

## 8.0 IMPLEMENTATION PLAN

### 8.1 Regulatory Background

The Transportation Equity Act for the 21<sup>st</sup> Century (TEA-21) provided that “...A recipient of Federal Financial assistance for a project...with an estimated total cost of \$1,000,000,000 or more shall submit to the Secretary an annual financial plan for the project.” In May 2000 the *FHWA Financial Plan Guidance* was established. The recently enacted Safe, Accountable, Flexible, Efficient Transportation Equity Act: A Legacy for Users (SAFETEA-LU) lowered the monetary threshold to \$500,000,000.

It has been determined by FHWA and DOTD that the Cost Estimate and Implementation Plan components of the financial plan, as described in Attachment C of the Guidance, would be included in the NEPA documents for this project. The other components of the plan, including the Funding Sources, the Cash Flow pro forma, and the identification of risks and risk mitigation strategies, will be developed following the ROD.

### 8.2 Development of Plan

This Implementation Plan was developed in several steps:

1. Initially, the project was divided into Segments that represent the smallest physical increments that can be constructed and operated to provide a transportation benefit.
2. These Segments were then prioritized to meet traffic demand and safety issues over time as these needs are currently projected to occur.
3. The third step was to schedule the sequential actions that must be accomplished for a Segment to become operational in a manner that achieves the priority ranking assigned in step 2. This sequence includes:
  - Preliminary Design, to define the additional required ROW to a greater degree than in Conceptual Design;
  - Acquisition of the ROW through either purchase or other transfer of either the land or an easement;
  - Final Design; and
  - Construction.
4. Prior to Preliminary Design, the demands of ROW preservation must be considered as the fourth step before Preliminary Design can be scheduled. ROW preservation requires that the acquisition of additional required ROW be sequenced. While ROW must be acquired in a sequence that provides what is needed based on the priority of constructing the Segments, the sequence of acquisition must also consider the following:
  - Currently vacant, privately-owned land that imminently could be developed for a non-transportation use;
  - Land that should be acquired earlier rather than later to satisfy mitigation commitments;
  - Land required for the early priorities; and
  - Other additional required ROW that may be owned by the same parties that own the areas described above.

5. Following definition of the acquisition sequence, Preliminary Design is scheduled to provide the information needed.
6. Final Design is scheduled generally to meet the requirements of the construction sequence based on the priorities of the Segments. In some cases, however, Final Design and Construction occur ahead of the sequence determined strictly by priorities. This is usually because, as in Segment 6, Priority 3, additional ROW is not required.
7. The last item in the sequence is construction.

The scheduling of mitigation actions could be included in ROW acquisition, Design, or Construction, as appropriate for the specific commitment. For the cost estimating purposes of this Implementation Plan it is included as follows:

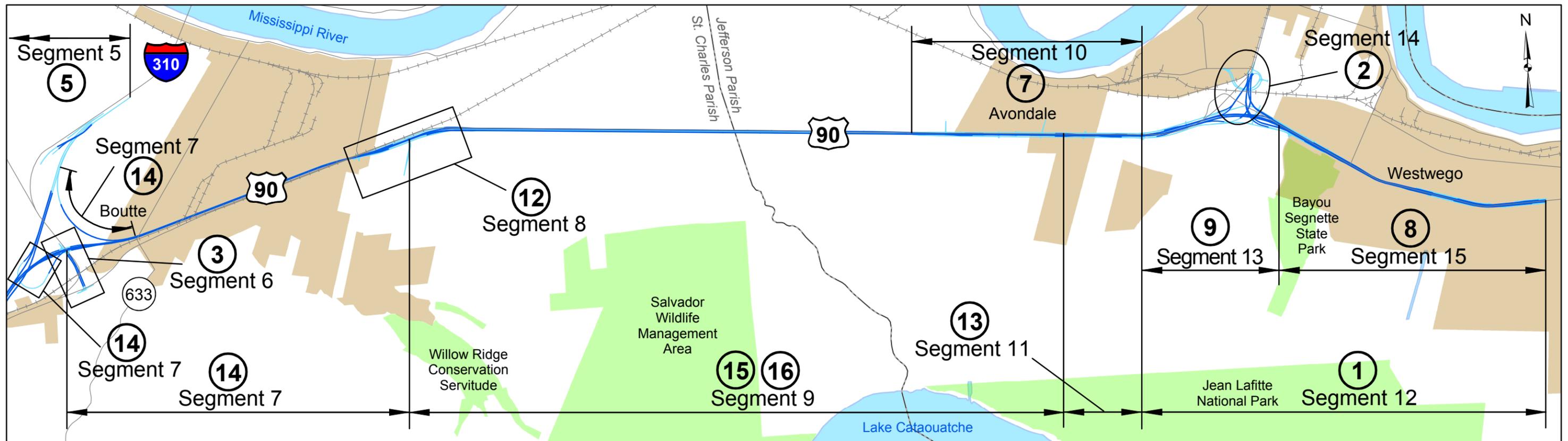
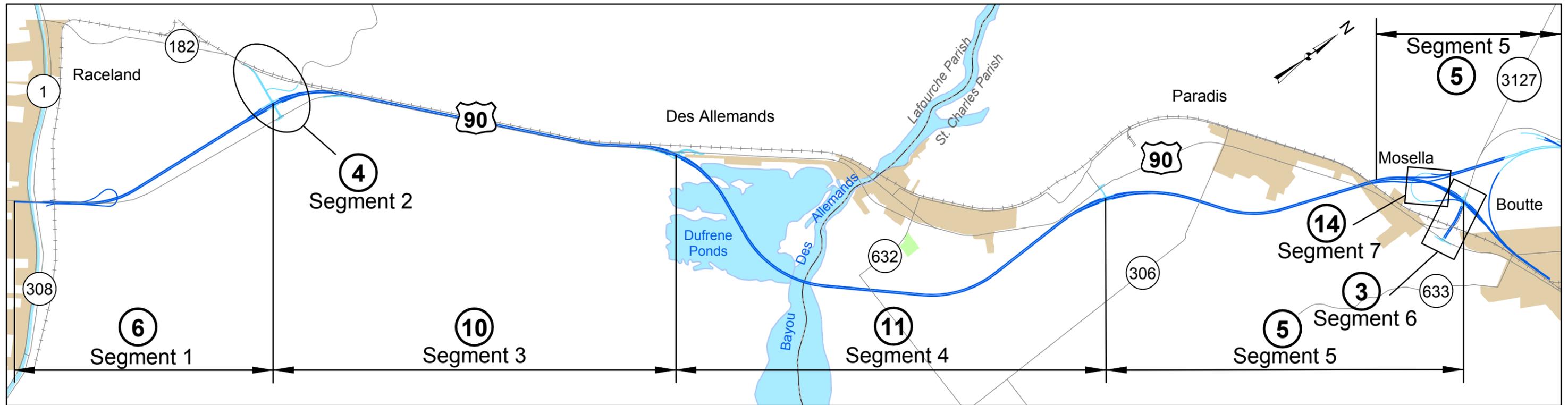
- In ROW acquisition:
  - The expenses for residential and commercial relocations.
- In Preliminary and Final Design Costs:
  - The costs of design services in connection with relocating infrastructure on the Monsanto property are included in Preliminary and Final Design.
- In Construction costs:
  - The cost of actual infrastructure relocation at Monsanto.
- As a separate column in the Table 8-17 Estimated Cost by Louisiana Fiscal Year:
  - The purchase of compensatory wetland acres.

Following this outline, Section 8.3 presents each Segment with a description of what is to be constructed; an explanation of the priority assigned, and Estimates of the Design, ROW, and Construction Costs. Section 8.4 describes the ROW acquisition sequence.

In summary, Section 8.5 presents **Table 8-17** of the estimated costs by Louisiana Fiscal Year for the major categories of expenditures: Design, ROW Acquisition, Construction including Contingency, Construction and Project Management, and Wetland Mitigation. This provides a snapshot of the activities and expenditures over time. It combines the detailed cost calculations by segment in **Appendix 8-A** and the ROW cost estimates in **Table 8-16** with the suggested schedule in **Appendix 8-B**.

### 8.3 Segments

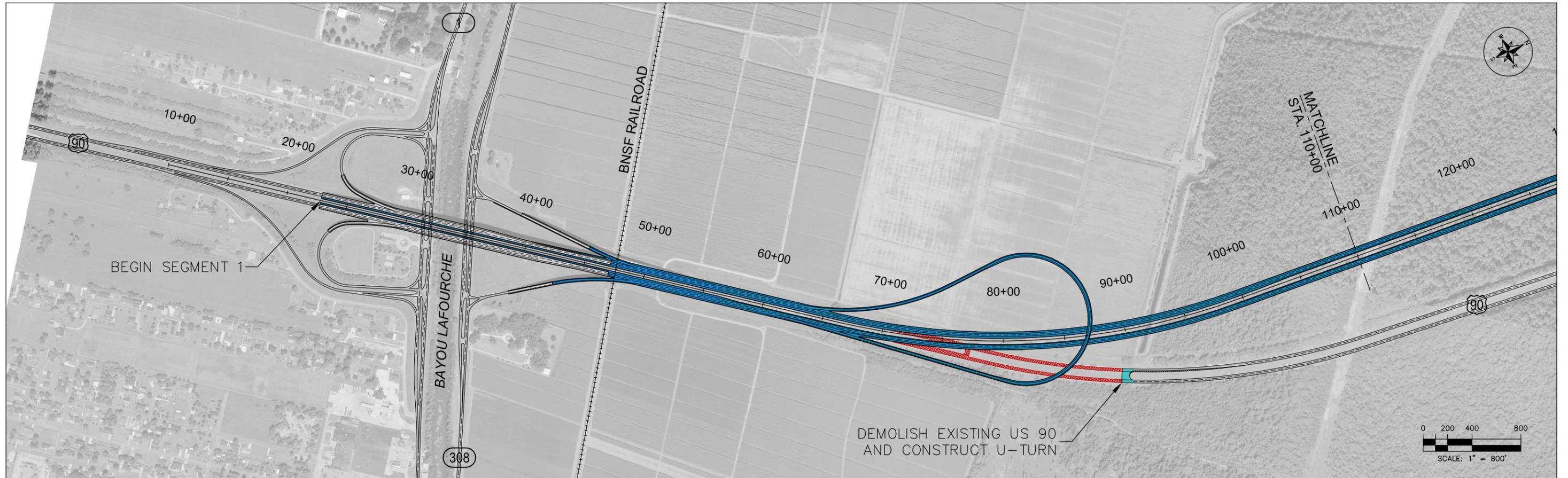
As presented in **Exhibit 8-1**, Segments are numbered sequentially from Raceland to the Westbank Expressway, which also is the sequence of the mainline stationing. That exhibit also indicates the priority that has been assigned to each. Sections 8.3.1 through 8.3.15 provide brief descriptions and summary cost estimates of each Segment. The cost estimates are in Year of Expenditure (YOE) dollars. YOE is estimated to be the mid-point of construction for that segment. Design is estimated at 8% of Construction with Preliminary Design being 35% of that amount and Final design being 65%. Construction Management is 12% of Construction including Contingency, and Project Management is 3% of Construction, Contingency, Design, and Construction Management. ROW costs include estimates for relocation and wetland mitigation expenses.



LEGEND:

**15** PRIORITY NUMBER

I-49 SOUTH  
 RACELAND TO THE WESTBANK EXPRESSWAY  
 EXHIBIT 8-1  
 SEGMENTS AND PRIORITIES



Currently, no funding source has been identified for the design, right-of-way acquisition, and construction of this portion of I-49. All estimated construction dates are dependent on the availability of future funding.

The priorities assigned to the segments are based primarily on the capacity requirements of traffic projections. Priorities are subject to change depending on funding, changes in traffic patterns and land use, and other factors.

Finally, note that I-49 is a north/south interstate highway. Directions of travel are expressed as northbound toward Lafayette or as southbound toward New Orleans, notwithstanding that within the general area of the segments described in this FEIS and in the Implementation Plan the actual directions of travel are more often east / west. US 90 is an east/west highway. Therefore its directions, although frequently parallel to I-49, are expressed as eastbound and westbound. Interchanges are described in accord with the direction of travel on I-49.

### 8.3.1 Segment 1 – Priority 6

Segment 1 is approximately 3.34 miles in length. The mainline extends from the start of the project at Station 23+00 to Station 190+00; the southbound exit and northbound entrance extend from the mainline to the interchange with realigned LA 182 as shown on **Exhibit 8-2**.

