

To: Conservation Commission and Planning Board  
From: Homeowners at the Cottages of Port Place  
Re: Project Review and Concerns

Updated April 29, 2021

18 Boyd Drive Subdivision - Evergreen Commons, LLC

**Project Review:**

1. Grading:
  - a. The grading of the site has been poorly executed.
  - b. There are many areas that do not drain and there are many areas that pond water.
  - c. Many homeowners have had water in their basements. Some have had water flowing into basement windows.
  - d. Many homeowners are experiencing erosion from roof run off. Gravel splash areas should be modified to
  - e. We have reviewed the site 24 hours after a rain and have noted areas that need to be regraded or dry wells added to eliminate standing water.

2. Grading behind lots 36, 37 and lots 5 and 6:

- a. There is standing water on the boundary of lots 36/37, standing water at the rear of lot 36/37 and standing water at the rear boundary of lots 36/37 after a rainstorm. Water ponds for over 5 days after it rains. A dry well should be installed at the rear boundary of lots 36 and 37 and the side and rear of lot 36 and 37 should be regraded to pitch to the dry well. Pitch the grade at 2% minimum per code to the drywell.

**Water continues to pond in this area. The installation of a dry well and the regrading of this area has not been completed.**

**Trees were planted in the low area in April 2021. These trees will eventually die due to ponding water.**

- b. There is standing water behind the house at lot 5 and at the common property line of lot 2 after a rainstorm. Water ponds for over 3 days after it rains. A dry well should be installed behind the home at lot 5. The back yard should be regraded to pitch to the dry well. Pitch the grade at 2% minimum per code to the drywell.

**A dry well and regrading has been completed by the developer.**

- c. There is standing water behind the house at lot 6 and at the common property line of lot 3 after a rainstorm. Water ponds for over 3 days after it rains. A dry well should be installed behind the home. The back yard should be regraded to pitch to the dry well. Pitch the grade at 2% minimum per code to the drywell.

**Work has been done in this area as part of the lot 5 drywell work to eliminate water ponding.**

- d. At the property line between lots 6/7 and lot 3 there is standing water. Remove the trees in the low area and regrade this area to pitch to Retention Area B at 2% minimum or install a drywell.

**Work has been done in this area as part of the lot 5 drywell work to eliminate water ponding.**

3. Grading of the center Common area:

- a. There are a number of areas that water ponds for over 3 days in the common area. These areas should be regraded.

4. Grading/Slope of walkways between lots 16/17, lots 20/21 and north west of lot 24:

- a. American with Disabilities Act federal code requires that all walk be less than 5%. The walks in these areas are over 5%. These walks must be reconstructed to be less than 5%.
- b. See attached memo.

**The path west of Lot 24 was reconstructed to comply with ADA slope but the path has not been constructed to ADA cross slope requirements of less than 2%.**

5. Walks at the bridges: stone dust is eroding at the bridge stone dust interface. Redo or add boulders so that stone dust does not erode.
6. Common Area between homes and Route 95:
  - a. The vegetation coverage is sparse and erosion control measures have not been installed around the water features, retention areas and improved isolated wetlands (storm water features). It appears that soil from around these features has eroded into the storm water features potentially altering the below water grading and compromising the performance of the storm water features.
    - 1) Will erosion control measures be installed to keep soils from eroding into the storm water features until there is vegetative cover?
    - 2) Will an underwater survey be done to determine if the contours of the storm water features are as designed?
    - 3) With soil eroding into the storm water features, has the soil and stone installed on the bottoms and sides of the storm water features been compromised?
  - b. Vegetation in the Improved Isolated Wetland Area:
    - 1) Has the Improved Isolated Wetland Area been designed to have vegetation within the water area of the feature or should the vegetation that is growing in the Improved Isolated Wetland Area be removed?
7. Sidewalks: remove snap caps and install sealant.
8. Landscaping:
  - a. Many trees/shrubs are in poor condition or dying.
    - 1) Will all of the plants be inspected before final acceptance by the City and will plants in poor health be replaced?
  - b. Many trees have not been installed as per the details shown on the plans:
    - 1) Plant pits have not been dug as large as shown on the drawings.
    - 2) Many trees have been installed with the root crown too low as related to the surrounding grade compromising their growth and future survivability.
    - 3) Bark mulch saucers have not been installed around all of the trees.
    - 4) Where bark mulch saucers have been installed they have not been installed to the thickness and as per the details shown on the drawings. Excess mulch around tree is detrimental to survivability of the trees.
    - 5) Tree stakes have not been installed as shown on the drawings.
9. Dead trees and brush: Cut down dead trees and remove dead branches and brush from the edges of the disturbed area around the edges of the entire site.
10. Clean up: Construction debris and trash needs to be removed from the extents of the property.
11. Dust: There are soil piles and soil areas exposed that create a lot of dust. Exposed soil and soil piles should be stabilized to reduce the amount of dust during windy days.
12. Exposed piping and conduit: There is exposed piping and conduit above grade in the front yards of most of the homes. Work associated with these pipes and conduits should be completed or cut down and capped below grade.
13. Playground:
  - a. **The subdrainage mitigation proposed by the engineer dated April 12, 2021 (Hughes Environmental) is not adequate to solve the water issue. The play surface needs to be removed and flat drains need to be installed on top of the subgrade at 10 feet on center and connected to a drain pipe.**
  - b. The playground does not comply with the American with Disabilities Code.
  - c. **Mats providing ADA access to the equipment are inadequate and are not ADA code compliant.**
  - d. Refer to attached memo.

#### **Trees and Shrubs:**

1. Trees and shrubs have been flagged in the common areas with green tape that should be replaced. These trees are dead, have trunk damage/frost cracks or have 25% or more of the crown of the tree dead. All trees and shrubs should be evaluated before acceptance by the City and replaced.

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2. We have flagged trees with pink tape that although technically not dead look dead because the leaves of the trees dropped each year around June. These trees are struggling and will eventually die. They were not a good choice for this environment and should be replaced.

3. Many trees and shrubs have not been installed as per the attached detail as shown on C13 and L-6 of the Approved Drawings.

#### **Lawns and Grasses**

1. Many of the area that were seeded in the common areas and in the rear yards of the homes are filled with crab grass and weeds with very little growth of the seed mix required in the Planning Documents. These areas are to be seeded with New England Roadside Matrix, New England Conservation and Wildlife Mix, Showy Northern Native Wildflower and Grass Mix, New England Wetmix, and Fescue Blend. See attached plans L-1, L-5.

#### **Rain / Watering**

1. The soils in all areas are compacted. Water cannot infiltrate into the soil due to its compaction. Compaction of soils limits the ability of water to penetrate the soil and for seed to grow and for roots to grow into the soil. Typically roots are evident at least 6" into the soil if the soil is healthy. Most roots are in the top 2" and most roots are crabgrass roots.

#### **Soils:**

1. The subgrade was to be scarified 4" before the topsoil was installed as required in the Permit Drawings (See C15). This was not done by the developer. This requirement promotes water movement through the soil horizon and promotes root growth into the soil.
2. The homeowners conducted soil testing through UMASS in various areas throughout the community. The soils tests determined that:
  - a. The topsoils are low in organic material. The soils have 2.0 organic content or below. In order to grow healthy lawns and grasses the organic content should be 3.5 or above.
  - b. PH levels are below what is required in the Planning Documents. Planning Documents require a PH of 5.5-6.5. One sample was 5.4 and all others were 4.9 or below.
  - c. Macronutrients (Phosphorus, Potassium, Calcium, Magnesium and Sulfur) are very low.
  - d. The topsoil composition is primarily evenly graded sand. Soils that are primarily sand tend to be over compacted and do not allow water to penetrate through the soil to promote seed growth and root growth into the soil. Sandy soils are low in PH, Organic Content and Macronutrients.
3. Conclusion:
  - a) Lawns and grasses specified in the Planning Documents are not growing as required.
  - b) The topsoil is over compacted, low in PH, Organic Content and Micronutrients.
  - c) A qualified Agricultural Soils Scientist (not a landscaper) should take samples and make recommendations on how to manage the in place soil to correct the topsoil deficiencies.
  - d) After the recommendations from the Soil Scientist are implemented testing should occur at a later date as recommended by the Soil Scientist to determine if further actions are necessary.

