

SUMMARY OF REVISIONS TO THE 2009 ROADWAY STANDARDS

The 2009 Standard Specifications for Highway Construction is the current specification for Oklahoma highway construction and Roadway Design is submitting the following summary of changes for the revised 2009 Roadway Standard Drawing, for your information and review.

Revised Standards Effective July 01, 2019			
Sheet Number	Standard	Revision	Status
R-24	PSMD-1	0	New Sheet
R-25	PCI-1	0	New Sheet

Sheet Number: R-24

Precast Standard Median Drain

Old Designation: PSMD-1

New Designation: PSMD-10

Description: New Sheet

Sheet Number: R-25

Precast Curb Inlet (Designs 1,2 and 3)

Old Designation: PCI-1

New Designation: PCI-10

Description: New Sheet

Revised Standards Effective June 03, 2019			
Sheet Number	Standard	Revision	Status
R-12	CSCD-5-	4	Revised
R-14	LECS-4-	2	Revised
R-17	CRCP2-3-	1	Revised
R-19	PCPR-3-	2	Revised
R-22	WCR-3-	2	Revised
R-23	TWD-1-	1	Revised
R-36	SMD-3-	2	Revised
R-43	MJB-3-	2	Revised
R-44	PRM-1-	0	New Sheet
R-45	PSM-1-	0	New Sheet
R-46	PMD-1-	0	New Sheet
R-53	PUD-3-	3	Revised
R-59	CLB-1-	3	Revised
R-63	RDI-3-	2	Revised
R-66	RWF1-2-	3	Revised
R-67	RWF2-2-	2	Revised
R-68	RWF3-2-	3	Revised

Sheet Number: R-12

Concrete Surfacing Construction Details

Old Designation: CSCD-5-3

New Designation: CSCD-5-4

- Description:
- Added T dimension description to Integral Curb Typical Sections.
 - Revised Gen. Notes 5 and 9 to add phrase "the current version of" just before roadway standard and traffic standard.
 - Revised Notes throughout the standard referencing other roadway standards to add phrase "the current version of."

Sheet Number: R-14

Joints and Sealers - Longitudinal, Expansion / Isolation & Contracti

Old Designation: LECS-4-1

New Designation: LECS-4-2

- Description:
- Revised last sentence of Gen Note 3 and added at end: "or by manufacturer's recommendation."
 - Revised title to include Isolation as the same type of joint as expansion: "Joints and Sealers - Longitudinal, Expansion/Isolation, and Contraction."
 - Moved General Note 4 under "Doweled Contraction Joint" detail.
 - Moved General Note 6 into a box near the Contraction Joint details.
 - Renumbered General Notes.

Sheet Number: R-17**Continuously Reinforced Concrete Pavement Terminal Joints**

Old Designation: CRCP2-3-0

New Designation: CRCP2-3-1

- Description:
- Removed "1 3/8" max." reference in Dowel Bar notes in Type 2 and 3 detail drawings.
 - Added "or grouted" after "Dowel Bars shall be epoxied..." notes in both Type 2 and 3 detail drawings.
 - Moved General Note 8 under Type 1 & 2 detail drawings.
 - Added General Note #10 "Holes are to be drilled in diameter based on dowel bar size and type of glue used: for epoxy, hole diameter shall be dowel dia. + (2 x 1/8"); for cement, grout hole diameter shall be dowel dia. + (2 x 1/4)".
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Sheet Number: R-19**Portland Cement Concrete Pavement Repair**

Old Designation: PCPR-3-1

New Designation: PCPR-3-2

- Description:
- Added General Note #6 to read "Holes are to be drilled in diameter based on dowel bar size and type of glue used: for epoxy, hole diameter shall be dowel dia. + (2 x 1/8"); for cement grout, hole diameter shall be dowel dia. + (2 x 1/4)".
 - Revised note on Detail of Dowel Bar at Construction Joint, to remove "1 3/8" max." and add "or grouted" after "Dowel bars shall be epoxied..."
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Sheet Number: R-22**Wheelchair Ramps**

Old Designation: WCR-3-1

New Designation: WCR-3-2

- Description:
- Put General Note #3 in a box above the intersection drawing - left side. Notes were renumbered.
 - Changing ADAAG reference to PROWAG in Note 9.
 - Reference to Gen Note #10 was changed to Note #9 in General Note #4.
 - Revised Note #11 to add the phrase "the current version of roadway" just before "standard TWD-1."
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Sheet Number: R-23**Tactile Warning Devices**

Old Designation: TWD-1-0

New Designation: TWD-1-1

- Description:
- Changed ADAAG to PROWAG reference in Notes #2 and 12.
 - Removed Note #16: "Wet or Dry Static Coefficient of Friction shall be 0.7 for tactile surfaces and meet ASTM C1028". The ASTM Spec has been withdrawn.
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Sheet Number: R-36**Standard Median Drains (18" To 36" Pipes)**

