

EROSION CONTROL SPECIFICATIONS AND PROCEDURES
CONTRACTOR'S RESPONSIBILITIES:

The contractor shall install, maintain, and replace as necessary all measures for erosion control, sediment control, and protection of abutting properties, wetlands, and water quality, throughout the site as is outlined in these specifications and shown on the drawings and in accordance with local, state, and federal environmental regulations and permits. The contractor shall execute all work in such a manner as to prevent alteration or degradation of abutting developed properties, wetlands or buffer zones beyond phase limits, including taking temporary or emergency measures as necessary.

This phase of the project includes no work within 100 feet of any wetland, however it is the contractor's responsibility to assure that sediment discharge from the site does not reach the wetland via the existing storm drain or overland flow. The contractor shall remove any accumulated sediment from the receiving detention basins when site work is completed.

GENERAL SEQUENCE OF WORK:

1. Clearing of work areas without stripping or grubbing.
2. Silt fence installation where work is immediately up-slope of developed lots.
3. Installation of sediment protection on existing storm drain inlets that will receive runoff from the site.
4. Construction of roadway, drainage, sewer, and utilities, with temporary erosion controls and maintenance of erosion control measures, as site conditions require.
5. Stabilization of site and removal of erosion controls.

EROSION AND SEDIMENT CONTROL PROCEDURES:

SILT FENCE: The bottom of the fence shall be trenched into the ground a minimum of 6" and back-filled with compacted soil. The top of the fabric shall be tightly butted and staked 12" into the ground. Intermediate stakes added to correct excessive sags. Stakes shall be driven at least 12" into the ground. Splices between sections shall be made by rolling and stakes together one complete turn and driving into the ground together.

HAY BALES: Hay bales may be used as temporary and moveable control measures, check dams, or as reinforcement for silt fence in areas of concentrated runoff. Bales shall be tightly butted and staked 12" into the ground. Where used without silt fence in front, the bales shall be trenched 4" into the ground, back-filled with compacted soil, and the spaces chinked with loose hay.

STONE CONSTRUCTION ENTRANCE: shall be installed and maintained at any points where construction traffic from an unpaved road enters onto the public way or a paved portion of the project roadway.

STOCKING ADDITIONAL MATERIALS: A stock of additional erosion control materials shall be maintained available on the site for emergency repairs and temporary measures. Stock shall be replenished when decreased to 50% of the numbers below. Stock shall include:

Hay-bales	25	(Covered to be kept dry)
Oak stakes	50	
Silt fence	100 linear feet	
Washed stone	2 cubic yards, 3/4" to 1" diameter	
Filter fabric	25 linear feet of 12 ft. wide roll, or equivalent.	

SOIL STOCKPILES: Soil expected to remain stockpiled for over 30 days shall be shaped to stable slopes and seeded or mulched for temporary cover. No stockpile shall be placed within a swale, drainage-way, or other path of concentrated surface runoff.

ROADSIDE SLOPES: Cut and fill slopes for roadway construction shall be finish graded, loamed, seeded, and mulched as soon as possible during road construction. This stabilization shall not await finish grading of roadway, tree-belts, or lots, where necessary, temporary runoff controls will be provided to permit establishment of permanent vegetative cover.

TRENCH PROTECTION: Open trenches shall be protected from accumulation of surface water or groundwater that could result in erosion of the trench and discharge of sediment. Finished trenches on slopes shall be crowned or cross-sloped sufficiently to prevent channelization of runoff along the trench and potential erosion. Check dams or diversions shall be installed if required.

TEMPORARY RUNOFF CONTROLS: As site grading progresses, temporary erosion control measures shall be installed, maintained, and removed as necessary to prevent erosive accumulations of runoff or sediment discharge until final grade and cover are established. Measures include mulch, temporary seeding, diversions, sediment barriers, water-bars, open-topped culverts, check-dams, crowning of trench back-fills, and stone lining of swales.