This segment comprises:

- The mainline connection of the existing US 90 crossing of Bayou Lafourche with the I-49 elevated mainline structures;
- The elevated U-turn ramp serving trips from LA 308 to northbound I-49 and from southbound I-49 to LA 308;
- The ramps on the northbound side of the LA 182 interchange; and
- The demolition and reconstruction of portions of the bridge and US 90.

Segment 1 is Priority 6. It is preceded by

- Segments in Jefferson Parish needed to coordinate with the scheduled completion of the Huey P. Long Bridge widening of US 90 in 2012,
- The at grade roadways at LA 182 required to improve operational conditions and in preparation for the construction of this segment, and
- Improvements at, and leading to, the interchange of I-49 and I-310 intended to control the growing congestion in that area.

Construction of Segment 1 would extend the portion of the I-49 corridor between Morgan City and Bayou Lafourche that is completed to freeway standards, and would eliminate the operational concerns that exist at the at-grade U-turn in the median of US 90 and the inadequate shoulders on the crossing of Bayou Lafourche.

Preliminary Design may include the application for a Section 10 permit as there will be changes made to the crossing of Bayou Lafourche.

The ROW, design and construction cost estimates are presented as rounded numbers in **Table 8-1**.

**Table 8-1**  
**Segment 1 – Priority 6**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 6.4
Final Design	\$ 11.8
Construction Management	\$ 31.5
Project Management	\$ 9.3
Construction	\$ 228.6
Contingencies (15% of Construction)	\$ 34.2
ROW	\$ 0.3
<b>Total Estimated Cost</b>	<b>\$ 322.4</b>

### 8.3.2 Segment 2 – Priority 4

Segment 2 is approximately 0.77 miles in length along LA 182 and 0.42 miles in length along LA 307. It intersects I-49 at approximately Station 200+00, and includes the at grade portions of the LA 182 interchange connecting roadways as shown on **Exhibit 8-3**.

This segment comprises:

- The realignment of both LA 182 and LA 307 to improve the intersection of LA 182 and US 90 in the short term and to provide an opportunity to have an interchange with I-49, and
- The removal of existing LA 182 from US 90 to the connection of existing LA 182 with realigned LA 182. The portion of this removal between US 90 and LA 307 could remain in operation if Lafourche Parish assumes maintenance responsibility, but the cost estimate below assumes removal of this portion.

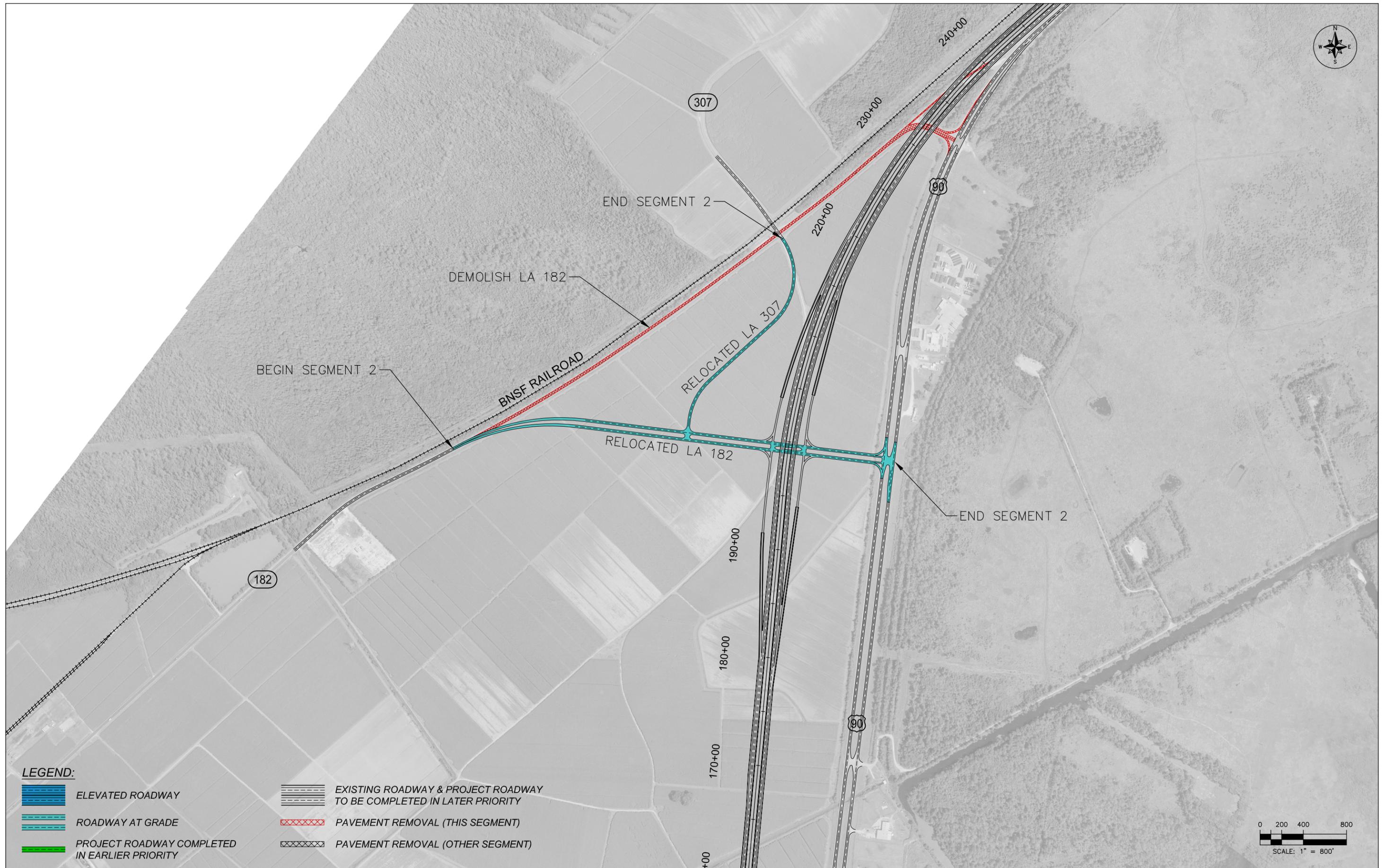
Segment 2 is Priority 4. It is preceded by:

- Segments in Jefferson Parish needed to coordinate with the scheduled completion of the Huey P. Long Bridge widening of US 90 in 2012; and
- Improvements at LA 3127 and US 90 leading to the interchange of I-49 and I-310.

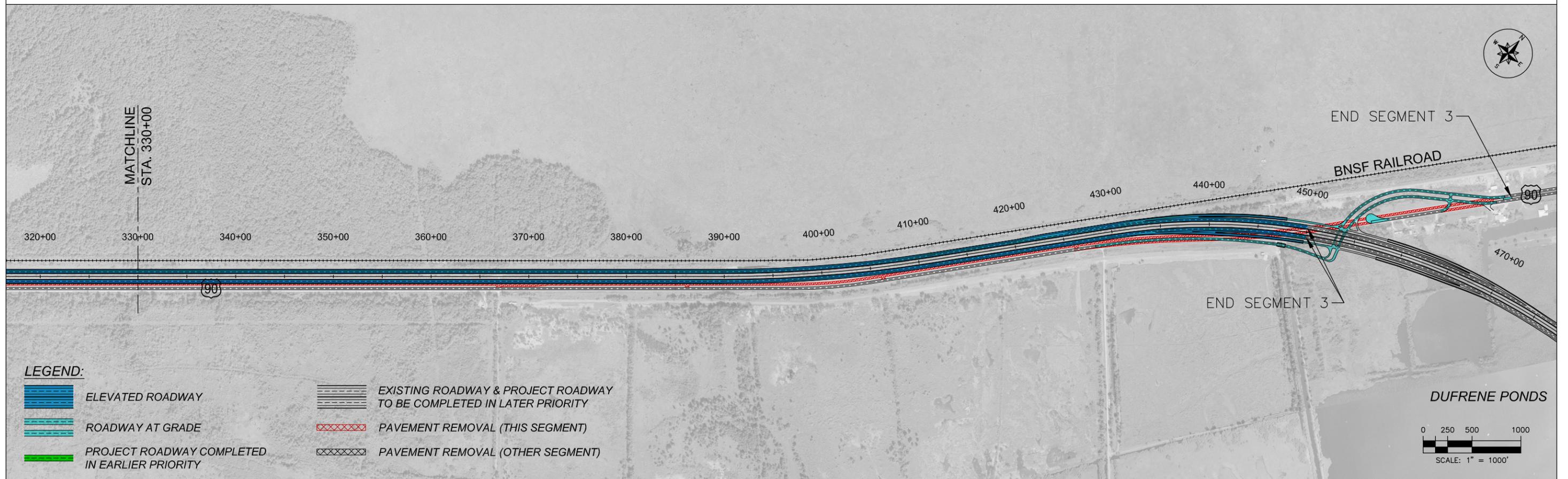
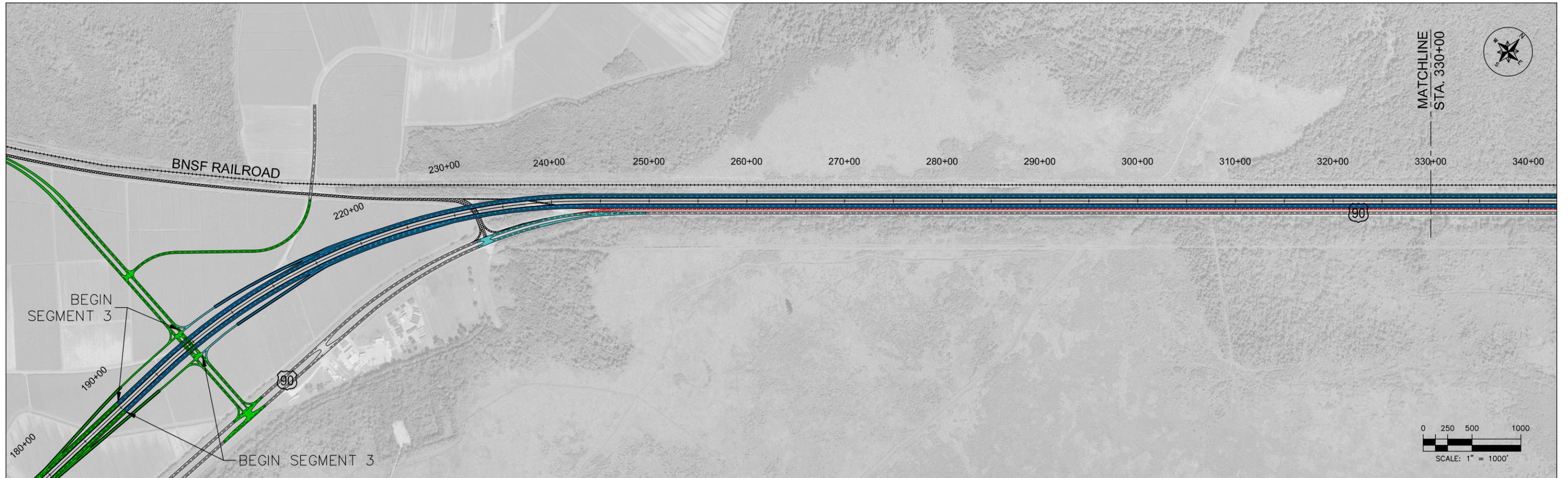
The ROW, design and construction cost estimates are presented as rounded numbers in **Table 8-2**.

**Table 8-2**  
**Segment 2 – Priority 4**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 0.1
Final Design	\$ 0.3
Construction Management	\$ 0.8
Project Management	\$ 0.2
Construction	\$ 6.1
Contingencies (15% of Construction)	\$ .9
ROW	\$ 0.1
<b>Total Estimated Cost</b>	<b>\$ 8.7</b>



SEGMENT 3 - PRIORITY 10



### 8.3.3 Segment 3 – Priority 10

Segment 3 is approximately 4.81 miles in length. The mainline extends from Station 190+00 to Station 450+00; the northbound exit and southbound entrance ramps begin at LA 182; and the southbound exit and northbound entrance extend from the mainline to the interchange with realigned US 90 near Dufrene Ponds as shown on **Exhibit 8-4**.

This segment comprises:

- The mainline I-49 between the LA 182 interchange and the interchange with realigned US 90 near Dufrene Ponds;
- A reduction in the capacity of US 90, serving as the frontage road, to 2 lanes for most of the distance between these interchanges; and
- A realignment of US 90 east of the US 90 interchange to provide a transition to the interchange.

