



AMERICAN
STRUCTUREPOINT
INC.

December 15, 2014

Mr. Jason Kaiser
Environmental Scoping Manager
Indiana Department of Transportation
Fort Wayne District Office
5333 Hartfield Road
Fort Wayne, Indiana 46808

Re: Additional Information Document
Des. No. 0400587
State Boulevard Reconstruction Project
between Spy Run Avenue and Cass Street
Fort Wayne, Allen County, Indiana

Dear Mr. Kaiser:

This letter documents the results of an Additional Information (AI) study of the State Boulevard Reconstruction Project between Spy Run Avenue and Cass Street in Fort Wayne, Allen County, Indiana. An Environmental Assessment (EA) Document was prepared for this project, and was approved on May 14, 2014 under Des. No. 0400587.

On June 18, 2014 a Public Hearing was held for the proposed project. At the June 18, 2014 Public Hearing and in a letter dated July 18, 2014 (attachment pages 1 to 3) ARCH, Inc. proposed an alternative prepared by Storrow Kinsella Associates and Transportation Solutions, LLC. Storrow Kinsella Associates and Transportation Solutions, LLC were commissioned by ARCH, Inc, Indiana Landmarks, Friends of the Parks, and the Brookview-Irvington Park Neighborhood Association to examine the background research developed for the proposed project to determine if there was an alternative that better protected the neighborhood, fulfilled the purpose and need for the project, was prudent and feasible, and avoided, minimized or mitigated the adverse effect to the neighborhood. As such, it was determined through coordination with the Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT) that the submitted alternative should be evaluated as part of the environmental process.

In addition, it has been requested by FHWA and INDOT that the residential properties acquired through the Voluntary Floodplain Relocation Fund of Fort Wayne be discussed as part of the environmental process. Therefore, the purpose of this AI is to evaluate the Consulting Parties Proposed Alternative (CPPA) and to provide information about properties acquired through the Voluntary Floodplain Relocation Fund.

CPPA

The CPPA, as presented by Storrow Kinsella Associates in collaboration with Transportation Solutions, LLC (attachment pages 3 to 14), consists of a two-lane parkway alignment shifted south of existing State Boulevard between Clinton Street and the Westbrook/Edgehill Drive intersection.

Des. No. 0400587

Page 2 of 5

The transition from existing State Boulevard to the CPPA includes a single lane roundabout at the Westbrook/Edgehill Drive intersection and a two-lane signalized hybrid roundabout at the North Clinton Street intersection. The CPPA includes a new crossing of Spy Run Creek raised above the 100-year flood elevation and a multi-use path separated from the roadway. The multi-use path would utilize the existing Spy Run Creek Bridge. If the deteriorated bridge condition or flooding issues dictate removal, a new multi-use path bridge would be constructed. Eastbrook Drive would be converted to a cul-de-sac just north of the realigned State Boulevard. Access to existing State Boulevard would be obtained by utilizing the proposed roundabout at Clinton Street. No direct access to the realigned State Boulevard would be provided at Eastbrook Drive, Oakridge Road, or Terrace Road. See attachment page 6 for graphic representation of the CPPA.

The CPPA would require the relocation of at least two businesses and one residential property to construct Clinton Street roundabout. The CPPA is estimated to cost \$1.6 million more than Alternative 3A (preferred). The cost of the CPPA is elevated due to the increased construction cost associated with a larger footprint and increased infrastructure associated with the two proposed roundabouts, the addition of a second pedestrian bridge, the potential for mechanically stabilized earth (MSE) retaining walls needed to keep fill slopes from extending into Spy Run Creek and associated with the realigned State Boulevard near the proposed Eastbrook Drive cul-de-sac.

Potential Historic Property Impacts

Similar to Alternative 3A (preferred) and 3C, the CPPA proposed realignment of State Boulevard and change in elevation associated with the CPPA would result in the bifurcation of the Brookview-Irvington Park Historic District. Contributing features located within the project area would be removed from their historical locations: State Boulevard relocation and the removal of the existing bridge over Spy Run Creek. Through the realignment of State Boulevard, the conversion of Eastbrook Drive (south of State Boulevard) to a cul-de-sac, and the replacement of the bridge over Spy Run Creek, the landscape of the area would be modified altering the character and setting of the district. The construction of a prefabricated trail bridge over State Boulevard at the abandoned New York Central Railroad would also change the character of the district along State Boulevard. Furthermore, the realignment of State Boulevard would require the acquisition of right-of-way from the Fort Wayne Park and Boulevard System Historic District, again altering the historic location of State Boulevard. The realigned State Boulevard profile would have a significant increase in vertical elevation as it passes over Spy Run Creek, introducing a visual barrier through the historic district as well as diminishing the presence of the sloping hills and natural features (contributing feature). The prefabricated trail bridge, pedestrian access ramps, and retaining walls (associated with the Pufferbelly trail) would be constructed over the contributing State Boulevard at the abandoned New York Central Railroad bridge, introducing a new visual element to the Fort Wayne Park and Boulevard System Historic District.

Unlike the required removal of 15 residential structures contributing to the Brookview-Irvington Historic District associated with Alternative 3A (preferred), the CPPA would not require any contributing residential structure removals; however, the realignment of State Boulevard and change in elevation would still result in a bifurcation of the district and the removal of contributing features from their historical location. The alteration and removal of contributing features from their historical location as proposed in the CPPA would also result in similar impacts to the Fort Wayne Park and Boulevard System Historic District. The CPPA also requires the replacement of the bridge over Spy Run Creek (non-select historical bridge) and minor right-of-way acquisition from Vesey Park. In addition, the contributing residential structures avoided by the CPPA and removed by Alternative 3A (preferred), as described in the May 14, 2014 approved EA, do not possess historically unique features when compared to the remaining residential structures in the Brookview-Irvington Park Historic District, which would make them individually eligible for the National Register of Historic Places. A significant portion of the contributing structures to be removed by Alternative 3A (preferred) are also located in areas that flood multiple times a year and thus continue to deteriorate at a relatively rapid rate.

Capacity Analysis (attachment pages 15 to 20)

American Structurepoint conducted a capacity analysis to evaluate the State Boulevard and Clinton Street intersection improvements as proposed in the CPPA as well as document the 2009 and 2030 traffic operations for all other alternatives considered in the environmental document (Alternatives 1, 2, 3A, 3B, 3C, 3D, and 4).

Des. No. 0400587

Page 3 of 5

CPPA Capacity Analysis

The CPPA includes a two-lane roundabout with a southbound left turn bypass lane at the Clinton Street intersection (attachment page 6). The accommodation of the bypass lane into the design of the roundabout would require that the entering and exiting flow on the east leg (State Boulevard) of the intersection be signalized. The proposed left turn bypass lane would also require all other roundabout circulating traffic wishing to exit eastbound onto State Boulevard to stop or yield to the southbound left turning traffic resulting in excessive congestion in the roundabout. The CPPA also proposes approach metering in order to provide gaps for certain approaches when heavy traffic flows dominate upstream approaches. However, because a left turn bypass at a roundabout is an unprecedented treatment in the United States and potentially unsafe due to lack of driver familiarity, the decision was made by FHWA and INDOT that such treatment was not desirable from a drivers' expectancy standpoint and therefore not considered in the capacity analysis conducted by American Structurepoint. Instead, three different roundabout scenarios were analyzed to determine if a multi-lane roundabout could feasibly operate at the intersection. These scenarios are defined in the attachment on page 15. As presented in the December 9, 2013 letter, 2005 traffic counts were utilized in the conceptual design of the CPPA. The 2005 traffic data was originally used for the scoping of the State Boulevard project. In 2009, the Northern Indiana Regional Coordinating Council (NIRCC) provided updated turning movement counts. Both 2005 and 2009 traffic data were analyzed for the purpose of evaluating the effectiveness of the CPPA State Boulevard/Clinton Street intersection improvement.

NIRCC has established a LOS "D" as the minimum acceptable peak hour service level for intersections and corridors within the urban area. A LOS of A thru D is considered acceptable and is an indicator of acceptable delay and level of intersection congestion. For the CPPA, the overall intersection LOS is E or F during the AM and PM peak hours in all three scenarios analyzed, with the exception of the AM peak hour of Scenario 1 in which a LOS B is expected. However, during the PM peak hour in Scenario 1, a LOS E is expected. Therefore, the capacity analysis prepared by American Structurepoint concluded that the proposed CPPA roundabout at State Boulevard and Clinton Street would not provide an acceptable level of service (LOS) in the design year, as established by NIRCC, and therefore does not adequately address the congestion mitigation component of the purpose and need of the proposed project.

EA Alternatives Capacity Analysis

To be consistent in the comparisons of alternatives evaluated as part of the overall environmental process and because design year traffic operations were not documented in the approved EA, a capacity analysis was performed for the alternatives evaluated in the approved EA (Alternatives 1, 2, 3A, 3B, 3C, 3D, and 4). The capacity analysis was performed for each alternative and evaluated the intersections of Clinton Street/State Boulevard and Spy Run Avenue/State Boulevard. The analysis grouped together Alternatives 1, 2, 3D, and 4 because the intersection lane configurations are the same for each alternative. Likewise, Alternatives 3A, 3B, and 3C were grouped together for the same reason. In addition, Alternatives 1, 2, 3D, and 4 are the same as the existing intersection lane configurations. For this reason, the capacity analysis was run with existing signal timings. When multiple movements displayed LOS E or F in the design year 2030, the capacity analysis for these alternatives was rerun with optimized signal timings. Optimization of signal timing slightly improved operations; however, several movements resulting in LOS E and F were still documented.

The year 2009 and 2030 analysis for Alternatives 1, 2, 3D, and 4 document that the current lane configurations do not operate at an acceptable LOS even with optimized traffic signal timings in 2030. On the contrary, Alternatives 3A, 3B, and 3C would operate acceptably in the year 2030. For these alternatives, all movements operated at an acceptable LOS (LOS D or above). Therefore, the preferred alternative as recommended in the approved EA (Alternative 3A) meets the purpose and need of the State Boulevard project with regard to traffic operations.

CPPA Alternative Evaluation Conclusion

The CPPA is not reasonable as it does not satisfy the Project's purpose and need. Based on a capacity analysis prepared for the CPPA, this alternative would not address the traffic congestion issues established by the Project's primary purpose and need. The intersections of State Boulevard with Spy Run and Clinton Street would not function at an acceptable level of service in the design year. For the CPPA, the overall intersection LOS is E or F during either the AM or PM peak hours in

Des. No. 0400587

Page 4 of 5

all scenarios analyzed. The CPPA would also likely require a level one design exception¹ with regards to roadway geometrics as it appears the CPPA utilizes substandard curvature in the proposed relocated segment of State Boulevard resulting in substandard sight distance conditions. Therefore, the CPPA does not appear to address the safety components associated with the sight distance, geometrics, and congestion. However, while not as significant as the need to address congestion and the safety components associated with sight distance, geometrics, and congestion, the CPPA does address the flooding and Greenways Trail System connectivity components of the purpose and need by proposing to elevate the roadway above the 100-year elevation and provide a separated multi-use path. Furthermore, this alternative would require an estimated \$9.6 million project cost, approximately \$1.6 million (20% increase) more than the preferred alternative (3A) presented in the May 14, 2014, approved EA (attachment pages 76-110). For these reasons, the CPPA is not considered reasonable and has been eliminated from further consideration.

An Addendum to the State Boulevard Reconstruction Project 800.11(e) Documentation has been prepared to incorporate the evaluation of the CPPA as presented by Storrow Kinsella Associates in collaboration with Transportation Solutions, LLC (attachment pages 23-24). In addition, the Draft Section 4(f) Evaluation for Impacts to Historic Properties prepared for the State Boulevard Reconstruction Project was also updated to include the CPPA as alternative considered and screened (attachment pages 25-62).

VOLUNTARY FLOODPLAIN RELOCATION FUND OF FORT WAYNE

As previously stated, FHWA and INDOT requested that the residential properties acquired through the Voluntary Floodplain Relocation Fund of Fort Wayne be discussed as part of the environmental process.

As a result of being built on the banks of the St. Mary's River, the St. Joseph River, and the Maumee River, the City of Fort Wayne is routinely impacted by flood events. As such, the City of Fort Wayne conducted several studies in conjunction with FEMA, the USACE, and the Maumee River Basin Commission to develop a flood protection plan. These studies were conducted by Rust Engineering (1996) and Christopher Burke Engineering (2005). The results and recommendations of the studies was a mix of strategies including construction of flood walls, earthen berms, flood proofing of properties, and voluntary buy outs. The recommendations were implemented using a mix of federal and local funding sources, identifying the worst areas and addressing them with a multitude of strategies, including the construction of levees, flood walls, detention basins and voluntary buyouts.

The Spy Run Creek area which passes through the State Boulevard project area is one of several tributaries that is prone to quick and extreme flooding. The recommendations in the 2005 study included the acquisition and removal of 23 homes along Eastbrook and Westbrook Drives located on the banks of Spy Run Creek between Clinton Street and State Boulevard. After the removal of the homes, a riparian green space along with an earthen berm would be erected to protect adjacent properties. The flood protection activities along Westbrook Drive were completed in 2008.

Similar flood protection activities were also initiated in 2008 along Eastbrook Drive. At the same time the preliminary engineering design of the State Boulevard widening project was initiated as a federal aid project. Prior to 2008, State Boulevard was only intended to be a widening project as identified in the NIRCC's Transportation Improvement Program (TIP). As the proposed widening project developed it was determined that roadway realignment would be required to correct the sub-standard horizontal curve in the vicinity of Spy Run Creek. It was then determined that the realigned roadway would likely pass through the Eastbrook Drive area where the voluntary flood buy-outs were occurring. The City then requested a meeting with INDOT to discuss the potential overlap of the on-going flood buy-out program and the proposed State Boulevard project. A meeting was held on June 26, 2008 at the Fort Wayne District offices of INDOT. As directed by INDOT and FHWA during the June 26th meeting, the City stopped further land acquisition associated with the flood buy-out program within the Eastbrook Drive area. It was determined by INDOT and FHWA that the previous purchases by the voluntary floodplain relocation fund of Fort Wayne would be considered previously owned properties, purchased and cleared under a separate program of local funds, and were in no way an attempt to circumvent federal regulations. Therefore, INDOT and FHWA determined the acquisitions were not an avoidance of federal regulations. See

¹ A design exception is a request for an exception to specific design criteria, required when an element of a proposed design does not meet the standard design criteria as set forth in the Indiana Design Manual. A design exception is submitted to and approved by INDOT. Level one design exceptions are those exceptions related to highway design elements which are judged to be the most critical indicators of a highway's safety and its overall serviceability.

Des. No. 0400587
Page 5 of 5

attachment pages 63-75 for a time line and further documentation detailing the City's flood protection activities in the Westbrook and Eastbrook Drive vicinity as it relates to the State Boulevard project.

Unless specifically discussed in this AI document, all impacts remain the same as in the approved EA. If you have any questions, please feel free to contact me at (317) 547-5580 or by e-mail at bhope@structurepoint.com.

Very truly yours,
American Structurepoint, Inc.



Briana M. Hope
Environmental Project Manager

BMH:slg

Attachments:

1. July 18, 2014 Letter from ARCH, Inc. -- Pages 1-3
2. The *Consulting Parties Proposed Alternative* (CPPA) as presented by Storrow Kinsella Associates, in collaboration with Transportation Solutions, LLC -- Pages 4-14
3. Capacity Analysis of CPPA Alternative for State Boulevard and Clinton Street Intersection -- Pages 15-22
4. Addendum to the State Boulevard Reconstruction Project 800.11(e) Documentation (text only) -- Pages 23-24
5. Draft Section 4(f) Evaluation for Impacts to Historic Properties prepared for the State Boulevard Reconstruction Project (text only) -- Pages 25-62
6. Voluntary Floodplain Relocation Fund of Fort Wayne Documentation -- Pages 63-75
7. Approved EA Document (text only), May 14, 2014 - Pages 76-110

AI Document Approval



Jason Kaiser
Environmental Scoping Manager
INDOT -- Fort Wayne District

12-17-14

Approval Date



Laura Hilden
Director of Environmental Services
INDOT

12/17/2014

Approval Date



Joyce Newland
Planning/Environmental Specialist
FHWA

12.17.14

Approval Date



The mission of ARCH is to advocate for the protection and preservation of historically and culturally significant assets and historic places in Allen County and northeast Indiana.

July 18, 2014

Briana M. Hope
Environmental Project Manager
American Structurepoint, Inc.
7260 Shadeland Station
Indianapolis, Indiana 46256

Dear Ms. Hope:

I am writing in reference to the June 5, 2014 updated FHWA Findings and Determinations materials provided as part of the Section 106 Review, and the May 2, 2014 Environmental Assessment for the proposed State Boulevard Reconstruction Project in Fort Wayne, Allen County, Indiana (Des. No. 0400587, DHPA No. 5903, Project No. IN20071404.) Thank you for the opportunity to comment and the work that went into preparing this and the related Environmental Assessment document for the above referenced project. I have a few specific points that I would like to address concerning the document and proposed project.

1. We concur that the project as currently proposed will cause an Adverse Effect under Section 106 and Section 4(f) to the three historic properties (Fort Wayne Park and Boulevard System Historic District, Brookview-Irvington Park Historic District, and the Bridge carrying State Boulevard over Spy Run Creek) located within the APE.
2. We believe that purpose of any Section 106 Review is as identified in 36 CFR 800.1(a) to “seek to accommodate historic preservation concerns with the needs of Federal undertakings through consultation among the agency official and other parties with an interest in the effects of the undertaking on historic properties, commencing at the early stages of project planning. The goal of consultation is to identify historic properties potentially affected by the undertaking, assess its effects and seek ways to avoid, minimize or mitigate any adverse effects on historic properties.” Pursuant to that purpose, we believe that the Findings and Determinations materials provided on June 5, 2014 adequately identifies historic properties, and assesses effects of the project as currently proposed. However, we believe that the third portion of the identified goal to “seek ways to avoid, minimize or mitigate any adverse effects on historic properties” is inadequate. To further the discussion, ARCH, Indianal Landmarks, Friends of the Parks, and the Brookview-Irvington Park Neighborhood Association commissioned Storrow Kinsella Associates and Transportation Solutions to examine the background research developed for this project to see if there was

an alternative that better protected the neighborhood, fulfilled the purpose and need for the project, was prudent and feasible and avoided, minimized or mitigated the adverse effect to the neighborhood. We believe that the alternative plan (the "Alternative"), presented by ARCH to American Structurepoint at the June 18, 2014 Public Hearing for the Environmental Assessment, and provided to American Structurepoint, FHWA, INDOT and Indiana SHPO by e-mail delivery on June 24, 2014 and June 26, 2014, better addresses historic preservation concerns while accommodating the purpose and need of the Federal undertaking.

3. We believe that the Alternative is provided during the completion of the Section 106 Review and is thus governed by the guidance in 36 CFR 800.1(c). This guidance mandates that the Alternative must undergo unrestricted consideration by the agency official, as indicated in 36 CFR 800.1(c), which directs the agency official to complete the Section 106 process in a manner "that such actions do not restrict the subsequent consideration of alternatives to avoid, minimize or mitigate the undertaking's adverse effects on historic properties."

4. We believe that the Alternative is presented in agreement with direction contained in 36 CFR 800.3(b) which directs the agency official to coordinate the Section 106 Review with "... the overall planning schedule for the undertaking and with any reviews required under other authorities..." including NEPA and Section 4(l) of the Department of Transportation Act. We further believe that guidance contained in 36 CFR 800.8(a)(1) encouraging agencies to "consider their section 106 responsibilities as early as possible in the NEPA process..." provides further impetus to consider the Alternative plan under both the 4(l) and NEPA processes.

5. We believe that the Alternative meets the identified Purpose and Need for the project. As stated in the May 2, 2014 Environmental Assessment, the Purpose and Need for the project is as follows;

"The primary purpose of the proposed project is to improve corridor connectivity along State Boulevard for both motorists and pedestrians alike. Currently, the existing corridor does not provide a safe environment for motorists, bicyclists, or pedestrians as the existing roadway is significantly congested and exhibits substandard sight distance and geometrics. In addition, State Boulevard is often impassable due to roadway flooding caused by Spy Run or the Saint Mary's River.

The need for this project derives from the traffic congestion along the corridor between Cass Street and Spy Run Avenue, the substandard sight distances at various intersections along the corridor, roadway flooding, and the substandard horizontal geometrics between Cass Street and Clinton Street. The State Boulevard project corridor also becomes congested at the intersections due to the reduction in lanes through this segment. In addition, pedestrian safety is compromised due to this level of congestion and insufficient sight distance at the substandard horizontal curves. Pedestrian facilities do not currently provide connectivity between the Greenways Trail System."

We believe that the Alternative meets the purpose of the project by improving corridor connectivity for both motorists and pedestrians. The identified problems of congestion, substandard sight distance, and geometrics are all addressed in the Alternative. Roadway flooding as well is addressed, although this remains a concern for both the currently proposed project and the Alternative. The nearly adjacent and recently completed US 27 Bridge Reconstruction project (Des. No. 0200914 and 0101527) experienced roadway flooding a little over a year after the project's conclusion, demonstrating the need for a thorough investigation and remediation of a larger problem. Regarding the need for the project, we believe that the Alternative addresses the identified congestion, substandard sight distance, and geometrics concerns as well as the pedestrian safety concerns.

6. We believe that the Alternative significantly “minimizes, mitigates or avoids” adverse Effect to historic properties as is identified as a purpose of Section 106, and makes “special effort to preserve...historic sites” as is the stated purpose of Section 4(f).

Comparing the enumerated Adverse Effect of the current plan as stated on page 206-209 of the Environmental Assessment, the Alternative proposal results in far less damage under both Sections 106 and 4(f), making it a prudent and feasible alternative that causes the least overall harm. In the Fort Wayne Park and Boulevard System Historic District, and in the Brookview-Irvington Historic District, the Alternative avoids to a much greater degree the removal and disruption of the NRHP-listed State Boulevard, minimizes the amount of new land disruption by using land previously altered through the removal of “flood-buyout” houses, and retains the plan of the Arthur Shurcliff-designed plat. In addition, the Alternative avoids the demolition of NRHP-listed residences entirely. The Alternative mitigates the disruption and bifurcation of the Shurcliff-designed plat by the use of a curvilinear “new” State Boulevard replicating the scale of the “original” State Boulevard, providing the driver and pedestrian alike with a similar feel, design and setting.

7. We believe that the Draft Memorandum of Agreement (MOA) as presented in the May 2, 2014 Environmental Assessment and the June 5, 2014 Section 106 Review will need to be modified, particularly if the Alternative is adopted as the basis for proceeding forward in this project. We agree that the use of Context Sensitive Solutions (CSS) is preferred, but would like to see that any such CSS solutions be implemented where feasible rather than merely “considered” as is suggested in the Draft MOA.

Sincerely,



Michael Galbraith
Executive Director, ARCH, Inc.

Enc; “Alternative” Plan (SKA + Transportation Solutions for ARCH, Inc., Indiana Landmarks, et al)



December 9, 2013

Mr. Michael Galbraith
Executive Director
ARCH, Inc.
818 Lafayette Street
Fort Wayne, IN 46802

Re: State Boulevard Reconstruction – Alternative Concepts
Fort Wayne, Indiana

Dear Mike and Consulting Parties Team,

Storror Kinsella Associates, in collaboration with Transportation Solutions, LLC has completed our analysis, evaluation and development of a sketch plan reconstruction alternative for the five-lane roadway widening project currently being proposed by the City of Fort Wayne.

We are confident that the resulting report provides a foundation for ARCH, Inc. and the Consulting Parties Team to have a constructive dialog with the City and its consultant. The *Consulting Parties Proposed Alternative* (CPPA) provides a solution that restores Spy Run Creek Parkway continuity, and maintains the integrity of the Brookview-Irvington historic neighborhood while meeting overall economic development, flood control, connectivity and beautification goals.

Please note that this report is a “sketch plan” alternative. We have made a good-faith effort to consider existing conditions and the purpose and need of the project, but must emphasize that additional design and study will be needed before this proposed alternative can be fully incorporated into the City’s project.

The costs for the CPPA appear to be of similar magnitude or less than the City’s Preferred Alternative, based on comparative lane-miles, bridge cross section and length, and probable right-of-way acquisition. In addition, the long term maintenance costs are comparable or less for the CPPA, based on thoroughfare lane length reduction from 5,175 to 2,100 feet.

The CPPA, as a two-lane facility, appears to be able to accommodate the 2005 peak hour recorded traffic volume of 750 vehicles per hour per lane. Additional analysis of the corridor as a whole will be needed to assess the future expected performance of the proposed alternative.

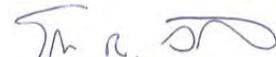
We remain available to answer questions and assist you and the City with moving an improved State Boulevard Reconstruction Project forward into implementation.

Sincerely,
STORROW KINSELLA ASSOCIATES


Margaret T. Storror, Principal


John W. Kinsella, Principal

TRANSPORTATION SOLUTIONS, LLC


Thomas R. Sturmer, Principal

File: X:\1305_FW State Blvd\3Work\05Report\3Final\131209_CovLetter_ARCH_StateBlvd_1305.docx

City of Fort Wayne

Park and Boulevard System

Historic District, Fort Wayne, Allen County, Indiana

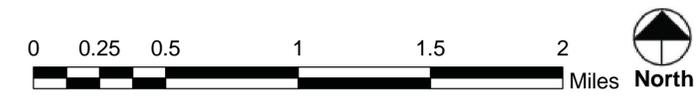
Key Map

 National Register Boundary

- Parks**
1. Franke
 2. McCormick
 3. McCulloch
 4. McMillen
 5. Memorial
 6. Nuckols
 7. Old Fort
 8. Reservoir
 9. Rockhill
 10. Weisser
 11. Williams

- Parkways (includes riverfront parks):**
- I. Maume River
 - i. Lakeside
 - II. Spy Run Creek (Brookview)
 - i. Lawton
 - ii. Vesey
 - III. St. Joseph River
 - i. Johnny Appleseed
 - IV. St. Mary's River
 - i. Bloomingdale
 - ii. Camp Allen
 - iii. Foster
 - iv. Guldlin
 - v. Orff/Thieme Drive Overlook
 - vi. Roosevelt
 - vii. Swinney (East & West)

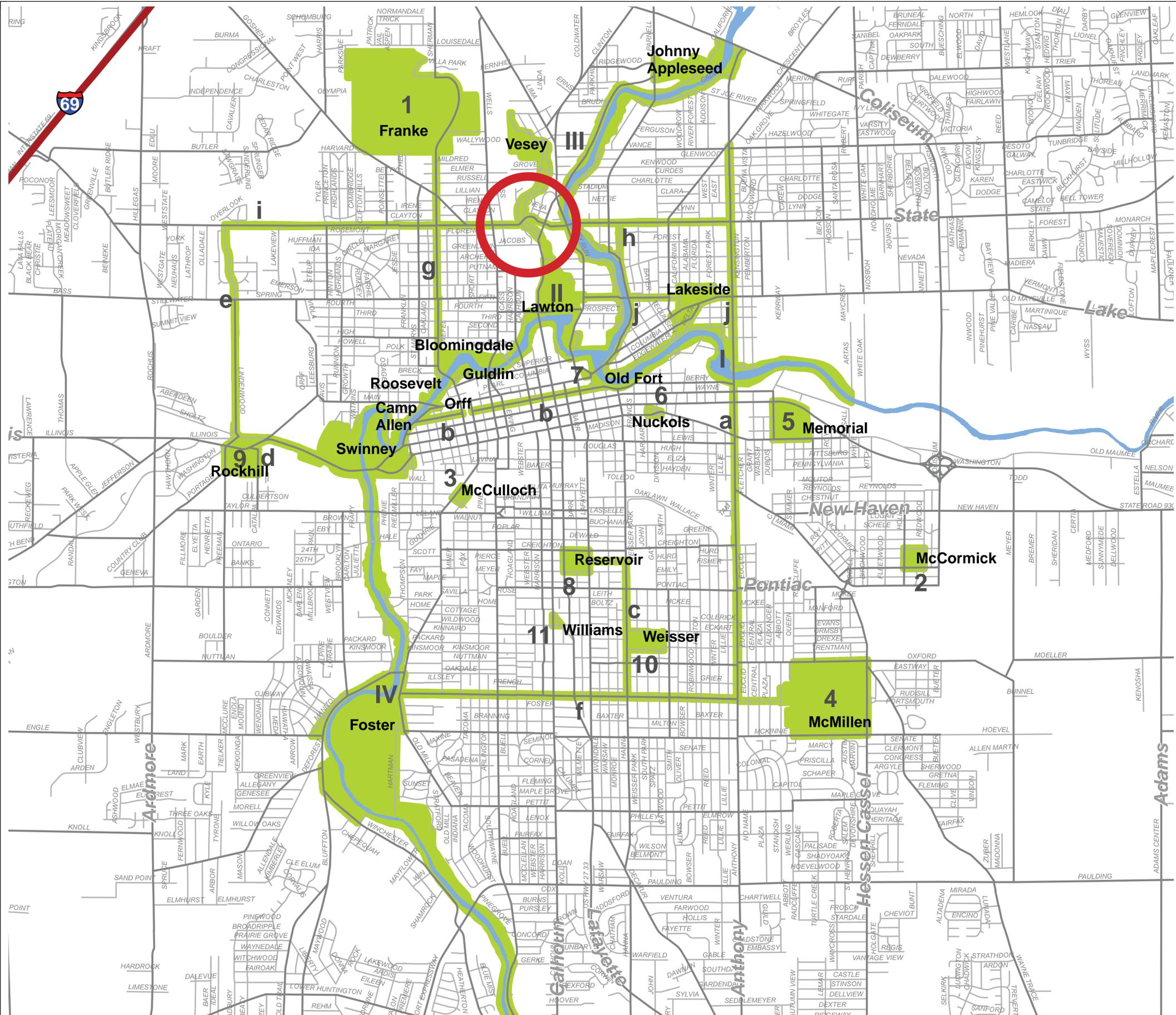
- Boulevards:**
- a. Anthony Boulevard
 - b. Berry Street
 - c. Hanna/Taber Street
 - d. Jefferson Boulevard
 - e. Lindenwood Avenue (Brookside)
 - f. Rudisill Boulevard
 - g. Sherman Boulevard (Kekionga)
 - h. St. Joseph Boulevard
 - i. State Boulevard (Pfeifer)
 - j. Tennessee Avenue/Lake Avenue



Note: This exhibit based on City of Fort Wayne Park and Boulevard System Historic District Key Map, prepared by The Westery Group, Inc. and Storrow Kinsella Associates, 5/24/2010.

 Study Area

December 9, 2013



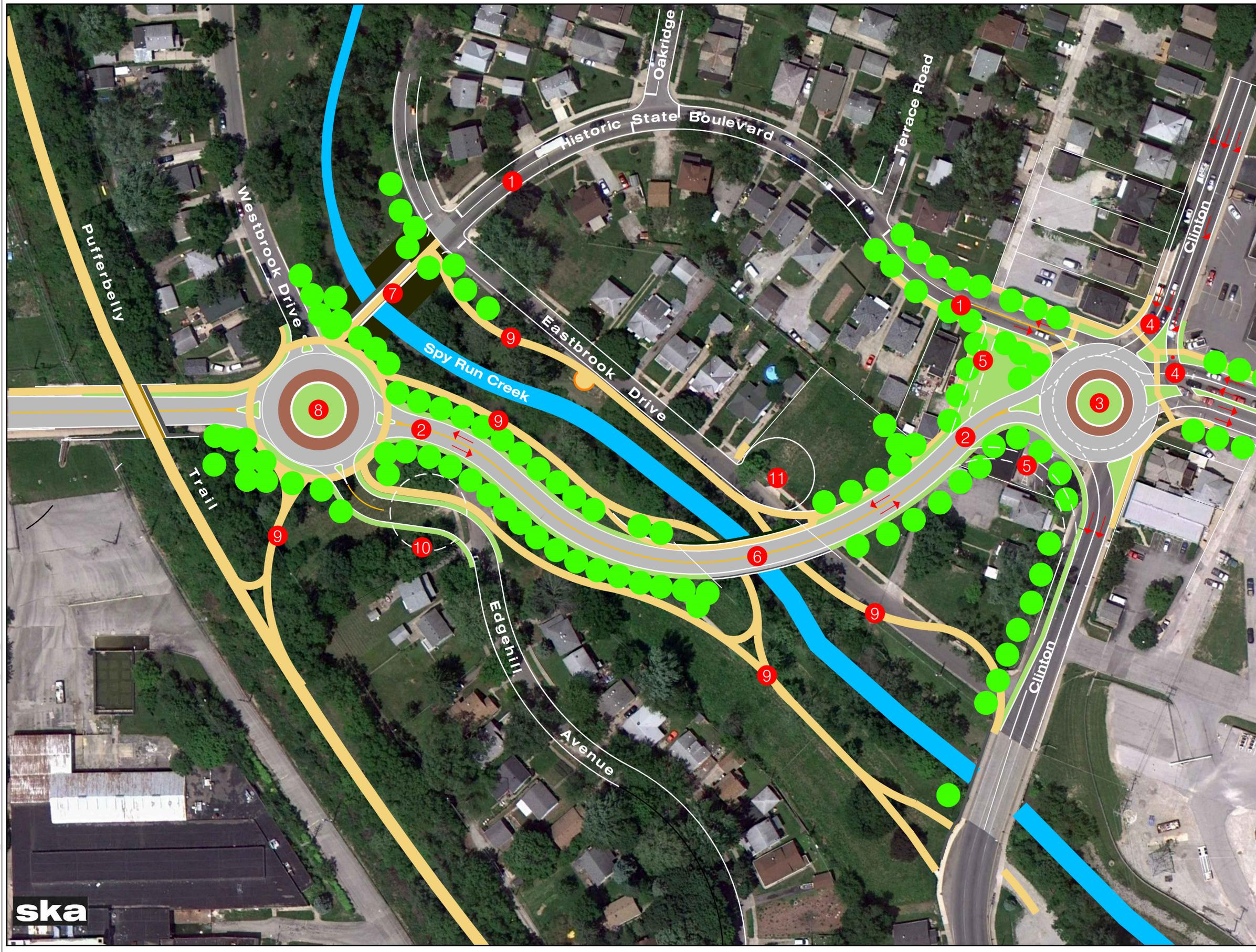
Storrow Kinsella Associates urban design & planning for places | connections | strategies
 in collaboration with
 Transportation Solutions, LLC. | connecting the dots

Consulting Parties:
 ARCH, Inc./ Historic Landmarks Foundation of Indiana
 Brookview-Irvington Neighborhood Associations

Fort Wayne Historic State Boulevard
 Consulting Parties Sketch Plan Alternatives Study
 City of Fort Wayne Project/INDOT DES# 0400587

Context Map 

© 2013 SKA X:\1305_FW State Blvd\3\Work\04Draw\ExhibitB_CPPA_1305.dwg 12/10/13



- Plan Keynotes
- 1 Historic State Boulevard convert as local street & bike boulevard
 - 2 New State Boulevard alignment
 - 3 Clinton/State 2-lane hybrid urban roundabout with signaled eastbound left turn bypass
 - 4 "Smart" roundabout signal -metered approaches to create gaps and balance flow during peak periods, and to provide pedestrian crossing synchronized with those phases (short/rolling yield or stop signal phases)
 - 5 Optional bypass lanes to reduce roundabout circulating traffic loads
 - 6 New Spy Run Creek 2-lane bridge
 - 7 Spy Run Creek bike/ped bridge
 - Retrofit existing bridge or
 - New multi-use path bridge
 - 8 Westbrook/Edgehill single lane urban roundabout w/ local street access
 - 9 Bike-Ped path system
 - 10 Edgehill Avenue cul de sac alternative
 - 11 Eastbrook Drive cul de sac

Note: this is a sketch-level diagrammatic concept drawing. Roadway elements are proximate in scale and intended to illustrate general feasibility and proof of concept. Additional traffic engineering and roadway geometric study is required for project scope development.

North  Scale 1"=50'-0" 

December 9, 2013



Storrow Kinsella Associates urban design & planning for places | connections | strategies
in collaboration with
Transportation Solutions, LLC. | connecting the dots

Consulting Parties:
ARCH, Inc./ Historic Landmarks Foundation of Indiana
Brookview-Irvington Neighborhood Associations

Fort Wayne Historic State Boulevard
Consulting Parties Sketch Plan Alternatives Study
City of Fort Wayne Project/INDOT DES# 0400587

BENEFITS COMPARISON

Alternative	Connectivity Improvement	New roadway alignment length	Reconstruction alignment length	Residential Impacts	Commercial Impact	Total historic relocations or impacts	Other impacts	State Blvd. historic bridge impacts	State Boulevard Safety Improvement			Congestion Improvement	Reduce flooding	Alternative	
									Motorists	Bicyclists	Pedestrians			Feasible?	Prudent?
City's Preferred Alternative	Regional connectivity improved for through motorist, bicyclist, and pedestrian movements. Connectivity reduced for neighborhood residents.	1035 LF 5 lanes sidewalk or trail both sides	5175 lane feet 2070 sidewalk feet	15	None?	State Blvd historic parkway system compromised. Neighborhood bisected by new raised alignment. Historic bridge removed. Traffic speed and volumes increased through neighborhood.	View sheds affected for some residents. Historic neighborhood context affected. Five-lane raised roadway out of scale with residential neighborhood.	Historic bridge to be removed and replaced for flood elevation and structural deficiency reasons.	A portion of Old State Boulevard will be converted to local use with significant reduction in traffic volumes. New east-west alignment designed to current federal standards. Intersection capacities improved.	No bicycle accommodation currently exists. New multi-use path provided along new alignment.	New sidewalks provided along new alignment. Appropriate pedestrian crossings assumed to be provided at intersections.	Added lanes and intersection improvements reduce travel delays in overall system. The localized portion of State Boulevard will be a lower speed travel environment.	Raised elevation of State Boulevard and larger hydraulic bridge opening will help to reduce localized flooding frequency.	Yes	This is the City's Preferred Alternative. The Purpose and Need items are addressed, however the impact to the historic neighborhood and parkway system is significant.
Consulting Parties Proposed Alternative	State Boulevard corridor (and Greenways Trail System) connectivity improved for through motorist, bicyclist, and pedestrian movements. Historic State Boulevard will function as bicycle boulevard.	1048 LF 2 lanes 2 sidewalks	2096 lane feet 2096 sidewalk feet	One loss of alley access	Three: 1) Gas Station Store acquisition or relocation; 2) impact to garage and storage shed; 3) site impact.	Minimum historic structure impacts. State Boulevard historic integrity respected. Historic Bridge removed or rehabilitated for pedestrian/bicycle use because of deteriorated condition.	One commercial property on south side of State Boulevard at Clinton Street relocated to allow construction of a five-legged hybrid roundabout. Partial impacts on 2 additional commercial properties.	Historic bridge to be rehabilitated or removed and replaced for flood elevation and structural deficiency reasons. Pedestrian bridge with narrower profile impacts flooding to a lesser degree and provides east/west connectivity.	Significantly reduced volumes on existing State Boulevard alignment improves safety. Lower posted speed limit possible. New alignment meets goal of regional connectivity.	Existing State Boulevard converted to a low volume shared use roadway suitable for travel by bicycle.	Vehicle volumes greatly reduced along existing alignment. Sidewalks to be improved along existing alignment and provided along the new alignment.	Regional through traffic given more direct route. Intersection levels-of-service may be improved by a "smart" roundabout at Clinton and a single-lane roundabout at Westbrook.	Flood frequency reduced along new alignment due to raised bridge and roadway elevation.	Yes	This option addresses the Purpose and Need with less impacts to the historic resources. Magnitude of costs similar to the City's Preferred Alternative.

COST (RELATIVE) COMPARISON

Alternative	New alignment length	New alignment width	Bridge length	Bridge width	Bridge elevation	Residential relocations	Other residential impacts	Commercial relocations	Intersection Types			Bridge removals	New pedestrian bridges	Local Streets Affected	
									Westbrook Drive	Oakridge Drive	Clinton Street			Pavement removed	Pavement added/rehabilitated
City's Preferred Alternative	1035 Linear Feet (5175 lane feet)	5 Travel Lanes + 2 Sidewalks	150 LF 750 lane feet	Five lanes, curb and gutter, sidewalks and a 10-foot multi-use path on one side.	Bridge raised 7-feet above existing bridge elevation.	15 structures: Est. value \$1M	Any?	None?	Two-way stop controlled + energy and maintenance costs.	New Side-street stop controlled intersection.	Three-way signalized intersection + energy and maintenance costs.	Existing historic bridge.	One over State Boulevard for Pufferbelly Trail.	In vicinity of existing bridge and at both ends of existing alignment between Spy Run Creek and Clinton Street.	Oakridge Drive connector, "bulbouts" at termini of existing alignment.
Consulting Parties Proposed Alternative	1050 Linear Feet (2010 lane feet)	2 Travel Lanes + 2 Sidewalks	140 LF 280 lane feet	Two lanes, curb and gutter, and sidewalks both sides.	Same.	Two residences south of Clinton Street roundabout?	Alley access impacted for one residence. Net Benefit to Contributing Structures in District.	1 complete take and 2 partial Impacts: unknown cost.	Single-lane roundabout. Est. cost: \$500,000 + landscape maintenance costs.	No new intersection.	Multi-lane hybrid roundabout with traffic metering signalization: Est. cost: \$2M + energy and maintenance costs.	Existing historic bridge rehabilitated or replaced.	One over State Boulevard for Pufferbelly Trail, replace existing State Boulevard bridge with a new pedestrian or rehabilitate existing bridge.	In vicinity of existing bridge only.	Rehabilitate existing State Boulevard alignment to create bike boulevard and pedestrian connector.

