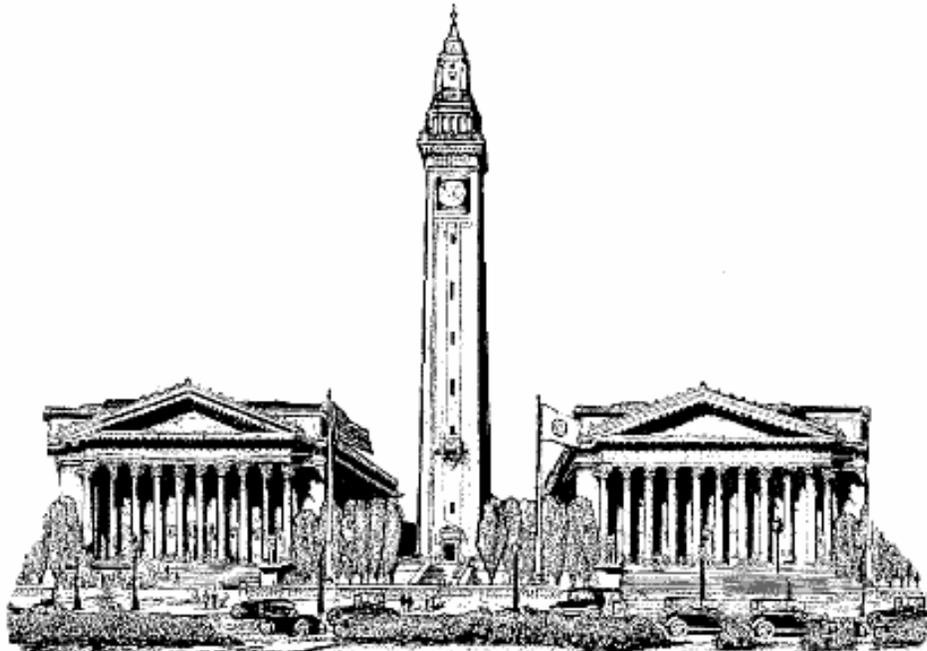


Springfield

Department of Public Works

Standard Engineering Details



SPRINGFIELD
Dpw
DEPARTMENT OF PUBLIC WORKS

CONSTRUCTION NOTES

- 1.** CALL DIG-SAFE (1-800-322-4844) A MINIMUM OF 72 HOURS PRIOR TO CONSTRUCTION.
- 2.** CONTRACTOR IS RESPONSIBLE FOR STREET OCCUPANCY PERMITS FROM THE ENGINEERING DIVISION, DEPARTMENT OF PUBLIC WORKS.
- 3.** NOTIFY FIELD INSPECTOR 48 HOURS PRIOR TO CONSTRUCTION.
- 4.** APPROVED PLANS SHALL BE ON SITE AT ALL TIMES.
- 5.** CHANGES TO THIS PLAN MAY OCCUR AS UNFORSEEN CONDITIONS ARISE. ALL CHANGES SHALL BE APPROVED BY FIELD INSPECTOR.
- 6.** CALCIUM CHLORIDE/ WATER FOR DUST CONTROL SHALL BE AVAILABLE AT ALL TIMES.
- 7.** ALL MATERIALS AND METHODS SHALL CONFORM TO CITY OF SPRINGFIELD D.P.W. AND WATER AND SEWER COMMISSION STANDARDS.
- 8.** THE CONTRACTOR SHALL ENSURE THE MAINTENANCE OF SAFETY AND TRAFFIC ON THE PUBLIC AND PRIVATE WAYS AFFECTED BY THE CONSTRUCTION OF THIS PROJECT.
- 9.** THE CONTRACTOR SHALL PROTECT ALL SLOPES, VEGETATION, PAVING, WALKS AND IMPROVEMENTS OUTSIDE THE AREAS TO BE AFFECTED BY THE CONSTRUCTION OF THIS PROJECT.
- 10.** ALL DRAINAGE STRUCTURES (CATCH BASINS / LEECHING BASINS) IN THE AREA SHALL BE PROTECTED FROM RUNOFF.
- 11.** "AS-BUILT" UTILITY DRAWINGS ARE TO BE SUBMITTED TO THE ENGINEERING DIVISION UPON COMPLETION OF THIS PROJECT.
- 12.** ALL PAVEMENT MARKINGS CHANGED, ALTERED OR REMOVED SHALL BE RE-APPLIED.
- 13.** SPRINGFIELD D.P.W. APPROVAL IS NOT TO BE CONSTRUED AS AN ALL-INCLUSIVE APPROVAL, AS OTHER APPROVALS MAY BE NECESSARY, I.E. CITY FORESTER, CONSERVATION, FIRE DEPT. AND WATER AND SEWER COMMISSION, ETC.
- 14.** THE CONTRACTOR SHALL HAVE AN APPROVED S.W.P.P.P. ON SITE AS NEEDED.
- 15.** (OTHER NOTES AS NEEDED)

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0065 - SIGN FACE DETAILS

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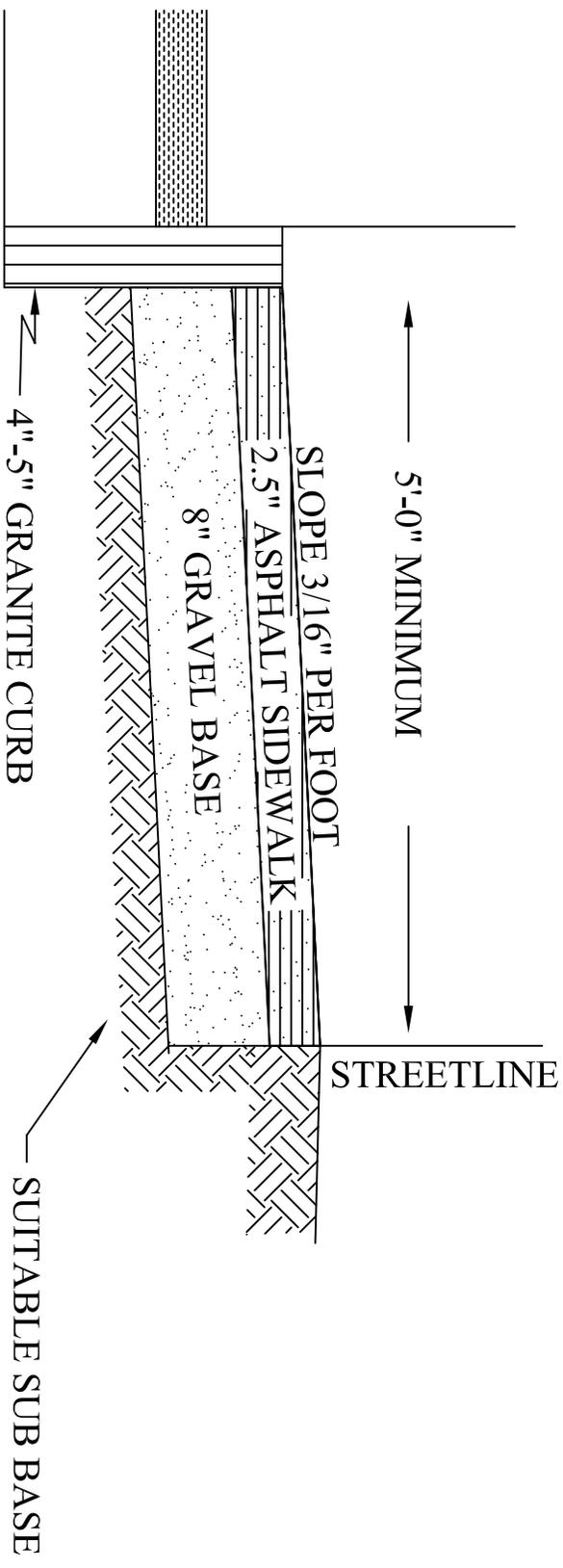
0070 - SIDEWALK REPAIR

0071 - MULTIPLE EXCAVATION REPAIR

0072 - IMPRINT OR INLAYED CROSSWALK REPAIR

0073 - CROSSWALK DETAIL – CONTINENTAL STYLE

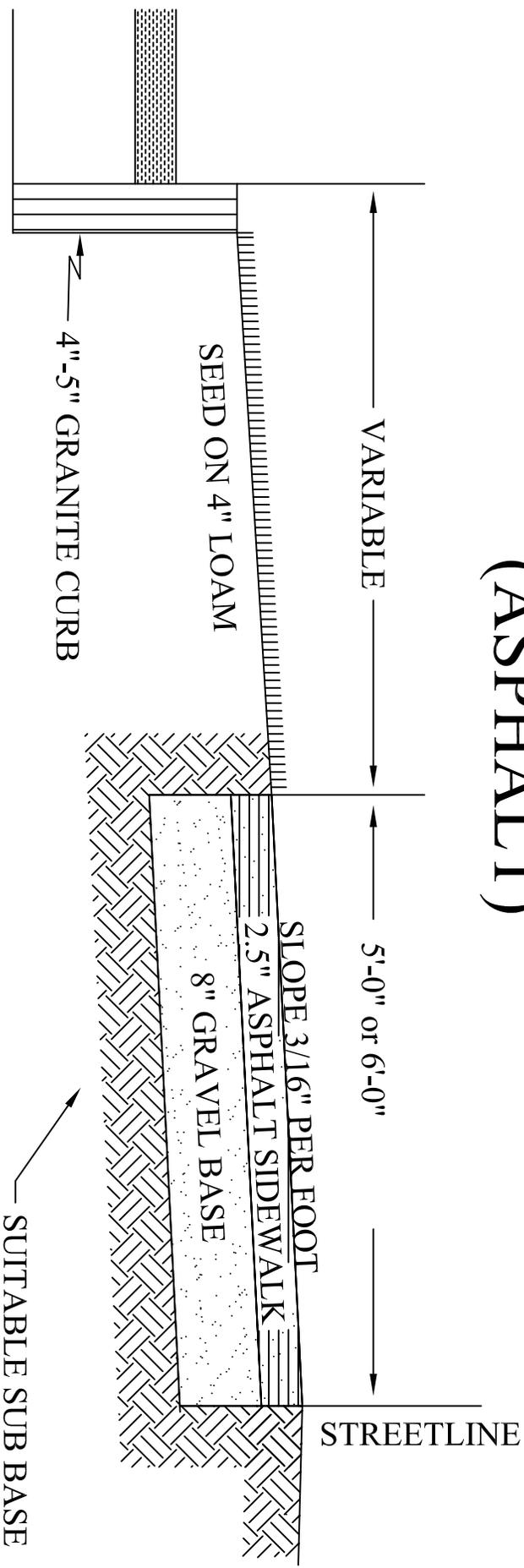
TYPICAL STANDARD SECTION FOR SIDEWALK CONSTRUCTION AT CURB LINE (ASPHALT)



NOTES:

- STANDARD SIDEWALK SLOPE IS 3/16 PER FT.
- ALL WORK TO CONFORM WITH SECTION 701.62 OF THE MASSACHUSETTS HIGHWAY DEPARTMENT'S STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES

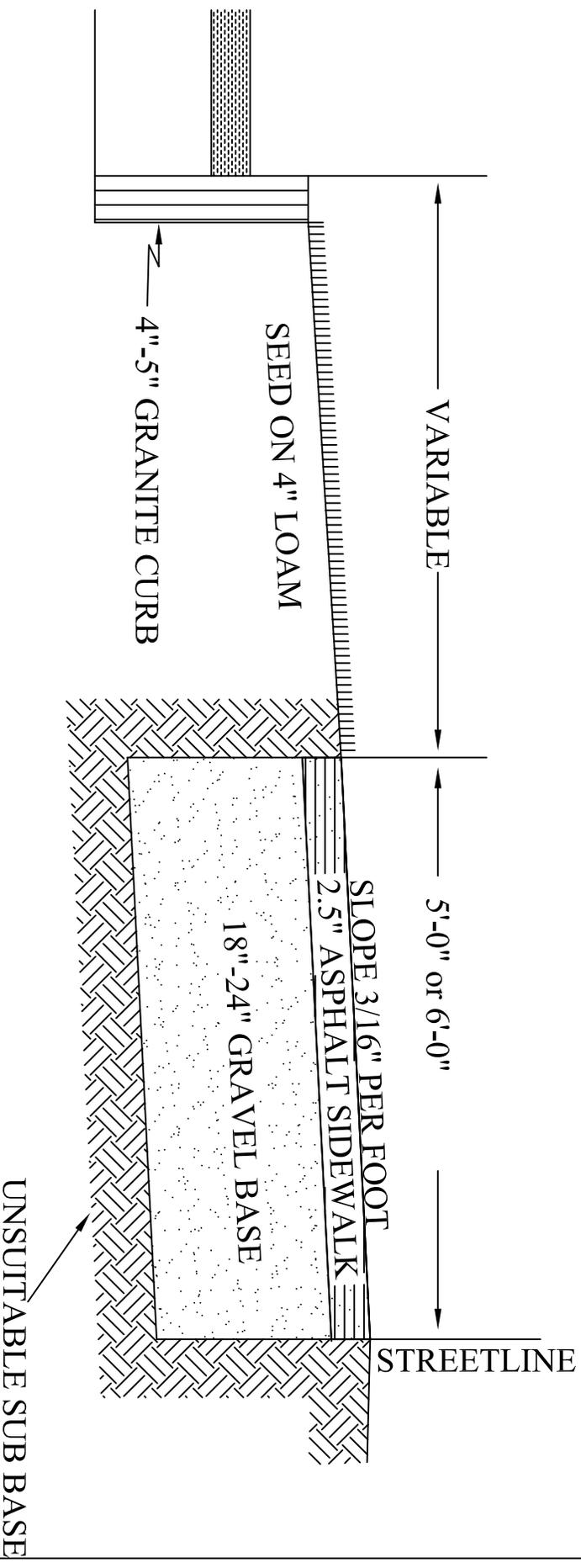
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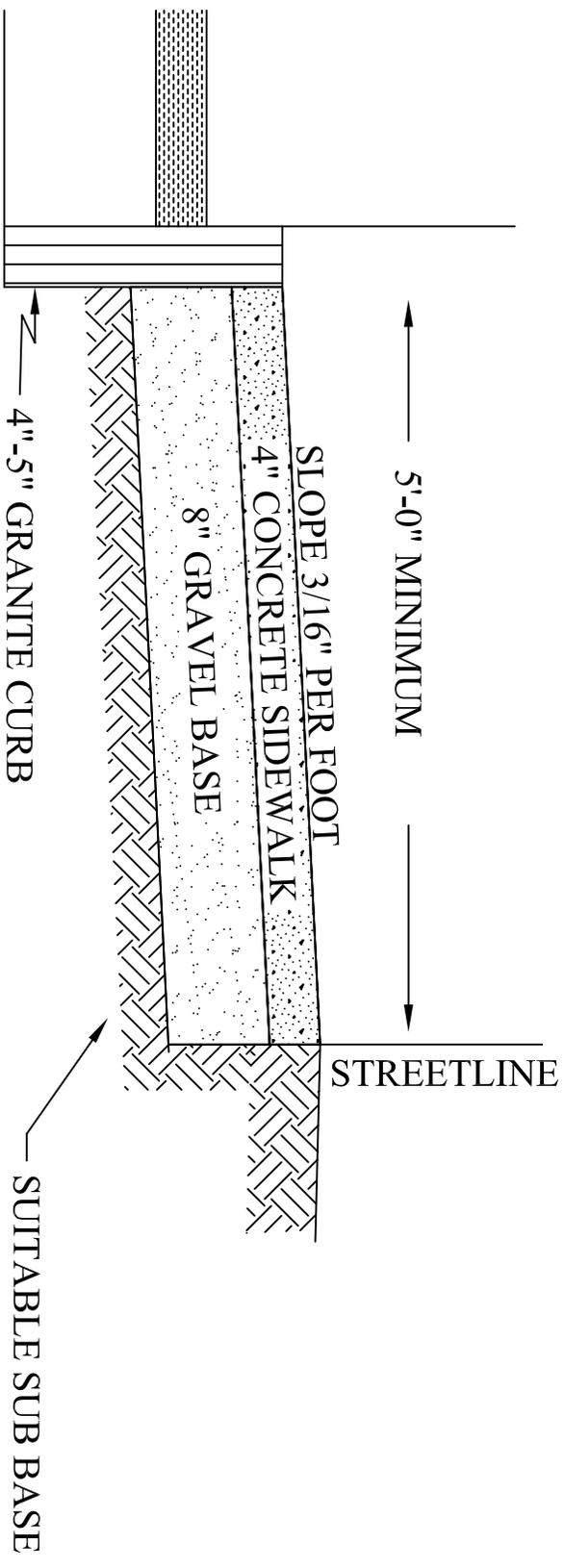
TYPICAL STANDARD SECTION FOR SIDEWALK CONSTRUCTION WITH UNSUITABLE SUB BASE (ASPHALT)



NOTES:

- STANDARD SIDEWALK SLOPE IS 3/16 PER FT.
- ALL WORK TO CONFORM WITH SECTION 701.62 OF THE MASSACHUSETTS HIGHWAY DEPARTMENT'S STANDARD SPECIFICATIONS FOR HIGHWAYS AND BRIDGES

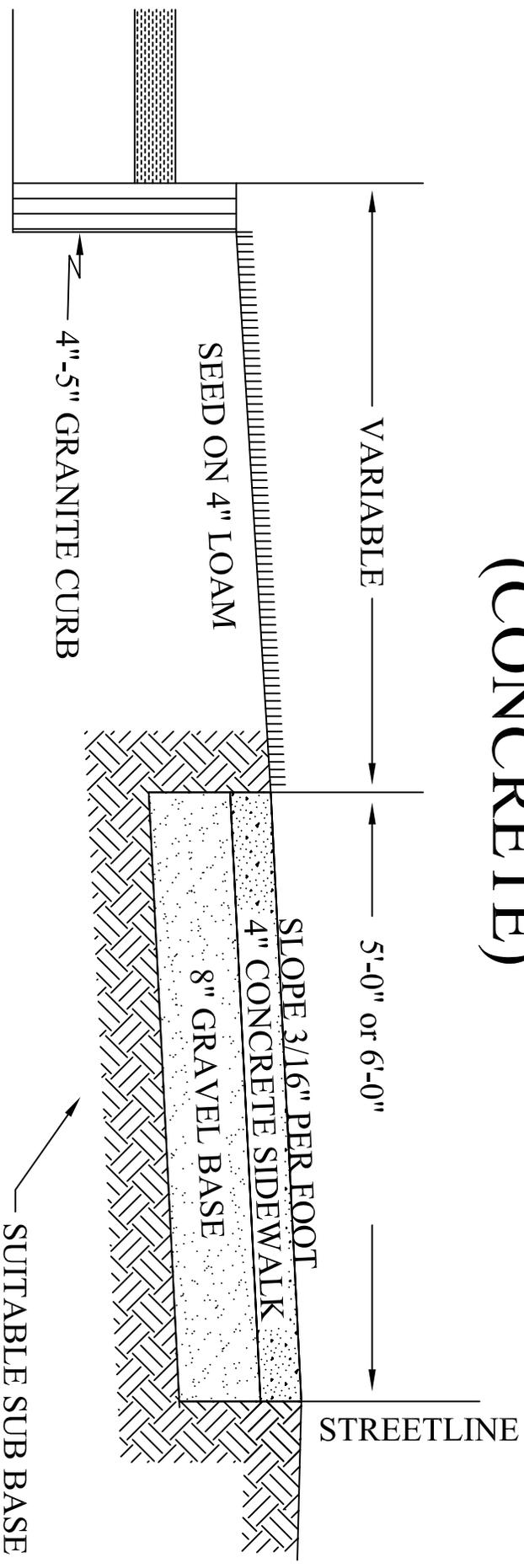
TYPICAL STANDARD SECTION FOR SIDEWALK CONSTRUCTION AT CURB LINE (CONCRETE)



NOTES:

- STANDARD SIDEWALK SLOPE IS 3/16 PER FT.
- MINIMUM CONCRETE STENGTH WILL BE 4,000#, CLASS D

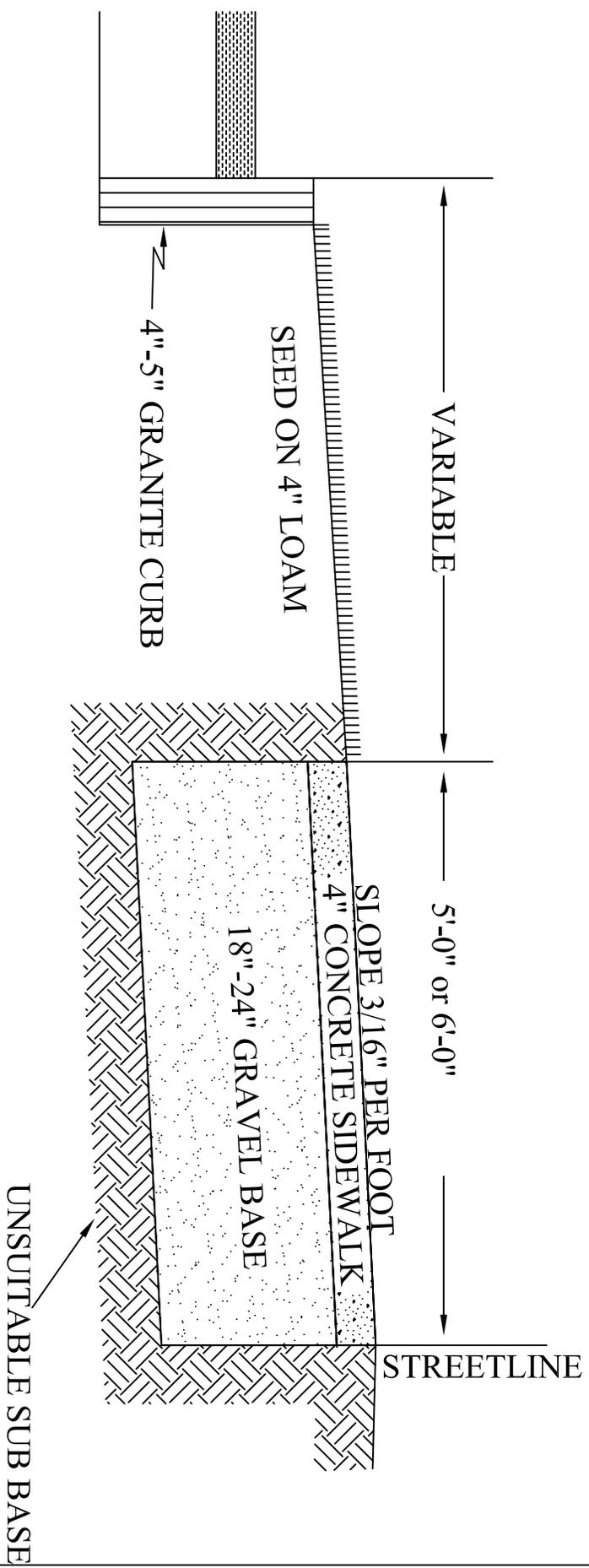
TYPICAL STANDARD SECTION FOR SIDEWALK CONSTRUCTION (CONCRETE)



NOTES:

- STANDARD SIDEWALK SLOPE IS 3/16 PER FT.
- MINIMUM CONCRETE STENGTH WILL BE 4,000#, CLASS D

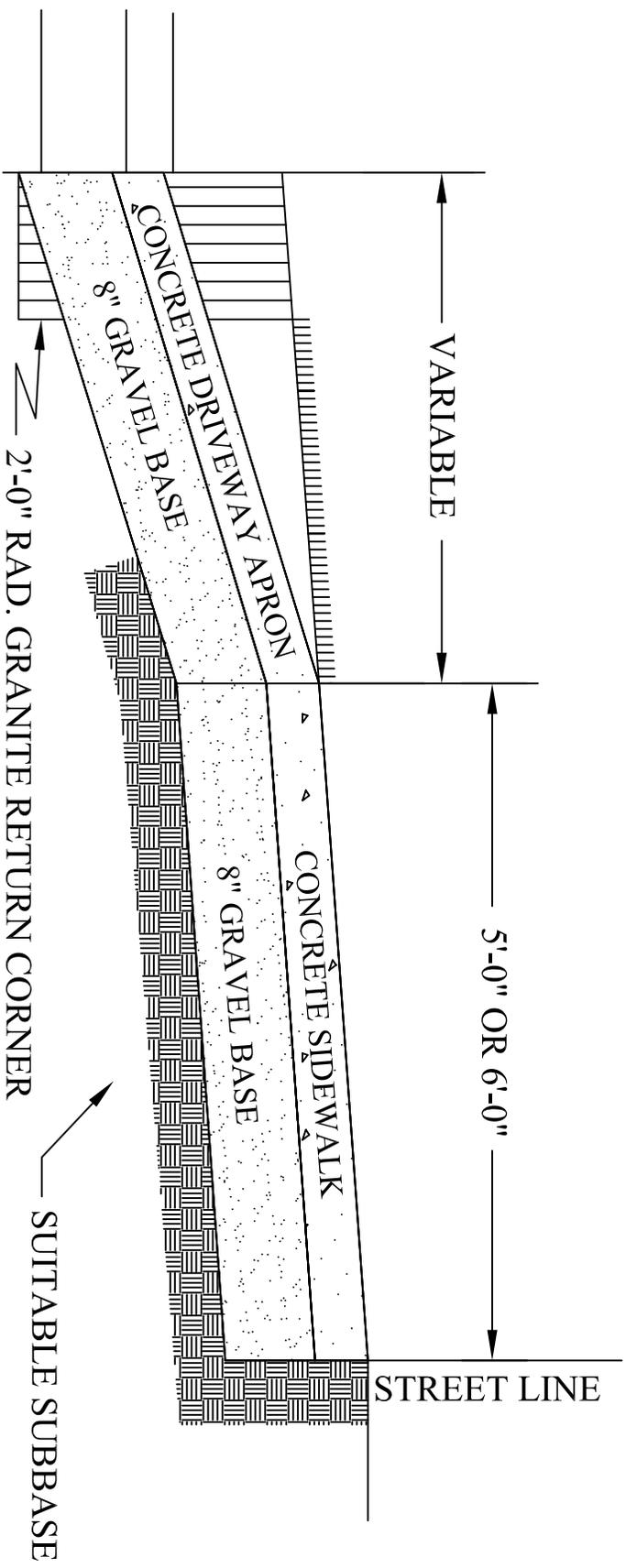
TYPICAL STANDARD SECTION FOR SIDEWALK CONSTRUCTION WITH UNSUITABLE SUB BASE (CONCRETE)



NOTES:

- STANDARD SIDEWALK SLOPE IS 3/16 PER FT.
- MINIMUM CONCRETE STRENGTH WILL BE 4,000#, CLASS D

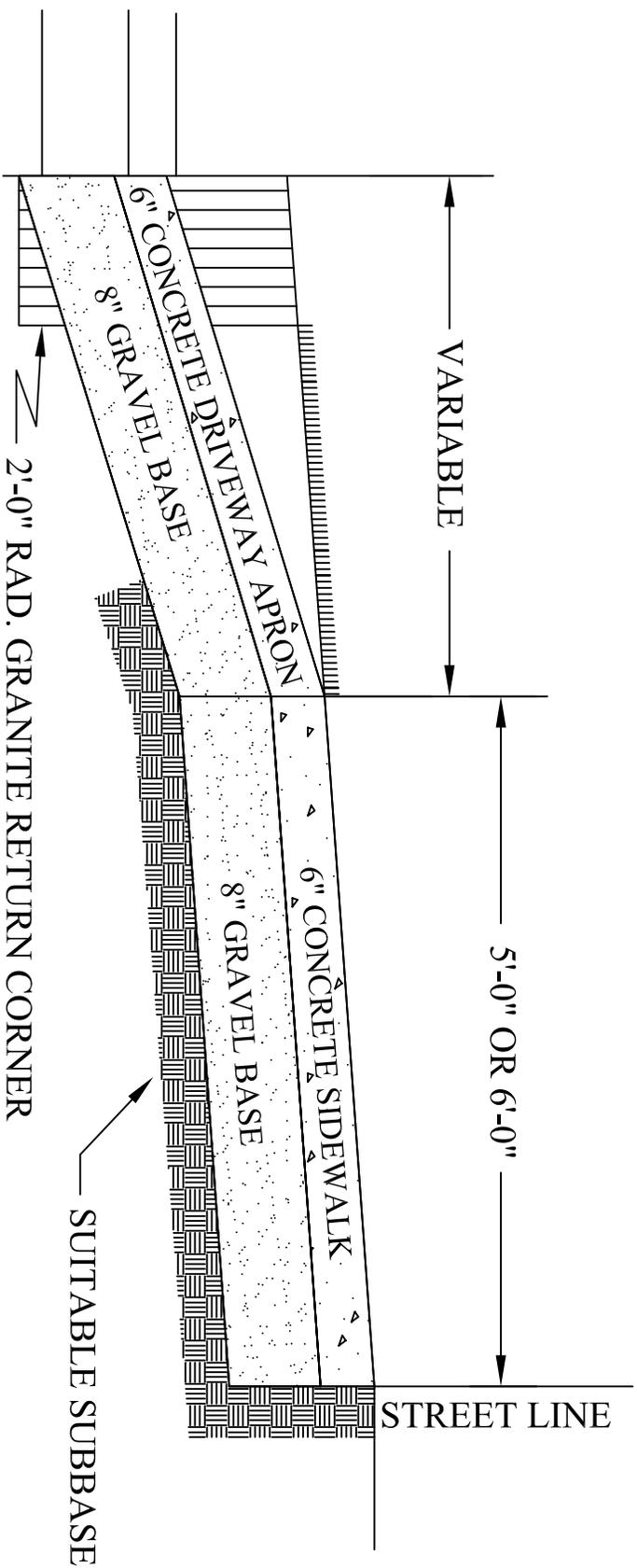
STANDARD SIDEWALK CONSTRUCTION AT COMMERCIAL DRIVEWAYS



NOTES:

- 9" CONCRETE MAY BE REPLACED BY 6" ASPHALT IF APPROVED
- STANDARD SIDEWALK SLOPE IS 3/16 PER FT.
- MAXIMUM DRIVEWAY WIDTH IS 40' WITH TWO 2' CURB RETURNS (36' OPENING)
- #3 REINFORCING BARS SHALL BE PLACED 12" O.C., 3" FROM GRAVEL BASE
- MINIMUM CONCRETE STRENGTH WILL BE 4,000#, CLASS D

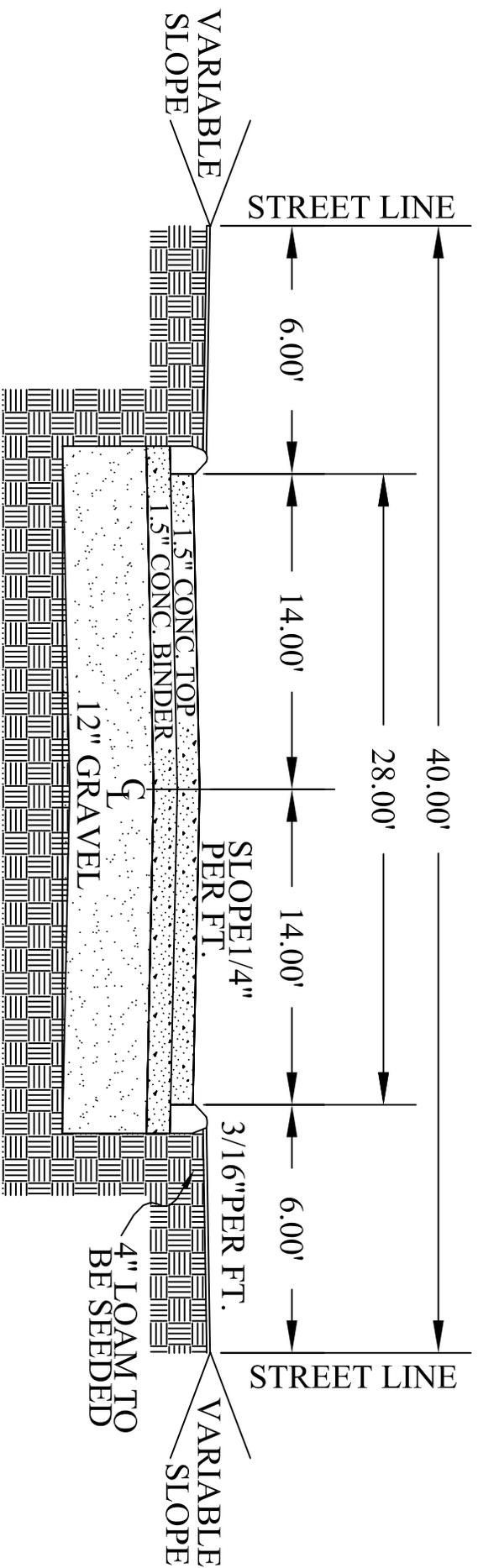
STANDARD SIDEWALK CONSTRUCTION AT RESIDENTIAL DRIVEWAYS



NOTES:

- 6" CONCRETE DEPTH TO BE REPLACED BY 3-1/2" ASPHALT(2" BINDER, 1- 1/2 TOP) AS DIRECTED BY THE ENGINEER
- STANDARD SIDEWALK SLOPE IS 3/16 PER FT.
- MAXIMUM DRIVEWAY WIDTH IS 24' WITH TWO 2' CURB RETURNS (20' OPENING)
- WIRE WELDED FABRIC PLACED 1-1/2" ABOVE GRAVEL BASE
- MINIMUM CONCRETE STRENGTH WILL BE 4,000#, CLASS D

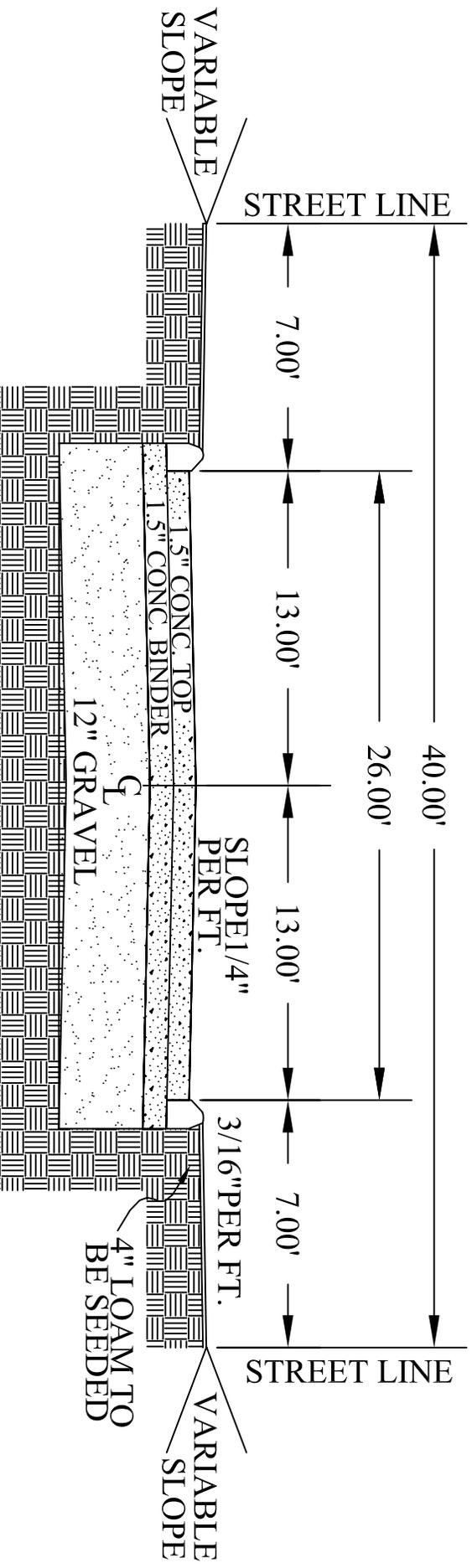
TYPICAL SECTION 40' STREET LINE 28' PAVEMENT



NOTES:

- EXISTING SUBGRADE TO BE SHAPED AND COMPACTED
- USE CALCIUM CHLORIDE APPLIED AT 1.5 LBS PER SQ. YD. OR APPROVED ALTERNATE
- SURFACE COURSE:
 - 1.5" BITUMINOUS CONCRETE TOP, 1.5" BITUMINOUS CONCRETE BINDER
- BASE:
 - 12" GRAVEL

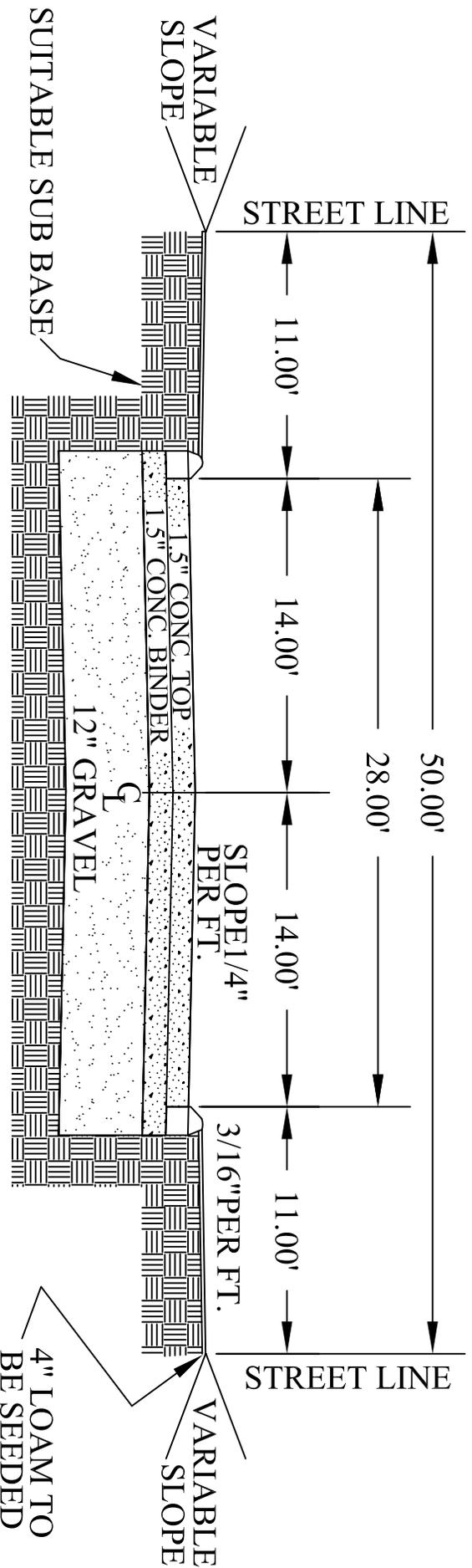
TYPICAL SECTION 40' STREET LINE 26' PAVEMENT CAPE COD BERM



NOTES:

- EXISTING SUBGRADE TO BE SHAPED AND COMPACTED
- USE CALCIUM CHLORIDE APPLIED AT 1.5 LBS PER SQ. YD. OR APPROVED ALTERNATE
- SURFACE COURSE:
 - 1.5" BITUMINOUS CONCRETE TOP, 1.5" BITUMINOUS CONCRETE BINDER
- BASE:
 - 12" GRAVEL

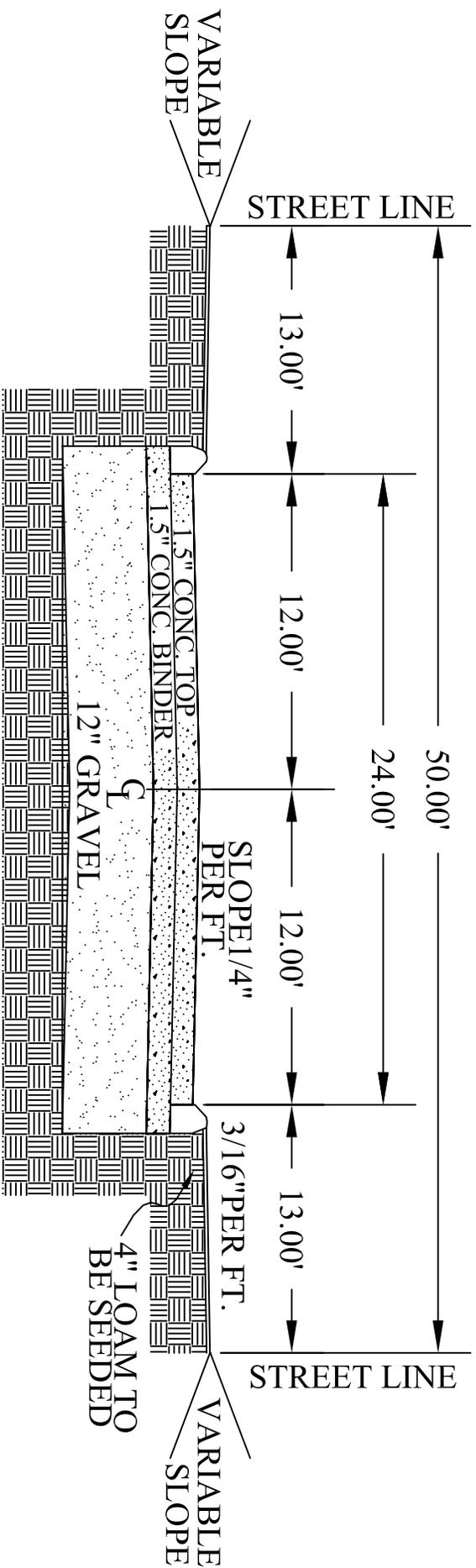
TYPICAL SECTION 50' STREET LINE 28' PAVEMENT CAPECOD BERM



NOTES:

- EXISTING SUBGRADE TO BE SHAPED AND COMPACTED
- USE CALCIUM CHLORIDE APPLIED AT 1.5 LBS PER SQ. YD. OR APPROVED ALTERNATE
- SURFACE COURSE:
 - 1.5" BITUMINOUS CONCRETE TOP, 1.5" BITUMINOUS CONCRETE BINDER
- BASE:
 - 12" GRAVEL

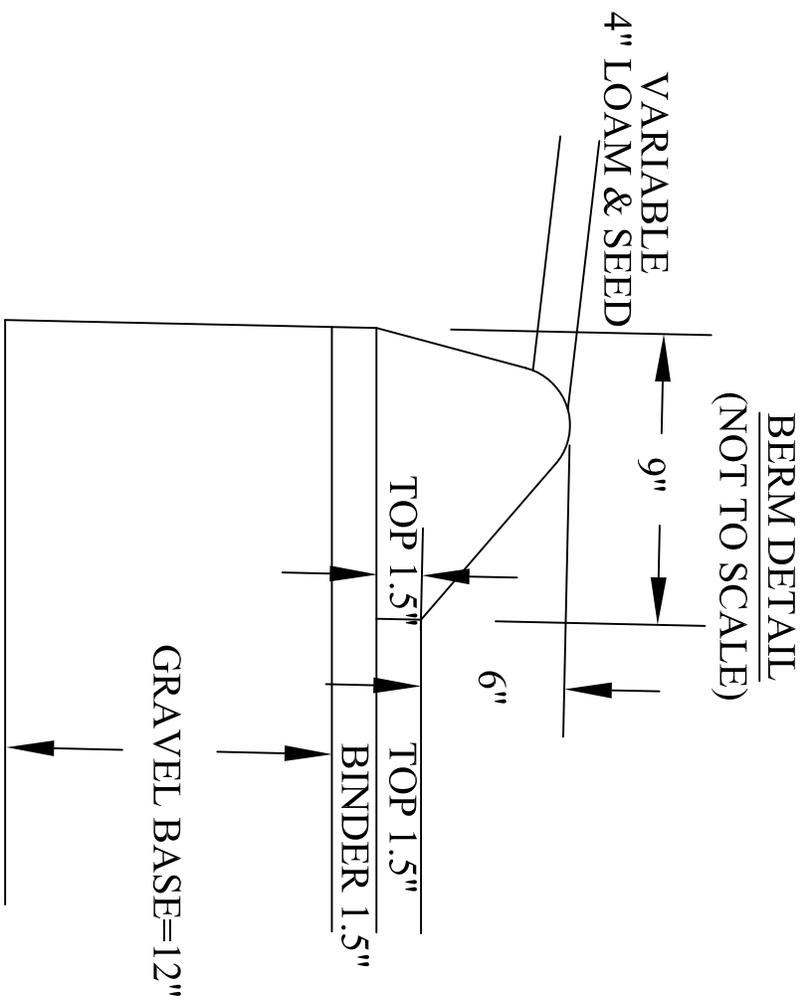
TYPICAL SECTION 50' STREET LINE 24' PAVEMENT



NOTES:

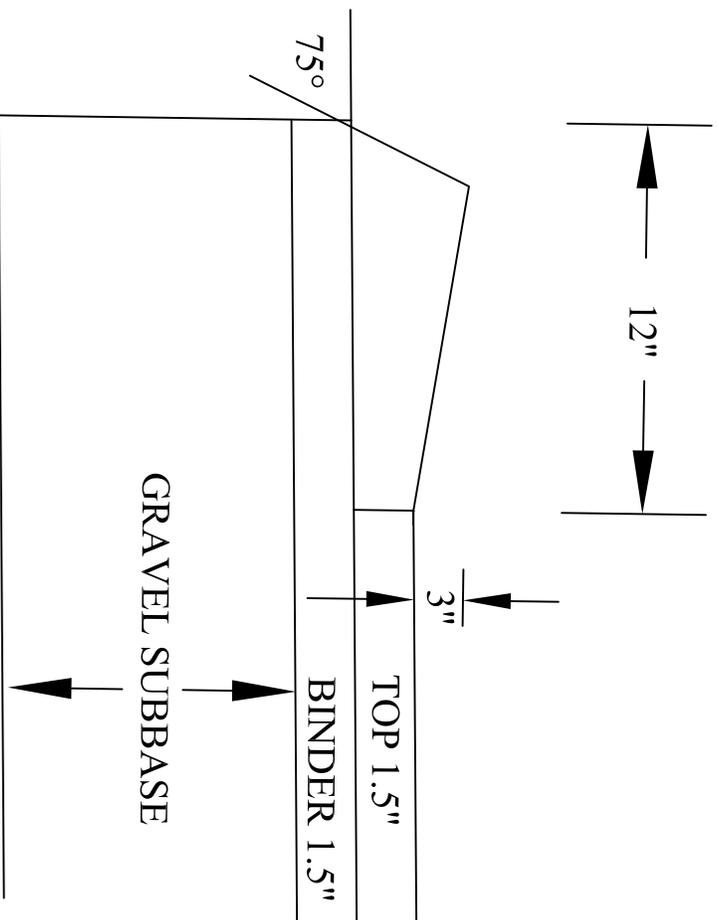
- EXISTING SUBGRADE TO BE SHAPED AND COMPACTED
- USE CALCIUM CHLORIDE APPLIED AT 1.5 LBS PER SQ. YD. OR APPROVED ALTERNATE
- SURFACE COURSE:
 - 1.5" BITUMINOUS CONCRETE TOP, 1.5" BITUMINOUS CONCRETE BINDER
- BASE:
 - 12" GRAVEL

BERM 6"

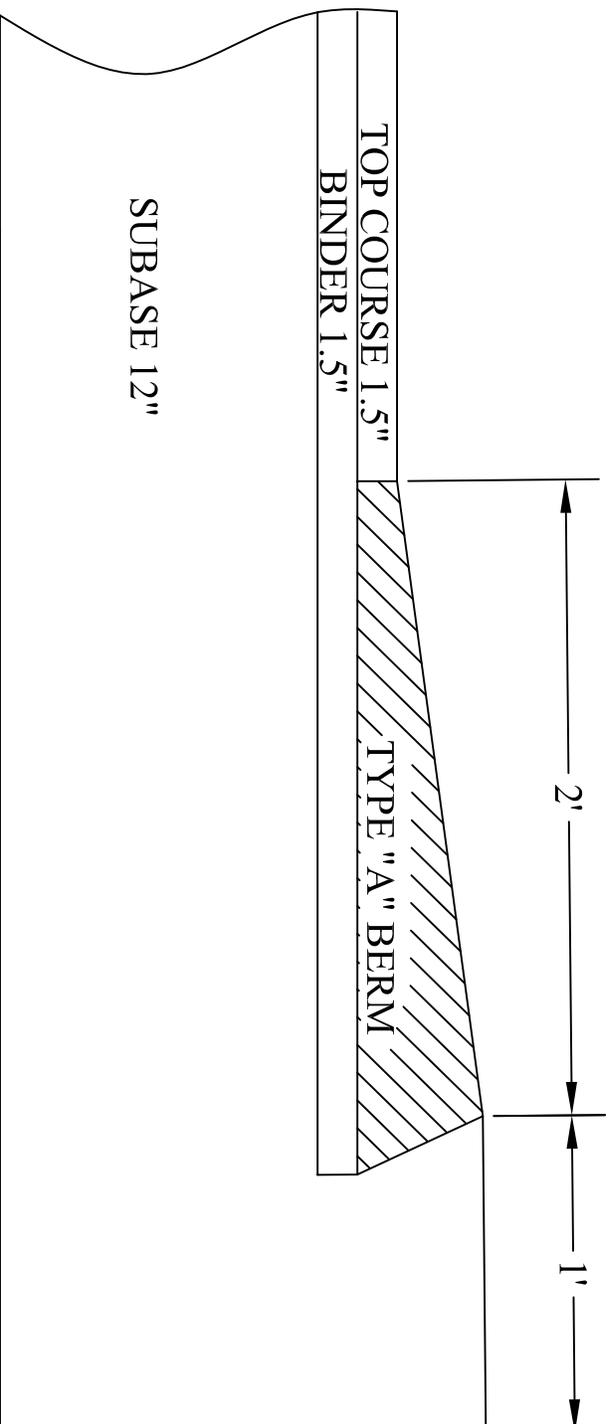


CAPE COD BERM

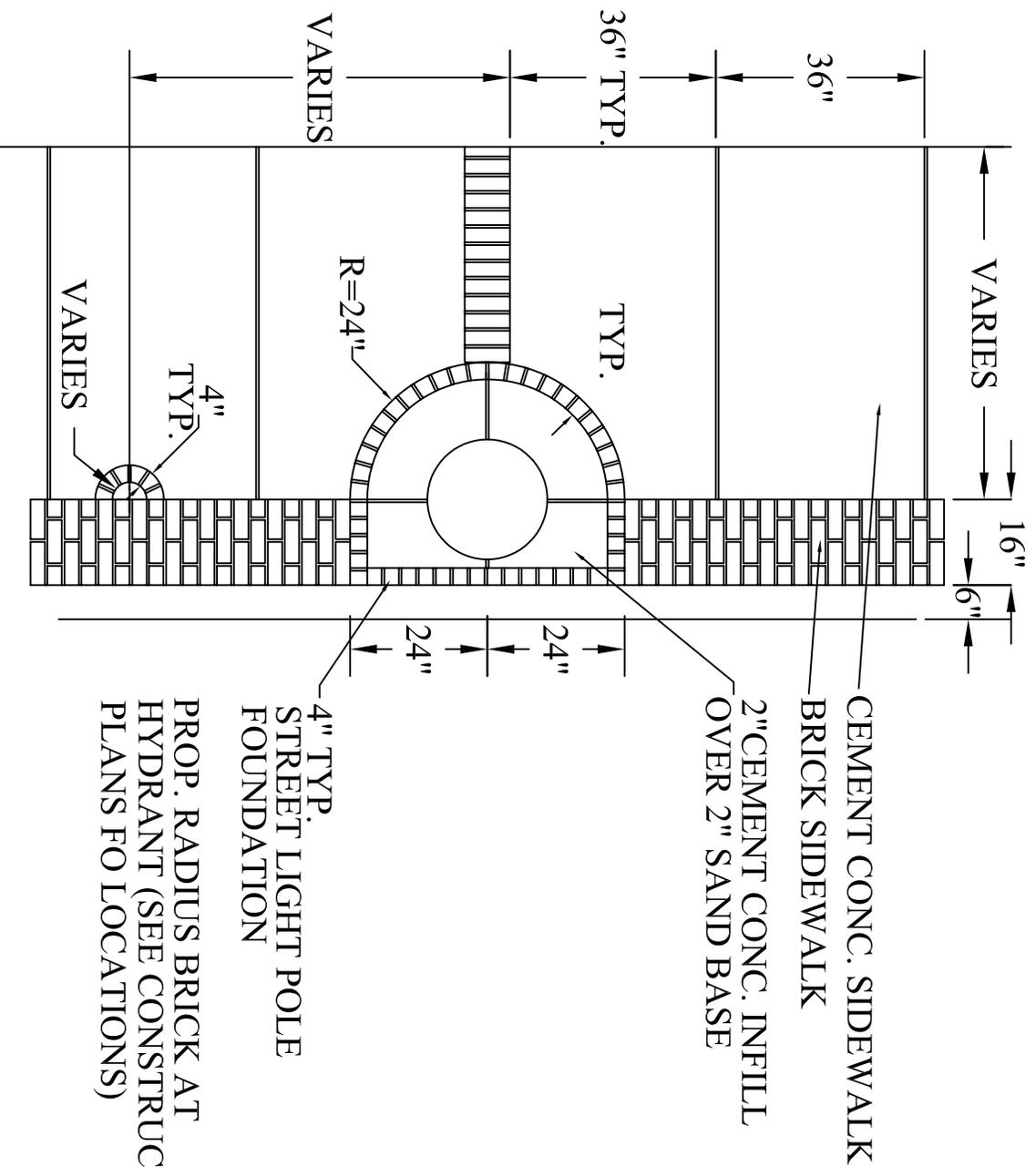
CAPE COD BERM DETAIL
(NOT TO SCALE)