EROSION CONTROL NETTING, MESH, OR MULCH MATS shall be used on steep slopes or in swales where required to protect seeding until establishment. Materials shall be installed per manufacturers' recommendations and anchored by burial of edges, staples, or stakes, as applicable.

STORM DRAIN PROTECTION: The storm drain system shall be protected against inflow of sediment. Storm drain structures shall be protected by elevation above grade, filter fabric inserts, sediment barriers, or stone filters until the tributary area is stabilized by pavement and vegetative cover is established. Filter protection shall be protected against damage by traffic and repaired/replaced as necessary.

SITE STABILIZATION: On completion of loaming and finish grading on any portion of the site, that area shall be seeded or planted in accordance with USDA NRCS guidelines or equivalent.

ROADWAY SWEEPING: The entrance(s) to the site and affected portions of the public roadway or paved project roadway shall be swept periodically, as required or directed by the engineer.

INSPECTION & MAINTENANCE: all erosion and sediment control measures shall be inspected daily during grading and after all rain storms by the contractor, and shall be kept in functioning condition until tributary areas are stabilized. Sediment shall be removed from silt fences, check dams, and filter dams when it reaches 6" depth.

SEEDING - ROADWAY SLOPES AND DRAIN EASEMENT:

Loam	6" minimum depth
Lime & Fertilizer	in accordance with soil test or NRCS guidelines
Seed mix:	
Red Fescue	0.25 lbs/1000 sq. ft.
Redtop	0.1 lbs/1000 sq. ft.
Perennial Ryegrass	0.1 lbs/1000 sq. ft.
Canada Bluegrass	0.25 lbs/1000 sq. ft.

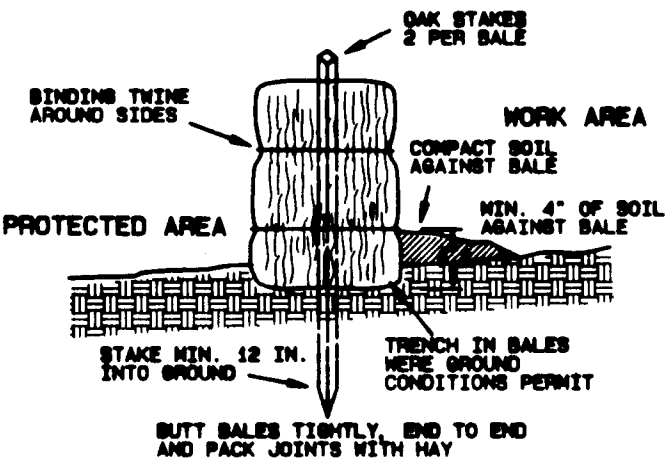
Mulch w/ hay or straw at 2 bales/1000 sq. ft.
On slopes steeper than 3:1 or areas of concentrated runoff, secure mulch with jute netting or hydrosseed with mulch and tack.

WORK ON INDIVIDUAL LOTS:

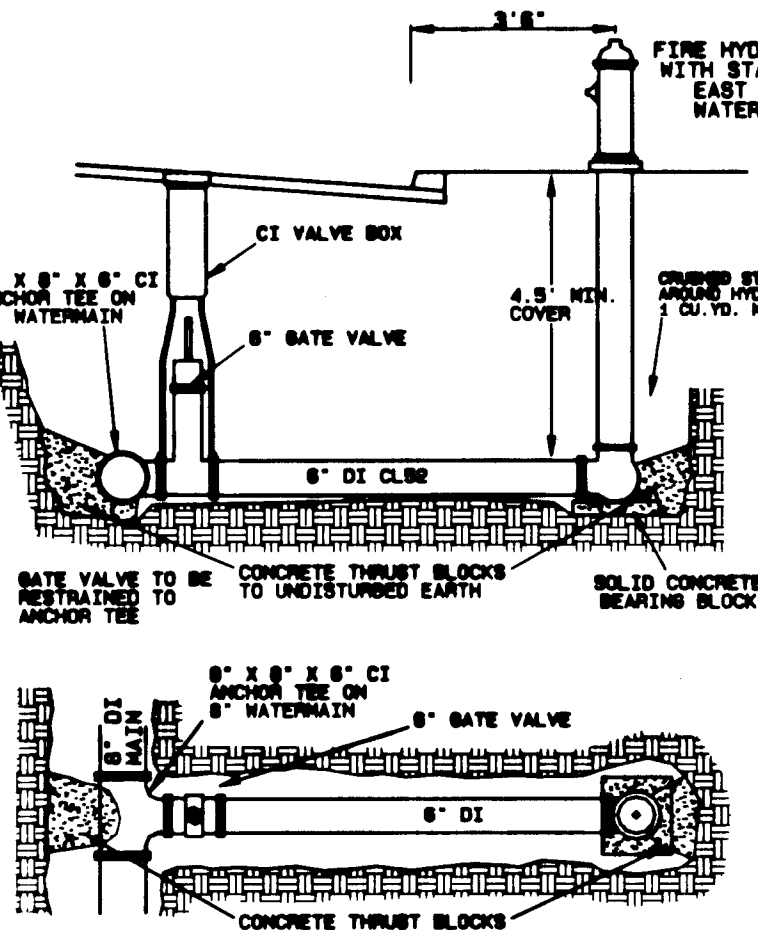
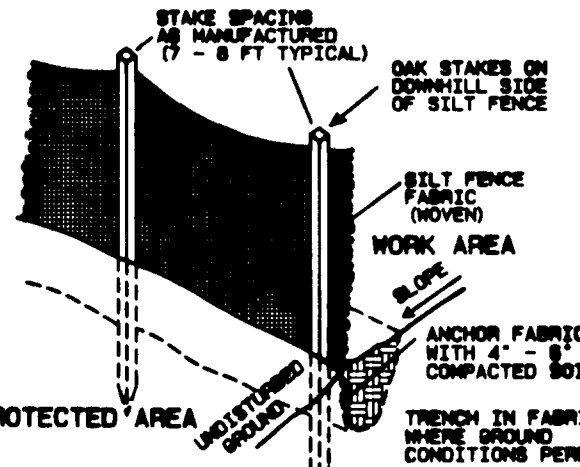
Site work on individual lots shall be controlled so as to prevent sediment discharge to street, wetland, or abutting lots. Typical measures may include:

1. Silt fence along down-slope edge of graded areas.
2. Stone construction entrance on driveway cut.
3. Silt fence and haybale check dams across swales carrying concentrated runoff.
4. Temporary diversions to carry runoff around open construction sites.
5. Stone-lined swales to carry concentrated runoff.
6. Immediate revegetation of slopes, prior to finish grading of yard and lawn.
7. Curtain drainage or stone blanket to control seepage from cut slopes.
8. Waterbars or open-topped culverts on driveways to prevent accumulation of runoff.

