

EROSION AND SEDIMENT CONTROL PLAN

OBJECTIVE

TO CONTAIN SILT AND SEDIMENT ON SITE SO AS TO PROTECT ADJACENT RESOURCE AREAS AND PROPERTIES FROM ANY DAMAGE, HARM, AND OR ALTERATIONS RESULTING FROM NEGLIGENT CONSTRUCTION ACTIVITIES OR PRACTICES. SAID NEGLIGENT ACTIVITIES OR PRACTICES INCLUDE BUT ARE NOT LIMITED TO:

- A. THE DISCHARGE OR PUMPING OF WATER CONTAMINATED WITH SILT INTO EXISTING OR PROPOSED CATCHBASINS.
- B. THE DISCHARGE OR PUMPING OF WATER CONTAMINATED WITH SILT INTO ADJACENT RESOURCE AREAS.
- C. THE DISCHARGE OR PUMPING OF WATER CONTAMINATED WITH SILT INTO ADJACENT DRIVEWAYS OR PROPERTIES.
- D. STOCK PILING FILL OF ANY CONSTRUCTION MATERIAL WITHOUT ADEQUATE PROTECTIVE MEASURES IN PLACE.

DISTURBED DEVELOPMENT AREA

TOTAL AREA OF DISTURBANCE FOR CONSTRUCTION RELATED ACTIVITIES-2.25 ACRES.
 THE MAXIMUM AREA OF DISTURBANCE AT ANY ONE TIME AND THE AMOUNT OF BARE EARTH TO BE EXPOSED AT ANY ONE TIME - 2.25 ACRES WITH LENGTH OF TIME OF EXPOSURE BEING 360 DAYS. STABILIZATION SHOULD OCCUR WITHIN 24 HOURS OF DISTURBANCE IF NO FURTHER WORK IS NECESSARY IN ANY PARTICULAR AREA. OTHERWISE, THE PARTICULAR CONSTRUCTION ACTIVITY SHOULD BE CONDUCTED SO AS TO COMPLY WITH THE TOWN'S CONSTRUCTION REQUIREMENTS AND THEN STABILIZE THE AREA WITHIN 24 HOURS OF COMPLETION OF THAT PARTICULAR CONSTRUCTION ACTIVITY. AFTER ROUGH GRADING IS COMPLETED SAID AREAS SHALL BE PROPERLY STABILIZED WITHIN 24 HOURS OF COMPLETION.

EROSION CONTROL

- 1. THE EASIEST AND MOST EFFECTIVE WAY TO CONTROL EROSION IS THROUGH SOURCE REDUCTION. THIS IS EFFECTIVELY DONE BY TEMPORARILY STABILIZING DISTURBED AREAS THAT NEED TO BE ALTERED FOR THE CURRENT CONSTRUCTION PHASE. DISTURBED AREAS OF SUBSEQUENT PHASES WILL REQUIRE ADDITIONAL STABILIZATION WORK AND ATTENTION. THESE AREAS MAY ALSO POSE A THREAT TO THE RESOURCE AREAS IF NEGLECTED.
- 2. ANOTHER EFFECTIVE METHOD OF SOURCE REDUCTION IS TO PROMPTLY TREAT DISTURBED AREAS. A DISTURBED AREA LEFT IN A NON-STABILIZED CONDITION IS A PROBLEM WAITING TO HAPPEN. DISTURBED AREAS CAN BE STABILIZED BY LOAMING AND SEEDING. IF THIS IS IMPRACTICAL DUE TO SEASONAL TIMING OR BEING IN A HIGH TRAFFIC AREA, THE AREA MAY BE STABILIZED THROUGH THE USE OF APPLYING A 6" LAYER OF CRUSHED STONE TO THE AREA. WOOD CHIPS AND MULCHING HAVE BEEN USED IN SUCH AREAS TO SOME SUCCESS AS WELL. FOR NON TRAFFIC AREAS, STRAW CAN BE PUT DOWN TO RETARD THE EFFECTS OF EROSION.
- 3. AREAS THAT CAN NOT BE STABILIZED DUE TO THE NATURE OF THE ACTIVITY SHOULD BE CONTAINED. CONTAINMENT MAY BE ACHIEVED BY INSTALLING A TEMPORARY SILT FENCE AROUND THE AREA OR ALONG THE DOWN GRADIENT EDGE OF THE DISTURBED AREA. THE CONTRACTOR SHALL USE GOOD JUDGMENT TO PREVENT EROSION AND DISCHARGES INTO RESOURCE AREAS. RELYING ONLY ON THE HAYBALE LINE AT THE LIMIT OF WORK LINE IS NOT PRUDENT AND CAN PUT THE PROJECT AT RISK TO ENFORCEMENT ORDERS.

DE-WATERING PRACTICES

- A. DE-WATERING OF TRENCHES AND OPEN EXCAVATIONS SHALL BE PERFORMED SO AS TO ACHIEVE AT A MINIMUM THE FOLLOWING STANDARDS:
 - 1. NO BUCKETING OR PUMPING OF DE-WATERING ACTIVITIES SHALL HAVE A DIRECT DISCHARGE INTO RESOURCE AREAS ON OR OFF THE SITE.
 - 2. ALL DE-WATERING DISCHARGES SHALL ROUTED THROUGH APPROVED TEMPORARY PRE-TREATMENT DEVICES AND THEN FLOW TO A SILTFENCE/HAYBALE LINE.
 - 3. MUD PUMPS SHALL BE PLACED IN A 5 GALLON BUCKET FILLED WITH CRUSHED STONE TO FILTER OUT HEAVY SEDIMENTS.
- B. THE CONTRACTOR MAY USE ANY PRE-TREATMENT DEVICES SHOWN ON THE PLANS OR MAY IMPLEMENT OTHER DEVICES OR PRACTICES WITH THE APPROVAL OF THE TOWN AND THE DESIGNING ENGINEER.
- C. THE PREFERRED PRE-TREATMENT METHOD IS TO SET A SILT BAG IN THE BACK OF A TRUCK AND PUMP INTO IT WHILE THE TRUCK IS PARKED IN A STABILIZED AREA. CLEAN WATER LEACHES OUT OF THE BAG AND RUNS OFF OVER AN UNDISTURBED AREA. WHEN THE BAG IS FULL, THE TRUCK DRIVES OFF AND EMPTIES THE BAG IN A PROPER LOCATION. THIS METHOD OFFERS THE CONTRACTOR A LOT OF FLEXIBILITY, MAKES EXCAVATION GO FASTER, AND IS A VERY SAFE METHOD OF DE-WATERING.
- D. THE PREFERRED TIME OF CONSTRUCTION IS WHEN THE WEATHER IS FAIR AND NOT AFTER A HEAVY RAINFALL EVENT.

STOCK PILING PRACTICES

- 1. LONG TERM STOCKPILES OF LOAM AND FILL MATERIALS SHALL BE CONTAINED OR STABILIZED THROUGH LOAMING AND SEEDING IF THE PILE IS TO SIT FOR A PERIOD OF TIME EXCEEDING 30 DAYS.
- 2. COVERING PILES DURING DOWN POURS WITH TARPS CAN BE AN EFFECTIVE METHOD OF TEMPORARY EROSION CONTROL.
- 3. STOCKPILES SHALL BE LOCATED AT LEAST 20' AWAY FROM WETLANDS AND SURROUNDED BY A SILTFENCE BARRIER.
- 4. STOCKPILES SHALL BE STABILIZED WITH TEMPORARY VEGETATION, MULCH, OR COVERING WITH TARPS.
- 5. DESIGNATED STOCKPILE LOCATIONS SHALL BE IN THE VICINITY OF BUILDING FOOT PRINT.