Segment 3 is Priority 10. The nine segments with earlier priorities either currently experience operational difficulties or have projections of operational difficulties. Segment 3 has the higher priority of the two segments between LA 182 and LA 635 because it can be constructed at less cost more quickly than Segment 4, which includes the new crossing of Bayou Des Allemands.

The ROW, design, and construction cost estimates are presented as rounded numbers in **Table 8-3**.

**Table 8-3**  
**Segment 3 – Priority 10**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 10.5
Final Design	\$ 19.5
Construction Management	\$ 52.0
Project Management	\$ 15.4
Construction	\$ 376.8
Contingencies (15% of Construction)	\$ 56.5
ROW	\$ 0.1
<b>Total Estimated Cost</b>	<b>\$ 531.1</b>

### 8.3.4 Segment 4 – Priority 11

Segment 4 is approximately 6.03 miles in length. The mainline extends from Station 450+00 to Station 765+00; the northbound exit and southbound entrance ramps begin at realigned US 90 near Dufrene Ponds; and the southbound exit and northbound entrance extend from the mainline to the interchange with LA 635 as shown on **Exhibit 8-5**.

This segment comprises:

- Mainline I-49 between the interchange with realigned US 90 near Dufrene Ponds and LA 635; and
- A new crossing of Bayou Des Allemands.

Segment 4 is Priority 11. If the priorities proposed in this FEIS are followed, this segment would complete the operational section of freeway extending from the existing section between Morgan City and Raceland to I-310 in St. Charles Parish.

The entire length of this mainline segment is comprised of elevated twin structures crossing Dufrene Ponds, Bayou Des Allemands, and the Paradis Mitigation Bank. The portion crossing the Ponds and the bayou are estimated at second level. There are no frontage roads. The only at grade sections are the ramp terminals.

Preliminary design would include an application for a scenic river permit and for a Section 10 bridge permit. The latter is expected require a navigation study.

In the event that the estimated cost is too great for a single segment, it could be built in two or more sections, but it cannot become operational until the entire segment is complete.

The ROW, design, and construction cost estimates are presented as rounded numbers in **Table 8-4**.

**Table 8-4**  
**Segment 4 – Priority 11**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 15.0
Final Design	\$ 27.8
Construction Management	\$ 74.0
Project Management	\$ 22.0
Construction	\$ 536.3
Contingencies (15% of Construction)	\$ 80.4
ROW	\$ 2.0
<b>Total Estimated Cost</b>	<b>\$ 757.7</b>

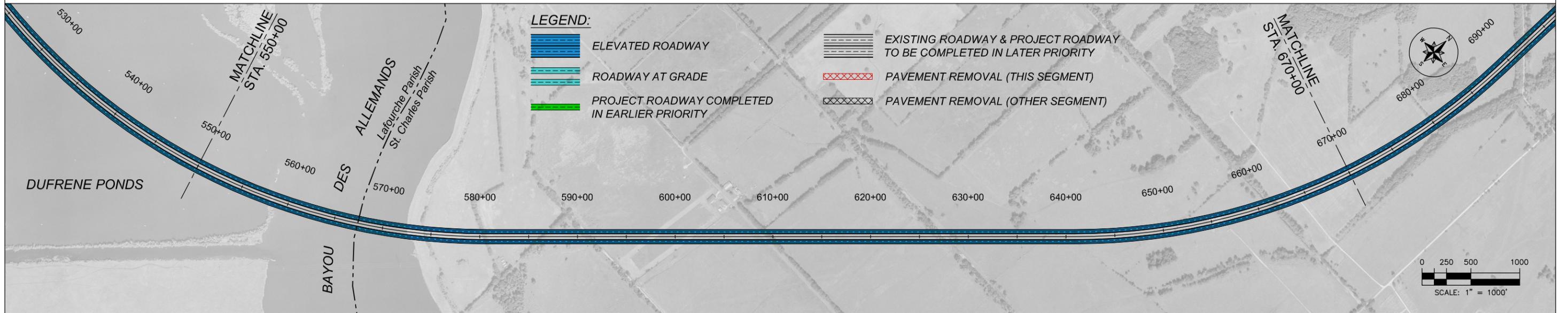
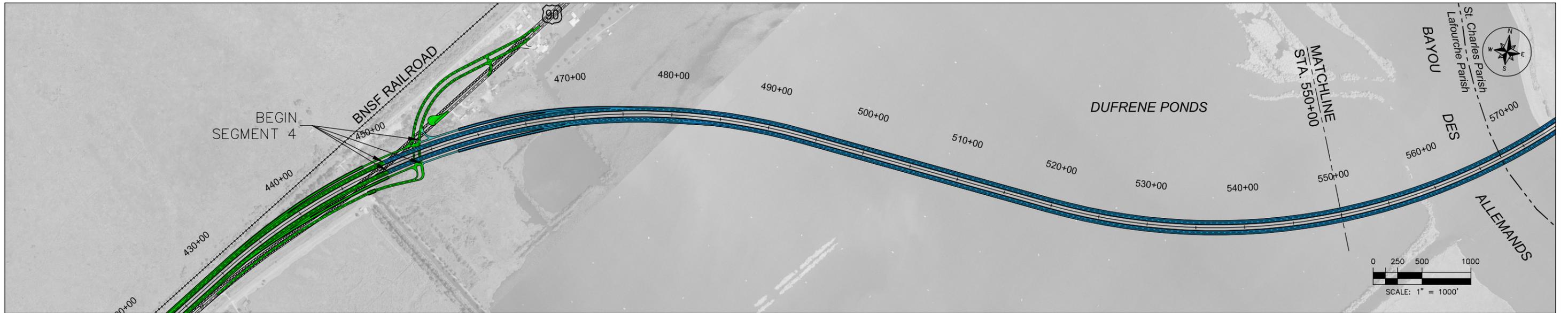
### 8.3.5 Segment 5 – Priority 5

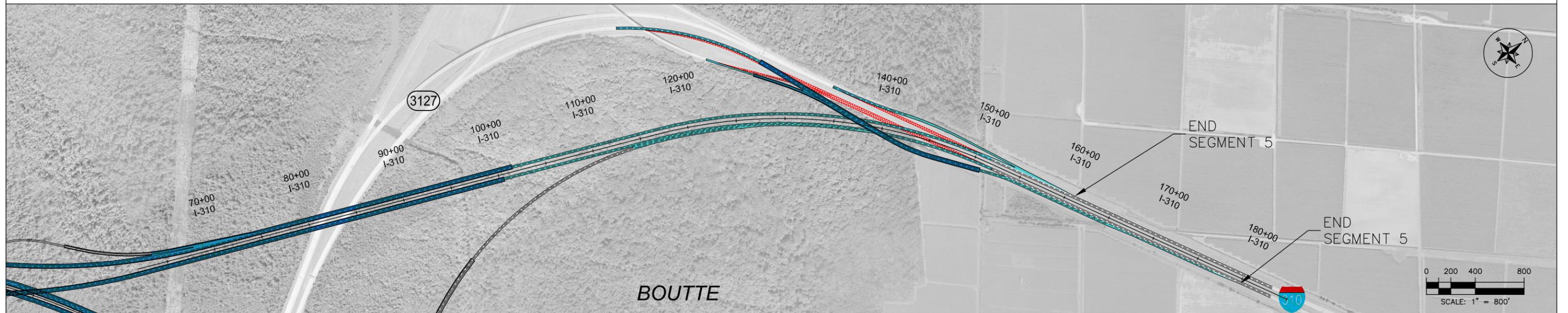
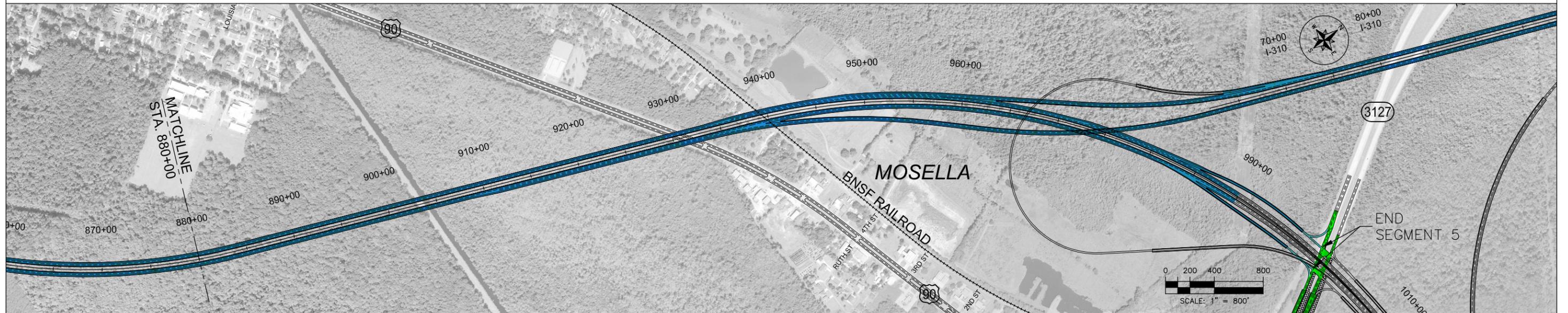
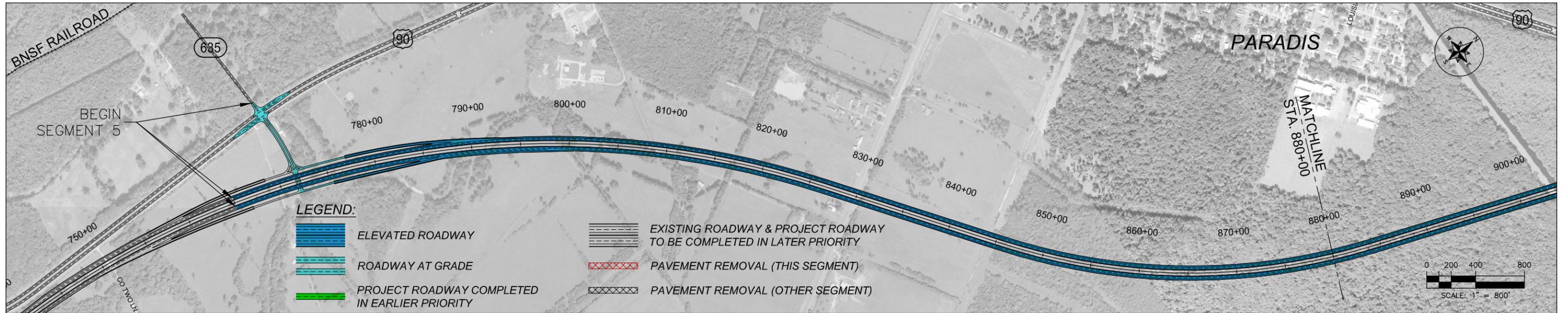
Segment 5 is approximately 7.23 miles in length as shown on **Exhibit 8-6** including:

- For I-49, 4.18 miles of mainline from Station 765+00 to Station 990+00; the extension of LA 635 across US 90; the northbound exit and southbound entrance ramps begin at the extension of LA 635; and the southbound exit and northbound entrance extend from the mainline to LA 3127; and
- For I-310, 3.05 miles of mainline that would be realigned and extended from existing I-310 on the riverside of the existing LA 3127/I-310 interchange to I-49 Station 965+00 northbound and I-49 Station 942+00 southbound.

On I-49 this segment comprises:

- Mainline connection from the LA 635 interchange to the LA 3127 interchange;
- The extension of LA 635 including intersection improvements at the US 90 intersection; and
- Improvements at the LA 3127 interchange.





On I-310 this segment comprises:

- Interstate to interstate ramps connecting the southbound I-49 to northbound I-310 and southbound I-310 to northbound I-49;
- Elevated and at-grade mainline to join the existing at grade I-310; and
- Realigned ramps, both elevated and at-grade at the LA 3127 / I-310 interchange.

Segment 5 is Priority 5. It is preceded by:

- Segments in Jefferson Parish needed to coordinate with the scheduled completion of the Huey P. Long Bridge widening of US 90 in 2012;
- The at grade roadways at LA 182 required to improve operational conditions and in preparation for the construction of Segment 1; and
- Segment 6 comprising improvements at the intersection of US 90 and LA 3127 to reduce existing congestion.

The operation of Segment 5 would reduce the congestion along US 90 in the urbanized areas of St. Charles Parish west of I-310, and would provide for the removal of Control of Access along a portion of LA 3127.

The design and construction cost estimates are presented as rounded numbers in **Table 8-5**.

