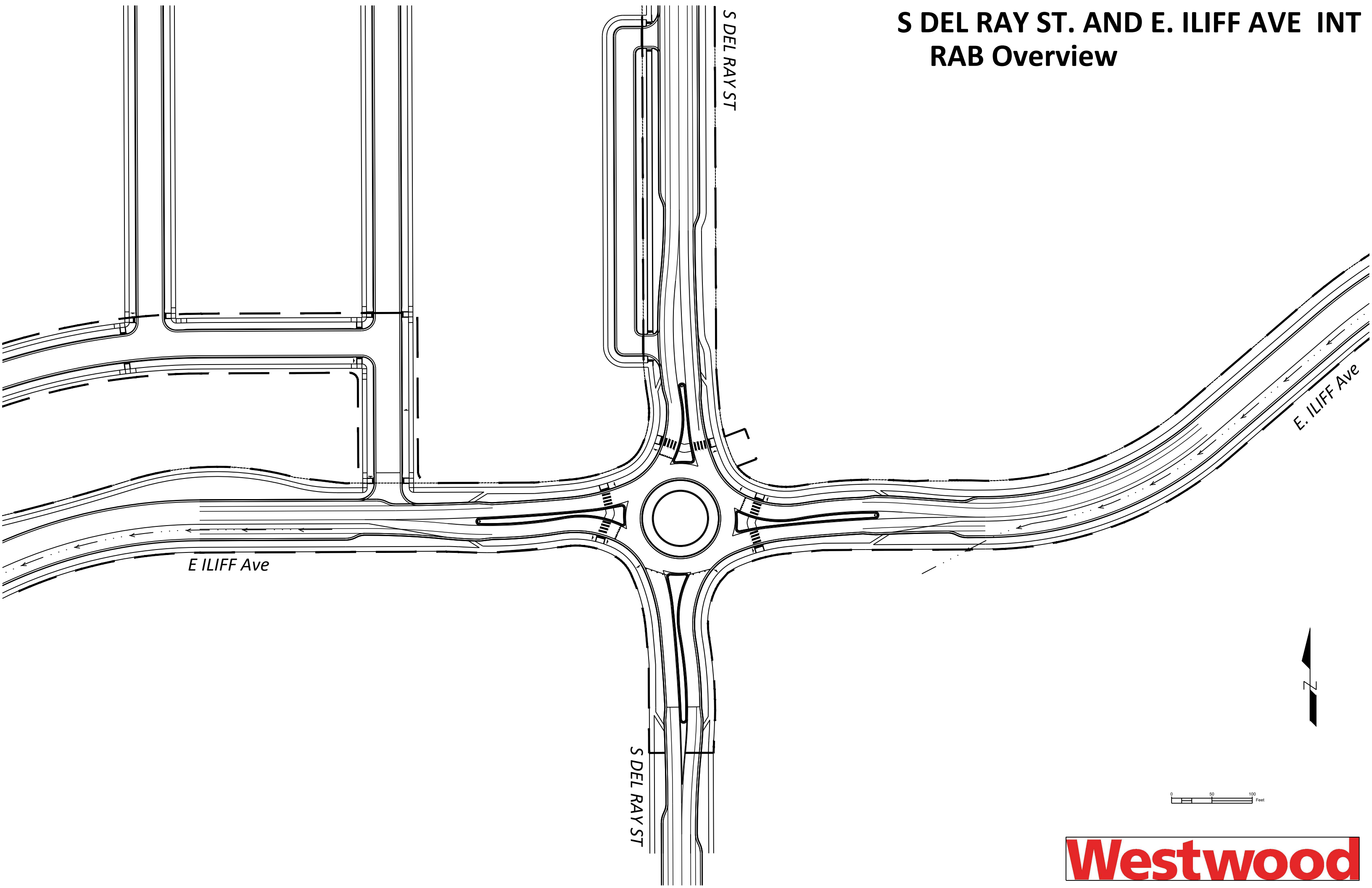


S DEL RAY ST. AND E. ILIFF AVE INT
RAB Overview



E ILIFF Ave

S DEL RAY ST

E. ILIFF Ave

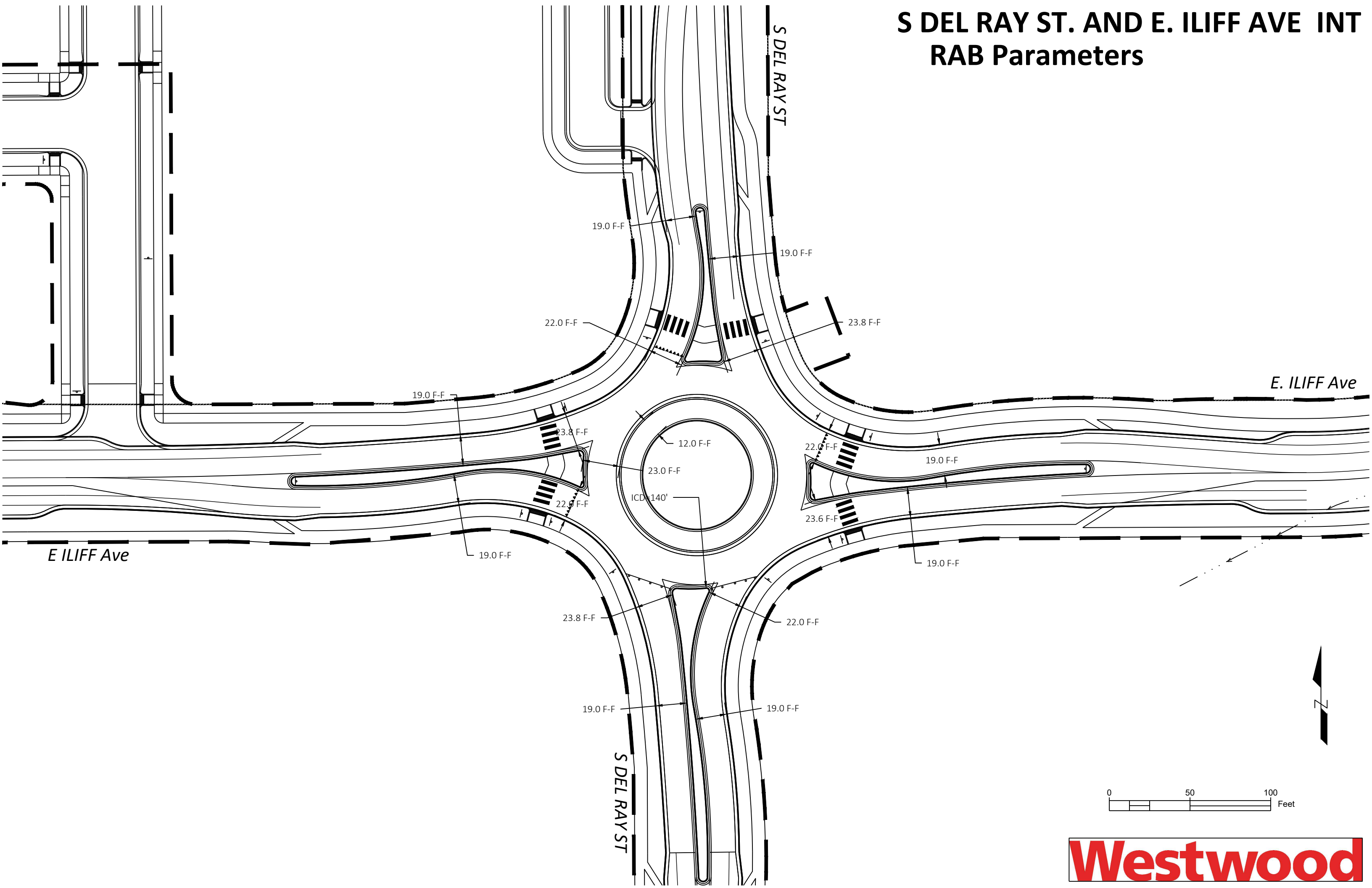
S DEL RAY ST

0 50 100 Feet

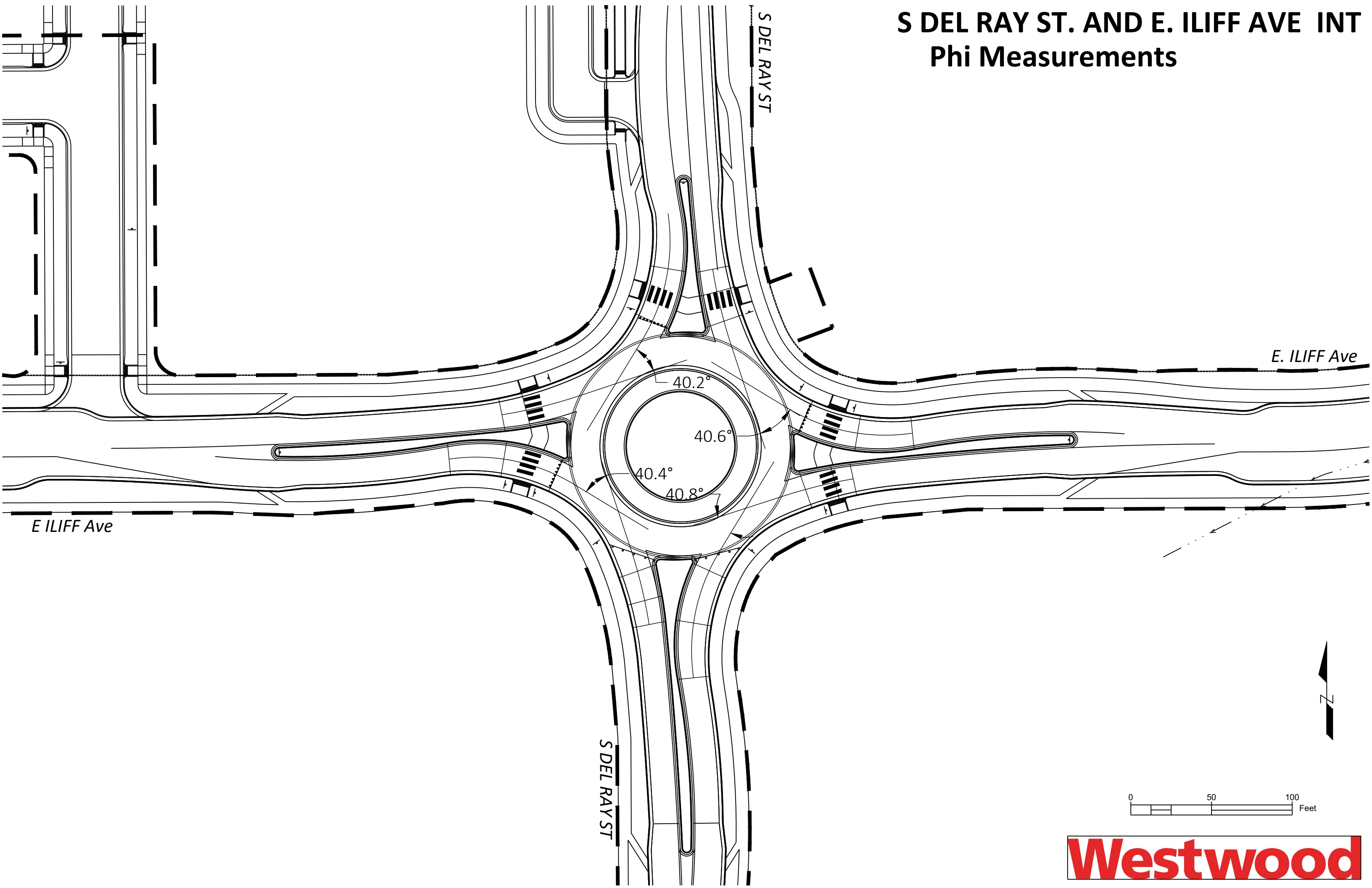


S DEL RAY ST. AND E. ILIFF AVE INT

RAB Parameters



S DEL RAY ST. AND E. ILIFF AVE INT
Phi Measurements



0 50 100 Feet

Westwood

ROUNDAABOUT CRITICAL DESIGN PARAMETERS

| DESIGN PARAMETERS | LEG 1 SB | LEG 2 EB | LEG 3 NB | LEG 4 WB | LEG 5 | LEG 6 |
|---|-------------|-------------|-------------|-------------|-------|-------|
| Approach Width, FT | 19.0 | 19.0 | 19.0 | 19.0 | | |
| Entry Width, FT | 22.0 | 22.0 | 22.0 | 22.0 | | |
| Entry Angle, PHI Φ , DEG | 20.1 | 20.2 | 20.4 | 20.3 | | |
| Inscribed Circle Diameter, FT | 140.0 | 140.0 | 140.0 | 140.0 | | |
| Exit Width, FT | 23.8 | 23.8 | 23.8 | 23.6 | | |
| Circulating Roadway Width Upstream of Entry, FT | 23.0 | 23.0 | 23.0 | 23.0 | | |

FASTEST SPEED PATH

| | | | | | | | | | | | | |
|-------------------------------------|-----|----|-----|----|-----|----|-----|----|--|--|--|--|