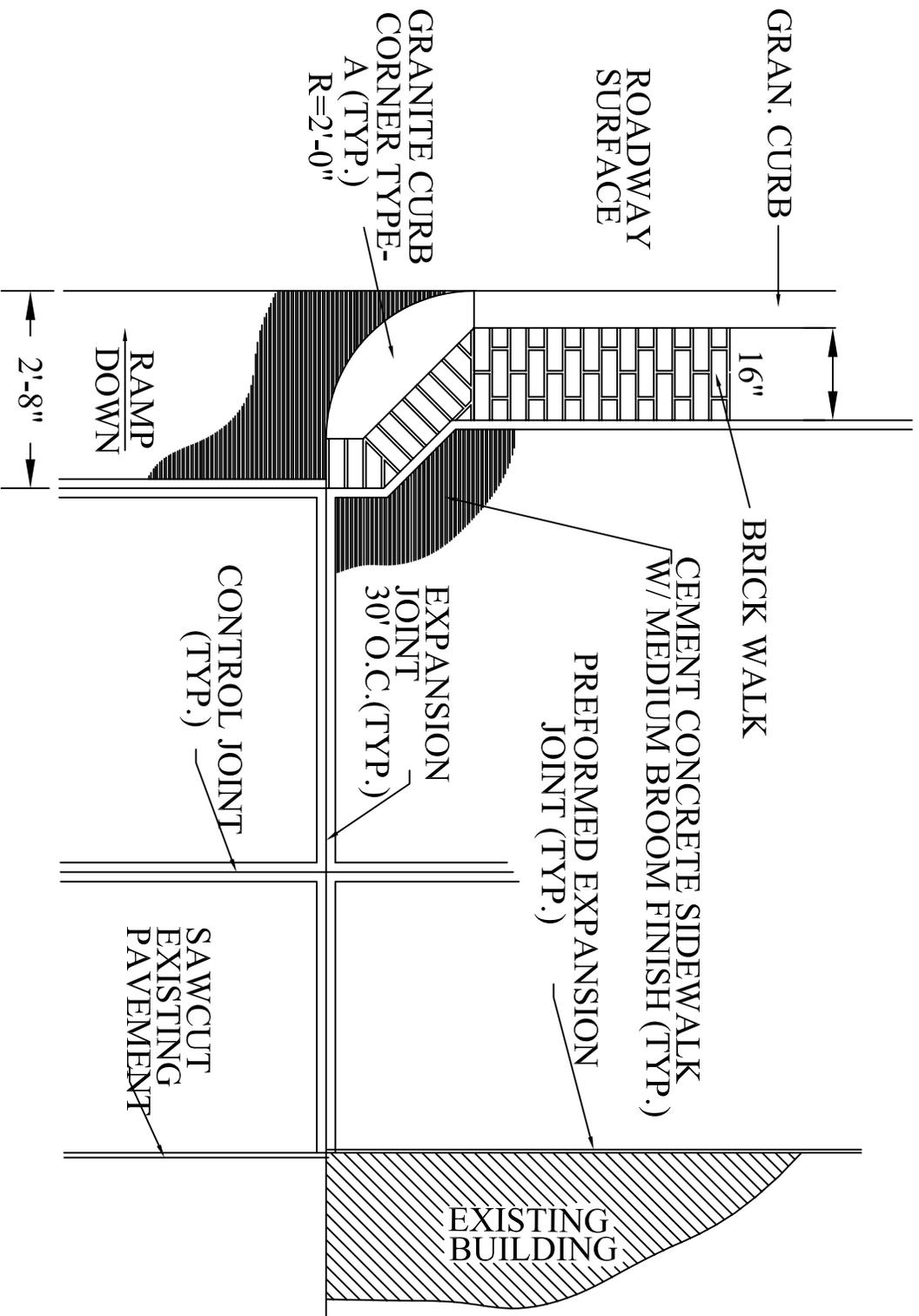
BERM TYPE A



BRICK SIDEWALK SIDEWALK TREATMENT AT UTILITIES

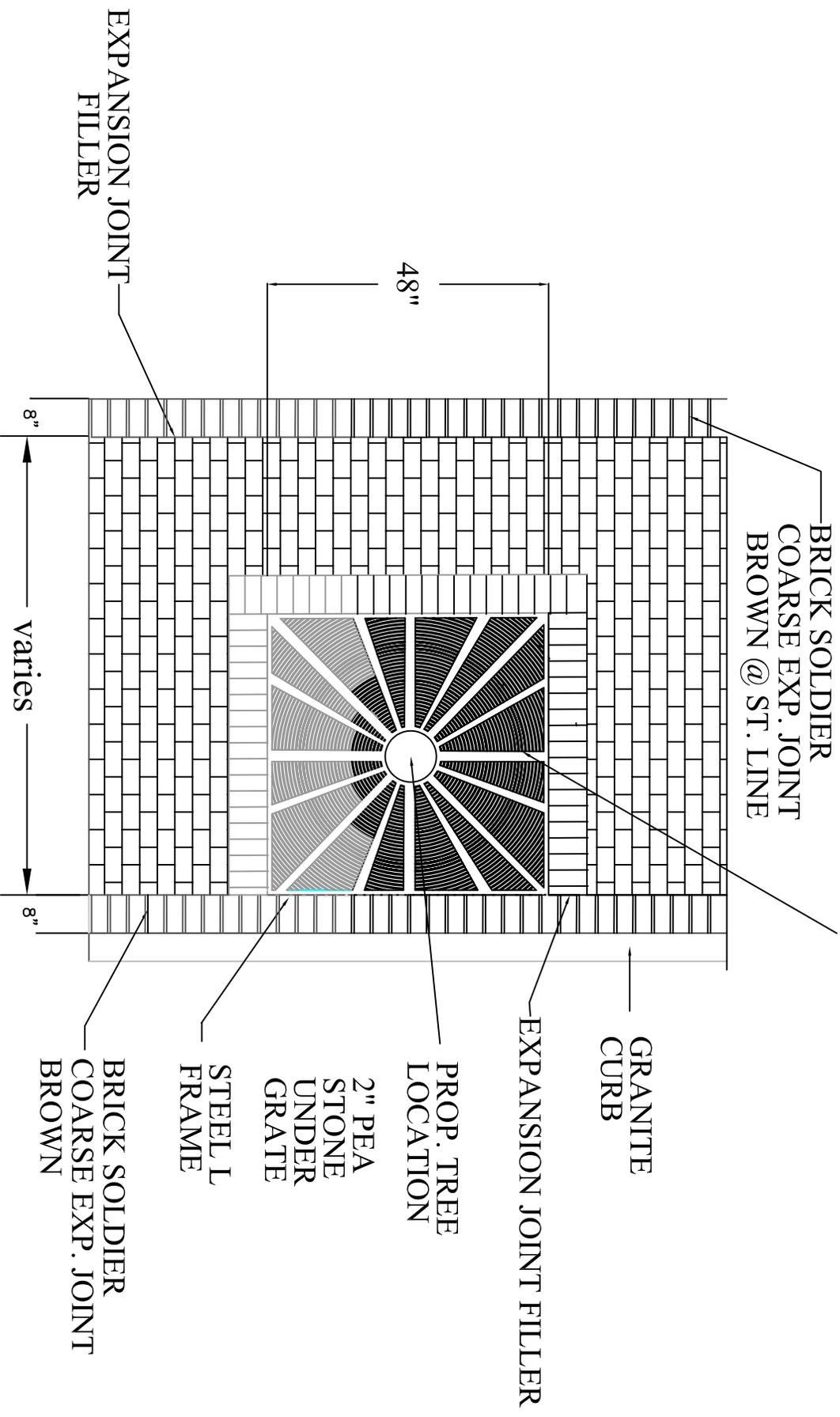


BRICK SIDEWALK SIDEWALK TREATMENT AT DRIVES

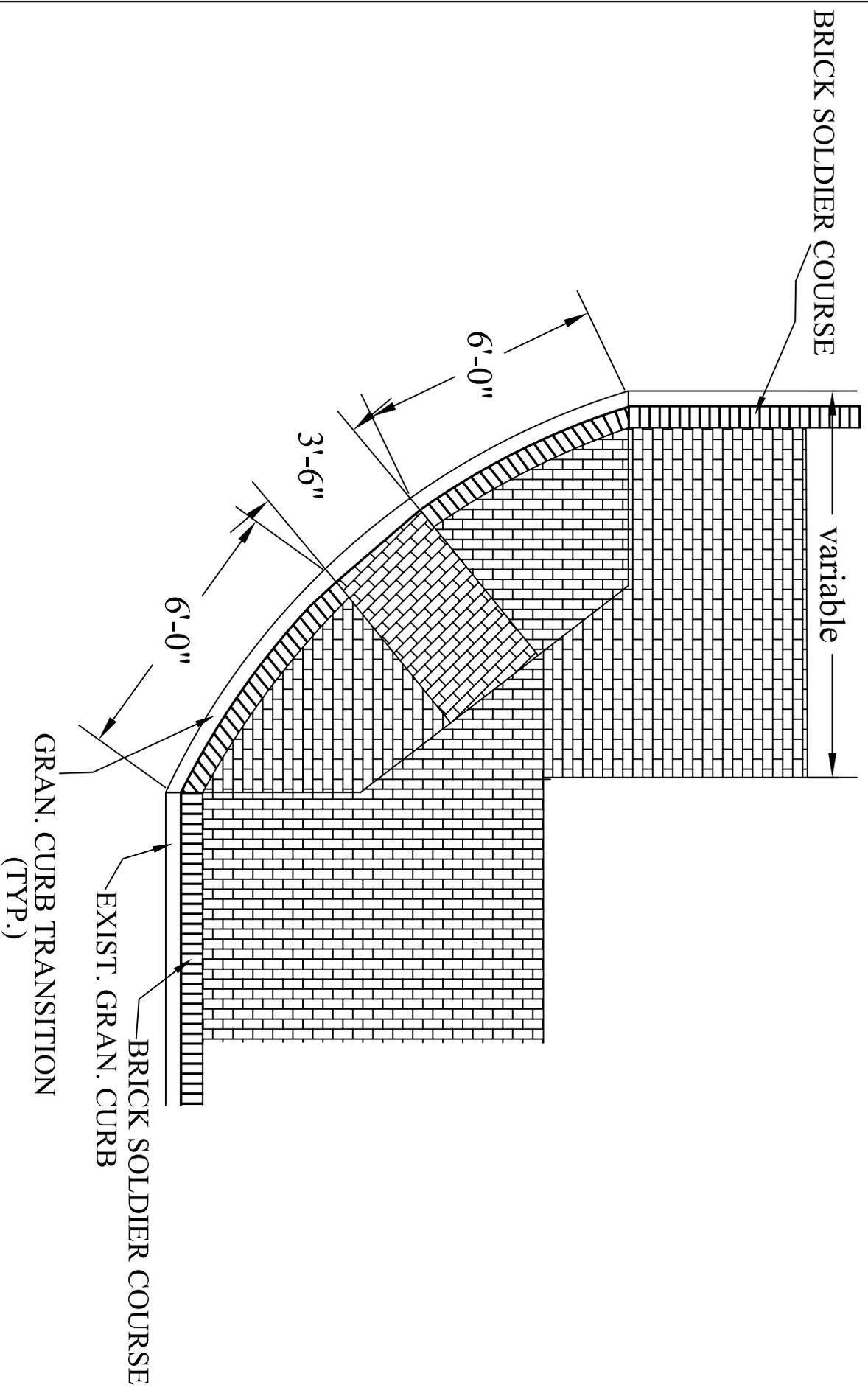


TREE PIT - TYPE - E

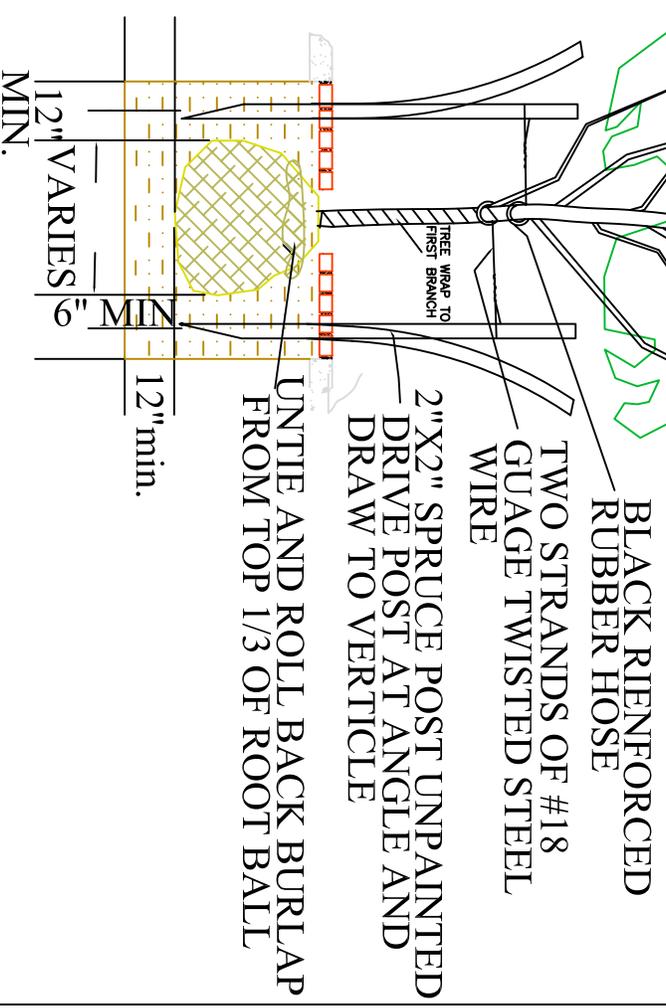
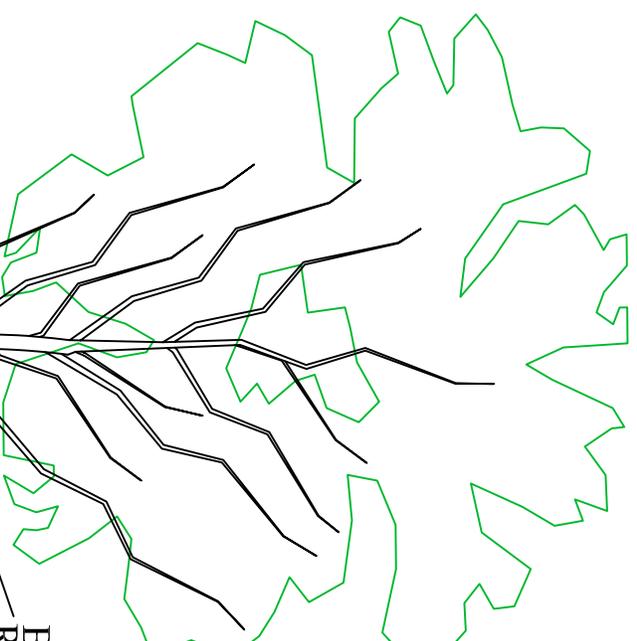
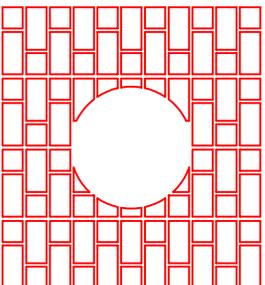
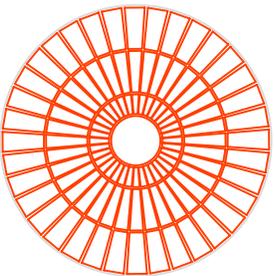
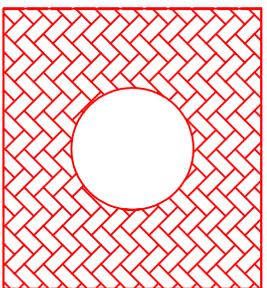
CAST IRON TREE GRATE
180 ROUND - MODEL# R-8647



BRICK WHEELCHAIR RAMP



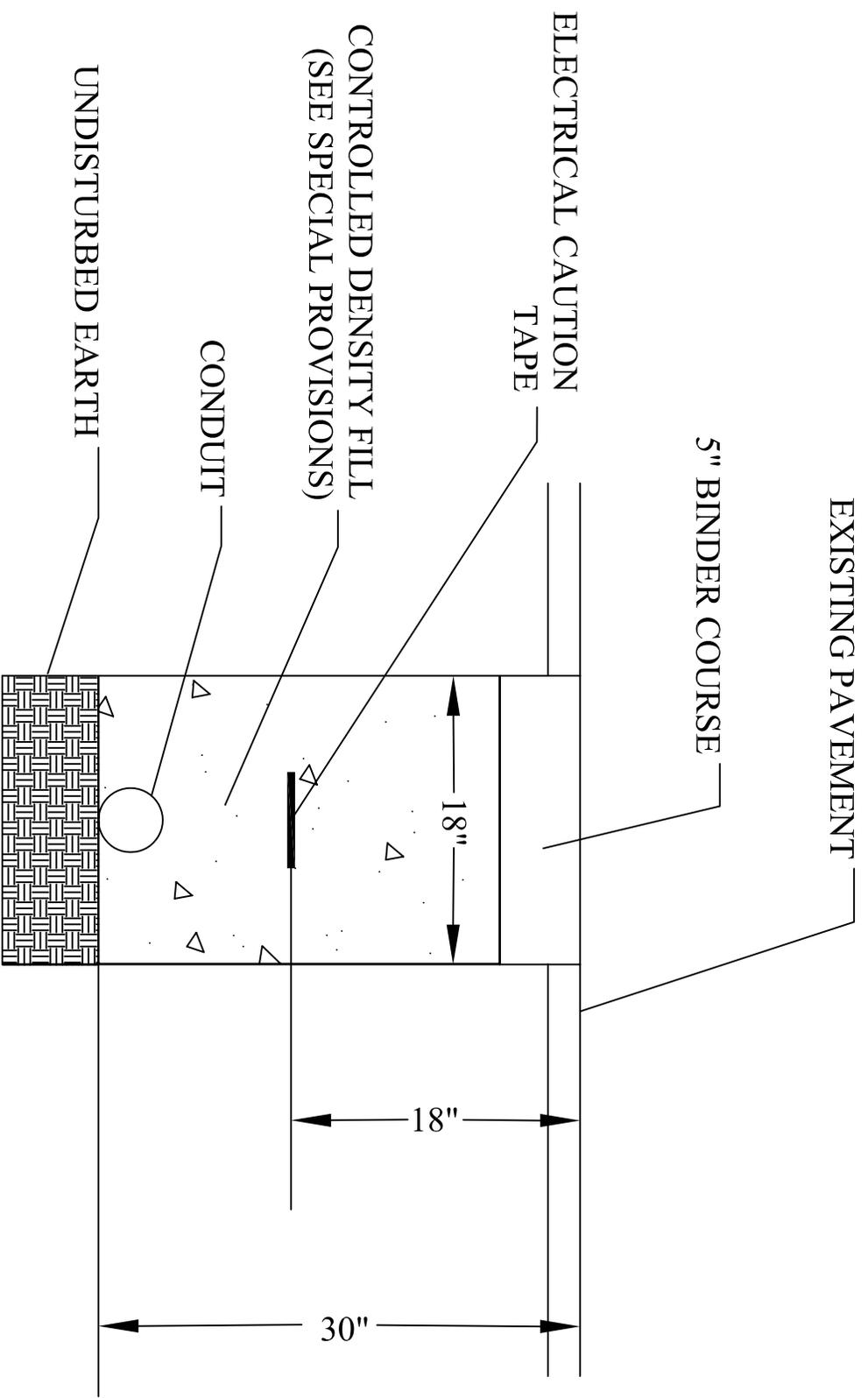
BRICK TREE PLANTING



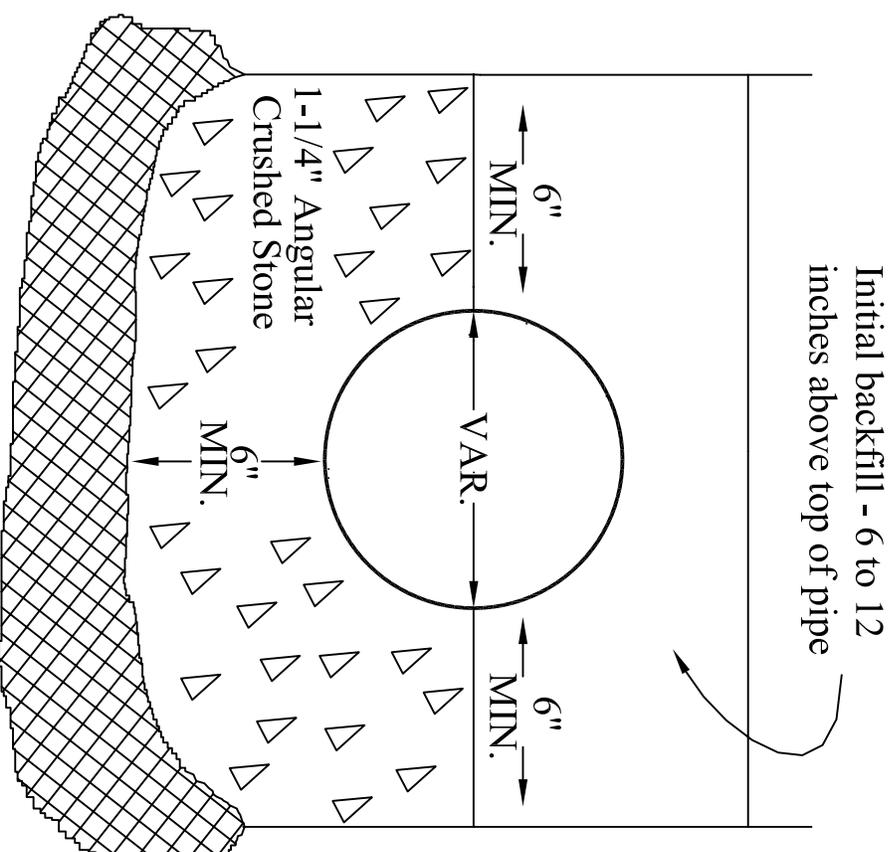
NOTES:

- TREES SHALL BE PLANTED PLUMB
- BRICK PAVERS SET ON A 2" LAYER OF SAND PLANTABLE SOIL MIXTURE (SEE SPECIAL PROVISIONS) COVERED BY A LAYER OF WEED BLOCKING FABRIC