SEDIMENT BASIN/SILT TRAP MAINTENANCE

- 1. SEDIMENT SHALL BE REMOVED AND TRAP RESTORED TO ITS ORIGINAL DIMENSIONS WHEN SEDIMENT HAS ACCUMULATED TO 1/2 OF THE DESIGN DEPTH IN THE TRAP. SEDIMENT SHALL BE REMOVED AND DEPOSITED IN A SUITABLE AREA AND IN SUCH A MANNER THAT IT WILL NOT ERODE.
- 2. THE TRAP SHALL BE INSPECTED AFTER EACH RAIN STORM AND CLEANED OR REPAIRED IF NECESSARY.
- 3. THE SEDIMENT TRAP SHALL BE EQUIPPED WITH A BROAD CRESTED WEIR FOR AN OUT LET CONTROL DEVICE. OTHER DEWATERING DEVICES MAY BE USED PROVIDED THE DISCHARGES IS SKIMMED FROM THE CLEANER SURFACE PORTION OF THE STANDING WATER.
- 4. THE WEIR INVERT 6" BELOW THE TOP OF BERM.
- 5. A FILTER SOCK SHOULD BE MAINTAINED IN A SEMI CIRCULAR SHAPE OUT SIDE THE WEIR TO INTERCEPT AND FILTER DISCHARGES FROM THE WEIR.
- 6. EARTH DAM FILL MATERIAL SHALL BE FREE OF ROCKS, ROOTS, OR OTHER ORGANIC MATERIAL.

STORMWATER INFILTRATION SYSTEM CONSTRUCTION PRACTICES

- 1. THE AREA OR THE SUBSURFACE INFILTRATION SYSTEM SHALL BE PROTECTED FROM DEGRADATION BY CONSTRUCTION BY INCORPORATING THE FOLLOWING CONSTRUCTION PRACTICES:
 - A. HEAVY EQUIPMENT SHALL NOT PASS, RE-PASS, OR HAUL MATERIALS IN THE AREAS OF THE RECHARGE SYSTEMS SO AS TO COMPLY WITH THE RESTRICTIONS OF THE SUBGRADE BY COMPACTION.
 - B. NO HEAVY EQUIPMENT SHALL BE PARKED, STORED, OR DRIVEN OVER THE RECHARGE SYSTEM AREAS.
 - C. ONLY HEAVY EQUIPMENT USED DIRECTLY IN THE CONSTRUCTION OF THE RECHARGE SYSTEMS SHALL BE ALLOWED IN THE AREA OF THE SUBSURFACE INFILTRATION SYSTEM.
 - D. NO STORMWATER FROM CONSTRUCTION ACTIVITIES OR DISTURBED AREAS SHALL NOT BE DISCHARGED INTO THE RECHARGE SYSTEMS. ALL SUCH DISCHARGES SHALL BE ROUTED THROUGH APPROVED TEMPORARY CONTROLS PRIOR TO RELEASE OFF SITE OR TO RESOURCE AREAS.
 - E. THE STORMWATER INFILTRATION SYSTEM SHALL NOT BE BROUGHT ON LINE UNTIL TRIBUTARY AREAS ARE STABILIZED AND ALL PERMANENT PRE-TREATMENT DEVICES AND STRUCTURES HAVE BEEN INSTALLED AND INSPECTED.

REFUELING OF CONSTRUCTION VEHICLES AND EQUIPMENT

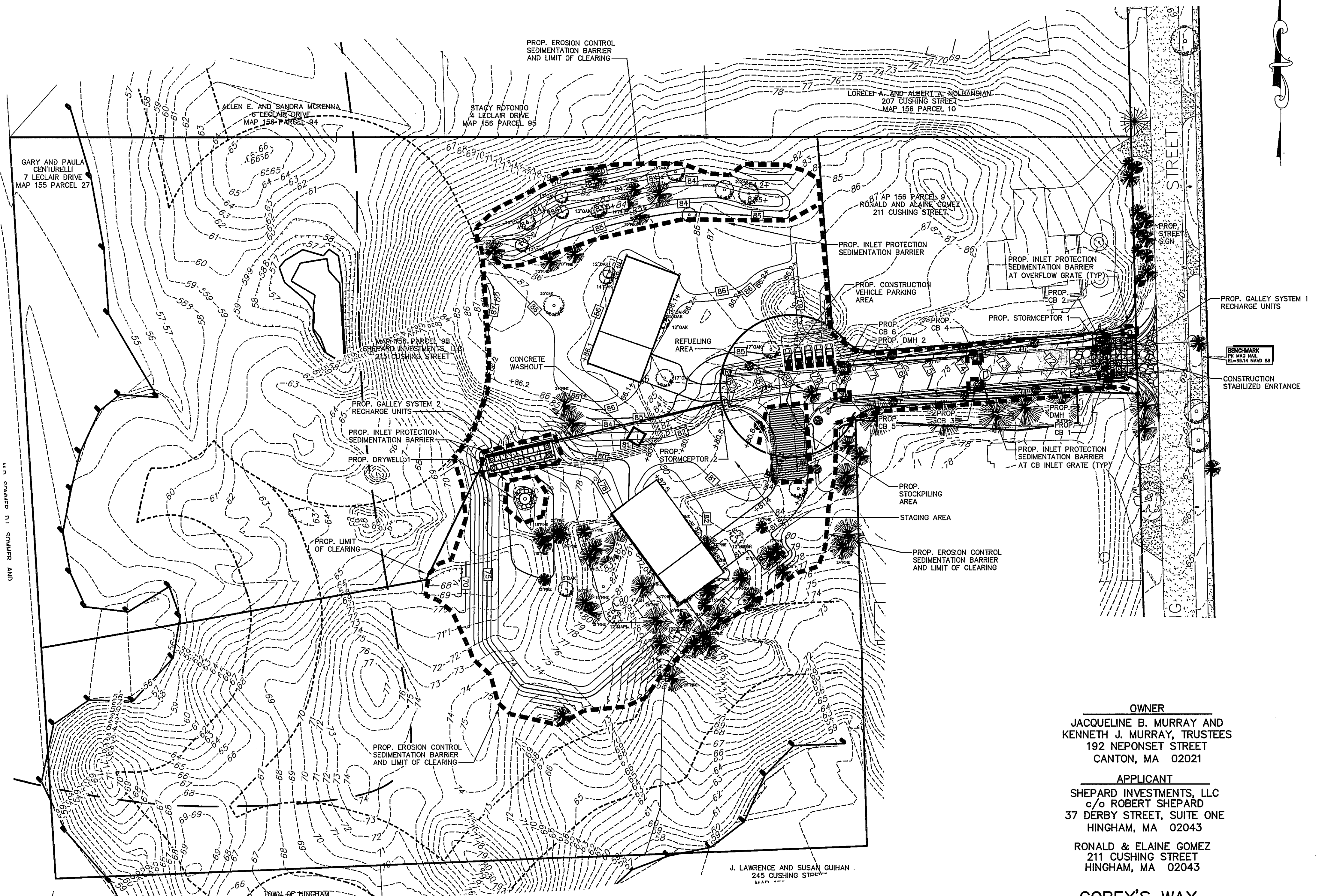
- 1. ALL REFUELING OF CONSTRUCTION VEHICLES AND EQUIPMENT SHALL BE CONDUCTED ON FLAT LEVEL SURFACES AWAY FROM OPEN EXCAVATIONS, DRAINAGE STRUCTURES OR ANY OTHER POTENTIAL MEANS OF TRANSMITTING HARMFUL POLLUTANTS AND OR HYDROCARBONS DIRECTLY INTO THE SOIL STRATA AND CONSEQUENTLY INTO THE UNDERLYING AQUIFER.
- 2. ALL REFUELING OF CONSTRUCTION VEHICLES AND EQUIPMENT SHALL BE CONDUCTED ON FLAT LEVEL IMPERVIOUS SURFACES. REFUELING SURFACE AREAS MAY BE MADE IMPERVIOUS BY COVERING THE RE-FUELING AREA WITH CORROSIVE RESISTANT MEMBRANES.
- 3. THE PERIMETER OF REFUELING AREA SHALL PROVIDE A 6" MINIMUM CONTAINMENT BERM TO PREVENT A DISCHARGE OF HAZARDOUS LIQUIDS FROM ESCAPING FROM THE REFUELING AREA.
- 4. THE ENTRANCE TO THE REFUELING AREA SHOULD BE LOCATED SO AS TO PROMOTE SAFETY AND EASE OF REFUELING.
- 5. CLEAN UP MATERIALS SUCH AS ABSORBENT PILLOWS AND OTHER PRODUCTS ARE TO BE STORED ON SITE NEAR THE REFUELING AREA IN A WEATHER TIGHT CONTAINER CLEARLY MARKED WITH THE WORDS "SPILL CONTAINMENT DEVICES" ON IT.
- 6. CONSTRUCTION PERSONNEL SHALL BE TRAINED IN SPILL RESPONSE MEASURES INCLUDING HAVING EMERGENCY PHONE NUMBERS READILY AVAILABLE.

