## **Green Sheet: Project Mitigation Summary**

## Detroit River International Crossing FEIS For the Preferred Alternative

This Project Mitigation Summary Green Sheet contains the project specific mitigation measures being considered at this time. A list of Community Enhancements that are above and beyond what is required mitigation for this project is included at the end of this Green Sheet. A Final Green Sheet will be prepared and included in the Record of Decision (ROD) for this project. These mitigation items may be modified during the ROD, final design, right-of-way acquisition, or construction phases of the project.

Impact Category	Mitigation Measures	
I. Social and Economic Environment		
a. Visual Effects	Buffers/barrier walls are planned for the plaza perimeter for all DRIC alternatives. Buffer/barrier wall construction materials and aesthetic concepts were discussed with the DRIC study team during a series of Context Sensitive Solution (CSS) workshops held in the community. Follow-up CSS meetings will be held with local officials and residents during the design process to continue to address the plaza buffer/barrier wall and bridge design options for the Preferred Alternative.	
b. Relocations	Adequate replacement housing and industrial/commercial space is available in Southwest Detroit to replace the 257 dwelling units, 43 businesses, and 9 non-profit organizations (community facilities and churches) that would be relocated. See Conceptual Stage Relocation Plan in Appendix A. MDOT will coordinate with the state and federal officials that control the Detroit Empowerment Zone and/or Renaissance Zone. If possible, these zones will be extended or modified to allow relocated businesses or residents to remain in the area.	
c. Environmental Justice	The mitigation and enhancement measures listed on this Green Sheet will benefit minority and low-income population groups who may be impacted by this project. Community Enhancement measures were developed by MDOT and the community. New windows and a new central heating, ventilating and air conditioning (HVAC) system will be offered to reduce noise levels within the Berwalt Manor apartment building. Coordination with Berwalt Manor will continue into design to address access to the property and additional landscaping options.	
d. Parks	South Rademacher Park and its associated Recreation Center, plus Post-Jefferson Playlot, fall within the plaza footprint, requiring compensation for the property, facilities, and recreational functions. Mitigation could take a number of forms and is being discussed with the Detroit Recreation Department. Mitigation will commence in the project's right-of-way acquisition phase.	
e. Noise	Project noise levels exceed FHWA Noise Abatement Criteria at 199 residential properties along I-75. Reasonable and feasible noise wall locations have been identified between Green and Rademacher (1,820'), East of Dragoon and east of Campbell (1,488'), and east of Campbell and Clark (2,234'). Meetings will be held with affected residents and the City of Detroit during the design phase to address noise barrier location/aesthetics and fire hydrant/emergency access.	
f. Infrastructure	MDOT will invest in a Green Street boulevard to improve local north south circulation in west Delray and improve Campbell Street as a narrow boulevard between the railroad tracks and Jefferson in east Delray.	
g. Pedestrian and Bicycle Effects	The Preferred Alternative will remove the five existing pedestrian/bicycle bridges over I-75, but each will be replaced near its original location. All vehicular bridges over I-75 also will have sidewalks. All new structures will be upgraded to meet Americans with Disabilities Act (ADA) standards.	