TRAFFIC SIGNAL CONDUIT TRENCH

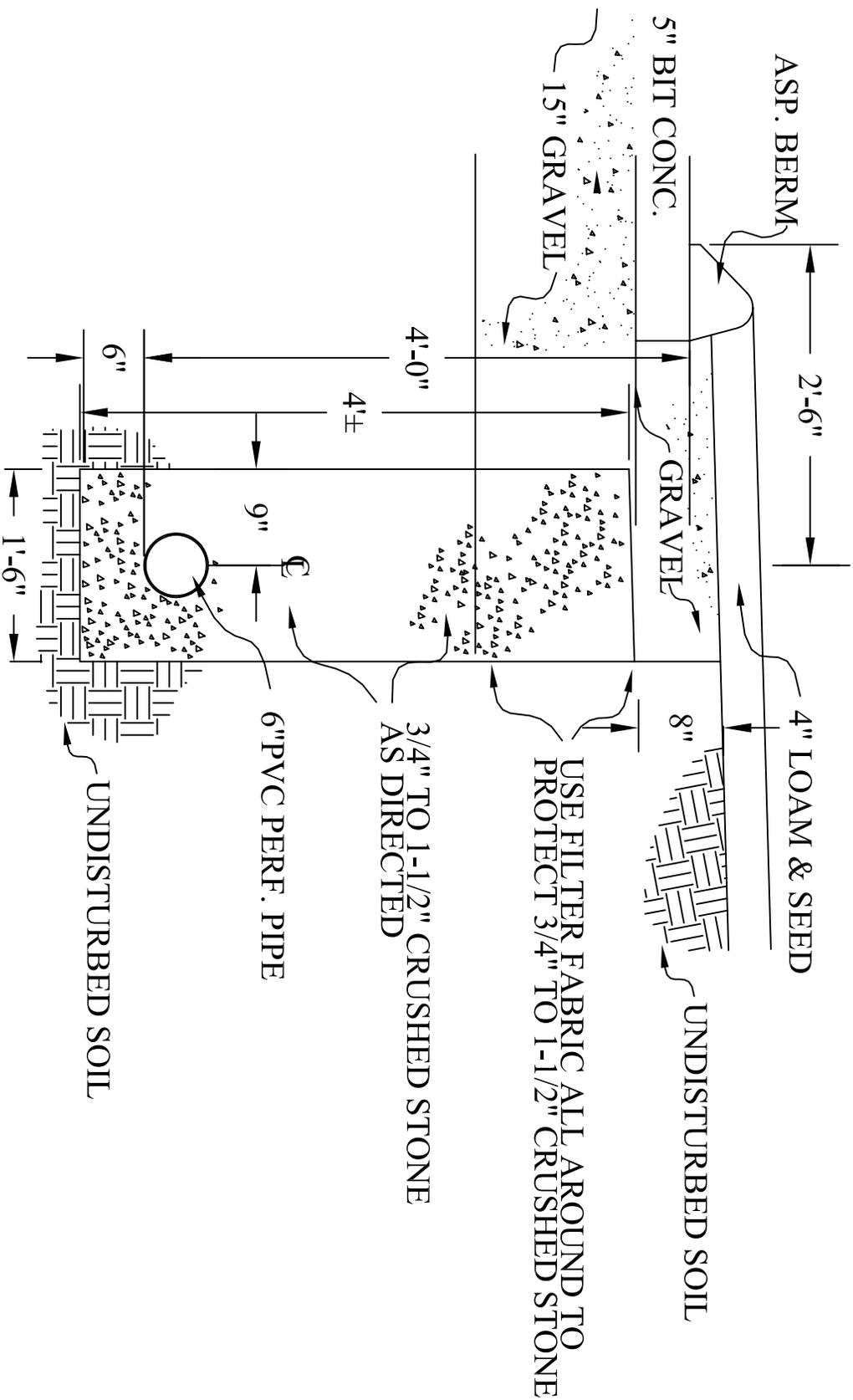


RCP. CLASS IV PIPE TRENCH



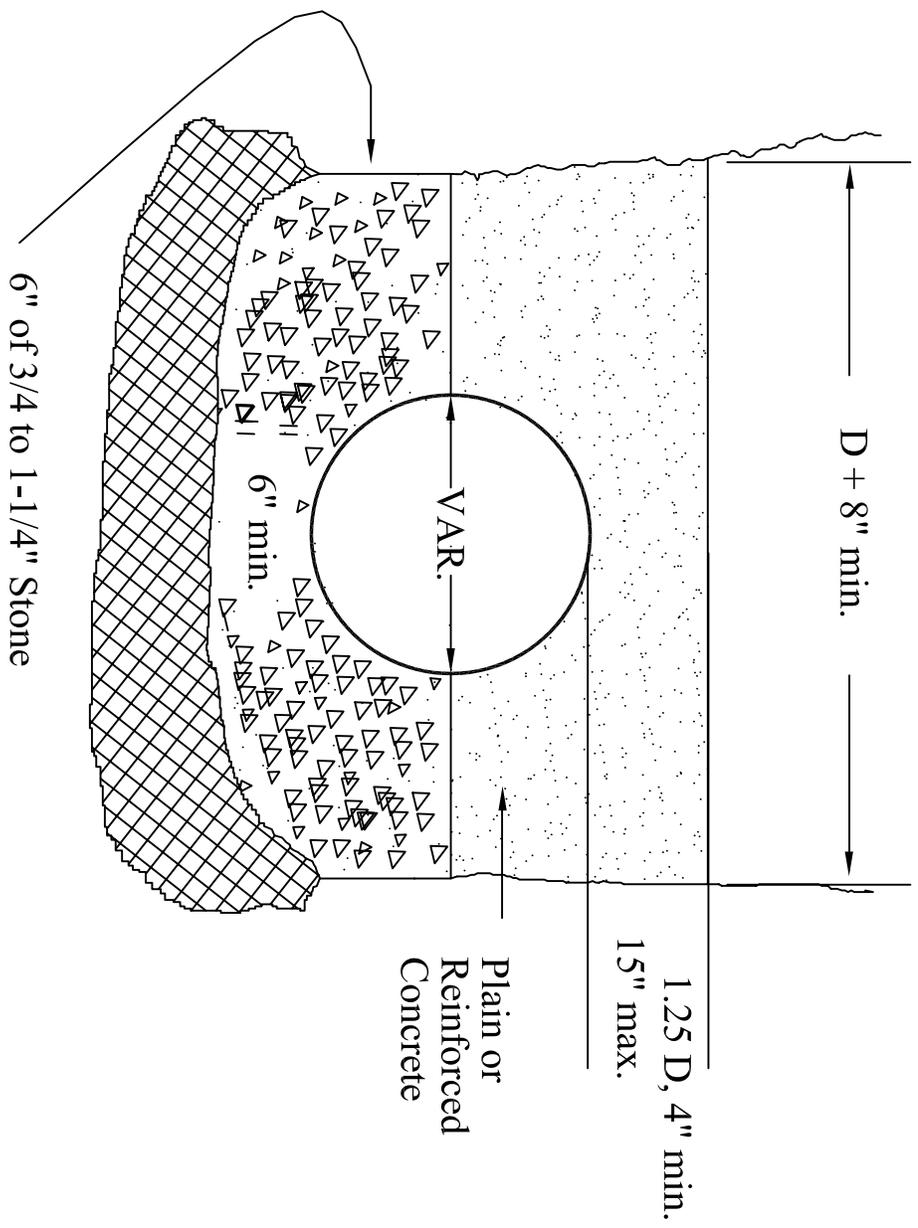
PIPE SUBDRAIN

L PERF. PIPE^C

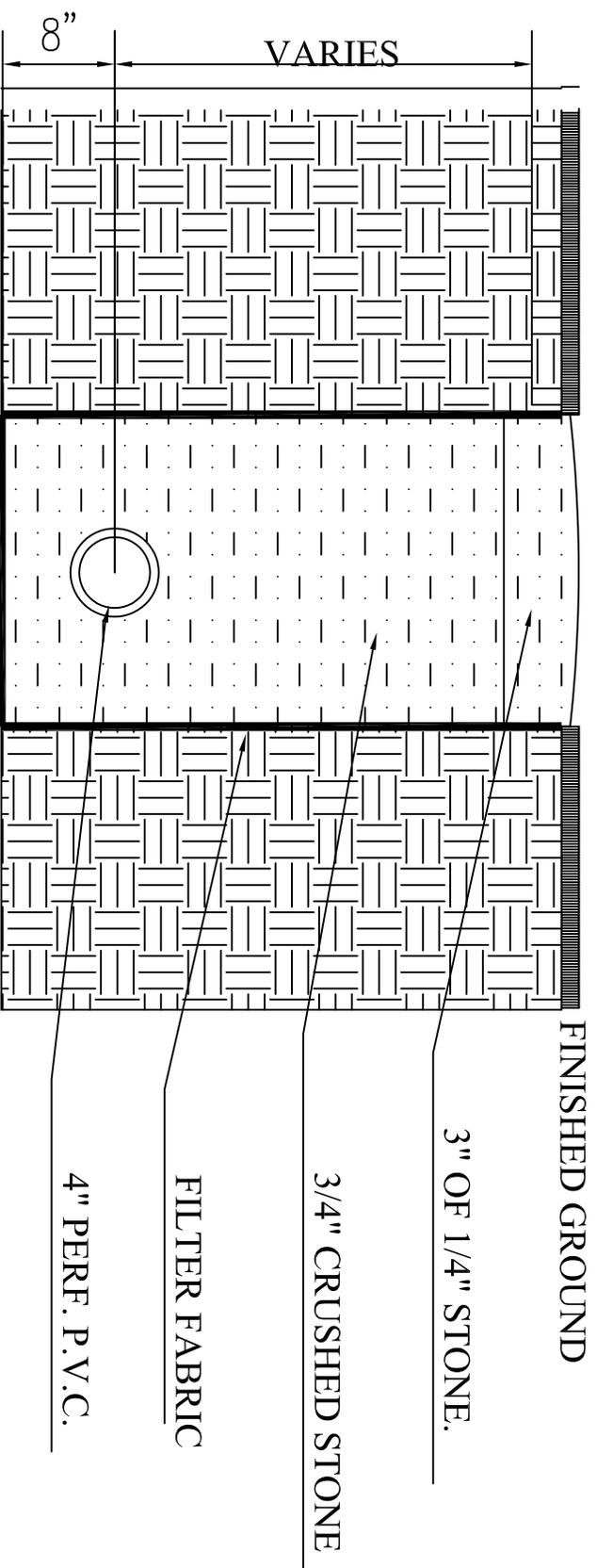


TYPICAL TRENCH DETAIL
 6" SUB DRAIN
 NOT TO SCALE
 STA 4+50± TO 14+00±

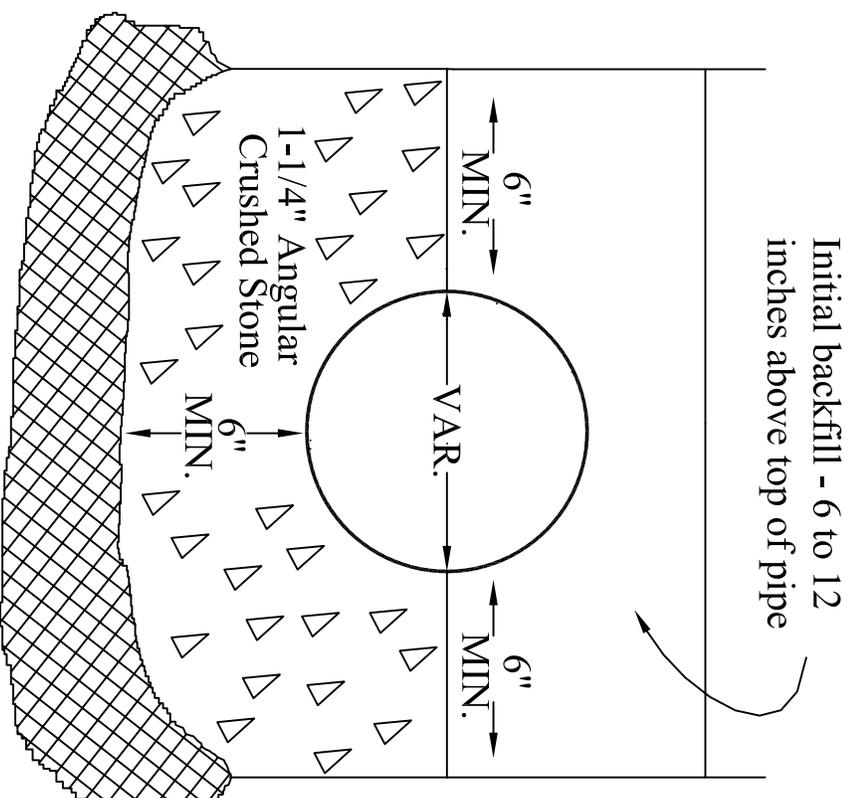
CLASS 'A' CONCRETE ARCH



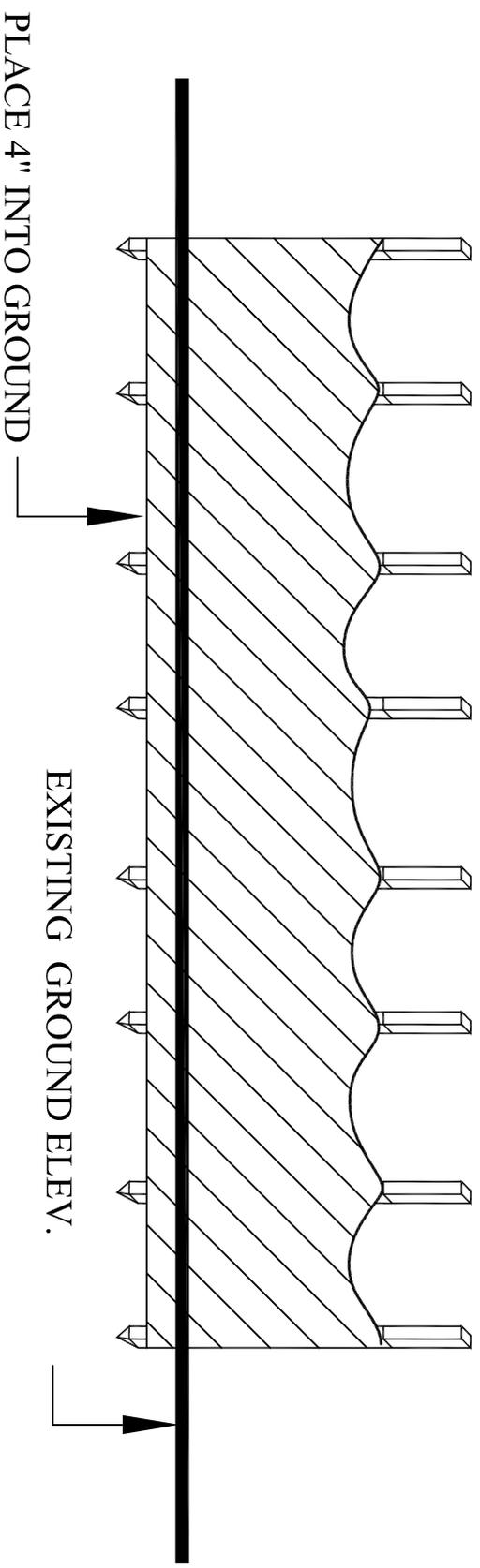
CURTAIN DRAIN



PVC-SDR35 PIPE TRENCH

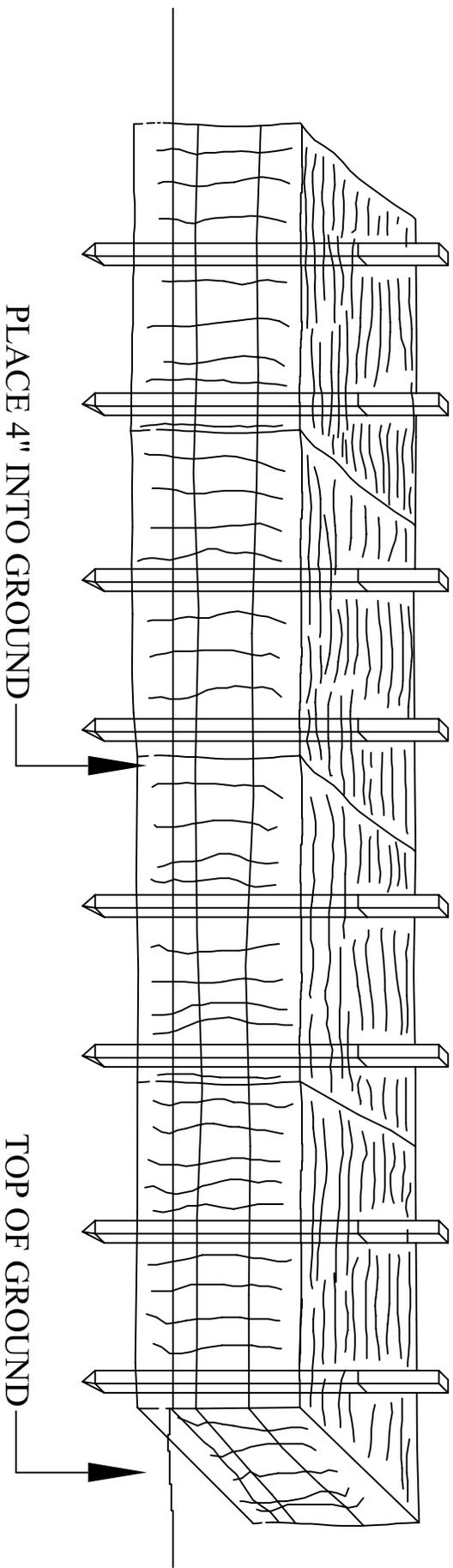


SILT FENCE



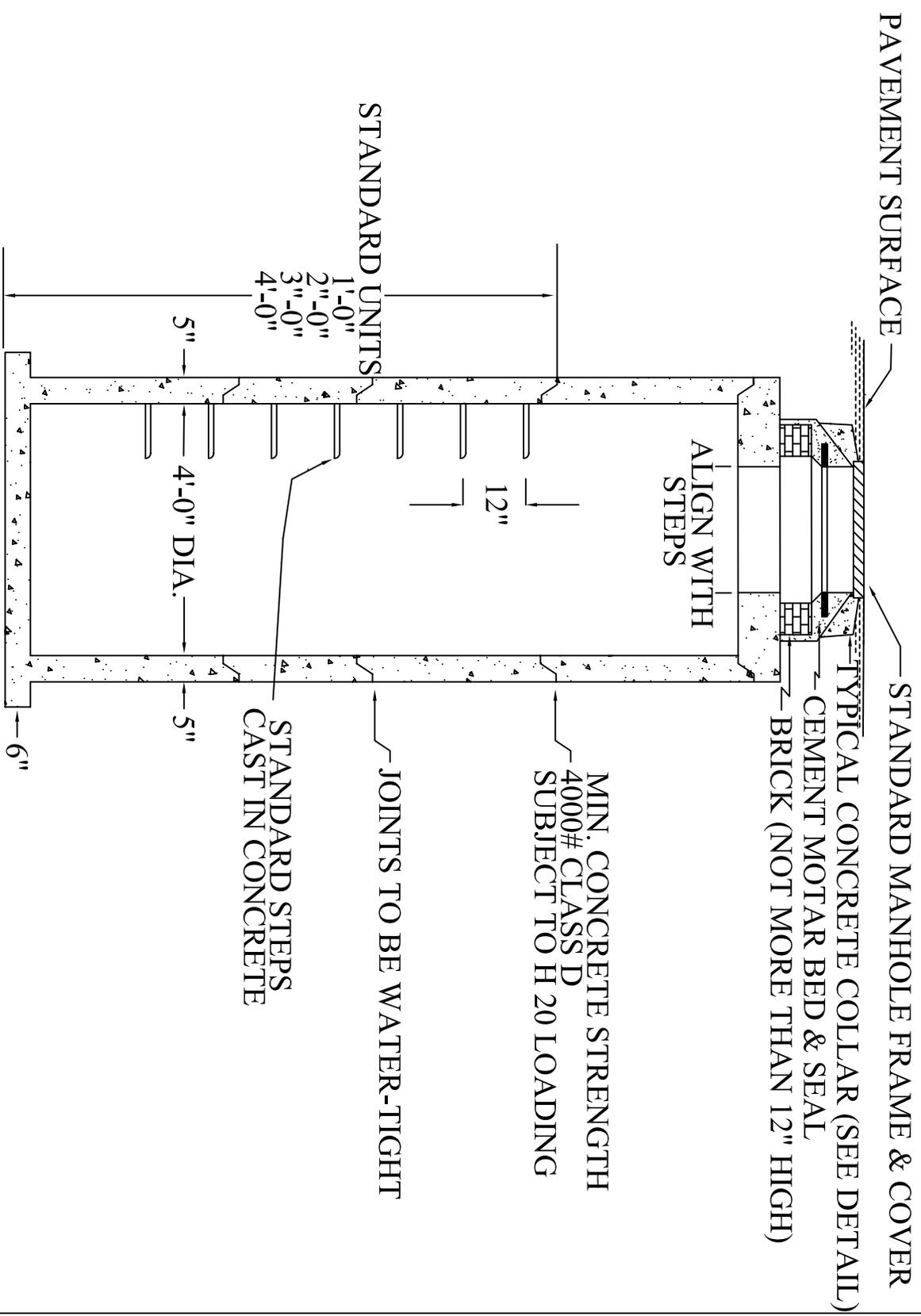
MITIGATION MEASURE

STAKED HAY BALES

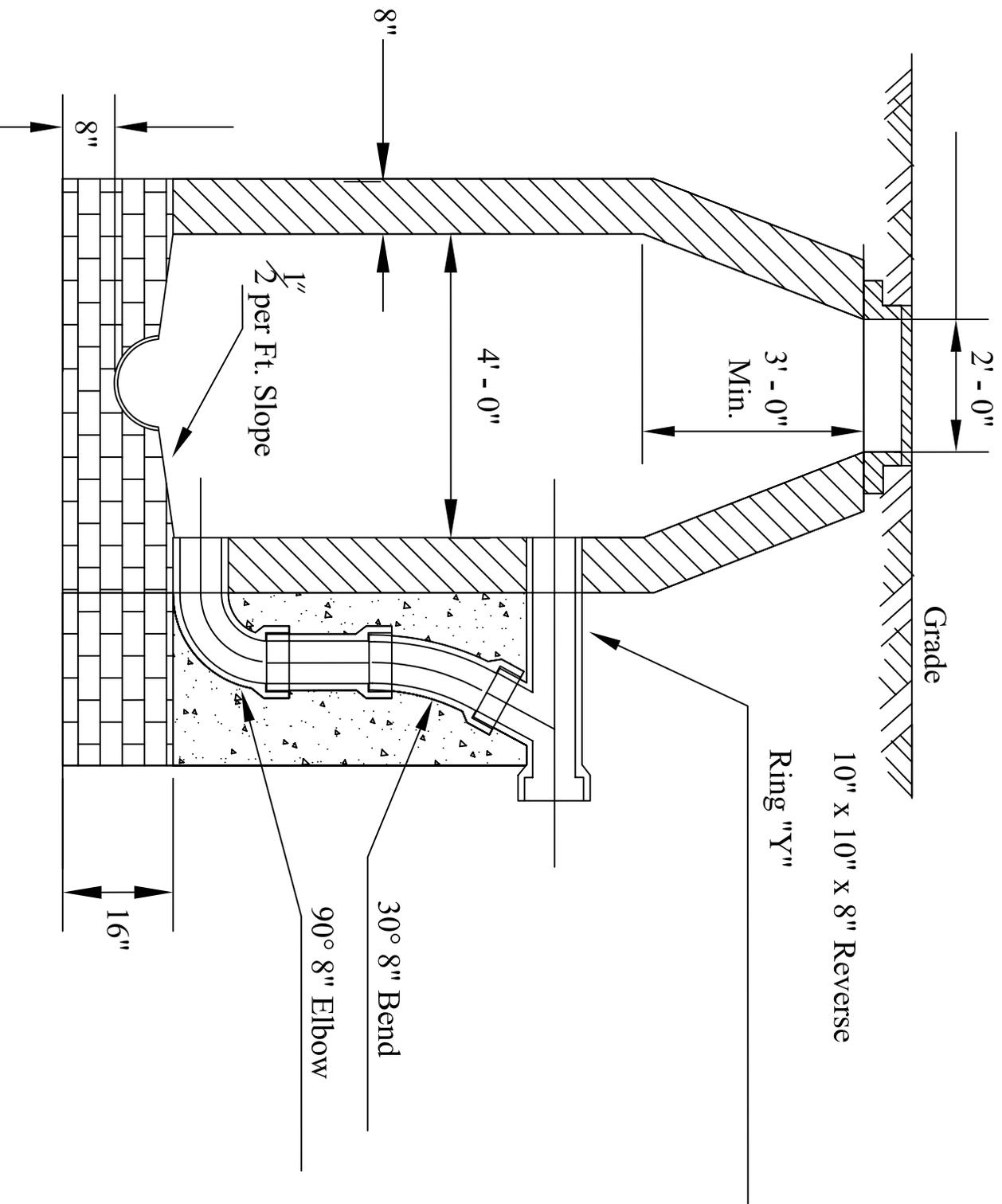


TYPICAL PRECAST CONCRETE MANHOLE

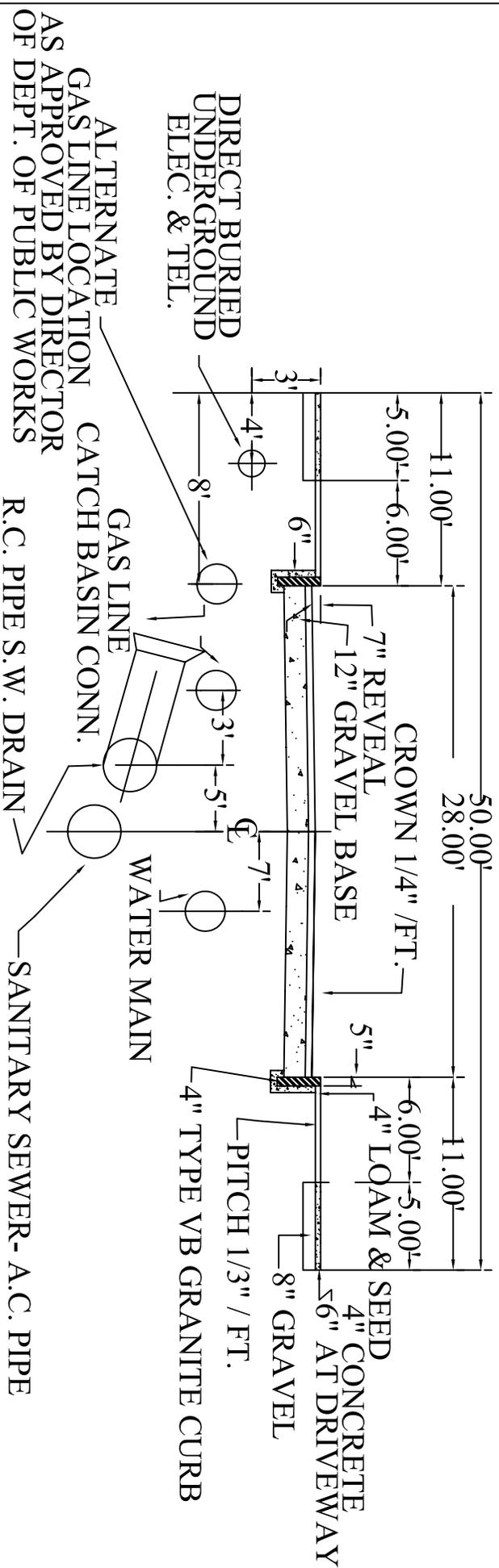
NOT TO SCALE



TYPICAL SECTION OF DROP TYPE MANHOLE



STREET TYPICAL SECTION FOR UTILITIES

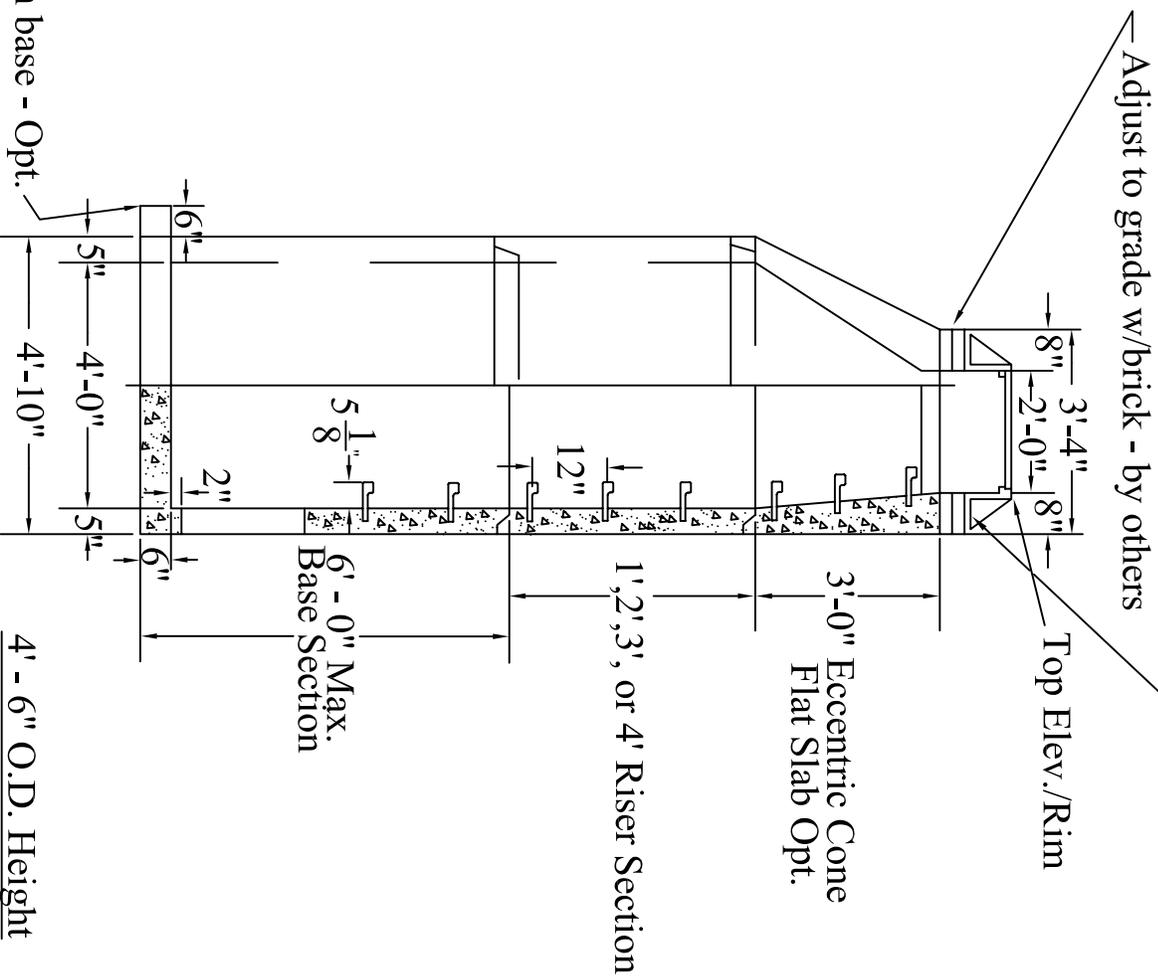


NOTES:

- WHERE PRACTICABLE STORMWATER LINES ARE PLACED 5' OFF THE CENTER LINE ON THE SOUTH OR WEST SIDE OF THE STREET
- WATER MAINS ARE 18' OFF STREET LINE, EITHER NORTH OR EAST SIDE OF THE STREET
- CONNECTIONS FROM CATCH BASINS TO MANHOLES- V.C. PIPE- CLASS 200-64T OR EQUAL
- SURFACE COURSE 3" TYPE I BIT. CON. LAID IN TWO COURSES- 1 1/2" TOP COURSE 1 1/2" BINDER COURSE

PRECAST CB OFFSET

Frame & cover - by others



Non-settling flanged foot on base - Opt.

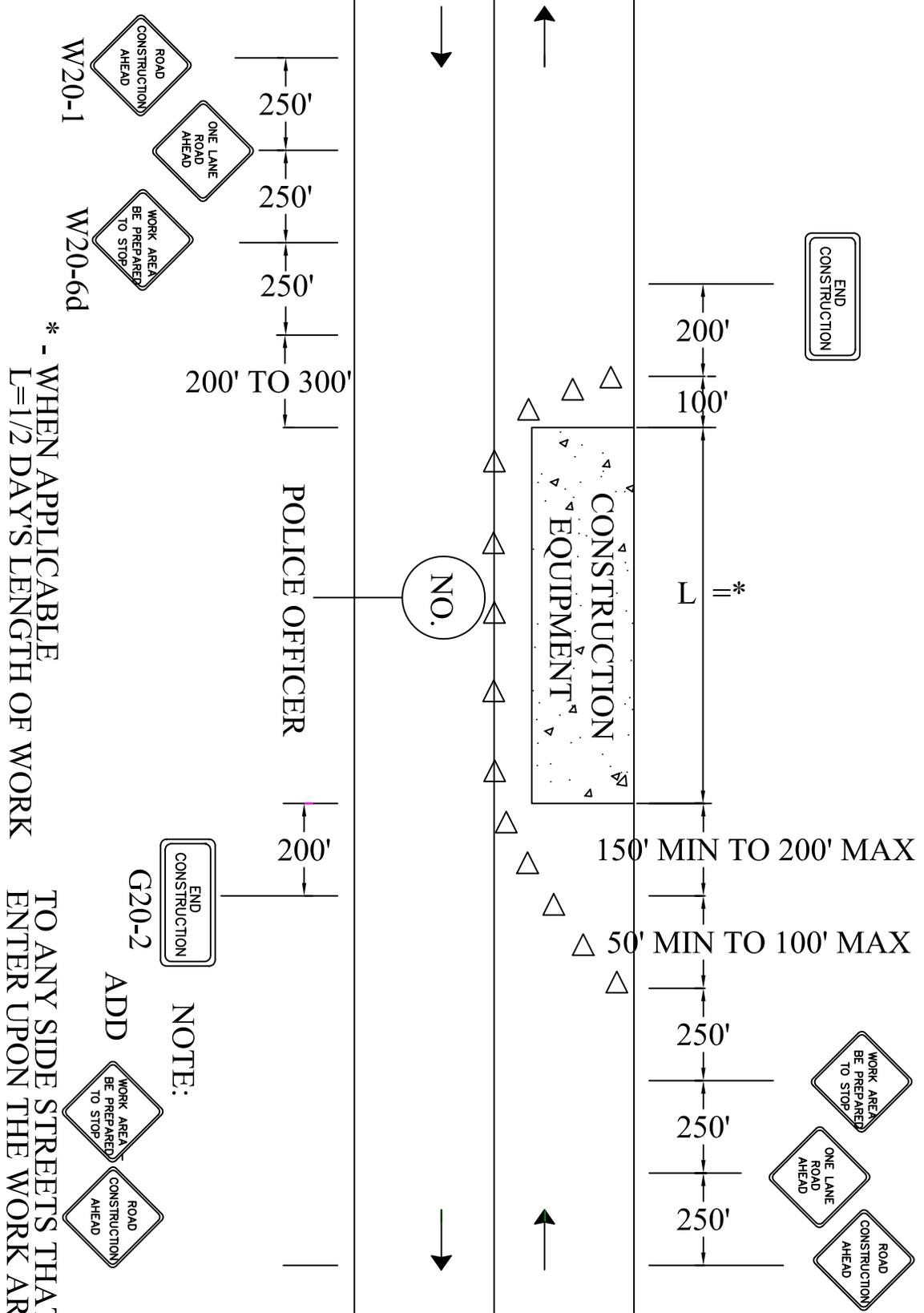
4' - 6" O.D. Height

ELEV. VIEW
(NTS)

ID # 0033

SPRINGFIELD, MA DPW 2-27-2006

TWO LANE TWO-WAY TRAFFIC CONTROL



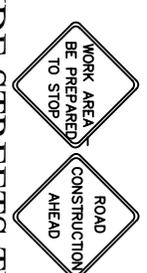
* - WHEN APPLICABLE
 $L=1/2$ DAY'S LENGTH OF WORK
 TO ANY SIDE STREETS THAT ENTER UPON THE WORK AREA.

END CONSTRUCTION

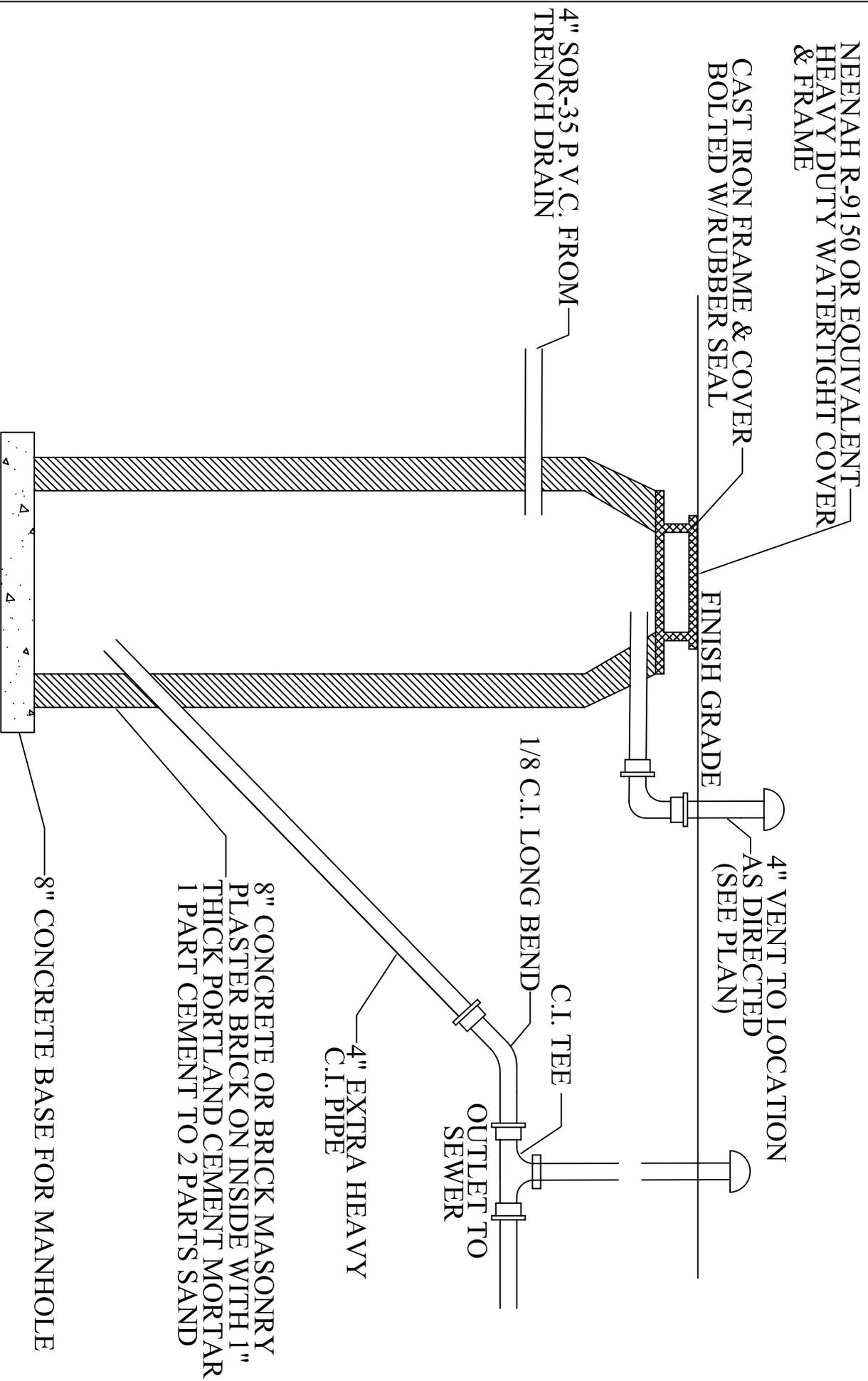
NOTE:

G20-2

ADD



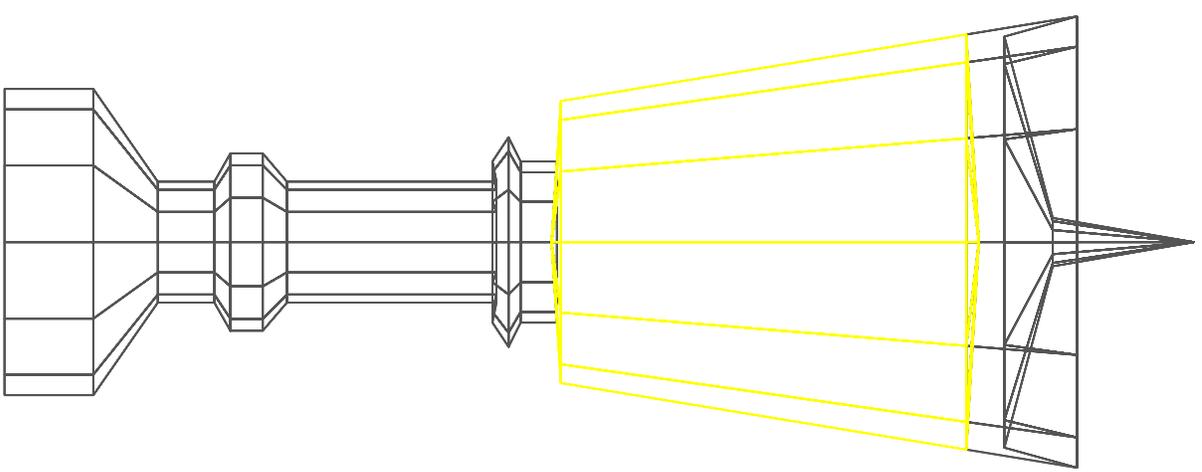
MDC GASOLINE TRAP MANHOLE



ID # 0035

SPRINGFIELD, MA DPW 2-27-2006

LIGHT POST STREETLIGHT HEAD



DECORATIVE LIGHTING IVY STYLE

LUMINAIRE SPECIFICATIONS

STYLE: EDGEWATER REFRACTIVE PANELS-

7" FITTER
HEIGHT: 34"

WIDTH: 20" ACROSS POINT TO POINT

MATERIAL: CAST ALUMINUM

PANELS: CLEAR POLYCARBONATE

FINISH: BLACK

LAMPING: 70 WATT HIGH PRESSURE SODIUM

VOLTAGE: QUADRI- VOLTS BALLST WIRE

FOR 120 VOLTS- HPF

REFRACTOR: TYPES/PRISMATIC ACRYLIC

HARDWARE: STAINLESS STEEL

WEIGHT: 50 POUNDS APPROX.

