

### EROSION AND SEDIMENTATION CONTROL NOTES: GENERAL CONDITIONS: • ALL WORK SHALL BE IN ACCORDANCE WITH THE ORDER OF CONDITIONS ISSUED BY THE CONSERVATION COMMISSION AND PROJECT STORMWATER POLLUTION PREVENTION PLAN (IF • THIS PLAN DEPICTS THE MINIMUM REQUIRED SEDIMENTATION AND EROSION CONTROLS. THE CONTRACTOR SHALL EMPLOY ADDITIONAL SEDIMENTATION AND EROSION CONTROL MEASURES AS NECESSITATED BY SITE CONDITIONS, OR AS DIRECTED BY THE OWNER, THE OWNER'S REPRESENTATIVE, - ALONG TOP OF BLOCK WALL PROVIDE OR THE CONSERVATION COMMISSION TO ENSURE PROTECTION OF ALL WETLAND RESOURCES AND CONTROL SEDIMENT TRANSPORT. IF SEDIMENTATION PLUMES OCCUR, THE CONTRACTOR SHALL STOP 8' TALL NOISE DEADINING FENCE WORK AND INSTALL ADDITIONAL SEDIMENTATION CONTROL DEVICES IMMEDIATELY TO PREVENT (MASS LOADED VINYL, OR EQUAL) 158 RESPONSIBLE PARTY: THE SITE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING ALL TEMPORARY AND PERMANENT MAP 3. PARCEL 16 SEDIMENTATION AND EROSION CONTROLS UNTIL WORK IS COMPLETE AND ALL AREAS HAVE BEEN AREA=3.43± ACRES PERMANENTLY STABILIZED. AT SUCH TIME THE CONTRACTOR IS RESPONSIBLE FOR REMOVING ALL SEDIMENTATION AND EROSION CONTROL MEASURES. CONTRACTOR'S CONTACT INFORMATION TO BE PROVIDED TO THE LOCAL AUTHORITY PRIOR TO CONSTRUCTION, INCLUDING 24 HOUR EMERGENCY CONTACT NUMBER.. SEQUENCE OF EROSION CONTROLS: • PRIOR TO INITIATING ANY CONSTRUCTION, ALL SEDIMENTATION AND EROSION CONTROL MEASURES SHALL BE INSTALLED AS SHOWN ON THE PLANS AND DETAIL DRAWINGS. INSPECTION / MAINTENANCE SCHEDULE: THE CONTRACTOR SHALL INSPECT SEDIMENTATION AND EROSION CONTROLS ON A WEEKLY BASIS AND IMMEDIATELY BEFORE/AFTER EACH RAINFALL GREATER THAN 0.25 INCHES. -PROP. EROSION BARRIER REPAIRS SHALL BE MADE BY THE END OF THE WORKING DAY. CONSTRUCTION PERIOD BMP'S: SEDIMENTATION BARRIERS SHALL BE INSTALLED ALONG THE EDGE OF PROPOSED DEVELOPMENT OR AS INDICATED ON THE PLANS. ADDITIONAL BARRIERS SHALL BE LOCATED AS CONDITIONS WARRANT, HEB LAND AND IN SOME AREAS STRUCTURES MAY HAVE TO BE DUPLICATED AT REGULAR INTERVALS UP GRADIENT OF WETLANDS. ACCUMULATED SEDIMENT SHALL BE REMOVED AND DISPOSED OF BY THE PROPOSED EROSION BARRIER CONTRACTOR WHEN THE VOLUME REACHES 1/4 TO 1/2 THE HEIGHT OF SEDIMENT BARRIER, OR AS SEDIMENTATION \ MAP 12, E DIRECTED BY THE LOCAL AUTHORITY. DURING CONSTRUCTION, STORMWATER TAIL) NOW WATER SOIL STOCKPILES SHALL BE STABILIZED TO PREVENT EROSION, AND A PERIMETER SEDIMENT CONTROL STORAGE FOR ×158 BARRIER SHALL BE INSTALLED. NO MATERIALS SUBJECT TO EROSION SHALL BE STOCKPILED DUST SUPPRESSION OVERNIGHT WITHIN 100 FEET OF A WETLAND UNLESS COVERED. 15<sub>4.4</sub> DISTURBED AREAS SHALL BE STABILIZED WITH 4 INCHES OF LOAM AND SEEDING (OR BY ANOTHER APPROVED METHOD) AS SOON AS POSSIBLE AFTER THE FINISHED GRADE HAS BEEN MET. DISTURBED AREAS WITH SLOPES 3:1 (H:V) OR GREATER SHALL BE COVERED WITH LOAM AND STABILIZED WITH HYDROSEED. IF FINAL GRADING DOES NOT OCCUR DURING THE GROWING SEASON, THESE AREAS SHALL BE MULCHED WITH HAY AND SECURED. SEDIMENT POND -DEWATERING OPERATIONS, IF REQUIRED, SHALL DISCHARGE ONTO STABILIZED AREAS, AND ALL NOT REGULATED RESOURCE AREA PER DISCHARGE WATER IS TO PASS THROUGH