**Table 8-5**  
**Segment 5 – Priority 5**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 11.2
Final Design	\$ 20.9
Construction Management	\$ 55.4
Project Management	\$ 16.5
Construction	\$ 402.1
Contingencies (15% of Construction)	\$ 60.3
ROW	\$ 3.9
<b>Total Estimated Cost</b>	<b>\$ 570.5</b>

### 8.3.6 Segment 6 – Priority 3

Segment 6 is approximately 0.62 miles in length. It extends from the existing elevated structures that carry LA 3127 across the BNSF railroad ROW in St. Charles Parish to connect with a new T intersection with US 90 as shown on **Exhibit 8-7**. This segment will replace the existing unsatisfactory connections between these roads that are comprised of ramps from an incomplete directional interchange.

This segment comprises:

- A widening of the existing ramp that provides for southbound traffic on LA 3127 to turn left, or eastbound, on US 90;
- Construction of a northbound ramp parallel to the widened ramp;
- Improvement of the traffic signal at the intersection of US 90; and
- Demolition of the unneeded portions of the existing interchange.

Segment 6 is Priority 3. It is preceded by

- The segments needed to be completed in Jefferson Parish to coordinate with the scheduled completion of the Huey P. Long Bridge widening of US 90 in 2012.

This segment could be combined with Segment 5; however, as DOTD owns all required ROW, and congestion is considerable, there would be advantages to accelerating the completion of Segment 6 at an early date.

The design and construction cost estimates are presented as rounded numbers in **Table 8-6**. No additional ROW is required.

**Table 8-6**  
**Segment 6 – Priority 3**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 0.5
Final Design	\$ 1.1
Construction Management	\$ 2.9
Project Management	\$ 0.8
Construction	\$ 21.1
Contingencies (15% of Construction)	\$ 3.1
<b>Total Estimated Cost</b>	<b>\$ 29.8</b>

### 8.3.7 Segment 7 - Priority 14

Segment 7 is approximately 6.92 miles in length as shown on **Exhibit 8-8** including:

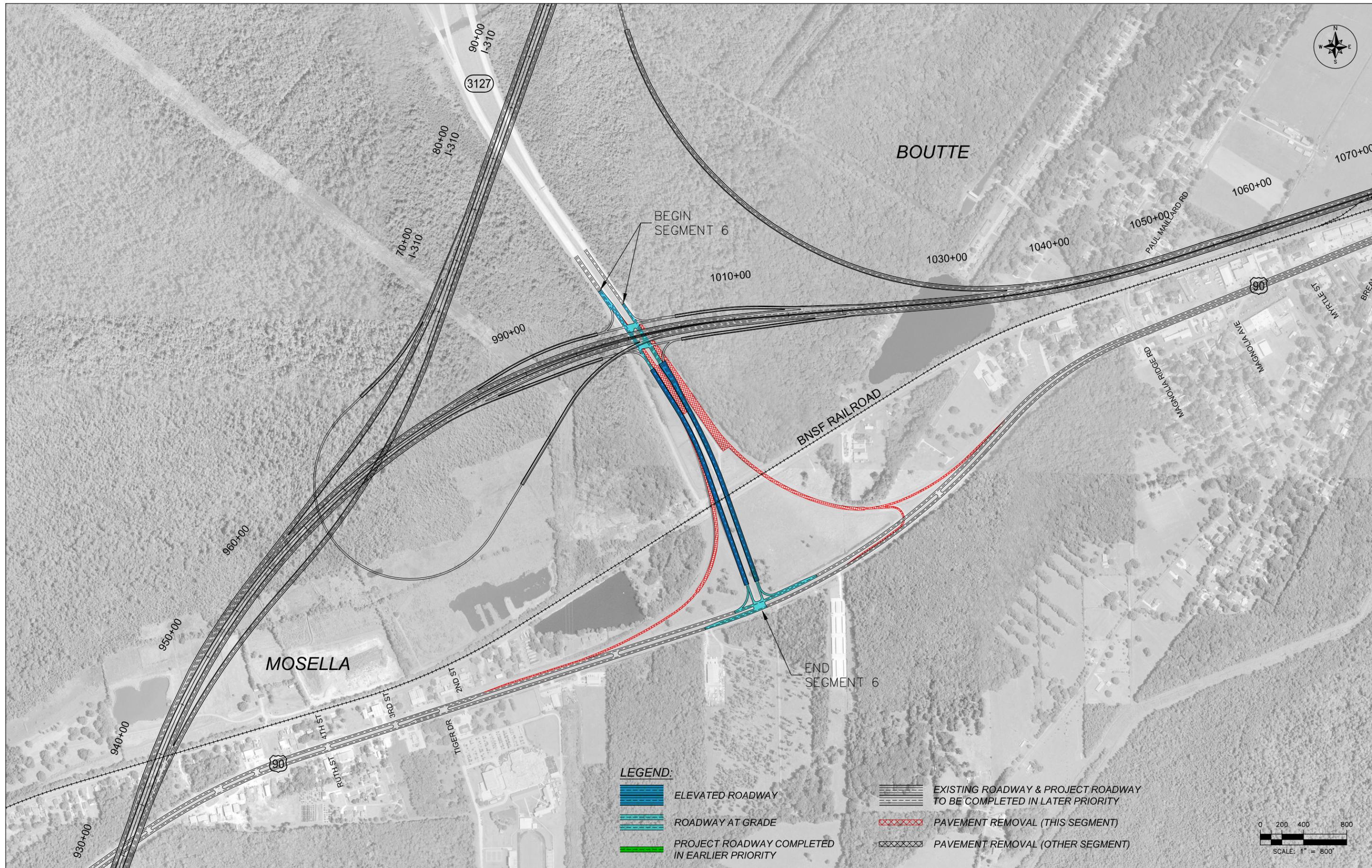
- 4.23 miles of mainline I-49 from Station 990+00 to Station 1210+00; the northbound exit and southbound entrance ramps at LA 3127; and the southbound exit and northbound entrance extending from the mainline to the interchange with Willowdale Boulevard;
- 1.45 miles of the interstate-to-interstate ramp that connects southbound I-310 to southbound I-49; and
- 1.24 miles of the interstate-to-interstate ramp that connects northbound I-49 to northbound I-310.

This segment comprises:

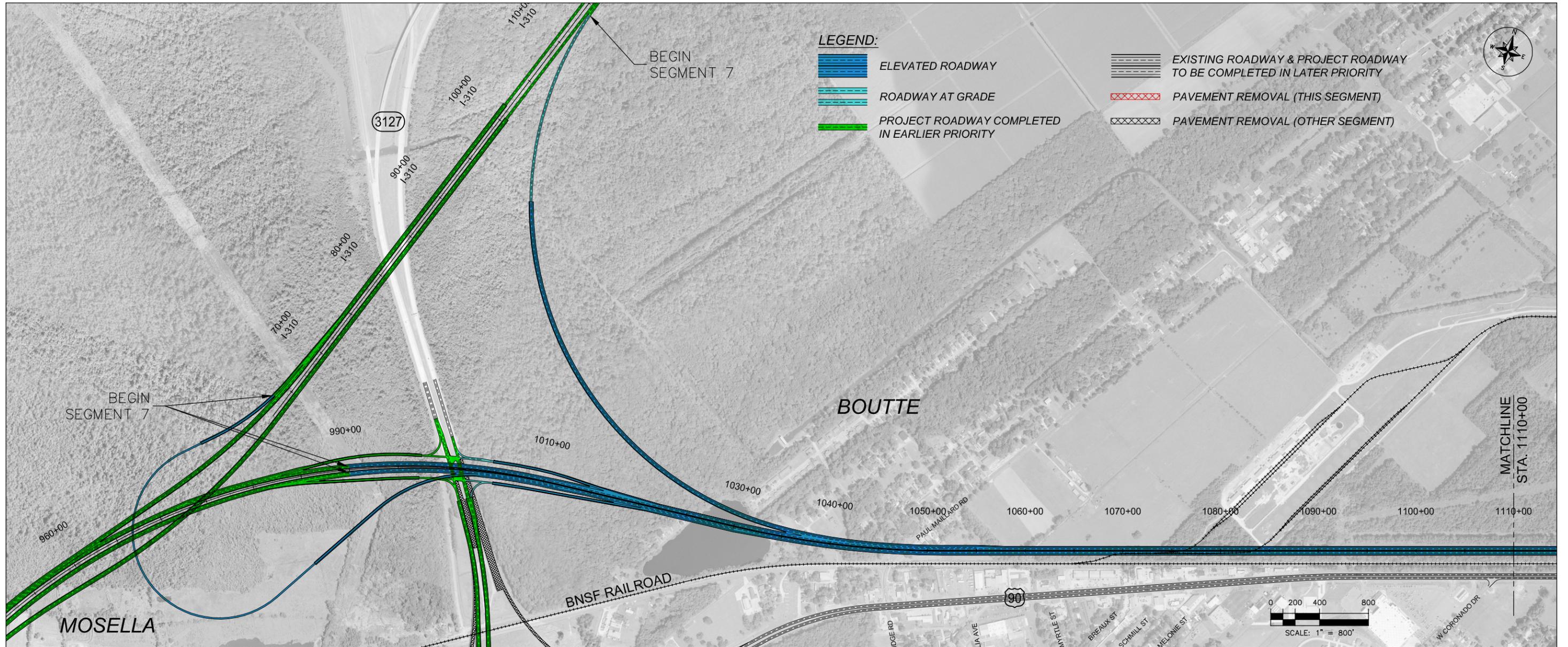
- The mainline connection between the LA 3127 interchange and the Willowdale Boulevard interchange; and
- The two interstate to interstate ramps.

Segment 7 is Priority 14. It is ranked after areas with higher traffic demand or greater operational concerns including the connection from Raceland to I-310 and Segment 8, including infrastructure relocations on the Monsanto property and realignment of US 90 at Willowdale Boulevard that both must be completed prior to construction of Segment 7.

Current projections indicate negligible traffic demand for the interstate-to-interstate ramps in 2030, but future traffic can be anticipated based on similar movements at interchanges in other areas of Louisiana with low initial traffic projections. Prior to construction of Segment 7, traffic analysis should be undertaken to phase the construction.



SEGMENT 7 - PRIORITY 14



The ROW, design, and construction cost estimates are presented as rounded numbers in **Table 8-7**.

**Table 8-7**  
**Segment 7 – Priority 14**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 11.3
Final Design	\$ 20.9
Construction Management	\$ 55.7
Project Management	\$ 16.5
Construction	\$ 403.6
Contingencies (15% of Construction)	\$ 60.5
ROW	\$ 1.9
<b>Total Estimated Cost</b>	<b>\$ 570.6</b>

### 8.3.8 Segment 8 – Priority 12

Segment 8 is approximately 1.36 miles in length. It realigns US 90 to serve as a frontage road for I-49 from Station 1188+00 near Barton Avenue and to Station 1260+00 as shown on **Exhibit 8-9**.

This segment comprises:

- Realignment of US 90 at grade to provide for the construction of Segment 7, the elevated mainline of I-49 between the LA 3127 and Willowdale Boulevard; and
- Relocation of the pipelines, rail line, drainage, roadways, and other infrastructure found in the ROW of I-49 mainline on the Monsanto property. This requires that an infrastructure relocation study and Preliminary and Final Design for the roadway and for these relocations must be completed concurrently.

Segment 8 is Priority 12. Earlier priorities addressed current and anticipated congestion and completion of the freeway connection between Raceland and I-310. Segment 8 addresses the highest remaining level of congestion in St. Charles Parish.

The ROW, design, and construction cost estimates are presented as rounded numbers in **Table 8-8**. The estimate also includes a YOE estimate for the relocations and the associated design costs are included in the design items.

**Table 8-8**  
**Segment 8 – Priority 12**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 0.5
Final Design	\$ 1.0
Construction Management	\$ 1.7
Project Management	\$ 0.5
Construction Roadway	\$ 12.3
Construction Relocations	\$ 7.6
Contingencies (15% of Construction)	\$ 1.8
ROW	\$ 3.7
<b>Total Estimated Cost</b>	<b>\$ 29.4</b>

### 8.3.9 Segment 9 – Priorities 15 and 16

Segment 9 is approximately 8.06 miles in length as shown on **Exhibit 8-10**. The mainline in this segment extends from Station 1210+00 to Station 1630+00 on the south side of the Avondale interchange. The associated frontage road would extend from Station 1260+00 to Station 1530+00.

Due to a very high estimate of construction cost, Segment 9 is proposed to be constructed in two phases:

- 9 A would include the elevated southbound mainline that can be constructed without removing the existing 4-lane US 90, and that can be operational as a stand alone facility once completed; and
- 9 B would include the elevated northbound mainline and the realigned frontage road.