MATERIALS STORAGE

- 1. ALL POTENTIALLY HARMFUL MATERIALS SHALL BE STORED IN A COVERED ENCLOSURE HAVING SOME FORM OF SECONDARY CONTAINMENT.
- 2. POTENTIALLY HARMFUL MATERIALS SHALL NOT BE EXPOSED TO THE ELEMENTS WHERE THEY COULD DISCHARGE INTO DRAINAGE STRUCTURES OR OPEN EXCAVATIONS.

CONSTRUCTION SEQUENCING AND PHASING

- 1. CONTRACTOR SHALL ENSURE THAT ALL REQUIRED PRE CONSTRUCTION MEETING REQUIREMENTS HAVE BEEN SATISFIED PRIOR TO START OF CONSTRUCTION.
- 2. ALL EROSION CONTROL MEASURES HAVE BEEN INSTALLED INCLUDING BUT NOT LIMITED TO:
 - INSTALLATION OF PERIMETER SEDIMENT CONTROL DEVICES SUCH AS SILT SOCKS.
 - CONSTRUCTION OF STABILIZED ENTRANCES.
 - CLEARING GRADING AND STABILIZATION OF ALL STAGING AND STORAGE AREAS.
 - ENSURED THAT AN ADEQUATE SUPPLY OF EXTRA SEDIMENT CONTROLS ARE STORED ON SITE FOR CONTINGENCY PURPOSES.
- 3. COMMENCE WITH THE CONSTRUCTION OF THE INFRA STRUCTURE:
 - IT IS PREFERABLE TO CONSTRUCT THE ROADWAY AND UTILITY INFRASTRUCTURE FIRST AS DESCRIBED IN DETAIL IN THE SWPPP REPORT WITH MINIMAL CLEARING AT THE HAMMERHEAD FOR STAGING AND STOCKPILING. TEMPORARILY STABILIZING AS MUCH DISTURBANCE AS POSSIBLE.
- 4. COMMENCE WITH THE LOT CLEARING FOR HOUSE CONSTRUCTION AND ASSOCIATED UTILITY INFRASTRUCTURE:
 - HINGHAM BOH REGULATIONS MANDATE THAT THE SEPTIC SYSTEMS BE BUILT FIRST AND THEN THE HOMES.
 - ROOF DRAIN INFILTRATION INFRASTRUCTURES AND BE INSTALLED AT ANY TIME, REFER TO THE CONSTRUCTION SEQUENCING PLAN DESCRIBED IN THE SWPPP REPORT FOR MORE DETAILS.
 - OBTAIN CERTIFICATE OF COMPLIANCE FROM THE COMMISSION.



OWNER
 JACQUELINE B. MURRAY AND
 KENNETH J. MURRAY, TRUSTEES
 192 NEPONSET STREET
 CANTON, MA 02021

APPLICANT
 SHEPARD INVESTMENTS, LLC
 c/o ROBERT SHEPARD
 37 DERBY STREET, SUITE ONE
 HINGHAM, MA 02043

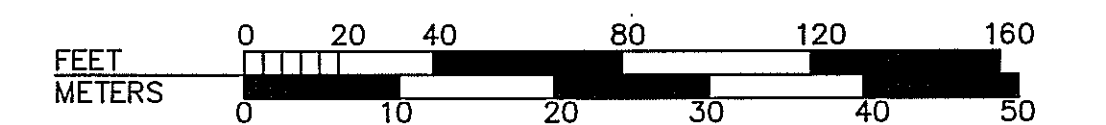
RONALD & ELAINE GOMEZ
 211 CUSHING STREET
 HINGHAM, MA 02043

COREY'S WAY
 MODIFIED SUBDIVISION
 SWPPP SITE PLAN
 FOR
 213 CUSHING STREET
 IN
HINGHAM, MASS.

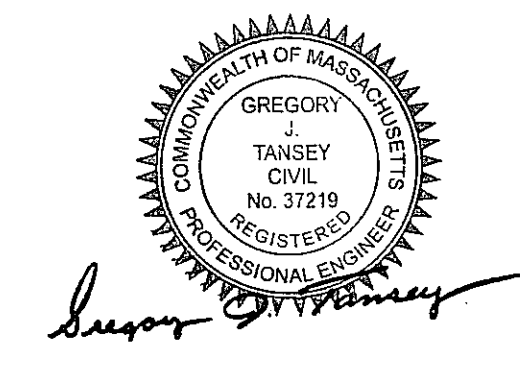
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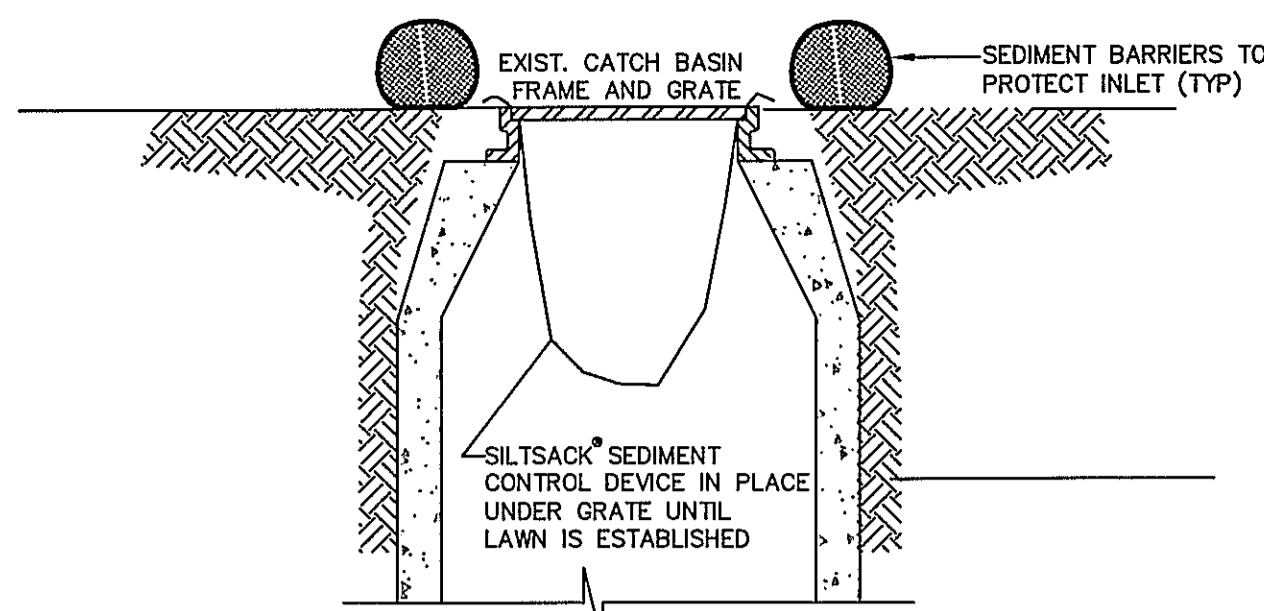
ROSS ENGINEERING COMPANY INC.
 PROFESSIONAL ENGINEERS - LAND SURVEYORS

