# 1.0 Project Notebook

As discussed in the [Requirements for Model Centric Design](https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/tdot-ord-workspace/requirements/Requirements%20for%20Model-Centric%20Design.pdf), projects using ORD need to have an associated **Project Notebook** to document the life cycle from design to construction. The Project Notebook summarizes the design decisions throughout all project phases, including design criteria, design exceptions, engineering assumptions, ORD versioning, and other impactful design information. This document will be utilized to review design accuracy, 3D model sufficiency, and serve as a project’s official documentation throughout the lifespan of the project. As a result of this document servicing multiple functional purposes, it is important for the project team to communicate criteria, applied design decisions, and modeling information. It is also important for the reviewer at each stage and each capacity to understand their role when referencing the Project Notebook to complete their respective review.

Much of the information to be filled out in the Project Notebook will be completed by members of Roadway Design. Information provided to Roadway Design from other disciplines should be clearly communicated if it is expected that Roadway Design is responsible for filling out the entire document.

The Project Notebook is a project deliverable that is expected with the required project submittals. **The Project Notebook is required for all ORD projects and is expected to grow with each phase to document more details and decisions made as the project progresses into a more complete design**. It is not expected to be filled out completely until final PS&E Plans are submitted or unless agreed upon by the TDOT PM. It will also be used in conjunction with the newly created ORD 3D Model Checklist during reviews.

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***Take Note!***

*The Project Notebook Template includes sections that may not apply to all projects. If a section below is not applicable to the associated project, it may be removed or deleted. For example, if there are no existing or proposed sidewalks in the project scope, Section 2.1.1 isn’t necessary.*

## 1.1 Project Information

### 1.1.1 General Project Information

|  |  |
| --- | --- |
| **County:** | Choose an item. |
| **Federal Project No.:** | Click or tap here to enter text. |
| **P.E. No.:** | Click or tap here to enter text. |
| **PIN:** | Click or tap here to enter text. |
| **Description:** | Click or tap here to enter text. |
| **Submitted by:****(TDOT or Consultant)** | Click or tap here to enter text.Click or tap here to enter text. |
| **Date:** | Click or tap here to enter text. |
| **Comments**:Click or tap here to enter text. |

### 1.1.2 Project Narrative

Project Narrative: **(Brief description on how the project scope will be executed.)**

Click or tap here to enter text.

## 1.2 Survey Information

Was the survey data processed in ORD? [ ]  Yes [ ]  No

 If yes, what Release? (e.g., 10.11.00.115) Click or tap here to enter text.

 If yes, what TDOT ORD Workspace was used? (e.g., 10.11.00.115\_07.24.2023)

Click or tap here to enter text.

 If no, attach the **ORD Conversion Decision-Making Form** for submittal.

Geographic Coordinate System Used: **(Any datum prior to 2011 should use the ESPG:2274 – NAD/Tennessee (ft US) coordinate system.)**

Click or tap here to enter text.

Datum Adjustment Factor: Click or tap here to enter text.

Other Important Survey Information to Note:

Click or tap here to enter text.

## 1.3 Submittal Log

**(Another row can be added to the Submittal Log by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

|  |  |  |
| --- | --- | --- |
| Deliverable/ Plan Set: | Submittal Date:  | Remarks: **(This area can be used to describe major design or model changes that occurred since the previous submittal)** |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

## 1.4 Design Submittal Information

**(The following information needs to be completed for each submittal; the information can be copied automatically by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

**Deliverable/Plan Set: Click or tap here to enter text.**

ORD Release Used at Time of Submittal: (e.g., 10.11.00.115) Click or tap here to enter text.

 Have the project files been uplifted during this design stage? [ ]  Yes [ ]  No

If yes, what previous ORD Release was used? (e.g., 10.11.00.115)

Click or tap here to enter text.

 If yes, list any notable information or issues during the uplift process:

 Click or tap here to enter text.

TDOT ORD Workspace at Time of Submittal: (e.g., 10.11.00.115\_07.24.2023) Click or tap here to enter text.

