

ADOT STANDARD DRAWINGS

STRUCTURE DETAIL DRAWINGS
EFFECTIVE NOVEMBER 2024

DATE	STANDARD	SUBJECT TITLE	DATE	STANDARD	SUBJECT TITLE
RAILINGS			DRAINAGE STRUCTURES (Continued)		
09/24	SD 1.10 (1 OF 2)	38" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION	07/12	SD 6.33 (1 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET
09/24	SD 1.10 (2 OF 2)	38" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION	07/12	SD 6.33 (2 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 2 :1 SLOPE
10/24	SD 1.11 (1 OF 1)	42" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION	07/12	SD 6.33 (3 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 4 :1 SLOPE
10/24	SD 1.11 (2 OF 2)	42" SINGLE SLOPE BRIDGE BARRIER AND TRANSITION	07/12	SD 6.33 (4 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW INLET - 6 :1 SLOPE
06/23	SD 1.12	COMBINATION PEDESTIAN-TRAFFIC BRIDGE RAILING	07/12	SD 6.33 (5 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET
01/20	SD 1.13	PEDESTRIAN FENCE FOR BRIDGE RAILING SD1.12	07/12	SD 6.33 (6 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 2 :1 SLOPE
01/20	SD 1.20	32' TYPE F ROADWAY BARRIER TRANSITION TO 38' SINGLE SLOPE BARRIER	07/12	SD 6.33 (7 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 4 :1 SLOPE
01/20	SD 1.21	32' TYPE F ROADWAY BARRIER TRANSITION TO 42' SINGLE SLOPE BARRIER	07/12	SD 6.33 (8 OF 8)	PIPE CULVERT HEADWALLS - 30° SKEW OUTLET - 6 :1 SLOPE
01/20	SD 1.22	42' TYPE F ROADWAY BARRIER TRANSITION TO 42' SINGLE SLOPE BARRIER	07/12	SD 6.34 (1 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET
01/20	SD 1.30	BARRIER JUNCTION BOX	07/12	SD 6.34 (2 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 2 :1 SLOPE
APPROACHES			07/12	SD 6.34 (3 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 4 :1 SLOPE
08/23	SD 2.01	APPROACH SLAB DETAILS	07/12	SD 6.34 (4 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW INLET - 6 :1 SLOPE
08/23	SD 2.02	TYPE 1 ANCHOR SLAB DETAILS	07/12	SD 6.34 (5 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET
08/23	SD 2.03	TYPE 2 ANCHOR SLAB DETAILS	07/12	SD 6.34 (6 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 2 :1 SLOPE
08/23	SD 2.04	SLOPE PAVING DETAILS	07/12	SD 6.34 (7 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 4 :1 SLOPE
DECK JOINTS			07/12	SD 6.34 (8 OF 8)	PIPE CULVERT HEADWALLS - 45° SKEW OUTLET - 6 :1 SLOPE
02/20	SD 3.01	DECK JOINT ASSEMBLY - COMPRESSION SEAL	07/12	SD 6.35 (1 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITHOUT APRON
02/20	SD 3.02	DECK JOINT ASSEMBLY - STRIP SEAL	07/12	SD 6.35 (2 OF 2)	PIPE CULVERT HEADWALLS - MULTI-PIPE WITH OUTLET APRON
02/20	SD 3.03 (1 OF 2)	DECK JOINT ASSEMBLY - FLANGELESS STRIP SEAL	07/12	SD 6.36 (1 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRONS
02/20	SD 3.03 (2 OF 2)	DECK JOINT ASSEMBLY - FLANGELESS STRIP SEAL	07/12	SD 6.36 (2 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 2 :1 SLOPE
SUBSTRUCTURE			07/12	SD 6.36 (3 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 4 :1 SLOPE
11/12	SD 5.01	STRUCTURAL EXCAVATION - PAYMENT LIMITS	07/12	SD 6.36 (4 OF 4)	PIPE CULVERT HEADWALLS - OUTLET APRON STEEL LIST - 6 :1 SLOPE
11/12	SD 5.02	STRUCTURE BACKFILL - PAYMENT LIMITS	RETAINING WALLS		
DRAINAGE STRUCTURES			10/24	SD 7.01 (1 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
05/15	SD 6.01 (1 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS	12/21	SD 7.01 (2 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
02/12	SD 6.01 (2 OF 5)	REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS	12/21	SD 7.01 (3 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
02/12	SD 6.01 (3 OF 5)	REINFORCED CONCRETE BOX CULVERTS - EXTENSION DETAILS	12/21	SD 7.01 (4 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
02/12	SD 6.01 (4 OF 5)	REINFORCED CONCRETE BOX CULVERTS - STRUCTURAL EXCAVATION & STRUCTURE BACKFILL	12/21	SD 7.01 (5 OF 5)	RETAINING WALL (REINFORCED CONCRETE CANTILEVER)
05/15	SD 6.01 (5 OF 5)	REINFORCED CONCRETE BOX CULVERTS - SINGLE BARREL (0'-30' FILLS)	12/21	SD 7.02 (1 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
05/15	SD 6.02 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (0'-15' FILLS)	12/21	SD 7.02 (2 OF 2)	RETAINING WALL (MASONRY CANTILEVER)
05/15	SD 6.02 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - DOUBLE BARREL (15'-30' FILLS)	SOUND BARRIER WALLS		
05/15	SD 6.03 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (0'-15' FILLS)	06/22	SD 8.01	SOUND BARRIER WALL (CONCRETE)