683 MAIN STREET
 NORWELL, MASS. 02061
 (781)659-1325



NO.	DATE	DESCRIPTION	BY





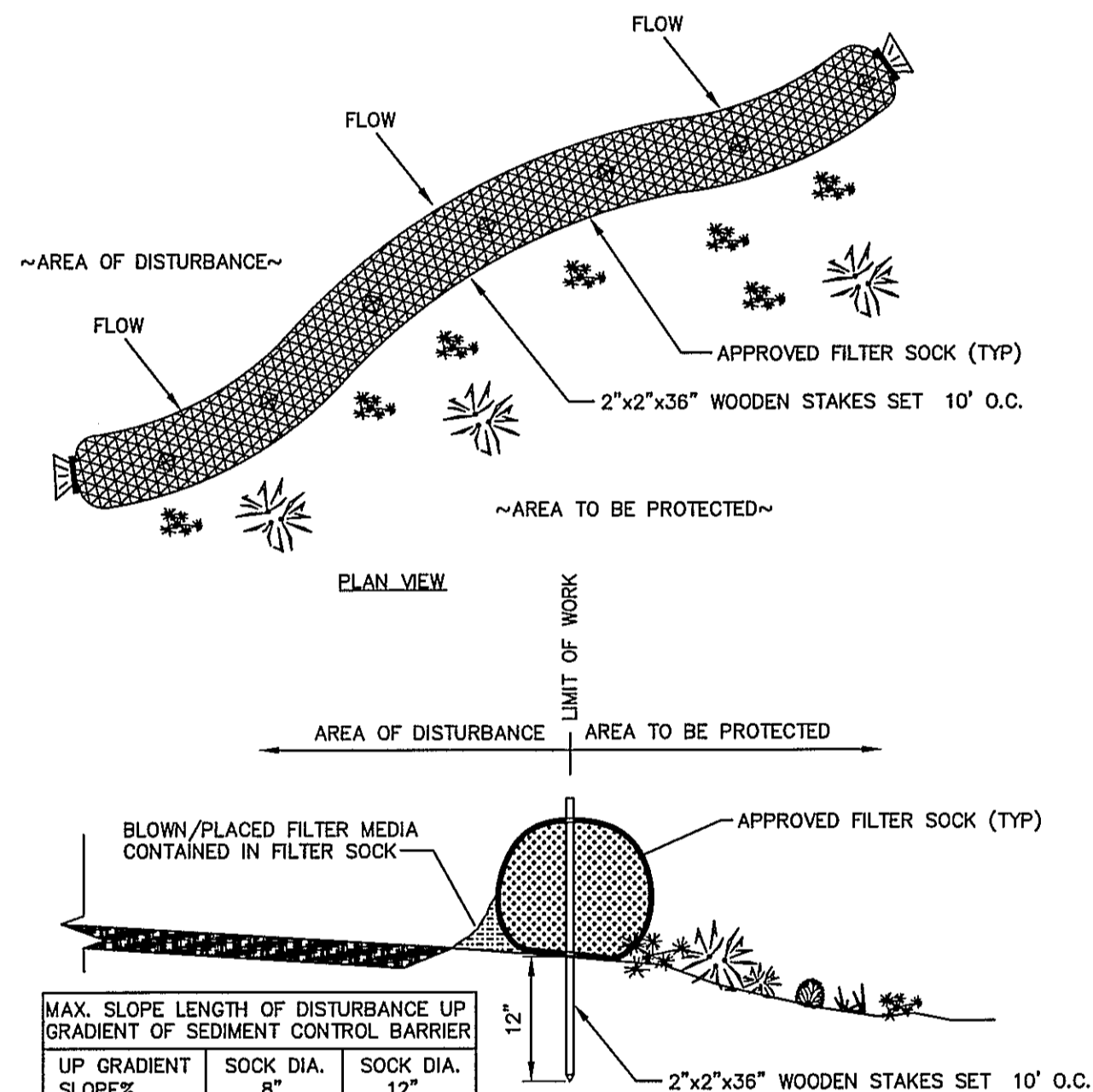
ELEVATION

NOTES:

1. PROVIDE 2x2 SILTSACK[®] MANUFACTURED BY SI GEOSOLUTIONS.
2. SILTSACK[®] SHALL BE PROVIDED WITH TWO DUMP STRAPS ATTACHED TO THE BOTTOM, LIFTING LOOPS, AND A YELLOW RESTRAINT CORD APPROX. HALFWAY UP THE SACK. THE YELLOW RESTRAINT CORD IS ALSO A VISUAL MEANS OF INDICATING WHEN SACK SHOULD BE EMPTIED. ONCE STRAP IS COVERED WITH SEDIMENT, SILTSACK SHOULD BE EMPTIED, CLEANED AND PLACED BACK INTO THE CHAMBER.
3. TO INSTALL SILTSACK[®] REMOVE GRATE AND PLACE SACK IN THE OPENING. HOLDOUT APPROXIMATELY SIX INCHES OF THE SACK (AREA WITH LIFTING STRAPS) OUTSIDE THE FRAME AND REPLACE GRATE TO HOLD SACK IN PLACE.
4. WHEN THE RESTRAINT CORD IS NO LONGER VISIBLE, SILTSACK[®] IS FULL AND SHOULD BE EMPTIED.
5. TO REMOVE SILTSACK[®] TAKE TWO PIECES OF 1" DIAMETER REBAR AND PLACE THROUGH THE LIFTING LOOPS ON EACH SIDE OF THE SACK TO FACILITATE LIFTING OF THE SACK.
6. TO EMPTY SILTSACK[®] PLACE IT WHERE CONTENTS WILL BE COLLECTED, PLACE THE REBAR THROUGH THE DUMP STRAPS (CONNECTED TO THE BOTTOM OF THE SACK) AND LIFT. THIS WILL TURN THE SACK INSIDE OUT AND EMPTY THE CONTENTS.

CATCH BASIN EROSION CONTROL MEASURE

NOT TO SCALE

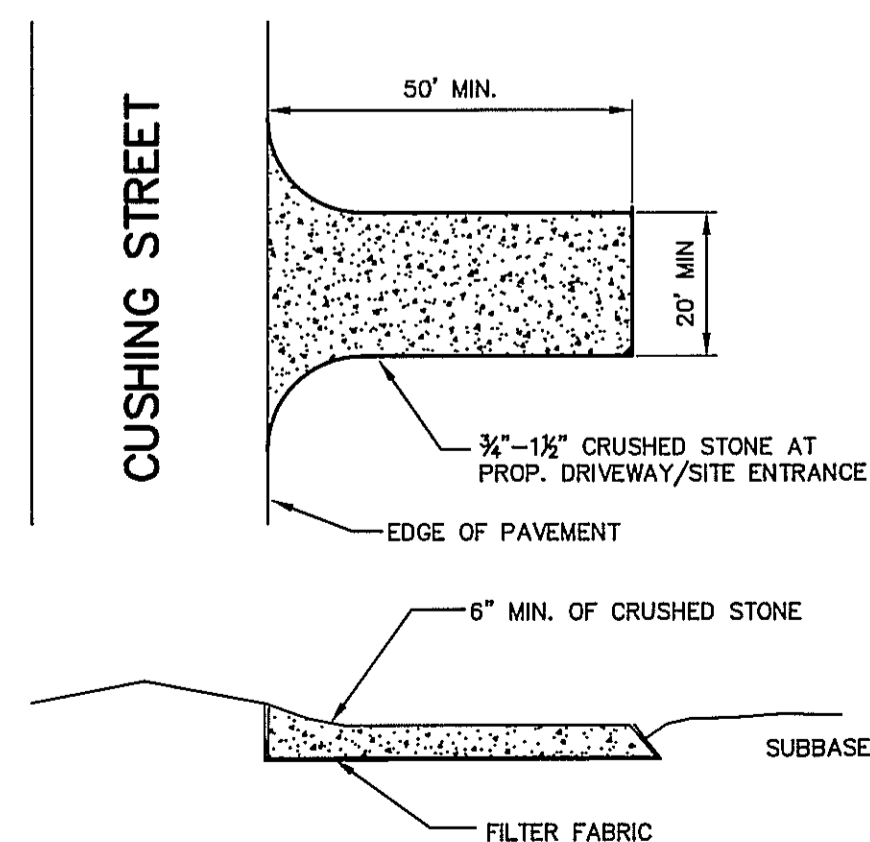


MAX. SLOPE LENGTH OF DISTURBANCE UP GRADIENT OF SEDIMENT CONTROL BARRIER		
UP GRADIENT SLOPE%	SOCK DIA. 8"	SOCK DIA. 12"
<2	600'	750'
5	400'	500'
10	200'	250'
20	100'	125'