9 A is Priority 15 and 9 B is Priority 16. This segment is assigned the lowest priority of any mainline segment because it is projected to have the lowest mainline traffic volumes after completion of the project.

**Table 8-9** presents a combined cost estimate as rounded numbers for both 9 A and 9 B. Aside from the \$43.1 million in design and the \$238,800 for ROW that would be a part of 9A, the remaining \$717 million would be roughly 40% 9A and 60% 9B. The ROW southbound of Station 1530+00 is acquired for Segment 10.

These costs assume that the frontage road will be a 2 lane facility, but the ROW is adequate for the frontage road to be a 4-lane facility. A determination of the capacity would be made during Preliminary Design.

**Table 8-9**  
**Segment 9– Priorities 15 and 16**  
**Estimated Design and Construction Costs (\$ million)**

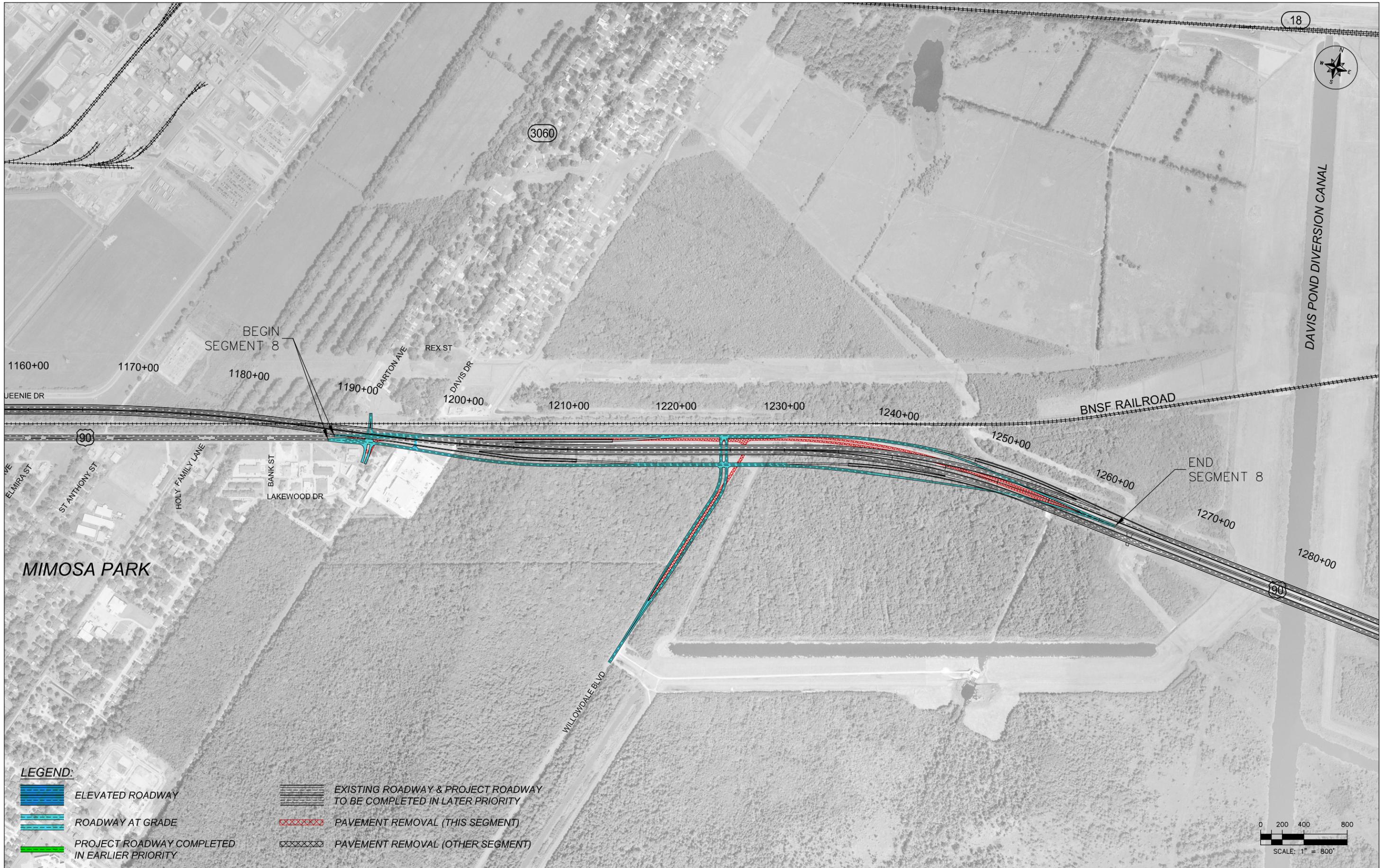
Preliminary Design	\$ 17.5
Final Design	\$ 32.5
Construction Management	\$ 86.5
Project Management	\$ 25.7
Construction	\$ 626.8
Contingencies (15% of Construction)	\$ 94.0
ROW	\$ 0.2
<b>Total Estimated Cost</b>	<b>\$ 883.4</b>

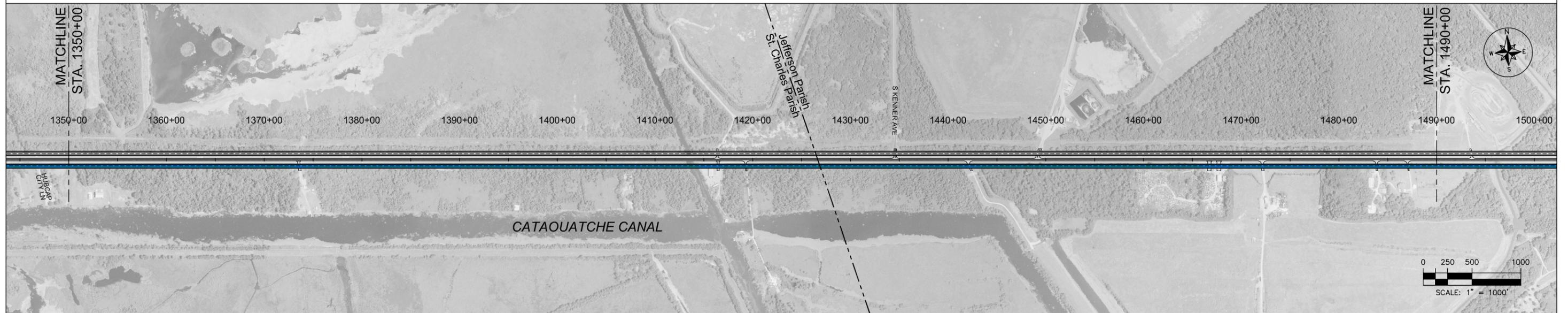
### 8.3.10 Segment 10 – Priority 7

Segment 10 is approximately 2.72 miles in length as shown on **Exhibit 8-11**. It extends from the point that the proposed frontage road realignment intersects with existing US 90 at approximately Station 1530+00 and extends through Avondale to the point of intersection with the frontage roads constructed in Segment 12, Priority 1, at the US 90 and Lapalco Boulevard intersection.

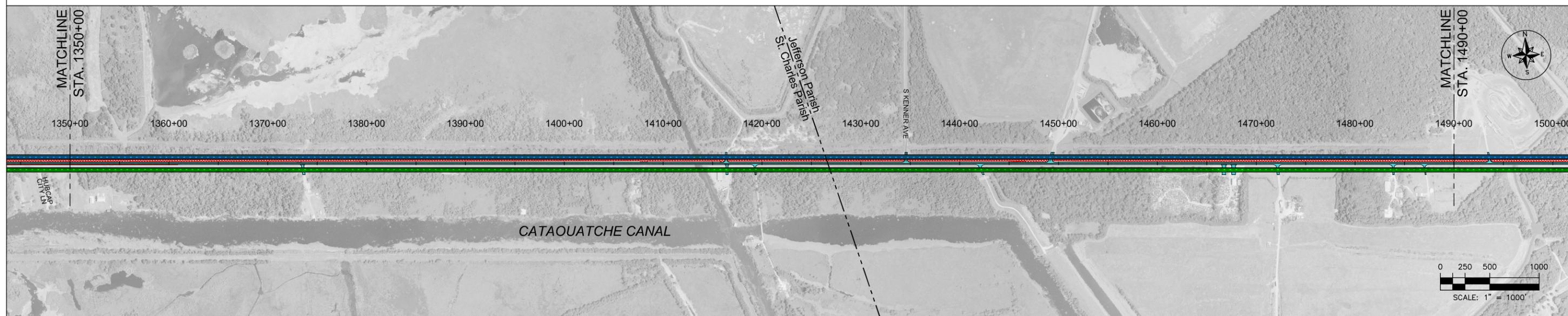
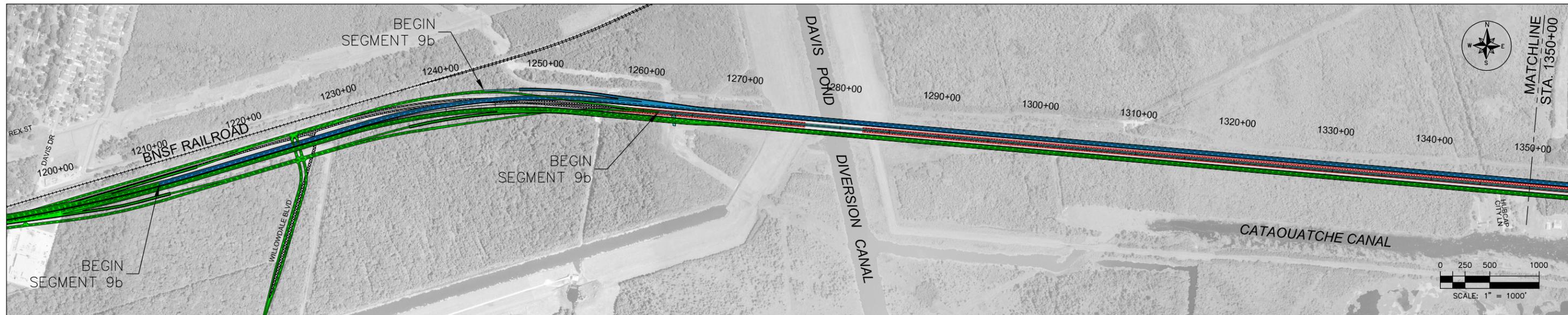
This segment comprises:

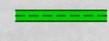
- The frontage roads as described above,





- LEGEND:**
-  ELEVATED ROADWAY
  -  ROADWAY AT GRADE
  -  PROJECT ROADWAY COMPLETED IN EARLIER PRIORITY
  -  EXISTING ROADWAY & PROJECT ROADWAY TO BE COMPLETED IN LATER PRIORITY
  -  PAVEMENT REMOVAL (THIS SEGMENT)
  -  PAVEMENT REMOVAL (OTHER SEGMENT)



- LEGEND:**
-  ELEVATED ROADWAY
  -  ROADWAY AT GRADE
  -  PROJECT ROADWAY COMPLETED IN EARLIER PRIORITY
  -  EXISTING ROADWAY & PROJECT ROADWAY TO BE COMPLETED IN LATER PRIORITY
  -  PAVEMENT REMOVAL (THIS SEGMENT)
  -  PAVEMENT REMOVAL (OTHER SEGMENT)



- The demolition of existing US 90 in this segment; and
- The relocation of major drainage structures currently found in the ROW. The contingency for this segment is estimated at 20% because of the unknown characteristics of this drainage relocation.

Segment 10 is Priority 7. It is preceded by:

- The segments needed to be completed in Jefferson Parish to coordinate with the scheduled completion of the Huey P. Long Bridge widening of US 90 in 2012,
- The need to extend the freeway from Raceland to LA 182, and
- The need for improvements in urbanized St. Charles Parish west of I-310.

Segment 10 completes the footprint of the project in urbanized Jefferson Parish.

The ROW, design, and construction cost estimates are presented as rounded numbers in **Table 8-10**. These costs assume that the frontage roads will be a 4 lane facility, but the ROW is adequate for both the frontage roads and the mainline to be 6-lane facilities. A determination of the capacity would be made during Preliminary Design.

**Table 8-10**  
**Segment 10 – Priority 7**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 0.9
Final Design	\$ 1.7
Construction Management	\$ 4.8
Project Management	\$ 1.4
Construction	\$ 33.8
Contingencies (20% of Construction)	\$ 6.7
ROW	\$ 8.4
<b>Total Estimated Cost</b>	<b>\$ 58.0</b>

### 8.3.11 Segment 11 – Priority 13

Segment 11 is approximately 0.76 miles in length as shown on **Exhibit 8-12**. It extends from Station 1630+00 to Station 1690+00 just past the southbound exit and northbound entrance from the mainline at the Lapalco interchange in Jefferson Parish.

