

**TYPICAL HALF SECTION**

**Density References:**

The following criteria shall apply to the compaction of materials:

<u>Material</u>	<u>Compaction</u>	<u>Reference</u>
HMA - Hot-Mixed Asphalt	95%	Page 100.00
AB - Aggregate Base (structural section)	95%	Page 100.00
AB - Aggregate Base (under sidewalk)	90%	Page 100.00
AS - Aggregate Subbase / Subgrade	90%-95%	Page 100.00
Fills/Embankments	90%	Page 700.00
Utility Trench Bedding	95%	Page 610.10
Utility Trench Backfill (AB)	90%	Page 610.10
Joint Trench	90%-95%	Page 620.00
Irrigation Trench Backfill (Native)	90%	Page 710.00

Compaction testing shall be performed by a certified materials testing laboratory. All testing methods shall conform to Caltrans California Test (CT) methods or approved nationally recognized standards (i.e. AASHTO, ASTM, etc.).

Jetting is not permitted.

**Minimum Testing Frequency**

Unless otherwise approved by the City Engineer, testing shall be performed by a certified materials testing laboratory and shall be reported to the City prior to any subsequent layer of material being placed.

Utility and Joint Trenches - One (1) test for every 500 feet of trench length and for every three (3) foot of trench depth with a minimum of three (3) tests per project.

Subgrade & Aggregate Base - One (1) test for every 300 feet of street length with a minimum of three (3) tests per project.

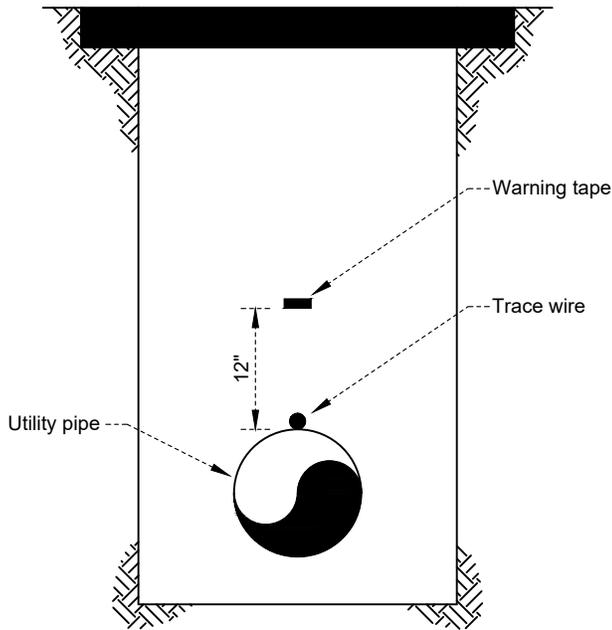
HMA Paving - One (1) test for every 200 feet of pavement with a minimum of ten (10) tests per project.

Retesting - Any tested area failing to meet the specified compaction requirement shall be reworked and/or re-compacted until a minimum of two (2) passing tests are achieved.

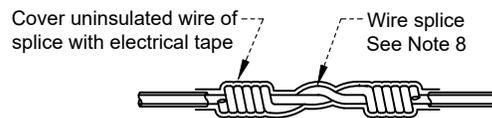
The above testing frequencies may be altered upon the recommendation of the project Geotechnical Engineer with the approval of the City Engineer.

The requirements for maximum density-optimum moisture relationships for all other fills (as specified in the Municipal Code) shall apply to those fills placed on private properties outside of street rights-of-way.

				<b>CITY OF SHASTA LAKE</b>		Approved:  Date: 09-30-2023	
				Public Works Department			
				STANDARD DRAWING		City Engineer _____ Date _____	
				DENSITY REFERENCE GUIDELINE		Date: 09/2023 Dwg No.: 601.00	
REVISION	BY	APPROVED	DATE			Scale: None	



UTILITY TRENCH



WIRE SPLICE DETAIL

**NOTES:**

1. Locating trace wire shall be installed with all buried utility pipelines and appurtenances. Warning tape shall be installed with all buried utility pipelines.
2. Wire shall be blue coated (water) or green coated (wastewater / storm drain) #10 awg solid copper.
3. Wire shall be placed on top of pipe and attached to the pipe with duct tape @ 10' o.c.
4. Wire shall be continuous between structures, except where water valve boxes are within ten (10) feet of a pipe intersection.
5. Raw wire shall not touch metallic structures, valves, or fittings (maintain 3" clear distance).
6. Wire shall terminate within 6"-12" of the top of structures and with sufficient excess wire to allow for above ground connection to locating equipment.
7. All valves shall have locating wires.
8. All splice installations shall be within a structure.
9. Warning tape shall be 2" wide detectable metallic warning tape, and shall be color-coded and imprinted appropriate to utility (i.e. "CAUTION - BURIED WATER LINE BELOW", "CAUTION - BURIED SEWER LINE BELOW").
10. Warning tape shall be placed as shown above, and shall be unbroken for the entire run of the pipe.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

**STANDARD DRAWING**

**LOCATING TRACE WIRE AND  
WARNING TAPE INSTALLATION**

Approved:

09-30-2023

City Engineer

Date

Date: 09/2023

Dwg No.:

Scale: None

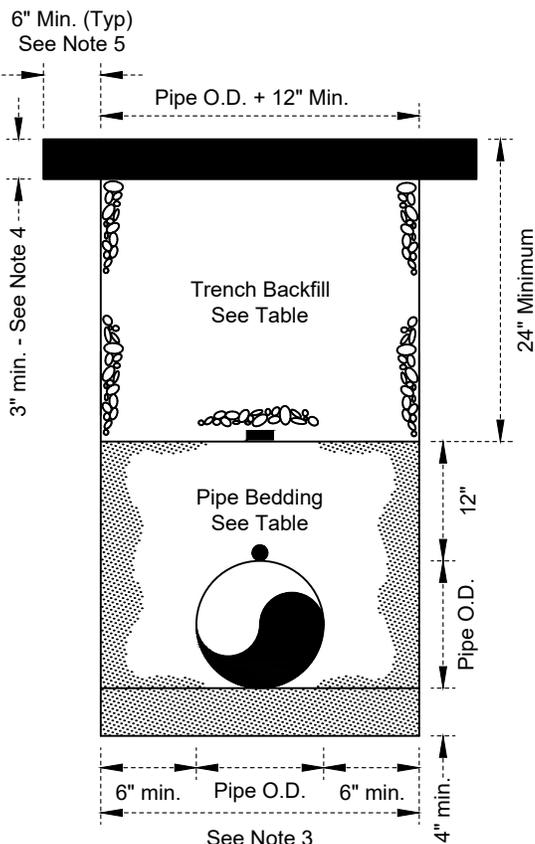
608.00

Property	Test Method	Specification Requirement	
Organic Impurities	ASTM C-40	Supernatant shall not be darker than plate 3 when compared to standard gardinar color series	
Sand Equivalent	ASTM D-2419	Equal to or greater than 20	
Compaction Characteristics	ASTM D-1557	Relative compaction of 95% or greater	
Gradation	ASTM C-136 & ASTM C-117	Sieve	Percent Passing (By weight)
REU		No. 4 (4.75mm)	100
		No. 8 (2.36mm)	90-100
		No. 16 (1.18mm)	80-100
		No. 30 (600um)	65-100
		No. 50 (300um)	40-70
		No. 100 (150um)	0-30
PG&E		1/2"	100
		No. 4	75-100
		No. 50	0-70
		No. 100	0-30
		No. 200	0-15

**Notes:**

1. Bedding sand shall be free from clay or organic material, suitable for the purpose intended, and shall conform to the physical properties listed in the table below. Either gradation is acceptable (REU OR PG&E).

				<b>CITY OF SHASTA LAKE</b> Public Works Department	Approved:  Date: 09-30-2023
				BEDDING SAND	City Engineer _____ Date _____
					Date: 09/2023      Dwg No.: 609.00
REVISION	BY	APPROVED	DATE		Scale: None



Utility	Pipe Bedding	Trench Backfill
Water	Sand	Class 2 Agg. Base*
Wastewater	Class 2 Agg. Base	Class 2 Agg. Base*
Storm Drain	Class 2 Agg. Base	Class 2 Agg. Base*

\* In non-street sections, trench backfill may be native material compacted to 90% relative

