### **Division 3**

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- 300.02 Standards Symbols and Conventions
- 300.03 Text Fonts and Sizes
- 300.04 Revision Process for Standard Symbols and Conventions
- 300.05 CAD Standard Process Conventions

#### 300.01 Introduction

#### (1) Purpose

Right of Way (R/W) Plans are used to describe the land boundaries for which the Washington State Department of Transportation (WSDOT) is responsible. This division describes Standard Symbols and Conventions for the production of R/W Plan sheets described in Division 1.

- (a) The Standard Symbols and Conventions in this division are listed by two methods:
  - 1. The *Alphabetical Listing of Symbols* contains an alphabetical index by symbol, indicating the category and group each symbol is associated with.
  - 2. The *R/W Standard Symbols and Conventions* listing is organized by category and group and is comprised of three columns of symbology information.
    - The **left** column is the symbology name and level.
    - The **middle** column indicates the standard symbology attributes: line weight, line style, color, and whether it is a cell, line, or text element. If the symbology includes text, the font and text size are listed also.
    - The **right** column is a graphic representation of each symbol, with correct attributes available in the WSDOT Expanded Level environment.
- (b) Unless otherwise noted:
  - All measurements are in U.S. Survey Feet.
  - The symbols and their measurements are shown at the correct size for plans plotted on 22-inch x 34-inch sheets.

#### (2) Drafting Standards

R/W Plans are created using the following established drafting standards. The Symbols and Conventions listed in this division are intended to comprise all of the standard symbols necessary for the preparation of R/W Plans for WSDOT. These standards apply to manually drafted plans as well as those prepared on Computer-Aided Drafting (CAD) equipment. Adherence to these standards is essential to ensure the uniformity of R/W Plans produced throughout the state.

There will be cases when custom symbols will need to be used, but every effort should be made to use the symbols listed herein in order to maintain the consistency of R/W Plans developed for state projects. If you think custom symbols are needed, confirm that need and their use with your WSDOT CAD Coordinator or Region Plans Office.

Any CAD or R/W Plan development questions, including the use of the WAESTATE.CEL and WAEDETAILS.CEL libraries, should first be forwarded to your Region CAD Coordinator and/or Headquarters (HQ) CAE Section.

### 300.02 Standard Symbols and Conventions

The various geometric and design features commonly used in drafting R/W Plans have been assigned to the different CAD levels. These levels are arranged by category (or "parent" code), then by subcategory (or "child" code), then by Item. Included are the CAD symbology names, with associated applicable cell name, CAD level, color, line style, and line weight. These symbols and conventions are available to the CAD operator for review or download at the WSDOT CAE Support web page, under "Resources" (~<sup>†</sup> www.wsdot.wa.gov/Design/CAE).

These R/W CAD standards must be followed in the production of R/W Plan sheets, whether by internal WSDOT personnel or by external WSDOT consultants.

### 300.03 Text Fonts and Sizes

The text fonts and sizes assigned to WSDOT CAD elements are set for readability, clarity, and consistency. The text font sizes and styles called out in the *R/W Standard Symbols and Conventions* listing maintain readability through the final Ad and Award printing process and after numerous copies. The text sizes indicated in this manual represent standards that will produce readable plans and should be considered the minimum accepted sizes. If a plan sheet becomes too crowded to place text at the minimum text size, a smaller text may be used at the discretion of your WSDOT Plan Review representative.

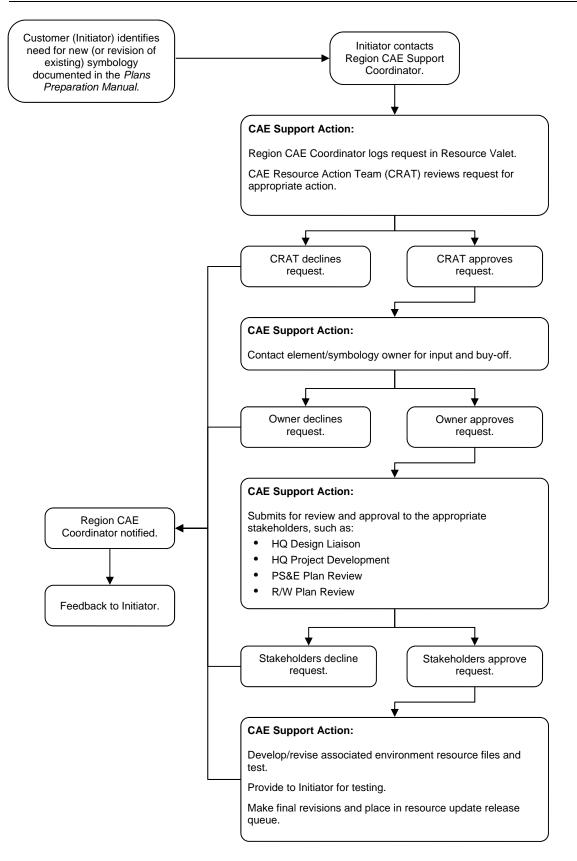
#### 300.04 Revision Process for Standard Symbols and Conventions

There is a R/W CAD standard revision process that provides the opportunity for department-wide participation in the development, review, and implementation of new symbology and standards to be used in R/W Plan preparation.

Although this division specifically references R/W CAD, this procedure may be used to share other ideas relating to all types of CAD plan preparation (see Figure 300-1, CAD Standard Revision Process).

#### (1) Resource Updates

The Standard Symbols and Conventions shown are current at the time of the final printing of each manual revision. The HQ CAE Section may update the resources to correct, expand, or improve the standards and procedures of R/W Plans between *Plans Preparation Manual* updates. For more information, visit the WSDOT CAE web page (*C* www.wsdot.wa.gov/Design/CAE) and contact HQ CAE Support.



CAD Standard Revision Process Figure 300-1

#### 300.05 CAD Standard Process Conventions

Some CAD symbology requires additional steps to accommodate *Plans Preparation Manual* standards. This may be due to the need for user input to place the symbology correctly or that there are multiple states of the same symbology that require modification.

This section provides additional steps to specific symbology in specific situations. For more information, contact your Region CAD Coordinator.

#### (1) Property Lines and Ownership Dots

When drawing property lines and ownership dots to show ownership on a R/W Plan, draw as follows:

- Draw the initial property line.
- Offset parallel that line 2.5 feet on a 1"=50' scale or 25 feet on a 1"=500' scale (Vicinity Map) in the direction of the ownership.
- Then, change the level and line code of the offset line to: RW\_PA\_OwnershipDots.

CATEGORY	GROUP	SUBJECT
SH	PR	Access Approach Sched Bottom
SH	PR	Access Approach Schedule Top
SH	PR	Access Notes Body Text
SH	PR	Access Notes Heading Text
SH	PR	Air Lease Schedule
SH	PR	Basis of Bearing
RW	SC	Bearings Text
SH	GI	Begin End Plan Arrow
SH	PR	Begin End Plan Text
RD	ED	Bike Path Edge
ST	BG	Bridge
ST	BG	Bridge New
ST	BG	Bridge Text
ST	BG	Bridge Text New
TP	ММ	Building 2D
TP	ММ	Canal
RW	SC	Center of Section
RW	SC	Center of Sections Text
RW	PA	City Names Text
RW	BD	City RW Bndry
RW	BD	City RW Bndry Sta Off Text
RW	PA	CLine Access Road
AL	RW	CLine Bike Path
AL	RW	CLine County Road
AL	RW	CLine Ped Path
AL	RW	CLine RW Cntrl
AL	RW	CLine RW Cntrl Bearings Text
AL	RW	CLine RW Cntrl Curve Pt Circle
AL	RW	CLine RW Cntrl Grade Int Text
AL	RW	CLine RW Cntrl Line Des Text
AL	RW	CLine RW Cntrl Major Sta Text
AL	RW	CLine RW Cntrl PCPIPT Text
AL	RW	CLine RW Cntrl PI to PI Line