#### **Project Closeout:**

**We request that these documents be prepared as soon as possible as outlined in the Permit Documents. The homeowners are taking over the HOA from the developer soon.**

1. We understand that there are many documents that are required from the developer as part to the permit process. The homeowners request that documents, in draft form and as early as possible be provided to the City and to the homeowners so that the homeowners can prepare for and understand responsibilities after the project is accepted by the City. Documents would include but not limited to:
  - a. Stormwater Management Operation and Maintenance Plan.
  - b. Open Space Management Plan: Written report by a registered Landscape Architect.
  - c. Open Space Preservation: Conservation Restriction.
  - d. 2020/2021 Operation and management plan for snow removal (required to be submitted to the city).
  - e. 2021 landscape maintenance and lawn fertilization plan (required to be submitted to the city).

**Irrigation – It is our understanding that the well currently being used for irrigation cannot be used as a water source.**

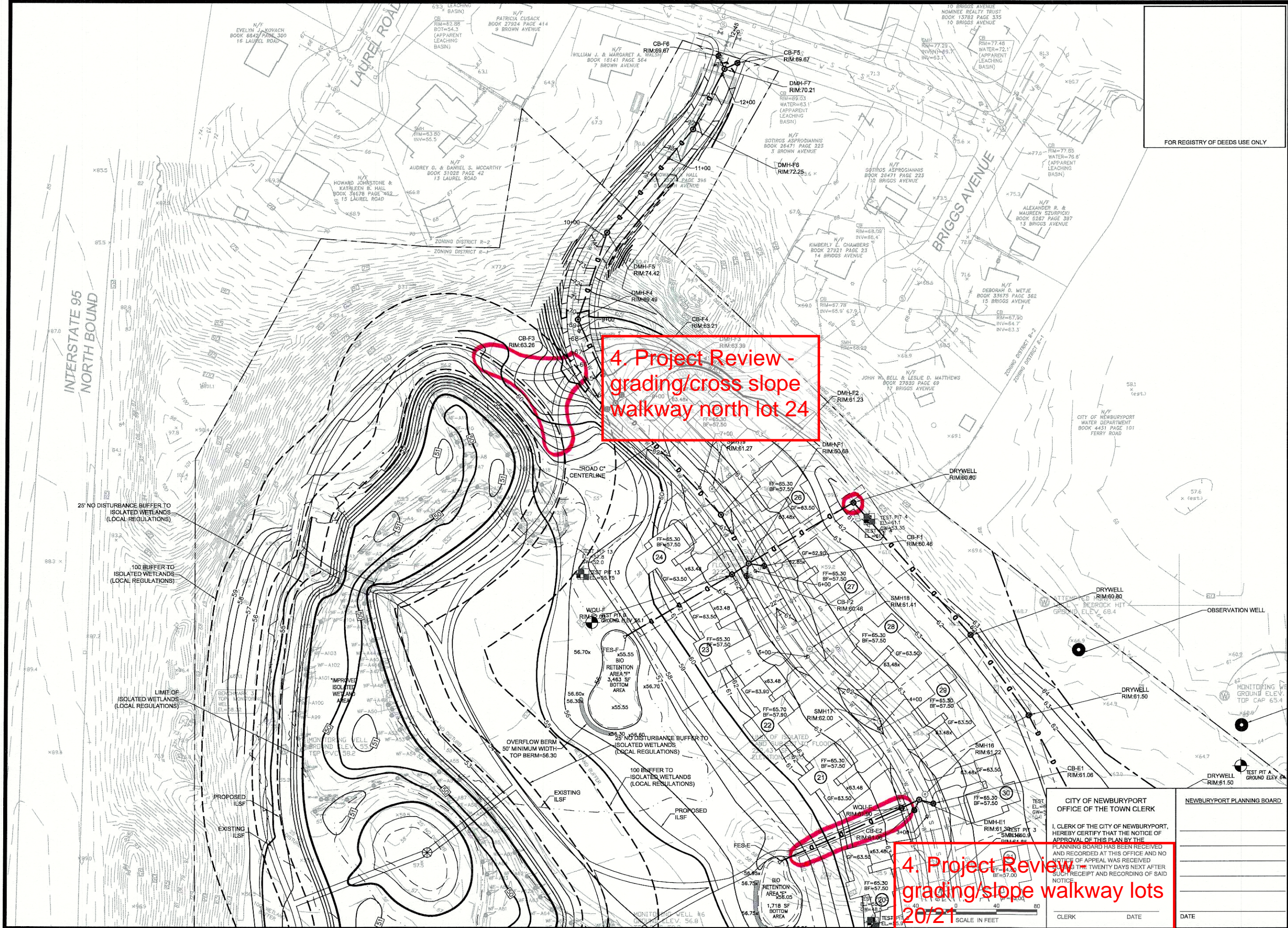
1. Can the system be connected to the city water line and new water meter?
2. What is the cost of a water meter?

3. Will we be charged water and sewer rates or just water rates for the water?

**Thank you**

**Homeowners of the Cottages at Port Place**

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**DCI**  
Design Consultants Inc.  
Samarville - Quincy - Newburyport  
www.dci-ma.com

PROJECT TEAM

18 BOYD DRIVE,  
SUBDIVISION  
NEWBURYPORT, MA

PREPARED FOR  
EVERGREEN  
COMMONS, LLC

PROJECT INFO

REV	DESCRIPTION	DATE
3.	CON.COM. PLANS	1/09/18
2.	REVIEW COMMENTS	11/16/17
1.	REVIEW COMMENTS	8/8/17



GRADING  
PLAN 2

STAMP:

CITY OF NEWBURYPORT  
OFFICE OF THE TOWN CLERK

NEWBURYPORT PLANNING BOARD

SHEET NAME:

**C3**

SHEET NO:

DR BY: WAK

CHK BY: SBS

PROJ NO: 2015-083

DATE: June 2, 2017

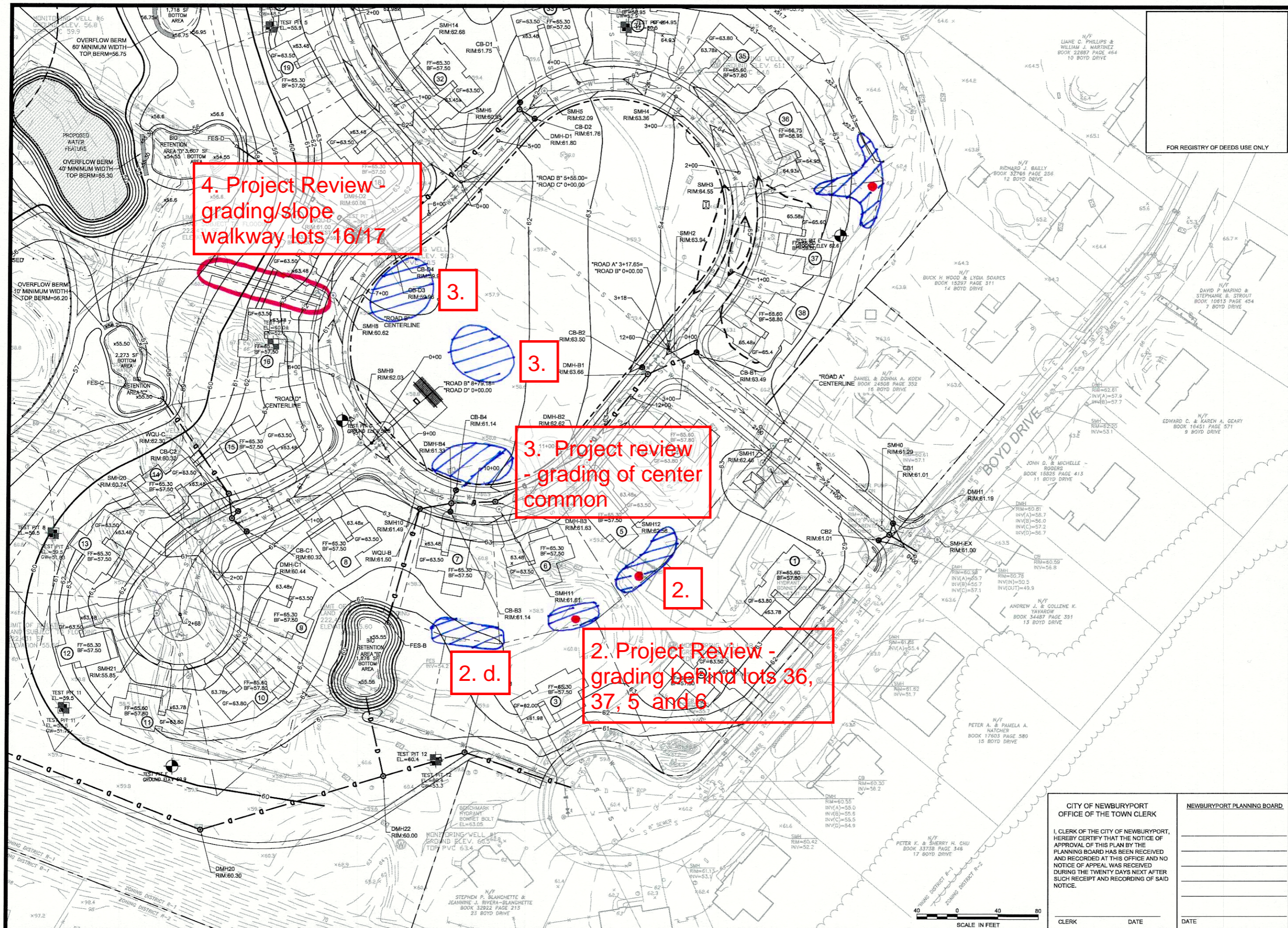
SCALE: 1"=40'