**NOTES:**

1. Joint utility trenching shall conform to Page 620.00.
2. All materials except bedding sand shall conform to Page 100.00. Bedding sand shall conform to Page 609.00. Material compaction shall conform to Page 601.00. Jetting is not permitted.
3. Trench width on each side of the pipe shall be a minimum of either six (6) inches or wider as required to allow for hand compaction of bedding material in the haunch zone of the pipe as directed by the City Engineer.
4. Trench surfacing shall be the greater of three (3) inches or the existing pavement thickness. In street sections, surfacing shall be Type 'A' Hot-Mixed Asphalt (HMA), 1/2" max. medium. In non-street sections, surfacing shall be native material graded to match the surrounding surface.
5. T-section of trench (six (6) inches minimum, typical) shall be required in all streets and paved areas, and shall be sawcut just prior to final paving. If the initial trench is cut with a grinder that leaves a clean edge that is maintained, the T-section may be omitted upon approval by the City Engineer. T-section is not required in non-paved areas.
6. All trench excavations requiring shoring shall conform to the requirements of the California Occupational Safety and Health Act (CAL-OSHA). The Contractor shall furnish and install all shoring and bracing required to support the trench walls for the protection of all personnel working in the excavation. Shoring and bracing shall be removed in a manner that protects workers and prevents sloughing of trench walls.
7. The Contractor is solely responsible for the safety of all workers, the general public, and private and public property within the project site for the duration of the project. This responsibility shall be in effect at all times.
8. Where the minimum depth of trench backfill cannot be attained, the City Engineer may approve lower cover conditions with the use of one-sack slurry cement for trench backfill. Slurry cement backfill shall conform to Page 610.30.
9. The Contractor shall dewater all excavations as required, and shall keep ground water out of the excavation. Water, wastewater, and storm water shall not be allowed in excavations during material placement or compaction operations.
10. Where pipeline excavation depth requires the use of a trench shield, and with the approval of the City Engineer, the Contractor may replace the bedding and backfill material with permeable material (3/4" crushed rock). Where permeable material is used, the Contractor shall construct one-sack slurry cement waterstops every one hundred (100) linear feet to contain the flow of groundwater along the pipeline. The waterstops shall extend from the bottom of the trench (under the pipeline) to the bottom of the final surfacing material.
11. Pipe shall be laid on an unyielding bed true to line and grade with compacted bedding material under the full length of the pipe. Bedding material shall be placed into the trench prior to pipe placement and compacted in conformance with Page 601.00. Bedding material under the coupling bells shall be hand-excavated so that there is a minimum clearance under the bell of 1 inch.
12. Pipe bedding in the pipe haunch zone between the bottom of the pipe and the springline of the pipe shall be placed underneath the pipe overhang and compacted in conformance with Page 601.00.
13. Trench backfill shall be placed in lifts. The maximum lift thickness will be determined by the City Engineer based upon the compaction method being employed; however, the maximum lift thickness when hand-operated compaction devices are used shall not exceed one (1) foot, and no lift shall exceed three (3) feet.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**  
Public Works Department

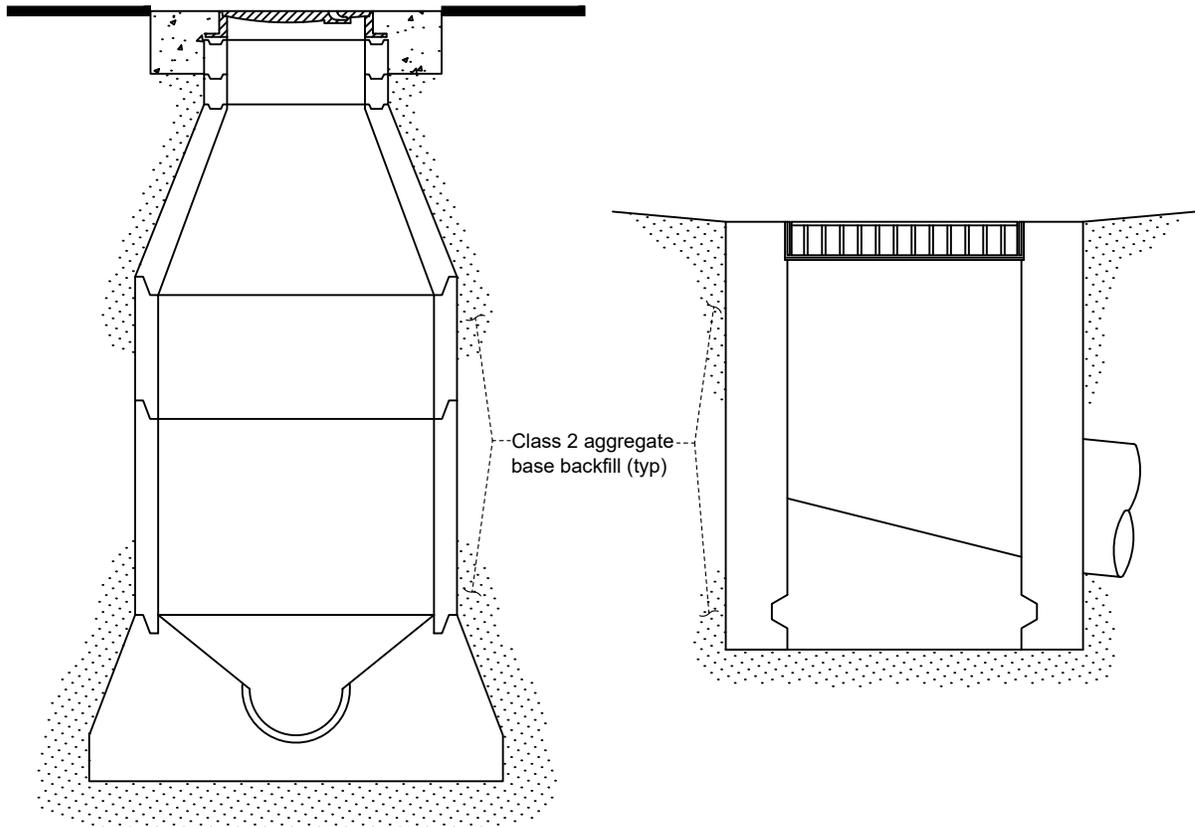
**STANDARD DRAWING**

**WET UTILITY TRENCH**

Approved:  09-30-2023  
Date

City Engineer \_\_\_\_\_ Date

Date: 09/2023 Dwg No.: 610.10  
Scale: None



Structure Backfill (typ)

**NOTES:**

1. Material compaction shall conform to Page 601.00. Jetting is not permitted.
2. Sanitary sewer manhole and storm drain drainage inlet shown for reference. Structure backfill requirements apply to all utility structures.
3. The Contractor is solely responsible for the safety of all workers, the general public, and private and public property within the project site for the duration of the project. This responsibility shall be in effect at all times.
4. The Contractor shall dewater all excavations as required, and shall keep ground water out of the excavation. Water, wastewater, and storm water shall not be allowed in excavations during material placement or compaction operations.
5. Where excavation depth requires the use of a box shield, and with the approval of the City Engineer, the Contractor may replace the backfill material with permeable material (3/4" crushed rock).
6. Structure backfill shall be placed in lifts. The maximum lift thickness will be determined by the City Engineer based upon the compaction method being employed; however, the maximum lift thickness when hand-operated compaction devices are used shall not exceed one (1) foot, and no lift shall exceed three (3) feet.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

STANDARD DRAWING

STRUCTURE BACKFILL

Approved:

09-30-2023

City Engineer

Date

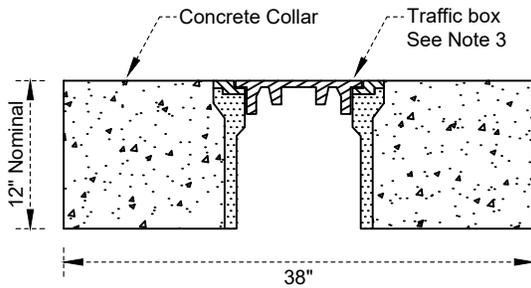
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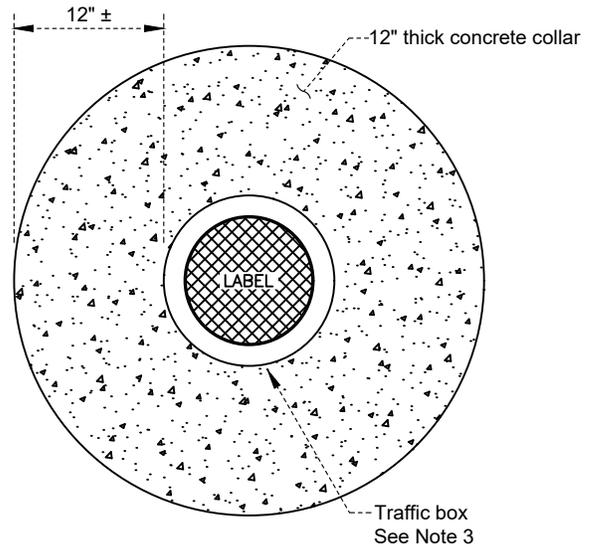
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610.20

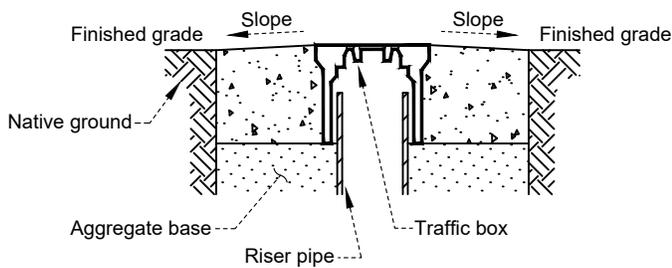




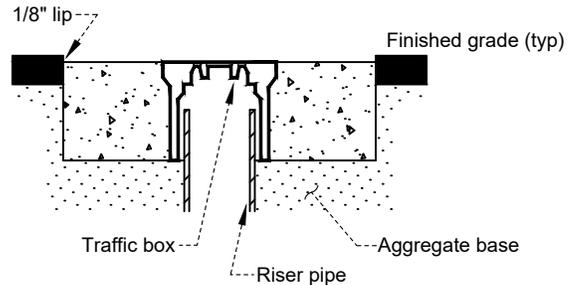
**TRAFFIC BOX CONCRETE COLLAR - PROFILE**