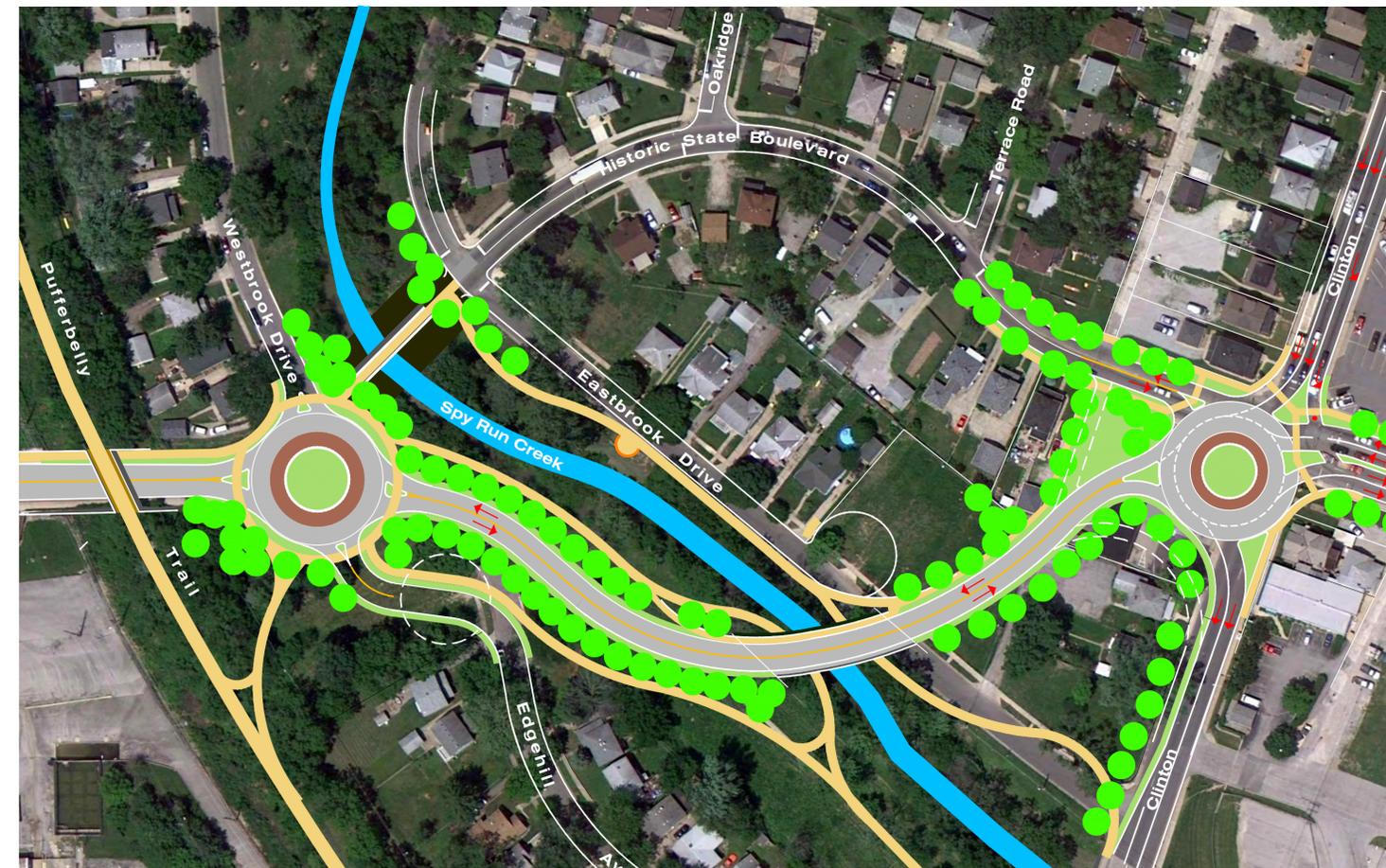
Description: City's Preferred Alternative	New four lane roadway with raised median and/or center turn lane for that portion of State Boulevard that lies between North Clinton Street and Westbrook Drive. Realigned section raised up to 7-feet at new bridge for floodway consideration. New sidewalks and/or multi-use side path along both sides of roadway. New pedestrian bridge and approach ramps for future Pufferbelly Trail.
Description: Consulting Parties Proposed Alternative	Relocate the thoroughfare function of State Boulevard to south of Spy Run Creek from Westbrook Drive east to Clinton Street to minimize impacts to historic properties and parkway. Develop the thoroughfare as a two-lane roadway with sidewalks on both sides between a single-lane roundabout at Westbrook and two-lane hybrid roundabout at Clinton and State with no intersections between them to optimize flow and volume. The roundabouts help condition traffic to a steady state at a reduced speed. The Clinton/State intersection is a "smart" roundabout using advanced technologies consisting of signal metered approaches and traffic sensing to help balance flow, create gaps, and provide for pedestrian connectivity through the roundabout area. Existing bridge rehabilitated or replaced with new pedestrian/bicycle bridge to provide connectivity with future Pufferbelly Trail. Sidewalks along existing alignment to be improved.

Note: Information obtained from Section 106 Findings of Adverse Impacts report (approved August 27, 2012) and other information shared by ARCH. Concept plans for City alternatives not available at this time.

December 9, 2013



City's Preferred Alternative



Consulting Parties Proposed Alternative



Purpose and Need

Shown above is a model of the City's Preferred Alternative; a new four lane roadway with raised median and/or center turn lane between North Clinton Street and Westbrook Drive. It is replacing a section of the existing two-lane State Boulevard in the City of Fort Wayne Park and Boulevard System Historic District.

The Park and Boulevard System Historic District represents a thoroughfare system designed in the early 1900's for the purpose of economic development, flood control, connectivity, and beauty. The proposed City's Preferred Alternative has many of the same purposes and characteristics, and, without reference to context, will be a significant upgrade to the City's thoroughfare system. However the segment between Clinton Street and Westbrook Drive does have historic context that the scale of the new boulevard will compromise.

Scale and Appropriateness

Shown above is the Consulting Parties Proposed Alternative, featuring a two-lane roadway able to accommodate the 2005 peak hour traffic volume of 750 vehicles per hour per lane. It restores Spy Run Creek Parkway continuity and maintains the integrity of the Brookview-Irvington Historic neighborhood.

The costs of the Consulting Parties proposed alternative appear to be of similar magnitude or less than the City's Preferred Alternative based on comparative lane-miles, bridge cross-section and length, and probable acquisition scope. The long term maintenance costs are comparable or less based on thoroughfare length reduction from 5175 to 2100 lane feet.

Fort Wayne Historic State Boulevard Consulting Parties Proposed Alternative

to the City of Fort Wayne, Indiana, State Boulevard Reconstruction Project
INDOT DES# 0400587

prepared for
ARCH, Inc.
by

Storrow Kinsella Associates + Transportation Solutions, LLC

This investigation has been undertaken on behalf of ARCH, Inc., in response to a current City of Fort Wayne proposal to straighten and widen the portion of State Boulevard that lies between North Clinton Street and Westbrook Drive. This section of State Boulevard is within the Brookview-Irvington Historic District neighborhood. Additionally, State Boulevard and Spy Run Creek Parkway, both components of the Fort Wayne Park and Boulevard System Historic District, intersect within the project area.

The project's impact on historic resources gives standing to the concerns of the Consulting Parties.

	Section
Purpose of this investigation	1
Description of the Consulting Parties Proposed Alternative	2
Clinton Street roundabout capacity	3
Pedestrian accommodation	4
Bicycle accommodation	5
Transit accommodation	6
Urban design considerations	7
Floodway/Floodplain considerations	8
Detailed development of the Consulting Parties Proposed Alternative	9
Cost discussion/comparative magnitude of cost	10
Summary of the Findings	11
Context Plan: Fort Wayne Park and Boulevard System Historic District	A
Proposed Alternative Sketch Plan	B
Comparison Chart	C
Comparison Plans	D

1 Purpose of this investigation

The intention of the investigation is to determine if there is a viable alternative to the City proposal, within the State Boulevard corridor, that reasonably addresses the connectivity and congestion mitigation purposes of that proposal, while avoiding its considerable impacts on the integrity of the overlapping historic districts through which it passes. The investigation does not address the viability of alternative corridors identified as part of the project's Section 106 process other than suggesting that they appear to need further study for their potential contribution to overall network east-west connectivity and congestion mitigation. Likewise the investigation does not address aspects of other State Boulevard project segments that lead to this focus area. It does suggest that lessons learned in this focus area could inform the larger system.

A description of the city's preferred alternative and critiques of its impacts by multiple consulting parties are available in the project's Section 106 documentation thus are not repeated here in the interest of brevity. The critiques include but are not limited to concerns regarding induced traffic, inappropriate scale, and disruption to the character and continuity of historic resources in the project area.

2 Description of the Consulting Parties Proposed Alternative (CPPA: See Exhibit B)

The CPPA diverts east-west crosstown traffic through the district of concern as a new 1000-foot+/- long *two-lane parkway* alignment, generally south of Spy Run Creek, a natural divide. It is intended to improve crosstown connectivity and relieve congestion in a manner that does not induce additional traffic volume and with scale and geometrics that respect the intrinsic qualities of both the Brookview-Irvington Historic District and the Historic Park and Boulevard System.

The transition to this parkway from existing State Boulevard occurs at Clinton Street on the east and at the Westbrook/Edgehill intersection on the west. That transition is enabled by a traffic calming single-lane roundabout at Westbrook/Edgehill, and by a two-lane signalized hybrid roundabout at the higher volume North Clinton Street intersection. The two roundabouts bookend a new terrain, uninterrupted two-lane parkway linkage as a system that modifies motorist behavior to a slower but steady-state stream between the roundabouts. This configuration allows less space-consuming geometrics (vertical and horizontal alignment and clear zone constraints) and much fewer vehicular conflict points, while accommodating expected volumes through operational efficiencies achieved by those reductions.

The CPPA parkway alignment replicates the scale and curvilinearity of the existing historic boulevard, while allowing the latter to revert to a low speed/low volume pedestrian-friendly local street and bicycle boulevard. Thus both the historic and the proposed new segment respect the characteristics of the Historic Park and Boulevard System, *and* the Brookview-Irvington Historic District neighborhoods, by their contextual scale and alignment.

A consideration for detailed development of this parkway alignment and its new crossing of Spy Run Creek, both of which will be raised above flood elevation (a project purpose), is that these elements be sensitively designed such that they integrate well with both the creek and with the Edgehill Avenue neighborhood. The narrow roadway cross-section will help facilitate that spatial integration by lessening the need for obtrusive retaining walls. For that reason a multi-purpose path is proposed to be separated from the roadway (other than at the bridge) as part of the existing pathway system, rather than as sidewalks adjacent to the roadway.

The provision of functionally interdependent roundabouts at east and west ends of the approximately 1000-foot distance of the proposed New State Boulevard alignment facilitates use of a two-lane configuration for this segment. The linked roundabouts will modulate traffic flow through this lower speed (but uninterrupted) segment such that the less-than-750 peak hour vehicles per lane per hour, as recorded in 2005, can be accommodated. A hybrid two-lane

roundabout is proposed to replace the Clinton Street/State Boulevard signalized intersection, while a single lane roundabout would occur at the Westbrook/Edgehill intersection with State Boulevard.

3 Clinton Street roundabout capacity

Clinton Street roundabout capacity is proposed to be maximized by several methods to allow the target traffic throughput discussed above:

A

A fairly new roundabout traffic management method, installation of metering signals at roundabout entries, creates gaps in dominant peak period flow to minimize excessive queues and delays at each successive downstream entry. Such roundabout signalization can be more effective than additional roundabout lanes, and can reduce the complexity associated with three-lane roundabouts. The signals would be controlled by queue detectors.¹

B

A left-turn by-pass lane is proposed from southbound Clinton to eastbound State Boulevard to reduce roundabout circulating traffic by an estimated 250 vehicles per hour, based on 2005 traffic volumes. It would be controlled by the queue detector system as well, and could further reduce the need for a third circulating lane.

C

Additional reduction of the Clinton-State roundabout circulating traffic can be affected, if necessary, by providing a westbound bypass (slip) lane from Historic State Boulevard to the new parkway segment, just west of its splitter island, and optionally from the new parkway's eastbound lane to southbound Clinton, immediately south of the roundabout. The contribution of either or both bypass lanes to roundabout efficiency should be determined during detailed roundabout design and weighed against the possible need for additional right-of-way to accommodate them.

4 Pedestrian accommodation

Pedestrian accommodation is shown through the roundabout for probable pedestrian routes and to provide connections to the Pufferbelly Trail system. *Accessibility Guidelines for Pedestrian Facilities in the Public Right of Way (PROWAG)* recommends signalization for pedestrian crosswalks at high-vehicular volume roundabouts, and requires them for crossings of two or more contiguous roundabout lanes. The required signalization can be integrated into the phasing of demand-cycles of the vehicular signal system discussed above for the Clinton Street roundabout to minimize disruption to vehicular flow while still accommodating pedestrian connectivity.

5 Bicycle accommodation

Bicycle travel through this district can be accommodated along Historic State Boulevard which, once converted to local traffic as proposed here, will be well-suited to become a bicycle boulevard. As a local street, all-way stops can be introduced along that segment for additional traffic-calming for bicycle and pedestrian safety. In the interest of a narrow roadway, multi-use paths at a separate and lower elevation alignment would replace sidewalks along the proposed, new two-lane parkway section.

¹ *National Cooperative Highway Research Program Report 672 Roundabouts: an Informational Guide Chapter 7/7.5.1, Signalization/Metering*

Should flooding or structural issues dictate removal of the State Boulevard Bridge, a proposed bicycle-pedestrian bridge in its location will provide additional neighborhood connectivity to the Pufferbelly Trail.

Pedestrian accommodations at the roundabouts should be configured to accommodate bicycles for those cyclists not comfortable riding with traffic through the roundabouts.

Additionally the existing trails along Spy Run Creek should be fully integrated with the proposed Pufferbelly Trail (see Exhibit B) to fulfill this project's multimodal objectives.

6 Transit accommodation

Citilink Route #8 serves this area along southbound North Clinton Street, paired with northbound Spy Run Avenue 800 feet to the east. The current North Clinton stop is in a travel lane immediately south of State Boulevard. The Consulting Parties recommend that a bus turnout be provided either south of the roundabout, or more preferably to north of the roundabout between building setback line and existing curb line, to minimize travel lane disruption, but requiring additional permanent right-of-way.

Citilink Route #6 uses east and westbound State Boulevard and north and southbound Westbrook Drive, and is potentially improved by the proposed roundabout at State/Westbrook. Paired in-lane bus stops are recommended on Westbrook just north of the roundabout to better serve this area.

7 Urban design considerations

The roundabout elements, if sensitively designed, can become gateway markers along the Clinton Street procession towards the city center, as well as become markers for this historic district along the park and boulevard system. The parkway section itself can become a beautiful passage through the convergence of the historic parkway and neighborhood, somewhat mending a route that has been compromised over many years of roadway expansion and ad hoc development prior to its historic designation. This is particularly important to a well-developed Section 4F argument that this intervention results in a net benefit to the historic resources it affects (or as in this case, celebrates). Leveraging the project to enhance Spy Run Creek Parkway as a public park, and reduction of existing traffic impacts to the historic neighborhood are compelling benefits that the original City Preferred Alternate could not claim but which the CPPA can...if executed well.

Another consideration is that Spy Run Creek Parkway was compromised several years ago when Westbrook Drive, a classic *City Beautiful* parkway along residential properties on one side and the meandering creek and variable open space of the park on the other, was terminated at Edgehill Avenue just south of State Boulevard, where it now enters a neighborhood street. The CPPA alignment along the south side of the creek restores much of the historic parkway's integrity by taking it to a more contextual terminus.

8 Floodway/Floodplain considerations

Floodway impacts appear lessened by the proposed alternative because of the reduced width of the two-lane roadway in addition to the provision of a comparable bridge opening along the new alignment. Spy Run Creek flood hydrology will require careful analysis and design such that this project lessens flood severity through removal of current impediments and through development of storage capacity potential of the open space surrounding the creek. That potential can be enlarged by investigation during the project's detailed design.

9 Detailed development of the CPPA

Assuming agreement can be reached regarding this proposed alternative, continuing oversight regarding its detailed development and implementation should be integrated into the project development process. It is extremely important to the Consulting Parties that execution of roadway elements and their urban design setting be context sensitive in scale, materials and detail such that the vision of George Kessler and Arthur Shurcliff, for the Park and Boulevard System and for the Brookview-Irvington District, respectively, be honored and can become a model for how the city balances its infrastructure needs with its heritage. With this caveat, the Consulting Parties will support the city's effort to improve this section of State Boulevard.

10 Cost discussion: comparative magnitude of cost

Comparison of costs between the City Preferred Alternative (City) and the Consulting Parties Proposed Alternative (CPPA) are of relative magnitude based on predictable differentials of project scope. Detailed cost analysis is dependent on more detailed development of the proposed alternative design, as well as on a better understanding of the cost basis for the City alternative.

	CPPA	City	Comments
Roadway	2100 lane feet	5175 lane feet, landscaped center median	CPPA option may cost about half of City's alternative
Bridges	New two-lane/140-150' long vehicular bridge New 16' wide x 100' long bike-ped bridge Remove existing two-lane vehicular bridge or retrofit as local traffic and bike boulevard link	5-lane 150' long new vehicular bridge Remove existing two-lane bridge	CPPA bridge costs reduced significantly because of reduced cross section
Major intersections	Two-lane hybrid roundabout at North Clinton Street	One signalized intersection with additional turn lanes at North Clinton Street	Multi-lane hybrid roundabout will cost significantly more than improved conventional signalized intersection
Secondary intersections	One single lane roundabout (minimal secondary neighborhood road improvements)	Two five-lane intersections (including left turn lanes) and substantial reconfiguration of neighborhood streets	Simplified interface with neighborhood streets anticipated to result in a net cost reduction for these elements
Residential acquisition	0	15 (at \$55-75,000 average assessed valuation)	Residential acquisition much less (approaching zero)
Commercial acquisition	1 total, with partial impacts on 2 additional parcels	0	Commercial acquisition much more Combined residential and commercial acquisition-relocation expected to be similar

11 Summary of the Findings

1

The CPPA, as a two-lane facility, appears to be able to accommodate the 2005 peak hour recorded traffic volume of 750 vehicles per hour per lane. Additional analysis of the corridor as a whole will be needed to assess the future expected performance of this new facility.

2

The costs for the CPPA appear to be of similar magnitude or less than the City Preferred Alternative, based on comparative lane-miles, bridge cross-section and length, and probable acquisition scope. The latter may be achieved through the offset of reduced residential relocation scope compensating for the higher individual valuation of commercial properties in general.

3

The long term maintenance costs are comparable or less for the CPPA, based on thoroughfare length reduction from 5175 to 2100 lane feet.

4

The CPPA provides greater safety through elimination of most intersection left turn conflicts, pedestrian/vehicle conflicts, and through the lower speeds associated with roundabouts, their approaches and linkages. Reduction in accident rates and their severity for roundabouts vs. conventional signalized intersections has been well documented by multiple FHWA and insurance industry studies utilizing data accumulated during the high rate of adoption of roundabouts by state and local agencies because of their safety and efficiency characteristics.

5

The CPPA minimizes negative impacts on historic properties and districts. The removal of existing traffic volume impacts is expected to result in neighborhood stabilization and reinvestment in the project area.

6

The CPPA provides an additional benefit to the historic districts by restoring the sense of Spy Run Creek/Westbrook Drive's parkway continuity, which had been compromised by earlier floodway-roadway improvements that terminated Westbrook Drive at Edgehill Avenue.

7

The CPPA meets the stated goals of the thoroughfare plan and reconciles that plan with the National Register-listed Park and Boulevard System.

8

The CPPA has the support of the affected neighborhoods and remonstrating parties which will facilitate the project moving forward expeditiously.



M E M O R A N D U M

DATE: November 20, 2014
TO: Scott Crites, PE, American Structurepoint
FROM: Jeromy Grenard, PE, PTOE, American Structurepoint
RE: Capacity Analysis of the Consulting Parties Proposed Alternative (CPPA) for State Boulevard and Clinton Street Intersection
CC: Briana Hope, American Structurepoint

The primary purpose of this analysis is to analyze an alternative intersection treatment at the existing Clinton Street and State Boulevard intersection, as prepared and presented in a letter dated December 9, 2103 by Storrow Kinsella Associates and Transportations Solutions. The alternative intersection treatment was commissioned by ARCH with the intent of identifying options to reduce impacts of the proposed State Boulevard project on the surrounding neighborhood. A schematic of the Consulting Parties Proposed Alternative (CPPA) is included in **Figure 1**. The secondary purpose of this memo is to document the 2009 and 2030 traffic operations for all other alternatives considered in the environmental document (Alternatives 1, 2, 3A, 3B, 3C, 3D, and 4).

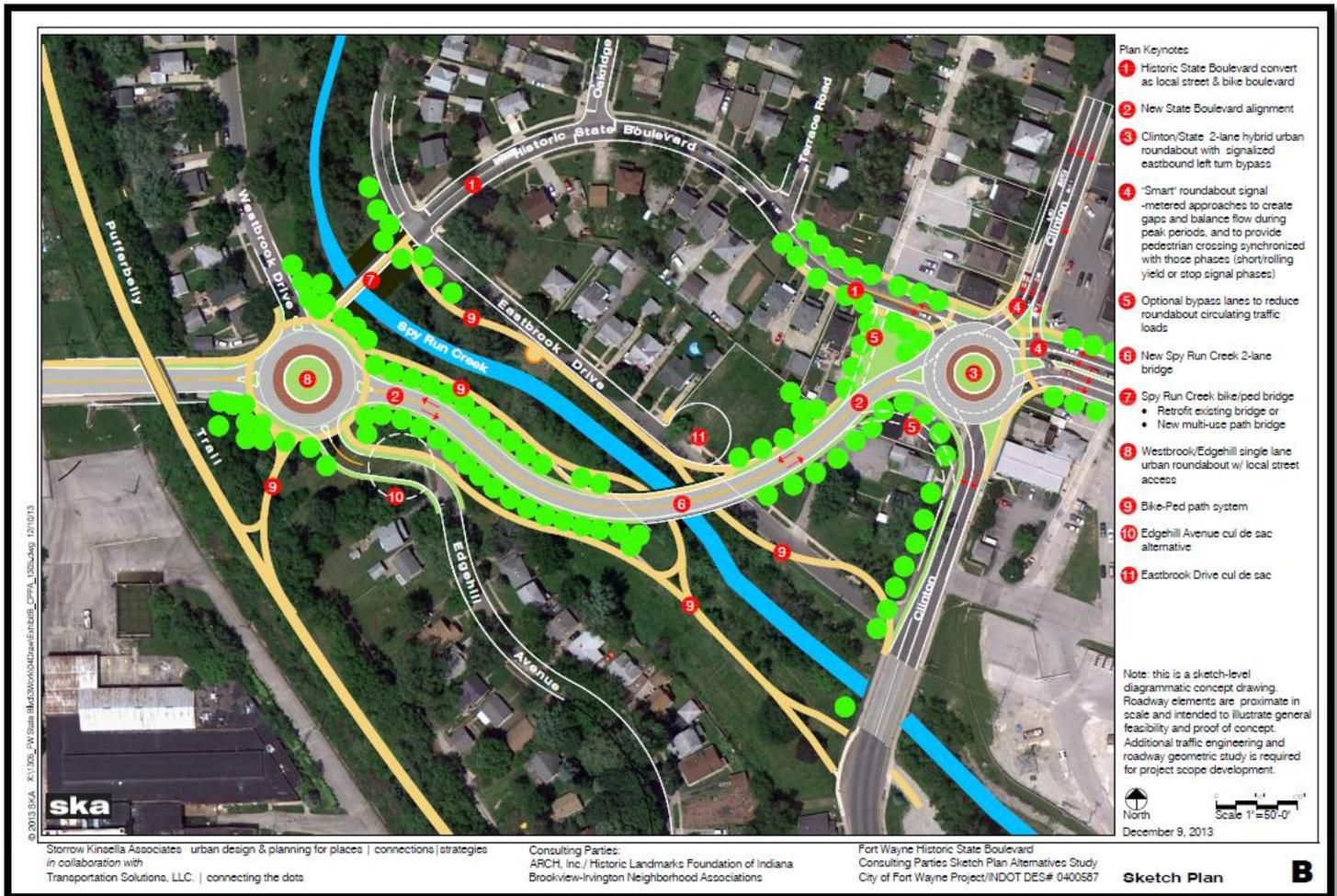
The CPPA includes a two-lane roundabout with a southbound left turn bypass lane. The accommodation of this bypass lane into the design of the roundabout would require that the entering and exiting flow on the east leg (State Boulevard) of the intersection be signalized. The CPPA also includes approach metering in order to provide gaps for certain approaches when heavy flows begin to dominate upstream approaches. Roundabout metering consists of one or more legs with queue detectors and one or more legs with metering signals. Once the queue extends such that the queue detectors are activated, the metering signal(s) turns red, stopping traffic on upstream approaches temporarily and allowing the queue to dissipate on the downstream approaches.

In a meeting with the City of Fort Wayne, Indiana Department of Transportation (INDOT), and the Federal Highway Administration (FHWA) regarding the CPPA, FHWA and INDOT directed American Structurepoint to analyze the capacity of the CPPA without the southbound left turn bypass. Because a left turn bypass at a roundabout is an unprecedented treatment in the United States, the decision was made by FHWA and INDOT that such treatment was not desirable from a drivers' expectancy standpoint. For the CPPA as shown in **Figure 1** of this memo, a left turn bypass from southbound Clinton Street to eastbound State Boulevard requires a motorist to complete a left turn movement by deflecting to the left of the splitter island when approaching the north leg of the roundabout. It is counterintuitive for the motorist to be required to be on the left side of

the splitter island when approaching the roundabout. Hence, such treatment is undesirable and confusing for drivers who are used to driving through conventional roundabouts in the United States.

SIDRA Intersection software was chosen for the analysis due to its ability to analyze roundabouts with metering signals. It was developed in Australia, where there are thousands of roundabouts, and many with metering signals.

Figure 1: Consulting Parties Alternative Configuration



Traffic Data Used

As presented in the December 9, 2013 letter, 2005 traffic counts were utilized in the conceptual design of the CPPA. The 2005 traffic data was originally used for the scoping of the State Boulevard project. In 2009, the Northern Indiana Regional Coordinating Council (NIRCC) provided updated turning movement counts.

Historic INDOT traffic counts on Clinton Street and Spy Run Avenue in the project vicinity were evaluated to determine the annual traffic growth rate. Over the past eight years, the INDOT traffic data shows that traffic counts have declined or held even within the study area. In order to be conservative with this analysis, a background traffic growth rate of 0.50% per year (linear) was used. The 2009 traffic counts were then adjusted to the year 2030.

Table 1 contains the 2005, 2009, and 2030 traffic volumes that were utilized for the analysis.

Table 1: Intersection Turning Movement Data

Approach (Street Name)	Destination	2005 AM Peak Hour Volume	2005 PM Peak Hour Volume	2009 AM Peak Hour Volume	2009 PM Peak Hour Volume	2030 AM Peak Hour Volume	2030 PM Peak Hour Volume
North (Clinton Street)	Historic State Blvd	5	5	5	5	5	5
	State Blvd (W)	44	98	47	117	52	129
	Clinton St	1,597	1,594	1,707	1,593	1,886	1,760
	State Blvd (E)	106	227	126	178	139	197
West (Historic State Blvd)	State Blvd (W)	5	5	5	5	5	5
	Clinton St	5	5	5	5	5	5
	State Blvd (E)	5	5	5	5	5	5
Southwest (State Blvd)	Clinton St	30	31	46	67	51	74
	State Blvd (E)	420	679	543	629	600	695
	Historic State Blvd	5	5	5	5	5	5
East (State Blvd)	Historic State Blvd	5	5	5	5	5	5
	State Blvd (W)	417	570	437	539	483	596
	Clinton St	140	196	200	192	221	212
TOTAL		2,784	3,425	3,136	3,345	3,462	3,693

CPPA Analysis Scenarios

Scenario 1:

- Original 2005 AM and PM Peak Hour traffic volumes
- CPPA Lane Configurations for roundabout and all approaches, except no southbound left-turn bypass. Lane configurations are shown in **Figure 2**.
- Roundabout metering – queue detectors installed on the north approach and metering signal on the east leg of State Boulevard

Scenario 2:

- 2009 AM and PM Peak Hour traffic volumes from NIRCC
- Same lane configurations as Scenario 1
- Roundabout metering – queue detectors installed on the north approach and metering signal on the east leg of State Boulevard

Scenario 3:

- 2009 AM and PM Peak Hour traffic volumes from NIRCC
- Addition of one southbound approach lane that acts as a dedicated left turn lane for southbound to eastbound traffic (in lieu of a left turn bypass). Lane configurations are shown in **Figure 3**.
- Roundabout metering – queue detectors installed on the north approach and metering signal on the east leg of State Boulevard

Figure 2: Scenario 1 and Scenario 2 Lane Configurations

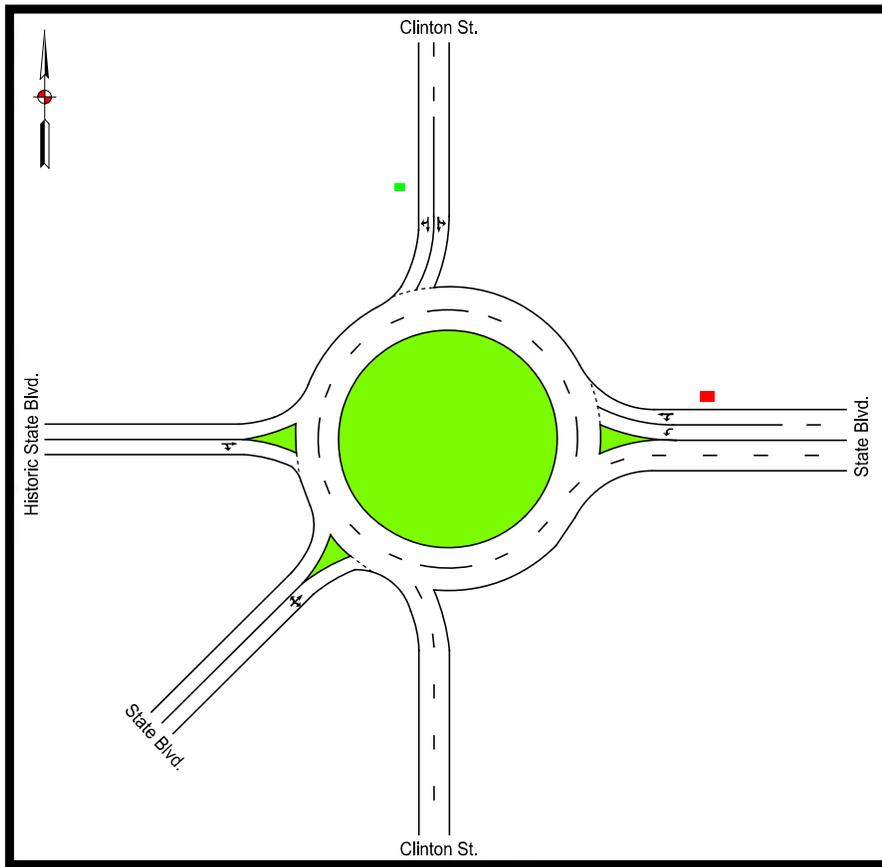
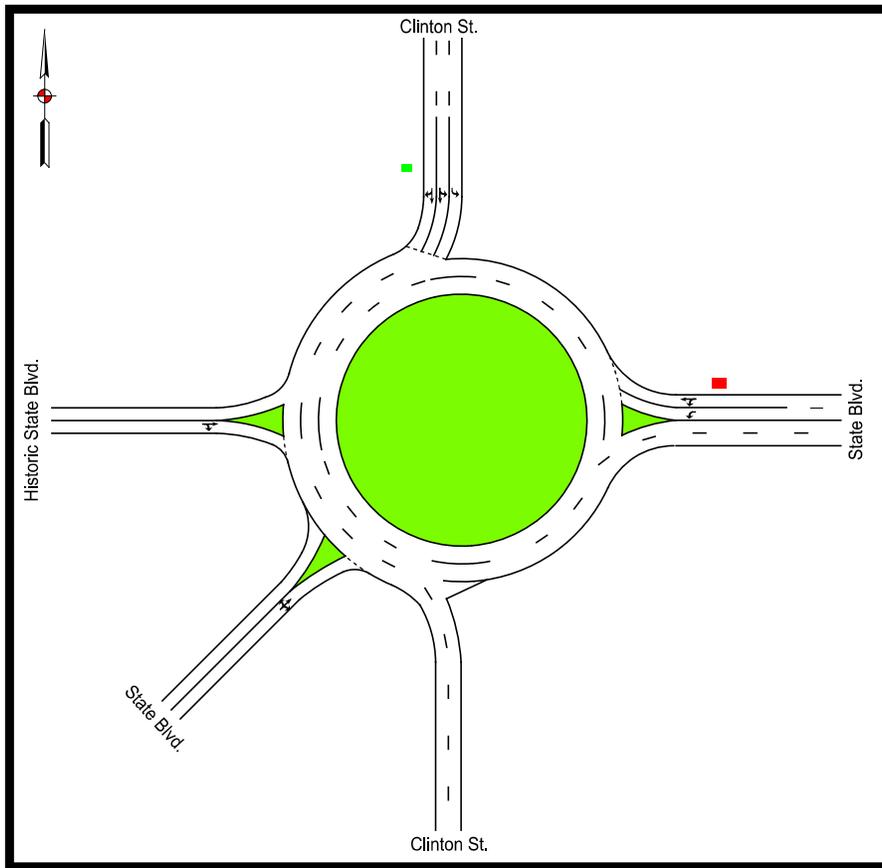


Figure 3: Scenario 3 Lane Configurations



CPPA Capacity Analysis

The results of the SIDRA capacity analysis are summarized in **Table 2**. It is noted that a number of approach metering options were explored. Because of the heavy southbound flow on Clinton Street, this approach cannot be metered. Doing so caused a level of service F on the approach. The final metering configuration involved placing queue detectors on the north approach of Clinton Street and metering signals on the east approach of State Boulevard.

The SIDRA output is also attached to this memorandum.

Table 2: Capacity Analysis Results for the Clinton Street and State Boulevard Intersection

		Scenario 1		Scenario 2		Scenario 3	
Approach (Street Name)	Destination	Year 2005 AM Peak Hour LOS Delay (sec/veh)	Year 2005 PM Peak Hour LOS Delay (sec/veh)	Year 2009 AM Peak Hour LOS Delay (sec/veh)	Year 2009 PM Peak Hour LOS Delay (sec/veh)	Year 2009 AM Peak Hour LOS Delay (sec/veh)	Year 2009 PM Peak Hour LOS Delay (sec/veh)
North (Clinton Street)	Historic State Blvd	A 6.5	A 4.5	F* 44.3	F* 31.3	A 5.7	A 6.2
	State Blvd (W)	A 5.9	A 3.8	F* 43.7	F* 30.7	A 5.3	A 5.7
	Clinton St	A 5.7	A 4.1	F* 44.6	F* 30.6	A 5.7	A 6.1
	State Blvd (E)	B 11.3	B 10.2	F* 51.4	F* 36.1	A 9.4	A 9.6
West (Historic State Blvd)	State Blvd (W)	A 7.7	A 6.8	A 9.2	A 8.0	A 8.2	A 7.9
	Clinton St	A 7.6	A 6.7	A 9.0	A 7.8	A 8.2	A 8.0
	State Blvd (E)	A 7.4	A 6.5	A 8.8	A 7.7	A 8.1	A 8.0
Southwest (State Blvd)	Clinton St	F* 41.2	F 274.2	F 413.2	F 248.1	F 389.8	F 263.1
	State Blvd (E)	F* 40.5	F 273.6	F 412.5	F 247.4	F 389.2	F 262.5
	Historic State Blvd	F* 48.1	F 281.1	F 420.0	F 254.9	F 396.3	F 269.6
East (State Blvd)	Historic State Blvd	C 27.3	F* 97.3	F* 66.8	F* 42.2	C 29.6	F* 41.8
	State Blvd (W)	C 32.2	F* 102.3	F* 71.7	F* 47.2	C 34.5	F* 46.7
	Clinton St	B 15.9	B 14.9	B 18.8	B 15.4	B 16.4	B 15.3
Overall Intersection		B 16.4	E 78.7	F 117.2	E 77.5	F 83.7	E 66.7

* LOS F is due to volume to capacity (v/c) ratio exceeding 1.0.

Year 2030 CPPA Capacity Analysis

Capacity analysis was run for the CPPA Scenario 2 and Scenario 3 lane configurations and metering signal configurations in the year 2030. **Table 3** summarizes the results of this analysis for the CPPA lane configurations.

Table 3: Year 2030 Capacity Analysis Results for the CPPA Alternative at the Clinton Street and State Boulevard Intersection

Approach (Street Name)	Destination	2030 - CPPA		2030 - CPPA Modified to 3-Lane	
		Year 2030 AM Peak Hour LOS Delay (sec/veh)	Year 2030 PM Peak Hour LOS Delay (sec/veh)	Year 2030 AM Peak Hour LOS Delay (sec/veh)	Year 2030 PM Peak Hour LOS Delay (sec/veh)
North (Clinton Street)	Historic State Blvd	F 67.6	F 96.3	A 9.2	B 10.6
	State Blvd (W)	F 61.8	F 90.4	A 4.5	C 28.1
	Clinton St	F 61.8	F 90.3	A 4.1	C 28.3
	State Blvd (E)	F 62.5	F 90.9	A 4.6	C 28.7
West (Historic State Blvd)	State Blvd (W)	A 8.9	A 6.9	A 7.2	A 9.5
	Clinton St	A 9.1	A 7.0	A 7.3	A 9.6
	State Blvd (E)	A 9.3	A 7.2	A 7.3	A 9.6
Southwest (State Blvd)	Clinton St	F 265.9	F 442.7	F 255.4	F 452.9
	State Blvd (E)	F 258.4	F 435.2	F 248.3	F 445.7
	Historic State Blvd	F 259.1	F 435.9	F 248.9	F 446.4
East (State Blvd)	Historic State Blvd	B 18.1	B 14.4	B 14.9	B 15.1
	State Blvd (W)	F 132.5	F 196.5	F 83.0	F* 62.2
	Clinton St	F 127.5	F 191.6	F 78.1	F* 57.2
Overall Intersection		F 102.6	F 175.1	F 83.7	F 117.7

* LOS F is due to volume to capacity (v/c) ratio exceeding 1.0.

Environmental Assessment (EA) Alternatives Capacity Analysis

A capacity analysis has also been performed for the EA Alternatives 1, 2, 3A, 3B, 3C, 3D, and 4 at the intersections of Clinton Street / State Boulevard and Spy Run Avenue/State Boulevard, respectively. The purpose of this analysis is to document the existing operations of the two intersections, as well as the anticipated operations in the year 2030.

Tables 4 and 5 summarize the capacity analysis results for each of the intersections. In these tables, Alternatives 1, 2, 3D, and 4 have been grouped together because the intersection lane configurations are the same for each of these alternatives. Likewise, Alternatives 3A, 3B, and 3C have been grouped together for the same reason. The preferred alternative identified in the EA is Alternative 3A.

Alternatives 1, 2, 3D, and 4 are the same as the existing intersection lane configurations. For this reason, the capacity analysis was run with existing signal timings. When multiple movements displayed LOS E or F in the year 2030, the capacity analysis for these alternatives was rerun with optimized signal timings. The operations were slightly improved; however, there are still movements that are LOS E and F.

Table 4: Capacity Analysis Results for Alternatives 1, 2, 3A, 3B, 3C, 3D, and 4 at the Clinton Street and State Boulevard Intersection

Approach (Street Name)	Movement	2009 Alt 1, 2, 3D, 4 & Existing Configuration Existing Signal Timing		2030 Alt 1, 2, 3D, 4 & Existing Configuration Existing Signal Timing		2030 Alt 1, 2, 3D, 4 & Existing Configuration Optimized Signals		2030 Alt 3A, 3B, 3C (Proposed Configuration) Optimized Signals	
		AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)	AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)	AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)	AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)
North (Clinton St)	L/TH/R	E 59.0	C 29.2	F 105.5	C 34.7	E 64.2	C 34.7	D 44.5	D 36.4
West (State Blvd)	TH/R	D 44.2	E 55.3	E 60.1	E 68.9	E 67.7	E 68.9	D 46.7	D 40.4
East (State Blvd)	L	E 56.9	F 86.4	E 60.6	F 99.5	E 70.0	E 73.3	D 52.5	D 39.3
	TH	C 23.6	D 48.7	C 25.4	D 53.3	B 11.2	D 37.9	C 25.0	A 6.1

Table 5: Capacity Analysis Results for Alternatives 1, 2, 3A, 3B, 3C, 3D, and 4 at the Spy Run Avenue and State Boulevard Intersection

Approach (Street Name)	Movement	2009 Alt 1, 2, 3D, 4 & Existing Configuration Existing Signal Timing		2030 Alt 1, 2, 3D, 4 & Existing Configuration Existing Signal Timing		2030 Alt 1, 2, 3D, 4 & Existing Configuration Optimized Signals		2030 Alt 3A, 3B, 3C (Proposed Configuration) Optimized Signals	
		AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)	AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)	AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)	AM Peak Hour LOS Delay (sec/veh)	PM Peak Hour LOS Delay (sec/veh)
West (State Blvd)	L	E 76.2	F 152.4	E 78.8	F 188.8	D 39.7	F 166.3	C 35.0	D 54.1
	TH	C 31.4	C 21.8	C 31.6	C 23.7	A 9.6	B 17.3	A 5.5	C 31.7
South (Spy Run)	L/TH/R	C 20.4	D 35.3	C 23.0	D 51.7	D 35.8	D 54.0	C 26.3	D 39.6
East (State Blvd)	TH/R	E 60.0	E 55.5	F 86.1	E 72.9	D 46.0	E 72.9	C 29.0	D 46.1

Conclusions

Consulting Parties Preferred Alternative

Based on the capacity analysis results shown in **Tables 2 and 3**, it can be concluded that a roundabout with approach metering will not provide acceptable levels of service (LOS) to alleviate traffic congestion and meet the purpose and need of the project. NIRCC has established a Level of Service “D” as the acceptable peak hour service level for intersections and corridors within the urban area. A LOS of A thru D is considered acceptable and is an indicator of acceptable delay and level of intersection congestion. As shown in **Tables 2 and 3**, the overall intersection LOS is E or F in all but one peak hour. The unacceptable LOS associated with the analysis of the CPPA indicates that the intersection would exhibit intersection traffic operations at LOS E or F and would not function at an acceptable level of congestion, and thus this alternative would not meet the purpose and need of the State Boulevard project.

EA Alternatives 1, 2, 3A, 3B, 3C, 3D, and 4

The year 2009 and 2030 analysis for Alternatives 1, 2, 3D, and 4 shows that the current lane configurations are not operating acceptably. This would only become worse in the future, even with optimized traffic signal timings. On the contrary, Alternatives 3A, 3B, and 3C would operate acceptably in the year 2030. For these alternatives, there were no movements that operated worse than LOS D.

The preferred alternative per the EA is Alternative 3A, and thus the preferred alternative does meet the purpose and need of the State Boulevard project in regard to traffic operations.

ADDENDUM to State Boulevard Reconstruction Project
From Spy Run to Cass Street
Fort Wayne, Allen County, Indiana
Des. No. 0400587
DHPA No. 5903

Prepared December 12, 2014

Introduction

The City of Fort Wayne, in cooperation with the Federal Highway Administration (FHWA) and the Indiana Department of Transportation (INDOT), conducted Section 106 consultation as part of the State Boulevard Reconstruction Project from Spy Run Avenue to Cass Street in Fort Wayne, Allen County, Indiana (Des. No. 0400587/DHPA No. 5903). Pursuant to Section 106 of the National Historic Preservation Act (1966) and 36 CFR Part 800 (2013), federal agencies are required to take into account the effects of their undertakings on both aboveground and archaeological historic properties. The FHWA issued an “adverse effect” finding for the project due to impacts to the Fort Wayne Park and Boulevard System Historic District (NRHP, 2010), Brookview-Irvington Park Historic District (NRHP, 2011) and the Bridge over Spy Run Creek (NBI No. 0200273) on February 27, 2013.

