

EROSION AND SEDIMENT CONTROL PLAN

OBJECTIVE

- TO PROTECT OFF SITE AREAS 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:
 - THE DISCHARGE OR PUMPING OF WATER CONTAMINATED WITH SILT INTO EXISTING STREETS.
 - ALLOWING UNTREATED RUNOFF INTO THE PROPOSED STORMWATER MANAGEMENT SYSTEM.
 - ALLOWING EROSION AND UNTREATED RUNOFF INTO EXISTING STORM DRAINS OR ADJUTING PROPERTIES.
 - STOCK PILING FILL OF ANY CONSTRUCTION MATERIAL NEAR PROPERTY LINES OR UTILITIES WITHOUT ADEQUATE PROTECTIVE MEASURES IN PLACE.

DISTURBED DEVELOPMENT AREA

- TOTAL AREA OF DISTURBANCE FOR PAVING, DRAINAGE, UTILITY AND HOUSE CONSTRUCTION ACTIVITIES=6,550 SF.
- THE MAXIMUM AREA OF DISTURBANCE AT ANY ONE TIME AND THE AMOUNT OF BARE EARTH TO BE EXPOSED AT ANY ONE TIME =7,500 SF WITH LENGTH OF TIME OF EXPOSURE BEING 240 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 CITY'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

- THE EASIEST AND MOST EFFECTIVE WAY TO CONTROL EROSION IS THROUGH SOURCE REDUCTION. THIS IS EFFECTIVELY DONE BY CLEARING AND DISTURBING AREAS THAT NEED TO BE ALTERED FOR THE CURRENT CONSTRUCTION PHASE. CLEARING AREAS OF SUBSEQUENT PHASES WILL REQUIRE ADDITIONAL STABILIZATION WORK AND ATTENTION. THESE AREAS MAY ALSO POSE A THREAT TO THE ADJUTING RESIDENCES AND MUNICIPAL INFRASTRUCTURE IF NEGLECTED.
- 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.
- AREAS THAT CAN NOT BE STABILIZED DUE TO THE NATURE OF THE 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 IMPRUDENT AND CAN PUT THE PROJECT AT RISK TO ENFORCEMENT ORDERS.

DE-WATERING PRACTICES

- DE-WATERING OF TRENCHES AND OPEN EXCAVATIONS SHALL BE PERFORMED SO AS TO ACHIEVE AT A MINIMUM THE FOLLOWING STANDARDS:
 - NO BUCKETING OR PUMPING OF UNTREATED DE-WATERING ACTIVITIES SHALL HAVE A DIRECT DISCHARGE INTO ADJUTING PROPERTIES OR MUNICIPAL INFRASTRUCTURE.
 - MUD PUMPS SHALL BE PLACED IN A 5 GALLON BUCKET FILLED WITH CRUSHED STONE TO FILTER OUT HEAVY SEDIMENTS.
- THE CONTRACTOR MAY USE ANY PRETREATMENT DEVICES SHOWN ON THE PLANS OR MAY IMPLEMENT OTHER DEVICES OR PRACTICES WITH THE APPROVAL OF THE COMMISSION AND THE DESIGNING ENGINEER.
- 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.

STOCK PILING PRACTICES

- LONG TERM STOCKPILES OF LOAM AND FILL MATERIALS SHALL BE CONTAINED OR STABILIZED THROUGH LOAMING AND SEEDING IF THE PILE IS TO REMAIN FOR A PERIOD OF TIME EXCEEDING 30 DAYS.
- COVERING PILES DURING DOWN POURS WITH TARPS CAN BE AN EFFECTIVE METHOD OF TEMPORARY EROSION CONTROL.
- STOCKPILES SHALL BE LOCATED AT LEAST 100' AWAY FROM WETLANDS AND SURROUNDED BY A SILTATION BARRIER.
- STOCKPILES SHALL BE STABILIZED WITH TEMPORARY VEGETATION, MULCH, OR COVERING WITH TARPS.

