

STANDARD DRAWINGS FOR AGENCIES IN THE SAN DIEGO REGION

Recommended by the Regional Standards Committee
Maintained and Published by the County of San Diego
Department of Public Works
November 2022
www.regional-stds.com

SECTION C - CONCRETE STRUCTURES

C-13D Reinforced Concrete Retaining Wall Details No. 1

SECTION C - CONCRETE STRUCTURES				
C-01	Masonry Retaining Wall Type 1 Level Backfill With 2-in Heel	C-14	Reinforced Concrete Retaining Wall Details No. 2	
C-02	Masonry Retaining Wall Type 2 (Live Load Surcharge or Sloping Backfill)	C-15	Reinforced Concrete Retaining Wall Details No. 3	
C-03	Masonry Retaining Wall Type 3 (Level Backfill)	SECTION D - DRAINAGE SYSTEMS		
		D-01	Curb Inlet - Type A	
C-04	Masonry Retaining Wall Type 4 (Live Load Surcharge or Sloping Backfill)	D-02	Curb Inlet - Type B	
C-05	Masonry Retaining Wall Type 5 (Level Backfill)	D-03A	Curb Inlet - Type C	
C-06	Masonry Retaining Wall Type 6 (Live Load Surcharge or Sloping Backfill)	D-03B	Concrete Apron for Type C Curb Inlet	
		D-07	Catch Basin - Type F	
C-07	General Notes for Masonry Retaining Walls	D-08	Catch Basin - Type G	
C-08	Details for Masonry Retaining Wall	D-09	Storm Drain Cleanout - Type A	
C-09	Gravity Retaining Walls	D-10	Storm Drain Cleanout - Type B	
	General Notes and Details for Gravity Retaining Walls	D-11A	Inlets and Cleanouts - Notes and Details	
C-10		D-11B	Inlets and Cleanouts - Notes and Details	
C-11A	Reinforced Concrete Retaining Wall Type 1 Elevation	D-12	Curb Inlet Opening	
		D-13	Welded Steel Grate Frame	
C-11B	Reinforced Concrete Retaining Wall Type 1 Spread Footing	D-15	Drainage Structure Grate	
		D-16	Corrugated Steel Pipe Inlets Types A & B	
C-11C	Reinforced Concrete Retaining Wall Type 1 Pile Footing	D-17A	Corrugated Steel Pipe Inlets, Details	
C 11D	·	D-17B	Corrugated Steel Pipe Inlets, Details	
C-11D		D-18	Slotted Corrugated Steel Pipe Drains 12" through 24"	
C-12A	Reinforced Concrete Retaining Wall Type 1A	D-19	Slotted Drain Connections to Standard Inlets	
C-12B	Reinforced Concrete Retaining Wall Type 1A	D-22	Asphalt Concrete Spillway	
C-13A	Reinforced Concrete Retaining Wall Details	D-23	Tapered Inlet and Downdrain Flume	
	No. 1	D-25A	Curb Outlet - Type A	
C-13B	Reinforced Concrete Retaining Wall Details No. 1			
C-13C	Reinforced Concrete Retaining Wall Details No. 1			