This Addendum to the State Boulevard Reconstruction Project 800.11(e) Documentation is to incorporate the Consulting Parties Proposed Alternative (CPPA) as presented by Storrow Kinsella Associates in collaboration with Transportation Solutions, LLC. Through the alternative evaluation process it has been determined that the CPPA is not reasonable as it does not sufficiently address the project’s purpose and need. This document amends the following sections of State Boulevard Reconstruction Project 800.11(e) Documentation with discussion of the CPPA.

Consulting Party Coordination:

On June 18, 2014, a Public Hearing was held for the proposed project. At the Public Hearing and in a letter dated July 18, 2014 (Appendix A – pages 1 to 3) ARCH, Inc. presented an alternative prepared by Storrow Kinsella Associates and Transportation Solutions, LLC (Appendix B – pages 4-14). Storrow Kinsella Associates and Transportation Solutions, LLC were commissioned by ARCH, Inc., Indiana Landmarks, Friends of the Parks, and the Brookview-Irvington Park Neighborhood Association to examine the background research developed for the proposed project to determine if there was an alternative that better protected the neighborhood, fulfilled the purpose and need for the project, was prudent and feasible, and avoided, minimized or mitigated the adverse effect to the neighborhood. As such, it was determined through coordination with the FHWA and INDOT that the submitted alternative should be evaluated as part of the environmental process.

The following alternative has been evaluated for the State Boulevard Reconstruction project:

Alternative 3E: CPPA - The CPPA, as presented by Storrow Kinsella Associates in collaboration with Transportation Solutions, LLC consists of a two-lane parkway alignment shifted south of existing State Boulevard between Clinton Street and the Westbrook/Edgehill Drive intersection. The transition from existing State Boulevard to the CPPA includes a single lane roundabout at the Westbrook/Edgehill Drive intersection and a two-lane signalized hybrid roundabout at the North Clinton Street intersection. The CPPA includes a new crossing of Spy Run Creek raised above the 100-year flood elevation and a multi-use path separated from the roadway. The multi-use path would utilize the existing Spy Run Creek Bridge. If the deteriorated bridge condition or flooding issues dictate removal, a new multi-use path

bridge would be constructed. Eastbrook Drive would be converted to a cul-de-sac just north of the realigned State Boulevard. Access to existing State Boulevard would be obtained by utilizing the proposed roundabout at Clinton Street. No direct access to the realigned State Boulevard would be provided at Eastbrook Drive, Oakridge Road, or Terrace Road.

This alternative would require the relocation of at least two businesses and one residential property for construction of the Clinton Street roundabout. The CPPA is estimated to cost \$9.6 million. The cost of the CPPA is elevated due to the increased construction cost associated with the larger footprint and increased infrastructure associated with the two proposed roundabouts, the addition of a second pedestrian bridge, the potential for mechanically stabilized earth (MSE) retaining walls needed to keep fill slopes from extending into Spy Run Creek and also associated with the realigned State Boulevard near the proposed Eastbrook Drive cul-de-sac.

The CPPA results in the use of the Brookview-Irvington Historic District, Fort Wayne Park and Boulevard System Historic District, the Bridge over Spy Run Creek, and Vesey Park, all 4(f) resources.

The CPPA is not reasonable as it does not satisfy the Project's purpose and need. Based on a capacity analysis prepared for the CPPA, this alternative would not address the traffic congestion issues established by the Project's primary purpose and need. The intersections of State Boulevard with Spy Run and Clinton Street would not function at an acceptable level of service in the design year. For the CPPA, the overall intersection LOS is E or F during either the AM or PM peak hours in all scenarios analyzed. The CPPA would also likely require a level one design exception* with regards to roadway geometrics as it appears the CPPA utilizes substandard curvature in the proposed relocated segment of State Boulevard resulting in substandard sight distance conditions. Therefore, the CPPA does not appear to address the safety components associated with the sight distance, geometrics, and congestion. However, while not as significant as the need to address congestion and the safety components associated with sight distance, geometrics, and congestion, the CPPA does address the flooding and Greenways Trail System connectivity components of the purpose and need by proposing to elevate the roadway above the 100-year elevation and provide a separated multi-use path. Furthermore, this alternative would require an estimated \$9.6 million project cost, approximately \$1.6 million (20% increase) more than the preferred alternative (3A) presented in the May 14, 2014, approved EA. For these reasons, the CPPA is not considered reasonable and has been eliminated from further consideration.

Addendum Appendices

Appendix A July 18, 2014 Letter from ARCH, Inc. – Pages 1-3

Appendix B The Consulting Parties Proposed Alternative (CPPA) as presented by Storrow Kinsella Associates, in collaboration with Transportation Solutions, LLC – Pages 4-14

**Draft Section 4(f) Evaluation
for
Impacts to Historic Properties**

**State Boulevard Reconstruction Project
Fort Wayne, Allen County, Indiana
Des. No. 0400587**

**City of Fort Wayne
200 E. Berry Street
Fort Wayne, Indiana 46802**

**Indiana Department of Transportation
Office of Environmental Services
642 Government Center North
100 North Senate Avenue
Indianapolis, Indiana 46204**

**Federal Highway Administration
254 Federal Office Building
575 North Pennsylvania Street
Indianapolis, Indiana 46204**

December 15, 2014

Table of Contents

Introduction 1
 Proposed Action 1
 Purpose and Need for the Proposed Action..... 2
 Description of the Section 4(f) Resources 6
 Alternatives..... 7
 Avoidance Alternative..... 7
 Alternative 4: No Build 7
 Initial 4(f) Use Alternatives Considered and Screened 8
 Alternative 1: Butler Road – Vance Road Corridor 8
 Alternative 2: Spring Street – Tennessee Avenue 8
 Alternative 3E: Consulting Parties Proposed Alternative (CPPA)..... 9
 4(f) Use Alternatives Retained for Further Consideration 11
 Alternative 3A: Substandard Horizontal Curve Correction with 4-Lane Typical Section..... 11
 Alternative 3B: Widen State Boulevard on Existing Alignment..... 15
 Alternative 3C: Shift State Boulevard Alignment South 16
 Alternative 3D: Substandard Horizontal Curve Correction with a 3-Lane Typical Section 18
 Measures to Minimize Harm 19
 Mitigation 20
 4(f) Least Overall Harm Analysis 23
 Agency Coordination..... 26

Appendices:

- Appendix 1 Mapping
 - State of Indiana Map
 - USGS Topographic Map – State Boulevard
 - Corridor Alternatives

- Appendix 2 Section 106 Findings and Determinations
 - Section 4(f) Compliance Requirements (for Historic Properties and Section 106 Findings and Determinations
 - Section 800.6(a)(3) Documentation
 - A. Plans
 - B. Maps
 - C. Plans
 - D. Maps
 - E. Consulting Parties
 - F. Photographs
 - G. Report Summaries
 - H. Correspondence
 - I. Draft Memorandum of Agreement (MOA)
 - Addendum to State Boulevard Reconstruction Project November 2014

- Appendix 3 Capacity Analysis of the Consulting Parties Proposed Alternative (CPPA) for State Boulevard and Clinton Street Intersection

Introduction

Section 4(f) of the US Department of Transportation Act (DOT Act) of 1966 [49 U.S.C. 303 (c)] states the use of any land from a significant publicly owned park or recreation area, wildlife and waterfowl refuge, or private or publically owned historic site on or considered eligible for the National Register of Historic Places (NR) shall not be allowed unless:

- a. There is no feasible and prudent alternative to the use of such land.
- b. The proposed project includes all possible planning to minimize harm to such park, recreational area, wildlife and waterfowl refuge, or historic site resulting from such use.

Pursuant to regulations at 23 CFR Part 774, a full evaluation is required to determine the most feasible federal-aid route that causes the least overall harm considering the following factors:

- a. The ability to mitigate adverse impacts to each Section 4(f) property, including measures that benefit the property
- b. The relative severity of the remaining harm, after mitigation to the protected activities, attributes, or features that qualify each property for Section 4(f) protection
- c. The relative significance of each Section 4(f) property
- d. The views of the official(s) with jurisdiction over each Section 4(f) property
- e. The degree to which each alternative meets the purpose and need of the project
- f. After reasonable mitigation, the magnitude of any adverse impacts to resources not protected by Section 4(f)
- g. Substantial differences in costs among the alternatives

The purpose of this report is to evaluate and summarize the proposed project's purpose and need, reasonable alternatives, the Section 4(f) resources, the 4(f) resources that are used by these alternatives; avoidance alternatives that relate to these 4(f) resources, and all possible planning to minimize harm, if the resources cannot be avoided.

Proposed Action

The City of Fort Wayne Board of Public Works is developing a federal-aid project to improve a section of State Boulevard between Spy Run and Cass Street in Fort Wayne, Wayne Township, Allen County, Indiana. The project area is located in Wayne Township in the east half of Section 35, Township 31 North, Range 12 East.

The project extends from Cass Street to the west and Spy Run Avenue to the east, an overall project length of 2,370 feet. The current proposed alternative involves widening the existing 2-lane section of State Boulevard between Cass Street and Clinton Street to four lanes and correcting the substandard horizontal curve. In this segment, State Boulevard would have four 10-foot travel lanes, two in each direction. Between Oakridge Road and Clinton Street, the travel lanes would be separated by an 8-foot wide raised median and a 2-way left turn lane. The horizontal and vertical alignment will be modified between Westbrook Drive and Clinton Street to correct substandard roadway geometrics, as well as alleviate roadway flooding at Spy Run Creek. The

horizontal alignment would shift a maximum of approximately 190 feet south of existing State Boulevard. The vertical alignment would be raised approximately seven feet at the proposed bridge over Spy Run Creek. The roadway from Clinton Street to Spy Run Avenue would consist of four 11-foot travel lanes, two in each direction, separated by a 12-foot 2-way left turn lane. As appropriate, left turn lanes would be installed at the intersections. The horizontal and vertical alignment between Clinton Street and Spy Run Avenue would closely follow the existing roadway alignments. Access to existing State Boulevard would be via a new access road which would extend from the new State Boulevard alignment north to the existing intersection of Oakridge Road and State Boulevard. The existing intersections of State Boulevard with Eastbrook Drive and Terrace Drive would be eliminated and turned into cul-de-sacs.

Combined concrete curb and gutters, including curb inlets and storm sewer, would be constructed throughout the corridor. A raised median containing landscape elements would be constructed where left turn lanes are not required between Oakridge Road and Clinton Street. New sidewalks, varying in width from five feet to ten feet would be constructed on both sides of the roadway. The sidewalk would be constructed adjacent to the curb throughout the corridor. A sodded, landscaped utility strip, typically five feet wide, would be installed between the back of the curb and sidewalk where available space permits between the bridge over Spy Run Creek and Terrace Road.

New decorative lighting would be installed along the project and the existing traffic signals at Clinton Street and Spy Run Avenue would be modified as necessary.

As a part of this project, a new pedestrian bridge would be constructed over State Boulevard at the existing abandoned railroad crossing. Sidewalk ramps would be extended from proposed State Boulevard to the pedestrian bridge approach connecting State Boulevard to the future Pufferbelly Trail. The pedestrian bridge and ramps would be utilized by the proposed Pufferbelly Trail which would be constructed by others.

Purpose and Need for the Proposed Action

The primary purpose of the proposed project is to improve corridor connectivity along State Boulevard for both motorists and pedestrians alike. Currently, the existing corridor does not provide a safe environment for motorists, bicyclists, or pedestrians as the existing roadway is significantly congested and exhibits substandard sight distance and geometrics. In addition, State Boulevard is often impassable due to roadway flooding caused by Spy Run or the Saint Mary's River.

The need for this project derives from the traffic congestion along the corridor between Cass Street and Spy Run Avenue, the substandard sight distances at various intersections along the corridor, roadway flooding, and the substandard horizontal geometrics between Cass Street and Clinton Street. The State Boulevard project corridor also becomes congested at the intersections due to the reduction in lanes through this segment. In addition, pedestrian safety is compromised due to this level of congestion and insufficient sight distance at the substandard horizontal curves. Pedestrian facilities do not currently provide connectivity between the Greenways Trail System.

The selected and approved Transportation Plan for the Fort Wayne Urbanized Area is based on an "Arterial plus Bypass" concept to improve mobility, connectivity, and accessibility within the region. This concept includes improvements to a number of arterial corridors and the completion of I-469 as a "bypass" around the urban area. State Boulevard is one of the arterials identified in the Transportation Plan for improvement.

State Boulevard is one of a few east-west arterials that provide some continuity as motorists and pedestrians traverse the urban area. Continuous adjacent parallel roadways include the Washington Center Road/St. Joe Center Road corridor (approximately 2.5 miles north) and the Washington Road/Jefferson Boulevard corridor (one-way pair approximately 1.3 miles south). Coliseum Boulevard (approximately 1.5 miles north) also helps

to serve east-west travel but also traverses north-south as it passes through the urban area, breaking its east-west continuity. Due to the limited number of continuous east-west corridors, the carrying capacity required of corridors such as State Boulevard to meet travel demands is elevated.

As part of the development of the Metropolitan Transportation Plan and the “Arterial plus Bypass” concept, the Northern Indiana Regional Coordinating Council (NIRCC) evaluated a number of potential roadways for improvement to help improve east-west traffic flow in the area north of the Fort Wayne Central Business District. Three corridors were considered for improvements to facilitate east-west travel by providing additional east-west roadways. The corridors included State Boulevard, Butler Road-Vance Road, and Spring Street-Tennessee Avenue. Through the Transportation Plan development, reviews of these corridors determined that State Boulevard was the most practical option.

As the Transportation Plan has been implemented, a number of investments in transportation improvements have been constructed on the State Boulevard Corridor. These improvements include widening the bridge over the St. Joseph River just east of Spy Run Avenue, a project necessary to support the widening project between Spy Run and Cass Street. A major intersection improvement project was also completed at State Boulevard and Wells Street that included the widening of State Boulevard between Goshen Avenue and Cass Street. State Boulevard has also been widened to four lanes east of the proposed project between Coliseum Boulevard and Maplecrest Road to facilitate traffic flow and reduce congestion.

The State Boulevard project from Spy Run Avenue (US 27 northbound) to Cass Street is a project consistent with the current Transportation Plan and improvement projects implemented in accordance with the transportation planning process. The proposed project would reduce existing congestion and improve traffic flow. State Boulevard is a 4-lane arterial from east of Maplecrest Road to Spy Run Avenue. It reduces to three lanes west of Spy Run Avenue, with two eastbound through lanes and one westbound lane. East of Clinton Street, State Boulevard is a 2-lane road with one travel lane in each direction. East of the project area, Goshen Road, an arterial traversing through the northwest portion of the urban area, merges into State Boulevard, approximately doubling the daily traffic volume.

State Boulevard is also an important east west arterial in the Fort Wayne Central Business District Fringe Area. It connects with a number of important north-south arterials including Hillegas Road, Sherman Street, Wells Street, Clinton Street (US 27 south bound), Spy Run Avenue (US 27 north bound), Parnell Avenue, Crescent Avenue, Anthony Boulevard, Hobson Road, Coliseum Boulevard (State Road 930), Reed Road and Maplecrest Road. State Boulevard merges with Maysville Road and Stelhorn Road as it leaves the Urban Area east of I-469 and becomes State Route 37.

Under current traffic conditions, congestion occurs at the intersections of Spy Run Boulevard and Clinton Street resulting in unacceptable service levels. The redevelopment of the urban core area will continue to place travel demands on the State Boulevard corridor and contribute to modest increases in traffic volumes. NIRCC has established a Level of Service “D” as the acceptable peak hour service level for intersections and corridors within the urban area. Currently, both intersections exhibit intersection movements having service levels of E or F as described in the following table.

State Street and Spy Run Avenue Intersection

Morning Peak	LOS Existing
East Bound Left	F
West Bound Through	E
Evening Peak	LOS Existing
East Bound Left	F
East Bound Through	E
West Bound Through	E

State Street and Clinton Street Intersection

Morning Peak	LOS Existing
South Bound Through	E
Evening Peak	LOS Existing
East Bound Through	E
West Bound Left	F

Both intersections at Spy Run Avenue and Clinton Street also exhibit lengthy delays demonstrating the congested conditions. Modest increases in traffic volumes will exacerbate these conditions and cause additional delay and service failures. The proposed project would reduce delay and improve overall intersection service to acceptable levels of service (“D” or above).

In addition to the congestion issues, the existing horizontal alignment along State Boulevard does not currently meet Indiana Design Manual guidelines for minimum curve radius. The Level One controlling design criteria found in Section 40-8.02 of the INDOT Design Manual (IDM) are those highway design elements which are judged to be the most critical indicators of a highway’s safety and its overall serviceability. The horizontal alignment and minimum curve radius of a roadway is considered to be a very important level one controlling design element.

According to IDM Chapter 43, Figure 43-3B, the horizontal alignment for a 30 mph roadway is required to be a minimum of 300 feet. As noted in the curve radius table below, several of the existing horizontal curve radii along the existing alignment currently do not meet proper Level One design standards. For further reference to the IDM see http://www.in.gov/indot/design_manual/design_manual_2013.htm.

Curve Radius Table:

Station Line “A”	Existing Curve Radius	Required Radius (30 mph)
18+66.60	175 feet	300 feet
24+64.47	243 feet	300 feet
27+23.73	210 feet	300 feet

The Level Two design criteria found in Section 40-8.02 of the INDOT Design Manual (IDM) are judged to be important indicators of a highway’s safety and serviceability but are not considered as critical as the Level One Criteria. The intersection sight distance along the roadway is a critical Level Two design element essential for a safe corridor for both vehicular and pedestrian traffic. A motorist entering State Boulevard and turning left must be able to see 420 feet along State Boulevard to safely make the left turn maneuver. Similarly, a motorist entering State Boulevard and turning right must be able to see 375 feet along State Boulevard to safely make the right turn maneuver. As noted in the “Intersection Sight Distance Table” below, many of the intersections along the State Boulevard corridor do not meet the proper Level Two design standards.

Intersection Sight Distance Table:

Intersection	Turning Direction	Approx. Exist. Sight Dist. (feet)	Required Sight Distance (feet)
Cass Street (South)	LT	300	420
Cass Street (South)	RT	160	375
Westbrook Dr. (South)	LT	150	420
Westbrook Dr. (North)	LT	210	420
Eastbrook Dr. (South)	LT	270	420
Eastbrook Dr. (South)	RT	210	375
Eastbrook Dr. (North)	LT	250	420
Terrace Rd. (North)	RT	160	375

Congestion, substandard horizontal alignment, and inadequate sight distance likely contribute to the high crash rate along the State Boulevard project corridor. Four of the major intersections along the project corridor are in the top twenty high crash locations in Allen County for the time period 2007-2009. In order to be placed on this list, the locations must consistently (all three years) display a high crash frequency, high crash rate (RMV-rate per million entering vehicles), and high index of crash costs. As shown in the table below, the RMV exceeds 2.0 which indicates that a safety problem exists for the years 2007 to 2009 and for both 2010 and 2011 at State Boulevard and Clinton Street.

Crash Location	2007				2008				2009				2010				2011			
	Total Crash	Injury Total Crash	Total Fatal Crash	RMV	Total Crash	Injury Total Crash	Total Fatal Crash	RMV	Total Crash	Injury Total Crash	Total Fatal Crash	RMV	Total Crash	Injury Total Crash	Total Fatal Crash	RMV	Total Crash	Injury Total Crash	Total Fatal Crash	RMV
State Boulevard and Eastbrook Dr.	17	4	0	2.41	17	4	0	2.61	15	1	0	2.11	9	1	0	1.26	12	3	0	1.69
State Boulevard and Clinton St.	41	7	0	2.74	49	10	0	3.28	35	8	0	2.38	30	3	0	2.04	36	8	0	2.45
State Boulevard And Spy Run Ave.	34	4	0	2.04	35	8	0	2.12	41	6	0	2.48	27	7	0	1.63	43	11	0	2.60
State Boulevard and Westbrook Dr.	16	3	0	2.31	17	5	0	2.38	12	1	0	2.16	9	1	0	1.26	12	3	0	1.69

The high crash rates can likely be attributed to traffic congestion, substandard geometrics, intersection sight distances, and the multiple driveways that are directly accessed from State Boulevard between Westbrook Drive and Terrace Road. Currently, State Boulevard does not provide motorists with a center left turn lane to allow turning vehicles to move out of the path of the thru traffic, or provide required sight distance between Westbrook and Clinton Streets to allow for adequate stopping distance.

For many of the same reasons stated above, pedestrian safety is also a concern along the State Boulevard project corridor. The existing pedestrian facilities through this corridor are in poor condition. The existing sidewalks exhibit extensive deterioration such as cracking, settling, and heaving due to age and weathering. The north/south pedestrian connectivity is also very limited due to the traffic congestion and poor sight distance for pedestrians attempting to cross State Boulevard between Cass Street and Clinton Street.

Currently pedestrians and bicyclists have to share deteriorating narrow sidewalks along State Boulevard. The Pufferbelly Trail, a piece of the Greenways Trail System which will run along the west side of Westbrook Drive and will cross State Boulevard with a pedestrian bridge, is currently being constructed. The St. Joseph Pathway, also a piece of the Greenways Trail System, runs along the St. Joseph River and crosses State Boulevard near

the eastern project terminus. The State Boulevard project corridor currently does not provide an adequate and safe link between the two trails.

The existing bridge carrying State Boulevard over Spy Run Creek provides insufficient waterway area and is quickly deteriorating. According to the 2006 Allen County Structure Inventory and Appraisal Report the existing bridge has a sufficiency rating of 27.9 which classifies the bridge as structurally deficient. According to the report, the expected remaining life of the bridge superstructure is five years from the date of the inspection report (2011). The existing bridge is currently below the flood elevation of the St. Mary's River which causes the bridge to be overtopped with backwater from the Saint Mary's River with relative frequency, therefore affecting roadway safety by flooding State Boulevard. According to the Spy Run Flood Control Study (Christopher B. Burke, 2005) "This flooding is caused primarily by backwater from the St. Mary's River which controls the water surface elevation up to about State Boulevard. The State Boulevard crossing causes a significant backwater affecting the upstream water surface elevation to about Grove Street."

According to recent City of Fort Wayne records, Spy Run Creek has experienced flood events causing sandbag or clay berm protection in the following years: 1976, 1978, 1981, 1982, 1985, 1991, 1993, 1999, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, and 2010. Seven out of the 17 years (1978, 1982, 2003, 2004, 2005, 2008, and 2009), State Boulevard was closed due to the flooding events. Road closure due to flooding events appear to be happening more consistently in recent years, restricting emergency traffic more often.

Description of the Section 4(f) Resources

Three historic properties and one park were identified within the limits of the proposed project.

The Westerly Group, Inc. (Westerly) and Weintraut & Associates Historians, Inc. (Weintraut) were contracted by American Structurepoint, Inc. to prepare a Historic Properties and Section 106 Documentation and Findings. Westerly and Weintraut, in conjunction with recommendations and comment from the State Historic Preservation Officer (SHPO) and consulting parties, determined three historic properties listed in or eligible for listing in the National Register of Historic Places (NR) would be affected by the undertaking. The three properties include the Fort Wayne Park and Boulevard System Historic District, the Brookview-Irvington Park Historic District, and the Bridge over Spy Run Creek.

The park identified as being affected by the undertaking includes the greenway portion of Vesey Park running parallel to Spy Run Creek, along both the east and west banks.

Fort Wayne Park and Boulevard System Historic District (NR, 2010): The Fort Wayne Park and Boulevard System Historic District is generally bound by the 1912 plan for the City of Fort Wayne. The district encompasses the system of 11 parks, four parkways (including ten "park or park-like areas" associated with the parkways), and ten boulevards envisioned by Charles Mumford Robinson and George Kessler and based on the City Beautiful Movement. The district includes nearly 2,000 acres of parks, boulevards, and sites. There are eight resources identified as part of the Fort Wayne Park and Boulevard System historic district located within the APE for this project. Seven of those identified resources contribute to the historic district and include: Spy Run Creek, Sloping Hills and Natural Features, Clinton Street Bridge, Westbrook Drive, Eastbrook Drive, State Boulevard (Lindenwood to Anthony), State Boulevard through Brookview, and bridge over Spy Run Creek (NBI No. 0200273). The Fort Wayne Park and Boulevard System Historic District was listed on the NR in 2010 and is significant under Criteria A and C in the areas of Community Planning and Development, Entertainment/Recreation, and Landscape Architecture. The period of significance is from 1909, marking the date of the first park and boulevard master plan, to 1955, marking the date when the park and boulevard plan was "essentially realized."

Brookview-Irvington Park Historic District (NR, 2011): The Brookview-Irvington Park Historic District is roughly bound by Northfolk Avenue, Lima Road, Spy Run Avenue, North Clinton Street, and Jacobs Avenue. The district contains a total of 424 contributing resources including houses, garages, and the combined plats of the district, as well as the previously determined eligible bridge over Spy Run Creek (NBI No. 0200273). Ninety-two resources associated with the historic district are within the project APE. The district is significant under Criteria A and C in the areas of Community Planning and Development, Landscape Architecture, and Architecture. The period of significance is 1906-1965, representing the construction dates of most buildings within the historic district, and also encompasses the utilization of Centlivre Park (no longer extant) as a resort destination.

Bridge over Spy Run Creek (NBI No. 0200273): The bridge over Spy Run Creek (NBI No. 0200273) is a reinforced concrete girder, T-Beam bridge constructed in 1927 by contractor Herman W. Tapp and featuring the design of A.W. Grosvenor and O. Darling. The bridge was previously determined eligible for listing in the NRHP per the Indiana Statewide Historic Bridge Inventory (2010). The bridge over Spy Run Creek is eligible under Criterion C for Engineering/Architecture and is a Non-Select bridge. The period of significance is 1927, the year it was constructed.

Vesey Park: Additionally, Vesey Park was noted in the project limits. This park is operated by the City of Fort Wayne Parks Department and includes the green space along Spy Run between Eastbrook Drive and Westbrook Drive. It connects the larger portion of Vesey Park located at Irvington Drive and Eastbrook Drive to the south to Lawton Park along the St. Mary's River. The park features open space among the trees with areas for picnicking and views of Spy Run Creek.

With the exception of the structures discussed, no other significant features are on the affected properties. No known covenants or other restrictions or conditions would relate to the acquisition of the necessary right-of-way from any of the properties.

Alternatives

Avoidance Alternative

There are no alternatives that can simultaneously meet the project's purpose and need while also avoiding all Section 4(f) resources. All the reasonable alternatives use 4(f) resources. Given the extensive north-south boundaries of the Brookview-Irvington Park Historic District, and the east-west nature of the transportation corridor need, no other avoidance alternatives, besides the No Build Alternative, were identified that would not result in a use a Section 4(f) resource.

Alternative 4: No Build

With the No Build Alternative, there would be no use of resources subject to Section 4(f) provisions. This alternative would leave the existing State Boulevard roadway as it currently exists. No reconstruction of the roadway to meet the project's purpose and need would be implemented. The existing roadway and bridge would continue to deteriorate. The existing roadway would continue to flood causing continued problems with accessibility and pavement deterioration. Traffic accidents would most likely continue to increase as the current congestion issues would not be addressed. The existing bridge over Spy Run Creek is currently rated structurally deficient and the estimated remaining life of the superstructure is five years. This structure is in immediate need of replacement due to the condition. East-west connectivity would continue to be a problem for the overall transportation network. The No Build Alternative would likely result in the complete failure of the structure over Spy Run Creek.

The No Build Alternative would not meet any of the needs of the project; therefore, is not considered a feasible and prudent alternative.

Initial 4(f) Use Alternatives Considered and Screened

Alternative 1: Butler Road – Vance Road Corridor

This alternative includes developing the Butler Road – Vance Road Corridor to improve east-west travel through Fort Wayne. The corridor would be located approximately 0.50 mile north of the existing State Boulevard roadway. The alternative would begin at the Butler Road intersection with Cedar Ridge Run / Sprunger Road East and proceed east a distance of approximately 3.25 miles to a terminus at the Vance Road intersection with North Anthony Boulevard.

This alternative would require approximately 2.25 miles of new roadway alignment in order to connect the existing terminus of Butler Road with the existing (western) termini of Vance Road, which is located immediately east of the St. Joseph River. The remaining 1.0 mile of the corridor (east of Spy Run Creek) would be constructed along the existing Vance Road alignment, expanding the existing roadway travel lanes to accommodate anticipated traffic volumes. This alternative would also require the construction of new bridges over Spy Run Creek and the St. Joseph River.

This alternative would require extensive residential and commercial relocations. A minimum of 125 residential relocations and 15 commercial relocations would be required. This alternative would also result in impacts to the Franke Park Elementary School and the Fort Wayne Children's Zoo. Of the approximate 2.25 miles of new roadway alignment required for this corridor, approximately 2.0 miles would be constructed on presently undeveloped, forested land.

Alternative 1 results in the use of the Brookview-Irvington Historic District (northern extents), Vesey Park, and Franke Park, all 4(f) resources.

This alternative is not reasonable as it does not address any of the project's purpose and need. Alternative 1 does not address connectivity along the State Boulevard corridor, correct the substandard horizontal curve, or address the roadway flooding concerns along State Boulevard. Furthermore, this alternative would require an extensive number of residential and commercial relocations for construction and approximately 2.0 miles of new roadway through existing forested land. For these reasons, Alternative 1 has been eliminated from further consideration.

Alternative 2: Spring Street – Tennessee Avenue

This alternative includes developing the Spring Street – Tennessee Avenue corridor to improve east-west travel through Fort Wayne. The corridor would be located approximately 0.50 mile south of the existing State Boulevard roadway. The alternative would begin at the Spring Street terminus at the North Wells Street intersection and proceed east a distance of approximately 1.50 miles to a terminus at the intersection of Lake Avenue and Forest Park Boulevard.

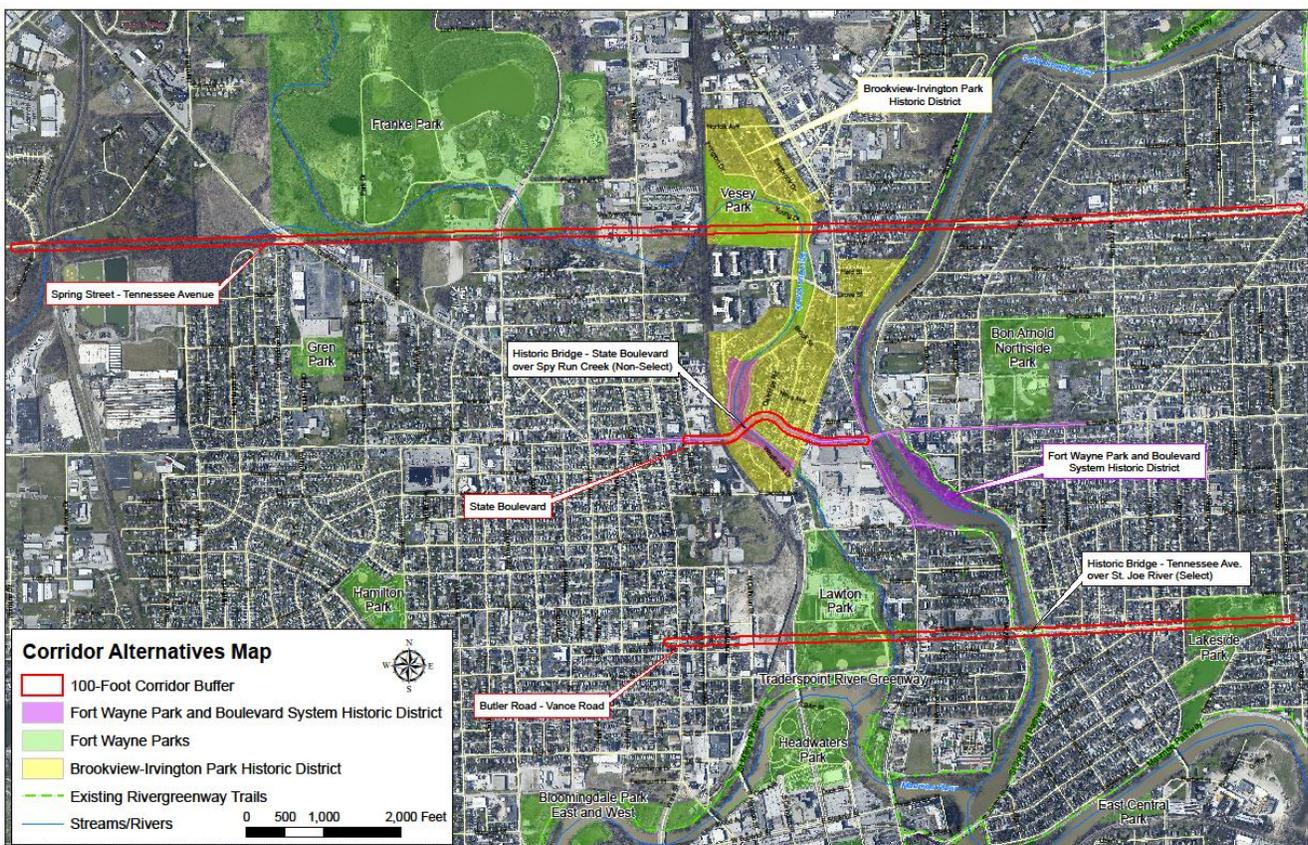
This alternative would require approximately 0.60 mile of new roadway alignment in order to connect the existing (eastern) terminus of Spring Street with the existing (western) terminus of Tennessee Avenue, which is located immediately east of the Spy Run Creek. An additional 0.25 mile of new roadway alignment would be required in order to connect the existing (eastern) terminus of Tennessee Avenue with Lake Avenue. The remaining 0.65 mile of the corridor would be constructed along the existing Tennessee Avenue alignment, expanding the existing roadway travel lanes to accommodate anticipated traffic volumes. This alternative would require the construction of a new bridge over Spy Run Creek. This alternative would also require the expansion of the existing Tennessee Avenue bridge over the St. Joseph River, a select historic bridge determined to be eligible for the National Register of Historic Places.

This alternative would require extensive residential and commercial relocations. A minimum of 75 residential relocations and 15 commercial relocations would be required. This alternative would also result in impacts or relocations to the Science Central Museum, Lakeside Park, and Lawton Park.

This alternative would result in the use of 4(f) resources including Lakeside Park, Lawton Park, and the NRHP eligible bridge over the St. Joseph River.

This alternative is not reasonable as it does not address any part of the project's purpose and need. Alternative 2 does not address connectivity along the State Boulevard corridor, correct the substandard horizontal curve, or address the roadway flooding concerns along State Boulevard. Furthermore, this alternative would require an extensive number of residential, commercial, and recreational property impacts/relocations for construction. For these reasons, Alternative 2 has been eliminated from further consideration.

Alternatives 1 and 2



Alternative 3E: Consulting Parties Proposed Alternative (CPPA)

The CPPA, as presented by Storrow Kinsella Associates in collaboration with Transportation Solutions, LLC consists of a two-lane parkway alignment shifted south of existing State Boulevard between Clinton Street and the Westbrook/Edgehill Drive intersection. The transition from existing State Boulevard to the CPPA includes a single lane roundabout at the Westbrook/Edgehill Drive intersection and a two-lane signalized hybrid roundabout at the North Clinton Street intersection. The CPPA includes a new crossing of Spy Run Creek raised above the 100-year flood elevation and a multi-use path separated from the roadway. The multi-use path would utilize the existing Spy Run Creek bridge. If the deteriorated bridge condition or flooding issues dictate removal, a new multi-use path bridge would be constructed. Eastbrook Drive would be converted to a cul-de-sac just north of the realigned State Boulevard. Access to existing State Boulevard would be obtained by utilizing the

proposed roundabout at Clinton Street. No direct access to the realigned State Boulevard would be provided at Eastbrook Drive, Oakridge Road, or Terrace Road.

This alternative would require the relocation of at least two businesses and one residential property for construction of the Clinton Street roundabout. The CPPA is estimated to cost \$9.6 million. The cost of the CPPA is elevated due to the increased construction cost associated with the larger footprint and increased infrastructure associated with the two proposed roundabouts, the addition of a second pedestrian bridge, the potential for mechanically stabilized earth (MSE) retaining walls needed to keep fill slopes from extending into Spy Run Creek and also associated with the realigned State Boulevard near the proposed Eastbrook Drive cul-de-sac.

The CPPA results in the use of the Brookview-Irvington Historic District, Fort Wayne Park and Boulevard System Historic District, the Bridge over Spy Run Creek, and Vesey Park, all 4(f) resources.

The CPPA is not reasonable as it does not satisfy the Project's purpose and need. Based on a capacity analysis prepared for the CPPA, this alternative would not address the traffic congestion issues established by the Project's primary purpose and need. The intersections of State Boulevard with Spy Run and Clinton Street would not function at an acceptable level of service in the design year. For the CPPA, the overall intersection LOS is E or F during either the AM or PM peak hours in all scenarios analyzed. The CPPA would also likely require a level one design exception* with regards to roadway geometrics as it appears the CPPA utilizes substandard curvature in the proposed relocated segment of State Boulevard resulting in substandard sight distance conditions. Therefore, the CPPA does not appear to address the safety components associated with the sight distance, geometrics, and congestion. However, while not as significant as the need to address congestion and the safety components associated with sight distance, geometrics, and congestion, the CPPA does address the flooding and Greenways Trail System connectivity components of the purpose and need by proposing to elevate the roadway above the 100-year elevation and provide a separated multi-use path. Furthermore, this alternative would require an estimated \$9.6 million project cost, approximately \$1.6 million (20% increase) more than the preferred alternative (3A) presented in the May 14, 2014, approved EA. For these reasons, the CPPA is not considered reasonable and has been eliminated from further consideration.

*A design exception is a request for an exception to specific design criteria, required when an element of a proposed design does not meet the standard design criteria as set forth in the Indiana Design Manual. A design exception is submitted to and approved by INDOT. Level one design exceptions are those exceptions related to highway design elements which are judged to be the most critical indicators of a highway's safety and its overall serviceability.

Alternative 3E CPPA



4(f) Use Alternatives Retained for Further Consideration

Alternative 3A: Substandard Horizontal Curve Correction with 4-Lane Typical Section

This alternative involves widening the existing 2-lane section of State Boulevard between Clinton Street and Cass Street to 4-lanes and correcting the substandard horizontal curve. State Boulevard would have four 10-foot travel lanes, two in each direction. Between Oakridge Road and Clinton Street, the travel lanes would be separated by an 8-foot wide raised median and a 2-way left turn lane. The horizontal and vertical alignment would be modified between Westbrook Drive and Clinton Street to correct substandard roadway geometrics, as well as alleviate roadway flooding at Spy Run Creek. The horizontal alignment would shift a maximum of approximately 190 feet south of existing State Boulevard. The vertical alignment would be raised approximately seven feet at the proposed bridge over Spy Run Creek. The roadway from Clinton Street to Spy Run Avenue would consist of four 11-foot travel lanes, two in each direction, separated by a 12-foot 2-way left turn lane. As appropriate, left turn lanes would be installed at the intersections. The horizontal and vertical alignment between Clinton Street and Spy Run Avenue would closely follow the existing roadway alignments. Access to existing State Boulevard would be via a new access road which would extend from the new State Boulevard alignment north to the existing intersection of Oakridge Road and State Boulevard. The existing intersections of State Boulevard with Eastbrook Drive and Terrace Drive would be eliminated and turned into cul-de-sacs. New sidewalks, varying in width from five feet to ten feet would be constructed on both sides of the roadway. As a part of this alternative, a new pedestrian bridge would also be constructed over State Boulevard at the existing abandoned railroad crossing.

Alternative 3A would result in the use of The Fort Wayne Park and Boulevard System Historic District, the Brookview-Invington Park Historic District, and the bridge over Spy Run Creek (NBI No. 0200273). The

Federal Highway Administration (FHWA) has determined the Section 106 finding of “Adverse Effect” is appropriate for the properties listed. The following summarizes anticipated use of Section 4(f) properties by the proposed project.

Fort Wayne Park and Boulevard System Historic District - The undertaking would affect the Fort Wayne Park and Boulevard System Historic District. In correcting the substandard horizontal curve and widening the roadway, the project would acquire right-of-way from the District and alter the historic location of State Boulevard. In addition, Eastbrook Drive (contributing feature) would be eliminated to the south of State Boulevard as the project would acquire all residential properties located along this portion of the roadway rendering the street unnecessary. Eastbrook Drive would be converted to a cul-de-sac north of State Boulevard, eliminating the existing Eastbrook Drive and State Boulevard intersection. The undertaking also proposes the removal of the existing bridge over Spy Run Creek, a contributing property, as the existing bridge does not provide a sufficient waterway opening and is in poor condition. The realigned State Boulevard profile would have a significant increase in vertical elevation (approximately 7-feet) as it passes over Spy Run Creek, introducing a visual barrier through the historic district as well as diminishing the presence of the sloping hills and natural features (contributing feature). A prefabricated trail bridge, access ramps, and retaining walls (associated with the Pufferbelly Trail) would be constructed over contributing State Boulevard at the abandoned New York Central Railroad bridge, introducing a new visual element to the District. FHWA has determined the appropriate Section 106 finding is “Adverse Effect” and there is a Section 4(f) use.

As mitigation for the impacts to the district, context sensitive solutions would be implemented, such as utilizing large scale, low-branched vegetation to emulate the street edge along the former path of State Boulevard as a reminder of the former roadway. In addition, fill slopes leading to the higher road elevations would be made gentle and obscured with low branched trees. Medians planted with low shrubs would be utilized to break roadways into smaller components that would be in scale with other neighborhood streets. The design of the present State Boulevard bridge over Spy Run Creek (NBI No. 0200273) would be recalled in the design of the new bridge, and the utilization of streetscape elements such as historically scaled lighting, trees in park strips and other elements seen in the District neighborhoods along the new roadway alignment would help maintain continuity between the various elements.

Brookview-Irvington Park Historic District - The undertaking would require the removal of approximately 15 contributing residential resources (not individually NRHP eligible) from the Brookview-Irvington Park Historic District, which would also result in a change to the orientation of the Brookview neighborhood plat (contributing resource). One residential property was identified as individually eligible along the State Boulevard corridor; however, no portions of this property would be converted to a transportation use. The realignment of State Boulevard and change in elevation would also result in the bifurcation of the district. Most of the contributing resources located within the project area would be removed from their historical locations: State Boulevard realignment, removal of residential resources, and the removal of the bridge over Spy Run Creek. Through the realignment of State Boulevard, the conversion of both Eastbrook Drive and Terrace Drive (north of State Boulevard) to cul-de-sacs, the replacement of the bridge over Spy Run Creek, and the removal of 15 contributing properties, the landscape of the area would be modified altering the character and setting of the district by creating much larger open public spaces. The construction of a prefabricated trail bridge over State Boulevard at the abandoned New York Central Railroad would also change the character of the district along State Boulevard. FHWA has determined the appropriate Section 106 finding is “Adverse Effect” and there is a Section 4(f) use.

