

STATE OF TENNESSEE DEPARTMENT OF TRANSPORTATION DESIGN DIVISION

NASHVILLE, TENNESSEE 37243-0348

INSTRUCTIONAL BULLETIN NO. 11-07

Regarding Revised Section V – List of Current Standard Drawings

Effective for the June 17, 2011 letting (April 13, 2011 Turn-In Date), Chapter 2 Standard Structure Drawings of Design Guidelines Section 5 is revised. It is attached to replace the existing section in the Roadway Design Guidelines. No Roadway Standard Drawings were revised.

The Structures Division has released new and revised standard drawings. The new STD-17-series are Box and Slab Bridge Standards designed in accordance with the AASHTO LRFD design specifications.

This bulletin voids Instructional Bulletin 10-16.

Carolyn Stonecipher, Civil Engineering Director

Design Division

English Revised: 03/31/11

SECTION V - LIST OF CURRENT STANDARD DRAWINGS

CHAPTER 1 – STANDARD ROADWAY DRAWINGS

ROADWAY DESIGN STANDARD DRAWINGS

ROADWAY DESIGN STANDARDS

DRAINAGE - CULVERTS AND ENDWALL

DRAINAGE - CATCH BASINS AND MANHOLES

ROADWAY AND PAVEMENT APPURTENANCES

SAFETY APPURTENANCES AND FENCE

TRAFFIC CONTROL APPURTENANCES

EROSION PREVENTION AND SEDIMENT CONTROL

CHAPTER 2 – STANDARD STRUCTURE DRAWINGS

STRUCTURE DESIGN STANDARD DRAWINGS

BRIDGE APPURTENANCES ENGLISH (NEW STRUCTURES)

BRIDGE APPURTENANCES ENGLISH (BOX CULVERTS)

BRIDGE APPURTENANCES ENGLISH (BRIDGE REPAIRS)

English Revised: 03/31/11

SECTION V - LIST OF CURRENT STANDARD DRAWINGS

CHAPTER 1 – STANDARD ROADWAY DRAWINGS

ROADWAY DESIGN STANDARD DRAWINGS

ROADWAY DESIGN STANDARDS

RD-A-1	12-18-99	STANDARD ABBREVIATIONS
RD-L-1	10-26-94	STANDARD LEGEND
RD-L-2	09-05-01	STANDARD LEGEND FOR UTILITY INSTALLATIONS
RD-L-3	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-4	04-15-04	STANDARD LEGEND FOR SIGNALIZATION AND LIGHTING
RD-L-5	05-01-08	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-6	03-30-10	STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-L-7		STANDARD LEGEND FOR EROSION PREVENTION AND SEDIMENT CONTROL
RD-S-11	03-31-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD-S-11A	03-31-03	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD-SA-1	03-31-03	SAFETY APPROACH TO UNDERPASSES GRADING DESIGN AND SLOPE PROTECTION
RD-SE-2	10-26-95	URBAN SUPERELEVATION DETAILS
RD-SE-3	10-26-95	RURAL SUPERELEVATION DETAILS
RD-TS-1	03-31-03	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD-TS-2	03-31-03	DESIGN STANDARDS FOR COLLECTOR ROADS AND STREETS
RD-TS-2A	03-31-03	DESIGN STANDARDS FOR 4-6 LANE COLLECTOR HIGHWAYS WITH DEPRESSED MEDIANS

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RD-TS-2B	03-31-03	DESIGN STANDARDS FOR 4-6 LANE COLLECTOR HIGHWAYS WITH FLUSH MEDIANS
RD-TS-3	03-31-03	DESIGN STANDARDS FOR 2-LANE ARTERIAL HIGHWAYS
RD-TS-3A	03-31-03	DESIGN STANDARDS 4-6 LANE ARTERIAL HIGHWAYS WITH DEPRESSED MEDIANS
RD-TS-3B	03-31-03	DESIGN STANDARDS 4-6 LANE ARTERIALS WITH INDEPENDENT ROADWAYS
RD-TS-3C	03-31-03	DESIGN STANDARDS 4-6 LANE ARTERIAL HIGHWAYS WITH FLUSH MEDIANS
RD-TS-4	03-31-03	DESIGN STANDARDS 1 & 2 LANE RAMPS
RD-TS-5	03-31-03	DESIGN STANDARDS FREEWAYS WITH DEPRESSED MEDIANS
RD-TS-5A	03-31-03	DESIGN STANDARDS FREEWAYS WITH INDEPENDENT ROADWAYS
RD-TS-5B	03-31-03	DESIGN STANDARDS FREEWAYS WITH MEDIAN BARRIER
RD-TS-6	03-31-03	TYPICAL CURB AND GUTTER SECTIONS WITH SHOULDER
RD-TS-6A	03-31-03	TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER
RD-TS-7	03-31-03	DESIGN STANDARDS 2-LANE HIGHWAY WITH CONTINUOUS 2-WAY LEFT-TURN LANE
RD-TS-7A	03-31-03	DESIGN STANDARDS 2-LANE CURB & GUTTER WITH CONTINUOUS 2-WAY LEFT-TURN LANE
RD-TS-8		SHARED USE PATH TYPICAL SECTIONS
RD-TS-9		DESIGN STANDARDS FOR SINGLE LANE URBAN AND RURAL ROUNDABOUTS
RD-TS-10		DESIGN STANDARDS FOR MULTI-LANE URBAN AND RURAL ROUNDABOUTS
RD-UD-3	09-05-96	UNDERDRAIN DETAILS
RD-UD-4	05-27-01	UNDERDRAIN LATERAL DETAILS
RD-UD-6	12-18-94	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 1:1 & 2:1 SLOPES

English		Revised: 03/31/11
RD-UD-7	12-18-94	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 3:1 & 4:1 SLOPES
RD-UD-8		LATERAL UNDERDRAIN ENDWALL DETAIL FOR 5:1 SLOPES
RD-UD-9	12-18-94	LATERAL UNDERDRAIN ENDWALL DETAIL FOR 6:1 SLOPES
RD01-S-11	04-04-03	DESIGN AND CONSTRUCTION DETAILS FOR ROADSIDE SLOPE DEVELOPMENT
RD01-S-11A	10-15-02	ROADSIDE DITCH DETAILS FOR DESIGN AND CONSTRUCTION
RD01-S-11B	10-15-02	DESIGN AND CONSTRUCTION DETAILS FOR ROCK CUT SLOPE AND CATCHMENT
RD01-S-12	08-01-09	CLEAR ZONE CRITERIA
RD01-SA-1	10-15-02	SAFETY APPROACH TO UNDERPASSES GRADING DESIGN AND SLOPE PROTECTION
RD01-SD-1		INTERSECTION SIGHT DISTANCE DESIGN AND GENERAL NOTES
RD01-SD-2		INTERSECTION SIGHT DISTANCE LANDSCAPE AND OBSTRUCTION
RD01-SD-3		INTERSECTION SIGHT DISTANCE 2-LANE ROADWAYS
RD01-SD-4		INTERSECTION SIGHT DISTANCE 5-LANE AND 4-LANE UNDIVIDED ROADWAYS
RD01-SD-5		INTERSECTION SIGHT DISTANCE 4-LANE DIVIDED HIGHWAYS
RD01-SD-6		INTERSECTION SIGHT DISTANCE 6-LANE DIVIDED HIGHWAYS
RD01-SD-7		INTERSECTION SIGHT DISTANCE FOR PASSIVE RAILROAD HIGHWAY GRADE CROSSINGS
RD01-SE-2	10-15-02	URBAN SUPERELEVATION DETAILS
RD01-SE-3	10-15-02	RURAL SUPERELEVATION DETAILS
RD01-TS-1	10-15-02	DESIGN STANDARDS FOR LOCAL ROADS AND STREETS
RD01-TS-1A		DESIGN STANDARDS FOR LOW-VOLUME LOCAL ROADS (ADT<=400)

English		Revised: 03/31/11
RD01-TS-2	10-15-02	DESIGN STANDARDS FOR COLLECTOR ROADS AND STREETS
RD01-TS-2A	10-15-02	DESIGN STANDARDS 4 AND 6 LANE COLLECTOR HIGHWAYS WITH DEPRESSED MEDIANS
RD01-TS-2B	10-15-02	DESIGN STANDARDS 4 AND 6 LANE COLLECTOR HIGHWAYS WITH FLUSH MEDIANS
RD01-TS-3	10-15-02	DESIGN STANDARD FOR 2-LANE ARTERIAL HIGHWAYS
RD01-TS-3A	10-15-02	DESIGN STANDARDS 4 AND 6 LANE ARTERIAL HIGHWAYS WITH DEPRESSED MEDIANS
RD01-TS-3B	10-15-02	DESIGN STANDARDS 4 AND 6 LANE ARTERIALS WITH INDEPENDENT ROADWAYS
RD01-TS-3C	10-15-02	DESIGN STANDARDS 4 AND 6 LANE ARTERIAL HIGHWAYS WITH FLUSH MEDIANS
RD01-TS-4	10-15-02	DESIGN STANDARDS 1 AND 2 LANE RAMPS
RD01-TS-5	10-15-02	DESIGN STANDARDS FREEWAYS WITH DEPRESSED MEDIANS
RD01-TS-5A	10-15-02	DESIGN STANDARDS FREEWAYS WITH INDEPENDENT ROADWAYS
RD01-TS-5B	10-15-02	DESIGN STANDARDS FREEWAYS WITH MEDIAN BARRIER
RD01-TS-6	10-15-02	TYPICAL CURB AND GUTTER SECTIONS WITH SHOULDER
RD01-TS-6A	10-15-02	TYPICAL CURB AND GUTTER SECTIONS WITHOUT SHOULDER
RD01-TS-7	10-15-02	DESIGN STANDARDS 2-LANE HIGHWAY WITH CONTINUOUS 2-WAY LEFT-TURN LANE
RD01-TS-7A	10-15-02	DESIGN STANDARDS 2-LANE CURB AND GUTTER WITH CONTINUOUS 2-WAY LEFT-TURN LANE
DRAINAGE - CULVERTS AND ENDWALL		
D-FLU-1		FLUME DETAILS
D-PB-1	04-15-07	STANDARD DETAILS, CLASS "B" BEDDING AND CULVERT EXCAVATION
D-PB-2	06-01-09	STANDARD DETAILS FOR PLASTIC PIPE INSTALLATION
D-PE-1	02-12-76	TYPE "A" CONCRETE ENDWALL (2:1 SLOPE. 36" TO 78")

