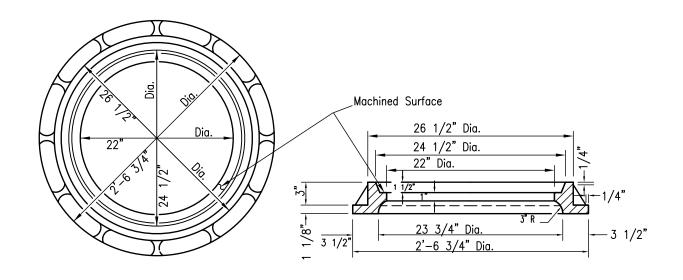
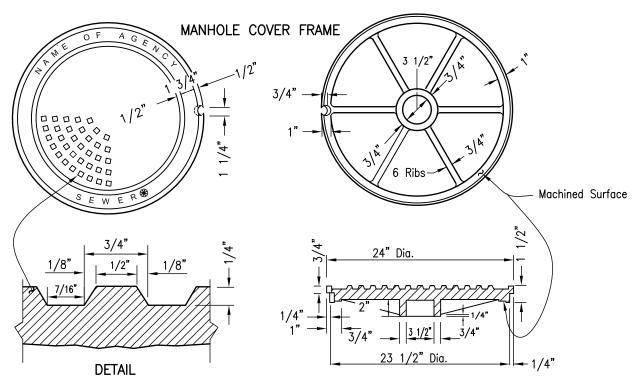
MISCELLANEOUS



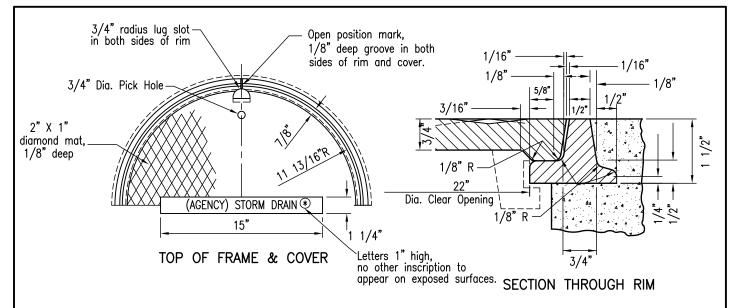


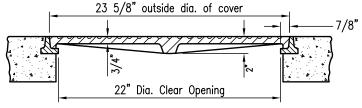
MANHOLE COVER

- Frame and cover shall be cast iron. Cast iron shall conform to ASTM 48, Class 35B.
- Weights: Frame 166 lbs 193 lbs.
 Cover 147 lbs 171 lbs.
 Machine all matching surfaces and seats of
- frame and cover to prevent rocking.
- Imported frames and covers shall have the country of origin marked in compliance with federal regulations.

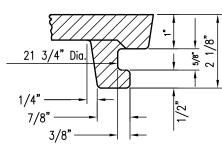
FOR	MARK
Sewer Projects	Sewer
Storm Drain Projects	Storm Drain
Water Projects	Water

Revision	Ву	Approved	Date		RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75	0	
Reviewed		T. Stanton	10/18		Samon Jacka 03/24/2022
Reviewed	RP	S. Engeda	03/22	24" MANHOLE FRAME AND COVER	Chairperson R.C.E. 52241 Date
				HEAVY DUTY	DRAWING M-01
					NUMBER IVI-U I

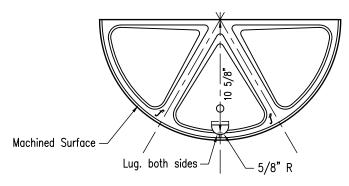




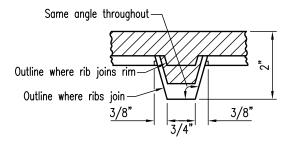
SECTION THROUGH FRAME & COVER



SECTION THROUGH LUG



BOTTOM OF COVER



SECTION THROUGH RIB AT MID RADIUS

Water

NOTES

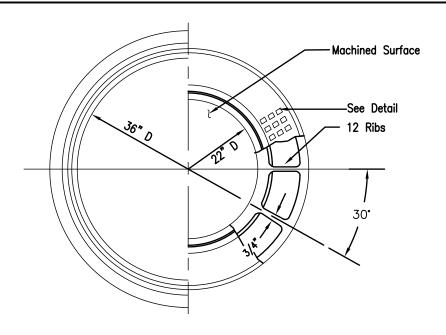
- 1. Frame and cover shall be cast iron. Cast iron shall conform to ASTM 48, Class 30.
- 2. Frame and cover for use in non-traffic area only.
 3. Weights: Frame 29 lbs 33 lbs.

 Cover 95 lbs. 110 lbs.
- 4. Imported frames and covers shall have the country of origin marked in compliance with federal regulations.

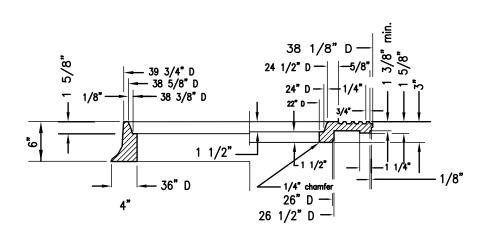
* **FOR** MARK Sewer Projects Sewer Storm Drain Projects Storm Drain

Water Projects

				LIGHT DUTY	DRAWING M-02
Reviewed	RP	S. Engeda	03/22	24" MANHOLE FRAME AND COVER	Chairperson R.C.E. 52241 Date
Reviewed		D. Gerschoffer	10/18		Samon Jacka 03/24/2022
ORIGINAL		Kercheval	12/75		REGIONAL STANDARDS COMMITTEE
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE



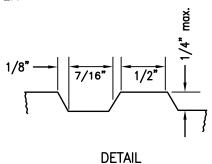
HALF PLAN FRAME & COVER



HALF SECTION FRAME & COVER

Davisian Dul Annuaccad Data

- Frame and cover shall be cast iron. Cast iron shall conform to ASTM 48, Class 35B.
- 2. Weights: Frame 314 lbs 363 lbs.
 Outer Cover 285 lbs 330 lbs.
 Inner Cover 147 lbs 171 lbs.
- 3. Machine all matching surfaces and seats of frame and cover to prevent rocking.
- Imported frames and covers shall have the country of origin marked in compliance with federal regulations.



Reviewed	DG	T.	Stanton	10/18	36" MANHOLF FRAME
Updated	DG	Τ.	Stanton	12/15	
Revision	l g à	A	oprovea	Date	SAN DIEGO REGIONAL STANDARD DRAWING

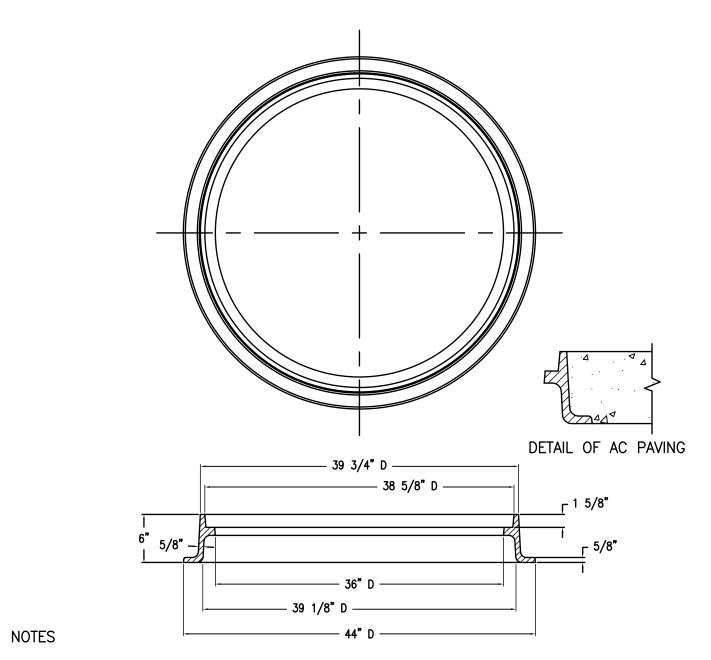
Reviewed DG T. Stanton 10/18
Reviewed RP S. Engeda 03/22
AND TWO CONCENTRIC COVERS
HEAVY DUTY

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

Samsin Engela 03/24/2022 Chairperson R.C.E. 52241 Date

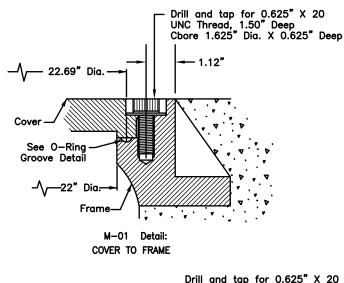
DRAWING NUMBER

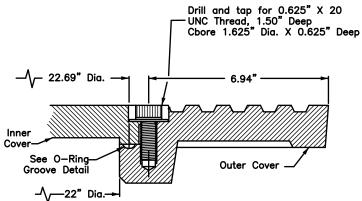
M-03A



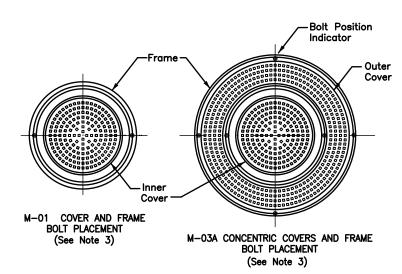
- 1. FRAME SHALL BE CAST IRON. CAST IRON SHALL CONFORM TO ASTM 48, CLASS 35B.
- 2. WEIGHT: FRAME 212 LBS.
- 3. USE COVER SHOWN ON M-03A.
- 4. MACHINE ALL MATCHING SURFACES AND SEATS OF FRAME AND COVER TO PREVENT ROCKING.
- 5. IMPORTED FRAMES AND COVERS SHALL HAVE THE COUNTRY OF ORIGIN MARKED IN COMPLIANCE WITH FEDERAL REGULATIONS.
- 6. COVER CANNOT BE BOLTED TO THIS FRAME.