 List any prior ORD TDOT workspaces used:

 Click or tap here to enter text.

Other Important Design (General) Information to Note:

**(This area can be used, but not limited, to keep record of any customizations for project needs, e.g., feature definitions, colors, levels, or line styles that are not part of the TDOT Standards provided in the workspace.)**

Click or tap here to enter text.

ORD Issues and Resolutions:

**(This area can be used to describe any issues relating to the software and what solution was found to continue.)**

Click or tap here to enter text.

# 2.0 Roadway Name: Click or tap here to enter text.

The following information will describe a roadway’s design criteria, design information, and modeling information. It is expected to be filled out for each roadway present in a design.

Choose an item. **Horizontal Alignment Name:** Click or tap here to enter text.

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***Take Note!***

*It is recommended at this point to* ***copy and paste Chapter 2.0*** *and associated subsections following this chapter for each mainline or sideroad within the project limits.*

## 2.1 Design Criteria

This section is intended to describe the **design component standards** referenced during the design of the project. The purpose of the criteria below is not to state the values used, but rather state the guidelines that the design adheres to. Actual values will be recorded in [Section 2.2 Design Information](#_Design_Information). **(If the criteria changes along a corridor (e.g., design speed), the criteria can be copied automatically by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

Station Range Following Criteria: Click or tap here to enter text.

Roadway Classification:

[ ]  Freeway [ ]  Arterial [ ]  Collector [ ]  Local [ ]  Other: Click or tap here to enter text.

Secondary Roadway Classification:

[ ]  Urban [ ]  Rural [ ]  Rural Town [ ]  Urban Core [ ]  Other: Click or tap here to enter text.

Average Daily Traffic (ADT): Click or tap here to enter text.

Posted Speed (mph): Click or tap here to enter text.

Design Speed (mph): Click or tap here to enter text.

Terrain: [ ]  Level [ ]  Rolling [ ]  Mountainous

TDOT Typical Section Used: Click or tap here to enter text.

 Lane Width (ft): Click or tap here to enter text.

 Shoulder Width (ft): Click or tap here to enter text.

 Minimum Horizontal Curve Radius (ft): Click or tap here to enter text.

Maximum Superelevation Rate (%): Click or tap here to enter text.

 Minimum Degree of Vertical Curvature (“K”) - Sag: Click or tap here to enter text.

Minimum Degree of Vertical Curvature (“K”) - Crest: Click or tap here to enter text.

 Maximum Grade (%): Click or tap here to enter text.

Minimum Stopping Sight Distance (ft): Click or tap here to enter text.

Cross Slope (%): Click or tap here to enter text.

 Vertical Clearance (ft): Click or tap here to enter text.

 Design Loading Structural Capacity: Click or tap here to enter text.

 Design Vehicle: Click or tap here to enter text.

Is a design exception or design waiver required? [ ]  Yes [ ]  No

If yes, attach the **Design Exception Request** or **Design Waiver Request** for submittal, which can be found under the **Roadway Design Documents >> Roadway Design Forms & Letters >> Requests** heading on this site:

<https://www.tn.gov/tdot/roadway-design/design-standards/tdot-documents.html>

### 2.1.1 Curb Ramps and Sidewalks

**(If no curb ramps within the project limits, remove the section below. If multiple criteria information is needed, the criteria can be copied automatically by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

**Curb ramps are placed as Civil Cells in ORD, and each curb ramp Civil Cell is named based on the Standard Drawing it follows. It may be helpful to verify the curb ramps used by reviewing the ORD Explorer >> OpenRoads Model >> Civil Cells drop-down.**

**Curb Ramps**

 Description of Pedestrian Mobility within Project Limits:

 Click or tap here to enter text.

Standard Drawing Reference(s):

Click or tap here to enter text.

Are there any midblock crossings present? [ ]  Yes [ ]  No

 If yes, fill out following information.

Roadway Name: Click or tap here to enter text.

Midblock Crossing Station: Click or tap here to enter text.

 Reasoning of midblock crossing: Click or tap here to enter text.

