

PARKING SUMMARY

PRINTING/PUBLISHING 605 - 1 PER 2 EMPLOYEES PLUS 5.5 PER 1,000 SQUARE FEET OF GROSS FLOOR AREA

REQUIRED: 80 EMPLOYEES = 40 SPACES PLUS 139,462 SF/1000 X 5.5=767 SPACES / TOTAL =807 SPACES

LIGHT MANUFACTURING 602 - 0.75 X EMPLOYEE MAX. SHIFT PLUS ONE PER COMPANY VEHICLE.

REQUIRED 80 MAXIMUM SHIFT EMPLOYEES = 60 SPACES

PARKING PROVIDED = 100 SPACES

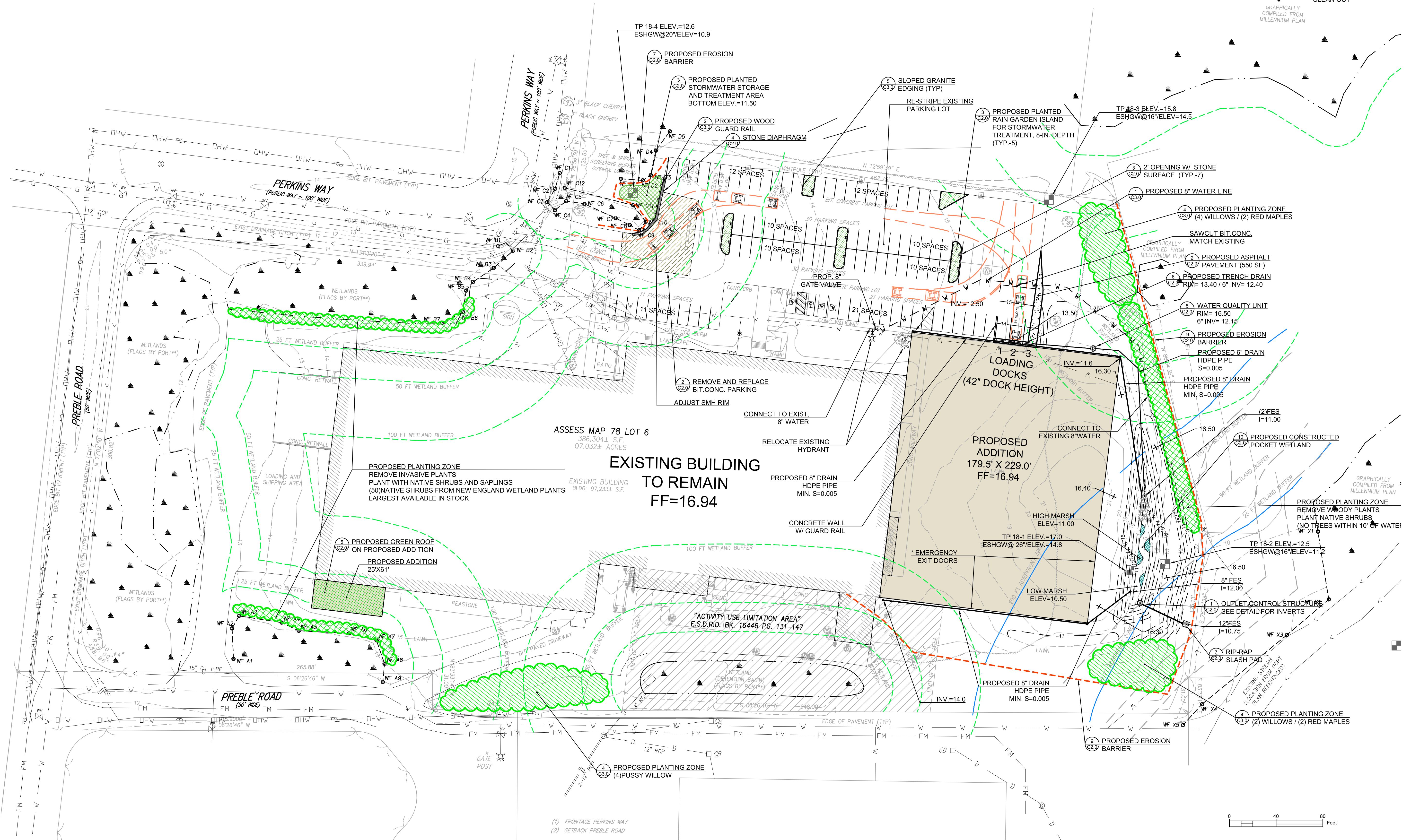
*EMERGENCY EXIT LOCATIONS TO BE COORDINATED WITH NEWBURYPORT FIRE DEPARTMENT DURING THE BUILDING PERMIT APPLICATION

LEGEND

- | | | | |
|-----------------------|-----------------------------|-------------------|-------------------------------------|
| EXISTING: | CS — COMBINED SEWER & DRAIN | ● CATCH BASIN | ● W.G. WATER GATE |
| S — SANITARY SEWER | D — DRAIN LINE | ● DECIDUOUS TREE | ○ G.G. GAS GATE |
| W — WATER LINE | — ELECTRIC LINE | ● CONIFEROUS TREE | ● TEST PIT |
| — OHW — OVERHEAD WIRE | G — GAS LINE | ● PLANTER | — STOCKRADE |
| T — TELEPHONE LINE | — TELEPHONE LINE | ● FIRE HYDRANT | — SEWER LINE |
| ST — STEAM LINE | — SANITARY MANHOLE | ● WASTE BASKET | — GAS LINE |
| ● SANITARY MANHOLE | ● DRAIN MANHOLE | ● PARKING METER | — DOMESTIC WATER LINE |
| ● UNKNOWN MANHOLE | ● ELECTRIC MANHOLE | ● MAIL BOX | — FIRE SUPPRESSION LINE |
| ● TELEPHONE MANHOLE | ● TELEPHONE MANHOLE | ● TRAFFIC SIGNAL | — ETC — ELECTRIC, TEL. & CABLE LINE |
| | | ● UTILITY POLE | — DRAIN LINE |
| | | ● SPOT GRADE | — SPOT GRADE |
| | | | + 16.38 CONTOUR |
| | | | TC, BC TOP OF CURB, BOTTOM OF CURB |
| | | | TW, BW TOP OF WALL, BOTTOM OF WALL |
| | | | ● INSPECTION PORT |
| | | | ● CLEAN OUT |

PROPOSED:

- | | | |
|---------|--------|-------------------------------------|
| ● W.G. | ● W.G. | ● WATER GATE |
| ○ G.G. | ○ G.G. | ○ GAS GATE |
| ● | ● | ● TEST PIT |
| — | — | — STOCKRADE |
| — | — | — SEWER LINE |
| — | — | — GAS LINE |
| — | — | — DOMESTIC WATER LINE |
| — | — | — FIRE SUPPRESSION LINE |
| — | — | — ETC — ELECTRIC, TEL. & CABLE LINE |
| — | — | — DRAIN LINE |
| + 16.38 | | + 16.38 SPOT GRADE |
| TC, BC | | TC, BC CONTOUR |
| TW, BW | | TW, BW TOP OF CURB, BOTTOM OF CURB |
| ● | | ● INSPECTION PORT |
| ● | | ● CLEAN OUT |



