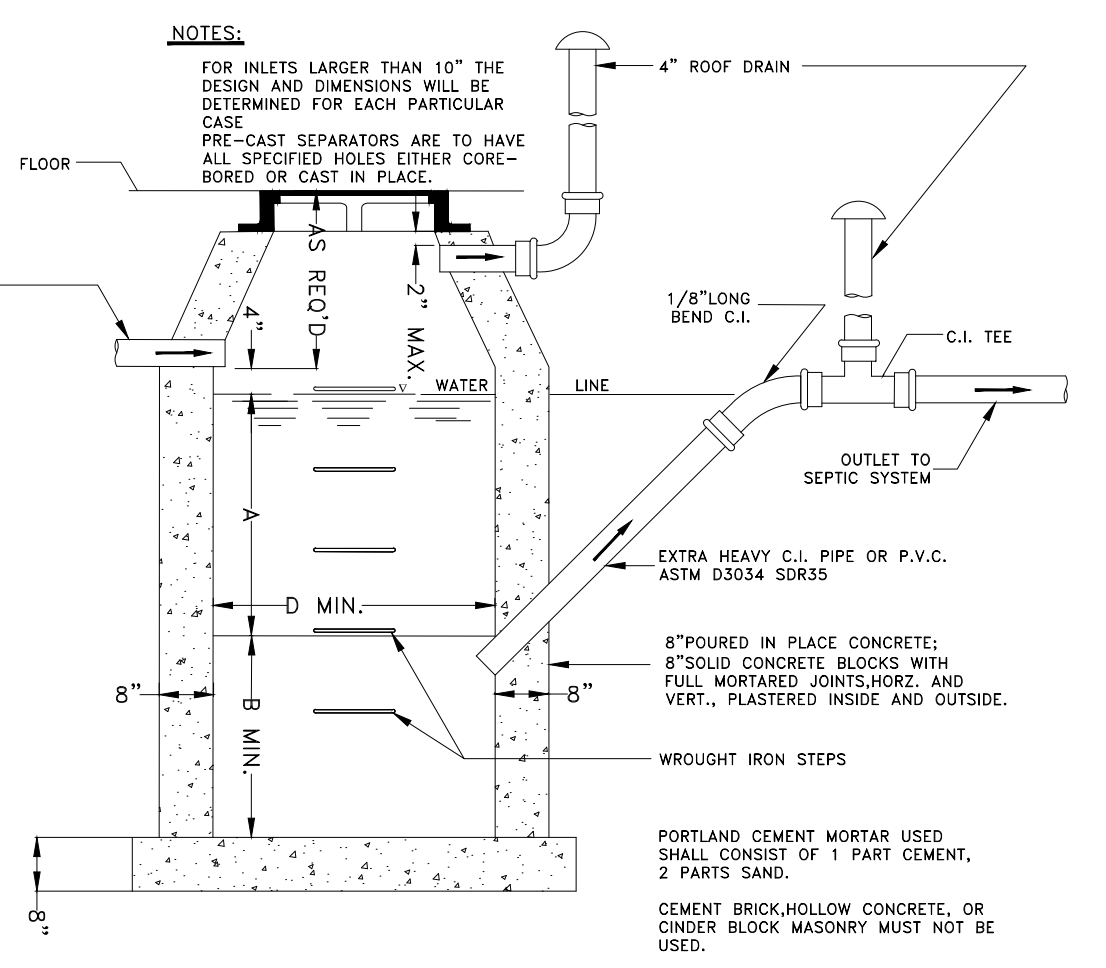


- NOTES:
1. CONCRETE: 4,000 PSI MINIMUM AFTER 28 DAYS.
  2. DESIGN CONFORMS WITH 310 CMR 15.00, DEP TITLE 5 REGS, FOR SEPTIC TANKS.
  3. ALL REINFORCEMENT PER ASTM C1227-93.
  4. TONGUE & GROOVE JOINT SEALED WITH BUTYLE RESIN.
  5. TEES AND Baffles SOLD SEPARATELY.
  6. ALSO AVAILABLE IN H-20 LOADING.
- SEPTIC TANK 2500 GALLON

