

**CITY OF EL MIRAGE
SUPPLEMENT TO
MARICOPA ASSOCIATION OF
GOVERNMENTS
UNIFORM STANDARD DETAILS
(UNDER CONSTRUCTION)**



**CITY OF EL MIRAGE
COMMUNITY DEVELOPMENT
ENGINEERING DIVISION**

(Revised **February 2018**)

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111-2	TRASH ENCLOSURE NOTES
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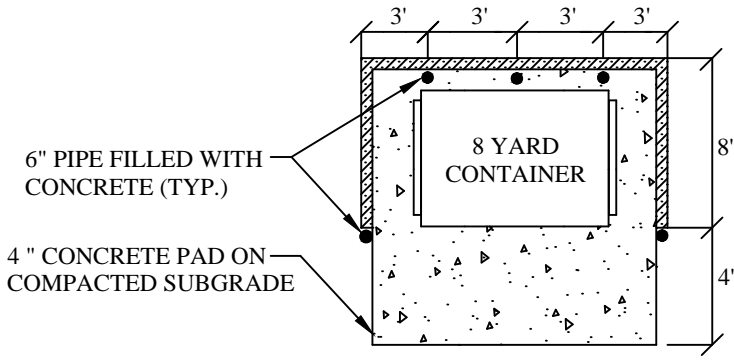
APPROVED BY:

CITY ENGINEER

REVISION DATE: 02/2018

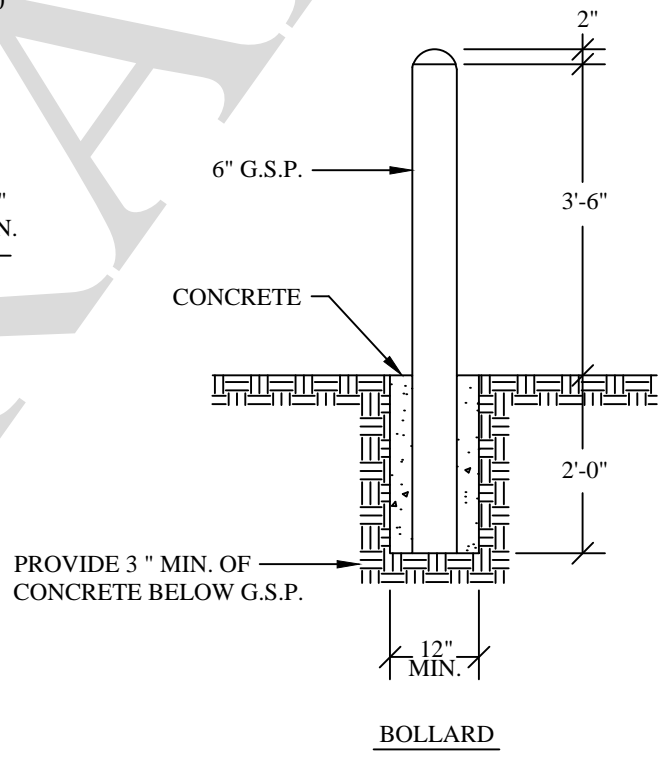
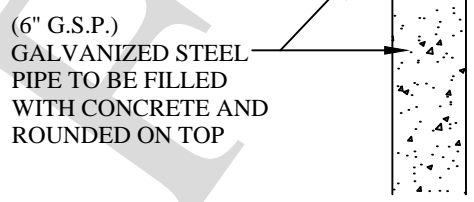
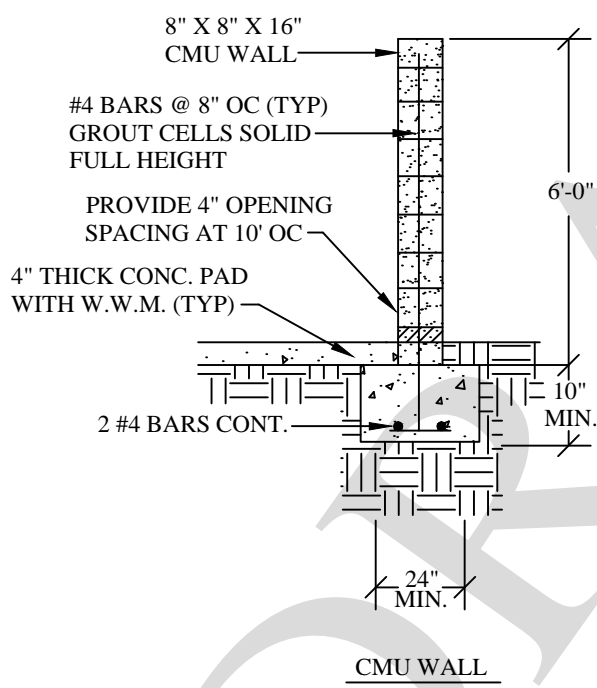
STANDARD DETAIL NO.

INDEX



TRASH ENCLOSURE

- SPECIFICATIONS**
- WALL SIZE - 6' HEIGHT, 8' DEPTH
 - CONTAINER SIZE - 6' WIDE, 6' DEEP, 7' HIGH
 - DRIVE (12' CLEARANCE) DIRECTION OF TRUCK



ENCLOSURE TO BE CONSTRUCTED PER STANDARD DETAILS 111-1 & 111-2.



TRASH ENCLOSURE	
APPROVED BY:	REVISION DATE: 08/2014
CITY ENGINEER	STANDARD DETAIL NO.
	111-1

NOTES

1. ENCLOSURE TO BE CONSTRUCTED AS PER STANDARD DETAIL 111-1 & 111-2.
2. USE CLASS "A" CONCRETE, GRADE 60 STEEL REINFORCEMENT AND WELDED WIRE MESH.
3. WHEN STRAIGHT APPROACH IS NOT AVAILABLE, ENCLOSURE MUST BE PLACED AT 45 DEGREE ANGLE TO THE APPROACH. THE TURNING RADIUS SHALL BE 45' FEET AT EACH TRASH ENCLOSURE.
4. CONCRETE SLAB 4' X 12' IN FRONT OF THE ENCLOSURE TO SUPPORT VEHICLE.
5. ALL ENCLOSURES SHALL HAVE GATES THAT SCREEN THE BIN(S) FROM PUBLIC VIEW.
6. IF ATTACHED TO BUILDING, THE CONTAINER MUST BE 3' MINIMUM FROM WALL OF ENCLOSURE AND SHALL BE 5' MINIMUM FROM COMBUSTIBLES OR EXISTING STRUCTURE.
7. ALL COMMERCIAL PROPERTIES SHALL BE DESIGNED WITH ENCLOSURES TO ACCOMMODATE (1) TRASH ENCLOSURE FOR EVERY 20,000 SQUARE FEET OF BUILDING SPACE. RESTAURANTS WHICH ARE DESIGNED ON A SINGLE PAD SHALL HAVE A MINIMUM OF (1) TRASH ENCLOSURE. THE ENCLOSURE CAN BE SET UP AS DOUBLE OR SINGLE TO MAXIMIZE THE USE OF THE PROPERTY.
8. THE NUMBER OF BIN ENCLOSURES NEEDED DEPENDS ON THE SIZE OF DEVELOPMENT. TYPICALLY, TOTAL VOLUME NEEDS CAN BE CALCULATED BASED ON THE 1/2-CUBIC YARD PER LIVING UNIT PER WEEK. EXAMPLE, A DEVELOPMENT WITH 240 UNITS X .5 YARDS = 120 YARDS PER WEEK OR 10 TRASH BINS (6 YARD) SERVICED TWO TIMES PER WEEK (10 X 6 X 2 = 120 YARDS).
9. RESTAURANTS MUST PROVIDE A SEPARATE AREA TO ACCOMMODATE THEIR GREASE TRAP. THIS DESIGNATED AREA MUST NOT INTERFERE WITH THE TRASH COLLECTION.
10. ADDITIONAL ITEMS SUCH AS LANDSCAPE CONTROL BOXES AND LIGHTING MAY BE POSITIONED ON THE OUTSIDE OF THE ENCLOSURE WALLS.
11. GATES, HINGES & MOUNTING HARDWARE SHALL NOT INTRUDE INTO ENCLOSURE OPENING.
12. EACH ENCLOSURE GATE SHALL HAVE DROP PINS INSTALLED AND HOLES DRILLED IN THE CONCRETE AT BOTH THE OPEN AND CLOSED POSITIONS TO PREVENT THE GATES FROM CLOSING INTO THE COLLECTION VEHICLE.
13. EXTERIOR FINISH OF 6' CMU WALL SHALL BE COORDINATED ARCHITECTURALLY WITH PRIMARY BUILDING FINISHES.
14. SOIL BELOW THE CMU FOOTING AND CONCRETE PAD SHALL BE COMPACTED TO A DEPTH OF 6" AND TO A MINIMUM DRY DENSITY OF 95% IN ACCORDANCE WITH ASTM D-2922 & D-3017, AFTER ADJUSTMENT FOR ROCK CORRECTION.



