



## 5.13 Visual and Aesthetic Resources

Visual impacts of the US 31 Plymouth to South Bend project include the “view from the road” and the “view of the road.” Such impacts are assessed to design quality, art, and architecture in the project planning. These values are particularly important for facilities in sensitive environmental settings.

The US 31 Improvement Project will result in both temporary and permanent visual impacts. Temporary impacts are the sighting of construction equipment and the resulting clearing of areas to construct the highway. These will be mitigated by the control of clearing to the area within the construction limits and with quick re-vegetation upon completion of construction. Permanent impacts are the conversion of forests, wetlands, farmland, and urban/suburban landscapes to a freeway.

The following descriptions for each alternative provide a general review of possible visual impacts. Information was gathered from driving each of the alternatives and their variations, and use of GIS layers. Commentaries on each alternative begin in the south, near Plymouth, and end near US 20 in South Bend. Aerial photographs for selected areas have been provided to illustrate the current landscape condition known as “Before,” and an artistic rendition of the landscape post construction known as “After.” The No-Build Alternative would have no significant visual impacts.

### 5.13.1 View from the Road

#### Alternative Cs

Alternative Cs begins at the existing US 31 and US 30 interchange, utilizing the existing cloverleaf configuration, and proceeds northward along the existing US 31 alignment to just south of West 4A Road in Marshall County, just south of LaPaz. It then continues northward on new alignment east of LaPaz and parallels existing US 31. Just south of Lakeville, in St. Joseph County, it crosses existing US 31 and continues northward, west of Lakeville, paralleling existing US 31. It terminates at US 20, approximately one mile west of the existing US 31 and US 20 interchange. It crosses flat agriculture/grazing lands of the Northern Lakes Natural Region and also passes through the Northern Moraine and Lake Physiographic Region.

**From US 31/US 30 Interchange to LaPaz:** there is the Yellow River, agricultural/grazing lands, farms, homes, forested areas, wetlands, a tributary of the Yellow River, a commercial grain operation, small businesses, an INDOT sub-district, the LaPaz wastewater treatment plant, overhead utility lines, the New Philadelphia Church and an injection plastics business. New interchanges are proposed at the US 31 intersections with 7<sup>th</sup> Road and with U.S. 6.

**From LaPaz to Lakeville:** the roadway will pass on the east side of LaPaz, near LaPaz Junction. There are agricultural/grazing lands, farms, homes, wooded areas, wetlands, a tributary of the Yellow River, Riddles Lake, Pleasant Lake, a pipeline, 84 Lumber and an abandoned railroad.

**From Lakeville to South Bend:** on the south edge of Lakeville, the roadway will cross from the east side to the west side of existing US 31. It will continue northward and will pass on the west side of Lakeville and remain on the west side of existing US 31 until it terminates at US 20. There is an outdoor recreation sports complex, a tributary to Moon Lake, wetlands, wooded areas, homes, farms, small businesses, gas stations, Colburn Subdivision, Southern Acres Subdivision, Sun Communities Mobile Home Park, Berliner Marx Vacant Industrial facility, Barber Mobile Home Park, Sycamore Hills Subdivision, Kern Road Subdivision, Whispering Hills Subdivision and Mittler Distribution Company. New interchanges are proposed at the US 31 intersections with SR 4 (Pierce Road), Kern Road (Figures 5.13.55 and 5.13.56) and at US 20, approximately 1-mile west of the existing US 31 and US 20 interchange location (Figures 5.13.57 and 5.13.58).



Figure 5.13.55: (Before) Proposed Interchange Location for Alternatives Cs and G-Cs at Kern Road



Figure 5.13.56: (After) Proposed Interchange Location for Alternatives Cs and G-Cs at Kern Road



Figure 5.13.57: (Before) Proposed Interchange Location for Alternatives Cs and G-Cs at US 20