| R_1 , Radius/Speed, FT/MPH | 165 | 25 | 168 | 25 | 167 | 25 | 167 | 25 | | | | |
| R_2 , Radius/Speed, FT/MPH | 93 | 19 | 93 | 19 | 91 | 19 | 93 | 19 | | | | |
| R_3 , Radius/Speed, FT/MPH | | 24 | | 24 | | 24 | | 24 | | | | |
| R_4 , Radius/Speed, FT/MPH | 53 | 15 | 53 | 15 | 53 | 15 | 53 | 15 | | | | |
| R_5 , Radius/Speed, FT/MPH | 90 | 20 | 90 | 20 | 91 | 20 | 89 | 20 | | | | |
| Bypass R_5 , Radius/Speed, FT/MPH | | | | | | | | | | | | |

MINIMUM SIGHT PARAMETERS

| | | | | | | |
|---|---------|---------|-----------|---------|--|--|
| Approach Design Speed, MPH | 35.0 | 35.0 | 35.0 | 35.0 | | |
| Horizontal Stopping Sight Distance, FT | 247.8 | 247.8 | 247.8 | 247.8 | | |
| Circulating Intersection Sight Distance, FT/MPH | 15: 110 | 15: 110 | 15: 110 | 15: 110 | | |
| Entering Intersection Sight Distance, FT/MPH | 22: 162 | 22: 162 | 22.0: 162 | 22: 162 | | |

Design Vehicle: WB-67 to stay out of the pan on approach and exit, WB-40 and Bus 45 to circulate without the use of the truck apron.

