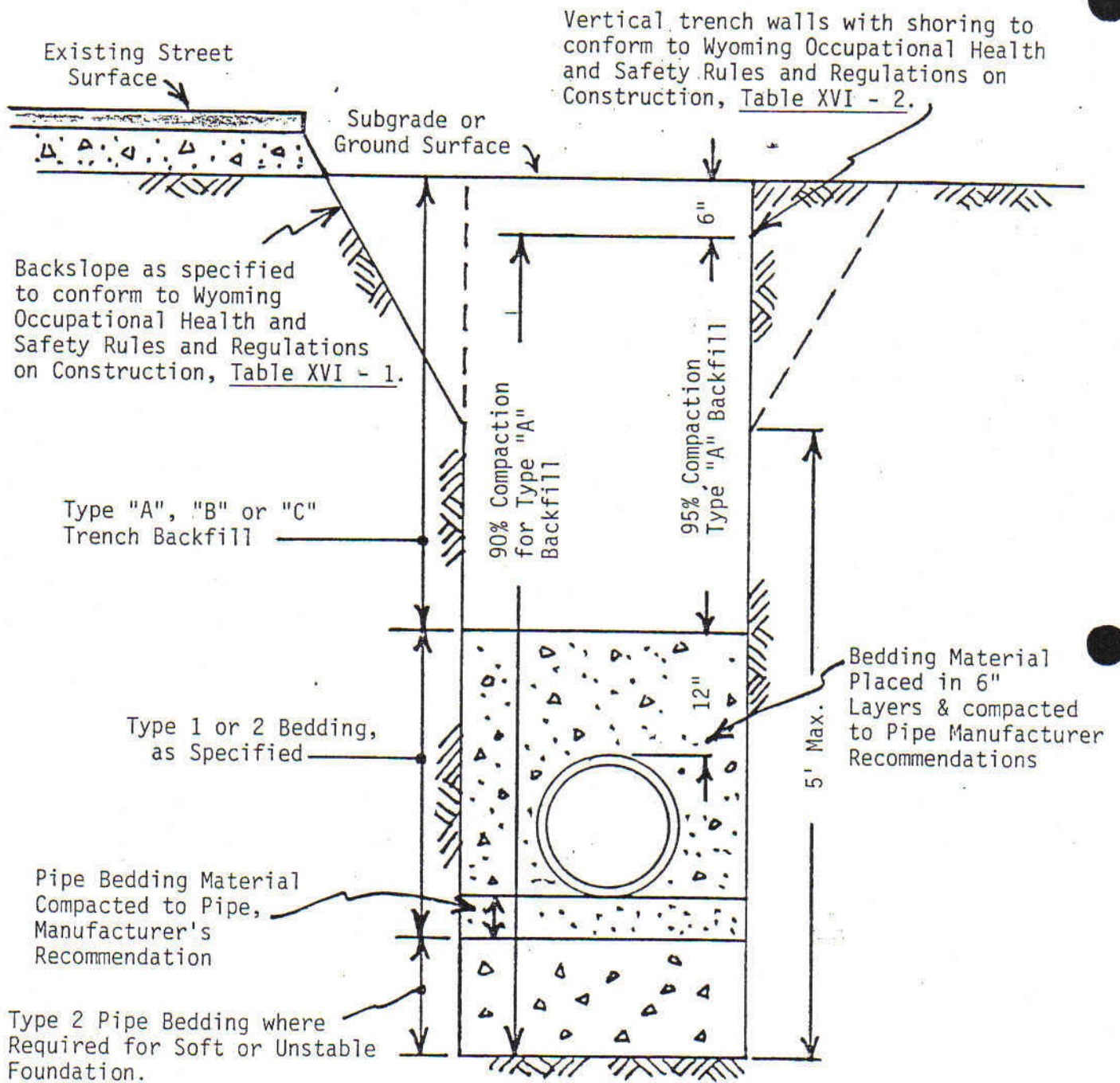
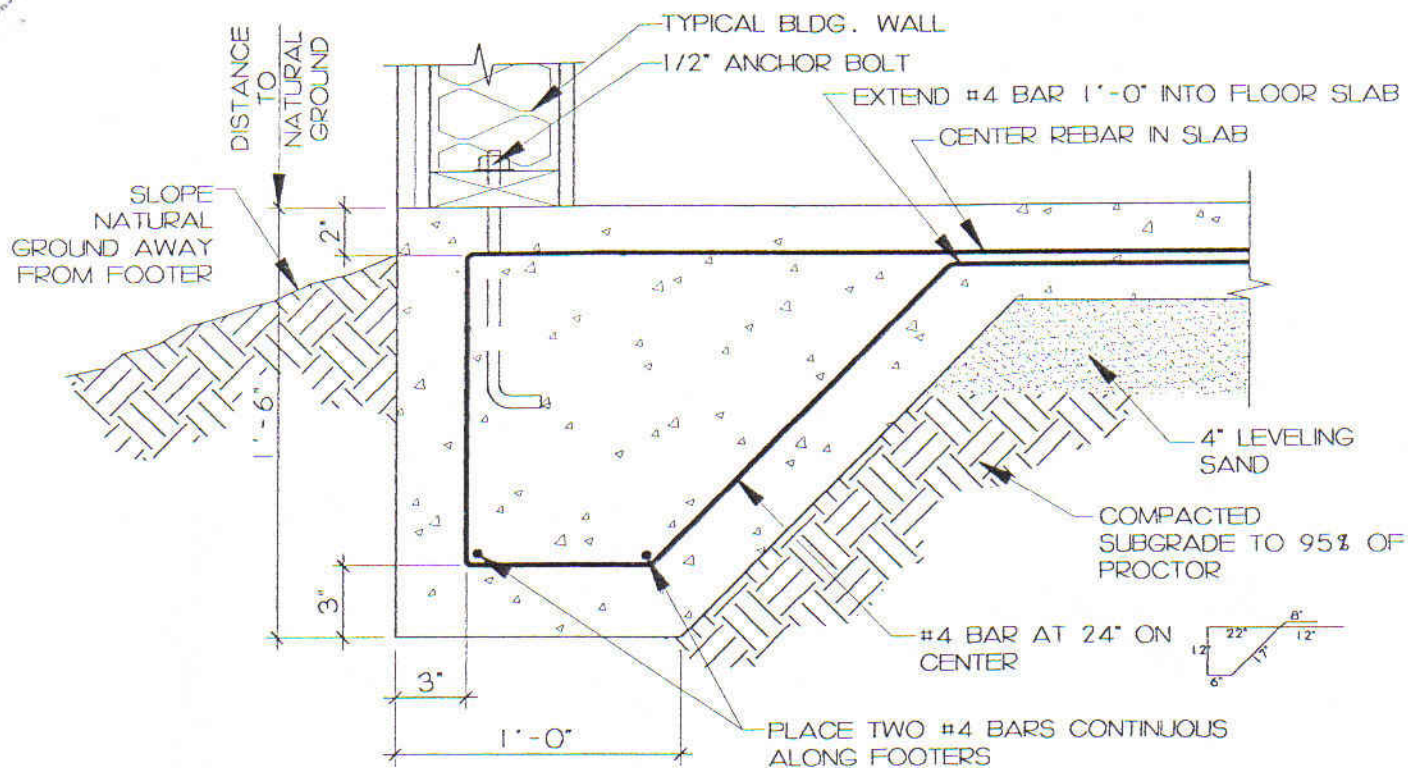


NOTE: Where Trench passes through existing pavement the pavement shall be cut in accordance with section 201.12 (G.) of attached specifications.





TYPICAL MONOLITIC FOUNDATION

SCALE 1 1/2" = 1'-0"

NOTES:

1. REINFORCING DIAGRAM REPRESENTS MINIMUM REQUIREMENTS. REINFORCEMENT VARIES WITH LOADINGS AND SOIL CONDITIONS. BUILDERS ARE ENCOURAGED TO SEEK PROFESSIONAL ADVICE FOR DIFFERING SITE CONDITIONS. MONOLITIC FOUNDATIONS ARE APPLICABLE WHEN APPROVED BY BUILDING INSPECTION DEPARTMENT.

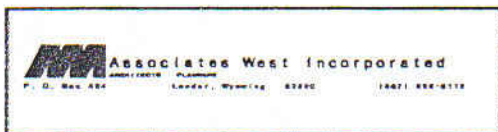
2. NOTE: FURTHER INFORMATION CONTACT BUILDING INSPECTION DEPARTMENT, 332-2588.

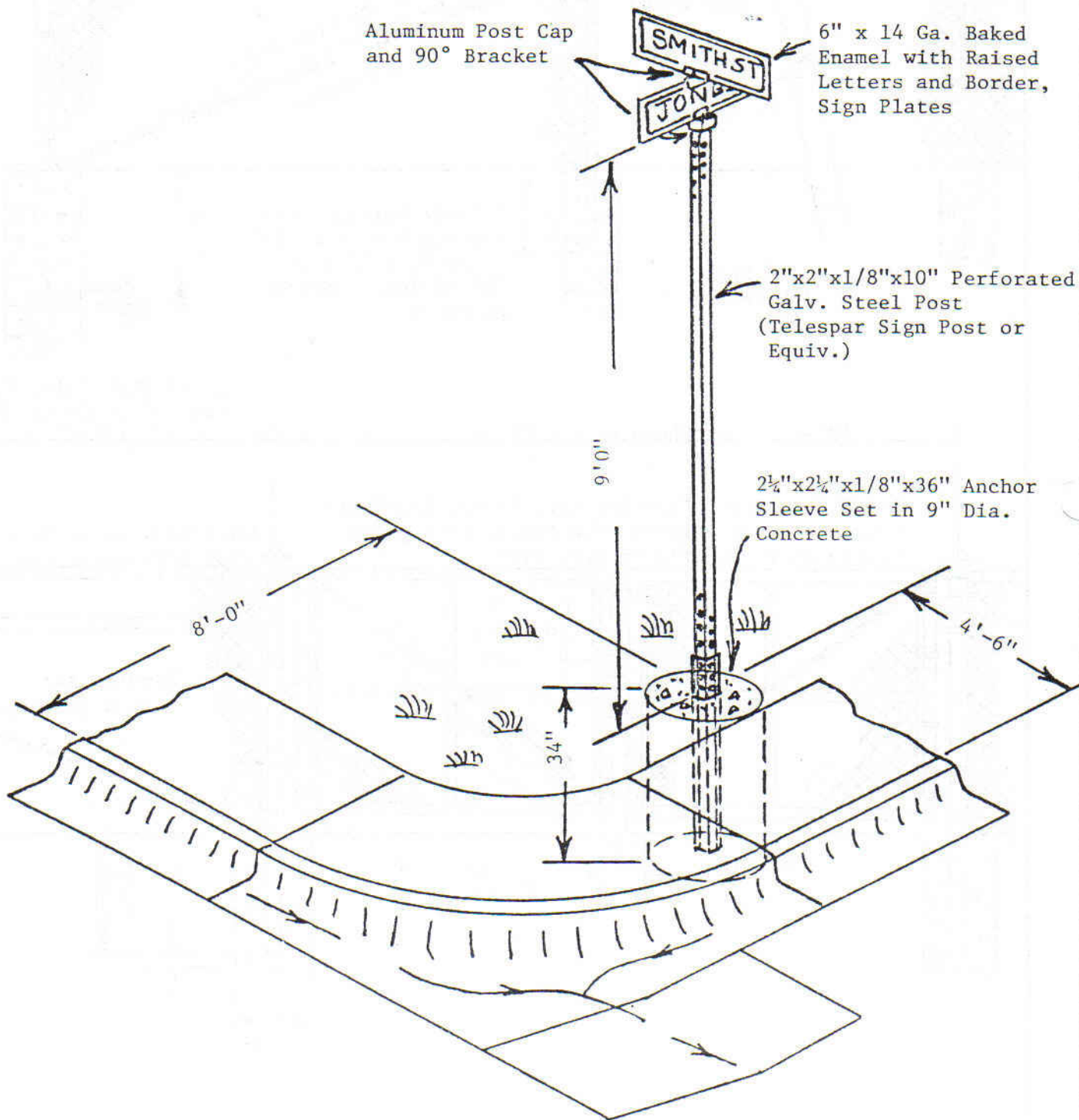
3. DESIGN CRITERIA

- A. MINIMUM CONCRETE COVER FOR REINFORCEMENT IS 3 INCHES EXCEPT FLOOR.
- B. SOIL BEARING STRENGTH CBR = 5%
- C. ANCHOR BOLTS - MINIMUM 1/2" DIA. SET BOLTS 7" INTO CONCRETE WALL SPACING 6'-0" ON CENTER SET BOLTS WITHIN 12" OF EACH CORNER OR END RUN.
- D. REINFORCING BAR YIELD STRENGTH = 40 k.s.i.
- E. CONCRETE DESIGN $f_c = 3500$ psi
 5.5 SACK
 MINIMUM
 W/C RATIO 0.45
 TYPE II MODIFIED
 C3A \leq 5%

