

4.0 Title Sheet

Note: Always create both Sheet 1 and Sheet 1A. Sheet 1 no longer has the Index of Sheets or Standard Drawing Nos. These two items will always be shown on Sheet 1A. See Fig. 4-3.

4.1 Control

Title sheet development begins with the name of the project. The official name of a project is given in the development of a prospectus. The official name can be check with the Project Leader (PL) or the Consultant Project Manager (CPM)

The basic information needed is the project name, highway name, county name, and the key number. Remember that highway routes are not the same as highway numbers. The highway route can traverse multiple state highways. The state highway number is tied to the highway name.

If abbreviations are necessary within the project name, use the standard abbreviations shown in the Contract Plans Development Guide and/or the following:

Barrier	Bar.
Beginning	Begin.
Boulevard	Blvd.
Directions	N. S. E. W. N.W. etc.
Illumination	Ill.
Intersection	Int.
North City Limits	NCL
Overcrossing	O'Xing.
Project	Proj.
River	Rvr.
Road	Rd.
South City Limits	SCL
Undercrossing	U'Xing.
Various	Var.

ODOT Technical Services maintains three archive systems for plan sheets. The Bridge Engineering Section assigns drawing numbers for the bridge plans to be filed in the structural archive. Traffic Management Section assigns drawing numbers for sign, signal, and illumination plans to be filed in the traffic systems archive. Roadway Engineering Section assigns a V-Number to all other plan sheets to be filed in the roadway archive.

4.2 Development

The files listed below are available for the development of the title sheets, which aid in adhering to CAD standards. See Figures 4-1 and 4-2.

seed_tsm.dgn – metric file (11x17 sheet file)

seed811tsm.dgn – metric file (8.5x11 sheet file)

cache_tsm.dgn – metric file

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Note: For examples of title sheets, see Section 4.0, Volume 2.

Note: In setting the project designation, consider the type of project. The most common designations used are 'R' for generic region project, 'OT' for an OTIA funded project, and 'CON' for a consultant-designed project. Other designations should only rarely be considered.

4.2 Development (Cont'd)

seed_tse.dgn – english file (11x17 sheet file)

seed811tse.dgn – english file (8.5x11 sheet file)

cache_tse.dgn – file containing frequently used cells and formats (referred to main file)

Titlesht.cel – cell library with cells for title sheet layout with most common PE stamps.

Keep in mind that project completions will extend over time and items such as the dates on professional stamps and membership of the Oregon Transportation Commission will change and need updating. There will also be occasion where the designated managing engineer will not be available to sign the title sheet and another person's professional stamp will need to be used along with their title designation (i.e. *Acting* Technical Services Managing Engineer).

To assist with tracking title sheet updates, a Title Sheet form is available to record the information used in developing a title sheet. Most of the information for this form is transferred from the title sheet request you have received. There are notation areas at the bottom to record the dates each project phase has been printed, electronic file name, and project-related charge numbers.

4.2.1 Sheet Setup

Step 1 — Create an "Active File"

Create a new MicroStation™ file from the seed file named SEED_TSE.DGN, SEED_TSM.DGN or SEED811TSE.DGN & SEED811TSM.DGN found at:

Internal ODOT staff	http://SCDATA3\ODOT_space\standards\seed
External	ftp://ftp.odot.state.or.us/isb/appeng/Microstation/Version8/