Truck Apron Width: 12' Back of curb to Flange of curb

OSOW Accommodations: None

Circulating Roadway Cross-Slope:

Access Control: No Access

Parking Control: The parking lanes end/begin outside of the bike slip lanes

Bicycle & Pedestrian Accommodations: Slip lanes added and sidewalk is widened to 10' wide when bikes are added.

Designer:

Reviewer:

SIGNATURE: _____

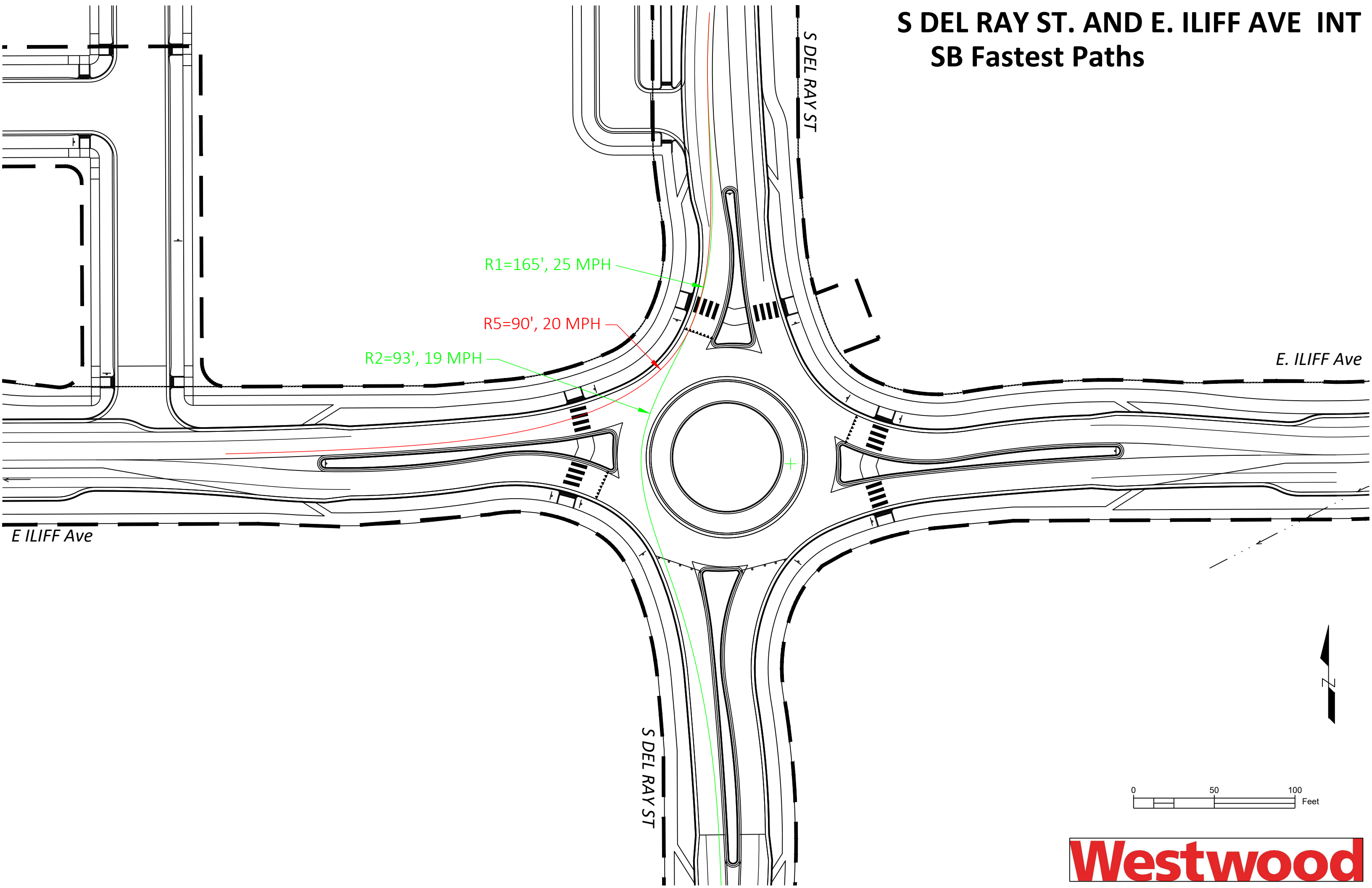
DATE: 2-22-23

NAME: _____

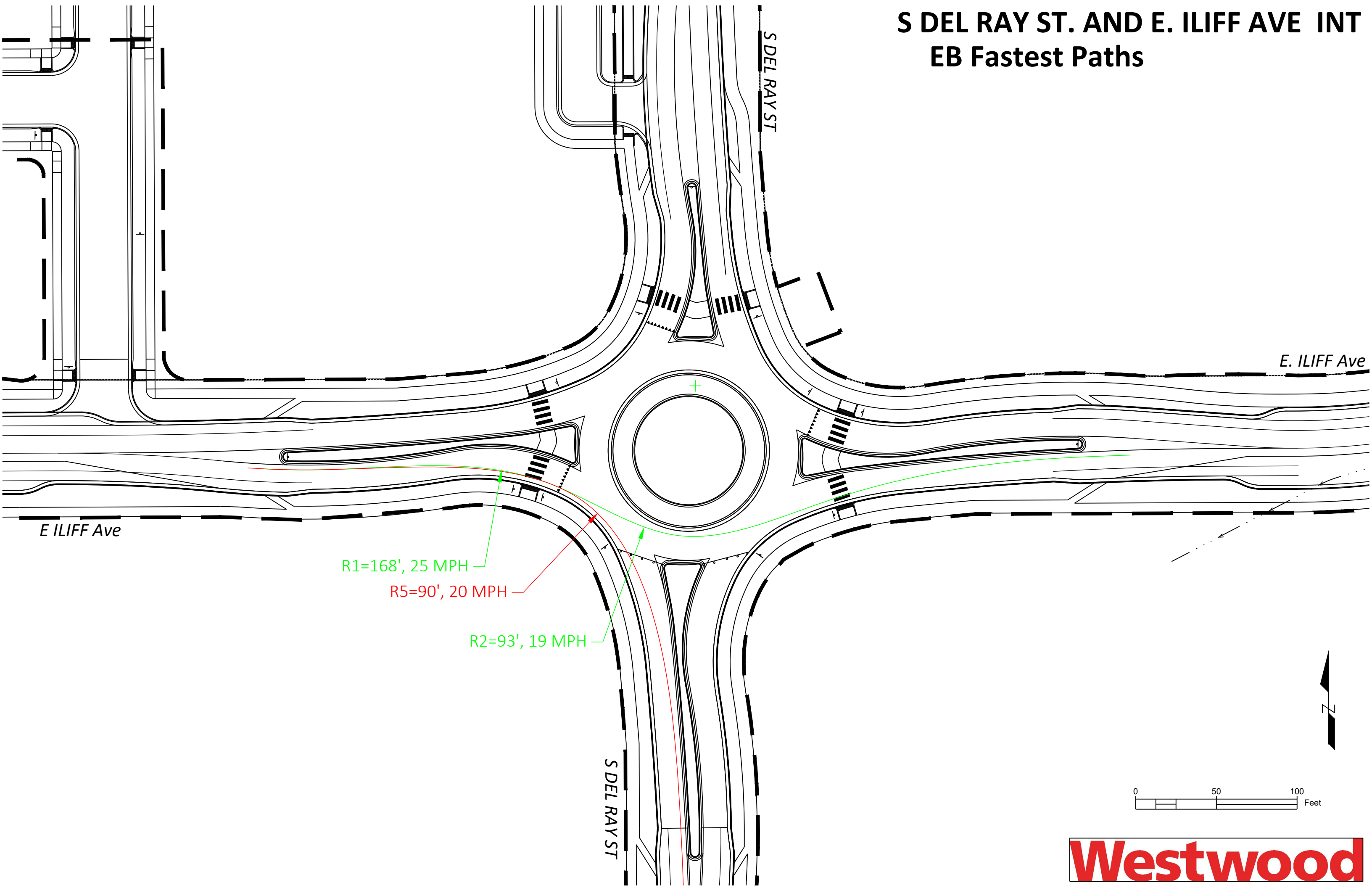
Ryan E. Betker

The reviewer's signature on this document indicates that the design has been reviewed and is in general compliance with good roundabout principals. The critical design elements have been addressed. The project design engineer in responsible charge of final plan development will stamp the plans when applicable.