**TRAFFIC BOX CONCRETE COLLAR - PLAN**



**TRAFFIC BOX INSTALLATION**  
Unpaved Locations



**TRAFFIC BOX INSTALLATION**  
Paved Locations

**NOTES:**

1. All materials shall conform to Page 100.00.
2. Traffic boxes shall be concrete with cast iron lid and box trim. Traffic boxes shall be Christy G5 or approved equal.
3. Traffic box lids shall be labeled as required (i.e. "WATER", "SEWER", etc.).
4. In paved locations, existing HMA shall be jackhammered to a neat vertical edge prior to collar placement.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**  
Public Works Department

STANDARD DRAWING

TRAFFIC BOX CONCRETE COLLAR  
AND GRADE ADJUSTMENT

Approved:

09-30-2023

City Engineer

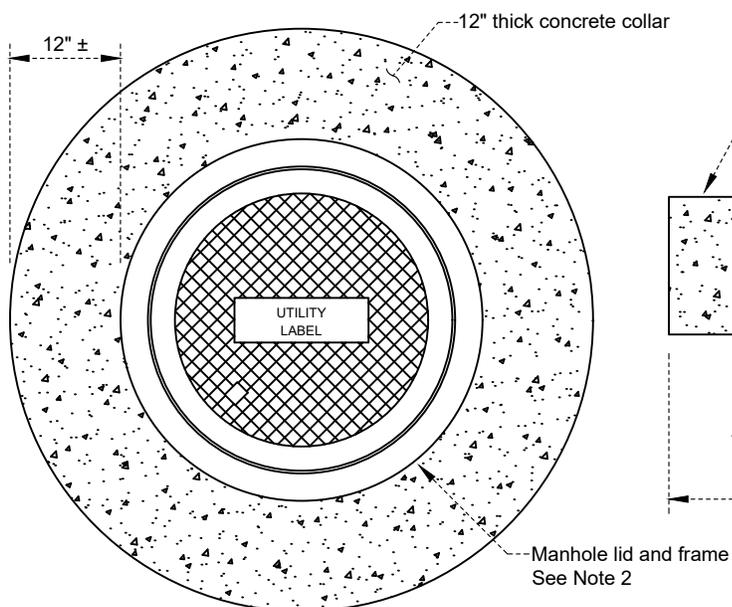
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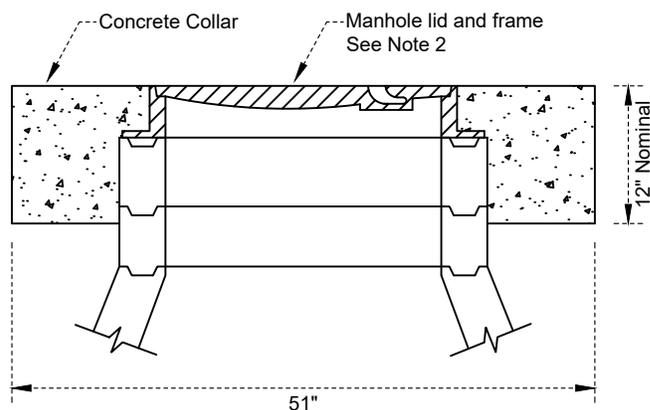
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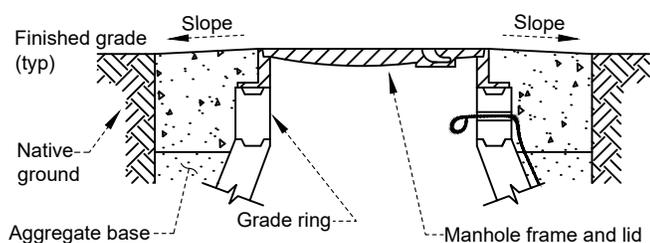
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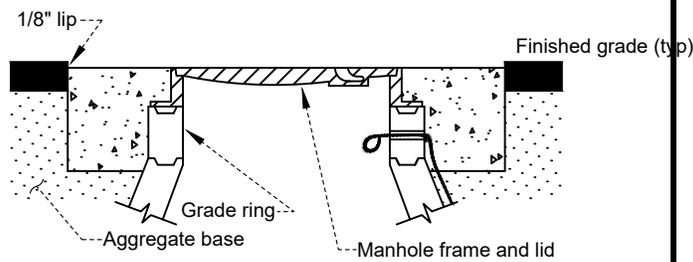
**MANHOLE CONCRETE COLLAR - PLAN**



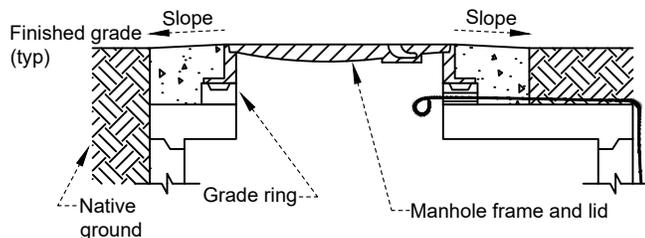
**MANHOLE CONCRETE COLLAR (typ) - PROFILE**



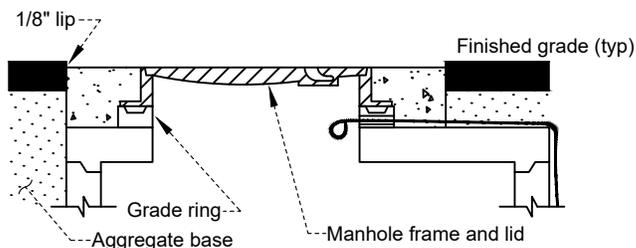
**TYPE 1 MANHOLE FRAME and LID INSTALLATION**  
Unpaved Locations



**TYPE 1 MANHOLE FRAME and LID INSTALLATION**  
Paved Locations



**TYPE 2 MANHOLE FRAME and LID INSTALLATION**  
Unpaved Locations



**TYPE 2 MANHOLE FRAME and LID INSTALLATION**  
Paved Locations

**NOTES:**

1. All material shall conform to Page 100.00.
2. Manhole frame and lid shall conform to Pages 264.10, 264.20, 364.10 or 364.20 as appropriate.
3. Manhole frame and lid shall be labeled as appropriate - see Note 2.
4. In paved locations, existing HMA shall be jackhammered to a neat vertical edge prior to collar placement.
5. Locating wire shall conform to Page 608.00. Core 1/2" dia. hole through grade ring as needed to maintain required clearance to top of structure.
6. Total grade ring adjustment shall not exceed 12".
7. Frame and lid adjustments less than 2" or on a slope shall be made with non-shrink grout and spacers.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**  
Public Works Department  
**STANDARD DRAWING**