Standard Drawing Reference(s):

Click or tap here to enter text.

**(If no sidewalks within the project limits, remove the section below. If multiple sections of sidewalks following different criteria are present, the criteria can be copied automatically by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

**Sidewalks**

Roadway Name: Click or tap here to enter text.

Sidewalk Station Range(s): Click or tap here to enter text.

Sidewalk Cross Slope (%): Click or tap here to enter text.

Sidewalk Width(ft): Click or tap here to enter text.

Standard Drawings Reference(s):

Click or tap here to enter text.

### 2.1.2 Curb and Gutter Sections

**(If no curb and gutter within the project limits, remove the section below. If multiple sections of curb and gutter following different criteria are present, the criteria can be copied automatically by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

**Curb and Gutter sections are most likely placed as part of a roadway template drop. It may be helpful to verify the components of the template drops by reviewing the ORD Explorer >> OpenRoads Model >> Corridors drop-down. By reviewing the properties, you can see the applied station range, or you can open the Edit Template Drop tool to review components.**

Roadway Name: Click or tap here to enter text.

Curb and Gutter Station Range(s): Click or tap here to enter text.

Type of Curb: Click or tap here to enter text.

Curb and Gutter Dimensions Used: Click or tap here to enter text.

Backslope (%): Click or tap here to enter text.

Longitudinal Slope (%): Click or tap here to enter text.

Standard Drawings Reference(s):

Click or tap here to enter text.

### 2.1.3 Drainage and Utilities

**(If multiple utilities present, the criteria can be copied automatically by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

**Information below can be found by reviewing the Utility Owner information and Utility Model deliverable provided by Survey.**

**Utilities**

Utility Type: Click or tap here to enter text.

Utility Owner: Click or tap here to enter text.

Minimum Utility Depth (ft): Click or tap here to enter text.

 Maximum Utility Depth (ft): Click or tap here to enter text.

 If applicable, Standard Drawings Reference(s):

Click or tap here to enter text.

Utility Type: Click or tap here to enter text.

Utility Owner: Click or tap here to enter text.

Minimum Utility Depth (ft): Click or tap here to enter text.

 Maximum Utility Depth (ft): Click or tap here to enter text.

 If applicable, Standard Drawings Reference(s):

Click or tap here to enter text.

Utility Type: Click or tap here to enter text.

Utility Owner: Click or tap here to enter text.

Minimum Utility Depth (ft): Click or tap here to enter text.

 Maximum Utility Depth (ft): Click or tap here to enter text.

If applicable, Standard Drawings Reference(s):

Click or tap here to enter text.

**Drainage Pipes**

**(The following information pertains to drainage pipes within the project limits, not within a stormwater network. Information to provide below includes side drain and cross drain data.)**

**It may be helpful to verify the information below by reviewing the ORD Explorer >> Drainage and Utilities Model drop-down or Flex Tables that have been run. This information should be contained within the PRJ NAME-DES-Drainage-Hydraulic Model file, if following the** [**TDOT ORD File Naming Convention Standards**](https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/tdot-ord-workspace/requirements/TDOT%20ORD%20File%20Naming%20Convention%20Standards.pdf) **document.**

Proposed Drainage Pipe Sizes (in) and Types: Click or tap here to enter text.

 Minimum Pipe Size (in) and Type: Click or tap here to enter text.

 Maximum Pipe Size (in) and Type: Click or tap here to enter text.

 Minimum Slope Used (%): Click or tap here to enter text.

Maximum Slope Used (%): Click or tap here to enter text.

**Storm Drainage System**

Proposed Catch Basin Sizes: Click or tap here to enter text.

 Minimum Pipe Size (in) and Type: Click or tap here to enter text.

 Maximum Pipe Size (in) and Type: Click or tap here to enter text.

 Minimum Slope (%): Click or tap here to enter text.

Maximum Slope (%): Click or tap here to enter text.

Maximum Velocity (fps): Click or tap here to enter text.