TRASH ENCLOSURE NOTES

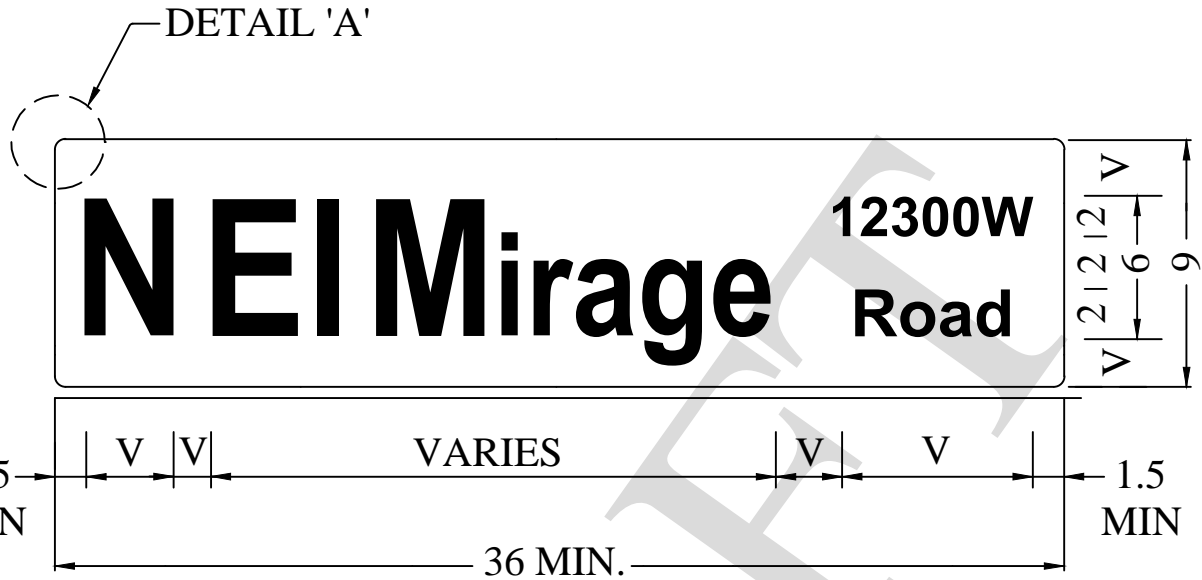
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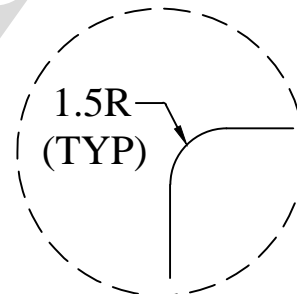
111-2



V = VARIES
 DIMENSIONS ARE IN INCHES

STREET NAME SPECIFICATIONS

- 1.50" RADIUS, NO BORDER, GREEN;
- [N] WHITE HIGHWAY GOTHIC D;
- [EL MIRAGE] WHITE HIGHWAY GOTHIC D;
- [12300W] WHITE HIGHWAY GOTHIC D;
- [ROAD] WHITE HIGHWAY GOTHIC D



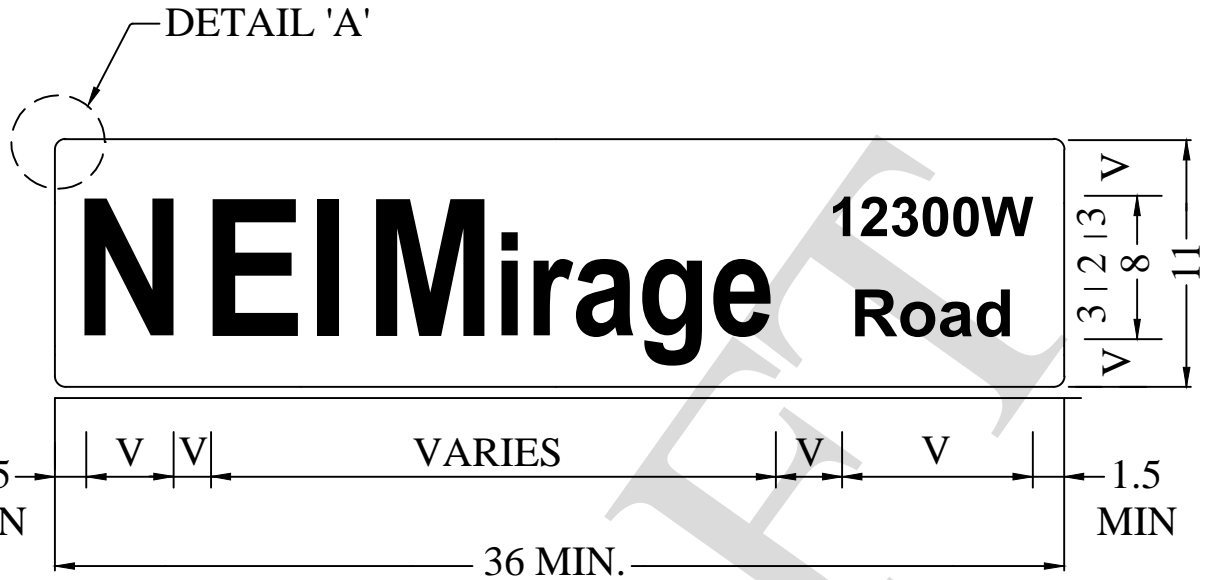
DETAIL 'A'

ADDITIONAL REQUIREMENTS:

1. ALUMINUM GAGE - 0.080, REFLECTIVE SHEETING TYPE - ASTM IV.
2. MOUNTING BRACKET(S) SHALL BE CENTERED AND PROVIDE A SIGN PLANE SUPPORT OF NO LESS THAN 25% MINIMUM OF THE OVERALL SIGN WIDTH.
3. LETTERING SHALL HAVE 6-INCH UPPER-CASE AND 4.5-INCH LOWER-CASE.
4. FOR LONGER STREET NAMES, USE HIGHWAY GOTHIC C OR B.



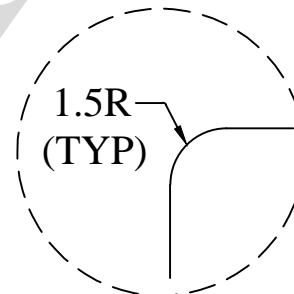
POST MOUNTED STREET SIGNS 40 MPH OR LESS	
APPROVED BY: _____	REVISION DATE: 01/2018
CITY ENGINEER	STANDARD DETAIL NO.
	131-1



V = VARIES
 DIMENSIONS ARE IN INCHES

STREET NAME SPECIFICATIONS

- 1.50" RADIUS, NO BORDER, GREEN;
- [N] WHITE HIGHWAY GOTHIC D;
- [EL MIRAGE] WHITE HIGHWAY GOTHIC D;
- [12300W] WHITE HIGHWAY GOTHIC D;
- [ROAD] WHITE HIGHWAY GOTHIC D



DETAIL 'A'

ADDITIONAL REQUIREMENTS:

1. ALUMINUM GAGE - 0.080, REFLECTIVE SHEETING TYPE - ASTM IV.
2. MOUNTING BRACKET(S) SHALL BE CENTERED AND PROVIDE A SIGN PLANE SUPPORT OF NO LESS THAN 25% MINIMUM OF THE OVERALL SIGN WIDTH.
3. LETTERING SHALL HAVE 8-INCH UPPER-CASE AND 6-INCH LOWER-CASE.
4. FOR LONGER STREET NAMES, USE HIGHWAY GOTHIC C OR B.



**POST MOUNTED STREET SIGNS
 OVER 40 MPH**

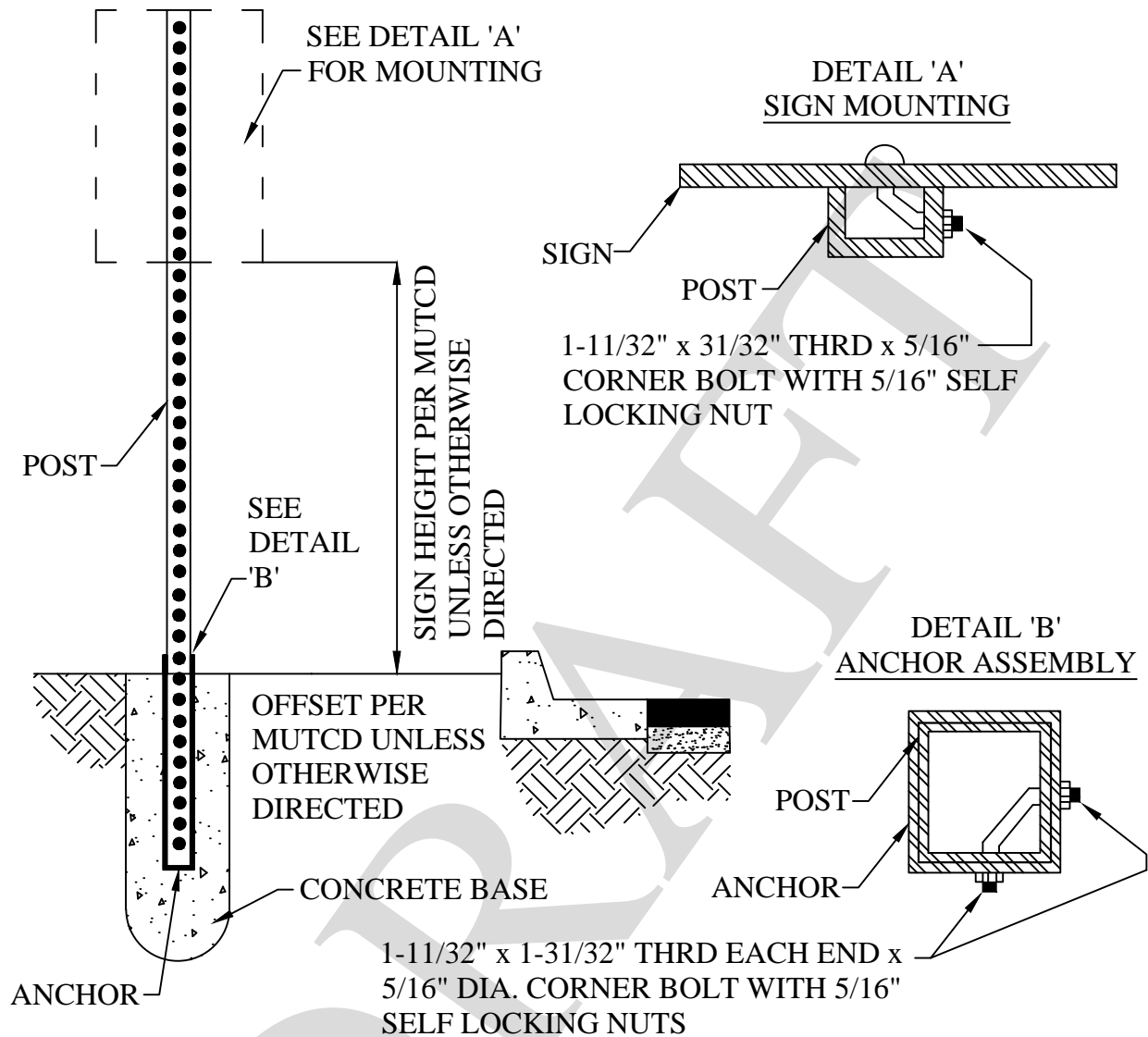
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CITY ENGINEER

REVISION DATE: 01/2018

STANDARD DETAIL NO.