SEDIMENT CONTROL BARRIERS SHOWN ON THE CONSTRUCTION PLAN SHALL HAVE A MINIMUM DIAMETER OF 8"

SEDIMENT CONTROL BARRIERS

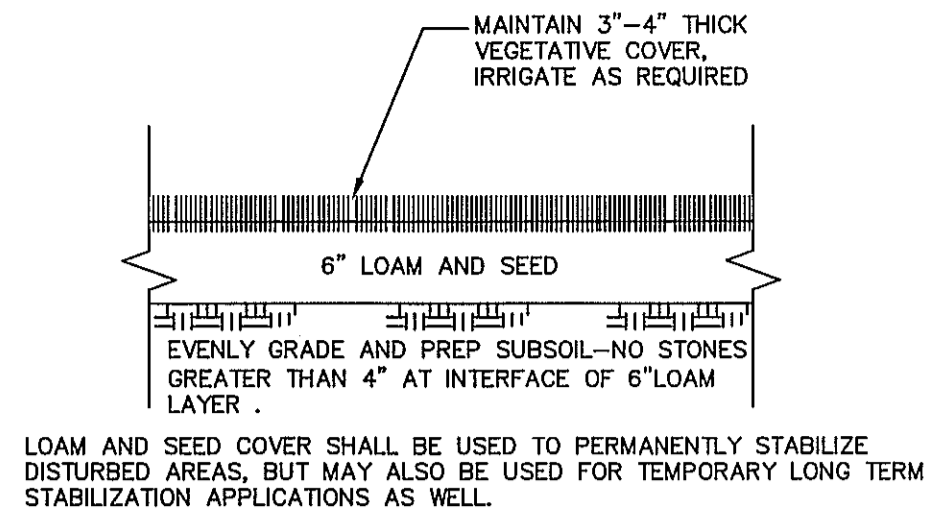
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1. CONTRACTOR TO MAINTAIN ENTRANCE (I.e. REMOVE STONE WHEN 90% CLOGGED) UNTIL BASE COURSE IS INSTALLED.

STABILIZED CONSTRUCTION ENTRANCE DETAIL

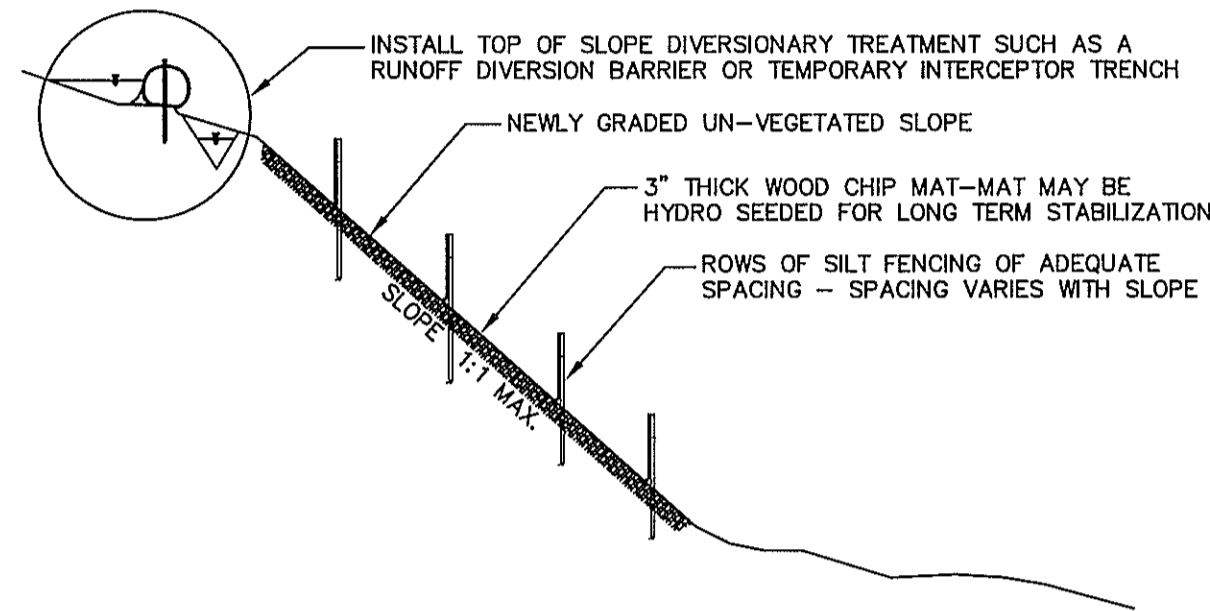
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LOAM AND SEED COVER SHALL BE USED TO PERMANENTLY STABILIZE DISTURBED AREAS, BUT MAY ALSO BE USED FOR TEMPORARY LONG TERM STABILIZATION APPLICATIONS AS WELL.

LOAM AND SEED COVER

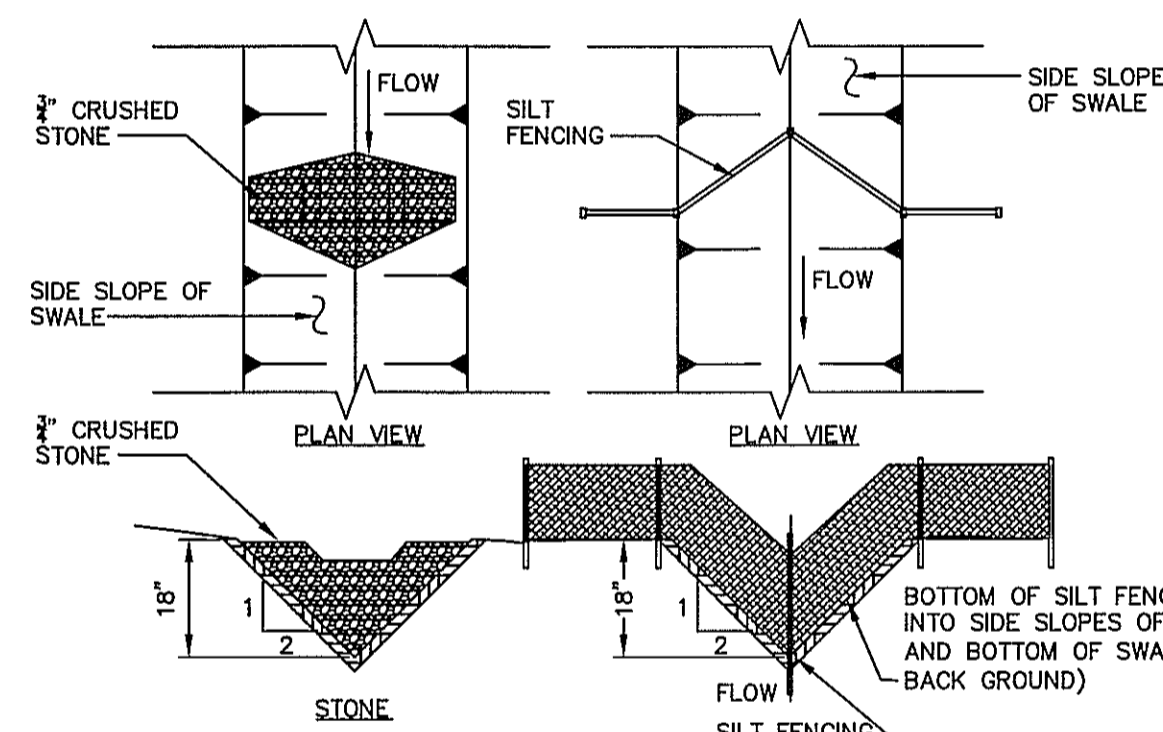
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USE THE ABOVE METHOD TO STABILIZE STEEP CUT SLOPES THAT MAY OCCUR DURING CONSTRUCTION OPERATIONS