Minimum Depth of Catch Basin (ft): Click or tap here to enter text.

Standard Drawings Reference(s):

Click or tap here to enter text.

## 2.2 Design Information

State the following parameters used as they will be shown on submitted plan sheets and DGN files. These values should match the current design of the project.

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***Take Note!***

*In this section, it might be helpful to fill in some of the information in tabular form. This may be done as long as the created table(s) lists* ***all information*** *described below.*

### 2.2.1 Plan

**Choose an item. Horizontal Alignment Name:** Click or tap here to enter text.

**(If multiple templates are used along the same alignment (e.g., design speed), the information can be copied automatically by selecting the blue “+” in the lower right-hand corner. (Note: Your cursor must be clicked inside the highlighted field to see the blue “+”.))**

**It may be helpful to verify the components of the template drops by reviewing the ORD Explorer >> OpenRoads Model >> Corridors drop-down. By reviewing the properties, you can see the applied station range, or you can open the Edit Template Drop tool to review components.**

TDOT Template Drop Used: Click or tap here to enter text.

Template Drop Station Range Click or tap here to enter text.

Lane Width (ft): Click or tap here to enter text.

Shoulder Width (ft): Click or tap here to enter text.

**(This information can be copied for each curve within the template drop by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

**It may be helpful to verify the horizontal curve data by reviewing the Horizontal Geometry Report (OpenRoads Modeling Workflow >> Home >> Model Analysis and Reporting >> Reports). However, this will not provide the superelevation rate or transition length applied to the model. You can use the Superelevation Report to review this information.**

Curve Click or tap here to enter text.:

 Curve Radius (ft): Click or tap here to enter text.

 Curve Length (ft): Click or tap here to enter text.

 Superelevation Rate (%): Click or tap here to enter text.

 Transition Length (ft): Click or tap here to enter text.

Curve Click or tap here to enter text.:

 Curve Radius (ft): Click or tap here to enter text.

 Curve Length (ft): Click or tap here to enter text.

 Superelevation Rate (%): Click or tap here to enter text.

 Transition Length (ft): Click or tap here to enter text.

Are spirals used? [ ]  Yes [ ]  No

**(If spirals are not required, remove the section below.)**

Spiral Click or tap here to enter text.:

Superelevation Rate (%): Click or tap here to enter text.

Transition Length (ft) (**xc**): Click or tap here to enter text.

Transition Offset (ft) (**yc**): Click or tap here to enter text.

Are compound curves used? [ ]  Yes [ ]  No

**(If compound curves are not used, remove the section below.)**

 Compound Curve: Click or tap here to enter text.

Ratio: Click or tap here to enter text.

 Superelevation Rate (%): Click or tap here to enter text.

 Transition Length (ft): Click or tap here to enter text.

### 2.2.2 Profile

**It may be helpful to verify the profile data by reviewing the Profile Report (OpenRoads Modeling Workflow >> Home >> Model Analysis and Reporting >> Reports).**

**Active Profile Name: Click or tap here to enter text.**

Minimum Profile Grade (%): Click or tap here to enter text.

Maximum Profile Grade (%): Click or tap here to enter text.

Minimum Vertical Clearance (ft): Click or tap here to enter text.

Minimum “**K**” Values (Sag & Crest) Used:

Click or tap here to enter text. & Click or tap here to enter text.

Maximum “**K**” Value (Sag & Crest) Used:

Click or tap here to enter text. & Click or tap here to enter text.

Minimum Stopping Sight Distance (ft): Click or tap here to enter text.

### 2.2.3 Cross Section

**It may be helpful to verify the components of the template drops by opening the Edit Template Drop tool to review the components. If a template drop from the TDOT Workspace was used or copied, the rollover transition criteria is already applied. If a template was created from scratch, verify in the Edit Template Drop window that the rollover transition criteria is being applied currently.**

Normal Crown Cross-Slope (%): Click or tap here to enter text.

 Do rollover transitions meet TDOT Standards? [ ]  Yes [ ]  No

*“The slope of the shoulder and the roadway pavement should not exceed an algebraic difference of 7%.”*

 If no, describe reason:

 Click or tap here to enter text.