CATEGORY	GROUP	SUBJECT
AL	RW	CLine RW Cntrl SR No Text
AL	RW	CLine RW Cntrl Sta Equa Text
AL	RW	CLine RW Cntrl Sta Equation
AL	RW	CLine RW Cntrl Station Text
AL	RW	CLine RW Cntrl Tics
AL	RW	CLine RW Non Cntrl Ex Name Text
AL	RW	CLine RW Non Cntrl Pr Name Text
AL	RW	CLine RW NonCntrl Ex
AL	RW	CLine RW NonCntrl Pr
AL	RW	CLine Trail
RW	SC	Closing Corner Found
RW	SC	Closing Corner Not Found
UT	СМ	Communication Util Text
RW	GB	Corp Limit Line
RW	GB	County Line
RW	BD	County RW Bndry
RW	BD	County RW Bndry Sta Off Text
SH	PR	Cross Ref Note Mon Map Text
SH	PR	Cross Ref Note RW Plan Text
DR	ST	Culvert
TP	ММ	Dam
RW	SC	Descriptions Text
SH	GI	Destination Arrows Text
TP	MM	Dike
TP	MM	Distance Tie
TP	MM	Distance Tie Text
RW	SC	Donation Land Claim
RW	SC	Donation Land Claims Text
DR	ST	Drainage Structures Text
DR	ST	Drainfield
RD	ED	Driveway Gravel Edge
RD	ED	Driveway Paved Edge
RW	ΡΑ	ER ParcelNumber

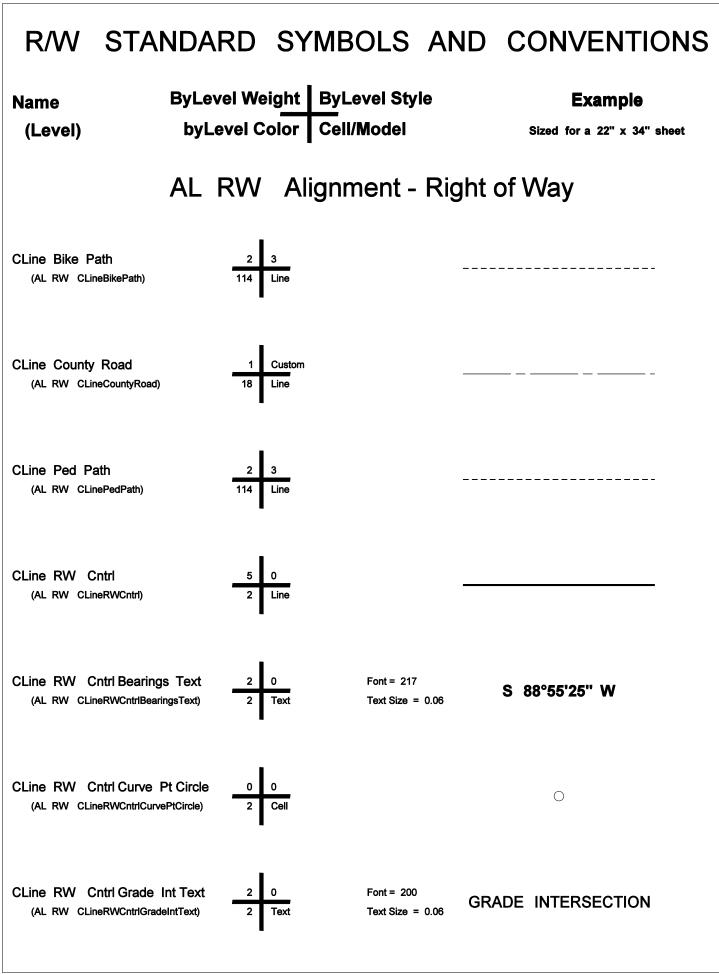
CATEGORY	GROUP	SUBJECT
RW	ES	Esmnt Line
RW	ES	Esmnt Line New
RW	ES	Esmnt Line RR
RW	ES	Esmnt Permit Line Sta Off Text
RW	ES	Esmnt Permits Text
RW	ES	Esmnt Permits Text New
SH	PR	Exhibit A Note
RD	BR	Fence RW Plan
RW	GB	Forest Bndry
RW	GB	Govt Bndry Text
RW	SC	Govt Lot ID Text
TP	NT	High Water Line
RW	BD	Highway RW Bndry
RW	BD	Highway RW Bndry Coincident
RW	BD	Highway RW Bndry New
RW	BD	Highway RW Bndry SO Text New
RW	BD	Highway RW Bndry Sta Off Text
RW	PA	Interchange Names Text
RW	BD	LAccess Coincident RW Lt
RW	BD	LAccess Coincident RW Rt
SH	PR	Laccess Designation Note
SH	PR	Laccess Establish Note
RW	BD	LAccess Floating Lt New
RW	BD	LAccess Floating Rt New
RW	BD	LAccess Proposed RW Lt
RW	BD	LAccess Proposed RW Rt
SH	PR	Laccess Tentative Note
TP	NT	Lake Edge
TP	NT	Large Body of Water Edge
SH	PR	Legend Block
SH	PR	Legend Block With LAccess
RW	PA	Lot Line
RW	PA	Lot Numbering

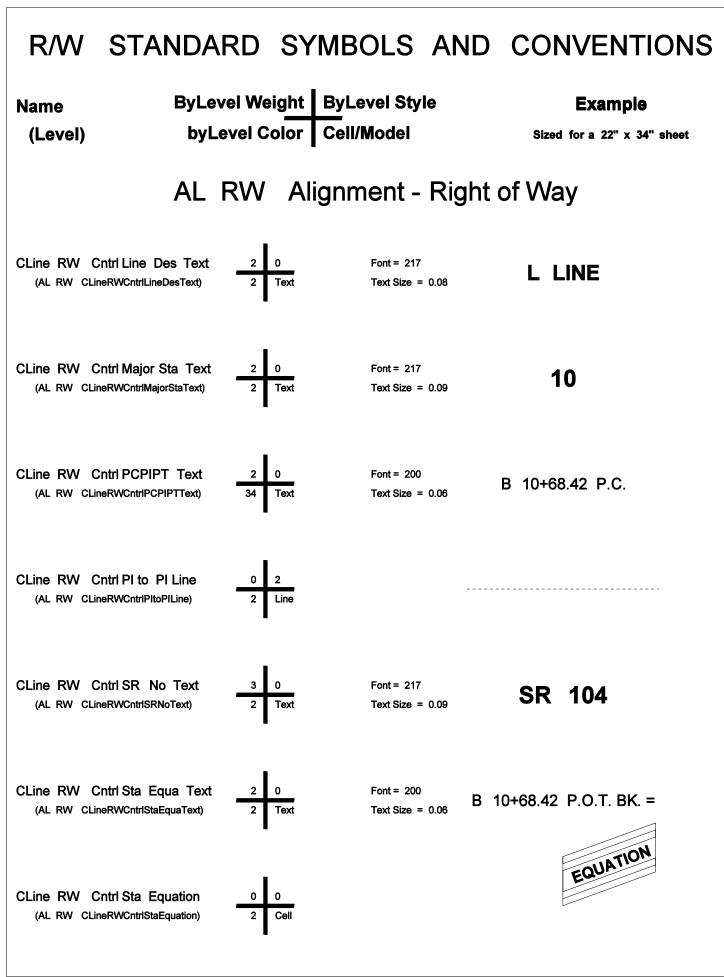
CATEGORY	GROUP	SUBJECT
TP	ММ	Manmade Topography Text
SH	GI	Match Line
SH	GI	Match Line Text
RW	SC	Meander Corner Found
RW	SC	Meander Corner Not Found
RW	SC	Meander Line
RW	SC	Meander Line Text
RW	BD	Metes And Bounds RW Text
RW	BD	Metes And Bounds Sundry Text
РМ	MN	Monument New
РМ	MN	Monument Text
PM	MN	Monument Text New
RW	PA	NCR Parcel Number
SH	GI	North Arrow
RW	PA	NWR Parcel Number
RW	PA	OR Parcel Number
TP	ММ	Orchard Or Vineyard
SH	PR	Ownership Block Bottom
SH	PR	OwnerShip Block Top
RW	PA	Ownership Dots
RW	PA	Ownership Tie
RW	PA	Parcel No Text
RW	GB	Park Bndry
RD	ED	Ped Path Edge
RW	ES	Permit Line
RW	ES	Permit Line New
TP	NT	Pond Edge
PM	MN	Primary Control Point
RW	PA	Property Line
RW	SC	Quarter Corner Found EW
RW	SC	Quarter Corner Found NS
RW	SC	Quarter Corner Not Found EW
RW	SC	Quarter Corner Not Found NS