Old Designation: SMD-3-1

New Designation: SMD-3-2

- Description:
- Added Note "See Corner Detail" to Type 1 Grate Plan Drawing.
 - Revised General Note 3: Removed first sentence "Bicycle and pedestrian safe grates, similar to Type 1 Grates, may be substituted for Type 2A and 2B Grates, if they meet the minimum equivalent hydraulic and structural requirements and proposed designs are approved by the engineer." and revised second sentence.
 - Added General Note 6: "As shown inlet concrete drawings and inlet reinforcing steel design are based on cast-in-place manufacturing. Precast concrete manufactured design and drawings are on roadway standard PSMD-0."
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Sheet Number: R-43**Manholes And Junction Boxes**

Old Designation: MJB-3-1

New Designation: MJB-3-2

- Description:
- General Note 3 was added to new General Note 8.
 - General Note #4 became Note #3; Note #5 became Note #4; Note #6 became Note #5; Note #7 became Note #6; Note #8 became Note #7.
 - Moved 'Bar Bending Diagrams' to left side of sheet.
 - Added reference note to 'Bar Bending Diagrams' in "Section thru Junction Box" and "In paving Manhole Terminal."
 - Revised new General Note 5 to change from 5' to 6' in height (to match height of precast manholes).
 - New General Note #8 reads as follows: "Manhole Frames, Covers and Cover Grates installed during original construction shall be included in contract unit price of original manhole and junction box. For details of frame and cover, see the current version of Roadway Standard MFC-4."
 - Revised General Note #9 and removed both parts A & B.
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Sheet Number: R-44**Precast Round Manhole**

Old Designation: PRM-1-

New Designation: PRM-1-0

Description: New Sheet

Sheet Number: R-45**Precast Square Manhole**

Old Designation: PSM-1-

New Designation: PSM-1-0

Description: New Sheet

Sheet Number: R-46**Precast Manhole Details**

Old Designation: PMD-1-

New Designation: PMD-1-0

Description: New Sheet

Sheet Number: R-53**Pipe Underdrain Installation**

Old Designation: PUD-3-2

New Designation: PUD-3-3

- Description:
- Revised the second to last sentence in first paragraph under Installation Technique to read: [THE COARSE COVER AGGREGATE AND FILTER SAND SHALL BE PAID FOR AS PIPE UNDERDRAIN COVER MATERIAL AND SHALL CONFORM TO SEC. 703.06].
 - Removed last sentence in this paragraph.
 - Removed Pay Item [STANDARD BEDDING MATERIAL, CLASS C] from list of pay items.
 - Added asterick next to Filter Sand and removed [CLASS C STD. BED. MAT'L] in Detail Trench Excavation Perforated Pipe Underdrain Installations.
 - Revised Gen. Notes 4,5,6 and 10 to add the phrase "the current version of" just before "roadway std."
 - Revised top right two paragraphs to add "of the specifications" after Section Number.

Sheet Number: R-59**Concrete Longitudinal Barrier (NCHRP 350 F-Shape)**

Old Designation: CLB-1-2

New Designation: CLB-1-3

- Description:
- Revised General Note 3 to reference Traffic Standard BMF1-2 (Safety Barrier Light Pole Footing Details, Design No. 1) and to add "the current version of" in front of "traffic std."
 - Revised General Note 8 to add reference "or MASH."
 - Revised Note in box under Section B2 drawing to add the phrase "the current version of"

Sheet Number: R-63**Driveway Installation**

Old Designation: RDI-3-1

New Designation: RDI-3-2

- Description:
- Updated Roadway Standard listed on Profile of Typical Asphalt Return and added the phrase "the current version of"

Sheet Number: R-66**Right-of-Way Fence Style WWF (Woven Wire Fence)**

Old Designation: RWF1-2-2

New Designation: RWF1-2-3

- Description:
- Added General Note #8: "Class "A" Concrete shall be used for all concrete footings. Ready Mix Concrete may be used as a substitute, if approved by the Engineer.
 - Revised Note in Box under Details G and H to add the phrase "the current version of" immediately before roadway standard RWF3-2.

Sheet Number: R-67**Right-of-Way Fence Style SWF (Strand Wire Fence)**

Old Designation: RWF2-2-1

New Designation: RWF2-2-2

- Description:
- Added General Note #5: "Ready Mix Concrete may be used as a substitute for Class A Concrete if approved by the engineer.
 - Revised Note in box under Detail G to add the phrase "the current version of" immediately before "roadway standard RWF3-2."

Sheet Number: R-68**Right-of-Way Fence Style CLF (Chain Link Fence)**

Old Designation: RWF3-2-2

New Designation: RWF3-2-3

- Description:
- Changed "A,B, or C" to "4',5',6' or 8'" in heights on the Fan, End, and Gate Details
 - Added information for 8' CLF Fence in Table in lower left
 - Added General Note #10
 - Added the word "Post" to "End,Corner and Stretcher Details"
 - Added the word "Post" to two notes in the Plan Drawing of Culvert Connection
 - Added the word "Post" to the top note and "Headwall" with arrows in "Elevation Headwall Connection" drawing
 - Moved the note inside of box in "Typical Line Post Detail" to in between drawings of "End, Corner and Stretcher Post Details" and "Gate Detail".
 - Added "Concrete Footing" Note in Gate Detail Drawing at top of standard.