I, CLERK OF THE CITY OF NEWBURYPORT, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED WITHIN THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

CLERK \_\_\_\_\_ DATE \_\_\_\_\_

4. Project Review -  
grading/slope  
walkway lots  
20/21

SCALE IN FEET



N  
↑  
NORTH

Design Consultants Inc.  
Somerville - Quincy - Newburyport  
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PROJECT TEAM

18 BOYD DRIVE,  
SUBDIVISION  
NEWBURYPORT, MA

PREPARED FOR  
EVERGREEN  
COMMONS, LLC

PROJECT INFO

REV	DESCRIPTION	DATE
3.	CON.COM. PLANS	1/09/18
2.	REVIEW COMMENTS	11/16/17
1.	REVIEW COMMENTS	8/8/17



STAMP:

**GRADING  
PLAN 3**

CITY OF NEWBURYPORT  
OFFICE OF THE TOWN CLERK

I, CLERK OF THE CITY OF NEWBURYPORT, HEREBY CERTIFY THAT THE NOTICE OF APPROVAL OF THIS PLAN BY THE PLANNING BOARD HAS BEEN RECEIVED AND RECORDED AT THIS OFFICE AND NO NOTICE OF APPEAL WAS RECEIVED DURING THE TWENTY DAYS NEXT AFTER SUCH RECEIPT AND RECORDING OF SAID NOTICE.

CLERK \_\_\_\_\_ DATE \_\_\_\_\_

NEWBURYPORT PLANNING BOARD

SHEET NAME:

**C4**

SHEET NO: \_\_\_\_\_

DR BY: WAK

CHK BY: SBS

PROJ NO: 2015-063

DATE: June 2, 2017

SCALE: 1"=40'

P:\2015 PROJECTS\2015-063 18 BOYD ST. NEWBURYPORT\DWG\ENGINEERING\15-063 C2 GRADING PLAN 1.DWG





PROJECT NAME AND LOCATION

PORT PLACE, 18 BOYD DRIVE, NEWBURYPORT, MASSACHUSETTS

DESCRIPTION: THE PROJECT CONSISTS OF SUBDIVIDING A 3.68 ACRE PARCEL AND THE CONSTRUCTION OF ASSOCIATED SITE IMPROVEMENTS INCLUDING ROADWAY, DRAINAGE SYSTEMS AND UNDERGROUND UTILITIES.

SOIL CHARACTERISTICS

THE EXISTING SITE IS PRESENTLY DEVELOPED WITH A PORTION OF UNDEVELOPED WOODED AREA. SOILS CONSIST PRIMARILY OF WELL DRAINING SOILS.

DISBURSED AREA

THE TOTAL AREA TO BE DISBURSED IS APPROXIMATELY 206 ACRES.

SEQUENCE OF MAJOR ACTIVITIES

- 1. INSTALL TEMPORARY EROSION CONTROL SILT FENCE, STABILIZED CONSTRUCTION ENTRANCE, CLEAR CONSTRUCTION STORAGE AREA AND LANDSCAPE PLANTING IN OPEN SPACES OUTSIDE OF DISTURBED AREAS.
2. CLEAR EXISTING BUILDINGS, UTILITIES AND PAVEMENT AND FILL SITE TO ROUGH GRADE.
3. CLEAR AND SPUR SITE. NO NEED TO BE CLEARED NOT INDICATED ON PLANS. CONSTRUCTION SHALL VERIFY CLEARING REQUIREMENTS.
4. PRODUCE GRADING.
5. CONSTRUCT ACCESS DRIVES, STABILIZATION SYSTEM, UTILITIES AND GRADE FINISHING LOTS.
6. WHEN ALL CONSTRUCTION ACTIVITIES ARE COMPLETED AND SITE IS STABILIZED, REMOVE ALL SILT BARRIERS, SILT FENCES AND SEGMENT THAT HAS BEEN TRAPPED BY THESE DEVICES.

STABILIZATION AND STABILIZATION PRACTICES

- 1. STABILIZATION: AN AREA SHALL BE CONSIDERED STABILIZED ONCE ONE OF THE FOLLOWING HAS OCCURRED:
A. BASE COURSE GRAVELS ARE INSTALLED IN AREAS TO BE PAVED.
B. A MINIMUM OF 50% VEGETATIVE GROWTH HAS BEEN ESTABLISHED.
C. A MINIMUM OF 3" OF NON-ERODIBLE MATERIAL SUCH AS STONE OR RIP-RAP HAS BEEN INSTALLED.
D. EROSION CONTROL BLANKETS OR MATS HAVE BEEN INSTALLED.

- 2. STABILIZATION SHALL BE INSTALLED ON ALL LOAN DEPOSITS AND DISTURBED AREAS WHERE CONSTRUCTION ACTIVITY WILL NOT OCCUR FOR MORE THAN THIRTY (30) CALENDAR DAYS BY THE FOURTEENTH (14TH) DAY AFTER CONSTRUCTION ACTIVITY HAS COMPLETED OR TEMPORARILY CEASED IN THAT AREA. ALL DISTURBED AREAS SHALL BE STABILIZED WITHIN 90 DAYS OF INITIAL DISTURBANCE. ALL CUT AND FILL SLOPES AND ROADWAYS SHALL BE STABILIZED WITHIN 90 DAYS OF GRADING. STABILIZATION MEASURES TO BE USED INCLUDE:
A. TEMPORARY SEEDING.
B. MULCHING.
C. STONE RIP-RAP.
D. SILT MATTING.

DURING CONSTRUCTION, RUNOFF WILL BE DIVERTED AROUND THE SITE WITH EARTH OBER, PILING OR STABILIZED CHANNELS WHERE POSSIBLE. SHEET RUNOFF FROM THE SITE WILL BE FILTERED THROUGH SILT BARRIERS AND SILT FENCES. STORM WATER SHALL BE PROVIDED WITH BARRIERS FILTERS. ALL CATCH BASINS WILL BE COVERED WITH A GEOTEXTILE FABRIC PRIOR TO THE BASE PAVEMENT COURSE BEING LAYED. STONE OR RIP-RAP SHALL BE PROVIDED AT THE OUTLETS OF DRAINAGE PITS WHERE EROSION OCCURS.

