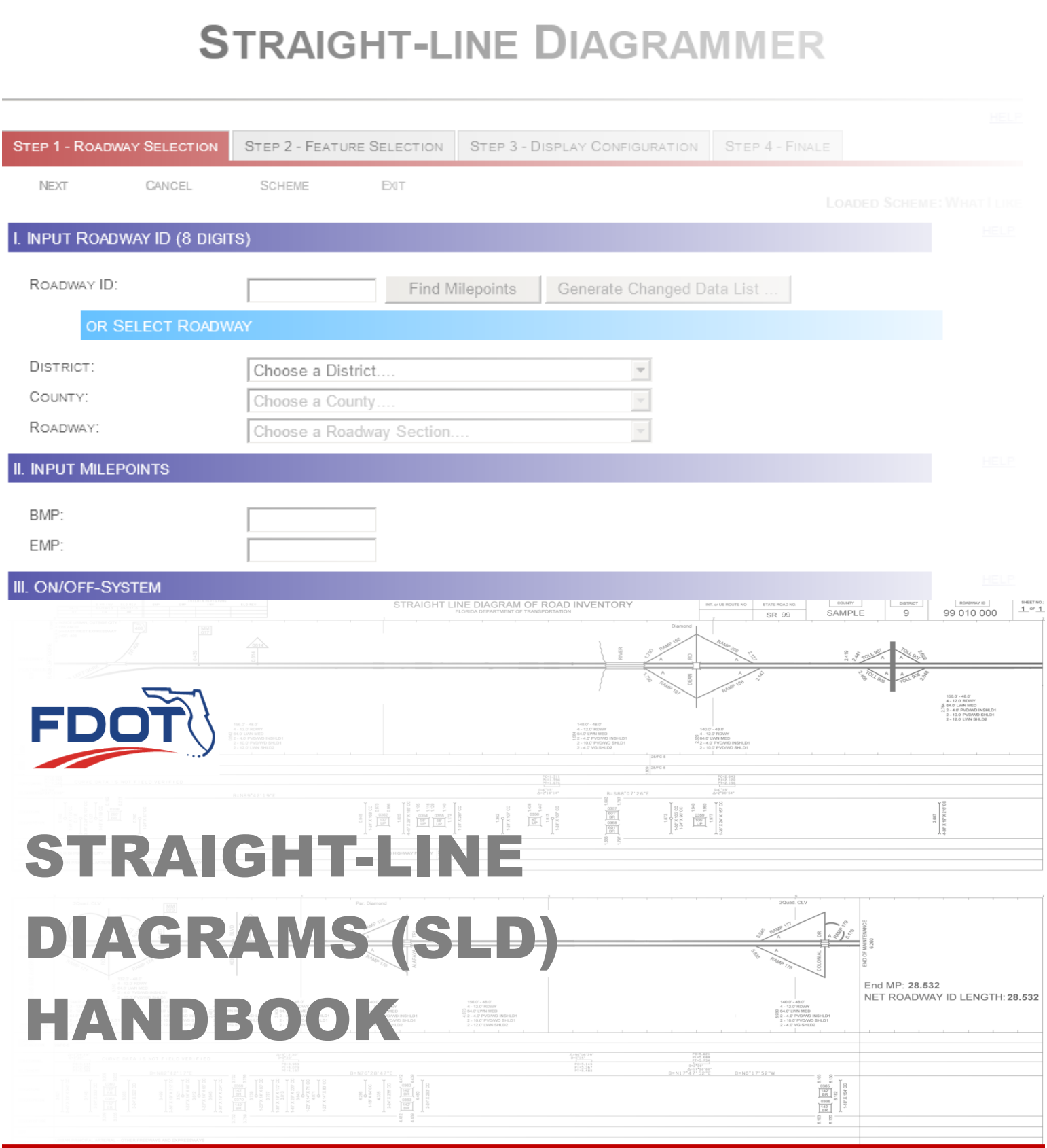

STRAIGHT-LINE DIAGRAMS (SLD) HANDBOOK

Florida Department of Transportation
Transportation Data & Analytics Office

APRIL 2023

The

SLD HANDBOOK

is produced by:

Transportation Data & Analytics Office
Florida Department of Transportation

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Copies may be downloaded in PDF format from the Transportation Data & Analytics Office Publications website: https://www.fdot.gov/statistics/tsopubs.shtm

Suggestions and Errata

The Transportation Data & Analytics Office desires that the SLD Handbook be as useful as possible to those working with straight-line diagrams. Your suggestions for improvement, desired additions, and notice of errors or omissions are welcome. Please send any comments to:

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Log of Changes

April 2023

	Page(s)	Description	Date
1	vi	Added List of Figures	3/31/2023
2	8-27	Replaced Straight-Line Diagrammer Screenshots	3/31/2023
3	28	Updated References to Spatial Data & Analytics Section	3/31/2023
4	28-36	Updated SLO URL and Screenshots	3/31/2023
5	36	Updated General Interest Roadway Data Text	3/31/2023
6	40	Updated Turnpike Contacts Information	4/25/2023
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STRAIGHT-LINE DIAGRAMS

This document provides information on the Straight-line Diagram (SLD), what it contains, how to generate it and other related information.

What is a Straight-line Diagram?

An SLD is a graphical linear representation of select Roadway Characteristics Inventory (RCI) data as coded for individual roadways Active On the State Highway System (SHS). However, as an optional feature, SLDs for Active off the SHS roadways may be produced at the discretion of the Districts. The SLD is annotated with text information and graphics that describe or illustrate information considered general interest roadway data (e.g., intersecting roadways, roadway descriptions, bridges and other structures, functional classification, and curve data, etc.). SLDs require regeneration whenever certain data changes. See the SLD Regeneration Requirements on pages 24 and 25.

A standard SLD has eleven reporting sections. In addition to the header, the basic SLD is composed of two divisions – top and bottom partitions. Each partition reports several different classes of data that include administrative, physical, classification, and status data. There is also an area reserved for District use.

Reporting Sections

An SLD has 11 reporting sections, A-K, that report different types of related data. However, at the District's discretion, the SLD can expand up to sections A-T to include additional optional information. In the header area of the SLD, the first four sections reflect primarily administrative and inventory related information.

Section A - SLD Inventory Block

The upper left most set of boxes for data entry is the revisions initial box or frequently referred to as the SLD inventory block.

Components of the SLD inventory block should reflect the dates recorded in RITA (Roadway Inventory Tracking Application):

- 5 YR INV – Date of field visit for 5-year re-inventory
- SLD REV – Date the revised SLD is produced after 5 YR INV
- BMP – Beginning milepoint (BMP) for interim revisions due to change
- EMP – Ending milepoint (EMP) for interim revisions due to change
- INV – Date of field visit for interim re-inventory due to change
- SLD REV – Date revised SLD is produced after interim re-inventory due to change
- DATE – Date of occurrence in mm/dd/yyyy format
- BY – Initials of the person making the change to the SLD

Section B - Roadway ID and Sheet No.

Identifies the eight-digit roadway ID number and the sheet numbers.

Section C - County and District

Displays the name of the county and the two-digit District number.

Section D - Overall Section Status, Interstate or US Route No., and State Road No.

Displays the overall section status (taken from the V/U/D screen), interstate or US route number (Feature 113), and state road number (Feature 111). Features 111 and 113 display according to how they are coded in RCI. Ensure that RCI is coded correctly according to the Features & Characteristics Handbook.

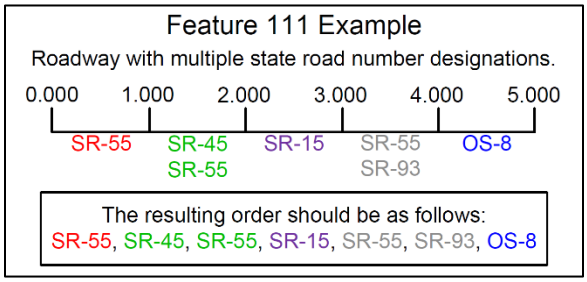

Figure 1 - Feature 111 Example

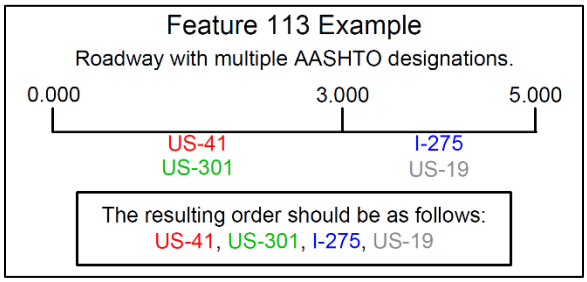

Figure 2 - Feature 113 Example

Section E - Roadway Features

Displays the data as coded in Features 111, 113, 114, 120, 124, 138 (added automatically), 140 (added automatically), 141 (added automatically), 143 (added automatically), 212, 214, 215, 219, 251, 252, 253, 258, 320, 322, and 326. Identify these features by their milepoint number.

Section F - Roadway Composition

Displays the roadway surface characteristics and surface type as coded in Features 230 and 232, respectively. The friction course information displays when it is available.

Section G - Horizontal Alignment

Displays information about the curvature and bearing of the roadway as coded in Features 220 and 221. The horizontal alignment data is divided into left and right roadway sides by the line that bisects this area, so that data for curves to the left are entered above the line and data for curves to the right are below the line.

Section H - Structure Description

Displays structural information about bridges, drainage pipes, overpasses, and culverts as coded in Features 241 and 258. Two symbols represent structures on the SLD. Structures less than 20 feet long are shown by a vertical

graphic (a line with inverted arrowheads at each end) with annotated text. This format is similar for drainage pipes. If the structure is over 20 feet long, the bridge graphic is shown (a text-annotated rectangle). Text data for bridges, at a minimum, includes the beginning and ending milepoints, structure number, structure type code, and approximate width in feet.

Section I - District Use (optional)

Districts can use this section to show non-standard information that is not currently required.

Section J - SIS

Displays the Strategic Intermodal System (SIS) designation for the roadway as coded in Feature 147. There are 14 SIS designations that can be coded for highway facilities, connectors, military access, and links.

Section K - Functional Classification

Displays the Federal Functional Classification designation as coded in Feature 121 for the roadway. There are 12 designations ranging from urban principal arterial (the highest level) to rural local road (the lowest level).

Section L - Traffic Data (optional)

Displays the annual average daily traffic volume, average D factor, average K factor, average T factor, and date as coded in Feature 331.

Section M - Speed Limit (optional)

Displays the speed limit for each side of the roadway as coded in Feature 311. This section is divided like the Horizontal Alignment section showing the left side of the roadway on top and the right side of the roadway on bottom.

Section N - Bike Lanes (optional)

Displays where bike lanes are located along the roadway as coded in Feature 216. This section is divided like the Horizontal Alignment section showing the left side of the roadway on top and the right side of the roadway on bottom. For the left side of the roadway, bike slots are shown above the bike lanes, and for the right side of the roadway, bike slots are shown under the bike lanes. See the Annotated SLD on page 4.

Section O - Sidewalks (optional)

Displays where sidewalks are located along the roadway as coded in Feature 216. This section is divided like the Horizontal Alignment section showing the left side of the roadway on top and the right side of the roadway on bottom.

Section P - Access Management (optional)

Displays the access management classification as coded in Feature 146.

Section Q - Managed Lanes (optional)

Displays the data as coded in Feature 142.

Section R - NHS (optional)

Displays the data as coded in Feature 112 TRAVLWAY.

Section S - Special Designations (optional)

Displays the data as coded in Feature 115 SCENEHWY.

Section T - HPMS (optional)

Displays the data as coded in Feature 118 HPMSIDNO.

Should a District choose to create their own SLDs, those SLDs must still contain the same format, order, look, and data as if the SLD was generated from the currently approved SLD Diagrammer.

NOTE: Do not remove or modify the Version Notation in the bottom left corner.

SLD Legend

5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE 0308/2005	03/18/2005	0.280	0.895	09/14/2008	09/20/2008
BY KAB	FGH				

SECTION A

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO.
99	US 99/US 99A/I 999	SR 999/SR999A	SAMPLE	99	99030000	1 OF 1

SECTION D SECTION C SECTION B

SECTION E ROADWAY FEATURES

Route Name and Number — Feature 111

Optional Symbology

State Road Numbers: 417, TOLL 618, 901

County Road Number: 18, 250 A

Feature 113

Optional Symbology

Interstate Number: INTERSTATE 95

U.S. Route Number: 27, BUS 41, 90

This features identifies the federal route number.

Feature 114

Local Name: "<=W MAIN ST"

Urban Classification — Feature 124

Boundary Status Combinations

Urban & Municipal Status
Outside City & Urban
Inside Urban, Outside City
Inside City, Not Urban
Inside City & Urban

Report Format:

MP | x Urban & Municipal Status | x
x Urban Area and/or City Name | x
x | x

Indicates change in Urban and/or City Class or Name, but status remains the same.

Examples of possible combos (change begins/ends on side of X's)

19.519: x Inside City & Urban; x Winter Garden, Orlando; x; x — **Ex: 1**

27.220: x Inside Urban, Outside City; x Orlando; x; x — **Ex: 2**

Intersections — Feature 251

Identifies the intersecting road names, 9 directions and 4 types.

FLOYD BLVD 0.726 A; 1.499 A; RAMP # 023 15.989 A; W COMMERCIAL BLVD 1.499 A; S MIAMI AVE 0.136 A; EB OFF TO SR 50 16.000 A

Intersection Surface Types: *optional*
A - Asphaltic Concrete
B - Brick
C - Portland Cement Concrete
O - Other

Interchanges — Feature 252

Exit Number: EXIT # 38

Type of Interchange: DIAMOND

WB FROM SR 44 1.000; MAIN ST; WB TO SR 44 1.030; EB TO SR 44 1.005; EB FROM SR 44 1.025

Types of Interchanges:
Diamond
Partial Diamond
Trumpet
Y Intersection
Partial Clover
4 Quad Clover with Collector
4 Quad Clover
Direct Connection Design
Other

Identifies the interchanges along the roadway with the exit number and the type of interchange.

Structures — Feature 258

Box Culverts/Bridges: (roadway travels on structure)

Underpasses: (roadway travels under structure)

Facility Crossing; CREEK; HOGTOWNE; Box Culvert; LAKE; CYPRESS; Bridge; 18; MAIN ST; Underpass

Identifies all structures intersecting the roadway and names of the facility crossings.

Railroads — Feature 253

Identifies the at-grade railroad crossings that intersect the roadway.

627451-B; Check Digit; RR Crossing Number; 5.931; M P; At-grade Railroad

Type Road — Feature 120

Not divided; Left Side; Right Side; Divided

Left Side / Right Side **INVENTORY DIRECTION**

Most roadways are inventoried in the direction of:
South to North or West to East

Surface and Lane Width — Features 212, 214, 215, 219

Identifies the total width for Through Lanes, Medians, Outside Shoulders, and Inside Shoulders.

291.0' = total road width; 72.0' = total through lane surface width

291.0' - 72.0'
6 - 12.0' RDWY
195.0' VEG MED
2*10.0' PVD SHLD1
2*2.0' LWN SHLD2
2*10.0' PVD INSHLD1

291.0'= 72.0' of RDWY + 195' VEG MED + 20 ' PVD SHLD1 + 4' LWN SHLD2

Through Lanes — Feature 212

Identifies the total width for Through Lanes.
e.g. 72.0' = 6 Lanes each at 12.0' wide

291.0' - 72.0'
6 - 12.0' RDWY
195.0' VEG MED
2*10.0' PVD SHLD1
2*2.0' LWN SHLD2
2*10.0' PVD INSHLD1

The leading "6" identifies that there are six 12-foot travel lanes.

Outside Shoulders — Feature 214

Identifies the Outside Shoulder Width and Type.
e.g. 4' Paved Shoulder1 Left, 8' Lawn Shoulder2 Left, and one 12' Lawn Shoulder1 Right

291.0' - 72.0'
6 - 12.0' RDWY
195.0' VEG MED
4.0' PVD SHLD1 - LT
8.0' LWN SHLD2 - LT
12.0' LWN SHLD1 - RT
2*10.0' PVD INSHLD1

Different shoulders widths from side to side are noted with "LT" - Left and "RT" - Right

Inside Shoulders — Feature 219

Identifies the Inside Shoulder Width and Type.
This measurement is included within the Median Width. e.g. 2*10' Paved Inside Shoulders

The leading "2" identifies that there are two-10 foot paved inside shoulders.

291.0' - 72.0'
6 - 12.0' RDWY
195.0' VEG MED
2*10.0' PVD SHLD1
2*2.0' LWN SHLD2
2*10.0' PVD INSHLD1

The inside shoulder width is excluded from the total measurement of 291.0' because it is included in the median width.

Mile Marker Signs — Feature 320

MM 99; MM 100; 0.649; 0.670; Divided Road; Undivided Road

Signals — Feature 322

Undivided Road; A APOPKA BLVD 0.870; O HOWDY BLVD 0.891; Divided Road

Medians — Feature 215

Identifies the median width and type.
e.g. 195.0' Vegetation

291.0' - 72.0'
6 - 12.0' RDWY
195.0' VEG MED
4.0' PVD SHLD1 - LT
8.0' LWN SHLD2 - LT
12.0' LWN SHLD1 - RT
2*10.0' PVD INSHLD1

RDMEDIAN Abbreviations: (updated July 2013)
PVD = paved
TFSP = raised traffic separator
VEG = vegetation
CB&VEG = curb & vegetation
OTHER = other

Reference the RCI Features & Characteristics Handbook for more RDMEDIAN code values and descriptions.

Reference the SLD Handbook Appendix for other abbreviations.

Traffic Monitoring — Feature 326

Identifies traffic monitoring sites.

For further information contact TDA.

Site Types:
TTMS - Telemetered traffic monitoring site (TDA)
PTMS - Portable traffic monitoring site (District)
Road Tubes - Tube count site (District)
Virtual Count Station - Virtual count site (Turnpike)
Inactive Count Station - Inactive count site (District)

TTMS: *A continuous traffic sensor at a specific permanent site.* Site Number 5057; MP 1.000

PTMS: *A non-continuous traffic sensor at a specific permanent site.* Site Number 3056; MP 1.000

Road Tube: *A portable traffic monitoring site that uses rubber hoses as sensors.* Site Number 0043; MP 1.000 — Optional Symbology

Virtual Count Station: *Electronic data collection from tolls and cameras.* Site Number 1002; MP 1.000 — Optional Symbology

Inactive Count Station: *An inactive traffic monitoring site.* MP 1.000 — Optional Symbology

SECTION F ROADWAY COMPOSITION

Pavement Surface Type — Feature 230

Identifies the pavement surface type.

Surface Types:
08 - Portland Cement Concrete
25 - Brick
28 - Asphaltic Concrete
99 - Other

Format: MP | Surface Type / Friction Course

Examples:
Not divided Road: 1.000 | 28/FC-2
Divided Road: 1.000 | 28/FC-2; 28/FC-2

Surface Layers — Feature 232

Identifies the type of Friction Course.

Types of Friction Courses:
0 - None
1 - Type 1
2 - Type 2
3 - Type 3
4 - Type 4
5 - Type 5
6 - Type 6
7 - Type 9.5
8 - Type 12.5
9 - Other

Format: MP | Surface Type / Friction Course

Examples:
Not divided Road: 1.000 | 28/FC-2
Divided Road: 1.000 | 28/FC-2; 28/FC-2

SECTION G HORIZONTAL ALIGNMENT

Non-Curve Intersection — Feature 220

Identifies the non-curve point of Intersection.

Non-Curve Intersection Codes:
Δ - Horizontal Curve Central Angle (degrees)
PI - Point of Intersection (MP)
B - Bearing = Δ & PI (non-gradual curves or directional change only, major turns shown using Bearings)

Examples with and without Bearing:
Shift to the right: without bearing — PI = 12.456; Δ = 9°15'00"
Shift to the left: with bearing — Δ = 9°15'00"; PI = 2.091 B = N15°07'00"W

Horizontal Curve — Feature 221

Identifies the Horizontal Curve Data such as bearings, central angles, degrees of curves, and points of intersections.

Horizontal Curve Codes:
Δ - Horizontal Curve Central Angle (degrees)
D - Degree of Curvature (degrees or radians)
PC - Point of Curvature (MP)
PI - Point of Intersection (MP)
PT - Point of Tangency (MP)
B - Bearing = Compass Bearing on Tangent (compass direction N or S in degrees & curve)

Examples with and without Bearing:
Curve to the right: with bearing — PC = 3.519; PI = 3.577; PT = 3.632; D = 0°05'00"; Δ = 0°29'30"; B = S89°32'25"E
Curve to the left: without bearing — Δ= 0°48'00"; D = 0°05'00"; PC = 3.965; PI = 4.056; PT = 4.147

SECTION H STRUCTURE DESCRIPTION

Structures & Crossdrains

Structures:
BR - Bridge (roadway travels on structure)
UP - Underpass (roadway travels under structure)
CB - Box Culvert ≥ 20'
TL - Tunnel

Crossdrains:
CBC - Concrete Box Culvert
CC - Concrete Pipe
CIP - Cast Iron Pipe
CMP - Corrugated Metal Pipe

Structure Attributes:
MP - Milepoint
SN - Structure Number
L - Length
TS - Type of Structure
NC - # of Structures
DIA - Diameter
W - Width
H - Height

Structures — Feature 258

Identifies the structure number, milepoint, and structure length or width.