Revised Standards Effective August 03, 2015			
Sheet Number	Standard	Revision	Status
R-11	ASCD-5-	2	Revised
R-12	CSCD-5-	3	Revised
R-26	CET4S-3-	2	Revised
R-27	CET6S-3-	2	Revised
R-28	CET4D-3-	2	Revised
R-29	CET6D-3-	2	Revised
R-47	SPI-4-	1	Revised
R-48	FPI-3-	3	Revised
R-49	SPB-1-	4	Revised
R-50	FHTMPP-1-	0	New Sheet
R-51	FHTCP-3-	1	Revised
R-65	PDT-1-	3	Revised

Sheet Number: R-11**Asphalt Surfacing Construction Details**

Old Designation: ASCD-5-1

New Designation: ASCD-5-2

- Description:
- Deleted note [FOR ADDITIONAL DETAILS SEE POLICY ON DRIVEWAY REGULATIONS FOR OKLA. HIGHWAYS].
 - Revised symbols on various details to reflect the way notes are supposed to be shown.
 - Revised Note 4 to read "...isolation joints at drainage structures, street curb returns, and at those locations..."
-

Sheet Number: R-12**Concrete Surfacing Construction Details**

Old Designation: CSCD-5-2

New Designation: CSCD-5-3

- Description:
- Revised closed circle and closed bottom circle notes to reflect the way notes are supposed to be shown.
 - Removed note in Section C-C: [FOR ADDITIONAL DETAILS SEE POLICY ON DRIVEWAY REGULATIONS FOR OKLA. HIGHWAYS].
 - Revised Note #5 second sentence to read "Transverse joints shall match pavement joints and placed at drainage structures."
 - First note under pay items was revised to state 'type' instead of 'shape'.
-

Sheet Number: R-26**Culvert End Treatment Single Pipe Installation 1 to 4 Safety Slope**

Old Designation: CET4S-3-1

New Designation: CET4S-3-2

- Description:
- Removed all information on the '26"x15" Reinf. Conc. Arch Pipe' line in Table A. [Concrete manufacturers are not making the 21" round and equivalent pipe anymore.]
-

Sheet Number: R-27**Culvert End Treatment Single Pipe Installation 1 to 6 Safety Slope**

Old Designation: CET6S-3-1

New Designation: CET6S-3-2

- Description:
- Removed all information in the '26"x15" Reinf. Conc. Arch Pipe' line. [Concrete pipe manufacturers are no longer making 21" round and its equivalent pipe.]
-

Sheet Number: R-28**Culvert End Treatment Double Pipe Installation 1 to 4 Safety Slope**

Old Designation: CET4D-3-1

New Designation: CET4D-3-2

- Description:
- Removed all information on the '26"x15" Reinf. Conc. Arch Pipe' line in Table A. [Concrete pipe manufacturers are no longer making 21" round and its equivalent pipes.]
-

Sheet Number: R-29**Culvert End Treatment Double Pipe Installation 1 to 6 Safety Slope**

Old Designation: CET6D-3-1

New Designation: CET6D-3-2

- Description:
- Removed all information on the '26"x15" Reinf. Conc. Arch Pipe' line in Table A. [Concrete manufacturers are not making the 21" round and equivalent pipe anymore.]
-

Sheet Number: R-47**Standard Pipe Installation**

Old Designation: SPI-4-0

New Designation: SPI-4-1

Description: • Removed the '26"x15" Reinf. Conc. Arch Pipe' in the 21" equiv. Dia. Line in the table on the bottom.[Concrete manufacturers are not making the 21" round and equivalent pipe anymore.]

Sheet Number: R-48**Flexible Pipe Installation**

Old Designation: FPI-3-2

New Designation: FPI-3-3

Description: • Replaced the standard reference FHTMP-5 with FHTMPP-1, in the table at the lower left of the sheet.

Sheet Number: R-49**Standard Pipe Bedding**

Old Designation: SPB-1-3

New Designation: SPB-1-4

Description: • Added Polypropylene Pipe (PP) row to Pipe Bedding table.
• Adding PP reference note under Pipe Bedding Table - "Backfill with a minimum of two (2) feet of approved backfill material."
• Added Note 13, for Polypropylene Pipe. "Polypropylene Pipes shall be installed in accordance with ASTM D2321."

Sheet Number: R-50**Fill Height Tables (Metal & Polypropylene Pipes)**

Old Designation: FHTMPP-1-

New Designation: FHTMPP-1-0

Description: New Sheet

Sheet Number: R-51**Fill Height Tables (Concrete Pipes)**

Old Designation: FHTCP-3-0

New Designation: FHTCP-3-1

Description: • Removed all information for 21" Round and equivalent concrete pipe. [Concrete manufacturers are not making the 21" round and equivalent pipe anymore.]

Sheet Number: R-65**Pavement Drop-Off Treatments**

Old Designation: PDT-1-2

New Designation: PDT-1-3

Description: • Revised posted speed limit for Treatment 3.
• Second sentence under Treatment 3 detail is revised to state "not to be used on interstates".
• Revised differential inside clear zone to be greater than 2" and less than or equal to 18".
• Revised Note in Differential from 12" to 18".