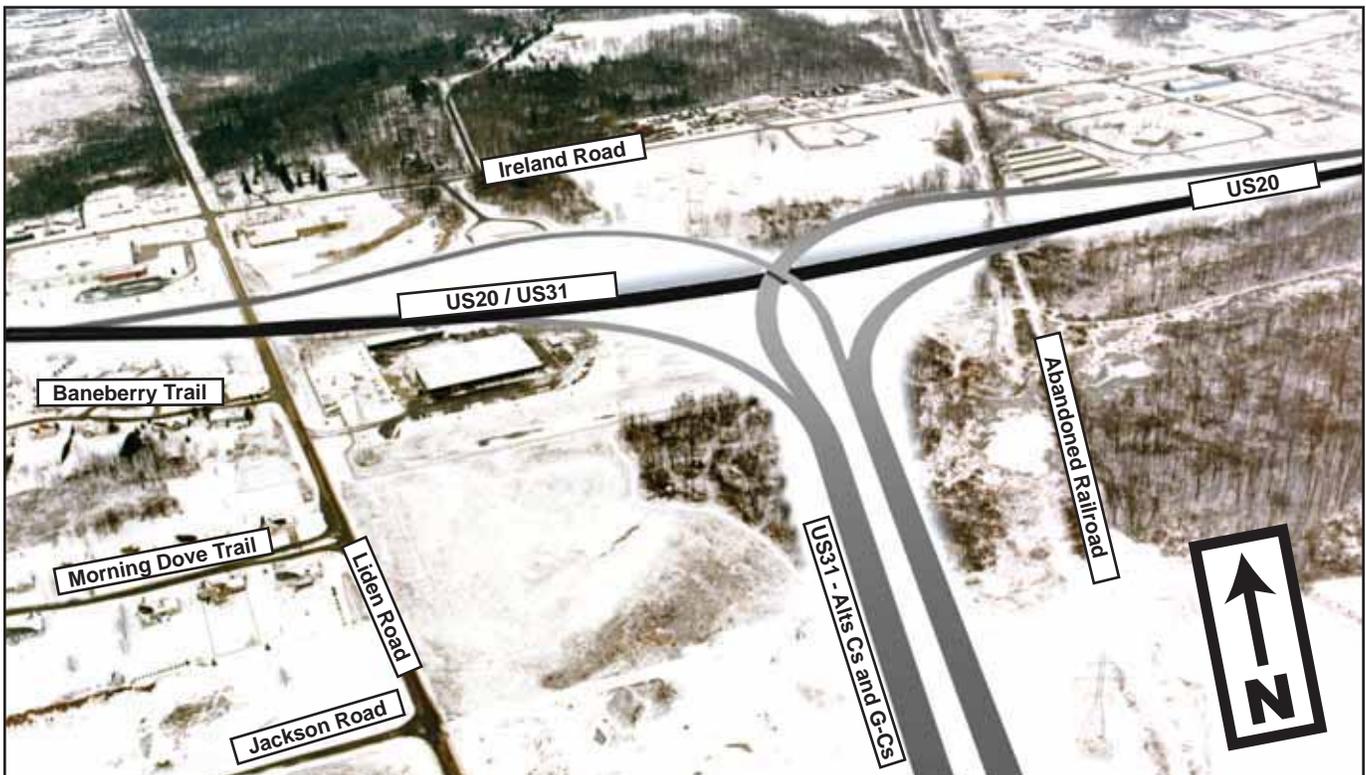


Figure 5.13.58: (After) Proposed Interchange Location for Alternatives Cs and G-Cs at US 20



## Alternative G-Cs

Alternative G-Cs begins at the existing US 31 and US 30 interchange, utilizing the existing cloverleaf configuration, and proceeds northward along the existing US 31 alignment to just south of West 4A Road in Marshall County, just south of LaPaz. It then continues northward on new alignment east of LaPaz and parallels existing US 31. Just south of the Marshall-St. Joseph County line, the alternative assumes a northeasterly direction around the east side of Riddles Lake, where it then continues in a northerly direction bypassing Lakeville on the east and paralleling existing US 31. Near Miller Road, the alternative turns in a northwesterly direction and crosses to the west side of existing US 31 just south of Roosevelt Road. The alternative then turns in a northerly direction, paralleling existing US 31, and terminates at US 20, approximately one mile west of the existing US 31 and US 20 interchange. It crosses flat agriculture/grazing lands of the Northern Lakes Natural Region and also crosses the Northern Moraine and Lake Physiographic Region.