LAMP POST SPECIFICATIONS

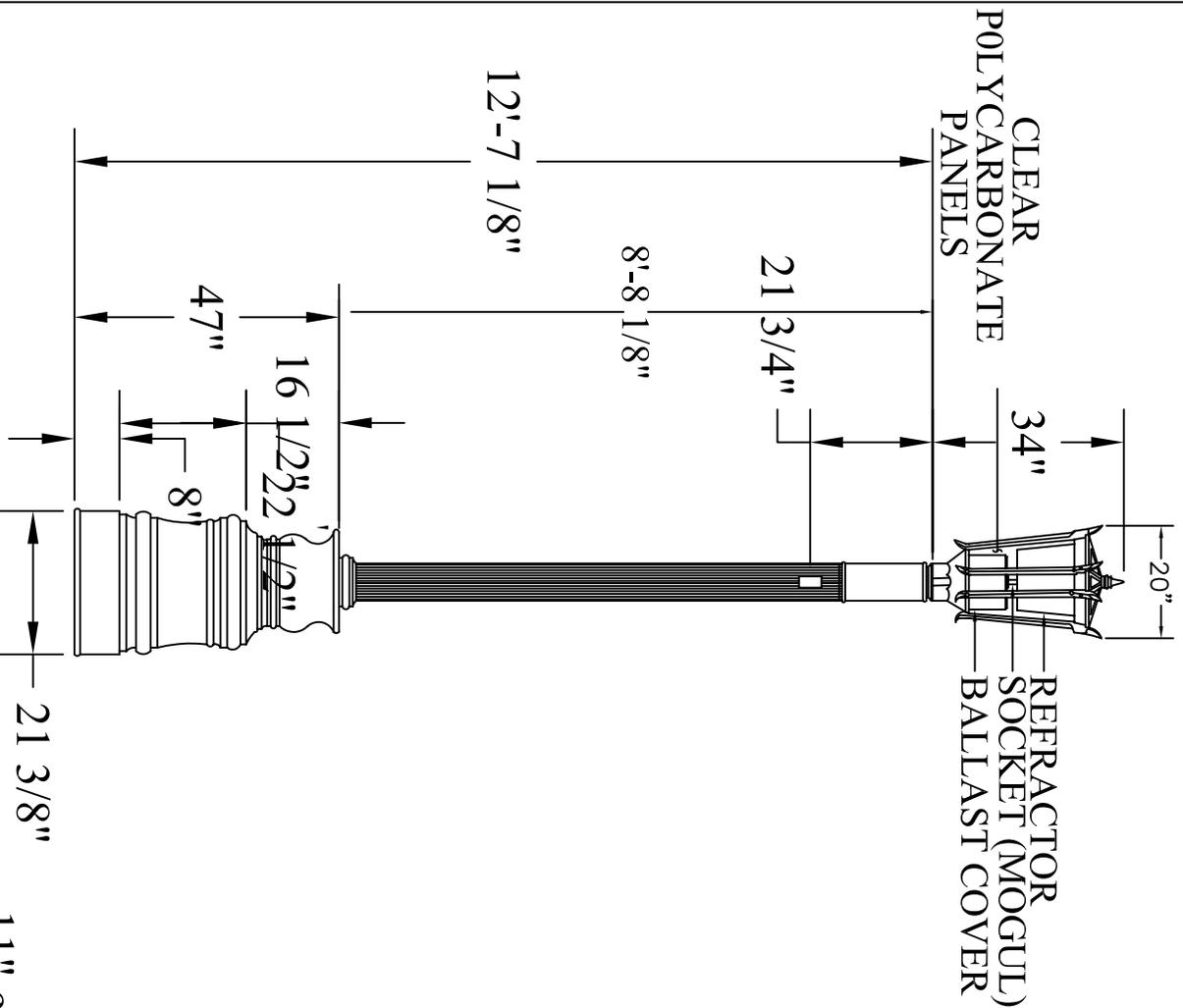
STYLE: IVY

HEIGHT: 12'-7 1/8"

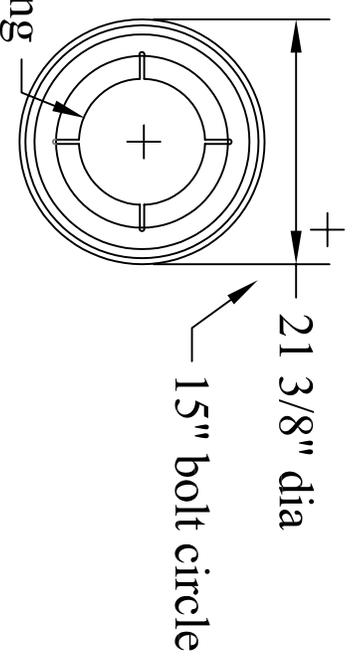
LT CENTER: 14'-0 1/8"

BASE: 21 3/8" DIAMETER

FINISH: PRIME PAINT BLACK



11" clear opening



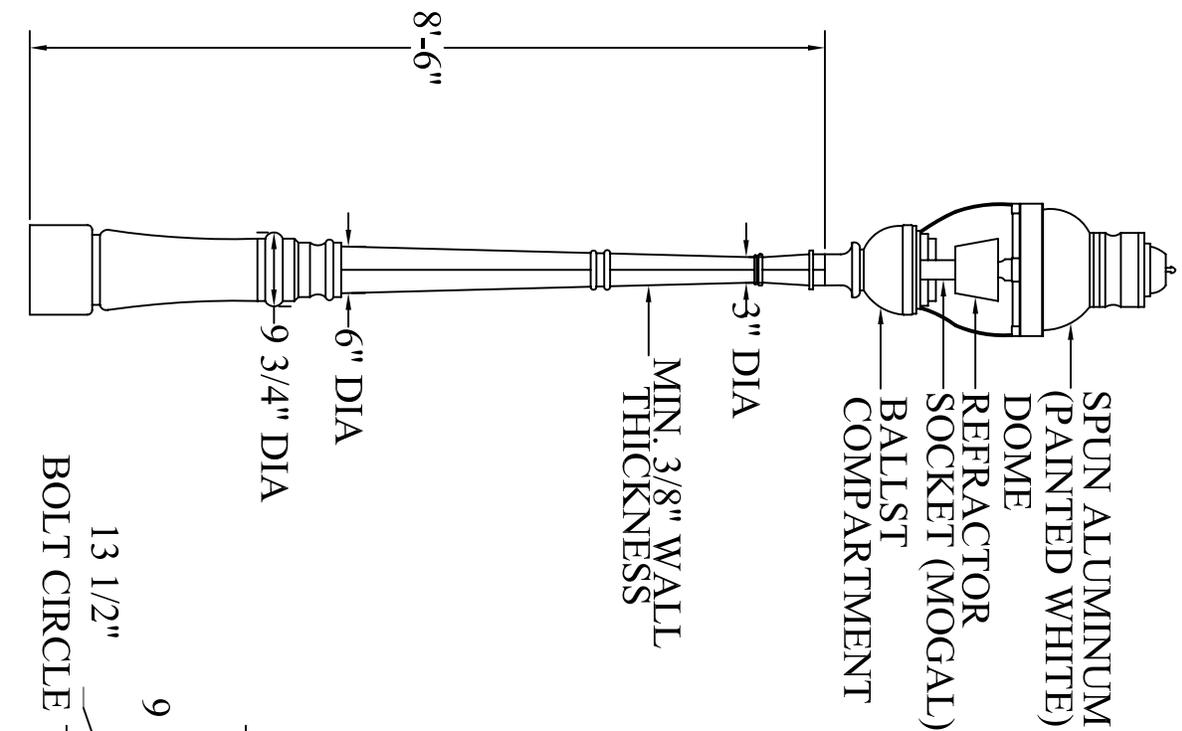
ID # 0037

SPRINGFIELD, MA DPW 2-27-2006

DECORATIVE LIGHTING BOROUGH STYLE

LUMINAIRE SPECIFICATIONS

STYLE: READING
HEIGHT: 43 7/8"
WIDTH: 17 1/8"
MATERIAL: CAST ALUMINUM
GLOBE: CLEAR POLYCARBONATE
FINISH: FINISH PAINT (BLACK)
BALLAST: INTEGRAL
REFRACTOR: PRISMATIC GLASS TYPE 5
LAMPING: 70 WATT HIGH PRESSURE
SODIUM
VOLTAGE: QUADRA-VOLT BALLAST
WIRED FOR 120 VOLTS
HARDWARE: STAINLESS STEEL
WEIGHT: 40 POUNDS



LAMP POST SPECIFICATIONS

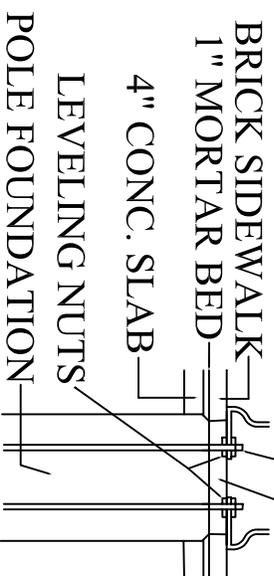
STYLE: BOROUGH
HEIGHT: 8'-6"
LIGHT CENTER: 10'-0 3/4"
BASE: 11 1/2" SQUARE
FINISH: PRIME PAINT (BLACK)
WEIGHT 40 POUNDS

