

| STD. NO. | STANDARD DRAWING TITLES |
|---------------|--|
| | DIVISION 1 - GENERAL REQUIREMENTS |
| | No Roadway Standard Drawings for this section. |
| | DIVISION 2 - EARTHWORK |
| 200.02 | Method of Clearing - Method II |
| 200.03 | Method of Clearing - Method III |
| 225.01 | Guide for Grading Subgrade - Interstate and Freeway |
| 225.02 | Guide for Grading Subgrade - Secondary and Local |
| 225.03 | Deceleration and Acceleration Lanes |
| 225.04 | Method of Obtaining Superelevation - Two Lane Pavement |
| 225.05 | Method of Obtaining Superelevation - Divided Highways |
| 225.06 | Method of Grading Sight Distance at Intersections |
| 225.07 | Grading for False Cut at Grade Separations |
| 225.08 | Earth Berm Median Pier Protection |
| 225.09 | Guide for Shoulder and Ditch Transition at Grade Separations |
| 235.01 | Embankment Monitoring |
| 240.01 | Guide for Berm Ditch Construction |
| 275.01 | Rock Plating |
| | DIVISION 3 - PIPE CULVERTS |
| 300.01 | Method of Pipe Installation |
| 310.02 | Parallel Pipe End Section - Precast Concrete Section for 15" to 24" Pipe |
| 310.03 | Cross Pipe End Section - Precast Concrete Section for 18" to 30" Pipe |
| Sheet 1 of 16 | |

| STD. NO. | STANDARD DRAWING TITLES |
|---|--|
| 310.04 | Parallel Pipe End Section - Prefabricated Steel Section for 15" to 24" Pipe |
| 310.05 | Cross Pipe End Section - Prefabricated Steel Section for 18" to 30" Pipe |
| 310.10 | Driveway Pipe Construction |
| DIVISION 4 - MAJOR STRUCTURES | |
| 423.01 | Bridge Approach Fills - Type 1 Approach Fill for Bridge Abutment |
| 423.02 | Bridge Approach Fills - Type 1A Alternate Approach Fill for Integral Bridge Abutment |
| 423.03 | Bridge Approach Fills - Type 2 Approach Fill for Bridge Abutment with MSE Wall |
| 423.04 | Bridge Approach Fills - Type 2A Alternate Approach Fill for Integral Bridge Abutment with MSE Wall |
| DIVISION 5 - SUBGRADE, BASES AND SHOULDERS | |
| 560.01 | Method of Shoulder Construction - High Side of Superelevated Curve - Method I |
| 560.02 | Method of Shoulder Construction - High Side of Superelevated Curve - Method II |
| DIVISION 6 - ASPHALT BASES AND PAVEMENTS | |
| 610.01 | Guide for Paving Shoulders Under Bridges - Method I |
| 610.02 | Guide for Paving Shoulders Under Bridges - Method II |
| 610.03 | Guide for Paving Shoulders Under Bridges - Method III |
| 610.04 | Guide for Paving Shoulders Under Bridges - Method IV |
| 654.01 | Pavement Repairs |
| 665.01 | Asphalt Shoulders - Milled Rumble Strips |
| 665.02 | Limits for Asphalt Shoulders - Milled Rumble Strips |

| STD. NO. | STANDARD DRAWING TITLES |
|--|---|
| DIVISION 7 - CONCRETE PAVEMENTS AND SHOULDERS | |
| 700.01 | Concrete Pavement Joints - Construction and Contraction Joints |
| 700.02 | Expansion Joint Layout - for Rigid Doweled Pavement at Bridges |
| 700.03 | Dowel Assembly |
| 700.04 | Concrete Pavement Header Board |
| 700.05 | Tying Proposed Pavement to Existing Pavement |
| 710.01 | Concrete Pavement - Station Marking |
| 720.01 | Concrete Shoulder - Stamped or Rolled Rumble Strips, Milled Rumble Strips |
| 720.02 | Limits of Concrete Shoulder Rumble Strips |
| DIVISION 8 - INCIDENTALS | |
| 806.01 | Concrete Right-of-Way Marker |
| 806.02 | Granite Right-of-Way Marker |
| 806.03 | Concrete Control-of-Access Marker |
| 815.02 | Subsurface Drain |
| 815.03 | Pipe Underdrain and Blind Drain |
| 816.01 | Concrete Pads - for Shoulder Drain Installation |
| 816.02 | Aggregate Shoulder Drain |
| 816.04 | Markers for Drainage Structure and Concrete Pad |
| 838.01 | Concrete Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90° Skew |
| 838.02 | Concrete Endwall and Sluice Gate - 15" thru 36" Pipe 90° Skew |
| Sheet 3 of 16 | |