131-2



LEGEND

- POST: 1-3/4" x 1-3/4" SQUARE PERFORATED 0.105" GALVANIZED STEEL TUBING (GALVANIZED FINISH)
- ANCHOR: 2" x 2" x 30" SQUARE PERFORATED 0.105" GALVANIZED STEEL TUBING (GALVANIZED FINISH)

NOTES:

1. SIGN POST AND ANCHOR PER CITY OF EL MIRAGE DETAIL 132-2 SPECIFICATIONS. 2. CONCRETE FOR ANCHOR SHALL BE 8-INCHES IN DIA. BY 24-INCHES IN DEPTH.
3. TOP OF ANCHOR SHALL BE 6-INCHES MAXIMUM ABOVE GROUND SURFACE.



SIGN POST INSTALLATION

APPROVED BY:

CITY ENGINEER

REVISION DATE: 08/2014

STANDARD DETAIL NO.

132-1

SPECIFICATIONS:

- THE CITY OF EL MIRAGE REQUIRES SQUARE TUBING FOR POST MOUNTED SIGN INSTALLATIONS.
- TUBING SHALL HAVE A GALVANIZED FINISH AND BE ROLL FORMED FROM TWELVE (12) GAGE (.105 USS GAGE) COLD ROLLED STEEL, BE PERFORATED, AND HAVE A HOLE SIZE OF 7/16" IN DIAMETER AND 1" ON CENTER ON ALL SIDES.
- ALL POSTS REQUIRE A 2" x 2" x 30" ANCHOR TO BE CONCRETED INTO ANY GROUND SURFACE AT A DEPTH OF 24".
- FOR SINGULAR SIGNS A 1-3/4" x 1-3/4" x 10' POST IS REQUIRED. FOR DUAL SIGNS A 1-3/4" x 1-3/4" x 12' POST IS REQUIRED.
- ALSO FOR SIGNS THAT EXCEED 42" IN WIDTH, DUAL POSTS AND ANCHORS ARE REQUIRED.
- ATTACHMENT OF THE POST TO THE ANCHOR REQUIRES A 1-11/32" x 31/32" x 5/16" CORNER BOLT (THREADED AT EACH END) WITH 5/16" SELF LOCKING NUTS.
- ATTACHMENT OF THE SIGN TO THE POST REQUIRES A 1-11/32" x 31/32" x 5/16" CORNER BOLT WITH SELF LOCKING NUTS.
- THE ANCHOR SHALL BE PROTECTED (TAPED) PRIOR TO THE CONCRETE PLACEMENT. THE CONCRETE BASE SHALL BE 8" IN DIAMETER x 24" IN DEPTH, WITH 4" MINIMUM TO 6" MAXIMUM ABOVE FINISH GROUND LEVEL.
- ALL STOP SIGN POSTS MUST BE EQUIPPED WITH A RED VIS-Z-SHIELD OR APPROVED EQUAL.



SIGN POST SPECIFICATIONS

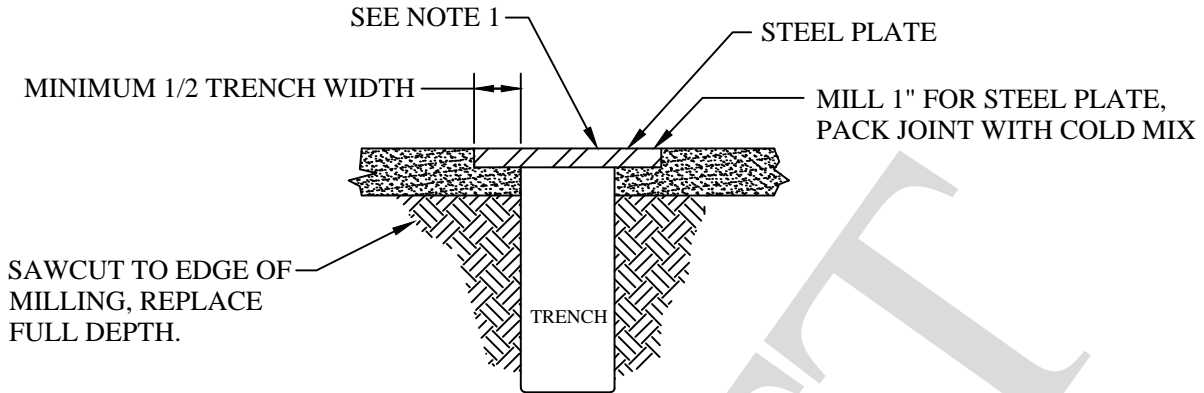
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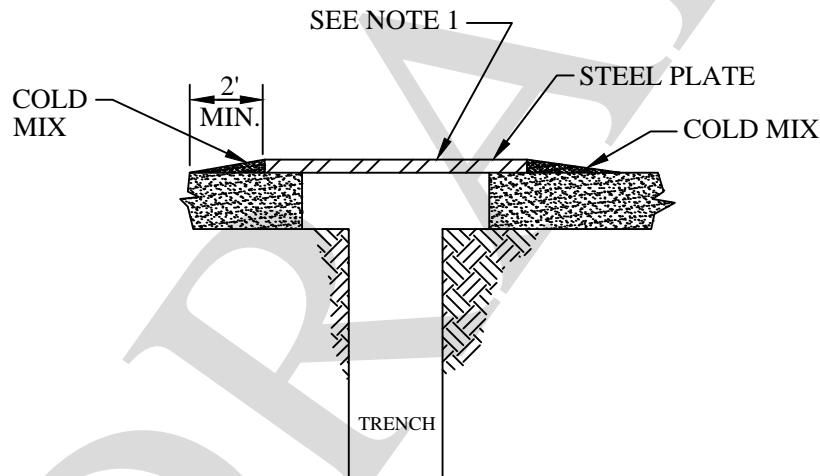
STANDARD DETAIL NO.

132-2



TYPE "A" PLATING

CITY POSTED SPEEDS OF
GREATER THAN 25 MPH
OR BUS & TRUCK ROUTE



TYPE "B" PLATING

CITY POSTED SPEEDS OF
25 MPH AND LESS

NOTES

1. THE CONTRACTOR SHALL PROVIDE ADEQUATE OVERLAP OF PLATE ON ASPHALT TO ASSURE NO SLIPPAGE OF PLATE AND NO COLLAPSING OF TRENCH.
2. "POSTED SPEED" DOES NOT INCLUDE TEMPORARY CONSTRUCTION SIGNING.
3. RECESSED PLATING MAY BE REQUIRED ON ANY STREET AT THE DISCRETION OF THE CITY ENGINEER.



TRENCH PLATING

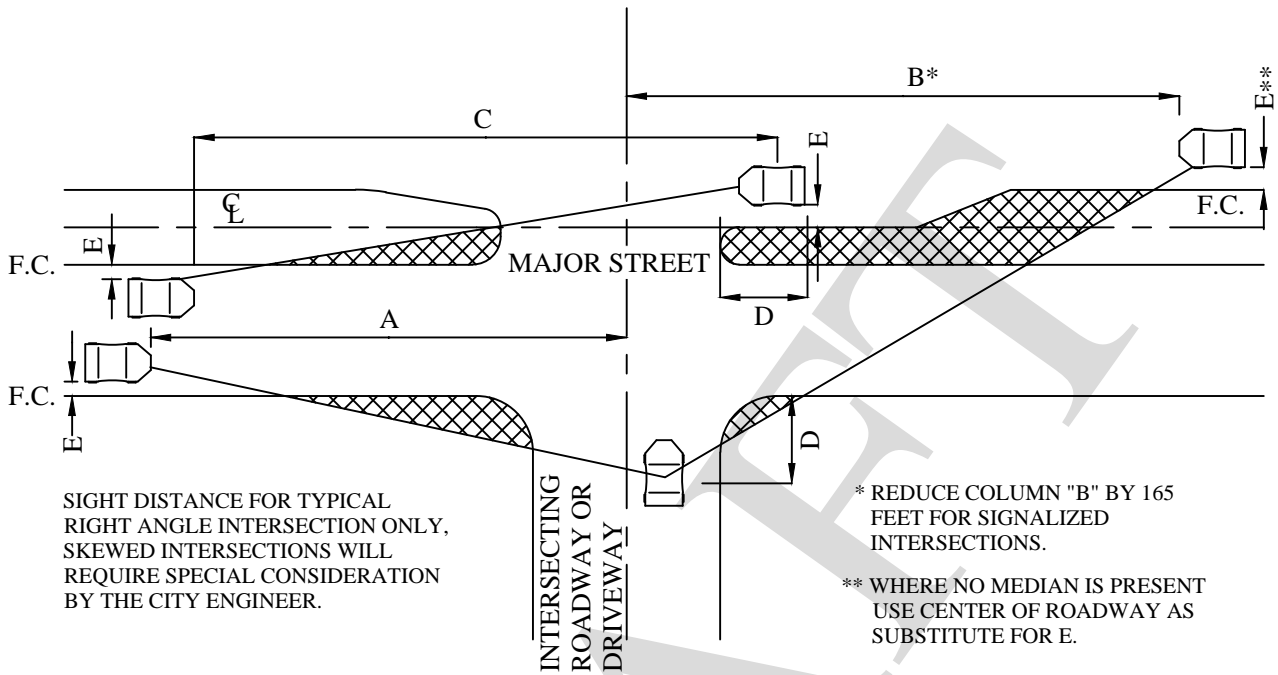
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REVISION DATE: 08/2014

STANDARD DETAIL NO.

149



TABLE

STREET	A	*B	C	D	E
COLLECTOR	455'	455'	490'	16'	3'
ARTERIAL	585'	585'	630'	16'	3'

NOTES

1. NO SIGNS, FENCES, WALLS, UTILITY BOXES, STRUCTURES, SHRUBS, HEDGES, OR OTHER PLANTS, (EXCLUDING TREES) OVER 30 INCHES IN HEIGHT SHALL BE PERMITTED WITHIN THE RESTRICTED AREAS, EXCEPT AS APPROVED BY THE CITY ENGINEER.
2. TREES ARE PERMITTED WITHIN THE RESTRICTED AREAS PROVIDED:
 - A. NO LIMBS, LEAVES, NEEDLES OR OTHER FOLIAGE ABOVE 30 INCHES OR BELOW 84 INCHES ARE PERMITTED.
 - B. TREES ARE PLANTED SO AS NOT TO OBSTRUCT 20% OF THE VISIBILITY WHEN COMBINED WITH OTHER OBSTRUCTIONS PRESENT.