S DEL RAY ST. AND E. ILIFF AVE INT
SB Fastest Paths



S DEL RAY ST. AND E. ILIFF AVE INT
EB Fastest Paths



E ILIFF Ave

E. ILIFF Ave

S DEL RAY ST

S DEL RAY ST

R1=168', 25 MPH

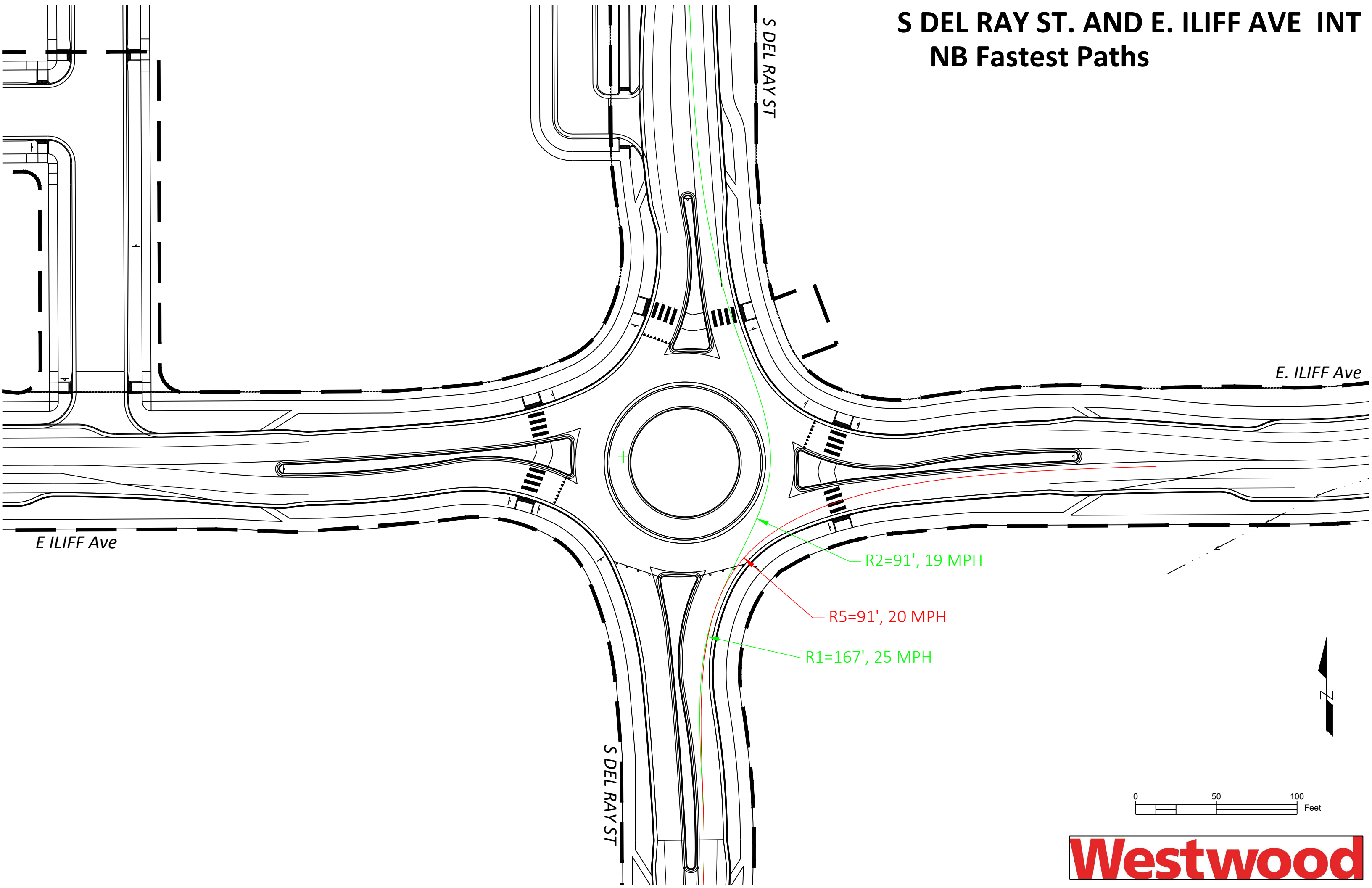
R5=90', 20 MPH

R2=93', 19 MPH

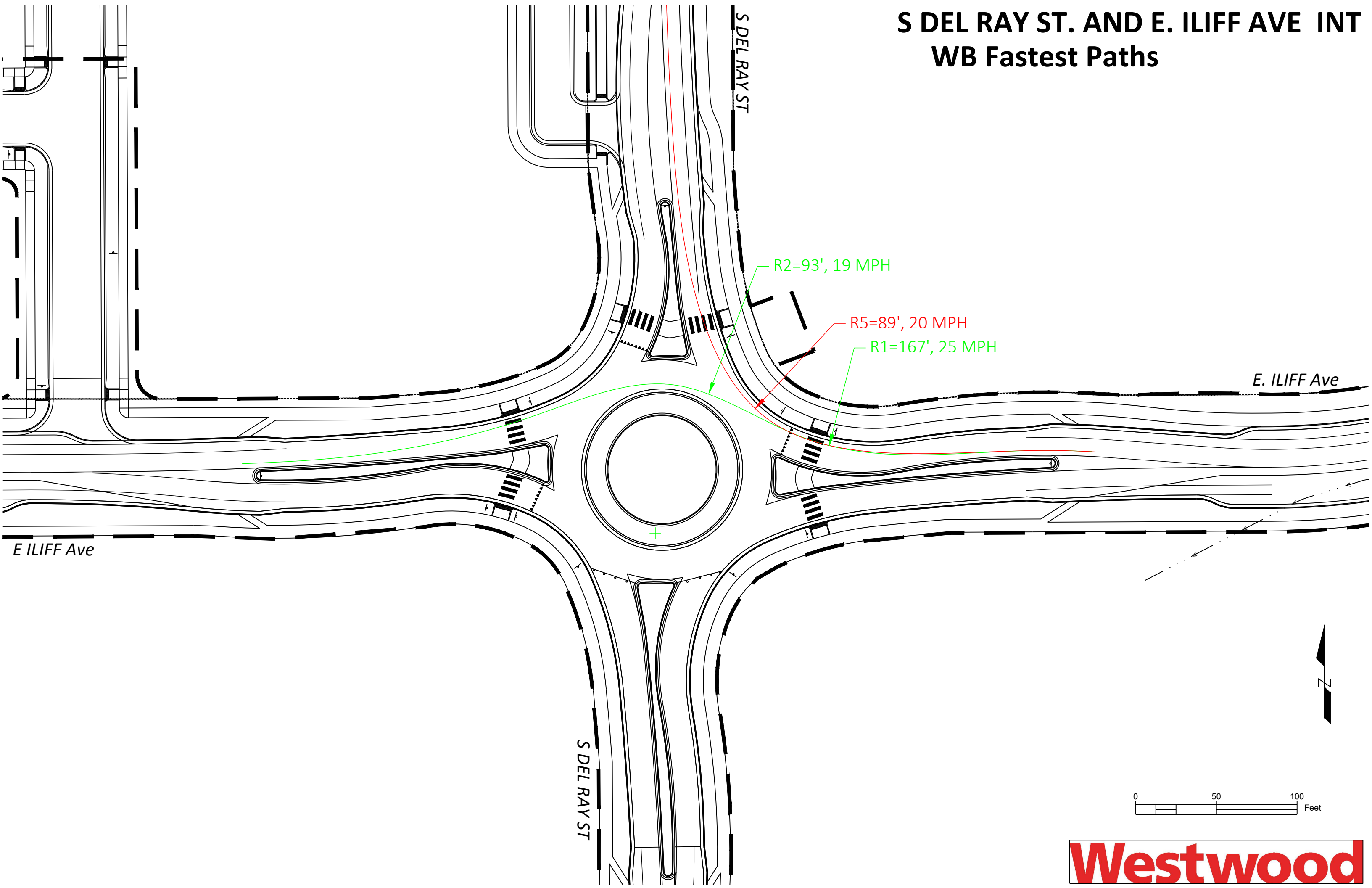
0 50 100 Feet

Westwood

S DEL RAY ST. AND E. ILIFF AVE INT