TEMPORARY SEDIMENT BASIN/SILT TRAP MAINTENANCE

- 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.
- THE TRAP SHALL BE INSPECTED AFTER EACH RAIN STORM AND CLEANED OR REPAIRED IF NECESSARY.
- THE TOP 2/3 OF THE RISER SHALL BE PERFORATED WITH 1" DIAMETER HOLES 6" HORIZ. AND VERTICALLY. NO HOLES SHALL BE ALLOWED WITHIN 6" OF THE HORIZONTAL PIPE.
- THE RISER SHALL BE WRAPPED WITH FILTER FABRIC. THE FILTER FABRIC SHALL BE 6" ABOVE THE HIGHEST HOLE AND 6" BELOW THE LOWEST. CONNECTING BANDS SHALL BE USED TO HOLD THE FILTER FABRIC IN PLACE AT THE TOP AND BOTTOM OF THE PIPE.
- THE RISER SHALL BE ANCHORED WITH EITHER A CONCRETE BASE OR STEEL PLATE TO PREVENT FLOATATION.
- EARTH DAM FILL MATERIAL SHALL BE FREE OF ROCKS, ROOTS, OR OTHER ORGANIC MATERIAL.
- TEMPORARY SEDIMENT TRAPS LOCATED IN THE AREA OF THE PERMANENT DETENTION BASIN SHALL BE REMOVED BY EXCAVATING A MINIMUM OF 6" BELOW THE BOTTOM OF THE TRAP TO ENSURE THAT ALL CONSTRUCTION SEDIMENT ARE REMOVED. THE AREA IS TO BE PROMPTLY PREPARED FOR CONSTRUCTION OF THE PERMANENT BASIN. THE PERMANENT BASIN SHALL BE STABILIZED AS SOON AS POSSIBLE. CONTRACTOR SHALL SCHEDULE BASIN CONSTRUCTION AND STABILIZATION OPERATIONS DURING FAVORABLE WEATHER CONDITIONS.

