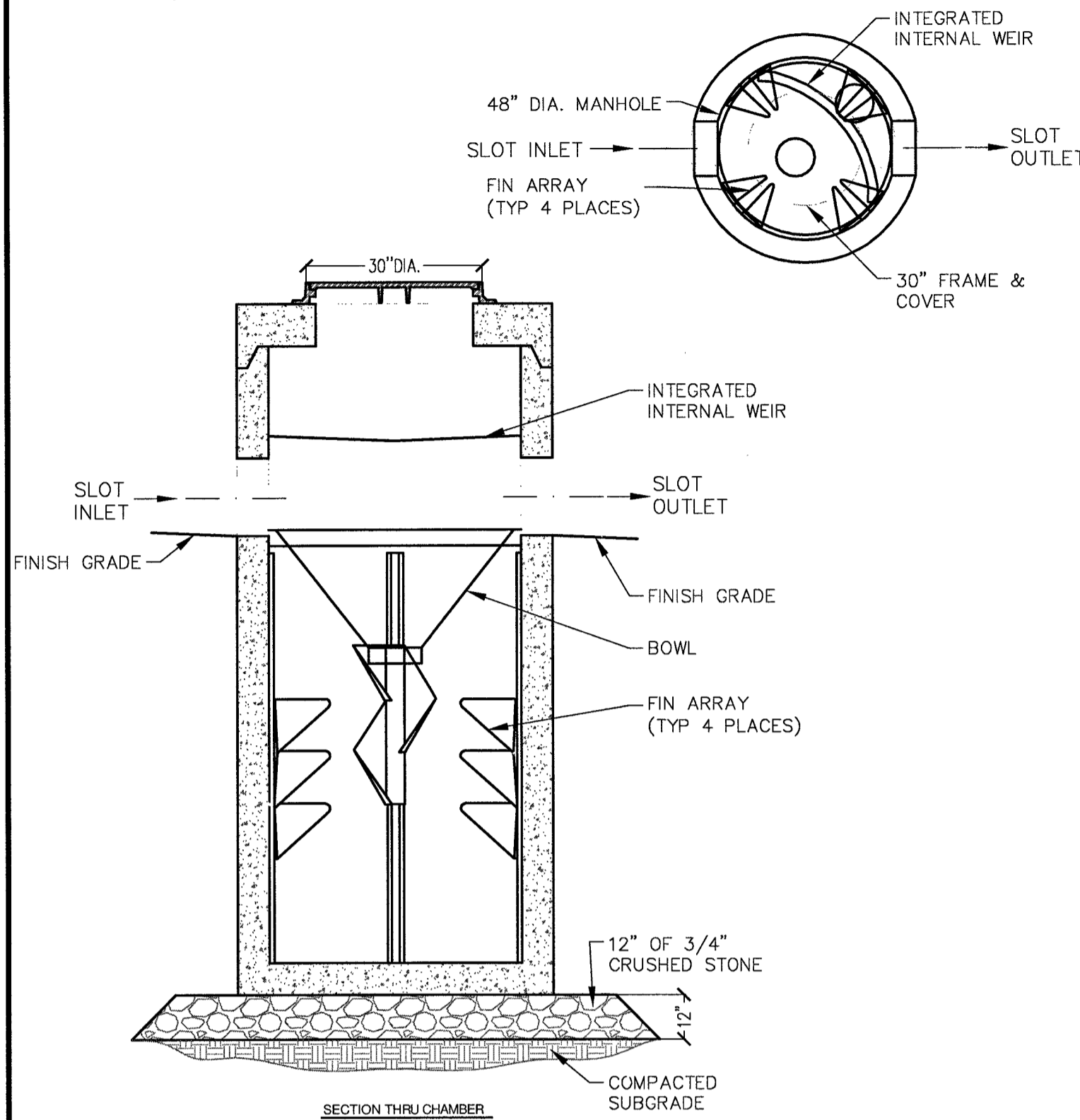


NOTES:

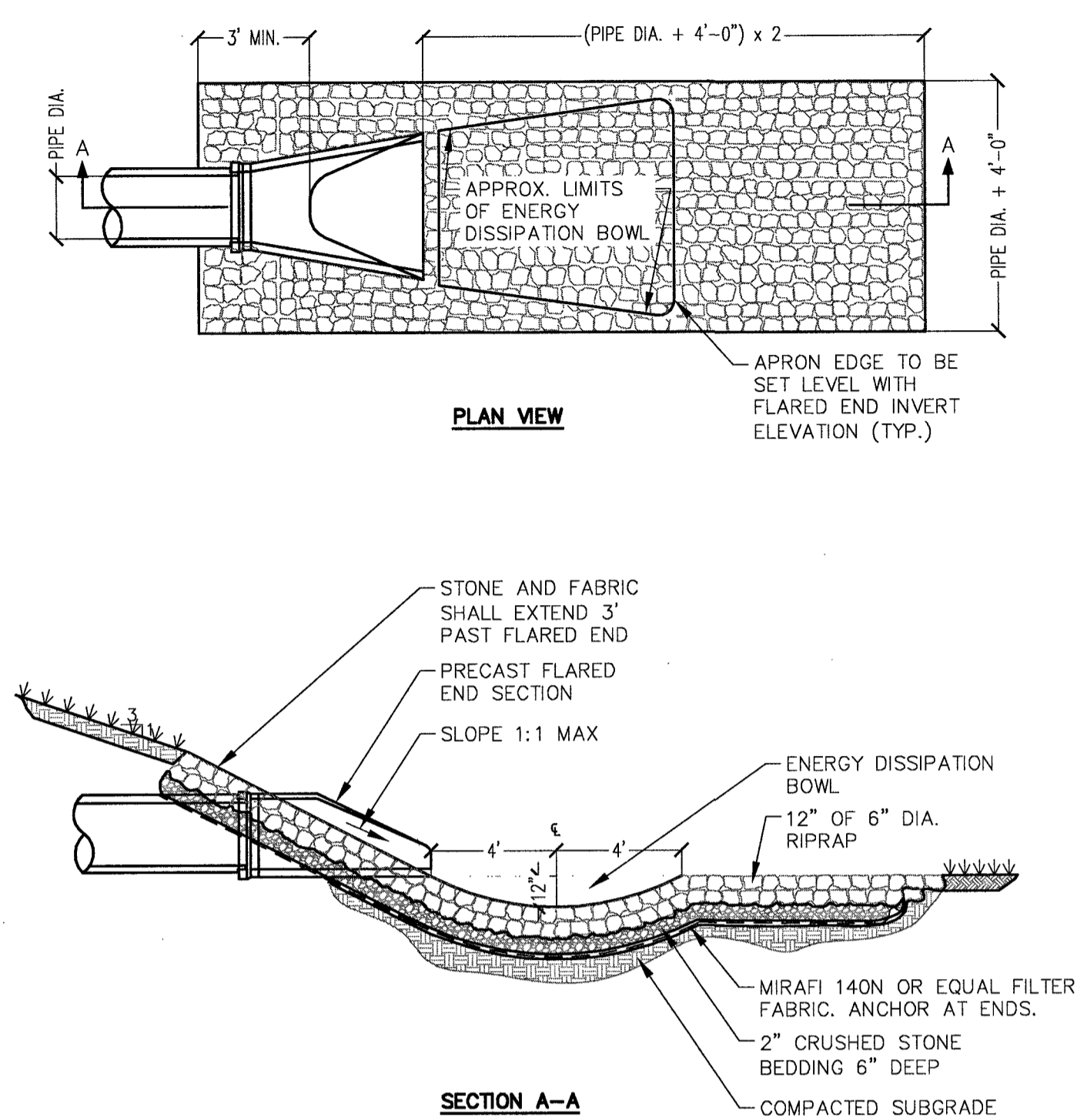
1. THE USE OF FLEXIBLE CONNECTION IS RECOMMENDED AT THE INLET AND OUTLET WHERE APPLICABLE.
2. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
3. PROVIDE "V" KNOCKOUTS FOR PIPES WITH 2" MAX. CLEARANCE TO OUTSIDE OF PIPE. MORTAR ALL PIPE CONNECTIONS.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAX.)