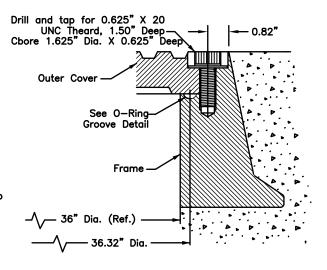
Revision	Ву	Approved	Date		RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Updated	DG	T. Stanton	12/15	ON THE BIESE RESIDIANE OF HAD THE BIG WING	0
Reviewed	DG	T. Stanton	10/18		Samson 20 do 03/24/2022
Reviewed	RP	S. Engeda	03/22	36" MANHOLE FRAME	Chairperson R.C.E. 52241 Date
				LIGHTWEIGHT - HEAVY DUTY	DRAWING M-03B
					NUMBER IVI-U3B



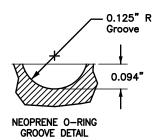


M-03A Detail: INNER COVER TO OUTER COVER





M-03A Detail: OUTER COVER TO FRAME



- 0.625" X 20 UNC THREAD, 316 STAINLESS STEEL SOCKET HEAD CAP SCREW AND 1.50" O.D. X 0.687" I.D. X 0.078" THICK 316 STAINLESS STEEL WASHER.
- 2. 0.25" NEOPRENE O-RING GASKET SHALL BE GLUED INTO MACHINED GROOVE. GLUE SHALL MEET THE REQUIREMENTS OF MIL-M-81288 (AMEND. 1)
- 3. BOLTDOWN PATTERNS:

 M-01 DETAIL (24" COVER & FRAME):
 INSTALL TWO (2) BOLTS AT 180 DEGREES.
- M-03A DETAIL (CONCENTRIC COVERS):
 BETWEEN INNER AND OUTER COVERS INSTALL
 TWO (2) BOLTS AT 180 DEGREES.

Revision	Ву	Approved	Date
ORIGINAL		Parkinson	2/95
Updated		D. Gerschoffer	12/15
Reviewed		D. Gerschoffer	10/18
Reviewed	RP	S. ENGEDA	03/22

SAN DIEGO REGIONAL STANDARD DRAWING

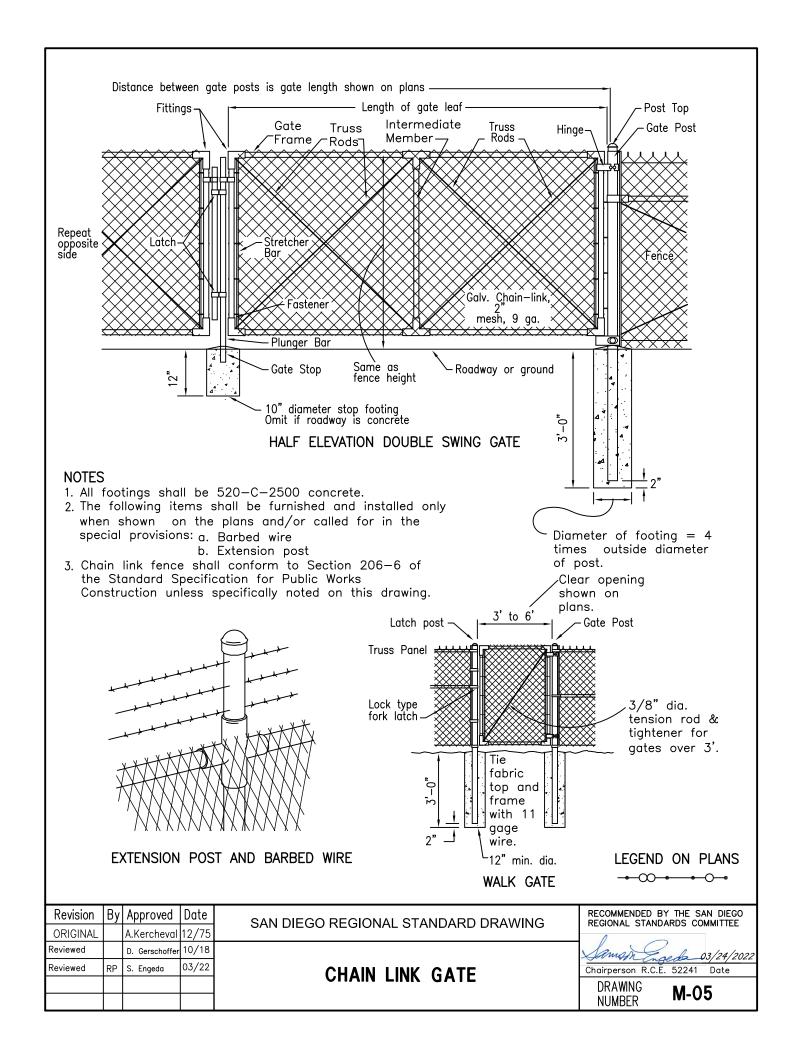
MANHOLE COVER - LOCKING DEVICE

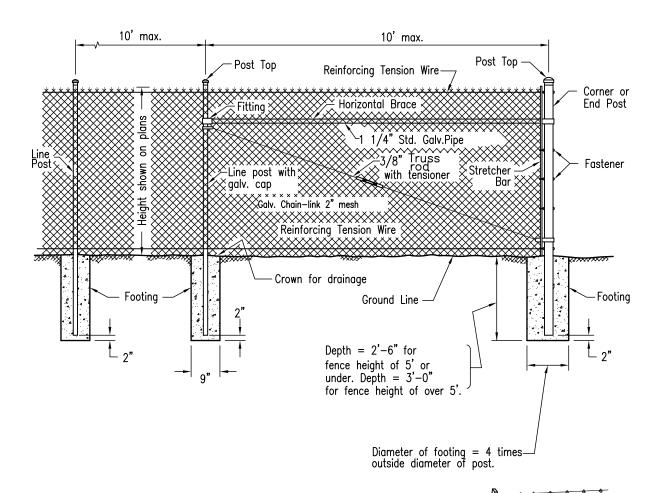
RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

03/24/2022 Chairperson R.C.E. 19246 Date

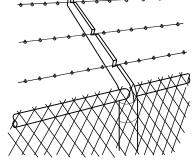
DRAWING M-04

NUMBER





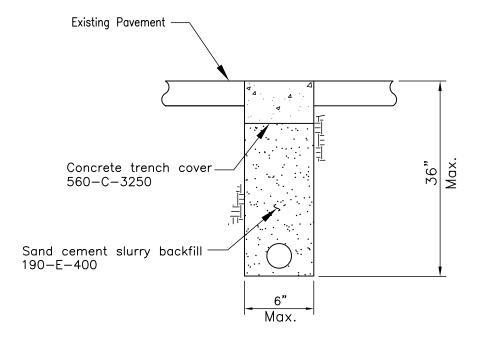
- 1. All footings shall be 520-C-2500 concrete.
- 2. The following items shall be furnished and installed only when shown on the plans and/or called for in the special provisions.
 - a. Barbed Wire
 - b. Extension Arm
 - c. Top Horizontal Rail
- Chain link fence shall conform to Section 206-6 of the Standard Specifications for Public Works Construction unless specifically noted on this drawing.
- 4. See Standard Drawing M-20 for additional details.



EXTENSION ARM AND BARBED WIRE

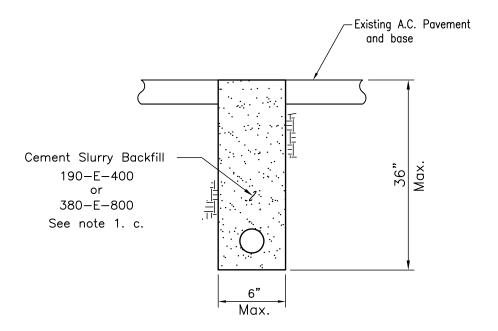
LEGEND ON PLANS

					DRAWING NUMBER M-06
Reviewed	RP	S. Engeda	03/22	CHAIN LINK FENCE	Chairperson R.C.E. 52241 Date
Reviewed		D. Gerschoffer	10/18		Samon Spela 03/24/2022
ORIGINAL		A.Kercheval	12/75		TRESISTANCE STATES THE STATES OF THE STATES
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE



- 1. Concrete encasement or sand cement slurry backfill shall have a minimum slump of 4".
- 2. Sand cement slurry backfill shall be thoroughly consolidated to encase conduits. Tampers or vibrators shall be used.
- 3. Concrete shall be screeded off to match pavement grade and floated to assure proper edge match.
- 4. Existing pavement will not require saw cutting when using rockwheel for excavation except when the existing pavement is concrete and trench finish is concrete.
- 5. All cuts shall be parallel or perpendicular to street centerline, when practical.
- 6. Allow concrete backfill or concrete trench cover 7 calendar days minimum, but no longer than 30 calendar days to cure and dry before applying any road surface finishes.
- 7. In major or prime arterial streets, an approved set accelerating admixture, such as calcium chloride, may be used only with prior approval of the Agency's Engineer otherwise the contractor shall protect the trench with the approval of the agency's Engineer.
- 8. See drawing G-33 for narrow trench resurfacing.
- 9. See table on drawing M-15 for standard minimum conduit depths.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Reviewed	DG	T. Stanton	10/18	OAN DIEGO REGIONAL GTANDARD BRAWING	A -
Reviewed	RP	S. Engeda	03/22	NARROW TRENOUES	Samar 2 03/24/2022
				NARROW TRENCHES	Chairperson R.C.E. 52241 Date
				TRENCHING & BACKFILLING	DRAWING M-07
				TREMOTING & DACKI ILLING	NUMBER WI-U7

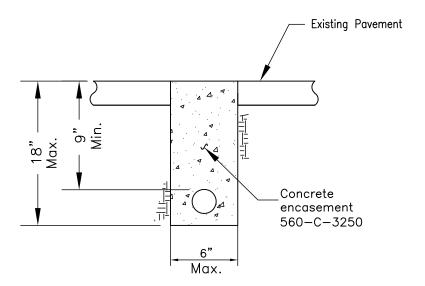


- 1. Cement Slurry Backfill:
 - a. Cement slurry backfill shall have a maximum slump of 4".
 - b. Cement slurry backfill shall be thoroughly consolidated to encase conduits. Tampers or vibrators shall be used.
 - c. Cement slurry backfill shall be as follows:

Alleys and local residential streets Class 190-E-400 All other streets Class 380-E-800