D-25B	Modified Curb Outlet – Type A	D-44B	Pipe Culvert - Headwalls, Endwalls and Warped Wingwalls
D-27	Sidewalk Underdrain Pipe	D-44C	Pipe Culvert - Headwalls, Endwalls and
D-29	Catch Basin - Type 1		Warped Wingwalls
D-30	Straight Headwall - Type A (Circular Pipe)	D-44D	Pipe Culvert - Headwalls, Endwalls and Warped Wingwalls
D-31	Straight Headwall - Type A (C.S.P Arch)	D-45	Median Curb Inlet – Type J
D-32	Straight Headwall - Type B (Circular Pipe)	D-60	Pipe Bedding and Trench Backfill for Storm
D-33	Straight Headwall - Type B (C.S.P Arch)		Drains
D-34	Wing and U Type Headwalls for 18" to 36" Pipes	D-61	Rounded Pipe Ends in Drainage Structures
D-35A	' Wing and U Type Headwalls for 42" to 84"	D-62	Pipe Collar
2 00/1	Pipes	D-63	Concrete Lug
D-35B	Wing and U Type Headwalls for 42" to 84" Pipes	D-70	Minor Drainage Channel
D-36	L Type Headwalls - Circular Pipes	D-71	Major Drainage Channel
D-37	L Type Headwalls - CSP Arch Pipes	D-72	Cutoff Wall for Drainage Channel
		D-73	Pipe to Channel Connection
D-38	Curtain Wall	D-74	Graded Earth Channel
D-39	Inlet Apron for Culverts Up to 42" Diameter	D-75	Drainage Ditches
D-40	Rip Rap Energy Dissipater	D-76A	Single Box Culvert, Details No. 1
D-41A	Concrete Energy Dissipater	D-76B	Single Box Culvert, Details No. 1
D-41B	Concrete Energy Dissipater	D-76C	Single Box Culvert, Details No. 1
D-42	Concrete Energy Dissipater (Reinforcement) 18" to 30" Diameter Pipe		Single Box Culvert, Details No. 1
D-43A	Concrete Energy Dissipater (Reinforcement) 36" to 72" Diameter Pipe	D-76E	Single Box Culvert, Details No. 1
D 405	·	D-76F	Single Box Culvert, Details No. 1
D-43B	Concrete Energy Dissipator (Reinforcement) 36" to 72" Diameter Pipe	D-76G	Single Box Culvert, Details No. 2
D-43C	Concrete Energy Dissipater (Reinforcement) 36" to 72" Diameter Pipe	D-77A	Double Box Culvert, Details No. 1
D-44A	Pipe Culvert - Headwalls, Endwalls and	D-77B	Double Box Culvert, Details No. 1
- · · · ·	Warped Wingwalls	D-77C	Double Box Culvert, Details No. 1

D-77D	Double Box Culvert, Details No. 1	SECTION	ON E - ELECTRICAL SYSTEMS
D-77E	Double Box Culvert, Details No. 1	E-01	Street Lighting Standard
D-77F	Double Box Culvert, Details No. 1	E-02	Grounding of Concrete Lighting Standards
D-77G	Double Box Culvert, Details No. 2	E-03	Pedestal for Electrical Equipment
D-78A	Triple Box Culvert, Details No. 1	SECTION	ON G - GENERAL SURFACE IMPROVEMENTS
	·	G-01	Curbs and Gutter-Separate
D-78B	Triple Box Culvert, Details No. 1	G-02	Curb and Gutters - Combined
D-78C	Triple Box Culvert, Details No. 1	G-03	Monolithic Curb, Gutter and Sidewalk
D-78D	Triple Box Culvert, Details No. 1	G-04A	Curb and Gutter – Rolled
D-78E	Triple Box Culvert, Details No. 1	G-04B	Curb and Gutter to Rolled Curb Transition
D-78F	Triple Box Culvert, Details No. 1	G-05	Dikes - Asphalt Concrete
D 70C	Triple Box Culvert, Details No. 2	G-06	Curbs and Gutter - Medians
D-76G	Triple Box Guivert, Details No. 2	G-07	Sidewalk - Typical Sections
D-79A	Box Culvert Wingwall Types A, B and C, Details No. 1	G-09	Sidewalk Joint Locations
D-79B	Box Culvert Wingwall Types A, B and C, Details No. 2	G-10	Concrete Joint Details
D-19B		G-11	Concrete Curb, Gutter, Sidewalk & Pavement Removal and Replacement
D-79C	Box Culvert Wingwall Types A, B and C, Details No. 3	G-12	Cross Gutter
		G-13	Mid-Block Cross Gutter
D-79D	Box Culvert Wingwall Types A, B and C, Details No. 4	G-14A	Concrete Driveway (Contiguous Sidewalk)
D-79F	Box Culvert Wingwall Types A, B and C, Details No. 5	G-14B	Concrete Driveway (Non-contiguous Sidewalk)
		G-14C	Residential Concrete Driveway (Parkway less than 10' in depth)
D-79F	Box Culvert Wingwall Types A, B and C, Details No. 6	G-14D	Concrete Driveway (for Confined Right-of-Way)
D-80A	Box Culvert Warped Wingwall, Details No. 1	G-14E	Concrete Driveway (Alley Type)
D-80B	Box Culvert Warped Wingwall, Details No. 2		
D-80C	Box Culvert Warped Wingwall, Details No. 3		
D-81A	Box Culvert, Miscellaneous Details No. 1		
D-81B	Box Culvert, Miscellaneous Details No. 2		