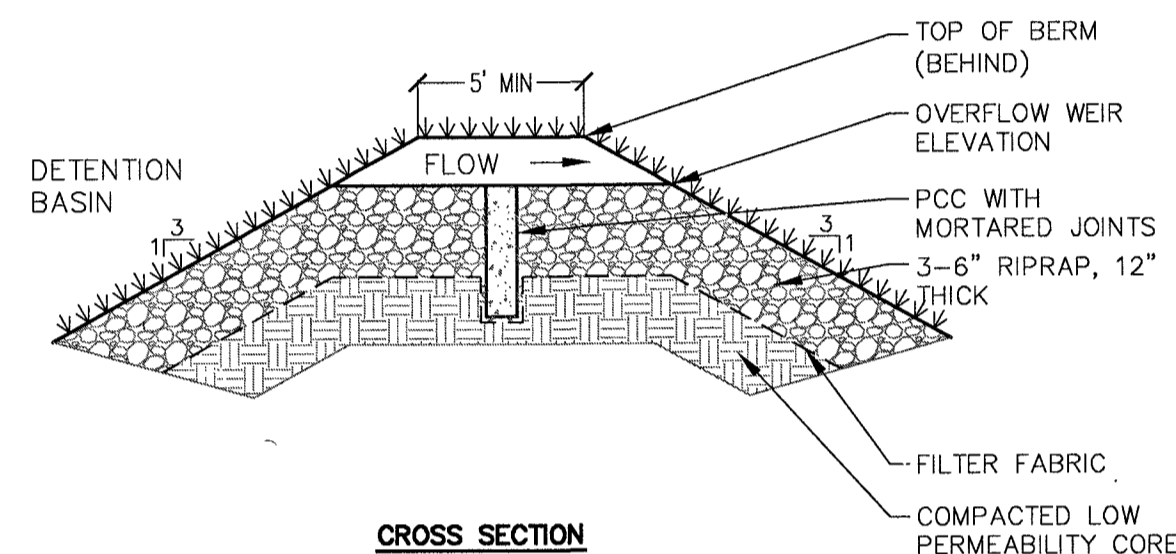
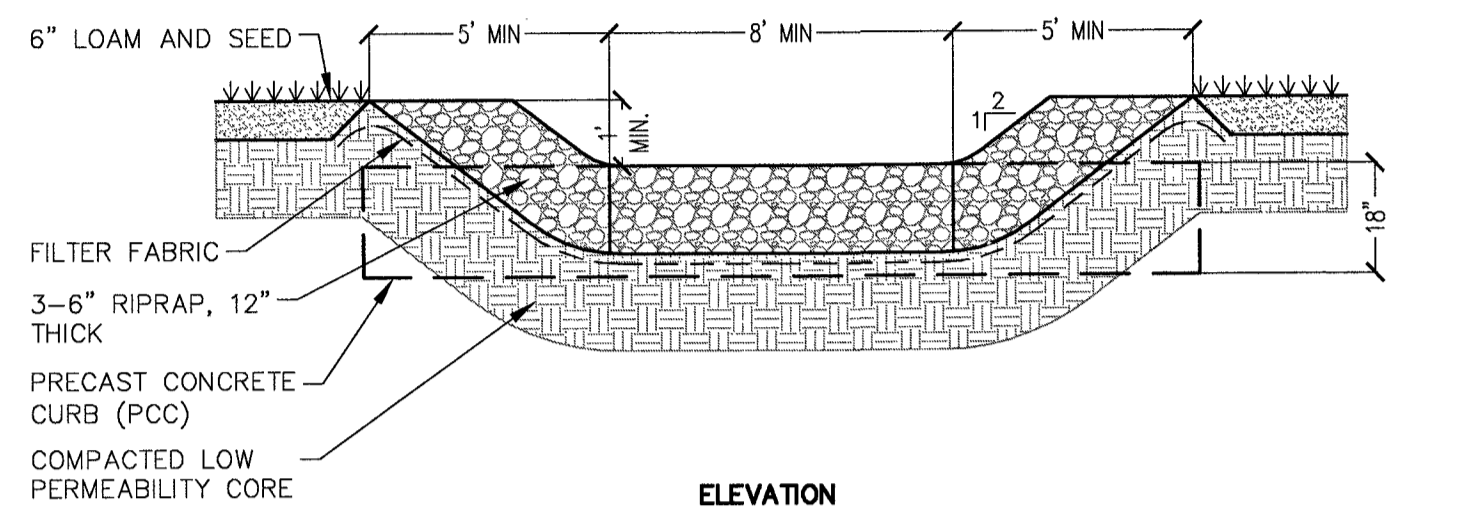
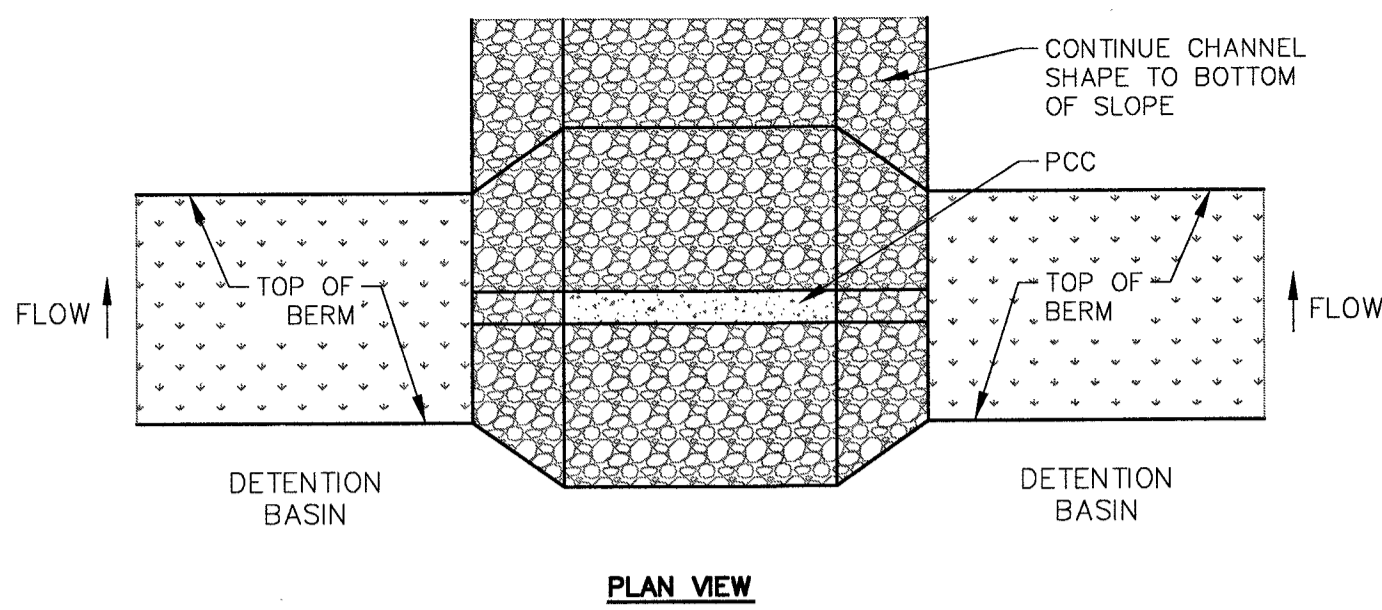
WATER QUALITY UNIT (BARRACUDA)
SCALE: N.T.S.