NORTH

DEVELOPER:
BRADFORD & BIGELOW
3 PERKINS WAY
NEWBURYPORT, MA 01950
PHONE

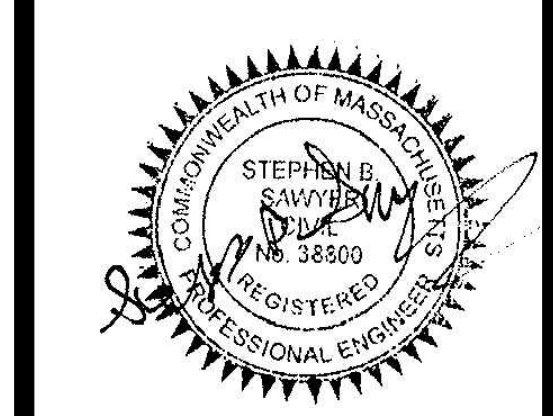
ARCHITECT:
ANDREW SIDFORD ARCHITECTS
44 MERRIMAC STREET
NEWBURYPORT, MA 01950
978-462-1657

PROJECT TEAM

PROJECT NAME
BUILDING ADDITION
3 PERKINS WAY
NEWBURYPORT, MA

PROJECT INFO

REV	DESCRIPTION	DATE
2.	REVIEW COMMENTS	5/25/18
1.	R&R BIT.CONC.	4/2/18



STAMP:

PROPOSED SITE PLAN

SHEET NAME:

C1.0

SHT NO:

DR BY: RLB

CHK BY: SBS

PROJ NO: 2017-137

DATE: MARCH 15, 2018

SCALE: 1" = 40'

2.	REVIEW COMMENTS	5/25/18
REV	DESCRIPTION	DATE



STAMP:

DETAILS

SHEET NAME:

C2.0

SHT NO:

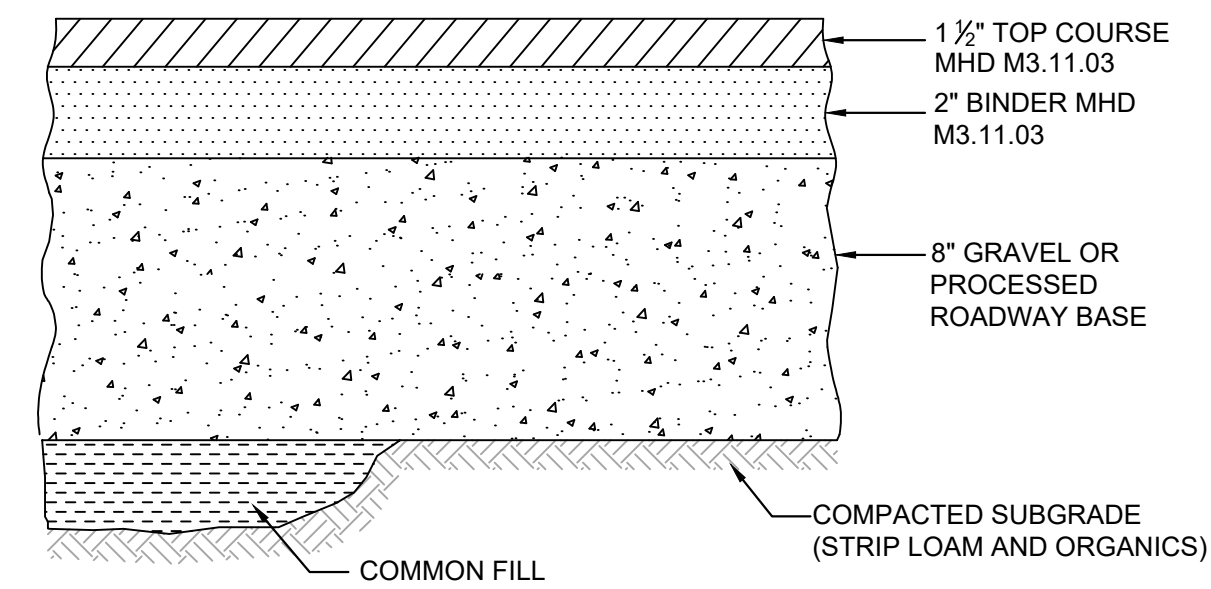
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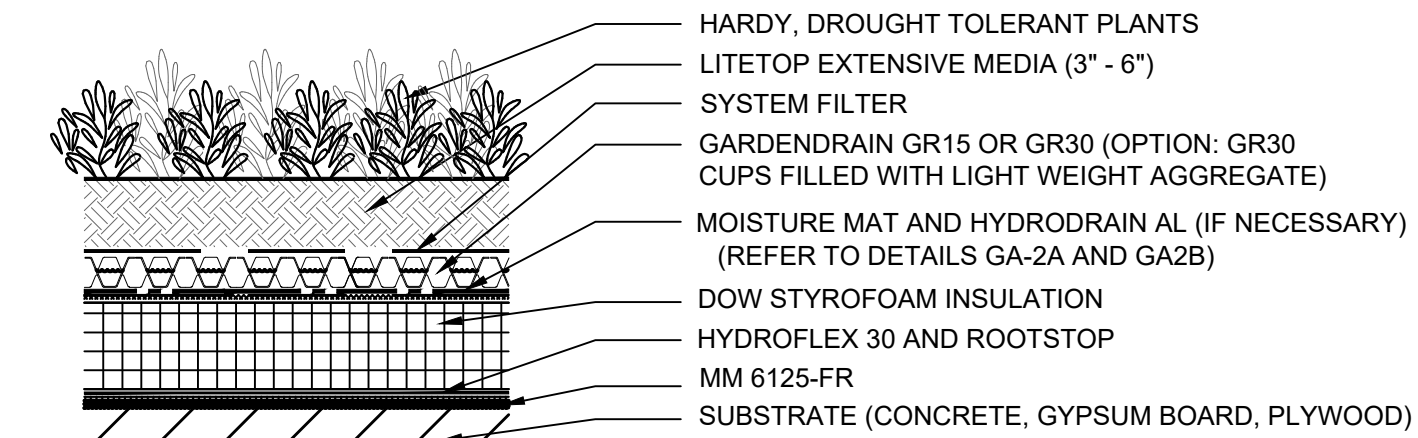
DATE: MARCH 15, 2018

SCALE: N.T.S.



- NOTE:**
- SEE SITE LAYOUT PLAN FOR PAVEMENT WIDTH AND LOCATION.
 - SEE GRADING PLAN FOR PAVEMENT SLOPE AND CROSS-SLOPE.