SEDIMENTATION CONTROL DEVICES TO PREVENT IMPACTS 15×.5 ORDER OF CONDITIONS 185-50 (1978), UPON WATER BODIES, BORDERING VEGETATED WETLANDS, DRAINAGE SYSTEMS AND ABUTTING PROPERTIES. AT A MINIMUM ALL DISCHARGES SHALL BE INTERCEPTED BY GEOTEXTILE FILTER BAG RECTIFIED 185-720 (1978), -PROPOSED ROOF DRYWELL AND/OR HAYBALE CHECK DAMS SPACED 10' APART. RECOGNIZED 2011 NOTICE OF INTENT 15-CULTEC C-100 HC CHAMBERS AND 2018 ENF. 115'X5.5'X2' STONE BED STREET SWEEPING IN THE VICINITY OF THE PROJECT AREA SHALL BE PERFORMED AS NEEDED UNTIL WATER ELEV. THE PROJECT LIMITS HAVE BEEN STABILIZED. ALL SEDIMENT TRACKED ONTO PUBLIC RIGHT-OF-WAYS BOTTOM STONE=156.0 $=153.3\pm$ SHALL BE SWEPT AT THE END OF EACH WORKING DAY AT A MINIMUM, AND AS NEEDED BASED ON BOTTOM CHAMBER=156.5 THE AMOUNT OF SEDIMENT TRACKED. 15<sub>4.5</sub> 6" IN=157.0 • ALL EXISTING AND PROPOSED DRAINAGE SYSTEM INLETS, WHICH MAY RECEIVE STORMWATER FLOW FROM DISTURBED AREAS, SHALL BE PROVIDED WITH INLET PROTECTION (CATCH BASIN SILT SACKS). BIT. CONC. PAD B06 THE CONTRACTOR SHALL MAINTAIN THESE DEVICES PER THE MANUFACTURERS RECOMMENDATIONS 1 1/2" TOP COURSE UNTIL ALL WORK IS COMPLETED AND ALL AREAS HAVE BEEN ADEQUATELY STABILIZED. 2 1/2" BINDER COURSE 12" (MIN.) GRAVEL BASE DUST CONTROL MEASURES SHALL BE IMPLEMENTED AND MAINTAINED PROPERLY THROUGHOUT DRY WEATHER PERIODS UNTIL ALL DISTURBED AREAS HAVE BEEN PERMANENTLY STABILIZED. METHODS FOR DUST CONTROL SHALL INCLUDE WATER SPRINKLING AND/OR OTHER METHODS APPROVED BY THE -BENCHMARK P.K. NAIL IN BIT.CONC. EL.=156.80 ALL VEHICLES SHALL ENTER AND EXIT THE SITE OVER THE EXISTING PAVED DRIVEWAY OR A STABILIZED CONSTRUCTION ENTRANCE CONSISTING OF 2" TO 3" INCH CRUSHED STONE TO A DEPTH OF 6" FOR A MINIMUM OF THE FIRST 50 FEET FROM EXISTING PAVED STREETS. EXTEND THE PAD BEYOND 50 FEET AS NECESSARY BASED UPON FIELD CONDITIONS. IF THE SITE CONDITIONS ARE SUCH THAT THE GRAVEL PAD DOES NOT REMOVE THE MAJORITY OF THE MUD AND DEBRIS, THEN THE TIRES SHALL BE WASHED BEFORE ANY VEHICLES ENTER ADJACENT ROADWAYS. ALL WATER USED FOR TIRE WASHING SHALL BE COLLECTED AND TREATED PRIOR TO ENTERING THE DRAINAGE SYSTEM. THE PROPOSED BERM W/ 8' TALL -CONTRACTOR SHALL INSPECT THE CONSTRUCTION ENTRANCE DAILY AND AFTER HEAVY USE. NOISE DEADENING FENCE (MASS LOADED VINYL, OR EQUAL), UP#2X **CONSTRUCTION NOTES:** ANGLES AS SHOWN $\Box$ 1. EXISTING UTILITY LINES SHOWN ON THIS DRAWING ARE FROM AVAILABLE INFORMATION AND ARE APPROXIMATE LOCATIONS. THE ENGINEER DOES NOT GUARANTEE THEIR ACCURACY OR THAT ALL 3R001 PREPARED FOR: UTILITIES AND SUBSURFACE STRUCTURES ARE SHOWN. THE CONTRACTOR SHALL VERIFY SIZE, LOCATION PROP. SEDIMENT TRAP AND INVERT ELEVATIONS OF THE UTILITIES AND STRUCTURES, AS REQUIRED PRIOR TO THE START OF CONSTRUCTION. ANY DISCREPANCIES WITH RECORD DATA SHALL BE REPORTED TO THE ENGINEER MASTER PAVING CORP. & IMMEDIATELY. THE CONTRACTOR SHALL CONTACT DIG SAFE: 1-800-344-7233 (72 HOURS BEFORE MIDDLESEX ASPHAULT SERVICES, INC. DIGGING), AND TOWN DPW FOR UTILITY LOCATIONS PRIOR TO EXCAVATION. TEST PITS SHALL BE UTILIZED -STORMWATER DITCH FOR UTILITY CONNECTIONS. NOT REGULATED RESOURCE AREA PER 157–165 LOWLAND STREET ORDER OF