NOTES:

1. FILTER FABRIC, RIP-RAP & CRUSHED STONE TO EXTEND MIN. OF 12" BEYOND PIPE OPENING.



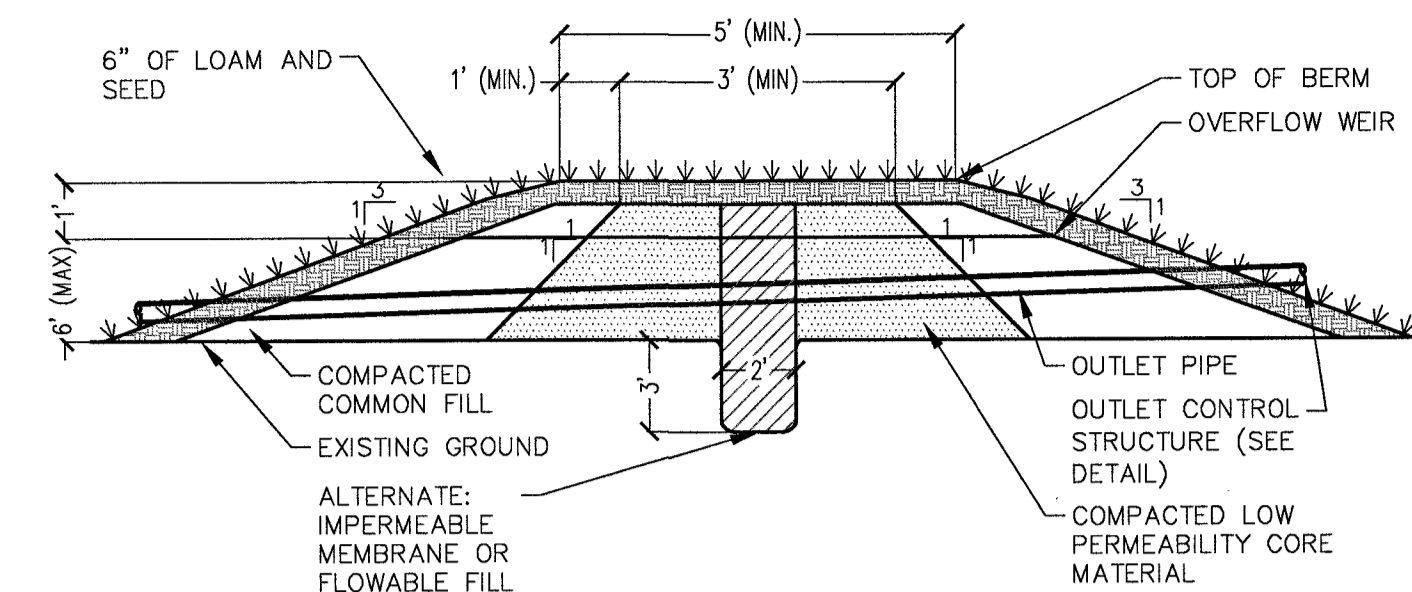
FLARED END SECTION (FES)
SCALE: N.T.S.