9 1/2" CLEAR OPENING

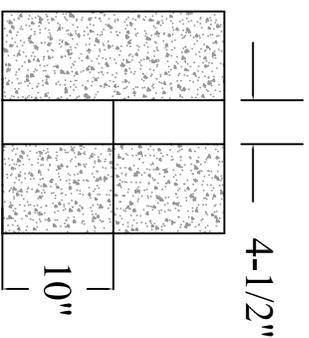
PRECAST LIGHT POLE FOUNDATION

ANCHOR BOLTS TO BE SUPPLIED BY LIGHT POLE MANUFACTURER WITH NUTS & WASHERS

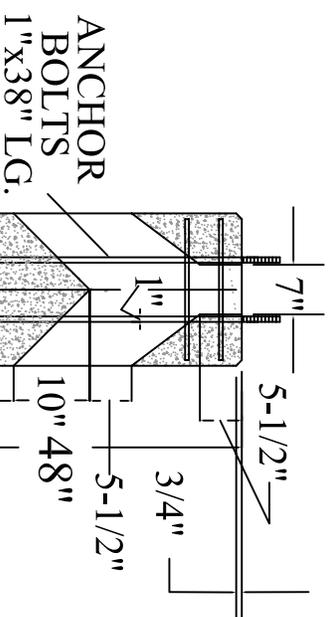
FILL WITH NONSHRINKING GROUT



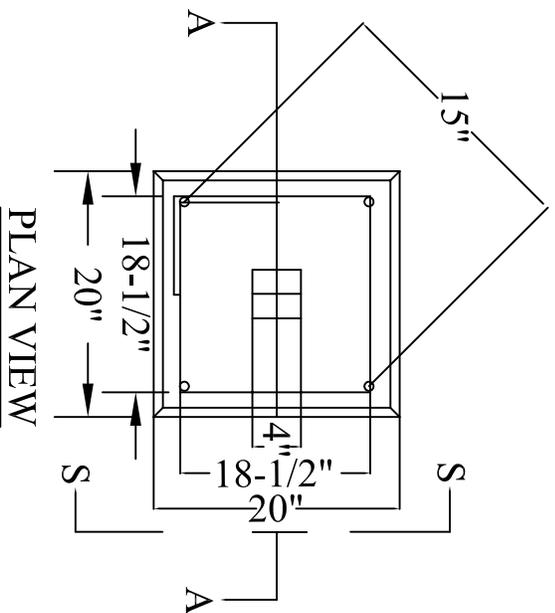
MOUNTING DETAIL



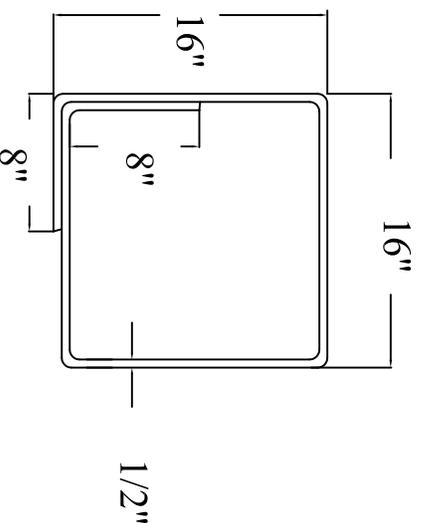
SECTION B-B



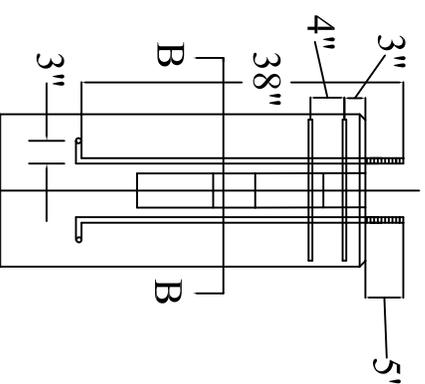
SECTION A-A



PLAN VIEW

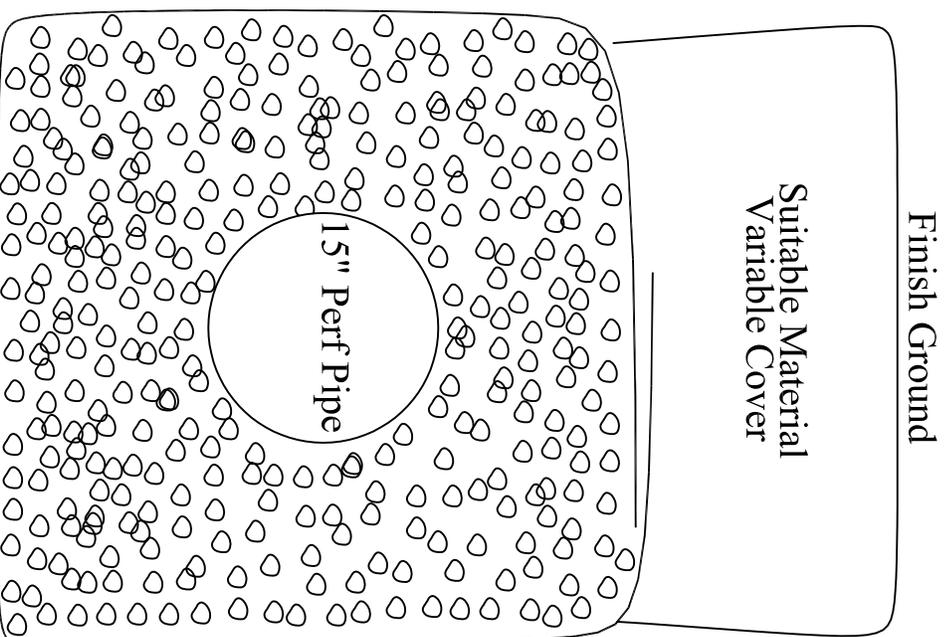


REINFORCING ROD
1/2" DIA. x 6'-8" LONG
BENT AS SHOWN



ELEVATION S-S

TYPICAL LEACHING TRENCH

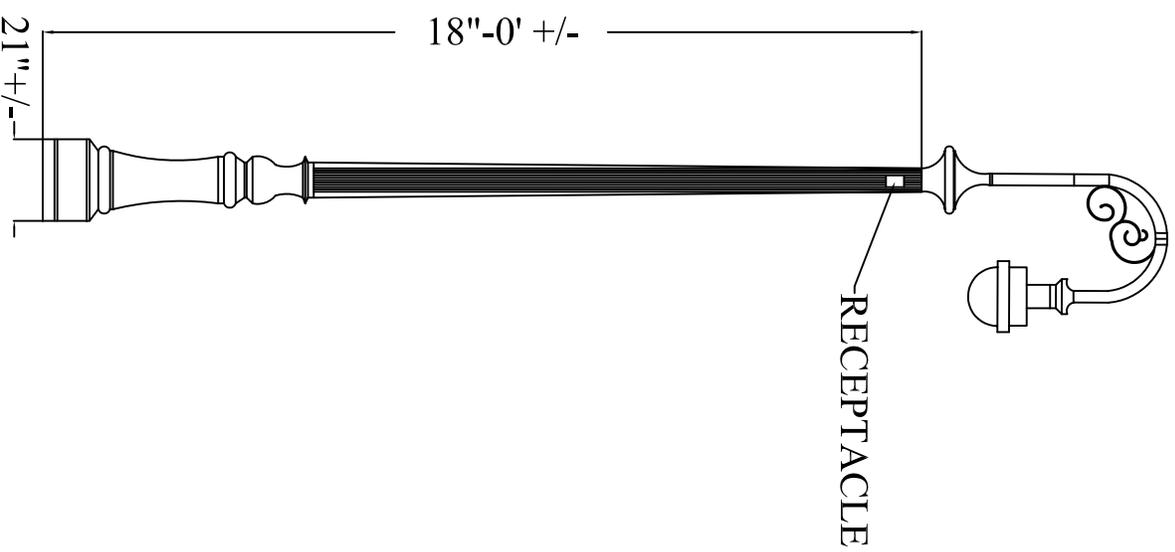


Filter Fabric

Surround Pipe with
12" of Stone and
Wrap with Filter Fabric

3/4"-1 1/2"
Washed Stone

DECORATIVE LIGHTING BISHOP'S CROOK

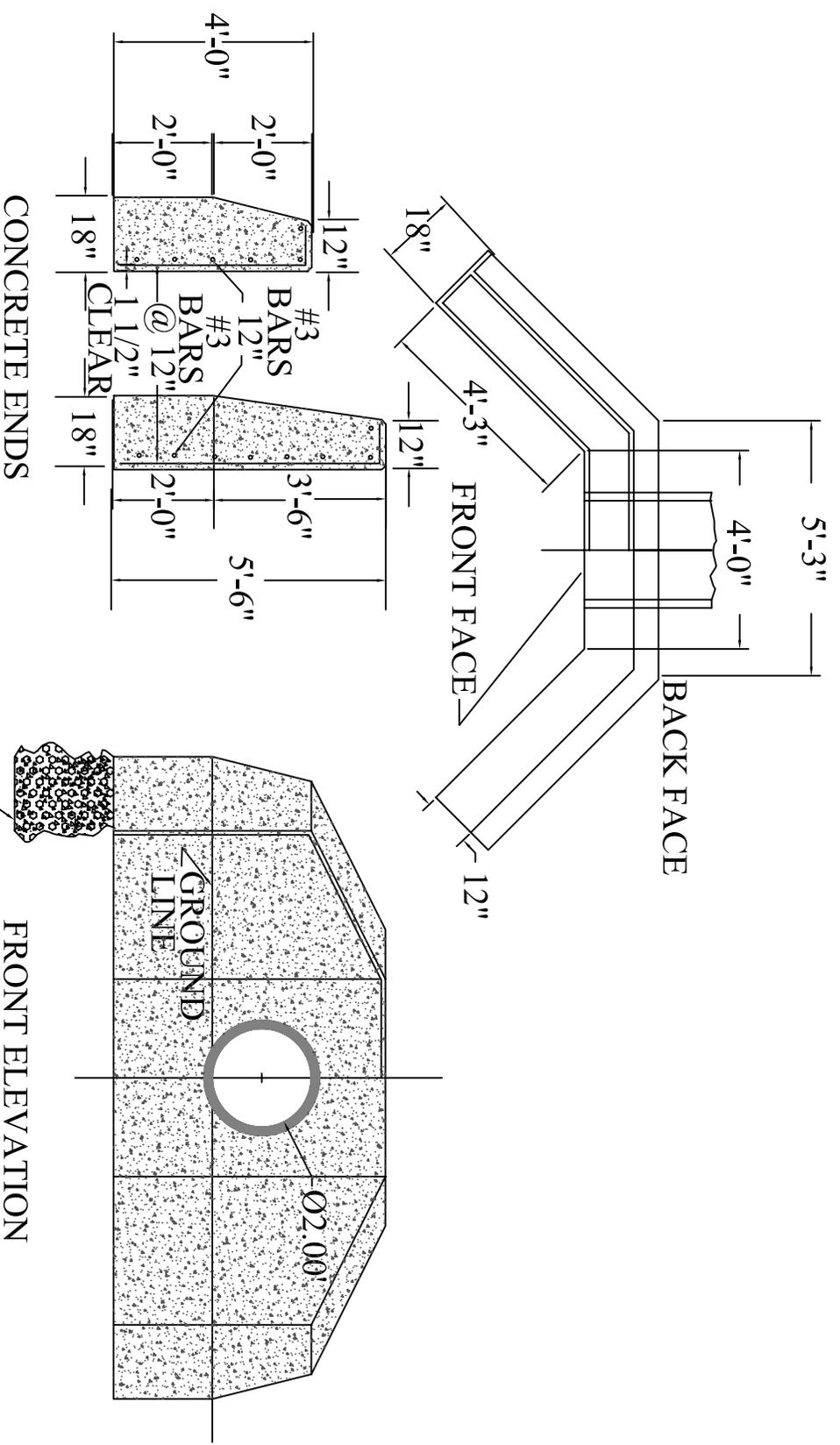


PROPOSED STREET LIGHTING
AS PER SPECIAL PROVISIONS

ID # 0041

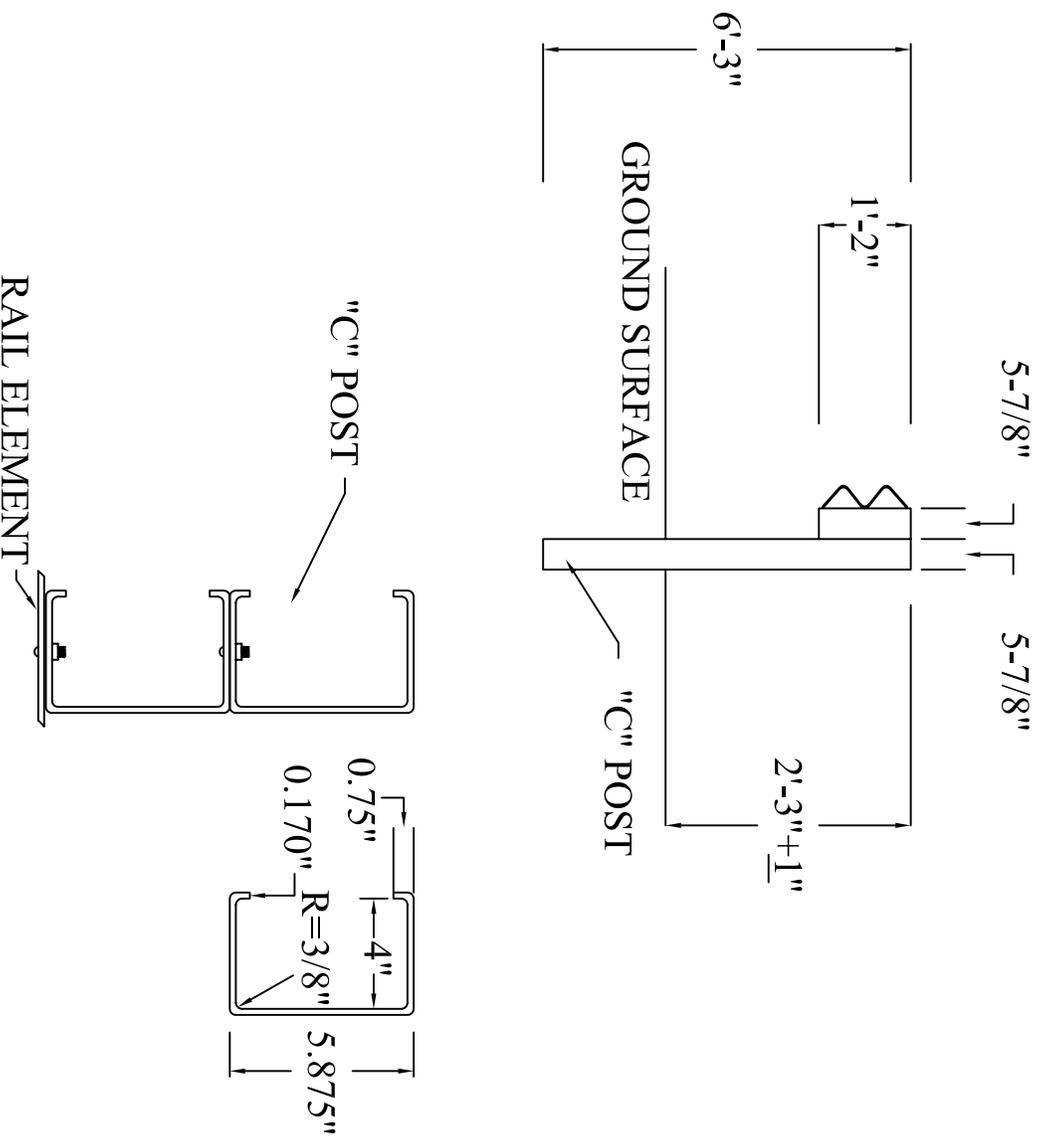
SPRINGFIELD, MA DPW 2-27-2006

HEADWALL

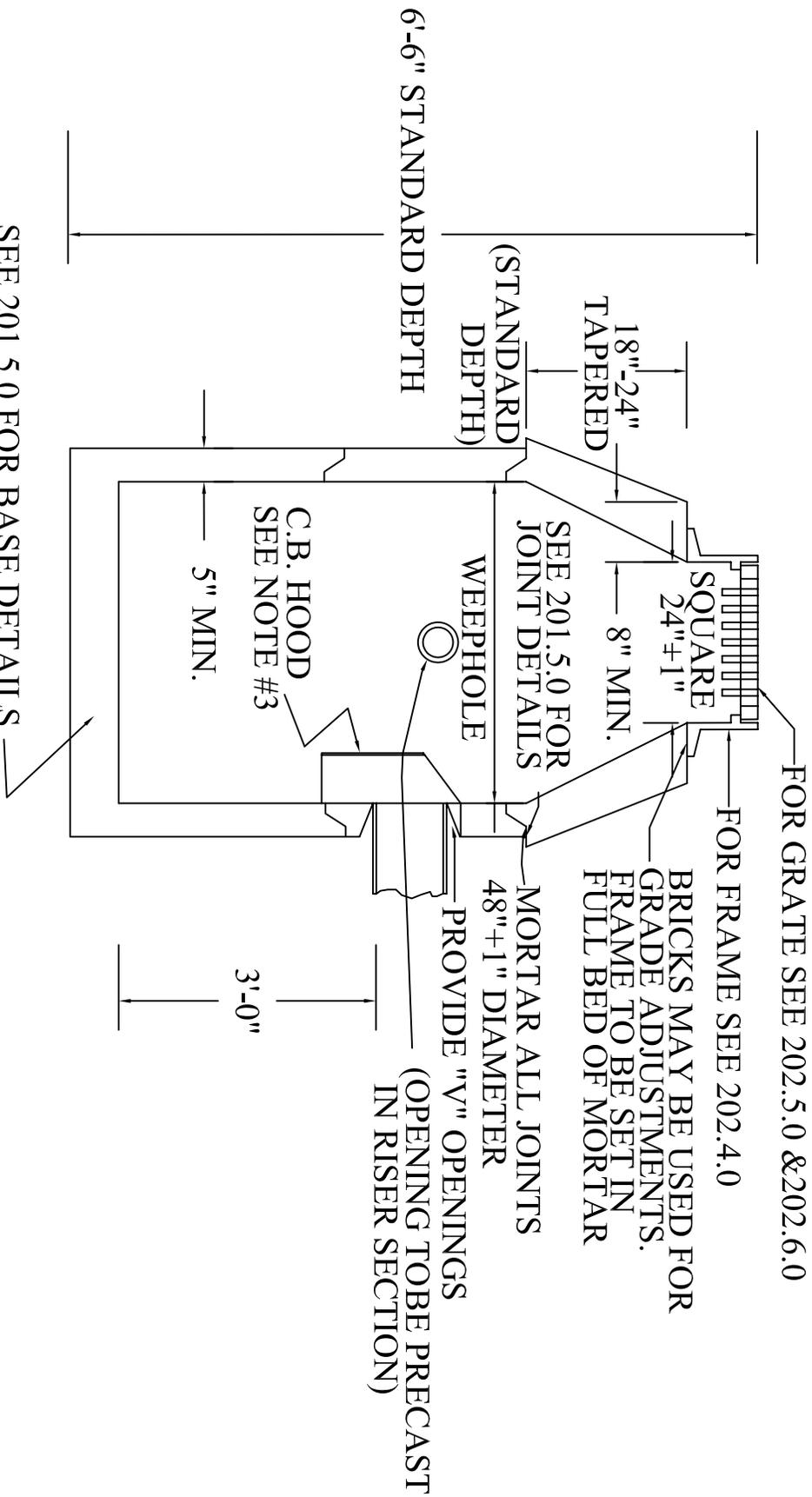


NOTE: 2' OF 3" STONE TO BE PLACED UNDER HEADWALL

STEEL BEAM GUARD RAIL



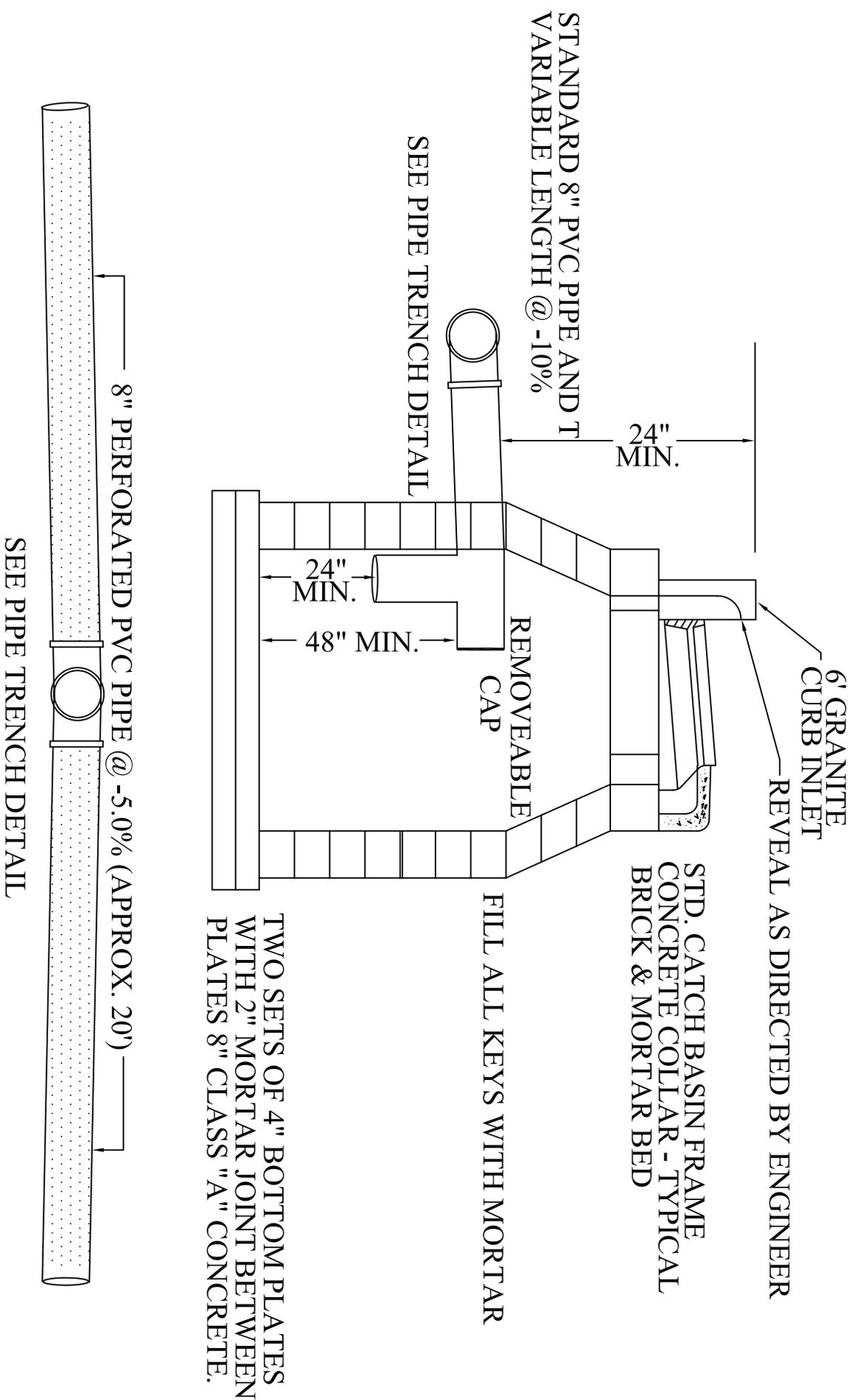
PRECAST CONCRETE CATCH BASIN



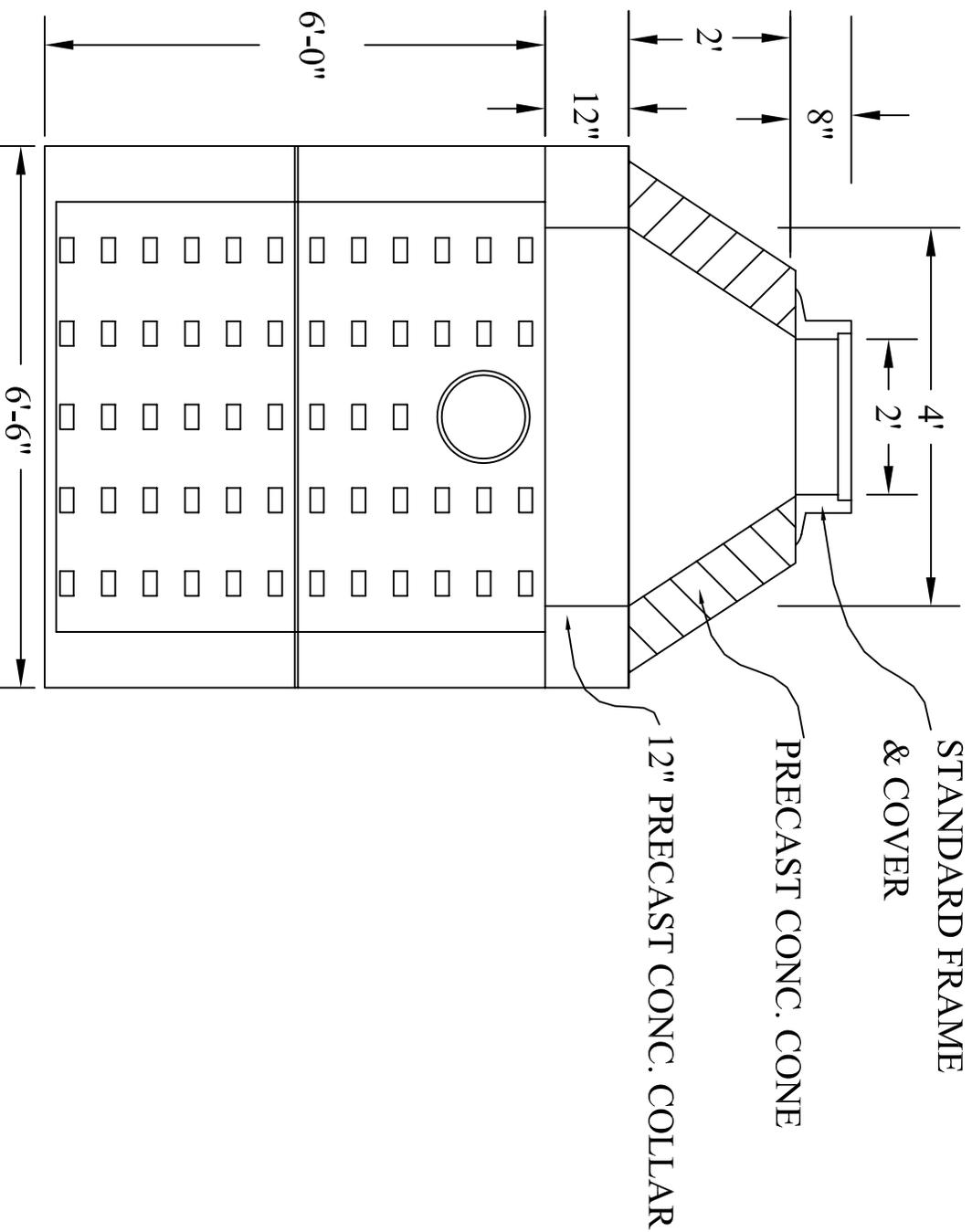
NOTES:

1. DETAILS NOT INDICATED ABOVE ARE TO BE SIMILAR TO THOSE SHOWN ON 202.1.0
2. FOR DESCRIPTIONS, MATERIALS AND CONSTRUCTION METHOD, SEE SPECIFICATIONS
3. MASS STANDARD CATCH BASIN HOOD SHALL BE INSTALLED ON OUTLET PIPE (SEE 202.7.0)

CATCH BASIN WITH PERFORATED PIPE OUTLET



TYPICAL LEACHING GALLEY



NOTES:

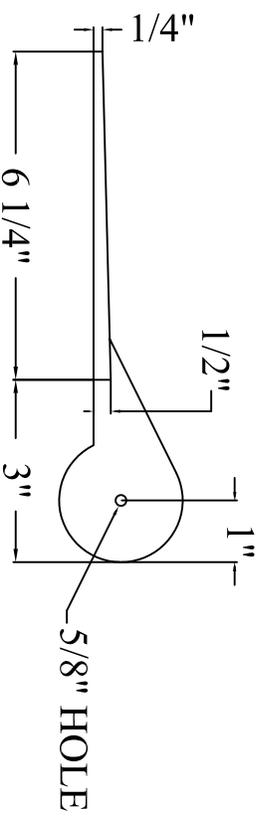
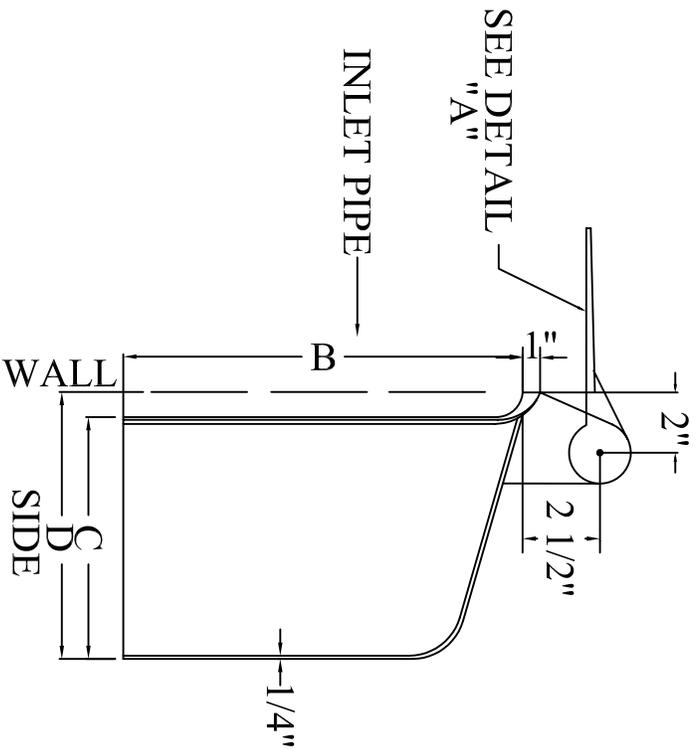
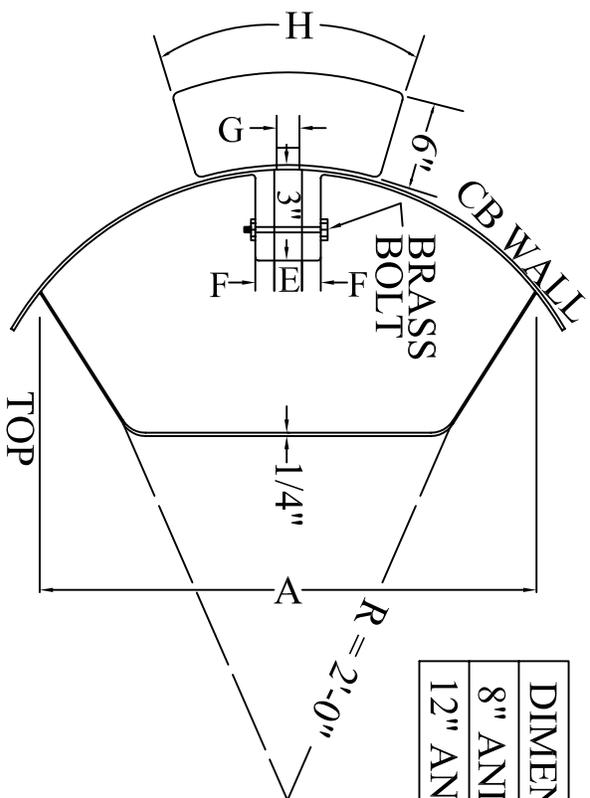
- USE 1.00' OF WASHED STONE SURROUNDING & UNDER ALL GALLEYS.
- USE FILTER FABRIC AROUND STONE.
- MIN. CONCRETE STRENGTH 4000# CLASS D ALL H-20 LOADING
- SOLID CONCRETE BOTTOM FOR CLEANING

ID # 0047

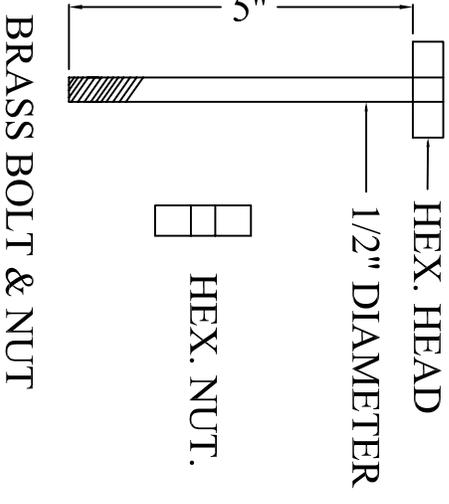
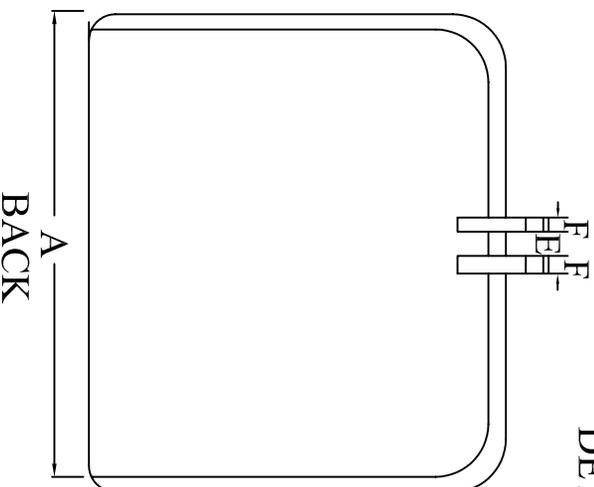
SPRINGFIELD, MA DPW 2-27-2006

CATCH BASIN HOOD

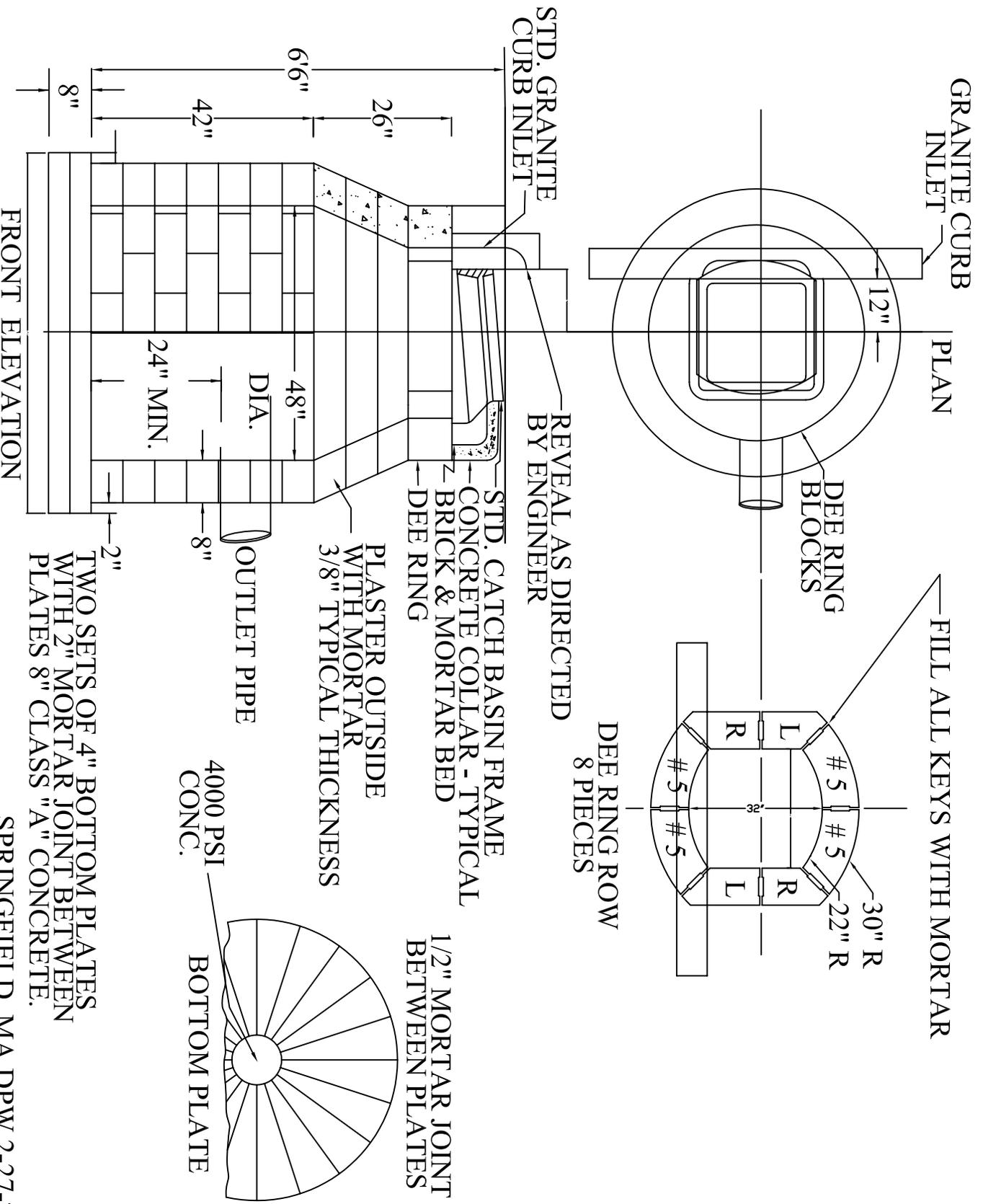
DIMENSIONS	A	B	C	D	E	F	G	H
8" AND 10" PIPE	15"	15"	8"	9"	2"	7/8"	1-7/8"	14"
12" AND 15" PIPE	18"	18"	10"	2"	1"	14"	1-7/8"	11-1/4"



DETAIL "A" HINGE



CATCH BASIN WITH CASTING



ID # 0049

SPRINGFIELD, MA DPW 2-27-2006

SPRINGFIELD SEAL



ACCEPTANCE PLAN KEY

KEY

	FIRE HYDRANT		GUY POLE
	CATCH BASIN		UTILITY POLE
	MAIL BOX		STUMP
	DRAINAGE MANHOLE		TREE
	SANITARY MANHOLE		IRON PIN
	EXISTING SB		IRON BAR
	PROP. GSB		

ACCEPTANCE PLAN KEY 2

KEY

⌘ FIRE HYDRANT
□ CATCH BASIN
M× MAIL BOX
⊙ DRAINAGE MANHOLE
⊙ SANITARY MANHOLE
■ EXISTING SB
○IP IRON PIN

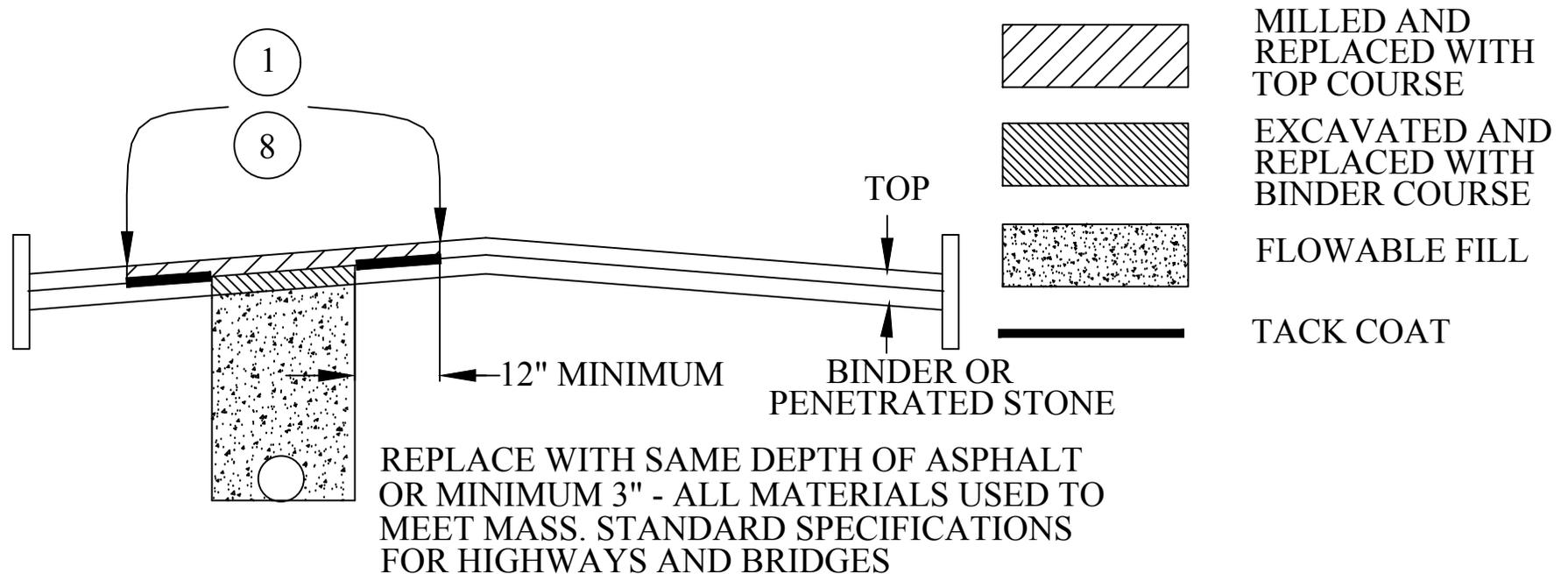
⊙ GUY POLE
⊙ UTILITY POLE
○ TREE
W WATERGATE
⊙ GASGATE
□ PROP. GSB

ACCEPTANCE PLAN KEY 3

KEY

	FIRE HYDRANT		GUY POLE
	CATCH BASIN		UTILITY POLE
	MAIL BOX		STUMP
	DRAINAGE MANHOLE		TREE
	SANITARY MANHOLE		WATERGATE
	EXISTING SB		GASGATE
	IRON PIN		IRON BAR
	WETLAND FLAGGING		PROP. GSB

TRENCH REPAIR SPECIFICATION RESIDENTIAL STREET

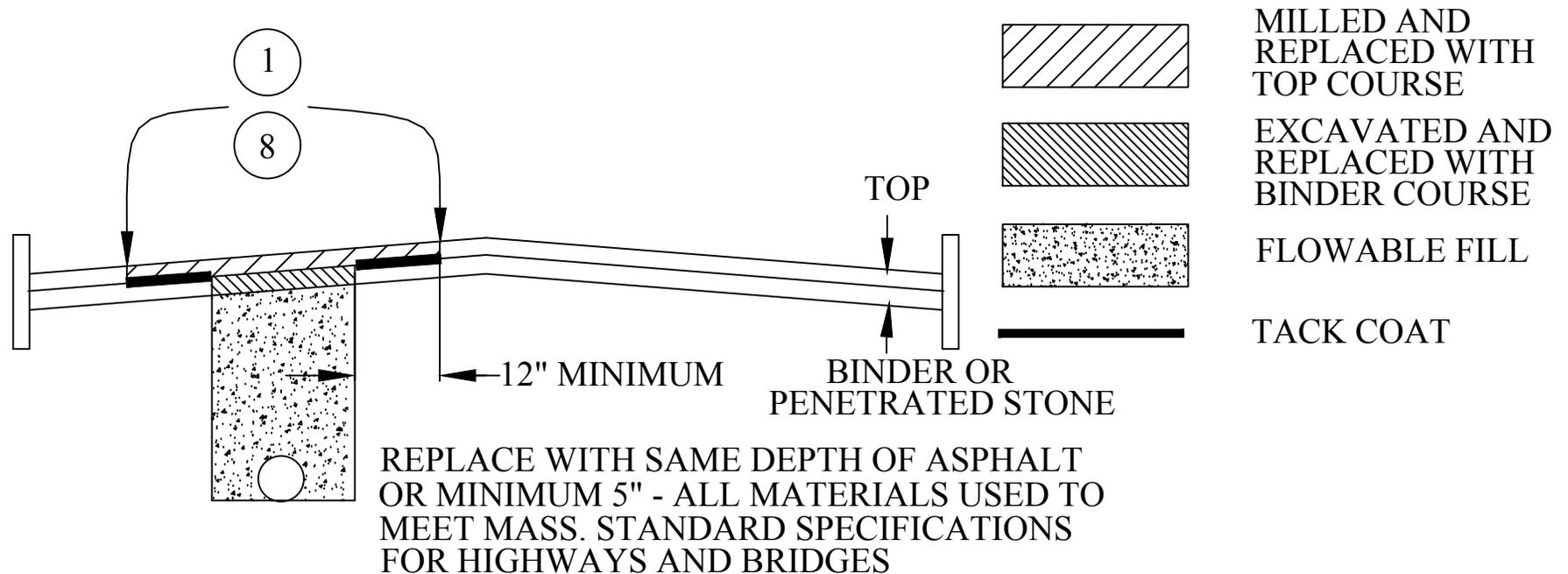


NOTES:

1. SAW CUT OUTER EDGE OF UTILITY PATCH
2. MILL TO REMOVE TOP COURSE
3. LEAVE 12" MIN. LIP BETWEEN EDGE OF TOP AND EDGE OF BINDER COURSE
4. AFTER TRENCH WORK COMPLETED, FILL AROUND PIPE TO BOTTOM
5. REPLACE ONE LAYER OF BINDER
6. TACK AREA OF MILLING
7. REPLACE TOP COURSE
8. SEAL EDGES OF UTILITY PATCH WITH HOT POURED RUBBERIZED ASPHALT SEALANT
9. ALL ROAD CUTS 2' OR LESS FROM THE CURB MUST BE MILLED AND REPAIRED FROM THE OUTER MOST EDGE OF CUT TO THE CURB.

2-B SPECIFICATION FOR PATCHING BIT. CONC. ROADWAYS (CON'T.)

TRENCH REPAIR SPECIFICATION ARTERIAL STREET

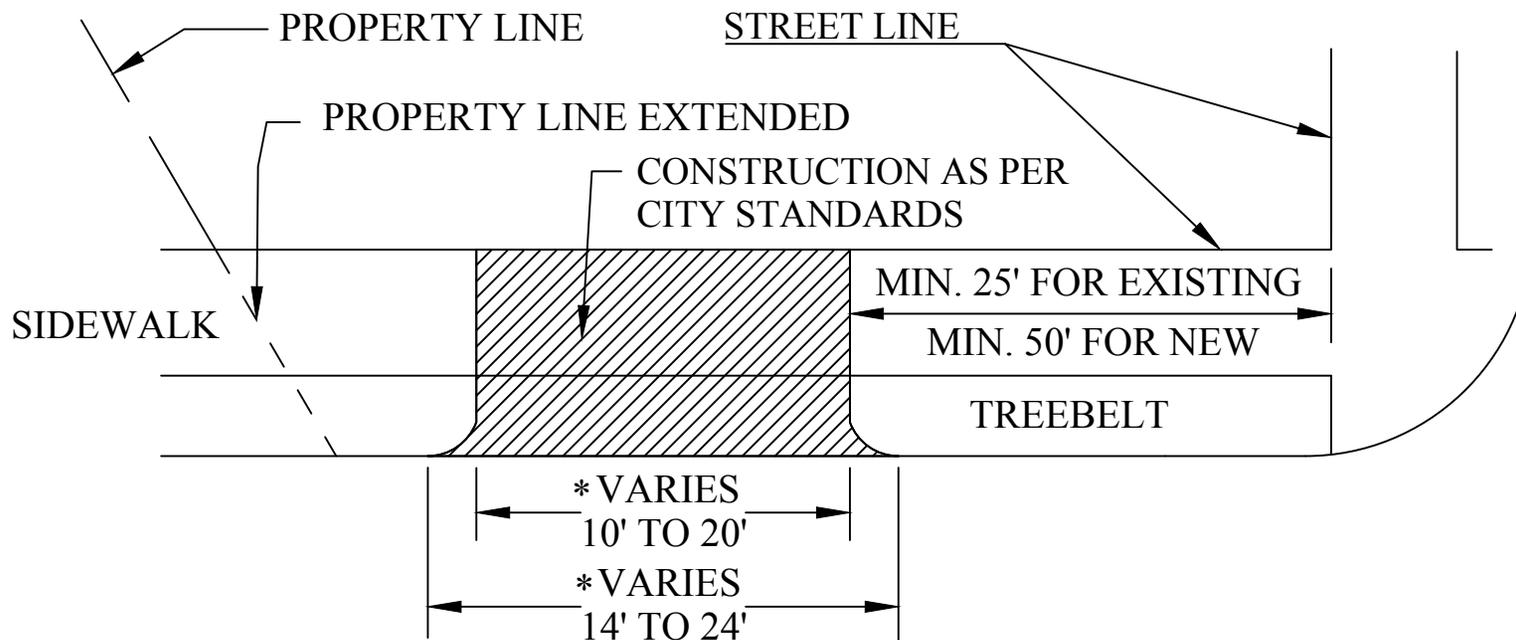


NOTES:

1. SAW CUT OUTER EDGE OF UTILITY PATCH
2. MILL TO REMOVE TOP COURSE
3. LEAVE 12" MIN. LIP BETWEEN EDGE OF TOP AND EDGE OF BINDER COURSE
4. AFTER TRENCH WORK COMPLETED, FILL AROUND PIPE TO BOTTOM WITH FLOWABLE FILL
5. REPLACE LAYERS OF BINDER AND DEEP BASE
6. TACK AREA OF MILLING
7. REPLACE TOP COURSE
8. SEAL EDGES OF UTILITY PATCH WITH HOT POURED RUBBERIZED ASPHALT SEALANT
9. ALL ROAD CUTS 2' OR LESS FROM THE CURB MUST BE MILLED AND REPAIRED FROM THE OUTER MOST EDGE OF CUT TO THE CURB.