English		Revised: 03/31/11
D-PE-3B(1)	07-17-07	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPE GRATE (FOR 18" THRU 48" PIPE) (3:1 SLOPE)
D-PE-3B(2)	05-27-01	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPE GRATE (FOR 18" THRU 48" PIPE) (3:1 SLOPE)
D-PE-4	07-19-10	STRAIGHT "L" AND "U' TYPE CONCRETE ENDWALL
D-PE-4B(1)	03-30-00	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPE GRATE (FOR 18" THRU 48" PIPES) (4:1 SLOPE)
D-PE-4B(2)	07-17-07	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPE GRATE (FOR 18" THRU 48" PIPES) (4:1 SLOPE)
D-PE-5	05-27-01	WINGWALLS HORIZONTAL OVAL CONCRETE PIPES
D-PE-6	05-27-01	STRAIGHT ENDWALLS VERTICAL OVAL CONCRETE PIPES
D-PE-6A	05-27-01	WINGWALLS VERTICAL OVAL CONCRETE PIPES
D-PE-6B(1)	03-30-00	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPE GRATE (FOR 18" THRU 48" PIPES) (6:1 SLOPE)
D-PE-6B(2)	07-19-10	CONCRETE ENDWALL TYPE "U" WITH STEEL PIPE GRATE (FOR 18" THRU 48" PIPES) (6:1 SLOPE)
D-PE-7	05-27-01	STRAIGHT ENDWALLS FLATBASE CONCRETE PIPES
D-PE-7A	05-27-01	WINGWALLS FLATBASE CONCRETE PIPES
D-PE-8	01-19-97	DETAIL OF STANDARD PIPE AND PIPE-ARCH CULVERT WITH BEVELED ENDS AND RIP-RAP
D-PE-9	04-25-90	CONCRETE ENDWALLS TYPE "B" (FOR ROUND & SIDE TAPERED INLETS, PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES) 1976
D-PE-9A	10-25-82	GENERAL DIMENSIONS QUANTITIES, ROUND PIPE CONCRETE ENDWALLS TYPE "B" (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES) 1976
D-PE-9B		GENERAL DIMENSIONS AND QUANTITIES, SIDE TAPER INLETS, CONCRETE ENDWALLS TYPE "B" (PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 AND 4:1 SLOPES) 1976
D-PE-9C		BILL OF STEEL (SHEET 1 OF 4) CONCRETE ENDWALLS TYPE "B" (FOR CONCRETE ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 SLOPE) 1976

English		Revised: 03/31/11	
D-PE-9D		BILL OF STEEL (SHEET 2 OF 4) CONCRETE ENDWALLS TYPE "B" (FOR CONCRETE ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 4:1 SLOPE) 1976	
D-PE-9E		BILL OF STEEL (SHEET 3 OF 4) CONCRETE ENDWALLS TYPE "B" (FOR STEEL ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 2:1 SLOPE) 1976	
D-PE-9F		BILL OF STEEL (SHEET 4 OF 4) CONCRETE ENDWALLS TYPE "B" (FOR STEEL ROUND AND SIDE TAPERED INLET, PIPE SIZES 15" TO 78", ALL SKEWS, 4:1 SLOPE) 1976	
D-PG-3	04-15-97	FERROUS AND ALUMINUM CORRUGATED METAL PIPE	
D-PG-4	07-29-94	FERROUS AND ALUMINUM CORR. METAL PIPE-ARCHES	
D-PO-1	05-27-01	OVAL & FLAT BASE CONCRETE CULVERT PIPE	
D-PS-1	03-15-76	STRUTTING DETAILS FOR CORRUGATED METAL & STRUCTURAL PLATE ROUND PIPE	
D-SEW-6DA	07-19-10	CONCRETE ENDWALL TYPE "SD" WITH STEEL PIPE GRATE (FOR 15" THRU 48" PIPES) (6:1 SLOPE)	
D-SEW-6DB	10-26-92	CONCRETE ENDWALL TYPE "SD" WITH STEEL PIPE GRATE (FOR 15" THRU 48" PIPES) (6:1 SLOPE)	
D-SEW-6DC	07-19-10	CONCRETE ENDWALL TYPE "SD" WITH STEEL PIPE GRATE (FOR 18" THRU 30" PIPES) (6:1 SLOPE)	
D-SEW-6DD	04-15-05	CONCRETE ENDWALL TYPE "SD" WITH STEEL PIPE GRATE (FOR 18" THRU 30" PIPES) (6:1 SLOPE)	
D-SEW-12D	07-19-10	CONCRETE ENDWALL TYPE "SD" WITH STEEL PIPE GRATE (FOR 15" AND 18" PIPES) (12:1 SLOPE)	
DRAINAGE - CATCH BASINS AND MANHOLES			
D-CB-10LPC	07-29-04	LOW PROFILE LOWERED CURB 32" X 26" RECTANGULAR CONCRETE NO. 10LPC CATCH BASIN	
D-CB-10RA		STANDARD PRECAST 48" CIRCULAR NO. 10 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)	
D-CB-10S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 10 CATCH BASIN	
D-CB-10SB		STANDARD 4' X 4' SQUARE CONCRETE NO. 10 CATCH BASIN	
D-CB-12B	07-29-02	STANDARD RECTANGULAR BRICK NO. 12 CATCH BASIN	

English		Revised: 03/31/11
D-CB-12LP	07-29-04	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 12LP CATCH BASIN
D-CB-12P	07-29-02	STANDARD PRECAST RECTANGULAR CONCRETE NO.12 CATCH BASIN
D-CB-12RA	05-27-01	STANDARD PRECAST 48" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12RB	05-27-01	STANDARD PRECAST 60" AND 72" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12RC	05-27-01	STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 12 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-12S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 12 CATCH BASIN
D-CB-12SB	07-29-02	STANDARD 4' X 4' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SC	09-11-02	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SD	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-12SE	05-05-05	STANDARD 9' X 9' SQUARE CONCRETE NO. 12 CATCH BASIN
D-CB-13B	07-29-02	STANDARD RECTANGULAR BRICK NO. 13 CATCH BASIN
D-CB-13P	07-29-02	STANDARD PRECAST RECTANGULAR CONCRETE NO. 13 CATCH BASIN
D-CB-13RA	05-27-01	STANDARD PRECAST 48" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-13RB	05-27-01	STANDARD PRECAST 60" AND 72" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-13RC	05-27-01	STANDARD PRECAST 84" THRU 120" CIRCULAR NO. 13 CATCH BASIN (FOR USE WITH 6" NONMOUNTABLE CURB)
D-CB-13S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 13 CATCH BASIN
D-CB-14B	07-29-02	STANDARD RECTANGULAR BRICK NO. 14 CATCH BASIN
D-CB-14P	07-29-02	STANDARD PRECAST RECTANGULAR CONCRETE NO. 14 CATCH BASIN
D-CB-14RB	05-27-01	STANDARD PRECAST CIRCULAR NO. 14RB CATCH BASIN

English		Revised: 03/31/11
D-CB-14S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 14 CATCH
D-CB-14SE	05-05-05	BASIN STANDARD 9' X 9' SQUARE CONCRETE NO. 14 CATCH BASIN
D-CB-16B	07-29-02	STANDARD RECTANGULAR BRICK NO. 16 CATCH BASIN
D-CB-16S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 16 CATCH BASIN
D-CB-17S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 17 CATCH BASIN
D-CB-25B	07-29-02	STANDARD RECTANGULAR BRICK NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25LP	07-29-04	STANDARD LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 25LP CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25P	07-29-02	STANDARD PRECAST RECTANGULAR CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25RA	05-27-01	STANDARD PRECAST 48" CIRCULAR NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25RB	05-27-01	STANDARD PRECAST CIRCULAR NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25SB	07-29-02	STANDARD 4' X 4' SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25SC	09-11-02	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25SD	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-25SE	05-05-05	STANDARD 9' X 9' SQUARE CONCRETE NO. 25 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-26P	07-29-02	STANDARD PRECAST RECTANGULAR CONCRETE NO. 26 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)

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D-CB-26S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 26 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-27S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 27 CATCH BASIN (FOR USE WITH 6" MOUNTABLE CURB)
D-CB-28B	07-29-02	STANDARD RECTANGULAR BRICK NO. 28 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-28LP	07-29-04	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 28LP CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-28P	07-29-02	STANDARD PRECAST RECTANGULAR CONCRETE NO. 28 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-28RA	05-27-01	STANDARD PRECAST 48" CIRCULAR NO. 28 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-28RB	05-27-01	STANDARD PRECAST CIRCULAR NO. 28 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-28S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 28 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-29P	07-29-02	STANDARD PRECAST RECTANGULAR CONCRETE NO. 29 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-29S	07-29-02	STANDARD RECTANGULAR CONCRETE NO. 29 CATCH BASIN (FOR USE WITH 4" MOUNTABLE CURB)
D-CB-31R	10-26-03	STANDARD PRECAST CIRCULAR NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-31SD	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-31SE	02-13-04	STANDARD 9' X 9' SQUARE CONCRETE NO. 31 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-32LP	06-30-03	STANDARD 80" X 32" RECTANGULAR CONCRETE NO. 32 CATCH BASIN (FOR USE UNDER CONCRETE MEDIUM BARRIER WALL)
D-CB-38RB	09-05-04	STANDARD PRECAST CIRCULAR NO. 38 CATCH BASIN
D-CB-38S	07-29-02	STANDARD 32" X 32" SQUARE CONCRETE NO. 38 CATCH BASIN
D-CB-38SB	09-05-04	STANDARD 4' X 4' SQUARE CONCRETE NO. 38 CATCH BASIN

