE CHART BELOW. IF SEEDING CANNOT BE DONE DURING THESE TIMES, REPEAT MULCHING PROCEDURE BELOW UNTIL SEEDING CAN TAKE PLACE.

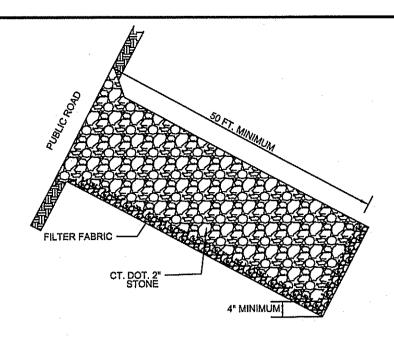
MULCHING: IMMEDIATELY FOLLOWING SEEDING, MULCH THE SEED SURFACE WITH STRAW OR HAY AT A RATE OF 2 TO 3 TONS/AC, SPREAD MULCH BY HAND OR MULCH BLOWER, PUNCH MULCH INTO SOIL SURFACE WITH A TRACK MACHINE OR DISK HARROW SET STRAIGHT UP. IF USING HYDRO SEED MIX USE TACTIFIER ADDITIVES TO ADHERE MULCH MATERIAL TO THE SURFACE.

|  |                                     | •   |   |
|--|-------------------------------------|---|---|
| SEED SELECTION:<br>USE LB/10<br>PERMANENT LAWN | 000 SQ. FT.<br>0.45<br>0.45<br>0.10 | SEED MIXTURE<br>KENTUCKY BLÜEGRASS<br>CREEPING RED FESCUE<br>PERENNIAL RYEGRASS | RECOMMENDED<br>SEEDING DATES<br>4/1-6/15<br>8/15-10/1 |
| SLOPES & COARSE LAWN                           | 0.45<br>0.05<br>0.45                | CREEPING RED FESCUE<br>RED TOP<br>TALL FESCUE                                   | 4/1-6/15<br>8/15-10/1                                 |
| SLOPES (NO MOWING)                             | 1.8<br>0.2                          | CREEPING RED FESCUE<br>RED TOP  | 4/1-6/15<br>8/15-10/1                                 |
| TEMPORARY COVER                                | 3.0                                 | WINTER RYE<br>OR  | 4/15-6/15,8/15-10/1                                   |
|  | 1.0                                 | ANNUAL RYEGRASS   | 3/1-6/15,8/1-10/15                                    |
|  |                                     |   |   |

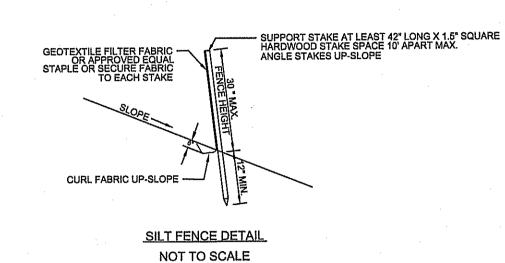
IF SEED IS PLANTED OUTSIDE THE RECOMMENDED SEEDING DATES IRRIGATION MAYBE REQUIRED AT A UNIFORM APPLICATION RATE OF 1 TO 2 INCHES OF WATER APPLIED PER APPLICATION, SOAKING THE GROUND TO A DEPTH OF 4 INCHES.