CONDITIONS 185-50 (1978), 2. WHERE AN EXISTING UTILITY IS FOUND TO CONFLICT WITH THE PROPOSED WORK, THE LOCATION, ELEVATION, AND SIZE OF THE UTILITY SHALL BE ACCURATELY DETERMINED WITHOUT DELAY BY THE RECTIFIED 185-720 (1978), HOLLISTON, MA 01746 CONTRACTOR AND THE INFORMATION FURNISHED TO THE ENGINEER FOR RESOLUTION OF THE CONFLICT. RECOGNIZED 2011 NOTICE OF INTENT AND 2018 ENF. 3. ALL MATERIALS AND CONSTRUCTION PRACTICES SHALL BE IN CONFORMANCE WITH THE STANDARDS AND SPECIFICATIONS OF THE AUBURN DEPARTMENT OF PUBLIC WORKS, OR THE LATEST EDITION OF THE **CONNORSTONE** PROPOSED EROSION BARRIER DURING CONSTRUCTION, MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) CONSTRUCTION STANDARDS AND THE MHD "STANDARD ENGINEERING INC. (SEE DETAIL) SPECIFICATIONS FOR HIGHWAYS AND BRIDGES", WHICHEVER IS MORE STRINGENT. 4. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR, TO KEEP ACCURATE AS-BUILT CIVIL ENGINEERS AND LAND SURVEYORS MEASUREMENTS / RECORDS OF ALL UNDERGROUND OR CONCEALED WORK. TEE/TOP INLET=153.76 10 SOUTHWEST CUTOFF, SUITE 7 INV. = 151.55. THE LAYOUT AND INSTALLATION OF ELECTRIC, GAS, TELEPHONE AND CATV UTILITY CONNECTIONS NORTHBOROUGH, MASSACHUSETTS 01532 AND SERVICES SHALL IN ACCORDANCE WITH THE REQUIREMENTS OF THE RESPECTIVE UTILITY. 18" CMP PHONE: 508-393-9727 FAX: 508-393-5242 - 1"X 1"X 4' STAKES INV. = 151.36. THE CONTRACTOR SHALL UTILIZE ALL MEASURES AND MATERIALS NECESSARY TO ENSURE THE 6' ON CENTER SAFETY OF ALL PERSONS AND PROPERTIES AT THE SITE DURING CONSTRUCTION. ALL EXCAVATIONS PROPOSED SITE PLAN 1"X 1"X 3' STAKES SHALL CONFORM TO CURRENT OSHA STANDARDS. EVERY 3' TO 4'-7. IT SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR TO COORDINATE HIS WORK WITH THE STRAW WATTLES APPROPRIATE HIGHWAY & UTILITY DEPARTMENTS. WORK WITHIN THE HIGHWAY LAYOUT SHALL CONFORM SILT FENCE 157–165 LOWLAND STREET SILT FENCE TO THE CONDITIONS OF THE PERMIT ISSUED BY MASSACHUSETTS DEPARTMENT OF TRANSPORTATION -ADJACENT ROLLS HIGHWAY DIVISION OR THE LOCAL AUTHORITY. SHALL TIGHTLY ABUT ENTRENCH 3" 8. ALL SIGN SIZES AND MATERIAL SHALL CONFORM TO THE "MANUAL ON UNIFORM TRAFFIC DEVICES" ( HOLLISTON, MA MUTCD ) AND THE OFFICE OF TRAFFIC OPERATIONS, FEDERAL HIGHWAY ADMINISTRATION, U.S. DEPARTMENT OF TRANSPORTATION. 9. ALL RAMPS, CURB CUTS, SIDEWALKS, AND ACCESSIBLE SPACES SHALL COMPLY WITH THE AMERICANS WITH DISABILITIES ACT REGULATIONS AND WITH ARCHITECTURAL ACCESS BOARD **CROSS SECTION** COLONNA REGULATIONS (521 CMR 1-47). PLAN VIEW No. 47635 10. AREAS OUTSIDE THE LIMITS OF PROPOSED WORK DISTURBED BY THE CONTRACTOR'S OPERATIONS SHALL BE RESTORED BY THE CONTRACTOR TO THEIR ORIGINAL CONDITION AT NO EXPENSE TO THE 1. STRAW ROLL INSTALLATION REQUIRES THE PLACEMENT AND SECURE STAKING OF THE ROLL IN A TRENCH, 3" DEEP. RUNOFF MUST NOT BE ALLOWED TO RUN UNDER OR AROUND ROLL. 11. ALL EXCAVATION AND EARTHWORK SHALL BE PERFORMED IN ACCORDANCE WITH THE LATEST /2/2022 TOWN COMMENT EDITION OF THE MASSACHUSETTS HIGHWAY DEPARTMENT (MHD) STANDARD SPECIFICATIONS FOR 2. INSTALLATION SHALL BE IN ACCORDANCE WITH THE HIGHWAYS AND BRIDGES, SECTIONS 120, 140, 150, AND 170. REVISED: DESCRIPTION: MANUFATURERS RECOMMENDATIONS.