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D-CB-38SC	09-05-04	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 38 CATCH BASIN
D-CB-39RB	05-27-01	STANDARD PRECAST CIRCULAR NO. 39 CATCH BASIN
D-CB-39S	07-29-02	STANDARD 4' X 4' SQUARE CONCRETE NO. 39 CATCH BASIN
D-CB-39SC		STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 39 CATCH BASIN
D-CB-39SD	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 39 CATCH BASIN
D-CB-39SE	02-13-04	STANDARD 9' X 9' SQUARE CONCRETE NO. 39 CATCH BASIN
D-CB-40S	07-29-02	STANDARD 4' X 8' RECTANGULAR CONCRETE NO. 40 CATCH BASIN
D-CB-40SE	05-05-05	STANDARD 9' X 9' SQUARE CONCRETE NO. 40. CATCH BASIN
D-CB-41LP	07-29-04	LOW PROFILE 32" X 32" SQUARE CONCRETE NO. 41LP CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-41P	07-29-02	STANDARD 4' X 3' PRECAST RECTANGULAR CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-41RB	05-27-01	STANDARD PRECAST CIRCULAR NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-41S	07-29-02	STANDARD 4' X 3' RECTANGULAR CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-41SB	07-29-02	STANDARD 4' X 4' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-41SC	09-11-02	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-41SD	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-41SE	05-05-05	STANDARD 9' X 9' SQUARE CONCRETE NO. 41 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-42RB	05-27-01	STANDARD PRECAST CIRCULAR NO. 42 CATCH BASIN

English		Revised: 03/31/11
D-CB-42S	01-19-05	STANDARD 32" X 32" SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-42SB	07-29-04	STANDARD 4' X 4' SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-42SC		STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-42SD	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 42 CATCH BASIN
D-CB-43R	05-27-01	STANDARD PRECAST CIRCULAR NO. 43R CATCH BASIN
D-CB-43SB	07-29-02	STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 43SB CATCH BASIN
D-CB-43SC	07-29-02	STANDARD 8' X 5'2" RECTANGULAR CONCRETE NO. 43SC CATCH BASIN
D-CB-44SE	05-05-05	STANDARD 9' X 9' SQUARE CONCRETE NO. 44 CATCH BASIN
D-CB-45S	05-27-01	STANDARD 8' X 4' RECTANGULAR CONCRETE NO. 45 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-46SE	05-05-05	STANDARD 9' X 9' SQUARE CONCRETE NO. 46 CATCH BASIN (FOR USE UNDER CONCRETE MEDIAN BARRIER WALL)
D-CB-51SC	09-11-02	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 51 CATCH BASIN (FOR USE IN FRONT OF CONCRETE RETAINING WALL)
D-CB-51SD		STANDARD 7' X 7' SQUARE CONCRETE NO. 51 CATCH BASIN FOR USE IN FRONT OF CONCRETE RETAINING WALL)
D-CB-51SE		STANDARD 9' X 9' SQUARE CONCRETE NO. 51 CATCH BASIN
D-CB-52SE		STANDARD 9' x 9' SQUARE CONCRETE NO. 52 CATCH BASIN
D-CBB-12A	05-27-01	TYPE "B" CAST IRON FRAME, GRATE & NONMOUNTABLE INLET DETAILS FOR NOS. 10, 12, 14, 16, AND 17 TYPE CATCH BASINS
D-CBB-12B	05-27-01	TYPE "B" CAST IRON FRAME, GRATE & 6" MOUNTABLE INLET DETAILS FOR NOS. 25, 26 AND 27 TYPE CATCH BASINS
D-CBB-12C	05-27-01	TYPE "B" CAST IRON FRAME, GRATE & 4" MOUNTABLE INLET DETAILS FOR NOS. 28 AND 29 TYPE CATCH BASINS

English		Revised: 03/31/11
D-CBB-13	05-27-01	TYPE "B" CAST IRON FRAME, GRATE & NONMOUNTABLE INLET DETAILS FOR NO. 13 TYPE CATCH BASINS
D-CBB-31	05-27-01	TYPE "B" CAST IRON FRAME, GRATE & INLET DETAILS FOR NOS. 31, 41, 45, 46, & 51 TYPE CATCH BASINS
D-CBB-42	05-27-01	CAST IRON GRATE DETAILS FOR NOS. 42, 43 & 44 TYPE
D-JBS-1	07-29-02	CATCH BASINS STANDARD 32" X 32" SQUARE CONCRETE NO. 1 JUNCTION BOX
D-JBS-2	07-29-02	STANDARD 4' X 4' SQUARE CONCRETE NO. 2 JUNCTION BOX
D-JBS-3	09-11-02	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 3 JUNCTION BOX
D-JBS-4	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 4 JUNCTION BOX
D-JBS-5	09-11-02	STANDARD 9' X 9' SQUARE CONCRETE NO. 5 JUNCTION BOX
D-MH-2	05-27-01	STANDARD MASONRY & PRECAST NO. 3 MANHOLE
D-MH-3	04-15-00	STANDARD PRECAST CIRCULAR LID DETAILS FOR NO. 3 MANHOLE
D-MH-3A	05-27-01	STANDARD PRECAST CIRCULAR LID DETAILS FOR NO. 3 MANHOLE (108" AND 120" DIA.)
D-MH-4	05-27-01	STANDARD NO. 3 MANHOLE CASTINGS AND STEPS
D-MH-5	09-11-02	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 3 MANHOLE
D-MH-6	09-11-02	STANDARD 7' X 7' SQUARE CONCRETE NO. 3 MANHOLE
D-MH-7	09-11-02	STANDARD 9' X 9' SQUARE CONCRETE NO. 3 MANHOLE
D-SDS-1	07-29-02	STANDARD 32" X 32" SQUARE CONCRETE NO. 1 SPRING DRAIN BOX
D-SDS-2A	07-29-02	STANDARD 4' X 4' SQUARE CONCRETE NO. 2A SPRING DRAIN BOX
D-SDS-2B	07-29-02	STANDARD 4' X 4' SQUARE CONCRETE NO. 2B SPRING DRAIN BOX
D-SDS-3A	07-29-02	STANDARD 5'2" X 5'2" SQUARE CONCRETE NO. 3A SPRING DRAIN BOX

English		Revised: 03/31/11
D-SLD-1	05-27-01	SLOTTED DRAINS
D-SLD-2	05-27-01	SLOTTED DRAINS
D-SLD-3	05-27-01	SLOTTED DRAINS
D-TD-1		TRENCH DRAIN
ROADWAY	AND PAVEME	NT APPURTENANCES
RP-CS-1	05-27-01	CONCRETE SHOULDER RUMBLE STRIP DETAIL (FOR 4-LANE DIVIDED HIGHWAY)
RP-CS-2	05-27-01	CONCRETE SHOULDER RUMBLE STRIP DETAIL (FOR 6-LANE OR WIDER DIVIDED HIGHWAY)
RP-D-15	07-15-08	DETAILS OF STANDARD CONCRETE DRIVEWAYS
RP-D-16	07-15-08	DETAILS OF LOWERED STANDARD CONCRETE DRIVEWAYS
RP-DHO-1	10-26-93	MEDIAN OPENINGS ON 4-LANE DIVIDED HIGHWAY
RP-H-3	07-17-07	HANDICAP RAMP AND TRUNCATED DOME SURFACE DETAIL
RP-H-4		PERPENDICULAR CURB RAMP
RP-H-5		PARALLEL CURB RAMP
RP-H-6		MEDIAN CROSSING
RP-H-7		PERPENDICULAR HANDICAP RAMP FOR 20' THRU 60' RADIUS
RP-H-8		PERPENDICULAR HANDICAP RAMP FOR 20' THRU 60' RADIUS
RP-H-9		PARALLEL HANDICAP RAMP FOR 20' THRU 60' RADIUS
RP-I-5	12-18-96	EXAMPLES OF STREET AND ALLEY INTERSECTIONS
RP-J-1	10-26-00	PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING
RP-J-3	10-26-00	PORTLAND CEMENT CONCRETE PAVEMENT JOINT TYPES AND SPACING
RP-J-5	07-01-01	TYPICAL ACCELERATION AND DECELERATION LANE JOINT TYPES AND SPACING FOR CONCRETE RAMPS
RP-J-7	10-26-00	CONCRETE RAMP JOINT TYPES AND SPACING

English		Revised: 03/31/11
RP-J-9	01-19-02	CONTRACTION AND CONSTRUCTION JOINTS FOR CONCRETE PAVEMENT
RP-J-11	07-29-96	3/4" AND 1-3/4" EXPANSION AND EDGE PAVEMENT JOINTS
RP-J-13	03-20-91	3/4" AND 1-3/4" ELASTOMERIC COMPRESSION JOINT SEALS
RP-J-15	01-19-02	LONGITUDINAL CONTRACTION AND CONSTRUCTION JOINTS
RP-J-17	10-26-00	DOWEL ASSEMBLY DEVICES
RP-J-18	10-21-05	DOWEL ASSEMBLY DEVICES
RP-J-19	10-21-05	DOWEL ASSEMBLY DEVICES
RP-J-23	10-26-04	CONCRETE PAVEMENT REPAIR DETAILS
RP-J-24	05-27-01	CONCRETE PAVEMENT SPALL AND RANDOM CRACK REPAIR DETAILS
RP-J-25	05-27-01	CONCRETE PAVEMENT JOINT REPAIR DETAILS
RP-MC-1	02-28-02	STANDARD 4" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-MC-2	02-28-02	STANDARD 6" SLOPING (MOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-NMC-10	07-29-03	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-NMC-11	02-28-02	STANDARD VERTICAL (NONMOUNTABLE) CONCRETE CURBS AND CONCRETE CURBS AND GUTTERS
RP-PMR-1	05-27-01	STANDARD DETAILS FOR PROPOSED PERMANENT MAINTENANCE RAMP
RP-R-1	05-27-01	STANDARD RAMPS TO SIDE ROADS
RP-R-2		STANDARD CONSTRUCTION DETAILS FOR ROUNDABOUTS
RP-S-7	07-29-96	DETAILS FOR STANDARD CONCRETE SIDEWALKS
RP-S-8	01-19-93	DETAILS FOR STANDARD CONCRETE STEPS AND PIPE HANDRAILS