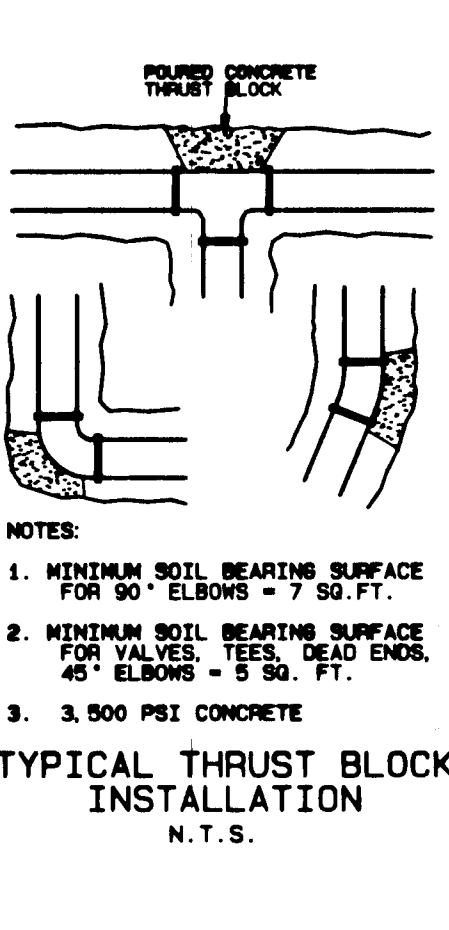
HAY BALE SEDIMENT BARRIER INSTALLATION



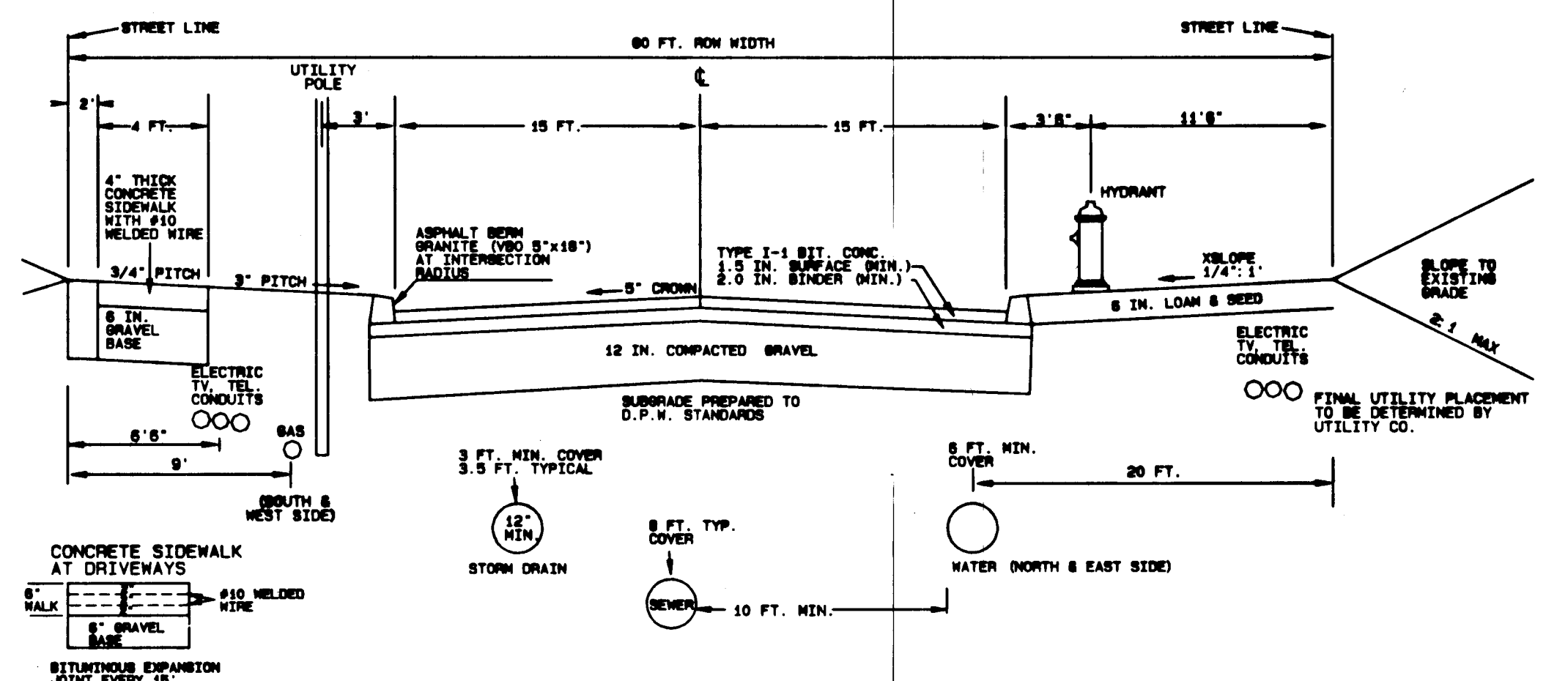