SIGHT DISTANCE REQUIREMENTS FOR ARTERIAL AND COLLECTOR STREETS

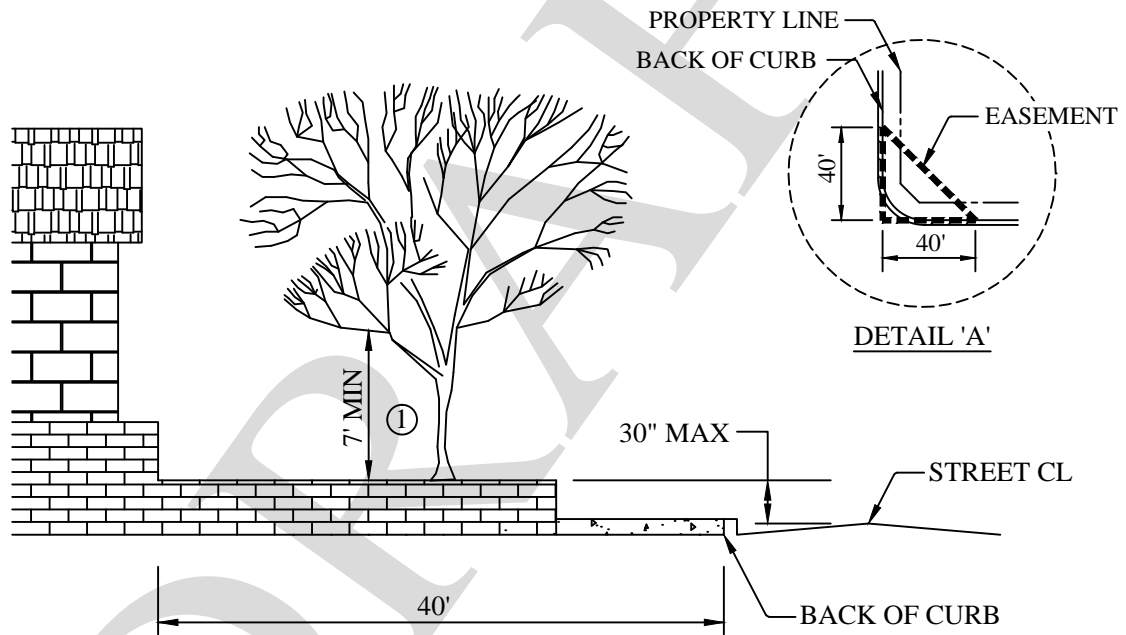
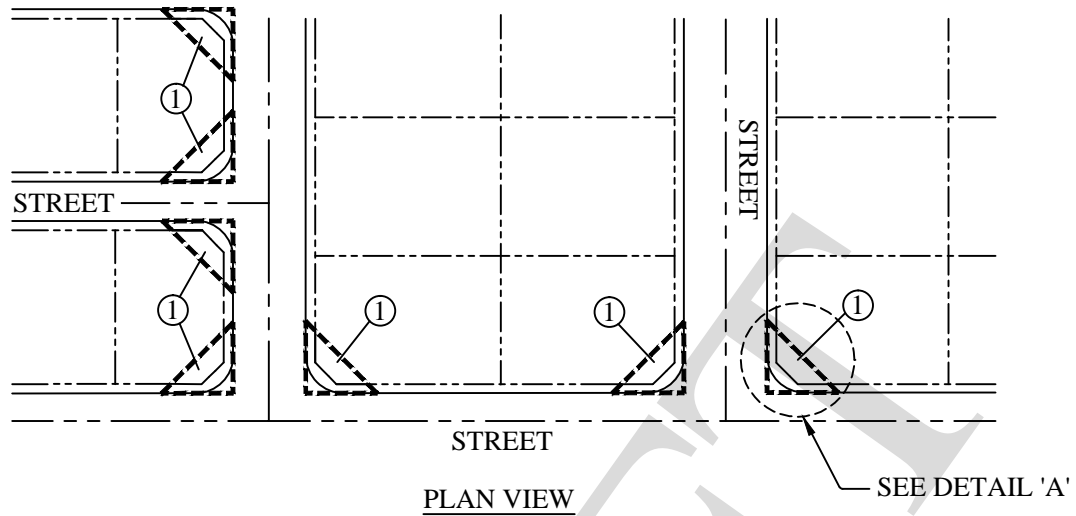
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CITY ENGINEER

REVISION DATE: 08/2014

STANDARD DETAIL NO.

158

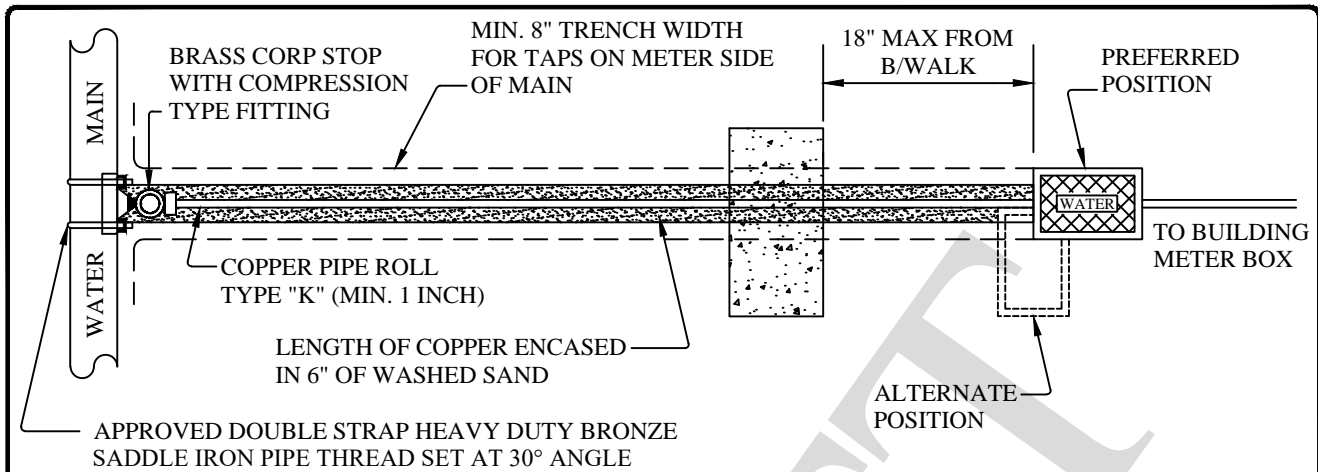


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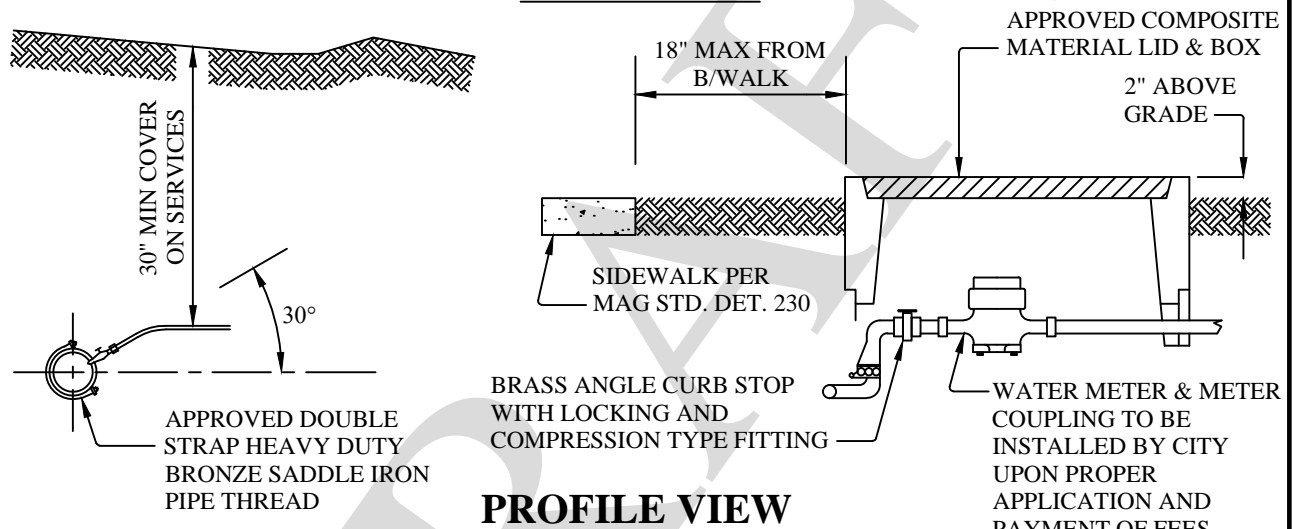
1. UNOBSTRUCTED VIEW EASEMENT INCLUDES THE TRIANGULAR AREA BEGINNING AT THE INTERSECTION OF THE PROJECTED CURB LINES OF TWO INTERSECTING STREETS, THENCE 40 FEET ALONG ONE BACK OF CURB LINE, THENCE DIAGONALLY TO A POINT 40 FEET FROM THE POINT OF BEGINNING ON THE OTHER CURB LINE AND THEN BACK TO THE POINT OF BEGINNING.
2. SIGNS, FENCES, WALLS, UTILITY BOXES, STRUCTURES, SHRUBS, HEDGES OTHER PLANTS (EXCLUDING TREES) OVER 30 INCHES ABOVE STREET CENTERLINE GRADE SHALL NOT BE PERMITTED WITHIN THE RESTRICTED AREAS, EXCEPT AS APPROVED BY THE CITY ENGINEER.
3. TREES ARE PERMITTED WITHIN THE RESTRICTED AREAS PROVIDED:
 - A) NO LIMBS, LEAVES, NEEDLES OR OTHER FOLIAGE ABOVE 30 INCHES OR BELOW 84 INCHES ARE PERMITTED.
 - B) TREES ARE PLANTED SO AS NOT TO OBSTRUCT 20 PERCENT OF THE VISIBILITY WHEN COMBINED WITH OTHER OBSTRUCTIONS PRESENT.