**From US 31/US 30 Intersection to LaPaz:** there is the Yellow River, agricultural/grazing lands, farms, homes, forested areas, wetlands, a tributary of the Yellow River, a commercial grain operation, small businesses, an INDOT sub-district, the LaPaz wastewater treatment plant, overhead utility lines, the New Philadelphia Church and an injection plastics business. New interchanges are proposed at the US 31 intersections with 7<sup>th</sup> Road and with U.S. 6.

**From LaPaz to Lakeville:** the roadway will pass on the east side of LaPaz, near LaPaz Junction. There are agricultural/grazing lands, farms, homes, wooded areas, wetlands, a tributary of the Yellow River, Riddles Lake, Pleasant Lake, a pipeline, 84 Lumber and an abandoned railroad.

**From Lakeville to South Bend:** the roadway will pass on the east side of Lakeville and continue to the north. There are wooded areas, agricultural/grazing fields, homes, and Robin Hood Subdivision. The roadway continues north, paralleling Kenilworth Road then begins to turn towards the north-northwest just north of Miller Road. Through this area one would see an increasing amount of homes and subdivisions, increasing industrial activity, and some small ponds. The new roadway will cross existing US 31 just south of Roosevelt Road, turns in a northwesterly direction, paralleling existing US 31, and terminates at US 20, approximately one mile west of the existing US 31 and US 20 interchange. There is the Weller's Heights Subdivision, businesses, a historical home, gas stations, Southern Acres Subdivision, Sun Communities Mobile Home Park, Berliner Marx Vacant Industrial facility, Barber Mobile Home Park, Sycamore Hills Subdivision, Kern Road Subdivision, Whispering Hills Subdivision and Mittler Distribution Company. New interchanges are proposed at the US 31 intersections with SR 4 (Pierce Road) (Figures 5.13.57 and 5.13.58), Kern Road (Figures 5.13.55 and 5.13.56) and at US 20, approximately 1-mile west of the existing US 31 and US 20 interchange location (Figures 5.13.57 and 5.13.58).

## Alternative Es

Alternative Es begins at the existing US 31 and US 30 interchange, utilizing the existing cloverleaf configuration, and proceeds northward along the existing US 31 alignment to just south of West 4A Road in Marshall County, just south of LaPaz. It then continues northward on new alignment east of LaPaz and parallels existing US 31. Just south of Lakeville, in St. Joseph County, it crosses existing US 31 and continues northward, west of Lakeville, paralleling existing US 31. Just north of Madison Road the alternative assumes a northeasterly direction and ties into existing US 31 just north of Kern Road. It then terminates at the existing US 31 and US 20 interchange. It crosses flat agriculture/grazing lands of the Northern Lakes Natural Region and also passes through the Northern Moraine and Lake Physiographic Region.



**From US 31/US 30 Interchange to LaPaz:** there is the Yellow River, agricultural/grazing lands, farms, homes, forested areas, wetlands, a tributary of the Yellow River, a commercial grain operation, small businesses, an INDOT sub-district, the LaPaz wastewater treatment plant, overhead utility lines, the New Philadelphia Church and an injection plastics business. New interchanges are proposed at the US 31 intersections with 7<sup>th</sup> Road and with U.S. 6.

**From LaPaz to Lakeville:** the roadway will pass on the east side of LaPaz, near LaPaz Junction. There are agricultural/grazing lands, farms, homes, wooded areas, wetlands, a tributary of the Yellow River, Riddles Lake, Pleasant Lake, a pipeline, 84 Lumber and an abandoned railroad.