BASIN BERM OVERFLOW WEIR
SCALE: N.T.S.

NOTES:

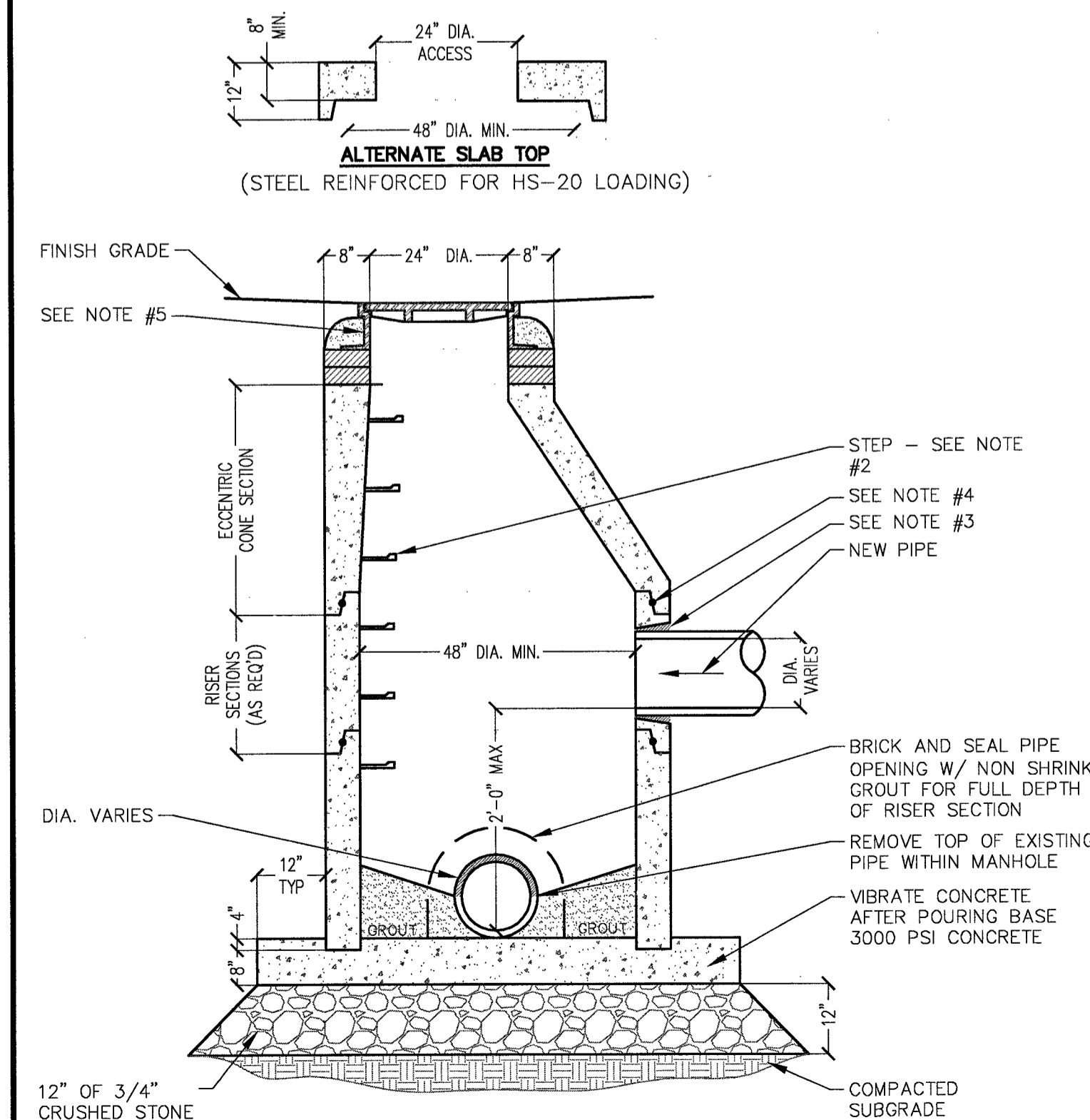
1. PIPES PENETRATING THE LOW PERMEABILITY CORE SHALL BE BEDDED IN THE LOW PERMEABILITY CORE MATERIAL.
2. THE BERM SECTION IS SUBJECT TO CHANGE AND WILL BE BASED ON THE RESULTS OF FURTHER GEOTECHNICAL INVESTIGATIONS.