As mitigation for the impacts to the district, context sensitive solutions would be implemented, such as utilizing large scale, low-branched vegetation to emulate the street edge along the former path of State Boulevard as a reminder of the former roadway. In addition, fill slopes leading to the higher road elevations would be made gentle and obscured with low branched trees. Medians planted with low shrubs would be utilized to break roadways into smaller components that would be in scale with other neighborhood streets. The design of the

present State Boulevard Bridge over Spy Run Creek (NBI No. 0200273) would be recalled in the design of the new bridge, and the utilization of streetscape elements such as historically scaled lighting, trees in park strips and other elements seen in the District neighborhoods along the new roadway alignment would help maintain continuity between the various elements. In addition, the City of Fort Wayne would make an effort to salvage architectural details from homes demolished for use in other District residences, as well as explore funding opportunities to provide low cost grants/loans to improve/rehabilitate historic resources within the Brookview-Irvington Historic District.

The bridge over Spy Run Creek (NBI No. 0200273) – The bridge over Spy Run Creek, located near the center of the project area, would be removed as it does not provide a sufficient waterway opening and is in poor condition. The removal or demolition would be consistent with the “Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana’s Historic Bridges” (Historic Bridge PA). The pending removal or demolition of the bridge is considered an adverse effect.

This alternative addresses the project’s purpose and need. Both congestion and safety are addressed through the addition of travel lanes and the correction of the substandard horizontal curve. Based on a capacity analysis prepared for Alternative 3A (Appendix 3), the intersections of State Boulevard with Spy Run and Clinton Street would function at an acceptable level of service (LOS D or better) in the design year. Alternative 3A also elevates the roadway above of the 100-year floodplain, likely eliminating the need for roadway closures due to flooding. Alternative 3A fully satisfies the projects purpose and need.

Table 1 identifies Section 4(f) resources, their location, and use by the proposed construction (Alternative 3A) on each of the resources.

Table 1: Summary of Section 4(f) Resources and Anticipated Use (Alternative 3A)				
Section 4(f) Resource	Location	Right-of-Way to be Acquired	Structures to be Removed	Section 4(f) Use
Fort Wayne Park and Boulevard System Historic District (NR 2010)	Includes Spy Run Creek, Sloping Hills and Natural Features, Clinton Street Bridge, Westbrook Drive, Eastbrook Drive, State Boulevard (Lindenwood to Anthony), State Boulevard through Brookview, and bridge over Spy Run Creek (NBI No. 0200273)	0.60 acre permanent	State Boulevard, Eastbrook Drive, bridge over Spy Run Creek	Permanent right-of-way acquisition and removal of contributing resources from historic location
Brookview-Irvington Park Historic District (NR 2011)	Bound by Northfolk Avenue, Lima Road, Spy Run Avenue, North Clinton Street and Jacobs Avenue	2.6 acre permanent	15 contributing residential structures (not individually NRHP eligible), bridge over Spy Run Creek (non-select)	Permanent right-of-way acquisition and removal of contributing resources from historic location
Bridge over Spy Run Creek (NBI. 0200273)	State Boulevard at Spy Run Creek	None	bridge over Spy Run Creek (non-select)	Programmatic Section 4(f) for Historic Bridges ¹
Vesey Park	Along both east and west banks of Spy Run Creek between Westbrook Drive and Eastbrook Drive	0.55 acre permanent, 0.12 acre temporary	None	<i>De minimis</i> ¹

1. *Programmatic Section 4(f) Evaluation for Historic Bridges and De minimis Section 4(f) evaluation will be completed as part of the Environmental Assessment. Further discussion of this Section 4(f) use will not be included in this document*

Alternative 3A



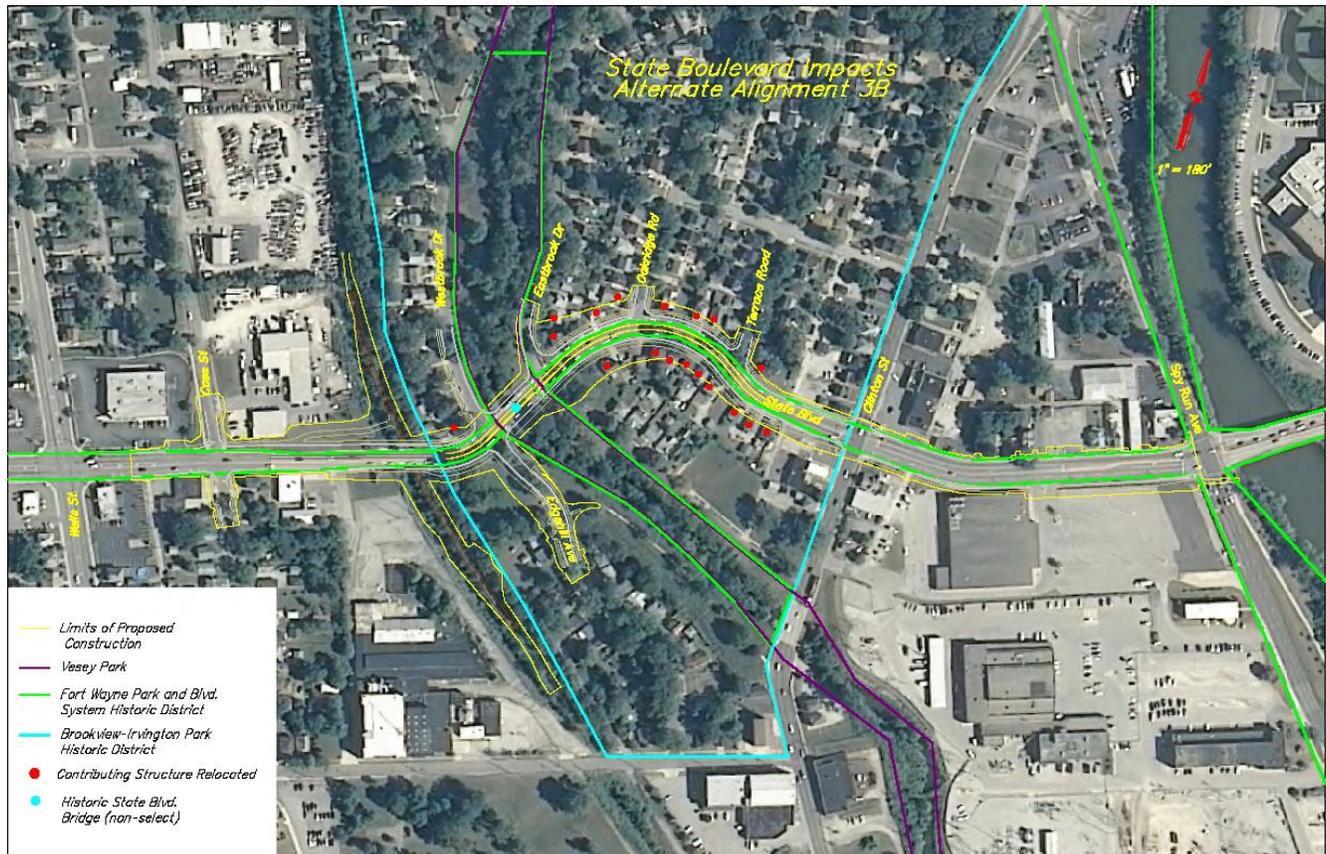
Alternative 3B: Widen State Boulevard on Existing Alignment

This alternative involves widening the existing 2-lane section of State Boulevard between Clinton Street and Cass Street to 4-lanes. This alternative would require a new bridge over Spy Run Creek at an elevation 7 feet above the existing bridge elevation. The overall alternative length is 2,700 feet.

This alternative would require approximately 18 residential relocations (contributing properties) from the Brookview-Irvington Historic District in order to provide the right-of-way necessary to widen State Boulevard along on the existing alignment.

Alternative 3B would address the flooding and congestion concerns by elevating the roadway and adding two additional travel lanes. Based on a capacity analysis prepared for Alternative 3B (Appendix 3), the intersections of State Boulevard with Spy Run and Clinton Street would function at an acceptable level of service (LOS D or better) in the design year. However, this alternative would require level one design exceptions with regards to roadway geometrics as it does not correct the substandard horizontal curve. Therefore, Alternative 3B does not address the safety issues resulting from substandard sight distance and substandard geometrics. Furthermore, this alternative requires a higher number of residential and historic property relocations for construction as compared to other alternatives.

Alternative 3B



Alternative 3C: Shift State Boulevard Alignment South

This alternative involves shifting the alignment of State Boulevard south and constructing the new alignment for 4-lanes. This alternative would essentially take the existing State Boulevard alignment between Westbrook Drive and Clinton Street and “mirror” or “flip” the alignment to the south. The roadway would be designed to meet current roadway geometric standards. The existing intersection of State Boulevard with Eastbrook Drive would be eliminated and converted to a cul-de-sac. Access to existing State Boulevard would be via a new access road which would extend from the new State Boulevard alignment north to the existing intersection of Terrace Road and State Boulevard. The Terrace Road extension would be required to provide access to the neighborhood north of existing State Boulevard as a result of access restrictions due to Clinton Street being a one-way south roadway. This alternative would also require a new bridge over Spy Run Creek at an elevation seven feet above the existing bridge elevation.

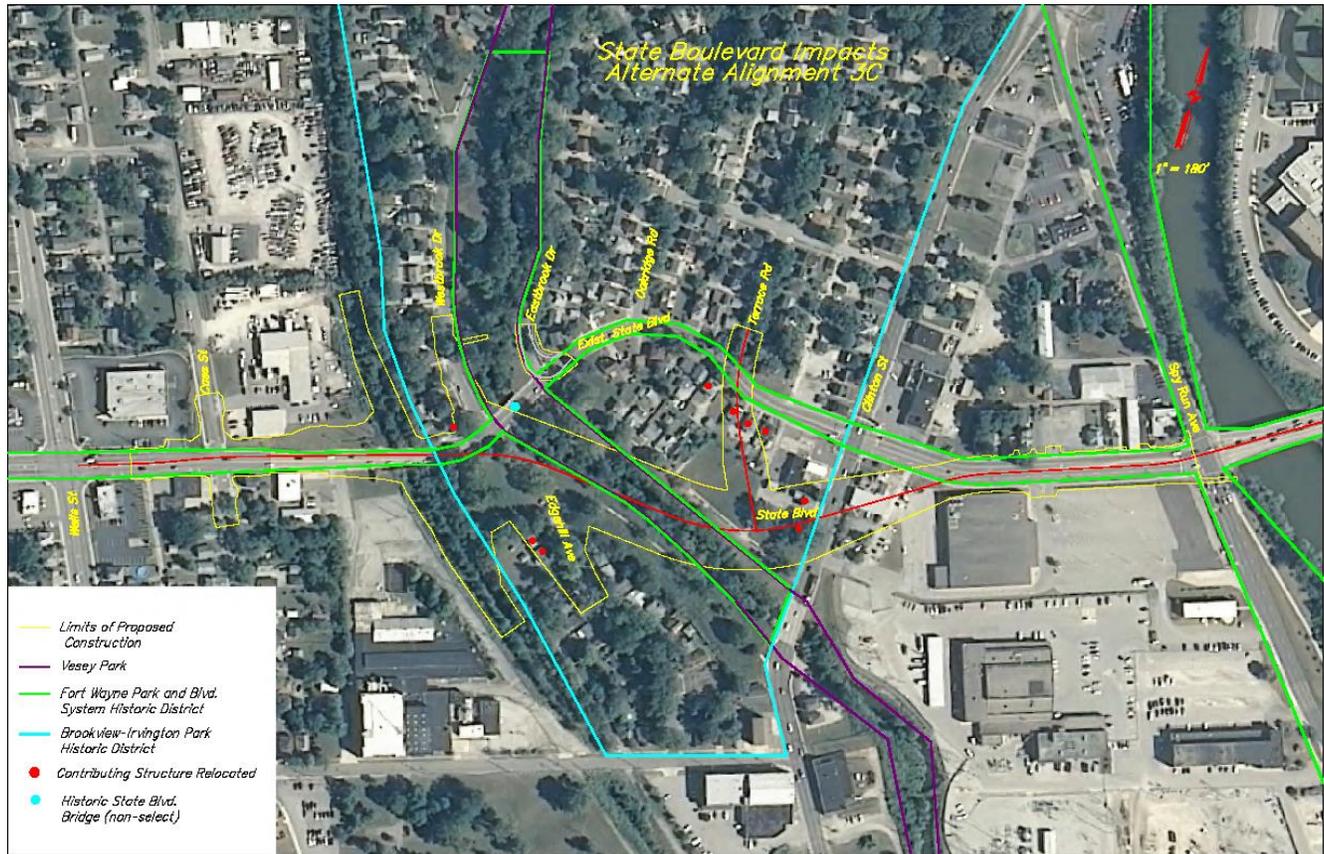
Similar to Alternative 3A, the realignment of State Boulevard and change in elevation would result in the bifurcation of the Brookview-Irvington Park Historic District. Contributing resources located within the project area would be removed from their historical locations: State Boulevard realignment, removal of residential resources, and the removal of the existing bridge over Spy Run Creek. Through the realignment of State Boulevard, the conversion of Eastbrook Drive (north of State Boulevard) to a cul-de-sac, the replacement of the bridge over Spy Run Creek, and the removal of five contributing properties, the landscape of the area would be modified altering the character and setting of the district. The construction of a prefabricated trail bridge over State Boulevard at the abandoned New York Central Railroad would also change the character of the district along State Boulevard. Furthermore, the realignment of State Boulevard would require the acquisition of right-of-way from the Fort Wayne Park and Boulevard System Historic District, again altering the historic location of State Boulevard. The realigned State Boulevard profile would have a significant increase in vertical elevation

(approximately 7-feet) as it passes over Spy Run Creek, introducing a visual barrier through the historic district as well as diminishing the presence of the sloping hills and natural features (contributing feature). The prefabricated trail bridge, access ramps, and retaining walls (associated with the Pufferbelly Trail) would be constructed over the contributing State Boulevard at the abandoned New York Central Railroad bridge, introducing new visual element to the Fort Wayne Park and Boulevard System Historic District.

While this alternative would reduce the number of contributing property relocations on the south side of existing State Boulevard, it would require extensive engineering considerations and significantly increased project costs. Due to the skew angle that State Boulevard would cross Spy Run Creek; impacts to the creek would be increased by approximately 330 linear feet for the purposes of re-grading. The new bridge length would be approximately 250 feet longer than the bridge design included in Alternatives 3A or 3D. This alternative would also require construction of a new intersection of State Boulevard with Clinton Street. The new intersection would be built in close proximity to the new Terrace Road intersection which would significantly impede traffic operations and efficiency as well as increase project costs due to additional traffic signal work. The increased length of the proposed bridge combined with relocating the roadway south would also require the intersection of State Boulevard and Clinton Street to be raised two to three feet, thus causing additional reconstruction along Clinton Street (approximately 500 feet) and further increasing project costs. In addition to the nine residential relocations that are also considered contributing resources, this alternative would result in the relocation of four commercial businesses, including the gas station at the southwest corner of Clinton Street and State Boulevard, a plumbing business on the southeast corner, a dog grooming business located just south of the gas station, and a storage unit business located on the southwest corner of Spy Run Avenue and State Boulevard.

Alternative 3C addresses the project's congestion and safety issues through the addition of travel lanes and the correction of the substandard horizontal curve. Based on a capacity analysis prepared for Alternative 3C (Appendix 3), the intersections of State Boulevard with Spy Run and Clinton Street would function at an acceptable level of service (LOS D or better) in the design year. It also elevates the roadway above of the 100-year floodplain, likely eliminating the need for roadway closures due to flooding. However, Alternative 3C introduces a new intersection at State Boulevard and Clinton Street which would create new operational and safety issues due to its close proximity to the new Terrace Road intersection. Project costs associated with Alternative 3C are an estimated \$3.9 million dollars more than any other alternative due to increased impacts to commercial businesses, a much longer bridge, and the reconstruction and elevated grade change along Clinton Street.

Alternative 3C



Alternative 3D: Substandard Horizontal Curve Correction with a 3-Lane Typical Section

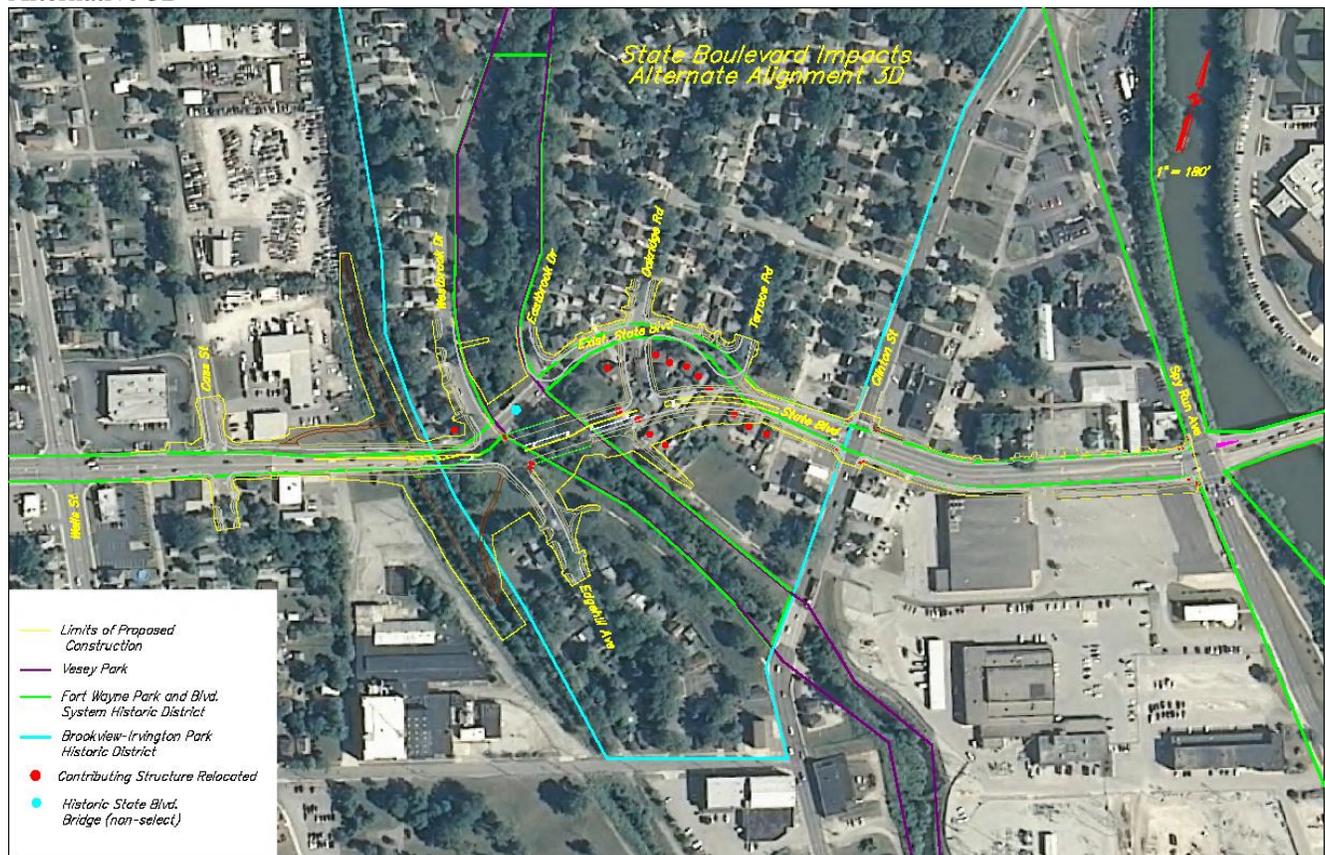
This alternative is similar to Alternative 3A but features a 3-lane typical section rather than a 4-lane typical section. This alternative involves widening the existing 2-lane section of State Boulevard between Clinton Street and Cass Street to 3-lanes and correcting the substandard horizontal curve. Beginning at Cass Street and extending to Clinton Street, State Boulevard would have two ten foot travel lanes, one in each direction. Between Westbrook Drive and Oakridge Road, the travel lanes would be separated by a twelve-foot wide left-turn lane. Between Oakridge Road and Clinton Street, the travel lanes would be separated by a twelve foot two way left turn lane. The vertical alignment would be raised approximately seven feet at the proposed bridge over Spy Run Creek. The roadway from Clinton Street to Spy Run Avenue would consist of four eleven foot travel lanes, two in each direction, separated by a twelve foot two way left turn lane. As appropriate, left turn lanes would be installed at the intersections. The horizontal and vertical alignment between Clinton Street and Spy Run Avenue would closely follow the existing roadway. As a part of this project, the new pedestrian bridge would also be constructed over State Boulevard at the existing abandoned railroad crossing.

By reducing the typical section from 4-lanes (Alternative 3A) to 3-lanes, construction limits are reduced by approximately ten feet on each side of the roadway. Because the reduction in construction limits associated with reducing the typical section from four lanes to three lanes is only ten feet, this alternative would continue to result in the same 4(f) use as Alternative 3A to the Brookview-Irvington Historic District, the Fort Wayne Park and Boulevard System Historic District, and the Bridge over Spy Run Creek.

Alternative 3D addresses some of the project's safety concerns and the project's substandard geometrics through the correction of the substandard horizontal curve. It also elevates the roadway above of the 100-year floodplain, likely eliminating the need for roadway closures due to flooding. However, Alternative 3D does not

fully address corridor connectivity or traffic congestion concerns along the corridor. This alternative would not address the congestion concerns at the intersection of State Boulevard and Clinton Street. This intersection currently functions at a low Level of Service. Based on a capacity analysis prepared for Alternative 3D (Appendix 3), the intersections of State Boulevard with Spy Run and Clinton Street would not function at an acceptable level of service in the design year. Both intersections are expected to have at least one movement function at a LOS E or F during the PM peak hour. While the dedicated left-turn lane may help alleviate some traffic congestion along the corridor, the congestion associated with four lanes of traffic funneling into two lanes at the Cass Street and Clinton Street intersections would still remain. Furthermore, this alternative would result in the same use of 4(f) resources as compared to Alternative 3A.

Alternative 3D



Measures to Minimize Harm

The proposed State Boulevard Reconstruction Project has been designed to reduce and minimize the use of each of the identified 4(f) resources. In an effort to minimize the overall footprint of the proposed roadway, a 3-lane typical section was considered and evaluated. It was determined that a 3-lane typical section would reduce the construction limits by approximately ten feet on each side of the roadway. Because the reduction would only be ten feet, the alternative would still result in the same use of 4(f) resources as the 4-lane typical section to the Brookview-Irvington Historic District, the Fort Wayne Park and Boulevard System Historic District, and the bridge over Spy Run Creek. In addition, a 3-lane typical section would address some of the project's safety concerns and the project's substandard geometrics; however, a 3-lane typical section would not address corridor connectivity or traffic congestion concerns along State Boulevard. Traffic congestion concerns would not be addressed at the intersection of State Boulevard and Clinton Street and the Level of Service would remain at an

unacceptable level. The congestion associated with four lanes of traffic funneling into two lanes at the Cass Street and Clinton Street intersections would also still remain.

The modification of the proposed Oakridge Road extension was evaluated to minimize the number of total parcel acquisitions of contributing properties (112 East State Boulevard, 134 East State Boulevard, and 138 East State Boulevard) between existing State Boulevard and proposed State Boulevard. Shortening the right-turn lane and eliminating the landscaped median, constructing sidewalks adjacent to the curb with retaining wall placed at the back of sidewalks, the use of guardrail, and enclosed drainage systems utilizing inlets were all options evaluated. The evaluated aspects did not result in a significant reduction of property impact. It was concluded that the significant reduction in greenspace between the existing residence and proposed roadway, impacts to existing drives, and removal of non-residential structures located on the properties would still likely result in a total parcel acquisition outcome.

Alternatives 3A, 3C, and 3D shift State Boulevard from its historical location; however, existing curvature of State Boulevard could be maintained between Eastbrook Drive and Terrace Road. In addition, the relocation of State Boulevard associated with Alternatives 3A and 3C would require the acquisition of the remaining homes along Eastbrook Drive (south of State Boulevard), resulting in the elimination of this portion of Eastbrook Drive (contributing resource). In an effort to further minimize the use of identified Section 4(f) resources, the existing curb lines of Eastbrook Drive would remain in place where possible along this portion of the roadway.

Mitigation

Mitigation measures have been detailed in a draft MOA to be executed by consulting parties. The draft MOA includes the following mitigation measures for historic properties:

FHWA will ensure that the following measures are implemented:

I. CONTEXT SENSITIVE SOLUTIONS

A. The City of Fort Wayne shall, where feasible, implement context sensitive solutions for this undertaking, including but not limited to the delineation of the former path of State Boulevard as a reminder of the former roadway; use of new, large scale, low-branched vegetation to emulate the street edge and the exterior walls of homes removed as a result of the undertaking in the Brookview plat; fill slopes leading to higher road elevations such that the slope is made gentle and obscured with low branched trees; medians planted with low shrubs to break roadways into smaller components that will be in scale with other neighborhood streets; use of retaining walls minimized but where used buffered by vegetation; design of present State Boulevard Bridge over Spy Run (NBI No. 0200273) recalled in the design of the new bridge; and use of streetscape elements such as historically scaled lighting, trees in parkstrips and other elements seen in the District neighborhoods in the new area to maintain continuity between the various elements.

B. The City of Fort Wayne, where feasible, salvage architectural details from homes demolished as a result of the undertaking for use in other District residences. The City of Fort Wyane shall provide the Indiana SHPO and consulting parties a dispensation plan for salvaged architectural details.

C. The City of Fort Wayne will explore funding opportunities that will, if appropriate, provide low costs grants/loans to people in the neighborhood to improve/rehabilitate historic resources within the Brookview-Irvington Historic District. All improvements will be in compliance with, and with the oversight of, the Fort Wayne Historic Preservation Commission.

D. As soon as practical, FHWA and the City of Fort Wayne will convene an Advisory Team to ensure that the Project is designed in a manner that respects the historic qualities, landscapes, historic buildings, and features in the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District. Responsibilities of and participation on the Advisory Team include the following:

1. The Advisory Team will function in an advisory capacity to assist FHWA and the City of Fort Wayne in developing Project design details to implement the measures stipulated in this MOA regarding the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District.
2. Context sensitive solutions that may include but not be limited to: protecting existing character-defining landscape features, both created and natural; dealing with light, sound, and air quality issues; providing pedestrian access across the bridge; and maintaining pedestrian connections along the former Eastbrook and Westbrook drives shall be included among the measures considered.
3. The City of Fort Wayne and FHWA shall have the authority for final approval of actions regarding the implementation of measures to avoid, minimize, or mitigate effects to the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System.
4. Representatives of the following jurisdictions and organizations will be invited by FHWA and the City of Fort Wayne to participate on the Advisory Team, based on their established geographic connection to or specific interest in the Brookview-Irvington Park Historic District, or expertise pertaining to the historic preservation area: City of Fort Wayne Parks & Recreation Department, City of Fort Wayne historic preservation planners, City of Fort Wayne Engineer, City of Fort Wayne Urban Designer (Community Redevelopment Department), INDOT, the Fort Wayne Greenway Consortium, ARCH, Inc., Brookview Neighborhood Association, Friends of the Parks of Allen County, and Indiana Landmarks. The Indiana SHPO or representatives may participate in Advisory Team meetings at their discretion. The City of Fort Wayne shall provide a licensed landscape architect to attend the Advisory Team meetings.
5. Additional participants having geographic connection to, or specific interest in, the Brookview-Irvington Park Historic District or Fort Wayne Park and Boulevard Historic District or expertise pertaining to the historic preservation of the area may be invited to participate on the Advisory Team at the discretion of the City of Fort Wayne, FHWA, and the Indiana SHPO. In addition, the City of Fort Wayne shall invite the project managers of or representatives from the consultants for the other projects in the vicinity of the historic district (e.g., Pufferbelly Trail or US 27) to participate in the meetings of the State Boulevard Reconstruction from Spy Run to Cass Street Advisory Team.
6. As soon as practical, FHWA and the City of Fort Wayne will convene the Advisory Team for an initial organizational meeting to establish processes and procedures for operation of the Advisory Team will need to meet to ensure the timely completion of the project, and the number and dates of future meetings. The Advisory Team will review plans, comment, and make specific recommendations regarding Project design scopes of work and details for consideration by FHWA and the City of Fort Wayne. The Advisory Team will be chaired by a representative of the City of Fort Wayne's engineering and/or environmental consultant. The chair will be responsible for convening meetings of the

Advisory Team, preparing and maintaining a summary of meetings, and preparing and submitting Advisory Team recommendations to FHWA and the City of Fort Wayne for consideration and action, in consultation with the Indiana SHPO.

7. The City of Fort Wayne's engineering and/or environmental consultant shall provide any materials needed for review by the Advisory Team at least fifteen (15) days before scheduled meetings. In addition to comments voiced in the meetings, the Advisory Team members may provide written comments to the chair within fifteen (15) days following the scheduled meeting.

8. Based on the comments provided by the Advisory Team members, the chair will develop recommendations and submit them to FHWA and the City of Fort Wayne for consideration and action, in consultation with the Indiana SHPO.

9. If other Federal undertakings planned in the vicinity of the Brookview-Irvington Park Historic District and Fort Wayne Park and Boulevard System Historic District are found to result in an adverse effect to the historic district, the City of Fort Wayne shall encourage the creation of Advisory Teams of the same composition of the State Boulevard Reconstruction from Spy Run to Cass Street Advisory Team available to guide the development of context sensitive design as part of the mitigation of such adverse effects. The City of Fort Wayne shall make meeting minutes and other pertinent records and materials from the State Boulevard Reconstruction from Spy Run to Cass Street Advisory Team available to other such Advisory Teams.

II. PHOTOGRAPHIC DOCUMENTATION

- A. Prior to commencement of the demolition of the existing historic State Boulevard Bridge over Spy Run (NBI No. 0200273) for this undertaking, the City of Fort Wayne will ensure that photographic documentation of the State Boulevard Bridge over Spy Run (NBI No. 0200273) will take place, as provided for in the 2006 "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges."
- B. Prior to the commencement of site preparation, demolition, or construction activities for this undertaking within the Brookview-Irvington Park Historic District, the City of Fort Wayne will ensure that photographic documentation of the part of the Historic District that will be altered by this undertaking will take place. The photographs will concentrate on the following subjects:
 - 1. The streetscape and setting, including broad views of the main facades of buildings facing the street, within the parts of the existing State Boulevard and Eastbrook Drive that will be altered; and
 - 2. Those houses that contribute to the significance of the Historic District and that will be demolished. At least two photographs of each of those houses will be taken, and they will be taken from oblique angles in order to document all four elevations of each house.
- C. This documentation will include black and white prints of digital photographs and a digital video disc ("DVD") containing the photographs, recorded as closely as possible in keeping with the relevant standards of the version of the "Indiana DNR – Division of Historic Preservation and Archaeology Minimum Architectural Documentation Standards" that are in effect at the time.
 - 1. Separate sets of the photographs of the State Boulevard Bridge over Spy Run and of the photographs of the parts of the Brookview-Irvington Park Historic District will be prepared;
 - 2. The photography will be conducted by a professional photographer or a qualified professional who meets relevant professional qualification standards of the Secretary of the Interior;

3. A draft set of photographs on DVD of the Bridge and a draft set of photographs on DVD of the Historic District will be submitted to the Indiana SHPO for review and approval within 30 days of receipt, and the Indiana SHPO has the discretion to require that photographs be retaken or that additional photographs be taken; and
4. After the Indiana SHPO has approved the sets of photographs of the Bridge and of the Historic District, the City of Fort Wayne will provide duplicates of the photographic prints and digital video discs to the Indiana SHPO, for ultimate transmittal to the Indiana State Archives, and to one or more libraries or other not-for-profit institutions in Fort Wayne that will commit to retaining them permanently and to providing the public with access to them.

4(f) Least Overall Harm Analysis

This section compares and summarizes the use of Section 4(f) resources associated with each alternative evaluated in the Section 4(f) Evaluation and leads to a determination of the alternative with the least overall harm to Section 4(f) properties.

Each of the remaining four alternatives (3A, 3B, 3C, and 3D) result in the use of an identified 4(f) resources. Table 2 presents the comparison of alternatives showing the evaluation and use of the identified section 4(f) properties.

Project Impacts/Effects	Alternative 3A: Substandard Horizontal Curve Correction	Alternative 3B: State Boulevard on Existing Alignment	Alternative 3C: Shift State Boulevard Alignment South	Alternative 3D: 3 Lane Typical Section
Use of 4(f) Resources				
Brookview-Irvington Park Historic District	15 Contributing Property Relocations (residential)	18 Contributing Property Relocations (residential)	9 Contributing Property Relocations (residential)	15 Contributing Property Relocations (residential)
Fort Wayne Park and Boulevard System Historic District	Clearing/altering landscape, Eastbrook Dr. access to State Blvd altered, State Blvd removed from historic location, bridge over Spy Run Creek replaced	Clearing/altering landscape, State Blvd widened and elevated, bridge over Spy Run Creek replaced	Clearing/altering landscape, Eastbrook Dr. access to State Blvd altered, State Blvd removed from historic location, bridge over Spy Run Creek replaced	Clearing/altering landscape, Eastbrook Dr. access to State Blvd altered, State Blvd removed from historic location, bridge over Spy Run Creek replaced
Bridge over Spy Run Creek (Non-Select Historic Bridge)	Replaced	Replaced	Replaced	Replaced
Vesey Park	0.605 ac permanent, 0.122 ac temp ROW	0.313 ac permanent, 0.055 ac temp ROW	1.46 ac permanent, 0.092 ac temp ROW	0.517 ac permanent, 0.143 ac temp ROW
Factors for Consideration (774.3(c)(1)(i-vii))				
Ability to mitigate adverse effects	Moderate	Low	Mod-High	Moderate
Relative severity of remaining harm after mitigation	High	Highest	Moderate	High
Relative significance of each Section 4(f) property	High	Mod-High	Mod-High	High
Views of officials with jurisdiction(SHPO)-Adverse Effect for all alternatives	Severe	Most Severe	Less Severe	Severe
Relative satisfaction of Purpose and Need	High	Low	Mod-High	Mod-Low
Magnitude of any adverse effects to non-4(f) resources				
Neighborhood cohesion	+	=	=	+
Environmental Justice	=	=	=	=
Business Relocations/ Encroachments Outside of Historic Districts	=	=	--	=
CAC/Public Involvement	No Consensus	No Consensus	No Consensus	No Consensus
Additional residential building relocations	=	=	-	=
Natural Resources (streams, wetlands, forest)	-	-	--	-
Project Costs Estimates (millions)**	8	8.5	13.5	7.5

Key: ++ Very Positive Effect; + Positive Effect, = Status Quo; - Negative Effect; -- Very Negative Effect

Alternative 3A – Sub-standard Horizontal Curve Correction

Alternative 3A would require the relocation of 15 contributing properties from the Brookview-Irvington Park Historic District. In addition, the realignment of State Boulevard and change in elevation would cause a bifurcation of the district and the removal of contributing features from their historical location. A similar use of 4(f) resources, resulting from the alteration and removal of contributing features from their historical location would also occur to the Fort Wayne Park and Boulevard System Historic District. Alternative 3A also requires the replacement of the bridge over Spy Run Creek (non-select historical bridge) and minor right-of-way acquisition from Vesey Park.

Alternative 3A addresses the project's purpose and need. Both congestion and safety are addressed through the addition of travel lanes and the correction of the substandard horizontal curve. Alternative 3A also elevates the roadway above of the 100-year floodplain. Alternative 3A fully satisfies the project's purpose and need.

Alternative 3B – Existing Alignment Improvements

Alternative 3B would result in a similar use of Section 4(f) resources as Alternate 3A to properties from the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District. This alternative would also require the replacement of the bridge over Spy Run Creek (non-select historical bridge) and minor right-of-way acquisition from Vesey Park. However, Alternative 3B would result in the relocation of 18 contributing properties from the Brookview-Irvington Park Historic District.

Alternative 3B would address the flooding and congestion concerns by elevating the roadway and adding two additional travel lanes. However, this alternative would require level one design exceptions with regards to roadway geometrics as it does not correct the substandard horizontal curve. Therefore, Alternative 3B does not address the safety issues resulting from substandard sight distance and substandard geometrics. This alternative would require a higher number of residential and historic property relocations for construction as compared to other alternatives. Alternative 3D would not meet all the needs for the project.

Alternative 3C – Southern Most Alignment

Alternative 3C would result in similar use of Section 4(f) resources as 3A and 3B to properties in the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District. This alternative would also require the replacement of the bridge over Spy Run Creek (non-select historical bridge) and minor right-of-way acquisition from Vesey Park. However, Alternative 3C would only result in the relocation of nine contributing properties from the Brookview-Irvington Park Historic District.

Alternative 3C would address the flooding issue by elevating the roadway above of the 100-year floodplain. It would also address some of the project's congestion and safety issues through the addition of travel lanes and the correction of the substandard horizontal curve. However, it introduces a new intersection at State Boulevard and Clinton Street which would create new congestion and traffic operational issues due to its close proximity to the Terrace Road intersection. Due to the introduction of new congestion and traffic operational issues, Alternative 3C would not meet all of the needs for the project.

Alternative 3D – 3-Lane Typical Section

Alternative 3D would result in the exact same use of Section 4(f) resources as Alternative 3A, including the relocation of 15 contributing properties from the Brookview-Irvington Park Historic District.

Alternative 3D addresses some of the project's safety concerns and the project's substandard geometrics through the correction of the substandard horizontal curve. It also elevates the roadway above of the 100-year floodplain. However, Alternative 3D does not fully address corridor connectivity or congestion along State Boulevard. This alternative would not address the congestion at the intersection of State Boulevard Clinton Street. The congestion associated with four lanes of traffic funneling into two lanes at the Cass Street and Clinton Street intersection would still remain. Alternative 3D would not meet all of the needs for the project.

Conclusion

Alternative 3B results in the most overall harm to Section 4(f) resources, requiring the relocation of 18 contributing properties. Alternative 3D and 3A result in the same use of Section 4(f) resources. However, Alternative 3A better satisfies the project's purpose and need. Alternative 3C causes the least harm to Section 4(f) resources with the anticipated relocation of only nine contributing properties.

The magnitude of adverse effects to non-4(f) resources associated with Alternative 3C is significant. Alternative 3C would also result in the relocation of four commercial businesses. Project costs associated with Alternative 3C would be an estimated five million dollars more than any other alternative due to the required relocation of the commercial businesses, a much longer bridge, and the reconstruction and elevated grade change along Clinton Street. Alternative 3C addresses the project's congestion and safety issues through the addition of travel lanes and the correction of the substandard horizontal curve and also elevates the roadway above of the 100-year floodplain. However, Alternative 3C introduces a new intersection at State Boulevard and Clinton Street, creating traffic operational issues due to its close proximity to the new Terrace Road intersection with State Boulevard. Therefore, Alternative 3C does not sufficiently satisfy the purpose and need of the project.

Alternative 3A is the only alternative that fully addresses the project's purpose and need. Both congestion and safety are addressed through the addition of travel lanes and the correction of the substandard horizontal curve. Alternative 3A also elevates the roadway above of the 100-year floodplain. While Alternative 3A has a greater number of contributing property relocations than Alternative 3C, the relative significance, value, and use of the 4(f) resource in Alternative 3A does not exceed the magnitude of adverse effects to non-Section 4(f) resources in Alternative 3C. In addition, the contributing properties relocated by Alternative 3A do not possess any unique features, when compared to the remaining properties in the Brookview-Irvington Park Historic District, which would make them individually eligible for the NR. Representative photographs of the relocated structures can be seen in Appendix 2. A significant portion of the contributing properties to be relocated by Alternative 3A are also located in areas that flood multiple times a year and thus continue to deteriorate at a relatively rapid rate.

In summary, the reduction of harm to Section 4(f) resources resulting from Alternative 3C does not outweigh the harm to non-Section 4(f) resources and properties adversely affected by this alternative. Therefore, among the remaining build alternatives which use 4(f) resources, Alternative 3A is considered the alternative which causes the least overall harm in light of the statute's preservation purpose. The proposed action includes all possible planning to minimize harm to each of the four identified 4(f) resources.

Agency Coordination

During the course of consultation, the following organizations have responded affirmatively to the invitation to join consultation: City of Fort Wayne; Friends of the Parks of Allen County; Allen County Historian; Indiana Landmarks—Northern Regional Office; Fort Wayne Historic Preservation Commission; ARCH, Inc.; Brookview Neighborhood Association; Indiana Historic Spans Taskforce; Irvington Park Neighborhood Association. Additionally, the following individuals or organizations participated in or requested to join consultation: Charley Shirmeyer, Northside Galleries; Albert Cohan, Westbrook 5, LLC; Thomas Niezer, Barret & McNagly, LLP; Ronald Ross, Martin Riley Architects and Engineers; Dan Ernst, Earth Source, Inc.; Jan Dailey, State Boulevard Resident. (See Appendix B: Consulting Parties.)

In a letter dated April 16, 2009, Michael Galbraith writing on behalf of ARCH, Inc., requested that Friends of the Parks of Allen County and Brookview Neighborhood Association be invited to join consultation. (See Appendix F: Correspondence and Meeting Minutes and Appendix C: Consulting Parties.)

On April 23, 2009, SHPO wrote in response to the notification concerning the reconstruction of State Boulevard and requested a literature review, historic context, research methodology, property descriptions, and NR eligibility evaluations and recommendations to aid analysis of the project. SHPO recommended the Friends of the Parks and Boulevard Neighborhood Association, Indiana Historic Spans Task Force, and bridge historian Dr. James L. Cooper be invited to participate as consulting parties. (See Appendix F: Correspondence and Meeting Minutes.)

On December 7, 2009, Jan Dailey, State Boulevard Resident, wrote in response to the HPR: “I have reviewed the Historic Properties Report and find that it accurately describes the nature of the properties and their contributions to the Area of Potential Effects.” In regard to the project, she stated, “While some may feel that redesigning the road and forever changing the integrity of the historic nature of State Boulevard is progress and must be accepted, this report more accurately reflects the feeling that residents of this neighborhood share.” She also requested that “a separate study be conducted in possible land use of the former Kroger Fuel Center.” (See Appendix F: Correspondence and Meeting Minutes.)

On December 8, 2009, Indiana Landmarks—Northern Regional Office wrote in response to the HPR. Landmarks agreed that Brookview-Irvington Park Historic District is eligible for the NR and suggested modifications to the HPR recommendations in light of NR nominations being composed by ARCH, Inc. Indiana Landmarks also requested more information on the proposed design in order to comment on a preliminary effect finding. Indiana Landmarks disagreed with the APE, asked some preliminary questions regarding the purpose and need in relation to historic properties, questioned the appropriateness of including a “trail bridge” in this Section 106 investigation, expressed the opinion that the “substandard horizontal curve” was a “character defining” element of the Brookview-Irvington Park historic district, and expressed the need for a “broad range of alternatives” to be included as part of the project options, and expressed concerns about the impacts of a different project on this Section 106 undertaking. (See Appendix F: Correspondence and Meeting Minutes.)