STRAW WATTLES AND SILT FENCE DETAIL

NOT TO SCALE

CHECK BY: VC

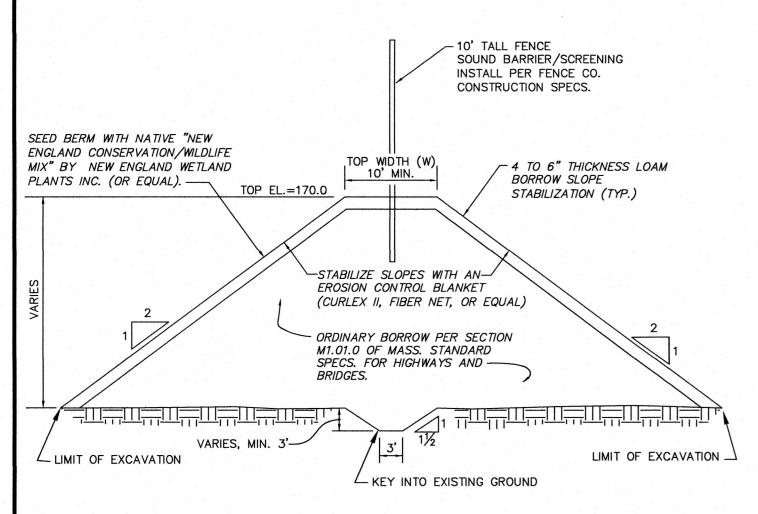
SCALE: 1"=30' | SHEET 3 OF 4.