INLET	D	A	B
4"	3'-6"	3'-0"	2'-6"
5"	3'-6"	5'-0"	4'-0"
6"	3'-6"	3'-0"	4'-0"
8"	4'-0"	4'-0"	3'-0"
8"	4'-0"	3'-0"	2'-6"
8"	4'-0"	3'-0"	2'-6"



GENERAL CONSTRUCTION NOTES

BASIN TO BE LOCATED OUTSIDE OF BUILDING WHERE POSSIBLE, COVER TO HAVE A CENTER HOLE.

A TIGHT COVER MUST BE USED IF BASIN IS LOCATED INSIDE OF BUILDING.

OPENING SHALL BE NOT LESS THAN 24" DIA.

THE CATCH BASIN SHALL BE SO LOCATED AND CONSTRUCTED THAT SURFACE WATER SHALL BE EXCLUDED.

INLET PIPE SHALL BE AT LEAST FOUR INCHES ABOVE NORMAL WATER LINE.

WHERE SUBJECT TO FROST OR CRUSHING CONDITIONS, OUTLET SHALL BE AT LEAST THREE FEET BELOW THE SURFACE.

THE NEW CATCH BASIN MUST BE FILLED WITH CLEAN WATER BEFORE USING, AND AFTER EMPLOYED FOR PERIODIC CLEANING.

ALL OIL AND GASOLINE MUST BE REMOVED BEFORE CLEANING OUT THE BASIN, AND MUST NOT BE DISCHARGED INTO THE SEWER THROUGH OTHER FITTINGS.

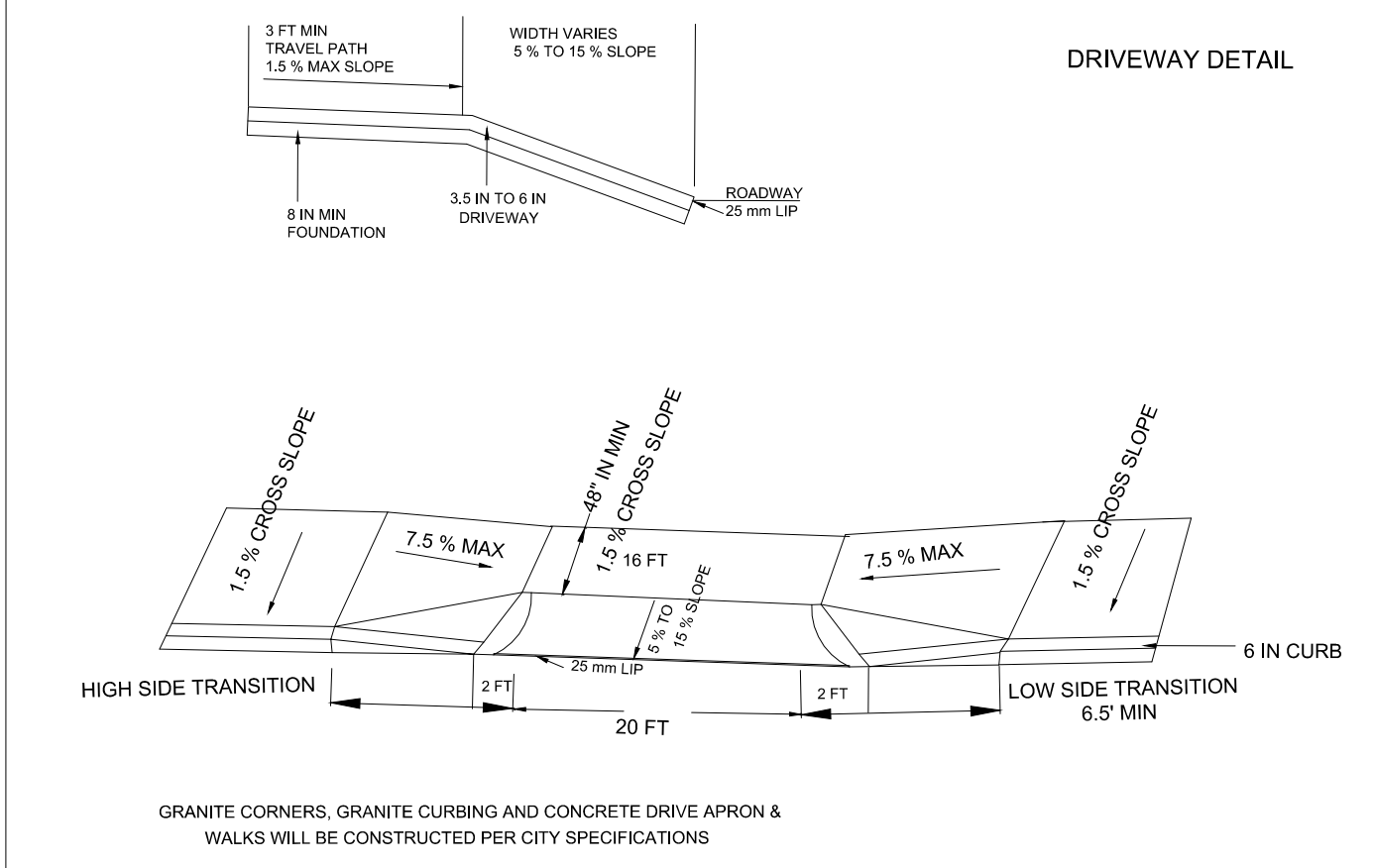
SPECIFICATIONS FOR COVERING SPECIAL CASES OR CONDITIONS, SHALL BE APPROVED BY THE LOCAL AUTHORITIES, AND THE AUTHORITIES OF THE M.W.R.A.