This segment comprises:

- The completion of the mainline between the southbound side of the Avondale interchange and the northbound side of the Lapalco interchange; and
- The ramps on the appropriate sides of the referenced interchanges. The frontage roads in this area would have been completed in Segments 10 and 12.

Segment 11 is Priority 13. It could be constructed as part of Segment 13, which is Priority 9. It is preceded by

- The segments needed to be completed in Jefferson Parish to coordinate with the scheduled completion of the Huey P. Long Bridge widening of US 90 in 2012, and
- The need to complete the corridor between Raceland and I-310.

The design and construction cost estimates are presented as rounded numbers in **Table 8-11**. These assume that the mainline will be a 4-lane facility, but the ROW is

adequate for 6 lanes. A determination of the capacity would be made during Preliminary Design. The required ROW was purchased for Segments 10 and 12.

**Table 8-11**  
**Segment 11 – Priority 13**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 3.7
Final Design	\$ 6.9
Construction Management	\$ 18.4
Project Management	\$ 5.4
Construction	\$ 133.4
Contingencies (15% of Construction)	\$ 20.0
<b>Total Estimated Cost</b>	<b>\$ 188.0</b>

### 8.3.12 Segment 12 – Priority 1

Segment 12 is approximately 5.0 miles in length from Station 1677+00 at Lapalco Boulevard to the end of the project at Station 1941+00 at Ames Boulevard as shown on **Exhibit 8-13**.

This segment comprises:

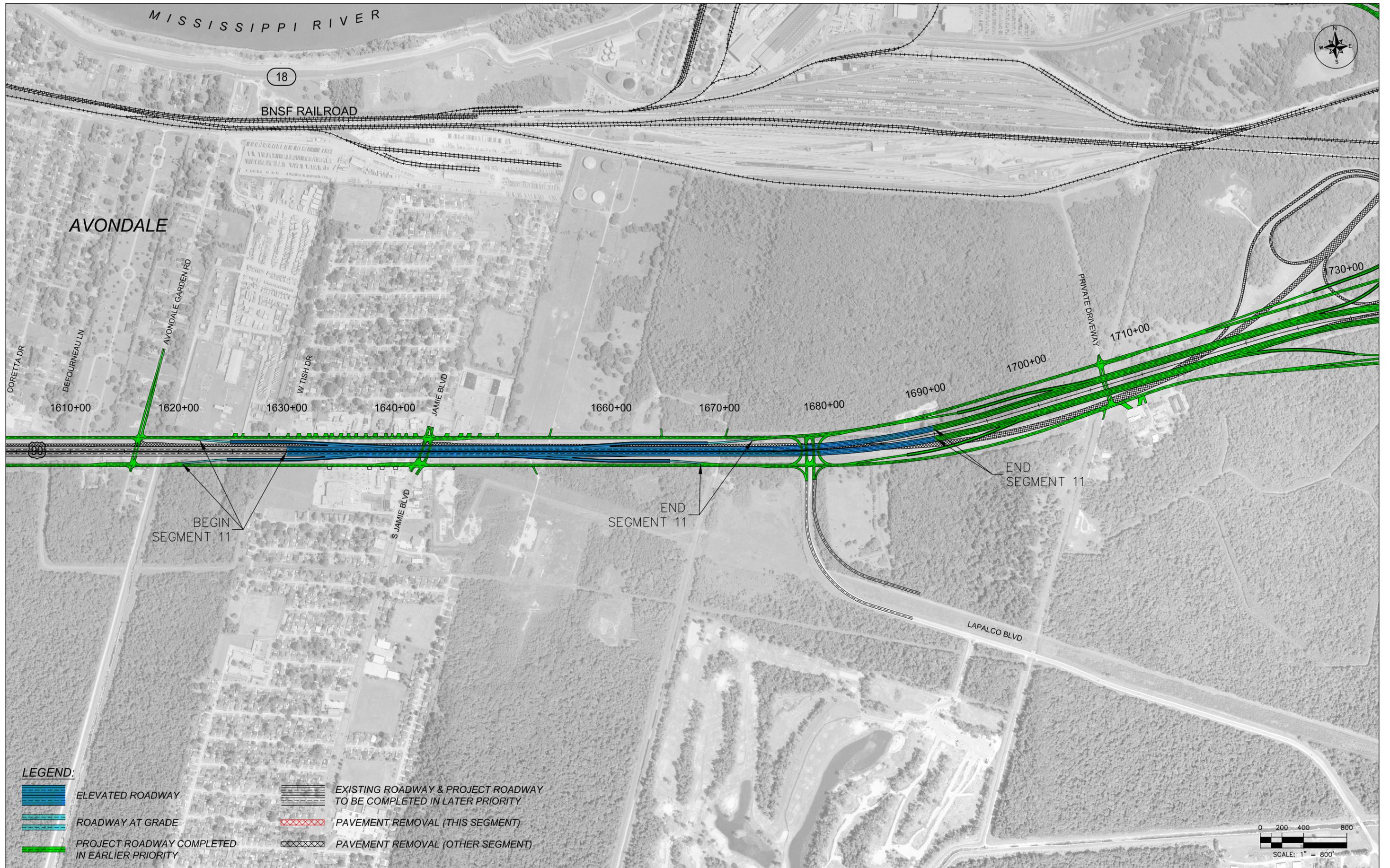
- New frontage roads (US 90 and US 90 Business) from Lapalco Boulevard to approximately Station 1799+00 near Wayne Avenue with the exception of the westbound US 90 Business from Station 1715+00 to Station 1744+00, and
- Realignment of US 90 Business, the Westbank Expressway frontage roads, as necessary, from Station 1799+00 to the end of the project.

Segment 12 is Priority 1. The great, near-term demand for capacity improvement in the Westbank Expressway corridor is generated by the Huey P. Long Bridge improvements in the US 90 corridor that are scheduled for completion in 2012. The actual connection of the two corridors requires new elevated ramps crossing the railroad ROW, but these frontage roads must be realigned before or concurrently with construction of the ramps in Segment 14, which is Priority 2.

The ROW, design, and construction cost estimates are presented as rounded numbers in **Table 8-12**. East of Segnette Park, no additional ROW is required.

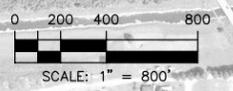
**Table 8-12**  
**Segment 12 – Priority 1**  
**Estimated Design and Construction (\$ million,)**

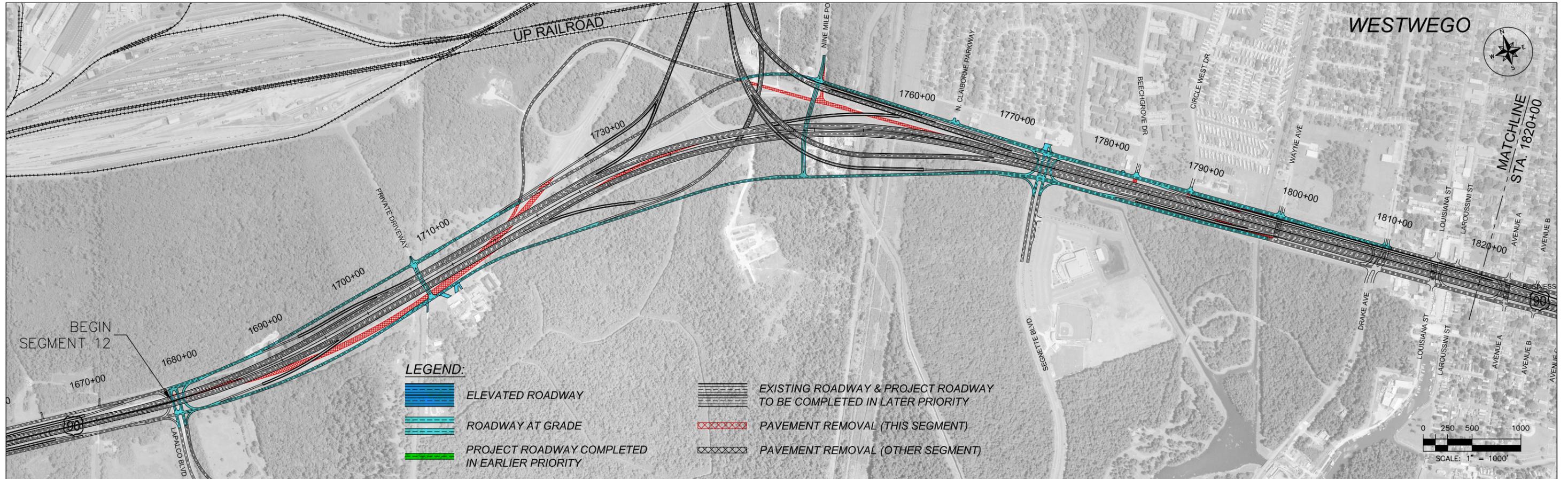
Preliminary Design	\$ 0.8
Final Design	\$ 1.6
Construction Management	\$ 4.3
Project Management	\$ 1.2
Construction	\$ 31.4
Contingencies (15% of Construction)	\$ 4.7
ROW	\$ 16.1
<b>Total Estimated Cost</b>	<b>\$ 60.4</b>