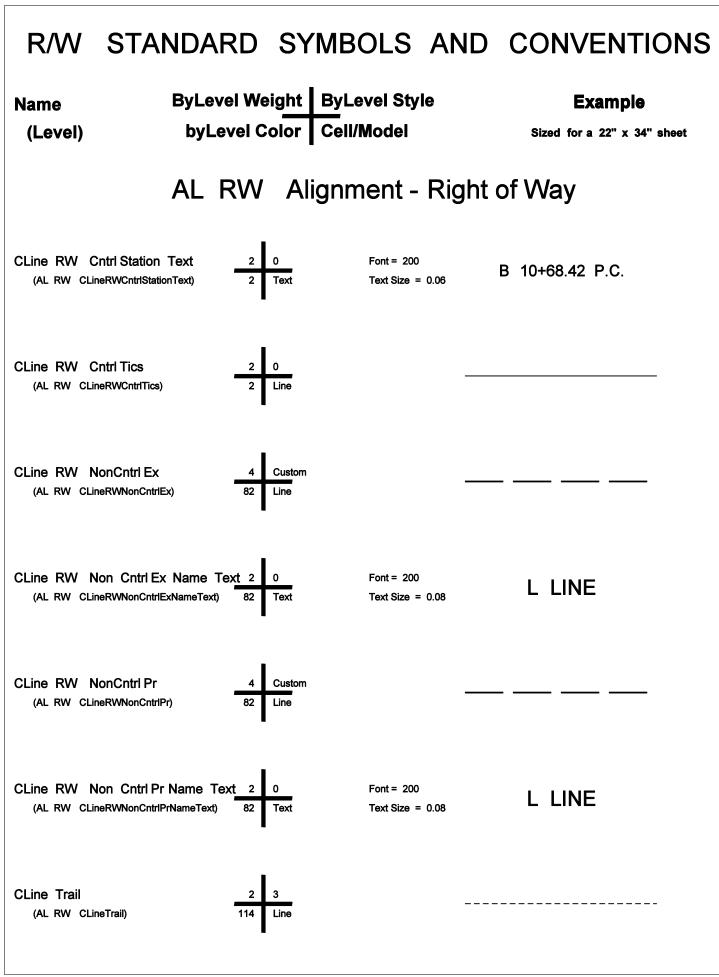
CATEGORY	GROUP	SUBJECT
RW	SC	Quarter Section Line
RW	SC	Range Line
RW	SC	Range Lines Text
RW	GB	Reservation Bndry
TP	ММ	Reservoir
SH	PR	Revision Block
SH	GI	Revision Strike Through Line
TP	NT	River Edge
SH	PR	Road Approach Type A Note
SH	PR	Road Approach Type B Note
SH	PR	Road Approach Type C Note
SH	PR	Road Approach Type D Note
SH	PR	Road Approach Type E Note
RD	ED	Roadway ETW Gravel
RD	ED	Roadway ETW Paved
RD	MC	Roadway Names Text
TP	ММ	RR Center Tracks
RW	BD	RR RW Bndry
RW	BD	RR RW Sta Off Text
ST	BG	RR Structure
ST	BG	RR Structure New
TP	ММ	RR Text
SH	PR	RW Curve Data Block
SH	PR	RW PLS Stamp
SH	PR	RW Total CurveData Block
SH	GI	Scale Bar 1 to 100
SH	GI	Scale Bar 1 to 20
SH	GI	Scale Bar 1 to 50
SH	GI	Scale Bar 1 to 500
RW	PA	SCR Parcel Number
RW	SC	Section Corner Found
RW	SC	Section Corner Not Found
RW	SC	Section Corner Number Text

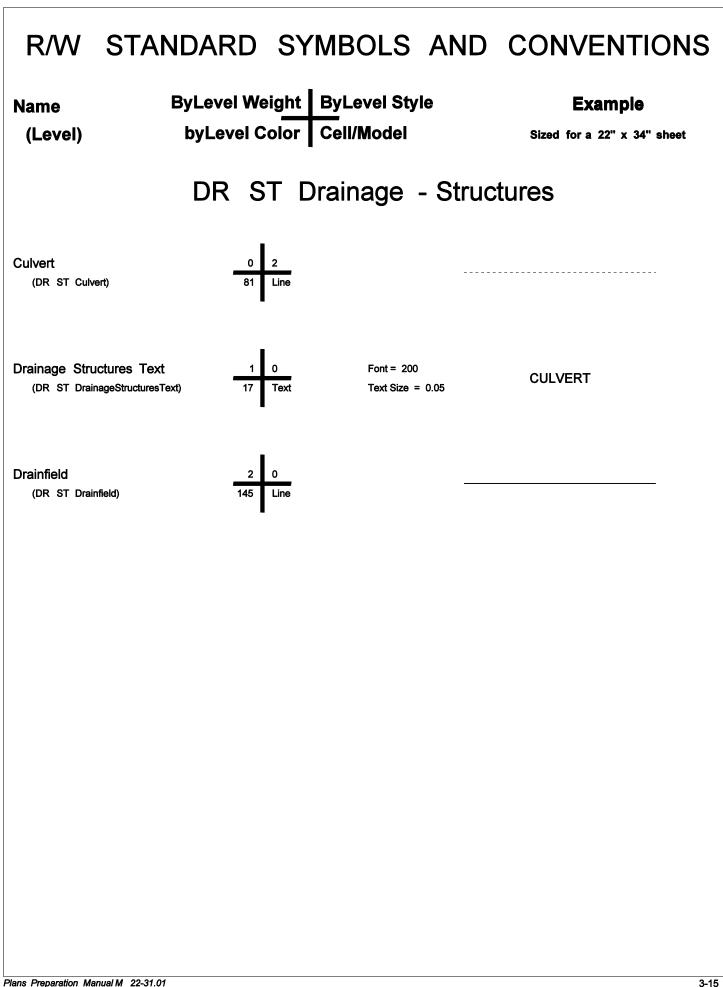
CATEGORY	GROUP	SUBJECT
RW	SC	Section ID
RW	SC	Section Line
RD	ED	Shoulder Gravel Edge
RD	ED	Shoulder Paved Edge
RW	BD	Site RW Bndry
RW	BD	Site RW Bndry Coincident
RW	BD	Site RW Bndry New
RW	BD	Site RW Name Text
RW	BD	Site RW Sta Off Text
RW	SC	Sixteenth Section Line
RW	GB	State Bndry
SH	PR	State Plane Coord System
UT	СМ	Steel Transmission Tower
EV	WL	Storm Water Trtmnt RW Plan
EV	WL	Storm Water Trtmnt RW Plan New
TP	NT	Stream NonScalable
TP	NT	Stream Scaleable Edge
ST	BG	Structure
ST	BG	Structure New
RW	PA	Subdivision Bndry
RW	PA	Subdivisions Names Text
RW	ES	Subterranean Esmnt Line
RW	ES	Subterranean Esmnt Line New
SH	PR	Supplemental Access Note 1
SH	PR	Supplemental Access Note 2
SH	PR	Supplemental Access Note 21
SH	PR	Supplemental Access Note 3
SH	PR	Supplemental Access Note 4
SH	PR	Supplemental Access Note 5
SH	PR	Supplemental Access Note 9
RW	PA	SWR Parcel Number
RW	ES	Temp Constr Esmnt Line
RW	ES	Temp Constr Esmnt Line New