English Revised: 03/31/11

SAFETY APPURTENANCES AND FENCE

S-F-1		HIGH VISIBILITY FENCE
S-F-10	06-01-09	STANDARD RIGHT-OF-WAY STOCK FENCE
S-F-10A	06-01-09	STANDARD RIGHT-OF-WAY STOCK FENCE WITH TIMBER POSTS
S-F-10B	05-14-10	STANDARD RIGHT-OF-WAY CHAIN LINK FENCE
S-F-10C	05-14-10	RIGHT-OF-WAY FENCE AT BRIDGES AND BOX CULVERTS
S-F-10D		RIGHT-OF-WAY FENCE LOCATIONS AT INTERCHANGES
S-FG-11	05-14-10	STANDARD STOCK FENCE GATE
S-FG-20	01-24-08	EXAMPLES OF WATER GATES AND WATER CROSSINGS
S-GR-11	11-26-07	W-BEAM & THRIE BEAM BARRIER RAIL AND RUB RAIL ALTERNATES
S-GR-12	05-27-03	W-BEAM BARRIER POST DETAILS AND SPECIFICATIONS
S-GR-13	05-27-03	BARRIER RAIL MOUNTING, POST BLOCK-OUTS WITH VERTICAL ADJUSTMENT HOLES
S-GR-13A		BARRIER RAIL MOUNTING POST FOR PLASTIC BLOCK-OUTS WITH HORIZONTAL ADJUSTMENT HOLES
S-GR-14	09-05-98	W-BEAM BARRIER FASTENING HARDWARE AND BRIDGE APPROACH DELINEATORS
S-GR-15	06-30-05	W-BEAM BARRIER TERMINAL ELEMENT DETAILS
S-GR-16	05-27-01	GUARDRAIL BARRIER TREATMENT FOR PIERS IN MEDIAN
S-GR-17	09-11-02	BRIDGE END PROTECTION IN MEDIAN FOR DUAL BRIDGE
S-GR-18	05-15-08	GUARDRAIL TERMINAL (TYPE IN-LINE) AND SHOULDER LINE DETAIL
S-GR-19	06-01-09	GUARDRAIL TERMINAL ANCHORS, TYPE 12 AND TYPE 13
S-GR-19A	06-30-09	TYPE 12 BURIED-IN-BACKSLOPE GUARDRAIL TERMINAL
S-GR-19B	05-15-08	TYPE 12 ALTERNATE BURIED IN BACKSLOPE GUARDRAIL TERMINAL
S-GR-19C		GUARDRAIL TERMINAL ANCHOR, TYPE 13 ALTERNATE

English		Revised: 03/31/11
S-GR-20	05-27-01	MEDIAN DIVIDER GUARDRAIL AND GUARDRAIL TERMINAL ANCHORS
S-GR-21	06-30-09	LENGTH OF NEED AND TERMINAL REQUIREMENTS IN FILLS
S-GR-22	03-10-10	GUARDRAIL ATTACHMENT TO CONCRETE DECKS OF BOX AND SLAB CULVERTS AND BRIDGES
S-GR-23	09-11-02	GUARDRAIL ATTACHMENT TO STRUCTURES AND PROTECTIVE GUARDRAIL AT BRIDGE ENDS DETAILS
S-GR-23A		GUARDRAIL ATTACHMENT TO BRIDGE END FOR LOW- VOLUME LOCAL ROADS (ADT<400)
S-GR-24	05-15-08	GUARDRAIL END TERMINALS AT BRIDGE ENDS
S-GR-26	03-15-08	SLOTTED GUARDRAIL TERMINAL ANCHOR (TYPE 21)
S-GR-27	05-27-03	GUARDRAIL TERMINAL ANCHOR (TYPE 21) ELEMENT ASSEMBLY DETAILS
S-GR-28	06-30-05	GUARDRAIL TERMINAL ANCHOR (TYPE 21) POST AND ASSEMBLY DETAILS
S-GR-38	06-30-09	DETAILS FOR CONSTRUCTION OF EARTH PAD FOR TYPE 38 GUARDRAIL END TERMINALS
S-GR-38A	06-30-05	DETAILS FOR CONSTRUCTION OF ALTERNATE EARTH PAD FOR TYPE 38 GUARDRAIL END TERMINALS
S-GR-39	05-27-01	DETAILS FOR CONSTRUCTION OF EARTH PAD FOR TYPE 21 GUARDRAIL END TERMINALS
S-GR-43		TANGENTIAL GUARDRAIL TERMINAL ANCHOR (TYPE 38) POST LAYOUT AND ERECTION DETAILS
S-GR-44		TANGENTIAL GUARDRAIL TERMINAL ANCHOR (TYPE 38) (2 TUBE) GUARDRAIL ELEMENT POST AND ASSEMBLY DETAILS
S-GR-45		LONG SPAN GUARDRAIL-ONE POST OMITTED
S-GR-46		CURVED GUARDRAIL
S-MB-1	01-31-06	STANDARD CONCRETE MEDIAN BARRIER
S-MB-2	05-27-01	STANDARD CONCRETE MEDIAN BARRIER (BRIDGE PIER PROTECTION)
S-MB-3	10-26-99	STANDARD CONCRETE GLARE SCREEN MEDIAN BARRIER

<u>English</u>		Revised: 03/31/11
S-MB-3A	10-26-99	STANDARD CONCRETE GLARE SCREEN MEDIAN BARRIER
S-MB-4	05-27-01	STANDARD CONCRETE GLARE SCREEN MEDIAN BARRIER (BRIDGE PIER PROTECTION)
S-MB-7		STANDARD DETAILS FOR CONCRETE BARRIER WALL INCLUDING GUARDRAIL ATTACHMENT
S-MB-8		STANDARD DETAILS FOR CONCRETE BARRIER WALL AT BRIDGE BENTS INCLUDING GUARDRAIL ATTACHMENT
S-RP-2	01-19-99	STANDARD CONCRETE RIGHT-OF-WAY MARKERS
S-SSMB-1		32" SINGLE SLOPE CONCRETE BARRIER WALL
S-SSMB-2		51" SINGLE SLOPE CONCRETE BARRIER WALL
S-SSMB-5		SINGLE SLOPE MEDIAN BARRIER WALL CATCH BASIN DETAIL

TRAFFIC CONTROL APPURTENANCES

T-FAB-1	05-27-97	FLASHING YELLOW ARROW BOARD
T-FO-1		FIBER OPTIC AERIAL ENTRANCE DETAILS
T-FO-2		FIBER OPTIC UNDERGROUND ENTRANCE DETAILS
T-FO-3		FIBER OPTIC AERIAL CONNECTION DETAILS
T-FO-4		FIBER OPTIC PULL BOX, CABINET & POLE DETAILS
T-L-1	02-15-07	STANDARD LIGHTING DETAILS - FOUNDATIONS
T-L-1SA	07-29-04	STANDARD LIGHTING DETAILS FOR SINGLE ARM SUPPORTS
T-L-1TM		STANDARD LIGHTING DETAILS TENON MOUNTED OFFSET LIGHTING SUPPORTS
T-L-2	09-11-03	FOUNDATION DETAIL FOR LUMINAIRE MOUNTED ON CONCRETE MEDIAN BARRIER
T-L-3	04-15-96	STANDARD LIGHTING DETAILS - PULL BOXES
T-L-4	07-29-04	STANDARD LIGHTING DETAILS CONDUIT, CABLE INSTALLATION

English		Revised: 03/31/11
T-M-1	04-15-04	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS AND MARKING ABBREVIATIONS
T-M-2	09-05-04	DETAILS OF PAVEMENT MARKINGS FOR CONVENTIONAL ROADS
T-M-3	09-19-91	MARKING STANDARDS FOR TRAFFIC ISLANDS, MEDIANS & PAVED SHOULDERS ON CONVENTIONAL ROADS
T-M-4	06-01-09	STANDARD INTERSECTION PAVEMENT MARKINGS
T-M-5	09-05-04	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-6	09-01-09	MARKING DETAIL FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-7	10-10-06	GORE MARKING DETAILS FOR EXPRESSWAY & FREEWAY INTERCHANGES
T-M-8	10-10-06	MARKING DETAILS FOR EXPRESSWAYS & FREEWAYS
T-M-9	11-30-04	MARKING DETAILS FOR RAMP INTERSECTIONS
T-M-10		SIGNING AND PAVEMENT MARKINGS FOR SHARED-USE PATHS
T-M-11	12-01-09	SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AND ROUTES ON RURAL ROADS
T-M-12	12-01-09	SIGNING AND PAVEMENT MARKINGS FOR URBAN BICYCLE LANES
T-M-13		SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES
T-M-14		SIGNING AND PAVEMENT MARKINGS FOR BICYCLE LANES AT INTERSECTIONS
T-M-15		ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES
T-M-15A		ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR INTERSTATE AND ACCESS CONTROLLED ROUTES
T-M-16		ASPHALT SHOULDER RUMBLE STRIP INSTALLATION DETAILS FOR NON-ACCESS CONTROLLED ROUTES
T-PBR-1	06-30-09	INTERCONNECTED PORTABLE BARRIER RAIL

English		Revised: 03/31/11
T-PBR-2	10-10-06	DETAIL FOR VERTICAL PANELS AND FLEXIBLE DELINEATORS
T-RR-1	10-23-06	TYPICAL PAVEMENT MARKING AT RAILROAD-HIGHWAY GRADE CROSSINGS AND RAILROAD ADVANCE WARNING SIGN
T-RR-2	07-29-96	STANDARD DRAWING FOR RAILROAD AND HIGHWAY CROSSING SIGNAL WITH GATE
T-RR-3	07-29-96	STANDARD DRAWING FOR RAILROAD-HIGHWAY CROSSING SIGNAL
T-RR-4	07-29-96	STANDARD DRAWING FOR TYPICAL CURB & GUTTER PLAN FOR RAILROAD-HIGHWAY CROSSING WITH OR WITHOUT GATES
T-RR-5	07-29-96	STANDARD DRAWING FOR RAILROAD-HIGHWAY CROSSING SIGNAL TYPICAL CANTILEVER SIGN
T-RR-6		TYPICAL SIGNING AND MARKING AT PASSIVE RAILROAD HIGHWAY GRADE CROSSINGS
T-S-6	02-12-91	STANDARD MOUNTING DETAILS - BOLTED EXTRUDED PANELS
T-S-7	02-12-91	HIGHWAY SHIELDS USED ON INTERSTATE AND U.S. NUMBERED ROUTES
T-S-8	07-15-91	HIGHWAY SHIELDS USED ON STATE NUMBERED ROUTES AND ARROWS
T-S-9	05-27-03	STANDARD LAYOUT - GROUND MOUNTED SIGNS
T-S-10	05-27-03	STANDARD MOUNTING DETAILS - FLAT SHEET SIGNS, ALUMINUM-STEEL DESIGN
T-S-11	05-27-01	DELINEATOR AND MILEPOST DETAILS
T-S-12	05-27-03	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, SQUARE TUBES
T-S-13	05-27-01	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, I-BEAMS
T-S-14	05-27-01	STANDARD STEEL GROUND MOUNTED SIGNS, BREAK-AWAY TYPE POST FOOTING DETAILS, WF-BEAMS