TYPICAL SILT FENCE INSTALLATION



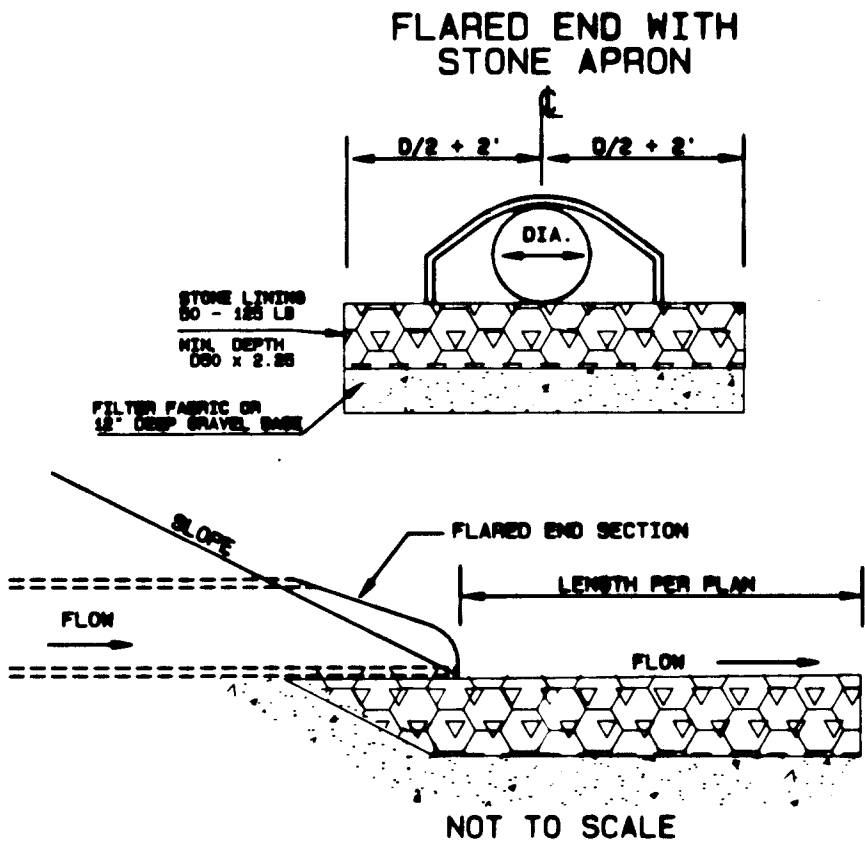
TYPICAL HYDRANT INSTALLATION
N.T.S.