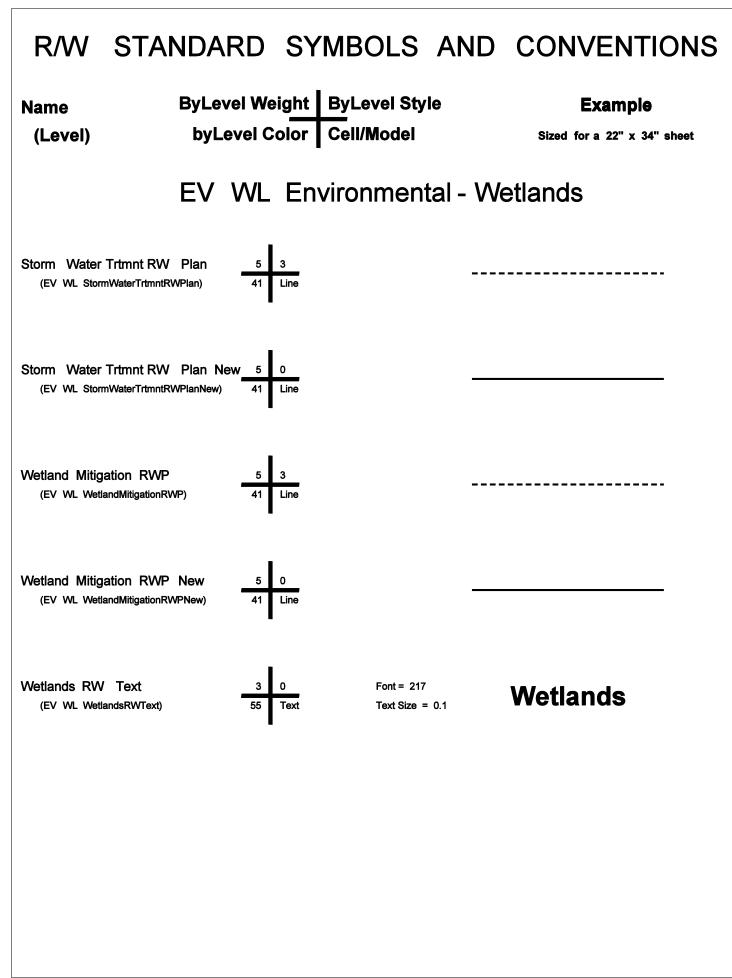
CATEGORY	GROUP	SUBJECT
SH	PR	Title Block
SH	PR	Title Block Exhibit Map
SH	PR	Title Block Sundry Site
SH	PR	Title Block Vicinity Map
RW	SC	Township Line
RW	SC	Township Range Line Text
SH	GI	Township Range Top Sheet Text
SH	GI	Traffic Mvmnt Arrow Lt 1 Lane
SH	GI	Traffic Mvmnt Arrow Rt 1 Lane
ST	BG	Tunnel
ST	BG	Tunnel New
ST	BG	Tunnel Text
ST	BG	Tunnel Text New
RW	BD	Turnback Line
RW	BD	Turnback Relinquish Text
UT	PW	Utilities Text
RW	BD	Utility RW Bndry
RW	BD	Utility RW Bndry Coincident
RW	BD	Utility RW Bndry New
RW	BD	Utility RW Sta Off Text
SH	PR	Verification Notes
SH	PR	Vicinity Map Body Text
SH	PR	Vicinity Map Heading Text
TP	NT	Water Pond Lake Res Text
TP	NT	Water Tidal Shore Lg Body Text
TP	MM	Well
EV	WL	Wetland Mitigation RWP
EV	WL	Wetland Mitigation RWP New
EV	WL	Wetlands RW Text
UT	СМ	Wooden Transmission Tower
RW	ΡΑ	WSDOT Parcel Number