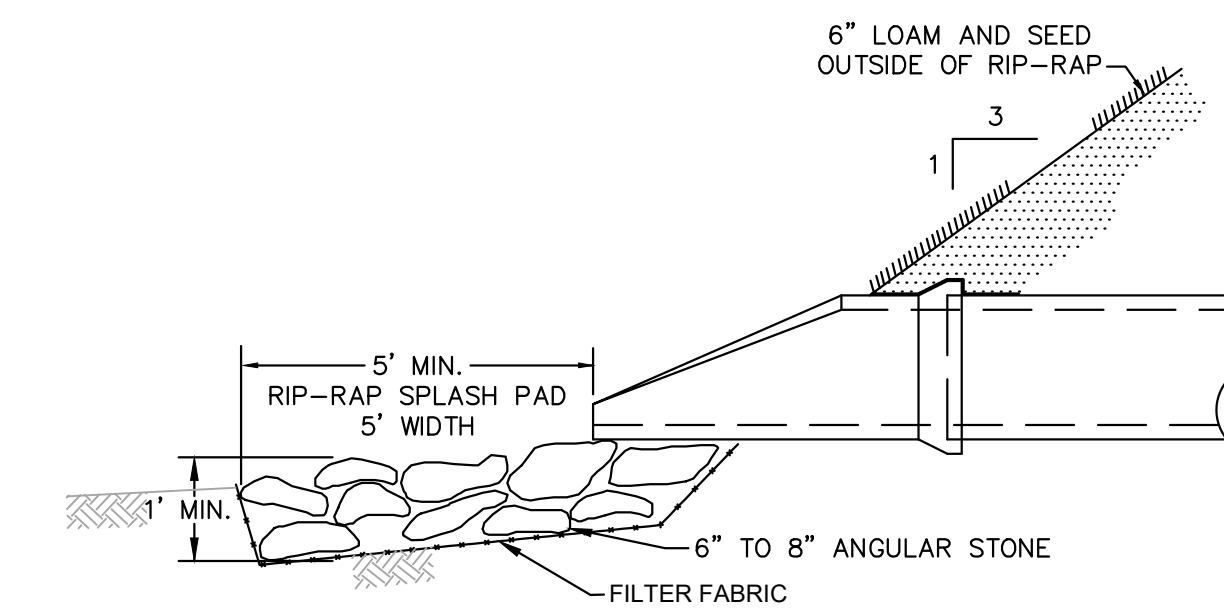
2 BITUMINOUS CONCRETE PAVEMENT
NOT TO SCALE



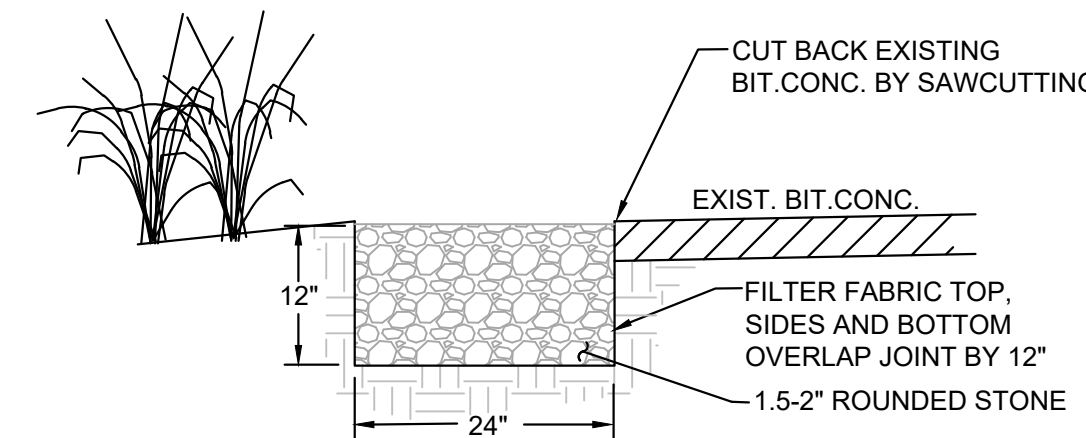
EXTENSIVE

- NOTES:**
- ADDITIONAL COMBINATIONS OF GARDEN ROOF ASSEMBLY COMPONENTS ARE POSSIBLE TO FIT SPECIFIC PROJECT REQUIREMENTS.
 - CONSULT HYDROTECH FOR VARIATIONS ON ABOVE ASSEMBLIES.