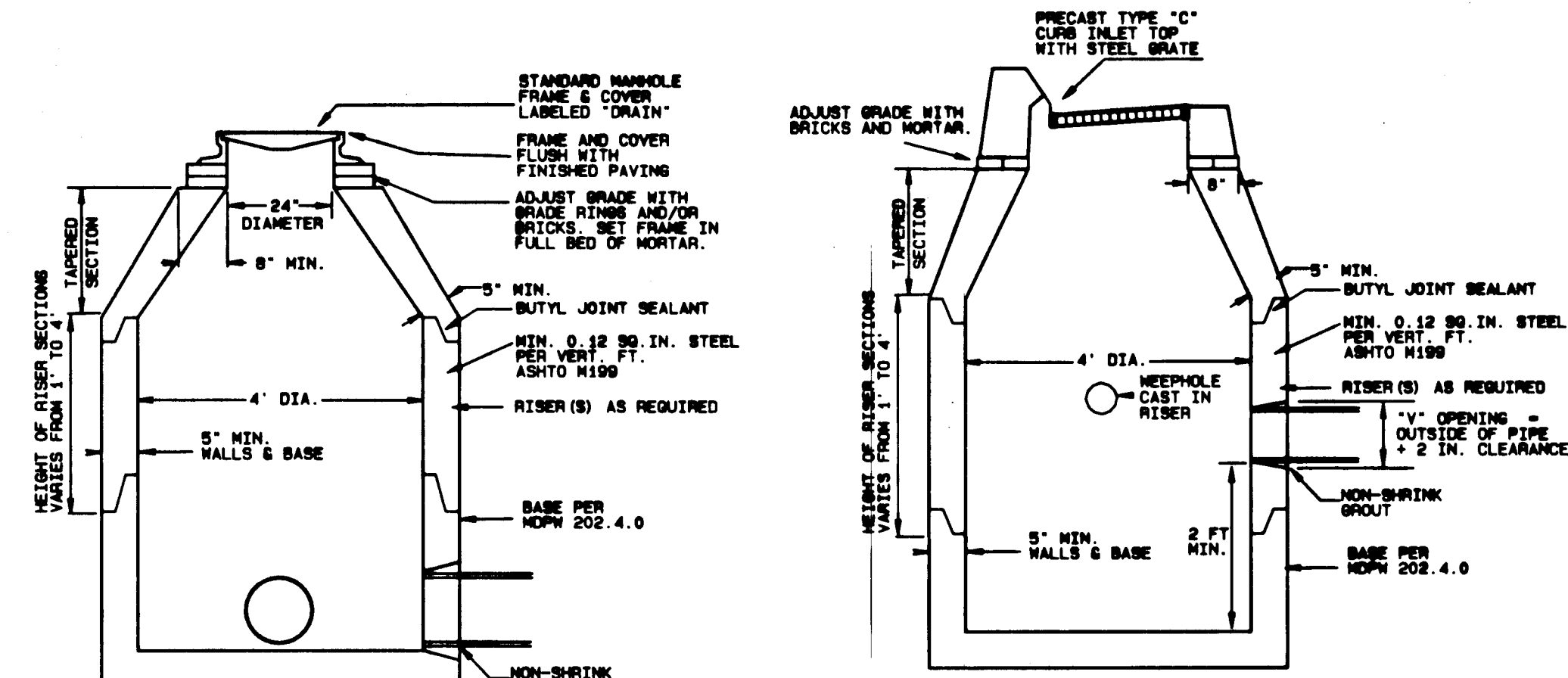
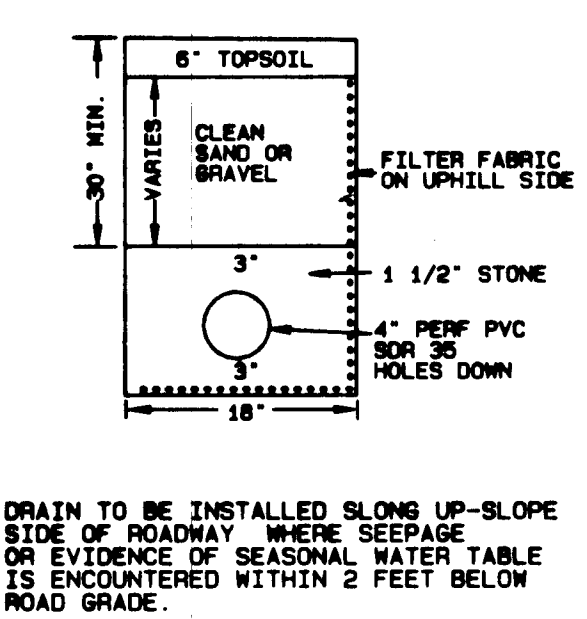
TYPICAL THRUST BLOCK
INSTALLATION
N.T.S.



TYPICAL STREET CROSS SECTION
NOT TO SCALE



ROADWAY SUBDRAIN
NOT TO SCALE



PRECAST CONCRETE
DRAIN MANHOLE
9 FT. OR LESS DEPTH
N.T.S.