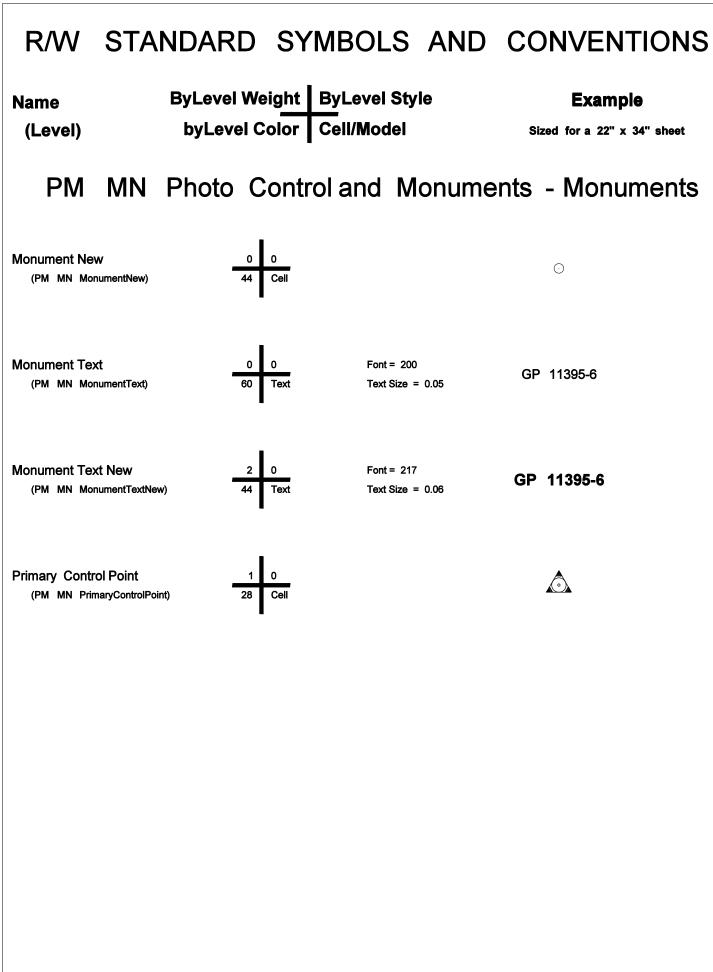


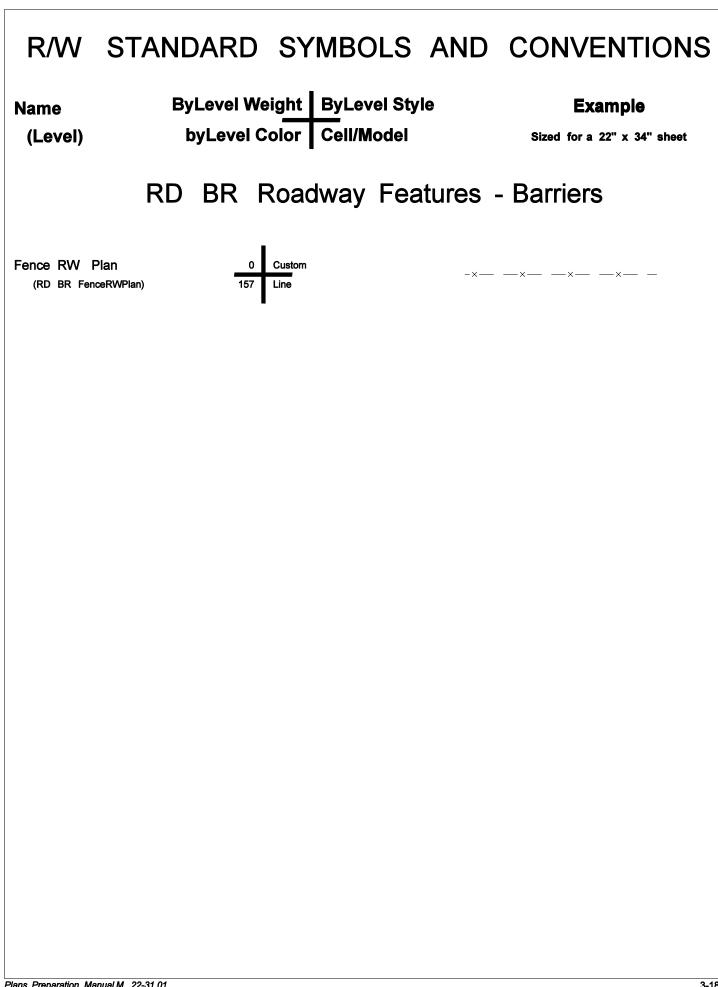


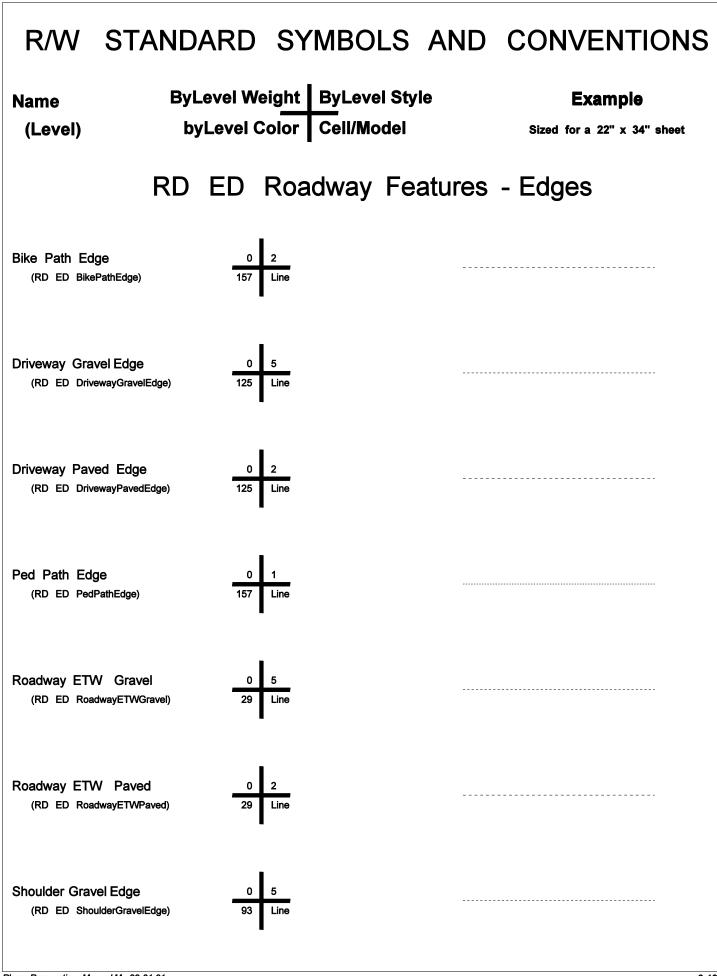


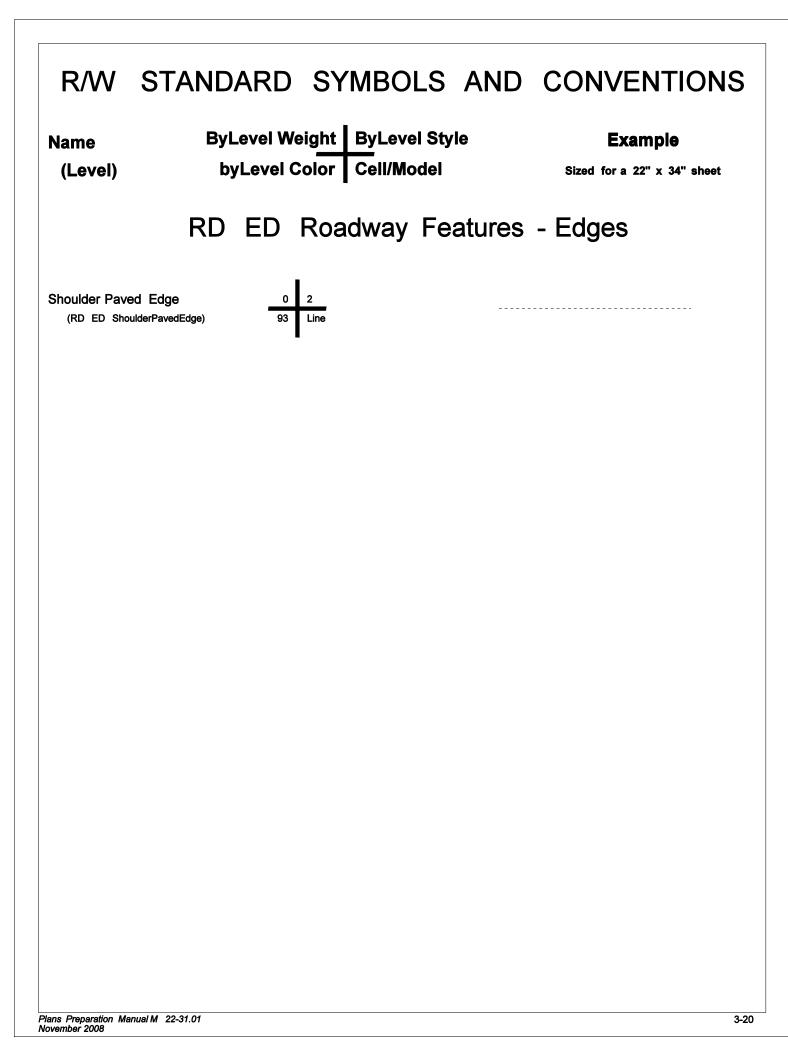


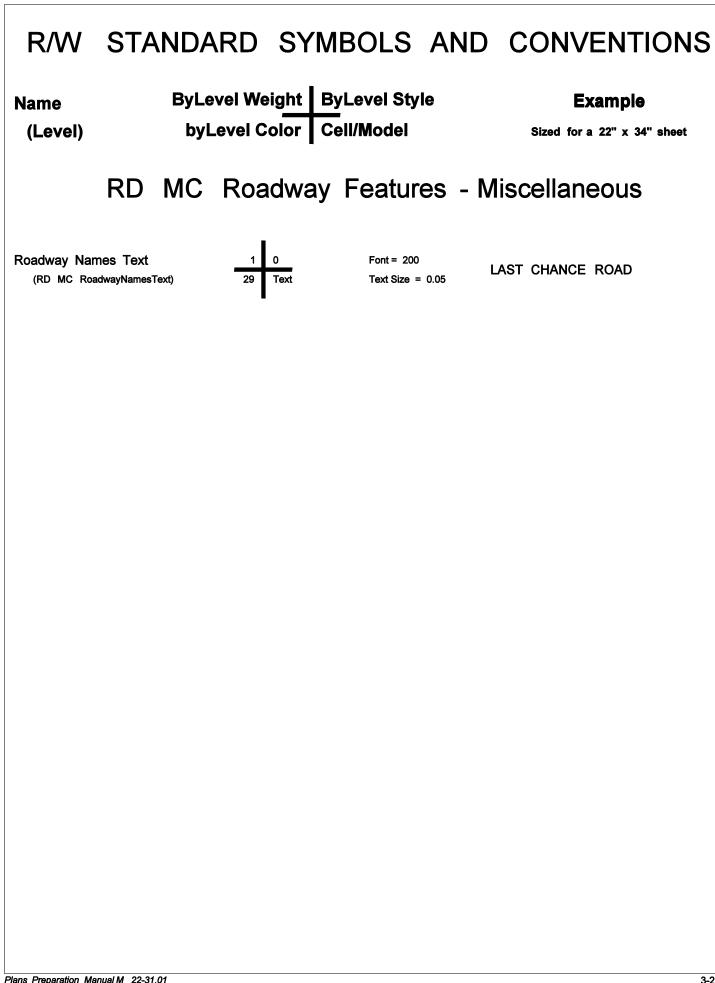


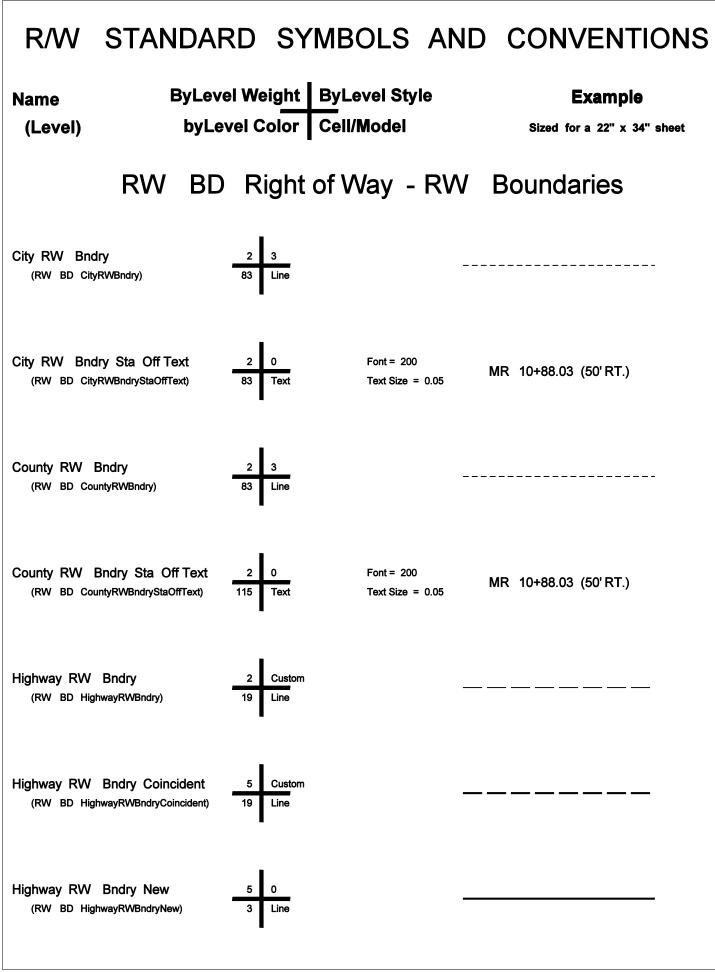


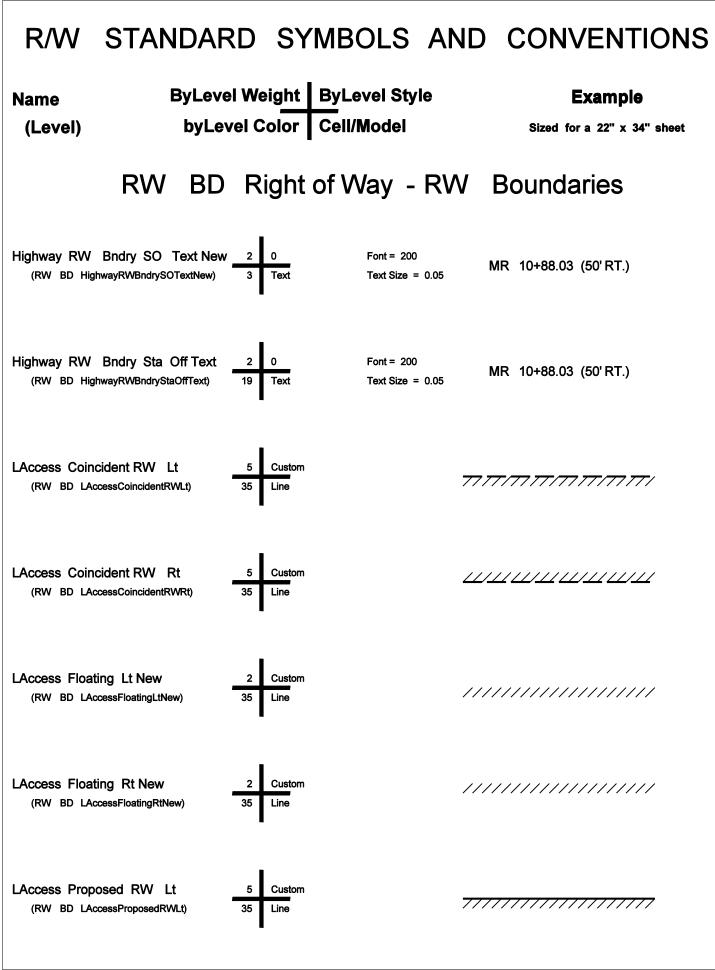