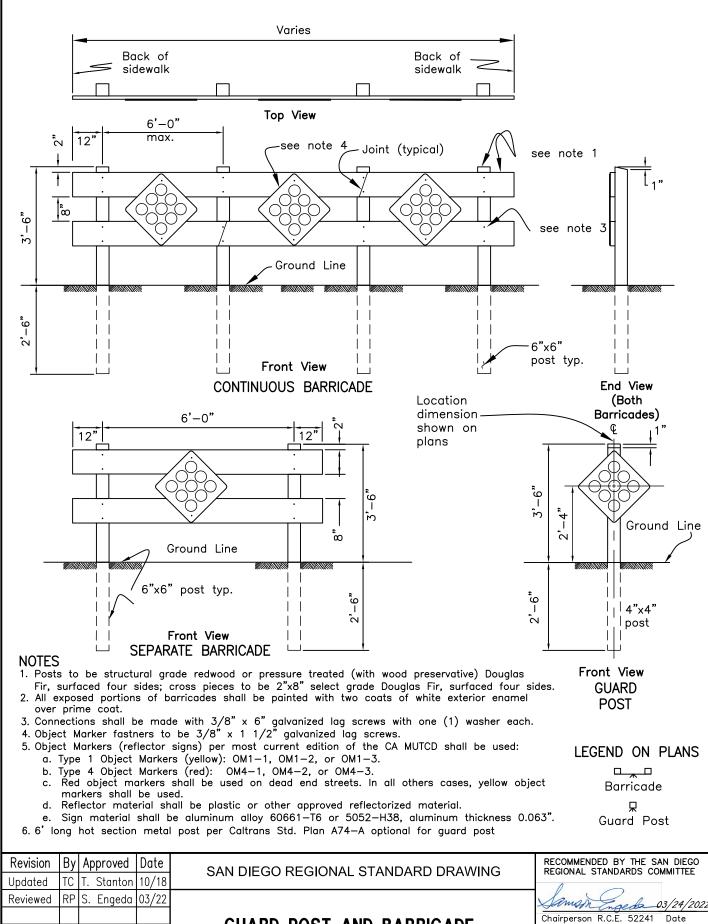
- 2. Existing A.C. pavement will not require sawcutting when using rockwheel for excavation.
- 3. All cuts shall be parallel or perpendicular to street centerline, when practical.
- 4. See drawing G-33 for narrow trench resurfacing.
- 5. See table on drawing M-15 for standard minimum conduit depths.

	 		Date	I SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Reviewed	DG	T. Stanton	10/18		
Reviewed	RP	S. ENGEDA	03/22	NABBOW TRENOUES	Samon Jacka 03/24/2022
				NARROW TRENCHES	Chairperson R.C.E. 52241 Date
				TRENCHING & BACKFILLING	DRAWING M-07A
				THEIROTHING & BROKE ILLING	NUMBER WI-U/A

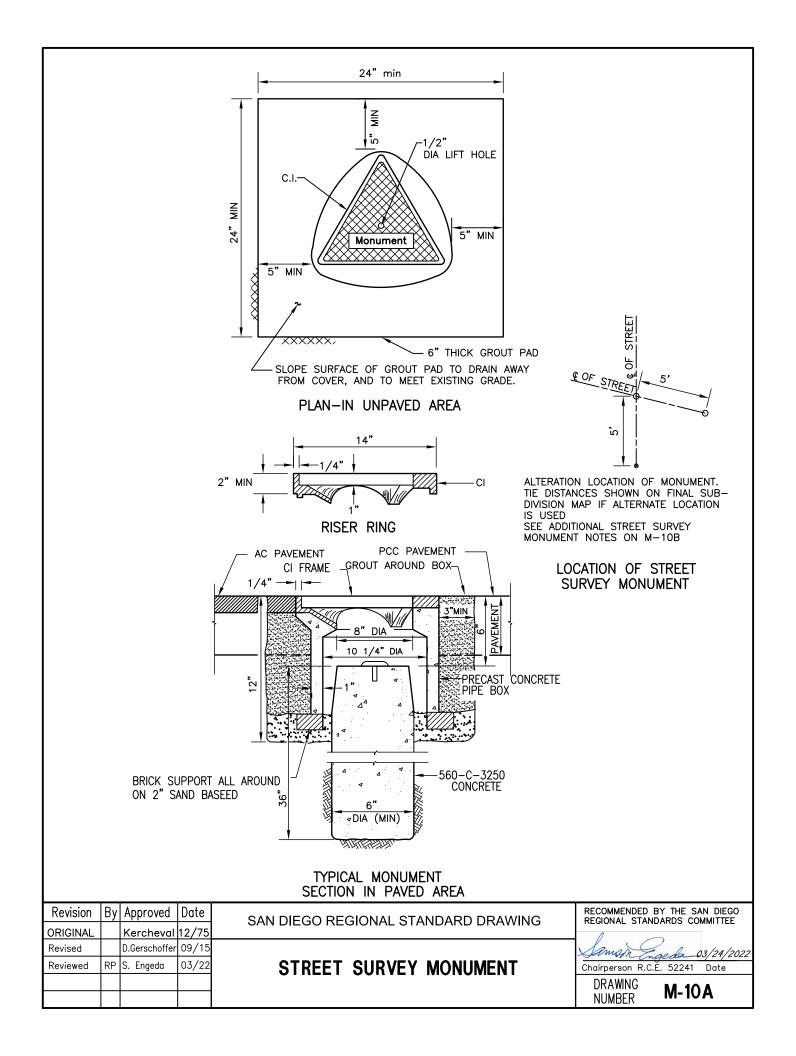


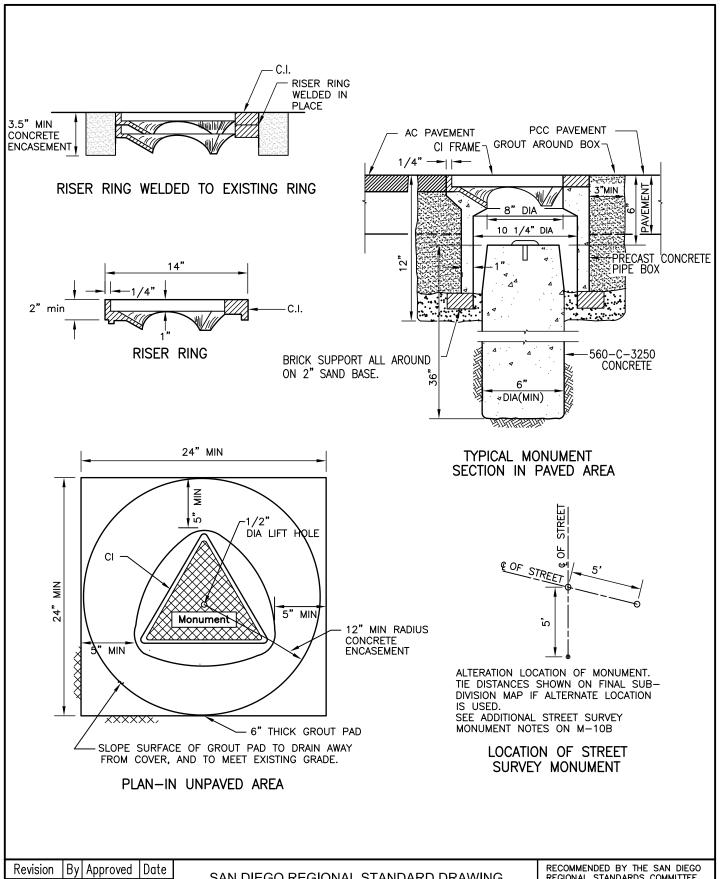
- 1. Concrete encasement or backfill shall have a minimum slump of 4".
- 2. Concrete encasement and/or sand cement slurry backfill shall be thoroughly consolidated to encase conduits. Tampers or vibrators shall be used.
- Concrete shall be screeded off to match pavement grade and floated to assure proper edge match.
- 4. Existing pavement will not require saw cutting when using rockwheel for excavation except when the existing pavement is concrete and trench finish is concrete.
- 5. All cuts shall be parallel or perpendicular to street centerline, when practical.
- 6. Allow concrete backfill or concrete trench cover 7 calendar days minimum, but no longer than 30 calendar days to cure and dry before applying any road surface finishes.
- 7. In major or prime arterial streets, an approved set accelerating admixture, such as calcium chloride, may be used only with prior approval of the Agency's Engineer otherwise the contractor shall protect the trench with the approval of the Agency's Engineer.
- 8. This type of trech shall be permitted for supply cables of 750 volts or less. See California Public Utility Commission General Order No. 128, Rule 33.4 D.(1)(b) and where the conduit can not be placed at the proper recommeded depth.
- 9. See drawing G-33 for narrow trench resurfacing.
- 10. This detail shall be used only when there is underground conflicts. See table on drawing M-15 for standard minimum conduit depths.

Revision Reviewed	By DG	Approved T. Stanton	Date 10/18	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Reviewed	RP	S. Engeda	03/22	MARITOW TREMOTIES	Samosh Engeda 03/24/2022 Chairperson R.C.E. 52241 Date
				TRENCHING & BACKFILLING SHALLOW CONDUIT DEPTH	DRAWING M-08 NUMBER



Updated Reviewed	TC RP	T. Stanton S. Engeda	-/-		REGIONAL STANDARDS COMMITTEE
T.GVIGWCG		o. Liigudd	00/ 22	GUARD POST AND BARRICADE	Samsin Ingeda 03/24/2022 Chairperson R.C.E. 52241 Date
				GOARD FOOT AND BARRICADE	DRAWING NUMBER M-09

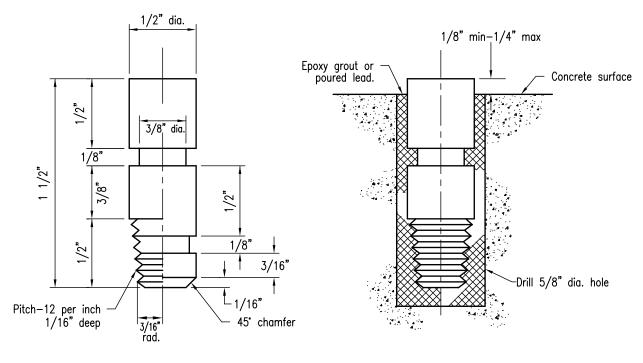




				OVERLAY ADJUSTMENT	DRAWING NUMBER M-10B
Reviewed	RP	S. Engeda	03/22	STREET SURVEY MONUMENT	Chairperson R.C.E. 52241 Date
Revised		D.Gerschoffer	10/18	OTREET OURVEY MONUMENT	Samon - 20 la 03/24/2022
New		T.Stanton	10/15		REGIONAL STANDARDS GOMMITTEE
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