Shoulder Cross-Slope (%): Click or tap here to enter text.

Pavement Thickness (in): Click or tap here to enter text.

Aggregate Thickness (in): Click or tap here to enter text.

Fill Slope (%): Click or tap here to enter text.

Cut Slope (%): Click or tap here to enter text.

Backslope (%): Click or tap here to enter text.

Referencing the General Slope Table ([TDOT Standard Drawing RD11-S-11](https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/standard_drawings/roadway_standard_drawings/current/roadway-design-standards/rd11-typical-sections-and-design-crieria/rd11-slope-developement-and-runoff-lengths/RD11S11.pdf)):

 What case does the mainline roadway fall within? [ ]  Case I [ ]  Class II

Do any side slopes along the mainline corridor differ from the used TDOT Typical Section and RD11-S-11 due to large cut and/or fill heights?

**(If no differing side slopes due to large cut and/or fill heights, remove the section below. This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

**Currently, the best way to review side slope transitions is to review the Dynamic Cross-Sections (OpenRoads Modeling Workflow >> Corridors >> Review >> Dynamic Cross-Sections >> Open Cross Section View) and select the corridor.**

If yes, Station Range: Click or tap here to enter text.

 Cut/Fill Height Range (ft-ft): Click or tap here to enter text.

Fill Slope (%): Click or tap here to enter text.

Cut Slope (%): Click or tap here to enter text.

Backslope (%): Click or tap here to enter text.

Is there proposed guardrail/barrier as part of design? [ ]  Yes [ ]  No

**(If guardrail/barrier not included in design, remove the section below. This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

 If yes fill out information:

Guardrail/Barrier Station Range: Click or tap here to enter text.

Roadside Hazard being Protected: Click or tap here to enter text.

End Treatments: Click or tap here to enter text.

Length of Need (ft) nearside & far side:

Click or tap here to enter text. & Click or tap here to enter text.

 Standard Drawings Reference(s):

Click or tap here to enter text.

Are there gore areas within project limits? [ ]  Yes [ ]  No

**(If no gore areas, remove the section below.)**

 If yes, Cross-Slope (%): Click or tap here to enter text.

### 2.2.4 Geotechnical Recommendations

**(The following information is to record any geotechnical recommendations received (e.g., undercutting sections).)**

Soil Depths (describe soils present and associated depths, e.g., topsoil, soil layers):

Click or tap here to enter text.

### 2.2.5 Structures and Bridges

**(The following information is to provide structural information within a project’s Hydraulic Grade Approval. The criteria for a structure to require Hydraulic Grade Approval is if the structure’s span is greater than 20’ or flow is greater than 500cfs.)**

Did this project receive drainage design data as part of Hydraulic Grade Approval?

[ ]  Yes [ ]  No

If yes, attach Hydraulic Grade Approval Letter.

### 2.2.6 Pipe Culverts and Box Culverts

**(If no culverts within project limits, remove the section below. This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

**It may be helpful to verify the information below by reviewing the ORD Explorer >> Drainage and Utilities Model drop-down. The information should be contained within the PRJ NAME-DES-Structures Model file, if following the** [**TDOT ORD File Naming Convention Standards**](https://www.tn.gov/content/dam/tn/tdot/roadway-design/documents/tdot-ord-workspace/requirements/TDOT%20ORD%20File%20Naming%20Convention%20Standards.pdf) **document.**

Culvert Station or Station Range: Click or tap here to enter text.

Culvert Description (e.g., 2 @ 3’ x 5’, 45̊ Skew RCBC or 1 @ 36”, 90̊ Skew RCP): Click or tap here to enter text.

Side Slope of Wingwalls (%): Click or tap here to enter text.

Standard Drawings Reference(s): **(include standard drawings for pipes, boxes, wingwalls, endwalls, etc.)**

Click or tap here to enter text.