F. LAP SPLICES - ON SLAB CORNERS, INSTALL #4 BAR FOR EACH #4 BAR IN FOOTER.

4. NOTE: OTHER MINIMUM DESIGNS MAY BE SUBSTITUTED WITH PRIOR WRITTEN APPROVAL BY BUILDING INSPECTION DEPARTMENT.



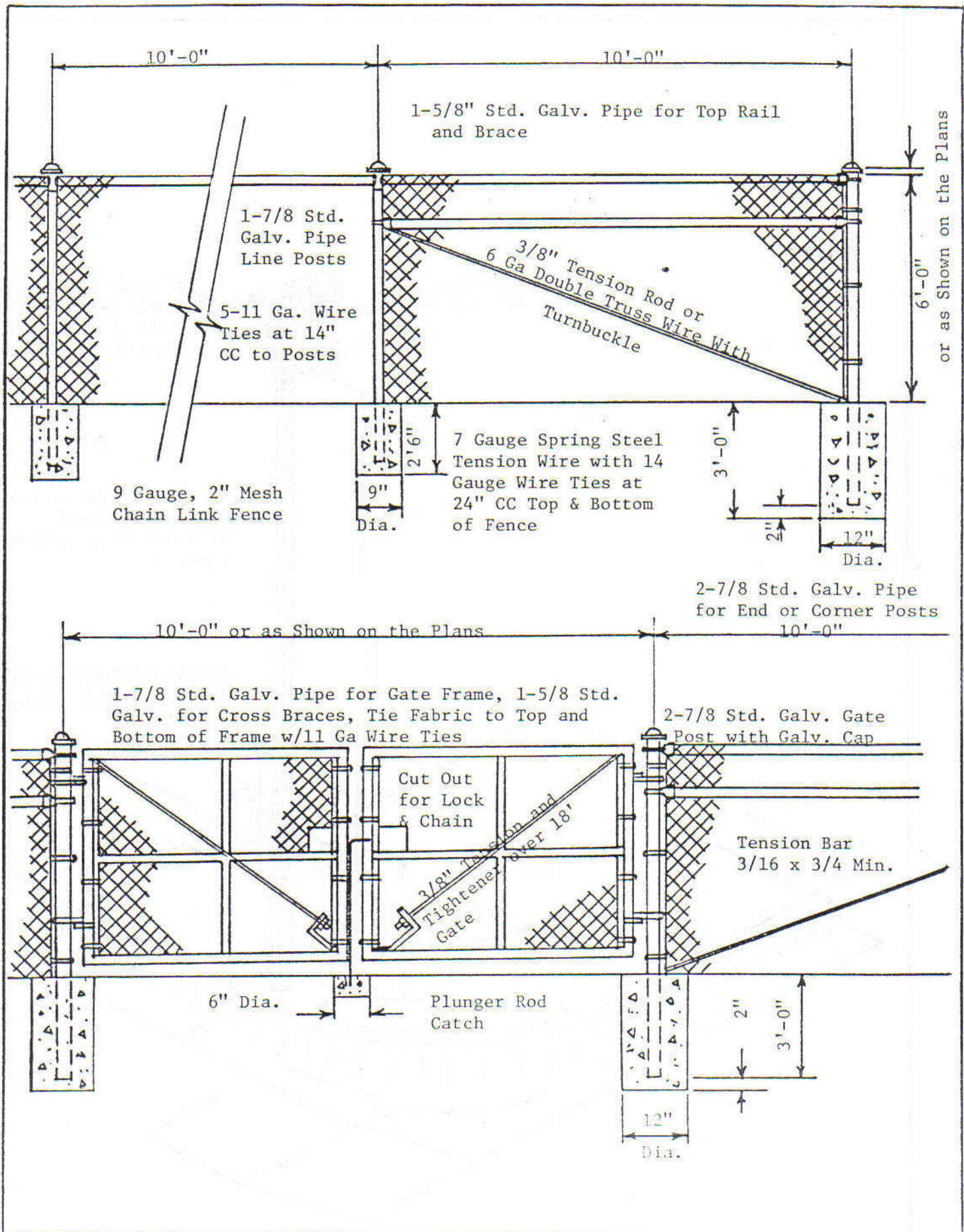


CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE:
NONE

STREET SIGN

STANDARD
DRAWING
NO. 702-01

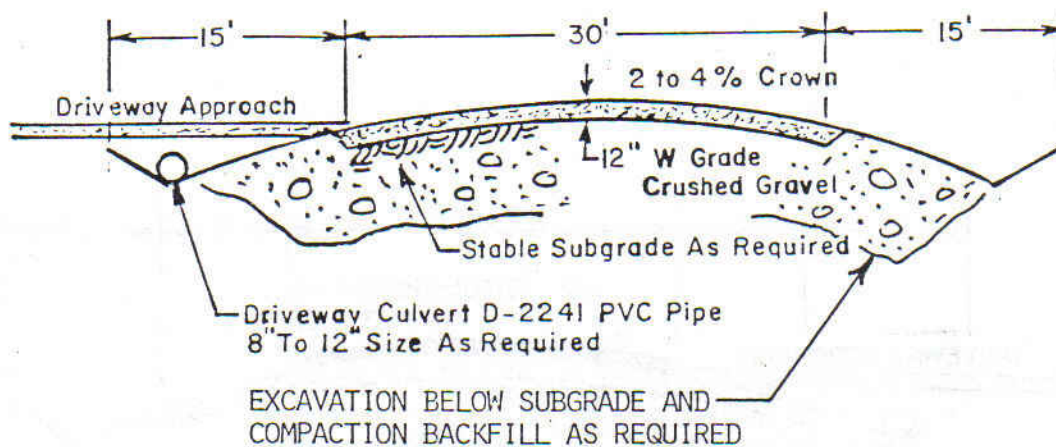


CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE:
NONE

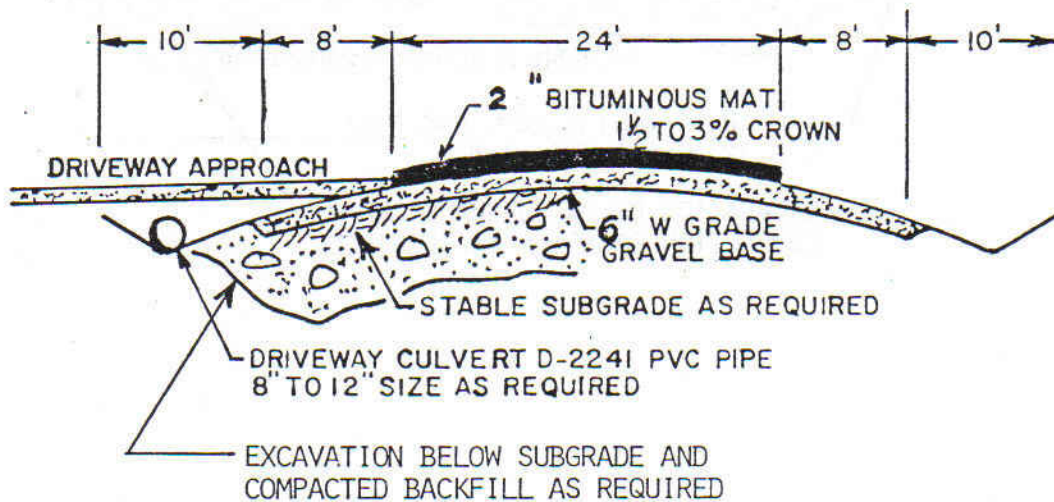
CHAIN LINK FENCE

STANDARD
DRAWING
NO. 701-01



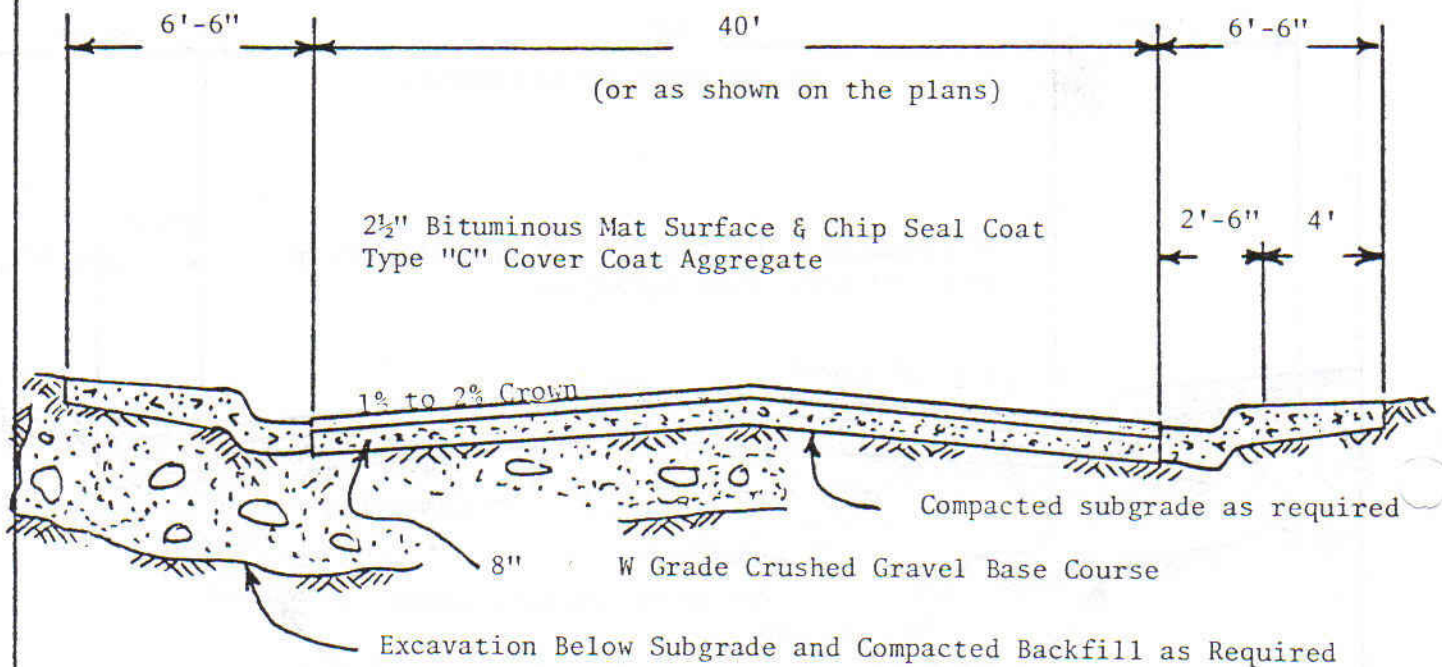
Notes:

1. Excavation below subgrade - backfill compaction shall not be less than 95% of AASHTO T-99.
2. Grade W crushed base course aggregate compaction shall not be less than 95% of AASHTO T-99.



Notes:

1. Excavation below subgrade - backfill compaction shall not be less than 95% of AASHTO T-99.
2. Grade W crushed base course aggregate compaction shall not be less than 95% of AASHTO T-99.
3. Prime coat may be required at the option of the City.
4. Bituminous pavement shall be compacted to not less than 95% of maximum lab density.



Notes:

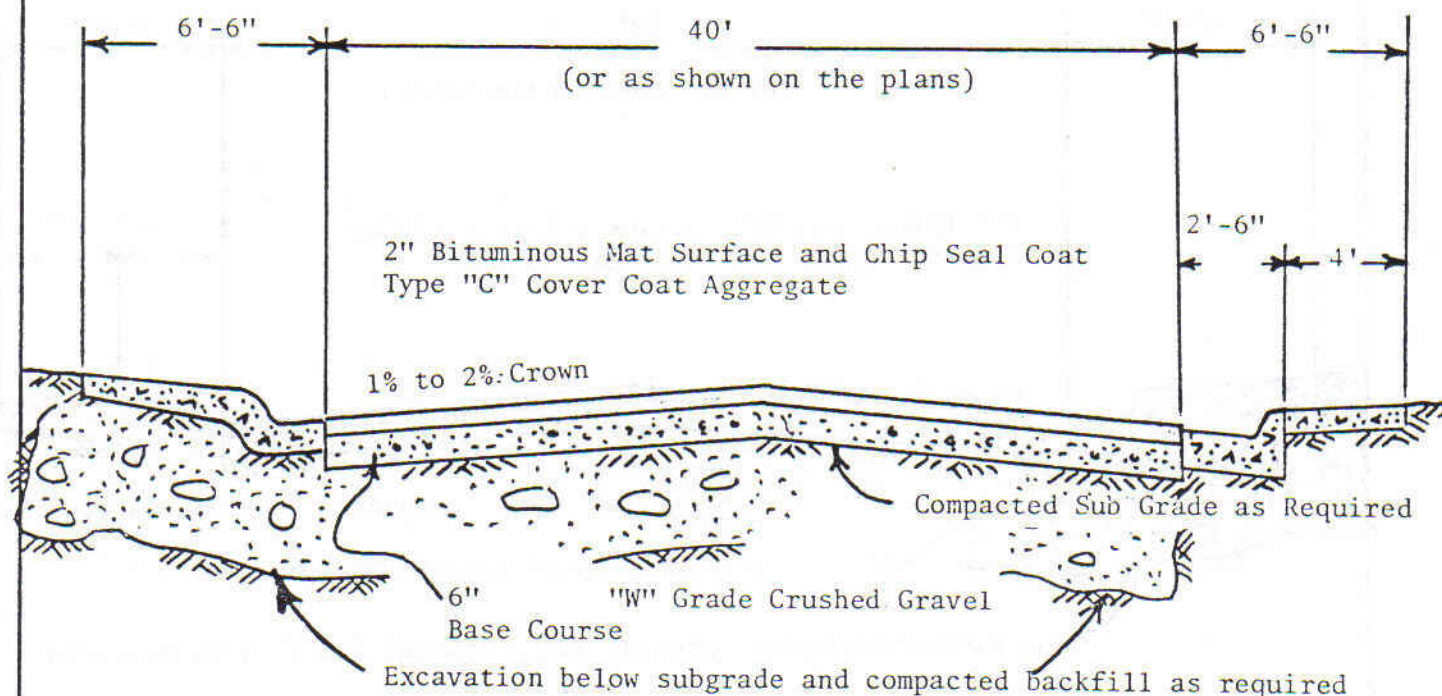
1. Excavation below subgrade - backfill compaction shall not be less than 95% of AASHTO T-99.
2. Grade W crushed base course aggregate compaction shall not be less than 95% of AASHTO T-99.
3. Edges of existing pavement and concrete shall be tacked with SS-1 emulsion or approved equal.
4. Prime coat may be required at the option of the City.
5. Bituminous pavement shall be compacted to not less than 95% of maximum lab density.

CITY OF LANDER
STANDARD SPECIFICATION

SCALE
NONE

COLLECTOR STREET DETAIL

STANDARD
DRAWING
NO. 609-02



Note:

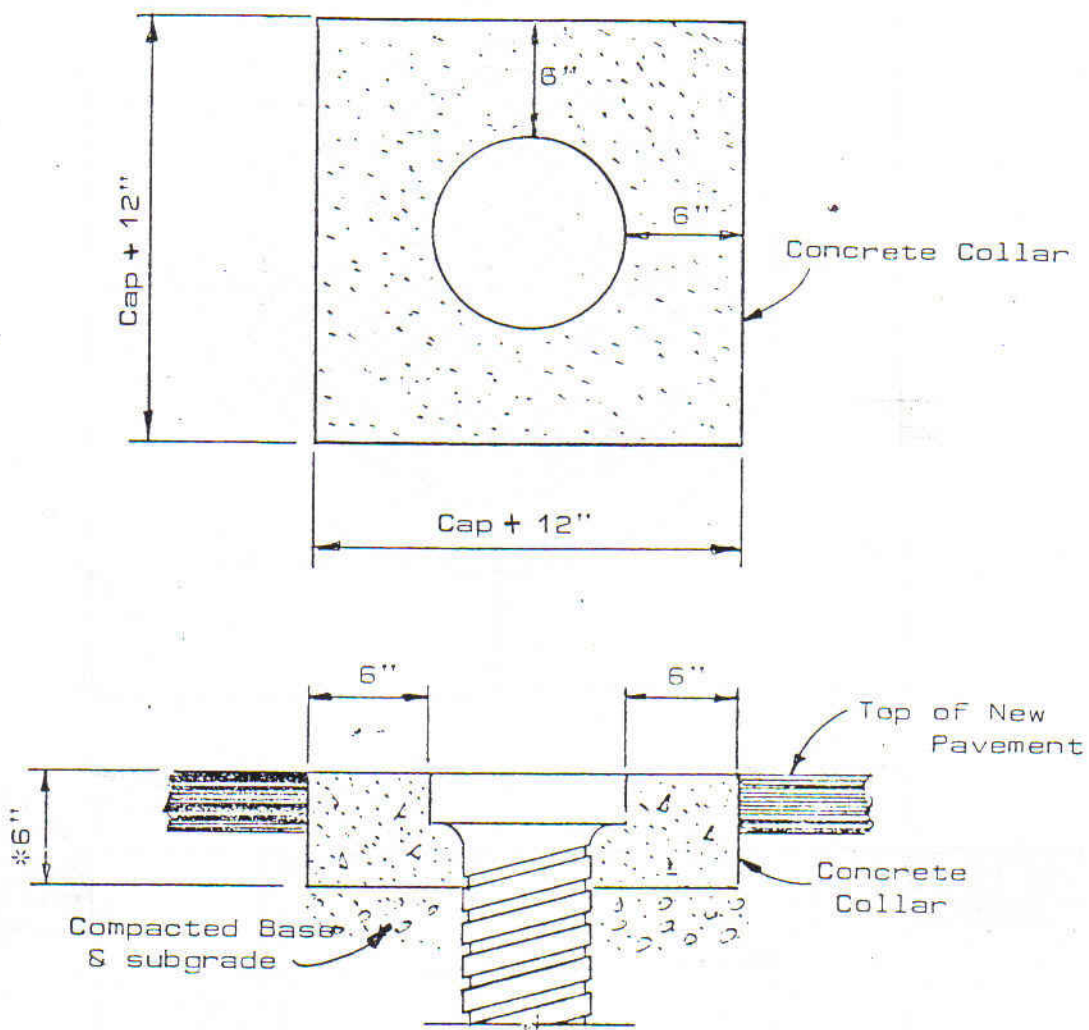
1. Excavation below subgrade - backfill compaction shall not be less than 95% of AASHTO T-99.
2. Grade W crushed base course aggregate compaction shall not be less than 95% of AASHTO T-99.
3. Edges of existing pavement and concrete shall be tacked with SS-1 emulsion or approved equal.
4. Prime coat may be required at the option of the City.
5. Bituminous pavement shall be compacted to not less than 95% of maximum lab density.