- 1. COVER AND FRAME TO BE CAST INTEGRALLY WITH PIPE BOX.
- 2. MONUMENT BASE MAY BE CAST IN PLACE OR PRECAST.
- 3. FORM AND TAPER EXPOSED UPPER 6" OF CAST-IN-PLACE BASE TO A TOP DIAMETER OF 5". (PRECAST BASE SHALL BE SAND BACKFILLED)
- 4. MONUMENT MARKER SHALL BE A DOMED BRASS, 3" IN DIAMETER.
- 5. MONUMENT LOCATION:
 - A) SET ON ALL CENTERLINE INTERSECTIONS UNLESS ACTUAL LOCATION IS MODIFIED BY THE AGENCY AND SHOWN IN MODIFIED LOCATION ON MAP. WHEN CENTERLINE INTERSECTIO IS IMPRACTICAL, OFFSET 5' ON CENTERLINE OF MAJOR STREET, (SEE DETAIL AT RIGHT). IF NEITHER CETERLINE CAN BE OCCUPIED, TWO MONUMENTS WILL BE SET IN LINE AROUND THE FRONT ON THE PERIMETER OF A 10' DIAMETER CIRCLE, WHOSE CENTER IS THE POINT.
 - B) SET ON CENTERLINE AT INTERVALS NOT EXCEEDING 1000' ON STRAIGHT RUNS.
 - C) SET ON CENTERLINE AT POINTS OF CURVATURE.
 - D) SET ON CENTER AT CENTER POINTS OF CUL-DE-SACS.
 - E) SET ON CENTERLINE WHEN CENTER POINT OF CUL-DE-SAC IS OFFSET FROM CENTERLINE.
 - F) THESE STANDARDS MAY BE MODIFIED AT THE DISCRETION OF THE THE AGENCY IN CASES WHERE STRICT COMPLIANCE THEREWITH RESULTS IN MORE MONUMENTS THAN IT CONSIDERS NECESSARY. THE FOLLOWING TECHNIQUE FOR REDUCING THE NUMBER OF MONUMENTS WILL BE ROUTINE.
 - G) SUBSTITUTION OF ONE MONUMENT ON THE "POINT OF INTERSECTION" FOR MONUMENTS AT THE "BEGINNING OF CURVE" AND THE "ENDING OF CURVE" WHEN THE "POINT OF INTERSECTION" FALLS WITHIN THE PAVEMENT AREA.
 - H) DELETION OF ANY MONUMENT OTHERWISE REQUIRED BY THESE STANDARDS WHEN ITS POSITION CAN BE DETERMINED BY TURNING ONE ANGLE FROM A POINT ON A STRAIGHT LINE BETWEEN TWO OTHER MONUMENTS, PROVIDING SUCH POINT IS NOT MORE THAN 300' FROM THE POINT ON WHICH THE DELETED MONUMENT WOULD HAVE BEEN PLACED.
 - I) FOR RAISING STREET SURVEY MONUMENT TO FINISH GRADE, RISER RING IS TO BE WELDED TO EXISTING RING AND BROUGHT TO SURFACE. ALL WELDING MUST BE DONE TO THE EXTERIOR OF THE RISER RING. NO INTERIOR WELDS ARE TO BE DONE. ENCASE RISER RING IN FAST SETTING CONCRETE WITH A MINIMUM OF 3.5" THICKNESS. CONCRETE MUST OBTAIN 1600 PSI BEFORE TRAFFIC USE, AND HAVE A MINIMUM STRENGTH OF 3250 PSI.

				NOTES	DRAWING NUMBER M-10C
Reviewed	RP	S. Engeda	03/22	STREET SURVEY MONUMENT	Chairperson R.C.E. 52241 Date
Note I Rev		D. Gerschoffer	10/18		Samon Inge da 03/24/2022
ORIGINAL		Kercheval	12/75	SAN DIEGO REGIONAL STANDARD BRAWING	NEGOTIAL STANDARDS COMMITTEE
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

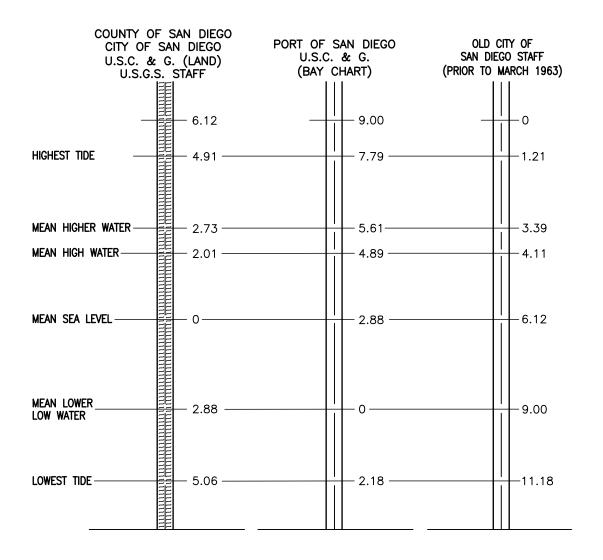


TYPE-A TYPE-B ELEVATION

INSTALLATION IN EXISTING CONCRETE (Typical for Type A or B)

- 1. Material- Brass A.S.T.M. B-16. All machine tolerances $\pm 1/64$ " machine finish.
- 2. May be installed in fresh concrete at time of installation of concrete structure.
- 3. Location—in most stable, permanent location in vicinity, such as in base for street light standard or traffic signal (behind sidewalk), in curb (not near joint, on curve or near trees), on top of drainage headwall, in foundation for building

					NUMBER IVI-II
Reviewed	RP	S. Engeda	03/22	BENCH MARK - BRASS PLUG	DRAWING M-11
Reviewed		D. Gerschoffer	10/18		Chairperson R.C.E. 52241 Date
Revised		D. Gerschoffer	09/15		Samph - 20 da 03/24/2022
ORIGINAL		Kercheval	12/75		REGIONAL STANDARDS COMMITTEE
Revision	RA	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE



LEGEND

U.S.C. & G. = United States Coast and Geodetic Survey.

U.S.G.S. = United States Geological Survey.

MEAN HIGH WATER = Mean of all high water in San Diego Bay.

MEAN HIGHER WATER = Mean of all higher water in San Diego Bay.

Bay charts and topography up to the mean high tide based on zero at the mean lower

low water.

SOURCE

Data based on U.S.C. & G. "Sea level Datum of 1929".

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15		Samon Jacka 03/24/2022
Reviewed		D. Gerschoffer	10/18	D A TUMO	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DATUMS	DRAWING BA 40
					NUMBER M-12

FOUND MONUMENTS

Found monuments must denote the character of the monument, how it is identified and the record, or no record as applicable.

SET MONUMENTS — Criteria for Locating and Character

On subdivision boundaries, permanent monuments are required; and must be shown on the map at intervals as specified by the local agency. The location of such points that are inacceptable or will be destroyed by construction may be established by ties to permanent reference monuments shown on the final map.

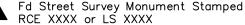
A permanent monument shall be no less substantial than the following:

- a. An iron pipe of minimum two inch diameter not less than 2' in length placed upright in the ground so that the top of said pipe is flush with the surface. Said pipe shall be filled with a metal or cement plug at least three inches in depth and centered with a metal tack and disc; or
- b. A metal plug with tack and disc set flush with the surface in portland cement concrete sidewalk, curb or pavement; or other monument satisfactory to the City Engineer or County Surveyor. The metal plug shall be anchored 1" deep in sidewalk.

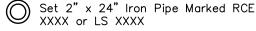
Lot corners and points of curves along street and alley right of way lines where portland cement concrete sidewalks, curbs or pavement exist, or will be constructed as part of the subdivision requirements, shall be identified with tack and disc set flush with the surface along an extension of the lot line at an approved offset, to be measured radially or at right angles to the right of way line in said sidewalk, curb pavement. In case the sideline of the lot is not radial or at right angles to the right of way line a disc shall be set along an extension of the sideline at an offset to be measured radially or at right angles to the right of way line. Where no such concrete work exists, and none will be required to be constructed, all lot corners, angle points and points of curve shall be marked with a monument no less substantial than a one-half inch steel rod or pipe, 18" long, set flush with the surface.

LEGEND

Fd 2" Iron Pipe Marked RCE XXXX or per Map XXX unless otherwise noted



RCE XXXX or LS XXXX



Set Lead and Disc Stamped RCE XXXX or LS XXXX

Set ½" x 18" Iron Pipe Marked RCE XXXX or LS XXXX

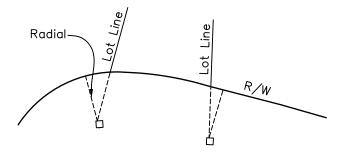
Set Street Survey Monument Stamped RCE XXXX or LS XXXX per Standard Drawing M-10

The addition of other symbols is permissible where such will result in a clearer map.

The following notes should be used in the legend where applicable.

Unless otherwise shown on this map:

- 1. All lot corners except as described below will be monumented by a ½" by 18" iron pin stamped (RCE or LS number).
- 2. Lot corners along the sideline of dedicated street right of way will be monumented by a disc stamped (RCE or LS number), set along an extension of the lot line at an offset of __ in the (curb, sidewalk). The offset shall be measured radially, or at right angles, to the right of way line. (See example below.)
- 3. All points of curve of the sidelines of dedicated streets will be monumented by a disc stamped (RCE or LS number), set at an offset of __ in the (curb, sidewalk). The offset shall be measured radially.