For further information see the Bridge Management System.

BMP; SN; L; TS; EMP

Crossdrains — Feature 241

Identifies the type of crossdrain, the number of pipes, and the crossdrain diameter.

For further information contact the Office of Maintenance.

Crossdrains: MP (composite); NC - Dia.(" or mm) X L' TS; MP (right); MP (left)

Culverts: MP (composite); NC - W' X H' X L' TS

Examples:
1.149: 1 - 18" X 80' CC
1.280: 1 - 24" X 70' CC - LT; 1 - 24" X 84' CC - RT
23.544: 1 - 18" X 128' CC
1.670: 1 - 4' X 3' X 145' CBC

Bridges and Box Culverts
20 feet and over in opening, have a structure number, and are coded under Feature 258

Box Culverts and Drainage
less than 20 feet in opening, do not have a structure number, and are coded under Feature 241

SECTION I DISTRICT USE

For District Use

Traffic Flow Breaks — Feature 331

SECTION L

AADT – Annual Average Daily Traffic
D – Predominate direction flow of traffic
K – Ratio of peak hour to AADT
T – Percentage of AADT that was trucks
Date – AADT date

0.755: AADT=60,000 D=50.7 K=8 T=8.6

Speed Limits — Feature 311

SECTION M

For undivided roadways, only one MPH displays.
For divided roadways, two MPHs display – the top is for the left side and the bottom is for the right side of the roadway.

0.500: 45MPH; 0.700: 60MPH; 50MPH

Access Management Class — Feature 146

SECTION P

Displays the access management classification code 00-07 or 99.

1.000: ACCESS CLASS01

SECTION J SIS

SIS — Feature 147

Identifies the Strategic Intermodal System, designated and/or emerging SIS routes, and connectors

Highway Facilities
SIS Corridor
SIS Corridor Planned Add
Emerging SIS Corridor Planned Add
Emerging SIS Corridor
SIS Corridor Planned Drop
Emerging SIS Corridor Planned Drop

Connectors
SIS Connector
SIS Connector Planned Add
SIS Connector Planned Drop

Military Access
Military Access
Military Access Planned Add
Military Access Planned Drop

Links
SIS Link
Emerging SIS Link

For further information contact the Systems Planning Office.

SECTION K FUNCLASS

Functional Classification — Feature 121

Functional Classification is the assignment of roads into systems according to the character of service they provide in relation to the total road network.

Rural Functional Classification Types:
Rural Principal Arterial - Interstate
Rural Principal Arterial - Freeways and Expressways
Rural Principal Arterial - Other
Rural Minor Arterial
Rural Major Collector
Rural Minor Collector
Rural Local

Urban Functional Classification Types:
Urban Principal Arterial - Interstate
Urban Principal Arterial - Freeways and Expressways
Urban Principal Arterial - Other
Urban Minor Arterial
Urban Major Collector
Urban Minor Collector
Urban Local

Functional Classification Example:
0.000: RURAL MAJOR COLLECTOR | 1.149: RURAL MINOR ARTERIAL

NOTES:
- Milepoint Conversion: 0.001 miles = 5.28 feet, 0.010 miles = 52.8 feet, 0.100 miles = 528 feet, 1.000 miles = 5,280 feet
- Inventory Tolerance: Within Urban Areas, 0.010 miles or 52.8 feet, within Rural Areas, 0.050 miles or 264.0 feet
- For further information on feature data refer to the RCI Features & Characteristics Handbook.
- For further information on straight-line diagram production refer to the SLD Handbook.
- SLDs consist of two partitions, an upper and lower. The upper and lower partitions contain the same sections, however the data in each partition differs.

Purpose: *To guide and direct users in reading SLDs*
Prepared by: *Transportation Data & Analytics Office*
Date: *06/30/2017*

Annotated SLD

	5 YR INV	SLD REV	BMP	EMP	INV	SLD REV
DATE	0308/2005	03/18/2005	0.280	0.895	09/14/2008	09/20/2008
BY	KAB	FGH				

FLORIDA DEPARTMENT OF TRANSPORTATION

STRAIGHT LINE DIAGRAM OF ROAD INVENTORY

SECTION STATUS	INT. or US ROUTE NO.	STATE ROAD NO.	COUNTY	DISTRICT	ROADWAY ID	SHEET NO:
99	US 99/US 99A/I 999	SR 999/SR999A	SAMPLE	99	99030000	1 OF 1

UPPER PARTITION

SECTION A · SECTION D · SECTION C · SECTION B

SECTION E ROADWAY FEATURES / LANE WIDTHS ARE AVERAGED / INVENTORY DIRECTION

- INSIDE URBAN, OUTSIDE CITY; * SAMPLE TOWN; *|<=EXAMPLE ST Feature 114; *|<SR 999) Feature 111; *|<US 99) Feature 113
- 0480 — 0.152 — Feature 326
- Feature 120: 94.0' - 48.0'; 4 - 12.0' RDWY; 40.0 VEG MED; 2* 2.0' VG SHLD1; 2.0' VG SHLD2 - LT
- 109.0' - 48.0'; 4 - 12.0' RDWY; 40.0 PVD MED; 6.0' PVD SHLD1 - LT; 5.0' PVD SHLD1 - RT; 10.0' LWN SHLD2 - RT
- ACTIVE OFF THE SHS (MP 0.216 TO MP 0.280) — Feature 140 (added automatically)
- Optional Symbology: 4949 — CR 4949 A — 0.402
- 117.0' - 48.0'; 4 - 12.0' RDWY; 164.0 VEG MED; 2* 10.0' WARN SHLD1; 2* 12.0' LWN SHLD2; 12.0' WARN INSHLD1 - LT; 10.0' WARN INSHLD1 - RT — Feature 212, 214, 215, & 219
- 625860Y — 0.464 — Feature 253
- MM 99 — 0.649 — Feature 320
- Optional Symbology: 499 — 0.762 SR 499 A — Feature 258
- 58.0' - 48.0'; 4 - 12.0' RDWY; 6.0 TFSP MED; 2* 2.0' C&G SHLD1
- A APOPKA BLVD 0.879 — Feature 322
- REALIGNMENT SEE ROADWAY ID: 99030001 MP 0.000 TO MP 0.985; DELETED (MP 0.895 TO MP 1.000) — Feature 138 (added automatically)

SECTION F ROADWAY COMPOSITION

- 28/FC-5 / 28/FC-5 — Feature 230 & 232
- 28/SAHM
- 28/FC-5 / 28/FC-5

SECTION G HORIZONTAL ALIGNMENT

- CURVE DATA NOT FIELD VERIFIED
- PI=0.189; Δ=0°28'02.00" — Feature 220
- B=N32°18'44"W — Feature 221
- Δ=0°07'53.00"; PI=0.762
- Feature 221: Δ=59°51'28.00"; D=0°45'; PC=0.900; PI=0.950; PT=0.979

SECTION H STRUCTURE DESCRIPTION

- #0552; 211; BR — Feature 241: 1 - 30' X 80' CC
- #0743; 132; UP — Feature 258
- 1 - 18' X 57' CC

DISTRICT USE — SECTION I

SIS — SIS CORRIDOR Feature 147 — SECTION J

FUN CLASS — URBAN OTHER PRINCIPAL ARTERIAL Feature 121 — SECTION K

TRAFFIC — AADT=36,000 D=99.9 K=8 T=8.6 — SECTION L — AADT=60,000 D=50.7 K=8 T=8.6 — Feature 331

SPEED LIMIT — SECTION M — 55MPH / 55MPH — 45MPH — Feature 311: 60MPH / 50MPH

BIKE LANES — SECTION N

- DESIGNATED — Feature 216 (bike slot)
- DESIGNATED
- DESIGNATED
- DESIGNATED
- Feature 216 (bike lane)

DISCLAIMER:

An SLD will always show the exact same sections for the upper and lower partitions. This is only an example SLD that illustrates how features are displayed in their respective section.

LOWER PARTITION

SECTION E · SECTION O · SECTION C · SECTION B

- INSIDE URBAN, OUTSIDE CITY; * ORLANDO; *|<=EXAMPLE ST; *|<SR 999; *|<US 99A
- EXAMPLE ST=>|<=ILLUSTRATION RD; FLORAL RD O 1.139; BREAD AVE C 1.160; PEMBERTON DR A 1.139; BRICK ST 1.157 B; 0021 — 1.227; PALM AVE O 1.267; LASER DR 1.019 A
- 116.0' - 48.0'; 4 - 12.0' RDWY; 40.0 VEG MED; 2* 4.0' PVD SHLD1; 2* 10.0' LWN SHLD2 — Feature 251
- STATIONING EXCEPTION SEE ROADWAY ID: 99020000 MP 5.384 TO MP 6.013 — Feature 141 (added automatically)
- ASSOCIATED STATION EXCEPTION SEE ROADWAY ID: 99060000 MP 2.648 TO MP 3.012 — Feature 143 (added automatically)
- INSIDE CITY, AND URBAN; * APOPKA; * ORLANDO; *|<=ILLUSTRATION RD; *|<SR 999A; *|<I 999A
- 0028 — 1.736
- 108.0' - 26.0'L+24.0'R; 2 - 13.0'L + 2 - 12.0'R RDWY; 40.0 VEG MED; 2* 9.0' LWN SHLD1
- 106.0' - 48.0'; 4 - 12.0' RDWY; 40.0 VEG MED; 2* 9.0' LWN SHLD1
- Optional Symbology
- 2Quad. CLV; RAMP 001; RAMP 003; I-99; RAMP 031; RAMP 030; RAMP 004; RAMP 002; 199 — Feature 252
- 49; US 49 1.896 A; B RED DR 1.870
- Optional Symbology

SECTION F ROADWAY COMPOSITION

- 28/FC-5 / 28/FC-5
- 28/FC-5 / 28/FC-5

SECTION G HORIZONTAL ALIGNMENT

- CURVE DATA NOT FIELD VERIFIED
- PC=1.227; PI=1.249; PT=1.267; Δ=51°57'12.00"; D=1°00'
- B=N32°18'44"W

SECTION H STRUCTURE DESCRIPTION

- 1.740 — 1 - 18' X 70' CC - LT; 1 - 18' X 84' CC - RT
- #9999; 227; UP — 1.757 — 1.808

SIDEWALKS — SECTION O

- 5' / 5'
- 1.653 — 10' — Feature 216 (sidewalk)
- 6'

AC MAN CLS — ACCESS CLASS01 Feature 146 — SECTION P

MAN LANES — SECTION Q — LMLBMP 1.102; RMLBMP 1.170; LMLRDWY 99030902; RMLRDWY 99030901; LMLEMP 1.800; RMLEMP 1.940

NHS — NHS/INTERMODAL CONNECTOR / NHS/INTERMODAL CONNECTOR — Feature 112 — SECTION R — NHS/MAP-21 PRINCIPAL ARTERIALS / NHS/MAP-21 PRINCIPAL ARTERIALS

END MP: 1.970 NET ROADWAY ID LENGTH: 1.518

Version: 14.2.17 04/10/2014 ← VERSION NOTATION

SLD Regeneration Process Flowchart

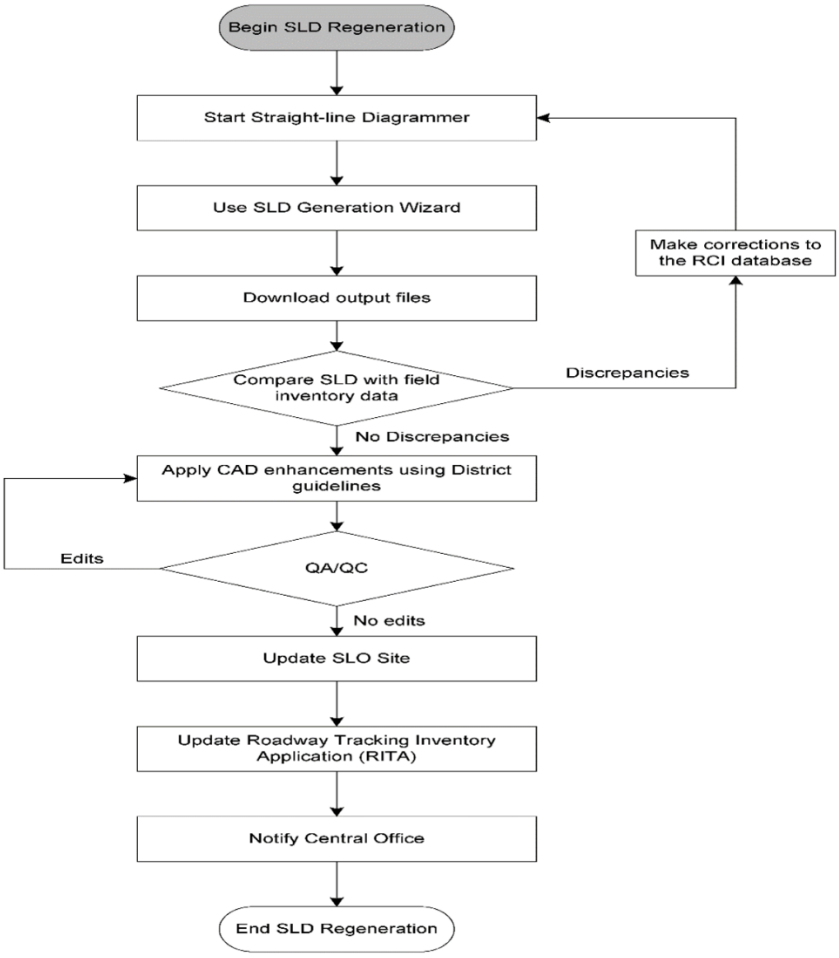

Figure 3 - SLD Regeneration Process Flowchart

SLD Specifications

Each roadway ID containing Feature 140 coded as code 2-Active On the SHS must have its own SLD.

Size

The layout is 11 by 17 inches.

Orientation

The layout orientation is landscape.

Layout Margins

All layout margins (top, bottom, left, and right) are 0.2 inches.

Color Scheme

SLDs are in black and white.

SLD Legend

If a District uses an optional section and adds symbology, then the SLD legend needs a description and explanation of that symbology. Otherwise, use the latest SLD Legend produced by Transportation Data & Analytics Office (TDA).

Straight-line Diagrammer Application

The Straight-line Diagrammer is a web-based application featuring a wizard interface to help generate SLDs from RCI data according to user-specified settings. It appeared online in October 2010 and can be accessed through the TDA SharePoint site: https://fdotewp2.dot.state.fl.us/StraightLineDiagrammer/welcome.aspx

Computer Requirements

To access the application, you should have:

- A personal computer with screen resolution at least 1024×768
- A web browser installed on the computer (Edge, Firefox, Chrome, Safari, …)
- A connection to FDOT intranet
- A valid FDOT user account

To review the SLD productions, you also need:

- An application for uncompressing zip files
- An application for reviewing PDF files (Adobe Acrobat Reader, Power PDF Advanced, …)
- An application for editing DXF files (MicroStation V8 XM, …)

Start the Straight-line Diagrammer

When you access the Straight-line Diagrammer, the *Welcome* screen displays first.

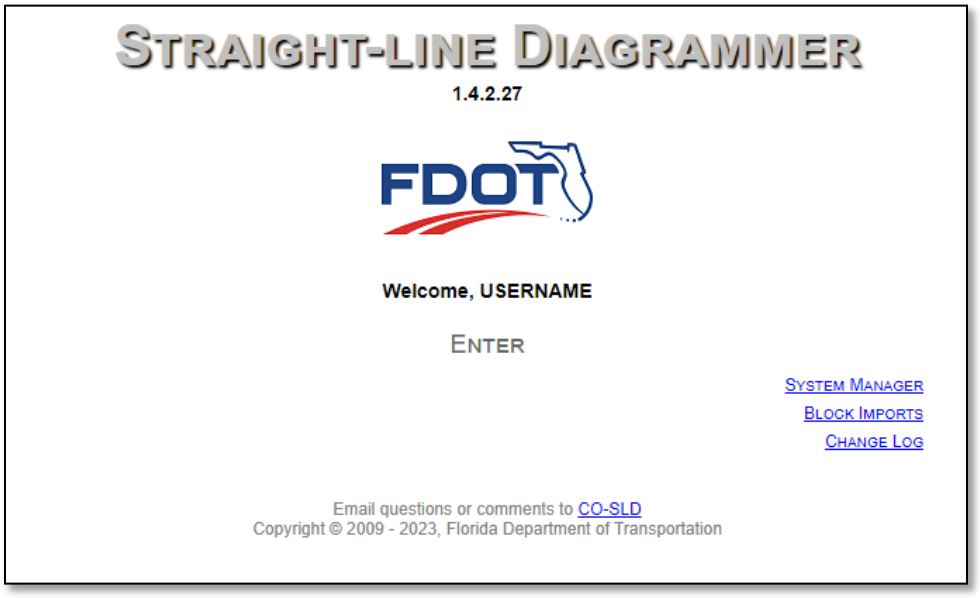

Figure 4 - Straight-Line Diagrammer Welcome Screen

Block Imports

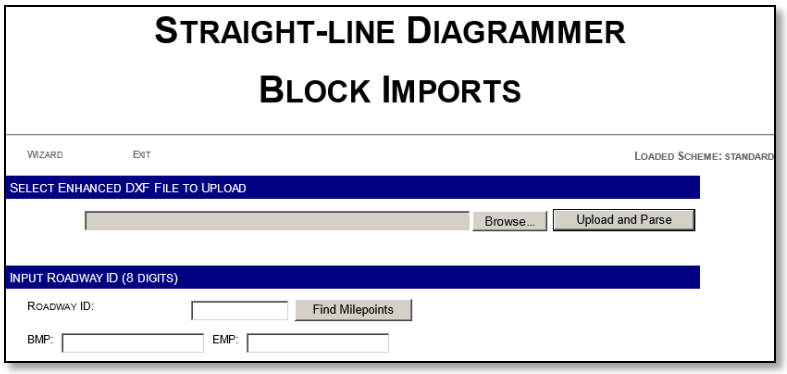

Figure 5 - Straight-Line Diagrammer Block Imports Screen

NOTE: This functionality is under development. There are scaling issues that still need to be worked out. The descriptions that follow are subject to change.

Click **BLOCK IMPORTS** on the *Welcome* screen of the Diagrammer to begin. This allows you to upload enhanced DXF files. The Diagrammer will replicate any enhancements from the DXF file and include them on the SLD product. The result is an SLD with current RCI data and enhancements.

Toolbar

The toolbar consists of two buttons and the name of the loaded scheme.

- **WIZARD** – takes you to the SLD generation wizard
- **EXIT** – takes you back to the *Welcome* screen
- **LOADED SCHEME** – displays the names of the loaded scheme

Select Enhanced DXF File

This is where you will upload DXF files to the web server, so that when the roadway ID is referenced, it will pull the enhancements. Click **Upload and Parse** to upload the DXF file.

Upload and Input Roadway ID (8 Digits)

This is required to associate the DXF file to the appropriate roadway ID and milepoint range. Click **Find Milepoints** to fill in the **BMP** and **EMP** boxes, then adjust them as necessary.