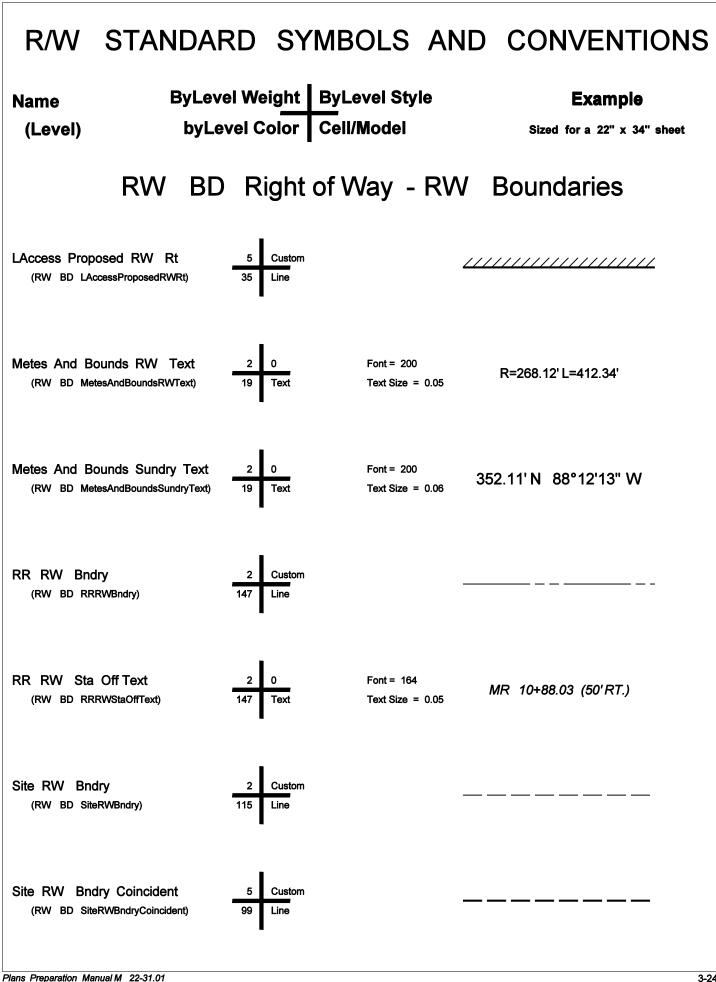


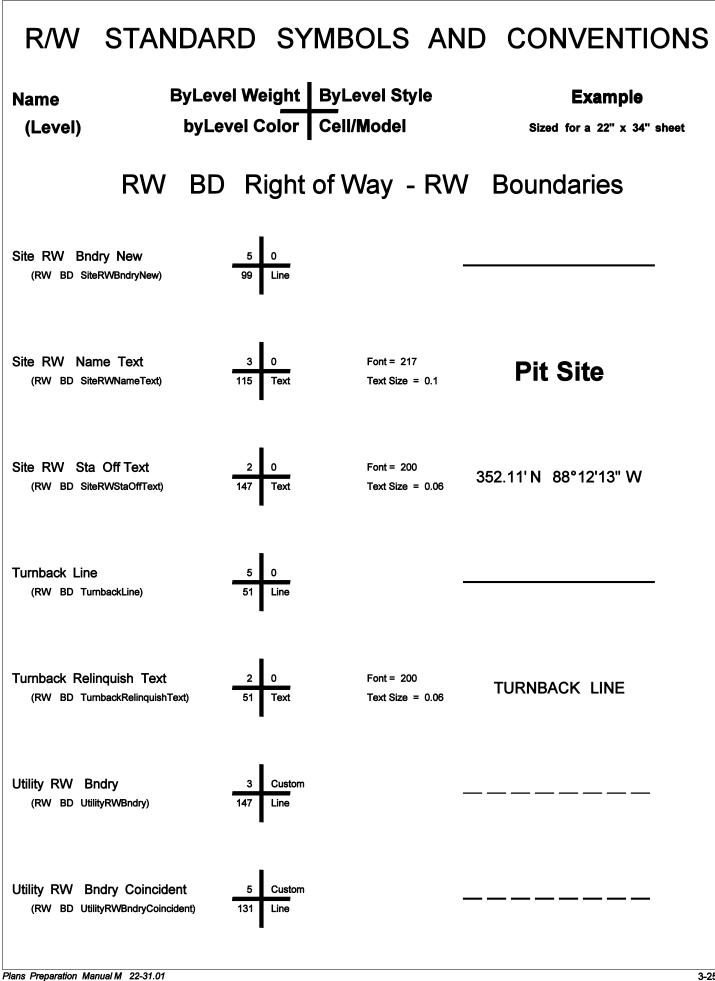


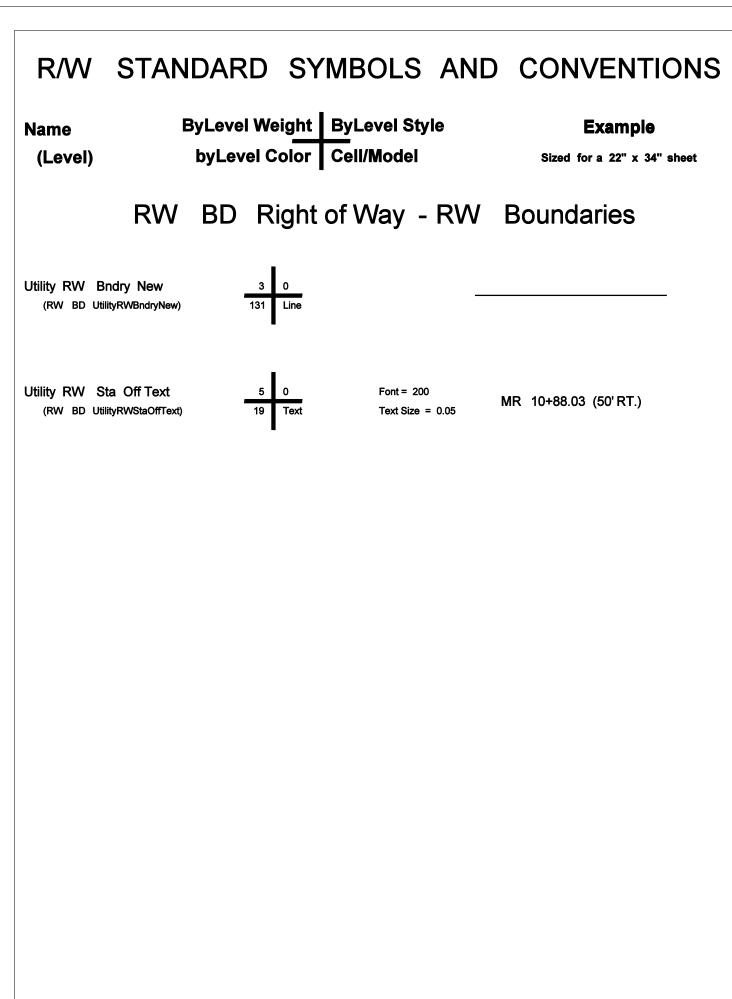


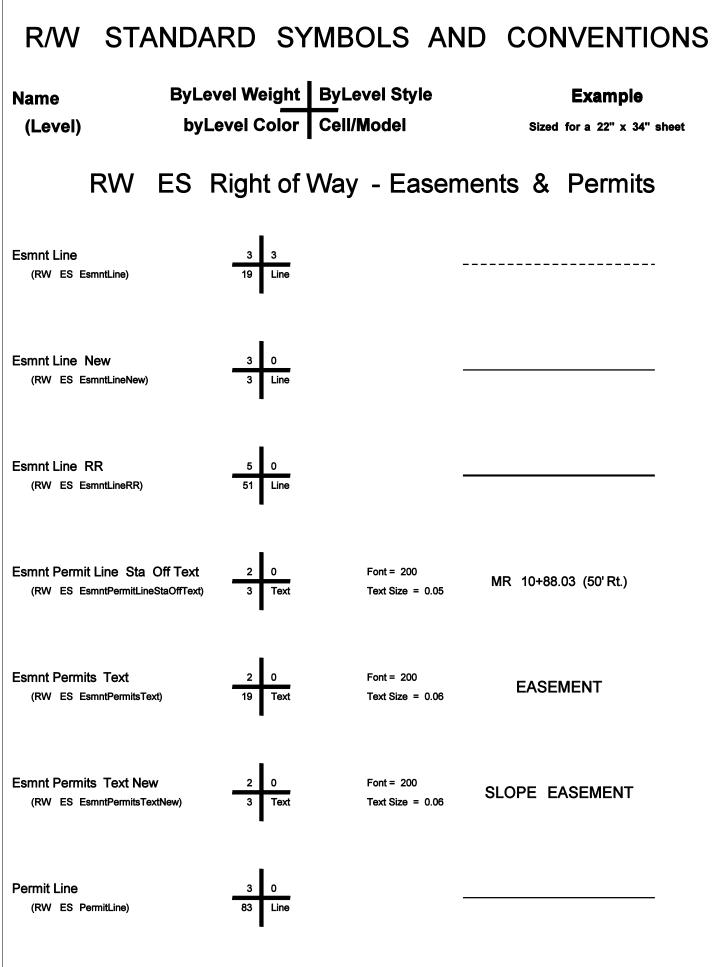


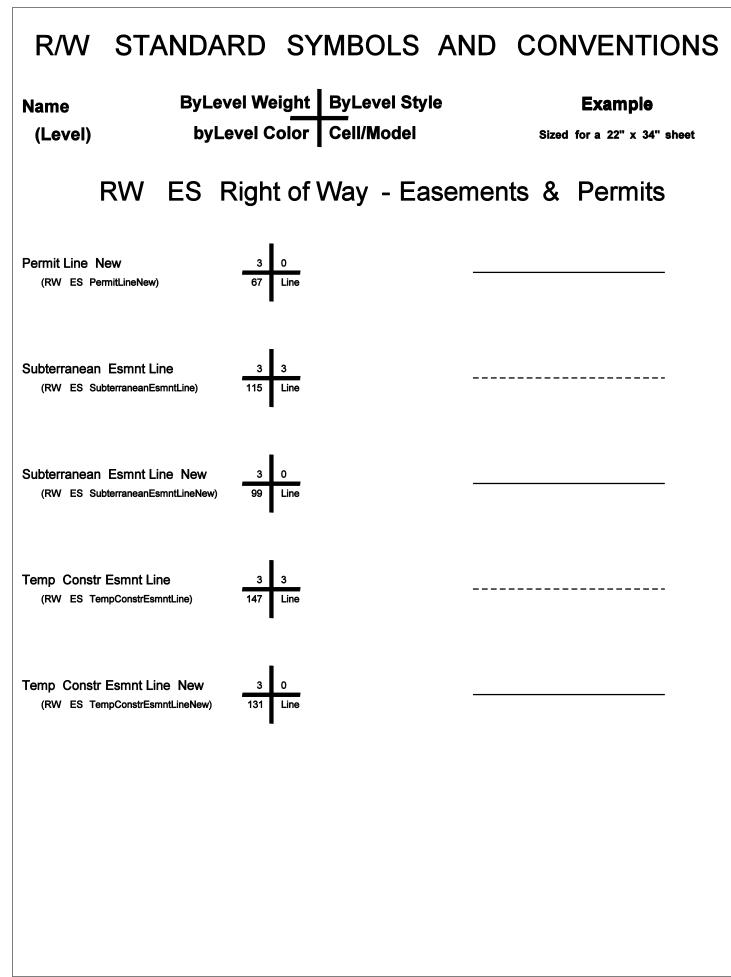


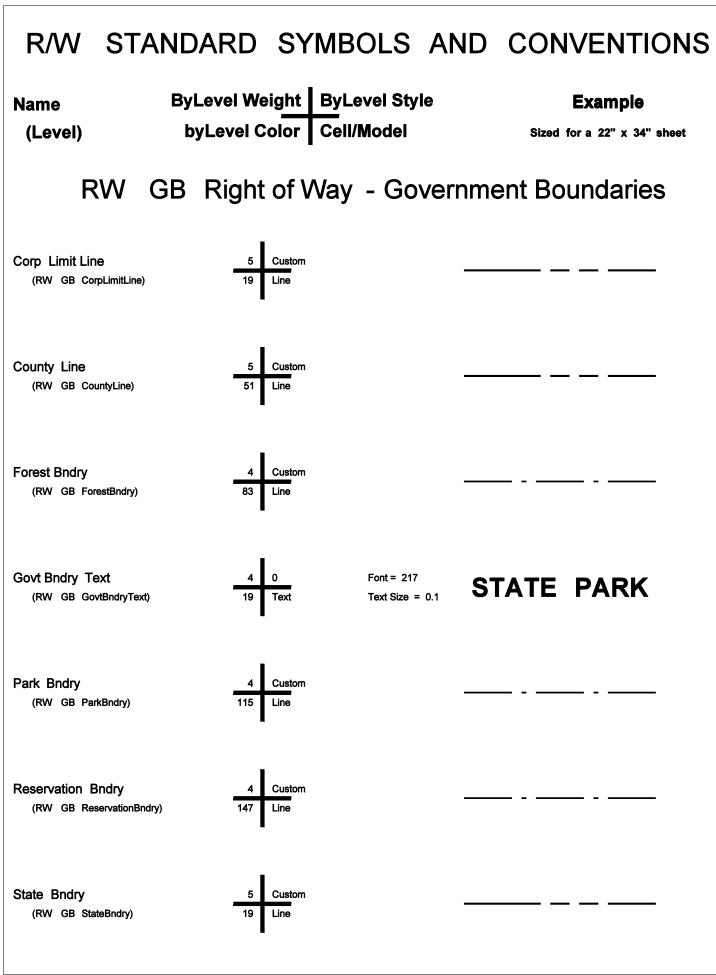


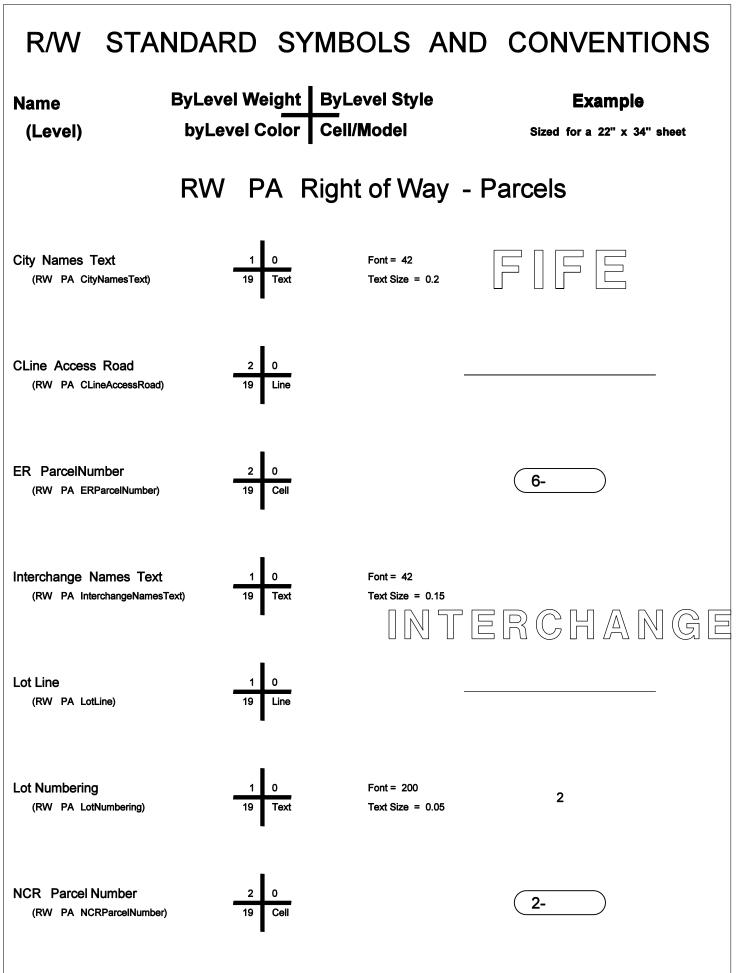