CITY OF LANDER
STANDARD SPECIFICATION

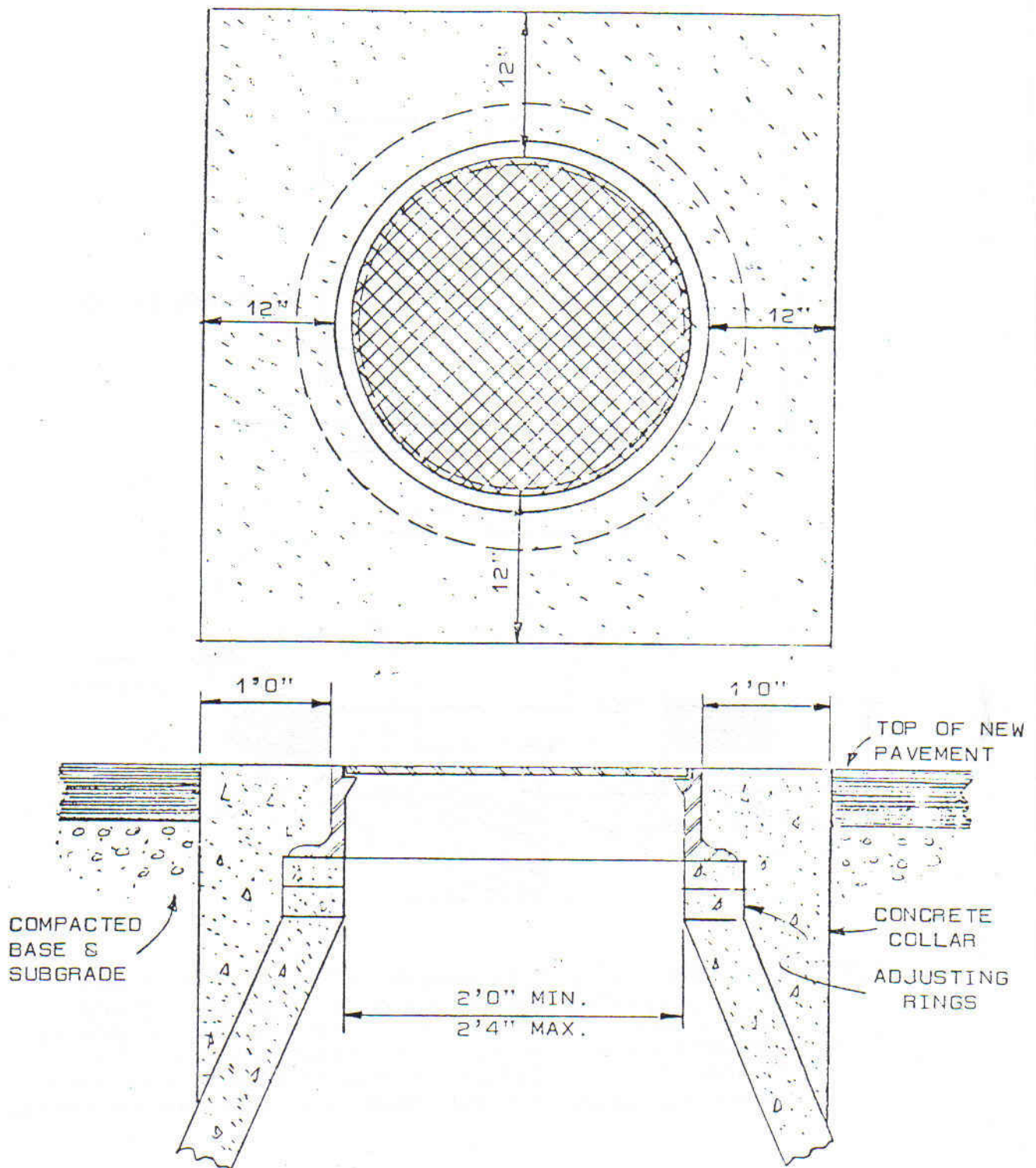
SCALE
NONE

LOCAL STREET DETAIL

STANDARD
DRAWING
NO. 609-01



- NOTE: 1) Adjust water valves upward or downward as required. Final adjustment shall be made after paving and before seal coating. No payment shall be made for adjustment of new valves to final grade.
- 2)* When Concrete Collar is poured abutting to concrete pavement, depth should equal that of pavement section.



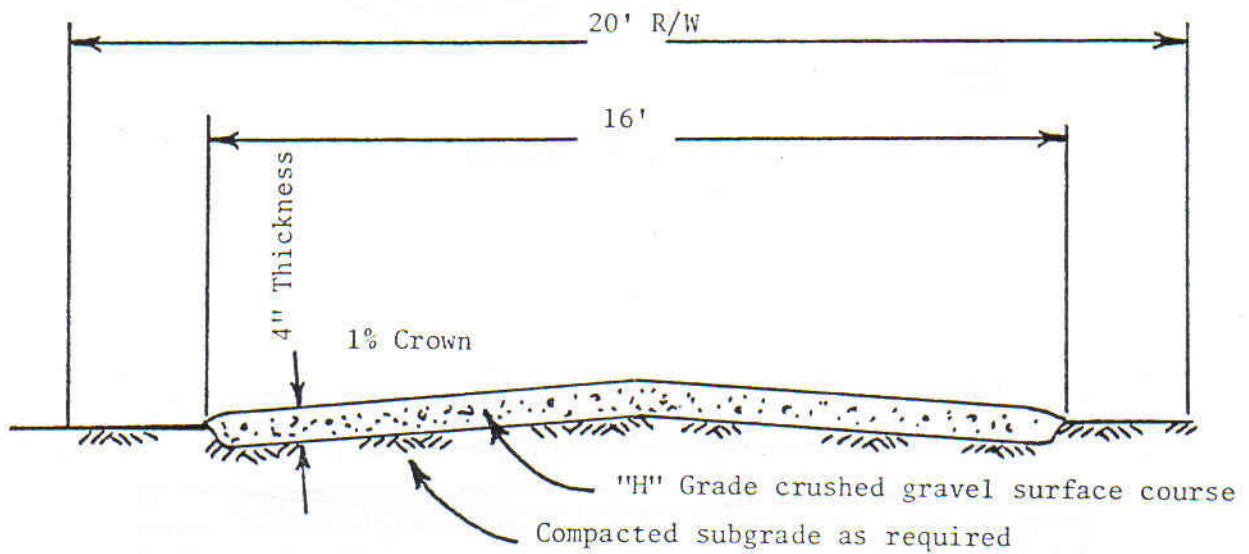
NOTE: Adjust manholes upward with brick & mortar or adjusting rings under frame. Adjust manhole downward by removing a portion of the manhole riser and rebuilding to proper diameter. Slope manhole ring as required to match longitudinal & transverse grade on street. Final manhole adjustment will be made after paving and before seal coating. No payment shall be made for adjustment of new manholes to final grade.

CITY OF LANDER
STANDARD SPECIFICATIONS

Scale:
None

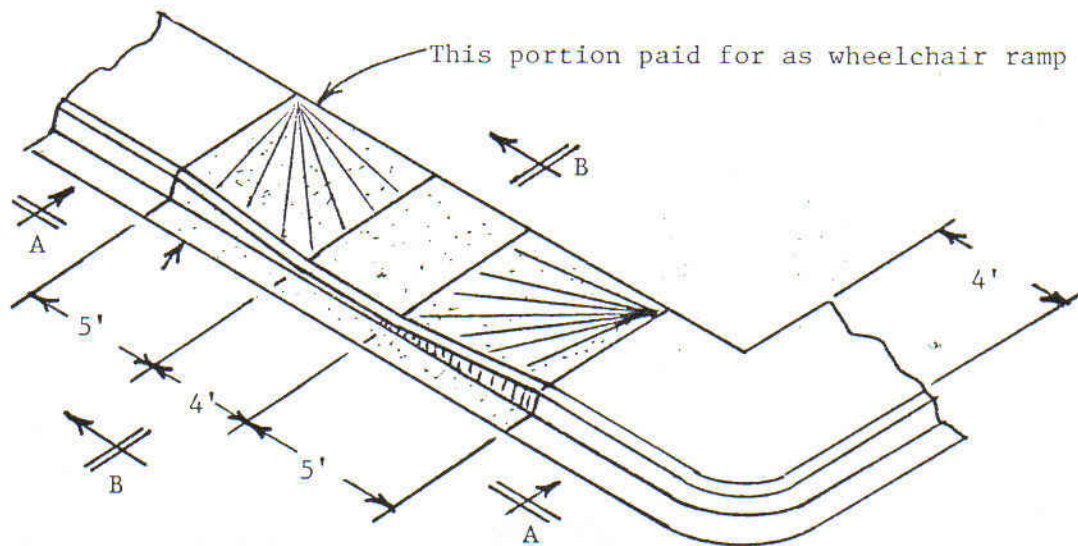
MANHOLE ADJUSTMENT DETAIL

Standard
Drawing
No. 305-01

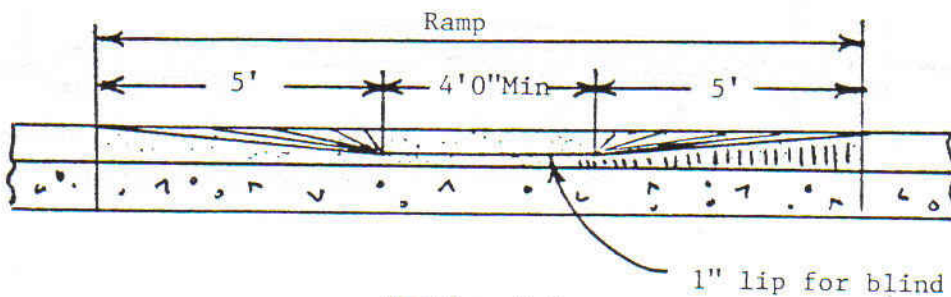


Notes:

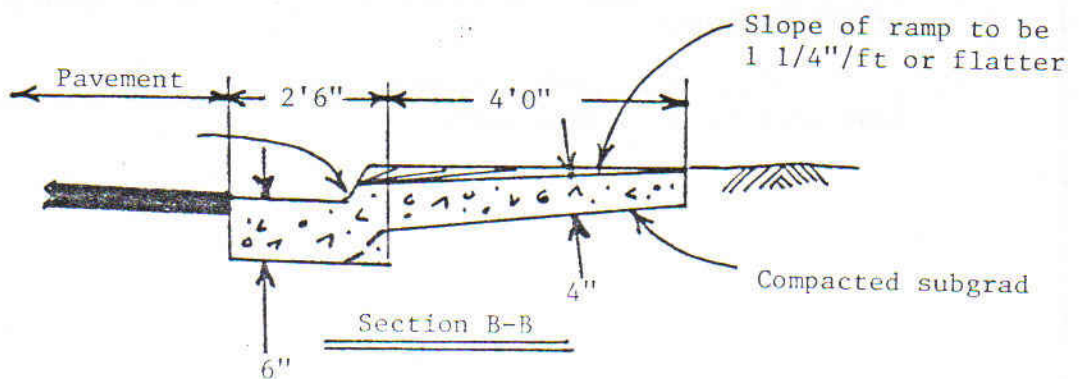
1. Subgrade to be shaped and compaction shall not be less than 95% of AASHTO T-99.
2. Grade "H" crushed surface course aggregate compaction shall not be less than 95% of AASHTO T-99.



Perspective



Section A-A



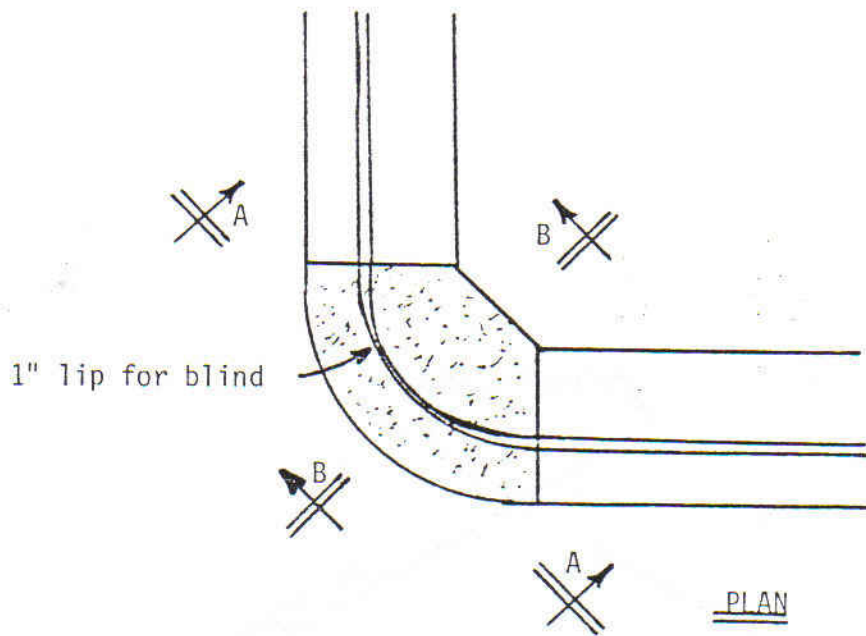
Section B-B

CITY OF LANDER
STANDARD SPECIFICATIONS

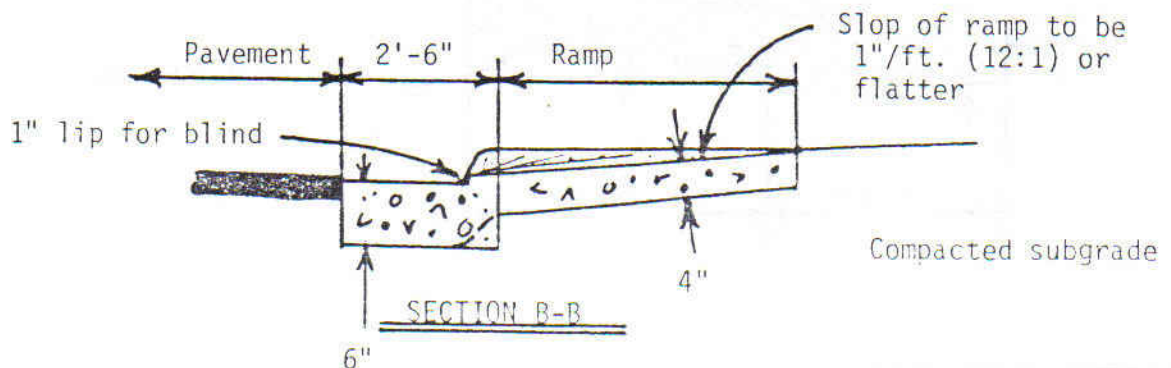
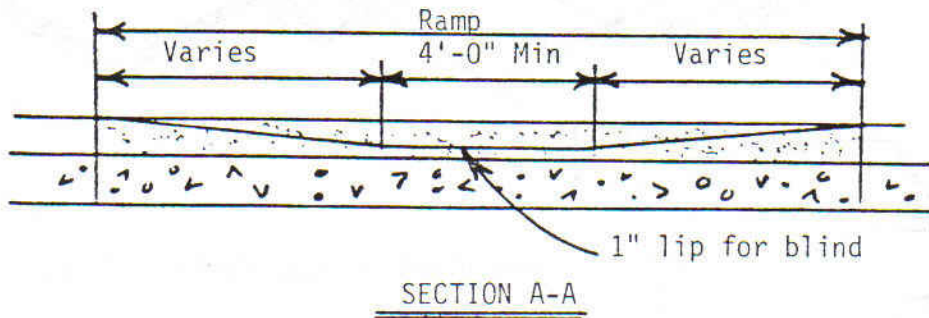
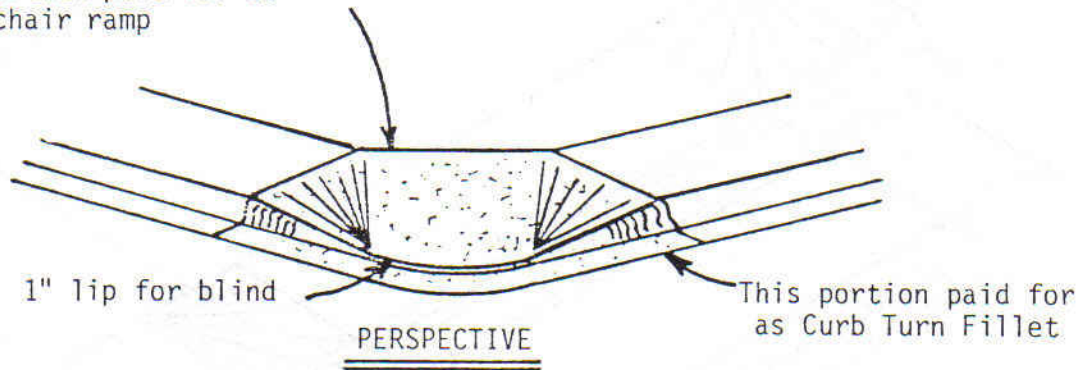
SCALE:
NONE

WHEELCHAIR RAMP
(TYPE "B")

STANDARD
DRAWING
NO. 504.04



This portion paid for as wheelchair ramp



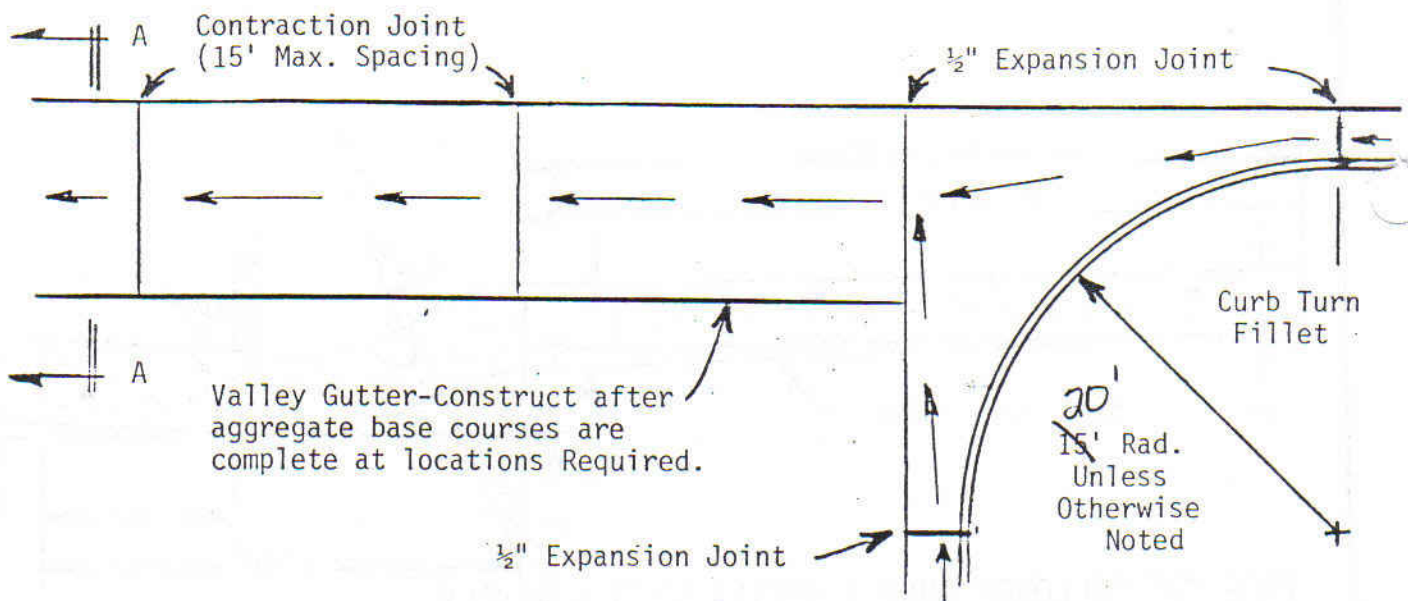
CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE:
NONE