SLD Generation Wizard

Click **Enter** on the *Welcome* screen to start the wizard. Send any questions or comments on the Straight-line Diagrammer via email to the application administrators: CO-SLD@dot.state.fl.us

The Straight-line Diagrammer provides a wizard page that allows the generation of SLDs following four predefined steps:

- Step 1 – Roadway Selection
- Step 2 – Feature Selection
- Step 3 – Display Configuration
- Step 4 – Finale

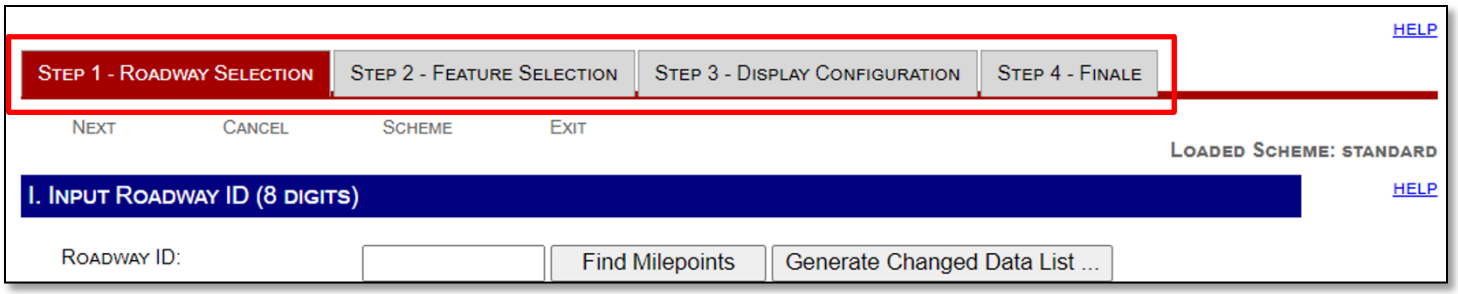

Figure 6 - Straight-Line Diagrammer Wizard Tabs

Wizard Interface

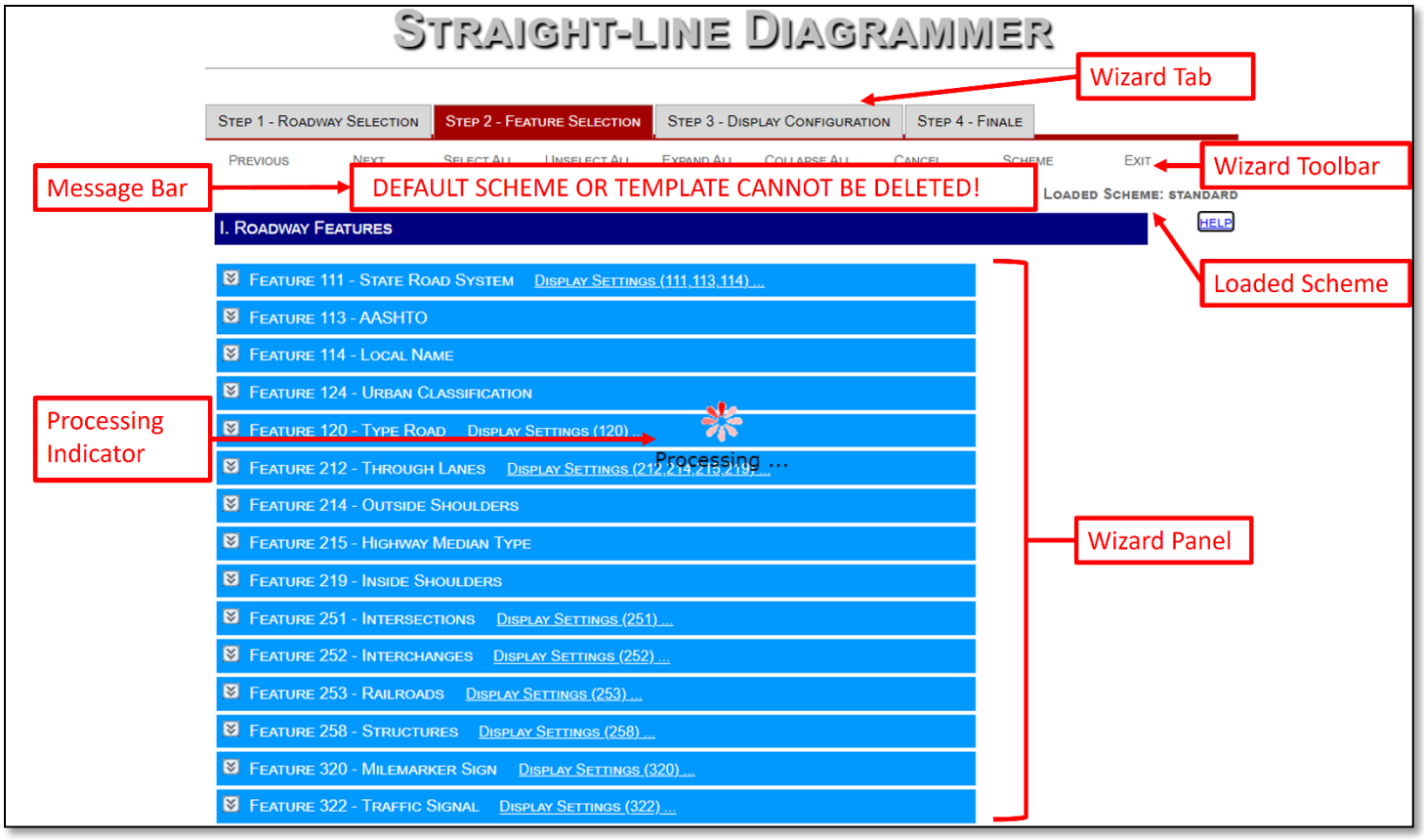

Figure 7 - Straight-Line Diagrammer Wizard Interface

Message Bar

Displays messages.

Processing Indicator

Appears when the application tasks the server.

Wizard Tab

Used to change between steps 1, 2, 3, and 4.

Wizard Toolbar

Contains a series of tool buttons to provide general functions. The tool buttons include:

- **PREVIOUS** – To go back to the previous step (in steps 2, 3, and 4 only)
- **NEXT –** To go to the next step (in steps 1, 2, and 3 only)
- **SELECT ALL** – To select all features and characteristics (in step 2 only)
- **UNSELECT ALL** – To unselect all features and characteristics (in step 2 only)
- **EXPAND ALL** – To expand feature panels to show all characteristics (in step 2 only)
- **COLLAPSE ALL** – To collapse feature panels to hide all characteristics (in step 2 only)
- **CANCEL** – To clear the current task and go back to step 1
- **SCHEME** – To open the dialog of scheme manager
- **EXIT** – To exit the wizard and go back to the *Welcome* screen

Loaded Scheme

Displays the name of the loaded scheme.

Wizard Panel

Contains elements for each step.

Scheme Management

A scheme is a record of user settings used in SLD generation. Use a scheme to produce the same SLD products without the need to reconfigure output settings for the next generation of other SLD products. The Straight-line Diagrammer allows the creation of an unlimited numbers of schemes. The information recorded in schemes includes:

- Selection of Features and Characteristics (step 2)
- Display Configurations of Features (step 2)
- Display Configurations of Pages and Partitions (step 3)
- Output Format (step 4)

Click **SCHEME** on the toolbar to display the Scheme Manager. Click **QUIT** to exit the Scheme Manager.

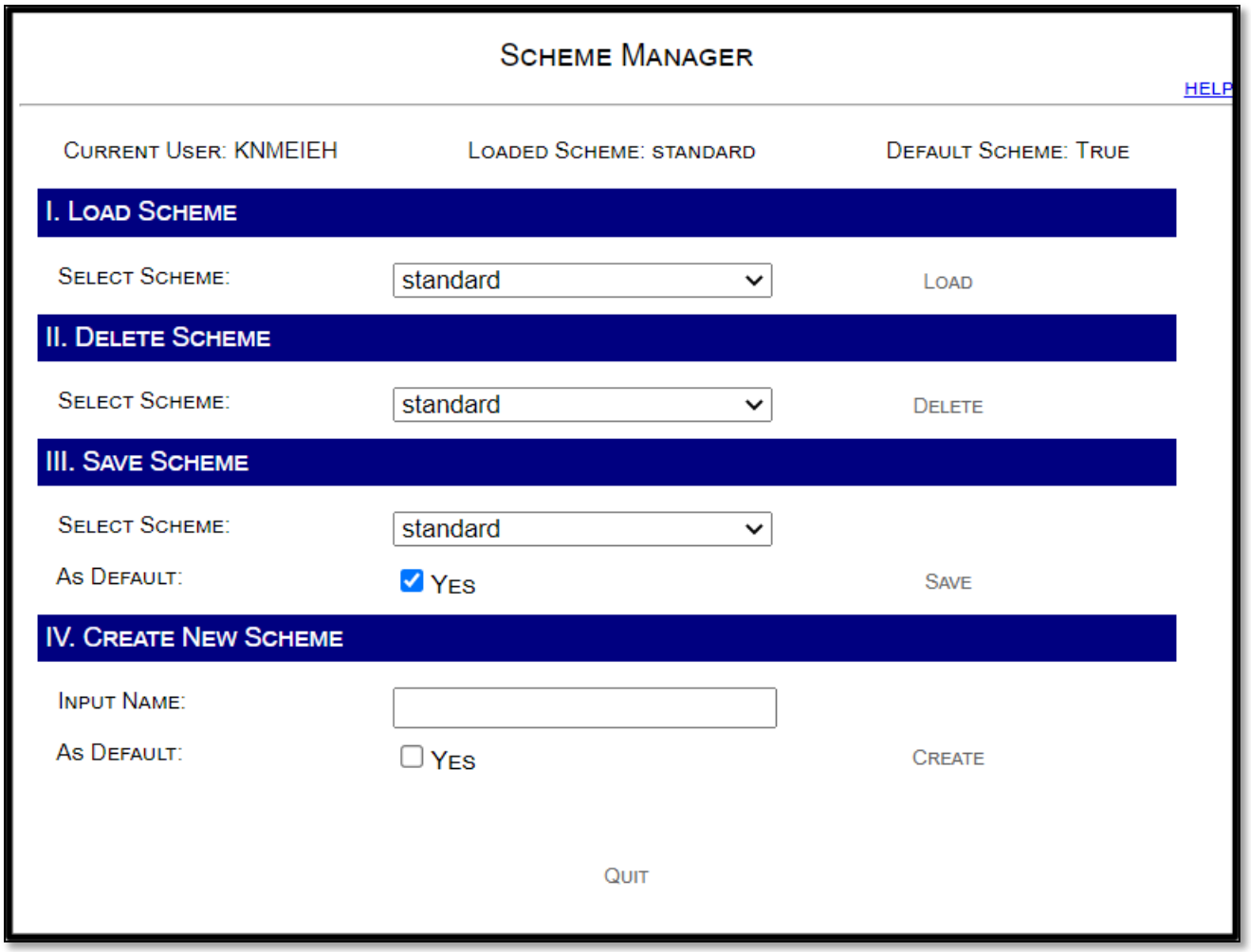

Figure 8 - Straight-Line Diagrammer Scheme Manager

Load Scheme

Use this section to load a scheme.

1. Select a scheme from the **SELECT SCHEME** dropdown list
2. Click **LOAD**

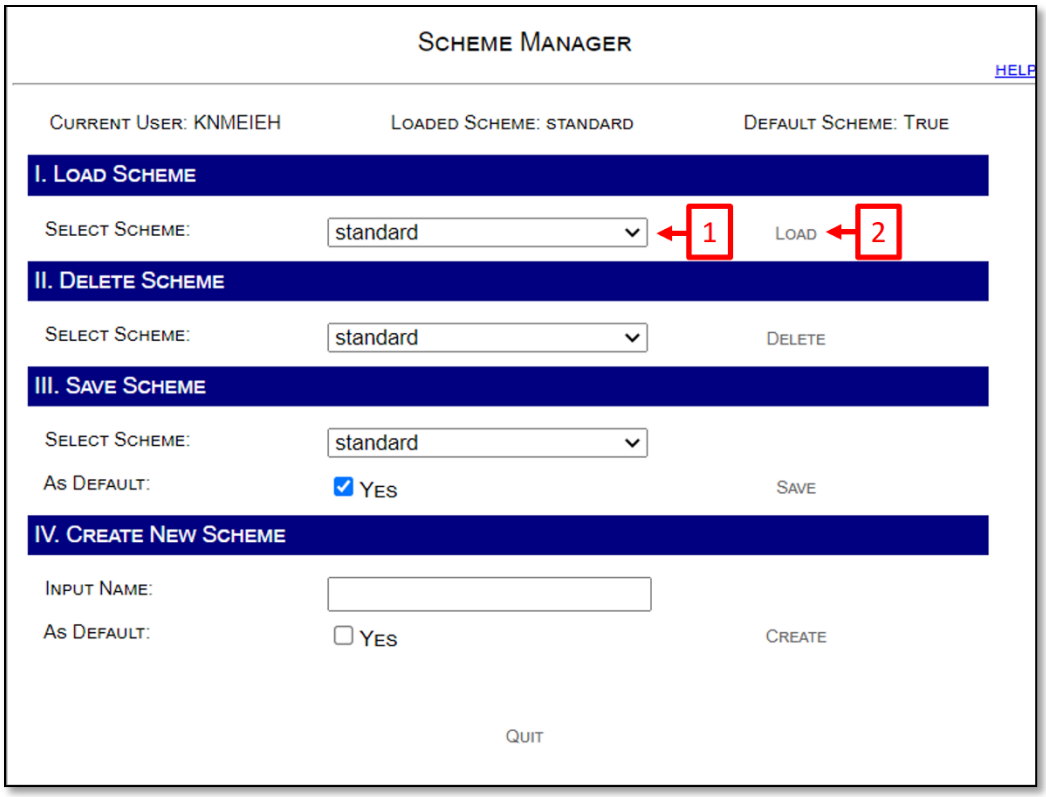

Figure 9 - Straight-Line Diagrammer Scheme Manager Load Scheme

Delete Scheme

The default scheme or the system-defined scheme (template) cannot be deleted. Trying to do so will produce this error:

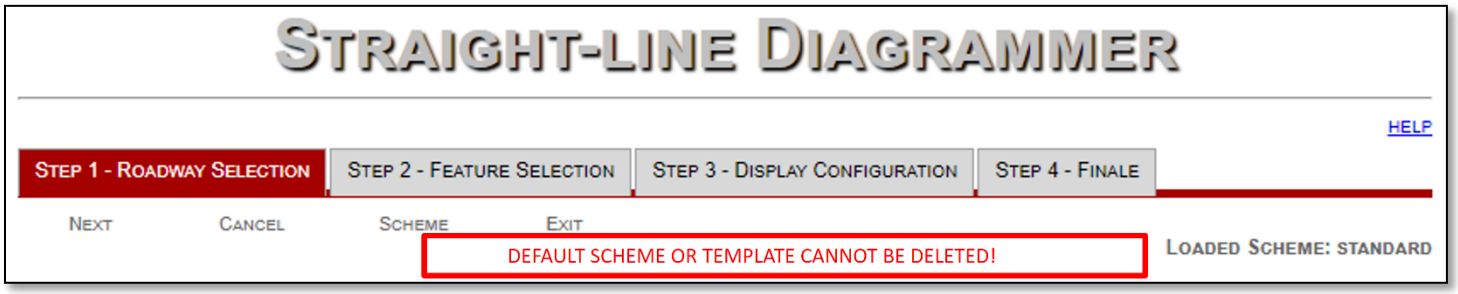

Figure 10 - Straight-Line Diagrammer Scheme Manager Delete Scheme Error

Use this section to delete a scheme.

1. Select a scheme from the **SELECT SCHEME** dropdown list
2. Click **DELETE**

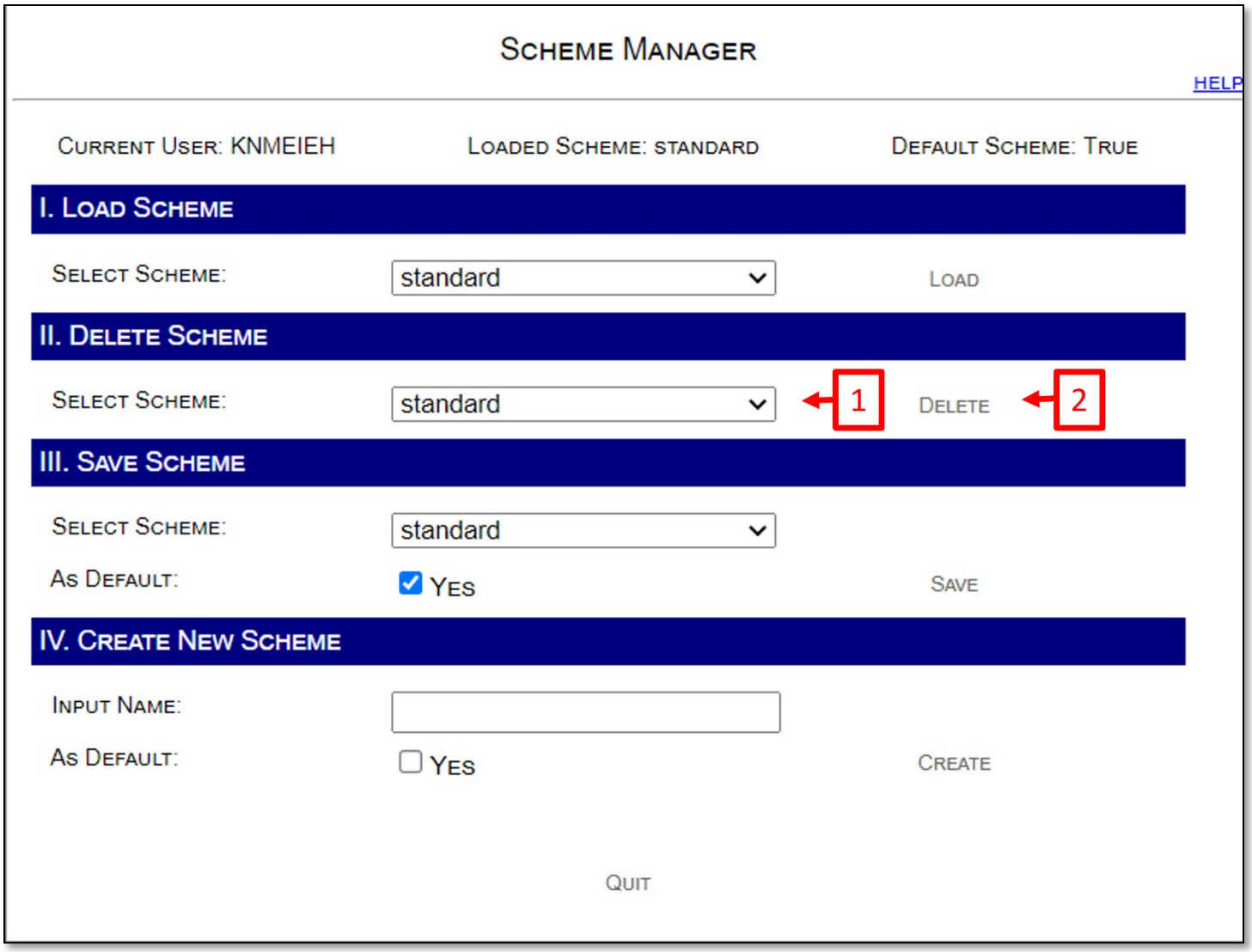

Figure 11 - Straight-Line Diagrammer Scheme Manager Delete Scheme

Save Scheme

The default scheme is the scheme that is loaded when the Straight-line Diagrammer starts. Changes to the system-defined scheme (template) cannot be saved.

Use this section to save a scheme.

1. Configure settings in steps 2,3, and 4
2. Select a scheme from the **SELECT SCHEME** dropdown list
3. Check the **AS DEFAULT** checkbox for **YES** if you want this scheme to be loaded the next time you open the application
4. Click **SAVE**

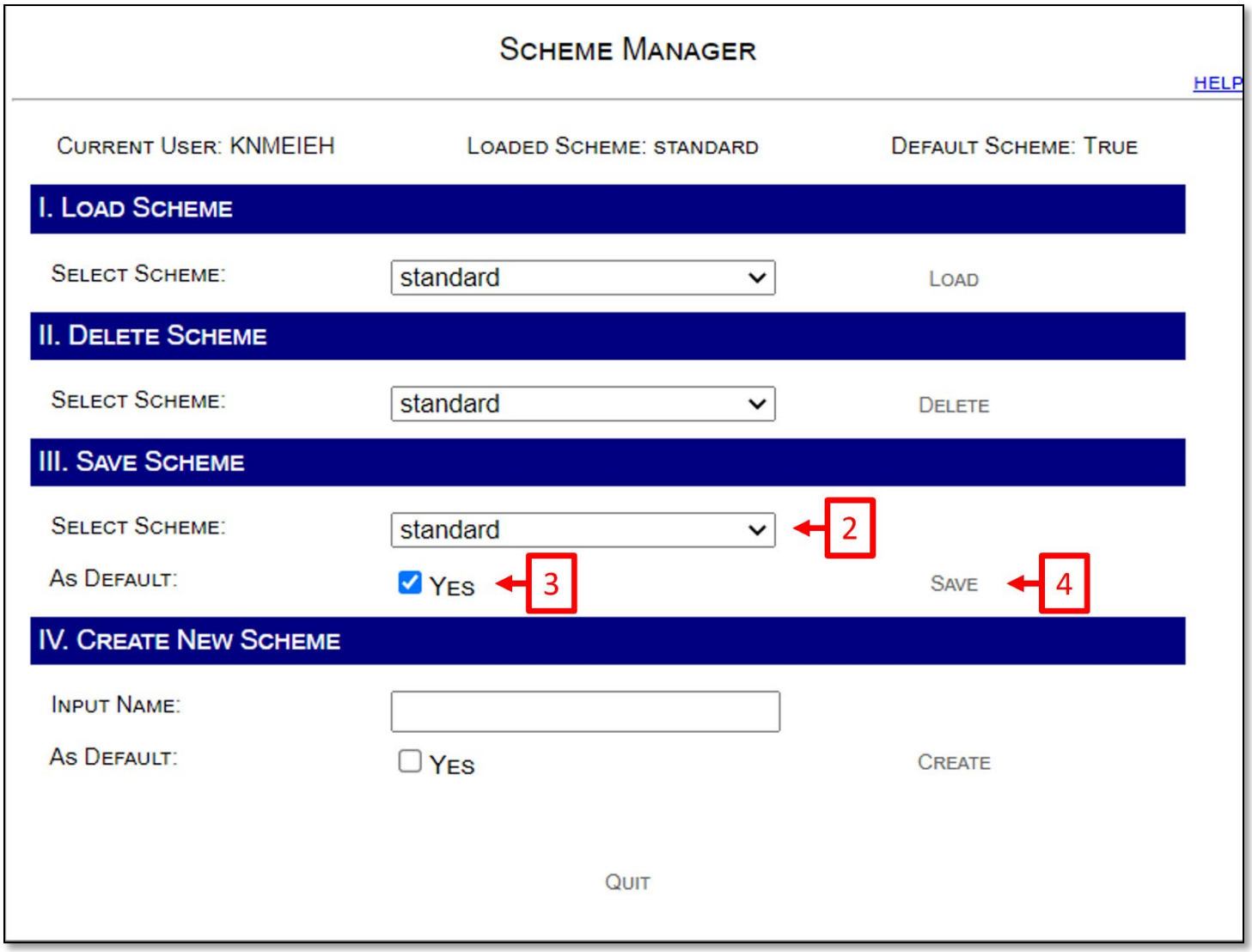

Figure 12 - Straight-Line Diagrammer Scheme Manager Save Scheme

Create New Scheme

Use this section to create a scheme.