UNOBSTRUCTED VIEW EASEMENT REQUIREMENTS FOR STREETS	
APPROVED BY: _____	REVISION DATE: 08/2014
CITY ENGINEER _____	STANDARD DETAIL NO. 159



PLAN VIEW

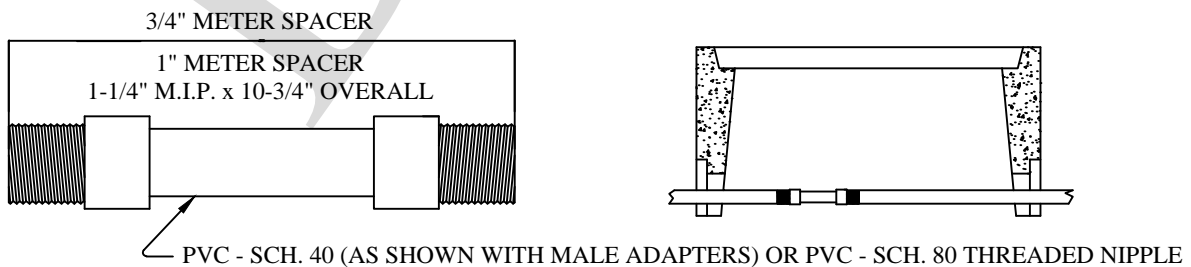


PROFILE VIEW

NOTES:

1. ALL TAPS MUST BE MADE BY USING A SERVICE SADDLE AS SHOWN.
2. IF CONTRACTOR IS TO TAP THE MAIN AND INSTALL WATER SERVICES, THEY SHALL INCLUDE THE CORP STOP, SERVICE PIPE, APPURTENANT FITTINGS, CURB STOP, METER BOX AND COVER.
3. TAP SIZE SHALL BE A MINIMUM OF ONE INCH. METERS LARGER THAN ONE INCH MUST MATCH METER SIZE.
4. NO COUPLINGS ALLOWED FOR SERVICE LINE.
5. ALL MATERIALS SHALL CONFORM TO THE LATEST MAG SPECIFICATIONS.

CONSTRUCTION SERVICE WATER METER BY-PASS



WATER SERVICE CONNECTIONS - 2\"/>

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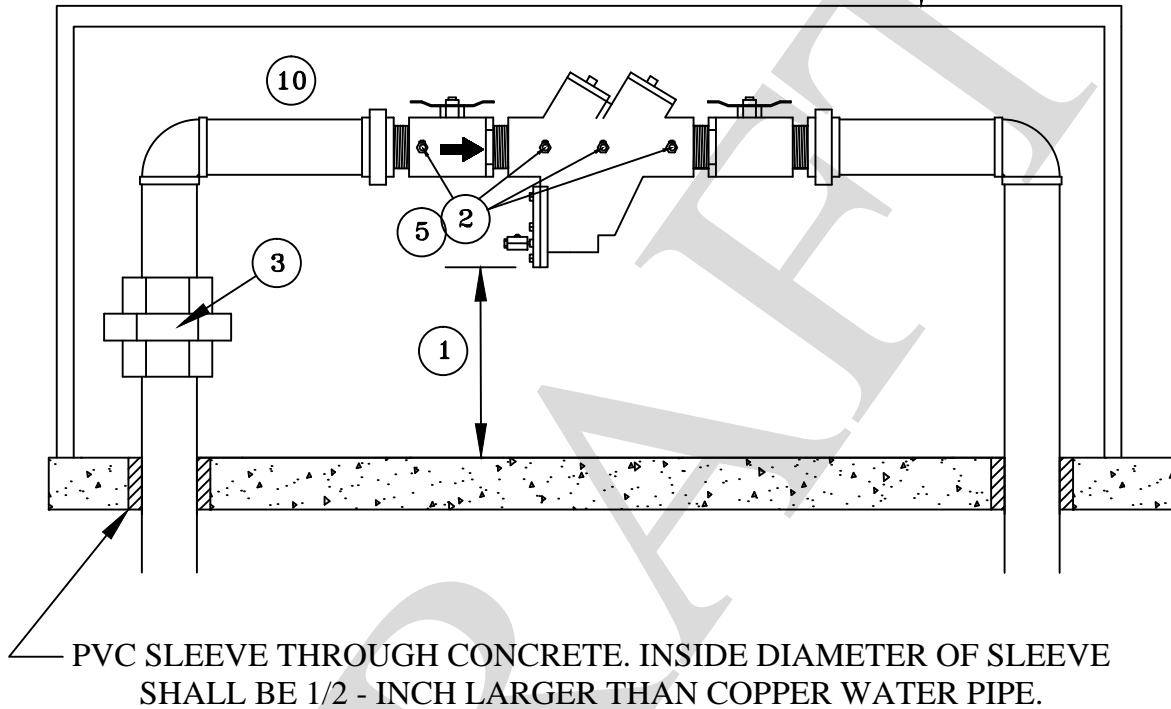
REVISION DATE: 8/2014

STANDARD DETAIL NO.

325

OUTSIDE INSTALLATION

GUARDSHACK GS-1 ENCLOSURE OR EQUIVALENT



PVC SLEEVE THROUGH CONCRETE. INSIDE DIAMETER OF SLEEVE SHALL BE 1/2 - INCH LARGER THAN COPPER WATER PIPE.

NOTES

1. BOTTOM OF ASSEMBLY MUST BE AT LEAST 12" ABOVE GRADE BUT NO MORE THAN 30" ABOVE GRADE.
2. MINIMUM CLEARANCE IN FRONT OF TEST COCKS-12".
3. MINIMUM OF ONE UNION REQUIRED, TYPE "L" HARD COPPER REQUIRED.
4. ASSEMBLIES MUST BE INSPECTED BY THE CITY OF EL MIRAGE AND TESTED BY A CITY APPROVED TESTER.
5. ALL TEST COCKS SHALL HAVE BRASS PLUGS.
6. A PERMIT IS REQUIRED FOR INSTALLATION.
7. CONTACT CITY FOR VERIFICATION OF APPROVED ASSEMBLIES.
8. ASSEMBLIES MUST BE INSTALLED AS SHIPPED.
9. ALL INSTALLATIONS SHALL BE PROTECTED.
10. INSTALL A "Y" STRAINER ON THE INLET SIDE.



REDUCED PRESSURE BACKFLOW PREVENTOR - 2" & SMALLER

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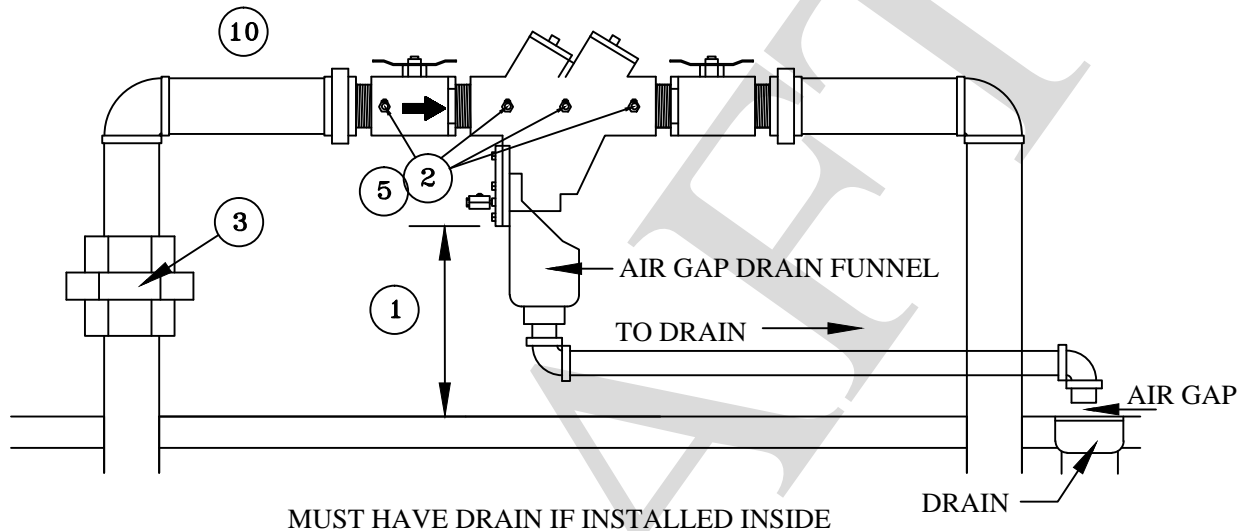
CITY ENGINEER

REVISION DATE: 03/2015

STANDARD DETAIL NO.

351-1

INSIDE INSTALLATION



NOTES

1. BOTTOM OF ASSEMBLY MUST BE AT LEAST 12" ABOVE GRADE BUT NO MORE THAN 30" ABOVE GRADE.
2. MINIMUM CLEARANCE IN FRONT OF TEST COCKS-12".
3. MINIMUM OF ONE UNION REQUIRED, TYPE "L" HARD COPPER REQUIRED.
4. ASSEMBLIES MUST BE INSPECTED BY THE CITY OF EL MIRAGE AND TESTED BY A CITY APPROVED TESTER.
5. ALL TEST COCKS SHALL HAVE BRASS PLUGS.
6. A PERMIT IS REQUIRED FOR INSTALLATION.
7. CONTACT CITY FOR VERIFICATION OF APPROVED ASSEMBLIES.
8. ASSEMBLIES MUST BE INSTALLED AS SHIPPED.
9. ALL INSTALLATIONS SHALL BE PROTECTED.
10. INSTALL A "Y" STRAINER ON THE INLET SIDE.