NB Fastest Paths



S DEL RAY ST. AND E. ILIFF AVE INT
WB Fastest Paths

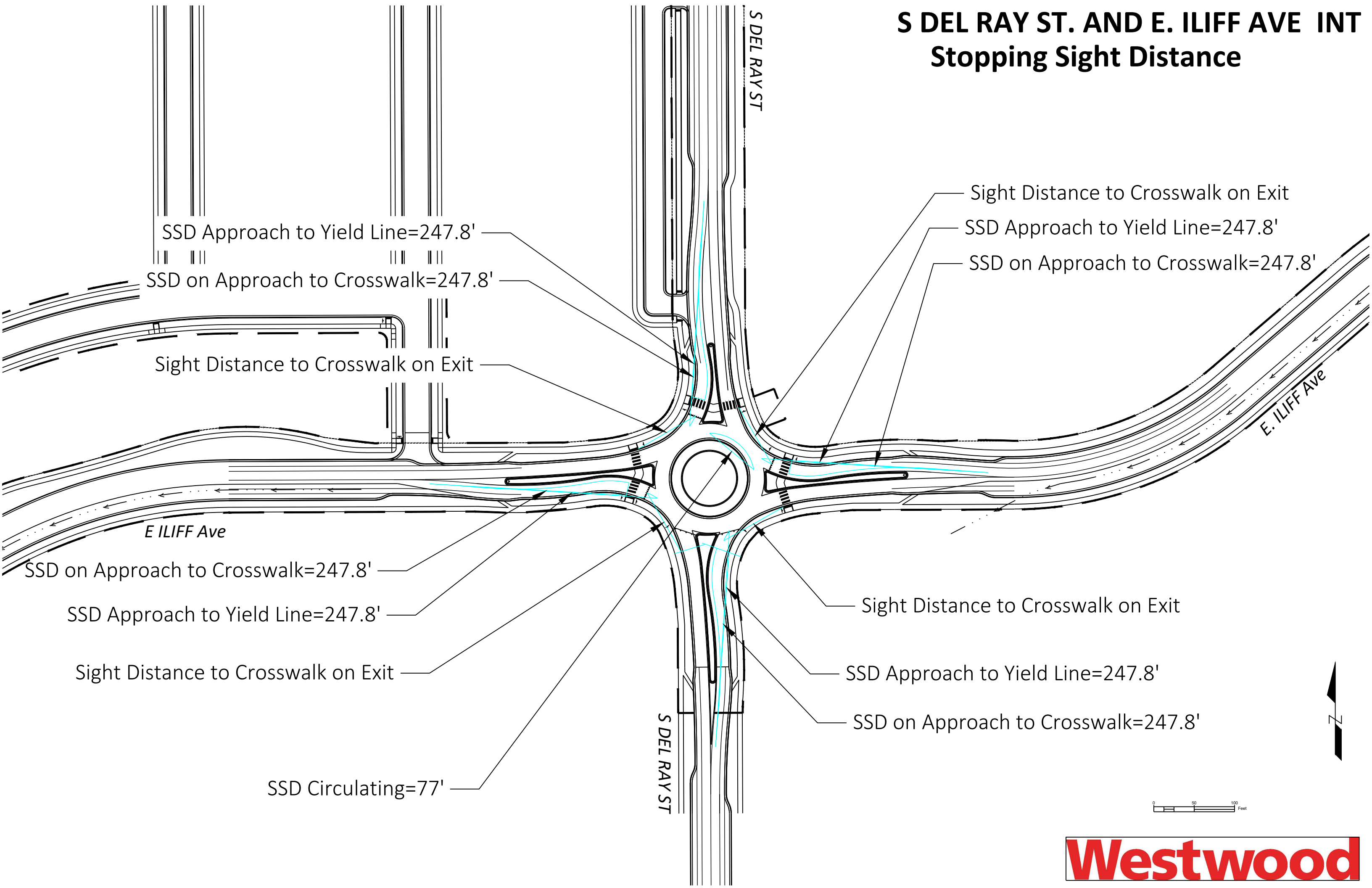


0 50 100 Feet

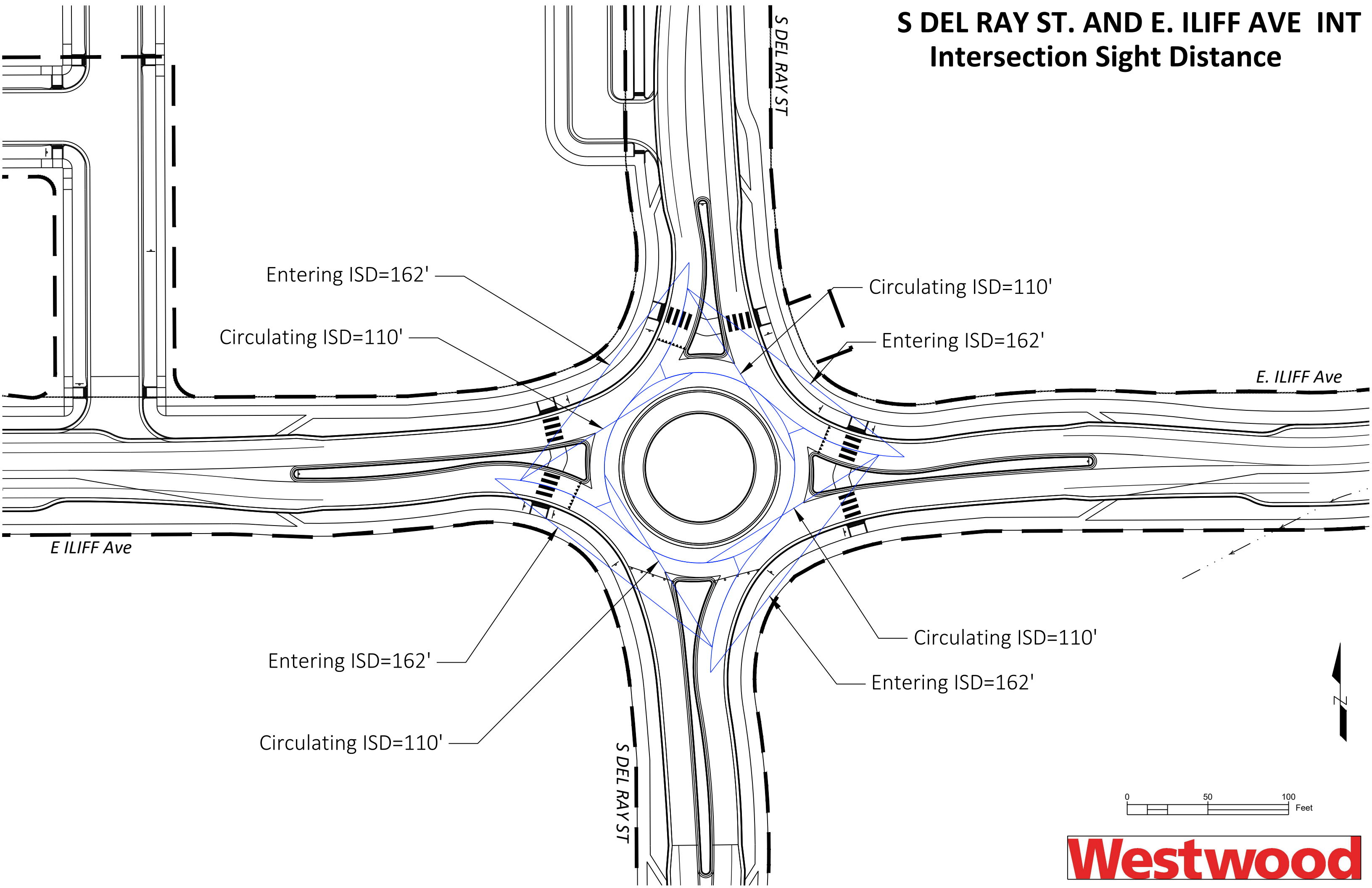
Westwood

S DEL RAY ST. AND E. ILIFF AVE INT

Stopping Sight Distance

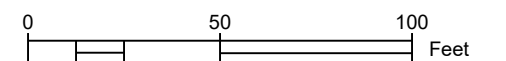
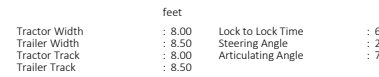
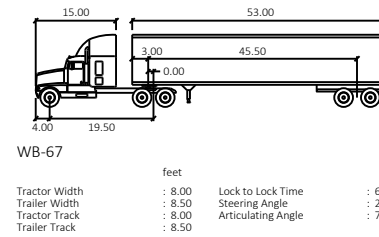


S DEL RAY ST. AND E. ILIFF AVE INT
Intersection Sight Distance



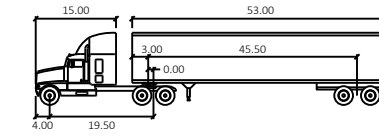
WB-67

| | feet | |
|-------------------|--------|--------------------|
| Tractor Width | : 8.00 | Lock to Lock Time |
| Tractor Wheelbase | : 8.50 | Steering Angle |
| Tractor Track | : 8.00 | Articulating Angle |
| Trailer Track | : 8.50 | |