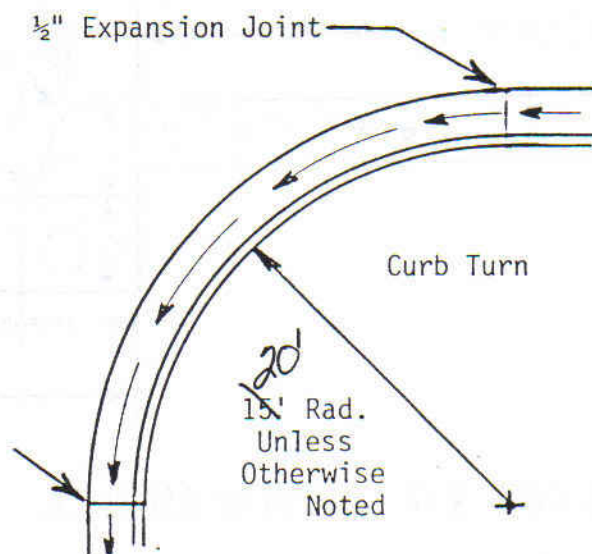
WHEELCHAIR RAMP
(TYPE "A")

STANDARD
DRAWING
NO. 504.03

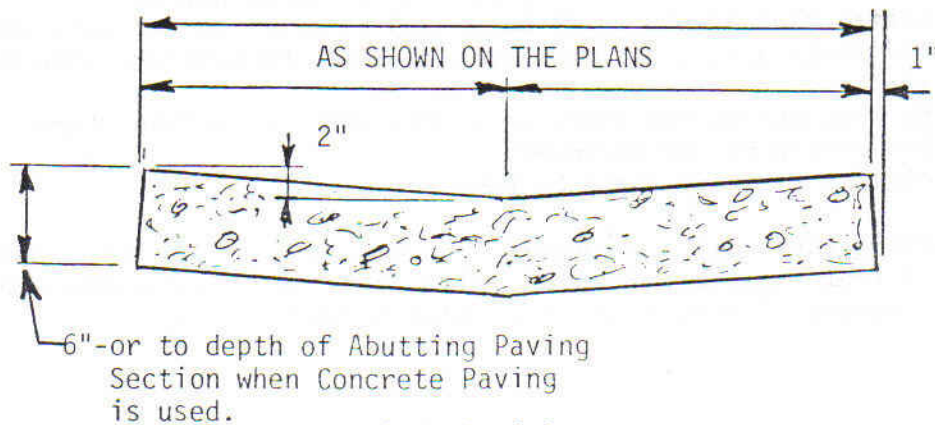




PLAN-WITH FILLET



CURB TURN



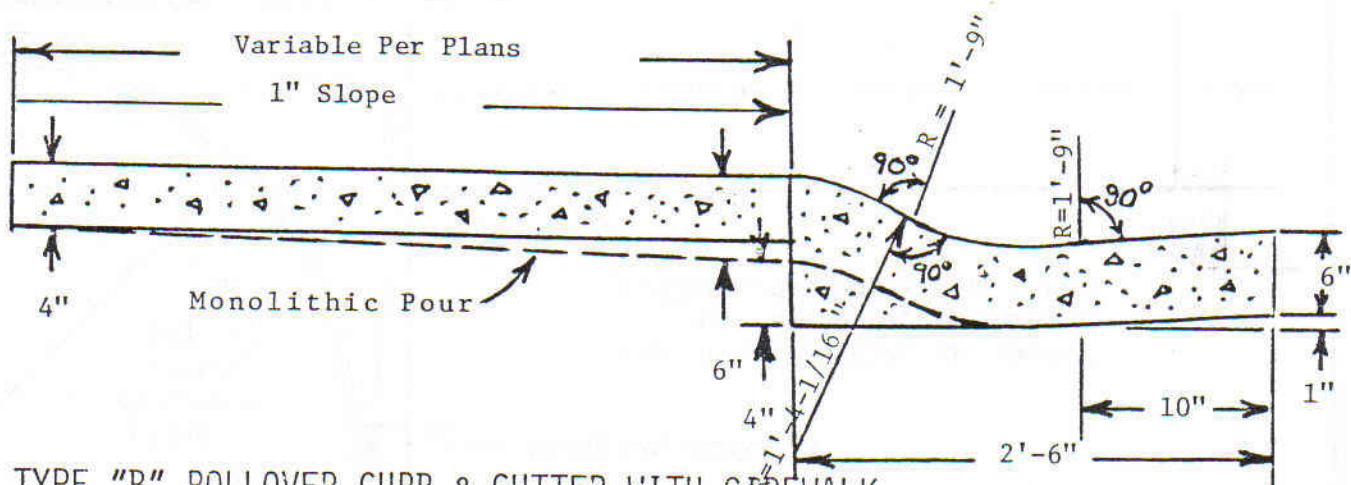
SECTION A-A

CITY OF LANDER
STANDARD SPECIFICATION

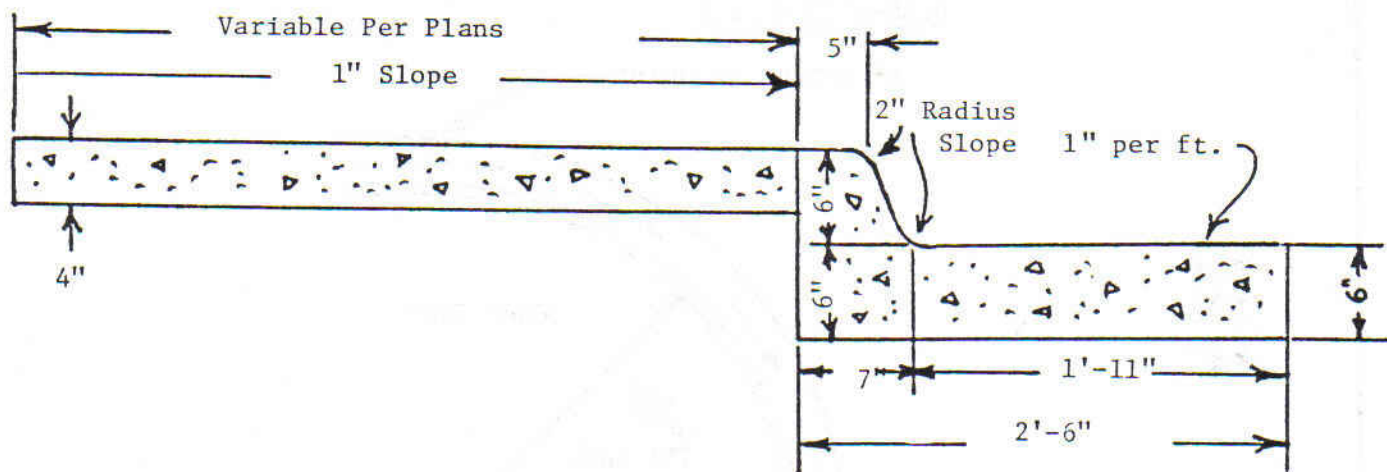
SCALE:
NONE

VALLEY CUTTER &
CURB TURN DETAIL

STANDARD
DRAWING
No. 504-01



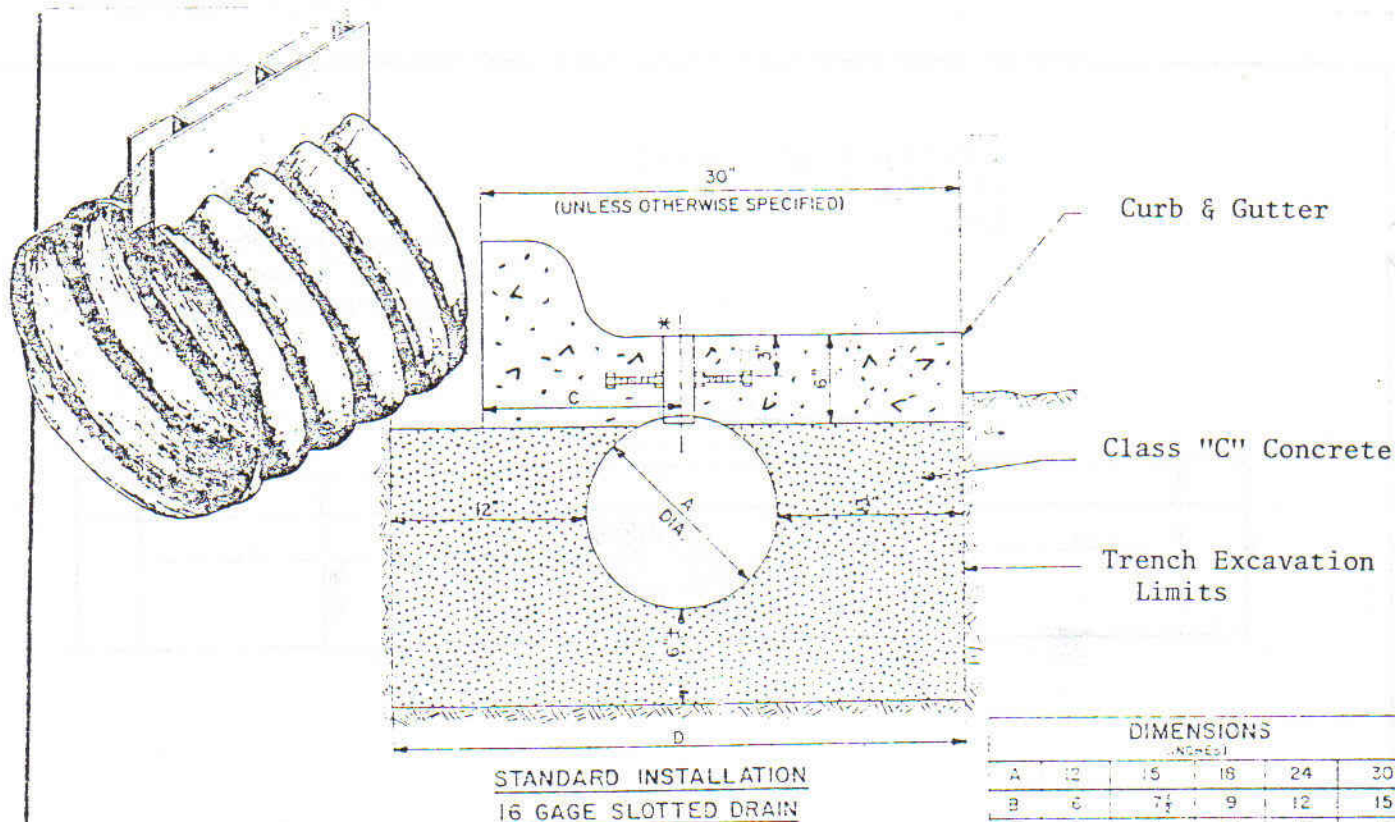
TYPE "B" ROLLOVER CURB & GUTTER WITH SIDEWALK



TYPE "A" TYPICAL CURB & GUTTER WITH SIDEWALK

- NOTE:
1. Subgrade Compaction shall conform to Section 601.04
 2. $\frac{1}{4}$ " expansion joint material shall be placed at immovable structures and at points of curvature for short radius curves
 - 3.* Contraction joints shall be placed at every 10' of curb length and shall have a minimum depth of $\frac{3}{4}$ " and minimum width of $\frac{1}{8}$ ".
 4. No curb and gutter shall be placed with out a final form inspection by the Engineer.
 5. Class A concrete shall be used.

* Contraction joints shall be constructed by sawing or scoring. When scoring, a tool shall be used which will leave corners rounded and destroy aggregate interlock for specified minimum depth.



Notes:

1. A typical length of slotted drain is twenty (20) feet. Installations should be in multiples of ten (10) feet unless situations dictate otherwise.
2. All slotted drain materials and hardware shall be galvanized.
3. Metal end plugs shall be provided for the closed end of each installation. The end plugs shall be the same gage as the pipe.
4. All joints and end plugs shall be watertight.
5. Close riveted soldered annular or continuously welded helical pipe shall be used and shall be watertight. All pipe shall have annular corrugations or rerolled ends.
6. Two gaskets shall be required for each coupling band or joint shall be rendered watertight by methods approved by the Engineer.
7. The slot shall be covered with an acceptable material during paving operation and installation of curb and gutter.
8. Anchors shall be 1/2" \emptyset x 3" galvanized bolts and nuts. The nuts shall be welded in the shop to the slot on two (2) foot centers. The bolts shall be added just prior to installation to prevent damage.
- 9.* Clearance shall be provided between the top of the slot and the top of the gutter section to prevent any direct wheel loading on the slot.
10. A 12" x 18" grated inlet, clean out box shall be located on the lower end of the slotted drain, R-1878-B1 Neenah frame and grate or equivalent to be installed.

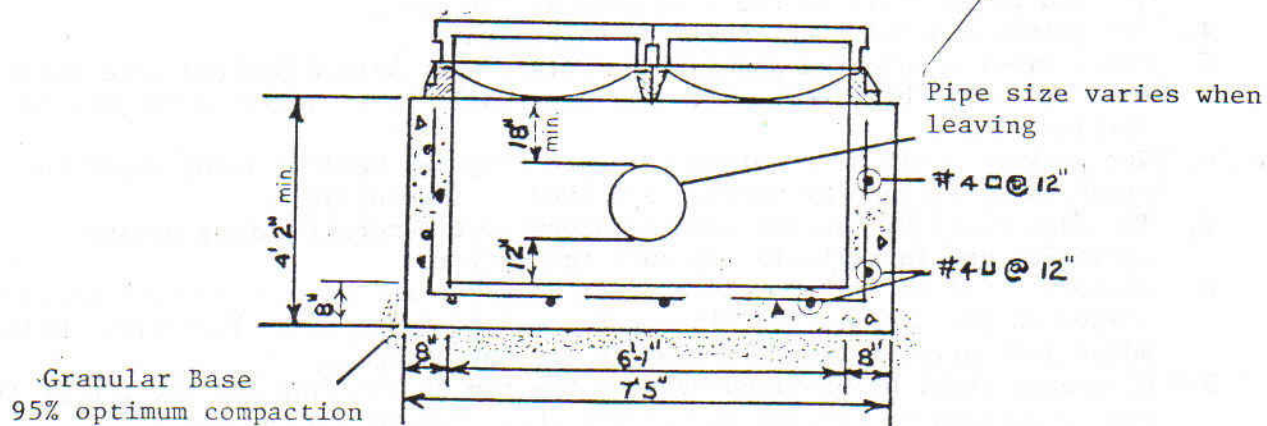
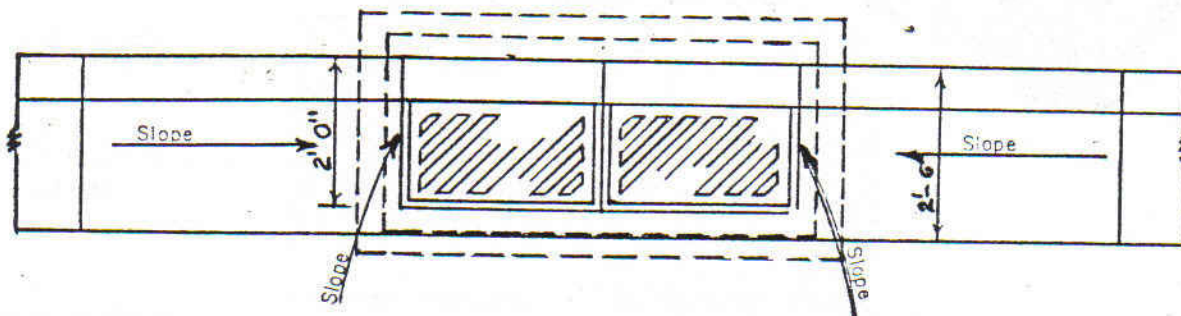
CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE
NONE