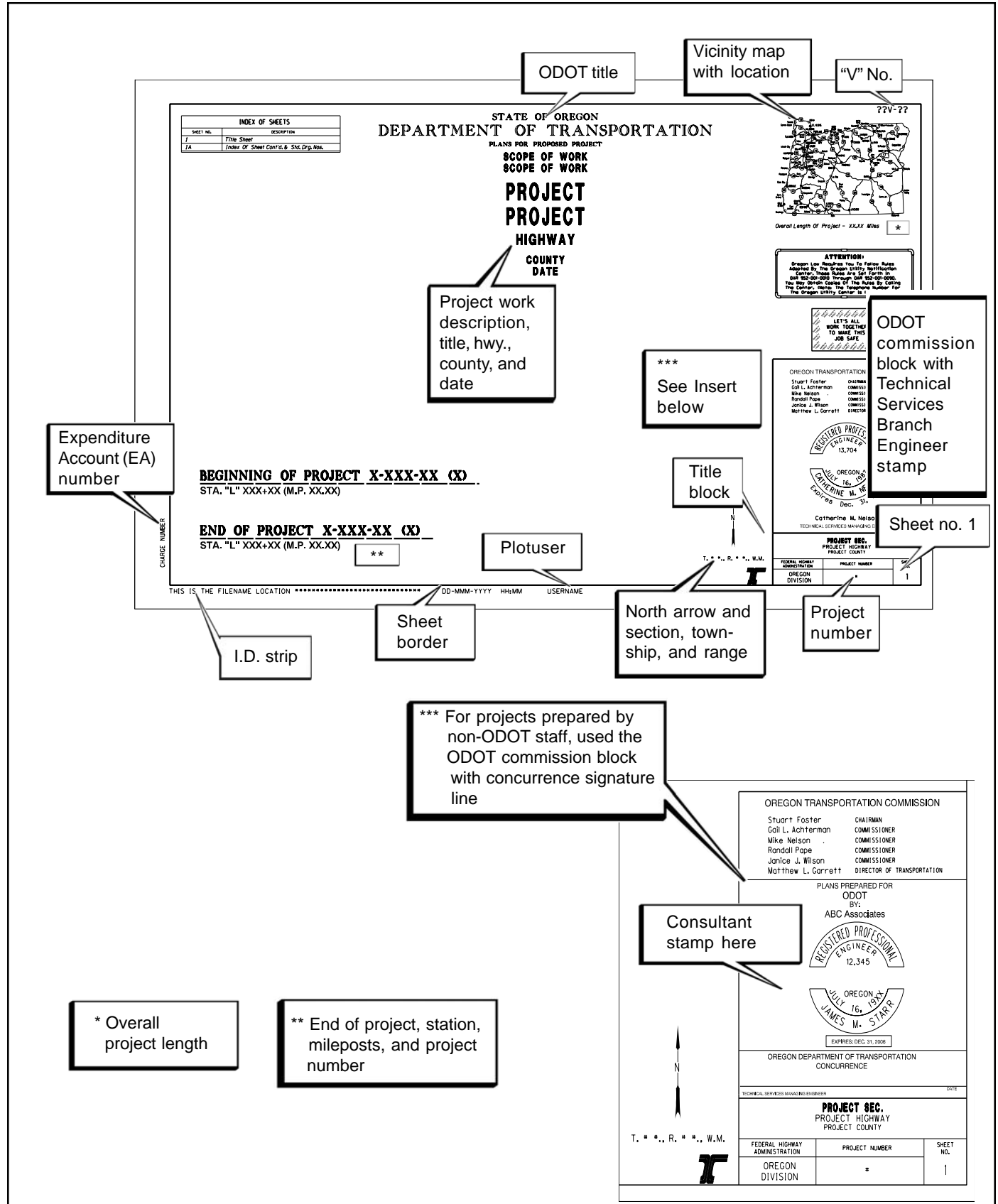
and name it KEYNUCN.TS1, where "KEYNU" represents your project key number assigned by ODOT (to be filled in by you), "C" represents the project designation (1-3 characters), "N" represents the region number (1 character), and ".TS1" is the appropriate extension for title sheets. This is your **active file**.

Step 2 — Add sheet borders

Enter ODOT's proprietary software, "Plotypus," to automatically place borders (*File/Plotypus*). "Plotypus" automatically creates the borders at a pre-designated location in the design file. Choose the intended scale and sheet size, placing up to ten borders per design file. Note that while you can place more than ten borders in a design file, the performance of that file may decrease. See Appendix D, "A Quickguide To Plotypus," for more information on placing borders.