OFF-SITE VEHICLE TRACKING

STABILIZED CONSTRUCTION ENTRANCES SHALL BE INSTALLED AT ALL EXITS FROM THE SITE AND MAINTAINED FOR THE DURATION OF CONSTRUCTION. TRACKS SHALL BE CLEANED PRIOR TO DEPARTURE FROM THE SITE.

TIMING OF CONTROLS/MEASURES

AS INDICATED IN THE SEQUENCE OF MAJOR ACTIVITIES AND SILT FENCES SHALL BE INSTALLED PRIOR TO COMMENCING ANY CLEARING OR GRADING OF THE SITE. STRUCTURAL CONTROLS SHALL BE INSTALLED CONCURRENTLY WITH THE SEEDING ACTIVITY. AREAS WHERE CONSTRUCTION ACTIVITY TEMPORARILY CEASES FOR MORE THAN THIRTY (30) DAYS WILL BE STABILIZED WITH A TEMPORARY SEED AND MULCH WITHIN 90 DAYS OF INITIAL DISTURBANCE. ALL SILT FENCES AND SILT BARRIERS AND ALL EARTHWORKS WILL BE REMOVED ONCE PERMANENT VEGETATION ESTABLISHMENT MEASURES TO BE USED INCLUDE.

INSTALLATION, MAINTENANCE AND INSPECTION PROCEDURES OF EROSION AND SEDIMENT CONTROLS

A. GENERAL

- 1. ALL CONTROL MEASURES WILL BE INSPECTED AT LEAST ONCE EACH WEEK AND FOLLOWING ANY STORM EVENT OF 0.3 INCHES OR GREATER.
2. A MAINTENANCE INSPECTION REPORT WILL BE MADE AFTER EACH INSPECTION.
3. THE CONTRACTOR SHALL BE RESPONSIBLE FOR INSPECTIONS, MAINTENANCE AND REPAIR ACTIVITIES, AND FILING OUT THE INSPECTION AND MAINTENANCE REPORT.

B. MAINTENANCE

- 1. STABILIZATION OF ALL SLOPES, CUTS AND PONDS IS REQUIRED PRIOR TO DIRECTING FLOW TO THEM.
2. ALL MEASURES WILL BE MAINTAINED IN GOOD WORKING ORDER. IF A REPAIR IS NECESSARY, IT WILL BE INSTALLED WITHIN 24 HOURS OF REPORT.
3. BUILT-UP SEDIMENT WILL BE REMOVED FROM SILT FENCE OR HAY BALE BARRIERS WHEN IT HAS REACHED ONE THIRD THE HEIGHT OF THE FENCE OR BALE.
4. ALL OVERFLOW DEVICES WILL BE INSPECTED AND ANY MEASURES PROMPTLY REPAIRED.
5. TEMPORARY SEEDING AND PLANTING WILL BE INSPECTED FOR BARE SPOTS, WASHOUTS, AND UNDESIRABLE GROWTH.

C. FILTERS

DISTURBED CONTRIBUTING AREA SHOULD NOT EXCEED 0.15 ACRES PER 100 LINEAR FEET OF FILTER BARRIER.

1. STRAW/HAY BALES

- A. SHEET FLOW APPLICATIONS
1. BALES SHALL BE PLACED IN A SINGLE ROW, LENGTHWISE ON THE CONTOUR, WITH ENDS OF ADJACENT BALES TIGHTLY ADJUTING ONE ANOTHER.
2. ALL BALES SHALL BE EITHER NEW-DRUM OR STRAW-TED. BALES SHALL BE INSTALLED SO THAT BRANCHES ARE ORIENTED AROUND THE SLOPE RATHER THAN DOWN THE SLOPE AND BOTTOMS OF THE BALES TO PREVENT DETERIORATION OF THE BRANCHES.
3. THE BARRIER SHALL BE EXTENDED AND BACKFILLED. A TRENCH SHALL BE EXCAVATED THE WIDTH OF A BALE AND THE LENGTH OF THE PROPOSED BARRIER TO A MINIMUM DEPTH OF FOUR (4) INCHES. THE BALES ARE PLACED AGAINST THE BARRIER. BAULTS OF SOIL SHALL CONFORM TO THE GRADE LEVEL ON THE DOWNHILL SIDE AND SHALL BE BUILT UP TO FOUR (4) INCHES AGAINST THE UPHILL SIDE OF THE BARRIER. BALES SHOULD BE PLACED WITH THE TOP FIVE FEET AWAY FROM THE TOE OF SLOPE.
4. EACH BALE SHALL BE PREVIOUSLY ANCHORED BY AT LEAST TWO (2) STAKES OR STAPLES TO THE UNDERLIERING SOIL. THE FIRST STAKE IN EACH BALE SHALL BE DRIVEN TOWARD THE PREVIOUSLY LAYED BALE TO FORCE THE BALES TOGETHER. STAPLES OR STAPLES SHALL BE DRIVEN DEEP DOWN INTO THE GROUND TO SECURELY ANCHOR THE BALES.
5. THE GAPS BETWEEN BALES SHALL BE COMBED (FILLED BY WOODING) WITH STRAW/HAY TO PREVENT WATER FROM ESCAPING BETWEEN THE BALES.

2. SILT FENCE

- A. SYNTHETIC FILTER FABRIC SHALL BE A PERVIOUS SHEET OF PROPYLENE, NYLON, POLYESTER OR ETHYLENE VINYL AND SHALL BE CERTIFIED BY THE MANUFACTURER OR SUPPLIER AS CONFORMING TO THE FOLLOWING REQUIREMENTS:
PHYSICAL PROPERTY TEST REQUIREMENTS
TENSILE STRENGTH 750 LB/INCH
TENSILE ELONGATION 20% MINIMUM
EXTRA STRENGTH 50 LB/LIN IN (WHD)
STAPLING STRENGTH 30 LB/LIN IN (WHD)
FLOW RATE 0.3 GAL/24 HRS (WHD)
REQUIREMENTS REDUCED BY 50 PERCENT AFTER SIX (6) MONTHS OF INSTALLATION.

SYNTHETIC FILTER FABRIC SHALL CONTAIN ULTRAVIOLET RAY INHIBITORS AND STABILIZERS TO PROVIDE A MINIMUM OF SIX (6) MONTHS OF EXPECTED USABLE CONSTRUCTION LIFE AT A TEMPERATURE RANGE OF 0 DEGREES F TO 120 DEGREES F.

B. THE HEIGHT OF A SILT FENCE SHALL NOT EXCEED THIRTY-SIX (36) INCHES.

C. THE FILTER FABRIC SHALL BE STAPLED TO THE GROUND OR ANCHORED TO THE LENGTH OF THE BARRIER TO AVOID THE USE OF JOISTS. WHEN JOISTS ARE NECESSARY, FILTER CLOTH SHALL BE STAPLED TO THE JOIST SUPPORTS, WITH A MINIMUM SIX (6) INCH OVERLAP AND SECURELY SEALED.

D. POSTS SHALL BE SPACED A MAXIMUM OF TEN (10) FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 18 INCHES).

E. A TRENCH SHALL BE EXCAVATED APPROXIMATELY SIX (6) INCHES WIDE AND SIX (6) INCHES DEEP ALONG THE LINE OF POSTS AND UPSTREAM FROM THE BARRIER.

F. WHEN STANDARD STRENGTH FILTER FABRIC IS USED, A WIRE MESH SUPPORT FENCE SHALL BE FASTENED TO THE POSTS BY THE POSTS USING HEAVY DUTY NAIL STAPLES AT LEAST ONE (1) INCH LONG, THE WIRE OR ROD NAILS, THE WIRE SHALL EXTEND TO THE UNDERLYING SURFACES.

G. THE "STANDARD STRENGTH" FILTER FABRIC SHALL BE STAPLED ON WIRE TO THE FENCE, AND SPACED (8) INCHES OF THE FABRIC SHALL BE EXTENDED INTO THE TRENCH. THE FABRIC SHALL EXTEND MORE THAN 24 INCHES ABOVE THE ORIGINAL GROUND SURFACE. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES.

H. WHEN EXTRA STRENGTH FILTER FABRIC AND CLOSER POST SPACING ARE USED, THE WIRE MESH SUPPORT FENCE MAY BE OMITTED. IN SUCH A CASE, THE FILTER FABRIC IS STAPLED ON WIRE DIRECTLY TO THE POSTS WITH ALL OTHER PROVISIONS OF ITEM (G) APPLYING.

I. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC.

J. SILT FENCES SHALL BE REMOVED WHEN THEY HAVE SERVED THEIR USEFUL PURPOSE, BUT NOT BEFORE THE UPFLOW AREA HAS BEEN PERMANENTLY STABILIZED.

3. SEQUENCE OF INSTALLATION

SEEDMENT BARRIERS SHALL BE INSTALLED PRIOR TO ANY SOIL OVERLAP OF THE CONTRIBUTING DRAINAGE AREA ABOVE THEM.

4. MAINTENANCE

A. STRAW/HAY BALE BARRIER AND SILT FENCE BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. IF THERE ARE SIGNS OF UNWEIGHTING AT THE CENTER OF THE DOGS, OR MALFUNCTION OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY DOGS BALE.

B. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SOILS INTO PUBLIC RIGHT-OF-WAY. WHEN MAINTENANCE IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE BRICK GRASS AND AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

WASTE DISPOSAL

A. WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LOCKED RECEPTACLES. ALL CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED TO OBSERVE THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.

B. HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OF BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.

C. SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE TOILETS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

ADDITIONAL NOTES FOR WINTER CONSTRUCTION

1. ALL PROPOSED POST-DEVELOPMENT LANDSCAPED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED BY EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1 AND SEDIMENT PLACING 2 TO 3 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELEMORNET, OR THE PLACEMENT OF EROSION CONTROL BLANKETS AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND.

2. ALL OTHERS OR SLOPES WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

3. AFTER NOVEMBER 15TH, ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEANED OF ANY ACCUMULATED SNOW/FALL AFTER EACH STORM EVENT.

DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED TRAILER TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST TO ADJACENT AREAS.

EROSION BASIN MAINTENANCE

A) INFILTRATION BASINS SHOULD NOT BE USED AS TEMPORARY SEDIMENTATION BASINS. ALL DRAINAGE SHOULD BE DIRECTED TO PERMANENT BASINS OR TO THE STORM DRAINAGE SYSTEM. INFILTRATION BASINS SHOULD BE MAINTAINED FOR BORDERTOWN WITH TEMPORARY SEDIMENT CONTROL BARRIERS, DIVERSION SLOTTES, OR STAKED HAY BALES.

B) FERTILIZERS SHOULD NOT BE OVER INFILTRATED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.

C) INFILTRATION BASINS SHOULD BE INSPECTED A FEW TIMES A YEAR AND PARTICULARLY AFTER LARGE STORM EVENTS. SEDIMENT SHOULD BE REMOVED AT LEAST ANNUALLY TO PREVENT CLOGGING.

AREAS DISTURBED BY CONSTRUCTION WITHIN THE PROPERTY LINES AND NOT COVERED BY STRUCTURES, PAVEMENTS, OR MULCH SHOULD BE REPAIRED AND RESEED.

LANDSCAPE SHALL BE INCORPORATED INTO THE LOAN LAYER AT A RATE OF 2 TONS PER ACRE IN GRASS TO PROVIDE A 1% VALUE OF 1.5 TO 2.0.

IF REQUIRED, FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAN AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER. USE OF FERTILIZER SHOULD BE ADDED IN INFILTRATION AREAS.

SOIL CONDITIONS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY MIXED WITH THE LOAN. LOAN SHALL BE PAVED OVER THE SURFACE IS FINELY PULVERIZED, SMOOTHED AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE RECOMMENDED LINES AND GRADERS WITH APPROVED ROLLERS MOVING BETWEEN 1/2 POUNDS AND 3/4 POUNDS PER INCH OF MOTIF.

SEED SHALL BE SOWN AT THE RATE SHOWN BELOW. SOWING SHALL BE DONE ON A CALM, DRY DAY, PREVIOUS TO ANY RAINFALL, BUT IF BY WIND, ONLY BY EXPLOSION WORKMAN. MANUALLY BEFORE SEEDING, THE SOIL SHALL BE LOOSELY PULVERIZED. THE SEED SHALL BE SOWN IN THE GROUND AT AN EQUAL RATE TO THE ORIGINAL DIRECTION. IT SHALL BE LOOSELY RAKE INTO THE SOIL TO A DEPTH NOT OVER 1/2 INCH. INCH AND ROLLED WITH A SINGLE ROLLER BEARING NOT OVER 100 POUNDS PER LINEAR FOOT OF WIDTH.

HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 3 TONS PER ACRE. MULCH SHALL NOT BE REAPPLIED UNTIL THE SEED HAS BEEN ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

THE SURFACE SHALL BE WATERED AND KEPT MOIST WITH A FINE SPRAY AS REQUIRED, UNTIL VEGETATION HAS ESTABLISHED. WATERING SHALL BE STOPPED WHEN THE SOIL IS SATISFACTORILY COVERED WITH GRASS SHALL BE RESEEDING, AND ALL NOODUS WERE REMOVED.

THE SITE SUPERINTENDENT SHALL PREVENT AND MAINTAIN THE NEEDED JOISTS, AND ACCEPTED STABILIZATION METHODS. THE CONTRACTOR SHALL BE RESPONSIBLE FOR THE PROTECTION OF THE SITE UNLESS OTHERWISE APPROVED. SEEDING SHALL BE DONE DURING THE APPROPRIATE PERIODS OF EARLY SPRING TO SEPTEMBER 30. SEEDING AFTER SEPTEMBER 30 WILL BE UNDESIRABLE FOR SUCH WORK.

A GRASS SEED MIXTURE CONTAINING THE FOLLOWING SEED REQUIREMENTS SHALL BE USED:

Table with columns: SEEDING PER ACRE, SEEDING PER ACRE, SEEDING PER ACRE, SEEDING PER ACRE. Rows include: CENTRAL COAST PERENNIAL BLUE GRASS, TALL FESCUE, SLIPKNOT FESCUE, BLUEGRASS, RYEGRASS, BROMEGRASS, FESCUE, RYEGRASS, BROMEGRASS.

IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS.

FOR TEMPORARY PLANTINGS AFTER SEPTEMBER TO EARLY SPRING AND FOR TEMPORARY PROTECTION OF DISTURBED AREAS:

- 1. FOLLOW ABOVE SLOPE, LOAN DEPTH AND GRADING REQUIREMENTS.
2. FERTILIZER SHALL BE SPREAD AND WORKED INTO THE SURFACE AT A RATE OF 200 POUNDS PER ACRE.
3. MULCHING AND SEEDING SHALL BE APPLIED AT THE FOLLOWING RATES:
GRAVIL (10% MULCH) 3 LBS./1,000 SQ. FT.
MULCH 1.5 TONS/ACRE

E. STABILIZED CONSTRUCTION ENTRANCE

1. SPECIFICATIONS

- A. AGGREGATE SIZE: USE TWO (2) INCHES STONE, OR RECLAIMED OR RECYCLED CONCRETE EQUIVALENT.
B. AGGREGATE THICKNESS: NOT LESS THAN SIX (6) INCHES.
C. WIDTH: TEN (10) FOOT MINIMUM, BUT NOT LESS THAN THE PAV. WIDTH OF THE DOGS.
D. POINTS WHERE BARRIERS OR FENCES COVERED.
E. DISTANCE: TO BE PLACED OVER THE ENTIRE AREA TO BE COVERED WITH AGGREGATE. PIPING OF SURFACE WATER UNDER ENTRANCE SHOULD BE PROVIDED AS REQUIRED.

F. CRITERIA FOR GEOTEXTILE: THE FABRICS SHALL BE EXTRA STRENGTH 1135, 1500 PSI OR EQUAL.

3. MAINTENANCE

THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SOILS INTO PUBLIC RIGHT-OF-WAY. WHEN MAINTENANCE IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE BRICK GRASS AND AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS.