STORM DRAIN SLOTTED INLET

STANDARD
DRAWING
NO. 403-03

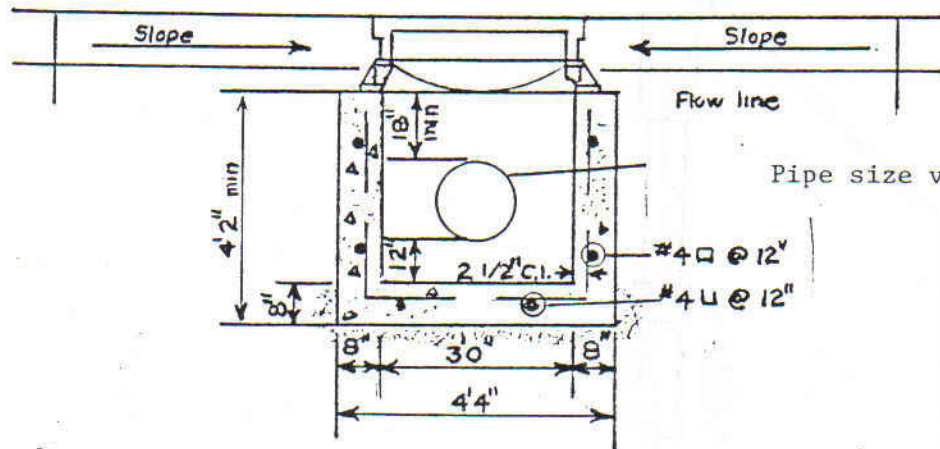
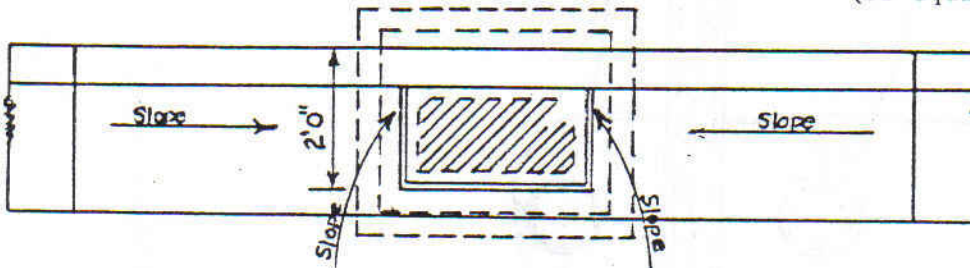
· Neenah R-3296-A curb
inlet, frame, grate, curb box
(or equivalent) grate DR



DOUBLE INLET

CITY OF LANDER STANDARD SPECIFICATIONS	SCALE: NONE	STORM DRAIN DOUBLE INLET	STANDARD DRAWING NO. 403-02
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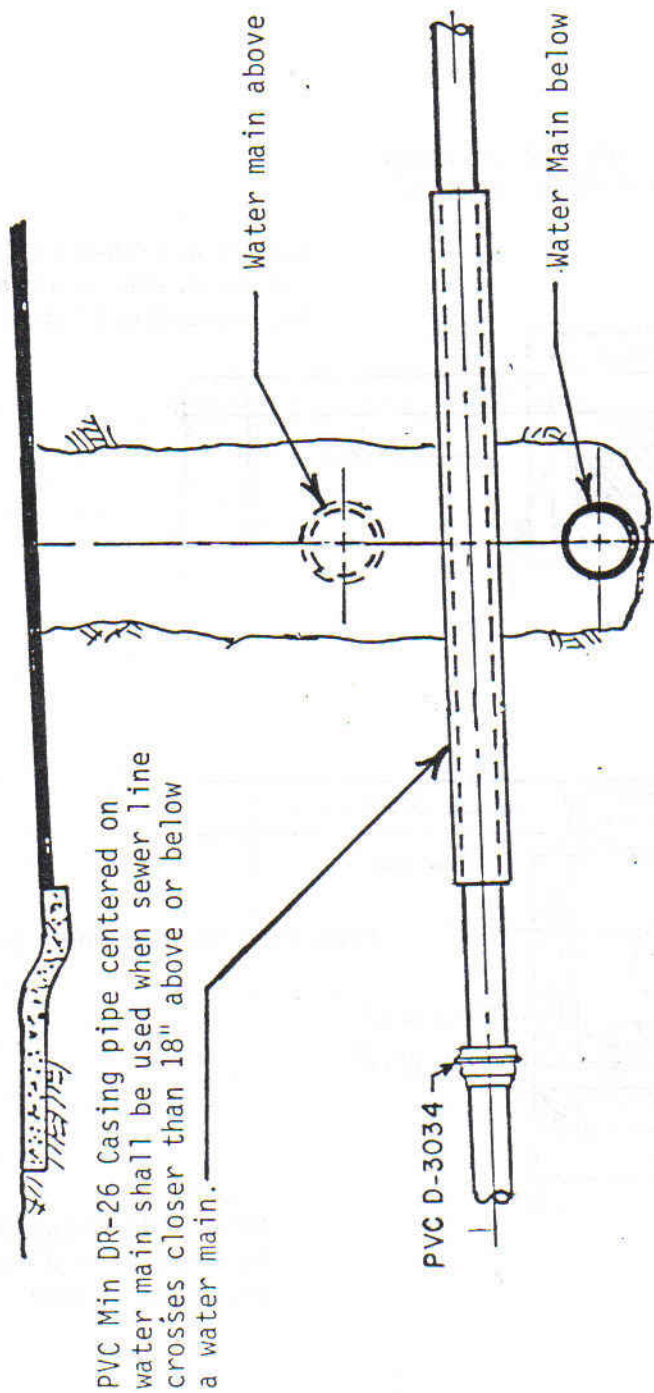
Neenah R-3246-B curb inlet
frame, grate, curb box
(or equivalent) grate DR



Pipe size varies when leaving

Note: 48" Class 3 pipe may be used with 6" top slab for catch basin.

SINGLE INLET



NOTES:

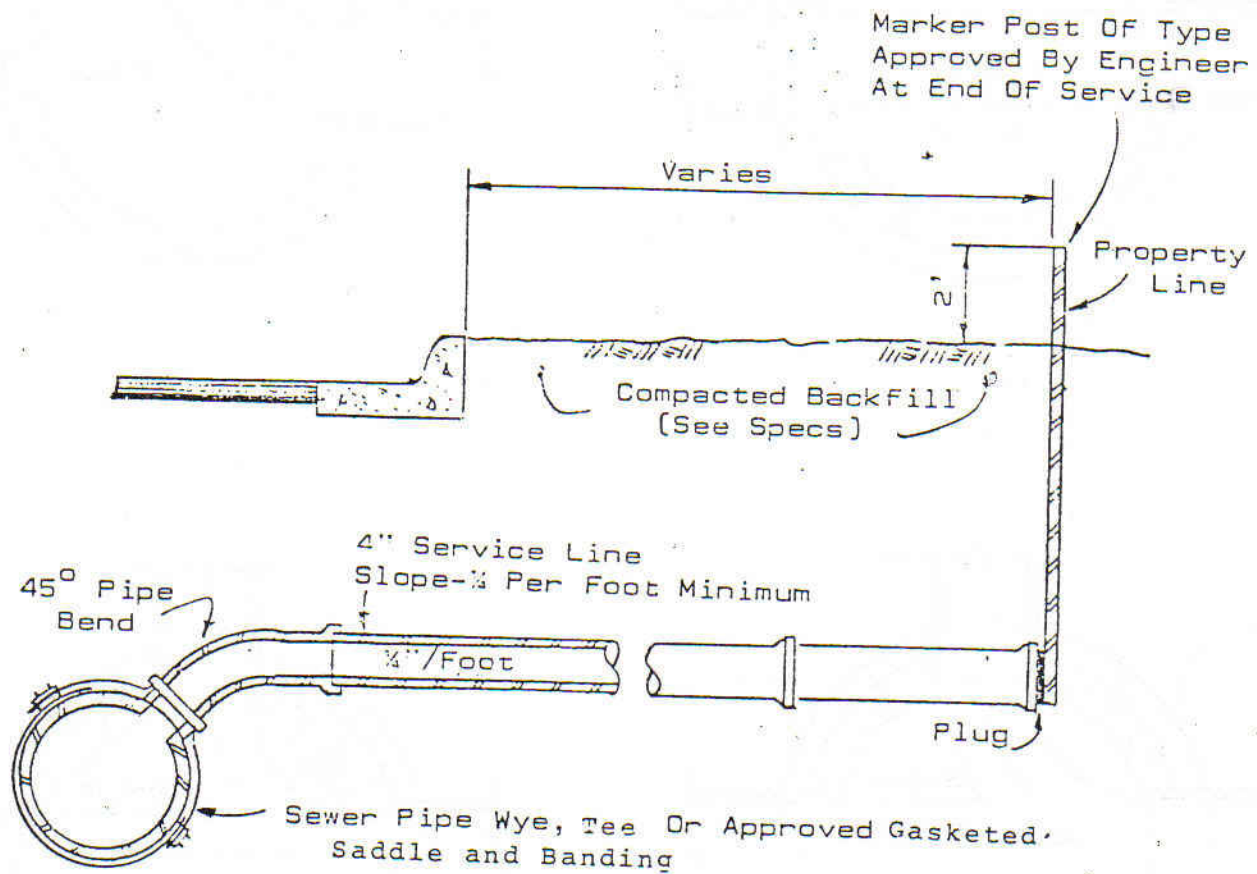
1. The casing pipe shall have a minimum diameter of 1.25 times O.D. of the carrier pipe.
2. Sewer crossings larger than 10 inches shall be designed on an individual basis.

CITY OF LANDER
STANDARD SPECIFICATION

SCALE
NONE

SEPARATION OF SEWER AND WATER
MAIN CROSSINGS

STANDARD
DRAWING
NO. 402-02



NOTE: 1) Sewer service pipe shall be either PVC ASTM D-3034 (SDR-35).

2) Sewer service lines shall be installed where shown on the drawings or as specified.

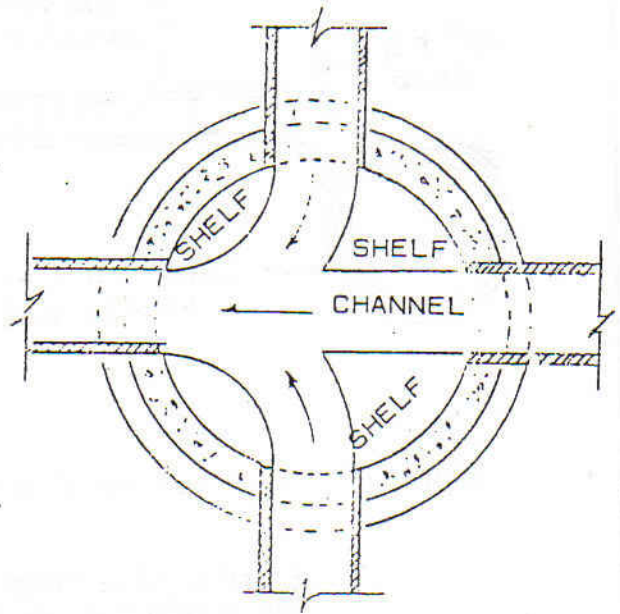
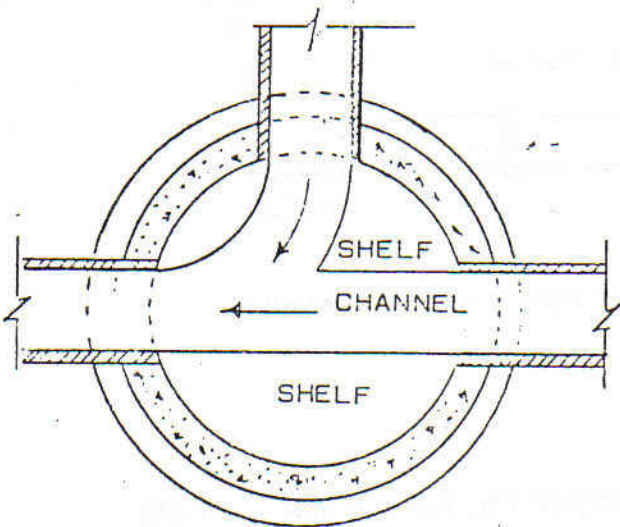
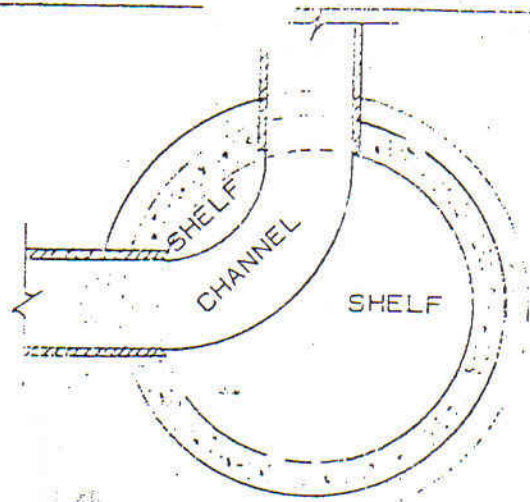
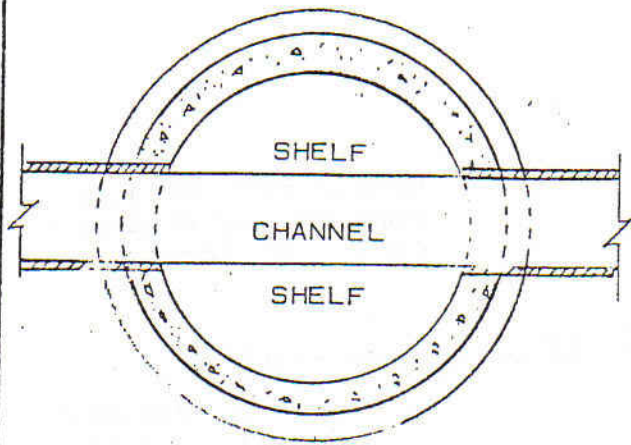
3) Bedding shall be either a well graded sand, sand gravel mixture or gravel to a point 12 inches above the top of the pipe.

CITY OF LANDER
STANDARD SPECIFICATIONS

Scale:
None

SANITARY SEWER
SERVICE LINE

Standard
Drawing
No. 402-01



NOTE:

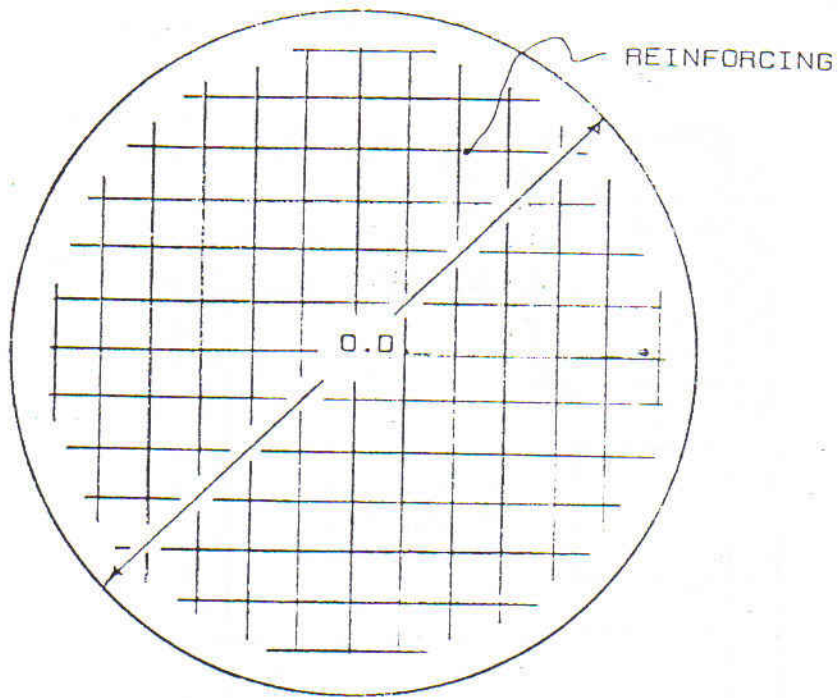
1. SLOPE ALL SHELVES TO CHANNEL AT 1" PER FOOT.
2. SEE PLAN-PROFILE SHEETS FOR SLOPE OF CHANNEL.

CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE:
NONE

TYPICAL MANHOLE
CHANNEL DETAILS

Standard
Drawing
No. 401-04



SIZE	O.D.	REIN.	WT.
48"	64"	#4 @ 8" Each Way	1675#
54"	71"	#4 @ 8" Each Way	4125#
60"	78"	#4 @ 8" Each Way	4975#
72"	92"	#4 @ 6" Each Way	6925#

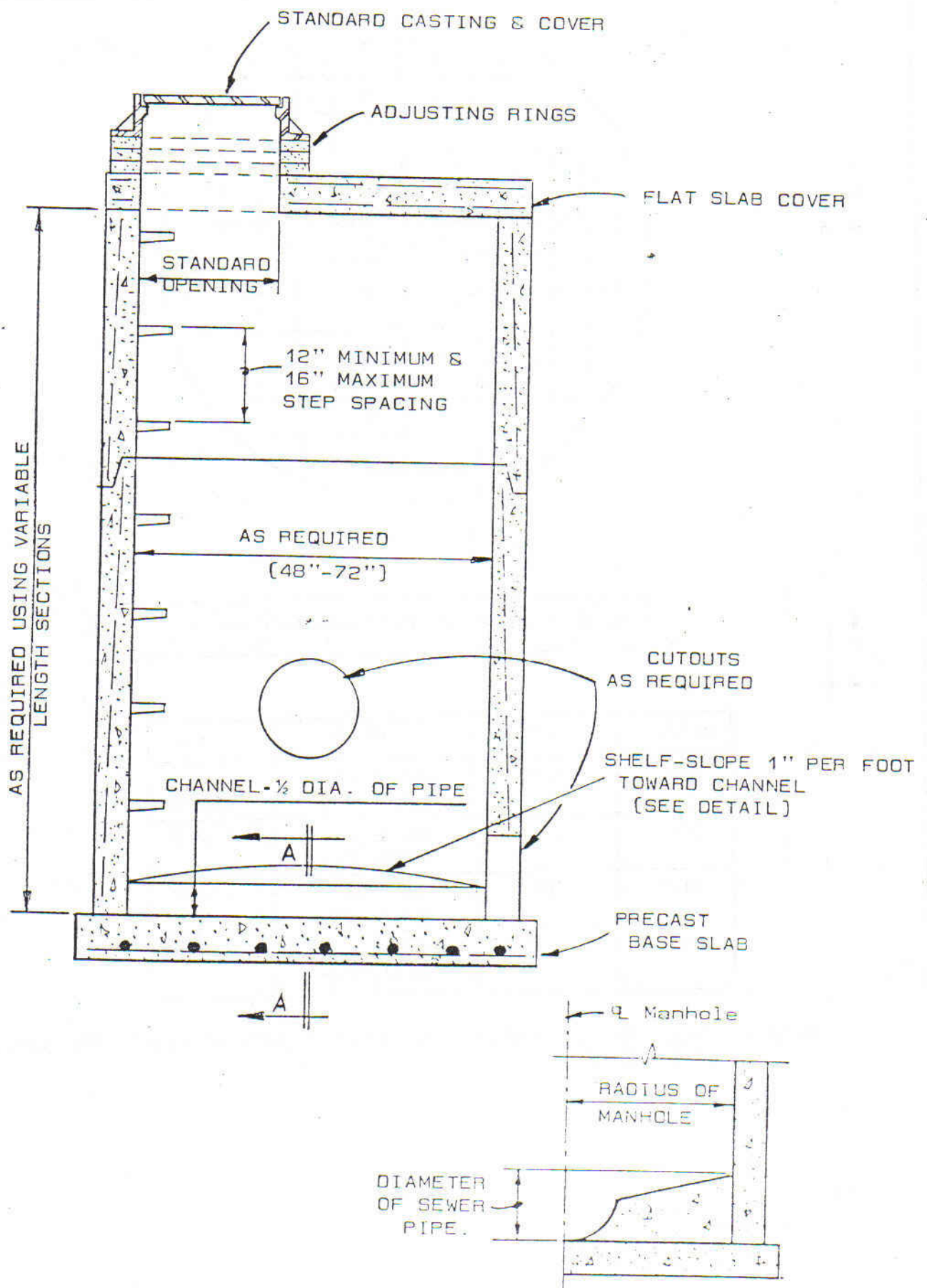
NOTE: BASES MAY BE PRECAST AS SQUARE UNIT WITH WRITTEN APPROVAL OF ENGINEER.

CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE:
NONE

PRECAST MANHOLE BASES
48", 54", 60", 72"

Standard
Drawing
No. 401-03



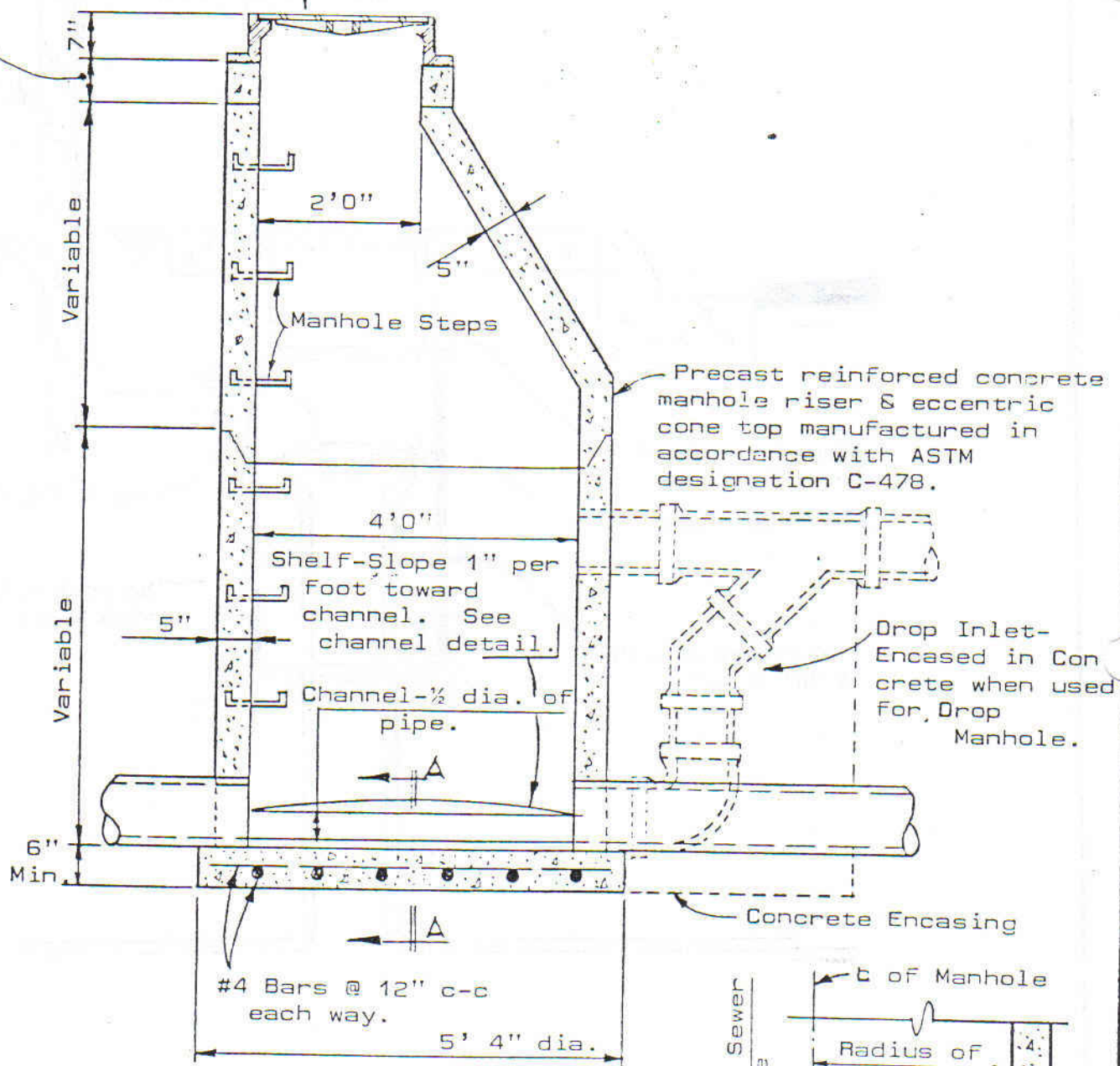
CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE:
NONE

SANITARY SEWER MANHOLE
STANDARD STRAIGHT MANHOLE
ASTM C-478

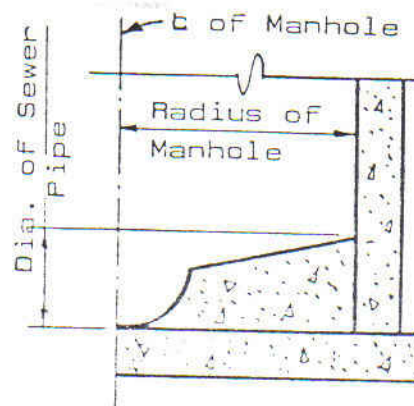
Standard
Drawing
No. 401-02

Standard Casting: Manhole Ring & Cover
with Solid Cover or Equal. Ring & Cover
shall be adjusted to Crown & Grade of street.

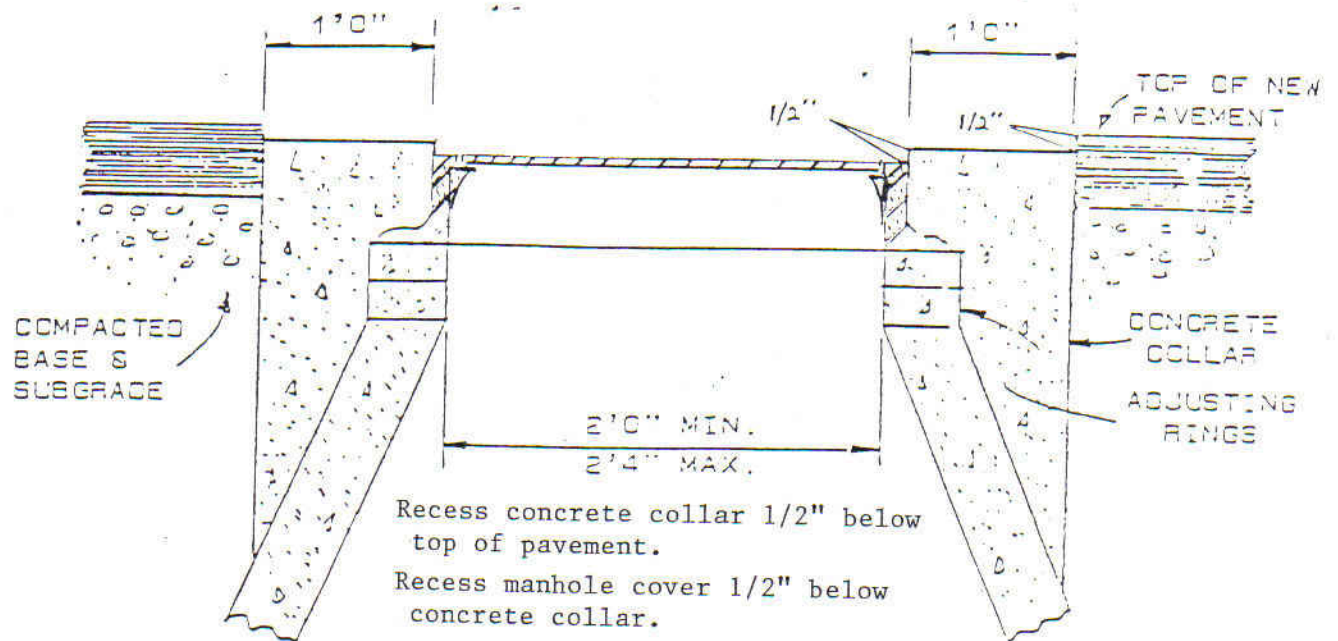
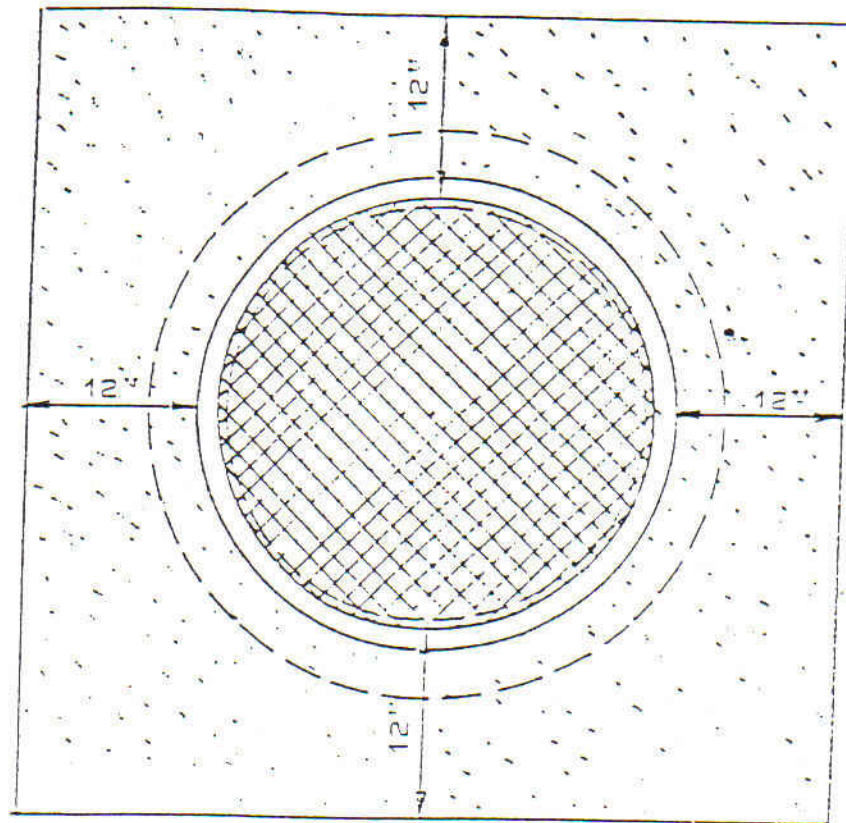


NOTE: 1) All joints between manhole sections, manhole ring & top section, & around sewer pipe into manhole shall be water-tight. Jointing material shall be "Ram-Nek" or equal.

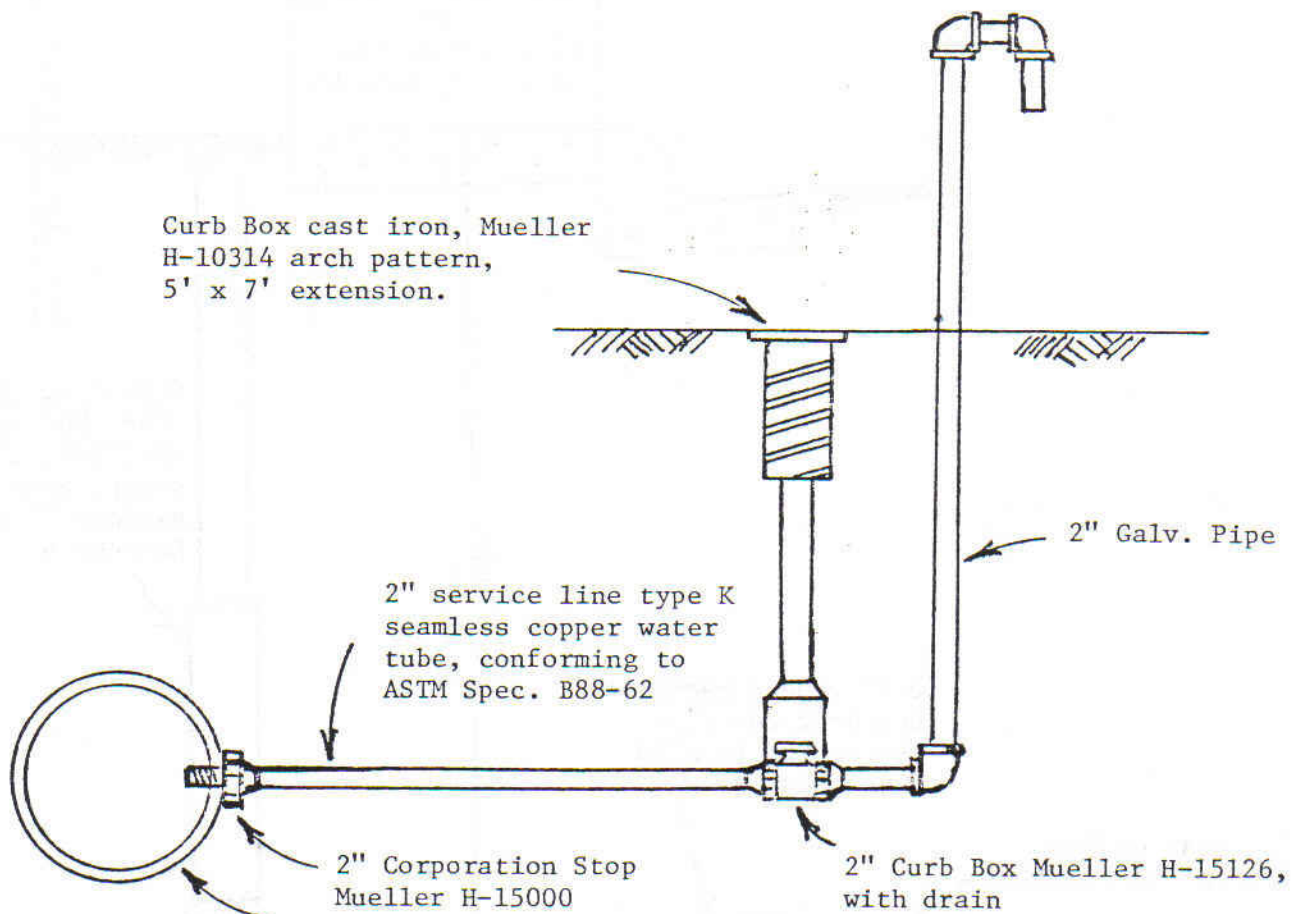
2) All steps shall be a minimum of 12" & a maximum of 16" spacing.