On December 9, 2009, ARCH, Inc. wrote in response to the HPR. Arch, Inc. agreed with the recommendation of eligibility for the Brookview-Irvington Park Historic District, noting that an NR nomination was being prepared. ARCH, Inc. requested the inclusion of proposed design maps, requested more detailed data regarding the project purpose and need, questioned the inclusion of the “trail bridge” in this Section 106 study, expressed the opinion that the “substandard horizontal curve” was a “character defining” element of the Brookview-Irvington Park historic district, disagreed with the APE, stated the importance of consulting “early in the undertaking’s planning,” expressed concerns about the impacts of a different project on this Section 106 undertaking and specifically stated “we believe that these projects must be aggregated for Section 106 Review. We also believe that if these houses south of State Boulevard were removed in order to avoid Section 106 Review that investigation into a possible violation of Section 110(k) of the NHPA (16 CFR 470) would be appropriate.” Finally, ARCH, Inc. agreed with statements regarding flooding in the area, but stated they “contend that this is an issue which is recent.”

In a letter dated December 10, 2009, Julie Donnell, president of the Friends of the Parks of Allen County, Inc. wrote in response to the meeting agenda and HPR. Donnell expressed concern over the project’s Section 106 process, including the concern “that an extreme amount of expenditure has gone into solidifying this alternative, even after the concerns about historic preservation were brought to the attention of the City, contrary to what a Section 106 process would seem to demand, and that after that expenditure, the engineering study will be presented as that alternative at the meeting on December 15, or, if not, at some later date.” The letter also commented on the Brookview Neighborhood, concurring with other consulting party comments on the resource and posing questions regarding the project’s effects on the landscape, and expressed the integral importance of the landscape in the Brookview neighborhood’s integrity. The letter requested considering the inclusion of the Cultural Landscape Foundation in the Section 106 process. (See Appendix F: Correspondence and Meeting Minutes.)

On December 14, 2009, SHPO wrote in response to the Draft HPR. Regarding the APE, SHPO wrote that “we are not yet prepared to comment on the adequacy of the APE.” SHPO commented on the HPR in the same letter, stating, “[o]ur initial impression is that the evaluations of above-ground properties contained in the HPR are probably accurate. However, we would like to hear the comments of other consulting parties at the meeting in Fort Wayne tomorrow before commenting in more detail on the HPR.” SHPO also wrote in response to the archaeological report that “we have not identified any currently known archaeological resources listed in or eligible for inclusion in the [NR] within the area which was surveyed for this project by Archaeological Consultants of Ossian,” but noted that the final alignment was not yet determined and that further archaeological investigations may be necessary. SHPO asked for more information on the project alignment and the purpose and need. (See Appendix F: Correspondence and Meeting Minutes.)

At a consulting party meeting held December 15, 2009, in Fort Wayne, consulting parties expressed concern with the APE used in the HPR, noted the importance of the “park-like setting” to the Brookview neighborhood, and questioned the selection of alternatives. (See Appendix F: Correspondence and Meeting Minutes.)

On January 27, 2010, SHPO responded to minutes of the consulting party meeting held December 15, 2009. SHPO requested more information regarding the purpose and need but stated that perhaps their questions would be answered in the forthcoming information packet for consulting parties. SHPO expressed concern about the purpose and need of the project. SHPO also asked for “clarification” on “the substandard nature of the roadway curvature on State Boulevard,” especially in light of statements from consulting parties “that the curves were intended by Arthur Shurcliff to contribute to a park-like setting for the residential area now known as the Brookview-Irvington Park Historic District, even though the curves were connected to relatively straight, east-west streets on either end that were known as, or later became, State Boulevard.” SHPO also stated “[w]e believe it is important for FHWA to evaluate this project’s purpose and need carefully before the Section 106 consultation proceeds much further. . . Clarifying purpose and need might result in a refinement of those key factors, which, in turn, might require consideration of alternatives that have not been presented to date.” Regarding the APE, SHPO asked some questions given the list of the alternatives provided at the December 15, 2009, consulting party meeting as well as in light of statements from consulting parties. “If . . . diversion of traffic onto other neighborhood streets foreseeably could increase traffic on streets that currently are lightly traveled, it seems to us that there might be indirect effects on historic properties outside the boundaries of the APE as currently proposed. Accordingly, we would appreciate it if further consideration were given to the possibility of such indirect effects and to the possible need to extend the APE to include areas that might be affected.” SHPO also stated that “we want to suggest that, at the appropriate time in the consultation, consideration be given to whether the southern boundary of the National Register-eligible district might have to be drawn at the new State Boulevard alignment, if the project is implemented as currently proposed.” (See Appendix F: Correspondence and Meeting Minutes.)

SHPO wrote on March 10, 2010, in response to the revised meeting minutes from the December 15, 2009, meeting. In the letter, SHPO stated that the Spy Run Bridge had been finalized as a Non-Select, NR-eligible bridge per the Indiana Statewide Historic Bridge Inventory. SHPO restated the understanding that Arthur Shurcliff intended “that part of what is now State Boulevard to have a park-like setting, which seems likely to be lost if the curvilinear character of that part of State Boulevard is diminished and if at least several more houses . . . that contribute to the Brookview-Irvington Park Historic District are demolished.” (See Appendix F: Correspondence and Meeting Minutes.)

On June 15, 2011, Jill D. Downs, chairperson of the Preservation Committee of ARCH, Inc., wrote to the Deputy SHPO regarding American Structurepoint’s May 19, 2011, letter. Downs questioned whether the revised purpose and need would “trigger a new Section 106 review. It also appears as though American Structurepoint has deviated from proper Section 106 procedures by not copying consulting parties on their May 19 correspondence with you.” (See Appendix F: Correspondence.)

On June 16, 2011, John H. Shoaff wrote that as a member of the city council, they “face an unpleasant two-fold task of fighting for a properly democratic, participatory process...” (See Appendix F: Correspondence and Meeting Minutes.)

On June 16, 2012, Todd Zeiger, Indiana Landmarks, sent an email asking for clarification of whether consulting parties were to comment on the May 19, 2012, letter and requesting a thirty day extension to the review period. (See Appendix F: Correspondence and Meeting Minutes.)

On June 17, 2011, Julie Donnell of the Friends of the Parks of Allen County sent an email to American Structurepoint conveying her letter dated June 14, 2011, in which she requested an additional thirty days of review. She expressed surprise that changes were made to purpose and need without “communicating this.” In the text of the email, Donnell wrote: “In short, we believe that the current Section 106 process may have been circumvented by the extensive changes in the Statement of Purpose and would like to have time to respond.” The email also said, “We also continue to be very concerned that this project is being planned in detail before the DHPA has made any findings on the project.” (See Appendix F: Correspondence and Meeting Minutes.)

On July 1, 2011, John H. Shoaff wrote to point out discrepancies in traffic numbers presented. (See Appendix F: Correspondence and Meeting Minutes.)

On July 5, 2011, SHPO responded to American Structurepoint’s letter of May 19, 2011. In their letter, SHPO wrote that it appeared appropriate to expand the APE “if it is foreseeable that traffic will increase significantly on other streets as a result of a limitation of access to or from State Boulevard being cut off or otherwise limited as a result of this project” and stated foreseeable “areas where the character of use of a historic property may be changed by a project could appropriately be included within the Section 106 APE, as well.” SHPO also requested American Structurepoint review previous correspondence and meeting minutes and “make a reasonable effort to respond to questions or issues raised there, if they have not already been dealt with in your May 10 letter.” SHPO also suggested that American Structurepoint share comments “that have been or shortly will be received in response to your May 19 and June 17 letters.” The letter re-stated comments from December 14, 2009, regarding the archaeology report. (See Appendix F: Correspondence and Meeting Minutes.)

Suzanne Slick, of the Irvington Park Neighborhood Association, sent an email on July 6, 2011, expressing disappointment with the project’s evaluation of impacts to neighborhood residents. The letter also stated, “There is little concern for the historic value of the roadway and surrounding neighborhood, little interest in the esthetics of the built structures in our quaint neighborhood, and little interest in its usability.” (See Appendix F: Correspondence and Meeting Minutes.)

On July 7, 2011, Michelle Briggs Wedaman of the Brookview Neighborhood Association emailed American Structurepoint and asked that her email address be updated in the project record and that she would provide comments on behalf of the neighborhood. (See Appendix F: Correspondence and Meeting Minutes.)

At an Agency Coordination meeting held July 13, 2011, SHPO suggested that American Structurepoint coordinate to evaluate if the project would result in a need to change the NR district boundaries. SHPO also suggested that American Structurepoint more specifically address the consulting party issues and comments in coordination. It was also agreed upon that the ACHP should be invited to participate in the State Boulevard project at this stage in the Section 106 process, rather than later. (See Appendix F: Correspondence and Meeting Minutes.)

On August 29, 2011, Suzanne Slick wrote regarding the consulting party comment and response form. Slick wrote regarding the consultation process, “People who understand streets and cities and neighborhoods and quality of life issues and the impact that large public works projects have on historical, environmental, esthetic and safety elements have weighed in against this project with substantial legitimate objections, yet responses are

pat, formulaic, vague and evasive.” Slick expressed concern with the proposed project and provided links to websites associated with various aspects encountered in this project. (See Appendix F: Correspondence and Meeting Minutes.)

At a consulting party meeting held September 1, 2011, consulting parties questioned the response process and whether all comments had been shared. Consulting parties were encouraged to respond to any Section 106 correspondence, even if the thirty day time period had passed. An effort would be made to post all Section 106 documentation on the City of Fort Wayne’s website. Consulting parties suggested that the project include consultation with a professional landscape architect. It was also noted that the State Boulevard curve is included in the Fort Wayne Park and Boulevard System Historic District which is different from the Brookview-Irvington Historic District. SHPO requested the consultant “look at the implications of reduction the width of a new alignment. . .[and]. . . evaluate if such a design would result in fewer historic property impacts or fewer impacts to the Shurcliff design elements.” (See Appendix F: Correspondence and Meeting Minutes.)

On September 2, 2011, at the Agency Meeting with FHWA and INDOT, FHWA stated it would follow-up on its invitation to the ACHP, noting that the ACHP’s involvement in the process would be beneficial. During the meeting it was agreed that American Structurepoint would provide consulting parties with a more elaborate alternatives analysis, would look into developing a Section 106 page for this project on the City of Fort Wayne’s website, and that an addendum to the HPR would be prepared. (See Appendix F: Correspondence and Meeting Minutes.)

The ACHP responded to FHWA’s invitation to join consultation on September 22, 2011. ACHP requested additional documentation in order to “determine whether our participation in the consultation to resolve adverse effects is warranted.” (See Appendix F: Correspondence and Meeting Minutes.)

On November 7, 2011, SHPO responded to the material conveyed August 15, 2011, and September 29, 2011. Regarding the Brookview-Irvington Park Historic District, SHPO stated, “Having considered the marked aerial photograph shown at the last consulting party meeting, we do not believe that the historic district, as a whole, would be rendered ineligible by the preferred alternative.” However, SHPO added, the proposed realignment of State Boulevard within the district “is not an ideal situation from a [NR] boundary delineation standpoint.” Further, SHPO stated, “We think the Brookview-Irvington Park Historic District would suffer a loss of integrity of setting, feeling, and association from the preferred alternative that would exceed the sum of the contributing buildings that would be demolished.” SHPO also offered additional comments from the September consulting party meeting that had not been recorded in the meeting minutes regarding the alternatives analysis. SHPO also questioned the feasibility of converting the existing Spy Run Bridge into a pedestrian bridge. SHPO stated they would also recommend, “where practicable, the curbs or sidewalks of abandoned sections of Eastbrook and State be left in place to recall, at least faintly, Shurcliff’s landscape design of that part of the neighborhood, as was done when most of Westbrook south of State was abandoned to eliminate the Clinton Street-Westbrook intersection and to establish a rain garden.” SHPO also suggested shifting the proposed alignment somewhat to the east to better reflect Kessler’s original plan for connecting State Boulevard. SHPO noted that this change may “result in a somewhat longer and costlier bridge over Spy Run than would be required for the proposed alignment of 3A, but it appears that there could also be cost savings from the acquisition of fewer residences along State Boulevard. Even if the project costs were somewhat higher, we think there could be intangible benefits from preserving more of Shurcliff’s design of the Brookview-Irvington Park Historic District, while largely meeting the city’s purpose and need with an alignment of the new State Boulevard that would be somewhat closer to Kessler’s plan.” (See Appendix F: Correspondence and Meeting Minutes.)

On June 20, 2012, an Agency meeting was held to discuss the State Boulevard Project. At the meeting, American Structurepoint reviewed the responses to the SHPO letter of November 7, 2011, and agreed to send them in writing. It was decided to hold a meeting with consulting parties in early September to discuss the Additional Information HPR, to present the preferred alternative and to discuss the MOA. Mitigation ideas from

that meeting included: Advisory team similar to US 27; Photographic documentation of bridge over Spy Run; Restore character of State Boulevard within the district; and Educational mitigation.

On June 22, 2012, SHPO provided comment on the AI Report. In the letter, SHPO stated, “we agree with the conclusions of the AI Report regarding the eligibility or ineligibility, of properties within the [APE], for inclusion in the [NR].” SHPO agreed that the house at 315 East State Boulevard “does not appear to possess sufficient historical or architectural significance or integrity to be eligible of inclusion in the [NR].” SHPO also commented on the explanatory note contained in the Fort Wayne Park and Boulevard NR nomination form which stated the portion of State Boulevard within the Brookview-Irvington Historic District was individually eligible for the NR. SHPO stated, “we do not consider that comment . . . to confer individual eligibility on State Boulevard or any part of it.” SHPO further stated, “we do not believe that any part of the State Boulevard roadway, curbs, or sidewalks lying within the [APE] is individually eligible” for the NR, but added “[w]e do not disagree, however, with the Fort Wayne Park and Boulevard system nomination identification of the portion of State Boulevard in question as a contributing resource to that historic district.” (See Appendix F: Correspondence and Meeting Minutes.)

Regarding archaeology, SHPO stated, “Please be reminded that if the final alignment contains areas that were not surveyed by Archaeological Consultants of Ossian, then an archaeological reconnaissance of those areas will be required, in order to determine the presence of absence of archaeological resources.” SHPO noted that one example of areas that may need archaeological survey included “a residential lot that was outside the area surveyed, according to the depiction of the surveyed area in the original archaeological report.” If the entire lot would need to be acquired as part of the project, “then we would recommend that consideration be given to whether further archaeological investigation is needed. This might apply even if the alignment of the new roadway is essentially the same as it had been proposed at the outset of the Section 106 review process.” (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated July 31, 2012, the ACHP wrote that “[b]ased upon the information we obtained, we believe our involvement in consultation would be premature at this time. As such, we decline to participate in the consultation at this time.” However, the Council did request to be notified in the event of an Adverse Effect finding and at that time the Council would “re-evaluate the undertaking . . . and advise you whether or not we have changed our decision regarding participation in consultation.” (See Appendix F: Correspondence and Meeting Minutes.)

On August 13, 2012, the Indiana SHPO concurred with the archaeology short report (Stilwell, July 11, 2012) that “no further investigations appear necessary at these additional portions of the project area” and that the office had not identified any archaeological resources listed or eligible for listing in the NR. (See Appendix F: Correspondence and Meeting Minutes.)

At the consulting party meeting held on September 19, 2012, consulting parties were asked to provide input into mitigation for the proposed undertaking. Most comments focused on purpose and need for the project; some spoke about traffic issues. Michelle Briggs Wedaman (Brookview Neighborhood Association) asked for context sensitive solutions at the beginning of the project rather than the end. Susan Haneline (property owner) asked why the owners of the three residences being evaluated to remain were not consulted or asked if they wanted to remain in the homes. Todd Zeiger (Indiana Landmarks) encouraged the involvement of the ACHP because he feels that there was anticipatory demolition as part of a flood control project. He asked that it be noted in this documentation that there is a bifurcation of the district. Tom Cain (City of Fort Wayne) pointed out that everyone needs to recognize that the landscape character is important and the layout of human development patterns on that landscape are the significant components that make-up a substantial part of the historic resources of the neighborhood. The change in those landscape elements needs discussion in the documentation. The visual and special components of the larger landscape need to be understood so they can be addressed in a mitigation discussion. Michael Galbraith (ARCH, Inc.) encouraged ACHP involvement, objected to the change

in historic consultant, asserted that the APE is inappropriate, and raised the question of cumulative impacts. Edward Welling (Friends of the Parks of Allen County) said that mitigation is premature since the APE is not appropriate; the MOA should be postponed until Environmental Assessment is complete. Mitigating for the larger landscape design impacts would create a condition that is more in line with the characteristics planned for the area. This should be the bigger issue addressed rather than the small detail of specific structures. Dr. James Glass (Deputy SHPO) expressed reservations that consensus can be developed for this project; he stated that this meeting was the time for consulting parties to put forth mitigation ideas. John Carr (SHPO staff) requested any ideas on ways to conserve more of the character defining features of the two historic districts, emphasizing the tangible physical features as a priority discussion. Mr. Galbraith objected to the timing of the consulting party meeting; Patrick Carpenter, manager of the INDOT-CRO, said that the timing was established so that consulting parties could discuss mitigation and formulate new ideas. Ms. Wedamen said that she did not believe that the public process has been followed. (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated September 14, 2012, Karl Dietsch wrote regarding a safety issue in the proposed project area. (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated September 17, 2012, 11 residents of the Brookview Neighborhood jointly submitted a letter regarding the State Boulevard project. The letter expressed support of the project. The residents stated, “We STRONGLY support the buyout of our homes thereby allowing for State Boulevard to be relocated to the south of its current location” and went on to conclude, “We are NOT in favor of finding ways to retain our homes within the footprint of the project; we feel this will lessen our property values, continue to cause issues with access to our homes, and leave the constant flooding issue unresolved.” (See Appendix F: Correspondence and Meeting Minutes.)

Sara Kruger Geyman, a member of the public, wrote in response to the meeting held September 19, 2012. (Note that the letter conveying responses to the consulting party meetings was dated August 21, 2012, and is likely a typo.) Geyman expressed concern “that residents are not and have not been consulted in this matter” and expressed dissatisfaction with meeting’s facilitation. Geyman offered comments to the project in general, objecting to its necessity and, regarding Section 106, stating: “Mitigation is premature in a plan and a process that has been faulty from the beginning. It is a proverbial lollipop stuck in the hands of resident to quiet them down and distract them from the truth.” (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated October 1, 2012, Susan R. Haneline, a Brookview neighborhood homeowner, expressed support for the project, noting that the current problems with flooding and bridge deterioration “do nothing to showcase what IS historical about the neighborhood.” Haneline added, “We CAN retain the beauty of the neighborhood, we CAN celebrate its design and vision. What we don’t have to do is force homeowners to retain properties that are simply, in and of themselves, of no historic value, nor necessary to the overall feeling of the neighborhood.” Haneline’s letter also included photographs showing recent flooding in the neighborhood. (See Appendix F: Correspondence and Meeting Minutes.)

Susan Haneline submitted an additional letter dated October 2, 2012. Haneline stated the current proposed design, “seems . . . to actually enhance historic vision, not cause it to be destroyed.” Haneline offered suggestions to “respect the historic vision,” including: 1.) “Installing historically correct lighting in the area”; 2.) “Plantings and green space that gives the area a park like feel, such as period style benches, grouping of trees and flowers, perhaps even brick style sidewalks”; 3.) “stone or brick entrance pillars for the neighborhood”; 4.) adding trees and flower beds to the bifurcated State Boulevard; 5.) “small monuments” conveying the history of the neighborhood and Arthur Shurcliff; 6.) “find ways to encourage people both inside and outside the neighborhood to spend time in the open green spaces.” (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated October 3, 2012, John Shoaff wrote regarding the project, consulting party meeting, and 800.11 materials. Shoaff wrote, "I cannot support the current State Boulevard widening plan in anything like its present form. . ." In particular, Shoaff objected to plans to elevate the road as a "perversion of the proper use of the 'Bypass and Arterial concept' . . ." Shoaff identified "two legitimate needs" in the Brookview neighborhood: the repair or replacement of the bridge over Spy Run Creek and the elimination of a "blind spot at the foot of State Boulevard, near the intersection with Westbrook." Shoaff stated that project plans should address these needs but be "minimally harmful to the historic district." Shoaff added that discussion of project planning and mitigation discussion "should await the outcome of the Environmental Assessment." (See Appendix F: Correspondence and Meeting Minutes.)

Shoaff also included comments on the September 19, 2012, consulting party meeting. Shoaff responded to comments received by Michelle Briggs Wedaman from FHWA's representative. Shoaff objected to the facilitation of the meeting stating "the proceedings were far from impartial, and were guaranteed to further alienate citizens from their government."

Shoaff enclosed letter "signed by 14 neighborhood association presidents and one vice-president, representing over 11,000 households, that was sent to the mayor and all city councilmen." The letter objected to the State Boulevard project. (See Appendix F: Correspondence and Meeting Minutes.)

Also on October 3, 2012, Suzanne Slick wrote regarding the project and the consulting party meeting of September 19, 2012. Slick stated that not building the project is preferable to mitigation and objected to the facilitation of the consulting party meeting. The letter re-stated some comments offered previously by consulting parties regarding the Purpose and Need and design. Slick objected to the traffic data previously supplied by American Structurepoint and offered two examples in which she found low-volume traffic while utilizing the State Boulevard. Slick stated the APE was inappropriate. (See Appendix F: Correspondence and Meeting Minutes.)

Julie Downs, Friends of the Parks of Allen County, submitted comments via a letter dated October 3, 2012. Downs stated the Friends of the Parks of Allen County agreed with the finding of adverse effect for the project but added "any discussion of mitigation is, at best, premature; at worst, the proposed [MOA] is a bad faith attempt to confuse an already complicated and unfair process." Downs also stated the "APE is not comprehensive enough and should include historic districts along State Boulevard" and "it is only prudent to postpone any and all discussion of mitigation until after the Environmental Assessment is complete." Finally, on behalf of members of the Friends of the Parks of Allen County who attended the September 19, 2012, consulting party meeting, Downs objected to the facilitation of the meeting and concluded, "Under these circumstances, the public is not being served properly at all." (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated October 4, 2012, Jill Downs wrote regarding the 800.11(e) and draft MOA. Downs agreed with the project's adverse effect finding but noted "the process that has been undertaken regarding the development and progression of this project has created a rather hostile environment resulting in a breakdown of the needed understanding and collaboration" and pointed to the September 19, 2012, consulting party meeting as proof of this breakdown. She stated it was premature to discuss mitigation because the Environmental Assessment had not been completed; the bifurcation of the district, elevation of State Boulevard, and the Pufferbelly Trail project should be added to the list of adverse effects; the Pufferbelly Trail project should be incorporated into the effects discussion; and the project has not fully accounted for the previous removal of several homes by the City of Fort Wayne which creates the impression of less impact as a result of the project. Downs concluded by stating she did not see the need to reconstruct State Boulevard. (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated October 4, 2012, Michael Galbraith of ARCH, Inc., wrote formally requesting an extension of the thirty-day comment period for the proposed MOA and mitigation measures. Galbraith stated, "We do not in any form, fashion, or manner concur with the proposed mitigation as present either in the draft supplied with the

FHWA 4(f) compliance document or in the presentation narrated by American Structurepoint and Dr. Weintraut. Galbraith also stated that “we fail to understand how a draft MOA can be developed prior to all of the information being in hand about potential design alternatives to avoid impact.” (Please note that in an email sent October 5, 2012, INDOT declined to extend the comment period for this project, noting consulting parties and the public would have an opportunity to comment on the Environmental Assessment.) (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated October 4, 2012, Michelle Briggs Wedaman of the Brookview Neighborhood Association, wrote requesting a thirty-day extension of the consulting party comment period to incorporate the material provided on September 18, 2012, into their comments. (Please note that in an email sent October 5, 2012, INDOT declined to extend the comment period for this project, noting consulting parties and the public would have an opportunity to comment on the revised Section 800.11 documentation in the Environmental Assessment.) Wedaman stated that previous questions from the December 2009 and September 2011 consulting party meetings “have remained unanswered,” particularly those dealing “Purpose and Need, exploration, documentation and analysis of current conditions and likely impacts of this project, and about the area of impact of this project.” Wedaman questioned how an appropriate discussion of mitigation could take place prior to the completion of the environmental assessment. (See Appendix F: Correspondence and Meeting Minutes.)

The SHPO wrote in response to the project in a letter dated October 4, 2012. SHPO concurred with the opinion of the archaeological short report, the Section 106 finding of effect and that the Fort Wayne Park and Boulevard System, Brookview-Irvington Park Historic District, and Bridge on State Boulevard over Spy Run would all be adversely affected as part of this undertaking. SHPO expressed concern “about the extent to which the removal of all houses along the south side of existing State Boulevard between Terrace Road and Eastbrook Drive would change the setting of that interior part of the Brookview-Irvington Park Historic District and suggested some minimization measures. In particular, SHPO wondered if “it would be feasible to eliminate the sidewalk along the north side of the proposed new alignment of the reconstructed State Boulevard between Terrace Road and Eastbrook Drive.” SHPO expressed sympathy for the preference of some property owners along the south side of State Boulevard who preferred to have their entire property, rather than a smaller portion, purchased; “however, we think that preserving even three houses (112, 134, and 138 East State Boulevard) along the south side of the existing State Boulevard that contribute to the Brookview-Irvington Park Historic District would help to reduce, but not eliminate, the adverse effect.”

SHPO also offered suggestions for design for minimizing impacts and suggestions for mitigation, including an advisory team, use of context-sensitive designs, photographic documentation of the bridge over Spy Run. (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated October 4, 2012, Todd Zeiger of Indiana Landmarks—Northern Regional Office wrote formally requesting a thirty-day extension on the comment period in light of the material conveyed September 18, 2012. (Please note that in an email sent October 5, 2012, INDOT declined to extend the comment period for this project, noting consulting parties and the public would have an opportunity to comment on the Environmental Assessment.) Zeiger stated “We do not in any form fashion or manner concur with the proposed mitigation as presented either in the draft MOA supplied with the FHWA 4(f) compliance document.” Zeiger added “we fail to understand how a draft MOA can be developed prior to all of the information being in hand about alternative design alternatives to avoid impact. Additional time is needed to evaluate that information and assess it within the context of the other informant provided in the 4(F) document.” (See Appendix F: Correspondence and Meeting Minutes.)

In a letter dated October 4, 2012, Tom Cain, Fort Wayne urban designer and Creager Smith, Fort Wayne historic preservation planner, wrote regarding the project. Both agreed with the project’s adverse effect finding. The letter listed twenty-one specific adverse effects of the project on the landscape to serve as the “potential basis of mitigation measures.” Cain and Smith also stated “we are available to assist in the development of mitigation

design features that can restore and recollect historic features where possible, and to integrate new features within the historic contexts of the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District. We agree with the proposal put forth in the draft Memorandum of Agreement to form an Advisory Team, and we are both available to serve on a team.” (See Appendix F: Correspondence and Meeting Minutes.)

On October 15, 2012, Tom Cain, City of Fort Wayne, called W&A to inquire whether SHPO will change their assessment of project impacts. Cain explained that the City of Fort Wayne is ready to prepare mitigation but wanted to make suggestions within the context of SHPO’s assessment of project impacts so that the City may address all adverse effects. Cain also stated that impacts to the Brookview neighborhood should be enumerated. (See Appendix F: Correspondence and Meeting Minutes.)

On October 16, 2012, W&A contacted Tom Cain in response to his phone call the previous day. W&A explained that American Structurepoint was very glad to have his input on this project and, at a minimum, would consult with him prior to the agency meeting. Cain spoke about the landscape changes that would take place as a result of the undertaking, particularly the changes from private to public space around the undertaking. He said that originally the areas along Spy Run had been grassy plain with a tree canopy; secondary growth was a result of a lack of maintenance beginning in the 1970s. Cain stated he would like for mitigation to deal with changes in scale that will occur; tree planting should occur within three feet of the roadway (and not the standard ten feet required on highways.) Cain stated this would change the scale of the undertaking for the residents. Cain also stated he would convey additional mitigation suggestions via email and stated the importance of achieving the “right feel” for the space. (See Appendix F: Correspondence and Meeting Minutes.)

On November 15, 2012, SHPO wrote in response to American Structurepoint’s offer to draft specific language for the MOA. (See Appendix F: Correspondence and Meeting Minutes.)

On December 18, 2012, American Structurepoint invited representatives from FHWA, INDOT, SHPO, and the City of Fort Wayne to meet to discuss landscape mitigation that has been developed by the City of Fort Wayne. Thomas Cain (landscape architect/City of Fort Wayne) made the presentation. Cain’s plan looked at larger scale issues of community rather than focusing on the individual resources. He wished to borrow a pastoral model of streets with houses on one side of the road, while retaining visual site lines as a ghost vision of the Shurcliff plan of the plat. He advocated use of native trees and disguising the change in slope by using larger trees at the periphery. Smaller trees would recall the footprint of the houses; he suggested the use of curbs, trees, and historic plaques to educate the public regarding the lost elements of the district. (See Appendix A, Plans.) Dr. James Glass (SHPO) expressed appreciation for the effort Mr. Cain had put forth for a thoughtful landscape plan. Dr. Glass said that his office needed time to digest but that he understood Mr. Cain’s point that in a Section 106 sense, there was a need to mitigate for the houses and for the loss of historic character. He also understood that there are larger issues of flood control and engineering that make this project difficult. There was discussion of other resources that may be preserved as far as compensation for the lost historic resources (houses and landscaping). It was agreed that SHPO would be given time to digest the landscape design presented at the meeting and that the City and its consultants would look for additional ways to mitigate, such as grants to rehabilitate the facades of existing houses (if practical and legally viable to do so), landscaping along the waterways, and rehabilitating an existing bridge for the loss of the bridge over Spy Run. Mary Ann Naber (FHWA preservation officer) suggested that the attendees look at the mitigation provided in Tampa. (See Appendix F: Correspondence and Meeting Minutes.)

On June 18, 2014, a Public Hearing was held for the proposed project. At the Public Hearing and in a letter dated July 18, 2014 (Appendix A – pages 1 to 3) ARCH, Inc. presented an alternative prepared by Storrow Kinsella Associates and Transportation Solutions, LLC. Storrow Kinsella Associates and Transportation Solutions, LLC were commissioned by ARCH, Inc., Indiana Landmarks, Friends of the Parks, and the

Brookview-Irvington Park Neighborhood Association (Appendix B – pages 4-14) to examine the background research developed for the proposed project to determine if there was an alternative that better protected the neighborhood, fulfilled the purpose and need for the project, was prudent and feasible, and avoided, minimized or mitigated the adverse effect to the neighborhood. As such, it was determined through coordination with the FHWA and INDOT that the submitted alternative should be evaluated as part of the environmental process.



CITY OF FORT WAYNE

THOMAS C. HENRY, MAYOR

November 20, 2014

Trevor Mills, P.E., Local Planning Engineer
Indiana Department of Transportation
100 N. Senate Avenue, Room N955-LPA
Indianapolis, IN 46204

**RE: City of Fort Wayne LPA Project Des 0400587 – State Boulevard Realignment –
FHWA Parcel Review**

Dear Mr. Mills:

Thank you for the opportunity to meet with you and the INDOT Real Estate Division on November 17th to discuss the FHWA parcel review of the above project. In their summary findings of an audit of seven parcels conducted on October 2, 2014, FHWA concluded that “...the City of Fort Wayne failed to comply with requirements of the URA in carrying out a number of acquisitions and relocations for the project. FHWA has determined that the noncompliance is a result of both the continuous failure of the City to appropriately implement and oversee the acquisition and relocation programs”. The findings continue to state that “...parcels were acquired with the intent to include them in a federal aid project but the Uniform Act was not followed”. I am hereby writing this letter to clarify the City of Fort Wayne’s position on how these parcels were acquired and our intent on how they were to be used.

Built on the banks of the St. Mary’s, St. Joseph and Maumee rivers, the City of Fort Wayne has a deep history of flooding that has impacted many of our property owners. Properties built in flood prone areas prior to adoption of flood control regulations have been particularly susceptible and as urbanization has occurred, these properties have been increasingly prone to flood damage. In 1982, we had one of the worst floods on record, which brought national attention to the area under the presidency of Ronald Reagan.

Since then we have been working proactively to identify the worst areas and address them with a multitude of strategies, including but not limited to construction of levees, flood walls, detention basins and voluntary buyouts. In cooperation with the US Army Corps of Engineers (USACE), we have constructed over 10 miles of flood protection along the banks of the three rivers and their tributaries at a cost of over \$50 million, with 75% participation by the USACE. This includes 8.4 miles of earthen levees and 1.7 miles of concrete flood walls. This project was initiated in 1995 and was constructed in four phases, with the final phase completed in September of 2001. We have also added on to this inventory of flood protection infrastructure by building over 11,000 feet of locally funded earthen levees and concrete floodwalls.

In 2003 we suffered another major flooding event after which we approached the Federal Emergency Management Agency (FEMA) and the USACE for additional assistance to provide more flood protection. At that time, we were advised that due to the limited availability of funding, it would take several years for the necessary funds to be appropriated through these federal agencies. In 2005, after yet another major flood in January, in an effort to expedite this process, Mayor Graham Richard and the City Council approved the sale of a \$12 million stormwater utility bond to continue with flood protection activities at a local level. This effort received super majority support from City Council and overwhelming support from the community. These activities included construction of flood walls and levees as well as a voluntary home buyout program. These buyouts were prioritized so that we addressed the most susceptible properties first.

We also conducted several studies in conjunction with FEMA, the USACE, and the Maumee River Basin Commission. These studies were conducted by Rust Engineering (1996) and Christopher Burke Engineering (2005). The purpose of these studies was to develop a flood protection plan with strategies and priorities laid out in detail. The studies included extensive modeling, geotechnical analyses and public outreach and input. The outcome of the studies was a recommendation of a mix of strategies which included construction of flood walls, earthen berms, flood proofing of properties and voluntary buyouts, and we proceeded to implement these recommendations using a mix of federal and local funding sources.

The Spy Run Creek area by State Boulevard and Clinton Street is one of several tributaries that are prone to quick and extreme flooding. This area was hit severely in 2003 as well as 2005. The recommendations in the Christopher Burke study included the acquisition of 23 homes along Eastbrook and Westbrook Drives located on the bank of the Spy Run Creek between Clinton Street and State Boulevard, removal of these homes and providing a riparian green space along with an earthen berm to protect properties located behind them. This process was carried out along Westbrook Drive in a project that was completed in 2008.

While we were in the process of carrying out the Christopher Burke study recommendations along Eastbrook Drive in 2008, the preliminary engineering design of the State Boulevard widening project was initiated as a federal aid project. Prior to 2008, State Boulevard was only intended to be a widening project as identified in the Northeast Indiana Regional Coordinating Council's (NIRCC) Transportation Improvement Program (TIP). No information was provided in the TIP as to what real estate impacts this project could incur since no change to the alignment had been considered until the design was initiated. Thus it was not known at the time the project was added to the TIP that properties involved in the voluntary buyout would be within the footprint of the project. As development of the project got underway, it became evident that the road would have to be realigned because of the sub-standard horizontal alignment in the vicinity of Spy Run Creek. The current road alignment creates and contributes to a major traffic safety issue for the City.

Upon determination that a new road alignment would be needed that would place the new roadway in the area where the voluntary flood buyouts were going on, the City on its own cognizance contacted INDOT and requested a meeting to discuss how to proceed from that point. On May 23, 2008, we received guidance from FHWA and INDOT through David Didion, who

was the Environmental Scientist at INDOT at the time. This guidance was also reaffirmed at a meeting held on June 26, 2008 at the Fort Wayne District offices of INDOT. After this meeting, the City received an email from Jason Kaiser, Fort Wayne District Environmental Manager, detailing the steps to follow from that point forward and the City has followed them. Attached are several emails that are related to the direction that the City was given prior to and at this meeting. The City then stopped any further land acquisitions in accordance with INDOT's directive until ROW acquisition approval is received from INDOT. The City thought the matter was resolved at that point based on the written directive received.

From 2008 to date, the City has been working through the preliminary engineering along with the environmental assessment as determined necessary for this project. The City has worked hard to be fair and open on this project by holding over 50 meetings to discuss the project components with all stakeholders. We were therefore surprised to receive the request for an audit of the ROW acquisitions for the State Boulevard project and the seven parcels acquired as a part of the voluntary flood buy-out programs. In continued cooperation with INDOT and the FHWA, we provided the parcel files to INDOT with the request to be included in any audit proceedings held.

Unbeknownst to the City, the seven files were audited by FHWA on October 2nd. According to the audit summary, the seven parcel files were audited at the INDOT District offices in Fort Wayne. This audit was performed by Colleen Smith, Realty Specialist with the Federal Highway Administration without the previously noted correspondence and meeting minutes, which would have provided a background history of these acquisitions.

The audit included parcels designated as 21A, 21B, 21C, 21D, 21E, 21F and 21G. The acquisitions of parcels 21A, 21B, 21C, 21D, 21E and 21G all occurred between the dates of March 2, 2007 and September 7, 2007 (before the June 26, 2008 meeting). Parcel 21F was not considered to have been in the footprint of the realignment project based on the conceptual drawing that had been developed at the time. The voluntary acquisition of that parcel continued – the effective date of the appraisals are May 15, 2008 and May 21, 2008 respectively, the offer to purchase was presented on July 9, 2008, accepted by the owners July 10, 2008 and was closed on September 26, 2008. All of these parcels were acquired per IC 36-1-10.5 using 100% local funds. (Refer to attached for conceptual drawing and location of parcels included in audit). While these parcels were not impacted by the existing roadway, they do fall within the proposed realignment of State Boulevard.

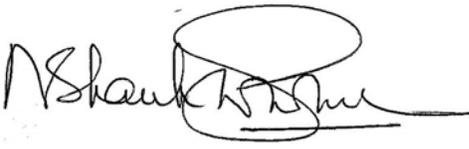
We have also developed a concurrent time line of both the flood fighting activities and the State Boulevard project to better show how these activities occurred. The 40 some items clearly show how both activities developed over time. The City in no way attempted to circumvent the land acquisition requirements on federally funded roadway projects but took the positive step of bringing a potential conflict to the attention of INDOT and FHWA so that it could be proactively resolved in the early stages of the project development.

In summary, we greatly appreciate the importance and need to comply with all requirements associated with federal aid projects. In this case, however, because the seven parcels were all purchased as a part of the City's well planned, self-funded flood mitigation program and the parcels were almost all purchased before any need or desirability of the street realignment

requiring use of the parcels, the record is clear that our sole intent in purchasing these properties was flood mitigation and only after they were purchased for such flood mitigation did we begin contemplating realigning State Boulevard using these parcels. And when we realized realignment might be optimal, we immediately sought direction from INDOT and FHWA and commenced following the requirements of the URA.

The City is hereby requesting that this audit be rescinded and the project be allowed to move forward without further delay. We still have many homeowners who cannot occupy their irreparably damaged homes or they have multiple mortgages on their properties while waiting for over 6 years to be bought as a part of this project. They are suffering both personal safety issues and financial hardships until this can be resolved. We wish to complete the acquisition of the remaining flood prone parcels as soon as possible following all URA requirements so that these home owners can be removed from further exposure to flooding of their properties. Please let us know what can be done to expedite this process if at all possible. If you would like to discuss this further or need more information, please do not hesitate to contact me.

Sincerely

A handwritten signature in black ink, appearing to read "Shan R. Gunawardena". The signature is written in a cursive style with a large, prominent initial "S".

Shan R. Gunawardena, P.E., PTOE
City Engineer

Attachments

Cc: Bob Kennedy, City of Fort Wayne – Public Works
Jason Kaiser, INDOT, Fort Wayne District
Dan Avery, NIRCC
Tim Pape, Carson Boxberger & Associates

Shan Gunawardena

From: Didion, David <ddidion@indot.IN.gov>
Sent: Friday, May 23, 2008 8:50 AM
To: Ross, David; Kimberly A.Stier; Shan Gunawardena; Scott Crites
Cc: Kaiser, Jason; Fitch, Michael; Krueckeberg, John; Wilson, Jarrod; Armstrong, David; Richard Zielinski; Christopher Murphy
Subject: Des 0400587, State Blvd. Realignment

David, Shan, Kim, and Scott,

Here is the guidance as discussed by INDOT and FHWA on the State Blvd. widening and realignment in regard to the properties within the new alignment corridor:

It has been determined the previous purchases by the voluntary floodplain relocation fund of Fort Wayne are going to be considered previously owned properties, purchased and cleared under a separate program of local funds, and were in no way an attempt to circumvent federal regulations. With that, this situation needs to be discussed under the cumulative effects section of the CE. In which, documentation showing the timing and reasoning for the previous acquisitions and demolitions should be explained. Also insert the above statement that INDOT and FHWA do not believe the take was an avoidance of federal regulations. To show evidence of not trying to avoid federal regulations, explain the changes made for acquisition of properties once the corridor was in place; that is, explain the current plans to purchase and demolish homes within the corridor were stopped and federal regulations will be implemented to further clear the right-of-way.

So, the short of it, the purchasing and demolition of the homes within the corridor by the floodplain voluntary acquisition must be stopped. Federal regulations for the purchase and demolition of these homes must be followed and can be coordinated with John Krueckeberg at INDOT Fort Wayne District for right-of-way acquisition. The homes previously purchased and demolished are a separate project and will be discussed in the environmental document as described above.

If you have any questions or concerns please feel free to contact me.

Thanks,

David Didion
Environmental Scientist
INDOT Fort Wayne District
5333 Hatfield Road
Fort Wayne, IN 46808
(260) 969-8302

Shan Gunawardena

From: Kaiser, Jason <JASONKAISER@indot.IN.gov>
Sent: Monday, July 07, 2008 9:14 AM
To: Shan Gunawardena
Subject: FW: LPA project Des # 0400587 State Blvd re-alignment and INDOT project des # 0101527/0200914 US 27 bridge replacement/re-alignment
Attachments: 0400587 meeting attendees 6-26-08.pdf
Follow Up Flag: Follow up
Due By: Tuesday, July 08, 2008 3:30 PM
Flag Status: Completed

Shan,

Please take a look and let me know if the city has any comments before I forward this to FHWA. Sorry this took so long to get out to you.

On June 26th 2008, the city of Fort Wayne, INDOT, and FHWA met to discuss the above projects and their relationship to a local floodplain buyout program that was initiated prior to the projects and is still ongoing. Attached is a list of the meeting attendees, not listed are Ken Woodruff and Janice Osadczuk who attended via teleconference. Steve Penturf was also called late in the meeting to discuss a parcel that may or may not be needed for 0101527/0200914. The following are the procedures discussed in the meeting that must be followed for federal funds to be available for 0400587 and 0101527/0200914.