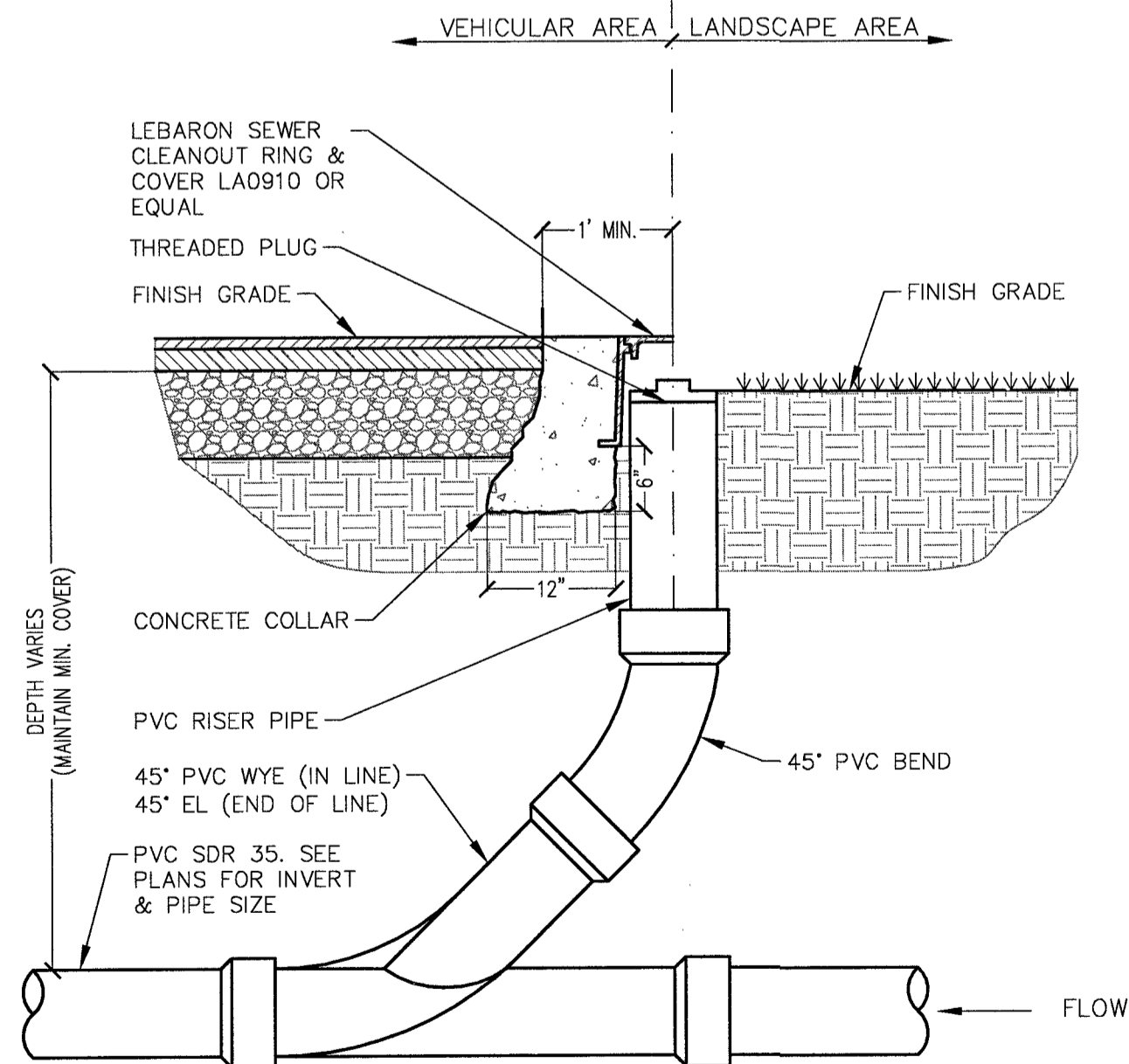
DETENTION BASIN BERM SECTION
SCALE: N.T.S.

NOTES:

1. ALL SECTIONS SHALL BE DESIGNED FOR HS-20 LOADING.
2. COPOLYMER MANHOLE STEPS SHALL BE INSTALLED AT 12" O.C. FOR THE DEPTH OF STRUCTURE.
3. EXTERIOR SURFACES SHALL BE GIVEN TWO COATS OF BITUMINOUS WATERPROOFING MATERIAL.
4. JOINT SEALANT BETWEEN PRECAST SECTIONS SHALL BE PREFORMED BUTYL RUBBER.
5. STANDARD SEWER MANHOLE FRAME AND COVER SHALL BE SET IN FULL MORTAR BED. ADJUST TO GRADE WITH CLAY BRICK AND MORTAR (2 BRICK COURSES TYPICALLY, 5 BRICK COURSES MAX.)