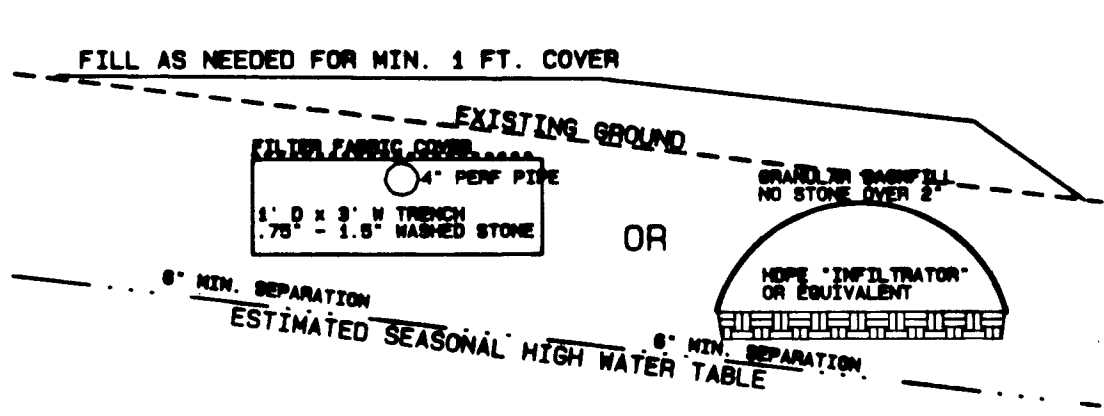
PRECAST CONCRETE
CATCH BASIN
N.T.S.

ALL MATERIALS AND CONSTRUCTION METHODS TO COMPLY WITH THE STANDARDS OF THE BOARD OF PUBLIC WORKS OF EAST LONGMEADOW.

THRUST BLOCKS TO BE INSTALLED AND MECHANICALLY RESTRAINED ON ALL BENDS ALONG WATER MAIN.