**From Lakeville to South Bend:** on the south edge of Lakeville, the roadway will cross from the east side to the west side of existing US 31. It will continue northward and will pass on the west side of Lakeville and remain on the west side of existing US 31 until it terminates at the existing US 31 and US 20 interchange location. There is an outdoor recreation sports complex, a tributary to Moon Lake, wetlands, wooded areas, homes, farms, small businesses, gas stations, Colburn Subdivision, Southern Acres Subdivision, Weller's Heights Subdivision, Sun Communities Mobile Home Park, Berliner Marx Vacant Industrial facility, Kern Road Subdivision, Gilmer South Michigan Subdivision, Gilmer Park Subdivision, agricultural/grazing lands, the Southside Church of God, an unnamed stream and a small ditch, homes, an historic home, Southlawn Cemetery and the commercial business district that includes businesses, gas stations, small shops, and a restaurant.. New interchanges are proposed at the US 31 intersections with SR 4 (Pierce Road), Kern Road (Figures 5.13.59 and 5.13.60) and at US 20 at the existing US 31 and US 20 interchange location.

## Preferred Alternative G-Es

Alternative G-Es begins at the existing US 31 and US 30 interchange, utilizing the existing cloverleaf configuration, and proceeds northward along the existing US 31 alignment to just south of West 4A Road in Marshall County, just south of LaPaz. It then continues northward on new alignment east of LaPaz, paralleling existing US 31. Just south of the Marshall-St. Joseph County line, the alternative assumes a northeasterly direction east of Riddles Lake, and then continues north, east of Lakeville, paralleling existing US 31. Near Miller Road, the alternative turns in a northwesterly direction and crosses existing US 31 just south of Roosevelt Road. As the alternative approaches Kern Road, it assumes a northeasterly direction and ties into existing US 31, just north of Kern Road. It then follows existing US 31 northward and terminates at the existing US 31 and US 20 interchange location. It crosses flat agriculture/grazing lands of the Northern Lakes Natural Region. It passes through the Northern Moraine and Lake Physiographic Region.

**From US 31/US 30 Intersection to LaPaz:** there is the Yellow River, agricultural/grazing lands, farms, homes, forested areas, wetlands, a tributary of the Yellow River, a commercial grain operation, small businesses, an INDOT sub-district, the LaPaz wastewater treatment plant, overhead utility lines, the New Philadelphia Church and an injection plastics business. New interchanges are proposed at the US 31 intersections with 7<sup>th</sup> Road and with U.S. 6.

**From LaPaz to Lakeville:** the roadway will pass on the east side of LaPaz, near LaPaz Junction. There are agricultural/grazing lands, farms, homes, wooded areas, wetlands, a tributary of the Yellow River, Riddles Lake, Pleasant Lake, a pipeline, 84 Lumber and an abandoned railroad.

**From Lakeville to South Bend:** the roadway will pass on the east side of Lakeville and continue to the north. There are wooded areas, agricultural/grazing fields, homes, and Robin Hood Subdivision. The roadway continues north, paralleling Kenilworth Road then begins to turn towards the north-northwest just north of Miller Road. Through this area one would see an increasing amount of homes and subdivisions, increasing industrial activity, and some small ponds. The new roadway will cross the existing US 31, just south of Roosevelt Road and turn north-easterly and tying into existing US 31 just north of Kern Road. It continues along the existing US 31 corridor and



terminates at the existing interchange location. There are small businesses, gas stations, Southern Acres Subdivision, Weller's Heights Subdivision, Sun Communities Mobile Home Park, Berliner Marx Vacant Industrial facility, Kern Road Subdivision, Gilmer South Michigan Subdivision, Gilmer Park Subdivision, agricultural/grazing lands, the Southside Church of God, an unnamed stream and a small ditch, homes, an historic home, Southlawn Cemetery and the commercial business district that includes businesses, gas stations, small shops, and a restaurant.. New interchanges are proposed at the US 31 intersections with SR 4 (Pierce Road) (Figures 5.13.59 and 5.13.60), Kern Road (Figures 5.13.61 and 5.13.62) and at US 20 at the existing US 31 and US 20 interchange location.

## 5.13.2 View of the Road

### Alternative Cs, Es, G-Cs, & Preferred Alternative G-Es

The Indiana Department of Transportation has a policy to incorporate context sensitive solutions into the development, construction, and maintenance process for improvements to the state jurisdictional transportation system (INDOT Design Memo No. 03-07). The establishment of context sensitive solutions incorporates accepted effective design practices. Context sensitive solutions allow ideas such as the preservation of historic places, scenic and natural environmental enhancement, and community values to be considered with the objectives of mobility, safety, and economics.