English		Revised: 03/31/11
T-S-15	12-07-90	STANDARD CONDUIT & GROUND DETAILS FOR OVERHEAD & CANTILEVER SIGN STRUCTURES
T-S-16	10-23-06	GROUND MOUNTED ROADSIDE SIGN AND DETAILS
T-S-16A		GROUND MOUNTED ROADSIDE SIGN PLACEMENT DETAILS
T-S-17	10-26-96	STANDARD GROUND MOUNTED SIGN USING PERFORATED/KNOCKOUT SQUARE TUBE
T-S-18	05-27-01	END OF ROADWAY AND DEAD END SIGNS, METAL BARRICADES (TYPE III) & WORK ZONE SPEED SIGNS
T-S-19	07-29-91	STANDARD MEMBERS BENDAWAY SIGN SUPPORTS STEEL DESIGN
T-S-20	05-27-01	SIGN DETAILS
T-SG-1	07-29-04	WOOD POLE, DETAILS FOR SPAN MOUNTED SIGNALS
T-SG-2	07-29-04	LOOP LEAD-INS CONDUIT AND PULL BOXES
T-SG-3	11-11-04	STANDARD NOTES AND DETAILS OF INDUCTIVE LOOPS
T-SG-3A		ALTERNATE DETECTION DETAILS
T-SG-4		SPAN WIRE AND MESSENGER CABLE DETAILS
T-SG-5	07-29-04	CONTROLLER CABINET DETAILS
T-SG-7	07-29-04	SIGNAL HEAD ASSEMBLIES AND PEDESTRIAN PUSH BUTTON SIGNS
T-SG-7A	07-29-04	TYPICAL SIGNAL HEAD PLACEMENT
T-SG-8	07-29-04	STRAIN POLE DETAILS FOR SPAN MOUNTED SIGNALS
T-SG-9	11-16-07	DETAILS OF CANTILEVER SIGNAL SUPPORT
T-SG-9A		MISCELLANEOUS SIGNAL DETAILS
T-SG-10	01-05-10	MAST ARM POLE AND STRAIN POLES FOUNDATION DETAILS
T-SG-11	07-29-04	MAINTENANCE OF EXISTING SIGNALS DURING HIGHWAY CONSTRUCTION
T-SG-12	07-29-04	TYPICAL WIRING FOR SIGNAL HEADS AND DETECTION LOOPS

English		Revised: 03/31/11
T-SG-13	06-01-09	FLASHING BEACON DETAIL
T-WZ-10	01-19-01	ADVANCE ROAD WORK SIGNING ON HIGHWAYS AND FREEWAYS
T-WZ-11	03-13-09	ONE LANE CLOSURE DETAIL ON DIVIDED HIGHWAYS
T-WZ-12	03-13-09	ONE LANE CLOSURE DETAIL FOR BRIDGES ON DIVIDED HIGHWAYS
T-WZ-13	03-13-09	TWO-OUTSIDE LANE CLOSURE ON FREEWAY OR EXPRESSWAY
T-WZ-14	03-13-09	TWO-OUTSIDE LANE CLOSURE ON INTERSTATE AND EXPRESSWAY (PORTABLE BARRIER RAIL)
T-WZ-15	03-13-09	INTERIOR LANE CLOSURE ON FREEWAYS OR EXPRESSWAYS
T-WZ-16	03-13-09	LANE SHIFT ON DIVIDED HIGHWAYS AND FREEWAYS
T-WZ-18	03-13-09	SHOULDER CLOSURE DETAIL FOR FREEWAYS AND DIVIDED HIGHWAYS
T-WZ-19	03-13-09	MEDIAN CROSS-OVER DETAIL ON DIVIDED HIGHWAYS
T-WZ-20	12-18-99	GEOMETRIC MEDIAN CROSS-OVER DETAIL ON DIVIDED HIGHWAYS
T-WZ-21	09-01-05	LANE CLOSURE WITH LEFT HAND MERGE AND LANE SHIFT
T-WZ-30	09-01-05	TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION (40 MPH OR LESS)
T-WZ-31	09-01-05	TRAFFIC CONTROL 2-LANE, 2-WAY DIVERSION (GREATER THAN 40 MPH)
T-WZ-32	03-03-06	TRAFFIC CONTROL PLAN SIGNAL LAYOUT FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-33	05-27-98	TRAFFIC CONTROL PLAN FOR CLOSE INTERSECTION CONDITIONS USING TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-34	09-01-05	TRAFFIC CONTROL PLAN GENERAL NOTES FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE
T-WZ-35	07-29-03	TRAFFIC CONTROL PLAN PAY ITEM AND SIGN DETAILS FOR TRAFFIC SIGNAL AT TWO LANE BRIDGE RECONSTRUCTION SITE

English		Revised: 03/31/11
T-WZ-36	09-01-05	LANE CLOSURE ON LOW-VOLUME 2-LANE HIGHWAY
T-WZ-40	09-01-05	RIGHT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-41	09-01-05	LEFT LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-42	09-01-05	CENTER LANE CLOSURES AT NEAR SIDE OF INTERSECTIONS
T-WZ-50	07-29-03	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 2 OR 3 LANE MAJOR ROUTES
T-WZ-51	07-29-03	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR 5 LANE MAJOR ROUTES
T-WZ-52	07-29-03	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR 5 LANE MAJOR AND MINOR ROUTES
T-WZ-53	07-29-03	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR MORE LANE DIVIDED MAJOR ROUTES
T-WZ-54	07-29-03	TRAFFIC CONTROL FOR SIGNALS ONLY PROJECTS ON 4 OR MORE LANE DIVIDED MAJOR ROUTES AND 4 OR MORE LANE MINOR ROUTES
EROSION P	REVENTION A	AND SEDIMENT CONTROL
EC STD 1	04 04 09	DEWATERING STRUCTURE

EC-STR-1	04-01-08	DEWATERING STRUCTURE
EC-STR-2	05-14-10	SEDIMENT FILTER BAG
EC-STR-3B	04-01-08	SILT FENCE
EC-STR-3C	04-01-08	SILT FENCE WITH WIRE BACKING
EC-STR-3D	04-01-08	ENHANCED SILT FENCE
EC-STR-3E	04-01-08	SILT FENCE FABRIC JOINING DETAILS
EC-STR-4	01-01-10	ENHANCED SILT FENCE CHECK (TRAPEZOIDAL DITCH)
EC-STR-4A	01-01-10	ENHANCED SILT FENCE CHECK (V-DITCH)
EC-STR-4B		ENHANCED SILT FENCE CHECK DETAILS
EC-STR-6	04-01-08	ROCK CHECK DAM
EC-STR-6A		ENHANCED ROCK CHECK DAM

<u>English</u>		Revised: 03/31/11
EC-STR-7	04-01-08	SEDIMENT TRAP WITH CHECK DAM
EC-STR-8		FILTER SOCK
EC-STR-11	04-01-08	CULVERT PROTECTION TYPE 1
EC-STR-11A		CULVERT PROTECTION TYPE 2
EC-STR-12	04-01-08	ROCK SEDIMENT DAM
EC-STR-13	04-01-08	ROCK AND EARTH SEDIMENT EMBANKMENT
EC-STR-15	04-01-08	SEDIMENT BASIN
EC-STR-16	04-01-08	SEDIMENT BASINS RISER AND COLLAR APPURTENANCES
EC-STR-17	04-01-08	SEDIMENT BASIN EMBANKMENT DETAILS
EC-STR-19	04-01-08	CATCH BASIN PROTECTION
EC-STR-21	04-01-08	PERMANENT RIPRAP BASIN ENERGY DISSIPATOR
EC-STR-25	04-01-08	TEMPORARY CULVERT CROSSING, CONSTRUCTION EXIT, CONSTRUCTION FORD
EC-STR-27	04-01-08	TEMPORARY SLOPE DRAIN AND BERM
EC-STR-29	04-01-08	PERMANENT SLOPE DRAIN PIPE
EC-STR-30		INSTREAM DIVERSION (WITHOUT TRAFFIC)
EC-STR-30A		INSTREAM DIVERSION (WITH TRAFFIC)
EC-STR-31	04-01-08	TEMPORARY DIVERSION CHANNEL
EC-STR-31A	04-01-08	TEMPORARY DIVERSION CHANNEL DESIGN
EC-STR-32	04-01-08	TEMPORARY DIVERSION CULVERTS
EC-STR-33	04-01-08	SUSPENDED PIPE DIVERSION (DOWNSTREAM)
EC-STR-33A	04-01-08	SUSPENDED PIPE DIVERSION (UPSTREAM)
EC-STR-34	04-01-08	EROSION CONTROL BLANKET FOR SLOPE INSTALLATION
EC-STR-35	04-01-08	FILTER BERMS
EC-STR-36	04-01-08	TURF REINFORCEMENT MAT FOR CHANNEL INSTALLATION
EC-STR-37	04-01-08	SEDIMENT TUBE