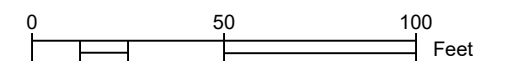
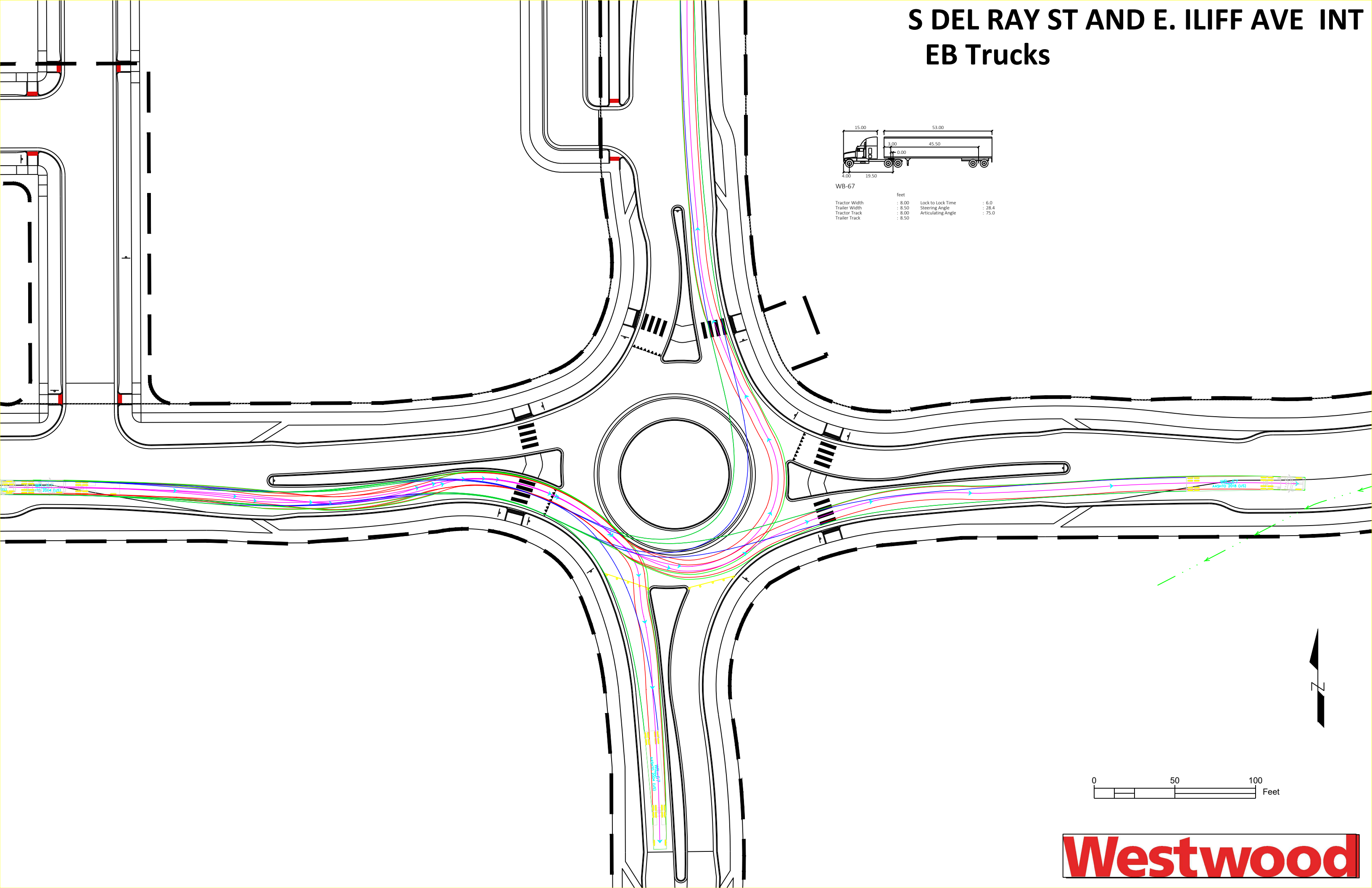
S DEL RAY ST AND E. ILIFF AVE INT

EB Trucks



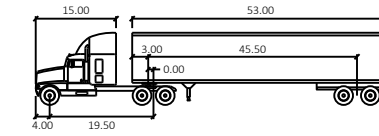
WB-67

| | | | |
|---------------|--------|--------------------|--------|
| | feet | | |
| Tractor Width | : 8.00 | Lock to Lock Time | : 6.0 |
| Trailer Width | : 8.50 | Steering Angle | : 28.4 |
| Tractor Track | : 8.00 | Articulating Angle | : 75.0 |
| Trailer Track | : 8.50 | | |



S DEL RAY ST AND E. ILIFF AVE INT

NB Trucks



WB-67

| | | | |
|---------------|--------|--------------------|--------|
| | feet | | |
| Tractor Width | : 8.00 | Lock to Lock Time | : 6.0 |
| Trailer Width | : 8.50 | Steering Angle | : 28.4 |
| Tractor Track | : 8.00 | Articulating Angle | : 75.0 |
| Trailer Track | : 8.50 | | |

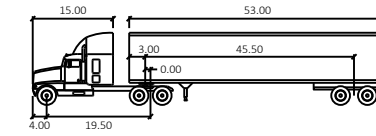
WB-67
AASHTO 2010 (US)

WB-67
AASHTO 2004 (US)