1. Configure settings in steps 2,3, and 4
2. Type a new scheme name in the **INPUT NAME** box
3. Check the **AS DEFAULT** checkbox for **YES** if you want this scheme to be loaded the next time you open the application
4. Click **CREATE**

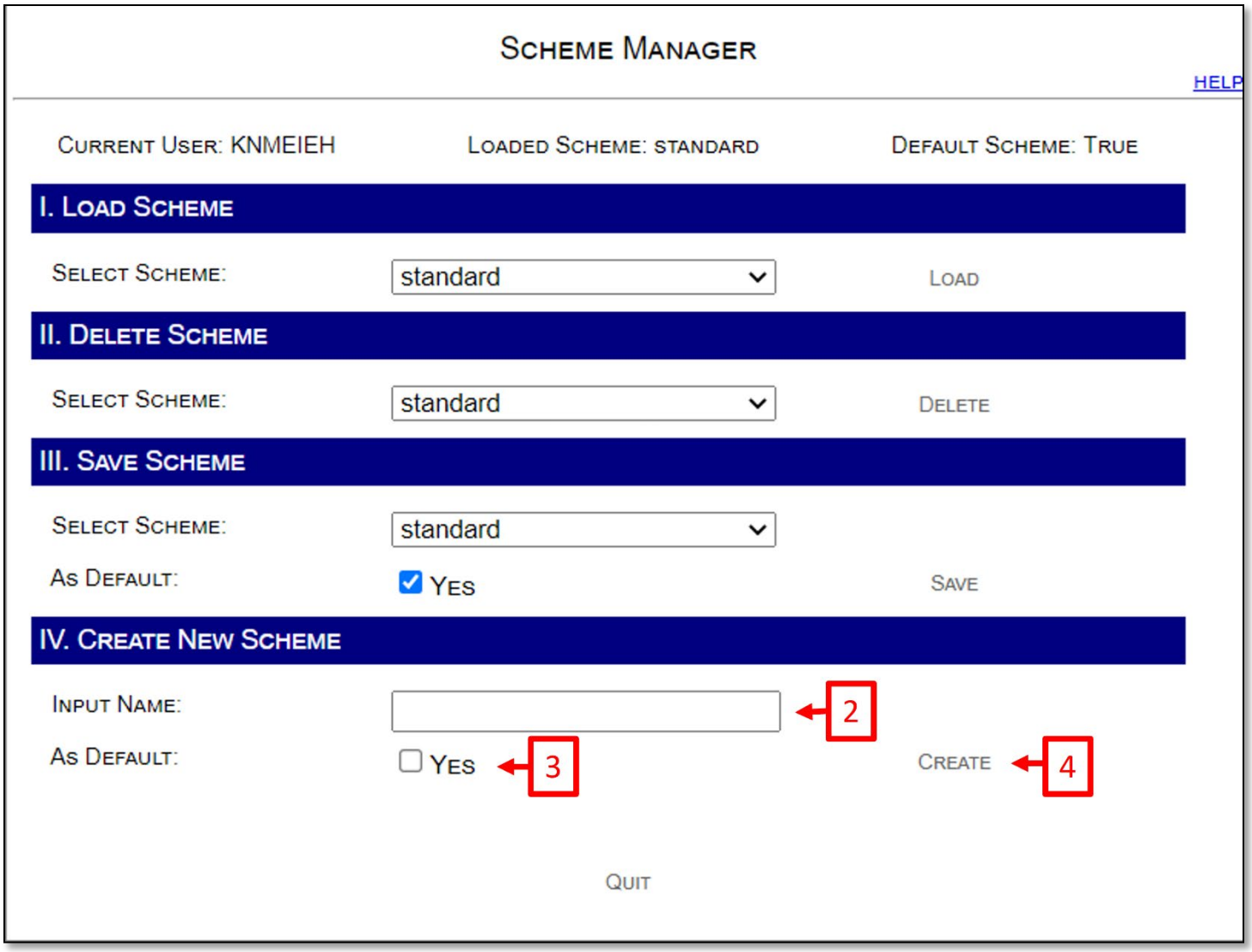

Figure 13 - Straight-Line Diagrammer Scheme Manager Create Scheme

Step 1 – Roadway Selection

Step 1 includes the following tasks:

- Input or select roadway
- Specify milepoint range
- Indicate on or off-system
- Specify using current RCI data or historical RCI data
- Link to external resources
- Generate changed data list

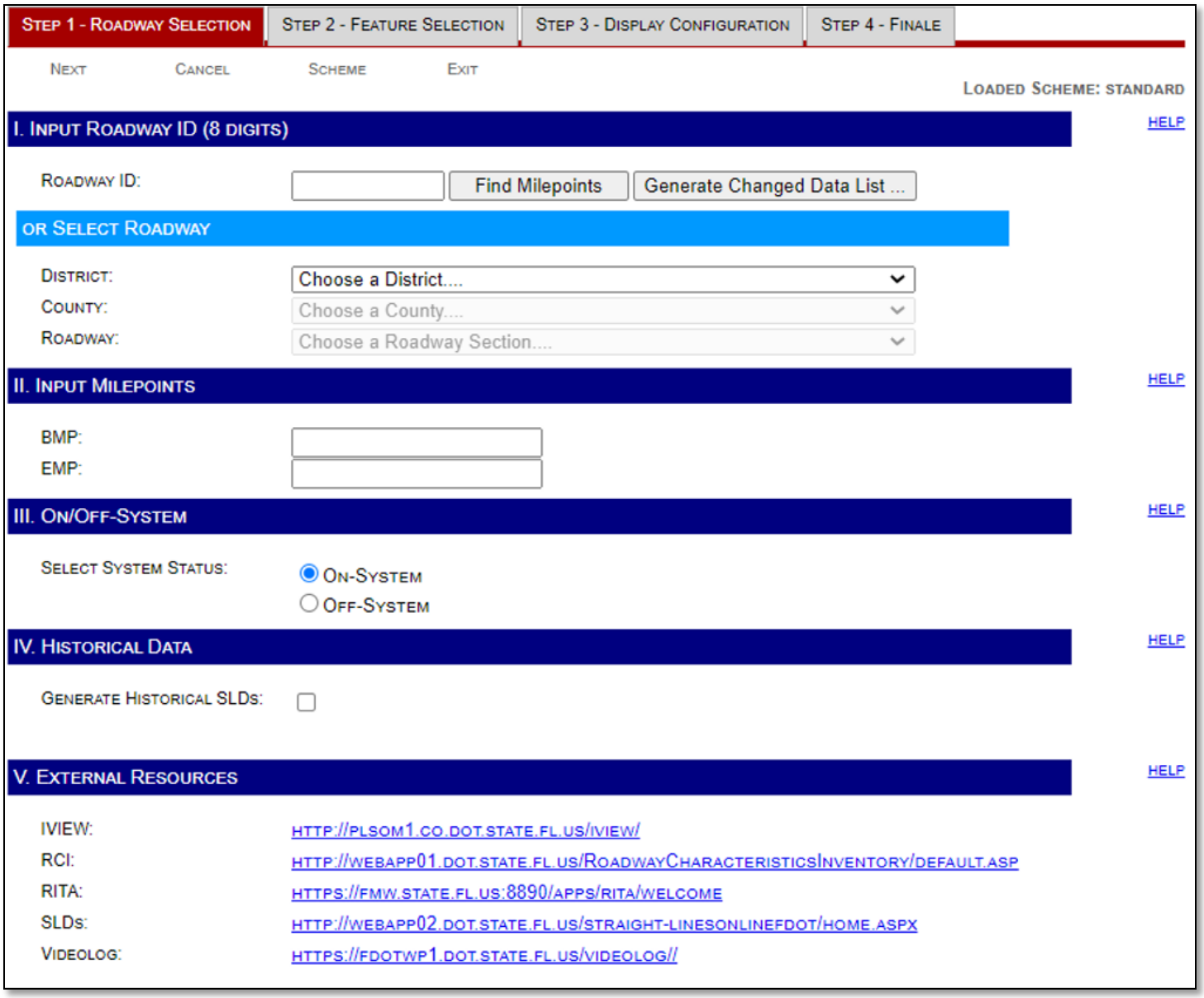

Figure 14 - Straight-Line Diagrammer Select Roadway

I. Input Roadway ID

1. Type the roadway ID (8 digits)
2. Click **Find Milepoints** to retrieve the BMP and the EMP for the roadway ID from the RCI database

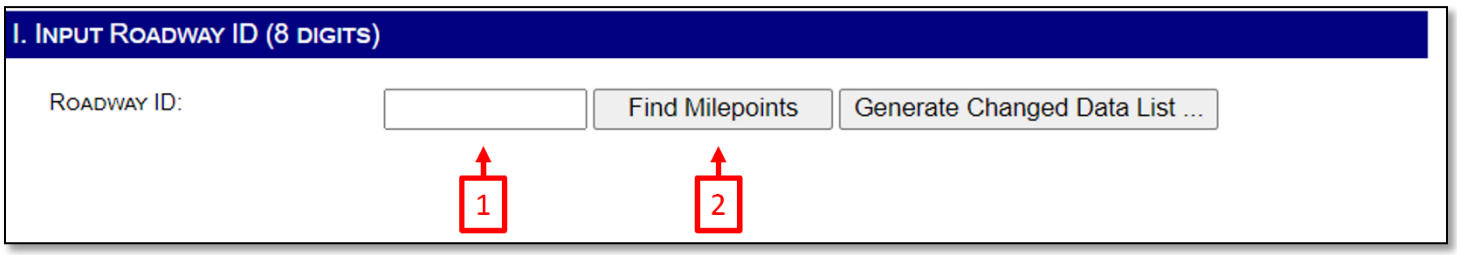

Figure 15 - Straight-Line Diagrammer Input Roadway ID

Select Roadway

As an alternative, manually select a roadway ID.

1. Select District
2. Select County
3. Select Roadway

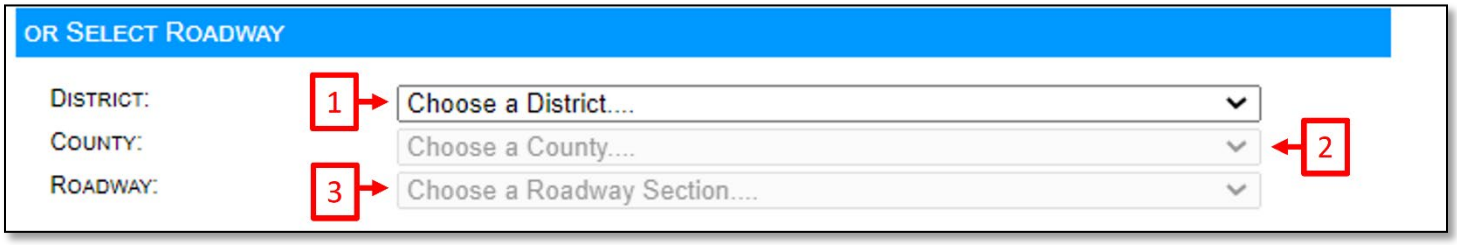

Figure 16 - Straight-Line Diagrammer Select Roadway

Generate Changed Data List

This will generate a report in PDF format listing the RCI data that were changed after a specified date.

1. Input the roadway ID
2. Click **Generate Changed Data List**

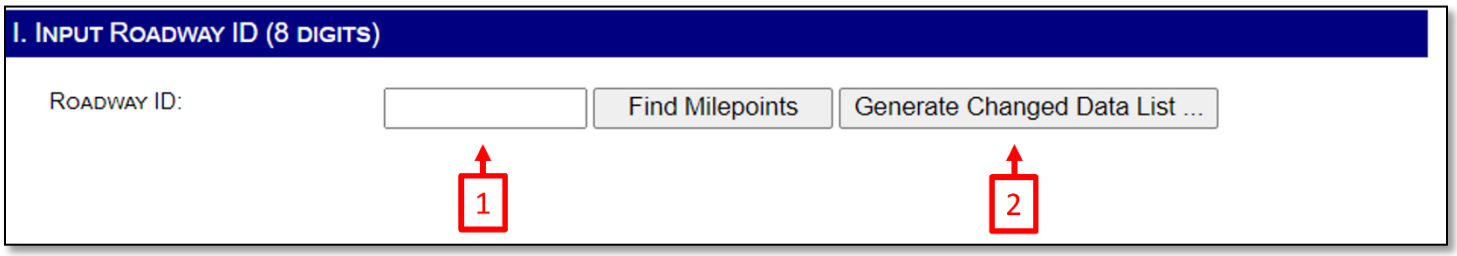

Figure 17 - Straight-Line Diagrammer Generate Changed Data List

3. In the popup window, input the specified date

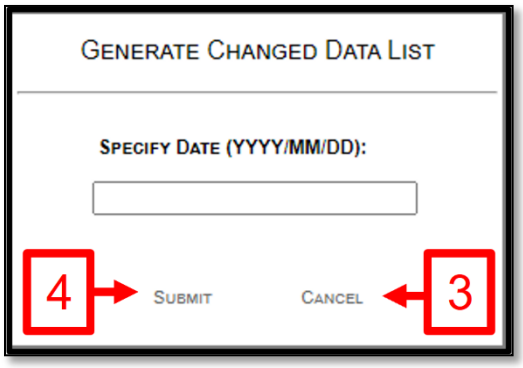

Figure 18 - Straight-Line Diagrammer Specify Date

4. Click **SUBMIT** to generate the data change list

After clicking **SUBMIT**, you will see to the *Result* screen. Click **Download Zip File** icon to download the report.

II. Input Milepoints

Click **Find Milepoints** or select a roadway ID from the dropdown lists, the BMP and EMP for the specified roadway ID are from the RCI database and displayed here. Change BMP and/or EMP by typing in new values.

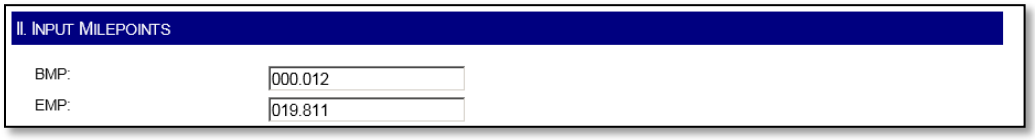

Figure 19 - Straight-Line Diagrammer Input Milepoints

III. ON/OFF-System

The Straight-line Diagrammer produces SLDs for Active On the SHS segments or Active Off the SHS segments. An Active On segment is owned and maintained by the Department as part of the SHS. An Active Off segment is maintained by another entity (county or city), but the Department collects data for reporting purposes. Use this section to specify if the roadway is Active On (On-System) or Active Off (Off-System).

Figure 20 - Straight-Line Diagrammer On/Off System

IV. Historical Data

You can generate an historical SLD from RCI data archives based on a specified date.

1. Check the **GENERATE HISTORICAL SLDS** checkbox
2. Specify a date in yyyy-mm-dd format

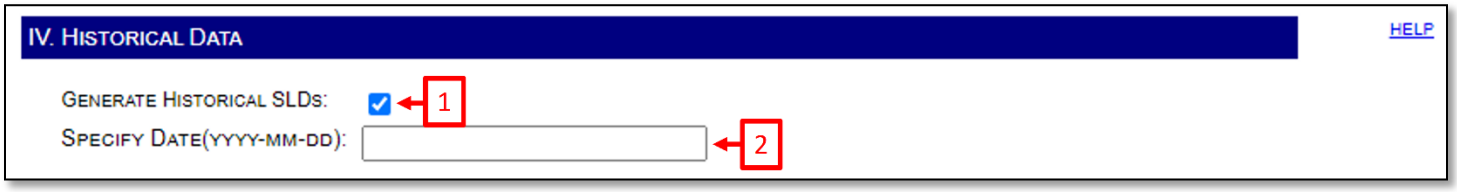

Figure 21 - Straight-Line Diagrammer Historical Data

V. External Resources

To access external data sources, click one of the links. These external sources provide the ability to view relevant data for assisting the understanding of a roadway's environment.

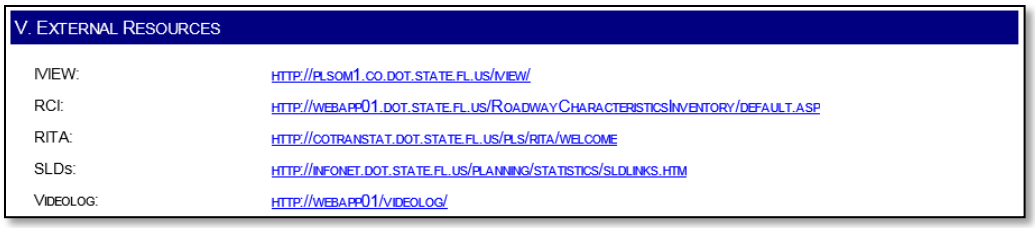

Figure 22 - Straight-Line Diagrammer External Resources

Step 2 – Feature Selection

Step 2 includes the following tasks:

- Select characteristics for display
- Customize display configurations for the selected characteristics
- Hide/display certain sections in SLD products

Select Characteristics

Select which characteristics you want generated.

1. Expand the characteristic panel by clicking the down arrow button

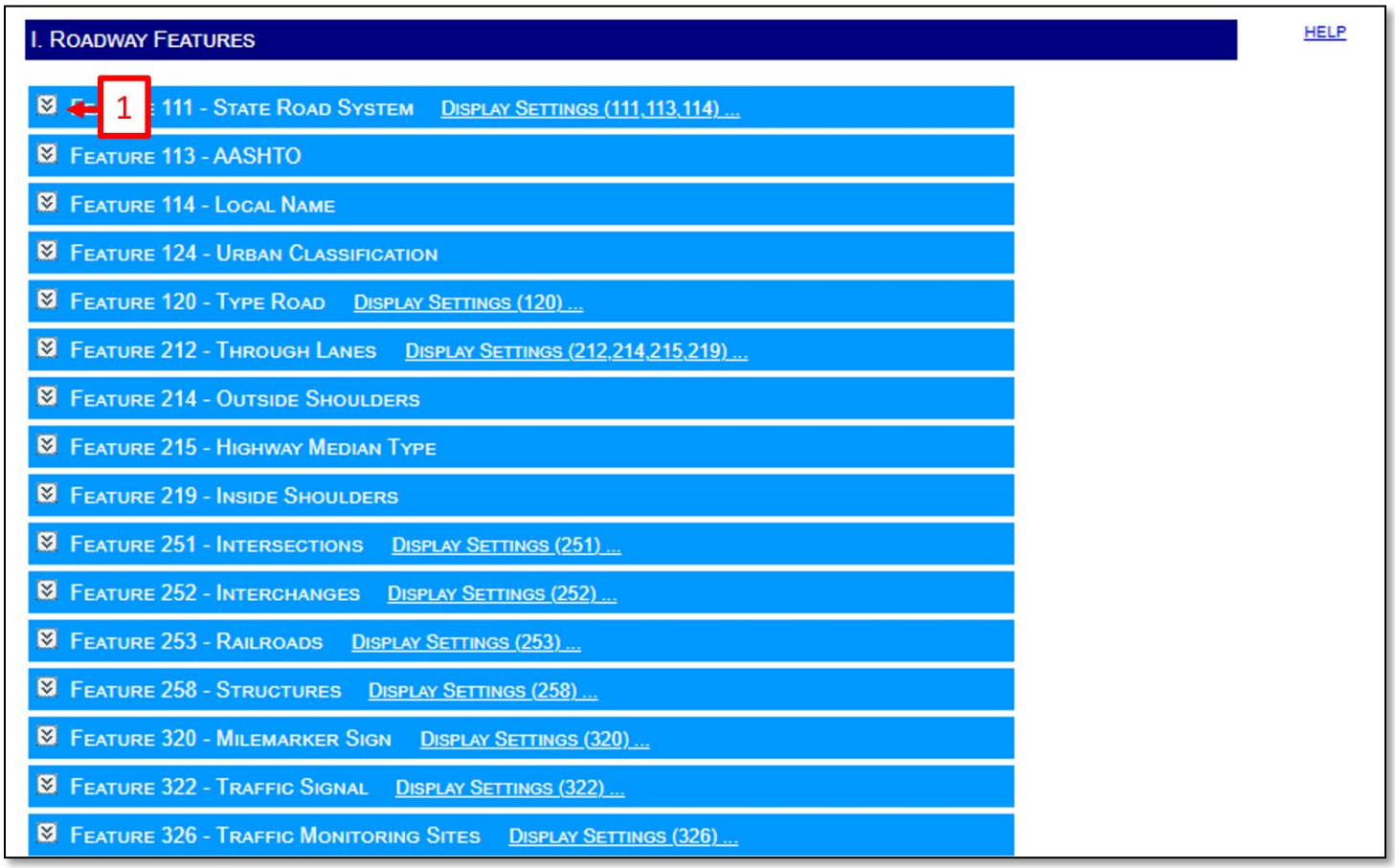

Figure 23 - Straight-Line Diagrammer Roadway Features

2. Click the checkbox to select or unselect a characteristic

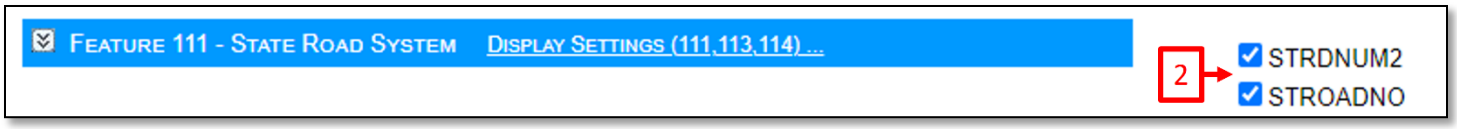

Figure 24 - Straight-Line Diagrammer Feature 111 Select Characteristic

3. Utilize the wizard toolbar buttons to **EXPAND ALL**, **COLLAPSE ALL**, **SELECT ALL**, and **UNSELECT ALL**

Customize Display Configurations for Selected Characteristics

Characteristics are grouped together and displayed using the same configurations. Customize display configurations for each group.