Revised Standards Effective January 01, 2015			
Sheet Number	Standard	Revision	Status
R-1	ECM1-3-	1	Revised
R-4	TSC1-3-	2	Revised
R-5	TSC2-3-	2	Revised
R-7	TFL-1-	1	Revised
R-8	TRFD-1-	2	Revised
R-19	PCPR-3-	1	Revised
R-20	PED-3-	2	Revised
R-30	PCES-4-	1	Revised
R-36	SMD-3-	1	Revised
R-42	MFC-4-	1	Revised
R-70	SUEL1-3-	2	Revised
R-71	SUEL2-3-	2	Revised
R-72	SUEL3-3-	2	Revised
R-73	SUEL4-3-	2	Revised

Sheet Number: R-1

Erosion Control Mat (Excelsior Mat)

Old Designation: ECM1-3-0

New Designation: ECM1-3-1

Description: • Added General Note 3

Sheet Number: R-4

Temporary Sediment Controls

Old Designation: TSC1-3-1

New Designation: TSC1-3-2

Description: • Added Symbology legend

Sheet Number: R-5

Temporary Sediment Controls

Old Designation: TSC2-3-1

New Designation: TSC2-3-2

Description: • Added 3 Symbology Legends. For Silt Fence, Sediment Filter and Slope Drain.

Sheet Number: R-7

Temporary Fiber Log

Old Designation: TFL-1-0

New Designation: TFL-1-1

Description: • Added Fiber Log Legend

Sheet Number: R-8

Temporary Rock Filter Dams

Old Designation: TRFD-1-1

New Designation: TRFD-1-2

Description: • Added Rock Filter Dam Legend

Sheet Number: R-19**Portland Cement Concrete Pavement Repair**

Old Designation: PCPR-3-0

New Designation: PCPR-3-1

- Description:
- Added Section A Dowel Bar Retrofit Placement Detail
 - Added Plan View Dowel Bar Retrofit Installation Detail
 - Removed Step 4 Note 3 See Seq of Op for Joint Rehab
-

Sheet Number: R-20**Pavement Edge Drain**

Old Designation: PED-3-1

New Designation: PED-3-2

- Description:
- Added to General Note #6, Outlet Laterals to be at 300'...
-

Sheet Number: R-30**Prefabricated Culvert End Sections**

Old Designation: PCES-4-0

New Designation: PCES-4-1

- Description: Adding dimensions for 18" equivalent for Elliptical and Arch Pipe End Sections
-

Sheet Number: R-36**Standard Median Drains (18" To 36" Pipes)**

Old Designation: SMD-3-0

New Designation: SMD-3-1

- Description:
- Cleaned up sheet in order to make room for new details.
 - Added the Median Drain Concrete Apron Detail, Section F-F, and a Corner Detail.
 - Added Estimated Quantities Per Typical Concrete Apron table.
 - Added General Notes 4 and 5.
 - Added Class C Concrete to Basis of Payment table.
 - Changed General Note #5 to read SMD Inlet and took off the Basis of Payment for Class C Concrete
 - Added Equally spaced @ 18" Max to Apron Reinf Steel Loc & Lengths summary
-

Sheet Number: R-42**Manhole Frame And Cover**

Old Designation: MFC-4-0

New Designation: MFC-4-1

- Description:
- Added two phrases to the detail "Top Side of Cover" of manhole: "Dump No Waste" and "Drains to River".
-

Sheet Number: R-70**Superelevation**

Old Designation: SUEL1-3-1

New Designation: SUEL1-3-2

- Description:
- Changed K Value in the Nomenclature and the Super At Any Distance X $S=K(X)$
 - Changed General Notes #5 to read MAY be used from SHALL be used.
-

Sheet Number: R-71**Superelevation Tables (emax = 4% and low speed urban streets)**

Old Designation: SUEL2-3-1

New Designation: SUEL2-3-2

- Description:
- Removed the Super Elevation Table (emax.=4%)
 - Added Note 4 (Tangent Runout Length Formula)
 - Added Normal Crown Row and Edited Table
 - Changed Msta Font to TT Font
 - Added Note 5 (Radius and Super runoff not rounded)

Sheet Number: R-72**Superelevation Tables (emax = 6%)**

Old Designation: SUEL3-3-1

New Designation: SUEL3-3-2

- Description:
- Added Normal Crown Row & Edited Tables.
 - Revised Note #3 (Tangent Runoff Formula)
 - Changed Msta Font to TT font
 - Added Note 4 (Radius and Super Runoff Lengths Not Rounded)

Sheet Number: R-73**Superelevation Tables (emax = 8%)**

Old Designation: SUEL4-3-1

New Designation: SUEL4-3-2

- Description:
- Added Normal Crown Row & Edited Tables
 - Added Note #3 (Tangent Runout Length Formula)
 - Changed Msta Font To TT Font
 - Added Note #4 (Radius and Super Lengths not Rounded)

Revised Standards Effective June 01, 2013			
Sheet Number	Standard	Revision	Status
R-4	TSC1-3-	1	Revised
R-5	TSC2-3-	1	Revised
R-14	LECS-4-	1	Revised
R-21	PSE-1-	0	New Sheet
R-39	CI-1-	2	Revised
R-48	FPI-3-	2	Revised
R-49	SPB-1-	3	Revised
R-52	SBI-4-	2	Revised
R-53	PUD-3-	2	Revised
R-59	CLB-1-	2	Revised
R-65	PDT-1-	2	Revised

Sheet Number: R-4**Temporary Sediment Controls**

Old Designation: TSC1-3-0

New Designation: TSC1-3-1

Description: • Deleted details which included Hay Bale Barriers in order to comply with DEQ's decision to no longer permit the use of them in erosion control. The details deleted were Bale Barrier (Type I), Bale Barrier (Type II), Section A-A, and Section B-B.