1. All offers currently in place on properties in the footprint of 0400587 must be rescinded and acquisition must continue under the methods described in the Uniform Relocation Act of 1970.
2. Those properties in the footprint that will be purchased in #1 must also be cleared by the SHPO's office as not being eligible for the national register of historic properties.
3. Properties in the footprint of 0400587 that were already purchased before 5-19-08 must be clearly defined in the NEPA documentation. An explanation given as to why they were purchased must also be included in order to demonstrate that they were not purchased to circumvent the NEPA process.
4. The property on the NW corner of US 27 and Eastbrook is not in the footprint of 0400587 and may or may not be needed in the development of 0101527/0200914. Since this is still unknown at this time, it would not be a violation of the uniform act for the city to continue purchasing this property under the local buyout program. If the state ends up needing the property, they can acquire it from the city without jeopardizing federal funds.

The above is my understanding of the conclusions reached during the meeting. If you have any corrections or additions please let me know.

Sincerely,

Jason Kaiser P.E.

Environmental Scoping Manager
INDOT Fort Wayne District
5333 Hatfield Rd.
Fort Wayne, IN 46808
260-969-8234

Shan Gunawardena

From: Kaiser, Jason <JASONKAISER@indot.IN.gov>
Sent: Wednesday, July 09, 2008 9:26 AM
To: Shan Gunawardena; Dave Ross; Krueckeberg, John; Shaffer, Benjamin; Wilson, Jarrod; Fitch, Michael
Subject: FW: LPA project Des # 0400587 State Blvd re-alignment and INDOT project des # 0101527/0200914 US 27 bridge replacement/re-alignment

All,

Please see Janice's comment below. Since her and Ken both concurred I would ask that everyone use the procedure described below. If any one has any questions please let me know.

Sincerely,

Jason Kaiser P.E.

Environmental Scoping Manager
INDOT Fort Wayne District
5333 Hatfield Rd.
Fort Wayne, IN 46808
260-969-8234

-----Original Message-----

From: Osadczuk, Janice <FHWA> [<mailto:Janice.Osadczuk@fhwa.dot.gov>]
Sent: Wednesday, July 09, 2008 7:51 AM
To: Kaiser, Jason; Woodruff, Kenneth
Subject: RE: LPA project Des # 0400587 State Blvd re-alignment and INDOT project des # 0101527/0200914 US 27 bridge replacement/re-alignment

The procedures listed below are accurate.

-----Original Message-----

From: Woodruff, Kenneth [<mailto:Kenneth.Woodruff@fhwa.dot.gov>]
Sent: Wednesday, July 09, 2008 7:25 AM
To: Kaiser, Jason; Osadczuk, Janice <FHWA>
Subject: RE: LPA project Des # 0400587 State Blvd re-alignment and INDOT project des # 0101527/0200914 US 27 bridge replacement/re-alignment

All I would add is that the City should make offers to those property owners within the foot print using their power of eminent domain.

From: Kaiser, Jason [<mailto:JASONKAISER@indot.IN.gov>]
Sent: Tuesday, July 08, 2008 5:08 PM
To: Woodruff, Kenneth; Osadczuk, Janice <FHWA>
Subject: FW: LPA project Des # 0400587 State Blvd re-alignment and INDOT project des # 0101527/0200914 US 27 bridge replacement/re-alignment

Ken and Janice,

Please review the procedures outlined below that the city of Fort Wayne and INDOT feels was the outcome of our meeting. Please let me know if either of you would like to make any clarifications.

Sincerely,

Jason Kaiser P.E.

Environmental Scoping Manager
INDOT Fort Wayne District
5333 Hatfield Rd.
Fort Wayne, IN 46808
260-969-8234

-----Original Message-----

From: Shan Gunawardena [<mailto:Shan.Gunawardena@ci.ft-wayne.in.us>]

Sent: Tuesday, July 08, 2008 4:32 PM

To: Kaiser, Jason

Cc: Bob Kennedy

Subject: RE: LPA project Des # 0400587 State Blvd re-alignment and INDOT project des # 0101527/0200914 US 27 bridge replacement/re-alignment

Jason

Looks good. Please forward a copy of the final minutes for our records.

Shan R. Gunawardena, P.E., PTOE

Traffic Engineer - City of Fort Wayne

(260) 427-6169 (direct)

(260) 410-2084 (mobile)

From: Kaiser, Jason [<mailto:JASONKAISER@indot.IN.gov>]

Sent: Monday, July 07, 2008 9:14 AM

To: Shan Gunawardena

Subject: FW: LPA project Des # 0400587 State Blvd re-alignment and INDOT project des # 0101527/0200914 US 27 bridge replacement/re-alignment

Shan,

Please take a look and let me know if the city has any comments before I forward this to FHWA. Sorry this took so long to get out to you.

On June 26th 2008, the city of Fort Wayne, INDOT, and FHWA met to discuss the above projects and their relationship to a local floodplain buyout program that was initiated prior to the projects and is still ongoing. Attached is a list of the meeting attendees, not listed are Ken Woodruff and Janice Osadczuk who attended via teleconference. Steve Penturf was also called late in the meeting to discuss a parcel that may or may not be needed for 0101527/0200914. The following are the procedures discussed in the meeting that must be followed for federal funds to be available for 0400587 and 0101527/0200914.

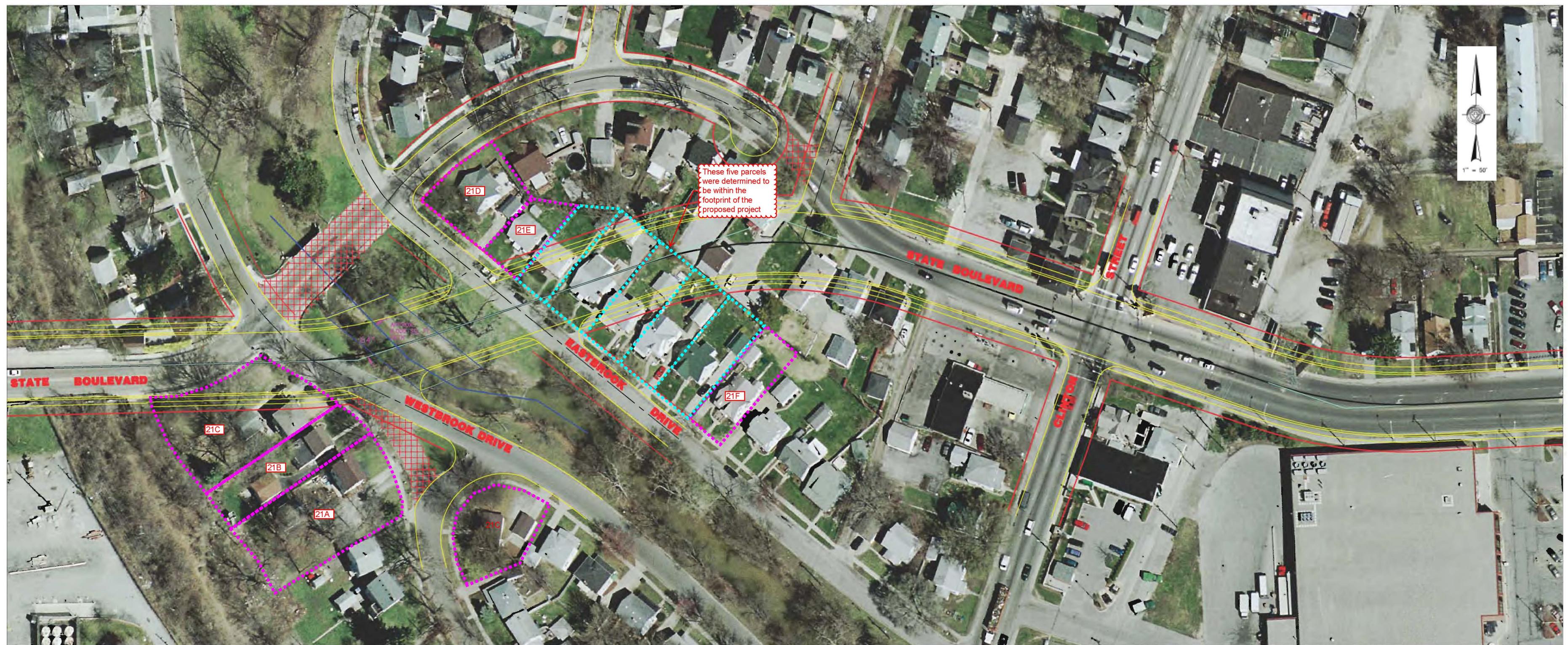
1. All offers currently in place on properties in the footprint of 0400587 must be rescinded and acquisition must continue under the methods described in the Uniform Relocation Act of 1970.
2. Those properties in the footprint that will be purchased in #1 must also be cleared by the SHPO's office as not being eligible for the national register of historic properties.
3. Properties in the footprint of 0400587 that were already purchased before 5-19-08 must be clearly defined in the NEPA documentation. An explanation given as to why they were purchased must also be included in order to demonstrate that they were not purchased to circumvent the NEPA process.
4. The property on the NW corner of US 27 and Eastbrook is not in the footprint of 0400587 and may or may not be needed in the development of 0101527/0200914. Since this is still unknown at this time, it would not be a violation of the uniform act for the city to continue purchasing this property under the local buyout program. If the state ends up needing the property, they can acquire it from the city without jeopardizing federal funds.

The above is my understanding of the conclusions reached during the meeting. If you have any corrections or additions please let me know.

Sincerely,

Jason Kaiser P.E.

Environmental Scoping Manager
INDOT Fort Wayne District
5333 Hatfield Rd.
Fort Wayne, IN 46808
260-969-8234



These five parcels were determined to be within the footprint of the proposed project

----- Parcels that were determined to be within the footprint of the proposed project at June 26, 2008 meeting

----- Parcels that were subject to FHWA audit

Spy Run & State Boulevard Planning, Design and Construction Timeline

Description	Date
1. Maumee River Basin Flood Control Master Plan by CBB	5/1995
2. Spy Run Watershed Master Plan by Rust completed	2/1996
3. Reconnaissance Study Section 905(b) by USACE completed	10/27/2000
4. Cross Creek Detention Basin Study by Schenkel Schultz Arch.	12/30/2001
5. State Blvd – Spy Run Ave to Clinton St added to TIP for PE	6/17/2003
6. State Blvd – Spy Run Ave to Clinton St added to TIP for PE/RW	5/4/2004
7. State Boulevard widening added to FTW STIP for PE	9/4/2004
8. Spy Run Flood Protection Study by CBB completed	3/2005
9. City Council Flood Committee Master Plan review	3/22/2005
10. State Blvd reconstruction updated in STIP for PE/RW	3/8/2006
11. State Blvd – Cass St to Spy Run Ave added to TIP for PE/RW	6/12/2006
12. Voluntary home buy-out along Spy Run started	9/2006
13. State Blvd Realignment project authorized for Federal Aid	1/2007
14. Westbrook home demolitions completed	10/2007
15. Westbrook rain gardens completed	5/2008
16. City requests meeting with INDOT to discuss Land Acquisition after conceptual alignment was established	5/2008
17. State Blvd – Cass St to Spy Run Ave added to TIP for CN(2)	6/19/2008
18. Meeting at INDOT FTW office to discuss Land Acq.	6/26/2008
19. Public Input Meetings held on conceptual alignment	7/2008 – 1/2014
20. FTW City Council approved PE Contract with Amer. Str.	2/2009
21. CE Level 4 initiated	3/2009
22. First Section 106 Consulting Parties meeting	12/15/2010
23. Second Section 106 Consulting Parties meeting	9/01/2011
24. Environmental Study changed to an Environmental Assessment	1/10/2012
25. Third Section 106 Consulting Parties meeting	9/19/2012
26. Draft EA submitted to INDOT/FHWA	6/25/2013
27. INDOT/FHWA comments received	8/20/2013
28. Updated EA submitted back to INDOT/FHWA	10/8/2013
29. Additional INDOT/FHWA comments received	10/31/2013
30. Updated EA submitted back to INDOT/FHWA again	11/4/2103
31. FHWA requests a conference call with INDOT and Consultant	11/18/2013
32. Further comments on EA from FHWA received	11/19/2013
33. Updated EA submitted again to INDOT/FHWA	12/18/2013
34. Further comment on EA received from FHWA	12/19/2013
35. “Least Harm Analysis” Conference call with all parties	1/14/2014
36. Arch Alternative proposal received	2/13/2014
37. Public Hearing held at Northside HS Cafeteria	6/18/2014

38. FHWA request for ROW/Land Acq info to INDOT	7/29/2014
39. INDOT request for ROW/Land Acq information	7/30/2014
40. ROW/Land Acquisition info submitted to INDOT	8/2014
41. Additional Information for EA submitted to INDOT	9/15/2014
42. Public Hearing certified	9/16/2014
43. FHWA audit conducted at INDOT Fort Wayne District Office	10/2/2014
44. FHWA audit results received	10/27/2014
45. City response letter to FHWA audit comments sent to INDOT	11/5/2014
46. Scheduled review meeting at INDOT central office	11/17/2014



AMERICAN
STRUCTUREPOINT
INC.

ENVIRONMENTAL ASSESSMENT
Des. No. 0400587

State Boulevard Reconstruction Project
State Boulevard between Spy Run Avenue and Cass Street
including the bridge over Spy Run Creek

City of Fort Wayne
Allen County, Indiana

Prepared for

City of Fort Wayne, Board of Public Works
Citizen Square
200 East Berry Street, Suite 240
Fort Wayne, Indiana 46802

Prepared by

American Structurepoint, Inc.
7260 Shadeland Station
Indianapolis, Indiana 46256-3957

May 2, 2014

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

**FHWA-Indiana Environmental Document
CATEGORICAL EXCLUSION/ENVIRONMENTAL ASSESSMENT FORM
GENERAL PROJECT INFORMATION**

Road No./County:	State Boulevard/Allen County
Designation Number:	0400587 (Phase 1, Terrace Road to Spy Run Avenue -1005151, Phase 2, Cass Street to Terrace Road -1005154, Pedestrian Bridge-1005155, and Spy Run Creek Bridge-1005152)
Project Description/Termini:	State Boulevard Reconstruction Project- State Boulevard between Spy Run Avenue and Cass Street including the bridge over Spy Run Creek

After completing this form, I conclude that this project qualifies for the following type of Categorical Exclusion (FHWA must review/approve if Level 4 CE):

<input type="checkbox"/>	Categorical Exclusion, Level 2 – The proposed action meets the criteria for Categorical Exclusion Manual Level 2 - table 1, CE Level Thresholds. Required Signatories: ESM (Environmental Scoping Manager).
<input type="checkbox"/>	Categorical Exclusion, Level 3 – The proposed action meets the criteria for Categorical Exclusion Manual Level 3 - table 1, CE Level Thresholds. Required Signatories: ESM, ES (Environmental Services).
<input type="checkbox"/>	Categorical Exclusion, Level 4 – The proposed action meets the criteria for Categorical Exclusion Manual Level 4 - table 1, CE Level Thresholds. Required Signatories: ESM, ES, FHWA.
<input checked="" type="checkbox"/>	Environmental Assessment (EA) – EAs require a separate FONSI. Additional research and documentation is necessary to determine the effects on the environment. Required Signatories: ES, FHWA.

Note: For documents prepared by or for Environmental Services, it is not necessary for the ESM of the district in which the project is located to release for public involvement or sign for approval.

Approval

ESM Signature _____	Date _____	ES Signature <u>[Signature]</u>	Date <u>8 MAY 14</u>
FHWA Signature <u>[Signature]</u>	Date <u>5-14-14</u>		

Release for Public Involvement

ESM Initials _____	Date _____	ES Initials _____	Date _____
--------------------	------------	-------------------	------------

Certification of Public Involvement

Examiner, Public Hearings Signature <u>[Signature]</u>	Date <u>9/12/14</u>
--	---------------------

Note: Do not approve until after Section 106 public involvement and all other environmental requirements have been satisfied.

Reviewer Signature _____ Date _____

Name and organization of CE/EA Preparer: Briana M. Hope – American Structurepoint, Inc.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Part I - PUBLIC INVOLVEMENT

Every Federal action requires some level of public involvement, providing for early and continuous opportunities throughout the project development process. **The level of public involvement should be commensurate with the proposed action.**

Discuss what public involvement activities (legal notices, letters to affected property owners and residents, meetings, special purpose meetings, newspaper articles, etc.) have occurred for this project.

Remarks:

Survey notice letters were sent to adjacent property owners on March 18, 2009, informing them of the proposed project. Copies of the survey notice letters are included in Appendix F pages F-2 to F-3.

Public Information Meetings (5 Meetings)

A total of five public meetings have been held throughout the development of this project. Public information meetings were initiated by the City in 2008 and 2009 (September 11, 2008; October 27, 2008; November 17, 2008; May 28, 2009; and September 30, 2009) to solicit input from the public during the early design stages of the proposed project. The public meetings consisted of formal presentations and opportunities for public questions and comments. In addition, a design charette was utilized as part of the September 30, 2009, public meeting to further aid the City of Fort Wayne in collecting information regarding how the connecting streets should intersect with the new State Boulevard. Information gathered from the charette was evaluated and taken into consideration and incorporated into the proposed design. The public meetings were held in varying locations to allow the public to attend meetings that would be most convenient and easily accessible to them. Meetings were held at the City Building, Northside High School, and the Allen County Public Library.

Neighborhood Association Meetings (13 Meetings)

The City of Fort Wayne attended multiple neighborhood meetings to present project information and address project questions and concerns. In most cases, the City attended a regularly scheduled meeting held in the neighborhoods, but also met with individual representatives of associations when requested. As the Brookview Civic Neighborhood is located within the proposed project limits, the majority of the meetings involved this neighborhood association or individual representatives from the association. In an effort to help adjacent property owners better understand the proposed project, a representative from the project team met twice in the field to walk the proposed project with interested individuals from the Brookview neighborhood. In addition to the Brookview Civic Neighborhood, the City also met with neighborhood associations outside the limits of the project. The purpose of these meetings was to answer questions and concerns expressed about the project and discuss how they would be affected as they travel through the area whether by motorized vehicles or other modes of transportation. The additional neighborhood associates consisted of Northside Neighborhood Association, Historic Oakwood Neighborhood Association, West Central Neighborhood Association, Bloomingdale Neighborhood Association, and Forest Park Neighborhood Association.

Open House Events (3 Events)

The City of Fort Wayne conducted a series of three open house events to present preliminary renderings of the preferred alignment to the public. These meetings were held on February 25, 2013, from 5:00 PM to 7:00 PM at the Franke Pond Pavilion located at 3411 Sherman Boulevard, Franke Parke, Fort Wayne; on March 1, 2013, from 11:00 AM to 1:00 PM at the Main Branch Allen County Public Library, Meeting Room A, 900 Library Plaza, Fort Wayne; and on March 7, 2013, from 5:00 PM to 7:00 PM at the Psi Ote Barn - Lower Level, Bob Arnold Northside Park, located at East State Boulevard and Parnell Avenue, Fort Wayne. Renderings were also available for comment on the City of Fort Wayne website. Comments were accepted at the open house, on-line, via email, and US Postal Service. For reference to renderings presented, see Appendix F pages F-25 to F-32.

Other Group and Individual Meetings (27 Meetings)

When requested, the City of Fort Wayne met with individuals, including representatives of interested groups, business owners, and adjacent property owners. The City met with these individuals to help explain the project, provide project updates, and address comments and concerns. Meeting with these individuals and representatives further helped the City ensure information regarding the project was reaching the public. Representatives from the varying groups brought comments and concerns to the City and distributed project information to their groups.

See Appendix F page F-4 for a list of all meetings, dates, and locations.

Section 106 (3 Consulting Party Meetings)

The Section 106 Area of Potential Effect (APE) determination (36 CFR 800.4(a)(1)) and the Adverse Effect determination (36 CFR 800.11(e)) were approved by FHWA on February 27, 2013, and distributed to the State Historic Preservation Officer (SHPO) on March 1, 2013. Upon release for public involvement for this document, copies of both

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

this document and the approved Adverse Effect determination will be submitted to Consulting Parties for review. A public notice describing the project and the Section 106 finding of "Adverse Effect" will be published in local media in conjunction with the Legal Notice of Public Hearing.

The bridge over Spy Run Creek was advertised for reuse, per the Historic Bridges Programmatic Agreement (HBPA). A notice was published in the *Fort Wayne Journal Gazette*, indicating a six month period during which interested parties could submit proposals for reuse of the bridge. Affidavits are found in Appendix C, pages C-490 to C-496. The bridge was advertised on the INDOT website, and signs were also placed at each end of the bridge, indicating the same six month response period. No responses were received regarding the notices.

In addition, three consulting party meetings were also held to discuss the findings of Historical Properties Report, effect findings, and options to avoid, minimize and mitigate adverse effects to the surrounding cultural resources. Meetings were held on December 15, 2009; September 1, 2011; and September 19, 2012. A total of 35 individuals, representing the FHWA, State, City, neighborhood associations, historic preservation groups, and adjacent property owners were invited to participate in the consulting party meetings.

For reference to consulting party consultation see Appendix C pages C-2 to D-476.

Public Hearing
The Indiana Department of Transportation (INDOT) Public Involvement Procedures Policy requires a public hearing be scheduled and held for projects classified as EAs. A Legal Notice of Public Hearing will be published twice in local media, and may be mailed via First Class US Mail to adjacent property owners and local or state officials whom may have an interest in the proposed project, and may be posted on the City of Fort Wayne website. The EA will be made available for public review. Comments will be accepted for 30 days following the hearing. The public hearing will include an informal open house, formal presentation, and comment period. Comments or concerns brought forth by the public during this process will be addressed in the Finding of No Significant Impact (FONSI) request document submitted to the FHWA.

A public notice describing the project and the Section 4(f) *de minimis* finding associated with Vesey Park will be advertised concurrently with the EA release for public involvement in the local media. The public notice will solicit comments regarding the project for a 30-day comment period. Comments or concerns brought forth by the public during this process will be addressed in the Finding of No Significant Impact (FONSI) request document submitted to the FHWA.

Public Controversy on Environmental Grounds

Will the project involve substantial controversy concerning community and/or natural resource impacts?

Yes	No
X	

Remarks:

During the preliminary project development, multiple citizens and consulting parties have expressed their opposition to the proposed project and the proposed impacts associated with the identified cultural resources and the overall footprint of the project.

As part of the Section 106 process, multiple consulting parties have expressed their concern associated with the project purpose and need as well as the magnitude of potential impact the preferred alternative would have on the identified historic resources within the project area.

Opportunity for a Public Hearing Required

Yes	No
X	

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No.

Part II - General Project Identification, Description, and Design Information

Sponsor of the Project: City of Fort Wayne INDOT District: Fort Wayne
Local Name of the Facility: State Boulevard

Funding Source: [X] Federal [] State [X] Local [] Private

PURPOSE AND NEED:

Describe the problem that the project will address.

The purpose of the proposed project is to improve corridor connectivity along State Boulevard for both motorists and pedestrians alike. Currently, the existing corridor does not provide a safe traveling environment for motorists, bicyclists, or pedestrians, as the existing roadway is congested and exhibits substandard sight distance and geometrics. In addition, State Boulevard is often impassable due to roadway flooding caused by Spy Run Creek and/or the Saint Mary's River.

The need for this project derives from the traffic congestion along the corridor between Cass Street and Spy Run Avenue, the substandard sight distances at various intersections along the corridor, roadway flooding, and the substandard horizontal geometrics between Cass Street and Clinton Street. The State Boulevard project corridor also becomes congested at the intersections due to the reduction in lanes through this segment. In addition, pedestrian safety is compromised due to this level of congestion and insufficient sight distance at the substandard horizontal curves. Pedestrian facilities do not currently provide connectivity between the Greenways Trail System.

The selected and approved Transportation Plan for the Fort Wayne Urbanized Area is based on an "Arterial plus Bypass" concept to improve mobility, connectivity, and accessibility within the region. This concept includes improvements to a number of arterial corridors and the completion of I-469 as a "bypass" around the urban area. State Boulevard is one of the arterials identified in the Transportation Plan for improvement.

State Boulevard is one of a few east-west arterials that provide some continuity as motorists and pedestrians traverse the urban area. Continuous adjacent parallel roadways include the Washington Center Road/St. Joe Center Road corridor (approximately 2.5 miles north) and the Washington Road/Jefferson Boulevard corridor (1-way pair approximately 1.3 miles south). Coliseum Boulevard (approximately 1.5 miles north) also helps to serve east-west travel but also traverses north-south as it passes through the urban area, breaking its east-west continuity. Due to the limited number of continuous east-west corridors, the carrying capacity required of corridors such as State Boulevard to meet travel demands is elevated.

As part of the development of the Metropolitan Transportation Plan and the "Arterial plus Bypass" concept, the Northern Indiana Regional Coordinating Council (NIRCC) evaluated a number of potential roadways for improvement to help improve east-west traffic flow in the area north of the Fort Wayne Central Business District. Three corridors were considered for improvements to facilitate east-west travel by providing additional east-west roadways. The corridors included State Boulevard, Butler Road-Vance Road, and Spring Street-Tennessee Avenue. Through the Transportation Plan development, reviews of these corridors determined that State Boulevard was the most practical option.

As the Transportation Plan has been implemented, a number of investments in transportation improvements have been constructed on the State Boulevard Corridor. These improvements include widening the bridge over the St. Joseph River just east of Spy Run Avenue, a project necessary to support the widening project between Spy Run Avenue and Cass Street. A major intersection improvement project was also completed at State Boulevard and Wells Street that included the widening of State Boulevard between Goshen Avenue and Cass Street. State Boulevard has also been widened to four lanes east of the proposed project between Coliseum Boulevard and Maplecrest Road to facilitate traffic flow and reduce congestion.

The State Boulevard project from Spy Run Avenue (US 27 northbound) to Cass Street is a project consistent with the current Transportation Plan and improvement projects implemented in accordance with the transportation planning process. The proposed project will reduce existing congestion and improve traffic flow. State Boulevard is a 4-lane arterial from east of Maplecrest Road to Spy Run Avenue. It reduces to three lanes west of Spy Run Avenue, with two eastbound through lanes and one westbound lane. East of Clinton Street, State Boulevard is a 2-lane road with one travel lane in each direction. East of the project area, Goshen Road, an arterial traversing through the northwest portion of the urban area, merges into State Boulevard, approximately doubling the daily traffic volume.

State Boulevard is also an important east-west arterial in the Fort Wayne Central Business District Fringe Area. It connects with a number of important north-south arterials including Hillegas Road, Sherman Street, Wells Street, Clinton Street (US 27 south bound), Spy Run Avenue (US 27 north bound), Parnell Avenue, Crescent Avenue, Anthony Boulevard, Hobson Road, Coliseum Boulevard (State Road 930), Reed Road and Maplecrest Road. State Boulevard merges with Maysville Road and Stelhorn Road as it leaves the Urban Area east of I-469 and becomes State Route 37.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Under current traffic conditions, congestion occurs at the intersections of Spy Run Avenue and Clinton Street resulting in unacceptable service levels. The redevelopment of the urban core area will continue to place travel demands on the State Boulevard corridor and contribute to modest increases in traffic volumes. NIRCC has established a Level of Service “D” as the acceptable peak hour service level for intersections and corridors within the urban area. Currently, both intersections exhibit intersection movements having service levels of E or F as described in the following table.

State Street and Spy Run Avenue Intersection

Morning Peak	LOS Existing
East Bound Left	F
West Bound Through	E
Evening Peak	LOS Existing
East Bound Left	F
East Bound Through	E
West Bound Through	E

State Street and Clinton Street Intersection

Morning Peak	LOS Existing
South Bound Through	E
Evening Peak	LOS Existing
East Bound Through	E
West Bound Left	F

Both intersections at Spy Run Avenue and Clinton Street also exhibit lengthy delays demonstrating the congested conditions. Modest increases in traffic volumes will exacerbate these conditions and cause additional delay and service failures. The proposed project will reduce delay and improve overall intersection service to acceptable levels of service (“D” or above).

In addition to the congestion issues, the existing horizontal alignment along State Boulevard does not currently meet Indiana Design Manual guidelines for minimum curve radius. The Level One controlling design criteria found in Section 40-8.02 of the INDOT Design Manual (IDM) are those highway design elements, which are judged to be the most critical indicators of a highway’s safety and its overall serviceability. The horizontal alignment and minimum curve radius of a roadway is considered to be a very important level one controlling design element.

According to IDM Chapter 43, Figure 43-3B, the horizontal alignment for a 30 mph roadway is required to be a minimum of 300 feet. As noted in the curve radius table below, several of the existing horizontal curve radii along the existing alignment currently do not meet proper Level One design standards. For further reference to the IDM see http://www.in.gov/indot/design_manual/design_manual_2013.htm.

Curve Radius Table:

Station Line “A”	Existing Curve Radius	Required Radius (30 mph)
18+66.60	175 feet	300 feet
24+64.47	243 feet	300 feet
27+23.73	210 feet	300 feet

The Level Two design criteria found in Section 40-8.02 of the INDOT Design Manual (IDM) are judged to be important indicators of a highway’s safety and serviceability but are not considered as critical as the Level One Criteria. The intersection sight distance along the roadway is a Level Two design element essential for a safe corridor for both vehicular and pedestrian traffic. A motorist entering State Boulevard and turning left must be able to see 420 feet along State Boulevard to safely make the left turn maneuver. Similarly, a motorist entering State Boulevard and turning right must be able to see 375 feet along State Boulevard to safely make the right turn maneuver. As noted in the “Intersection Sight Distance Table” below, many of the intersections along the State Boulevard corridor do not meet the proper Level Two design standards.

Intersection Sight Distance Table:

Intersection	Turning Direction	Approximate Existing Sight Distance (feet)	Required Sight Distance (feet)
Cass Street (south)	LT	300	420
Cass Street (south)	RT	160	375
Westbrook Drive (South)	LT	150	420
Westbrook Drive (North)	LT	210	420
Eastbrook Drive (South)	LT	270	420
Eastbrook Drive (South)	RT	210	375
Eastbrook Drive (North)	LT	250	420
Terrace Road (North)	RT	160	375

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Congestion, substandard horizontal alignment, and inadequate sight distance likely contribute to the high crash rate along the State Boulevard project corridor. Four of the major intersections along the project corridor are in the top 20 high crash locations in Allen County for the time period 2007-2011. In order to be placed on this list, the locations must consistently (all three years) display a high crash frequency, high crash rate (RMV-rate per million entering vehicles), and high index of crash costs. As shown in the table below, the RMV exceeds 2.0, which indicates that a safety problem exists.

Crash Location	2007				2008				2009				2010				2011			
	Total Crash	Total Injury Crash	Total Fatal Crash	RMV	Total Crash	Total Injury Crash	Total Fatal Crash	RMV	Total Crash	Total Injury Crash	Total Fatal Crash	RMV	Total Crash	Total Injury Crash	Total Fatal Crash	RMV	Total Crash	Total Injury Crash	Total Fatal Crash	RMV
State Boulevard and Eastbrook Drive	17	4	0	2.41	17	4	0	2.61	15	1	0	2.11	9	1	0	1.26	12	3	0	1.69
State Boulevard and Clinton Street	41	7	0	2.74	49	10	0	3.28	35	8	0	2.38	30	3	0	2.04	36	8	0	2.45
State Boulevard And Spy Run Avenue	34	4	0	2.04	35	8	0	2.12	41	6	0	2.48	27	7	0	1.63	43	11	0	2.60
State Boulevard and Westbrook Drive	16	3	0	2.31	17	5	0	2.38	12	1	0	2.16	9	1	0	1.26	12	3	0	1.69

The high crash rates can likely be attributed to traffic congestion, substandard geometrics, intersection sight distances, and the multiple driveways that are directly accessed from State Boulevard between Westbrook Drive and Terrace Road. Currently, State Boulevard does not provide motorists with a center left turn lane to allow turning vehicles to move out of the path of the thru traffic, or provide required sight distance between Westbrook and Clinton Streets to allow for adequate stopping distance.

For many of the same reasons stated above, pedestrian safety is also a concern along the State Boulevard project corridor. The existing pedestrian facilities through this corridor are in poor condition. The existing sidewalks exhibit extensive deterioration such as cracking, settling, and heaving due to age and weathering. The north/south pedestrian connectivity is also very limited due to the traffic congestion and poor sight distance for pedestrians attempting to cross State Boulevard between Cass Street and Clinton Street.

Currently pedestrians and bicyclists have to share deteriorating narrow sidewalks along State Boulevard. The Pufferbelly Trail, a piece of the Greenways Trail System, which will run along the west side of Westbrook Drive and will cross State Boulevard with a pedestrian bridge, is currently being constructed. The St. Joseph Pathway, also a piece of the Greenways Trail System, runs along the St. Joseph River and crosses State Boulevard near the eastern project terminus. The State Boulevard project corridor currently does not provide an adequate and safe link between the two trails.

The existing bridge carrying State Boulevard over Spy Run Creek provides insufficient waterway area and is quickly deteriorating. According to the 2006 Allen County Structure Inventory and Appraisal Report the existing bridge has a sufficiency rating of 27.9, which classifies the bridge as structurally deficient. According to the report, the expected remaining life of the bridge superstructure is five years from the date of the inspection report (2011). The existing bridge is currently below the flood elevation of the St. Mary's River, which causes the bridge to be overtopped with backwater from the Saint Mary's River with relative frequency, therefore affecting roadway safety by flooding State Boulevard. According to the Spy Run Creek Flood Control Study (Christopher B. Burke, 2005), "this flooding is caused primarily by backwater from the St. Mary's River, which controls the water surface elevation up to about State Boulevard. The State Boulevard crossing causes a significant backwater affecting the upstream water surface elevation to about Grove Street."

According to recent City of Fort Wayne records, Spy Run Creek has experienced flood events causing sandbag or clay berm protection in the following years: 1976, 1978, 1981, 1982, 1985, 1991, 1993, 1999, 2002, 2003, 2004, 2005, 2006, 2007, 2008, 2009, and 2010. Seven out of the 17 years (1978, 1982, 2003, 2004, 2005, 2008, and 2009), State Boulevard was closed due to the flooding events. Road closure due to flooding events appear to be happening more consistently in recent years, restricting emergency traffic more often.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

PROJECT DESCRIPTION (PREFERRED ALTERNATIVE):

County: Allen
 Municipality: Fort Wayne
 Limits of Proposed Work: State Boulevard between Spy Run Avenue and Cass Street in Fort Wayne
 Total Work Length / Area: 0.45 Miles

Is an Interchange Modification Study/Interchange Justification Study (IMS/IJS) required? Yes¹ No
 If yes, when did the FHWA grant a conditional approval for this project? Date:

¹If an IMS or IJS is required; a copy of the approved CE/EA document must be submitted to the FHWA with a request for final approval of the IMS/IJS.

In the Remarks box below, describe in detail the scope of work for the project, including the preferred alternative. Include a discussion of logical termini. Discuss any major issues for the project and how the project will improve safety or roadway deficiencies if these are issues.

The current preferred alternative is Alternative 3A. This alternative involves widening the existing 2-lane section of State Boulevard between Clinton Street and Cass Street to four (4) lanes while correcting the substandard horizontal curve. Beginning at Cass Street and extending to Clinton Street, State Boulevard would have four (4) 10-foot travel lanes, two (2) in each direction. Between Oakridge Road and Clinton Street, the travel lanes would be separated by an 8-foot-wide raised median. The horizontal and vertical alignment would be modified between Westbrook Drive and Clinton Street to correct substandard geometrics as well as alleviate roadway flooding at Spy Run Creek. The horizontal alignment would shift a maximum of approximately 190 feet south of existing State Boulevard. The vertical alignment would be raised approximately seven (7) feet at the proposed bridge over Spy Run Creek. The roadway from Clinton Street to Spy Run Avenue would consist of four (4) 11-foot travel lanes, two (2) in each direction, separated by a 12 foot 2-way left turn lane. The overall alternative length is 2,370 feet. As appropriate, left turn lanes would be installed at the intersections. The horizontal and vertical alignment between Clinton Street and Spy Run Avenue would closely follow the existing roadway.

Access to existing State Boulevard would be via a new access road, which would extend from the new State Boulevard alignment north to the existing intersection of Oakridge Road and State Boulevard. The existing State Boulevard intersections with Eastbrook Drive and Terrace Drive would be eliminated and turned into cul-de-sacs.

Alternative 3A would require approximately 15 residential relocations from the Brookview-Irvington Historic District in order to provide the right-of-way necessary to widen State Boulevard on the new alignment.

Combined concrete curb and gutters would be constructed throughout the corridor. A raised median containing landscape elements would be constructed where left turn lanes are not required between Oakridge Road and Clinton Street.

New sidewalks, varying in width from five (5) feet to ten 10 feet would be constructed on both sides of the roadway. The sidewalk would be constructed adjacent to the curb throughout the corridor. A sodded, landscaped utility strip, typically five (5) feet wide, would be installed between the back of curb and sidewalk where available space permits between the bridge over Spy Run Creek and Terrace Road.

New decorative lighting would be installed along the project and the existing traffic signals at Clinton Street and Spy Run Avenue would be modified as necessary. New curb inlets and storm sewer would be constructed throughout the project limits. A new bridge structure would replace the existing bridge over Spy Run Creek. The proposed bridge would be elevated approximately seven (7) feet to eliminate roadway flooding along State Boulevard. As a part of this project, a new pedestrian bridge would be constructed over State Boulevard at the existing abandoned railroad crossing. Sidewalk ramps would extend from proposed State Boulevard to the pedestrian bridge approach connecting State Boulevard to the future Pufferbelly Trail. The pedestrian bridge and ramps would be utilized by the proposed Pufferbelly Trail, which would be constructed by others.

For the entire proposed project, a total of approximately 3.80 acres of new permanent and 2.50 acres of temporary right-of-way would be required. Based on 2015 costs, the estimated cost of the project is \$10,372,000.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

OTHER ALTERNATIVES CONSIDERED:

Describe all discarded alternatives, including the Do-Nothing Alternative and an explanation of why each discarded alternative was not selected.

Alternative 1: Butler Road – Vance Road Corridor: This alternative includes developing the Butler Road – Vance Road Corridor to improve east-west travel through Fort Wayne. The corridor would be located approximately 0.50 mile north of the existing State Boulevard roadway. The alternative would begin at the Butler Road intersection with Cedar Ridge Run / Sprunger Road East and proceed east a distance of approximately 3.25 miles to a terminus at the Vance Road intersection with North Anthony Boulevard.

This alternative would require approximately 2.25 miles of new roadway alignment, in order to connect the existing terminus of Butler Road with the existing (western) termini of Vance Road, which is located immediately east of the St. Joseph River. The remaining approximately 1.0 mile of the corridor (east of Spy Run Creek) would be constructed along the existing Vance Road alignment, expanding the existing roadway travel lanes to accommodate anticipated traffic volumes. This alternative would also require the construction of new bridges over Spy Run Creek and the St. Joseph River.

This alternative would require extensive residential and commercial relocations. A minimum of approximately 125 residential relocations and 15 commercial relocations would be required. The alternative would also result in impacts to the Franke Parke Elementary School and Fort Wayne Children's Zoo. Of the approximately 2.25 miles of new roadway alignment required by this corridor, approximately 2.0 miles would be constructed on presently undeveloped, forested land.

This alternative avoids impacts to historic properties identified within the APE of this project; however the alternative still results in impacts to the north end of the Brookview-Irvington Historic District. Approximately 0.25 mile of this alignment would bisect the Brookview-Irvington Historic District as well as Vesey Park.

Alternative 1 results in the use of the Brookview-Irvington Historic District (northern extents), Vesey Park, and Franke Park, all Section 4(f) resources.

Alternative 1 is not reasonable as it does not address any of the Project's purpose and need. Alternative 1 does not address connectivity along the State Boulevard corridor, correct the substandard horizontal curve, or address the roadway flooding concerns along State Boulevard. Furthermore, this alternative would require an extensive number of residential and commercial relocations for construction and approximately 2.0 miles of new roadway through existing forested land. For these reasons, Alternative 1 has been eliminated from further consideration.

Alternative 2: Spring Street – Tennessee Avenue: This alternative includes developing the Spring Street – Tennessee Avenue corridor to improve east-west travel through Fort Wayne. The corridor would be located approximately 0.50 mile south of the existing State Boulevard roadway. The alternative would begin at the Spring Street terminus at the North Wells Street intersection and proceed east a distance of approximately 1.50 miles to a terminus at the intersection of Lake Avenue and Forest Park Boulevard.

This alternative would require approximately 0.60 mile of new roadway alignment, in order to connect the existing (eastern) terminus of Spring Street with the existing (western) terminus of Tennessee Avenue, which is located immediately east of the Spy Run Creek. An additional 0.25 mile of new roadway alignment would be required, in order to connect the existing (eastern) terminus of Tennessee Avenue with Lake Avenue. The remaining approximately 0.65 mile of the corridor would be constructed along the existing Tennessee Avenue alignment, expanding the existing roadway travel lanes to accommodate anticipated traffic volumes. This alternative would also require the construction of a new bridge over Spy Run Creek. This alternative would also require the expansion of the existing Tennessee Avenue bridge over the St. Joseph River, a select historic bridge determined to be eligible for the National Register of Historic Places (NRHP).

This alternative would require extensive residential and commercial relocations. A minimum of approximately 75 residential relocations and 15 commercial relocations would be required. The alternative would also result in impacts or relocations of the Science Central museum, Lakeside Park, and Lawton Park.

This alternative avoids impacts to historic properties identified within the APE of this project; however, the alternative still results in impacts to other historic properties not included in the project APE, including the Science Central facility.

This alternative would result in the use of 4(f) resources including Lakeside Park, Lawton Park, and the NRHP eligible bridge over the St. Joseph River.

The alternative is not reasonable as it does not address any part of the Project's purpose and need. Alternative 2 does not address connectivity along the State Boulevard corridor, correct the substandard horizontal curve, or address the roadway flooding concerns along State Boulevard. Furthermore, this alternative would require an extensive number of residential, commercial, and recreational property impacts/relocations for construction. For these reasons, Alternative 2 has been eliminated from further consideration.

Alternative 3B: Widen State Boulevard on Existing Alignment: This alternative involves widening the existing 2-lane section of State Boulevard between Clinton Street and Cass Street to four lanes. This alternative would require a new bridge with additional travel

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

lanes over Spy Run Creek. The overall alternative length is 2,700 feet.

This alternative would require approximately 18 residential relocations (contributing properties) from the Brookview-Irvington Historic District in order to provide the right-of-way necessary to widen State Boulevard on the existing alignment.

Alternative 3B would address the flooding and congestion concerns by elevating the roadway and adding two additional travel lanes. However, this alternative would require level one design exceptions with regards to roadway geometrics as it does not correct the substandard horizontal curve. Therefore, Alternative 3B does not address the safety issues resulting from substandard sight distance and substandard geometrics. Furthermore, this alternative requires a higher number of residential and historic property relocations for construction as compared to other alternatives.