REDUCED PRESSURE BACKFLOW PREVENTOR - 2" & SMALLER

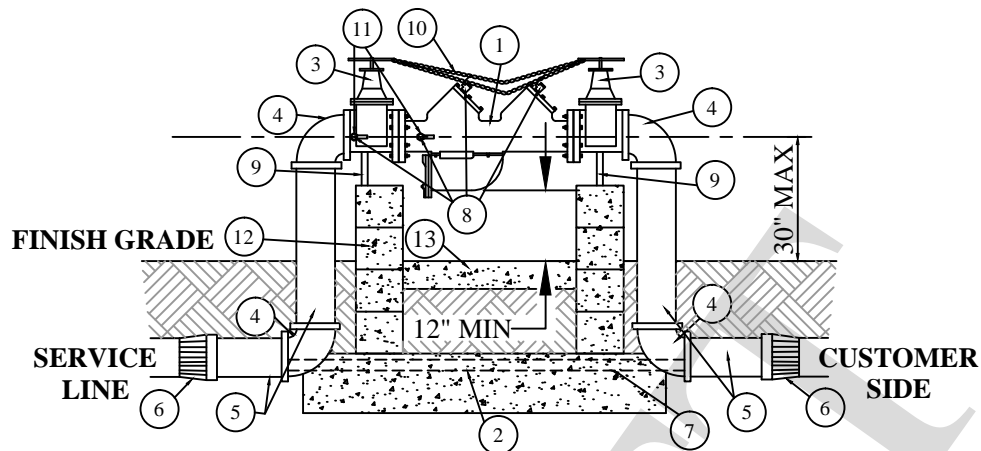
APPROVED BY:

CITY ENGINEER

REVISION DATE: 03/2015

STANDARD DETAIL NO.

351-2



REDUCED PRESSURE PRINCIPLE

LIST OF MATERIALS

1. APPROVED BACKFLOW ASSEMBLY
2. COAT WITH COAL TAR EPOXY (16 MILS.)
3. GATE VALVE
4. 90° ELBOW (FLANGED D.I.P. 3" THRU 10")
5. PIPE SPOOL (FLANGED D.I.P. 3" THRU 10")
6. FLANGED ADAPTER (WHEN REQUIRED)
7. 3" X 3" X 1/4" STEEL ANGLE BOLT TO FLANGE AT EACH END
8. TEST COCK (4 REQUIRED)
9. ADJUSTABLE PIPE SUPPORT
10. CHAIN & LOCK (FIRE LINE ONLY)
11. INSTALL TATTLE TAIL APPARATUSES & FITTINGS (METER TO BE INSTALLED BY CITY)
12. 8" X 8" X 16" CONCRETE BLOCK FILLED WITH MORTAR
13. CONCRETE PAD FROM SUPPORT TO SUPPORT (4" DEEP X 12" WIDE)

GENERAL NOTES

- A. CONTACT CITY OF EL MIRAGE WATER SUPERINTENDENT FOR LIST OF APPROVED ASSEMBLIES
- B. ASSEMBLY SHALL BE APPROVED BY CITY OF EL MIRAGE INSPECTOR
- C. THE FOUR TEST COCKS SHALL BE FITTED WITH PLUGS AND USED FOR NO REASON OTHER THAN TESTING
- D. INSTALLATION SHALL BE PROTECTED BY GUARD POST (SEE STANDARD) IF NEAR TRAFFIC
- E. FINISHED GRADE UNDERNEATH ASSEMBLY SHALL BE 95% COMPACTION
- F. ASSEMBLY SHALL BE PAINTED TAN OR COLOR TO MATCH BACKGROUND
- G. INSPECTIONS MUST BE CALLED FOR PIERS, KICKBLOCK, AND ANGLE STEEL PLACEMENT
- H. BOTTOM TO BE 12" MIN TO 30" MAX. ABOVE GRADE
- I. 12" CLEARANCE TO TEST COCKS
- J. ASSEMBLY MUST BE TESTED AT TIME OF INSTALLATION BY CITY APPROVED TESTER
- K. PERMIT REQUIRED FOR INSTALLATION
- L. THRUST BLOCK PER MAG STD DET 380



CROSS CONNECTION CONTROL LARGER THAN 2" REDUCED PRESSURE BACKFLOW PREVENTOR

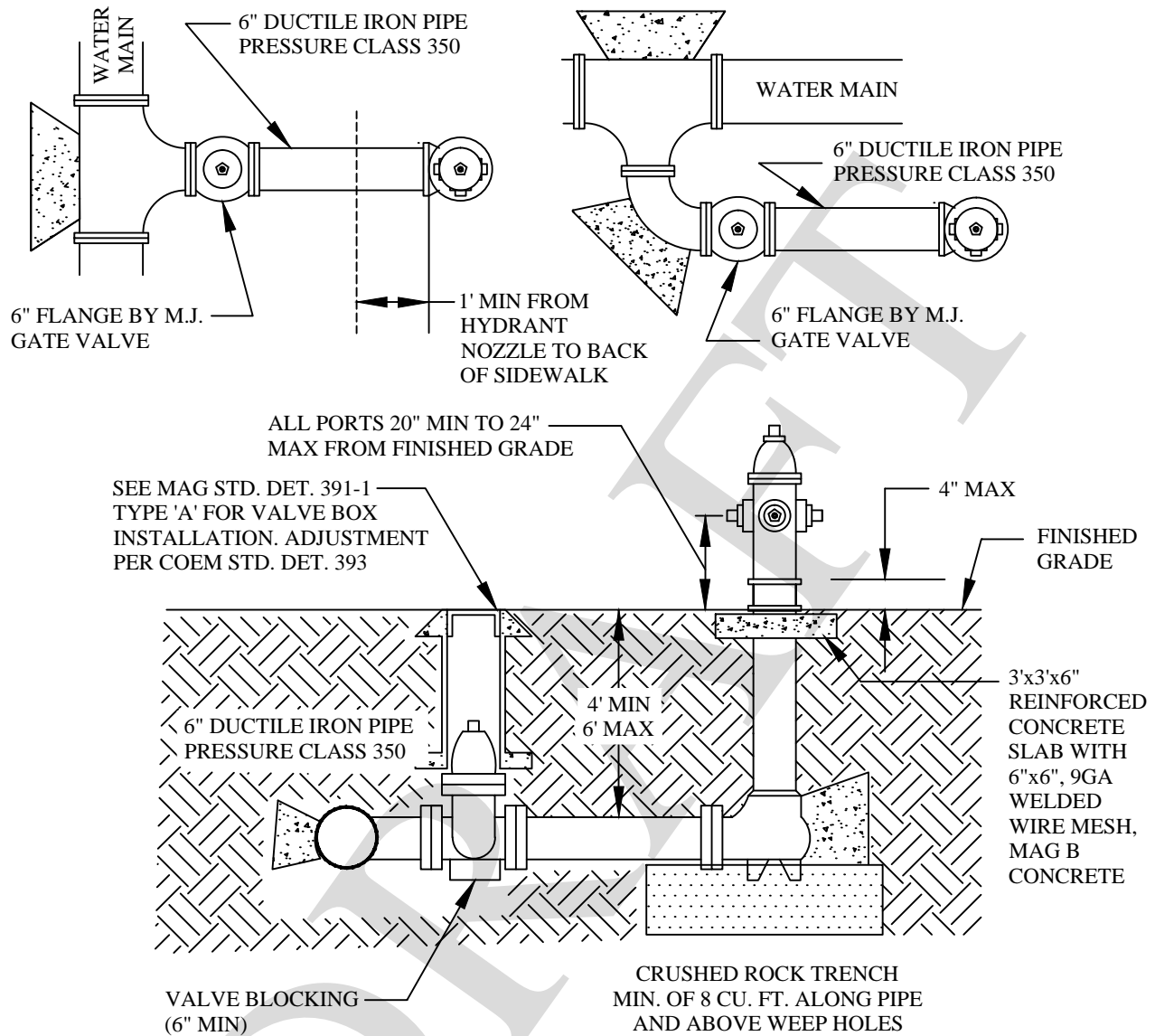
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REVISION DATE: 11/2017

STANDARD DETAIL NO.

352



NOTES:

1. ALL JOINTS SHALL BE RESTRAINED, INCLUDING THE MAIN AT TEE ENDS..
2. APPROVED HYDRANTS INCLUDE MUELLER CENTURION, WATEROUS PACER, KENNEDY, CLOW AND EAST JORDAN.
3. THE 6-INCH GATE VALVE SHALL BE FLANGED BY MECHANICAL JOINT.
4. NO VALVES ARE TO BE IN THE CONCRETE.
5. THE 4-1/2 INCH PORT OF THE FIRE HYDRANT IS TO BE INSTALLED FACING THE STREET.
6. NATIONAL STANDARD THREADS REQUIRED ON ALL CONNECTIONS.
7. INSTALL FIRE HYDRANT MARKER(S) PER MAG STD. DET. 122
8. ALL CITY HYDRANTS SHALL BE PAINTED WITH TWO COATS OF SHERWIN WILLIAMS INDUSTRIAL ENAMEL "SAFETY YELLOW" (B54Y37) PAINT. ALL PRIVATE HYDRANTS SHALL BE PAINTED WITH TWO COATS OF SHERWIN WILLIAMS INDUSTRIAL ENAMEL "SAFETY RED" (B54R38) PAINT.