**MANHOLE CONCRETE COLLAR AND GRADE ADJUSTMENT**

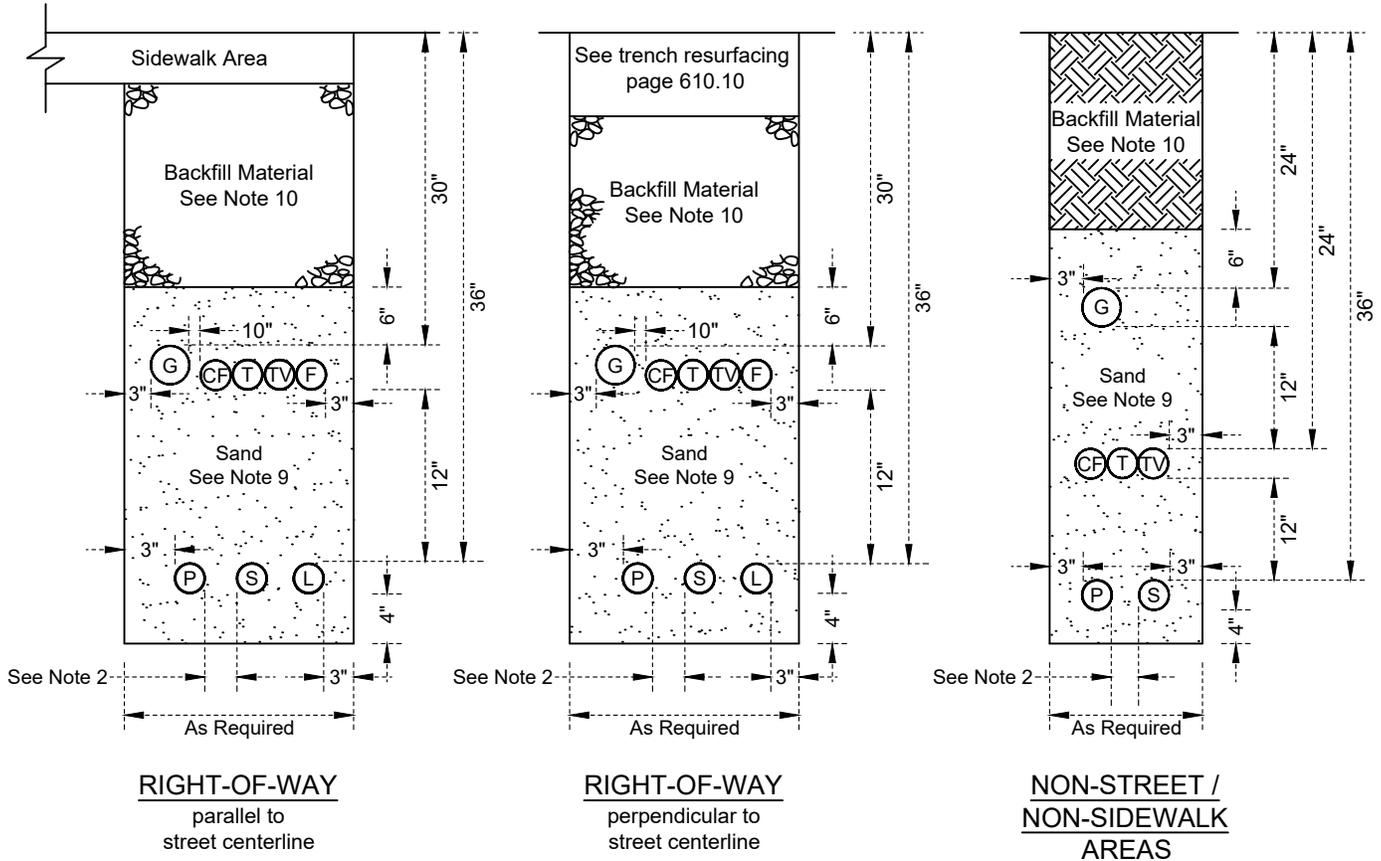
Approved:  09-30-2023  
Date

City Engineer \_\_\_\_\_ Date \_\_\_\_\_

Date: 09/2023 Dwg No.: 612.20  
Scale: None

**LEGEND**

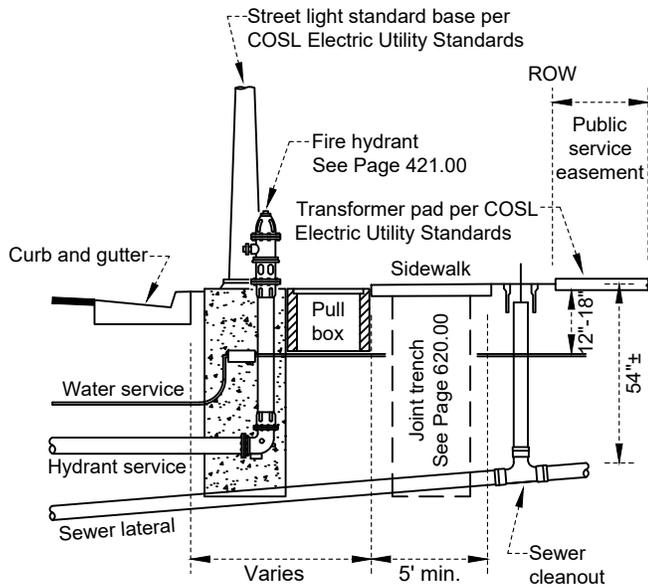
- |                |                        |
|----------------|------------------------|
| (G) Gas (PG&E) | (P) Primary Electric   |
| (T) Telephone  | (S) Secondary Electric |
| (TV) Cable TV  | (L) Street Light       |
| (F) Fire Alarm | (CF) City Fiber        |



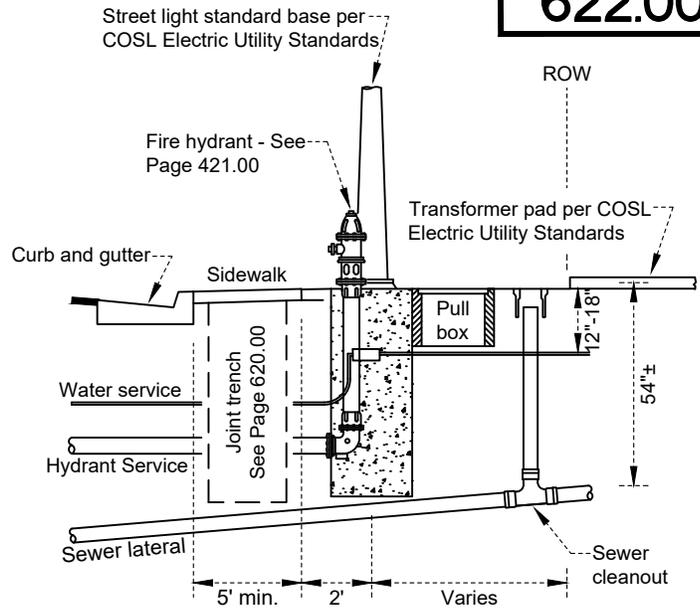
**NOTES:**

1. Wet utility trenching shall conform to Page 610.10.
2. All dimensions shown are minimum requirements. Trench depths and conduit separations will vary due to conduit size, lateral interference, and conflict with other utilities. Separation between primary and secondary electric conduits shall be per CoSL Electric Utility standards.
3. Joint utility trench location shall conform to Pages 624.10 and 624.20.
4. All underground cable or conductors shall be installed in plastic conduit that conforms to CoSL Electric Utility standards. No direct burial cable will be permitted.
5. All conduits installed shall include mule tape or pull line per CoSL Electric Utility standards.
6. At no time shall dry utilities (gas, primary or secondary electric, phone, or cable) be allowed to occupy the same trench as any wet utility (water, sanitary sewer, or storm drain).
7. Gas facilities shall adhere by GO-112F:
  - A. Where 10" separation cannot be obtained in a 18" wide trench, separation may be reduced to not less than 6" instead of widening the trench.
  - B. Where primary electrical and gas are not involved, secondary electrical may occupy the position shown for gas.
8. Each utility may have one or more conduits in a joint trench.
9. Sand shall be used to provide bedding and backfill for the conduits, and shall conform to Page 609.00. Crushed rock or sharp-edged material of any kind is unacceptable.
10. Slurry backfill shall conform with page 610.30, and shall be placed and compacted in lifts not exceeding three (3) feet. Where streets have not yet been constructed, import material (Class 2 aggregate base) may be used in lieu of slurry. In non-street / non-sidewalk areas, backfill may be native material compacted to 90% relative.
11. Material compaction shall conform to page 601.00.

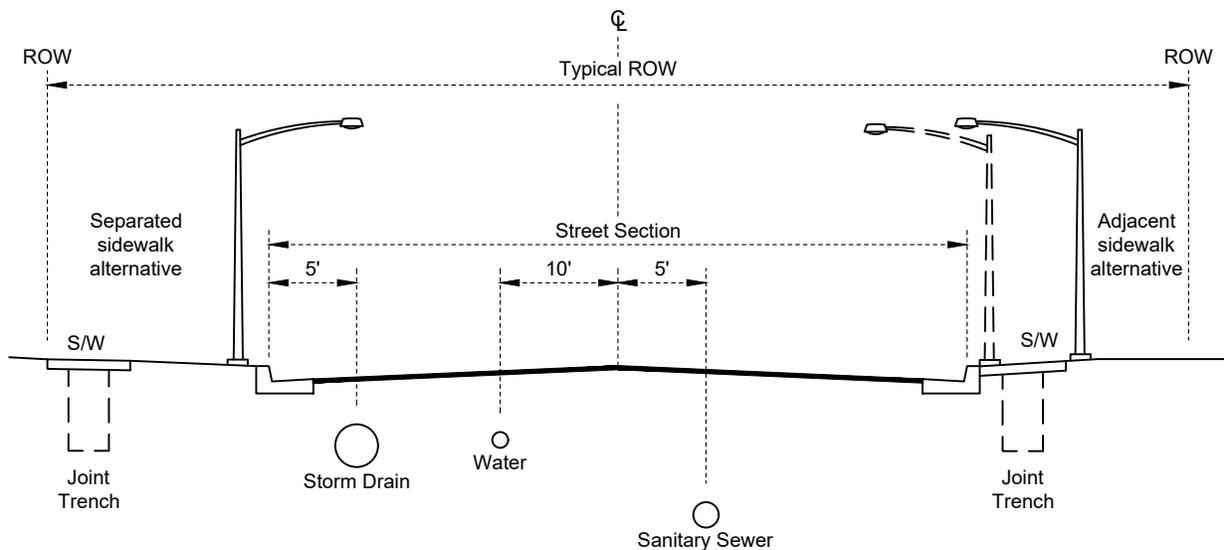
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				Public Works Department			
				<b>STANDARD DRAWING</b>		City Engineer _____ Date _____	
				<b>JOINT UTILITY TRENCH</b>		Date: 09/2023 Dwg No.: 620.00	
						Scale: None	
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REVISION	BY	APPROVED	DATE				