1. Click the display settings link to show the configuration window

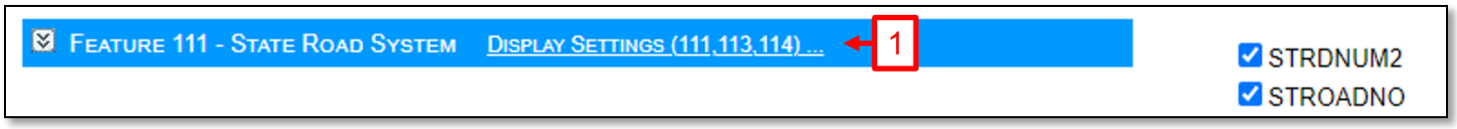

Figure 25 - Straight-Line Diagrammer Feature 111 Display Settings

2. Determine the settings for **COLOR**, **FONT FAMILY**, **FONT STYLE**, **SIZE FACTOR**, and **LINE WEIGHT**
3. Click **OK** to complete the customization

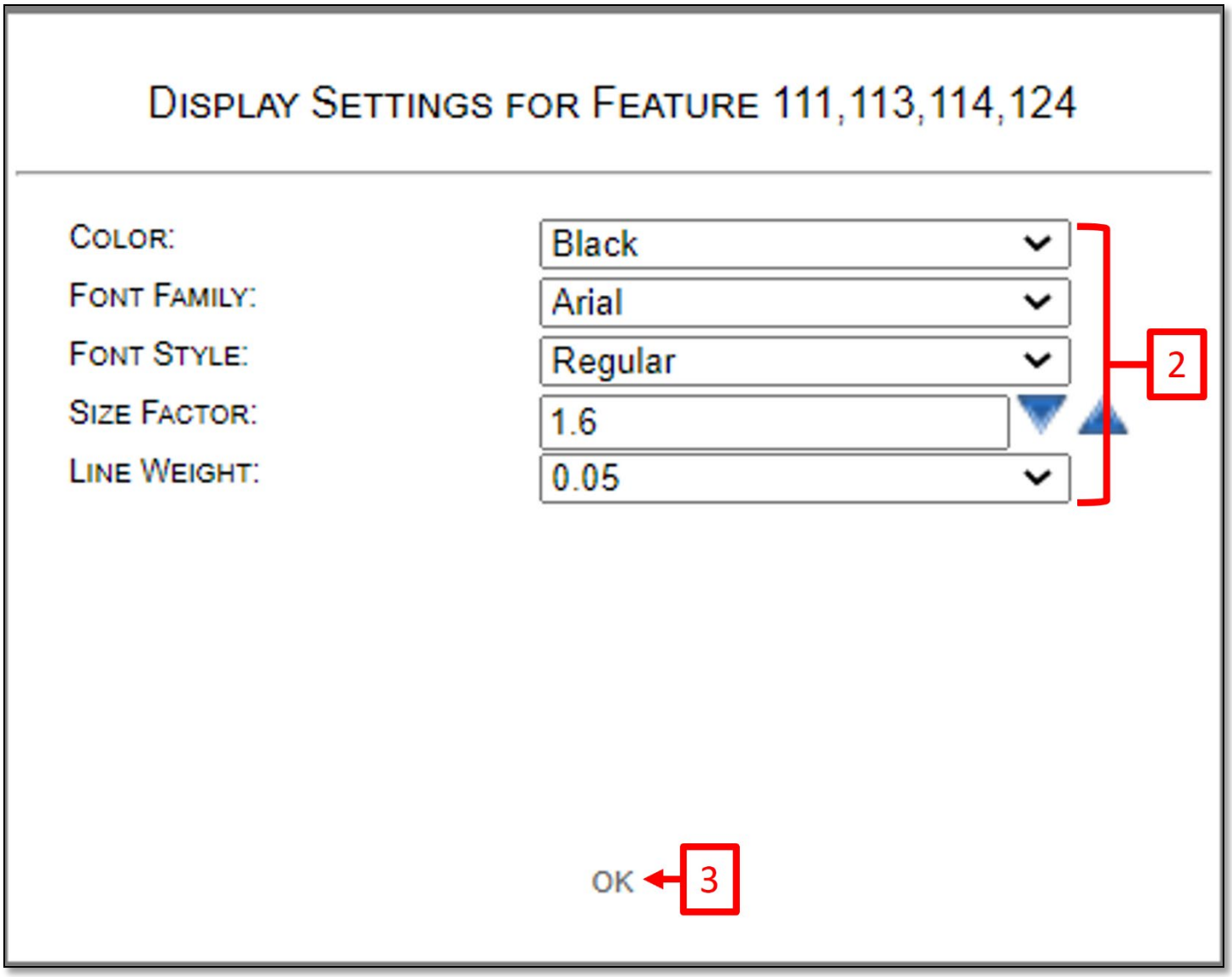

Figure 26 - Straight-Line Diagrammer Display Settings

NOTE: SIZE FACTOR is an amplification of the system's predefined size by a factor of 0.0 to 5.0.

Hide Section

Sections F, G, H, I, J, and K will display by default on SLD products, even when no characteristics associated with these sections are displayed. The only way not to show them is by clicking the hide section checkbox.

1. Check the checkbox to hide a section

Figure 27 - Straight-Line Diagrammer Hide Section

Step 3 – Display Configurations

Step 3 includes the following tasks:

- Customize display configurations of pages
- Customize display configurations of sections
- Specify partition scaling method

I. Page Configuration

Customize the look of the generated page(s).

1. Select a page size from the dropdown list
2. Increase or decrease page margins
3. Select style, line weight, and color of page border
4. Select font attributes (family, style, size factor, and color) of page titles

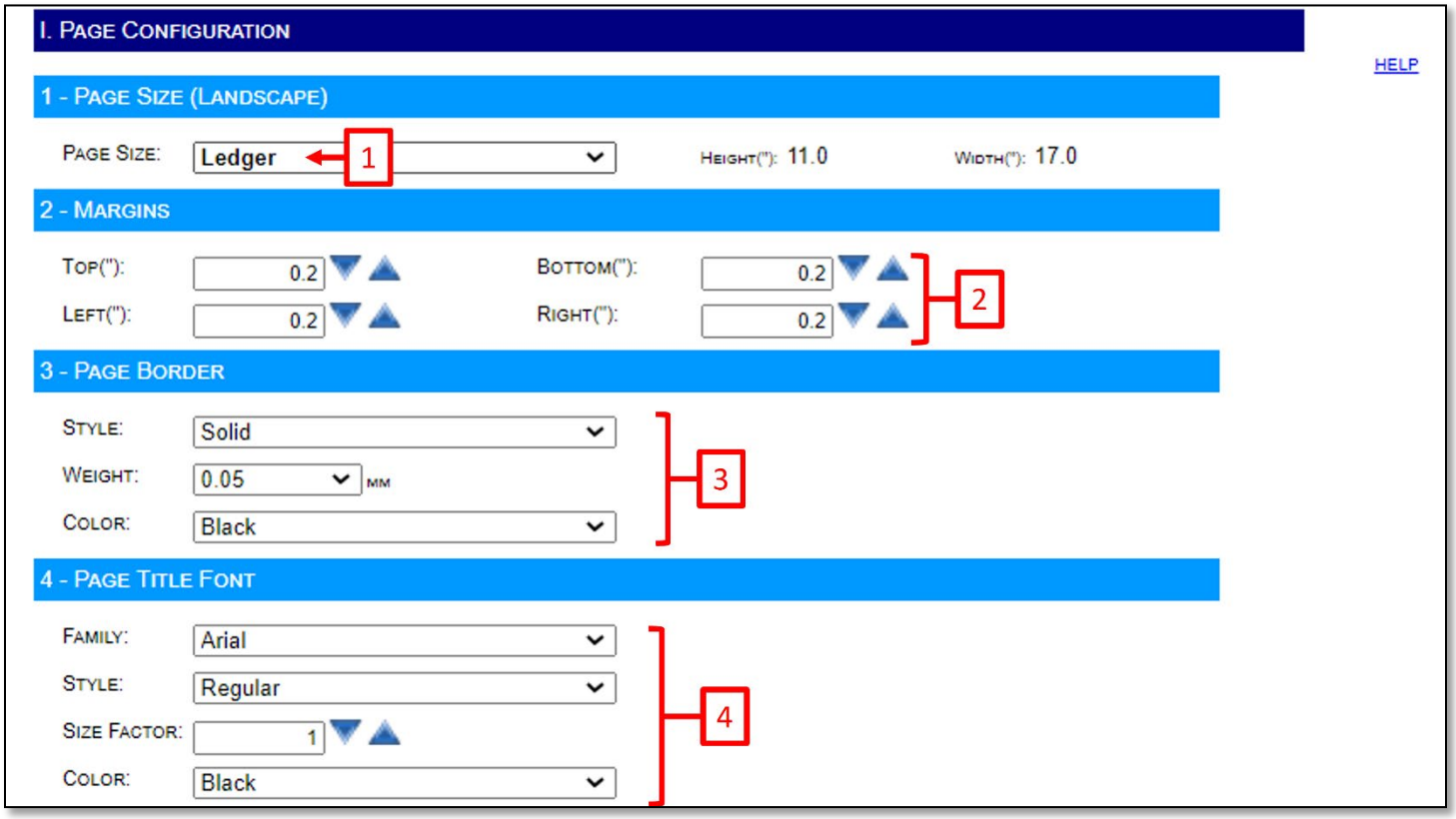

Figure 28 - Straight-Line Diagrammer Page Configuration

NOTE: SIZE FACTOR is an amplification of the system's predefined size by a factor of 0.0 to 5.0.

II. Section Configuration

Customize the look of the border and title font for sections A, B, C, and D.

1. Select style, line weight, and color of section border
2. Select font attributes (family, style, size factor, and color) of section titles
3. Select font attributes (family, style, size factor, and color) of section (A-D) titles

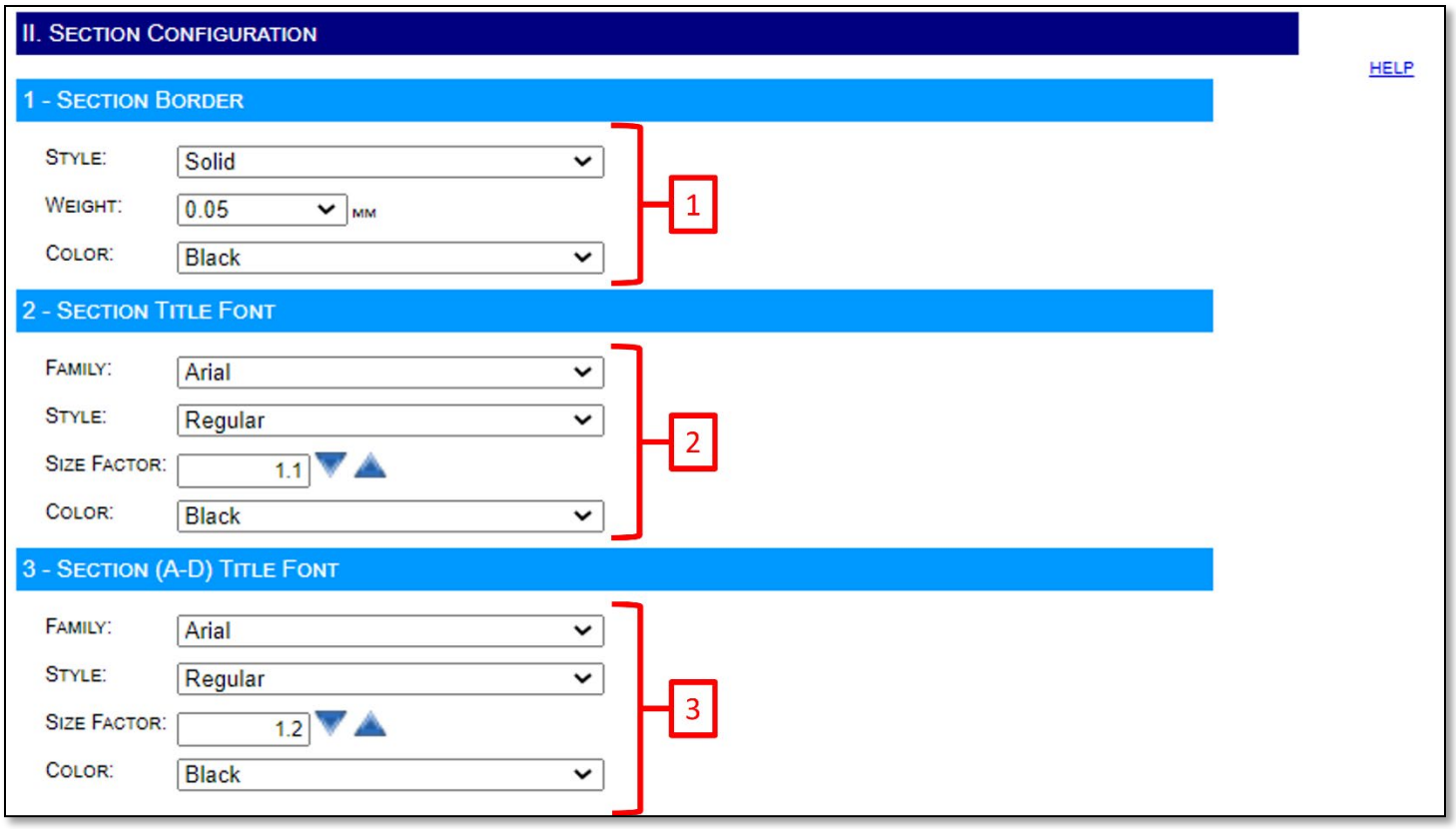

Figure 29 - Straight-Line Diagrammer Section Configuration

III. Scaling

1. Specify one partition or two partitions per page.

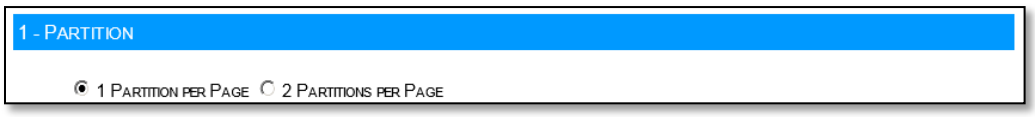

Figure 30 - Straight-Line Diagrammer Partition

2. A scale is defined as the miles displayed within one partition. The Straight-line Diagrammer provides three scaling methods.

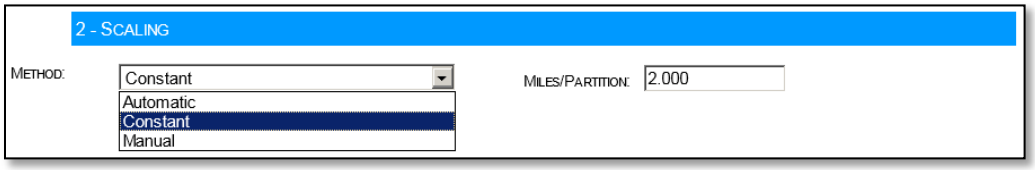

Figure 31 - Straight-Line Diagrammer Scaling Method

Constant – All partitions have uniform scales. Specify the constant scale in the **Miles/Partition** box.

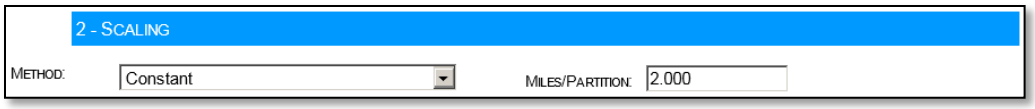

Figure 32 - Straight-Line Diagrammer Scaling Miles/Partition

Automatic – The Straight-line Diagrammer calculates the scale for each partition based on an optimization algorithm.

1. Click **AUTO SCALING CONFIGURATION** to show the Automatic Scaling Configuration window

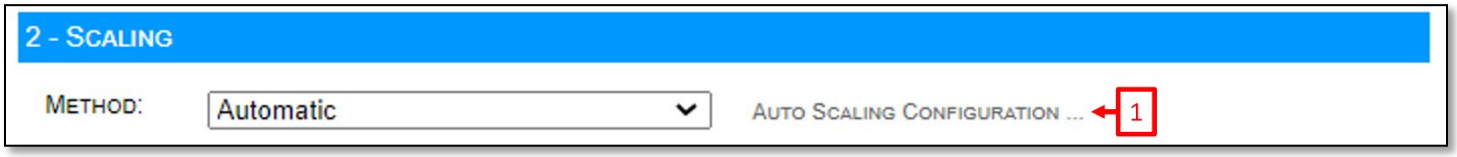

Figure 33 - Straight-Line Diagrammer Auto-Scaling

2. Select the features to be used in automatic scaling
3. Set the minimum distance for mile breaks and the maximum distance for mile breaks
4. Click **OK** to complete the automatic scaling configuration

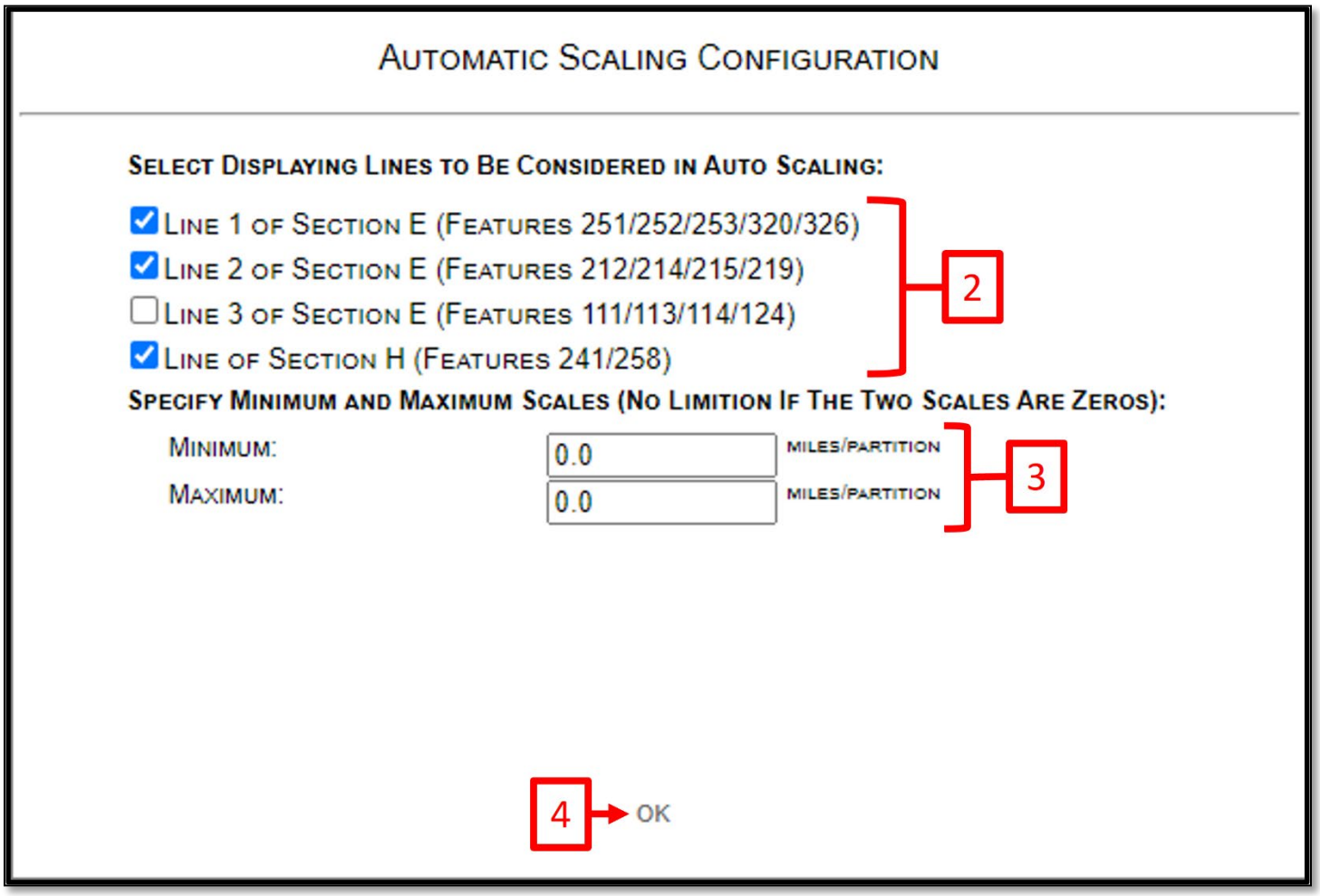

Figure 34 - Straight-Line Diagrammer Automatic Scaling Configuration

Manual – Specify scales for each partition.