Sheet Number: R-5**Temporary Sediment Controls**

Old Designation: TSC2-3-0

New Designation: TSC2-3-1

Description: • Deleted details which included Hay Bale Barriers in order to comply with DEQ's decision to no longer permit the use of them in erosion control. The details deleted were Sediment Filter (Type I-A) Section A-A and Sediment Filter (Type I-B) Section B-B.
• Renamed detail [SEDIMENT FILTER (TYPE I-C) SECTION C-C] to [SEDIMENT FILTER SECTION A-A].

Sheet Number: R-14**Joints and Sealers - Longitudinal, Expansion / Isolation & Contracti**

Old Designation: LECS-4-0

New Designation: LECS-4-1

Description: • Added General Note 8.

Sheet Number: R-21**Pavement Safety Edge**

Old Designation: PSE-1-

New Designation: PSE-1-0

Description: • New Sheet

Sheet Number: R-39**Curb Inlets**

Old Designation: CI-1-1

New Designation: CI-1-2

Description: • Added a note and symbol to Replacement of Inlet Frame and Grate in the Basis of Payment that states that the type of frame and grate used will be specified.
• Moved and boxed the note covering the wording on the top of the hood on the Cast Iron Hood Elevation Detail.

Sheet Number: R-48**Flexible Pipe Installation**

Old Designation: FPI-3-1

New Designation: FPI-3-2

Description: • Revised Standard Bedding Material Class A, B, and C in the Basis of Payment table in order to match the current 2009 Roadway Pay Item List.

Sheet Number: R-49**Standard Pipe Bedding**

Old Designation: SPB-1-2

New Designation: SPB-1-3

Description: • Revised Standard Bedding Material Class A, B, and C in the Basis of Payment table in order to match the current 2009 Roadway Pay Item List.

Sheet Number: R-52**Standard Box Installation**

Old Designation: SBI-4-1

New Designation: SBI-4-2

Description: • Revised Structural Excavation Unclassified in the Basis of Payment table in order to match the current 2009 Roadway Pay Item List.

Sheet Number: R-53**Pipe Underdrain Installation**

Old Designation: PUD-3-1

New Designation: PUD-3-2

Description: • Revised Perforated Pipe Underdrain Round and Non-Perforated Pipe Underdrain Rnd. in the Basis of Payment table in order to match the current 2009 Roadway Pay Item List.

Sheet Number: R-59**Concrete Longitudinal Barrier (NCHRP 350 F-Shape)**

Old Designation: CLB-1-1

New Designation: CLB-1-2

Description: • Changed Note 7 from [DELINEATOR UNITS SHALL BE PLACED ON MEDIAN BARRIER ACCORDING TO TRAFFIC STANDARD DU1-1. ALL COST OF INSTALLATION SHALL BE INCLUDED IN COST OF BARRIER.] to [DELINEATOR UNITS SHALL BE PLACED ON MEDIAN BARRIER ACCORDING TO TRAFFIC STANDARD DU1-1. ALL COST OF INSTALLATION SHALL BE INCLUDED IN UNIT PRICE BID FOR DELINEATORS.].

Sheet Number: R-65**Pavement Drop-Off Treatments**

Old Designation: PDT-1-1

New Designation: PDT-1-2

Description: • Revised Cross Section notes for all Treatments

- Revised Differential notes for Treatments 1-3.
- Revised Time notes for Treatments 1.
- Revised Sign for Treatments 1-3.
- Added General Note 11.

Revised Standards Effective October 01, 2012			
Sheet Number	Standard	Revision	Status
R-7	TFL-1-	0	New Sheet
R-12	CSCD-5-	2	Revised
R-20	PED-3-	1	Revised
R-22	WCR-3-	1	Revised
R-26	CET4S-3-	1	Revised
R-27	CET6S-3-	1	Revised
R-28	CET4D-3-	1	Revised
R-29	CET6D-3-	1	Revised
R-34	CDIP-1-	1	Revised
R-38	SSCD-3-	1	Revised
R-39	CI-1-	1	Revised
R-43	MJB-3-	1	Revised
R-48	FPI-3-	1	Revised
R-49	SPB-1-	2	Revised
R-53	PUD-3-	1	Revised
R-63	RDI-3-	1	Revised
R-64	DC-3-	2	Revised
R-66	RWF1-2-	1	Revised
R-68	RWF3-2-	1	Revised

Sheet Number: R-7

Temporary Fiber Log

Old Designation: TFL-1-

New Designation: TFL-1-0

Description: • New Sheet

Sheet Number: R-12

Concrete Surfacing Construction Details

Old Designation: CSCD-5-1

New Designation: CSCD-5-2

Description: • Added [LONGITUDINAL JOINTS SHALL BE TIED WITH #5 DEFORMED TIE BARS 2'-6" LONG AT 3'-0" CTRS. SEE TIED BUTT AND LONGITUDINAL CONSTRUCTION JOINT DETAIL ON ROADWAY STANDARD LECS-4] to General Note 5.
 • Corrected spelling of [PREMOLDED] in Curb Joint With Expansion Material Detail.