WASTE DISPOSAL

A. WASTE MATERIALS

ALL WASTE MATERIALS WILL BE COLLECTED AND STORED IN SECURELY LOCKED RECEPTACLES. ALL CONSTRUCTION WASTE MATERIALS WILL BE BURIED ON SITE. ALL PERSONNEL WILL BE INSTRUCTED TO OBSERVE THE CORRECT PROCEDURE FOR WASTE DISPOSAL BY THE SUPERINTENDENT.

B. HAZARDOUS WASTE

ALL HAZARDOUS WASTE MATERIALS WILL BE DISPOSED OF IN THE MANNER SPECIFIED BY LOCAL OR STATE REGULATION OF BY THE MANUFACTURER. SITE PERSONNEL WILL BE INSTRUCTED IN THESE PRACTICES BY THE SUPERINTENDENT.

C. SANITARY WASTE

ALL SANITARY WASTE WILL BE COLLECTED FROM THE PORTABLE TOILETS A MINIMUM OF ONCE PER WEEK BY A LICENSED SANITARY WASTE MANAGEMENT CONTRACTOR.

ADDITIONAL NOTES FOR WINTER CONSTRUCTION

1. ALL PROPOSED POST-DEVELOPMENT LANDSCAPED AREAS WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED BY EROSION CONTROL BLANKETS ON SLOPES GREATER THAN 4:1 AND SEDIMENT PLACING 2 TO 3 TONS OF MULCH PER ACRE, SECURED WITH ANCHORED NETTING, ELEMORNET, OR THE PLACEMENT OF EROSION CONTROL BLANKETS AND NETTING SHALL NOT OCCUR OVER ACCUMULATED SNOW OR FROZEN GROUND.

2. ALL OTHERS OR SLOPES WHICH DO NOT EXHIBIT A MINIMUM OF 80% VEGETATIVE GROWTH BY NOVEMBER 15TH, OR WHICH ARE DISTURBED AFTER NOVEMBER 15TH, SHALL BE STABILIZED WITH STONE OR EROSION CONTROL BLANKETS APPROPRIATE FOR THE DESIGN FLOW CONDITIONS.

3. AFTER NOVEMBER 15TH, ALL TRAVEL SURFACES SHALL BE PROTECTED WITH A MINIMUM OF 3-INCHES OF CRUSHED GRAVEL OR IF CONSTRUCTION IS TO CONTINUE THROUGH THE WINTER SEASON BE CLEANED OF ANY ACCUMULATED SNOW/FALL AFTER EACH STORM EVENT.

DUST CONTROL

THE CONTRACTOR SHALL BE RESPONSIBLE TO CONTROL DUST THROUGHOUT THE CONSTRUCTION PERIOD. DUST CONTROL MEASURES SHALL INCLUDE, BUT NOT LIMITED TO, SPRINKLING WATER ON EXPOSED AREAS, COVERING LOADED TRAILER TRUCKS LEAVING THE SITE, AND TEMPORARY MULCHING. DUST CONTROL MEASURES SHALL BE UTILIZED SO AS TO PREVENT THE MIGRATION OF DUST TO ADJACENT AREAS.

EROSION BASIN MAINTENANCE

A) INFILTRATION BASINS SHOULD NOT BE USED AS TEMPORARY SEDIMENTATION BASINS. ALL DRAINAGE SHOULD BE DIRECTED TO PERMANENT BASINS OR TO THE STORM DRAINAGE SYSTEM. INFILTRATION BASINS SHOULD BE MAINTAINED FOR BORDERTOWN WITH TEMPORARY SEDIMENT CONTROL BARRIERS, DIVERSION SLOTTES, OR STAKED HAY BALES.

B) FERTILIZERS SHOULD NOT BE OVER INFILTRATED UNLESS ABSOLUTELY NECESSARY TO ESTABLISH VEGETATION.

C) INFILTRATION BASINS SHOULD BE INSPECTED A FEW TIMES A YEAR AND PARTICULARLY AFTER LARGE STORM EVENTS. SEDIMENT SHOULD BE REMOVED AT LEAST ANNUALLY TO PREVENT CLOGGING.

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IF REQUIRED, FERTILIZER SHALL BE SPREAD ON THE TOP LAYER OF LOAN AND WORKED INTO THE SURFACE. FERTILIZER APPLICATION RATE SHALL BE 500 POUNDS PER ACRE OF 10-20-20 FERTILIZER. USE OF FERTILIZER SHOULD BE ADDED IN INFILTRATION AREAS.

SOIL CONDITIONS AND FERTILIZER SHALL BE APPLIED AT THE RECOMMENDED RATES AND SHALL BE THOROUGHLY MIXED WITH THE LOAN. LOAN SHALL BE PAVED OVER THE SURFACE IS FINELY PULVERIZED, SMOOTHED AND EVEN, AND THEN COMPACTED TO AN EVEN SURFACE CONFORMING TO THE RECOMMENDED LINES AND GRADERS WITH APPROVED ROLLERS MOVING BETWEEN 1/2 POUNDS AND 3/4 POUNDS PER INCH OF MOTIF.

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HAY MULCH SHALL BE APPLIED IMMEDIATELY AFTER SEEDING AT A RATE OF 1.5 TO 3 TONS PER ACRE. MULCH SHALL NOT BE REAPPLIED UNTIL THE SEED HAS BEEN ANCHORED USING APPROPRIATE TECHNIQUES FROM THE EROSION AND SEDIMENT CONTROL HANDBOOK.

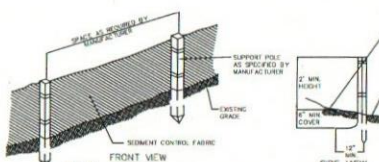
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IN NO CASE SHALL THE WEED CONTENT EXCEED 1 PERCENT BY WEIGHT. ALL SEED SHALL COMPLY WITH STATE AND FEDERAL SEED LAWS.



NOTES: 1. THE DISTURBED FABRIC SHALL MEET THE DESIGN CRITERIA FOR BEST MANAGEMENT PRACTICE FOR SILT FENCES. 2. THE HEIGHT OF THE BARRIER SHALL NOT EXCEED 36 INCHES. 3. WHEN JOISTS ARE NECESSARY, FILTER CLOTH SHALL BE STAPLED TOGETHER ONLY AT A SUPPORT POLE WITH A MINIMUM 6-INCH OVERLAP AND SECURELY SEALED. SEE MANUFACTURER'S RECOMMENDATIONS. 4. POSTS SHALL BE SPACED A MAXIMUM OF 10 FEET APART AT THE BARRIER LOCATION AND DRIVEN SECURELY INTO THE GROUND (MINIMUM OF 18 INCHES). 5. THE FABRIC SHALL BE STAPLED TO THE JOIST SUPPORTS, WITH A MINIMUM SIX (6) INCH OVERLAP AND SECURELY SEALED. 6. THE TRENCH SHALL NOT EXCEED MORE THAN 6 INCHES ABOVE THE ORIGINAL GROUND SURFACE, AND WILL EXTEND TO A MINIMUM OF 8 INCHES INTO THE TRENCH. FILTER FABRIC SHALL NOT BE STAPLED TO EXISTING TREES. 7. THE TRENCH SHALL BE BACKFILLED AND THE SOIL COMPACTED OVER THE FILTER FABRIC. 8. FILTER BARRIERS SHALL BE INSPECTED IMMEDIATELY AFTER EACH RAINFALL, AND AT LEAST DAILY DURING PROLONGED RAINFALL. THEY SHALL BE REPAIRED IF THERE ARE ANY SIGNS OF EROSION OR SEDIMENTATION BELOW THEM. ANY REQUIRED REPAIRS SHALL BE MADE IMMEDIATELY. 9. IF THERE ARE SIGNS OF UNWEIGHTING AT THE CENTER OF THE DOGS, OR MALFUNCTION OF LARGE VOLUMES OF WATER BEHIND THEM, SEDIMENT BARRIERS SHALL BE REPLACED WITH A TEMPORARY DOGS BALE. 10. THE ENTRANCE SHALL BE MAINTAINED IN A CONDITION WHICH WILL PREVENT TRACKING OF SOILS INTO PUBLIC RIGHT-OF-WAY. WHEN MAINTENANCE IS REQUIRED, IT SHALL BE DONE ON AN AREA STABILIZED WITH AGGREGATE BRICK GRASS AND AN APPROVED SEDIMENT TRAPPING DEVICE. ALL SEDIMENT SHALL BE PREVENTED FROM ENTERING STORM DRAINS, DITCHES, OR WATERWAYS. 11. SEDIMENT DEPOSITS SHOULD BE REMOVED WHEN THEY REACH APPROXIMATELY ONE THIRD THE HEIGHT OF THE BARRIER. 12. ANY SEDIMENT DEPOSITS REMAINING IN PLACE AFTER THE SILT FENCE OR FILTER BARRIER IS NO LONGER REQUIRED, SHALL BE DELETED TO CONFORM TO THE EXISTING GRADE, PREPARED AND RESEED.