SLOPE INTERRUPTION

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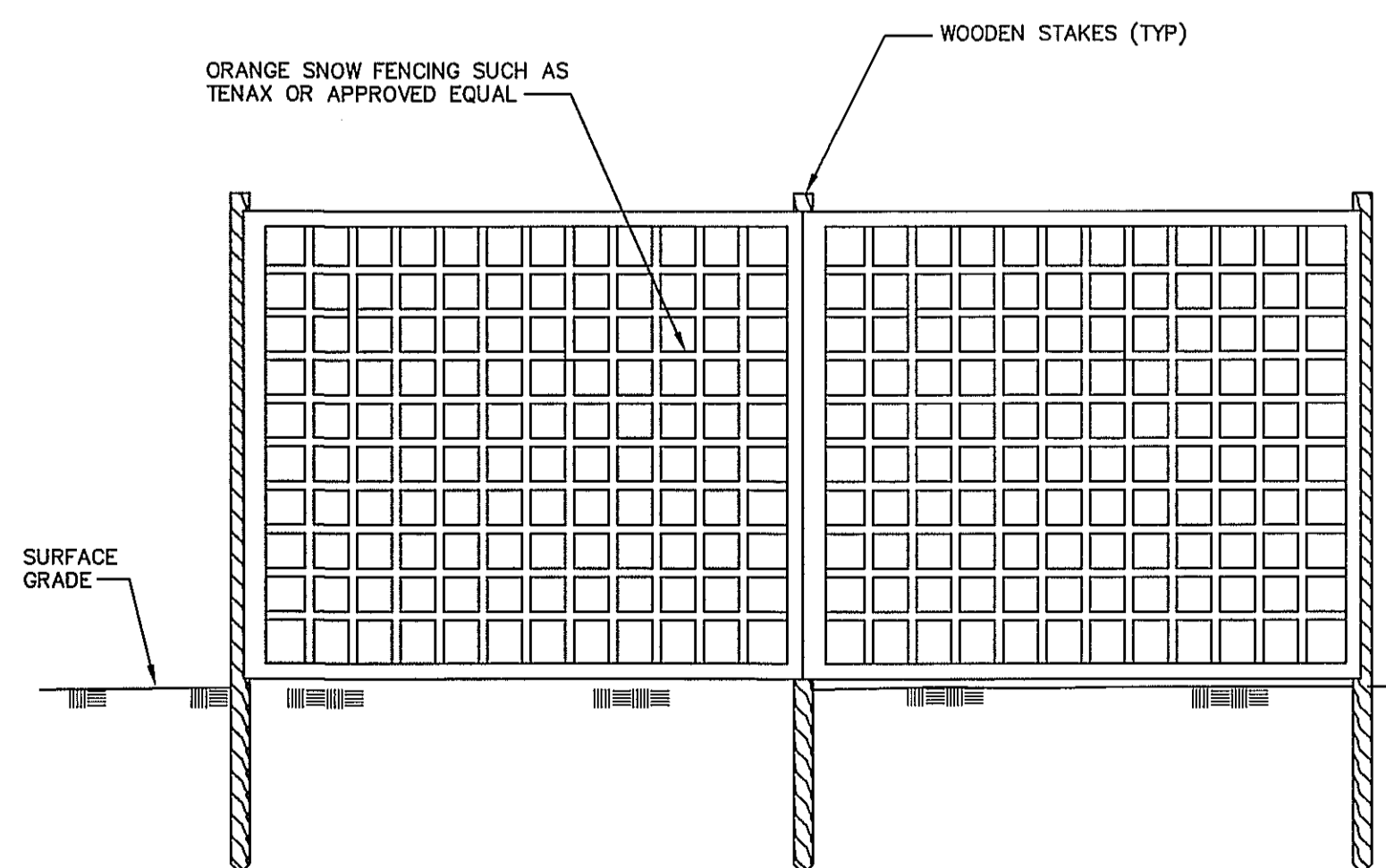


NOTE:

CHECK DAMS MAY BE MADE USING THE SILT SOCK SEDIMENT BARRIERS. THIS APPLICATION IS WELL SUITED FOR THE PERMANENT WATER QUALITY SWALES ON EITHER SIDE OF THE DRIVEWAY.

CHECK DAM TYPES

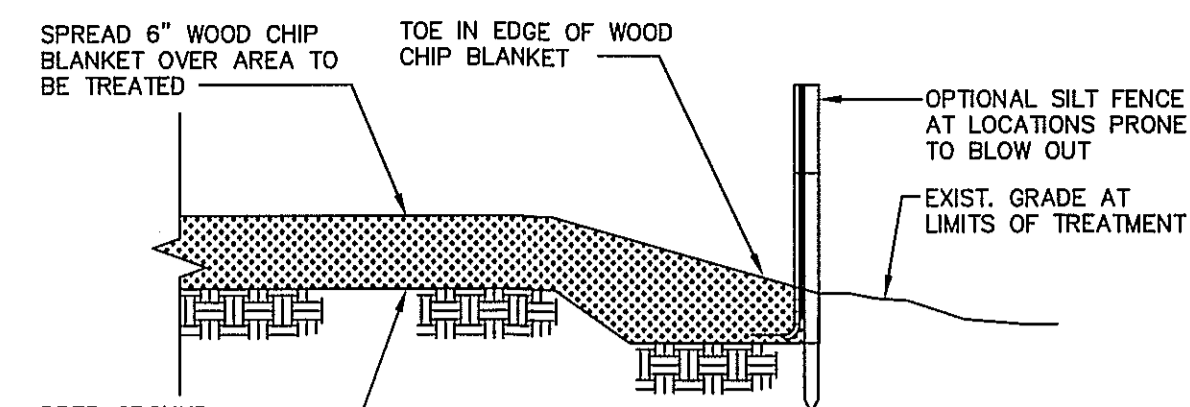
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INSTALL SILT FENCE ALONG EDGE OF DRIVEWAY AS SHOWN IN PLAN TO PREVENT UNAUTHORIZED VEHICLE ENTRY THE INFILTRATION ZONE.