05/15	SD 6.03 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (15'-30' FILLS)	06/22	SD 8.02 (1 OF 2)	SOUND BARRIER WALL (MASONRY)
05/15	SD 6.03 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (0'-15' FILLS)	06/22	SD 8.02 (2 OF 2)	SOUND BARRIER WALL (MASONRY)
05/15	SD 6.03 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - TRIPLE BARREL (15'-30' FILLS)	TRAFFIC STRUCTURES		
05/15	SD 6.04 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (0'-15' FILLS)	04/19	SD 9.01 (1 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - ELEVATION & NOTES
05/15	SD 6.04 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FOUR BARREL (15'-30' FILLS)	03/22	SD 9.01 (2 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - FOUNDATION DETAILS
05/15	SD 6.05 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (0'-15' FILLS)	04/19	SD 9.01 (3 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE A SIGN MOUNT ASSEMBLY
05/15	SD 6.05 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - FIVE BARREL (15'-30' FILLS)	04/19	SD 9.01 (4 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - TYPE B SIGN MOUNT ASSEMBLY
05/15	SD 6.06 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (0'-15' FILLS)	04/19	SD 9.01 (5 OF 5)	MEDIAN SIGN STRUCTURE (TWO SIDED) - LIGHT SUPPORT AND MISC. DETAILS
05/15	SD 6.06 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - SIX BARREL (15'-30' FILLS)	04/19	SD 9.02 (1 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - ELEVATION & NOTES
02/12	SD 6.07	REINFORCED CONCRETE BOX CULVERTS - 16'x 14' EQUIPMENT PASS (0'-20' FILLS)	03/22	SD 9.02 (2 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - FOUNDATION DETAILS
05/15	SD 6.08 (1 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 3'to 7'	04/19	SD 9.02 (3 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE A SIGN MOUNT ASSEMBLY
02/12	SD 6.08 (2 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 8'to 12'	04/19	SD 9.02 (4 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - TYPE B SIGN MOUNT ASSEMBLY
05/15	SD 6.08 (3 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 3'to 7'	04/19	SD 9.02 (5 OF 5)	MEDIAN SIGN STRUCTURE (ONE SIDED) - LIGHT SUPPORT AND MISC. DETAILS
02/12	SD 6.08 (4 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 0° to 20° - CULVERT HEIGHT 8'to 12'	04/19	SD 9.10 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - GENERAL PLAN
05/15	SD 6.08 (5 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 3'to 7'	09/23	SD 9.10 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - FOUNDATION DETAILS
02/12	SD 6.08 (6 OF 8)	REINFORCED CONCRETE BOX CULVERTS - OUTLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 8'to 12'	04/19	SD 9.10 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - POST AND MAST ARM DETAILS
05/15	SD 6.08 (7 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 3'to 7'	04/19	SD 9.10 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - SIGN SUPPORT DETAILS
02/12	SD 6.08 (8 OF 8)	REINFORCED CONCRETE BOX CULVERTS - INLET WINGS - SKEW 25° to 45° - CULVERT HEIGHT 8'to 12'	09/23	SD 9.10 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR CANTILEVER - LIGHT SUPPORT DETAILS
05/15	SD 6.09 (1 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 2 :1 SLOPE	04/19	SD 9.20 (1 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - GENERAL PLAN
05/15	SD 6.09 (2 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 4 :1 SLOPE	09/23	SD 9.20 (2 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - FOUNDATION DETAILS
05/15	SD 6.09 (3 OF 3)	REINFORCED CONCRETE BOX CULVERTS - HEADWALL QUANTITIES - 6 :1 SLOPE	04/19	SD 9.20 (3 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - POST AND MAST ARM DETAILS
05/15	SD 6.10 (1 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 3'to 7'	04/19	SD 9.20 (4 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - SIGN SUPPORT DETAILS
02/12	SD 6.10 (2 OF 2)	REINFORCED CONCRETE BOX CULVERTS - INLET OR OUTLET - LEVEL WINGS - CULVERT HEIGHT 8'to 12'	09/23	SD 9.20 (5 OF 5)	TUBULAR SIGN STRUCTURES - TUBULAR FRAME - LIGHT SUPPORT AND MISC. DETAILS
02/12	SD 6.11 (1 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON DETAILS	04/19	SD 9.50 (1 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
05/15	SD 6.11 (2 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (2 :1 SLOPE)	04/19	SD 9.50 (2 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