SILT FENCE

NOT TO SCALE

CONSTRUCTION SPECIFICATIONS

STONE SIZE - HEAVY STANDING STONE SIZE #4 - SECTION 703 OF ROAD STANDARD SPECIFICATIONS (SEE DRAWING NOTES)

LENGTH - 80 FOOT MINIMUM

HEIGHTS - 36 (6) INCHES (MAXIMUM)

BASES - 12" MINIMUM

SEDIMENT - 15" MINIMUM

SEDIMENT - 15" MINIMUM

SEDIMENT - 15" MINIMUM

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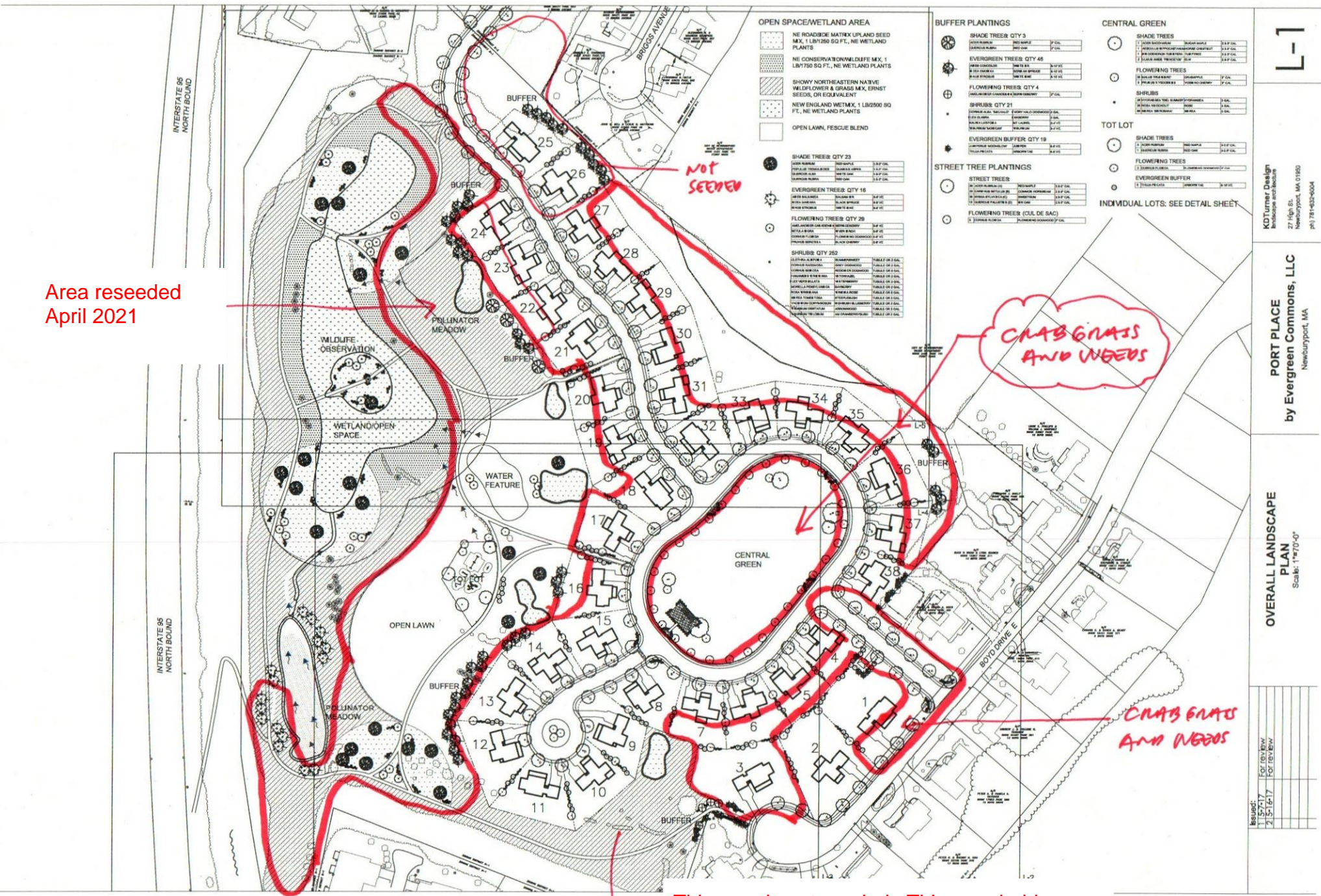
Area reseeded  
April 2021

NOT  
SEEDED

CRAB GRASS  
AND WEEDS

CRAB GRASS  
AND WEEDS

This area is not seeded. This area holds water up to 8" deep for long periods of time and needs to be regraded.



**OPEN SPACE/WETLAND AREA**

- NE ROADSIDE MATRIX UPLAND SEED MIX, 1 LB/250 SQ FT, NE WETLAND PLANTS
- NE CONSERVATION/WILDLIFE MIX, 1 LB/750 SQ FT, NE WETLAND PLANTS
- SHOWY NORTHEASTERN NATIVE WILDFLOWER & GRASS MIX, ERNST SEEDS, ON ECVALENT
- NEW ENGLAND WETMX, 1 LB/250 SQ FT, NE WETLAND PLANTS
- OPEN LAWN, FESCUE BLEND

**SHADE TREES: QTY 23**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**EVERGREEN TREES: QTY 16**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN DOGWOOD	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**FLOWERING TREES: QTY 26**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**SHRUBS: QTY 262**

SHRUB NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**BUFFER PLANTINGS**

**SHADE TREES: QTY 3**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%

**EVERGREEN TREES: QTY 46**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN DOGWOOD	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**FLOWERING TREES: QTY 4**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**SHRUBS: QTY 21**

SHRUB NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**EVERGREEN BUFFER: QTY 19**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN DOGWOOD	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**STREET TREE PLANTINGS**

**STREET TREE**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**FLOWERING TREES: (CUL DE SAC)**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**CENTRAL GREEN**

**SHADE TREES**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**FLOWERING TREES**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**SHRUBS**

SHRUB NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**TOT LOT**

**SHADE TREES**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**FLOWERING TREES**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN BEECH	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**EVERGREEN BUFFER**

TREE NAME	DBH RANGE	SP. CAL.
AMERICAN DOGWOOD	8" - 12"	100%
AMERICAN HICKORY	8" - 12"	100%
AMERICAN Sycamore	8" - 12"	100%
AMERICAN WHITE PINE	8" - 12"	100%
RED BARK PINE	8" - 12"	100%
WHITE PINE	8" - 12"	100%