### 2.2.7 Special Ditches

**(If no special ditches within project limits, remove the section below. This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

**The method used to incorporate special ditches into the ORD Model will determine how to review the components. For the most part, special ditches should be reviewable within the Explorer >> OpenRoads Model >> Corridor and fall under Point Controls, End Condition Exceptions, or Parametric Constraints. How special ditches are incorporated into the ORD Model should be specified in the Modeling Information (**[**Section 2.3**](#_Modeling_Information)**) of this roadway.**

Special Ditch Station Range and Shape (e.g., STA. 10+00 – 12+00 LT Trapezoidal Ditch, 2’ bottom):

Click or tap here to enter text.

Fill Slope (%): Click or tap here to enter text.

Cut Slope (%): Click or tap here to enter text.

Backslope (%): Click or tap here to enter text.

Ditch Width (ft): Click or tap here to enter text.

Longitudinal Slope (%): Click or tap here to enter text.

Are any transverse slopes used? [ ]  Yes [ ]  No

 If yes fill out information.

**This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

Transverse Slope Station Range: Click or tap here to enter text.

Slope (%): Click or tap here to enter text.

### 2.2.8 Retaining Wall

**(If no retaining walls are present within project limits, remove the section below. This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

**Retaining walls will most likely be applied to the model by using an End Condition Exception. You can review this information within the Explorer >> OpenRoads Model >> Corridor >> End Condition Exceptions.**

Alignment Name: **Click or tap here to enter text.**

Retaining Wall Station Range: Click or tap here to enter text.

Retaining Wall Minimum Height (ft): Click or tap here to enter text.

Retaining Wall Maximum Height (ft): Click or tap here to enter text.

Retaining Wall Type **(Refer to Standard Drawing Naming Convention)**: Click or tap here to enter text.

Standard Drawings Reference(s):

Click or tap here to enter text.

### 2.2.9 Noise Wall

**(If no noise walls are present within project limits, remove the section below. This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each type of curve’s information.)**

**Noise walls will most likely be applied to the model by using an End Condition Exception. You can review this information within the Explorer >> OpenRoads Model >> Corridor >> End Condition Exceptions.**

Alignment Name: Click or tap here to enter text.

Noise Wall Station Range: Click or tap here to enter text.

Noise Wall Height: Click or tap here to enter text.

Noise Wall Width: Click or tap here to enter text.

Noise Wall Type: Click or tap here to enter text.

Noise Drawings Reference(s):

Click or tap here to enter text.

### 2.2.10 Natural Stream Design

**Natural stream designs will most likely be applied to the model by creating a natural stream alignment and profile, then applying a stream corridor and associated template drop. It may be helpful to verify the components of the template drops by reviewing the ORD Explorer >> OpenRoads Model >> Corridors drop-down.**

Natural Stream Alignment Name: Click or tap here to enter text.

Station Range along Roadway: Click or tap here to enter text.

Fill Slope (%): Click or tap here to enter text.

Cut Slope (%): Click or tap here to enter text.

Backslope (%): Click or tap here to enter text.

Channel Width (ft): Click or tap here to enter text.

Longitudinal Slope (%): Click or tap here to enter text.

Reasoning for Need:

Click or tap here to enter text.

Standard Drawings:

Click or tap here to enter text.

Attach any design requirements from TDOT Environmental Division.

### 2.2.11 EPSC Design

Narrative Description of EPSC Phases:

Click or tap here to enter text.

EPSC Drawings Reference(s):

Click or tap here to enter text.

### 2.2.12 Traffic Design

#### 2.2.12.1 Traffic Control Design

**(The following information is to record traffic control measures and design during construction.)**

Narrative Description of Traffic Control through Construction Stages:

Click or tap here to enter text.

Traffic Control Drawings Reference(s):

Click or tap here to enter text.

#### 2.2.12.2 Maintenance of Traffic Design

**(The following information is to record traffic control measures and design once the project has been constructed (e.g., If a signal design is included and will be implemented as a permanent traffic control measure.)**

Narrative Description of Maintenance:

Click or tap here to enter text.