EROSION CONTROL PLAN

DRAWN BY: REM

GRAPHIC SCALE: 1"=30"

DATE: APRIL 7, 2022



# SOUND BARRIER - SCREENING BERM SECTION

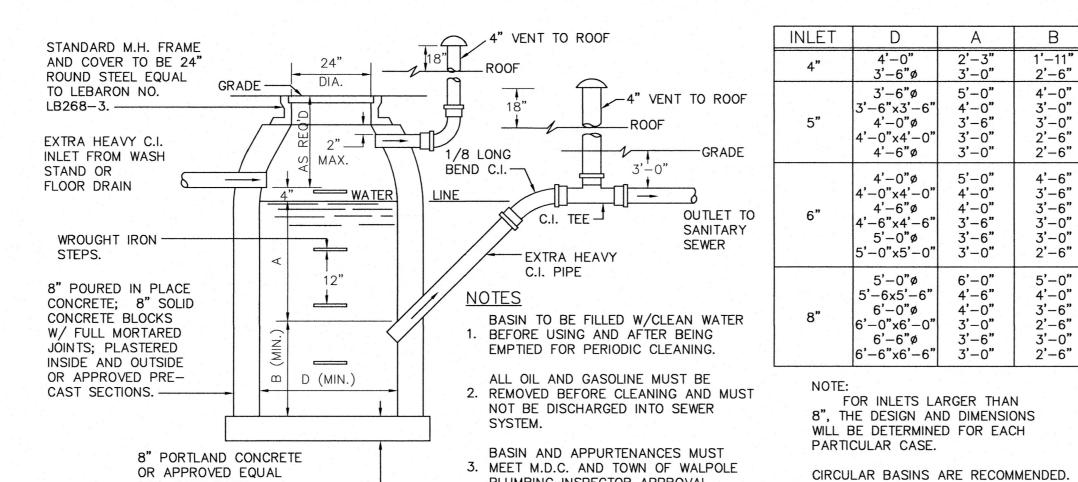
NOT TO SCALE

NOTES: EMBANKMENT CONSTRUCTION SHALL BE PERFORMED IN ACCORDANCE WITH MASSDOT STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES, SECTIONS 150.

MINIMUM OF 95% MAXIMUM DRY DENSITY.

OF TOPSOIL, SUBSOIL, AND ANY UNSUITABLE MATERIALS. EMBANKMENTS SHALL BE FORMED BY PLACING SUCCESSIVE LAYERS OF MATERIAL UNIFORMLY DISTRIBUTED AND COMPACTED OVER THE FULL WIDTH OF THE CROSS SECTION AND EXTENDED BEYOND THE FINISH SLOPE FACE. LAYERS SHALL BE PLACED AND COMPACTED IN MAXIMUM 12 INCH LIFTS AND COMPACTED TO A

PRIOR TO PLACEMENT OF FILL, AREAS UNDER EMBANKMENTS SHALL BE CLEARED, GRUBBED, AND STRIPPED



PRE-CAST BASE.

## STANDARD M.D.C. CATCH BASIN & GASOLINE TRAP DETAILS

PLUMBING INSPECTOR APPROVAL.

NOT TO SCALE

<u>Tight-Tank Operations and Management Plan</u>
<u>Final Commissioning and Long-term Maintenance Program</u> Septic System Owner: Property owner During Construction: Site Contractor Responsible Party: After Construction: Property owner

The proposed facilty is a self storage facility with bays for storage of vehicles equipped with floor drains

Why a tight tank is necessary

The tight tank is required by the plumbing code.

### Monthly pump-out

The tank must be pumped monthly.

If actual pump volumes allow, time between tank pumping may be extended.

The tank is sized on the 2,000 gallon minimum requirement, there are no designed flows.