SHALLOW LAWN BASIN CONSTRUCTION PRACTICES

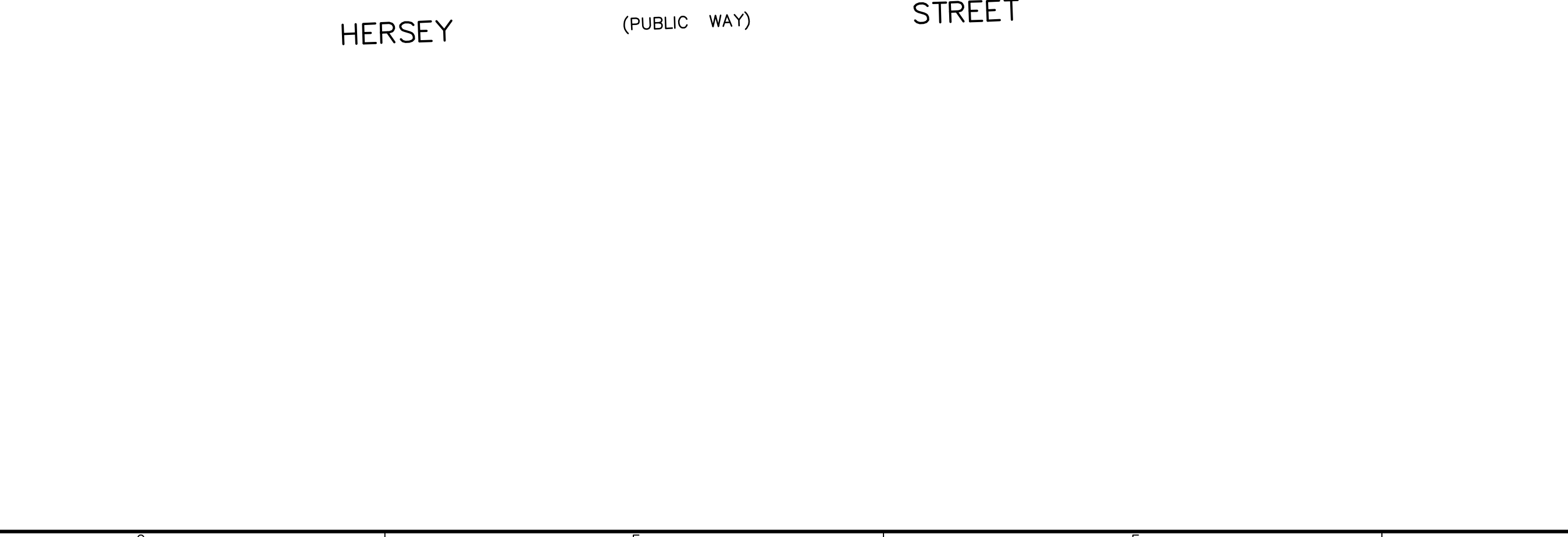
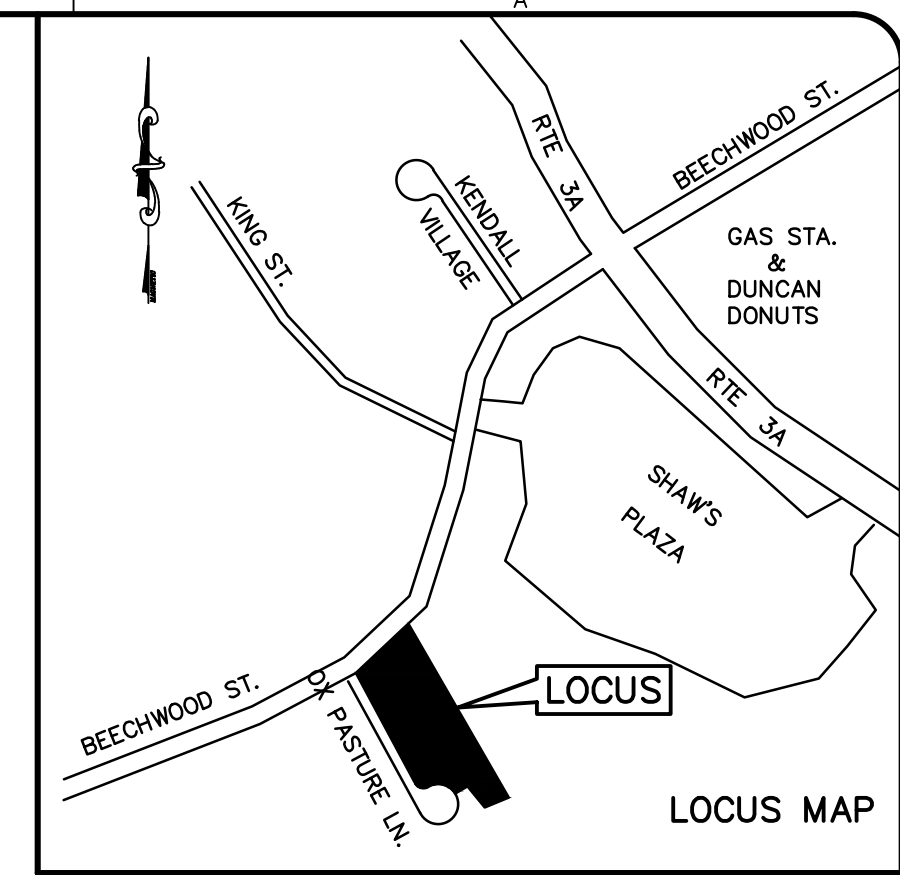
- ALL AREAS WHERE STORMWATER RETENTION/RECHARGE SYSTEMS ARE BEING PROPOSED, SHALL BE PROTECTED FROM DEGRADATION BY CONSTRUCTION BY INCORPORATING THE FOLLOWING CONSTRUCTION PRACTICES:
 - HEAVY EQUIPMENT SHALL NOT PASS, RE-PASS, OR HAUL MATERIALS IN THE AREAS OF THE STORMWATER RECHARGE SYSTEMS SO AS TO COMPACT AND ALTER THE INFILTRATION CHARACTERISTICS OF THE PARENT MATERIAL BY COMPACTION.
 - NO HEAVY EQUIPMENT SHALL BE PARKED, STORED, OR DRIVEN OVER THE EXCAVATION FOR THE SUBSURFACE STORMWATER RECHARGE SYSTEM.
 - ONLY HEAVY EQUIPMENT USED DIRECTLY IN THE CONSTRUCTION OF THE SHALLOW LAWN BASIN RECHARGE SYSTEM, SHALL BE ALLOWED IN THE AREA OF THE SYSTEM. WORK SHALL PROCEED STEADILY DURING FAVORABLE WEATHER TO ENSURE THE SYSTEM WILL FUNCTION AS INTENDED.
 - NO STORMWATER FROM CONSTRUCTION ACTIVITIES OR DISTURBED AREAS SHALL BE DISCHARGED INTO THE SHALLOW LAWN BASIN.
- ALL SUCH DISCHARGES SHALL BE ROUTED THROUGH APPROVED TEMPORARY CONTROLS PRIOR TO RELEASE OFF SITE OR TO RESOURCE AREAS.
- SHALLOW LAWN BASIN SHALL NOT BE BROUGHT ON LINE UNTIL TRIBUTARY AREAS ARE STABILIZED AND ALL PERMANENT PRE-TREATMENT DEVICES AND STRUCTURES HAVE BEEN INSTALLED AND INSPECTED.