2-B SPECIFICATION FOR PATCHING BIT. CONC. ROADWAYS (CON'T.)

TYPICAL RESIDENTIAL DRIVEWAY



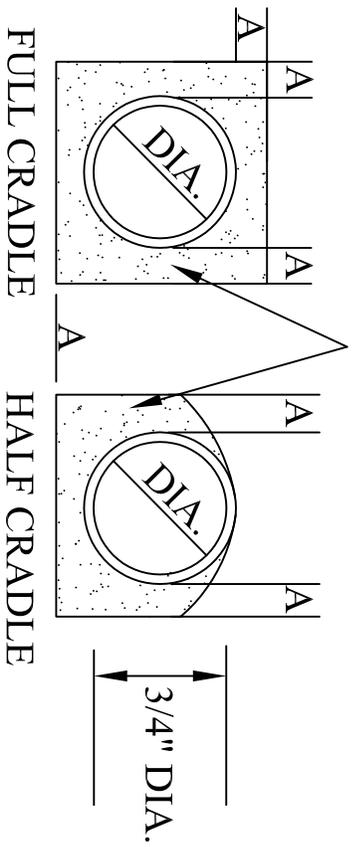
* WIDTH OF DRIVEWAY VARIES AS GEOMETRIC CONDITIONS ALLOW,
DESIRABLE WIDTHS ARE 12' FOR A SINGLE AND 20' FOR DOUBLE DRIVEWAY

NOTES:

- STANDARD 2'-RADIUS CURB RETURNS SHALL BE UTILIZED
- ENTIRE DRIVEWAY INCLUDING 2'-RADIUS CURB RETURNS, MUST BE WITHIN THE PROP. LINES EXTENDED OF THE PROP. WHICH THE DRIVEWAY SERVES
- DRIVEWAY APRON MUST MEET SIDEWALK GRADE
- PORTION OF DRIVEWAY WITHIN THE PUBLIC WAY MUST BE CONSTRUCTED ACCORDING TO CITY SPECIFICATIONS
- IF ANY TREES, POLES, SIGNS OR UTILITIES ARE LOCATED WITHIN THE LIMITS OF THE PROPOSED DRIVEWAY, THE APPROPRIATE DEPARTMENT MUST BE NOTIFIED FOR REMOVAL OR RELOCATION OF SUCH
- CONDITIONS MAY TEND TO ALTER PROPOSED WIDTH AND LOCATION OF DRIVEWAY AND ANY VARIATIONS FROM THE STANDARDS SHOWN MUST BE APPROVED BY THE TRAFFIC ENGINEER

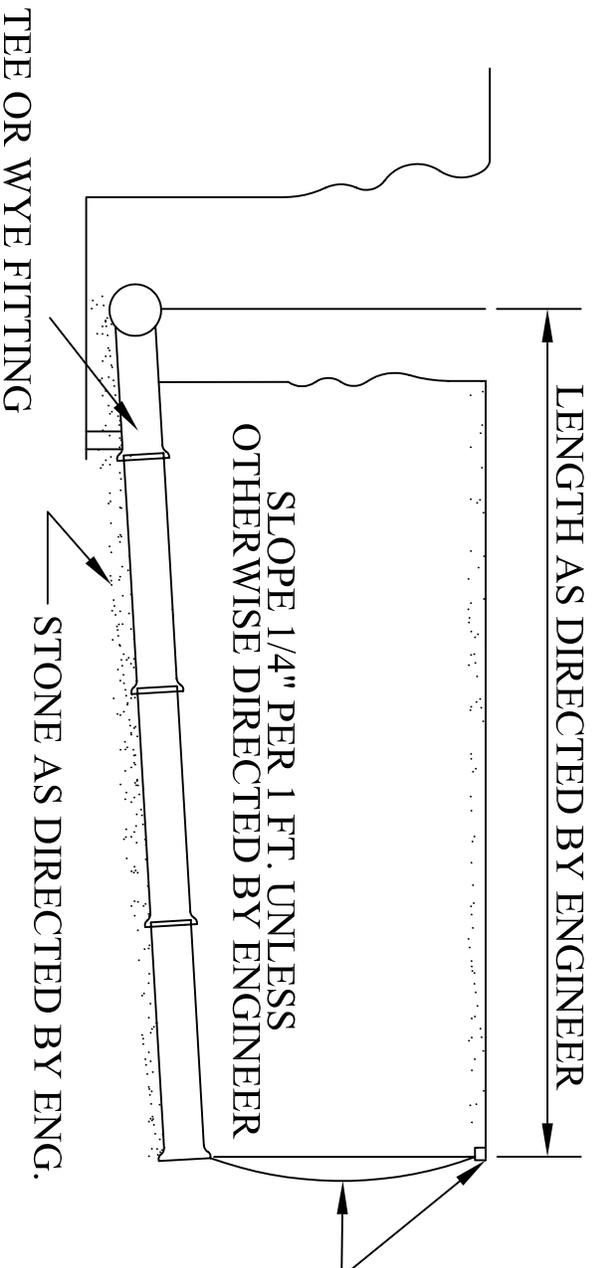
SEWER CONNECTION

2000 LB. CONCRETE

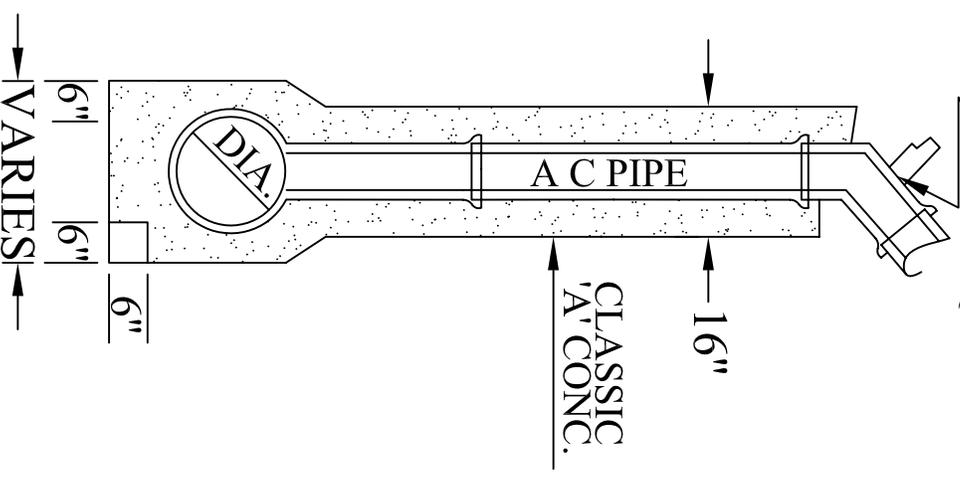


DIMENSIONS	
DIA.	A
6"	5"
8"	5 1/2"
10"	5 1/2"
12"	6"

CRADLE DETAILS



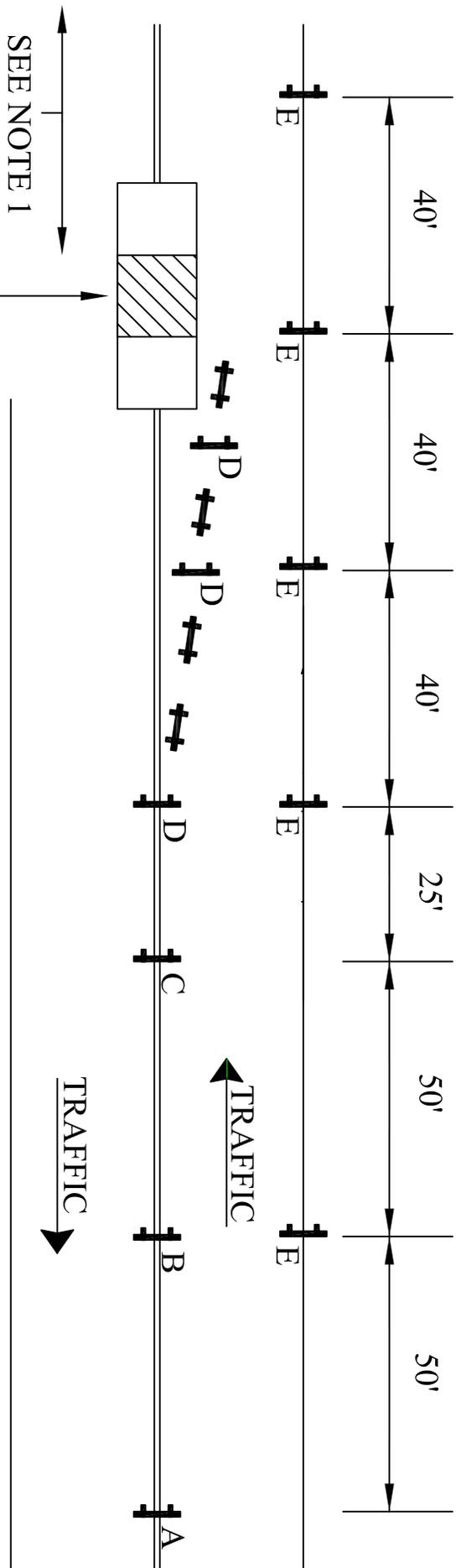
ELBOW OR WYE AS REQUIRED



MARK END OF LATERAL WITH 3" DIA. X 4" LG. BLOCK SET FLUSH WITH GROUND AND CONNECT TO LATERAL WITH WIRE

SIGNING & BARRICADE PLAN

TWO-WAY STREET CENTER OF ROAD WORK AREA



WORK AREA

EDGE OF ROAD

LEGEND

- A - "CONSTRUCTION AHEAD" SIGN*
- B - "20 MPH CONSTRUCTION ZONE" SIGN**
- C - "SLOW SINGLE LANE" SIGN**
- D - "KEEP RIGHT" SIGN**
- E - "NO PARKING" SIGN**
- BARRICADE ***

NOTES

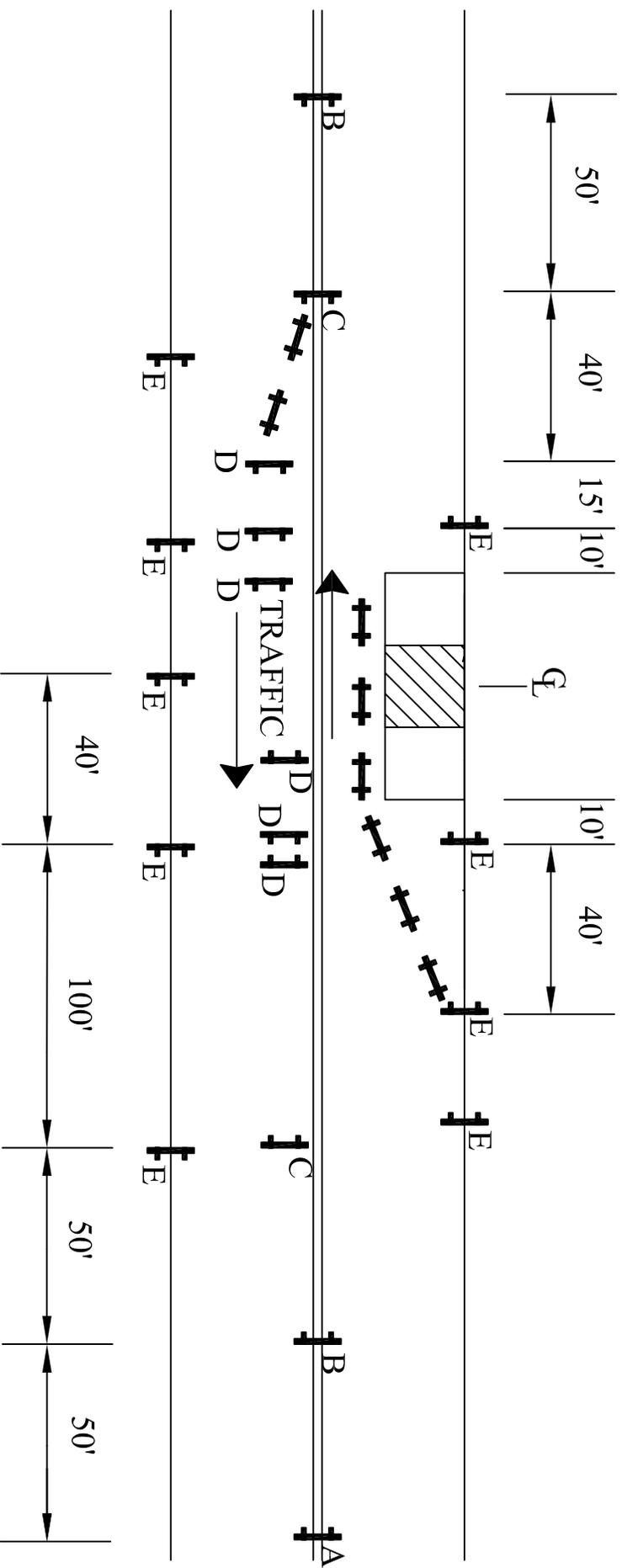
- * - 36" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- ** - 30" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- *** - 6' LONG OR LONGER STRIPED ORANGE AND WHITE
- (1) - SIGNING & BARRICADES SHOW FOR ONE DIRECTION OF TRAFFIC ONLY. IDENTICAL SET- UP TO BE USED FOR OPPOSITE DIRECTION

ID # 0059

SPRINGFIELD, MA DPW 2-27-2006

SIGNING & BARRICADE PLAN

TWO-WAY STREET SIDE OF ROAD WORK AREA



NOTES

- * - 36" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- ** - 30" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- *** - 6' LONG OR LONGER STRIPED ORANGE AND WHITE

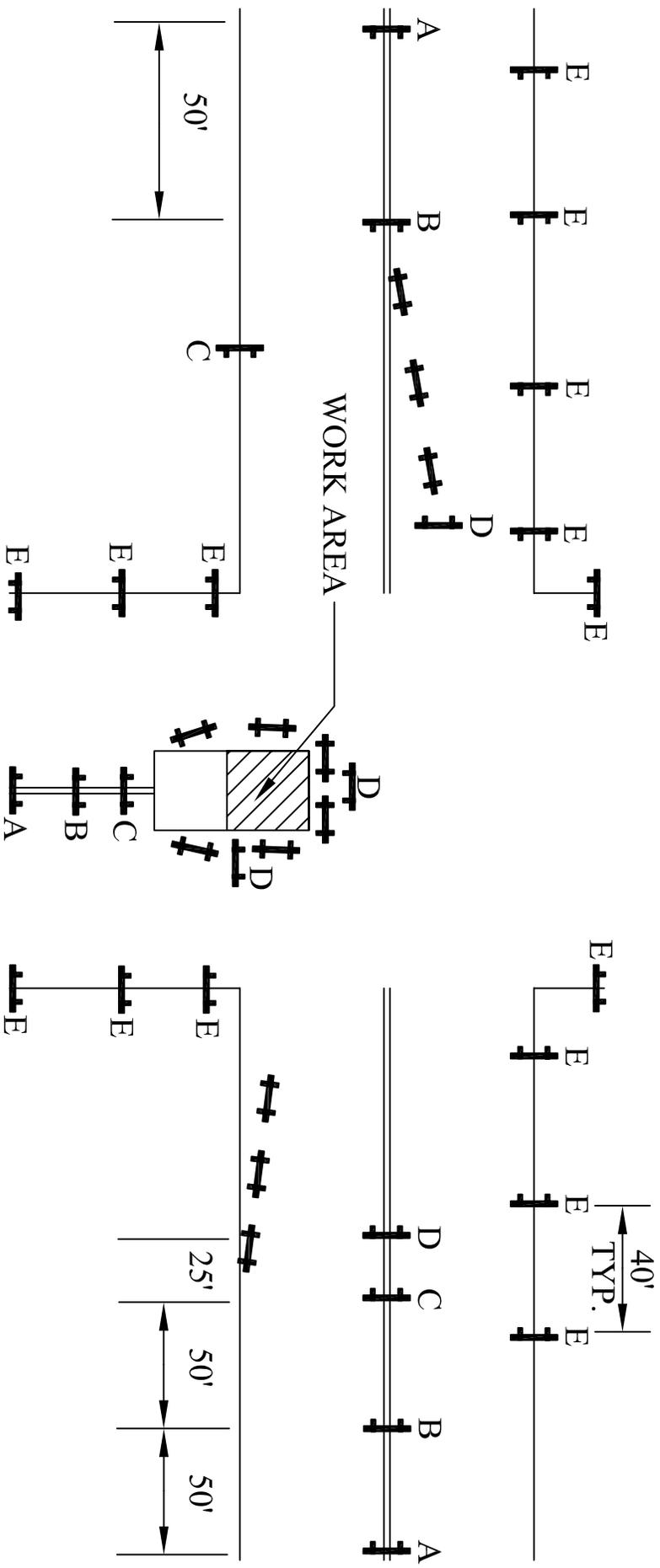
LEGEND

-  A - "CONSTRUCTION AHEAD" SIGN*
-  B - "20 MPH CONSTRUCTION ZONE" SIGN**
-  C - "SLOW SINGLE LANE" SIGN**
-  D - "KEEP RIGHT" SIGN**
-  E - "NO PARKING" SIGN**
-  BARRICADE ***

TO BE USED AS A GUIDE ONLY

SIGNING & BARRICADE PLAN

ALL TWO-WAY STREETS AT INTERSECTION WORK AREA



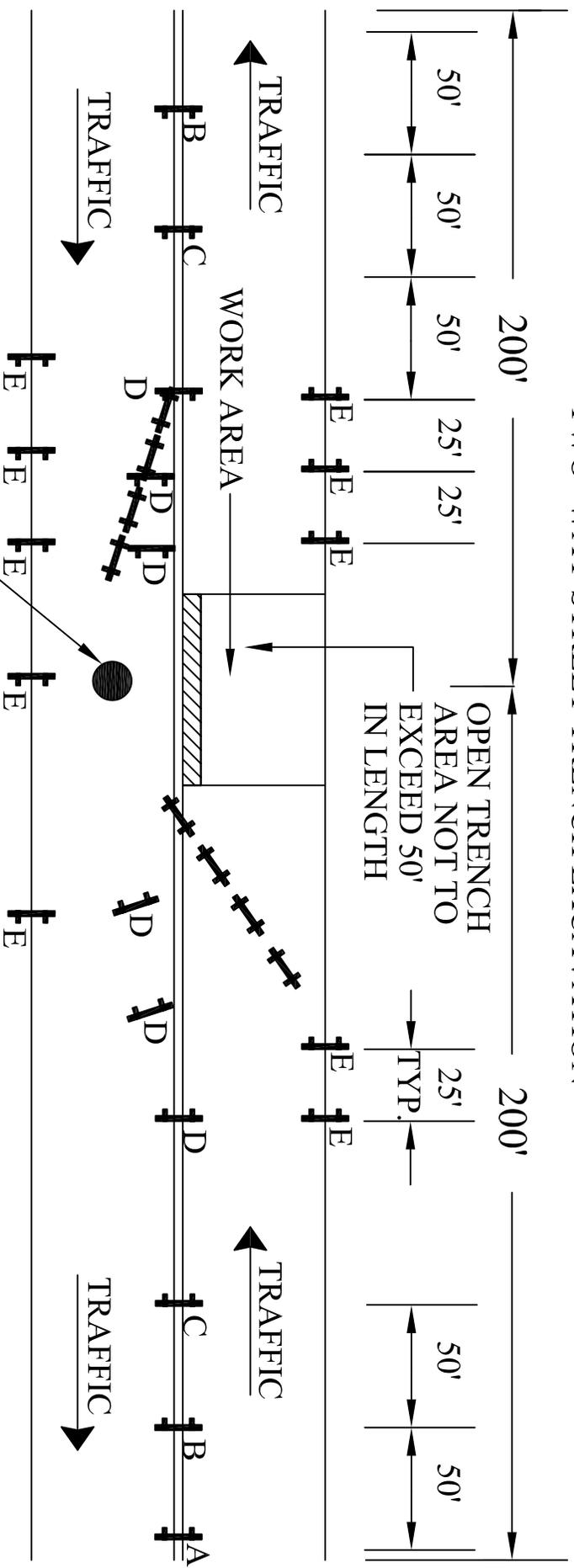
NOTES

- * - 36" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- ** - 30" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- *** - 6' LONG OR LONGER STRIPED ORANGE AND WHITE

TO BE USED AS A GUIDE ONLY

SIGNING & BARRICADE PLAN

TWO-WAY STREET TRENCH EXCAVATION



NOTES

- * - 36" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- ** - 30" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- *** - 6' LONG OR LONGER STRIPPED ORANGE AND WHITE

ONE LANE TRAFFIC
POLICE OFFICER REQUIRED

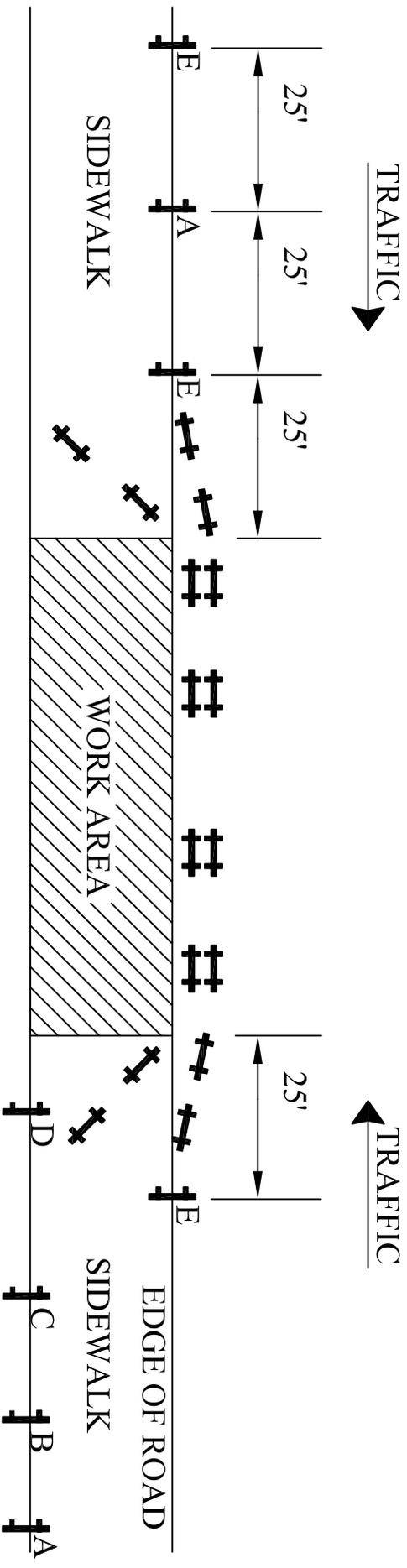
LEGEND

-  A - "CONSTRUCTION AHEAD" SIGN*
-  B - "20 MPH CONSTRUCTION ZONE" SIGN**
-  C - "SLOW SINGLE LANE" SIGN**
-  D - "KEEP RIGHT" SIGN**
-  E - "NO PARKING" SIGN**
-  BARRICADE ***

TO BE USED AS A GUIDE ONLY

SIGNING & BARRICADE PLAN

SIDEWALK & TREEBELT AREA



NOTES

- * - 36" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- ** - 30" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- *** - 6' LONG OR LONGER STRIPED ORANGE AND WHITE

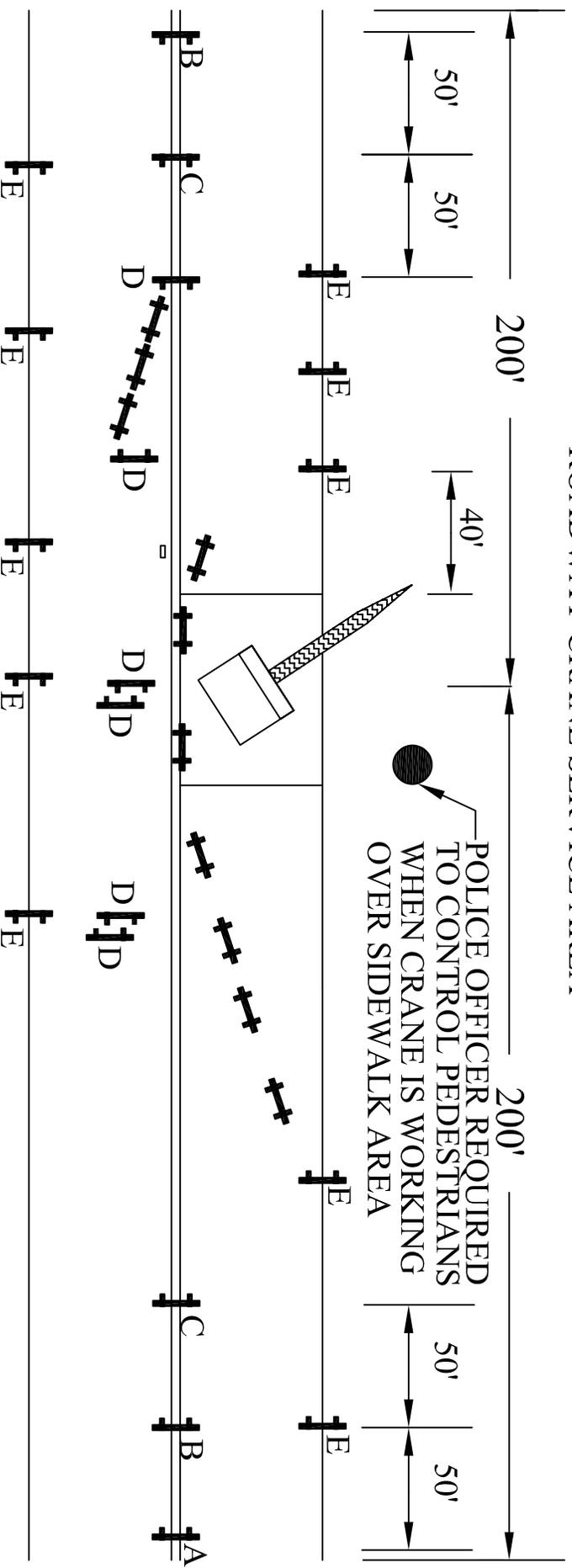
LEGEND

- A - "CONSTRUCTION AHEAD" SIGN*
- B - "20 MPH CONSTRUCTION ZONE" SIGN**
- C - "SLOW SINGLE LANE" SIGN**
- D - "KEEP RIGHT" SIGN**
- E - "NO PARKING" SIGN**
- BARRICADE ***

TO BE USED AS A GUIDE ONLY

SIGNING & BARRICADE PLAN

ROADWAY CRANE SERVICE AREA



NOTES

- * - 36" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- ** - 30" DIAMOND SHAPE, BLACK LEGEND ON CONSTRUCTION ORANGE
- *** - 6' LONG OR LONGER STRIPED ORANGE AND WHITE

