

CADDS DETAILING STANDARDS – ORD FORMAT

SHEET FORMAT

Bridge plans prepared for ITD shall use the sheet layout format shown on page B17.1 of the Bridge Design Manual.

SHEET SCALE GUIDE

To increase the size of an 11" x 17" bordered sheet to fit over the smallest scaled object, set the active scale or "AS=" to the sheet size required.

<u>ACTIVE SCALE</u>	<u>SHEET SCALE</u>	<u>SHEET SIZE</u>
AS = 1200	1" = 100'	1700' x 1100'
AS = 720	1" = 60'	1020' x 660'
AS = 600	1" = 50'	850' x 550'
AS = 480	1" = 40'	680' x 440'
AS = 360	1" = 30'	510' x 330'
AS = 24	1" = 20'	340' x 220'
AS = 10	1" = 10'	170' x 110'
AS = 60	1" = 5'	85' x 55'
AS = 4	3" = 1'	5'-8" x 3'-8"
AS = 8	1 1/2" = 1'	11'-4" x 7'-4"
AS = 12	1" = 1'	17'-0" x 11'-0"
AS = 16	3/4" = 1'	22'-8" x 14'-8"
AS = 24	1/2" = 1'	34'-0" x 22'-0"
AS = 32	3/8" = 1'	45'-4" x 29'-4"
AS = 48	1/4" = 1'	68'-0" x 44'-0"
AS = 64	3/16" = 1'	90'-8" x 58'-8"
AS = 96	1/8" = 1'	136'-0" x 88'-0"
AS = 128	3/32" = 1'	181'-4" x 117'-4"

Numbers are valid when Master Unit = US Survey Feet and Sub Unit = US Survey Inches

TEXT & TERMINATOR SCALE GUIDE

Text size based upon selected sheet scale and managed by the selected drawing scale. OpenRoads Designer font is "Engineering Vert Bold" style which is managed by the Bridge Section. These styles are selected through the dimension styles and include styles:

- Bridge 1
- Bridge 1 (arrow)
- Bridge 1 (arrow) mask
- Bridge 2 (area)
- Bridge 2 (area) mask

Various text sizes (styles) are used within the selected drawing scale:

Numbers are valid when Master Unit = US Survey Feet and Sub Unit = US Survey Inches

Styles beginning with 0067 are utilized for dimensioning text – including sheet index, Quantities, general notes, detail notes, etc.

Styles beginning with 0083 are utilized for titles: Views, Lists, Diagrams, Data

Styles beginning with _01_ are utilized for Sheet Title

LEVELS, LINE WEIGHTS, AND COLORS

ITEM	LEVEL	COLOR	LINE CODE	WEIGHT
Object Lines	BRDG BASE Obj-Line	0	0	3
Break Lines	BRDG BASE Obj-Line	1	0	2
Construction Joints	BRDG BASE Obj-Line	3	0	1
Hidden Lines / Reference Lines	BRDG BASE Hidden-Line	0	5	0
Rebar	BRDG BASE Rebar	6	0	2
Dimensioning Text / Notes	BRDG ANNO General-Notes	2 or 9	0	1
Dimensioning Lines	BRDG ANNO General-Notes	2 or 9	0	0
Detail Titles	BRDG ANNO General-Notes	3 or 9	0	2
Centerlines	BRDG BASE Dtlctrln	4	7	1
Roadway Centerlines	BRDG_BASE_Roadway-Center-Lines	4	7	2
Sheet/Plan Block Data	BRDG ANNO Anno-Sheet	Varies	0	Varies
Sheet Border	BORDER ANNO Cutsheet	0	0	0
Contour Lines (Major)	BRDG BASE Idxcontr	26	0	2
Contour Lines (Minor)	BRDG BASE Intcontr	30	0	1
Ground Lines in Profile – Existing	BRDG BASE Ground-Lines	8	2	1
Ground Lines in Profile - New	BRDG BASE Ground-Lines	8	0	2
Riprap / Gabion	BRDG BASE Ground-Lines	8	0	1
Cross Hatching Lines	BRDG BASE Pattern	10	0	0
Concrete Symbol	BRDG BASE Pattern	39	0	0
Active Points	BRDG BASE Active-Point	14	0	4
Phantom Lines	BRDG BASE Phtline	11	6	1

COLOR	DESCRIPTION
0	White (Plots Black)
1	Blue
2	Chartreuse Green
3	Red
4	Yellow
5	Purple
6	Orange
7	Dark Brown
8	Light Brown
9	Blue-Green
10	Aqua Blue
11	Lavender
12	Lima Bean
13	Dark Blue
14	Faded Red
15	Faded Chartreuse
39	Tan
187	Gold Yellow

LINE CODE	DESCRIPTION
0	Continuous
1	Dot Dash
2	Medium Dash
3	Long Dash
4	Centerline (Long Dash/Short Dash)
5	Hidden Line (Short Dash)
6	Phantom Line (Long Dash/2 Short Dash)
7	Centerline (Long Dash/Medium Dash)

PLOT LINE THICKNESS-inches	
WEIGHT	11"x 17"
0	0.0035
1	0.0060
2	0.0075
3	0.0110
4	0.0180