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h. Lighting	Proposed plaza and new structure lighting requirements will continue to be reviewed for the Preferred Alternative to minimize potential impacts to adjacent residents, properties (especially Fort Wayne), and wildlife. Coordination will occur with FHWA, MDOT, Federal Aviation Administration, U.S. Coast Guard, and U.S. Army Corps of Engineers during design to balance the safety and navigation lighting needs on the bridge. Coordination will also occur with the U.S. Fish and Wildlife Service during design to review the new bridge and lighting concepts to reduce potential impacts to migratory birds. Further CSS meetings will be held during design to receive local community input for proposed plaza and bridge lighting that provides safe, attractive, energy efficient, and low-maintenance lighting.
i. Emergency Services	A system of traffic signal pre-emptions is planned for the Southwest Safety Center on Fort Street to assist the police and fire services in accessing the area north of I-75.
II. Natural Environm	
a. Tree Removal/ Clearing/ Landscaping	Mature trees will be preserved, where possible. Remaining property owners will be notified before any trees in front of their residences are removed and replacement trees will be offered. Landscaping opportunities will be determined drawing on input from the local community from previous CSS meetings and a follow-up meeting during the design phase for the Preferred Alternative. Landscaping will emphasize native species and not include invasive species. As an added benefit, EPA has stated that landscaping can aid in improving air quality along roadways.
b. Water Quality	Stormwater management will be incorporated into the project's final design. For runoff, stormwater management facilities could include detention basins, oversized pipes and grassy swales. The sealing of water wells, septic systems, and sewer lines will be ensured by enforcement of MDOT specifications required of contractors during construction. The contractor must also meet Michigan Department of Community Health requirements. Water pumped during de-watering operations for the new bridge foundations will be treated prior to discharge.
c. Migratory Birds	Coordination with the U.S. Fish and Wildlife Service will continue through the design phase for structure type and lighting options.
III. Hazardous / Con	taminated Materials
a. Contaminated Sites	An Initial Site Assessment (ISA) examined more than 100 commercial, industrial and vacant sites for contamination impacts and found 26 medium to high rated sites that could be impacted. The Preferred Alternative would impact 23 of these sites. Preliminary Site Investigations (PSIs) which include more soil borings and analysis have been completed for 6 sites. PSIs will continue on the remaining 17 sites affected by the Preferred Alternative as access can be obtained by provisions in Michigan law. Further assessment of the regulatory status and site conditions of the other sites (that may already be in the process of remediation) will be required. Access will be maintained to current monitoring wells and wells will be relocated if required.
	Contamination areas will be marked on all construction plans. A Utility Plan will also be prepared to ensure no deep utility cuts will impact and/or spread existing contamination. Design of the bridge piers will include measures to prevent migration of contaminated groundwater and contamination of deep aquifers. Measures will be taken during construction to prevent exacerbation of existing contamination. Further, construction will not interfere with existing caps or remediation systems. Design specifications will include provisions on how to handle contaminated material, including groundwater. Structures acquired for the project would be tested for asbestos-containing materials and lead-containing materials before demolition. The MDEQ notification procedures for demolitions will be followed. A Risk Assessment Plan will be developed to include a Worker Health and Safety Plan. All contaminated materials will be properly disposed of. All monitoring wells will be properly sealed and abandoned.
	FHWA and the MDOT will continue to work with the Detroit Department of Environmental Affairs, the Detroit Economic Growth Corporation, the Michigan

Impact Category	Mitigation Measures
	Department of Environmental Quality (MDEQ), and the responsible party (Honeywell International, Inc.) at the former Detroit Coke site to ensure that the existing and proposed environmental response activities as required by the MDEQ are not impeded. This may include, for example, the need for access to complete on-going system monitoring and/or the installation of subsurface or surface appurtenances for remedial systems.
IV. Cultural Environ	
a. Historic	Prior to any construction activities, the Kovacs Bar and St. Paul AME Church will be documented in text and graphics to record its place in history. Coordination with the SHPO will be required during design for landscaping and potential noise reduction improvements to the exterior of the Berwalt Manor apartments. Details of the mitigation commitments are listed in the updated draft Memorandum of Agreement (MOA) found in Appendix E of this FEIS. A Final MOA will be included in the Record of Decision (ROD) for this project.
b. Archaeology	Prior to construction in the area of sites 20WN1132 and 20WN 1133, MDOT shall develop an appropriate data recovery strategy for these two sites and mitigate the adverse effects of construction through data recovery excavations, data analysis, and document the results in a report. Details of the mitigation commitments are listed in the updated Draft Memorandum of Agreement (MOA) found in Appendix E of this FEIS. A Final MOA signed by the MDOT, FHWA, and SHPO will be included in the Record of Decision (ROD) for this project.
V. Construction	
a. Vibration	Basement/foundation surveys will be offered to Fort Wayne and structures within 150 feet of any construction activity in areas where vibration effects could occur. These areas will be identified during the design phase, where pavement and bridge removal will occur, or where piling and/or steel sheeting is planned. Monitoring will occur before, during and after the construction phase. Vibration impacts are not expected at this time.
b. Maintenance of Traffic	All construction areas and altered traffic patterns will be clearly marked during the construction phase. Access will be maintained to properties to the extent possible. Public awareness will be maintained through the use of a Public Information Plan, which will provide information to visitors, motorists, area residents, and business owners. Coordination with emergency service providers and the Detroit School District will continue during the design and construction phases. Communication methods can include but are not limited to the use of electronic message signs, an MDOT Web site (www.michigan.gov/mdotstudies), and the project hotline (1.800.900.2649).
c. Utilities	Coordination will continue between MDOT and utility companies prior to and during construction to minimize service interruption to the public.
d. Permits	Permits under Michigan Public Act 451, Part 31 (Water Quality and Floodplains), 55 (Air Pollution Control), and 301 (Inland Lakes and Streams) are required from the MDEQ for this project. Coverage under the National Pollutant Discharge Elimination System (NPDES), which is administered by the MDEQ, is also required. A Section 9 permit will be required from the U.S. Coast Guard. All Detroit River navigational requirements including lighting will be followed. Since the DRIC will be a new international crossing, a Presidential Permit will be required from the U.S. Department of State.