Sheet Number: R-20

Pavement Edge Drain

Old Designation: PED-3-0

New Designation: PED-3-1

Description: • Added the Edge Drain Installation - Curbed Typical Section Detail

Sheet Number: R-22**Wheelchair Ramps**

Old Designation: WCR-3-0

New Designation: WCR-3-1

Description: • Revised notes on Type "A", Type "B", Type "C" and Type "D" Details from [SEE GEN. NOTE 11] to [SEE GEN. NOTE 12].

Sheet Number: R-26**Culvert End Treatment Single Pipe Installation 1 to 4 Safety Slope**

Old Designation: CET4S-3-0

New Designation: CET4S-3-1

Description: • Changed dimensions in Section A-A from [6"] to [VARIABLE].
• Changed [TABLE A] to [TABLE B] in General Note 2.
• Changed [TABLE A] and [TABLE B] to [TABLE B] and [TABLE A] respectively in General Note 3.

Sheet Number: R-27**Culvert End Treatment Single Pipe Installation 1 to 6 Safety Slope**

Old Designation: CET6S-3-0

New Designation: CET6S-3-1

Description: • Changed dimensions in Section A-A from [6"] to [VARIABLE].
• Changed [TABLE A] to [TABLE B] in General Note 2.

Sheet Number: R-28**Culvert End Treatment Double Pipe Installation 1 to 4 Safety Slope**

Old Designation: CET4D-3-0

New Designation: CET4D-3-1

Description: • Changed dimensions in Section A-A from [6"] to [VARIABLE].
• Changed [TABLE A] to [TABLE B] in General Note 2.
• Changed [A6], [E6], [TABLE A] and [TABLE B] to [AA6], [EE6], [TABLE B] and [TABLE A] respectively in General Note 3.
• Moved [28" x 18"], [36" x 22"], [43" x 26"], [51" x 31"], [58" x 36"] and [65" x 40"] in Table A under Culvert Type Reinf. Conc. Arch Pipe up one and also added the dimension [73" x 45"].

Sheet Number: R-29**Culvert End Treatment Double Pipe Installation 1 to 6 Safety Slope**

Old Designation: CET6D-3-0

New Designation: CET6D-3-1

Description: • Changed dimensions in Section A-A from [6"] to [VARIABLE].
• Changed [TABLE A] to [TABLE B] in General Note 2.
• Changed [A6], [E6], [TABLE A] and [TABLE B] to [AA6], [EE6], [TABLE B] and [TABLE A] respectively in General Note 3.
• Changed [B TIMES] to [BB TIMES] in General Note 11.
• Changed [2 EA.] to [3 EA.] in both the S-Bar Detail and Z-Bar Detail.
• Moved [28" x 18"], [36" x 22"], [43" x 26"], [51" x 31"], [58" x 36"] and [65" x 40"] in Table A under Culvert Type Reinf. Conc. Arch Pipe up one and also added the dimension [73" x 45"].

Sheet Number: R-34**Concrete Drop Inlet For 18" To 72" R. C. Pipes**

Old Designation: CDIP-1-0

New Designation: CDIP-1-1

- Description:
- Changed [10"] to [8"] in Drop Inlet For 18" To 42" Reinf. Concrete Pipe Plan Detail.
 - Added General Note 8 [ARCH PIPES MAY BE USED INSTEAD OF ROUND PIPES AT THE DISCRETION OF THE ENGINEER].
-

Sheet Number: R-38**Storm Sewer Construction Details**

Old Designation: SSCD-3-0

New Designation: SSCD-3-1

- Description:
- Changed [VARIABLE-SEE STD. CICI & SUMMARY OF STRUCTURES] to [VARIABLE-SEE STD. CI-1 & SUMMARY OF STRUCTURES] in Curb Turnout For Curb Inlet Plan Detail.
-

Sheet Number: R-39**Curb Inlets**

Old Designation: CI-1-0

New Designation: CI-1-1

- Description:
- Upsized the triangle symbols in the 6" Barrier Curb Hood Detail, 8" Barrier Curb Hood Detail and the 6" Mountable Curb Hood Detail to match the size of the triangles in General Notes 12 and 13.
 - Changed [ADDDITIONAL] to [ADDITIONAL] in the first note underneath the Quantities Table.
 - Added [COST OF THESE ITEMS AND HOODS SHALL BE INCLUDED IN THE COST OF INLET] to the end of General Note 2.
 - Changes [SEPERATE], [SHOWN IN THE PLAN OF INLETS ON THIS SHEET], [IN THE PLAN (THIS SHEET)] and [THICNESS] to [SEPARATE], [AS SHOWN], [AS SHOWN] and [THICKNESS] respectively in General Note 3.
 - Changed [INTEGREL] to [INTEGRAL] in General Note 4.
 - Removed text [THIS SHEET] in General Note 6.
-