D-82 Debris Fence

G-14F	Concrete Driveway Type B (Contiguous Sidewalk)	G-33	Narrow Trenches Trenching & Backfilling
G-14G	Asphalt Concrete Driveway	G-36	Slurry Backfill
G-15	Driveway Location – Adjacent to Curb Returns and Street Lines	G-37	Temporary Turnaround at Dead End Street
G-16	Driveway Location and Width Requirements	G-38	Parking Bay
G-17	Alley Apron	SECTION	ON I - SPRINKLER IRRIGATION SYSTEMS
G-18	Concrete Pavement, Width 40' or Less	I-01	Shrub Spray Head, on Fixed Riser
G-19	Concrete Pavement, Width 42' to 62'	I-02	Rotor or Impact Head on Fixed Riser
G-20	Concrete Pavement, Alley Section, Width 52' to 72'	I-03	Rotor, Spray or Bubbler Pop-Up Head
G-21	Concrete Pavement, Alley Section, Width 40' or Less	I-04	Deep Root Tree Bubbler
		I-05	Quick Coupling Valve
G-22	Cutoff Wall at End of Pavement	I-09	Flow Sensor
G-23	Cutoff Wall at End of Alley Pavement	I-10	Irrigation Master Valve
G-24A	3 1	I-11	Isolation Ball Valve - 2" and Smaller
G-24B	Trench Resurfacing Notes and Details	1-11	isolation ball valve - 2 and smaller
G-25	Trench Resurfacing PCC Surfaced Streets	I-12	Isolation Globe/Gate Valve – 2 ½" and Large
G-26	Concrete Driveway Commercial Alternate	I-13	Isolation Globe Valve (2" and Smaller)
G-27A	Curb Ramp - Types A and B (New Construction)	I-14	Remote Control Valve
G-27B	. ,,	I-15	Electrical Pull Box for Direct Burial Control Wires and Splicing Notes
G-28	Curb Ramp - Types A-1 and B-1 (For Existing Sidewalk)	I-16	Control Wire Installation
G-29	Curb Ramp - Type C (For Existing Sidewalk)	I-17	Automatic Irrigation Controller Pedestal
G-30	Truncated Domes		Mounted
G-31	Curb Ramp - Type D	I-18	Automatic Irrigation Controller Indoor Wall
G-32A	General Notes for Curb Ramps		Mounted
G-32B	Notes for Curb Ramps (no longer in use)	I-19	Solar Irrigation Controller
		I-20	On-Grade Pipe Stabilization – Temporary Installation
		I-23	Swing Joint and Pipe Installation on Slopes above Ground
		I-24	Double Swing Joint- Above Ground Pipe Installations

I-25	Irrigation Trench PVC or Copper Pipe	M 00	Name Translate Translater 9 Dealtfilling
I-26	Irrigation Trench Detail 4" and Larger P.V.C. Mainline	M-08	Narrow Trenches - Trenching & Backfilling - Shallow Conduit Depth
1.20		M-09	Guard Post and Barricade
I-32	Remote Control Valve Manifold Assembly with PVC Pipe (Temporary Systems)	M-10A	Street Survey Monument
I-33	Remote Control Valve Manifold Assembly with Brass Pipe	M-10B	Street Survey Monument – Overlay Adjustment
I-35	Remote Control Valve Drip Irrigation	M-10C	Street Survey Monument - Notes
I-36	Air/Vacuum Relief Valve	M-11	Bench Mark - Brass Plug
I-37	Drip Irrigation Flush Valve (Automatic)	M-12	Datums
SECTIO	ON L - LANDSCAPING	M-13	Survey Monuments
L-01	Tree Planting & Staking	M-14	Metric Equivalents
L-02	Shrub Planting	M-15	Joint Trench Location
L-03	Concrete Mowing Strip	M-16	Demountable Post
L-04	Tree Grate	M-17	Tennis Court Fence Chain Link
L-05	Light Pole Pad in Turf Areas	M-18	Drinking Fountain
L-06	Root Control Barrier	M-19	Fire Hydrant Markers
L-07	Palm Tree Planting	M-20	Chain Link Fence, Details
SECTIO	ON M - MISCELLANEOUS	M-21	Underground Typical Location, Conversion/Replacement/Upgrade
M-01	24" Manhole Frame and Cover, Heavy Duty	M-22	Utility Locations, Local and Major Streets
M-02	24" Manhole Frame and Cover, Light Duty	M-23	Utility Locations Prime Arterials and
M-03A	36" Manhole Frame and Two Concentric Covers, Heavy Duty	W 20	Expressways
M_03B	36" Manhole Frame	M-24	Pedestrian Protective Railing, Details No. 1
WI-00D	Light Weight-Heavy Duty	M-25	Pedestrian Protective Railing, Details No. 2
M-04	Manhole Cover Locking Device	M-26	Concrete Steps
M-05	Chain Link Gate	M-27A	Disabled Parking Stall(s)
M-06	Chain Link Fence	M-27B	Diagonal Disabled Parking Stall(s)
M-07	Narrow Trenches - Trenching & Backfilling	M-28A	Disabled Parking Sign
M-07A	Narrow Trenches - Trenching & Backfilling		