WROUGHT IRON STEPS SHALL BE SPACED ABOUT 18" APART.

BOTH VENTS SHALL BE EXTENDED INDEPENDENTLY 18" ABOVE THE ROOF, OR AS APPROVED BY THE LOCAL AUTHORITIES, AND THE AUTHORITIES OF THE M.W.R.A. (Outlet pipe to be 45 degree angle)

- 1) ZONING INFORMATION: GENERAL BUSINESS ISTRIC
- 2) LOCUS IS NOT LOCATED WITHIN ANY WETLAND JURISDICTIONAL BUFFER OR PERENNIAL STREAM.
- 3) THE PROP. BUILDING WILL BE USED AS STORAGE AND WAREHOUSE FOR HEAVY CONSTRUCTION EQUIPMENT
- 5) THIS PROPERTY IS LOCATED WITHIN A WATER SUPPLY PROTECTION DISTRICT.
- 6) PARKING SHOWN IS EXISTING. NO ADDITIONAL SPACES ARE PROPOSED.
- 7) THE STORM WATER INFILTRATION SYSTEM IS BASE ON THE 100 YEAR STORM: 8.9 IN IN 24 HOURS.
- 8) THE ENTIRE SITE IS DISTURBED: PROPOSED BUILDING WILL BE PLACED MAINLY OVER EXISTING PAVEMENT.
- 9) YARD REQUIREMENTS AND LOT AREA REQUIREMENTS FOR GENERAL BUSINESS:

	REQUIRED	PROVIDED
AREA	8000 SF	22457 SF
SIDE YARD	0	
FRONT YARD	15' (AS PER SPECIAL PERMIT)	22.3
REAR YARD	30	97



NO EXCAVATION IS ALLOWED WITHIN THE TOWN'S ROW BETWEEN NOVEMBER 15<sup>TH</sup> AND APRIL 15<sup>TH</sup> IF AN EMERGENCY EXISTS OR THERE ARE EXTENUATING CIRCUMSTANCES. APPLICANT MAY SEEK PERMISSION FOR SUCH WORK FROM THE DPW COMMISSIONER VIA THE TOWN ENGINEER. IF PERMISSION IS GRANTED, SPECIAL CONSTRUCTION STANDARDS WILL BE APPLIED. APPLICANT OR APPLICANT'S REPRESENTATIVE MUST CONTACT THE TOWN ENGINEERING DEPARTMENT PRIOR TO START WORK FOR CLARIFICATION.

ENGINEER OF RECORD IS RESPONSIBLE FOR THE ON-SITE INSPECTIONS OF ALL SUBSURFACE STRUCTURES. THIS INCLUDES BUT NOT LIMITED TO DRAINAGE UTILITIES INCLUDING SEWER PIPE SLOPE, ROOF LEADER COLLECTION SYSTEM, TRENCH DRAINS, MANHOLES ETC.. ENGINEER OF RECORD MUST ALSO CONDUCT BOTTOM OF HOLE INSPECTIONS PRIOR TO DRAINAGE SYSTEM BEING INSTALLED.

TEST PIT  
JAN 25, 2021

DISCUSSION:

0-6 IN SANDY LOAM 10YR 5/3  
6" - 5" LOAMY SAND 10YR 6/5  
5" - 5" LOAMY SAND 10YR 6/4

PERC 4 MIN / IN % 42 IN

MERRIMAC SOILS  
OUTWASH

THE IMPERVIOUS SURFACE FOR THE LOT POST DEVELOPMENT IS APPROX: 3200 SF. USING A RUNOFF CO OF 3 FOR NATURAL AND 9 FOR IMPERVIOUS SURFACES THE POSTDEVELOPMENT RUNOFF IS AS FOLLOWS:  
3200 SF(.6)(8.9/12) = 1425