•	DOT ROADWAT DEGICAL CONDENIALS
English	Revised: 03/31/11
EC-STR-38 04-01-08	FLOATING TURBIDITY CURTAIN
EC-STR-39 04-01-08	CURB INLET PROTECTION TYPE 1 & 2
EC-STR-39A 06-24-10	CURB INLET PROTECTION TYPE 3 & 4
EC-STE-40	CATCH BASIN FILTER ASSEMBLY FOR CIRCULAR STRUCTURES
EC-STR-41	CATCH BASIN FILTER ASSEMBLY (TYPE 1)
EC-STR-41A	CATCH BASIN FILTER ASSEMBLY (TYPE 1) SLIPCOVER DETAILS
EC-STR-42	CATCH BASIN FILTER ASSEMBLY (TYPE 2)
EC-STR-42A	CATCH BASIN FILTER ASSEMBLY (TYPE 2) SLIPCOVER DETAILS
EC-STR-43	CATCH BASIN FILTER ASSEMBLY (TYPE 3)
EC-STR-43A	CATCH BASIN FILTER ASSEMBLY (TYPE 3) SLIPCOVER DETAILS
EC-STR-44	CATCH BASIN FILTER ASSEMBLY (TYPE 4)
EC-STR-44A	CATCH BASIN FILTER ASSEMBLY (TYPE 4) SLIPCOVER DETAILS
EC-STR-45	CATCH BASIN FILTER ASSEMBLY (TYPE 5)
EC-STR-45A	CATCH BASIN FILTER ASSEMBLY (TYPE 5) SLIPCOVER DETAILS
EC-STR-46	CATCH BASIN FILTER ASSEMBLY (TYPE 6)
EC-STR-46A	CATCH BASIN FILTER ASSEMBLY (TYPE 6) SLIPCOVER DETAILS
EC-STR-47	CATCH BASIN FILTER ASSEMBLY (TYPE 7)
EC-STR-47A	CATCH BASIN FILTER ASSEMBLY (TYPE 7) SLIPCOVER DETAILS
EC-STR-48 EC-STR-48A	CATCH BASIN FILTER ASSEMBLY (TYPE 8) CATCH BASIN FILTER ASSEMBLY (TYPE 8) SLIPCOVER DETAILS
EC-STR-49	CATCH BASIN FILTER ASSEMBLY (TYPE 9)

<u>English</u>		Revised: 03/31/11
EC-STR-49A		CATCH BASIN FILTER ASSEMBLY (TYPE 9) SLIPCOVER DETAILS
EC-STR-50		CATCH BASIN FILTER ASSEMBLY (TYPE 10)
EC-STR-50A		CATCH BASIN FILTER ASSEMBLY (TYPE 10) SLIPCOVER DETAILS
EC-STR-51		CATCH BASIN FILTER ASSEMBLY (TYPE 11)
EC-STR-51A		CATCH BASIN FILTER ASSEMBLY (TYPE 11) SLIPCOVER DETAILS
EC-STR-55	04-01-08	GABION CHECK DAM
EC-STR-56	04-01-08	GABION CHECK DAM DESIGN TABLES
EC-STR-57	04-01-08	GABION ASSEMBLY DETAILS
EC-STR-58	04-01-08	GABION ASSEMBLY DETAILS
EC-STR-59	04-01-08	GABION CHECK DAM GENERAL NOTES AND COMPONENT PROPERTIES
EC-STR-61		LEVEL SPREADERS
EL-P-10	05-27-96	TYPICAL ROADWAY LANDSCAPE PLANTING DETAILS
EL-P-11	05-27-96	TYPICAL MATURE PLANT SPREAD AND CRITERIA FOR PROXIMITY TO ROADWAY
EL-W-1	05-27-96	DETAILS OF TREE WALLS
EL-W-2	05-27-01	STANDARD GRAVITY-TYPE RETAINING WALLS

English		Revised: 03/31/11
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English Revised: 03/31/11

CHAPTER 2 – STANDARD STRUCTURE DRAWINGS

STRUCTURE DESIGN STANDARD DRAWINGS

BRIDGE APPURTENANCES ENGLISH (NEW STRUCTURES)

STD-1-1	07–31–00	BRIDGE RAILING CONCRETE PARAPET
STD-1-1SS	11-01-10	BRIDGE RAILING SINGLE SLOPE CONCRETE PARAPET
STD-1-2	03-28-08	SLIDER PLATE AND DECK DRAIN
STD-1-2SS		SLIDER PLATES FOR SINGLE SLOPE PARAPETS AND DECK DRAINS
STD-1-3	07–31–00	STD. CONCRETE MEDIAN BARRIER
STD-1-3SS	11-01-10	STD. SINGLE SLOPE CONCRETE MEDIAN BARRIER
STD-1-4	01-05-01	SLIDER PLATES FOR MEDIAN BARRIER
STD-1-4SS		SLIDER PLATE ASSEMBLIES FOR SINGLE SLOPE MEDIAN BARRIER
STD-1-5	04-08-05	PAVEMENT AT BRIDGE ENDS
STD-1-6	04–28–97	BRIDGE END DRAIN W/ PABE
STD-1-7	07–31–00	BRIDGE END DRAIN W/ PABE
STD-1-8	05-01-95	BRIDGE END DRAIN 2' X 8' 7" W/PABE
STD-1-9	05-01-95	BRIDGE END DRAIN 4' X 7" W/PABE
STD-1-10	03-28-94	BRIDGE END DRAIN W/O PABE
STD-1-11	05–21–99	BRIDGE END DRAIN W/O PABE
STD-1-12	03-28-94	BRIDGE END DRAIN 2'x8'7" W/O PABE
STD-1-13	03-28-94	BRIDGE END DRAIN 4'x8'7" W/O PABE
STD-2-1	11-01-10	BRIDGE MOUNTED INTERCONNECTED PORTABLE BARRIER RAIL
STD-2-2		VERTICAL PANEL DETAILS
STD-3-1	11-01-10	STRIPSEAL EXPANSION JOINT
STD-3-2	11-01-10	STRIPSEAL EXPANSION JOINT
STD-4-1	04–08–05	STD. PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS

English		Revised: 03/31/11
STD-4-2	04-08-05	STD. PRECAST PRESTRESSED BRIDGE DECK PANELS DESIGN CRITERIA
STD-4-3	03-02-02	STD.PRECAST PRESTRESSED BRIDGE DECK PANELS GENERAL DETAILS
STD-4-4	06–10–96	STD. PRECAST PRESTRESSED BRIDGE DECK PANELS CONSTRUCTION DETAILS
STD-5-1	10–25–93	STD. PILE DETAILS
STD-5-2	04–08–05	STD. PILE DETAILS
STD-6-1	11-01-10	STANDARD SEISMIC DETAILS
STD-6-2	11–07–94	STANDARD SEISMIC DETAILS
STD-7-1	11-01-10	STD. CONCRETE RAIL
STD-8-2	11-01-10	LIGHT STANDARD SUPPORT DETAILS
STD-8-2SS		SINGLE SLOPE PARAPET STANDARD LIGHT SUPPORT DETAILS
STD-8-3	09–01–91	MEDIAN BARRIER LIGHT STANDARD SUPPORT DETAILS
STD-8-3SS		SINGLE SLOPE MEDIAN BARRIER STANDARD LIGHT SUPPORT DETAILS
STD-8-4		SIGN, LUMINAIRE, AND TRAFFIC SIGNAL SUPPORTS
STD-9-1	10-07-08	REINFORCING BAR SUPPORT DETAILS FOR CONCRETE SLABS
STD-10-1	04–08–05	MISCELLANEOUS ABUTMENT AND DRAINAGE DETAILS
STD-11-1	08–13-02	BRIDGE RAILING W/ STRUCTURAL TUBING
STD-11-2		STANDARD CONCRETE CLASSIC RAIL
STD-14-1	10–15–08	STD. DETAILS AND INT. DIAPH.DETAILS FOR BULB – TEE BEAMS
STD-14-2	11-01-10	STD. DETAILS AND INT. DIAPH.DETAILS FOR I-BEAMS
STD-14-3	10–15–08	STD. DETAILS FOR PRESTRESSED BOX BEAMS
STD-16-1		ALUMINUM ARCH CULVERT HADWALL DETAILS

BRIDGE APPURTENANCES ENGLISH (BOX CULVERTS)

STD-15-1	11–06–08	INDEX OF DRAWINGS AND TERMINOLOGY
STD-15-2	3-28-08	GENERAL NOTES

English		Revised: 03/31/11
STD-15-3	02-28-03	DESIGN SECTION LIMITS
STD-15-4	12-07-01	TYPICAL SECTION AND DETAILS
STD-15-5	02-28-03	TYPICAL ELEVATION
STD-15-6	03–28–08	CURB AND RAIL DETAILS SKEW NOT LESS THAN 45 DEG.
STD-15-7	03-02-02	STANDARD EDGE BEAM DETAILS FOR FILLS GREATER THAN 3' - 8"
STD-15-8	12-07-01	INTERIOR WALL END TREATMENTS
STD-15-9	02-28-03	TYPICAL WINGWALL DETAILS AND NOTES
STD-15-10	11-06-08	WINGWALL DIMENSIONS AND QUANTITIES
STD-15-11		WINGWALL DIMENSIONS AND QUANTITIES
STD-15-12	03–28–08	WINGWALL & SPECIAL RETAINING WALL DESIGN SECTION
STD-15-13		WINGWALL DESIGN SECTION
STD-15-14	02-28-03	BACKFILL AND DRAINAGE DETAILS
STD-15-15		BACKFILL AND DRAINAGE DETAILS
STD-15-16	12-07-01	PAVED OUTLET DETAIL
STD-15-16A		LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET
STD-15-17		DEBRIS DEFLECTION WALL
STD-15-18		DEBRIS DEFLECTION WALL
STD-15-19		SIDEWALK AND MISCELLANEOUS DETAILS
STD-15-20		WARPED SLOPE DETAIL
STD-15-21	03-02-02	STAGE CONSTRUCTION JOINT DETAIL (FILL ABOVE TOP OF SLAB NOT GREATER THAN 3'-8")
STD-15-22	02-28-03	EXTENSION DETAILS
STD-15-23	12-07-01	EXTENSION DETAILS FOR SCOURED OUTLET
STD-15-24	12-07-01	END SECTION DETAILS
STD-15-25	11-01-10	PRECAST BOX CULVERT DETAILS
STD-15-26		PRECAST BOX CULVERT DETAILS
STD-15-27		PRECAST BOX CULVERT DETAILS