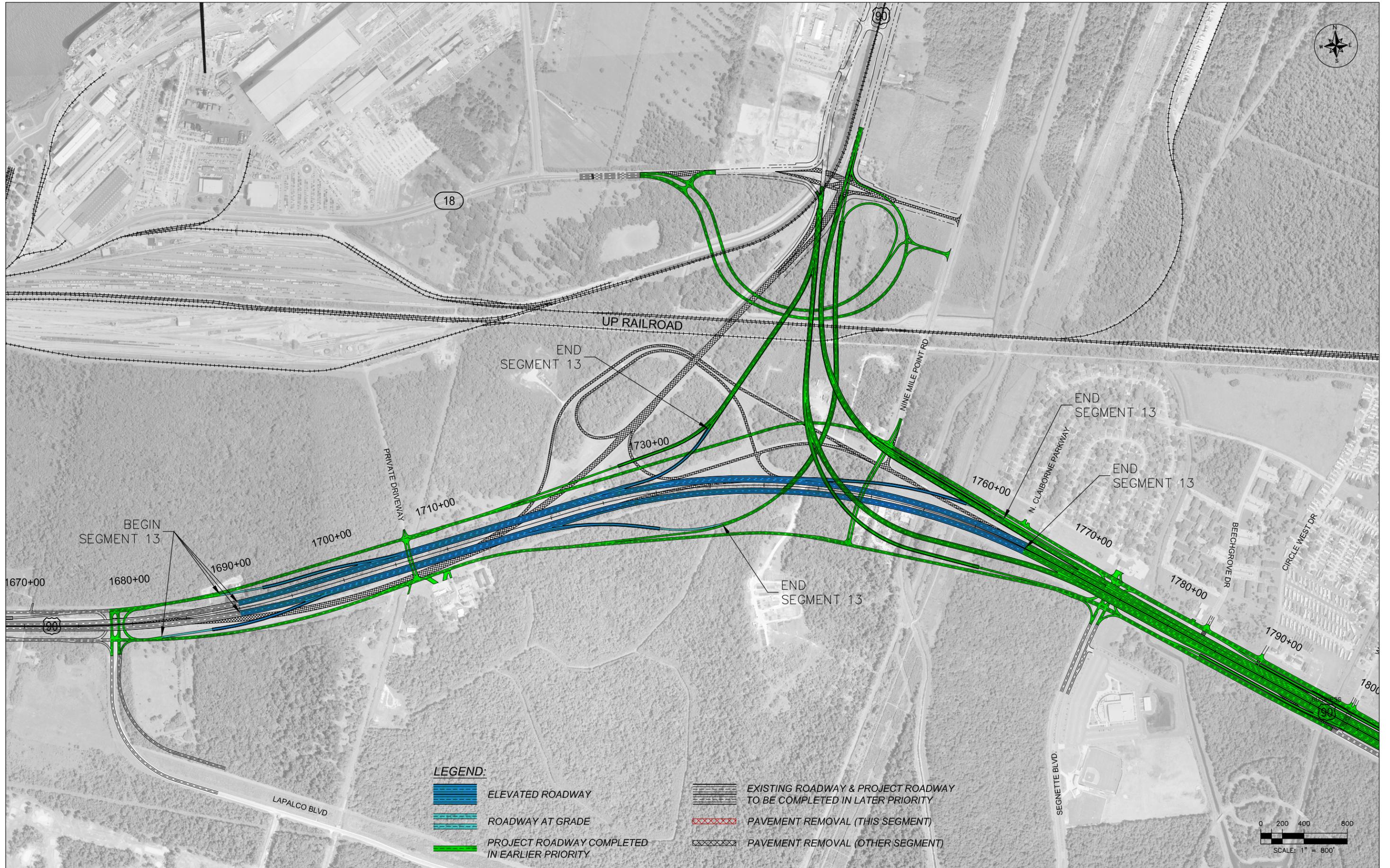


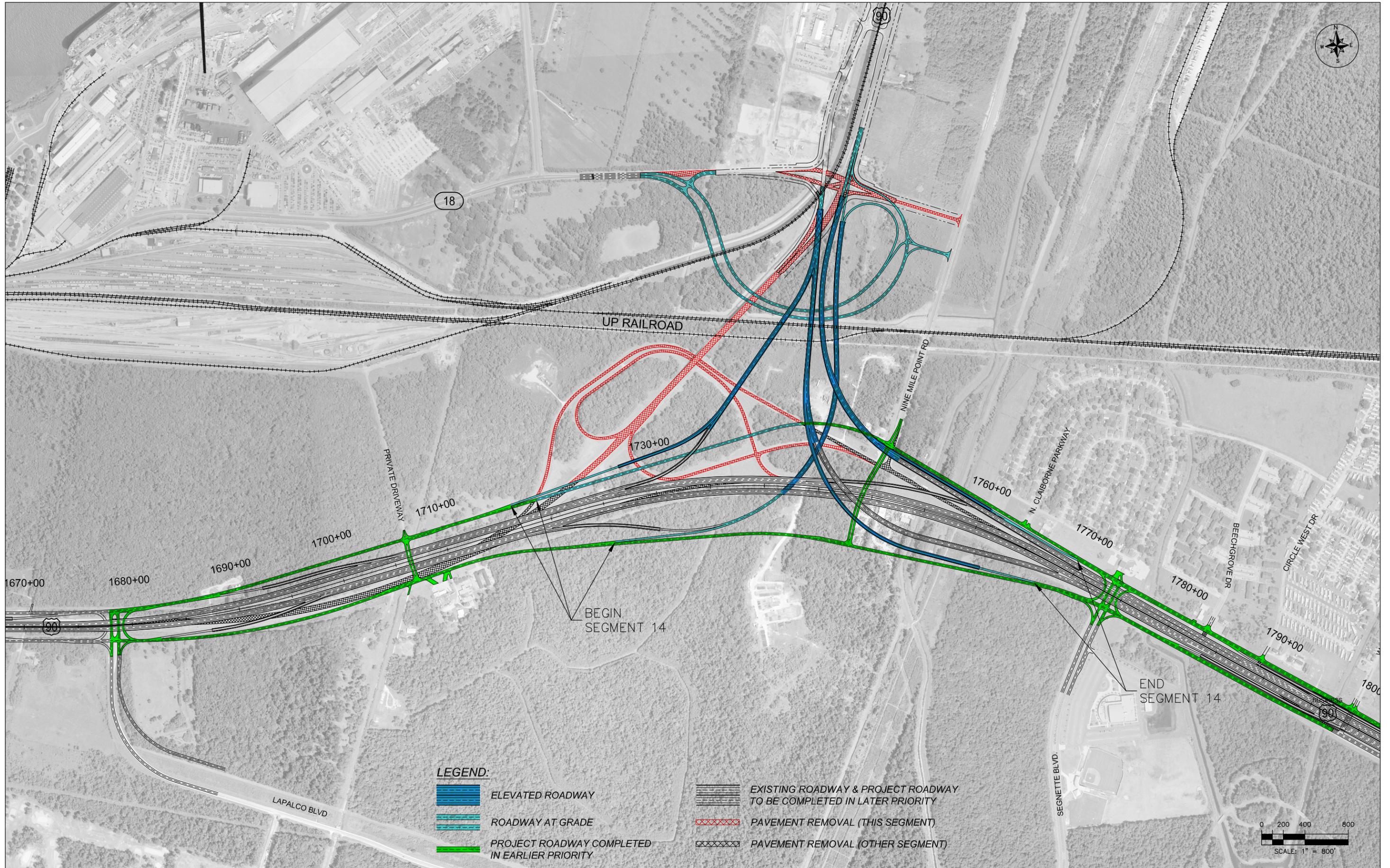
**LEGEND:**

- ELEVATED ROADWAY
- ROADWAY AT GRADE
- PROJECT ROADWAY COMPLETED IN EARLIER PRIORITY
- EXISTING ROADWAY & PROJECT ROADWAY TO BE COMPLETED IN LATER PRIORITY
- PAVEMENT REMOVAL (THIS SEGMENT)
- PAVEMENT REMOVAL (OTHER SEGMENT)

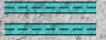
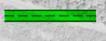








**LEGEND:**

-  ELEVATED ROADWAY
-  ROADWAY AT GRADE
-  PROJECT ROADWAY COMPLETED IN EARLIER PRIORITY

-  EXISTING ROADWAY & PROJECT ROADWAY TO BE COMPLETED IN LATER PRIORITY
-  PAVEMENT REMOVAL (THIS SEGMENT)
-  PAVEMENT REMOVAL (OTHER SEGMENT)

### 8.3.13 Segment 13 – Priority 9

Segment 13 is approximately 1.42 miles in length along the mainline. It extends from the Lapalco Boulevard interchange at Station 1690+00 to Station 1765+00 near Segnette Boulevard where it joins the portion of the Westbank Expressway extended previously from Ames Boulevard as shown on **Exhibit 8-14**.

This segment comprises:

- The elevated mainline through the Huey P. Long / US 90 interchange;
- The exit from southbound I-49 to eastbound US 90;
- The entrance from westbound US 90 to northbound I-49; and
- The northbound exit and southbound entrance ramps connecting the frontage road to I-49 at the Lapalco interchange.

Segment 13 is Priority 9. This completes the segments needed to relieve existing or foreseeable short term congestion resulting from the Huey P. Long Bridge widening.

The design and construction cost estimates are presented as rounded numbers in **Table 8-13**. No additional ROW is required as it was purchased in association with Segment 12. The costs assume that the mainline is 4-lanes, but the ROW would allow 6-lanes. A decision on the capacity would be made during Preliminary Design.

**Table 8-13**  
**Segment 13 – Priority 9**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 4.7
Final Design	\$ 8.7
Construction Management	\$ 23.3
Project Management	\$ 6.9
Construction	\$ 169.2
Contingencies (15% of Construction)	\$ 25.3
<b>Total Estimated Cost</b>	<b>\$ 238.4</b>

### 8.3.14 Segment 14 – Priority 2

Segment 14 includes two elevated sections of US 90 that each are approximately 1.0 mile in length, and a realignment of LA 18 that is approximately 0.77 miles in length as shown on **Exhibit 8-15**.

This segment comprises:

- Elevated westbound US 90 (Huey P. Long Bridge Approach) with ramp connecting to US 90 Business east (southbound frontage road);
- Elevated eastbound US 90 (Huey P. Long Bridge Approach);
- Elevated ramp from westbound US 90 Business to eastbound US 90 (Huey P. Long Bridge Approach);
- Realigned westbound US 90 from Station 1715+00 to Station 1744+00; and
- The realignment of LA 18 as it connects with US 90 to eliminate the signal at that intersection.

Segment 14 is Priority 2. As discussed in Section 8.3.12, this is the second step in addressing the potential congestion that is anticipated after completion of the US 90 improvements associated with the widening of the Huey P. Long Bridge. Segment 14 could be scheduled as part of the Priority 1 construction if funding is available. It is desirable to complete Segments 12 and 14 in 2012 to coordinate with the US 90 project.

The ROW, design, and construction cost estimates are presented as rounded numbers in **Table 8-14**.

**Table 8-14**  
**Segment 14 – Priority 2**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 2.4
Final Design	\$ 4.5
Construction Management	\$ 12.1
Project Management	\$ 3.6
Construction	\$ 88.2
Contingencies (15% of Construction)	\$ 13.2
ROW	\$ 7.4
<b>Total Estimated Cost</b>	<b>\$ 131.8</b>

### 8.3.15 Segment 15 – Priority 8

Segment 15 is approximately 3.3 miles in length along the mainline as shown on **Exhibit 8-16**. The mainline portion extends from Station 1765+00 near Segnette Boulevard to join the existing completed section of the elevated Westbank Expressway at Station 1941+00. The frontage roads in this segment would be resurfaced, as necessary, after completion of the mainline construction. For cost estimating purposes, it is assumed that the entire 3.3 miles would be resurfaced.

This segment comprises:

- The mainline of I-49 throughout the extent of the segment.
- The ramp connecting westbound US 90 (Huey P. Long Bridge Approach) to southbound I-49;
- The ramp connecting northbound I-49 to eastbound US 90 (Huey P. Long Bridge Approach);
- The southbound entrance and northbound exit at the Segnette Boulevard interchange;
- The northbound and southbound exits and northbound and southbound entrances at the Victory Drive interchange; and
- The northbound entrance and southbound exit at Ames Boulevard.

Segment 15 is Priority 8. Traffic projections indicate that once the Westbank Expressway corridor is connected to US 90 (Huey P. Long Bridge approach) with directional ramps in Priorities 1 and 2, there would be a period during which segments of the project elsewhere in the corridor can be constructed to eliminate imminent congestion before it is necessary to complete the mainline Westbank

Expressway. If costs are a major limitation on the extent of construction, Segment 15 could be divided into three subsegments.

The design and construction cost estimates are presented as rounded numbers in **Table 8-15**. No additional ROW is required as it was purchased in association with Segment 12.

**Table 8-15**  
**Segment 15 – Priority 8**  
**Estimated Design and Construction Costs (\$ million)**

Preliminary Design	\$ 12.2
Final Design	\$ 22.8
Construction Management	\$ 60.5
Project Management	\$ 17.9
Construction	\$ 438.4
Contingencies (15% of Construction)	\$ 65.7
<b>Total Estimated Cost</b>	<b>\$ 617.8</b>

#### 8.4 Right-of-way Acquisition

The additional ROW to be acquired for this project is divided into ten phases of acquisition that are described below with brief explanations of their relative position in the sequence. **Exhibit 8-17** indicates the general location and size, and **Table 8-16** summarizes the location, size, and estimated cost of each phase and associated relocation costs.

**Phase 1** is all land needed in Jefferson Parish east of Avondale Canal. This area constitutes the first phase because of three conditions:

1. The first segments to be constructed require this area, including:
  - Segment 12 – Priority 1;
  - Segment 14 – Priority 2; and
  - Segment 10 – Priority 7 (a portion).

This ROW is required also for all or portions of Segments 9, 11, and 13, but these are mainline segments that will be constructed later and within the ROW defined by Segments 10, 12, and 14. Therefore, the costs of the acquisition are shown in **Tables 8-10, 8-12, and 8-14**. The total estimated cost of this Jefferson Parish property is shown in FY 2009 in **Table 8-16**. Although currently it is almost entirely undeveloped, this property is in the center of an area of urban growth. To be conservative, the land will be estimated at \$200,000 per acre, a value comparable to similar property in the metropolitan area. In addition, the two active businesses that would be relocated are estimated at \$1,000,000; two other businesses that may be only part-time uses are valued at \$100,000 each. The two residences to be relocated in Avondale have a current value based on average costs in the area of \$61,300 plus \$100,000 for relocation. This results in an estimated total of \$29.9 million;

2. The land is within the urbanized area of Jefferson Parish and within the levee system. Development is imminent, and it is important to acquire the ROW prior to development; and

3. A large amount of the area is owned by a small number of owners.

**Phase 2** of ROW acquisition involves numerous owners in St. Charles Parish between the Paradis Mitigation Bank and Monsanto. Emphasis would be placed on relocating the residential population being displaced, especially the Honor Family. While this area has five large owners, there are a number of small owners, many of whom are homeowners and all of whom are minority residents. In at least two cases, the land is held in common by several households and generations. It is important to provide relocation and closure for these families, even if the roadway would not be constructed for some time, as is the case between LA 3127 and Paul Maillard Road. The Segments that would be provided ROW by this purchase would include:

- Segment 5 – Priority 5 (portion outside of Paradis Mitigation Bank); and
- Segment 7 – Priority 14 (portion outside of Monsanto site).