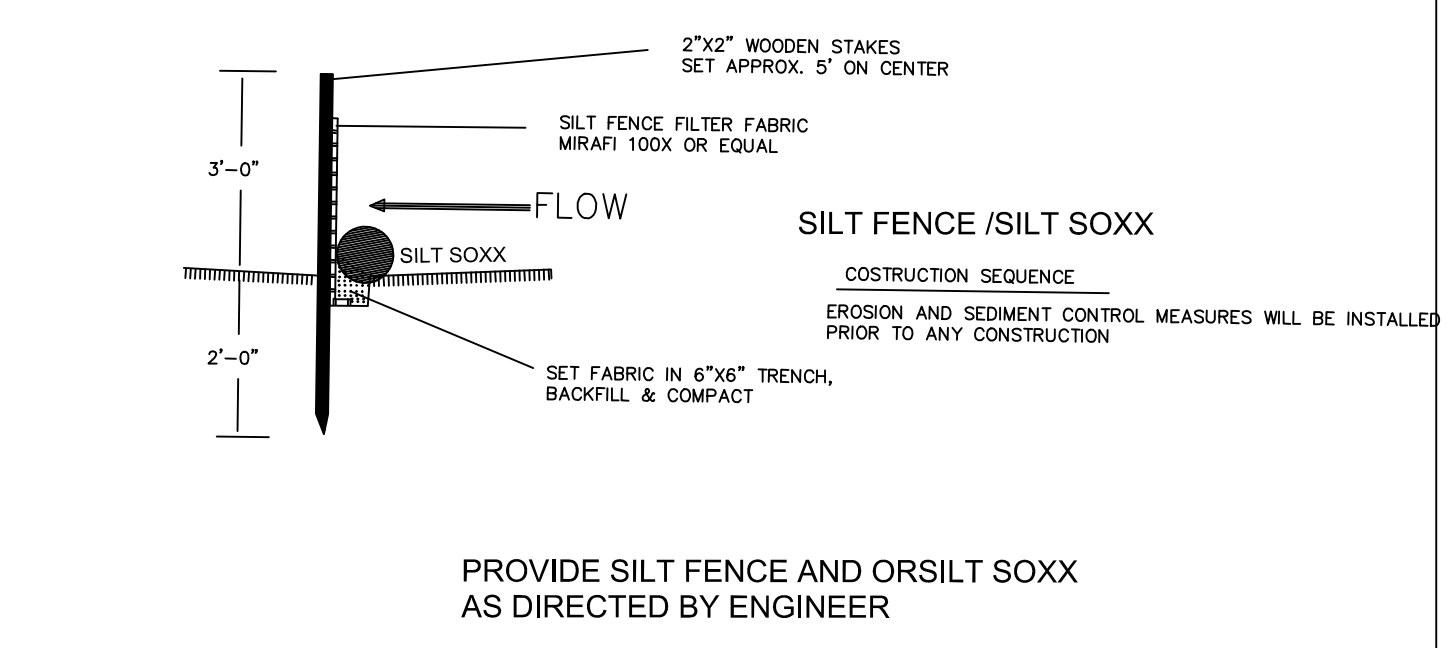
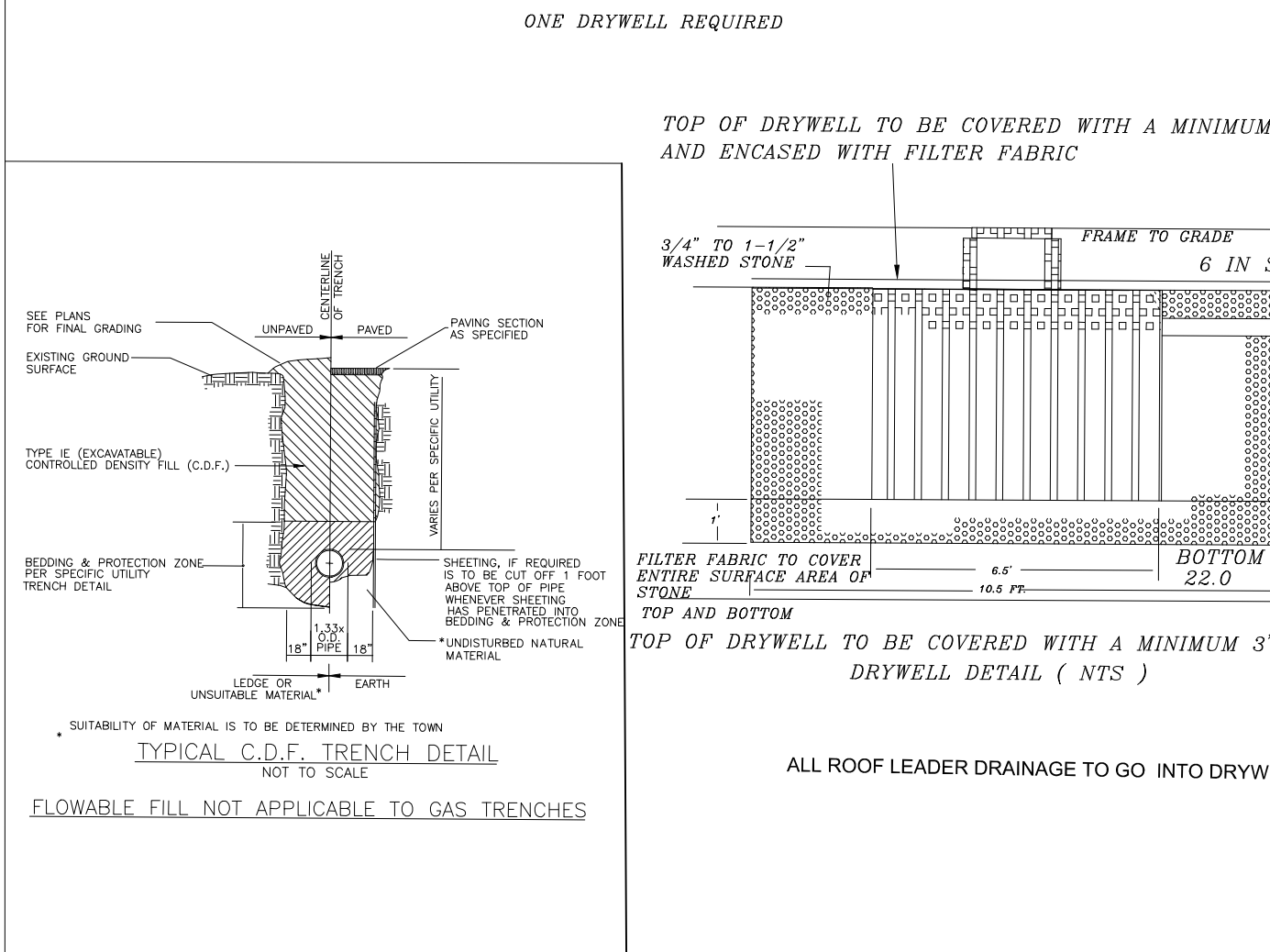
THE RUNOFF WILL BE STORED AND INFILTRATED UTILIZING DRYWELLS.