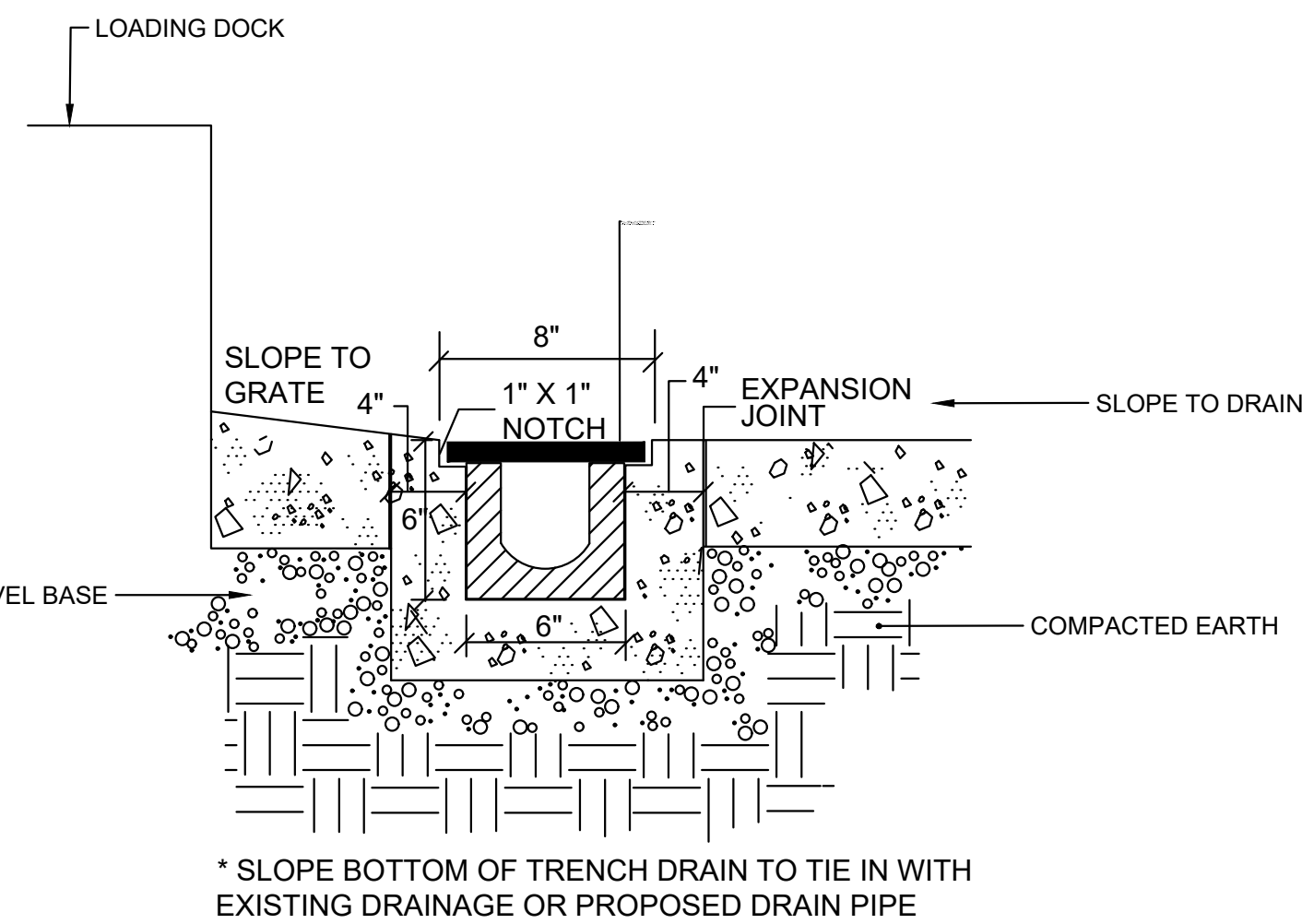
5 GREEN ROOF
NOT TO SCALE



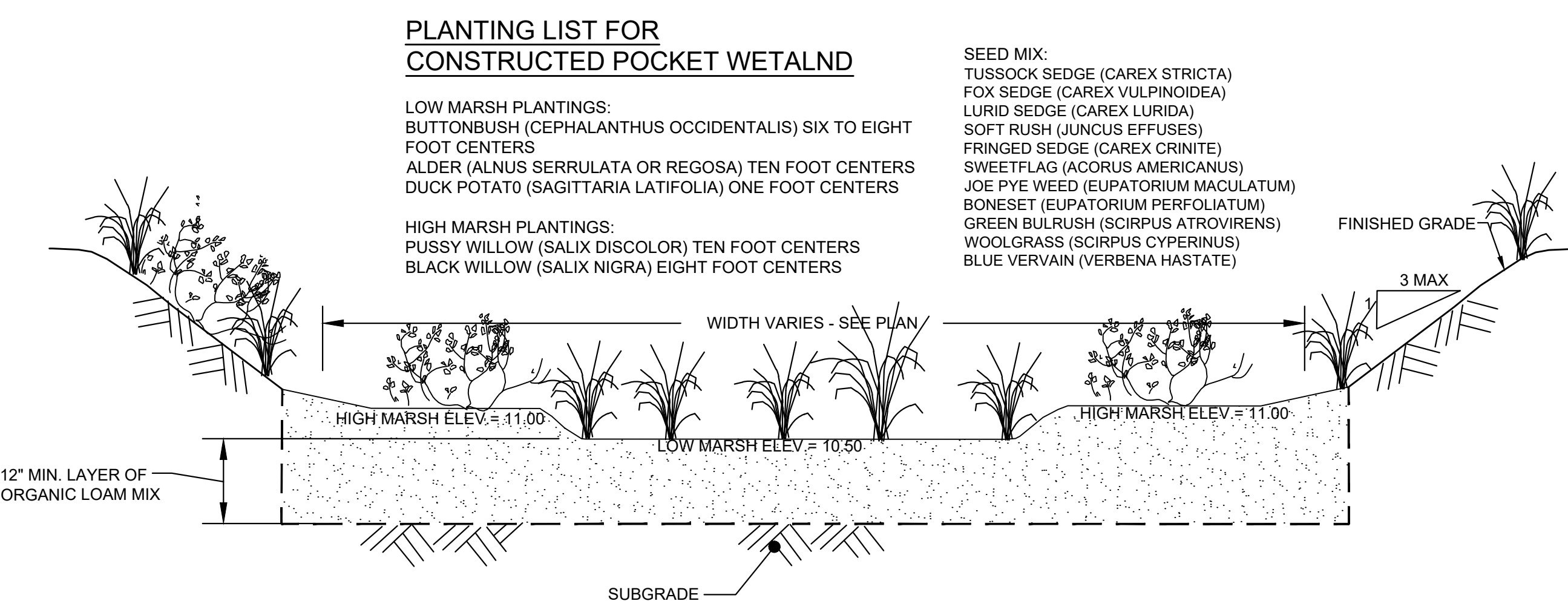
7 FLARED END W/ RIP-RAP SPLASH PAD
NOT TO SCALE



4 STONE DIAPHRAGM
NOT TO SCALE



6 TRENCH DRAIN
NOT TO SCALE



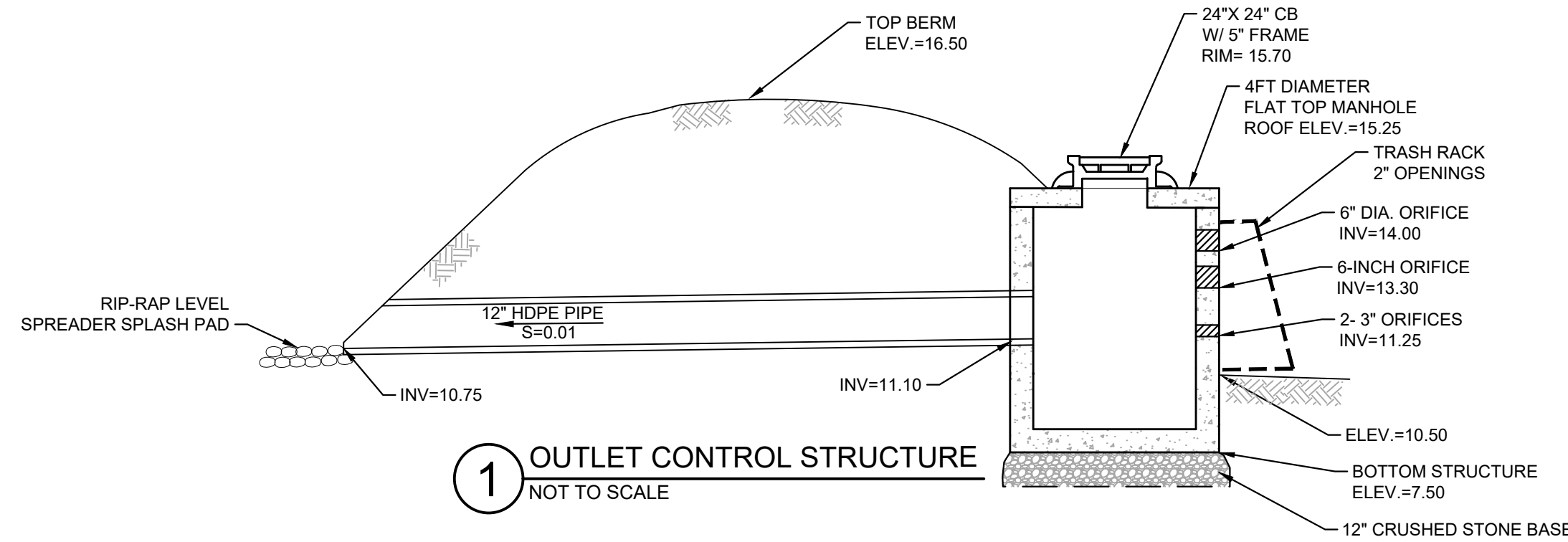
PLANTING LIST FOR CONSTRUCTED POCKET WETLAND

- LOW MARSH PLANTINGS:**
BUTTONBUSH (CEPHALANTHUS OCCIDENTALIS) SIX TO EIGHT FOOT CENTERS
ALDER (ALNUS SERRULATA OR REGOSA) TEN FOOT CENTERS
DUCK POTATO (SAGITTARIA LATIFOLIA) ONE FOOT CENTERS

- HIGH MARSH PLANTINGS:**
PUSSY WILLOW (SALIX DISCOLOR) TEN FOOT CENTERS
BLACK WILLOW (SALIX NIGRA) EIGHT FOOT CENTERS

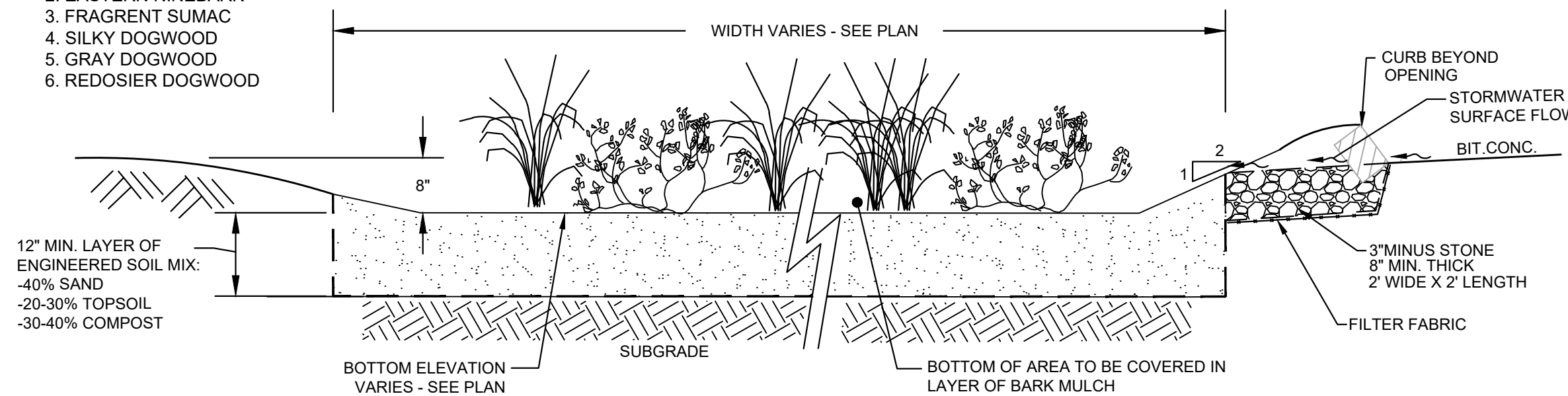
- SEED MIX:**
TUSSOCK SEDGE (CAREX STRICTA)
FOX SEDGE (CAREX VULPINOIDEA)
LURID SEDGE (CAREX LURIDA)
SOFT RUSH (JUNCUS EFFUSES)
FRINGED SEDGE (CAREX CRINITA)
SWEET FLAG (ACORUS AMERICANUS)
JOE PYE WED (EUPATORIUM MACULATUM)
BONESET (EUPATORIUM PERFOLIATUM)
GREEN BULRUSH (SCIRPUS ATROVIRENS)
WOOLGRASS (SCIRPUS CYPERINUS)
BLUE VERVAIN (VERBENA HASTATE)