Alternative 3C: Shift State Boulevard Alignment South: This alternative involves shifting the alignment of State Boulevard south and widening the new alignment to 4 lanes. This alternative would essentially take the existing State Boulevard alignment between Westbrook Drive and Clinton Street, and “mirror” or “flip” the alignment to the south. The existing intersection of State Boulevard with Eastbrook Drive would be eliminated and converted to a cul-de-sac. Access to existing State Boulevard would be via a new access road which would extend from the new State Boulevard alignment north to the existing intersection of Terrace Road and State Boulevard. The Terrace Road extension would be required to provide access to the neighborhood north of existing State Boulevard as a result of access restrictions due to Clinton Street being a one-way south roadway. This alternative would also require a new bridge over Spy Run Creek at an elevation seven feet above the existing bridge elevation.

Similar to Alternative 3A, the realignment of State Boulevard and change in elevation would result in the bifurcation of the Brookview-Irvington Park Historic District. Contributing resources located within the project area would be removed from their historical locations: State Boulevard realignment, removal of residential resources, and the removal of the existing bridge over Spy Run Creek. Through the realignment of State Boulevard, the conversion of Eastbrook Drive (north of State Boulevard) to a cul-de-sac, the replacement of the bridge over Spy Run Creek, and the removal of five contributing properties, the landscape of the area would be modified altering the character and setting of the district. The construction of a prefabricated trail bridge over State Boulevard at the abandoned New York Central Railroad will also change the character of the district along State Boulevard. Furthermore, the realignment of State Boulevard would require the acquisition of right-of-way from the Fort Wayne Park and Boulevard System Historic District, again altering the historic location of State Boulevard. The realigned State Boulevard profile would have a significant increase in vertical elevation (approximately 7-feet) as it passes over Spy Run Creek, introducing a visual barrier through the historic district as well as diminishing the presence of the sloping hills and natural features (contributing feature). The prefabricated trail bridge, access ramps, and retaining walls (associated with the Pufferbelly trail) would be constructed over the contributing State Boulevard at the abandoned New York Central Railroad bridge, introducing new visual element to the Fort Wayne Park and Boulevard System Historic District.

While this alternative would reduce the number of contributing property relocations on the south side of existing State Boulevard, it would require extensive engineering considerations and significantly increased project costs. Due to the skew angle that State Boulevard would cross Spy Run Creek; impacts to the creek would be increased by approximately 330 linear feet for the purposes of re-grading. The new bridge length would be approximately 250 feet longer than the bridge design included in Alternatives 3A or 3D. This alternative would also require construction of a new intersection of State Boulevard with Clinton Street. The new intersection would be built in close proximity to the new Terrace Road intersection which would significantly impede traffic operations and efficiency as well as increase project costs due to additional traffic signal work. The increased length of the proposed bridge combined with relocating the roadway south would also require the intersection of State Boulevard and Clinton Street to be raised two to three feet, thus causing additional reconstruction along Clinton Street (approximately 500 feet) and further increasing project costs. In addition to the nine residential relocations that are also considered contributing resources, this alternative would result in the relocation of four commercial businesses, including the gas station at the southwest corner of Clinton Street and State Boulevard, a plumbing business on the southeast corner, a dog grooming business located just south of the gas station, and a storage unit business located on the southwest corner of Spy Run Avenue and State Boulevard.

Alternative 3C addresses the project’s congestion and safety issues through the addition of travel lanes and the correction of the substandard horizontal curve. It also elevates the roadway above of the 100-year floodplain, likely eliminating the need for roadway closures due to flooding. However, Alternative 3C introduces a new intersection at State Boulevard and Clinton Street which would create new operational and safety issues due to its close proximity to the new Terrace Road intersection. Project costs associated with Alternative 3C are an estimated five million dollars more than any other alternative due to increased impacts to commercial businesses, a much longer bridge, and the reconstruction and elevated grade change along Clinton Street.

Alternative 3D: Substandard Horizontal Curve Correction with a 3-Lane Typical Section: This alternative is similar to Alternative 3A but features a 3-lane typical section rather than a 4-lane typical section. This alternative involves widening the existing 2-lane section of State Boulevard between Clinton Street and Cass Street to 3-lanes and correcting the substandard horizontal curve. Beginning at Cass Street and extending to Clinton Street, State Boulevard would have two ten foot travel lanes, one in each direction. Between Westbrook Drive and Oakridge Road, the travel lanes would be separated by a twelve-foot wide left-turn lane. Between Oakridge Road and Clinton Street, the travel lanes would be separated by a twelve foot two way left turn lane. The vertical alignment would be raised approximately seven feet at the proposed bridge over Spy Run Creek. The roadway from Clinton Street to Spy Run Avenue would consist of four eleven foot travel lanes, two in each direction, separated by a twelve foot two way left turn lane. As appropriate, left turn lanes would be

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

installed at the intersections. The horizontal and vertical alignment between Clinton Street and Spy Run Avenue would closely follow the existing roadway. As a part of this project, the new pedestrian bridge would also be constructed over State Boulevard at the existing abandoned railroad crossing.

By reducing the typical section from 4-lanes (Alternative 3A) to 3-lanes, construction limits are reduced by approximately ten feet on each side of the roadway. Because the reduction in construction limits associated with reducing the typical section from four lanes to three lanes is only ten feet, this alternative would continue to result in the same 4(f) use as Alternative 3A to the Brookview-Irvington Historic District, the Fort Wayne Park and Boulevard System Historic District, and the Bridge over Spy Run Creek.

Alternative 3D addresses some of the project's safety concerns and the project's substandard geometrics through the correction of the substandard horizontal curve. It also elevates the roadway above of the 100-year floodplain, likely eliminating the need for roadway closures due to flooding. However, Alternative 3D does not fully address corridor connectivity or traffic congestion concerns along the corridor. This alternative would not address the congestion concerns at the intersection of State Boulevard and Clinton Street. NIRCC has established a Level of Service "D" as the acceptable peak hour service level for intersections and corridors within an urban area. This intersection currently functions at a low Level of Service. Alternative 3D would not address the poor Level of Service (E/F) at State Boulevard and Clinton Street. While the dedicated left-turn lane may help alleviate some traffic congestion along the corridor, the congestion associated with four lanes of traffic funneling into two lanes at the Cass Street and Clinton Street intersections would still remain. Furthermore, this alternative would result in the same use of 4(f) resources as compared to Alternative 3A.

Alternative 4: No Build: With the No Build Alternative, there would be no use of resources subject to Section 4(f) provisions. This alternative would leave the existing State Boulevard roadway as it currently exists. No reconstruction of the roadway to meet the project's purpose and need would be implemented. The existing roadway and bridge would continue to deteriorate. The existing roadway would continue to flood causing continued problems with accessibility and pavement deterioration. Traffic accidents would most likely continue to increase as the current congestion issues would not be addressed. The existing bridge over Spy Run Creek is currently rated structurally deficient and the estimated remaining life of the superstructure is five years. This structure is in immediate need of replacement due to the condition. East-west connectivity would continue to be a problem for the overall transportation network. The no build alternative would likely result in the complete failure of the structure over Spy Run Creek.

The No Build Alternative would not meet any of the needs of the project; therefore, is not considered a feasible and prudent alternative.

The Do Nothing Alternative is not feasible, prudent or practicable because (Mark all that apply):

- | | |
|---|-------------------------------------|
| It would not correct existing capacity deficiencies; | <input checked="" type="checkbox"/> |
| It would not correct existing safety hazards; | <input checked="" type="checkbox"/> |
| It would not correct the existing roadway geometric deficiencies; | <input checked="" type="checkbox"/> |
| It would not correct existing deteriorated conditions and maintenance problems, or | <input checked="" type="checkbox"/> |
| It would result in serious impacts to the motoring public and general welfare of the economy. | <input type="checkbox"/> |
| Other (Describe) | <input type="checkbox"/> |

ROADWAY CHARACTER:

Functional Classification:	Minor Arterial						
Current ADT:	20,650 VPD 2009	Design Year ADT:	26,200 VPD 2030				
Current Year DHV	1,730 VPH	Trucks (%)	2	Design Year DHV	2,620 VPH	Trucks (%)	2
Designed Speed (mph):	35	Legal Speed (mph):	30				
	Existing		Proposed				
Number of Lanes:	2		5				
Type of Lanes:	Through Travel Lanes		4 through travel lanes and 1 left turn lane when required				
Pavement Width:	10	ft.	10-11		ft.		
Shoulder Width:	NA	ft.	NA		ft.		
Median Width:	NA	ft.	8		ft.		
Sidewalk Width:	5	ft.	6 - 10		ft.		

- Setting: Urban Suburban Rural
 Topography: Level Rolling Hilly

If the proposed action has multiple roadways, this section should be filled out for each roadway.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

DESIGN CRITERIA FOR BRIDGES:

Structure Number(s): Allen County Bridge No. 00546 Sufficiency Rating: 27.9 (2006 Allen County Structure Inventory and Appraisal Report)

	Existing	Proposed
Bridge Type:	Concrete Girder	Continuous Composite Prestressed Concrete Box Beam
Number of Spans:	<u>1</u>	<u>3</u>
Weight Restrictions:	<u>NA</u> ton	<u>NA</u> ton
Height Restrictions:	<u>NA</u> ft.	<u>NA</u> ft.
Curb to Curb Width:	<u>24</u> ft.	<u>56</u> ft.
Outside to Outside Width:	<u>26</u> ft.	<u>85.83</u> ft.
Shoulder Width:	<u>1</u> ft.	<u>2</u> ft.
Length of Channel Work:	<u>NA</u> ft.	<u>270</u> ft.

Describe bridges and structures; provide specific location information for small structures.

Remarks: The existing bridge over Spy Run Creek (NBI No. 0200273) is a reinforced concrete girder, T-beam bridge constructed in 1927 by contractor Herman W. Tapp and featuring the design of A.W. Grosvenor and O. Darling. The bridge was previously determined eligible for listing in the NRHP per the Indiana Statewide Historic Bridge Inventory (2010). The Bridge over Spy Run Creek is eligible under Criterion C for Engineering/Architecture and is a Non-Select bridge. The period of significance is 1927, the year it was constructed.

The proposed bridge over Spy Run Creek would be a three span, continuous, composite, prestressed concrete box beam structure. The proposed span lengths are 28 feet, 58 feet, and 28 feet. The structure would have a total bridge width of 85 feet and 10 inches, and would be comprised of four 10-foot travel lanes, a 12-foot left turn lane, with 2-foot shoulders. In addition, a 16-foot, 2-inch wide sidewalk on the north side and a 12-foot, 8-inch wide sidewalk on the south side are also proposed. The clear roadway width is 56 feet and the proposed structure would be skewed 30-degrees to the left.

Yes **No** **N/A**

Will the structure be rehabilitated or replaced as part of the project?
If the proposed action has multiple bridges or small structures, this section should be filled out for each structure.

MAINTENANCE OF TRAFFIC (MOT) DURING CONSTRUCTION:

	Yes	No
Is a temporary bridge proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is a temporary roadway proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Will the project involve the use of a detour or require a ramp closure? (describe in remarks)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Provisions will be made for access by local traffic and so posted.	<input type="checkbox"/>	<input type="checkbox"/>
Provisions will be made for through-traffic dependent businesses.	<input type="checkbox"/>	<input type="checkbox"/>
Provisions will be made to accommodate any local special events or festivals.	<input type="checkbox"/>	<input type="checkbox"/>
Will the proposed MOT substantially change the environmental consequences of the action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is there substantial controversy associated with the proposed method for MOT?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Remarks: Traffic is expected to be maintained along the existing roadway during construction, through the use of phased construction. One (1) travel lane is expected to remain open at all times and access shall be maintained to all residences and businesses during construction.

From Clinton Street to Spy Run Avenue, 2-way traffic will be maintained on the existing westbound lanes of existing State Boulevard while the proposed east bound lanes are being constructed. Once the eastbound lanes are built, 2-way traffic will be maintained on the newly constructed eastbound lanes until the proposed west bound lanes are constructed.

From Westbrook Drive to Clinton Street, 2-way traffic will be maintained on the existing roadway and bridge structure while the new alignment portions of the eastbound State Boulevard lanes and bridge structure are constructed to the south of the existing alignment. Once the eastbound portion of proposed State Boulevard is constructed, 2-way traffic will be maintained on the proposed eastbound lanes while the westbound lanes and remaining bridge structure are constructed.

From Cass Street to Westbrook Drive, 2-way traffic will be maintained on the westbound lanes of existing State Boulevard while the eastbound lanes are being constructed. Temporary asphalt pavement widening may be required on the northern side of State Boulevard between Cass Street and Westbrook Drive to accommodate 2-way traffic. Once the proposed eastbound lanes are constructed, 2-way traffic will be maintained on the eastbound lanes while the westbound lanes are being constructed.

MOT plans were included as part of the plan sets made available for public review at the three open house events hosted by the City (February 25, 2013, March 1, 2013, and March 7, 2013). No comments or concerns have been received regarding the MOT plan.

ESTIMATED PROJECT COST AND SCHEDULE:

Engineering: \$ 1,062,295 Right-of-Way: \$ 2,300,000 Construction: \$ 1,500,000/6,572,000
 (FY 2015) (FY 2017/2018)

Anticipated Start Date of Construction: April 1, 2015

Date project incorporated into STIP July 11, 2013

If in an MPO area, location of project in TIP on pages 42, 43, and 51* which was incorporated by reference into The STIP on July 11, 2013

*Administrative modification processed for project to account for the change in Year of Expenditure for Right-of-Way and Construction costs.

RIGHT OF WAY:

Land Use Impacts	Amount (acres)	
	Permanent	Temporary
Agricultural	0.00	0.00
Commercial	1.06	0.57
Forest	0.00	0.00
Industrial	0.00	0.00
Other	0.00	0.00
Other: Park	0.55	0.12
Residential	2.19	1.81
Wetlands	0.00	0.00
TOTAL	3.80	2.50

Remarks: Approximately 3.80 acres of additional permanent right-of-way will be acquired for the construction of the proposed project. Existing right-of-way currently extends approximately 25 feet from the centerline on both sides of State Boulevard. The right-of-way to be acquired will be primarily residential; however, some right-of-way will also be acquired from commercial areas. Acquisition of 15 whole parcels is anticipated as part of the proposed project. Acquisition of 15 residential structures is anticipated.

Approximately 2.50 acres of temporary right-of-way will be acquired for grading, driveway construction, and tie-ins. Project plans, including existing and proposed right-of-way limits, are included in Appendix A pages A-11 to A-129 of

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

this document.

All right-of-way will be acquired in accordance with applicable federal and state procedures. Those procedures include specific requirements for appraisals, review appraisals, negotiations, and relocation benefits. Compliance with these procedures will assure the fair and equitable treatment of affected residents and businesses. The acquisition and relocation program will be conducted in accordance with 49 CFR 24 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970 as amended.

Part III – Identification and Evaluation of Impacts of the Proposed Action

SECTION A – ECOLOGICAL RESOURCES

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Streams, Rivers, Watercourses & Jurisdictional Ditches	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
State Wild, Scenic or Recreational River	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

There is one stream located within the project corridor. This was initially determined by referencing aerial photography and USGS Topographic Mapping and field verified by American Structurepoint personnel during the August 14, 2009, field visit to conduct a wetland delineation and waters investigation. One stream, Spy Run Creek, was identified as potential “waters of the US”. Defined bed and bank were observed to be associated with Spy Run Creek. An ordinary high water mark (OHWM) was estimated at a depth of 1.5 feet. Spy Run Creek flows south through the project area under existing State Boulevard eventually outletting into the Saint Mary’s River.

This stream is not a state natural, scenic, or recreational river. For reference, see the Ecological Evaluation Form and attachments prepared for the project corridor, which is located in Appendix E pages E-2 to E-12.

Based on the preliminary project design, avoidance of all waterways is not possible. The bridge carrying State Boulevard over Spy Run Creek will completely span the ordinary high water mark; however, impacts as a result of storm water outfalls, existing bridge removal, and channel grading are unavoidable. The total permanent impacts to waterways associated with the project are 292 linear feet and include a temporary crossing for construction, storm water outfalls, and stream bank stabilization for erosion control purposes.

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Other Surface Waters				
Reservoirs	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Lakes	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Farm Ponds	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Detention Basins	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Storm Water Management Facilities	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Other: _____	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remarks:

There are no other surface waters located in the project corridor. This was initially determined by referencing aerial photography and USGS Topographic Mapping and field verified by American Structurepoint personnel during the August 14, 2009, field visit to conduct a wetland delineation and waters investigation. For reference, see the Ecological Evaluation Form and attachments prepared for the project corridor, which is located in Appendix E, pages E-2 to E-12.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

<u>Presence</u>		<u>Impacts</u>	
Yes	No	Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Wetlands

Total wetland area: 0 acre(s) Total wetland area impacted: 0 acre(s)
 (If a determination has not been made for non-isolated/isolated wetlands, fill in the total wetland area impacted above.)

Wetland No.	Classification	Impacted Acres – Permanent	Impacted Acres - Temporary	Total Impacted Acres	Comments
Totals:					

Wetlands

Wetland Determination
 Wetland Delineation Report
 USACE Isolated Waters Determination
 Mitigation Plan

<u>Documentation</u>	
Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input checked="" type="checkbox"/>	<input type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>
<input type="checkbox"/>	<input checked="" type="checkbox"/>

ES Approval Dates

LPA Project/Red Flag
LPA Project
Jurisdiction for all waterways will be given to the USACE

Improvements that will not result in any wetland impacts are not practicable because such avoidance would result in (Mark all that apply and explain):

- Substantial adverse impacts to adjacent homes, business or other improved properties;
- Substantially increased project costs;
- Unique engineering, traffic, maintenance, or safety problems;
- Substantial adverse social, economic, or environmental impacts, or
- The project not meeting the identified needs.

<u>Individual Wetland Finding</u>	
Yes	No
<input type="checkbox"/>	<input type="checkbox"/>

Measures to avoid, minimize and mitigate wetland impacts need to be discussed in the remarks section

Remarks:

There are no wetlands located in the project corridor. This was initially determined by referencing aerial photography and USGS Topographic Mapping and field verified by American Structurepoint personnel during the August 14, 2009, field visit to conduct a wetland delineation and waters investigation. For reference, see the Ecological Evaluation Form and attachments prepared for the project corridor, which is located in Appendix E pages, E-2 to E-12.

Terrestrial Habitat

<u>Presence</u>		<u>Impacts</u>	
Yes	No	Yes	No
<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Use the remarks table to identify each type of habitat and the acres impacted (i.e. forested, grassland, farmland, lawn, etc).

Remarks:

Terrestrial habitat within the project corridor includes residential yard and grassed passive park along Spy Run Creek. Approximately 2.19 acres of residential property and 0.55 acre of grassed passive park are located within the project study area and will be impacted by the proposed project. None of these areas are considered significant or sensitive habitat.

The US Fish and Wildlife Service (USFWS), in their April 20, 2009, early coordination response letter provided comments relative to impacts to wetlands, streams, and forested areas. USFWS indicated they felt shade trees and other landscaping that provide habitat for songbirds and small mammals are likely to be lost. Therefore, trees lost to the project should be replaced as close to the project impact area as possible, such as along Spy Run Creek, the St. Joseph River, and the new trail. The USFWS letter also indicated there is no known habitat for any endangered species within the project area and stated the project is not likely to adversely affect endangered species. For reference to this coordination see Appendix B, page B-15 TO B-16.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Appropriate stormwater best management practices will be implemented as part of the project and stormwater collection system. In addition, a landscaping plan is proposed as part of this project. The landscaping plan will help address the replacement of trees removed from residential yards and along the Spy Run Creek corridor. Trees will be planted along the proposed roadway and remaining green spaces in an effort to mitigate for the anticipated loss of trees as well as to help preserve the park like appearance currently associated with this segment of State Boulevard.

Coordination with the IDNR on November 18, 2009, recommended appropriate sediment and erosion control measures and restrictions to minimize impacts to fish, wildlife, and botanical resources. IDNR stated the Natural Heritage Program's data indicated no plant or animal species listed as state or federally threatened, endangered, or rare have been reported in the project vicinity. For reference to this coordination see Appendix B, page B-19.

If there are high incidences of animal movements observed in the project area, or if bridges and other areas appear to be the sole corridor for animal movement, consideration of utilizing wildlife crossings should be taken.

	Yes	No
Karst		
Is the proposed project located within or adjacent to the potential Karst Area of Indiana?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Are karst features located within or adjacent to the footprint of the proposed project?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If yes, will the project impact any of these karst features?	<input type="checkbox"/>	<input type="checkbox"/>

Use the remarks table to identify any karst features within the project area. (Karst investigation must comply with the Karst MOU, dated October 13, 1993)

Remarks: The project is located outside of the designated karst area of the state as identified in the October 13, 1993, Memorandum of Understanding (MOU). No karst features were observed or are known to exist within or adjacent to the proposed project area. The 1993 Karst MOU is not applicable to this project, and a karst assessment is not required. Project location mapping is included in Appendix A, page A-2. No karst features were noted on the Red Flag Investigation Mapping included in Appendix D pages D-2 to D-14.

	Presence		Impacts	
	Yes	No	Yes	No
Threatened or Endangered Species				
Within the known range of any federal species?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Any critical habitat identified within project area?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Federal species found in project area (based upon informal consultation)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
State species found in project area (based upon consultation with IDNR)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Is Section 7 formal consultation required for this action?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Remarks: Coordination with the IDNR on November 18, 2009, confirmed the Natural Heritage Database has been checked and to date, no plant or animal species listed as state or federally threatened, endangered, or rare have been reported to occur in the project's vicinity. See Appendix B, page B-19 for reference to the IDNR coordination letter.

Coordination with the USFWS on April 20, 2009, indicated the proposed project area is within the range of the federally endangered Indiana bat (*Myotis sodalis*) and the candidate eastern massasauga rattlesnake (*Sistrurus catenatus*). Re-coordination with USFWS on March 19, 2014, indicated that the endangered species in All County, Indiana had been revised. In addition to the previously identified species, Allen County is now within the range of the Federally endangered rayed bean mussel (*Villosa fabalis*) and the proposed endangered northern long-eared bat (*Myotis septentrionalis*). There is no known habitat for any of these species within the proposed project area; therefore, the proposed project is not likely to adversely affect these endangered, proposed endangered, and candidate species. In addition, both the April 20, 2009 and March 19, 2014 USFWS coordination stated "this precludes the need for further consultation on this project as required under Section 7 of the Endangered Species Act of 1973, as amended. However, should new information arise pertaining to project plans or a revised species list be published, it will be necessary for the Federal agency to reinstate consultation." See Appendix B, page B-15 to B-16 and B-25 to B-26 for reference to the USFWS coordination letters.

SECTION B – OTHER RESOURCES

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Drinking Water Resources				
Sole Source Aquifer (SSA)		X		
Is the Project in the St. Joseph Aquifer System?		X		
Is the FHWA/EPA SSA MOU Applicable?		X		
Initial Groundwater Assessment Required?		X		
Detailed Groundwater Assessment Required?		X		
Source Water Protection Area(s)		X		
Public Water System(s)	X			X
Residential Well(s)		X		
Wellhead Protection Area		X		

Remarks: The proposed project is located in Allen County; therefore, the project is not located within the area of the St. Joseph Sole Source Aquifer the only legally designated sole source aquifer in Indiana. The FHWA/EPA Sole Source Aquifer MOA is not applicable to this project, and a groundwater assessment is not required.

Review of the Wellhead Proximity Locator (<http://idemmaps.idem.in.gov/whpa/>) on March 15, 2013, indicated the proposed project area is not located in a wellhead protection area.

Drinking water is provided by the City of Fort Wayne within the project area. Existing water mains will be replaced as necessary throughout the project corridor.

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Flood Plains				
Longitudinal Encroachment		X		
Transverse Encroachment	X			X
Is the project located in a FEMA designated floodplain?	X			X
Homes located in floodplain within 1000' up/downstream from project.	X			X

Discuss impacts according to classification system described in the "Procedural Manual for Preparing Environmental Studies".

Remarks: Per the INDOT Categorical Exclusion manual, the proposed project includes a new bridge on new alignment, and is therefore considered a Category 5 project.

A hydraulic design study has been performed by American Structurepoint, and concluded that the project will meet all requirements of the Indiana Design Manual, and may therefore be considered to have no adverse impact on the floodplain. This hydraulic study was approved on May 13, 2010, by INDOT Hydraulics Section. A summary of this study is included in Appendix E, pages E-13 to E-17.

There will be no substantial impacts on natural and beneficial floodplain values; there will be no substantial change in flood risks; and there will be no substantial increase in potential for interruption or termination of emergency service or emergency evaluation routes; therefore it has been determined that this encroachment is not substantial. A map depicting the mapped DFIRM flood plain boundaries is included in Appendix E, pages E-11 to E-12.

Formal permit approval of the IDNR under the Flood Control Act (IC 14-28) will be obtained for this project.

	<u>Presence</u>		<u>Impacts</u>	
	Yes	No	Yes	No
Farmland				
Agricultural Lands		X		
Prime Farmland (per NRCS)		X		
NRCS Form AD-1006/CPA-106 scored \geq 160?	Yes	No		
		X		

Provide the NRCS Form AD-1006/CPA-106 score and state whether there is a significant loss of farmland as a result of the project in the remarks section. See CE Manual for guidance to determine which NRCS form is appropriate for your project.

This is page 16 of 34 Project name: State Boulevard Reconstruction Date: May 2, 2014

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Remarks:

As is required by the Farmland Protection Policy Act (FPPA), the NRCS has been coordinated with (March 10, 2009). The NRCS indicated that the project will not cause a conversion of prime farmland, Appendix B, page B-8. Since there will not be a conversion of prime farmland, the requirements of the FPPA are not applicable and the completion of the CPA-106 is not required. No other alternatives other than those already discussed in this document will be considered without a reevaluation of the project's potential impacts upon farmland. This project will not have a significant impact to farmland.

SECTION C – CULTURAL RESOURCES

	Category	Type	INDOT Approval Dates
Minor Projects PA Clearance			

Eligible and/or Listed Resource Present

	Yes	No
Results of Research		
Archaeology		X
History/Architecture	X	
NRHP Buildings/Site(s)	X	
NRHP District(s)	X	
NRHP Bridge(s)	X	

	Yes	Not Applicable	SHPO/ES/FHWA Approval Dates
Project Effect			
No Historic Properties Affected		X	
No Adverse Effect		X	
Adverse Effect	X		FHWA: 02/27/2013 SHPO: 04/01/2013

Documentation Prepared

	Yes	Not Applicable	SHPO/ES/FHWA Approval Dates
Documentation			
Historic Properties Short Report		X	
Historic Property Report	X		ES: 07/16/2012 SHPO 08/13/2012
Archaeological Records Check/ Review	X		
Archaeological Phase Ia Survey Report	X		ES: 07/16/2012 SHPO 08/13/2012
Archaeological Phase Ic Survey Report		X	
Archaeological Phase II Investigation Report		X	
Archaeological Phase III Data Recovery		X	
APE, Eligibility and Effect Determination	X		FHWA: 02/27/2013 SHPO 04/01/2013
800.11 Documentation	X		FHWA: 02/27/2013 SHPO 04/01/2013
Memorandum of Agreement	X		Approval date to be documented in FONSI request to FHWA

Describe all efforts to document cultural resources, including a detailed summary of the Section 106 process, using the categories outlined in the remarks box. The completion of the Section 106 process requires that a Legal Notice be published in local newspapers. Please indicate the publication date, name of paper(s) and the comment period deadline. Likewise include any further Section 106 work, which must be completed at a later date, such as mitigation or deep trenching.

Remarks:

Area of Potential Effect (APE): The APE is centered on State Boulevard in Fort Wayne, Wayne Township, Allen County, Indiana. From the alley west of Cass Street to the abandoned New York Central Railroad, the APE will extend 250 feet from the centerline of the existing roadway. It encompasses the first properties on the west side of Cass Street, north and south of West State Boulevard. From the abandoned railroad it continues east to the west property line of the property at 2239 Westbrook Drive. Following the north property line of 2239 Westbrook Drive, the APE continues east, crossing Westbrook Drive, Spy Run Creek and Eastbrook Drive, turning north to follow the east side of Eastbrook Drive to the north property line of 2342 Eastbrook Drive and turning east along that property line, including the north line of the property at 2335 Oakridge Road and continuing west along the south side of Neva Avenue to its intersection with North Clinton Street. From North Clinton Street east to Spy Run Avenue, the APE will extend 250 feet from the centerline of the existing roadway. Maps depicting the APE are included in Appendix C, pages C-134 to C-137.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

The archaeological APE is defined as the project footprint.

Coordination with Consulting Parties: An invitation to consulting parties and a request for participation in the Section 106 process was provided to federal, state, and local agencies initially on March 23, 2009. Additional requests (multiple dates) for participation in the process was provided as individuals or groups expressed interest. Those agencies were invited to be consulting parties and participate in the development of the project in accordance with provisions of Section 106 of the National Historic Preservation Act.

The following is a list of organizations and individuals that were invited or requested to be consulting parties. If no response was received to the consulting party invitation after 30 days, it was assumed the parties involved did not wish to act as consulting parties. FHWA, INDOT, and SHPO are considered automatic consulting parties.

Organization/Name	Response
Indiana Historical Society	No response
Fort Wayne City Council	Added 03/23/2009
ARCH, Inc.	Participant 03/26/2009
Allen County Historian	Participate 03/27/2009
Fort Wayne Historic Preservation Review Board	Participant 04/02/2009
Indiana Landmarks (formerly known as Historic Landmarks Foundation), Northern Regional Office	Participate 04/13/2009
Brookview Neighborhood Association	Participate 05/01/2009
Indiana Historic Spans Task Force	Participate 05/01/2009
Friends of the Parks of Allen County	Participate 05/22/2009
City of Fort Wayne	Participate 06/01/2009
Allen County Historical Society	No response
Irvington Park Neighborhood Association	Participate 07/09/2009
Historic Bridge Expert, James L. Cooper	No response
Adjacent Property Owner, Susan Haneline	Added 12/01/2009
Northside Galleries	Added 11/07/2009
Adjacent Property Owner, Karl Dietsch	Added 12/01/2009
Northeastern Indiana Regional Coordinating Council	Added 12/01/2009
Adjacent Property Owner, Annette "Jan" Dailey	Added 12/01/2009
Westbrook 5, LLC	Added 12/06/2009
Barrett & McNagney, LLP	Added 12/06/2009
Martin Riley Architects and Engineers	Added 12/06/2009
Earth Source, Inc.	Added 12/15/2009
Spy Run Neighborhood Association	No response
Five Points Neighborhood Association	No response
Bloomingtondale Neighborhood Association	No response
Advisory Council on Historic Preservation	Declined 07/31/2012

Archaeology: Archaeological Consultants of Ossian completed an Archaeological Field Reconnaissance of the proposed State Boulevard Reconstruction Project on April 2, 2009. No archaeological sites were located during the field reconnaissance. The Archaeological Field Reconnaissance Report concluded no properties on or eligible for listing on the NRHP will be affected by the proposed project. In reviewing the area previously surveyed by Archaeological Consultants of Ossian it was determined that there were areas within the limits of the preferred alternative for the proposed State Boulevard Improvements Project that had not been surveyed. On July 11, 2012, Archaeological Consultants of Ossian completed the Indiana Archaeological Short Report, for the additional area required for the State Boulevard Improvements project. The short report was reviewed and approved by the Indiana Department of Transportation, Cultural Resources (INDOT-CR) on July 16, 2012, and the State Historic Preservation Officer (SHPO) on August 13, 2012.

Historic Properties: A Historic Properties Report (HPR) was prepared by The Westerly Group, Inc. in September 2009, for the proposed State Boulevard Reconstruction Project. Historic properties were identified and evaluated in accordance with current Section 106 federal regulations. Four properties were recommended as eligible for listing on the NRHP including 315 East State Boulevard, the proposed Brookview-Irvington Park Historic District, the bridge carrying East State Boulevard over Spy Run Creek, and State Boulevard (within the historic district). In February 2012, Weintraut & Associates, Inc. prepared an Additional Information Report (AI) to append the HPR. The AI was prepared to supplement the HPR following the inclusion of two new NRHP-listed resources within the APE. As part of the AI investigation two districts were identified that were listed in the NRHP after the HPR (2009) was prepared. Portions of both the Fort Wayne Park and Boulevard System Historic District (NRHP, 2010) and Brookview-Irvington Park Historic District

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

(NRHP, 2011) are contained within the project APE. The AI further recommended that the portion of State Boulevard within the Brookview-Irvington Park Historic District is best represented as a contributing component of the NRHP historic districts and would not be recommended eligible as an individual resource, and that 315 East State Boulevard does not meet the criteria to be eligible for listing in the NRHP. The AI was reviewed and approved by INDOT-CR on May 10, 2012, and SHPO on June 22, 2012.

Documentation, Findings: Two historic properties are listed in the NRHP: Fort Wayne Park and Boulevard System Historic District and Brookview-Irvington Park Historic District. One historic property has previously been determined eligible for the NRHP: Bridge over Spy Run Creek.

- Fort Wayne Park and Boulevard System Historic District (NRHP, 2010)—Adverse Effect
- Brookview-Irvington Park Historic District (NRHP, 2011)—Adverse Effect
- Bridge over Spy Run Creek (NBI No. 0200273)—Adverse Effect

The Section 106 APE Determination (36 CFR 800.4(a)(1)), and the Finding of Adverse Effect (36 CFR 800.6(a)(3)), was approved by Federal Highway on February 27, 2013 and concurred with by the SHPO on April 1, 2013. The Section 800 Determination and Finding Documentation, signed by FHWA will be sent to all consulting parties at the same time the Environmental Assessment is released for public involvement. A Draft Memorandum of Agreement (MOA) was prepared to outline the proposed 'Adverse Effect' the project will have on the Fort Wayne Park and Boulevard System Historic District and Brookview-Irvington Park Historic District and the proposed mitigation for those adverse impacts. The Bridge over Spy Run Creek falls within the scope of the HBPA; and therefore, does not require an MOA for the adverse effect the project will have on the resource. The Draft MOA will be distributed to the IDNR-DHPA and consulting parties at the same time the Environmental Assessment is released for public involvement. Once the MOA is finalized and signed it will be forwarded to the ACHP for their information and record.

Public Involvement: Three consulting party meetings were held to discuss the findings of Historical Properties Report, effect findings, and options to avoid, minimize and mitigate adverse effects to the surrounding cultural resources. A total of 35 individuals, representing the FHWA, State, City, neighborhood associations, historic preservation groups, and adjacent property owners were invited to participate in the consulting party meetings. Meetings were held on December 15, 2009, September 1, 2011, and September 19, 2012. Meeting minutes can be found in the Section 106 Documentation in Appendix C, pages C-222 to C-224, C-340 to C-348, and C-427 to C-434.

A multitude of comments were received from consulting parties during the Section 106 process. Most comments received were to express concern with the scope and magnitude of the project and the significant impact it will have on the Brookview-Irvington Parks Historical District. Copies of all Section 106 consulting party comments can be found in Appendix C, pages C-189 to C-485.

The bridge over Spy Run Creek was advertised for reuse, per the HBPA. A notice was published in the *Fort Wayne Journal Gazette*, indicating a six month period during which interested parties could submit proposals for reuse of the bridge. Affidavits are found in Appendix C, pages C-491 to C-493. The bridge was advertised on the INDOT website, and signs were also placed at each end of the bridge, indicating the same six month response period. No responses were received regarding the notices.

A public notice describing the project and the Section 106 finding of "Adverse Effect" will be advertised concurrently with the EA release for public involvement in the local media. The public notice will solicit comments regarding the project for a 30-day comment period. This will also be the final chance for a responsible party to come forward to fund perseveration of the bridge. Should no party come forward within 30 days and the draft MOA be approved the 106 process will be concluded. A summary of any comments received and the disposition of those comments will be included in the FONSI request packet to be reviewed by FHWA prior to their issuance of a FONSI.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

SECTION D – SECTION 4(f) RESOURCES/ SECTION 6(f) RESOURCES

Section 4(f) Involvement

	<u>Presence</u>		<u>Use</u>		<u>FHWA / ES Approval/dates</u>
	Yes	No	Yes	No	
Parks & Other Recreational Land					
Publicly owned park	X		X		
Publicly owned recreation area		X			
Other (school, state/national forest, bikeway, etc.)		X			
Programmatic Section 4(f)		X			
Individual Section 4(f) Evaluation		X			
“De minimis” Impact	X				Pending FONSI

	<u>Presence</u>		<u>Use</u>		<u>FHWA / ES Approval/dates</u>
	Yes	No	Yes	No	
Wildlife & Waterfowl Refuges					
National Wildlife Refuge		X			
State Fish and Wildlife Area – recreation or refuge areas only		X			
Programmatic Section 4(f)		X			
Individual Section 4(f) Evaluation		X			
“De minimis” Impact		X			

	<u>Presence</u>		<u>Use</u>		<u>FHWA / ES approval/dates</u>
	Yes	No	Yes	No	
Historic Properties					
Sites eligible and/or listed on the NRHP	X		X		
Programmatic Section 4(f)	X				Historic Bridge PA Pending FONSI
Individual Section 4(f) Evaluation	X				Pending FONSI
“De minimis” Impact		X			

Discuss Programmatic Section 4 (f) and De minimis Section 4(f) impacts in the remarks section below. Individual Section 4(f) documentation must be separate Draft and Final documents. For further discussions on Programmatic, De minimis and Individual Section 4(f) documents please refer to the “Procedural Manual for the Preparation of Environmental Studies.” Discuss proposed alternatives that satisfy the requirements of Section 4(f).

Remarks:

Parks and other Recreational Land

“De minimis” Impact – Vesey Park: One property, Vesey Park was noted in the project limits as a Section 4(f) resource. This park is operated by the City of Fort Wayne Parks Department and includes the green space along Spy Run Creek between Eastbrook Drive and Westbrook Drive connecting the larger portion of Vesey Park located at Irvington Drive and Eastbrook Drive to the south to Lawton Park along the St. Mary’s River. The park features open space among the trees with areas for picnicking and views to Spy Run Creek. This undertaking would convert approximately 0.55-acre of permanent right-of-way to a transportation use for the installation of a new bridge over Spy Run Creek and State Boulevard. Avoidance of this resource is not feasible as the existing roadway crosses Spy Run Creek and Vesey Park and one purpose of the project is to replace the existing bridge. Coordination with the City of Fort Wayne Parks Department regarding the proposed project was undertaken. The City of Fort Wayne Parks Department provided a letter in support of this project on January 23, 2013. The project will have a *de minimis* effect on Vesey Park, a Section 4(f) property, as it will not adversely affect the activities, features, and attributes that qualify Vesey Park for protection under Section 4(f). For reference to the communication see Appendix J page J-2 to J-8.

A public notice describing the project and the Section 4(f) *de minimis* finding associated with Vesey Park will be advertised concurrently with the EA release for public involvement in the local media. The public notice will solicit comments regarding the project for a 30-day comment period. Comments or concerns brought forth by the public during this process will be addressed in the Finding of No Significant Impact (FNOSI) request document submitted to the FHWA.

Historical Properties

It has been determined two historic districts and a historic bridge eligible for listing in the NRHP exist within the APE of this project. The undertaking will affect the Fort Wayne Park and Boulevard System Historic District, the Brookview-

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Irvington Park Historic District, and the Bridge over Spy Run Creek.

Programmatic Section 4(f) – Bridge over Spy Run Creek: The Bridge over Spy Run Creek (NBI No. 0200273) is a reinforced concrete girder, T-Beam bridge constructed in 1927 by contractor Herman W. Tapp and featuring the design of A.W. Grosvenor and O. Darling. The bridge was previously determined eligible for listing in the NRHP per the Indiana Statewide Historic Bridge Inventory (2010) and is thus considered a Section 4(f) resource based upon 23 CFR 774.11(e). The Bridge over Spy Run Creek is eligible under Criterion C for Engineering/Architecture and is a Non-Select bridge. As part of the project, the bridge will be removed and replaced on new alignment.

The project falls within the stipulations for the Historic Bridges Programmatic Section 4(f). Per the Programmatic Section 4(f) Evaluation and Approval for FHWA Projects that Necessitate the Use of Historic Bridges, three specific alternatives must be evaluated prior to the use of a historic bridge. The following are these alternatives, along with findings that are supported through consultation with consulting parties:

1. Do Nothing. The do nothing alternative has been studied. The do nothing alternative ignores the basic transportation need. For the following reasons this alternative is not feasible and prudent:
 - a. Maintenance - The do nothing alternative does not correct existing deficiencies that cause the bridge to be considered structurally deficient or deteriorated. These deficiencies can lead to sudden collapse and potential injury or loss of life. Normal maintenance is not considered adequate to cope with the situation.
 - b. Safety - The do nothing alternative does not correct the situation that causes the bridge to be considered deficient.

Because of these deficiencies the bridge poses serious and unacceptable safety hazards to the traveling public and places intolerable restriction on transport and travel.

2. Build on New Location Without Using the Old Bridge. Investigations have been conducted to construct a new bridge on a new location or parallel to the old bridge (allowing for a 1-way couplet).
 - a. Preservation of Old Bridge - It is not feasible and prudent to preserve the existing bridge, even if a new bridge were to be built at a new location. The existing bridge carrying State Boulevard over Spy Run Creek provides an insufficient waterway opening and is quickly deteriorating. Structurepoint has reviewed the 2006 Structural Inventory and Appraisal Report (SAI) for Allen County Bridge 546. *State Boulevard Reconstruction From Spy Run Creek to Cass Street, Version February 20, 2013, Fort Wayne, Allen County, Indiana Des. No.: 0400587 Federal Project Number: IN20071404* 17. The structure is a cast-in-place reinforced concrete girder bridge built in 1927. The concrete girders were in serious condition with large spalls and exposed rusted rebar. According to the SAI, the existing bridge has a sufficiency rating of 27.9. Sufficiency ratings of 50 to 80 are considered for rehabilitation, while those under 50 are usually replaced or closed. The SIA report recommended replacement and due to extremely poor condition of the R/C girders the estimated remaining life of the bridge superstructure is five years from the date of the inspection report (2006). The SAI report indicated the structure has the potential to be historic. If the structure were to be rehabilitated it would likely require a complete superstructure replacement eliminating the elements that would contribute to its need for preservation.

The existing bridge is currently below the flood elevation of the St. Mary's River, which causes the bridge to be overtopped with backwater from the Saint Mary's River frequently, therefore affecting roadway safety by flooding State Boulevard. According to the Spy Run Creek Flood Control Study (Christopher B. Burke, 2005) "This flooding is caused primarily by backwater from the St. Mary's River, which controls the water surface elevation up to about State Boulevard. The State Boulevard crossing causes a significant backwater affecting the upstream water surface elevation to about Grove Street."