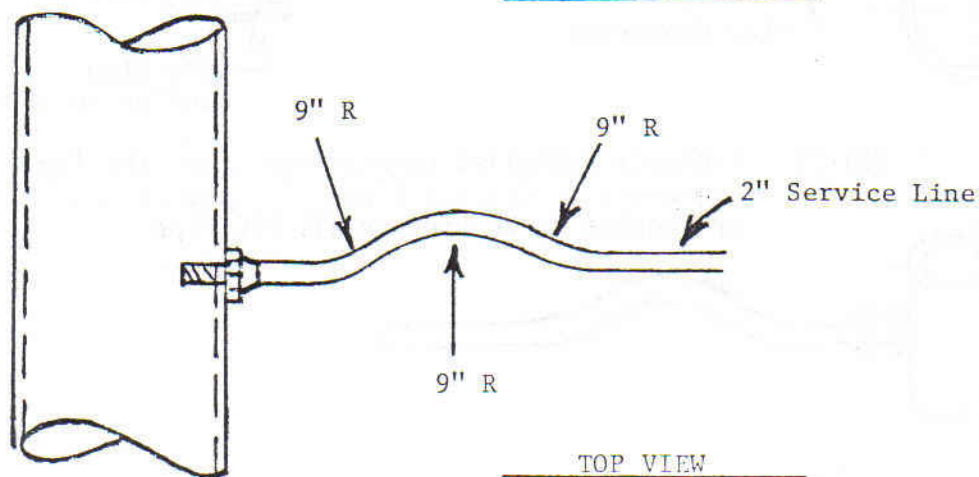
SECTION A-A



NOTE: Adjust manholes upward with brick & mortar or adjusting rings under frame. Adjust manhole downward by removing a portion of the manhole riser and rebuilding to proper diameter. Slope manhole ring as required to match longitudinal & transverse grade on street. Final manhole adjustment will be made after paving and before seal coating. No payment shall be made for adjustment of new manholes to final grade.

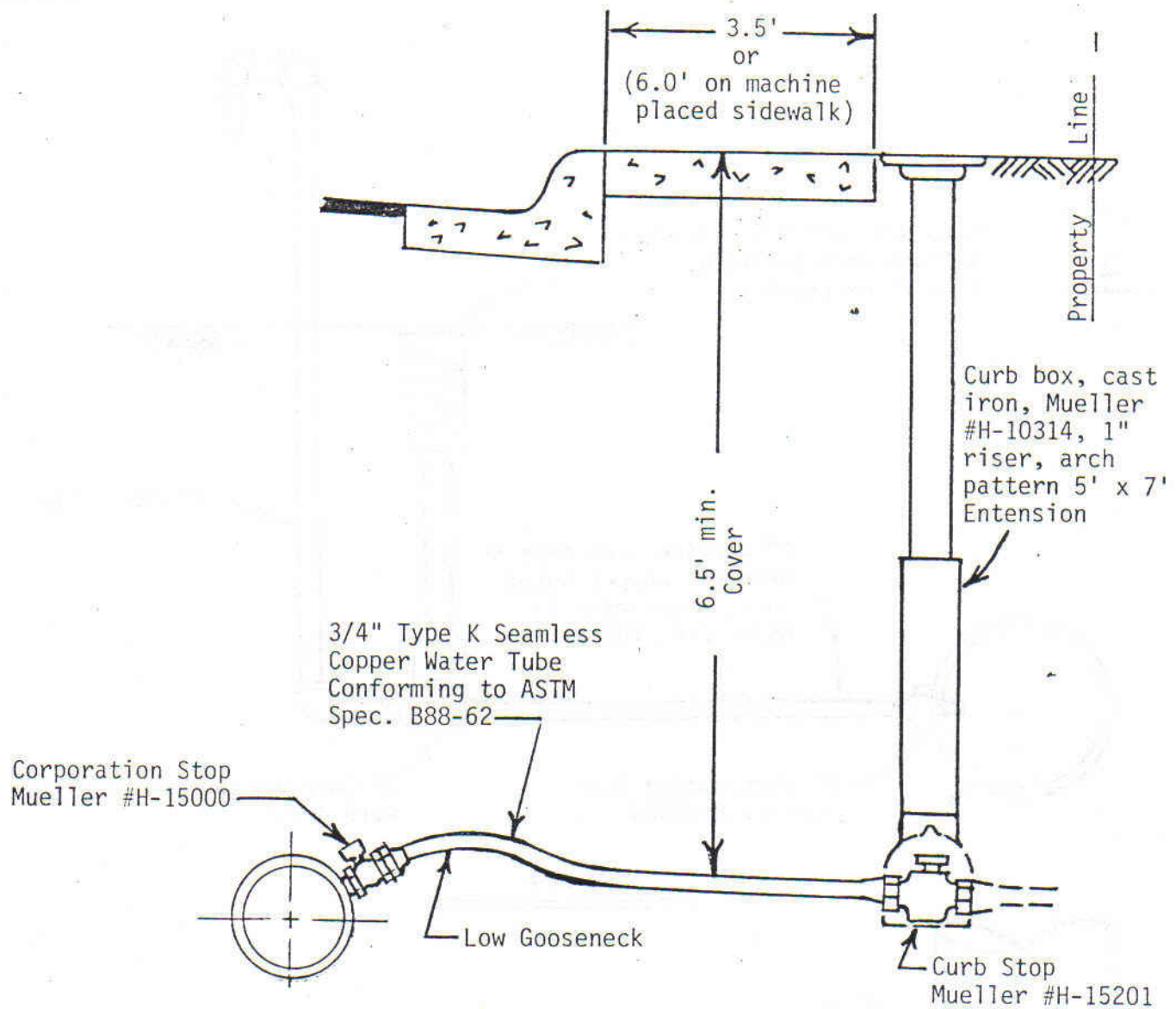


SIDE VIEW

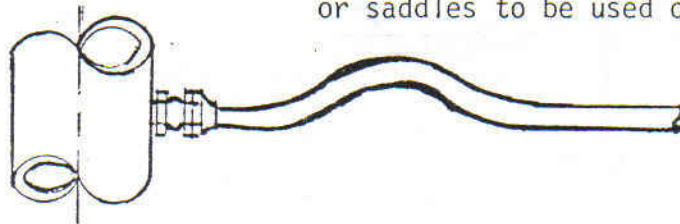


TOP VIEW

- NOTE: 1. PVC mains and DI mains 8" or less in diameter --- use corporation saddle.
2. DI mains 10" or greater --- may be tapped directly.



DETAIL - Properly installed Corporation Stop, showing
gooseneck in Service Pipe. Service clamps
or saddles to be used on all PVC Pipe.



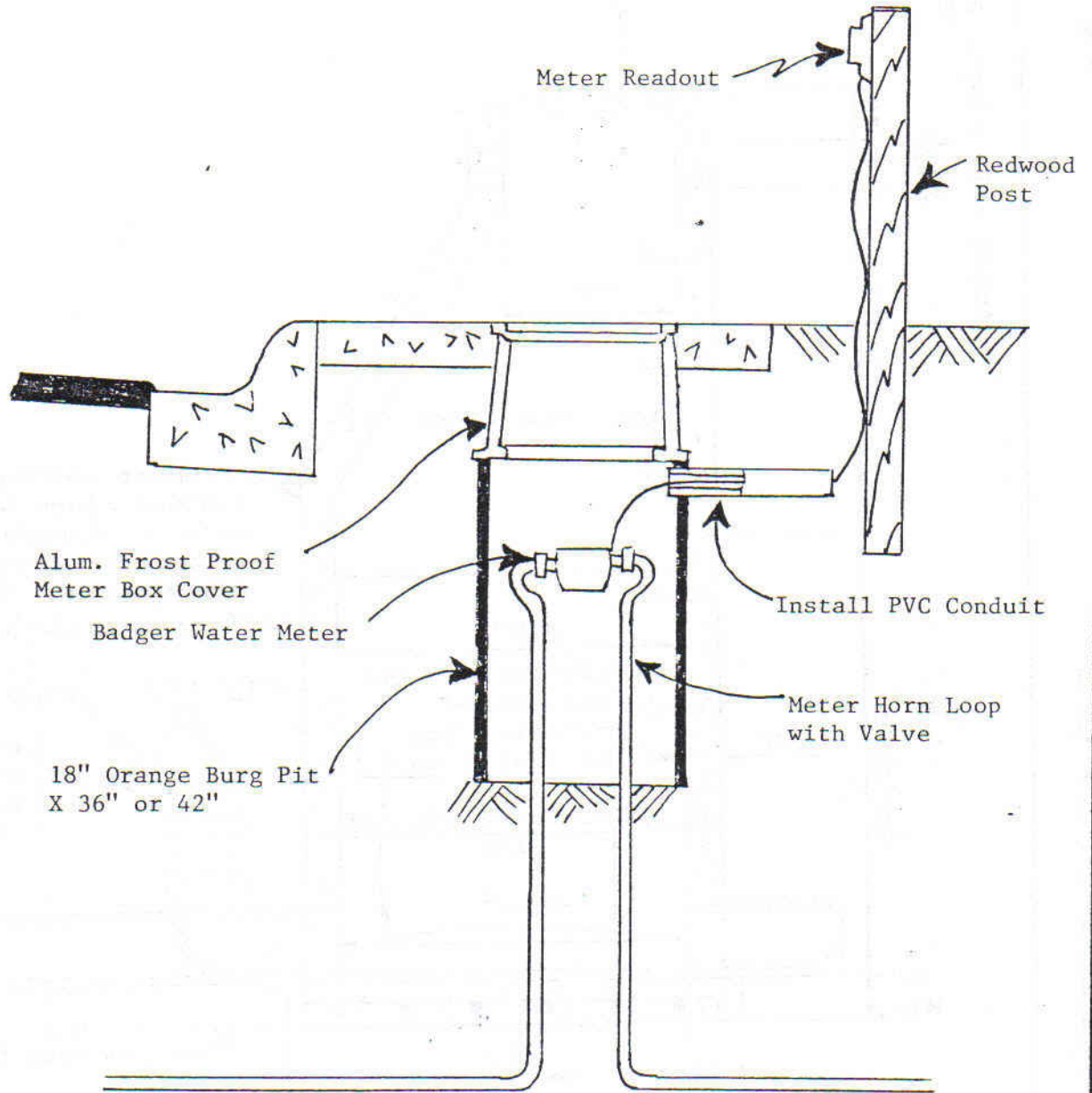
- NOTE: 1) Water Service lines shall have a minimum cover of 6.5 feet measured from the existing ground surface.
- 2) Water service lines shall be installed where shown on the drawings or as specified.
- 3) Bedding shall be 1½" dia. maximum within 12" of service pipe.