The floor drain and tight tank system is "to prevent the discharge of oil, gasoline, grease, sand, and other substances, that are harmful or hazardous to the building drainage system and sewage treatment system".

A signed contract with a licensed hauler/pumper to conduct all monthly pumpings to be signed and submitted to the Southborough Board of Health before the final certificate of completion and compliance is issued

Pumping slips, along with a monthly report on the alarm shall be submitted to the Southborough Board of Health. If the Board of Health determines that the tight tank has been compromised, or the owner/operator is not properly servicing and maintaining the tight tank, the Board of Health has the right to immediately shut down the facility

### System Components

2,000-gallon septic tank alarm float and control box

NOTE— shop drawings shall be approved and become a part of the O&M document.

## Tight Tank

Tight tank to be pumped monthly, or as needed.

Inspect structural integrity of tank, tees covers (also for infiltration). Repair as necessary.

Audible & visual alarm to be installed in each workshop providing flow to the tank.

Wiring relays, circuit breakers, disconnects, junction boxes, control boxes, service wiring and appurtenant items to be inspected for wear or breakage/cracking, arcing etc. and replaced repaired as necessary.

Float switches to be inspected for wear, breakage/cracking, and replaced as necessary, floats shall also be inspected for operation, attachment to the walls and tangling or sludge accumulation.

### Reporting/ Record Keeping

Records including all of the follows shall be kept in a log within the workshop, with copies sent to the design engineer, the Board of Health and to DEP if requested:

Monthly inspection notes and pumping record

All tank pumping reports.

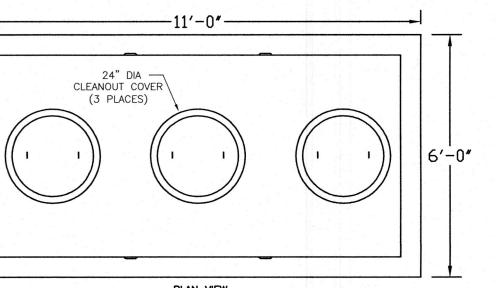
Pump Maintenance logs and repair logs

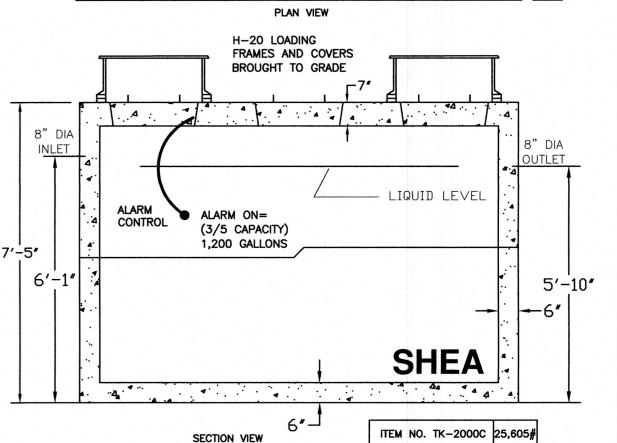
Submit records to the Board of Health monthly

## Recommended Personnel

All alarm inspections, maintenance and repairs shall be conducted by a licensed electrical contractor experienced in sewage systems.

Tank pumping shall be by a licensed septic hauler in accordance with State and local codes.





COMMERCIAL LINE

SEPTIC TANK

2000 GALLON

1. CONCRETE: 5,000 PSI MINIMUM AFTER 28 DAYS DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS.

- 3. ALL REINFORCEMENT PER ASTM C1227-93. 4. DESIGNED FOR H-20 LOADING.
- 5. TONGUE & GROOVE JOINT SEALED WITH BUTYLE RESIN.
- 6. TEES AND BAFFLES SOLD SEPARATELY.

## **GENERAL NOTES:**

TIGHT TANK FACILITY.