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Figure 4-1 Title Sheet Seed File (from SEED_TSE.DGN or SEED_TSM.DGN)



4.0 Title Sheet

Figure 4-2 Continuation Sheet Seed File (from CACHE_TS.DGN)


TM100 - Temp. Wood Post Sizing Charts
TM105 - Orange Flag Board Mounting Details
TM111, TM112 - Self-Regulating Diverter
TM115, TM114, TM115 - Signling Details
TM150, TM151 - Low Drop Marking & Signling

TM200, TM201, TM202, TM205 - Sign Installation Details
TM206, TM207 - Sign Mounting Details
TM211, TM212 - Signling Details
TM214, TM215 - Perm. Wood Post Sizing Charts
TM216 - Sign Installation Br. Mount Details
TM217 - Route Markers & Secondary Assemblies
TM218 - Secondary Signling Mounting Details
TM219 - Steel Pole Mounted Sign Details
TM220 - Multi-Pole Installations
TM221, TM222 - Wispot Marker Details
TM223, TM224 - Directional Sign Layout
TM225 - Exit No. & Over Signling Details
TM230, TM231, TM322, TM233 - Mounting Details For Removable Legend
TM235, TM237 - Pipe Sign Support Details
TM239 - Square Tube Sign Support
TM241 - Triangular Base Breakaway
TM250, TM251 - Truck Wlgh Sta. Signling Details

TM300, TM301 - Illumination Cabinets
TM305, TM306 - Illumination Installation
TM310 - Illumination Details

TM400, TM401 - Temp. Signal Details
TM402 - Strain Pole Details
TM403 - Mast Arm Pole Details
TM404 - Span Wire Details
TM405 - Pole Foundations & Grounding
TM406, TM407, TM408 - Vehicle Signal Details
TM409, TM410 - Pedestrian Signals
TM411 - Crosswalk Closure Details
TM412, TM413 - Interior Illuminated Signs
TM414 - Mounted Sign Details
TM415 - Mast Arm Mounted Warning Sign
TM416 - Overhead Sign Details
TM417, TM418 - Junction Boxes
TM419, TM420 - Loop Details
TM421 - Color Code Charts
TM422 - Miscellaneous Details
TM423 - Controller Cabinet & Related Details
TM424 - Post & Pedestal Cabinets
TM425 - Fisher Cabinets
TM426, TM427 - Service Cabinets
TM428 - Terminal Cabinets
TM429 - Stabilizer Details
TM430 - Microloop
TM431 - Fiber Optic & LED PTH Signs
TM432, TM433 - Ramp Meter Details
TM434 - Maintenance Pod Details

TM500, TM501, TM502 - Pavement Markings
TM505 - Railroad Pavement Markings
TM510, TM511 - Bike Lane Pavement Markings
TM520, TM521, TM522 - Durable Pavement Markings
TM525 - Pavement Marking Details
TM526 - Freeway Pavement Markings
TM527 - Intersection Pavement Markings
TM530 - Urban Pavement Markings
TM531 - Urban Pavement Markers
TM533 - Pavement Markings, Speed Humps
TM535, TM537 - Crosswalk Markings
TM539, TM545 - Left Turn Pavement Markings
TM547 - Fwy. Entrance Pavement Markings
TM549 - Fwy. Railed Pavement Markers
TM551 - Fwy. Exit Pavement Markings
TM555 - No Parking Zone Paint Markings
TM556 - Bus Pavement Markings
TM560 - Obstruction Pavement Markings
TM565 - Rural Railed Pavement Markers

R/W Map No. 

List R/W Map No. after STD.Drgs. If not required use "No R/W Map"

Roadway plan sheet

APPROVED

PRELIMINARY COPY

APPROVED COPY


PLANS IN HAND

FINAL REVIEW

PLANS

BEGINNING OF PROJECT
 STA. "L" XX+XXX (M.P. XXXXX)

END OF PROJECT
 STA. "L" XX+XXX (M.P. XXXXX)



T. * *, R. * *, W.M.

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	Title Sheet


INDEX OF SHEETS, CONT'D.	
SHEET NO.	DESCRIPTION
1	Description

INDEX OF SHEETS, CONT'D.	
DRAWING NO.	DESCRIPTION
*	BRIDGE NO. # Description

INDEX OF SHEETS, CONT'D.	
DRAWING NO.	DESCRIPTION
*	BRIDGE NO. # Description

Project status stamps

Drg. nos. from other technical units



ATTENTION:
 Oregon Law Requires You To Follow Rules Approved by the Oregon Utility Information Center and 800-451-2000 Through Our Web Site at www.ouic.org. You May Contact Us at 800-451-2000. The Oregon Utility Center is 800-451-2000.