| STD. NO. | STANDARD DRAWING TITLES |
|----------|--|
| 838.04 | Conc. Endwall for Single & Double Pipe Culverts - 17"x13" thru 71"x47" Arch 90° Skew |
| 838.05 | Concrete 'L' Endwall for Single Pipe Culverts - 15" thru 48" Pipe |
| 838.06 | Concrete 'L' Endwall for Single Pipe Culverts - 17"x13" thru 71"x47" Pipe Arch |
| 838.07 | Conc. Endwall for Single & Double Pipe Culverts - 40"x31" thru 66"x51" Arch 90° Skew |
| 838.08 | Concrete 'L' Endwall for Single Pipe Culverts - 40"x31" thru 66"x51" Pipe Arch |
| 838.10 | Concrete Endwall for Outfall - 4", 6" or 8" Pipe |
| 838.11 | Brick Endwall for Single and Double Pipe Culverts - 15" thru 48" Pipe 90° Skew |
| 838.14 | Brick Endwall for Single & Double Pipe Culverts - 17"x13" thru 71"x47" Arch 90° Skew |
| 838.15 | Brick 'L' Endwall for Single Pipe Culverts - 15" thru 48" Pipe |
| 838.16 | Brick 'L' Endwall for Single Pipe Culverts - 17"x13" thru 71"x47" Pipe Arch |
| 838.17 | Brick Endwall for Single & Double Pipe Culverts - 40"x31" thru 66"x51" Arch 90° Skew |
| 838.18 | Brick Endwall for Single Pipe Culverts - 40"x31" thru 66"x51" Pipe Arch |
| 838.20 | Brick Endwall for Outfall - 4", 6" or 8" Pipe |
| 838.21 | Reinforced Concrete Endwall - for Single 54" Pipe 90° Skew |
| 838.22 | Reinforced Concrete Endwall - for Double and Triple 54" Pipes 90° Skew |
| 838.27 | Reinforced Concrete Endwall - for Single 60" Pipe 90° Skew |
| 838.28 | Reinforced Concrete Endwall - for Double and Triple 60" Pipes 90° Skew |
| 838.33 | Reinforced Concrete Endwall - for Single 66" Pipe 90° Skew |
| 838.34 | Reinforced Concrete Endwall - for Double and Triple 66" Pipes 90° Skew |
| 838.39 | Reinforced Concrete Endwall - for Single 72" Pipe 90° Skew |
| 838.40 | Reinforced Concrete Endwall - for Double and Triple 72" Pipes 90° Skew |