Areas near the roadway would experience some loss of forested areas, loss of adjacent homes, and the conversion of agricultural/grazing lands to that of right-of-way corridor for the US 31 project. Every conceivable method shall be explored to mitigate the effects of road construction. Some visually pleasing natural habitat may also be lost for the roadway areas, particularly near and around the wetlands and the lake complex to the southeast of Lakeville. These areas may be mitigated within close proximity of those areas converted.

Homes or areas adjacent or nearby may experience some form of light pollution after the roadway is constructed. However, methods of non-diffuse lighting will be explored to negate these effects during the engineering phase. The roadway will connect to US 20 with an interchange.

All routes considered for the upgrade and new construction of US 31 will involve the loss of some forested areas, wetlands, homes, and business.

All efforts will be made to appropriately enhance roadside areas for improvements to US 31. Some examples may be roadside ditch enhancements with wetland and wildflower plantings. Outside the clear zone, plantings of shrubs and trees will be considered in the project design.

In interchange areas (Figures 5.13.59 and 5.13.60), the use of non-diffuse lighting will be explored to negate the effects of light pollution in rural areas. These same lighting solutions shall be used in urban areas as well. Studies indicate that these lighting techniques aid in driver safety.

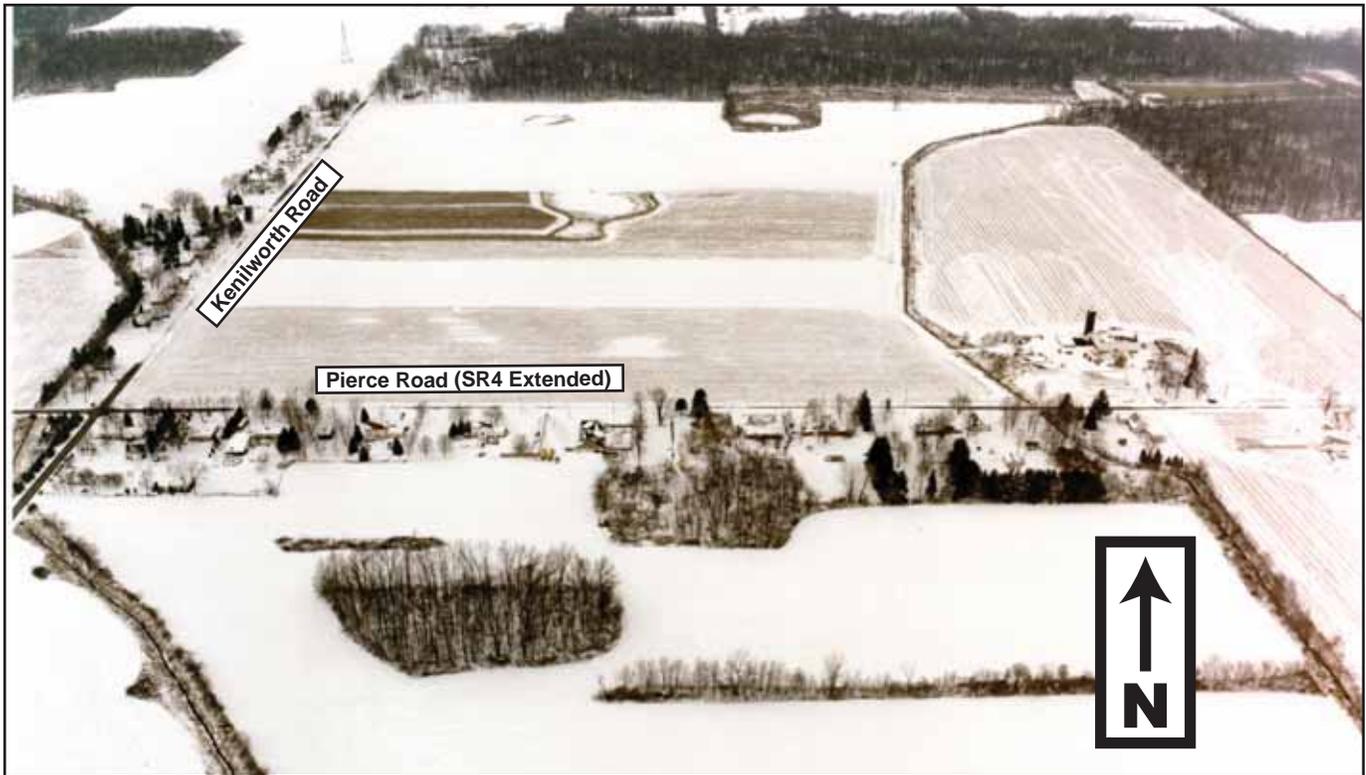


Figure 5.13.59: (Before) Proposed Interchange Location for Alternative G-Cs and Preferred Alternative G-Es at SR 4 (Pierce Road)



Figure 5.13.60: (After) Proposed Interchange Location for Alternative G-Cs and Preferred Alternative G-Es at SR 4 (Pierce Road)

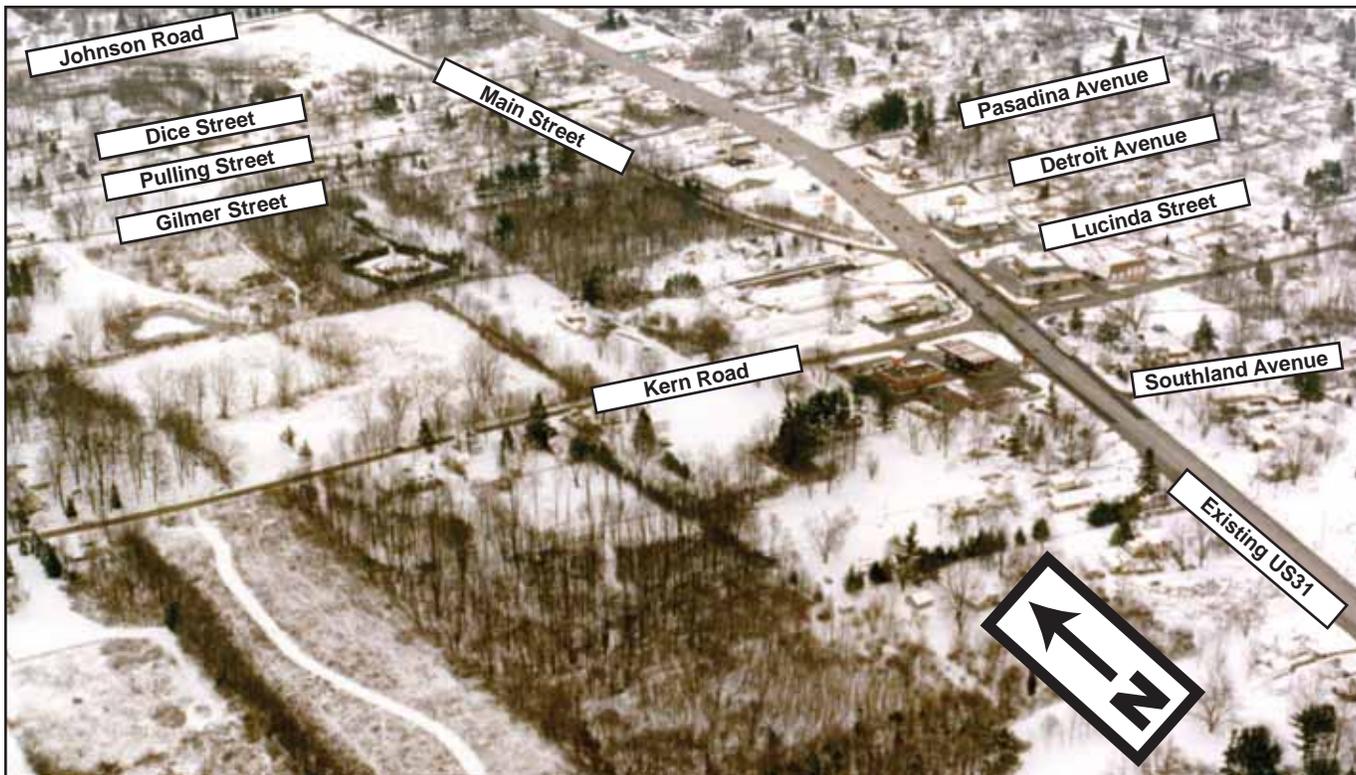


Figure 5.13.61: (Before) Proposed Interchange Location for Alternative Es and Preferred Alternative G-Es at Kern Road