EXAMPLE OF OFFSET DISCS

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15	2	Samon Jacka 03/24/2022
Reviewed		D. Gerschoffer	10/18	SURVEY MONUMENTS	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	SURVET MUNUMENTS	DRAWING NA 40
					NUMBER M-13

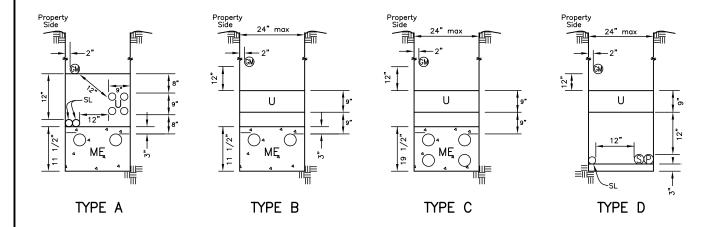
```
0.0648 g.
1 Gram
              = 15.4324 grains
                                                    1 Grain
                                                    1 Ounce
                                                                  28.3495 g.
1 Gram
              = 0.0353 \text{ oz.}
1 Kg.
              = 2.2046 lb.
                                      WEIGHT
                                                    1 Pound
                                                                    0.4536 kg.
                                                              =
              = 0.0011 \text{ ton}
                                                    1 Ton
                                                              = 907.1848 \text{ kg}.
1 Kg.
1 \text{ Ton (met)} = 1.1023 \text{ ton}
                                                    1 Ton
                                                                    0.9072 ton (met)
1 Sq. cm.
              = 0.1550 \text{ sq. in.}
                                                    1 Sq. in. = 6.4516 sq. cm.
1 Sq. m.
              = 10.7639 \text{ sq. ft.}
                                                    1 Sq. ft. = 0.0929 sq. m.
                                                   1 Sq. yd. = 0.8361 sq. m.
1 Sq. m.
              = 1.1960 sq. yd.
                                       AREA
1 Hectare
                                                   1 \text{ Acre} = 0.4047 \text{ hectare}
              = 2.4710 \text{ acres}
1 Sq. km.
              = 0.3861 sq. mile
                                                   1 Sq. mile = 2.5900 \text{ sq. km.}
1 Sq. km.
              = 247.10 acres
                                                    1 Acre
                                                              = 0.0040 \text{ sq. km.}
1 Cu. cm.
              = 0.0610 cu. in.
                                                    1 Cu. in. = 16.3872 cu. cm.
                                     VOLUME
1 Cu. m.
              = 35.3134 cu. ft.
                                                   1 Cu. ft. = 0.0283 cu. m.
1 Cu. m.
              = 1.3079 cu. yd.
                                                    1 Cu. yd. = 0.7646 cu. m.
1 Liter
              = 61.0250 cu. in.
                                                    1 Cu. in. = 0.0164 liter
1 Liter
                 0.0353 cu. ft.
                 0.2642 gal. (U.S) CAPACITY
                                                   1 Cu. ft. = 28.3162 liters
                                                   1 Gal.
                                                              = 3.7853 liters
1 Liter
1 Liter
                                                    1 Bu.
                                                              = 35.2383 liters
                 0.0284 Bu.
                                                              = 25.4000 mm.
1 MM.
              = 0.0394 in.
                                                    1 In.
1 CM.
              = 0.3937 in.
                                                    1 ln.
                                                                  2.5400 cm.
                                     LENGTH
1 Meter
              = 3.2808 ft.
                                                   1 Ft.
                                                              = 0.3048 \text{ m}.
             = 1.0936 \text{ yd}.
1 Meter
                                                   1 Yd.
                                                              = 0.9144 \text{ m}.
1 Km.
              = 0.6214 mile
                                                    1 Mile
                                                                  1.6093 km.
MULTIPLE
              PREFIX
                                                    MULTIPLE
                                                                 PREFIX
1000000
              mega
                                                    1/10
                                                                 deci
                                      METRIC
1000
              kilo
                                                    1/100
                                                                 centi
                                      PREFIX
100
              hecto
                                                    1/1000
                                                                 milli
10
              deka
                                                    1/1000000