CITY OF LANDER
STANDARD SPECIFICATION

SCALE:
NONE

WATER SERVICE LINE

STANDARD
DRAWING
No. 303-01

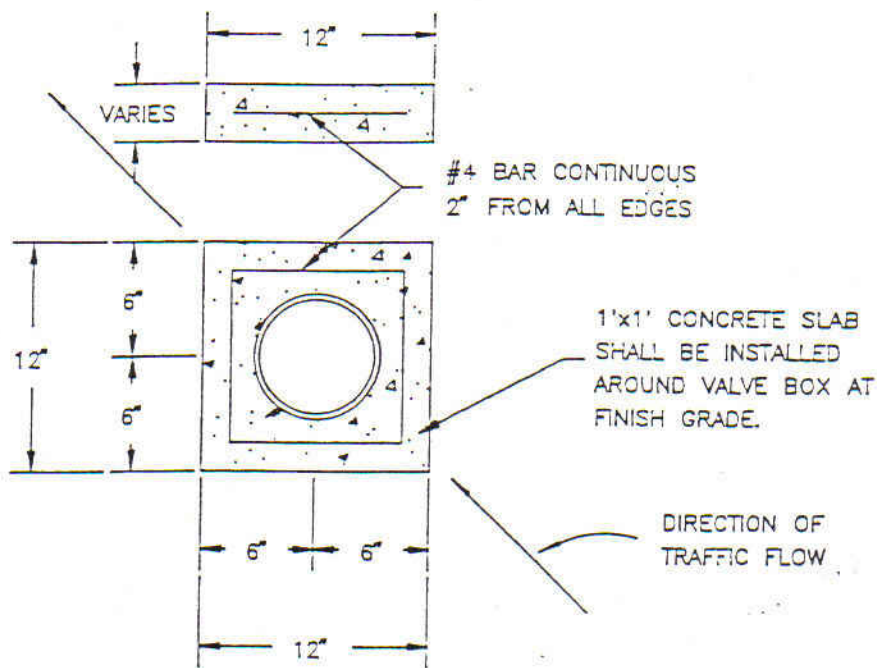


CITY OF LANDER
STANDARD SPECIFICATIONS

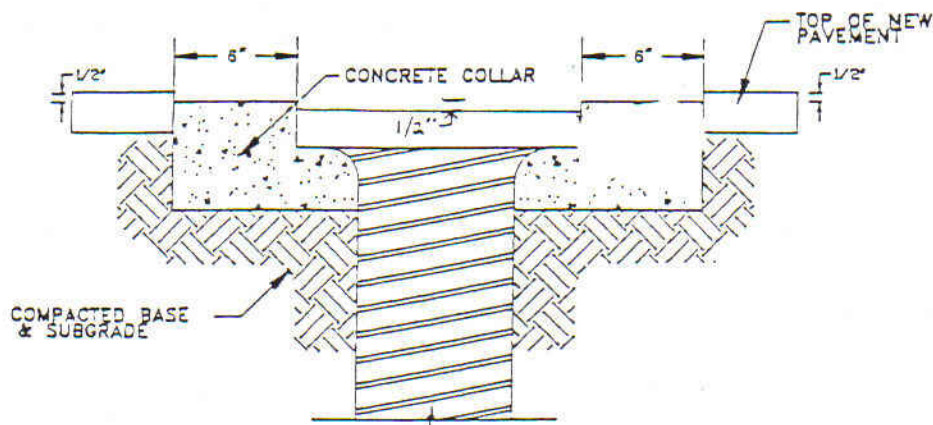
SCALE:
NONE

WATER METER VAULT

Standard
Drawing
NO. 303.03



WATER VALVE COVER

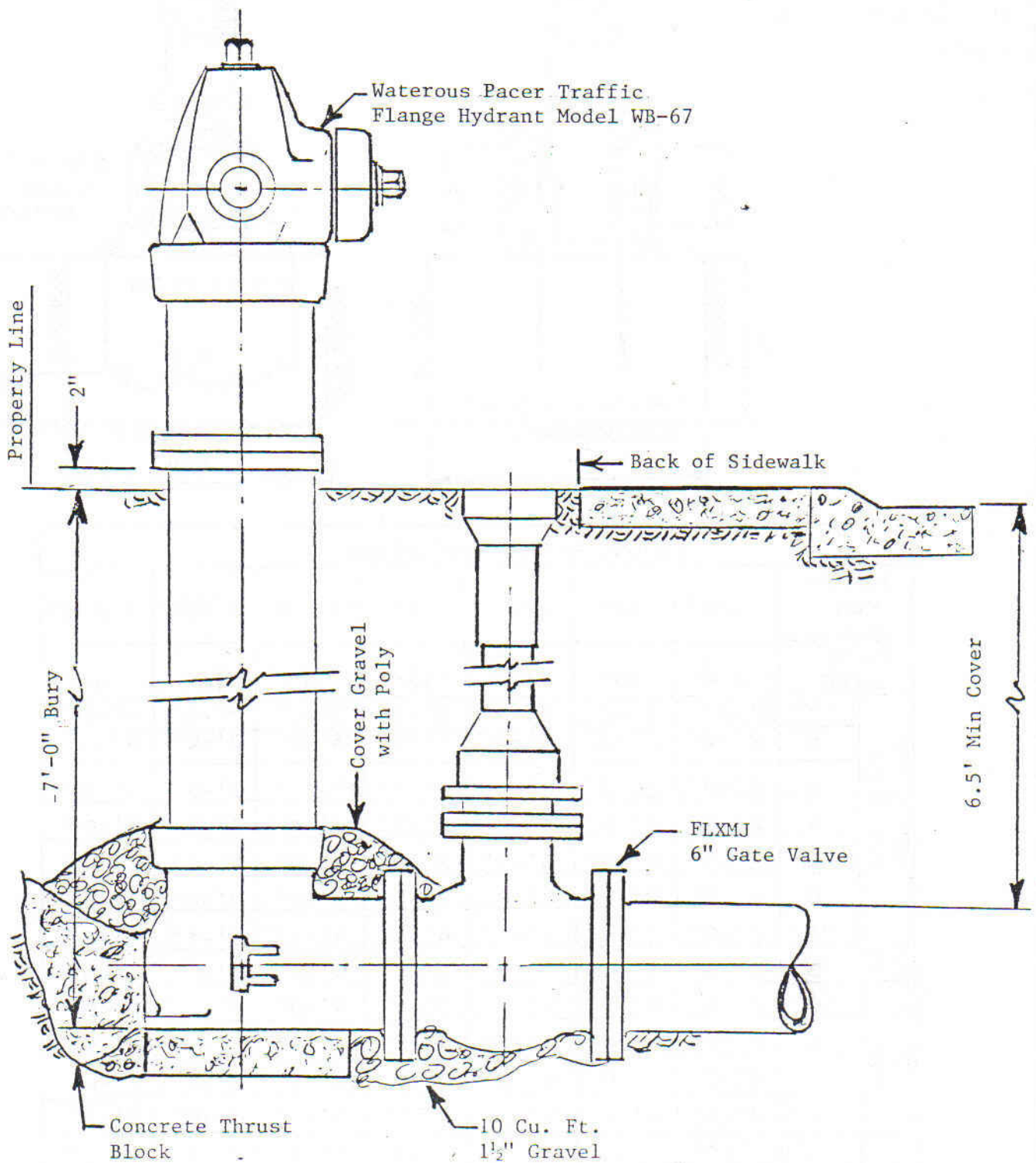


WATER VALVE ADJUSTMENT

NOTE: 1) ADJUST WATER VALVES UPWARD OR DOWNWARD AS REQUIRED.
FINAL ADJUSTMENT SHALL BE MADE AFTER PAVING AND
BEFORE SEAL COATING. NO PAYMENT SHALL BE MADE FOR
ADJUSTMENT OF NEW VALVES TO FINAL GRADE.

2) * WHEN CONCRETE COLLAR IS POURED ABUTTING CONCRETE
PAVEMENT, DEPTH SHOULD EQUAL THAT OF PAVEMENT SECTION.

3) Recess concrete collar 1/2" below top of pavement
Recess water valve cover 1/2" below concrete collar



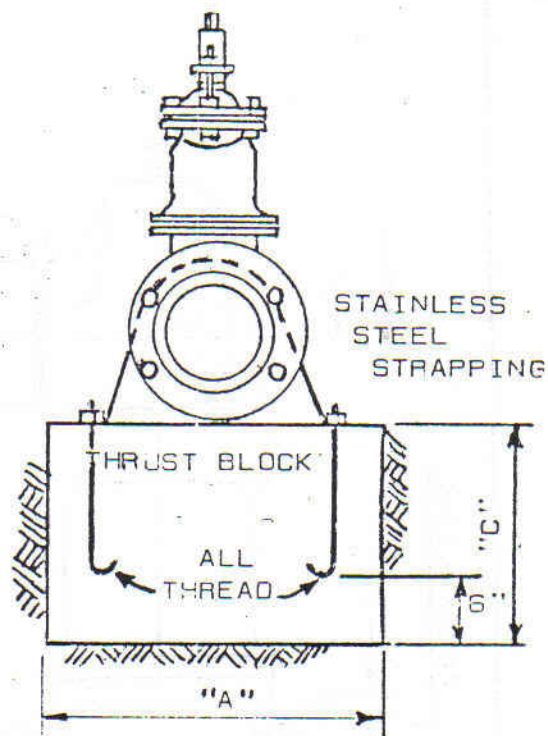
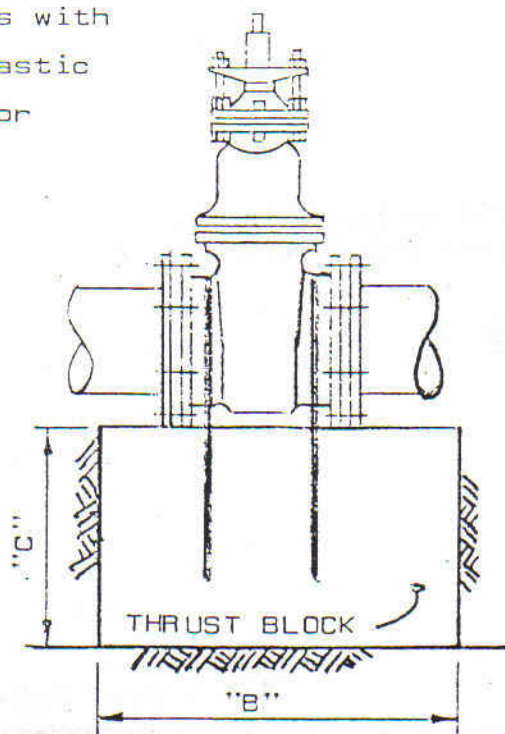
CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE:
NONE

FIRE HYDRANT SETTING DETAIL-
VALVE BEHIND CURB OR SIDEWALK

STANDARD
DRAWING
No. 302-02

NOTE: Coat rods with
"Koppers" Bitumastic
No. 50 coating or
equal.



THRUST BLOCK DIMENSIONS								
ANCHOR ROD SIZE	3/4"	3/4"	3/4"	1"	1 1/8"	1 1/4"	1 3/8"	
VALVE SIZE	6' & 8"	10"	12"	14"	15"	18"	24"	
100 PSI	"A"	2'-0"	2'-0"	2'-3"	2'-3"	3'-0"	3'-8"	4'-4"
	"B"	2'-0"	2'-0"	2'-0"	2'-0"	3'-0"	3'-0"	4'-0"
	"C"	2'-0"	2'-0"	2'-9"	2'-4"	2'-11"	3'-0"	4'-0"
150 PSI	"A"	2'-0"	2'-6"	3'-0"	3'-5"	4'-4"	5'-5"	6'-5"
	"B"	2'-0"	2'-6"	3'-0"	3'-0"	3'-0"	3'-0"	4'-0"
	"C"	2'-0"	2'-0"	2'-8"	3'-0"	3'-0"	3'-0"	4'-0"
200 PSI	"A"	2'-0"	2'-9"	3'-5"	4'-6"	4'-1"	5'-1"	6'-6"
	"B"	2'-0"	2'-6"	3'-0"	3'-0"	4'-0"	4'-0"	5'-0"
	"C"	2'-0"	2'-6"	3'-0"	3'-0"	4'-0"	4'-0"	5'-0"
250 PSI	"A"	2'-0"	3'-0"	4'-3"	4'-0"	5'-1"	6'-4"	6'-5"
	"B"	2'-0"	3'-0"	3'-0"	4'-0"	4'-0"	4'-0"	6'-0"
	"C"	2'-0"	3'-0"	3'-0"	4'-0"	4'-0"	4'-0"	6'-0"
300 PSI	"A"	2'-0"	3'-7"	5'-1"	4'-9"	6'-1"	5'-9"	7'-8"
	"B"	2'-0"	3'-0"	3'-0"	4'-0"	4'-0"	5'-0"	6'-0"
	"C"	2'-7"	3'-0"	3'-0"	4'-0"	4'-0"	5'-0"	6'-0"

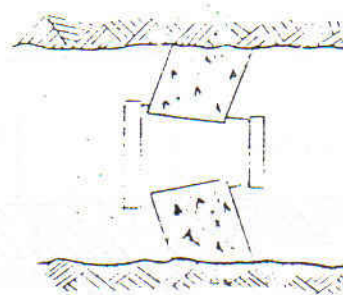
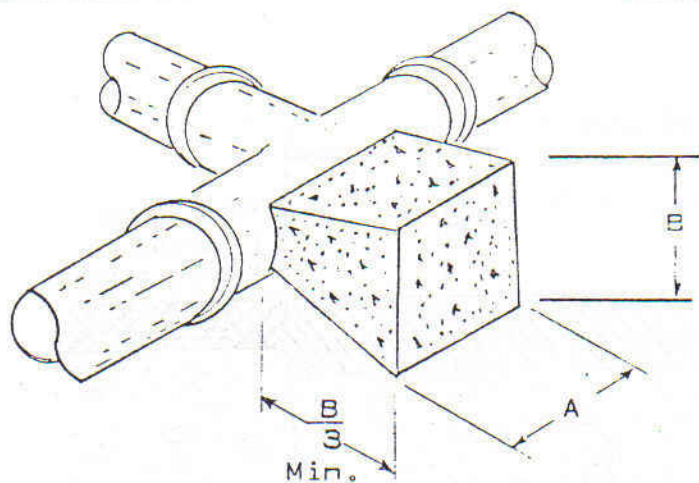
NOTE: 1) Pressures shown above are maximum working pressure in system.
2) To be installed as called for and at locations as shown on plans.

CITY OF LANDER
STANDARD SPECIFICATIONS

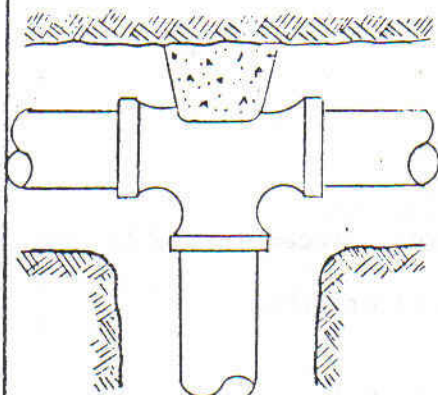
Scale:
None.

THRUST BLOCKING FOR
WATER MAIN VALVES

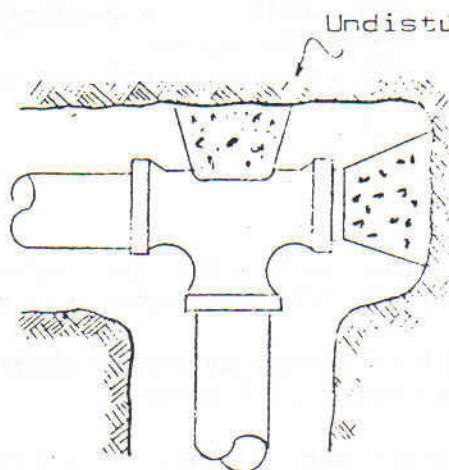
Standard
Drawing
No. 302-01



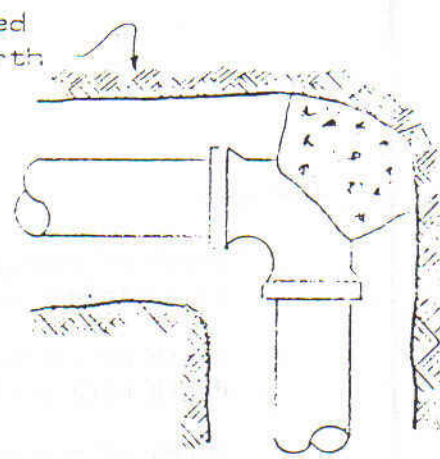
REDUCER



TEE



TEE (Plugged)



BEND

DIMENSION FOR THRUST BLOCKING

FIT- TING SIZES	TEES & PLUGS		90° BEND		45° BEND & WYES		REDUCERS, 11 1/2° & 22 1/2° BENDS	
	A	B	A	B	A	B	A	B
4"	1'-7"	1'-2"	1'-9"	1'-6"	1'-8"	0'-10"	1'-7"	0'-6"
6"	2'-0"	1'-11"	2'-5"	2'-2"	1'-10"	1'-7"	1'-9"	0'-10"
8"	2'-8"	2'-6"	3'-2"	3'-0"	2'-5"	2'-1"	1'-9"	1'-6"
10"	3'-4"	3'-3"	4'-0"	3'-10"	3'-0"	2'-9"	2'-2"	1'-11"
12"	4'-0"	3'-10"	4'-8"	4'-8"	3'-8"	3'-3"	2'-7"	2'-3"
14"	5'-5"	3'-10"	6'-6"	4'-11"	4'-9"	3'-5"	3'-5"	2'-5"

NOTE: This table is based on 150 PSI Main Pressure
2000 PSF Soil Bearing Pressure

Wrap all Fittings with polyethylene.

CITY OF LANDER
STANDARD SPECIFICATIONS

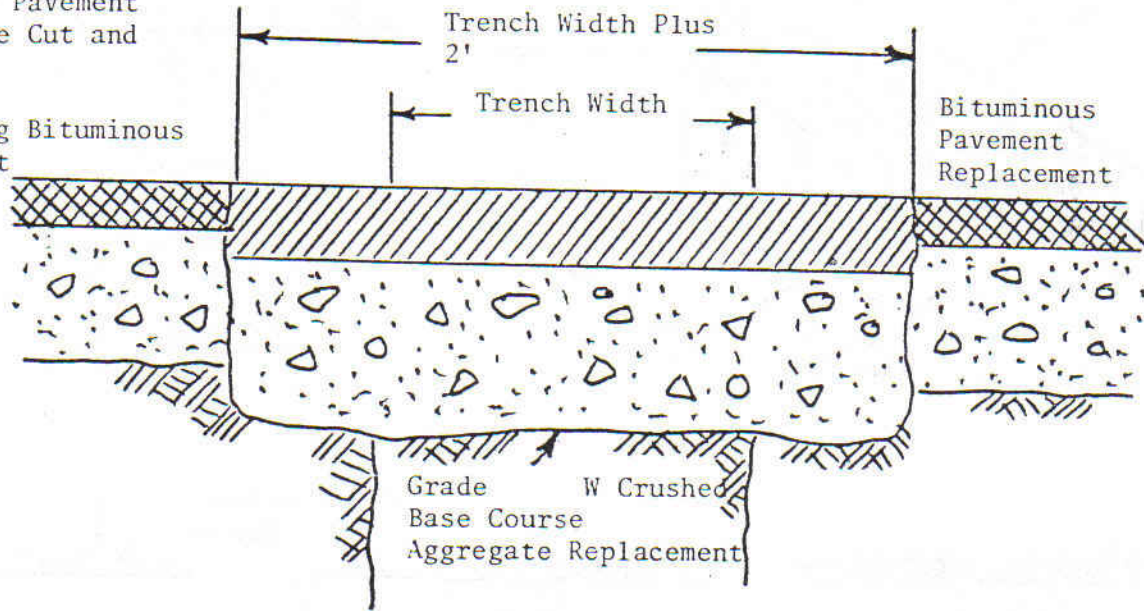
Scale:
None

THRUST BLOCKING FOR
WATER MAIN FITTINGS

Standard
Drawing
NO: 301-01

Edge of Pavement
Shall be Cut and
Tacked

Existing Bituminous
Pavement



Bituminous
Pavement
Replacement

Grade W Crushed
Base Course
Aggregate Replacement

Notes:

1. Depth of pavement replacement shall equal original depth or a minimum depth of 3 inches, whichever is greater, placed in two layers.
2. Depth of untreated base course aggregate shall equal original depth with a minimum depth of 6 inches.
3. Edges of pavement and concrete shall be tacked with SS-1 emulsion or approved equal.
4. Grade W crushed base course aggregate compaction shall not be less than 95% or AASHTO T-99.
5. Bituminous pavement shall be compacted to not less than 95% of maximum lab. density.
6. When hot mix pavement is not available, cold mix pavement may be used, but shall have a minimum depth of four inches (4"), placed in two equal layers.
7. Temporary cold mix patches shall be two inches (2") thick.

CITY OF LANDER
STANDARD SPECIFICATIONS

SCALE
NONE

PAVEMENT REPLACEMENT DETAIL

STANDARD
DRAWING
NO. 201-02