**SEPARATED SIDEWALK DETAIL**



**ADJACENT SIDEWALK DETAIL**



**TYPICAL STREET SECTION**

**NOTES:**

1. All dimensions shown are minimum requirements. Trench depths and conduit separations will vary due to conduit size, lateral interference, and conflict with other utilities. Refer to relevant COSLCS Pages for more information.
2. The typical location for joint utility trenches in parkways shall be under the sidewalk section.
3. All underground cable or conductors shall be installed in plastic conduit that conforms to City of Shasta Lake Electric Utility standards. No direct burial cable will be permitted.
4. At no time shall dry utilities (gas, primary or secondary electric, phone, or cable) be allowed to occupy the same trench as any wet utility (water, sanitary sewer, or storm drain).
5. For specific joint trench details, see page 620.00.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

**STANDARD DRAWING**

**TYPICAL UTILITY LOCATIONS**

Approved:

09-30-2023

City Engineer

Date

Date: 09/2023

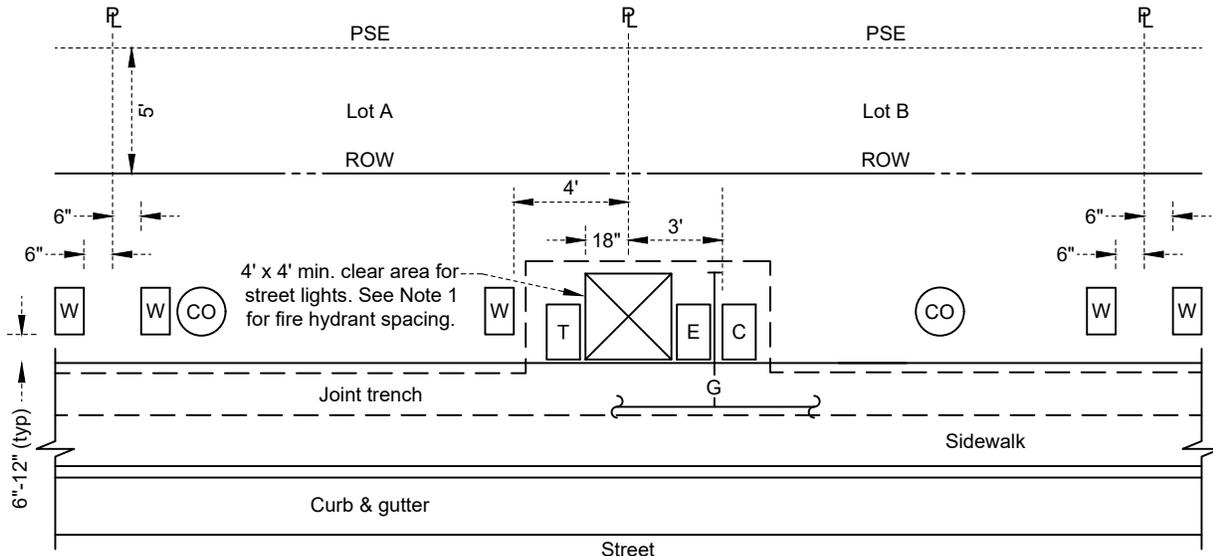
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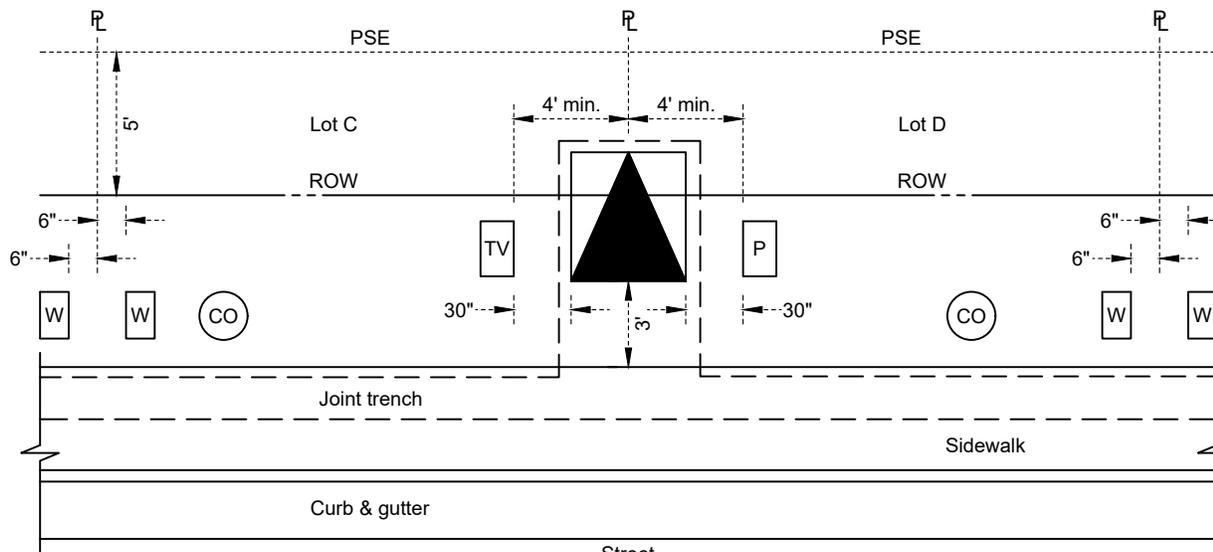
622.00

**LEGEND**

- |   |  |  |
|---|--|--|
|  Electric box  |  Telephone pedestal |  Gas                   |
|  Cable TV box  |  Cable pedestal     |  S.S. lateral cleanout |
|  Telephone box |  Water meter        |  Transformer           |



**LOCATION A**  
(for street lights and fire hydrants)



**LOCATION B**  
(for electric transformer)

**NOTES:**

- No underground utility shall be located within 4' of a fire service trench per Page 421.00.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

STANDARD DRAWING

TYPICAL UTILITY  
SERVICE BOX LOCATIONS

Approved:



09-30-2023

City Engineer

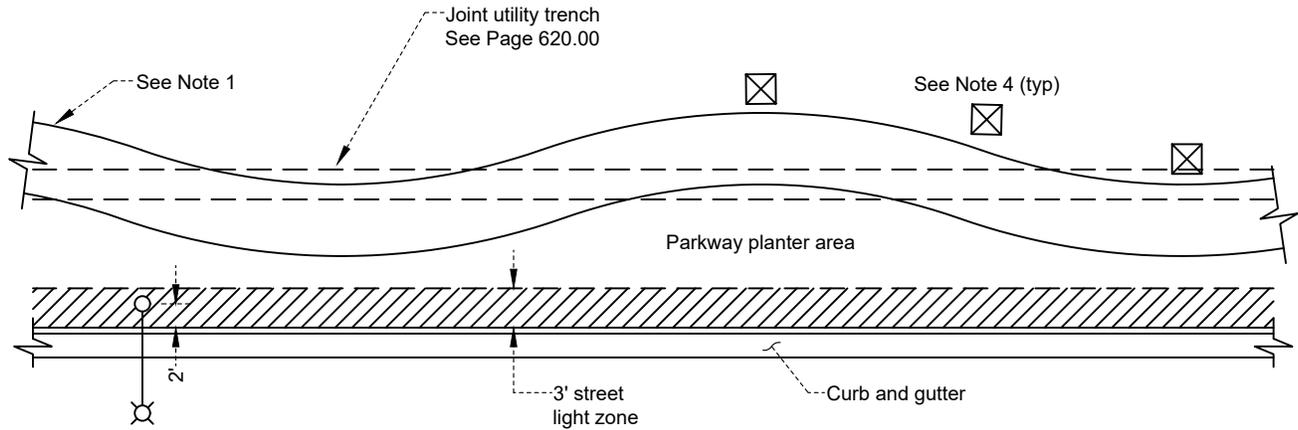
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Date: 09/2023

Dwg No.:

Scale: None

623.00



**NOTES:**

1. Meandering sidewalk layout and dimensions shall conform to Page 131.30.
2. Joint utility trench shall be centered at the maximum meander distance from curb.
3. Underground utilities located within the street light zone shall accommodate street light foundations per City of Shasta Lake Electric Utility Standards.
4. Utility splice boxes, transformers, terminations, hand holds, pedestals, etc., shall be located behind the sidewalk. See Page 623.00 for typical locations.
5. Depending on the location of the sidewalk, a PSE may be required. The easement width shall be 5' minimum and shall not exceed the building setback line.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

**STANDARD DRAWING**

**JOINT TRENCH LOCATION  
MEANDERING SIDEWALK**

Approved:

09-30-2023

City Engineer

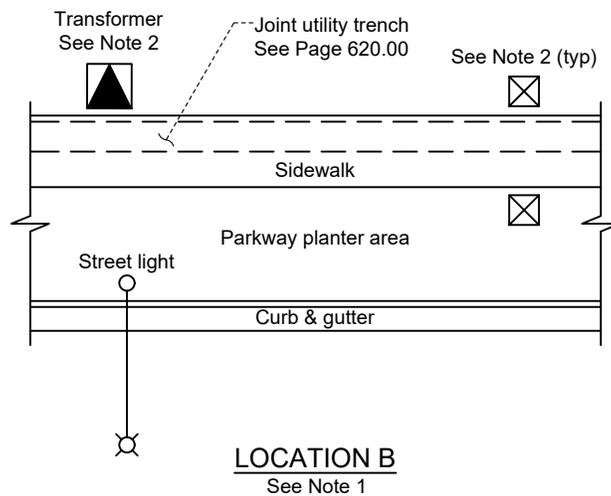
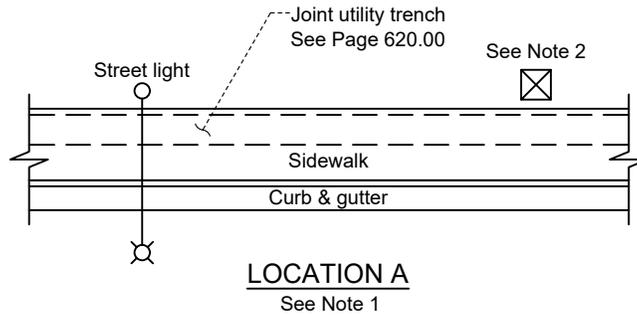
Date

Date: 09/2023

Dwg No.:

Scale: None

624.10



**NOTES:**

1. Joint utility trench shall be located under the sidewalk as follows:
  - A. Where the sidewalk is adjacent to the curb or where the parkway strip width is less than 5', the joint trench shall be located under the back edge of the sidewalk.
  - B. Where the parkway strip width is greater than 5', the joint trench may be located on either side of the sidewalk.
2. All above ground structures including electric transformers shall be located behind the sidewalk. Utility splice boxes, terminations, hand holds, etc. shall be located on the same side of the sidewalk as the joint trench. See Page 623.00 for typical locations.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

**STANDARD DRAWING**

**JOINT TRENCH LOCATION  
NON-MEANDERING SIDEWALK**

Approved:

09-30-2023

City Engineer

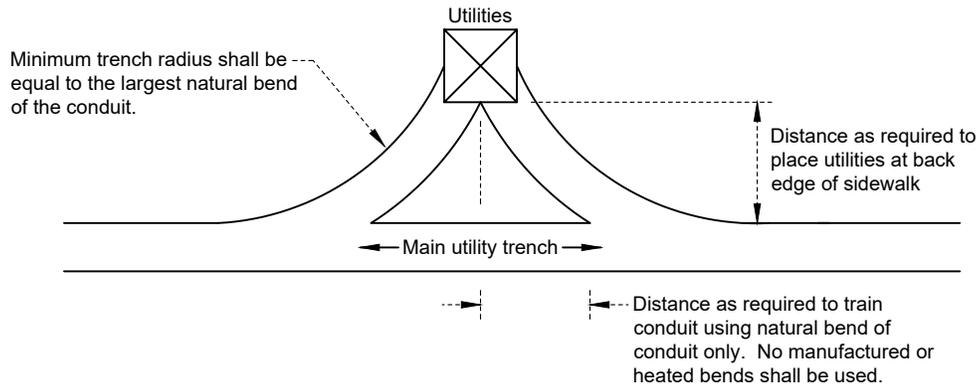
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Date: 09/2023

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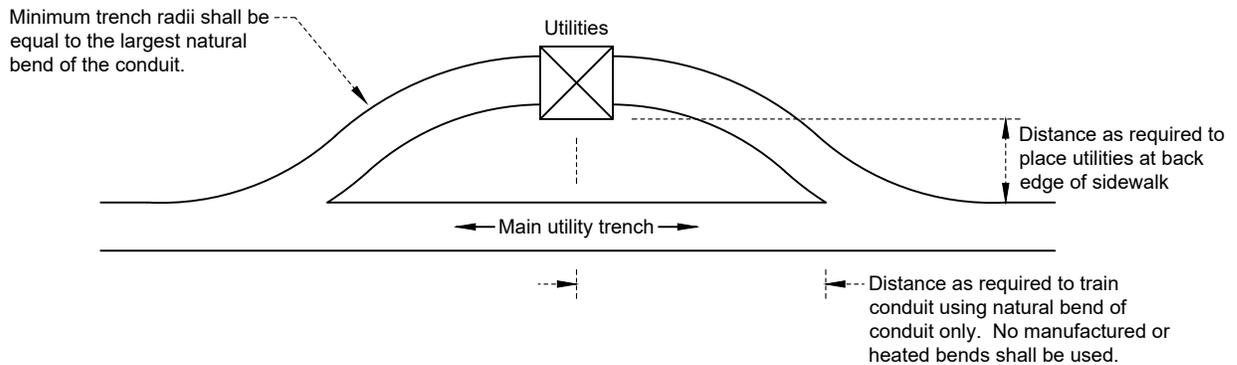
**624.20**



DETAIL A

NOTE:

1. Detail A shall be used where joint utility conduits enter the bottom of pull or splice boxes with 90° bends.

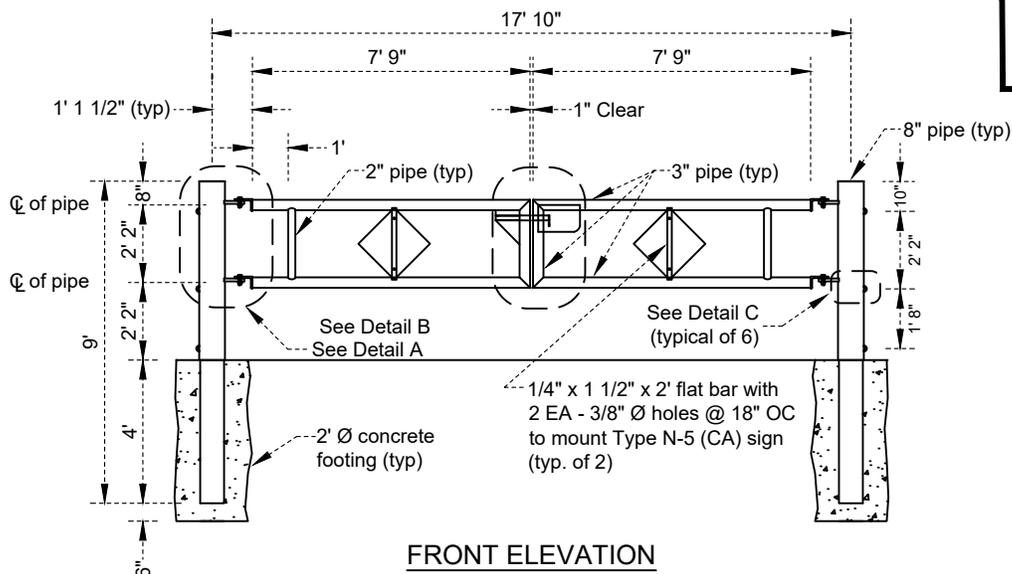


DETAIL B

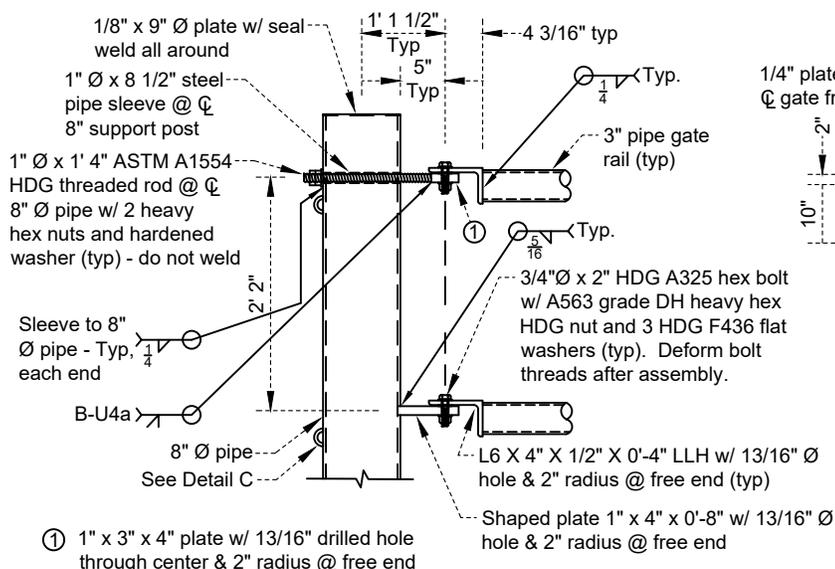
NOTE:

1. Where one or more conduits must enter a box perpendicular (90°) to the box wall or where a gas line must be tapped.

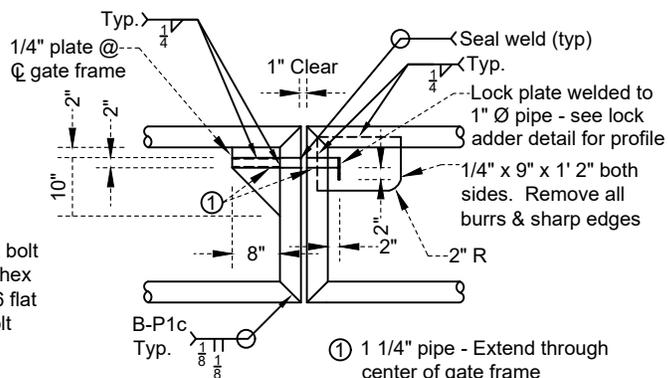
				<b>CITY OF SHASTA LAKE</b> Public Works Department	Approved:  09-30-2023 Date
				<b>JOINT TRENCH TURNOUT</b>	City Engineer _____ Date _____
					Date: 09/2023      Dwg No.: Scale: None              624.30
REVISION	BY	APPROVED	DATE		