APPROVED BY THE EAST LONGMEADOW PLANNING BOARD
DATE: 9/20/01
Chairman

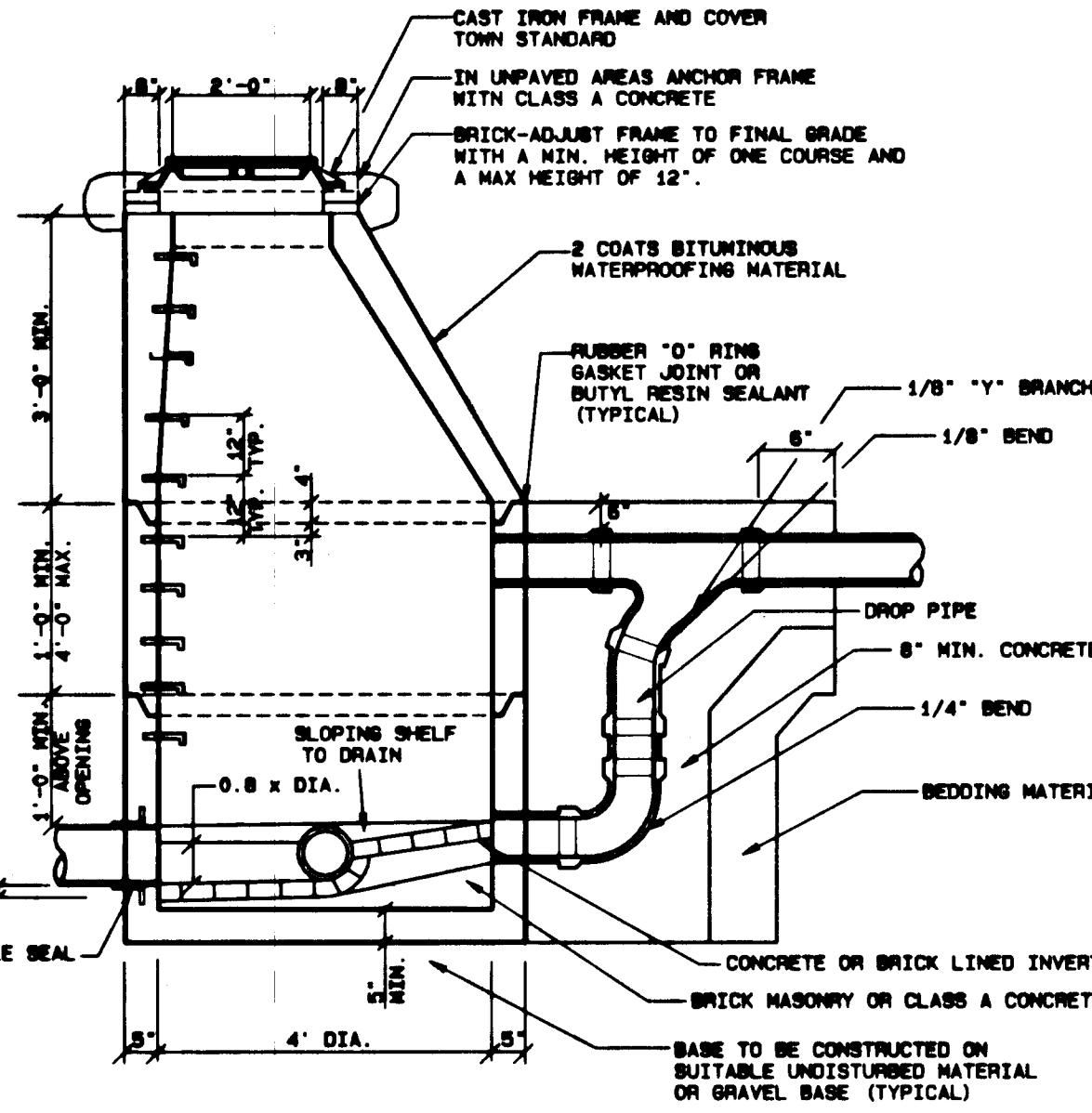
TYPICAL INFILTRATION SYSTEM
FOR RESIDENTIAL ROOF RUNOFF
REQUIRED FOR ALL HOMES



FOR ALL HOMES, AT LEAST 1/2 OF THE ROOF AREA SHALL BE DIRECTED TO SURFACE INFILTRATION SYSTEMS. SYSTEM MAY BE SPLIT APPROXIMATELY PROPORTIONALLY TO ROOF AREA. TRENCHES SHALL BE ORIENTED ACROSS THE SLOPE AND AT LEAST 20 FEET FROM ANY BASEMENT WALL.

MINIMUM TOTAL SYSTEM SIZE:
TRENCH: 77 LF PER HOME
OR
INFILTRATOR: 47 LF (7.5 UNITS) PER HOME

LEAVES AND DEBRIS TO BE DIVERTED FROM SYSTEM BY SELF-CLEANING BUTTER SCREENS, "LEAFGO" DEBRIS SEPARATOR, OR EQUIVALENT.
DOWNPOUTS TO HAVE OVERFLOW AT GROUND LEVEL BEFORE ENTERING SUBSURFACE PIPE SYSTEM.



PRECAST SANITARY MANHOLE
(WITH DROP IF REQUIRED)
N.T.S.

DETAIL SHEET

PEMBROKE TERRACE & ROCKINGHAM CIRCLE
GREAT WOODS, PHASE V
EAST LONGMEADOW, MA

OWNED BY
SIVAD NOMINEE TRUST
PREPARED FOR
DAN ROULIER & ASSOCIATES, INC.

SHEET 4 OF 4

SCALE: AS NOTED DATE: 4/30/01 8/17/01

SMITH ASSOCIATES
SURVEYORS, INC.

105 SHAKER RD., EAST LONGMEADOW, MASS. 01028