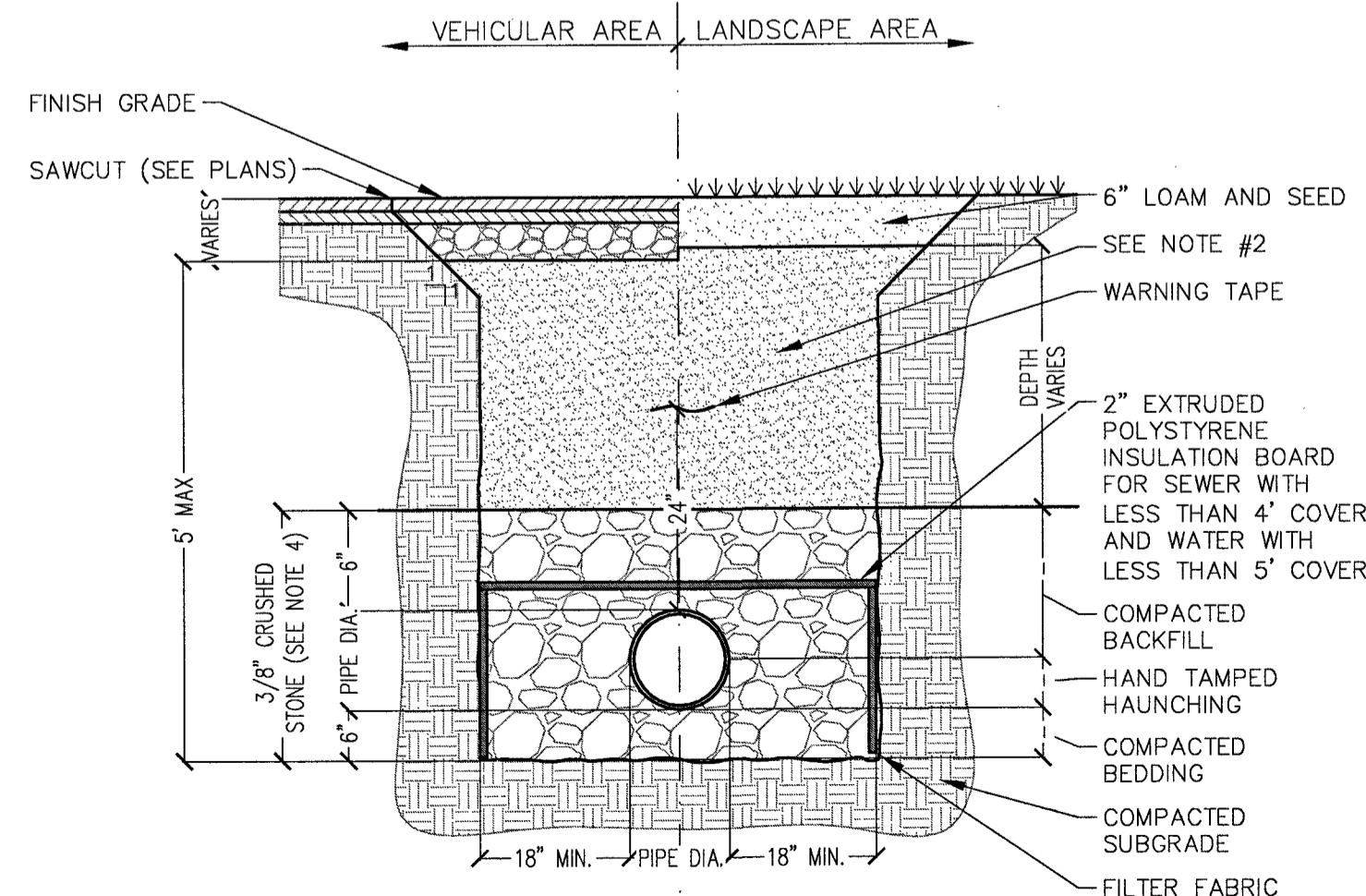
DOGHOUSE SEWER MANHOLE (SMH)
SCALE: N.T.S.



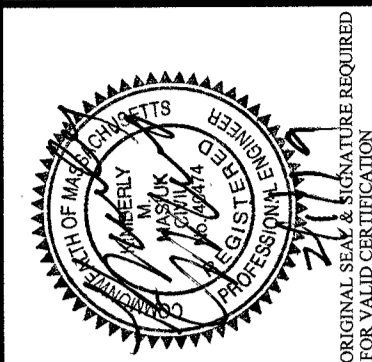
SEWER CLEANOUT
SCALE: N.T.S.