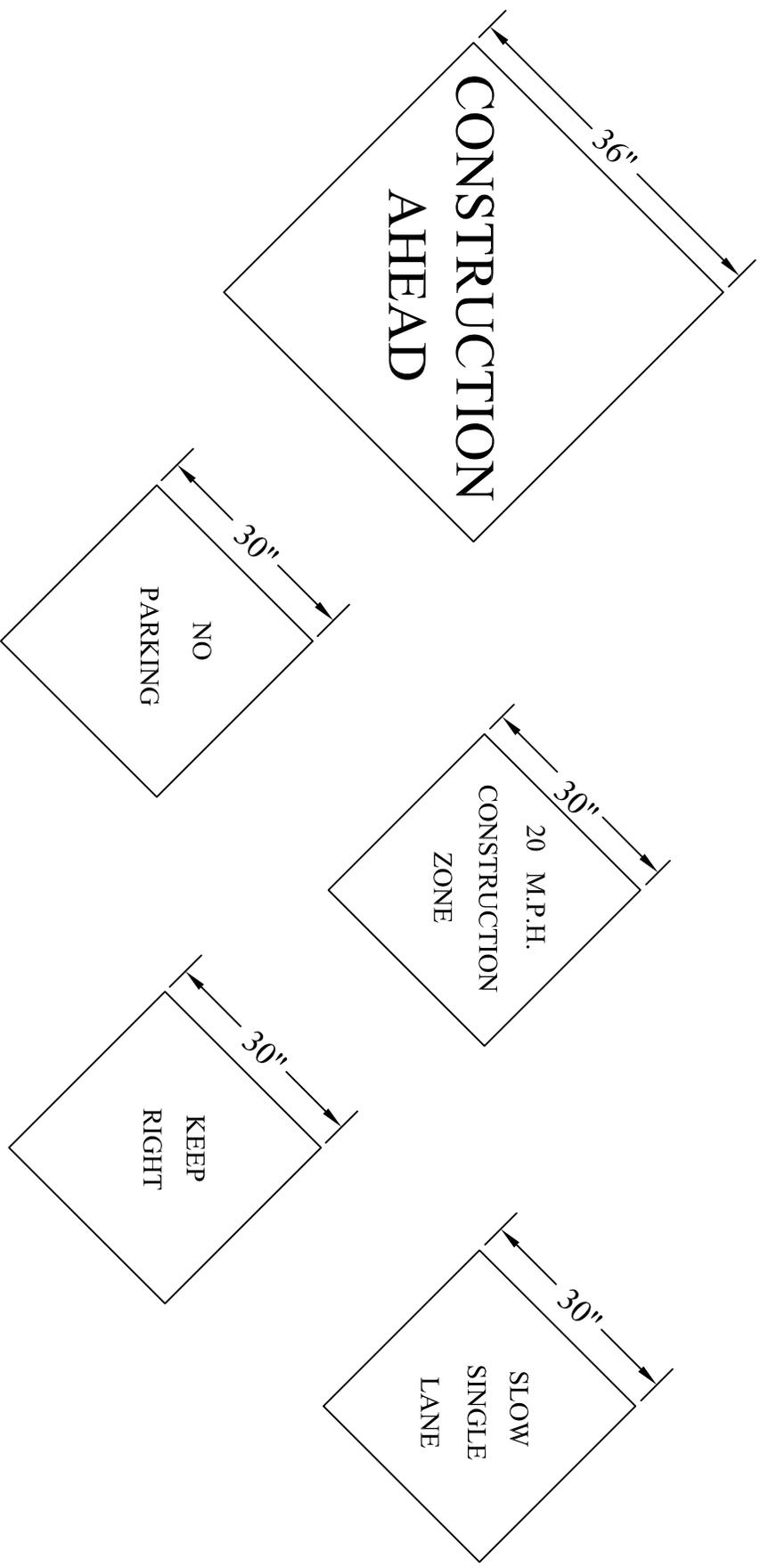
LEGEND

-  A - "CONSTRUCTION AHEAD" SIGN*
-  B - "20 MPH CONSTRUCTION ZONE" SIGN**
-  C - "SLOW SINGLE LANE" SIGN**
-  D - "KEEP RIGHT" SIGN**
-  E - "NO PARKING" SIGN**
-  BARRICADE ***

TO BE USED AS A GUIDE ONLY

SIGN FACE DETAILS

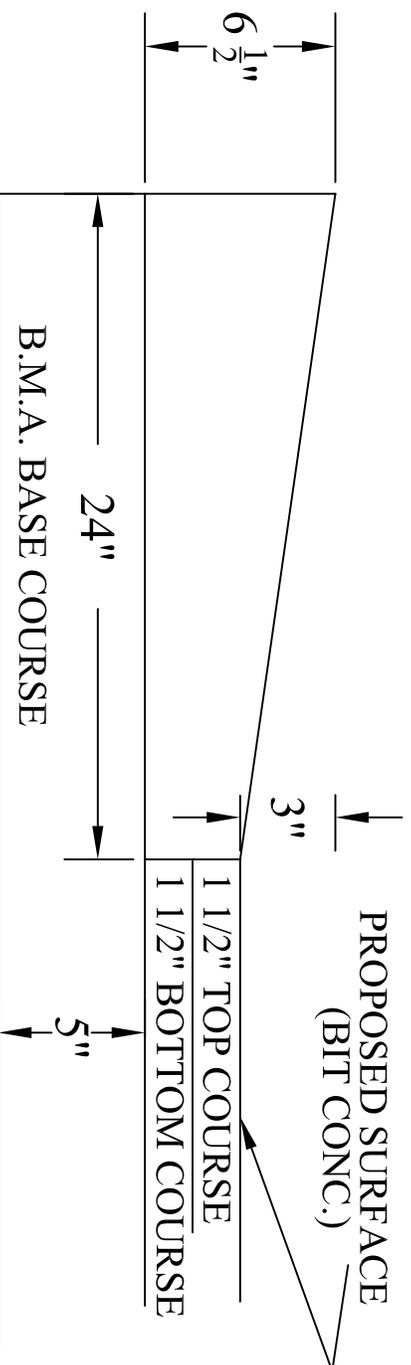
THE NOTED SIGNS ARE AS FOLLOWS:



NOTES:

- ALL SIGNS SHALL BE BLACK LEGEND ON REFLECTORIZED CONSTRUCTION ORANGE BACKGROUND
- ALL TRAFFIC AND / OR PEDESTRIAN DETOURS SHALL BE INSTALLED AND MAINTAINED IN ACCORDANCE WITH THE APPROPRIATE PLAN AS CONTAINED IN THIS SECTION

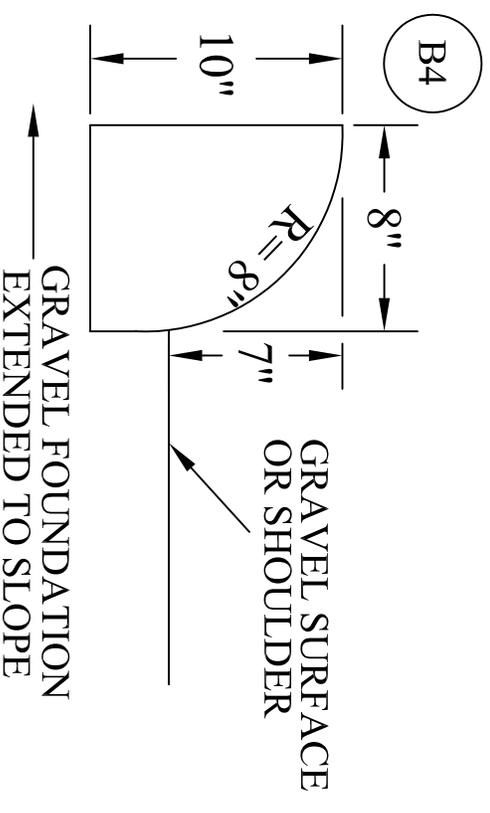
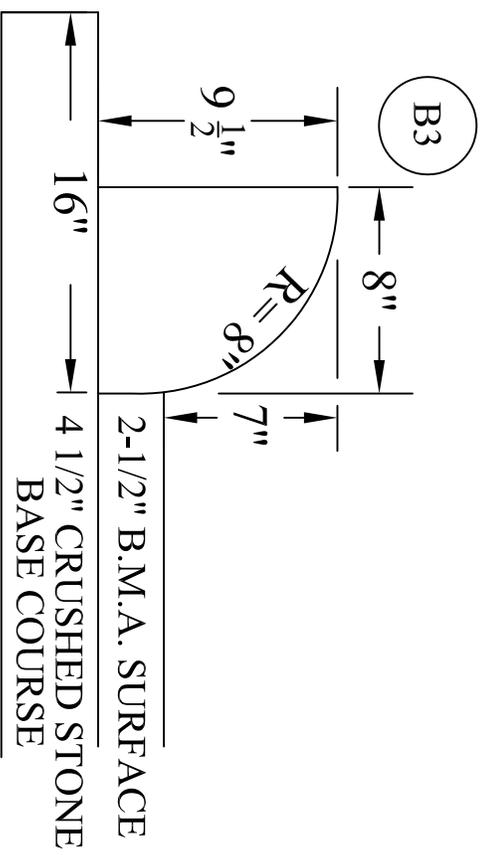
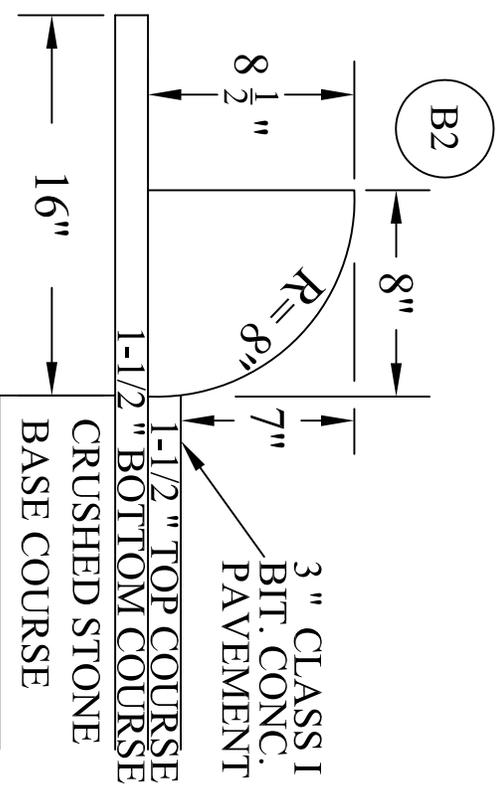
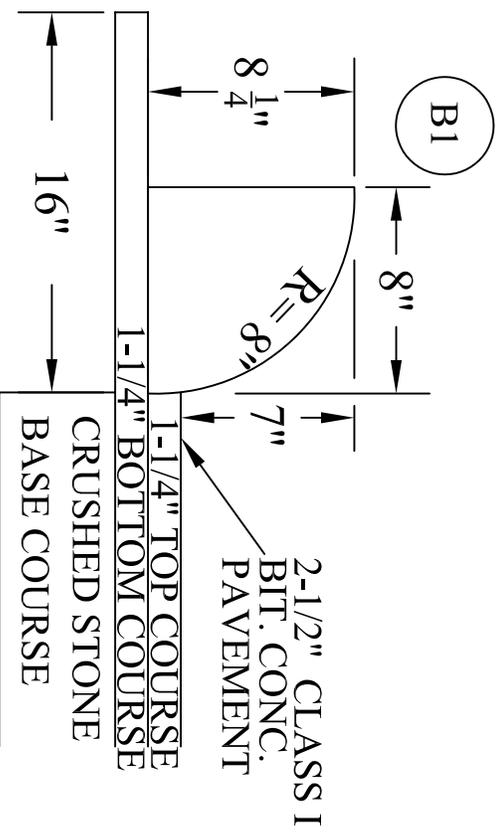
BERM TYPE A



NOTES:

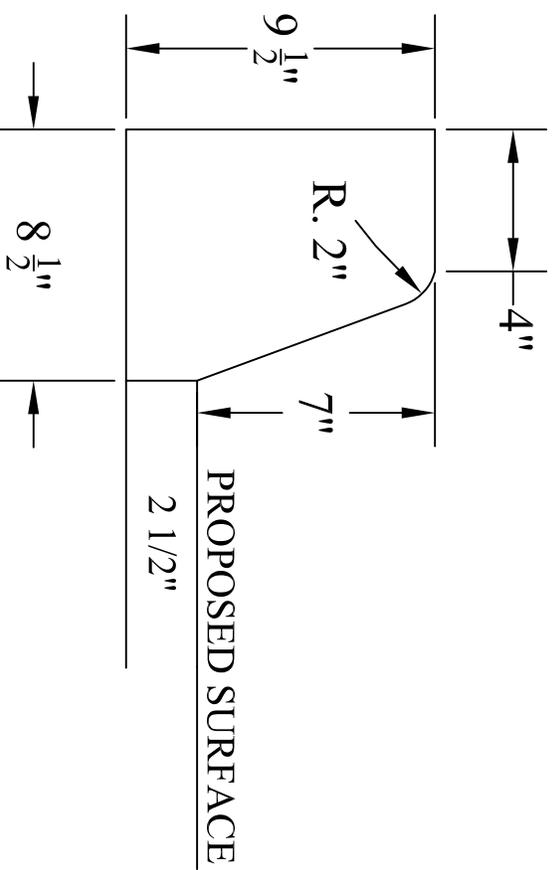
- USED PRIMARILY ON INTERSTATE PROJECTS

BERM TYPE B



BERM TYPE C

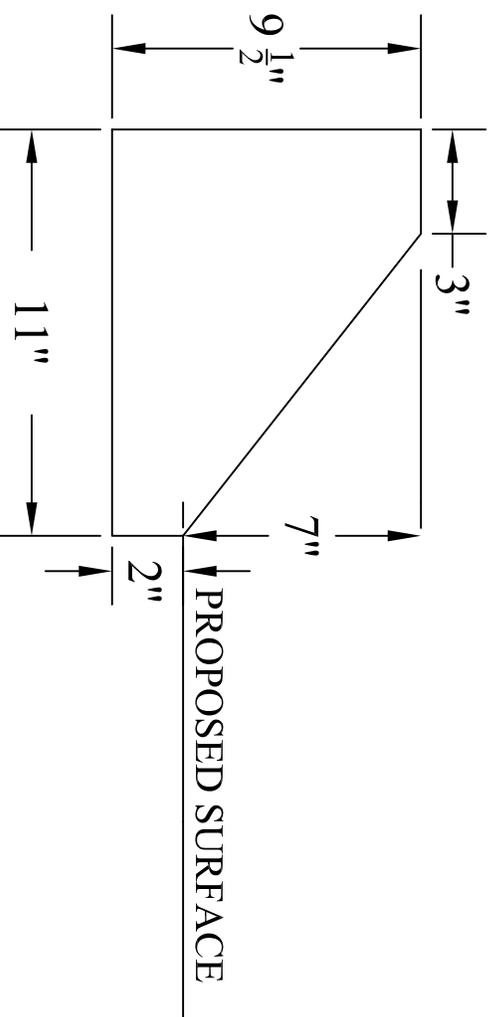
MOST COMMONLY USED



NOTES:

- METHOD OF CONSTRUCTION OF FOUNDATION FOR TYPES C AND D SAME AS FOR TYPE B DEPENDING ON KIND OF SURFACE

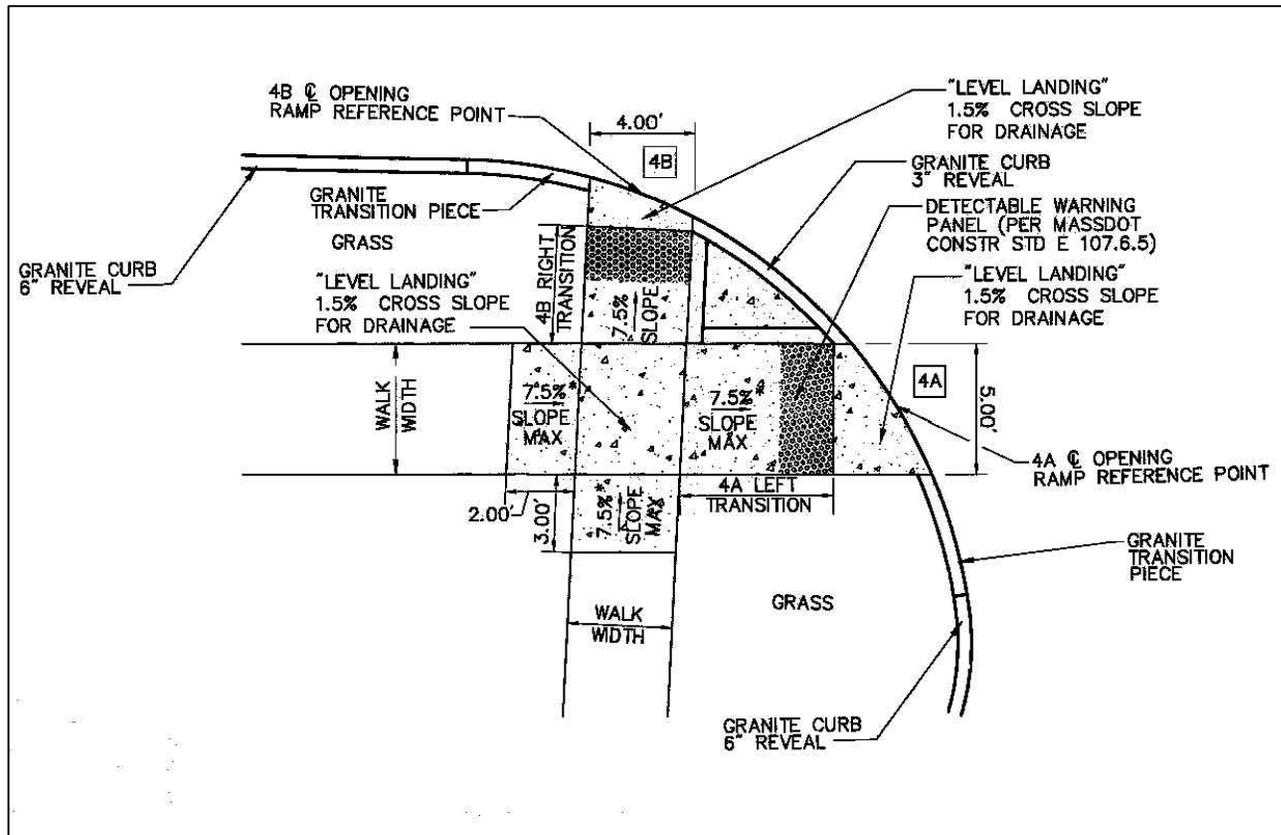
BERM TYPE D



NOTES:

- METHOD OF CONSTRUCTION OF FOUNDATION FOR TYPES C AND D SAME AS FOR TYPE B
DEPENDING ON KIND OF SURFACE

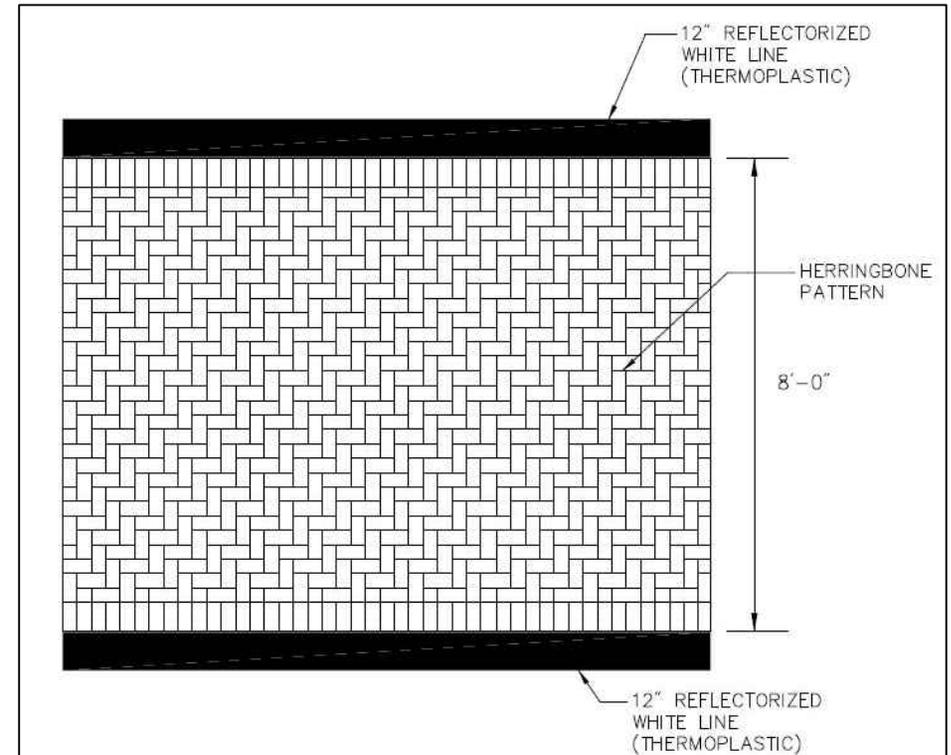
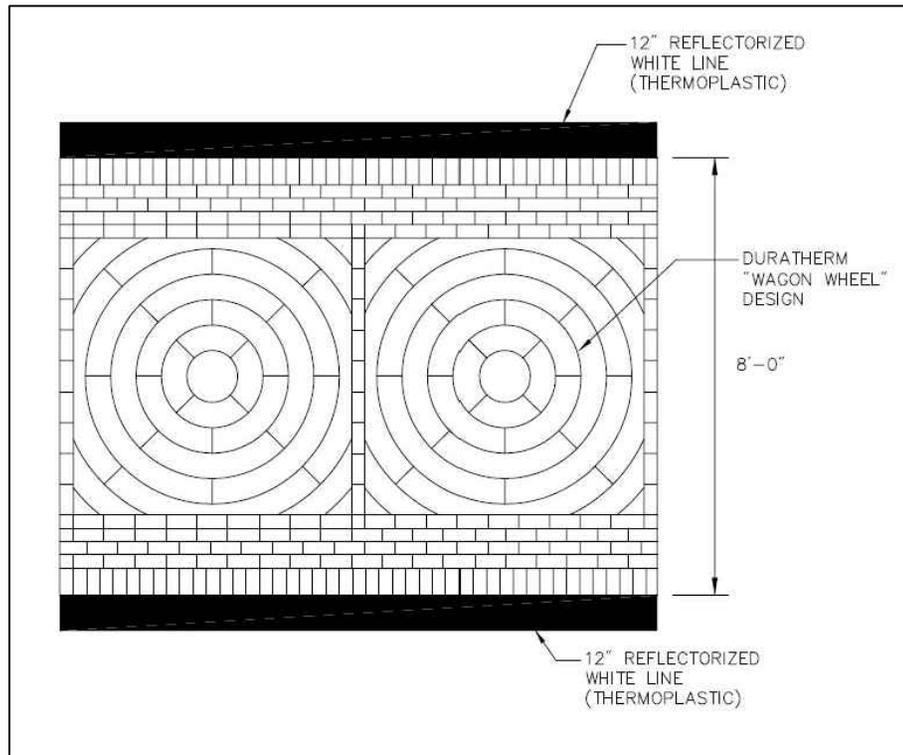
SIDEWALK REPAIR



NOTES:

- IF EXCAVATION OCCURS ON A SIDEWALK AT AN INTERSECTION, CONTRACTOR IS REQUIRED TO REMOVE ENTIRE SIDEWALK WHEELCHAIR RAMP, ADJUST CURB, AND REPLACE TO CURRENT MASSDOT A.D.A. GUIDELINES.
- IF NO CURRENT RAMP EXISTS, CONTRACTOR IS REQUIRED TO INSTALL RAMP AND ADJUST CURB TO MEET CURRENT MASSDOT A.D.A. GUIDELINES.
- WIRE MESH REINFORCEMENT CONFORMING TO AASHTO-M55 OR ASTM A185-79 WILL BE REQUIRED.

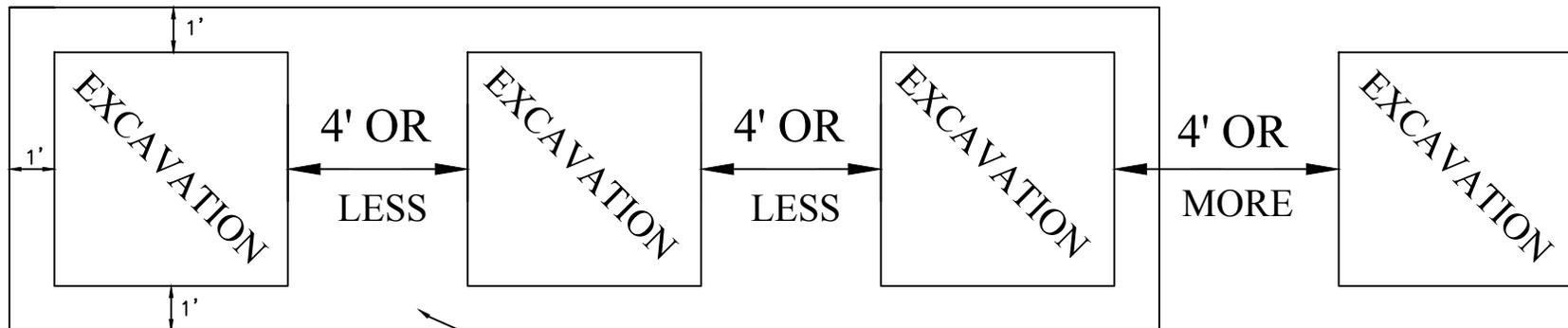
IMPRINT OR INLAYED CROSSWALK REPAIR



NOTES:

- IF ANY EXCAVATION OR SURFACE PAVEMENT IMPROVEMENT OCCURS OF ANY LOCATION WITHIN THE CITY OF SPRINGFIELD WHERE EXISTING IMPRINTED OR INLAYED CROSS WALKS EXIST, THE CONTRACTOR IS REQUIRED TO REPLACE IN KIND WITH THE EXACT MATERIAL AND COLOR AS ORIGINALLY INSTALLED.
- INSTALLATIONS MUST BE COMPLETED BY AN INSTALLER APPROVED BY THE CITY OF SPRINGFIELD.
- ABUTTING PAVEMENT MARKINGS MUST ALSO BE REPLACED.

MULTIPLE EXCAVATION REPAIR



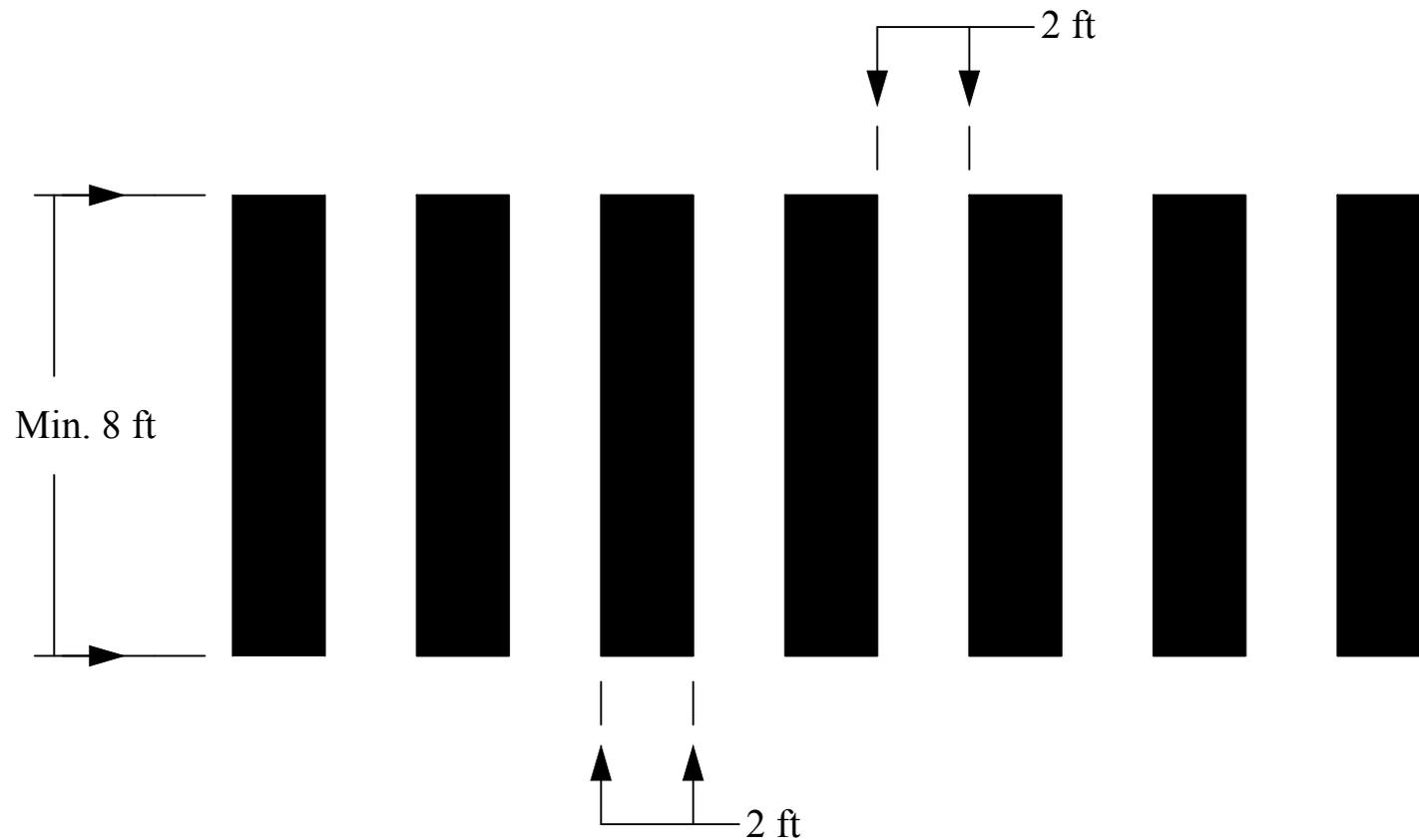
PAVEMENT RESTORATION REQUIREMENT

NOTES:

- APPLIES TO ANY ROADWAY EXCAVATION THAT RESULTS IN MULTIPLE PENETRATIONS PERFORMED LESS THAN 4' OF ONE ANOTHER UNDER A SINGLE PERMIT.
- APPLIES TO ANY ROADWAY EXCAVATIONS THAT ARE PERFORMED WITHIN 2 MONTHS OF ANY OTHER PERMIT ISSUED TO THE SAME CONTRACTOR/UTILITY AT A SPECIFIC LOCATION.
- EXISTING PAVEMENT REMAINING SHALL BE MILLED AND OVERLAYED (1.5" RESIDENTIAL □ 2" ARTERIAL) AS SHOWN ABOVE.

CROSSWALK DETAIL

CONTINENTAL STYLE



- CITY OF SPRINGFIELD STANDARD CROSSWALK DETAIL
- THIS DETAIL TO BE USED ON ALL NEW PAVEMENT PROJECTS
- ALL CROSSWALKS SHALL HAVE A MINIMUM WIDTH OF 8 FT