LET'S ALL WORK TOGETHER TO MAKE THIS JOB SAFE.

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Volume 1

4.0 Title Sheet

4.2.1 Sheet Setup (Cont'd)

Step 3 — Edit the Project Title

Edit the project title text within the title block. When the contract plans are complete and ready to be advertised for bid, the “V” number will be edited in this file in the upper right hand corner of each title sheet. For preliminary, advance and final review submittals, the appropriate block shall be placed here rather than the “V” number (from the cell library ODOT.cel).

Step 4 — Add Sheet Numbers

While in the *active file*, add the appropriate sheet numbers listed in Table 2-1, snapping to the point provided in the space.

Step 5 — Add Professional Engineer Stamp

While in the *active file*, add the Professional Engineer’s Stamp cell for the appropriate person signing the plans, snapping the cell to the point provided.

Step 6 — Sheet Information

The location, name and date of the *active file* are to appear in the lower left corner of the sheet. For ODOT users, this will update automatically. Users outside ODOT must use an appropriate pen table.

4.2.2 General Information

Edit placeholders on left side of the border for project charge number and, for English projects, the associated right-of-way map reference. Continue editing the file to reflect the project on which you are working. In the main title sheet text, two individual lines have been allowed for scope of work and project name.

When you receive the initial title sheet as requested, the project name with appropriate text will be shown. All project titles end with either “Sec.” (Section) or “Project”. The scope of work will be on the request form and needs to follow the order set in the standard as shown in Figure 4-3. Determine whether one or two lines will be needed. If only one line is needed, move the following text lines up and delete the second line used as a placeholder. The title block will be a duplicate of the project title, highway name, and counties including spelling, punctuation, and lines of text used.

Continue editing the title sheet by adding the project arrow to the state map, phase stamp, length of project, township & range, vicinity map, and project limits. Vicinity maps are taken from the county maps that are located at:

<ftp://ftp.odot.state.or.us/tdb/trandata/maps/comap>

4.0 Title Sheet

4.2.2 General Information (Cont'd)

Vicinity maps are first referenced to the original file, unwanted levels are turned off (3, 12, 15, 17, 25, 30, 39, 40, 43, 58 suggested), and then the area needed for the project is fence-clip-copied into the title sheet. Do NOT move the title sheet to the county map area. The county information is then manipulated to make it readable (usually scaled up), the highway area affected is designated (line weight = 12 or circled for spot location), and leader lines with arrowhead to project area(s) are added. The line terminator used for the project leader lines is “projectarrow” found in ODOT.cel at a scale of 1. The line terminator for no work areas is “dimarrow” found in ODOT.cel, also at a scale of 1.

Additional suggested editing to the vicinity map is to reset line weights to 3 for the major highways, and to 2 for all other roadways, make highway symbols ‘no fill’ types, and increase text and highway symbols where needed. The suggestions listed here work for most projects to portray the locations effectively. You may find some projects to be more accurately shown using the city maps instead of the county maps. City maps are located at:

Tip

For the standard order of sheets, see Table 2-1, Volume 1.

<ftp://ftp.odot.state.or.us/tdb/trandata/maps/citymap>

and will need the same basic manipulations to be placed into the title sheet.

Note: Chapter 4, Volume 2 shows samples of title sheets to give a general overview of the variances in sheet indexes. Each set of plans will be different and no two sheet indexes will be alike. However, the orders of sheets in this section and the sections that follow do not change.

This will usually be all that is done to the title sheet initially. The title sheet indexes and standard drawing numbers are not usually available until the preliminary stage of the project.