FIRE HYDRANT INSTALLATION

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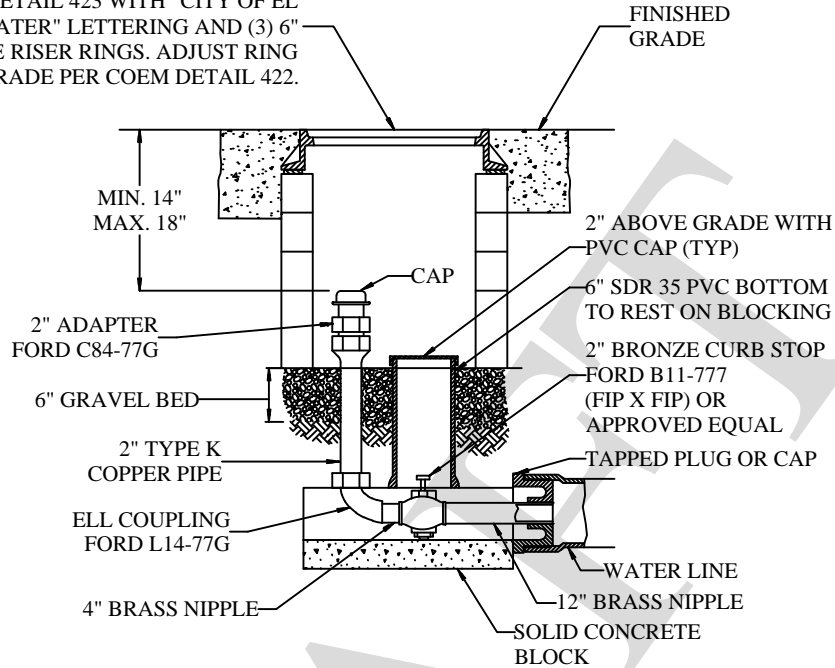
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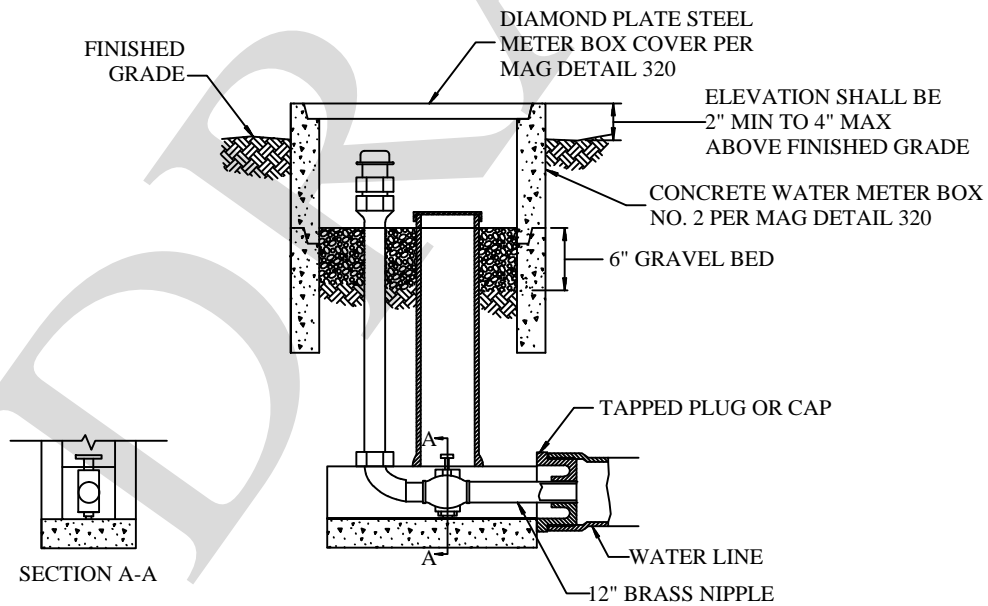
STANDARD DETAIL NO.

360

24" MANHOLE RING AND COVER PER COEM DETAIL 423 WITH "CITY OF EL MIRAGE WATER" LETTERING AND (3) 6" MANHOLE RISER RINGS. ADJUST RING TO GRADE PER COEM DETAIL 422.



TRAFFIC AREAS



SECTION A-A

NON-TRAFFIC AREAS



BLOW OFF

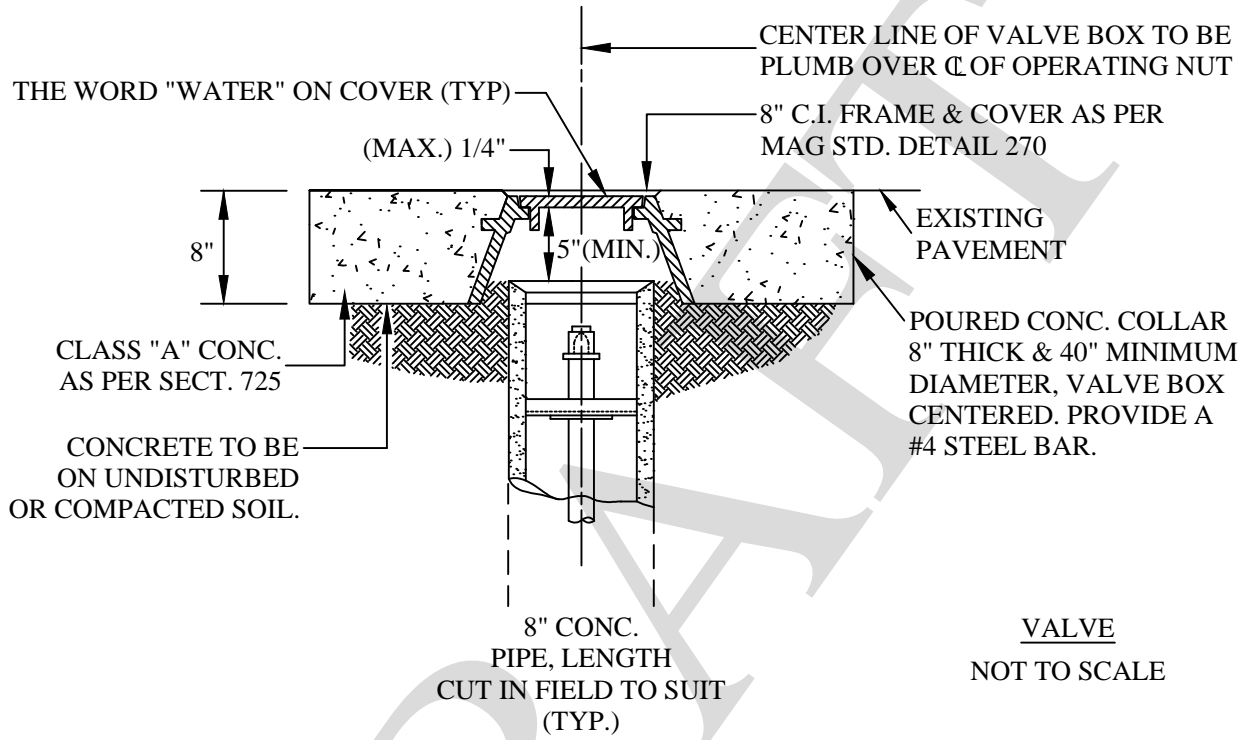
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REVISION DATE: 02/2018

STANDARD DETAIL NO.

390



NOTES:

1. COMPACTION BELOW CONCRETE ADJUSTMENT TO BE COMPACTED AT 95% MIN.
2. CONCRETE ADJUSTMENTS ARE REQUIRED ON (BOTH) PAVED AND UNPAVED SURFACES.
3. CONCRETE SHALL HAVE A MEDIUM BROOM FINISH WITH FOUR SCORE MARKS MINIMUM.
4. VALVE BOX SHALL BE ADJUSTED TO FINISHED GRADE PRIOR TO CONCRETE PLACEMENT.
5. EXTENSION STEM IS REQUIRED FOR STEM DEPTHS EXCEEDING 5-FEET.
6. ASPHALT SURFACE (CRACKSEAL) IS REQUIRED AT CONCRETE JOINTS.
7. DEBRIS CAPS ARE REQUIRED.



WATER VALVE ADJUSTMENT

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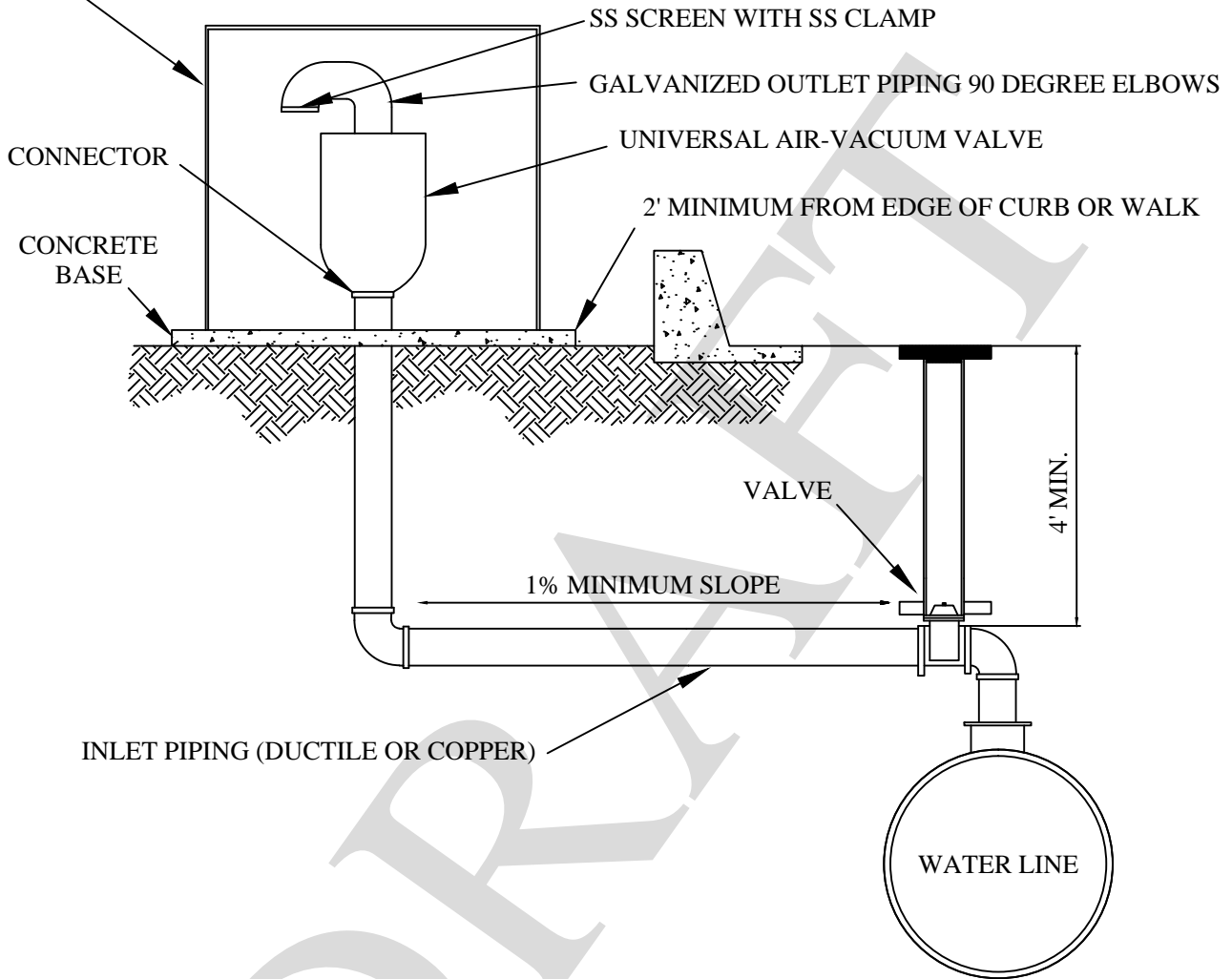
CITY ENGINEER

REVISION DATE: 11/2017

STANDARD DETAIL NO.