**INDIVIDUAL LOTS: SEE DETAIL SHEET**

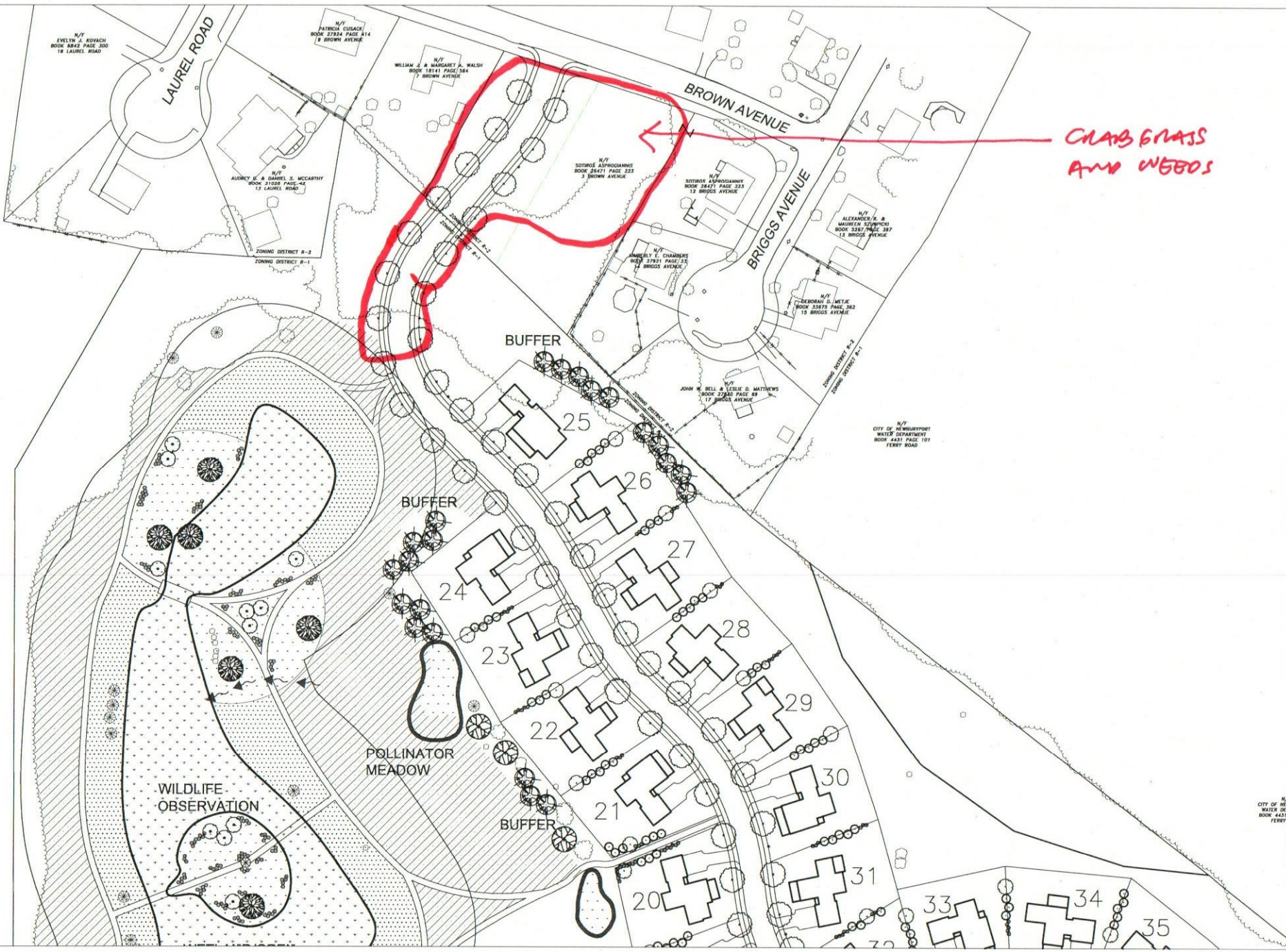
KOTurner Design  
Landscape Architecture  
27 High St.  
Newburyport, MA 01860  
ph: 781-432-6504

**PORT PLACE**  
by Evergreen Commons, LLC  
Newburyport, MA

**OVERALL LANDSCAPE PLAN**  
Scale: 1" = 70'-0"

Issued:	1/5/17	FOR REVIEW
	2/5/17	FOR REVIEW





CRAB GRASS  
AND WEEDS

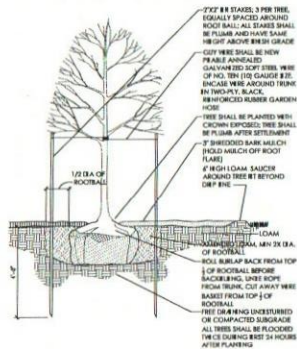
KDTurner Design  
Landscape Architecture  
27 High St.  
Newburyport, MA 01850  
(978) 432-2604

PORT PLACE  
by Evergreen Commons, LLC  
Newburyport, MA

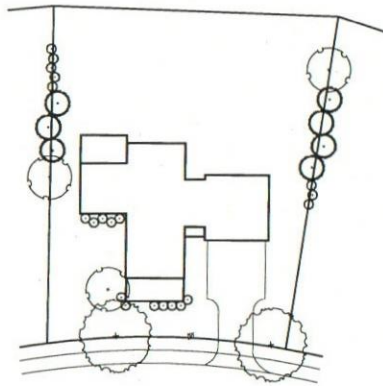
LANDSCAPE PLAN  
Scale: 1"=40'-0"

ISSUED:	11-15-17	N/A
FOR REVIEW	11-15-17	FOR REVIEW
FOR REVIEW		
FOR REVIEW		
FOR REVIEW		
FOR REVIEW		

CITY OF NEWBURYPORT  
WATER DEPARTMENT  
BOOK 4421 FERRY



DECIDUOUS TREE PLANTING



TYPICAL LOT PLANTING  
1"=20'

EVERGREEN BUFFER: QTY 7

JUNPERUS 'MOONGLOW'	JUNPER	6" H. HT.
THILIA PECCATA	ARBORVITAE	6" H. HT.

FLOWERING TREES: QTY 3

AMELANCHIER CANADENSIS	SERAPICEBERRY	2" CAL.
CORNUS FLORIDA	FLOWERING DOGWOOD	2" CAL.
PHILULUS X YEDDOENSIS	YOSHINO CHERRY	2" CAL.

SHRUBS: QTY 20

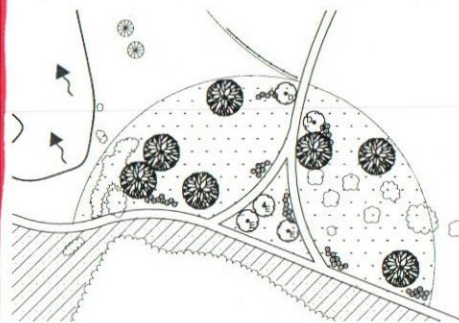
AZALEA 'DEL VALLEY WHITE'	AZALEA	3 GAL.
HYDRANGEA 'ENGL. SUMMER'	HYDRANGEA	3 GAL.
ROSA 'KNOCKOUT'	ROSE	3 GAL.
SPIREEA 'SHERIDANA'	SPIREEA	3 GAL.
SYRINGA MEYER 'PALAZIN'	OWARF KOREAN LILAC	3 GAL.

SHADE TREES: QTY 7

ACER RUBRUM (A)	RED MAPLE	1.5-2" CAL.
QUERCUS ALBA (B)	WHITE OAK	1.5-2" CAL.
QUERCUS RUBRA (C)	RED OAK	1.5-2" CAL.

ORNAMENTAL TREES: QTY 5

BETULA NIGRA (D)	WEVER BIRCH	5" H. HT.
CORNUS FLORIDA (E)	FLOWERING DOGWOOD	5" H. HT.

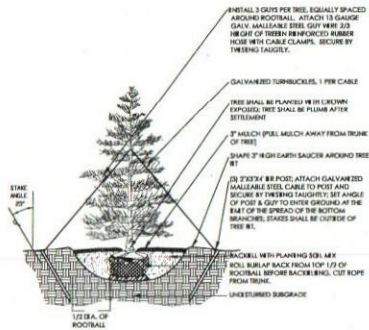


TRAIL TREE PLANTING  
1"=40'

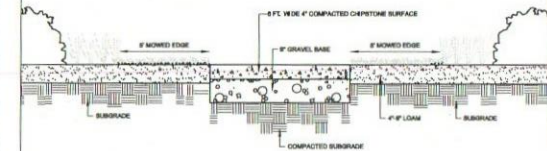
LIGHTING SCHEDULE

- ⊕ STREET LIGHTS: QTY 34
- ⊖ UPLIGHTS: QTY 20

\* SEE CIVIL PLAN FOR SPEC SHEETS



EVERGREEN TREE PLANTING



TRAIL DETAIL

Revised:	FOR REVIEW
1 5/7/17	FOR REVIEW
2 5/15/17	FOR REVIEW