M-28B	Van Accessible Sign for Disabled Parking Space	SS-04 4" and 6" Sewer Cut-In Wye Connections
M-29	Pavement Symbol, Disabled Parking	SECTION W - WATER SYSTEMS
M-30	Guard Rail Reference Note	WA-01 2" Manual Air Valve
M-45	Break-Away Sign Post	WA-02 2" Automatic Combination Air Release and Air/Vacuum Valve Installations
SECTION	ON S - SEWERAGE SYSTEMS	WA-04 4" and 6" Automatic Combination Air Release and Air/Vacuum Valve Installations
SC-01	Sewer Cleanout	WA-06 Air and Vacuum Valve Enclosure Locations
SM-01	48" Diameter Precast Manhole Installation	WB-01 2" Blow-Off Installation
		WB-02 4" and 6" Blow-Off Installation – Type A
SM-02	60" Diameter Precast Manhole Installation	WB-03 4" and 6" Blow-Off Assemblies in Street Type B
SM-03	Sewer Manhole Base	WB-04 Blow-Off Installation from end of Mains and from Steel Mains
SM-04	Manhole Pipe Connectors	WB-05 Temporary 2" Blow-Off Installation
SM-05	Manhole Miscellaneous Details	WF-01 6" Fire Hydrant Installation
SM-07	Manhole Coating and Lining System	WF-02 6" Fire Hydrant Installation with Break-Off Check Valve
SM-08	Existing Manhole Abandonment	WF-04 Fire Hydrant Locations and Port Orientation
SP-01	Warning/Identification Tape Installation	WF-05 4" and Larger Fire Service Installation
SP-02	Pipe Bedding and Trench Backfill for	WM-04 Protection Post Installation
	Sewer Facilities	WP-01 Warning/Identification Tape and Tracer Wire Installations
SP-03	Concrete Protection for Sewer Pipe	WP-02 Pipe Bedding and Trench Backfill for
SP-05	Slope Protection Installations	Potable and Recycled Water Mains
SP-07	Cut-Off Wall Installation in Traveled Areas	WP-03 Cutting and Plugging Abandoned Water, Recycled Water and Sewer Main
SP-09	Mains or Sower Laterals	WP-05 Slope Protection Installations
- 3		WP-07 Cut-Off Wall Installation in Traveled Areas
SS-01	4" and 6" Sewer Lateral Installation	WP-09 Pipe Support for Undercut Sewer Mains or
SS-02	4" and 6" Deep-Cut Sewer Lateral Installation	Sewer Laterals
SS-03	Sewer Lateral Notes and Detail	

WR-01	Reduced Pressure Backflow Prevention Device (3/4" Thru 2")
WR-02	3" and Larger Reduced Pressure Backflow Prevention Device
WS-01	1" Water Service Installation
WS-02	2" Water Service Installation
WS-03	Meter Box Locations for Water and Recycled Water Appurtenances
WS-04	4" or 6" Fireline/Master Meter Installation
WT-01	Concrete Thrust and Anchor Block Installations
WV-01	Gate Well Cap Installation for Valves 4" and Larger
WV-02	Gate Well Cap & Can Installation for Valves 4 and Larger
WV-03	Gate Well Identification
WV-04	Steel Valve Stem Extension for Valves 4" and Larger
WV-05	Steel Valve Stem Extension for Valves 2" and Smaller

APPENDIX A - TRAFFIC CONTROL PLANS