English		Revised: 03/31/11
STD-15-28		PRECAST BOX CULVERT DETAILS
STD-15-29		PRECAST BOX CULVERT DETAILS
STD-15-30		STANDARD INTERNAL ENERGY DISSIPATOR FOR BOX AND PIPE CULVERTS
STD-15-35		BOX BRIDGE, 1 BARREL AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-15-36		BOX BRIDGE, 1 BARREL AT 8', CLEAR HTS. 3' - 4', 0 - 60' FILL
STD-15-37		BOX BRIDGE, 1 BARREL AT 8', CLEAR HTS. 5' - 8', 0 - 60' FILL
STD-15-38	09-19-06	BOX BRIDGE, 1 BARREL AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-15-39		BOX BRIDGE, 1 BARREL AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-15-40		BOX BRIDGE, 1 BARREL AT 12', CLEAR HTS. 4' - 7', 0 - 60' FILL
STD-15-41		BOX BRIDGE, 1 BARREL AT 12', CLEAR HTS. 8' - 12', 0 - 60' FILL
STD-15-42		BOX BRIDGE, 1 BARREL AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-15-43		BOX BRIDGE, 1 BARREL AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-15-44		BOX BRIDGE, 1 BARREL AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-15-45		BOX BRIDGE, 1 BARREL AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-46		BOX BRIDGE, 1 BARREL AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-15-47		BOX BRIDGE, 1 BARREL AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-15-48		BOX BRIDGE, 1 BARREL AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-49		BOX BRIDGE, 1 BARREL AT 18', CLEAR HTS. 9' - 13', 0 - 60' FILL
STD-15-50		BOX BRIDGE, 1 BARREL AT 18', CLEAR HTS. 14' - 18', 0 - 60' FILL
STD-15-55		BOX BRIDGE, 2 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-15-56		BOX BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 3' - 4', 0 - 60' FILL
STD-15-57		BOX BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 5' - 8', 0 - 60' FILL
STD-15-58		BOX BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-15-59		BOX BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-15-60		BOX BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 4' - 7', 0 - 60' FILL
STD-15-61		BOX BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 8' - 12', 0 - 60' FILL
STD-15-62		BOX BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL

English		Revised: 03/31/11
STD-15-63		BOX BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-15-64		BOX BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-15-65		BOX BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-66		BOX BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-15-67		BOX BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-15-68		BOX BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-69		BOX BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 9' - 13', 0 - 60' FILL
STD-15-70		BOX BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 14' - 18', 0 - 60' FILL
STD-15-75		BOX BRIDGE, 3 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-15-76		BOX BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 3' - 4', 0 - 60' FILL
STD-15-77	12-07-01	BOX BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 5' - 8', 0 - 60' FILL
STD-15-78	12-07-01	BOX BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-15-79	12-07-01	BOX BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-15-80		BOX BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 4' - 7', 0 - 60' FILL
STD-15-81		BOX BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 8' - 12', 0 - 60' FILL
STD-15-82		BOX BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-15-83		BOX BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-15-84		BOX BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-15-85		BOX BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-86		BOX BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-15-87		BOX BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-15-88		BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-89		BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 9' - 13', 0 - 60' FILL
STD-15-90		BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 14' - 18', 0 - 60' FILL
STD-15-95		SLAB BRIDGE, 1 BARREL AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-15-96		SLAB BRIDGE, 1 BARREL AT 8', CLEAR HTS. 3' - 4', 0 - 60' FILL
STD-15-97		SLAB BRIDGE, 1 BARREL AT 8', CLEAR HTS. 5' - 8', 0 - 60' FILL
STD-15-98		SLAB BRIDGE, 1 BARREL AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL

English		Revised: 03/31/11
STD-15-99	02-28-03	SLAB BRIDGE, 1 BARREL AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-15-100	02-28-03	SLAB BRIDGE, 1 BARREL AT 12', CLEAR HTS. 4' - 7', 0 - 60' FILL
STD-15-101	02-28-03	SLAB BRIDGE, 1 BARREL AT 12', CLEAR HTS. 8' - 12', 0 - 60' FILL
STD-15-102		SLAB BRIDGE, 1 BARREL AT 14', CLEAR HTS. 5' - 9', 0 - 60' FILL
STD-15-103		SLAB BRIDGE, 1 BARREL AT 14', CLEAR HTS. 10' - 14', 0 - 60' FILL
STD-15-104		SLAB BRIDGE, 1 BARREL AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-105		SLAB BRIDGE, 1 BARREL AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-15-106		SLAB BRIDGE, 1 BARREL AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-15-107		SLAB BRIDGE, 1 BARREL AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-108		SLAB BRIDGE, 1 BARREL AT 18', CLEAR HTS. 9' - 13', 0 - 60' FILL
STD-15-109		SLAB BRIDGE, 1 BARREL AT 18', CLEAR HTS. 14' - 18', 0 - 60' FILL
STD-15-115	02-28-03	SLAB BRIDGE, 2 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-15-116	02-28-03	SLAB BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 3' - 4', 0 - 60' FILL
STD-15-117	02-28-03	SLAB BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 5' - 8', 0 - 60' FILL
STD-15-118	02-28-03	SLAB BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-15-119	02-28-03	SLAB BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-15-120	02-28-03	SLAB BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 4' - 7', 0 - 60' FILL
STD-15-121	02-28-03	SLAB BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 8' - 12', 0 - 60' FILL
STD-15-122	02-28-03	SLAB BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-15-123	02-28-03	SLAB BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-15-124	02-28-03	SLAB BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-15-125	02-28-03	SLAB BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-126	02-28-03	SLAB BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-15-127	02-28-03	SLAB BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-15-128	02-28-03	SLAB BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-129	02-28-03	SLAB BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 9' - 13', 0 - 60' FILL
STD-15-130	02-28-03	SLAB BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 14' - 18', 0 - 60' FILL

English		Revised: 03/31/11
STD-15-135		SLAB BRIDGE, 3 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-15-136		SLAB BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 3' - 4', 0 - 60' FILL
STD-15-137		SLAB BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 5' - 8', 0 - 60' FILL
STD-15-138		SLAB BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-15-139		SLAB BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-15-140		SLAB BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 4' - 7', 0 - 60' FILL
STD-15-141		SLAB BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 8' - 12', 0 - 60' FILL
STD-15-142		SLAB BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-15-143		SLAB BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-15-144		SLAB BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-15-145		SLAB BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-146		SLAB BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-15-147		SLAB BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-15-148	12-07-01	SLAB BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-15-149	12-07-01	SLAB BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 9' - 13', 0 - 60' FILL
STD-15-150	12-07-01	SLAB BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 14' - 18', 0 - 60' FILL
BRIDGE AP	PURTENANC	ES ENGLISH (LRFD BOX CULVERTS)
STD-17-1		INDEX OF DRAWINGS
STD-17-2		TERMINOLOGY
STD-17-3		GENERAL NOTES
STD-17-4		DESIGN SECTION LIMITS
STD-17-5		TYPICAL SECTION AND DETAILS
STD-17-6		TYPICAL ELEVATIONS
STD-17-7		CURB, RAIL & EDGE BEAM DETAILS – SKEW NOT LESS THAN 45 DEG.
STD-17-8		EDGE BEAM DETAILS FOR FILLS GREATER THAN 3' - 6"
STD-17-9		INTERIOR WALL END TREATMENTS
STD-17-10		TYPICAL WINGWALL DETAILS AND NOTES

English	Revised: 03/31/11
STD-17-11	WINGWALL DIMENSIONS AND QUANTITIES
STD-17-12	WINGWALL DIMENSIONS AND QUANTITIES
STD-17-13	WINGWALL DIMENSIONS AND QUANTITIES
STD-17-14	WINGWALL DIMENSIONS AND QUANTITIES
STD-17-15	WINGWALL & SPECIAL RETAINING WALL DESIGN SECTION
STD-17-16	WINGWALL DESIGN SECTION
STD-17-17	BACKFILL AND DRAINAGE DETAILS
STD-17-18	BACKFILL DETAILS
STD-17-19	PAVED OUTLET DETAIL
STD-17-20	LOW FLOW CHANNEL CONSTRUCTION DETAILS FOR CULVERT INLET AND OUTLET
STD-17-21	DEBRIS DEFLECTION WALL FOR BOX BRIDGE
STD-17-22	DEBRIS DEFLECTION WALL FOR SLAB BRIDGE
STD-17-23	SIDEWALK AND MISCELLANEOUS DETAILS
STD-17-24	WARPED SLOPE DETAIL
STD-17-25	STAGE CONSTRUCTION JOINT DETAIL (FILL ABOVE TOP OF SLAB NOT GREATER THAN 3'-6")
STD-17-26	EXTENSION DETAILS
STD-17-27	EXTENSION DETAILS FOR SCOURED OUTLET
STD-17-28	END SECTION DETAILS
STD-17-29	PRECAST BOX CULVERT DETAILS
STD-17-34	INTERNAL ENERGY DISSIPATOR FOR BOX AND PIPE CULVERTS
STD-17-51	BOX BRIDGE, 1 BARREL AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-17-52	BOX BRIDGE, 1 BARREL AT 8', CLEAR HTS. 3' - 5', 0 - 60' FILL
STD-17-53	BOX BRIDGE, 1 BARREL AT 8', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-54	BOX BRIDGE, 1 BARREL AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-55	BOX BRIDGE, 1 BARREL AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-17-56	BOX BRIDGE, 1 BARREL AT 12', CLEAR HTS. 4' - 6', 0 - 60' FILL

English	Revised: 03/31/11
STD-17-57	BOX BRIDGE, 1 BARREL AT 12', CLEAR HTS. 7' - 9', 0 - 60' FILL
STD-17-58	BOX BRIDGE, 1 BARREL AT 12', CLEAR HTS. 10' - 12', 0 - 60' FILL
STD-17-59	BOX BRIDGE, 1 BARREL AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-17-60	BOX BRIDGE, 1 BARREL AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-17-61	BOX BRIDGE, 1 BARREL AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-62	BOX BRIDGE, 1 BARREL AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-63	BOX BRIDGE, 1 BARREL AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-17-64	BOX BRIDGE, 1 BARREL AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-17-65	BOX BRIDGE, 1 BARREL AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-66	BOX BRIDGE, 1 BARREL AT 18', CLEAR HTS. 9' - 11', 0 - 60' FILL
STD-17-67	BOX BRIDGE, 1 BARREL AT 18', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-68	BOX BRIDGE, 1 BARREL AT 18', CLEAR HTS. 15' - 18', 0 - 60' FILL
STD-17-71	BOX BRIDGE, 2 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-17-72	BOX BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 3' - 5', 0 - 60' FILL
STD-17-73	BOX BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-74	BOX BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-75	BOX BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-17-76	BOX BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-77	BOX BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 7' - 9', 0 - 60' FILL
STD-17-78	BOX BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 10' - 12', 0 - 60' FILL
STD-17-79	BOX BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-17-80	BOX BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-17-81	BOX BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-82	BOX BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-83	BOX BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-17-84	BOX BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-17-85	BOX BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-86	BOX BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 9' - 11', 0 - 60' FILL