## **Community Enhancements**

Impact Category	Enhancement Measures
a. Local Roads	Jefferson Avenue intersections at Dearborn Avenue, West End Avenue and Clark Street will be rebuilt to better accommodate local truck movements affected by the DRIC. Adjacent to the DRIC where local traffic must detour around the proposed plaza, local roads will be evaluated to determine what improvements are needed to the roadways including paving, sidewalks, streetscaping, traffic calming and lighting. MDOT will coordinate with the City of Detroit to determine the limits, scope of work, cost (not to exceed \$12 million), and schedule for the local road improvements. MDOT will work together with the City of Detroit in an effort to secure Transportation
Enhancement Funds	Enhancement Funds for aesthetic improvements in the vicinity of the DRIC.
c. Economic	MDOT will participate with other stakeholders in funding a study of economic development opportunities that will support small business development in the DRIC study area. MDOT will continue to coordinate with the Michigan Economic Development Corporation, the Detroit Economic Growth Corporation, the Dearborn Department of Economic Development, various public-private partnerships and the local community.
d. Air Quality	MDOT will work with contractors on an operational agreement to control air pollution during construction. A construction emissions plan may include actions such as: retrofitting off-road construction equipment; limiting the age of off-road vehicles used in construction projects; minimizing engine operations; restricting construction activities around certain more-sensitive receptors, like Southwestern High School (when it is in session); using diesel particulate traps and oxidation catalysts; and, using existing power sources or clean fuel generators, rather than temporary power generators. The Contractor will institute fugitive dust control plans as per MDOT Standard Construction Specifications under Section 107.15A and 107.19.
	MDOT will work with SEMCOG, MDEQ, the private sector and the community to create an action plan that includes short-term and long-term objectives aimed at reducing fugitive dust, diesel truck idling, fuel consumption, or diesel emissions to limit PM <sub>2.5</sub> emissions in the study area defined by the yellow boundary in Figure 3-9A. The action plan will identify priorities for future federal aid eligible transportation projects through programs such as Congestion Management and Air Quality (CMAQ) and the Midwest Clean Diesel Initiative. The action plan will be implemented during design and construction phases, and sustained through the maintenance and operations of the facilities. Activities could also include outreach activities to inform commercial operations and residents on air pollution control strategies. The actual projects will be generated from the community and its partners who will develop project proposals.
e. Land Use	MDOT will support Delray's efforts to get the City of Detroit to adopt the Delray land use plan.
f. Job Training	MDOT will coordinate with the Michigan Department of Labor and Economic Growth to explore job training opportunities, English as a Second Language (ESL), and other training options in the project area. This will allow residents to take advantage of training opportunities to avail themselves of jobs that will result from the construction and operation of the DRIC.