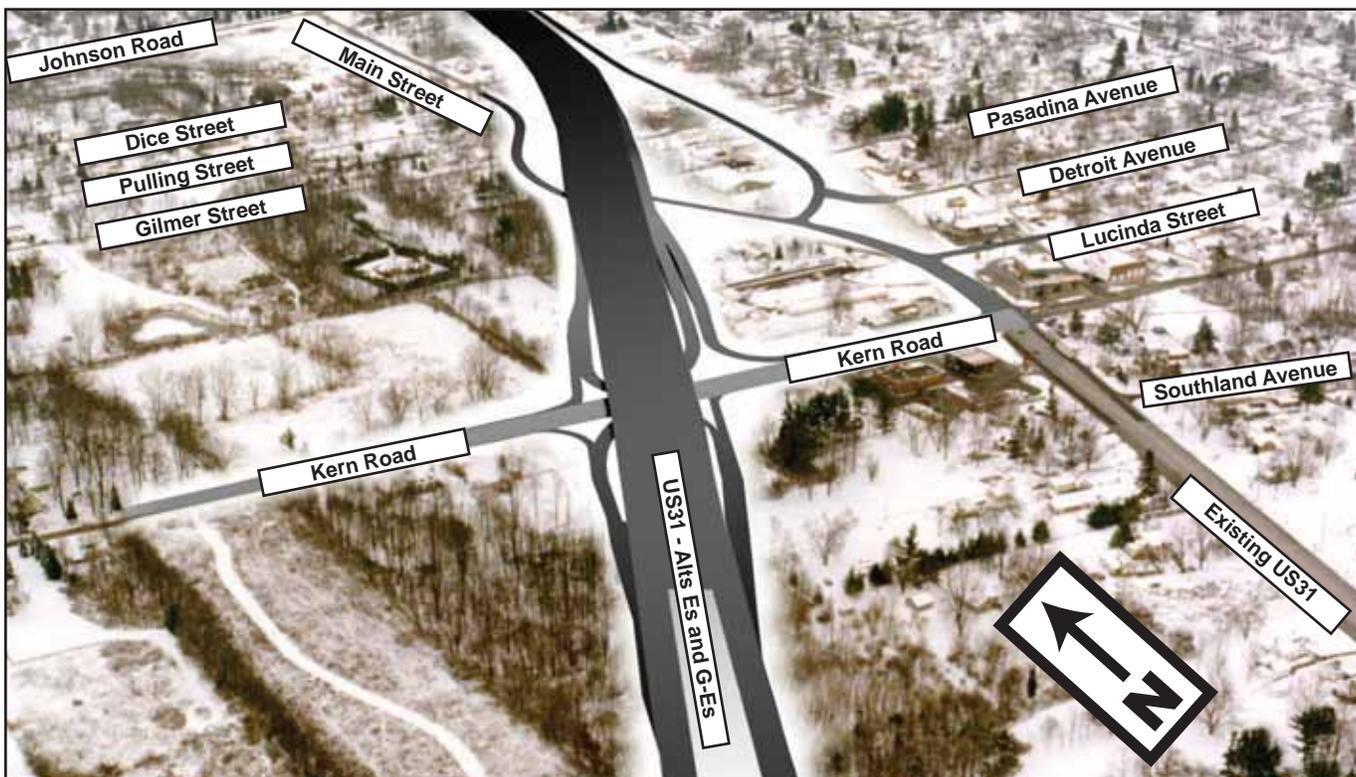


Figure 5.13.62: (After) Proposed Interchange Location for Alternative Es and Preferred Alternative G-Es at Kern Road