393

GAURDSHACK GS-1 ENCLOSURE OR EQUIVALENT



NOTES:

1. VANDAL ENCLOSURE TO BE "GAURDSHACK GS-1 OR APPROVED EQUAL.
2. LINE FROM MAIN TO AIR RELEASE VALVE TO BE INSTALLED WITH POSITIVE SLOPE TO PREVENT BLOCKAGE.
3. CONCRETE BASE TO BE 4-INCHES THICK WITH NUMBER 4-60 GRADE STEEL REINFORCEMENT AT 12-INCHES O.C. E.W., THE BASE SHALL EXTEND A MINIMUM OF 12-INCHES OUTSIDE THE ENCLOSURE.
4. FIELD PAINT ALL FITTINGS AND VANDAL ENCLOSURE "SAN DIEGO BUFF".
5. SIZE OF UNIVERSAL AIR-VACUUM VALVE AND APPURTENANCES SHALL BE SPECIFIED BY THE DESIGN ENGINEER.



UNIVERSAL AIR-VACUUM VALVE

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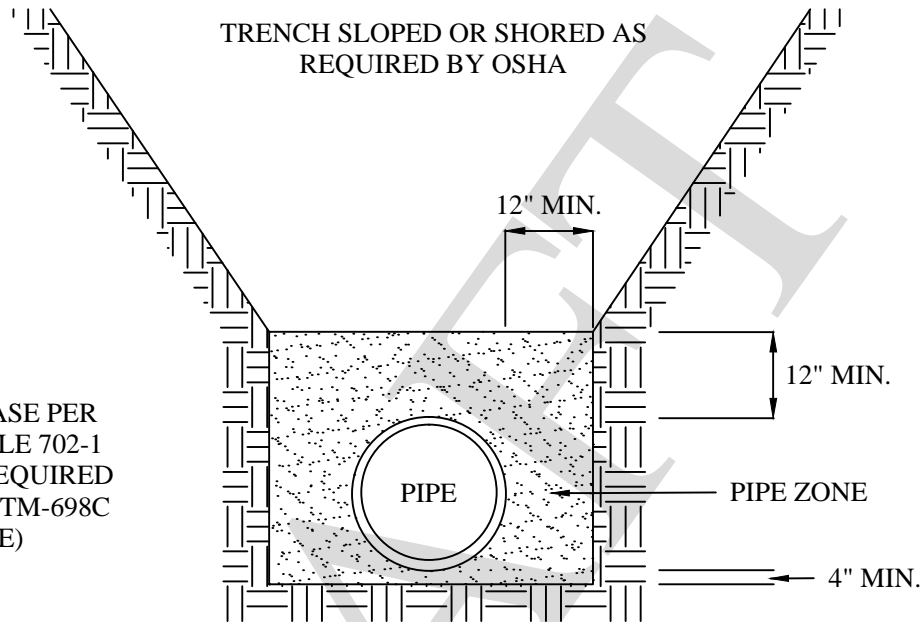
CITY ENGINEER

REVISION DATE: 11/2017

STANDARD DETAIL NO.

395

AGGREGATE BASE PER
MAG SPEC. TABLE 702-1
90% MINIMUM REQUIRED
DENSITY PER ASTM-698C
(PIPE ZONE)



NOTES:

1. AGGREGATE BASE PER MAG STANDARD SPECIFICATIONS TABLE 702-1, SHALL BE USED IN THE PIPE ZONE. THE PIPE ZONE EXTENDS FROM THE BOTTOM OF TRENCH TO ONE-FOOT ABOVE THE TOP OF PIPE.
2. BOTTOM OF TRENCH TO BE INSPECTED FOR UNIFORMITY AND SUBJECT TO COMPACTION TESTING AT THE DISCRETION OF THE CITY OF EL MIRAGE PRIOR TO BEDDING PLACEMENT.
3. PIPE ZONE PLACEMENTS SHALL BE NO LESS THAN FOUR LIFTS, BEDDING, SPRINGLINE, TOP OF PIPE AND 1-FOOT ABOVE PIPE. EACH LIFT SHALL BE PLACED AT 90% COMPACTION.
4. BACKFILL ABOVE THE PIPE ZONE SHALL CONFORM TO MAG SECTION 601, TABLE 601-2 TYPE 1 AND NOTE 5 BELOW.
5. ALL BACKFILL BELOW EXISTING ASPHALT PAVING SHALL BE PLACED WITH 1/2 SACK CLSM (SLURRY). ASPHALT REPLACEMENTS SHALL CONFORM TO MAG STANDARD DETAIL 200 "TYPE A" FROM 1-FOOT ABOVE TOP OF PIPE TO 5-INCHES BELOW FINISH GRADE.



**BEDDING AND BACKFILL FOR
ALL PIPELINES**

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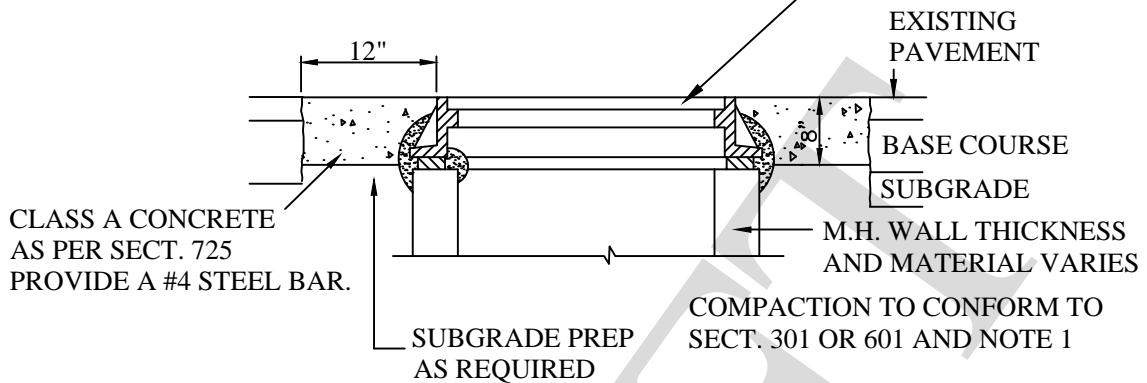
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406

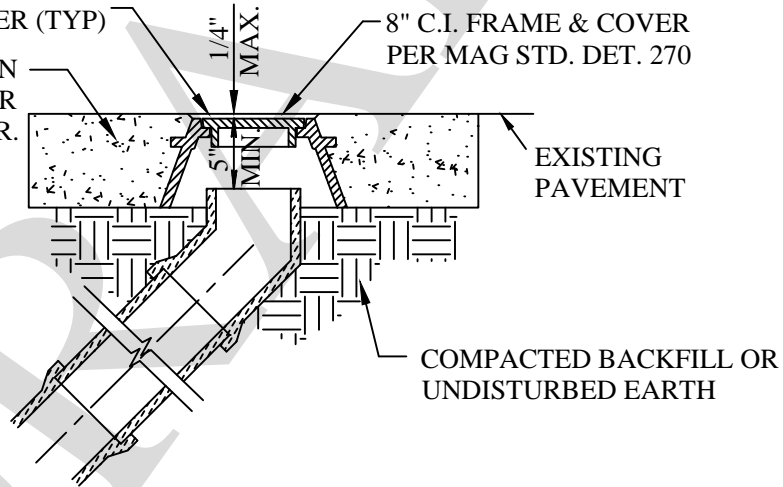
THE WORD "CITY OF EL MIRAGE
SANITARY SEWER" ON COVER (TYP)



MANHOLE

THE WORD "SEWER" ON
COVER (TYP)

CLASS 'A' CONC. PER SECTION
725, 8" THICK, 40" DIAMETER
PROVIDE A #4 STEEL BAR.



CLEANOUT

NOTES:

1. COMPACTION BELOW CONCRETE ADJUSTMENT TO BE AT 95% MIN.
2. CONCRETE ADJUSTMENTS ARE REQUIRED ON (BOTH) PAVED AND UNPAVED SURFACES.
3. MANHOLES SHALL HAVE AT LEAST ONE ADJUSTMENT RING ON CONE.
4. CONCRETE SHALL HAVE A MEDIUM BROOM FINISH WITH FOUR SCORE MARKS MINIMUM.
5. ASPHALT SURFACE (CRACKSEAL) IS REQUIRED AT CONCRETE JOINTS.



**SEWER MANHOLE AND CLEANOUT
ADJUSTMENTS**

APPROVED BY:

CITY ENGINEER

REVISION DATE: 11/2017

STANDARD DETAIL NO.

422

MATERIAL: CAST GRAY IRON ASTM A-48, CLASS 35, AASHTO M306
DRAWING NOT TO SCALE



2" RAISED LETTERS
FLUSH WITH TOP OF
COVER



OPEN PICKSLOT

NOTES:

1. MANHOLE COVER DIMENSIONS MUST ADHERE TO MAG STANDARD DETAILS 423 OR 424.
2. ALL MATERIALS SHALL CONFORM TO THE LATEST MAG SPECIFICATIONS.
3. MANHOLE COVER IS NEENAH FOUNDRY PRODUCT NO. DF-1296-T OR EAST JORDAN IRON WORKS PRODUCT NO. 2230.



MANHOLE COVER WITH CITY LOGO

APPROVED BY:

CITY ENGINEER

REVISION DATE: 10/2015

STANDARD DETAIL NO.

423