                                                                 micro
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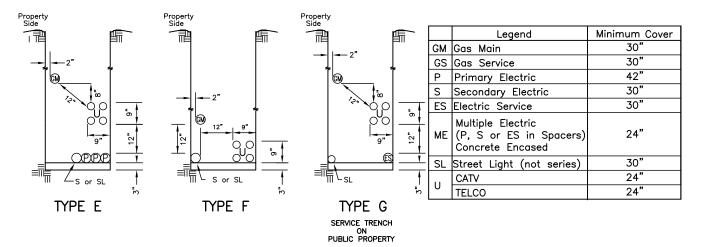
TEMPERATURE

Degrees Fahrenheit = 9/5 (Degrees Celsius) + 32

Degrees Centigrade = 5/9 (Degrees Fahrenheit - 32)

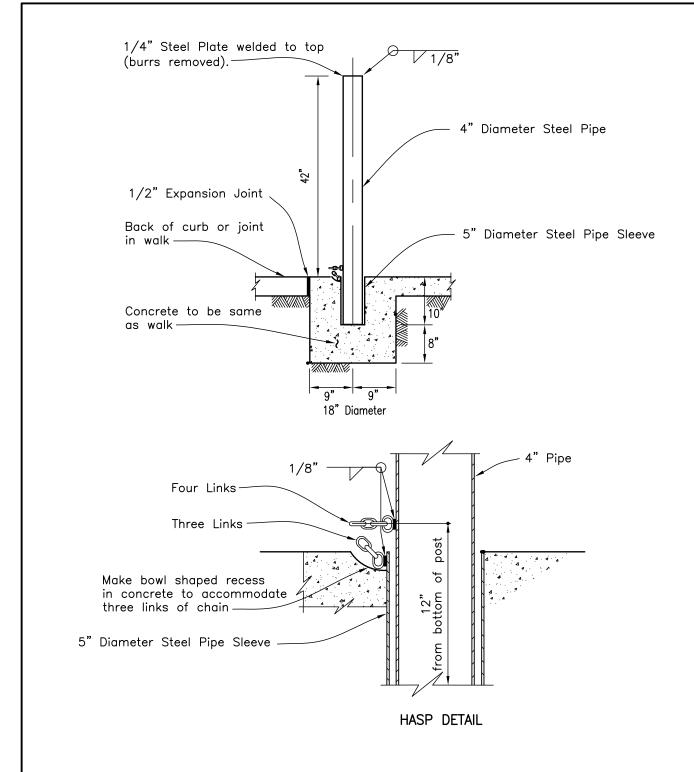
					NUMBER IVI- 14
Reviewed	RP	S. Engeda	10/18	WILTRIO LUDIVALENTS	DRAWING M-14
Reviewed		D. Gerschoffer	10/18	METRIC EQUIVALENTS	Chairperson R.C.E. 52241 Date
Revised		D. Gerschoffe	09/15		Samson Engela 03/24/2022
ORIGINAL		Kercheval	12/75		
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE





- 1. All dimensions are typical unless otherwise noted.
- 2. Generally utilities are to be installed under the applicable specifications for the particular utility and the specifications of the owner Agency.
- 3. The location of utilities as shown by the Standard Drawing shall in no way violate existing codes or regulations applicable to individual utilities.
- 4. Installation of sewer and/or water utilities are not permitted in the joint trenches shown above.
- 5. Minimum depth of gas pipe may, subject to gas company inspectors approval, be reduced to 24" where necessary to clear structure crossings.
- 6. Depth and width of trench varies.
- 7. CATV main or trunk line conduit required along all streets, except cul—de—sac streets less than 1,000' in length which may be served by feeder lines only.
- 8. CATV 1-1/2" feeder conduit shall run across streets with each power service line and capped at edge of sidewalk.
- 9. All CATV terminals and conduits shall be terminated at generally accepted locations and marked. A map shall be filed with the appropriate agency showing the locations of the CATV system.
- 10. In no case shall CATV conduits be placed within 12" of gas lines, also conduits are not to be placed directly over gas lines.
- 11. Catv conduit may be placed with the TELCO conduit provided the TELCO minimum depth is held.

					NUMBER M-15
Reviewed	RP	S. Engeda	03/22	JOINT TRENCH LOCATIONS	DRAWING NA 45
Reviewed		D. Gerschoffer	10/18	IOINT TRENCH LOCATIONS	Chairperson R.C.E. 52241 Date
Revised		D. Gerschoffer	09/15		Samon Inge for 03/24/2022
ORIGINAL		Kercheval	12/75		REGISTRE STANDARDS COMMITTEE
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE



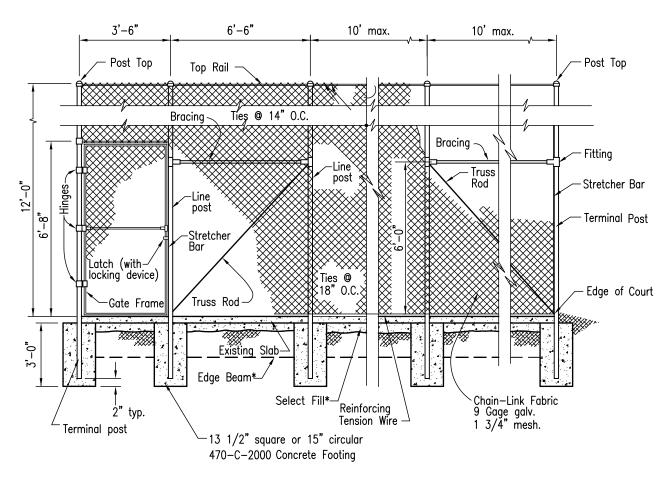
1. Chain to be 1/4" proof coil chain galvanized steel.
Weld four links to post and three links to pipe sleeve.

2. All metal to be hat—dip galvanized after fabrication.

LEGEND ON PLANS

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Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75	3/11/ BIE 30 (12 310 11/12 31/11/B/11/B BIO (17/11/3	
Revised		D. Gerschoffer	09/15		Samon Son do 03/24/2022
Reviewed		D. Gerschoffer	10/18	DEMOUNTABLE POST	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DEMICUNIABLE POST	DRAWING NA 16
					NUMBER M-16



* For Edge Beam, Slab, and Select Fill details, see plans.

ELEVATION

DESCRIPTION	MIN. SIZE IN INCHES	MIN. WEIGHT PER LIN FT IN LBS.
Line Post	2.375 O.D.	3.65
Terminal Post	2.875 O.D.	5.79
Top Rail	1.660 O.D.	2.27
Bracing	1.660 O.D.	2.27
Gate Frame	1.660 O.D.	2.27

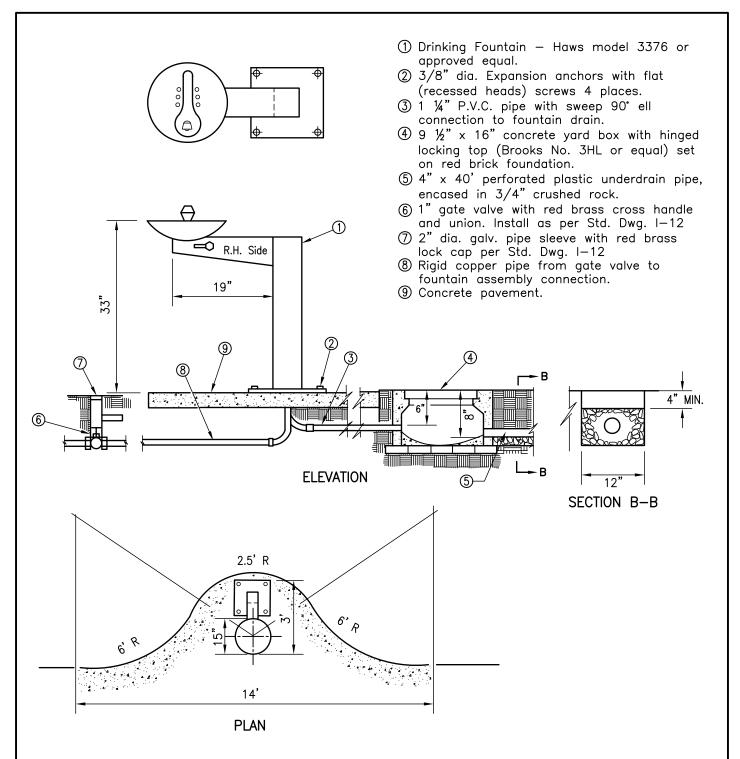
NOTE:

Chain link fabric shall be erected on the interior side of the courts.

CAUTION:

This Standard Drawing is not to be used if any wind screen is to be applied to the fence.

				OHAIN LINK	NUMBER M-17
Reviewed	RP	S. Engeda	03/22	CHAIN LINK	DRAWING
Reviewed		D. Gerschoffer	10/18	TENNIS COURT FENCE	Chairperson R.C.E. 52241 Date
Revised		D. Gerschoffer	09/15		Samson Engela 03/24/2022
ORIGINAL		Kercheval	12/75		TRESIGNAL STATES TO STATE THE
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

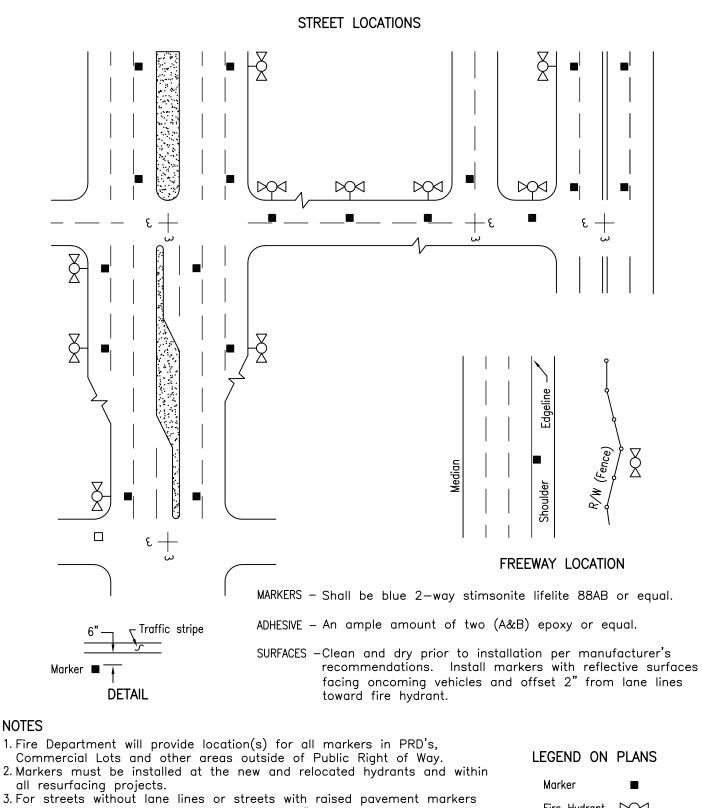


- 1. Install fountain so that right hand side faces prevailing wind.
- 2. Hand form a concrete bowl at bottom of yard box to facilitate sand clean out.
- 3. Perforated drain pipe and trench are to drain away from fountain at 1% min. slope. Keep drain in lawn areas.
- 4. Item no. 6 is a 1" gate valve. Use red brass bushing reducers to adapt to feed pipe.

LEGEND ON PLANS



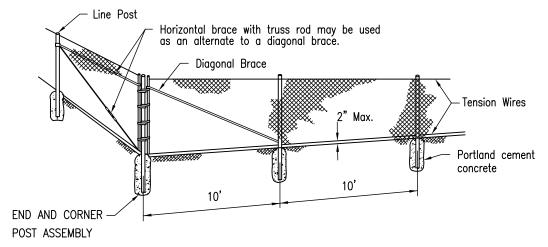
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15		Samson - 20 do 03/24/2022
Reviewed		D. Gerschoffer	10/18	DRINKING FOUNTAIN	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22		DRAWING M-18
					NUMBER IVI- IO

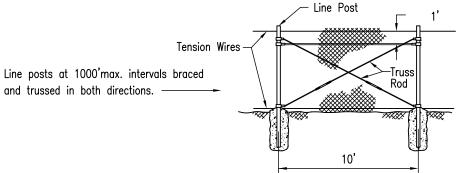


- 1. Fire Department will provide location(s) for all markers in PRD's,
- 3. For streets without lane lines or streets with raised pavement markers and no painted lane lines, install markers 6" from centerline or existing markers.

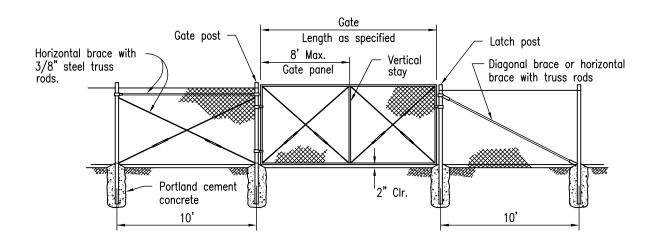
Fire Hydrant D♥

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75	5, 11 512 3 1 12 3 1 1 1 1 1 1 1 1 1 1 1 1 1 1	