0 50 100 Feet

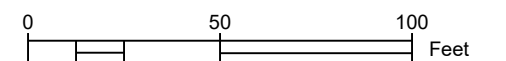
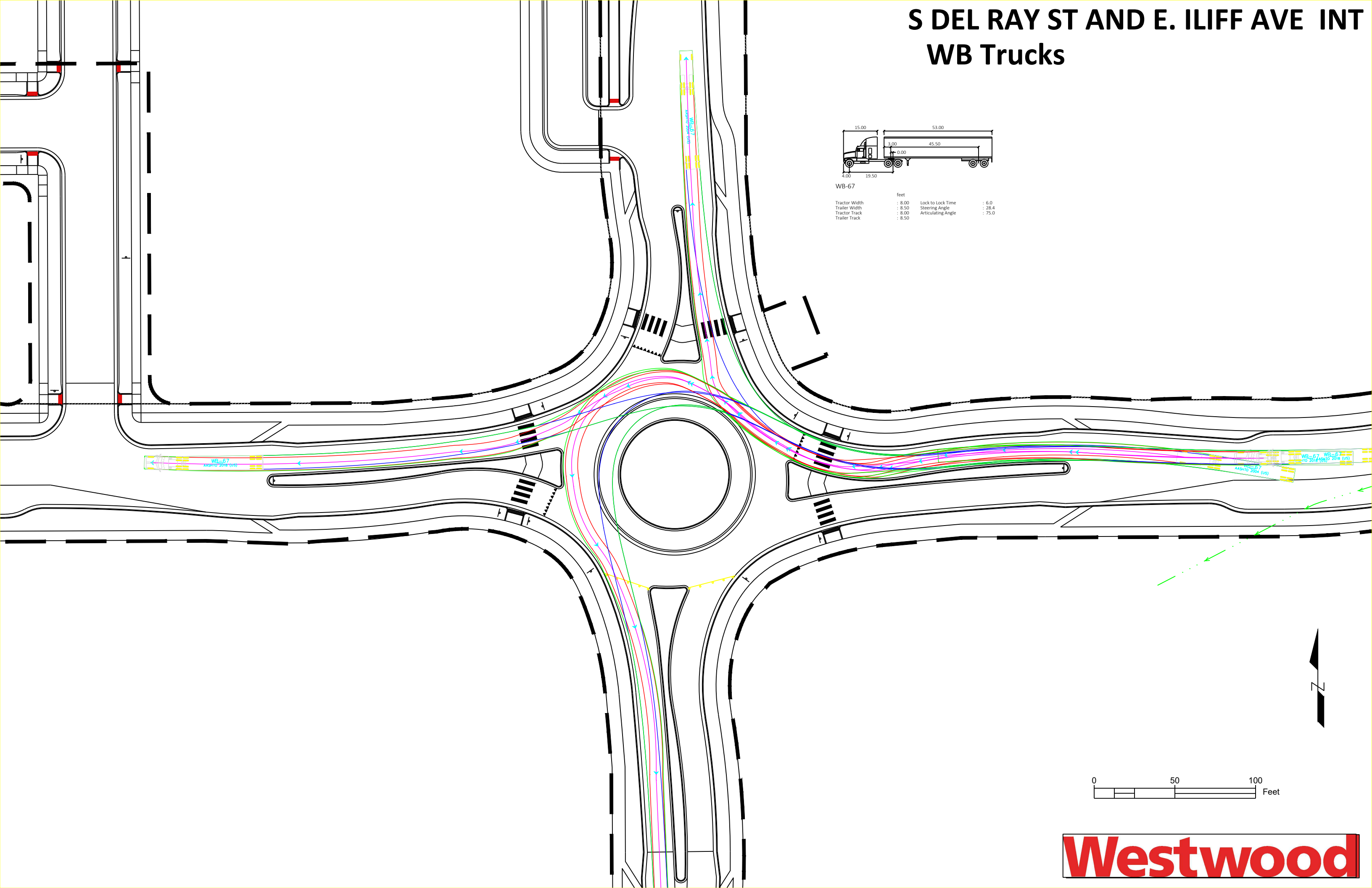
Westwood

S DEL RAY ST AND E. ILIFF AVE INT WB Trucks



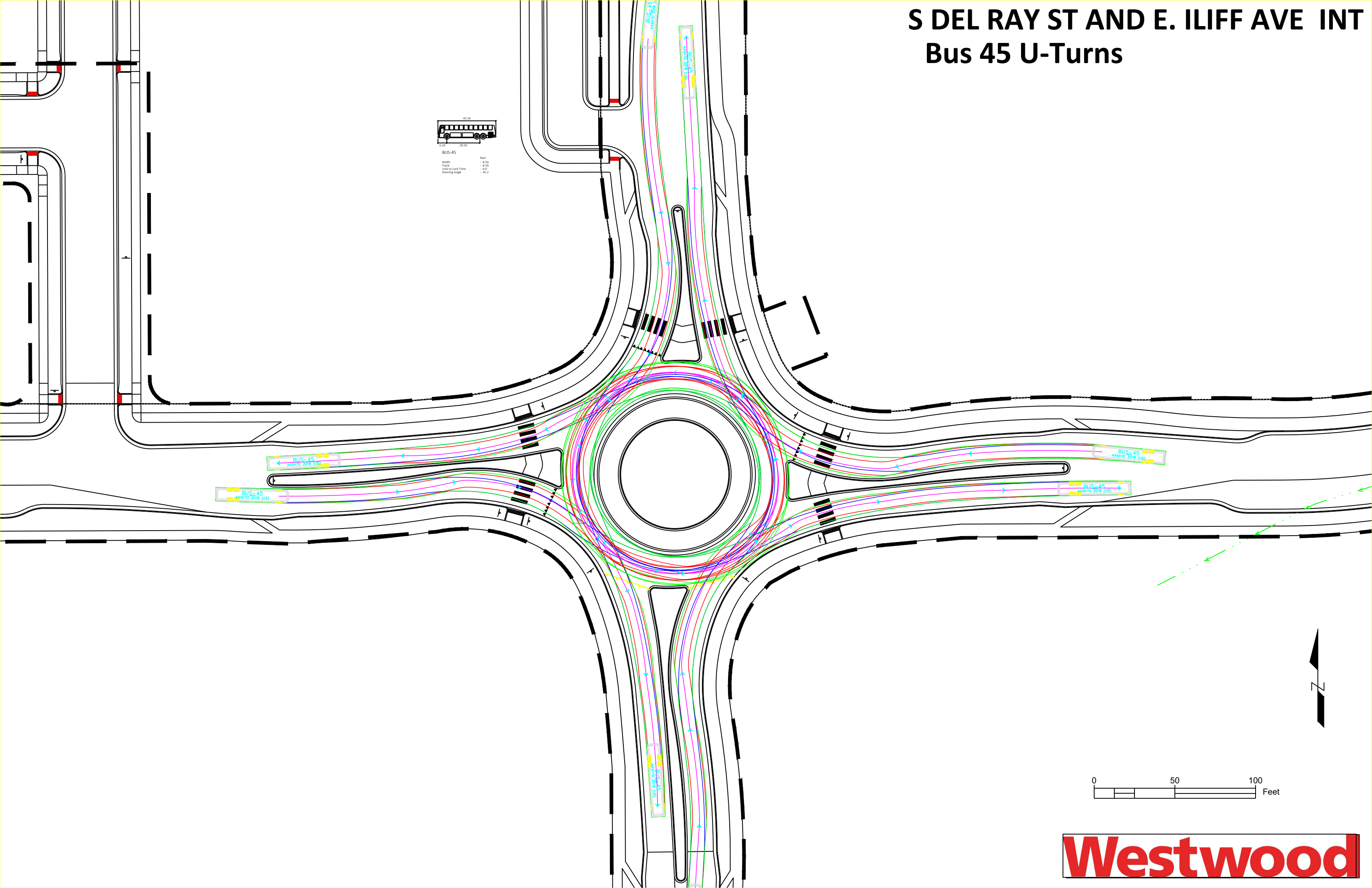
WB-67

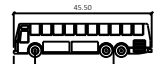
| | | | |
|---------------|--------|--------------------|--------|
| | feet | | |
| Tractor Width | : 8.00 | Lock to Lock Time | : 6.0 |
| Trailer Width | : 8.50 | Steering Angle | : 28.4 |
| Tractor Track | : 8.00 | Articulating Angle | : 75.0 |
| Trailer Track | : 8.50 | | |



S DEL RAY ST AND E. ILIFF AVE INT

Bus 45 U-Turns



| | |
|--|------|
| 45.50 | |
|  | |
| 6.20 28.50 | |
| BUS-45 | |
| Width | 8.50 |
| Track | 8.50 |
| Lock to Lock Time | 6.07 |
| Steering Angle | 45.2 |

0 50 100 Feet

Westwood