**FRONT ELEVATION**

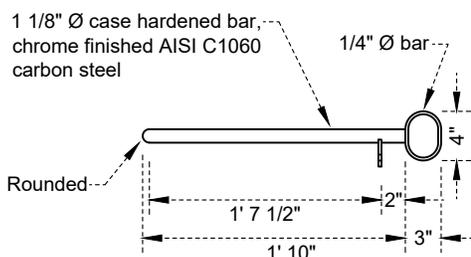


**DETAIL A**

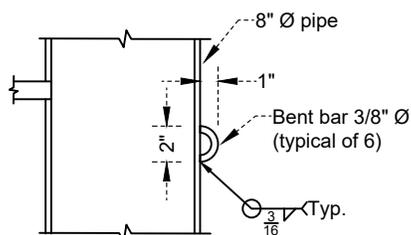


**DETAIL B**

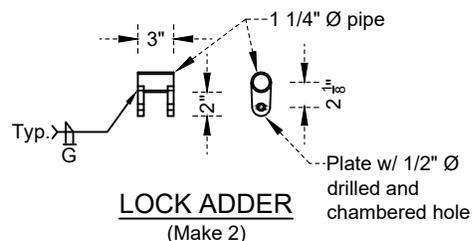
① 1" x 3" x 4" plate w/ 13/16" drilled hole through center & 2" radius @ free end



**LOCKING BAR**



**DETAIL C**



**LOCK ADDER**  
(Make 2)

**NOTES:**

1. Concrete shall conform to Page 100.00.
2. All pipe shall be Schedule 40 steel.
3. Gate locks shall be provided by the City.
4. Contractor shall prepare and paint all surfaces with 2-part epoxy paint prior to installation. Color shall be as directed by the City Engineer.
5. Signage shall be Type N-5 (CA) warning signs with safety reflectors.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

STANDARD DRAWING

ACCESS CONTROL GATE

Approved:

*WST*

09-30-2023

City Engineer

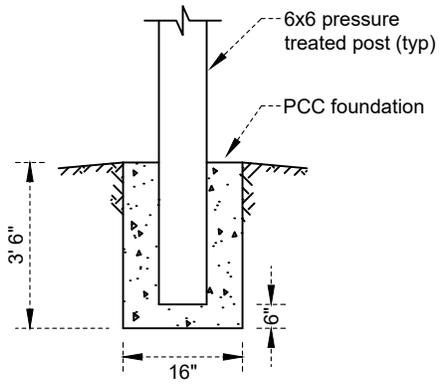
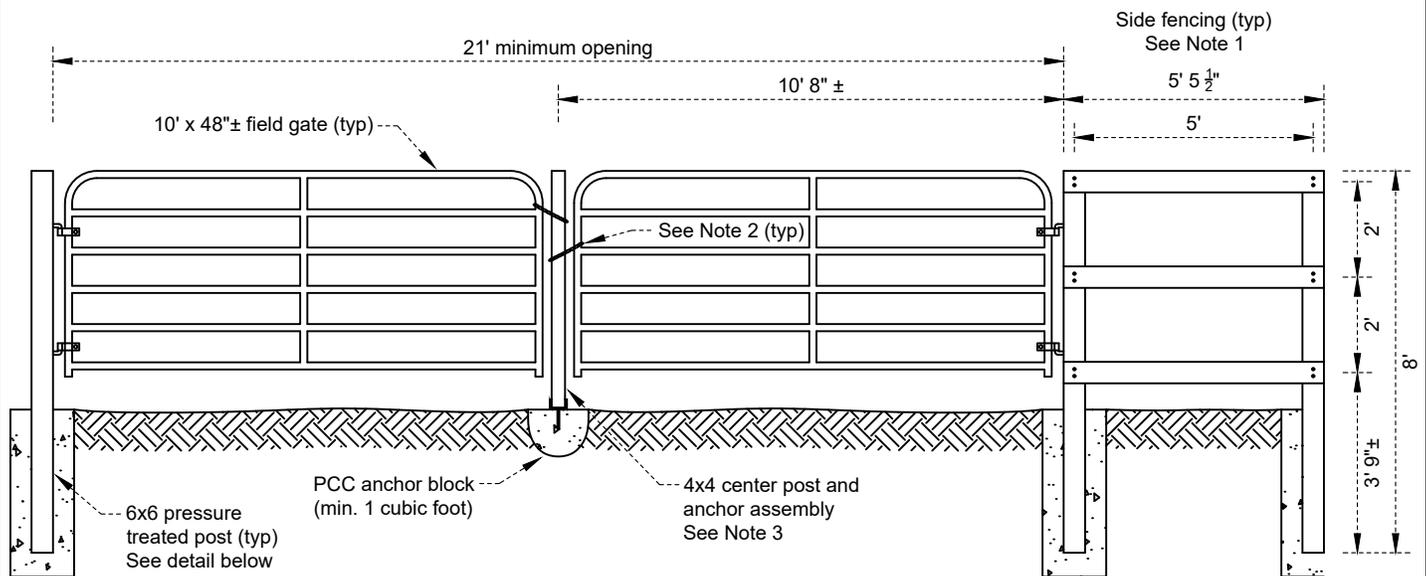
Date

Date: 09/2023

Dwg No.:

Scale: None

630.10



**POST FOUNDATION DETAIL**

**NOTES:**

1. Side fencing shall be installed where required by the City Engineer to prevent drive-around. Horizontal fencing shall be 1x6 pressure treated lumber, attachment hardware shall be 1/2" x 5" galvanized lag bolts, and entire side fencing assembly shall be painted white.
2. Chains shall connect a single gate to the center breakaway post. Chains shall not connect gates together, and shall be closed with locks provided by the City.
3. The center 4x4 post is intended to be easily knocked down in the direction of gate opening. The post shall be attached to the post base (Simpson Strong-Tie Type BC or equal) with a simple screw attachment, and the post base shall be attached to the anchor block with an anchor bolt.
4. Field gates shall be 1 1/4" Ø tubing (min.). Color shall be as determined by the City Engineer.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

STANDARD DRAWING

EMERGENCY ACCESS  
KNOCKDOWN GATE

Approved:

09-30-2023

City Engineer

Date

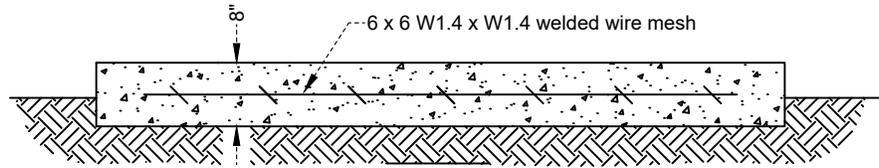
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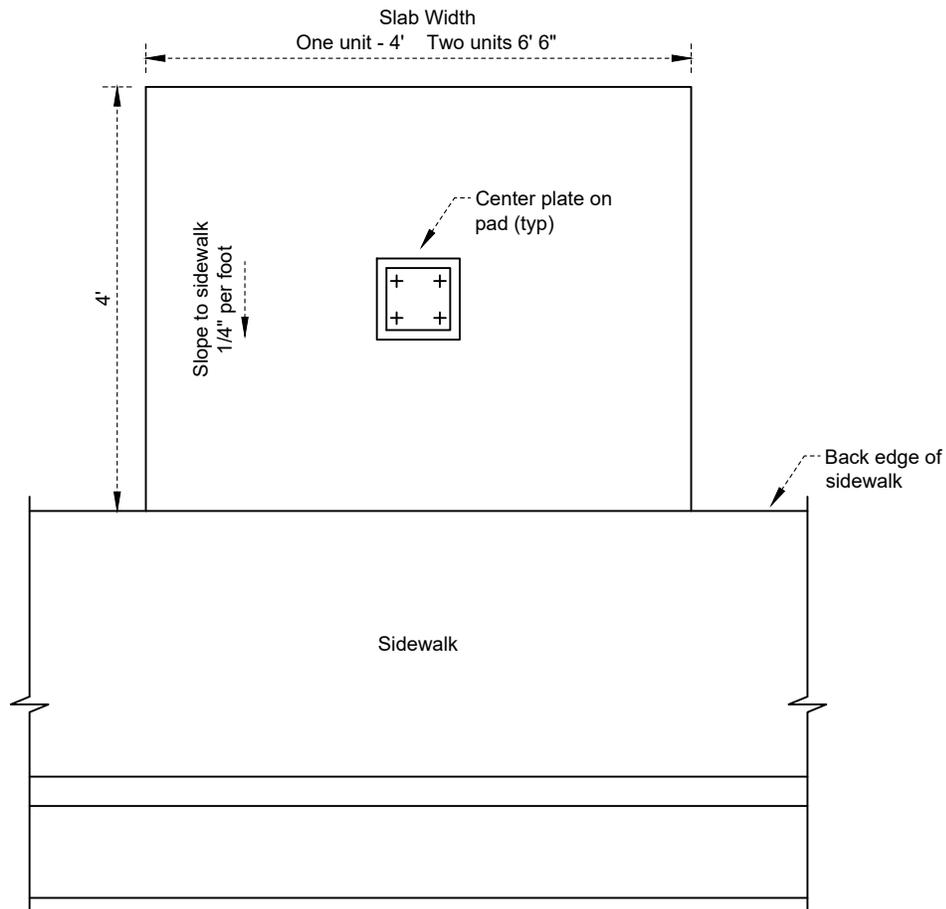
Scale: None

630.20





SECTION



PLAN VIEW

**NOTES:**

1. All materials shall conform to Page 100.00.
2. All brooming shall be perpendicular to the sidewalk.
3. Base plate(s) and anchor bolts (supplied by U.S. Postal Service) shall be installed per Postal Service specifications.