SNOW FENCING DETAIL

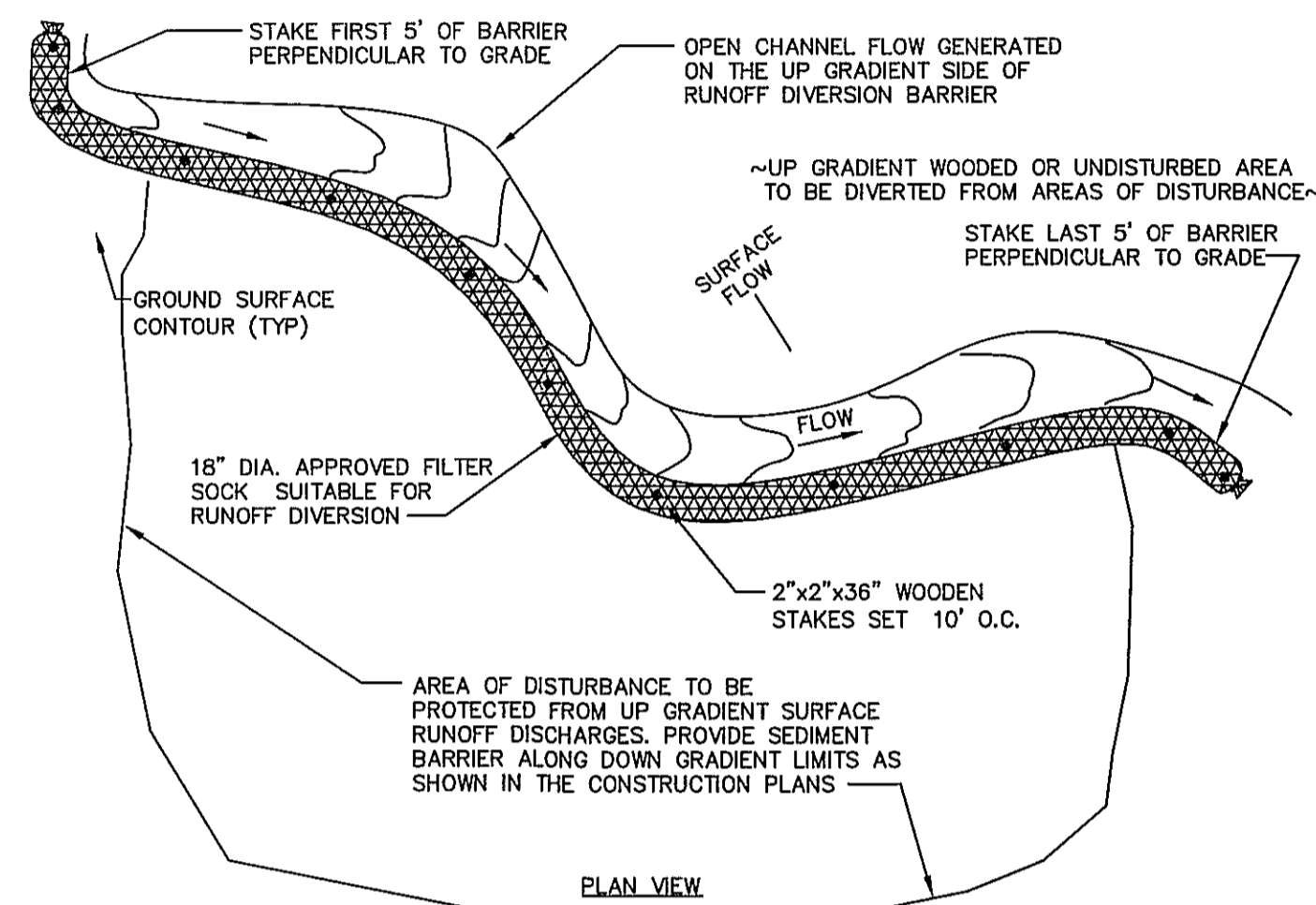
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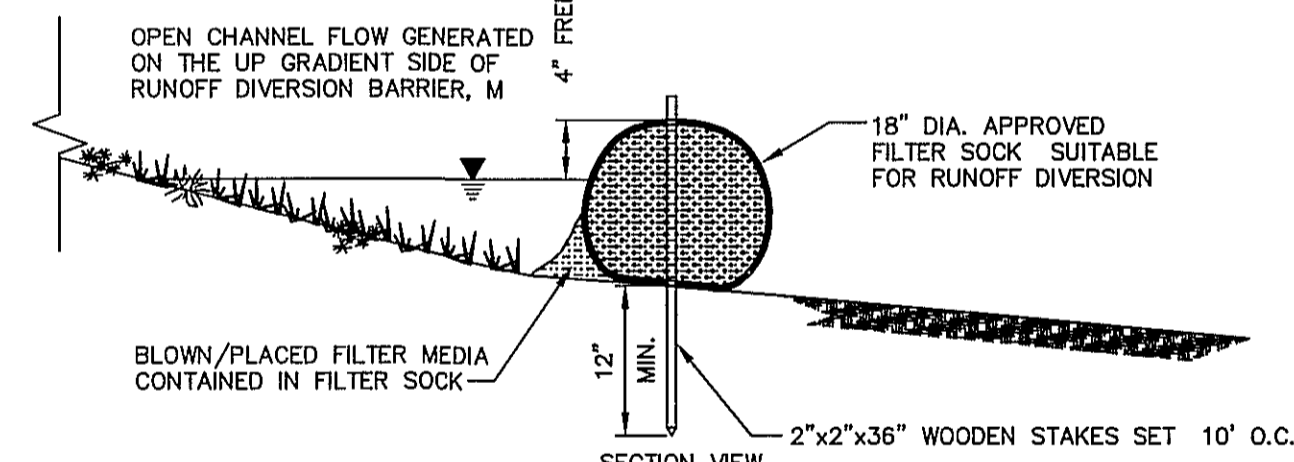
CONSTRUCT A WOOD CHIP BLANKET PER DETAIL TO STABILIZE TRAFFIC OR STORAGE AREAS DURING SATURATED CONDITIONS TO PREVENT EROSION, OR OTHER FORMS OF SILT LADEN CONTAMINATION SUCH AS TIRE TREADS DEPOSITING SILT IN AREAS THAT MAY BECOME PROBLEMATIC.
WOOD CHIP BLANKET MAY ALSO BE IMPLEMENTED FOR DUST CONTROL DURING DRY CONDITIONS.

WOOD CHIP COVER OF BLANKET

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UP GRADIENT WOODED OR UNDISTURBED AREA TO BE DIVERTED FROM AREAS OF DISTURBANCE

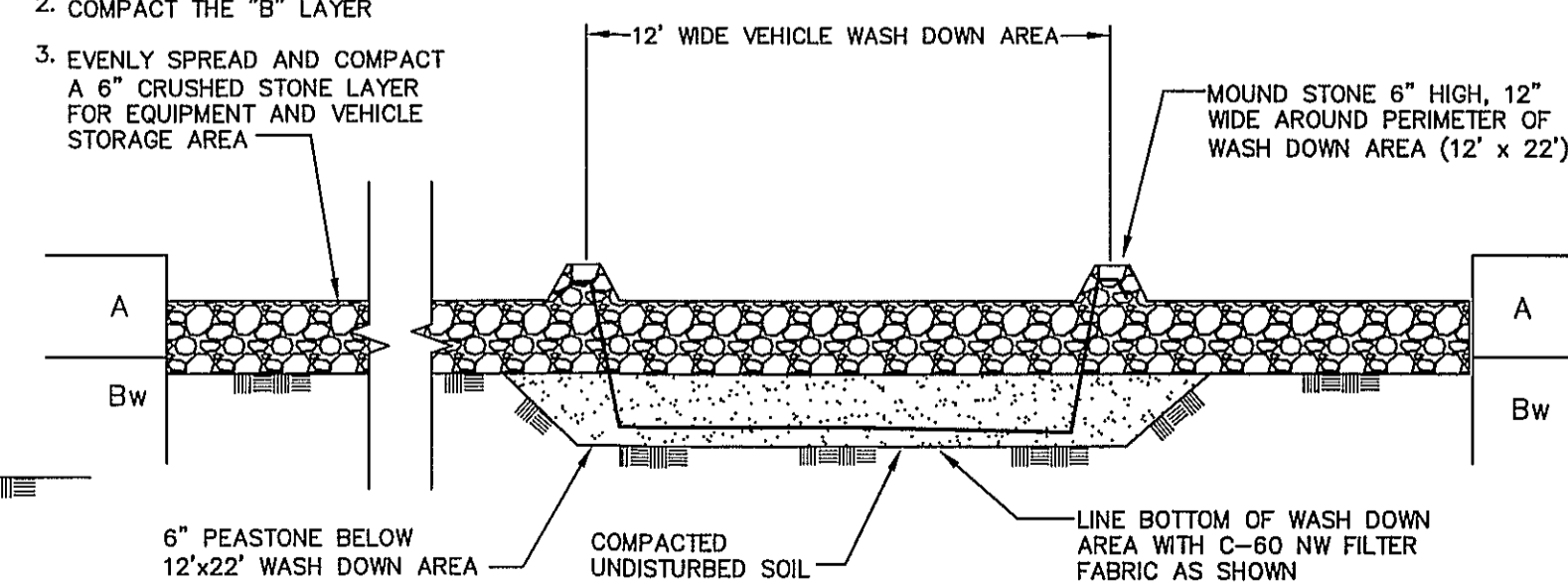


RUNOFF DIVERSION BARRIER SHALL BE THE FILTREXX RUNOFF DIVERSION TYPE AS MANUFACTURED BY FILTREXX LAND IMPROVEMENT SYSTEMS OR APPROVED EQUAL. MINIMUM DIAMETER OF RUNOFF DIVERSION BARRIER SHALL BE 18"