GENERAL EROSION CONTROL CONSTRUCTION PRACTICES

- VEHICLE EQUIPMENT STORAGE AND RE-FUELING SHALL ONLY OCCUR IN AREAS DESIGNATED, AS ON THIS PLAN.
- STOCKPILING OF EARTHEN MATERIALS SHALL OCCUR ONLY IN AREAS DESIGNATED, AS SHOWN ON THE PLAN.
- AREAS DESIGNATED TO BE AMENDED USING ENGINEERED SOILS SHALL NOT BE USED FOR STAGING AREAS, CONSTRUCTION VEHICLE PARKING, HEAVY EQUIPMENT STORAGE/ REFUELING, OFFICE TRAILERS, EQUIPMENT STORAGE TRAILERS, STOCKPILING OF EARTHEN MATERIALS OR ANY OTHER ACTIVITY THAT COULD COMPACT SOILS.
- SEDIMENT BARRIERS SHALL BE MAINTAINED THROUGH OUT THE COURSE OF CONSTRUCTION PHASES.

GENERAL CONSTRUCTION SEQUENCING

- OBTAIN ALL PERMITS AND KEEP COPIES PRESENT ON SITE DURING CONSTRUCTION.
- INSTALL PERIMETER EROSION CONTROL SEDIMENT BARRIERS, STAGING PARKING, STABILIZED ENTRANCE AND RE-FUELING AREAS.
- EXCAVATE AND INSTALL NEW FOUNDATION FOOTINGS AND WALLS FOR ADDITION AND SUBGRADE FOR DRIVEWAY.
- STOCKPILE TEMPORARILY IN AREA OF SHALLOW BASIN. REMOVE AND DISPOSE OF STOCKPILE PROMPTLY AS FRAMING OF ADDITION IS INITIATED.
- COMPLETE CONSTRUCTION OF ADDITION.
- INSTALL DRIVEWAY SUBBASE AND BINDER COURSE.
- REMOVE ALL STOCKPILED MATERIALS AND EXCAVATE FOR SHALLOW LAWN BASIN.
- REMOVE ANY STOCKPILES AT END OF DRIVE WAY.
- INSTALL SAND LOAM & SEED SHALLOW LAWN BASIN AND ALSO INSTALL FOREBAY SANDFILTER.
- REMOVE EROSION CONTROLS EXCEPT FOR THE SEDIMENT BARRIERS AR SITE PERIMETER
- HYDRO SEED AND FINAL STABILIZATION OF DISTURBED AREAS.
- REMOVE PERIMETER SEDIMENT BARRIERS.
- INSTALL TOP COURSE PAVEMENT ON DRIVEWAY.



LEGEND

EXISTING	PROPOSED	DESCRIPTION
○	□	CONTOUR ELEVATION
○	○	SPOT GRADE
○	○	SEWER MANHOLE (SMH)
○	○	DRAIN MANHOLE (DMH)
○	○	CATCH BASIN (CB)
○	○	HYDRANT (HYD)
○	○	UTILITY POLE (UP)
○	○	LIGHT
○	○	WATER GATE (WG)
○	○	WATER SERVICE (WS)
○	○	SIGN
○	○	EDGE OF PAVEMENT
○	○	STONE WALL
○	○	TREELINE
○	○	WETLAND LINE
○	○	TEST PIT LOCATION
○	○	GROUNDWATER ELEV
○	○	EXISTING TREE

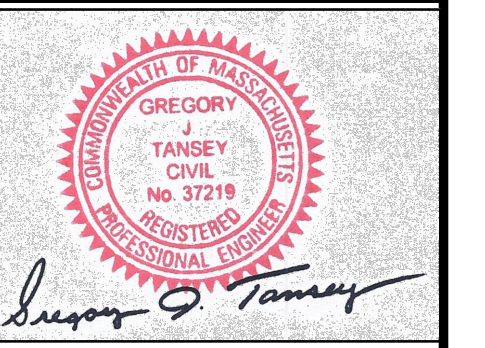
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EROSION CONTROL SITE PLAN
AT
180 HERSEY STREET
IN
HINGHAM, MA



OWNER/APPLICANT
OAK DEVELOPMENT, LLC
30 SUMMER STREET
HINGHAM, MA

LOCUS
180 HERSEY STREET
HINGHAM, MA

PLAN TITLE:
EROSION CONTROL SITE PLAN
180 HERSEY STREET
HINGHAM, MA

SCALE: 1"=10' DATE: 05-22-21

NO.	DATE	DESCRIPTION	BY

PATRIOT PERMITTING & ENGINEERING

617-827-0851

DRAWN BY: GJT
CHECKED BY: GJT

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