10 CONSTRUCTED POCKET WETLAND
NOT TO SCALE



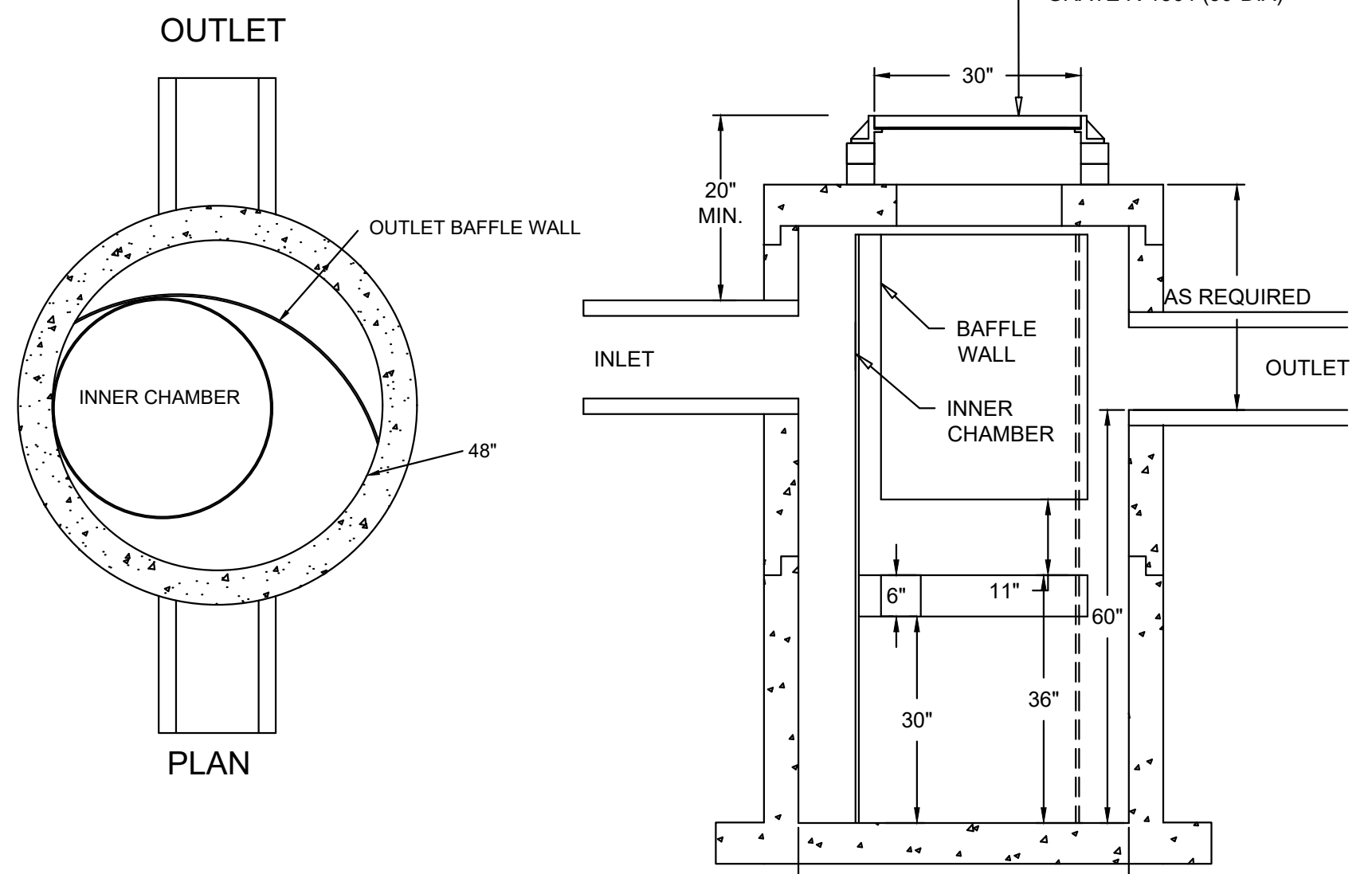
1 OUTLET CONTROL STRUCTURE
NOT TO SCALE

- PLANT LIST:**
- SMALL BATBERRY
 - EASTERN NINEBARK
 - FRAGRANT SUMAC
 - SILKY DOGWOOD
 - GRAY DOGWOOD
 - REDOSIER DOGWOOD



- NOTE:**
BIORETENTION PLANTINGS TO CONSIST OF: BIRDSFOOT-TREFOIL, SWITCH GRASS, SPINDLE-TREE AND WINTERBERRY (OR OTHER APPROVED PLANTINGS FROM THE MASSACHUSETTS DEP STORMWATER HANDBOOK) IN QUANTITIES AND SPACING SPECIFIED BY PROJECT ENVIRONMENTAL CONSULTANT

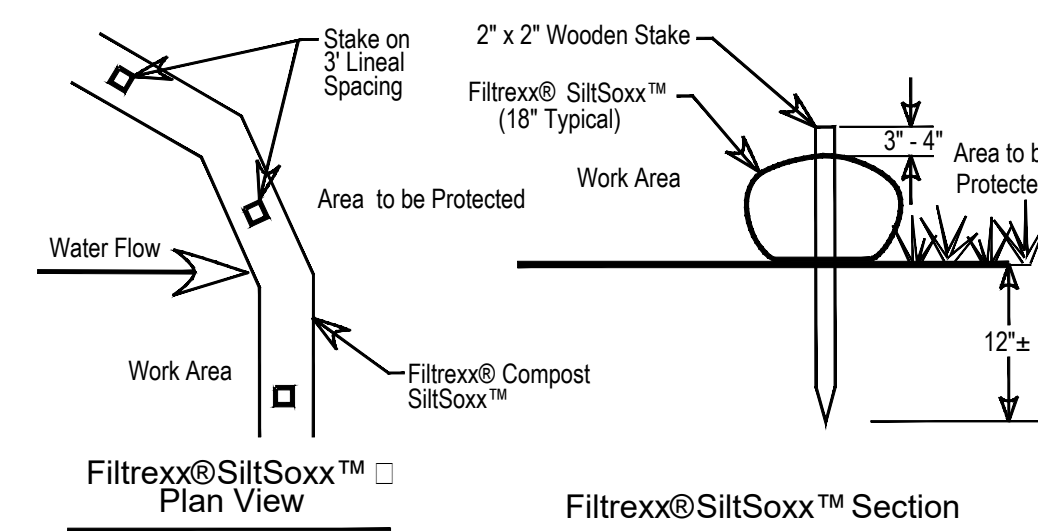
3 RAIN GARDEN ISLAND
NOT TO SCALE



DIMENSIONS IN INCHES
PERMANENT POOL VOLUME = 450 US GALLONS
THE HYDROGUARD MUST BE CLEANED AFTER THE CONSTRUCTION PERIOD IF IT IS USED AS A SEDIMENT AND EROSION CONTROL MEASURE
THE HYDROGUARD SHOULD BE INSPECTED ONCE PER YEAR FOR STABILIZED SITES
INSPECTION WILL DETERMINE THE MAINTENANCE FREQUENCY (ANNUAL MAINTENANCE OR ONCE EVERY TWO YEARS TYPICAL FOR STABILIZED SITES)
SITES WITH UNSTABLE CONDITIONS (EXPOSED SOIL OR MATERIALS STORAGE) WILL REQUIRE MORE FREQUENT INSPECTION AND MAINTENANCE