Sheet Number: R-43**Manholes And Junction Boxes**

Old Designation: MJB-3-0

New Designation: MJB-3-1

- Description:
- Added [COST OF FRAME & COVER SHALL BE INCLUDED IN COST OF JUNCTION BOX] to the end of General Note 7.
-

Sheet Number: R-48**Flexible Pipe Installation**

Old Designation: FPI-3-0

New Designation: FPI-3-1

- Description:
- Changed [REFER TO RDY. STANDARD FHTMP-4] to [REFER TO RDY STANDARD FHTMP-5] in Table of Fill Heights.
-

Sheet Number: R-49**Standard Pipe Bedding**

Old Designation: SPB-1-1

New Designation: SPB-1-2

Description: • Added Note 12 [THE USE OF AN ALTERNATE PIPE AND ITS CORRESPONDING BEDDING MATERIAL WILL BE ACCEPTABLE PROVIDED THE CRITERIA IN THE DESIGN TABLE IS MET.]

Sheet Number: R-53**Pipe Underdrain Installation**

Old Designation: PUD-3-0

New Designation: PUD-3-1

Description: • Added General Note 10 [FOR DETAILS OF OUTLET LATERAL HEADWALL, SEE ROADWAY STANDARD PED-3.].

- Added Detail Trench Excavation Non-Perforated Pipe Underdrain Installations.
- Changed [613(S) STANDARD BEDDING MATERIAL, CLASS B] to [613(T) STANDARD BEDDING MATERIAL, CLASS C] in Basis of Payment.
- Added [THE LAYER OF COARSE COVER AGGREGATE SHALL BE PAID FOR AS PIPE UNDERDRAIN COVER MATERIAL AND SHALL CONFORM TO SEC. 703.06. FILTER SAND SHALL BE PAID FOR AS CLASS C STANDARD BEDDING MATERIAL AND SHALL CONFORM TO SEC. 703.06.] to the end of the first paragraph and changed [BEDDING MATERIAL LAYER SHALL CONFORM TO THE REQUIREMENTS OF SECTION 703.04. COST OF NON-PERFORATED PIPE UNDERDRAIN BEDDING LAYER TO BE INCLUDED WITH PIPE UNDERDRAIN COVER MATERIAL.

THE REMAINING BACKFILL MAY BE NATIVE SOIL REMOVED IN THE TRENCHING OPERATION, FILTER SAND OR BACKFILLED ACCORDING TO THE ENGINEER. COST TO BE INCLUDED IN OTHER ITEMS OF WORK. SEE GENERAL NOTE NUMBERS 5 & 6.] to [THIS LAYER OF COVER MATERIAL SHALL CONFORM TO SEC. 703.06, AND SHALL BE PAID FOR AS PIPE UNDERDRAIN COVER MATERIAL. THE REMAINING BACKFILL MAY BE NATIVE SOIL REMOVED IN THE TRENCHING OPERATION, FILTER SAND OR BACKFILLED ACCORDING TO THE ENGINEER. COST TO BE INCLUDED IN OTHER ITEMS OF WORK. SEE GENERAL NOTE NUMBERS 5 & 6.] in the second paragraph in the Installation Technique note.

- Removed [(SEC. 703.06)] from Detail Trench Excavation Perforated Pipe Underdrain Installations.

Sheet Number: R-63**Driveway Installation**

Old Designation: RDI-3-0

New Designation: RDI-3-1

Description: • Changed [ABBREVIATIONS] to [ABBREVIATIONS] in Useful Abbreviations For Plan Sheets note and also boxed the note.

- Adjusted the size and location of all details.

Sheet Number: R-64**Paved Ditches and Flumes**

Old Designation: DC-3-1

New Designation: DC-3-2

Description: • Changed [BARRIED] to [BURIED] in Optional Longitudinal Section With Buried Ends

Sheet Number: R-66**Right-of-Way Fence Style WWF (Woven Wire Fence)**

Old Designation: RWF1-2-1

New Designation: RWF1-2-2

- Description:
- Switched the Limit Of No Access dimensions with the Right-Of-Way Fence Measured To Here dimensions on the Gate Details. This is so the details will coincide with other standards.
 - Revised Pay Item Description to exactly match the 2009 Pay Item List.
-

Sheet Number: R-66**Right-of-Way Fence Style WWF (Woven Wire Fence)**

Old Designation: RWF1-2-0

New Designation: RWF1-2-1

- Description:
- Revised Gate Line Style from a closed 'gate' to an open 'gate' (delete line between gate posts).
 - Changed [RIGHT-OF-WAY MEASURED TO HERE] to [RIGHT-OF-WAY FENCE MEASURED TO HERE] in both Gate Details.
 - Revised numerous dimension lines in both details to point to correct areas on the details.
-