1. Input a scale
2. Click **ADD** to add the scale to the end of the scaling list
3. Click **DELETE** to delete the scale at the end of the scaling list
4. Click **CLEAR** to delete all scales in the scaling list

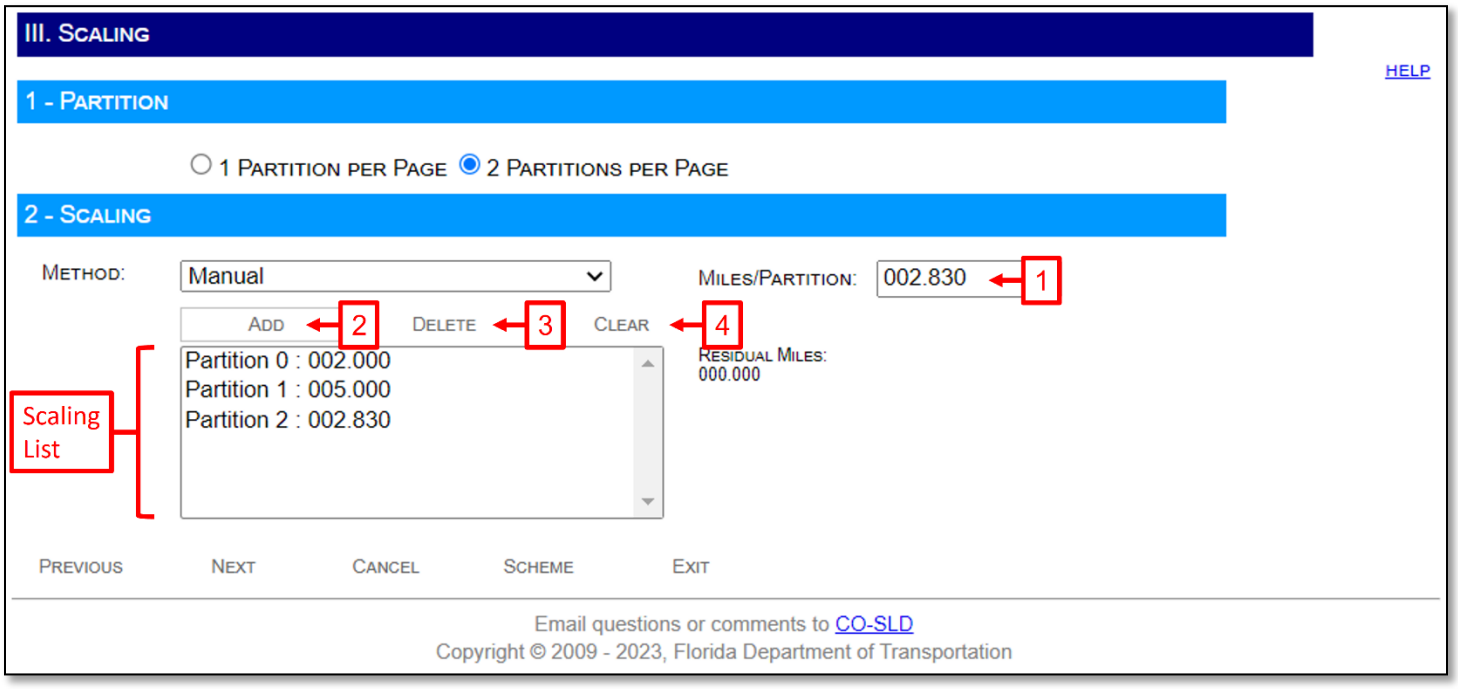

Figure 35 - Straight-Line Diagrammer Scaling

Step 4 – Finale

Step 4 includes the following tasks:

- Specify output format
- Decide whether or not to output the RCI data used in generating the SLD
- Submit

I. SLD Output

1. Check DXF, PDF, or both

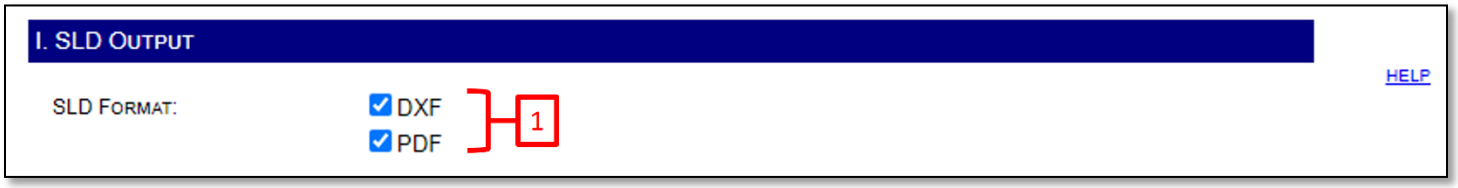

Figure 36 - Straight-Line Diagrammer SLD Output

II. RCI Data

1. Check the **YES** checkbox to output RCI data
2. Check **DATA FORMAT** as original, partitional, or both

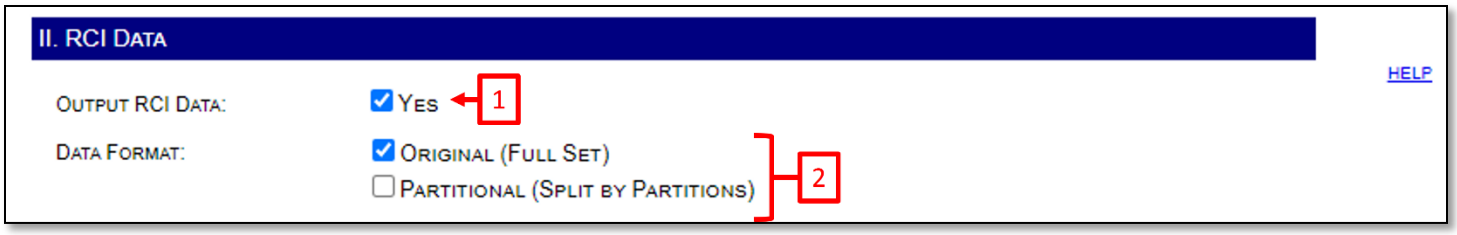

Figure 37 - Straight-Line Diagrammer RCI Data

NOTE: Original (Full Set) RCI data output is a full set of retrieved data for a whole roadway ID. **Partitional** output is a filtered RCI dataset grouped into partitions according to BMP, EMP, and selected features/characteristics. All RCI data files are in CSV format.

Submit

Initiates the generation of the SLD according to the specifications in the previous steps.

1. Click **Submit**

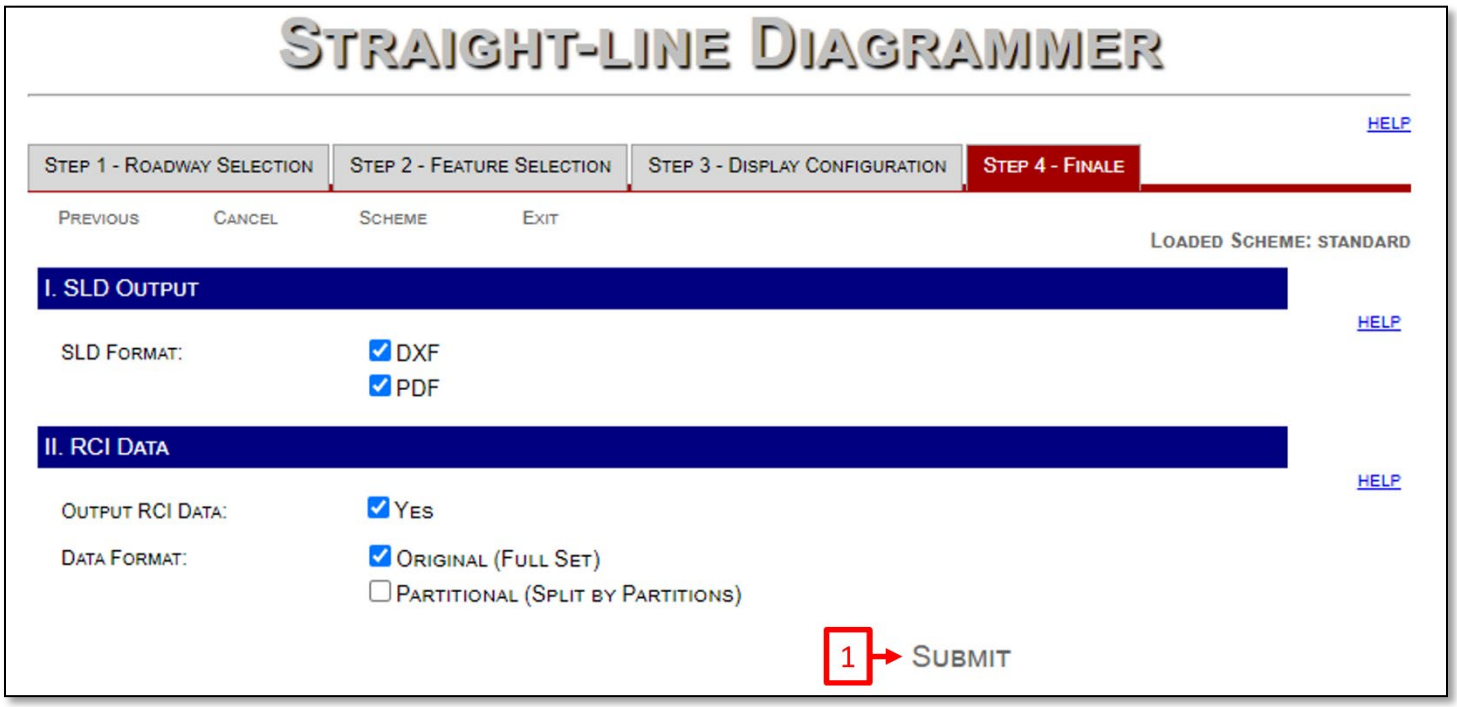

Figure 38 - Straight-Line Diagrammer Submit

Results Screen

When the Straight-line Diagrammer completes the task of SLD generation, the results (PDFs, DXFs, and/or CSVs) are compressed in a single zip file.

1. Click the **Download Zip File** icon to download the zip file
2. Click **Wizard** to return to Step 1 and start over
3. Click **Exit** to return to the *Welcome* screen

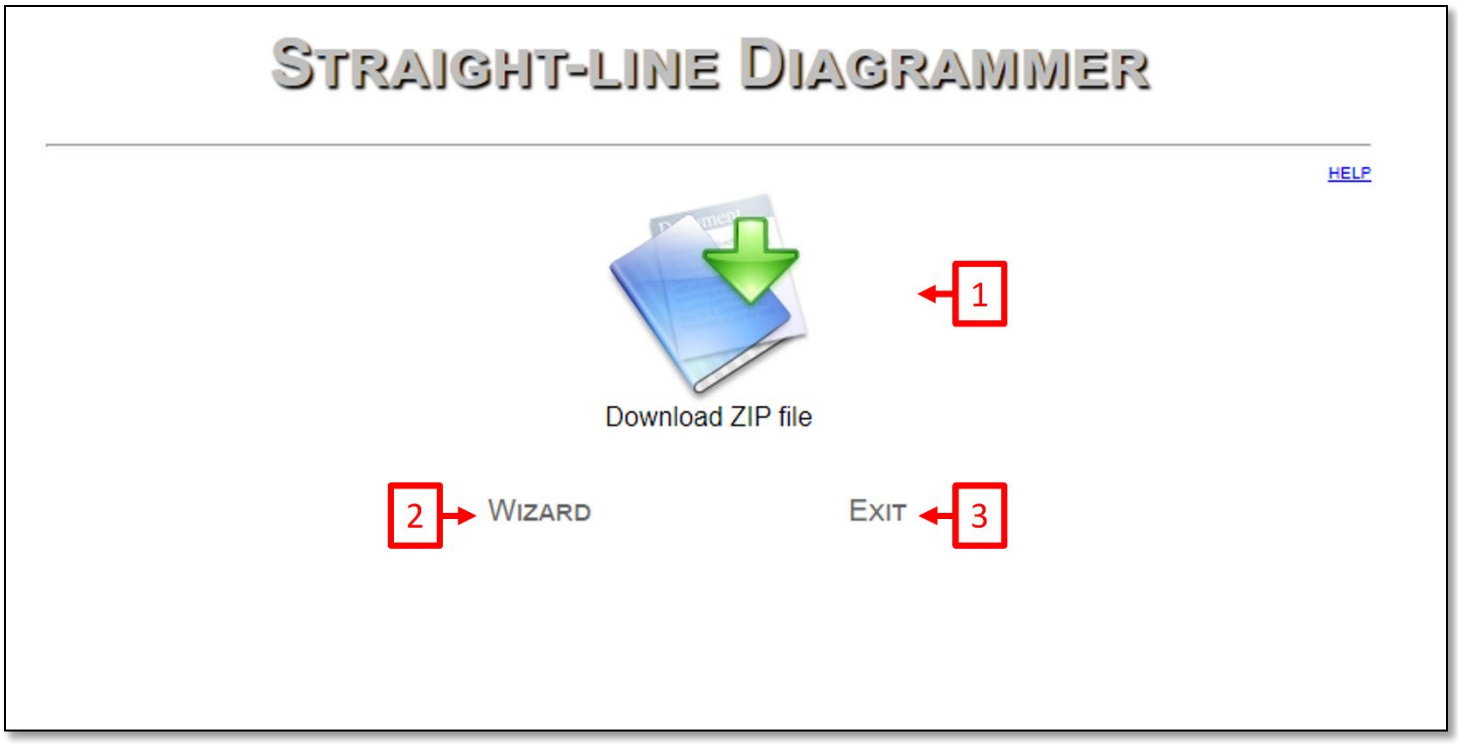

Figure 39 - Straight-Line Diagrammer Results

On-System Key Sheet Generation

County Section Number Key Sheets (aka Key Sheets) are location maps for SLDs. Key Sheets display the location of each roadway ID with an SLD within each county.

The TDA Spatial Data & Analytics section maintains an application called the County Key Sheet application for use in ArcMap. Use the application to ensure that the Key Sheets follow the appropriate specifications. For more information on this application, contact the Spatial Data & Analytics section.

Off-System MAP-21 and SIS Connector SLD and Key Sheet Generation

Key Sheets are location maps for SLDs. Key Sheets display the location of each roadway ID with an SLD within each county.

The TDA Spatial Data & Analytics section maintains an application called the County Key Sheet application for use in ArcMap. Use the application to ensure that the Key Sheets follow the appropriate specifications. For more information on this application, contact the TDA Spatial Data & Analytics section.

Using the Straight-line Diagrams Online GIS Web Application

To view, print, download, or email straight-line diagrams visit the SLOGIS website:
http://www2.dot.state.fl.us/straight-linesonlinegis/

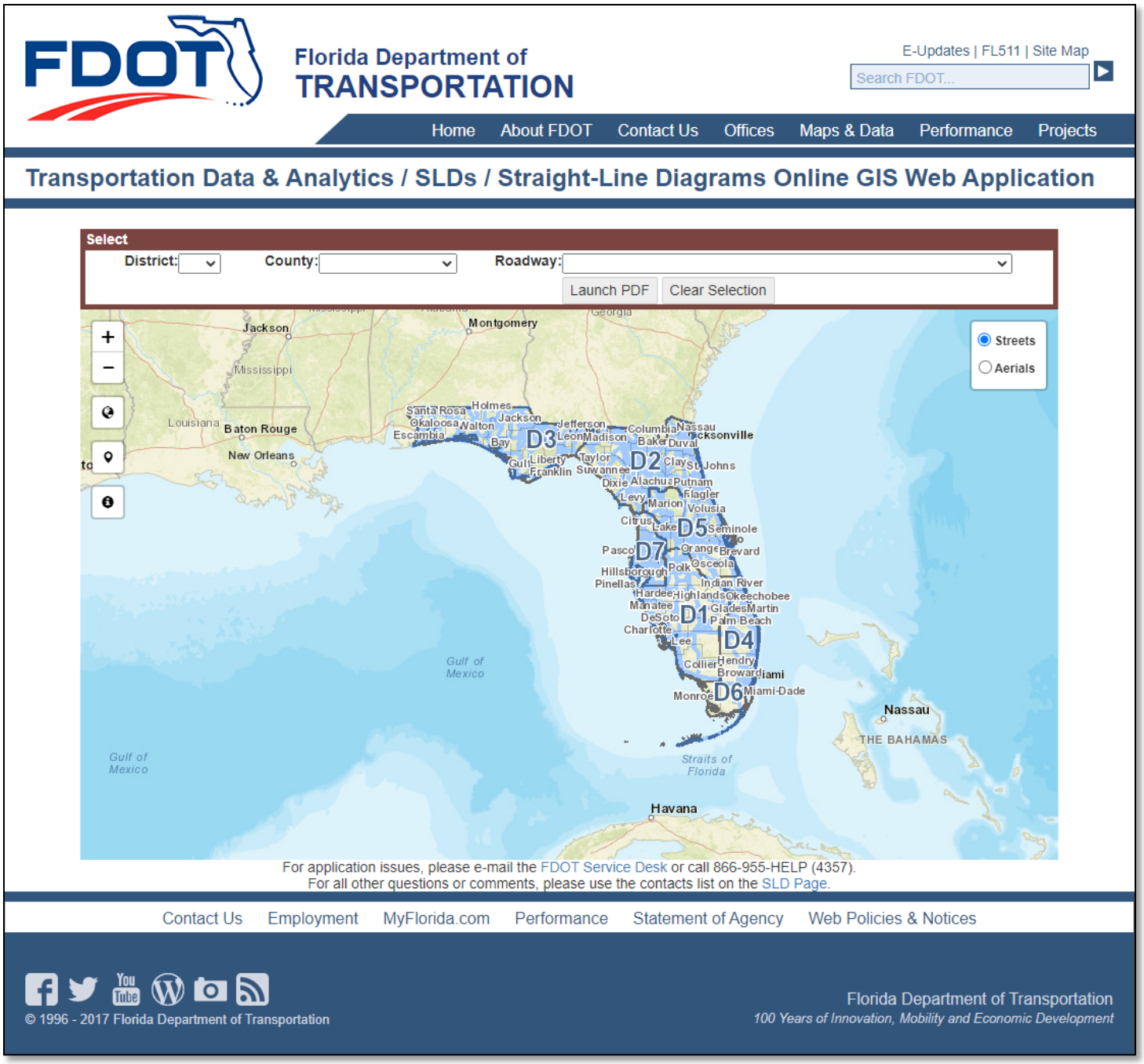

Figure 40 - SLOGIS Map Interface

Links

Above the map and below the map, links provide navigation to various locations throughout the Florida Department of Transportation website.

The only link that directly pertains to the application itself is:

- FDOT Service Desk

FDOT Service Desk

Click this to email the FDOT Service Desk. If the link is broken or does not properly pull up an email client, the email is FDOT.ServiceDesk@dot.state.fl.us

Searching for SLDs

There are two methods to search for SLDs. The first is to use the map and the second is to use the dropdown menus at the top.

Selecting SLDs Using the Map

The map functions just like other online mapping applications, such as Google Maps and Bing Maps. Use the mouse to click and drag. Use the scroll wheel of the mouse to zoom in and out. The blue highlighted roadways are SHS roadways that have SLDs.