This alternative is not feasible because the minimum design standards in the Indiana Design Manual cannot be addressed by rehabilitating the existing structure. This alternative is not prudent because the existing bridge carrying State Boulevard over Spy Run Creek provides an insufficient waterway opening and is quickly deteriorating.

3. Rehabilitation without Affecting the Historic Integrity of the Bridge. Studies have been conducted of rehabilitation measures, but, for the following reason, this alternative is not feasible and prudent:
 - a. The bridge is so structurally deficient that it cannot be rehabilitated to meet minimum acceptable load requirements without affecting the historic integrity of the bridge.

The project's alternatives were developed using the July 17, 2006, Programmatic Agreement (PA) on Indiana's Historic Bridges, as well as guidance provided on this PA by INDOT subsequent to its enactment. According to the Indiana Historic Bridge Inventory report dated December 2010, the Bridge over Spy Run Creek (NBI No. 0200273) is considered

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

a non-select candidate for inclusion on the NRHP. As such, the project was evaluated utilizing guidance from this PA for non-select bridges.

Initial Section 4(f) alternatives were sent out with the HPR to consulting parties and SHPO on August 15, 2011, along with the invitation to the September 1, 2011 Consulting Party Meeting. The initial alternatives were discussed and further developed as a result of input received during Consulting Party meetings which were held throughout the development of the project. The final Section 4(f) alternatives were included in the Section 800 documentation presented by INDOT to FHWA for their review and comment and approved on February 27, 2013. The Section 800 documentation was then submitted to SHPO for review on March 1, 2013 and concurred with on April 1, 2013.

The Alternatives Analysis resulted in the identification of a preferred alternative (described previously in this document in the Project Description Section) that includes replacement of the existing bridge, thus resulting in an "Adverse Effect". FHWA signed the finding of "Adverse Effect" on February 27, 2013. By signature of this document, the FHWA has concluded that there is no feasible and prudent alternative to the Section 4(f) use of the Bridge over Spy Run Creek (NBI No. 0200273) through replacement.

The Bridge over Spy Run Creek (NBI No. 0200273) was advertised for reuse, per the HBPA. A notice was published in the *Fort Wayne Journal Gazette*, indicating a six month period during which interested parties could submit proposals for reuse of the bridge. Affidavits are found in Appendix C, pages C-490 to C-496. The bridge was advertised on the INDOT website, and signs were also placed at each end of the bridge, indicating the same six month response period. No responses were received regarding the notices.

A public notice describing the project and the Programmatic Section 4(f) will be advertised concurrently with the EA release for public involvement in local media. The public notice will solicit comments regarding the project for a 30-day comment period. This will also be the final chance for a responsible party to come forward to fund perseverance of the bridge. If a responsible party does not take ownership of the bridge it will be demolished.

Individual Section 4(f) Evaluation – Fort Wayne Park and Boulevard System Historic District and Brookview-Irvington Historic District: The Fort Wayne Park and Boulevard System Historic District is generally bound by the 1912 plan for the City of Fort Wayne. The district encompasses the system of 11 parks, four parkways (including ten "park or park-like areas" associated with the parkways), and ten boulevards envisioned by Charles Mumford Robinson and George Kessler and based on the City Beautiful Movement. The district includes nearly 2,000 acres of parks, boulevards, and sites. There are eight resources identified as part of the Fort Wayne Park and Boulevard System historic district located within the APE for this project. Seven of those identified resources contribute to the historic district and include: Spy Run Creek, Sloping Hills and Natural Features, Clinton Street Bridge, Westbrook Drive, Eastbrook Drive, State Boulevard (Lindenwood to Anthony), State Boulevard through Brookview, and Bridge over Spy Run Creek (NBI No. 0200273). The Fort Wayne Park and Boulevard System Historic District was listed on the NRHP in 2010 and is significant under Criteria A and C in the areas of Community Planning and Development, Entertainment/Recreation, and Landscape Architecture. The period of significance is 1909, marking the date of the first park and boulevard master plan, to 1955, marking the date when the park and boulevard plan was "essentially realized." Approximately 0.60 acres of permanent right-of-way will be acquired from this district as part of the proposed project.

The Brookview-Irvington Park Historic District is roughly bound by Northfolk Avenue, Lima Road, Spy Run Avenue, North Clinton Street, and Jacobs Avenue. The district contains a total of 424 contributing resources including houses, garages, and the combined plats of the district, as well as the previously determined eligible Bridge over Spy Run Creek (NBI No. 0200273). Ninety-two resources associated with the historic district are within the project APE. The district is significant under Criteria A and C in the areas of Community Planning and Development, Landscape Architecture, and Architecture. The period of significance is 1906-1965, represents the construction dates of most buildings within the historic district, and also encompasses the utilization of Centlivre Park (no longer extant) as a resort destination. Approximately 2.60 acres of permanent right-of-way and 15 residential relocations will be required from this district as part of the proposed project.

This undertaking will convert property from two historic districts and an historic bridge, all NRHP eligible properties, to a transportation use. The FHWA has determined the appropriate Section 106 finding is Adverse Effect for both districts and therefore, an Individual Section 4(f) evaluation was undertaken. An Individual 4(f) Document has been prepared, which discusses project use of the Section 4(f) resources. The Individual 4(f) Document evaluated and summarized the proposed project's purpose and need, reasonable alternatives, Section 4(f) resources, and all possible planning to minimize harm to those resources. The report identified Alternative 3A as the alternative which would cause the least over all harm in light of the statute's preservation purpose. This alternative includes widening the existing 2-lane section of State Boulevard between Clinton Street and Cass Street to 4 lanes while correcting the substandard horizontal curve. For reference to the Section 4(f) evaluation, see Appendix J pages J-9 to J-51.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Mitigation measures have been detailed in a Memorandum of Agreement (MOA) to be executed by consulting parties. As mitigation for unavoidable impacts to each of the NRHP listed historic districts, the City of Fort Wayne shall implement context sensitive design solutions for this undertaking, salvage architectural details from homes to be demolished, explore funding opportunities for neighborhood improvements, and convene an Advisory Team to ensure the project is developed in a manner that respects the historic qualities, landscapes, historic buildings, and features in the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District. The Bridge over Spy Run Creek falls within the scope of the HBPA; and therefore, does not require an MOA for the adverse effect the project will have on the resource.

In compliance with Section 4(f), pursuant to 23 CFR Part 774.5, the draft Section 4(f) documentation was provided to the US Department of Interior (DOI) for review and comment on May 24, 2013. The DOI provided comments on July 8, 2013 (Appendix J, pages J-52 to J-53). The DOI indicated they would tend to concur with the FHWA and INDOT that there are no feasible and prudent alternatives to the preferred alternative, if built as proposed, which would result in impacts to Section 4(f) properties. Constrained linear features such as State Boulevard offer few good alternatives when 4(f) resources have grown up on either side of the corridor and the functionality of the feature becomes compromised by growing populations. DOI also states that as recently as this last December, there was still considerable disagreement over the project and its mitigation. The Department cannot concur with the INDOT and FHWA because there is no evidence that all parties, including the SHPO, have agreed to the mitigation measures, or is there evidence in the evaluation that the MOA has been signed. DOI reserves their concurrence with the hope that the final 4(f) will present the necessary agreements. For reference to the Section 4(f) documentation see Appendix J, pages J-9 to J-51.

A public notice describing the project and the Individual Section 4(f) Evaluation for impacts to the Fort Wayne Park and Boulevard System Historic District and Brookview-Irvington Historic District will be advertised concurrently with the EA release for public involvement in the local media. The public notice will solicit comments regarding the project for a 30-day comment period. After the conclusion of the comment period efforts will be made to finalize the MOA and obtain concurrence from all necessary signatories. Once the MOA has been signed and the Section 4(f) has been finalized it will be submitted to DOI for final concurrence. The Individual Section 4(f) document will then be reviewed by FHWA for legal sufficiency. Comments or concerns brought forth during this process will be addressed in the FONSI request document submitted to the FHWA.

Section 6(f) Involvement

<u>Presence</u>		<u>Use</u>	
Yes	No	Yes	No
<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Section 6(f) Property

Discuss proposed alternatives that satisfy the requirements of Section 6(f). Discuss any Section 6(f) involvement.

Remarks:

The project will not involve any properties acquired by or improved with the Land and Water Conservation Fund (LWCF). The US Department of the Interior, National Park Service LWCF Detailed Listing of Grants Grouped by County was reviewed for Allen County. Twenty-four sites were noted in Allen County, all of which are outside of the project area. Therefore, there is no Section 6(f) involvement and there will be no taking of LWCF property. DNR's Division of Outdoor Recreation early coordination response (April 7, 2009) also confirmed that no LWCF properties are within the project area. See Appendix B, pages B-27 to B-28 for a copy of the Allen County 6(f) property listings.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

SECTION E – Air Quality

Air Quality

Conformity Status of the Project

	Yes	No
Is the project in an air quality non-attainment or maintenance area?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
If YES, then:		
Is the project in the most current MPO TIP?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is the project exempt from conformity?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
If the project is NOT exempt from conformity, then:		
Is the project in the Transportation Plan (TP)?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is a hot spot analysis required (CO/PM)?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is an MSAT level 1a Analysis required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is an MSAT level 1b Analysis required?	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Is an MSAT level 2 Analysis required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is an MSAT level 3 Analysis required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is an MSAT level 4 Analysis required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Is an MSAT level 5 Analysis required?	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks:

The project area is located within the air quality maintenance area of ozone and attainment for particulate matter. Copies of the air quality maps are included in Appendix G pages G-16 to G-18. The FY 2014 to 2017 Transportation Improvement Program for the Northeastern Indiana Regional Coordinating Council was found to conform to air quality regulations and incorporated by reference into the FY 2014 to 2017 State Transportation Improvement Program on July 11, 2013. The proposed project is regionally significant and non-exempt. For reference to the planning documents see Appendix G, pages G-8 to G-15.

The purpose of this project is to improve vehicular and pedestrian/bicycle safety along State Boulevard. This project has been determined to generate minimal air quality impacts for CAAA criteria pollutants and has not been linked with any special MSAT concerns. As such, this project will not result in changes in traffic volumes, vehicle mix, basic project location, or any other factor that would cause an increase in MSAT impacts of the project from that of the no-build alternative.

Moreover, EPA regulations for vehicle engines and fuels will cause overall MSAT emissions to decline significantly over the next several decades. Based on regulations now in effect, an analysis of national trends with EPA's MOVES model forecasts a combined reduction of over 80 percent in the total annual emission rate for the priority MSAT from 2010 to 2050 while vehicle-miles of travel are projected to increase by over 100 percent. This will both reduce the background level of MSAT as well as the possibility of even minor MSAT emissions from this project.

SECTION F - NOISE

Noise

Is a noise analysis required in accordance with FHWA regulations and INDOT's noise policy? Yes No

	No	Yes/ Date
ES Approval of Noise Analysis	<input type="checkbox"/>	10/18/2011 (Technical Sufficiency)

Remarks:

The proposed State Boulevard Reconstruction Project proposes road improvements on new alignment utilizing federal funds. Under the provisions of 23 CFR, part 772, the project is considered a "Type I" noise project requiring an analysis of potential noise impacts and, if so, whether there are feasible and reasonable ways to mitigate those impacts.

A noise analysis was prepared by the Corradino Group following the guidance in the Federal Highway Administration's (FHWA's) *Highway Traffic Noise: Analysis and Abatement Guidance* (July 2010) and the Indiana Department of Transportation's (INDOT's) *Procedural Manual for Preparing Environmental Documents* and its *Traffic Noise Policy* (July 2011).

Noise measurements were made in conformance with Federal Highway Administration (FHWA) guidance at six locations that represent 63 residential receivers present within 500 feet of the proposed improvement (the analysis distance criterion set in INDOT's *Traffic Noise Policy*). The noise measurement locations represent worst case

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

locations for all homes in what are considered noise sensitive areas. An additional measurement was made at another noise sensitive receiver, North Side High School, beyond the east construction limit of the proposed project. Land use at the west project end is commercial, as it is in the east, with the exception of the school. The residential receivers fall into land use category B in terms of FHWA's Noise Abatement Criteria (NAC) (Table 1). The applicable noise criterion for this land use is 67 dBA in terms of the one-hour equivalent noise level, expressed as L_{eq} (1h). Because Part 772 defines potential impacts in terms of noise levels approaching or exceeding the NAC and INDOT's *Noise Policy* defines approaching as one decibel, the effective value for impact analysis in Indiana for land use category B is 66 dBA, rather than 67 dBA. The school falls into NAC land use category C, which is subject to the same NAC dBA criterion.

Existing measured noise levels did not approach or exceed the NAC at any receiver, with the exception noted below. Analysis using the Traffic Noise Model (TNM2.5) validated the noise measurements obtained in the field. TNM2.5 modeling also finds no receivers will experience future project noise levels that approach or exceed the NAC, with the same exception. And, no modeled receiver will experience predicted noise levels that substantially exceed existing noise levels (INDOT's *Noise Policy* defines this as 15 dBA). So, except for measurement site 2S, there are no noise impacts and no mitigation is needed.

Measurement site 2S represents a home on the south side of State Boulevard, where the new alignment joins the existing alignment west of Clinton Street, plus the home across State Boulevard on the east side of Terrace Street. These homes are 22 feet and 16 feet, respectively, from existing State Boulevard. The home on the south side of State Boulevard was a measurement site because early engineering did not call for its acquisition. More detailed design found it was necessary to acquire this home for the project. The house on the north side will remain and will be approximately 50 feet from the future roadway edge. It will experience noise levels exceeding the NAC. However, there is no feasible or reasonable mitigation that could protect this home.

Based upon preliminary design costs and design criteria, no locations have been identified where noise abatement is likely. Noise abatement has not been found to be feasible because effective noise barriers require long, uninterrupted segments of barrier to be feasible. As such, because of the existing cross streets, access points, alleyways and driveways located throughout the project area, it is not feasible to construct effective noise barriers for the roadway. Noise walls would not be reasonable because the cost of providing a wall for an individual home would exceed INDOT cost-effectiveness guidelines. Therefore, there is no feasible or reasonable noise mitigation proposed.

A reevaluation of the noise analysis will occur during final design. If during final design it has been determined that conditions have changed such that noise abatement is feasible and reasonable, the abatement measurements might be provided. The final decision on the installation of any abatement measure(s) will be made upon the completion of the project's final design and the public involvement processes.

For reference, the complete Noise Study Report is provided in Appendix I, pages I-2 to I-53. A copy of the approval of the technical sufficiency of the Noise Analysis (from INDOT Environmental Services) was received on October 18, 2011, and is included in Appendix I, page I-54.

SECTION G – COMMUNITY IMPACTS

Regional, Community & Neighborhood Factors

- Will the proposed action comply with the local/regional development patterns for the area?
- Will the proposed action result in substantial impacts to community cohesion?
- Will the proposed action result in substantial impacts to local tax base or property values?
- Will construction activities impact community events (festivals, fairs, etc.)?

Yes	No
X	
	X
	X
	X

Remarks:

The proposed project will improve public safety, improve roadway capacity at intersections, improve traffic flow along the project corridor, and improve the infrastructure along State Boulevard. No substantial adverse community impacts are anticipated to result from this project. The project will require a total of 15 residential relocations. The project will not affect community cohesion because it will not substantially change access or travel patterns within the community.

Currently, the State Boulevard project corridor does not provide an adequate and safe link between the two Greenway Trail Systems located in the project area. The proposed project will provide this link between the Pufferbelly Trail and the St. Joseph Pathway. New sidewalks, varying in width from five feet to ten feet, will be constructed on both sides of the roadway.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

The preferred alternative is anticipated to improve neighborhood/community cohesion, as one of the identified needs addressed by the proposed project is pedestrian safety. The proposed project will address the limited north/south pedestrian connectivity caused by traffic congestion and poor sight distance for pedestrians attempting to cross State Boulevard between Cass Street and Clinton Street. As a part of this project, a new pedestrian bridge will be constructed over State Boulevard at the existing abandoned railroad crossing. Sidewalk ramps will be extended from proposed State Boulevard to the pedestrian bridge approach connecting State Boulevard to the future Pufferbelly Trail.

The project is not anticipated to affect any public facilities during construction. Traffic is expected to be maintained along the existing roadway during construction, through the use of phased construction. One travel lane is expected to remain open at all times and access shall be maintained to all residences and businesses during construction.

Indirect and Cumulative Impacts

Will the proposed action result in substantial indirect or cumulative impacts?

Yes	No
	X

Remarks:

This project will improve public safety, traffic flow, and infrastructure along State Boulevard. The project will improve existing conditions and will not result in any substantial indirect or cumulative impacts. The project will reconstruct an existing road in an already fully developed area.

Public Facilities & Services

Will the proposed action result in substantial impacts on health and educational facilities, public utilities, fire, police, emergency services, religious institutions, public transportation or pedestrian and bicycle facilities? Discuss the maintenance of traffic, and how that will affect public facilities and services.

Yes	No
	X

Remarks:

Based on the Maintenance-of-Traffic Plan, traffic is expected to be maintained along the existing roadway during construction, through the use of phased construction. Access to residential, commercial, and public properties will be maintained throughout construction.

Early coordination describing the project was sent to public agencies, including the highway department, sheriff's department, fire department, public schools, and other local public agencies. No other responses were received from local agencies. See Appendix B, page B-7 for reference to the early coordination list.

Environmental Justice (EJ) (Presidential EO 12898)

During the development of the project were EJ issues identified?

Are any EJ populations located within the project area?

Will the project result in adversely high or disproportionate impacts to the EJ population?

Yes	No
X	
X	
	X

Remarks:

An EJ concern is considered any impact that would have a disproportionately high and adverse effect on an environmental justice population. For EJ analysis, the reference community is typically a county, city, or town that contains the project and is called the community of comparison (COC). The community that overlaps the project limits is called the affected community (AC). Affected communities, which are more than 50 percent minority or low-income are automatically EJ populations. For all other affected communities, an EJ population exists if the low-income population or minority population is 25 percent higher than the population in the COC. A low-income population is a population with a median income that is below the federal poverty guidelines. A minority population consists of individuals who belong to one or more minority groups.

The project area is comprised of two Census Tracts, as determined by a review of the 2010 US Census data. These Census Tracts are considered to be the ACs. For this analysis, Allen County was analyzed as the COC. Within Allen County, 16.3 percent of the population was considered low-income and 28.8 percent were considered minority populations. An EJ population would exist if the population exceeds 20.4 percent low income or 36.0 percent minority respectively.

Within the project limits, Census Tract 00500 includes the eastern portion of the proposed project. According to the 2010 US Census, 33.3 percent of this population is low income and 34.8 percent is minority. Census Tract 00701 includes the western portion of the proposed project. According to the 2010 US Census, 27.9 percent of this population is low income and 25.4 percent is minority. As such, a potential environmental justice low income population exists within the Affected Community as compared to Allen County. For reference see the table below and Appendix H pages H-2 to H-10.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Analysis of Potential EJ Populations	COC	AC	
	Allen County, Indiana	Census Tract 00500	Census Tract 00701
LOW-INCOME			
Total Population for whom poverty status is determined (estimated)	248,772	2,766	3,342
Total Population Below Poverty Level (estimated)	40,534	922	931
Percent Low-income	16.3%	33.3%	27.9%
125 Percent of COC	20.4%	AC>125% COC	AC>125% COC
Potential Low-income EJ Impact?		Yes	Yes
MINORITY			
Total population (all races)	254,228	2,939	3,343
White alone or in combination	181,101	1,915	2,493
Number Non-white/Minority	73,127	1,024	850
Percent Non-white/Minority	28.8%	34.8%	25.4%
125 Percent of COC	36.0%	AC>125% COC	AC>125% COC
Potential Minority EJ Impact?		No	No

The 15 residential properties are anticipated to be acquired as part of the proposed project. Avoidance of these acquisitions is not possible due to the proximity of the existing structures to the roadway and due to re-alignment of the proposed roadway. Impacts have been minimized to the greatest extent possible. The acquisition and relocation program will be conducted in accordance with 49 CFR 24 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources are available to all residential and business relocates without discrimination. No person displaced by this project will be required to move from a displaced dwelling unless comparable replacement housing is available to that person.

The project is intended to improve safety along State Boulevard by widening and realigning the roadway. The widening and realignment is required to help correct sight distance issues and substandard intersections, as well as provide turn lanes as appropriate. The project will also increase pedestrian safety by the addition of sidewalks varying in width from five feet to ten feet along both sides of the roadway.

The proposed project is expected to benefit the immediate project area including those Census Tracts with environmental justice concerns, through addition of pedestrian facilities, correction of drainage issues associated with the roadway, and improvement of the existing roadway. The existing bridge is currently below the flood elevation of the St. Mary's River, which causes the bridge to be overtopped with backwater from the Saint Mary's River with frequently, therefore affecting roadway safety by flooding State Boulevard and requiring the closure of the roadway. Road closure due to flooding events appear to be happening more consistently in recent years, restricting emergency traffic more often. The proposed project will address this issue by raising the vertical alignment of the roadway approximately seven feet at the proposed bridge over Spy Run Creek. This will significantly reduce the amount of road closures due to flooding events and allow emergency vehicles and local residents access during times when they may not have in the past. Noted negative effects include up to 15 residential relocations and the impact those will have on the existing neighborhood.

Significant efforts were made to engage and involve the public in the project planning process. Early coordination was initiated with representatives of the community. On multiple occasions the City of Fort Wayne met with neighborhood associations, business owners, adjacent property owners, and interested groups. The City met with these individuals to help explain the project, provide project updates, and address comments and concerns. Meeting with these groups, individuals, and representatives further helped the City ensure the public was involved in the planning process. In addition five public information meetings and three open-house style public information meetings were conducted to further attempt to engage the public. Significant efforts were made to encourage participation in the meetings, including public notices and press releases published in the *Fort Wayne Journal Gazette*. For additional information see the public involvement documents associated with this project see Appendix F pages F-12 to F-24.

The positive effects of the project outweigh the noted negative effects; the project would be a benefit to those in the area. The State Boulevard Reconstruction Project would not cause a disproportionate impact on the known EJ community. Significant efforts were made to encourage full and fair participation by all potentially affected communities in the project planning process, and suggestions and comments received from community participants are being considered in the final project design. As a result of this analysis and public involvement process, the requirements of Executive Order 12898 and the policy principles of the US DOT have been addressed, and no further evaluation is warranted.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Relocation of People, Businesses or Farms:

Will the proposed action result in the relocation people, businesses or farms?

Is a Business Information Survey (BIS) required?

Is a Conceptual Stage Relocation Study (CSRS) required?

Yes	No
X	
	X
	X

Number of relocations: Residences: 15 Businesses: 0 Farms: 0 Other: 0

If a BIS or CSRS is required, discuss the results in the Remarks section.

Remarks:

Relocations have been minimized to the extent practical. Existing structures to be relocated are generally within zero to thirty feet of the proposed edge of pavement. Significant property acquisition cannot be avoided due to the roadway alignment and profile. For reference to the parcels anticipated to be relocated see plans included in Appendix A pages A-11 to A-129.

There are no other relocations anticipated from this project; however, during property acquisition, it is possible additional structures may be acquired. The acquisition and relocation program will be conducted in accordance with 49 CFR 24 and the Uniform Relocation Assistance and Real Property Acquisition Policies Act of 1970, as amended. Relocation resources are available to all residential and business relocatees without discrimination. No person displaced by this project will be required to move from a displaced dwelling unless comparable replacement housing is available to that person.

SECTION H – HAZARDOUS MATERIALS & REGULATED SUBSTANCES

- Red Flag Investigation
- Hazardous Materials Site Assessment Form
- Phase I Initial Site Assessment (ISA)
- Phase II Preliminary Site Investigation (PSI)
- Design/Specifications for Remediation required?

Documentation	
Yes	No
X	
X	
X	
	X
	X

	No	Yes/ Date
ES Review of Investigations	X	

Include a summary of findings for each investigation.

Remarks:

A Red Flag Investigation (RFI) was initiated by American Structurepoint, Inc., in 2007. The investigation included a search of nationwide and local database resources provided by IndianaMap and FirstSearch. A total of 46 hazardous material concern records were identified within a 0.5-mile of the project radius. Results of the 2007 preliminary investigation recommended a Phase I Initial Site Assessment (ISA). Prior to completion of the RFI on April 26, 2013 a search of nationwide and local databases was again performed to review updated information. No additional hazardous material concern records were identified in the 2013 search.

A Hazardous Material Site Visit Form was also completed for the project area. The Hazardous Materials Site Visit Form did not identify any additional hazardous materials concerns.

An ISA was prepared by American Structurepoint, Inc on November 11, 2011. A total of five sites were assessed, with no sites identified as having a Recognized Environmental Condition (REC). Because no RECs were identified, no additional investigations are necessary. The following are those properties addressed as part of the ISA.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

Site ID	Address	Site Name	REC	Additional Investigation Recommended
1	215 West State Boulevard	Ink Spot Printing	None	No
2	324 East State Boulevard	Kroger	None	No
3	310 West State Boulevard	Townsend and Pratt Auto Sales	None	No
4	2230 North Clinton Street	Lassus Brothers Oil Handy Dandy	None	No
5	2522 Cass Street	Superior Collision	None	No

A copy of the RFI, Hazardous Material Site Visit Form, and ISA Executive Summary are included in Appendix D, pages D-2 to D-14.

SECTION I – PERMITS CHECKLIST

	<u>Required</u>	<u>Not Required</u>
Army Corps of Engineers (404/Section 10 Permit)		
Individual Permit (IP)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Nationwide Permit (NWP)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Regional General Permit (RGP)	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Pre-Construction Notification (PCN)	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IDEM		
Section 401 WQC	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Isolated Wetlands determination	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Rule 5	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Wetland Mitigation required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Stream Mitigation required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
IDNR		
Construction in a Floodway	<input checked="" type="checkbox"/>	<input type="checkbox"/>
Navigable Waterway Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Lake Preservation Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Other	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Mitigation Required	<input type="checkbox"/>	<input checked="" type="checkbox"/>
US Coast Guard Section 9 Bridge Permit	<input type="checkbox"/>	<input checked="" type="checkbox"/>
Others (Please discuss in the Remarks section below)	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Remarks:

The project will require a Section 404 from the USACE and a Section 401 Water Quality Certification from IDEM for impacts to regulated wetlands or waterways. The project will require a Construction in a Floodway permit from IDNR for the crossings of Spy Run Creek. The project will require a Rule 5 Erosion Control Permit from IDEM if at least one acre of land is disturbed.

The local project sponsor is responsible for obtaining all required permits.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

SECTION J- ENVIRONMENTAL COMMITMENTS

Information below must be included on Commitments Summary Form. List all commitments, indicating which are firm and which are optional.

Remarks:

<p>Firm Commitments</p> <p>USFWS</p> <ol style="list-style-type: none">1. Post DO NOT DISTURB signs at the construction zone boundaries and do not clear trees or understory vegetation outside the boundaries.2. Restrict below-water work to placement of piers, pilings and/or footings, shaping of the spill slopes around the bridge abutments, and placement of riprap.3. Restrict channel work and vegetation clearing to within the width of the normal approach road right-of-way.4. Minimize the extent of artificial bank stabilization.5. If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.6. Implement temporary erosion and siltation control devices such as placement of straw bales in drainage ways and ditches, covering exposed areas with burlap, jute matting or straw, and grading slopes to retain runoff in basins.7. Revegetate all disturbed soil areas immediately upon project completion.8. Avoid all work within the inundated part of the stream channel during the fish spawning season (April 1 through June 30), except for work within sealed structures such as caissons or cofferdams that were installed prior to the spawning season (as applicable). <p>IDNR</p> <ol style="list-style-type: none">9. Minimize and contain within the project limits in channel disturbance and the clearing of trees and brush.10. Do not work in the waterway from April 1 through June 30 without prior written approval of the Division of Fish and Wildlife11. Post "Do Not Mow or Spray" signs along the right-of-way.12. Seed and protect all disturbed streambanks and slopes that are 3: 1 or steeper with erosion control blankets (follow manufacturer's recommendations for installation); seed and apply mulch on all other disturbed areas.13. Revegetate "low maintenance" areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion; low endophyte tall fescue may be used in "high maintenance" areas only.[Alternate wording – check your letter - Revegetate "low maintenance" areas with a mixture of grasses (excluding all varieties of tall fescue), legumes as soon as possible upon completion; low endophyte tall fescue may be used in ditch bottom and side slopes only.]14. Do not cut any trees suitable for Indiana bat roosting (greater than 3 inches dbh, living or dead, with loose hanging bark) from April 1 through September 30.15. Appropriately designed measures for controlling erosion and sediment must be implemented to prevent sediment from entering the stream or leaving the construction site; maintain these measures until construction is complete and all disturbed areas are stabilized.16. Do not excavate in the low flow area except for the placement of piers, foundations, and riprap, or removal of the old structure.17. Do not work in salmonid waterways from March 15 through June 15 and from July 15 through November 30 without the prior written approval of the Department of Natural Resources, Division of Fish and Wildlife.18. Use minimum average 6-inch graded riprap stone extended below the normal water level to provide habitat for aquatic organisms in the voids.19. The project must not create conditions that are less favorable for wildlife passage under the structure compared to current conditions. This includes maintaining land under the bridge unarmored with riprap to allow for wildlife passage.20. If any archaeological artifacts or human remains are uncovered during construction, demolition, or earthmoving activities, state law (Indiana Code 14-21-1-27 and 29) requires that the discovery must be reported to the Department of Natural Resources within two (2) business days. In that event, please call (317)232-1646. Be advised that adherence to Indiana Code 14-21-1-27 and 29 does not obviate the need to adhere to applicable federal statutes and regulations.21. Revegetate all bare and disturbed areas with a mixture of grasses (excluding all varieties of tall fescue), legumes, and native shrub and hardwood tree species as soon as possible upon completion.22. Place all excavated material landward of the floodway.23. Do not leave felled trees, brush, or other debris in the floodway. Remove all construction debris from the floodway.24. Keep the bridge waterway opening free of debris and sediment at all times.25. Plant five trees, at least 2 inches in diameter-at-breast height, for each tree, which is removed that is ten inches or greater in diameter-at-breast height within the regulatory floodway or as required by permit conditions.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

IDEM

26. The physical disturbance of the stream and riparian vegetation, especially large trees overhanging any affected water bodies should be limited to only that which is absolutely necessary to complete the project.
27. IDEM recommends that appropriate structures and techniques be utilized both during the construction phase, and after completion of the project, to minimize the impacts associated with storm water runoff.
28. Reasonable precautions must be taken to minimize fugitive dust emissions from construction and demolition activities. Dirt tracked onto paved roads from unpaved areas should be minimized.
29. All facilities slated for renovation or demolition must be inspected by an Indiana-licensed asbestos inspector prior to renovation or demolition activities. If regulated asbestos- containing material (RACM) that may become airborne is found, demolition, renovation, or asbestos removal activities must be performed in accordance with notification and emission control requirements.
30. In all cases where a demolition activity will occur (even if no asbestos is found), the owner or operator must still notify IDEM 10 working days prior to the demolition.
31. IDEM encourages all efforts to minimize human exposure to lead-based paint chips and dust.
32. The use of cutback asphalt, or asphalt emulsion containing more than seven percent (7 percent) oil distillate, is prohibited during the months of April through October.
33. Stabilize all disturbed areas upon completion of land disturbing activities.
34. Sediment-laden water, which otherwise would flow from the project site shall be treated by erosion and sediment control measures appropriate to minimize sedimentation.
35. Wastes and unused building materials shall be managed and disposed of in accordance with all applicable statutes and regulations.
36. A stable construction site access shall be provided at all points of construction traffic ingress and egress to the project site.
37. Public or private roadways shall be kept cleared of accumulated sediment that is a result of run-off or tracking.

MOA (commitments are considered firm pending the MOA approval)

38. The City of Fort Wayne shall consider and, where feasible, shall implement context sensitive solutions for this undertaking, including but not limited to the delineation of the former path of State Boulevard as a reminder of the former roadway; use of new, large scale, low-branched vegetation to emulate the street edge and the exterior walls of homes removed as a result of the undertaking in the Brookview plat; fill slopes leading to higher road elevations such that the slope is made gentle and obscured with low branched trees; medians planted with low shrubs to break roadways into smaller components that will be in scale with other neighborhood streets; use of retaining walls minimized but where used buffered by vegetation; design of present State Boulevard Bridge over Spy Run (NBI No. 0200273) recalled in the design of the new bridge; and use of streetscape elements such as historically scaled lighting, trees in parkstrips and other elements seen in the District neighborhoods in the new area to maintain continuity between the various elements.
39. The City of Fort Wayne shall consider and, where feasible, salvage architectural details from homes demolished as a result of the undertaking for use in other District residences.
40. The City of Fort Wayne will explore funding opportunities that will, if appropriate, provide low costs grants/loans to people in the neighborhood to improve/rehabilitate historic resources within the Brookview-Irvington Historic District. All improvements will be in compliance with, and with the oversight of, the Fort Wayne Historic Preservation Commission.
41. As soon as practical, FHWA and the City of Fort Wayne will convene an Advisory Team to ensure that the Project is designed in a manner that respects the historic qualities, landscapes, historic buildings, and features in the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District. Responsibilities of and participation on the Advisory Team include the following:
 - a. The Advisory Team will function in an advisory capacity to assist FHWA and the City of Fort Wayne in developing Project design details to implement the measures stipulated in this MOA regarding the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System Historic District.
 - b. Context sensitive solutions, such as protecting existing character-defining landscape features, both created and natural; dealing with light, sound, and air quality issues; providing pedestrian access across the bridge; maintaining pedestrian connections along the former Eastbrook and Westbrook drives; the rights-of-way, shall be included among the measures considered.
 - c. The City of Fort Wayne and FHWA shall have the authority for final approval of actions regarding the implementation of measures to avoid, minimize, or mitigate effects to the Brookview-Irvington Park Historic District and the Fort Wayne Park and Boulevard System.
 - d. Representatives of the following jurisdictions and organizations will be invited by FHWA and the City of Fort Wayne to participate on the Advisory Team, based on their established geographic connection to or specific interest in the Brookview-Irvington Park Historic District, or expertise pertaining to the historic preservation area: City of Fort Wayne Parks & Recreation Department, City of Fort Wayne historic

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

- preservation planners, City of Fort Wayne Engineer, City of Fort Wayne Urban Designer (Community Redevelopment Department), the Fort Wayne Greenway Consortium, ARCH, Inc., Brookview Neighborhood Association, Friends of the Parks of Allen County, and Indiana Landmarks. The Indiana SHPO or representatives may participate in Advisory Team meetings at their discretion. The City of Fort Wayne shall provide a licensed landscape architect to attend the Advisory Team meetings.
- e. Additional participants having geographic connection to, or specific interest in, the Brookview-Irvington Park Historic District or Fort Wayne Park and Boulevard Historic District or expertise pertaining to the historic preservation of the area may be invited to participate on the Advisory Team at the discretion of the City of Fort Wayne, FHWA, and the Indiana SHPO. In addition, the City of Fort Wayne shall invite the project managers of or representatives from the consultants for the other projects in the vicinity of the historic district (e.g., Pufferbelly Trail Des. No. 0710990 or US 27 Nos. 0101527 and 0200914) to participate in the meetings of the State Boulevard Reconstruction from Spy Run to Cass Street Advisory Team.
 - f. As soon as practical, FHWA and the City of Fort Wayne will convene the Advisory Team for an initial organizational meeting to establish processes and procedures for operation of the Advisory Team will need to meet to ensure the timely completion of the project, and the number and dates of future meetings. The Advisory Team will review plans, comment, and make specific recommendations regarding Project design scopes of work and details for consideration by FHWA and the City of Fort Wayne. The Advisory Team will be chaired by a representative of the City of Fort Wayne's engineering and/or environmental consultant. The chair will be responsible for convening meetings of the Advisory Team, preparing and maintaining a summary of meetings, and preparing and submitting Advisory Team recommendations to FHWA and the City of Fort Wayne for consideration and action, in consultation with the Indiana SHPO.
 - g. The City of Fort Wayne's engineering and/or environmental consultant shall provide any materials needed for review by the Advisory Team at least fifteen (15) days before schedule meetings. In addition to comments voiced in the meetings, the Advisory Team members may provide written comments to the chair within fifteen (15) days following the scheduled meeting.
 - h. Based on the comments provided by the Advisory Team members, the chair will develop recommendations and submit them to FHWA and the City of Fort Wayne for consideration and action, in consultation with the Indiana SHPO.
 - i. If other Federal undertakings planned in the vicinity of the Brookview-Irvington Park Historic District and Fort Wayne Park and Boulevard System Historic District are found to result in an adverse effect to the historic district, the City of Fort Wayne shall encourage the creation of Advisory Teams of the same composition of the State Boulevard Reconstruction from Spy Run to Cass Street Advisory Team available to guide the development of context sensitive design as part of the mitigation of such adverse effects. The City of Fort Wayne shall make meeting minutes and other pertinent records and materials from the State Boulevard Reconstruction from Spy Run to Cass Street Advisory Team available to other such Advisory Teams.
42. Prior to commencement of the demolition of the existing historic State Boulevard Bridge over Spy Run (NBI No. 0200273) for this undertaking, the City of Fort Wayne will ensure that photographic documentation of the State Boulevard Bridge over Spy Run (NBI No. 0200273) will take place, as provided for in the 2006 "Programmatic Agreement Among the Federal Highway Administration, the Indiana Department of Transportation, the Indiana State Historic Preservation Officer, and the Advisory Council on Historic Preservation Regarding Management and Preservation of Indiana's Historic Bridges."
43. Prior to the commencement of site preparation, demolition, or construction activities for this undertaking within the Brookview-Irvington Park Historic District, the City of Fort Wayne will ensure that photographic documentation of the part of the Historic District that will be altered by this undertaking will take place. The photographs will concentrate on the following subjects:
- a. The streetscape and setting, including broad views of the main facades of buildings facing the street, within the parts of the existing State Boulevard and Eastbrook Drive that will be altered; and
 - b. Those houses that contribute to the significance of the Historic District and that will be demolished. At least two photographs of each of those houses will be taken, and they will be taken from oblique angles in order to document all four elevations of each house.
44. Photo documentation will include black and white prints of digital photographs and a digital video disc ("DVD") containing the photographs, recorded as closely as possible in keeping with the relevant standards of the version of the "Indiana DNR – Division of Historic Preservation and Archaeology Minimum Architectural Documentation Standards" that are in effect at the time.
- a. Separate sets of the photographs of the State Boulevard Bridge over Spy Run and of the photographs of the parts of the Brookview-Irvington Park Historic District will be prepared;
 - b. The photography will be conducted by a professional photographer or a qualified professional who meets relevant professional qualification standards of the Secretary of the Interior;
 - c. A draft set of photographs on DVD of the Bridge and a draft set of photographs on DVD of the Historic

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

District will be submitted to the Indiana SHPO for review and approval within 30 days of receipt, and the Indiana SHPO has the discretion to require that photographs be retaken or that additional photographs be taken; and

- d. After the Indiana SHPO has approved the sets of photographs of the Bridge and of the Historic District, the City of Fort Wayne will provide duplicates of the photographic prints and digital video discs to the Indiana SHPO, for ultimate transmittal to the Indiana State Archives, and to one or more libraries or other not-for-profit institutions in Fort Wayne that will commit to retaining them permanently and to providing the public with access to them.
45. The City of Fort Wayne will fund the research, design, manufacture, and installation of a series of four interpretative plaques to be placed at accessible locations. The plaques may include, but not be limited to: 1) discussion of Brookview Plat, 2) information about George Kessler's landscape design, 3) history of Vesey Park and Centlive beer garden grounds, 4) the role of Civilian Conservation Corps or other WPA era programs in public projects.
46. The development of the proposed content and design of the plaques will be provided to the Indiana SHPO and consulting parties at ninety-five (95) percent completion for review and comment. If the Indiana SHPO does not respond within thirty (30) days, acceptance will be assumed. If the Indiana SHPO responds with recommendations, a good faith effort to accommodate the recommendations will be made. The City of Fort Wayne will inform the SHPO and the consulting parties of its response to such recommendations and provide any revisions to the Indiana SHPO and consulting parties for their files.

For Consideration

USFWS

1. Shade trees and other landscaping that provide habitat for songbirds and small mammals are likely to be lost. Therefore we request that trees lost to the project be replaced as close to the project impact area as possible, such as along Spy Run Creek, the St. Joseph River, and the new trail.

INDOT-Fort Wayne District

2. This project will be taking place within the NRHP Eligible Brookview/Irvington Park Historic District. This neighborhood is eligible due to the layout of the streets following Spy Run Creek. Taking of right-of-way in the area will most likely constitute a Section 4(f) impact. Due to these situations, minimization of impacts in this area should be considered by multiple alternatives to show the proposed plan is the most feasible and prudent. Context sensitive design to fit the historic setting of the neighborhood should also be investigated.

Indiana Department of Transportation

County Allen Route State Boulevard Des. No. 0400587 Project No. _____

SECTION K- EARLY COORDINATION

Please list the date coordination was sent and all agencies that were contacted as a part of the development of this Environmental Study. Also, include the date of their response or indicate that no response was received.

Remarks:

Agency	Date Mailed	Response Received	Appendix Location
US Fish and Wildlife Service	March 16, 2009 March 19, 2014	April 20, 2009 March 19, 2014	B-15 to B-16 B-25 to B-26
US Natural Resources Conservation Service	March 16, 2009	March 20, 2009	B-8
US Army Corps of Engineers	March 16, 2009	May 11, 2009	B-17 to B-18
Indiana Geological Survey	March 16, 2009	April 06, 2009	B-13
Aeronautics Section – INDOT	March 16, 2009	No Response	
Indiana Department of Environmental Management	April 24, 2013 (electronic submittal)	April 24, 2013	B-21 to B-24
IDNR, Division of Fish and Wildlife	March 16, 2009	November 18, 2009	B-19
Ninth Coast Guard Unit	March 16, 2009	March 30, 2009	B-9
Fort Wayne District – INDOT	March 16, 2009	March 30, 2009	B-10
Allen County Sheriff's Department	March 16, 2009	No Response	
City of Fort Wayne	March 16, 2009	April 3, 2009	B-11 to B-12
Allen County Surveyor	March 16, 2009	No Response	
Allen County Highway Department	March 16, 2009	No Response	
City of Fort Wayne Office of Mayor	March 16, 2009	No Response	
Fort Wayne Community School Board	March 16, 2009	No Response	
Allen County Executive Board of Health	March 16, 2009	No Response	
Northside High School	March 16, 2009	No Response	
Allen County Parks and Recreation	March 16, 2009	No Response	
Imagine Master Academy	March 16, 2009	No Response	
Forest Park Elementary School	March 16, 2009	No Response	
Department of Planning Services	March 16, 2009	No Response	
IDNR – Division of Outdoor Recreation	March 16, 2009	April 07, 2009	B-14
Allen County Engineer	March 16, 2009	No Response	
Allen County Board of Commissioners	March 16, 2009	No Response	