METHODOLOGY:  
PERCOLATION RATE: 4 MIN PER INCH

DRYWELL SIZE:  
10 FT 6 IN DIAMETER  
3 FT DEEP  
BOTTOM AREA = 3.14\*D\*D/4 = 3.14\*10.5\*10.5/4 = 86.6 SF  
VOLUME OF PIT: 3.14\*D\*H/4 = 3.14\*6.5\*6.5\*3 / 4 = 99.5 CF  
VOLUME OF STONE = 3.14\*D\*H/4 = 3.14\*10.5\*10.5\*3/4 = 259.8 CF  
VOID STORAGE VOLUME = VOID RATIO ( STONE VOLUME - PIT VOLUME)

STORAGE PER DRYWELL = 99.5 + 56.1 = 155.6 CF  
(.35)(259.8 - 99.5) = 56.1

INFILTRATION CAPACITY = .25(86.6)(1/12)(24)(60) = (2598 + 155) = 2753 CF/DAY

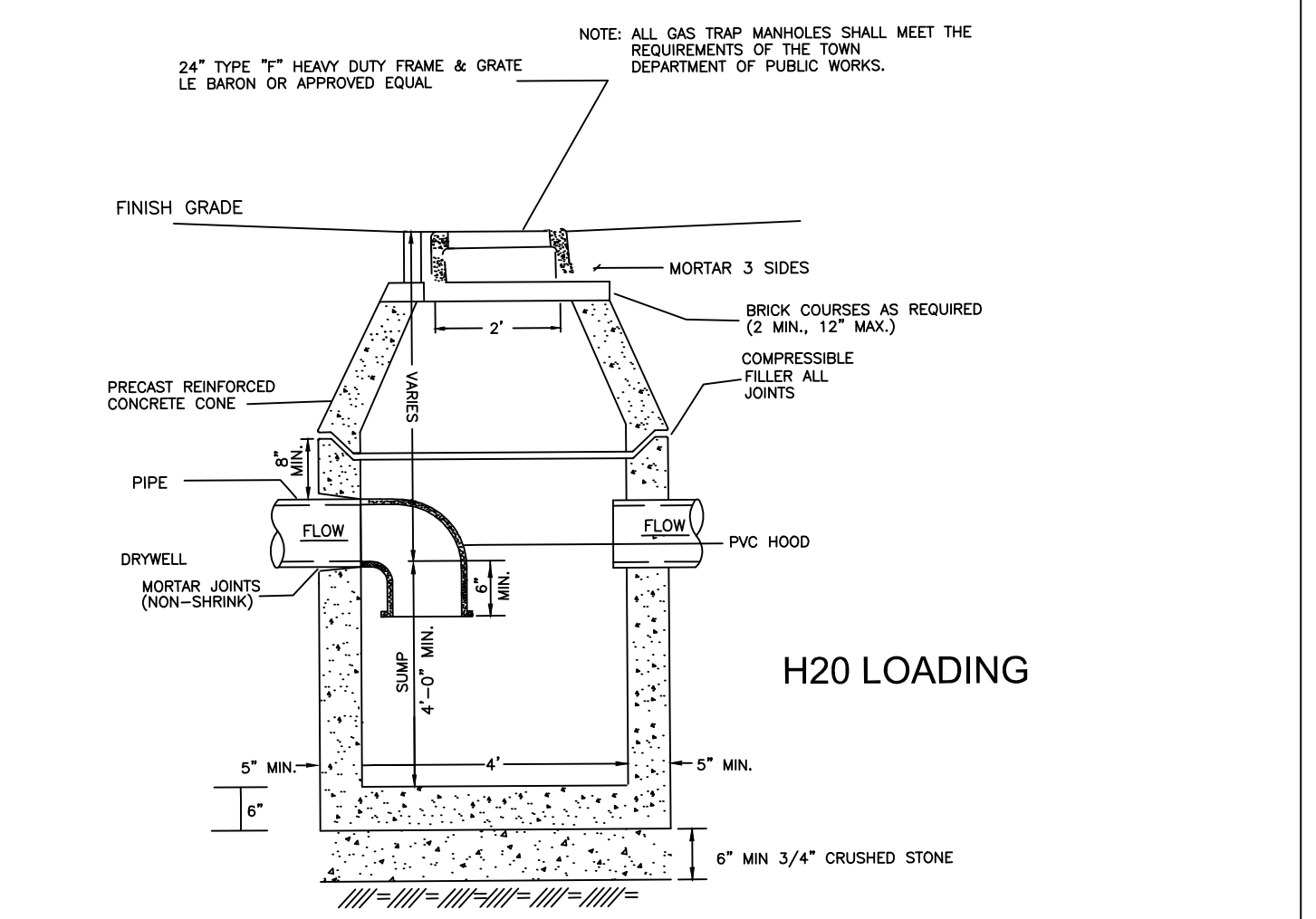


- 1) ALL WORK TO BE IN ACCORDANCE WITH TOWN AND MASS HIGHWAY STANDARDS. DRIVEWAY WILL CONFORM TO MASS & NEWTON STANDARDS. A MINIMUM 4 FT (6 IN WIDTH AND MAX 1.5% CROSS SLOPE WILL BE MAINTAINED).
- 2) MINIMUM COMPACTION IN TRENCHES TO BE 98%.
- 3) PRIOR TO START CONSTRUCTION ALL APPLICABLE LOCAL AGENCIES AND CITY SAFETY WILL BE NOTICED AT LEAST 72 HOURS PRIOR TO COMMENCING WORK.
- 4) NO BACKFILLING OF ANY TRENCHES WILL TAKE PLACE UNTIL WORK HAS BEEN INSPECTED AND APPROVED BY THE TOWN. CONTRACTOR WILL NOTIFY CITY 48 HOURS IN ADVANCE OF UTILITY INSPECTOR. UTILITIES & DRAINAGE SYSTEM MUST BE FULLY EXPOSED FOR THE INSPECTOR. UTILITIES CAN ONLY BE BACKFILLED ON APPROVAL & SIGNOFF BY INSPECTOR.
- 5) STREET OPENING, SIDEWALK CROSSING, UTILITY CONNECTION AND TRENCH PERMITS WILL BE OBTAINED FROM THE TOWN PRIOR TO COMMENCING ANY WORK.
- 6) WATER AND SEWER SERVICES WILL BE CUT AND CAPPED AT THE MAIN AND REMOVED FROM SITE, PROPERLY BACKFILLED & INSPECTED BY THE TOWN. UTILITY CONNECTION PERMIT WILL NOT BE ISSUED IF THIS IS NOT ACCOMPLISHED.
- 7) TRENCH PAVEMENT PERMANENT PATCH WILL CONFORM TOWN STANDARDS AND WITH THE TRENCH SECTION SPECIFIED HEREIN.
- 8) LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR WILL NOTIFY DIG SAFE PRIOR TO COMMENCING WORK. CONTRACTOR WILL BE HELD RESPONSIBLE FOR ANY DAMAGE RESULTING FROM INCORRECTLY LOCATED UTILITIES.