4.2.3 Create Sheet Index

As information is supplied, edit the title sheet. The biggest part of the title sheet editing will be the inclusion of the sheet index. The sheet index has a prescribed order and needs to be followed. If the sheets are not following this order, they should be referred back to the spec writer or project lead.

Select and copy the blank text nodes and lines to build the index box. Match text symbology and text parameters to add text to the box. End each section in the listing with a line copy paralleled at 1.5' followed by a blank line.

There will rarely be more than two sheets for your title sheets. The plan sheet layout (section 1B) is usually set up by the roadway drafter.

4.0 Title Sheet

Figure 4-3 Continuation Sheet (from CACHE_TSE.DGN & CACHE_TSM.DGN)

INDEX OF SHEETS	
SHEET NO.	DESCRIPTION
1	Title Sheet
1A	Index Of Sheets Cont'd. & Std. Drg. Nos.

Standard Drg. Nos.

PROJECT SEC.		
PROJECT HIGHWAY		
PROJECT COUNTY		
FEDERAL HIGHWAY ADMINISTRATION	PROJECT NUMBER	SHEET NO.
OREGON DIVISION	*	1A

THIS IS THE FILENAME LOCATION ***** DD-MMM-YYYY HH:MM USERNAME

4.2.4 List Standard Drawing Numbers

Standard drawing numbers are listed after the index of sheets and listed in the sequenced order of roadway drawings (RD), then bridge drawings (BR), and followed by traffic management (TM). Template standard drawing numbers have been set up and are copied and edited for the required drawing numbers and sections. When listing the standard drawing numbers, they should be numbered in the 2002 Oregon Standard Drawings. See Chapter 4, Volume 2 for samples.

Edits are done at each phase as the project progresses. When the project is at final stage, edits to be made to the title sheet come from the spec writer as he/she is compiling the complete project set. Title sheet mylars are usually not prepared until the spec writer has received all project sheet mylars from each section working on the project.

After the list of standard drawing numbers, the right of way map number(s) for the project is listed. If there are no R/W impacts on the project, the notation of “No R/W maps” should be used.

4.0 Title Sheet

Figure 4-4 Title Sheet Scope of Work

OFFICIAL ODOT TITLE SHEET
SCOPE OF WORK

Use the 8 major headings below if the type of work is included in the project. Items below each major heading are examples of work included in that major heading.

Items listed on the title sheet are in "Specification Book" order.

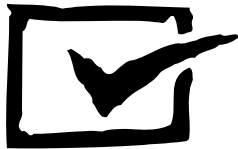
<p>1. Grading</p> <p>2. Drainage Fish Passage Culverts Culvert Rehabilitation Storm Sewer System</p> <p>3. Structure(s) Bridge Rehabilitation Bridge Replacement Deck Overlay Joint Repair Bridge Railing Retaining Walls Box Culverts Culverts in excess of 1200 mm diameter</p> <p>4. Paving Inlay / Overlay Emulsified Oil Mat Ramp Rehabilitation Walks, Driveways, Curbs Cold Planing HMAC / Concrete Surfacing</p>	<p>5. Signing</p> <p>6. Illumination</p> <p>7. Signal(s) Pole Relocation Loop Replacement Traffic Signals ATMS CCTV Camera & Fiber optic Cable Variable Message Signs</p> <p>8. Roadside Development Landscaping Irrigation Systems Wetland Mitigation</p>
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Use headings from "Other Listings" only if that item itself makes up 10% or more of the construction dollar value of the project.

Other Listings:

- Historic Preservation
- Guardrail
- Haz-Mat Abatement
- Rock Production
- Pavement Markings
- RR X'ing Improvements
- Barrier
- Buildings
- Painting
- Utility Relocation
- Riprap
- Protective Screening

4.0 Title Sheet



4.3 Checklist

- State map and project arrow
- "V" number or project status stamp
- Project title
- Scope of work
- County of project work
- Index of sheets
- Overall length of project
- Township and range
- Standard drawing numbers used in project
- R/W map number
- Professional Engineer's stamp
- Title block and sheet numbers
- Oregon Transportation Commission listing of names
- OTIA stamp, if applicable
- Attention stamp for Oregon Utility Notification