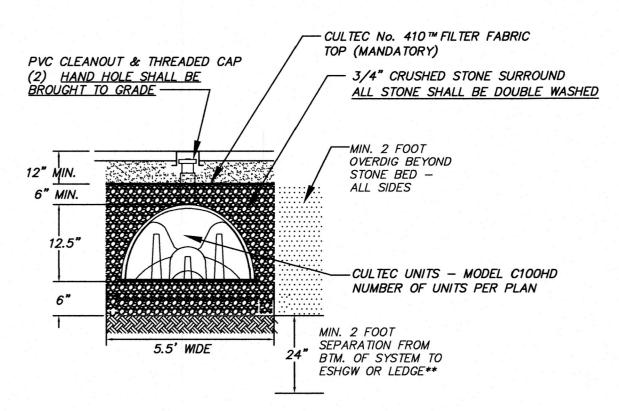
- 1. MUST BE WATER TIGHT AND SET ON A LEVEL BASE.
- 2. TANK MUST HAVE A SEAL STATING THAT ASTM STANDARDS HAVE BEEN MET.
- 3 THE INLET TEE SHALL EXTEND A MINIMUM OF 10" BELOW THE FLOW LINE. 4. HIGHWATER ALARM TO CONSIST OF MERCURY FLOAT SWITCH
- (FLCA ALARM CONTROL) SET TO ACTIVATE ALARM IN BUILDING.
- 5. ALARMS SHALL BE SET TO ACTIVATE AT 3/5 (60%) TANK CAPACITY.
- 6. ALL WIRING TO BE PLACED OUTSIDE OF BUILDING WILL BE WATERPROOF AND INSTALLED IN ACCORDANCE WITH APPLICABLE CODES.
- 7. VISUAL AND AUDIBLE ALARMS TO BE PLACED IN A CONSPICUOUS
- LOCATION IN THE WORKSHOP AREAS OF THE BUILDING. 8. OWNER / APPLICANT TO OBTAIN ALL REQUIRED LOCAL AND STATE PERMITS PRIOR TO INSTALLATION AND OPERATION OF

COLONNA

No. 47635

9. ALL UTILITY LOCATIONS TO BE CONFIRMED PRIOR TO COMMENCING CONSTRUCTION.

PREPARED FOR:



REMOVE UNSUITABLE MATERIAL AND FILL BELOW DRYWELL, EXCAVATE AT LEAST 6 INCHES INTO THE 'C' LAYER, AND PROVIDE MINIMUM 2 FOOT OVERDIG ON ALL SIDES. ANY FILL REQUIRED BELOW THE BOTTOM OF STONE SHALL BE FREE-DRAINING CLEAN SAND WITH LESS THAN 5% PASSING THE NO. 200

## DRYWELL SIZING SUMMARY

PROPOSED VOLUME = 640 CUBIC FEET

DESIGN VOLUME = 1-INCH X ROOF AREA ROOF AREA = 7,200 SQUARE FEET 7,200 SQ. FT. X 1-INCH/12 = 600 CUBIC FEET

# DRYWELL DRAWDOWN CALCULATIONS

DRAWDOWN TIME = STORAGE VOLUME / (RAWLES RATE\* X BOTTOM AREA X STONE POROSITY  $(72 \text{ HR MAX.}) = 640 \text{ C.F.} / (2.42 \text{ IN/HR/12} \times 630 \text{ S.F.} \times 40\%)$ 

= 13 HOURS

\*NATURAL C LAYER CONSIST OF FINE SAND & LOAMY SAND PER MASSDEP HANDBOOK RAWLES RATE = 2.42 IN/HR

> DRYWELL DETAIL NOT TO SCALE

PROPOSED SITE PLAN OF 157-165 LOWLAND STREET IN

MASTER PAVING CORP. &

MIDDLESEX ASPHAULT SERVICES, INC.

157–165 LOWLAND STREET

HOLLISTON, MA 01746

**CONNORSTONE** 

ENGINEERING INC.

CIVIL ENGINEERS AND LAND SURVEYORS

10 SOUTHWEST CUTOFF, SUITE 7 NORTHBOROUGH, MASSACHUSETTS 01532

PHONE: 508-393-9727 FAX: 508-393-5242

HOLLISTON, MA

6/2/2022 TOWN COMMENT REVISED: **DESCRIPTION:** CHECK BY: VC DRAWN BY: REM

DATE: APRIL 7, 2022 SHEET 4 OF 4. SCALE: NONE

**CONSTRUCTION DETAILS**