Hydroworks, LLC
50 S. 21st St., Kenilworth, NJ 07033
Phone: 888-230-7900 Fax: 888-783-7271
Web: www.hydroworks.com

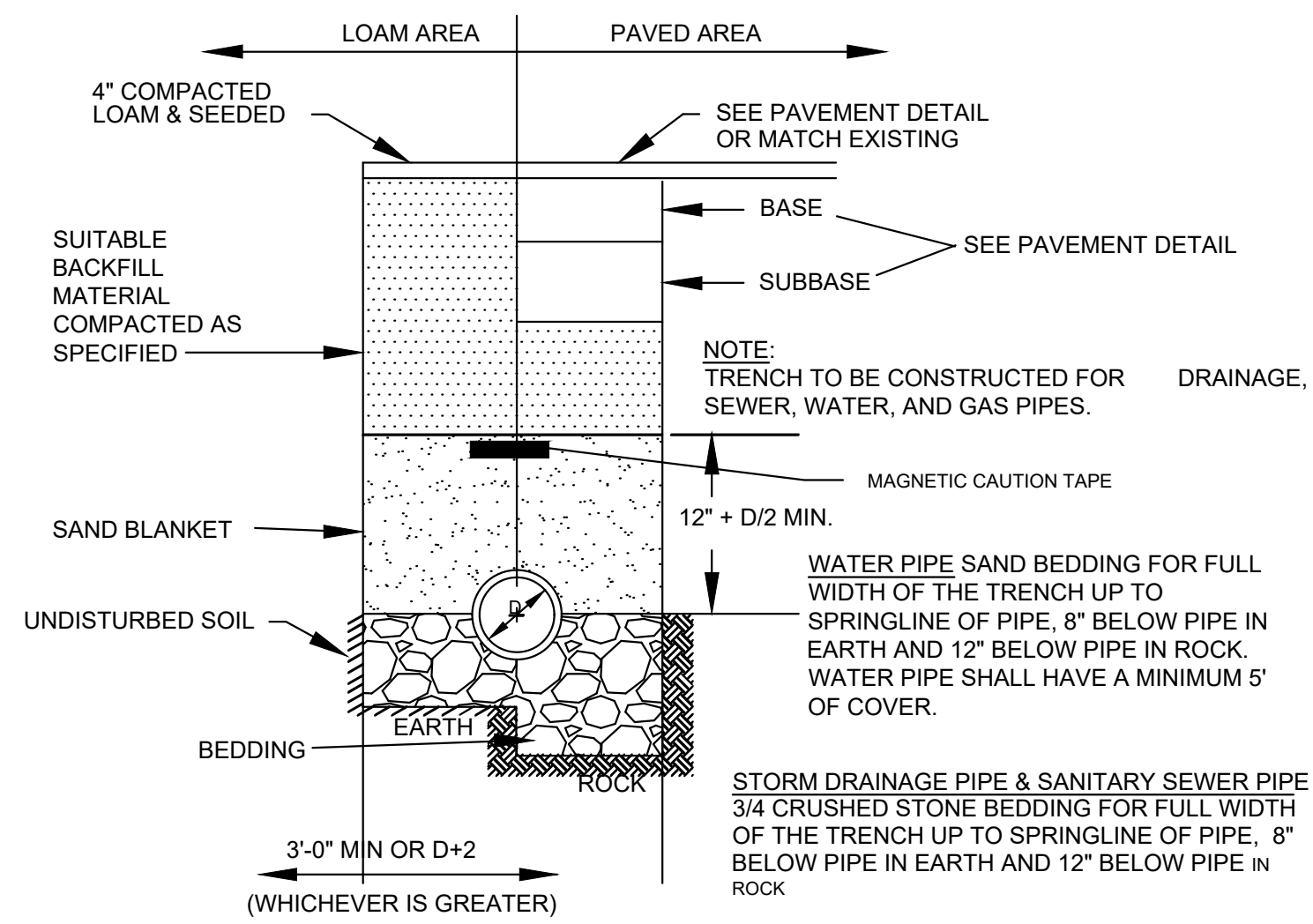
8 HYDROGUARD WATER QUALITY UNIT (HG-4)
NOT TO SCALE



- Notes:**
- All material to meet Filtrexx@ specifications
 - SiltSoxx™ compost/soil/rock/seed fill to meet application requirements.
 - Compost material to be dispersed on site, as determined by Engineer.