Revised		D. Gerschoffer	09/15		Samon Engela 03/24/2022
Reviewed		D. Gerschoffer	10/18	FIRE HVDDANT MARKERO	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	FIRE HYDRANT MARKERS	DRAWING
					NUMBER M-19



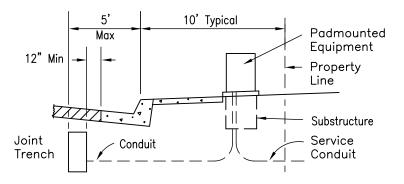


LINE POST BRACING

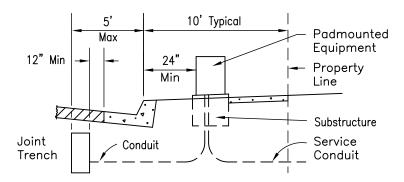


GATE ASSEMBLY

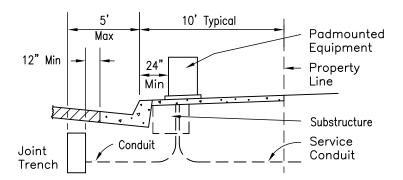
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15		Samson Engela 03/24/2022
Reviewed		D. Gerschoffer	10/18	CHAIN LINK FENCE	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DETAILS	DRAWING NA 20
				DETAILO	NUMBER M-20



SIDEWALK NEXT TO CURB



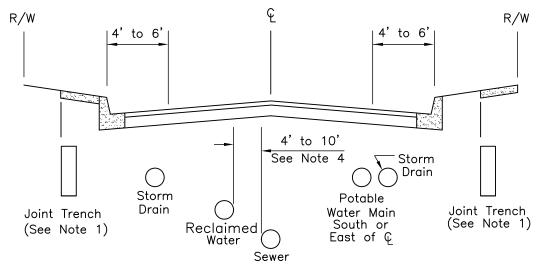
SIDEWALK NEXT TO PROPERTY LINE



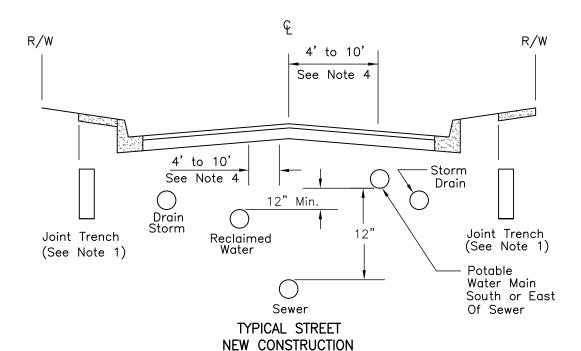
SIDEWALK NEXT TO CURB AND PROPERTY LINE

- 1. Sidewalk shall have a minimum of 4' clear area (path, not including curb) passing pedestals, pullboxes and other structures.
- 2. See Standard Drawing M-15 for joint trench.

ORIGINAL		Approved Kercheval			RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Revised Reviewed	-	D. Gerschoffer D. Gerschoffer		UNDERGROUND TYPICAL LOCATION	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	CONVERSION/REPLACEMENT/ UPGRADE	DRAWING NUMBER M-21

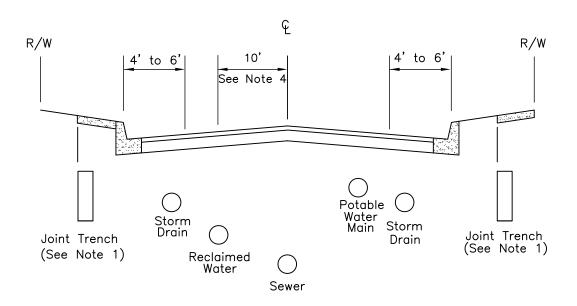


MAJOR STREET

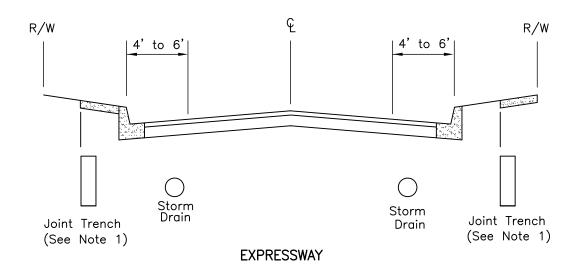


- 1. At catch basin locations, joint trench shall be 4' minimum from back of curb to inside wall of trench. See Standard Drawing M-15 for configuration of utilities in joint trench.
- 2. Sewer and reclaimed water mains shall be designed to cross under potable water mains. The vertical separation between potable water and reclaimed water shall be a minimum of 12".
- 3. Sewer and reclaimed water laterals shall cross under potable water main, with a minimum vertical separation of 12".
- 4. Sewer and reclaimed water mains shall maintain a 10' minimum horizontal separation, O.D to O.D., with any potable water or sewer/reclaimed main. This separation may be reduced utilizing special construction, with special approval from the Agency and the County Health Dept. For sewer or reclaimed water mains less than 24" in diameter, only Agency approval is required.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15		Samon Fre da 03/24/2022
Reviewed		D. Gerschoffer	10/18	UTILITY LOCATIONS	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	LOCAL AND MAJOR STREETS	DRAWING N 22
				LOOKE AND MAGON OTHER	NUMBER M-22

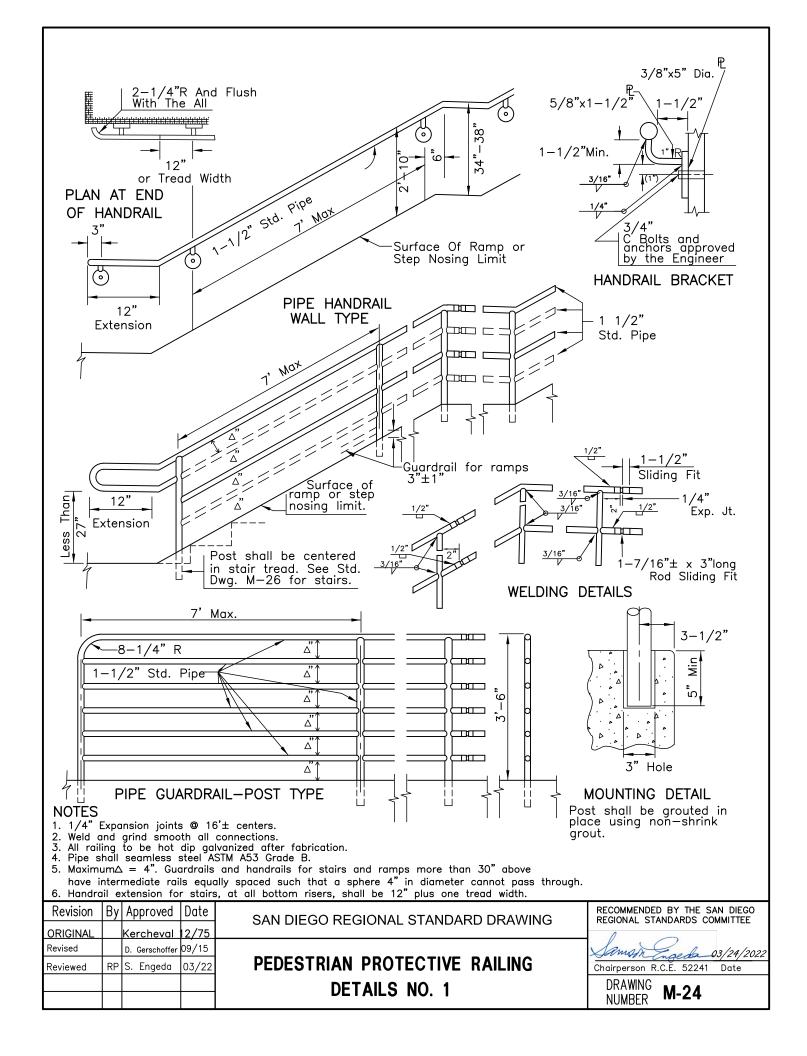


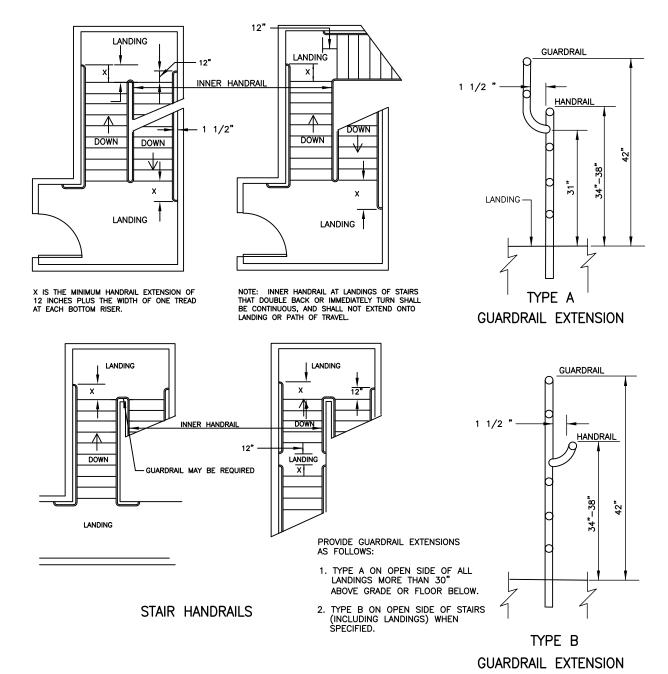
PRIME ARTERIAL



- 1. At catch basin locations, joint trench shall be 4' minimum from back of curb to inside wall of trench. See Standard Drawing M-15 for configuration of utilities in joint trench.
- 2. Sewer and reclaimed water mains shall be designed to cross under potable water mains. The vertical separation between potable water and reclaimed water shall be a minimum of 12".
- 3. Sewer and reclaimed water laterals shall cross under potable water main, with a minimum vertical separation of 12".
- 4. Sewer and reclaimed water mains shall maintain a 10' minimum horizontal separation, O.D to O.D., with any potable water or sewer/reclaimed main. This separation may be reduced utilizing special construction, with special approval from the Agency and the County Health Dept. For sewer or reclaimed water mains less than 24" in diameter, only Agency approval is required.

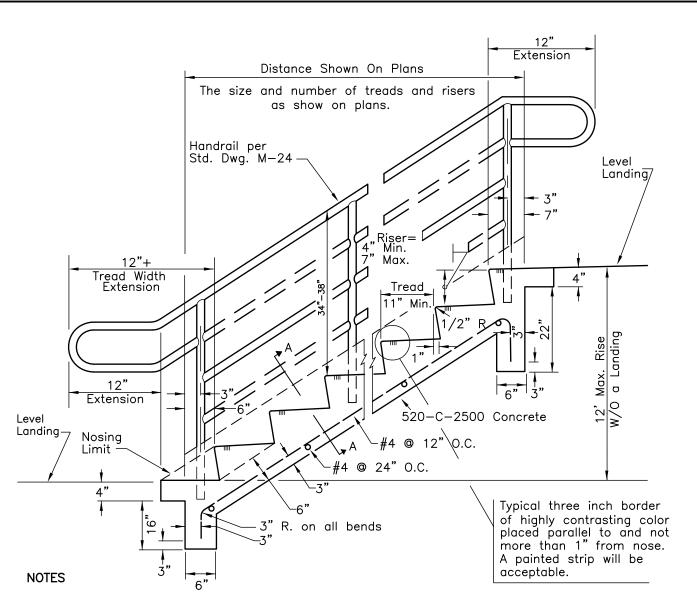
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15	UTILITY LOCATIONS	Sampon 201/2022
Reviewed		D. Gerschoffer	10/18		Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22		DRAWING
				AND EXPRESSWAYS	NUMBER M-23



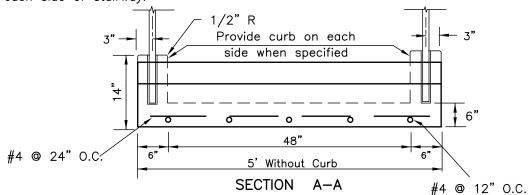


- Post type guardrails, and handrails for stairs or landings 30" or less above grade or floor below shall have only one intermediate rail centered between the step nosing limit (or if specified the top of curb) and top of railing.
- 2. Post type guardrails, and handrails for stairs or landings more than 30" above grade or floor below shall have intermediate rails equally spaced such that a sphere 4" in diameter cannot pass through.
- 3. Where handrail extensions interfere with transverse walkways the horizontal portions shall not encroach but be turned away from stairs and parallel to walkway.
- 4. The top of guardrails for stairways, exclusive of their landings, may have a height as specified for handrails.

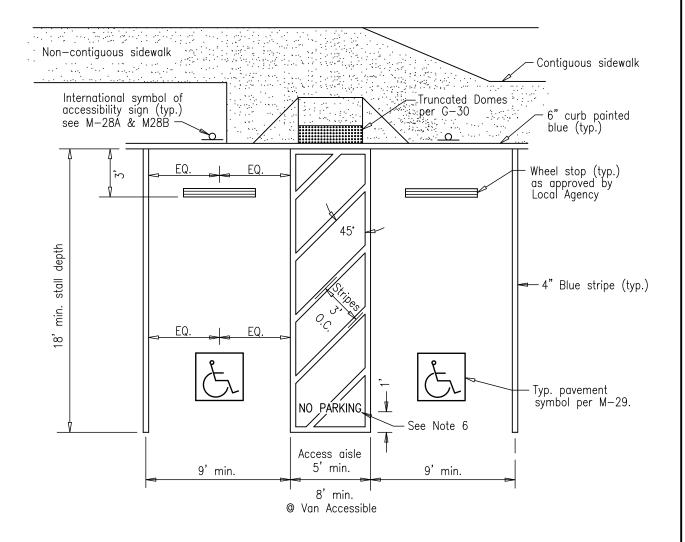
Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		1
Revised		D. Gerschoffer	09/15		Samson 20 for 03/24/2022
Reviewed		D. Gerschoffer	10/18	PEDESTRIAN PROTECTIVE RAILING	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DETAILS NO. 2	DRAWING M-25
				DETAILS NO. 2	NUMBER WI-25



- Broom finish on treads, trowel finish on all other exposed surfaces.