The costs of acquisition and relocation are shown in **Tables 8-5 and 8-7**. The total estimated cost of this property in St. Charles Parish is shown in FY 2009 in **Table 8-16**. This includes an estimated 15 residences in Boutte and Mosella with current average costs of \$54,200 plus \$100,000 for relocation. The total estimated value for the residences and relocation is \$2.3 million in FY 2009. The acreage to be acquired in St. Charles Parish is estimated at \$1.7 million based on \$10,000 per acre as it is undeveloped, and this value is 50% of the value of a mitigated acre in the nearby mitigation bank. The Phase 2 total would be \$4 million.

**Phase 3** is all land required for ROW that is owned by Raceland Sugar. It includes:

- Segment 2 – Priority 4;
- Segment 1 – Priority 6 (a portion); and
- Segment 3 – Priority 10 (a portion).

While some of this property is in Priorities 6 and 10, it is reasonable to purchase it all in the same transaction. The cost of acquisition is shown in **Tables 8-1, 8-2, and 8-3**. Based on recent data from Lafourche Parish transactions, it is estimated to cost \$473,500, and it is scheduled for FY 2009.

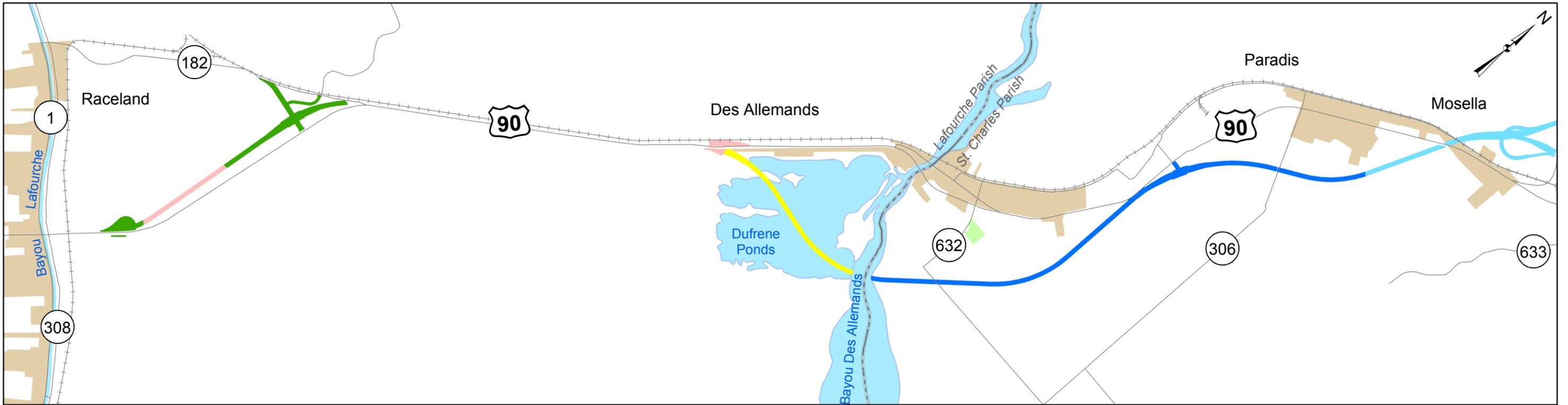
**Phase 4** is all land required for ROW that is within the Paradis Mitigation Bank, including both the bank property and the property of the Sunset Drainage District. This property must be available for Priority 5 construction. The Drainage District land, it is currently believed, would consist only of canal crossings and may require only an easement. The Drainage District also is an owner of acreage in Phase 2, and all transactions with them may be accomplished then.

The Segments requiring this property include

- Segment 5 – Priority 5 (the portion within the Paradis Mitigation Bank); and
- Segment 4 – Priority 11 (the portion within the Paradis Mitigation Bank).

The cost of acquisition is shown in **Tables 8-4 and 8-5**. In **Tables 8-16 and 8-17**, the 10.2 acres of the LA 635 interchange area are acquired in 2009. Assuming the value would be equal to a compensatory acre, the cost is estimated at \$204,000. The other property in the bank also is valued at \$20,000 per acre for a total of \$2,826,000 and scheduled for acquisition in FY 2010 in **Tables 8-16 and 8-17**.





	<b>LEGEND:</b>					
	PHASE 1 - (137.3 acres)	PHASE 4 - (152.8 acres)	PHASE 7 - (35.8 acres)	PHASE 8 - (51.2 acres)	PHASE 10 - (11.9 acres)	
	PHASE 2 - (177.0 acres)	PHASE 5 - (41.4 acres)	PHASE 6 - (4.7 acres)	PHASE 9 - (35.8 acres)		
	PHASE 3 - (94.7 acres)					

I-49 SOUTH  
 RACELAND TO THE WESTBANK EXPRESSWAY  
**EXHIBIT 8-17**  
 ROW ACQUISITION

Table 8-16  
Summary of ROW Acquisition

Phase	Start Station	End Station	Parish	Acres	Relocation	Estimated Cost		Total	Segments	Year
						per Acre	per Relocation			
1	1560+59 1796+38	Jefferson		137.35	2 residences 2 major commercial 2 minor commercial		\$ 200,000	\$ 27,470,000	9,10,11, 12,13,14	2009
							\$ 161,300	\$ 322,600		
							\$ 1,000,000	\$ 2,000,000		
							\$ 100,000	\$ 200,000		
2	882+43	1059+29	St. Charles	176.76	15 residences		\$ 10,000	\$ 1,767,600	5,7	2009
							\$ 154,200	\$ 2,313,000		
3	65+55 151+40		Lafourche	23.81	N/A		\$ 5,000	\$ 119,050	1,2,3	2009
				70.89			\$ 354,450			
				94.70			\$ 473,500			
4	573+74	882+80	St. Charles	10.20	N/A		\$ 20,000	\$ 204,000	4,5	2009
				141.30			\$ 2,826,000			
				151.50			\$ 3,030,000			
5	92+48 442+67	151+40 465+39	Lafourche	26.28	N/A		\$ 5,000	\$ 131,400	1,3	2010
				15.12			\$ 75,600			
				41.40			\$ 207,000			
6	1530+59	1670+86	Jefferson	4.71	1 residence 1 major commercial		\$ 200,000	\$ 942,000	10	2010
							\$ 161,300	\$ 161,300		
							\$ 1,000,000	\$ 1,000,000		
7	1189+06	1272+45	St. Charles	35.80	2 major commercial 1 public facility		\$ 20,000	\$ 716,000	7,8	2011
							\$ 1,000,000	\$ 3,000,000		
8	453+94	558+49	Lafourche	50.68	N/A		\$ 2,500	\$ 126,700	4	2011
9	1057+82	1177+77	St. Charles	35.83	Monsanto infrastructure		\$ 20,000	\$ 716,600	7	2012
10	1317+14 1426+70	1426+70 1530+59	St. Charles Jefferson	6.24	N/A		\$ 20,000	\$ 238,800	9	2013
				5.70			\$ 11,94			

**Phase 5** of ROW acquisition comprises property in Lafourche Parish other than Raceland Sugar between Station 23+00 and 450+00 plus whatever is needed to complete the US 90 interchange near Dufrene Ponds.

The Segments requiring this property include

- Segment 1 – Priority 6 (a portion); and
- Segment 3 – Priority 10 (a portion).

Most of this property is thought to belong to the same owner. The cost is estimated at the same value as the Raceland Sugar property for a total of \$207,000. The cost of acquisition is shown in **Tables 8-1 and 8-3**. In **Tables 8-16 and 8-17** the total cost is scheduled for FY 2010.

**Phase 6** comprises the additional required ROW between Station 1530+00 and the Avondale Canal. It is less likely to be developed, and it is much smaller in extent, than the area in Jefferson Parish east of the Avondale Canal that comprises Phase 1. Therefore, to reduce early project costs, it is deferred to this later phase.

The Segment requiring this ROW is

- Segment 10 - Priority 7.

Although Phase 6 contains only 4.7 acres, a small amount of land compared with other phases, it includes a residence and Mosca's Restaurant, a well-known business. If valued at the same rates as the earlier Jefferson acquisitions, the cost would total \$2.1 million. This cost is included in **Table 8-10** and in FY 2010 in **Tables 8-16 and 8-17**.

**Phase 7** comprises area needed to expand the ROW of US 90 in St Charles Parish between Station 1188+00 near Barton Avenue and Davis Pond. Portions of this property are developed and include the sites of the St. Charles Library, a service station, and a supermarket. While none of these structures must be removed, there would be impacts to parking and other site features. Relocation costs could result and are included in the estimate of \$3.7 million.

The Segments requiring this ROW are

- Segment 8 - Priority 12; and
- Segment 9 – Priority 15 and 16 (the portion of additional required ROW in St. Charles Parish adjacent to Segment 8).

The costs are included in **Tables 8-8 and 8-9**. The total is shown in **Tables 8-16 and 8-17** in FY 2011.

**Phase 8** comprises the ROW between Station 450+00 and Station 560+00 in Lafourche Parish. It consists of a portion of Dufrene Ponds that is a flooded wetland that was formed by a failed levee. It is believed that the area is the property of a single landowner.

The Segment requiring this ROW is

- Segment 4 - Priority 11 (the portion in Lafourche Parish).

The cost is estimated to be \$126,700, which is one half the value per acre of the other required ROW in Lafourche Parish.

The cost is included in **Table 8-4** and in **Tables 8-16 and 8-17** in FY 2011.

**Phase 9** comprises the portion of ROW on the Monsanto site. As it would be advantageous to both Monsanto and DOTD in their negotiations to have the results of the Infrastructure Relocation Study available prior to negotiating the transfer, this is deferred as long as possible. It is difficult to estimate the value as this land cannot readily be developed by anyone. For the purpose of this estimate, it is valued for purchase in FY 2012 at the same rate as the other vacant land in St. Charles for a total of \$716,600.

The Segment requiring this ROW is

- Segment 7 - Priority 14 (the portion on the Monsanto site).

The cost is included in **Table 8-7** and in **Tables 8-16 and 8-17** in FY 2012.

**Phase 10** comprises the additional ROW between Davis Pond and Station 1530+00 in Jefferson Parish. Acquisition would involve small amounts of land, much of it wetlands, in which no construction would occur. ROW would be acquired to assure 25 feet of clearance on either side of the mainline structures. These strips of land in both St. Charles and Jefferson Parishes are valued at half the value of vacant land in St. Charles Parish on the west side of the Davis Pond, for \$238,800.

The Segment requiring this ROW is

- Segment 9 - Priority 15 and 16.

The cost is included in **Table 8-9** and in **Tables 8-16 and 8-17** in FY 2013.

## 8.5 Estimated Cost to Complete

The estimated costs to complete are identified by Louisiana fiscal year (FY), which begins on July the first of each calendar year. **Table 8-17** provides a snapshot of the costs and activities that would be undertaken beginning in late FY 2008, after the planned issuance of the ROD in November 2007, and continuing until project completion.

The table includes:

- Columns for Design, ROW Acquisition, Construction including Contingency at the estimated mid-point of construction, Construction Management and Project Management, and Wetland Mitigation; and
- The ROW Acquisition includes estimates of relocation expenses as seen in **Table 8.16**.

The wetlands mitigation cost is based on the current cost of compensatory acres in the Paradis Mitigation Bank assuming that the USACE takes jurisdiction of all potential acres and that DOTD must purchase two acres for every one impacted. Of the 578.9 potential acres, 43.0 are cypress/tupelo swamp, 376.4 are bottomland hardwood, and 159.5 are accounted for by the other categories. The 43.0 acres, doubled at a cost per acre of \$23,000, equals \$1,978,000; the remaining acres, assuming that the cost of all would be the asking price for bottomland hardwood, would cost \$21,436,000. The total wetland mitigation is estimated to be \$23,414,000.

**Table 8-17**  
**Estimated Cost by Louisiana Fiscal Year (\$ million)**

<b>FY</b>	<b>Design</b>	<b>ROW</b>	<b>Construction and Contingency at Mid-point</b>	<b>CM and PM at Mid-point</b>	<b>Wetland Mitigation</b>	<b>Total Estimate</b>
2008	59.0					59.0
2009	118.7	34.8			23.4	176.9
2010	40.0	5.1	67.6	10.5		123.2
2011	42.6	3.8	585.8	89.8		722.0
2012	21.0	0.7	263.0	41.0		325.7
2013		0.2	40.6	6.3		47.1
2014						0.0
2015			937.7	146.0		1083.7
2016			720.9	112.2		833.1
2017			464.2	72.3		536.5
2018			811.4	126.3		937.7
2019						0.0
2020			153.4	23.9		177.3
<b>Total</b>	281.3	44.6	4044.6	628.3	23.4	5022.2

NOTE: Column totals may vary due to rounding.