RUNOFF DIVERSION BARRIER

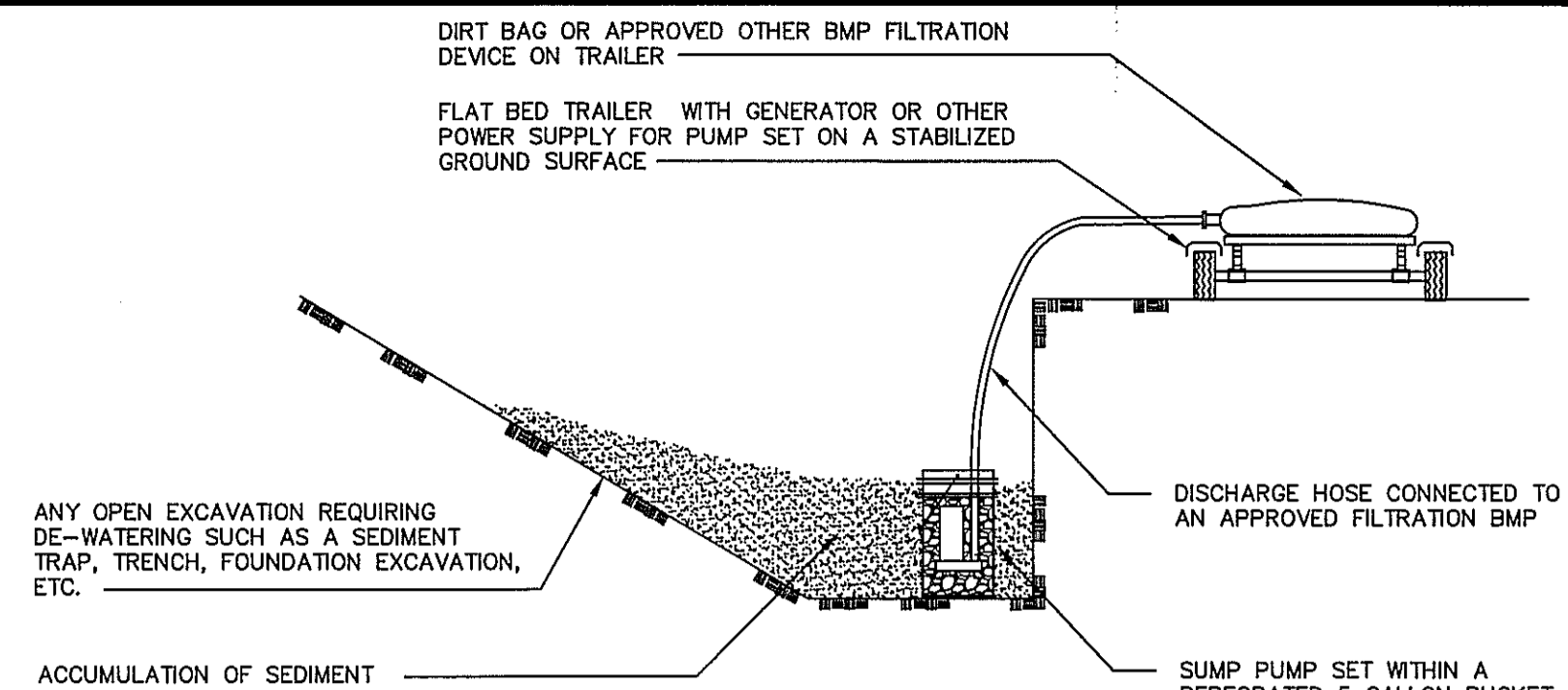
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1. STRIP OFF THE "A" LAYER AND STOCK PILE.
2. COMPACT THE "B" LAYER
3. EVENLY SPREAD AND COMPACT A 6" CRUSHED STONE LAYER FOR EQUIPMENT AND VEHICLE STORAGE AREA



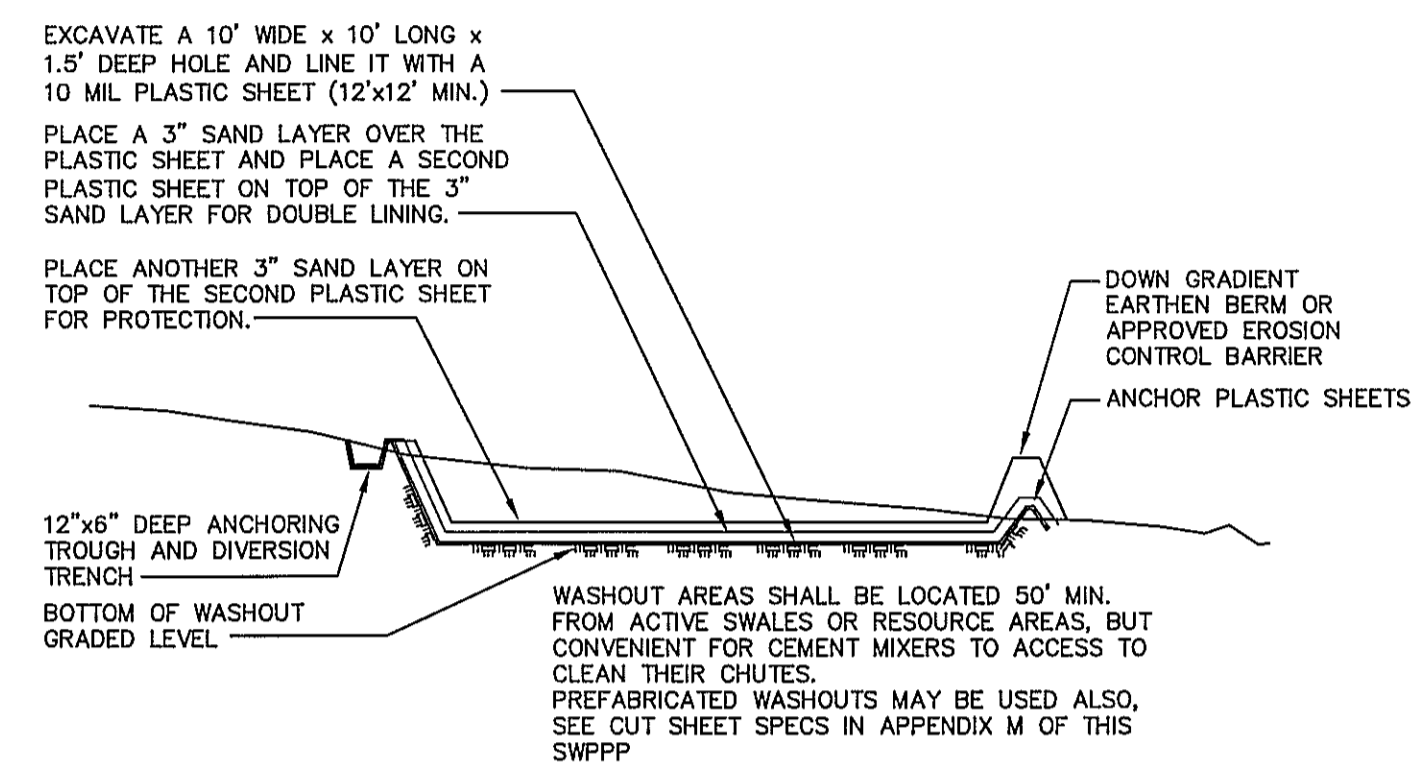
VEHICLE PARKING/WASHDOWN AREA

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DE-WATERING TECHNIQUES

NTS



DESIGNATED WASHOUT AREAS

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OWNER

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192 NEPONSET STREET
CANTON, MA 02021

APPLICANT

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COREY'S WAY
MODIFIED SUBDIVISION
SWPPP DETAILS PLAN
FOR
213 CUSHING STREET
IN

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SCALE: AS SHOWN OCTOBER 22, 2020

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683 MAIN STREET
NORWELL, MASS. 02061
(781)659-1325