| STD. NO. | STANDARD DRAWING TITLES |
|----------|---|
| 838.45 | Notes for Reinforced Concrete Endwall - Std. Dwg.s 838.21 thru 838.40 |
| 838.51 | Reinforced Brick Endwall - for Single 54" Pipe 90° Skew |
| 838.52 | Reinforced Brick Endwall - for Double and Triple 54" Pipes 90° Skew |
| 838.57 | Reinforced Brick Endwall - for Single 60" Pipe 90° Skew |
| 838.58 | Reinforced Brick Endwall - for Double and Triple 60" Pipes 90° Skew |
| 838.63 | Reinforced Brick Endwall - for Single 66" Pipe 90° Skew |
| 838.64 | Reinforced Brick Endwall - for Double and Triple 66" Pipes 90° Skew |
| 838.69 | Reinforced Brick Endwall - for Single 72" Pipe 90° Skew |
| 838.70 | Reinforced Brick Endwall - for Double and Triple 72" Pipes 90° Skew |
| 838.75 | Notes for Reinforced Brick Endwall - Std. Dwg.s 838.51 thru 838.70 |
| 838.80 | Precast Endwalls - 12" thru 72" Pipe 90° Skew |
| 840.00 | Concrete Base Pad for Drainage Structures |
| 840.01 | Brick Catch Basin - 12" thru 54" Pipe |
| 840.02 | Concrete Catch Basin - 12" thru 54" Pipe |
| 840.03 | Frame, Grates, and Hood - for Use on Standard Catch Basin |
| 840.04 | Concrete Open Throat Catch Basin (with Manhole) - 12" thru 48" Pipe |
| 840.05 | Brick Open Throat Catch Basin (with Manhole) - 12" thru 48" Pipe |
| 840.13 | Concrete Bridge Approach Drop Inlet - 12" thru 24" Pipe |
| 840.14 | Concrete Drop Inlet - 12" thru 30" Pipe |
| 840.15 | Brick Drop Inlet - 12" thru 30" Pipe |
| 840.16 | Drop Inlet Frame and Grates - for use with Std. Dwg.s 840.14 and 840.15 |

| STD. NO. | STANDARD DRAWING TITLES |
|----------|--|
| 840.17 | Concrete Grated Drop Inlet Type 'A' - 12" thru 72" Pipe |
| 840.18 | Concrete Grated Drop Inlet Type 'B' - 12" thru 36" Pipe |
| 840.19 | Concrete Grated Drop Inlet Type 'D' - 12" thru 36" Pipe |
| 840.20 | Frames and Wide Slot Flat Grates |
| 840.22 | Frames and Wide Slot Sag Grates |
| 840.24 | Frames and Narrow Slot Sag Grates |
| 840.25 | Anchorage for Frames - Brick, Concrete or Precast |
| 840.26 | Brick Grated Drop Inlet Type 'A' - 12" thru 72" Pipe |
| 840.27 | Brick Grated Drop Inlet Type 'B' - 12" thru 36" Pipe |
| 840.28 | Brick Grated Drop Inlet Type 'D' - 12" thru 36" Pipe |
| 840.29 | Frames and Narrow Slot Flat Grates |
| 840.30 | Driveway Drop Inlet |
| 840.31 | Concrete Junction Box - 12" thru 66" Pipe |
| 840.32 | Brick Junction Box - 12" thru 66" Pipe |
| 840.33 | Angled Vane Grates and Frames |
| 840.34 | Traffic Bearing Junction Box - for Use with Pipes 42" and Under |
| 840.35 | Traffic Bearing Grated Drop Inlet - for Double Frame and Grates |
| 840.36 | Traffic Bearing Grated Drop Inlet - for Steel (840.37) Double Frame and Grates |
| 840.37 | Steel Grate and Frame |
| 840.39 | Steel Grate and Frame - Bicycle Safe |
| 840.41 | Spring Box - Concrete or Brick |
| 840.45 | Precast Drainage Structure |

| STD. NO. | STANDARD DRAWING TITLES |
|-----------------|---|
| 840.46 | Traffic Bearing Precast Drainage Structure |
| 840.51 | Brick Manhole - 12" thru 36" Pipe |
| 840.52 | Precast Manhole - 4', 5' and 6' Diameter - 12" thru 48" Pipe |
| 840.53 | Precast Manhole with Masonry Base - 12" thru 42" Pipe |
| 840.54 | Manhole Frame and Cover |
| 840.55 | Manhole Frame and Cover (Flush with Slab for Open Throat Catch Basin) |
| 840.66 | Drainage Structure Steps |
| 840.71 | Concrete and Brick Pipe Plug |
| 840.72 | Pipe Collar |
| 846.01 | Concrete Curb, Gutter and Curb & Gutter |
| 846.02 | Drop Inlet Installation in Expressway Gutter |
| 846.04 | Drop Inlet Installation in Shoulder Berm Gutter |
| 848.01 | Concrete Sidewalk |
| 848.02 | Driveway Turnout - Radius Type |
| 848.03 | Driveway Turnout - Drop Curb Type |
| 848.04 | Street Turnout |
| 848.06 | Curb Ramp |
| 848.07 | Concrete Sidepath / Shared Use Path / Greenway Construction |
| 850.01 | Concrete Paved Ditches |
| 850.10 | Guide for Berm Drainage Outlet - 15" and 18" Pipe |
| 850.11 | Guide for Berm Drainage Outlet - 24" and 30" Pipe |