 1/4" per 1' slope on treads for drainage.
 Locate handrails on both sides.
 Handrail may project into the required width a distance of 3-1/2" from each side of stairway.

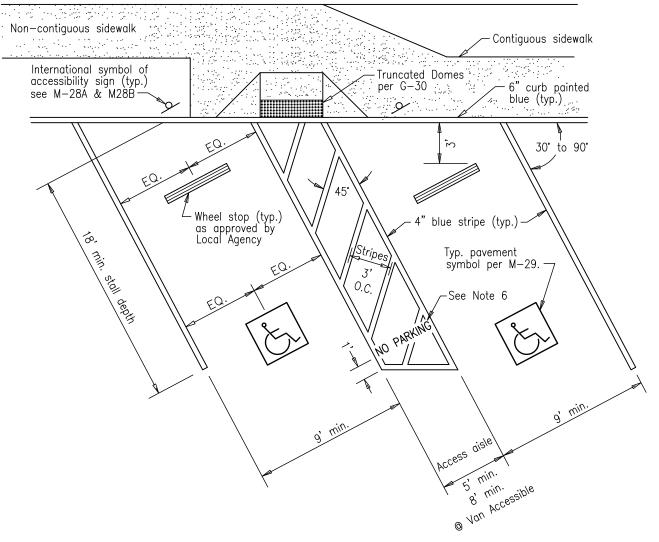


Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15		Samon Freda 03/24/2022
Reviewed		D. Gerschoffer	10/18	CONCRETE STERS	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	CONCRETE STEPS	DRAWING M-26
					NUMBER IVI-20



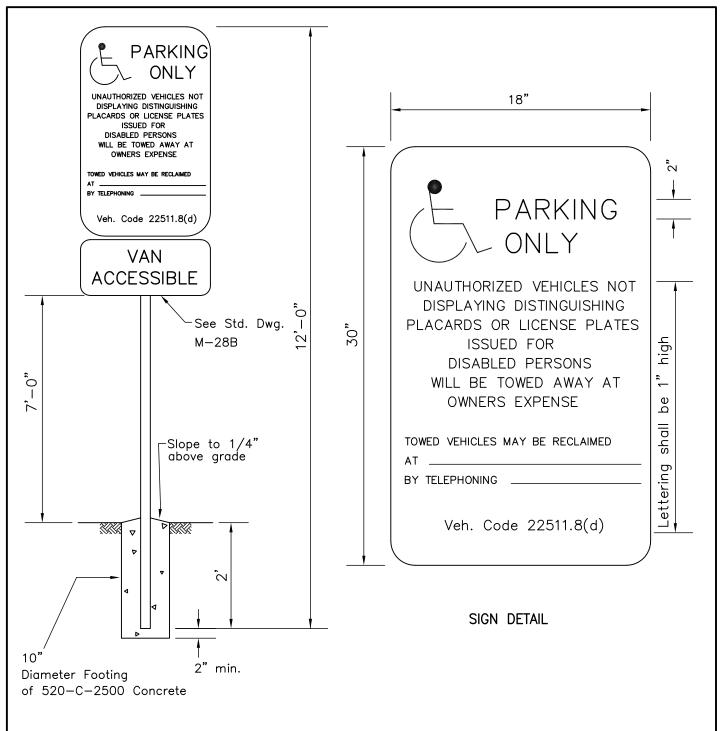
- 1. Provide for adequate drainage.
- 2. For appropriate ramp alternate to conform to topographical conditions, see standard drawings G-27 through G-32B.
- 3. Blue color should match color No. 15090 in the Federal Standard 595a as specified in Section 522(b)2.
- 4. If only one accessible parking stall is going to be provided, the access aisle shall be 8' (van accessible) and located on the passenger side.
- 5. Sidewalk cross slope shall not exceed 2.0%.
- 6. "NO PARKING" 12" high stencil marking, reflective white over blue stripes.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15		Samson Ingela 03/24/2022
Reviewed		K. Equipado	10/18	DISABLED PARKING STALL(S)	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DISABLED PARKING STALL(S)	DRAWING M-27A
					NUMBER WI-Z/A



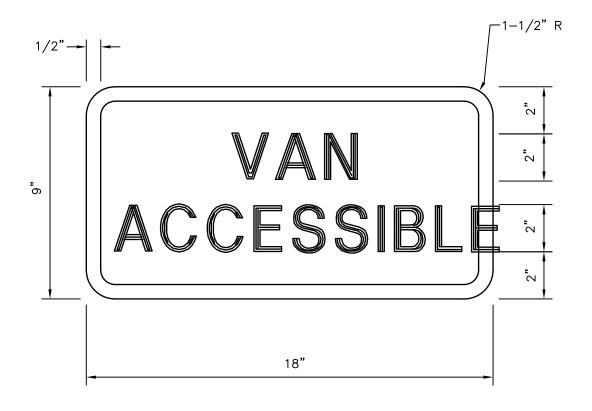
- 1. Provide for adequate drainage.
- 2. For appropriate ramp alternate to conform to topographical conditions, see standard drawings G-27 through G-32B.
- 3. Blue color should match color No. 15090 in the Federal Standard 595a as specified in Section 522(b)2.
- 4. If only one accessible parking stall is going to be provided, the access aisle shall be 8' (van accessible) and located on the passenger side.
- 5. Sidewalk cross slope shall not exceed 2.0%.
- 6. "NO PARKING" 12" high stencil marking, reflective white over blue stripes.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffer	09/15	DIACONAL DIOADLED	Samon Joseph 03/24/2022
Reviewed		K. Equipado	10/18	DIAGONAL DISABLED	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	PARKING STALL(S)	DRAWING M-27B
				17/11/11/19	NUMBER IVI-276



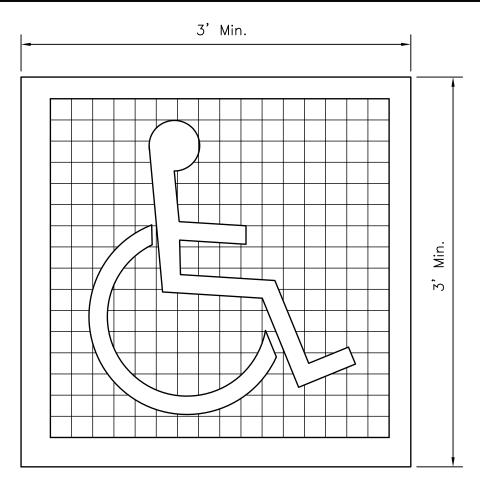
- 1. Sign shall be constructed of a minimum 0.062" thick aluminum.
- Lettering, symbol and border shall be reflectorized white, on a blue background.
 Lettering shall be 1" and 2" high.
- 4. Where space is designed for van accessibility, a sign "VAN ACCESSIBLE" shall be installed.
- 5. Minimum van accessible vertical clearance is 8'-2".

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		Kercheval	12/75		
Revised		D. Gerschoffe	09/15		Samson Engeda 03/24/2022
Reviewed		K. Equipado	10/18	DICADI ED DADVING CICNI	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DISABLED PARKING SIGN	DRAWING M-28A
					NUMBER IVI-20A

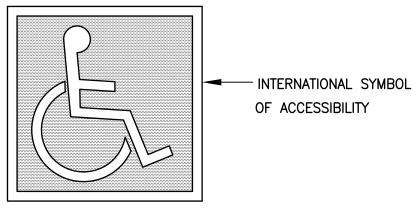


- 1. Sign shall be constructed of aluminum, 0.062" minimum thickness.
- Colors: Background—Reflectorized Blue
 Border and letters— Reflectorized White
 Blue color shall match color No. 15090 in the
 Federal Standard 595a as specified in Section 522(b)2.

Revision	Ву	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
ORIGINAL		G.Parkinson	05/92		
Revised		D. Gerschoffer	09/15		Samon - 2 6 03/24/2022
Reviewed		K. Equipado	10/18	VAN ACCESSIBLE SIGN	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	FOR DISABLE PARKING SPACE	DRAWING MAGOO
				FOR DISABLE PARKING SPACE	NUMBER M-28B



(a) SYMBOL PROPORTIONS



(b) DISPLAY CONDITIONS

- Pavement symbol shall be painted white on a blue background.
 Blue color shall match color No. 15090 in the Federal Standard 595a as specified in Section 522(b)2.

Revision ORIGINAL	Ву	Approved G. Parkinson	Date 02/95	SAN DIEGO REGIONAL STANDARD DRAWING	RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE
Revised		D. Gerschoffer	<u> </u>		Samon Engela 03/24/2022
Reviewed		K. Equipado	10/18	PAVEMENT SYMBOL-	Chairperson R.C.E. 52241 Date
Reviewed	RP	S. Engeda	03/22	DISABLED PARKING	DRAWING M-29

FOR GUARDRAIL STANDARDS USE: Caltrans "Standard Plans for Construction of Local Streets and Roads"

Revision	Ву	Approved	Date	
ORIGINAL		G. Parkinson	05/92	
Revised		D. Gerschoffer	09/15	
Reviewed		K. Equipado	10/18	
Reviewed	RP	S. Engeda	03/22	

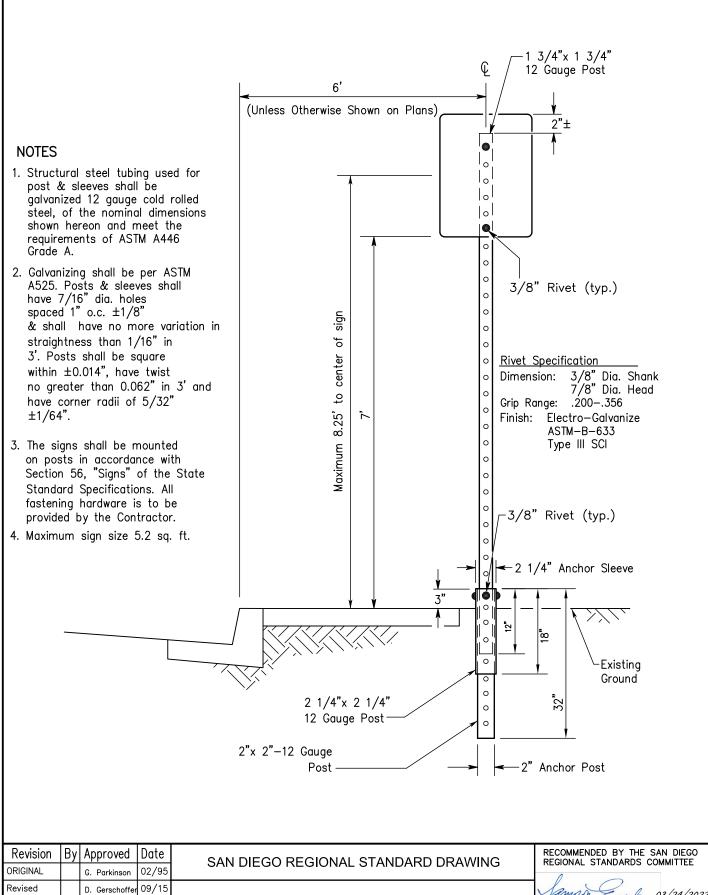
SAN DIEGO REGIONAL STANDARD DRAWING

GUARD RAIL REFERENCE NOTE

RECOMMENDED BY THE SAN DIEGO REGIONAL STANDARDS COMMITTEE

Samon Engela 03/24/2022

DRAWING M-30



					NUMBER WI-45
Reviewed	RP	S. Engeda	03/22	DREAK-AWAT SIGN POST	DRAWING M-45
Reviewed		K. Equipado	10/18	BREAK-AWAY SIGN POST	Chairperson R.C.E. 52241 Date
Revised		D. Gerschoffe	09/15		Samson Engeda 03/24/2022
ORIGINAL		G. Parkinson	02/95	OAN DIEGO NEGIONAL GTANDAND DIAWING	TREGISTALE STATESTICS COMMITTEE
Revision	ру	Approved	Date	SAN DIEGO REGIONAL STANDARD DRAWING	REGIONAL STANDARDS COMMITTEE