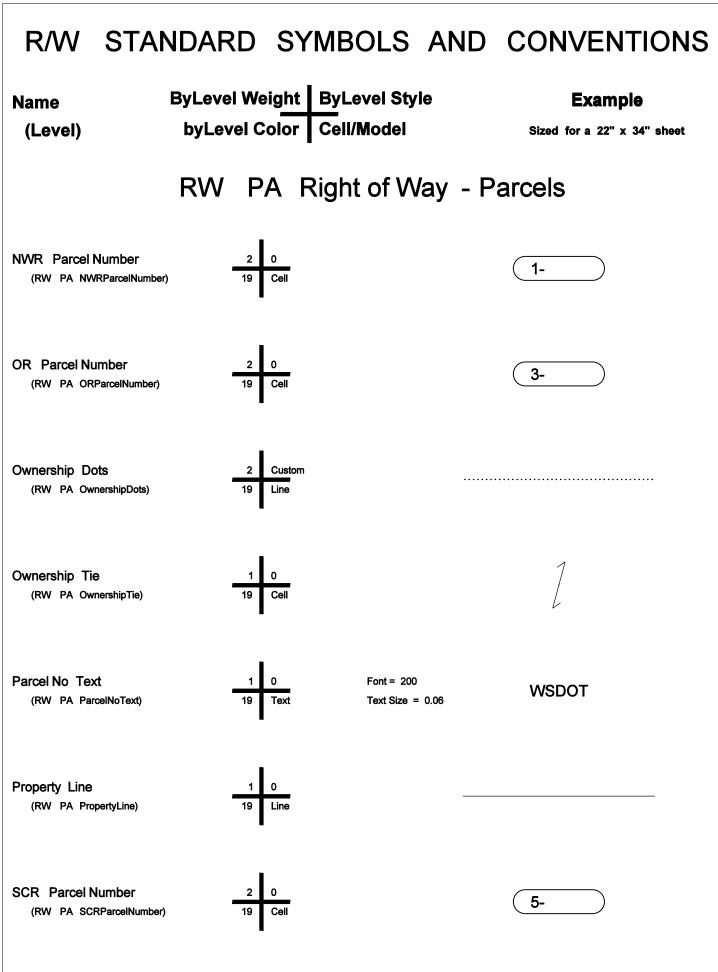


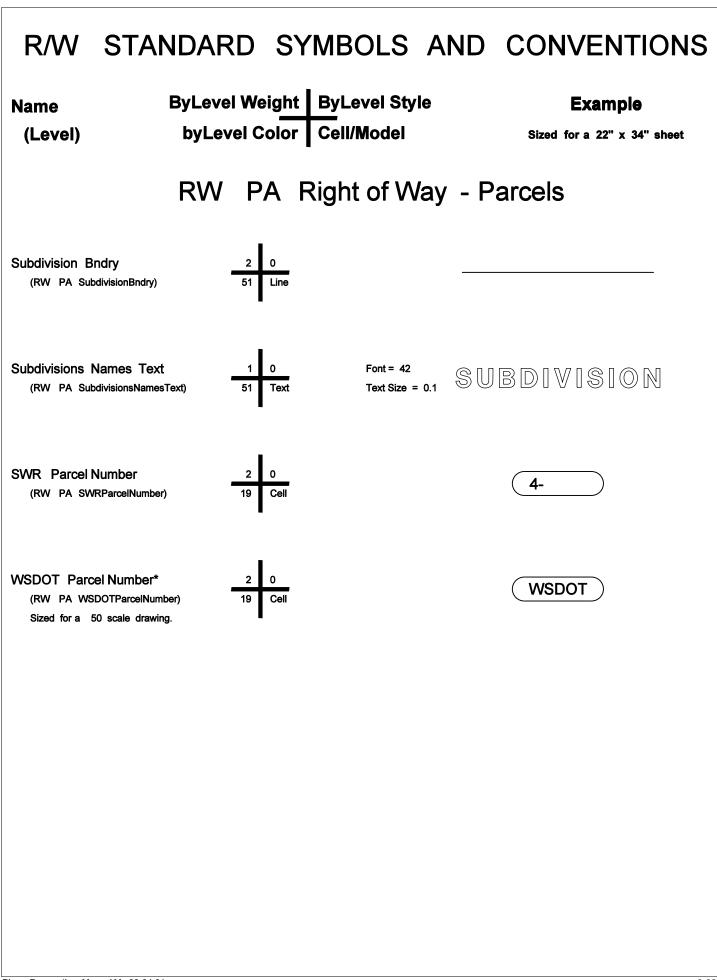


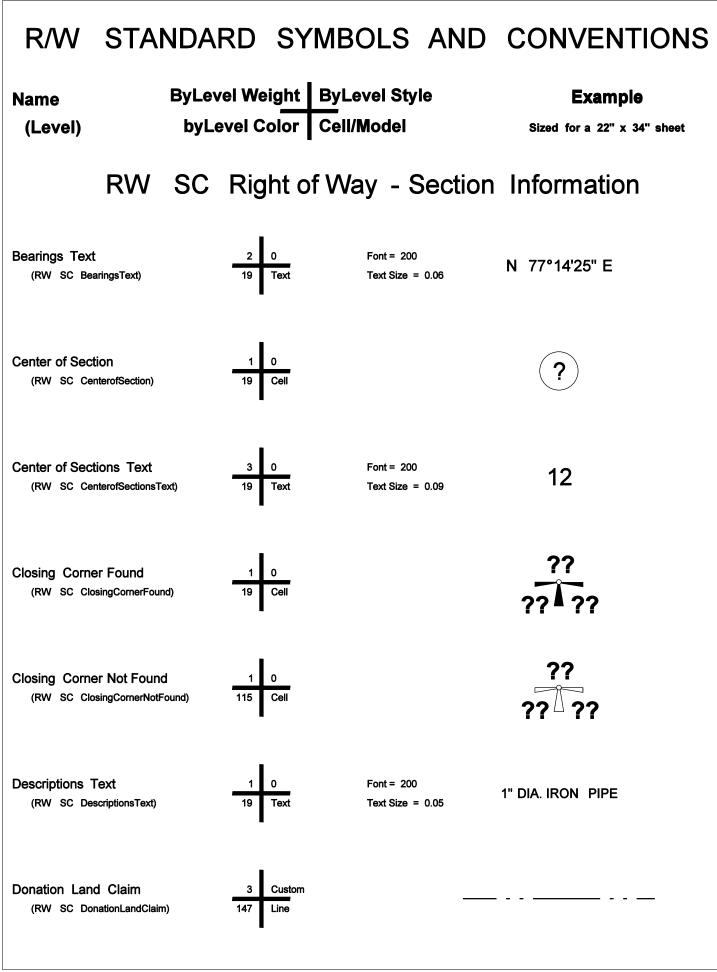












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(RW SC DonationLandClaimsText) Govt Lot ID Text (RW SC GovtLotIDText) Meander Corner Found (RW SC MeanderCornerFound) Meander Corner Not Found	) 147 Text <u>3</u> 0 147 Text <u>1</u> 0	
(RW SC GovtLotIDText) Meander Corner Found (RW SC MeanderCornerFound) Meander Corner Not Found	1 0	
(RW SC MeanderCornerFound) Meander Corner Not Found	1 0 19 Cell	
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