Maintenance of Traffic Drawings Reference(s):

Click or tap here to enter text.

## 2.3 Modeling Information

This section is intended to describe how a roadway’s modeling is controlled. The benefit of having this documented is: (1) allows for consistency if multiple designers are working on a project, (2) beneficial if there are any design team personnel changes during the project, and (3) assists in design model reviews before submittals. This section is not limited to the prompts below. These are a starting point will evolve as the design progresses.

### 2.3.1 General Design Information

Alignment Name: Click or tap here to enter text.

Profile Name: Click or tap here to enter text.

Existing Terrain Name: Click or tap here to enter text.

Proposed Terrain Name:Click or tap here to enter text.

Name of Project ITL File: Click or tap here to enter text.

**Modeling Narrative: (Brief description of how the designer/design team approached the modeling of this roadway.)**

Click or tap here to enter text.

### 2.3.2 Major Model Revisions Log

This area is to be used to record major model revisions after a submittal throughout the lifecycle of the project. A major model revision is considered to be:

|  |  |  |
| --- | --- | --- |
| Previous Deliverable/ Plan Set Submitted: | Submittal at Time of Major Revision:  | Major Revision Description:  |
| Click or tap here to enter text. | Click or tap here to enter text. | Click or tap here to enter text. |

### 2.3.3 Project Customization

This area is used to record any custom ORD elements used, such as feature definitions, levels, colors, line styles that are not in the default TDOT Workspace.

 Click or tap here to enter text.

### 2.3.4 Corridor Template Drops

This area is used to record a brief narrative of how the corridor was developed. The corridor editing tool can be utilized to assist in the description. **(This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each template drop used.)**

**It may be helpful to verify the components of the template drops by reviewing the ORD Explorer >> OpenRoads Model >> Corridors drop-down. By reviewing the properties, you can see the applied station range, or you can open the Edit Template Drop tool to review components.**

Station Range of Template Drop: Click or tap here to enter text.

Name of Template: Click or tap here to enter text.

Description of Template (e.g., TS-3A (4LN) – 3 Layer): Click or tap here to enter text.

### 2.3.5 Corridor Controls

This area is used to record how the roadway’s corridor is controlled by documenting a brief narrative. The corridor editing tool can be utilized to assist in the description. For example, if end condition exceptions were used to control different special ditches and parametric constraints for tapers, that information would be included here.

**It may be helpful to verify the following Corridor Edits by reviewing the ORD Explorer >> OpenRoads Model >> Corridors drop-down and selecting the applicable corridor editing tool.**

**End Condition Exception**:

Click or tap here to enter text.

**Key Stations**:

Click or tap here to enter text.

**Secondary Alignment**:

Click or tap here to enter text.

**Parametric Constraint**:

Click or tap here to enter text.

**Curve Widening**:

Click or tap here to enter text.

**Point Control**:

Click or tap here to enter text.

**Other**:

Click or tap here to enter text.

### 2.3.6 Drainage Modeling Information

This area is used to describe the drainage modeling process. For simplicity, systems will be grouped by outfall.

Extended Terrain Name: Click or tap here to enter text.

Existing Drainage Network Description:

Click or tap here to enter text.

**Proposed Drainage Network:**

The following information is intended to describe each drainage scenario to an outfall, which includes ditches and cross drains to a stormwater system.

**(This information can be copied as needed by selecting the blue “+” in the lower right-hand corner of each outfall of the proposed drainage network information.)**

**It may be helpful to verify the information below by reviewing the ORD Explorer >> Drainage and Utilities Model drop-down or Flex Tables that have been run.**

Outfall Name: Click or tap here to enter text.

Drainage Elements Used **(include pipe lengths, end treatments, catch basin sizes (if applicable), etc.)**:

Click or tap here to enter text.

Velocity Control **(can include the type of energy dissipaters, riprap dimensions, etc.)**:

Click or tap here to enter text.

Modeling Notes **(can include any information that would be helpful to document regarding how the modeling of this drainage network was setup.)**:

Click or tap here to enter text.