05/15	SD 6.11 (3 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (4 :1 SLOPE)	04/19	SD 9.50 (3 OF 5)	VARIABLE MESSAGE SIGN - TUBULAR FRAME - MOUNTING & SIGN BRACKET DETAILS
05/15	SD 6.11 (4 OF 4)	REINFORCED CONCRETE BOX CULVERTS - OUTLET APRON - DIMENSIONS & QUANTITIES (6 :1 SLOPE)	04/19	SD 9.50 (4 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
10/24	SD 6.20 (1 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - SINGLE BARREL NOTES & DIMENSIONS	04/19	SD 9.50 (5 OF 5)	VARIABLE MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
10/24	SD 6.20 (2 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 1	04/19	SD 9.51	DUAL VARIABLE MESSAGE SIGN - TUBULAR FRAME
10/24	SD 6.20 (3 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - END SECTION & CONNECTION DETAILS	04/19	SD 9.52 (1 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - PLAN & ELEVATION
10/24	SD 6.20 (4 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 2	04/19	SD 9.52 (2 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
10/24	SD 6.20 (5 OF 5)	PRECAST REINFORCED CONCRETE BOX CULVERTS - MISCELLANEOUS DETAILS 3	04/19	SD 9.52 (3 OF 5)	DYNAMIC MESSAGE SIGN - TUBULAR FRAME - MOUNTING DETAILS
07/12	SD 6.30 (1 OF 5)	PIPE CULVERT HEADWALLS - MISCELLANEOUS DETAILS	04/19	SD 9.52 (4 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - HANDRAIL DETAILS
07/12	SD 6.30 (2 OF 5)	PIPE CULVERT HEADWALLS - INLET AND OUTLET - 18" to 42" PIPES	04/19	SD 9.52 (5 OF 5)	DYNAMIC MESSAGE SIGN - CATWALK - MISCELLANEOUS DETAILS
07/12	SD 6.30 (3 OF 5)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET AND OUTLET - 48" to 84" PIPES	04/19	SD 9.53 (1 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - PLAN & ELEVATION
07/12	SD 6.30 (4 OF 5)	PIPE CULVERT HEADWALLS - SKEWED INLET AND OUTLET - 48" to 84" PIPES	04/19	SD 9.53 (2 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
07/12	SD 6.30 (5 OF 5)	PIPE CULVERT HEADWALLS - MULTI-PIPE - 48" to 84" PIPES	04/19	SD 9.53 (3 OF 5)	DMS (VARIABLE TILT CABINET) - TUBULAR FRAME - MOUNTING DETAILS
07/12	SD 6.31 (1 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET	04/19	SD 9.53 (4 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - HANDRAIL DETAILS
07/12	SD 6.31 (2 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 2 :1 SLOPE	04/19	SD 9.53 (5 OF 5)	DMS (VARIABLE TILT CABINET) - CATWALK - MISCELLANEOUS DETAILS
07/12	SD 6.31 (3 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 4 :1 SLOPE	05/22	SD 9.60 (1 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - GENERAL PLAN AND ELEVATION
07/12	SD 6.31 (4 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE INLET - 6 :1 SLOPE	05/22	SD 9.60 (2 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - FOUNDATION DETAILS
07/12	SD 6.31 (5 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET	05/22	SD 9.60 (3 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - DMS MONOTUBE ASSEMBLY
07/12	SD 6.31 (6 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 2 :1 SLOPE	05/22	SD 9.60 (4 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - DMS MAST ARM DETAILS
07/12	SD 6.31 (7 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 4 :1 SLOPE	05/22	SD 9.60 (5 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - MISCELLANEOUS DETAIL
07/12	SD 6.31 (8 OF 8)	PIPE CULVERT HEADWALLS - RIGHT ANGLE OUTLET - 6 :1 SLOPE	05/22	SD 9.60 (6 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - CATWALK ASSEMBLY AND HANDRAIL
07/12	SD 6.32 (1 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET	05/22	SD 9.60 (7 OF 7)	DYNAMIC MESSAGE SIGN (BUTTERFLY) - CATWALK DETAILS
07/12	SD 6.32 (2 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 2 :1 SLOPE			
07/12	SD 6.32 (3 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 4 :1 SLOPE			
07/12	SD 6.32 (4 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW INLET - 6 :1 SLOPE			
07/12	SD 6.32 (5 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET			
07/12	SD 6.32 (6 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 2 :1 SLOPE			
07/12	SD 6.32 (7 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 4 :1 SLOPE			
07/12	SD 6.32 (8 OF 8)	PIPE CULVERT HEADWALLS - 15° SKEW OUTLET - 6 :1 SLOPE			

ADOT STANDARD DRAWINGS			
REVISION DATES and STANDARD NO.'s REVIEW			
	NAME	DATE	
STRUCTURES STANDARDS	-----	-----	
PROJECT NO.	-----	1D ____ OF ____	
RECORD DRAWING DATA	FEDERAL ID NO. -----	REC. DWG. DATE -----	____ OF ____