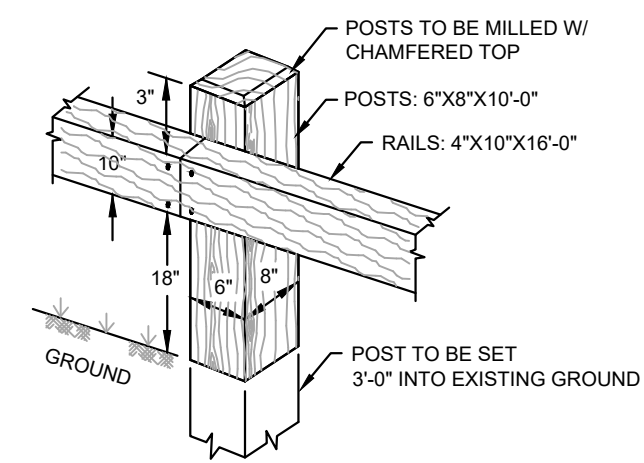
Filtrexx@SiltSoxx™

9 EROSION CONTROL BARRIER
NOT TO SCALE



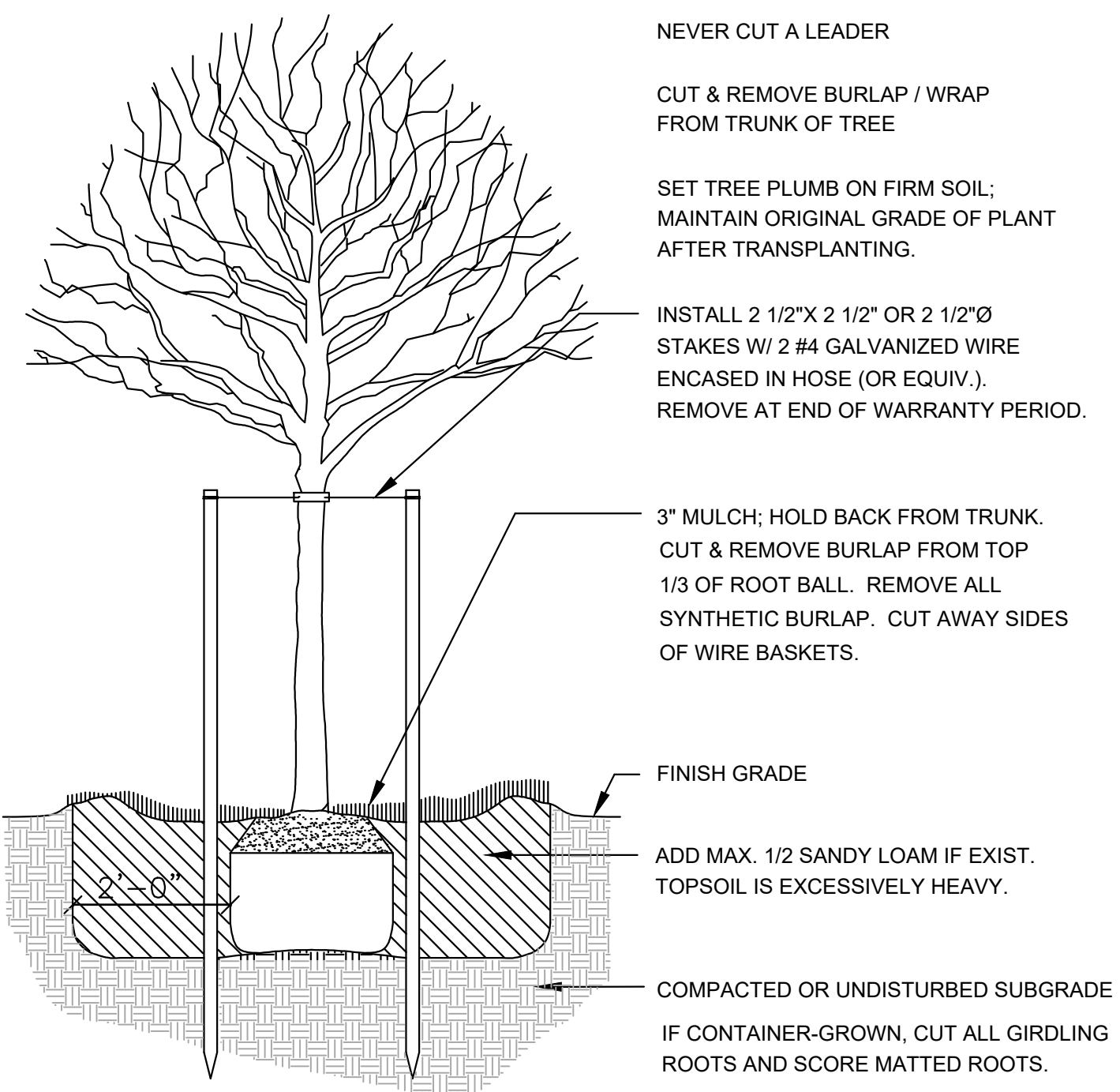
BACKFILL MATERIAL BELOW PAVED OR CONCRETE AREAS, BEDDING MATERIAL, AND SAND BLANKET SHALL BE COMPACTED TO NOT LESS THAN 95% OF AASHTO T 99, METHOD C. SUITABLE BACKFILL MATERIAL BELOW LOAM AREAS SHALL BE COMPACTED TO NOT LESS THAN 90% OF AASHTO T 99, METHOD C.

1 UTILITY TRENCH
NOT TO SCALE

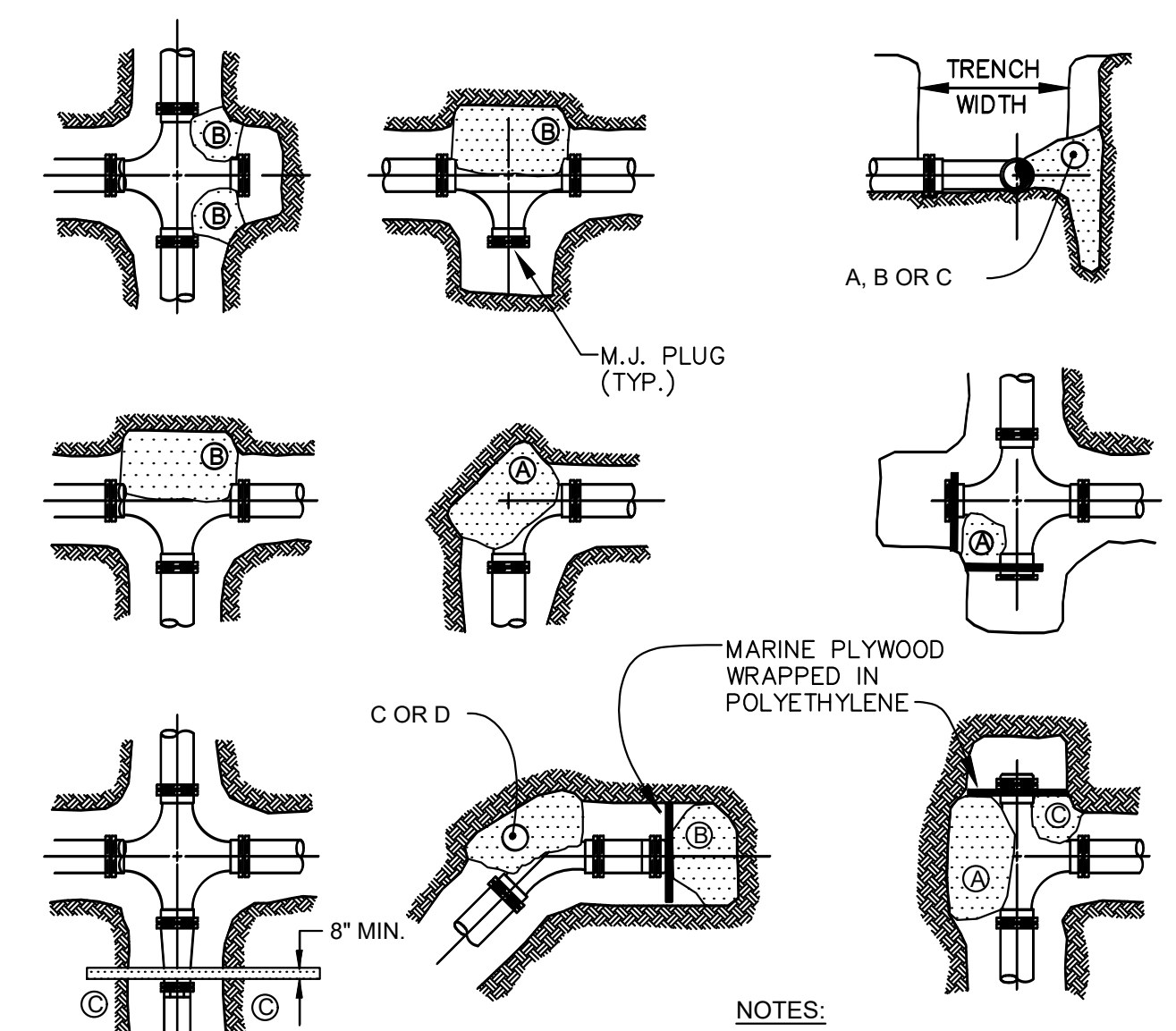


- NOTES**
1. GALVANIZED BOLTS & NUTS 5/8 Ø.
 2. POSTS & SPACING TO BE 8'-0\".
 3. RAIL TO BE FLUSH MOUNTED.