| STD. NO. | STANDARD DRAWING TITLES |
|----------|--|
| 852.01 | Concrete Islands |
| 852.02 | Monolithic Concrete Mountable Island Median for Use with Rigid or Flexible Pavement |
| 852.04 | Method for Placement of Drop Inlets in Grassed Median - Using 1'-6" Curb and Gutter |
| 852.05 | Median Curb for Catch Basin for Use with 1'-6" Curb and Gutter |
| 852.06 | Method for Placement of Drop Inlets in Concrete Islands |
| 852.07 | Median Curb for Traffic Bearing Grated Drop Inlet for Use with 2'-9" Curb and Gutter |
| 852.10 | Median Construction - with Curb and Gutter |
| 854.01 | Double Faced Concrete Barrier - Types I, II, III and IV |
| 854.02 | Double Faced Concrete Barrier - Types T, T1 and T2 |
| 854.04 | Concrete Median Barrier - Precast Permanent |
| 854.05 | Concrete Median Transition Barrier - Location of Overhead Assembly |
| 854.06 | Median Hazard Protection |
| 854.07 | Single Slope Concrete Barrier |
| 857.01 | Precast Reinforced Concrete Barrier - 41" Single Faced |
| 862.01 | Guardrail Placement |
| 862.02 | Guardrail Installation |
| 862.03 | Structure Anchor Units |
| 862.04 | Anchoring End of Guardrail - for B-77 and B-83 Anchor Units |
| 865.01 | Cable Guiderail |
| 866.01 | Chain Link Fence - 4', 5 and 6' High Fence |
| 866.02 | Woven Wire Fence - with Wood Post |

| STD. NO. | STANDARD DRAWING TITLES |
|-----------------------------|--|
| 866.03 | Woven Wire Fence - with Steel Post |
| 866.04 | Barbed Wire Fence - with Wood Posts |
| 866.05 | Glare Screen - Chain Link Fabric/Guardrail Mounted |
| 866.06 | Chain Link Fence on Retaining Wall |
| 866.07 | Wildlife Fence - with Chain Link |
| 876.01 | Rip Rap in Channels and Ditches |
| 876.02 | Guide for Rip Rap at Pipe Outlets |
| 876.03 | Drainage Ditches with Class 'A' Rip Rap |
| 876.04 | Drainage Ditches with Class 'B' Rip Rap |
| DIVISION 9 - SIGNING | |
| 901.10 | Type 'A' Signs - Welded Stud Construction |
| 901.20 | Type 'B' Signs - Welded Stud Construction |
| 901.50 | Arrows and Shields |
| 901.60 | Rivet Spacing for Overlaid Signs |
| 901.70 | Sign Stringers and Support Spacing |
| 901.80 | Sign Mounting Details - Type A and Type B Signs |
| 901.80 | Sign Mounting Details - Type A and Type B Signs |
| 902.10 | Foundations for Ground Mounted Signs |
| 903.10 | Ground Mounted Sign Supports |
| 903.20 | Wood Sign Support |
| 903.30 | Barrier Sign Support Assembly |