The map has interactive functions located on the top left side.

Figure 41 - SLOGIS Map Functions

The **zoom in** icon will zoom in to the area highlighted on the map.

The **zoom out** icon will zoom out upon clicking it.

The **world** icon resets the map to the entire state extent.

The **location** icon will zoom to the user's location.

The '**i**' is an identify function. Use it to click on one of the blue roadways. After clicking on a roadway, it turns golden brown.

In the top right corner of the map, there is a Base Map option. Use this option to select between **Streets** (the default) or **Aerials**.

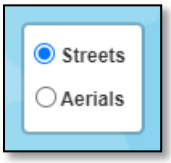

Figure 42 - SLOGIS Basemap Options

Selecting SLDs Using the Dropdown Menus

The dropdown menus are in a **Select** box. There are also two buttons, **Launch PDF** and **Clear Selection**.

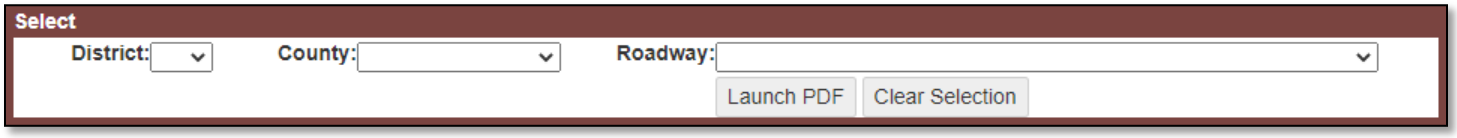

Figure 43 - SLOGIS Select Options

Use the **District** dropdown menu to select a District. After selecting, the map will automatically zoom to that District.

Use the **County** dropdown menu to select a county. After selecting, the map will automatically zoom to that county.

Use the **Roadway** dropdown menu to select a roadway. After selecting, the map will automatically zoom to that roadway.

The **Launch PDF** button will open a new browser window/tab of the selected SLD.

The **Clear Selection** button will clear the selected roadway from the map and the **Select** box.

Searching for Key Sheets

Use the **District** and/or **County** dropdown menus to narrow the search for a Key Sheet. Select the desired Key Sheet from the **Roadway** dropdown menu. All Key Sheets for Districts 1through 7 are named COUNTY KEYSHEET and have zeroes as their section and sub-section numbers. All Key Sheets for Turnpike are named COUNTY KEYSHEET (TURNPIKE) but have ‘479’ as their section number and ‘999’ as their sub-section number.

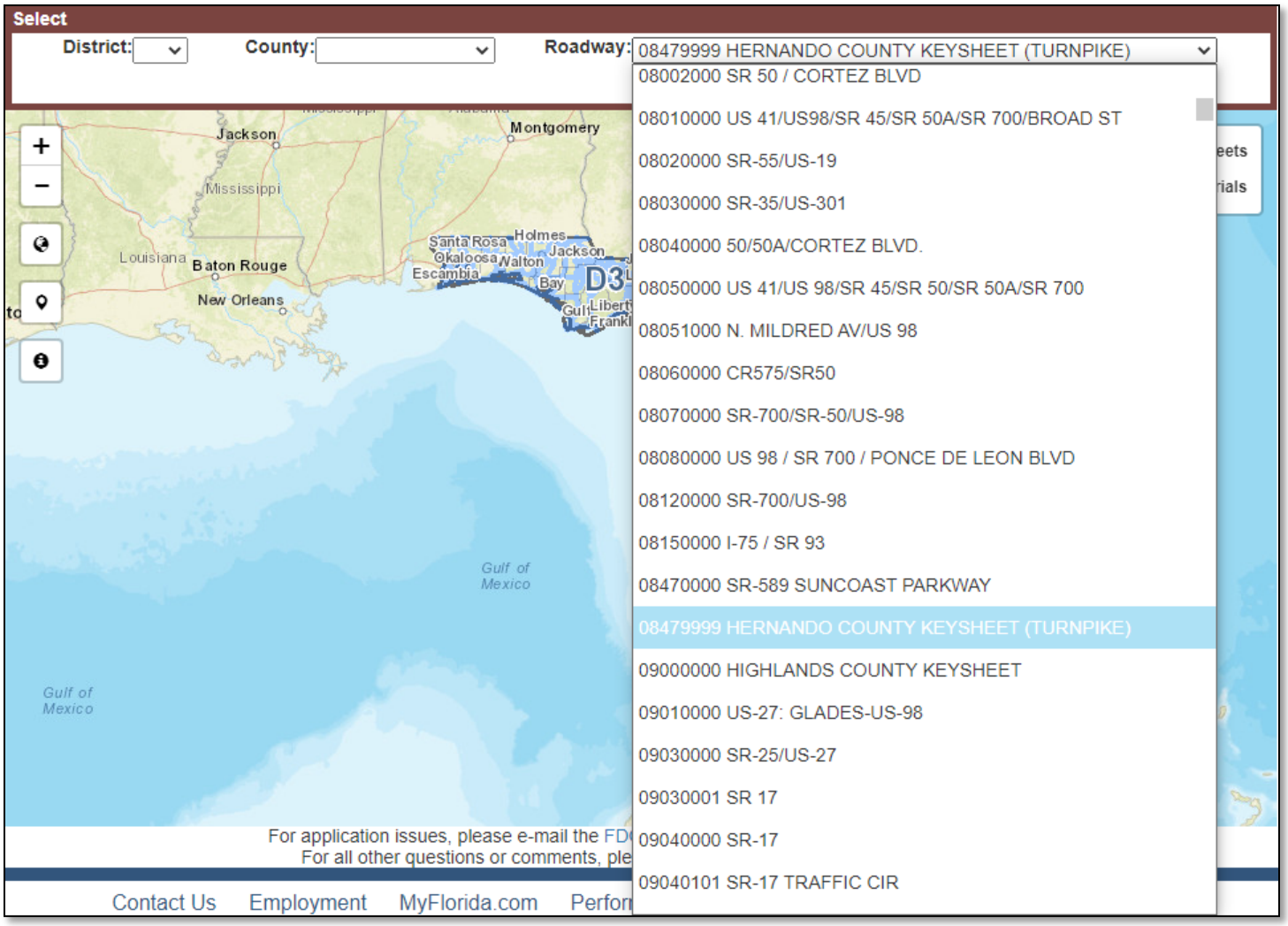

Figure 44 - SLOGIS Roadway Dropdown Menu

Viewing the SLD

Select a roadway ID from the **Roadway** dropdown menu then click **Launch SLD**. A PDF file opens in a new browser window/tab. To print the SLD, click the printer icon in the top left. To save the SLD, click the floppy disk icon in the top left. To email the SLD, click the letter icon in the top left.

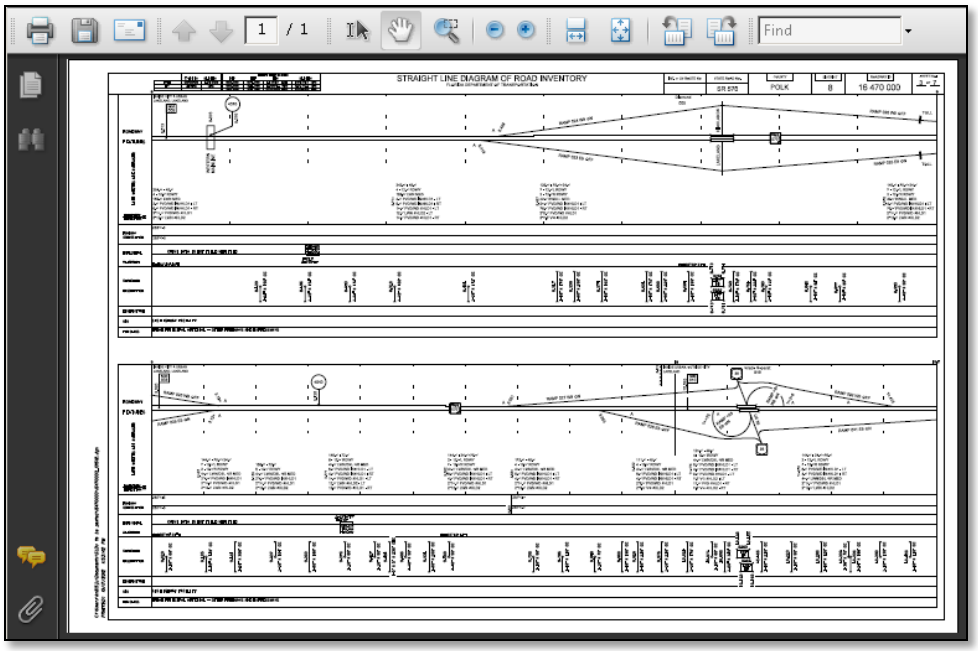

Figure 45 - Sample SLD

NOTE: The SLD is only viewable through a PDF viewer such as Adobe Acrobat or Power PDF Advanced.

How to Upload to the SLO Site

Only users with authorized access can upload SLDs to the SLO site. To gain authorization access, submit an Automatic Access Request Form (AARF) for Straight-Line Diagrams Online application (SLO). The upload site is on the FDOT intranet. Get to the site by using this link: https://tdaappsprod.dot.state.fl.us/prv/slo/search.aspx

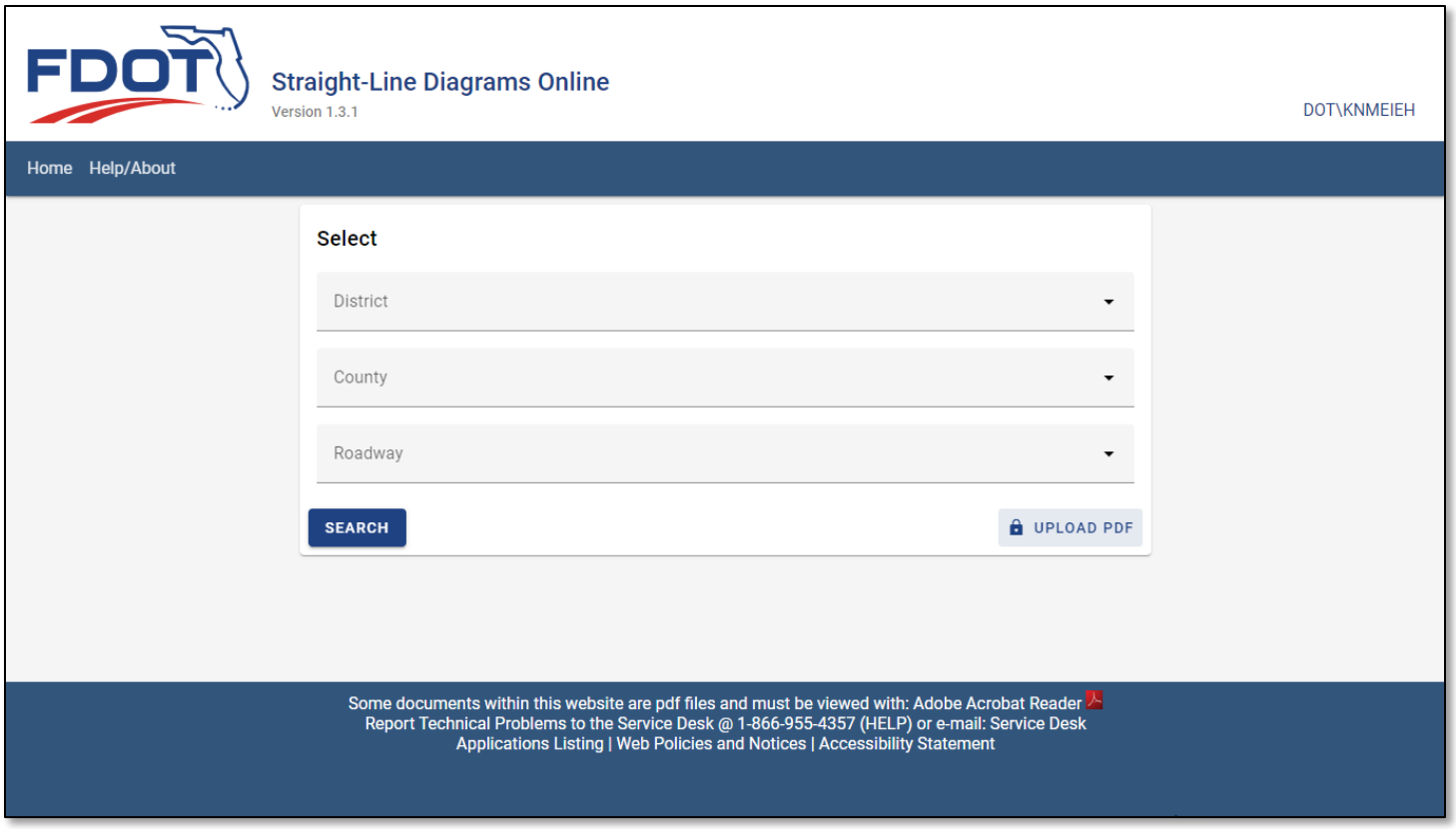

Figure 46 - SLO Home

The SLO site automatically assigns a date when the PDF file is uploaded.

Click **Upload PDF**.

Follow the directions on the screen to upload the file.

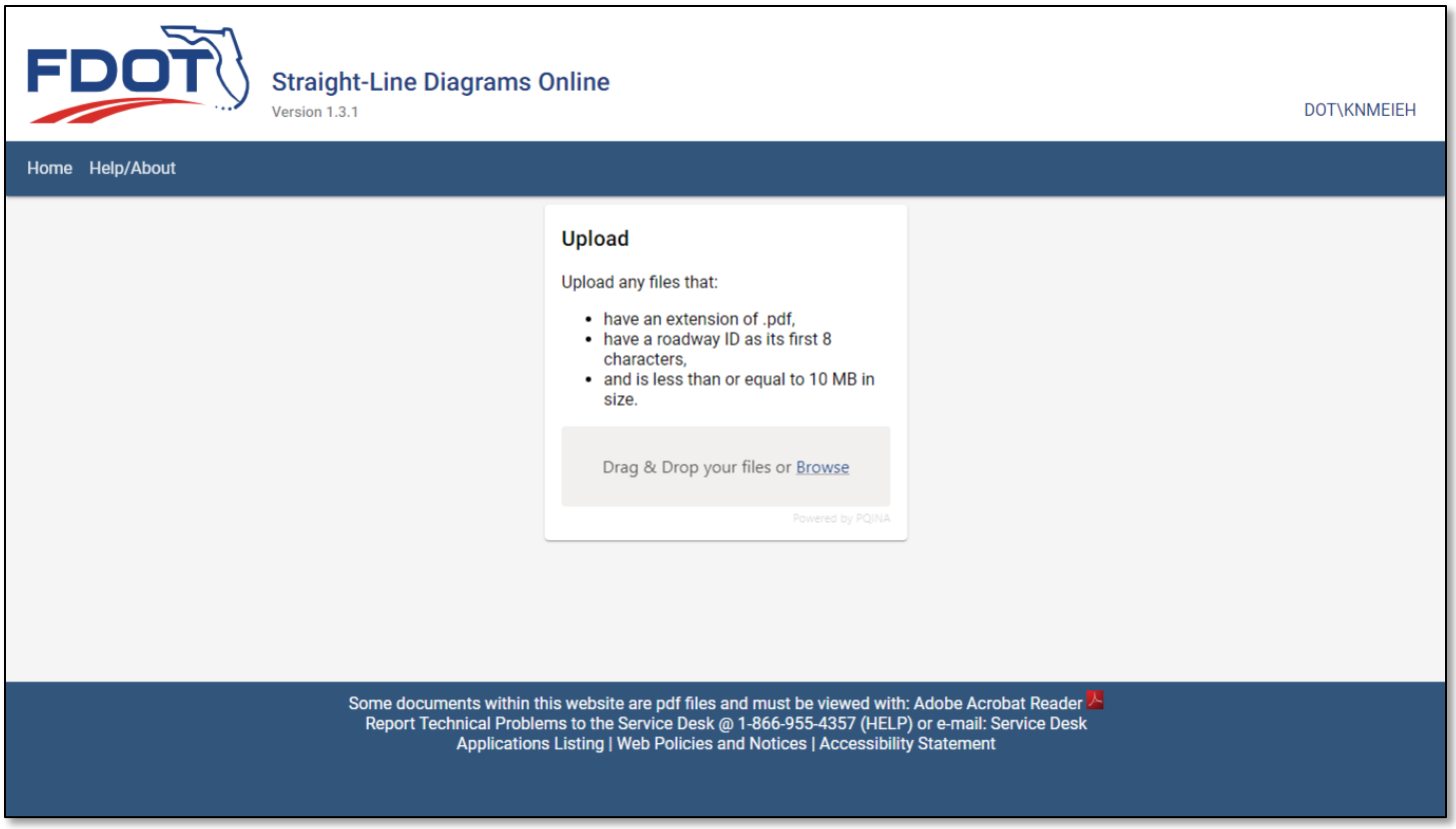

Figure 47 - SLO Upload

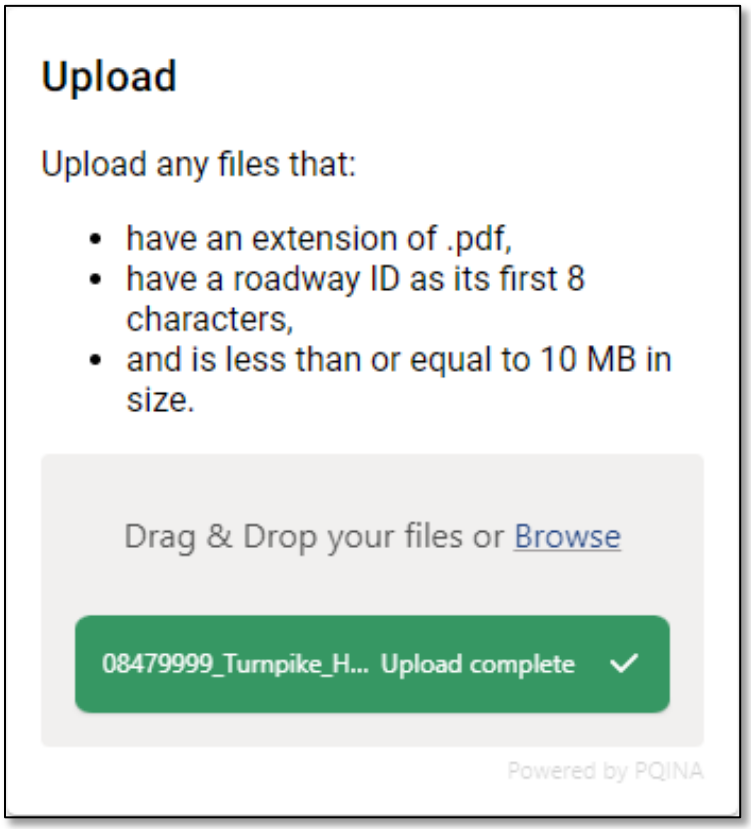

Figure 48 - SLO Upload Directions

SLDs

For uniformity, all SLD PDF files should be named starting with the roadway ID number and ending with the extension of ".pdf." It is recommended that multiple sheets be created as one file for one roadway ID. That way it is easier to locate and view the SLD for a particular roadway ID. SLD files should fit in the allowable 1 MB size, however, if the file needs to be broken into multiple files, use the following format, 99010000_1_of_2.pdf.

Key Sheets

Use the following format, CC000000_X County Key Sheet, where "CC" stands for the county code and "X" is the county name. For example, 26000000_Alachua County Key Sheet. For Key Sheet insets, use the following format, 26000000_Alachua County_inset1, 26000000_Alachua County_inset2, 26000000_Alachua County_inset3, etc.

For Turnpike Key Sheets, use the following format, CC479999_Turnpike_X County Key Sheet, where "CC" stands for the county code and "X" is the county name. For example, 93479999_Turnpike_Palm Beach County Key Sheet.

How to Delete files from the SLO Site

After uploading SLD(s), perform a search to see if everything uploaded properly. If there is a need to delete the uploaded file(s), use the Delete Action column on the search results page to delete the file(s) by clicking the **Delete** link.