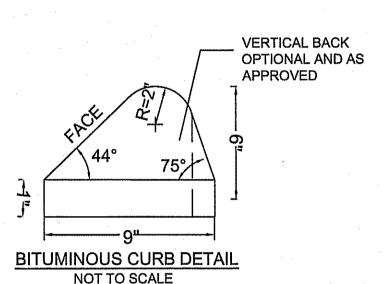


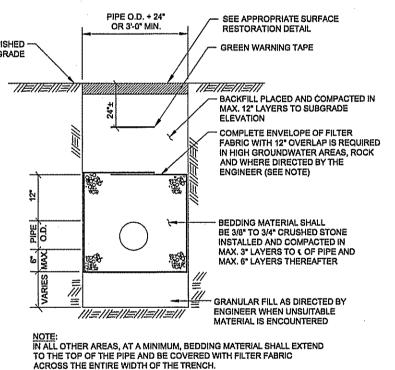
PRE CAST CONCRETE WHEEL STOP DETAIL NOT TO SCALE



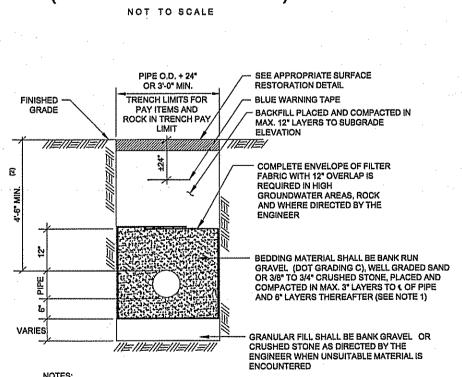
ANTI - TRACKING CONSTRUCTION ENTRANCE NOT TO SCALE







TYPICAL TRENCH DETAIL (SANITARY SEWER)

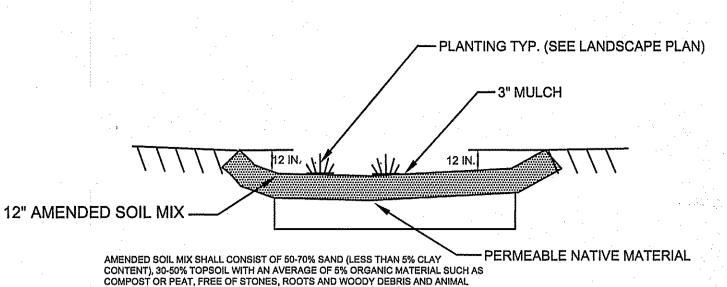


NOTES:

1. CRUSHED STONE SHALL ONLY BE USED IN HIGH GROUNDWATER CONDITIONS AS DIRECTED BY THE ENGINEER.

2. ALL WATER MAIN WITH LESS THAN 4'-6" OF COVER SHALL BE INSULATED UNLESS APPROVED OTHERWISE BY THE ENGINEER. SEE TYPICAL TRENCH DETAIL (INSULATED WATER) FOR ADDITIONAL

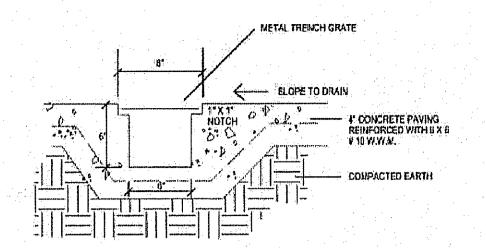
TYPICAL TRENCH DETAIL (WATER) NOT TO SCALE



WASTE. THE DEPTH OF THE AMENDED SOIL SHOULD BE APPROXIMATELY 4 INCHES BELOW THE BOTTOM OF THE DEEPEST PLANT ROOT BALL. RAIN GARDEN CROSS SECTION DETAIL

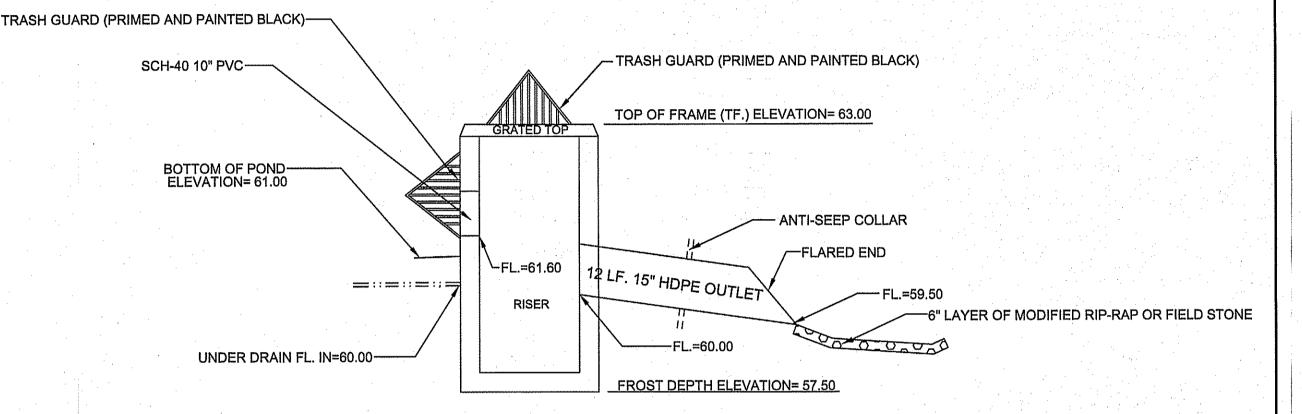
RAIN GARDEN MAINTENANCE PLAN: ACTIVITY SCHEDULE REMULCH VOID AREAS AS NEEDED WATER PLANTS DAILY UNTIL ESTABLISHED INSPECT SOIL AND REPAIR ERODED AREAS MONTHLY REMOVE LITTER, DEBRIS AND SEDIMENT MONTHLY REMOVE AND REPLACE DEAD AND DISEASED VEGETATION TWICE PER YEAR ADD ADDITIONAL MULCH ONCE PER YEAR