| STD. NO. | STANDARD DRAWING TITLES |
|--|---|
| 903.40 | Median Barrier Sign Support and Anchorage |
| 904.10 | Orientation of Ground Mounted Signs |
| 904.20 | Secondary Sign Mounting |
| 904.30 | Supplemental Sign Mounting |
| 904.40 | Milepost and Placement |
| 904.50 | Mounting of Type 'D', 'E' and 'F' Signs on 'U' Channel Posts |
| 910.10 | Highway-Rail Grade Crossings (Rural District) |
| 910.20 | Signing School Zone with Marked Crosswalk Where Speed Reduction is Required |
| 910.30 | Signing Unsignalized Reduced Conflict Intesection |
| 910.40 | Sigle Lane Roundabout Signing, with Pedestrians |
| 910.50 | Signing for Speed Reduction Zones |
| DIVISION 10 - MATERIALS | |
| No Roadway Standard Drawings for this section. | |
| DIVISION 11 - WORK ZONE TRAFFIC CONTROL | |
| 1101.01 | Work Zone Advance Warning Signs |
| 1101.02 | Temporary Lane Closures |
| 1101.03 | Temporary Road Closures |
| 1101.04 | Temporary Shoulder Closures |
| 1101.05 | Work Zone Vehicle Accesses |
| 1101.06 | Warning Signs for Blasting Zones |
| 1101.11 | Traffic Control Design Tables |

| STD. NO. | STANDARD DRAWING TITLES |
|---|---|
| 1110.01 | Stationary Work Zone Signs |
| 1110.02 | Portable Work Zone Signs |
| 1115.01 | Flashing Arrow Boards |
| 1130.01 | Drums |
| 1135.01 | Cones |
| 1145.01 | Barricades - Type III |
| 1150.01 | Flaggers |
| 1160.01 | Temporary Crash Cushion - Reflective End Treatment |
| 1165.01 | Truck Mounted Attenuator |
| 1170.01 | Portable Concrete Barrier |
| 1180.01 | Skinny Drums |
| DIVISION 12 - PAVEMENT MARKINGS, MARKERS AND DELINEATION | |
| 1205.01 | Pavement Markings - Line Types and Offsets |
| 1205.02 | Pavement Markings - Two-Lane and Multi-Lane Roadways |
| 1205.03 | Pavement Markings - Exit and Entrance Ramps |
| 1205.04 | Pavement Markings - Intersections |
| 1205.05 | Pavement Markings - Turn Lanes |
| 1205.06 | Pavement Markings - Lane Drops |
| 1205.07 | Pavement Markings - Pedestrian Crosswalks |
| 1205.08 | Pavement Markings - Symbols and Word Messages |
| 1205.09 | Pavement Markings - Painted Islands |

| STD. NO. | STANDARD DRAWING TITLES |
|-----------------|---|
| 1205.10 | Pavement Markings - School Areas |
| 1205.11 | Pavement Markings - Railroad Crossings |
| 1205.12 | Pavement Markings - Bridges |
| 1205.13 | Pavement Markings - Lane Reductions |
| 1205.14 | Pavement Markings - Roundabouts |
| 1205.15 | Pavement Markings - Reduced Conflict Intersections |
| 1205.16 | Bicycle Facilities |
| 1205.17 | Pavement Markings - Side-By-Side/Adjacent On/Off Ramps Pvmt. Marking Lane Treatment |
| 1250.01 | Raised Pavement Markers Installation Spacing |
| 1251.01 | Raised Pavement Markers - Permanent and Temporary |
| 1261.01 | Guardrail and Barrier Delineators - Installation Spacing |
| 1261.02 | Guardrail and Barrier Delineators - Types and Mounting |
| 1262.01 | Guardrail End Delineation |
| 1264.01 | Object Markers - Types |
| 1264.02 | Object Markers - Installation |
| 1266.01 | Raised Pavement Markers - Tubular Markers |
| 1267.01 | Flexible Delineators - Installation |
| 1267.02 | Flexible Delineators - Spacing Tables |
| 1267.03 | Flexible Delineators - Interchange Placement |