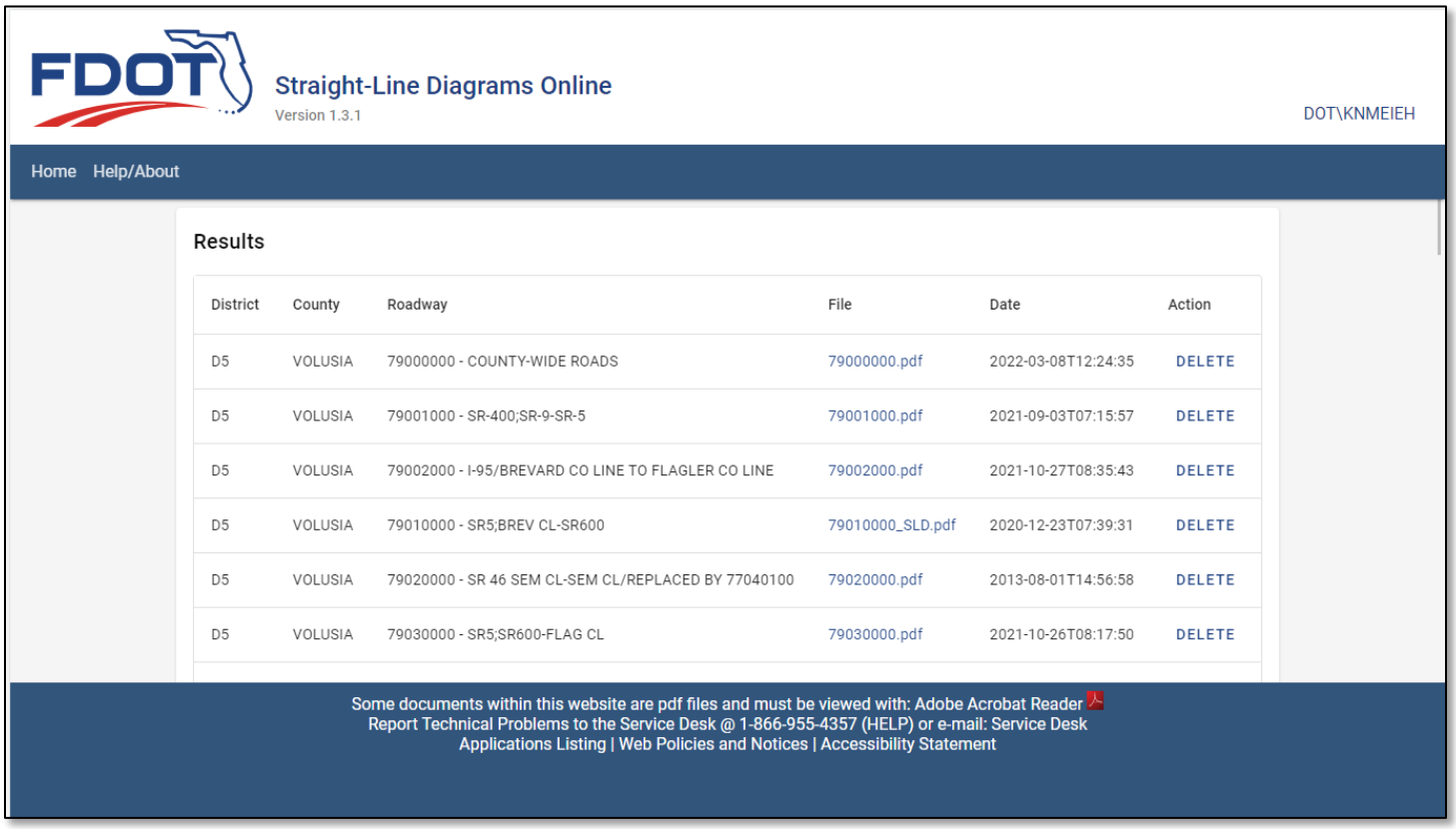

Figure 49 - SLO Results

Before deleting a file, a confirmation dialog will appear asking to confirm the deletion. Click **Delete** to delete the file from the SLO site or click **Cancel** to cancel the deletion.

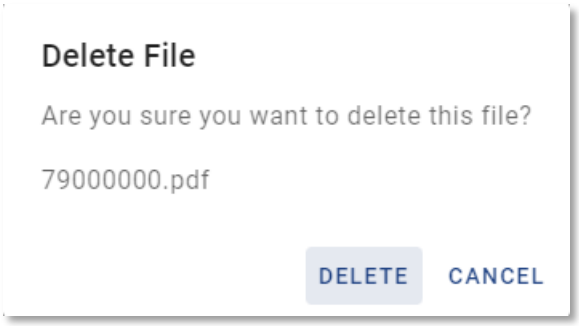

Figure 50 - SLO Delete File Dialog

A notification will let the user know that the file was deleted.

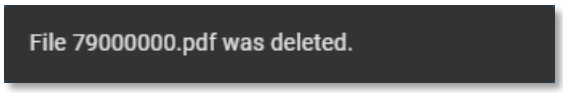

Figure 51 - SLO Delete File Notification

On-System SLD Regeneration Requirements

According to the General Interest Roadway Data Procedure (525-020-310), Districts are required to generate and distribute SLDs from the RCI database within 30, 60, or 120 days, depending on the type of change, from the date of any updates to the following list of required data:

- **Feature 111 – State Road System**
  - STROADNO – State Road Number
  - STRDNUM2 – State Road Number (next occurrence)
- **Feature 113 – AASHTO**
  - USROUTE – Lowest Numerical Posted U.S. Route No.
  - USROUTE2 – Second Lowest Numerical Posted U.S. Route No.
- **Feature 114 – Local Name**
  - LOCALNAM – Posted or Known Local Street Name
- **Feature 120 – Type Road**
  - TYPEROAD – Type of Road
- **Feature 121 – Functional Classification**
  - FUNCLASS – Federal Functional Classification
- **Feature 124 – Urban Classification**
  - HWYLOCAL – Location Code
  - PLACECD – Current Place Code
  - URBAREA – Urban Area Number
- **Feature 138 – Roadway Realignment**
  - NALIGNID – Section Identification of New Alignment
  - NALNBGPT – Beginning Milepoint of New Alignment
  - NALNENPT – Ending Milepoint of New Alignment
- **Feature 140 – Section Status Exception**
  - STATEXPT – Section Status Exception
- **Feature 141 – Stationing Exceptions**
  - STATIONING EXCEPTION (reference effective June 2010)
  - BEGSECPT – Beginning Roadway Section Milepoint

  - ENDSECPT – Ending Milepoint of Exception
  - RDWYID – Roadway ID of Exception Within a County
- **Feature 142 – Managed Lanes**
  - LMLBMP – Left managed lane begin milepoint
  - LMLEMP – Left managed lane end milepoint
  - LMLRDWY – left managed lane roadway ID
  - MAINBMP – Mainline begin milepoint
  - MAINEMP – Mainline end milepoint
  - MAINRDWY – Mainline roadway id
  - RMLBMP – Right managed lane being milepoint
  - RMLEMP – Right managed lane end milepoint
  - RMLRDWY – Right managed lane roadway ID
- **Feature 143 – Associated Station Exceptions**
  - ASSOCIATED STATIONING EXCEPTION (reference effective June 2010)
  - BEGSECPT – Beginning Roadway Section Milepoint
  - ENDSECPT – Ending Milepoint of Exception
  - RDWYID – Roadway ID of Exception Within a County
- **Feature 147 – Strategic Intermodal System**
  - SISFCTPx – SIS Facility Type Level (x=1-9)
- **Feature 212 – Through Lanes**
  - NOLANES – Number of Through Roadway Lanes
  - SURWIDTH – Total Through Lanes Surface Width
- **Feature 214 – Outside Shoulders**
  - SHLDTYPE – Highway Shoulder Type
  - SHLDTYPx – Other Highway Shoulder Type (x=2,3)
  - SLDWIDTH – Highway Shoulder Width
  - SHLDWTHx – Other Highway Shoulder Width (x=2,3)
- **Feature 215 – Highway Median Type**
  - MDBARTYP – Type of Median Barrier
  - MEDWIDTH – Highway Median Width
  - RDMEDIAN – Type of Median
- **Feature 219 – Inside Shoulders**
  - ISLDTYPE – Inside Shoulder Type
  - ISLDTYPx – Other Inside Shoulder Type (x=2, 3)
  - ISLDWDTH – Inside Shoulder Width
  - ISLDWTHx – Other Inside Shoulder Width (x=2, 3)
- **Feature 220 – Non-Curve Intersection**
  - NCPTINT – Non-Curve Point of Intersection
- **Feature 221 – Horizontal Curve**
  - BEARING – Compass Bearing Along Road at a Point
  - HRZCANGL – Horizontal Curve Central Angle
  - HRZDGCRV – Horizontal Degree of Curve
  - HRZPTINT – Horizontal Point of Intersection
- **Feature 230 – Surface Description**
  - SURFNUM – Pavement Surface Type
- **Feature 232 – Surface Layers**
  - FRICTCSE – Type of Friction Layer Course
- **Feature 241 – Crossdrains & Box Culverts**

  - BOXCULHT – Box Culvert Height
  - BOXCULLT – Box Culvert Width
  - BXCULGTH – Box Culvert Length
  - CRSDRLGH – Length of Crossdrain
  - NOBXCULV – Number of Box Culverts
  - NOCRDRAN – Number of Crossdrain Pipes
  - PIPEDIAM – Pipe Diameter
  - PIPEHIGH – Non-Circular Pipe Height
  - PIPETYPE – Type of Pipe
  - PIPEWDTH – Non-Circular Pipe Width
- **Feature 251 – Intersections**
  - BEGSECNM – Beginning Roadway Section Milepoint Name
  - ENDSECNM – Ending Roadway Section Milepoint Name
  - INTSDIRx – Intersection Direction (x=1-9)
  - INTSRTPx – Intersection Surface Type (x=1-9) (optional)
- **Feature 252 – Interchanges**
  - EXITNO – Interchange (Exit) Number
  - INTERCHG – Type of Interchange
- **Feature 253 – Railroads**
  - CHKDIGIT – Check Digit
  - RRCROSNO – National RR Grade Crossing Number
- **Feature 258 – Structures**
  - BOXCULNO – Box Culvert Structure Number
  - BRIDGENO – Bridge Structure ID Number
  - FACCROSS – Facility Crossing Name
  - UNDPASNO – Underpass Number
  - TUNNELNO – Tunnel Number
- **Feature 320 – Milemarker Signs**
  - MILEMARK – Milemarker Sign
- **Feature 326 – Traffic Monitoring Sites**
  - TRFSTANO – Traffic Count Station Number
  - TRSTATYP – Traffic Count Station Type (Type I – Inactive, Type R – Roadtubes, and Type V – Virtual are optional)

Contacts

For information or questions about SLDs, contact the specific District Office.

District 1

District Maintenance Statistics Office 1-800-292-3368
Southwest Florida (Charlotte, Collier, De Soto, Glades, Hardee, Hendry, Highlands, Lee, Manatee, Okeechobee, Polk, and Sarasota)
Major cities: Arcadia, Bartow, Bradenton, Fort Myers, Lakeland, Naples, North Port, Sarasota, Sebring, and Venice

District 2

District Planning Statistics Office 1-800-749-2967
Northeast Florida (Alachua, Baker, Bradford, Clay, Columbia, Dixie, Duval, Gilchrist, Hamilton, Lafayette, Levy, Madison, Nassau, Putnam, St. Johns, Suwannee, Taylor, and Union)
Major cities: Gainesville, Jacksonville, Lake City, Palatka, Perry, Saint Augustine, and Starke

District 3

District Planning Statistics Office 1-888-638-0250
Northwest Florida (Bay, Calhoun, Escambia, Franklin, Gadsden, Gulf, Holmes, Jackson, Jefferson, Leon, Liberty, Okaloosa, Santa Rosa, Wakulla, Walton, and Washington)
Major cities: Apalachicola, Chipley, Crestview, Fort Walton Beach, Marianna, Panama City, Pensacola, Quincy, and Tallahassee

District 4

District Planning Statistics Office 1-866-336-8435
Southeast Florida (Broward, Indian River, Martin, Palm Beach, and St. Lucie)
Major cities: Belle Glade, Boca Raton, Fort Lauderdale, Fort Pierce, Hollywood, Pompano Beach, Port St. Lucie, Stuart, Vero Beach, and West Palm Beach

District 5

District Maintenance Statistics Office 1-800-780-7102
Central Florida (Brevard, Flagler, Lake, Marion, Orange, Osceola, Seminole, Sumter, and Volusia)
Major cities: Daytona Beach, DeLand, Melbourne, Merritt Island, Ocala, Orlando, and Titusville

District 6

District Planning Statistics Office 1-800-435-2368
South Florida (Miami-Dade and Monroe)
Major cities: Coral Gables, Hialeah, Key West, and Miami

District 7

District Maintenance Statistics Office 1-800-226-7220

West Central Florida (Citrus, Hernando, Hillsborough, Pasco, and Pinellas)

Major cities: Brooksville, Clearwater, Dunedin, Largo, New Port Richey, St. Petersburg, and Tampa

Turnpike

District Planning Statistics Office 1-800-798-3691

Florida's Turnpike Enterprise oversees a system of limited-access toll highways: Florida's Turnpike, extending north from Homestead in Miami-Dade County to Wildwood in Sumter County; SR-23 in Clay and Duval Counties; the Seminole Expressway and Southern Connector (Toll 417) in Seminole, Orange, and Osceola counties; Beachline Expressway West (Toll 528) in Orange County and Beachline Expressway East (Toll 528) in Orange and Brevard Counties; the Polk Parkway (Toll 570) in Polk County; the Veterans Expressway and Suncoast Parkway in Hillsborough, Pasco, Hernando, and Citrus counties (Toll 589); the Sawgrass Expressway (Toll 869) in Broward County; and the Daniel Webster Western Beltway (Toll 429) in Orange and Osceola Counties.

Districts with Counties Map

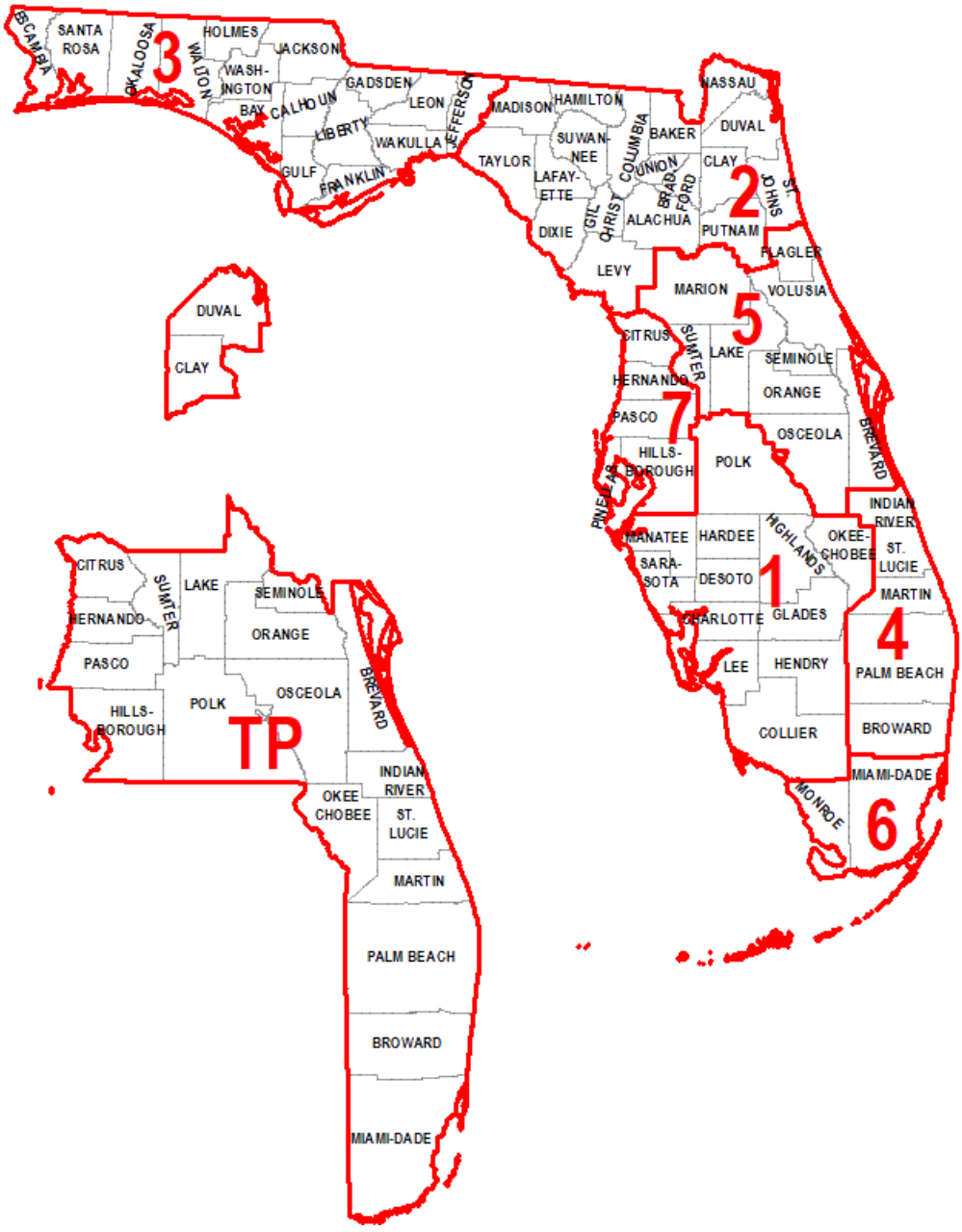

Figure 52 - Districts With Counties Map

APPENDIX

Abbreviated SLD Descriptions for Features 214, 215, & 219

Feature	Characteristic	Code	Description	Abbreviation
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	0	RAISED CURB	RC
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	1	PAVED	PVD
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	2	PAVED WARN	WARN
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	3	LAWN	LWN
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	4	GRAVEL/MARL	GRVL
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	5	VALLEY GUTR	VG
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	6	CURB&GUTTER	C&G
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	7	OTHER	OTHER
214	SHLDTYPE, SHLDTYP2, SHLDTYP3	8	CURB W RESF	CRG
215	MDBARTYP	3	CABLE BARRIER	CBL
215	MDBARTYP	4	GUARDRAIL (ALL TYPES)	GRD
215	MDBARTYP	5	FENCE	FNC
215	MDBARTYP	6	BARRIER WALL	BAR
215	MDBARTYP	20	OTHER	OTHER
215	MDBARTYP	28	CANAL, RIVER, WATERWAY, ETC.	CRW
215	MLTRFSEP	1	FLEXIBLE POSTS	FLEX POSTS
215	MLTRFSEP	2	GUARDRAIL	GRD
215	MLTRFSEP	3	BARRIER WALL	BAR
215	RDMEDIAN	1	PAINTED/TWO-WAY LEFT TURN	PVD
215	RDMEDIAN	2	TRAFFIC SEPARATOR/CONCRETE CRB	TFSP
215	RDMEDIAN	3	CURB > 6 INCH	TFSP
215	RDMEDIAN	8	LAWN/TURF	VEG
215	RDMEDIAN	9	GRAVEL/MARL	OTHER
215	RDMEDIAN	10	PAVED/HATCHING AND GORES	PVD
215	RDMEDIAN	11	DEPRESSED MEDIAN	VEG
215	RDMEDIAN	12	PAVED W/ GUARDRAIL	PVD
215	RDMEDIAN	13	PAVED WITH BARRIER	PVD
215	RDMEDIAN	14	C.<6 IN. & GU.RAIL	TFSP
215	RDMEDIAN	15	C.<6 IN. & FENCE	TFSP
215	RDMEDIAN	16	C.<6 IN. & BARRIER	TFSP
215	RDMEDIAN	17	CURB W/LAWN/TURF	CB&VEG
215	RDMEDIAN	18	C.>6 IN. & GU.RAIL	TFSP
215	RDMEDIAN	19	CURB > 6" & FENCE	TFSP
215	RDMEDIAN	20	OTHER	OTHER
215	RDMEDIAN	21	C.>6 IN. & BARRIER	TFSP
215	RDMEDIAN	22	C.>6 IN. & LAWN	CB&VEG

215	RDMEDIAN	23	LAWN & GU.RAIL	VEG
215	RDMEDIAN	24	GRASSED WITH FENCE	VEG
215	RDMEDIAN	25	LAWN & BARRIER	VEG
215	RDMEDIAN	26	LW,BAR.& C.< 6 IN.	CB&VEG
215	RDMEDIAN	27	LW,BAR.& C.> 6 IN.	CB&VEG
215	RDMEDIAN	29	COM 02,03,& 28	OTHER
215	RDMEDIAN	30	COM 02,03,05,28	OTHER
215	RDMEDIAN	31	LAWN W/DBL GUARDRL	VEG
215	RDMEDIAN	32	UNPAVED W/LANDSCAPING	VEG
215	RDMEDIAN	33	WOODED	VEG
215	RDMEDIAN	34	CURB W/LANDSCAPING	CB&VEG
215	RDMEDIAN	41	ROUNDABOUT	RND
215	RDMEDIAN	42	NON-COUNTED ROUNDABOUT	NC RND
215	RDMEDIAN	43	TRAFFIC CIRCLE	CIR
215	RDMEDIAN	44	NON-COUNTED TRAFFIC CIRCLE	NC CIR
215	RDMEDIAN	50	NON-COUNTED MANAGED LANE	NC MNG LN
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	0	RAISED CURB	RC
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	1	PAVED	PVD
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	2	PAVED WARN	WARN
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	3	LAWN	LWN
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	4	GRAVEL/MARL	GRVL
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	5	VALLEY GUTR	VG
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	6	CURB&GUTTER	C&G
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	7	OTHER	OTHER
219	ISLDTYPE, ISLDTYP2, ISLDTYP3	8	CURB W RESF	CRG