NOTES:

1. WHERE UTILITY TRENCHES ARE CONSTRUCTED THROUGH DETENTION BASIN BERMS OR OTHER SUCH SPECIAL SECTIONS, PLACE TRENCH BACKFILL WITH MATERIALS SIMILAR TO THE SPECIAL SECTION REQUIREMENTS.
2. USE FLOWABLE FILL IN TRENCHES IN THE CITY R.O.W. AND CONTROLLED FILL ON PRIVATE PROPERTY APPLICATIONS.
3. ALL ELECTRIC LINES TO BE CONCRETE ENCASED. TOP OF CONCRETE ENCASEMENT CAN BE NO HIGHER THAN 30" BELOW FINISHED GRADE.
4. GAS, ELECTRIC, TEL/DATA SERVICES SHALL HAVE SAND BEDDING IN LIEU OF 3/8" CRUSHED STONE.

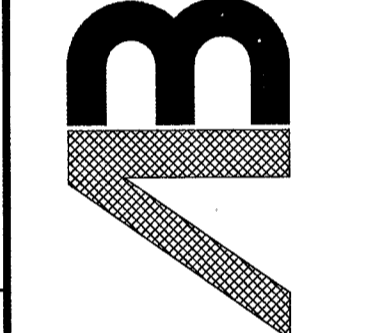


UTILITY TRENCH
SCALE: N.T.S.



ASSOCIATED BUILDERS, INC.
REGISTERED PROFESSIONAL ENGINEERS
REGISTERED PROFESSIONAL ARCHITECTS
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECTS
REGISTERED PROFESSIONAL SURVEYORS
REGISTERED PROFESSIONAL CIVIL ENGINEERS
REGISTERED PROFESSIONAL ELECTRICAL ENGINEERS
REGISTERED PROFESSIONAL MECHANICAL ENGINEERS
REGISTERED PROFESSIONAL CHEMICAL ENGINEERS
REGISTERED PROFESSIONAL INDUSTRIAL ENGINEERS
REGISTERED PROFESSIONAL METALLURGICAL ENGINEERS
REGISTERED PROFESSIONAL AERONAUTICAL ENGINEERS
REGISTERED PROFESSIONAL AGRICULTURAL ENGINEERS
REGISTERED PROFESSIONAL FORESTRY ENGINEERS
REGISTERED PROFESSIONAL MINING ENGINEERS
REGISTERED PROFESSIONAL PETROLEUM ENGINEERS
REGISTERED PROFESSIONAL SANITARY ENGINEERS
REGISTERED PROFESSIONAL THERMAL ENGINEERS
REGISTERED PROFESSIONAL WATERSUPPLY ENGINEERS
REGISTERED PROFESSIONAL WIND ENGINEERS
REGISTERED PROFESSIONAL WOOD ENGINEERS
REGISTERED PROFESSIONAL YACHT ENGINEERS
REGISTERED PROFESSIONAL ZONING ENGINEERS
REGISTERED PROFESSIONAL ARCHITECTURAL ENGINEERS
REGISTERED PROFESSIONAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL ARCHITECTS IN TRAINING
REGISTERED PROFESSIONAL LANDSCAPE ARCHITECTS IN TRAINING
REGISTERED PROFESSIONAL SURVEYORS IN TRAINING
REGISTERED PROFESSIONAL CIVIL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL ELECTRICAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL MECHANICAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL CHEMICAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL INDUSTRIAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL METALLURGICAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL AERONAUTICAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL AGRICULTURAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL FORESTRY ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL MINING ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL PETROLEUM ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL SANITARY ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL THERMAL ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL WATERSUPPLY ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL WIND ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL WOOD ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL YACHT ENGINEERS IN TRAINING
REGISTERED PROFESSIONAL ZONING ENGINEERS IN TRAINING

ASSOCIATED BUILDERS, INC.
4 INDUSTRIAL DRIVE, SOUTH HADLEY, MA 01075
PHONE (413) 536-0021 FAX (413) 536-0908
EMAIL: abuilders@abuilders.com



SITE DETAILS (1)
Proposed Facility
Center for Human Development
Old Lyman Road
South Hadley, MA 01075

PLAN DATE	DESCRIPTION
01/25/19	ISSUED FOR BID
02/01/19	ISSUED FOR LOCAL APPROVALS

SCALE: N.T.S.
JOB #: 18008
SHEET #: L5.1

NOT FOR CONSTRUCTION