AT PROJECT COMPLETION

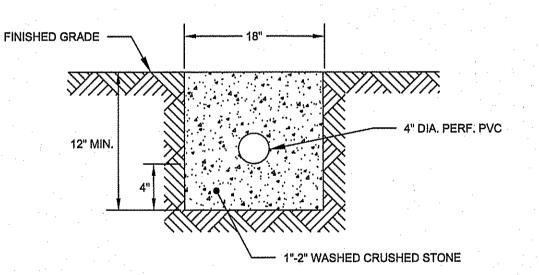


SLOPE BOTTOM OF TRENCH DRAFF TO THE WINTH EXISTING CRAINAGE

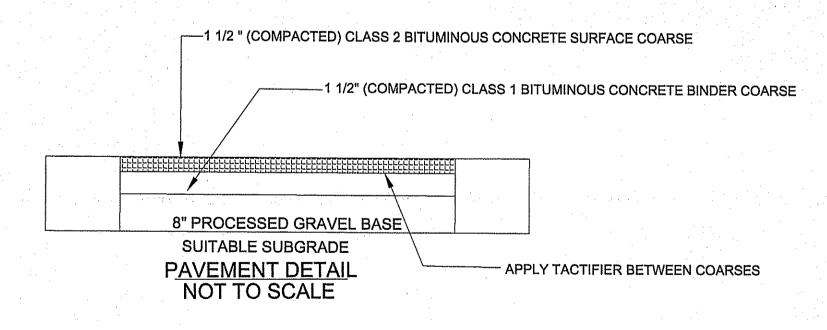
# DRIVEWAY TRENCH DRAIN DETAIL



### CROSS SECTION OF DETENTION BASIN OUTLET STRUCTURE NOT TO SCALE



## **DETENTION BASIN UNDERDRAIN**



| PLAN PREPARED FOR  |                  |                   |                   |  |  |  |
|--|------------------|-------------------|-------------------|--|--|--|
| BURNHAM REALTY, LLC  |                  |                   |                   |  |  |  |
| 396 BURNHAM STREET   |                  |                   | SOUTH WINDSOR, CT |  |  |  |
| CONSTRUCTION / E&S/ SEPTIC DETAILS   |                  |                   |                   |  |  |  |
| SCALE: NONE  | DATE: 10/23/2023 | FILE NO. 2021-134 | SHEET: 2 OF 2     |  |  |  |
| BUSHNELL ASSOCIATES LLC. CIVIL ENGINEERING AND LAND SURVEYING 563 WOODBRIDGE STREET MANCHESTER, CT. 06042 860-643-7875 |                  |                   |                   |  |  |  |
| REVISIONS: 1/3   | 1/2024, 2/8/2024 |                   | :                 |  |  |  |

## STORMWATER SYSTEM OPERATIONS AND MAINTENANCE PLAN:

WATER & WEED DETENTION / WATER QUALITY BASIN & RAIN GARDEN

REMOVE SEDIMENT FROM BASIN RAIN GARDEN AND TRENCH DRAIN

REMOVE AND REPLACE DEAD AND DISEASED VEGETATION

ADD ADDITIONAL MULCH

SCHEDULE FIRST GROWING SEASON AS NEEDED

SEMI ANNUALLY

ANNUALLY AS NEEDED

ANNUALLY AS NEEDED