EXPANDED LEVELS, LINE WEIGHTS, AND COLORS

ITEM	LEVEL	COLOR	LINE CODE	WEIGHT
Existing Abutments	BRDG BASE X Abutments	5	5	3
Existing Deck	BRDG BASE X Deck	5	0	2
Existing Footings	BRDG BASE X Footings	5	5	0
Existing Piers	BRDG BASE X Piers	5	5	1
Existing Rails	BRDG BASE X Rails	5	0	1
Bearing Miscellaneous	BRDG BEARINGS Misc	11	0	2
Bearing Pads	BRDG BEARINGS Pads	11	0	2
Bearing Plates	BRDG BEARINGS Plates	48	0	2
Concrete - Approach	BRDG CONCRETE Approach	38	0	3
Concrete - Deck	BRDG CONCRETE Deck	38	0	3
Concrete - Epoxy Coat	BRDG CONCRETE EpxyCoat	38	0	1
Concrete - Girder	BRDG CONCRETE Girder	38	0	3
Concrete - Miscellaneous	BRDG CONCRETE Misc	38	0	3
Concrete – MSE Walls	BRDG CONCRETE MSE-Walls	38	0	3
Concrete - Rails	BRDG CONCRETE Rail	38	0	1
Concrete - Seal	BRDG CONCRETE Seal	38	0	1
Concrete - Sidewalk	BRDG CONCRETE Sidewalk	38	0	3
Concrete - Slope Paving	BRDG CONCRETE Slope-Paving	38	0	2
Concrete - Substructure	BRDG CONCRETE Sub-Structure	38	0	3
Concrete - Superstructure	BRDG CONCRETE_Super-Structure	38	0	3
Earth - Backfill	BRDG EARTH Backfill	11	0	0
Earth - Base Material	BRDG EARTH Base-Material	12	0	2
Earth - Excavation	BRDG EARTH Excavation	11	0	0
Earth - Geotextile	BRDG EARTH Geotextile	11	0	2
Earth - Miscellaneous	BRDG EARTH Misc	12	0	2
Earth - Riprap	BRDG EARTH Riprap	11	0	0
Earth - Retaining Walls	BRDG EARTH Walls-Retaining	11	0	1
Joint - Metal Extrusion	BRDG JOINTS Extrusion-Metal	48	0	2
Joint - Neoprene Extrusion	BRDG JOINTS Extrusion-Neoprene	1	0	2
Joint - Filler	BRDG JOINTS Filler	11	0	2
Joint - Concrete Header	BRDG JOINTS Header-Concrete	39	0	3
Joint - Miscellaneous	BRDG JOINTS Misc	48	0	3
Joint - Plates	BRDG JOINTS Plates	48	0	3
Joint - Seals	BRDG JOINTS Seals	3	0	2
Metal – Deck Drains	BRDG METAL Deck-Drains	48	0	1
Metal - Fasteners	BRDG METAL Fasteners	48	0	1
Metal - Miscellaneous	BRDG METAL Misc	48	0	3
Metal - Plates	BRDG METAL Plates	48	0	3
Metal - Posts	BRDG METAL Posts	48	0	3
Metal - Rails	BRDG METAL Rails	48	0	2
Metal - Steel Girder	BRDG METAL Steel-Girder	48	0	3
Metal – Steel Shapes	BRDG METAL Steel-Shapes	48	0	3
Piles - Concrete	BRDG PILES Concrete	39	0	3
Piles - Shafts	BRDG PILES Shafts	39	0	3
Piles - Steel	BRDG PILES Steel	64	0	2
Rebar - Approach	BRDG REBAR Approach	6	0	2
Rebar – Deck Bottom Longitudinal	BRDG REBAR Deck-BotL	6	0	2
Rebar – Deck Bottom Transverse	BRDG REBAR Deck-BotT	6	0	2
Rebar – Deck Top Longitudinal	BRDG REBAR Deck-TopL	6	0	2
Rebar – Deck Top Transverse	BRDG REBAR Deck-TopT	6	0	2
Rebar – Epoxy Coated	BRDG_REBAR_EpxyCoat	6	0	2

ITEM	LEVEL	COLOR	LINE CODE	WEIGHT
Rebar - Girder	BRDG REBAR Girder	6	0	2
Rebar - Rail	BRDG REBAR Rail	6	0	2
Rebar - Substructure	BRDG REBAR Sub-Structure	6	0	2
Rebar - Superstructure	BRDG REBAR Super-Structure	6	0	2
Render - Buildings	BRDG RENDER Buildings	97	0	2
Render - Concrete Diaphragm	BRDG RENDER Diaph-Concrete	38	0	3
Render - Steel Diaphragm	BRDG RENDER Diaph-Steel	48	0	2
Render - People	BRDG RENDER People	97	0	2
Render - Ground Surface	BRDG RENDER Surface Ground	23	0	2
Render - Textured Surface	BRDG RENDER Surface-Textured	39	0	0
Render - Water Surface	BRDG RENDER Surface-Water	97	0	2
Render - Trees	BRDG RENDER Trees	97	0	2
Render - Vehicles	BRDG RENDER Vehicles	97	0	2
Render - White	BRDG RENDER White	97	0	2
Render - Yellow	BRDG RENDER Yellow	97	0	2
Utility - Cables	BRDG UTILITY Cables	11	0	1
Utility - Conduits	BRDG UTILITY Conduits	11	0	2
Utility - Hangers	BRDG UTILITY Hangers	11	0	1
Utility - Inserts	BRDG UTILITY Inserts	11	0	1
Utility – Luminaires	BRDG UTILITY Luminaires	11	0	1

Revisions:

Sep 2020 New Article for OpenRoads Designer standards.

June 2022 Deleted Article 17.4 for SS4 drawings and changed Article 17.4A for ORD drawings to Article 17.4.