2 WOOD GUARD RAIL
NOT TO SCALE

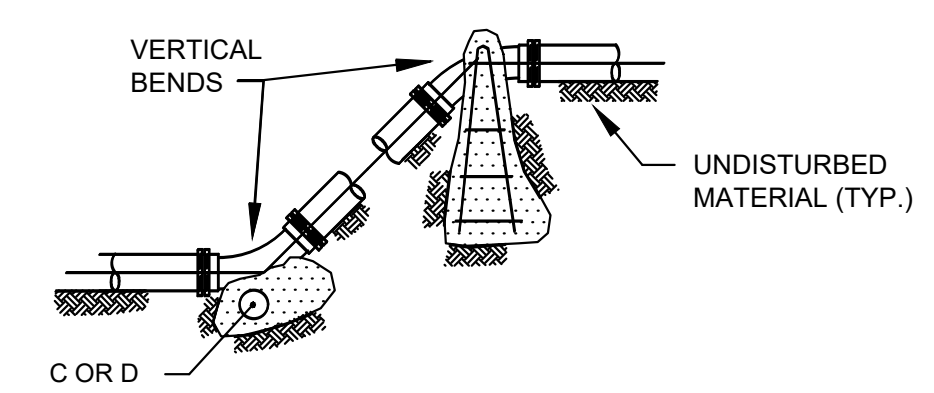


4 TREE PLANTING
NOT TO SCALE

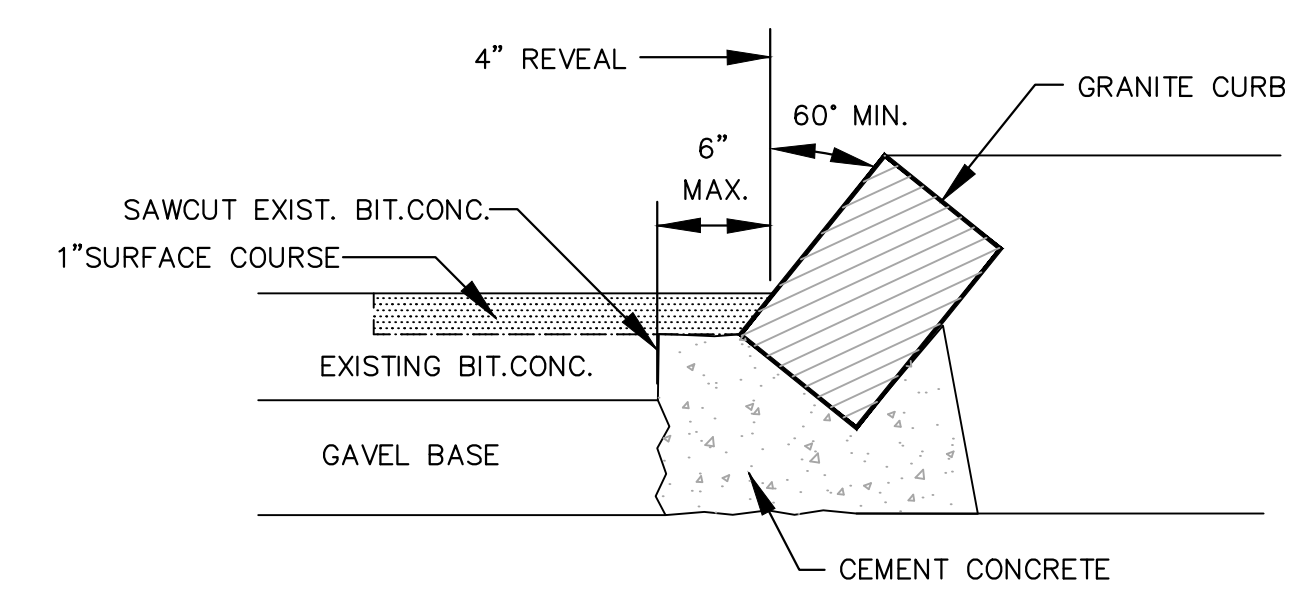


- NOTES:**
1. POUR THRUST BLOCKS AGAINST UNDISTURBED MATERIAL. WHERE TRENCH WALL HAS BEEN DISTURBED, EXCAVATE LOOSE MATERIAL AND EXTEND THRUST BLOCK TO UNDISTURBED MATERIAL. NO JOINTS SHALL BE COVERED WITH CONCRETE.
 2. ON BENDS AND TEES, EXTEND THRUST BLOCKS FULL LENGTH OF FITTING.
 3. PLACE BOARD IN FRONT OF ALL PLUGS BEFORE POURING THRUST BLOCKS.
 4. WHERE M.J. PIPE IS USED, M.J. PLUG WITH RETAINER GLANDS MUST BE USED, GRIP RING, MEGA-LUG OR STAR GRIP

3 THRUST BLOCKS
NOT TO SCALE



SQUARE FEET OF CONCRETE THRUST BLOCKING BEARING ON UNDISTURBED MATERIAL		PIPE SIZE				
REACTION TYPE		4"	6"	8"	10"	12"
A 90°	0.89	2.19	3.82	11.14	17.24	
B 180°	0.65	1.55	2.78	8.38	12.00	
C 45°	0.48	1.19	2.12	6.02	9.32	
D 22-1/2°	0.25	0.60	1.06	3.08	4.74	
E 11-1/4°	0.13	0.30	0.54	1.54	2.38	



5 SLOPED GRANITE EDGING
NOT TO SCALE

WATER CONSTRUCTION NOTES:

General

- No water will be supplied to any contractor or builder through a water main which hasn't been placed "in service" by the Newburyport Water Works.
- No distribution system component will be operated by anyone other than Water Works personnel.
- All installations must be inspected by the Construction Foreman or his designee.
- There must be at least six inches of clearance between a new water main and any underground rock formation.
- As-built plans (hard copies and digital) are required prior to placing a new main in service.
- Any work which does not meet these guidelines must have prior approval of the Construction Foreman under the guidance of the Newburyport Water Commission.

Water Mains

- All water main components must meet AWWA Standards.
- All components must be installed to meet DEP Guidelines & Practices.
 - All new water lines must have 10 ft of separation from sewer lines.
 - "Dead ends shall be minimized by looping of all mains whenever practical."
 - All water mains shall be sized after a hydraulic analysis based on flow demands and pressure requirements. The system shall be designed to maintain a minimum of 20 PSI at all points under all flow conditions.
- All water mains will be 8 in. (or larger), Class 52 Ductile Iron, Zinc coated, Cement lined pipe. *Due to high groundwater and clay soils provide polyethylene jacket and stainless steel hardware.
- All water mains will have at least 5 feet of cover. A minimum of 3 inches of sand under the pipe, both sides, and 6 inches on top of the main; all thoroughly compacted.
- All mechanical joint components will be installed using retaining glands.
 - Examples: Grip Ring (preferred), Mega-lug, or Star grip.
- Metal wedges must be used at all bell joints to ensure continuity for tracing.

Valves

- Gate valves will be ductile iron epoxy coated (AWWA C 550), with O ring seals, urethane coated wedge, stainless steel nuts and bolts, and anti-rotation seats to prevent l-bolts from turning. Valves will open right using a 2 inch operating nut with an arrow cast in the metal.

Fire Hydrants

- Fire Hydrants, for the purpose of standardization, will be Waterous Pacer WB-67.
 - 16 inch barrel, stainless steel hardware below grade, open right, 4 1/2 ft. to 6ft. bury depths.
 - Breakaway flange must be above grade
 - Must have two, 2 1/2 inch hose nozzle and one 4 1/2 inch pumper outlet with National Standard Fire Hose thread.
- Hydrants will be installed by using retaining glands (grip rings preferred) and thrust blocks. There must be at least two means by which to maintain the integrity of a fire hydrant installation. Rods may be used only if thrust block is not an option, but will be at the discretion of the Construction Foreman or his designee.
- Hydrant location and spacing will be at the discretion of the Fire Chief or his designee.
- Any fire hydrant which is required to be non-draining will be painted safety red with only the steamer nozzle cap painted safety yellow. Draining hydrants will be safety red only.

Testing

- Water Mains will be pressure tested to 150 PSI and witnessed by the Construction Foreman or his designee.
- Chlorination will meet AWWA Standards (ANSI/AWWA C651-05).
 - If the bacteria test comes back positive the water main will be flushed and re-chlorinated prior to re-sampling.
- Bacteria samples will be tested by an approved Lab, which will send results directly to the Newburyport Water Works through certified mail, and received within five working days or re-sampling must be done.



DEVELOPER:
BRADFORD & BIGELOW
3 PERKINS WAY
NEWBURYPORT, MA 01950
PHONE

ARCHITECT:
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NEWBURYPORT, MA 01950
978-462-1657

PROJECT TEAM

PROJECT NAME
BUILDING ADDITION
3 PERKINS WAY
NEWBURYPORT, MA
PROJECT INFO

REV	DESCRIPTION	DATE
2.	REVIEW COMMENTS	5/25/18



STAMP:

DETAILS

SHEET NAME:

C3.0

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DR BY: RLB
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