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

**STANDARD DRAWING**

**POSTAL PAD - NDCBU CLUSTER BOX**  
(Concrete Pad without J-Bolts)

Approved:

09-30-2023

City Engineer

Date

Date: 09/2023

Dwg No.:

Scale: None

650.00

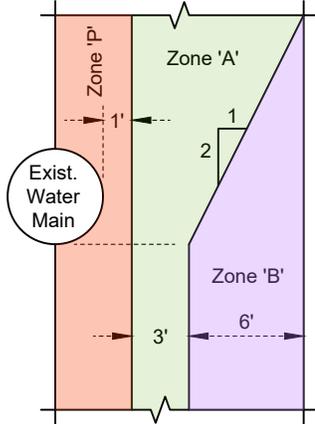
**Criteria for the separation of water mains and non-potable pipelines**

The construction of new pipelines lines for the conveyance of potable water and non-potable material shall conform to California Code of Regulations, Title 22, Division 4 - Environmental Health, Chapter 16 - California Waterworks Standards, Article 4 - Materials and Installation of Water Mains and Appurtenances, §64572 - Water Main Separation.

1. New water mains and new supply lines shall not be installed in the same trench as, and shall be at least 10 feet horizontally from and 1 foot vertically above, any parallel pipeline conveying untreated sewage, primary or secondary treated sewage, recycled water, and hazardous fluids such as fuels, industrial wastes, and wastewater sludge.
2. New water mains and new supply lines shall be installed at least 4 feet horizontally from, and 1 foot vertically above, any parallel pipeline conveying storm drainage and disinfected tertiary recycled water (defined in section 60301.230).
3. New supply lines conveying raw water to be treated for drinking purposes shall be installed at least 4 feet horizontally from, and 1 foot vertically below, any water main.
4. If crossing a pipeline conveying a fluid listed in Section 1 or 2 above, a new water main shall be constructed no less than 45-degrees to and at least 1 foot above that pipeline. No connection joints shall be made in the water main within 8 horizontal feet of the fluid pipeline.
5. The vertical separation specified in Sections 1, 2, and 3 above is required only when the horizontal distance between a water main and pipeline is less than 10 feet.
6. New water mains shall not be installed within 100 horizontal feet of the nearest edge of any sanitary landfill, wastewater disposal pond, or hazardous waste disposal site, or within 25 horizontal feet of the nearest edge of any cesspool, septic tank, sewage leach field, seepage pit, underground hazardous material storage tank, or groundwater recharge project site.
7. The minimum separation distances set forth in this section shall be measured from the nearest outside edge of each pipe barrel.
8. When new water mains or non-potable pipelines cannot be constructed in accordance with the above standards due to existing conditions, the appropriate alternate construction criteria described on Page 660.20 shall apply to the pipelines.

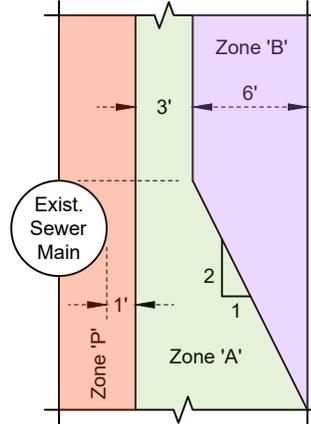
				<b>CITY OF SHASTA LAKE</b> Public Works Department	Approved:  09-30-2023 Date
				<b>SEPARATION CRITERIA          FOR POTABLE AND NON-POTABLE PIPELINES</b>	City Engineer _____ Date
					Date: 09/2023      Dwg No.: Scale: None              660.10
REVISION	BY	APPROVED	DATE		

**CASE 1**  
New Non-Potable Pipeline

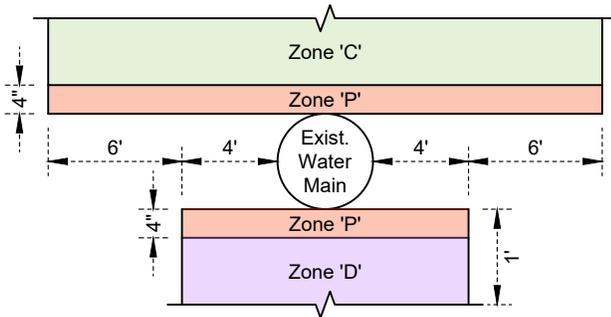


Parallel

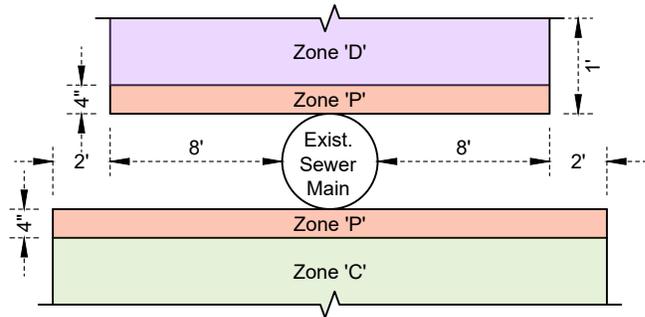
**CASE 2**  
New Water Main



Parallel



Crossing



Crossing

**Description of Special Installation Conditions by Zone**

Zone	Case 1: New Non-Potable Pipeline	Case 2: New Water Main
P	New construction is prohibited within this area	New construction is prohibited within this area
A	New construction within this area shall have prior written approval from both DDW & City of Shasta Lake Public Works	New construction within this area shall have prior written approval from both DDW & City of Shasta Lake Public Works
B	New construction within this area shall be PVC sewer main pipe with rubber ring joints (ASTM D3034)	New construction within this area shall be PC350 DIP with gasketed compression joints or DR 14 PVC C900 water main pipe with rubber ring joints (ASTM F477)
C	New construction shall be DR 14 PVC C900 water main pipe centered on the sewer main and shall have no joints within ten (10) feet from either side of the existing water main	New construction shall be PC350 DIP or DR14 PVC C900 water main pipe and shall have no joints within ten (10) feet from either side of the existing sewer main
D	New construction shall be DR14 PVC C900 water main pipe and shall have no joints within four (4) feet from either side of water main	New construction shall be PC350 DIP or DR14 PVC C900 and have no joints within four (4) feet from either side of the existing water main

REVISION	BY	APPROVED	DATE

**CITY OF SHASTA LAKE**

Public Works Department

STANDARD DRAWING

SPECIAL INSTALLATION CONDITIONS  
FOR POTABLE AND NON-POTABLE PIPELINES

Approved:

09-30-2023

City Engineer

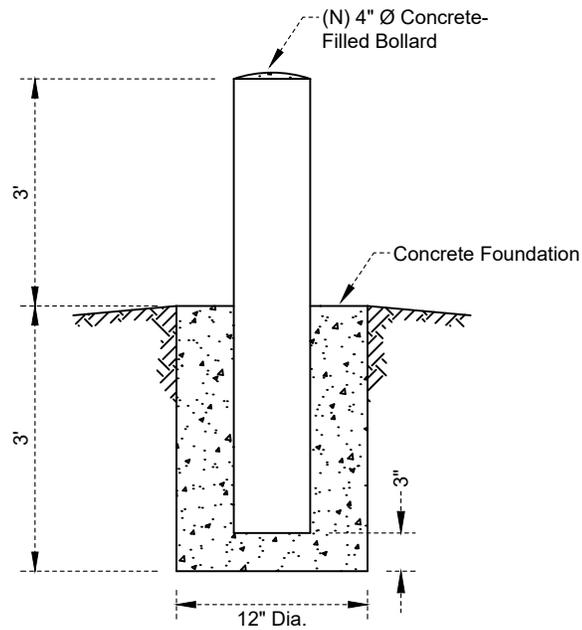
Date

Date: 09/2023

Dwg No.:

Scale: None

660.20



**NOTES:**

1. Concrete shall conform to Page 100.00.
2. Bollards shall be Schedule 80 steel, shall be filled with concrete, and shall be painted Safety Yellow.

				<b>CITY OF SHASTA LAKE</b> Public Works Department	Approved: 	09-30-2023
					STANDARD DRAWING	City Engineer
				<b>BOLLARD INSTALLATION</b>	Date: 09/2023	Dwg No.:
					Scale: None	670.00
REVISION	BY	APPROVED	DATE			