- 9) WITH THE EXCEPTION OF GAS SERVICES, ALL TRENCH WORK WITHIN THE TOWN ROW WILL BE BACKFILLED WITH TYPE II (EXCAVATABLE) CONTROLLED DENSITY FILL AS SPECIFIED BY THE CITY ENGINEERING SPECIFICATIONS. EXCAVATABLE FILL WILL EXTEND TO WITHIN 18 IN OF ROADWAY ASPHALT.
- 10) LOCATION OF UNDERGROUND UTILITIES IS APPROXIMATE. CONTRACTOR WILL VERIFY UTILITY LOCATIONS THROUGH DIGSAFE. ANY DAMAGE CAUSED BY CONTRACTOR AS A RESULT OF UTILITY LOCATIONS SHOWN WILL BE BORNE SOLELY BY CONTRACTOR AT HIS COST TO OWNER.
- 11) IT IS THE CONTRACTOR'S RESPONSIBILITY TO CONTACT THE DESIGN ENGINEER FOR ALL REQUIRED INSPECTIONS SUCH AS MATERIALS USED, CONSTRUCTION UTILITY AS BUILT, ETC.. ENGINEER ASSUMES NO RESPONSIBILITY UNLESS HE INSPECTS THE SYSTEM DURING CONSTRUCTION.
- 12) THE NEW SEWER SERVICES (AND/OR STRUCTURES) SHALL BE PRESSURE TESTED OR VIDEOTAPED AFTER FINAL INSTALLATION IS COMPLETE. METHOD OF FINAL INSPECTION SHALL BE DETERMINED SOLELY BY THE CONTRACTOR IN CONSULTATION WITH THE ENGINEERING DIVISION. THE SEWER SERVICE WILL NOT BE ACCEPTED UNTIL ONE OF THE TWO METHODS STATED ABOVE IS COMPLETED. A CERTIFICATE OF OCCUPANCY WILL NOT BE RECOMMENDED UNTIL ALL PIPING AND STRUCTURES ARE TESTED AND PASS.

AS OF JAN 1, 2009, ALL TRENCH EXCAVATION CONTRACTORS SHALL COMPLY WITH MASS REGS. TRENCH EXCAVATION AND SAFETY REQUIREMENTS, TO PROTECT THE PUBLIC FROM UNAUTHORIZED ACCESS TO UNATTENDED TRENCHES. AN EXCAVATION PERMIT IS REQUIRED AND APPLIES TO ALL TRENCHES ON PUBLIC OR PRIVATE PROPERTY.

EXIST WATER & SEWER SERVICES TO BE CUT AND CAPPED PER NOTE 7

PROPOSED SEWER LINES AND MANHOLES TO BE AIR TESTED PRIOR TO ACCEPTANCE.



PROPOSED BUILDING  
105 MEMORIAL DRIVE  
AVON, MA.  
SCALE: 1 IN = 20 FT  
JUNE 20, 2021 JULY 27, 2021  
AUG 15, 2021

ESSEX ENG. & SURVEY  
PO BOX 650217 WEST NEWTON  
MA. 02465  
617-797-7342  
FRANK.IEBBA@GMAIL.COM