Sheet Number: R-67**Right-of-Way Fence Style SWF (Strand Wire Fence)**

Old Designation: RWF2-2-0

New Designation: RWF2-2-1

- Description:
- Removed 3 Wire Detail and added 6 Wire Detail.
 - Added spacing on Typical Fan Details for 6 Wire and removed the spacing for 3 Wire.
 - Revised Pay Item Description to exactly match the 2009 Pay Item List.
-

Sheet Number: R-68**Right-of-Way Fence Style CLF (Chain Link Fence)**

Old Designation: RWF3-2-1

New Designation: RWF3-2-2

- Description:
- Added Limits Of No Access (Where Applicable) dimensions to the Gate Detail.
 - Also changed the description of pay item 624(F) to match what it actually is. The Class was replaced with Long and a new symbol and the note Length Of Gate Shall Be Specified was added.
 - Revised Pay Item Description to exactly match the 2009 Pay Item List.
-

Sheet Number: R-68**Right-of-Way Fence Style CLF (Chain Link Fence)**

Old Designation: RWF3-2-0

New Designation: RWF3-2-1

- Description:
- Added [RIGHT-OF-WAY FENCE MEASURED TO HERE] dimension to Gate Detail.
-

Revised Standards Effective July 01, 2011			
Sheet Number	Standard	Revision	Status
R-3	SSS-1-	1	Revised
R-8	TRFD-1-	1	Revised
R-11	ASCD-5-	1	Revised
R-12	CSCD-5-	1	Revised
R-49	SPB-1-	1	Revised
R-52	SBI-4-	1	Revised
R-59	CLB-1-	1	Revised
R-64	DC-3-	1	Revised
R-65	PDT-1-	1	Revised
R-70	SUEL1-3-	1	Revised
R-71	SUEL2-3-	1	Revised
R-72	SUEL3-3-	1	Revised
R-73	SUEL4-3-	1	Revised

Sheet Number: R-3

Solid Slab Sodding

Old Designation: SSS-1-0

New Designation: SSS-1-1

Description: • Changed Slope Descriptions from [6:1] to [1:6].

Sheet Number: R-8

Temporary Rock Filter Dams

Old Designation: TRFD-1-0

New Designation: TRFD-1-1

Description: • Removed [See Note 6] from Filter Dam at Channel Section Detail. This note is covered under specifications book.

Sheet Number: R-11

Asphalt Surfacing Construction Details

Old Designation: ASCD-5-0

New Designation: ASCD-5-1

Description: • Replace and relocate reference symbol from half full skewed square with a solid star in Typical Street Return details.

Sheet Number: R-12

Concrete Surfacing Construction Details

Old Designation: CSCD-5-0

New Designation: CSCD-5-1

Description: • Changed dimension in detail Type I Driveway from [2.52'] to [3.00'] and from [9.22'] to [3.46'], and added [5:1] to "Curb Beginning" detail.

Sheet Number: R-49**Standard Pipe Bedding**

Old Designation: SPB-1-0

New Designation: SPB-1-1

Description: • Removed Pay Items '613(U) Pipe Underdrain Cover Material' and '613(V) Trench Excavation' from Basis of Payment table. These items are covered under Specifications, Note #5 and other standards.

Sheet Number: R-52**Standard Box Installation**

Old Designation: SBI-4-0

New Designation: SBI-4-1

Description: • Changed slopes from 2:1 to 1:2.

Sheet Number: R-59**Concrete Longitudinal Barrier (NCHRP 350 F-Shape)**

Old Designation: CLB-1-0

New Designation: CLB-1-1

Description: • Change taper from 21:4 to 24:1 in detail of "Transition Section at Bridge Piers".

Sheet Number: R-64**Paved Ditches and Flumes**

Old Designation: DC-3-0

New Designation: DC-3-1

Description: • Changed slopes from 3:1, 2:1 to 1:3, 1:2 in the table.

Sheet Number: R-65**Pavement Drop-Off Treatments**

Old Designation: PDT-1-0

New Designation: PDT-1-1

Description: • Added Notes 9 and 10. Removed solid circle from "Cross Section Treatment 4 and 5" details.

Sheet Number: R-70**Superelevation**

Old Designation: SUEL1-3-0

New Designation: SUEL1-3-1

Description: • Change labeling on Inside and Outside slope shoulders. Added in notes "Profile Grade is Finish Grade Line". Added text to Note 4: Cross Slope (S).

Sheet Number: R-71**Superelevation Tables (emax = 4% and low speed urban streets)**

Old Designation: SUEL2-3-0

New Designation: SUEL2-3-1

Description: • Rearrange radius numbering on Superelevation Table 4% for 15, 20, 25, 35, 40, 45 and 50 mph.

Sheet Number: R-72

Superelevation Tables (emax = 6%)

Old Designation: SUEL3-3-0

New Designation: SUEL3-3-1

Description: • Rearrange radius numbering on Superelevation table 6% for 15, 20, 25, 30, 35, 40, 45 and 50 mph. Readjusted number under N1 Column.

Sheet Number: R-73

Superelevation Tables (emax = 8%)

Old Designation: SUEL4-3-0

New Designation: SUEL4-3-1

Description: • Rearrange radius numbering on Superelevation table 8% for 15 through 65 mph.