English	Revised: 03/31/11
STD-17-87	BOX BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-88	BOX BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 15' - 18', 0 - 60' FILL
STD-17-91	BOX BRIDGE, 3 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-17-92	BOX BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 3' - 5', 0 - 60' FILL
STD-17-93	BOX BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-94	BOX BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-95	BOX BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-17-96	BOX BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-97	BOX BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 7' - 9', 0 - 60' FILL
STD-17-98	BOX BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 10' - 12', 0 - 60' FILL
STD-17-99	BOX BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-17-100	BOX BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-17-101	BOX BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-102	BOX BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-103	BOX BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-17-104	BOX BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-17-105	BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-106	BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 9' - 11', 0 - 60' FILL
STD-17-107	BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-108	BOX BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 15' - 18', 0 - 60' FILL
STD-17-111	SLAB BRIDGE, 1 BARREL AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-17-112	SLAB BRIDGE, 1 BARREL AT 8', CLEAR HTS. 3' - 5', 0 - 60' FILL
STD-17-113	SLAB BRIDGE, 1 BARREL AT 8', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-114	SLAB BRIDGE, 1 BARREL AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-115	SLAB BRIDGE, 1 BARREL AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-17-116	SLAB BRIDGE, 1 BARREL AT 12', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-117	SLAB BRIDGE, 1 BARREL AT 12', CLEAR HTS. 7' - 9', 0 - 60' FILL

English	Revised: 03/31/11
STD-17-118	SLAB BRIDGE, 1 BARREL AT 12', CLEAR HTS. 10' - 12', 0 - 60' FILL
STD-17-119	SLAB BRIDGE, 1 BARREL AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-17-120	SLAB BRIDGE, 1 BARREL AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-17-121	SLAB BRIDGE, 1 BARREL AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-122	SLAB BRIDGE, 1 BARREL AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-123	SLAB BRIDGE, 1 BARREL AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-17-124	SLAB BRIDGE, 1 BARREL AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-17-125	SLAB BRIDGE, 1 BARREL AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-126	SLAB BRIDGE, 1 BARREL AT 18', CLEAR HTS. 9' - 11', 0 - 60' FILL
STD-17-127	SLAB BRIDGE, 1 BARREL AT 18', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-128	SLAB BRIDGE, 1 BARREL AT 18', CLEAR HTS. 15' - 18', 0 - 60' FILL
STD-17-131	SLAB BRIDGE, 2 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-17-132	SLAB BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 3' - 5', 0 - 60' FILL
STD-17-133	SLAB BRIDGE, 2 BARRELS AT 8', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-134	SLAB BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-135	SLAB BRIDGE, 2 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-17-136	SLAB BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-137	SLAB BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 7' - 9', 0 - 60' FILL
STD-17-138	SLAB BRIDGE, 2 BARRELS AT 12', CLEAR HTS. 10' - 12', 0 - 60' FILL
STD-17-139	SLAB BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-17-140	SLAB BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-17-141	SLAB BRIDGE, 2 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-142	SLAB BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-143	SLAB BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-17-144	SLAB BRIDGE, 2 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-17-145	SLAB BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-146	SLAB BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 9' - 11', 0 - 60' FILL
STD-17-147	SLAB BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 12' - 14', 0 - 60' FILL

English		Revised: 03/31/11
STD-17-148		SLAB BRIDGE, 2 BARRELS AT 18', CLEAR HTS. 15' - 18', 0 - 60' FILL
STD-17-151		SLAB BRIDGE, 3 BARRELS AT 6', CLEAR HTS. 3' - 6', 0 - 60' FILL
STD-17-152		SLAB BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 3' - 5', 0 - 60' FILL
STD-17-153		SLAB BRIDGE, 3 BARRELS AT 8', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-154		SLAB BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-155		SLAB BRIDGE, 3 BARRELS AT 10', CLEAR HTS. 7' - 10', 0 - 60' FILL
STD-17-156		SLAB BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 4' - 6', 0 - 60' FILL
STD-17-157		SLAB BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 7' - 9', 0 - 60' FILL
STD-17-158		SLAB BRIDGE, 3 BARRELS AT 12', CLEAR HTS. 10' - 12', 0 - 60' FILL
STD-17-159		SLAB BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 5' - 7', 0 - 60' FILL
STD-17-160		SLAB BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 8' - 11', 0 - 60' FILL
STD-17-161		SLAB BRIDGE, 3 BARRELS AT 14', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-162		SLAB BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-163		SLAB BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 9' - 12', 0 - 60' FILL
STD-17-164		SLAB BRIDGE, 3 BARRELS AT 16', CLEAR HTS. 13' - 16', 0 - 60' FILL
STD-17-165		SLAB BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 6' - 8', 0 - 60' FILL
STD-17-166		SLAB BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 9' - 11', 0 - 60' FILL
STD-17-167		SLAB BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 12' - 14', 0 - 60' FILL
STD-17-168		SLAB BRIDGE, 3 BARRELS AT 18', CLEAR HTS. 15' - 18', 0 - 60' FILL
BRIDGE APP	URTENANCES	ENGLISH (BRIDGE REPAIRS)
SBR-2-115	01–04–96	GENERAL NOTES AND DETAILS FOR EXPANSION JOINT REPLACEMENT CONSTRUCTION TYPES "A" THRU "J" - 1991
SBR-2-116	01–04–96	GENERAL DETAILS FOR STRIPSEAL EXPANSION JOINT REPLACEMENTCONSTRUCTION DETAILS TYPES "A" THRU "J" - 1991
SBR-2-117	05–30–96	STRIPSEAL EXPEANSION JOINTS – REPLACEMENT CONSTRUCTION DETAILS TYPE "A" AND TYPE "B" - 1991
SBR-2-118	05–30–96	STRIPSEAL EXPANSION JOINT REPLACEMENT CONSTRUCTION DETAILS TYPE "C" AND TYPE "D" - 1991

English		Revised: 03/31/11
SBR-2-119	05–30–96	STRIPSEAL EXPANSION JOINT REPLACEMENT CONSTRUCTION DETAILS TYPE "E" AND TYPE "F" - 1991
SBR-2-120	05–30–96	STRIPSEAL EXPANSION JOINT REPLACEMENT CONSTRUCTION DETAILS TYPE "G" AND "H" - 1991
SBR-2-121	01–04–96	STRIPSEAL EXPANSION JOINT REPLACEMENT CONSTRUCTION DETAILS TYPE "J" - 1991
SBR-2-122	01–04–96	DETAILS FOR PRECAST SLAB BRIDGE CHANNELS, SPANS 16' – 0" THRU 34' – 0", DEGREE OF SKEW 90 - 75 - 60 - 45 - 1992
SBR-2-123	01–04–96	DETAILS FOR PRECAST SLAB BRIDGE CHANNELS, SPANS 16' – 0" THRU 34' -0", DEGREE OF SKEW 90 - 75 - 60 - 45 - 1992
SBR-2-124	01–04–96	DETAILS SHOWING REPLACEMENT OF EXISTING BRIDGERAIL SYSTEM WITH NEW JERSEY SHAPE CONCRETE PARAPET AND NEW 10' -2" ENDPOST - 1988
SBR-2-125	11–05–01	DETAILS SHOWING REPLACEMENT OF EXISTING BRIDGERAIL SYSTEM WITH NEW JERSEY SHAPE CONCRETE PARAPET AND NEW 10' -2" ENDPOST - 1988
SBR-2-126	01–04–96	DETAILS SHOWING REPLACEMENT OF EXISTING BRIDGERAIL SYSTEM WITH NEW JERSEY SHAPE CONCRETE PARAPET AND NEW 10' -2" ENDPOST - 1988
SBR-2-127	11–05–01	DETAILS SHOWING PIER PROTECTION WITH NEW CONCRETE BARRIER WALL - 1988
SBR-2-128	01–04–96	DETAILS SHOWING PIER PROTECTION WITH NEW CONCRETE BARRIER WALL - 1988
SBR-2-129	11–05–01	DETAILS SHOWING PIER PROTECTION WITH NEW VERTICAL CONCRETE BARRIER - 1988
SBR-2-130	01–04–96	DETAILS SHOWING PIER PROTECTION WITH NEW VERTICAL CONCRETE BARRIER - 1988
SBR-2-131	01–22–02	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS TO EXISTING CONCRETE SLOPE FACE ENDPOST - 1989
SBR-2-132	01–04–96	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS EXISTING CONCRETE SLOPE FACE ENDPOST - 1989
SBR-2-133	01–22–02	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS TO EXISTING CONCRETE VERTICAL FACE ENDPOST – 1989
SBR-2-134	01–04-96	DETAILS SHOWING GUARDRAIL ATTACHMENT AT BRIDGE ENDS TO EXISTING CONCRETE VERTICAL FACE ENDPOST - 1989
SBR-2-135	01–22–02	GUARDRAIL ATACHMENT TO EXISTING PIER PROTECTION -

<u>English</u>		Revised: 03/31/11
		1991
SBR-2-136	11-05-01	STANDARD DRAWING FOR REPLACING EXISTING CONCRETE ENDPOST AND GUARDRAIL AT EXISTING BRIDGE ENDS - 1992
SBR-2-137	11–05–01	STANDARD SHOWING DETAILS FOR ATTACHING NEW GUARDRAIL TO EXISTING END OF BRIDGE - 1992
SBR-2-138	11–05–01	STANDARD SHOWING DETAILS FOR ATTACHING NEW GUARDRAIL AT EXISTING BRIDGE END AND ALONG EXISTING BRIDGE RAIL - 1992
SBR-2-140	11–05–01	STANDARD SHOWING DETAILS FOR ATTACHING NEW GUARDRAIL ALONG EXISTING BRIDGE RAILS - 1992
SBR-2-144	01–22–02	STANDARD SHOWING DETAILS OF ATTACHING GUARDRAIL BRIDGERAIL TO TOP OF EXISTING CURBS - 1992