| STD. NO. | STANDARD DRAWING TITLES |
|--------------------------------|---|
| DIVISION 14 - LIGHTING | |
| 1401.01 | High Mount Standard |
| 1402.01 | High Mount Foundation |
| 1403.01 | High Mount LED Luminaires |
| 1404.01 | Light Standards |
| 1405.01 | Standard Foundation |
| 1406.01 | Light Standard Luminaires |
| 1407.01 | Electric Service Pole and Lateral |
| 1408.01 | Light Control System |
| 1409.01 | Electrical Duct |
| 1410.01 | Feeder Circuits |
| 1411.01 | Electrical Junction Boxes |
| 1412.01 | Underpass Lighting |
| DIVISION 15 - UTILITIES | |
| 1515.01 | Water Meter |
| 1515.02 | Fire Hydrant |
| 1520.01 | Sewer Clean Out |
| 1525.02 | Precast Concrete Sanitary Sewer Manhole - Outside Drop |
| 1525.06 | Precast Concrete Sanitary Sewer Manhole - with Cast-in-Place Bottom |

| STD. NO. | STANDARD DRAWING TITLES |
|----------|---|
| | DIVISION 16 - EROSION CONTROL AND ROADSIDE DEVELOPMENT |
| 1604.01 | Railroad Erosion Control Detail |
| 1605.01 | Temporary Silt Fence |
| 1606.01 | Special Sediment Control Fence |
| 1607.01 | Gravel Construction Entrance |
| 1622.01 | Guide for Temporary Berms and Slope Drains |
| 1630.01 | Riser Basin |
| 1630.02 | Silt Basin Type B |
| 1630.03 | Temporary Silt Ditch |
| 1630.04 | Stilling Basin For Pumped Effluent |
| 1630.05 | Temporary Diversion |
| 1630.06 | Special Stilling Basin |
| 1630.07 | Skimmer Basin with Baffles |
| 1630.08 | Tiered Skimmer Basin with Baffles |
| 1630.09 | Earthen Dam with Skimmer |
| 1631.01 | Matting Installation |
| 1632.01 | Rock Inlet Sediment Trap Type A |
| 1632.02 | Rock Inlet Sediment Trap Type B |
| 1632.03 | Rock Inlet Sediment Trap Type C |
| 1633.01 | Temporary Rock Silt Check Type A |
| 1633.02 | Temporary Rock Silt Check Type B |

| STD. NO. | STANDARD DRAWING TITLES |
|---|--|
| 1633.03 | Temporary Rock Silt Check Type A with Excelsior Matting and Flocculant |
| 1634.01 | Temporary Rock Sediment Dam Type A |
| 1634.02 | Temporary Rock Sediment Dam Type B |
| 1635.01 | Rock Pipe Inlet Sediment Trap Type A |
| 1635.02 | Rock Pipe Inlet Sediment Trap Type B |
| 1636.01 | Wattle Check |
| 1636.02 | Silt Fence Wattle Break |
| 1636.03 | Wattle Barrier |
| 1640.01 | Coir Fiber Baffle |
| 1645.01 | Temporary Stream Crossing |
| DIVISION 17 - Signals and Traffic Management Systems | |
| 1700.01 | Electrical Service Options |
| 1700.02 | Electrical Service Grounding |
| 1705.01 | Signal Heads - Vehicular Signal Heads |
| 1705.02 | Signal Heads - Mounting |
| 1705.03 | Signal Heads - Wire Color Conventions |
| 1705.04 | Signal Heads - Pedestrian Pushbutton Placement |
| 1715.01 | Underground Conduit - Trenching |
| 1716.01 | Junction Boxes |
| 1720.01 | Wood Poles |
| 1721.01 | Guy Assemblies |

| STD. NO. | STANDARD DRAWING TITLES |
|-----------------|--|
| 1725.01 | Inductive Detection Loops |
| 1730.01 | Fiber-Optic Cable - Spare Cable Storage |
| 1736.01 | Spread Spectrum Radio |
| 1743.01 | Pedestals - Pedestrian Pushbutton Post (Type I) |
| 1743.02 | Pedestals - Normal Duty (Type II) |
| 1743.03 | Pedestals - Heavy Duty (Type III) |
| 1743.04 | Pedestals - Foundations |
| 1751.01 | Controllers and Cabinets - Cabinet Component Layout |
| 1751.02 | Controllers and Cabinets - Power, Ground, and Auxiliary |